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02 APR -

NORTHERN ORION
EXPLORATIONS LTD.

311 West First Street, North Vancouver, B.C. Canada V7M 1B5
Tel: (604) 980-0573 Toll Free: 1-800-811-4447 Fax: (604) 985-2189

May 21, 1999 **NEWS RELEASE 99-05** NNO – TSE, VSE

Northern Orion Reports First Quarter Results of 1999

Northern Orion Explorations Ltd. (the "Company") announces its financial results for the three months ended March 31, 1999. The Company reports a loss of $1,699,000 or $0.02 per share compared to a loss of $868,000 or $0.01 per share in the quarter ended March 31, 1998. The weighted average number of common shares outstanding for the period was 74,006,780.

During the quarter, the Mantua gold leach facility produced 6,043 ounces of gold (Northern Orion's share 3,021 ounces). Cash operating costs were US$300 per ounce. The realized gold selling price on Northern Orion's 50% share of the quarters gold production from Mantua was US$327 per ounce due the positive results of gold hedging operations by Northern Orion. Cash costs were higher than budgeted due to water shortages experienced at the mine. Water shortages were the result of extended drought conditions and reduced the Company's ability to leach gold from the pads. Weather conditions returned to normal during May 1999 and irrigation of the leach pads returned to normal levels. As a result of the higher operating costs at the Mantua project, Northern Orion was unable to make the principal and interest payments required by its project financing and therefore Miramar paid $3.0 to Northern Orion's bank under its guarantee of the project financing. The Mantua project is held in a 50-50 joint venture with Geominera SA, a Cuban state owned company.

The board of Northern Orion has initiated a strategic review process to evaluate alternatives for the optimal medium to long term future for the Company given continued depressed copper prices and poor equity markets for junior exploration companies. Results of the strategic review will be reported as appropriate. During the quarter, the Company continued to reduce staffing levels and substantially reduced exploration expenditures, focussing expenditures on the Company's core assets such as Agua Rica and Mantua.

Northern Orion Explorations Ltd. is a mineral exploration and development company focussing on the substantial and largely untapped mining opportunities in Latin America. Northern Orion's common shares are listed for trading on the Toronto and Vancouver Stock Exchanges under the symbol NNO.

For Further Information Contact:
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No Stock Exchange has approved or disapproved the information contained herein

NORTHERN ORION EXPLORATIONS LTD.

Consolidated Balance Sheets
(expressed in thousands of dollars)

March 31, 1999 and December 31, 1998

	1999 (unaudited)	1998
Assets		
Current assets:		
Cash and short-term investments	$ 333	$ 542
Marketable securities	3	3
Accounts receivable	3,651	4,056
Inventory	2,115	2,201
Prepaid expenses	132	102
	6,234	6,904
Plant and equipment	8,144	8,788
Mineral properties and deferred development	115,427	113,397
Other assets	2,334	2,322
	$ 132,139	$ 131,411
Liabilities and Shareholders' Equity		
Current liabilities:		
Accounts payable and accrued liabilities	$ 2,986	$ 3,076
Current portion of long-term debt	3,106	5,801
	6,092	8,877
Payables to related parties	5,213	3,596
Guarantee to related party	13,427	10,120
Convertible debenture	18,257	17,907
Reclamation liability	24	86
	43,013	40,586
Shareholders' equity:		
Share capital	122,000	122,000
Deficit	(32,874)	(31,175)
	89,126	90,825
	$ 132,139	$ 131,411

No Stock Exchange has approved or disapproved the information contained herein .

NORTHERN ORION EXPLORATIONS LTD.

Consolidated Statements of Operations and Deficit
(expressed in thousands of dollars except per share amounts)

Three month periods ended March 31, 1999 and 1998

	1999 (unaudited)	1998 (unaudited)
Revenue:		
Metal sales	$ 1,317	$ -
Interest and other income	2	14
	1,319	14
Expenses:		
Cost of sales	1,369	–
Management fee	300	630
General and administration	125	146
Interest	78	174
Depreciation and depletion	644	25
Write-down of mineral properties	106	–
Loss (gain) on foreign exchange translation	396	(93)
	3,018	882
Loss for the period	1,699	868
Deficit, beginning of period	31,175	9,888
Deficit, end of period	$ 32,874	$ 10,756
Loss per share	$ 0.02	$ 0.01
Weighted average number of common shares outstanding	74,006,780	74,006,780

No Stock Exchange has approved or disapproved the information contained herein

NORTHERN ORION EXPLORATIONS LTD.

Consolidated Statements of Cash Flows
(expressed in thousands of dollars)

Three month periods ended March 31, 1999 and 1998

	1999 (unaudited)	1998 (unaudited) (restated-note 1)
Cash flows from (used in) operating activities:		
Loss for the period	$ (1,699)	$ (868)
Items not involving cash:		
Depreciation and depletion	644	25
Writedown of marketable securities	106	–
	(949)	(843)
Decrease in accounts receivable	405	228
Decrease (increase) in inventories	86	(2,629)
Decrease (increase) in prepaid expenses	(30)	(65)
Increase (decrease) in accounts payable and accrued liabilities	(90)	1,085
	(578)	(2,224)
Cash flows from (used in) financing activities:		
Due to related parties	1,617	2,484
Long-term debt	(2,695)	(42)
Capitalized interest on convertible debenture	350	–
Guarantee to related party	3,307	–
	2,579	2,442
Cash flows from (used in) investing activities:		
Mineral properties	(2,198)	(2,805)
Plant and equipment	–	(1,157)
Other long-term assets	(12)	(45)
	(2,210)	(4,007)
Net decrease in cash and short-term investments	(209)	(3,789)
Cash and short-term investments, beginning of period	542	6,359
Cash and short-term investments, end of period	$ 333	$ 2,570

Note 1: Comparative figures for the Consolidated Statements of Cash Flows have been restated to reflect the retroactive application of the new guidance for the statement of cash flows by the Canadian Institute of Chartered Accountants which the Company adopted effective January 1, 1999.

No Stock Exchange has approved or disapproved the information contained herein

VALERIE GOLD RESOURCES LTD.

NORTHERN ORION EXPLORATIONS LTD.

www.valeriegold.com / www.langmining.com

March 28, 2002

VLG-CDNX
NNO – TSE

NORTHERN ORION & VALERIE GOLD RESOURCES LTD. RECEIVE EXCHANGE ACCEPTANCE OF PRIVATE PLACEMENT

Valerie Gold Resources Ltd. ("Valerie") (VLG-CDNX) and Northern Orion Explorations Ltd. (NNO-TSE) ("Northern Orion") are pleased to announce the closing of their previously announced non-brokered private placement, whereby Valerie subscribed for 8,333,333 units of Northern Orion at a price of $0.06 per unit for a payment of $500,000. The 8,333,333 units consist of an aggregate of 8,333,333 common shares and 500,000 share purchase warrants. Each whole warrant is exercisable for a period of two years from closing at price of $0.075 per share.

The issuance of the 8,333,333 common shares and 500,000 warrants will result in Valerie owning 18,333,333 common shares of Northern Orion representing 15% of the issued and outstanding shares of Northern Orion. In addition, Valerie holds 10,000,000 warrants to purchase up to an additional 10,000,000 previously unissued common shares and is entitled to purchase or direct the sale of 60,012,471 common shares in the capital of Northern Orion held under option by 1341180 Ontario Limited.

Valerie has acquired these securities for investment purposes. It is Valerie's intention to evaluate the investment in Northern Orion and to increase and decrease its shareholdings, as circumstances require.

Northern Orion intends to use the proceeds of this private placement for working capital as it pursues acquisition opportunities.

For further information please contact:

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David Cohen, Senior Vice President
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VALERIE GOLD RESOURCES LTD.

Frank A. Lang, – President
William ("Bill") Witte, Exec. Vice President
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No regulatory authority has approved or disapproved the information contained in this news release.

NORTHERN ORION
EXPLORATIONS LTD
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AMENDED ANNUAL INFORMATION FORM

For Year Ended December 31, 2000

October 16, 2001

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PRELIMINARY INFORMATION

The information contained in this Annual Information Form is as at December 31, 2000, unless otherwise stated. Throughout the Annual Information Form ("AIF"), Northern Orion Explorations Ltd. may be referred to as Northern Orion or the Company. Where the context requires, the term Company includes the subsidiaries of the Company. All dollar amounts in this annual information form are in Canadian dollars unless otherwise stated.

2 CORPORATE STRUCTURE

2.1 Name and Incorporation

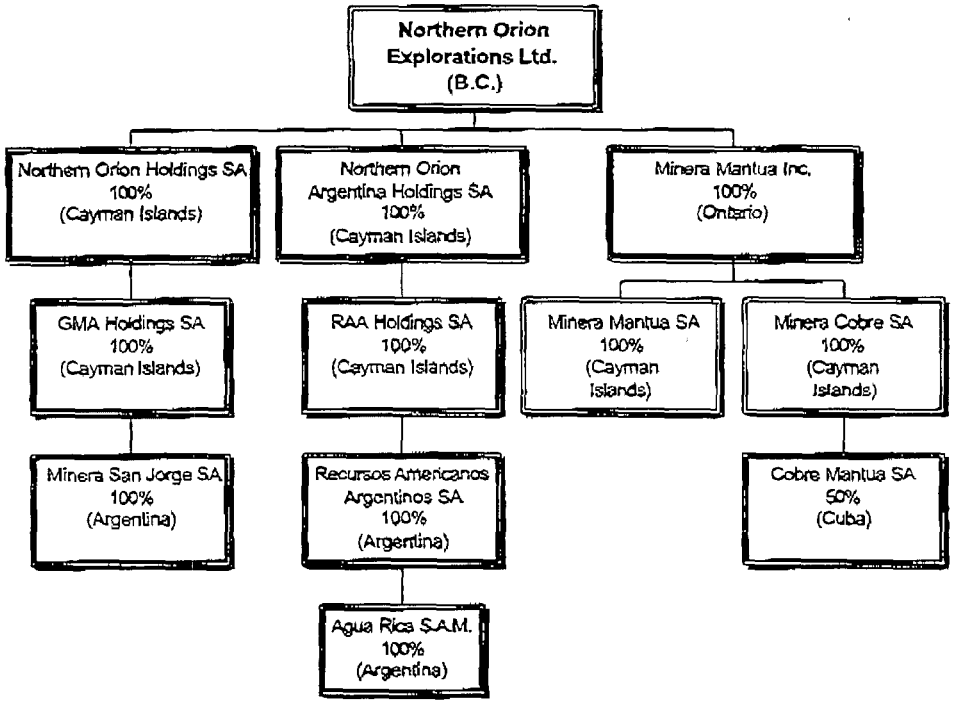
Northern Orion Explorations Ltd. was incorporated with the name Northern Orion Resources Ltd. under the laws of British Columbia by memorandum and articles dated April 30, 1986. On October 31, 1986, the memorandum of the Company was amended to change the name of the Company to Northern Orion Explorations Ltd. On November 28, 1994, the memorandum of the Company was amended to increase the authorized capital from 25,000,000 to 100,000,000 common shares without par value ("Common Shares"), and on October 15, 1997, the memorandum and articles of the Company were amended to increase the authorized capital from 100,000,000 to 700,000,000 shares divided into 500,000,000 Common Shares, 100,000,000 First Preference Shares without par value ("First Preference Shares") and 100,000,000 Second Preference Shares without par value ("Second Preference Shares").

The registered and records offices of the Company are located at 10th Floor, 595 Howe Street, Vancouver, British Columbia V6C 2T5 and its principal executive office is located at Suite 1400, 570 Granville Street, Vancouver, British Columbia V6C 3P1.

2.2 Intercorporate Relationships

The following chart sets forth the name of each material subsidiary of the Company, the jurisdiction of its incorporation and the direct or indirect percentage ownership of the Company in such subsidiary.

Northern Orion Explorations Ltd.
Organizational Structure Chart
As At October 16, 2001



3 GENERAL DEVELOPMENT OF THE BUSINESS

The Company, through its subsidiaries, is engaged in the exploration for, and development and production of, precious and base metals. The Company indirectly owns all of the outstanding shares of Minera San Jorge S.A. ("MSJ") and Recursos Americanos Argentinos S.A. ("RAA"), both Argentine companies that hold interests in mineral properties in Argentina. The Company also owns all of the outstanding shares of Minera Mantua Inc. ("MMI"), an Ontario company that holds an indirect interest in the Mantua property in Cuba.

3.1 Three Year History

Since its incorporation in 1986, the Company has been in the business of acquiring and exploring mineral properties. For the past three years, the Company has been principally engaged in attempting to locate deposits of precious and base metals on its Agua Rica and San Jorge properties in Argentina and attempting to find financing or joint venture partners to bring the Mantua project in Cuba into full production.

Agua Rica Project

As at December 31, 2000, BHP had fully reimbursed the Company for the US$7.9 million paid to exercise the Agua Rica Option. Under the Joint Operating Agreement, exploration expenditures are shared between RAA and BHP on a 30-70 basis, respectively. During 2000, the Company contributed $4.4 million (1999 - $5.6 million) to the project, which includes the Company's 30% share of the total budget. In the second quarter of fiscal 2001, the Company elected to reduce its interest in the Agua Rica Project to approximately 29.12% from the original interest of 30%. As a result, cash calls made by the operator to August 31, 2000, will not be made by the Company.

RAA and BHP are continuing with a work program that is designed to advance the project towards completion of a final feasibility study. Work completed in 1998 included 300 metres of underground drifting, collection of 300 tonnes of bulk sample, pilot mill testing as well as revised capital and operating cost estimates. In the past three years, all the physical work necessary to support a bankable feasibility study has been completed. Base-line environmental studies and process enhancement are ongoing.

San Jorge Project

The original San Jorge copper/gold property, located approximately 90 kilometres northwest of the City of Mendoza in Mendoza, Argentina and 250 kilometres northeast of Santiago, Chile, consisted of seven mining concessions (covering about 5 1/2 square kilometres) and 35 mineral claims (covering about 102 square kilometres) owned by MSJ. The purchase price for the seven concessions was US$4.015 million. During 2000, the Company expended $0.414 million in exploration and development expenses on the San Jorge project (versus $1.7 million in 1999). In fiscal 2000 the Company wrote down the San Jorge project by $22.027 million due to continuing low metal prices. The property remains in good standing.

In March 1999, GMA and Argentina Mineral Development ("AMD"), an associate of Climax Mining of Australia, entered into an agreement (the "AMD Agreement") that allows for the consolidation of a large land package surrounding the San Jorge property. Both companies agreed to contribute their property holdings and mining rights in San Jorge and the surrounding area into a newly formed holding company with GMA owning 85% and AMD having the remaining 15%. This new company, Minera San Jorge S.A. ("MSJ") is to continue the development of the property, working towards producing a bankable feasibility study. AMD's ownership in the holding company was to be redeemed in exchange for a 2% net smelter return royalty ("NSR") on the mine developed if MSJ produced a feasibility study within three years, obtained financing within another year and committed to construction of a mine within another six months. If AMD's interest were redeemed, GMA would then own 100% of the new company. If the project did not proceed, the ownership structure will remain in place and will allow for potential disposal of each party's interest.

In April 2000, GMA's holding in the San Jorge property was transferred without cost or penalties to MSJ. The transfer was part of the reorganization of Northern Orion's Argentine holdings and part of the settlement with Dr. Ricardo Auriemma.

Areas to the east and southeast of San Jorge, within the expanded property area, contain large IP chargeability anomalies that coincide with anomalous copper-bearing, intercepts in the core of a reconnaissance drill hole, indicating potential for satellite copper systems similar to the San Jorge deposit. The Company is currently evaluating the potential for exploring for and developing additional resources in the satellite areas. However, limited work is planned for 2001 in light of the continued poor metal prices.

Mantua Project

Mining of gold ore commenced in February 1998 and was concluded in September 1999. Prior to achieving commercial production, all costs of start up operations and related interest and overhead were capitalized. During the operation, recovered gold was below expectations and totalled 31,389 ounces of which the Company's share was 15,694 ounces. Due to higher than expected ore clay and fines content field leach times had to be extended to 70 days from the designed 28 days and ultimate gold recoveries were 50% of what was forecast.

In August 2001, the Company and International Barytex Resources Ltd. ("Barytex") announced that they have entered into an option agreement whereby Barytex may acquire the undivided 50% interest of the Company in the Mantua Copper Project in Cuba by the acquisition of 100% of the issued and outstanding

shares in Minera Mantua Inc., a wholly-owned subsidiary of the Company. Geominera S.A., a Cuban company controlled by the government of Cuba, holds the remaining 50% interest in the project.

In order to exercise the option, Barytex must:

- assume and pay all carrying costs relating to Northern Orion's operations in Cuba and the Project;
- complete a bankable feasibility study within 18 months;
- arrange all financing required in order to commence commercial production; and
- commence construction of the project within 120 days of making a production decision.

The project is subject to approximately US $28 million in subordinated debt owing to the Company from Geominera S.A. in respect of past advances from the Company to fund the exploration and development of the project including mining of a gold-enriched gossan capping the copper deposit.

Under the terms of the Agreement, Barytex may acquire the subordinated debt from the Company, thereby significantly enhancing the economics of the project, in consideration for 4.5 million shares of Barytex. The project is subject to a 2.5% net smelter return royalty from attributable production.

Barytex has retained Hatch, an international engineering firm, to prepare a report on the Mantua Copper Project to qualify the transactions for regulatory approvals.

In 1998 the Delita Project was placed on hold due to low gold prices and a write down of $8.4 million was recorded representing the costs of exploration of the project to 1998. In March 2000, the Company released its interest in the Delita project and returned the project to Geominera.

3.2 Significant Acquisitions and Significant Dispositions

The Company has made no significant acquisitions as that term is defined under applicable securities rules or significant dispositions during its most recently completed financial year. There have been no transactions were with insiders, associates of affiliates of the Company except as otherwise noted.

3.3 Trends

Management does not presently know of any trend, commitment, event or uncertainty that may reasonably be expected to have a material effect on the Company's business, financial condition or results of operations. As disclosed in the management discussion and analysis, restructuring has resulted in a reduction in management fees and operating costs.

4 NARRATIVE DESCRIPTION OF THE BUSINESS

4.1 General

Information contained in this Annual Information Form that is of a scientific or technical nature has been prepared by or under the supervision of Dean McDonald, PhD, PGeo, who is a "qualified person" as the term is defined in National Instrument 43-101. The Company explores for minerals and in fiscal 2000 has been concentrated its efforts on restructuring its business, while maintaining its properties in Argentina and Cuba in good standing. Currently, Northern Orion has interests in three properties in the advanced exploration stage. No definitive ore reserves have yet been identified on any of the properties and the Company is continually evaluating the results and analyzing future potential.

The Company does not directly employ any personnel. Northern Orion conducts its business and exploration activities through consultants, whose employees and consultants supervise and carry out the day-to-day business of the Company. – see Item 8.5 "Conflicts of Interest".

Risks and Uncertainties

The following list risk factors, while not exhaustive, may apply to the Company due to the nature of its business.

Financing Risks

The Company has no revenue other than interest income. A mining project can typically require five years or more between discovery, definition, development and construction and as a result, no production revenue is expected from any of the Company's exploration properties in that time frame. All of the Company's short to medium-term operating and exploration expenses must be paid from its existing cash position or external financing; however, the Company believes it has sufficient capital to fund forecasted levels of operations for at least the next two to three years. Actual funding may vary from that planned due to a number of factors, the most significant of which would be the progress of exploration and development. In the event that changes in market conditions prevent the Company from receiving additional external financing if required, the Company would be forced to review its property holdings and prioritize project exploration to fit within cash availability.

Foreign Countries: Currency Fluctuations and Regulatory Requirements

The Company's principal areas of activity in fiscal 2000 were Argentina and Cuba, which have different cultural, economic and political environments to that of Canada and the United States. Instability in the Argentinean currency has subjected the Company to some degree of foreign currency risk. Most of the Company's expenditures in Argentina and Cuba are in United States (US) dollars. The Company minimizes this risk by maintaining most of its cash in Canadian and US dollars outside of Argentina and Cuba.

Exploration and Mining Risks

The business of exploration for minerals and mining involves a high degree of risk. Few properties that are explored are ultimately developed into producing mines. At present, none of the Company's properties has a known body of commercial ore. Substantial expenditures are required to establish ore reserves through drilling, to develop metallurgical processes to extract the metal from the ore and to develop the mining and processing facilities and infrastructure at any site chosen for mining. Although substantial benefits may be derived from the discovery of a major mineralized deposit, no assurance can be given that minerals will be discovered in sufficient quantities to justify commercial operations or that funds required for development can be obtained on a timely basis.

Uninsured Risks

In the course of exploration, development and production of mineral properties, certain risks, and in particular, unexpected or unusual geological and operating conditions including rock bursts, unusual or unexpected formations, formation pressures, cave-ins, land-slides fires, explosions, flooding and earthquakes, power outages, labour disruptions, and the inability to obtain suitable or adequate machinery, equipment or labour may occur. It is not always possible to fully insure against such risks and the Company may decide not to take out insurance against such risks as a result of high premiums or other reasons. Should such liabilities arise, they could reduce or eliminate any future profitability and result in increasing costs and a decline in the value of the securities of the Company.

Metal Prices, Environmental and other Regulatory Requirements

The economics of developing gold and other mineral properties is affected by many factors, including the cost of operations, variations in the grade of ore mined, fluctuations in metals markets, costs of processing equipment and factors such as government regulations, including regulations relating to royalties, allowable production, importing and exporting of minerals and environmental protection. The Company has a history of losses and it has no producing mines at this time.

The operations of the Company will require licenses and permits from various governmental authorities. There can be no assurance that the Company will be able to obtain all necessary licenses and permits that may be required to carry out exploration, development and mining operations at any of its mineral properties.

Factors beyond the control of the Company may affect the marketability of any gold or other minerals discovered. Metal prices have fluctuated widely, particularly in recent years, and are affected by numerous factors beyond the Company's control, including international economic and political trends, acts of terrorism, expectations of inflation, currency exchange fluctuations, interest rates, global or regional consumption patterns, speculative activities and worldwide production levels. The effect of these factors cannot accurately be predicted.

The Company's operations may be subject to environmental regulations promulgated by government agencies from time to time. Environmental legislation provides for restrictions and prohibitions on spills, releases or emissions of various substances produced in association with certain mining industry operations, such as seepage from tailings disposal areas, which would result in environmental pollution. A breach of such legislation may result in imposition of fines and penalties. In addition, certain types of operations require the submission and approval of environmental impact assessments. Environmental assessments of proposed projects carry a heightened degree of responsibility for companies and directors, officers and employees. The cost of compliance with changes in governmental regulations has a potential to reduce or eliminate the profitability of operations.

Title Matters

Although the Company obtains legal opinions with respect to title to its properties, there is no guarantee that title to such properties will not be challenged or impugned. The Company's mineral property interests may be subject to prior unregistered agreements or transfers or native land claims and title may be affected by undetected defects.

Competition

The mining industry is intensely competitive in all its phases. The Company competes with many companies possessing greater financial resources and technical facilities than itself for the acquisition of mineral concessions, claims, leases and other mineral interests as well as for the recruitment and retention of qualified employees.

4.2 Issuers With Asset-backed Securities Outstanding

N/A

4.3 Issuers With Mineral Projects

Argentine Properties

On November 17, 1994, the Company acquired all of the outstanding shares of Grupo Minera Aconcagua S.A. ("GMA"), a private Argentine company with interests in various exploration projects including the San Jorge Project further described below, from Miramar Mining Corporation ("Miramar"), Grupo R.A. (a group of Argentinean companies controlled by Dr. Ricardo Auriemma) and an Aruba corporation controlled by Dr. Auriemma. The shares of GMA were purchased for 6,000,000 Common Shares (2,600,000 to Miramar, 2,600,000 to Grupo R.A. and 800,000 to the Aruba corporation), and US$1,073,490 in cash to Grupo R.A. Pursuant to that transaction, Miramar was reimbursed $650,000 for out-of-pocket costs incurred in acquiring its interest in GMA and structuring the transaction, property maintenance expenditures in Argentina and due diligence work on the properties. An additional 300,000 Common Shares were issued as to 150,000 Common Shares each to two unrelated third parties for finders' fees.

On June 9, 1995, the Company acquired in an arm's length transaction all of the outstanding shares of RAA, a private Argentinean company, from American Resource Corporation, Inc. ("ARC") for 15,000,000 Common Shares. As part of the same transaction, Miramar Finance (Bermuda) Ltd. ("Miramar Bermuda"), a wholly owned subsidiary of Miramar, loaned $10,000,000 to ARC which was repaid in 1995. ARC has disposed of all 15,000,000 Common Shares issued to it in the RAA transaction.

GMA was transferred back to Dr. Auriemma on April 7, 2000, in part for consideration for settlement of outstanding issues associated with the San Jorge project and as part of the rationalization of Northern Orion's holdings in Argentina. At the same time, the San Jorge project was transferred from GMA to Minera San Jorge S.A. ("MSJ") and a "servidumbre" over surface and access rights was granted to MSJ. The following is a brief description of the Agua Rica and San Jorge exploration projects in which the Company has indirect interests.

Agua Rica Project

The Agua Rica copper/gold property covers an area of about 13.5 square kilometres and is located in Catamarca Province, Argentina. On May 5, 1996, RAA exercised an option (the "Agua Rica Option") to purchase all of the outstanding shares of Agua Rica S.A., a private Argentine company that owns the central mining claims of the Agua Rica property, for a purchase price of US$7.9 million. Pursuant to an agreement made in September 1993 (the "Joint Operating Agreement"), BHP Minerals International Inc. ("BHP") earned a 70% joint venture interest in the project by spending US$1 million on exploration and agreeing to reimburse RAA for all costs of exercising the Agua Rica Option. As at December 31, 2000, BHP had fully reimbursed the Company for the US$7.9 million paid to exercise the Agua Rica Option. Under the Joint Operating Agreement, exploration expenditures are shared between RAA and BHP on a 30-70 basis, respectively. During 2000, the Company contributed $4.4 million (1999 - $5.6 million) to the project, which includes the Company's 30% share of the total budget. In the second quarter of fiscal 2001, the Company elected to reduce its interest in the Agua Rica Project to approximately 29.12% from the original interest of 30%. Cash calls made by the operator to August 31, 2000, will not be made by the Company, and the reduction in carrying cost and the related reduction in accounts payable will be reflected in the consolidated financial statements for the year ended December 31, 2001.

Location and Access

The Agua Rica property is located approximately 30 kilometres north of the town of Andalgala in Catamarca Province, Argentina. The property is at an elevation of 3,300 metres. The original access to the property was by provincial highway to within 20 kilometres and then by four-wheel drive road. In 1997, a road to the property was completed 35 kilometres up the Potrero valley from Andalgala.

History

City Services Limited explored the Agua Rica property from 1969 to 1972. It carried out geological mapping and geochemical sampling and drilled 27 surface holes and 6 underground holes. Many holes were lost or had poor recovery, but some had 40 to 50 metre intersections of greater than 1% copper and gold grades in the range of 0.3 grams per tonne to 0.5 grams per tonne. In 1994, under the Joint Operating Agreement, BHP commenced a work program of mapping, surface sampling and drilling. Follow-up drilling in 1995 intersected thick intervals of near surface, supergene-enriched chalcocite and covellite mineralization containing significant gold, silver and molybdenum. By the end of 1998, more than 67,000 metres of drilling in 176 holes had defined continuous copper-gold-molybdenum mineralization over an area of 2,000 metres by 1,200 metres and to depths of up to 600 metres below surface.

RAA and BHP are continuing with a work program that is designed to advance the project towards completion of a final feasibility study. Work completed in 1998 included 300 metres of underground drifting, collection of 300 tonnes of bulk sample, pilot mill testing as well as revised capital and operating cost estimates. There was no material activity on the property in 1999 or 2000 as all the physical work necessary to support a bankable feasibility study has been completed. Base-line environmental studies are ongoing.

Geology and Mineralization

Basement rocks near Agua Rica consist of Cambrian-Ordovician metamorphic schists and garnet gneisses that were intruded by an Ordovician-age granite (Capillitas Batholith) and a subsequent cluster of Miocene age porphyries (Farallon Negro Complex). The oldest known intrusive near Agua Rica is the Melcho Monzonite with an age of 8.6 million years. Intrusive activity peaked overall at 7 to 8 million years, but persisted until 5.2 million years (dacite dykes at Capillitas).

The oldest rocks at Agua Rica are Paleozoic metasedimentary units that form the wallrock to the mineralized intrusive complex. The metasediments are intruded by granite, aplite and pegmatite in the Morro Alumbrera area. At Quebrada Seca Norte (Mi Vida) and Trampeadero, the metasediments are intruded by porphyry bodies and are altered mainly to quartz and sericite. Immediately west of Agua Rica the granite has a low-angle fault contact relationship with underlying metasediments suggesting it was thrust over the metasediments.

Dacitic porphyries with well-developed stockworking veins and strong quartz-sericite alteration underlie the central area, containing the principal mineralized areas. The porphyries are cut by an igneous/hydrothermal breccia that has been traced over a vertical extent exceeding 1,000 metres. Upper portions of the breccia exhibit advanced argillic alteration and deeper in the system quartz-sericite alteration is predominant. Supergene enrichment has led to almost complete replacement of chalcopyrite with covellite and chalcocite. Near-surface, high-grade chalcocite zones gradually change downward through the mineralization into mixed chalcocite and covellite zones and then into disseminated covellite zones. Leaching and enrichment is most intense in the central area coincident with silica stockworking and quartz-sericite-pyrite alteration at Quebrada Seca Norte (Mi Vida). Molybdenite occurs primarily as clusters on the edges and in the centres of the veins. In deeper areas, anomalous values of sulphur, arsenic, lead and zinc occur with the copper mineralization.

The presence of higher grade copper (greater than 1%) mineralization in three discrete bodies of supergene enrichment over Quebrada Seca Norte (Mi Vida), Filo Amarillo, and Trampeadero implies that a more extensive enriched zone has been dissected by erosion. Higher-grade gold mineralization (greater than 0.5 grams per tonne) is located on the western side of Quebrada Minas and in hydrothermal breccias in western Trampeadero. Molybdenite is present throughout the system with higher grades occurring in

Trampeadero, Filo Amarillo (greater than 0.07%) and within a deep zone on the south side of Quebrada Seca Norte (Mi Vida).

Geological Resources

In February 1998, BHP reported a new resource estimate, based on 151 diamond drill holes totalling approximately 58,000 metres. At the higher copper cut-off grades, the results show an increase in tonnage of about 30% compared to the previous estimate that was based on 103 holes. A summary of the new estimates of the size and average grades of the mineral resource (in millions of tonnes), shown for different cut-off grades, is as follows:

Cut-off	Tonnes (millions)	Copper %	Molyb-denum %	Gold (g/t)	Silver (g/t)	Measured	Indicated	Inferred
0.2%Cu	1,714	0.43	0.032	0.17	3.0	52%	25%	23%
0.4%Cu	750	0.62	0.037	0.23	3.2	70%	21%	9%
0.7%Cu	167	0.99	0.036	0.32	3.3	92%	7%	1%
1.0%Cu	60	1.31	0.040	0.35	4.0	98%	2%	<1%

The resource estimates were prepared in accordance with National Instrument 43-101, The Toronto Stock Exchange's "Disclosure Standards for Companies Engaged in Mineral Exploration, Development & Production" and the Canadian Institute of Mining and Metallurgy classification system. The qualified person responsible for the reserve and resource estimates was Dean McDonald, PhD, P Geo, Exploration Manager, Miramar Mining Corporation.

These were based on results available at the date of calculation. Since the completion of the resource estimation, an additional 25 drill holes have been completed but have not been incorporated in the calculation. In addition, based on drilling to December 31, 1997, BHP has estimated a geologic gold resource in leached caps, which overlie the higher-grade sulphide mineralization using a 0.25 g/t gold cut-off grade, which was publicly disclosed by Northern Orion. This gold may be amenable to recovery by heap leach methods.

Tonnes	89 million
Gold Grade	0.41 g/t
Contained Gold (oz)	1.2 million

These were based on results available at the date of calculation and do not incorporate the results of the abovementioned drill holes completed in 1998.

It has not been established that the gold mineralization at the property may be economically mined.

Initial Feasibility Study

In November 1997, the joint venture released a positive initial feasibility study (the "Study") on the Agua Rica Project, which recommended proceeding with the work to complete a final feasibility study and development plan for the project. The Study was based on resources estimated for the first 40,000 metres of drilling in 103 drill holes completed on the project to the end of 1996. The Study evaluated two development options, both utilizing conventional open pit mining, milling, flotation and concentrate

shipment. The 60K Case examined a single mill line processing 60,000 tonnes per day ("TPD") of ore throughput, while the 120K Case examined adding a second mill line after year two of production, raising the plant throughput to 120,000 TPD from year three on.

Pit plans were developed by BHP for the 60K and 120K cases, which are summarized as follows:

	60K Case	120K Case
Cut-off Grade	0.4% Cu	0.2% Cu
Daily Ore Production	60,000	120,000
Mine Life (years)	24.4	17
Tonnes (000s)	512,351	681,389
Grades		
- Copper (%)	0.66	0.59
- Gold (g/t)	0.26	0.25
- Silver (g/t)	3.44	3.61
- Molybdenum (%)	0.034	0.033
- Copper Equivalent (%)*	0.97	0.89
Waste (billions of tonnes)	1.2	1.2
Strip Ratio	2.35	1.80

* - The copper equivalent grades are based on in-situ values at the following metal prices: copper at US$0.80/lb, gold at US$300 per ounce, silver at US$5 per ounce and molybdenum at US$4 per pound. Actual values received will depend on the metal recoveries that may vary for different minerals.

The mine plans were based on information available at the time and do not incorporate the results of the last 73 drill holes, totalling 27,000 metres, including the newly defined Filo Amarillo zone, completed in 1998. New resource and reserve models are to be prepared in 2000/01 incorporating the geological and metallurgical data generated during 1998 and 1999 once a final metallurgical flow sheet has been selected.

Crushing and grinding tests were completed on six ore composites, indicating the ore to be relatively soft. Approximately 200 flotation tests have been completed on ore composites and, based on these tests, recoveries were estimated to be 87% for copper, 50% for gold and 65% for molybdenum producing a copper concentrate grading 33% copper and a separate molybdenum concentrate. Phase 2 pilot-scale metallurgical work was completed in late 1999. Results from the testing of low-grade copper mineralization (0.2 to 0.4%) commonly yield 80% recovery. Higher-grade copper mineralization typically produced concentrates greater than 30% copper with better than 90% recovery. Some ore types also yield 70% recovery of molybdenum.

Capital costs have been estimated (in first quarter 1997 dollars) to be US$767 million for the 60K Case and US$1.1 billion for the 120K Case. The capital costs were estimated based on a mix of quotations, experiences of the nearby Alumbrera mine which has a similar capacity, and factored costs from BHP's similar mines elsewhere.

Future Work

The initial Study demonstrates the potential feasibility for the development of a large-scale copper-gold-molybdenum mine at Agua Rica based on 1997 metal prices. Since the publishing of the Initial Feasibility Study, all of the fieldwork necessary for a Bankable Feasibility Study has been completed. The remaining work consists primarily of optimisation studies regarding the evaluations of the mining and processing alternatives together with operating models that could offer the greatest potential returns. Coincident with the optimisation studies, the environmental baseline studies will be concluded.

BHP has presented a budget for the Agua Rica project for the period July 1, 2001, to June 30, 2002. The proposed budget calls for expenditures of US$1.5 million. The proposed budget and work program is currently being reviewed by the Company.

Fiscal Stability Application

The Agua Rica joint venture filed a fiscal stability application for the project in 1998. The application was approved and guarantees protection for the project from increases in taxes, import duties, royalties and other government-controlled costs for a period of thirty years.

San Jorge Project

The original San Jorge copper/gold property consisted of seven mining concessions (covering about 5 1/2 square kilometres) and 35 mineral claims (covering about 102 square kilometres) owned by MSJ. The purchase price for the seven concessions was US$4.015 million. During 2000, the Company expended $0.414 million in exploration and development expenses on the San Jorge project (versus $1.7 million in 1999). In fiscal 2000 the Company wrote down the San Jorge project by $22.027 million due continuing low metal prices. The property remains in good standing.

Location and Access

The San Jorge property is located approximately 90 kilometres northwest of the city of Mendoza in Mendoza Province, Argentina and 250 kilometres northeast of Santiago, Chile. The property is accessed from the paved Mendoza-Santiago highway to the town of Uspallata and then 40 kilometres north on a good gravel highway along the Uspallata valley. The property is at an elevation of 2,500 metres and the deposit occurs as a small hill surrounded by flat alluvium plains.

History

Several test pits were dug at San Jorge in the 1960s to investigate outcropping copper-oxide mineralization and in 1964 Compania Minera Aguilar ("Aguilar") optioned the property. Over the next four years, Aguilar completed approximately 950 metres of trenching, 111 kilometres of induced polarization geophysical surveys ("IP") and 32 drill holes for 4,894.5 metres of core. Exploraciones Falconbridge Argentinos ("Falconbridge") optioned the property in 1973 and drilled six holes for 1,126 metres. Falconbridge also sent samples for metallurgical testing.

RAA optioned the property in 1992 and, between 1993 and 1995, 45 reverse circulation holes for a total of 5,518 metres and two core holes totalling 165 metres were drilled. In 1994, metallurgical testing of oxide mineralization from various cutting samples and of an enriched zone was conducted. From 1994 to 1996, 43 reverse circulation holes were drilled for 3,942 metres and eight lines totalling 17.6

kilometres of IP were surveyed over and beyond the mineralized outcrop. The option to RAA was terminated and GMA purchased the property in 1995. Between September 1995 and February 1996 a 5,746-metre drill program was conducted on the property. From this drilling, samples were taken for metallurgical testing.

In March 1999, GMA and Argentina Mineral Development ("AMD"), an associate of Climax Mining of Australia, entered into an agreement (the "AMD Agreement") that allows for the consolidation of a large land package surrounding the San Jorge property. Both companies agreed to contribute their property holdings and mining rights in San Jorge and the surrounding area into a newly formed holding company with GMA owning 85% and AMD having the remaining 15%. This new company, Minera San Jorge S.A. ("MSJ") is to continue the development of the property, working towards producing a bankable feasibility study. AMD's ownership in the holding company is to be redeemed in exchange for a 2% net smelter return royalty ("NSR") on the mine developed if MSJ produces a feasibility study within three years, obtains financing within another year and commits to construction of a mine within another six months. If AMD's interest were redeemed, GMA would then own 100% of the new company. If the project does not proceed, the ownership structure will remain in place and will allow for potential disposal of each party's interest.

In April 2000, GMA's holding in the San Jorge property was transferred without cost or penalties to MSJ. The transfer was part of the reorganization of Northern Orion's Argentine holdings and part of the settlement with Dr. Ricardo Auriemma.

Geology and Mineralization

San Jorge mineralization consists of a porphyry copper-gold deposit. Mineralization at San Jorge trends northeast and occurs in four approximately horizontal but irregular layers, from top to bottom as follows:

Leached: A leached cap with copper grades averaging 0.15% copper or less, primarily as green and black copper oxides that should be amenable to dump leaching.

Oxide: Best developed along the western contact of the granite porphyry with the clastics containing malachite, chrysocolla, tenorite and pitch limonite with grades averaging approximately 0.5% copper and 0.25 grams of gold per tonne at a 0.1% copper cut-off.

Enriched: Associated with areas of intense faulting and repetitive water recharge, and occurs as sooty and steely chalcocite, covellite, digenite and subordinate chalcopyrite averaging approximately 0.7% copper and 0.20 grams of gold per tonne at a 0.1% copper cut-off.

Primary: Three high-grade areas have been defined in clastics sedimentary units. Good copper grades in both sedimentary and intrusive rocks have been detected to a depth of 495 metres below surface. Copper occurs dominantly as chalcopyrite with very minor bornite. At a 0.4% copper cut-off, the primary mineralization has an average grade of 0.5% copper and 0.2 grams of gold per tonne.

Gold occurs in native form and uniformly grades 0.2 grams of gold per tonne throughout the copper deposit. Silver distribution is approximately proportional to copper grade and averages 3.5 grams of silver per tonne overall.

Resources

The total indicated and inferred resource at San Jorge for oxide, enriched, and primary mineralization, using a 025% copper cut-off, is estimated by Northern Orion to be 381.4 million tonnes grading 0.39 % copper and 0.15 g/t Au for a contained 1.49 million tonnes of copper and 1.8 million ounces of gold. At a 0.4% copper cut-off, the total resource is reduced to 113.1 million tonnes grading 0.60% copper and 0.18 g/t gold for a contained 670,000 tonnes of copper and 636,000 ounces of gold.

The Company, based on open pit mining and heap leaching of the oxide, has estimated an indicated resource and secondary enriched mineralization for solvent extraction and electrowinning (SX/EW) for copper recovery. Assuming a US$0.85 per pound copper price, a 0.25% copper cut-off, and a 2% NSR with incremental dump leach of low-grade material, an in-pit resource has been estimated at 57.3 million tonnes grading 0.61% copper, for 348,900 tonnes of contained copper. Primary copper-gold mineralization could then potentially be evaluated for a primary milling style of operation, producing concentrates. At today's metal prices this is not economic but gives an idea of the potential of the property if metal prices were to improve.

Metallurgy

In 1997, a metallurgical test program was undertaken to determine the response of the ore to bacterial oxidation. Preliminary results indicated recoveries up to 75% in 250 days. Flotation tests on primary mineralization have given copper recoveries of up to 92% producing concentrates grading 25% copper. Gold is mostly free milling and recoveries of 60% have been achieved.

Exploration

Drilling by GMA and AMD has encountered indications of additional copper mineralization to the northeast, east and southeast of the main San Jorge deposit in a similar geologic setting to the main San Jorge deposit. These results indicate the potential for the expansion of the deposit beyond the current resource.

Areas to the east and southeast of San Jorge, within the expanded property area, contain large IP chargeability anomalies that coincide with anomalous copper-bearing, intercepts in the core of a reconnaissance drill hole, indicating potential for satellite copper systems similar to the San Jorge deposit. The Company is currently evaluating the potential for exploring for and developing additional resources in the satellite areas. However, limited work is planned for 2001 in light of the continued poor metal prices.

Cuban Properties

Acquisition of Properties

The Company entered into a letter of intent dated May 1, 1995, with Miramar and subsequently entered into an agreement dated October 4, 1995 (the "Transaction Agreement"), with Miramar, Red Lion Management Ltd. ("Red Lion") and Richard Dewinetz ("Dewinetz") (collectively the "Vendors") pursuant to which on December 20, 1995, the Company purchased (the "MMI Transaction") from the Vendors all of the outstanding shares of Minera Mantua Inc. ("MMI") in exchange for 24 million Common Shares of the Company. MMI, through Minera Cobre S.A. ("Cobre") and Minera Delita S.A. ("Delita"), both of which became wholly-owned subsidiaries of MMI prior to the completion of the MMI Transaction, has a 50% working interest in the Mantua copper project (the "Mantua Project"), and had the right to earn a 50% working interest in the Delita gold project (the "Delita Project"), respectively. The Mantua Project and the Delita Project are both located in Cuba and are referred to collectively herein as the "Cuban Projects".

Prior to the MMI Transaction, Miramar owned all of the outstanding shares of Cobre and Delita. Miramar acquired all of the outstanding shares of Cobre and Delita from Matlock Mining, N.L. ("Matlock"), an Australian company, pursuant to an agreement dated March 1, 1993 (the "Matlock Purchase Agreement"). Pursuant to the Matlock Purchase Agreement, Miramar paid Matlock share consideration having a value of approximately $475,000 in respect of the purchase price for the shares of Cobre and Delita and was obligated to pay a further $350,000 to Matlock (which amount was subsequently paid by the Company). The Matlock Purchase Agreement also provides that (i) Cobre is obligated to repay to Matlock the $750,000, plus interest, which was invested by Matlock in the Mantua Project and the Delita Project prior to the sale of the shares of Delita and Cobre by Matlock to Miramar pro rata with the return of equity to Miramar, and (ii) Matlock is entitled to receive 12% of the difference between all profits received by Cobre and Delita from their 50% working interests in the respective projects and administrative expenses (to a maximum of US$150,000 per year for each company) of Cobre and Delita.

Prior to the MMI Transaction, Miramar transferred to MMI all of the outstanding shares of Cobre and Delita and the obligation to pay $350,000 to Matlock and converted all of its advances to fund the Cuban Projects to April 30, 1995 into shares of MMI. The aggregate cost, as at April 30, 1995, of Miramar's interest in Cobre and Delita, including the amount of $350,000 payable to Matlock and amounts advanced by Miramar to Cobre and Delita to fund the Cuban Projects, was $7,188,261. A wholly owned subsidiary of Miramar was indebted to each of Red Lion and Dewinetz in the amount of $75,000, which amounts were used for the Cuban Projects. Prior to the MMI Transaction, Red Lion and Dewinetz converted such indebtedness into shares of MMI.

Pursuant to the MMI Transaction, Miramar, Red Lion and Dewinetz exchanged all of their shares of MMI respectively, at an ascribed price of $2.50 per share. For tax purposes the shares of MMI were transferred to the Company at the respective cost bases of such shares to the Vendors. Accordingly, in the event the Company disposes of the shares of MMI at an amount in excess of such cost bases, the Company will realize a taxable gain on such disposition.

The reserve and resource estimates for the Cuban projects have been prepared in accordance with proposed OSC National Instrument 43-101 and the Canadian Institute of Mining and Metallurgy classification system.

Mantua Project

The Mantua property contains a secondarily enriched copper deposit. It is located in Pinar del Rio Province, western Cuba, 240 kilometres from Havana. The property consists of an 8 square kilometre production concession and an adjoining 11.2 square kilometre area of interest. The site is reached via a four-lane highway from Havana to Pinar Del Rio, which is 65 kilometres east of Mantua. A paved secondary road then links with the site.

Acquisition Agreement

Cobre acquired a 50% working interest in the Mantua Project pursuant to an agreement with Geominera SA ("Geominera") dated August 13, 1993, (as amended, the "Cobre Association Agreement"). Geominera is a Cuban corporation formed by the Cuban Ministry of Basic Industry for the purpose of holding mineral rights and entering into agreements with foreigners for the development of such mineral rights. The Cobre Association Agreement and the related articles of incorporation are the constating documents of Cobre Mantua S.A. ("Comantua"), a Cuban joint enterprise the shares of which are allocated on a 50/50 basis between Geominera and Cobre, with each party's equity capital contribution agreed to have been US$1 million. Geominera's equity capital contribution was comprised of the

exclusive right to explore, develop, mine and exploit the Mantua Project, together with all previous studies and investigations relating to the Mantua Project. Cobre's equity capital contribution was comprised of the feasibility study on the Mantua Project that was prepared in 1993 together with a cash contribution of US$20,000. Profits of Comantua are to be distributed 50% to Cobre and 50% to Geominera. Pursuant to the Cobre Association Agreement, Cobre was required to negotiate and obtain all financing necessary for the commercial development of the Mantua Project by June 30, 1995. However, subsequent to the date of the Cobre Association Agreement, Geominera agreed that the June 30 date would be waived so long as Cobre obtained financing when required to develop the Mantua project.

Under the Cobre Association Agreement, in order to repay loans received by Comantua from Cobre, Cobre is entitled to the total net income (after satisfaction of all current obligations in respect of third party financing) of the Mantua Project during the first two years of operations of the mine and the industrial installations. If any such loan amount remains outstanding at the end of that two-year period, Cobre will continue to be entitled to no less than 75% of the net income of the Mantua Project until all such amounts owed are repaid. All major decisions of Comantua require the approval of the representatives of each of Geominera and Cobre; however, all ordinary operating decisions are made by the operations manager who is nominated by Cobre for a period of time equal to 1.5 times the period of time required for Cobre to receive a return of its capital investment.

History and Exploration

In the early 1960s workers from the Instituto de Recursos Minerales, a Cuban government agency, explored the Mantua copper deposit. In 1964 copper mineralization was discovered beneath an iron rich gossanous cap by an exploration program, including drilling, supervised by Soviet geologists. In 1992 Marc Rich & Co., a United Kingdom-based investment firm, completed an additional 12 drill holes, geotechnical investigations and metallurgical test work.

In late 1993 Minera Cobre ("MC") commenced detailed investigations, including an additional 13 drill holes, bulk sampling and metallurgical testing. An 11 tonne metallurgical sample was collected from one of the test shafts for metallurgical testing. A preliminary metallurgical scoping study was completed in the latter part of 1993 on material collected from one drill hole and a metallurgical test program was commenced in February 1994 on material from the 11 tonne bulk sample.

In the summer of 1994 MC drove a 145-metre exploration tunnel to access the ore body and in September and October 1994 extracted 600 tonnes of material for pilot scale metallurgical testing. A pilot plant was operated using material extracted from the tunnel. Pilot plant operations were conducted in two phases, in November and December 1994 and from January to March 1995. Results of these operations confirmed the viability of the preferred processing method.

In 1995 MC identified significant gold values in the gossan cap overlying the main copper deposit, as well as payable gold credits in the copper ore itself, and a zone of anomalous gold values parallel to the copper deposit. A program of work to evaluate the potential for an economic gold operation to recover gold values from the gossan cap was commenced in February 1995. A total of 65 drill holes were completed, delineating a zone of potentially commercial gold values over the centre of the copper deposit. Metallurgical testing has demonstrated the amenability of this material to conventional heap leach recovery methods.

In 1996 a regional exploration program was initiated to identify additional gold occurrences in gossans, saprolites and regional shear structures. In excess of six hundred surface samples were taken throughout the region and some minor gold occurrences were identified.

Drilling in 1997 involved two main phases that included nine diamond drill holes for 655 metres and eight diamond drill holes for 684.7 metres, respectively. Both programs were primarily designed to define the distribution of near surface, gold gossan; however, the second program included two deep holes. Late in the year a single hole was drilled to collect a metallurgical sample.

Geology and Mineralization

The Mantua copper deposit is a secondary enrichment of copper mineralization produced by the weathering of primary sulphide mineralization of volcanogenic-exhalative origin. Copper has been leached from trace amounts of sulphide copper mineralization (chalcopyrite) and re-deposited beneath a gold-rich gossanous cap.

Primary sulphide mineralization, both massive and disseminated, occurs within a 50 to 100 metre thick sequence of inter-layered basic volcanic rocks, shale, siltstones and sandstones. Folding and thrust faulting in the Late Mesozoic was focused between the more competent limestone units causing extensive shearing and brecciation of the volcanic and sedimentary sequence.

The folding of the Mantua and surrounding area rocks is interpreted as a broad syncline and anticline defining an open "S" shape. The eastern limb of the syncline contains the majority of the mineralization defined by drilling. The Mantua copper deposit forms an elongate lens with a northeast to southwest strike, concordant with the enclosing formations. The deposit dips 50 to 70 degrees to the west and has a strike length of 1,300 metres.

Unoxidized mineralization is dominated by pyrite, with some chalcopyrite and sphalerite. The leached cap oxide zone is composed of lateritic iron oxides with essentially no copper content. The supergene zone below this leached cap consists mainly of chalcocite, with cuprite, covellite and some native copper. The secondary-enriched copper zone can be divided into three distinct ore types that may be segregated during mining operations.

Geological Resources

The reserves and resources at Mantua have been calculated by the Company, and have been confirmed by qualified third parties. Within the proposed open pit and assuming a copper price of US$0.85 per pound, proven and probable reserves are estimated to be 7,525,000 tonnes grading 2.74% copper containing 206,212 tonnes or 454.6 million pounds of copper and additional measured and indicated resources are estimated to be 4,454,000 tonnes grading 0.76% copper containing 33,850 tonnes or 74.6 million pounds of copper. Mine Plan and Capital Cost

After a thorough review of previous test work and a rigorous program of laboratory and pilot tests conducted in Cuba, Chile and Canada from 1993 through 1998, a processing scheme was selected which utilizes modern, proven processing technologies to extract the maximum amount of copper economically possible. These processing steps include grinding, agitation leaching, solvent extraction and, finally, electrowinning for the production of copper cathodes.

The copper ore will be fed as mined directly to an SAG (semi-autogenous grinding) mill, followed by leaching in agitated tanks. A series of counter current decantation thickeners will then wash out all of the copper-containing acid solution. Copper-containing acid solutions will be processed through a solvent extraction circuit to form a strong electrolyte solution from which copper cathodes will be produced by conventional electrowinning. Tailings will be pumped to a nearby impoundment for disposal based on an environmentally sound design.

The preliminary design is for processing facilities capable of treating 750,000 tonnes of high-grade copper ore per annum.

Phase 1 Gold Leaching

Construction of the Phase 1 gold leaching at the Mantua Project commenced in March 1997 and concluded in February 1998. Phase 1 consisted of a heap leach gold operation that was planned to recover approximately 70,000 ounces of gold from the gossan cap over a two-year period at a capital cost of approximately US$11.6 million. Removal of this material was intended to allow access to the high-grade copper reserve under the gossan cap.

Mining of gold ore commenced in February 1998 and was concluded in September 1999. Prior to achieving commercial production, all costs of start up operations and related interest and overhead were capitalized. During the operation, recovered gold was below expectations and totalled 31,389 ounces of which the Company's share was 15,694 ounces. Due to higher than expected ore clay and fines content field leach times had to be extended to 70 days from the designed 28 days and ultimate gold recoveries were 50% of what was forecast.

Phase 2 Copper Mining

The Phase 2 copper operation is planned to commence after gold leaching is completed. Evaluation of the copper phase is proceeding, with production targeted to average about 40 million pounds of copper cathode per year at a cash cost of US $ 0.45 per pound.

Capital costs are anticipated to be US$ 50 million with a moderate pressure and temperature ferric leach process. This process utilizes proven technologies that are in use at other mining operations.

Preliminary financial evaluation by the Company, independently reviewed by Bateman Project Holdings Limited, indicates that an average annual production rate of 39 million pounds of copper cathode can be achieved with direct operating costs of US $0.445 per pound over a 11 year mine life. This would place the operation in the lower quartile of world copper production costs. Capital costs including contingency are estimated at US $48.5 million.

In August 2001, the Company and International Barytex Resources Ltd. ("Barytex") announced that they have entered into an option agreement whereby Barytex may acquire the undivided 50% interest of the Company in the Mantua Copper Project in Cuba by the acquisition of 100% of the issued and outstanding shares in Minera Mantua Inc., a wholly-owned subsidiary of the Company. Geominera S.A., a Cuban company controlled by the government of Cuba, holds the remaining 50% interest in the project.

In order to exercise the option, Barytex must:

- assume and pay all carrying costs relating to Northern Orion's operations in Cuba and the Project;
- complete a bankable feasibility study within 18 months;
- arrange all financing required in order to commence commercial production; and
- commence construction of the project within 120 days of making a production decision.

The project is subject to approximately US $28 million in subordinated debt owing to the Company from Geominera S.A. in respect of past advances from the Company to fund the exploration and development of the project including mining of a gold-enriched gossan capping the copper deposit.

Under the terms of the Agreement, Barytex may acquire the subordinated debt from the Company, thereby significantly enhancing the economics of the project, in consideration for 4.5 million shares of Barytex. The project is subject to a 2.5% net smelter return royalty from attributable production.

Barytex has retained Hatch, an international engineering firm, to prepare a report on the Mantua Copper Project to qualify the transactions for regulatory approvals.

4.4 Issuers with Oil and Gas Operations

N/A

5 SELECTED CONSOLIDATED FINANCIAL INFORMATION

5.1 Annual Information

Five Year Comparative Data

All dollar figures are in thousands except for per share data that is in dollar amounts.

	2000 ($)	1999 ($)	1998 ($)	1997 ($)	1996($)
Total Revenue	66	2,987	3,629	637	2,593 (2)
Loss for the year	23,804	18,167	21,287	7,126	1,526 (2)
Loss per share	0.28	0.25	0.29	0.10	0.02 (2)
Total Assets	83,071	119,265	131,411	138,621	123,819
Long-term Debt	27,254	27,669	33,828	13,567	1,370
Dividends declared	NIL	NIL	NIL	NIL	NIL

(1) As at and for the year ended December 31

(2) Includes a gain on disposal of mineral properties of $1.3 million or $0.018 per common share

5.2 Dividends

There are no restrictions that could prevent the Company from paying dividends, however, the Company has not paid any dividends on its common shares since incorporation and has no present intention of paying dividends as it anticipates that all available funds will be invested to finance the growth of the Company.

5.3 Foreign GAAP

N/A

6 MANAGEMENT'S DISCUSSION AND ANALYSIS

6.1 Form 44-101F2 Disclosure

The Company is primarily engaged in the development of its main mineral properties – Agua Rica in Argentina and Mantua in Cuba. Financial constraints on the Company for the past three years have necessitated a significantly reduced scale of all corporate activities. Consequently, many property interests have been evaluated in light of such constraints and released.

Exploration and Development Activities

Agua Rica

Work continued at a reduced level in 2000 at the 30% owned Agua Rica Project in Argentina. The project operator, BHP, completed the 1999/2000 work program in June 2000. The Company's share of the work program (including management fees to the operator) in 2000 was approximately $682,000 (1999 - $2,895,000). To date, the Company has funded all required cash calls to meet its commitment to Agua Rica. Due to the persistent weak world copper price in 2000, activities at Agua Rica continued on a reduced scale from previous years. The 1999/2000 work program built on the work performed in completing the Initial Feasibility Study, which was issued in November 1997. The findings of this study indicated that a large low-cost mine could be developed that would have attractive returns on capital invested. On a long-term basis, the Company's share of the capital requirement to develop an open pit mine and concentrator at Agua Rica could be in excess of US$ 200 million.

Effective June 30, 2001, the Company has elected to reduce its interest in the Agua Rica Project to approximately 29.3% from its original interest of 30%. Cash calls made by BHP as operator will not be made by the Company to BHP with respect to cash calls made to June 30, 2001. A corresponding reduction in carrying cost and accounts payable was reflected in the Company's balance sheet in the second quarter.

Significant progress has been made in the first half of fiscal 2001 with the restructuring of the project that would result in having the BHP and Northern Orion interests held in a single corporate Entity. Each of the companies would own equity reflecting a 70%/30% ownership ratio, which was the ownership until the end of the second quarter of fiscal 2001. Management is continuing to examine all of the Company's options on how best to proceed with this important project including alternative operating scenarios and restructuring of holdings.

Mantua Copper

During fiscal 2000, the Company undertook to seek financing for a bankable feasibility study for the copper mining phase with negotiations underway for funding to complete this study. A final production decision for the copper phase is pending the results of this feasibility study. The Company's ability to develop the copper phase at Mantua is dependent upon obtaining third party financing. A production decision for the copper phase is dependent upon the results of the feasibility study.

Subsequent to the end of the second quarter the Company announced that it had entered into an agreement with International Barytex Resources Limited ("Barytex"). Under the agreement, Barytex has an option to acquire all of the shares of Minera Mantua Inc., a wholly owned subsidiary of the Company through which it holds its 50% interest in the Mantua Copper Project. To exercise its right, Barytex must assume the costs and obligations of the Company's Cuban operation, finance and complete the bankable feasibility study and finance and build the copper mine and plant. During the option period, the Company may nominate two directors to the Barytex board. Subsequent to the exercise of the option, the Company would retain a 2% net smelter royalty in proceeds to Barytex from the mine.

The Company is also owed an aggregate amount of US$28 million by the project in consideration of previous expenditures. Barytex may, if it elects to proceed to production, acquire this debt in exchange for 4.5 million common shares of Barytex.

Commitments

Until the end of the second quarter of fiscal 2001, the Company had accrued the contribution to the Agua Rica joint venture with BHP. Under the joint venture, exploration and development expenditures are made under the terms of annual work programs and are contributed to on the basis of the respective party's interest. Northern Orion's interest is 30% and BHP has a 70% interest. At June 30, 2001, the Company elected to reduce its interest in the Agua Rica Project to an approximate 29.3% interest. It is expected that total expenditures under the current 12-month program will be approximately $2.3 million (US$1.5 million), of which the Company's share is $0.68 million (US$0.45 million), including management fees. The Company currently does not have sufficient cash resources to fund its share of the program, and will have to continue to raise capital to maintain its current interest or continue to gradually reduce its interest to a 10% carried interest. This decision will have to be made annually on presentation of the annual budget to the Company by BHP, the operator of the joint venture.

Outlook

Advanced Stage Projects

The Company has evaluated, on a pre-feasibility basis, the potential for developing an SX/EW operation at San Jorge. Even though the results were encouraging, management believes that the project economics could be more attractive with the definition of additional resources through further exploration drilling supplemented by a recovery in the copper price. The Company is seeking a third party with which to form a joint venture to undertake the necessary work program and to complete a final feasibility study.

Exploration Projects

In light of financial constraints, the Company has suspended exploration efforts in all non-core properties. The Company may perform exploration to generate additional new prospects as and when financial resources allow.

Quarterly Information

Two-Year Comparative Data by Quarter

(All Figures expressed in thousands of dollars, except per share amounts)

The following table sets out selected financial information for the four quarters in fiscal 2000:

	Q4 ($)	Q3 ($)	Q2 ($)	Q1 ($)
Total Revenue	23	29	8	6
Loss for the year	22,467	273	370	694
Loss per share	0.25	0.01	0.01	0.01

The following table sets out selected financial information for the four quarters in fiscal 1999:

	Q4 ($)	Q3 ($)	Q2 ($)	Q1 ($)
Total Revenue	80	464	1,124	1,319
Loss for the year	5,070	7,581	3,817	1,699
Loss per share	0.12	0.10	0.01	0.02

Liquidity and Capital Resources

General

The Company's financial condition in 2000 continued to be challenged principally due to the level of management fees and administrative overhead, the decision to continue to fund project expenses, and the consequential costs associated with amounts of funds advanced by the Company's controlling shareholder, Miramar Mining Corporation ('Miramar').

Due to the prospective nature of the mineral exploration business and the number of exploration properties held, the Company has a limited ability to generate sources of internal cash flow from operations. The Company has financed the acquisition, exploration and development of its properties through a combination of the issuance of common shares to the public, borrowings from Miramar, attracting other companies to joint venture the evaluation of properties and through third party borrowings.

When, and if, the Company places any of its exploration properties into production, it is anticipated that the resulting cash flows may become sufficient to sustain future operations, exploration and development. At present, the Company lacks the internal financial ability to advance any of its projects to the production stage.

Cash Resources and Liquidity

At the end of fiscal 2000, the Company had a working capital deficiency of $924,000 compared to a deficiency of $187,000 at the end of 1999. However, subsequent to the year ended December 31, 2000, the Company arranged a private placement in the amount of $1,500,000 as further described below under "2001 Financial Restructuring". These funds are not sufficient to continue the full evaluation of all of the Company's mineral prospects. Management of the Company is in the process of further evaluating all of the Company's property interests in order to ensure that value is realized. In addition, all contemplated expenditures are reviewed to ensure that cash commitments are prioritized and that existing capital resources are available to maintain the core properties currently held. Management is evaluating potential new sources of financing to meet the anticipated expenditures required to further advance its projects.

2001 Financial Restructuring

In 2000, Miramar made advances to the Company to fund working capital requirements and various exploration expenditures. Interest was charged on these advances at 8% per annum. As at the end of fiscal 2000, the amount owed to Miramar including advances and capitalized interest payable had accumulated to approximately $27.3 million.

In February 2001, the Company reached an agreement to restructure and partially settle amounts owing to Miramar. Under the agreement, Miramar agreed to convert convertible debenture, reduce the cap of royalty and net proceeds interest ('Royalty Interest') from $17,987,000 to $15,000,000 and restructure the remaining indebtedness of the Company to Miramar to $6.9 million.

The largest component of the debt restructuring was the conversion of Miramar's convertible debenture, resulting in the issuance of an additional 14.4 million shares to Miramar. A total of $21.2 million in debt was converted at a per share conversion price of $1.47.

The Royalty Interest entitles Miramar to receive the economic equivalent of a 2.5% net smelter return royalty on all of the Company's mining interests and to receive 50% of the net proceeds from the sale of any of the Company's mining interests, excluding the San Jorge project in Argentina. The total of the payments under the Royalty Interest is limited to $15.0 million.

In addition, under the agreement, the remaining indebtedness to Miramar, amounting to $6.9 million, was consolidated and restructured into two long-term convertible notes that may be converted at $0.15 per share and are due on demand after June 30, 2002. The new convertible notes no longer require that the Company maintain any minimum level of working capital as was previously required.

The Company continues its process of determining methods to obtain sufficient capital resources to meet its short and medium term financial requirements. Long-term liquidity and capital resources will be dependent upon the successful development and profitable operation of its mineral properties and the availability of capital from the equity markets. In order to maintain financial resources and take advantage of financial leverage, the Company will continue to negotiate with major financial institutions to obtain project financing.

Results of Operations

The Company recorded a loss of $23.8 million or $0.28 per share in 2000 compared to a loss of $18.2 million or $0.25 per share in 1999. The loss in 2000 includes write-downs on mineral properties (primarily a write down of the San Jorge project), and other assets of $22.3 million or $0.26 per share compared to write-downs of mineral properties, inventories, other assets and marketable securities of $12.3 million or $0.17 per share in 1999. Excluding write-downs, the Company's loss in 2000 of $1.6 million compares to a loss of $4.8 million in 1999. The loss in 1999 reflected the losses from the gold operations in Cuba, the costs of continued curtailment of exploration activities in Argentina and Cuba and costs of depreciation related to the Cuban operating assets. During 2000, the decreased costs were due in part to the reduced scale of operations, a 51 percent reduction in management fees charged by Miramar and an 85 percent reduction in termination and severance costs.

Management's Discussion and Analysis of Financial Conditions and Results of Operations for the year ended December 31, 2000, is set out at pages 5 to 6, inclusive, of the Company's 2000 Annual Report filed via SEDAR on September 21, 2001, under "MD & A – English".

6.2 Foreign GAAP

N/A

7 MARKET FOR SECURITIES

7.1 Market for Securities

The Company's common shares are listed and posted for trading on the Toronto Stock Exchange under the symbol NNO.

8 DIRECTORS AND OFFICERS

8.1 Name, Address, Occupation and Security Holding

The following table sets the names and municipalities of residence of the directors and officers of the Company, their positions held with the Company and their principal occupations.

Name, Office Held and Municipality of Residence	Director Since	Principal Occupation for the Previous Five Years
M. Norman Anderson [1] Director Vancouver, BC	4-Feb-2000	President of Anderson & Associates
John K. Burns [1] Chairman of the Board and Director Philadelphia, Pa.	26-May-1995	President & Chief Executive Officer, Frontier Resources Management Inc.
P. Terence O'Kane [1] Director Vancouver, BC	19-Jun-1999	Self-employed Metallurgical Engineer
Stephen J. Wilkinson [1][2] President, Chief Executive Officer and Director North Vancouver, BC	19-Jun-1999	Self-employed Businessman; 1997-1999, Mining Analyst, Global Mining and Metals Group for RBC Dominion Securities Inc.
David W. Cohen, Chief Operating Officer and Senior Vice President West Vancouver, BC	N/A	Self employed businessman Senior Vice President, Miramar Mining Corporation
Robert Cross Director West Vancouver, BC	13-Mar-2001	Managing Director of Vencourt Capital Inc.
Frank A. Lang Director West Vancouver, BC	02-May-2001	Honorary Chairman of Aurizon Mines Ltd., Chairman of Sultan Minerals Inc., President and Director Cream Minerals Ltd., Valerie Gold Resources Ltd. and Emgold Mining Corporation, Director and/or Officer of other natural resource companies
Sargent H. Berner Secretary Vancouver, BC	N/A	Partner, DuMoulin Black, Barristers and Solicitors

Name, Office Held and Municipality of Residence	Director Since	Principal Occupation for the Previous Five Years
Mary P. Collyer Assistant Secretary Vancouver, BC	N/A	Partner, DuMoulin Black, Barristers and Solicitors
Shannon M. Ross Chief Financial Officer Burnaby, BC	N/A	Chief Financial Officer and Corporate Secretary of the Company since June 29th 2001; Controller and Corporate Secretary, Dia Met Minerals Ltd., January to July 1999; Controller, Hunter Dickinson Group of companies, 1996 to 1999, Vice President, Corporate Affairs, Quartz Mountain Resources Ltd., January 1990 to present.
Anthony P. Walsh Director West Vancouver, BC	5-Mar-1999	President and Chief Executive Officer, Miramar Mining Corporation
Stephen P. Quin Director West Vancouver, BC	9-Dec-1998	Executive Vice-President of Miramar Mining Corporation

(1)Member of executive committee.

(2) Member of audit committee.

The directors of the Company are elected and hold office until the next annual general meeting of the shareholders, unless any director resigns, is removed, or becomes disqualified earlier.

Based on information provided by the individual directors, as at May 18, 2001, the directors and officers of the Company as a group, beneficially own, directly or indirectly, or exercise control or direction over 70,138,275 common shares or 61.6% of the voting common shares of the Company. As at May 18, 2001, Messrs. Anthony Walsh and Stephen Quin were both directors of Miramar Mining Corporation, which at the time owned 70,012,471 of the 70,138,275 shares held by directors and officers. On May 1, 2001, Mr. Robert Cross obtained an option to purchase up to 60,012,471 shares of the Company, held by Miramar Mining Corporation, at an exercise price of $0.08 per share expiring on June 30, 2002.

8.2 Corporate Cease Trade Orders or Bankruptcies

To the knowledge of Management, except as otherwise disclosed herein there have been no directors or officers of the company, or any shareholder holding a sufficient number of securities of the Company to affect materially the control of the Company, who is, or within the last 10 years before the date of this AIF, was a director or officer of any issuer which, while that person was acting in that capacity:

(a) was the subject of a cease trade order or similar order, or an order that denied the other issuer access to any exemptions under Canadian securities legislation, for a period of more than 30 consecutive days; or

(b) became bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency or was subject to or instituted any proceedings, arrangements or compromise with creditors or had a receiver, receiver manager or trustee appointed to hold its assets;

Robert Cross, a director of the Company, joined the board of Livent Inc. ("Livent") as part of the M. Ovitz Group in June 1998. Accounting irregularities were subsequently uncovered and Livent declared bankruptcy in late 1998. Thereafter a class action suit was filed against Livent and its directors. Mr. Cross is currently not involved in any actions or proceedings.

8.3 Penalties or Sanctions

To the knowledge of Management, there have been no directors or officers of the Company, or any shareholder holding a sufficient number of securities of the Company to affect materially the control of the Company, that have:

(a) been subject to any penalties or sanctions imposed by any court relating to Canadian securities legislation or by any Canadian securities regulatory authority or has entered into a settlement agreement with a Canadian securities regulatory authority; or

(b) been subject to any other penalties or sanctions imposed by a court or regulatory body that would likely be considered important to a reasonable investor in making an investment decision.

8.4 Personal Bankruptcies

To the knowledge of Management, there have been no directors or officers of the Company, or any shareholder holding a sufficient number of securities of the Company to affect materially the control of the Company, or a personal holding company of any such person has, within the last 10 years before the date of this AIF, become bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency, or was subject to or instituted any proceedings, arrangements or compromise with creditors, or had a receiver, receiver manager or trustee appointed to hold the assets of the director or officer.

8.5 Conflicts of Interest

From May 2001 until July 31, 2001, the Company received administrative services from Lang Mining Corporation ("Lang Mining"), a private company of which Frank A. Lang, a director of the Company, is the President, a Director and a major shareholder, and reimbursed Lang Mining for expenses.

Since August 1, 2001, management, administrative, geological and other services have been provided by LMC Management Services Ltd., a private company held jointly by the Company and other public companies, to provide services at cost to the various individuals, partnerships and corporate entities currently sharing office space with the Company.

Miramar Mining Corporation ("Miramar") owns approximately 62% of the Corporation and is therefore considered an insider of the Corporation.

During the financial year ended December 31, 2000, the Corporation paid management fees totalling $420,000 to Miramar ($861,000 in 1999). A portion of the management fees paid to Miramar was for the payment of the salary of a shared member of senior management of the Corporation, for services performed as an officer of the Corporation.

In December 1999, the Corporation reached an agreement to restructure and partially settle amounts owing to Miramar. Under the agreement, the Corporation issued a royalty and net proceeds interest ("Royalty Interest") entitling Miramar to receive the economic equivalent of a 2.5% net smelter return royalty on all of the Corporation's mining properties and interests to a total of $17,987,000. The payment of this obligation is limited to payments from the Royalty Interest and a right to receive a portion of the proceeds from the sale of any interest in any of the Corporation's mining interests.

Included in the 1999 debt restructuring, the Corporation issued a promissory note to Miramar and capitalized certain amounts to the convertible debenture as consideration for existing indebtedness. No gain or loss was realized on this restructuring of amounts payable to Miramar. The promissory note was in the face amount of $6.5 million; bears interest at bank prime plus 2%, and is due on demand after June 20, 2001. The note requires that the Corporation maintain working capital of not less than $1,000,000 as and from March 31, 2000, to be tested monthly. Subsequent to the end of 1999, $4.5 million of the principal amount of the promissory note was settled through the issue to Miramar of 15 million shares in the Corporation. In addition, on March 31, 2000, Miramar provided the Corporation with a waiver extending the date for the imposition of the working capital requirement to June 15, 2000.

On April 27, 2001, Northern Orion concluded further restructuring agreements in conjunction with a private placement of $1,500,000. The placement completed with an arms length investor required Miramar to convert the convertible debenture into common shares, restructure the remaining indebtedness of Northern Orion into a long term convertible note and to option 60 million of its 70 million shares to a third party. The convertible debenture was in an amount of $21.2 million and was converted into 14.4 million shares of the Corporation at a conversion price of $1.47 per share. The remaining indebtedness of Northern Orion to Miramar amounted to $6.9 million and was restructured into convertible notes due after June 30th 2002, and with a conversion price of $0.15 per Northern Orion share. In addition, the Royalty Interest was reduced from a total obligation of $18 million to $15 million and excluded any interest in the San Jorge property in Argentina.Two of the directors of the Company are also directors of Miramar.

The Company's directors and officers may serve as directors or officers of other companies or have significant shareholdings in other resource companies and, to the extent that such other companies may participate in ventures in which the Company may participate, the directors of the Company may have a conflict of interest in negotiating and conducting terms respecting the terms of such participation. In the event that such conflict of interest arises at a meeting of the Company's directors, a director who has such a conflict is required to disclose such conflict and abstain from voting for or against the approval of such a participation or such terms.

To the knowledge of management there are no existing or potential conflicts of interest between the Company, any subsidiary of the Company and a director or officer of the Company, except as disclosed herein.

9 ADDITIONAL INFORMATION

9.1 Additional Information

The information contained in this Annual Information Form is as at December 31, 2000, unless otherwise stated. The Company's management proxy circular for its annual general meeting of shareholders held on June 29, 2001, contains further information, including information relating to directors' and officers' remuneration, principal holders of voting securities, options to purchase securities and interest of insiders in material transactions. Additional financial information is provided in the Company's comparative financial statements for the year December 31, 2000. The financial statements are set out at pages 10 to 27, inclusive, of the 2000 Annual Report, filed via SEDAR on May 23, 2001, under Annual Audited

Financial Statements-English. The applicable sections of those documents are incorporated herein by reference.

The Company will provide to any person, upon written request to the Secretary of the Company, c/o Northern Orion Explorations Ltd., Suite 1400, 570 Granville Street, Vancouver B.C. Canada V6C 3P1, copies of the following documents:

(i) One copy of the AIF of the Company, together with one copy of any document, or the pertinent pages of any document, incorporated by reference in the AIF;

(ii) One copy of the comparative financial statements of the Company for its most recently completed financial year together with the accompanying report of the auditor and one copy of any interim financial statements of the Company issued subsequent to the financial statements for its most recently completed financial year;

(iii) One copy of the information circular of the Company in respect of its most recent annual meeting of the shareholders that involved the election of directors or one copy of any filing prepared in lieu of that information circular as appropriate; and

At any other time, one copy of any other documents referred to in paragraphs (i), (ii) and (iii) above, provided the Company may require the payment of a reasonable charge if a person who is not a security holder of the Company makes the request.

Additional information, including directors' and officers' remuneration and indebtedness, principal holders of the Company's securities, options to purchase securities and interests of insiders in material transactions, where applicable, is contained in the Company's information circular for the most recent annual meeting of the shareholders that involved the election of directors. Additional financial information is provided in the Company's comparative financial statements for its most recently completed financial year.

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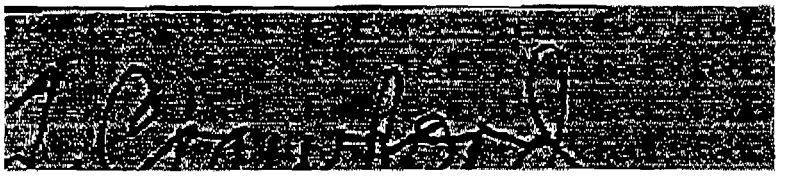

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Delivery Date: April 11, 2002
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Tracking No: 833239805389

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[i ii iii iv v]

→ Call to Mary Casci at SEC.

List

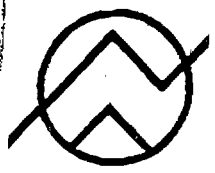
REVIEW 12g3-2b1(v) & prepare letter addressed to Mary Casci, SEC detailing the required info from Sub Debtor:

(1) # of holders resident in US for the last fiscal

(2) Amount & % of the class of outstanding equity Security held by residents in the US.

(3) Transactions in which such Equities were acquired

(4) Date & circumstances giving rise to recent public distribution of Securities by means of Prospectus



NORTHERN ORION
EXPLORATIONS LTD

Suite 1400, 570 Granville Street, Vancouver, B.C. V6C 3P1
Tel: (604) 687-4622 Fax: (604) 687-4212

March 25, 2002

VIA FEDERAL EXPRESS

United States Securities and Exchange Commission
Office of International Corporate Finance
450 5th Street, N.W.
Judiciary Plaza
Washington, D.C. U.S.A. 20549

Dear Sirs/Mesdames:

Re: **NORTHERN ORION EXPLORATIONS LTD.** (the "Company")
Rule 12(g)3-2(b) Exemptions – File #82-3153
Under the United States Securities Exchange Act of 1934

Please find enclosed Form 6K for filing pursuant to Rule 12(g)3-2(b) Exemption from 12(g) requirements. The enclosed documents, which make up this 6-K filing and are listed in the SEDAR printout attached hereto, are *Required to be Made Public* pursuant to the laws of the Province of British Columbia and the policies of the ~~Canadian Venture~~ Exchange ~~Exchange~~ TSXV

Please note that the Company is a foreign private issuer and its securities are neither traded in the United States nor quoted on NASDAQ.

We trust that the information included in this package is complete. However, should you have any questions regarding the foregoing, please do not hesitate to contact the writer.

Sincerely,

Rodrigo A. Romo
Legal Assistant
for **NORTHERN ORION EXPLORATIONS LTD.**

Encl.

SEC 1815 (02/2001) Previous version obsolete	**Potential persons who are to respond to the collection of information contained in this form are not required to respond unless the form displays a current valid OMB control number**

OMB APPROVAL
OMB Number: 3235-0116
Expires: March 31, 2003
Estimated average burden hours per response: 8

FORM 6-K
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

Report of Foreign Private Issuer

Pursuant to Rule 13a-16 or 15d-16 of the Securities Exchange Act of 1934

For the month of **April 1999 to March 2002**

NORTHERN ORION EXPLORATIONS LTD.
(Translation of registrant's name into English)

1400 – 570 Granville Street, Vancouver, British Columbia, V6C 3P1 Canada
(Address of principal executive offices)

Indicate by check mark whether the registrant files or will file annual reports under cover Form 20-F or Form 40-F.

Form 20-F ☐ Form 40-F ☐

Indicate by check mark whether the registrant by furnishing the information contained in this Form is also thereby furnishing the information to the Commission pursuant to Rule 12g3-2(b) under the Securities Exchange Act of 1934.

Yes ☒ No ☐

If "Yes" is marked, indicate below the file number assigned to the registrant in connection with Rule 12g3-2(b): **82-3153**

Signatures

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

NORTHERN ORION EXPLORATIONS LTD.
(Registrant)

Date: 25-MAR-02

By: _____
(Signature)

Stephen J. Wilkinson, President
(Name and Title of signing Officer)

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Form 6-K

Report of Foreign Private Issuer Pursuant to Rules 13a-16 and 15d-16

under the Securities Exchange Act of 1934

NORTHERN ORION
EXPLORATIONS LTD.
Suite 1400, 570 Granville St., Vancouver, B.C. V6C 3PI
Tel: (604) 687-4622 Fax: (604) 687-4212

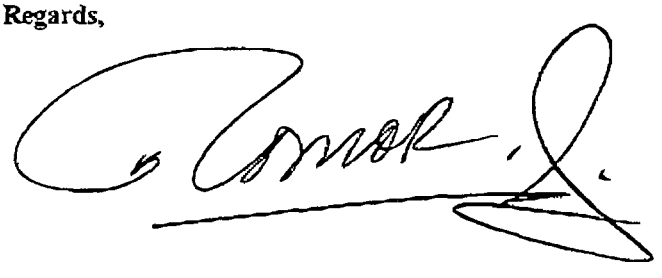
FAX COVER SHEET

TO: Mary Cascio	
FAX NUMBER: 202-942-9624	
FROM: Rodrigo A. Romo	NO. OF PAGES: 41
SUBJECT: 12(g)3-2(b) – File#82-3153	DATE: September 27, 2002

Further to our telephone conversation of this morning, we enclose copies of correspondence sent to your attention on March 25, 2002 and April 10, 2002. We also enclose a copy of my notes regarding our April 5, 2002 telephone conversation.

We trust you will find everything in good order.

Regards,



02 AR-1

PACIFIC CORPORATE TRUST COMPANY
Suite 830 - 625 Howe Street
Vancouver, B.C. V6C 3B8

Telephone: (604) 689 - 9853
Fax: (604) 689 - 8144

May 31, 1999

B.C. Securities Commission
Executive Director
2nd Floor, 865 Hornby Street
Vancouver, B.C., V6Z 2H4

Dear Sirs:

RE: NORTHERN ORION EXPLORATIONS LTD
MAILING ON MAY 31, 1999
INTERIM FINANCIAL STATEMENT
FOR THE FIRST PERIOD ENDING MARCH 31, 1999

We confirm that on the above date, the material issued by the subject Company was forwarded by prepaid first class mail to all the persons on the Supplementary Mailing List maintained at our office.

Yours truly,

PACIFIC CORPORATE TRUST COMPANY

"Lisa Scotland"

Lisa Scotland

LS/jl

cc: Alberta Securities Commission
cc: Director of Corporations - PEI
cc: Manitoba Securities Commission
cc: Nova Scotia Securities Commission
cc: Office of the Administrator of Securities - NB
cc: Ontario Securities Commission
cc: Quebec Securities Commission
cc: Registrar of Securities - NT
cc: Registrar of Securities - YT
cc: Saskatchewan Securities Commission
cc: Securities Division - Department of Justice - NF

cc: Alberta Stock Exchange
cc: Montreal Stock Exchange
cc: Toronto Stock Exchange
cc: Vancouver Stock Exchange Listings Dept.

cc: Northern Orion Explorations Ltd
cc: Owen Bird
cc: KPMG Peat Marwick Thorne.

NORTHERN ORION
EXPLORATIONS LTD.
Tel: (604) 980-0573 Fax: (604) 980-0731 Toll Free: 1-800-811-4447

January 25, 1999

Commission des Valeurs Mobilieres du Quebec
P O Box 245, 22nd Floor
Stock Exchange Tower
800 Victoria Square
Montreal, Quebec
H4Z 1G3

02 JAN -1 PM 8:

ATTENTION: DISCLOSURE BRANCH

Dear Sir or Madam:

RE: Section 114 of the Regulation under the Securities Act (Quebec)

Reference is made to Section 114 ("QSR Section 114") of the regulation under the Securities Act (Quebec).

Please be advised that:

(a) No securities of the Corporation were distributed in the Province of Quebec under the exemption prescribed by section 52 of the Securities Act (Quebec);

(b) No securities of the Corporation were issued by the Corporation upon the exercise of a right, warrant or option previously distributed in the Province of Quebec; and

(c) No securities of the Corporation were distributed for Quebec Stock Savings Plans;

In each case since the filing of the last annual report of the Corporation with the Commission des Valeurs Mobilieres du Quebec.

Yours truly,
NORTHERN ORION EXPLORATIONS LTD
Nicole Copley
Legal Department

Consolidated Financial Statements of

NORTHERN ORION EXPLORATIONS LTD.

Years ended December 31, 2000 and 1999

AUDITORS' REPORT TO THE SHAREHOLDERS

We have audited the consolidated balance sheets of Northern Orion Explorations Ltd. as at December 31, 2000 and 1999 and the consolidated statements of operations and deficit and cash flows for the years then ended. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with Canadian generally accepted auditing standards. Those standards require that we plan and perform an audit to obtain reasonable assurance whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation.

In our opinion, these consolidated financial statements present fairly, in all material respects, the financial position of the Company as at December 31, 2000 and 1999 and the results of its operations and its cash flows for the years then ended in accordance with generally accepted accounting principles in Canada. As required by the Company Act (British Columbia), we report that, in our opinion, these principles have been applied, except for the change in the method of accounting for income taxes as explained in note 3 to the consolidated financial statements, on a basis consistent with that of the preceding year.

KPMG LLP (signed)

Chartered Accountants

Vancouver, Canada

February 23, 2001, except as to note 14
which is as of May 1, 2001

NORTHERN ORION EXPLORATIONS LTD.

Consolidated Balance Sheets
(Expressed in Thousands of Dollars)

December 31, 2000 and 1999

	2000	1999
Assets		
Current assets:		
Cash	$ 13	$ 314
Accounts receivable	36	347
Prepaid expenses	40	37
	89	698
Plant and equipment (note 4)	2,224	2,784
Mineral properties and deferred development (note 4)	80,758	115,746
Other assets	–	37
	$ 83,071	$ 119,265
Liabilities and Shareholders' Equity		
Current liabilities:		
Accounts payable and accrued liabilities	$ 1,013	$ 885
Promissory note payable (note 5)	3,551	7,113
Royalty and proceeds interest payable (note 6)	–	17,987
Convertible debenture (note 7)	23,703	20,556
Reclamation	36	66
Future income taxes (note 8)	24,320	–
	52,623	46,607
Shareholders' equity:		
Share capital (note 9)	126,574	122,000
Deficit	(96,126)	(49,342)
	30,448	72,658
	$ 83,071	$ 119,265

Continuing operations (note 1)
Subsequent events (note 14)

See accompanying notes to consolidated financial statements.

Approved on behalf of the Board:

"Stephen Wilkinson"
Director

"Anthony Walsh"
Director

NORTHERN ORION EXPLORATIONS LTD.

Consolidated Statements of Operations and Deficit
(Expressed in Thousands of Dollars, except per share amounts)

Years ended December 31, 2000 and 1999

	2000	1999
Revenue:		
Mineral sales revenue	$ –	$ 2,957
Interest and other income	66	30
	66	2,987
Expenses:		
Cost of sales	142	3,911
Depreciation and depletion	317	2,292
Management fees (note 11)	420	861
General and administration	570	520
Terminations and severance	157	1,080
Interest	–	117
Loss (gain) on foreign exchange translation	(44)	89
Exploration	–	29
Write-down of marketable securities	–	3
Write-down of inventory	–	1,052
Write-down of mine plant, mineral properties and deferred development	22,271	9,440
Write-down of other assets	37	1,760
	23,870	21,154
Loss for the year	23,804	18,167
Deficit, beginning of year	49,342	31,175
Adjustment to deficit for future income tax (note 3)	22,980	–
Deficit, end of year	$ 96,126	$ 49,342
Loss per share	$ 0.28	$ 0.25
Weighted average number of common shares outstanding	85,330,540	74,006,780

See accompanying notes to consolidated financial statements.

NORTHERN ORION EXPLORATIONS LTD.

Consolidated Statements of Cash Flows
(Expressed in Thousands of Dollars)

Years ended December 31, 2000 and 1999

	2000	1999
Cash provided by (used in):		
Operating activities:		
Loss for the year	$ (23,804)	$ (18,167)
Items not involving the use of cash:		
Depreciation and depletion	317	2,292
Write-down of marketable securities	–	3
Write-down of mine plant, mineral properties and deferred development	22,271	9,440
Write-down of other assets	37	1,760
Change in non-cash working capital items:		
Accounts receivable	311	3,709
Inventory	–	2,201
Prepaid expenses	(3)	65
Accounts payable and accrued liabilities	202	(2,191)
	(669)	(888)
Investing activities:		
Expenditures on:		
Plant and equipment	–	(42)
Mineral properties and deferred development	(3,687)	(7,499)
Other long-term assets	–	(11)
	(3,687)	(7,552)
Financing activities:		
Promissory note	1,551	4,926
Guarantee to related party	–	1,865
Decrease in reclamation obligation	(30)	(20)
Increase in convertible debenture	2,534	1,441
	4,055	8,212
Decrease in cash	(301)	(228)
Cash, beginning of year	314	542
Cash, end of year	$ 13	$ 314
Supplementary information:		
Income taxes paid	$ 5	$ –
Interest paid	–	117
Non-cash transactions:		
Shares issued in settlement of promissory note	4,500	–
Shares issued for financial consulting services	74	–
Mineral properties disposal for royalty and net proceeds interest	17,987	–
Increase in mineral properties due to increase in future income tax liability	1,340	–
Other long-term liabilities settled through issuance of other debt instruments	–	26,308
Reduction in long-term debt by Miramar payments under obligation under guarantee	–	5,801

See accompanying notes to consolidated financial statements.

1. Continuing operations:

Northern Orion Explorations Ltd. (the "Company") is incorporated under the Company Act (British Columbia) and has interests in mineral properties in Argentina and Cuba. The Company is currently in the process of defining its ore reserves and their economic recoverability. The Company ceased operations of a gold processing operation at its Mantua property in Cuba in 1999 as cashflow generated was insufficient to meet cash operating costs. At December 31, 2000, the Company has insufficient cash available to settle its obligations including accounts payable and accrued liabilities. During the year ended December 31, 2000, the Company restructured and partially settled debts owing to Miramar Mining Corporation ("Miramar"), its controlling shareholder (notes 5, 6 and 7). Furthermore, subsequent to the year ended December 31, 2000, the Company further restructured debts owing to Miramar (note 14(d)). As at December 31, 2000, the Company continues to be dependent upon Miramar or other parties providing funds to continue the evaluation of its mineral properties. Miramar, which held voting control at December 31, 2000, over the Company, had agreed to provide certain funds under the terms of a settlement and restructuring agreement and several additional debt instruments. These statements have been prepared on a going concern basis which assumes that the Company continues to receive support from Miramar or other sources of financing (note 14(e)) and that no actions are taken which require settlement outside of the normal course of business.

2. Significant accounting policies:

(a) Basis of presentation:

These consolidated financial statements are prepared in accordance with generally accepted accounting principles in Canada. They include the accounts of the Company and its subsidiaries Minera San Jorge S.A., Recursos Americanos Argentinos S.A. ("RAA"), Minera Mantua Inc., Minera Cobre S.A. and Agua Rica S.A.M, all of which are wholly owned. Interests in joint ventures are accounted for by the proportionate consolidation method. All material intercompany balances and transactions have been eliminated.

The preparation of financial statements in accordance with Canadian generally accepted accounting principles requires management to make estimates that affect the reported values of assets, such as the recoverable value of mineral properties and deferred development, and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from these estimates.

2. Significant accounting policies (continued):

(b) Inventory and revenue recognition:

Revenue is recognized on production and product inventories are recorded at estimated net realizable value. Materials and supplies inventories are valued at average cost less appropriate *allowances for obsolescence.*

(c) Plant and equipment:

Plant and equipment are recorded at cost including capitalized interest incurred during the construction phase. Net operating costs and interest and financing costs incurred in the period preceding commercial production are capitalized. Mine plant and equipment are depreciated using the straight-line and declining balance methods, as appropriate to the assets, over their estimated useful lives, not to exceed the estimated proven and probable ore reserves commencing with the attainment of commercial production. Mining equipment and vehicles are depreciated over their estimated useful lives of five to fifteen years. The Company has ceased depreciation of mining equipment and vehicles pending re-commencement of mining operations. Maintenance costs during this period are being expensed as incurred. Office furniture and computer equipment are depreciated using the straight line method over periods from three to ten years.

(d) Mineral properties and deferred development:

Mineral resource properties and related exploration and development costs are recorded at cost, including capitalized interest during exploration and development, on a property-by-property basis. These costs will be amortized over the estimated useful life of the properties on a unit-of-production basis following the commencement of commercial production, written-down if estimated future cash flows indicate the carrying value will not be recoverable, or written-off if the properties are sold, allowed to lapse or abandoned. A provision for site restoration costs is provided as necessary by a charge to earnings over the estimated remaining life of the resource properties. Costs related to ongoing site restoration programs are expensed when incurred. Management periodically reviews the underlying value of mineral properties and records a provision to reduce the costs incurred to net recoverable amount as appropriate.

(e) Translation of foreign currency:

The accounts of foreign operations are translated into Canadian dollars as follows:

(i) Monetary assets and liabilities at the rates of exchange prevailing at the balance sheet date;

(ii) Other assets and liabilities at applicable historical exchange rates; and

(iii) Revenues and expenses at the average rate of exchange for the year with translation gains and losses being included in earnings.

2. Significant accounting policies (continued):

(f) Stock-based compensation plan:

The Company has a stock-based compensation plan. No compensation expense is recognized for these plans when stock or stock options are issued to employees. Any consideration paid by employees on exercise of stock options is credited to share capital. The plan provides that these options can alternatively be exercised as stock appreciation rights, whereby the number of shares issued is dependent upon the market price at the date of exercise, which, if exercised, would substantially reduce the number of common shares issued on exercise.

(g) Income taxes:

The Company uses the asset and liability method of accounting for future income taxes (note 3). Under this method of tax allocation, future income tax assets and liabilities are determined based on differences between the financial statement carrying values and their respective income tax basis (temporary differences). Future income tax assets and liabilities are measured using the enacted tax rates expected to be in effect when the temporary differences are likely to reverse. The effect on future income tax assets and liabilities of a change in tax rates is included in the results of operations in the period in which the change is enacted. The amount of future tax assets recognized is limited to the amount that is more likely than not to be realized.

Prior to the adoption of the new accounting recommendation, the Company used the deferral method of accounting for income taxes under which deferred income taxes are recorded for differences in the timing of recognition or transactions in the determination of income for accounting and tax purposes.

(h) Loss per share:

Loss per share amounts are calculated using the weighted average number of shares outstanding during the year. Fully diluted loss per share has not been disclosed as the impact of outstanding options would be anti-dilutive.

3. Changes in Accounting Policy:

Effective January 1, 2000, the Company adopted the new recommendations of the Canadian Institute of Chartered Accountants for the accounting for income taxes, being the liability method of accounting for future income taxes as described in note 2(g).

This accounting change has been applied retroactively, without restatement of prior periods. As a result, the Company has recorded an increase to deficit of $22,980,000 and a future tax liability of $22,980,000 as at January 1, 2000. This adjustment reflects the difference between the financial statement carrying value and the tax basis of assets held in Argentina.

4. Capital assets:

(a) Plant and equipment:

	2000			1999		
	Cost	Accumulated depreciation and writedown	Net book value	Cost	Accumulated depreciation and writedown	Net book value
Mine plant and equipment, including capitalized interest	$ 9,945	$ 7,760	$ 2,185	$ 9,948	$ 7,648	$ 2,300
Office and other equipment	121	82	39	1,040	556	484
	$ 10,066	$ 7,842	$ 2,224	$ 10,988	$ 8,204	$ 2,784

Mine plant and equipment was placed on care and maintenance in March 2000 after the cessation of production at the gold phase at the Mantua property. Depreciation of the remaining copper processing facility has been discontinued pending commencement of the copper phase at Mantua.

(b) Mineral properties and deferred development:

2000	Agua Rica	San Jorge	Mantua	Other	Total
Balance, December 31, 1999	$ 69,590	$ 21,613	$ 24,543	$ –	$ 115,746
Exploration and development expenditures	4,417	414	195	–	5,026
Write-down during the year	–	(22,027)	–	–	(22,027)
Disposal of proceeds interest (note 6)	–	–	–		(17,987)
Balance, December 31, 2000	$ 74,007	$ –	$ 24,738	$ –	$ 80,758

1999	Agua Rica	San Jorge	Mantua	Other	Total
Balance, December 31, 1998	$ 63,973	$ 19,920	$ 24,354	$ 5,686	$ 113,933
Exploration and development expenditures	5,617	1,693	189	–	7,499
Write-down during the year	–	–	–	(5,686)	(5,686)
Balance, December 31, 1999	$ 69,590	$ 21,613	$ 24,543	$ –	$ 115,746

4. Capital assets (continued):

(b) Mineral properties and deferred development (continued):

(*i*) Agua Rica:

The Agua Rica project is located in Catamarca Province, Argentina. The property is composed of mining claims and exploration licences. Work is focused upon a major porphyry copper-gold-silver-molybdenum deposit that is being explored by a joint venture between the Company (30%) and BHP Copper (70%).

(*ii*) San Jorge:

The San Jorge project is located northwest of Mendoza in Argentina. The property consists of mining concessions and staked claims. The project encompasses an oxidized copper deposit overlying a large low grade primary porphyry copper-gold deposit. During the year ended December 31, 2000, management has determined this project to be uneconomic at current metal prices and has written down the property by $22,027,000.

(*iii*) Mantua:

The Company operated a gold processing facility at Mantua, Cuba from April 1998 to September 1999 at which time operations were ceased. The Mantua project of which the Company owns a 50% interest is a high-grade copper deposit amenable to open pit mining and solvent extraction/electro-winning recovery of copper. The property is located in the Pinar del Rio Province, Cuba.

(*iv*) Other:

Other properties consist of smaller exploration properties in Argentina and Cuba. These properties have been determined to be of no further economic value and have been written down by $5,686,000.

During 2000, the Company capitalized interest of $2,005,000 (1999 - $3,457,000) on funds borrowed for exploration and development activities.

5. Promissory note:

	2000	1999
Promissory note (a)	$ 2,000	$ 6,500
Accrued interest on promissory note	244	–
Other interest	613	613
June agreement ("Additional Funds") (b)	675	–
Accrued interest on Additional Funds	19	–
	$ 3,551	$ 7,113

(a) Promissory note:

Under a debt restructuring agreement entered in 1999, the Company issued a promissory note payable (the "Promissory Note") as partial consideration for existing indebtedness to Miramar. No gain or loss was realized on this restructuring of amounts payable to Miramar. The Promissory Note payable in the face amount of $6,500,000, bears interest at bank prime plus 2% and was due on demand after June 30, 2001. Subsequent to December 31, 2000, this Promissory Note was restructured (note 14(d)). On March 31, 2000, $4,500,000 of the Promissory Note was settled through the issue of shares in the Company. The requirement that the Company maintain a positive working capital level of $1,000,000 as and from March 31, 2000, calculated on a monthly basis, was removed as a result of the restructuring subsequent to year end. The Promissory Note is secured by a General Security Agreement, a Pledge and a Charge over certain assets and shares in subsidiaries of the Company.

(b) Additional funds:

In June, 2000, the Company arranged additional borrowings from Miramar over a three month period to a maximum amount of $675,000 to provide working capital to allow the Company to continue to work to secure other sources of financing.

The Company has amended and restated the Promissory Note to evidence the existing indebtedness and the Additional Funds and to provide security for the Additional Funds.

(c) Obligation under guarantee:

In 1998 and 1999, the Company was unable to fund required repayments under a credit facility to a commercial lender which had been guaranteed by Miramar. Under the terms of this financing guarantee, Miramar was required to make these repayments and the Company became directly obligated to Miramar. In 1999, interest of $1,534,000 was charged at 11% per annum on the guarantee payments made by Miramar. During 1999, these amounts were settled through the agreement with Miramar described in note 6.

6. Royalty and proceeds interest payable:

In December 1999, the Company reached an agreement to restructure and partially settle amounts owing to Miramar under the guarantee and other obligations described in note 5.

Under the agreement, the Company also issued a royalty and net proceeds interest ("Proceeds Interest") entitling Miramar to receive the economic equivalent of a 2.5% net smelter return royalty on all of the Company's mining properties and interests to a maximum of $17,987,000. The repayment of $17,987,000 is limited to payments from the Proceeds Interest and a right to receive a 50% of the proceeds from the sale of any interest in Agua Rica or any of the Company's other mining interest. The proceeds interest has been treated as a disposition of mineral property interest by the Company and the $17,987,000 value assigned has been applied to reduce the carrying value of mineral properties.

Under the agreement, the Company issued a promissory note payable and limited recourse repayment obligation and capitalized certain amounts to the convertible debenture as consideration for the existing indebtedness. No gain or loss was realized on this restructuring of amounts payable to Miramar.

7. Convertible debenture:

In September 1998, the Company completed the private placement to Miramar of a $17,500,000 convertible debenture, repayable as to principal and interest on September 14, 2003 and bearing interest at 8% per annum. The convertible debenture is secured by a guarantee, pledge of shares and a first charge over the assets of RAA. The principal and unpaid interest are convertible into common shares of the Company at the option of Miramar at a price of $1.47 per common share.

The conversion of the debenture by Miramar is limited as follows:

(a) At any time after September 14, 1999, and prior to September 15, 2000, Miramar will be entitled to convert not more than 30% of the principal and unpaid interest;

(b) At any time after September 14, 2000, and prior to September 15, 2001, Miramar will be entitled to convert not more than 50% of the principal and unpaid interest;

(c) After September 14, 2001, Miramar is entitled to convert any portion of the principal and unpaid interest.

The Company may repay any portion of the principal and unpaid interest on the convertible debenture at any time. On September 14, 1999 unpaid interest of $1,400,000 was capitalized into the principal balance of the convertible debenture. Miramar did not exercise the entitlement to convert any shares in 1999 or 2000 (note 14(d)).

7. Convertible debenture (continued):

Under the terms of the debt restructuring and settlement agreement with Miramar, the Company received additional funds of $2,600,000 from Miramar. The additional funds were drawn under and secured with the convertible debenture but carry no right of conversion into common shares of the Company. At December 31, 1999, the Company had drawn $1,209,000 of the additional amount and the remaining balance of $1,391,000 was drawn in 2000.

	2000	1999
Principal amount plus accrued interest	$ 20,412	$ 18,900
Additional amount secured by the Debenture	2,600	1,209
Accrued interest on additional amount	691	447
	$ 23,703	$ 20,556

8. Income and resource taxes:

At December 31, 2000, the Company has unused tax losses carried forward in Canada of $17,700,000 (December 31, 1999 - $16,000,000) expiring between the years 2001 and 2007 which are available to reduce taxable income otherwise calculated. The ability of the Company to utilize these losses is not considered by management to be more likely than not and therefore a valuation allowance has been provided against this future income tax asset. The Company also has $2,300,000 of Argentine tax losses carried forward that expire between the years 2001 and 2004. The ability of the Company to utilize these losses is not considered by management to be more likely than not and a valuation allowance has been provided against this future income tax asset.

The tax effect of the significant components within the Company's future tax asset (liability) as at December 31, 2000 were as follows:

Future income tax assets:	
Losses carried forward	$ 8,650
Mineral properties representing excess of tax basis over carrying value	3,470
	12,120
Valuation allowance	(12,120)
Net future tax asset	–
Future income tax liability for mineral properties representing excess of carrying value over tax basis	(24,320)
Net future income tax liability	$ (24,320)

8. Income and resource taxes (continued):

The future income tax liability recorded by the Company at January 1, 2000, with retroactive effect without restatement arises from the investment in a joint venture held in Argentina. The purchase price and subsequent funds advanced to this joint venture do not currently have tax basis in the jurisdiction that Northern Orion holds the interest. Management is currently working on a plan to establish tax basis in the appropriate jurisdiction.

9. Share capital:

(a) Authorized:

500,000,000 common shares without par value

100,000,000 first preference shares without par value

100,000,000 second preference shares without par value

(b) Issued:

	Number of common shares	Amount
Issued, December 31, 1998 and 1999	74,006,780	$ 122,000
Shares issued:		
In partial settlement of promissory note (note 5(a))	15,000,000	4,500
For financial consulting services	423,821	74
Issued, December 31, 2000	89,430,601	$ 126,574

(c) Stock options:

Stock options are granted at the closing market price of the common shares on the last trading day before grant. Options have a maximum term of ten years and usually terminate 30 days following the termination of the optionee's employment. All options granted are exercisable within two years from date of grant. The stock option plan includes share appreciation rights providing for an optionee to elect to terminate options and to receive an amount in common shares equal to the difference between the fair market value at the time of termination and the exercise price for those options terminated.

9. Share capital (continued):

(c) Stock options (continued):

The Company had stock options outstanding as follows:

	2000		1999	
	Share options	Average exercise price	Share options	Average exercise price
Outstanding, beginning of year	1,204,900	$ 1.80	8,204,419	$ 1.80
Granted	5,900,000	0.30	–	–
Exercised	–	–	–	–
Forfeited and expired	(1,009,900)	1.80	(6,999,519)	1.80
Outstanding, end of year	6,095,000	$ 0.35	1,204,900	$ 1.80
Available for exercise, end of year	4,545,000	$ 0.36	1,204,900	$ 1.80

Of the 6,095,000 outstanding options, 195,000 with an exercise price of $1.80 per share expire in 2001. The remaining 5,900,000 options with an exercise price of $0.30 per share expire in 2005.

Of the 5,900,000 options awarded during the year ended December 31, 2000, 2,700,000 options vested immediately and an additional 1,650,000 vested in the year. The remaining 1,550,000 vest and will become exercisable in 2001.

10. Business segments:

(a) Operating segment - The Company's operations are primarily directed towards the exploration and development of mineral properties in Latin America. During 1999, the Company generated revenue fom the sale of gold extracted from one of these properties. The Company's mining activities represent a single reportable segment.

(b) Geographic segments - The Company's identifiable capital assets and revenues by geographic area are as follows:

2000	Capital assets	Revenues
Central America	$ 26,539	$ 49
South America	56,331	–
Canada	112	17
	$ 82,982	$ 66

10. Business segments:

(b) Continued:

1999	Capital assets	Revenues
Central America	$ 26,640	$ 2,974
South America	91,848	–
Canada	42	13
	$ 118,530	$ 2,987

Capital assets include plant and equipment and mineral properties and deferred development.

11. Related party transactions:

Related party transactions which were recorded at the exchange amount not disclosed elsewhere in these consolidated financial statements are as follows:

(a) During 2000, the Company incurred management fee charges of $420,000 (1999 - $861,000) from Miramar. In addition, interest expense of nil (1999 - $523,000) was charged by Miramar on amounts payable; and

(b) The Company paid consulting fees and expenses of $171,000 (1999 – nil) to a management company controlled by an officer and director of the Company.

12. Financial instruments:

Financial instruments are recorded at cost. Fair value estimates are made at the balance sheet date, based upon relevant market information relating to the financial instrument. These estimates are subjective in nature and involve uncertainties and significant matters of judgment. Changes in assumptions could significantly affect these estimates.

The fair value of financial instruments, comprising cash, marketable securities, accounts receivable, current liabilities and long-term debt, are estimated to not be materially different from their carrying value due to their ability for prompt liquidation or short-term to maturity. The fair value of amounts payable to Miramar are not readily determinable due to the nature of the relationship between the Company and Miramar and the lack of a ready liquid market for such instruments.

13. Comparative figures:

Certain comparative figures have been reclassified to conform with the basis of presentation adopted in the current year's consolidated financial statements.

14. Subsequent events:

(a) In November 2000, the Company arranged additional working capital financing with Miramar of $200,000. These funds were drawn subsequent to December 31, 2000 when all of the required security was created and provided to Miramar. These additional funds were secured by the same security granted to Miramar for the Promissory Note.

(b) In February 2001, the Company arranged to borrow $139,000 ("the Funds") from Miramar to be added to the amounts secured under the convertible promissory note to be executed as part of the reorganization described in note 14(d).

(c) In February 2001, the Company arranged an additional interim funding loan ("IFL") from Miramar of $145,000 for working capital purposes. The funds under the IFL are to be advanced to the Company on request as required in order to enable the Company to pay liabilities as they come due. The Company has agreed that the IFL will be repaid from the first funds available to the Company from a debt or equity financing conducted by the Company or the proceeds from the sale of specified assets.

(d) In April 2001, the Company restructured debts owing to Miramar (the "Reorganization") and arranged a $1,500,000 private placement for shares in the Company with another investor. As a condition of the private placement, the Company arranged with Miramar to reorganize and restructure all amounts owing as follows:

(*i*) Miramar will convert the convertible portion of the Convertible Debenture into common shares of the Company at a rate of $1.47 per share resulting in the issuance of approximately 14,440,000 common shares by the Company. On May 1, 2000, Miramar converted the Convertible Debenture into common shares;

(*ii*) Miramar will convert all other amounts owing into a convertible promissory note totaling approximately $6,900,000. The convertible promissory note is convertible at Miramar's option into common shares of the Company at a price of $0.15 per share, bears interest at prime plus 2% per annum and is due on demand after June 30, 2002;

(*iii*) The Proceeds Interest payable to Miramar will be reduced from $17,987,000 to $15,000,000 and is modified to include proceeds from production and asset sales with the exception of the San Jorge property; and

(*iv*) Miramar has agreed to enter into a voting trust agreement with an arm's length third party until June 30, 2002 for the shares that it owns in the Company.

14. Subsequent events (continued):

(e) On April 17, 2001 the Company completed a private placement of units ("Units") at a price of $0.15 per Unit for gross proceeds of $1,500,000. Each Unit is comprised of one common share and one warrant ("Warrant"). Each Warrant is exercisable into one common share of the Company at a price of $0.175 per share until April 27, 2002 and $0.20 per share until April 27, 2003.

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Northern Orion

EXPLORATIONS LTD.

First Quarter Report

For the three months ended March 31, 1999

Management Report

FINANCIAL RESULTS

During the first three months of 1999, Northern Orion Explorations Ltd. ("Northern Orion" or the "Company") incurred an operating loss of $1,699,000 or $0.02 per share compared to a loss of $868,000 or $0.01 per share for the same period in 1998. The loss reflects results from operations at the Mantua mine in Cuba and on-going costs related to Northern Orion's exploration activities in Latin America.

MANAGEMENT CHANGES

In March 1999, Walter H. Berukoff, Chairman, resigned as the President and Chief Executive Officer of Northern Orion and its controlling shareholder, Miramar Mining Corporation ("Miramar"). Mr. Berukoff will continue as the non-executive chairman of the board of directors until the Company's annual general meeting in June, when he will not stand for re-election to the board of directors. Northern Orion appreciates Mr. Berukoff's years of service with the Company and acknowledges his contributions to the growth of the Company since its formation.

STRATEGIC REVIEW

The board of Northern Orion has initiated a strategic review process to evaluate alternatives or the optimal medium to long term future of the Company given continued depressed copper prices and poor equity markets for junior exploration companies. During the quarter, the Company continued to reduce staffing levels and substantially reduced exploration expenditures, focussing expenditures on the Company's core assets such as Agua Rica, San Jorge and Mantua. The Company expects this strategic review to be completed by mid-1999.

MANTUA

During the quarter, the Mantua gold leach mine produced 6,043 ounces of gold (Northern Orion's share 3,021 ounces). Cash operating costs were US$300 per ounce. The realized gold selling price on Northern Orion's 50% share of such gold production from Mantua was US$327 per ounce due the positive results of gold hedging by Northern Orion. Cash costs were higher than budgeted due to water shortages experienced at the mine. Water

shortages were the result of extended drought conditions and reduced the Company's ability to leach gold from the pads. Weather conditions returned to normal during May 1999 and irrigation of the leach pads returned to normal levels. As a result of the higher operating costs at the Mantua mine, Northern Orion was unable to make the principal and interest payments required by its project financing and therefore Miramar paid $3.0 million under the guarantee provided by Miramar for the Mantua project financing. The Mantua mine is held in a 50-50 joint venture with Geominera SA, a Cuban state owned company.

Studies on the high grade copper deposit underlying the gold deposit continued to progress. The results of an independent pre-feasibility study are expected to be announced in the second quarter of 1999.

AGUA RICA

The Agua Rica project is a large porphyry copper-gold-silver-molybdenum deposit located in Catamarca province, northwest Argentina, and is being explored by a joint venture between Northern Orion (30%) and BHP Copper (70%).

The US$8.4 million 1998/99 work program continued towards completion at the end of May 1999. Phase 2 metallurgical work on core samples collected from drill holes was completed during the period with positive results. Preliminary results from low grade copper mineralization (0.2 to 0.4%) are commonly yielding 80% recovery. Higher grade copper mineralization typically produced concentrates grading greater than 30% copper with better than 90% recovery. Some ore types are also yielded 70% recovery of molybdenum. Metallurgical testing of 300 tonnes of bulk sample collected in 1998 will be completed in the second quarter.

Work currently underway includes updating resource estimates and a mine plan that incorporates the results of additional drilling completed in 1997 and 1998. Progress has been made on studies evaluating project infrastructure, water supply, product transportation options and power supply alternatives, as well as production scale optimization. The results of these and other work will be incorporated into an updated project model during 1999.

SAN JORGE

In May 1999, Northern Orion announced that it had consolidated the land position around the San Jorge copper deposit in Argentina, expanding the existing resource and opening up a larger area for exploration. Northern Orion will own 85% of the expanded property and another company will own 15%. Northern Orion can convert the 15% minority interest to a 2% NSR by bringing the project to commercial production. The San Jorge project encompasses a porphyry copper deposit that has undergone superficial leaching resulting in sub-horizontal oxide and enriched copper zones, overlying a large primary porphyry copper-gold deposit.

OTHER EXPLORATION

Due to continued depressed prices for copper and gold, combined with poor equity markets for exploration stocks, Northern Orion continues to reduce its exploration activities in Argentina and has eliminated them in Cuba. Northern Orion will be concentrating its future efforts on its key projects, such as Agua Rica, San Jorge and Mantua. Other exploration projects will be put on care and maintenance or joint ventured to suitable partners.

NORTHERN ORION EXPLORATIONS LTD.

Consolidated Balance Sheets

(expressed in thousands of dollars)

March 31, 1999 and December 31, 1998	1999 (unaudited)	1998 (unaudited)
Assets		
Current assets:		
Cash and short-term investments	$ 333	$ 542
Marketable securities	3	3
Accounts receivable	3,651	4,056
Inventory	2,115	2,201
Prepaid expenses	132	102
	6,234	6,904
Plant and equipment	8,144	8,788
Mineral properties and deferred development	115,427	113,397
Other assests	2,334	2,322
	$ 132,139	$ 131,411
Liabilities and Shareholders' Equity		
Current Liabilities:		
Accounts payable and accrued liabilities	$ 2,986	$ 3,076
Current portion of long-term debt	3,106	5,801
	6,092	8,877
Payables to related parties	5,213	3,596
Guarentee to related party	13,427	10,120
Convertible debenture	18,257	17,907
Reclamation liability	24	86
	43,013	40,586
Shareholder's equity:		
Share capital	122,000	122,000
Deficit	(32,874)	(31,175)
	89,126	90,825
	$ 132,139	$ 131,411

Consolidated Statements of Operations and Deficit

Three month periods ended March 31, 1999 and 1998
(expressed in thousands of dollars except per share amounts)

	1999 (unaudited)	1998 (unaudited)
Revenue:		
Metal sales	1,317	—
Interest and other income	$ 2	$ 14
	1,319	14
Expenses:		
Cost of sales	1,369	—
Management fee	300	630
General and administration	125	146
Interest	78	174
Depreciation and depletion	644	25
Write-down of mineral properties	106	—
Loss (gain) on foreign exchange translation	396	(93)
	3,018	882
Loss for the period	1,699	868
Deficit, beginning of period	31,175	9,888
Deficit, end of period	$ 32,874	$ 10,756
Loss per share	$ 0.02	$ 0.01
Weighted average number of common shares outstanding	74,006,780	74,006,780

NORTHERN ORION EXPLORATIONS LTD.

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April 12, 1999

The B.C. Securities Commission
2nd Floor - 865 Hornby Street
Vancouver, B.C.
V6Z 2H4

Dear Sirs:

As per National Policy 41 requirements, including Addendum "A" to the Policy, please be advised of the following:

Company:	Northern Orion Explorations Ltd. (Cusip 66557D109)
Meeting:	AnnualGeneral Meeting
Record Date:	May 6, 1999
Meeting Date:	June 23, 1999

If you require further information, please contact:

"Lisa Scotland"

Lisa Scotland
Pacific Corporate Trust Company

cc: Alberta Securities Commission
cc: Manitoba Securities Commission
cc: New Brunswick Securities Commission
cc: Newfoundland Securities Commission
cc: Nova Scotia Securities Commission
cc: Ontario Securities Commission
cc: Vancouver Stock Exchange
cc: P.E.I. Securities Commission
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NORTHERN ORION EXPLORATIONS LTD.

ANNUAL INFORMATION FORM

July 22, 1999

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ITEM 1 - INCORPORATION

Northern Orion Explorations Ltd. (the "Corporation") was incorporated with the name Northern Orion Resources Ltd. under the laws of British Columbia by memorandum and articles dated April 30, 1986. On October 31, 1986 the memorandum of the Corporation was amended to change the name of the Corporation to Northern Orion Explorations Ltd. On November 28, 1994, the memorandum of the Corporation was amended to increase the authorized capital from 25,000,000 to 100,000,000 common shares without par value ("Common Shares"), and on October 15, 1997, the memorandum and articles of the Corporation were amended to increase the authorized capital from 100,000,000 to 700,000,000 shares divided into 500,000,000 Common Shares, 100,000,000 First Preference Shares without par value ("First Preference Shares") and 100,000,000 Second Preference Shares without par value ("Second Preference Shares").

The registered office of the Corporation is located at Suite 2800, 595 Burrard Street, Vancouver, British Columbia V7X 1J5 and its principal executive office is located at 311 West First Street, North Vancouver, British Columbia V7M 1B5.

The following table sets forth the name of each material subsidiary of the Corporation, the jurisdiction of its incorporation and the direct or indirect percentage ownership of the Corporation in such subsidiary.

Name of Subsidiary	Jurisdiction of Incorporation	Percentage Ownership
Minera Mantua Inc.	Ontario	100%
Minera Cobre S.A.	Cayman Islands	100%
Cobre Mantua S.A.	Cuba	50%
Minera Delita S.A.	Cayman Islands	100%
Oro Delita S.A.	Cuba	50%
Grupo Minero Aconcagua S.A.	Argentina	100%
Recursos Americanos Argentinos S.A.	Argentina	100%
Northern Orion Finance Corporation	Barbados	100%

Where the context requires, the term "Corporation" includes the subsidiaries of the Corporation. All dollar amounts in this annual information form ("AIF") are in Canadian dollars unless otherwise stated. The Corporation has approximately 15 full time employee.

ITEM 2 - GENERAL DESCRIPTION OF THE BUSINESS

The Corporation, through subsidiaries, is engaged in the exploration for, and development and production of, precious and base metals. The Corporation indirectly owns all of the outstanding shares of Grupo Minero Aconcagua S.A. ("GMA") and Recursos Americanos Argentinos S.A. ("RAA"), both Argentine companies which hold interests in a number of mineral properties in Argentina. The Corporation also owns all of the outstanding shares of Minera Mantua Inc. ("MMI"), an Ontario company which holds indirect interests in two mineral properties in Cuba.

ITEM 3 - NARRATIVE DESCRIPTION OF THE BUSINESS

Argentine Properties

On November 17, 1994, the Corporation acquired all of the outstanding shares of GMA, a private Argentine company, from Miramar Mining Corporation ("Miramar"), Grupo R.A. (a group of Argentinean companies controlled by Dr. Ricardo Auriemma) and an Aruba corporation controlled by Dr. Auriemma. The purchase price for the shares of GMA was 6,000,000 Common Shares (2,600,000 to Miramar, 2,600,000 to Grupo R.A. and 800,000 to the Aruba corporation), and US$1,073,490 in cash to Grupo R.A. An amount of $650,000 was paid to Miramar to reimburse Miramar's out-of-pocket costs incurred in acquiring its interest in GMA and structuring the transaction, property maintenance expenditures in Argentina and due diligence work on the properties. An additional 300,000 Common Shares were issued as to 150,000 Common Shares each to two unrelated third parties for finders' fees.

On June 9, 1995, the Corporation acquired in an arm's length transaction all of the outstanding shares of RAA, a private Argentinean company, from American Resource Corporation, Inc. ("ARC") for 15,000,000 Common Shares. As part of the same transaction, Miramar Finance (Bermuda) Ltd. ("Miramar Bermuda"), a wholly-owned subsidiary of Miramar, loaned $10,000,000 to ARC which was repaid in 1995. ARC has disposed of all 15,000,000 Common Shares issued to it in the RAA transaction.

GMA and RAA have interests in a number of exploration projects in Argentina. The following is a brief description of the Agua Rica and San Jorge exploration projects in which the Corporation has an indirect interest.

Agua Rica

The Agua Rica copper/gold property consists of a group of exploitation concessions and mining claims located in Catamarca Province, Argentina. On May 5, 1996, RAA exercised an option (the "Agua Rica Option") to purchase all of the outstanding shares of Agua Rica S.A., a private Argentine company which owns the central mining claims of the Agua Rica property, for a purchase price of US$7.9 million. Pursuant to an agreement made in September 1993 (the "Joint Operating Agreement"), BHP Minerals International Inc. ("BHP") earned a 70% joint venture interest in the project by having spent US$1 million on exploration and agreeing to reimburse to the Corporation all costs of exercising the Agua Rica Option. As at December 31, 1998, BHP has reimbursed the Corporation US$5.5 million of US$7.9 million paid to exercise the Agua Rica Option. The remaining US$2.4 million is due in July 1999. Under the Joint Operating Agreement, exploration expenditures are shared between RAA and BHP on a 30-70 basis, respectively.

Location and Access

The Agua Rica property is located approximately 30 kilometres north of the town of Andalgala in Catamarca Province, Argentina. The original access to the property was by provincial highway to within 20 kilometres and then by four wheel drive road. In 1997 a new 35 kilometre road was completed up the Potrero valley from Andalgala to the property. The property lies in steeply incised mountains at an elevation of 3,300 metre.

History

The Agua Rica property was explored from 1969 to 1972 by City Services Ltd. which carried out geologic mapping and geochemical sampling and drilled 27 surface holes and 6 underground holes. Many holes were lost or had poor recovery, but some had 40 to 50 meter intersections of greater than 1% copper and gold grades in the range of 0.3 grams per tonne to 0.5 grams per tonne. In 1994, under the Joint Operating Agreement, BHP commenced a work program of mapping, surface sampling and drilling. Follow-up drilling in 1995 intersected thick intervals of near surface, supergene enriched chalcocite and covellite mineralization containing significant gold, silver and molybdenum. By the end of 1998 more than 67,000 meters of drilling in 176 holes had defined continuous copper-gold-molybdenum mineralization over an area of 2,000 meters by 1,200 meters and to depths of up to 600 meters below surface.

RAA and BHP are continuing with a work program that is designed to advance the project towards completion of a final feasibility study. Recently completed work includes 300 meters of underground drifting, collection of 300 tonnes of bulk sample, pilot mill testing, updated resource and reserve estimates, as well as revised capital and operating cost estimates.

Geology and Mineralization

Basement rocks near Agua Rica consist of Cambrian-Ordovician metamorphic schists and garnet gneisses that were intruded by a regional scale Ordovician granite (Capillitas Batholith) and a subsequent cluster of Miocene age porphyries (Farallon Negro Complex). The oldest known intrusive near Agua Rica is the Melcho Monzonite with an age of 8.6 million years. Intrusive activity peaked overall at 7 to 8 million years, but persisted until 5.2 million years (dacite dykes at Capillitas).

Paleozoic metasediments are the oldest rocks at Agua Rica and form the wallrocks to the mineralized intrusive complex. The metasediments are intruded by granite, aplite and pegmatite in the Morro Alumbrera area. At Quebrada Seca Norte (Mi Vida) and Trampeadero the metasediments are intruded by porphyry bodies and altered primarily to quartz and sericite. Immediately west of Agua Rica the granite has a low angle faulted contact relationship with underlying metasediments suggesting they were thrust over the metasediments.

The central area, containing the principal mineralized areas, consists of dacite porphyries with well developed stockworks and strong quartz-sericite alteration. The porphyries are cut by an igneous/hydrothermal breccia that has been traced over a vertical extent exceeding 1,000 meters. Upper portions of the breccia exhibit advanced argillic alteration and deeper in the system quartz-sericite alteration is predominant. Supergene enrichment has led to almost complete replacement of chalcopyrite with covellite and chalcocite. Near surface, high grade areas of chalcocite grade down into mixed chalcocite and covellite and then into disseminated, crystalline (hexagonal) covellite. Leaching and enrichment is most intense in the central area coincident with silica stockworking and quartz-sericite-pyrite alteration at Quebrada Seca Norte (Mi Vida). Molybdenite occurs primarily as clusters on the edges and in the centers of the veins. In deeper areas, anomalous values of sulphur, arsenic, lead and zinc occur with the copper mineralization.

The presence of higher grade copper (greater than 1%) mineralization in three discrete bodies of supergene enrichment over Quebrada Seca Norte (Mi Vida), Filo Amarillo, and Trampeadero implies that a more extensive enriched zone has been dissected by erosion. Higher grade gold mineralization (greater than 0.5 grams per tonne) is located on the western side of Quebrada Minas and is also within hydrothermal breccias in western Trampeadero. Molybdenum is present throughout the system, but higher concentrations occur in Trampeadero, Filo Amarillo (greater than 0.07%) and within a deep zone on the south side of Quebrada Seca Norte (Mi Vida).

Geologic Resources

In 1997 the Agua Rica joint venture continued with the US$45 million work program designed to advance the Agua Rica project to completion of a final feasibility study.

In February 1998, BHP reported a new resource estimate which was publicly disclosed by Northern Orion, based on 151 diamond drill holes totaling approximately 58,000 meters. At the higher copper cut-off grades, the results show an increase in tonnage of about 30% compared to the previous estimate that was based on 103 holes. A summary of the new estimates of the size and average grades of the mineral resource (in millions of tonnes), shown for different cut-off grades, is as follows:

Cut-off	Tonnes (millions)	Copper %	Molyb-denum%	Gold (g/t)	Silver (g/t)	Measured	Indicated	Inferred
0.2%Cu	1,714	0.43	0.032	0.17	3.0	52%	25%	23%
0.4%Cu	750	0.62	0.037	0.23	3.2	70%	21%	9%
0.7%Cu	167	0.99	0.036	0.32	3.3	92%	7%	1%
1.0%Cu	60	1.31	0.040	0.35	4.0	98%	2%	<1%

These were based on results available at the date of calculation and do not incorporate the results of approximately 25 drillholes completed in 1998. In addition, based on drilling to December 31, 1997 BHP has estimated a geologic gold resource in leached caps which overlie the higher grade sulphide mineralization using a 0.25 g/t gold cut-off grade which was publicly disclosed by Northern Orion. This gold may be amenable to recovery by heap leach methods.

Tonnes	89 million
Gold Grade	0.41 g/t
Contained Gold (oz)	1.2 million

These were based on results available at the date of calculation and do not incorporate the results of the approximately 73 drillholes completed in 1998.

It has not been established that the mineralization at the property may be economically mined.

Initial Feasibility Study

In November 1997, the joint venture released a positive initial feasibility study (the "Study") on the Agua Rica Project, which recommended proceeding with the work to complete a final feasibility study and development plan for the project. The Study was based on resources estimated for the first 40,000 meters of drilling in 103 drill holes completed on the project to the end of 1996. The Study evaluated two development options, both utilizing conventional open pit mining, milling, flotation and concentrate shipment. The 60K Case examined a single mill line processing 60,000 tonnes per day ("TPD") of ore throughput, while the 120K Case examined adding a second mill line after year two of production, raising the plant throughput to 120,000 TPD from year three on.

Pit plans were developed by BHP for the 60K and 120K cases which are summarized as follows.

	60K Case	120K Case
Cut-off Grade	0.4% Cu	0.2% Cu
Daily Ore Production	60,000	120,000
Mine Life (years)	24.4	17
Tonnes (000s)	512,351	681,389
Grades		
- Copper (%)	0.66	0.59
- Gold (g/t)	0.26	0.25
- Silver (g/t)	3.44	3.61
- Molybdenum (%)	0.034	0.033
- Copper Equivalent(%)*	0.97	0.89
Waste (billions of tonnes)	1.2	1.2
Strip Ratio	2.35	1.80

**The copper equivalent grades are based on in situ values at the following metal prices: copper at US$0.80/lb, gold at US$300 per ounce, silver at US$5 per ounce and molybdenum at US$4 per pound. Actual payable values received will depend on the recoveries which may vary for different metals.*

These mine plans were based on information available at the time and do not incorporate the results of the approximately 73 additional drillholes for 27,000 meters including the newly defined Filo Amarillo zone, completed in 1998. New resource and reserve models are to be prepared in 1999 incorporating the geologic and metallurgical data generated during 1998 and early 1999.

Crushing and grinding tests were completed on six ore composites, indicating the ore to be relatively soft. Approximately 200 flotation tests have been completed on ore composites and, based on these tests, recoveries were estimated to be 87% for copper, 50% for gold and 65% for molybdenum producing a copper concentrate grading 33% copper and a separate molybdenum concentrate. Phase 2 pilot scale metallurgical work is scheduled for completion in the first half of 1999.

Preliminary results from recent testing of low grade copper mineralization (0.2 to 0.4%) is commonly yielding 80% recovery. Higher grade copper mineralization typically produced concentrates greater than 30% copper with better than 90% recovery. Some ore types are also yielding 70% recovery of molybdenum.

Capital costs have been estimated (in first quarter 1997 dollars) to be US$767 million for the 60K case and US$1.1 billion for the 120K case. The capital costs were estimated based on a mix of quotations, experiences of the nearby Alumbrera mine which has a similar capacity and factored costs from BHP's similar mines elsewhere.

Future Work

The Study demonstrates the potential feasibility for the development of a large scale copper-gold-molybdenum mine at Agua Rica based on 1997 metal prices. Additional work, most of which is currently underway, is required to produce a final feasibility study and offers potential for future optimization of the Agua Rica project. A program designed to facilitate the completion of a final feasibility study is continuing. This will include:

1. Updated resource estimates and mine plans, incorporating the results of the additional drilling completed in 1997 and 1998 for the development of a project reserve model.
2. Evaluation of the potential for recovery of copper through low grade dump leaching and for the recovery of gold from gold leach cap material removed during stripping.
3. Phase 2 metallurgical testing of bulk sampling, pilot mill tests and concentrate value optimization.
4. Continuing evaluation of project infrastructure, water supply, product transportation and power supply alternatives, as well as production scale optimizations.
5. Extraction of a representative bulk sample from the deposit for pilot plant metallurgical testing and milling evaluation.
6. Construction and monitoring of environmental test pads and ongoing environmental baseline monitoring.

BHP and the Corporation are currently reviewing the Study and several potential optimizations identified since the Study was completed. The optimizations under review include the potential for reduced power and concentrate transportation costs, increased mill throughput based on softer ore and the impact of increased tonnage and grade of the resources due to 1997 and 1998 drill results.

BHP has presented a budget for the Agua Rica project for the period June 1, 1999 to May 31, 2000. The proposed budget calls for expenditures of US$2.0 million. The proposed budget and work program is currently being reviewed by the Corporation.

Fiscal Stability Application

The Agua Rica joint venture has filed a fiscal stability application for the project that, if approved, will guarantee protection for the project from increases in taxes, import duties, royalties and other government-controlled costs for a period of thirty years.

San Jorge

The San Jorge copper/gold property consists of seven mining concessions and 35 staked mineral claims covering 50 hectares that are owned by GMA. The purchase price for the seven concessions was US$4.015 million.

Location and Access

The San Jorge property is located approximately 90 kilometres northwest of the city of Mendoza in Mendoza Province, Argentina and 250 kilometre northeast of Santiago, Chile. The property is accessed from the paved Mendoza-Santiago highway to the town of Uspallata and then 40 kilometres north on a good gravel highway along the Uspallata valley. The property is at an elevation of 2,500 meters and the deposit occurs as a small hill surrounded by flat alluvium plains.

History

Several test pits were dug at San Jorge in the 1960s to investigate outcropping copper-oxide mineralization and in 1964 Compania Minera Aguilar ("Aguilar") optioned the property. Over the next four years, Aguilar completed approximately 950 meters of trenching, 111 kilometers of induced polarization ("IP") and 32 diamond drillholes for 4,894.5 meters. Exploraciones Falconbridge Argentinos ("Falconbridge") optioned the property in 1973 and drilled six holes for 1,126 meters. Falconbridge also sent samples for metallurgical testing.

RAA optioned the property in 1992 and, between 1993 and 1995, 45 reverse circulation holes for a total of 5,518 meters and two core holes totaling 165 meters were drilled. In 1994, metallurgical testing of oxide mineralization from various cutting samples and of an enriched zone was conducted.

From 1994 to 1996, 43 reverse circulation holes were drilled for 3,942 meters and eight lines totaling 17.6 kilometers of IP were surveyed over and beyond the mineralized outcrop. The option to RAA was terminated and GMA purchased the property in 1995. Between September 1995 and February 1996 a 5,746 meter drill program was conducted on the property. From this drilling, samples were taken for metallurgical testing.

In March 1999, GMA and Argentina Mineral Development ("AMD"), an associate of Climax Mining of Australia, entered into an agreement (the "AMD Agreement") that allows for the consolidation of a large land package surrounding the San Jorge property. Both companies agreed to contribute their property holdings and mining rights in San Jorge and the surrounding area into a newly formed holding company. GMA will own 85% of the company and AMD will hold the remaining 15%. This new company plans to continue the development of San Jorge, working towards producing a bankable feasibility study. AMD's ownership in the holding company may be redeemed in exchange for a 2% net smelter return royalty ("NSR") on the mine developed if the new company produces a feasibility study within three years, obtains financing within another year and commits to construction of a mine within another six months. If AMD's interest is redeemed, GMA would then own 100% of the new company. If the project does not proceed, the ownership structure will remain in place and will allow for potential disposal of each party's interest.

Geology and Mineralization

San Jorge is a porphyry copper deposit. Mineralization at San Jorge trends northeast and occurs in four approximately horizontal but irregular layers, from top to bottom as follows:

- Leached: A leached cap with copper grades averaging 0.15% copper or less, primarily as green and black copper oxides that should be amenable to dump leaching.
- Oxide: Best developed along the western contact of the granite porphyry with the clastics and comprises malachite, chrysocolla, tenorite and pitch limonite with grades averaging approximately 0.5% copper and 0.25 grams of gold per tonne at a 0.1% copper cut-off.
- Enriched: Associated with areas of intense faulting and repetitive water recharge, and occurs as sooty and steely chalcocite, covellite, digenite and subordinate chalcopyrite averaging approximately 0.7% copper and 0.20 grams of gold per tonne at a 0.1% copper cut-off.
- Primary: Three high grade areas have been defined in clastics. Good copper grades in the clastics and intrusives have been detected to as much as 495 meters below surface. Copper occurs dominantly as chalcopyrite with very minor bornite. At a 0.4% copper cut-off, the primary mineralization has an average grade of 0.5% copper and 0.2 grams of gold per tonne.

Gold occurs in native form and uniformly grades 0.2 grams of gold per tonne throughout the copper deposit. Silver distribution is approximately proportional to copper grade and averages 3.5 grams of silver per tonne overall.

Resources

The total indicated and inferred resource at San Jorge for oxide, enriched, and primary mineralization, using a 0.25% copper cutoff, is estimated by Northern Orion to be 381.4 million tonnes grading 0.39 % copper and 0.15 g/t Au for a contained 1.49 million tonnes of copper and 1.8 million ounces of gold. At a 0.4% copper cutoff the total resource is reduced to 113.1 million tonnes grading 0.60% copper and 0.18 g/t gold for a contained 670,000 tonnes of copper and 636,000 ounces of gold.

An indicated resource has been estimated by the Corporation based on open pit mining and heap leaching the oxide and secondary enriched mineralization for solvent extraction and electrowinning (SX/EW) for copper recovery. Assuming a US$0.85 per pound copper price, a 0.25% copper cutoff, and a 2% NSR with incremental dump leach of low grade material, an in-pit resource has been estimated at 57.3 million tonnes grading 0.61% copper, for 348,900 tonnes of contained copper. Primary copper-gold mineralization could then potentially be evaluated for a primary milling style of operation, producing concentrates.

Metallurgy

In 1997, a metallurgical test program was undertaken to determine the response of the ore to bacterial oxidation. Preliminary results indicated recoveries up to 75% in 250 days. Flotation tests on primary mineralization have given copper recoveries of up to 92% producing concentrates grading 25% copper. Gold is mostly free milling and recoveries of 60% have been achieved.

Exploration

Drilling by GMA and AMD has encountered indications of additional copper mineralization to the northeast, east and southeast of the main San Jorge deposit in a similar geologic setting to the main San Jorge deposit. These results indicate the potential for the expansion of the deposit beyond the current resource.

Areas to the east and southeast of San Jorge, within the expanded property area, contain large IP chargeability anomalies that coincide with anomalous copper-bearing, reconnaissance drill hole intercepts, indicating potential for satellite copper systems similar to the San Jorge deposit.

Due to depressed copper prices the Corporation is currently evaluating the potential for developing an SX/EW operation at San Jorge and limited work is planned for 1999.

Cuban Properties

Acquisition of Minera Mantua Inc.

The Corporation entered into a letter of intent dated May 1, 1995 with Miramar and subsequently entered into an agreement dated October 4, 1995 (the "Transaction Agreement") with Miramar, Red Lion Management Ltd. ("Red Lion") and Richard Dewinetz ("Dewinetz") (collectively the "Vendors") pursuant to which on December 20, 1995 the Corporation purchased (the "MMI Transaction") from the Vendors all of the outstanding shares of Minera Mantua Inc. ("MMI") in exchange for 24 million Common Shares of the Corporation. MMI, through Minera Cobre S.A. ("Cobre") and Minera Delita S.A. ("Delita"), both of which became wholly-owned subsidiaries of MMI prior to the completion of the MMI Transaction, has a 50% working interest in the Mantua copper project (the "Mantua Project"), and has the right to earn a 50% working interest in the Delita gold project (the "Delita Project"), respectively. The Mantua Project and the Delita Project are both located in Cuba and are referred to collectively herein as the "Cuban Projects".

Prior to the MMI Transaction, Miramar owned all of the outstanding shares of Cobre and Delita. Miramar acquired all of the outstanding shares of Cobre and Delita from Matlock Mining, N.L. ("Matlock"), an Australian company, pursuant to an agreement dated March 1, 1993 (the "Matlock Purchase Agreement"). Pursuant to the Matlock Purchase Agreement, Miramar paid Matlock share consideration having a value of approximately $475,000 in respect of the purchase price for the shares of Cobre and Delita and was obligated to pay a further $350,000 to

Matlock (which amount was subsequently paid by the Corporation). The Matlock Purchase Agreement also provides that (i) Cobre is obligated to repay to Matlock the $750,000, plus interest, which was invested by Matlock in the Mantua Project and the Delita Project prior to the sale of the shares of Delita and Cobre by Matlock to Miramar pro rata with the return of equity to Miramar, and (ii) Matlock is entitled to receive 12% of the difference between all profits received by Cobre and Delita from their 50% working interests in the respective projects and administrative expenses (to a maximum of US$150,000 per year for each company) of Cobre and Delita.

Prior to the MMI Transaction, Miramar transferred to MMI all of the outstanding shares of Cobre and Delita and the obligation to pay $350,000 to Matlock and converted all of its advances to fund the Cuban Projects to April 30, 1995 into shares of MMI. The aggregate cost, as at April 30, 1995, of Miramar's interest in Cobre and Delita, including the amount of $350,000 payable to Matlock and amounts advanced by Miramar to Cobre and Delita to fund the Cuban Projects, was $7,188,261. A wholly-owned subsidiary of Miramar was indebted to each of Red Lion and Dewinetz in the amount of $75,000, which amounts were used for the Cuban Projects. Prior to the MMI Transaction, Red Lion and Dewinetz converted such indebtedness into shares of MMI.

Pursuant to the MMI Transaction, Miramar, Red Lion and Dewinetz exchanged all of their shares of MMI for 23,484,850 Common Shares, 257,575 Common Shares and 257,575 Common Shares, respectively, at an ascribed price of $2.50 per share. For tax purposes the shares of MMI were transferred to the Corporation at the respective cost bases of such shares to the Vendors. Accordingly, in the event the Corporation disposes of the shares of MMI at an amount in excess of such cost bases, the Corporation will realize a taxable gain on such disposition.

The reserve and resource estimates for the Cubans projects have been prepared in accordance with proposed OSC National Instrument 43-101 and the Canadian Institute of Mining and Metallurgy classification system.

Mantua Project

The Mantua Project is a secondary enriched copper deposit located in Pinar del Rio Province, western Cuba, 240 kilometers from Havana. The Mantua Project consists of an 8 square kilometer production concession and an adjoining 11.2 square kilometer area of interest. The site is accessed by a four-lane highway from Havana to Pinar del Rio, which is 65 kilometers east of the site. A paved secondary road then links with the site.

Acquisition Agreement

Cobre acquired a 50% working interest in the Mantua Project pursuant to an agreement with Geominera SA ("Geominera") dated August 13, 1993, (as amended, the "Cobre Association Agreement"). Geominera is a Cuban corporation formed by the Cuban Ministry of Basic Industry for the purpose of holding mineral rights and entering into agreements with foreigners for the development of such mineral rights. The Cobre Association Agreement and the related articles of incorporation are the constating documents of Cobre Mantua S.A. ("Comantua"), a Cuban joint enterprise the shares of which are allocated on a 50/50 basis between Geominera and Cobre, with each party's equity capital contribution agreed to have been US$1 million. Geominera's equity capital contribution was comprised of the exclusive right to explore, develop, mine and exploit the Mantua Project, together with all previous studies and investigations relating to the Mantua Project. Cobre's equity capital contribution was comprised of the feasibility study on the Mantua Project that was prepared in 1993 together with a cash contribution of US$20,000. Profits of Comantua are to be distributed 50% to Cobre and 50% to Geominera. Pursuant to the Cobre Association Agreement, Cobre was required to negotiate and obtain all financing necessary for the commercial development of the Mantua Project by June 30, 1995. However, subsequent to the date of the Cobre Association Agreement, Geominera agreed that the June 30 date would be waived so long as Cobre obtained financing when required to develop the Mantua project.

Under the Cobre Association Agreement, in order to repay loans received by Comantua from Cobre, Cobre is entitled to the total net income (after satisfaction of all current obligations in respect of third party financing) of the Mantua Project during the first two years of operations of the mine and the industrial installations. If any such loan amount remains outstanding at the end of that two year period, Cobre will continue to be entitled to no less than 80% of the net income of the Mantua Project until all such amounts owed are repaid. All major decisions of Comantua require the approval of the representatives of each of Geominera and Cobre; however, all ordinary operating decisions are made by the operations manager who is nominated by Cobre for a period of time equal to 1.5 times the period of time required for Cobre to receive a return of its capital investment.

History and Exploration

In the early 1960s workers from the Instituto de Recursos Minerales, a Cuban government agency, explored the Mantua copper deposit. In 1964 copper mineralization was discovered beneath an iron rich gossanous cap by an exploration program, including drilling, supervised by Soviet geologists. In 1992 Marc Rich & Co., a United Kingdom based investment firm, completed an additional 12 drill holes, geotechnical investigations and metallurgical test work.

In late 1993 Miramar commenced detailed investigations, including an additional 13 drill holes, bulk sampling and metallurgical testing. In addition, an 11 tonne metallurgical sample was collected from one of the test shafts for metallurgical testing. A preliminary metallurgical scoping study was completed in the latter part of 1993 on material collected from one drill hole and a metallurgical test program was commenced in February 1994 on material from the 11 tonne bulk sample.

In the summer of 1994 Miramar drove a 145 meter exploration tunnel to access the ore body and in September and October 1994 extracted 600 tonnes of material for pilot scale metallurgical testing. A pilot plant was operated using material extracted from the tunnel. Pilot plant operations were conducted in two phases; in November and December 1994 and from January to March 1995. Results of these operations confirmed the viability of the preferred processing method.

In 1995 Miramar identified significant gold values in the gossan cap overlying the main copper deposit, as well as payable gold credits in the copper ore itself, and a zone of anomalous gold values parallel to the copper deposit. A program of work to evaluate the potential for an economic gold operation to recover gold values from the gossan cap was commenced in February 1995. A total of 65 drill holes were completed, delineating a zone of potentially commercial gold values over the centre of the copper deposit. Metallurgical testing has demonstrated the amenability of this material to conventional heap leach recovery methods.

In 1996 a regional exploration program was initiated to identify additional gold occurrences in gossans, saprolites and regional shear structures. In excess of six hundred surface samples were taken throughout the region and some minor gold occurrences were identified.

Drilling in 1997 involved two main phases that included nine diamond drill holes for 655 meters and eight diamond drill holes for 684.7 meters, respectively. Both programs were primarily designed to define the distribution of near surface, gold gossan; however, the second program included two deep holes. Late in the year a single hole was drilled to collect a metallurgical sample.

Geology and Mineralization

The Mantua copper deposit is a secondary enrichment of copper mineralization produced by the weathering of primary sulphide mineralization of volcanogenic-exhalative origin. Copper has been leached from trace amounts of sulphide copper mineralization (chalcopyrite) and re-deposited beneath a gold-rich gossanous cap.

Primary sulphide mineralization, both massive and disseminated, occurs within a 50 to 100 meter thick sequence of inter-layered basic volcanics, shales, siltstones and sandstones. Folding and thrust faulting in the Late Mesozoic was focused between the more competent limestone units causing extensive shearing and brachiation of the volcanic and sedimentary sequence.

The area surrounding the Mantua Project is folded into a broad syncline and anticline defining an open "S" shape. The eastern limb of the syncline contains the majority of the mineralization defined by drilling. The Mantua copper deposit forms an elongate lens with a northeast to southwest strike, lying concordantly within the enclosing formations. The deposit dips 50 to 70 degrees and extends over a strike length of 1,300 meters. Widths of the mineralized zone vary from 50 to 150 meters.

Unoxidized mineralization is dominated by pyrite, with some chalcopyrite and sphalerite. The oxide zone is composed of iron oxides without copper enrichment, while the supergene zone below this leached cap consists mainly of chalcocite, with cuprite, covellite and some native copper. The secondary enriched copper zone can be divided into three distinct ore types which may be segregated during mining operations.

Geological Resources

The reserves and resources at Mantua have been calculated by the Corporation, using the 1997 drill holes. For the gold gossan, after mining in 1998, proven and probable reserves as at December 31, 1998 are estimated to be 319,000 tonnes grading 2.16 grams per tonne containing 22,000 ounces of gold. For the copper ore, proven and probable reserves are estimated to be 7,525,000 tonnes grading 2.74% copper containing 206,212 tonnes or 454.6 million pounds of copper and additional measured and indicated resources are estimated to be 4,454,000 tonnes grading 0.76% copper containing 33,850 tonnes or 74.6 million pounds of copper.

Mine Plan and Capital Cost

After a thorough review of previous testwork and a rigorous program of laboratory and pilot tests conducted in Cuba, Chile and Canada from 1993 through 1998, a processing scheme was selected which utilizes modern, proven, processing technologies to extract the maximum amount of copper economically possible. These processing steps include grinding, agitation leaching, solvent extraction and, finally, electrowinning for the production of copper cathodes. Gold processing includes crushing, agglomeration, heap leaching and Merrill-Crowe gold doré recovery.

The copper ore will be fed as mined directly to an SAG (semi autogenious grinding) mill, followed by leaching in agitated tanks. A series of counter current decantation thickeners will then wash out all of the copper containing acid solution.

Copper containing acid solutions will be processed through a solvent extraction circuit to form a strong electrolyte solution from which copper cathodes will be produced by conventional electrowinning. Tailings will be pumped to a nearby impoundment for disposal based on an environmentally sound design.

The gold contained in the gossan cap is currently being extracted. The process utilizes some of the copper producing facilities already built.

The preliminary design is for processing facilities capable of treating 750,000 tonnes of high grade copper ore per annum.

Phase 1 Gold Leaching

Construction of the Phase 1 gold leaching at the Mantua Project commenced in March 1997 and concluded in February 1998. Phase 1 consists of a heap leach gold operation that was planned to recover approximately 70,000 ounces of gold from the gossan cap over a two-year period at a capital cost of approximately US$11.6 million. Removal of this material will allow access to the high grade copper reserve under the gossan cap.

Gold production commenced in February 1998. Prior to achievement of production, all costs of startup operations and related interest and overhead were capitalized. During 1998, revenues from gold sales were US$4.8 million of which the Corporation's share was $2.4 million. The total production sold was 16,323 ounces of which the Corporation's share was 8,161 ounces. As the result of certain hedging transactions entered by the Corporation, the realized selling price on the Corporation's 50% share of production was US$337 per ounce compared to an average gold spot price of US$294 per ounce for the period.

Although significant progress was made on the Mantua gold heap leach operation, field results have failed to match those predicted from lab tests. Due to higher that expected ore clay and fines content and the impact of major rain delays, field leach times have had to be extended to 70 days from the designed 28 days and ultimate gold recoveries are expected to be 60% versus the predicted 85%. These factors, combined with the current low gold prices, have resulted in a re-evaluation of the mine and process plans leading to a significant increase in the process cut-off grade. As a result of these changes, it is expected that only 50,000 ounces of gold will be produced over the two year heap leach life. Cash costs are expected to be in the US$250 – US$260 per ounce range.

Cash operating cost for 1998 was US$244 per ounce. The total tons of ore mined in 1998 was 423,742. at The average grade was 0.09 ounces per ton with a cumulative recovery to December 31, 1998 of 51%.

The Phase 2 copper operation is planned to commence after gold leaching is completed. Evaluation of the copper phase is proceeding, with production targeted to average over 40 million pounds of copper cathodes per year at a cash cost of under US $ 0.45 per pound.

Capital costs are anticipated to be significantly lower than previously anticipated due to the adoption of an elevated pressure and temperature leach process. This process is similar to hat used at Western Metals Gunpowder project in Australia.

In November 1997 the Corporation entered into a credit agreement with a chartered bank whereby the Corporation borrowed US$9.6 million to fund the construction of the gold leaching facility on the Mantua Project (the "Loan"). Miramar provided the bank with a guarantee of repayment of the Loan (the "Guarantee") in consideration of a guarantee fee of 5% of the amount of the loan. As the Mantua Project did not generate sufficient cash to repay the Loan, Miramar was called on the Guarantee and paid a total of Cdn$10.1 million during 1998 to the bank. This amount is owed to Miramar by the Corporation, is payable on demand and bears interest at the rate of 8% per annum.

Delita Project

The Delita Project is comprised of the Delita gold deposit located on the western portion of the Isla de la Juventud ("Isle of Youth"), which is approximately 80 kilometers south of the main island of Cuba and 215 kilometers south of Havana. Access to the Isle of Youth's capital and port city, Nueva Gerona, is via daily flights from Havana or by auto ferry or passenger hydrofoil. Large equipment may be off-loaded at the port of Nueva Gerona. The Delita gold deposit is accessible from Nueva Gerona by 40 kilometers of paved road.

In 1998 the Delita Project was placed on hold due to low gold prices and a writedown of $8.4 million, representing the costs of exploration of the project to 1998, was recorded.

Acquisition Agreement

Delita acquired the right to earn a 50% working interest in the Delita Project pursuant to an agreement dated December 14, 1993, (as amended, the "Delita Association Agreement"), with Geominera. Under the Delita Association Agreement, a preliminary feasibility study was completed in May 1995 and was declared by Delita and Geominera to be positive. On December 21, 1996, Delita and Geominera entered into an association agreement and articles of incorporation for a joint enterprise (the "Joint Enterprise") in respect of the Delita Project, similar to those used to form Cobre Under the Delita Association Agreement the Joint Enterprise is to complete a final feasibility study within six months of the date of the association agreement in order to obtain financing for the commercial development of the Delita gold deposit. Delita is required to cause the final feasibility study to be completed and to obtain the financing required to develop the Delita Project within a period of eight months (which may be extended by a further four months) from the formation of the Joint Enterprise. As a result of the delay in the completion of the final feasibility study and the related obtaining of financing, Delita will be required to obtain an extension from the Cuban government of the times stipulated in the Delita Association Agreement.

Pursuant to the Delita Association Agreement, the shares of the Joint Enterprise are divided on a 50/50 basis between Geominera and Delita. Geominera's equity capital contribution is comprised of the exclusive right to explore, develop, mine and exploit the Delita gold deposit, together with all previous studies and investigations and existing infrastructure relating to the Delita Project. Geominera and Delita have agreed that the value of Geominera's equity capital contribution will be US$6.5 million. Delita's equity capital contribution will be comprised of the expenses incurred by it to prepare the preliminary and final feasibility studies, obtain third party financing to develop the Delita Project and fund the operations until project financing has been obtained. Geominera and Delita have agreed that the value of Delita's equity capital contribution will be US$3.5 million. In order to equalize the agreed equity capital contributions, under certain circumstances which include a production decision being made, Delita has agreed to pay Geominera US$1.5 million with interest, of which US$1,000,000 will be paid from 40% of the first dividends received by Delita from the Joint Enterprise and US$500,000 will be paid in five annual payments of US$100,000 between years 11 and 15 following the date of commencement of production at the Delita Project.

If the total amount spent by Delita to prepare the preliminary and final feasibility studies, to obtain equity and debt financing and to fund the operations of the Joint Enterprise until project financing has been obtained exceeds US$3.5 million, the excess amount will be a reimbursable expenditure to be paid to Delita by the Joint Enterprise. It is expected that any repayment of reimbursable expenses will be paid to Delita after the repayment of third party project financing loans but before the payment of any distributions on account of equity capital contributions. In addition, Delita will be entitled to a fee of US$2 million for obtaining financing for the Joint Enterprise, which fee will be payable on a pro rata basis with reimbursable expenses.

The Delita project will be subject to a one-time royalty payment of US$750,000 (US$375,000 for the account of Delita) payable after the seventh year of production.

History

The Delita gold deposit was discovered about 1900 but received only cursory interest until the 1920s, after which more detailed exploratory work was conducted until the 1940s. The Corporation understands that the Delita gold deposit was mined during the early 1950s. Following on-site roasting of concentrate, concentrates were shipped to a smelter for direct refining. In August 1961 all goods and companies located in the national territory of Cuba were expropriated in favour of the state. An indemnity has been obtained from Geominera in respect of any losses or expenses arising out of any claims from third parties relating to title to the Delita gold deposit.

During the 1970s and 1980s regional exploration, mapping and geophysical surveys and, from 1977 to 1980, trenching and drilling were carried out on the Delita gold deposit by the Cuban government. In 1980 a new shaft was sunk and a flotation and gravity process pilot plant was constructed with a throughput rate of approximately 60 tonnes per day. High recoveries of gold and silver were achieved but the inability to process the refractory concentrates prevented continuing operation.

All work ceased on the Delita gold deposit in 1989 with the withdrawal of the USSR from the Cuban economy. In June 1990 Boliden Contech, a Swedish multinational mining and services company, prepared a pre-feasibility study of the Delita gold deposit as part of a technical assistance arrangement with Cuba. In May 1992 Minproc Engineering Pty. Ltd., an Australian based international consulting engineering firm, prepared a further pre-feasibility study for Matlock on the Delita gold deposit.

In 1995 a drill program consisting of 61 diamond drill holes totalling 5,916 meters was completed. The program consisted of 13 confirmation holes (2,730 meters), 29 metallurgical holes (2,633 meters), 5 exploration holes (380 meters) and 14 short vertical holes (173 meters) to obtain oxide material for metallurgical testing. A comparison of assay results and geological interpretations generally indicate a good correlation with the Cuban database.

Since January 1995, field work has been concentrated on a detailed analysis of the Delita property using trenching, sapprolite sampling and mapping. The mapping includes a re-evaluation of the previously developed base data.

In March 1997 a 6,151 meter drill program was commenced on the Delita property to infill previous drilling on footwall veins to the main Delita vein and to determine the potential of satellite structures defined in previous trenching programs. This drilling identified a northeast extension to the main Delita vein and defined additional gold-bearing structures in the immediate footwall to the main Delita vein. Numerous intersections in the new structures contained significant gold and silver abundances; however, gold distribution in these structures did not have the continuity required to satisfy ore reserve criteria.

Geology and Mineralization

The mineralization is hosted by a meta-sedimentary sequence cut by a northeast trending fault zone that has been the focus of alteration and mineralization. Epithermal and mesothermal vein formation within this structural zone has resulted in several quartz-sulphide lenses that are up to 700 meters long and 500 meters wide. Within the main vein there are locally discontinuous high grade quartz veins, within an overall tectonic breccia zone.

Mineralization is primarily comprised of auriferous sulphides with the presence of both arsenopyrite and stibnite, and sphalerite. Other sulphide minerals also occur in a quartz-sericite-graphite-schist gangue. Gold values average approximately 4 grams per tonne at a 1 gram per tonne cut-off within the mineralized zones. Silver values are approximately 40 grams per tonne in these zones. Lead, zinc, arsenic and antimony accompany the precious metals. Gold is mostly sub-microscopic, is refractory and is associated with arsenopyrite and sulphosalts.

A resource of 13,282,000 tonnes grading 3.27 grams of gold per ton has been calculated by the Corporation and on site personnel based on drilling completed in May 1997. The drilling confirms gold contained in the main Delita vein.

ITEM 4 - SELECTED CONSOLIDATED FINANCIAL INFORMATION

	1998[1]	1997[1]	1996[1]	1995[1]	1994[2]
Total Revenues	3,629	637	2,593[3]	2,408[4]	41
Net Loss	21,287	7,126	1,526[3]	322[4]	31
Net Loss Per Share ($)	0.29	0.10	0.02[3]	0.01[4]	0.01
Total Assets	131,411	138,621	123,819	108,474	10,476
Long-term Debt	33,828	13,567	1,370	2,807	-

[1]As at and for the year ended December 31
[2]As at and for the six month period ended December 31
[3] Includes a gain on disposal of mineral properties of $1.3 million or $0.018 per common share
[4]Includes drilling revenue from equipment which was disposed of in 1995 of $1.1 million or $0.04 per common share

For the Three Months Ended (unaudited)[1]

	Dec 31, 1998	Sep 30, 1998	June 30, 1998	Mar 31, 1998	Dec 31, 1997	Sep 30, 1997	June 30, 1997	Mar 31, 1997
Revenue	957	1,482	1,176	14	121	292	78	146
Loss	16,521	2,098	1,800	868	4,769	959	844	554
Loss per Common Share	0.23	0.03	0.02	0.01	0.064	0.013	0.01	0.01

[1]All figures expressed in thousands of dollars, except per share amounts

The Corporation has not paid any dividends on the Common Shares and has no dividend policy with respect to the payment of dividends.

ITEM 5 - MANAGEMENT'S DISCUSSION AND ANALYSIS

The section entitled "Management's Discussion and Analysis of Financial Condition and Results of Operations" included in the annual report to the shareholders of the Corporation for the year ended December 31, 1998 is incorporated herein by reference.

There is no material financial or operational effect of environmental protection requirements on the Corporation's capital expenditures, earnings and competitive position in the current financial year and the Corporation cannot predict such effects in future years.

ITEM 6 - MARKET FOR SECURITIES

The Common Shares are listed and posted for trading on The Toronto Stock Exchange and the Vancouver Stock Exchange.

ITEM 7 - DIRECTORS AND OFFICERS

The following table sets forth the names and municipalities of residence of the directors and officers of the Corporation, their positions held with the Corporation and their principal occupations.

Name and Municipality of Residence	Positions Held	Director Since	Principal Occupation
John K. Burns Philadelphia, Pa.	Chairman of the Board and Director	1995	President & Chief Executive Officer, Frontier Resources Management L.L.C., Chicago - Project Finance Advisors & Arrangers, Project Managers & Operators Commodity Trading Advisors, Introducing Brokers
Terence O'Kane	Director	1999	Self-employed Mining Engineer
Lyall D. Knott, Q.C.(1)(2)(3) Vancouver, B.C.	Director	1987	Partner, Clark Wilson, law firm
Stephen P. Quin(1)(2) West Vancouver, B.C.	Executive Vice-President and Director	1988	Executive Vice-President of Miramar Mining Corporation
Christopher J. Pollard(2)(3) Vancouver, B.C.	Director	1994	Associate Counsel, Clark Wilson, law firm
Anthony P. Walsh West Vancouver, B.C.	Interim President and Chief Executive Officer, Chief Financial Officer and Vice-President, Finance, and Director		Interim President and Chief Executive Officer, Chief Financial Officer and Vice-President, Finance, Miramar Mining Corporation
Stephen Wilkinson West Vancouver, B.C.	Director	1999	Self-employed Businessman
Brian Labadie North Vancouver, B.C.	Senior Vice-President, Operations		Senior Vice-President, Operations, Miramar Mining Corporation
David Cohen West Vancouver, B.C.	Senior Vice-President, Engineering and Development		Senior Vice-President, Engineering and Development, Miramar Mining Corporation
Luis Vera Havana, Cuba	Vice-President, Operations Cuba		Vice-President, Operations Cuba, Northern Orion Explorations Ltd.
A. David Long West Vancouver, B.C.	Corporate Secretary		Corporate Secretary and General Counsel, Miramar Mining Corporation.

(1) Member of executive committee.
(2) Member of audit committee.
(3) Member of environmental committee.

Each of the foregoing individuals has been engaged in the principal occupation set forth opposite his name during the past five years except for: John K. Burns who, prior to March 1995, was global head of Metals Derivatives, Barclays Metals, a division of Barclays Bank, London; Christopher J. Pollard who, prior to December 1998 was the President of Pollard Management Ltd., a management consulting firm and, prior to February 1997, was a partner of Owen, Bird, a law firm; Anthony P. Walsh who, prior to March 1995, was Senior Vice-President and Chief Financial Officer of MFP Technology Services Ltd. a computer leasing company; Stephen Wilkinson

who, prior to 1999, was a gold analyst with RBC Dominion Securities Inc, and investment dealer and prior to 1996, was an independent mining and financial consultant; David Cohen who, prior to December 1996, was Director of Business Development of Fluor Daniel Inc., an international engineering and construction company; Brian Labadie who, prior to December 1996, was Vice-President Operations of Echo Bay Mines Limited, a mining company and, prior to May 1995, was Vice-President Planning and Development of Echo Bay Mines Limited, a mining company; and Luis Vera who, prior to November 1996, was President of L. Vera & Associates Ltda., a mining consulting firm.

ITEM 8 - ADDITIONAL INFORMATION

Additional information including directors' and officers' remuneration and indebtedness, principal holders of securities of the Corporation, options to purchase securities and interests of insiders in material transactions, where applicable, is contained in the management information circular of the Corporation for its most recent annual meeting of shareholders that involved the election of directors. Additional financial information is provided in the comparative financial statements of the Corporation for its most recently completed financial year. A copy of such documents may be obtained upon request from the Secretary of the Corporation.

NORTHERN ORION
EXPLORATIONS LTD.

311 West First Street, North Vancouver, B.C. Canada V7M 1B5
Tel: (604) 980-0573 Toll Free: 1-800-811-4447 Fax: (604) 985-2189

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April 30, 1999 **NEWS RELEASE 99-0 3** NNO - TSE
MAE - TSE, VSE
MAENF - NASDAQ

Financial Results for the Year Ended December 31, 1998

Northern Orion announces its financial results forthe fourth quarter and year ended December 31, 1998. For 1998, Northern Orion reports a loss of $21.3 million or $0.29 compared to a loss of $7.1 million or $0.10 per share for the same period in 1997. This loss reflects the writedown of the Delita project in Cuba resulting from the continued low gold price, the writedown of certain properties in Argentina which have beenreleased due to low commodity prices or poor exploration results and the operating losses from the Mantua gold phase resulting from lower than expected recoveries of gold.

For the fourth quarter, the Company reported a loss of $16.5 million or $0.22 per share which was principally the result of the writedowns noted above and general corporate overheads including severance costs for certain exploration personnel in Argentina This compares to the loss of $4.8 million or $0.06 per share for the fourth quarter of 1997.

For the year, the Mantua mine in Cuba produced 16,323 ounces (of which Northern Orion's share is 8,161 ounces) of gold at an average cash cost of US$244 per ounce. Production in the fourth quarter was 4,850 ounces of gold at an average cash cost of US$267 per ounce. The continued low gold price and poor leach kineticsresulted in a re-evaluation of the mine and process plans, leading to a significant increase in the process cut-off grade and resulting in lower forecast total gold production and higher project cash costs. The gold phase of operations at Mantua are expected to continue until mid 1999.

With the collapse of metal prices and mining and exploration equities, Northern Orion continues to take the steps necessary to reduce its level of exploration activity and other expenditures. This will allow the Company toconserve its resources and focus its efforts on its highest priority projects; Agua Rica, San Jorge, Antofalla and Mantua.

Northern Orion Explorations (NNO-TSE) is a mining company targeting the exploration and development of gold and copper deposits in Latin America. Miramar Mining Corporation (MAE-TSE) owns 54.8% of the issued shares of Northern Orion.

For Further Information Contact
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No Stock Exchange has approved or disapproved the information contained herein.

NORTHERN ORION EXPLORATIONS LTD.

Consolidated Balance Sheets
(expressed in thousands of dollars)
Audited
December 31, 1998 and 1997

	1998	1997
Assets		
Current assets:		
Cash and short-term investments	$ 542	$ 6,359
Marketable securities	3	575
Accounts receivable	4,056	9,073
Inventory	2,201	52
Prepaid expenses	102	69
	6,904	16,128
Plant and equipment	8,788	7,780
Mineral properties and deferred development	113,397	112,462
Other assets	2,322	2,251
	$ 131,411	$ 138,621
Liabilities and Shareholders' Equity		
Current liabilities:		
Accounts payable and accrued liabilities	$ 3,076	$ 1,863
Current portion of long-term debt	5,801	8,932
	8,877	10,795
Payables to related parties	3,596	10,993
Guarantee to related party	10,120	–
Convertible debenture	17,907	–
Long-term debt	–	4,635
Reclamation liability	86	86
	40,586	26,509
Shareholders' equity:		
Share capital	122,000	122,000
Deficit	(31,175)	(9,888)
	90,825	112,112
	$ 131,411	$ 138,621

No Stock Exchange has approved or disapproved the information contained herein.

NORTHERN ORION EXPLORATIONS LTD.

Consolidated Statements of Operations and Deficit
(expressed in thousands of dollars except per share amounts)
Audited
Years ended December 31, 1998 and 1997

	1998	1997
Revenue:		
Metal sales revenue	$ 3,581	$ –
Interest and other income	48	637
	3,629	637
Expenses:		
Cost of sales	3,086	–
Depreciation and depletion	1,947	137
Management fees	2,190	2,532
General and administration	969	778
Interest	616	617
Write-down of marketable securities	572	1,365
Exploration	380	–
Write-down of mineral properties and deferred development	15,372	2,920
Gain on foreign exchange translation	(216)	(586)
	24,916	7,763
Loss for the year	21,287	7,126
Deficit, beginning of year	9,888	2,762
Deficit, end of year	$ 31,175	$ 9,888
Loss per share	$ 0.29	$ 0.10
Weighted average number of common shares outstanding	74,006,780	73,993,600

No Stock Exchange has approved or disapproved the information contained herein.

NORTHERN ORION EXPLORATIONS LTD.

Consolidated Statements of Changes in Financial Position
(expressed in thousands of dollars)
Audited
Years ended December 31, 1998 and 1997

	1998	1997
Cash provided by (used in):		
Operations:		
Loss for the year	$ (21,287)	$ (7,126)
Items not involving cash:		
Depreciation and depletion	1,947	137
Write-down of marketable securities	572	1,365
Write-down of mineral properties and deferred development	15,372	2,920
Net change in non-cash working capital	4,048	2,608
	652	(96)
Financing:		
Repayments to related parties	(15,652)	–
Advances from related parties	8,255	9,891
Guarantee to related party	10,120	–
Increase in long-term debt	572	13,567
Repayments of long-term debt	(8,338)	(1,369)
Increase in convertible debenture	17,907	–
Deferred gain	–	(685)
Common shares issued for cash	–	73
	12,864	21,477
Investments:		
Expenditures on:		
Plant and equipment	(2,955)	(7,242)
Mineral properties	(16,307)	(26,330)
Other long-term assets	(71)	(458)
	(19,333)	(34,030)
Decrease in cash and short-term investments	(5,817)	(12,649)
Cash and short-term investments, beginning of year	6,359	19,008
Cash and short-term investments, end of year	$ 542	$ 6,359

No Stock Exchange has approved or disapproved the information contained herein.

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May 11, 1999 **NEWS RELEASE 99-04** NNO – TSE
MAE - TSE, VSE

San Jorge Project Expands

Northern Orion is pleased to announce that it has consolidated the land position around the San Jorge copper deposit in Argentina, expanding the existing resource and opening up a larger area for exploration.

The San Jorge project encompasses a porphyry copper deposit that has undergone superficial leaching resulting in sub-horizontal oxide and enriched copper zones, overlying a large primary porphyry copper-gold deposit.

Resources

The total indicated and inferred resource for oxide, enriched, and primary mineralization, using a 0.25 % Cu cutoff, is 381.4 million tonnes grading 0.39 % Cu and 0.15 g/t Au for a contained 1.49 million tonnes of copper and 1.8 million ounces of gold. At a 0.4% Cu cutoff the total resource is reduced to 113.1 million tonnes grading 0.60% Cu and 0.18 g/t Au for a contained 670,000 tonnes of copper and 636,000 ounces of gold.

An indicated resource has been estimated based on open pit mining and heap leaching the oxide and secondary enriched mineralization for SX/EW copper recovery. Assuming a US$0.85/lb copper price, and a 0.25% Cu cutoff with incremental dump leach of low grade material, an in-pit resource has been estimated at 57.3 million tonnes grading 0.61% Cu, for 348,900 tonnes of contained copper. Primary copper-gold mineralization could then potentially be evaluated for a primary milling style of operation, producing concentrates.

Expanded Property Agreement

Northern Orion and Argentina Mineral Development ("AMD"), an affiliate of Climax Mining Ltd of Australia, executed an agreement that allows for the consolidation of a large land package surrounding the San Jorge property.

Both companies have agreed to contribute their property holdings and mining rights in San Jorge and the surrounding area into a newly formed holding company. Northern Orion will control the Board and 85% of the company and AMD holds the remaining 15%. This new company will continue the development of San Jorge, working towards producing a bankable feasibility study. AMD's ownership in the holding company may be redeemed in exchange for a 2% NSR on the mine developed if the new company produces a feasibility study within three years, obtains financing within another and commits to construction of a mine within another six months. If AMD's interest is redeemed, NNO would then own 100% of the holding company for San Jorge. If the project does not proceed, the ownership structure will remain in place and will allow for potential disposal of each party's interest.

No Stock Exchange has approved or disapproved the information contained herein.

Exploration Potential

Drilling by Northern Orion and AMD has encountered indications of additional copper mineralization to the northeast, east, and southeast of the main San Jorge deposit in a similar geologic settings to the main San Jorge deposit. These results indicate potential for expansion of the deposit beyond the current resource limits.

Areas to the east and southeast of San Jorge, within the expanded property area, contain large IP chargeability anomalies that coincide with anomalous copper-bearing, reconnaissance drill hole intercepts, indicating potential for satellite copper systems similar to the San Jorge deposit.

Location

San Jorge project is well located relative to infrastructure, 90 km northwest of Mendoza, Argentina, in flat terrain at an elevation of 2,500 m east of the Andes. The main highway from Santiago (Chile) to Mendoza (Argentina) passes 40 km to the south of the property, with an excellent gravel highway passing within 5 km of the property. This ease of access could facilitate the development of an SX/EW operation at San Jorge.

Ownership

Northern Orion is a Latin American exploration company focused on the development of copper and gold projects in Argentina and Cuba. Northern Orion has 74,006,780 shares issued of which Miramar Mining Corporation owns 54.8%.

For Further Information Contact
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No Stock Exchange has approved or disapproved the information contained herein.

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RESULTS OF OPERATIONS

Northern Orion Explorations Ltd. ("Northern Orion" or "the Company") completed the construction, commissioning and startup of a gold mining operation at the Mantua project in Cuba during 1998. With the achievement of full production in March 1998, Northern Orion began reporting the results of mining operations. In addition, the Company continued to evaluate and develop a number of mineral properties in Argentina. Financial constraints on Northern Orion have necessitated a reduced scale of exploration and development activities in 1998 as compared to previous years and resulted in the elimination of a number of property interests.

Northern Orion's financial condition has been challenged in comparison to 1997 due principally to continued expenditures on exploration and administrative overhead, poorer than expected operating performance at the Mantua operation, lower than expected gold prices and higher costs of financing required to maintain the properties held in Argentina and Cuba.

Northern Orion recorded a loss of $21.3 million or $0.29 per share in 1998 compared to a loss of $7.1 million or $0.10 per share in 1997. The 1998 loss includes write-downs on mineral properties and marketable securities of $15.9 million or $0.22 per share compared to writedowns of mineral properties and marketable securities of $4.3 million or $0.06 per share in 1997. Excluding the writedowns of mineral properties and marketable securities, the Company's loss in 1998 of $5.3 million compares to a loss of $2.8 million in 1997. The increased loss in 1998 was due to losses from the operations in Cuba, costs of curtailing exploration activities, costs of depreciation related to the Cuban operating assets and costs of external debt. These increased costs were partially offset by a reduction in management fees charged by Miramar.

Mining Operations

Gold production commenced at the Company's 50% owned Mantua mine in the first quarter of 1998. Prior to achievement of commercial production, all costs of startup operations and related interest and overhead were capitalized. During 1998, revenues from gold sales were US$4.8 million of which Northern Orion's share was $2.4 million. Total production sold was 16,323 ounces of which Northern Orion's share was 8,161 ounces. As the result of certain hedging transactions entered by Northern Orion, the realized selling price on the Company's 50% share of production was US$337 per ounce compared to an average gold spot price of US$294 per ounce for the period. Cash operating cost for 1998 was US$244 per ounce. Total tons of ore mined in 1998 were 423,742 at an average grade of 0.09 ounces per ton. Cumulative recoveries on ore treated in 1998 reached 51% and estimates for the ultimate recoveries were downgraded to 60%.

EXPLORATION AND DEVELOPMENT ACTIVITIES

Agua Rica

Work continued in 1998 at the 30% owned Agua Rica Project in Argentina. The project operator, BHP completed the 1997/98 work program for the project in May 1998 and commenced work on the 1998/99 work program in June. The Company's share of these programs (including management fees to the operator) is US$4.8 million for the 1998/99 work program and US$5.3 million for the 1997/98 program. The 1998/99 work program, to be completed in May 1999, will complete the necessary fieldwork required to support the preparation of a bankable feasibility study. Due to the decline in the world copper price in 1998, activities at Agua Rica are being conducted on a reduced scale from previous years. The 1998/99 work program builds on the work performed in completing the Initial Feasibility Study which was issued in November 1997. The findings of this study indicated that a large low-cost mine could be developed that would have attractive returns on capital invested. In the short-term, the capital required to advance the Agua Rica project will be available from internal sources of funds. Management of the Company is determined to see the project through final feasibility and beyond. On a long-term basis, the Company's share of the capital requirement to develop a mine at Agua Rica could be in excess of US$300 million. Northern Orion's management is continuing to examine all of the Company's options on how best to proceed with this important project. In order to develop a mine at Agua Rica, the Company will need to obtain or arrange significant additional capital.

Mantua

Work continued in 1998, further evaluating the Mantua copper phase, including additional drilling, detailed pilot plant testing, ore reserve development and selecting Bateman Engineering to complete a prefeasibility study and the completion of an internal review of the project. The Company is currently seeking funding to complete a bankable feasibility study. A final production decision for the copper phase is pending the results of this feasibility study and the recovery of the copper price. The Company's ability to develop the next phase at Mantua is dependent upon obtaining third party financing.

Other

In 1998, the Company continued to evaluate its prospective mineral properties in Argentina.

The Argentine projects accounted for expenditures that totaled $13.4 million in 1998 compared to $16.0 million in 1997 and $14.9 million in 1996. The single largest component of the Argentine expenditures was for the Agua Rica project and its extended area at $6.7 million (1997—$7.8 million and 1996—$7.0 million) in which Northern Orion (through it's wholly owned subsidiary, Recursos Americanos Argentinos SA or "RAA") has a 30% joint venture interest. Grupo Minero Aconcagua SA ("GMA") accounted for $5.3 million (1997—$7.5 million and 1996—$4.6 million) of these expenditures of which the largest component was for the San Jorge project at $1.3 million (1997—$3.4 million and 1996—$2.1 million).

The process of reviewing all properties in the "exploration pipeline" culminated in the fourth quarter of 1998. Management determined that the Delita project be placed on hold due to low gold prices and the deferred costs of $8.4 million associated with its exploration were written down. In Argentina this comprehensive review resulted in the abandonment of several prospective properties in 1998 and a corresponding writedown of $6.9 million was recorded.

LIQUIDITY AND CAPITAL RESOURCES

General

Due to the prospective nature of the mineral exploration business and the number of exploration properties held, Northern Orion has a limited ability to generate sources of internal cashflow from operations. The Company has financed the acquisition, exploration and development of its properties through a combination of the issuance of common shares, borrowings from Miramar, attracting joint venture partners to finance the evaluation of properties and third party borrowings.

When and if the Company places an adequate number of its exploration properties into production, it is expected that the resulting cashflows will become sufficient to sustain future operations, exploration and development. At present, the Company lacks the internal financial ability to advance any of its projects to the production stage.

Cash Resources and Liquidity

In order to properly manage the term structure of the funding provided by Miramar to Northern Orion, the Company entered into negotiations with Miramar which culminated in September 1998 with the issuance of a 5 year $17.5 million convertible debenture to Miramar. Under the terms of this debenture, Northern Orion agreed to provide certain assets as security to Miramar. The conversion feature of this debenture phases in over 3 years and is based on a conversion price of $1.47 per share. The debenture and accrued interest mature on September 14, 2003 (see note 6 to the consolidated financial statements for additional information regarding the convertible debenture). At the option of Miramar, interest and principal may be repaid in the form of common shares in Northern Orion. In 1997, the Company, through its subsidiary, Minera Cobre S.A., arranged financing of US$10 million with a chartered bank upon which quarterly repayments commenced at the end of March 1998. All amounts drawn under this facility are due by the third quarter of 1999. The Company and Miramar guaranteed the obligations of Minera Cobre S.A. should there be a deficiency in cashflow from the project. Due to the low gold price and lower than expected recoveries at Mantua, Minera Cobre S.A. was unable to generate sufficient cashflow from operations to make required principal and interest payments on this financing. As a result, the principal and interest requirements under the loan were met by Miramar under the terms of the guarantee to the lender. Amounts drawn under the Miramar guarantee bear interest at 11%. Miramar has agreed not to demand repayment of this amount in the coming year. Northern Orion is dependent on continued financial assistance from Miramar to continue the development and operation of its mineral properties. At the end of December 1998, the Company had a working capital deficiency of $2.0 million including cash of $542,000 compared to working capital of $5.3 million and cash of $6.3 million at the end of 1997. These funds are not sufficient to continue the full evaluation of all of the Company's mineral prospects. Management of the Company is in the process of further evaluating all of the Company's property interests in order to ensure that value is realized. In addition, the Company is reviewing all of its expenditures to ensure that cash commitments are prioritized. It is expected that the remaining balance of the Mantua construction loan will be repaid by Miramar under the guarantee. The Company is evaluating potential new sources of financing and all required expenditures to ensure that existing capital resources are available to maintain the core properties currently held.

In 1997, cash and short-term investments decreased to $6.3 million compared to $19 million in 1996. Working capital declined to $5.3 million in 1997 from $28.3 million in 1996.

This decline was the result of the investments undertaken by Northern Orion in 1997 at Mantua and at the various exploration projects in Argentina.

The Company's cash balances and short-term investments are unrestricted and have terms to maturity of less than 90 days. The current portion of the long-term debt is expected to be repaid by Miramar as the cashflow provided by the Mantua project will not be sufficient to meet these requirements. The remaining balance of accounts receivable of $4.0 million are expected to be received in June 1999. Apart from the requirement to fund the operations at Mantua, there are no restrictions to the free flow of funds between Northern Orion and its subsidiaries. Northern Orion is in the process of determining methods to obtain sufficient capital resources to meet its short and medium term financial requirements. Long term liquidity and capital resources will be dependent upon the successful development and profitable operation of mineral properties and the availability of capital from the equity markets. In order to maintain financial resources and take advantage of financial leverage, the Company will continue to negotiate with major financial institutions to obtain project financing.

Commitments

Northern Orion continues to contribute to a work plan for the Agua Rica property with its joint venture party, BHP, which requires that exploration and development expenditures be made under the terms of annual work programs. It is expected that total expenditures for 1999 under this program will be approximately $6.0 million (US$4.2 million), of which Northern Orion's share will be 30% or $2.0 million (US$1.4 million) including management fees. To December 31, 1998, the Company has spent C$20.6 million (US$14.5 million) on development activities at Agua Rica.

As part of the Mantua financing, the Company entered into forward sales contracts for the cashflows from the gold sales revenue in order to mitigate any currency risk associated with the project. At December 31, 1998 the currency hedge had unrealized losses of $637,000 which will be reflected in income as these contracts mature. The Company has entered into no other commitments for currency, metals or financial derivatives.

Northern Orion has entered into exploration agreements that require exploration expenditures to be funded in accordance with planned work programs and schedules. In most cases, these commitments are limited in recourse to the property involved and can be dropped with a loss of rights to the property being the only consequence.

REVIEW OF FINANCIAL RESULTS

General

Prior to 1998, Northern Orion was in a pre-operating phase during which it was evaluating its many exploration prospects. During the pre-operating phase, most of the costs of exploration and development (including related general and administrative expenditures) are capitalized. With the commencement of operations at Mantua, the Company's financial statements reflect a combination of operating results from the mining projects and the continued exploration and development of exploration properties.

Comparison of results for the previous two years

Revenue for the year of $3.6 million compares to revenue of $0.6 million in 1997 and $2.6 million in 1996. This increase results from the Company's 50% interest in the sales of gold from Mantua in Cuba and related hedging gains. In 1996 the Company recorded a gain on mineral properties optioned of $1.3 million which was non-recurring. Interest income earned in 1998 was $48,000 and compares to $0.6 million and $1.3 million earned in 1997 and 1996, respectively. Lower interest income is primarily the result of reduced cash balances being held by the Company during the year.

The Company's 50% share of the cost of sales of $3.0 million was incurred in the production of gold at the Mantua mine in Cuba. In addition, the Company reflected depreciation charges of $1.9 million related principally to the mining assets in Cuba.

Due to the increased financial pressures faced by Northern Orion in 1998, Miramar reduced the management fee to $100,000 per month commencing in October with the undertaking that overhead would be reduced generally as a result of a reduced level of operations related to Northern Orion. In 1997, the management fee charged had increased to $210,000 per month due to the significant effort of senior management on projects within Northern Orion. During 1996, Miramar charged a management fee of $100,000 per month. The management fee includes Northern Orion's share of all of the costs of premises and personnel as the Company shares executives, offices and employees with Miramar. The costs of these services are charged to Northern Orion based upon estimates made by management and staff regarding their efforts in respect of Northern Orion's properties and operations. It is expected that Miramar's management will take further steps to reduce overheads incurred on behalf of the Company and that the management fee in 1999 will be at or below $100,000 per month.

General and administrative expenses increased by $191,000 in 1998 to $969,000 primarily as the result of the severance costs incurred in reducing exploration personnel in Argentina during the second half of 1998. In 1997, general and administrative expenses were reduced from $1,424,000 in 1996 to $778,000 as the result of lower and regulatory expenses and through tighter management of administrative expenses. Interest charges of $616,000 in 1998 relate to the Company's share of the interest charged on the Mantua financing and compares to interest of $617,000 in 1997. During the year, the Company capitalized interest of $1.2 million on funds related to development properties and exploration activities. In prior years, interest was not capitalized on exploration properties. The costs of operating offices in Buenos Aires and Mendoza in Argentina and offices in Cuba are allocated to mineral properties to the extent that the costs relate to specific exploration and development properties.

In 1998, as additional exploration work was performed on the Company's portfolio of exploration properties, management determined that certain properties should not be further pursued and as a result a write-down of several of the properties (including Delita) totaling $15.4 million was taken. This compares to similar write-downs of $2.9 million and $1.3 million in 1997 and 1996, respectively. Write-downs of this nature are not unusual in the industry and should be expected to re-occur as grassroots exploration properties are evaluated and their potential for commercial viability is better defined.

As the result of declining equity markets for mineral exploration securities, the Company reduced the value of certain shares held as marketable securities to the lower of cost or market which resulted in a write-down of $572,000 in 1998 which compares to $1,365,000 in 1997 and $nil in 1996.

Investing Activities

In 1998, the Company invested a total of $19.3 million in mine construction ($3.0 million) and exploration and development activities ($16.3 million) which compares to investments in 1997 of $33.6 million and in 1996 of $22.6 million. The decrease is the result of completion of construction at Mantua in early 1998 and reduced levels of exploration in Argentina.

Financing Activities

The Company was unable to repay the maturing principal and interest on the funds of $13.6 million (US$9.6 million) borrowed to finance the construction of the Mantua gold phase. This financing was effectively replaced by the drawings on the Miramar guarantee. The Company used the majority of the proceeds of the $17.5 million convertible debenture to settle advances from Miramar. In the first quarter of 1998, interest on the construction financing of $572,000 (US$389,000) was capitalized into the principal balance of the loan. Additional advances have been received from Miramar during 1998 to temporarily finance the monthly management fee and various other short-term cash requirements.

OUTLOOK

Northern Orion's plan is to reduce expenditures to the lowest possible level while maintaining its interest in certain core properties. Plans for 1999 call for concentration on the Mantua project in Cuba and on Agua Rica, Antofalla and San Jorge in Argentina.

Operations

The gold phase at Mantua is expected to complete mining of ore in mid 1999. Upon completion of mining, the processing plant will continue to operate on drawing down work in process inventory until complete late in the third quarter of 1999. Management is currently assessing alternative opportunities and uses for the processing facility. The Company will continue to operate using the combined efforts of the Miramar management and the Northern Orion staff to focus on the exploration and development of the existing projects in Latin America. Inflation and changes in prices of significant inputs are not expected to materially affect the results of Northern Orion for 1999.

Advanced Stage Projects

The largest project currently underway is the Agua Rica copper-gold-molybdenum project. The Company continues to fund 30% of the exploration expenditures and costs of the feasibility study being prepared under the terms of a joint operation agreement with BHP. The program for 1999 includes completion of fieldwork and documentation and preparatory work towards a final feasibility study.

The Company is evaluating the potential for developing an SX/EW operation at San Jorge and will await a recovery in the copper price before committing to a work program necessary to complete a final feasibility study.

Construction of the second phase at Mantua is proposed to commence upon successful financing of the capital requirements for the project, completion of a positive final feasibility study and improvement in the price of copper.

Exploration Projects

The primary exploration target for 1999 is the Antofalla prospect in Argentina. In light of financial constraints, Northern Orion has rationalized the number of properties upon which exploration efforts will be focused and has therefore eliminated its interests in a number of non core properties. Northern Orion may perform grassroots exploration to generate additional new prospects as and when financial resources allow.

RISKS AND UNCERTAINTIES

The Company operates almost exclusively in foreign jurisdictions and is dependent on world metals and currency markets that may present risks to the future prospects of Northern Orion.

Risks Associated with the Mining Industry

Northern Orion is engaged in the exploration for and the development of mineral deposits. These activities involve significant risks which careful evaluation, experience and knowledge may not, in some cases, eliminate. The commercial viability of any mineral deposit depends on a number of factors, many of which are not within the control of management. Some of the factors which will effect the financial viability of a given mineral deposit include its size, grade and proximity to infrastructure. In addition, government regulation, taxes, royalties, land tenure, land use, environmental protection and reclamation and closure obligations could have a profound impact on the economic viability of a mineral deposit.

Northern Orion is not able to determine the impact of potential changes in environmental laws and regulations on its financial position due to the uncertainty surrounding the form such changes may take. As mining regulators continue to update and clarify their requirements for closure plans and environmental protection laws and administrative policies are changed, additional reclamation obligations and further security for mine reclamation costs may be required. It is not expected that such changes will have a material affect on the operations of Northern Orion.

Risks Associated with Financial Markets

Both Argentina and Cuba have currently fixed their currency to the US dollar and removal of these exchange controls could significantly effect the exchange rates in terms of the Canadian dollar. Continued weakness of the Canadian dollar in comparison to the US dollar will also affect the results of operations. Increasing costs of labour, supplies and energy may affect planned operations in future years. The potential for increased input prices is taken into consideration when preparing plans for future exploration, development and mine construction.

Risks Associated with the Market for Minerals

The prices of minerals are subject to relatively large movements over short periods of time. These prices have a direct impact on the commercial viability of production from mineral properties.

Risks Associated with Foreign Operations

Northern Orion's investments in foreign countries such as Argentina and Cuba carry certain risks associated with different political and economic environments. Northern Orion undertakes investments in foreign countries only when it is satisfied that the risks and uncertainties of operating in different cultural, economic and political environments are manageable and reasonable relative to the expected benefits.

The Impact of the Year 2000 Problem

The Company is well advanced in the process of evaluating the impact of the Year 2000 issue on its operations. Northern Orion uses relatively simple systems for the compilation and preparation of financial, operating and administrative information. The core business of Northern Orion is not reliant upon complex information technology or highly automated process logic control systems. Even with relatively uncomplicated systems, Northern Orion has commenced a detailed inventory and assessment of the impact of the Year 2000 issue on all information technology and mechanical systems. This assessment will identify areas where the Year 2000 issue may have an impact on the continued efficient operation of the Company. The Company has formulated plans to test, repair or replace these potential areas of risk and will design contingency plans for those areas outside the control of the Company. In addition, the Company has embarked upon an assessment of the preparedness of key suppliers and service providers to ensure that there are uninterrupted sources of supply and services to the Company's core business.

The Company is confident that all risk areas will be assessed, tested and repaired or replaced in advance of December 31, 1999. In order to ensure that adequate resources are available to properly evaluate the Year 2000 issue, the Company created a project team consisting of members of senior management charged with planning and reporting progress to the Board of Directors on a regular basis. The costs associated with this initiative to date have been included in the results of operations. All future expenses incurred in connection with Year 2000 preparedness will be expensed in the period incurred.

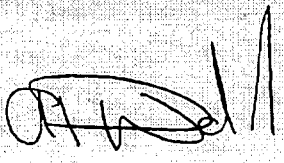
MANAGEMENT'S RESPONSIBILITY FOR FINANCIAL REPORTING

To the Shareholders of Northern Orion Explorations Ltd.:

The consolidated financial statements and all information in the Annual Report are the responsibility of the Board of Directors and management. The consolidated financial statements have been prepared by management based on information available to February 19, 1999 and are in accordance with accounting principles generally accepted in Canada. A system of internal controls is maintained by management to provide reasonable assurance that assets are safeguarded and financial information is accurate and reliable.

The Audit Committee of the Board of Directors is comprised of a majority of outside directors, and meets with management and the independent auditors to review internal control and financial reporting matters, and to ensure that management is maintaining adequate financial controls. The Audit Committee also reviews the audit plan of the independent auditors and discusses the results of their audit and their audit report prior to submitting the consolidated financial statements to the Board of Directors for approval.

The consolidated financial statements have been audited by KPMG and their report is below.



ANTHONY P. WALSH

Interim President, Vice-President Finance and Chief Financial Officer

AUDITORS' REPORT TO THE SHAREHOLDERS

We have audited the consolidated balance sheets of Northern Orion Explorations Ltd. as at December 31, 1998 and 1997 and the consolidated statements of operations and deficit and changes in financial position for the years then ended. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with generally accepted auditing standards. Those standards require that we plan and perform an audit to obtain reasonable assurance whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation.

In our opinion, these consolidated financial statements present fairly, in all material respects, the financial position of the Company as at December 31, 1998 and 1997 and the results of its operations and the changes in its financial position for the years then ended in accordance with generally accepted accounting principles. As required by the Company Act (British Columbia), we report that, in our opinion, these principles have been applied on a consistent basis.

KPMG LLP

CHARTERED ACCOUNTANTS

Vancouver, Canada
February 18, 1999

NORTHERN ORION
EXPLORATIONS LTD.

311 WEST FIRST STREET, NORTH VANCOUVER, B.C. V7M 1B5
TEL: (604) 980-0573 FAX: (604) 980-0731

NOTICE OF ANNUAL GENERAL MEETING OF SHAREHOLDERS

NOTICE IS HEREBY GIVEN that the Annual General Meeting (the "Meeting") of the shareholders of Northern Orion Explorations Ltd. (the "Corporation") will be held in the Lonsdale Quay Hotel, 123 Carrie Cates Court, North Vancouver, British Columbia on Wednesday, June 23, 1999, at 10:00 am (Vancouver Time) for the following purposes:

1. to receive the audited financial statements of the Corporation for the financial year of the Corporation ended December 31, 1998, together with the report of the auditor thereon;

2. to elect directors of the Corporation;

3. to appoint an auditor of the Corporation for the ensuing financial year and to authorize the directors of the Corporation to fix the remuneration of the auditor;

4. to transact such other business as may properly come before the Meeting or any adjournment thereof.

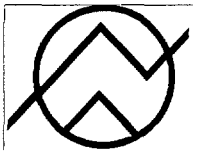
Shareholders of the Corporation are invited to attend the Meeting. Shareholders of record at the close of business on Thursday, May 6, 1998 are entitled to notice of the Meeting and will be entitled to vote at the Meeting. Shareholders who are unable to attend the Meeting in person should complete, date and sign the accompanying form of proxy and return it to the office of the Corporation's registrar and transfer agent, Pacific Corporate Trust Company, at 830 - 625 Howe Street, Vancouver, British Columbia, V6C 3B8.

Dated at Vancouver, British Columbia this 20th day of May, 1999.

By Order of the Board

Anthony P. Walsh
President

NOTE: Shareholders are requested to date, sign and return the accompanying form of proxy for use at the Meeting whether or not they are able to attend personally. In order to be used at the Meeting or an adjournment thereof, forms of proxy must be received by the Corporation c/o Pacific Corporate Trust Company, Suite 830, 625 Howe Street, Vancouver, British Columbia V6C 3B8, prior to 5:00 p.m., Vancouver time, on Monday, June 21, 1999, or, in the case of an adjournment of the Meeting, not later than 5:00 p.m., Vancouver time, on the business day prior to the reconvened meeting. Deposit of a proxy may be made by delivery through the mail, but the proxy should be mailed promptly in order to ensure timely deposit. A SELF-ADDRESSED ENVELOPE IS PROVIDED FOR RETURN OF A PROXY.



NORTHERN ORION
EXPLORATIONS LTD.

MANAGEMENT INFORMATION CIRCULAR

GENERAL PROXY INFORMATION

Solicitation of Proxies

This management information circular (this "Proxy Circular") is being provided to the shareholders of Northern Orion Explorations Ltd. (the "Corporation") in connection with the solicitation of proxies by the directors and management of the Corporation for use at the annual general meeting of the shareholders of the Corporation (the "Meeting") to be held in the Lonsdale Quay Hotel, 123 Carrie Cates Court, North Vancouver, British Columbia on Wednesday, June 23 1999, at the hour of 10:00 a.m., Vancouver time, called for the purposes set out in the notice of the Meeting accompanying this Proxy Circular. This Proxy Circular is first being sent to shareholders of the Corporation on or about May 18, 1999. Unless otherwise stated, information contained in this Proxy Circular is given as of the date hereof.

The solicitation of proxies for the Meeting will be primarily by mail, but proxies may also be solicited personally or by telephone by employees of the Corporation. Employees of the Corporation will not receive any extra compensation for such activities. The Corporation may also pay brokers or other persons holding common shares of the Corporation in their own names, or in the names of nominees, their reasonable expenses for sending proxies and proxy material to beneficial owners of common shares of the Corporation and requesting authority to execute proxies in respect of such common shares of the Corporation. The Corporation will bear the expenses of such solicitation of proxies.

No person is authorized to give any information or to make any representation other than as contained in this Proxy Circular and, if given or made, such information or representation should not be relied upon as having been authorized by the Corporation. The delivery of this Proxy Circular shall not under any circumstances create an implication that there has been no change in the information set forth herein since the date of this Proxy Circular.

Appointment of Proxy and Discretionary Authority

The persons named in the form of proxy accompanying this Proxy Circular are officers and directors of the Corporation. **A shareholder of the Corporation has the right to appoint a person, who need not be a shareholder of the Corporation, other than the persons named in the form of proxy accompanying this Proxy Circular, as nominee to attend and act for and on behalf of such shareholder at the Meeting and may exercise such right by inserting the name of such person in the blank space provided on the form of proxy, or by executing a proxy in a form similar to the form of proxy, accompanying this Proxy Circular. If a shareholder of the Corporation appoints one of the persons named in the form of proxy accompanying this Proxy Circular as the nominee of the shareholder and does not direct such nominee to vote either for, against or withhold from voting on a matter or matters with respect to which an opportunity to specify how the common shares of the Corporation registered in the name of such shareholder are to be voted, the proxy shall be voted for such matter or matters.**

To be effective, proxies must be received by the Corporation c/o Pacific Corporate Trust Company, Suite 830, 625 Howe Street, Vancouver, British Columbia V6C 3B8, prior to 5:00 p.m., Vancouver time, on

Monday , June 21, 1999, or, in the case of any adjournment of the Meeting, not later than 5:00 p.m., Vancouver time, on the business day prior to the reconvened meeting.

Exercise of Vote by Proxy

The common shares of the Corporation represented by a proxy at the Meeting will be voted for, against or withheld from voting in accordance with the instructions of the holder of such common shares of the Corporation, so long as such instructions are certain, on any ballot that may be called for and, where the shareholder of the Corporation whose proxy is solicited specifies a choice with respect to any matter to be voted upon, the common shares of the Corporation represented by such proxy will be voted in accordance with the specification so made. **If no choice is specified in the proxy, the persons named in the form of proxy accompanying this Proxy Circular will vote for all of the matters proposed by management at the Meeting and described in the notice of the Meeting accompanying this Proxy Circular.**

The form of proxy accompanying this Proxy Circular confers discretionary authority upon the persons named therein with respect to any amendment or variation to the matters identified in the notice of the Meeting accompanying this Proxy Circular and with respect to other matters which may properly come before the Meeting. Management of the Corporation knows of no matters to come before the Meeting other than those referred to in the notice of the Meeting accompanying this Proxy Circular. However, if any other matters which are not now known to management of the Corporation should properly come before the Meeting, the common shares of the Corporation represented by proxies given in favour of the persons named in the form of proxy accompanying this Proxy Circular will be voted on such matters in accordance with the best judgement of such person.

Revocation of Proxies

A shareholder of the Corporation may revoke a previously given proxy by depositing an instrument in writing executed by the shareholder or his attorney authorized in writing, or, if the shareholder is a corporation, under its corporate seal by an officer or attorney thereof properly authorized, indicating the capacity under which such officer or attorney is signing, and deposited, together with the instrument so empowering the officer or officers or the attorney, or a notarially certified copy of such instrument, either at the registered office of the Corporation at any time up to and including 5:00 p.m., Vancouver time, on the last business day preceding the day of the Meeting, or any adjournment thereof, at which the proxy is to be used, or in any other manner permitted by law.

Voting Securities and Principal Holders Thereof

As of May 8, 1999, 74,006,780 common shares of the Corporation were outstanding, each entitled to one vote on each matter voted upon by ballot at the Meeting. Each holder of record of common shares of the Corporation on May 8, 1999, was entitled to notice of the Meeting and is entitled to vote at the Meeting.

To the knowledge of the directors and senior officers of the Corporation, as at May 8, 1999, the only person or company which beneficially owned, directly or indirectly or exercised control or direction over, shares carrying more than 10% of the votes attached to all outstanding shares of the Corporation was Miramar Mining Corporation ("Miramar"), a publicly-traded company, which beneficially owned 40,572,350 common shares, representing approximately 54.8% of the total number of common shares then outstanding.

Interest of Insiders in Material Transactions

Miramar Mining Corporation ("Miramar") owns approximately 54.8% of the Corporation and is therefore considered to be an insider of the Corporation.

During the financial year ended December 31, 1998, the Corporation paid management fees in the amount of $2,190,000 to Miramar. A portion of the management fees paid to Miramar were for the payment of the salary of Mr. Berukoff, the former President and Chief Executive Officer of the Corporation, and of the other shared members of senior management of the Corporation, for their services performed as directors and officers of the Corporation.

Commencing November 1998, Miramar provided financial assistance to the Corporation by paying overhead and working capital expenses on behalf of the Corporation. To provide the Corporation with a source of funding for its working capital requirements for 1998, Miramar loaned $17.5 million to the Corporation secured by a convertible debenture (the "Debenture") issued by the Corporation on September 14, 1998 (the "Issue Date"). The Debenture is repayable in full September 14, 2003 (the "Maturity Date") and the outstanding balance bears interest at 8% per annum compounded annually and payable at the earlier of the redemption date or the Maturity Date. The Debenture is also convertible by Miramar into shares of the Corporation at the election of Miramar at the rate of $1.47 per share (the "Conversion Price") but the Debenture is not convertible until the third anniversary of the Issue Date unless the Corporation calls for redemption of the Debenture. If the Debenture is called by the Corporation prior to the first anniversary of the Issue Date, Miramar will have the option to convert up to 20% into shares, if the Debenture is called for redemption on or prior to the second anniversary of the Issue Date, Miramar will have the option to convert up to 30% into shares and if the Debenture is called for redemption prior to the third anniversary of the Issue Date, Miramar will have the option to convert up to 50% into shares. An Argentine subsidiary of the Corporation has pledged to Miramar as security for repayment of the Debenture 99.9% of the shares of Agua Rica S.A., the Argentine company which holds the title to mineral claims which form part of the Agua Rica project in Argentina. Miramar has agreed to subordinate its security to any bonafide project financing arranged by the Corporation to finance the development of any of its projects in Argentina.

Mantua Loan Guarantee

In November, 1997 the Corporation entered into a credit agreement with Barclays Bank PLC whereby the Corporation borrowed US$9.6 million to fund the construction of a gold leaching facility on the Mantua Project located in Cuba (the "Loan"). Miramar provided to the bank a guarantee of repayment of the Loan (the "Guarantee") in consideration of a guarantee fee of 5% of the amount of the loan. The Mantua project did not generate cash to repay the Loan and Miramar was called on the Guarantee and paid a total of Cdn$10.1 million during 1998. This amount is owed to Miramar by the Corporation, is payable on demand and bears interest at the rate of 8% per annum.

Interest of Certain Persons in Matters to be Acted Upon

No director or senior officer of the Corporation or any proposed nominee of management of the Corporation for election as a director of the Corporation, nor any associate or affiliate of any of the foregoing persons, has any material interest, direct or indirect, by way of beneficial ownership of securities or otherwise, in any matter to be acted upon at the Meeting other than the election of directors.

Executive Remuneration

The following table (presented in accordance with the regulation (the "Regulation") made under the Securities Act (Ontario)) sets forth all annual and long-term compensation for services rendered in all capacities to the Corporation and to subsidiaries of the Corporation for the financial years indicated (to the extent required by the Regulation) in respect of each of the individuals who were, at December 31, 1998, the Chief Executive Officer and the three other most highly compensated executive officers of the Corporation whose aggregate salary and bonus exceeded $100,000 (collectively the "Named Executive Officers").

SUMMARY COMPENSATION TABLE

		Annual Compensation			Long-Term Compensation Awards	
Name and Principal Position	Year	Salary ($)	Bonus ($)	Other Annual Compensation[1] ($)	Securities Under Options Granted (#)	All Other Compensation ($)
Walter H. Berukoff President and Chief Executive Officer[2]	1998 1997 1996	NIL NIL NIL	NIL NIL 125,000	NIL NIL NIL	NIL NIL 517,919	NIL NIL NIL
Ricardo Auriemma Vice-President[3]	1998 1997 1996	97,500 97,500 97,500	NIL NIL NIL	13,494 NIL NIL	NIL NIL 50,000	NIL NIL NIL
Luis Vera Vice-President, Cuban Operations[4]	1998 1997 1996	175,000 175,000 43,750	NIL NIL NIL	NIL NIL NIL	NIL NIL 150,000	NIL NIL NIL
Jorge Nicanovich Country Manager, Cuba[5]	1998 1997	125,000 20,833	NIL NIL	NIL NIL	NIL NIL	NIL NIL

(1) Where the value of perquisites and benefits for a Named Executive Officer does not exceed the lesser of $50,000 and 10% of the total of the annual salary and bonus of such Named Executive Officer, the value is not reported.

(2) Mr. Berukoff's salary is paid by Miramar Mining Corporation which charges a management fee to the Corporation - See "Interests of Insiders in Material Transactions".

(3) Dr. Auriemma commenced employment with the Corporation on November 1, 1994. The amounts for Dr. Auriemma are payable and quoted in U.S. dollars.

(4) Mr. Vera commenced employment with the Corporation in August 1996. The amounts for Mr. Vera are payable and quoted in U.S. dollars. The Corporation also pays a housing and expense allowance for Mr. Vera in Cuba, a portion of which is charged to the Corporation's co-venturer in its Cuban mining projects.

(5) Mr. Nicanovich commenced employment with the Corporation in November 1997. Previously Mr. Nicanovich rendered consulting services to the Corporation from 1993 to 1997. The amounts for Mr. Nicanovich are payable and quoted in U.S. dollars. The Corporation also pays a housing and expense allowance for Mr. Nicanovich in Cuba, a portion of which is charged to the Corporation's co-venturer in its Cuban mining projects.

Stock Option Plan

Under the stock option plan of the Corporation (the "Stock Option Plan"), options to purchase common shares of the Corporation may be granted to full or part-time employees and directors of the Corporation or subsidiaries of the Corporation and other persons or companies engaged to provide ongoing management or consulting services for the Corporation or any entity controlled by the Corporation. The maximum aggregate number of common shares of the Corporation subject to option under the Stock Option Plan may not exceed 10,000,000. In determining the number of common shares of the Corporation subject to each option granted under the Stock Option Plan, consideration is given to the present and potential contribution by such person or company to the success of the Corporation. The exercise price per common share may not be less than the closing price of the common shares of the Corporation on The

Toronto Stock Exchange on the trading day immediately preceding the day on which the option is granted. Each option is for a term not in excess of ten years and is not exercisable unless the optionee has been continuously employed by, a director or an officer of, or engaged in providing ongoing management or consulting services for, the Corporation or a subsidiary of the Corporation continuously since the date of grant of the option, except in the case of the death of an optionee, in which case the option is exercisable for a maximum of twelve months thereafter, or in the case of an optionee ceasing to be a participant under the Stock Option Plan for any reason other than cause or death, in which case the option is exercisable for a maximum of 30 days thereafter. The Stock Option Plan does not provide for the granting of financial assistance, whether by way of a loan, guarantee or otherwise, by the Corporation in connection with any purchase of common shares from the Corporation.

The Stock Option Plan also provides for share appreciation rights in favour of holders of options granted under the Stock Option Plan. A holder of an option under the Stock Option Plan is entitled to elect to terminate such option, in whole or in part, and, in lieu of receiving the common shares of the Corporation to which the terminated option relates, to receive that number of common shares of the Corporation, disregarding fractions, which, when multiplied by the fair value of the common shares of the Corporation (which is the average of the high and low board lot prices for the common shares on The Toronto Stock Exchange for the immediately preceding five trading days) to which the terminated option relates, has a total value equal to the product of the number of such common shares multiplied by the difference between the fair value and the exercise price per share of such common shares of the Corporation, less any amount required to be withheld on account of income taxes.

During the financial year of the Corporation ended December 31, 1998 no options were granted to any of the Named Executive Officers.

The following table sets forth details of all exercises of options during the financial year of the Corporation ended December 31, 1998 by each of the Named Executive Officers and the value as at December 31, 1998 of unexercised options on an aggregate basis:

AGGREGATED OPTION EXERCISES DURING THE MOST RECENTLY COMPLETED FINANCIAL YEAR AND DECEMBER 31, 1998 OPTION VALUES

Name	Securities Acquired on Exercise (#)	Aggregate Value Realised ($)	Unexercised Options at December 31, 1998 (#) Exercisable/ Unexercisable	Value of Unexercised in-the-Money Options at December 31, 1998 ($) Exercisable/ Unexercisable
Walter H. Berukoff	NIL	NIL	3,179,100/Nil	Nil/Nil
Ricardo Auriemma	NIL	NIL	331,900/Nil	Nil/Nil
Luis Vera	NIL	NIL	Nil/150,000	Nil/Nil
Jorge Nicanovich	NIL	NIL	50,000/Nil	Nil/Nil

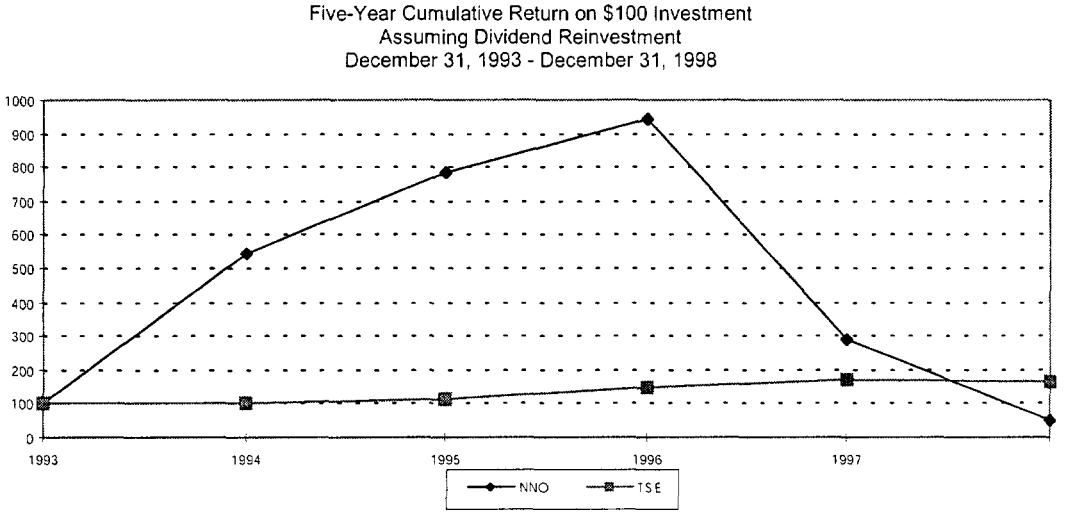
Report on Executive Compensation

No Compensation Committee has been formed and no policies relating to executive compensation have been established, as the only executives of the Corporation compensated were Dr. Ricardo Auriemma, Luis Vera and George Nicanovich, whose salaries are reviewed by the whole board of directors of the Corporation. The other members of the senior management of the Corporation are paid by Miramar, which charged the Corporation a management fee in the amount of $2,190,000 for the financial year ended December 31, 1998. The management fee is reviewed by the Audit Committee of the Board of the Corporation. The salaries paid to the Named Executive Officers are based on industry standards.

The board of directors of the Corporation consists of Ricardo Auriemma, Walter H. Berukoff, John K. Burns, Lyall D. Knott, Maria Amalia Leguizamon, Christopher J. Pollard, Stephen P. Quin and Anthony P. Walsh.

Performance Graph

The following graph compares the yearly percentage change in the cumulative total shareholder return over the last five financial years of the common shares of the Corporation, assuming a $100 investment in the common shares of the Corporation on December 31, 1993, with The TSE 300 Stock Index during such period, assuming dividend reinvestment.



Compensation of Directors

The Corporation does not pay cash compensation to directors of the Corporation for services rendered in their capacity as directors or as members of committees except as described below.

During the financial year ended December 31, 1998, the Corporation paid fees in the amount of $47,000 to Clark Wilson, a law firm of which Lyall D. Knott is a partner, in respect of services rendered by Mr. Knott as a director and a member of committees of the board of directors of the Corporation.

In 1998 the Corporation had a consulting agreement with a company controlled by Christopher J. Pollard, pursuant to which Mr. Pollard provided consulting services to the Corporation and its subsidiaries. During the financial year ended December 31, 1998, the Corporation paid fees in the amount of $37,500 to Mr. Pollard in respect of consulting services rendered. The agreement with the company controlled by Mr. Pollard was terminated in December of 1998. Mr. Knott is a member of the audit, environmental and executive committees of the board. Mr. Pollard is a member of the audit and environmental committees of the board.

Services of directors who are also employees of the Corporation are included in the salaries paid to the employees.

The Corporation has no plans other than as set out herein pursuant to which cash or non-cash compensation was paid or distributed to Directors during the most recently completed financial year or is proposed to be paid or distributed in a subsequent year.

During the financial year ended December 31, 1998, there were no options granted to purchase common shares of the Corporation to any of the directors of the Corporation in their capacity as directors.

Executive Contracts

Luis Vera is employed under an industry standard employment contract. Ricardo Auriemma is employed under an employment agreement with a wholly owned Argentine subsidiary of the Corporation. None of the other Named Executive Officers have entered into employment agreements with the Corporation. The Corporation entered into letters of employment with each of Messrs. Vera and Nicanovich on their acceptance of employment, which letters set out their initial salaries, the terms of any bonuses that may be paid, the grant and vesting of stock options, and the grant of a standard employee benefit plan including medical and dental benefits.

Corporate Governance

In December 1994, The Toronto Stock Exchange Committee on Corporate Governance in Canada (the "TSE Committee") issued its report on proposed guidelines for corporate governance in Canada. In May 1995 The Toronto Stock Exchange (the "TSE") adopted the TSE Committee's report and announced that all companies with a year end on or after June 30, 1995, would be required to describe their practices and policies with regards to corporate governance, with reference to the TSE Committee's report guidelines, on an annual basis, by way of a corporate governance statement contained in the company's annual report or information circular.

Pursuant to the TSE guidelines on corporate governance (the "Guidelines"), the board of directors of the Corporation has approved the following statement on the corporate governance practices of the Corporation.

The role of the board of directors of the Corporation is to supervise management and to approve major and strategic decisions. The board annually adopts budgets for the upcoming year's operations and receives monthly operating reports which show budget variances. All major matters are analysed in reports prepared by management and are submitted to the Board for its approval. Such major matters include significant acquisitions, exploration and development budgets and financings.

The Chief Executive Officer of the Corporation is primarily responsible for establishing the future direction of the Corporation. The board reviews all new proposed directions and significant decisions to be made, and has the ultimate decision on the direction of the Corporation.

The Corporation's board of directors consists of eight directors, three of whom are members of management and five of whom are outside directors. Of the five outside directors, one is married to one of the inside directors, another provided consulting services to the Corporation and its subsidiaries during 1998. Two of the inside directors and three of the outside directors are directors of Miramar Mining Corporation ("Miramar"), the controlling shareholder of the Corporation. The outside directors who are directors of Miramar are considered related directors for the purposes of the Guidelines. One of the directors is considered by the board to be an unrelated director.

During 1998 the Chairman of the Board of Directors was the Corporation's President and Chief Executive Officer. Effective in March, 1999 the Chairman ceased to be the President and Chief Executive Officer of the Corporation, therefore in 1999 the Chairman is not a member of management of the Corporation.

In 1998 there were three board committees.

The Executive Committee is made up of the Chairman, two other members of management and one outside director. The Executive Committee has not been delegated any specific authority by the board and acts primarily as a senior management decision making forum.

The Audit Committee consists of one inside and two outside directors, none of whom are unrelated directors. The Audit Committee implements and reviews internal systems thereby assisting the board in identifying and monitoring the risks of the business of the Corporation. Further, the Audit Committee is charged with the initial responsibility of determining that the financial and budget goals of the Corporation are met by management, and where the goals have not been met by management, reporting back to the board on the progress and the level of the achievement of management versus the predetermined budget levels.

The Environmental Committee consists of two outside directors and one inside director, none of whom are unrelated directors. The Environmental Committee reviews compliance by the Corporation with all applicable regulatory requirements together with an analysis of risks which could be encountered in the future related to environmental matters.

From time to time the board forms committees to deal with specific issues, such as the committee formed in 1998 of directors independent of Miramar to review and recommend to the shareholders of the Corporation the Debenture agreement with Miramar.

In May 1999, the board formed a Nominating Committee to locate and select future directors of the Corporation with a view to increase the number of independent directors on the board of the Corporation.

The Corporation is controlled by Miramar which is considered a "significant shareholder" within the meaning of the Guidelines. The Corporation does not have a separate nominating committee or corporate governance committee. The Board is considering the creation of those formal committees and the addition of one or more unrelated directors. There are no formal procedures in place for recruiting new directors.

The Corporation has an investor relations group which is the main communications channel with investors. Senior members of management also have frequent communication with institutional investors.

The Board relies on management to follow the directions and policies established by the Board and the Chief Executive Officer and to provide accurate information to the board relating to all major developments in the Corporation's business within sufficient time to enable the board to carry out its responsibilities.

THE MEETING

Election of Directors

It is proposed that the persons named below be nominated for election as directors of the Corporation. All of the proposed nominees are now directors of the Corporation and have been since the year set forth below. Management of the Corporation does not contemplate that any of the proposed nominees will be unable to serve as directors of the Corporation, but if that should occur for any reason prior to the Meeting, the persons named in the form of proxy accompanying this Proxy Circular have the right to vote for any other nominee of management of the Corporation. Each director will be elected to hold office until the close of the next annual general meeting of the shareholders of the Corporation or until his successor is appointed or elected. The following table sets forth certain information concerning the persons nominated for election as directors of the Corporation.

Name and Municipality of Residence	Positions Held	Principal Occupation	Director	Number of Common

			Since	Shares Owned[4]
Anthony P. Walsh, West Vancouver, B.C.	Interim President and Chief Executive Officer, Chief Financial Officer and Director	Interim President and Chief Executive Officer, Chief Financial Officer and Director	1999	Nil
Ricardo Auriemma[2][3] Buenos Aries, Argentina	Vice-President and Director	President of Ingeoma S.A. and Grupo Minera Aconcagua S.A.	1994	3,940,000
John K. Burns Philadelphia, PA, U.S.A.	Director	President and CEO of Frontier Resources Management Inc.	1995	20,000
Lyall D. Knott, Q.C.[1][2][3] Vancouver, B.C.	Director	Partner, Clark Wilson, law firm	1987	Nil
Maria Amalia Leguizamon Buenos Aries, Argentina	Director	Professor of Petrology, University Nacional de La Plata	1994	40,000
Christopher J. Pollard[1][3] Vancouver, B.C.	Director	Associate Counsel, Clark Wilson, law firm.	1994	5,600
Stephen P. Quin[1][2] West Vancouver, B.C.	Executive Vice-President and Director	Executive Vice-President of Miramar Mining Corporation	1988	5,604

(1) Member of the Audit Committee.
(2) Member of the Executive Committee.
(3) Member of the Environmental Committee.
(4) Indicates the number of common shares of the Corporation beneficially owned, directly or indirectly, or over which control and direction is exercised. Such information, not within the knowledge of the Corporation, has been furnished by the respective nominees.

Each of the foregoing individuals has been engaged in the principal occupation set forth opposite his name during the past five years except for: John K. Burns who, prior to May 1995, was the Managing Director and global head of Derivative Finance and Metals Derivatives Trading with Barclays Metals Group, Barclays Bank PLC London; Christopher J. Pollard who, prior to March 1997, was a partner of Owen Bird, a law firm and prior to 1999 was the President of Pollard Management Ltd.; and Anthony P. Walsh who, prior to 1995, was the Chief Financial Officer of MFP Technology Services Ltd., a computer leasing company.

Unless such authority is withheld, the persons named in the form of proxy accompanying this Proxy Circular intend to vote for the election of the foregoing individuals as directors of the Corporation until the close of the next following annual general meeting of the shareholders of the Corporation or until their successors are elected.

Appointment of Auditor

KPMG, Chartered Accountants, have been the auditors of the Corporation since August 14, 1994. Unless such authority is withheld, the persons named in the form of proxy accompanying this Proxy Circular intend to vote for the appointment of KPMG, Chartered Accountants, as the auditor of the Corporation until the close of the next following annual general meeting of the shareholders of the Corporation or until their successor is appointed.

Other

A copy of the most recent annual report and interim financial statements of the Corporation may be obtained upon request from the Secretary of the Corporation. The Corporation may require the payment of a reasonable fee for providing a copy of the foregoing documents to a person who is not a security holder of the Corporation.

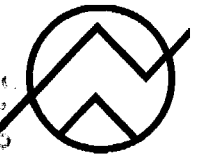
Approval

The contents and the sending of this management information circular have been approved by the directors of the Corporation

By Order of the Board

Anthony P. Walsh
President

May 18,1999



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NORTHERN ORION
EXPLORATIONS LTD.

PROXY

for the Annual General Meeting to be held Wednesday , June 23, 1999

THIS PROXY IS SOLICITED BY MANAGEMENT

The undersigned member of NORTHERN ORION EXPLORATIONS LTD. (the "Corporation") hereby appoints **ANTHONY P. WALSH** , or failing him, **STEPHEN P. QUIN,** or failing him, _____ as the true and lawful attorney and proxy of the undersigned to attend the annual general meeting of the shareholders of the Corporation and any adjournment thereof and to vote the common shares of the Corporation registered in the name of the undersigned as follows:

Item (1)	To elect **RICARDO AURIEMMA** as a director	FOR ( )	WITHHOLD VOTE ( )
	To elect **JOHN BURNS** as a director	FOR ( )	WITHHOLD VOTE ( )
	To elect **LYALL KNOTT** as a director	FOR ( )	WITHHOLD VOTE ( )
	To elect **AMALIA LEGUIZAMON** as a director	FOR ( )	WITHHOLD VOTE ( )
	To elect **CHRISTOPHER POLLARD** as a director	FOR ( )	WITHHOLD VOTE ( )
	To elect **STEPHEN QUIN** as a director	FOR ( )	WITHHOLD VOTE ( )
	To elect **ANTHONY P. WALSH** as a director	FOR ( )	WITHHOLD VOTE ( )
Item (2)	To appoint **KPMG LLP, Chartered Accountants** , as auditor and to authorize the directors to fix the auditor's remuneration.	FOR ( )	WITHHOLD VOTE ( )

YOU MAY APPOINT ANY PERSON (WHO NEED NOT BE A SHAREHOLDER OF THE CORPORATION) TO REPRESENT YOU AT THE MEETING. SUCH RIGHT MAY BE EXERCISED BY STRIKING OUT THE NAMES OF THE DESIGNATED PERSONS AND INSERTING THE NAME OF THE PERSON TO BE APPOINTED IN THE BLANK SPACE PROVIDED. THIS PROXY WILL BE VOTED ON ANY BALLOT IN ACCORDANCE WITH THE INSTRUCTIONS GIVEN AND IN THE ABSENCE OF INSTRUCTIONS WILL BE VOTED FOR EACH OF THE ITEMS SET FORTH ABOVE. IN RESPECT OF ANY AMENDMENT TO OR VARIATION IN ANY OF SUCH ITEMS OR ANY OTHER ITEM WHICH MAY PROPERLY COME BEFORE THE MEETING OR ANY ADJOURNMENT THEREOF, THE COMMON SHARES OF THE CORPORATION REPRESENTED BY THIS PROXY WILL BE VOTED IN THE DISCRETION OF THE PERSON NAMED AS PROXY HEREIN.

The undersigned hereby revokes any proxy previously given.

AS WITNESS MY HAND this _____ day of _____, 1999. **[NOTE: YOU MUST DATE THIS PROXY FOR IT TO BE VALID]**

_____ _____

SIGNATURE PRINT NAME

NOTES

1. THIS FORM OF PROXY WILL NOT BE VALID UNLESS IT IS DATED AND SIGNED EXACTLY AS YOUR NAME APPEARS IN THE RECORDS OF THE CORPORATION. WHEN SIGNING IN A FIDUCIARY OR REPRESENTATIVE CAPACITY, PLEASE GIVE YOUR FULL TITLE. IN THE CASE OF A JOINT SHAREHOLDING, EACH SHAREHOLDER MUST SIGN. IF THE SHAREHOLDER IS A CORPORATION, THIS FORM OF PROXY MUST BE SIGNED UNDER CORPORATE SEAL BY AN OFFICER THEREOF, OR BY AN ATTORNEY THEREOF AUTHORIZED IN WRITING. THIS FORM OF PROXY MUST BE DATED TO BE VALID. IF THIS FORM OF PROXY IS EXECUTED BY AN ATTORNEY FOR AN INDIVIDUAL SHAREHOLDER OR JOINT SHAREHOLDERS OR BY AN OFFICER OR OFFICERS OR AN ATTORNEY OF A CORPORATE SHAREHOLDER, THE INSTRUMENT SO EMPOWERING THE OFFICER OR OFFICERS OR THE ATTORNEY, AS THE CASE MAY BE, OR A NOTARIAL COPY THEREOF, SHOULD ACCOMPANY THIS FORM OF PROXY.

2. TO BE EFFECTIVE, THIS FORM OF PROXY MUST BE RECEIVED BY THE CORPORATION C/O PACIFIC CORPORATE TRUST COMPANY, SUITE 830, 625 HOWE STREET, VANCOUVER, BRITISH COLUMBIA, V6C 3B8, PRIOR TO 5:00 P.M., VANCOUVER TIME, ON JUNE 21, 1999 OR, IN THE CASE OF ANY ADJOURNMENT OF THE MEETING, NOT LATER THAN 5:00 P.M., VANCOUVER TIME, ON THE BUSINESS DAY PRIOR TO THE RECONVENED MEETING.

PACIFIC CORPORATE TRUST COMPANY
Suite 830 - 625 Howe Street
Vancouver, B.C. V6C 3B8

Telephone: (604) 689 - 9853
Fax: (604) 689 - 8144

May 20, 1999

B.C. Securities Commission
Executive Director
2nd Floor, 865 Hornby Street
Vancouver, B.C., V6Z 2H4

Dear Sirs:

RE: NORTHERN ORION EXPLORATIONS LTD
MAILING ON MAY 20, 1999
MANAGEMENT PROXY MATERIAL **and**
ANNUAL FINANCIAL STATEMENTS **and** ANNUAL REPORT
FOR YEAR ENDING DECEMBER 31, 1998

We confirm that on the above date, the material issued by the subject Company was forwarded by prepaid first class mail to all of the registered members of the Company.

We also confirm that the attached material was distributed to intermediaries in accordance with National Policy 41.

The filing fee(s) for the financial statements has been remitted via SEDAR.

Yours truly,

PACIFIC CORPORATE TRUST COMPANY

"Lisa Scotland"
Lisa Scotland
LS/ab

cc: Alberta Securities Commission
cc: Director of Corporations - PEI
cc: Manitoba Securities Commission
cc: Nova Scotia Securities Commission
cc: Office of the Administrator of Securities - NB
cc: Ontario Securities Commission
cc: Quebec Securities Commission
cc: Registrar of Securities - NT
cc: Registrar of Securities - YT
cc: Saskatchewan Securities Commission
cc: Securities Division - Department of Justice - NF
cc: Alberta Stock Exchange
cc: Montreal Stock Exchange
cc: Toronto Stock Exchange
cc: Vancouver Stock Exchange Listings Dept.
cc: US Securities & Exchange Commission
File # 12G32(B) # 8215666
cc: Northern Orion Explorations Ltd
cc: Owen Bird Attn: Josephine Margolis Nadel
cc: KPMG Peat Marwick Thorne.

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Yours truly,

PACIFIC CORPORATE TRUST COMPANY

"Lisa Scotland"
Lisa Scotland
LS/ab

cc: Alberta Securities Commission
cc: Director of Corporations - PEI
cc: Manitoba Securities Commission
cc: Nova Scotia Securities Commission
cc: Office of the Administrator of Securities - NB
cc: Ontario Securities Commission
cc: Quebec Securities Commission
cc: Registrar of Securities - NT
cc: Registrar of Securities - YT
cc: Saskatchewan Securities Commission
cc: Securities Division - Department of Justice - NF
cc: Alberta Stock Exchange
cc: Montreal Stock Exchange
cc: Toronto Stock Exchange
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cc: Northern Orion Explorations Ltd
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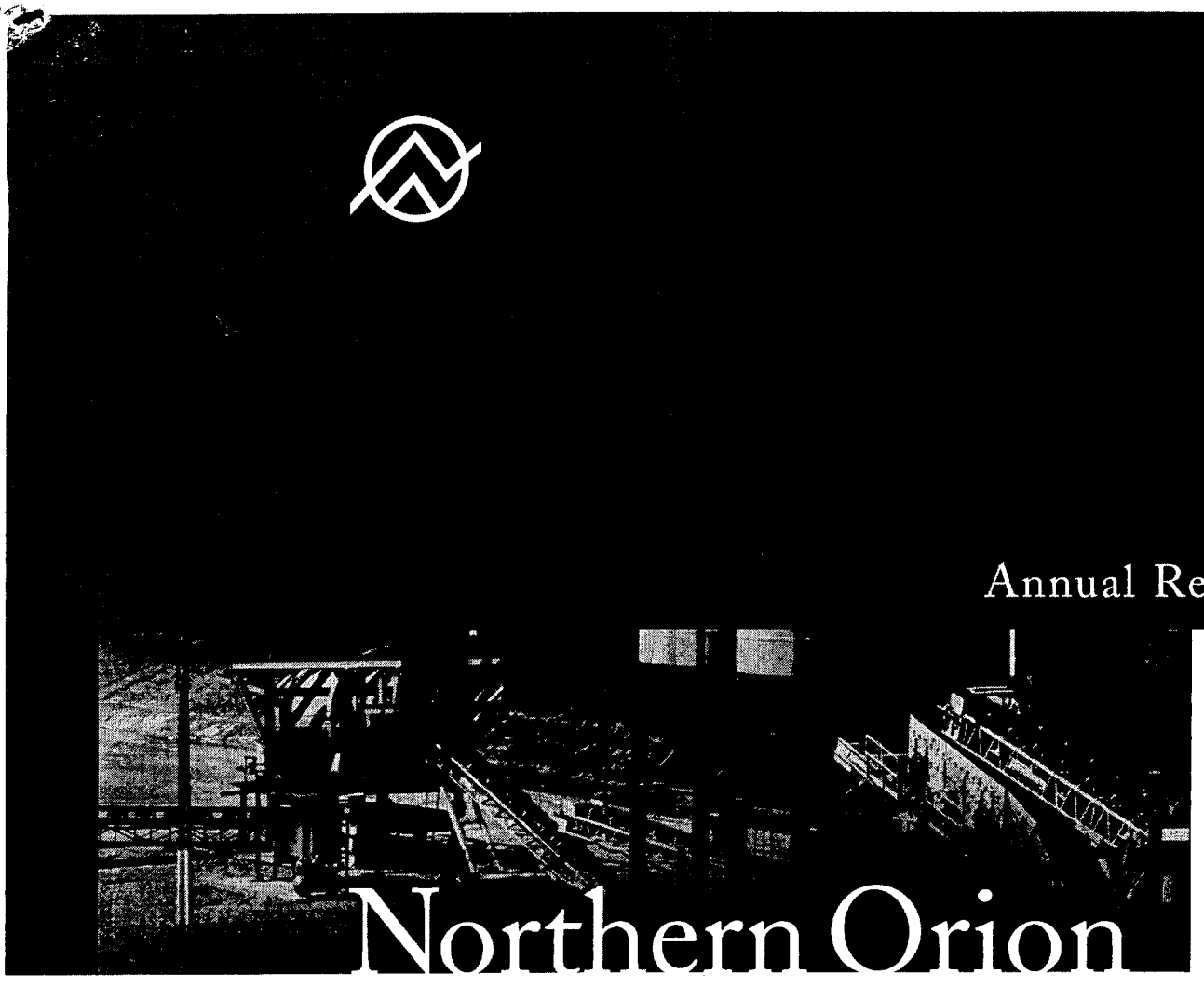

Annual Report 1998

Northern Orion

EXPLORATIONS LTD.

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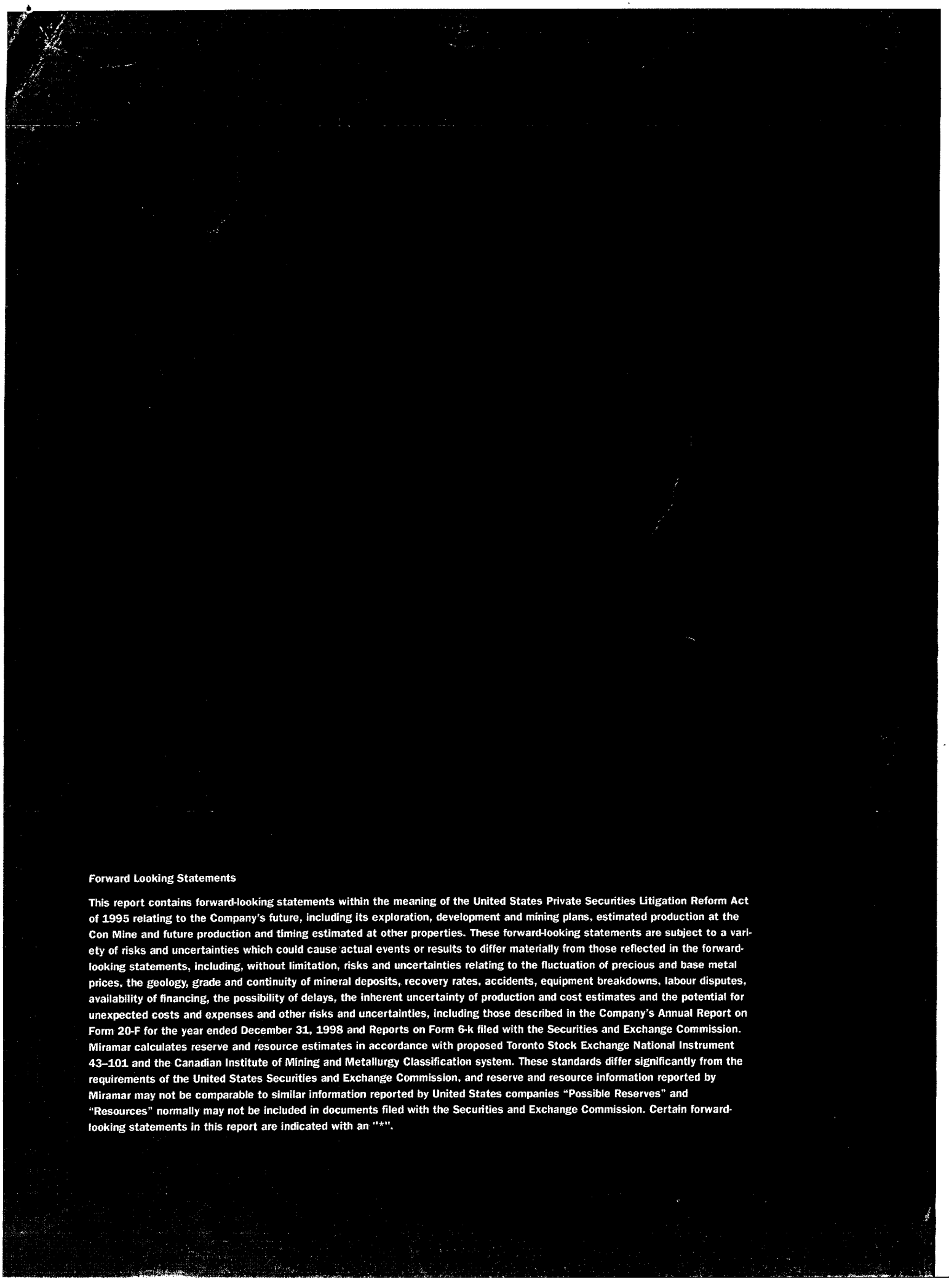
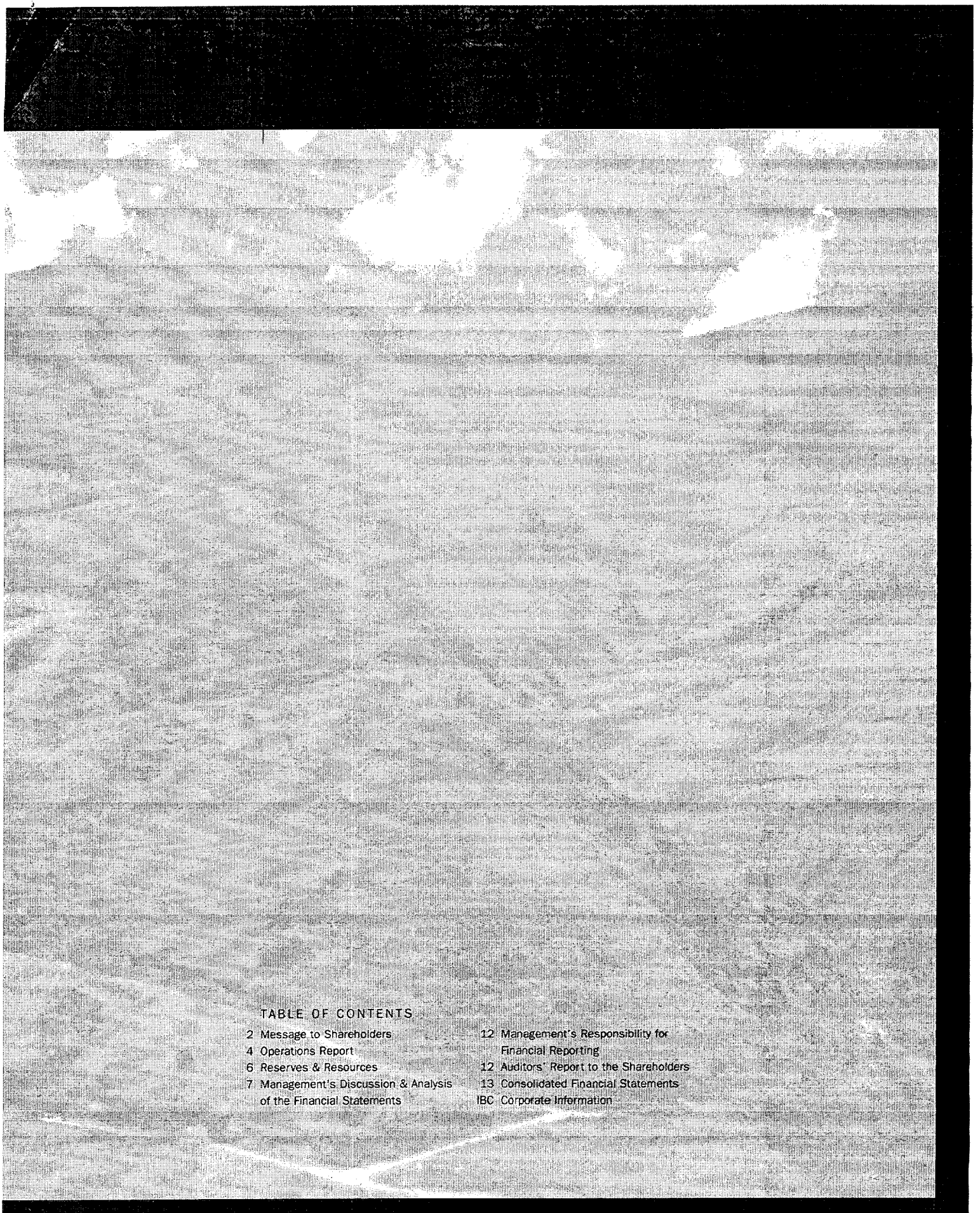


Forward Looking Statements

This report contains forward-looking statements within the meaning of the United States Private Securities Litigation Reform Act of 1995 relating to the Company's future, including its exploration, development and mining plans, estimated production at the Con Mine and future production and timing estimated at other properties. These forward-looking statements are subject to a variety of risks and uncertainties which could cause actual events or results to differ materially from those reflected in the forward-looking statements, including, without limitation, risks and uncertainties relating to the fluctuation of precious and base metal prices, the geology, grade and continuity of mineral deposits, recovery rates, accidents, equipment breakdowns, labour disputes, availability of financing, the possibility of delays, the inherent uncertainty of production and cost estimates and the potential for unexpected costs and expenses and other risks and uncertainties, including those described in the Company's Annual Report on Form 20-F for the year ended December 31, 1998 and Reports on Form 6-k filed with the Securities and Exchange Commission. Miramar calculates reserve and resource estimates in accordance with proposed Toronto Stock Exchange National Instrument 43–101 and the Canadian Institute of Mining and Metallurgy Classification system. These standards differ significantly from the requirements of the United States Securities and Exchange Commission, and reserve and resource information reported by Miramar may not be comparable to similar information reported by United States companies "Possible Reserves" and "Resources" normally may not be included in documents filed with the Securities and Exchange Commission. Certain forward-looking statements in this report are indicated with an "*".



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13 Consolidated Financial Statements
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Message to Shareholders

Northern Orion Explorations Ltd. ("Northern Orion" or the "Company") is an exploration and development company in a time when exploration companies are not favoured investment vehicles. Its assets are primarily focused in the copper sector, where prices have been severely depressed, reaching their lowest level in 12 years. The impact on Northern Orion's share price has been severe and the Company has had to take drastic measures to ensure its survival through this down cycle.

Management and directors have initiated a strategic review process to examine the future survival and direction of the company*. It is evident that Northern Orion has some valuable assets, especially its interest in Agua Rica (30%), which offer the potential for substantial cash flow at reasonable long term copper prices*. In addition, copper is a cyclical metal and copper prices will return to more reasonable levels at some time in the future*. The key issue is to ensure Northern Orion's shareholders gain the benefit of its assets when copper prices recover. This is the purpose of the strategic review.

In the interim, however, management and directors have instituted a rigorous budgeting and cost control policy to ensure capital is preserved and Northern Orion's interests in its most important assets are maintained. To this end, Northern Orion has and continues to reduce its level of exploration activity and other expenditures. Northern Orion has re-evaluated its property portfolio and is focussing its attention on those core properties expected to create real value over the medium to longer term, such as Agua Rica, Mantua and San Jorge*. Other more speculative properties have been released, exploration activity has been curtailed and staffing levels reduced.

The Company's major shareholder, Miramar Mining Corporation (54.8%) ("Miramar"), has provided vital financing support, putting in place a $17.5 million convertible debenture facility and providing a guarantee on the Mantua project loan from Barclays bank. Consequently, the Company is significantly indebted to Miramar.

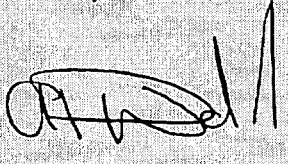
Northern Orion poured its first gold from the gold phase at Mantua in February 1998, after 10 months of construction. However, a number of operational difficulties were encountered, and the project has performed below expectations since opening. Lower than expected recovery and longer leach cycles have resulted in production being curtailed and costs increasing.

On a more positive note, Northern Orion has maintained its interests in its most valuable assets. Progress continues to be made at the world class Agua Rica deposit in a joint venture with BHP, with a significant amount of work completed at the property in 1998, with encouraging results. Early in 1999, the San Jorge property was significantly expanded, opening up the exploration potential of that area and at Mantua, positive results were reported from studies on the copper phase. These core property interests offer the potential of significant long term value creation for shareholders over the medium to longer term, as copper prices recover and interest returns to advanced stage exploration and development properties*.

In March of 1999, Walter Berukoff resigned as President and CEO of Miramar and Northern Orion in order to pursue other opportunities. Northern Orion acknowledges Mr. Berukoff's contributions to the Company from its inception.

On behalf of the Board of Directors, I would like to thank the management and employees of the Company for their continued enthusiasm and energy. I would also like to express my thanks to shareholders for their support and look forward to a recovery in copper prices and a return of investor interest in mining equities. In the meantime, Northern Orion will continue to work to reduce its overhead and maintain its key property interests for better times ahead*.

Sincerely,



Anthony P Walsh

Interim President & CEO

Activities Review

Northern Orion is a company focused on the exploration and development of copper and gold assets in Latin America. Northern Orion's most important asset is its 30% interest in the Agua Rica copper-gold-molybdenum porphyry deposit in Argentina. Its other assets include copper and gold projects in Argentina and Cuba.

The performance of Northern Orion's shares has been severely impacted by depressed copper prices. However, by maintaining its interests in its most important assets, (Agua Rica, San Jorge, Antofalla and Mantua) Northern Orion can expect to realize significant value as the commodity cycle turns and copper prices recover*.

Argentina

The major properties retained in Argentina include the Agua Rica copper-porphyry deposit, San Jorge, Los Petisos and Antofalla. These holdings maintain the company's resource and reserve base and offer continued opportunities for exploration and development success*.

AGUA RICA (30%)

Agua Rica is a world-class porphyry copper-gold-molybdenum deposit held in a joint venture with BHP Copper (70%)*. With the completion of an Initial Feasibility Study in 1997, which demonstrated the potential of Agua Rica to become a major producer of copper, gold and molybdenum, the joint venture initiated a work program in 1998 designed to advance the project towards a development decision.

Work carried out during 1998 and into early 1999 included:

- *Completion of 67,000 meter drilling program;*
- *Resource modeling;*
- *Extraction of a 300 tonne bulk sample;*
- *Phase 2 metallurgical testing on drill core;*
- *Pilot mill testing on bulk samples;*
- *Water exploration;*
- *Ongoing environmental baseline monitoring;*
- *Ongoing studies on capital, infrastructure and operating costs;*
- *Filing of a fiscal stability application setting the project's fiscal regime for 30 years.*

During 1999, the program of physical work commenced in 1998 will be completed, culminating in the development of new resource and reserve models, selected infrastructure requirements and an update of the project economics. The 1999/2000 budget year is likely to see reduced levels of expenditures due to depressed copper prices.

SAN JORGE

The San Jorge project encompasses a porphyry copper deposit that has undergone superficial leaching resulting in sub-horizontal oxide and enriched copper zones overlying a large primary porphyry copper-gold deposit. The total indicated and inferred resources for oxide, enriched, and primary mineralization, using a 0.25 % Cu cutoff, is 381.4 million tonnes grading 0.39 % Cu and 0.15 g/t Au for a contained 1.49 million tonnes of copper and 1.8 million ounces of gold*.

An in-pit indicated and inferred resource for San Jorge has been estimated at 57.3 million tonnes grading 0.61% Cu, for 348,900 tonnes of contained copper *. This is based on open pit mining and heap leaching the oxide and secondary enriched mineralization for SX/EW copper recovery, at a US$0.85/lb copper price, a 0.25% Cu cutoff, with incremental dump leach of low grade material. Primary copper-gold mineralization could then potentially be evaluated for a primary milling style of operation, producing concentrates*.

In 1999, Northern Orion announced that it had increased its land position around the San Jorge deposit and expanded the existing resource. Drilling has encountered additional copper mineralization to the northeast, east, and southeast of the main San Jorge deposit in similar geologic settings to the main San Jorge deposit. In addition, geophysical surveys on the expanded property have detected anomalies indicating potential for satellite copper systems similar to the San Jorge deposit*.

ANTOFALLA

Antofalla consists of six exploration concessions and one provincial mineral reserve that cover a major epithermal system in a setting analogous to that hosting Apex's San Cristobal deposit in Bolivia. Surface work indicates that Antofalla is prospective for the discovery of multiple epithermal and porphyry silver deposits, with several mineralized centers identified by geologic mapping, some drilling and surface sampling. The main focus of exploration in 1999 will be centered on the breccia complexes, which host gold and silver bearing systems at depth.

Cuba

MANTUA

During the first quarter of 1998, Northern Orion poured its first gold at the newly constructed gold leach facility at the Mantua Mine in Cuba. The gold leach facility was completed in February 1998 after 10 months of construction. However, the Mantua mine had a difficult start up, resulting in lower production and higher costs than anticipated. The ores contained higher than expected clays and fines, extending leach times, reducing overall recoveries and increasing cash costs to around US$250/oz.

Northern Orion also completed and had independently audited a new reserve estimate for the Mantua copper deposit which underlies the gold deposit, based on additional drilling completed in 1997. The copper deposit is estimated to contain a reserve of 7.5 million tonnes grading an average of 2.74% copper, containing approximately 200,000 tonnes of copper*. Studies on this high grade copper deposit, which lies under the gold cap, continued to provide encouragement for the long-term future of Mantua, assuming reasonable copper prices. Northern Orion, in conjunction with its partner, is currently evaluating the potential of advancing the copper deposit at Mantua.

DELITA

Due to continued depressed gold prices, Northern Orion elected to write off its investment in the Delita gold project in Cuba. While a significant resource has been delineated at Delita, the relatively low grade and refractory nature of the gold mineralization make this resource uneconomic at current gold prices. A significant sustained recovery in gold prices would be required to justify a resumption in activity at Delita.

Reserves & Resources

as of December 31, 1998

		Project Reserves (Proven and Probable)					Additional Project Resources (Measured and Indicated)				
GOLD	Ownership*	Tonnes (000s)	Grade g/t	Contained kg	Contained oz (000s)	**Northern Orion oz (000s)**	Tonnes (000s)	Grade g/t	Contained kg	Contained oz (000s)	**Northern Orion oz (000s)**
San Jorge	85%	—	—	—	—	—	381,400	0.15	57,210	1,839	**1,563**
Delita	50%	—	—	—	—	—	13,282	3.27	43,432	1,396	**698**
Mantua	50%	319	2.16	689	22	**11**	401	1.22	489	16	**8**
Agua Rica	30%	681,389	0.25	170,347	5,477	**1,643**	1,031,971	0.12	120,947	3,888	**1,167**
Gold Cap	30%	—	—	—	—	—	89,440	0.41	36,670	1,179	**354**
TOTALS		681,708	0.25	171,036	5,499	**1,654**	1,516,494	0.17	258,749	8,319	**3,790**
TOTAL—RESERVES & RESOURCES											**5,444**

		Project Reserves (Proven and Probable)					Additional Project Resources (Measured and Indicated)				
COPPER	Ownership*	Tonnes (000s)	Cu %	Contained Cu (tonnes)	Contained lbs (millions)	**Northern Orion oz (000s)**	Tonnes (000s)	Cu %	Contained Cu (tonnes)	Contained lbs (millions)	**Northern Orion oz (000s)**
San Jorge	85%	—	—	—	—	—	381,400	0.39	1,487,460	3,279	**2,787**
Mantua	50%	7,526	2.74	206,212	455	**227**	4,454	0.76	33,850	75	**37**
Agua Rica	30%	681,389	0.59	4,020,195	8,863	**2,659**	1,031,971	0.41	4,200,122	9,260	**2,778**
TOTALS		688,915	0.61	4,226,408	9,318	**2,886**	1,417,825	0.40	5,721,432	12,613	**5,603**
TOTAL—RESERVES & RESOURCES											**8,489**

*Numbers may not add due to rounding.

RESERVE TABLE

The reserve and resource estimates have been prepared in accordance with proposed TSE National Instrument 43-101 and the Canadian Institute of Mining and Metallurgy classification system.

Qualified persons responsible for the reserve and resource estimates include: Dean McDonald. PhD, PGeo, Exploration Manager; Bob Hauser, Chief Geologist, Con Mine; and Maria Esperenza Borrego, Chief Geologist, Cuba. In addition, production geologists, mine engineers, and metallurgists also had input into the reserve and resource estimates. The Agua Rica Reserves and Resources were calculated separately by representatives of BHP Copper. Independent parties have audited many of the current reserves and resources.

DEFINITIONS

- Reserve is that part of a mineral deposit which has been defined for mining purposes and can be economically and legally extracted at the time of the reserve determination.
- Proven Ore is a mineable part of the reserve wherein the sampling from outcrops, trenches, underground working and drillholes is sufficiently close spaced that the grade, tonnage and continuity are well defined and includes a provision for mining dilution that generally occurs during extraction.
- Probable Ore is a mineable part of the reserve wherein the sampling is spaced further apart, but is still adequate to demonstrate continuity, grade and tonnage at a lower confidence level than for proven ore.
- Possible Ore is the mineralization wherein the sampling is wide spaced and where continuity, grade and tonnage cannot be assured. Further sampling is required to increase confidence and conversion to Proven or Probable Reserve categories.
- Resource is that part of the mineral deposit that has not had economic parameters applied or is not presently considered economic to mine and is not included in Reserves. It may be reclassified into reserve categories by further sampling or changes in other factors such as metal prices or mining costs.
- Measured Resource is that part of the resource wherein sampling from outcrops, trenches, underground workings and drill holes is sufficiently close spaced that the grade, tonnage and continuity are well defined.
- Indicated Resource is that part of the resource wherein the sampling is spaced further apart, but is still adequate to demonstrate continuity, grade and tonnage at a lower confidence level than for a measured resource.
- Inferred Resource is that part of the resource wherein the sampling is wide spaced and where continuity, grade and tonnage cannot be assured. Further sampling is required to increase confidence and conversion to measured or indicated resource categories.

RESULTS OF OPERATIONS

Northern Orion Explorations Ltd. ("Northern Orion" or "the Company") completed the construction, commissioning and startup of a gold mining operation at the Mantua project in Cuba during 1998. With the achievement of full production in March 1998, Northern Orion began reporting the results of mining operations. In addition, the Company continued to evaluate and develop a number of mineral properties in Argentina. Financial constraints on Northern Orion have necessitated a reduced scale of exploration and development activities in 1998 as compared to previous years and resulted in the elimination of a number of property interests.

Northern Orion's financial condition has been challenged in comparison to 1997 due principally to continued expenditures on exploration and administrative overhead, poorer than expected operating performance at the Mantua operation, lower than expected gold prices and higher costs of financing required to maintain the properties held in Argentina and Cuba.

Northern Orion recorded a loss of $21.3 million or $0.29 per share in 1998 compared to a loss of $7.1 million or $0.10 per share in 1997. The 1998 loss includes write-downs on mineral properties and marketable securities of $15.9 million or $0.22 per share compared to writedowns of mineral properties and marketable securities of $4.3 million or $0.06 per share in 1997. Excluding the writedowns of mineral properties and marketable securities, the Company's loss in 1998 of $5.3 million compares to a loss of $2.8 million in 1997. The increased loss in 1998 was due to losses from the operations in Cuba, costs of curtailing exploration activities, costs of depreciation related to the Cuban operating assets and costs of external debt. These increased costs were partially offset by a reduction in management fees charged by Miramar.

Mining Operations

Gold production commenced at the Company's 50% owned Mantua mine in the first quarter of 1998. Prior to achievement of commercial production, all costs of startup operations and related interest and overhead were capitalized. During 1998, revenues from gold sales were US$4.8 million of which Northern Orion's share was $2.4 million. Total production sold was 16,323 ounces of which Northern Orion's share was 8,161 ounces. As the result of certain hedging transactions entered by Northern Orion, the realized selling price on the Company's 50% share of production was US$337 per ounce compared to an average gold spot price of US$294 per ounce for the period. Cash operating cost for 1998 was US$244 per ounce. Total tons of ore mined in 1998 were 423,742 at an average grade of 0.09 ounces per ton. Cumulative recoveries on ore treated in 1998 reached 51% and estimates for the ultimate recoveries were downgraded to 60%.

EXPLORATION AND DEVELOPMENT ACTIVITIES

Agua Rica

Work continued in 1998 at the 30% owned Agua Rica Project in Argentina. The project operator, BHP completed the 1997/98 work program for the project in May 1998 and commenced work on the 1998/99 work program in June. The Company's share of these programs (including management fees to the operator) is US$4.8 million for the 1998/99 work program and US$5.3 million for the 1997/98 program. The 1998/99 work program, to be completed in May 1999, will complete the necessary fieldwork required to support the preparation of a bankable feasibility study. Due to the decline in the world copper price in 1998, activities at Agua Rica are being conducted on a reduced scale from previous years. The 1998/99 work program builds on the work performed in completing the Initial Feasibility Study which was issued in November 1997. The findings of this study indicated that a large low-cost mine could be developed that would have attractive returns on capital invested. In the short-term, the capital required to advance the Agua Rica project will be available from internal sources of funds. Management of the Company is determined to see the project through final feasibility and beyond. On a long-term basis, the Company's share of the capital requirement to develop a mine at Agua Rica could be in excess of US$300 million. Northern Orion's management is continuing to examine all of the Company's options on how best to proceed with this important project. In order to develop a mine at Agua Rica, the Company will need to obtain or arrange significant additional capital.

Mantua

Work continued in 1998, further evaluating the Mantua copper phase, including additional drilling, detailed pilot plant testing, ore reserve development and selecting Bateman Engineering to complete a prefeasibility study and the completion of an internal review of the project. The Company is currently seeking funding to complete a bankable feasibility study. A final production decision for the copper phase is pending the results of this feasibility study and the recovery of the copper price. The Company's ability to develop the next phase at Mantua is dependent upon obtaining third party financing.

Other

In 1998, the Company continued to evaluate its prospective mineral properties in Argentina.

The Argentine projects accounted for expenditures that totaled $13.4 million in 1998 compared to $16.0 million in 1997 and $14.9 million in 1996. The single largest component of the Argentine expenditures was for the Agua Rica project and its extended area at $6.7 million (1997—$7.8 million and 1996—$7.0 million) in which Northern Orion (through it's wholly owned subsidiary, Recursos Americanos Argentinos SA or "RAA") has a 30% joint venture interest. Grupo Minero Aconcagua SA ("GMA") accounted for $5.3 million (1997—$7.5 million and 1996—$4.6 million) of these expenditures of which the largest component was for the San Jorge project at $1.3 million (1997—$3.4 million and 1996—$2.1 million).

The process of reviewing all properties in the "exploration pipeline" culminated in the fourth quarter of 1998. Management determined that the Delita project be placed on hold due to low gold prices and the deferred costs of $8.4 million associated with its exploration were written down. In Argentina this comprehensive review resulted in the abandonment of several prospective properties in 1998 and a corresponding writedown of $6.9 million was recorded.

LIQUIDITY AND CAPITAL RESOURCES

General

Due to the prospective nature of the mineral exploration business and the number of exploration properties held, Northern Orion has a limited ability to generate sources of internal cashflow from operations. The Company has financed the acquisition, exploration and development of its properties through a combination of the issuance of common shares, borrowings from Miramar, attracting joint venture partners to finance the evaluation of properties and third party borrowings.

When and if the Company places an adequate number of its exploration properties into production, it is expected that the resulting cashflows will become sufficient to sustain future operations, exploration and development. At present, the Company lacks the internal financial ability to advance any of its projects to the production stage.

Cash Resources and Liquidity

In order to properly manage the term structure of the funding provided by Miramar to Northern Orion, the Company entered into negotiations with Miramar which culminated in September 1998 with the issuance of a 5 year $17.5 million convertible debenture to Miramar. Under the terms of this debenture, Northern Orion agreed to provide certain assets as security to Miramar. The conversion feature of this debenture phases in over 3 years and is based on a conversion price of $1.47 per share. The debenture and accrued interest mature on September 14, 2003 (see note 6 to the consolidated financial statements for additional information regarding the convertible debenture). At the option of Miramar, interest and principal may be repaid in the form of common shares in Northern Orion. In 1997, the Company, through its subsidiary, Minera Cobre S.A., arranged financing of US$10 million with a chartered bank upon which quarterly repayments commenced at the end of March 1998. All amounts drawn under this facility are due by the third quarter of 1999. The Company and Miramar guaranteed the obligations of Minera Cobre S.A. should there be a deficiency in cashflow from the project. Due to the low gold price and lower than expected recoveries at Mantua, Minera Cobre S.A. was unable to generate sufficient cashflow from operations to make required principal and interest payments on this financing. As a result, the principal and interest requirements under the loan were met by Miramar under the terms of the guarantee to the lender. Amounts drawn under the Miramar guarantee bear interest at 11%. Miramar has agreed not to demand repayment of this amount in the coming year. Northern Orion is dependent on continued financial assistance from Miramar to continue the development and operation of its mineral properties. At the end of December 1998, the Company had a working capital deficiency of $2.0 million including cash of $542,000 compared to working capital of $5.3 million and cash of $6.3 million at the end of 1997. These funds are not sufficient to continue the full evaluation of all of the Company's mineral prospects. Management of the Company is in the process of further evaluating all of the Company's property interests in order to ensure that value is realized. In addition, the Company is reviewing all of its expenditures to ensure that cash commitments are prioritized. It is expected that the remaining balance of the Mantua construction loan will be repaid by Miramar under the guarantee. The Company is evaluating potential new sources of financing and all required expenditures to ensure that existing capital resources are available to maintain the core properties currently held.

In 1997, cash and short-term investments decreased to $6.3 million compared to $19 million in 1996. Working capital declined to $5.3 million in 1997 from $28.3 million in 1996.

This decline was the result of the investments undertaken by Northern Orion in 1997 at Mantua and at the various exploration projects in Argentina.

The Company's cash balances and short-term investments are unrestricted and have terms to maturity of less than 90 days. The current portion of the long-term debt is expected to be repaid by Miramar as the cashflow provided by the Mantua project will not be sufficient to meet these requirements. The remaining balance of accounts receivable of $4.0 million are expected to be received in June 1999. Apart from the requirement to fund the operations at Mantua, there are no restrictions to the free flow of funds between Northern Orion and its subsidiaries. Northern Orion is in the process of determining methods to obtain sufficient capital resources to meet its short and medium term financial requirements. Long term liquidity and capital resources will be dependent upon the successful development and profitable operation of mineral properties and the availability of capital from the equity markets. In order to maintain financial resources and take advantage of financial leverage, the Company will continue to negotiate with major financial institutions to obtain project financing.

Commitments

Northern Orion continues to contribute to a work plan for the Agua Rica property with its joint venture party, BHP, which requires that exploration and development expenditures be made under the terms of annual work programs. It is expected that total expenditures for 1999 under this program will be approximately $6.0 million (US$4.2 million), of which Northern Orion's share will be 30% or $2.0 million (US$1.4 million) including management fees. To December 31, 1998, the Company has spent C$20.6 million (US$14.5 million) on development activities at Agua Rica.

As part of the Mantua financing, the Company entered into forward sales contracts for the cashflows from the gold sales revenue in order to mitigate any currency risk associated with the project. At December 31, 1998 the currency hedge had unrealized losses of $637,000 which will be reflected in income as these contracts mature. The Company has entered into no other commitments for currency, metals or financial derivatives.

Northern Orion has entered into exploration agreements that require exploration expenditures to be funded in accordance with planned work programs and schedules. In most cases, these commitments are limited in recourse to the property involved and can be dropped with a loss of rights to the property being the only consequence.

REVIEW OF FINANCIAL RESULTS

General

Prior to 1998, Northern Orion was in a pre-operating phase during which it was evaluating its many exploration prospects. During the pre-operating phase, most of the costs of exploration and development (including related general and administrative expenditures) are capitalized. With the commencement of operations at Mantua, the Company's financial statements reflect a combination of operating results from the mining projects and the continued exploration and development of exploration properties.

Comparison of results for the previous two years

Revenue for the year of $3.6 million compares to revenue of $0.6 million in 1997 and $2.6 million in 1996. This increase results from the Company's 50% interest in the sales of gold from Mantua in Cuba and related hedging gains. In 1996 the Company recorded a gain on mineral properties optioned of $1.3 million which was non-recurring. Interest income earned in 1998 was $48,000 and compares to $0.6 million and $1.3 million earned in 1997 and 1996, respectively. Lower interest income is primarily the result of reduced cash balances being held by the Company during the year.

The Company's 50% share of the cost of sales of $3.0 million was incurred in the production of gold at the Mantua mine in Cuba. In addition, the Company reflected depreciation charges of $1.9 million related principally to the mining assets in Cuba.

Due to the increased financial pressures faced by Northern Orion in 1998, Miramar reduced the management fee to $100,000 per month commencing in October with the undertaking that overhead would be reduced generally as a result of a reduced level of operations related to Northern Orion. In 1997, the management fee charged had increased to $210,000 per month due to the significant effort of senior management on projects within Northern Orion. During 1996, Miramar charged a management fee of $100,000 per month. The management fee includes Northern Orion's share of all of the costs of premises and personnel as the Company shares executives, offices and employees with Miramar. The costs of these services are charged to Northern Orion based upon estimates made by management and staff regarding their efforts in respect of Northern Orion's properties and operations. It is expected that Miramar's management will take further steps to reduce overheads incurred on behalf of the Company and that the management fee in 1999 will be at or below $100,000 per month.

General and administrative expenses increased by $191,000 in 1998 to $969,000 primarily as the result of the severance costs incurred in reducing exploration personnel in Argentina during the second half of 1998. In 1997, general and administrative expenses were reduced from $1,424,000 in 1996 to $778,000 as the result of lower and regulatory expenses and through tighter management of administrative expenses. Interest charges of $616,000 in 1998 relate to the Company's share of the interest charged on the Mantua financing and compares to interest of $617,000 in 1997. During the year, the Company capitalized interest of $1.2 million on funds related to development properties and exploration activities. In prior years, interest was not capitalized on exploration properties. The costs of operating offices in Buenos Aires and Mendoza in Argentina and offices in Cuba are allocated to mineral properties to the extent that the costs relate to specific exploration and development properties.

In 1998, as additional exploration work was performed on the Company's portfolio of exploration properties, management determined that certain properties should not be further pursued and as a result a write-down of several of the properties (including Delita) totaling $15.4 million was taken. This compares to similar write-downs of $2.9 million and $1.3 million in 1997 and 1996, respectively. Write-downs of this nature are not unusual in the industry and should be expected to re-occur as grassroots exploration properties are evaluated and their potential for commercial viability is better defined.

As the result of declining equity markets for mineral exploration securities, the Company reduced the value of certain shares held as marketable securities to the lower of cost or market which resulted in a write-down of $572,000 in 1998 which compares to $1,365,000 in 1997 and $nil in 1996.

Investing Activities

In 1998, the Company invested a total of $19.3 million in mine construction ($3.0 million) and exploration and development activities ($16.3 million) which compares to investments in 1997 of $33.6 million and in 1996 of $22.6 million. The decrease is the result of completion of construction at Mantua in early 1998 and reduced levels of exploration in Argentina.

Financing Activities

The Company was unable to repay the maturing principal and interest on the funds of $13.6 million (US$9.6 million) borrowed to finance the construction of the Mantua gold phase. This financing was effectively replaced by the drawings on the Miramar guarantee. The Company used the majority of the proceeds of the $17.5 million convertible debenture to settle advances from Miramar. In the first quarter of 1998, interest on the construction financing of $572,000 (US$389,000) was capitalized into the principal balance of the loan. Additional advances have been received from Miramar during 1998 to temporarily finance the monthly management fee and various other short-term cash requirements.

OUTLOOK

Northern Orion's plan is to reduce expenditures to the lowest possible level while maintaining its interest in certain core properties. Plans for 1999 call for concentration on the Mantua project in Cuba and on Agua Rica, Antofalla and San Jorge in Argentina.

Operations

The gold phase at Mantua is expected to complete mining of ore in mid 1999. Upon completion of mining, the processing plant will continue to operate on drawing down work in process inventory until complete late in the third quarter of 1999. Management is currently assessing alternative opportunities and uses for the processing facility. The Company will continue to operate using the combined efforts of the Miramar management and the Northern Orion staff to focus on the exploration and development of the existing projects in Latin America. Inflation and changes in prices of significant inputs are not expected to materially affect the results of Northern Orion for 1999.

Advanced Stage Projects

The largest project currently underway is the Agua Rica copper-gold-molybdenum project. The Company continues to fund 30% of the exploration expenditures and costs of the feasibility study being prepared under the terms of a joint operation agreement with BHP. The program for 1999 includes completion of fieldwork and documentation and preparatory work towards a final feasibility study.

The Company is evaluating the potential for developing an SX/EW operation at San Jorge and will await a recovery in the copper price before committing to a work program necessary to complete a final feasibility study.

Construction of the second phase at Mantua is proposed to commence upon successful financing of the capital requirements for the project, completion of a positive final feasibility study and improvement in the price of copper.

Exploration Projects

The primary exploration target for 1999 is the Antofalla prospect in Argentina. In light of financial constraints, Northern Orion has rationalized the number of properties upon which exploration efforts will be focused and has therefore eliminated its interests in a number of non core properties. Northern Orion may perform grassroots exploration to generate additional new prospects as and when financial resources allow.

RISKS AND UNCERTAINTIES

The Company operates almost exclusively in foreign jurisdictions and is dependent on world metals and currency markets that may present risks to the future prospects of Northern Orion.

Risks Associated with the Mining Industry

Northern Orion is engaged in the exploration for and the development of mineral deposits. These activities involve significant risks which careful evaluation, experience and knowledge may not, in some cases, eliminate. The commercial viability of any mineral deposit depends on a number of factors, many of which are not within the control of management. Some of the factors which will effect the financial viability of a given mineral deposit include its size, grade and proximity to infrastructure. In addition, government regulation, taxes, royalties, land tenure, land use, environmental protection and reclamation and closure obligations could have a profound impact on the economic viability of a mineral deposit.

Northern Orion is not able to determine the impact of potential changes in environmental laws and regulations on its financial position due to the uncertainty surrounding the form such changes may take. As mining regulators continue to update and clarify their requirements for closure plans and environmental protection laws and administrative policies are changed, additional reclamation obligations and further security for mine reclamation costs may be required. It is not expected that such changes will have a material affect on the operations of Northern Orion.

Risks Associated with Financial Markets

Both Argentina and Cuba have currently fixed their currency to the US dollar and removal of these exchange controls could significantly effect the exchange rates in terms of the Canadian dollar. Continued weakness of the Canadian dollar in comparison to the US dollar will also affect the results of operations. Increasing costs of labour, supplies and energy may affect planned operations in future years. The potential for increased input prices is taken into consideration when preparing plans for future exploration, development and mine construction.

Risks Associated with the Market for Minerals

The prices of minerals are subject to relatively large movements over short periods of time. These prices have a direct impact on the commercial viability of production from mineral properties.

Risks Associated with Foreign Operations

Northern Orion's investments in foreign countries such as Argentina and Cuba carry certain risks associated with different political and economic environments. Northern Orion undertakes investments in foreign countries only when it is satisfied that the risks and uncertainties of operating in different cultural, economic and political environments are manageable and reasonable relative to the expected benefits.

The Impact of the Year 2000 Problem

The Company is well advanced in the process of evaluating the impact of the Year 2000 issue on its operations. Northern Orion uses relatively simple systems for the compilation and preparation of financial, operating and administrative information. The core business of Northern Orion is not reliant upon complex information technology or highly automated process logic control systems. Even with relatively uncomplicated systems, Northern Orion has commenced a detailed inventory and assessment of the impact of the Year 2000 issue on all information technology and mechanical systems. This assessment will identify areas where the Year 2000 issue may have an impact on the continued efficient operation of the Company. The Company has formulated plans to test, repair or replace these potential areas of risk and will design contingency plans for those areas outside the control of the Company. In addition, the Company has embarked upon an assessment of the preparedness of key suppliers and service providers to ensure that there are uninterrupted sources of supply and services to the Company's core business.

The Company is confident that all risk areas will be assessed, tested and repaired or replaced in advance of December 31, 1999. In order to ensure that adequate resources are available to properly evaluate the Year 2000 issue, the Company created a project team consisting of members of senior management charged with planning and reporting progress to the Board of Directors on a regular basis. The costs associated with this initiative to date have been included in the results of operations. All future expenses incurred in connection with Year 2000 preparedness will be expensed in the period incurred.

MANAGEMENT'S RESPONSIBILITY FOR FINANCIAL REPORTING

To the Shareholders of Northern Orion Explorations Ltd.:

The consolidated financial statements and all information in the Annual Report are the responsibility of the Board of Directors and management. The consolidated financial statements have been prepared by management based on information available to February 19, 1999 and are in accordance with accounting principles generally accepted in Canada. A system of internal controls is maintained by management to provide reasonable assurance that assets are safeguarded and financial information is accurate and reliable.

The Audit Committee of the Board of Directors is comprised of a majority of outside directors, and meets with management and the independent auditors to review internal control and financial reporting matters, and to ensure that management is maintaining adequate financial controls. The Audit Committee also reviews the audit plan of the independent auditors and discusses the results of their audit and their audit report prior to submitting the consolidated financial statements to the Board of Directors for approval.

The consolidated financial statements have been audited by KPMG and their report is below.

ANTHONY P. WALSH

Interim President, Vice–President Finance and Chief Financial Officer

AUDITORS' REPORT TO THE SHAREHOLDERS

We have audited the consolidated balance sheets of Northern Orion Explorations Ltd. as at December 31, 1998 and 1997 and the consolidated statements of operations and deficit and changes in financial position for the years then ended. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with generally accepted auditing standards. Those standards require that we plan and perform an audit to obtain reasonable assurance whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation.

In our opinion, these consolidated financial statements present fairly, in all material respects, the financial position of the Company as at December 31, 1998 and 1997 and the results of its operations and the changes in its financial position for the years then ended in accordance with generally accepted accounting principles. As required by the Company Act (British Columbia), we report that, in our opinion, these principles have been applied on a consistent basis.

KPMG LLP

CHARTERED ACCOUNTANTS

Vancouver, Canada
February 18, 1999

Consolidated Balance Sheets

(expressed in thousands of dollars)

December 31, 1998 and 1997	1998	1997
Assets		
Current assets:		
Cash and short-term investments	$ 542	$ 6,359
Marketable securities	3	575
Accounts receivable (note 3)	4,056	9,073
Inventory	2,201	52
Prepaid expenses	102	69
	6,904	16,128
Plant and equipment (note 4)	8,788	7,780
Mineral properties and deferred development (note 4)	113,397	112,462
Other assets	2,322	2,251
	$ 131,411	$ 138,621
Liabilities and Shareholders' Equity		
Current liabilities:		
Accounts payable and accrued liabilities	$ 3,076	$ 1,863
Current portion of long-term debt	5,801	8,932
	8,877	10,795
Payables to related parties (note 5)	3,596	10,993
Guarantee to related party (note 5)	10,120	—
Convertible debenture (note 6)	17,907	—
Long-term debt (note 7)	—	4,635
Reclamation liability	86	86
	40,586	26,509
Shareholders' equity:		
Share capital (note 8)	122,000	122,000
Deficit	(31,175)	(9,888)
	90,825	112,112
Operations (note 1)		
Uncertainty due to the Year 2000 Issue (note 15)		
Contingent liability (note 16)		
	$ 131,411	$ 138,621

See accompanying notes to consolidated financial statements.

On behalf of the Board:

Director

Director

Consolidated Statements of Operations and Deficit

(expressed in thousands of dollars, except per share amounts)

Years ended December 31, 1998 and 1997	1998	1997
Revenue:		
Metal sales revenue	$ 3,581	$ —
Interest and other income	48	637
	3,629	637
Expenses:		
Cost of sales	3,086	—
Depreciation and depletion	1,947	137
Management fees (note 11)	2,190	2,532
General and administration	969	778
Interest	616	617
Write-down of marketable securities	572	1,365
Exploration	380	—
Write-down of mineral properties and deferred development	15,372	2,920
Gain on foreign exchange translation	(216)	(586)
	24,916	7,763
Loss for the year	21,287	7,126
Deficit, beginning of year	9,888	2,762
Deficit, end of year	$ 31,175	$ 9,888
Loss per share	$ 0.29	$ 0.10
Weighted average number of common shares outstanding	74,006,780	73,993,600

See accompanying notes to consolidated financial statements.

Consolidated Statements of Changes in Financial Position

(expressed in thousands of dollars)

Years ended December 31, 1998 and 1997	1998	1997
Cash provided by (used in):		
Operations:		
Loss for the year	$ (21,287)	$ (7,126)
Items not involving cash:		
Depreciation and depletion	1,947	137
Write-down of marketable securities	572	1,365
Write-down of mineral properties and deferred development	15,372	2,920
Net change in non-cash working capital	4,048	2,608
	652	(96)
Financing:		
Repayments to related parties	(15,652)	—
Advances from related parties	8,255	9,891
Guarantee to related party	10,120	—
Increase in long-term debt	572	13,567
Repayments of long-term debt	(8,338)	(1,369)
Increase in convertible debenture	17,907	—
Deferred gain	—	(685)
Common shares issued for cash	—	73
	12,864	21,477
Investments:		
Expenditures on:		
Plant and equipment	(2,955)	(7,242)
Mineral properties	(16,307)	(26,330)
Other long-term assets	(71)	(458)
	(19,333)	(34,030)
Decrease in cash and short-term investments	(5,817)	(12,649)
Cash and short-term investments, beginning of year	6,359	19,008
Cash and short-term investments, end of year	$ 542	$ 6,359

See accompanying notes to consolidated financial statements.

Notes to Consolidated Financial Statements

(tabular dollar amounts expressed in thousands of dollars)

Years ended December 31, 1998 and 1997

1 OPERATIONS:

Northern Orion Explorations Ltd. (the "Company") is incorporated under the Company Act (British Columbia). The Company is currently in the process of defining its ore reserves and their economic recoverability. Although one property commenced production in 1998, cash flow generated has been insufficient to meet all cash operating costs incurred. Accordingly, the Company continues to be dependent upon Miramar Mining Corporation ("Miramar") providing funds to continue the evaluation of its mineral properties. Miramar, which holds voting control over the Company, has agreed to provide certain funds and not to demand the repayment of these advances during 1999 (note 5). These statements have been prepared on the basis that the Company continues to receive support from Miramar and no actions are taken which require settlement outside of the normal course of business.

2 SIGNIFICANT ACCOUNTING POLICIES:

a) Basis of presentation:

These consolidated financial statements are prepared in accordance with generally accepted accounting principles in Canada. They include the accounts of the Company and its subsidiaries Grupo Minero Aconcagua S.A. ("GMA"), Recursos Americanos Argentinos S.A. ("RAA"), Minera Mantua Inc., Minera Cobre S.A., Minera Delita S.A., Agua Rica S.A. and Northern Orion Finance Corporation, all of which are wholly-owned. Interests in joint ventures are accounted for by the proportionate consolidation method. All material intercompany balances and transactions have been eliminated.

The preparation of financial statements in accordance with generally accepted accounting principles requires management to make estimates that affect the reported values of assets, such as the recoverable value of mineral properties and deferred development (note 1), and liabilities, and the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from these estimates.

b) Marketable securities:

Marketable securities are recorded at the lower of cost or market.

c) Inventory:

Revenue is recognized on production and product inventories are recorded at estimated net realizable value. Materials and supplies inventories are valued at average cost less appropriate allowances for obsolescence.

d) Plant and equipment:

Plant and equipment are recorded at cost including capitalized interest incurred during the construction phase. Mine plant and equipment will be depreciated using the straight-line and declining balance methods, as appropriate to the assets, over their estimated useful lives, not to exceed the estimated proven and probable ore reserves commencing with the attainment of commercial production. Net operating costs and interest and financing costs incurred in the period preceding commercial production are capitalized. Mining equipment and vehicles are depreciated over their estimated useful lives of five to fifteen years. Office furniture and computer equipment are depreciated using the straight line method over periods from three to ten years.

e) Mineral properties and deferred development:

Mineral resource properties and related exploration and development costs are recorded at cost, including capitalized interest during exploration and development, on a property-by-property basis. These costs will be amortized over the estimated useful life of the properties on a unit-of-production basis following the commencement of commercial production, written-down if estimated future cash flows indicate the carrying value will not be recoverable, or written-off if the properties are sold, allowed to lapse or abandoned. A provision for site restoration costs is provided as necessary by a charge to earnings over the estimated remaining life of the resource properties. Costs related to ongoing site restoration programs are expensed when incurred. Management periodically reviews the underlying value of mineral properties and records a provision to reduce the costs incurred to net recoverable amount as appropriate.

Notes to Consolidated Financial Statements (Continued)

(tabular dollar amounts expressed in thousands of dollars)

Years ended December 31, 1998 and 1997

2 SIGNIFICANT ACCOUNTING POLICIES (CONTINUED):

f) Translation of foreign currency:

The accounts of foreign operations are translated into Canadian dollars as follows:

(i) Monetary assets and liabilities at the rates of exchange prevailing at the balance sheet date;

(ii) Other assets and liabilities at applicable historical exchange rates; and

(iii) Revenues and expenses at the average rate of exchange for the year with translation gains and losses being included in earnings.

g) Loss per share:

Loss per share amounts are calculated using the weighted average number of shares outstanding during the year. Fully diluted loss per share has not been disclosed as the impact of outstanding options would be anti-dilutive.

h) Derivative financial instruments:

The Company uses forward sales agreements for the purpose of managing currency exposures on its anticipated U.S. dollar denominated cash flows. These financial instruments are accounted for as hedges of anticipated transactions and are not recorded on the balance sheet of the Company. Gains and losses from these contracts are recorded in income in the same period as production is delivered to meet the hedged commitments.

3 ACCOUNTS RECEIVABLE:

During 1996, the Company, under an existing option agreement, acquired all of the shares of Agua Rica S.A. for US$7.9 million, which amounts are recoverable from an unrelated party under the terms of a joint operation agreement. As at December 31, 1998, the Company has received US$5.5 million on account of this receivable. The balance is included in accounts receivable. Agua Rica S.A. owns claims that contain most of the known mineralization on the Agua Rica copper/gold project.

4 CAPITAL ASSETS:

a) Plant and equipment:

			1998	1997
	Cost	Accumulated depreciation	Net book value	Net book value
Mine plant and equipment, including capitalized interest	$ 9,968	$ 1,889	$ 8,079	$ 7,070
Office and other equipment	1,043	334	709	710
	$ 11,011	$ 2,223	$ 8,788	$ 7,780

During 1998, the Company capitalized interest and financing costs of $744,000 (1997–$1,001,000) during the period of mine development and construction.

b) Mineral properties and deferred development:

During 1998, the Company capitalized interest of $1,198,000 (1997–nil) on funds borrowed for exploration and development activities.

5 PAYABLES TO RELATED PARTIES:

In prior years, Miramar has made advances to the Company to fund working capital requirements and various exploration expenditures. In September 1998, these amounts were repaid. Subsequent to September 1998, the Company drew additional funds from Miramar in order to finance continued work on its exploration and development projects. Interest is being charged on these advances at 8% per annum. These amounts have been funded subject to compliance with all other covenants related to the convertible debenture. Interest charged on amounts payable to related parties during the year was $604,000 (1997–$617,000).

In 1998, the Company was unable to fund required repayments under its Credit Facility (note 7). Under the terms of a financing guarantee, Miramar was required to make these repayments. At December 31, 1998, the Company is liable for repayment to Miramar of amounts that Miramar paid under the guarantee. Interest of $360,000 was charged at 11% per annum on the guarantee payments made by Miramar.

Notes to Consolidated Financial Statements (Continued)

(tabular dollar amounts expressed in thousands of dollars)

Years ended December 31, 1998 and 1997

6. CONVERTIBLE DEBENTURE:

In September 1998, the Company completed the private placement to Miramar of a $17,500,000 convertible debenture repayable as to principal and interest on September 14, 2003 bearing interest at 8% per annum. The convertible debenture is secured by a guarantee, pledge of shares and a first charge over certain assets of RAA. The principal and unpaid interest are convertible into common shares at the option of Miramar at a price of $1.47 per common share.

Conversion of the debenture by Miramar is limited as follows:

a) At any time prior to September 15, 1999, Miramar will be entitled to convert not more than 20% of the principal and unpaid interest;

b) At any time after September 14, 1999 and prior to September 15, 2000, Miramar will be entitled to convert not more than 30% of the principal and unpaid interest;

c) At any time after September 14, 2000 and prior to September 15, 2001, Miramar will be entitled to convert not more than 50% of the principal and unpaid interest;

d) After September 14, 2001, Miramar is entitled to convert any portion of the principal and unpaid interest.

The Company may repay any portion of the principal and unpaid interest on the convertible debenture at any time.

7. LONG-TERM DEBT:

In 1997, a subsidiary of the Company (the "Borrower") established a Credit Facility with a chartered bank in the aggregate principal amount of US$10,000,000. Loans drawn under the Credit Facility were used to fund the construction and development of the first phase of a copper-gold project in Cuba and to repay funds advanced by Miramar to initiate this construction. Loans drawn under the Credit Facility bear interest at LIBOR plus 5% and are secured by the Guarantee of Miramar and a charge over the shares and assets of the Borrower. The Credit Facility requires quarterly repayments of principal and interest commencing on March 31, 1998. All amounts due under the Credit Facility must be repaid on or before December 31, 1999.

	1998	1997
Loans drawn under Credit Facility, US$4.0 million (1997—US$9.6 million)	$ 5,801	$ 13,567
Less: current portion of long-term debt	(5,801)	(8,932)
	$ —	$ 4,635

8. SHARE CAPITAL:

a) Authorized:

500,000,000 common shares without par value; 100,000,000 first preference shares without par value; 100,000,000 second preference shares without par value.

b) Issued:

	Number of common shares	Amount
Issued, December 31, 1996	73,977,486	$ 121,927
Shares issued:		
For cash on exercise of options	26,204	73
Issued, December 31, 1997	74,003,690	122,000
Shares issued:		
On exercise of stock appreciation rights	3,090	—
Issued, December 31, 1998	74,006,780	$ 122,000

Shares issued for non-cash consideration are recorded at their estimated fair value at the date of issuance.

Notes to Consolidated Financial Statements (Continued)

(tabular dollar amounts expressed in thousands of dollars)

Years ended December 31, 1998 and 1997

8 SHARE CAPITAL (CONTINUED):

c) Stock options:

As at December 31, 1998, the Company had stock options outstanding to acquire 8,204,419 common shares which options are exercisable to August 2002 at prices ranging from $1.45 per share to $1.80 per share. These options can alternatively be exercised as stock appreciation rights, whereby the number of shares issued is dependent upon the market price at the date of exercise, which would substantially reduce the number of common shares issued on exercise. During 1998, 8,130,049 stock options with exercise prices ranging from $5.35 to $3.20 were repriced to $1.80.

9 INCOME AND RESOURCE TAXES:

The Company and a Canadian subsidiary have federal non-capital loss carry-forwards for Canadian tax purposes of approximately $10.0 million available to reduce taxable income otherwise calculated through 2005. The future tax benefit of these loss carry forward balances has not been recognized in the accounts.

In addition, the Company has certain other tax balances that may be recoverable from future operations in Latin America which have been classified as other assets. The tax basis of the Company's assets does not differ materially from their carrying values.

10 BUSINESS SEGMENTS:

a) Operating segment:

The Company's operations are primarily directed towards the exploration and development of mineral properties in Latin America. During 1998, the Company generated revenue from the sale of gold extracted from one of these properties. The Company's mining activities represent a single reportable segment.

b) Geographic segments:

The Company's identifiable capital assets and revenues by geographic area are as follows:

As at December 31, 1998:

	Capital assets	Revenues
Central America	$ 32,331	$ 3,346
South America	89,815	3
Canada	39	280
	$ 122,185	$ 3,629

As at December 31, 1997:

	Capital assets	Revenues
Central America	$ 38,412	$ —
South America	81,822	7
Canada	8	630
	$ 120,242	$ 637

Capital assets are comprised of plant and equipment and mineral properties and deferred development.

11 RELATED PARTY TRANSACTIONS:

Related party transactions not disclosed elsewhere in these consolidated financial statements are as follows:

a) During 1998, the Company paid $2.2 million (1997–$2.5 million) in management fees to Miramar; and

b) A company controlled by one of the directors of the Company performed drilling services for GMA totaling $50,000 (1997–$149,000); and

c) A company controlled by one of the directors of the Company was advanced funds under a drilling services contract for GMA totaling US$250,000. This advance was expensed during the year.

Notes to Consolidated Financial Statements (Continued)

(tabular dollar amounts expressed in thousands of dollars)

Years ended December 31, 1998 and 1997

12 FINANCIAL RISK MANAGEMENT:

a) Foreign currency hedging:

All of the Company's anticipated mineral revenues are denominated in US dollars. In order to manage its exposure to currency fluctuations, the Company may enter into currency forward sales or options contracts. The Board of Directors has approved a hedging policy and reviews the Company's hedging position periodically.

As at December 31, the Company had outstanding contracts which mature in 1999 as follows:

	US $	Average exchange rate
Forward sales contracts	$ 4,982	1.3955

b) Credit risks:

The Company's ability to realize on the above contracts is dependent upon the ability of the counter-parties to perform in accordance with the terms of the agreements. The Company deals only with major financial institutions with investment grade credit ratings and does not expect any counter-parties to fail to meet their obligations.

13 FINANCIAL INSTRUMENTS:

Financial instruments are recorded at cost. Fair value estimates are made at the balance sheet date, based upon relevant market information relating to the financial instrument. These estimates are subjective in nature and involve uncertainties and significant matters of judgment. Changes in assumptions could significantly affect these estimates.

The fair value of financial instruments, comprising cash and short-term investments, marketable securities, accounts receivable, current liabilities and long-term debt, are estimated to not be materially different from carrying value due to their ability for prompt liquidation or short-term to maturity. The fair value of payables to related parties, guarantee to related party and the convertible debenture are not readily determinable due to the nature of the relationship between the Company and the related party and the lack of a ready liquid market for such instruments. The fair value of the forward sales contracts described in note 12(a) is:

	1998		1997	
	Carrying value	Fair value	Carrying value	Fair value
Derivatives:				
Forward sales contracts	$ —	$ (637)	$ —	$ (202)

14 COMPARATIVE FIGURES:

Certain comparative figures have been reclassified to conform with the basis of presentation adopted in the current year's consolidated financial statements.

15 UNCERTAINTY DUE TO THE YEAR 2000 ISSUE:

The Year 2000 Issue arises because many computerized systems use two digits rather than four to identify a year. Date-sensitive systems may recognize the year 2000 as 1900 or some other date, resulting in errors when information using year 2000 dates is processed. In addition, similar problems may arise in some systems which use certain dates in 1999 to represent something other than a date. The effect of the Year 2000 Issue may be experienced before, on, or after January 1, 2000, and, if not addressed, the impact on operations and financial reporting may range from minor errors to significant systems failure which could affect an entity's ability to conduct normal business operations. It is not possible to be certain that all aspects of the Year 2000 Issue affecting the Company, including those related to the efforts of customers, suppliers or other third parties, will be fully resolved.

16 CONTINGENT LIABILITY:

A claim of $1.3 million (US$856,000) has been asserted against GMA by one of its Argentine directors for a purported loan to GMA to allow it to purchase a mineral property in 1996. In the opinion of management, this claim is without merit. No provision for this claim has been recorded in the financial statements.

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Vancouver, BC, Canada

OFFICERS

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Interim President & CEO, Vice President, Finance & CFO

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Executive Vice President

Dr. Ricardo Auriemma
Senior Vice President Argentina

Brian M. Labadie
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LISTINGS

TSE-Symbol NNO
VSE-Symbol NNO

ANNUAL GENERAL MEETING

Northern Orion's Annual General Meeting of Shareholders will be held on Wednesday, June 23rd, 1999 at 10:00 am Lonsdale Quay, North Vancouver, BC, Canada.

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Northern Orion

EXPLORATIONS LTD.

First Quarter Report

For the three months ended March 31, 1999

Management Report

FINANCIAL RESULTS

During the first three months of 1999, Northern Orion Explorations Ltd. ("Northern Orion" or the "Company") incurred an operating loss of $1,699,000 or $0.02 per share compared to a loss of $868,000 or $0.01 per share for the same period in 1998. The loss reflects results from operations at the Mantua mine in Cuba and on-going costs related to Northern Orion's exploration activities in Latin America.

MANAGEMENT CHANGES

In March 1999, Walter H. Berukoff, Chairman, resigned as the President and Chief Executive Officer of Northern Orion and its controlling shareholder, Miramar Mining Corporation ("Miramar"). Mr. Berukoff will continue as the non-executive chairman of the board of directors until the Company's annual general meeting in June, when he will not stand for re-election to the board of directors. Northern Orion appreciates Mr. Berukoff's years of service with the Company and acknowledges his contributions to the growth of the Company since its formation.

STRATEGIC REVIEW

The board of Northern Orion has initiated a strategic review process to evaluate alternatives or the optimal medium to long term future of the Company given continued depressed copper prices and poor equity markets for junior exploration companies. During the quarter, the Company continued to reduce staffing levels and substantially reduced exploration expenditures, focussing expenditures on the Company's core assets such as Agua Rica, San Jorge and Mantua. The Company expects this strategic review to be completed by mid-1999.

MANTUA

During the quarter, the Mantua gold leach mine produced 6,043 ounces of gold (Northern Orion's share 3,021 ounces). Cash operating costs were US$300 per ounce. The realized gold selling price on Northern Orion's 50% share of such gold production from Mantua was US$327 per ounce due the positive results of gold hedging by Northern Orion. Cash costs were higher than budgeted due to water shortages experienced at the mine. Water

shortages were the result of extended drought conditions and reduced the Company's ability to leach gold from the pads. Weather conditions returned to normal during May 1999 and irrigation of the leach pads returned to normal levels. As a result of the higher operating costs at the Mantua mine, Northern Orion was unable to make the principal and interest payments required by its project financing and therefore Miramar paid $3.0 million under the guarantee provided by Miramar for the Mantua project financing. The Mantua mine is held in a 50-50 joint venture with Geominera SA, a Cuban state owned company.

Studies on the high grade copper deposit underlying the gold deposit continued to progress. The results of an independent pre-feasibility study are expected to be announced in the second quarter of 1999.

AGUA RICA

The Agua Rica project is a large porphyry copper-gold-silver-molybdenum deposit located in Catamarca province, northwest Argentina, and is being explored by a joint venture between Northern Orion (30%) and BHP Copper (70%).

The US$8.4 million 1998/99 work program continued towards completion at the end of May 1999. Phase 2 metallurgical work on core samples collected from drill holes was completed during the period with positive results. Preliminary results from low grade copper mineralization (0.2 to 0.4%) are commonly yielding 80% recovery. Higher grade copper mineralization typically produced concentrates grading greater than 30% copper with better than 90% recovery. Some ore types are also yielded 70% recovery of molybdenum. Metallurgical testing of 300 tonnes of bulk sample collected in 1998 will be completed in the second quarter.

Work currently underway includes updating resource estimates and a mine plan that incorporates the results of additional drilling completed in 1997 and 1998. Progress has been made on studies evaluating project infrastructure, water supply, product transportation options and power supply alternatives, as well as production scale optimization. The results of these and other work will be incorporated into an updated project model during 1999.

SAN JORGE

In May 1999, Northern Orion announced that it had consolidated the land position around the San Jorge copper deposit in Argentina, expanding the existing resource and opening up a larger area for exploration. Northern Orion will own 85% of the expanded property and another company will own 15%. Northern Orion can convert the 15% minority interest to a 2% NSR by bringing the project to commercial production. The San Jorge project encompasses a porphyry copper deposit that has undergone superficial leaching resulting in sub-horizontal oxide and enriched copper zones, overlying a large primary porphyry copper-gold deposit.

OTHER EXPLORATION

Due to continued depressed prices for copper and gold, combined with poor equity markets for exploration stocks, Northern Orion continues to reduce its exploration activities in Argentina and has eliminated them in Cuba. Northern Orion will be concentrating its future efforts on its key projects, such as Agua Rica, San Jorge and Mantua. Other exploration projects will be put on care and maintenance or joint ventured to suitable partners.

Consolidated Balance Sheets

(expressed in thousands of dollars)

March 31, 1999 and December 31, 1998	1999 (unaudited)	1998 (unaudited)
Assets		
Current assets:		
Cash and short-term investments	$ 333	$ 542
Marketable securities	3	3
Accounts receivable	3,651	4,056
Inventory	2,115	2,201
Prepaid expenses	132	102
	6,234	6,904
Plant and equipment	8,144	8,788
Mineral properties and deferred development	115,427	113,397
Other assests	2,334	2,322
	$ 132,139	$ 131,411
Liabilities and Shareholders' Equity		
Current Liabilities:		
Accounts payable and accrued liabilities	$ 2,986	$ 3,076
Current portion of long-term debt	3,106	5,801
	6,092	8,877
Payables to related parties	5,213	3,596
Guarentee to related party	13,427	10,120
Convertible debenture	18,257	17,907
Reclamation liability	24	86
	43,013	40,586
Shareholder's equity:		
Share capital	122,000	122,000
Deficit	(32,874)	(31,175)
	89,126	90,825
	$ 132,139	$ 131,411

Consolidated Statements of Operations and Deficit

Three month periods ended March 31, 1999 and 1998
(expressed in thousands of dollars except per share amounts)

	1999 (unaudited)	1998 (unaudited)
Revenue:		
Metal sales	1,317	—
Interest and other income	$ 2	$ 14
	1,319	14
Expenses:		
Cost of sales	1,369	—
Management fee	300	630
General and administration	125	146
Interest	78	174
Depreciation and depletion	644	25
Write-down of mineral properties	106	—
Loss (gain) on foreign exchange translation	396	(93)
	3,018	882
Loss for the period	1,699	868
Deficit, beginning of period	31,175	9,888
Deficit, end of period	$ 32,874	$ 10,756
Loss per share	$ 0.02	$ 0.01
Weighted average number of common shares outstanding	74,006,780	74,006,780

Consolidated Statements of Cash Flows

Three month periods ended March 31, 1999 and 1998
(expressed in thousands of dollars)

	1999 (unaudited)	1998 (unaudited) (restated note 1)
Cash flows from (used in) operating activities:		
Loss for the period	$ (1,699)	$ (868)
Items not involving cash:		
Depreciation and depletion	644	25
Writedown of marketable securities	106	—
	(949)	(843)
Decrease in accounts receivable	405	228
Decrease (increase) in inventories	86	(2,629)
Decrease (increase) in prepaid expenses	(30)	(65)
Increase (decrease) in accounts payable and acrued liabilities	(90)	1,085
	(578)	(2,224)
Cash flows from (used in) financing activities:		
Due to related parties	1,617	2,484
Long-term debt	(2,695)	(42)
Capitalized interest on convertible debenture	350	—
Guarantee to related party	3,307	—
	2,579	2,442
Cash flows from (used in) investing activities:		
Mineral properties	(2,198)	(2,805)
Plant and equipment	—	(1,157)
Other long-term assets	(12)	(45)
	(2,20)	(4,007)
Net decrease in cash and short-term investments	(209)	(3,789)
Cash and short-term investments beginning of period	542	6,359
Cash and short-term investments end of period	$ 333	$ 2,570

Note 1: Comparative figures for the Consolidated Statements of Cash Flows have been restated to reflect the retroactive application of the new guidance for the statement of cash flows by the Canadian Institute of Chartered Accountants which the Company adopted effective January 1, 1999.

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RESULTS OF OPERATIONS

Northern Orion Explorations Ltd. ("Northern Orion" or "the Company") completed the construction, commissioning and startup of a gold mining operation at the Mantua project in Cuba during 1998. With the achievement of full production in March 1998, Northern Orion began reporting the results of mining operations. In addition, the Company continued to evaluate and develop a number of mineral properties in Argentina. Financial constraints on Northern Orion have necessitated a reduced scale of exploration and development activities in 1998 as compared to previous years and resulted in the elimination of a number of property interests.

Northern Orion's financial condition has been challenged in comparison to 1997 due principally to continued expenditures on exploration and administrative overhead, poorer than expected operating performance at the Mantua operation, lower than expected gold prices and higher costs of financing required to maintain the properties held in Argentina and Cuba.

Northern Orion recorded a loss of $21.3 million or $0.29 per share in 1998 compared to a loss of $7.1 million or $0.10 per share in 1997. The 1998 loss includes write-downs on mineral properties and marketable securities of $15.9 million or $0.22 per share compared to writedowns of mineral properties and marketable securities of $4.3 million or $0.06 per share in 1997. Excluding the writedowns of mineral properties and marketable securities, the Company's loss in 1998 of $5.3 million compares to a loss of $2.8 million in 1997. The increased loss in 1998 was due to losses from the operations in Cuba, costs of curtailing exploration activities, costs of depreciation related to the Cuban operating assets and costs of external debt. These increased costs were partially offset by a reduction in management fees charged by Miramar.

Mining Operations

Gold production commenced at the Company's 50% owned Mantua mine in the first quarter of 1998. Prior to achievement of commercial production, all costs of startup operations and related interest and overhead were capitalized. During 1998, revenues from gold sales were US$4.8 million of which Northern Orion's share was $2.4 million. Total production sold was 16,323 ounces of which Northern Orion's share was 8,161 ounces. As the result of certain hedging transactions entered by Northern Orion, the realized selling price on the Company's 50% share of production was US$337 per ounce compared to an average gold spot price of US$294 per ounce for the period. Cash operating cost for 1998 was US$244 per ounce. Total tons of ore mined in 1998 were 423,742 at an average grade of 0.09 ounces per ton. Cumulative recoveries on ore treated in 1998 reached 51% and estimates for the ultimate recoveries were downgraded to 60%.

EXPLORATION AND DEVELOPMENT ACTIVITIES

Agua Rica

Work continued in 1998 at the 30% owned Agua Rica Project in Argentina. The project operator, BHP completed the 1997/98 work program for the project in May 1998 and commenced work on the 1998/99 work program in June. The Company's share of these programs (including management fees to the operator) is US$4.8 million for the 1998/99 work program and US$5.3 million for the 1997/98 program. The 1998/99 work program, to be completed in May 1999, will complete the necessary fieldwork required to support the preparation of a bankable feasibility study. Due to the decline in the world copper price in 1998, activities at Agua Rica are being conducted on a reduced scale from previous years. The 1998/99 work program builds on the work performed in completing the Initial Feasibility Study which was issued in November 1997. The findings of this study indicated that a large low-cost mine could be developed that would have attractive returns on capital invested. In the short-term, the capital required to advance the Agua Rica project will be available from internal sources of funds. Management of the Company is determined to see the project through final feasibility and beyond. On a long-term basis, the Company's share of the capital requirement to develop a mine at Agua Rica could be in excess of US$300 million. Northern Orion's management is continuing to examine all of the Company's options on how best to proceed with this important project. In order to develop a mine at Agua Rica, the Company will need to obtain or arrange significant additional capital.

Mantua

Work continued in 1998, further evaluating the Mantua copper phase, including additional drilling, detailed pilot plant testing, ore reserve development and selecting Bateman Engineering to complete a prefeasibility study and the completion of an internal review of the project. The Company is currently seeking funding to complete a bankable feasibility study. A final production decision for the copper phase is pending the results of this feasibility study and the recovery of the copper price. The Company's ability to develop the next phase at Mantua is dependent upon obtaining third party financing.

Other

In 1998, the Company continued to evaluate its prospective mineral properties in Argentina.

The Argentine projects accounted for expenditures that totaled $13.4 million in 1998 compared to $16.0 million in 1997 and $14.9 million in 1996. The single largest component of the Argentine expenditures was for the Agua Rica project and its extended area at $6.7 million (1997—$7.8 million and 1996—$7.0 million) in which Northern Orion (through it's wholly owned subsidiary, Recursos Americanos Argentinos SA or "RAA") has a 30% joint venture interest. Grupo Minero Aconcagua SA ("GMA") accounted for $5.3 million (1997—$7.5 million and 1996—$4.6 million) of these expenditures of which the largest component was for the San Jorge project at $1.3 million (1997—$3.4 million and 1996—$2.1 million).

The process of reviewing all properties in the "exploration pipeline" culminated in the fourth quarter of 1998. Management determined that the Delita project be placed on hold due to low gold prices and the deferred costs of $8.4 million associated with its exploration were written down. In Argentina this comprehensive review resulted in the abandonment of several prospective properties in 1998 and a corresponding writedown of $6.9 million was recorded.

LIQUIDITY AND CAPITAL RESOURCES

General

Due to the prospective nature of the mineral exploration business and the number of exploration properties held, Northern Orion has a limited ability to generate sources of internal cashflow from operations. The Company has financed the acquisition, exploration and development of its properties through a combination of the issuance of common shares, borrowings from Miramar, attracting joint venture partners to finance the evaluation of properties and third party borrowings.

When and if the Company places an adequate number of its exploration properties into production, it is expected that the resulting cashflows will become sufficient to sustain future operations, exploration and development. At present, the Company lacks the internal financial ability to advance any of its projects to the production stage.

Cash Resources and Liquidity

In order to properly manage the term structure of the funding provided by Miramar to Northern Orion, the Company entered into negotiations with Miramar which culminated in September 1998 with the issuance of a 5 year $17.5 million convertible debenture to Miramar. Under the terms of this debenture, Northern Orion agreed to provide certain assets as security to Miramar. The conversion feature of this debenture phases in over 3 years and is based on a conversion price of $1.47 per share. The debenture and accrued interest mature on September 14, 2003 (see note 6 to the consolidated financial statements for additional information regarding the convertible debenture). At the option of Miramar, interest and principal may be repaid in the form of common shares in Northern Orion. In 1997, the Company, through its subsidiary, Minera Cobre S.A., arranged financing of US$10 million with a chartered bank upon which quarterly repayments commenced at the end of March 1998. All amounts drawn under this facility are due by the third quarter of 1999. The Company and Miramar guaranteed the obligations of Minera Cobre S.A. should there be a deficiency in cashflow from the project. Due to the low gold price and lower than expected recoveries at Mantua, Minera Cobre S.A. was unable to generate sufficient cashflow from operations to make required principal and interest payments on this financing. As a result, the principal and interest requirements under the loan were met by Miramar under the terms of the guarantee to the lender. Amounts drawn under the Miramar guarantee bear interest at 11%. Miramar has agreed not to demand repayment of this amount in the coming year. Northern Orion is dependent on continued financial assistance from Miramar to continue the development and operation of its mineral properties. At the end of December 1998, the Company had a working capital deficiency of $2.0 million including cash of $542,000 compared to working capital of $5.3 million and cash of $6.3 million at the end of 1997. These funds are not sufficient to continue the full evaluation of all of the Company's mineral prospects. Management of the Company is in the process of further evaluating all of the Company's property interests in order to ensure that value is realized. In addition, the Company is reviewing all of its expenditures to ensure that cash commitments are prioritized. It is expected that the remaining balance of the Mantua construction loan will be repaid by Miramar under the guarantee. The Company is evaluating potential new sources of financing and all required expenditures to ensure that existing capital resources are available to maintain the core properties currently held.

In 1997, cash and short-term investments decreased to $6.3 million compared to $19 million in 1996. Working capital declined to $5.3 million in 1997 from $28.3 million in 1996.

This decline was the result of the investments undertaken by Northern Orion in 1997 at Mantua and at the various exploration projects in Argentina.

The Company's cash balances and short-term investments are unrestricted and have terms to maturity of less than 90 days. The current portion of the long-term debt is expected to be repaid by Miramar as the cashflow provided by the Mantua project will not be sufficient to meet these requirements. The remaining balance of accounts receivable of $4.0 million are expected to be received in June 1999. Apart from the requirement to fund the operations at Mantua, there are no restrictions to the free flow of funds between Northern Orion and its subsidiaries. Northern Orion is in the process of determining methods to obtain sufficient capital resources to meet its short and medium term financial requirements. Long term liquidity and capital resources will be dependent upon the successful development and profitable operation of mineral properties and the availability of capital from the equity markets. In order to maintain financial resources and take advantage of financial leverage, the Company will continue to negotiate with major financial institutions to obtain project financing.

Commitments

Northern Orion continues to contribute to a work plan for the Agua Rica property with its joint venture party, BHP, which requires that exploration and development expenditures be made under the terms of annual work programs. It is expected that total expenditures for 1999 under this program will be approximately $6.0 million (US$4.2 million), of which Northern Orion's share will be 30% or $2.0 million (US$1.4 million) including management fees. To December 31, 1998, the Company has spent C$20.6 million (US$14.5 million) on development activities at Agua Rica.

As part of the Mantua financing, the Company entered into forward sales contracts for the cashflows from the gold sales revenue in order to mitigate any currency risk associated with the project. At December 31, 1998 the currency hedge had unrealized losses of $637,000 which will be reflected in income as these contracts mature. The Company has entered into no other commitments for currency, metals or financial derivatives.

Northern Orion has entered into exploration agreements that require exploration expenditures to be funded in accordance with planned work programs and schedules. In most cases, these commitments are limited in recourse to the property involved and can be dropped with a loss of rights to the property being the only consequence.

REVIEW OF FINANCIAL RESULTS

General

Prior to 1998, Northern Orion was in a pre-operating phase during which it was evaluating its many exploration prospects. During the pre-operating phase, most of the costs of exploration and development (including related general and administrative expenditures) are capitalized. With the commencement of operations at Mantua, the Company's financial statements reflect a combination of operating results from the mining projects and the continued exploration and development of exploration properties.

Comparison of results for the previous two years

Revenue for the year of $3.6 million compares to revenue of $0.6 million in 1997 and $2.6 million in 1996. This increase results from the Company's 50% interest in the sales of gold from Mantua in Cuba and related hedging gains. In 1996 the Company recorded a gain on mineral properties optioned of $1.3 million which was non-recurring. Interest income earned in 1998 was $48,000 and compares to $0.6 million and $1.3 million earned in 1997 and 1996, respectively. Lower interest income is primarily the result of reduced cash balances being held by the Company during the year.

The Company's 50% share of the cost of sales of $3.0 million was incurred in the production of gold at the Mantua mine in Cuba. In addition, the Company reflected depreciation charges of $1.9 million related principally to the mining assets in Cuba.

Due to the increased financial pressures faced by Northern Orion in 1998, Miramar reduced the management fee to $100,000 per month commencing in October with the undertaking that overhead would be reduced generally as a result of a reduced level of operations related to Northern Orion. In 1997, the management fee charged had increased to $210,000 per month due to the significant effort of senior management on projects within Northern Orion. During 1996, Miramar charged a management fee of $100,000 per month. The management fee includes Northern Orion's share of all of the costs of premises and personnel as the Company shares executives, offices and employees with Miramar. The costs of these services are charged to Northern Orion based upon estimates made by management and staff regarding their efforts in respect of Northern Orion's properties and operations. It is expected that Miramar's management will take further steps to reduce overheads incurred on behalf of the Company and that the management fee in 1999 will be at or below $100,000 per month.

General and administrative expenses increased by $191,000 in 1998 to $969,000 primarily as the result of the severance costs incurred in reducing exploration personnel in Argentina during the second half of 1998. In 1997, general and administrative expenses were reduced from $1,424,000 in 1996 to $778,000 as the result of lower and regulatory expenses and through tighter management of administrative expenses. Interest charges of $616,000 in 1998 relate to the Company's share of the interest charged on the Mantua financing and compares to interest of $617,000 in 1997. During the year, the Company capitalized interest of $1.2 million on funds related to development properties and exploration activities. In prior years, interest was not capitalized on exploration properties. The costs of operating offices in Buenos Aires and Mendoza in Argentina and offices in Cuba are allocated to mineral properties to the extent that the costs relate to specific exploration and development properties.

In 1998, as additional exploration work was performed on the Company's portfolio of exploration properties, management determined that certain properties should not be further pursued and as a result a write-down of several of the properties (including Delita) totaling $15.4 million was taken. This compares to similar write-downs of $2.9 million and $1.3 million in 1997 and 1996, respectively. Write-downs of this nature are not unusual in the industry and should be expected to re-occur as grassroots exploration properties are evaluated and their potential for commercial viability is better defined.

As the result of declining equity markets for mineral exploration securities, the Company reduced the value of certain shares held as marketable securities to the lower of cost or market which resulted in a write-down of $572,000 in 1998 which compares to $1,365,000 in 1997 and $nil in 1996.

Investing Activities

In 1998, the Company invested a total of $19.3 million in mine construction ($3.0 million) and exploration and development activities ($16.3 million) which compares to investments in 1997 of $33.6 million and in 1996 of $22.6 million. The decrease is the result of completion of construction at Mantua in early 1998 and reduced levels of exploration in Argentina.

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The Company was unable to repay the maturing principal and interest on the funds of $13.6 million (US$9.6 million) borrowed to finance the construction of the Mantua gold phase. This financing was effectively replaced by the drawings on the Miramar guarantee. The Company used the majority of the proceeds of the $17.5 million convertible debenture to settle advances from Miramar. In the first quarter of 1998, interest on the construction financing of $572,000 (US$389,000) was capitalized into the principal balance of the loan. Additional advances have been received from Miramar during 1998 to temporarily finance the monthly management fee and various other short-term cash requirements.

OUTLOOK

Northern Orion's plan is to reduce expenditures to the lowest possible level while maintaining its interest in certain core properties. Plans for 1999 call for concentration on the Mantua project in Cuba and on Agua Rica, Antofalla and San Jorge in Argentina.

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The gold phase at Mantua is expected to complete mining of ore in mid 1999. Upon completion of mining, the processing plant will continue to operate on drawing down work in process inventory until complete late in the third quarter of 1999. Management is currently assessing alternative opportunities and uses for the processing facility. The Company will continue to operate using the combined efforts of the Miramar management and the Northern Orion staff to focus on the exploration and development of the existing projects in Latin America. Inflation and changes in prices of significant inputs are not expected to materially affect the results of Northern Orion for 1999.

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The largest project currently underway is the Agua Rica copper-gold-molybdenum project. The Company continues to fund 30% of the exploration expenditures and costs of the feasibility study being prepared under the terms of a joint operation agreement with BHP. The program for 1999 includes completion of fieldwork and documentation and preparatory work towards a final feasibility study.

The Company is evaluating the potential for developing an SX/EW operation at San Jorge and will await a recovery in the copper price before committing to a work program necessary to complete a final feasibility study.

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The primary exploration target for 1999 is the Antofalla prospect in Argentina. In light of financial constraints, Northern Orion has rationalized the number of properties upon which exploration efforts will be focused and has therefore eliminated its interests in a number of non core properties. Northern Orion may perform grassroots exploration to generate additional new prospects as and when financial resources allow.

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The Company operates almost exclusively in foreign jurisdictions and is dependent on world metals and currency markets that may present risks to the future prospects of Northern Orion.

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Northern Orion is engaged in the exploration for and the development of mineral deposits. These activities involve significant risks which careful evaluation, experience and knowledge may not, in some cases, eliminate. The commercial viability of any mineral deposit depends on a number of factors, many of which are not within the control of management. Some of the factors which will effect the financial viability of a given mineral deposit include its size, grade and proximity to infrastructure. In addition, government regulation, taxes, royalties, land tenure, land use, environmental protection and reclamation and closure obligations could have a profound impact on the economic viability of a mineral deposit.

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MANAGEMENT'S RESPONSIBILITY FOR FINANCIAL REPORTING

To the Shareholders of Northern Orion Explorations Ltd.:

The consolidated financial statements and all information in the Annual Report are the responsibility of the Board of Directors and management. The consolidated financial statements have been prepared by management based on information available to February 19, 1999 and are in accordance with accounting principles generally accepted in Canada. A system of internal controls is maintained by management to provide reasonable assurance that assets are safeguarded and financial information is accurate and reliable.

The Audit Committee of the Board of Directors is comprised of a majority of outside directors, and meets with management and the independent auditors to review internal control and financial reporting matters, and to ensure that management is maintaining adequate financial controls. The Audit Committee also reviews the audit plan of the independent auditors and discusses the results of their audit and their audit report prior to submitting the consolidated financial statements to the Board of Directors for approval.

The consolidated financial statements have been audited by KPMG and their report is below.

ANTHONY P. WALSH

Interim President, Vice-President Finance and Chief Financial Officer

AUDITORS' REPORT TO THE SHAREHOLDERS

We have audited the consolidated balance sheets of Northern Orion Explorations Ltd. as at December 31, 1998 and 1997 and the consolidated statements of operations and deficit and changes in financial position for the years then ended. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with generally accepted auditing standards. Those standards require that we plan and perform an audit to obtain reasonable assurance whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation.

In our opinion, these consolidated financial statements present fairly, in all material respects, the financial position of the Company as at December 31, 1998 and 1997 and the results of its operations and the changes in its financial position for the years then ended in accordance with generally accepted accounting principles. As required by the Company Act (British Columbia), we report that, in our opinion, these principles have been applied on a consistent basis.

KPMG LLP

CHARTERED ACCOUNTANTS

Vancouver, Canada
February 18, 1999

Consolidated Balance Sheets

(expressed in thousands of dollars)

December 31, 1998 and 1997	1998	1997
Assets		
Current assets:		
Cash and short-term investments	$ 542	$ 6,359
Marketable securities	3	575
Accounts receivable (note 3)	4,056	9,073
Inventory	2,201	52
Prepaid expenses	102	69
	6,904	16,128
Plant and equipment (note 4)	8,788	7,780
Mineral properties and deferred development (note 4)	113,397	112,462
Other assets	2,322	2,251
	$ 131,411	$ 138,621
Liabilities and Shareholders' Equity		
Current liabilities:		
Accounts payable and accrued liabilities	$ 3,076	$ 1,863
Current portion of long-term debt	5,801	8,932
	8,877	10,795
Payables to related parties (note 5)	3,596	10,993
Guarantee to related party (note 5)	10,120	—
Convertible debenture (note 6)	17,907	—
Long-term debt (note 7)	—	4,635
Reclamation liability	86	86
	40,586	26,509
Shareholders' equity:		
Share capital (note 8)	122,000	122,000
Deficit	(31,175)	(9,888)
	90,825	112,112
Operations (note 1)		
Uncertainty due to the Year 2000 Issue (note 15)		
Contingent liability (note 16)		
	$ 131,411	$ 138,621

See accompanying notes to consolidated financial statements.

On behalf of the Board:

Director

Director

RESULTS OF OPERATIONS

Northern Orion Explorations Ltd. ("Northern Orion" or "the Company") completed the construction, commissioning and startup of a gold mining operation at the Mantua project in Cuba during 1998. With the achievement of full production in March 1998, Northern Orion began reporting the results of mining operations. In addition, the Company continued to evaluate and develop a number of mineral properties in Argentina. Financial constraints on Northern Orion have necessitated a reduced scale of exploration and development activities in 1998 as compared to previous years and resulted in the elimination of a number of property interests.

Northern Orion's financial condition has been challenged in comparison to 1997 due principally to continued expenditures on exploration and administrative overhead, poorer than expected operating performance at the Mantua operation, lower than expected gold prices and higher costs of financing required to maintain the properties held in Argentina and Cuba.

Northern Orion recorded a loss of $21.3 million or $0.29 per share in 1998 compared to a loss of $7.1 million or $0.10 per share in 1997. The 1998 loss includes write-downs on mineral properties and marketable securities of $15.9 million or $0.22 per share compared to writedowns of mineral properties and marketable securities of $4.3 million or $0.06 per share in 1997. Excluding the writedowns of mineral properties and marketable securities, the Company's loss in 1998 of $5.3 million compares to a loss of $2.8 million in 1997. The increased loss in 1998 was due to losses from the operations in Cuba, costs of curtailing exploration activities, costs of depreciation related to the Cuban operating assets and costs of external debt. These increased costs were partially offset by a reduction in management fees charged by Miramar.

Mining Operations

Gold production commenced at the Company's 50% owned Mantua mine in the first quarter of 1998. Prior to achievement of commercial production, all costs of startup operations and related interest and overhead were capitalized. During 1998, revenues from gold sales were US$4.8 million of which Northern Orion's share was $2.4 million. Total production sold was 16,323 ounces of which Northern Orion's share was 8,161 ounces. As the result of certain hedging transactions entered by Northern Orion, the realized selling price on the Company's 50% share of production was US$337 per ounce compared to an average gold spot price of US$294 per ounce for the period. Cash operating cost for 1998 was US$244 per ounce. Total tons of ore mined in 1998 were 423,742 at an average grade of 0.09 ounces per ton. Cumulative recoveries on ore treated in 1998 reached 51% and estimates for the ultimate recoveries were downgraded to 60%.

EXPLORATION AND DEVELOPMENT ACTIVITIES

Agua Rica

Work continued in 1998 at the 30% owned Agua Rica Project in Argentina. The project operator, BHP completed the 1997/98 work program for the project in May 1998 and commenced work on the 1998/99 work program in June. The Company's share of these programs (including management fees to the operator) is US$4.8 million for the 1998/99 work program and US$5.3 million for the 1997/98 program. The 1998/99 work program, to be completed in May 1999, will complete the necessary fieldwork required to support the preparation of a bankable feasibility study. Due to the decline in the world copper price in 1998, activities at Agua Rica are being conducted on a reduced scale from previous years. The 1998/99 work program builds on the work performed in completing the Initial Feasibility Study which was issued in November 1997. The findings of this study indicated that a large low-cost mine could be developed that would have attractive returns on capital invested. In the short-term, the capital required to advance the Agua Rica project will be available from internal sources of funds. Management of the Company is determined to see the project through final feasibility and beyond. On a long-term basis, the Company's share of the capital requirement to develop a mine at Agua Rica could be in excess of US$300 million. Northern Orion's management is continuing to examine all of the Company's options on how best to proceed with this important project. In order to develop a mine at Agua Rica, the Company will need to obtain or arrange significant additional capital.

Mantua

Work continued in 1998, further evaluating the Mantua copper phase, including additional drilling, detailed pilot plant testing, ore reserve development and selecting Bateman Engineering to complete a prefeasibility study and the completion of an internal review of the project. The Company is currently seeking funding to complete a bankable feasibility study. A final production decision for the copper phase is pending the results of this feasibility study and the recovery of the copper price. The Company's ability to develop the next phase at Mantua is dependent upon obtaining third party financing.

Other

In 1998, the Company continued to evaluate its prospective mineral properties in Argentina.

The Argentine projects accounted for expenditures that totaled $13.4 million in 1998 compared to $16.0 million in 1997 and $14.9 million in 1996. The single largest component of the Argentine expenditures was for the Agua Rica project and its extended area at $6.7 million (1997—$7.8 million and 1996—$7.0 million) in which Northern Orion (through it's wholly owned subsidiary, Recursos Americanos Argentinos SA or "RAA") has a 30% joint venture interest. Grupo Minero Aconcagua SA ("GMA") accounted for $5.3 million (1997—$7.5 million and 1996—$4.6 million) of these expenditures of which the largest component was for the San Jorge project at $1.3 million (1997—$3.4 million and 1996—$2.1 million).

The process of reviewing all properties in the "exploration pipeline" culminated in the fourth quarter of 1998. Management determined that the Delita project be placed on hold due to low gold prices and the deferred costs of $8.4 million associated with its exploration were written down. In Argentina this comprehensive review resulted in the abandonment of several prospective properties in 1998 and a corresponding writedown of $6.9 million was recorded.

LIQUIDITY AND CAPITAL RESOURCES

General

Due to the prospective nature of the mineral exploration business and the number of exploration properties held, Northern Orion has a limited ability to generate sources of internal cashflow from operations. The Company has financed the acquisition, exploration and development of its properties through a combination of the issuance of common shares, borrowings from Miramar, attracting joint venture partners to finance the evaluation of properties and third party borrowings.

When and if the Company places an adequate number of its exploration properties into production, it is expected that the resulting cashflows will become sufficient to sustain future operations, exploration and development. At present, the Company lacks the internal financial ability to advance any of its projects to the production stage.

Cash Resources and Liquidity

In order to properly manage the term structure of the funding provided by Miramar to Northern Orion, the Company entered into negotiations with Miramar which culminated in September 1998 with the issuance of a 5 year $17.5 million convertible debenture to Miramar. Under the terms of this debenture, Northern Orion agreed to provide certain assets as security to Miramar. The conversion feature of this debenture phases in over 3 years and is based on a conversion price of $1.47 per share. The debenture and accrued interest mature on September 14, 2003 (see note 6 to the consolidated financial statements for additional information regarding the convertible debenture). At the option of Miramar, interest and principal may be repaid in the form of common shares in Northern Orion. In 1997, the Company, through its subsidiary, Minera Cobre S.A., arranged financing of US$10 million with a chartered bank upon which quarterly repayments commenced at the end of March 1998. All amounts drawn under this facility are due by the third quarter of 1999. The Company and Miramar guaranteed the obligations of Minera Cobre S.A. should there be a deficiency in cashflow from the project. Due to the low gold price and lower than expected recoveries at Mantua, Minera Cobre S.A. was unable to generate sufficient cashflow from operations to make required principal and interest payments on this financing. As a result, the principal and interest requirements under the loan were met by Miramar under the terms of the guarantee to the lender. Amounts drawn under the Miramar guarantee bear interest at 11%. Miramar has agreed not to demand repayment of this amount in the coming year. Northern Orion is dependent on continued financial assistance from Miramar to continue the development and operation of its mineral properties. At the end of December 1998, the Company had a working capital deficiency of $2.0 million including cash of $542,000 compared to working capital of $5.3 million and cash of $6.3 million at the end of 1997. These funds are not sufficient to continue the full evaluation of all of the Company's mineral prospects. Management of the Company is in the process of further evaluating all of the Company's property interests in order to ensure that value is realized. In addition, the Company is reviewing all of its expenditures to ensure that cash commitments are prioritized. It is expected that the remaining balance of the Mantua construction loan will be repaid by Miramar under the guarantee. The Company is evaluating potential new sources of financing and all required expenditures to ensure that existing capital resources are available to maintain the core properties currently held.

In 1997, cash and short-term investments decreased to $6.3 million compared to $19 million in 1996. Working capital declined to $5.3 million in 1997 from $28.3 million in 1996.

This decline was the result of the investments undertaken by Northern Orion in 1997 at Mantua and at the various exploration projects in Argentina.

The Company's cash balances and short-term investments are unrestricted and have terms to maturity of less than 90 days. The current portion of the long-term debt is expected to be repaid by Miramar as the cashflow provided by the Mantua project will not be sufficient to meet these requirements. The remaining balance of accounts receivable of $4.0 million are expected to be received in June 1999. Apart from the requirement to fund the operations at Mantua, there are no restrictions to the free flow of funds between Northern Orion and its subsidiaries. Northern Orion is in the process of determining methods to obtain sufficient capital resources to meet its short and medium term financial requirements. Long term liquidity and capital resources will be dependent upon the successful development and profitable operation of mineral properties and the availability of capital from the equity markets. In order to maintain financial resources and take advantage of financial leverage, the Company will continue to negotiate with major financial institutions to obtain project financing.

Commitments

Northern Orion continues to contribute to a work plan for the Agua Rica property with its joint venture party, BHP, which requires that exploration and development expenditures be made under the terms of annual work programs. It is expected that total expenditures for 1999 under this program will be approximately $6.0 million (US$4.2 million), of which Northern Orion's share will be 30% or $2.0 million (US$1.4 million) including management fees. To December 31, 1998, the Company has spent C$20.6 million (US$14.5 million) on development activities at Agua Rica.

As part of the Mantua financing, the Company entered into forward sales contracts for the cashflows from the gold sales revenue in order to mitigate any currency risk associated with the project. At December 31, 1998 the currency hedge had unrealized losses of $637,000 which will be reflected in income as these contracts mature. The Company has entered into no other commitments for currency, metals or financial derivatives.

Northern Orion has entered into exploration agreements that require exploration expenditures to be funded in accordance with planned work programs and schedules. In most cases, these commitments are limited in recourse to the property involved and can be dropped with a loss of rights to the property being the only consequence.

REVIEW OF FINANCIAL RESULTS

General

Prior to 1998, Northern Orion was in a pre-operating phase during which it was evaluating its many exploration prospects. During the pre-operating phase, most of the costs of exploration and development (including related general and administrative expenditures) are capitalized. With the commencement of operations at Mantua, the Company's financial statements reflect a combination of operating results from the mining projects and the continued exploration and development of exploration properties.

Comparison of results for the previous two years

Revenue for the year of $3.6 million compares to revenue of $0.6 million in 1997 and $2.6 million in 1996. This increase results from the Company's 50% interest in the sales of gold from Mantua in Cuba and related hedging gains. In 1996 the Company recorded a gain on mineral properties optioned of $1.3 million which was non-recurring. Interest income earned in 1998 was $48,000 and compares to $0.6 million and $1.3 million earned in 1997 and 1996, respectively. Lower interest income is primarily the result of reduced cash balances being held by the Company during the year.

The Company's 50% share of the cost of sales of $3.0 million was incurred in the production of gold at the Mantua mine in Cuba. In addition, the Company reflected depreciation charges of $1.9 million related principally to the mining assets in Cuba.

Due to the increased financial pressures faced by Northern Orion in 1998, Miramar reduced the management fee to $100,000 per month commencing in October with the undertaking that overhead would be reduced generally as a result of a reduced level of operations related to Northern Orion. In 1997, the management fee charged had increased to $210,000 per month due to the significant effort of senior management on projects within Northern Orion. During 1996, Miramar charged a management fee of $100,000 per month. The management fee includes Northern Orion's share of all of the costs of premises and personnel as the Company shares executives, offices and employees with Miramar. The costs of these services are charged to Northern Orion based upon estimates made by management and staff regarding their efforts in respect of Northern Orion's properties and operations. It is expected that Miramar's management will take further steps to reduce overheads incurred on behalf of the Company and that the management fee in 1999 will be at or below $100,000 per month.

General and administrative expenses increased by $191,000 in 1998 to $969,000 primarily as the result of the severance costs incurred in reducing exploration personnel in Argentina during the second half of 1998. In 1997, general and administrative expenses were reduced from $1,424,000 in 1996 to $778,000 as the result of lower and regulatory expenses and through tighter management of administrative expenses. Interest charges of $616,000 in 1998 relate to the Company's share of the interest charged on the Mantua financing and compares to interest of $617,000 in 1997. During the year, the Company capitalized interest of $1.2 million on funds related to development properties and exploration activities. In prior years, interest was not capitalized on exploration properties. The costs of operating offices in Buenos Aires and Mendoza in Argentina and offices in Cuba are allocated to mineral properties to the extent that the costs relate to specific exploration and development properties.

In 1998, as additional exploration work was performed on the Company's portfolio of exploration properties, management determined that certain properties should not be further pursued and as a result a write-down of several of the properties (including Delita) totaling $15.4 million was taken. This compares to similar write-downs of $2.9 million and $1.3 million in 1997 and 1996, respectively. Write-downs of this nature are not unusual in the industry and should be expected to re-occur as grassroots exploration properties are evaluated and their potential for commercial viability is better defined.

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The consolidated financial statements have been audited by KPMG and their report is below.

ANTHONY P. WALSH

Interim President, Vice-President Finance and Chief Financial Officer

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We have audited the consolidated balance sheets of Northern Orion Explorations Ltd. as at December 31, 1998 and 1997 and the consolidated statements of operations and deficit and changes in financial position for the years then ended. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with generally accepted auditing standards. Those standards require that we plan and perform an audit to obtain reasonable assurance whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation.

In our opinion, these consolidated financial statements present fairly, in all material respects, the financial position of the Company as at December 31, 1998 and 1997 and the results of its operations and the changes in its financial position for the years then ended in accordance with generally accepted accounting principles. As required by the Company Act (British Columbia), we report that, in our opinion, these principles have been applied on a consistent basis.

KPMG LLP

CHARTERED ACCOUNTANTS

Vancouver, Canada
February 18, 1999

Consolidated Balance Sheets

(expressed in thousands of dollars)

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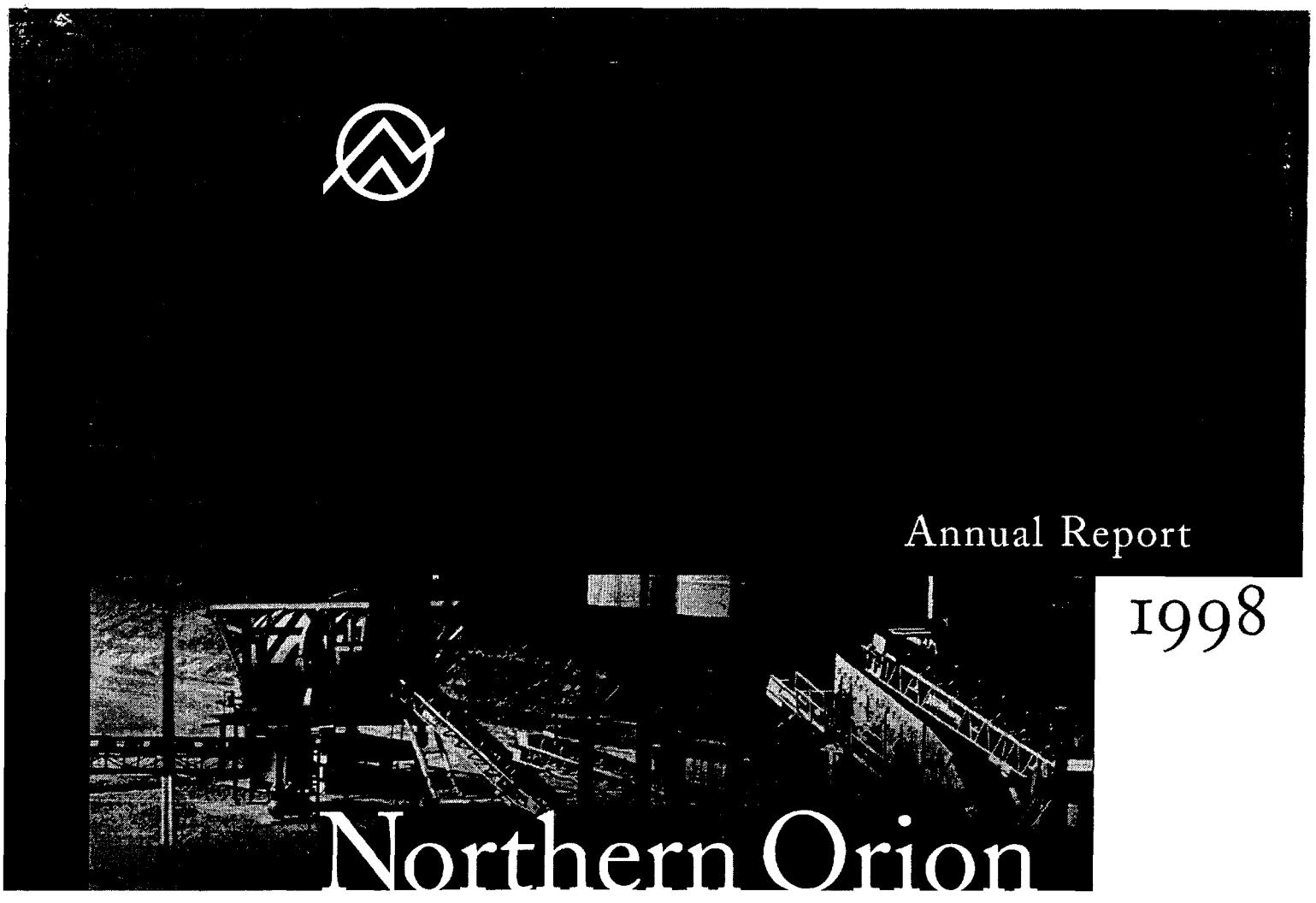
Plant and equipment (note 4)	8,788	7,780
Mineral properties and deferred development (note 4)	113,397	112,462
Other assets	2,322	2,251
	$ 131,411	$ 138,621
Liabilities and Shareholders' Equity		
Current liabilities:		
Accounts payable and accrued liabilities	$ 3,076	$ 1,863
Current portion of long-term debt	5,801	8,932
	8,877	10,795
Payables to related parties (note 5)	3,596	10,993
Guarantee to related party (note 5)	10,120	—
Convertible debenture (note 6)	17,907	—
Long-term debt (note 7)	—	4,635
Reclamation liability	86	86
	40,586	26,509
Shareholders' equity:		
Share capital (note 8)	122,000	122,000
Deficit	(31,175)	(9,888)
	90,825	112,112
Operations (note 1)		
Uncertainty due to the Year 2000 Issue (note 15)		
Contingent liability (note 16)		
	$ 131,411	$ 138,621

See accompanying notes to consolidated financial statements.

On behalf of the Board:

Director

Director



Annual Report 1998

Northern Orion

EXPLORATIONS LTD.

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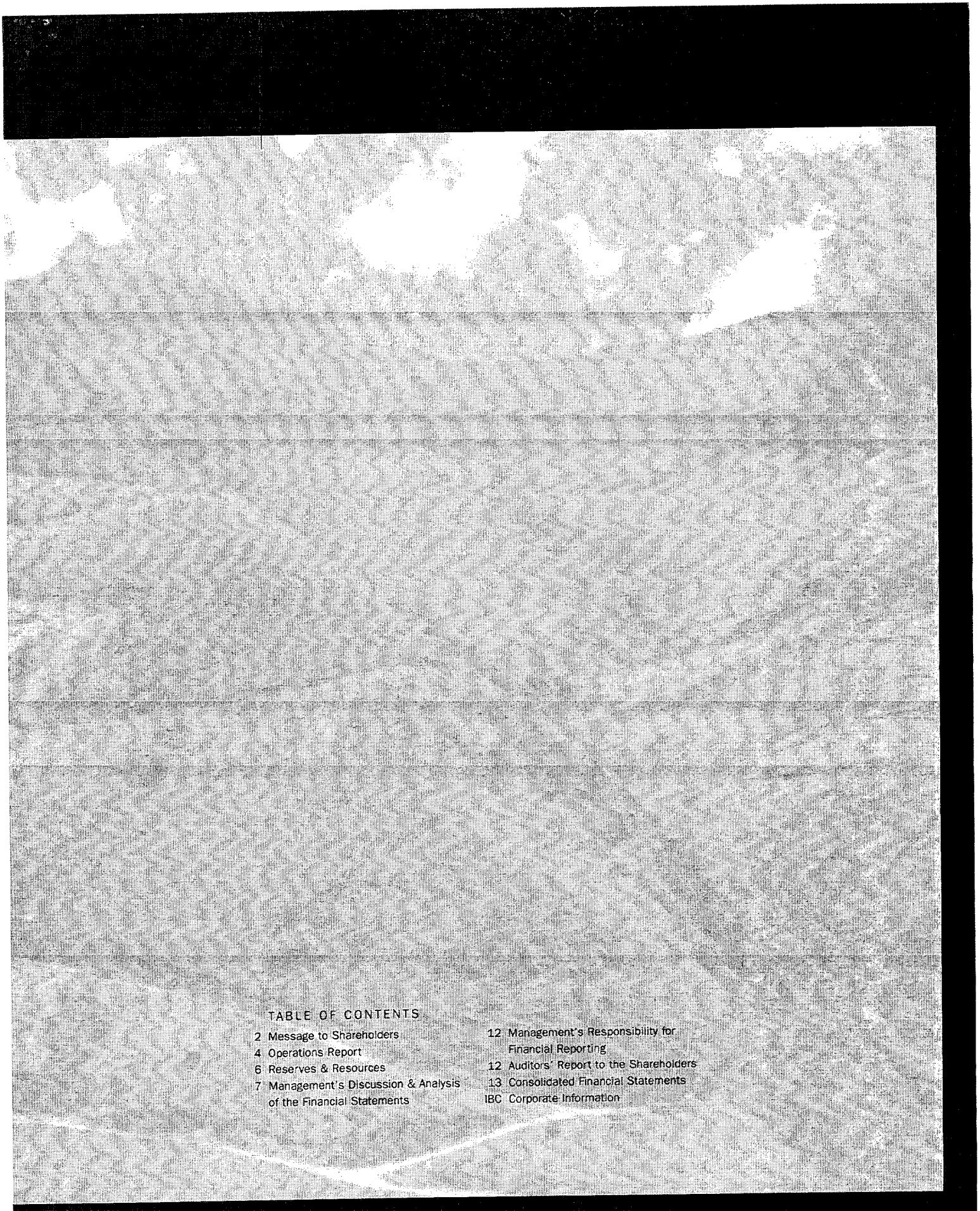
Forward Looking Statements

This report contains forward-looking statements within the meaning of the United States Private Securities Litigation Reform Act of 1995 relating to the Company's future, including its exploration, development and mining plans, estimated production at the Con Mine and future production and timing estimated at other properties. These forward-looking statements are subject to a variety of risks and uncertainties which could cause actual events or results to differ materially from those reflected in the forward-looking statements, including, without limitation, risks and uncertainties relating to the fluctuation of precious and base metal prices, the geology, grade and continuity of mineral deposits, recovery rates, accidents, equipment breakdowns, labour disputes, availability of financing, the possibility of delays, the inherent uncertainty of production and cost estimates and the potential for unexpected costs and expenses and other risks and uncertainties, including those described in the Company's Annual Report on Form 20-F for the year ended December 31, 1998 and Reports on Form 6-k filed with the Securities and Exchange Commission. Miramar calculates reserve and resource estimates in accordance with proposed Toronto Stock Exchange National Instrument 43–101 and the Canadian Institute of Mining and Metallurgy Classification system. These standards differ significantly from the requirements of the United States Securities and Exchange Commission, and reserve and resource information reported by Miramar may not be comparable to similar information reported by United States companies "Possible Reserves" and "Resources" normally may not be included in documents filed with the Securities and Exchange Commission. Certain forward-looking statements in this report are indicated with an "*".



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Message to Shareholders

Northern Orion Explorations Ltd. ("Northern Orion" or the "Company") is an exploration and development company in a time when exploration companies are not favoured investment vehicles. Its assets are primarily focused in the copper sector, where prices have been severely depressed, reaching their lowest level in 12 years. The impact on Northern Orion's share price has been severe and the Company has had to take drastic measures to ensure its survival through this down cycle.

Management and directors have initiated a strategic review process to examine the future survival and direction of the company*. It is evident that Northern Orion has some valuable assets, especially its interest in Agua Rica (30%), which offer the potential for substantial cash flow at reasonable long term copper prices*. In addition, copper is a cyclical metal and copper prices will return to more reasonable levels at some time in the future*. The key issue is to ensure Northern Orion's shareholders gain the benefit of its assets when copper prices recover. This is the purpose of the strategic review.

In the interim, however, management and directors have instituted a rigorous budgeting and cost control policy to ensure capital is preserved and Northern Orion's interests in its most important assets are maintained. To this end, Northern Orion has and continues to reduce its level of exploration activity and other expenditures. Northern Orion has re-evaluated its property portfolio and is focussing its attention on those core properties expected to create real value over the medium to longer term, such as Agua Rica, Mantua and San Jorge*. Other more speculative properties have been released, exploration activity has been curtailed and staffing levels reduced.

The Company's major shareholder, Miramar Mining Corporation (54.8%) ("Miramar"), has provided vital financing support, putting in place a $17.5 million convertible debenture facility and providing a guarantee on the Mantua project loan from Barclays bank. Consequently, the Company is significantly indebted to Miramar.

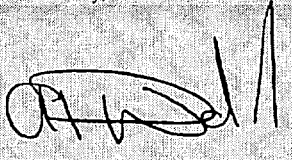
Northern Orion poured its first gold from the gold phase at Mantua in February 1998, after 10 months of construction. However, a number of operational difficulties were encountered, and the project has performed below expectations since opening. Lower than expected recovery and longer leach cycles have resulted in production being curtailed and costs increasing.

On a more positive note, Northern Orion has maintained its interests in its most valuable assets. Progress continues to be made at the world class Agua Rica deposit in a joint venture with BHP, with a significant amount of work completed at the property in 1998, with encouraging results. Early in 1999, the San Jorge property was significantly expanded, opening up the exploration potential of that area and at Mantua, positive results were reported from studies on the copper phase. These core property interests offer the potential of significant long term value creation for shareholders over the medium to longer term, as copper prices recover and interest returns to advanced stage exploration and development properties*.

In March of 1999, Walter Berukoff resigned as President and CEO of Miramar and Northern Orion in order to pursue other opportunities. Northern Orion acknowledges Mr. Berukoff's contributions to the Company from its inception.

On behalf of the Board of Directors, I would like to thank the management and employees of the Company for their continued enthusiasm and energy. I would also like to express my thanks to shareholders for their support and look forward to a recovery in copper prices and a return of investor interest in mining equities. In the meantime, Northern Orion will continue to work to reduce its overhead and maintain its key property interests for better times ahead*.

Sincerely,



Anthony P Walsh

Interim President & CEO

Activities Review

Northern Orion is a company focused on the exploration and development of copper and gold assets in Latin America. Northern Orion's most important asset is its 30% interest in the Agua Rica copper-gold-molybdenum porphyry deposit in Argentina. Its other assets include copper and gold projects in Argentina and Cuba.

The performance of Northern Orion's shares has been severely impacted by depressed copper prices. However, by maintaining its interests in its most important assets, (Agua Rica, San Jorge, Antofalla and Mantua) Northern Orion can expect to realize significant value as the commodity cycle turns and copper prices recover*.

Argentina

The major properties retained in Argentina include the Agua Rica copper-porphyry deposit, San Jorge, Los Petisos and Antofalla. These holdings maintain the company's resource and reserve base and offer continued opportunities for exploration and development success*.

AGUA RICA (30%)

Agua Rica is a world-class porphyry copper-gold-molybdenum deposit held in a joint venture with BHP Copper (70%)*. With the completion of an Initial Feasibility Study in 1997, which demonstrated the potential of Agua Rica to become a major producer of copper, gold and molybdenum, the joint venture initiated a work program in 1998 designed to advance the project towards a development decision.

Work carried out during 1998 and into early 1999 included:

- *Completion of 67,000 meter drilling program;*
- *Resource modeling;*
- *Extraction of a 300 tonne bulk sample;*
- *Phase 2 metallurgical testing on drill core;*
- *Pilot mill testing on bulk samples;*
- *Water exploration;*
- *Ongoing environmental baseline monitoring;*
- *Ongoing studies on capital, infrastructure and operating costs;*
- *Filing of a fiscal stability application setting the project's fiscal regime for 30 years.*

During 1999, the program of physical work commenced in 1998 will be completed, culminating in the development of new resource and reserve models, selected infrastructure requirements and an update of the project economics. The 1999/2000 budget year is likely to see reduced levels of expenditures due to depressed copper prices.

SAN JORGE

The San Jorge project encompasses a porphyry copper deposit that has undergone superficial leaching resulting in sub-horizontal oxide and enriched copper zones overlying a large primary porphyry copper-gold deposit. The total indicated and inferred resources for oxide, enriched, and primary mineralization, using a 0.25 % Cu cutoff, is 381.4 million tonnes grading 0.39 % Cu and 0.15 g/t Au for a contained 1.49 million tonnes of copper and 1.8 million ounces of gold*.

An in-pit indicated and inferred resource for San Jorge has been estimated at 57.3 million tonnes grading 0.61% Cu, for 348,900 tonnes of contained copper *. This is based on open pit mining and heap leaching the oxide and secondary enriched mineralization for SX/EW copper recovery, at a US$0.85/lb copper price, a 0.25% Cu cutoff, with incremental dump leach of low grade material. Primary copper-gold mineralization could then potentially be evaluated for a primary milling style of operation, producing concentrates*.

In 1999, Northern Orion announced that it had increased its land position around the San Jorge deposit and expanded the existing resource. Drilling has encountered additional copper mineralization to the northeast, east, and southeast of the main San Jorge deposit in similar geologic settings to the main San Jorge deposit. In addition, geophysical surveys on the expanded property have detected anomalies indicating potential for satellite copper systems similar to the San Jorge deposit*.

ANTOFALLA

Antofalla consists of six exploration concessions and one provincial mineral reserve that cover a major epithermal system in a setting analogous to that hosting Apex's San Cristobal deposit in Bolivia. Surface work indicates that Antofalla is prospective for the discovery of multiple epithermal and porphyry silver deposits, with several mineralized centers identified by geologic mapping, some drilling and surface sampling. The main focus of exploration in 1999 will be centered on the breccia complexes, which host gold and silver bearing systems at depth.

Cuba

MANTUA

During the first quarter of 1998, Northern Orion poured its first gold at the newly constructed gold leach facility at the Mantua Mine in Cuba. The gold leach facility was completed in February 1998 after 10 months of construction. However, the Mantua mine had a difficult start up, resulting in lower production and higher costs than anticipated. The ores contained higher than expected clays and fines, extending leach times, reducing overall recoveries and increasing cash costs to around US$250/oz.

Northern Orion also completed and had independently audited a new reserve estimate for the Mantua copper deposit which underlies the gold deposit, based on additional drilling completed in 1997. The copper deposit is estimated to contain a reserve of 7.5 million tonnes grading an average of 2.74% copper, containing approximately 200,000 tonnes of copper*. Studies on this high grade copper deposit, which lies under the gold cap, continued to provide encouragement for the long-term future of Mantua, assuming reasonable copper prices. Northern Orion, in conjunction with its partner, is currently evaluating the potential of advancing the copper deposit at Mantua.

DELITA

Due to continued depressed gold prices, Northern Orion elected to write off its investment in the Delita gold project in Cuba. While a significant resource has been delineated at Delita, the relatively low grade and refractory nature of the gold mineralization make this resource uneconomic at current gold prices. A significant sustained recovery in gold prices would be required to justify a resumption in activity at Delita.

Reserves & Resources

as of December 31, 1998

		Project Reserves (Proven and Probable)					Additional Project Resources (Measured and Indicated)				
GOLD	Ownership*	Tonnes (000s)	Grade g/t	Contained kg	Contained oz (000s)	**Northern Orion oz (000s)**	Tonnes (000s)	Grade g/t	Contained kg	Contained oz (000s)	**Northern Orion oz (000s)**
San Jorge	85%	—	—	—	—	—	381,400	0.15	57,210	1,839	**1,563**
Delita	50%	—	—	—	—	—	13,282	3.27	43,432	1,396	**698**
Mantua	50%	319	2.16	689	22	**11**	401	1.22	489	16	**8**
Agua Rica	30%	681,389	0.25	170,347	5,477	**1,643**	1,031,971	0.12	120,947	3,888	**1,167**
Gold Cap	30%	—	—	—	—	—	89,440	0.41	36,670	1,179	**354**
TOTALS		681,708	0.25	171,036	5,499	**1,654**	1,516,494	0.17	258,749	8,319	**3,790**
TOTAL—RESERVES & RESOURCES											**5,444**

		Project Reserves (Proven and Probable)					Additional Project Resources (Measured and Indicated)				
COPPER	Ownership*	Tonnes (000s)	Cu %	Contained Cu (tonnes)	Contained lbs (millions)	**Northern Orion oz (000s)**	Tonnes (000s)	Cu %	Contained Cu (tonnes)	Contained lbs (millions)	**Northern Orion oz (000s)**
San Jorge	85%	—	—	—	—	—	381,400	0.39	1,487,460	3,279	**2,787**
Mantua	50%	7,526	2.74	206,212	455	**227**	4,454	0.76	33,850	75	**37**
Agua Rica	30%	681,389	0.59	4,020,195	8,863	**2,659**	1,031,971	0.41	4,200,122	9,260	**2,778**
TOTALS		688,915	0.61	4,226,408	9,318	**2,886**	1,417,825	0.40	5,721,432	12,613	**5,603**
TOTAL—RESERVES & RESOURCES											**8,489**

*Numbers may not add due to rounding.

RESERVE TABLE

The reserve and resource estimates have been prepared in accordance with proposed TSE National Instrument 43-101 and the Canadian Institute of Mining and Metallurgy classification system.

Qualified persons responsible for the reserve and resource estimates include: Dean McDonald. PhD, PGeo, Exploration Manager; Bob Hauser, Chief Geologist, Con Mine; and Maria Esperenza Borrego, Chief Geologist, Cuba. In addition, production geologists, mine engineers, and metallurgists also had input into the reserve and resource estimates. The Agua Rica Reserves and Resources were calculated separately by representatives of BHP Copper. Independent parties have audited many of the current reserves and resources.

DEFINITIONS

- Reserve is that part of a mineral deposit which has been defined for mining purposes and can be economically and legally extracted at the time of the reserve determination.
- Proven Ore is a mineable part of the reserve wherein the sampling from outcrops, trenches, underground working and drillholes is sufficiently close spaced that the grade, tonnage and continuity are well defined and includes a provision for mining dilution that generally occurs during extraction.
- Probable Ore is a mineable part of the reserve wherein the sampling is spaced further apart, but is still adequate to demonstrate continuity, grade and tonnage at a lower confidence level than for proven ore.
- Possible Ore is the mineralization wherein the sampling is wide spaced and where continuity, grade and tonnage cannot be assured. Further sampling is required to increase confidence and conversion to Proven or Probable Reserve categories.
- Resource is that part of the mineral deposit that has not had economic parameters applied or is not presently considered economic to mine and is not included in Reserves. It may be reclassified into reserve categories by further sampling or changes in other factors such as metal prices or mining costs.
- Measured Resource is that part of the resource wherein sampling from outcrops, trenches, underground workings and drill holes is sufficiently close spaced that the grade, tonnage and continuity are well defined.
- Indicated Resource is that part of the resource wherein the sampling is spaced further apart, but is still adequate to demonstrate continuity, grade and tonnage at a lower confidence level than for a measured resource.
- Inferred Resource is that part of the resource wherein the sampling is wide spaced and where continuity, grade and tonnage cannot be assured. Further sampling is required to increase confidence and conversion to measured or indicated resource categories.

RESULTS OF OPERATIONS

Northern Orion Explorations Ltd. ("Northern Orion" or "the Company") completed the construction, commissioning and startup of a gold mining operation at the Mantua project in Cuba during 1998. With the achievement of full production in March 1998, Northern Orion began reporting the results of mining operations. In addition, the Company continued to evaluate and develop a number of mineral properties in Argentina. Financial constraints on Northern Orion have necessitated a reduced scale of exploration and development activities in 1998 as compared to previous years and resulted in the elimination of a number of property interests.

Northern Orion's financial condition has been challenged in comparison to 1997 due principally to continued expenditures on exploration and administrative overhead, poorer than expected operating performance at the Mantua operation, lower than expected gold prices and higher costs of financing required to maintain the properties held in Argentina and Cuba.

Northern Orion recorded a loss of $21.3 million or $0.29 per share in 1998 compared to a loss of $7.1 million or $0.10 per share in 1997. The 1998 loss includes write-downs on mineral properties and marketable securities of $15.9 million or $0.22 per share compared to writedowns of mineral properties and marketable securities of $4.3 million or $0.06 per share in 1997. Excluding the writedowns of mineral properties and marketable securities, the Company's loss in 1998 of $5.3 million compares to a loss of $2.8 million in 1997. The increased loss in 1998 was due to losses from the operations in Cuba, costs of curtailing exploration activities, costs of depreciation related to the Cuban operating assets and costs of external debt. These increased costs were partially offset by a reduction in management fees charged by Miramar.

Mining Operations

Gold production commenced at the Company's 50% owned Mantua mine in the first quarter of 1998. Prior to achievement of commercial production, all costs of startup operations and related interest and overhead were capitalized. During 1998, revenues from gold sales were US$4.8 million of which Northern Orion's share was $2.4 million. Total production sold was 16,323 ounces of which Northern Orion's share was 8,161 ounces. As the result of certain hedging transactions entered by Northern Orion, the realized selling price on the Company's 50% share of production was US$337 per ounce compared to an average gold spot price of US$294 per ounce for the period. Cash operating cost for 1998 was US$244 per ounce. Total tons of ore mined in 1998 were 423,742 at an average grade of 0.09 ounces per ton. Cumulative recoveries on ore treated in 1998 reached 51% and estimates for the ultimate recoveries were downgraded to 60%.

EXPLORATION AND DEVELOPMENT ACTIVITIES

Agua Rica

Work continued in 1998 at the 30% owned Agua Rica Project in Argentina. The project operator, BHP completed the 1997/98 work program for the project in May 1998 and commenced work on the 1998/99 work program in June. The Company's share of these programs (including management fees to the operator) is US$4.8 million for the 1998/99 work program and US$5.3 million for the 1997/98 program. The 1998/99 work program, to be completed in May 1999, will complete the necessary fieldwork required to support the preparation of a bankable feasibility study. Due to the decline in the world copper price in 1998, activities at Agua Rica are being conducted on a reduced scale from previous years. The 1998/99 work program builds on the work performed in completing the Initial Feasibility Study which was issued in November 1997. The findings of this study indicated that a large low-cost mine could be developed that would have attractive returns on capital invested. In the short-term, the capital required to advance the Agua Rica project will be available from internal sources of funds. Management of the Company is determined to see the project through final feasibility and beyond. On a long-term basis, the Company's share of the capital requirement to develop a mine at Agua Rica could be in excess of US$300 million. Northern Orion's management is continuing to examine all of the Company's options on how best to proceed with this important project. In order to develop a mine at Agua Rica, the Company will need to obtain or arrange significant additional capital.

Mantua

Work continued in 1998, further evaluating the Mantua copper phase, including additional drilling, detailed pilot plant testing, ore reserve development and selecting Bateman Engineering to complete a prefeasibility study and the completion of an internal review of the project. The Company is currently seeking funding to complete a bankable feasibility study. A final production decision for the copper phase is pending the results of this feasibility study and the recovery of the copper price. The Company's ability to develop the next phase at Mantua is dependent upon obtaining third party financing.

Other

In 1998, the Company continued to evaluate its prospective mineral properties in Argentina.

The Argentine projects accounted for expenditures that totaled $13.4 million in 1998 compared to $16.0 million in 1997 and $14.9 million in 1996. The single largest component of the Argentine expenditures was for the Agua Rica project and its extended area at $6.7 million (1997—$7.8 million and 1996—$7.0 million) in which Northern Orion (through it's wholly owned subsidiary, Recursos Americanos Argentinos SA or "RAA") has a 30% joint venture interest. Grupo Minero Aconcagua SA ("GMA") accounted for $5.3 million (1997—$7.5 million and 1996—$4.6 million) of these expenditures of which the largest component was for the San Jorge project at $1.3 million (1997—$3.4 million and 1996—$2.1 million).

The process of reviewing all properties in the "exploration pipeline" culminated in the fourth quarter of 1998. Management determined that the Delita project be placed on hold due to low gold prices and the deferred costs of $8.4 million associated with its exploration were written down. In Argentina this comprehensive review resulted in the abandonment of several prospective properties in 1998 and a corresponding writedown of $6.9 million was recorded.

LIQUIDITY AND CAPITAL RESOURCES

General

Due to the prospective nature of the mineral exploration business and the number of exploration properties held, Northern Orion has a limited ability to generate sources of internal cashflow from operations. The Company has financed the acquisition, exploration and development of its properties through a combination of the issuance of common shares, borrowings from Miramar, attracting joint venture partners to finance the evaluation of properties and third party borrowings.

When and if the Company places an adequate number of its exploration properties into production, it is expected that the resulting cashflows will become sufficient to sustain future operations, exploration and development. At present, the Company lacks the internal financial ability to advance any of its projects to the production stage.

Cash Resources and Liquidity

In order to properly manage the term structure of the funding provided by Miramar to Northern Orion, the Company entered into negotiations with Miramar which culminated in September 1998 with the issuance of a 5 year $17.5 million convertible debenture to Miramar. Under the terms of this debenture, Northern Orion agreed to provide certain assets as security to Miramar. The conversion feature of this debenture phases in over 3 years and is based on a conversion price of $1.47 per share. The debenture and accrued interest mature on September 14, 2003 (see note 6 to the consolidated financial statements for additional information regarding the convertible debenture). At the option of Miramar, interest and principal may be repaid in the form of common shares in Northern Orion. In 1997, the Company, through its subsidiary, Minera Cobre S.A., arranged financing of US$10 million with a chartered bank upon which quarterly repayments commenced at the end of March 1998. All amounts drawn under this facility are due by the third quarter of 1999. The Company and Miramar guaranteed the obligations of Minera Cobre S.A. should there be a deficiency in cashflow from the project. Due to the low gold price and lower than expected recoveries at Mantua, Minera Cobre S.A. was unable to generate sufficient cashflow from operations to make required principal and interest payments on this financing. As a result, the principal and interest requirements under the loan were met by Miramar under the terms of the guarantee to the lender. Amounts drawn under the Miramar guarantee bear interest at 11%. Miramar has agreed not to demand repayment of this amount in the coming year. Northern Orion is dependent on continued financial assistance from Miramar to continue the development and operation of its mineral properties. At the end of December 1998, the Company had a working capital deficiency of $2.0 million including cash of $542,000 compared to working capital of $5.3 million and cash of $6.3 million at the end of 1997. These funds are not sufficient to continue the full evaluation of all of the Company's mineral prospects. Management of the Company is in the process of further evaluating all of the Company's property interests in order to ensure that value is realized. In addition, the Company is reviewing all of its expenditures to ensure that cash commitments are prioritized. It is expected that the remaining balance of the Mantua construction loan will be repaid by Miramar under the guarantee. The Company is evaluating potential new sources of financing and all required expenditures to ensure that existing capital resources are available to maintain the core properties currently held.

In 1997, cash and short-term investments decreased to $6.3 million compared to $19 million in 1996. Working capital declined to $5.3 million in 1997 from $28.3 million in 1996.

This decline was the result of the investments undertaken by Northern Orion in 1997 at Mantua and at the various exploration projects in Argentina.

The Company's cash balances and short-term investments are unrestricted and have terms to maturity of less than 90 days. The current portion of the long-term debt is expected to be repaid by Miramar as the cashflow provided by the Mantua project will not be sufficient to meet these requirements. The remaining balance of accounts receivable of $4.0 million are expected to be received in June 1999. Apart from the requirement to fund the operations at Mantua, there are no restrictions to the free flow of funds between Northern Orion and its subsidiaries. Northern Orion is in the process of determining methods to obtain sufficient capital resources to meet its short and medium term financial requirements. Long term liquidity and capital resources will be dependent upon the successful development and profitable operation of mineral properties and the availability of capital from the equity markets. In order to maintain financial resources and take advantage of financial leverage, the Company will continue to negotiate with major financial institutions to obtain project financing.

Commitments

Northern Orion continues to contribute to a work plan for the Agua Rica property with its joint venture party, BHP, which requires that exploration and development expenditures be made under the terms of annual work programs. It is expected that total expenditures for 1999 under this program will be approximately $6.0 million (US$4.2 million), of which Northern Orion's share will be 30% or $2.0 million (US$1.4 million) including management fees. To December 31, 1998, the Company has spent C$20.6 million (US$14.5 million) on development activities at Agua Rica.

As part of the Mantua financing, the Company entered into forward sales contracts for the cashflows from the gold sales revenue in order to mitigate any currency risk associated with the project. At December 31, 1998 the currency hedge had unrealized losses of $637,000 which will be reflected in income as these contracts mature. The Company has entered into no other commitments for currency, metals or financial derivatives.

Northern Orion has entered into exploration agreements that require exploration expenditures to be funded in accordance with planned work programs and schedules. In most cases, these commitments are limited in recourse to the property involved and can be dropped with a loss of rights to the property being the only consequence.

REVIEW OF FINANCIAL RESULTS

General

Prior to 1998, Northern Orion was in a pre-operating phase during which it was evaluating its many exploration prospects. During the pre-operating phase, most of the costs of exploration and development (including related general and administrative expenditures) are capitalized. With the commencement of operations at Mantua, the Company's financial statements reflect a combination of operating results from the mining projects and the continued exploration and development of exploration properties.

Comparison of results for the previous two years

Revenue for the year of $3.6 million compares to revenue of $0.6 million in 1997 and $2.6 million in 1996. This increase results from the Company's 50% interest in the sales of gold from Mantua in Cuba and related hedging gains. In 1996 the Company recorded a gain on mineral properties optioned of $1.3 million which was non-recurring. Interest income earned in 1998 was $48,000 and compares to $0.6 million and $1.3 million earned in 1997 and 1996, respectively. Lower interest income is primarily the result of reduced cash balances being held by the Company during the year.

The Company's 50% share of the cost of sales of $3.0 million was incurred in the production of gold at the Mantua mine in Cuba. In addition, the Company reflected depreciation charges of $1.9 million related principally to the mining assets in Cuba.

Due to the increased financial pressures faced by Northern Orion in 1998, Miramar reduced the management fee to $100,000 per month commencing in October with the undertaking that overhead would be reduced generally as a result of a reduced level of operations related to Northern Orion. In 1997, the management fee charged had increased to $210,000 per month due to the significant effort of senior management on projects within Northern Orion. During 1996, Miramar charged a management fee of $100,000 per month. The management fee includes Northern Orion's share of all of the costs of premises and personnel as the Company shares executives, offices and employees with Miramar. The costs of these services are charged to Northern Orion based upon estimates made by management and staff regarding their efforts in respect of Northern Orion's properties and operations. It is expected that Miramar's management will take further steps to reduce overheads incurred on behalf of the Company and that the management fee in 1999 will be at or below $100,000 per month.

General and administrative expenses increased by $191,000 in 1998 to $969,000 primarily as the result of the severance costs incurred in reducing exploration personnel in Argentina during the second half of 1998. In 1997, general and administrative expenses were reduced from $1,424,000 in 1996 to $778,000 as the result of lower and regulatory expenses and through tighter management of administrative expenses. Interest charges of $616,000 in 1998 relate to the Company's share of the interest charged on the Mantua financing and compares to interest of $617,000 in 1997. During the year, the Company capitalized interest of $1.2 million on funds related to development properties and exploration activities. In prior years, interest was not capitalized on exploration properties. The costs of operating offices in Buenos Aires and Mendoza in Argentina and offices in Cuba are allocated to mineral properties to the extent that the costs relate to specific exploration and development properties.

In 1998, as additional exploration work was performed on the Company's portfolio of exploration properties, management determined that certain properties should not be further pursued and as a result a write-down of several of the properties (including Delita) totaling $15.4 million was taken. This compares to similar write-downs of $2.9 million and $1.3 million in 1997 and 1996, respectively. Write-downs of this nature are not unusual in the industry and should be expected to re-occur as grassroots exploration properties are evaluated and their potential for commercial viability is better defined.

As the result of declining equity markets for mineral exploration securities, the Company reduced the value of certain shares held as marketable securities to the lower of cost or market which resulted in a write-down of $572,000 in 1998 which compares to $1,365,000 in 1997 and $nil in 1996.

Investing Activities

In 1998, the Company invested a total of $19.3 million in mine construction ($3.0 million) and exploration and development activities ($16.3 million) which compares to investments in 1997 of $33.6 million and in 1996 of $22.6 million. The decrease is the result of completion of construction at Mantua in early 1998 and reduced levels of exploration in Argentina.

Financing Activities

The Company was unable to repay the maturing principal and interest on the funds of $13.6 million (US$9.6 million) borrowed to finance the construction of the Mantua gold phase. This financing was effectively replaced by the drawings on the Miramar guarantee. The Company used the majority of the proceeds of the $17.5 million convertible debenture to settle advances from Miramar. In the first quarter of 1998, interest on the construction financing of $572,000 (US$389,000) was capitalized into the principal balance of the loan. Additional advances have been received from Miramar during 1998 to temporarily finance the monthly management fee and various other short-term cash requirements.

OUTLOOK

Northern Orion's plan is to reduce expenditures to the lowest possible level while maintaining its interest in certain core properties. Plans for 1999 call for concentration on the Mantua project in Cuba and on Agua Rica, Antofalla and San Jorge in Argentina.

Operations

The gold phase at Mantua is expected to complete mining of ore in mid 1999. Upon completion of mining, the processing plant will continue to operate on drawing down work in process inventory until complete late in the third quarter of 1999. Management is currently assessing alternative opportunities and uses for the processing facility. The Company will continue to operate using the combined efforts of the Miramar management and the Northern Orion staff to focus on the exploration and development of the existing projects in Latin America. Inflation and changes in prices of significant inputs are not expected to materially affect the results of Northern Orion for 1999.

Advanced Stage Projects

The largest project currently underway is the Agua Rica copper-gold-molybdenum project. The Company continues to fund 30% of the exploration expenditures and costs of the feasibility study being prepared under the terms of a joint operation agreement with BHP. The program for 1999 includes completion of fieldwork and documentation and preparatory work towards a final feasibility study.

The Company is evaluating the potential for developing an SX/EW operation at San Jorge and will await a recovery in the copper price before committing to a work program necessary to complete a final feasibility study.

Construction of the second phase at Mantua is proposed to commence upon successful financing of the capital requirements for the project, completion of a positive final feasibility study and improvement in the price of copper.

Exploration Projects

The primary exploration target for 1999 is the Antofalla prospect in Argentina. In light of financial constraints, Northern Orion has rationalized the number of properties upon which exploration efforts will be focused and has therefore eliminated its interests in a number of non core properties. Northern Orion may perform grassroots exploration to generate additional new prospects as and when financial resources allow.

RISKS AND UNCERTAINTIES

The Company operates almost exclusively in foreign jurisdictions and is dependent on world metals and currency markets that may present risks to the future prospects of Northern Orion.

Risks Associated with the Mining Industry

Northern Orion is engaged in the exploration for and the development of mineral deposits. These activities involve significant risks which careful evaluation, experience and knowledge may not, in some cases, eliminate. The commercial viability of any mineral deposit depends on a number of factors, many of which are not within the control of management. Some of the factors which will effect the financial viability of a given mineral deposit include its size, grade and proximity to infrastructure. In addition, government regulation, taxes, royalties, land tenure, land use, environmental protection and reclamation and closure obligations could have a profound impact on the economic viability of a mineral deposit.

Northern Orion is not able to determine the impact of potential changes in environmental laws and regulations on its financial position due to the uncertainty surrounding the form such changes may take. As mining regulators continue to update and clarify their requirements for closure plans and environmental protection laws and administrative policies are changed, additional reclamation obligations and further security for mine reclamation costs may be required. It is not expected that such changes will have a material affect on the operations of Northern Orion.

Risks Associated with Financial Markets

Both Argentina and Cuba have currently fixed their currency to the US dollar and removal of these exchange controls could significantly effect the exchange rates in terms of the Canadian dollar. Continued weakness of the Canadian dollar in comparison to the US dollar will also affect the results of operations. Increasing costs of labour, supplies and energy may affect planned operations in future years. The potential for increased input prices is taken into consideration when preparing plans for future exploration, development and mine construction.

Risks Associated with the Market for Minerals

The prices of minerals are subject to relatively large movements over short periods of time. These prices have a direct impact on the commercial viability of production from mineral properties.

Risks Associated with Foreign Operations

Northern Orion's investments in foreign countries such as Argentina and Cuba carry certain risks associated with different political and economic environments. Northern Orion undertakes investments in foreign countries only when it is satisfied that the risks and uncertainties of operating in different cultural, economic and political environments are manageable and reasonable relative to the expected benefits.

The Impact of the Year 2000 Problem

The Company is well advanced in the process of evaluating the impact of the Year 2000 issue on its operations. Northern Orion uses relatively simple systems for the compilation and preparation of financial, operating and administrative information. The core business of Northern Orion is not reliant upon complex information technology or highly automated process logic control systems. Even with relatively uncomplicated systems, Northern Orion has commenced a detailed inventory and assessment of the impact of the Year 2000 issue on all information technology and mechanical systems. This assessment will identify areas where the Year 2000 issue may have an impact on the continued efficient operation of the Company. The Company has formulated plans to test, repair or replace these potential areas of risk and will design contingency plans for those areas outside the control of the Company. In addition, the Company has embarked upon an assessment of the preparedness of key suppliers and service providers to ensure that there are uninterrupted sources of supply and services to the Company's core business.

The Company is confident that all risk areas will be assessed, tested and repaired or replaced in advance of December 31, 1999. In order to ensure that adequate resources are available to properly evaluate the Year 2000 issue, the Company created a project team consisting of members of senior management charged with planning and reporting progress to the Board of Directors on a regular basis. The costs associated with this initiative to date have been included in the results of operations. All future expenses incurred in connection with Year 2000 preparedness will be expensed in the period incurred.

MANAGEMENT'S RESPONSIBILITY FOR FINANCIAL REPORTING

To the Shareholders of Northern Orion Explorations Ltd.:

The consolidated financial statements and all information in the Annual Report are the responsibility of the Board of Directors and management. The consolidated financial statements have been prepared by management based on information available to February 19, 1999 and are in accordance with accounting principles generally accepted in Canada. A system of internal controls is maintained by management to provide reasonable assurance that assets are safeguarded and financial information is accurate and reliable.

The Audit Committee of the Board of Directors is comprised of a majority of outside directors, and meets with management and the independent auditors to review internal control and financial reporting matters, and to ensure that management is maintaining adequate financial controls. The Audit Committee also reviews the audit plan of the independent auditors and discusses the results of their audit and their audit report prior to submitting the consolidated financial statements to the Board of Directors for approval.

The consolidated financial statements have been audited by KPMG and their report is below.

ANTHONY P. WALSH

Interim President, Vice-President Finance and Chief Financial Officer

AUDITORS' REPORT TO THE SHAREHOLDERS

We have audited the consolidated balance sheets of Northern Orion Explorations Ltd. as at December 31, 1998 and 1997 and the consolidated statements of operations and deficit and changes in financial position for the years then ended. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with generally accepted auditing standards. Those standards require that we plan and perform an audit to obtain reasonable assurance whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation.

In our opinion, these consolidated financial statements present fairly, in all material respects, the financial position of the Company as at December 31, 1998 and 1997 and the results of its operations and the changes in its financial position for the years then ended in accordance with generally accepted accounting principles. As required by the Company Act (British Columbia), we report that, in our opinion, these principles have been applied on a consistent basis.

KPMG LLP

CHARTERED ACCOUNTANTS

Vancouver, Canada
February 18, 1999

Consolidated Balance Sheets

(expressed in thousands of dollars)

December 31, 1998 and 1997	1998	1997
Assets		
Current assets:		
Cash and short-term investments	$ 542	$ 6,359
Marketable securities	3	575
Accounts receivable (note 3)	4,056	9,073
Inventory	2,201	52
Prepaid expenses	102	69
	6,904	16,128
Plant and equipment (note 4)	8,788	7,780
Mineral properties and deferred development (note 4)	113,397	112,462
Other assets	2,322	2,251
	$ 131,411	$ 138,621
Liabilities and Shareholders' Equity		
Current liabilities:		
Accounts payable and accrued liabilities	$ 3,076	$ 1,863
Current portion of long-term debt	5,801	8,932
	8,877	10,795
Payables to related parties (note 5)	3,596	10,993
Guarantee to related party (note 5)	10,120	—
Convertible debenture (note 6)	17,907	—
Long-term debt (note 7)	—	4,635
Reclamation liability	86	86
	40,586	26,509
Shareholders' equity:		
Share capital (note 8)	122,000	122,000
Deficit	(31,175)	(9,888)
	90,825	112,112
Operations (note 1)		
Uncertainty due to the Year 2000 Issue (note 15)		
Contingent liability (note 16)		
	$ 131,411	$ 138,621

See accompanying notes to consolidated financial statements.

On behalf of the Board:

Director

Director

Consolidated Statements of Operations and Deficit

(expressed in thousands of dollars, except per share amounts)

Years ended December 31, 1998 and 1997	1998	1997
Revenue:		
Metal sales revenue	$ 3,581	$ —
Interest and other income	48	637
	3,629	637
Expenses:		
Cost of sales	3,086	—
Depreciation and depletion	1,947	137
Management fees (note 11)	2,190	2,532
General and administration	969	778
Interest	616	617
Write-down of marketable securities	572	1,365
Exploration	380	—
Write-down of mineral properties and deferred development	15,372	2,920
Gain on foreign exchange translation	(216)	(586)
	24,916	7,763
Loss for the year	21,287	7,126
Deficit, beginning of year	9,888	2,762
Deficit, end of year	$ 31,175	$ 9,888
Loss per share	$ 0.29	$ 0.10
Weighted average number of common shares outstanding	74,006,780	73,993,600

See accompanying notes to consolidated financial statements.

Consolidated Statements of Changes in Financial Position

(expressed in thousands of dollars)

Years ended December 31, 1998 and 1997	1998	1997
Cash provided by (used in):		
Operations:		
Loss for the year	$ (21,287)	$ (7,126)
Items not involving cash:		
Depreciation and depletion	1,947	137
Write-down of marketable securities	572	1,365
Write-down of mineral properties and deferred development	15,372	2,920
Net change in non-cash working capital	4,048	2,608
	652	(96)
Financing:		
Repayments to related parties	(15,652)	—
Advances from related parties	8,255	9,891
Guarantee to related party	10,120	—
Increase in long-term debt	572	13,567
Repayments of long-term debt	(8,338)	(1,369)
Increase in convertible debenture	17,907	—
Deferred gain	—	(685)
Common shares issued for cash	—	73
	12,864	21,477
Investments:		
Expenditures on:		
Plant and equipment	(2,955)	(7,242)
Mineral properties	(16,307)	(26,330)
Other long-term assets	(71)	(458)
	(19,333)	(34,030)
Decrease in cash and short-term investments	(5,817)	(12,649)
Cash and short-term investments, beginning of year	6,359	19,008
Cash and short-term investments, end of year	$ 542	$ 6,359

See accompanying notes to consolidated financial statements.

Notes to Consolidated Financial Statements

(tabular dollar amounts expressed in thousands of dollars)

Years ended December 31, 1998 and 1997

1 OPERATIONS:

Northern Orion Explorations Ltd. (the "Company") is incorporated under the Company Act (British Columbia). The Company is currently in the process of defining its ore reserves and their economic recoverability. Although one property commenced production in 1998, cash flow generated has been insufficient to meet all cash operating costs incurred. Accordingly, the Company continues to be dependent upon Miramar Mining Corporation ("Miramar") providing funds to continue the evaluation of its mineral properties. Miramar, which holds voting control over the Company, has agreed to provide certain funds and not to demand the repayment of these advances during 1999 (note 5). These statements have been prepared on the basis that the Company continues to receive support from Miramar and no actions are taken which require settlement outside of the normal course of business.

2 SIGNIFICANT ACCOUNTING POLICIES:

a) Basis of presentation:

These consolidated financial statements are prepared in accordance with generally accepted accounting principles in Canada. They include the accounts of the Company and its subsidiaries Grupo Minero Aconcagua S.A. ("GMA"), Recursos Americanos Argentinos S.A. ("RAA"), Minera Mantua Inc., Minera Cobre S.A., Minera Delita S.A., Agua Rica S.A. and Northern Orion Finance Corporation, all of which are wholly-owned. Interests in joint ventures are accounted for by the proportionate consolidation method. All material intercompany balances and transactions have been eliminated.

The preparation of financial statements in accordance with generally accepted accounting principles requires management to make estimates that affect the reported values of assets, such as the recoverable value of mineral properties and deferred development (note 1), and liabilities, and the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from these estimates.

b) Marketable securities:

Marketable securities are recorded at the lower of cost or market.

c) Inventory:

Revenue is recognized on production and product inventories are recorded at estimated net realizable value. Materials and supplies inventories are valued at average cost less appropriate allowances for obsolescence.

d) Plant and equipment:

Plant and equipment are recorded at cost including capitalized interest incurred during the construction phase. Mine plant and equipment will be depreciated using the straight-line and declining balance methods, as appropriate to the assets, over their estimated useful lives, not to exceed the estimated proven and probable ore reserves commencing with the attainment of commercial production. Net operating costs and interest and financing costs incurred in the period preceding commercial production are capitalized. Mining equipment and vehicles are depreciated over their estimated useful lives of five to fifteen years. Office furniture and computer equipment are depreciated using the straight line method over periods from three to ten years.

e) Mineral properties and deferred development:

Mineral resource properties and related exploration and development costs are recorded at cost, including capitalized interest during exploration and development, on a property-by-property basis. These costs will be amortized over the estimated useful life of the properties on a unit-of-production basis following the commencement of commercial production, written-down if estimated future cash flows indicate the carrying value will not be recoverable, or written-off if the properties are sold, allowed to lapse or abandoned. A provision for site restoration costs is provided as necessary by a charge to earnings over the estimated remaining life of the resource properties. Costs related to ongoing site restoration programs are expensed when incurred. Management periodically reviews the underlying value of mineral properties and records a provision to reduce the costs incurred to net recoverable amount as appropriate.

Notes to Consolidated Financial Statements (Continued)

(tabular dollar amounts expressed in thousands of dollars)

Years ended December 31, 1998 and 1997

2 SIGNIFICANT ACCOUNTING POLICIES (CONTINUED):

f) Translation of foreign currency:

The accounts of foreign operations are translated into Canadian dollars as follows:

(i) Monetary assets and liabilities at the rates of exchange prevailing at the balance sheet date;

(ii) Other assets and liabilities at applicable historical exchange rates; and

(iii) Revenues and expenses at the average rate of exchange for the year with translation gains and losses being included in earnings.

g) Loss per share:

Loss per share amounts are calculated using the weighted average number of shares outstanding during the year. Fully diluted loss per share has not been disclosed as the impact of outstanding options would be anti-dilutive.

h) Derivative financial instruments:

The Company uses forward sales agreements for the purpose of managing currency exposures on its anticipated U.S. dollar denominated cash flows. These financial instruments are accounted for as hedges of anticipated transactions and are not recorded on the balance sheet of the Company. Gains and losses from these contracts are recorded in income in the same period as production is delivered to meet the hedged commitments.

3 ACCOUNTS RECEIVABLE:

During 1996, the Company, under an existing option agreement, acquired all of the shares of Agua Rica S.A. for US$7.9 million, which amounts are recoverable from an unrelated party under the terms of a joint operation agreement. As at December 31, 1998, the Company has received US$5.5 million on account of this receivable. The balance is included in accounts receivable. Agua Rica S.A. owns claims that contain most of the known mineralization on the Agua Rica copper/gold project.

4 CAPITAL ASSETS:

a) Plant and equipment:

			1998	1997
	Cost	Accumulated depreciation	Net book value	Net book value
Mine plant and equipment, including capitalized interest	$ 9,968	$ 1,889	$ 8,079	$ 7,070
Office and other equipment	1,043	334	709	710
	$ 11,011	$ 2,223	$ 8,788	$ 7,780

During 1998, the Company capitalized interest and financing costs of $744,000 (1997–$1,001,000) during the period of mine development and construction.

b) Mineral properties and deferred development:

During 1998, the Company capitalized interest of $1,198,000 (1997–nil) on funds borrowed for exploration and development activities.

5 PAYABLES TO RELATED PARTIES:

In prior years, Miramar has made advances to the Company to fund working capital requirements and various exploration expenditures. In September 1998, these amounts were repaid. Subsequent to September 1998, the Company drew additional funds from Miramar in order to finance continued work on its exploration and development projects. Interest is being charged on these advances at 8% per annum. These amounts have been funded subject to compliance with all other covenants related to the convertible debenture. Interest charged on amounts payable to related parties during the year was $604,000 (1997–$617,000).

In 1998, the Company was unable to fund required repayments under its Credit Facility (note 7). Under the terms of a financing guarantee, Miramar was required to make these repayments. At December 31, 1998, the Company is liable for repayment to Miramar of amounts that Miramar paid under the guarantee. Interest of $360,000 was charged at 11% per annum on the guarantee payments made by Miramar.

Notes to Consolidated Financial Statements (Continued)

(tabular dollar amounts expressed in thousands of dollars)

Years ended December 31, 1998 and 1997

6. CONVERTIBLE DEBENTURE:

In September 1998, the Company completed the private placement to Miramar of a $17,500,000 convertible debenture repayable as to principal and interest on September 14, 2003 bearing interest at 8% per annum. The convertible debenture is secured by a guarantee, pledge of shares and a first charge over certain assets of RAA. The principal and unpaid interest are convertible into common shares at the option of Miramar at a price of $1.47 per common share.

Conversion of the debenture by Miramar is limited as follows:

a) At any time prior to September 15, 1999, Miramar will be entitled to convert not more than 20% of the principal and unpaid interest;

b) At any time after September 14, 1999 and prior to September 15, 2000, Miramar will be entitled to convert not more than 30% of the principal and unpaid interest;

c) At any time after September 14, 2000 and prior to September 15, 2001, Miramar will be entitled to convert not more than 50% of the principal and unpaid interest;

d) After September 14, 2001, Miramar is entitled to convert any portion of the principal and unpaid interest.

The Company may repay any portion of the principal and unpaid interest on the convertible debenture at any time.

7. LONG-TERM DEBT:

In 1997, a subsidiary of the Company (the "Borrower") established a Credit Facility with a chartered bank in the aggregate principal amount of US$10,000,000. Loans drawn under the Credit Facility were used to fund the construction and development of the first phase of a copper-gold project in Cuba and to repay funds advanced by Miramar to initiate this construction. Loans drawn under the Credit Facility bear interest at LIBOR plus 5% and are secured by the Guarantee of Miramar and a charge over the shares and assets of the Borrower. The Credit Facility requires quarterly repayments of principal and interest commencing on March 31, 1998. All amounts due under the Credit Facility must be repaid on or before December 31, 1999.

	1998	1997
Loans drawn under Credit Facility, US$4.0 million (1997—US$9.6 million)	$ 5,801	$ 13,567
Less: current portion of long-term debt	(5,801)	(8,932)
	$ —	$ 4,635

8. SHARE CAPITAL:

a) Authorized:

500,000,000 common shares without par value; 100,000,000 first preference shares without par value; 100,000,000 second preference shares without par value.

b) Issued:

	Number of common shares	Amount
Issued, December 31, 1996	73,977,486	$ 121,927
Shares issued: For cash on exercise of options	26,204	73
Issued, December 31, 1997	74,003,690	122,000
Shares issued: On exercise of stock appreciation rights	3,090	—
Issued, December 31, 1998	74,006,780	$ 122,000

Shares issued for non-cash consideration are recorded at their estimated fair value at the date of issuance.

Notes to Consolidated Financial Statements (Continued)

(tabular dollar amounts expressed in thousands of dollars)

Years ended December 31, 1998 and 1997

8 SHARE CAPITAL (CONTINUED):

c) Stock options:

As at December 31, 1998, the Company had stock options outstanding to acquire 8,204,419 common shares which options are exercisable to August 2002 at prices ranging from $1.45 per share to $1.80 per share. These options can alternatively be exercised as stock appreciation rights, whereby the number of shares issued is dependent upon the market price at the date of exercise, which would substantially reduce the number of common shares issued on exercise. During 1998, 8,130,049 stock options with exercise prices ranging from $5.35 to $3.20 were repriced to $1.80.

9 INCOME AND RESOURCE TAXES:

The Company and a Canadian subsidiary have federal non-capital loss carry-forwards for Canadian tax purposes of approximately $10.0 million available to reduce taxable income otherwise calculated through 2005. The future tax benefit of these loss carry forward balances has not been recognized in the accounts.

In addition, the Company has certain other tax balances that may be recoverable from future operations in Latin America which have been classified as other assets. The tax basis of the Company's assets does not differ materially from their carrying values.

10 BUSINESS SEGMENTS:

a) Operating segment:

The Company's operations are primarily directed towards the exploration and development of mineral properties in Latin America. During 1998, the Company generated revenue from the sale of gold extracted from one of these properties. The Company's mining activities represent a single reportable segment.

b) Geographic segments:

The Company's identifiable capital assets and revenues by geographic area are as follows:

As at December 31, 1998:

	Capital assets	Revenues
Central America	$ 32,331	$ 3,346
South America	89,815	3
Canada	39	280
	$ 122,185	$ 3,629

As at December 31, 1997:

	Capital assets	Revenues
Central America	$ 38,412	$ —
South America	81,822	7
Canada	8	630
	$ 120,242	$ 637

Capital assets are comprised of plant and equipment and mineral properties and deferred development.

11 RELATED PARTY TRANSACTIONS:

Related party transactions not disclosed elsewhere in these consolidated financial statements are as follows:

a) During 1998, the Company paid $2.2 million (1997–$2.5 million) in management fees to Miramar; and

b) A company controlled by one of the directors of the Company performed drilling services for GMA totaling $50,000 (1997–$149,000); and

c) A company controlled by one of the directors of the Company was advanced funds under a drilling services contract for GMA totaling US$250,000. This advance was expensed during the year.

Notes to Consolidated Financial Statements (Continued)

(tabular dollar amounts expressed in thousands of dollars)

Years ended December 31, 1998 and 1997

12 FINANCIAL RISK MANAGEMENT:

a) Foreign currency hedging:

All of the Company's anticipated mineral revenues are denominated in US dollars. In order to manage its exposure to currency fluctuations, the Company may enter into currency forward sales or options contracts. The Board of Directors has approved a hedging policy and reviews the Company's hedging position periodically.

As at December 31, the Company had outstanding contracts which mature in 1999 as follows:

	US $	Average exchange rate
Forward sales contracts	$ 4,982	1.3955

b) Credit risks:

The Company's ability to realize on the above contracts is dependent upon the ability of the counter-parties to perform in accordance with the terms of the agreements. The Company deals only with major financial institutions with investment grade credit ratings and does not expect any counter-parties to fail to meet their obligations.

13 FINANCIAL INSTRUMENTS:

Financial instruments are recorded at cost. Fair value estimates are made at the balance sheet date, based upon relevant market information relating to the financial instrument. These estimates are subjective in nature and involve uncertainties and significant matters of judgment. Changes in assumptions could significantly affect these estimates.

The fair value of financial instruments, comprising cash and short-term investments, marketable securities, accounts receivable, current liabilities and long-term debt, are estimated to not be materially different from carrying value due to their ability for prompt liquidation or short-term to maturity. The fair value of payables to related parties, guarantee to related party and the convertible debenture are not readily determinable due to the nature of the relationship between the Company and the related party and the lack of a ready liquid market for such instruments. The fair value of the forward sales contracts described in note 12(a) is:

	1998		1997	
	Carrying value	Fair value	Carrying value	Fair value
Derivatives:				
Forward sales contracts	$ —	$ (637)	$ —	$ (202)

14 COMPARATIVE FIGURES:

Certain comparative figures have been reclassified to conform with the basis of presentation adopted in the current year's consolidated financial statements.

15 UNCERTAINTY DUE TO THE YEAR 2000 ISSUE:

The Year 2000 Issue arises because many computerized systems use two digits rather than four to identify a year. Date-sensitive systems may recognize the year 2000 as 1900 or some other date, resulting in errors when information using year 2000 dates is processed. In addition, similar problems may arise in some systems which use certain dates in 1999 to represent something other than a date. The effect of the Year 2000 Issue may be experienced before, on, or after January 1, 2000, and, if not addressed, the impact on operations and financial reporting may range from minor errors to significant systems failure which could affect an entity's ability to conduct normal business operations. It is not possible to be certain that all aspects of the Year 2000 Issue affecting the Company, including those related to the efforts of customers, suppliers or other third parties, will be fully resolved.

16 CONTINGENT LIABILITY:

A claim of $1.3 million (US$856,000) has been asserted against GMA by one of its Argentine directors for a purported loan to GMA to allow it to purchase a mineral property in 1996. In the opinion of management, this claim is without merit. No provision for this claim has been recorded in the financial statements.

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LISTINGS

TSE–Symbol NNO
VSE–Symbol NNO

ANNUAL GENERAL MEETING

Northern Orion's Annual General Meeting of Shareholders will be held on Wednesday, June 23rd, 1999 at 10:00 am Lonsdale Quay, North Vancouver, BC, Canada.

NORTHERN ORION EXPLORATIONS LTD.

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June 24, 1999 **NEWS RELEASE 99-06** NNO – TSE, VSE

Northern Orion Reports on Annual General Meeting

Northern Orion Explorations Ltd. (the "Company") held its Annual General Meeting on June 23, 1999.

Two new independent directors were elected at the annual general meeting, subject to TSE approval: Terry O'Kane and Stephen Wilkinson. Terry O'Kane is a mining engineer with his own consulting practice. Prior to 1993, Mr. O'Kane was Vice President of Fluor Daniel Wright, a worldwide consulting engineering firm. Mr. O'Kane has 44 years experience in metallurgical engineering, project management and operations management. Stephen Wilkinson is a geologist with 25 years experience in mineral exploration and operations. Most recently, Mr. Wilkinson was a gold analyst with RBC Dominion Securities. Mr. Walter H. Berukoff, Dr. Ricardo Auriemma and Dr. Amalia Leguizamon had asked that their names not be presented for re-election at the annual general meeting. The Company would like to thank Mr. Berukoff, Dr. Auriemma and Dr. Leguizamon for their years of service as directors. The other members re-elected to the board are John Burns, Lyall Knott QC, Christopher Pollard, Stephen Quin and Anthony Walsh, all current directors of Northern Orion. Following the meeting, the board of directors elected John Burns as Chair of the Board.

At the annual meeting, management reviewed progress at the Company's core assets: Agua Rica, San Jorge and Mantua. Management noted that despite severely depressed copper prices, the Company had an excellent portfolio of copper projects. Particular emphasis was put on the potential of Agua Rica to be developed as a major copper-gold-molybdenum mine in conjunction with 70% partner BHP Copper. The Mantua project is a small tonnage, high-grade copper deposit, amenable to SX/EW recovery, providing potential for low cost copper production. San Jorge is a copper/gold deposit with significant exploration potential on the expanded land area.

Management also reported that a strategic review process had been initiated to review alternatives for the Company's medium to long-term future. The Company is focused on maintaining its interests in its core properties through the bottom of the current copper cycle so that it can benefit from its excellent portfolio of projects as copper prices recover. With the Company's weak balance sheet, sources of financing or alternative strategies for the Year 2000 and beyond need to be identified. Significant developments in this strategic review will be reported to the shareholders as they occur.

Northern Orion Explorations Ltd. is a mineral exploration and development company focussing on advanced copper mining opportunities in Latin America. Northern Orion's common shares are listed for trading on the Toronto and Vancouver Stock Exchanges under the symbol NNO. Miramar Mining Corporation (MAE-T, V) owns 54.8% of the issued shares of Northern Orion and has provided significant financial support to the Company.

No Stock Exchange has approved or disapproved the information contained herein.

For Further Information Contact:
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Interim President & CEO, VP Finance & C.F.O.
Or
Stephen P. Quin
Executive Vice President
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Email: info@northernorion.com

No Stock Exchange has approved or disapproved the information contained herein.

MANAGEMENT'S RESPONSIBILITY FOR FINANCIAL REPORTING

To the Shareholders of Northern Orion Explorations Ltd.:

The consolidated financial statements and all information in the Annual Report are the responsibility of the Board of Directors and management. The consolidated financial statements have been prepared by management based on information available to February 19, 1999 and are in accordance with accounting principles generally accepted in Canada. A system of internal controls is maintained by management to provide reasonable assurance that assets are safeguarded and financial information is accurate and reliable.

The Audit Committee of the Board of Directors is comprised of a majority of outside directors, and meets with management and the independent auditors to review internal control and financial reporting matters, and to ensure that management is maintaining adequate financial controls. The Audit Committee also reviews the audit plan of the independent auditors and discusses the results of their audit and their audit report prior to submitting the consolidated financial statements to the Board of Directors for approval.

The consolidated financial statements have been audited by KPMG and their report is below.

ANTHONY P. WALSH

Interim President, Vice-President Finance and Chief Financial Officer

AUDITORS' REPORT TO THE SHAREHOLDERS

We have audited the consolidated balance sheets of Northern Orion Explorations Ltd. as at December 31, 1998 and 1997 and the consolidated statements of operations and deficit and changes in financial position for the years then ended. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with generally accepted auditing standards. Those standards require that we plan and perform an audit to obtain reasonable assurance whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation.

In our opinion, these consolidated financial statements present fairly, in all material respects, the financial position of the Company as at December 31, 1998 and 1997 and the results of its operations and the changes in its financial position for the years then ended in accordance with generally accepted accounting principles. As required by the Company Act (British Columbia), we report that, in our opinion, these principles have been applied on a consistent basis.

KPMG LLP

CHARTERED ACCOUNTANTS

Vancouver, Canada
February 18, 1999

Consolidated Balance Sheets

(expressed in thousands of dollars)

December 31, 1998 and 1997	1998	1997
Assets		
Current assets:		
Cash and short-term investments	$ 542	$ 6,359
Marketable securities	3	575
Accounts receivable (note 3)	4,056	9,073
Inventory	2,201	52
Prepaid expenses	102	69
	6,904	16,128
Plant and equipment (note 4)	8,788	7,780
Mineral properties and deferred development (note 4)	113,397	112,462
Other assets	2,322	2,251
	$ 131,411	$ 138,621
Liabilities and Shareholders' Equity		
Current liabilities:		
Accounts payable and accrued liabilities	$ 3,076	$ 1,863
Current portion of long-term debt	5,801	8,932
	8,877	10,795
Payables to related parties (note 5)	3,596	10,993
Guarantee to related party (note 5)	10,120	—
Convertible debenture (note 6)	17,907	—
Long-term debt (note 7)	—	4,635
Reclamation liability	86	86
	40,586	26,509
Shareholders' equity:		
Share capital (note 8)	122,000	122,000
Deficit	(31,175)	(9,888)
	90,825	112,112
Operations (note 1)		
Uncertainty due to the Year 2000 Issue (note 15)		
Contingent liability (note 16)		
	$ 131,411	$ 138,621

See accompanying notes to consolidated financial statements.

On behalf of the Board:

Director

Director

MANAGEMENT'S RESPONSIBILITY FOR FINANCIAL REPORTING

To the Shareholders of Northern Orion Explorations Ltd.:

The consolidated financial statements and all information in the Annual Report are the responsibility of the Board of Directors and management. The consolidated financial statements have been prepared by management based on information available to February 19, 1999 and are in accordance with accounting principles generally accepted in Canada. A system of internal controls is maintained by management to provide reasonable assurance that assets are safeguarded and financial information is accurate and reliable.

The Audit Committee of the Board of Directors is comprised of a majority of outside directors, and meets with management and the independent auditors to review internal control and financial reporting matters, and to ensure that management is maintaining adequate financial controls. The Audit Committee also reviews the audit plan of the independent auditors and discusses the results of their audit and their audit report prior to submitting the consolidated financial statements to the Board of Directors for approval.

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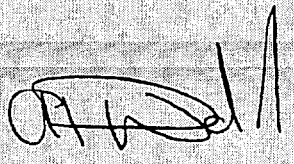

ANTHONY P. WALSH

Interim President, Vice-President Finance and Chief Financial Officer

AUDITORS' REPORT TO THE SHAREHOLDERS

We have audited the consolidated balance sheets of Northern Orion Explorations Ltd. as at December 31, 1998 and 1997 and the consolidated statements of operations and deficit and changes in financial position for the years then ended. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with generally accepted auditing standards. Those standards require that we plan and perform an audit to obtain reasonable assurance whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation.

In our opinion, these consolidated financial statements present fairly, in all material respects, the financial position of the Company as at December 31, 1998 and 1997 and the results of its operations and the changes in its financial position for the years then ended in accordance with generally accepted accounting principles. As required by the Company Act (British Columbia), we report that, in our opinion, these principles have been applied on a consistent basis.

KPMG LLP

CHARTERED ACCOUNTANTS

Vancouver, Canada
February 18, 1999

Consolidated Statements of Operations and Deficit

(expressed in thousands of dollars, except per share amounts)

Years ended December 31, 1998 and 1997	1998	1997
Revenue:		
Metal sales revenue	$ 3,581	$ —
Interest and other income	48	637
	3,629	637
Expenses:		
Cost of sales	3,086	—
Depreciation and depletion	1,947	137
Management fees (note 11)	2,190	2,532
General and administration	969	778
Interest	616	617
Write-down of marketable securities	572	1,365
Exploration	380	—
Write-down of mineral properties and deferred development	15,372	2,920
Gain on foreign exchange translation	(216)	(586)
	24,916	7,763
Loss for the year	21,287	7,126
Deficit, beginning of year	9,888	2,762
Deficit, end of year	$ 31,175	$ 9,888
Loss per share	$ 0.29	$ 0.10
Weighted average number of common shares outstanding	74,006,780	73,993,600

See accompanying notes to consolidated financial statements.

Consolidated Statements of Changes in Financial Position

(expressed in thousands of dollars)

Years ended December 31, 1998 and 1997	1998	1997
Cash provided by (used in):		
Operations:		
Loss for the year	$ (21,287)	$ (7,126)
Items not involving cash:		
Depreciation and depletion	1,947	137
Write-down of marketable securities	572	1,365
Write-down of mineral properties and deferred development	15,372	2,920
Net change in non-cash working capital	4,048	2,608
	652	(96)
Financing:		
Repayments to related parties	(15,652)	—
Advances from related parties	8,255	9,891
Guarantee to related party	10,120	—
Increase in long-term debt	572	13,567
Repayments of long-term debt	(8,338)	(1,369)
Increase in convertible debenture	17,907	—
Deferred gain	—	(685)
Common shares issued for cash	—	73
	12,864	21,477
Investments:		
Expenditures on:		
Plant and equipment	(2,955)	(7,242)
Mineral properties	(16,307)	(26,330)
Other long-term assets	(71)	(458)
	(19,333)	(34,030)
Decrease in cash and short-term investments	(5,817)	(12,649)
Cash and short-term investments, beginning of year	6,359	19,008
Cash and short-term investments, end of year	$ 542	$ 6,359

See accompanying notes to consolidated financial statements.

Notes to Consolidated Financial Statements

(tabular dollar amounts expressed in thousands of dollars)

Years ended December 31, 1998 and 1997

1 OPERATIONS:

Northern Orion Explorations Ltd. (the "Company") is incorporated under the Company Act (British Columbia). The Company is currently in the process of defining its ore reserves and their economic recoverability. Although one property commenced production in 1998, cash flow generated has been insufficient to meet all cash operating costs incurred. Accordingly, the Company continues to be dependent upon Miramar Mining Corporation ("Miramar") providing funds to continue the evaluation of its mineral properties. Miramar, which holds voting control over the Company, has agreed to provide certain funds and not to demand the repayment of these advances during 1999 (note 5). These statements have been prepared on the basis that the Company continues to receive support from Miramar and no actions are taken which require settlement outside of the normal course of business.

2 SIGNIFICANT ACCOUNTING POLICIES:

a) Basis of presentation:

These consolidated financial statements are prepared in accordance with generally accepted accounting principles in Canada. They include the accounts of the Company and its subsidiaries Grupo Minero Aconcagua S.A. ("GMA"), Recursos Americanos Argentinos S.A. ("RAA"), Minera Mantua Inc., Minera Cobre S.A., Minera Delita S.A., Agua Rica S.A. and Northern Orion Finance Corporation, all of which are wholly-owned. Interests in joint ventures are accounted for by the proportionate consolidation method. All material intercompany balances and transactions have been eliminated.

The preparation of financial statements in accordance with generally accepted accounting principles requires management to make estimates that affect the reported values of assets, such as the recoverable value of mineral properties and deferred development (note 1), and liabilities, and the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from these estimates.

b) Marketable securities:

Marketable securities are recorded at the lower of cost or market.

c) Inventory:

Revenue is recognized on production and product inventories are recorded at estimated net realizable value. Materials and supplies inventories are valued at average cost less appropriate allowances for obsolescence.

d) Plant and equipment:

Plant and equipment are recorded at cost including capitalized interest incurred during the construction phase. Mine plant and equipment will be depreciated using the straight-line and declining balance methods, as appropriate to the assets, over their estimated useful lives, not to exceed the estimated proven and probable ore reserves commencing with the attainment of commercial production. Net operating costs and interest and financing costs incurred in the period preceding commercial production are capitalized. Mining equipment and vehicles are depreciated over their estimated useful lives of five to fifteen years. Office furniture and computer equipment are depreciated using the straight line method over periods from three to ten years.

e) Mineral properties and deferred development:

Mineral resource properties and related exploration and development costs are recorded at cost, including capitalized interest during exploration and development, on a property-by-property basis. These costs will be amortized over the estimated useful life of the properties on a unit-of-production basis following the commencement of commercial production, written-down if estimated future cash flows indicate the carrying value will not be recoverable, or written-off if the properties are sold, allowed to lapse or abandoned. A provision for site restoration costs is provided as necessary by a charge to earnings over the estimated remaining life of the resource properties. Costs related to ongoing site restoration programs are expensed when incurred. Management periodically reviews the underlying value of mineral properties and records a provision to reduce the costs incurred to net recoverable amount as appropriate.

Notes to Consolidated Financial Statements (Continued)

(tabular dollar amounts expressed in thousands of dollars)

Years ended December 31, 1998 and 1997

2 SIGNIFICANT ACCOUNTING POLICIES (CONTINUED):

f) Translation of foreign currency:

The accounts of foreign operations are translated into Canadian dollars as follows:

(i) Monetary assets and liabilities at the rates of exchange prevailing at the balance sheet date;

(ii) Other assets and liabilities at applicable historical exchange rates; and

(iii) Revenues and expenses at the average rate of exchange for the year with translation gains and losses being included in earnings.

g) Loss per share:

Loss per share amounts are calculated using the weighted average number of shares outstanding during the year. Fully diluted loss per share has not been disclosed as the impact of outstanding options would be anti-dilutive.

h) Derivative financial instruments:

The Company uses forward sales agreements for the purpose of managing currency exposures on its anticipated U.S. dollar denominated cash flows. These financial instruments are accounted for as hedges of anticipated transactions and are not recorded on the balance sheet of the Company. Gains and losses from these contracts are recorded in income in the same period as production is delivered to meet the hedged commitments.

3 ACCOUNTS RECEIVABLE:

During 1996, the Company, under an existing option agreement, acquired all of the shares of Agua Rica S.A. for US$7.9 million, which amounts are recoverable from an unrelated party under the terms of a joint operation agreement. As at December 31, 1998, the Company has received US$5.5 million on account of this receivable. The balance is included in accounts receivable. Agua Rica S.A. owns claims that contain most of the known mineralization on the Agua Rica copper/gold project.

4 CAPITAL ASSETS:

a) Plant and equipment:

			1998	1997
	Cost	Accumulated depreciation	Net book value	Net book value
Mine plant and equipment, including capitalized interest	$ 9,968	$ 1,889	$ 8,079	$ 7,070
Office and other equipment	1,043	334	709	710
	$ 11,011	$ 2,223	$ 8,788	$ 7,780

During 1998, the Company capitalized interest and financing costs of $744,000 (1997–$1,001,000) during the period of mine development and construction.

b) Mineral properties and deferred development:

During 1998, the Company capitalized interest of $1,198,000 (1997–nil) on funds borrowed for exploration and development activities.

5 PAYABLES TO RELATED PARTIES:

In prior years, Miramar has made advances to the Company to fund working capital requirements and various exploration expenditures. In September 1998, these amounts were repaid. Subsequent to September 1998, the Company drew additional funds from Miramar in order to finance continued work on its exploration and development projects. Interest is being charged on these advances at 8% per annum. These amounts have been funded subject to compliance with all other covenants related to the convertible debenture. Interest charged on amounts payable to related parties during the year was $604,000 (1997–$617,000).

In 1998, the Company was unable to fund required repayments under its Credit Facility (note 7). Under the terms of a financing guarantee, Miramar was required to make these repayments. At December 31, 1998, the Company is liable for repayment to Miramar of amounts that Miramar paid under the guarantee. Interest of $360,000 was charged at 11% per annum on the guarantee payments made by Miramar.

Notes to Consolidated Financial Statements (Continued)

(tabular dollar amounts expressed in thousands of dollars)

Years ended December 31, 1998 and 1997

6. CONVERTIBLE DEBENTURE:

In September 1998, the Company completed the private placement to Miramar of a $17,500,000 convertible debenture repayable as to principal and interest on September 14, 2003 bearing interest at 8% per annum. The convertible debenture is secured by a guarantee, pledge of shares and a first charge over certain assets of RAA. The principal and unpaid interest are convertible into common shares at the option of Miramar at a price of $1.47 per common share.

Conversion of the debenture by Miramar is limited as follows:

a) At any time prior to September 15, 1999, Miramar will be entitled to convert not more than 20% of the principal and unpaid interest;

b) At any time after September 14, 1999 and prior to September 15, 2000, Miramar will be entitled to convert not more than 30% of the principal and unpaid interest;

c) At any time after September 14, 2000 and prior to September 15, 2001, Miramar will be entitled to convert not more than 50% of the principal and unpaid interest;

d) After September 14, 2001, Miramar is entitled to convert any portion of the principal and unpaid interest.

The Company may repay any portion of the principal and unpaid interest on the convertible debenture at any time.

7 LONG-TERM DEBT:

In 1997, a subsidiary of the Company (the "Borrower") established a Credit Facility with a chartered bank in the aggregate principal amount of US$10,000,000. Loans drawn under the Credit Facility were used to fund the construction and development of the first phase of a copper-gold project in Cuba and to repay funds advanced by Miramar to initiate this construction. Loans drawn under the Credit Facility bear interest at LIBOR plus 5% and are secured by the Guarantee of Miramar and a charge over the shares and assets of the Borrower. The Credit Facility requires quarterly repayments of principal and interest commencing on March 31, 1998. All amounts due under the Credit Facility must be repaid on or before December 31, 1999.

	1998	1997
Loans drawn under Credit Facility, US$4.0 million (1997—US$9.6 million)	$ 5,801	$ 13,567
Less: current portion of long-term debt	(5,801)	(8,932)
	$ —	$ 4,635

8 SHARE CAPITAL:

a) Authorizied:

500,000,000 common shares without par value; 100,000,000 first preference shares without par value; 100,000,000 second preference shares without par value.

b) Issued:

	Number of common shares	Amount
Issued, December 31, 1996	73,977,486	$ 121,927
Shares issued: For cash on exercise of options	26,204	73
Issued, December 31, 1997	74,003,690	122,000
Shares issued: On exercise of stock appreciation rights	3,090	—
Issued, December 31, 1998	74,006,780	$ 122,000

Shares issued for non-cash consideration are recorded at their estimated fair value at the date of issuance.

Notes to Consolidated Financial Statements (Continued)

(tabular dollar amounts expressed in thousands of dollars)

Years ended December 31, 1998 and 1997

8 SHARE CAPITAL (CONTINUED):

c) Stock options:

As at December 31, 1998, the Company had stock options outstanding to acquire 8,204,419 common shares which options are exercisable to August 2002 at prices ranging from $1.45 per share to $1.80 per share. These options can alternatively be exercised as stock appreciation rights, whereby the number of shares issued is dependent upon the market price at the date of exercise, which would substantially reduce the number of common shares issued on exercise. During 1998, 8,130,049 stock options with exercise prices ranging from $5.35 to $3.20 were repriced to $1.80.

9 INCOME AND RESOURCE TAXES:

The Company and a Canadian subsidiary have federal non-capital loss carry-forwards for Canadian tax purposes of approximately $10.0 million available to reduce taxable income otherwise calculated through 2005. The future tax benefit of these loss carry forward balances has not been recognized in the accounts.

In addition, the Company has certain other tax balances that may be recoverable from future operations in Latin America which have been classified as other assets. The tax basis of the Company's assets does not differ materially from their carrying values.

10 BUSINESS SEGMENTS:

a) Operating segment:

The Company's operations are primarily directed towards the exploration and development of mineral properties in Latin America. During 1998, the Company generated revenue from the sale of gold extracted from one of these properties. The Company's mining activities represent a single reportable segment.

b) Geographic segments:

The Company's identifiable capital assets and revenues by geographic area are as follows:

As at December 31, 1998:

	Capital assets	Revenues
Central America	$ 32,331	$ 3,346
South America	89,815	3
Canada	39	280
	$ 122,185	$ 3,629

As at December 31, 1997:

	Capital assets	Revenues
Central America	$ 38,412	$ —
South America	81,822	7
Canada	8	630
	$ 120,242	$ 637

Capital assets are comprised of plant and equipment and mineral properties and deferred development.

11 RELATED PARTY TRANSACTIONS:

Related party transactions not disclosed elsewhere in these consolidated financial statements are as follows:

a) During 1998, the Company paid $2.2 million (1997–$2.5 million) in management fees to Miramar; and

b) A company controlled by one of the directors of the Company performed drilling services for GMA totaling $50,000 (1997–$149,000); and

c) A company controlled by one of the directors of the Company was advanced funds under a drilling services contract for GMA totaling US$250,000. This advance was expensed during the year.

Notes to Consolidated Financial Statements (Continued)

(tabular dollar amounts expressed in thousands of dollars)

Years ended December 31, 1998 and 1997

12 FINANCIAL RISK MANAGEMENT:

a) Foreign currency hedging:

All of the Company's anticipated mineral revenues are denominated in US dollars. In order to manage its exposure to currency fluctuations, the Company may enter into currency forward sales or options contracts. The Board of Directors has approved a hedging policy and reviews the Company's hedging position periodically.

As at December 31, the Company had outstanding contracts which mature in 1999 as follows:

	US $	Average exchange rate
Forward sales contracts	$ 4,982	1.3955

b) Credit risks:

The Company's ability to realize on the above contracts is dependent upon the ability of the counter-parties to perform in accordance with the terms of the agreements. The Company deals only with major financial institutions with investment grade credit ratings and does not expect any counter-parties to fail to meet their obligations.

13 FINANCIAL INSTRUMENTS:

Financial instruments are recorded at cost. Fair value estimates are made at the balance sheet date, based upon relevant market information relating to the financial instrument. These estimates are subjective in nature and involve uncertainties and significant matters of judgment. Changes in assumptions could significantly affect these estimates.

The fair value of financial instruments, comprising cash and short-term investments, marketable securities, accounts receivable, current liabilities and long-term debt, are estimated to not be materially different from carrying value due to their ability for prompt liquidation or short-term to maturity. The fair value of payables to related parties, guarantee to related party and the convertible debenture are not readily determinable due to the nature of the relationship between the Company and the related party and the lack of a ready liquid market for such instruments. The fair value of the forward sales contracts described in note 12(a) is:

	1998		1997	
	Carrying value	Fair value	Carrying value	Fair value
Derivatives:				
Forward sales contracts	$ —	$ (637)	$ —	$ (202)

14 COMPARATIVE FIGURES:

Certain comparative figures have been reclassified to conform with the basis of presentation adopted in the current year's consolidated financial statements.

15 UNCERTAINTY DUE TO THE YEAR 2000 ISSUE:

The Year 2000 Issue arises because many computerized systems use two digits rather than four to identify a year. Date-sensitive systems may recognize the year 2000 as 1900 or some other date, resulting in errors when information using year 2000 dates is processed. In addition, similar problems may arise in some systems which use certain dates in 1999 to represent something other than a date. The effect of the Year 2000 Issue may be experienced before, on, or after January 1, 2000, and, if not addressed, the impact on operations and financial reporting may range from minor errors to significant systems failure which could affect an entity's ability to conduct normal business operations. It is not possible to be certain that all aspects of the Year 2000 Issue affecting the Company, including those related to the efforts of customers, suppliers or other third parties, will be fully resolved.

16 CONTINGENT LIABILITY:

A claim of $1.3 million (US$856,000) has been asserted against GMA by one of its Argentine directors for a purported loan to GMA to allow it to purchase a mineral property in 1996. In the opinion of management, this claim is without merit. No provision for this claim has been recorded in the financial statements.

NORTHERN ORION
EXPLORATIONS LTD.

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August 25, 1999 **NEWS RELEASE 99 – 09** NNO – TSE
MAE – TSE, VSE
MAENF – OTC

Northern Orion Reports Financial Results for the First Half of 1999

Northern Orion Explorations Ltd. (the "Company") announces its financial results for the six months ended June 30, 1999. The Company eports a loss of $5,516,000 or $0.07 per share compared to a loss of $2,668,000 or $0.04 per share in the same period in 1998.

Mantua
During the first half of 1999, the Mantua gold leach facility produced 11,953 ounces of gold (Northern Orion's share 5,976 ounces). Cash operating costs before inventory adjustments were US$343 per ounce. Year to date, the realized gold selling price on Northern Orion's 50% share of gold production from Mantua has averaged US$305 per ounce due to the positive results of gold hedging operations by Northern Orion. Gold mining will cease during the third quarter of 1999 and the subsequent leaching of the residual gold in the pads is expected to generate positive cash flow at current gold prices. The Mantua project is held in a 50-50 joint venture with Geominera SA, a Cuban state owned company.

Agua Rica
During the second quarter, the Agua Rica joint venture completed its 1998/1999-work program totaling US$8.8 million, of which Northern Orion's share was 30%. Work completed includes bulk sampling, pilot scale metallurgical testing and reviews of capital and operating costs. The joint venture is currently developing resource models that will provide the basis for mine planning and baseline environmental monitoring continues.

Strategic Committee
The board of Northern Orion has established a Strategic Action Committee consisting of three outside independent directors to evaluate alternatives for maximizing shareholder value from the Company's excellent portfolio of copper projects. In the meantime, the Company continues with its commitment to exploration, focusing expenditures on the Company's core assets such as Agua Rica and Mantua. All non-core expenditures are being carefully controlled to ensure that the Company preserves resources for value creating activities.

Northern Orion Explorations Ltd. is a mineral exploration and development company focusing on the substantial and largely untapped copper mining opportunities in Latin America. Northern Orion's common shares are listed for trading on the Toronto and Vancouver Stock Exchanges under the symbol NNO.

For further information contact:
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No Stock Exchange has approved or disapproved the information contained herein.

NORTHERN ORION EXPLORATIONS LTD.

Consolidated Balance Sheets
(expressed in thousands of dollars)

June 30, 1999 and December 31, 1998

	1999 (unaudited)	1998
Assets		
Current assets:		
Cash and short-term investments	$ 598	$ 542
Marketable securities	–	3
Accounts receivable	3,357	4,056
Inventory	938	2,201
Prepaid expenses	92	102
	4,985	6,904
Plant and equipment	7,468	8,788
Mineral properties and deferred development	117,324	113,397
Other assets	2,351	2,322
	$ 132,128	$ 131,411
Liabilities and Shareholders' Equity		
Current liabilities:		
Accounts payable and accrued liabilities	$ 4,493	$ 3,076
Current portion of long-term debt	–	5,801
	4,493	8,877
Payables to related parties	6,514	3,596
Guarantee to related party	17,161	10,120
Convertible debenture	18,625	17,907
Reclamation liability	26	86
	46,819	40,586
Shareholders' equity:		
Share capital	122,000	122,000
Deficit	(36,691)	(31,175)
	85,309	90,825
	$ 132,128	$ 131,411

No Stock Exchange has approved or disapproved the information contained herein.

NORTHERN ORION EXPLORATIONS LTD.

Consolidated Statements of Operations and Deficit
(expressed in thousands of dollars except per share amounts)

Six month periods ended June 30, 1999 and 1998

	1999 (unaudited)	1998 (unaudited)
Revenue:		
Metal sales	$ 2,434	$ 1,168
Interest and other income	9	22
	2,443	1,190
Expenses:		
Cost of sales	3,065	798
Management fee	540	1,260
Terminations and severance	734	–
General and administration	292	276
Interest	116	356
Depreciation and depletion	1,320	656
Write-down of inventory	436	–
Write-down of marketable securities	3	572
Write-down of mineral properties	906	–
Loss (gain) on foreign exchange translation	547	(60)
	7,959	3,858
Loss for the period	5,516	2,668
Deficit, beginning of period	31,175	9,888
Deficit, end of period	$ 36,691	$ 12,556
Loss per share	$ 0.07	$ 0.04
Weighted average number of common shares outstanding	74,006,780	74,006,780

No Stock Exchange has approved or disapproved the information contained herein.

NORTHERN ORION EXPLORATIONS LTD.

Consolidated Statements of Cash Flows
(expressed in thousands of dollars)

Six month periods ended June 30, 1999 and 1998

	1999 (unaudited)	1998 (unaudited) (restated-note 1)
Cash flows from (used in) operating activities:		
Loss for the period	$ (5,516)	$ (2,668)
Items not involving cash:		
Depreciation and depletion	1,320	656
Writedown of mineral properties	906	–
Writedown of marketable securities	3	572
	(3,287)	(1,440)
Decrease (increase) in accounts receivable	699	4,296
Decrease (increase) in inventories	1,262	(3,081)
Decrease (increase) in prepaid expenses	10	(88)
Increase (decrease) in accounts payable and accrued liabilities	1,417	1,456
	101	1,143
Cash flows from (used in) financing activities:		
Due to related parties	2,918	6,011
Long-term debt	(5,801)	(3,332)
Capitalized interest on convertible debenture	718	–
Guarantee to related party	7,041	–
	4,876	2,679
Cash flows from (used in) investing activities:		
Mineral properties	(4,892)	(6,988)
Plant and equipment	–	(881)
Other long-term assets	(29)	(64)
	(4,921)	(7,933)
Net increase (decrease) in cash and short-term investments	56	(4,111)
Cash and short-term investments, beginning of period	542	6,359
Cash and short-term investments, end of period	$ 598	$ 2,248

Note 1: Comparative figures for the Consolidated Statements of Cash Flows have been restated to reflect the retroactive application of the new guidance for the statement of cash flows by the Canadian Institute of Chartered Accountants which the Company adopted effective January 1, 1999.

No Stock Exchange has approved or disapproved the information contained herein.

02 APR

NORTHERN ORION
EXPLORATIONS LTD.

311 West First Street, North Vancouver, B.C. Canada V7M 1B5
Tel: (604) 980-0573 Toll Free: 1-800-811-4447 Fax: (604) 985-2189

August 25, 1999 **NEWS RELEASE 99 – 09** NNO – TSE
MAE – TSE, VSE
MAENF – OTC

Northern Orion Reports Financial Results for the First Half of 1999

Northern Orion Explorations Ltd. (the "Company") announces its financial results for the six months ended June 30, 1999. The Company eports a loss of $5,516,000 or $0.07 per share compared to a loss of $2,668,000 or $0.04 per share in the same period in 1998.

Mantua
During the first half of 1999, the Mantua gold leach facility produced 11,953 ounces of gold (Northern Orion's share 5,976 ounces). Cash operating costs before inventory adjustments were US$343 per ounce. Year to date, the realized gold selling price on Northern Orion's 50% share of gold production from Mantua has averaged US$305 per ounce due to the positive results of gold hedging operations by Northern Orion. Gold mining will cease during the third quarter of 1999 and the subsequent leaching of the residual gold in the pads is expected to generate positive cash flow at current gold prices. The Mantua project is held in a 50-50 joint venture with Geominera SA, a Cuban state owned company.

Agua Rica
During the second quarter, the Agua Rica joint venture completed its 1998/1999-work program totaling US$8.8 million, of which Northern Orion's share was 30%. Work completed includes bulk sampling, pilot scale metallurgical testing and reviews of capital and operating costs. The joint venture is currently developing resource models that will provide the basis for mine planning and baseline environmental monitoring continues.

Strategic Committee
The board of Northern Orion has established a Strategic Action Committee consisting of three outside independent directors to evaluate alternatives for maximizing shareholder value from the Company's excellent portfolio of copper projects. In the meantime, the Company continues with its commitment to exploration, focusing expenditures on the Company's core assets such as Agua Rica and Mantua. All non-core expenditures are being carefully controlled to ensure that the Company preserves resources for value creating activities.

Northern Orion Explorations Ltd. is a mineral exploration and development company focusing on the substantial and largely untapped copper mining opportunities in Latin America. Northern Orion's common shares are listed for trading on the Toronto and Vancouver Stock Exchanges under the symbol NNO.

For further information contact:
Anthony P. Walsh
Interim President, C.E.O., VP Finance & CFO
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Tel: (604) 980-0573 Fax: (604) 980-0731
Email: info@northernorion.com

No Stock Exchange has approved or disapproved the information contained herein.

NORTHERN ORION EXPLORATIONS LTD.

Consolidated Balance Sheets
(expressed in thousands of dollars)

June 30, 1999 and December 31, 1998

	1999 (unaudited)	1998
Assets		
Current assets:		
Cash and short-term investments	$ 598	$ 542
Marketable securities	–	3
Accounts receivable	3,357	4,056
Inventory	938	2,201
Prepaid expenses	92	102
	4,985	6,904
Plant and equipment	7,468	8,788
Mineral properties and deferred development	117,324	113,397
Other assets	2,351	2,322
	$ 132,128	$ 131,411
Liabilities and Shareholders' Equity		
Current liabilities:		
Accounts payable and accrued liabilities	$ 4,493	$ 3,076
Current portion of long-term debt	–	5,801
	4,493	8,877
Payables to related parties	6,514	3,596
Guarantee to related party	17,161	10,120
Convertible debenture	18,625	17,907
Reclamation liability	26	86
	46,819	40,586
Shareholders' equity:		
Share capital	122,000	122,000
Deficit	(36,691)	(31,175)
	85,309	90,825
	$ 132,128	$ 131,411

No Stock Exchange has approved or disapproved the information contained herein.

NORTHERN ORION EXPLORATIONS LTD.

Consolidated Statements of Operations and Deficit
(expressed in thousands of dollars except per share amounts)

Six month periods ended June 30, 1999 and 1998

	1999 (unaudited)	1998 (unaudited)
Revenue:		
Metal sales	$ 2,434	$ 1,168
Interest and other income	9	22
	2,443	1,190
Expenses:		
Cost of sales	3,065	798
Management fee	540	1,260
Terminations and severance	734	–
General and administration	292	276
Interest	116	356
Depreciation and depletion	1,320	656
Write-down of inventory	436	–
Write-down of marketable securities	3	572
Write-down of mineral properties	906	–
Loss (gain) on foreign exchange translation	547	(60)
	7,959	3,858
Loss for the period	5,516	2,668
Deficit, beginning of period	31,175	9,888
Deficit, end of period	$ 36,691	$ 12,556
Loss per share	$ 0.07	$ 0.04
Weighted average number of common shares outstanding	74,006,780	74,006,780

No Stock Exchange has approved or disapproved the information contained herein.

NORTHERN ORION EXPLORATIONS LTD.

Consolidated Statements of Cash Flows
(expressed in thousands of dollars)

Six month periods ended June 30, 1999 and 1998

	1999 (unaudited)	1998 (unaudited) (restated-note 1)
Cash flows from (used in) operating activities:		
Loss for the period	$ (5,516)	$ (2,668)
Items not involving cash:		
Depreciation and depletion	1,320	656
Writedown of mineral properties	906	–
Writedown of marketable securities	3	572
	(3,287)	(1,440)
Decrease (increase) in accounts receivable	699	4,296
Decrease (increase) in inventories	1,262	(3,081)
Decrease (increase) in prepaid expenses	10	(88)
Increase (decrease) in accounts payable and accrued liabilities	1,417	1,456
	101	1,143
Cash flows from (used in) financing activities:		
Due to related parties	2,918	6,011
Long-term debt	(5,801)	(3,332)
Capitalized interest on convertible debenture	718	–
Guarantee to related party	7,041	–
	4,876	2,679
Cash flows from (used in) investing activities:		
Mineral properties	(4,892)	(6,988)
Plant and equipment	–	(881)
Other long-term assets	(29)	(64)
	(4,921)	(7,933)
Net increase (decrease) in cash and short-term investments	56	(4,111)
Cash and short-term investments, beginning of period	542	6,359
Cash and short-term investments, end of period	$ 598	$ 2,248

Note 1: Comparative figures for the Consolidated Statements of Cash Flows have been restated to reflect the retroactive application of the new guidance for the statement of cash flows by the Canadian Institute of Chartered Accountants which the Company adopted effective January 1, 1999.

No Stock Exchange has approved or disapproved the information contained herein.

02 APR -1 A 8:5

PACIFIC CORPORATE TRUST COMPANY
Suite 830 - 625 Howe Street
Vancouver, B.C. V6C 3B8

Telephone: (604) 689 - 9853
Fax: (604) 689 - 8144

August 30, 1999

B.C. Securities Commission
Executive Director
2nd Floor, 865 Hornby Street
Vancouver, B.C., V6Z 3B8

Dear Sirs:

RE: NORTHERN ORION EXPLORATIONS LTD
MAILING ON AUGUST 30, 1999
INTERIM FINANCIAL STATEMENT
FOR THE SECOND PERIOD ENDING JUNE 30, 1999

We confirm that on the above date, the material issued by the subject Company was forwarded by prepaid first class mail to all the persons on the Supplementary Mailing List maintained at our office.

Yours truly,

PACIFIC CORPORATE TRUST COMPANY

"Lisa Scotland"

Lisa Scotland

LS/jo

cc: Vancouver Stock Exchange Listings Dept.
cc: Alberta Securities Commission
cc: Director of Corporations – PEI
cc: Manitoba Securities Commission
cc: Nova Scotia Securities Commission
cc: Office of the Administrator of Securities – NB
cc: Ontario Securities Commission
cc: Quebec Securities Commission
cc: Registrar of Securities – NT
cc: Registrar of Securities – YT
cc: Saskatchewan Securities Commission
cc: Securities Division - Department of Justice-NF
cc: Northern Orion Explorations Ltd
cc: Owen Bird
cc: KPMG Peat Marwick Thorne

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Northern Orion

EXPLORATIONS LTD.

NORTHERN ORION EXPLORATIONS LTD.

311 West First Street
North Vancouver, BC
Canada V7M 1B5

TSE—Symbol NNO
VSE—Symbol NNO

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http://www.northernorion.com
email: info@northernorion.com

Printed in Canada

Second Quarter Report

For the six months ended
June 30, 1999

Management Report

FINANCIAL RESULTS

During the first six months of 1999, Northern Orion Explorations Ltd ("Northern Orion" or the "Company") incurred an operating loss of $5,516,000 or $0.07 per share compared to a loss of $2,668,000 or $0.04 per share for the same period in 1998.

STRATEGIC REVIEW

In the second quarter of 1999, the Board of Directors of Northern Orion appointed a Strategic Action Committee to consider all possible alternatives for the development of Northern Orion's assets and the creation of shareholder value. The Committee consists of three independent directors and the review process focuses on gaining market recognition for Northern Orion as a copper company with three significant and advanced copper projects. The Committee is examining all alternatives including the option of becoming independent of Miramar Mining Corporation. The Committee will recommend actions that will maintain Northern Orion's interests in its core properties, and will evaluate all alternatives to maximize shareholder value by advancing these properties towards production decisions. The Strategic Committee is also evaluating alternatives for accessing funding for the advancement of Northern Orion's portfolio of copper projects.

The Strategic Action Committee expects to complete the review process during the third quarter of 1999 and have embarked on a clearly defined path forward by the end of this year.

MANTUA

COPPER PREFEASIBILITY

Northern Orion has completed an internal prefeasibility study on the Mantua copper project in Cuba to evaluate the potential for using a ferric leach, SX/EW recovery process. Use of this process could result in significantly reduced capital and operating costs versus the previously proposed pressure oxidation process.

Using the ferric leach process, the ore is leached in vessels operating under mild pressures (5 atmospheres of oxygen) and temperatures (90 degrees C), liberating the copper and generating the acid required for copper leaching. The solution is then fed to a standard SX/EW circuit for copper recovery. Overall copper recovery is projected at 88%. This is the same recovery process successfully used at the recently completed Mt. Gordon (Gunpowder) mine in Australia. The ferric leach process has been thoroughly tested on Mantua ore at a pilot plant scale in Vancouver utilizing the same facilities used for the feasibility work on Mt. Gordon.

Northern Orion is evaluating the results of this prefeasibility study in conjunction with its partners Geominera SA. The next step would be to arrange financing to embark on a final feasibility study at an estimated cost of US$1.3 million, with work focused on confirmatory piloting of the ferric leach process, combined with further refining the capital and operating cost estimates. Northern Orion is evaluating potential alternate sources of funding to complete the feasibility study.

GOLD LEACHING

Production for the second quarter of 1999 was 11,953 ounces of gold (Northern Orion's share 5,976 ounces) at a cash cost (after inventory adjustments) of US$343 per ounce. Gold mining will cease in the third quarter of 1999 and the subsequent leaching of the residual gold in the pads is expected to generate positive cash flow at current gold prices.

LOAN GUARANTEE

In June 1999, Miramar made a final payment of $3.1 million under the guarantee provided to Northern Orion for the bank financing of the Mantua gold project. This loan has now been fully re-paid. Payments made by Miramar on behalf of Northern Orion total $17.2 million (including interest) and this amount is owed to Miramar under the terms of the guarantee.

AGUA RICA

The Agua Rica project (30% Northern Orion) is a major copper-gold molybdenum deposit being advanced in a joint venture with BHP Copper (70%). If developed as contemplated in the Initial Feasibility Study at 60,000 tonnes per day throughput, Agua Rica project production would average approximately 300 million lbs. of copper, 100,000 oz of gold and 7 million pounds of molybdenum per year.

During the second quarter of 1999, the joint venture completed all of the physical work required to initiate a bankable feasibility study on the project. During the past 12 months, this work has included phase two metallurgical testing on core samples, collection of 300 tonnes of bulk sample that were pilot mill tested in South Africa, as well as further studies on capital and operating costs.

Work currently underway includes resource modeling, mine planning and further capital and operating cost reviews. Environmental monitoring continues unabated as part of baseline studies. The project was recently granted approval of its application for 30-year

fiscal stability under Argentine law, protecting the project against increases in taxes, duties and other potentially negative changes to the fiscal and regulatory regime in Argentina. The joint venture plans to complete an update to the Initial Feasibility Study during the balance of 1999, incorporating the results of all of the project activities since the completion of that study.

SAN JORGE

San Jorge (85%) is a large copper deposit potentially amenable to open pit mining and SX/EW recovery of copper. Recent expansion of the property ownership has opened up some promising exploration possibilities for expansion of the known mineralization. The Strategic Action Committee is examining alternative paths to move this project forward.

YEAR 2000

The Company's Year 2000 program is progressing in accordance with our plan. The program which was commenced in early 1998 has progressed well with testing and required renovation work on critical systems substantially complete. As part of our preparations, independent consultants have been engaged to assist in inventory development, testing and remediation efforts.

With internal systems now in compliance, the Company is focused on managing the exposure to the Year 2000 preparedness of third parties—suppliers and service providers. Key to our efforts will be continued communication with critical suppliers and service providers to monitor their readiness.

Contingency planning is in progress and it is expected that these plans will be complete by the end of the third quarter. While the Company has performed extensive efforts to prepare for the Year 2000, uncertainty remains that events outside of the Company's control may impact operations†.

Consolidated Balance Sheets

(expressed in thousands of dollars)
June 30, 1999 and December 31, 1998

	1999 (unaudited)	1998
Assets		
Current assets:		
Cash	$ 598	$ 542
Marketable securities	—	3
Accounts receivable	3,357	4,056
Inventory	938	2,201
Prepaid expenses	92	102
	4,985	6,904
Plant and equipment	7,468	8,788
Mineral properties and deferred development	117,324	113,397
Other assets	2,351	2,322
	$ 132,128	$ 131,411
Liabilities and Shareholders' Equity		
Current Liabilities:		
Accounts payable and accrued liabilities	$ 4,493	$ 3,076
Current portion of long-term debt	—	5,801
	4,493	8,877
Payables to related parties	6,514	3,596
Guarantee to related party	17,161	10,120
Convertible debenture	18,625	17,907
Reclamation liability	26	86
	46,819	40,586
Shareholder's equity:		
Share capital	122,000	122,000
Deficit	(36,691)	(31,175)
	85,309	90,825
	$ 132,128	$ 131,411

Consolidated Statements of Operations and Deficit

Six month periods ended June 30, 1999 and 1998
(expressed in thousands of dollars except per share amounts)

	1999 (unaudited)	1998 (unaudited)
Revenue:		
Metal sales	$ 2,434	$ 1,168
Interest and other income	9	22
	2,443	1,190
Expenses:		
Cost of sales	3,065	798
Management fee	540	1,260
Terminations and severance	734	—
General and administration	292	276
Interest	116	356
Depreciation and depletion	1,320	656
Write-down of inventory	436	—
Write-down of marketable securities	3	572
Write-down of mineral properties	906	—
Loss (gain) on foreign exchange translation	547	(60)
	7,959	3,858
Loss for the period	5,516	2,668
Deficit, beginning of period	31,175	9,888
Deficit, end of period	$ 36,691	$ 12,556
Loss per share	$ 0.07	$ 0.04
Weighted average number of common shares outstanding	74,006,780	74,006,780

Consolidated Statements of Cash Flows

Six month periods ended June 30, 1999 and 1998
(expressed in thousands of dollars)

	1999 (unaudited)	1998 (unaudited) (restated note 1)
Cash flows from (used in) operating activities:		
Loss for the period	$ (5,516)	$ (2,668)
Items not involving cash:		
Depreciation and depletion	1,320	656
Write-down of mineral properties	906	—
Write-down of marketable securities	3	572
	(3,287)	(1,440)
Decrease in accounts receivable	699	4,296
Decrease (increase) in inventories	1,262	(3,081)
Decrease (increase) in prepaid expenses	10	(88)
Increase (decrease) in accounts payable and accrued liabilities	(1,417)	1,456
	101	1,143
Cash flows from (used in) financing activities:		
Due to related parties	2,918	6,011
Long-term debt	(5,801)	(3,332)
Capitalized interest on convertible debenture	718	—
Guarantee to related party	7,041	—
	4,876	2,679
Cash flows from (used in) investing activities:		
Mineral properties	(4,892)	(6,988)
Plant and equipment	—	(881)
Other long-term assets	(29)	(64)
	(4,921)	(7,933)
Net increase in cash	56	(4,111)
Cash beginning of period	542	6,359
Cash,end of period	$ 598	$ 2,248

Note 1: Comparative figures for the Consolidated Statements of Cash Flows have been restated to reflect the retroactive application of the new guidance for the statement of cash flows by the Canadian Institute of Chartered Accountants which the Company adopted effective January 1, 1999.

NORTHERN ORION
EXPLORATIONS LTD.

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02-BR-1 P.8:07

November 23, 1999 **NEWS RELEASE 99 – 11** NNO – TSE, VSE

Northern Orion Reports Financial Results for the nine months ending September 30, 1999

Northern Orion Explorations Ltd. ("Northern Orion" or the "Company") announces its financial results for the nine months ended September 30, 1999. The Company reports a loss of $13,097,000 or $0.18 per share compared to a loss of $4,766,000 or $0.06 per share in the same period in 1998. Included in the loss for the period are writedowns of $7,683,000. For the quarter, Northern Orion reports a loss of $7,581,000 or $0.10 per share compared to $2,098,000 or $0.03 per share for the same quarter in 1998. The loss is attributable to lower than expected production at Mantua and writedowns on mineral properties.

Mantua Gold Operations, Cuba

The Mantua project is held in a 50-50 joint venture with Geominera SA, a Cuban state owned company. During the nine months, the Mantua gold leach facility produced 14,764 ounces of gold (Northern Orion's share 7,382 ounces). Direct cash operating costs before writedowns and inventory adjustments were approximately US$244 per ounce. Year to date, the realized gold selling price on Northern Orion's 50% share of gold production from Mantua has averaged US$297 per ounce versus an average spot price of US$273 per ounce due to the positive results of gold hedging operations by the Company. Gold mining operations ceased in September as it was determined that further leaching was not economic at current gold prices. With the cessation of gold production the remaining gold assets at Mantua have been written down to their net salvage value. The next stage of development for the Mantua project is the completion of a feasibility study respecting the copper phase. Northern Orion recently completed a pre-feasibility study that indicated a mineable resource of 7.5 million tonnes containing approximately 450 million pounds of recoverable copper. The Strategic Action Committee continues to evaluate potential alternate sources of funding to complete the feasibility study.

Agua Rica Project

Work at Agua Rica continues under a provisional budget agreed to by the joint venture. Work during the first nine months has included bulk sampling, pilot scale metallurgical testing and reviews of capital and operating costs. The joint venture is currently developing resource models that will provide the basis for mine planning and baseline environmental monitoring continues. Agua Rica is a large, moderate grade copper-gold porphyry property and is owned by Northern Orion (30%) and BHP Copper (70%).

Strategic Action Committee

The board of Northern Orion has established a Strategic Action Committee consisting of two independent directors and the president to evaluate alternatives for maximizing shareholder value from the Company's excellent portfolio of copper projects. In the meantime, the Company continues with its commitment to exploration, focusing expenditures on the Company's core assets such as Agua Rica and Mantua. All non-discretionary expenditures are being carefully controlled to ensure that the Company preserves resources for value creating activities.

In November of 1999 the existing management of Northern Orion stepped down to make way for a scaled down management team. The newly appointed President, Stephen Wilkinson and the Senior Vice

No Stock Exchange has approved or disapproved the information contained herein.

President, David Cohen will work in conjunction with the Board and the Strategic Action Committee to determine the best future course for the Company.

Northern Orion Explorations Ltd. is a mineral exploration and development company focusing on copper mining opportunities in Latin America. The Company has one of the largest undeveloped resource bases within the junior mining sector, with net attributable resources of 8.5 billion pounds of copper and 8.5 million ounces of gold. Northern Orion's common shares are listed for trading on the Toronto and Vancouver Stock Exchanges under the symbol NNO.

For further information contact:
Stephen Wilkinson
President & C..E.O.
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Email: info@northernorion.com

No Stock Exchange has approved or disapproved the information contained herein.

NORTHERN ORION EXPLORATIONS LTD.

Consolidated Balance Sheets
(expressed in thousands of dollars)

September 30, 1999 and December 31, 1998

	1999 (unaudited)	1998
Assets		
Current assets:		
Cash and short-term investments	$ 601	$ 542
Marketable securities	–	3
Accounts receivable	168	4,056
Inventory	–	2,201
Prepaid expenses	88	102
	857	6,904
Plant and equipment	2,942	8,788
Mineral properties and deferred development	116,988	113,397
Other assets	2,354	2,322
	$ 123,141	$ 131,411
Liabilities and Shareholders' Equity		
Current liabilities:		
Accounts payable and accrued liabilities	$ 1,906	$ 3,076
Current portion of long-term debt	–	5,801
	1,906	8,877
Payables to related parties	6,969	3,596
Guarantee to related party	17,536	10,120
Convertible debenture	18,976	17,907
Reclamation liability	26	86
	45,413	40,586
Shareholders' equity:		
Share capital	122,000	122,000
Deficit	(44,272)	(31,175)
	77,728	90,825
	$ 123,141	$ 131,411

No Stock Exchange has approved or disapproved the information contained herein.

NORTHERN ORION EXPLORATIONS LTD.

Consolidated Statements of Operations and Deficit
(expressed in thousands of dollars except per share amounts)

Nine month periods ended September 30, 1999 and 1998

	1999 (unaudited)	1998 (unaudited)
Revenue:		
Metal sales	$ 2,893	$ 2,631
Interest and other income	14	41
	2,907	2,672
Expenses:		
Cost of sales	3,734	2,087
Management fee	780	1,890
Terminations and severance	1,054	–
General and administration	416	842
Interest	117	604
Depreciation and depletion	1,964	1,344
Write-down of inventory	1,052	–
Write-down of marketable securities	3	572
Write-down of mining plant and equipment	3,882	–
Write-down of mineral properties	2,746	–
Loss (gain) on foreign exchange translation	256	99
	16,004	7,438
Loss for the period	13,097	4,766
Deficit, beginning of period	31,175	9,888
Deficit, end of period	$ 44,272	$ 14,654
Loss per share	$ 0.18	$ 0.06
Weighted average number of common shares outstanding	74,006,780	74,006,780

No Stock Exchange has approved or disapproved the information contained herein.

NORTHERN ORION EXPLORATIONS LTD.

Consolidated Statements of Cash Flows
(expressed in thousands of dollars)

Nine month periods ended September 30, 1999 and 1998

	1999 (unaudited)	1998 (unaudited) (restated-note 1)
Cash flows from (used in) operating activities:		
Loss for the period	$ (13,097)	$ (4,766)
Items not involving cash:		
Depreciation and depletion	1,964	1,344
Writedown of mineral properties	2,746	–
Writedown of mine plant and equipment	3,882	–
Writedown of marketable securities	3	572
	(4,502)	(2,850)
Decrease (increase) in accounts receivable	3,888	4,157
Decrease (increase) in inventories	2,201	(3,488)
Decrease (increase) in prepaid expenses	14	(436)
Increase (decrease) in accounts payable and accrued liabilities	(1,170)	2,907
	431	290
Cash flows from (used in) financing activities:		
Due to related parties	3,373	(4,033)
Long-term debt	(5,801)	(5,536)
Proceeds from issue of convertible debenture	–	16,863
Capitalized interest on convertible debenture	1,069	–
Guarantee to related party	7,416	–
	6,057	7,294
Cash flows from (used in) investing activities:		
Mineral properties	(6,397)	(11,498)
Plant and equipment	–	(1,325)
Other long-term assets	(32)	(109)
	(6,429)	(12,932)
Net increase (decrease) in cash and short-term investments	59	(5,348)
Cash and short-term investments, beginning of period	542	6,359
Cash and short-term investments, end of period	$ 601	$ 1,011

Note 1: Comparative figures for the Consolidated Statements of Cash Flows have been restated to reflect the retroactive application of the new guidance for the statement of cash flows by the Canadian Institute of Chartered Accountants which the Company adopted effective January 1, 1999.

No Stock Exchange has approved or disapproved the information contained herein.

No Stock Exchange has approved or disapproved the information contained herein.

02 APR

NORTHERN ORION
EXPLORATIONS LTD.

311 West First Street, North Vancouver, B.C. Canada V7M 1B5
Tel: (604) 980-0573 Toll Free: 1-800-811-4447 Fax: (604) 985-2189

November 22, 1999 **NEWS RELEASE 99 – 10** NNO – TSE, VSE

John K. Burns, the Chairman of the Board of Directors of Northern Orion Explorations Ltd., (the Company) is pleased to announce (subject to TSE approval) the appointment of Mr. Stephen Wilkinson as President and Chief Executive Officer of Northern Orion. Mr. Wilkinson has been a director the the Company since June of this year and is a member of the Strategic Action Committee of the Board. "Mr. Wilkinson brings significant skills and focus to the management of Northern Orion," said Mr. Burns. "Northern Orion is very pleased to have someone of Mr.Wilkinson's caliber at the helm and I look forward to working closely with him."

Mr. Wilkinson's appointment is part of Northern Orion's efforts to create a smaller management group that will be focussed exclusively on the Company's business. The new management group has been reduced to Mr. Wilkinson and Mr. David Cohen, who will continue as Senior Vice president of the Company. All other officers and employees shared with Miramar Mining Corporation have stepped down from their positions with the Company as part of this reorganization. "" am pleased to see a considerably slimmed down management and organizational structure more reflective of Northern Orion's current level of activities and its financial position." said Mr. Burns. Mr. Burns would also like to thank Mr. Tony Walsh and his management team for their contribution over the last eight months.

The Company also announces Mr. Lyall Knott's retirement from the Board of Directors. Mr. Knot has been a director of Northern Orion since 1994 and has made valuable contributions to the Company. His presence on the Board will be missed.

Mr. Wilkinson will work with the Stategic Action Committee of the Board to directo Northern Orion" efforts to inititate a restruuring in the company by the end of the first quarter of 2000. The Strategic Action Committee has been activley evaluativing alternatives to maximize shareholder value by accessing funding and advancing the Company's core properties.

Northern Orion is a junior company focused on the exploration and development of copper projects in Latin America. The company has one of the largest undeveloped resource bases within the junior mining sector, with net attributable resources of 8.5 billion lbs of copper and 5.5 million oz of gold. successful development of its projects could see Northern Orion become and important producer of copper.

No Stock Exchange has approved or disapproved the information contained herein.

PACIFIC CORPORATE TRUST COMPANY
Suite 830 - 625 Howe Street
Vancouver, B.C. V6C 3B8

Telephone: (604) 689 - 9853
Fax: (604) 689 - 8144

02 DEC -1 AM 8:01

November 25, 1999

B.C. Securities Commission
Executive Director
2nd Floor, 865 Hornby Street
Vancouver, B.C., V6Z 2H4

Dear Sirs:

RE: NORTHERN ORION EXPLORATIONS LTD
MAILING ON NOVEMBER 25, 1999
INTERIM FINANCIAL STATEMENT
FOR THE THIRD PERIOD ENDING SEPTEMBER 30, 1999

We confirm that on the above date, the material issued by the subject Company was forwarded by prepaid first class mail to all persons on the Supplementary Mailing List maintained at our office.

Yours truly,

PACIFIC CORPORATE TRUST COMPANY

Lisa Scotland
LS/jo

cc: Alberta Securities Commission
cc: Director of Corporations - PEI
cc: Manitoba Securities Commission
cc: Nova Scotia Securities Commission
cc: Office of the Administrator of Securities - NB
cc: Ontario Securities Commission
cc: Quebec Securities Commission
cc: Registrar of Securities - NT
cc: Registrar of Securities - YT
cc: Saskatchewan Securities Commission
cc: Securities Division - Department of Justice - NF
cc: Northern Orion Explorations Ltd
cc: Owen Bird
cc: KPMG Peat Marwick Thorne.

NORTHERN ORION
EXPLORATIONS LTD.

311 West First Street, North Vancouver, B.C. Canada V7M 1B5
Tel: (604) 980-0573 Toll Free: 1-800-811-4447 Fax: (604) 985-2189

THIRD QUARTER REPORT NNO – TSE, VSE

Northern Orion Reports Financial Results for the nine months ending September 30, 1999

For the nine months ended September 30, 1999, Northern Orion Explorations Ltd. ("Northern Orion" or the "Company") reports a loss of $13,097,000 or $0.18 per share compared to a loss of $4,766,000 or $0.06 per share in the same period in 1998. Included in the loss for the period are writedowns of $7,683,000. For the quarter, Northern Orion reports a loss of $7,581,000 or $0.10 per share compared to $2,098,000 or $0.03 per share for the same quarter in 1998. The loss is attributable to lower than expected production at Mantua and writedowns on mineral properties.

Mantua Gold Operations, Cuba

The Mantua project is held in a 50-50 joint venture with Geominera SA, a Cuban state owned company. During the nine months, the Mantua gold leach facility produced 14,764 ounces of gold (Northern Orion's share 7,382 ounces). Direct cash operating costs before writedowns and inventory adjustments were approximately US$244 per ounce. Year to date, the realized gold selling price on Northern Orion's 50% share of gold production from Mantua has averaged US$297 per ounce versus an average spot price of US$273 per ounce due to the positive results of gold hedging operations by the Company. Gold mining operations ceased in September as it was determined that further leaching was not economic at current gold prices. With the cessation of gold production the remaining gold assets at Mantua have been written down to their net salvage value. The next stage of development for the Mantua project is the completion of a feasibility study respecting the copper phase. Northern Orion recently completed a pre-feasibility study that indicated a mineable resource of 7.5 million tonnes containing approximately 450 million pounds of recoverable copper. The Strategic Action Committee continues to evaluate potential alternative sources of funding to complete the feasibility study.

Agua Rica Project, Argentina

Work at Agua Rica continues under a provisional budget agreed to by the joint venture. Work during the first nine months has included bulk sampling, pilot scale metallurgical testing and reviews of expected capital and operating costs for the project. The joint venture is currently developing resource models that will provide the basis for mine planning and baseline environmental monitoring continues. Agua Rica is a large, moderate grade copper-gold porphyry property and is owned by Northern Orion (30%) and BHP Copper (70%).

Strategic Action Committee

The Board of Northern Orion has established a Strategic Action Committee consisting of two independent directors and the president to evaluate alternatives for maximizing shareholder value from the Company's excellent portfolio of copper prospects. In the meantime, the Company continues with its commitment to exploration, focusing expenditures on the Company's core assets such as Agua Rica and Mantua. All non-discretionary expenditures are being carefully controlled to ensure that the Company preserves resources for value creating activities.

In November of 1999 the existing management of Northern Orion stepped down to make way for a scaled down management team. The newly appointed President, Stephen Wilkinson and the Senior Vice President, David Cohen will work in conjunction with the Board and the Strategic Action Committee to determine the best future course for the Company.

Year 2000

The Company's Year 2000 program is progressing in accordance with our plan. The program, which was commenced in early 1998, has progressed well with testing and required renovation work on critical systems substantially complete. As part of our preparations, independent consultants were engaged to assist in inventory development, testing and remediation efforts.

With internal systems now in compliance, the Company is focused on managing the exposure to the Year 2000 preparedness of third parties - suppliers and service providers. Key in our efforts will be continued communication with critical suppliers and service providers to monitor their readiness.

Contingency planning is substantially completed. While the Company has performed extensive efforts to prepare for the Year 2000, some uncertainty remains that events outside of the Company's control may impact operations

NORTHERN ORION EXPLORATIONS LTD.

Consolidated Balance Sheets
(expressed in thousands of dollars)

September 30, 1999 and December 31, 1998

	1999 (unaudited)	1998
Assets		
Current assets:		
Cash and short-term investments	$ 601	$ 542
Marketable securities	–	3
Accounts receivable	168	4,056
Inventory	–	2,201
Prepaid expenses	88	102
	857	6,904
Plant and equipment	2,942	8,788
Mineral properties and deferred development	116,988	113,397
Other assets	2,354	2,322
	$ 123,141	$ 131,411
Liabilities and Shareholders' Equity		
Current liabilities:		
Accounts payable and accrued liabilities	$ 1,906	$ 3,076
Current portion of long-term debt	–	5,801
	1,906	8,877
Payables to related parties	6,969	3,596
Guarantee to related party	17,536	10,120
Convertible debenture	18,976	17,907
Reclamation liability	26	86
	45,413	40,586
Shareholders' equity:		
Share capital	122,000	122,000
Deficit	(44,272)	(31,175)
	77,728	90,825
	$ 123,141	$ 131,411

NORTHERN ORION EXPLORATIONS LTD.

Consolidated Statements of Operations and Deficit
(expressed in thousands of dollars except per share amounts)

Nine month periods ended September 30, 1999 and 1998

	1999 (unaudited)	1998 (unaudited)
Revenue:		
Metal sales	$ 2,893	$ 2,631
Interest and other income	14	41
	2,907	2,672
Expenses:		
Cost of sales	3,734	2,087
Management fee	780	1,890
Terminations and severance	1,054	–
General and administration	416	842
Interest	117	604
Depreciation and depletion	1,964	1,344
Write-down of inventory	1,052	–
Write-down of marketable securities	3	572
Write-down of mining plant and equipment	3,882	–
Write-down of mineral properties	2,746	–
Loss (gain) on foreign exchange translation	256	99
	16,004	7,438
Loss for the period	13,097	4,766
Deficit, beginning of period	31,175	9,888
Deficit, end of period	$ 44,272	$ 14,654
Loss per share	$ 0.18	$ 0.06
Weighted average number of common shares outstanding	74,006,780	74,006,780

NORTHERN ORION EXPLORATIONS LTD.

Consolidated Statements of Cash Flows
(expressed in thousands of dollars)

Nine month periods ended September 30, 1999 and 1998

	1999 (unaudited)	1998 (unaudited) (restated-note 1)
Cash flows from (used in) operating activities:		
Loss for the period	$ (13,097)	$ (4,766)
Items not involving cash:		
Depreciation and depletion	1,964	1,344
Writedown of mineral properties	2,746	–
Writedown of mine plant and equipment	3,882	–
Writedown of marketable securities	3	572
	(4,502)	(2,850)
Decrease (increase) in accounts receivable	3,888	4,157
Decrease (increase) in inventories	2,201	(3,488)
Decrease (increase) in prepaid expenses	14	(436)
Increase (decrease) in accounts payable and accrued liabilities	(1,170)	2,907
	431	290
Cash flows from (used in) financing activities:		
Due to related parties	3,373	(4,033)
Long-term debt	(5,801)	(5,536)
Proceeds from issue of convertible debenture	–	16,863
Capitalized interest on convertible debenture	1,069	–
Guarantee to related party	7,416	–
	6,057	7,294
Cash flows from (used in) investing activities:		
Mineral properties	(6,397)	(11,498)
Plant and equipment	–	(1,325)
Other long-term assets	(32)	(109)
	(6,429)	(12,932)
Net increase (decrease) in cash and short-term investments	59	(5,348)
Cash and short-term investments, beginning of period	542	6,359
Cash and short-term investments, end of period	$ 601	$ 1,011

Note 1: Comparative figures for the Consolidated Statements of Cash Flows have been restated to reflect the retroactive application of the new guidance for the statement of cash flows by the Canadian Institute of Chartered Accountants which the Company adopted effective January 1, 1999.

02 SEP -1 P 12:03

FORM 27

SECURITIES ACT

MATERIAL CHANGE REPORT

ITEM 1 Reporting Issuer

Northern Orion Explorations Ltd.
(the "Company")
311 West First Street
North Vancouver, British Columbia
V7M 1B5
(604) 980-0573

ITEM 2 Date of Material Change

November 22, 1999

ITEM 3 Press Release

November 22, 1999
North Vancouver, British Columbia

ITEM 4 Summary of Material Change

The Company announces the appointment of Mr. Stephen Wilkinson as President and Chief Executive Officer of the Company, subject to TSE approval. Mr. Stephen Wilkinson has been a director of the Company since June of this year and is a member of the Strategic Action Committee of the Board.

The Company also announces the retirement of Mr. Lyall Knott as a director of the Company.

ITEM 5 Full Description of Material Change

See attached Schedule "A"

ITEM 6 Reliance on Section 85(2) of the Act

N/A

ITEM 7 Omitted Information

N/A

ITEM 8 Senior Officers

Anthony Walsh, Vice-President, Finance
(604) 980-0573

ITEM 9 Statement of Senior Officer

The foregoing accurately discloses the material change referred to herein.

DATED at North Vancouver, British Columbia, this_____ day of November, 1999.

"A. David Long"

A. David Long,
Corporate Secretary and General Counsel

02 APR -1 AM 8:11

SCHEDULE "A"

NORTHERN ORION
EXPLORATIONS LTD.

311 West First Street, North Vancouver, B.C. Canada V7M 1B5
Tel: (604) 980-0573 Toll Free: 1-800-811-4447 Fax: (604) 985-2189

November 22, 1999 **NEWS RELEASE 99 – 10** NNO – TSE, VSE

John K. Burns, the Chairman of the Board of Directors of Northern Orion Explorations Ltd., (the Company) is pleased to announce (subject to TSE approval) the appointment of Mr. Stephen Wilkinson as President and Chief Executive Officer of Northern Orion. Mr. Wilkinson has been a director the the Company since June of this year and is a member of the Strategic Action Committee of the Board. 'Mr. Wilkinson brings significant skills and focus to the management of Northern Orion,"said Mr. Burns. 'Northern Orion is very pleased to have someone of Mr.Wilkinsons caliber at the helm and I look forward to working closely with him."

Mr. Wilkinsons appointment is part of Northern Orions efforts to create a smaller management group that will be focussed exclusively on the Companys business. The new management group has been reduced to Mr. Wilkinson and Mr. David Cohen, who will continue as Senior Vice president of the Company. All other officers and employees shared with Miramar Mining Corporation have stepped down from their positions with the Company as part of this reorganization. ""am pleased to see a considerably slimmed down management and organizational structure more reflective of Northern Orions current level of activities and its financial position."said Mr. Burns. Mr. Burns would also like to thank Mr. Tony Walsh and his management team for their contribution over the last eight months.

The Company also announces Mr. Lyall Knotts retirement from the Board of Directors. Mr. Knot has been a director of Northern Orion since 1994 and has made valuable contributions to the Company. His presence on the Board will be missed.

Mr. Wilkinson will work with the Stategic Action Committee of the Board to directo Northern Orion"efforts to inititate a restruuring in the company by the end of the first quarter of 2000. The Strategic Action Committee has been activley evaluativing alternatives to maximize shareholder value by accessing funding and advancing the Companys core properties.

Northern Orion is a junior company focused on the exploration and development of copper projects in Latin America. The company has one of the largest undeveloped resource bases within the junior mining sector, with net attributable resources of 8.5 billiolbs of copper and 5.5 million oz of gold. successful development of its projects could see Northern Orion become and important producer of copper.

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December 8, 1999 **NEWS RELEASE 99-12** **NNO – TSE, CDNX**

NORTHERN ORION ANNOUNCES DEBT SETTLEMENT AND FINANCING WITH MIRAMAR MINING CORPORATION

Northern Orion Explorations Ltd. is pleased to announce an agreement in principle for debt settlement and financing with its major shareholder, Miramar Mining Corporation. As of September 30, Northern Orion owed Miramar a total of $43.5 million: $19.0 under a Convertible Debenture, $17.4 million used for the development of the Mantua project and $7.1 million in additional borrowings.

Under the terms of the agreement in principle, Northern Orion will be reducing its indebtedness to Miramar by approximately $22.5 million and will receive additional funding in the amount of $2.6 million. The agreement calls for the debt to be settled in part through an exchange for Royalty & Sales Proceeds Interest in its mining properties. The additional borrowings will be settled with part of the debt exchanged for shares in Northern Orion and the remainder is to be secured by a medium-term note. The Convertible Debenture will remain in place.

The independent directors of each company have approved this agreement in principle. The general terms of the agreement are outlined below and are subject to the execution of the formal agreements, final approval by the independent directors of each company and by regulatory authorities. "This is a good transaction for Northern Orion and allows us to move forward in our efforts to maximize value for all of our shareholders, " said Stephen Wilkinson, Northern Orion's President and CEO.

Debt for Royalty & Sales Proceeds Interest

Debt in the amount of $18.5 million will be exchanged for a royalty & sales proceeds interest in the Company's mining assets. The royalty is to be comprised of a 2.5% Net Smelter Royalty (NSR) in the Mantua copper project in Cuba and a cash flow royalty equivalent to a 2.5% NSR in any production from any of the Company's other mining properties. In addition, if Northern Orion sells any of its mining assets, it will repay to Miramar the amount owing under the Convertible Debenture, and thereafter 50% of the net proceeds of the sale will be applied to the balance of the debt.

Debt for Equity

Northern Orion will issue to Miramar 15 million common shares to settle of $4.5 million of debt at a price of $0.30 per share which represents a substantial premium to the recent trading range for Northern Orion shares. Following this debt settlement, Miramar

will hold approximately 55.6 million common shares of Northern Orion, representing 66% of the issued and outstanding shares of the Company.

Debt for Promissory Note

Northern Orion will secure the remainder of the additional debt by executing and delivering to Miramar a promissory note in the amount of $2.0 million. The note together with accumulated interest will be due on demand after June 30, 2001. The interest rate will be set at approximately 2% over prime with interest calculated twice annually and added to the principal. In addition to standard commercial loan terms, Northern Orion will be required to maintain $1,000,000 of working capital and this level of working capital will be tested monthly, commencing March 31, 2000. After March 31, 2000, should Northern Orion not meet the required working capital and have no other means of financing, this could constitute a default causing Miramar to accelerate the payment of the Promissory Note and of the Convertible Debenture.

Additional Funding

The additional funds are to be advanced to Northern Orion by Miramar in an amount of $2.6 million. The funds will be firstly utilized to settle the outstanding current third party liabilities and secondly to provide working capital. Subsequently, Northern Orion's working capital should be about $1.4 million on completion of this transaction. The additional funds will be added to the principal amount of the Convertible Debenture. As of September 30 1999, the principal amount of the debenture stood at $19.0 million and will be approximately $21.6 million subsequent to this transaction. The additional funds added into the Convertible Debenture will not be convertible into common shares of Northern Orion.

"Northern Orion acknowledges Miramar's forbearance on the current outstanding debt. The conversion of the debt into a combination of a royalty interest, equity and additional long-term indebtedness removes a lot of pressure from Northern Orion's balance sheet," said Mr. Wilkinson, President of Northern Orion. "The provision of additional funding allows the Company to have the time to continue it's restructuring and to identify alternative sources of funding to ensure it's long-term future," he said. Alternatives under consideration include possible financing, joint ventures and corporate transactions.

Northern Orion is a junior company focused on the exploration and development of copper projects in Latin America. The Company has one of the largest undeveloped resource bases of the junior mining sector, with net attributable resources of 8.5 billion pounds of copper and 5.5 million ounces of gold.

For further information contact:
Stephen Wilkinson
President & C.E.O.
NORTHERN ORION EXPLORATIONS LTD
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Email: info@northernorion.com

NORTHERN ORION
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February 22, 2000 **NEWS RELEASE 00-01** **NNO – TSE**
NNO - CDNX

MR. NORMAN ANDERSON JOINS NORTHERN ORION'S BOARD OF DIRECTORS

Northern Orion Explorations Ltd. is pleased to announce that Mr. Norman Anderson (P.Eng.) has joined its Board of Directors. Mr. Anderson brings to the company a wealth of knowledge and experience gained through a career in the mining industry spanning nearly fifty years. Rising through the ranks, Mr. Anderson began his career with Cominco Limited in 1953, advancing from engineering to management. In 1980, he was elected Chairman and CEO of Cominco and held that position until taking early retirement in 1986. Mr. Anderson has also held positions as Vice President with AMAX Inc., and as Chairman of International Corona Corporation. In addition, Mr. Anderson is currently a director of Homestake Mining Company, Minas Beunaventura S.A. (Peru), Solv-Ex Corporation and The Toronto-Dominion Bank, and is active in his consulting practice undertaking due diligence and evaluations for financial institutions and mining companies.

"Mr. Anderson is a welcome addition to the Board of Directors and considerably strengthens the Board's depth in terms of technical expertise and commercial aspects of the mining industry," said Stephen Wilkinson, Northern Orion's President and CEO. "We are looking forward to working with him and receiving the benefit of his advice while advancing the company's portfolio of advanced

Northern Orion also announces the retirement from the Board of Mr. Christopher Pollard. Chris Pollard has served the company as a director since 1994. The company appreciates and thanks Chris for his generous effort and contribution to the development of the company made over the past six years.

Also, the company granted to its officers and directors stock options to acquire a total of 5.9 million common shares exercisable at a price of $0.30, consistent with the company's stock option plan and being the closing price of the prev
trades plus 20%. Of the 5.9 million options, 3.2 million are subject to vesting at an average rate of 530,000-share purchase options per calendar quarter during the next six quarters. As of December 31, 1998, there were 8.2 million stock options outstanding. However, during 1999 the changes in management and directors have resulted in the cancellation of 7.1 million share purchase options. Consequently, Northern Orion has reduced its awarded options to 7.0 million. It

should be noted that the directors receive no other form of compensation from Northern Orion.

Northern Orion is a junior company focused on the exploration and development of copper projects in Latin America. The company has one of the largest undeveloped resource bases of the junior mining sector, with net attributable resources of 8.5 billion pounds of copper and 5.5 million ounces of gold.

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President & C.E.O.
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April 3, 2000 **NEWS RELEASE 00-02** **NNO – TSE & CDNX**

Northern Orion Explorations Reports Financial Results for the Year Ended December 31, 1999

Northern Orion announces its financial results for the fourth quarter and year ended December 31, 1999. For 1999, Northern Orion reports a loss of $18.2 million or $0.25 per share compared to a loss of $21.3 million or $0.29 per share for the same period in 1998. The loss reflects the completion of gold operations at the Mantua mine and the write-down of remaining gold assets and leach pad inventory of $4.8 million. In light of weak commodity prices and poor exploration results, the Company also recorded a write-down of $7.3 million with the release of certain mineral properties and related tax credits in Argentina.

For the fourth quarter, the Company reports a loss of $5.1 million or $0.07 per share that was principally the result of the write-down of the Los Petisos property and other minor properties in Argentina plus related tax credits amounting to $4.6 million, and general corporate overheads. This compares to the loss of $16.5 million or $0.23 per share for the fourth quarter of 1998 when the Company abandoned the Delita gold project in Cuba.

During 1999, the Mantua mine in Cuba produced 15,066 ounces (of which Northern Orion's share is 7,533 ounces). With mining suspended in the previous quarter, production was limited in the fourth quarter to the recovery of 302 ounces of gold.

Northern Orion has been successful in taking the steps necessary to reduce its level of exploration activity, in reducing overhead and eliminating discretionary expenditures. Cash out flow for general and administrative expenses was substantially reduced to $185,000 in the fourth quarter of 1999 as compared to $427,000 for the same period in 1998. Management is continuing to strive for further cost savings throughout the organization. This will allow the Company to conserve its resources and to focus its efforts on its highest priority projects, Agua Rica, San Jorge and Mantua.

Debt Settlement Agreement: Royalty and Proceeds Interest and Promissory Note

In December 1999, the Company reached an agreement to restructure and partially settle amounts owing to Miramar Mining Corporation ("Miramar") under a loan guarantee and other obligations. The attached financial statements reflect the terms of the restructuring and settlement agreement.

Under the agreement, the Company issued a royalty and net proceeds interest ('Proceeds Interest') entitling Miramar to receive the economic equivalent of a 2.5% net smelter return royalty on all of the Company's mining properties and interests to a total of approximately $18 million. Repayment of this amount limited to payments from the Proceeds Interest and a right to receive a portion of the proceeds from the sale of any of

the Company's mining interests.

Under the debt settlement agreement, the Company issued a promissory note to Miramar and capitalized certain amounts of other indebtedness to the convertible debenture issued to Miramar. No gain or loss was realized on this restructuring of amounts payable to Miramar. The promissory note is in the principal amount of $6.5 million and bears interest at bank prime plus 2%. It is due on demand after June 20, 2001. The note requires that the Company maintain a working capital of $1,000,000 as and from March 31, 2000. As the Company's financial statements were completed prior to receiving regulatory approval for the exchange of debt for equity relating to $4.5 million of the $6.5 million note, the issue of 15 million shares and the reduction in the principal amount owing under the note from $6.5 million to $2.0 million will be reflected in the financial statements for the first quarter of 2000.

Under the terms of the debt restructuring agreements, the Company is entitled to receive additional funds of $2.6 million from Miramar. The additional funds will be secured by the existing convertible debenture held by Miramar but carry no right of conversion into common shares of the Company. At December 31 1999, the Company has drawn $1.2 million of these additional funds. Had the remaining $1.4 million been drawn prior to year-end the Company's working capital would have been $1.2 million.

Outlook

Northern Orion is a junior company focused on the exploration and development of copper projects in Latin America. The company has one of the largest undeveloped resource bases of the junior mining sector, with net attributable resources of 8.5 billion pounds of copper and 5.5 million ounces of gold. Management is continuing to work toward developing Northern Orion as a significant copper producer based on its portfolio of advanced projects.

For further information contact:
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President & C.E.O.
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Email: info@northernorion.com

NORTHERN ORION EXPLORATIONS LTD.

Consolidated Balance Sheets
(expressed in thousands of dollars)

December 31, 1999 and 1998

	1999	1998
Assets		
Current assets:		
Cash	$ 314	$ 542
Marketable securities	–	3
Accounts receivable	347	4,056
Inventory	–	2,201
Prepaid expenses	37	102
	698	6,904
Plant and equipment	2,784	8,788
Mineral properties and deferred development	115,746	113,933
Other assets	37	1,786
	$ 119,265	$ 131,411
Liabilities and Shareholders' Equity		
Current liabilities:		
Accounts payable and accrued liabilities	$ 885	$ 3,076
Current portion of long-term debt	–	5,801
	885	8,877
Promissory note payable	6,500	–
Royalty and proceeds interest payable	17,987	–
Convertible debenture	21,169	17,907
Other long-term liabilities	66	13,802
	46,607	40,586
Shareholders' equity:		
Share capital	122,000	122,000
Deficit	(49,342)	(31,175)
	72,658	90,825
	$ 119,265	$ 131,411

NORTHERN ORION EXPLORATIONS LTD.

Consolidated Statements of Operations and Deficit
(expressed in thousands of dollars except per share amounts)

Years ended December 31, 1999 and 1998

	1999	1998
Revenue:		
Metal sales revenue	$ 2,957	$ 3,581
Interest and other income	30	48
	2,987	3,629
Expenses:		
Cost of sales	3,911	3,086
Depreciation and depletion	2,292	1,947
Management fees	861	2,190
General and administration	520	969
Terminations and severance	1,080	–
Interest	117	616
Loss (gain) on foreign exchange translation	89	(216)
Exploration	29	380
Write-down of marketable securities	3	572
Write-down of inventory	1,052	–
Write-down of mine plant, mineral properties and deferred development	9,440	15,372
Write-down of other assets	1,760	–
	21,154	24,916
Loss for the year	18,167	21,287
Deficit, beginning of year	31,175	9,888
Deficit, end of year	$ 49,342	$ 31,175
Loss per share	$ 0.25	$ 0.29
Weighted average number of common shares outstanding	74,006,780	74,006,780

NORTHERN ORION EXPLORATIONS LTD.

Consolidated Statements of Cash Flows
(expressed in thousands of dollars)

Years ended December 31, 1999 and 1998

	1999	1998
Cash provided by (used in):		
Operations:		
Loss for the year	$ (18,167)	$ (21,287)
Items not involving the use of cash:		
Depreciation and depletion	2,292	1,947
Write-down of marketable securities	3	572
Write-down of mine plant, mineral properties and deferred development	9,440	15,372
Write-down of other assets	1,760	–
Net change in non-cash working capital:		
Accounts receivable	3,709	5,017
Inventory	2,201	(2,149)
Prepaid expenses	65	(33)
Accounts payable and accrued liabilities	(2,191)	1,213
	(888)	652
Financing:		
Repayments to related parties	–	(15,652)
Advances from related parties	5,108	8,255
Guarantee to related party	1,683	1,782
Increase in long-term debt	(20)	572
Increase in convertible debenture	1,441	17,907
	8,212	12,864
Investments:		
Expenditures on:		
Plant and equipment	(42)	(2,955)
Mineral properties and deferred development	(7,499)	(16,307)
Other long-term assets	(11)	(71)
	(7,552)	(19,333)
Decrease in cash	(228)	(5,817)
Cash, beginning of year	542	6,359
Cash, end of year	$ 314	$ 542
Supplementary information:		
Income taxes paid	$ –	$ –
Interest paid	117	616
Non-cash transactions:		
Other long-term liabilities settled through issuance of other debt instruments	26,491	–
Reduction in long-term debt by Miramar payments under obligation under guarantee	5,801	8,338

MIRAMAR MINING CORPORATION

311 West First Street, North Vancouver, B.C. CANADA V7M 1B5
Tel: (604) 985-2572 Fax: (604) 980-0731 Toll Free: 1-800-663-8780

April 5, 2000

MAE - TSE
NEWS RELEASE 00-5 MAENF–OTC Bulletin Board

Miramar Reports Progress at Northern Orion, Debt Restructuring Completed

VANCOUVER – Miramar Mining Corporation and Northern Orion Explorations Ltd. announced today that the debt restructuring entered into in late 1999 has received all regulatory approvals and is complete. Under this restructuring, Northern Orion was required to maintain positive working capital of at least $1 million from March 31, 2000. As a result of the progress made by Northern Orion over the past three months, Miramar has further agreed to provide a waiver to Northern Orion extending the working capital requirement to June 15, 2000. No additional funding is involved in providing Northern Orion this waiver, although Northern Orion is still drawing funds under a $2.6 million facility previously provided as part of the debt restructuring arrangement and Northern Orion is pursuing alternate sources of funding.

"This agreement is providing Northern Orion with the means to evaluate options for developing as a separate company, independent from Miramar†," said Tony Walsh, President & CEO of Miramar. Over the past several months, new management has been put in place; the board of directors has been enhanced to provide for more independence and corporate affairs have been restructured to allow Northern Orion to function independently of Miramar. Overhead costs have been cut dramatically; cash outflows reduced to more appropriate levels and Northern Orion has focused its attention on bringing value to its three core assets†. These positive developments have been recognized by the market, where Northern Orion's share price has recovered from a low of $0.09 to a current range of $0.40 - $0.45 per share†.

"We are very encouraged with the steps taken by Northern Orion to date and have therefore agreed to give them more time to develop a future independent of Miramar's support†," said Mr. Walsh. "We believe there is significant value in Northern Orion's core properties and have been providing Northern Orion with the opportunity to locate additional sources of funding, whether that be through financing, partnerships or mergers†, to bring value to these assets." Northern Orion's three principal assets are its 30% interest in the very large Agua Rica porphyry copper-gold-molybdenum deposit in Argentina, a 50% interest in the high grade Mantua copper project in Cuba and the San Jorge copper project in Argentina.

As part of the previously announced restructuring, Northern Orion has issued to Miramar 15 million common shares to settle $4.5 million of debt. This has increased Miramar's share ownership to 55.6 million shares trading at approximately $0.40-0.45 per share, out of a total of 89.0 million shares issued, giving Miramar a 62.4% interest in Northern Orion. "Miramar is focused on developing value in the gold business and no longer sees Northern Orion as a core asset†. We are cooperating with Northern Orion in our efforts to realize value from our significant investment in Northern Orion†," said Mr. Walsh. "We believe that Northern Orion should be able to advance its portfolio of copper properties to the benefit of all shareholders and provide a return for Miramar's shareholders†."

- 30 -

†*This News Release contains forward-looking statements within the meaning of the United States Private Securities Litigation Reform Act of 1995 concerning the Company's plans for the support of Northern Orion Explorations Ltd and the execution of the debt settlement agreement. These forward-looking statements are subject to a variety of risks and uncertainties which could cause actual events or results to differ materially from those reflected in this forward-looking statement, including, without limitation, risks and uncertainties relating to fluctuating precious and base metals prices; or other unanticipated difficulties with or interruptions in the course of business for Northern Orion, the possibility of unexpected costs and expenses relating to environmental issues, uncertainties relating to the need for government approvals and the cooperation of government agencies in regards to the environmental liabilities of the Giant mine and other risks and uncertainties, including those described in the Company's Annual Report on Form 20-F for the year ended December 31, 1998 and Reports on Form 6-K filed with the Securities and Exchange Commission.*

Certain forward looking statements in this report are indicated with an "†"

This news release has been authorized by the undersigned on behalf of Miramar Mining Corporation

For further information contact:
Tony Walsh
President & CEO
Miramar Mining Corporation
Tel: (604) 985-2572 Fax: (604) 980-0731
Toll Free: 1-800-663-8780
Email: info@miramarmining.com

SECTION 101 OF THE SECURITIES ACT (ONTARIO)
SECTION 141 OF THE SECURITIES ACT (ALBERTA)
SECTION111 OF THE SECURITIES ACT (BRITISH COLUMBIA)
SECTION93 OF THE SECURITIES ACT (MANITOBA)
SECTION 102 OF THE SECURITIES ACT (NEWFOUNDLAND)
SECTION 107 OF THE SECURITIES ACT (NOVA SCOTIA)
SECTION 147.11 OF THE SECURITIES ACT (QUEBEC)
SECTION 110 OF THE SECURITIES ACT (SASKATCHEWAN)

1. **Name of Offeror**

   MIRAMAR MINING CORPORATION

2. **The number of securities over which the Offeror and any person or company acting jointly or in concert with the Offeror acquired ownership or control or direction as a result of the transaction or occurrence giving rise to the report.**

   15,000,000 common shares in Northern Orion Explorations Ltd.

3. **The ownership of or control and direction by the Offeror and any person or company acting jointly or in concert with the Offeror over the securities immediately after the transaction or occurrence giving rise to the report.**

   55,572,350 common shares

4. **The name of the market wherein the transaction or occurrence took place.**

   N/A - private placement

5. **The purpose of the Offeror and any person or company acting jointly or in concert with the Offeror in effecting the transaction, including any future intention to increase the beneficial ownership, control or direction of the Offeror and any person or company acting jointly or in concert with the Offeror over the securities of the offeree issuer.**

   Settlement of $4.5 million of debt owing by Northern Orion Explorations Ltd. to Miramar Mining Corporation.

6. When applicable, a description of any change in any material facts set out in a previous report under Section 101 of the Securities Act (Ontario)

N/A

7. The names of persons or companies acting jointly or in concert with the Offeror in connection with the disclosure required above.

N/A

DATED at Vancouver, British Columbia, this 7th day of April, 2000.

MIRAMAR MINING CORPORATION

By: "David Long"

Name: David Long

STIKEMAN ELLIOTT

Barristers & Solicitors
Suite 1700, Park Place, 666 Burrard Street, Vancouver, Canada V6C 2X8
Tel: (604) 631-1300 Fax: (604) 681-1825 www.stikeman.com

Direct: (604) 631-1325
E-mail: nmcclure@van.stikeman.com

BY SEDAR

April 7, 2000
File No.: 062470-1003

Alberta Securities Commission
British Columbia Securities Commission
The Manitoba Securities Commission
Newfoundland Securities Commission
Ontario Securities Commission
Nova Scotia Securities Commission
Commission des valeurs mobilieres du Québec
Saskatchewan Securities Commission

Dear Sirs/Mesdames:

Re: Miramar Mining Corporation (the "Company")

Please find attached for filing the Company's Early Warning Report dated April 7, 2000 and News Release dated April 5, 2000.

If you have any questions, please do not hesitate to contact the writer.

Yours truly,

"Stuart MacKenzie"

Stuart MacKenzie

SAM/sks
encl.

062470-1003\53825.1

STIKEMAN ELLIOTT

Barristers & Solicitors
Suite 1700, Park Place, 666 Burrard Street, Vancouver, Canada V6C 2X8
Tel: (604) 631-1300 Fax: (604) 681-1825 www.stikeman.com

Direct: (604) 631-1325
E-mail: nmcclure@van.stikeman.com

BY SEDAR

April 7, 2000
File No.: 062470-1003

Alberta Securities Commission
British Columbia Securities Commission
The Manitoba Securities Commission
Newfoundland Securities Commission
Ontario Securities Commission
Nova Scotia Securities Commission
Commission des valeurs mobilieres du Québec
Saskatchewan Securities Commission

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Re: Miramar Mining Corporation (the "Company")

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If you have any questions, please do not hesitate to contact the writer.

Yours truly,

"Stuart MacKenzie"

Stuart MacKenzie

SAM/sks
encl.

062470-1003\53825.1

ADVANCE NOTICE IS HEREBY GIVEN that the Annual General Meeting of the members of NORTHERN ORION EXPLORATIONS LTD (the "Company") will be held at the Lonsdale Quay Hotel in North Vancouver, British Columbia, on Friday, the 12th day of June, 2000.

Written nominations for directors signed by members holding in the aggregate not less than 10% of the outstanding shares having the right to vote at the meeting of the Company may be submitted to the Registered Office of the Company, not less than thirty-five (35) days before the date of the meeting. A nomination must be accompanied by the nominee's full name, residential address, present principal occupation and principal employment during the past five years, number of shares held and if previously a director, the period(s) during which he or she served. Upon receipt of the notice and accompanying information, the Company will include the name of the nominee in the in the form of proxy and Information Circular sent by the management of the Company to the members of the Company.

A person may be disqualified from becoming or acting as a director by Section 114 of the Company Act (*British Columbia*). The Articles of the Company make no provisions as to the qualifications of a Director.

The registered office of the Company is at 10th Floor, 595 Howe Street, Vancouver, BC V6C 2T5.

DATED at North Vancouver, British Columbia, this 10th day of April, 2000.

BY ORDER OF THE BOARD
"STEPHEN WILKINSON"
PRESIDENT

PACIFIC CORPORATE TRUST COMPANY
Suite 830 - 625 Howe Street
Vancouver, B.C. V6C 3B8

Telephone: (604) 689-9853
Fax: (604) 689-8144

April 11, 2000

The B.C. Securities Commission
2nd Floor - 865 Hornby Street
Vancouver, B.C.
V6Z 2H4

Dear Sirs:

As per National Policy 41 requirements, including Addendum "A" to the Policy, please be advised of the following:

Company:	Northern Orion Explorations Ltd.
	(Cusip 66557D109)
Meeting:	Annual General Meeting
Record Date:	May 4, 2000
Meeting Date:	June 12, 2000

If you require further information, please contact:

"Lisa Scotland"

Lisa Scotland
Pacific Corporate Trust Company

cc: Alberta Securities Commission
cc: Manitoba Securities Commission
cc: New Brunswick Securities Commission
cc: Newfoundland Securities Commission
cc: Nova Scotia Securities Commission
cc: Ontario Securities Commission
cc: Toronto Stock Exchange
cc: P.E.I. Securities Commission
cc: Quebec Securities Commission
cc: Saskatchewan Securities Commission
cc: Northwest Territory
cc: Yukon Territory
cc: Canadian Venture Exchange

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02032-1

FORM 27

Material Change Report
Under:
Section 85(1) of the *Securities Act* (British Columbia)
Section 118(1) of the *Securities Act* (Alberta)
Section 75(2) of the *Securities Act* (Ontario)

Item 1 **Reporting Issuer**

Northern Orion Explorations Ltd.
311 West First Street
North Vancouver, British Columbia, V7M 1B5
Telephone: (604) 980-0573

Item 2 **Date of Material Change**

April 4, 2000

Item 3 **Press Release/Publication/Filing**

A press release providing notice of the material change was issued on December 8, 1999, and a further press release was issued April 5, 2000 (copy attached).

Item 4 **Summary of Material Change**

The Company and its major shareholder, Miramar Mining Corporation ("Miramar") have now concluded formal agreements intended (a) to restructure a portion of the Company's existing indebtedness to Miramar; (b) to convert a portion of such indebtedness into a royalty and sales proceeds interest in mineral properties held by the Company through subsidiaries; and (c) to provide the Company with working capital. The transactions subject to the agreements are "related party transactions" under OSC Policy 9.1 and OSC Proposed Rule 61-5.01. The transactions were reviewed by a special committee of the independent directors of the Company (the "Special Committee"), and the Special Committee determined that the terms of the transactions were fair and reasonable under the circumstances and the transactions are beneficial to and in the interests of the Company and its shareholders, including minority shareholders. The Special Committee also determined that in the circumstances the "financial hardship" exemption in sections 5.6(8) and 5.8(5) of Proposed Rule 61-5.01 would be applicable.

The effect of the Agreements is to reduce the Company's unsecured indebtedness to Miramar by approximately $22.5 million and to provide additional funding for the Company in an amount of approximately $2.6 million. The Company has issued Miramar 15,000,000 common shares at a deemed value of $0.30 per share to settle $4.5 million of indebtedness, which increases Miramar's holdings to approximately 55.6 million shares of the Company, representing approximately 66% of the issued

and outstanding shares. Debt in the amount of $18.5 million has been exchanged for a Royalty and Sales Proceeds interest in the Company's mineral property assets.

Item 5 Full Description of Material Change

(a) Description of the Transaction:

The Company and its subsidiaries have concluded agreements with the Company's principal shareholder, Miramar, to:

i) restructure a portion (approximately $2.0 million) of the Company's existing indebtedness to Miramar as secured by a debenture held by Miramar;

ii) exchange approximately $18.0 million in indebtedness owing to Miramar for a Royalty and Sales Proceeds interest in the Company's mining assets held through subsidiary companies;

iii) settle $4.5 million of debt owing to Miramar by issuance of shares in the capital of the Company at $0.30 per share;

iv) provide additional funding for Miramar to the Company in an amount of approximately $2.6 million to settle current third party liabilities and to provide working capital (approximately $1.4 million) to the Company.

The Royalty Interest held by Miramar will entitle Miramar to 2.5% of the net smelter returns, or the economic equivalent thereof, from production on any of the mining properties or interests held by the Company directly or through any of its subsidiaries including its Mantua project (Cuba) and its Agua Rica project (Argentina).

The Proceeds Interest will entitle Miramar to receive from the sale of any interest held directly or indirectly in

i) the Agua Rica project, 100% of the net sale proceeds up to the amount of the convertible debenture, of approximately $22.6 million and 50% thereafter; and

ii) any interests other than Agua Rica, 50% of the net sales proceeds up to $18.0 million less any amount paid to Miramar in excess of the convertible debenture.

The maximum amount payable to Miramar under the Proceeds Interest and the Royalty Interest, in aggregate will not exceed the amount of the Company's outstanding indebtedness to Miramar, following the restructuring outlined above.

Following the issuance of 15,000,000 additional shares to Miramar in settlement of $4.5 million in debt, Miramar holds approximately

55.6 million common shares of the Company, representing approximately 62.5% of the issued and outstanding shares of the Company.

The Company has executed and delivered to Miramar a promissory note in the amount of $2 million, bearing interest at prime plus 2% and due on demand after June 30, 2001.

The existing debenture held by Miramar has been amended as the principal amount secured is increased from $19 million to approximately $21.6 million. The additional funds added to the debenture will not be convertible into common shares of the Company.

On completion of these transactions, the Company now has approximately $1.4 million in working capital after payment of third party liabilities. In addition to standard commercial loan terms, the Company is required to maintain not less than $1 million in working capital, to be tested on a monthly basis, from June 15, 2000. A failure to meet this requirement could constitute a default under the security held by Miramar which would allow Miramar to accelerate payment of the promissory note and its convertible debenture.

(b) Reasons for the Transaction:

The Company was indebted to Miramar in an amount approximately of $43,480,473 as a consequence of funds advanced by Miramar to assist the Company in developing its mineral properties and for general corporate purposes. Miramar was also the majority shareholder in the Company, owning 40.6 million shares representing approximately 54.8% of the issued and outstanding share capital.

While the Company had a large undeveloped resource base in its mineral property holdings, it had no present ability to repay its indebtedness to Miramar, a large portion of which was due on demand.

The proposed transactions eliminate the Company's current liabilities and provide working capital to allow new management of the Company to pursue additional funding, joint venture opportunities and other corporate transactions with a view to maximizing shareholder value. If management is successful in its efforts to enhance shareholder value, Miramar will benefit through its substantial shareholding in the Company, and the minority shareholders of the Company also will benefit proportionately.

(c) Effect of the Transaction on Issuer's Business and Affairs:

The Transaction eliminates the Company's short-term indebtedness, provides the Company with working capital, and will allow the Company's new management an opportunity to continue restructuring efforts and pursue alternative sources of additional financing.

(d) Relevant History of the Subject Matter of the Transaction:

The Strategic Action Committee entered into negotiations with Miramar's management respecting the debt settlement in September 1999. On December 2, 1999, a term sheet outlining the settlement was signed and a press release regarding the settlement was made on December 8, 1999. On April 4, 2000 final closing of the agreements took place, following receipt of regulatory approvals and acceptances.

(e) Interest in the Transaction of Miramar Mining Corporation, Its Insiders, Associates and Affiliates and Any Other Related Party:

Insiders, Associates, Affiliates and other Related Parties of Miramar own a total of 2,971,559 Shares of Miramar and hold options to purchase an additional 97,600 Shares of Miramar. The same persons, together with Miramar, own a total of 40,213,850 Shares of the Company, and hold options to acquire an additional 1,265,000 Shares of the Company.

(f) Effect of the Transaction on Miramar Mining Corporation and Related Parties:

Miramar's equity interest in the Company has been substantially increased, and its debt position reduced. Miramar retains its existing security for its debt position, and will acquire additional security through pledges of shares of the Company's subsidiaries and guarantees by subsidiaries, as well as its Royalty and Proceeds Interests in the Company's mineral properties.

(g) Nature of Any Benefit to be Secured by Related Parties as a Result of the Transaction:

Insiders and Related Parties will not secure any benefit not shared proportionately by all shareholders of the Company.

(h) Review and Approval Process for the Transaction:

The proposed transactions were reviewed by a Special Committee of independent directors of the Company, who determined that the terms of the transactions were fair and reasonable under the circumstances and the transactions were beneficial to and in the interests of the Company and its shareholders, including minority shareholders. The Special Committee also determined that in the circumstances the "financial hardship" exemption in sections 5.6(8) and 5.8(5) of Proposed Rule 61-5.01 would be applicable. The proposed transactions have been accepted for filing by The Toronto Stock Exchange, and a "no action" letter was obtained from the Ontario Securities Commission with respect to the application of OSC Policy 9.1.

(i) Summary of Any Valuation in Respect of the Transaction:

No valuation will be carried out.

(j) Other Material Information Relevant to the Transaction:

There is no other relevant Material Information.

Item 6 Reliance on Confidentiality Provisions of the Securities Act

Not applicable.

Item 7 Omitted Information

Not applicable.

Item 8 Senior Officer

Contact: Stephen Wilkinson
Telephone: (604) 980-0573

Item 9 Statement of Senior Officer/Director

The foregoing accurately discloses the material change referred to in this report.

Dated at the City of Vancouver, in the Province of British Columbia, this 5th day of April, 2000.

NORTHERN ORION EXPLORATIONS LTD.

Per: "Stephen Wilkinson"
Stephen Wilkinson, President

IT IS AN OFFENCE FOR A PERSON TO MAKE A STATEMENT IN A DOCUMENT REQUIRED TO BE FILED OR FURNISHED UNDER THE ACT OR THIS REGULATION THAT, AT THE TIME AND IN THE LIGHT OF THE CIRCUMSTANCES UNDER WHICH IT IS MADE, IS A REPRESENTATION.

02-27-1

FORM 27

Material Change Report
Under:
Section 85(1) of the *Securities Act* (British Columbia)
Section 118(1) of the *Securities Act* (Alberta)
Section 75(2) of the *Securities Act* (Ontario)

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Northern Orion Explorations Ltd.
311 West First Street
North Vancouver, British Columbia, V7M 1B5
Telephone: (604) 980-0573

Item 2 **Date of Material Change**

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The effect of the Agreements is to reduce the Company's unsecured indebtedness to Miramar by approximately $22.5 million and to provide additional funding for the Company in an amount of approximately $2.6 million. The Company has issued Miramar 15,000,000 common shares at a deemed value of $0.30 per share to settle $4.5 million of indebtedness, which increases Miramar's holdings to approximately 55.6 million shares of the Company, representing approximately 66% of the issued

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i) the Agua Rica project, 100% of the net sale proceeds up to the amount of the convertible debenture, of approximately $22.6 million and 50% thereafter; and

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55.6 million common shares of the Company, representing approximately 62.5% of the issued and outstanding shares of the Company.

The Company has executed and delivered to Miramar a promissory note in the amount of $2 million, bearing interest at prime plus 2% and due on demand after June 30, 2001.

The existing debenture held by Miramar has been amended as the principal amount secured is increased from $19 million to approximately $21.6 million. The additional funds added to the debenture will not be convertible into common shares of the Company.

On completion of these transactions, the Company now has approximately $1.4 million in working capital after payment of third party liabilities. In addition to standard commercial loan terms, the Company is required to maintain not less than $1 million in working capital, to be tested on a monthly basis, from June 15, 2000. A failure to meet this requirement could constitute a default under the security held by Miramar which would allow Miramar to accelerate payment of the promissory note and its convertible debenture.

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The Company was indebted to Miramar in an amount approximately of $43,480,473 as a consequence of funds advanced by Miramar to assist the Company in developing its mineral properties and for general corporate purposes. Miramar was also the majority shareholder in the Company, owning 40.6 million shares representing approximately 54.8% of the issued and outstanding share capital.

While the Company had a large undeveloped resource base in its mineral property holdings, it had no present ability to repay its indebtedness to Miramar, a large portion of which was due on demand.

The proposed transactions eliminate the Company's current liabilities and provide working capital to allow new management of the Company to pursue additional funding, joint venture opportunities and other corporate transactions with a view to maximizing shareholder value. If management is successful in its efforts to enhance shareholder value, Miramar will benefit through its substantial shareholding in the Company, and the minority shareholders of the Company also will benefit proportionately.

(c) Effect of the Transaction on Issuer's Business and Affairs:

The Transaction eliminates the Company's short-term indebtedness, provides the Company with working capital, and will allow the Company's new management an opportunity to continue restructuring efforts and pursue alternative sources of additional financing.

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The Strategic Action Committee entered into negotiations with Miramar's management respecting the debt settlement in September 1999. On December 2, 1999, a term sheet outlining the settlement was signed and a press release regarding the settlement was made on December 8, 1999. On April 4, 2000 final closing of the agreements took place, following receipt of regulatory approvals and acceptances.

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(g) Nature of Any Benefit to be Secured by Related Parties as a Result of the Transaction:

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The proposed transactions were reviewed by a Special Committee of independent directors of the Company, who determined that the terms of the transactions were fair and reasonable under the circumstances and the transactions were beneficial to and in the interests of the Company and its shareholders, including minority shareholders. The Special Committee also determined that in the circumstances the "financial hardship" exemption in sections 5.6(8) and 5.8(5) of Proposed Rule 61-5.01 would be applicable. The proposed transactions have been accepted for filing by The Toronto Stock Exchange, and a "no action" letter was obtained from the Ontario Securities Commission with respect to the application of OSC Policy 9.1.

(i) Summary of Any Valuation in Respect of the Transaction:

No valuation will be carried out.

(j) Other Material Information Relevant to the Transaction:

There is no other relevant Material Information.

Item 6 Reliance on Confidentiality Provisions of the Securities Act

Not applicable.

Item 7 Omitted Information

Not applicable.

Item 8 Senior Officer

Contact: Stephen Wilkinson
Telephone: (604) 980-0573

Item 9 Statement of Senior Officer/Director

The foregoing accurately discloses the material change referred to in this report.

Dated at the City of Vancouver, in the Province of British Columbia, this 5th day of April, 2000.

NORTHERN ORION EXPLORATIONS LTD.

Per: "Stephen Wilkinson"
Stephen Wilkinson, President

IT IS AN OFFENCE FOR A PERSON TO MAKE A STATEMENT IN A DOCUMENT REQUIRED TO BE FILED OR FURNISHED UNDER THE ACT OR THIS REGULATION THAT, AT THE TIME AND IN THE LIGHT OF THE CIRCUMSTANCES UNDER WHICH IT IS MADE, IS A REPRESENTATION.

NORTHERN ORION
EXPLORATIONS LTD.

311 West First Street, North Vancouver, B.C. V7M 1B5
Tel: (604) 980-0573 Fax: (604) 980-0731 Toll Free: 1-800-811-4447

April 10, 2000

BY TELECOPIER (605-2729)

The Province
Granville Square Flagship
200 Granville Street Suite 1
Vancouver BC
V6N 3C3

Attention: Legal Notices

Dear Sirs:

Re: Notice for the Annual General Meeting of Northern Orion Explorations Ltd.

We enclose an Advance Notice of Annual General Meeting for the Company. Please publish this Notice once in the Legal Notices Section of The Province as soon as possible but in any event on or before April 14, 2000. We would like it to run using minimum space.

Please send your account to the attention of the writer. If you have any questions, contact the writer at your convenience.

Yours truly,
Northern Orion Explorations Ltd.,

Per: Stephen Wilkinson,
President & CEO

Enclosure
c.c. Canadian Venture Exchange
c.c. British Columbia Securities Commission
c.c. DuMoulin Black
c.c. Pacific Corporate Trust Company

* Please DO NOT publish notice on a Sunday, if applicable.

NORTHERN ORION
EXPLORATIONS LTD.

311 West First Street, North Vancouver, B.C. V7M 1B5
Tel: (604) 980-0573 Fax: (604) 980-0731

April 6, 2000 **NEWS RELEASE 00-3** **NNO – TSE & CDNX**

Positive Progress for Northern Orion, Debt Restructuring Completed

VANCOUVER -- Northern Orion Explorations Ltd. is pleased to announce that the debt restructuring between Northern Orion and Miramar Mining Corporation has received all regulatory approvals and closed April 4, 2000. The agreement in principal that governed the final agreements was previously announced in December 1999.

Under this restructuring for amounts owed to Miramar, Northern Orion has:

- Exchanged approximately $18.0 million in indebtedness owing to Miramar for a Royalty and Sales Proceeds interest in the Company's mining assets held through subsidiary companies;
- Settled $4.5 million of debt owing to Miramar by issuing 15 million shares in the capital of the Company at $0.30 per share ;
- Arranged for $2.6 million of additional funding secured by the exisiting $17.5 million convertible debenture; and,
- Issued a promissory note in the amount of $2 million to Miramar for which Northern Orion is required to maintain working capital of at least $1 million from June 15, 2000.

Over the past several months, new management has been put in place and the board of directors has been enhanced to provide for greater depth with respect to the business of mining, exploration and development. Northern Orion's affairs have been restructured to allow Northern Orion to act independently of Miramar. Overhead costs have been cut dramatically, cash outflows have been significantly reduced and Northern Orion has focused its attention on bringing value to its three core assets. These positive developments have been recognized by the market, where Northern Orion's share price has substantially recovered from a low of $0. 09.

In a separate Miramar news release, Mr. Tony Walsh, President & CEO of Miramar said "We are encouraged with the steps taken by Northern Orion to date and have therefore agreed to give them more time to develop a future independent of Miramar's support. We believe there is significant value in Northern Orion's core properties and have been providing Northern Orion with the opportunity to locate additional sources of funding, whether that be through financing, partnerships or mergers, to bring value to these assets." Northern Orion's three principal assets are its 30% interest in the very large Agua Rica porphyry copper-gold-molybdenum deposit in Argentina, a 50% interest in the high-grade Mantua copper project in Cuba and the San Jorge copper pro ject in Argentina.

Through the restructuring, Miramar has increased its share ownership to 55.6 million shares, out of a total of 89.0 million shares issued, giving Miramar a 62.4% interest in Northern Orion. "Miramar is clearly focused on developing value in the gold business and no longer sees Northern Orion as a core asset. We are cooperating with Northern Orion in our efforts to realize value from our significant investment in Northern Orion," said Mr. Walsh. "We believe that Northern Orion should be able to advance its exciting portfolio of copper properties, to the benefit of all shareholders and provide a return for Miramar shareholders."

Northern Orion is a junior company focused on the exploration and development of copper projects in Latin America. The company has one of the largest undeveloped resource bases of the junior mining sector, with attributable resources of 9.0 billion pounds of copper and 5.0 million ounces of gold. Management is continuing to work toward developing Northern Orion as a significant copper producer based on its portfolio of advanced projects.

For further information contact:
Stephen Wilkinson
President & CEO
NORTHERN ORION EXPLORATIONS LTD
Tel: (604) 980-0573 Fax: (604) 980-0731
Email: info@northernorion.com

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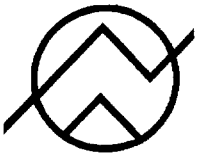

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02-33-1 07827

FORM 27

Material Change Report
Under:
Section 85(1) of the *Securities Act* (British Columbia)
Section 118(1) of the *Securities Act* (Alberta)
Section 75(2) of the *Securities Act* (Ontario)

Item 1 **Reporting Issuer**

Northern Orion Explorations Ltd.
311 West First Street
North Vancouver, British Columbia, V7M 1B5
Telephone: (604) 980-0573

Item 2 **Date of Material Change**

April 4, 2000

Item 3 **Press Release/Publication/Filing**

A press release providing notice of the material change was issued on December 8, 1999, and a further press release was issued April 6, 2000 (copy attached).

Item 4 **Summary of Material Change**

The Company and its major shareholder, Miramar Mining Corporation ("Miramar") have now concluded formal agreements intended (a) to restructure a portion of the Company's existing indebtedness to Miramar; (b) to convert a portion of such indebtedness into a royalty and sales proceeds interest in mineral properties held by the Company through subsidiaries; and (c) to provide the Company with working capital. The transactions subject to the agreements are "related party transactions" under OSC Policy 9.1 and OSC Proposed Rule 61-5.01. The transactions were reviewed by a special committee of the independent directors of the Company (the "Special Committee"), and the Special Committee determined that the terms of the transactions were fair and reasonable under the circumstances and the transactions would be beneficial to and in the interests of the Company and its shareholders, including minority shareholders. The Special Committee also determined that in the circumstances the "financial hardship" exemption in sections 5.6(8) and 5.8(5) of Proposed Rule 61-5.01 would be applicable.

The effect of the Agreements is to reduce the Company's unsecured indebtedness to Miramar by approximately $22.5 million and to provide additional funding for the Company in an amount of approximately $2.6 million. The Company has issued Miramar 15,000,000 common shares at a deemed value of $0.30 per share to settle $4.5 million of indebtedness, which increases Miramar's holdings to approximately 55.6 million shares of the Company, representing approximately

62.4% of the issued and outstanding shares. Debt in the amount of $18.5 million has been exchanged for a Royalty and Sales Proceeds interest in the Company's mineral property assets.

Item 5 Full Description of Material Change

(a) Description of the Transaction

The Company and its subsidiaries have concluded agreements with the Company's principal shareholder, Miramar, to:

i) restructure a portion (approximately $2.0 million) of the Company's existing indebtedness to Miramar as secured by a debenture held by Miramar;

ii) exchange approximately $18.0 million in indebtedness owing to Miramar for a Royalty and Sales Proceeds interest in the Company's mining assets held through subsidiary companies;

iii) settle $4.5 million of debt owing to Miramar by issuance of shares in the capital of the Company at $0.30 per share;

iv) provide additional funding for Miramar to the Company in an amount of approximately $2.6 million to settle current third party liabilities and to provide working capital (approximately $1.4 million) to the Company.

The Royalty Interest held by Miramar will entitle Miramar to 2.5% of the net smelter returns, or the economic equivalent thereof, from production on any of the mining properties or interests held by the Company directly or through any of its subsidiaries including its Mantua project (Cuba) and its Agua Rica project (Argentina).

The Proceeds Interest will entitle Miramar to receive from the sale of any interest held directly or indirectly in

i) the Agua Rica project, 100% of the net sale proceeds up to the amount of the convertible debenture, of approximately $22.6 million and 50% thereafter; and

ii) any interests other than Agua Rica, 50% of the net sales proceeds up to $18.0 million less any amount paid to Miramar in excess of the convertible debenture.

The maximum amount payable to Miramar under the Proceeds Interest and the Royalty Interest, in aggregate will not exceed the amount of the Company's outstanding indebtedness to Miramar, following the restructuring outlined above.

Following the issuance of 15,000,000 additional shares to Miramar in settlement of $4.5 million in debt, Miramar holds approximately 55.6 million common shares of the Company, representing approximately 62.4% of the issued and outstanding shares of the Company.

The Company has executed and delivered to Miramar a promissory note in the amount of $2 million, bearing interest at prime plus 2% and due on demand after June 30, 2001.

The existing debenture held by Miramar has been amended as the principal amount secured is increased from $19 million to approximately $21.6 million. The additional funds added to the debenture will not be convertible into common shares of the Company.

On completion of these transactions, the Company now has approximately $1.4 million in working capital after payment of third party liabilities. In addition to standard commercial loan terms, the Company is required to maintain not less than $1 million in working capital, to be tested on a monthly basis, from June 15, 2000. A failure to meet this requirement could constitute a default under the security held by Miramar which would allow Miramar to accelerate payment of the promissory note and its convertible debenture.

(b) Reasons for the Transaction

The Company was indebted to Miramar in an amount approximately of $43,480,473 as a consequence of funds advanced by Miramar to assist the Company in developing its mineral properties and for general corporate purposes. Miramar was also the majority shareholder in the Company, owning 40.6 million shares representing approximately 54.8% of the issued and outstanding share capital.

While the Company had a large undeveloped resource base in its mineral property holdings, it had no present ability to repay its indebtedness to Miramar, a large portion of which was due on demand.

The proposed transactions eliminate the Company's current liabilities and provide working capital to allow new management of the Company to pursue additional funding, joint venture opportunities and other corporate transactions with a view to maximizing shareholder value. If management is successful in its efforts to enhance shareholder value, Miramar will benefit through its substantial shareholding in the Company, and the minority shareholders of the Company also will benefit proportionately.

(c) Effect of the Transaction on Issuer's Business and Affairs

The Transaction eliminates the Company's short-term indebtedness, provides the Company with working capital, and will allow the Company's

new management an opportunity to continue restructuring efforts and pursue alternative sources of additional financing.

(d) Relevant History of the Subject Matter of the Transaction

The Strategic Action Committee entered into negotiations with Miramar's management respecting the debt settlement in September 1999. On December 2, 1999, a term sheet outlining the settlement was signed and a press release regarding the settlement was made on December 8, 1999. On April 4, 2000 final closing of the agreements took place, following receipt of regulatory approvals and acceptances.

(e) Interest in the Transaction of Miramar Mining Corporation, Its Insiders, Associates and Affiliates and Any Other Related Party:

Insiders, Associates, Affiliates and other Related Parties of Miramar own a total of 2,971,559Shares of Miramar and hold options to purchase an additional 97,600Shares of Miramar. The same persons, together with Miramar, own a total of 40,647,107Shares of the Company, and hold options to acquire an additional 1,265,000Shares of the Company.

(f) Effect of the Transaction on Miramar Mining Corporation and Related Parties:

Miramar's equity interest in the Company has been substantially increased, and its debt position reduced. Miramar retains its existing security for its debt position, and will acquire additional security through pledges of shares of the Company's subsidiaries and guarantees by subsidiaries, as well as its Royalty and Proceeds Interests in the Company's mineral properties.

(g) Nature of Any Benefit to be Secured by Related Parties as a Result of the Transaction:

Insiders and Related Parties will not secure any benefit not shared proportionately by all shareholders of the Company.

(h) Review and Approval Process for the Transaction

The proposed transactions were reviewed by a Special Committee of independent directors of the Company, who determined that the terms of the transactions were fair and reasonable under the circumstances and the transactions were beneficial to and in the interests of the Company and its shareholders, including minority shareholders. The Special Committee also determined that in the circumstances the "financial hardship" exemption in sections 5.6(8) and 5.8(5) of Proposed Rule 61-5.01 would be applicable. The proposed transactions have been accepted for filing by The Toronto Stock Exchange, and a "no action" letter was obtained from the Ontario Securities Commission with respect to the application of OSC Policy 9.1.

(i) Summary of Any Valuation in Respect of the Transaction

No valuation will be carried out.

(j) Other Material Information Relevant to the Transaction

There is no other relevant Material Information.

Item 6 Reliance on Confidentiality Provisions of the Securities Act

Not applicable.

Item 7 Omitted Information

Not applicable.

Item 8 Senior Officer

Contact: Stephen Wilkinson
Telephone: (604) 980-0573

Item 9 Statement of Senior Officer/Director

The foregoing accurately discloses the material change referred to in this report.

Dated at the City of Vancouver, in the Province of British Columbia, this 7th day of April, 2000.

NORTHERN ORION EXPLORATIONS LTD.

Per: _____
Stephen Wilkinson, President

IT IS AN OFFENCE FOR A PERSON TO MAKE A STATEMENT IN A DOCUMENT REQUIRED TO BE FILED OR FURNISHED UNDER THE ACT OR THIS REGULATION THAT, AT THE TIME AND IN THE LIGHT OF THE CIRCUMSTANCES UNDER WHICH IT IS MADE, IS A REPRESENTATION.

NORTHERN ORION
EXPLORATIONS LTD.

311 West First Street, North Vancouver, B.C. V7M 1B5
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NOTICE OF ANNUAL GENERAL MEETING OF SHAREHOLDERS

NOTICE IS HEREBY GIVEN that the 2000 Annual General Meeting ("the Meeting) of the Registered Shareholders ("the Shareholders") of Northern Orion Explorations Ltd. ("the Corporation") will be held at the Lonsdale Quay Hotel, 123 Carrie Cates Court, North Vancouver, British Columbia, on the 12th day of June, 2000 at the hour of ten o'clock in the forenoon for the following purposes:

1. to receive the audited financial statements of the Corporation for the financial year of the Corporation ended December 31 1999, together with the report of the auditors;
2. to elect directors of the Corporation
3. to appoint an auditor of the Corporation for the ensuing financial year and to authorize the directors of the Corporation to fix the remuneration of the auditor;
4. to transact such other business as may properly come before the Meeting or any adjournment thereof.

Accompanying this Notice of Meeting is an Information Circular, Instrument of Proxy and Annual Report for the fiscal year ended December 31, 1999. The Information Circular provides additional information relating to the matters to be dealt with at the meeting and is deemed to form part of this Notice.

A Registered Shareholder who is unable to attend the meeting in person is entitled to appoint a proxyholder to attend and vote in his stead. If you cannot be personally present, please refer to the notes accompanying the Instrument of Proxy enclosed and then complete and deposit the Instrument of Proxy with Pacific Corporate Trust Company within the time set out in the notes, as set out below.

The Instrument of Proxy must be signed by the Registered Shareholder or by his or her attorney authorized in writing, or, if the Registered Shareholder is a corporation, by an officer or director thereof as an authorized signatory.

The completed Instrument of Proxy must be deposited at the office of Pacific Corporate Trust Company at least 48 hours before the time of the meeting (excluding Saturdays, Sundays and holidays), or any adjournment thereof.

The enclosed Instrument of Proxy is solicited by management but you may amend it, if you so desire, by striking out the names of the management proxyholders shown and inserting in the space provided the name of the person you wish to represent you at the meeting.

DATED at North Vancouver, British Columbia, the 4th day of May, 2000

ON BEHALF OF THE BOARD

Stephen Wilkinson, President

NORTHERN ORION
EXPLORATIONS LTD.

MANAGEMENT INFORMATION CIRCULAR

GENERAL PROXY INFORMATION

Solicitation of Proxies

This management information circular ("Proxy Circular") is being furnished to the shareholders of Northern Orion Explorations Ltd. (the "Corporation") in connection with the solicitation of proxies by the directors and management of the Corporation for use at the annual general meeting of the shareholders of the Corporation (the "Meeting"). The Meeting will be held in the Lonsdale Quay Hotel, North Vancouver, British Columbia on Friday, June 12, 2000, at the hour of 10:00 a.m., Vancouver time, for the purposes set out in the notice of the Meeting accompanying this Proxy Circular. This Proxy Circular is first being sent to shareholders of the Corporation on or about May 10, 2000. Unless otherwise stated, information contained in this Proxy Circular is given as of the date hereof.

The solicitation of proxies for the Meeting will be primarily by mail but proxies may also be solicited personally or by telephone by employees of the Corporation. Employees of the Corporation will not receive any extra compensation for such activities. The Corporation may also pay brokers or other persons holding common shares of the Corporation in their own names, or in the names of nominees, their reasonable expenses for sending proxies and proxy material to beneficial owners of common shares of the Corporation and requesting authority to execute proxies in respect of such common shares of the Corporation. The Corporation will bear the expenses of such solicitation of proxies.

No person is authorized to give any information or to make any representation other than as contained in this Proxy Circular and, if given or made, such information or representation should not be relied upon as having been authorized by the Corporation. The delivery of this Proxy Circular shall not under any circumstances create an implication that there has been no change in the information set forth herein since the date of this Proxy Circular.

Appointment of Proxy and Discretionary Authority

The persons named in the form of proxy accompanying this Proxy Circular are officers and directors of the Corporation. **A shareholder of the Corporation has the right to appoint a person, who need not be a shareholder of the Corporation, other than the persons named in the form of proxy accompanying this Proxy Circular, as nominee to attend and act for and on behalf of such shareholder at the Meeting and may exercise such right by inserting the name of such person in the blank space provided on the form of proxy, or by executing a proxy in a form similar to the form of proxy accompanying this Proxy Circular. If a shareholder of the Corporation appoints one of the persons named in the form of proxy accompanying this Proxy Circular as the nominee of the shareholder and does not direct such nominee to vote either for, against or withhold from voting on a matter or matters with respect to which an opportunity to specify how the common shares of the Corporation registered in the name of such shareholder are to be voted, the proxy shall be voted for such matter or matters.** To be effective, proxies must be received by the Corporation c/o Pacific Corporate Trust Company, Suite 830, 625 Howe Street, Vancouver, British Columbia V6C 3B8, prior to 5:00 p.m., Vancouver time, on Friday, June 9 2000, or, in the case of any adjournment of the Meeting, not later than 5:00 p.m., Vancouver time, on the business day prior to the

reconvened meeting. **PROXIES PRESENTED AT THE MEETING, OR, IN THE CASE OF ANY ADJOURNMENT OF THE MEETING, PRESENTED AT THE RECONVENED MEETING, WILL NOT BE ACCEPTED OR COUNTED.**

Exercise of Vote by Proxy

The common shares of the Corporation represented by a proxy at the Meeting will be voted for, against or withheld from voting in accordance with the instructions of the holder of such common shares of the Corporation, so long as such instructions are certain, on any ballot that may be called for and, where the shareholder of the Corporation whose proxy is solicited specifies a choice with respect to any matter to be voted upon, the common shares of the Corporation represented by such proxy will be voted in accordance with the specification so made. **If no choice is specified in the proxy, the persons named in the form of proxy accompanying this Proxy Circular will vote for all of the matters proposed by management at the Meeting and described in the notice of the Meeting accompanying this Proxy Circular.**

The form of proxy accompanying this Proxy Circular confers discretionary authority upon the persons named therein with respect to any amendment or variation to the matters identified in the notice of the Meeting accompanying this Proxy Circular and with respect to other matters which may properly come before the Meeting. Management of the Corporation knows of no matters to come before the Meeting other than those referred to in the notice of the Meeting accompanying this Proxy Circular. However, if any other matters which are not now known to management of the Corporation should properly come before the Meeting, the common shares of the Corporation represented by proxies given in favour of the persons named in the form of proxy accompanying this Proxy Circular will be voted on such matters in accordance with the best judgement of such person.

Revocation of Proxies

A shareholder of the Corporation may revoke a previously given proxy by depositing an instrument in writing executed by the shareholder or his attorney authorized in writing, or, if the shareholder is a corporation, under its corporate seal by an officer or attorney thereof properly authorized, indicating the capacity under which such officer or attorney is signing, and deposited, together with the instrument so empowering the officer or officers or the attorney, or a notarially certified copy of such instrument, either at the registered office of the Corporation at any time up to and including 5:00 p.m., Vancouver time, on the last business day preceding the day of the Meeting, or any adjournment thereof, at which the proxy is to be used, or in any other manner permitted by law.

Voting Securities and Principal Holders Thereof

As of May 4, 2000, 89,006,780 common shares of the Corporation were outstanding, each entitled to one vote on each matter voted upon by ballot at the Meeting. Each holder of record of common shares of the Corporation on May 4, 2000, was entitled to notice of the Meeting and is entitled to vote at the Meeting.

To the knowledge of the directors and senior officers of the Corporation, as at May 4, 2000, the only person or company which beneficially owned, directly or indirectly or exercised control or direction over, shares carrying more than 10% of the votes attached to all outstanding shares of the Corporation was Miramar Mining Corporation ("Miramar"), a publicly-traded company. Miramar beneficially owns 55,572,850 common shares, representing approximately 62.4% of the total number of common shares then outstanding.

Interest of Insiders in Material Transactions

Miramar Mining Corporation ("Miramar") owns approximately 62.4% of the Corporation and is therefore considered an insider of the Corporation.

During the financial year ended December 31, 1999, the Corporation paid management fees totalling $861,000 (1998 - $2.2 million) to Miramar. A portion of the management fees paid to Miramar were for the payment of the salary of Messrs. Berukoff and Walsh, each having acted as President and Chief Executive Officer of the Corporation during 1999, and of the other shared members of senior management of the Corporation, for their services performed as directors and officers of the Corporation.

In December 1999, the Company reached an agreement to restructure and partially settle amounts owing to Miramar. Under the agreement, the Company issued a royalty and net proceeds interest ("Royalty Interest") entitling Miramar to receive the economic equivalent of a 2.5% net smelter return royalty on all of the Company's mining properties and interests to a total of $17,987,000. The payment of this obligation is limited to payments from the Royalty Interest and a right to receive a portion of the proceeds from the sale of any interest in any of the Company's mining interests.

Further to the debt restructuring agreement, the Company issued a promissory note to Miramar and capitalized certain amounts to the convertible debenture as consideration for existing indebtedness. No gain or loss was realized on this restructuring of amounts payable to Miramar. The promissory note was in the face amount of $6.5 million; bears interest at bank prime plus 2%, and is due on demand after June 20, 2001. The note requires that the Company maintain working capital of not less than $1,000,000 as and from March 31, 2000, to be tested monthly. Subsequent to the end of 1999, $4.5 million of the principal amount of the promissory note was settled through the issue to Miramar of 15 million shares in the Company. In addition, on March 31, 2000, Miramar provided the Company with a waiver extending the date for the imposition of the working capital requirement to June 15, 2000.

Interest of Certain Persons in Matters to be Acted Upon

No director or senior officer of the Corporation or any proposed nominee of management of the Corporation for election as a director of the Corporation, nor any associate or affiliate of any of the foregoing persons, has any material interest, direct or indirect, by way of beneficial ownership of securities or otherwise, in any matter to be acted upon at the Meeting other than the election of directors.

Executive Remuneration

The following table (presented in accordance with the regulation (the "Regulation") made under the Securities Act (Ontario)) sets forth all annual and long-term compensation for services rendered in all capacities to the Corporation and to subsidiaries of the Corporation for the financial years indicated (to the extent required by the Regulation) in respect of the Chief Executive Officers of the Corporation and each of the individuals who were, at December 31, 1999, executives of the Corporation whose aggregate salary and bonus exceeded $100,000 (collectively the "Named Executive Officers").

SUMMARY COMPENSATION TABLE

		Annual Compensation			Long-Term Compensation Awards	
Name and Principal Position	Year	Salary ($)	Bonus ($)	Other Annual Compen -sation (1) ($)	Securities Under Options Granted In Year (#)	All Other Compensation ($)
Stephen Wilkinson (2) President and Chief Executive Officer from November/99	1999	NIL	NIL	6,000	NIL	NIL
Walter Berukoff President and Chief Executive Officer to March/99	1999 1998 1997	NIL NIL NIL	NIL NIL NIL	NIL NIL NIL	NIL NIL NIL	NIL NIL NIL
Anthony Walsh Chief Financial Officer & Interim President and Chief Executive Officer from March/99 to Nov. /99	1999	NIL	NIL	NIL	NIL	NIL
Ricardo Auriemma (3) President of Argentine Subsidiaries	1999 1998 1997	97,500 97,500 97,500	NIL NIL NIL	14,118 13,494 NIL	NIL NIL 50,000	NIL NIL NIL
Jorge Nicanovich (4) Country Manager Cuba	1999 1998 1997	125,000 125,000 20,833	NIL NIL NIL	NIL NIL NIL	NIL 70,000 NIL	NIL NIL NIL
Luis Vera Vice President Cuban Operations	1999 1998 1997	131,250 175,000 175,000	NIL NIL NIL	NIL NIL NIL	NIL NIL 150,000	NIL NIL NIL

(1) Where the value of perquisites and benefits for a Named Executive Officer does not exceed the lesser of $50,000 and 10% of the total of the annual salary and bonus of such Named Executive Officer, the value is not reported.

(2) Stephen Wilkinson commenced duties as President of the Company in November, 1999 and received expense allowance of $3,000 for costs incurred in performance of his duties.

(3) Dr. Auriemma commenced employment with the Corporation on November 1, 1994. The salary and bonus amounts for Dr. Auriemma is payable and quoted in U.S. dollars.

(4) Mr. Nicanovich commenced employment with the Corporation on November 5 1997 and was terminated effective December 31, 1999. The salary and bonus amounts for Mr. Nicanovich were payable and quoted in U.S. dollars.

(5) Luis Vera ceased employment with the Corporation in September 1999. Salary amounts are quoted in US$.

Stock Option Plan

Under the stock option plan of the Corporation (the "Stock Option Plan"), options to purchase common shares of the Corporation may be granted to full or part-time employees and directors of the Corporation or subsidiaries of the Corporation and other persons or companies engaged to provide ongoing management or consulting services for the Corporation or any entity controlled by the Corporation. The maximum aggregate number of common shares of the Corporation subject to option under the Stock Option Plan may not exceed 10,000,000. In determining the number of common shares of the Corporation subject to each option granted under the Stock Option Plan, consideration is given to the present and potential contribution by such person or company to the success of the Corporation. The exercise price per common share may not be less than the closing price of the common shares of the

Corporation on The Toronto Stock Exchange on the trading day immediately preceding the day on which the option is granted. Each option is for a term not in excess of ten years and is not exercisable unless the optionee has been continuously employed by, a director or an officer of, or engaged in providing ongoing management or consulting services for, the Corporation or a subsidiary of the Corporation continuously since the date of grant of the option, except in the case of the death of an optionee, in which case the option is exercisable for a maximum of twelve months thereafter, or in the case of an optionee ceasing to be a participant under the Stock Option Plan for any reason other than cause or death, in which case the option is exercisable for a maximum of 30 days thereafter. The Stock Option Plan does not provide for the granting of financial assistance, whether by way of a loan, guarantee or otherwise, by the Corporation in connection with any purchase of common shares from the Corporation.

The Stock Option Plan also provides for share appreciation rights in favour of holders of options granted under the Stock Option Plan. A holder of an option under the Stock Option Plan is entitled to elect to terminate such option, in whole or in part, and, in lieu of receiving the common shares of the Corporation to which the terminated option relates, to receive that number of common shares of the Corporation, disregarding fractions, which, when multiplied by the fair value of the common shares of the Corporation (which is the average of the high and low board lot prices for the common shares on The Toronto Stock Exchange for the immediately preceding 5 trading days) to which the terminated option relates, has a total value equal to the product of the number of such common shares multiplied by the difference between the fair value and the exercise price per share of such common shares of the Corporation, less any amount required to be withheld on account of income taxes.

During the financial year of the Corporation ended December 31, 1999, no options were granted to any of the Named Executive Officers. The following table (presented in accordance with the Regulation) sets forth details of all exercises of options during the financial year of the Corporation ended December 31, 1999 by each of the Named Executive Officers and the value as at December 31, 1999 of unexercised options on an aggregate basis:

AGGREGATED OPTION EXERCISES DURING THE MOST RECENTLY COMPLETED FINANCIAL YEAR AND DECEMBER 31, 1999 OPTION VALUES

Name	Securities Acquired on Exercise (#)	Aggregate Value Realised ($)	Unexercised Options at December 31, 1999 (#) Exercisable/ Unexercisable	Value of Unexercised in-the-Money Options at December 31, 1999 ($) Exercisable/ Unexercisable
Stephen Wilkinson	NIL	NIL	NIL/NIL	NIL/NIL
Walter Berukoff	NIL	NIL	NIL/NIL	NIL/NIL
Anthony Walsh	NIL	NIL	325,000/NIL	NIL/NIL
Ricardo Auriemma	NIL	NIL	274,900/NIL	NIL/NIL
Jorge Nicanovich	NIL	NIL	NIL/NIL	NIL/NIL
Luis Vera	NIL	NIL	NIL/NIL	NIL/NIL

Report on Executive Compensation

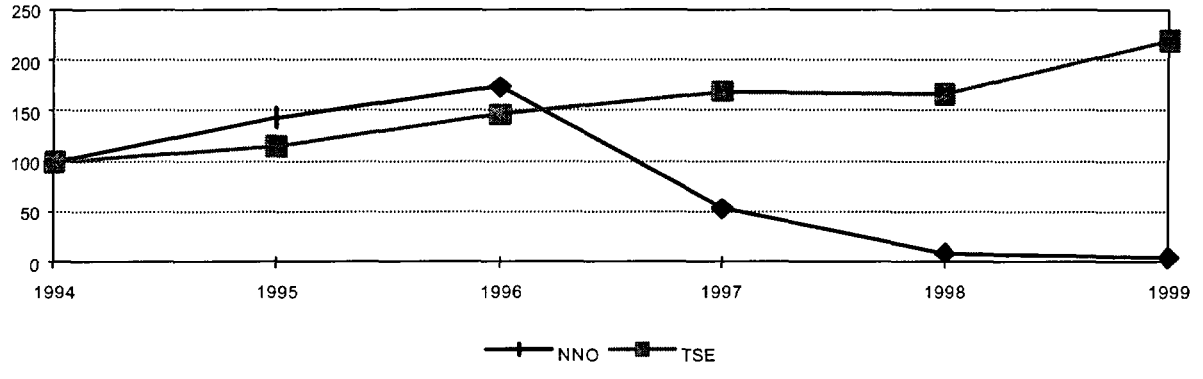
No Compensation Committee has been formed and no policies relating to executive compensation have been established. The only executives of the Corporation compensated directly were Dr. Ricardo Auriemma and Jorge Nicanovich, whose salaries were reviewed by the whole board of directors of the Corporation. One member of the senior management of the Corporation is paid by Miramar which charged the Corporation rent, and management and services fees of $861,000 for the financial year ended December 31, 1999 ($2.2 million in 1998). The management fee is reviewed by the

Audit Committee of the Board of the Corporation. The salaries paid to the Named Executive Officers are based on industry standards. As of April 24, 2000, the board of directors of the Corporation consists of John K. Burns, Terrance O'Kane, Norman Anderson, Stephen Wilkinson, Anthony Walsh and Stephen Quin.

Performance Graph

The following graph compares the yearly percentage change in the cumulative total shareholder return over the last five financial years of the common shares of the Corporation, assuming a $100 investment in the common shares of the Corporation on December 31, 1992, with The TSE 300 Stock Index during such period, assuming dividend reinvestment.

Five-Year Cumulative Return on $100 Investment
Assuming Dividend Reinvestment
December 31, 1994 - December 31, 1999



Compensation of Directors

The Corporation does not pay cash compensation to directors of the Corporation for services rendered in their capacity as directors or for their services rendered as members of committees.

The Corporation has no plans other than as set out herein pursuant to which cash or non-cash compensation was paid or distributed to Directors during the most recently completed financial year or is proposed to be paid or distributed in a subsequent year.

During the financial year ended December 31, 1999, there were no options granted to purchase common shares of the Corporation to any of the directors of the Corporation in their capacity as directors.

Executive Contracts

Ricardo Auriemma is employed under an employment agreement with a wholly owned Argentine subsidiary of the Corporation. During the financial year ended December 31 1999, none of the other Named Executive Officers entered into employment agreements with the Corporation. The Corporation entered into a letter of employment with Jorge Nicanovich on his acceptance of employment, which letter sets out initial salaries, terms of any bonuses that may be paid, the grant and vesting of stock options, and the grant of a standard employee benefit plan including medical and dental benefits.

Corporate Governance

In December 1994, The Toronto Stock Exchange Committee on Corporate Governance in Canada (the "TSE Committee") issued its report on proposed guidelines for corporate governance in Canada. In May 1995 The Toronto Stock Exchange (the "TSE") adopted the TSE Committee's report and announced that all companies with a year end on or after June 30, 1995, would be required to describe their practices and policies with regards to corporate governance, with reference to the TSE Committee's report guidelines, on an annual basis, by way of a corporate governance statement contained in the company's annual report or information circular.

Pursuant to the TSE guidelines on corporate governance (the "Guidelines"), the board of directors of the Corporation has approved the following statement on the corporate governance practices of the Corporation.

The role of the board of directors of the Corporation is to supervise management and to approve major and strategic decisions. The board annually adopts budgets for the upcoming year's operations and receives monthly operating reports that show budget variances. All major matters are analysed in reports prepared by management and are submitted to the Board for its approval. Such major matters include significant acquisitions, exploration and development budgets and financings.

The Chief Executive Officer of the Corporation is primarily responsible for establishing the future direction of the Corporation. The board reviews all new proposed directions and significant decisions to be made, and has the ultimate decision on the direction of the Corporation.

The Corporation's board of directors consists of six directors, one is a member of management and three are outside directors. The three outside directors are considered unrelated directors for the purposes of the Guidelines. Two of the directors are directors and officers of Miramar Mining Corporation and are considered related directors.

The Chairman of the Corporation is not an officer of the Corporation. At the Corporation's present stage of development, the board is of the view that having a chair who is not involved in management is most appropriate for the Corporation. Moreover, the Board is of the view that the Corporation's outside directors have shown significant independence from management and receive the greatest benefit from a chairman who is also an outside director.

There are three board committees.

The Executive Committee is made up of the President and the three outside directors. The Executive Committee has not been delegated any specific authority by the board and acts primarily as a senior management decision making forum. However, it is a primary responsibility of the Executive Committee to review and approve any transactions of the Corporation involving Miramar Mining Corporation.

During 1999, the Audit Committee consisted of the President and two directors, both of whom are related directors. The Audit Committee is mandated to implement and review internal systems. Thereby it would assist the board in identifying and monitoring the risks of the business of the Corporation. Further, the Audit Committee is charged with the initial responsibility of determining that the financial and budget goals of the Corporation are met by management, and where the goals have not been met by management, reporting back to the board on the progress and level of the achievement of management versus the predetermined budget levels.

The Environmental Committee consists of three directors, a majority of whom are related directors. The Environmental Committee reviews compliance by the Corporation with all applicable regulatory requirements together with an analysis of risks, which could be encountered in the future related to environmental matters.

The Corporation is controlled by Miramar, which is considered a "significant shareholder" within the meaning of the Guidelines. The Corporation does not have a separate nominating committee or corporate governance committee. The board is considering the creation of those formal committees and the addition of one or more unrelated directors. There are no formal procedures in place for recruiting new directors.

The Corporation has an investor relations group which is the main communications channel with investors. Senior members of management also have frequent communication with institutional and retail investors.

The board relies on management to follow the directions and policies established by the board and to provide accurate information to the board relating to all major developments in the Corporation's business within sufficient time to enable the board to carry out its responsibilities.

THE MEETING

Election of Directors

It is proposed that the persons named below be nominated for election as directors of the Corporation. All of the proposed nominees are now directors of the Corporation and have been since the year set forth below. Management of the Corporation does not contemplate that any of the proposed nominees will be unable to serve as directors of the Corporation, but if that should occur for any reason prior to the Meeting, the persons named in the form of proxy accompanying this Proxy Circular have the right to vote for any other nominee of management of the Corporation. Each director will be elected to hold office until the close of the next annual general meeting of the shareholders of the Corporation or until his successor is appointed or elected. The following table sets forth certain information concerning the persons nominated for election as directors of the Corporation.

Name and Municipality of Residence	Positions Held	Principal Occupation	Director Since	Number of Common Shares Owned[4]
John K. Burns [2][3] Philadelphia, PA	Chairman of the Board and Director	President and CEO of Frontier Resources Management Inc.	1995	20,000
Stephen Wilkinson [1][2][3] North Vancouver, B.C.	President, Chief Executive Officer and Director	President and Chief Executive Officer of Northern Orion Explorations Ltd.	1999	23,000
Anthony P. Walsh [1] West Vancouver, B.C.	Director	President and Chief Executive Officer of Miramar Mining Corporation	1999	Nil
Stephen P. Quin [1][3] West Vancouver, B.C.	Director	Executive Vice-President of Miramar Mining Corporation	1988	5,604
Norman Anderson [2] Vancouver, B.C.	Director	Partner of Anderson & Associates	2000	Nil
Terrance O'Kane [2] Vancouver, B.C.	Director	Independent Consultant	1999	11,200

(1) Member of the Audit Committee.
(2) Member of the Executive Committee.
(3) Member of the Environmental Committee.

(4) Indicates the number of common shares of the Corporation beneficially owned, directly or indirectly, or over which control and direction is exercised. Such information, not within the knowledge of the Corporation, has been furnished by the respective nominees.

Each of the foregoing individuals has been engaged in the principal occupation set forth opposite his name during the past five years except for John K. Burns and Stephen Wilkinson. Mr. Burns, prior to May 1995, was the Managing Director and global head of Derivative Finance and Metals Derivatives Trading with Barclays Metals Group, Barclays Bank PLC London. Mr. Wilkinson, prior to 1999, was a mining analyst employed by RBC Dominion Securities.

Unless such authority is withheld, the persons named in the form of proxy accompanying this Proxy Circular intend to vote for the election of the foregoing individuals as directors of the Corporation until the close of the next following annual general meeting of the shareholders of the Corporation or until their successors are elected.

Appointment of Auditor

Unless such authority is withheld, the persons named in the form of proxy accompanying this Proxy Circular intend to vote for the appointment of KPMG, Chartered Accountants, as the auditor of the Corporation until the close of the next following annual general meeting of the shareholders of the Corporation or until their successor is appointed, at a remuneration to be fixed by the directors.

Other

A copy of the most recent annual report and interim financial statements of the Corporation may be obtained upon request from the Secretary of the Corporation. The Corporation may require the payment of a reasonable fee for providing a copy of the foregoing documents to a person who is not a security holder of the Corporation.

Approval

The contents and the sending of this management information circular have been approved by the directors of the Corporation

By Order of the Board

(signed) Stephen Wilkinson
President

May 10, 2000

Schedule "A" Northern Orion Stock Options Granted as of May 10, 2000

NAME OF OPTIONEE	NUMBER OF OPTIONS	EXPIRY DATE	EXERCISE PRICE
John K. Burns	150,000 160,000 50,000 1,000,000	July 2000 Dec 2000 Sept 2001 Feb 2005	$1.40 $1.40 $1.40 $0.30
Stephen Wilkinson	1,200,000	Feb 2005	$0.30
Stephen P. Quin	40,000 160,000 50,000 500,000	July 2000 Dec. 2000 Sept 2001 Feb 2005	$1.40 $1.40 $1.40 $0.30
Anthony Walsh	110,000 190,000 25,000 500,000	May 2000 Dec. 2000 Sept 2001 Feb 2005	$1.40 $1.40 $1.40 $0.30
Patrick T. O'Kane	20,000 1,000,000	Aug 2002 Feb 2005	$1.40 $0.30
Norman Anderson	1,000,000	Feb 2005	$0.30
David Cohen	700,000	Feb 2005	$0.30
Ricardo Auriemma	134,900 90,000 50,000	July 2000 Dec. 2000 Sept 2001	$1.40 $1.40 $1.40
Amalita Leguizamon	95,000 50,000	Dec. 2000 Sept 2001	$1.40 $1.40

Proxy

ANNUAL GENERAL MEETING OF SHAREHOLDERS OF

NORTHERN ORION EXPLORATIONS LIMITED

TO BE HELD AT THE LONSDALE QUAY HOTEL, 123 CARRIE CATES COURT, NORTH VANCOUVER, BRITISH COLUMBIA
ON MONDAY, JUNE 12, 2000, AT 10:00 AM

The undersigned member ("Registered Shareholder") of the Company hereby appoints, John K. Burns, a Director of the Company, or failing this person, **Stephen Wilkinson**, a Director of the Company, or in the place of the foregoing,

(*print the name*), as proxyholder for and on behalf of the Registered Shareholder with the power of substitution to attend, act and vote for and on behalf of the Registered Shareholder in respect of all matters that may properly come before the aforesaid meeting of the Registered Shareholders of the Company (the "Meeting") and at every adjournment thereof, to the same extent and with the same powers as if the undersigned Registered Shareholder were present at the said Meeting, or any adjournment thereof.

The Registered Shareholder hereby directs the proxyholder to vote the securities of the Company recorded in the name of the Registered Shareholder as specified herein.

The undersigned Registered Shareholder hereby revokes any proxy previously given to attend and vote at said Meeting.

REGISTERED HOLDER SIGN HERE: _____

DATE SIGNED: _____

Resolutions (For full details of each item, please see the enclosed Notice of Meeting and Information Circular)

	For	Against	Withhold
1. Appointment of KPMG Chartered Accountants as auditors of the Company		N/A	
2. To authorize the Directors to fix the Auditors' remuneration			N/A
3. To determine the number of Directors at 6			N/A
4. To elect as Director, Norman Anderson		N/A	
5. To elect as Director, John K. Burns		N/A	
6. To elect as Director, Patrick T. O'Kane		N/A	
7. To elect as Director, Stephen Quin		N/A	
8. To elect as Director, Anthony Walsh		N/A	
9. To elect as Director, Stephen Wilkinson		N/A	
10. To grant the proxyholder authority to vote at his/her discretion on any other business or amendment or variation to the previous resolutions		N/A	
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THIS PROXY MUST BE SIGNED AND DATED.

SEE IMPORTANT INSTRUCTIONS ON REVERSE.

INSTRUCTIONS FOR COMPLETION OF PROXY

1. **This Proxy is solicited by the Management of the Company.**

2. This form of proxy ("Instrument of Proxy") ***must be signed*** by you, the Registered Shareholder, or by your attorney duly authorized by you in writing, or, in the case of a corporation, by a duly authorized officer or representative of the corporation; and ***if executed by an attorney, officer, or other duly appointed representative,*** the original or a notarial copy of the instrument so empowering such person, or such other documentation in support as shall be acceptable to the Chairman of the Meeting, must accompany the Instrument of Proxy.

3. ***If this Instrument of Proxy is not dated*** in the space provided, authority is hereby given by you, the Registered Shareholder, for the proxyholder to date this proxy seven (7) calendar days after the date on which it was mailed to you, the Registered Shareholder, by Pacific Corporate Trust Company.

4. ***A Registered Shareholder who wishes to attend the Meeting and vote on the resolutions in person*** may simply register with the scrutineers before the Meeting begins.

5. ***A Registered Shareholder who is not able to attend the Meeting in person but wishes to vote on the resolutions***, may do the following:

   (a) ***appoint one of the management proxyholders*** named on the Instrument of Proxy, by leaving the wording appointing a nominee as is (i.e. do not strike out the management proxyholders shown and do not complete the blank space provided for the appointment of an alternate proxyholder). Where no choice is specified by a Registered Shareholder with respect to a resolution set out in the Instrument of Proxy, a management appointee acting as a proxyholder will vote the resolution as if the Registered Shareholder had specified an affirmative vote;

   OR

   (b) ***appoint another proxyholder,*** who need not be a Registered Shareholder of the Company, to vote according to the Registered Shareholder's instructions, by striking out the management proxyholder names shown and inserting the name of the person you wish to represent you at the meeting in the space provided for an alternate proxyholder. If no choice is specified, the proxyholder has discretionary authority to vote as the proxyholder sees fit.

6. ***The securities represented by this Instrument of Proxy will be voted or withheld from voting in accordance with the instructions of the Registered Shareholder on any poll*** of a resolution that may be called for and, if the Registered Shareholder specifies a choice with respect to any matter to be acted upon, the securities will be voted accordingly. Further, if so authorized by this Instrument of Proxy, the securities will be voted by the appointed proxyholder with respect to any amendments or variations of any of the resolutions set out on the Instrument of Proxy or matters which may properly come before the Meeting as the proxyholder in its sole discretion sees fit.

7. If a Registered Shareholder has submitted an Instrument of Proxy, ***the Registered Shareholder may still attend the Meeting and may vote in person.*** To do so, the Registered Shareholder must record his/her attendance with the scrutineers before the commencement of the Meeting and revoke, in writing, the prior votes.

To be represented at the Meeting, **voting instructions *must be DEPOSITED* at the office of "PACIFIC CORPORATE TRUST COMPANY" no later than forty eight ("48") hours (excluding Saturdays, Sundays and holidays) prior to the time of the Meeting, or adjournment thereof.**

The mailing address of Pacific Corporate Trust Company is Suite 830, 625 Howe Street, Vancouver, British Columbia, V6C 3B8, and its fax number is (604) 689-8144.

Telephone voting can be completed at 1-888-Tel-Vote (1-888-835-8683) and Internet voting at http://www.stocktronics.com/webvote

Proxy

ANNUAL GENERAL MEETING OF SHAREHOLDERS OF

NORTHERN ORION EXPLORATIONS LIMITED

TO BE HELD AT THE LONSDALE QUAY HOTEL, 123 CARRIE CATES COURT, NORTH VANCOUVER, BRITISH COLUMBIA
ON MONDAY, JUNE 12, 2000, AT 10:00 AM

The undersigned member ("Registered Shareholder") of the Company hereby appoints, John K. Burns, a Director of the Company, or failing this person, **Stephen Wilkinson**, a Director of the Company, or in the place of the foregoing,

(*print the name*), as proxyholder for and on behalf of the Registered Shareholder with the power of substitution to attend, act and vote for and on behalf of the Registered Shareholder in respect of all matters that may properly come before the aforesaid meeting of the Registered Shareholders of the Company (the "Meeting") and at every adjournment thereof, to the same extent and with the same powers as if the undersigned Registered Shareholder were present at the said Meeting, or any adjournment thereof.

The Registered Shareholder hereby directs the proxyholder to vote the securities of the Company recorded in the name of the Registered Shareholder as specified herein.

The undersigned Registered Shareholder hereby revokes any proxy previously given to attend and vote at said Meeting.

REGISTERED HOLDER SIGN HERE: _____

DATE SIGNED: _____

Resolutions (For full details of each item, please see the enclosed Notice of Meeting and Information Circular)

	For	Against	Withhold
1. Appointment of KPMG Chartered Accountants as auditors of the Company		N/A	
2. To authorize the Directors to fix the Auditors' remuneration			N/A
3. To determine the number of Directors at 6			N/A
4. To elect as Director, Norman Anderson		N/A	
5. To elect as Director, John K. Burns		N/A	
6. To elect as Director, Patrick T. O'Kane		N/A	
7. To elect as Director, Stephen Quin		N/A	
8. To elect as Director, Anthony Walsh		N/A	
9. To elect as Director, Stephen Wilkinson		N/A	
10. To grant the proxyholder authority to vote at his/her discretion on any other business or amendment or variation to the previous resolutions		N/A	
11.			
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THIS PROXY MUST BE SIGNED AND DATED.

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1. **This Proxy is solicited by the Management of the Company.**

2. This form of proxy ("Instrument of Proxy") ***must be signed*** by you, the Registered Shareholder, or by your attorney duly authorized by you in writing, or, in the case of a corporation, by a duly authorized officer or representative of the corporation; and ***if executed by an attorney, officer, or other duly appointed representative,*** the original or a notarial copy of the instrument so empowering such person, or such other documentation in support as shall be acceptable to the Chairman of the Meeting, must accompany the Instrument of Proxy.

3. ***If this Instrument of Proxy is not dated*** in the space provided, authority is hereby given by you, the Registered Shareholder, for the proxyholder to date this proxy seven (7) calendar days after the date on which it was mailed to you, the Registered Shareholder, by Pacific Corporate Trust Company.

4. ***A Registered Shareholder who wishes to attend the Meeting and vote on the resolutions in person*** may simply register with the scrutineers before the Meeting begins.

5. ***A Registered Shareholder who is not able to attend the Meeting in person but wishes to vote on the resolutions***, may do the following:

   (a) ***appoint one of the management proxyholders*** named on the Instrument of Proxy, by leaving the wording appointing a nominee as is (i.e. do not strike out the management proxyholders shown and do not complete the blank space provided for the appointment of an alternate proxyholder). Where no choice is specified by a Registered Shareholder with respect to a resolution set out in the Instrument of Proxy, a management appointee acting as a proxyholder will vote the resolution as if the Registered Shareholder had specified an affirmative vote;

   OR

   (b) ***appoint another proxyholder,*** who need not be a Registered Shareholder of the Company, to vote according to the Registered Shareholder's instructions, by striking out the management proxyholder names shown and inserting the name of the person you wish to represent you at the meeting in the space provided for an alternate proxyholder. If no choice is specified, the proxyholder has discretionary authority to vote as the proxyholder sees fit.

6. ***The securities represented by this Instrument of Proxy will be voted or withheld from voting in accordance with the instructions of the Registered Shareholder on any poll*** of a resolution that may be called for and, if the Registered Shareholder specifies a choice with respect to any matter to be acted upon, the securities will be voted accordingly. Further, if so authorized by this Instrument of Proxy, the securities will be voted by the appointed proxyholder with respect to any amendments or variations of any of the resolutions set out on the Instrument of Proxy or matters which may properly come before the Meeting as the proxyholder in its sole discretion sees fit.

7. If a Registered Shareholder has submitted an Instrument of Proxy, ***the Registered Shareholder may still attend the Meeting and may vote in person***. To do so, the Registered Shareholder must record his/her attendance with the scrutineers before the commencement of the Meeting and revoke, in writing, the prior votes.

To be represented at the Meeting, **voting instructions *must be DEPOSITED* at the office of "PACIFIC CORPORATE TRUST COMPANY" no later than forty eight ("48") hours (excluding Saturdays, Sundays and holidays) prior to the time of the Meeting, or adjournment thereof.**

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Telephone voting can be completed at 1-888-Tel-Vote (1-888-835-8683) and Internet voting at http://www.stocktronics.com/webvote

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PACIFIC CORPORATE TRUST COMPANY
Suite 830 - 625 Howe Street
Vancouver, B.C. V6C 3B8

Telephone: (604) 689 - 9853
Fax: (604) 689 - 8144

May 11, 2000

B.C. Securities Commission
Executive Director
2nd Floor, 865 Hornby Street
Vancouver, B.C., V6Z 2H4

Dear Sirs:

RE: NORTHERN ORION EXPLORATIONS LTD
MAILING ON MAY 11, 2000
MANAGEMENT PROXY MATERIAL **and**
ANNUAL FINANCIAL STATEMENTS **and** ANNUAL REPORT
FOR YEAR ENDING DECEMBER 31, 1999

We confirm that on the above date, the material issued by the subject Company was forwarded by prepaid first class mail to all of the registered members of the Company.

We also confirm that the attached material was distributed to intermediaries in accordance with National Policy 41.

The filing fee(s) for the financial statements has been remitted via SEDAR.

Yours truly,

PACIFIC CORPORATE TRUST COMPANY

"Lisa Scotland"
Lisa Scotland
LS/ax

cc: Alberta Securities Commission
cc: Director of Corporations - PEI
cc: Manitoba Securities Commission
cc: Nova Scotia Securities Commission
cc: Office of the Administrator of Securities - NB
cc: Ontario Securities Commission
cc: Quebec Securities Commission
cc: Registrar of Securities - NT
cc: Registrar of Securities - YT
cc: Saskatchewan Securities Commission
cc: Toronto Stock Exchange
cc: Canadian Venture Exchange

cc: Northern Orion Explorations Ltd
cc: Dumoulin Black
cc: KPMG Peat Marwick Thorne.

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cc: Securities Division - Department of Justice - NF

PACIFIC CORPORATE TRUST COMPANY
Suite 830 - 625 Howe Street
Vancouver, B.C. V6C 3B8

Telephone: (604) 689 - 9853
Fax: (604) 689 - 8144

May 11, 2000

B.C. Securities Commission
Executive Director
2nd Floor, 865 Hornby Street
Vancouver, B.C., V6Z 2H4

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MAILING ON MAY 11, 2000
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Yours truly,

PACIFIC CORPORATE TRUST COMPANY

"Lisa Scotland"
Lisa Scotland
LS/ax

cc: Alberta Securities Commission
cc: Director of Corporations - PEI
cc: Manitoba Securities Commission
cc: Nova Scotia Securities Commission
cc: Office of the Administrator of Securities - NB
cc: Ontario Securities Commission
cc: Quebec Securities Commission
cc: Registrar of Securities - NT
cc: Registrar of Securities - YT
cc: Saskatchewan Securities Commission
cc: Toronto Stock Exchange
cc: Canadian Venture Exchange

cc: Northern Orion Explorations Ltd
cc: Dumoulin Black
cc: KPMG Peat Marwick Thorne.

cc: Securities Division - Department of Justice - NF

Consolidated Financial Statements of

NORTHERN ORION EXPLORATIONS LTD.

Years ended December 31, 1999 and 1998

AUDITORS' REPORT TO THE SHAREHOLDERS

We have audited the consolidated balance sheets of Northern Orion Explorations Ltd. as at December 31, 1999 and 1998 and the consolidated statements of operations and deficit and cash flows for the years then ended. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with Canadian generally accepted auditing standards. Those standards require that we plan and perform an audit to obtain reasonable assurance whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation.

In our opinion, these consolidated financial statements present fairly, in all material respects, the financial position of the Company as at December 31, 1999 and 1998 and the results of its operations and its cash flows for the years then ended in accordance with generally accepted accounting principles in Canada. As required by the Company Act (British Columbia), we report that, in our opinion, these principles have been applied on a consistent basis.

Chartered Accountants

Vancouver, Canada

February 18, 2000

NORTHERN ORION EXPLORATIONS LTD.

Consolidated Balance Sheets
(expressed in thousands of dollars)

December 31, 1999 and 1998

	1999	1998
Assets		
Current assets:		
Cash	$ 314	$ 542
Marketable securities	–	3
Accounts receivable (note 3)	347	4,056
Inventory	–	2,201
Prepaid expenses	37	102
	698	6,904
Plant and equipment (note 4)	2,784	8,788
Mineral properties and deferred development (note 4)	115,746	113,933
Other assets	37	1,786
	$ 119,265	$ 131,411
Liabilities and Shareholders' Equity		
Current liabilities:		
Accounts payable and accrued liabilities	$ 885	$ 3,076
Current portion of long-term debt (note 5)	–	5,801
	885	8,877
Promissory note payable (note 6)	6,500	–
Royalty and proceeds interest payable (note 6)	17,987	–
Convertible debenture (note 7)	21,169	17,907
Other long-term liabilities (note 8)	66	13,802
	46,607	40,586
Shareholders' equity:		
Share capital (note 9)	122,000	122,000
Deficit	(49,342)	(31,175)
	72,658	90,825
Operations (note 1)		
Subsequent event (note 9 (c))		
	$ 119,265	$ 131,411

See accompanying notes to consolidated financial statements.

On behalf of the Board:

_____ _____

05/18/00

Director

Director

NORTHERN ORION EXPLORATIONS LTD.

Consolidated Statements of Operations and Deficit
(expressed in thousands of dollars except per share amounts)

Years ended December 31, 1999 and 1998

	1999	1998
Revenue:		
Metal sales revenue	$ 2,957	$ 3,581
Interest and other income	30	48
	2,987	3,629
Expenses:		
Cost of sales	3,911	3,086
Depreciation and depletion	2,292	1,947
Management fees (note 12)	861	2,190
General and administration	520	969
Terminations and severance	1,080	–
Interest	117	616
Loss (gain) on foreign exchange translation	89	(216)
Exploration	29	380
Write-down of marketable securities	3	572
Write-down of inventory	1,052	–
Write-down of mine plant, mineral properties and deferred development	9,440	15,372
Write-down of other assets	1,760	–
	21,154	24,916
Loss for the year	18,167	21,287
Deficit, beginning of year	31,175	9,888
Deficit, end of year	$ 49,342	$ 31,175
Loss per share	$ 0.25	$ 0.29
Weighted average number of common shares outstanding	74,006,780	74,006,780

See accompanying notes to consolidated financial statements.

NORTHERN ORION EXPLORATIONS LTD.

Consolidated Statements of Cash Flows
(expressed in thousands of dollars)

Years ended December 31, 1999 and 1998

	1999	1998
Cash provided by (used in):		
Operations:		
Loss for the year	$ (18,167)	$ (21,287)
Items not involving the use of cash:		
Depreciation and depletion	2,292	1,947
Write-down of marketable securities	3	572
Write-down of mine plant, mineral properties and deferred development	9,440	15,372
Write-down of other assets	1,760	–
Net change in non-cash working capital:		
Accounts receivable	3,709	5,017
Inventory	2,201	(2,149)
Prepaid expenses	65	(33)
Accounts payable and accrued liabilities	(2,191)	1,213
	(888)	652
Financing:		
Repayments to related parties	–	(15,652)
Advances from related parties	5,108	8,255
Guarantee to related party	1,683	1,782
Increase in long-term debt	(20)	572
Increase in convertible debenture	1,441	17,907
	8,212	12,864
Investments:		
Expenditures on:		
Plant and equipment	(42)	(2,955)
Mineral properties and deferred development	(7,499)	(16,307)
Other long-term assets	(11)	(71)
	(7,552)	(19,333)
Decrease in cash	(228)	(5,817)
Cash, beginning of year	542	6,359
Cash, end of year	$ 314	$ 542
Supplementary information:		
Income taxes paid	$ –	$ –
Interest paid	117	616
Non-cash transactions:		
Other long-term liabilities settled through issuance of other debt instruments	26,491	–
Reduction in long-term debt by Miramar payments under obligation under guarantee	5,801	8,338

See accompanying notes to consolidated financial statements.

NORTHERN ORION EXPLORATIONS LTD.

Notes to Consolidated Financial Statements
(tabular dollar amounts expressed in thousands of dollars)

Years ended December 31, 1999 and 1998

1. Operations:

Northern Orion Explorations Ltd. (the "Company") is incorporated under the Company Act (British Columbia). The Company is currently in the process of defining its ore reserves and their economic recoverability. Although the gold phase at Mantua commenced production in 1998, cash flow generated was insufficient to meet cash operating costs incurred and production was suspended in 1999. Accordingly, the Company continues to be dependent upon Miramar Mining Corporation ("Miramar") providing funds to continue the evaluation of its mineral properties. Miramar, which holds voting control over the Company, has agreed to provide certain funds under the terms of a settlement and restructuring agreement (note 6). The Company is required under the related agreement to have working capital (current assets minus current liabilities) of at least $1 million commencing March 31, 2000 or Miramar can call the debt and take possession of the security. These statements have been prepared on the basis that the Company continues to receive support from Miramar or other sources of financing and that no actions are taken which require settlement outside of the normal course of business.

2. Significant accounting policies:

(a) Basis of presentation:

These consolidated financial statements are prepared in accordance with generally accepted accounting principles in Canada. They include the accounts of the Company and its subsidiaries Grupo Minero Aconcagua S.A. ("GMA"), Recursos Americanos Argentinos S.A. ("RAA"), Minera Mantua Inc., Minera Cobre S.A., Minera Delita S.A., Agua Rica S.A. and Northern Orion Finance Corporation, all of which are wholly owned. Interests in joint ventures are accounted for by the proportionate consolidation method. All material intercompany balances and transactions have been eliminated.

The preparation of financial statements in accordance with generally accepted accounting principles requires management to make estimates that affect the reported values of assets, such as the recoverable value of mineral properties and deferred development (note 1), and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from these estimates.

(b) Marketable securities:

Marketable securities are recorded at the lower of cost or market.

(c) Inventory:

Revenue is recognized on production and product inventories are recorded at estimated net realizable value. Materials and supplies inventories are valued at average cost less appropriate allowances for obsolescence.

2. Significant accounting policies (continued):

(d) Plant and equipment:

Plant and equipment are recorded at cost including capitalized interest incurred during the construction phase. Mine plant and equipment are depreciated using the straight-line and declining balance methods, as appropriate to the assets, over their estimated useful lives, not to exceed the estimated proven and probable ore reserves commencing with the attainment of commercial production. Net operating costs and interest and financing costs incurred in the period preceding commercial production are capitalized. Mining equipment and vehicles are depreciated over their estimated useful lives of five to fifteen years. Office furniture and computer equipment are depreciated using the straight line method over periods from three to ten years.

(e) Mineral properties and deferred development:

Mineral resource properties and related exploration and development costs are recorded at cost, including capitalized interest during exploration and development, on a property-by-property basis. These costs will be amortized over the estimated useful life of the properties on a unit-of-production basis following the commencement of commercial production, written-down if estimated future cash flows indicate the carrying value will not be recoverable, or written-off if the properties are sold, allowed to lapse or abandoned. A provision for site restoration costs is provided as necessary by a charge to earnings over the estimated remaining life of the resource properties. Costs related to ongoing site restoration programs are expensed when incurred. Management periodically reviews the underlying value of mineral properties and records a provision to reduce the costs incurred to net recoverable amount as appropriate.

(f) Translation of foreign currency:

The accounts of foreign operations are translated into Canadian dollars as follows:

(i) Monetary assets and liabilities at the rates of exchange prevailing at the balance sheet date;

(ii) Other assets and liabilities at applicable historical exchange rates; and

(iii) Revenues and expenses at the average rate of exchange for the year with translation gains and losses being included in earnings.

2. Significant accounting policies (continued):

(g) Stock-based compensation plan:

The Company has a stock-based compensation plan. No compensation expense is recognized for these plans when stock or stock options are issued to employees. Any consideration paid by employees on exercise of stock options is credited to share capital. The plan provides that these options can alternatively be exercised as stock appreciation rights, whereby the number of shares issued is dependent upon the market price at the date of exercise, which would substantially reduce the number of common shares issued on exercise.

(h) Loss per share:

Loss per share amounts are calculated using the weighted average number of shares outstanding during the year. Fully diluted loss per share has not been disclosed as the impact of outstanding options would be anti-dilutive.

(i) Derivative financial instruments:

The Company uses forward sales agreements for the purpose of managing currency exposures on its anticipated U.S. dollar denominated cash flows. These financial instruments are accounted for as hedges of anticipated transactions and are not recorded on the balance sheet of the Company. Gains and losses from these contracts are recorded in income in the same period as production is delivered to meet the hedged commitments.

3. Accounts receivable:

During 1996, the Company acquired all of the shares of Agua Rica S.A. for US$7.9 million, which amounts were recoverable from an unrelated party under the terms of a joint operation agreement. As at December 31, 1999, the Company has received US$7.9 million (1998 - US$5.5 million) from BHP Copper on account of this receivable. Agua Rica S.A. owns claims that contain most of the known mineralization on the Agua Rica copper/gold project.

4. Capital assets:

(a) Plant and equipment:

			1999	1998
	Cost	Accumulated depreciation and writedown	Net book value	Net book value
Mine plant and equipment, including capitalized interest	$ 9,948	$ 7,648	$ 2,300	$ 8,079
Office and other equipment	1,040	556	484	709
	$ 10,988	$ 8,204	$ 2,784	$ 8,788

During 1999, the Company capitalized interest and financing costs of $nil (1998 - $744,000) during the period of mine development and construction.

(b) Mineral properties and deferred development:

1999	Aqua Rica	San Jorge	Mantua	Other	Total
Balance, December 31, 1998	$ 62,420	$ 21,473	$ 24,354	$ 5,686	$ 113,933
Exploration and development expenditures	5,617	1,693	189	–	7,499
Write-down during the year	–	–	–	(5,686)	(5,686)
Balance, December 31, 1999	$ 68,037	$ 23,166	$ 24,543	–	$ 115,746

1998	Aqua Rica	San Jorge	Mantua	Other	Total
Balance, December 31, 1997	$ 52,604	$ 16,241	$ 23,095	$ 21,058	$ 112,998
Exploration and development expenditures	9,816	5,232	1,259	–	16,307
Write-down during the year	–	–	–	(15,372)	(15,372)
Balance, December 31, 1998	$ 62,420	$ 21,473	$ 24,354	$ 5,686	$ 113,933

4. Capital assets (continued):

(b) *Mineral properties and deferred development (continued)*:

(i) Agua Rica

The Agua Rica project is located in Catamarca Province, Argentina. The property is composed of mining claims and exploration licences. Work is focused upon a major porphyry copper-gold-silver-molybdenum deposit that is being explored by a joint venture between the Company (30%) and BHP Copper (70%).

(ii) San Jorge

The San Jorge project is located northwest of Mendoza in Argentina. The property consists of mining concessions and staked claims. The project encompasses an oxidized copper deposit overlying a large low grade primary porphyry copper-gold deposit.

(iii) Mantua

The Company operated a gold processing facility at Mantua from April 1998 to September 1999. The Mantua project of which the Company owns a 50% interest is a high-grade copper deposit amenable to open pit mining and solvent extraction/ electro-winning recovery of copper. The property is located in the Pinar del Rio Province, Cuba.

(iv) Other

Other properties consist of smaller exploration properties in Argentina and Cuba. These properties have been determined to be of no further economic value and have been written down by $5,686,000. During 1998, the Company made a similar determination for several other properties and recorded a writedown of $15,372,000.

(v) During 1999, the Company capitalized interest of $3,457,000 (1998 - $1,198,000) on funds borrowed for exploration and development activities.

5. Long-term debt:

In 1997, a subsidiary of the Company (the "Borrower") established a Credit Facility with a chartered bank in the aggregate principal amount of US $10,000,000. Loans drawn under the Credit Facility were used to fund the construction and development of the first phase of a copper-gold project in Cuba and to repay funds advanced by Miramar to initiate this construction. Loans drawn under the Credit Facility bore interest at LIBOR plus 5% and were secured by the guarantee of Miramar and a charge over the shares and assets of the Borrower. The Credit Facility required quarterly repayments of principal and interest commencing on March 31, 1998. All amounts due under the Credit Facility were repaid in 1999.

	1999	1998
Loans drawn under Credit Facility (1998 - US$4.0 million)	$ –	$ 5,801
Less: current portion of long-term debt	–	(5,801)
	$ –	$ –

6. Promissory Note and Royalty and Proceeds Interest Payable:

In December 1999, the Company reached an agreement to restructure and partially settle amounts owing to Miramar under the guarantee and other obligations described in note 8.

Under the agreement, the Company also issued a royalty and net proceeds interest ('Proceeds Interest') entitling Miramar to receive the economic equivalent of a 2.5% net smelter return royalty on all of the Company's mining properties and interests to $17,987,000. The repayment of $17,987,000 is limited to payments from the Proceeds Interest and a right to receive a portion of the proceeds from the sale of any interest in Agua Rica or any of the Company's other mining interest.

Under the agreement, the Company issued a promissory note payable and limited recourse repayment obligation and capitalized certain amounts to the convertible debenture as consideration for the existing indebtedness. No gain or loss was realized on this restructuring of amounts payable to Miramar. The promissory note payable is in the face amount of $6.5 million, bears interest a bank prime plus 2% and is due on demand after June 20, 2001. The promissory note requires that the Company maintain a positive working capital level of $1,000,000 as and from March 31, 2000. This level is to be tested monthly. Subject to regulatory approval, $4.5 million of the promissory note will be settled through the issue of shares in the Company.

7. Convertible debenture:

In September 1998, the Company completed the private placement to Miramar of a $17,500,000 convertible debenture repayable as to principal and interest on September 14, 2003 and bearing interest at 8% per annum. The convertible debenture is secured by a guarantee, pledge of shares and a first charge over the assets of RAA. The principal and unpaid interest are convertible into common shares at the option of Miramar at a price of $1.47 per common share.

The conversion of the debenture by Miramar is limited as follows:

(a) At any time after September 14, 1999 and prior to September 15, 2000, Miramar will be entitled to convert not more than 30% of the principal and unpaid interest;

(b) At any time after September 14, 2000 and prior to September 15, 2001, Miramar will be entitled to convert not more than 50% of the principal and unpaid interest;

(c) After September 14, 2001, Miramar is entitled to convert any portion of the principal and unpaid interest.

7. Convertible debenture (continued):

The Company may repay any portion of the principal and unpaid interest on the convertible debenture at any time. On September 14, 1999 unpaid interest of $1.4 million was capitalized into the principal balance of the convertible debenture. Miramar did not exercise the entitlement to convert any shares in 1999.

Under the terms of the debt restructuring and settlement agreement with Miramar, the Company is entitled to receive additional funds of $2.6 million from Miramar. The additional funds will be drawn under and secured with the convertible debenture but will carry no right of conversion into common shares of the Company. At December 31, 1999 the Company has drawn $1,209,000 of the additional amount and $1,391,000 remains available.

	1999	1998
Principal amount	$ 18,900	$ 17,500
Additional amount secured by the Debenture	1,209	–
Accrued interest	1,060	407
	$ 21,169	$ 17,907

8. Other long-term liabilities:

	1999	1998
Obligation under guarantee (a)	$ –	$ 10,120
Other liabilities(b)	–	3,596
Reclamation	66	86
	$ 66	$ 13,802

(a) Obligation under guarantee:

In 1998 and 1999, the Company was unable to fund required repayments under its Credit Facility (note 5). Under the terms of a financing guarantee, Miramar was required to make these repayments and the Company became directly obligated to Miramar. Interest of $1,534,000 (1998 - $360,000) was charged at 11% per annum on the guarantee payments made by Miramar. During 1999, these amounts were settled through the agreement with Miramar described in note 6.

8. Other long-term liabilities (continued):

(b) Other:

In prior years, Miramar made advances to the Company to fund working capital requirements and various exploration expenditures. In September 1998, these amounts were repaid. Subsequent to September 1998, the Company drew additional funds from Miramar in order to finance continued work on its exploration and development projects. Interest was charged on these advances at 8% per annum. Interest expense charged on amounts payable to related parties during the year was $523,000 (1998 - $604,000). During 1999, these amounts were settled through the agreement with Miramar described in note 6.

9. Share capital:

(a) Authorized:

500,000,000 common shares without par value

100,000,000 first preference shares without par value

100,000,000 second preference shares without par value

(b) Issued:

	Number of Common shares	Amount
Issued, December 31, 1997	74,003,690	$ 122,000
Shares issued:		
For cash on exercise of stock appreciation rights	3,090	–
Issued, December 31, 1998 and 1999	74,006,780	122,000

9. Share capital (continued):

(c) Stock options:

At December 31, the Company had stock options outstanding as follows:

	1999		1998	
	Share options	Average exercise price	Share options	Average exercise price
Outstanding, beginning of year	8,204,419	$ 1.80	9,034,419	$ 1.80
Granted	–	–	–	–
Exercised	–	–	–	–
Forfeited and expired	(6,939,419)	1.80	(830,000)	1.80
Outstanding and available for exercise end of year	1,265,000	$ 1.80	8,204,419	$ 1.80

During 1998, 8,130,049 stock options with exercise prices ranging from $5.35 to $3.20 were repriced to $1.80. Substantially all of the outstanding options at December 31, 1999 expire before the end of 2001.

Subsequent to year end, the Company granted stock options to acquire 5.9 million common shares in the Company at an exercise price of $0.30. Of the 5.9 million options awarded, 3.2 million of these options vest and will become exercisable in 2001 and 2002.

10. Income and resource taxes:

The Company and a Canadian subsidiary have federal non-capital loss carry-forwards for Canadian tax purposes of approximately $16.0 million (1998 - $10.0 million) available to reduce taxable income otherwise calculated through 2006. The future tax benefit of these loss carry forward balances has not been recognized in the accounts.

In addition, the Company has certain other tax balances that may be recoverable from future operations in Latin America which have been classified as other assets, net of a valuation allowance. The tax basis of the Company's assets does not differ materially from their carrying values.

11. Business segments:

(a) Operating segment - The Company's operations are primarily directed towards the exploration and development of mineral properties in Latin America. During 1998, the Company generated revenue from the sale of gold extracted from one of these properties. The Company's mining activities represent a single reportable segment.

(b) Geographic segments - The Company's identifiable capital assets and revenues by geographic area are as follows:

As at December 31, 1999:

	Capital assets	Revenues
Central America	$ 26,640	$ 2,974
South America	91,848	–
Canada	42	13
	$ 118,530	$ 2,987

As at December 31, 1998:

	Capital assets	Revenues
Central America	$ 32,331	$ 3,346
South America	90,351	3
Canada	39	280
	$ 122,721	$ 3,629

Capital assets are comprised of plant and equipment and mineral properties and deferred development.

12. Related party transactions:

Related party transactions not disclosed elsewhere in these consolidated financial statements are as follows:

(a) During 1999, the Company paid $861,000 (1998 - $2.2 million) in management fees to Miramar; and

(b) In 1998, a company controlled by one of the directors of the Company was advanced funds under a drilling services contract for GMA totaling US$250,000. This advance was expensed in 1998.

13. Financial risk management:

(a) Foreign currency hedging:

All of the Company's anticipated mineral revenues are denominated in US dollars. In order to manage its exposure to currency fluctuations, the Company may enter into currency forward sales or options contracts. The Board of Directors has approved a hedging policy and reviews the Company's hedging position periodically.

As at December 31, the Company had no outstanding currency hedging contracts.

(b) Credit risks:

The Company's ability to realize on the above contracts is dependent upon the ability of the counter-parties to perform in accordance with the terms of the agreements. The Company deals only with major financial institutions with investment grade credit ratings and does not expect any counter-parties to fail to meet their obligations.

14. Financial instruments:

Financial instruments are recorded at cost. Fair value estimates are made at the balance sheet date, based upon relevant market information relating to the financial instrument. These estimates are subjective in nature and involve uncertainties and significant matters of judgment. Changes in assumptions could significantly affect these estimates.

The fair value of financial instruments, comprising cash, marketable securities, accounts receivable, current liabilities and long-term debt, are estimated to not be materially different from carrying value due to their ability for prompt liquidation or short-term to maturity. The fair value of amounts payable to Miramar are not readily determinable due to the nature of the relationship between the Company and Miramar and the lack of a ready liquid market for such instruments. The fair value of the forward sales contracts that were outstanding at December 31, 1998 was negative $637,000.

15. Comparative figures:

Certain comparative figures have been reclassified to conform with the basis of presentation adopted in the current year's consolidated financial statements.

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June 19, 2000 **NEWS RELEASE 00-05** **NNO – TSE & CDNX**

Northern Orion Explorations Reports Financial Results for the Period Ended March 31, 2000

Northern Orion announces its financial results for the three-month period ended March 31, 2000. For the quarter, Northern Orion reports a loss of $694,000 or $0.01 per share compared to a loss of $1,699,000 or $0.02 per share for the same period in 1999. The loss reflects the ongoing costs of restructuring the Company and the write-down of certain Argentine assets of $243,000.

In December 1999, the Company announced an agreement-in-principal to restructure and partially settle amounts owing to Miramar Mining Corporation ("Miramar") under a loan guarantee and other obligations. The final closing of the Debt Settlement agreement has occurred as announced in a joint Miramar and Northern Orion release dated, April 4 2000. The attached financial statements reflect the terms of the restructuring and settlement agreement.

Under this restructuring for amounts owed to Miramar, Northern Orion has:

- Exchanged approximately $18.0 million in indebtedness owing to Miramar for a Royalty and Sales Proceeds interest in the Company's mining assets held through subsidiary companies;
- Settled $4.5 million of debt owing to Miramar by issuance of shares in the capital of the Company at $0.30 per share;
- Arranged for $2.6 million of additional funding from Miramar secured by the convertible debenture; and,
- Issued a promissory note in the amount of $2 million to Miramar for which Northern Orion is required to maintain working capital of at least $1 million from June 15 2000.

At March 31 2000, the Company has drawn $1,619,000 of the additional Miramar funding and reflects the remaining amount receivable in working capital. The Company's working capital at the end of the quarter is $571,000.

Management is currently working toward securing new financing for Northern Orion and discussions are well advanced with shareholders and third parties for funding of project development and general corporate purposes. However, there is no assurance that such additional financing will be obtained and it is emphasized that unless sufficient funding is arranged by June 15, 2000, the Company will not meet

the minimum working capital requirement under the promissory note held by Miramar. This would entitle Miramar to demand payment of the promissory note and invoke its default remedies under the promissory note and the convertible debenture.

For further information contact:
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NORTHERN ORION EXPLORATIONS LTD.

Consolidated Balance Sheets
(expressed in thousands of dollars)

March 31, 2000 and December 31, 1999

	2000 (unaudited)	1999
Assets		
Current assets:		
Cash	$ 86	$ 314
Accounts receivable	80	347
Amount receivable from controlling shareholder	981	–
Prepaid expenses	88	37
	1,235	698
Plant and equipment	2,389	2,784
Mineral properties and deferred development	98,613	115,746
Other assets	–	37
	$ 102,237	$ 119,265
Liabilities and Shareholders' Equity		
Current liabilities:		
Accounts payable and accrued liabilities	$ 664	$ 885
	664	885
Promissory note payable	2,000	6,500
Royalty and proceeds interest payable (see Note 2)	–	17,987
Convertible debenture	23,081	21,169
Other long-term liabilities	28	66
	25,773	46,607
Shareholders' equity:		
Share capital (issued and outstanding at March 31, 2000 – 89,006,780 common shares; December 31, 1999 – 74,006,780 common shares)	126,500	122,000
Deficit	(50,036)	(49,342)
	76,464	72,658
	$ 102,237	$ 119,265

(see Note 1. *Basis of Presentation)*

NORTHERN ORION EXPLORATIONS LTD.

Consolidated Statements of Operations and Deficit
(expressed in thousands of dollars except per share amounts)

Three-month periods ended March 31, 2000 and 1999

	2000 (unaudited)	1999 (unaudited)
Revenue:		
Metal sales	$ –	$ 1,317
Interest and other income	6	2
	6	1,319
Expenses:		
Cost of sales	36	1,369
Management fee	105	300
General and administration	77	125
Restructuring costs	57	–
Interest	–	78
Depreciation and depletion	156	644
Write-down of mineral properties and other assets	280	106
Loss (gain) on foreign exchange translation	(11)	396
	700	3,018
Loss for the period	$ 694	$ 1,699
Deficit, beginning of period	49,342	31,175
Deficit, end of period	$ 50,036	$ 32,874
Loss per share	$ 0.01	$ 0.02
Weighted average number of common shares outstanding	74,006,780	74,006,780
Total common shares outstanding at end of period	89,006,780	74,006,780

NORTHERN ORION EXPLORATIONS LTD.

Consolidated Statements of Cash Flows
(expressed in thousands of dollars)

Three-month periods ended March 31, 2000 and 1999

	2000 (unaudited)	1999 (unaudited)
Cash provided by (used in):		
Operations:		
Loss for the period	$ (694)	$ (1,699)
Items not involving cash:		
Depreciation and depletion	156	644
Write down of mineral properties and other assets	280	106
Net change in non-cash working capital:		
Decrease (increase) in accounts receivable	267	405
Decrease (increase) in inventories	–	86
Decrease (increase) in prepaid expenses	(52)	(30)
Increase (decrease) in accounts payable and accrued liabilities	(221)	(90)
	(264)	(578)
Financing:		
Advances from controlling shareholder	411	–
Due to related parties	–	1,617
Long-term debt	–	(2,695)
Capitalized interest on convertible debenture	520	350
Other long-term liabilities	(38)	–
Guarantee to related party	–	3,307
	893	2,579
Investments:		
Mineral properties	(857)	(2,198)
Other long-term assets	–	(12)
	(857)	(2,210)
Increase (decrease) in cash	(228)	(209)
Cash, beginning of period	314	542
Cash, end of period	$ 86	$ 333
Supplementary information:		
Income taxes paid	$ –	$ –
Interest paid	–	78
Non-cash transactions:		
Reduction in promissory note payable through issuance of common shares	4,500	–
Reduction in royalty and proceeds interest payable through partial disposition of mineral property interests	17,987	–

Notes:

1. Basis of Presentation:

These statements have been prepared on the basis that the Company continues to receive financial support from Miramar or other sources of financing and that no actions are taken which require settlement outside the normal course of business.

2. Partial Disposal of Mineral Properties and Contingent Liability

In the quarter ended March 31, 2000, the Company obtained regulatory approval and completed final documentation for the debt settlement and restructuring agreement entered into with its controlling shareholder, Miramar Mining Corporation ('Miramar'). As a result of this debt settlement, the Company exchanged a royalty and proceeds interest ('Proceeds Interest') granted on the Agua Rica, Mantua and San Jorge properties. This transaction was treated as a partial disposition of mineral properties in the quarter and no gain or loss was recognized. The Proceeds Interest entitles Miramar to receive the economic equivalent of a 2.5% net smelter return royalty and a portion of the proceeds from the sale of all of the Company's mining properties and interests to a total of $17,987,000.

3. Future Income Taxes

The CICA issued new accounting recommendations dealing with future income taxes and employee future benefits that the Company implemented in the first quarter of 2000. The Company is adopting these new recommendations on a retroactive basis.

Under the new rules for future income taxes, Northern Orion is required to record deferred taxes as if all assets and liabilities on the balance sheet were settled at their carrying amounts, net of valuation allowance, at current tax rates.

The Company has tax basis and loss carry-forwards in excess of the carrying value of the assets held on the balance sheet. The Company has provided a valuation allowance equal to the excess and no future tax asset has been recognized.

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June 19, 2000 **NEWS RELEASE 00-05** **NNO – TSE & CDNX**

Northern Orion Explorations Reports Financial Results for the Period Ended March 31, 2000

Northern Orion announces its financial results for the three-month period ended March 31, 2000. For the quarter, Northern Orion reports a loss of $694,000 or $0.01 per share compared to a loss of $1,699,000 or $0.02 per share for the same period in 1999. The loss reflects the ongoing costs of restructuring the Company and the write-down of certain Argentine assets of $243,000.

In December 1999, the Company announced an agreement-in-principal to restructure and partially settle amounts owing to Miramar Mining Corporation ("Miramar") under a loan guarantee and other obligations. The final closing of the Debt Settlement agreement has occurred as announced in a joint Miramar and Northern Orion release dated, April 4 2000. The attached financial statements reflect the terms of the restructuring and settlement agreement.

Under this restructuring for amounts owed to Miramar, Northern Orion has:

- Exchanged approximately $18.0 million in indebtedness owing to Miramar for a Royalty and Sales Proceeds interest in the Company's mining assets held through subsidiary companies;
- Settled $4.5 million of debt owing to Miramar by issuance of shares in the capital of the Company at $0.30 per share;
- Arranged for $2.6 million of additional funding from Miramar secured by the convertible debenture; and,
- Issued a promissory note in the amount of $2 million to Miramar for which Northern Orion is required to maintain working capital of at least $1 million from June 15 2000.

At March 31 2000, the Company has drawn $1,619,000 of the additional Miramar funding and reflects the remaining amount receivable in working capital. The Company's working capital at the end of the quarter is $571,000.

Management is currently working toward securing new financing for Northern Orion and discussions are well advanced with shareholders and third parties for funding of project development and general corporate purposes. However, there is no assurance that such additional financing will be obtained and it is emphasized that unless sufficient funding is arranged by June 15, 2000, the Company will not meet

the minimum working capital requirement under the promissory note held by Miramar. This would entitle Miramar to demand payment of the promissory note and invoke its default remedies under the promissory note and the convertible debenture.

For further information contact:
Stephen Wilkinson
President & C.E.O.
NORTHERN ORION EXPLORATIONS LTD
Tel: (604) 980-0573 Fax: (604) 980-0731
Email: info@northernorion.com

NORTHERN ORION EXPLORATIONS LTD.

Consolidated Balance Sheets
(expressed in thousands of dollars)

March 31, 2000 and December 31, 1999

	2000 (unaudited)	1999
Assets		
Current assets:		
Cash	$ 86	$ 314
Accounts receivable	80	347
Amount receivable from controlling shareholder	981	–
Prepaid expenses	88	37
	1,235	698
Plant and equipment	2,389	2,784
Mineral properties and deferred development	98,613	115,746
Other assets	–	37
	$ 102,237	$ 119,265
Liabilities and Shareholders' Equity		
Current liabilities:		
Accounts payable and accrued liabilities	$ 664	$ 885
	664	885
Promissory note payable	2,000	6,500
Royalty and proceeds interest payable (see Note 2)	–	17,987
Convertible debenture	23,081	21,169
Other long-term liabilities	28	66
	25,773	46,607
Shareholders' equity:		
Share capital (issued and outstanding at March 31, 2000 – 89,006,780 common shares; December 31, 1999 – 74,006,780 common shares)	126,500	122,000
Deficit	(50,036)	(49,342)
	76,464	72,658
	$ 102,237	$ 119,265

(see Note 1. *Basis of Presentation)*

NORTHERN ORION EXPLORATIONS LTD.

Consolidated Statements of Operations and Deficit
(expressed in thousands of dollars except per share amounts)

Three-month periods ended March 31, 2000 and 1999

	2000 (unaudited)	1999 (unaudited)
Revenue:		
Metal sales	$ –	$ 1,317
Interest and other income	6	2
	6	1,319
Expenses:		
Cost of sales	36	1,369
Management fee	105	300
General and administration	77	125
Restructuring costs	57	–
Interest	–	78
Depreciation and depletion	156	644
Write-down of mineral properties and other assets	280	106
Loss (gain) on foreign exchange translation	(11)	396
	700	3,018
Loss for the period	$ 694	$ 1,699
Deficit, beginning of period	49,342	31,175
Deficit, end of period	$ 50,036	$ 32,874
Loss per share	$ 0.01	$ 0.02
Weighted average number of common shares outstanding	74,006,780	74,006,780
Total common shares outstanding at end of period	89,006,780	74,006,780

NORTHERN ORION EXPLORATIONS LTD.

Consolidated Statements of Cash Flows
(expressed in thousands of dollars)

Three-month periods ended March 31, 2000 and 1999

	2000 (unaudited)	1999 (unaudited)
Cash provided by (used in):		
Operations:		
Loss for the period	$ (694)	$ (1,699)
Items not involving cash:		
Depreciation and depletion	156	644
Write down of mineral properties and other assets	280	106
Net change in non-cash working capital:		
Decrease (increase) in accounts receivable	267	405
Decrease (increase) in inventories	–	86
Decrease (increase) in prepaid expenses	(52)	(30)
Increase (decrease) in accounts payable and accrued liabilities	(221)	(90)
	(264)	(578)
Financing:		
Advances from controlling shareholder	411	–
Due to related parties	–	1,617
Long-term debt	–	(2,695)
Capitalized interest on convertible debenture	520	350
Other long-term liabilities	(38)	–
Guarantee to related party	–	3,307
	893	2,579
Investments:		
Mineral properties	(857)	(2,198)
Other long-term assets	–	(12)
	(857)	(2,210)
Increase (decrease) in cash	(228)	(209)
Cash, beginning of period	314	542
Cash, end of period	$ 86	$ 333
Supplementary information:		
Income taxes paid	$ –	$ –
Interest paid	–	78
Non-cash transactions:		
Reduction in promissory note payable through issuance of common shares	4,500	–
Reduction in royalty and proceeds interest payable through partial disposition of mineral property interests	17,987	–

Notes:

1. Basis of Presentation:

These statements have been prepared on the basis that the Company continues to receive financial support from Miramar or other sources of financing and that no actions are taken which require settlement outside the normal course of business.

2. Partial Disposal of Mineral Properties and Contingent Liability

In the quarter ended March 31, 2000, the Company obtained regulatory approval and completed final documentation for the debt settlement and restructuring agreement entered into with its controlling shareholder, Miramar Mining Corporation ('Miramar'). As a result of this debt settlement, the Company exchanged a royalty and proceeds interest ('Proceeds Interest') granted on the Agua Rica, Mantua and San Jorge properties. This transaction was treated as a partial disposition of mineral properties in the quarter and no gain or loss was recognized. The Proceeds Interest entitles Miramar to receive the economic equivalent of a 2.5% net smelter return royalty and a portion of the proceeds from the sale of all of the Company's mining properties and interests to a total of $17,987,000.

3. Future Income Taxes

The CICA issued new accounting recommendations dealing with future income taxes and employee future benefits that the Company implemented in the first quarter of 2000. The Company is adopting these new recommendations on a retroactive basis.

Under the new rules for future income taxes, Northern Orion is required to record deferred taxes as if all assets and liabilities on the balance sheet were settled at their carrying amounts, net of valuation allowance, at current tax rates.

The Company has tax basis and loss carry-forwards in excess of the carrying value of the assets held on the balance sheet. The Company has provided a valuation allowance equal to the excess and no future tax asset has been recognized.

PACIFIC CORPORATE TRUST COMPANY
Suite 830 - 625 Howe Street
Vancouver, B.C. V6C 3B8

Telephone: (604) 689 - 9853
Fax: (604) 689 - 8144

June 20, 2000

B.C. Securities Commission
Executive Director
2nd Floor, 865 Hornby Street
Vancouver, B.C., V6Z 2H4

Dear Sirs:

RE: NORTHERN ORION EXPLORATIONS LTD
MAILING ON JUNE 20, 2000
INTERIM FINANCIAL STATEMENTS
FOR THE FIRST PERIOD ENDING MARCH 31, 2000

We confirm that on the above date, the material issued by the subject Company was forwarded by prepaid first class mail to all of the persons on the Supplementary Mailing List maintained at our office.

The filing fee(s) for the financial statements has been remitted via SEDAR.

Yours truly,

PACIFIC CORPORATE TRUST COMPANY

"Lisa Scotland"

Lisa Scotland
LS/ax

cc: Alberta Securities Commission
cc: Director of Corporations - PEI
cc: Manitoba Securities Commission
cc: Nova Scotia Securities Commission
cc: Office of the Administrator of Securities - NB
cc: Ontario Securities Commission
cc: Quebec Securities Commission
cc: Registrar of Securities - NT
cc: Registrar of Securities - YT
cc: Saskatchewan Securities Commission
cc: Securities Division - Department of Justice - NF
cc: Montreal Stock Exchange
cc: Canadian Venture Exchange
cc: Toronto Stock Exchange
cc: Northern Orion Explorations Ltd
cc: Dumoulin Black
cc: KPMG Peat Marwick Thorne.

PACIFIC CORPORATE TRUST COMPANY
Suite 830 - 625 Howe Street
Vancouver, B.C. V6C 3B8

Telephone: (604) 689 - 9853
Fax: (604) 689 - 8144

May 11, 2000

B.C. Securities Commission
Executive Director
2nd Floor, 865 Hornby Street
Vancouver, B.C., V6Z 2H4

Dear Sirs:

RE: NORTHERN ORION EXPLORATIONS LTD
MAILING ON MAY 11, 2000
MANAGEMENT PROXY MATERIAL **and**
ANNUAL FINANCIAL STATEMENTS **and** ANNUAL REPORT
FOR YEAR ENDING DECEMBER 31, 1999

We confirm that on the above date, the material issued by the subject Company was forwarded by prepaid first class mail to all of the registered members of the Company.

We also confirm that the attached material was distributed to intermediaries in accordance with National Policy 41.

The filing fee(s) for the financial statements has been remitted via SEDAR.

Yours truly,

PACIFIC CORPORATE TRUST COMPANY

"Lisa Scotland"
Lisa Scotland
LS/ax

cc: Alberta Securities Commission
cc: Director of Corporations - PEI
cc: Manitoba Securities Commission
cc: Nova Scotia Securities Commission
cc: Office of the Administrator of Securities - NB
cc: Ontario Securities Commission
cc: Quebec Securities Commission
cc: Registrar of Securities - NT
cc: Registrar of Securities - YT
cc: Saskatchewan Securities Commission
cc: Toronto Stock Exchange
cc: Canadian Venture Exchange

cc: Northern Orion Explorations Ltd
cc: Dumoulin Black
cc: KPMG Peat Marwick Thorne.

cc: Securities Division - Department of Justice - NF

LETTER TO OUR SHAREHOLDERS

Thursday, June 22, 2000

The year 1999 was unprecedented in the history our Company to be remembered as the year of change for Northern Orion. Every facet of our business has been reviewed, analyzed and where needed altered to better suit present and expected economic conditions. Changes have been realized from the Board of Directors right down to the project level.

In comparison with 1998, the Board of Directors has been reduced from seven to six members with three new directors, two being independent. The new Board brings to the Company a greater depth and overall level of experience as related to the mining industry, and is well suited to guiding the Company in its transition from principally a junior explorer to profitable metal producer.

Like wise, the management group has significantly changed. In March of 1999, Mr. Walter Berukoff resigned as the long-standing President and CEO of Northern Orion. From that point until November, Mr. Tony Walsh presided over the affairs of the Company as its interim President and CEO. Northern Orion appreciates and acknowledges the contributions of both these individuals. In addition, the number of officers has gone from eight to two as operations have been rationalized. Consequently, Northern Orion has moved to contracting many of its functions to achieve significant cost savings in the areas of General and Administrative Expenses and the costs of its offshore operations.

The Company's principal mining assets are all well advanced and consist of a 30% interest in the very large Agua Rica copper-gold project and 100% of the San Jorge copper project in Argentina, and a 50% interest in the Mantua mine in Cuba. Most of the less developed exploration properties are either in the process of being returned to the original venders or have been returned. In addition, Argentine and Cuban staff have been reduced to minimum levels, reflecting management's plan of attaining the maximum return from lowest achievable level of operating costs.

The goal of the management of any corporation must be to maximize the value returned to all its stakeholders. For the year 2000 and beyond, we will be building upon our progress to date with a strategy of advancing our mining assets toward ultimate production. Our focus will be on those mining projects robust enough to demonstrate the potential for positive cash flows through the economic cycles. It is our belief that a project like the Mantua copper phase holds such potential. Pre-feasibility stage estimations of operating costs and total costs including capital for Mantua are in the order of US$0.45 and US$0.58 respectively per pound of copper produced.

The first step to meeting this objective was the negotiation and closing of the debt restructuring and refinancing agreement with our major shareholder, Miramar Mining Corporation. With the restructuring complete, management has been given the opportunity to evaluate several different paths forward including various alternatives for future financing, corporate acquisitions and combinations, the joint venturing of projects and the potential sale of assets. In addition, we recommend that our shareholders read the Management's Discussion & Analyses of this Annual Report for a more complete description of the terms and conditions of the debt restructuring and refinancing agreement.

Even though as of the date of this letter the Company has yet to sign a firm deal, much progress has been made. For example, negotiations are well advanced for funding of the Mantua copper project metallurgical optimization program and completion of the bankable feasibility study. The budget for the project work together with all associated costs and contingencies is approximately $2 million. The work is to commence with the closing of the funding agreement and should take nine months to complete.

Where 1999 was the year of change for Northern Orion, 2000 may well be the start of the rebuilding process and hence may result in further change. Management believes that the share prices for small mining companies will continue to be impacted by a weak and volatile market for much of the near term. Even though we may have finally seen the end of a multi-year bear market for base and precious metals, our expectations are for the difficult times to persist for companies like ours when it comes to seeking traditional sources of financing. The demand upon management will be to locate non-traditional funding rather than relying on issuing equity.

For our shareholders and other interested parties, we are re-building our web site so that after June 2000 it should be the best source of information regarding Northern Orion. In addition, management has initiated a program of increased use of the Internet and e-mail for the dissemination of news and information. We encourage investors to visit www.northernorion.com for the most complete and comprehensive outline of our company. In addition, enquiries made by e-mail using info@northernorion.com will be promptly answered.

In closing, the Company welcomes Mr. Norman Anderson to our Board of Directors. Mr. Anderson has had a long and distinguished career in the mining industry, particularly in the base metal side, and has already made valuable contributions to our Company. Plus, we wish to thank our retiring directors Messrs. Lyall Knott and Christopher Pollard for their years of service on Northern Orion's board.

Sincerely,

Stephen J. Wilkinson,

President and Chief Executive Officer

Consolidated Financial Statements of

NORTHERN ORION EXPLORATIONS LTD.

Years ended December 31, 1999 and 1998

AUDITORS' REPORT TO THE SHAREHOLDERS

We have audited the consolidated balance sheets of Northern Orion Explorations Ltd. as at December 31, 1999 and 1998 and the consolidated statements of operations and deficit and cash flows for the years then ended. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with Canadian generally accepted auditing standards. Those standards require that we plan and perform an audit to obtain reasonable assurance whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation.

In our opinion, these consolidated financial statements present fairly, in all material respects, the financial position of the Company as at December 31, 1999 and 1998 and the results of its operations and its cash flows for the years then ended in accordance with generally accepted accounting principles in Canada. As required by the Company Act (British Columbia), we report that, in our opinion, these principles have been applied on a consistent basis.

Chartered Accountants

Vancouver, Canada

February 18, 2000

NORTHERN ORION EXPLORATIONS LTD.

Consolidated Balance Sheets
(expressed in thousands of dollars)

December 31, 1999 and 1998

	1999	1998
Assets		
Current assets:		
Cash	$ 314	$ 542
Marketable securities	–	3
Accounts receivable (note 3)	347	4,056
Inventory	–	2,201
Prepaid expenses	37	102
	698	6,904
Plant and equipment (note 4)	2,784	8,788
Mineral properties and deferred development (note 4)	115,746	113,933
Other assets	37	1,786
	$ 119,265	$ 131,411
Liabilities and Shareholders' Equity		
Current liabilities:		
Accounts payable and accrued liabilities	$ 885	$ 3,076
Current portion of long-term debt (note 5)	–	5,801
	885	8,877
Promissory note payable (note 6)	6,500	–
Royalty and proceeds interest payable (note 6)	17,987	–
Convertible debenture (note 7)	21,169	17,907
Other long-term liabilities (note 8)	66	13,802
	46,607	40,586
Shareholders' equity:		
Share capital (note 9)	122,000	122,000
Deficit	(49,342)	(31,175)
	72,658	90,825
Operations (note 1)		
Subsequent event (note 9 (c))		
	$ 119,265	$ 131,411

See accompanying notes to consolidated financial statements.

On behalf of the Board:

Director
Stephen Wilkinson

Director
Stephen P. Quin

NORTHERN ORION EXPLORATIONS LTD.

Consolidated Statements of Operations and Deficit
(expressed in thousands of dollars except per share amounts)

Years ended December 31, 1999 and 1998

	1999	1998
Revenue:		
Metal sales revenue	$ 2,957	$ 3,581
Interest and other income	30	48
	2,987	3,629
Expenses:		
Cost of sales	3,911	3,086
Depreciation and depletion	2,292	1,947
Management fees (note 12)	861	2,190
General and administration	520	969
Terminations and severance	1,080	–
Interest	117	616
Loss (gain) on foreign exchange translation	89	(216)
Exploration	29	380
Write-down of marketable securities	3	572
Write-down of inventory	1,052	–
Write-down of mine plant, mineral properties and deferred development	9,440	15,372
Write-down of other assets	1,760	–
	21,154	24,916
Loss for the year	18,167	21,287
Deficit, beginning of year	31,175	9,888
Deficit, end of year	$ 49,342	$ 31,175
Loss per share	$ 0.25	$ 0.29
Weighted average number of common shares outstanding	74,006,780	74,006,780

See accompanying notes to consolidated financial statements.

NORTHERN ORION EXPLORATIONS LTD.

Consolidated Statements of Cash Flows
(expressed in thousands of dollars)

Years ended December 31, 1999 and 1998

	1999	1998
Cash provided by (used in):		
Operations:		
Loss for the year	$ (18,167)	$ (21,287)
Items not involving the use of cash:		
Depreciation and depletion	2,292	1,947
Write-down of marketable securities	3	572
Write-down of mine plant, mineral properties and deferred development	9,440	15,372
Write-down of other assets	1,760	–
Net change in non-cash working capital:		
Accounts receivable	3,709	5,017
Inventory	2,201	(2,149)
Prepaid expenses	65	(33)
Accounts payable and accrued liabilities	(2,191)	1,213
	(888)	652
Financing:		
Repayments to related parties	–	(15,652)
Advances from related parties	4,926	8,255
Guarantee to related party	1,865	1,782
Increase in other long-term liabilities	(20)	572
Increase in convertible debenture	1,441	17,907
	8,212	12,864
Investments:		
Expenditures on:		
Plant and equipment	(42)	(2,955)
Mineral properties and deferred development	(7,499)	(16,307)
Other long-term assets	(11)	(71)
	(7,552)	(19,333)
Decrease in cash	(228)	(5,817)
Cash, beginning of year	542	6,359
Cash, end of year	$ 314	$ 542
Supplementary information:		
Income taxes paid	$ –	$ –
Interest paid	117	616
Non-cash transactions:		
Other long-term liabilities settled through issuance of other debt instruments	26,308	–
Reduction in long-term debt by Miramar payments under obligation under guarantee	5,801	8,338

See accompanying notes to consolidated financial statements.

NORTHERN ORION EXPLORATIONS LTD.

Notes to Consolidated Financial Statements
(tabular dollar amounts expressed in thousands of dollars)

Years ended December 31, 1999 and 1998

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1. Operations:

Northern Orion Explorations Ltd. (the "Company") is incorporated under the Company Act (British Columbia). The Company is currently in the process of defining its ore reserves and their economic recoverability. Although the gold phase at Mantua commenced production in 1998, cash flow generated was insufficient to meet cash operating costs incurred and production was suspended in 1999. Accordingly, the Company continues to be dependent upon Miramar Mining Corporation ("Miramar") providing funds to continue the evaluation of its mineral properties. Miramar, which holds voting control over the Company, has agreed to provide certain funds under the terms of a settlement and restructuring agreement (note 6). The Company is required under the related agreement to have working capital (current assets minus current liabilities) of at least $1 million commencing March 31, 2000 or Miramar can call the debt and take possession of the security. These statements have been prepared on the basis that the Company continues to receive support from Miramar or other sources of financing and that no actions are taken which require settlement outside of the normal course of business.

2. Significant accounting policies:

(a) Basis of presentation:

These consolidated financial statements are prepared in accordance with generally accepted accounting principles in Canada. They include the accounts of the Company and its subsidiaries Grupo Minero Aconcagua S.A. ("GMA"), Recursos Americanos Argentinos S.A. ("RAA"), Minera Mantua Inc., Minera Cobre S.A., Minera Delita S.A., Agua Rica S.A. and Northern Orion Finance Corporation, all of which are wholly owned. Interests in joint ventures are accounted for by the proportionate consolidation method. All material intercompany balances and transactions have been eliminated.

The preparation of financial statements in accordance with generally accepted accounting principles requires management to make estimates that affect the reported values of assets, such as the recoverable value of mineral properties and deferred development (note 1), and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from these estimates.

(b) Marketable securities:

Marketable securities are recorded at the lower of cost or market.

(c) Inventory:

Revenue is recognized on production and product inventories are recorded at estimated net realizable value. Materials and supplies inventories are valued at average cost less appropriate allowances for obsolescence.

2. *Significant accounting policies (continued):*

(d) Plant and equipment:

Plant and equipment are recorded at cost including capitalized interest incurred during the construction phase. Mine plant and equipment are depreciated using the straight-line and declining balance methods, as appropriate to the assets, over their estimated useful lives, not to exceed the estimated proven and probable ore reserves commencing with the attainment of commercial production. Net operating costs and interest and financing costs incurred in the period preceding commercial production are capitalized. Mining equipment and vehicles are depreciated over their estimated useful lives of five to fifteen years. Office furniture and computer equipment are depreciated using the straight line method over periods from three to ten years.

(e) Mineral properties and deferred development:

Mineral resource properties and related exploration and development costs are recorded at cost, including capitalized interest during exploration and development, on a property-by-property basis. These costs will be amortized over the estimated useful life of the properties on a unit-of-production basis following the commencement of commercial production, written-down if estimated future cash flows indicate the carrying value will not be recoverable, or written-off if the properties are sold, allowed to lapse or abandoned. A provision for site restoration costs is provided as necessary by a charge to earnings over the estimated remaining life of the resource properties. Costs related to ongoing site restoration programs are expensed when incurred. Management periodically reviews the underlying value of mineral properties and records a provision to reduce the costs incurred to net recoverable amount as appropriate.

(f) Translation of foreign currency:

The accounts of foreign operations are translated into Canadian dollars as follows:

(i) Monetary assets and liabilities at the rates of exchange prevailing at the balance sheet date;

(ii) Other assets and liabilities at applicable historical exchange rates; and

(iii) Revenues and expenses at the average rate of exchange for the year with translation gains and losses being included in earnings.

2. Significant accounting policies (continued):

(g) Stock-based compensation plan:

The Company has a stock-based compensation plan. No compensation expense is recognized for these plans when stock or stock options are issued to employees. Any consideration paid by employees on exercise of stock options is credited to share capital. The plan provides that these options can alternatively be exercised as stock appreciation rights, whereby the number of shares issued is dependent upon the market price at the date of exercise, which would substantially reduce the number of common shares issued on exercise.

(h) Loss per share:

Loss per share amounts are calculated using the weighted average number of shares outstanding during the year. Fully diluted loss per share has not been disclosed as the impact of outstanding options would be anti-dilutive.

(i) Derivative financial instruments:

The Company uses forward sales agreements for the purpose of managing currency exposures on its anticipated U.S. dollar denominated cash flows. These financial instruments are accounted for as hedges of anticipated transactions and are not recorded on the balance sheet of the Company. Gains and losses from these contracts are recorded in income in the same period as production is delivered to meet the hedged commitments.

3. Accounts receivable:

During 1996, the Company acquired all of the shares of Agua Rica S.A. for US$7.9 million, which amounts were recoverable from an unrelated party under the terms of a joint operation agreement. As at December 31, 1999, the Company has received US$7.9 million (1998 - US$5.5 million) from BHP Copper on account of this receivable. Agua Rica S.A. owns claims that contain most of the known mineralization on the Agua Rica copper/gold project.

4. Capital assets:

(a) Plant and equipment:

	1999			1998
	Cost	Accumulated depreciation and writedown	Net book value	Net book value
Mine plant and equipment, including capitalized interest	$ 9,948	$ 7,648	$ 2,300	$ 8,079
Office and other equipment	1,040	556	484	709
	$ 10,988	$ 8,204	$ 2,784	$ 8,788

During 1999, the Company capitalized interest and financing costs of $nil (1998 - $744,000) during the period of mine development and construction.

(b) Mineral properties and deferred development:

1999	Aqua Rica	San Jorge	Mantua	Other	Total
Balance, December 31, 1998	$ 62,420	$ 21,473	$ 24,354	$ 5,686	$ 113,933
Exploration and development expenditures	5,617	1,693	189	–	7,499
Write-down during the year	–	–	–	(5,686)	(5,686)
Balance, December 31, 1999	$ 68,037	$ 23,166	$ 24,543	–	$ 115,746

1998	Aqua Rica	San Jorge	Mantua	Other	Total
Balance, December 31, 1997	$ 52,604	$ 16,241	$ 23,095	$ 21,058	$ 112,998
Exploration and development expenditures	9,816	5,232	1,259	–	16,307
Write-down during the year	–	–	–	(15,372)	(15,372)
Balance, December 31, 1998	$ 62,420	$ 21,473	$ 24,354	$ 5,686	$ 113,933

4. Capital assets (continued):

(b) Mineral properties and deferred development (continued):
(i) Agua Rica

The Agua Rica project is located in Catamarca Province, Argentina. The property is composed of mining claims and exploration licences. Work is focused upon a major porphyry copper-gold-silver-molybdenum deposit that is being explored by a joint venture between the Company (30%) and BHP Copper (70%).

(ii) San Jorge

The San Jorge project is located northwest of Mendoza in Argentina. The property consists of mining concessions and staked claims. The project encompasses an oxidized copper deposit overlying a large low grade primary porphyry copper-gold deposit.

(iii) Mantua

The Company operated a gold processing facility at Mantua from April 1998 to September 1999. The Mantua project of which the Company owns a 50% interest is a high-grade copper deposit amenable to open pit mining and solvent extraction/ electro-winning recovery of copper. The property is located in the Pinar del Rio Province, Cuba.

(iv) Other

Other properties consist of smaller exploration properties in Argentina and Cuba. These properties have been determined to be of no further economic value and have been written down by $5,686,000. During 1998, the Company made a similar determination for several other properties and recorded a writedown of $15,372,000.

(v) During 1999, the Company capitalized interest of $3,457,000 (1998 - $1,198,000) on funds borrowed for exploration and development activities.

5. Long-term debt:

In 1997, a subsidiary of the Company (the "Borrower") established a Credit Facility with a chartered bank in the aggregate principal amount of US $10,000,000. Loans drawn under the Credit Facility were used to fund the construction and development of the first phase of a copper-gold project in Cuba and to repay funds advanced by Miramar to initiate this construction. Loans drawn under the Credit Facility bore interest at LIBOR plus 5% and were secured by the guarantee of Miramar and a charge over the shares and assets of the Borrower. The Credit Facility required quarterly repayments of principal and interest

commencing on March 31, 1998. All amounts due under the Credit Facility were repaid in 1999.

	1999	1998
Loans drawn under Credit Facility (1998 - US$4.0 million)	$ –	$ 5,801
Less: current portion of long-term debt	–	(5,801)
	$ –	$ –

6. Promissory Note and Royalty and Proceeds Interest Payable:

In December 1999, the Company reached an agreement to restructure and partially settle amounts owing to Miramar under the guarantee and other obligations described in note 8.

Under the agreement, the Company also issued a royalty and net proceeds interest ('Proceeds Interest') entitling Miramar to receive the economic equivalent of a 2.5% net smelter return royalty on all of the Company's mining properties and interests to $17,987,000. The repayment of $17,987,000 is limited to payments from the Proceeds Interest and a right to receive a portion of the proceeds from the sale of any interest in Agua Rica or any of the Company's other mining interest.

Under the agreement, the Company issued a promissory note payable and limited recourse repayment obligation and capitalized certain amounts to the convertible debenture as consideration for the existing indebtedness. No gain or loss was realized on this restructuring of amounts payable to Miramar. The promissory note payable is in the face amount of $6.5 million, bears interest a bank prime plus 2% and is due on demand after June 20, 2001. The promissory note requires that the Company maintain a positive working capital level of $1,000,000 as and from March 31, 2000. This level is to be tested monthly. Subject to regulatory approval, $4.5 million of the promissory note will be settled through the issue of shares in the Company.

7. Convertible debenture:

In September 1998, the Company completed the private placement to Miramar of a $17,500,000 convertible debenture repayable as to principal and interest on September 14, 2003 and bearing interest at 8% per annum. The convertible debenture is secured by a guarantee, pledge of shares and a first charge over the assets of RAA. The principal and unpaid interest are convertible into common shares at the option of Miramar at a price of $1.47 per common share.

The conversion of the debenture by Miramar is limited as follows:

(a) At any time after September 14, 1999 and prior to September 15, 2000, Miramar will be entitled to convert not more than 30% of the principal and unpaid interest;

(b) At any time after September 14, 2000 and prior to September 15, 2001, Miramar will be entitled to convert not more than 50% of the principal and unpaid interest;

(c) After September 14, 2001, Miramar is entitled to convert any portion of the principal and unpaid interest.

7. Convertible debenture (continued):

The Company may repay any portion of the principal and unpaid interest on the convertible debenture at any time. On September 14, 1999 unpaid interest of $1.4 million was capitalized into the principal balance of the convertible debenture. Miramar did not exercise the entitlement to convert any shares in 1999.

Under the terms of the debt restructuring and settlement agreement with Miramar, the Company is entitled to receive additional funds of $2.6 million from Miramar. The additional funds will be drawn under and secured with the convertible debenture but will carry no right of conversion into common shares of the Company. At December 31, 1999 the Company has drawn $1,209,000 of the additional amount and $1,391,000 remains available.

	1999	1998
Principal amount	$ 18,900	$ 17,500
Additional amount secured by the Debenture	1,209	–
Accrued interest	1,060	407
	$ 21,169	$ 17,907

8. Other long-term liabilities:

	1999	1998
Obligation under guarantee (a)	$ –	$ 10,120
Other liabilities(b)	–	3,596
Reclamation	66	86
	$ 66	$ 13,802

(a) Obligation under guarantee:

In 1998 and 1999, the Company was unable to fund required repayments under its Credit Facility (note 5). Under the terms of a financing guarantee, Miramar was required to make these repayments and the Company became directly obligated to Miramar. Interest of $1,534,000 (1998 - $360,000) was charged at 11% per annum on the guarantee payments made by Miramar. During 1999, these amounts were settled through the agreement with Miramar described in note 6.

8. Other long-term liabilities (continued):

(b) Other:

In prior years, Miramar made advances to the Company to fund working capital requirements and various exploration expenditures. In September 1998, these amounts were repaid. Subsequent to September 1998, the Company drew additional funds from Miramar in order to finance continued work on its exploration and development projects. Interest was charged on these advances at 8% per annum. Interest expense charged on amounts payable to related parties during the year was $523,000 (1998 - $604,000). During 1999, these amounts were settled through the agreement with Miramar described in note 6.

9. Share capital:

(a) Authorized:

500,000,000 common shares without par value

100,000,000 first preference shares without par value

100,000,000 second preference shares without par value

(b) Issued:

	Number of Common shares	Amount
Issued, December 31, 1997	74,003,690	$ 122,000
Shares issued:		
For cash on exercise of stock appreciation rights	3,090	–
Issued, December 31, 1998 and 1999	74,006,780	122,000

9. Share capital (continued):

(c) Stock options:

At December 31, the Company had stock options outstanding as follows:

	1999		1998	
	Share options	Average exercise price	Share options	Average exercise price
Outstanding, beginning of year	8,204,419	$ 1.80	9,034,419	$ 1.80
Granted	–	–	–	–
Exercised	–	–	–	–
Forfeited and expired	(6,999,519)	1.80	(830,000)	1.80
Outstanding and available for exercise end of year	1,204,900	$ 1.80	8,204,419	$ 1.80

During 1998, 8,130,049 stock options with exercise prices ranging from $5.35 to $3.20 were repriced to $1.80. Substantially all of the outstanding options at December 31, 1999 expire before the end of 2001.

Subsequent to year end, the Company granted stock options to acquire 5.9 million common shares in the Company at an exercise price of $0.30. Of the 5.9 million options awarded, 3.2 million of these options vest and will become exercisable in 2001 and 2002.

10. Income and resource taxes:

The Company and a Canadian subsidiary have federal non-capital loss carry-forwards for Canadian tax purposes of approximately $16.0 million (1998 - $10.0 million) available to reduce taxable income otherwise calculated through 2006. The future tax benefit of these loss carry forward balances has not been recognized in the accounts.

In addition, the Company has certain other tax balances that may be recoverable from future operations in Latin America which have been classified as other assets, net of a valuation allowance. The tax basis of the Company's assets does not differ materially from their carrying values.

11. Business segments:

(a) Operating segment - The Company's operations are primarily directed towards the exploration and development of mineral properties in Latin America. During 1998, the Company generated revenue from the sale of gold extracted from one of these properties. The Company's mining activities represent a single reportable segment.

(b) Geographic segments - The Company's identifiable capital assets and revenues by geographic area are as follows:

As at December 31, 1999:

	Capital assets	Revenues
Central America	$ 26,640	$ 2,974
South America	91,848	–
Canada	42	13
	$ 118,530	$ 2,987

As at December 31, 1998:

	Capital assets	Revenues
Central America	$ 32,331	$ 3,346
South America	90,351	3
Canada	39	280
	$ 122,721	$ 3,629

Capital assets are comprised of plant and equipment and mineral properties and deferred development.

12. Related party transactions:

Related party transactions not disclosed elsewhere in these consolidated financial statements are as follows:

(a) During 1999, the Company paid $861,000 (1998 - $2.2 million) in management fees to Miramar; and

(b) In 1998, a company controlled by one of the directors of the Company was advanced funds under a drilling services contract for GMA totaling US$250,000. This advance was expensed in 1998.

13. Financial risk management:

(a) Foreign currency hedging:

All of the Company's anticipated mineral revenues are denominated in US dollars. In order to manage its exposure to currency fluctuations, the Company may enter into currency forward sales or options contracts. The Board of Directors has approved a hedging policy and reviews the Company's hedging position periodically.

As at December 31, the Company had no outstanding currency hedging contracts.

(b) Credit risks:

The Company's ability to realize on the above contracts is dependent upon the ability of the counter-parties to perform in accordance with the terms of the agreements. The Company deals only with major financial institutions with investment grade credit ratings and does not expect any counter-parties to fail to meet their obligations.

14. Financial instruments:

Financial instruments are recorded at cost. Fair value estimates are made at the balance sheet date, based upon relevant market information relating to the financial instrument. These estimates are subjective in nature and involve uncertainties and significant matters of judgment. Changes in assumptions could significantly affect these estimates.

The fair value of financial instruments, comprising cash, marketable securities, accounts receivable, current liabilities and long-term debt, are estimated to not be materially different from carrying value due to their ability for prompt liquidation or short-term to maturity. The fair value of amounts payable to Miramar are not readily determinable due to the nature of the relationship between the Company and Miramar and the lack of a ready liquid market for such instruments. The fair value of the forward sales contracts that were outstanding at December 31, 1998 was negative $637,000.

15. Comparative figures:

Certain comparative figures have been reclassified to conform with the basis of presentation adopted in the current year's consolidated financial statements.

Northern Orion Explorations Ltd. Management Discussion and Analysis
December 31, 1999

Overview

Northern Orion Explorations Ltd. ("Northern Orion" or "the Company") is engaged in the development of three main mineral properties – Agua Rica and San Jorge in Argentina and Mantua in Cuba. In the third quarter of 1999, Northern Orion ceased operation of a gold mining operation at the Mantua project in Cuba. Financial constraints on Northern Orion for the past two years have necessitated a significantly reduced scale of exploration and development activities in 1999 and 1998 as compared to previous years. Consequently, many property interests have been evaluated in light of the constraints and abandoned.

Northern Orion recorded a loss of $18.2 million or $0.25 per share in 1999 compared to a loss of $21.3 million or $0.29 per share in 1998. The loss in 1999 includes write-downs on mineral properties, other assets, leach pad inventories and marketable securities of $12,255,000 or $0.17 per share compared to write downs of mineral properties and marketable securities of $15.9 million or $0.22 per share in 1998. Excluding write downs and the costs of termination and severance, the Company's loss in 1999 of $4.8 million compares to a loss of $5.3 million in 1998. The loss in 1999 reflects the losses from the gold operations in Cuba, the costs of continued curtailment of exploration activities in Argentina and Cuba and costs of depreciation related to the Cuban operating assets. These increased costs were partially offset by a 60 percent reduction in management fees charged by Miramar and a 45 percent reduction in general and administrative costs.

Mining Operations

Gold production from the Company's 50% owned Mantua operation was completed in September 1999. The termination of the gold phase at Mantua was made as planned with the depletion of mineable ore, and in light of longer than expected leach times and lower than expected recoveries combined with a low gold price environment. The Company recorded a write down of the remaining gold assets of $3.8 million and leach pad inventory of $1.1 million as a result. During the period of operation in 1999, revenues from gold sales were US$4.1 million compared to US$4.8 million in 1998 of which Northern Orion's share was 50 percent. Total production sold in 1999 was 15,066 ounces compared to 16,323 ounces of which Northern Orion's share was 7,533 and 8,161 ounces, respectively. As the result of certain hedging transactions, the realized selling price for the Company's 50% share of production in 1999 was US$298 per ounce compared to US$337 per ounce in 1998 and compared to an average gold spot price of US$273 per ounce for the period of operation in 1999. Gold production commenced at Mantua mine in the first quarter of 1998. Prior to achievement of commercial production in 1998, all costs of startup operations and related interest and overhead were capitalized.

Exploration and Development Activities

Agua Rica

Work continued at a reduced level in 1999 at the 30% owned Agua Rica Project in Argentina. The project operator, BHP completed the 1998/1999 work program in May 1999 that completed the necessary fieldwork required to support the preparation of a bankable feasibility study. The Company's share of these programs (including management fees to the operator) in 1999 was $2,895,000. The 1998/9 work program for the project of US$ 14.5million was completed and work on the 1999/2000 program of US$ 1.5 million was commenced. To date, the Company has funded all required cash calls to meet its commitment to Agua Rica. Due to the continued weak world copper price in 1999, activities at Agua Rica continued on a reduced scale from previous years. The 1998/9 work program built on the work performed in completing the Initial Feasibility Study, which was issued in November 1997. The findings of this study indicated that a large low-cost mine could be developed that would have attractive returns on capital invested. On a long-term basis, the Company's share of the capital requirement to develop a mine at Agua Rica could be in excess of US$ 200 million. Northern Orion's management is continuing to examine all of the Company's options on how best to proceed with this important project. In order to develop a mine at Agua Rica, the Company will need to obtain or arrange significant additional capital.

Mantua

Work continued in 1999 to arrange financing for a bankable feasibility study for the copper mining phase. The Company is currently seeking funding to complete this study. A final production decision for the copper phase is pending the results of this feasibility study. The Company's ability to develop the next phase at Mantua is dependent upon obtaining third party financing.

LIQUIDITY AND CAPITAL RESOURCES

General

Northern Orion's financial condition in 1999 continued to be challenged principally due to poorer than expected operating performance at the Mantua gold operation, the decision to continue to fund exploration, the level of management fees and administrative overhead, and the consequential costs associated with amounts of funds advanced by the Company's controlling shareholder, Miramar Mining Corporation ('Miramar').
Due to the prospective nature of the mineral exploration business and the number of exploration properties held, Northern Orion has a limited ability to generate sources of internal cash flow from operations. The Company has financed the acquisition, exploration and development of its properties through a combination of the issuance of common shares to the public, borrowings from Miramar, attracting other companies to joint venture the evaluation of properties and through third party borrowings.
When and if the Company places anyof its exploration properties into production, it is intended that the resulting cash flows may become sufficient to sustain future operations, exploration and development. At present, the Company lacks the internal financial ability to advance any of its projects to the production stage.

Cash Resources and Liquidity

At the end of December 1999, the Company had a working capital deficiency of $187,000 compared to a deficiency of $2.0 million at the end of 1998. However, at year-end, the Company had $1,391,000 available under the Miramar facility as further described below under the 1999 Financial Restructuring. These funds are not sufficient to continue the full evaluation of all of the Company's mineral prospects. Management of the Company is in the process of further evaluating all of the Company's property interests in order to ensure that value is realized. In addition, all contemplated expenditures are reviewed to ensure that cash commitments are prioritized and that existing capital resources are available to maintain the core properties currently held. Management is evaluating potential new sources of financing to meet the anticipated expenditures required to further advance its projects.

1999 Financial Restructuring

In 1998 and 1999, the Company was unable to fund required repayments under a US$10 million credit facility that had been arranged to fund the construction of the Mantua gold operation. Under the terms of a financing guarantee, Miramar was required to make these repayments and the Company became directly obligated to Miramar. Interest of $1,534,000 (1998 - $360,000) was charged at 11% per annum on the guarantee payments made by Miramar. In addition, Miramar made advances to the Company to fund working capital requirements and various exploration expenditures. In September 1998, these amounts totaling $17.5 million were repaid. Subsequent to September 1998, the Company drew additional funds from Miramar to cover operating costs at the Mantua gold project, to finance continued work on its exploration and development projects, and to fund administrative expenses and management fees. Interest was charged on these advances at 8% per annum. As of September 1999, the amount owed to Miramar due to the advances and interest charged had accumulated to approximately $24.5 million.

In December 1999, the Company reached an agreement to restructure and partially settle amounts owing to Miramar. Under the agreement, the Company issued to Miramar a royalty and net proceeds interest ('Royalty Interest') in exchange of $17,987,000 owed. The Royalty Interest entitles Miramar to receive the economic equivalent of a 2.5% net smelter return royalty on all of the Company's mining properties and a right to receive a portion of the proceeds from the sale of any of the Company's mining interests. . The total of the payments under the Royalty Interest is limited to $17,987,000, the amount exchanged.

In addition, under the agreement, the Company issued a promissory note to Miramar and capitalized certain amounts to the convertible debenture as consideration for the existing indebtedness. No gain or loss was realized on this restructuring of amounts payable to Miramar. The promissory note is in the amount of $6.5 million; bears interest a bank prime plus 2% and is due on demand after June 20, 2001. The promissory note requires that the Company maintain working capital of not less than $1,000,000 as and from March 31, 2000, to be tested monthly. Subsequent to December 31, 1999, $4.5 million of the promissory note was settled through the issuance to Miramar of 15 million shares in the Company, priced at $0.30 per share.On March 31, 2000, Miramar issued a waiver that effectively extended the start of the monthly testing of the Company's working capital position to June 15, 2000.

Under the terms of the debt restructuring and settlement agreement with Miramar, the Company was entitled to receive additional funds of $2.6 million from Miramar. The

additional funds are drawn under and secured with the convertible debenture but carry no right of conversion into common shares of the Company. At December 31, 1999, the Company had drawn $1,209,000 of the additional amount and $1,391,000 remained available.

Northern Orion continues its process of determining methods to obtain sufficient capital resources to meet its short and medium term financial requirements. Long-term liquidity and capital resources will be dependent upon the successful development and profitable operation of its mineral properties and the availability of capital from the equity markets. In order to maintain financial resources and take advantage of financial leverage, the Company will continue to negotiate with major financial institutions to obtain project financing.

Commitments

Northern Orion continues to contribute to the Agua Rica joint venture with BHP. Under the joint venture, exploration and development expenditures are made under the terms of annual work programs and contributed to on the basis of the respective party's interest. Northern Orion's interest is 30% and BHP owns 70%. It is expected that total expenditures under the current program will be approximately $ 1.5 million (US$ 1.0 million), of which Northern Orion's share is $0.5 million (US$ 0.3 million), including management fees.

OUTLOOK

Northern Orion's plan is to reduce expenditures to the lowest possible level while maintaining its interest in certain core properties. Plans for 2000 call for concentration on the Mantua project in Cuba and on Agua Rica and San Jorge in Argentina.

Advanced Stage Projects

The Company's 30% interest in Agua Rica continues to be funded under the terms of a joint operation agreement with BHP. The current program for 2000 includes the completion of certain property activities and the remaining physical work for the final feasibility study.

The Company has evaluated on a pre-feasibility basis the potential for developing an SX/EW operation at San Jorge. Even though the results were encouraging, management believes that the project economics could be more attractive with the definition of additional resources through further exploration drilling supplemented by a recovery in the copper price. The Company is seeking a third party with which to form a joint venture to undertake the necessary work program and to complete a final feasibility study.

Management is in the final stages of negotiating the funding of the bankable feasibility study for the Mantua copper phase. If recommended by the study, construction of the copper plant at Mantua may commence upon successful financing of the capital requirements for the project.

Exploration Projects

In light of financial constraints, Northern Orion has suspended exploration efforts in all non-core properties. Northern Orion may perform exploration to generate additional new prospects as and when financial resources allow.

RISKS AND UNCERTAINTIES

The Company operates almost exclusively in foreign jurisdictions and is dependent on world metals and currency markets that may present risks to the future prospects of Northern Orion.

Risks Associated with the Mining Industry

Northern Orion is engaged in the exploration for and the development of mineral deposits. These activities involve significant risks which careful evaluation, experience and knowledge may not, in some cases, eliminate. The commercial viability of any mineral deposit depends on many factors, not all of which are within the control of management. Some of the factors that will effect the financial viability of a given mineral deposit include its size, grade and proximity to infrastructure. In addition, government regulation, taxes, royalties, land tenure, land use, environmental protection and reclamation and closure obligations could have a profound impact on the economic viability of a mineral deposit.

Northern Orion is not able to determine the impact of potential changes in environmental laws and regulations on its financial position due to the uncertainty surrounding the form such changes may take. As mining regulators continue to update and clarify their requirements for closure plans and environmental protection laws and administrative policies are changed, additional reclamation obligations and further security for mine reclamation costs may be required. It is not expected that such changes will have a material effect on the operations of Northern Orion.

Risks Associated with Financial Markets

Both Argentina and Cuba have currently fixed their currency to the US dollar and removal of these exchange controls could significantly effect the exchange rates in terms of the Canadian dollar. Continued weakness of the Canadian dollar in comparison to the US dollar will also affect the results of operations. Increasing costs of labour, supplies and energy may affect planned operations in future years. The potential for increased input prices is taken into consideration when preparing plans for future exploration, development and mine construction.

Risks Associated with the Market for Metals and Minerals

The prices of metals and minerals are subject to relatively large changes over short time periods. These prices can have a direct impact on the commercial viability of production from mineral properties.

Risks Associated with Foreign Operations

Northern Orion's investments in foreign countries such as Argentina and Cuba carry certain risks associated with different political and economic environments. Northern Orion undertakes investments in various countries around the world only when it is satisfied that the risks and uncertainties of operating in different cultural, economic and political environments are manageable and reasonable relative to the expected benefits.

NORTHERN ORION EXPLORATIONS LTD.

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July 4, 2000 **NEWS RELEASE 00-06** **NNO - TSE**

Northern Orion & Miramar Reach Accord on Extension of Financial Support

VANCOUVER - Northern Orion Explorations Ltd. (Northern Orion) is pleased to announce that it has negotiated with its major shareholder, Miramar Mining Corporation, for continued financial support to the end of September 2000. Progress made by the management of Northern Orion over the last seven months in reducing operating expenses, attracting new parties for joint venture discussions and securing new funding for the Company has given Miramar sufficient confidence to further extend financial support.

Under the new accord, Miramar has agreed, subject to any necessary regulatory approvals, to make an additional $675,000 available to Northern Orion for working capital purposes over the next 3 months. The extension of additional credit will be reflected in an amendment to the terms of an existing promissory note issued by Northern Orion in connection with the debt restructuring announced April 4, 2000, and will bring the principal amount payable under the promissory note, as amended, to $2,625,000. The major terms of the amended note include:

- The commitment of Miramar to make additional advances of up to $675,000 during July through to September, 2000;
- Extension of the security granted for previous advances to cover the additional funds advanced.;
- Interest on the additional advances will be calculated semi-annually at prime plus 2%, and will be capitalized;
- The additional funds will become due and payable on demand after June 30, 2001 (the same time as the principal and interest were due under the original note);
- The working capital maintenance requirements under the existing debt restructuring agreements will be waived by Miramar until September 15 2000; and,
- In lieu of banking fees, Northern Orion will issue to Miramar 400,000 common shares upon receipt of regulatory approval.

As a result of the issuance of the 400,000 shares to Miramar Miramar's share ownership will increase to 56 million shares, out of a total of 89.4 million Northern Orion shares issued, giving Miramar a 62.6% interest in Northern Orion.

Northern Orion is a junior company focused on the exploration and development of mining projects in Latin America. The company has one of the largest undeveloped resource bases of copper and gold in the junior mining sector. (See our news release of April 27 2000) Management is continuing to work toward developing Northern Orion as a significant copper producer based on its portfolio of advanced projects.

For further information contact:
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Email: info@northernorion.com

FORM 27

Material Change Report
Under:
Section 85(1) of the *Securities Act* (British Columbia)
Section 118(1) of the *Securities Act* (Alberta)
Section 75(2) of the *Securities Act* (Ontario)

Item 1 **Reporting Issuer**

Northern Orion Explorations Ltd.
311 West First Street
North Vancouver, British Columbia, V7M 1B5
Telephone: (604) 980-0573

Item 2 **Date of Material Change**

July 4, 2000.

Item 3 **Press Release/Publication/Filing**

A press release providing notice of the material change was issued on July 4, 2000 (copy attached).

Item 4 **Summary of Material Change**

The Company and its major shareholder, Miramar Mining Corporation ("Miramar") have now concluded an agreement pursuant to which Miramar will advance to the Company an additional $675,000, to provide the Company with working capital. The transaction subject to the agreement is a "related party transaction" under Rule 61-501. The transactions were reviewed by a special committee of the independent directors of the Company (the "Special Committee"), and the Special Committee determined that the terms of the transactions were fair and reasonable under circumstances and the transactions are beneficial to and in the interests of the Company and its shareholders, including minority shareholders. The Special Committee also determined that in the circumstances the "financial hardship "exemption in sections 5.6(8) and 5.8(5) of Rule 61-501 would be applicable.

The effect of the agreement is to provide relief from the working capital maintenance requirements under existing agreements between the Company and Miramar, through to September, 2000 and to provide the Company with additional working capital. In consideration for the advance the Company will, subject to regulatory approval, issue to Miramar 400,000 common shares.

Item 5 Full Description of Material Change

(a) Description of the Transaction

The Company has concluded an agreement with the Company's principal shareholder, Miramar, pursuant to which:

- Miramar will make an additional $675,000 available to the Company over the next 3 months (to September, 2000);
- Existing security granted to Miramar for existing indebtedness will be extended to cover the additional advances;
- Miramar will receive, subject to regulatory approval, 400,000 Common Shares of the Company;
- Miramar will waive working capital maintenance requirements of the Company to September 15, 2000, once it receives 400,000 Common Shares of the Company.

The Company has executed and delivered to Miramar a promissory note (the "Replacement Note") in the amount of $2.675 million, bearing interest at prime plus 2% and due on demand after June 30, 2001. The Replacement Note supercedes and replaces a previously issued promissory note in the principal amount of $2 million and has the same material terms as the previous note.

(b) Reasons for the Transaction:

Under existing agreements with Miramar the Company was obliged to maintain a working capital position of $1,000,000 per month. The Company has not been able to meet that requirement and advised that it would not meet the requirement and requested a waiver and additional financial support, pending obtaining financing from alternate sources.

(c) Effect of the Transaction on Issuer's Business and Affairs:

The Transaction provides the Company with working capital, and will allow the Company's new management an opportunity to continue restructuring efforts and pursue alternative sources of financing.

(d) Relevant History of the Subject Matter of the Transaction:

On April 4, 2000, the Company completed a restructuring of debt owed to Miramar (see Material Change Report dated, April 5 2000). While the Company is currently pursuing financing alternatives it requires additional working capital to continue operations pending obtaining such financing. The Company is unable to comply with the working capital maintenance

requirements of the April 4, 2000 debt restructuring agreements. Miramar has agreed to make additional working capital available to the Company and to waive the working capital maintenance requirements to September 15, 2000.

(e) Interest in the Transaction of Miramar Mining Corporation, Its Insiders, Associates and Affiliates and Any Other Related Party:

Insiders, Associates, Affiliates and other Related Parties of Miramar own a total of 2,971,559 Shares of Miramar and hold options to purchase an additional 97,600 Shares of Miramar. To the knowledge of the Company, the same persons, together with Miramar, own a total of 55,941,850 Shares of the Company, and hold options to acquire an additional 1,265,000 Shares of the Company.

(f) Effect of the Transaction on Miramar Mining Corporation and Related Parties:

Miramar's equity interest in the Company will be increased by 400,000 Shares, bringing its percentage interest in the Company to 62.6%.

(g) Nature of Any benefit to Accrue to Related Parties as a result of the Transaction:

[Insiders and Related Parties will not secure any benefit not shared proportionately by all shareholders of the Company.]

(h) Review and Approval Process for the Transaction:

The proposed transactions were reviewed by Special Committee of independent directors of the Company, who determined that the terms of the transactions were fair and reasonable under the circumstances and the transactions were beneficial to and in the interests of the Company and its shareholders, including minority shareholders. The Special Committee also determined that in the circumstances the "financial hardship" exemption in sections 5.6(8) ad 5.8(5) of Rule 61-501 would be applicable. The proposed transactions have been filed with the Toronto Stock Exchange.

(i) Summary of Any Valuation in Respect of the Transaction:

No valuation will be carried out.

(j) Other Material Relevant to the Transaction:

There is no other relevant information.

Item 6 **Reliance on Confidentiality Provisions of the Securities Act**

Not applicable.

Item 7 **Omitted Information**

Not applicable.

Item 8 **Senior Officer**

Contact: Stephen Wilkinson
Telephone: (604) 980-0573

Item 9 **Statement of Senior Officer/Director**

The foregoing accurately discloses the material change referred to in this report.

Dated at the City of Vancouver, in the Province of British Columbia, this ____ day of July, 2000.

NORTHERN ORION EXPLORATIONS LTD.

Per: _____(signed)_____
Stephen Wilkinson, President

IT IS AN OFFENCE FOR A PERSON TO MAKE A STATEMENT IN A DOCUMENT REQUIRED TO BE FILED OR FURNISHED UNDER THE ACT OR THIS REGULATION THAT, AT THE TIME AND IN THE LIGHT OF THE CIRCUMSTANCES UNDER WHICH IT IS MADE, IS A REPRESENTATION.

NORTHERN ORION EXPLORATIONS LTD.

Consolidated Balance Sheets
(expressed in thousands of dollars)

June 30, 2000 and December 31, 1999

	2000 (unaudited)	1999
Assets		
Current assets:		
Cash	$ 44	$ 314
Accounts receivable	34	347
Amount receivable from controlling shareholder	236	–
Prepaid expenses	71	37
	385	698
Plant and equipment	2,236	2,784
Mineral properties and deferred development	99,738	115,746
Other assets	–	37
	$ 102,359	$ 119,265
Liabilities and Shareholders' Equity		
Current liabilities:		
Accounts payable and accrued liabilities	$ 478	$ 885
	478	885
Promissory note payable	2,159	6,500
Royalty and proceeds interest payable (see Note 3)	–	17,987
Convertible debenture	23,600	21,169
Future income taxes (see Note 2)	7,373	–
Other long-term liabilities	28	66
	33,638	46,607
Shareholders' equity:		
Share capital (issued and outstanding at June 30, 2000 – 89,006,780 common shares; December 31, 1999 – 74,006,780 common shares)	126,500	122,000
Deficit	(57,779)	(49,342)
	68,721	72,658
	$ 102,359	$ 119,265

NORTHERN ORION EXPLORATIONS LTD.

Consolidated Statements of Operations and Deficit
(expressed in thousands of dollars except per share amounts)

Six month periods ended June 30, 2000 and 1999

	2000 (unaudited)	1999 (unaudited)
Revenue:		
Metal sales	$ –	$ 2,434
Interest and other income	14	9
	14	2,443
Expenses:		
Cost of sales	70	3,065
Management fee	210	540
General and administration	147	292
Restructuring costs	57	734
Interest	–	116
Depreciation and depletion	311	1,320
Write-down of mineral properties and other assets	315	1,345
Loss (gain) on foreign exchange translation	(32)	547
	1,078	7,959
Loss for the period	$ 1,064	$ 5,516
Deficit, beginning of period	56,715	31,175
Deficit, end of period	$ 57,779	$ 36,691
Loss per share	$ 0.01	$ 0.07
Weighted average number of common shares outstanding	81,547,764	74,006,780
Total common shares outstanding at end of period	89,006,780	74,006,780

NORTHERN ORION EXPLORATIONS LTD.

Consolidated Statements of Cash Flows
(expressed in thousands of dollars)

Six month periods ended June 30, 2000 and 1999

	2000 (unaudited)	1999 (unaudited)
Cash provided by (used in):		
Operations:		
Loss for the period	$ (1,064)	$ (5,516)
Items not involving cash:		
Depreciation and depletion	311	1,320
Writedown of mineral properties and other assets	315	909
Net change in non-cash working capital:		
Decrease (increase) in accounts receivable	313	699
Decrease (increase) in inventories	–	1,262
Decrease (increase) in amount receivable	(236)	–
Decrease (increase) in prepaid expenses	(34)	10
Increase (decrease) in accounts payable and accrued liabilities	(407)	1,417
	(802)	101
Financing:		
Advances from controlling shareholder	1,587	–
Due to related parties	–	2,918
Long-term debt	–	(5,801)
Capitalized interest on convertible debenture	1,040	718
Other long-term liabilities	(38)	–
Guarantee to related party	–	7,041
	2,589	4,876
Investments:		
Mineral properties	(2,057)	(4,892)
Other long-term assets	–	(29)
	(2,057)	(4,921)
Increase (decrease) in cash	(270)	56
Cash, beginning of period	314	542
Cash, end of period	$ 44	$ 598
Supplementary information:		
Income taxes paid	$ –	$ –
Interest paid	–	78
Non-cash transactions:		
Reduction in promissory note payable through issuance of common shares	4,500	–
Reduction in royalty and proceeds interest payable through partial disposition of mineral property interests	17,987	–

Notes:

1. Northern Orion Explorations Ltd. (the "Company")

The Company is currently in the process of defining its ore reserves and their economic recoverability. Accordingly, the Company continues to be dependent upon Miramar Mining Corporation ("Miramar") providing funds to continue the evaluation of its mineral properties. Miramar, which holds voting control over the Company, has agreed to provide certain funds under the terms of several agreements. The Company is required to have working capital (current assets minus current liabilities) of at least $1 million commencing September 15, 2000 or Miramar can call the debt and take possession of the security. These statements have been prepared on the basis that the Company continues to receive support from Miramar or other sources of financing and that no actions are taken which require settlement outside of the normal course of business.

2. Accounting Changes

Effective January 1, 2000, the Canadian Institute of Chartered Accountants ("CICA") changed accounting standards relating to the accounting for income taxes and employee future benefits.

Future Income Taxes

The CICA's new standard on accounting for income taxes adopts the liability method of accounting for future income taxes, which is based upon differences in the timing of reporting income and expenses in financial statements and tax returns. Under the new rules for future income taxes, Northern Orion is required to record deferred taxes as if all assets and liabilities on the balance sheet were settled at their carrying amounts, net of valuation allowance, at current tax rates.

This accounting change has been applied retroactively, without restatement of prior periods. As a result, the Company has recorded an increase to deficit of $7,373,000 and a future tax liability of $7,373,000 as at January 1, 2000.

Employee Future Benefits

The CICA's new standard on accounting for employee future benefits has no material impact on the financial statements of the Company.

3. Partial Disposal of Mineral Properties and Contingent Liability

In the quarter ended March 31, 2000, the Company obtained regulatory approval and completed final documentation for the debt settlement and restructuring agreement entered into with its controlling shareholder, Miramar. As a result of this debt settlement, the Company exchanged a royalty and proceeds interest ('Proceeds Interest') granted on the Agua Rica, Mantua and San Jorge properties. This transaction was treated as a partial disposition of mineral properties in the quarter and no gain or loss was recognized. The Proceeds Interest entitles Miramar to receive the economic equivalent of a 2.5% net smelter return royalty and a portion of the proceeds from the sale of all of the Company's mining properties and interests to a total of $17,987,000.

4. Subsequent Event

In July 2000, the Company arranged an extension ('the Extension') of financial support from its controlling shareholder, Miramar. The Extension provides that Miramar will provide additional funds of up to $675,000 through September 2000. Miramar has also agreed to allow the working capital maintenance requirements under the Promissory Note to be waived until September 15, 2000. In lieu of a banking fee, the Company has agreed, subject to regulatory approval, to issue an additional 400,000 common shares to Miramar.

PACIFIC CORPORATE TRUST COMPANY
Suite 830 - 625 Howe Street
Vancouver, B.C. V6C 3B8

Telephone: (604) 689 - 9853
Fax: (604) 689 - 8144

August 29, 2000

B.C. Securities Commission
Executive Director
2nd Floor, 865 Hornby Street
Vancouver, B.C., V6Z 2H4

Dear Sirs:

RE: NORTHERN ORION EXPLORATIONS LTD
MAILING ON AUGUST 29, 2000
INTERIM FINANCIAL STATEMENTS
FOR THE SECOND PERIOD ENDING JUNE 30, 2000

We confirm that on the above date, the material issued by the subject Company was forwarded by prepaid first class mail to all the persons on Supplementary Mailing List maintained at our office.

Yours truly,

PACIFIC CORPORATE TRUST COMPANY

"Lisa Scotland"

Lisa Scotland
LS/ab

cc: Alberta Securities Commission
cc: Director of Corporations - PEI
cc: Manitoba Securities Commission
cc: Nova Scotia Securities Commission
cc: Office of the Administrator of Securities - NB
cc: Ontario Securities Commission
cc: Quebec Securities Commission
cc: Registrar of Securities - NT
cc: Registrar of Securities - YT
cc: Saskatchewan Securities Commission
cc: Securities Division - Department of Justice - NF
cc: Montreal Stock Exchange
cc: Toronto Stock Exchange
cc: Canadian Venture Exchange
cc: Northern Orion Explorations Ltd
cc: Dumoulin Black
cc: KPMG Peat Marwick Thorne.

NORTHERN ORION
EXPLORATIONS LTD.

311 West First Street, North Vancouver, B.C. V7M 1B5
Tel: (604) 980-0573 Fax: (604) 980-0731

September 6, 2000 **NEWS RELEASE 00-07** **NNO – TSE & CDNX**
MAE – TSE, MAENF – OTC BB

Northern Orion Announces Agreements for $8.2 Million Private Placement, Restructuring & Settlement of Debts and Redistribution of Control Block

VANCOUVER - Northern Orion Explorations Ltd. is pleased to announce that it has entered into agreements that are intended to:

1. Raise by way of private placement up to $8.2 million for Northern Orion;
2. Restructure and settle its long-term indebtedness to Miramar Mining Corporation ("Miramar"); and,
3. Redistribute approximately 75% of the existing control block currently held by Miramar.

The closing for the above transactions is to be on or before October 17, 2000. After which, Northern Orion should be a widely held company that is sufficiently funded to carry on its business of developing its highly perspective copper properties.

Harris Partners Limited, a Toronto-based securities dealer, has been engaged to act as Northern Orion's financial advisor and the dealer (the "Dealer") for these transactions. A merchant banking operation has offered the lead commitment to the financial restructuring of the Company.

Private Placement

Northern Orion intends to offer special warrants, which will be exchangeable into common shares of the Company. With the completion of the offering, Northern Orion expects to have net of fees and expenses, approximately $7.7 million in cash.

Agreement

Miramar has agreed to sell to the Dealer at the Dealer's election for resale, 42.4 million of its approximately 55.5 million issued shares in Northern Orion, $1.9 million of the $2.7 million Note held by Miramar and the Northern Orion $26.6 million Convertible Debenture that matures in September 2003, for $8.4 million in cash, which would be payable to Miramar on closing.

Miramar would also retain approximately 13 million shares of Northern Orion or approximately 15% of the issued shares before completion of the anticipated Northern Orion financing.

Miramar would also retain the existing royalty and proceeds interest in Northern Orion's mining assets. The interest is an obligation to pay an equivalent to a 2.5% NSR in any production from any of Northern Orion's mining properties to a maximum of $18 million. In addition, if Northern Orion sells any of its mining assets, it would pay to Miramar 50% of the net proceeds of the sale up to the maximum of $18 million.

The transaction is expected to close by October 17, 2000. Closing of the proposed transaction is subject to, among other things, completion of due diligence by the Dealer, conversion and resale by the Dealer of the Northern Orion securities to third parties and any required regulatory approval.

Outlook

Management of Northern Orion believes that these transactions will be positive for the company, resulting in an independent, well financed exploration company set to aggressively pursue the development of its copper and gold resources. In addition, Northern Orion views the current environment of appreciating commodity prices as highly positive for the economic potential of its mineral properties.

Northern Orion is a junior company focused on the exploration and development of mining projects in Latin America. The company has one of the largest undeveloped resource bases of copper and gold in the junior mining sector. (See the Northern Orion news release of April 27 2000) Management is continuing to work toward developing Northern Orion as a significant copper producer based on its portfolio of advanced projects.

Neither any securities that may be offered by Northern Orion in any future financing nor the Northern Orion securities being sold by Miramar will be registered under the United States Securities Act of 1933, as amended, or the securities laws of any state. **These securities may not be offered or sold in the United States or to U.S. persons without registration unless an exemption from registration is available.**

The TSE has not consented to the form of this press release. The transactions contemplated herein are subject to regulatory approval.

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E-mail vwyprysky@harrispartners.com

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NORTHERN ORION EXPLORATIONS LTD.

ANNUAL INFORMATION FORM

10 September 2000

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ITEM 1 – INCORPORATION

Northern Orion Explorations Ltd. was incorporated with the name Northern Orion Resources Ltd. under the laws of British Columbia by memorandum and articles dated April 30, 1986. On October 31, 1986 the memorandum of the Corporation was amended to change the name of the Corporation to Northern Orion Explorations Ltd. On November 28, 1994, the memorandum of the Corporation was amended to increase the authorized capital from 25,000,000 to 100,000,000 common shares without par value ("Common Shares"), and on October 15, 1997, the memorandum and articles of the Corporation were amended to increase the authorized capital from 100,000,000 to 700,000,000 shares divided into 500,000,000 Common Shares, 100,000,000 First Preference Shares without par value ("First Preference Shares") and 100,000,000 Second Preference Shares without par value ("Second Preference Shares").

The registered and records offices of the Corporation are located at 10th Floor, 595 Howe Street, Vancouver, British Columbia V6C 2T5 and its principal executive office is located at 311 West First Street, North Vancouver, British Columbia V7M 1B5.

The following table sets forth the name of each material subsidiary of the Corporation, the jurisdiction of its incorporation and the direct or indirect percentage ownership of the Corporation in such subsidiary.

Name of Subsidiary	Jurisdiction of Incorporation	Percentage Ownership
Minera Mantua Inc.	Ontario	100%
Minera Mantua S.A.	Cayman Islands	100%
Minera Cobre S.A.	Cayman Islands	100%
Cobre Mantua S.A.	Cuba	50%
GMA Holdings S.A.	Argentina	100%
Recursos Americanos Argentinos S.A.	Argentina	100%
Minera San Jorge S.A.	Argentina	100%

Northern Orion may be referred to as the Corporation or the Company. Where the context requires, the terms "Corporation" or "Company" include the subsidiaries of the Corporation. All dollar amounts in this annual information form ("AIF") are in Canadian dollars unless otherwise stated. The Corporation has no full-time employees.

Item 2 - General Description of the Business

The Corporation, through subsidiaries, is engaged in the exploration for, and development and production of, precious and base metals. The Corporation indirectly owns all of the outstanding shares of Minera San Jorge S.A. ("MSJ") and Recursos Americanos Argentinos S.A. ("RAA"), both Argentine companies that hold interests in mineral properties in Argentina. The Corporation also owns all of the outstanding shares of Minera Mantua Inc. ("MMI"), an Ontario company that holds indirect interest in the Mantua property in Cuba.

Item 3 - Narrative Description of the Business

Argentine Properties

On November 17, 1994, the Corporation acquired all of the outstanding shares of Grupo Minera Aconcagua S.A. (GMA), a private Argentine company with interests in various exploration projects including the San Jorge Project further described below, from Miramar Mining Corporation ("Miramar"), Grupo R.A. (a group of Argentinean companies controlled by Dr. Ricardo Auriemma) and an Aruba corporation controlled by Dr. Auriemma. The shares of GMA were purchased for 6,000,000 Common Shares (2,600,000 to Miramar, 2,600,000 to Grupo R.A. and 800,000 to the Aruba corporation), and US$1,073,490 in cash to Grupo R.A. For that transaction, Miramar was reimbursed $650,000 for out-of-pocket costs incurred in acquiring its interest in GMA and structuring the transaction, property maintenance expenditures in Argentina and due diligence work on the properties. An additional 300,000 Common Shares were issued as to 150,000 Common Shares each to two unrelated third parties for finders' fees.

On June 9, 1995, the Corporation acquired in an arm's length transaction all of the outstanding shares of RAA, a private Argentinean company, from American Resource Corporation, Inc. ("ARC") for 15,000,000 Common Shares. As part of the same transaction, Miramar Finance (Bermuda) Ltd. ("Miramar Bermuda"), a wholly owned subsidiary of Miramar, loaned $10,000,000 to ARC which was repaid in 1995. ARC has disposed of all 15,000,000 Common Shares issued to it in the RAA transaction.

GMA was transferred back to Dr. Auriemma on April 7 2000 in part for consideration for settlement of outstanding issues associated with the San Jorge project and as part of the rationalization of Northern Orion's holdings in Argentina. At the same time, the San Jorge project was transferred from GMA to Minera San Jorge S.A. ("MSJ") and a "servidumbre" over surface and access rights was granted to MSJ. The following is a brief description of the Agua Rica and San Jorge exploration projects in which the Corporation has indirect interests.

Agua Rica Project

The Agua Rica copper/gold property covers an area of about 13.5 square kilometres and is located in Catamarca Province, Argentina. On May 5, 1996, RAA exercised an option (the "Agua Rica Option") to purchase all of the outstanding shares of Agua Rica S.A., a private Argentine company that owns the central mining claims of the Agua Rica property, for a purchase price of US$7.9 million. Pursuant to an agreement made in September 1993 (the "Joint Operating Agreement"), BHP Minerals International Inc. ("BHP") earned a 70% joint venture interest in the project by spending US$1 million on exploration and agreeing to reimburse RAA for all costs of exercising the Agua Rica Option. As at December 31, 1999, BHP had fully reimbursed the Corporation for the US$7.9 million paid to exercise the Agua Rica Option. Under the Joint Operating Agreement, exploration expenditures are shared between RAA and BHP on a 30-70 basis, respectively. During 1999, the Company contributed $5.6 million to the project, which was its 30% share of the total budget. In 1998, Northern Orion's share of the exploration budget was $9.8 million.

Location and Access

The Agua Rica property is located approximately 30 kilometres north of the town of Andalgala in Catamarca Province, Argentina. The property is at an elevation of 3,300 meters. The original access to the property was by provincial highway to within 20 kilometres and then by four-wheel drive road. In 1997, a road to the property was completed 35 kilometres up the Potrero valley from Andalgala.

History

The Agua Rica property was explored from 1969 to 1972 by City Services Limited that carried out geological mapping and geochemical sampling, and drilled 27 surface holes and 6 underground holes. Many holes were lost or had poor recovery, but some had 40 to 50 meter intersections of greater than 1% copper and gold grades in the range of 0.3 grams per tonne to 0.5 grams per tonne. In 1994, under the Joint Operating Agreement, BHP commenced a work program of mapping, surface sampling and drilling. Follow-up drilling in 1995 intersected thick intervals of near surface, supergene-enriched chalcocite and covellite mineralization containing significant gold, silver and molybdenum. By the end of 1998, more than 67,000 meters of drilling in 176 holes had defined continuous copper-gold-molybdenum mineralization over an area of 2,000 meters by 1,200 meters and to depths of up to 600 meters below surface.

RAA and BHP are continuing with a work program that is designed to advance the project towards completion of a final feasibility study. Work completed in 1998 included 300 meters of underground drifting, collection of 300 tonnes of bulk sample, pilot mill testing, updated resource and reserve estimates, as well as revised capital and operating cost estimates. There was no material activity on the property in 1999 as all the physical work necessary to support a bankable feasibility study has been completed. Base-line environmental studies are ongoing.

Geology and Mineralization

Basement rocks near Agua Rica consist of Cambrian-Ordovician metamorphic schists and garnet gneisses that were intruded by an Ordovician-age granite (Capillitas Batholith) and a subsequent cluster of Miocene age porphyries (Farallon Negro Complex). The oldest known intrusive near Agua Rica is the Melcho Monzonite with an age of 8.6 million years. Intrusive activity peaked overall at 7 to 8 million years, but persisted until 5.2 million years (dacite dykes at Capillitas).

The oldest rocks at Agua Rica are Paleozoic metasedimentary units that form the wallrock to the mineralized intrusive complex. The metasediments are intruded by granite, aplite and pegmatite in the Morro Alumbrera area. At Quebrada Seca Norte (Mi Vida) and Trampeadero, the metasediments are intruded by porphyry bodies and are altered mainly to quartz and sericite. Immediately west of Agua Rica the granite has a low-angle fault contact relationship with underlying metasediments suggesting it was thrust over the metasediments.

Dacitic porphyries with well-developed stockworking veins and strong quartz-sericite alteration underlie the central area, containing the principal mineralized areas. The porphyries are cut by an igneous/hydrothermal breccia that has been traced over a vertical extent exceeding 1,000 meters. Upper portions of the breccia exhibit advanced argillic alteration and deeper in the system quartz-sericite alteration is predominant. Supergene enrichment has led to almost complete replacement of chalcopyrite with covellite and chalcocite. Near-surface, high-grade chalcocite zones gradually change downward through the mineralization into mixed chalcocite and covellite zones and then into disseminated covellite

zones. Leaching and enrichment is most intense in the central area coincident with silica stockworking and quartz-sericite-pyrite alteration at Quebrada Seca Norte (Mi Vida). Molybdenite occurs primarily as clusters on the edges and in the centres of the veins. In deeper areas, anomalous values of sulphur, arsenic, lead and zinc occur with the copper mineralization.

The presence of higher grade copper (greater than 1%) mineralization in three discrete bodies of supergene enrichment over Quebrada Seca Norte (Mi Vida), Filo Amarillo, and Trampeadero implies that a more extensive enriched zone has been dissected by erosion. Higher-grade gold mineralization (greater than 0.5 grams per tonne) is located on the western side of Quebrada Minas and in hydrothermal breccias in western Trampeadero. Molybdenite is present throughout the system with higher grades occurring in Trampeadero, Filo Amarillo (greater than 0.07%) and within a deep zone on the south side of Quebrada Seca Norte (Mi Vida).

Geological Resources

In February 1998, BHP reported a new resource estimate, based on 151 diamond drill holes totalling approximately 58,000 meters. At the higher copper cut-off grades, the results show an increase in tonnage of about 30% compared to the previous estimate that was based on 103 holes. A summary of the new estimates of the size and average grades of the mineral resource (in millions of tonnes), shown for different cut-off grades, is as follows:

Cut-off	Tonnes (millions)	Copper %	Molybdenum%	Gold(g/t)	Silver (g/t)	Measured	Indicated	Inferred
0.2%Cu	1,714	0.43	0.032	0.17	3.0	52%	25%	23%
0.4%Cu	750	0.62	0.037	0.23	3.2	70%	21%	9%
0.7%Cu	167	0.99	0.036	0.32	3.3	92%	7%	1%
1.0%Cu	60	1.31	0.040	0.35	4.0	98%	2%	<1%

These were based on results available at the date of calculation. Since the completion of the resource estimation, an additional 25 drill holes have been completed but have do not been incorporated in the calculation. In addition, based on drilling to December 31, 1997 BHP has estimated a geologic gold resource in leached caps which overlie the higher grade sulphide mineralization using a 0.25 g/t gold cut-off grade which was publicly disclosed by Northern Orion. This gold may be amenable to recovery by heap leach methods.

Tonnes	89 million
Gold Grade	0.41 g/t
Contained Gold (oz)	1.2 million

These were based on results available at the date of calculation and do not incorporate the results of the abovementioned drill holes completed in 1998.

It has not been established that the mineralization at the property may be economically mined.

Initial Feasibility Study

In November 1997, the joint venture released a positive initial feasibility study (the "Study") on the Agua Rica Project, which recommended proceeding with the work to complete a final feasibility study and development plan for the project. The Study was based on resources estimated for the first 40,000 meters of drilling in 103 drill holes completed on the project to the end of 1996. The Study evaluated two development options, both utilizing conventional open pit mining, milling, flotation and concentrate shipment. The 60K Case examined a single mill line processing 60,000 tonnes per day ("TPD") of ore throughput, while the 120K Case examined adding a second mill line after year two of production, raising the plant throughput to 120,000 TPD from year three on.

Pit plans were developed by BHP for the 60K and 120K cases, which are summarized as follows.

	60K Case	**120K Case**
Cut-off Grade	0.4% Cu	0.2% Cu
Daily Ore Production	60,000	120,000
Mine Life (years)	24.4	17
Tonnes (000s)	512,351	681,389
Grades		
- Copper (%)	0.66	0.59
- Gold (g/t)	0.26	0.25
- Silver (g/t)	3.44	3.61
- Molybdenum (%)	0.034	0.033
- Copper Equivalent (%)*	0.97	0.89
Waste (billions of tonnes)	1.2	1.2
Strip Ratio	2.35	1.80

* - The copper equivalent grades are based on in-situ values at the following metal prices: copper at US$0.80/lb, gold at US$300 per ounce, silver at US$5 per ounce and molybdenum at US$4 per pound. Actual values received will depend on the metal recoveries that may vary for different minerals.

The mine plans were based on information available at the time and do not incorporate the results of the last 73 drill holes, totalling 27,000 meters including the newly defined Filo Amarillo zone, completed in 1998. New resource and reserve models are to be prepared in 2000/01 incorporating the geological and metallurgical data generated during 1998 and 1999.

Crushing and grinding tests were completed on six ore composites, indicating the ore to be relatively soft. Approximately 200 flotation tests have been completed on ore composites and, based on these tests, recoveries were estimated to be 87% for copper, 50% for gold and 65% for molybdenum producing a copper concentrate grading 33% copper and a separate molybdenum concentrate. Phase 2 pilot-scale metallurgical work was completed in late 1999. Results from the recent testing of low-grade copper mineralization (0.2 to 0.4%) are commonly yielding 80% recovery. Higher-grade copper mineralization typically produced concentrates greater than 30% copper with better than 90% recovery. Some ore types are also yielding 70% recovery of molybdenum.

Capital costs have been estimated (in first quarter 1997 dollars) to be US$767 million for the 60K Case and US$1.1 billion for the 120K Case. The capital costs were estimated based on a mix of quotations, experiences of the nearby Alumbrera mine which has a similar capacity, and factored costs from BHP's similar mines elsewhere.

Future Work

The initial Study demonstrates the potential feasibility for the development of a large-scale copper-gold-molybdenum mine at Agua Rica based on 1997 metal prices. Since the publishing of the Initial Feasibility Study, all of the fieldwork necessary for a Bankable Feasibility Study has been completed. The remaining work consists primarily of optimisation studies regarding the evaluations of the mining and processing alternatives together with operating models that could offer the greatest potential returns. Coincident with the optimisation studies, the environmental baseline studies will be concluded. BHP has presented a budget for the Agua Rica project for the period July 1, 2000 to June 30, 2001. The proposed budget calls for expenditures of US$1.0 million. The proposed budget and work program is currently being reviewed by the Corporation.

Fiscal Stability Application

The Agua Rica joint venture filed a fiscal stability application for the project in 1998. The application was approved and guarantees protection for the project from increases in taxes, import duties, royalties and other government-controlled costs for a period of thirty years.

San Jorge Project

The original San Jorge copper/gold property consisted of seven mining concessions (covering about 5 1/2 square kilometres) and 35 mineral claims (covering about 102 square kilometres) owned by MSJ. The purchase price for the seven concessions was US$4.015 million. During 1999, the Company expended $1.7 million in exploration and development expenses on the San Jorge project (versus $5.2 million in 1998).

Location and Access

The San Jorge property is located approximately 90 kilometres northwest of the city of Mendoza in Mendoza Province, Argentina and 250 kilometres northeast of Santiago, Chile. The property is accessed from the paved Mendoza-Santiago highway to the town of Uspallata and then 40 kilometres north on a good gravel highway along the Uspallata valley. The property is at an elevation of 2,500 meters and the deposit occurs as a small hill surrounded by flat alluvium plains.

History

Several test pits were dug at San Jorge in the 1960s to investigate outcropping copper-oxide mineralization and in 1964 Compania Minera Aguilar ("Aguilar") optioned the property. Over the next four years, Aguilar completed approximately 950 meters of trenching, 111 kilometres of induced polarization geophysical surveys ("IP") and 32 drill holes for 4,894.5 meters of core. Exploraciones Falconbridge Argentinos ("Falconbridge") optioned the property in 1973 and drilled six holes for 1,126 meters. Falconbridge also sent samples for metallurgical testing.

RAA optioned the property in 1992 and, between 1993 and 1995, 45 reverse circulation holes for a total of 5,518 meters and two core holes totalling 165 meters were drilled. In 1994, metallurgical testing of oxide mineralization from various cutting samples and of an enriched zone was conducted. From 1994 to 1996, 43 reverse circulation holes were drilled for 3,942 meters and eight lines totalling 17.6 kilometres of IP were surveyed over and beyond the mineralized outcrop. The option to RAA was terminated and GMA purchased the property in 1995. Between September 1995 and February 1996 a 5,746-meter drill program was conducted on the property. From this drilling, samples were taken for metallurgical testing.

In March 1999, GMA and Argentina Mineral Development ("AMD"), an associate of Climax Mining of Australia, entered into an agreement (the "AMD Agreement") that allows for the consolidation of a large land package surrounding the San Jorge property. Both companies agreed to contribute their property holdings and mining rights in San Jorge and the surrounding area into a newly formed holding company with GMA owning 85% and AMD having the remaining 15%. This new company, Minera San Jorge S.A. ("MSJ") is to continue the development of the property, working towards producing a bankable feasibility study. AMD's ownership in the holding company is to be redeemed in exchange for a 2% net smelter return royalty ("NSR") on the mine developed if MSJ produces a feasibility study within three years, obtains financing within another year and commits to construction of a mine within another six months. If AMD's interest were redeemed, GMA would then own 100% of the new company. If the project does not proceed, the ownership structure will remain in place and will allow for potential disposal of each party's interest.

In April 2000, all of GMA's holding in the San Jorge property was transferred without cost or penalties to MSJ. The transfer was part of the reorganization of Northern Orion's Argentine holdings and part of the settlement with Dr. Ricardo Auriemma.

Geology and Mineralization

San Jorge mineralization consists of a porphyry copper-gold deposit. Mineralization at San Jorge trends northeast and occurs in four approximately horizontal but irregular layers, from top to bottom as follows:

Leached: A leached cap with copper grades averaging 0.15% copper or less, primarily as green and black copper oxides that should be amenable to dump leaching.

Oxide: Best developed along the western contact of the granite porphyry with the clastics and comprises malachite, chrysocolla, tenorite and pitch limonite with grades averaging approximately 0.5% copper and 0.25 grams of gold per tonne at a 0.1% copper cut-off.

Enriched: Associated with areas of intense faulting and repetitive water recharge, and occurs as sooty and steely chalcocite, covellite, digenite and subordinate chalcopyrite averaging approximately 0.7% copper and 0.20 grams of gold per tonne at a 0.1% copper cut-off.

Primary: Three high-grade areas have been defined in clastics sedimentary units. Good copper grades in both sedimentary and intrusive rocks have been detected to a depth of 495 meters below surface. Copper occurs dominantly as chalcopyrite with very minor bornite. At a 0.4% copper cut-off, the primary mineralization has an average grade of 0.5% copper and 0.2 grams of gold per tonne.

Gold occurs in native form and uniformly grades 0.2 grams of gold per tonne throughout the copper deposit. Silver distribution is approximately proportional to copper grade and averages 3.5 grams of silver per tonne overall.

Resources

The total indicated and inferred resource at San Jorge for oxide, enriched, and primary mineralization, using a 0.25% copper cut-off, is estimated by Northern Orion to be 381.4 million tonnes grading 0.39 % copper and 0.15 g/t Au for a contained 1.49 million tonnes of copper and 1.8 million ounces of gold. At a 0.4% copper cut-off, the total resource is reduced to 113.1 million tonnes grading 0.60% copper and 0.18 g/t gold for a contained 670,000 tonnes of copper and 636,000 ounces of gold.

The Corporation based on open pit mining and heap leaching of the oxide has estimated an indicated resource and secondary enriched mineralization for solvent extraction and electrowinning (SX/EW) for copper recovery. Assuming a US$0.85 per pound copper price, a 0.25% copper cut-off, and a 2% NSR with incremental dump leach of low-grade material, an in-pit resource has been estimated at 57.3 million tonnes grading 0.61% copper, for 348,900 tonnes of contained copper. Primary copper-gold mineralization could then potentially be evaluated for a primary milling style of operation, producing concentrates.

Metallurgy

In 1997, a metallurgical test program was undertaken to determine the response of the ore to bacterial oxidation. Preliminary results indicated recoveries up to 75% in 250 days. Flotation tests on primary mineralization have given copper recoveries of up to 92% producing concentrates grading 25% copper. Gold is mostly free milling and recoveries of 60% have been achieved.

Exploration

Drilling by GMA and AMD has encountered indications of additional copper mineralization to the northeast, east and southeast of the main San Jorge deposit in a similar geologic setting to the main San Jorge deposit. These results indicate the potential for the expansion of the deposit beyond the current resource.

Areas to the east and southeast of San Jorge, within the expanded property area, contain large IP chargeability anomalies that coincide with anomalous copper-bearing, intercepts in the core of a reconnaissance drill hole, indicating potential for satellite copper systems similar to the San Jorge deposit. The Corporation is currently evaluating the potential for exploring for and developing additional resources in the satellite areas. However, limited work is planned for 2000 in light of the continued poor metal prices.

Cuban Properties

Acquisition of Properties

The Corporation entered into a letter of intent dated May 1, 1995 with Miramar and subsequently entered into an agreement dated October 4, 1995 (the "Transaction Agreement") with Miramar, Red Lion Management Ltd. ("Red Lion") and Richard Dewinetz ("Dewinetz") (collectively the "Vendors") pursuant

to which on December 20, 1995 the Corporation purchased (the "MMI Transaction") from the Vendors all of the outstanding shares of Minera Mantua Inc. ("MMI") in exchange for 24 million Common Shares of the Corporation. MMI, through Minera Cobre S.A. ("Cobre") and Minera Delita S.A. ("Delita"), both of which became wholly-owned subsidiaries of MMI prior to the completion of the MMI Transaction, has a 50% working interest in the Mantua copper project (the "Mantua Project"), and had the right to earn a 50% working interest in the Delita gold project (the "Delita Project"), respectively. The Mantua Project and the Delita Project are both located in Cuba and are referred to collectively herein as the "Cuban Projects".

Prior to the MMI Transaction, Miramar owned all of the outstanding shares of Cobre and Delita. Miramar acquired all of the outstanding shares of Cobre and Delita from Matlock Mining, N.L. ("Matlock"), an Australian company, pursuant to an agreement dated March 1, 1993 (the "Matlock Purchase Agreement"). Pursuant to the Matlock Purchase Agreement, Miramar paid Matlock share consideration having a value of approximately $475,000 in respect of the purchase price for the shares of Cobre and Delita and was obligated to pay a further $350,000 to Matlock (which amount was subsequently paid by the Corporation). The Matlock Purchase Agreement also provides that (i) Cobre is obligated to repay to Matlock the $750,000, plus interest, which was invested by Matlock in the Mantua Project and the Delita Project prior to the sale of the shares of Delita and Cobre by Matlock to Miramar pro rata with the return of equity to Miramar, and (ii) Matlock is entitled to receive 12% of the difference between all profits received by Cobre and Delita from their 50% working interests in the respective projects and administrative expenses (to a maximum of US$150,000 per year for each company) of Cobre and Delita.

Prior to the MMI Transaction, Miramar transferred to MMI all of the outstanding shares of Cobre and Delita and the obligation to pay $350,000 to Matlock and converted all of its advances to fund the Cuban Projects to April 30, 1995 into shares of MMI. The aggregate cost, as at April 30, 1995, of Miramar's interest in Cobre and Delita, including the amount of $350,000 payable to Matlock and amounts advanced by Miramar to Cobre and Delita to fund the Cuban Projects, was $7,188,261. A wholly owned subsidiary of Miramar was indebted to each of Red Lion and Dewinetz in the amount of $75,000, which amounts were used for the Cuban Projects. Prior to the MMI Transaction, Red Lion and Dewinetz converted such indebtedness into shares of MMI.

Pursuant to the MMI Transaction, Miramar, Red Lion and Dewinetz exchanged all of their shares of MMI for 23,484,850 Common Shares, 257,575 Common Shares and 257,575 Common Shares of the Corporation, respectively, at an ascribed price of $2.50 per share. For tax purposes the shares of MMI were transferred to the Corporation at the respective cost bases of such shares to the Vendors. Accordingly, in the event the Corporation disposes of the shares of MMI at an amount in excess of such cost bases, the Corporation will realize a taxable gain on such disposition.

The reserve and resource estimates for the Cuban projects have been prepared in accordance with proposed OSC National Instrument 43-101 and the Canadian Institute of Mining and Metallurgy classification system.

Mantua Project

The Mantua property contains a secondarily enriched copper deposit. It is located in Pinar del Rio Province, western Cuba, 240 kilometres from Havana. The property consists of an 8 square kilometre production concession and an adjoining 11.2 square kilometre area of interest. The site is reached via a

four-lane highway from Havana to Pinar Del Rio, which is 65 kilometres east of Mantua. A paved secondary road then links with the site.

Acquisition Agreement

Cobre acquired a 50% working interest in the Mantua Project pursuant to an agreement with Geominera SA ("Geominera") dated August 13, 1993, (as amended, the "Cobre Association Agreement"). Geominera is a Cuban corporation formed by the Cuban Ministry of Basic Industry for the purpose of holding mineral rights and entering into agreements with foreigners for the development of such mineral rights. The Cobre Association Agreement and the related articles of incorporation are the constating documents of Cobre Mantua S.A. ("Comantua"), a Cuban joint enterprise the shares of which are allocated on a 50/50 basis between Geominera and Cobre, with each party's equity capital contribution agreed to have been US$1 million. Geominera's equity capital contribution was comprised of the exclusive right to explore, develop, mine and exploit the Mantua Project, together with all previous studies and investigations relating to the Mantua Project. Cobre's equity capital contribution was comprised of the feasibility study on the Mantua Project that was prepared in 1993 together with a cash contribution of US$20,000. Profits of Comantua are to be distributed 50% to Cobre and 50% to Geominera. Pursuant to the Cobre Association Agreement, Cobre was required to negotiate and obtain all financing necessary for the commercial development of the Mantua Project by June 30, 1995. However, subsequent to the date of the Cobre Association Agreement, Geominera agreed that the June 30 date would be waived so long as Cobre obtained financing when required to develop the Mantua project.

Under the Cobre Association Agreement, in order to repay loans received by Comantua from Cobre, Cobre is entitled to the total net income (after satisfaction of all current obligations in respect of third party financing) of the Mantua Project during the first two years of operations of the mine and the industrial installations. If any such loan amount remains outstanding at the end of that two-year period, Cobre will continue to be entitled to no less than 75% of the net income of the Mantua Project until all such amounts owed are repaid. All major decisions of Comantua require the approval of the representatives of each of Geominera and Cobre; however, all ordinary operating decisions are made by the operations manager who is nominated by Cobre for a period of time equal to 1.5 times the period of time required for Cobre to receive a return of its capital investment.

History and Exploration

In the early 1960s workers from the Instituto de Recursos Minerales, a Cuban government agency, explored the Mantua copper deposit. In 1964 copper mineralization was discovered beneath an iron rich gossanous cap by an exploration program, including drilling, supervised by Soviet geologists. In 1992 Marc Rich & Co., a United Kingdom-based investment firm, completed an additional 12 drill holes, geotechnical investigations and metallurgical test work.

In late 1993 Minera Cobre ("MC") commenced detailed investigations, including an additional 13 drill holes, bulk sampling and metallurgical testing. An 11 tonne metallurgical sample was collected from one of the test shafts for metallurgical testing. A preliminary metallurgical scoping study was completed in the latter part of 1993 on material collected from one drill hole and a metallurgical test program was commenced in February 1994 on material from the 11 tonne bulk sample.

In the summer of 1994 MC drove a 145-meter exploration tunnel to access the ore body and in September and October 1994 extracted 600 tonnes of material for pilot scale metallurgical testing. A pilot

plant was operated using material extracted from the tunnel. Pilot plant operations were conducted in two phases; in November and December 1994 and from January to March 1995. Results of these operations confirmed the viability of the preferred processing method.

In 1995 MC identified significant gold values in the gossan cap overlying the main copper deposit, as well as payable gold credits in the copper ore itself, and a zone of anomalous gold values parallel to the copper deposit. A program of work to evaluate the potential for an economic gold operation to recover gold values from the gossan cap was commenced in February 1995. A total of 65 drill holes were completed, delineating a zone of potentially commercial gold values over the centre of the copper deposit. Metallurgical testing has demonstrated the amenability of this material to conventional heap leach recovery methods.

In 1996 a regional exploration program was initiated to identify additional gold occurrences in gossans, saprolites and regional shear structures. In excess of six hundred surface samples were taken throughout the region and some minor gold occurrences were identified.

Drilling in 1997 involved two main phases that included nine diamond drill holes for 655 meters and eight diamond drill holes for 684.7 meters, respectively. Both programs were primarily designed to define the distribution of near surface, gold gossan; however, the second program included two deep holes. Late in the year a single hole was drilled to collect a metallurgical sample.

Geology and Mineralization

The Mantua copper deposit is a secondary enrichment of copper mineralization produced by the weathering of primary sulphide mineralization of volcanogenic-exhalative origin. Copper has been leached from trace amounts of sulphide copper mineralization (chalcopyrite) and re-deposited beneath a gold-rich gossanous cap.

Primary sulphide mineralization, both massive and disseminated, occurs within a 50 to 100 meter thick sequence of inter-layered basic volcanic rocks, shale, siltstones and sandstones. Folding and thrust faulting in the Late Mesozoic was focused between the more competent limestone units causing extensive shearing and brecciation of the volcanic and sedimentary sequence.

The folding of the Mantua and surrounding area rocks is interpreted as a broad syncline and anticline defining an open "S" shape. The eastern limb of the syncline contains the majority of the mineralization defined by drilling. The Mantua copper deposit forms an elongate lens with a northeast to southwest strike, concordant with the enclosing formations. The deposit dips 50 to 70 degrees to the west and has a strike length of 1,300 meters.

Unoxidized mineralization is dominated by pyrite, with some chalcopyrite and sphalerite. The leached cap oxide zone is composed of lateritic iron oxides with essentially no copper content. The supergene zone below this leached cap consists mainly of chalcocite, with cuprite, covellite and some native copper. The secondary-enriched copper zone can be divided into three distinct ore types that may be segregated during mining operations.

Geological Resources

The reserves and resources at Mantua have been calculated by the Corporation, and have been confirmed by qualified third parties. Within the proposed open pit and assuming a copper price of US$0.85 per pound, proven and probable reserves are estimated to be 7,525,000 tonnes grading 2.74% copper containing 206,212 tonnes or 454.6 million pounds of copper and additional measured and indicated resources are estimated to be 4,454,000 tonnes grading 0.76% copper containing 33,850 tonnes or 74.6 million pounds of copper.

Mine Plan and Capital Cost

After a thorough review of previous test work and a rigorous program of laboratory and pilot tests conducted in Cuba, Chile and Canada from 1993 through 1998, a processing scheme was selected which utilizes modern, proven processing technologies to extract the maximum amount of copper economically possible. These processing steps include grinding, agitation leaching, solvent extraction and, finally, electrowinning for the production of copper cathodes.

The copper ore will be fed as mined directly to an SAG (semi-autogenous grinding) mill, followed by leaching in agitated tanks. A series of counter current decantation thickeners will then wash out all of the copper-containing acid solution. Copper-containing acid solutions will be processed through a solvent extraction circuit to form a strong electrolyte solution from which copper cathodes will be produced by conventional electrowinning. Tailings will be pumped to a nearby impoundment for disposal based on an environmentally sound design.

The preliminary design is for processing facilities capable of treating 750,000 tonnes of high-grade copper ore per annum.

Phase 1 Gold Leaching

Construction of the Phase 1 gold leaching at the Mantua Project commenced in March 1997 and concluded in February 1998. Phase 1 consisted of a heap leach gold operation that was planned to recover approximately 70,000 ounces of gold from the gossan cap over a two-year period at a capital cost of approximately US$11.6 million. Removal of this material was intended to allow access to the high-grade copper reserve under the gossan cap.

Mining of gold ore commenced in February 1998 and was concluded in September 1999. Prior to achieving commercial production, all costs of start up operations and related interest and overhead were capitalized. During the operation, recovered gold was below expectations and totalled 31,389 ounces of which the Corporation's share was 15,694 ounces. Due to higher than expected ore clay and fines content and the impact of major rain delays, field leach times had to be extended to 70 days from the designed 28 days and ultimate gold recoveries were 50% of what was forecast.

Phase 2: Copper Mining

The Phase 2 copper operation is planned to commence after gold leaching is completed. Evaluation of the copper phase is proceeding, with production targeted to average about 40 million pounds of copper cathode per year at a cash cost of US $ 0.45 per pound. Capital costs are anticipated to be US$ 50 million with a moderate pressure and temperature ferric leach process. This process utilizes proven technologies that are in use at other mining operations.

Delita Project

In 1998 the Delita Project was placed on hold due to low gold prices and a write down of $8.4 million was recorded representing the costs of exploration of the project to 1998. In March 2000, the Corporation released its interest in the Delita project and returned the project to Geominera.

Item 3 – Risks and Uncertainties

The Company operates almost exclusively in foreign jurisdictions and is dependent on world metals and currency markets that may present risks to the future prospects of Northern Orion.

Risks Associated with the Mining Industry

Northern Orion is engaged in the exploration for and the development of mineral deposits. These activities involve significant risks which careful evaluation, experience and knowledge may not, in some cases, eliminate. The commercial viability of any mineral deposit depends on many factors, not all of which are within the control of management. Some of the factors that will effect the financial viability of a given mineral deposit include its size, grade and proximity to infrastructure. In addition, government regulation, taxes, royalties, land tenure, land use, environmental protection and reclamation and closure obligations could have a profound impact on the economic viability of a mineral deposit.

Northern Orion is not able to determine the impact of potential changes in environmental laws and regulations on its financial position due to the uncertainty surrounding the form such changes may take. As mining regulators continue to update and clarify their requirements for closure plans and environmental protection laws and administrative policies are changed, additional reclamation obligations and further security for mine reclamation costs may be required. It is not expected that such changes will have a material effect on the operations of Northern Orion.

Risks Associated with Financial Markets

Both Argentina and Cuba have currently fixed their currency to the US dollar and removal of these exchange controls could significantly effect the exchange rates in terms of the Canadian dollar. Continued weakness of the Canadian dollar in comparison to the US dollar will also affect the results of operations. Increasing costs of labour, supplies and energy may affect planned operations in future years. The potential for increased input prices is taken into consideration when preparing plans for future exploration, development and mine construction.

Risks Associated with the Market for Metals and Minerals

The prices of metals and minerals are subject to relatively large changes over short time periods. These prices can have a direct impact on the commercial viability of production from mineral properties.

Risks Associated with Foreign Operations

Northern Orion's investments in foreign countries such as Argentina and Cuba carry certain risks associated with different political and economic environments. Northern Orion undertakes investments in various countries around the world only when it is satisfied that the risks and uncertainties of operating in different cultural, economic and political environments are manageable and reasonable relative to the expected benefits.

Item 4 - Selected Consolidated Financial Information

All dollar figures are in thousands except for per share data that is in dollar amounts.

	1999[1]	1998[1]	1997[1]	1996[1]	1995[1]
Total Revenues	2,987	3,629	637	2,593[2]	2,408[3]
Net Loss	18,167	21,287	7,126	1,526[2]	322[3]
Net Loss Per Share ($)	0.25	0.29	0.10	0.02[2]	0.01[3]
Total Assets	119,265	131,411	138,621	123,819	108,474
Long-term Debt	27,669	33,828	13,567	1,370	2,807

[1] As at and for the year ended December 31
[2] Includes a gain on disposal of mineral properties of $1.3 million or $0.018 per common share
[3] Includes drilling revenue from equipment which was disposed of in 1995 of $1.1 million or $0.04/share.

For the Three Months Ended (unaudited)[1]

	Dec 31 1999	Sep 30 1999	June 30 1999	Mar 31 1999	Dec 31 1998	Sep 30 1998	June 30 1998	Mar 31 1998
Revenue	80	473	1,124	1,319	957	1,482	1,176	14
Loss	5,070	7,581	3,817	1,699	16,521	2,098	1,800	868
Loss/Common Share	0.(	0.	0.(	0.(	0.:	0.(	0.(	0.(

[1] All figures expressed in thousands of dollars, except per share amounts

The Corporation has not paid any dividends on the Common Shares and has no dividend policy with respect to the payment of dividends.

Item 5 - Management's Discussion and Analysis

The section entitled "Management's Discussion and Analysis of Financial Condition and Results of Operations" included in the Annual Report to the shareholders of the Corporation for the year ended December 31, 1999 is incorporated herein by reference.

There is no material financial or operational effect of environmental protection requirements on the Corporation's capital expenditures, earnings and competitive position in the current financial year and the Corporation cannot predict such effects in future years.

Item 6 - Market for Securities

The Common Shares are listed and posted for trading on The Toronto Stock Exchange and the Canadian Venture Exchange (Vancouver Stock Exchange).

Item 7 - Directors and Officers

The following table sets forth the names and municipalities of residence of the directors and officers of the Corporation, their positions held with the Corporation and their principal occupations.

Name and Municipality of Residence	Positions Held	Director Since	Principal Occupation
Norman Anderson [1] Vancouver, B.C.	Director	2000	Self-employed Mining Engineer
John K. Burns [1] Philadelphia, Pa.	Chairman of the Board and Director	1995	President & Chief Executive Officer, Frontier Resources Management L.L.C.,
P. Terence O'Kane [1] Vancouver, B.C.	Director	1999	Self-employed Metallurgical Engineer
Stephen P. Quin [1] [2] West Vancouver, B.C.	Director	1988	Executive Vice-President of Miramar Mining Corporation
Anthony P. Walsh [1] [2] West Vancouver, B.C.	Director	1998	President and Chief Executive Officer, Miramar Mining Corporation
Stephen Wilkinson [1] [2] North Vancouver, B.C.	President, Chief Executive Officer and Director	1999	Self-employed Businessman
David Cohen West Vancouver, B.C.	Senior Vice-President	n/a	Senior Vice-President, Engineering and Development, Miramar Mining Corporation

(1) Member of executive committee.
(2) Member of audit committee.

Each of the individuals has been engaged in the principal occupation set forth opposite his name during the past five years with the exception of the following. Stephen Wilkinson, prior to May 1999, was a gold analyst with RBC Dominion Securities Inc, and prior to 1996, was an independent mining and financial consultant. David Cohen, prior to December 1996, was Director of Business Development of Fluor Daniel Inc., an international engineering and construction company.

Item 8 - Additional Information

The Corporation will provide to any person upon request to the Secretary of the Corporation:

a) Where the securities of the Corporation are in the course of a distribution pursuant to a short form prospectus or a preliminary short form prospectus has been filed in respect of a distribution,

   (i) One copy of the AIF of the Corporation, together with one copy of any document, or the pertinent pages of any document, incorporated by reference in the AIF;

   (ii) One copy of the comparative financial statements of the Corporation for its most recently completed financial year together with the accompanying report of the auditor and one copy of any interim financial statements of the Corporation issued subsequent to the financial statements for its most recently completed financial year;

   (iii) One copy of the information circular of the Corporation in respect of its most recent annual meeting of the shareholders that involved the election of directors or one copy of the any filing prepared in lieu of that information circular; and,

   (iv) One copy of any other documents that are incorporated by reference into the preliminary short form prospectus or the short form prospectus and are not required to be provided under (i) to (iii) above; or,

b) At any other time, one copy of any other document referred to in paragraphs (i), (ii) or (iii) above, provided the Corporation may require the payment of a reasonable charge if a person who is not a security holder of the Corporation makes the request.

Additional information including directors' and officers' remuneration and indebtedness, principal holders of securities of the Corporation, options to purchase securities and interests of insiders in material transactions, where applicable, is contained in the management information circular of the Corporation for its most recent annual meeting of shareholders that involved the election of directors. Additional financial information is provided in the comparative financial statements of the Corporation for its most recently completed financial year. These documents are incorporated by reference herein. A copy of such documents may be obtained upon request from the Secretary of the Corporation.

FORM 27

Material Change Report
Under:
Section 85(1) of the *Securities Act* (British Columbia)
Section 118(1) of the *Securities Act* (Alberta)
Section 75(2) of the *Securities Act* (Ontario)

Item 1 **Reporting Issuer**

Northern Orion Explorations Ltd.
311 West First Street
North Vancouver, British Columbia, V7M 1B5
Telephone: (604) 980-0573

Item 2 **Date of Material Change**

September 6, 2000

Item 3 **Press Release/Publication/Filing**

A press release providing notice of the material change was issued on September 6, 2000 (copy attached).

Item 4 **Summary of Material Change**

The Company has entered into agreements, subject to regulatory approvals, completion of due diligence and other conditions, intended to: (a) raise by way of private placement up to $8.2 million; (b) restructure and settle the Company's long-term indebtedness to Miramar Mining Corporation; and (c) redistribute approximately 75% of the existing control block currently held by Miramar Mining Corporation.

Item 5 **Full Description of Material Change**

See attached news release.

Item 6 **Reliance on Confidentiality Provisions of the Securities Act**

Not applicable.

Item 7 **Omitted Information**

Not applicable.

Item 8 **Senior Officer**

Contact: Stephen Wilkinson
Telephone: (604) 980-0573

Item 9 Statement of Senior Officer/Director

The foregoing accurately discloses the material change referred to in this report.

Dated at the City of Vancouver, in the Province of British Columbia, this 14th day of September, 2000.

NORTHERN ORION EXPLORATIONS LTD.

Per: "Stephen Wilkinson"
Stephen Wilkinson, President

IT IS AN OFFENCE FOR A PERSON TO MAKE A STATEMENT IN A DOCUMENT REQUIRED TO BE FILED OR FURNISHED UNDER THE ACT OR THIS REGULATION THAT, AT THE TIME AND IN THE LIGHT OF THE CIRCUMSTANCES UNDER WHICH IT IS MADE, IS A REPRESENTATION.

British Columbia Securities Commission

Corporate Finance
SEDAR Electronic Correspondence

200, 865 Hornby Street
Vancouver, British Columbia
V6Z 2H4 CANADA
Telephone: (604) 899-6500
Fax: (604) 899-6760
(BC only) 1-800-373-6393

September 15, 2000

Project No: 297483

Dear Sirs/Mesdames:

RE: NORTHERN ORION EXPLORATIONS LTD. (the "Issuer")

We confirm under section 5.3 of Local Policy Statement 3-27 that the annual information form dated September 10, 2000 has been filed.

This confirmation does not mean the Commission has passed on the merits or the content of the material and does not preclude review of the material, which is subject to review at any time.

Yours truly,

Olga Malkoc

Olga Malkoc
Filings Officer

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NORTHERN ORION EXPLORATIONS LTD.

Consolidated Balance Sheets
(expressed in thousands of dollars)

September 30, 2000 and December 31, 1999

	2000 (unaudited)	1999
Assets		
Current assets:		
Cash	$ 26	$ 314
Accounts receivable	32	347
Amount receivable from controlling shareholder	251	–
Prepaid expenses	51	37
	360	698
Plant and equipment	2,231	2,784
Mineral properties and deferred development	100,444	115,746
Other assets	–	37
	$ 103,035	$ 119,265
Liabilities and Shareholders' Equity		
Current liabilities:		
Accounts payable and accrued liabilities	$ 447	$ 885
Current portion of promissory note payable	2,885	–
	3,332	885
Promissory note payable	–	6,500
Royalty and proceeds interest payable (note 3)	–	17,987
Convertible debenture	23,854	21,169
Future income taxes (note 2)	7,373	–
Other long-term liabilities	28	66
	34,587	46,607
Shareholders' equity:		
Share capital (issued and outstanding at September 30, 2000 – 89,006,780 common shares; December 31, 1999 – 74,006,780 common shares)	126,500	122,000
Deficit	(58,052)	(49,342)
	68,448	72,658
	$ 103,035	$ 119,265

NORTHERN ORION EXPLORATIONS LTD.

Consolidated Statements of Operations and Deficit
(expressed in thousands of dollars except per share amounts)

Nine month periods ended September 30, 2000 and 1999

	2000 (unaudited)	1999 (unaudited)
Revenue:		
Metal sales	$ –	$ 2,893
Interest and other income	43	14
	43	2,907
Expenses:		
Cost of sales	108	3,734
Management fee	315	780
General and administration	300	416
Restructuring costs	57	1,054
Depreciation and depletion	317	1,964
Write-down of mineral properties	315	2,746
Write-down of mining plant and equipment	–	3,882
Write-down of inventory	–	1,052
Write-down of marketable securities	–	3
Interest	–	117
Loss (gain) on foreign exchange translation	(32)	256
	1,380	16,004
Loss for the period	$ 1,337	$ 13,097
Deficit, beginning of period	56,715	31,175
Deficit, end of period	$ 58,052	$ 42,272
Loss per share	$ 0.01	$ 0.18
Weighted average number of common shares outstanding	81,547,764	74,006,780
Total common shares outstanding, end of period	89,006,780	74,006,780

NORTHERN ORION EXPLORATIONS LTD.

Consolidated Statements of Cash Flows
(expressed in thousands of dollars)

Nine month periods ended September 30, 2000 and 1999

	2000 (unaudited)	1999 (unaudited)
Cash flows from (used in) operating activities:		
Loss for the period	$ (1,337)	$ (13,097)
Items not involving cash:		
Depreciation and depletion	317	1,964
Write-down of mineral properties	278	2,746
Write-down of other assets	37	–
Write-down of mine plant and equipment	–	3,882
Write-down of marketable securities	–	3
Net change in non-cash working capital:		
Decrease (increase) in accounts receivable	315	3,888
Decrease (increase) in inventories	–	2,201
Decrease (increase) in amount receivable	(251)	–
Decrease (increase) in prepaid expenses	(14)	14
Increase (decrease) in accounts payable and accrued liabilities	(438)	(1,170)
	(1,093)	431
Cash flows from (used in) financing activities:		
Advances from controlling shareholder	2,276	–
Due to related parties	–	3,373
Long-term debt	–	(5,801)
Capitalized interest on convertible debenture	1,294	1,069
Other long-term liabilities	(38)	–
Guarantee to related party	–	7,416
	3,532	6,057
Cash flows from (used in) investing activities:		
Mineral properties	(2,727)	(6,397)
Other long-term assets	–	(32)
	(2,727)	(6,429)
Increase (decrease) in cash	(288)	59
Cash, beginning of period	314	542
Cash, end of period	$ 26	$ 601
Supplementary information:		
Income taxes paid	$ –	$ –
Interest paid	–	78
Non-cash transactions:		
Reduction in promissory note payable through issuance of common shares	4,500	–
Reduction in royalty and proceeds interest payable through partial disposition of mineral property interests	17,987	–

Notes:

1. Northern Orion Explorations Ltd. (the "Company")

The Company is currently in the process of defining its mineral resources and their economic potential. Accordingly, the Company continues to be dependent upon Miramar Mining Corporation ("Miramar") providing funds for the evaluation of its mining properties. Miramar, which holds voting control over the Company, has agreed to provide certain funds under the terms of several agreements. Consequently, the Company is required to have working capital (current assets minus current liabilities) of at least $1 million or Miramar can call the debt and take possession of the security. To date, Miramar has not exercised its right and has not called the debt. These statements have been prepared on the basis that the Company continues to receive support from Miramar or other sources of financing and that no actions are taken which require settlement outside of the normal course of business.

2. Accounting Changes

Effective January 1, 2000, the Canadian Institute of Chartered Accountants ("CICA") changed accounting standards relating to the accounting for income taxes and employee future benefits.

Future Income Taxes

The CICA's new standard on accounting for income taxes adopts the liability method of accounting for future income taxes, which is based upon differences in the timing of reporting income and expenses in financial statements and tax returns. Under the new rules for future income taxes, Northern Orion is required to record deferred taxes as if all assets and liabilities on the balance sheet were settled at their carrying amounts, net of valuation allowance, at current tax rates. This accounting change has been applied retroactively, without restatement of prior periods. As a result, the Company has recorded an increase to deficit of $7,373,000 and a future tax liability of $7,373,000 as at January 1, 2000.

Employee Future Benefits

The CICA's new standard on accounting for employee future benefits has no material impact on the financial statements of the Company.

3. Partial Disposal of Mineral Properties and Contingent Liability

In the quarter ended March 31, 2000, the Company obtained regulatory approval and completed final documentation for the debt settlement and restructuring agreement entered into Miramar. As a result of this settlement, the Company exchanged a royalty and proceeds interest ('Proceeds Interest') granted on the Agua Rica, Mantua and San Jorge properties. This transaction was treated as a partial disposition of mineral properties in the quarter and no gain or loss was recognized. The Proceeds Interest entitles Miramar to receive the economic equivalent of a 2.5% net smelter return royalty and a portion of the proceeds from the sale of all of the Company's mining properties and interests to a total of $17,987,000.

4. Subsequent Events

a) In July 2000, the Company arranged an extension ('the Extension') of financial support from Miramar. The Extension provided that Miramar would advance funds of up to $675,000 through September 2000.

b) In August 2000, the Company entered into agreements with Harris Partners Limited ("HPL") with the intention of having HPL arrange a private placement of Special Warrants on a "best-efforts" basis in an amount of up to $8.2 million. At the same time, Northern Orion and Miramar entered into an option agreement with HPL whereby substantially all of the amounts owing to Miramar would be converted into

Northern Orion common shares and together with approximately 42 million of Miramar's 55 million Northern Orion shares would be sold to institutional and other sophisticated investors. Miramar also agreed to allow the working capital requirements under the Promissory Note to be waived until October 2000. The deal was not sufficiently subscribed and did not close. In November 2000, the Company released HPL from its obligations as financial advisor and entered negotiations for new funding with investors. As of the release of these statements, a new funding agreement had yet to be concluded.

c) In November, the Company issued to HPL 423,821 common shares of the Company in settlement of $75,000 in fees incurred respecting HPL's financial advisory role over the period of August to November 2000.

PACIFIC CORPORATE TRUST COMPANY
625 Howe Street – 10th Floor
Vancouver, B.C. V6C 3B8

Telephone: (604) 689 - 9853
Fax: (604) 689 - 8144

November 29, 2000

B.C. Securities Commission
Executive Director
2nd Floor, 865 Hornby Street
Vancouver, B.C., V6Z 3B8

Dear Sirs:

RE: NORTHERN ORION EXPLORATIONS LTD
MAILING ON NOVEMBER 29, 2000
INTERIM FINANCIAL STATEMENT
FOR THE THIRD PERIOD ENDING SEPTEMBER 30, 2000

We confirm that on the above date, the material issued by the subject Company was forwarded by prepaid first class mail to all the persons on the Supplementary Mailing List maintained at our office.

Yours truly,

PACIFIC CORPORATE TRUST COMPANY

"Anissa Rimer-Ly"

Anissa Rimer-Ly

AR/jo

cc: Alberta Securities Commission
cc: Director of Corporations – PEI
cc: Manitoba Securities Commissions
cc: Office of the Administrator of Securities –NB
cc: Ontario Securities Commission
cc: Quebec Securities Commission
cc: Registrar of Securities – NT
cc: Registrar of Securities – YT
cc: Saskatchewan Securities Commission
cc: Securities Division – Department of Justice - NF
cc: Canadian Venture Exchange
cc: Toronto Stock Exchange
cc: Nunavut Securities Commission
cc: Northern Orion Explorations Ltd
cc: Dumoulin Black
cc: KMPG Peat Marwick Thorne

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DuMOULIN BLACK

BARRISTERS & SOLICITORS

W. DAVID BLACK
SARGENT H. BERNER
KENNETH W. BALL
COREY M. DEAN
J. DOUGLAS SEPPALA*
MARY P. COLLYER
JANICE E. CONWAY
GEORGE R. BRAZIER
BRIAN C. IRWIN
CHERI L. PEDERSEN
KENNETH L.H. EMBREE
C. BRUCE SCOTT
STEPHEN TONG
PATRICIA D. SANDBERG
JEROME D. ZISKROUT
associate counsel

(*denotes law corporation)

10TH FLOOR, 595 HOWE STREET
VANCOUVER, CANADA
V6C 2T5

TELEPHONE No. (604) 687-1224

TELECOPIER No. (604) 687-8772

FILE NO. 0869-1
DIRECT LINE
EMAIL lchinn@dumoulinblack.com

VIA SEDEAR

January 9, 2001

Ontario Securities Commission
Suite 800, 20 Queen Street West
PO Box 55
Toronto, Ontario, M5H 3S8

Attention: Ms. Julanna Vine,
Continuous Disclosure Clerk

Dear Sirs:

Re: Northern Orion Explorations Ltd. (the "Company")
SEDAR Project #282363 – Submission Date July 12, 2000

We attach herewith $80.00 in payment of filing fees for a Material Change Report filed July 12, 2000 under SEDAR Project #282363.

Yours truly,
DuMOULIN BLACK

(Signed) "Linda Chinn"

Per: Linda Chinn, Secretary
to Sargent H. Berner

:lsc
Attachment

SHB\086901\0722

DuMOULIN BLACK

BARRISTERS & SOLICITORS

W. DAVID BLACK
SARGENT H. BERNER
KENNETH W. BALL
COREY M. DEAN
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TELECOPIER No. (604) 687-8772

FILE NO. 0869-1
DIRECT LINE
EMAIL lchinn@dumoulinblack.com

VIA SEDEAR

January 17, 2001

Ontario Securities Commission
Suite 800, 20 Queen Street West
PO Box 55
Toronto, Ontario, M5H 3S8

Attention: Ms. Julanna Vine,
Continuous Disclosure Clerk

Dear Sirs:

Re: Northern Orion Explorations Ltd. (the "Company")
SEDAR Project #298033 – Submission Date September 14, 2000

We attach herewith $80.00 in payment of filing fees for a Material Change Report filed September 14, 2000 under SEDAR Project #298033.

Yours truly,
DuMOULIN BLACK

(Signed) "Linda Chinn"

Per: Linda Chinn, Secretary
to Sargent H. Berner

:lsc
Attachment

SHB\086901\0724

NEWS RELEASE

Acquisition of Option to Purchase Shares by way of private placement
in the capital of Northern Orion Explorations Ltd. (**Northern Orion**")
Report required by Section 101 of Ontario Securities Act

Miramar Mining Corporation (**Miramar**") has agreed to grant to 1341180 Ontario Limited an option to purchase up to 60 million shares held by Miramar in Northern Orion at $0.08 per share and up to 100% in the principal amount of a $6.8 million promissory note to be issued to Miramar by Northern Orion pursuant to a concurrent debt re-structuring announced by Miramar and Northern Orion (See News Releases dated February 23, 2001, **NNO – TSE / MAE - TSE**), subject to regulatory approvals. The promissory note will be convertible @ $0.15 per share for a maximum of 45.3 million additional shares of Northern Orion.

Assuming exercise in full of the Option and conversion of the Note, 1341180 Ontario Limited would own or have control over an aggregate of 105.2 million common shares of Northern Orion representing 66.2 % of the issued and outstanding shares of Northern Orion.

1341180 Ontario Limited has acquired the Option for investment purposes. It is its' intention to evaluate the investment in Northern Orion and to increase and decrease its shareholdings as circumstances require.

1341180 Ontario Limited

Per: *"Robert Cross"*
Robert Cross, President

Neither the Toronto Stock Exchange nor the Canadian Venture Exchange has reviewed and do not accept responsibility for the adequacy or accuracy of this news release.

NORTHERN ORION
EXPLORATIONS LTD.
311 West First Street, North Vancouver, B.C. V7M 1B5
Tel: (604) 980-0573 Fax: (604) 980-0731

February 23, 2001 **NEWS RELEASE 01-01** **NNO – TSE**

NORTHERN ORION ANNOUNCES $1.5 MILLION PRIVATE PLACEMENT PLUS DEBT REDUCTION AND RESTRUCTURING

Northern Orion is pleased to announce the signing of an agreement with an arms length investor for a non-brokered private placement to raise $1,500,000. Subject to conditions outlined below, the private placement financing will consist of ten million Units at $0.15 each, composed of one common share and one share purchase warrant. Each warrant is exercisable to acquire an additional common share for two years at a price of $0.175 in the first year and $0.20 in the second. The placement will require Northern Orion to issue 10 million shares and increase its issued and outstanding to 99.4 million shares. The private placement is expected to close on or around March 14th 2001.

A condition of the abovementioned placement is that Northern Orion reduce and restructure the debt on its balance sheet. The debt is currently composed of two components; a Convertible Debenture ("CD") and promissory notes. The CD has convertible principal and interest totalling approximately $21.2 million and is convertible into Northern Orion shares priced at $1.47 per share. Miramar Mining Corporation ("Miramar"), the only holder of the CD, has agreed to exercise its right to convert all of this debt into approximately 14.4 million shares.

The remaining debts total about $6.8 million and are secured by various notes issued to Miramar for cash advances made over the past two years plus accrued interest. Northern Orion and Miramar have agreed to consolidate and restructure these debts into a new note that will be due on demand after June 30th 2002. Subject to regulatory approval and the approval of the Toronto Stock Exchange, the note may be convertible into shares of Northern Orion based on a conversion price of $0.15 per share. If the new note is converted into shares during its term, the number of shares issued will be in the order of 45.3 million.

In addition, Miramar is reduce the cap on the 2.5% Royalty and Net Proceeds Agreement with Northern Orion from approximately $18 million to $15 million. In addition, any future proceeds that could be realized from sale of the San Jorge copper property in Argentina are to be specifically excluded from the Royalty and Net Proceeds Agreement.

Miramar has further agreed to option all but 10 million of its shares plus the new note to 1341180 Ontario Limited, a company owned by Mr. Robert Cross. The term of the option is the same as the new note, ending on June 30th 2002. Under the option agreement, the minimum purchase would be 5 million Northern Orion shares with the total value of the option with all shares purchased in the order of $4.8 million.

Northern Orion is a junior company focused on the exploration and development of mining projects in Latin America. The company has one of the largest undeveloped resource bases of copper and gold in the junior mining sector. (See our news release of April 27 2000) Management is continuing to work toward developing Northern Orion as a significant copper producer based on its portfolio of advanced projects.

For further information contact:
Stephen Wilkinson, President & CEO
NORTHERN ORION EXPLORATIONS LTD
Tel: (604) 980-0573 Fax: (604) 980-0731
Email: info@northernorion.com

REPORT PURSUANT TO SECTION 101
OF THE SECURITIES ACT (ONTARIO)

(a) Name of Offeror

1341180 Ontario Limited

(b) The number of securities over which the Offeror and any person or company acting jointly or in concert with the Offeror acquired ownership or control or direction as a result of the transaction or occurrence giving rise to the report:

Option granted by Miramar Mining Corporation ("Miramar") to purchase: (1) up to approximately 60 million shares of Northern Orion Explorations Limited (the "Company") owned by Miramar at $0.08 per share; and (2) up to 100% of the principal amount of a $6.8 million convertible note (the "Note") to be issued by the Company to Miramar pursuant to a concurrent debt restructuring, subject to regulatory approval. The Note will be convertible at $0.15 per share for a total of approximately 45.3 million shares.

(c) The ownership of or control and direction by the Offeror and any person or company acting jointly or in concert with the Offeror over the securities immediately after the transaction or occurrence giving rise to the report:

Assuming exercise in full of the Option and conversion of the entire principal amount of the convertible Note, approximately 105.2 million shares. The 105.2 million common shares, if acquired, would represent approximately 66.2 % of the then issued and outstanding shares of the Company, assuming no issuances of shares pursuant to other outstanding share options, share purchase warrants or other convertible securities.

(d) The name of the market where the transaction or occurrence took place:

Private Placement.

(e) The purpose of the Offeror and any person or company acting jointly or in concert with the Offeror in effecting the transaction, including any future intention to increase the beneficial ownership, control, or direction of the Offeror and any person or company acting jointly or in concert with the Offeror over the securities of the Offeree Issuer:

1341180 Ontario Limited acquired the securities for investment purposes. It is its intention to evaluate the investment in the Company and to increase or decrease its shareholdings as circumstances require.

(f) Where applicable, description of any change in any material facts set out in a previous report under Section 101 of the Act:

Not applicable.

(g) The name of the persons or companies acting jointly or in concert with the Offeror in connection with the disclosure required by Clauses (b), (c), or (d) above:

There are no persons acting jointly or on concert with the Offeror in connection with the transaction.

Dated February 23, 2001

1341180 Ontario Limited

Per:
"Robert Cross"
Robert Cross, President

NORTHERN ORION
EXPLORATIONS LTD.

311 West First Street, North Vancouver, B.C. V7M 1B5
Tel: (604) 980-0573 Fax: (604) 980-0731

February 23, 2001 **NEWS RELEASE 01-01** **NNO – TSE**

NORTHERN ORION ANNOUNCES $1.5 MILLION PRIVATE PLACEMENT PLUS DEBT REDUCTION AND RESTRUCTURING

Northern Orion is pleased to announce the signing of an agreement with an arms length investor for a non-brokered private placement to raise $1,500,000. Subject to conditions outlined below, the private placement financing will consist of ten million Units at $0.15 each, composed of one common share and one share purchase warrant. Each warrant is exercisable to acquire an additional common share for two years at a price of $0.175 in the first year and $0.20 in the second. The placement will require Northern Orion to issue 10 million shares and increase its issued and outstanding to 99.4 million shares. The private placement is expected to close on or around March 14th 2001.

A condition of the abovementioned placement is that Northern Orion reduce and restructure the debt on its balance sheet. The debt is currently composed of two components; a Convertible Debenture ("CD") and promissory notes. The CD has convertible principal and interest totalling approximately $21.2 million and is convertible into Northern Orion shares priced at $1.47 per share. Miramar Mining Corporation ("Miramar"), the only holder of the CD, has agreed to exercise its right to convert all of this debt into approximately 14.4 million shares.

The remaining debts total about $6.8 million and are secured by various notes issued to Miramar for cash advances made over the past two years plus accrued interest. Northern Orion and Miramar have agreed to consolidate and restructure these debts into a new note that will be due on demand after June 30th 2002. Subject to regulatory approval and the approval of the Toronto Stock Exchange, the note may be convertible into shares of Northern Orion based on a conversion price of $0.15 per share. If the new note is converted into shares during its term, the number of shares issued will be in the order of 45.3 million.

In addition, Miramar is reduce the cap on the 2.5% Royalty and Net Proceeds Agreement with Northern Orion from approximately $18 million to $15 million. In addition, any future proceeds that could be realized from sale of the San Jorge copper property in Argentina are to be specifically excluded from the Royalty and Net Proceeds Agreement.

Miramar has further agreed to option all but 10 million of its shares plus the new note to 1341180 Ontario Limited, a company owned by Mr. Robert Cross. The term of the option is the same as the new note, ending on June 30th 2002. Under the option agreement, the minimum purchase would be 5 million Northern Orion shares with the total value of the option with all shares purchased in the order of $4.8 million.

Northern Orion is a junior company focused on the exploration and development of mining projects in Latin America. The company has one of the largest undeveloped resource bases of copper and gold in the junior mining sector. (See our news release of April 27 2000) Management is continuing to work toward developing Northern Orion as a significant copper producer based on its portfolio of advanced projects.

For further information contact:
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Tel: (604) 980-0573 Fax: (604) 980-0731
Email: info@northernorion.com

FORM 27

Material Change Report
Under:
Section 85(1) of the *Securities Act* (British Columbia)
Section 118(1) of the *Securities Act* (Alberta)
Section 75(2) of the *Securities Act* (Ontario)

Item 1 **Reporting Issuer**

Northern Orion Explorations Ltd.
311 West First Street
North Vancouver, British Columbia, V7M 1B5
Telephone: (604) 980-0573

Item 2 ***Date of Material Change***

February 23, 2001

Item 3 **Press Release/Publication/Filing**

A press release providing notice of the material change was issued on February 23, 2001 (copy attached).

Item 4 **Summary of Material Change**

The Company has negotiated a non- brokered private placement with an arm's length party to raise $1.5 million. The private placement will consist of 10 million units at $0.15 per unit, each unit consisting of one common share and one share purchase warrant, each warrant exercisable for a period of two years post-closing to acquire one additional share at $0.175 per share in the first year and $0.20 per share in the second year. An aggregate of 10 million shares will be issuable pursuant to the private placement, which would increase the Company's issued and outstanding share capital to 99.4 million shares.

The private placement is conditional upon the reduction and restructuring of the debt owed by the Company to its major shareholder, Miramar Mining Corporation ("Miramar").

The Miramar debt is currently composed of two components: a Convertible Debenture and promissory notes. The Convertible Debenture has convertible principal and interest totalling approximately $21.2 million and is convertible into Northern Orion shares priced at $1.47 per share Miramar, the only holder of the Convertible Debenture, has agreed to exercise its right to convert all of this debt into approximately 14.4 million shares.

The remaining debts total about $6.8 million and are secured by various notes issued to Miramar for cash advances made over the past two years plus accrued interest. Northern Orion and Miramar have agreed to consolidate and restructure

these debts into a new note that will be due on demand after June 30th 2002. Subject to regulatory approval and the approval of the Toronto Stock Exchange, the note may be convertible into shares of Northern Orion based on a conversion price of $0.15 per share. If the new note is converted into shares during its term, the number of shares issued will be in the order of 45.3 million.

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Miramar has further agreed to option all but 10 million of its shares plus the new note to 1341180 Ontario Limited, a company owned by Mr. Robert Cross. The term of the option will be the same as the new note, ending on June 30th 2002. Under the option agreement, the minimum purchase would be 5 million Northern Orion shares with the total value of the option with all shares purchased in the order of $4.8 million.

The debt restructuring involving the Company and Miramar is a "related party transaction" under Rule 61-501. The transactions were reviewed by the independent directors of the Company (the "Special Committee"), and the Special Committee determined that the terms of the transactions were fair and reasonable under circumstances and the transactions are beneficial to and in the interests of the Company and its shareholders, including minority shareholders. The Special Committee also determined that in the circumstances the "financial hardship "exemption in sections 5.6(8) and 5.8(5) of Rule 61-501 would be applicable.

The transactions involving the Company and Miramar are subject to Toronto Stock Exchange approval and regulatory approval.

Item 5 Full Description of Material Change

(a) Description of the Transaction:

See Item 4 above.

(b) Reasons for the Transaction:

On April 4, 2000, the Company completed a restructuring of debt owed to Miramar (see Material Change Report dated, April 5 2000). In July, 2000, because the Company was unable to comply with the working capital maintenance requirements of the April, 2000 debt restructuring agreements and was in need of bridge financing pending arranging other financing alternatives, the Company and Miramar reached an agreement under which Miramar provided additional working capital to the Company and waived certain requirements in the April, 2000 agreements (See Material Change Report dated July 4, 2000). The Company has continued to seek other financing alternatives and has negotiated the announced 10 million unit

private placement with an arm's length party which will provide the Company with sufficient working capital for approximately 12 months, conditional upon a restructuring of the Miramar debt and the distribution of Miramar's control block as described.

(c) Effect of the Transaction on Issuer's Business and Affairs:

While the Company has a large undeveloped resource base in its mineral property holdings it has no present ability to repay its indebtedness to Miramar.

The debt restructuring will allow the Company to avail itself of alternate sources of financing including, in the immediate term, working capital from the related private placement, and will allow the Company's new management an opportunity to pursue additional funding, joint venture opportunities and other corporate transactions with a view to maximizing shareholder value.

(d)

(i) Interest in the Transaction of Miramar Mining Corporation, Its Insiders, Associates and Affiliates and Any Other Related Party:

Insiders, Associates, Affiliates and other Related Parties of Miramar own a total of 122,204 Shares of Miramar and hold options to purchase an additional 1,850,000 Shares of Miramar and warrants to purchase a further 280,000 Shares of Miramar. To the knowledge of the Company, the same persons, together with Miramar, own a total of 55.6 million Shares of the Company, and hold options to acquire an additional 1,075,000 Shares of the Company.

(ii) Effect of Transaction on Miramar Mining Corporation and Related Parties

Miramar's equity interest in the Company will be increased by 14.4 million Shares, bringing its holdings to 69.9 million Shares and its percentage interest in the Company to approximately 67.3%.

(iii) Nature of any Benefit to be Secured by Related Parties as a Result of the Transaction

Insiders and Related Parties will not secure any benefit not shared proportionately by all shareholders of the Company.

(e) Review and Approval Process for the Transaction:

The proposed transactions were reviewed by Special Committee of independent directors of the Company, who determined that the terms of the transactions were fair and reasonable under the circumstances and the

transactions were beneficial to and in the interests of the Company and its shareholders, including minority shareholders. The Special Committee also determined that in the circumstances the "financial hardship" exemption in sections 5.6(8) ad 5.8(5) of Rule 61-501 would be applicable. Notice of the proposed transactions have been filed with the Toronto Stock Exchange.

(f) Summary of Any Valuation in Respect of the Transaction:

No valuation will be carried out.

(g) Prior Valuations Within Past 24 Months

No prior valuations have been made in respect of the Company in the 24 months prior to the date of this material change report that relate to the subject matter or are otherwise relevant to the transaction and the existence of which is known after reasonable inquiry to any director or senior officer of the Company.

(h) Agreements Between Company and/or Related Party and Interested Parties in Respect of Transaction

There are no agreements between the Company and an "interested party" (as that term is defined in OSC Rule 61-501) and to the knowledge of the Company there are no agreements between a Related Party and an "interested party", in connection with the debt restructuring.

Item 6 Reliance on Confidentiality Provisions of the Securities Act

Not applicable.

Item 7 Omitted Information

Not applicable.

Item 8 Senior Officer

Contact: Stephen Wilkinson
Telephone: (604) 980-0573

Item 9 Statement of Senior Officer/Director

The foregoing accurately discloses the material change referred to in this report.

Dated at the City of Vancouver, in the Province of British Columbia, this 23rd day of February, 2001.

NORTHERN ORION EXPLORATIONS LTD.

Per: *"Stephen Wilkinson"*
Stephen Wilkinson, President

IT IS AN OFFENCE FOR A PERSON TO MAKE A STATEMENT IN A DOCUMENT REQUIRED TO BE FILED OR FURNISHED UNDER THE ACT OR THIS REGULATION THAT, AT THE TIME AND IN THE LIGHT OF THE CIRCUMSTANCES UNDER WHICH IT IS MADE, IS A REPRESENTATION.

NORTHERN ORION
EXPLORATIONS LTD.

311 West First Street, North Vancouver, B.C. V7M 1B5
Tel: (604) 980-0573 Fax: (604) 980-0731

February 23, 2001 **NEWS RELEASE 01-01** **NNO – TSE**

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FORM 27

Material Change Report
Under:
Section 85(1) of the *Securities Act* (British Columbia)
Section 118(1) of the *Securities Act* (Alberta)
Section 75(2) of the *Securities Act* (Ontario)

Item 1 **Reporting Issuer**

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311 West First Street
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Item 4 **Summary of Material Change**

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The private placement is conditional upon the reduction and restructuring of the debt owed by the Company to its major shareholder, Miramar Mining Corporation ("Miramar").

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these debts into a new note that will be due on demand after June 30th 2002. Subject to regulatory approval and the approval of the Toronto Stock Exchange, the note may be convertible into shares of Northern Orion based on a conversion price of $0.15 per share. If the new note is converted into shares during its term, the number of shares issued will be in the order of 45.3 million.

In addition, Miramar has agreed to reduce the cap on the 2.5% Royalty and Net Proceeds Agreement with Northern Orion from approximately $18 million to $15 million and any future proceeds that could be realized from sale of the San Jorge copper property in Argentina are to be specifically excluded from the Royalty and Net Proceeds Agreement.

Miramar has further agreed to option all but 10 million of its shares plus the new note to 1341180 Ontario Limited, a company owned by Mr. Robert Cross. The term of the option will be the same as the new note, ending on June 30th 2002. Under the option agreement, the minimum purchase would be 5 million Northern Orion shares with the total value of the option with all shares purchased in the order of $4.8 million.

The debt restructuring involving the Company and Miramar is a "related party transaction" under Rule 61-501. The transactions were reviewed by the independent directors of the Company (the "Special Committee"), and the Special Committee determined that the terms of the transactions were fair and reasonable under circumstances and the transactions are beneficial to and in the interests of the Company and its shareholders, including minority shareholders. The Special Committee also determined that in the circumstances the "financial hardship "exemption in sections 5.6(8) and 5.8(5) of Rule 61-501 would be applicable.

The transactions involving the Company and Miramar are subject to Toronto Stock Exchange approval and regulatory approval.

Item 5 Full Description of Material Change

(a) Description of the Transaction:

See Item 4 above.

(b) Reasons for the Transaction:

On April 4, 2000, the Company completed a restructuring of debt owed to Miramar (see Material Change Report dated, April 5 2000). In July, 2000, because the Company was unable to comply with the working capital maintenance requirements of the April, 2000 debt restructuring agreements and was in need of bridge financing pending arranging other financing alternatives, the Company and Miramar reached an agreement under which Miramar provided additional working capital to the Company and waived certain requirements in the April, 2000 agreements (See Material Change Report dated July 4, 2000). The Company has continued to seek other financing alternatives and has negotiated the announced 10 million unit

private placement with an arm's length party which will provide the Company with sufficient working capital for approximately 12 months, conditional upon a restructuring of the Miramar debt and the distribution of Miramar's control block as described.

(c) Effect of the Transaction on Issuer's Business and Affairs:

While the Company has a large undeveloped resource base in its mineral property holdings it has no present ability to repay its indebtedness to Miramar.

The debt restructuring will allow the Company to avail itself of alternate sources of financing including, in the immediate term, working capital from the related private placement, and will allow the Company's new management an opportunity to pursue additional funding, joint venture opportunities and other corporate transactions with a view to maximizing shareholder value.

(d)

(i) Interest in the Transaction of Miramar Mining Corporation, Its Insiders, Associates and Affiliates and Any Other Related Party:

Insiders, Associates, Affiliates and other Related Parties of Miramar own a total of 122,204 Shares of Miramar and hold options to purchase an additional 1,850,000 Shares of Miramar and warrants to purchase a further 280,000 Shares of Miramar. To the knowledge of the Company, the same persons, together with Miramar, own a total of 55.6 million Shares of the Company, and hold options to acquire an additional 1,075,000 Shares of the Company.

(ii) Effect of Transaction on Miramar Mining Corporation and Related Parties

Miramar's equity interest in the Company will be increased by 14.4 million Shares, bringing its holdings to 69.9 million Shares and its percentage interest in the Company to approximately 67.3%.

(iii) Nature of any Benefit to be Secured by Related Parties as a Result of the Transaction

Insiders and Related Parties will not secure any benefit not shared proportionately by all shareholders of the Company.

(e) Review and Approval Process for the Transaction:

The proposed transactions were reviewed by Special Committee of independent directors of the Company, who determined that the terms of the transactions were fair and reasonable under the circumstances and the

transactions were beneficial to and in the interests of the Company and its shareholders, including minority shareholders. The Special Committee also determined that in the circumstances the "financial hardship" exemption in sections 5.6(8) ad 5.8(5) of Rule 61-501 would be applicable. Notice of the proposed transactions have been filed with the Toronto Stock Exchange.

(f) Summary of Any Valuation in Respect of the Transaction:

No valuation will be carried out.

(g) Prior Valuations Within Past 24 Months

No prior valuations have been made in respect of the Company in the 24 months prior to the date of this material change report that relate to the subject matter or are otherwise relevant to the transaction and the existence of which is known after reasonable inquiry to any director or senior officer of the Company.

(h) Agreements Between Company and/or Related Party and Interested Parties in Respect of Transaction

There are no agreements between the Company and an "interested party" (as that term is defined in OSC Rule 61-501) and to the knowledge of the Company there are no agreements between a Related Party and an "interested party", in connection with the debt restructuring.

Item 6 Reliance on Confidentiality Provisions of the Securities Act

Not applicable.

Item 7 Omitted Information

Not applicable.

Item 8 Senior Officer

Contact: Stephen Wilkinson
Telephone: (604) 980-0573

Item 9 Statement of Senior Officer/Director

The foregoing accurately discloses the material change referred to in this report.

Dated at the City of Vancouver, in the Province of British Columbia, this 23rd day of February, 2001.

NORTHERN ORION EXPLORATIONS LTD.

Per: *"Stephen Wilkinson"*
Stephen Wilkinson, President

IT IS AN OFFENCE FOR A PERSON TO MAKE A STATEMENT IN A DOCUMENT REQUIRED TO BE FILED OR FURNISHED UNDER THE ACT OR THIS REGULATION THAT, AT THE TIME AND IN THE LIGHT OF THE CIRCUMSTANCES UNDER WHICH IT IS MADE, IS A REPRESENTATION.

DuMOULIN BLACK

BARRISTERS & SOLICITORS

W. DAVID BLACK
SARGENT H. BERNER
KENNETH W. BALL
COREY M. DEAN
J. DOUGLAS SEPPALA*
MARY P. COLLYER
GEORGE R. BRAZIER
BRIAN C. IRWIN
CHERI L. PEDERSEN
KENNETH L.H. EMBREE
C. BRUCE SCOTT
JEROME D. ZISKROUT
associate counsel

(*denotes law corporation)

10TH FLOOR, 595 HOWE STREET
VANCOUVER, CANADA
V6C 2T5

TELEPHONE No. (604) 687-1224

TELECOPIER No. (604) 687-8772

FILE NO. 869-1
DIRECT LINE 602-6812
EMAIL mcollyer@dumoulinblack.com

BY SEDAR

February 26, 2001

Ontario Securities Commission
Suite 800, 20 Queen Street West
P.O. Box 55
Toronto, Ontario
M5H 3S8

Attention: Office of the General Counsel

Dear Sirs:

Re: Miramar Mining Corporation and Northern Orion Explorations Ltd.
- Related Party Transaction

We are acting as counsel to Northern Orion Explorations Ltd. ("Orion") in connection with certain transactions between Orion and Miramar Mining Corporation ("Miramar"), particulars of which are set out in a Material Change Report of Orion filed on February 26, 2001, a copy of which is enclosed. A news release announcing agreement in principle to the transactions was issued by the Company on February 23, 2001 and a copy of that news release is also enclosed for your reference.

The subject transactions are "related party transactions", under Rule 61-501, as Miramar is the majority shareholder of Orion. Both Miramar and Orion are reporting companies and both are listed for trading on The Toronto Stock Exchange.

A special committee of independent directors of Orion has reviewed the subject transactions and has determined that the terms thereof are fair and reasonable in the circumstances, and are beneficial to Orion and its shareholders, including minority shareholders. The special committee has also determined that in the circumstances the "financial hardship" exemption in sections 5.6(8) and 5.8(5) of Rule 61-501 is applicable.

We trust you will find this filing to be in order. If anything further should be required, however, please

do not hesitate to contact the writer or Mr. Sargent Berner of our offices.

Yours truly,
DuMOULIN BLACK

"Mary P. Collyer"

Per:
Mary P. Collyer
MPC:lsc
Enclosures
cc: Northern Orion Explorations Ltd.
cc: The Toronto Stock Exchange, Attention: Mr. Robert J. Perry

NORTHERN ORION
EXPLORATIONS LTD.

311 West First Street, North Vancouver, B.C. V7M 1B5
Tel: (604) 980-0573 Fax: (604) 980-0731

February 28, 2001 **NEWS RELEASE 01-02** **NNO – TSE, CDNX**

NORTHERN ORION ANNOUNCES VOLUNTARY DELISTING FROM THE CANADIAN VENTURE EXCHANGE

Northern Orion has traded exclusively on the Toronto Stock Exchange over the last twelve months while maintaining a dual listing on the Canadian Venture Exchange. As a consequence, the Board of Northern Orion has elected to voluntarily delist the company's shares from the CDNX, effective immediately. The shares of Northern Orion will continue to be traded on the Toronto Stock Exchange under the symbol NNO.

Northern Orion is a junior company focused on the exploration and development of mining projects in Latin America. The company has one of the largest undeveloped resource bases of copper and gold in the junior mining sector. (See our news release of April 27 2000) Management is continuing to work toward developing Northern Orion as a significant copper producer based on its portfolio of advanced projects.

For further information contact:
Stephen Wilkinson, President & CEO or
David Cohen, Chief Operating Officer
NORTHERN ORION EXPLORATIONS LTD
Tel: (604) 980-0573 Fax: (604) 980-0731
Email: info@northernorion.com

VALERIE GOLD RESOURCES LTD.
Suite 1400 – 570 Granville Street
Vancouver, B.C. V6C 3P1
www.valeriegold.com / www.langmining.com

NORTHERN ORION EXPLORATIONS LTD.
311 West First Street, North Vancouver, B.C.
V7M 1B5
Tel: (604) 980-0573 Fax: (604) 980-0731

April 18, 2001

VLG-CDNX
NNO – TSE

VALERIE GOLD UNDERTAKES $1.5 MILLION PRIVATE PLACEMENT IN NORTHERN ORION

Valerie Gold Resources Ltd. ("**Valerie**") and Northern Orion Explorations Ltd. ("**Northern Orion**") are pleased to announce that they have entered into an agreement by which Valerie will subscribe for a $1.5 million private placement of 10 million Units of Northern Orion priced at $0.15 per Unit. Each Unit will be comprised of one Northern Orion common share and one share purchase warrant. Each warrant will entitle Valerie to purchase an additional common share of Northern Orion over a two year period for a price per share of $0.175 during the first year and $0.20 during the second. The placement was non-brokered and will close immediately upon receipt of all required regulatory approvals. Upon closing, Valerie Gold will own 8.8% of Northern Orion's outstanding common shares.

Valerie and Northern Orion view the private placement as the first step in the formation of a significant strategic alliance between the two companies. Each company brings unique and synergistic qualities to the alliance. Northern Orion's considerable resource base in copper and gold is matched with the strong balance sheet possessed by Valerie, and it is the intent of both management groups to utilize these synergies to achieve greater value for their respective companies. In addition, Valerie will be afforded the opportunity to participate in any improvements in the metals markets through its equity holding in Northern Orion.

The proposed private placement is subject to a number of conditions, which upon closing, will set in motion events that should have significant impact on Northern Orion. Firstly, the closing will trigger conversion of the $21.4 million Convertible Debenture ("**CD**") held by Miramar Mining Corporation ("**Miramar**") into 14,439,621 Northern Orion common shares priced at $1.47 each. Secondly, Northern Orion's remaining debts to Miramar in the amount of approximately $6.9 million will be consolidated into new convertible notes. The conversion price for the new notes will be $0.15 per share. The new notes are expected to be converted in conjunction with the distribution of Miramar control block, as disclosed in Northern Orion's news release of February 23, 2001.

By agreement between Valerie and 1341180 Ontario Limited, a company owned by Mr. Robert Cross, Valerie will assist Mr. Cross in placing the Miramar shareholding of Northern Orion subject to the option held by 1341180 Ontario Limited (60,012,471 Common Shares in total).

The principal mineral properties of Northern Orion are listed in the table below together with Northern Orion's ownership interest, the total measured and indicated resource for the projects, and that attributable to Northern Orion's interest.

Northern Orion Explorations Ltd.
Mineral Resources with Sensitivities to Cut Off Grades (%Cu)

Project	NNO Ownership	RESOURCES* (Measured and Indicated) Tonnes (000's) Total	Attributable to NNO	Copper %	Gold g/t	Silver g/t	Molybdenum %	*Cut Off Grade % Cu*
Agua Rica	30%	1,714,000	514,200	0.43	0.17	3.00	0.032	*0.20*
		750,000	225,000	0.66	0.23	3.20	0.037	*0.40*
		167,000	50,100	0.99	0.32	3.30	0.036	*0.70*
San Jorge	100%	381,400	381,400	0.39	0.15	n/a	n/a	*0.25*
		113,400	113,400	0.60	0.18	n/a	n/a	*0.40*
Mantua	50%	7,525	3,763	2.74	n/a	n/a	n/a	*0.70*

Northern Orion Project Summaries

The ***Agua Rica*** project is Northern Orion's primary asset and contains a world-class copper-gold-molybdenum porphyry deposit. The project is located in the state of Catamarca in Argentina about 35 kilometres east of the Alumbrera copper-gold mine. BHP Copper, the project operator, owns 70% and NNO holds the remaining 30%. To date, 176 drill holes have been completed with substantially all other field studies complete for a bankable feasibility study, including bulk sampling from two adits, laboratory and pilot scale metallurgical testing, geotechnical design, water exploration, and pre-feasibility level engineering.

The ***San Jorge*** deposit is located near Mendoza in Argentina. The resources were estimated by Northern Orion staff as part of a pre-feasibility study that examined the potential of leaching the copper oxide cap mineralization. Management is currently looking for a joint venture partner to participate in the project.

The original feasibility study for the ***Mantua*** copper project in Cuba was completed by Davy International in October 1995. In 1999, Northern Orion completed an internal pre-feasibility study to evaluate the use of a ferric leach, solvent extraction process. Annual copper production at an estimated cost of U.S. $0.45/lb. Cu. of 18,000 tons of cathode is projected over a 10-year mine life. Northern Orion is planning to proceed with further metallurgical testing and integration of the results into a new bankable feasibility study.

For further information please contact:

VALERIE GOLD RESOURCES LTD.

Frank Lang, President
William Witte, Executive Vice President
Tel: (604) 687-4622 / Fax: (604) 687-4212
Email: investor@langmining.com

NORTHERN ORION EXPLORATIONS LTD.

Stephen Wilkinson, President
David Cohen, Vice President
Tel: (604) 980-0573 / Fax: (604) 980-0731
Email: info@northernorion.com

*The Northern Orion resource estimates were prepared in accordance with proposed National Instrument 43-101, the Toronto Stock Exchange's "Disclosure Standards for Companies Engaged in Mineral Exploration, Development & Production" and the Canadian Institute of Mining and Metallurgy classification system. The qualified person responsible for the reserve and resource estimates was Dean McDonald PhD, P Geo, Exploration Manager, Miramar Mining Corporation. At the time of the estimate, Miramar owned 62.4% of Northern Orion's 89.4 million outstanding shares.

NORTHERN ORION
EXPLORATIONS LTD.

311 West First Street, North Vancouver, B.C. V7M 1B5
Tel: (604) 980-0573 Fax: (604) 980-0731

May 1, 2001 **NEWS RELEASE 01-04** **NNO – TSE**
VLG - CDNX

NORTHERN ORION CLOSES PRIVATE PLACEMENT AND ADDS NEW DIRECTORS

Northern Orion announces that it has closed the private placement financing, previously announced on April 18th. The financing was completed solely by Valerie Gold Resources Limited ("Valerie") and consisted of a $1.5 million private placement of 10 million Units of Northern Orion priced at $0.15 per Unit. Each Unit will be comprised of one Northern Orion common share and one share purchase warrant. Each warrant will entitle Valerie to purchase an additional common share of Northern Orion over a two year period for a price per share of $0.175 during the first year and $0.20 during the second.

Further to the above, Mr. John K. Burns, Chairman of Northern Orion is pleased to announce that with the closing of the private placement financing, Robert ("Bob") Cross and Frank Lang are joining Northern Orion's Board of Directors.

Mr. Cross is well recognized as a financier and dealmaker, having acted as the Chairman and Chief Executive Officer of Yorkton Securities and as a Vice President and Director of Gordon Capital. Northern Orion will clearly benefit from his extensive investment experience with the mining and technology sectors.

Mr. Frank Lang is currently President of Valerie. Also, he controls and is President of Lang Mining Corporation, a private company that manages the affairs of junior mining companies, including in addition to Valerie, Cream Minerals Ltd. (CMA – CDNX), Emgold Mining Corp. (EMR – CDNX), and Sultan Minerals Inc. (SUL – CDNX). Mr. Lang's extensive background in international mineral exploration makes him a welcome addition to Northern Orion's board and an asset to management.

Northern Orion is a junior company focused on the exploration and development of mining projects in Latin America. The company has one of the largest undeveloped resource bases of copper and gold in the junior mining sector. (See Northern Orion news release of April 27 2000) Management is continuing to work toward developing Northern Orion as a significant copper producer.

For further information please contact:

NORTHERN ORION EXPLORATIONS LTD

Stephen Wilkinson, President
David Cohen, Vice President
Tel: (604) 980-0573 / Fax: (604) 980-0731
Email: info@northernorion.com

DUMOULIN BLACK

BARRISTERS & SOLICITORS

W. DAVID BLACK
SARGENT H. BERNER
KENNETH W. BALL
COREY M. DEAN
J. DOUGLAS SEPPALA*
MARY P. COLLYER
JANICE E. CONWAY
CHRISTINE E. COLEMAN
GEORGE R. BRAZIER
BRIAN C. IRWIN
CHERI L. PEDERSEN
KENNETH L.H. EMBREE
C. BRUCE SCOTT
STEPHEN TONG
PATRICIA D. SANDBERG
JEROME D. ZISKROUT
associate counsel

(*denotes law corporation)

10TH FLOOR, 595 HOWE STREET
VANCOUVER, CANADA
V6C 2T5

TELEPHONE No. (604) 687-1224

TELECOPIER No. (604) 687-3635

FILE NO. 1812-01
DIRECT LINE 602-6804
EMAIL sberner@dumoulinblack.com

VIA SEDAR

May 4, 2001

British Columbia Securities Commission
9th Floor - 701 Georgia Street West
P.O. Box 10142, Pacific Centre
Vancouver, British Columbia, V7Y 1G6

Attention: Insider Reporting

Dear Sirs:

Re: Valerie Gold Resources Ltd. ("Valerie Gold") Holding of Northern Orion Explorations Ltd. ("Northern Orion")
- Report under Section 111 of the *Securities Act* (British Columbia)

Please find enclosed for filing on behalf of Valerie Gold in respect of their holdings of securities in Northern Orion a press release and report, both dated May 2, 2001.

We trust you will find everything to be in order. If you have any further questions regarding this matter, please do not hesitate to contact the writer.

Yours truly,
DuMOULIN BLACK
Per:
(signed) "*Stephen Tong*"

Stephen Tong

:lsc
Enclosures
cc: Valerie Gold Resources Ltd.

181201\NNOPP\0238

REPORT PURSUANT TO SECTION 111
OF THE SECURITIES ACT (BRITISH COLUMBIA)

(a) Name of Offeror

Valerie Gold Resources Ltd.

(b) The number of securities over which the Offeror and any person or company acting jointly or in concert with the Offeror acquired ownership or control or direction as a result of the transaction or occurrence giving rise to the report:

The Offeror has acquired 10,000,000 units of Northern Orion Explorations Ltd. (the "Company"). Each unit consists of one common share in the capital of the Company and one non-transferable share purchase warrant for the purchase of an additional common share in the capital of the Company at an exercise price of $0.175 per share in the first year and $0.20 per share in the second year.

(c) The ownership of or control and direction by the Offeror and any person or company acting jointly or in concert with the Offeror over the securities immediately after the transaction or occurrence giving rise to the report:

The Offeror owns a total of 10,000,000 common shares in the capital of the Company and 10,000,000 non-transferable share purchase warrant exercisable for the purchase of up to an additional 10,000,000 common shares at an exercise price of $0.175 per share in the first year and $0.20 per share in the second year.

The 10,000,000 common shares and the 10,000,000 non-transferable share purchase warrants represent approximately 17.5% of the currently issued and outstanding shares of the Company.

(d) The name of the market where the transaction or occurrence took place:

Private Placement.

(e) The purpose of the Offeror and any person or company acting jointly or in concert with the Offeror in effecting the transaction, including any future intention to increase the beneficial ownership, control, or direction of the Offeror and any person or company acting jointly or in concert with the Offeror over the securities of the Offeree Issuer:

The Offeror acquired the securities for investment purposes. It is their intention to evaluate the investment in the Company and to increase or decrease their shareholdings as circumstances require.

(f) Where applicable, description of any change in any material facts set out in a previous report under Section 111 of the Act:

Not applicable.

(g) The name of the persons or companies acting jointly or in concert with the Offeror in connection with the disclosure required by Clauses (b), (c), or (d) above:

Not applicable.

Dated May 2, 2001.

VALERIE GOLD RESOURCES LTD.
Per:

(signed) "William J. Witte"

NEWS RELEASE

May 2, 2001

Purchase of shares by way of private placement
in the capital of Northern Orion Explorations Ltd. ("Northern Orion")

Report required by Section 111 of the
British Columbia Securities Act

Valerie Gold Resources Ltd. ("Valerie Gold") has purchased a total of 10,000,000 units in the capital of Northern Orion by way of private placement. Each unit consists of one common share and one warrant to purchase an additional common share at a price of $0.175 per share in the first year and $0.20 per share in the second year. The issuance of the units will result in Valerie Gold owning or exercising control over 10,000,000 common shares of Northern Orion representing 8.78% of the issued and outstanding shares of Northern Orion.

Valerie Gold has acquired these securities for investment purposes. It is their intention to evaluate the investment in Northern Orion and to increase and decrease their shareholdings as circumstances require.

VALERIE GOLD RESOURCES LTD.

Per: (signed) "William J. Witte"

The Canadian Venture Exchange has not reviewed and does not accept responsibility for the adequacy or accuracy of this news release.

181201\NNOPP\0236

PACIFIC CORPORATE TRUST COMPANY
10th Floor - 625 Howe Street
Vancouver, B.C. V6C 3B8

Telephone: (604) 689-9853
Fax: (604) 689-8144

May 3, 2001

British Columbia Securities Commission
PO Box 10142 Pacific Centre
701 West Georgia Street 9th Floor
Vancouver, BC
V7Y 1L2

Dear Sirs:

As per National Policy 41 requirements, including Addendum "A" to the Policy, please be advised of the following:

Company:	Northern Orion Explorations Ltd.
	(Cusip 66557D109)
Meeting:	Annual General Meeting
Record Date:	May 18, 2001
Meeting Date:	June 29, 2001

If you require further information, please contact:

"Anissa Rimer-Ly"

Anissa Rimer-Ly
Pacific Corporate Trust Company

cc: Alberta Securities Commission
cc: Manitoba Securities Commission
cc: New Brunswick Securities Commission
cc: Newfoundland Securities Commission
cc: Nova Scotia Securities Commission
cc: Ontario Securities Commission
cc: Toronto Stock Exchange
cc: P.E.I. Securities Commission
cc: Quebec Securities Commission
cc: Saskatchewan Securities Commission
cc: Northwest Territory
cc: Yukon Territory
cc: Nunavut

BC FORM 53-901.F

SECURITIES ACT

MATERIAL CHANGE REPORT UNDER SECTION 85(1) OF THE ACT

ITEM 1. REPORTING ISSUER

Northern Orion Explorations Ltd. (the "Company")
#1400 – 570 Granville Street
Vancouver, British Columbia
V6C 3P1
Telephone: (604) 687-4622

ITEM 2. DATE OF MATERIAL CHANGE

May 1, 2001

ITEM 3. PRESS RELEASE

Issued May 1, 2001 and distributed through the facilities of Canada News Wire.

ITEM 4. SUMMARY OF MATERIAL CHANGE

The Company has now closed its recently announced private placement of 10,000,000 Units raising gross proceeds of $1,500,000.

ITEM 5. FULL DESCRIPTION OF MATERIAL CHANGE

The Company has now closed its recently announced private placement of 10,000,000 Units at the price of $0.15 per Unit, each Unit consisting of one share and one warrant, each warrant entitling the holder to purchase one additional share of the Company at the price of $0.175 per share for the first year and $0.20 per share for the second year, until April 27, 2003.

ITEM 6. RELIANCE ON SECTION 85(2) OF THE ACT

This report is not being filed on a confidential basis.

ITEM 7. OMITTED INFORMATION

There are no significant facts required to be disclosed herein which have been omitted.

ITEM 8. DIRECTOR/SENIOR OFFICER

Contact: Stephen Wilkinson, President
Telephone: (604) 687-4622

ITEM 9. STATEMENT OF SENIOR OFFICER/DIRECTOR

The foregoing accurately discloses the material change referred to herein.

(signed) "Stephen Wilkinson"
Stephen Wilkinson, President

DATED at Vancouver, British Columbia, this 11th day of May, 2001.

NORTHERN ORION
EXPLORATIONS LTD.

Suite 1400 – 570 Granville St., Vancouver, B.C. V6C 3P1
Tel: (604) 687-4622 Fax: (604) 687-4212

May 16, 2001 **NEWS RELEASE 01-05** **NNO – TSE**

NORTHERN ORION ENTERS FINAL STAGE OF RESTRUCTURING AND MOVES TO NEW HEAD OFFICE

Following the closing of the $1.5 million private placement financing by Valerie Gold Resources Ltd ("Valerie"), announced on May 1st, Northern Orion has settled and restructured all of ts remaining debts owed to Miramar Mining Corporation ("Miramar"). The largest component of the debt restructuring was the conversion of Miramar's convertible debenture, resulting in the issuance of an additional 14.4 million shares to Miramar. A total of $21.2 million in debt was converted at a per share conversion price of $1.47. The remaining indebtedness to Miramar amounting to $6.9 million was consolidated and restructured into two long-term convertible notes that may be converted at $0.15 per share.

Miramar's holdings in Northern Orion now total 70.0 million shares or approximately 62% of the outstanding shares of the Company. However, all but ten million of Miramar's Northern Orion shares are subject to an option agreement as announced in Northern Orion's news release of February 23rd 2001.

With the completion of these transactions, Northern Orion has begun the process of regaining investor and shareholder confidence and returning value to its shares. An important component of the process has been the elimination of the Company's debts. In November 1999, when current management assumed responsibility for the affairs of the Company, Northern Orion had negative working capital of $1.1 million and total indebtedness of $45.4 million. Since then, management has negotiated and completed -

- The settlement of $40.7 million of debt for 47.4 million shares of the company, all issued to Miramar,
- The settlement of $18.0 million of debt for a $15.0 million royalty in favour of Miramar,
- The raising of $6.3 million in advances from Miramar for operating expenses, and
- The $1.5 million private placement.

In addition to the debt restructuring, operating costs have been brought down to levels more appropriate to a company the size of Northern Orion. By rationalizing all operations in Canada and abroad, operating expenses attributed to management fees, general and administrative expenses and interest charges have been reduced from $146,000 per month as paid in the first nine months of 1999 to less than $50,000 per month as being realized currently.

To further its efforts to trim costs, Northern Orion has moved its head office into that of Valerie and the Lang Mining Group. It is expected that the change of location should be beneficial in

terms of further reducing expenses associated with overheads in an environment that is supportive and positive. The new address is:

Northern Orion Explorations Limited
Suite 1400, 570 Granville Street,
Vancouver, BC V6C 3P1
Telephone: (604) 687-4622 Fax: (604) 687-4212

Northern Orion is a junior company focused on the exploration and development of mining projects in Latin America. The company has one of the largest undeveloped resource bases of copper and gold in the junior mining sector. (See Northern Orion news release of April 27 2000)

For further information please contact:

NORTHERN ORION EXPLORATIONS LTD

Stephen Wilkinson, President
David Cohen, Vice President
Tel: (604) 687-4622 / Fax: (604) 687-4212
Email: info@northernorion.com

PACIFIC CORPORATE TRUST COMPANY
625 Howe Street – 10th Floor
Vancouver, B.C. V6C 3B8

Telephone: (604) 689 - 9853
Fax: (604) 689 - 8144

May 22, 2001

B.C. Securities Commission
Executive Director
2nd Floor, 865 Hornby Street
Vancouver, B.C., V6Z 2H4

Dear Sirs:

RE: NORTHERN ORION EXPLORATIONS LTD
MAILING ON MAY 22, 2001
ANNUAL FINANCIAL STATEMENTS
FOR YEAR ENDING DECEMBER 31, 2000

We confirm that on the above date, the material issued by the subject Company was forwarded by prepaid first class mail to all of the registered members of the Company.

The filing fee(s) for the financial statements has been remitted via SEDAR.

Yours truly,

PACIFIC CORPORATE TRUST COMPANY

Anissa Rimer-Ly
AR/jr

cc: Alberta Securities Commission
cc: Director of Corporations - PEI
cc: Manitoba Securities Commission
cc: Nova Scotia Securities Commission
cc: Office of the Administrator of Securities - NB
cc: Ontario Securities Commission
cc: Quebec Securities Commission
cc: Registrar of Securities - NT
cc: Registrar of Securities - YT
cc: Saskatchewan Securities Commission
cc: Securities Division - Department of Justice - NF
cc: Montreal Stock Exchange
cc: Toronto Stock Exchange
cc: Nunavut Securities Commission
cc: US Securities & Exchange Commission
File # 12G32(B) # 8215666
cc: Northern Orion Explorations Ltd
cc: Dumoulin Black
cc: KPMG Peat Marwick Thorne.

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PACIFIC CORPORATE TRUST COMPANY
625 Howe Street – 10th Floor
Vancouver, B.C. V6C 3B8

Telephone: (604) 689 - 9853
Fax: (604) 689 - 8144

May 25, 2001

B.C. Securities Commission
Executive Director
2nd Floor, 865 Hornby Street
Vancouver, B.C., V6Z 2H4

Dear Sirs:

RE: NORTHERN ORION EXPLORATIONS LTD
MAILING ON MAY 25, 2001
MANAGEMENT PROXY MATERIAL **and**
ANNUAL FINANCIAL STATEMENTS
FOR YEAR ENDING DECEMBER 31, 2000

We confirm that on the above date, the material issued by the subject Company was forwarded by prepaid first class mail to all of the registered members of the Company.

We also confirm that the attached material was distributed to intermediaries in accordance with National Policy 41.

Yours truly,

PACIFIC CORPORATE TRUST COMPANY

"Anissa Rimer-Ly"
Anissa Rimer-Ly
AR/jr

cc: Alberta Securities Commission
cc: Director of Corporations - PEI
cc: Manitoba Securities Commission
cc: Nova Scotia Securities Commission
cc: Office of the Administrator of Securities - NB
cc: Ontario Securities Commission
cc: Quebec Securities Commission
cc: Registrar of Securities - NT
cc: Registrar of Securities - YT
cc: Saskatchewan Securities Commission
cc: Securities Division - Department of Justice - NF
cc: Montreal Stock Exchange
cc: Toronto Stock Exchange
cc: Nunavut Securities Commission
cc: Northern Orion Explorations Ltd
cc: Dumoulin Black
cc: KPMG Peat Marwick Thorne.

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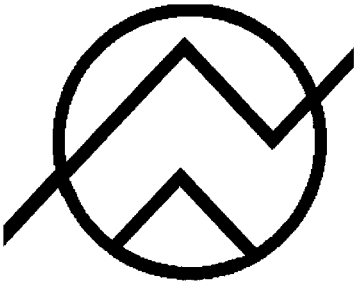

NORTHERN ORION

EXPLORATIONS LIMITED

First Quarter Report

2001

MANAGEMENT'S DISCUSSION & ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

FOR THE THREE MONTHS ENDED MARCH 31, 2001

Description of Business

Northern Orion Explorations Ltd. ("Northern Orion" or "the Company") is primarily engaged in the development of its two main mineral properties – Agua Rica in Argentina and Mantua in Cuba. Financial constraints on Northern Orion for the past three years have necessitated a significantly reduced scale of all corporate and exploration activities.

Work continued at a reduced level in 2001 at the 30% owned Agua Rica Project in Argentina. The project operator, BHP, continued on the 2000/01 program work. The Company's share of the work program (including management fees to the operator) in the quarter was approximately $198,000 versus $682,000 in the same period in 2000. During the quarter, the Company accrued the cash calls to meet its commitment to Agua Rica. The current work program is focused upon project restructuring with the intent of having the ownership interests held via single corporate entity, with BHP and Northern Orion owning equity on a 70/30 basis, reflecting the present ownership ratio. The restructuring should be completed subsequent to the end of the quarter. On a long-term basis, the Company's share of the capital requirement to develop an open pit mine and concentrator at Agua Rica could be in excess of US$200 million. Northern Orion's management is continuing to examine all of the Company's options on how best to proceed with this important project, including alternative operating scenarios.

For the Mantua project, work continued in 2001 to arrange financing for a bankable feasibility study for the copper mining phase. The Company is currently negotiating the funding to complete this study. A final production decision for the copper phase is pending the results of this feasibility study. The Company's ability to develop the copper phase at Mantua is dependent upon obtaining third party financing.

Discussion of Operations and Financial Condition

For the three months ending March 31st, 2001, Northern Orion recorded a loss of $322,000 or $0.00 per share in 2001 compared to a loss of $694,000 or $0.01 per share in 2000. There are no write-downs on mineral properties, and other assets included in the first quarter loss as compared to $280,000 or $0.00 per share in 2000.

Northern Orion's financial condition in 2001 continued to be challenged principally due to the level of management fees and administrative overhead, the decision to continue to participate in Agua Rica project expenses, and the consequential costs associated with amounts of funds advanced by the Company's controlling shareholder, Miramar Mining Corporation ('Miramar').

Due to the prospective nature of the mineral exploration business and the number of exploration properties held, Northern Orion has a limited ability to generate sources of internal cash flow from operations. The Company has financed the acquisition, exploration and development of its properties through a combination of the issuance of common shares to the public, borrowings from Miramar, attracting other companies to joint venture the evaluation of properties and through third party borrowings.

When and if the Company places any of its exploration properties into production, it is intended that the resulting cash flows may become sufficient to sustain future operations, exploration and development. At present, the Company lacks the internal financial ability to advance any of its projects to the production stage.

Financing, Principal Purposes and Milestones

During the quarter, Northern Orion negotiated and closed a funding arrangement with Miramar. Under the arrangement, the Company was advanced operating money from an operating line from Miramar. The line was capped at $145,000 and uses for the funds were pre-approved. In addition, the Company

agreed to repay all of the funds drawn under the arrangement from the proceeds of any new equity or debt financing. By the end of the quarter, Northern Orion had drawn approximately $134,000.

Liquidity and Solvency

At the end of March 2001, the Company had a working capital deficiency of $923,000 compared to working capital of $571,000 at the end the same period in 2000. However, subsequent to the first quarter of 2001, the Company arranged a private placement in the amount of $1,500,000 as further described below under the 2001 Financial Restructuring. These funds are not sufficient to continue the full evaluation of all of the Company's mineral prospects. Management of the Company is in the process of further evaluating all of the Company's property interests in order to ensure that value is realized. In addition, all contemplated expenditures are reviewed to ensure that cash commitments are prioritized and that existing capital resources are available to maintain the core properties currently held. Management is evaluating potential new sources of financing to meet the anticipated expenditures required to further advance its projects.

Subsequent Events - 2001 Financial Restructuring

In 2000, Miramar made advances to the Company to fund working capital requirements and various exploration expenditures. Interest was charged on these advances at 8% per annum. As of the end of March 2001, the amount owed to Miramar due to the advances and interest charged had accumulated to approximately $28.3 million.

In February 2001, the Company reached an agreement to restructure and partially settle amounts owing to Miramar. Under the agreement, Miramar agreed to convert the convertible debenture, reduce the cap of the royalty and net proceeds interest ('Royalty Interest') from $17,987,000 to $15,000,000 and restructure the remaining Northern Orion indebtedness of $6.9 million.

The largest component of the debt restructuring was the conversion of Miramar's convertible debenture, resulting in the issuance of an additional 14.4 million shares to Miramar. A total of $21.2 million in debt was converted at a per share conversion price of $1.47.

The Royalty Interest entitles Miramar to receive the economic equivalent of a 2.5% net smelter return royalty on all of the Company's mining interests and a right to receive a portion of the net proceeds from the sale of any of the Company's mining interests, excluding the San Jorge project in Argentina. The total of the payments under the Royalty Interest is limited to $15.0 million.

In addition, under the agreement, the remaining indebtedness to Miramar amounting to $6.9 million was consolidated and restructured into two long-term convertible notes that may be converted at $0.15 per share and are due on demand after June 30, 2002. The new convertible notes no longer require that the Company maintain any minimum level of working capital as was previously required by Miramar.

Northern Orion continues its process of determining methods to obtain sufficient capital resources to meet its short and medium term financial requirements. Long-term liquidity and capital resources will be dependent upon the successful development and profitable operation of its mineral properties and the availability of capital from the equity markets. In order to maintain financial resources and take advantage of financial leverage, the Company will continue to negotiate with major financial institutions to obtain project financing.

Commitments

Northern Orion continues to participate in the Agua Rica joint venture with BHP. Under the joint venture, exploration and development expenditures are made under the terms of annual work programs and are contributed to on the basis of the respective party's interest. Northern Orion's interest is 30% and BHP has a 70% interest. It is expected that total expenditures under the current 12-month program will be approximately $2.3 million (US$ 1.5 million), of which Northern Orion's share is $0.68 million (US$ 0.45 million), including management fees.

RISKS AND UNCERTAINTIES

The Company operates almost exclusively in foreign jurisdictions and is dependent on world metals and currency markets that may present risks to the future prospects of the Company.

Risks Associated with the Mining Industry

Northern Orion is engaged in the exploration for and the development of mineral deposits. These activities involve significant risks which careful evaluation, experience and knowledge may not, in some cases, eliminate. The commercial viability of any mineral deposit depends on many factors, not all of which are within the control of management. Some of the factors that will affect the financial viability of a given mineral deposit include its size, grade and proximity to infrastructure. In addition, government regulation, taxes, royalties, land tenure, land use, environmental protection and reclamation and closure obligations could have a profound impact on the economic viability of a mineral deposit.

Northern Orion is not able to determine the impact of potential changes in environmental laws and regulations on its financial position due to the uncertainty surrounding the form such changes may take. As mining regulators continue to update and clarify their requirements for closure plans and environmental protection laws and administrative policies are changed, additional reclamation obligations and further security for mine reclamation costs may be required. It is not expected that such changes will have a material effect on the operations of Northern Orion.

Risks Associated with Financial Markets

Both Argentina and Cuba have currently fixed their currency to the US dollar and removal of these exchange controls could significantly effect the exchange rates in terms of the Canadian dollar. Continued weakness of the Canadian dollar in comparison to the US dollar will also affect the results of operations. Increasing costs of labour, supplies and energy may affect planned operations in future years. The potential for increased input prices is taken into consideration when preparing plans for future exploration, development and mine construction.

Risks Associated with the Market for Metals and Minerals

The prices of metals and minerals are subject to relatively large changes over short time periods. These prices can have a direct impact on the commercial viability of production from mineral properties.

Risks Associated with Foreign Operations

Northern Orion's investments in foreign countries such as Argentina and Cuba carry certain risks associated with different political and economic environments. Northern Orion undertakes investments in various countries around the world only when it is satisfied that the risks and uncertainties of operating in different cultural, economic and political environments are manageable and reasonable relative to the expected benefits.

NORTHERN ORION EXPLORATIONS LTD.

Consolidated Balance Sheets [1]
(expressed in thousands of dollars)

March 31, 2001 and December 31, 2000

	2001 (unaudited)	2000
Assets		
Current assets:		
Cash	$ 6	$ 13
Accounts receivable	45	36
Prepaid expenses	47	40
	98	89
Plant and equipment	2,218	2,224
Mineral properties and deferred development	81,385	80,758
	$ 83,701	$ 83,071
Liabilities and Shareholders' Equity		
Current liabilities:		
Accounts payable and accrued liabilities	$ 887	$ 1,013
Interim funding loan from Miramar	134	–
	1,021	1,013
Promissory note payable	4,055	3,551
Convertible debenture	24,078	23,703
Other long-term liabilities	36	36
Future income taxes	24,385	24,320
	53,575	52,623
Shareholders' equity:		
Share capital (issued and outstanding at March 31, 2001 – 89,430,601 common shares; December 31, 2000 – 89,430,601 common shares)	126,574	126,574
Deficit	(96,448)	(96,126)
	30,126	30,448
	$ 83,701	$ 83,071

(1) See accompanying notes to consolidated financial statements.

Approved on behalf of the Board:

"Frank Lang" *"Stephen Wilkinson"*

Director	Director

NORTHERN ORION EXPLORATIONS LTD.

Consolidated Statements of Operations and Deficit
(expressed in thousands of dollars except per share amounts)

Three month periods ended March 31, 2001 and 2000

	2001 (unaudited)	2000 (unaudited)
Revenue:		
Interest and other income	20	6
	20	6
Expenses:		
Cost of sales	–	36
Management fee	40	105
General and administration	184	77
Property costs	112	–
Restructuring costs	–	57
Depreciation and depletion	6	156
Write-down of mineral properties and other assets	–	280
Loss (gain) on foreign exchange translation	–	(11)
	342	700
Loss for the period	$ 322	$ 694
Deficit, beginning of period, previously reported	96,126	49,342
Adjustment to deficit for future income taxes	–	22,980
Deficit, end of period	$ 96,448	$ 73,016
Loss per share – basic and fully diluted	$ 0.00	$ 0.01
Weighted average number of common shares outstanding	89,430,601	74,006,780
Total common shares outstanding at end of period	89,430,601	89,006,780

NORTHERN ORION EXPLORATIONS LTD.

Consolidated Statements of Cash Flows
(expressed in thousands of dollars)

Three month periods ended March 31, 2001 and 2000

	2001 (unaudited)	2000 (unaudited)
Cash provided by (used in):		
Operations:		
Loss for the period	$ (322)	$ (694)
Items not involving cash:		
Depreciation and depletion	6	156
Writedown of mineral properties and other assets	–	280
Net change in non-cash working capital:		
Decrease (increase) in accounts receivable	(9)	267
Decrease (increase) in prepaid expenses	(7)	(52)
Increase (decrease) in accounts payable and accrued liabilities	(126)	(221)
	(458)	(264)
Financing:		
Advances from controlling shareholder	134	–
Due to related parties	504	411
Capitalized interest on convertible debenture	375	520
Other long-term liabilities	–	(38)
	1,013	893
Investments:		
Mineral properties	(562)	(857)
	(562)	(857)
Increase (decrease) in cash	(7)	(228)
Cash, beginning of period	13	314
Cash, end of period	$ 6	$ 86
Supplementary information:		
Income taxes paid (received)	$ –	$ (35)
Interest paid	–	–
Non-cash transactions:		
Increase in mineral properties due to increase in future income tax liability	65	274
Reduction in promissory note payable through issuance of common shares	–	4,500
Reduction in royalty and proceeds interest payable through partial disposition of mineral property interests	–	17,987

1. Interim Financial Statements:

These interim financial statements should be read in conjunction with the consolidated financial statements and notes thereto included in the Company's Annual Report for the year ended December 31, 2000.

The quarterly results are not necessarily indicative of results to be expected for an entire year.

2. Change in Accounting Policy:

Earnings (loss) per share:

Effective January 1, 2001, the Canadian Institute of Chartered Accountants established new recommendations for the calculation and reporting of basic and diluted earnings per share. The Company has adopted the new recommendation retroactively.

3. Loss per share:

Diluted loss per share is not calculated as the potential issue of common shares under the convertible debenture or the Company's stock appreciation rights plan would be anti-dilutive to the common shareholders.

Stock options:

Options to purchase 6,095,000 common shares were outstanding during the first quarter of 2001. 195,000 options have an exercise price of $1.80 per share and expire in 2001 and 2002. The remaining 5,900,000 options have an exercise price of $0.30 per share and expire in 2005. The impact of these options were not included in the computation of diluted earnings per share as the options' exercise would be anti-dilutive to loss available to common shareholders.

Of the 5,900,000 options awarded during the year ended December 31, 2000, 2,700,000 options vested immediately and an additional 1,650,000 vested in the year. Of the remaining 1,550,000 options, 550,000 options vested and became exercisable on January 1, 2001 and 550,000 options vested and became exercisable on April 1, 2001. The remaining 450,000 options will vest and become exercisable on July 1, 2001.

Convertible debenture:

Conversion of the convertible into common shares of the Company would have increased the number of shares outstanding for the period by 14,439,621 common shares and reduced capitalized interest by $331,000. The impact of the conversion has not been included in the calculation of diluted earnings per share as it would be anti-dilutive to the common shareholders.

4. Capital assets and segmented information:

Mineral properties and deferred development:

2001	Agua Rica	Mantua	Unallocated	Total
Balance, December 31, 2000	$ 74,007	$ 24,738	$(17,987)	$ 80,758
Exploration and development expenditures	198	21	–	219
Capitalized interest	408	–	–	408
Balance, March 31, 2001	$ 74,613	$ 24,759	$(17,987)	$ 81,385

(*i*) Agua Rica:

The Agua Rica project is located in Catamarca Province, Argentina. The property is composed of mining claims and exploration licences. Work is focused upon a major porphyry copper-gold-silver-molybdenum deposit that is being explored by a joint venture between the Company (30%) and BHP Copper (70%).

(*ii*) Mantua:

The Company operated a gold processing facility at Mantua, Cuba from April 1998 to September 1999 at which time operations were ceased. The Mantua project of which the Company owns a 50% interest is a high-grade copper deposit amenable to open pit mining and solvent extraction/electro-winning recovery of copper. The property is located in the Pinar del Rio Province, Cuba.

During the first quarter of 2000, the Company capitalized interest of $408,000 (Quarter ended March 31, 2000 - $430,000) on funds borrowed for exploration and development activities.

5. Subsequent events:

(a) In February 2001, the Company arranged an additional interim funding loan ("IFL") from Miramar of $145,000 for working capital purposes. In the quarter, $133,704 of the funds under the IFL were advanced to the Company. The repaid all amounts owing under the IFL on May 16, 2001 from the proceeds of the private placement that closed in April 2001.

(b) In April 2001, the Company restructured debts owing to Miramar (the "Reorganization") and arranged a $1,500,000 private placement for shares in the Company with another investor. As a condition of the private placement, the Company arranged with Miramar to reorganize and restructure all amounts owing as follows:

(*i*) Miramar will convert the convertible portion of the Convertible Debenture into common shares of the Company at a rate of $1.47 per share resulting in the issuance of approximately 14,440,000 common shares by the Company. On May 1, 2000, Miramar converted the Convertible Debenture into common shares;

(*ii*) Miramar will convert all other amounts owing into a convertible promissory note totaling approximately $6,900,000. The convertible promissory note is convertible at Miramar's option into common shares of the Company at a price of $0.15 per share, bears interest at prime plus 2% per annum and is due on demand after June 30, 2002;

(*iii*) The Proceeds Interest payable to Miramar will be reduced from $17,987,000 to $15,000,000 and is modified to include proceeds from production and asset sales with the exception of the San Jorge property; and

(*iv*) Miramar has agreed to enter into a voting trust agreement with an arm's length third party until June 30, 2002 for the shares that it owns in the Company.

(c) On April 17, 2001 the Company completed a private placement of units ("Units") at a price of $0.15 per Unit for gross proceeds of $1,500,000. Each Unit is comprised of one common share and one warrant ("Warrant"). Each Warrant is exercisable into one common share of the Company at a price of $0.175 per share until April 27, 2002 and $0.20 per share until April 27, 2003.

(d) In May, the Directors of the Company approved a proposal that would, if approved by the shareholders of the Company, cancel all outstanding stock options and re-issue a total of 7.2 million options ('New Options') to purchase common shares at a price of $0.15 per share. The New Options would vest immediately except for approximately 1.9 million New Options granted to management which would vest equally over two years. The New Options would expire 5 years from date of grant. This New Option proposal is subject to regulatory and shareholder approval.

PACIFIC CORPORATE TRUST COMPANY
625 Howe Street – 10th Floor
Vancouver, B.C. V6C 3B8

Telephone: (604) 689 - 9853
Fax: (604) 689 – 8144

June 8, 2001

B.C. Securities Commission
Executive Director
701 W Georgia Street, 9th Floor
Vancouver, B.C., V7Y 1L2

Dear Sirs:

RE: NORTHERN ORION EXPLORATIONS LTD
MAILING ON JUNE 8, 2001
INTERIM FINANCIAL STATEMENTS
FOR THE FIRST PERIOD ENDING MARCH 31, 2001

We confirm that on the above date, the material issued by the subject Company was forwarded by prepaid first class mail to all the persons on the Supplementary Mailing List maintained at our office.

Yours truly,

PACIFIC CORPORATE TRUST COMPANY

"Anissa Rimer-Ly"

Anissa Rimer-Ly
AR/jo

cc: Alberta Securities Commission
cc: Director of Corporations – PEI
cc: Manitoba Securities Commission
cc: Nova Scotia Securities Commission
cc: Office of the Administrator of Securities – NB
cc: Ontario Securities Commission
cc: Quebec Securities Commission
cc: Registrar of Securities – NT
cc: Registrar of Securities – YT
cc: Saskatchewan Securities Commission
cc: Securities Division - Department of Justice - NF
cc: Toronto Stock Exchange
cc: Nunavut Securities Commission

cc: Northern Orion Explorations Ltd
cc: Dumoulin Black
cc: KPMG Peat Marwick Thorne

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DuMOULIN BLACK

BARRISTERS & SOLICITORS

W. DAVID BLACK
SARGENT H. BERNER
KENNETH W. BALL
COREY M. DEAN
J. DOUGLAS SEPPALA*
MARY P. COLLYER
JANICE E. CONWAY
CHRISTINE E. COLEMAN
GEORGE R. BRAZIER
BRIAN C. IRWIN
CHERI L. PEDERSEN
KENNETH L.H. EMBREE
C. BRUCE SCOTT
STEPHEN TONG
PATRICIA D. SANDBERG
JEROME D. ZISKROUT
associate counsel

(*denotes law corporation)

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DIRECT LINE 602-6804
EMAIL sberner@dumoulinblack.com

SEDAR PROJECT NO. 00297483

July 18, 2001

Ontario Securities Commission
Suite 1903, Box 55
20 Queen Street West
Toronto, Ontario, M5H 3S8

Attention: Ms. Loreta Varanavicieme

Dear Sirs:

Re: Northern Orion Explorations Ltd.
- Filing of Annual Information Form

Enclosed please find a copy of the Annual Information Form dated September 10, 2000 which was filed via SEDAR on September 12, 2000 under project number 00297483. Unfortunately, the Ontario Securities Commission was inadvertently omitted from the Recipient Agency list. We trust this matter has now been rectified to your satisfaction.

Yours truly,
DuMOULIN BLACK
Per:

(signed) Linda Chinn
Linda Chinn, Secretary
to Sargent H. Berner

:lsc
Enclosure
cc: Northern Orion Explorations Ltd.

02 [illegible]

NORTHERN ORION EXPLORATIONS LTD.

ANNUAL INFORMATION FORM

10 September 2000

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ITEM 1 – INCORPORATION

Northern Orion Explorations Ltd. was incorporated with the name Northern Orion Resources Ltd. under the laws of British Columbia by memorandum and articles dated April 30, 1986. On October 31, 1986 the memorandum of the Corporation was amended to change the name of the Corporation to Northern Orion Explorations Ltd. On November 28, 1994, the memorandum of the Corporation was amended to increase the authorized capital from 25,000,000 to 100,000,000 common shares without par value ("Common Shares"), and on October 15, 1997, the memorandum and articles of the Corporation were amended to increase the authorized capital from 100,000,000 to 700,000,000 shares divided into 500,000,000 Common Shares, 100,000,000 First Preference Shares without par value ("First Preference Shares") and 100,000,000 Second Preference Shares without par value ("Second Preference Shares").

The registered and records offices of the Corporation are located at 10th Floor, 595 Howe Street, Vancouver, British Columbia V6C 2T5 and its principal executive office is located at 311 West First Street, North Vancouver, British Columbia V7M 1B5.

The following table sets forth the name of each material subsidiary of the Corporation, the jurisdiction of its incorporation and the direct or indirect percentage ownership of the Corporation in such subsidiary.

Name of Subsidiary	Jurisdiction of Incorporation	Percentage Ownership
Minera Mantua Inc.	Ontario	100%
Minera Mantua S.A.	Cayman Islands	100%
Minera Cobre S.A.	Cayman Islands	100%
Cobre Mantua S.A.	Cuba	50%
GMA Holdings S.A.	Argentina	100%
Recursos Americanos Argentinos S.A.	Argentina	100%
Minera San Jorge S.A.	Argentina	100%

Northern Orion may be referred to as the Corporation or the Company. Where the context requires, the terms "Corporation" or "Company" include the subsidiaries of the Corporation. All dollar amounts in this annual information form ("AIF") are in Canadian dollars unless otherwise stated. The Corporation has no full-time employees.

Item 2 - General Description of the Business

The Corporation, through subsidiaries, is engaged in the exploration for, and development and production of, precious and base metals. The Corporation indirectly owns all of the outstanding shares of Minera San Jorge S.A. ("MSJ") and Recursos Americanos Argentinos S.A. ("RAA"), both Argentine companies that hold interests in mineral properties in Argentina. The Corporation also owns all of the outstanding shares of Minera Mantua Inc. ("MMI"), an Ontario company that holds indirect interest in the Mantua property in Cuba.

Item 3 - Narrative Description of the Business

Argentine Properties

On November 17, 1994, the Corporation acquired all of the outstanding shares of Grupo Minera Aconcagua S.A. (GMA), a private Argentine company with interests in various exploration projects including the San Jorge Project further described below, from Miramar Mining Corporation ("Miramar"), Grupo R.A. (a group of Argentinean companies controlled by Dr. Ricardo Auriemma) and an Aruba corporation controlled by Dr. Auriemma. The shares of GMA were purchased for 6,000,000 Common Shares (2,600,000 to Miramar, 2,600,000 to Grupo R.A. and 800,000 to the Aruba corporation), and US$1,073,490 in cash to Grupo R.A. For that transaction, Miramar was reimbursed $650,000 for out-of-pocket costs incurred in acquiring its interest in GMA and structuring the transaction, property maintenance expenditures in Argentina and due diligence work on the properties. An additional 300,000 Common Shares were issued as to 150,000 Common Shares each to two unrelated third parties for finders' fees.

On June 9, 1995, the Corporation acquired in an arm's length transaction all of the outstanding shares of RAA, a private Argentinean company, from American Resource Corporation, Inc. ("ARC") for 15,000,000 Common Shares. As part of the same transaction, Miramar Finance (Bermuda) Ltd. ("Miramar Bermuda"), a wholly owned subsidiary of Miramar, loaned $10,000,000 to ARC which was repaid in 1995. ARC has disposed of all 15,000,000 Common Shares issued to it in the RAA transaction.

GMA was transferred back to Dr. Auriemma on April 7 2000 in part for consideration for settlement of outstanding issues associated with the San Jorge project and as part of the rationalization of Northern Orion's holdings in Argentina. At the same time, the San Jorge project was transferred from GMA to Minera San Jorge S.A. ("MSJ") and a "servidumbre" over surface and access rights was granted to MSJ. The following is a brief description of the Agua Rica and San Jorge exploration projects in which the Corporation has indirect interests.

Agua Rica Project

The Agua Rica copper/gold property covers an area of about 13.5 square kilometres and is located in Catamarca Province, Argentina. On May 5, 1996, RAA exercised an option (the "Agua Rica Option") to purchase all of the outstanding shares of Agua Rica S.A., a private Argentine company that owns the central mining claims of the Agua Rica property, for a purchase price of US$7.9 million. Pursuant to an agreement made in September 1993 (the "Joint Operating Agreement"), BHP Minerals International Inc. ("BHP") earned a 70% joint venture interest in the project by spending US$1 million on exploration and agreeing to reimburse RAA for all costs of exercising the Agua Rica Option. As at December 31, 1999, BHP had fully reimbursed the Corporation for the US$7.9 million paid to exercise the Agua Rica Option. Under the Joint Operating Agreement, exploration expenditures are shared between RAA and BHP on a 30-70 basis, respectively. During 1999, the Company contributed $5.6 million to the project, which was its 30% share of the total budget. In 1998, Northern Orion's share of the exploration budget was $9.8 million.

Location and Access

The Agua Rica property is located approximately 30 kilometres north of the town of Andalgala in Catamarca Province, Argentina. The property is at an elevation of 3,300 meters. The original access to the property was by provincial highway to within 20 kilometres and then by four-wheel drive road. In 1997, a road to the property was completed 35 kilometres up the Potrero valley from Andalgala.

History

The Agua Rica property was explored from 1969 to 1972 by City Services Limited that carried out geological mapping and geochemical sampling, and drilled 27 surface holes and 6 underground holes. Many holes were lost or had poor recovery, but some had 40 to 50 meter intersections of greater than 1% copper and gold grades in the range of 0.3 grams per tonne to 0.5 grams per tonne. In 1994, under the Joint Operating Agreement, BHP commenced a work program of mapping, surface sampling and drilling. Follow-up drilling in 1995 intersected thick intervals of near surface, supergene-enriched chalcocite and covellite mineralization containing significant gold, silver and molybdenum. By the end of 1998, more than 67,000 meters of drilling in 176 holes had defined continuous copper-gold-molybdenum mineralization over an area of 2,000 meters by 1,200 meters and to depths of up to 600 meters below surface.

RAA and BHP are continuing with a work program that is designed to advance the project towards completion of a final feasibility study. Work completed in 1998 included 300 meters of underground drifting, collection of 300 tonnes of bulk sample, pilot mill testing, updated resource and reserve estimates, as well as revised capital and operating cost estimates. There was no material activity on the property in 1999 as all the physical work necessary to support a bankable feasibility study has been completed. Base-line environmental studies are ongoing.

Geology and Mineralization

Basement rocks near Agua Rica consist of Cambrian-Ordovician metamorphic schists and garnet gneisses that were intruded by an Ordovician-age granite (Capillitas Batholith) and a subsequent cluster of Miocene age porphyries (Farallon Negro Complex). The oldest known intrusive near Agua Rica is the Melcho Monzonite with an age of 8.6 million years. Intrusive activity peaked overall at 7 to 8 million years, but persisted until 5.2 million years (dacite dykes at Capillitas).

The oldest rocks at Agua Rica are Paleozoic metasedimentary units that form the wallrock to the mineralized intrusive complex. The metasediments are intruded by granite, aplite and pegmatite in the Morro Alumbrera area. At Quebrada Seca Norte (Mi Vida) and Trampeadero, the metasediments are intruded by porphyry bodies and are altered mainly to quartz and sericite. Immediately west of Agua Rica the granite has a low-angle fault contact relationship with underlying metasediments suggesting it was thrust over the metasediments.

Dacitic porphyries with well-developed stockworking veins and strong quartz-sericite alteration underlie the central area, containing the principal mineralized areas. The porphyries are cut by an igneous/hydrothermal breccia that has been traced over a vertical extent exceeding 1,000 meters. Upper portions of the breccia exhibit advanced argillic alteration and deeper in the system quartz-sericite alteration is predominant. Supergene enrichment has led to almost complete replacement of chalcopyrite with covellite and chalcocite. Near-surface, high-grade chalcocite zones gradually change downward through the mineralization into mixed chalcocite and covellite zones and then into disseminated covellite

zones. Leaching and enrichment is most intense in the central area coincident with silica stockworking and quartz-sericite-pyrite alteration at Quebrada Seca Norte (Mi Vida). Molybdenite occurs primarily as clusters on the edges and in the centres of the veins. In deeper areas, anomalous values of sulphur, arsenic, lead and zinc occur with the copper mineralization.

The presence of higher grade copper (greater than 1%) mineralization in three discrete bodies of supergene enrichment over Quebrada Seca Norte (Mi Vida), Filo Amarillo, and Trampeadero implies that a more extensive enriched zone has been dissected by erosion. Higher-grade gold mineralization (greater than 0.5 grams per tonne) is located on the western side of Quebrada Minas and in hydrothermal breccias in western Trampeadero. Molybdenite is present throughout the system with higher grades occurring in Trampeadero, Filo Amarillo (greater than 0.07%) and within a deep zone on the south side of Quebrada Seca Norte (Mi Vida).

Geological Resources

In February 1998, BHP reported a new resource estimate, based on 151 diamond drill holes totalling approximately 58,000 meters. At the higher copper cut-off grades, the results show an increase in tonnage of about 30% compared to the previous estimate that was based on 103 holes. A summary of the new estimates of the size and average grades of the mineral resource (in millions of tonnes), shown for different cut-off grades, is as follows:

Cut-off	Tonnes (millions)	Copper %	Molybde num%	Gold(g/t)	Silver (g/t)	Measured	Indicated	Inferred
0.2%Cu	1,714	0.43	0.032	0.17	3.0	52%	25%	23%
0.4%Cu	750	0.62	0.037	0.23	3.2	70%	21%	9%
0.7%Cu	167	0.99	0.036	0.32	3.3	92%	7%	1%
1.0%Cu	60	1.31	0.040	0.35	4.0	98%	2%	<1%

These were based on results available at the date of calculation. Since the completion of the resource estimation, an additional 25 drill holes have been completed but have do not been incorporated in the calculation. In addition, based on drilling to December 31, 1997 BHP has estimated a geologic gold resource in leached caps which overlie the higher grade sulphide mineralization using a 0.25 g/t gold cut-off grade which was publicly disclosed by Northern Orion. This gold may be amenable to recovery by heap leach methods.

Tonnes	89 million
Gold Grade	0.41 g/t
Contained Gold (oz)	1.2 million

These were based on results available at the date of calculation and do not incorporate the results of the abovementioned drill holes completed in 1998.

It has not been established that the mineralization at the property may be economically mined.

Initial Feasibility Study

In November 1997, the joint venture released a positive initial feasibility study (the "Study") on the Agua Rica Project, which recommended proceeding with the work to complete a final feasibility study and development plan for the project. The Study was based on resources estimated for the first 40,000 meters of drilling in 103 drill holes completed on the project to the end of 1996. The Study evaluated two development options, both utilizing conventional open pit mining, milling, flotation and concentrate shipment. The 60K Case examined a single mill line processing 60,000 tonnes per day ("TPD") of ore throughput, while the 120K Case examined adding a second mill line after year two of production, raising the plant throughput to 120,000 TPD from year three on.

Pit plans were developed by BHP for the 60K and 120K cases, which are summarized as follows.

	60K Case	**120K Case**
Cut-off Grade	0.4% Cu	0.2% Cu
Daily Ore Production	60,000	120,000
Mine Life (years)	24.4	17
Tonnes (000s)	512,351	681,389
Grades		
- Copper (%)	0.66	0.59
- Gold (g/t)	0.26	0.25
- Silver (g/t)	3.44	3.61
- Molybdenum (%)	0.034	0.033
- Copper Equivalent (%)*	0.97	0.89
Waste (billions of tonnes)	1.2	1.2
Strip Ratio	2.35	1.80

* - The copper equivalent grades are based on in-situ values at the following metal prices: copper at US$0.80/lb, gold at US$300 per ounce, silver at US$5 per ounce and molybdenum at US$4 per pound. Actual values received will depend on the metal recoveries that may vary for different minerals.

The mine plans were based on information available at the time and do not incorporate the results of the last 73 drill holes, totalling 27,000 meters including the newly defined Filo Amarillo zone, completed in 1998. New resource and reserve models are to be prepared in 2000/01 incorporating the geological and metallurgical data generated during 1998 and 1999.

Crushing and grinding tests were completed on six ore composites, indicating the ore to be relatively soft. Approximately 200 flotation tests have been completed on ore composites and, based on these tests, recoveries were estimated to be 87% for copper, 50% for gold and 65% for molybdenum producing a copper concentrate grading 33% copper and a separate molybdenum concentrate. Phase 2 pilot-scale metallurgical work was completed in late 1999. Results from the recent testing of low-grade copper mineralization (0.2 to 0.4%) are commonly yielding 80% recovery. Higher-grade copper mineralization typically produced concentrates greater than 30% copper with better than 90% recovery. Some ore types are also yielding 70% recovery of molybdenum.

Capital costs have been estimated (in first quarter 1997 dollars) to be US$767 million for the 60K Case and US$1.1 billion for the 120K Case. The capital costs were estimated based on a mix of quotations, experiences of the nearby Alumbrera mine which has a similar capacity, and factored costs from BHP's similar mines elsewhere.

Future Work

The initial Study demonstrates the potential feasibility for the development of a large-scale copper-gold-molybdenum mine at Agua Rica based on 1997 metal prices. Since the publishing of the Initial Feasibility Study, all of the fieldwork necessary for a Bankable Feasibility Study has been completed. The remaining work consists primarily of optimisation studies regarding the evaluations of the mining and processing alternatives together with operating models that could offer the greatest potential returns. Coincident with the optimisation studies, the environmental baseline studies will be concluded. BHP has presented a budget for the Agua Rica project for the period July 1, 2000 to June 30, 2001. The proposed budget calls for expenditures of US$1.0 million. The proposed budget and work program is currently being reviewed by the Corporation.

Fiscal Stability Application

The Agua Rica joint venture filed a fiscal stability application for the project in 1998. The application was approved and guarantees protection for the project from increases in taxes, import duties, royalties and other government-controlled costs for a period of thirty years.

San Jorge Project

The original San Jorge copper/gold property consisted of seven mining concessions (covering about 5 1/2 square kilometres) and 35 mineral claims (covering about 102 square kilometres) owned by MSJ. The purchase price for the seven concessions was US$4.015 million. During 1999, the Company expended $1.7 million in exploration and development expenses on the San Jorge project (versus $5.2 million in 1998).

Location and Access

The San Jorge property is located approximately 90 kilometres northwest of the city of Mendoza in Mendoza Province, Argentina and 250 kilometres northeast of Santiago, Chile. The property is accessed from the paved Mendoza-Santiago highway to the town of Uspallata and then 40 kilometres north on a good gravel highway along the Uspallata valley. The property is at an elevation of 2,500 meters and the deposit occurs as a small hill surrounded by flat alluvium plains.

History

Several test pits were dug at San Jorge in the 1960s to investigate outcropping copper-oxide mineralization and in 1964 Compania Minera Aguilar ("Aguilar") optioned the property. Over the next four years, Aguilar completed approximately 950 meters of trenching, 111 kilometres of induced polarization geophysical surveys ("IP") and 32 drill holes for 4,894.5 meters of core. Exploraciones Falconbridge Argentinos ("Falconbridge") optioned the property in 1973 and drilled six holes for 1,126 meters. Falconbridge also sent samples for metallurgical testing.

RAA optioned the property in 1992 and, between 1993 and 1995, 45 reverse circulation holes for a total of 5,518 meters and two core holes totalling 165 meters were drilled. In 1994, metallurgical testing of oxide mineralization from various cutting samples and of an enriched zone was conducted. From 1994 to 1996, 43 reverse circulation holes were drilled for 3,942 meters and eight lines totalling 17.6 kilometres of IP were surveyed over and beyond the mineralized outcrop. The option to RAA was terminated and GMA purchased the property in 1995. Between September 1995 and February 1996 a 5,746-meter drill program was conducted on the property. From this drilling, samples were taken for metallurgical testing.

In March 1999, GMA and Argentina Mineral Development ("AMD"), an associate of Climax Mining of Australia, entered into an agreement (the "AMD Agreement") that allows for the consolidation of a large land package surrounding the San Jorge property. Both companies agreed to contribute their property holdings and mining rights in San Jorge and the surrounding area into a newly formed holding company with GMA owning 85% and AMD having the remaining 15%. This new company, Minera San Jorge S.A. ("MSJ") is to continue the development of the property, working towards producing a bankable feasibility study. AMD's ownership in the holding company is to be redeemed in exchange for a 2% net smelter return royalty ("NSR") on the mine developed if MSJ produces a feasibility study within three years, obtains financing within another year and commits to construction of a mine within another six months. If AMD's interest were redeemed, GMA would then own 100% of the new company. If the project does not proceed, the ownership structure will remain in place and will allow for potential disposal of each party's interest.

In April 2000, all of GMA's holding in the San Jorge property was transferred without cost or penalties to MSJ. The transfer was part of the reorganization of Northern Orion's Argentine holdings and part of the settlement with Dr. Ricardo Auriemma.

Geology and Mineralization

San Jorge mineralization consists of a porphyry copper-gold deposit. Mineralization at San Jorge trends northeast and occurs in four approximately horizontal but irregular layers, from top to bottom as follows:

Leached: A leached cap with copper grades averaging 0.15% copper or less, primarily as green and black copper oxides that should be amenable to dump leaching.

Oxide: Best developed along the western contact of the granite porphyry with the clastics and comprises malachite, chrysocolla, tenorite and pitch limonite with grades averaging approximately 0.5% copper and 0.25 grams of gold per tonne at a 0.1% copper cut-off.

Enriched: Associated with areas of intense faulting and repetitive water recharge, and occurs as sooty and steely chalcocite, covellite, digenite and subordinate chalcopyrite averaging approximately 0.7% copper and 0.20 grams of gold per tonne at a 0.1% copper cut-off.

Primary: Three high-grade areas have been defined in clastics sedimentary units. Good copper grades in both sedimentary and intrusive rocks have been detected to a depth of 495 meters below surface. Copper occurs dominantly as chalcopyrite with very minor bornite. At a 0.4% copper cut-off, the primary mineralization has an average grade of 0.5% copper and 0.2 grams of gold per tonne.

Gold occurs in native form and uniformly grades 0.2 grams of gold per tonne throughout the copper deposit. Silver distribution is approximately proportional to copper grade and averages 3.5 grams of silver per tonne overall.

Resources

The total indicated and inferred resource at San Jorge for oxide, enriched, and primary mineralization, using a 0.25% copper cut-off, is estimated by Northern Orion to be 381.4 million tonnes grading 0.39 % copper and 0.15 g/t Au for a contained 1.49 million tonnes of copper and 1.8 million ounces of gold. At a 0.4% copper cut-off, the total resource is reduced to 113.1 million tonnes grading 0.60% copper and 0.18 g/t gold for a contained 670,000 tonnes of copper and 636,000 ounces of gold.

The Corporation based on open pit mining and heap leaching of the oxide has estimated an indicated resource and secondary enriched mineralization for solvent extraction and electrowinning (SX/EW) for copper recovery. Assuming a US$0.85 per pound copper price, a 0.25% copper cut-off, and a 2% NSR with incremental dump leach of low-grade material, an in-pit resource has been estimated at 57.3 million tonnes grading 0.61% copper, for 348,900 tonnes of contained copper. Primary copper-gold mineralization could then potentially be evaluated for a primary milling style of operation, producing concentrates.

Metallurgy

In 1997, a metallurgical test program was undertaken to determine the response of the ore to bacterial oxidation. Preliminary results indicated recoveries up to 75% in 250 days. Flotation tests on primary mineralization have given copper recoveries of up to 92% producing concentrates grading 25% copper. Gold is mostly free milling and recoveries of 60% have been achieved.

Exploration

Drilling by GMA and AMD has encountered indications of additional copper mineralization to the northeast, east and southeast of the main San Jorge deposit in a similar geologic setting to the main San Jorge deposit. These results indicate the potential for the expansion of the deposit beyond the current resource.

Areas to the east and southeast of San Jorge, within the expanded property area, contain large IP chargeability anomalies that coincide with anomalous copper-bearing, intercepts in the core of a reconnaissance drill hole, indicating potential for satellite copper systems similar to the San Jorge deposit. The Corporation is currently evaluating the potential for exploring for and developing additional resources in the satellite areas. However, limited work is planned for 2000 in light of the continued poor metal prices.

Cuban Properties

Acquisition of Properties

The Corporation entered into a letter of intent dated May 1, 1995 with Miramar and subsequently entered into an agreement dated October 4, 1995 (the "Transaction Agreement") with Miramar, Red Lion Management Ltd. ("Red Lion") and Richard Dewinetz ("Dewinetz") (collectively the "Vendors") pursuant

to which on December 20, 1995 the Corporation purchased (the "MMI Transaction") from the Vendors all of the outstanding shares of Minera Mantua Inc. ("MMI") in exchange for 24 million Common Shares of the Corporation. MMI, through Minera Cobre S.A. ("Cobre") and Minera Delita S.A. ("Delita"), both of which became wholly-owned subsidiaries of MMI prior to the completion of the MMI Transaction, has a 50% working interest in the Mantua copper project (the "Mantua Project"), and had the right to earn a 50% working interest in the Delita gold project (the "Delita Project"), respectively. The Mantua Project and the Delita Project are both located in Cuba and are referred to collectively herein as the "Cuban Projects".

Prior to the MMI Transaction, Miramar owned all of the outstanding shares of Cobre and Delita. Miramar acquired all of the outstanding shares of Cobre and Delita from Matlock Mining, N.L. ("Matlock"), an Australian company, pursuant to an agreement dated March 1, 1993 (the "Matlock Purchase Agreement"). Pursuant to the Matlock Purchase Agreement, Miramar paid Matlock share consideration having a value of approximately $475,000 in respect of the purchase price for the shares of Cobre and Delita and was obligated to pay a further $350,000 to Matlock (which amount was subsequently paid by the Corporation). The Matlock Purchase Agreement also provides that (i) Cobre is obligated to repay to Matlock the $750,000, plus interest, which was invested by Matlock in the Mantua Project and the Delita Project prior to the sale of the shares of Delita and Cobre by Matlock to Miramar pro rata with the return of equity to Miramar, and (ii) Matlock is entitled to receive 12% of the difference between all profits received by Cobre and Delita from their 50% working interests in the respective projects and administrative expenses (to a maximum of US$150,000 per year for each company) of Cobre and Delita.

Prior to the MMI Transaction, Miramar transferred to MMI all of the outstanding shares of Cobre and Delita and the obligation to pay $350,000 to Matlock and converted all of its advances to fund the Cuban Projects to April 30, 1995 into shares of MMI. The aggregate cost, as at April 30, 1995, of Miramar's interest in Cobre and Delita, including the amount of $350,000 payable to Matlock and amounts advanced by Miramar to Cobre and Delita to fund the Cuban Projects, was $7,188,261. A wholly owned subsidiary of Miramar was indebted to each of Red Lion and Dewinetz in the amount of $75,000, which amounts were used for the Cuban Projects. Prior to the MMI Transaction, Red Lion and Dewinetz converted such indebtedness into shares of MMI.

Pursuant to the MMI Transaction, Miramar, Red Lion and Dewinetz exchanged all of their shares of MMI for 23,484,850 Common Shares, 257,575 Common Shares and 257,575 Common Shares of the Corporation, respectively, at an ascribed price of $2.50 per share. For tax purposes the shares of MMI were transferred to the Corporation at the respective cost bases of such shares to the Vendors. Accordingly, in the event the Corporation disposes of the shares of MMI at an amount in excess of such cost bases, the Corporation will realize a taxable gain on such disposition.

The reserve and resource estimates for the Cuban projects have been prepared in accordance with proposed OSC National Instrument 43-101 and the Canadian Institute of Mining and Metallurgy classification system.

Mantua Project

The Mantua property contains a secondarily enriched copper deposit. It is located in Pinar del Rio Province, western Cuba, 240 kilometres from Havana. The property consists of an 8 square kilometre production concession and an adjoining 11.2 square kilometre area of interest. The site is reached via a

four-lane highway from Havana to Pinar Del Rio, which is 65 kilometres east of Mantua. A paved secondary road then links with the site.

Acquisition Agreement

Cobre acquired a 50% working interest in the Mantua Project pursuant to an agreement with Geominera SA ("Geominera") dated August 13, 1993, (as amended, the "Cobre Association Agreement"). Geominera is a Cuban corporation formed by the Cuban Ministry of Basic Industry for the purpose of holding mineral rights and entering into agreements with foreigners for the development of such mineral rights. The Cobre Association Agreement and the related articles of incorporation are the constating documents of Cobre Mantua S.A. ("Comantua"), a Cuban joint enterprise the shares of which are allocated on a 50/50 basis between Geominera and Cobre, with each party's equity capital contribution agreed to have been US$1 million. Geominera's equity capital contribution was comprised of the exclusive right to explore, develop, mine and exploit the Mantua Project, together with all previous studies and investigations relating to the Mantua Project. Cobre's equity capital contribution was comprised of the feasibility study on the Mantua Project that was prepared in 1993 together with a cash contribution of US$20,000. Profits of Comantua are to be distributed 50% to Cobre and 50% to Geominera. Pursuant to the Cobre Association Agreement, Cobre was required to negotiate and obtain all financing necessary for the commercial development of the Mantua Project by June 30, 1995. However, subsequent to the date of the Cobre Association Agreement, Geominera agreed that the June 30 date would be waived so long as Cobre obtained financing when required to develop the Mantua project.

Under the Cobre Association Agreement, in order to repay loans received by Comantua from Cobre, Cobre is entitled to the total net income (after satisfaction of all current obligations in respect of third party financing) of the Mantua Project during the first two years of operations of the mine and the industrial installations. If any such loan amount remains outstanding at the end of that two-year period, Cobre will continue to be entitled to no less than 75% of the net income of the Mantua Project until all such amounts owed are repaid. All major decisions of Comantua require the approval of the representatives of each of Geominera and Cobre; however, all ordinary operating decisions are made by the operations manager who is nominated by Cobre for a period of time equal to 1.5 times the period of time required for Cobre to receive a return of its capital investment.

History and Exploration

In the early 1960s workers from the Instituto de Recursos Minerales, a Cuban government agency, explored the Mantua copper deposit. In 1964 copper mineralization was discovered beneath an iron rich gossanous cap by an exploration program, including drilling, supervised by Soviet geologists. In 1992 Marc Rich & Co., a United Kingdom-based investment firm, completed an additional 12 drill holes, geotechnical investigations and metallurgical test work.

In late 1993 Minera Cobre ("MC") commenced detailed investigations, including an additional 13 drill holes, bulk sampling and metallurgical testing. An 11 tonne metallurgical sample was collected from one of the test shafts for metallurgical testing. A preliminary metallurgical scoping study was completed in the latter part of 1993 on material collected from one drill hole and a metallurgical test program was commenced in February 1994 on material from the 11 tonne bulk sample.

In the summer of 1994 MC drove a 145-meter exploration tunnel to access the ore body and in September and October 1994 extracted 600 tonnes of material for pilot scale metallurgical testing. A pilot

plant was operated using material extracted from the tunnel. Pilot plant operations were conducted in two phases; in November and December 1994 and from January to March 1995. Results of these operations confirmed the viability of the preferred processing method.

In 1995 MC identified significant gold values in the gossan cap overlying the main copper deposit, as well as payable gold credits in the copper ore itself, and a zone of anomalous gold values parallel to the copper deposit. A program of work to evaluate the potential for an economic gold operation to recover gold values from the gossan cap was commenced in February 1995. A total of 65 drill holes were completed, delineating a zone of potentially commercial gold values over the centre of the copper deposit. Metallurgical testing has demonstrated the amenability of this material to conventional heap leach recovery methods.

In 1996 a regional exploration program was initiated to identify additional gold occurrences in gossans, saprolites and regional shear structures. In excess of six hundred surface samples were taken throughout the region and some minor gold occurrences were identified.

Drilling in 1997 involved two main phases that included nine diamond drill holes for 655 meters and eight diamond drill holes for 684.7 meters, respectively. Both programs were primarily designed to define the distribution of near surface, gold gossan; however, the second program included two deep holes. Late in the year a single hole was drilled to collect a metallurgical sample.

Geology and Mineralization

The Mantua copper deposit is a secondary enrichment of copper mineralization produced by the weathering of primary sulphide mineralization of volcanogenic-exhalative origin. Copper has been leached from trace amounts of sulphide copper mineralization (chalcopyrite) and re-deposited beneath a gold-rich gossanous cap.

Primary sulphide mineralization, both massive and disseminated, occurs within a 50 to 100 meter thick sequence of inter-layered basic volcanic rocks, shale, siltstones and sandstones. Folding and thrust faulting in the Late Mesozoic was focused between the more competent limestone units causing extensive shearing and brecciation of the volcanic and sedimentary sequence.

The folding of the Mantua and surrounding area rocks is interpreted as a broad syncline and anticline defining an open "S" shape. The eastern limb of the syncline contains the majority of the mineralization defined by drilling. The Mantua copper deposit forms an elongate lens with a northeast to southwest strike, concordant with the enclosing formations. The deposit dips 50 to 70 degrees to the west and has a strike length of 1,300 meters.

Unoxidized mineralization is dominated by pyrite, with some chalcopyrite and sphalerite. The leached cap oxide zone is composed of lateritic iron oxides with essentially no copper content. The supergene zone below this leached cap consists mainly of chalcocite, with cuprite, covellite and some native copper. The secondary-enriched copper zone can be divided into three distinct ore types that may be segregated during mining operations.

Geological Resources

The reserves and resources at Mantua have been calculated by the Corporation, and have been confirmed by qualified third parties. Within the proposed open pit and assuming a copper price of US$0.85 per pound, proven and probable reserves are estimated to be 7,525,000 tonnes grading 2.74% copper containing 206,212 tonnes or 454.6 million pounds of copper and additional measured and indicated resources are estimated to be 4,454,000 tonnes grading 0.76% copper containing 33,850 tonnes or 74.6 million pounds of copper.

Mine Plan and Capital Cost

After a thorough review of previous test work and a rigorous program of laboratory and pilot tests conducted in Cuba, Chile and Canada from 1993 through 1998, a processing scheme was selected which utilizes modern, proven processing technologies to extract the maximum amount of copper economically possible. These processing steps include grinding, agitation leaching, solvent extraction and, finally, electrowinning for the production of copper cathodes.

The copper ore will be fed as mined directly to an SAG (semi-autogenous grinding) mill, followed by leaching in agitated tanks. A series of counter current decantation thickeners will then wash out all of the copper-containing acid solution. Copper-containing acid solutions will be processed through a solvent extraction circuit to form a strong electrolyte solution from which copper cathodes will be produced by conventional electrowinning. Tailings will be pumped to a nearby impoundment for disposal based on an environmentally sound design.

The preliminary design is for processing facilities capable of treating 750,000 tonnes of high-grade copper ore per annum.

Phase 1 Gold Leaching

Construction of the Phase 1 gold leaching at the Mantua Project commenced in March 1997 and concluded in February 1998. Phase 1 consisted of a heap leach gold operation that was planned to recover approximately 70,000 ounces of gold from the gossan cap over a two-year period at a capital cost of approximately US$11.6 million. Removal of this material was intended to allow access to the high-grade copper reserve under the gossan cap.

Mining of gold ore commenced in February 1998 and was concluded in September 1999. Prior to achieving commercial production, all costs of start up operations and related interest and overhead were capitalized. During the operation, recovered gold was below expectations and totalled 31,389 ounces of which the Corporation's share was 15,694 ounces. Due to higher than expected ore clay and fines content and the impact of major rain delays, field leach times had to be extended to 70 days from the designed 28 days and ultimate gold recoveries were 50% of what was forecast.

Phase 2: Copper Mining

The Phase 2 copper operation is planned to commence after gold leaching is completed. Evaluation of the copper phase is proceeding, with production targeted to average about 40 million pounds of copper cathode per year at a cash cost of US $ 0.45 per pound. Capital costs are anticipated to be US$ 50 million with a moderate pressure and temperature ferric leach process. This process utilizes proven technologies that are in use at other mining operations.

Delita Project

In 1998 the Delita Project was placed on hold due to low gold prices and a write down of $8.4 million was recorded representing the costs of exploration of the project to 1998. In March 2000, the Corporation released its interest in the Delita project and returned the project to Geominera.

Item 3 – Risks and Uncertainties

The Company operates almost exclusively in foreign jurisdictions and is dependent on world metals and currency markets that may present risks to the future prospects of Northern Orion.

Risks Associated with the Mining Industry

Northern Orion is engaged in the exploration for and the development of mineral deposits. These activities involve significant risks which careful evaluation, experience and knowledge may not, in some cases, eliminate. The commercial viability of any mineral deposit depends on many factors, not all of which are within the control of management. Some of the factors that will effect the financial viability of a given mineral deposit include its size, grade and proximity to infrastructure. In addition, government regulation, taxes, royalties, land tenure, land use, environmental protection and reclamation and closure obligations could have a profound impact on the economic viability of a mineral deposit.

Northern Orion is not able to determine the impact of potential changes in environmental laws and regulations on its financial position due to the uncertainty surrounding the form such changes may take. As mining regulators continue to update and clarify their requirements for closure plans and environmental protection laws and administrative policies are changed, additional reclamation obligations and further security for mine reclamation costs may be required. It is not expected that such changes will have a material effect on the operations of Northern Orion.

Risks Associated with Financial Markets

Both Argentina and Cuba have currently fixed their currency to the US dollar and removal of these exchange controls could significantly effect the exchange rates in terms of the Canadian dollar. Continued weakness of the Canadian dollar in comparison to the US dollar will also affect the results of operations. Increasing costs of labour, supplies and energy may affect planned operations in future years. The potential for increased input prices is taken into consideration when preparing plans for future exploration, development and mine construction.

Risks Associated with the Market for Metals and Minerals

The prices of metals and minerals are subject to relatively large changes over short time periods. These prices can have a direct impact on the commercial viability of production from mineral properties.

Risks Associated with Foreign Operations

Northern Orion's investments in foreign countries such as Argentina and Cuba carry certain risks associated with different political and economic environments. Northern Orion undertakes investments in various countries around the world only when it is satisfied that the risks and uncertainties of operating in different cultural, economic and political environments are manageable and reasonable relative to the expected benefits.

Item 4 - Selected Consolidated Financial Information

All dollar figures are in thousands except for per share data that is in dollar amounts.

	1999[1]	1998[1]	1997[1]	1996[1]	1995[1]
Total Revenues	2,987	3,629	637	2,593[2]	2,408[3]
Net Loss	18,167	21,287	7,126	1,526[2]	322[3]
Net Loss Per Share ($)	0.25	0.29	0.10	0.02[2]	0.01[3]
Total Assets	119,265	131,411	138,621	123,819	108,474
Long-term Debt	27,669	33,828	13,567	1,370	2,807

[1] As at and for the year ended December 31
[2] Includes a gain on disposal of mineral properties of $1.3 million or $0.018 per common share
[3] Includes drilling revenue from equipment which was disposed of in 1995 of $1.1 million or $0.04/share.

For the Three Months Ended (unaudited)[1]

	Dec 31 1999	Sep 30 1999	June 30 1999	Mar 31 1999	Dec 31 1998	Sep 30 1998	June 30 1998	Mar 31 1998
Revenue	80	473	1,124	1,319	957	1,482	1,176	14
Loss	5,070	7,581	3,817	1,699	16,521	2,098	1,800	868
Loss/Common Share	0.(	0.	0.(	0.(	0.:	0.(	0.(	0.(

[1] All figures expressed in thousands of dollars, except per share amounts

The Corporation has not paid any dividends on the Common Shares and has no dividend policy with respect to the payment of dividends.

Item 5 - Management's Discussion and Analysis

The section entitled "Management's Discussion and Analysis of Financial Condition and Results of Operations" included in the Annual Report to the shareholders of the Corporation for the year ended December 31, 1999 is incorporated herein by reference.

There is no material financial or operational effect of environmental protection requirements on the Corporation's capital expenditures, earnings and competitive position in the current financial year and the Corporation cannot predict such effects in future years.

Item 6 - Market for Securities

The Common Shares are listed and posted for trading on The Toronto Stock Exchange and the Canadian Venture Exchange (Vancouver Stock Exchange).

Item 7 - Directors and Officers

The following table sets forth the names and municipalities of residence of the directors and officers of the Corporation, their positions held with the Corporation and their principal occupations.

Name and Municipality of Residence	Positions Held	Director Since	Principal Occupation
Norman Anderson [1] Vancouver, B.C.	Director	2000	Self-employed Mining Engineer
John K. Burns [1] Philadelphia, Pa.	Chairman of the Board and Director	1995	President & Chief Executive Officer, Frontier Resources Management L.L.C.,
P. Terence O'Kane [1] Vancouver, B.C.	Director	1999	Self-employed Metallurgical Engineer
Stephen P. Quin [1] [2] West Vancouver, B.C.	Director	1988	Executive Vice-President of Miramar Mining Corporation
Anthony P. Walsh [1] [2] West Vancouver, B.C.	Director	1998	President and Chief Executive Officer, Miramar Mining Corporation
Stephen Wilkinson [1] [2] North Vancouver, B.C.	President, Chief Executive Officer and Director	1999	Self-employed Businessman
David Cohen West Vancouver, B.C.	Senior Vice-President	n/a	Senior Vice-President, Engineering and Development, Miramar Mining Corporation

(1) Member of executive committee.
(2) Member of audit committee.

Each of the individuals has been engaged in the principal occupation set forth opposite his name during the past five years with the exception of the following. Stephen Wilkinson, prior to May 1999, was a gold analyst with RBC Dominion Securities Inc, and prior to 1996, was an independent mining and financial consultant. David Cohen, prior to December 1996, was Director of Business Development of Fluor Daniel Inc., an international engineering and construction company.

Item 8 - Additional Information

The Corporation will provide to any person upon request to the Secretary of the Corporation:

a) Where the securities of the Corporation are in the course of a distribution pursuant to a short form prospectus or a preliminary short form prospectus has been filed in respect of a distribution,

   (i) One copy of the AIF of the Corporation, together with one copy of any document, or the pertinent pages of any document, incorporated by reference in the AIF;

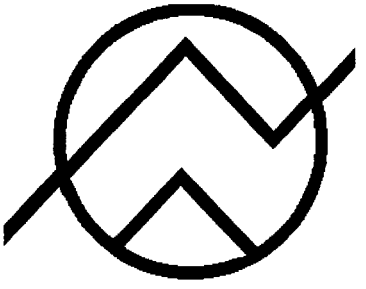
   (ii) One copy of the comparative financial statements of the Corporation for its most recently completed financial year together with the accompanying report of the auditor and one copy of any interim financial statements of the Corporation issued subsequent to the financial statements for its most recently completed financial year;

   (iii) One copy of the information circular of the Corporation in respect of its most recent annual meeting of the shareholders that involved the election of directors or one copy of the any filing prepared in lieu of that information circular; and,

   (iv) One copy of any other documents that are incorporated by reference into the preliminary short form prospectus or the short form prospectus and are not required to be provided under (i) to (iii) above; or,

b) At any other time, one copy of any other document referred to in paragraphs (i), (ii) or (iii) above, provided the Corporation may require the payment of a reasonable charge if a person who is not a security holder of the Corporation makes the request.

Additional information including directors' and officers' remuneration and indebtedness, principal holders of securities of the Corporation, options to purchase securities and interests of insiders in material transactions, where applicable, is contained in the management information circular of the Corporation for its most recent annual meeting of shareholders that involved the election of directors. Additional financial information is provided in the comparative financial statements of the Corporation for its most recently completed financial year. These documents are incorporated by reference herein. A copy of such documents may be obtained upon request from the Secretary of the Corporation.



NORTHERN ORION

EXPLORATIONS LIMITED

Second Quarter Report

2001

MANAGEMENT'S DISCUSSION & ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS FOR THE SIX MONTHS ENDED JUNE 30, 2001

Description of Business

Northern Orion Explorations Ltd. ("Northern Orion" or "the Company") is primarily engaged in the development of its two main mineral properties – Agua Rica in Argentina and Mantua in Cuba. Financial constraints on Northern Orion for the past three years have significantly constricted all of its head office and field activities.

Agua Rica Project

Work continued at the Company's Agua Rica Project in Argentina with BHP as the project operator. At June 30, 2001, the Company has elected to reduce its interest in the Agua Rica Project to approximately 29.3% from its original interest of 30%. Cash calls made by the operator will not be made by the Company and the reduction in carrying cost and related reduction in accounts payable has been reflected in the unaudited consolidated financial statements.

Significant progress was made during the quarter with the restructuring of the project that would result in having the BHP and Northern Orion ownership interests held via a single corporate entity. Consequently, BHP and Northern Orion would own equity reflecting the present ownership ratio. The ownership will change to reflect the ownership ratios. The restructuring should be completed in the third quarter of 2001.

On a long-term basis the Initial Feasibility Study, completed by BHP in 1997, indicated that the Company's share of the required capital to construct a 60,000 tonne per day open pit mine and concentrator at Agua Rica could be in excess of US$200 million. Northern Orion's management in co-operation with BHP is continuing to examine all of the options on how best to proceed with this important project, including alternative operating scenarios, attracting another participant to fund the project or an outright sale of a part or the entire project. In addition, management has considered certain alternatives with respect to the Agua Rica Project. These include electing whether or not, in context of the current metals and equity markets, it is in the best interests of our shareholders to fully fund our share of the expenditures. In the event that the Company continues to elect not to contribute any more funds to the operator, its current approximate 29.3% interest could be reduced over time to ultimately hold a 10% carried interest. Management estimates that additional expenditures on the project in excess of US$90 million would needed to reduce Northern Orion's interest to a carried interest.

Mantua Copper Project

The focus during the quarter continued to be the financing for a bankable feasibility study for the copper mining phase with negotiations underway for the funding to complete this study. A production decision for the copper phase is dependent upon the results of the feasibility study.

Subsequent to the end of the quarter, the Company announced that it had entered into an agreement with International Barytex Resources Limited ("Barytex"). Under the agreement, Barytex has an option to acquire all of the shares of Minera Mantua Inc., a wholly owned subsidiary of the Company through which it holds its 50% interest in the Mantua Copper Project. To exercise its right, Barytex must assume the costs and obligations of Northern Orion's Cuban operation, finance and complete the bankable feasibility study and finance and build the copper mine and plant. During the option period, Northern Orion may nominate two directors to the Barytex board. Subsequent to the exercise of the option, Northern Orion would retain a 2.5% net smelter royalty in proceeds to Barytex from the mine.

Furthermore, Northern Orion is owed an aggregate amount of US$28 million by the project in consideration of previous expenditures. Barytex may, if it elects to proceed to production, exchange 4.5 million common shares of Barytex for this debt.

Discussion of Operations and Financial Condition

For the six months ending June 30th, 2001, Northern Orion recorded a loss of $0.735 million or $0.01 per share compared to a loss of $1.064 million or $0.01 per share in 2000. The loss in 2001 includes no write-downs on mineral properties, and other assets compared to write-downs of mineral properties and other assets of $0.315 million or $0.00 per share in 2000. During 2001, the operating costs decreased in part due to the reduced scale of head and regional office operations, and an elimination of management fees charged by Miramar Mining Corporation ("Miramar").

Due to the prospective nature of the mineral exploration business and the number of exploration properties held, Northern Orion has a limited ability to generate sources of internal cash flow from operations. The Company has financed the acquisition, exploration and development of its properties through a combination of the issuance of common shares to the public, borrowings from Miramar, attracting other companies to joint venture the evaluation of properties and through third party borrowings.

When and if the Company places any of its exploration properties into production, it is intended that the resulting cash flows may become sufficient to sustain future operations, exploration and development. At present, the Company lacks the internal financial ability to advance any of its projects to the production stage.

Financing, Principal Purposes and Milestones

During the first quarter of 2001, Northern Orion negotiated and closed a funding arrangement with Miramar. Under the arrangement, the Company was advanced operating money from an operating line from Miramar. The line was capped at $145,000 and uses for the funds were pre-approved. In addition, the Company agreed to repay all of the funds drawn under the arrangement from the proceeds of any new equity or debt financing. All funds advanced by Miramar under this operating line were repaid in full in May 2001.

On May 1st 2001, the Company announced the closing of a private placement plus the supplementary restructuring of long-term debt and current liabilities. Valerie Gold Resources Ltd. ("Valerie") and Northern Orion entered into an agreement by which Valerie subscribed for a $1.5 million private placement of 10 million Units of Northern Orion priced at $0.15 per Unit. Each Unit was comprised of one Northern Orion common share and one share purchase warrant. Each warrant entitles Valerie to purchase an additional common share of Northern Orion over a two year period for a price per share of $0.175 during the first year and $0.20 during the second. Upon closing, Valerie Gold owned 8.8% of Northern Orion's outstanding common shares.

The closing of the private placement triggered conversion of the $21.4 million Convertible Debenture ("CD") held by Miramar into 14,439,621 Northern Orion common shares priced at $1.47 each. Secondly, Northern Orion's remaining debts to Miramar in the amount of approximately $6.9 million were consolidated into convertible notes. The conversion price for the notes is $0.15 per share. The new notes are to be converted in conjunction with the distribution of the Miramar control block, as disclosed in Northern Orion's news release of February 23, 2001.

Under the agreement, Miramar further agreed to reduce the cap of the royalty and net proceeds interest ('Royalty Interest') from $17,987,000 to $15,000,000. Also, any proceeds received by Northern Orion from operating or the sale of the San Jorge Project in Argentina would be excluded from the royalty agreement.

Liquidity and Solvency

At June 30, 2001, the Company had working capital of $253,000, compared to a working capital deficiency of $924,000 at the end of the same period in 2000. Subsequent to the quarter end, the Company received $125,000 in partial settlement of an account receivable relating to a mineral property held by the Company in fiscal 1997. The Company holds shares in Brooks Petroleum Ltd. ("Brooks"), related to a debt settlement completed in 1997, received in relation to this receivable. The receivable was written off in fiscal 1997, and the Company signed an option agreement with Brooks for the disposition of the Company's holdings in Brooks. It is not known at this time whether the optionors will exercise the option they have on the remaining shares. This addition to working capital is not sufficient to continue the full evaluation of all of the Company's mineral prospects.

Management of the Company is in the process of further evaluating all of the Company's property interests in order to ensure that value is realized. In addition, all contemplated expenditures are reviewed to ensure that cash commitments are prioritized and that existing capital resources are available to maintain the core properties currently held. Management is also evaluating potential new sources of financing to meet the anticipated expenditures required to further advance its projects.

Risks And Uncertainties

The Company operates almost exclusively in foreign jurisdictions and is dependent on world metals and currency markets that may present risks to the future prospects of the Company.

Risks Associated with the Mining Industry

Northern Orion is engaged in the exploration for and the development of mineral deposits. These activities involve significant risks which careful evaluation, experience and knowledge may not, in some cases, eliminate. The commercial viability of any mineral deposit depends on many factors, not all of which are within the control of management. Some of the factors that will affect the financial viability of a given mineral deposit include its size, grade and proximity to infrastructure. In addition, government regulation, taxes, royalties, land tenure, land use, environmental protection and reclamation and closure obligations could have a profound impact on the economic viability of a mineral deposit.

Northern Orion is not able to determine the impact of potential changes in environmental laws and regulations on its financial position due to the uncertainty surrounding the form such changes may take. As mining regulators continue to update and clarify their requirements for closure plans and environmental protection laws and administrative policies are changed, additional reclamation obligations and further security for mine reclamation costs may be required. It is not expected that such changes will have a material effect on the operations of Northern Orion.

Risks Associated with Financial Markets

Both Argentina and Cuba have currently fixed their currency to the US dollar and removal of these exchange controls could significantly affect the exchange rates in terms of the Canadian dollar. Continued weakness of the Canadian dollar in comparison to the US dollar will also affect the results of operations. Increasing costs of labour, supplies and energy may affect planned operations in future years. The potential for increased input prices is taken into consideration when preparing plans for future exploration, development and mine construction.

Risks Associated with the Market for Metals and Minerals

The prices of metals and minerals are subject to relatively large changes over short time periods. These prices can have a direct impact on the commercial viability of production from mineral properties.

Risks Associated with Foreign Operations

Northern Orion's investments in foreign countries such as Argentina and Cuba carry certain risks associated with different political and economic environments. Northern Orion undertakes investments in various countries around the world only when it is satisfied that the risks and uncertainties of operating in different cultural, economic and political environments are manageable and reasonable relative to the expected benefits.

NORTHERN ORION EXPLORATIONS LTD.

Consolidated Balance Sheets
(expressed in thousands of dollars)
(prepared by management without audit)

	June 30, 2001	December 31, 2000
Assets		
Current assets		
Cash	$ 688	$ 13
Accounts receivable	63	36
Prepaid expenses	42	40
	793	89
Plant and equipment	2,221	2,224
Mineral properties and deferred development	81,216	80,758
	$ 84,230	$ 83,071
Liabilities and Shareholders' Equity		
Current liabilities		
Accounts payable and accrued liabilities	$ 540	$ 1,013
	540	1,013
Promissory note payable	6,915	3,551
Convertible debenture	–	23,703
Other long-term liabilities	36	36
Future income taxes	24,320	24,320
	31,811	52,623
Shareholders' equity		
Share capital		
Authorized		
500,000,000 common shares without par value		
100,000,000 first preference shares without par value		
100,000,000 second preference shares without par value		
Issued and outstanding		
113,870,222 common shares (December 31, 2000 – 89,430,601 common shares)	149,280	126,574
Deficit	(96,861)	(96,126)
	52,419	30,448
	$ 84,230	$ 83,071

Approved by the Directors

Stephen P. Quin, Director

Stephen J. Wilkinson, Director

NORTHERN ORION EXPLORATIONS LTD.

Consolidated Statements of Operations and Deficit
(expressed in thousands of dollars except per share amounts)
(unaudited – prepared by management)

	Three months ended June 30,		Six months ended June 30,	
	2001	2000	2001	2000
Expenses				
Cost of sales	$ –	$ 34	$ –	$ 70
Management fee	–	105	40	210
General and administration	332	70	516	147
Restructuring costs	79	–	79	57
Depreciation and depletion	1	155	7	311
Property costs	–	–	112	–
Write-down of mineral properties and other assets	–	35	–	315
Loss (gain) on foreign exchange translation	3	(21)	3	(32)
Interest and other income	(2)	(8)	(22)	(14)
	413	370	735	1,064
Loss for the period	(413)	(370)	(735)	(1,064)
Deficit, beginning of period	(96,448)	(56,715)	(96,126)	(56,715)
Deficit, end of period	$ (96,861)	$ (57,085)	$ (96,861)	$ (57,779)
Loss per share – basic and fully diluted	$ (0.00)	$ (0.00)	$ (0.01)	$ (0.01)
Weighted average number of common shares outstanding	105,813,204	85,277,272	97,667,158	81,547,764
Total common shares outstanding at end of period	113,870,222	89,006,780	113,870,222	89,006,780

NORTHERN ORION EXPLORATIONS LTD.

Consolidated Statements of Cash Flows
(expressed in thousands of dollars)
(unaudited – prepared by management)

	Three months ended June 30,		Six months ended June 30,	
	2001	2000	2001	2000
Cash provided by (used in):				
Operations				
Loss for the period	$ (413)	$ (370)	$ (735)	$ (1,064)
Items not involving cash				
Depreciation and depletion	1	155	7	311
Write down of mineral properties and other assets	–	35	–	315
Change in non-cash working capital				
Decrease (increase) in accounts receivable	(18)	(190)	(27)	77
Decrease (increase) in prepaid expenses	5	18	(2)	(34)
Increase (decrease) in accounts payable and accrued liabilities	(347)	(186)	(473)	(407)
	(772)	(538)	(1,230)	(802)
Financing				
Common shares issued for cash	1,480	–	1,480	–
Advances from controlling shareholder	(126)	1,176	479	1,587
Capitalized interest on convertible debenture	–	520	408	1,040
Other long-term liabilities	–	–	–	(38)
	1,354	1,696	2,367	2,589
Investments				
Mineral properties	104	(1,200)	(458)	(2,057)
Plant and equipment	(4)	–	(4)	–
	100	(1,200)	(462)	(2,057)
Increase (decrease) in cash	682	(42)	675	(270)
Cash, beginning of period	6	86	13	314
Cash, end of period	$ 688	$ 44	$ 688	$ 44
Supplementary information:				
Non-cash transactions				
Reduction in promissory note payable through issuance of common shares	–	–	–	4,500
Increase in mineral properties due to future income tax liability	(65)	–	–	–
Reduction in royalty and proceeds interest payable through partial disposition of mineral property interests	–	–	–	17,987
Convertible debenture to equity	21,226	–	21,226	–

1. Interim financial statements

These interim financial statements should be read in conjunction with the consolidated financial statements and notes thereto included in the Company's Annual Report for the year ended December 31, 2000.

The quarterly results are not necessarily indicative of results to be expected for an entire year.

2. Change in accounting policy

Earnings (loss) per share:

Effective January 1, 2001, the Canadian Institute of Chartered Accountants established new recommendations for the calculation and reporting of basic and diluted earnings per share. The Company has adopted the new recommendation retroactively.

3. Loss per share

Diluted loss per share is not calculated as the potential issue of common shares under the convertible debenture or the Company's stock appreciation rights plan would be anti-dilutive to the common shareholders.

4. Capital assets and segmented information

Mineral properties and deferred development:

2001	Agua Rica	Mantua	Unallocated	Total
Balance, December 31, 2000	$74,007	$24,738	$(17,987)	$80,758
Exploration and development Expenditures	(2)	52	–	50
Capitalized interest	408	–	–	408
Balance, June 30, 2001	$74,413	$24,790	$(17,987)	$81,216

(i) Agua Rica:

The Agua Rica project is located in Catamarca Province, Argentina. The property is composed of mining claims and exploration licences. Work is focused upon a major porphyry copper-gold-silver-molybdenum deposit that is being explored by a joint venture between the Company (30%) and BHP Copper (70%). In June 2001 the Company elected to reduce its interest in the Agua Rica project to an approximate 29.3% interest. In the event that the Company elects to contribute no more funds to the operator, its current 29.3% interest would be reduced over time to a 10% carried interest.

(ii) Mantua:

The Company operated a gold processing facility at Mantua, Cuba from April 1998 to September 1999 at which time operations were ceased. The Mantua project of which the Company owns a 50% interest is a high-grade copper deposit amenable to open pit mining and solvent extraction/electro-winning recovery of copper. The property is located in the Pinar del Rio Province, Cuba.

During the first six months of 2001, the Company capitalized interest of $408,000 (Six months ended June 30, 2000 - $860,000) on funds borrowed for exploration and development activities.

5. Convertible debenture

(a) In February 2001, the Company arranged an additional interim funding loan ("IFL") from Miramar of up to $145,000 for working capital purposes. The Company repaid all amounts owing under the IFL on May 16, 2001, from the proceeds of the private placement that closed in April 2001.

(b) In April 2001, the Company restructured debts owing to Miramar and arranged a $1,500,000 private placement for shares in the Company with another investor. As a condition of the private placement, the Company arranged with Miramar to reorganize and restructure all amounts owing as follows:

(i) On May 1, 2001, Miramar converted the convertible portion of the Convertible Debenture into common shares of the Company at a rate of $1.47 per share resulting in the issuance of 14,439,621 common shares by the Company;

(ii) Miramar has converted all other amounts owing into a convertible promissory note totalling $6,915,000. The convertible promissory note is convertible at Miramar's option into common shares of the Company at a price of $0.15 per share, and will bear interest at prime plus 2% per annum after June 30, 2002, and is due on demand after June 30, 2002;

(iii) The Proceeds Interest Royalty payable to Miramar is reduced from $17,987,000 to $15,000,000 and is modified to include proceeds from production and asset sales with the exception of the San Jorge property; and

(iv) Miramar has agreed to enter into a voting trust agreement with an arm's length third party until June 30, 2002, for the shares that it owns in the Company.

6. Share capital

2001	Number of Common Shares	Amount
Balance, December 31, 2000	89,430,601	$126,574
Shares issued:		
For cash	10,000,000	1,480
Debenture converted	14,439,621	21,226
Balance, June 30, 2001	113,870,222	$149,280

On April 17, 2001 the Company completed a private placement of units ("Units") at a price of $0.15 per Unit for gross proceeds of $1,500,000. Each Unit is comprised of one common share and one warrant ("Warrant"). Each Warrant is exercisable into one common share of the Company at a price of $0.175 per share until April 27, 2002 and $0.20 per share until April 27, 2003.

Stock options

During the quarter, all previously granted stock options were cancelled, and a total of a total of 7.2 million options ('New Options') to purchase common shares at a price of $0.15 per share were granted. The New Options would vest immediately except for approximately 1.9 million New Options granted to management which would vest equally over two years. The New Options would expire 5 years from date of grant. This New Option proposal is subject to regulatory and received shareholder approval at the Annual Meeting of Shareholders on June 29th 2001.

At December 31, 2000, 6,095,000 common shares were outstanding. Of these, 195,000 options had an exercise price of $1.80 per share and expired in 2001 and 2002. The remaining 5,900,000 options had an

exercise price of $0.30 per share and expired in 2005. The impact of these options was not included in the computation of diluted earnings per share as the options' exercise would be anti-dilutive to loss available to common shareholders.

Of the 5,900,000 options awarded during the year ended December 31, 2000, 2,700,000 options vested immediately and an additional 1,650,000 vested in the year. Of the remaining 1,550,000 options, 550,000 options vested and became exercisable on January 1, 2001, and 550,000 options vested and became exercisable on April 1, 2001. The remaining 450,000 options were to vest and become exercisable on July 1, 2001. All of these options were cancelled in the second quarter of fiscal 2001.

7. Subsequent events

(a) The Company and International Barytex Resources Ltd. ("Barytex") have entered into an option agreement whereby Barytex may acquire the undivided 50% interest of the Company in the Mantua Copper Project in Cuba by the acquisition of 100% of the issued and outstanding shares in Minera Mantua Inc. Geominera S.A., a Cuban company controlled by the government of Cuba, holds the remaining 50% interest in the project. In order to exercise the option, Barytex must:

(i) assume and pay all carrying costs relating to the Company's operations in Cuba and the Project;

(ii) complete a bankable feasibility study within 18 months;

(iii) arrange all financing required in order to commence commercial production; and

(iv) commence construction of the project within 120 days of making a production decision.

The agreement is subject to due diligence that was completed on August 15th 2001.

(b) The Company has received $125,000 in partial settlement of an account receivable relating to a mineral property held by the Company in fiscal 1997. The Company holds shares in Brooks Petroleum Ltd. ("Brooks"), related to a debt settlement completed in 1997, received in relation to this receivable. The receivable and related mineral property were written off in fiscal 1997, and the Company signed an option agreement with Brooks for the disposition of the Company's holdings in Brooks.

NORTHERN ORION
EXPLORATIONS LTD
Suite 1400, 570 Granville Street, Vancouver, B.C. V6C 3P1
Tel: (604) 687-4622 Fax: (604) 687-4212

NOTICE OF ANNUAL GENERAL MEETING

NOTICE IS HEREBY GIVEN THAT the annual general meeting of the members of Northern Orion Explorations Ltd. (the "Corporation") will be held at #1400 – 570 Granville Street, , Vancouver, British Columbia, on Friday, June 29th, 2001, at the hour of 2:00 P.M., Vancouver time, for the following purposes:

1. To receive and consider the report of the directors and the consolidated financial statements of the Corporation together with the auditor's report thereon for the financial year ended December 31, 2000.

2. To fix the number of directors at eight.

3. To elect directors for the ensuing year.

4. To appoint the auditor for the ensuing year.

5. To authorize the directors to fix the remuneration to be paid to the auditor.

6. To approve the increase in the number of common shares which may be issued pursuant to the exercise of options under the Stock Option Plan, subject to regulatory approvals, as more fully set forth in the information circular accompanying this notice.

7. To consider and, if thought fit, to pass an ordinary resolution to approve a reduction in the price of options granted to certain directors and officers, subject to regulatory approvals, as more fully set forth in the information circular accompanying this notice.

8. To consider and, if thought fit, to pass an ordinary resolution to approve the issuance by the Corporation in one or more private placements of such number of securities as would result in the Corporation making issuable during the 12 month period following the date of the Meeting an amount of shares that exceeds 25% of the Corporation's issued and outstanding share capital but not more than 50,000,000 Shares.

9. To transact such further or other business as may properly come before the meeting and ny adjournments thereof.

The accompanying information circular provides additional information relating to the matters to be dealt with at the meeting and is deemed to form part of this notice.

If you are unable to attend the meeting in person, please complete, sign and date the enclosed form of proxy and return the same in the enclosed return envelope provided for that purpose within the time and to the location set out in the form of proxy accompanying this notice.

DATED this 18th day of May, 2001.

BY ORDER OF THE BOARD

Stephen Wilkinson, President

NORTHERN ORION
EXPLORATIONS LTD.

MANAGEMENT INFORMATION CIRCULAR

GENERAL PROXY INFORMATION

Solicitation of Proxies

This management information circular ("Proxy Circular") is being furnished to the shareholders of Northern Orion Explorations Ltd. (the "Corporation" or the "Company") in connection with the solicitation of proxies by the directors and management of the Corporation for use at the annual general meeting of the shareholders of the Corporation (the "Meeting"). The Meeting will be held at #1400 – 570 Granville Street, Vancouver, British Columbia on Friday, June 29, 2001, at the hour of 2:00 p.m., Vancouver time, for the purposes set out in the notice of the Meeting accompanying this Proxy Circular. This Proxy Circular is first being sent to shareholders of the Corporation on or about May 18, 2001. Unless otherwise stated, information contained in this Proxy Circular is given as of the date hereof.

The solicitation of proxies for the Meeting will be primarily by mail but proxies may also be solicited personally or by telephone by employees of the Corporation. Employees of the Corporation will not receive any extra compensation for such activities. The Corporation may also pay brokers or other persons holding common shares of the Corporation in their own names, or in the names of nominees, their reasonable expenses for sending proxies and proxy material to beneficial owners of common shares of the Corporation and requesting authority to execute proxies in respect of such common shares of the Corporation. The Corporation will bear the expenses of such solicitation of proxies.

No person is authorized to give any information or to make any representation other than as contained in this Proxy Circular and, if given or made, such information or representation should not be relied upon as having been authorized by the Corporation. The delivery of this Proxy Circular shall not under any circumstances create an implication that there has been no change in the information set forth herein since the date of this Proxy Circular.

Appointment of Proxy and Discretionary Authority

The persons named in the form of proxy accompanying this Proxy Circular are officers and directors of the Corporation. **A shareholder of the Corporation has the right to appoint a person, who need not be a shareholder of the Corporation, other than the persons named in the form of proxy accompanying this Proxy Circular, as nominee to attend and act for and on behalf of such shareholder at the Meeting and may exercise such right by inserting the name of such person in the blank space provided on the form of proxy, or by executing a proxy in a form similar to the form of proxy accompanying this Proxy Circular. If a shareholder of the Corporation appoints one of the persons named in the form of proxy accompanying this Proxy Circular as the nominee of the shareholder and does not direct such nominee to vote either for, against or withhold from voting on a matter or matters with respect to which an opportunity to specify how the common shares of the Corporation registered in the name of such shareholder are to be voted, the proxy shall be voted for such matter or matters.** To be effective, proxies must be received by the Corporation c/o Pacific Corporate Trust Company, 10th Floor, 625 Howe Street, Vancouver, British Columbia, V6C 3B8, prior to 5:00 p.m., Vancouver time, on Wednesday, June 27, 2001, or, in the case of any adjournment of the Meeting, not later than 5:00 p.m., Vancouver time, on the business day prior to the reconvened meeting. **PROXIES PRESENTED AT THE MEETING, OR, IN THE CASE OF ANY ADJOURNMENT OF**

Interest of Insiders in Material Transactions

Miramar Mining Corporation ("Miramar") owns approximately 62% of the Corporation and is therefore considered an insider of the Corporation.

During the financial year ended December 31, 2000, the Corporation paid management fees totalling $420,000 to Miramar ($861,000 in 1999). A portion of the management fees paid to Miramar was for the payment of the salary of a shared member of senior management of the Corporation, for services performed as an officer of the Corporation.

In December 1999, the Corporation reached an agreement to restructure and partially settle amounts owing to Miramar. Under the agreement, the Corporation issued a royalty and net proceeds interest ("Royalty Interest") entitling Miramar to receive the economic equivalent of a 2.5% net smelter return royalty on all of the Corporation's mining properties and interests to a total of $17,987,000. The payment of this obligation is limited to payments from the Royalty Interest and a right to receive a portion of the proceeds from the sale of any interest in any of the Corporation's mining interests.

Included in the 1999 debt restructuring, the Corporation issued a promissory note to Miramar and capitalized certain amounts to the convertible debenture as consideration for existing indebtedness. No gain or loss was realized on this restructuring of amounts payable to Miramar. The promissory note was in the face amount of $6.5 million; bears interest at bank prime plus 2%, and is due on demand after June 20, 2001. The note requires that the Corporation maintain working capital of not less than $1,000,000 as and from March 31, 2000, to be tested monthly. Subsequent to the end of 1999, $4.5 million of the principal amount of the promissory note was settled through the issue to Miramar of 15 million shares in the Corporation. In addition, on March 31, 2000, Miramar provided the Corporation with a waiver extending the date for the imposition of the working capital requirement to June 15, 2000.

On April 27, 2001, Northern Orion concluded further restructuring agreements in conjunction with a private placement of $1,500,000. The placement completed with an arms length investor required Miramar to convert the convertible debenture into common shares, restructure the remaining indebtedness of Northern Orion into a long term convertible note and to option 60 million of its 70 million shares to a third party. The convertible debenture was in an amount of $21.2 million and was converted into 14.4 million shares of the Corporation at a conversion price of $1.47 per share. The remaining indebtedness of Northern Orion to Miramar amounted to $6.9 million and was restructured into convertible notes due after June 30th 2002, and with a conversion price of $0.15 per Northern Orion share. In addition, the Royalty Interest was reduced from a total obligation of $18 million to $15 million and excluded any interest in the San Jorge property in Argentina.

Interest of Certain Persons in Matters to be Acted Upon

No director or senior officer of the Corporation or any proposed nominee of management of the Corporation for election as a director of the Corporation, nor any associate or affiliate of any of the foregoing persons, has any material interest, direct or indirect, by way of beneficial ownership of securities or otherwise, in any matter to be acted upon at the Meeting other than the election of directors.

Executive Remuneration

The following table (presented in accordance with the regulation (the "Regulation") made under the Securities Act (Ontario)) sets forth all annual and long-term compensation for services rendered in all capacities to the Corporation and to subsidiaries of the Corporation for the financial years indicated (to the extent required by the Regulation) in respect of the Chief Executive Officers of the Corporation and

SUMMARY COMPENSATION TABLE

		Annual Compensation			Long-Term Compensation Awards	
Name and Principal Position	Year	Salary ($)	Bonus ($)	Other Annual Compen-sation [1] ($)	Securities Under Options Granted In Year (#)	All Other Compensation ($)
Stephen Wilkinson President and Chief Executive Officer	2000 1999	NIL NIL	NIL NIL	171,000 6,000	1,200,000 NIL	NIL NIL
Ricardo Auriemma [2] President of Argentine Subsidiaries	2000 1999 1998	97,500 97,500 97,500	NIL NIL NIL	14,118 14,118 13,494	NIL NIL NIL	NIL NIL NIL

(1) Where the value of perquisites and benefits for a Named Executive Officer does not exceed the lesser of $50,000 and 10% of the total of the annual salary and bonus of such Named Executive Officer, the value is not reported.

(2) Dr. Auriemma commenced employment with the Corporation on November 1, 1994. The salary and bonus amounts for Dr. Auriemma is payable and quoted in U.S. dollars.

During the financial year of the Corporation ended December 31, 2000, options were granted to the Chief Executive Officer. The following table (presented in accordance with the Regulation) sets forth details of all exercises of options during the financial year of the Corporation ended December 31, 2000 by each of the Named Executive Officers and the value as at December 31, 2000 of unexercised options on an aggregate basis:

AGGREGATED OPTION EXERCISES DURING THE MOST RECENTLY COMPLETED FINANCIAL YEAR AND DECEMBER 31, 2000 OPTION VALUES

Name	Securities Acquired on Exercise (#)	Aggregate Value Realised ($)	Unexercised Options at December 31, 2000 (#) Exercisable/ Unexercisable	Value of Unexercised in-the-Money Options at December 31, 2000 ($) Exercisable/ Unexercisable
Stephen Wilkinson	NIL	0	1,000,000/200,000	NIL
Anthony Walsh	NIL	0	475,000/50,000	NIL
Ricardo Auriemma	NIL	0	50,000/0	NIL

Report on Executive Compensation

No Compensation Committee has been formed and no policies relating to executive compensation have been established. No executives of the Corporation have been compensated directly. One member of the senior management of the Corporation was paid by Miramar that charged the Corporation rent, and management and services fees of $420,000 for the financial year ended December 31, 2000. The management fee is reviewed by the Audit Committee of the Board of the Corporation. The fees paid to the Named Executive Officers are based on industry standards.

Performance Graph

The following graph compares the yearly percentage change in the cumulative total shareholder return over the last five financial years of the common shares of the Corporation, assuming a $100 investment in the common shares of the Corporation on December 31, 1995, with The TSE 300 Stock Index during such period, assuming dividend reinvestment.

analysed in reports prepared by management and are submitted to the Board for its approval. Such major matters include significant acquisitions, exploration and development budgets and financings.

The Chief Executive Officer of the Corporation is primarily responsible for establishing the future direction of the Corporation. The board reviews all new proposed directions and significant decisions to be made, and has the ultimate decision on the direction of the Corporation.

The Corporation's board of directors consists of eight directors, Stephen Wilkinson is a member of management and as at December 31, 2000, John K. Burns, Terry O'Kane and Norman Anderson are outside directors. Robert Cross and Frank Lang joined the Board subsequent to year-end and may be currently considered outside directors. The five outside directors are considered unrelated directors for the purposes of the Guidelines. Two of the directors are directors and officers of Miramar Mining Corporation and are considered related directors.

The Chairman of the Corporation is not an officer of the Corporation. At the Corporation's present stage of development, the board is of the view that having a chair who is not involved in management is most appropriate for the Corporation. Moreover, the Board is of the view that the Corporation's outside directors have shown significant independence from management and receive the greatest benefit from a chairman who is also an outside director.

There are three board committees.

The Executive Committee is made up of the President and the three outside directors as at the end of the year. The Executive Committee has not been delegated any specific authority by the board and acts primarily as a senior decision making forum. However, it is a primary responsibility of the Executive Committee to review and approve any transactions of the Corporation involving Miramar Mining Corporation.

During 2000, the Audit Committee consisted of the President and two directors, both of whom are related directors. The Audit Committee is mandated to implement and review internal systems. Thereby it would assist the board in identifying and monitoring the risks of the business of the Corporation. Further, the Audit Committee is charged with the initial responsibility of determining that the financial and budget goals of the Corporation are met by management, and where the goals have not been met by management, reporting back to the board on the progress and level of the achievement of management versus the predetermined budget levels.

The Environmental Committee consists of three directors, a majority of whom are related directors. The Environmental Committee reviews compliance by the Corporation with all applicable regulatory requirements together with an analysis of risks, which could be encountered in the future related to environmental matters.

The Corporation is controlled by Miramar, which is considered a "significant shareholder" within the meaning of the Guidelines. The Corporation does not have a separate nominating committee or corporate governance committee. The board is considering the creation of those formal committees and the addition of one or more unrelated directors. There are no formal procedures in place for recruiting new directors.

The Corporation has an investor relations group which is the main communications channel with investors. Senior members of management also have frequent communication with institutional and retail investors.

Appointment of Auditor

Unless such authority is withheld, the persons named in the form of proxy accompanying this Proxy Circular intend to vote for the appointment of KPMG, Chartered Accountants, as the auditor of the Corporation until the close of the next following annual general meeting of the shareholders of the Corporation or until their successor is appointed, at a remuneration to be fixed by the directors.

Particulars of Other Matters to be Acted Upon

(a) Amendment to Stock Option Plan

At the special meeting held November 13, 1995, shareholders approved the creation of the stock option plan (the "Plan") for directors, officers and employees. The maximum number of shares made available for distribution under the Plan was 10,000,000 shares.

It is proposed to amend the Plan to increase the maximum number of shares available for issue under the Plan to 16,000,000 shares.

The directors consider that the Plan is of fundamental importance in achieving the Corporation's objective of attracting, retaining and motivating qualified directors, officers and employees, and serves to align the personal interests of such persons with the interests of the Corporation and its shareholders.

In order to allow the Corporation to grant additional incentive share purchase options, an increase in the maximum number of shares presently provided for under the Plan is required, and the directors recommend that the maximum number be increased from 10,000,000 to 16,000,000. This number would represent approximately 10% of the total number of shares of the Corporation issued and outstanding on a fully diluted basis.

Under the policies of The Toronto Stock Exchange, the proposed increase in the maximum number of shares reserved for issuance under the Plan will require approval by a majority of the votes cast at the meeting other than votes attached to securities beneficially owned by insiders to whom shares may be issued pursuant to the Plan and their associates (a "disinterested shareholder vote"). Such insiders and associates presently hold an aggregate of 88,604 shares, which will not be counted for the purpose of determining whether a disinterested shareholder vote has been obtained.

The Corporation does not provide financial assistance to participants in the Plan to facilitate the purchase of shares under the Plan.

The following resolution will be proposed at the meeting:

> "RESOLVED as an ordinary resolution of the disinterested shareholders of the Corporation that the maximum number of shares to be reserved for issuance by the Corporation under its Stock Option Plan (the "Plan") be increased from 10,000,000 to 16,000,000 and that the Plan be amended accordingly."

If this resolution is not passed, the Plan will remain in effect, but options granted in excess of the maximum number provided for will not be exercisable, and the Corporation will be severely restricted in its ability to grant further incentive options or to allow for employee share purchases or share bonuses.

Any private placement proceeded with by the Corporation under the advance shareholder approval being sought at the Meeting will be subject to the following additional restrictions:

(a) it must be substantially with parties at arm's length to the Corporation;

(b) it cannot have a material effect on control of the Corporation;

(c) it must be completed within a 12-month period following the date advance shareholder approval is given; and

(d) it must comply with the private placement pricing rules of the TSE, which currently require that the price per security must not be lower than the closing market price of the security on the TSE on the trading day prior to the date notice of the private placement is given to the TSE (the "Market Price") less the applicable discount, as follows:

Market Price	Maximum Discount
$0.50 or less	25%
$0.51 to $2.00	20%
Above $2.00	15%

In any event, the TSE retains the discretion to decide whether or not a particular placement is "substantially" at arms-length or have a "material effect on the Company", in which case specific shareholder approval may still be required.

In anticipation that the Company may need to enter into one or more private placements in the next 12 months that will make issuable such number of its treasury Common Shares, taking into account any Common Shares that may be issued upon exercise of any warrants or options granted in connection with the private placements, that will exceed the TSE 25% Rule, the Company requests that shareholders pass a resolution as follows:

> "Resolved that the issuance by the Corporation in one or more private placements of such number of securities as would result in the Corporation making issuable during the 12 month period following the date of the annual general meeting an amount of Common Shares that exceeds 25% of the Corporation's issued and outstanding share capital but not more than 50.0 million Common Shares, as more particularly described in and subject to the restrictions described in the Corporation's Information Circular relating to the annual general meeting is hereby approved."

The directors of the Corporation believe the passing of the ordinary resolution is in the best interests of the Corporation and recommend the shareholders vote in favour of the resolution. In the event the resolution is not passed, the TSE will not approve any private placements which result in the issuance or possible issuance of a number of Common Shares which exceeds the TSE 25% Rule, without specific shareholder approval. Such restriction could impede the Corporation's timely access to required funds.

Proxy

ANNUAL GENERAL MEETING OF SHAREHOLDERS OF

NORTHERN ORION EXPLORATIONS LIMITED

TO BE HELD AT SUITE 1400, 570 GRANVILLE STREET, VANCOUVER, BRITISH COLUMBIA ON FRIDAY, JUNE 29, 2001, AT 2:00 P.M. (Vancouver Time)

The undersigned member ("Registered Shareholder") of the Company hereby appoints, John K. Burns, a Director of the Company, or failing this person, **Stephen Wilkinson**, President and a Director of the Company, or in the place of the foregoing,_____ _____(*print the name*), as proxyholder for and on behalf of the Registered Shareholder with the power of substitution to attend, act and vote for and on behalf of the Registered Shareholder in respect of all matters that may properly come before the aforesaid meeting of the Registered Shareholders of the Company (the "Meeting") and at every adjournment thereof, to the same extent and with the same powers as if the undersigned Registered Shareholder were present at the said Meeting, or any adjournment thereof.

The Registered Shareholder hereby directs the proxyholder to vote the securities of the Company recorded in the name of the Registered Shareholder as specified herein.

The undersigned Registered Shareholder hereby revokes any proxy previously given to attend and vote at said Meeting.

REGISTERED HOLDER SIGN HERE: _____

DATE SIGNED: _____

Resolutions (For full details of each item, please see the enclosed Notice of Meeting and Information Circular)

	For	Against	Withhold
1. Appointment of KPMG Chartered Accountants as auditors of the Company		N/A	
2. To authorize the Directors to fix the Auditors' remuneration			N/A
3. To determine the number of Directors at 8			N/A
4. To elect as Director, Norman Anderson		N/A	
5. To elect as Director, John K. Burns		N/A	
6. To elect as Director, Robert Cross		N/A	
7. To elect as Director, Frank A. Lang		N/A	
8. To elect as Director, Patrick T. O'Kane		N/A	
9. To elect as Director, Stephen Quin		N/A	
10. To elect as Director, Anthony Walsh		N/A	
11. To elect as Director, Stephen Wilkinson		N/A	
12. To approve the increase in the number of common shares which may be issued pursuant to the exercise of options under the Stock Option Plan, subject to regulatory approvals			N/A
13. To pass an ordinary resolution to approve a reduction in the price of options granted to certain directors and officers, subject to regulatory approvals			N/A
14. To pass a ordinary resolution to approve the issuance by the Corporation in one or more private placements of such number of securities as would result in the Corporation making issuable during the 12 month period following the date of the annual general meeting an amount of shares that exceeds 25% of the Corporation's issued and outstanding share capital but not more than 50 million shares.			N/A
15. To grant the proxyholder authority to vote at his/her discretion on any other business or amendment or variation to the previous resolutions		N/A	

THIS PROXY MUST BE SIGNED AND DATED.

SEE IMPORTANT INSTRUCTIONS ON REVERSE.

NORTHERN ORION
EXPLORATIONS LTD
Suite 1400, 570 Granville Street, Vancouver, B.C. V6C 3P1
Tel: (604) 687-4622 Fax: (604) 687-4212

October 26, 2001 **NEWS RELEASE 01-07** **NNO – TSE**

NORTHERN ORION TO ACQUIRE CONTROL OF MID-TIER GOLD PRODUCER

Northern Orion Explorations Ltd. ("**NNO**") has entered into a letter agreement to acquire a 100% interest in Ditchburn Management Limited, ("**Ditchburn**") a Jersey Corporation ("**the Acquisition** ").

On closing, NNO, through Ditchburn, will hold a 12 month option (the "**Ditchburn Option**") to acquire, at a price of no more than Rand 0.48 (C$0.08) per share, up to 450,000,000 ordinary shares representing 90% of the total number of shares issued and outstanding in President Steyn Gold Mines Limited ("**PS Gold**"), a mid-tier South African gold producer trading on the JSE Securities Exchange South Africa.

The PS Gold mining operations, located 190 kilometers southwest of Johannesburg in South Africa, were acquired from Anglogold and Avgold in 1998. The properties are adjacent to other large operating mines presently owned by Anglo American, Gold Fields and Harmony. The PS Gold mines contain five production shafts, supported by significant infrastructure. PS Gold has been operating on a positive cash flow basis since the acquisition of the mine in 1998 through effective cost management programs, improved miner training and reduction of overhead expenses. Most recently, it reported production of 89,154 ounces of gold at a total cost of US$221 per ounce for the first six months of 2001.

The consideration for the acquisition of Ditchburn will be determined by the assets remaining in PS Gold at the time of closing. NNO is presently negotiating with PS Gold for the acquisition of the operating assets of PS Gold as a separate transaction.

Depending on the assets retained by PS Gold at the time of closing, NNO will issue between a minimum of 93,600,000 and a maximum of 201,000,000 shares as consideration for the Acquisition of Ditchburn.

The Acquisition is subject to a due diligence investigation which is currently being conducted in conjunction with the bankers of NNO, the settlement of formal agreements, regulatory and other approvals. The Acquisition is also subject to NNO completing a debt and/or equity financing in an amount sufficient to exercise the Ditchburn Option.

Management of Northern Orion believes that the proposed transactions would provide long-term positive cash flow to the Company on a cost effective basis.

For further information please contact:

NORTHERN ORION EXPLORATIONS LTD.
Stephen Wilkinson, President
David Cohen, Vice President
Tel: (604) 687-4622 / Fax: (604) 687-4212
Email: info@northernorion.com

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November 5, 2001 **NEWS RELEASE 01-08** **NNO – TSE**

TSE APPROVES STOCK OPTION PLAN AMENDMENT AND GRANT OF REPLACEMENT STOCK OPTIONS

Northern Orion Explorations Ltd. (NNO-TSE) has received regulatory approval for the cancellation of previously granted stock options (amounting to 6.24 million options) and the amendment of its stock option plan as approved by shareholders at the Annual Meeting held on June 29th 2001 (the "Plan"). Accordingly the company has proceeded with the granting of 7.7 million replacement options at a price of $0.15 per share under the amended Plan.

Stephen J. Wilkinson
President and Chief Executive Officer

For further information please contact:

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Tel: (604) 687-4622 / Fax: (604) 687-4212
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November 19, 2001 **NEWS RELEASE 01-09** NNO – TSE

Northern Orion Explorations Ltd. ("Northern Orion") announces that as of November 15th, it is no longer pursuing the acquisition of Ditchburn Management Limited or President Steyn Gold Mines Limited ("PS Gold") or its assets, as had previously been announced on October 26, 2001. During the course of negotiating a definitive agreement regarding the acquisition, PS Gold management required terms for the transaction that were beyond those of the signed letter agreement, negatively impacting the potential value of the deal to Northern Orion's shareholders. As a result, it was the opinion of Northern Orion's management that there was no reasonable basis for continuing with the proposed transaction and discussions have been terminated.

With Northern Orion's recent exposure to potential mining opportunities in South Africa, Northern Orion is capitalizing on this opportunity to evaluate a number of mining operations that could potentially provide the basis for an acquisition that would be accretive to shareholder value. It is Northern Orion's objective to identify, evaluate and acquire an existing cash flow positive operation. With a source of on going operating cash flow, Northern Orion could maintain and, as market conditions permit, realize significant value from its substantial copper-gold assets located in Argentina. These assets include its interest in the very large copper-gold-molybdenum Agua Rica deposit and 100% interest in the San Jorge copper-gold porphyry deposit.

For further information please contact:

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President and Chief Executive Officer
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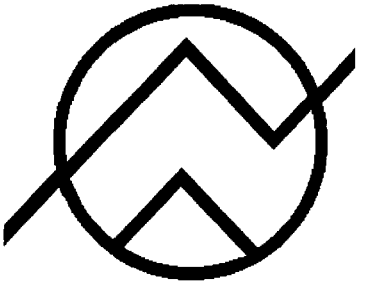

NORTHERN ORION

EXPLORATIONS LIMITED

Third Quarter Report

2001

RESULTS OF OPERATIONS FOR THE NINE MONTHS ENDED SEPTEMBER 30, 2001

Description of Business

the development of its two main mineral properties – Agua Rica in Argentina and Mantua in Cuba. Financial constraints on Northern Orion for the past three years have significantly constricted all of its head office and field activities.

Agua Rica Project

BHP continues as the project operator at the Agua Rica Project in Argentina. At June 30, 2001, and for the period since that date, the Company has elected to reduce its interest in the Agua Rica Project to approximately 29% from its original interest of 30%. Cash calls made by the operator will not be made by the Company and the carrying cost of the property and the related reduction in accounts payable from the fiscal year ended December 31, 2000, has been reflected in the unaudited consolidated interim financial statements.

Significant progress was made during the quarter with the restructuring of the project that would result in having the BHP and Northern Orion ownership interests held via a single corporate entity. Consequently, BHP and Northern Orion would own equity reflecting the present ownership ratio. The ownership will change to reflect the ownership ratios. The restructuring is progressing and should be completed before the end of 2001.

On a long-term basis the Initial Feasibility Study, completed by BHP in 1997, indicated that the Company's share of the required capital to construct a 60,000 tonne per day open-pit mine and concentrator at Agua Rica could be in excess of US$200 million. Northern Orion's management in co-operation with BHP is continuing to examine all of the options on how best to proceed with this important project, including alternative operating scenarios, attracting another participant to fund the project or an outright sale of a part or the entire project. In addition, management has considered certain alternatives with respect to the Agua Rica Project. These include electing whether or not, in context of the current metals and equity markets, it is in the best interests of our shareholders to fully fund our share of the expenditures. In the event that the Company continues to elect not to contribute any more funds to the operator, its current approximate 29% interest could be reduced over time to ultimately hold a 10% carried interest. Management estimates that additional expenditures on the project in excess of US$90 million would be needed to reduce Northern Orion's interest to a carried interest.

Mantua Copper Project

The focus during the quarter continued to be the financing for a bankable feasibility study for the copper mining phase with negotiations underway for the funding to complete this study. A production decision for the copper phase is dependent upon the results of the feasibility study.

During the quarter, the Company announced that it had entered into an agreement with International Barytex Resources Limited ("Barytex"). Under the agreement, Barytex has an option to acquire all of the shares of Minera Mantua Inc., a wholly owned subsidiary of the Company through which it holds its 50% interest in the Mantua Copper Project. To exercise its right, Barytex has assumed the costs and obligations of Northern Orion's Cuban operation, and must finance and complete the bankable feasibility study and finance and build the copper mine and plant. During the option period, Northern Orion may nominate two directors to the Barytex board. Subsequent to the exercise of the option, Northern Orion would retain a 2.5% net smelter royalty in proceeds to Barytex from the mine.

Furthermore, Northern Orion is owed an aggregate amount of US$28 million by the project in consideration of previous expenditures. Barytex may, if it elects to proceed to production, exchange 4.5 million common shares of Barytex for this debt.

Discussion of Operations and Financial Condition

For the nine months ending September 30th, 2001, Northern Orion recorded a loss of $0.69 million or $0.00 per share compared to a loss of $1.34 million or $0.01 per share in 2000. The loss in 2001 includes no write-downs on mineral properties, and other assets compared to write-downs of mineral properties and other assets of $0.32 million or $0.00 per share in 2000. During 2001, the operating costs remained at approximately the same level as in fiscal 2000, partly due to consulting fees to investment bankers hired to review and assist in new project acquisitions. Management fees paid to Miramar Mining Corporation ("Miramar") of $315,000 in fiscal 2000 have been included in general and administration expenses. The services provided by Miramar are now paid directly by the Company.

During the quarter the Company received $0.32 million in settlement of an account receivable relating to a mineral property held by the Company in 1997. The Company held shares in Brooks Petroleum Ltd. ("Brooks"), related to a debt settlement completed in 1997 for the settlement of the account receivable. The mineral property and related balance receivable were written off in fiscal 1997. The Company subsequently signed an option agreement with Brooks for the disposition of the Company's shares received in the debt settlement.

Due to the prospective nature of the mineral exploration business and the number of exploration properties held, Northern Orion has a limited ability to generate sources of internal cash flow from operations. The Company has financed the acquisition, exploration and development of its properties through a combination of the issuance of common shares to the public, borrowings from Miramar, attracting other companies to joint venture the evaluation of properties and through third party borrowings.

When and if the Company places any of its exploration properties into production, it is intended that the resulting cash flows may become sufficient to sustain future operations, exploration and development. At present, the Company lacks the internal financial ability to advance any of its projects to the production stage.

Financing, Principal Purposes and Milestones

During the first quarter of 2001, Northern Orion negotiated and closed a funding arrangement with Miramar. Under the arrangement, the Company was advanced operating money from an operating line from Miramar. The line was capped at $145,000 and uses for the funds were pre-approved. In addition, the Company agreed to repay all of the funds drawn under the arrangement from the proceeds of any new equity or debt financing. All funds advanced by Miramar under this operating line were repaid in full in May 2001.

On May 1st 2001, the Company announced the closing of a private placement plus the supplementary restructuring of long-term debt and current liabilities. Valerie Gold Resources Ltd. ("Valerie") and Northern Orion entered into an agreement by which Valerie subscribed for a $1.5 million private placement of 10 million Units of Northern Orion priced at $0.15 per Unit. Each Unit was comprised of one Northern Orion common share and one share purchase warrant. Each warrant entitles Valerie to purchase an additional common share of Northern Orion over a two year period for a price per share of $0.175 during the first year and $0.20 during the second. Upon closing, Valerie Gold owned 8.8% of Northern Orion's outstanding common shares.

The closing of the private placement triggered conversion of the $21.4 million Convertible Debenture ("CD") held by Miramar into 14,439,621 Northern Orion common shares priced at

$1.47 each. Secondly, Northern Orion's remaining debts to Miramar in the amount of approximately $6.9 million were consolidated into convertible notes. The conversion price for the notes is $0.15 per share. The new notes are to be converted in conjunction with the distribution of the Miramar control block, as disclosed in Northern Orion's news release of February 23, 2001.

Under the agreement, Miramar further agreed to reduce the cap of the royalty and net proceeds interest ('Royalty Interest') from $17,987,000 to $15,000,000. Also, any proceeds received by Northern Orion from operating or the sale of the San Jorge Project in Argentina would be excluded from the royalty agreement.

Liquidity and Solvency

At September 30, 2001, the Company had working capital of $0.36 million, compared to a working capital deficiency of $3.0 million at the end of the same period in 2000. During the quarter the Company received $0.32 million in partial settlement of an account receivable relating to a mineral property held by the Company in fiscal 1997. This addition to working capital is not sufficient to continue the full evaluation of all of the Company's mineral prospects.

Management of the Company is in the process of further evaluating all of the Company's property interests in order to ensure that value is realized. In addition, all contemplated expenditures are reviewed to ensure that cash commitments are prioritized and that existing capital resources are available to maintain the core properties currently held. Management is also evaluating potential new sources of financing to meet the anticipated expenditures required to further advance its projects.

Risks And Uncertainties

The Company operates almost exclusively in foreign jurisdictions and is dependent on world metals and currency markets that may present risks to the future prospects of the Company.

Risks Associated with the Mining Industry

Northern Orion is engaged in the exploration for and the development of mineral deposits. These activities involve significant risks which careful evaluation, experience and knowledge may not, in some cases, eliminate. The commercial viability of any mineral deposit depends on many factors, not all of which are within the control of management. Some of the factors that will affect the financial viability of a given mineral deposit include its size, grade and proximity to infrastructure. In addition, government regulation, taxes, royalties, land tenure, land use, environmental protection and reclamation and closure obligations could have a profound impact on the economic viability of a mineral deposit.

Northern Orion is not able to determine the impact of potential changes in environmental laws and regulations on its financial position due to the uncertainty surrounding the form such changes may take. As mining regulators continue to update and clarify their requirements for closure plans and environmental protection laws and administrative policies are changed, additional reclamation obligations and further security for mine reclamation costs may be required. It is not expected that such changes will have a material effect on the operations of Northern Orion.

Risks Associated with Financial Markets

Both Argentina and Cuba have currently fixed their currency to the US dollar and removal of these exchange controls could significantly affect the exchange rates in terms of the Canadian dollar. Continued weakness of the Canadian dollar in comparison to the US dollar will also affect the results of operations. Increasing costs of labour, supplies and energy may affect planned operations in future years. The potential for increased input prices is taken

into consideration when preparing plans for future exploration, development and mine construction.

Risks Associated with the Market for Metals and Minerals

The prices of metals and minerals are subject to relatively large changes over short time periods. These prices can have a direct impact on the commercial viability of production from mineral properties.

Risks Associated with Foreign Operations

Northern Orion's investments in foreign countries such as Argentina and Cuba carry certain risks associated with different political and economic environments. Northern Orion undertakes investments in various countries around the world only when it is satisfied that the risks and uncertainties of operating in different cultural, economic and political environments are manageable and reasonable relative to the expected benefits.

NORTHERN ORION EXPLORATIONS LTD.

Consolidated Balance Sheets
(expressed in thousands of dollars)
(prepared by management without audit)

	September 30, 2001	December 31, 2000
Assets		
Current assets		
Cash	$ 605	$ 13
Accounts receivable	63	36
Prepaid expenses	40	40
	708	89
Plant and equipment	2,221	2,224
Mineral properties and deferred development	81,149	80,758
	$ 84,078	$ 83,071
Liabilities and Shareholders' Equity		
Current liabilities		
Accounts payable and accrued liabilities	$ 347	$ 1,013
	347	1,013
Promissory note payable	6,915	3,551
Convertible debenture	–	23,703
Other long-term liabilities	36	36
Future income taxes	24,320	24,320
	31,618	52,623
Shareholders' equity		
Share capital		
Authorized		
500,000,000 common shares without par value		
100,000,000 first preference shares without par value		
100,000,000 second preference shares without par value		
Issued and outstanding		
113,870,222 common shares (December 31, 2000 – 89,430,601 common shares)	149,280	126,574
Deficit	(96,820)	(96,126)
	52,460	30,448
	$ 84,078	$ 83,071

Approved by the Directors

Stephen P. Quin, Director

Stephen J. Wilkinson, Director

NORTHERN ORION EXPLORATIONS LTD.

Consolidated Statements of Operations and Deficit
(expressed in thousands of dollars except per share amounts)
(unaudited – prepared by management)

	Three months ended September 30,		Nine months ended September 30,	
	2001	2000	2001	2000
Expenses				
Cost of sales	$ –	$ 38	$ –	$ 108
General and administration	255	258	811	615
Restructuring costs	31	–	110	57
Depreciation and depletion	–	6	7	317
Property costs	–	–	112	–
Write-down of mineral properties and other assets	–	–	–	315
Loss (gain) on foreign exchange translation	1	–	4	(32)
Interest and other income	(9)	(29)	(31)	(43)
Proceeds on sale of shares	(319)	–	(319)	–
	(41)	273	694	1,337
Income (loss) for the period	41	(273)	(694)	(1,337)
Deficit, beginning of period	(96,861)	(57,779)	(96,126)	(56,715)
Deficit, end of period	$ (96,820)	$ (58,052)	$ (96,820)	$ (58,052)
Income (loss) per share – basic and fully diluted	$ 0.00	$ (0.00)	$ (0.01)	$ (0.01)
Weighted average number of common shares outstanding	113,870,222	89,006,780	103,127,531	81,547,764
Total common shares outstanding at end of period	113,870,222	89,006,780	113,870,222	89,006,780

NORTHERN ORION EXPLORATIONS LTD.

Consolidated Statements of Cash Flows
(expressed in thousands of dollars)
(unaudited – prepared by management)

	Three months ended September 30,		Nine months ended September 30,	
	2001	2000	2001	2000
Cash provided by (used in):				
Operations				
Income (loss) for the period	$ 41	$ (273)	$ (694)	$ (1,337)
Items not involving cash				
Depreciation and depletion	–	6	7	317
Write down of mineral properties and other assets	–	–	–	315
Change in non-cash working capital				
Decrease (increase) in accounts receivable	–	(13)	(27)	64
Decrease (increase) in prepaid expenses	2	20	–	(14)
Increase (decrease) in accounts payable and accrued liabilities	(193)	(31)	(666)	(438)
	(150)	(291)	(1,380)	(1,093)
Financing				
Common shares issued for cash	–	–	1,480	–
Advances from controlling shareholder	–	689	479	2,276
Capitalized interest on convertible debenture	–	254	408	1,294
Other long-term liabilities	–	–	–	(38)
	–	943	2,367	3,532
Investments				
Mineral properties	67	(670)	(391)	(2,727)
Plant and equipment	–	–	(4)	–
	67	(670)	(395)	(2,727)
Increase (decrease) in cash	(83)	(18)	592	(288)
Cash, beginning of period	688	44	13	314
Cash, end of period	$ 605	$ 26	$ 605	$ 26
Supplementary information:				
Non-cash transactions				
Reduction in promissory note payable through issuance of common shares	–	–	–	4,500
Increase in mineral properties due to future income tax liability	–	–	–	–
Reduction in royalty and proceeds interest payable through partial disposition of mineral property interests	–	–	–	17,987
Convertible debenture to equity	–	–	21,226	–

1. Interim financial statements

These interim financial statements should be read in conjunction with the consolidated financial statements and notes thereto included in the Company's Annual Report for the year ended December 31, 2000.

The quarterly results are not necessarily indicative of results to be expected for an entire year.

2. Change in accounting policy

Earnings (loss) per share:

Effective January 1, 2001, the Canadian Institute of Chartered Accountants established new recommendations for the calculation and reporting of basic and diluted earnings per share. The Company has adopted the new recommendation retroactively.

3. Loss per share

Diluted loss per share is not calculated as the potential issue of common shares under the convertible debenture or the Company's stock appreciation rights plan would be anti-dilutive to the common shareholders.

4. Capital assets and segmented information

Mineral properties and deferred development:

2001	Agua Rica	Mantua	Unallocated	Total
Balance, December 31, 2000	$74,007	$24,738	$(17,987)	$80,758
Exploration and development Expenditures	(69)	52	–	(17)
Capitalized interest	408	–	–	408
Balance, September 30, 2001	$74,346	$24,790	$(17,987)	$81,149

(i) Agua Rica:

The Agua Rica project is located in Catamarca Province, Argentina. The property is composed of mining claims and exploration licences. Work is focused upon a major porphyry copper-gold-silver-molybdenum deposit that is being explored by a joint venture between the Company (30%) and BHP Copper (70%). In June 2001 the Company elected to reduce its interest in the Agua Rica project to an approximate 29% interest. In the event that the Company elects to contribute no more funds to the operator, its current interest would be reduced over time to a 10% carried interest.

(ii) Mantua:

The Company operated a gold processing facility at Mantua, Cuba from April 1998 to September 1999 at which time operations were ceased. The Mantua project of which the Company owns a 50% interest is a high-grade copper deposit amenable to open pit mining and solvent extraction/electro-winning recovery of copper. The property is located in the Pinar del Rio Province, Cuba.

The Company and International Barytex Resources Ltd. ("Barytex") have entered into an option agreement whereby Barytex may acquire the undivided 50% interest of the Company in the Mantua

Copper Project in Cuba by the acquisition of 100% of the issued and outstanding shares in Minera Mantua Inc. Geominera S.A., a Cuban company controlled by the government of Cuba, holds the remaining 50% interest in the project. In order to exercise the option, Barytex must:

(a) assume and pay all carrying costs relating to the Company's operations in Cuba and the Project;

(b) complete a bankable feasibility study within 18 months;

(c) arrange all financing required in order to commence commercial production; and

(d) commence construction of the project within 120 days of making a production decision.

The agreement is subject to due diligence that was completed on August 15th 2001.

During the first nine months of 2001, the Company capitalized interest of $408,000 (Nine months ended September 30, 2000 - $1.29 million) on funds borrowed for exploration and development activities.

5. Convertible debenture

(a) In February 2001, the Company arranged an additional interim funding loan ("IFL") from Miramar of up to $145,000 for working capital purposes. The Company repaid all amounts owing under the IFL on May 16, 2001, from the proceeds of the private placement that closed in April 2001.

(b) In April 2001, the Company restructured debts owing to Miramar and arranged a $1,500,000 private placement for shares in the Company with another investor. As a condition of the private placement, the Company arranged with Miramar to reorganize and restructure all amounts owing as follows:

(i) On May 1, 2001, Miramar converted the convertible portion of the Convertible Debenture into common shares of the Company at a rate of $1.47 per share resulting in the issuance of 14,439,621 common shares by the Company;

(ii) Miramar has converted all other amounts owing into a convertible promissory note totalling $6,915,000. The convertible promissory note is convertible at Miramar's option into common shares of the Company at a price of $0.15 per share, and will bear interest at prime plus 2% per annum after June 30, 2002, and is due on demand after June 30, 2002;

(iii) The Proceeds Interest Royalty payable to Miramar is reduced from $17,987,000 to $15,000,000 and is modified to include proceeds from production and asset sales with the exception of the San Jorge property; and

(iv) Miramar has agreed to enter into a voting trust agreement with an arm's length third party until June 30, 2002, for the shares that it owns in the Company.

6. Share capital

2001	Number of Common Shares	Amount
Balance, December 31, 2000	89,430,601	$126,574
Shares issued:		
For cash	10,000,000	1,480
Debenture converted	14,439,621	21,226
Balance, September 30, 2001	113,870,222	$149,280

On April 17, 2001 the Company completed a private placement of units ("Units") at a price of $0.15 per Unit for gross proceeds of $1,500,000. Each Unit is comprised of one common share and one warrant ("Warrant"). Each Warrant is exercisable into one common share of the Company at a price of $0.175 per share until April 27, 2002 and $0.20 per share until April 27, 2003.

Stock options

During the quarter, all previously granted stock options were cancelled, and a total of a total of 7.7 million options ('New Options') to purchase common shares at a price of $0.15 per share were granted. The New Options will vest immediately except for approximately 1.9 million New Options granted to management that will vest equally over two years. The New Options expire 5 years from the date of grant. This New Option proposal was subject to regulatory approval and received shareholder approval at the Annual Meeting of Shareholders on June 29th 2001.

At December 31, 2000, 6,095,000 stock options were outstanding. Of these, 195,000 options had an exercise price of $1.80 per share and expired in 2001 and 2002. The remaining 5,900,000 options had an exercise price of $0.30 per share and expired in 2005. The impact of these options was not included in the computation of diluted earnings per share as the options' exercise would be anti-dilutive.

Of the 5,900,000 options awarded during the year ended December 31, 2000, 2,700,000 options vested immediately and an additional 1,650,000 vested in the year. Of the remaining 1,550,000 options, 550,000 options vested and became exercisable on January 1, 2001, and 550,000 options vested and became exercisable on April 1, 2001. The remaining 450,000 options were to vest and become exercisable on July 1, 2001. All of these options were cancelled in the second quarter of fiscal 2001.

7. Brooks Petroleum Investment

The Company has received $319,000 in settlement of an account receivable relating to a mineral property held by the Company in fiscal 1997. The Company holds shares in Brooks Petroleum Ltd. ("Brooks"), received in a debt settlement completed in 1997, related to this receivable. The receivable and related mineral property were written off in fiscal 1997, and subsequently, the Company signed an option agreement with Brooks for the disposition of the Company's holdings in Brooks.

NORTHERN ORION
EXPLORATIONS LTD
Suite 1400, 570 Granville Street, Vancouver, B.C. V6C 3P1
Tel: (604) 687-4622 Fax: (604) 687-4212

November 29, 2001

B.C. Securities Commission
Executive Director
701 W. Georgia Street, 9th Floor
Vancouver, B.C. V7Y 1L2

Dear Sirs:

RE: NORTHERN ORION EXPLORATIONS LTD
MAILING ON NOVEMBER 29, 2001
INTERIM FINANCIAL STATEMENTS
FOR THE NINE MONTHS ENDED SEPTEMBER 30, 2001

We confirm that on the above date, the material above noted was forwarded by prepaid first class mail to all the persons on the Supplementary Mailing List.

Yours truly,

NORTHERN ORION EXPLORATIONS LTD.

"Stephen Wilkinson"
Stephen Wilkinson
President

cc: Alberta Securities Commission cc: Director of Corporations – PEI cc: Manitoba Securities Commission cc: Nova Scotia Securities Commission cc: Office of the Administrator of Securities – NB cc: Ontario Securities Commission cc: Quebec Securities Commission cc: Registrar of Securities – NT cc: Registrar of Securities – YT cc: Saskatchewan Securities Commission cc: Securities Division – Department of Justice - NF	cc: Toronto Stock Exchange cc: Nunavut Securities Commission

NORTHERN ORION
EXPLORATIONS LTD
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January 29, 2002 *NEWS RELEASE 2002-01* **NNO – TSE**

CHANGES TO NORTHERN ORION'S BOARD OF DIRECTORS

Northern Orion Explorations Ltd. ("Northern Orion") announces that Anthony Walsh and Stephen Quin have resigned as directors of Northern Orion effective January 7th, 2002.

Mr. Walsh who is the Chief Executive Officer, President and a Director of Miramar Mining Corporation ("Miramar") was the President, CEO and a Director of the Northern Orion from March 1999 to November 1999. Prior to his service as President, Mr. Walsh was the Vice President and Chief Financial Officer of Northern Orion over a period of approximately four years. Mr. Quin is Executive Vice President and also a Director of Miramar, and had been a director of Northern Orion since 1988.

Northern Orion recognizes and acknowledges the years of service by these gentlemen, and thanks them for their valued contributions.

Northern Orion is presently attempting to capitalize on its recent exposure to potential mining opportunities in South Africa, and is continuing to evaluate a number of mining operations that could provide the basis for an acquisition. The Company's objective is to identify, evaluate and acquire an existing cash flow positive operation. Northern Orion retains substantial copper-gold assets located in Argentina, which include its interest in the very large copper-gold-molybdenum Agua Rica deposit and 100% interest in the San Jorge copper-gold porphyry deposit.

For further information please contact:

Stephen J. Wilkinson
President and Chief Executive Officer
NORTHERN ORION EXPLORATIONS LTD.
Tel: (604) 687-4622 / Fax: (604) 687-4212
Email: info@northernorion.com

PACIFIC CORPORATE TRUST COMPANY

625 Howe Street – 10th Floor Vancouver BC V6C 3B8
T: (604) 689-9853 F: (604) 689-8144

March 7, 2002

British Columbia Securities Commission
PO Box 10142 Pacific Centre
701 West Georgia Street 9th Floor
Vancouver, BC
V7Y 1L2

Dear Sirs:

As per National Policy 41 requirements, including Addendum "A" to the Policy, please be advised of the following:

Company:	**Northern Orion Explorations Ltd.**
	(Cusip 66557D109)
Meeting:	**Annual & Extraordinary General Meeting**
Record Date:	**April 1, 2002**
Meeting Date:	**May 10, 2002**

If you require further information, please contact:

"Anissa Rimer-Ly"

Anissa Rimer-Ly
PACIFIC CORPORATE TRUST COMPANY

cc: Alberta Securities Commission
cc: Manitoba Securities Commission
cc: New Brunswick Securities Commission
cc: Newfoundland Securities Commission
cc: Nova Scotia Securities Commission
cc: Ontario Securities Commission
cc: Toronto Stock Exchange
cc: P.E.I. Securities Commission
cc: Quebec Securities Commission
cc: Saskatchewan Securities Commission
cc: Northwest Territory
cc: Yukon Territory
cc: Nunavut

VALERIE GOLD RESOURCES LTD.

NORTHERN ORION EXPLORATIONS LTD.

www.valeriegold.com / www.langmining.com

March 8, 2002

VLG-CDNX
NNO – TSE

NORTHERN ORION & VALERIE GOLD RESOURCES LTD. ANNOUNCE PRIVATE PLACEMENT

Valerie Gold Resources Ltd. ("Valerie") (VLG-CDNX) and Northern Orion Explorations Ltd. (NNO-TSE) ("Northern Orion") are pleased to announce that they have entered into an agreement by which Valerie will subscribe for a $0.5 million private placement of 8.33 million common shares of Northern Orion priced at $0.06 per share. In addition, Valerie will receive 500,000 share purchase warrants. Each warrant will entitle Valerie to purchase an additional common share of Northern Orion over a two-year period for a price per share of $0.075. The placement was non-brokered and will close immediately upon receipt of all required regulatory approvals and subject to certain conditions. Upon closing, Valerie Gold will own 18.33 million shares or 14.8% of Northern Orion's outstanding common shares. Northern Orion intends to use the funds for working capital as it pursues acquisition opportunities.

For further information please contact:

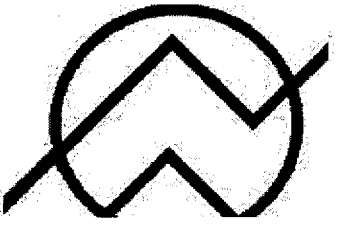
NORTHERN ORION EXPLORATIONS LTD

Stephen Wilkinson, President
David Cohen, Vice President
Tel: (604) 687-4622 Fax: (604) 687-4212
Email: *info@northernorion.com*

VALERIE GOLD RESOURCES LTD.

Frank A. Lang, – President
William ("Bill") Witte, Exec. Vice President
Tel: (604) 687-4622 Fax: (604) 687-4212
Toll Free: 1-888-267-1400
Email: Investor@langmining.com

No regulatory authority has approved or disapproved the information contained in this news release.



NORTHERN ORION EXPLORATIONS LTD.

ANNUAL INFORMATION FORM

October 16, 2001

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Item 1 – Incorporation

Northern Orion Explorations Ltd. was incorporated with the name Northern Orion Resources Ltd. under the laws of British Columbia by memorandum and articles dated April 30, 1986. On October 31, 1986, the memorandum of the Company was amended to change the name of the Company to Northern Orion Explorations Ltd. On November 28, 1994, the memorandum of the Company was amended to increase the authorized capital from 25,000,000 to 100,000,000 common shares without par value ("Common Shares"), and on October 15, 1997, the memorandum and articles of the Company were amended to increase the authorized capital from 100,000,000 to 700,000,000 shares divided into 500,000,000 Common Shares, 100,000,000 First Preference Shares without par value ("First Preference Shares") and 100,000,000 Second Preference Shares without par value ("Second Preference Shares").

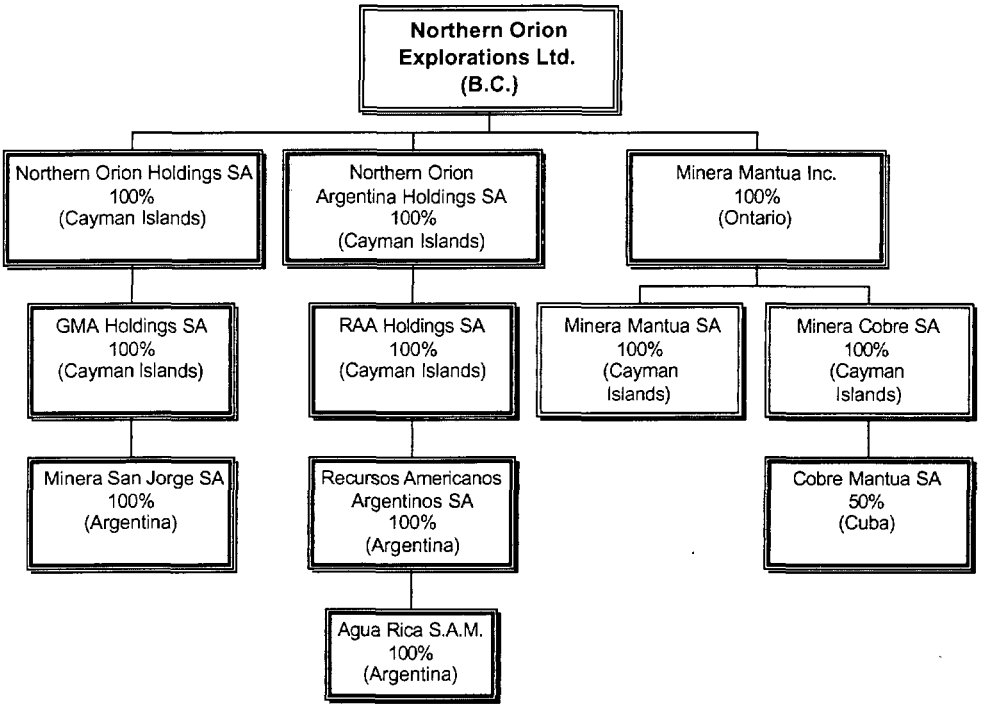
The registered and records offices of the Company are located at 10th Floor, 595 Howe Street, Vancouver, British Columbia V6C 2T5 and its principal executive office is located at Suite 1400, 570 Granville Street, Vancouver, British Columbia V6C 3P1.

The following table sets forth the name of each material subsidiary of the Company, the jurisdiction of its incorporation and the direct or indirect percentage ownership of the Company in such subsidiary.

Name of Subsidiary	Jurisdiction of Incorporation	Percentage Ownership
Minera Mantua Inc.	Ontario	100%
Minera Mantua S.A.	Cayman Islands	100%
Minera Cobre S.A.	Cayman Islands	100%
Cobre Mantua S.A.	Cuba	50%
GMA Holdings S.A.	Argentina	100%
Recursos Americanos Argentinos S.A.	Argentina	100%
Minera San Jorge S.A.	Argentina	100%

Throughout the Annual Information Form ("AIF"), Northern Orion Explorations Ltd. may be referred to as Northern Orion or the Company. Where the context requires, the term Company includes the subsidiaries of the Company. All dollar amounts in this annual information form are in Canadian dollars unless otherwise stated. The Company has no full-time employees.

Northern Orion Explorations Ltd.
Organizational Structure Chart
As At August 31, 2001



Item 2 - General Description of the Business

The Company, through its subsidiaries, is engaged in the exploration for, and development and production of, precious and base metals. The Company indirectly owns all of the outstanding shares of Minera San Jorge S.A. ("MSJ") and Recursos Americanos Argentinos S.A. ("RAA"), both Argentine companies that hold interests in mineral properties in Argentina. The Company also owns all of the outstanding shares of Minera Mantua Inc. ("MMI"), an Ontario company that holds an indirect interest in the Mantua property in Cuba.

Item 3 - Narrative Description of the Business

Argentine Properties

On November 17, 1994, the Company acquired all of the outstanding shares of Grupo Minera Aconcagua S.A. ("GMA"), a private Argentine company with interests in various exploration projects including the San Jorge Project further described below, from Miramar Mining Corporation ("Miramar"), Grupo R.A. (a group of Argentinean companies controlled by Dr. Ricardo Auriemma) and an Aruba corporation controlled by Dr. Auriemma. The shares of GMA were purchased for 6,000,000 Common Shares (2,600,000 to Miramar, 2,600,000 to Grupo R.A. and 800,000 to the Aruba corporation), and US$1,073,490 in cash to Grupo R.A. Pursuant to that transaction, Miramar was reimbursed $650,000 for out-of-pocket costs incurred in acquiring its interest in GMA and structuring the transaction, property maintenance expenditures in Argentina and due diligence work on the properties. An additional 300,000

Common Shares were issued as to 150,000 Common Shares each to two unrelated third parties for finders' fees.

On June 9, 1995, the Company acquired in an arm's length transaction all of the outstanding shares of RAA, a private Argentinean company, from American Resource Corporation, Inc. ("ARC") for 15,000,000 Common Shares. As part of the same transaction, Miramar Finance (Bermuda) Ltd. ("Miramar Bermuda"), a wholly owned subsidiary of Miramar, loaned $10,000,000 to ARC which was repaid in 1995. ARC has disposed of all 15,000,000 Common Shares issued to it in the RAA transaction.

GMA was transferred back to Dr. Auriemma on April 7, 2000, in part for consideration for settlement of outstanding issues associated with the San Jorge project and as part of the rationalization of Northern Orion's holdings in Argentina. At the same time, the San Jorge project was transferred from GMA to Minera San Jorge S.A. ("MSJ") and a "servidumbre" over surface and access rights was granted to MSJ. The following is a brief description of the Agua Rica and San Jorge exploration projects in which the Company has indirect interests.

Agua Rica Project

The Agua Rica copper/gold property covers an area of about 13.5 square kilometres and is located in Catamarca Province, Argentina. On May 5, 1996, RAA exercised an option (the "Agua Rica Option") to purchase all of the outstanding shares of Agua Rica S.A., a private Argentine company that owns the central mining claims of the Agua Rica property, for a purchase price of US$7.9 million. Pursuant to an agreement made in September 1993 (the "Joint Operating Agreement"), BHP Minerals International Inc. ("BHP") earned a 70% joint venture interest in the project by spending US$1 million on exploration and agreeing to reimburse RAA for all costs of exercising the Agua Rica Option. As at December 31, 2000, BHP had fully reimbursed the Company for the US$7.9 million paid to exercise the Agua Rica Option. Under the Joint Operating Agreement, exploration expenditures are shared between RAA and BHP on a 30-70 basis, respectively. During 2000, the Company contributed $4.4 million (1999 - $5.6 million) to the project, which includes the Company's 30% share of the total budget. In the second quarter of fiscal 2001, the Company elected to reduce its interest in the Agua Rica Project to approximately 29.3% from the original interest of 30%. Cash calls made by the operator will not be made by the Company and the reduction in carrying cost and the related reduction in accounts payable was reflected in the unaudited consolidated financial statements for the six months ended June 30, 2001.

Location and Access

The Agua Rica property is located approximately 30 kilometres north of the town of Andalgala in Catamarca Province, Argentina. The property is at an elevation of 3,300 metres. The original access to the property was by provincial highway to within 20 kilometres and then by four-wheel drive road. In 1997, a road to the property was completed 35 kilometres up the Potrero valley from Andalgala.

History

City Services Limited explored the Agua Rica property from 1969 to 1972. It carried out geological mapping and geochemical sampling and drilled 27 surface holes and 6 underground holes. Many holes were lost or had poor recovery, but some had 40 to 50 metre intersections of greater than 1% copper and gold grades in the range of 0.3 grams per tonne to 0.5 grams per tonne. In 1994, under the Joint Operating Agreement, BHP commenced a work program of mapping, surface sampling and drilling. Follow-up drilling in 1995 intersected thick intervals of near surface, supergene-enriched chalcocite and

covellite mineralization containing significant gold, silver and molybdenum. By the end of 1998, more than 67,000 metres of drilling in 176 holes had defined continuous copper-gold-molybdenum mineralization over an area of 2,000 metres by 1,200 metres and to depths of up to 600 metres below surface.

RAA and BHP are continuing with a work program that is designed to advance the project towards completion of a final feasibility study. Work completed in 1998 included 300 metres of underground drifting, collection of 300 tonnes of bulk sample, pilot mill testing as well as revised capital and operating cost estimates. There was no material activity on the property in 1999 or 2000 as all the physical work necessary to support a bankable feasibility study has been completed. Base-line environmental studies are ongoing.

Geology and Mineralization

Basement rocks near Agua Rica consist of Cambrian-Ordovician metamorphic schists and garnet gneisses that were intruded by an Ordovician-age granite (Capillitas Batholith) and a subsequent cluster of Miocene age porphyries (Farallon Negro Complex). The oldest known intrusive near Agua Rica is the Melcho Monzonite with an age of 8.6 million years. Intrusive activity peaked overall at 7 to 8 million years, but persisted until 5.2 million years (dacite dykes at Capillitas).

The oldest rocks at Agua Rica are Paleozoic metasedimentary units that form the wallrock to the mineralized intrusive complex. The metasediments are intruded by granite, aplite and pegmatite in the Morro Alumbrera area. At Quebrada Seca Norte (Mi Vida) and Trampeadero, the metasediments are intruded by porphyry bodies and are altered mainly to quartz and sericite. Immediately west of Agua Rica the granite has a low-angle fault contact relationship with underlying metasediments suggesting it was thrust over the metasediments.

Dacitic porphyries with well-developed stockworking veins and strong quartz-sericite alteration underlie the central area, containing the principal mineralized areas. The porphyries are cut by an igneous/hydrothermal breccia that has been traced over a vertical extent exceeding 1,000 metres. Upper portions of the breccia exhibit advanced argillic alteration and deeper in the system quartz-sericite alteration is predominant. Supergene enrichment has led to almost complete replacement of chalcopyrite with covellite and chalcocite. Near-surface, high-grade chalcocite zones gradually change downward through the mineralization into mixed chalcocite and covellite zones and then into disseminated covellite zones. Leaching and enrichment is most intense in the central area coincident with silica stockworking and quartz-sericite-pyrite alteration at Quebrada Seca Norte (Mi Vida). Molybdenite occurs primarily as clusters on the edges and in the centres of the veins. In deeper areas, anomalous values of sulphur, arsenic, lead and zinc occur with the copper mineralization.

The presence of higher grade copper (greater than 1%) mineralization in three discrete bodies of supergene enrichment over Quebrada Seca Norte (Mi Vida), Filo Amarillo, and Trampeadero implies that a more extensive enriched zone has been dissected by erosion. Higher-grade gold mineralization (greater than 0.5 grams per tonne) is located on the western side of Quebrada Minas and in hydrothermal breccias in western Trampeadero. Molybdenite is present throughout the system with higher grades occurring in Trampeadero, Filo Amarillo (greater than 0.07%) and within a deep zone on the south side of Quebrada Seca Norte (Mi Vida).

Geological Resources

In February 1998, BHP reported a new resource estimate, based on 151 diamond drill holes totalling approximately 58,000 metres. At the higher copper cut-off grades, the results show an increase in tonnage of about 30% compared to the previous estimate that was based on 103 holes. A summary of the new estimates of the size and average grades of the mineral resource (in millions of tonnes), shown for different cut-off grades, is as follows:

Cut-off	Tonnes (millions)	Copper %	Molyb-denum %	Gold (g/t)	Silver (g/t)	Measured	Indicated	Inferred
0.2%Cu	1,714	0.43	0.032	0.17	3.0	52%	25%	23%
0.4%Cu	750	0.62	0.037	0.23	3.2	70%	21%	9%
0.7%Cu	167	0.99	0.036	0.32	3.3	92%	7%	1%
1.0%Cu	60	1.31	0.040	0.35	4.0	98%	2%	<1%

The resource estimates were prepared in accordance with National Instrument 43-101, The Toronto Stock Exchange's "Disclosure Standards for Companies Engaged in Mineral Exploration, Development & Production" and the Canadian Institute of Mining and Metallurgy classification system. The qualified person responsible for the reserve and resource estimates was Dean McDonald, PhD, P Geo, Exploration Manager, Miramar Mining Corporation.

These were based on results available at the date of calculation. Since the completion of the resource estimation, an additional 25 drill holes have been completed but have not been incorporated in the calculation. In addition, based on drilling to December 31, 1997, BHP has estimated a geologic gold resource in leached caps, which overlie the higher-grade sulphide mineralization using a 0.25 g/t gold cut-off grade, which was publicly disclosed by Northern Orion. This gold may be amenable to recovery by heap leach methods.

Tonnes	89 million
Gold Grade	0.41 g/t
Contained Gold (oz)	1.2 million

These were based on results available at the date of calculation and do not incorporate the results of the abovementioned drill holes completed in 1998.

It has not been established that the gold mineralization at the property may be economically mined.

Initial Feasibility Study

In November 1997, the joint venture released a positive initial feasibility study (the "Study") on the Agua Rica Project, which recommended proceeding with the work to complete a final feasibility study and development plan for the project. The Study was based on resources estimated for the first 40,000 metres of drilling in 103 drill holes completed on the project to the end of 1996. The Study evaluated two development options, both utilizing conventional open pit mining, milling, flotation and concentrate shipment.

The 60K Case examined a single mill line processing 60,000 tonnes per day ("TPD") of ore throughput, while the 120K Case examined adding a second mill line after year two of production, raising the plant throughput to 120,000 TPD from year three on.

Pit plans were developed by BHP for the 60K and 120K cases, which are summarized as follows.

	60K Case	**120K Case**
Cut-off Grade	0.4% Cu	0.2% Cu
Daily Ore Production	60,000	120,000
Mine Life (years)	24.4	17
Tonnes (000s)	512,351	681,389
Grades		
- Copper (%)	0.66	0.59
- Gold (g/t)	0.26	0.25
- Silver (g/t)	3.44	3.61
- Molybdenum (%)	0.034	0.033
- Copper Equivalent (%)*	0.97	0.89
Waste (billions of tonnes)	1.2	1.2
Strip Ratio	2.35	1.80

* - The copper equivalent grades are based on in-situ values at the following metal prices: copper at US$0.80/lb, gold at US$300 per ounce, silver at US$5 per ounce and molybdenum at US$4 per pound. Actual values received will depend on the metal recoveries that may vary for different minerals.

The mine plans were based on information available at the time and do not incorporate the results of the last 73 drill holes, totalling 27,000 metres, including the newly defined Filo Amarillo zone, completed in 1998. New resource and reserve models are to be prepared in 2000/01 incorporating the geological and metallurgical data generated during 1998 and 1999 once a final metallurgical flow sheet has been selected.

Crushing and grinding tests were completed on six ore composites, indicating the ore to be relatively soft. Approximately 200 flotation tests have been completed on ore composites and, based on these tests, recoveries were estimated to be 87% for copper, 50% for gold and 65% for molybdenum producing a copper concentrate grading 33% copper and a separate molybdenum concentrate. Phase 2

pilot-scale metallurgical work was completed in late 1999. Results from the testing of low-grade copper mineralization (0.2 to 0.4%) commonly yield 80% recovery. Higher-grade copper mineralization typically produced concentrates greater than 30% copper with better than 90% recovery. Some ore types also yield 70% recovery of molybdenum.

Capital costs have been estimated (in first quarter 1997 dollars) to be US$767 million for the 60K Case and US$1.1 billion for the 120K Case. The capital costs were estimated based on a mix of quotations, experiences of the nearby Alumbrera mine which has a similar capacity, and factored costs from BHP's similar mines elsewhere.

Future Work

The initial Study demonstrates the potential feasibility for the development of a large-scale copper-gold-molybdenum mine at Agua Rica based on 1997 metal prices. Since the publishing of the Initial Feasibility Study, all of the fieldwork necessary for a Bankable Feasibility Study has been completed. The remaining work consists primarily of optimisation studies regarding the evaluations of the mining and processing alternatives together with operating models that could offer the greatest potential returns. Coincident with the optimisation studies, the environmental baseline studies will be concluded. BHP has presented a budget for the Agua Rica project for the period July 1, 2001, to June 30, 2002. The proposed budget calls for expenditures of US$1.5 million. The proposed budget and work program is currently being reviewed by the Company.

Fiscal Stability Application

The Agua Rica joint venture filed a fiscal stability application for the project in 1998. The application was approved and guarantees protection for the project from increases in taxes, import duties, royalties and other government-controlled costs for a period of thirty years.

San Jorge Project

The original San Jorge copper/gold property consisted of seven mining concessions (covering about 5 1/2 square kilometres) and 35 mineral claims (covering about 102 square kilometres) owned by MSJ. The purchase price for the seven concessions was US$4.015 million. During 2000, the Company expended $0.414 million in exploration and development expenses on the San Jorge project (versus $1.7 million in 1999). In fiscal 2000 the Company wrote down the San Jorge project by $22.027 million due continuing low metal prices. The property remains in good standing.

Location and Access

The San Jorge property is located approximately 90 kilometres northwest of the city of Mendoza in Mendoza Province, Argentina and 250 kilometres northeast of Santiago, Chile. The property is accessed from the paved Mendoza-Santiago highway to the town of Uspallata and then 40 kilometres north on a good gravel highway along the Uspallata valley. The property is at an elevation of 2,500 metres and the deposit occurs as a small hill surrounded by flat alluvium plains.

History

Several test pits were dug at San Jorge in the 1960s to investigate outcropping copper-oxide mineralization and in 1964 Compania Minera Aguilar ("Aguilar") optioned the property. Over the next four years, Aguilar completed approximately 950 metres of trenching, 111 kilometres of induced

polarization geophysical surveys ("IP") and 32 drill holes for 4,894.5 metres of core. Exploraciones Falconbridge Argentinos ("Falconbridge") optioned the property in 1973 and drilled six holes for 1,126 metres. Falconbridge also sent samples for metallurgical testing.

RAA optioned the property in 1992 and, between 1993 and 1995, 45 reverse circulation holes for a total of 5,518 metres and two core holes totalling 165 metres were drilled. In 1994, metallurgical testing of oxide mineralization from various cutting samples and of an enriched zone was conducted. From 1994 to 1996, 43 reverse circulation holes were drilled for 3,942 metres and eight lines totalling 17.6 kilometres of IP were surveyed over and beyond the mineralized outcrop. The option to RAA was terminated and GMA purchased the property in 1995. Between September 1995 and February 1996 a 5,746-metre drill program was conducted on the property. From this drilling, samples were taken for metallurgical testing.

In March 1999, GMA and Argentina Mineral Development ("AMD"), an associate of Climax Mining of Australia, entered into an agreement (the "AMD Agreement") that allows for the consolidation of a large land package surrounding the San Jorge property. Both companies agreed to contribute their property holdings and mining rights in San Jorge and the surrounding area into a newly formed holding company with GMA owning 85% and AMD having the remaining 15%. This new company, Minera San Jorge S.A. ("MSJ") is to continue the development of the property, working towards producing a bankable feasibility study. AMD's ownership in the holding company is to be redeemed in exchange for a 2% net smelter return royalty ("NSR") on the mine developed if MSJ produces a feasibility study within three years, obtains financing within another year and commits to construction of a mine within another six months. If AMD's interest were redeemed, GMA would then own 100% of the new company. If the project does not proceed, the ownership structure will remain in place and will allow for potential disposal of each party's interest.

In April 2000, GMA's holding in the San Jorge property was transferred without cost or penalties to MSJ. The transfer was part of the reorganization of Northern Orion's Argentine holdings and part of the settlement with Dr. Ricardo Auriemma.

Geology and Mineralization

San Jorge mineralization consists of a porphyry copper-gold deposit. Mineralization at San Jorge trends northeast and occurs in four approximately horizontal but irregular layers, from top to bottom as follows:

Leached: A leached cap with copper grades averaging 0.15% copper or less, primarily as green and black copper oxides that should be amenable to dump leaching.

Oxide: Best developed along the western contact of the granite porphyry with the clastics containing malachite, chrysocolla, tenorite and pitch limonite with grades averaging approximately 0.5% copper and 0.25 grams of gold per tonne at a 0.1% copper cut-off.

Enriched: Associated with areas of intense faulting and repetitive water recharge, and occurs as sooty and steely chalcocite, covellite, digenite and subordinate chalcopyrite averaging approximately 0.7% copper and 0.20 grams of gold per tonne at a 0.1% copper cut-off.

Primary: Three high-grade areas have been defined in clastics sedimentary units. Good copper grades in both sedimentary and intrusive rocks have been detected to a depth of 495 metres below surface. Copper occurs dominantly as chalcopyrite with very minor bornite. At a 0.4% copper cut-off, the primary mineralization has an average grade of 0.5% copper and 0.2 grams of gold per tonne.

Gold occurs in native form and uniformly grades 0.2 grams of gold per tonne throughout the copper deposit. Silver distribution is approximately proportional to copper grade and averages 3.5 grams of silver per tonne overall.

Resources

The total indicated and inferred resource at San Jorge for oxide, enriched, and primary mineralization, using a 0.25% copper cut-off, is estimated by Northern Orion to be 381.4 million tonnes grading 0.39 % copper and 0.15 g/t Au for a contained 1.49 million tonnes of copper and 1.8 million ounces of gold. At a 0.4% copper cut-off, the total resource is reduced to 113.1 million tonnes grading 0.60% copper and 0.18 g/t gold for a contained 670,000 tonnes of copper and 636,000 ounces of gold.

The Company, based on open pit mining and heap leaching of the oxide, has estimated an indicated resource and secondary enriched mineralization for solvent extraction and electrowinning (SX/EW) for copper recovery. Assuming a US$0.85 per pound copper price, a 0.25% copper cut-off, and a 2% NSR with incremental dump leach of low-grade material, an in-pit resource has been estimated at 57.3 million tonnes grading 0.61% copper, for 348,900 tonnes of contained copper. Primary copper-gold mineralization could then potentially be evaluated for a primary milling style of operation, producing concentrates. At today's metal prices this is not economic but gives an idea of the potential of the property if metal prices were to improve.

Metallurgy

In 1997, a metallurgical test program was undertaken to determine the response of the ore to bacterial oxidation. Preliminary results indicated recoveries up to 75% in 250 days. Flotation tests on primary mineralization have given copper recoveries of up to 92% producing concentrates grading 25% copper. Gold is mostly free milling and recoveries of 60% have been achieved.

Exploration

Drilling by GMA and AMD has encountered indications of additional copper mineralization to the northeast, east and southeast of the main San Jorge deposit in a similar geologic setting to the main San Jorge deposit. These results indicate the potential for the expansion of the deposit beyond the current resource.

Areas to the east and southeast of San Jorge, within the expanded property area, contain large IP chargeability anomalies that coincide with anomalous copper-bearing, intercepts in the core of a reconnaissance drill hole, indicating potential for satellite copper systems similar to the San Jorge deposit. The Company is currently evaluating the potential for exploring for and developing additional resources in the satellite areas. However, limited work is planned for 2001 in light of the continued poor metal prices.

Cuban Properties

Acquisition of Properties

The Company entered into a letter of intent dated May 1, 1995, with Miramar and subsequently entered into an agreement dated October 4, 1995 (the "Transaction Agreement"), with Miramar, Red Lion Management Ltd. ("Red Lion") and Richard Dewinetz ("Dewinetz") (collectively the "Vendors") pursuant to which on December 20, 1995, the Company purchased (the "MMI Transaction") from the Vendors all of the outstanding shares of Minera Mantua Inc. ("MMI") in exchange for 24 million Common Shares of

the Company. MMI, through Minera Cobre S.A. ("Cobre") and Minera Delita S.A. ("Delita"), both of which became wholly-owned subsidiaries of MMI prior to the completion of the MMI Transaction, has a 50% working interest in the Mantua copper project (the "Mantua Project"), and had the right to earn a 50% working interest in the Delita gold project (the "Delita Project"), respectively. The Mantua Project and the Delita Project are both located in Cuba and are referred to collectively herein as the "Cuban Projects".

Prior to the MMI Transaction, Miramar owned all of the outstanding shares of Cobre and Delita. Miramar acquired all of the outstanding shares of Cobre and Delita from Matlock Mining, N.L. ("Matlock"), an Australian company, pursuant to an agreement dated March 1, 1993 (the "Matlock Purchase Agreement"). Pursuant to the Matlock Purchase Agreement, Miramar paid Matlock share consideration having a value of approximately $475,000 in respect of the purchase price for the shares of Cobre and Delita and was obligated to pay a further $350,000 to Matlock (which amount was subsequently paid by the Company). The Matlock Purchase Agreement also provides that (i) Cobre is obligated to repay to Matlock the $750,000, plus interest, which was invested by Matlock in the Mantua Project and the Delita Project prior to the sale of the shares of Delita and Cobre by Matlock to Miramar pro rata with the return of equity to Miramar, and (ii) Matlock is entitled to receive 12% of the difference between all profits received by Cobre and Delita from their 50% working interests in the respective projects and administrative expenses (to a maximum of US$150,000 per year for each company) of Cobre and Delita.

Prior to the MMI Transaction, Miramar transferred to MMI all of the outstanding shares of Cobre and Delita and the obligation to pay $350,000 to Matlock and converted all of its advances to fund the Cuban Projects to April 30, 1995 into shares of MMI. The aggregate cost, as at April 30, 1995, of Miramar's interest in Cobre and Delita, including the amount of $350,000 payable to Matlock and amounts advanced by Miramar to Cobre and Delita to fund the Cuban Projects, was $7,188,261. A wholly owned subsidiary of Miramar was indebted to each of Red Lion and Dewinetz in the amount of $75,000, which amounts were used for the Cuban Projects. Prior to the MMI Transaction, Red Lion and Dewinetz converted such indebtedness into shares of MMI.

Pursuant to the MMI Transaction, Miramar, Red Lion and Dewinetz exchanged all of their shares of MMI for 23,484,850 Common Shares, 257,575 Common Shares and 257,575 Common Shares of the Company, respectively, at an ascribed price of $2.50 per share. For tax purposes the shares of MMI were transferred to the Company at the respective cost bases of such shares to the Vendors. Accordingly, in the event the Company disposes of the shares of MMI at an amount in excess of such cost bases, the Company will realize a taxable gain on such disposition.

The reserve and resource estimates for the Cuban projects have been prepared in accordance with proposed OSC National Instrument 43-101 and the Canadian Institute of Mining and Metallurgy classification system.

Mantua Project

The Mantua property contains a secondarily enriched copper deposit. It is located in Pinar del Rio Province, western Cuba, 240 kilometres from Havana. The property consists of an 8 square kilometre production concession and an adjoining 11.2 square kilometre area of interest. The site is reached via a four-lane highway from Havana to Pinar Del Rio, which is 65 kilometres east of Mantua. A paved secondary road then links with the site.

Acquisition Agreement

Cobre acquired a 50% working interest in the Mantua Project pursuant to an agreement with Geominera SA ("Geominera") dated August 13, 1993, (as amended, the "Cobre Association Agreement"). Geominera is a Cuban corporation formed by the Cuban Ministry of Basic Industry for the purpose of holding mineral rights and entering into agreements with foreigners for the development of such mineral rights. The Cobre Association Agreement and the related articles of incorporation are the constating documents of Cobre Mantua S.A. ("Comantua"), a Cuban joint enterprise the shares of which are allocated on a 50/50 basis between Geominera and Cobre, with each party's equity capital contribution agreed to have been US$1 million. Geominera's equity capital contribution was comprised of the exclusive right to explore, develop, mine and exploit the Mantua Project, together with all previous studies and investigations relating to the Mantua Project. Cobre's equity capital contribution was comprised of the feasibility study on the Mantua Project that was prepared in 1993 together with a cash contribution of US$20,000. Profits of Comantua are to be distributed 50% to Cobre and 50% to Geominera. Pursuant to the Cobre Association Agreement, Cobre was required to negotiate and obtain all financing necessary for the commercial development of the Mantua Project by June 30, 1995. However, subsequent to the date of the Cobre Association Agreement, Geominera agreed that the June 30 date would be waived so long as Cobre obtained financing when required to develop the Mantua project.

Under the Cobre Association Agreement, in order to repay loans received by Comantua from Cobre, Cobre is entitled to the total net income (after satisfaction of all current obligations in respect of third party financing) of the Mantua Project during the first two years of operations of the mine and the industrial installations. If any such loan amount remains outstanding at the end of that two-year period, Cobre will continue to be entitled to no less than 75% of the net income of the Mantua Project until all such amounts owed are repaid. All major decisions of Comantua require the approval of the representatives of each of Geominera and Cobre; however, all ordinary operating decisions are made by the operations manager who is nominated by Cobre for a period of time equal to 1.5 times the period of time required for Cobre to receive a return of its capital investment.

History and Exploration

In the early 1960s workers from the Instituto de Recursos Minerales, a Cuban government agency, explored the Mantua copper deposit. In 1964 copper mineralization was discovered beneath an iron rich gossanous cap by an exploration program, including drilling, supervised by Soviet geologists. In 1992 Marc Rich & Co., a United Kingdom-based investment firm, completed an additional 12 drill holes, geotechnical investigations and metallurgical test work.

In late 1993 Minera Cobre ("MC") commenced detailed investigations, including an additional 13 drill holes, bulk sampling and metallurgical testing. An 11 tonne metallurgical sample was collected from one of the test shafts for metallurgical testing. A preliminary metallurgical scoping study was completed in the latter part of 1993 on material collected from one drill hole and a metallurgical test program was commenced in February 1994 on material from the 11 tonne bulk sample.

In the summer of 1994 MC drove a 145-metre exploration tunnel to access the ore body and in September and October 1994 extracted 600 tonnes of material for pilot scale metallurgical testing. A pilot plant was operated using material extracted from the tunnel. Pilot plant operations were conducted in two phases, in November and December 1994 and from January to March 1995. Results of these operations confirmed the viability of the preferred processing method.

In 1995 MC identified significant gold values in the gossan cap overlying the main copper deposit, as well as payable gold credits in the copper ore itself, and a zone of anomalous gold values parallel to the copper deposit. A program of work to evaluate the potential for an economic gold operation to recover gold values from the gossan cap was commenced in February 1995. A total of 65 drill holes were completed, delineating a zone of potentially commercial gold values over the centre of the copper deposit. Metallurgical testing has demonstrated the amenability of this material to conventional heap leach recovery methods.

In 1996 a regional exploration program was initiated to identify additional gold occurrences in gossans, saprolites and regional shear structures. In excess of six hundred surface samples were taken throughout the region and some minor gold occurrences were identified.

Drilling in 1997 involved two main phases that included nine diamond drill holes for 655 metres and eight diamond drill holes for 684.7 metres, respectively. Both programs were primarily designed to define the distribution of near surface, gold gossan; however, the second program included two deep holes. Late in the year a single hole was drilled to collect a metallurgical sample.

Geology and Mineralization

The Mantua copper deposit is a secondary enrichment of copper mineralization produced by the weathering of primary sulphide mineralization of volcanogenic-exhalative origin. Copper has been leached from trace amounts of sulphide copper mineralization (chalcopyrite) and re-deposited beneath a gold-rich gossanous cap.

Primary sulphide mineralization, both massive and disseminated, occurs within a 50 to 100 metre thick sequence of inter-layered basic volcanic rocks, shale, siltstones and sandstones. Folding and thrust faulting in the Late Mesozoic was focused between the more competent limestone units causing extensive shearing and brecciation of the volcanic and sedimentary sequence.

The folding of the Mantua and surrounding area rocks is interpreted as a broad syncline and anticline defining an open "S" shape. The eastern limb of the syncline contains the majority of the mineralization defined by drilling. The Mantua copper deposit forms an elongate lens with a northeast to southwest strike, concordant with the enclosing formations. The deposit dips 50 to 70 degrees to the west and has a strike length of 1,300 metres.

Unoxidized mineralization is dominated by pyrite, with some chalcopyrite and sphalerite. The leached cap oxide zone is composed of lateritic iron oxides with essentially no copper content. The supergene zone below this leached cap consists mainly of chalcocite, with cuprite, covellite and some native copper. The secondary-enriched copper zone can be divided into three distinct ore types that may be segregated during mining operations.

Geological Resources

The reserves and resources at Mantua have been calculated by the Company, and have been confirmed by qualified third parties. Within the proposed open pit and assuming a copper price of US$0.85 per pound, proven and probable reserves are estimated to be 7,525,000 tonnes grading 2.74% copper containing 206,212 tonnes or 454.6 million pounds of copper and additional measured and indicated resources are estimated to be 4,454,000 tonnes grading 0.76% copper containing 33,850 tonnes or 74.6 million pounds of copper.

Mine Plan and Capital Cost

After a thorough review of previous test work and a rigorous program of laboratory and pilot tests conducted in Cuba, Chile and Canada from 1993 through 1998, a processing scheme was selected which utilizes modern, proven processing technologies to extract the maximum amount of copper economically possible. These processing steps include grinding, agitation leaching, solvent extraction and, finally, electrowinning for the production of copper cathodes.

The copper ore will be fed as mined directly to an SAG (semi-autogenous grinding) mill, followed by leaching in agitated tanks. A series of counter current decantation thickeners will then wash out all of the copper-containing acid solution. Copper-containing acid solutions will be processed through a solvent extraction circuit to form a strong electrolyte solution from which copper cathodes will be produced by conventional electrowinning. Tailings will be pumped to a nearby impoundment for disposal based on an environmentally sound design.

The preliminary design is for processing facilities capable of treating 750,000 tonnes of high-grade copper ore per annum.

Phase 1 Gold Leaching

Construction of the Phase 1 gold leaching at the Mantua Project commenced in March 1997 and concluded in February 1998. Phase 1 consisted of a heap leach gold operation that was planned to recover approximately 70,000 ounces of gold from the gossan cap over a two-year period at a capital cost of approximately US$11.6 million. Removal of this material was intended to allow access to the high-grade copper reserve under the gossan cap.

Mining of gold ore commenced in February 1998 and was concluded in September 1999. Prior to achieving commercial production, all costs of start up operations and related interest and overhead were capitalized. During the operation, recovered gold was below expectations and totalled 31,389 ounces of which the Company's share was 15,694 ounces. Due to higher than expected ore clay and fines content field leach times had to be extended to 70 days from the designed 28 days and ultimate gold recoveries were 50% of what was forecast.

Phase 2 Copper Mining

The Phase 2 copper operation is planned to commence after gold leaching is completed. Evaluation of the copper phase is proceeding, with production targeted to average about 40 million pounds of copper cathode per year at a cash cost of US $ 0.45 per pound. Capital costs are anticipated to be US$ 50 million with a moderate pressure and temperature ferric leach process. This process utilizes proven technologies that are in use at other mining operations.

Preliminary financial evaluation by the Company, independently reviewed by Bateman Project Holdings Limited, indicates that an average annual production rate of 39 million pounds of copper cathode can be achieved with direct operating costs of US $0.445 per pound over a 11 year mine life. This would place the operation in the lower quartile of world copper production costs. Capital costs including contingency are estimated at US $48.5 million.

In August 2001, the Company and International Barytex Resources Ltd. ("Barytex") announced that they have entered into an option agreement whereby Barytex may acquire the undivided 50% interest

of the Company in the Mantua Copper Project in Cuba by the acquisition of 100% of the issued and outstanding shares in Minera Mantua Inc., a wholly-owned subsidiary of the Company. Geominera S.A., a Cuban company controlled by the government of Cuba, holds the remaining 50% interest in the project.

In order to exercise the option, Barytex must:

- assume and pay all carrying costs relating to Northern Orion's operations in Cuba and the Project;
- complete a bankable feasibility study within 18 months;
- arrange all financing required in order to commence commercial production; and
- commence construction of the project within 120 days of making a production decision.

The project is subject to approximately US $28 million in subordinated debt owing to the Company from Geominera S.A. in respect of past advances from the Company to fund the exploration and development of the project including mining of a gold-enriched gossan capping the copper deposit.

Under the terms of the Agreement, Barytex may acquire the subordinated debt from the Company, thereby significantly enhancing the economics of the project, in consideration for 4.5 million shares of Barytex. The project is subject to a 2.5% net smelter return royalty from attributable production.

Barytex has retained Hatch, an international engineering firm, to prepare a report on the Mantua Copper Project to qualify the transactions for regulatory approvals.

Barytex has stated that it believes that the Mantua project can generate positive returns at low copper prices due to the high grade of the deposit and the anticipated low operating costs per pound of copper produced. The existing infrastructure will be of significant benefit in the development of the project and its ongoing operation. Barytex anticipates further enhancements to the project economics as the feasibility study progresses.

Delita Project

In 1998 the Delita Project was placed on hold due to low gold prices and a write down of $8.4 million was recorded representing the costs of exploration of the project to 1998. In March 2000, the Company released its interest in the Delita project and returned the project to Geominera.

Item 3 – Risks and Uncertainties

The Company operates almost exclusively in foreign jurisdictions and is dependent on world metals and currency markets that may present risks to the future prospects of the Company.

Risks Associated with the Mining Industry

The company is engaged in the exploration for and the development of mineral deposits. These activities involve significant risks which careful evaluation, experience and knowledge may not, in some cases, eliminate. The commercial viability of any mineral deposit depends on many factors, not all of which are within the control of management. Some of the factors that will affect the financial viability of a given mineral deposit include its size, grade and proximity to infrastructure. In addition, government regulation, taxes, royalties, land tenure, land use, environmental protection and reclamation and closure obligations could have a profound impact on the economic viability of a mineral deposit.

The Company is not able to determine the impact of potential changes in environmental laws and regulations on its financial position due to the uncertainty surrounding the form such changes may take. As mining regulators continue to update and clarify their requirements for closure plans and environmental protection laws and administrative policies are changed, additional reclamation obligations and further security for mine reclamation costs may be required. It is not expected that such changes will have a material effect on the operations of the Company.

Risks Associated with Financial Markets

Both Argentina and Cuba have currently fixed their currency to the US dollar and removal of these exchange controls could significantly affect the exchange rates in terms of the Canadian dollar. Continued weakness of the Canadian dollar in comparison to the US dollar will also affect the results of operations. Increasing costs of labour, supplies and energy may affect planned operations in future years. The potential for increased input prices is taken into consideration when preparing plans for future exploration, development and mine construction.

Risks Associated with the Market for Metals and Minerals

The prices of metals and minerals are subject to relatively large changes over short time periods. These prices can have a direct impact on the commercial viability of production from mineral properties.

Risks Associated with Foreign Operations

The Company's investments in foreign countries such as Argentina and Cuba carry certain risks associated with different political and economic environments. The Company undertakes investments in various countries around the world only when it is satisfied that the risks and uncertainties of operating in different cultural, economic and political environments are warranted.

Risks Associated with Environmental Protection Requirements

There is no material financial or operational effect of environmental protection requirements on the Company's capital expenditures, earnings and competitive position in the current financial year and the Company cannot predict whether such effects in future years will be manageable and reasonable relative to the expected benefits.

Item 4 - Selected Consolidated Financial Information

All dollar figures are in thousands except for per share data that is in dollar amounts.

	2000 [1]	**1999** [1]	**1998** [1]	**1997** [1]	**1996** [1]
Total revenue	66	2,987	3,629	637	2,593 [2]
Loss	23,804	18,167	21,287	7,126	1,526 [2]
Loss per share ($)	0.28	0.25	0.29	0.10	0.02 [2]
Total assets	83,071	119,265	131,411	138,621	123,819
Long-term debt	27,254	27,669	33,828	13,567	1,370

(1) As at and for the year ended December 31

(2) Includes a gain on disposal of mineral properties of $1.3 million or $0.018 per common share

For the Three Months Ended (unaudited)

All figures expressed in thousands of dollars, except per share amounts

	Jun 30 2001	Mar 31 2001	Dec 31 2000	Sep 30 2000	June 30 2000	Mar 31 2000
Revenue	2	20	23	29	8	6
Expenses	415	342	22,490	302	378	700
Loss	413	322	22,467	273	370	694
Loss/Common share	0.00	0.01	0.25	0.01	0.01	0.01
Total Assets	84,230	83,701	83,071	103,035	102,359	102,237
Total Liabilities	31,811	53,575	52,623	34,587	33,638	25,773
Share Capital	149,280	126,574	126,574	126,500	126,500	126,500
Deficit	96,861	96,448	96,126	58,052	57,779	50,036

Fiscal 1999
All figures expressed in thousands of dollars, except per share amounts

	Dec 31 1999	Sep 30 1999	June 30 1999	Mar 31 1999
Revenue	80	464	1,124	1,319
Expenses	5,150	8,045	4,941	3,018
Loss	5,070	7,581	3,817	1,699
Loss/Common share	0.12	0.10	0.01	0.02
Total Assets	119,265	123,141	132,128	132,139
Total Liabilities	46,607	45,413	46,819	43,013
Share Capital	122,000	122,000	122,000	122,000
Deficit	49,342	44,272	36,691	32,874

The Company has not paid any dividends on the Common Shares and has no dividend policy with respect to the payment of dividends.

Item 5 - Management's Discussion and Analysis of Financial Condition and Results of Operations

Overview

The Company is primarily engaged in the development of its main mineral properties – Agua Rica in Argentina and Mantua in Cuba. Financial constraints on the Company for the past three years have necessitated a significantly reduced scale of all corporate activities. Consequently, many property interests have been evaluated in light of such constraints and released.

Results of Operations

The Company recorded a loss of $23.8 million or $0.28 per share in 2000 compared to a loss of $18.2 million or $0.25 per share in 1999. The loss in 2000 includes write-downs on mineral properties (primarily a write down of the San Jorge project), and other assets of $22.3 million or $0.26 per share compared to write-downs of mineral properties, inventories, other assets and marketable securities of $12.3 million or $0.17 per share in 1999. Excluding write-downs, the Company's loss in 2000 of $1.6 million compares to a loss of $4.8 million in 1999. The loss in 1999 reflected the losses from the gold operations in Cuba, the costs of continued curtailment of exploration activities in Argentina and Cuba and costs of depreciation related to the Cuban operating assets. During 2000, the decreased costs were due in part to the reduced scale of operations, a 51 percent reduction in management fees charged by Miramar and an 85 percent reduction in termination and severance costs.

Exploration and Development Activities

Agua Rica

Work continued at a reduced level in 2000 at the 30% owned Agua Rica Project in Argentina. The project operator, BHP, completed the 1999/2000 work program in June 2000. The Company's share of the work program (including management fees to the operator) in 2000 was approximately $682,000 (1999 - $2,895,000). To date, the Company has funded all required cash calls to meet its commitment to Agua Rica. Due to the persistent weak world copper price in 2000, activities at Agua Rica continued on a reduced scale from previous years. The 1999/2000 work program built on the work performed in completing the Initial Feasibility Study, which was issued in November 1997. The findings of this study indicated that a large low-cost mine could be developed that would have attractive returns on capital invested. On a long-term basis, the Company's share of the capital requirement to develop an open pit mine and concentrator at Agua Rica could be in excess of US$ 200 million.

Effective June 30, 2001, the Company has elected to reduce its interest in the Agua Rica Project to approximately 29.3% from its original interest of 30%. Cash calls made by BHP as operator will not be made by the Company to BHP with respect to cash calls made to June 30, 2001. A corresponding reduction in carrying cost and accounts payable was reflected in the Company's balance sheet in the second quarter.

Significant progress has been made in the first half of fiscal 2001 with the restructuring of the project that would result in having the BHP and Northern Orion interests held in a single corporate Entity. Each of the companies would own equity reflecting a 70%/30% ownership ratio, which was the ownership until the end of the second quarter of fiscal 2001. Management is continuing to examine all of the Company's options on how best to proceed with this important project including alternative operating scenarios and restructuring of holdings.

Mantua Copper

During fiscal 2000, the Company undertook to seek financing for a bankable feasibility study for the copper mining phase with negotiations underway for funding to complete this study. A final production decision for the copper phase is pending the results of this feasibility study. The Company's ability to develop the copper phase at Mantua is dependent upon obtaining third party financing. A production decision for the copper phase is dependent upon the results of the feasibility study.

Subsequent to the end of the second quarter the Company announced that it had entered into an agreement with International Barytex Resources Limited ("Barytex"). Under the agreement, Barytex has an option to acquire all of the shares of Minera Mantua Inc., a wholly owned subsidiary of the Company through which it holds its 50% interest in the Mantua Copper Project. To exercise its right, Barytex mush assume the costs and obligations of the Company's Cuban operation, finance and complete the bankable feasibility study and finance and build the copper mine and plant. During the option period, the Company may nominate two directors to the Barytex board. Subsequent to the exercise of the option, the Company would retain a 2% net smelter royalty in proceeds to Barytex from the mine.

The Company is also owed an aggregate amount of US$28 million by the project in consideration of previous expenditures. Barytex may, if it elects to proceed to production, acquire this debt in exchange for 4.5 million common shares of Barytex.

Liquidity And Capital Resources

General

The Company's financial condition in 2000 continued to be challenged principally due to the level of management fees and administrative overhead, the decision to continue to fund project expenses, and the consequential costs associated with amounts of funds advanced by the Company's controlling shareholder, Miramar Mining Corporation ('Miramar').

Due to the prospective nature of the mineral exploration business and the number of exploration properties held, the Company has a limited ability to generate sources of internal cash flow from operations. The Company has financed the acquisition, exploration and development of its properties through a combination of the issuance of common shares to the public, borrowings from Miramar, attracting other companies to joint venture the evaluation of properties and through third party borrowings.

When, and if, the Company places any of its exploration properties into production, it is anticipated that the resulting cash flows may become sufficient to sustain future operations, exploration and development. At present, the Company lacks the internal financial ability to advance any of its projects to the production stage.

Cash Resources and Liquidity

At the end of fiscal 2000, the Company had a working capital deficiency of $924,000 compared to a deficiency of $187,000 at the end of 1999. However, subsequent to the year ended December 31, 2000, the Company arranged a private placement in the amount of $1,500,000 as further described below under "2001 Financial Restructuring". These funds are not sufficient to continue the full evaluation of all of the Company's mineral prospects. Management of the Company is in the process of further evaluating all of the Company's property interests in order to ensure that value is realized. In addition, all contemplated expenditures are reviewed to ensure that cash commitments are prioritized and that existing capital resources are available to maintain the core properties currently held. Management is evaluating potential new sources of financing to meet the anticipated expenditures required to further advance its projects.

2001 Financial Restructuring

In 2000, Miramar made advances to the Company to fund working capital requirements and various exploration expenditures. Interest was charged on these advances at 8% per annum. As at the end of fiscal 2000, the amount owed to Miramar including advances and capitalized interest payable had accumulated to approximately $27.3 million.

In February 2001, the Company reached an agreement to restructure and partially settle amounts owing to Miramar. Under the agreement, Miramar agreed to convert convertible debenture, reduce the cap of royalty and net proceeds interest ('Royalty Interest') from $17,987,000 to $15,000,000 and restructure the remaining indebtedness of the Company to Miramar to $6.9 million.

The largest component of the debt restructuring was the conversion of Miramar's convertible debenture, resulting in the issuance of an additional 14.4 million shares to Miramar. A total of $21.2 million in debt was converted at a per share conversion price of $1.47.

The Royalty Interest entitles Miramar to receive the economic equivalent of a 2.5% net smelter return royalty on all of the Company's mining interests and to receive 50% of the net proceeds from the sale of any of the Company's mining interests, excluding the San Jorge project in Argentina. The total of the payments under the Royalty Interest is limited to $15.0 million.

In addition, under the agreement, the remaining indebtedness to Miramar, amounting to $6.9 million, was consolidated and restructured into two long-term convertible notes that may be converted at $0.15 per share and are due on demand after June 30, 2002. The new convertible notes no longer require that the Company maintain any minimum level of working capital as was previously required.

The Company continues its process of determining methods to obtain sufficient capital resources to meet its short and medium term financial requirements. Long-term liquidity and capital resources will be dependent upon the successful development and profitable operation of its mineral properties and the availability of capital from the equity markets. In order to maintain financial resources and take advantage of financial leverage, the Company will continue to negotiate with major financial institutions to obtain project financing.

Commitments

Until the end of the second quarter of fiscal 2001, the Company had accrued the contribution to the Agua Rica joint venture with BHP. Under the joint venture, exploration and development expenditures are made under the terms of annual work programs and are contributed to on the basis of the respective party's interest. Northern Orion's interest is 30% and BHP has a 70% interest. At June 30, 2001, the Company elected to reduce its interest in the Agua Rica Project to an approximate 29.3% interest. It is expected that total expenditures under the current 12-month program will be approximately $2.3 million (US$1.5 million), of which the Company's share is $0.68 million (US$0.45 million), including management fees. The Company currently does not have sufficient cash resources to fund its share of the program, and will have to continue to raise capital to maintain its current interest or continue to gradually reduce its interest to a 10% carried interest. This decision will have to be made annually on presentation of the annual budget to the Company by BHP, the operator of the joint venture.

Outlook

Advanced Stage Projects

The Company has evaluated, on a pre-feasibility basis, the potential for developing an SX/EW operation at San Jorge. Even though the results were encouraging, management believes that the project economics could be more attractive with the definition of additional resources through further exploration drilling supplemented by a recovery in the copper price. The Company is seeking a third party with which to form a joint venture to undertake the necessary work program and to complete a final feasibility study.

Exploration Projects

In light of financial constraints, the Company has suspended exploration efforts in all non-core properties. The Company may perform exploration to generate additional new prospects as and when financial resources allow.

Item 6 - Market for Securities

The Common Shares are listed and posted for trading on The Toronto Stock Exchange. The Company's shares also traded on the Canadian Venture Exchange (formerly the Vancouver Stock Exchange) until February 28, 2001, when it voluntarily delisted from that Exchange.

Item 7 - Directors and Officers

The following table sets forth the names and municipalities of residence of the directors and officers of the Company, their positions held with the Company and their principal occupations.

Name and Municipality of Residence	Positions Held	Director Since	Principal Occupation
Norman Anderson [1] Vancouver, BC	Director	2000	President of Anderson & Associates
John K. Burns [1] Philadelphia, Pa.	Chairman of the Board and Director	1995	President & Chief Executive Officer, Frontier Resources Management Inc.
P. Terence O'Kane [1] Vancouver, BC	Director	1999	Self-employed Metallurgical Engineer
Stephen P. Quin [1][2] West Vancouver, BC	Director	1988	Executive Vice-President of Miramar Mining Corporation
Anthony P. Walsh [1][2] West Vancouver, BC	Director	1998	President and Chief Executive Officer, Miramar Mining Corporation
Stephen Wilkinson [1][2] North Vancouver, BC	President, Chief Executive Officer and Director	1999	Self-employed Businessman
David Cohen West Vancouver, BC	Chief Operating Officer	N/A	Self employed businessman
Robert Cross West Vancouver, BC	Director	2001	Managing Director of Vencourt Capital Inc.
Frank A. Lang West Vancouver, BC	Director	2001	President and Chairman of Valerie Gold Resources Ltd.
Sargent H. Berner Vancouver, BC	Corporate Secretary	N/A	Partner, DuMoulin Black, Barristers and Solicitors

Name and Municipality of Residence	Positions Held	Director Since	Principal Occupation
Marry P. Collyer Vancouver, BC	Assistant Secretary	N/A	Partner, DuMoulin Black, Barristers and Solicitors
Shannon Ross Burnaby, BC	Chief Financial Officer	N/A	Chief Financial Officer, Valerie Gold Resources Ltd.

(1) Member of executive committee.
(2) Member of audit committee.

Each of the individuals has been engaged in the principal occupation set forth opposite his name during the past five years with the exception of the following:

- Stephen Wilkinson, prior to May 1999, was a gold analyst with RBC Dominion Securities Inc.
- David Cohen, prior to December 1996, was Director of Business Development of Fluor Daniel Inc., an international engineering and construction company; and
- Shannon Ross, prior to 2000, was Controller with the Hunter Dickinson Group of companies and Dia Met Minerals Ltd.

Item 8 - Additional Information

The Company will provide to any person upon request to the Secretary of the Company:

1. Where the securities of the Company are in the course of a distribution pursuant to a short form prospectus or a preliminary short form prospectus has been filed in respect of a distribution,
   a. One copy of the AIF of the Company, together with one copy of any document, or the pertinent pages of any document, incorporated by reference in the AIF;
   b. One copy of the comparative financial statements of the Company for its most recently completed financial year together with the accompanying report of the auditor and one copy of any interim financial statements of the Company issued subsequent to the financial statements for its most recently completed financial year;
   c. One copy of the information circular of the Company in respect of its most recent annual meeting of the shareholders that involved the election of directors or one copy of the any filing prepared in lieu of that information circular; and,
   d. One copy of any other documents that are incorporated by reference into the preliminary short form prospectus or the short form prospectus and are not required to be provided under (i) to (iii) above; or,

2. At any other time, one copy of any other document referred to in paragraphs (a), (b) or (c) above, provided the Company may require the payment of a reasonable charge if a person who is not a security holder of the Company makes the request.

Additional information including directors' and officers' remuneration and indebtedness, principal holders of securities of the Company, options to purchase securities and interests of insiders in material transactions, where applicable, is contained in the management information circular of the Company for its most recent annual meeting of shareholders that involved the election of directors. Additional financial information is provided in the comparative financial statements of the Company for its most recently completed financial year. These documents are incorporated by reference herein. A copy of such documents may be obtained upon request from the Secretary of the Company.