IVANHOE MINES LTD.

Renewal Annual Information Form

FOR THE YEAR ENDED
DECEMBER 31, 2002

DATED MAY 20, 2003
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Forward-Looking Statements

Certain statements contained in this Annual Information Form respecting reserves, resources, plans, objectives and future performance of IVN’s business are forward-looking statements including, without limitation, the discussion about a feasibility study being performed on the Oyu Tolgoi Project and the discussion about a scoping study in respect of development of the Letpadaung deposit of the Monywa Copper Project. Forward-looking statements generally can be identified by the use of forward-looking terminology such as “may”, “will”, “expect”, “intend”, “estimate”, “anticipate”, “believe”, or “continue” or the negative thereof or variations thereon or similar terminology. These forward-looking statements involve risks and uncertainties relating to, among other things, changes in commodity prices, unanticipated reserve and resource grades, geological, metallurgical, processing, transportation, infrastructure and other problems, results of exploration activities, cost overruns, availability of materials and equipment, timeliness of government approvals, political risk and related economic risk, actual performance of plant, equipment and processes relative to specifications and expectations and unanticipated environmental impacts on operations. Actual results may differ materially from those expressed or implied by such forward-looking statements. Factors that could cause actual results to differ materially include, but are not limited to, those set forth herein under “Risk Factors”.

Currency and Exchange Rates

In this Annual Information Form, all funds are quoted in United States dollars unless otherwise indicated. References to “$” are to United States dollars, references to “Cdn$” are to Canadian dollars and references to “Aus$” are to Australian dollars. The Bank of Canada noon buying rates for the purchase of one United States dollar using Canadian dollars were as follows during the indicated periods:

(Stated in Canadian dollars)

<table>
<thead>
<tr>
<th></th>
<th>Year Ended December 31</th>
</tr>
</thead>
<tbody>
<tr>
<td>End of period</td>
<td>1.5796</td>
</tr>
<tr>
<td>High for the period</td>
<td>1.6184</td>
</tr>
<tr>
<td>Low for the period</td>
<td>1.5155</td>
</tr>
<tr>
<td>Average for the period</td>
<td>1.5703</td>
</tr>
</tbody>
</table>

The Bank of Canada noon buying rate on May 16, 2003 for the purchase of one United States dollar using Canadian dollars was Cdn$1.3667 (one Canadian dollar on that date equaled US$0.732).

The Bank of Canada noon buying rate on December 31, 2002 and May 16, 2003, respectively, for the purchase of one United States dollar using Australian dollars was Aus$1.7770 and Aus$1.5377 (one Australian dollar on those dates equalled US$0.5627 and US$0.6503, respectively).
Conversion Factors

For ease of reference, the following conversion factors are provided:

<table>
<thead>
<tr>
<th>Imperial Measure</th>
<th>Metric Unit</th>
<th>Metric Unit</th>
<th>Imperial Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.47 acres</td>
<td>1 hectare</td>
<td>0.4047 hectares</td>
<td>1 acre</td>
</tr>
<tr>
<td>3.28 feet</td>
<td>1 metre</td>
<td>0.3048 metres</td>
<td>1 foot</td>
</tr>
<tr>
<td>0.62 miles</td>
<td>1 kilometre</td>
<td>1.609 kilometres</td>
<td>1 mile</td>
</tr>
<tr>
<td>0.032 ounces (troy)</td>
<td>1 gram</td>
<td>31.1 grams</td>
<td>1 ounce (troy)</td>
</tr>
<tr>
<td>2.205 pounds</td>
<td>1 kilogram</td>
<td>0.454 kilograms</td>
<td>1 pound</td>
</tr>
<tr>
<td>1.102 tons (short)</td>
<td>1 tonne</td>
<td>0.907 tonnes</td>
<td>1 ton</td>
</tr>
<tr>
<td>0.029 ounces (troy)/ton</td>
<td>1 gram/tonne</td>
<td>34.28 grams/tonne</td>
<td>1 ounce (troy)/ton</td>
</tr>
</tbody>
</table>

Glossary of Geological and Mining Terms

**andesite**: a dark-coloured, fine grained extrusive rock.

**anomaly**: a departure from the norm which may indicate the presence of mineralization in the underlying bedrock.

**assay**: the chemical analysis of an ore, mineral or concentrate of metal to determine the amount of valuable species.

**breccia**: rock consisting of fragments, more or less angular, in a matrix of finer-grained material or of cementing material.

**carbonaceous**: containing carbon or coal, especially shale or other rock containing small particles of carbon distributed throughout the whole mass.

**chalocite**: a form of copper mineral ore that generally contains a high copper content.

**chalcopyrite**: a form of copper mineral ore that generally contains a low copper content.

**concentrate**: a product containing valuable metal from which most of the waste material in the ore has been eliminated.

**concentrator**: a plant for recovery of valuable minerals from ore in the form of concentrate. The concentrate must then be treated in some other type of plant, such as a smelter, to effect recovery of the pure metal.

**covellite**: a supergene mineral found in copper deposits; a source of copper.

**cut-off grade**: the lowest grade of mineral resources considered economic; used in the calculation of reserves and resources in a given deposit.
dilution: an estimate of the amount of waste or low-grade mineralized rock which will be mined with the ore as part of normal mining practices in extracting an orebody.

dacitic: fine grained extrusive rock having the same general composition as andesite, but with less plagioclase and more quartz.

dyke: a tabular igneous intrusion that cuts across the bedding or foliation of the country rock.

DTR: means “Davis Tube Recovery”, which is a measure of the percentage of magnetite mineral that will be recovered into concentrate from a magnetite ore. The iron content of pure magnetite is approximately 72%. Accordingly, to determine the iron content of a magnetite ore from a DTR grade, multiply the grade by 0.72.

electrowinning: recovery of a metal from an ore by means of electro-chemical processes.

flotation: a milling process by which some mineral particles are induced to become attached to bubbles of froth and float, and others to sink, so that the valuable minerals are concentrated and separated from the gangue.

gangue: valueless rock or mineral material in ore.

heap leaching: a process whereby valuable metals are leached from a heap, or pad, of crushed ore by leaching solutions percolating down through the heap and are collected from a sloping, impermeable liner.

hypogene: primary mineralization formed by mineralizing solutions emanating up from a deep magnetic source.

HQ: diamond drilling equipment that produces a 63.5 millimetre (“mm”) core diameter.

igneous rock: rock which is magmatic in origin.

indicated mineral resource: that part of a mineral resource for which quantity, grade or quality, densities, shape and physical characteristics can be estimated with a level of confidence sufficient to allow the appropriate application of technical and economic parameters to support mine planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration and test information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough for geological and grade continuity to be reasonably assumed.

inferred mineral resource: that part of a mineral resource for which the quantity and grade or quality can be estimated on the basis of geological evidence and limited sampling and reasonably assumed, but not verified, geological and grade continuity. The estimate is based on limited information and sampling gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes.

intrusive: rock which while molten, penetrated into or between other rocks but solidified before reaching the surface.

kriged resource: resource grades estimated using weighted averages of the surrounding samples. The weights are based on the mineralization’s spatial continuity which has been statistically quantified beforehand.

leach: to dissolve minerals or metals out of ore with chemicals.
measured mineral resource: that part of a mineral resource for which quantity, grade or quality, densities, shape and physical characteristics are so well established that they can be estimated with confidence sufficient to allow the appropriate application of technical and economic parameters to support production planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough to confirm both geological and grade continuity.

mineral resource (deposit): a concentration or occurrence of natural, solid, inorganic or fossilized organic material in or on the earth’s crust in such form and quantity and of such a grade or quality that it has reasonable prospects for economic extraction. The location, quantity, grade, geological characteristics and continuity of a mineral resource (deposit) are known, estimated or interpreted from specific geological evidence and knowledge.

NQ: diamond drilling equipment that produces a 47.5 mm core diameter.

ore reserve: the economically mineable part of a measured or indicated mineral resource demonstrated by at least a preliminary feasibility study. This study must include adequate information on mining, processing, metallurgical, economic and other relevant factors that demonstrate, at the time of reporting, that economic extraction can be justified. An ore reserve includes diluting materials and allowances for losses that may occur when the material is mined.

porphyry: any igneous rock in which relatively large, conspicuous crystals (called phenocrysts) are set in a fine-grained ground mass.

probable ore reserve: the economically mineable part of an indicated and, in some circumstances, a measured mineral resource demonstrated by at least a preliminary feasibility study. This study must include adequate information on mining, processing, metallurgical, economic and other relevant factors that demonstrate, at the time of reporting, that economic extraction can be justified.

proven ore reserve: the economically mineable part of a measured mineral resource demonstrated by at least a preliminary feasibility study. This study must include adequate information on mining, processing, metallurgical, economic and other relevant factors that demonstrate, at the time of reporting, that economic extraction can be justified.

PQ: diamond drilling equipment that produces an 85 mm core diameter.

qualified person: an individual who: (a) is an engineer or geoscientist with at least five years of experience in mineral exploration, mine development or operation, or mineral project assessment, or any combination of these; (b) has experience relevant to the subject matter of the mineral project; and (c) is a member in good standing of a professional association as defined by National Instrument 43-101 of the Canadian Securities Administrators.

schist: a strongly foliated crystalline rock which readily splits into sheets or slabs as a result of the planar alignment of the constituent crystals. The constituent minerals are commonly specified (e.g. “quartz-muscovite-chlorite schist”).

scoping study: the first level of a study performed on a mineral deposit to determine its economic viability.
shear zone: a tabular zone of rock which has been crushed and brecciated by parallel fractures due to “shearing” along a fault or zone of weakness. Shear zones can be mineralized with ore-forming solutions.

shoot: a body of ore, usually in elongated form, extending downward or upward in a vein.

strike: the direction, or course or bearing, of a vein or rock formation measured on a level surface.

sulphides: compounds of sulphur with other metallic elements.

supergene: ore minerals that have been formed by the effects (usually oxidization and secondary sulphide enrichment) of descending ground water.

SX-EW processing: solvent extraction and electrowinning processing. Recovery of a metal from an ore by means of acid leaching and organic extraction, combined with electro-chemical processes.

tailing: material rejected from a mill after the recoverable valuable minerals have been extracted.

tuffs: a general term used for all consolidated pyroclastic rocks.

vein: sheet-like body of minerals formed by fracture filling or replacement of host rock.

vug: a small cavity in a vein or rock usually lined with crystals.

**ITEM 2: CORPORATE STRUCTURE**

Name and Incorporation

Ivanhoe Mines Ltd. (“IVN” or the “Corporation”) was incorporated under the *Company Act* (British Columbia) on January 25, 1994 under the name 463212 B.C. Ltd. In February, 1994 the Corporation changed its name to Indochina Goldfields Ltd. In March, 1994 the Corporation increased its authorized capital from 10,000 common shares without par value to 100,000,000 common shares without par value and created 100,000,000 preferred shares without par value. In February, 1995 the Corporation was continued under the *Business Corporations Act* (Yukon). In July, 1997 the Corporation increased its authorized capital to an unlimited number of common shares without par value and an unlimited number of preferred shares without par value. In June, 1999 the Corporation changed its name to Ivanhoe Mines Ltd.

The Corporation’s North American headquarters are located at 654, 999 Canada Place, Vancouver, British Columbia, Canada, V6C 3E1. The Corporation’s Asian headquarters are located at 37th Floor #2, Millenia Tower, 1 Temasek Avenue, Singapore 039192. The Corporation’s registered office is located at Suite 300, 204 Black Street, Whitehorse, Yukon, Canada, Y1A 2M9.

Subsidiaries and Management Structure

In this Annual Information Form, the “IVN Group” means, collectively, the Corporation and its subsidiaries or a particular subsidiary or group of subsidiaries, as the context requires. The corporate structure of the Corporation, its active subsidiaries, the percentage ownership in subsidiaries which are not wholly-owned by the Corporation and the jurisdiction of incorporation of such corporations as at December 31, 2002 are set out in the following chart.
Note: All subsidiaries are wholly-owned unless otherwise indicated
“BVI” means British Virgin Islands
Note: All subsidiaries are wholly-owned unless otherwise indicated
“BVI” means British Virgin Islands
ITEM 3: GENERAL DEVELOPMENT OF THE BUSINESS

Overview

IVN is an international mineral exploration and development company. The IVN Group holds interests in mineral resource properties in Mongolia, Myanmar, Australia, China, South Korea, Kazakhstan and Vietnam. The IVN Group also holds investments in Pacific Minerals Inc., a company listed on the TSX Venture Exchange, Resource Investment Trust Plc., a company listed on the London Stock Exchange, Olympus Pacific Minerals Inc., a company listed on the TSX Venture Exchange and Intec Ltd., a company listed on the Australian Stock Exchange.

The IVN Group’s principal mineral resource properties are the Oyu Tolgoi gold and copper exploration project (the “Oyu Tolgoi Project”) in Mongolia, the Monywa copper project (the “Monywa Copper Project”) in Myanmar and the Savage River iron ore mine (the “Savage River Project”) in Tasmania, Australia. The IVN Group holds a 100% interest in the Oyu Tolgoi Project and the Savage River Project and a 50% interest in the Monywa Copper Project.

History

In June, 1996, the Corporation completed its initial public offering and listed its common shares on the Toronto Stock Exchange (“TSX”). Between 1996 and 1998, the IVN Group successfully developed the first phase of the Monywa Copper Project in Myanmar, engaged in extensive mineral exploration activities in Indonesia and elsewhere in Southeast Asia and acquired the Bakyrchik gold project in Kazakhstan.

A severe economic crisis in Southeast Asia coupled with a dramatic decline in the price of gold in 1998 adversely affected the economics of the Bakyrchik gold project and the IVN Group postponed its development plans and placed the project on care and maintenance, curtailing further development expenditures. The IVN Group also curtailed most of its exploration activities, other than those in Mongolia, South Korea and Myanmar.

In May, 2000, IVN entered into an earn-in agreement with BHP Minerals International Exploration Inc. (“BHP Exploration”) to earn a 100% interest in the Oyu Tolgoi Project in Mongolia. IVN carried out an extensive exploration program on the Oyu Tolgoi property and, by February 2002, had incurred the expenditures necessary to earn a 100% interest in the project. BHP retains a 2% net smelter returns royalty. By March 2002, IVN had completed a sufficient amount of drilling to complete a resource estimate. This resource estimate was updated in February 2003. See “ITEM 4. NARRATIVE DESCRIPTION OF BUSINESS – Oyu Tolgoi Gold and Copper Project, Mongolia – Mineral Resources”.

In December 2000, the Corporation acquired all of the issued and outstanding shares of ABM Mining Limited (“ABM”) by issuing 50,322,533 common shares of the Corporation to the shareholders of ABM. IVN’s Chairman and largest shareholder, Robert M. Friedland was also the largest shareholder of ABM. ABM owns and operates the Savage River Project in Tasmania, Australia. As part of the transaction, certain outstanding loans owed by ABM and its subsidiaries to entities controlled by Mr. Friedland were made convertible into IVN common shares at a conversion rate of Cdn$1.20. In December 2001, these loans were converted into 30,625,000 common shares.,

The Savage River Project was adversely affected in 2001 by a downturn in the global steel industry. The resulting decline in demand for iron ore pellets contributed to a $54 million write down in the value of its assets. In 2001, ABM also commenced negotiations with its existing project lenders with a view to restructuring the
Savage River Project’s finances. In September 2002, IVN, through a wholly-owned subsidiary, acquired all of
the rights of the project lenders under the Savage River Project credit facilities, including project debt, currency
hedging obligations and security interests. See “ITEM 4. NARRATIVE DESCRIPTION OF BUSINESS –
Savage River Iron Ore Project, Tasmania, Australia – Financial Developments”.

In January 2002, IVN raised approximately Cdn$24.2 million through the sale of approximately 9.39 million
special warrants. Each special warrant was exercisable to acquire one common share for no additional
consideration. In March 2002, all of the special warrants were exercised and approximately 9.39 million
common shares were issued. In April 2002, IVN raised approximately Cdn$56.7 million through the sale of
17.45 million common shares. In December 2002 and January 2003, IVN raised an additional Cdn$60 million
through the sale of 20 million special warrants. Each special warrant was exercisable to acquire one common
share for no additional consideration. In February 2003, all of the special warrants were exercised and 20
million common shares were issued. In April 2003, IVN raised an additional Cdn$74.5 million through the sale
of approximately 21.3 million special warrants. Each special warrant entitles the holder to acquire one IVN
common share, for no additional consideration, following the issuance of receipts for a prospectus by applicable
regulatory authorities or the lapse of four months, whichever occurs first.

ITEM 4: NARRATIVE DESCRIPTION OF BUSINESS

Overview

For the purposes of Form 44-101F1 under National Instrument 44-101 of the Canadian Securities
Administrators (“NI 44-101”), the Oyu Tolgoi Project, the Monywa Copper Project and the Savage River
Project have been identified as the mineral properties which are material to the IVN Group. None of the IVN
Group’s other mineral property interests are considered material for the purposes of Form 44-101F1 insofar as
none of them represents 10% or more of the book value, as of December 31, 2002, of the IVN Group’s total
mineral resource property interests and related plant and equipment.

Qualified Persons

Disclosure of a scientific or technical nature in this Annual Information Form in respect of each of the mineral
resource properties of the IVN Group was prepared by or under the supervision of the “qualified person” (as
that term is defined in National Instrument 43-101 (“NI 43-101”)) listed below:

<table>
<thead>
<tr>
<th>Property</th>
<th>Qualified Person</th>
<th>Relationship to Corporation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oyu Tolgoi Project(1)</td>
<td>Harry Parker / Stephen Juras</td>
<td>Independent Consultant (AMEC)</td>
</tr>
<tr>
<td>Monywa Copper Project(2)</td>
<td>Paul Chare</td>
<td>Full Time Employee</td>
</tr>
<tr>
<td>Savage River Project(2)</td>
<td>Anson Griffiths</td>
<td>Full Time Employee</td>
</tr>
<tr>
<td>Mongolia (other than Oyu Tolgoi)</td>
<td>Chris Wilson</td>
<td>Full Time Employee</td>
</tr>
<tr>
<td>South Korea</td>
<td>Paul Chare</td>
<td>Full Time Employee</td>
</tr>
<tr>
<td>Bakyrchik</td>
<td>Gordon Toll</td>
<td>Full Time Employee</td>
</tr>
<tr>
<td>China</td>
<td>Douglas Kirwin</td>
<td>Full Time Employee</td>
</tr>
<tr>
<td>Myanmar (other than Monywa)</td>
<td>Paul Chare</td>
<td>Full Time Employee</td>
</tr>
</tbody>
</table>
Disclosure regarding exploration results and other recent developments on the Oyu Tolgoi Project subsequent to the January 30, 2003 cut-off date for the AMEC Technical Report (as defined below) was prepared under the supervision of Charles P.N. Forster, P. Geo., an employee of IVN. Mr. Forster is a qualified person within the meaning of NI 43-101.

The reports respecting mineral resources and ore reserves for the Monywa Copper Project and the Savage River Project were prepared in accordance with the Australasian Code for Reporting of Identified Mineral Resources and Ore Reserves (the “JORC Code”). Both Mr. Chare and Mr. Griffiths are “competent persons” within the meaning of the JORC Code.

The reports in this document relating to mineral resources and ore reserves have been based on information compiled by the person noted above for the applicable property. Each such person has consented to the inclusion in this report of the matters based on the information compiled by him in the form and context in which it appears.

Oyu Tolgoi Gold and Copper Project, Mongolia

On February 26, 2003, AMEC E&C Services Ltd. (“AMEC”) completed a technical report on the Oyu Tolgoi Project (the “AMEC Technical Report”), prepared in accordance with NI 43-101. Dr. Harry Parker, Ch. P. Geol. and Dr. Stephen Juras, P. Geo, both independent, qualified persons for the purposes of NI 43-101, were the authors of the AMEC Technical Report.

Project Description and Location

IVN’s wholly-owned subsidiary, Ivanhoe Mines Mongolia Inc. (“IMM”), is conducting an exploration and development program at Oyu Tolgoi in the south Gobi Region of Mongolia. The objective of the program is to define the nature and scope of a porphyry zone containing gold, copper and molybdenum mineralization. IMM has focused its efforts on four areas of mineralization on the property within an area of 5 kilometres (“km”) north-south by 3 km east-west, delineating four mineral deposits known as the Central Oyu, Far North Oyu, South Oyu and Southwest Oyu zones.

The Oyu Tolgoi Project is located in the Aimag (province) of Omnigov, approximately 530 km south of the capital city of Ulaanbaatar and 80 km north of the border with China. IMM holds the right to conduct drilling and other exploration work on the Oyu Tolgoi Project through Mongolian Mineral Exploration License (“MEL”) 66X, which comprises approximately 8,496 hectares of property. This license was originally granted to BHP Exploration in 1997. The license expires on February 2, 2004 and, as it is the second and final extension of the MEL, it is not renewable. IMM must apply for a mining license prior to February 2, 2004 in order to maintain its right to develop the Oyu Tolgoi Project.

IMM originally acquired MEL 66X from BHP Exploration pursuant to a May 2000 Earn-in Agreement (the “Earn-in Agreement”). In 2002, IMM completed the earn-in requirements under the Earn-in Agreement. After certain back-in rights held by BHP Exploration expired, BHP Exploration transferred title to MEL 66X to IMM in the summer of 2002. Pursuant to the Earn-in Agreement, BHP Exploration retains a 2% net smelter returns royalty on production from the Oyu Tolgoi Project.

IMM must pay a yearly per hectare fee to the Mongolian government in order to maintain the MEL in good standing. IMM must apply to the Mongolian government for a mining license prior to the expiry of the corresponding MEL before it can commence mining activity on the property. Mining licenses are typically granted for a term of 60 years, and are renewable for up to an additional 40 years. The Mongolian government also imposes a royalty of 2.5% on the sale value of all minerals mined in the country.
Holders of a MEL in Mongolia must comply with environmental protection obligations. These obligations include submitting an environmental plan along with annual work plans and posting a bond against completion of environmental compliance obligations with the relevant Soum (district), which in the case of MEL 66X is the Khan Bogd Soum. In October 2002, IMM completed and submitted to the Mongolian government an environmental baseline study respecting the Oyu Tolgoi Project. The study will be used for the preparation of guidelines for an environmental impact assessment (an “EIA”) of the project. An EIA will be required prior to commencement of project development work, and IMM has retained independent consultants to assist in the preparation of the EIA with a target completion date of the first quarter of 2004.

IMM pays to the Khan Bogd Soum an annual fee to account for water and road usage. IMM also retained the Institute of Archaeology at the Mongolian Academy of Science to complete archaeological studies of the Oyu Tolgoi Project, and has now received approval from archaeological regulatory authorities in Mongolia to disturb the property for the purposes of exploration and development of the property.

**Accessibility, Climate, Local Resources and Physiography**

The Oyu Tolgoi Project is located in the south Gobi Region of Mongolia, approximately 530 km south of the capital city, Ulaanbaatar. Road access to the property follows a well-defined track directly south from Ulaanbaatar requiring approximately 12 hours travel time in a four-wheel drive vehicle. The IVN Group has also constructed a 1,400 metre (“m”) airstrip which allows the property to be reached by small aircraft. Mongolian rail service and a large electric power line lie 350 km east of the property at the main rail line between Ulaanbaatar and China. The China-Mongolia border is located approximately 80 km south of Oyu Tolgoi. A major thermal coal deposit is located at Tavan Tolgoi, approximately 110 km west-northwest of Oyu Tolgoi.

A small diesel power station is located 60 km east of the Oyu Tolgoi Project in Handbogd. The nearest significant population centre is the regional provincial capital at Dalandzadgad, located 240 km west northwest of Oyu Tolgoi with a population of approximately 12,500 people. Dalandzadgad is accessible by unpaved road and regular, scheduled air service from Ulaanbaatar.

Temperatures at Oyu Tolgoi range from an extreme maximum of approximately 36 degrees Celsius to –25 degrees Celsius. IMM believes that it is possible to conduct exploration and mining operations on a year round basis.

The property ranges in elevation from 1,140 m to 1,215 m above sea level, and has a relatively flat, undulating topography with less than 50 m of relief. The surface area is a semi-desert steppe, with total precipitation of approximately 100 mm and sparse, semi-desert vegetation.

The Mongolian Minerals Law and Mongolian Land Law govern IMM’s surface rights on the Oyu Tolgoi Project. Water rights are governed by the Mongolian Water Law and the Mongolian Minerals Law. These laws permit license holders to use the land and water in connection with exploration and mining operations, subject to the discretionary authority of Mongolian national, provincial and regional governmental authorities. Ivanhoe expects that it will have to negotiate with all three levels of government to ensure access to appropriate land and water rights prior to the commencement of any mining operations.

Power and local water sources are currently sufficient for exploration activities. The nearest power line is 350 km away, so IMM operates two 200 kilowatt diesel generators for camp electrical needs. Water is generally available from shallow wells. Additional power and water sources will need to be developed prior to the
commencement of mining operations. IMM is presently conducting a water resource exploration program to locate sufficient water sources for production purposes.

The Oyu Tolgoi Project property is relatively flat, and should be amenable to the construction of the necessary infrastructure for a mining operation, including tailings storage sites, heap leach pads, waste disposal and processing plant sites.

**History**

Old diggings and small amounts of slag found in the area indicate that the Oyu Tolgoi area was subject to small scale mining activity in ancient times. However, modern mineral exploration did not begin in earnest in the area until 1996, when the Magma Copper Company Ltd. (“Magma”) began a reconnaissance program which examined more than 60 copper occurrences in various parts of Mongolia. In 1996, after BHP Exploration acquired Magma, BHP Exploration continued the reconnaissance program in western and southern Mongolia.

BHP Exploration first visited the Oyu Tolgoi Project in September, 1996 as part of its regional reconnaissance program of the south Gobi region. BHP Exploration subsequently applied for, and was granted, an exploration concession covering 1,350 square km. After geological mapping, stream and soil sediment surveys and magnetic and induced polarization (“IP”) surveys, BHP Exploration completed 6 diamond core holes totalling 1,102 m during the 1997 field season. With encouraging results from two of the holes, a second phase of drilling was undertaken in 1998, consisting of an additional 17 widely-spaced core holes totalling 2,800 m. These holes failed to return significant mineralization and BHP Exploration suspended the project pending economic review. In 1999, following a review of past results, additional drilling and continued exploration on the property was planned but never carried out. BHP Exploration offered the properties for joint venture, which culminated in the execution of the Earn-in Agreement with IVN in 2000.

In 2000, after entering into the Earn-in Agreement, IMM carried out a reverse circulation (“RC”) drill program to delineate a chalcocite blanket intersected by one of BHP Exploration’s diamond drill holes. This program consisted of 109 RC holes totalling 8,828 m. The holes were targeted to define supergene copper mineralization that might be amenable to a heap leaching SX-EW process similar to the one used at the Monywa Copper Project. IVN reviewed the results and decided that the chalcocite blanket at Central Oyu was neither large enough nor high grade enough to be economic as a stand-alone deposit.

In 2001, IMM continued the RC drilling program to expand the chalcocite blanket and locate additional supergene resources. The IMM also completed three diamond drill holes to test deep hypogene copper and gold potential. One of these holes, OTD 150, intersected 508 m of chalcopyrite-rich mineralization grading 0.81% copper and 1.17 grams per tonne (“g/t”) gold, while another hole, OTD 159, intersected a 49 m thick chalcocite blanket grading 1.17% copper and 0.21 g/t gold and 252 m of hypogene covellite mineralization grading 0.61% copper and 0.11 g/t gold.

The diamond drill holes were sufficiently encouraging for IMM to conduct a major follow-up drill program and, by the end of 2002, the IVN Group had completed approximately 120,000 m of diamond drilling.

**Geology and Mineralization**

The Oyu Tolgoi Project lies near the boundary of the South Mongolian and the South Gobi tectonic units, in the Kazakh Mongol Belt. The area contains a mixture of arc and back arc rocks that accreted to southern
Mongolia during the Paleozoic age.

The Oyu Tolgoi Project area falls within an arc terrane composed of lower to mid Paleozoic metasediments and island arc basalts that rest on a lower Paleozoic ophiolite complex. The arc terrane is dominated by basaltic volcanics and intercalated volcanogenic sediments, intruded by plutonic-size hornblende-bearing granitoids of mainly quartz monzodiorite to possibly granitic composition.

IMM has established a tentative hardrock stratigraphy of the Oyu Tolgoi Project based mainly on drilling data and detailed mapping. The drilling indicates that massive porphyritic augite basalt underlies much of the central part of the exploration block, with some drill holes encountering augite basalt at depths of over 1,000 m. To date, the structural attitude and true thickness of the augite basalt are unknown. Overlying the augite basalt are dacitic to andesitic ash flow tuffs, several hundred metres in thickness, which in turn are overlain by an approximately 500 m thick layer of sedimentary rocks, including siltstones, minor conglomerate and carbonaceous shale, with intercalated auto-brecciated basaltic lava and tuff. A wide variety of felsic to mafic dykes are found throughout the exploration block including porphyritic quartz monzodiorite dykes that may be genetically related to the copper and gold porphyry systems.

The geology and mineralization of the Southwest Oyu zone is characterized by a gold-rich porphyry system, with a high-grade core about 250 m in diameter and extending up to 900 m vertically. The deposit is centered on small quartz monzodiorite dykes. Intrusive into the deposit is massive biotite, magnetite altered porphyritic basalt. Mineralization consists mainly of finely disseminated pyrite-chalcopyrite with minor bornite and massive chalcopyrite veins cross-cutting and impregnating earlier deformed quartz vein stock works. The mineralization is related to a late stage sericite and sericite-biotite-albite overprint, which affects the quartz monzodiorite intrusions and basaltic wall rocks. Most of the ore body is situated within the basaltic wall rocks, with less than 20% hosted by quartz monzodiorite. The mineralization is characterized by a two-to-one gold to chalcopyrite copper ratio that increases with depth.

South Oyu is a copper porphyry deposit, developed mainly in basaltic volcanics and related to small, strongly sericite altered quartz monzodiorite dykes. The South Oyu zone is characterized by secondary biotite, magnetite and moderate intensity quartz veining, with strong, late-stage overprinting by sericite, chlorite-smectite. Unlike Southwest Oyu, the South Oyu system is not gold rich. The deposit is intruded by sericite altered quartz monzodiorite dykes, with weak to locally strong copper mineralization, and by small post-mineral andesite, rhyolite and basalt dykes, that locally may occupy up to 50% of the rock volume. Copper mineralization at South Oyu consists of finely disseminated pyrite-chalcopyrite and bornite.

The mineralization at Central Oyu includes a body of high-sulphidation with copper mineralization consisting of covellite, chalcocite and minor enargite, a body of copper and gold porphyry mineralization consisting primarily of chalcopyrite and a shallow chalcocite enrichment blanket. The high-sulphidation mineralization and its associated advanced argillic alteration and mineralization are telescoped onto the underlying and peripheral porphyry system. The chalcocite blanket appears to overlie the covellite-rich quartz-veined zones in pyrite-rich quartz monzodiorite. The quartz-veined zones are also strongly covellite mineralized. Supergene mineralization underlies a leached cap extending 20 to 80 m below the surface. The upper 20 to 40 m of the chalcocite blanket consists of chalcocite with minor covellite and digenite. The lower parts of the blanket, which has lower copper grades, is dominated by covellite. The upper chalcocite and lower covellite zones are a standard feature of enrichment blankets. Distribution of gold is not well known. Most of the supergene system and covellite zones contain less than 30 parts per billion of gold but there are erratic values of 0.1 parts per million ("ppm") of gold to 1 ppm of gold. Significant gold values occur in the intermediate argillic and chlorite
altered basaltic rocks that flank and underlie the west side of Central Oyu. There is also hypogene mineralization beneath the enrichment blanket.

The Far North Oyu zone is dominated by high-sulphidation type related mineralization, hosted by advanced argillic altered dacitic ash flow tuff overlaying intermediate argillic to chlorite altered basaltic volcanics. Sedimentary rocks overlie the dacitic tuffs and cap the high-sulphidation system. The Far North Oyu deposit contains a high-grade copper zone, in which mineralization exceeding 2% copper is present, which extends over a strike length of more than 1.8 km. This high-grade zone is dominated by bornite, but is mixed with chalcocite or chalcopyrite and is associated with intense quartz veining occupying up to 85% of the rock. The high-grade deposit is internal to a significantly larger moderate grade body of copper mineralization grading between 1% to 2% copper, consisting of a mixture of chalcopyrite, bornite, chalcocite and pyrite. Fluorine-bearing minerals, including fluorite and topaz are also prevalent throughout the deposit, while enargite occurs in the upper most, pyrite-rich zones of the deposit and to a lesser extent on its flanks.

**Exploration and Development**

IMM’s exploration at Oyu Tolgoi has consisted mainly of remote sensing and geophysical methods, including satellite image interpretation, detailed ground magnetics, Bouguer gravity and gradient array IP, as well as extensive drilling. Gradient array IP has been conducted on north to south and subsequently east to west lines at 100 m line spacing, with current electrode spacing varying from 1,000 m to 11 km. Drill holes have been targeted to test IP chargeability targets or structural zones. Outcropping prospects, including Southwest, South and Central Oyu, have been mapped at 1:1,000 scale, while the central part of the exploration block was mapped at 1:2,000 scale in 2001. The entire remaining exploration block was mapped at 1:10,000 scale in 2002.

Initial geophysical surveys were conducted by BHP Exploration in 1996 consisting of airborne magnetics, ground magnetics and gradient array IP. In 2001, IMM conducted gradient array IP on 100 m spaced north to south lines over the 3 km by 4 km core block of Oyu Tolgoi. IMM used multiple current electrode spacing ranging from 1,000 m to 3,600 m, and was able to define the sulphide assemblages in Southwest, South and Central Oyu. The IP survey also defined a large, semi-circular feature with Central Oyu on the southern side and the Far North IP anomaly on the north side.

In 2002, IMM re-oriented the IP survey lines to east to west to account for a predicted north-northeast trending high grade copper zone at Far North Oyu. IMM then re-surveyed the core block of Oyu Tolgoi on 100 m spaced lines using multiple AB current electrode spacing. This survey resulted in an entirely different chargeability signature that now appears to reflect a continuous zone of sulphide mineralization extending north-northeasterly from the southwest end of Southwest Oyu through to the northernmost extent of the property, for a total strike length of approximately 5 km.

The most recent IP survey clearly outlines the high-grade zone of Southwest Oyu as a nearly vertical pipe that becomes tightly constrained with depth. On the survey, Central Oyu mineralization trends north to northeasterly and continues to be the dominant chargeability feature on the IP survey, reflecting concentrations of pyrite of up to 10% and the central covellite core of the high-sulphidation system. This very strong chargeability feature extends unabated to inferred depths of 1,500 m and is currently being tested by deep drilling at Central Oyu. Extending north-northwesterly from Central Oyu, a strong IP anomaly reflecting 4% to 6% pyrite mineralization extends through Far North Oyu, with high-grade copper mineralization intersected in hole OTD270 and subsequent drill holes flanking it on the east side.
IMM has expanded the IP program to search deeper to a limit of 1.5 km. The survey results to date are consistent with an extension of sulphide mineralization to this depth.

Detailed total field, ground magnetic surveys, reading 25 m by 5 m and 50 m by 10 m centres, have been completed over the full Oyu Tolgoi tenement. Although done in two surveys, the data were merged to produce a magnetic image of the block. The magnetic survey clearly defines the structural fabric of the property as well as the altered zonation. It produced marked magnetic highs on the hydrothermal magnetite-altered basalts underlying South and Southwest Oyu and magnetic lows on the extensive advanced argillic, high sulphidation systems that encompass Central Oyu to Far North Oyu due to the magnetic destruction caused by these systems.

In February 2003, IMM engaged an international engineering construction and project management group to prepare a feasibility study of the Oyu Tolgoi Project. The IVN Group is a joint venture consisting of AMEC and Ausenco. The IVN Group will also obtain specialized advice from other internationally recognized engineering companies for certain aspects of the feasibility study. The IVN Group commenced preparation of a scoping study in March 2003, and the parties have targeted the middle of 2004 for the completion of the feasibility study.

IMM contracted an independent consultant to analyze geotechnical characteristics of the Far North Oyu zone. The consultant produced a report in the first quarter of 2003 indicating that the Far North Oyu zone would be amenable to block cave mining, which is the lowest-cost, bulk underground mining method available.

IMM has conducted geo-technical reconnaissance in 2002 and 2003 to assess foundation conditions and the local availability of construction materials.

**Drilling**

IMM has employed up to 14 drill rigs on the Oyu Tolgoi Property in connection with its drilling program. IMM has conducted drilling by wireline method utilizing HQ and NQ size core and some PQ size core for metallurgical testing. Upon completion, the collar and anchor rods on drill holes are trimmed to about 0.5 m above ground and capped.

Drill hole collars are located respective to a property grid by either global positioning system or theodolite and electronic distance measuring instruments. Holes are drilled at a declination of between 45° and 90°, with the majority between 60° and 70°. The drill contractors take down-hole surveys about every 50 m.

IMM uses standard logging and sampling conventions to capture information from the drill core. The core is logged in detail onto paper logging sheets and the data are then entered into the project database. The core is photographed prior to being sampled. Drill core is then stored as stacked pallets in an organized “core farm”. Core recovery in the mineralized units has been usually between 95% and 100%.

By the January 30, 2003 cut-off date for the AMEC Technical Report resource estimate, IMM had completed diamond drilling of over 121,000 m in 199 drill holes. Subsequent to that date, IMM has completed an additional 37 drill holes at Far North Oyu and four drill holes at Central Oyu. The holes generally range in length from 60 m to 1,200 m, averaging 610 m.

IMM's diamond drilling program is currently focusing on gold and copper porphyry underlying the Far North Oyu and Central Oyu zones. IMM initially believed that the Far North Oyu mineralization was controlled by a north-northeast trending linear feature. IMM’s recent drilling, which has focused on determining the
continuation of mineralization to the north, indicates that the zone is broadening and more flat-lying. Drilling is now focussing on identifying the total extent of the broadening linear feature beyond the area covered in resource estimate in the AMEC Technical Report.

To date, the Far North Oyu drill program has extended the strike length of the mineralized zone by an additional 700 m from the area covered in the most recent resource estimate. Included in the drill results is evidence of a new zone of high-grade chalcopyrite-bornite, copper and gold mineralization. IMM has intercepted this zone with ten drill holes over a strike length of approximately 800 m. The drill holes contain broad intercepts of between 100 to 200 m averaging grades of between 2.5% to 6.1% copper with moderate to strong associated gold values. The new zone is interpreted to lie between 400 m and 1,100 m below surface and is open in all directions and to depth. IP data indicates that the zone is primarily open to the north-northeast for another 600 m, where it appears to be cut off by a major east to west trending post-mineral structure. Recent drill results on this trend include OTD367A on the northern end of Far North Oyu, approximately 650 m from the area included in the most recent resource estimate. OTD 367A intersected a 144 m chalcopyrite-rich high-grade interval grading 4.41% copper and 1.61 g/t gold starting at a depth of 1,062 m. IMM also encountered a 40 m intersection starting at 1,146 m grading 3.49% copper and 0.19 g/t gold in OTD383, which lies approximately 200 m east of OTD367A.

On the southern end of Far North Oyu, OTD382 and OTD401 have intersected high grade mineralization that appears to extend the high-grade core to the southern end of the Far North Oyu resource block. OTD382 intersected 96 m grading 3.09% copper and 0.16 g/t gold starting at 626 m, while assays are pending for OTD401. These two drill holes lie approximately 2 km from OTD367A, lying at the northern end of the mineralized zone of Far North Oyu.

**Sampling and Analysis**

IMM’s sampling procedure includes the collection of core samples taken on continuous 2 m intervals down each drill hole, excluding dykes that extend more than 10 m along the core length. One-half of each NQ and HQ core and one-quarter of each PQ core is taken in the sampling.

The core is split with a rock saw and cooled and lubricated with fresh water. To prevent sampling bias, the core is marked with a continuous linear cutting line before being split. Samples are placed in cloth bags and sent to an on-site preparation facility for processing. In the AMEC Technical Report, AMEC reported that core recovery is good, with relatively few broken zones.

The samples are initially assembled into groups of 16, then interspersed with four quality control samples to make up a batch of 20. The quality control samples comprise one duplicate split core sample and one uncrushed field blank, which are inserted prior to sample preparation; a reject or pulp preparation duplicate, which is inserted during sample preparation, and a reference material sample, which is inserted after sample preparation.

Split core samples are prepared for analysis at an on-site facility operated by SGS-Analabs Pty. Ltd. (“Analabs”). Prepared samples are placed in wooden shipping boxes, locked, sealed with tamper-proof tags and shipped under the custody of IMM to Ulaanbaatar, where they are assayed at a non-certified facility operated by Analabs.

All samples are routinely assayed for gold, copper and molybdenum while samples from Far North Oyu and Central Oyu are also assayed for arsenic. Samples are digested with nitric, hydrochloric, hydrofluoric and perchloric acids to dryness before being leached with hydrochloric acid to dissolve soluble salts and made to
volume with distilled water. Gold is determined using fire assay fusion, while copper and molybdenum are determined using acid digestion.

Upon receipt of assay results, values for reference material samples and filed blanks are tabulated and compared to an established round robin program. Assay results that deviate from round robin program results beyond pre-set parameters are rejected and subject to re-assay. IMM also performs check assays at the rate of one per batch of 20 samples and conducts blind pulp duplicates at the rate of two per five batches of 100 samples.

In April 2002, IMM also implemented a formal quality assessment and quality control ("QA/QC") program for its sampling procedure. The program currently uses core duplicate, coarse reject duplicate, pulp duplicate, blind pulp duplicate (samples resubmitted back to Analabs) and laboratory pulp duplicate (samples sent to an umpire lab) samples to assess the quality of sampling procedure.

Samples taken from diamond drill holes OTD149 to 190 from Southwest Oyu were originally assayed prior to implementation of the QA/QC program. In connection with the preparation of the AMEC Technical Report, AMEC recommended that a re-assay program be completed to determine if any assay biases were present for those samples. All samples from within the Southwest Oyu mineralized zone were therefore compiled and 20% selected for re-assay under the QA/QC program.

The results of the program indicated a positive bias in the original gold and copper assays. A bias assessment was conducted on moving grade windows to obtain a better understanding of the patterns. AMEC determined that for gold, data below two g/t and above six g/t are biased by more than 5%. No adjustment was made to gold grading below two g/t because the average bias of approximately 8.5% equates to a copper equivalent grade of only 0.05%, which is negligible. The bias affecting gold grading above six g/t is much higher, with an average bias for such gold assays of 14%, which equates to a copper equivalent grade of 0.61%. Accordingly, AMEC made a proportional adjustment of the original grades of all pre-OTD231 gold assays grading over six g/t equal to the average bias of 14%.

AMEC also made a proportional adjustment of the original grades of copper assays grading above 2% copper. Based on an average 5% bias and a mean grade of 3% copper for such copper assays, AMEC calculated an average bias of 11%. Accordingly, AMEC made an adjustment equal to 11% for all pre-OTD231 data grading over 2% copper.

IMM has commenced a pre-feasibility level metallurgical test program using PQ half core samples from Southwest and Central Oyu and one quarter PQ core samples at Far North Oyu. IMM is currently conducting grinding tests with a view to providing engineering parameters for semi-autogenous grinding. IMM is also conducting column leaching test work to assess the potential for copper recovery from heap leaching.

**Mineral Resources**

The mineral resource estimates for the Oyu Tolgoi Project were calculated by AMEC in the AMEC Technical Report under the direction of Dr. Harry Parker, Ch.P.Geol., and Dr. Stephen Juras, P.Geo. The estimates were made from 3-dimensional block models utilizing commercial mine planning software (MineSight). The project was divided into four deposits: Southwest Oyu, South Oyu, Central Oyu and Far North Oyu.

Mineral resource estimates were classified using logic consistent with the Canadian Institute of Mining, Metallurgy and Petroleum ("CIM") Standards on Mineral Resources and Reserves Definitions and Guidelines ("CIM Standards") definitions referred to in NI 43-101. All interpolated blocks within 150 m of a drill composite were assigned as inferred mineral resources. The South, Central and Far North Oyu deposits all fall
within this category. Tighter drill spacing together with the demonstrated confidence in the assayed values from the QA/QC program allowed AMEC to classify a significant portion of the Southwest Oyu deposit as indicated mineral resources.

As there has been no analysis of the feasibility of extracting minerals based on a particular cut-off grade, AMEC estimated resources at the four deposits at a number of copper equivalent cut-off grades. AMEC in particular focused on a copper equivalent cut-off grade of 0.3% copper and 0.6% copper. The estimates are listed below:

**Oyu Tolgoi Resource Estimate**
(Based on a 0.30% Copper Equivalent Cut-off)

<table>
<thead>
<tr>
<th>Deposit</th>
<th>Indicated Resources</th>
<th></th>
<th></th>
<th></th>
<th>Inferred Resources</th>
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<tbody>
<tr>
<td></td>
<td>Tonnes (millions)</td>
<td>Grade</td>
<td>Gold (millions)</td>
<td>Copper (million pounds)</td>
<td>Gold Eq. (millions)</td>
<td>Grade</td>
<td>Gold (millions)</td>
<td>Copper (million pounds)</td>
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<tr>
<td></td>
<td></td>
<td>g/t Gold</td>
<td>% copper</td>
<td>g/t Gold</td>
<td>% copper</td>
<td>g/t Gold</td>
<td>% copper</td>
<td>g/t Gold</td>
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<tr>
<td>Southwest Oyu</td>
<td>509</td>
<td>0.59</td>
<td>0.40</td>
<td>9.69</td>
<td>4.54</td>
<td>20.07</td>
<td>291</td>
<td>0.50</td>
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<td>Central Oyu</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>237</td>
<td>0.18</td>
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<tr>
<td>South Oyu</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>270</td>
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<tr>
<td>Far North Oyu</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>804</td>
<td>0.07</td>
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<tr>
<td>Total</td>
<td>509</td>
<td>0.59</td>
<td>0.40</td>
<td>9.69</td>
<td>4.54</td>
<td>20.07</td>
<td>1,602</td>
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**Oyu Tolgoi Resource Estimate**
(Based on a 0.60% Copper Equivalent Cut-off)

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<tr>
<td></td>
<td>Tonnes (millions)</td>
<td>Grade</td>
<td>Gold (millions)</td>
<td>Copper (million pounds)</td>
<td>Gold Eq. (millions)</td>
<td>Grade</td>
<td>Gold (millions)</td>
<td>Copper (million pounds)</td>
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<tr>
<td></td>
<td></td>
<td>g/t Gold</td>
<td>% copper</td>
<td>g/t Gold</td>
<td>% copper</td>
<td>g/t Gold</td>
<td>% copper</td>
<td>g/t Gold</td>
</tr>
<tr>
<td>Southwest Oyu</td>
<td>267</td>
<td>0.86</td>
<td>0.53</td>
<td>7.35</td>
<td>3.14</td>
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<tr>
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<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>48</td>
<td>0.26</td>
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<td>-</td>
<td>-</td>
<td>-</td>
<td>148</td>
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<tr>
<td>Far North Oyu</td>
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<td>-</td>
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<td>489</td>
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<tr>
<td>Total</td>
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<td>3.14</td>
<td>14.52</td>
<td>812</td>
<td>0.21</td>
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*Note: (1) Copper equivalent cut-off grades have been calculated using assumed metal prices (US$0.80/lb. for copper and US$350/oz for gold); %Cu eq. = %Cu + Au (g/t) x (11.25/17.64).*
Gold equivalents have been calculated using assumed metal prices of US$350 per ounce gold and US$0.80 per pound copper; in situ pounds of copper multiplied by US$0.80 per pound copper and divided by US$350 per ounce gold added to the in situ ounces of gold. The contained gold, copper and gold equivalents represent estimated contained metal in the ground and have not been adjusted for the metallurgical recoveries of gold and copper. The determination of an adjustment factor to account for differences in relative metallurgical recoveries between gold and copper will depend upon the completion of definitive metallurgical testing.

The resource estimates include results from 71 drill holes from Southwest Oyu, 68 drill holes from South Oyu, 61 drill holes from Central Oyu and 63 drill holes from Far North Oyu. Mineral resources are not mineral reserves until they have demonstrated economic viability based on a feasibility study or pre-feasibility study.

Each of the deposits were assigned mineralized domains based on geological criteria and marked changes in mineralization intensity. AMEC checked the shapes for interpretational consistency in section and plan, and found them to have been properly constructed. These mineralized domains were then critically reviewed to determine appropriate estimation or grade interpolation domains. Several different procedures were applied to the data to discover whether statistically distinct domains could be constructed using the available geological variables. The results were then used to guide the construction of a block model and the development of estimation plans. AMEC also prepared contact profiles for copper, gold and molybdenum across the various mineralized domains in each deposit.

The data analyses demonstrated that most of the domains in the four mineralized zones should be treated as separate domains with respect to copper, gold and molybdenum. The exception to this is an ignimbrite-augite basalt boundary in Far North Oyu. This boundary shows transitional characteristics and was treated as a soft boundary during grade interpolation.

AMEC also conducted variography analysis (the study of the spatial variability of an attribute) of copper and gold in the main mineralized domains in each zone by constructing correlograms. AMEC prepared 37 sample correlograms, which allowed AMEC to form a model to assist in the determination of single or two-nested structure variance contributions, ranges for the variance contributions, and the model type.

AMEC composited the assays into 5 m down-hole composites. The compositing followed the domain zone by breaking the composites on the domain code values. Capping limits were applied to the assay data prior to compositing. AMEC reviewed the compositing process and found it to have been performed correctly, after adjusting assay data for biases contained in pre-OTD231 drill holes prior to capping.

Bulk density data were assigned to a unique MineSight assay database file. These data were composited into 15 m fixed-length down-hole values to reflect the block model bench height. Bulk density values were estimated into the resource model by an averaging of composites.

Various coding was done on the block model in preparation for grade interpolation. The block model was coded according to zone and domain. Percent below topography was also calculated into the model blocks. Post-mineral dykes were assumed to represent zero grade waste cutting the mineralized rock. The shapes were used to calculate an ore-remaining percent for each block by subtracting the volume percent dyke that intersects a block from 100. This percentage was used in the resource tabulation procedures to properly account for mineralized material.

The Oyu Tolgoi estimation plans were designed using a philosophy of restricting the number of samples for local estimation. While local predictions based on the small number of samples are uncertain, this method can
produce reliable estimates of the recovered tonnage and grade over the entire deposit because the global grade-
tonnage curves from the estimations tend to be accurate predictors of the actual grade-tonnage curves.

Modelling consisted of grade interpolation by ordinary kriging. Inverse distance weighting to the second power
was used to interpolate molybdenum grades in Southwest Oyu and Central Oyu. Also, the chalcocite blanket in
Central Oyu was interpolated by grade averaging because of the small data population in this domain. Only
capped grades were interpolated.

AMEC completed a detailed visual validation of the Oyu Tolgoi resource block models. This included an
independent check on the smoothing in the estimates using the Discrete Gaussian or Hermitian polynominial
change-of-support method.

AMEC checked the block model estimates for global bias by comparing the average metal grades from the
model with means from nearest-neighbour estimates. The results displayed no evidence of bias.

AMEC also checked for local trends in the grade estimates. This was done by plotting the mean values from
the nearest-neighbour estimate versus the kriged results benches, northings and eastings. The trends for copper
and gold behave as predicted.

Histograms were constructed to show the frequency of sample grades within the mineralized domains. Both
kriged and nearest-neighbour plots were made for copper, gold and molybdenum. The nearest-neighbour plots
mimic the respective composite value distribution. The kriged results show the formation of a more symmetric
distribution because of the smoothing effect caused by using multiple values from multiple drill holes to
interpolate a model block value.

**Monywa Copper Project, Myanmar**

*Project Description and Location*

The Monywa Copper Project is located in west central Myanmar, approximately 5 kilometres west of the town
of Monywa. The site is approximately 110 kilometres west of Mandalay and 832 kilometres by road north of
the capital city of Yangon, and is situated on the west bank of the Chindwin River, near its confluence with
Yama Stream.

The Monywa Copper Project comprises four mineralized deposits: Sabetaung, Sabetaung South, Kyisintaung
and Letpadaung. The two Sabetaung deposits and Kyisintaung are adjacent to each other and have been
developed as the S&K Mine, the first phase of the Monywa Copper Project. The fourth deposit, Letpadaung, is
approximately seven kilometres southeast of the S&K Mine site and is to be the subject of the second future
development phase of the Monywa Copper Project. The S&K Mine site property covers approximately 3,059
hectares and the Letpadaung deposit covers approximately 3,269 hectares.

The Monywa Copper Project is a joint venture between IVN’s wholly-owned subsidiary, Ivanhoe Myanmar
Holdings Ltd., and Mining Enterprise No. 1 (“ME1”), an entity wholly-owned by the Government of Myanmar.
IVN holds a 50% interest in the joint venture, which operates through Myanmar Ivanhoe Copper Company
Limited (“JVCo”), a company incorporated under the laws of Myanmar. JVCo operates the S&K Mine, an
open-pit mine using heap leach SX-EW technology designed to produce London Metal Exchange (“LME”)
Grade A cathode copper. JVCo also plans to develop copper mining operations on the Letpadaung deposit.
JVCo pays royalties to the Myanmar Ministry of Mines in respect of cathode copper sold by the Monywa Joint Venture at a rate of 2% of the value of cathode copper sold during the first five years of commercial production. Thereafter, the royalty rate increases to 4% plus an amount equal to 2% of the value of cathode copper sold during the first five years of commercial production, amortized and payable in equal instalments over the following five years. JVCo must pay all such royalties in cash or in kind at the option of the Myanmar Ministry of Mines. JVCo must also pay rent to the Myanmar Ministry of Mines at an annual rate of $500 per square kilometre.

The Monywa joint venture is governed by a joint venture agreement which provides that the joint venture will operate on each deposit for twenty years from the date of commencement of commercial production on such deposit. The joint venture may apply for an extension for an additional five-year period if the board of directors of JVCo determines that further production is technically feasible and economically viable, subject to receipt from applicable Myanmar governmental authorities of all necessary approvals to continue operations.

Accessibility, Climate, Local Resources, Infrastructure and Physiography

The Monywa Copper Project is located approximately 110 kilometres west of Mandalay, Myanmar’s second largest city. Several villages are located in and near the mine site. The mine townsite, Nyaungbingyi on the west bank of the Chindwin River and Monywa on the east bank are the nearest population centres. Monywa, which is the main supply centre in the area, has a population of approximately 500,000.

The mine site is situated on the west bank of the Chindwin River to the east of the Chin Hills, within Myanmar’s flat central plains. Elevations range from 75 m above sea level on the banks of the Chindwin River, to about 330 m above sea level at the crest of the Letpadaung Hills. The area is characterized by dry zone vegetation consisting mostly of low growing shrubs and grasses together with cultivated fields. The area has a dry, continental monsoon type climate. Winters are warm and very dry, while summers can be extremely hot with thunderstorm activity and localized flooding.

Yangon is the major entry point for Myanmar with regular air service from Yangon to Mandalay. The mine site is accessible by paved road from Mandalay. The drive takes about three hours and culminates in a ferry crossing of the Chindwin River. The mine site can also be reached from the town of Pakokku on the Irrawaddy River by way of an unimproved road on the western bank of the Chindwin River. The town of Monywa is also linked by rail to Mandalay and Yangon. The Irrawaddy and Chindwin Rivers also provide a viable shipment route for copper, bulk supplies and heavy equipment to and from Yangon and the mine site.

History

The existence of copper mineralization in the Monywa area has been known for centuries. Ancient copper extraction from shallow oxidised ores is evidenced by slag remnants in some of the villages surrounding Sbetaung.

In the early 1900s, a British company registered gold and copper claims in the Letpadaung area. Several existing small adits were probably excavated around that time. During the 1930s, attempts were made to extract copper from malachite and other minerals which occur locally within the Letpadaung deposit. Extensive workings were opened, but soon abandoned, as the attempts were unsuccessful.
In the mid-1950s, the Burma Geological Department and a survey team from Yugoslavia visited the area as part of a regional reconnaissance and recommended further study. Between 1957 and 1960, the Burma Geological Department, using a foreign contractor, undertook an economic survey of the Monywa copper region. This work was followed up with additional drilling by the Burma Geological Department.

From 1972 until 1976, the Japanese Overseas Technical Co-operation Agency financed a programme of exploration and pilot plant studies leading to a feasibility study for the Sabetaung and Kyisintaung deposits. The programme included underground exploration at Sabetaung. A number of holes were drilled in the Sabetaung and Kyisintaung deposits. The Japanese built and operated a 50 tonne per day pilot plant and planned a mill and smelter project that was never implemented.

In June 1978, an agreement for development of the Sabetaung and Kyisintaung deposits was signed between ME-1 and Bor Copper Institute of Yugoslavia (“Bor”). The programme was funded, in part, by the government of Yugoslavia. Bor prepared a full feasibility study and mine plan which served as the basis for construction of a concentrator complex to process 8,000 tonnes per day of ore from Sabetaung, Sabetaung South and Kyisintaung and to produce copper concentrates for export. During the mid-1980s the parties mined feed ore from the Sabetaung pit only, although they also carried out limited stripping at Kyisintaung.

IVN and ME-1 entered into an agreement in March 1994 to carry out feasibility studies on the Sabetaung and Kyisintaung deposits, to construct a pilot plant to test the use of an SX/EW process on Sabetaung ores and, subject to feasibility, to enter into a joint venture to develop the Monywa Copper Project. The parties also agreed to carry out additional feasibility studies on the Letpadaung deposit.

In April 1996, IVN and ME-1 formed JVCo and entered into a joint venture agreement to develop the S&K Mine. In September 1997, JVCo entered into project financing, construction and marketing agreements with Marubeni U.K. P.L.C. and Nissho Iwai Europe P.L.C., a syndicate of Japanese trading houses, for a $90 million project loan facility to finance construction of the S&K Mine. During 1998 and 1999, the project loan facility was used, in part, to pay a $75 million lump sum engineering, procurement and construction contract that was awarded to a consortium of Marubeni Corporation (“Marubeni”) and Chiyoda Corporation, a Japanese engineering and construction concern. JVCo also entered into a long-term sales agreement with Marubeni in which Marubeni agreed to purchase copper cathode produced by the S&K mine during the first seven years of operation. JVCo completed construction of the S&K Mine mining and processing facilities in 1998 and the project achieved full commercial production at a rate of 25,000 tonnes of copper cathode per annum by the end of 1998.

**Geological Setting and Mineralization**

**Regional Geology**

The Monywa copper district is located along the generally north-trending Inner Volcanic Arc which bisects the Inner Burman Tertiary Basin tectonic province. That province coincides with the Central Lowlands physiographic province. Elevations in the district range from about 70 to 330 m. There are four known copper deposits within the district: Sabetaung, Sabetaung South, Kyisintaung, and Letpadaung, all of which occur in andesitic intrusive plugs of late Tertiary age and associated older Tertiary pyroclastics and sediments. The plugs form hills above a generally flat plain.

Pyrite and primary and secondary copper sulfide minerals, mainly chalcocite, occur in hydrothermal breccias, as fracture fillings, and as disseminations in a supergene enriched zone, in a mixed secondary and primary zone, and in a primary zone below an oxidized leached cap that contains essentially no copper values. The
hydrothermal breccias are controlled primarily by fractures, and the primary copper mineralization occurs predominantly in and associated with the breccias and in fractures.

Local and Property Geology

The Sabetaung deposit is currently being mined by open pit methods. The dimensions of the mineralized zone are approximately 500 metres by 500 metres and the deposit has been tested by drilling to depths of 300 metres. Copper mineralization in the zone occurs as subparallel narrow chalcocite-pyrite veinlets, fracture fillings and irregular hydrothermal breccia bodies hosted in intermediate volcanic rocks, dacite porphyries and possibly tuffs. Chalcocite appears to be replacing pyrite to varying degrees and some veinlets up to 10 centimetres wide contained better than 50% chalcocite.

The Sabetaung South deposit is located some 500 metres southeast of the Sabetaung pit. The host rock is comprised of hydrothermal breccias which typically display rounded and mixed clasts of either sediment fragments or tuffs in a matrix comprised of rock, flour-silica and iron oxides after sulphides. The surface dimensions of the brecciated zone are approximately 200 metres by 250 metres. Drillhole data indicates that leaching extends to a depth of 40 metres, and that a chalcocite-bearing zone is developed over a depth of more than 100 metres below the leached zone.

The Kyisintaung deposit is an area of widespread intense acid sulphate leaching developed over dacite porphyry-hosted fracture and breccia-related chalcocite mineralization. Silicification predominates, with minor kaolinite being developed in the argillized periphery of the deposit. Drilling indicates that the thickness of the intensely leached cap is up to 200 metres and that it is underlain by a major zone of chalcocite enrichment. Chalcocite occurs predominately as thin coatings on pyrite which occurs as disseminations and fracture fillings in the host rock. Mineralized hydrothermal breccias often contain greater than 2% total copper and appear to be the primary mineralization within the deposit.

The Letpadaung deposit encompasses approximately five square kilometres and crops out as a cluster of fault bounded hills above a generally flat plain. The Letpadaung deposit is bounded on the north by the Chindwin Basin Fault and approximately 1,000 metres to the south by the subparallel Monastery Fault Zone. The block bounded by the Chindwin and the Monastery faults hosts the majority of the Letpadaung ore body. Within this fault bounded block is a complex system of northeast and northwest faults. Episodic hydrothermal brecciation is the most striking geologic feature related to mineralization at the Letpadaung deposit. Hydrothermal breccia occurs within northwest and northeast trending, lozenge shaped breccia dikes which pinch and swell in all directions. Individual breccia dikes range from a few centimetres to over five metres in thickness. The breccias are the main control of high-grade copper mineralization and are preferentially developed in the more brittle, silicified alteration zones. These northeast trending zones and swarms were considered to be the dominant control on mineralization, but the recently recognised northwest trending zones and swarms are now known to exert a strong control on the location and orientation of mineralization along the Monastery and northwest faults.

Mineralization

Chalcocite is the predominant copper sulfide mineral in the Monywa deposits. The chalcocite is believed to be mostly secondary and occurs as thin coatings on pyrite. Pyrite occurs in fracture fillings (veins), breccias and vugs, and is disseminated in the groundmass of the rock. Primary chalcocite also occurs in crystalline form in vugs, fractures, and breccias and as graphic intergrowths in pyrite. The deposits can be classified as belonging to the acid-sulfate (high-sulfidation) type.
Exploration, Drilling, Sampling and Analysis

Exploration drilling was carried out by JVCo on the Sabetaung, Sabetaung South and Kyisintaung deposits consisting of 101 exploration holes totalling 18,000 metres. In addition, another 102 holes for condemnation, continuity studies, water and geotechnical studies were drilled.

JVCo has information on 269 historical core holes totalling about 52,000 metres drilled by third parties in the Kyisintaung, Sabetaung, and Sabetaung South deposits from 1958 to 1983. All of these holes have been included in the JVCo computer database. All but six of these holes are vertical. In 1994 and 1995, JVCo drilled 101 exploration-development core holes totalling about 18,000 metres, 18 core holes totalling about 2,000 metres for metallurgical test samples, and 24 reverse circulation holes for a grade continuity study in the Sabetaung pit, totalling 730 metres, for a total of 143 holes and about 21,000 metres. Sixty-three of the exploration-development holes are angle holes and 38 are vertical holes.

JVCo has also established a computer database in respect of the Letpadaung deposit based on information received from a total of 533 drill holes, of which 304 are exploration drill holes totalling 92,575 metres of diamond drill core which were drilled, sampled and assayed under JVCo’ supervision between 1994 and 1996. The remaining drill holes were completed for hydrological, metallurgical or condemnation purposes.

JVCo also recovered information and compiled an electronic database for 143 drill holes totalling 31,286 metres which were drilled between 1957 and 1986 under the direction of a number of Burmese and Myanmar governmental agencies. Due to data inaccuracies, including unreliable drill hole location, poor core recovery, unsatisfactory assay reliability and potentially inadequate drilling direction, JVCo disregarded these drilling results for resource evaluation purposes. However, JVCo used the data from these holes for statistical comparison with its own database.

All drill core from the JVCo drilling was logged systematically by IVN Group geologists for geotechnical and geological information. The core was photographed and sampled, generally in two-metre intervals.

Sampling was done by sawing the core in half. One half is stored at the Monywa Copper Project site. The other half was sent to the joint venture’s analytical laboratory, where it was crushed and pulverised. The coarse rejects and a subsample of the pulverised core are stored at the laboratory. An identical subsample was sent to Inchcape Testing Services of Jakarta, Indonesia, for total copper analysis. JVCo also analysed onsite most copper-mineralised samples for total copper by atomic absorption analysis.

Partial copper analyses, (acid-soluble and cyanide-soluble copper) were performed on part of the database. Cyanide-soluble copper assay results were then used to establish numerical relationships between total copper and cyanide-soluble copper.

Quality control procedures were followed for the JVCo sample preparation and all analytical processes. An electronic database was created at the Monywa mine site office and contains all the geological and related exploration data, including analytical data. All original hard copy documentation is kept at that office.

Mineral Resources and Reserves

Estimates of copper reserves and resources at the Sabetaung, South Sabetaung, Kyisintaung and Letpadaung deposits are as of December 31, 2002. Reserves and resources are categorized in accordance with the JORC Code. The principles and procedures of the JORC Code and CIM Standards are closely aligned and mineralization categorized as measured, indicated and inferred resources and as proved and probable reserves.
under the JORC Code would be reported under identical categories pursuant to CIM Standards. Estimated measured and indicated mineral resources include those mineral resources modified to produce estimated ore reserves. Resources which are not reserves do not have demonstrated economic viability. Reserve and resource estimates reflect 100% of the deposit. IVN’s share is 50%.

**Ore Reserves**  
**December 31, 2002**

<table>
<thead>
<tr>
<th>Deposit</th>
<th>Proven</th>
<th>Probable</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Tonnes</td>
<td>Grade(^{(1)})</td>
<td>Tonnes</td>
</tr>
<tr>
<td></td>
<td>(millions)</td>
<td>(%)</td>
<td>(millions)</td>
</tr>
<tr>
<td>Sabetaung</td>
<td>-</td>
<td>-</td>
<td>18</td>
</tr>
<tr>
<td>South Sabetaung</td>
<td>-</td>
<td>-</td>
<td>13</td>
</tr>
<tr>
<td>Kyisintaung</td>
<td>-</td>
<td>-</td>
<td>182</td>
</tr>
<tr>
<td>Letpadaung</td>
<td>506</td>
<td>0.45</td>
<td>298</td>
</tr>
</tbody>
</table>

(1) Cutoff grade for all deposits other than Letpadaung is 0.15%. Cutoff grade for Letpadaung is 0.10%.

**Mineral Resources**  
**December 31, 2002**

<table>
<thead>
<tr>
<th>Deposit</th>
<th>Measured</th>
<th>Indicated</th>
<th>Total(^{(1)})</th>
<th>Inferred</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Tonnes</td>
<td>Grade(^{(2)})</td>
<td>Tonnes</td>
<td>Grade(^{(2)})</td>
</tr>
<tr>
<td></td>
<td>(millions)</td>
<td>(%)</td>
<td>(millions)</td>
<td>(%)</td>
</tr>
<tr>
<td>S&amp;K Mine(^{(3)})</td>
<td>-</td>
<td>-</td>
<td>213</td>
<td>0.37</td>
</tr>
<tr>
<td>Letpadaung</td>
<td>576</td>
<td>0.43</td>
<td>491</td>
<td>0.35</td>
</tr>
</tbody>
</table>

(1) Represents aggregate measured and indicated resources excluding inferred resources.
(2) Cutoff grade for all deposits other than Letpadaung is 0.15%. Cutoff grade for Letpadaung is 0.10%.
(3) Includes Sabetaung, Sabetaung South and Kyisintaung deposits.

The Sabetaung resource model was estimated using the technique of multiple indicator kriging, while the South Sabetaung and Kyisintaung deposits were estimated using the technique of ordinary kriging. The Sabetaung South and Kyisintaung reserves were estimated by running the Whittle Pit Optimization computer program to determine the economic ultimate pit limits. The estimates assume mining costs of $0.44 per tonne, processing costs of $1.75 per tonne, general and administrative costs of $0.87 per tonne, production at the rate of 25,000 tonnes of cathode copper per year, 81% recovery and a copper price of $0.80 per pound.

The Letpadaung resource model was estimated using the technique of multiple indicator kriging. The reserve was then estimated by running the Whittle Pit Optimization computer program to determine the economic ultimate pit limits. The estimates assume mining costs of between $1.10 and $1.78 per tonne, processing costs of $0.76 per tonne, general and administrative costs of $0.23 per tonne, production at the rate of 125,000 tonnes of cathode copper per year, 81% recovery and a copper price of $0.80 per pound.
Mining Operations

The S&K Mine was designed to produce 25,000 tonnes per annum of LME grade A cathode copper using heap-leach, SX/EW extraction technology. Construction commenced in September, 1997 and JVCo produced its first copper from the mine on November 1, 1998. JVCo’s capital cost of the S&K Mine to December 31, 2002 was approximately $150 million of which $90 million was provided under a credit facility agreement with Marubeni U.K., PLC and Nissho Iwai Europe, PLC. In August 1999, JVCo completed construction of the S&K Mine, at which time the project loan, previously non-recourse only to ME1, also became non-recourse to IVN. As of February 28, 2003, JVCo has repaid approximately $52.5 million in principal against the credit facility and all accrued interest.

The S&K Mine consists of an ore plant and processing related facilities and mining operations on the Sabetaung, Kyisintaung and Sabetaung South deposits. JVCo uses heap leach pads to process the ore. In 2002 JVCo began to increase processing capacity through a program of expanding electrowinning capacity. In the last quarter of 2002, JVCo produced copper at annualized rates of approximately 28,700 tonnes per annum. The expansion program continues, with the ultimate planned capacity expected to be 33,000 tonnes per annum. JVCo has increased the leach pad area of the mine to maintain the increased cathode production and has used run of mine dumps to supplement crusher capacity.

JVCo has relocated some of its mining and ore production from the Sabetaung deposit to the Sabetaung South deposit and reallocated some of the production at the Sabetaung pit from Stage 2 to the Stage 3 area of the pit. Ore grade from Stage 2 of the Sabetaung pit is declining in line with design. The decline is being offset by higher-grade ore recovered from Sabetaung South and Stage 3 of the Sabetaung pit.

In recent years JVCo has encountered ore zones with a high proportion of clay. The clay material increases the proportion of fine material in processing, which reduces the efficiency of leach kinetics and copper extraction. In 2001, all Sabetaung, Sabetaung South and Kyisintaung exploration drill core was re-logged to determine clay content in order to address an increase in clay content in the ores. The clay content information was incorporated into a computer database, allowing JVCo to generate mine plans, and thereby ensure that clay ores are blended with harder ores so as to ensure maximum percolation of solutions through the heap. During 2002, JVCo constructed and operated a pilot fines material removal plant. Based on the success of the pilot plant, a fines removal plant will be added to the crushing circuit during 2003 and is expected to remove a sufficient amount of fines to permit optimum copper leach extraction.

In the past three years, JVCo’s production at the S&K Mine has exceeded the annual target capacity for production of 25,000 tonnes of cathode copper, producing 27,542 tonnes of cathode copper in 2002, 26,025 tonnes of cathode copper in 2001 and 26,699 tonnes of cathode copper in 2000. JVCo’s recent electrowinning capacity expansion program has increased capacity so that JVCo is now capable of producing copper cathode from the S&K Mine at a rate of 31,000 tonnes per annum.

JVCo’s cash costs for the S&K Mine during 2002 (before inventory allowances) averaged $0.42 per pound of copper compared to $0.37 per pound of copper in 2001. Average sales price for cathode copper produced from the mine in 2001 and 2002 was $0.73 per pound.

JVCo has developed and implemented an environmental reclamation plan for the S&K Mine. Under the plan, JVCo will perform reclamation procedures during and subsequent to the mine’s operating life. Reclamation will be funded by ongoing operating and capital allowances and by an estimated $5 million cash accrual during the
operating period. This plan has been reviewed and accepted by an independent engineer and adopted by the JVCo Board of Directors.

Environmental management at the site is under the direction of a permanently employed environmental manager. Commencing in 1999, an Environmental, Health & Safety Report ("EHS") was prepared by the National Occupational Safety Association Limited ("NOSA") and PPK Environment & Infrastructure Pty Ltd. ("PPK"). These independent organizations audited the Monywa Copper Project operations and produced a publicly available report. JVCo staff will prepare the EHS in accordance with NOSA and PPK guidelines. Similar reviews will be conducted annually. JVCo achieved ISO 14001 environmental certification for the S&K Mine in January 2001.

**Marketing Arrangements**

JVCo is a party to a copper sales agreement dated September 23, 1997 with Marubeni Corporation, of Japan whereunder JVCo has agreed to sell, and Marubeni has agreed to purchase, 25,000 tonnes per annum of cathode copper from the S&K Mine. Sale prices are negotiated from year to year based on the market price of LME Grade A cathode copper. Shipping rates and insurance costs are adjusted annually to reflect actual costs. Marubeni receives a sales commission of one percent (1%) of the negotiated sale price. Throughout the term of the copper sales agreement, Marubeni has the exclusive right to market copper produced from the Monywa Copper Project throughout the world. The copper sales agreement will expire on December 31, 2005 unless, prior to that date, copper shipments to Marubeni exceed 175,000 tonnes or JVCo entirely repays all outstanding Monywa Copper Project construction loans, in which case the agreement will expire on December 31 of the year in which either such event first occurs.

In December, 2001, the London Metals Exchange ("LME") registered cathode copper produced from S&K. LME registration certifies that copper produced from the mine meets LME standards for purity, shape and weight as specified by its special contract rules. LME registration means that S&K produced copper cathode can be sold at premium prices.

**Planned Development Activities**

**Development of Letpadaung**

IVN originally planned to obtain project financing to develop a mining operation capable of producing between 50,000 and 125,000 tonnes per annum of cathode copper at the Letpadaung deposit as the second phase of the Monywa Copper Project. Due to an inability to arrange project financing on favourable terms, IVN contracted Ausenco Limited ("Ausenco") to prepare a scoping study (the "Scoping Study") to expand mining operations to the Letpadaung deposit using internal cash flow from the S&K Mine and a limited capital injection. Ausenco completed the Scoping Study in January 2003.

The Scoping Study contemplates an expansion of existing mining facilities and the commencement of mining operations in reliance on operating profits from the S&K Mine and a capital injection of between $11.9 million and $40.9 million, depending on the speed of implementation of the program.

In the Scoping Study,Ausenco states that it is possible for JVCo to incrementally increase production capacity through a series of increases in infrastructure. Ausenco contemplates a six stage process, which would extend over four to seven years depending on whether JVCo implemented a "slow-track" or "fast-track" process. As the stages advance, JVCo would install an increasing amount of infrastructure both at the S&K processing facility and at the Letpadaung deposit site. By Stage 5 (between 2006 to 2010), JVCo would be capable of
processing 90,000 tonnes per annum of copper cathode from the Letpadaung Deposit and 39,000 tonnes per annum from the S&K Mine deposits. The activities contemplated in the six stages are as follows:

<table>
<thead>
<tr>
<th>Stage</th>
<th>Production (tonnes per annum (“tpa”))</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>33,000</td>
<td>extend S&amp;K Mine tank house and install eight additional electrowinning cells</td>
</tr>
<tr>
<td>2</td>
<td>39,000</td>
<td>extend S&amp;K Mine tank house and install 22 additional electrowinning cells at S&amp;K, pre-strip Letpadaung deposit and construct mining infrastructure; construct leach pads, solution handling ponds and overland pipeline to S&amp;K Mine</td>
</tr>
<tr>
<td>3</td>
<td>69,000</td>
<td>construct 30,000 tpa SX-EW module, power and water supply, solutions handling pond no. 2 at Letpadaung</td>
</tr>
<tr>
<td>4</td>
<td>99,000</td>
<td>construct 30,000 tpa SX-EW module, expand power supply and construct leach pads and solutions handling pond no. 3 at Letpadaung</td>
</tr>
<tr>
<td>5</td>
<td>129,000</td>
<td>construct 30,000 tpa SX-EW module, crushed ore leach pads, tailings dam facilities at Letpadaung</td>
</tr>
<tr>
<td>6</td>
<td>129,000</td>
<td>construct primary and secondary crushing facilities, crushed ore leach pads, tailings dam facilities at Letpadaung</td>
</tr>
</tbody>
</table>

The fast-track plan contemplates commencement of Stage 1 in 2003 and completion of Stage 6 in 2007 or 2008, with a capital injection of approximately $40.9 million. JVCo would need to inject $35 million in year 2 and $5.9 million in year 3. The slow-track plan contemplates commencement of Stage 1 in 2003 and completion of Stage 6 in 2009 or 2010, with a capital investment of approximately $11.9 million. Under the slow-track program, JVCo would need to inject all $11.9 million in year 3. In both cases, the analysis assumes a copper price of $0.75 per pound in the first two years and the overall capital cost is estimated at $315.5 million.

The expansion program contemplates increasing the capacity of the S&K Mine in Stage 1 and 2. The Sbetaung and Kyisintaung deposits would be mined at a higher rate and infrastructure increases would involve the production of up to 39,000 tonnes per annum by completion of Stage 2. JVCo would then commence an aggressive growth strategy at Letpadaung where 30,000 tonnes per annum SX/EW modules are installed each year between year three to year five to obtain a total of 90,000 tonnes per annum of production from Letpadaung by year 5.

The government of Myanmar is building a bridge across the Chindwin River at Monywa and the Irrawaddy River at Mandalay, which will significantly reduce transport logistic difficulties and reduce the amount that JVCo would otherwise have had to expend to improve transport infrastructure in the area.

The life of the project is estimated to be 25 years. No decision has been made as to whether JVCo will proceed with the expansion plan, as the Scoping Study is under review by the Board of Directors of IVN and
the Board of Directors of JVCo. Development of the Letpadaung deposit will also be subject to approval by the
government of Myanmar.

Other Development Activities

Myanmar Electric Power Enterprise (“MEPE”) is responsible for supplying power to the project. The total estimated average power requirement for the project is estimated to be 70 megavolt amperes. The Letpadaung development plan contemplates the installation of a 215 kilometre, 230 kilovolt, 90 megavolt ampere overhead transmission line from Thazi to Letpadaung. Thazi is located south of Mandalay on the main national electricity distribution grid. This connection was chosen after extensive study of power supply options by JVCo’s advisors in consultation with MEPE.

As an alternate source of power, JVCo has encouraged several interested parties to study the possibility of building a natural gas or coal-fired power plant in the Monywa area. A Japanese group has funded a study which would involve using local coal from deposits north of Monywa. Several companies are also reviewing the use of domestic sources of natural gas as a fuel source.

Savage River Iron Ore Project, Tasmania, Australia

Property Description and Location

IVN’s wholly-owned subsidiary ABM and its subsidiaries (for the purposes of this part, collectively referred to as “ABM”), operates an iron ore (magnetite) mine and produces iron ore pellets and magnetite concentrate at its integrated Savage River and Port Latta facilities in Tasmania, Australia. The Savage River iron ore mining operation is situated on approximately 2,400 hectares of leasehold land, 110 kilometres by paved all-weather road from the City of Burnie on the northwest coast of Tasmania. ABM uses an 83 kilometre pipeline to transport concentrate, in the form of slurry, from Savage River to Port Latta. At Port Latta, ABM processes the bulk of the concentrate into iron ore pellets which are stockpiled and loaded onto ships for delivery to ABM customers.

The Savage River magnetite deposit is located on the northwest coast of Tasmania, within the municipality of Wynyard-Waratah, at an elevation of 229 metres. The regional terrain is rugged and mountainous, and covered with dense rain forest. Local vegetation includes undisturbed rain forest but in the area of the mine it is mainly wet eucalyptus and acacia with open heathland. The mine and concentrating plant are both in the Savage River valley, with the Savage River flowing through the mine site and ultimately discharging into the Pieman River, which then flows westward to the coast.

The Port Latta pelletising and shiploading facility is located on Sawyer Bay, on Tasmania’s northwestern coast approximately 20 kilometres east of Stanley and 50 kilometres west of Burnie. The pelletising plant is situated on a narrow strip of relatively flat coastal land.

ABM holds the Savage River Project through its indirect subsidiary, Goldamere Pty Ltd. (“Goldamere”). In September 1996, Goldamere entered into an agreement with the State Government of Tasmania (the “State of Tasmania”) pursuant to which Goldamere agreed to carry out a feasibility study respecting the possible redevelopment of mining operations at the Savage River mining site. In December 1996, Goldamere and the State of Tasmania entered into an asset purchase agreement (the “Savage River Asset Purchase Agreement”) whereby Goldamere agreed to purchase from the State of Tasmania the assets relating to the Savage River mining operation and the Port Latta pelletising and shiploading facilities for a deferred payment of AUSS$13
million (the “Asset Purchase Price”). The government further agreed to indemnify Goldamere against liability resulting from any pre-existing or on-going environmental pollution or contamination caused by past operations.

In May 1, 1997, Goldamere and the State of Tasmania entered into a mining lease for a term of 30 years, whereby Goldamere leased the Savage River iron ore mine site for the purpose of carrying on mining operations. Goldamere agreed to pay annual rent in the form of royalties. The royalty rate comprises an ad valorem royalty of 1.6% of net sales plus an annual profit royalty of a maximum of 40% of the profit margin for the immediately preceding year. The sum of both royalty payments is limited to a maximum of 5% of net sales.

**Accessibility, Climate, Local Resources, Infrastructure and Physiography**

**Accessibility**

The Savage River iron ore mine is relatively isolated, being situated 43 kilometres off the Murchison Highway which links the northwest and western coasts of Tasmania. The nearest major town by road is Burnie (population 20,000) located about 98 kilometres from the mine site.

The Port Latta pelletising and shiploading facilities are located on Sawyer Bay, on Tasmania’s northwestern coast approximately 144 kilometres north (by road) of the mine site. The nearest towns are Stanley (population 576), 21 kilometres to the northwest (by road), Smithton (population 3,495), 29 kilometres to the west and Wynyard/Burnie, which lies 59 kilometres to the southeast on the north coast.

**Climate**

There are no climatic extremes experienced at the Savage River mine site or the Port Latta facilities and few conditions which affect production operations. Mine haulage can be affected by high rainfall and shiploading operations may be delayed by winds above 30 knots. Rainfall distribution in western Tasmania is generally high throughout the year, with June to September being the wettest months and December to March the driest. Drought conditions are rare. Average annual rainfall at the Savage River mine site is 1,953.9 millimetres while average annual rainfall at Stanley and Port Latta are 935.8 millimetres and 940.4 millimetres, respectively.

At Savage River, mean monthly minimum and maximum temperatures range from between 3.5 and 9.3°C in July to between 9.9 and 20.1°C in February. Mean monthly minimum and maximum temperatures at Stanley range from between 6.5 and 12.0°C in July to between 12.9 and 20.6°C in February, and at Port Latta from between 4.8 and 12.5°C in July to between 12.4 and 21.4°C in January. Although not exposed to extreme and persistent winter conditions, the Savage River mine area is subject to an average of 24.6 days of frost and 5.5 days of snow per year. The coastal setting at Stanley experiences an average of 11.3 days of frost per year and no snow.

**Local Resources and Infrastructure**

All surface rights necessary to carry on mining operations at the Savage River mine site are held on a leasehold basis. The initial mining lease (11M/97), entered into in 1997, has a term of 30 years. Goldamere applied for 4 additional leasehold areas contiguous with its existing leasehold to accommodate all foreseen extensions of the pit on the south ore body and for tailings and waste dump purposes. Mining Lease 2M/2001 was granted on November 7, 2001 for thirty (30) years, to replace 11M/97 and incorporates the additional lease areas into a single mining lease over the operation.
Infrastructure is well established from previous operations and Goldamere has undertaken extensive refurbishment of facilities. Maintenance buildings and offices are appropriate to the needs of the operation. The workforce is generally drawn from local towns in the immediate area, with on-site single status accommodation provided at Savage River on a weekly basis for most employees.

Experienced plant operators, backed by technical and professional staff, run the Savage River processing and plant operations. Activities carried on by previous operators ran continuously for 30 years from 1967. This has resulted in a large pool of experienced operations and maintenance personnel who live in the local area. Tasmania is considered to be a highly liveable location and ABM has had no difficulty in recruiting suitably trained and experienced personnel.

Heavy parts and bulk materials are transported from the mainland by sea to the local port of Burnie. Road access to the mine site is via the all-weather Murchison Highway south from Burnie and thence west to the mine site on a sealed road. Burnie is served by commercial commuter air service from Melbourne several times daily.

Concentrate from the mine is transported in slurry form via an 83 kilometre pipeline to the pelletising plant at Port Latta. Final product pellet shipments are loaded onto bulk carriers at the purpose-built jetty, which can accommodate vessels of up to 125,000 tonnes capacity. The jetty, adjacent to the pellet plant, is equipped with bulk loading facilities and is serviced by tugboats to assist in the berthing of bulk carriers.

Both sites are connected to the Tasmanian power grid and electricity is purchased from Aurora Energy, the Tasmanian power retailer. Available power is sufficient for the project and future expansion. Water supplies to the concentrator operation are plentiful through local established storage dams and reclamation from tailings. Water at Port Latta is reclaimed from the concentrate slurry and is supplemented by a local borefield.

In March 2001 ABM signed a 10 year gas supply agreement with Duke Energy International to supply natural gas to ABM at the Port Latta pellet plant, enabling ABM to convert its fuel oil furnaces to natural gas. The gas is supplied by marine pipeline across the Bass Strait from Longford in Victoria to Bell Bay in northern Tasmania, with a branch line extending to Port Latta in northwestern Tasmania. ABM has converted four of its five fuel oil furnaces to natural gas, with the final furnace scheduled for conversion later in 2003.

**Physiography**

The Savage River mine site is located in a steep valley incising the easternmost extension of the Western Ranges physiographic region of central west Tasmania. The mine site lies at an elevation of between 200 and 350 m in the Savage River valley. The immediate surroundings consist of a series of sub-parallel ridges to the northwest and southeast. Further to the northwest and southeast, the ridges give way to more mountainous terrain with peaks of 700 to 800 m. Mount Bertha, which peaks at 703 m and is the highest mountain in the northwest of Tasmania, is located north of the mine site.

The slurry pipeline to Port Latta traverses east of Mount Bertha, climbing from the Savage River mine site for 25 km to an altitude of approximately 520 m. It then descends over 56 km to the northwestern coastline, crossing the Rapid, Arthur and Black rivers en route. Port Latta itself is located on the foreshore of Sawyer Bay, which is an open, 25 km stretch of coast, protected to the northwest by a headland leading out to North Point and to the east by Rocky Cape.
History

Magnetite mineralization was discovered at Savage River in 1877. For many years, interest in the deposit centred on the copper and gold potential of the area. Adits were developed in the hillsides but no significant base or precious metal mineralization was identified. Exploration of the prospect was carried out by the Bureau of Mineral Resources in 1956, including ground and air magnetometer surveys. In 1957 and 1959, diamond drilling was undertaken.

In 1965, Savage River Mines Limited (“SRM”), a joint venture of Australian, Japanese and United States interests, was formed to develop the Savage River deposit. Open cut mining commenced in 1967 and continued until 1996. A magnetite concentrate was produced and exported, principally to Japan. Between four and six million tonnes of ore were mined per annum producing approximately 1.5 to 2.3 million tonnes of concentrate averaging 67% iron in grade. Over a 30 year period 137 million tonnes of ore were mined and processed and 58 million tonnes of magnetite concentrate was produced, pelletised and exported.

In 1995, SRM decided to close the operation and mining ceased in April 1996. However, in October 1995, Goldamere commenced discussions with the Tasmanian government to take over the Savage River mine site and continue the mining, production and export of pellets. Plans were based on a cut back and expansion of the open pits, a river diversion to provide access to high grade ore, and changes to the mining and ore haulage methods. After various discussions and proposals, Goldamere was granted an Authority to Prospect and commenced an infill and confirmatory drilling programme.

During 1996, Goldamere carried out feasibility studies and entered into a series of agreements with the Tasmanian government to acquire and operate the Savage River mine. See “Property Description and Location”. Goldamere commenced site construction work in 1997. A third party contractor was retained to undertake mining and to operate and maintain the conveyor, concentrator, slurry pipeline system, pelletising plant and shiploading facilities. Waste stripping commenced in September 1997 and mining and milling began the following month. Goldamere began replacing the third party contractor’s personnel with its own staff and eventually assumed full control of operations in May 1999.

In December 2000, the Corporation acquired all of the issued and outstanding shares of Goldamere’s parent, ABM in exchange for common shares of the Corporation.

Geological Setting and Mineralization

Regional Geology

The Savage River magnetite deposit lies within and near the eastern margin of the Proterozoic Arthur Metamorphic Complex in northwestern Tasmania. This complex is exposed along a northeast-southwest trending structural corridor, the Arthur Lineament, which separates Proterozoic sedimentary rocks to the northwest from a variety of Palaeozoic rocks to the southeast. The Arthur Metamorphic Complex in the vicinity of Savage River is dominated by the Whyte Schist that is subdivided into an eastern and western sequence. The eastern sequence consists predominantly of quartz-mica rocks including thin micaceous quartzite beds, schist and phyllite. The western sequence is characterised by amphibolite, chlorite and albite schist or quartz-muscovite schist. The grade of metamorphism has been interpreted to range from upper greenschist to amphibolite facies metamorphism.
Local and Property Geology

The magnetite deposits at the Savage River mine site represent the largest of a series of discontinuous lenses that extend in a narrow belt for some 25 kilometres south of what was formerly the Savage River township. The deposit is subdivided into sections on the basis of areas that have been mined. These areas are referred to as Centre Pit, South Lens and North Pit. A new deposit has been discovered to the south of Centre Pit and is referred to as the South Deposit. The South Deposit comprises two, elongated lenses of magnetite referred to as the eastern and western zones that strike roughly north to south and extend along strike for up to 400 m.

The magnetite ore bodies developed at Savage River are enclosed within a highly sheared and strike-faulted belt of mafic and ultramafic schist and mylonite. The belt is approximately 500 m in width and strikes north-northeast to south-southwest.

The magnetite ore, which is almost entirely enclosed within ultramafic rocks, specifically serpentinite and talc-carbonate schist, ranges in thickness from 40 to 150 m in width in what is known as the main ore zone. The main ore zone has a known strike length of 4 km and can occur as two or more thinner lenses. Down dip continuity is indicated to depths of up to 600 m.

Mineralization

The Savage River deposits are all relatively similar, comprising sub-vertical north-south striking magnetite lodes within a schist-serpentinite sequence. The mineral occurrence is subdivided into several deposits, based largely on structural breaks in the ore sequence which are reflected in the pit designs. The ore may be massive, layered or disseminated and range from being fine-grained to coarsely crystalline.

The magnetite ores comprise three volumetrically important groups: pyritic ores, serpentinitic ores and talc-carbonate ores. Pyrite and serpentinite are ubiquitous. Talc, tremolite, actinolite, chlorite, epidote and apatite occur in varying amounts.

Massive magnetite is generally defined as having a DTR of greater than 40%. The DTR approximately indicates the percentage of recoverable magnetite in the rock. A lower cut-off of 15% DTR is used to define ore. Below this cut-off the rocks are considered waste.

Exploration, Drilling, Sampling and Analysis

ABM has surveyed all pits and dumps and the current topography is well defined. All drill hole collars have been surveyed. Down hole surveys have been undertaken to determine the inclination of the holes, but because of the presence of magnetite, standard hole deviation surveying has not been carried out. A check has been carried out on a single hole using a non-magnetic survey method. Relatively minor deviation was recorded. Given the scale of the ore zone, it is not considered that hole deviation will materially affect the total resource or reserve estimates.

Subsequent to its acquisition of the Savage River Project, ABM identified two sub-outcropping lodes of magnetite-rich material in the southwest portion of its mining leasehold, approximately 3 km southwest of the plant site, which ABM has termed the South Deposit. ABM geologists identified the source of the anomaly on the ground and carried out ground magnetic traverses, trenching and mapping. Two north-south striking magnetic lodes, approximately 100 m apart, have been mapped over a 400 m strike length. The thickness of the lodes at surface ranges from less than 5 m to more than 30 m.
ABM has conducted a diamond drilling programme to establish the true thickness, grade and continuity of the mineralization at the South Deposit. Thirty-nine diamond drill holes, for a total advance of 7,314 m, were completed at the South Deposit by December 2002. Two of these holes were drilled to provide whole core samples for metallurgical testwork. Grid drilling was completed at an initial 100 m by 100 m grid spacing to broadly define the extent of the magnetite mineralization. Infill drilling was completed at 50 m by 50 m grid spacing.

Drilling completed during 2002 was directed at defining depth and strike extensions of the magnetite mineralization to the south of the existing resources and reserves on sections 4200N, 4150N, 4100N and 4050N.

ABM has also supplemented previous SRM drilling with a further 20 holes (approximately 4,000 m) drilled from June to October 1996. The maximum depth drilled by ABM was 300 m. Recoveries were generally in excess of 90%. As all the pits were flooded at the time, some of the preferred drill sites were inaccessible.

ABM carried out limited additional infill drilling between 1998 and 2001. Infill diamond drilling was completed during 2001 in the Centre Pit and South Lens pit areas. Nine diamond drill holes for a total advance of 2,475 m were completed. The program was designed to improve the geological confidence and upgrade existing resources and reserves previously defined in the area.

Mineralized core samples were cut by diamond saw and half the core sent for analysis. ABM sampled principally in 2 m intervals and the core was crushed and split at the Savage River laboratory and analysed for DTR. These samples were then sent to Port Latta for further chemical analysis. Blast hole cuttings are analysed in situ in the pit using a magnetic susceptibility meter, with some samples collected and assayed to maintain the correct calibration of the meters.

The susceptibility meter values provide a general crosscheck on the DTR results. Scatter plots of the two sets of values show a good correlation. Routine cross checks of DTR values between laboratories have been undertaken and, historically, product grades and production reconciliation figures have given confirmation that the sampling and DTR values are generally satisfactory.

Data quality is reasonable. The primary data comprises DTR factors based on diamond drill samples. The DTR values are a measure of the percentage of recoverable magnetite that can be achieved in the magnetite concentration plant. A 95% ‘efficiency factor’ is applied by the mill to the mine DTR estimates. The database includes holes drilled by SRM and more recent holes drilled by ABM. DTR values are from different source laboratories. Limited cross-checking has been undertaken but available evidence suggests the data is comparable and satisfactory.

Prior operators carried out a number of density determinations in 1977 and a regression curve was defined based on the DTR value. ABM determined density values on all new diamond drill core to more accurately define the density/DTR relationships in the different areas of the deposit. Waste density is taken as 2.81 tonnes per cubic metre. Ore density ranges from approximately 3 tonnes per cubic metre (20% DTR) to 4 tonnes per cubic metre (70% DTR) and averages approximately 3.5 tonnes per cubic metre (50% DTR).

**Mineral Resources and Reserves**

Estimates of reserves and resources at the Savage River iron ore mine are as of December 31, 2002. Resources and reserves are categorized in accordance with the JORC Code. The principles and procedures of the JORC Code and the CIM Standards are closely aligned and mineralization categorized as measured, indicated and inferred resources and as proved and probable reserves under the JORC Code would be reported.
under identical categories pursuant to CIM Standards. Estimated measured and indicated mineral resources include those mineral resources modified to produce the estimated ore reserves. Resources which are not reserves do not have demonstrated economic viability.

### Ore Reserves
**December 31, 2002**

<table>
<thead>
<tr>
<th>Deposit</th>
<th>Proved</th>
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<th>Probable</th>
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<th>Total</th>
<th></th>
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<tbody>
<tr>
<td></td>
<td>Tonnes (millions)</td>
<td>Grade (DTR %)</td>
<td>Tonnes (millions)</td>
<td>Grade (DTR %)</td>
<td>Tonnes (millions)</td>
<td>Grade (DTR %)</td>
</tr>
<tr>
<td>Savage River(^{(1)})</td>
<td>21.5</td>
<td>51.9</td>
<td>3.4</td>
<td>48.0</td>
<td>24.9</td>
<td>51.4</td>
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</tbody>
</table>

\(^{(1)}\) Includes North Pit, Centre Pit and South Deposit.

### Mineral Resources
**December 31, 2002**

<table>
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<tr>
<th>Deposit</th>
<th>Measured</th>
<th></th>
<th>Indicated</th>
<th></th>
<th>Total(^{(1)})</th>
<th></th>
<th>Inferred</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Tonnes (millions)</td>
<td>Grade (DTR %)</td>
<td>Tonnes (millions)</td>
<td>Grade (DTR %)</td>
<td>Tonnes (millions)</td>
<td>Grade (DTR %)</td>
<td>Tonnes (millions)</td>
<td>Grade (DTR %)</td>
</tr>
<tr>
<td>Savage River(^{(2)})</td>
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<td>52.3</td>
<td>77.8</td>
<td>49.3</td>
<td>180.7</td>
<td>51.0</td>
<td>49.5</td>
<td>42.7</td>
</tr>
</tbody>
</table>

\(^{(1)}\) Represents aggregate measured and indicated resources excluding inferred resources.

\(^{(2)}\) Includes North Pit, Centre Pit and the South Deposit.

Historically, SRM estimated the resource using a sectional estimation method. The initial ABM resource estimate was derived by block modelling using an inverse distance cubed grade interpolation algorithm. More recently, the results from geostatistical analysis have been applied to the inverse distance interpolation. The blocks of the main ore zone fall within a “wire-frame” which has been geologically constrained. Mineralised blocks have been categorised as measured, indicated and inferred resources or proved and probable reserves based primarily on the distance from the nearest drill hole.

The reserve represents that part of the resource which is planned to be mined taking into account economic factors. The reserve at Savage River has been estimated by the conventional process of pit optimization followed by the development of a practical pit design. The optimization stage incorporates prevailing economic factors, such as mining cost and its variation with depth, the grade, processing costs and selling price. The overall slope of the pit walls based on operational geotechnical experience are also entered into the optimizer which generates a series of pit envelopes used as the basis of the pit designs.

Selected pit envelopes are next turned into practical designs that incorporate haulage ramps, ramp grades, mining widths, berm widths, batter angles and other practical operational and scheduling considerations. Measured and indicated resources which fall within the final designed pit envelope are categorized as proved and probable reserves and represent that part of the resource planned to be mined. The reserves incorporate expected mining recovery and dilution.
Factors, equivalent to approximately 11% dilution and 95% mining recovery, have been applied to the resource tonnes and DTR. In areas of broad continuous mineralization, losses and dilution may be minimal but will be more significant where zones are thinner or cross-cutting intrusives are common. The factors applied by ABM are consistent with historical data from the Savage River deposit.

**Mining Operations**

Mining activities in the open pit involve the use of conventional off-highway rear-dump trucks of 100 to 150 tonnes capacity and hydraulic excavators, with contract drilling and blasting being used to prepare the ground ahead of mining.

Ore processing operations at Savage River comprise primary crushing and stockpiling of crushed ore, followed by autogenous milling, rougher magnetic concentration of magnetite, regrinding of the rougher magnetic concentrate, hydroseparation to remove fine gangue minerals and finisher magnetic separation to produce a final magnetite concentrate which is stored in agitated tanks prior to being pumped to the pellet plant at Port Latta. The pipeline pump station is located at the concentrator. Tailings are thickened prior to pumping to the tailings dam.

ABM’s production is controlled by the concentrator capacity. The concentrate slurry pipeline is approximately 83 kilometres in length and has an internal diameter of 229 millimetres. Buried sections of the pipe are wrapped and cathodically protected against corrosion. A corrosion inhibitor, pH control and an oxygen scavenger are used to control internal corrosion. Regular surveys in recent years have shown that the rate of wear and corrosion in the line has been reduced to negligible levels.

The Port Latta pellet plant receives the concentrate slurry from the pipeline, thickens and filters it prior to agglomeration into green balls and induration of the balls into fired pellets. The pellets are screened to remove fine chips and coarse pellet clusters and then stored in a yard pending shipment by sea.

In 2002 ABM temporarily ceased mining operations at Extension 3 of the North Pit deposit because of a slope failure at Extension 2. Accordingly, all mining in the fall of 2002 took place at the South Deposit. This development, combined with poor reconciliation of high grade ore in the upper benches of the South Deposit reduced ore supply and weight recoveries in the mill. ABM processed low-grade ore stockpiles to compensate for the reduced supply. Recent upgrades to the mill circuit have increased ore throughout, allowing ABM to maintain slightly better than planned concentrate production.

During the first quarter of 2003 a majority of the ore feed for the Savage River Project came from the eastern ore lens of the South Deposit. The eastern ore lens consists primarily of high-grade soft ore, with high nickel impurities. ABM has instituted quality improvement measures in order to control the level of nickel impurities until the South Deposit cutback exposes the western ore lens of the South Deposit which does not contain the same level of nickel impurities.

Mining at Extension 3 of the North Pit resumed at the end of January 2003 with the establishment of access behind the Extension 2 slope failure. The Savage River Project’s mine plan has now been revised to incorporate slope design changes in the North Pit, and a new mining sequence to reduce the probability and impact of a similar slope failure in Extension 3. In addition, a new design at the southern end of the Center Pit has been included in the schedule, adding a year to the life of mine and taking end of mine life out to May 2008.
Marketing Arrangements

On July 1, 2002, Goldamere entered into a five-year supply contract with BHP Steel (AIS) Pty. Ltd. (the “BHP Sales Agreement”) to supply between one million and one and a quarter million dry metric tonnes of iron ore pellets per year. All payments under the BHP Sales Agreement are made in U.S. dollars. Price adjustments are provided for in the BHP Sales Agreement depending on the quality and content of the iron ore pellets.

Goldamere’s supply contract with Posco Australia Pty. Ltd. (“POSCO”) ended on March 31, 2003. Goldamere is currently in negotiations with POSCO for a new three year supply contract.

Goldamere has increased its focus on the Chinese market, and has established a sales target of 300,000 tonnes of pellet and concentrate into the Chinese market for 2003. Goldamere shipped its first delivery to the Chinese market in April 2003, and is in discussions with Chinese steel producers for long-term supply contracts.

Financing

In 1998, Goldamere entered into a Project Facility Agreement with UBS Australia Limited (“UBS”), pursuant to which UBS granted to Goldamere an Aus$43 million ($23.6 million) credit facility (the “Credit Facility”). As a condition of the Credit Facility, Goldamere was required to implement a risk management program which involved, among other things, hedging currency risk in respect of the US dollar proceeds of the sale of iron ore from the Savage River Project (the “Hedging Arrangements”). Under the Hedging Arrangements, Goldamere was required to deliver to the hedge counterparty $5 million of currency per month at an exchange rate of $0.6817: Aus$1.

Pursuant to the Savage River Asset Purchase Agreement, the Asset Purchase Price was to be satisfied by way of expenditures by Goldamere to remediate environmental damage on the Savage River Project property caused by the previous owner. The Asset Purchase Price was originally secured by a bank guarantee and then by the State of Tasmania becoming a beneficiary of charges and mortgages granted over the assets of the Savage River Project and certain other assets.

As a result of a significant weakening of the Australian dollar in relation to the U.S. dollar, the Hedging Arrangements required Goldamere to incur substantial ongoing currency exchange losses. As an interim relief measure, commencing in the end of June 2001 UBS agreed to allow Goldamere to make the monthly United States dollar payments required pursuant to the Hedging Arrangements at the then prevailing Aus$:US$ exchange rate rather than at the specified contract rate. An amount equal to the difference between the amount otherwise payable at the specified contract rate and the amount actually paid at the then prevailing exchange rate was then added to the outstanding principal amount of the Credit Facility.

Faced with a deteriorating international market for iron ore and continuing weakness in the Australian dollar, the management of Goldamere concluded that the economic viability of the Savage River Project could not be sustained under the burden of the Credit Facility and UBS Hedging Arrangement obligations and, in August 2001, approached UBS to discuss alternatives for restructuring the mine plan and financial arrangements of the Savage River Project.

In September 2002, Arbutus Holdings Ltd. (“Arbutus”), a wholly-owned subsidiary of IVN, acquired all of UBS’ rights in respect of the Credit Facility and assumed all of UBS’ liabilities and obligations under the Project Facility Agreement. In connection with, and as part of, these transactions, Arbutus replaced UBS as the hedge counterparty under the Hedging Arrangements and all remaining currency exchange transactions and obligations under the Hedging Arrangements were closed out. As consideration for UBS’ rights under the Credit Facility and acquiring the residual liabilities resulting from the closing out of the Hedging Arrangement transactions and obligations (the “Close Out Amounts”), Arbutus paid to UBS cash in the amount of Aus$15
million ($8.2 million). Including the Close Out Amounts, the total Goldamere indebtedness acquired by Arbutus from UBS was approximately Aus$74.9 million ($41 million).

In connection with Arbutus’ acquisition from UBS of the Credit Facility indebtedness and related security, the State of Tasmania agreed to relinquish its security in the Savage River Project. As consideration for the relinquishment, Goldamere agreed to lodge with the State of Tasmania a bank guarantee in the amount of Aus$2.8 million ($1.5 million) as substitute security for Goldamere’s obligations under the Asset Purchase Agreement to either pay the deferred Asset Purchase Price in cash or to incur environmental remediation expenditures in respect of the Savage River Project in an aggregate amount equal to the deferred Asset Purchase Price plus accrued interest. Goldamere and the State of Tasmania also agreed upon a variation of the time for, and manner of payment of, interest in respect of the Asset Purchase Price.

The transaction reduced current and long-term liabilities on IVN’s consolidated balance sheet by approximately Aus$74.9 million ($41 million).

ABM management has advised IVN that ABM will likely need to supplement anticipated cash flow from project operations with additional capital in order to cover budgeted operating costs. The funding shortfall has arisen because of the recent rapid appreciation of the Australian dollar against the US dollar. ABM management recently sought to arrange a working capital credit facility and new currency hedging arrangements with a third party lender in order to meet cash flow shortfalls and mitigate currency risks but has since advised IVN that recent currency exchange rate fluctuations have made that alternative unavailable for the foreseeable future. ABM has further advised IVN that a failure to make suitable financial contingency arrangements to meet anticipated shortfalls could have an adverse impact on ABM’s ability to continue as a going concern. ABM management has requested, and IVN has agreed to make available, an Aus$8 million working capital credit facility to enable ABM to meet any such shortfalls that may arise in the immediate future. ABM management has advised IVN that it plans to continue exploring suitable alternatives for obtaining any future credit facilities it requires from external sources but that there is no assurance that it will be successful in doing so.

Other Projects

Mongolia

Beginning in 2002, IVN, a group of wholly-owned Mongolian subsidiaries of IVN (collectively, “IVN Mongolia”), substantially increased the landholdings of the IVN Group throughout southeastern and southern Mongolia and near Saran Uul in central Mongolia. IVN Mongolia holds 87 exploration licenses and has applied for another 23 exploration licenses, which combined cover approximately 10,000,000 hectares (100,000 square kilometres (“km$^2$”)) of land in Mongolia. IVN Mongolia has commenced an aggressive exploration program of the non-Oyu Tolgoi Mongolian land holdings of the IVN Group from a base camp located at Manlei in the Gobi desert. The following is a description of some of the more significant exploration activities on these properties.
Kharmagtai/Ovoot Hyar

The Kharmagtai and Ovoot Hyar project area comprises three licenses. IVN Mongolia currently owns 100% of two of the licenses, but has agreed to convey a 10% interest in one of these licenses to an arm’s length third party in exchange for an exploration dataset owned by the third party in respect of the property. IVN Mongolia conditionally owns the third license, with the right to earn an unconditional 80% interest in the license upon completion of a $500,000 work program. An arm’s length third party would hold the remaining 20%. IVN Mongolia is the sole owner of exploration licenses covering a substantial portion of the area surrounding these three licenses.

Detailed geological mapping, diamond drilling and rock-chip sampling of the Kharmagtai and Ovoot Hyar project area commenced in April 2002 and is ongoing. As part of the field program, 1,160 line km of gradient array IP, 1,750 line km of field magnetics and 31.2 km of trenching have been completed. A gravity survey was conducted between October 2002 and January 2003 over key areas of the licenses. In 2002, IVN Mongolia commenced diamond drilling of several copper-gold porphyry targets, which have been designated as Copper Hill, Gold Hill, Duck, Eagle, Wolf, OV3/Falcon and White Vein.

Forty one diamond drill holes totaling 10,175 m have been completed at the Copper Hill target. The drill results define a broadly east-west trending zone of gold and copper mineralization with near surface dimensions of approximately 200 m by 200 m. High-grade mineralization occurs within 30 m of surface and extends to a depth greater than 250 m. Initial geologic modelling suggests that mineralization is pipe-like and is associated with fingers of monzodiorite stock that are intruded into a volcanoclastic siltstone package. An intense stockwork of quartz-chalcopyrite veins is developed within the monzodiorite and locally within the siltstone. Highlights of assays for holes for which assays are available include:

<table>
<thead>
<tr>
<th>Hole</th>
<th>From (m)</th>
<th>To (m)</th>
<th>Depth (m)</th>
<th>Interval (m)</th>
<th>Gold (g/t)</th>
<th>Copper (%)</th>
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<tbody>
<tr>
<td>KHD002</td>
<td>72</td>
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<tr>
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<td>36</td>
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<td>70</td>
<td>58</td>
<td>0.63</td>
<td>0.50</td>
</tr>
</tbody>
</table>
Mineralization does not outcrop at Copper Hill and a recently completed RC drill program returned assays of low tenor.

The Gold Hill Prospect is located approximately two kilometres due north of Copper Hill. Mineralization crops out locally as a series of malachite-stained quartz stockwork zones which trend broadly east-west. Trenching has extended this zone eastwards under Quaternary cover. The Gold Hill Prospect has a field magnetic response similar to Copper Hill, characterized by a 1,200 m long east-west trending zone, which hosts localized, intense, elongate magnetic highs up to 200 m long. A moderate chargeability anomaly occurs immediately to the north.

IVN Mongolia has completed eighteen diamond drill holes totaling 6,235 m at Gold Hill, and most have intersected well-developed quartz-chalcopyrite stockworks and chalcopyrite-mineralised breccias. Drilling has defined an area of approximately 200 m by 300 m of anomalous gold and copper mineralization. Mineralization occurs within 50 m of surface, has a vertical extent of over 500 m and is open in all directions. Highlights for holes for which assays are available include:

<table>
<thead>
<tr>
<th>Hole</th>
<th>From (m)</th>
<th>To (m)</th>
<th>Interval (m)</th>
<th>Gold (g/t)</th>
<th>Copper (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>KHD047</td>
<td>146</td>
<td>202</td>
<td>56</td>
<td>1.52</td>
<td>0.54</td>
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<tr>
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<td>40</td>
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<tr>
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<td>44</td>
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<tr>
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<td>184</td>
<td>52</td>
<td>0.69</td>
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</tr>
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<td>38</td>
<td>33.8</td>
<td>1.17</td>
<td>0.52</td>
</tr>
</tbody>
</table>

Note: Depth (m) is the depth from surface to the top of the specified mineralized interval. In the absence of detailed topographical contours it is considered accurate to within five metres. Although broadly pipe-like, the plunge of the mineralization is poorly constrained and it is not possible to give true widths of mineralization.
A second phase of diamond drilling at Gold Hill of at least 3,800 m commenced in March 2003. Two diamond drill rigs are presently drilling at Gold Hill and have intersected strongly developed quartz-chalcopyrite stockworks. Assays are pending.

IVN Mongolia has also conducted several thousand metres of diamond drilling and trenching work at each of the White Vein, Falcon and Eagle Prospects. In all three cases, IVN Mongolia has identified encouraging returns of copper and gold mineralization. Further exploration work is scheduled for all three prospects, including an 1,800 m diamond drilling program on the White Vein prospect, which IVN Mongolia intends to start following the completion of drilling at Gold Hill. The drill program will test extensions of known mineralization encountered in the first phase of diamond drilling, including drilling to determine whether or not the White Vein mineralization is contiguous with that of Gold Hill.

_Shuteen_

The Shuteen license is located within the Southern Mongolian Mineralised Belt that also hosts the Oyu Tolgoi Project and Kharmagtai/Ovoot Hyar Project. It is located in the Omnogovi Aimag (Province) approximately 500 kilometres southeast of Ulaanbataar. The license is held by an arm’s length third party, but IVN Mongolia has the right to earn an 80% interest in the property upon completion of a $1,500,000 work program over three years.

The Shuteen license is characterized by an extensive silica-clay lithocap and a series of hematitic matrix- and clast-supported breccias. Over 1,800 line km of field magnetics and 1,000 line km of IP surveying have been completed and processed. IVN Mongolia has identified several high priority targets for drill testing including several large chargeability highs, feeder zones to the lithocap and the hematitic breccias. Diamond drilling commenced in March 2003.

_Oyut Ulaan_

The Oyut Ulaan license was granted to IVN Mongolia in February 2002 and comprises 12,063 hectares. The Oyut Ulaan license comprises a variety of targets which extend over an area of approximately 12 km by 6 km. These targets include a copper mineralized tourmaline-breccia pipe complex, an extensive area of copper-stained colluvium and quartz vein float, several quartz stockwork zones with highly anomalous gold and copper, large chargeability anomalies with peripheral magnetic resistivity highs and occasional gold-copper anomalous porphyry-style veins and gold and copper anomalous skarns.

IVN Mongolia took 35 rock-chip samples of the area of copper-stained colluvium and quartz vein float. Assays were highly anomalous in copper (18 samples between 1 to10%), gold (seven samples between 0.25 to 16.8 g/t) and molybdenum (three samples between 200 to 709 ppm).

Detailed geological mapping and surface rock-chip sampling was completed on the property in September 2002, which included 890 line km of ground magnetics and approximately 700 line km of gradient array IP. Diamond drill testing of several drill targets is scheduled to commence in August 2003.
Saran Uul

The Saran Uul license is located in Bayanhongor Aimag and comprises a total of 10,172 hectares. The license was granted in February 2002. Licenses to explore the surrounding areas are either held by IVN Mongolia or are under application by IVN Mongolia.

An extensive geological mapping and sampling program was conducted during October and November 2002 and included 815 line km of ground magnetics. IVN Mongolia also took 122 surface rock-chip and float samples, with assays defining an area measuring approximately 900 m by 450 m averaging 0.40 g/t gold, 0.70% copper, 90 ppm molybdenum and 1.4 g/t silver. Within this zone is a higher grade core measuring approximately 400 m by 250 m with gold values that average 1.1 g/t.

In the first quarter of 2003 IVN Mongolia completed an IP survey totaling 220 line km. The survey defined a 1.2 km by 350 m broadly east-west trenching chargeability high which is coincident with the main zone of copper and gold mineralization. Detailed IP sections indicated that the anomaly extends to greater than 300 m below surface. A strong chargeability high of approximately 500 m by 200 m was also defined at the southwestern edge of known mineralization. Diamond drilling commenced in March 2003.

The area from which the high-grade samples were collected occurs within a broad zone containing copper oxides in float and outcrop. Occasional centimetre wide quartz veins containing haematitic and geothitic oxides and rare chalcopyrite veins to 5 mm wide are present. Veins occur individually and as stockworks. Mineralization is hosted in a porphyritic monzonite which has intruded moderately hornfelsed siltstone, sandstone and rhyolite. A zone of sericite silica pyrite alteration is present in sediments to the south of the copper oxide zone. Mineralization is open to the southwest where it is covered by Quaternary gravels.

Oyut Ovoo

The Oyut Ovoo prospect is centered on a series of prominent hills comprising copper-bearing magnetite skarns and hydrothermal breccia pipes hosted in Permian granitoid stocks. The mineralised zone has a surface area of approximately four square km and is surrounded by Quaternary and recent alluvium. IVN Mongolia has collected forty-three surface rock-chip samples, and assays contained anomalous values of copper (17 samples between 1 to 10%), gold (nine samples between 0.3 to 0.7 g/t) and molybdenum (16 samples between 100 ppm and 1%). IVN Mongolia has established an exploration camp at Oyut Ovoo in preparation for additional exploration activities.

Proposed MX Exploration Alliance

IVN has entered into a letter of intent with MX Capital Corp. (“MX”), a private Canadian mineral exploration company, to jointly develop certain early-stage exploration and mining projects in Mongolia and South Korea. MX holds a 100%-interest in exploration licenses covering approximately 931,000 hectares (9,310 km²) in Mongolia’s South Gobi region, west of the Oyu Tolgoi Project. During the summer of 2002, MX completed a successful exploration reconnaissance program on approximately 15% of its Mongolia license area. The program resulted in the discovery of several gold and copper prospects, including Builsen, a large epithermal gold discovery, Zuramtai, a porphyry copper system with geological characteristics similar to the Oyu Tolgoi Project, and three strong geochemical anomalies with large alteration systems: Alag Mountain, Ridgeline, Red Valley/White Hill.

The agreement in principle between IVN and MX calls for IVN to transfer to MX a series of early-stage Mongolian exploration licenses covering approximately 932,000 hectares (9,332 km²) in the South Gobi region of Mongolia. These licenses, combined with the existing MX Mongolia licenses, cover 1,863,654 hectares (18,636
km²) throughout the prospective South Gobi porphyry belt. In addition, IVN will contribute its Korean gold and silver projects, including the Silver Hill Gold and Silver Mine, located in Chollanam-Do Province, South Korea. In consideration for these assets, MX will issue to IVN common shares representing approximately 75% of MX’s then outstanding share capital.

IVN has also agreed to immediately provide MX with a Cdn$1,000,000 convertible non-interest bearing loan facility pending the execution of a definitive purchase agreement and closing of the transaction, expected to occur on or about June 15, 2003. Amounts advanced under the convertible loan facility will be convertible into MX units, each consisting of one MX common share and one share purchase warrant exercisable for a period of one year to purchase one additional MX common share at a price of Cdn$0.22. At closing, the entire loan facility will be converted into 5,000,000 MX units, increasing IVN’s equity interest in MX to approximately 80% on a fully diluted basis.

IVN will appoint four representatives to the MX Board, which will consist of six directors. The MX executive management team will continue to be led by David Owens, President and Ian D. McCartney, Vice-President, Exploration. In carrying out its exploration activities and development activities in Mongolia and Korea, MX will draw upon IVN’s considerable body of local expertise and infrastructure, which IVN has agreed to make available on a cost recovery basis. IVN also intends to assist MX in devising and implementing a corporate development plan to raise the additional financing necessary to fund ongoing exploration and development activities in respect of MX’s portfolio of exploration and development assets.

China

Pacific Agreement

In May, 2002 IVN entered into an agreement (the “Pacific Agreement”) with Pacific Minerals Inc. (“Pacific”) a company listed on the TSX Venture Exchange. Pursuant to the Pacific Agreement, IVN subscribed for 5,100,000 common shares of Pacific and 5,100,000 share purchase warrants at an aggregate cost of $3,000,000. IVN also received options to participate in two mineral exploration and development joint ventures between Pacific and Chinese government controlled agencies, the 217 Gold Project (the “217 Project”) in Inner Mongolia and the JBS Platinum-Nickel-Palladium Project (the “JBS Project”) in Yunnan Province. IVN has the right, exercisable on either one or both of the projects until May 31, 2004, to obtain an initial 60% interest in the 217 Project and a 35% interest in the JBS Project, conditional upon funding and completing a feasibility study on the applicable project by no later than July 1, 2006. IVN may then increase its interest in the 217 Project to up to 76.5% and its interest in the JBS Project to up to 75% provided it arranges production financing by July 1, 2007.

The Pacific Agreement also gives IVN the right, until May 31, 2012, to participate in any new project identified by Pacific in China excluding Anhui Province. To date, Pacific has identified four new projects (“New Projects”): the Huize-Xuanwei Copper Project in Southern Yunnan Province, the Zhaotong Copper Project in Northern Yunnan Province, the Guizhou Copper Project in Guizhou Province and the Dandong Gold Project in Liaoning Province. IVN has elected to participate in all of the New Projects. Accordingly, IVN is entitled to an initial 50% of Pacific’s interest in each of the New Projects, which may increase to up to 80% if IVN funds and completes a feasibility study and arranges project financing. For each New Project, IVN and Pacific will fund in equal shares the first $1,000,000 of exploration expenses. Thereafter, IVN may increase its interest in a New Project to 80% by funding exploration and development expenses, completing a feasibility study and arranging project financing.
In October 2002, IVN purchased 2,000,000 units of Pacific at a price of Cdn$1.00 per unit in a private placement. Each unit consisted of one common share and one warrant. Each warrant is exercisable to purchase one common share at a price of Cdn$1.10 per warrant. IVN concurrently acquired 6,597,112 outstanding common shares from five existing shareholders in exchange for Common Shares of IVN. Including common shares issuable upon exercise of warrants, IVN holds approximately 46.5% of Pacific’s issued and outstanding share capital.

The following is a discussion concerning the exploration activities and status of the 217 Project, the JBS Project and New Projects summarized from information publicly disclosed by Pacific.

217 Project and the JBS Project

The 217 Project consists of a 36 km² exploration license in the western part of Inner Mongolia in northern China and approximately 160 km south of the Oyu Tolgoi Project. The 217 Project hosts a zone containing gold mineralization that has been traced along strike by surface trenches over a distance of at least 4,000 m, ranging in width from 40 m to 150 m. Pacific reports that it has drilled twenty core drill holes totalling approximately 4,300 m within the main mineralized zone of gold mineralization. This main mineralized zone is about 1,600 m long and 100 m wide and is open down dip and along strike. The drilling evidences continuity of mineralization. Pacific states that the joint venture has also commenced preliminary metallurgical testing of core samples of both an oxide and a sulphide zone on the deposit. The preliminary metallurgical results indicate the potential for using low-cost heap leaching or vat leaching to recover gold.

Pacific reports that an independent resource estimate of the 217 Project has estimated measured and indicated resources of 35,000,000 tonnes grading 0.848 g/t gold at a 0.6 g/t gold cut-off. The resource estimate also estimated inferred resources of 85,000,000 tonnes grading 0.928 g/t gold at a 0.6 g/t cut-off grade. Pacific states that it intends to conduct an exploration drilling program consisting of forty core drill holes, totalling 5,920 m, starting in July 2003 to improve the degree of confidence of the inferred resource in the southwest zone of the area of mineralization.

The JBS Project is a platinum, palladium and nickel prospect located in Yunnan Province. The prospect is still in the initial stages of exploration and development, with some preliminary underground mapping, sampling and drilling conducted in the second half of 2002. Pacific reports that a substantial database of exploration is already available from work conducted by the government of Yunnan Province between 1975 to 2000. Pacific and its Chinese joint venture partner are using this database and the results of its preliminary exploration work to develop an exploration plan for the JBS Project.

New Projects

The Huize-Xuanwei Copper Project and the Zhaotong Copper Project are the most advanced of the four New Projects. In both cases, Pacific has executed a co-operative joint venture agreement with the Yunnan Geological and Mining Co. Limited, a geological exploration company owned by the government of Yunnan Province. The joint venture agreements contemplate Pacific contributing an aggregate of $8,000,000 over three years in consideration of a 70% interest in the Zhaotong Copper Project and a 75% interest in the Huize-Xuanwei Copper Project.
Exploration activities on each of the New Projects remain in the early stages. IVN anticipates that a detailed exploration plan will be devised and implemented upon finalization of joint venture negotiations with the applicable Chinese party for each New Project.

*Inner Mongolian Agreements*

IVN has been actively looking for opportunities to explore and develop properties that are geologically similar and geographically proximate to the Oyu Tolgoi Project. In this regard, IVN and a wholly-owned subsidiary (collectively, “IVN China”), have identified a number of opportunities in the Autonomous Region of Inner Mongolia, China, which lies south of the Oyu Tolgoi Project and borders Mongolia.

In January 2003, IVN China entered into a Cooperative Framework Agreement with the Inner Mongolia Bureau of Geology and Minerals Exploration and Development, a government agency of the Autonomous Region of Inner Mongolia, which contemplates the negotiation of definitive joint venture agreements between the parties with respect to three properties in Inner Mongolia. The Cooperative Framework Agreement contemplates IVN earning up to an 80% interest in mineral exploration properties owned by the government agency in consideration for conducting an exploration program on the property. The parties have entered into negotiations on formal joint venture agreements but, to date, no agreements have been finalized.

IVN China also entered into an agreement in April 2003 to purchase the Siwumuchang mining property, which is a small-scale mining property located in Inner Mongolia. IVN China has agreed, subject to due diligence, Chinese government approvals and certain other conditions, to purchase the property for an acquisition cost of approximately Cdn$1,800,000. The Siwumuchang mining property is within the area of one of the exploration targets that are being considered for a joint venture with the Inner Mongolia Bureau of Geology and Minerals Exploration and Development.

In April 2003, IVN China entered into a Joint Venture Agreement with the Inner Mongolia Huayu Geology and Minerals Exploration Co. (“Huayu”), an affiliate of China Non-Ferrous Metals Co. The parties agreed, subject to Chinese government approval, to establish a joint venture company (the “Huayu Joint Venture”) for the exploration and mining of copper, gold, silver and other metals and minerals on exploration properties of approximately 400 km$^2$ in Inner Mongolia that Huayu owns and has agreed to contribute to the Huayu Joint Venture. The Joint Venture Agreement provides that IVN China will earn an 80% interest in the Huayu Joint Venture by contributing $2,800,000 of capital over a three-year period.

Huayu also holds a mining license over the Oblaga mine, a small-scale gold and copper mine. The Oblaga mine is located within one of the exploration properties to be contributed to the Huayu Joint Venture, and is owned and operated by a Chinese mining company pursuant to a lease agreement with Huayu. Huayu, IVN China and the Chinese mining company entered into an agreement pursuant to which the Huayu Joint Venture will purchase the leasehold rights of the Chinese mining company in the Oblaga mine and related assets at an acquisition cost of approximately Cdn$2,300,000. The agreement is subject to due diligence by the Huayu Joint Venture, the concurrent transfer of the mining license by Huayu to the Huayu Joint Venture, Chinese government approvals and certain other conditions.

The geologic and tectonic settings of the Oblaga property are similar to the porphyry belt that hosts the Oyu Tolgoi Project. IVN China’s analysis of exploration results by previous holders of the property indicate that the property contains characteristics of a gold and copper based porphyry environment, with classically zoned skarns, sheeted quartz veining and multiple phase porphyry intrusives. IVN China intends to conduct an IP and resistivity survey, a ground magnetic survey and a scout diamond drilling program on the property in 2003.

*South Korea*
IVN’s 90% owned South Korean subsidiary, Korean Exploration and Mining Inc. (“KEI”), holds an interest in two South Korean mineral projects, Seongsan and Gasado, both located in Chollonamdo Province, in the southwestern part of South Korea. In 2002, KEI conducted limited scale mining operations at the Silver Hill Gold and Silver Mine located at the Eunsan prospect of Seongsan and exploration activity at Seongsan and Gasado.

IVN has entered into an agreement in principle to sell its Projects in South Korea. See “ITEM 4. NARRATIVE DESCRIPTION OF THE BUSINESS - Other Properties – Mongolia – Proposed MX Exploration Alliance”.

Seongsan and Silver Hill Gold and Silver Mine

The Seongsan Project contains outcropping, low sulphidation, epithermal gold-silver mineralized systems occurring as veins, breccias, stockworks and zones of silicification along a cumulative strike length of at least 3.2 km. KEI has identified and conducted exploration work on a number of low-sulphidation epithermal prospects at Seongsan. These vein systems occur within several kilometres of each other and are adjacent to the Seongsan Clay Mine, which is currently owned and operated by a South Korean company.

The Eunsan prospect, located approximately two km northwest of the Seongsan Clay Mine, is the most advanced prospect of the Seongsan Project. In 2002 KEI constructed the necessary infrastructure and established a limited scale mining operation on the Eunsan prospect, which is known as the Silver Hill Gold and Silver Mine.

KEI commenced trial production at the Silver Hill Gold and Silver Mine in April 2002 by mining the eastern half of the mineralized vein system at Eunsan. KEI suspended operations from October 2002 until December 2002 in order to complete an infill drilling program so that an updated resource block model and a mine plan could be developed.

KEI recommenced exploratory underground development in the eastern half of the defined underground zone at Eunsan following completion of the infill drilling program in order to compare actual mining results with those of the updated resource block model. Shortly after mining recommenced, KEI encountered a system of cavities filled with mud and other unconsolidated material in the vein system being mined. The mud filled cavity system has since been mined through and bypassed and exploratory development has continued on multiple levels throughout the eastern half of the mine.

KEI’s mining operations have confirmed that the high-grade shoot from the vein system continues at depth. The mining program has also enabled KEI to collect geological information that will assist in the generation of an updated geological model and resource.

KEI is conducting geological mapping to determine the displacement caused by faulting and the cavities associated with the eastern half of the mineralised vein system. KEI has also designed a small open pit to provide a second access to enable the exploitation of the high grade shoot that has been defined under the current open pit. Construction of the second open pit is due to be completed in late May 2003.

By the end of 2002 KEI had processed approximately 25,000 tonnes of ore and mined, produced and sold approximately 5,000 ounces of gold and 200,000 ounces of silver. High-grade oxide ore from the open pit was processed at the Eunsan mill until the high-grade stockpile was depleted in December 2002. Thereafter, low-grade oxide ore from stockpiles was processed until the tailings impoundment was filled. Approximately 2,000 tonnes of sulphide ore remains in the surface stockpile. KEI also hauled from underground and stockpiled 2,717 tonnes of ore in the first quarter of 2003 grading 14.9 g/t gold equivalent (based on a silver to gold ratio of 72:1).
The only other prospect at Seongsan that KEI is currently exploring is the Keunsan prospect. The Keunsan prospect is located approximately one km to the northeast of the Seongsan Clay Mine. KEI has excavated four trenches 50 to 70 m long to expose the bedrock at Keunsan. KEI has also completed seven diamond drill holes, totalling approximately 1,475 m. Each of the drill holes intercepted local narrow zones of gold and silver mineralization. Two drill holes are currently in progress, and further drilling will be based on the results of these two drill holes. Based on the results of drilling to date, mineralization appears to be confined along intensely silicified zones hosted in dacitic ash to pumiceous lithic tuffs and tuffaceous fine sediments, which are cut by narrow crystalline to chalcedonic quartz veins and veinlets. The geology indicates the potential for supergene enrichment.

Gasado

KEI originally commenced drilling on the Gasado Island prospect in 1999, and identified four targets, referred to as the Lighthouse vein, the Lighthouse East vein, the Stork vein and the Spad vein. Drilling of the Lighthouse vein returned the best results, demonstrating continuity of gold and silver mineralization at depth.

A detailed mapping, channel and rock-chip sampling program of the Lighthouse and Lighthouse East vein area, carried out between April and May 2002 identified a high-grade shoot zone, at least three m wide, along the southern Lighthouse vein headland. The vein has been traced over 120 m in plan distance over a vertical interval of 70 m up slope. It has an average estimated width and calculated composite grade over this strike extent of 2.4 m at 7.61 ppm gold and 278.3 ppm silver. KEI has identified high grade channel intercepts from the Lighthouse East vein section including one m at 5.57 ppm gold and 231.7 ppm silver, 1.4 m at 16.93 ppm gold and 824 ppm silver and 0.6 m at 4.77 ppm gold and 333.2 ppm silver.

The results of recent exploration activities coupled with gold and silver intercepts obtained during previous scout drilling indicate that these vein sections have down-dip potential. KEI is conducting a drilling program aimed at delineating economically exploitable sections of the Lighthouse vein and its Lighthouse East vein extension, where open cut and underground amenable targets are present. KEI is in the process of drilling ten drill holes totalling 730 m to target 25 to 30 m down-dip of the highest-grade vein sections, and intends to use the drill results to calculate a resource estimate.

Kazakhstan

The Corporation’s subsidiary Central Asian Mining Limited (“CAML”) holds a 70% interest in a joint venture with the government of Kazakhstan (the “Bakyrchik Mining Venture”) to develop the Bakyrchik gold project in north-eastern Kazakhstan. The Bakyrchik Mining Venture holds mining and exploration licenses from the government of Kazakhstan covering an area of approximately 86 km² surrounding the existing Bakyrchik gold mine.

The Bakyrchik property is located in the village of Auezov in north-eastern Kazakhstan, about 1,100 km north-east of Almaty, the country’s largest city. The project site consists of a number of mine shafts and associated facilities, process plant, workshops, warehouses, administration buildings and accommodations.

The gold deposits at Bakyrchik consist of a series of mineralized lenses or lodes lying within a large shear zone, which is 11.5 km in length. Gold mineralization is hosted within sheared carbonaceous sediments of the fault zones, and is principally contained within sulfide mineralization occurring in association with quartz stockworks, which crosscuts and parallels the foliation of the sediments. Mineralogical studies indicate that the majority of the gold is encapsulated by arsenopyrite and to a lesser extent, pyrite. As the associated sediments contain up to 4% carbon, the deposit is said to be “double refractory” in nature, which makes processing very difficult.
The Bakyrchik mine commenced ore production in 1956 to provide gold bearing flux to a copper smelter at Ust-
Kamenogorsk and later to smelting facilities in Russia. A total of five shafts were sunk on the Bakyrchik
deposit, and the underground has been explored and developed for mining from a series of development drifts
driven at 40 m vertical intervals.

Engineering studies commissioned by the IVN Group in 1996 and 1997 recommended development of a mining
operation capable of producing between 500,000 and 1,000,000 tonnes of ore per annum at a capital cost
ranging from $100 million to $222 million. However, a precipitous decline in the price of gold at the end of 1997
dramatically changed the economic assumptions upon which these engineering studies were based and the IVN
Group’s development plans for the Bakyrchik gold project were indefinitely postponed. In January 1998, the
IVN Group placed the Bakyrchik gold project on care and maintenance status pending a sustained recovery of
the price of gold.

In the fall of 2001 the Bakyrchik Mining Venture began limited scale operations in order to offset the holding
costs of the property. The Bakyrchik Mining Venture began processing existing stockpiles containing
approximately 117,000 tonnes of oxidized ore and prepared plans to mine outcroppings of oxide ore on the
property. Oxide ore can be processed without the technical difficulties and costs associated with sulphide ore.
The gold is recovered using the carbon-in-leach recovery method. Initial recoveries of gold from oxide ore were
expected to be in the order of 90% but the uneven nature of the stockpiled material resulted in an average
recovery rate to date of approximately 45%.

Gold production at the Bakyrchik project during 2002 was approximately 2,600 ounces. Production of gold was
halted for a substantial period during 2002 because of limited supplies of cyanide required for the leaching
process. CAML was unable to import cyanide for a period of 3 months due to new controls imposed by the
Kazakh government on the import, use and transportation of hazardous materials. New importation procedures
are expected to function smoothly in the future.

In the first quarter of 2002, the Bakyrchik Mining Venture completed the installation of an electrical line to the
open pit mining areas and limited pre-production waste rock removal in preparation for mining the oxide ore
outcroppings on the property. The first oxide ore deposit to be mined was Gluboki Log. A mining contractor
began stripping waste rock from Gluboki Log in October 2002 in preparation for oxide ore mining. This work
was halted in the beginning of January 2003 to allow a grade control drilling program to catch up so as to allow
more accurate mine scheduling. Gold production was also halted at the same time. The grade control drilling
program revealed that the grade of the Gluboki Log mineralization had previously been grossly overestimated by
the Soviet mineral evaluation authorities. Accordingly, the Bakyrchik Mining Venture has suspended plans to
mine this deposit. The Bakyrchik Mining Venture continues to explore other oxide ore deposits located on the
property, but gold production will remain suspended until such time as CAML identifies an oxide ore deposit
capable of economic development.

Work continued throughout 2002 and 2003 on process development for the primary sulphide resources at
Bakyrchik. The Bakyrchik Mining Venture has been reviewing a process design using mainly Russian designed
rotary kiln roasters. Similarly, work is progressing on bacterial oxidation and other methods of oxidation of
Bakyrchik concentrates. The Bakyrchik Mining Venture also commissioned an independent consultant to
perform a technology screening study and development due diligence study of a first stage development at a
production rate of between 150,000 and 200,000 tonnes per year. All three projects are well advanced and
near completion; nevertheless, there can be no assurance that any larger scale production of sulphide ore
necessary to generate significant cash flow in excess of the holding costs of the mine can be made
economically viable under existing conditions.
In 2001, the Republic of Kazakhstan issued a decree transferring management of its interest in the Bakyrchik Mining Venture to the East Kazakhstan Oblast. The Republic has appointed the East Kazakhstan Oblast as its agent to represent its interests in the Bakyrchik Mining Venture. In May 2002, the East Kazakhstan Oblast, through the Department of Municipal Property, entered into a contract with a local company to sell the Republic of Kazakhstan’s 30% participatory interest in Bakyrchik Mining Venture. CAML and the General Director of the Bakyrchik Mining Venture appealed the legality of this transaction as it violates the Bakyrchik Mining Venture Charter and Kazakh limited liability partnership law. Negotiations with the Republic of Kazakhstan are currently ongoing to find a suitable solution.

At the end of 2002, the Bakyrchik Mining Venture received notice from Kazakh governmental authorities denying the renewal of the exploration license covering the exploration license areas of the Bakyrchik Project. This license lies outside the primary mining license area of the Bakyrchik Project and does not affect the mine or any of the known resources and the extensions thereto at Bakyrchik. After meetings with government officials the decision was reversed as it was in violation with the terms of The Sale and Purchase Agreement and The Subsoil Use Contract between the Bakyrchik Mining Venture and the Republic of Kazakhstan.

Myanmar

IVN’s wholly-owned subsidiary, Ivanhoe Myanmar Holdings Limited (“IVN Myanmar”), conducts exploration activities in Myanmar. IVN Myanmar has entered into an agreement with the Government of Myanmar covering the Block 10 exploration concession approximately 150 km southeast of Mandalay. IVN Myanmar renegotiated certain terms of the agreement in 2002, and now has the right to establish a joint venture with the Government of Myanmar to develop minerals identified on the property in which IVN Myanmar would hold a 65% interest.

IVN Myanmar has identified a belt of quartz gold veins in Block 10 in an area referred to as the Modi Taung – Nankwe district. The veins are most abundant at Modi Taung in the south of Block 10 where six mesothermal veins systems with coarse visible gold, book-and-ribbon texture and stylolaminations are being explored. The veins trend south-southeast, dip steeply, and occur within a 1 km by 3 km area about 30 km east of the Yangon-Mandalay highway.

At Modi Taung, IVN Myanmar has completed 5 km of exploration adits, comprising drives along the veins or in footwall mudstones and cross-cuts. Most adits are on the Shwesin vein system, with adit levels between 1000 m and 1225 m elevation, but adits have also been driven on the Htongyi Taung, Kyauksayit, Theingi and Momi Taung vein systems. The vein systems range in lengths from 250 m to over 800 m, and all are open at each end. IVN Myanmar suspects that the Shwesin and Momi Taung veins are part of a continuous system that is over 1.2 km long, and the Htongyi Taung and Kyauksayit veins are part of a continuous system over one km in length.

Assays on over 3,000 channel and panel samples from adits indicate that the veins in the Shwesin vein system, with an average width of 30 to 40 cm, have high-grade segments up to about 80 m long with average values above 40 g/t, and more typically lengths of 40 to 50 m averaging 100 to 200 g/t. These segments are separated by low-grade vein segments. Raies between levels at Shwesin indicate vertical continuity of high-grade zones but do not yet allow definition of shoots. Veins in systems other than Shwesin have similar average widths, slightly lower grade but better along-strike continuity. More than half the adit length on the Shwesin system is below the base of the oxide zone, which is at depths of 40 to 70 m.
Diamond core drilling began at Modi Taung in July 2002, and IVN Myanmar has completed approximately 4,200 m of drilling from 27 inclined holes. The primary purpose of the drilling is to identify the structure of the mineralized area, including the identification of veins and shear zones that host the veins. Most of the completed holes are located on the Shwesin vein system. The deepest vein intercept is a stylolaminated quartz vein with an apparent width 160 cm which graded 1.3 g/t gold, at an elevation of 777 m. This is 538 m below the highest vein identified to date, which is exposed in trenches at Momi Taung. The highest grade intercept in drill core was 330 g/t gold over a 27 cm apparent width in hole 14 on the Shwesin vein. Only three of the drill holes intercepted high-grade veins, reflecting the irregular 'nuggety' distribution of gold even in high-grade vein segments.

Near-surface supergene enrichment in gold is commonly present over high-grade veins and typically found at trench depths of a few metres. The enrichment decreases downwards to primary or hypogene grades at depths of 20 to 30 m. A supergene enriched zone at Momi Taung, averaging 198 g/t gold in trenches across a vein width of 30 to 70 cm, provides a small potential open pit deposit.

A preliminary draft scoping study was completed in December 2002 for an underground and surface operation at Modi Taung that would process between 70 and 150 tonnes of ore per day. This study has been updated to include mine processing details, and was used as the basis for an application to enter into a development and mining joint venture with the Government of Myanmar submitted to the Myanmar Ministry of Mines in March 2003.

**Vietnam**

IVN owns a 32.6% interest in a joint venture with Olympus Pacific Minerals Inc. (“Olympus”) and Zedex Limited (the “Phuoc Son Joint Venture”) to explore and develop two exploration licenses in the Phuoc Son area of Vietnam. The Phuoc Son Joint Venture was formed in 1997 in connection with the IVN Group’s sale of its Vietnam assets to Olympus. Olympus is the operator of the joint venture. The following is a discussion concerning the exploration activities and status of the Phuoc Son Joint Venture summarized from information publicly disclosed by Olympus.

Olympus states that it has identified sixteen discreet mineralized prospects in the 100 km² property, each prospect consisting of either gold, silver, lead and zinc or gold, copper and molybdenum associations. The two most advanced of Olympus’ prospects are the Bai Dat and Bai Go mineralized zones. Olympus reports that at Bai Dat, Olympus has intersected a vein or breccia zone of gold mineralization. In the Bai Go structure, Olympus reports intersecting a large sheeted vein system. Olympus states that it is currently undergoing infill drilling on these two prospects with a view to commencing pilot-scale underground mining and pilot processing plant operations for these prospects in late 2003 or early 2004.

The Phuoc Son Joint Venture recently completed a drilling program at a second property, called Khe Rin, which is believed to have skarn potential. Olympus reports that the joint venture completed 2,100 metres of drilling on the property, and assays are pending.

In November 2002, IVN reached an agreement with Olympus and Zedex Limited to sell a 10.18% interest in the Phuoc Son Joint Venture to Olympus in exchange for 8.5 million common shares of Olympus. The closing is subject to regulatory approval and Olympus shareholder approval. Upon completion of the transaction, IVN will own a direct 22.46% participating interest in the Phuoc Son Joint Venture and 25% of the outstanding share capital of Olympus.

**Equity Investments**
Between June to October 2002, the IVN Group acquired 13,697,112 common shares in the capital of Pacific, representing approximately 36.4% of Pacific’s currently outstanding common shares. Pacific is listed on the TSX Venture Exchange.

The IVN Group also holds 8,845,867 common shares of Olympus, representing approximately 17.6% of the issued and outstanding common shares of Olympus. Olympus’ common shares are listed on the TSX Venture Exchange.

In 2002, the IVN Group acquired 29,000,000 ordinary shares in the capital of Intec Limited, representing approximately 19.9% of its issued and outstanding share capital. Intec Limited is listed on the Australian Stock Exchange.

In 2002, the IVN Group acquired 1,265,092 shares in the capital of Resource Investment Trust Plc. Resource Investment Trust Plc.’s shares are listed on the London Stock Exchange.
The following table outlines the equity investments held by the IVN Group and their quoted market value as at December 31, 2002:

<table>
<thead>
<tr>
<th>Company</th>
<th>Number of Shares</th>
<th>Value (US$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pacific Minerals Inc.</td>
<td>13,697,112</td>
<td>$13,943,000</td>
</tr>
<tr>
<td>Olympus Pacific Minerals Inc.</td>
<td>8,845,867</td>
<td>$2,813,000</td>
</tr>
<tr>
<td>Intec Limited</td>
<td>29,000,000</td>
<td>$1,384,000</td>
</tr>
<tr>
<td>Resource Investment Trust Plc.</td>
<td>1,265,092</td>
<td>$1,212,000</td>
</tr>
</tbody>
</table>

**Exploration Expenditures**

Total exploration and related expenses, categorized by country, for the years 2002 and 2001 were as follows:

<table>
<thead>
<tr>
<th>Country</th>
<th>2002 (US$ Million)</th>
<th>2001 (US$ Million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mongolia</td>
<td>27.5</td>
<td>3.8</td>
</tr>
<tr>
<td>Indonesia/Thailand</td>
<td>1.8</td>
<td>0.7</td>
</tr>
<tr>
<td>South Korea</td>
<td>2.8</td>
<td>1.7</td>
</tr>
<tr>
<td>Myanmar</td>
<td>2.3</td>
<td>1.1</td>
</tr>
<tr>
<td>China</td>
<td>0.3</td>
<td>-</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>34.7</strong></td>
<td><strong>7.3</strong></td>
</tr>
</tbody>
</table>

**Human Resources**

At December 31, 2002 the IVN Group had 2,152 employees working at various locations. The IVN Group’s proportionate share of employees at its operations, and those partnerships and joint ventures which are
accounted for on a proportionate basis, was 1,776 employees at December 31, 2002. Total employees were allocated as follows:

<table>
<thead>
<tr>
<th></th>
<th>Total employees Dec./02</th>
<th>Proportionate share Dec./02</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monywa</td>
<td>752</td>
<td>376</td>
</tr>
<tr>
<td>Savage River / Port Latta</td>
<td>263</td>
<td>263</td>
</tr>
<tr>
<td>Mongolia</td>
<td>283</td>
<td>283</td>
</tr>
<tr>
<td>South Korea</td>
<td>40</td>
<td>40</td>
</tr>
<tr>
<td>Myanmar Exploration</td>
<td>460</td>
<td>460</td>
</tr>
<tr>
<td>Bakyrchik</td>
<td>306</td>
<td>306</td>
</tr>
<tr>
<td>Exploration</td>
<td>27</td>
<td>27</td>
</tr>
<tr>
<td>Head office</td>
<td>21</td>
<td>21</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2,152</strong></td>
<td><strong>1,776</strong></td>
</tr>
</tbody>
</table>

**Risk Factors**

Investment in the common shares of the Corporation involves a significant degree of risk and should be considered speculative due to the nature of the Corporation’s business and the present stage of its development. Prospective investors should carefully review the following factors together with other information contained in this Annual Information Form before making an investment decision.

*IVN’s business in Mongolia may be harmed if the country fails to complete its transition from state socialism and a planned economy to political democracy and a free market economy.*

Since 1990, Mongolia has been in transition from state socialism and a planned economy to a political democracy and a free market economy. Much progress has been made in this transition but much progress remains to be made, particularly with respect to the rule of law. Many laws have been enacted, but in many instances they are neither understood nor enforced. For decades Mongolians have looked to politicians and bureaucrats as the sources of the “law”. This has changed in theory, but often not in practice. With respect to most day-to-day activities in Mongolia government civil servants interpret, and often effectively make, the law. This situation is gradually changing but at a relatively slow pace. Laws may be applied in an inconsistent, arbitrary and unfair manner and legal remedies may be uncertain, delayed or unavailable.

*Future amendments to Mongolian laws could weaken, shorten or curtail the IVN Group’s mineral exploration rights or make it more difficult or expensive to obtain mining rights and carry out mining.*

Mongolia’s Minerals Law was drafted with the assistance of Western legal experts and is regarded as one of the most logical, internally consistent and effective pieces of mining legislation among all of the developing countries of Asia. However, future amendments to the Minerals Law or new legislation covering ostensibly
unrelated matters could affect the existing tenure regime under the Minerals Law and harm IVN’s ability to carry on business in Mongolia. Mongolian government civil servants have, in the past, unsuccessfully attempted to introduce amendments to the Minerals Law which would, from the perspective of the international mining industry, be regarded as counterproductive. Future amendments to the Minerals Law or new legislation, if implemented, could vary or abrogate key provisions of the Minerals Law in a manner that impairs the IVN Group’s ability to conduct exploration and mining in Mongolia.

*The mineral resources identified on the Oyu Tolgoi Project do not have demonstrated economic viability and the feasibility of mining has not been established.*

The mineral resources identified to date on the Oyu Tolgoi Project are not mineral reserves and do not have demonstrated economic viability. There can be no assurance that mineral reserves will be identified on the property. The feasibility of mining on the Oyu Tolgoi Project has not been, and may never be, established.

*Lack of infrastructure in proximity to the Oyu Tolgoi Project could adversely affect mining feasibility.*

The Oyu Tolgoi Project is located in an extremely remote area which lacks basic infrastructure, including sources of power, water, housing, food and transport. While the IVN Group has established the limited infrastructure necessary to conduct exploration activities, it would need to establish substantially greater sources of power, water, physical plant and transport infrastructure in the area before it could conduct mining operations. The availability of such sources may adversely affect mining feasibility and will, in any event, require IVN to arrange significant financing, locate adequate supplies and obtain necessary approvals from national, provincial and regional governments, none of which can be assured.

*The IVN Group’s exploration licenses could expire before the IVN Group is ready or able to obtain a mining license.*

The exploration licenses for the Oyu Tolgoi Project expire in less than one year (February 2, 2004), and renewals of those licenses are unavailable under the Minerals Law. Prior to such expiry, IVN will have to convert the exploration licenses to the significantly more expensive mining licenses or risk losing its rights to the Oyu Tolgoi Project. IVN may not be ready to commence mining activities when the exploration licenses expire. Early in 2002, a law on Licences for Business Activities was enacted which has been interpreted by Mongolian bureaucrats as requiring aimag (provincial) government level approval as a condition to the grant of exploration and mining licenses. There can be no assurance that IVN will be able to obtain such approval on acceptable terms or at all when applying for mining licenses and exploration licenses in the future.

*Economic sanctions imposed by the United States and Canada against Myanmar may adversely affect the Monywa Copper Project.*

In May 1997, the United States government imposed economic sanctions on Myanmar, banning new investments in Myanmar by any United States investor. In August 1997, the Canadian government imposed selective economic sanctions on Myanmar, directed against imports and exports between Canada and Myanmar. These sanctions were imposed based on the United States and Canadian governments’ belief that the current government of Myanmar has repressed opposition to the government. While the sanctions in their current form do not affect the Corporation’s investments in Myanmar, there can be no assurances that the sanctions will not be broadened or that other countries will not adopt sanctions in the future. The existence of United States sanctions may restrict the ability of United States companies to participate in the Monywa
Copper Project. It is not possible to assess whether additional legislation will be enacted by the United States, Canada or elsewhere or, if enacted, will ultimately affect the Corporation or investment in the Corporation.

**The IVN Group faces geotechnical and development risks at the Monywa Copper Project, including generating capacity shortages and leaching process technical risks.**

IVN faces a number of potential risks with respect to the proposed development of the Letpadaung deposit and the proposed expansion of the S&K mine as part of the Monywa Copper Project. Myanmar is currently short of the generating capacity necessary to deliver sufficient power to Letpadaung and there can be no assurance that improvements to Myanmar’s national power system, sufficient to furnish the required power, will be made on a timely basis or at all. If not, it may be necessary to construct a local source of power which may not be feasible or which may render the project uneconomic.

The high lift leach piles planned for both the S&K mine and the Letpadaung deposit carry technical risks. These risks include geotechnical failure, chemical degradation of the heap material, compaction and loss of permeability, lack of oxygen, excessive iron build-up and excessive acid generation. Manifestation of these risks could adversely affect operating costs.

Although IVN believes that the Letpadaung pit run ore will exhibit the same heap leaching characteristics as the Sabetaung ore currently being mined at the S&K mine, this assumption cannot be confirmed prior to mining. Different metallurgical characteristics in the Letpadaung deposit, if and to the extent they might exist, could adversely affect the technical feasibility and economics of IVN’s Letpadaung development plans.

**There can be no assurance that the IVN Group will be capable of raising the additional funding that it needs to carry out its development and exploration objectives.**

The further development and exploration of the various mineral properties in which it holds interests depends upon the IVN Group’s ability to obtain financing through joint ventures, debt financing, equity financing or other means. There is no assurance that the IVN Group will be successful in obtaining required financing as and when needed. Depressed markets for precious and base metals may make it difficult or impossible for the IVN Group to obtain debt financing or equity financing on favourable terms or at all. The IVN Group operates in a region of the world that is prone to economic and political upheaval and certain mineral properties held by the IVN Group are located in politically and economically unstable countries, which may make it more difficult for the IVN Group to obtain debt financing from project lenders. The IVN Group must arrange significant project financing for development of the Oyu Tolgoi Project. Failure to obtain additional financing on a timely basis may cause the IVN Group to postpone its development plans, forfeit rights in some or all of its properties or joint ventures or reduce or terminate some or all of its operations.

**The IVN Group has a limited customer base for its products and needs to secure additional markets.**

The Savage River Project has only a few customers and the pricing of its iron ore products is subject to annual negotiations. Demand for ABM’s iron ore products can fluctuate based on market conditions in the international steel industry. ABM has as yet been unable to finalize the renewal of a supply contract with one of its principal customers and if it is unable to negotiate a renewal of this contract ABM will need to secure new customers. The loss of a key customer or a material decrease in sales to a key customer could have an adverse impact on short to medium term cash flow and adversely affect the project’s economic viability.
All of the IVN Group’s production from the Monywa Copper Project is sold to a single Japanese buyer. If, for any reason, the IVN Group was unable to sell all of its production to its existing buyer, economic sanctions against trade with Myanmar may significantly reduce the number of potential alternative buyers.
The Savage River Project is dependent on older process facilities and pipeline operations which may be prone to failure or breakdown.

Savage River operations are heavily dependent upon the successful operation of the concentrator and pipeline apparatus. All the process facilities and the pipeline have been in operation for over 30 years and are subject to potentially higher rates of failure than a new plant. Despite a comprehensive maintenance program there can be no assurance that the operating availabilities required to achieve planned product output can be sustained.

There is a risk of long term decline in pellet grade at the Savage River Project.

Since inception in 1967, the grade of Savage River iron pellets has declined as mining was extended to deeper levels in the pit and as the pit was extended northwards. IVN has had geological and mineralogical data independently examined and the preliminary opinion is that this trend will not continue in the future. However, there can be no assurance that a long term decline in pellet grade, which may affect marketability, will not occur.

The pit wall of the Savage River pit requires additional work to ensure its stability.

The stability of the walls of the Savage River open pit have, historically, been problematic and ABM experienced a slope failure at Extension 2 of the North Pit in 2002 which temporarily halted operations on the North Pit. Although the Corporation has retained expert advice in this area, is pro-actively managing the pit wall stability and has taken additional corrective measures since the 2002 slope failure, there can be no assurance that a failure, large enough to cause an extended interruption in production, will not occur during the life of the project.

There can be no assurance that the interest held by the IVN Group in its exploration, development and mining properties is free from defects or that material contractual arrangements between the IVN Group and entities owned or controlled by foreign governments will not be unilaterally altered or revoked.

The IVN Group has investigated its rights to explore and exploit its various properties and, to the best of its knowledge, those rights are in good standing but no assurance can be given that such rights will not be revoked, or significantly altered, to the detriment of the IVN Group. There can also be no assurance that the IVN Group’s rights will not be challenged or impugned by third parties. The IVN Group has also applied for rights to explore, develop and mine various properties, but there is no certainty that such rights, or any additional rights applied for, will be granted on terms satisfactory to the IVN Group or at all.

Competition for new mining properties by larger, more established companies may prevent IVN from acquiring interests in additional properties or mining operations.

Significant and increasing competition exists for mineral acquisition opportunities throughout the world. As a result of this competition, some of which is with large, better established mining companies with substantial capabilities and greater financial and technical resources, the IVN Group may be unable to acquire rights to exploit additional attractive mining properties on terms it considers acceptable. Accordingly, there can be no assurance that the IVN Group will acquire any interest in additional operations that would yield reserves or result in commercial mining operations.
IVN has a limited operating history, and there is no assurance that it will be capable of consistently producing positive cash flows.

The Corporation has paid no dividends on its common shares since incorporation and does not anticipate doing so in the foreseeable future. The IVN Group only recently began to generate positive cash flow from its Monywa Copper Project and is currently producing negative cash flows from the Savage River Project and its other exploration and development projects. IVN has a limited operating history and there can be no assurance of its ability to operate its projects profitably. While the IVN Group may in the future generate additional working capital through the operation, development, sale or possible syndication of its properties, there is no assurance that the IVN Group will be capable of producing positive cash flow on a consistent basis or that any such funds will be available for exploration and development programs.

A substantial portion of the IVN Group’s operations involve exploration and development and there is no guarantee that any such activity will result in commercial production of mineral deposits.

Development of the IVN Group’s mineral properties is contingent upon obtaining satisfactory exploration results. Mineral exploration and development involves substantial expenses and a high degree of risk, which even a combination of experience, knowledge and careful evaluation may not be able to adequately mitigate. There is no assurance that commercial quantities of ore will be discovered on any of the IVN Group’s exploration properties. There is also no assurance that, even if commercial quantities of ore are discovered, a mineral property will be brought into commercial production. The discovery of mineral deposits is dependent upon a number of factors not the least of which is the technical skill of the exploration personnel involved. The commercial viability of a mineral deposit, once discovered, is also dependent upon a number of factors, some of which are the particular attributes of the deposit, such as size, grade and proximity to infrastructure, metal prices and government regulations, including regulations relating to royalties, allowable production, importing and exporting of minerals, and environmental protection. In addition, assuming discovery of a commercial ore body, depending on the type of mining operation involved, several years can elapse from the initial phase of drilling until commercial operations are commenced. Most of the above factors are beyond the control of IVN.

Mining operations are subject to numerous hazards that could have a material adverse effect on the financial position of IVN.

The business of mining is subject to a variety of risks such as groundfall, explosions and other accidents, flooding, environmental hazards, the discharge of toxic chemicals and other risks. Such occurrences, against which the IVN Group cannot, or may elect not to, insure, may result in destruction of mines and other production facilities, damage to life and property, environmental damage, delayed production, increased production costs and possible legal liability for any and all damages. Such liabilities may have a material adverse effect on IVN’s financial position.

Calculation of reserves and metal recovery is only an estimate, and there can be no assurance about the quantity and grade of minerals until reserves or resources are actually mined.

There is a degree of uncertainty attributable to the calculation of reserves, resources and corresponding grades being mined or dedicated to future production. Until reserves or resources are actually mined and processed, the quantity of reserves or resources and grades must be considered as estimates only. In addition, the quantity of reserves or resources may vary depending on metal prices. Any material change in the quantity of reserves, resources, grades or stripping ratio may affect the economic viability of IVN’s properties. In addition, there can
be no assurance that metal recoveries in small-scale laboratory tests will be duplicated in larger scale tests under on-site conditions or during production.

*Fluctuations in currency exchange rates may adversely affect ABM’s financial position and results of operations.*

Fluctuations in currency exchange rates, may adversely affect ABM’s financial position and results of operations. ABM receives United States dollars from the bulk of its sales of iron ore products but pays most of its operating costs in Australian dollars and, the recent strengthening of the Australian dollar against the United States dollar has negatively impacted ABM’s cash flow. Further deterioration in the United States dollar as against the Australian dollar will have a negative effect on the financial viability of the Savage River Project.

**JVCo’s indebtedness on the Monywa Copper Project is subject to floating interest rates.**

Monywa Copper Project dent accrues interest at a floating interest rate. As a result, fluctuations in interest rates may have a significant impact on the project’s profitability, and on JVCo’s ability to successfully finance expansion.

**The Monywa Copper Project is not in full compliance with certain covenants under its principal project financing agreement**

JVCo does not currently comply with certain covenants in its principal Monywa Copper Project financing agreement, including a requirement to maintain a minimum amount of working capital and a requirement to retain a specified minimum amount of cash on deposit in a debt service reserve account. The lenders have not, to date, notified JVCo that it is in default of these covenants and, although management does not believe that the lenders will do so in the foreseeable future, the lenders may, at any time while JVCo remains non-compliant, formally notify JVCo that it is in default. If, in that event, JVCo failed to cure the default in a timely manner, the lenders would be entitled to pursue their remedies against JVCo which could include foreclosing on JVCo’s interest in the Monywa Copper Project. JVCo’s obligations to the lenders are non-recourse to IVN.

**Metal prices are volatile.**

The mining industry is intensely competitive and there is no assurance that, even if commercial quantities of a mineral resource are discovered, a profitable market will exist for the sale of the same. There can be no assurance that metal prices will be such that the IVN Group’s properties can be mined at a profit. Factors beyond the control of the IVN Group may affect the marketability of any minerals discovered. Metal prices are subject to volatile price changes from a variety of factors including international economic and political trends, expectations of inflation, global and regional demand, currency exchange fluctuations, interest rates and global or regional consumption patterns, speculative activities and increased production due to improved mining and production methods. The supply of, and demand for, IVN’s principal products, iron ore and copper, is affected by various factors, including political events, economic conditions and production costs.

Unlike most metals, iron ores are not fungible commodities, as each is somewhat different in composition and usage characteristics. The iron ore market behaves like a product, rather than a commodity, market, with zones of competition and zones of exclusion. The market is one of direct customer to producer relationships, without middlemen, warehousing or buffer stocks, speculators or futures market. The market is imperfect and oligopolistic. Prices are not set by the market clearance principle, but to optimize returns to producers within the constraint of the total market size.
The IVN Group is exposed to risks of changing political stability and government regulation in the countries in which it operates.

The IVN Group holds mineral interests in countries which may be affected in varying degrees by political stability, government regulations relating to the mining industry and foreign investment therein, and the policies of other nations in respect of these countries. Any changes in regulations or shifts in political conditions are beyond the control of the IVN Group and may adversely affect its business. The IVN Group’s operations may be affected in varying degrees by government regulations, including those with respect to restrictions on production, price controls, export controls, income taxes, expropriation of property, employment, land use, water use, environmental legislation and mine safety. The IVN Group’s operations may also be affected in varying degrees by political and economic instability, economic or other sanctions imposed by other nations, terrorism, military repression, crime, extreme fluctuations in currency exchange rates and high inflation.

In certain areas where the IVN Group is active, the regulatory environment is in a state of continuing change, and new laws, regulations and requirements may be retroactive in their effect and implementation. The laws of many of the countries in which the IVN Group operates also contain inconsistencies and contradictions. Many of them are structured to bestow on government bureaucrats substantial administrative discretion in their application and enforcement with the result that the laws are subject to changing and different interpretations. As such, even the Corporation’s best efforts to comply with the laws may not result in effective compliance in the determination of government bureaucrats.

The IVN Group conducts its operations in several countries through co-operative joint ventures with government controlled entities. While this connection benefits the IVN Group in some respects, there is a substantial inequality with respect to the influence of the parties with the applicable government. Governments in these countries hold a substantial degree of subjective control over the application and enforcement of laws and the conduct of business. This inequality would become particularly detrimental if a business dispute arises between joint venture parties. IVN seeks to minimize this issue by including international arbitration clauses in relevant agreements whenever possible and by maintaining positive relations with both its joint venture partners and local governments, but there can be no guarantee that these measures will be sufficient to protect the IVN Group’s interest in these countries.

The IVN Group is subject to substantial environmental and other regulatory requirements and such regulations are becoming more stringent. Non-compliance with such regulations, either through current or future operations or a pre-existing condition could materially adversely affect IVN.

All phases of the IVN Group’s operations are subject to environmental regulations in the various jurisdictions in which it operates. For example, the Oyu Tolgoi Project is subject to an environmental impact assessment, as well as other environmental protection obligations. Environmental legislation is evolving in a manner which will require stricter standards and enforcement, increased fines and penalties for non-compliance, more stringent environmental assessments of proposed projects and a heightened degree of responsibility for companies and their officers, directors and employees. There is no assurance that future changes in environmental regulation, if any, will not adversely affect the IVN Group’s operations. Environmental hazards may exist on the properties in which the IVN Group holds interests which are presently unknown to the IVN Group and which have been caused by previous or existing owners or operators of the properties.

Government approvals and permits are sometimes required in connection with the IVN Group’s operations. To the extent such approvals are required and not obtained, the IVN Group may be delayed or prohibited from proceeding with planned exploration or development of its mineral properties.
Failure to comply with applicable laws, regulations and permitting requirements may result in enforcement actions thereunder, including orders issued by regulatory or judicial authorities causing operations to cease or be curtailed, and may include corrective measures requiring capital expenditures, installation of additional equipment, or remedial actions. Parties engaged in mining operations may be required to compensate those suffering loss or damage by reason of the mining activities and may have civil or criminal fines or penalties imposed for violations of applicable laws or regulations.

Amendments to current laws, regulations and permits governing operations and activities of mining companies, or more stringent implementation thereof, could have a material adverse impact on IVN and cause increases in capital expenditures or production costs or reductions in levels of production at producing properties or require abandonment or delays in development of new mining properties.

*Previous mining operations may have caused environmental damage at IVN Group mining sites, and if the IVN Group cannot prove that it was caused by such prior operators, its indemnities and exemptions from liability may not be effective.*

The IVN Group has received exemptions from liability from relevant governmental authorities for environmental damage caused by previous mining operations at the Savage River Project, the Monywa Copper Project and the Bakyrychik Project. There is a risk, however, that, if an environmental accident occurred at those sites, it may be difficult or impossible to assess the extent to which environmental damage was caused by the IVN Group’s activities or the activities of previous operators. In that event, the indemnities could be ineffective and possibly worthless.

*The IVN Group’s prospects depend on its ability to attract and retain key personnel.*

Recruiting and retaining qualified personnel is critical to the IVN Group’s success. The number of persons skilled in the acquisition, exploration and development of mining properties is limited and competition for such persons is intense. The Corporation believes that it has been successful in recruiting excellent personnel to meet its corporate objectives but, as the IVN Group’s business activity grows, it will require additional key financial, administrative, mining, marketing and public relations personnel as well as additional staff on the operations side. Although the Corporation believes that it will be successful in attracting and retaining qualified personnel, there can be no assurance of such success.

*Certain directors of IVN are directors or officers of, or have significant shareholdings, in other mineral resource companies and there is the potential that such directors will encounter conflicts of interest with the IVN Group.*

Certain of the directors of the Corporation are directors or officers of, or have significant shareholdings in, other mineral resource companies and, to the extent that such other companies may participate in ventures in which the IVN Group may participate, the directors of IVN may have a conflict of interest in negotiating and concluding terms respecting the extent of such participation. Such other companies may also compete with the IVN Group for the acquisition of mineral property rights. In the event that any such conflict of interest arises, a director who has such a conflict will disclose the conflict to a meeting of the directors of the Corporation and will abstain from voting for or against the approval of such a participation or such terms. In appropriate cases, IVN will establish a special committee of independent directors to review a matter in which several directors, or management, may have a conflict. From time to time, several companies may participate in the acquisition, exploration and development of natural resource properties thereby allowing their participation in larger programs, permitting involvement in a greater number of programs and reducing financial exposure in respect of...
any one program. It may also occur that a particular company will assign all or a portion of its interest in a
particular program to another of these companies due to the financial position of the company making the
assignment. In accordance with the laws of the Yukon, the directors of the Corporation are required to act
honestly, in good faith and in the best interests of the Corporation. In determining whether or not the IVN
Group will participate in a particular program and the interest therein to be acquired by it, the directors will
primarily consider the potential benefits to IVN, the degree of risk to which IVN may be exposed and its
financial position at that time.

ITEM 5: SELECTED CONSOLIDATED FINANCIAL INFORMATION

The following table shows selected consolidated financial information related to the Corporation for the periods
indicated:

<table>
<thead>
<tr>
<th>Selected Annual Information</th>
<th>2002</th>
<th>2001</th>
<th>2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenues</td>
<td>87,121</td>
<td>75,334</td>
<td>22,470</td>
</tr>
<tr>
<td>Loss from continuing operations</td>
<td>30,233</td>
<td>84,998</td>
<td>17,860</td>
</tr>
<tr>
<td>Loss from continuing operations per share</td>
<td>$0.16</td>
<td>$0.66</td>
<td>$0.24</td>
</tr>
<tr>
<td>Total assets</td>
<td>271,554</td>
<td>247,832</td>
<td>316,359</td>
</tr>
<tr>
<td>Long-term debt</td>
<td>10,622</td>
<td>46,533</td>
<td>75,726</td>
</tr>
<tr>
<td>Net loss</td>
<td>30,233</td>
<td>84,998</td>
<td>17,860</td>
</tr>
<tr>
<td>Net loss per share</td>
<td>$0.16</td>
<td>$0.66</td>
<td>$0.24</td>
</tr>
</tbody>
</table>

The acquisition of ABM on December 31, 2000 is the principal basis for a substantial change in revenue and
loss information for the 2001 and 2002 fiscal years as against that of 2000. The reduction in total assets in 2001
as against 2000 reflects a $54 million write down in the carrying value of the Savage River Project that
occurred in 2001. The substantial decrease in long-term debt in the last three years includes the combined
results of a $33.7 million acquisition of bank debt by the IVN Group in August 2002 and the conversion in
December 2001 of $20.5 million of convertible debt into common shares of IVN.

Dividend Policy

The Corporation has not paid any dividends on its outstanding common shares since its inception and does not
anticipate that it will do so in the foreseeable future. The declaration of dividends on the common shares of the
Corporation is within the discretion of the Corporation’s Board of Directors and will depend upon their
assessment of, among other factors, earnings, capital requirements and the operating and financial condition of
the Corporation. At the present time, the Corporation’s anticipated capital requirements are such that it intends
to follow a policy of retaining earnings in order to finance further development of its business. The Corporation
is restricted in its ability to pay dividends on its common shares by limitations under the Business Corporations
Act (Yukon) relating to the sufficiency of profits from which dividends may be paid.

ITEM 6: MANAGEMENT’S DISCUSSION AND ANALYSIS OF
FINANCIAL CONDITION AND RESULTS OF OPERATIONS
Reference is made to the Management Discussion and Analysis ("MD&A") which accompanies the Corporation’s comparative consolidated financial statements for the years ended December 31, 2002 and 2001. The MD&A is incorporated by reference into this Annual Information Form.

ITEM 7: MARKET FOR SECURITIES

The common shares of the Corporation are traded in Canada on the TSX and in Australia on the Australian Stock Exchange ("ASX"). The closing price of the Corporation’s common shares on the TSX on May 16, 2003 was Cdn$3.18.

The following sets forth the high and low market prices and the volume of the common shares traded on the TSX during the periods indicated:

(Stated in Canadian dollars)

<table>
<thead>
<tr>
<th>Period</th>
<th>High</th>
<th>Low</th>
<th>Volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quarter ended March 31, 2001</td>
<td>$2.25</td>
<td>$0.95</td>
<td>13,228,956</td>
</tr>
<tr>
<td>Quarter ended June 30, 2001</td>
<td>$2.10</td>
<td>$1.26</td>
<td>4,719,183</td>
</tr>
<tr>
<td>Quarter ended September 31, 2001</td>
<td>$3.04</td>
<td>$1.28</td>
<td>6,833,345</td>
</tr>
<tr>
<td>Quarter ended December 31, 2001</td>
<td>$2.60</td>
<td>$1.58</td>
<td>12,983,791</td>
</tr>
<tr>
<td>Quarter ended March 31, 2002</td>
<td>$3.65</td>
<td>$2.03</td>
<td>26,090,076</td>
</tr>
<tr>
<td>Quarter ended June 30, 2002</td>
<td>$3.46</td>
<td>$3.13</td>
<td>23,628,388</td>
</tr>
<tr>
<td>Quarter ended September 30, 2002</td>
<td>$3.33</td>
<td>$2.96</td>
<td>23,447,927</td>
</tr>
<tr>
<td>Quarter ended December 31, 2002</td>
<td>$3.35</td>
<td>$3.02</td>
<td>14,802,072</td>
</tr>
<tr>
<td>Quarter ended March 30, 2003</td>
<td>$3.27</td>
<td>$3.29</td>
<td>42,547,512</td>
</tr>
<tr>
<td>Month ended April 30, 2003</td>
<td>$3.29</td>
<td>$3.12</td>
<td>3,348,991</td>
</tr>
</tbody>
</table>

ITEM 8: DIRECTORS AND OFFICERS

The name, municipality of residence and position with the Corporation of each director and executive officer of the Corporation, and the principal business or occupation in which each director or executive officer has been engaged during the immediately preceding five years is as follows:

<table>
<thead>
<tr>
<th>Name and Municipality of Residence</th>
<th>Position with Corporation</th>
<th>Principal Occupation During Past Five Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROBERT M. FRIEDLAND, Hong Kong</td>
<td>Chairman, Director, Chief Executive Officer and President (Director since March 1994)</td>
<td>Chairman of the Corporation (March 1994 to present); Chairman and President, Ivanhoe Capital Corporation.</td>
</tr>
<tr>
<td>R. EDWARD FLOOD, Ketchum, Idaho</td>
<td>Deputy Chairman and Director (Director since March 1994)</td>
<td>Deputy Chairman of the Corporation (May 1999 to present); Senior Mining Analyst, Haywood Securities Inc. (May 1999 to November 2001); President of the Corporation (August 1995 to May, 1999).</td>
</tr>
<tr>
<td>Name and Municipality of Residence</td>
<td>Position with Corporation</td>
<td>Principal Occupation During Past Five Years</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>---------------------------</td>
<td>---------------------------------------------</td>
</tr>
<tr>
<td>GORDON L. TOLL, Singapore</td>
<td>Deputy Chairman and Director (Director since March 1996)</td>
<td>Senior Vice-President, Ivanhoe Capital Corporation (December 1995 to present); Executive Vice-President and Chief Operating Officer of the Corporation (December 1995 to October 1998).</td>
</tr>
<tr>
<td>KJELD THYGESEN, London, England</td>
<td>Director (Director since February 2001)</td>
<td>Managing Director, Lion Resources Management.</td>
</tr>
<tr>
<td>JOHN WEATHERALL, Toronto, Ontario</td>
<td>Director (Director since June 1996)</td>
<td>President of Scarthingmoor Asset Management Inc.</td>
</tr>
<tr>
<td>MARKUS FABER, Hong Kong</td>
<td>Director (Director since February 2002)</td>
<td>Managing Director, Marc Faber Limited.</td>
</tr>
<tr>
<td>PIERRE MASSE, West Vancouver, BC</td>
<td>Chief Financial Officer</td>
<td>Chief Financial Officer of the Corporation (November 2001 to present); Controller of the Corporation (October 1998 to November 2001); Chief Financial Officer, Canarc Resources Ltd. (January 1997 to September 1998).</td>
</tr>
<tr>
<td>DOUGLAS KIRWIN, Townsville, Australia</td>
<td>Executive Vice-President, Exploration</td>
<td>Executive Vice-President, Exploration of the Corporation (September 1995 to present).</td>
</tr>
<tr>
<td>EDWARD C. ROCHELLE, Ulaanbaatar, Mongolia</td>
<td>Executive Vice-President, Legal &amp; Administration</td>
<td>Executive Vice-President, Legal &amp; Administration of the Corporation (September 1995 to present).</td>
</tr>
<tr>
<td>Name and Municipality of Residence</td>
<td>Position with Corporation</td>
<td>Principal Occupation During Past Five Years</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>---------------------------</td>
<td>---------------------------------------------</td>
</tr>
<tr>
<td>PAUL CHARE Perth, Australia</td>
<td>Executive Vice-President, Operations</td>
<td>Executive Vice-President of Operations of the Corporation (May 2002 to present); Managing Director, Mines of Sardinia (2001 to May 2002); General Manager, JVCo (August 1997 to 2001).</td>
</tr>
<tr>
<td>BEVERLY A. BARTLETT New Westminster, British Columbia</td>
<td>Corporate Secretary</td>
<td>Corporate Secretary of the Corporation and Corporate Secretary, Ivanhoe Energy Inc. (June 2001 to present); Compliance Manager, Global Mining Management Corporation (April 1997 to present); Assistant Secretary, Ivanhoe Energy Inc. (1999 – 2001); Assistant Secretary, Diamondworks Ltd. (January 1999 to December 1999), Corporate Secretary, Credit Union Central of Canada (August 1993 to March 1997)</td>
</tr>
</tbody>
</table>

Each director’s term of office expires at the next annual general meeting of the Corporation.

**Shareholdings of Directors and Senior Officers**

As at May 16, 2003, the directors and executive officers, as a group, beneficially owned, directly or indirectly, or exercised control or direction over, 101,671,406 common shares of the Corporation representing approximately 44.85% of the outstanding common shares of the Corporation.

**Committees of the Board**

IVN has an audit committee, compensation and benefits committee and a nominating and corporate governance committee. The audit committee consists of Messrs. Faber, Weatherall and Thygesen, the compensation and benefits committee consists of Messrs. Thygesen, Hanson and Flood and the nominating and corporate governance committee consists of Messrs. Weatherall, Hanson and Thygesen. All of the above-noted directors are outside, unrelated directors within the meaning of the TSX’s corporate governance guidelines except Mr. Flood, who currently sits on the compensation and benefits committee. The Corporation intends to replace Mr. Flood on that committee with an unrelated, outside director following its next annual general meeting on June 12, 2003.

**ITEM 9: ADDITIONAL INFORMATION**

The Corporation will provide, upon request to its Secretary, at 654 – 999 Canada Place, Vancouver, British Columbia, V6C 3E1:

(a) when its securities are in the course of a distribution pursuant to a short form prospectus or when a preliminary short form prospectus has been filed in respect of a distribution of its securities:
(i) one copy of this Annual Information Form;

(ii) one copy of its comparative consolidated financial statements for the year ended December 31, 2002 and auditors’ report thereon and the accompanying MD&A;

(iii) one copy of its most recent interim consolidated financial statements issued subsequent to December 31, 2002;

(iv) one copy of its management information circular dated April 15, 2003 in respect of its 2003 annual meeting of shareholders to be held on June 12, 2003; and

(v) one copy of any other documents that are incorporated by reference into the aforementioned short form or preliminary short form prospectus;

(b) at any other time, one copy of the documents referred to in (a)(i), (ii), (iii) and (iv) above provided that the Corporation may require the payment of a reasonable charge if the request is made by a person or company who is not a securityholder of the Corporation.

Additional information, including directors’ and officers’ remuneration and indebtedness, principal holders of the Corporation’s securities, options to purchase the Corporation’s Common Shares and interests of insiders in material transactions is contained in the management information circular for the annual general meeting of the Corporation to be held on June 12, 2003. Additional financial information is contained in the Corporation’s comparative financial statements for year ended December 31, 2002. Copies of the information circular and financial statements may be obtained upon request from the Corporation at 654 – 999 Canada Place, Vancouver, British Columbia, V6C 3E1.