



IVANHOE  
MINES



**Drilling at Ivanhoe's Turquoise Hill  
Gold and Copper Project  
in Mongolia's South Gobi region.**

## **Letter to Shareholders – First Quarter, 2002**

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### **Quarterly Highlights and Recent Developments**

#### **In Mongolia**

- Ivanhoe announced in late May that ongoing exploration drilling at the Turquoise Hill gold and copper discovery in Mongolia had added approximately 233 million tonnes to the overall Inferred Mineral Resource of the Southwest Oyu Discovery Zone that was announced on March 11<sup>th</sup>. The results, from six new holes, brought the estimated Inferred Resource to 821 million tonnes grading 0.52 grams of gold per tonne and 0.38% copper, based on a cut-off grade of 0.30% copper equivalent. This is an increase of approximately 40% in the overall Inferred Resource tonnage for the Southwest Oyu Discovery Zone since March 11<sup>th</sup>. The zone now includes 13.8 million ounces of gold, an increase of 37% since March 11<sup>th</sup>, and 6.9 billion pounds of copper, an increase of 29%.
- At a cut-off grade of 0.50% copper equivalent, there is now estimated to be 469 million tonnes grading 0.70 grams of gold per tonne and 0.48% copper, containing 10.6 million ounces of gold and almost 5.0 billion pounds of copper. This represents an increase of 34% in the Inferred Resource tonnage at the 0.50% cut-off that Ivanhoe reported on March 11<sup>th</sup>, an increase of 29% in the estimated amount of gold and an increase of 24% in the estimated amount of copper.
- Deep drilling has successfully expanded the high-grade core to depth and along strike. At a cut-off grade of 0.70% copper equivalent, the estimated high-grade Inferred Resource now stands at 199 million tonnes, an increase of 7.7% from the March 11<sup>th</sup> estimate. This resource has grades of 1.12 grams of gold per tonne and 0.63% copper, and contains an estimated 7.2 million ounces gold, an increase of 16.3%, and 2.8 billion pounds of copper, an increase of 8.3%. The total Inferred Mineral Resource at this cut-off grade includes a geologically discrete, inferred high-grade resource of 120 million tonnes, known as Zone 2, grading 1.55 grams of gold per tonne and .70% copper. It is estimated that this zone contains 6.0 million ounces of gold and 1.8 billion pounds of copper.

The majority of this mineralization is contained within the presently known limits of the high-grade core at Southwest Oyu, which remains open to depth and along strike.

- Step-out drilling has demonstrated that thick intercepts of primary gold and copper mineralization continue far into the Southwest Oyu Zone, more than 500 metres on strike from the Southwest Oyu Discovery Zone.
- New holes drilled in and adjacent to the Discovery Zone have significantly extended the gold and copper sulphide mineralization to true depth of more than 900 metres.
- At the nearby Central Zone, drilling encountered gold-rich, chalcopyrite mineralization similar to that in the Southwest Discovery Zone, adjacent to and beneath a thick blanket of strong, secondary chalcocite and covellite mineralization.
- Drilling has started at the Kharmagtai gold and copper prospect, 120 kilometres north of Turquoise Hill.
- A new, 50,000-metre contract was signed with Major Pontil Drilling to employ another seven drill rigs in Mongolia, including high-capacity deep rigs with directional capabilities.

#### **In Myanmar**

- Ivanhoe's share of copper production from the Monywa Copper Project totalled 7.2 million pounds (3,243 tonnes), producing revenues of US\$4.7 million.

#### **In Australia**

- Iron pellet production from ABM's Savage River Mine was 533,495 tonnes. Sales revenue was US\$17.1 million.

#### **In South Korea**

- Gold and silver production began from Ivanhoe's new mine in South Korea.

## **Exploration and Development**

### **Update: Turquoise Hill (Oyu Tolgoi) Project, Mongolia**

Exploration drilling at the Turquoise Hill Project in the first and second quarters was focused on the continued delineation of the known zones of primary and secondary gold and copper mineralization, primarily at the Southwest Discovery Zone and nearby Central Zone.

Drilling in the Discovery Zone significantly extended the high-grade gold and copper sulphide mineralization to a true depth of more than 900 metres. In addition, the drilling intersected significant widths of gold and copper mineralization to the southwest and to the east across a prominent northeast-trending fault that was earlier thought to cut off the mineralization in that direction.

On May 29<sup>th</sup>, Ivanhoe issued an updated resource estimate for the Discovery Zone. The inferred resource estimate of 821 million tonnes, grading 0.52 grams of gold per tonne and 38% copper, and containing 13.8 million ounces of gold and 6.9 billion pounds of copper, is based on a cut-off grade of 0.30% copper equivalent, and incorporates all holes drilled in the zone to May 24, 2002. Within the inferred resource is a higher-grade core of approximately 199 million tonnes, grading 1.12 grams of gold per tonne and 0.63% copper.

## Update of Preliminary Mineral Resource Estimate— Southwest Oyu Discovery Zone

Cut-off Grade Copper Eq. (%) <sup>1</sup>	Tonnes	In Situ Copper Grade (%)	In Situ Gold Grade (g/t)	Copper (billions of pounds)	Gold (millions of ounces)
0.70	199,300,000	0.63	1.12	2.76	7.20
0.65	247,800,000	0.59	0.99	3.22	7.89
0.60	309,000,000	0.55	0.88	3.75	8.69
0.55	382,900,000	0.51	0.78	4.34	9.60
0.50	468,500,000	0.48	0.70	4.95	10.60
0.45	561,500,000	0.45	0.64	5.55	11.59
0.40	654,400,000	0.42	0.59	6.06	12.50
0.35	746,800,000	0.40	0.55	6.54	13.25
0.30	820,700,000	0.38	0.52	6.85	13.77
0.25	882,000,000	0.36	0.50	7.08	14.15
0.20	940,800,000	0.35	0.48	7.26	14.43

<sup>1</sup> Equivalence calculated using only assumed metal prices (US\$0.80/lb. for copper and US\$300/oz. for gold); %cu eq. = %cu + Au (g/t) x (9.65/17.64).

The resource estimate was prepared by AMEC E&C Services Limited of Vancouver, Canada, in accordance with Canadian regulatory requirements set out in National Instrument 43-101. All drill holes, together with updated drill plans and sections, will be posted on the Turquoise Hill Project section of the company's website at [www.ivanhoe.com](http://www.ivanhoe.com).

Charles Forster, P.Geo., Ivanhoe Mines' Turquoise Hill Manager, a Qualified Person as defined by National Instrument 43-101 of the Canadian Securities Administrators, supervises the exploration program at Turquoise Hill. Douglas Kirwin, Ivanhoe Mines' Senior Vice-President, Exploration, and a Qualified Person, oversees the company's exploration programs.

Based on the updated Inferred Resource estimate for the Southwest Oyu Discovery Zone, together with the recently announced drilling results for the Central Zone, Ivanhoe has significantly expanded its internal scoping study to evaluate possible production and cost scenarios, review metallurgical processing alternatives, test ore types for making concentrates, review SX-EW and heap leaching, crushing and milling, and guide current exploration. A review of the ore types encountered in the Central Zone has led to a study that is underway to develop a pilot plant SX-EW heap leach operation.

The full scope of the study, planned to be completed by the end of the year, will include development of potential mining scenarios that could utilize a large open pit encompassing the currently defined resource, as well as adjacent mineralization in the Far Southwest and Central zones. An example of an open pit of the depth that would be required to develop the deeper portions of the Southwest Oyu Discovery Zone is Batu Hijau in Indonesia, which is currently designed to extract ore to 900 metres below surface. Other mines with deep open pits include the Palabora Mine in South Africa, which has

a current pit depth of 640 metres, and is designed for a total depth of 830 metres. In Chile, the open pit at the Chuquicamata Mine is currently at a depth of 660 metres, and the open pits at the Andina and Zaldivar mines are designed for depths of 900 to 1000 metres, respectively.

Some of the resource in the Southwest Oyu Discovery Zone may prove too deep to recover by the open-pit mining method at current metals prices. An internal review by Ivanhoe's engineering staff of the current Inferred Resource block model indicates that open-pit mining would recover approximately two-thirds of the current resource, using a 0.50% cut-off copper equivalent, by mining down to depths of approximately 500 metres below surface. At depths lower than approximately 500 metres below surface, the high-grade core appears amenable to high-volume underground mining methods.

Potential underground development schemes are being investigated to determine the possibility of underground mining of the deep portions of the Southwest Oyu Discovery Zone's high-grade core in combination with open-pit operations. Two Australian mines, North Parkes and Cadia Ridgeway, currently run underground mining operations in conjunction with an open-pit. North Parkes operates on a mining grade of approximately 1.2% copper, whereas the Ridgeway underground operation was initiated on a resource base of approximately 50 million tonnes grading 2.46 g/t of gold and 0.75% copper. The large Grasberg copper-gold mine in Indonesia also operates with a large open pit to mine the near-surface ore and an underground operation to mine the deep-lying ore.

Recent drilling at the Central Zone, approximately 1,000 metres north of the Southwest Discovery Zone, has encountered intrusive and volcanic-hosted hypogene, gold-rich, chalcopyrite mineralization similar to that in the Southwest Discovery Zone, adjacent to and beneath a thick blanket of strong, secondary chalcocite and covellite mineralization. These contiguous zones of mineralization offer the potential for a second open pit that ultimately could merge into a super-pit encompassing the Southwest Discovery Zone.

Preliminary metallurgical test work conducted by Lakefield Research Limited, of Canada, indicated that potential exists to make a high-grade flotation concentrate from the secondary copper mineralization. The ability to make a commercial-grade concentrate from the shallow secondary mineralization would allow for the use of a single concentrator facility, designed for the long-term treatment of the deeper, hypogene chalcopyrite-hosted gold/copper mineralization. The net effect would be to significantly lower the overall strip ratio within the Central Zone and increase the probability for development of the deposit early in the life of the project.

Ivanhoe has signed a contract to employ seven additional drill rigs. It will increase to 14 the number of rigs that Ivanhoe has working around the clock in Mongolia. Several of the new rigs will have directional-drilling capabilities that will allow Ivanhoe to delineate the deeper sections of the high-grade core at the Southwest Discovery Zone. The additional rigs also will allow Ivanhoe to test other high-priority targets on the property, including the North Oyu Zone.

Ivanhoe believes that, based on the increasing grade and extent of the gold and copper mineralization with depth in the Southwest Oyu Discovery Zone's core, the possibility exists to significantly extend the high-grade core mineralization to depth. The strongest gold and copper grades recorded to date at the project are from the deeper intercepts in the Southwest Oyu Discovery Zone's core.

The project is proceeding with additional in-fill and step-out drilling of the Southwest Oyu and Central Oyu zones to obtain a suitable resource base to permit an evaluation of the economic viability of the resource.

Ivanhoe holds a 100% interest in the gold and copper project, subject to BHP Billiton's 2% royalty. BHP Billiton holds certain back-in rights in the project that become exercisable if copper mineralization meeting certain contractually defined parameters is identified on, or before, June 7, 2002. If copper mineralization meeting these parameters is not identified by June 7, 2002, BHP Billiton's back-in rights will expire on that date.

### **Kharmagtai Project, Mongolia**

Ivanhoe has commenced exploration drilling at the Kharmagtai gold and copper project, located 120 kilometres north of the Turquoise Hill Project. Kharmagtai, which has similar geological characteristics and is within the same copper-rich belt of Devonian-age rocks that encompasses Turquoise Hill, is the first in a series of priority porphyry-related targets in Mongolia's South Gobi region that Ivanhoe plans to drill-test this year.

The Kharmagtai exploration licence covers a 67-square-kilometre (26-square-mile) block that lies within a group of exploration tenements that, in total, cover more than 50,000 square kilometres (19,300 square miles) in the South Gobi region.

Ivanhoe's drilling program at Kharmagtai initially will focus on an area approximately six kilometres by four kilometres that has been covered by a detailed Induced Polarization (IP) and magnetic survey. This work has identified a number of high-priority anomalies, including one specific target where a scout hole drilled by the previous licence holder reportedly assayed 3.08 g/t gold and 1.89% copper over 72 metres. The core samples from this hole indicate that the mineralization is in an altered, intrusive rock with similar characteristics to the Discovery Zone at Turquoise Hill. The geophysical anomalies delineated at Kharmagtai also are similar in intensity and relative relationship to alteration patterns found at Turquoise Hill.

The scout drilling was part of a US\$5 million exploration program carried out by a private company in the mid-to-late 1990s. The program included 18 widely-spaced diamond holes, totalling 3,730 metres, 9,000 rock samples, 4,000 soil samples, 19 kilometres of trenching and 240 kilometres of magnetic surveying. In March, Ivanhoe acquired all of the exploration data by giving the private company a 10% interest in the Kharmagtai exploration licence. Ivanhoe has a 90% interest in the licence.

The previous drilling also intersected significant near-surface, gold-copper mineralization in quartz stockwork zones, with a probable strike length in excess of 200 metres. Reported drill results ranged in value from 0.71 to 2.01 g/t gold over intersections of 34 metres to 64 metres. On surface, sub-cropping mineralization was cut by two trenches (31 metres at 1.25 g/t gold and 16 metres at 2.74 g/t gold). The mineralized stockwork is situated on the northern edge of a coincident magnetic and IP anomaly delineated in the recent survey. Copper assays are not known at this time. The best trench intercept reported was an average of 2.7 g/t gold over 70 metres.

Other high-priority targets that Ivanhoe plans to test this year in its reconnaissance exploration program include Shuteen, Turquoise Ridges, Oyut Ovoo, Saran Uul, Oyut Ulaan and Chandman Uul. Ivanhoe selected the projects for follow-up exploration after completing extensive helicopter-supported field investigations of more than 350 mineral occurrences throughout Mongolia during the past five years.

### **Modi Taung Gold Project, Block 10, Myanmar**

Underground development work is continuing at Ivanhoe's high-grade gold discovery on the Modi Taung Project, in Central Myanmar.

The Modi Taung Project, approximately 150 kilometres southeast of Mandalay, is located in a mesothermal slate belt setting similar to the one supporting the multi-million-ounce Bendigo goldfield in Australia. The project includes five known parallel zones of mineralized vein structures, each between 500 and 800 metres long.

Ivanhoe is investigating options to develop a small-scale mining operation at Modi Taung, along the lines of the company's new 150-tonne-per-day Eunsan gold and silver mine in South Korea.

## **Metals Production**

### **Monywa Copper Project, Myanmar**

Copper production attributable to Ivanhoe from the S&K Mine in Myanmar was 3,243 tonnes (7.2 million pounds) in the first quarter of 2002, compared to 3,536 tonnes (7.8 million pounds) in 2001. Ivanhoe's share of copper sales from S&K in the first quarter of 2002 totalled US\$4.7 million, compared to US\$5.2 million in the same period in 2001. The average selling price for copper in the first quarter of 2002 (after royalties and commissions on sales) was US\$0.69 per pound.

Copper production at the mine has improved steadily since last fall as a result of operational improvements at the mine, including, tighter ore control in the pit, construction of a screening and washing plant to remove clay fines from the ore, re-mining of poorly-leached cells and increased leaching of run-of-mine ore. In March, copper production reached a rate of more than 30,000 tonnes a year.

In February, the S&K Mine made another installment payment against its project loan. Including the reserve payment held in escrow, the balance owing on the project's original US\$90 million loan now has been reduced to US\$45 million.

Ivanhoe is continuing detailed negotiations with potential Japanese, Korean and Chinese institutions that have expressed intense interest in participating in the planned, phase-two development of the Letpadaung deposit. Letpadaung, located six kilometres south of the S&K Mine, has a planned production rate of 125,000 tonnes (275 million pounds) of copper a year, and a flow sheet, metallurgy and process design similar to those at the S&K Mine.

Ivanhoe welcomed the recent decision by the Myanmar government to lift restrictions on public activities by Aung San Suu Kyi, the leader of Myanmar's National League for Democracy. Razali Ismail, the United Nations' special envoy who has been instrumental in the success of reconciliation talks between the government and Ms. Suu Kyi, stated that he believes that the government's action demonstrates its commitment to the objective of democracy for Myanmar.

### **Eunsan Gold-Silver Mine, South Korea**

The Eunsan Mine began production in March and is processing stockpiled, high-grade, open-pit ore as it scales up toward commercial production. When commercial underground production from high-grade ore begins later this year, Eunsan is expected to produce up to 50,000 ounces of gold and 118,000 ounces of silver on an annual basis for at least two years. Drilling is continuing at other targets to define the grades and the extent of the gold and silver mineralization. The current development concept is to mine three or more nearby deposits and feed the ore to the Eunsan mill.

During April, the mill treated approximately 3,000 tonnes of stockpiled ore grading 10.1 grams per tonne (gpt) gold and 542 gpt silver, and produced approximately 1.25 tonnes of doré containing 788 ounces of gold and 38,585 ounces of silver. A doré sales agreement was

recently signed with KOEXGO, a consortium of Korean jewellery wholesalers.

The underground development is proceeding as planned. An underground diamond drill is scheduled to arrive on site in early June to begin the reserve-definition program. Exploration activities are currently focused on the nearby Kunsan and Gasado Island prospects, with an emphasis on delineating resources to be milled in the Eunsan mill.

### **Savage River Iron Ore Mine, Australia**

Operations at the Savage River iron ore mine were in accordance with the mine plan during the first quarter of 2002. Sales of all iron-ore products during the first three months of 2002 totalled approximately 600,500 tonnes, generating sales revenue of US\$17.1 million. This compares to sales of iron-ore products in the first quarter of 2001 totalling 434,000 tonnes, and sales revenue of US\$12.8 million. The iron ore products are sold to customers in Australia and Asia.

Goldamere Pty. Ltd., a subsidiary of Ivanhoe's wholly-owned subsidiary, ABM Mining Limited, owns the Savage River assets. Goldamere operates an open pit mine and a crusher/concentrator facility at Savage River and a pellet plant at Port Latta, approximately 83 kilometres north of the mine.

### **Bakyrchik Gold Mine, Kazakhstan**

Production recommenced at the Bakyrchik Gold Mine, in northeastern Kazakhstan, in late 2001. The economics of the open-pit project are being tested on oxidized ore material stockpiled on surface from previous operations.

Ivanhoe has a 70% interest in Bakyrchik Mining Venture, the company that owns the mine; the government of Kazakhstan holds the other 30%. Ivanhoe is entitled to 100% of all operating cash flows from the mine until all of the company's previously invested capital in the project is recovered.

## **Outlook**

We aim to grow our gold and copper business, and we believe that profitable, low-cost production is the best way to grow — that's why we're so excited about the potential of our Turquoise Hill discovery, the Kharmagtai prospect and other high-priority targets in Mongolia's South Gobi region. History has shown that a great mineral discovery can rapidly and dramatically lift the fortunes of a company and its shareholders. While we have made impressive progress to date in Mongolia, we are optimistic that the best drill hole is yet to come. Given the demand for metals to build modern economies throughout Asia, and especially China, we remain more than pleased with our prospects.

***Robert M. Friedland***

Chairman

***R. Edward Flood***

Deputy Chairman

May 29, 2002

Forward-Looking Statements: Statements in this release that are forward-looking statements are subject to various risks and uncertainties concerning the specific factors identified in Ivanhoe Mines' periodic filings with Canadian Securities Regulators. Such forward-looking information represents management's best judgment based on information currently available. No forward-looking statement can be guaranteed and actual future results may vary materially.