

IVANHOE MINES LTD  
Form 6-K  
August 24, 2004

---

---

**SECURITIES AND EXCHANGE COMMISSION**  
Washington, DC 20549

**Form 6-K**

**REPORT OF FOREIGN PRIVATE ISSUER  
PURSUANT TO RULE 13a-16 OR 15d-16 OF  
THE SECURITIES EXCHANGE ACT OF 1934**

From: August 24, 2004

**Ivanhoe Mines Ltd.**

---

*(Translation of Registrant's Name into English)*

**Suite 654 999 Canada Place, Vancouver, British Columbia V6C 3E1**

---

*(Address of Principal Executive Offices)*

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

Form 20-F

Form 40-F

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

Yes

No

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

Enclosed:

Form 51-102F3

---

---

---

**SIGNATURES**

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

**IVANHOE MINES LTD.**

Date: August 24, 2004

By: */s/ Beverly A. Bartlett*

\_\_\_\_\_  
Beverly A. Bartlett  
Corporate Secretary

---

## APPENDIX A

### *Material Change Report*

#### **1. NAME AND ADDRESS OF COMPANY**

Ivanhoe Mines Ltd. ( Ivanhoe )  
World Trade Centre  
Suite 654 999 Canada Place  
Vancouver, British Columbia  
V6C 3E1

#### **2. DATE OF MATERIAL CHANGE**

August 18, 2004

#### **3. NEWS RELEASE**

The news release was issued on August 18, 2004 and disseminated through the facilities of recognized newswire services.

#### **4. SUMMARY OF MATERIAL CHANGE**

AMEC E&C Services ( AMEC ) of Vancouver, Canada has prepared an updated independent resource estimate in respect of the Southwest Oyu, Far Southwest Oyu, South Oyu, Central Oyu, Bridge, Wedge and Southern Sliver zones (the Southern Oyu Deposits ) of Ivanhoe 's Oyu Tolgoi project in Mongolia. AMEC now estimates measured and indicated resources of 1.06 billion tonnes, grading 0.47% copper and 0.36 grams of gold ( g/t ) per tonne (a copper equivalent grade of 0.71%), at a 0.30% copper equivalent cut-off down to 560 metres below surface and 0.60% copper equivalent cut-off below a depth of 560 metres.

#### **5. FULL DESCRIPTION OF MATERIAL CHANGE**

The updated Southern Oyu Deposits resource estimate (the August 2004 Estimate ) was prepared by AMEC in conformance with the requirements of National Instrument 43-101 ( NI 43-101 ) under the direction of Dr. Harry Parker, Ch.P.Geol., and Dr. Stephen Juras, P.Geol., independent qualified persons under NI 43-101.

The August 2004 Estimate increases and upgrades the near-surface resources contained in the Oyu Tolgoi project 's Southern Oyu Deposits, which lie at the southern end of a series of co-genetic copper and gold deposits delineated to date along a 5.3-kilometre-long chain of deposits at Oyu Tolgoi. Extensive drilling has taken place during the 4th quarter of 2003 and first half of 2004 to bring the resources contained within the planned open pits in the southern part of the Oyu Tolgoi project to a measured and indicated resource classification for use in feasibility studies. A total of 539 holes, totalling 255,000 metres, have now been completed on the Southern Oyu Deposits. This compares

---

to 155 holes used in the last AMEC independent resource estimate for the Southern Oyu Deposits in February, 2003 (the February 2003 Estimate ). To date, Ivanhoe has drilled 934 holes, totalling more than 500,000 metres, on the entire Oyu Tolgoi project.

The August 2004 Estimate splits the resources delineated at the Southern Oyu Deposits into resources lying above and below a depth of 560 metres below surface (an elevation of 600 metres above sea level), which Ivanhoe's engineers consider to be a conservative depth for a large-scale, open-pit mining operation. The resources above the depth of 560 metres from surface have been estimated using a 0.30% copper equivalent cut-off. The resources lying below a depth of 560 metres from surface were estimated using a 0.60% copper equivalent cut-off. The contained gold and copper estimates have not been adjusted for metallurgical recoveries. The majority of the measured and indicated resources delineated to date lie above a depth of 560 metres.

Pursuant to the August 2004 Estimate, AMEC has estimated measured and indicated resources of 1.06 billion tonnes, grading 0.47% copper and 0.36 g/t at a 0.30% copper equivalent cut-off down to 560 metres below surface and 0.60% copper equivalent cut-off below a depth of 560 metres. The measured and indicated resources have increased 109% from the February 2003 Estimate of indicated resources, which was 508.9 million tonnes averaging 0.40% copper and 0.59 g/t gold at 0.30% copper equivalent cut-off. Contained metal now stands at 11.2 billion pounds of copper, an increase of 147%, and 12.4 million ounces of gold, an increase of 28%.

Within 560 metres of surface, the Southern Oyu Deposits' measured and indicated resources are now 990.4 million tonnes grading 0.48% copper and 0.31 g/t gold, containing 10.5 billion pounds of copper and 9.87 million ounces of gold, at an open-pit, cut-off grade of 0.30% copper equivalent. Below the 560-metre depth, the measured and indicated resources total 70.9 million tonnes averaging 0.47% copper and 1.08 g/t gold, containing 735 million pounds of copper and 2.46 million ounces of gold, at a higher cut-off grade of 0.60% copper equivalent.

In addition to the measured and indicated resources, the Southern Oyu Deposits contain inferred resources above a depth of 560 metres of 259 million tonnes grading 0.35% copper and 0.20 g/t gold, containing 2.0 billion pounds of copper and 1.66 million ounces of gold, at a 0.30% copper equivalent cut-off.

Within the Southwest Oyu deposit, the measured and indicated resources above a depth of 560 metres have increased to 511.6 million tonnes grading 0.41% copper and 0.47 g/t gold, containing 4.65 billion pounds of copper and 7.69 million ounces of gold, at a 0.30% copper equivalent cut-off. At the higher cut-off grade of 1.00% copper equivalent, the high-grade core of Southwest Oyu contains measured and indicated resources of 79.7 million tonnes grading 0.77% copper and 1.44 g/t gold, containing 1.35 billion pounds of copper and 3.69 million ounces of gold.

In Central Oyu, the indicated resources above a depth of 560 metres have increased to 281.9 million tonnes grading 0.62% copper and 0.17 g/t gold, containing 3.85 billion pounds of copper and 1.54 million ounces of gold, at a 0.30% copper equivalent cut-off.

---

This compares to the February 2003 Estimate of inferred resources of 236.8 million tonnes grading 0.67% copper and 0.18 g/t gold, containing 3.51 billion pounds of copper and 1.36 million ounces of gold, at a 0.30% copper equivalent cut-off.

In South Oyu, the indicated resources above a depth of 560 metres are 196.9 million tonnes grading 0.46% copper and 0.11 g/t gold, containing 2.0 billion pounds of copper and 709,000 ounces of gold, at a 0.30% copper equivalent cut-off.

In addition to the resources delineated in the Southern Oyu Deposits, the Oyu Tolgoi Project contains an inferred resource at the 2.6-kilometre-long Hugo Dummett Deposits (Hugo North and Hugo South) of 1.16 billion tonnes grading 1.29% copper and 0.23 g/t gold (a copper equivalent grade of 1.44%), at a 0.60% copper equivalent cut-off. The total inferred resource at the Hugo Dummett Deposits contain approximately 33 billion pounds of copper and 8.58 million ounces of gold. This estimate was independently prepared by AMEC in May, 2004. Expansion and infill drilling is continuing with six rigs at the Hugo Dummett Deposits with the objective of upgrading a large percentage of the current inferred resource to the indicated category by early 2005.

Detailed analyses of the updated mineral resources for the Southern Oyu Deposits, at various copper equivalent cut-off grades, are provided in Tables 1 through 4 in Appendix A. The August 2004 Estimate of resources at the Southern Oyu Deposits above a depth of 560 metres from surface are provided in Table 1 and were calculated using a 0.30% copper equivalent cut-off. The August 2004 Estimate of resources at the Southern Oyu Deposits lying below a depth of 560 metres from surface are provided in Table 2, and were calculated using a 0.60% copper equivalent cut-off.

The February 2003 Estimate was calculated using a 0.30% copper equivalent cut-off for all resources above and below a depth of 560 metres from surface. For the purpose of comparing the August 2004 Estimate to the February 2003 Estimate, Table 3 shows (i) the combined resources above 560 metres at a 0.30% cut-off (Table 1) and below 560 metres at a 0.60% copper equivalent cut-off (Table 2) as at August 2004 and (ii) the combined resources above and below 560 metres at a 0.3% copper equivalent cut-off as at February 2003. Table 4 shows all of the resources in the Southern Oyu Deposits and the Hugo Dummett deposits identified to date. The resources reported in Table 4 for the Hugo Dummett Deposits were estimated by AMEC in May, 2004.

Copper equivalent grades have been calculated using assumed metal prices of US\$0.80/lb. for copper and US\$350/oz. for gold. The contained gold and copper 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.

Resource classifications conform to CIM Standards on Mineral Resources and Reserves prescribed by National Instrument 43-101. Mineral resources that are not reserves do not have demonstrated economic viability. Measured and indicated mineral resources are that part of a mineral resource for which quantity and grade can be estimated with a level

-4-

of confidence sufficient to allow the application of technical and economic parameters to support mine planning and evaluation of the economic viability of the deposit. An inferred mineral resource is that part of a mineral resource for which quantity and grade can be estimated on the basis of geological evidence and limited sampling and reasonably assumed, but not verified.

The new AMEC independent resource estimates for the near-surface Southern Oyu Deposits will be incorporated into an independent feasibility study for an open-pit operation that is scheduled to be completed in early 2005. The open-pit feasibility study is being done concurrently with an independent underground pre-feasibility study for the Hugo Dummett Deposits. The studies are intended to provide an integrated development plan for the entire Oyu Tolgoi project.

Charles Forster, P.Geo., Ivanhoe Mines exploration manager of the Oyu Tolgoi project and a qualified person under National Instrument 43-101, supervised the preparation of the information in this release. SGS Analabs Pty. Ltd. prepares the split core at the project site and assays all samples at its facility in Ulaanbaatar, Mongolia. Ivanhoe's QA/QC program is monitored by independent consultant Dr Barry Smee, P.Geo., and managed on site by Dale Sketchley, M.Sc., P.Geo. Prepared standards and blanks are inserted at the sample preparation lab on the project site to monitor the quality control of the assay data.

**6. RELIANCE ON SUBSECTION 7.1(2) OR (3) OF NATIONAL INSTRUMENT 51-102**

Not applicable

**7. EXECUTIVE OFFICER**

The name and business number of the executive officer of Ivanhoe who is knowledgeable of the material change and this report is:

Beverly A. Bartlett  
Ivanhoe Mines Ltd.  
Suite 654 999 Canada Place  
Vancouver, British Columbia  
V6C 3E1

Telephone: (604) 688-5755

---

**8. DATE OF REPORT**

DATED at Vancouver, British Columbia this 23rd day of August, 2004.

**IVANHOE MINES LTD.**

Per: Beverly A. Bartlett

---

Beverly A. Bartlett  
Corporate Secretary

---

## APPENDIX A

Table 1: Southern Oyu resources above a depth of 560 metres from surface August, 2004.

	<b>Copper Eq. Cut-Off (%)</b>	<b>Tonnes</b>	<b>Copper (%)</b>	<b>Gold (g/t)</b>	<b>Copper Eq. (%)</b>	<b>Copper (<sup>'000</sup> lbs)</b>	<b>Gold (ounces)</b>	<b>Copper Eq. (<sup>'000</sup> lbs)</b>
<b>Measured</b>	1.00	48,200,000	0.79	1.48	1.73	840,000	2,293,500	1,839,000
	0.70	69,900,000	0.70	1.17	1.45	1,079,000	2,629,323	2,235,000
	0.60	83,560,000	0.66	1.03	1.32	1,216,000	2,767,048	2,432,000
	0.50	96,395,500	0.62	0.93	1.21	1,318,000	2,882,177	2,572,000
	0.40	104,562,600	0.60	0.88	1.15	1,383,000	2,958,285	2,651,000
	0.30	108,360,000	0.58	0.85	1.13	1,386,000	2,961,208	2,700,000
<b>Indicated</b>	1.00	81,730,000	0.92	0.75	1.40	1,658,000	1,970,715	2,523,000
	0.70	239,970,000	0.74	0.42	1.01	3,916,600	3,240,315	5,344,000
	0.60	357,120,000	0.66	0.36	0.89	5,197,000	4,133,307	7,008,000
	0.50	523,483,600	0.58	0.31	0.78	6,695,000	5,217,299	9,003,000
	0.40	708,013,000	0.52	0.27	0.69	8,118,000	6,145,907	10,772,000
	0.30	882,070,000	0.47	0.25	0.62	9,141,000	7,089,638	12,059,000
<b>Measured + Indicated</b>	1.00	129,930,000	0.87	1.02	1.52	2,493,000	4,260,794	4,355,000
	0.70	309,870,000	0.73	0.59	1.11	4,988,000	5,877,769	7,584,000
	0.60	440,680,000	0.66	0.48	0.97	6,413,000	6,800,574	9,425,000
	0.50	619,879,000	0.59	0.41	0.85	8,064,000	8,170,935	11,618,000
	0.40	812,575,600	0.53	0.35	0.75	9,496,000	9,143,507	13,438,000
	0.30	990,430,000	0.48	0.31	0.68	10,483,000	9,871,121	14,851,000
<b>Inferred</b>	1.00	5,390,000	1.14	0.57	1.50	135,500	98,774	178,000
	0.70	16,650,000	0.79	0.35	1.02	290,000	187,354	374,000
	0.60	35,990,000	0.61	0.32	0.81	484,000	370,265	643,000
	0.50	80,245,100	0.48	0.29	0.66	849,000	748,165	1,168,000
	0.40	155,072,800	0.40	0.24	0.56	1,368,000	1,196,542	1,915,000
	0.30	259,060,000	0.35	0.20	0.47	1,999,000	1,665,756	2,685,000

**Table 2: Southern Oyu resources below a depth of 560 metres from surface August, 2004.**

	<b>Copper Eq. Cut-Off (%)</b>	<b>Tonnes</b>	<b>Copper (%)</b>	<b>Gold (g/t)</b>	<b>Copper Eq. (%)</b>	<b>Copper (<b>'000 lbs</b>)</b>	<b>Gold (ounces)</b>	<b>Copper Eq. (<b>'000 lbs</b>)</b>
<b>Measured</b>	1.00	5,000,000	0.78	2.19	2.18	86,000	352,000	240,000
	0.70	5,220,000	0.76	2.13	2.13	87,000	357,500	245,000
	0.60	5,280,000	0.76	2.12	2.11	88,000	359,900	246,000
<b>Indicated</b>	1.00	29,470,000	0.55	1.39	1.44	357,000	1,317,000	936,000
	0.70	54,440,000	0.46	1.09	1.17	552,000	1,907,800	1,404,000
	0.60	65,620,000	0.44	0.99	1.08	637,000	2,088,600	1,563,000
<b>Measured + Indicated</b>	1.00	34,470,000	0.58	1.50	1.55	441,000	1,662,300	1,178,000
	0.70	59,660,000	0.49	1.19	1.25	645,000	2,282,500	1,644,000
	0.60	70,900,000	0.47	1.08	1.15	735,000	2,461,800	1,798,000
<b>Inferred</b>	1.00	3,020,000	0.51	1.04	1.17	34,000	101,000	78,000
	0.70	12,960,000	0.45	0.69	0.89	129,000	287,500	254,000
	0.60	26,200,000	0.41	0.55	0.76	237,000	463,300	439,000

**Table 3 Southern Oyu resources (August 2004 estimate compared to February 2003 estimate)****August 2004 (0.30% CuEq. cut-off above 560 metres and 0.60% CuEq. cut-off below 560 metres)**

	<b>Tonnes</b>	<b>Copper (%)</b>	<b>Gold (g/t)</b>	<b>Copper Eq. (%)</b>	<b>Copper ('000 lbs)</b>	<b>Gold (ounces)</b>	<b>Copper Eq. ('000 lbs)</b>
<b>Measured</b>	113,380,000	0.59	0.91	1.17	1,480,000	3,328,000	2,930,000
<b>Indicated</b>	947,670,000	0.47	0.30	0.66	9,720,000	9,068,000	13,690,000
<b>Measured + Indicated</b>	1,061,310,000	0.48	0.36	0.71	11,200,000	12,397,800	16,620,000
<b>Inferred</b>	285,260,000	0.35	0.23	0.50	2,210,000	2,116,400	3,120,000
<b>February 2003 (0.30% CuEq. cut-off)</b>							

	<b>Tonnes</b>	<b>Copper (%)</b>	<b>Gold (g/t)</b>	<b>Copper Eq. (%)</b>	<b>Copper ('000 lbs)</b>	<b>Gold (ounces)</b>	<b>Copper Eq. ('000 lbs)</b>
<b>Measured</b>	0						
<b>Indicated</b>	508,900,000	0.40	0.59	0.52	4,540,000	9,690,000	5,801,000
<b>Measured + Indicated</b>	508,900,000	0.40	0.59	0.52	4,540,000	9,690,000	5,801,000
<b>Inferred</b>	797,854,000	0.45	0.28	0.50	7,890,000	7,160,000	8,889,245

**Table 4: Total Oyu Tolgoi Project resources based on a 0.60% copper equivalent cut-off August, 2004**

Deposit	Resources (tonnes)	Copper Grade (%)	Gold Grade (g/t)	Copper Equiv. Grade (%)	Contained Metal		
					Copper ( <sup>'000</sup> pounds)	Gold (ounces)	Copper Equiv. ( <sup>'000</sup> pounds)
<b><u>Southern Oyu</u></b>							
<b><u>Deposits</u></b>							
Measured	88,840,000	0.67	1.09	1.37	1,304,500	3,126,900	2,677,800
Indicated	422,740,000	0.63	0.46	0.92	5,883,800	6,221,900	8,571,000
Measured + Indicated	511,580,000	0.64	0.59	1.00	7,188,300	9,348,800	11,248,800
Inferred	62,190,000	0.53	0.42	0.79	720,000	839,000	1,090,000
<b><u>Hugo Dummett</u></b>							
<b><u>Deposits</u></b>							
Inferred	1,159,800,000	1.29	0.23	1.44	32,970,000	8,580,000	36,810,000
<b><u>Oyu Tolgoi Project</u></b>							
<b><u>Grand Total</u></b>							
Measured	88,840,000	0.67	1.09	1.37	1,304,500	3,126,900	2,677,800
Indicated	422,740,000	0.63	0.46	0.92	5,883,800	6,221,900	8,571,000
Measured + Indicated	511,580,000	0.64	0.59	1.00	7,188,300	9,348,800	11,248,800
Inferred	1,221,990,000	1.25	0.24	1.41	33,690,000	9,416,300	37,890,000