IVANHOE MINES LTD
Form 6-K
October 06, 2010

**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: October 6, 2010**
**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 of Form 20-F or Form 40-F.)

Form 20-F- o Form 40-F- þ

(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: o No: þ

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

Enclosed:
Material Change Report dated 11 May 2010

***Form 51-102F3***
***Material Change Report***

1. **REPORTING ISSUER**

Ivanhoe Mines Ltd. ( **Ivanhoe** or the **Company** )
654 999 Canada Place
Vancouver, BC V6C 3E1

2. **DATE OF MATERIAL CHANGE**

May 11, 2010

3. **PRESS RELEASE**

The press release was issued on May 11, 2010 and was disseminated through the facilities of recognized newswire services. A copy of the press release was filed on SEDAR.

4. **SUMMARY OF MATERIAL CHANGE**

Ivanhoe announced a new Integrated Development Plan (the **IDP** ) in respect of its Oyu Tolgoi Project (the **Project** ) in southern Mongolia. The IDP includes the first underground reserves for the planned Hugo Dummett block-cave mine and presents the results of extensive studies of two complementary development scenarios: a Reserve Case and a Life-of-Mine Sensitivity Case.

The first lift ( **Lift 1** ) of the planned underground block cave on the Hugo North Deposit contains 437 million tonnes of Probable Reserve at 1.90% copper and 0.42 grams of gold per tonne.

The Reserve Case, based only on proven and probable mineral reserves, would sustain mining for a projected 27 years. The estimated after-tax net present value ( **NPV** ) would be US$4.536 billion at an 8% discount rate, an internal rate of return ( **IRR** ) of 16.33% and a payback period of 6.32 years (based on US$2.00/lb. copper and US$850/oz. gold). Based on current metal prices of US$3.23/lb. copper and US$1,200/oz. gold, the estimated NPV would be US$12.6 billion, with an IRR of 26.3% and a payback period of 4.73 years.

The Life-of-Mine Sensitivity Case adds to the Reserve Case a large inventory of mineral resources identified based on exploration to date but currently classified only to the level of inferred resources. Inferred mineral resources are considered too speculative geologically to have the economic considerations applied to them in order to be categorized as mineral reserves, and there is no certainty that the Life-of-Mine Sensitivity Case will be realized. The Life-of-Mine Sensitivity Case, if realized, would sustain mining for a projected 59 years. Mining of all resources would yield an after-tax NPV of US$5.614 billion (based on US$2.00/lb. copper and US$850/oz. gold). Based on current metal prices of US$3.23/lb. copper and US$1,200/oz. gold, the NPV would be US$15.3 billion, with an IRR of 26.7% and a payback period of 4.62 years. In both cases, the IDP contemplates annual average production from the Project in excess of 1.2 billion pounds of copper and 650,000 ounces of gold for the first ten years.

5. **FULL DESCRIPTION OF MATERIAL CHANGE**

The IDP is a technical report in respect of the Project prepared on Ivanhoe s behalf by a team of independent qualified persons led by Australia-based AMEC Minproc.

The scale of the Project has increased significantly since the publication in 2005 of the first Integrated Development Plan. Since 2005 Ivanhoe has commissioned a series of updated independent analyses of project economics, increased mineral resources and reserves and revised valuation estimates.

The completion and effectiveness of an Investment Agreement in respect of the Project with the Government of Mongolia on March 31, 2010 validated the economic assumptions upon which these analyses were based and the IDP represents the consolidation of this accumulated technical and economic information respecting the Project.

**Scenario 1: Key Aspects of the Reserve Case**

The Reserve Case sets out the likely path of development for the initial phases of the Oyu Tolgoi group of deposits (stages 1 through 9 of the open pit on the Southern Oyu deposits and Lift 1 of the Hugo North Deposit s underground block-cave mine).

Lift 1 of the planned underground block cave on the Hugo North Deposit contains 437 million tonnes of probable reserves at 1.90% copper and 0.42 grams of gold per tonne.

The planned open pit on the Southern Oyu copper and gold deposits contains a Proven and Probable Reserves of 955 million tonnes at 0.49% copper and 0.35 grams of gold per tonne.

The total mineral reserve (Proven & Probable) contains 1.393 billion tonnes at 0.93% copper and 0.37 grams of gold per tonne.

Total production of 25.2 billion pounds (11.5 million tonnes) of copper and 13.1 million ounces of gold is projected from mining only the open pit on the Southern Oyu deposits and Lift 1 of the underground block cave on the Hugo North Deposit.

Production is expected to commence in mid-2013.

The ore processing plant would be expanded from an initial 36.5 million tonnes per year to 58 million tonnes per year (100,000 to 160,000 tonnes per day) by the end of the fifth year of operations.

Peak single-year production is estimated at 1.7 billion pounds (800,000 tonnes) of copper and 1.1 million ounces of gold.

- The economic analysis projects an after-tax NPV of US$4.536 billion at an 8% discount rate, an IRR of 16.33% and a payback period of 6.32 years (based on US$2.00/lb. copper and US$850/oz. gold).
- Based on current metal prices of US$3.23/lb. copper and US$1,200/oz. gold, the estimated NPV would be US$12.6 billion, with an IRR of 26.3% and a payback period of 4.73 years.

**Scenario 2: Key Aspects of the Life-of-Mine Sensitivity Case**

The Life-of-Mine Sensitivity Case reflects the development flexibility that exists with later phases of the Oyu Tolgoi group of deposits, which currently include the Heruga Deposit, the Hugo South Deposit and the second lift of the Hugo North Deposit. These subsequent phases will require separate development decisions in the future based on conditions prevailing at the time and the accumulated experience gained from developing and operating the initial phases of the Project.

Accordingly, the Life of Mine Sensitivity Case is effectively a preliminary assessment. Insofar as the Life-of-Mine Sensitivity Case includes an economic analysis that is based, in part, on inferred mineral resources, the Life-of-Mine Sensitivity Case does not have as high a level of certainty as the Reserve Case. Inferred mineral resources are considered too speculative geologically to have the economic considerations applied to them in order to be categorized as mineral reserves, and there is no certainty that the Life-of-Mine Sensitivity Case will be realized.

- The projected 59-year mine life incorporates the Reserve Case s proven and probable mineral reserves at the Southern Oyu open pit and the Hugo North block-cave s Lift 1 and also adds inferred resources from the Hugo North block-cave s second lift ( **Lift 2** ) and the Hugo South and Heruga deposits.
- Oyu Tolgoi would process an average of 58 million tonnes of ore per year, yielding total production of 52.5 billion pounds of copper (23.8 million tonnes) and 26.4 million ounces of gold.
- Mining of all resources would yield an after-tax NPV of US$5.614 billion (based on US$2.00/lb. copper and US$850/oz. gold).
- Based on current metal prices of US$3.23/lb. copper and US$1,200/oz. gold, the NPV would be US$15.3 billion, with an IRR of 26.7% and a payback period of 4.62 years.

The IDP is based on Oyu Tolgoi mineral resources that have been identified through Ivanhoe Mines ongoing exploration. Currently identified Oyu Tolgoi resources include:

- 1.4 billion tonnes classified as measured and indicated at an average grade of 1.33% copper and 0.47g/t gold.
- 2.4 billion tonnes are classified as inferred at an average grade of 0.78% copper and 0.33g/t gold.

The measured and indicated resource classifications contain an estimated 40.7 billion pounds of copper and 21 million ounces of gold. The inferred classification contains an additional 40.6 billion pounds of copper and 25.4 million ounces of gold.

**Production and Financial Results**

| Description | ***Reserve Case*** | ***Life of Mine (Sensitivity) Case*** |
|---|---|---|
| Inventory | Mineral Reserve | Mineral Reserve plus Inferred Resources |
| Production rate | 58 mt/a | 58 mt/a |
| Total processed | 1 393 million tonnes | 3 019 million tonnes |
| NSR | US$32.57/t | US$32.37/t |
| Copper grade | 0.93% | 0.89% |
| Gold grade | 0.37g/t | 0.34g/t |
| Copper recovered | 25.2 billion lb. | 52.6 billion lb. |
| Gold recovered | 13.1 million oz. | 26.4 million oz. |
| Mine life | 27 years | 59 years |
| Initial Capital (100,000 tpd concentrator Southern Oyu Open Pit) | US$3.5 billion | US$3.5 billion |
| Pre-production underground capital | US$1.1 billion | US$1.1 billion |
| Total project cash requirement | US$4.6 billion | US$4.6 billion |
| 10-year cash cost (net of gold credits) | 0.45 cents/lb. | 0.44 cents/lb. |
| NPV (8%) After Tax | US$4 536m | US$5 614m |
| IRR after tax | 16.33% | 16.73% |
| Payback period | 6.32 years | 6.22 years |

**Notes:**

1. The NSR has been calculated with assumptions for smelter refining and treatment charges, deductions and payment terms, transport costs, metallurgical recoveries and royalties. NSR in this table is based on metal prices of: copper US$1.80/lb, gold US$800/oz, silver US$13.50/oz,

molybdenum US$13.50/lb.

2. Long term metal prices used in the NPV, IRR and Payback economic analyses are: copper US$2.00/lb, gold US$850/oz, silver US$13.50/oz, molybdenum US$13.50/lb.

3. Under the NI 43-101 guidelines, inferred mineral resources are considered too speculative geologically to have the economic considerations applied to them that would allow them to be categorized as mineral reserves, and there is no certainty that the Life of Mine (Sensitivity) Case will be realized.

The Life-of-Mine Sensitivity Case includes an economic analysis that is based, in part, on inferred resources that do not have as high a level of certainty as the Reserve Case. Inferred resources are considered too speculative geologically to have the economic considerations applied to them that would allow them to be categorized as mineral reserves, and there is no certainty that the Life-of-Mine Sensitivity will be realized.

**Metal Price Sensitivities (project Net Present Value at 8% discount; US$M)**

| | Metal Price Sensitivity | | | Reserve Case | | | |
|---|---|---|---|---|---|---|---|
| **After-tax values** | | | | **Gold price/oz** | | | |
| **Copper price/lb** | **$ 750** | **$ 850 (Base)** | **$ 1,000** | **$ 1,200 (Current)** | **$ 1,500** | **$ 1,750** | **$ 2,000** |
| **$1.50** | **1,346** | **1,680** | **2,173** | **2,824** | **3,784** | **4,580** | **5,377** |
| **$2.00 (Base)** | **4,218** | **4,536** | **5,011** | **5,648** | **6,602** | **7,391** | **8,188** |
| **$2.50** | **7,035** | **7,353** | **7,826** | **8,460** | **9,416** | **10,210** | **11,000** |
| **$3.23 (Current)** | **11,145** | **11,464** | **11,937** | **12,569** | **13,516** | **14,309** | **15,100** |
| **$3.50** | **12,663** | **12,979** | **13,452** | **14,084** | **15,037** | **15,827** | **16,617** |
| **$4.00** | **15,469** | **15,788** | **16,265** | **16,899** | **17,847** | **18,638** | **19,428** |
| **$5.00** | **21,097** | **21,413** | **21,887** | **22,520** | **23,464** | **24,250** | **25,039** |
| **$6.00** | **26,715** | **27,029** | **27,502** | **28,134** | **29,083** | **29,870** | **30,654** |

| | Metal Price Sensitivity | | | Life-of-Mine Sensitivity Case | | | |
|---|---|---|---|---|---|---|---|
| **After-tax values** | | | | **Gold price/oz** | | | |
| **Copper price/lb** | **$ 750** | **$ 850 (Base)** | **$ 1,000** | **$ 1,200 (Current)** | **$ 1,500** | **$ 1,750** | **$ 2,000** |
| **$1.50** | **1,777** | **2,137** | **2,671** | **3,377** | **4,412** | **5,269** | **6,126** |
| **$2.00 (Base)** | **5,268** | **5,614** | **6,127** | **6,815** | **7,840** | **8,698** | **9,559** |
| **$2.50** | **8,703** | **9,043** | **9,556** | **10,244** | **11,277** | **12,131** | **12,986** |
| **$3.23 (Current)** | **13,715** | **14,056** | **14,568** | **15,253** | **16,287** | **17,143** | **17,999** |
| **$3.50** | **15,563** | **15,905** | **16,422** | **17,111** | **18,140** | **18,996** | **19,852** |
| **$4.00** | **19,002** | **19,346** | **19,859** | **20,544** | **21,571** | **22,427** | **23,285** |
| **$5.00** | **25,865** | **26,208** | **26,725** | **27,412** | **28,442** | **29,300** | **30,155** |
| **$6.00** | **32,740** | **33,083** | **33,597** | **34,280** | **35,305** | **36,158** | **37,014** |

**Mineral Resources**

The IDP is based on updated reserve and resource estimates filed on March 31, 2010. Total resources for the deposits at Oyu Tolgoi are now estimated to contain 1.4 billion tonnes at a grade of 1.33% copper and 0.47 grams of gold per tonne in the Measured and Indicated category. These classifications contain an estimated 40.6 billion pounds (18.4 million tonnes) of copper and 21 million ounces of gold providing a total copper equivalent of 49.9 billion pounds (22.6 million tonnes).

In the Inferred category, Oyu Tolgoi now is estimated to contain:

an estimated 40.6 billion pounds (18.4 million tonnes) of copper, an increase of 2.4 billion pounds (1.1 million tonnes), or 6.2%, since March 2008;

25.4 million ounces of gold, an increase of 1.1 million ounces, or 4.8%, since March 2008; and

a copper equivalent of 53.3 billion pounds (24.1 million tonnes), an increase of 3.2 billion pounds (1.5 million tonnes), or 6.4%, since March 2008.

The revised estimate of mineral reserves adds underground reserves of 437 million tonnes. The revised estimate also extends the reserves in the proposed open-pit mine to 955 million tonnes, an increase of 2.6% since February 2006.

**Total Oyu Tolgoi Project Mineral Resources based on the March 31, 2010[(1)(2)] Technical Report (based on a 0.60% copper equivalent (CuEq) cut-off)**

| | | | | | | Contained Metal[(4)] | | |
|---|---|---|---|---|---|---|---|---|
| **Resource Category** | **Tonnes** | **Cu (%)** | **Au (g/t)** | **Mo (ppm)** | **CuEq[(3)] (%)** | **Cu ( 000 lbs)** | **Au (ounces)** | **CuEq[(3)] ( 000 lbs)** |
| Measured | 101,590,000 | 0.64 | 1.10 | | 1.34 | 1,430,000 | 3,590,000 | 3,000,000 |
| Indicated | 1,285,840,000 | 1.38 | 0.42 | | 1.65 | 39,120,000 | 17,360,000 | 46,770,000 |
| Measured + Indicated | 1,387,430,000 | 1.33 | 0.47 | | 1.63 | 40,680,000 | 20,970,000 | 49,860,000 |
| Inferred | 2,367,130,000 | 0.78 | 0.33 | 50 | 1.02 | 40,610,000 | 25,390,000 | 53,280,000 |

**Notes:**

1. Resource classifications conform to CIM Standards on mineral resources and reserves referred to in National Instrument 43-101. Mineral resources that are not reserves do not have demonstrated economic viability. Measured and indicated resources are that part of a mineral resource for which quantity and grade can be estimated with a level of confidence sufficient to allow the application of technical and economic parameters to support mine planning and evaluation of the economic viability of the project. An inferred 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, geological and grade continuity.

2. This table includes estimated resources on the Hugo North Extension Deposit and the Heruga Deposit. These deposits are located on mineral licences owned by Entrée but subject to the Entrée Joint Venture. These resources consist of indicated resources of 117,000,000 tonnes grading 1.8% copper and 0.61 g/t gold and Inferred Resources of 910,000,000 tonnes grading 0.48% copper and 0.49 g/t gold and a 141ppm molybdenum at a 0.6% cut-off grade on

the combined Hugo North Extension and Heruga Deposits.

3. CuEq has been calculated using assumed metal prices ($1.35/lb. for copper and $650/oz for gold and $10/lb for molybdenum); %CuEq. = Cu+((Au*18.98)+(Mo*0.01586))/29.76. Mo grades outside of Heruga are assumed to be zero for CuEq calculations. The CuEq formula also took into account the different levels of metallurgical recovery for the metals. Gold was assumed to have only 91% of copper recovery, molybdenum only 72% of copper recovery.

4. 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. Differences in measured and indicated totals relate to rounding associated with tonnes and grade.

The estimates were based on 3-D block models utilizing commercial mine planning software. Industry-accepted methods were used to create interpolation domains; these domains were based upon mineralization and geology. Grade estimation was performed by ordinary kriging. A separate resource model was prepared for each of the deposits. Only hypogene mineralization was estimated, with the exception of a zone of supergene mineralization at Central Oyu.

Modeling consisted of grade interpolation by ordinary kriging. Grade capping during interpolation was only applied in the Southern Oyu and Hugo South deposits. For copper and gold, on all deposits except Hugo South, an outlier restriction was used to control the effect of high-grade composites. In the Southern Oyu deposits, resource grades were also adjusted to reflect likely occurrences of internal and contact dilution from unmineralized post-mineral dykes. Validation procedures included Discrete Gaussian change-of-support method, comparisons using a nearest neighbour model and visual checks.

The base case copper-equivalent cut-off grade assumptions for each deposit were determined using cut-off grades applicable to mining operations exploiting similar deposits.

**Mineral Reserves**

The estimated mineral reserves, a sub-set of the resources, total 1.39 billion tonnes.

**Total Oyu Tolgoi Project Mineral Reserve, May 2010**

| | | | | | Recovered Metal | |
|---|---|---|---|---|---|---|
| **Deposit** | **Ore (Mt)** | **NSR ($/t)** | **Cu (%)** | **Au (g/t)** | **Copper (Mlb)** | **Gold (koz)** |
| **Southern Oyu Deposits** | | | | | | |
| Proven | 127 | 21.38 | 0.58 | 0.93 | 1 399 | 2 994 |
| Probable | 828 | 10.81 | 0.48 | 0.27 | 6 980 | 5 229 |
| Mineral Reserve (Proven + Probable) | 955 | 12.21 | 0.49 | 0.35 | 8 380 | 8 223 |
| **Hugo Dummett Deposits** | | | | | | |
| Probable (Hugo North Ivanhoe) | 410 | 51.12 | 1.90 | 0.40 | 15 823 | 4 368 |
| Probable (Hugo North EJV Shivee Tolgoi) | 27 | 55.57 | 1.85 | 0.72 | 1 032 | 531 |
| Mineral Reserve (Probable) (All Hugo North) | 437 | 51.40 | 1.90 | 0.42 | 16 855 | 4 899 |
| **Oyu Tolgoi Project Mineral Reserve** | | | | | | |
| Proven | 127 | 21.38 | 0.58 | 0.93 | 1 399 | 2 994 |
| Probable | 1 266 | 24.84 | 0.97 | 0.32 | 23 835 | 10 127 |
| Mineral Reserve (Proven + Probable) | 1 393 | 24.52 | 0.93 | 0.37 | 25 234 | 13 121 |

**Notes:**

1. Metal prices used for calculating the Southern Oyu Open Pit NSR are copper US$1.30/lb., gold US$500/oz., and silver US$9.50/oz., based on long-term metal price forecasts

at the beginning of the mineral reserve work. The analysis indicates that the reserve is still valid at these metal prices.

2. Metal prices used for calculating the Hugo North Underground NSR are copper US$1.50/lb., gold US$640/oz. and silver US$10.50/oz., based on long-term metal price forecasts at the beginning of the mineral reserve work. The analysis indicates that the reserve is still valid at these metal prices.

3. The base case financial analysis has been prepared using current long term metal price estimates of copper US$2.00/lb., gold US$850/oz. and silver US$13.50/oz.

4. For the open pit, the processing and general

administration operating costs that have been used to determine cut-off grades are: Southwest and Central Chalcopyrite US$3.88/t, Central Chalcocite and Central Covellite US$3.41/t.

5. The NSR has been calculated with assumptions for smelter refining and treatment charges, deductions and payment terms, concentrate transport, metallurgical recoveries and royalties.

6. For the underground block cave, all material within the shell has been converted to mineral reserve. This includes inferred material with zero grade that has been treated as dilution.

7. Only measured resources were used to report proven reserves and only indicated resources were used to report probable reserves.

8. EJV is the Entrée Gold Joint Venture. Ivanhoe Mines rights in the Shivee Tolgoi and Javkhlant

mining licences are included in the Contract Area covered by the Oyu Tolgoi Investment Agreement. Activities in the Contract Area will be the responsibility of Oyu Tolgoi LLC, which will receive 70-80% of cash flows from the EJV licences after capital and operating costs.

9. The mineral reserves are not additive to the mineral resources.

**Common start-up plan creates base for two development scenarios**

Both the Reserve Case and the alternative Life-of-Mine Sensitivity Case share the same underlying plan for the construction and operation of an initial concentrator facility that would process 100,000 tonnes of ore per day (36.5 million tonnes per year). By the end of the fifth year of operation, the concentrator would be expanded to a capacity of 160,000 tonnes per day (58 million tonnes per year).

Under the common start-up plan, ore initially would be sourced from the open-pit mine on the Southern Oyu deposits while the adjacent, higher-grade underground mine on the Hugo Dummett Deposit is developed for targeted full production of 85,000 tonnes per day. The expansion would be timed to provide for the processing of ore to be mined from underground, as well as the open pit, when operations reach full capacity. The initial infrastructure to be constructed to support the mining is also common to both cases.

All the proven and probable reserves included in the Reserve Case would be from mineral resources classified as measured and indicated, which would be mined from the open pit on the Southern Oyu deposits and Lift 1 of the underground block cave on the Hugo North Deposit.

Expanding on the Reserve Case, the Life-of-Mine Sensitivity Case is based on the addition of inferred resources from the proposed Lift 2 of the Hugo North block cave, as well as inferred resources from additional block caves at the Hugo South and Heruga deposits. This expanded development plan would create a much larger resource base for mining. The study of this case shows the possible development plan for all of the currently identified future mining areas at Oyu Tolgoi and the significant, long-life potential of the entire mineral resource at Oyu Tolgoi.

The economic analysis of the Reserve and Life-of-Mine cases used a price assumption of US$2.00/lb. for copper and US$850/oz. for gold at a discount rate of 8%. The basis of the operational framework of the mine used in the analysis is based on current Mongolian legislation and the terms of the October 2009 Investment Agreement between Ivanhoe, its strategic partner, Rio Tinto, and the Government of Mongolia.

**Additional details of the IDP**

Mining of the open pit on the Southern Oyu deposits and Lift 1 of the underground block cave on the Hugo North Deposit is confirmed as the foundation for long-term development plans.

Total cash costs are estimated at US$0.45 per pound of payable copper produced, after gold credits, over the first 10 years (using a gold price of US$850/oz.). Total cash costs include mine site costs and all treatment, refining, transport and royalty costs arising from product sales.

Cash costs for the Life-of-Mine Sensitivity Case, after gold credits, will be US$0.73/lb.

The initial capital cost required to achieve first production from the open-pit mine on the Southern Oyu deposits is forecast at US$4.6 billion. This amount includes US$1.1 billion to be spent advancing underground development at the Hugo North Deposit in preparation for the start of block-cave mining.

**Summary of key results of the IDP**

Economic results have been generated using metal prices of US$2.00/lb. copper and US$850/oz. gold. Under these assumptions, capital expansion programs would be funded from mine operations.

Detailed baseline capital estimates originally were prepared for plant and infrastructure in Q4 2007. These estimates have been trended for the IDP up to December 2009, with reference to scope changes and changes in the underlying escalation indices in the United States, Mongolia and China.

No provision has been made for escalation during construction. All other anticipated pre production cash costs have been classified as capital for the purposes of the IDP, including the prepayment of taxes to the Government of Mongolia required under the terms of the Investment Agreement.

Capital and project-schedule assumptions will continue to be updated during initial construction activities as project financing discussions progress.

**Oyu Tolgoi Project resources**

In 2001, Ivanhoe Mines discovered the copper-gold porphyry potential in South Oyu, Southwest Oyu and Central Oyu now known as the Southern Oyu deposits. In late 2002, Ivanhoe drilled a hole in the far northern portion of the property, now known as the Hugo Dummett Deposit, to test a broad, induced-polarization high. More than 800,000 metres of drilling now have been completed at Oyu Tolgoi, including related exploration on the adjoining joint-venture licences with Entrée Gold.

Measured and indicated resources at Oyu Tolgoi now total approximately 1.4 billion tonnes at an average grade of 1.33% copper and 0.47g/t gold, plus an additional 2.4 billion tonnes of inferred resources at an average grade of 0.78% copper and 0.33g/t gold. The estimated mineral reserves, a sub-set of the resources, total 1.39 billion tonnes.

**Oyu Tolgoi mineral resource summary based on the March 31, 2010 Technical Report**

| | | Copper | | | Contained Metal | | |
|---|---|---|---|---|---|---|---|
| **Deposit** | **Tonnage (t)** | **Copper (%)** | **Gold (g/t)** | **Equiv. (%)** | **Copper (000 lb)** | **Gold (oz)** | **Copper Equiv. (000 lb)** |
| **Southern Oyu Deposits** | | | | | | | |
| Measured | 101 590 000 | 0.64 | 1.10 | 1.34 | 1 430 000 | 3 590 000 | 3 000 000 |
| Indicated | 465 640 000 | 0.62 | 0.43 | 0.89 | 6 360 000 | 6 440 000 | 9 140 000 |
| Measured + Indicated | 567 230 000 | 0.62 | 0.55 | 0.97 | 7 750 000 | 10 030 000 | 12 130 000 |
| Inferred | 88 500 000 | 0.47 | 0.41 | 0.73 | 920 000 | 1 170 000 | 1 420 000 |
| **Hugo Dummett Deposits** | | | | | | | |
| Indicated (Hugo North Ivanhoe) | 703 200 000 | 1.82 | 0.39 | 2.07 | 28 220 000 | 8 820 000 | 32 090 000 |
| Indicated Shivee Tolgoi (Hugo North EJV) | 117 000 000 | 1.80 | 0.61 | 2.19 | 4 640 000 | 2 290 000 | 5 650 000 |
| Indicated (All Hugo North) | 820 200 000 | 1.82 | 0.42 | 2.08 | 32 910 000 | 11 080 000 | 37 610 000 |
| Inferred (Hugo North Ivanhoe) | 722 800 000 | 0.97 | 0.30 | 1.17 | 15 460 000 | 6 970 000 | 18 640 000 |
| Inferred Shivee Tolgoi (Hugo North EJV) | 95 500 000 | 1.15 | 0.31 | 1.35 | 2 420 000 | 950 000 | 2 840 000 |
| Inferred (All Hugo North) | 818 300 000 | 1.00 | 0.30 | 1.19 | 18 040 000 | 7 890 000 | 21 470 000 |
| Inferred (Hugo South) | 490 330 000 | 1.05 | 0.09 | 1.11 | 11 350 000 | 1 420 000 | 12 000 000 |
| Inferred (Hugo North and South) | 1 308 630 000 | 1.02 | 0.22 | 1.16 | 29 430 000 | 9 260 000 | 33 470 000 |
| **Heruga Deposit** | | | | | | | |
| Heruga Javkhlant EJV | 910 000 000 | 0.48 | 0.49 | 0.87 | 9 570 000 | 14 300 000 | 17 390 000 |
| Heruga Ivanhoe | 60 000 000 | 0.48 | 0.37 | 0.78 | 670 000 | 700 000 | 1 090 000 |
| Inferred (All Heruga) | 970 000 000 | 0.48 | 0.48 | 0.86 | 10 240 000 | 15 000 000 | 18 480 000 |
| **Oyu Tolgoi Project Grand** | | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Total** | | | | | | | |
| Measured | 101 590 000 | 0.64 | 1.10 | 1.34 | 1 430 000 | 3 590 000 | 3 000 000 |
| Indicated | 1 285 840 000 | 1.38 | 0.42 | 1.65 | 39 120 000 | 17 360 000 | 46 770 000 |
| Measured + Indicated | 1 387 430 000 | 1.33 | 0.47 | 1.63 | 40 680 000 | 20 970 000 | 49 860 000 |
| Inferred | 2 367 130 000 | 0.78 | 0.33 | 1.02 | 40 610 000 | 25 390 000 | 53 280 000 |

**Notes:**

1. The contained gold and copper estimates in the tables have not been adjusted for metallurgical recoveries.

2. The 0.6% CuEq cut-off has been used to enable comparison with previous disclosures.

3. The mineral reserves are not additive to the mineral resources.

4. CuEq has been calculated using assumed metal prices (US$1.35/lb. for copper and US$650/oz for gold and US$10/lb for molybdenum); %CuEq. = Cu+((Au*18.98)+(Mo*0.01586))/29.76. Mo grades outside of Heruga are assumed to be zero for CuEq calculations.

5. Mineral resources that are not mineral reserves do not have demonstrated economic viability.

6. EJV is the Entrée Gold Joint Venture. The Shivee Tolgoi and Javkhlant licences are held by Entrée Gold. The Shivee Tolgoi and Javkhlant licences are planned to be operated by Oyu Tolgoi LLC. Oyu Tolgoi LLC will receive 80% of cash flows after capital and operating costs.

**Preparation of IDP and Qualified Persons**

The IDP was prepared under the supervision of AMEC Minproc Limited. Bernard Peters, as Oyu Tolgoi Study Director for AMEC Minproc Limited and Qualified Person as defined in National Instrument 43-101, has reviewed, verified and approved the technical contents of this material change report.

The Qualified Persons and their areas of responsibility in relation to this material change report are:

Bernard Peters, B.Eng. (Mining), M. AusIMM (201743), employed by AMEC Minproc Limited as Principal Mining Consultant, was responsible for the overall preparation of the report and, in particular, the open-pit mineral reserve estimate of the Technical Report.

Scott Jackson, B.Sc. (Hons), CFSG, M. AusIMM (201735), employed by Quantitative Group Pty. Ltd. (trading as QG ) as Principal Consultant, was responsible for preparation of the mineral resources.

John Vann, B.App.Sc., B.Sc. (Hons), M.Sc., F.Aus.I.M.M. (103352), F.A.I.G., M.S.E.G, employed by Quantitative Group Pty. Ltd. (trading as QG ) as Principal Consultant, was responsible for preparation of the mineral resources.

Albert Chance, B.App.Sc., Association of Professional Engineers of the Province of British Columbia (no. 16370), an employee of Golder Associates Ltd., was responsible for preparation of the subsection on Open Pit Mine Geotechnical.

George R Stephan, E.M. (Engineer of Mines), MBA, Qualified Professional Member Mining and Metallurgical Society of America an employee of Stantec Mining (formerly McIntosh Engineering), was responsible for the underground mineral reserve estimate of the Technical Report.

Jarek Jakubec, C.Eng., an employee of SRK Consulting Inc., was responsible for preparation of the subsection on Underground Mine Geotechnical Sections.

Dean David, B.App.Sc. (Metallurgy), AusIMM.(102351), employed by AMEC Minproc Limited as Process Consultant, was responsible for preparation of the Processing Sections.

Bruce Brown, PE.PhD., employed by Rio Tinto Technology and Innovation as Principal Advisor Water, Waste and Tailings, was responsible for preparation of the Tailings Storage Facility Sections.

**Quality Assurance and Quality Control**

John Vann, Principal and Director, and Scott Jackson, Principal and Director of Quantitative Group, of Perth, Australia, performed an independent audit at the Oyu Tolgoi site on Ivanhoe s exploration practices and resource estimation parameters and found them to be in line with industry best practices.

SGS Mongolia LLC 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. In-house, matrix-matched copper-gold-molybdenum 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) OF NATIONAL INSTRUMENT 51-102**

Not applicable.

7. **OMITTED INFORMATION**

No information has been intentionally omitted from this form.

8. **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
Vice President & Corporate Secretary
Telephone: (604) 331-9803

9. **DATE OF REPORT**

DATED at Vancouver, B.C. this 21st day of May, 2010.

**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:** October 6, 2010

By: */s/ Beverly A. Bartlett*
BEVERLY A. BARTLETT
Vice President &
Corporate Secretary