

Edgar Filing: IVANHOE MINES LTD - Form 6-K

IVANHOE MINES LTD
Form 6-K
May 31, 2005

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: May 25, 2005

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- 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:

Technical Report

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: May 25, 2005

By: /s/ Beverly A. Bartlett

BEVERLY A. BARTLETT
Corporate Secretary

[IVANHOE MINES LOGO]

Edgar Filing: IVANHOE MINES LTD - Form 6-K

TECHNICAL REPORT

Hugo Dummett and Southern Oyu Deposits
Oyu Tolgoi, Mongolia

EFFECTIVE DATE: 03 MAY 2005

PREPARED BY: DR. STEPHEN JURAS, P. GEO

131294

[AMEC LOGO]

IMPORTANT NOTICE

This report was prepared as a National Instrument 43-101 Technical Report, in accordance with Form 43-101F1, for Ivanhoe Mines Limited (Ivanhoe) by AMEC Americas Limited (AMEC). The quality of information, conclusions, and estimates contained herein is consistent with the level of effort involved in AMEC's services, based on: i) information available at the time of preparation, ii) data supplied by outside sources, and iii) the assumptions, conditions, and qualifications set forth in this report. This report is intended to be used by Ivanhoe, subject to the terms and conditions of its contract with AMEC. That contract permits Ivanhoe to file this report as a Technical Report with Canadian Securities Regulatory Authorities pursuant to provincial securities legislation. Except for the purposes legislated under provincial securities laws, any other use of this report by any third party is at that party's sole risk.

[AMEC LOGO]

CERTIFICATE OF AUTHOR

Stephen J. Juras, P.Geol.
111 Dunsmuir Street, Suite 400
Vancouver, BC
Tel: (604) 664-4349
Fax: (604) 664-3057
stephen.juras@amec.com

I, Stephen J. Juras, P.Geol., am a Professional Geoscientist, employed as Chief Geologist of AMEC Americas Limited and residing at 9030 161 Street in the City of Surrey in the Province of British Columbia.

I am a member of the Association of Professional Engineers and Geoscientists of British Columbia. I graduated from the University of Manitoba with a Bachelor of Science (Honours) degree in geology in 1978 and subsequently obtained a Master of Science degree in geology from the University of New Brunswick in 1981 and a Doctor of Philosophy degree in geology from the University of British Columbia in 1987.

I have practiced my profession continuously since 1987 and have been involved in: mineral exploration for copper, zinc, gold and silver in Canada and United States and in underground mine geology, ore control and resource modelling for copper, zinc, gold, silver, tungsten, platinum/palladium and industrial mineral properties in Canada, United States, Brazil, Peru, Chile, Vietnam and Russia.

As a result of my experience and qualifications, I am a Qualified Person as defined in N.P. 43-101.

Edgar Filing: IVANHOE MINES LTD - Form 6-K

I am currently a Consulting Geologist and have been so since January 1998.

From 18 February 2005 until 24 February 2005 I visited the Oyu Tolgoi project in Mongolia. I also helped to direct the mineral estimation work for the Hugo Dummett and Southern Oyu deposits, Oyu Tolgoi project. This report was prepared under my direct supervision.

I am not aware of any material fact or material change with respect to the subject matter of this technical report that is not reflected in this report and that the omission to disclose would make this report misleading.

I am independent of Ivanhoe Mines Limited in accordance with the application of Section 1.5 of National Instrument 43-101.

AMEC Americas Limited
111 Dunsmuir Street, Suite 400
Vancouver, B.C. V6B 5W3
Tel +1 604 664 3471
Fax +1 604 664 3057
www.amec.com

I have read National Instrument 43-101 and Form 43-101F1 and this report, Technical Report -Hugo Dummett and Southern Oyu Deposits, Oyu Tolgoi, Mongolia (May 2005), has been prepared in compliance with same.

Dated at Vancouver, British Columbia, this 25th day of May 2005.

/s/ Stephen J. Juras [STAMP]

Stephen J. Juras, Ph.D., P Geo

[AMEC LOGO]

Stephen J. Juras, P. Geo.
AMEC Americas Limited
111 Dunsmuir Street, Suite 400
Vancouver, BC
Telephone: (604) 664-4349
Fax: (604) 664-3057
Email: stephen.juras@amec.com

CONSENT OF AUTHOR

TO: British Columbia Securities Commission
Alberta Securities Commission
Saskatchewan Securities Commission
Manitoba Securities Commission
Ontario Securities Commission
Commission des valeurs mobilières du Québec
Nunavut Legal Registry
Officer of the Administrator, New Brunswick
Nova Scotia Securities Commission
Registrar of Securities, Prince Edward Island
Securities Commission of Newfoundland
Registrar of Securities, Government of the Yukon Territories
Securities Registry, Government of the Northwest Territories

Edgar Filing: IVANHOE MINES LTD - Form 6-K

AND TO: Ivanhoe Mines Limited

I, Stephen J. Juras, P.Geo., do hereby consent to the filing of the technical report prepared for Ivanhoe Mines Limited titled Technical Report - Hugo Dummett and Southern Oyu Deposits, Oyu Tolgoi, Mongolia (May 2005), (the "Technical Report") with the securities regulatory authorities referred to above.

I further consent (a) to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication of the Technical Report by them for regulatory purposes, including electronic publication in the public company files on their websites accessible by the public, and (b) to the publication of the Technical Report by Ivanhoe Mines Limited on its company website or otherwise, and (c) to all other uses by Ivanhoe Mines Limited of the Technical Report or excerpts thereof in connection with its business.

Dated this 25th day of May 2005.

/s/ Stephen J. Juras [STAMP]

Stephen J. Juras, Ph. D., P. Geo

AMEC Americas Limited
111 Dunsmuir Street, Suite 400
Vancouver, B.C. V6B 5W3
Tel (604) 664-4315
Fax (604) 664-3057

[IVANHOE MINES LOGO]

HUGO DUMMETT AND SOUTHERN OYU DEPOSITS
TECHNICAL REPORT
OYU TOLGOI, MONGOLIA

CONTENTS

SECTION 1 - SUMMARY.....
SECTION 2 - INTRODUCTION AND TERMS OF REFERENCE.....
2.1 Terms of Reference.....
SECTION 3 - DISCLAIMER.....
SECTION 4 - PROPERTY DESCRIPTION AND LOCATION.....
4.1 Mineral Tenure.....
4.2 Permits and Agreements.....
4.3 Environmental Impact Assessment.....
SECTION 5 - ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE, AND PHYSIOGRAPHY.....
5.1 Location.....
5.2 Regional Centres and Infrastructure.....
5.3 Climate.....
5.4 Physiography.....
5.5 Seismicity.....
5.6 Transportation Infrastructure.....
5.7 Other Resources.....
SECTION 6 - HISTORY.....
SECTION 7 - GEOLOGICAL SETTING.....
7.1 Regional Geology.....
7.2 Property Geological Units.....
7.2.1 Stratified Rocks.....
7.2.2 Intrusive Rocks.....
7.3 Property Structural Geology.....
7.3.1 Solongo Fault.....
7.3.2 Northwest Shear Zone.....
7.3.3 Central Fault.....

Edgar Filing: IVANHOE MINES LTD - Form 6-K

7.3.4 Axial Fault, West Bat, East Bat Faults.....
7.3.5 Boundary Fault System.....
7.3.6 Northeast-Striking Secondary Faults.....
7.3.7 Folds.....
7.4 Southern Oyu Deposits.....
7.4.1 Southwest Oyu Deposit.....
7.4.2 South Oyu Deposit.....
7.4.3 Wedge Deposit.....
7.4.4 Central Oyu Deposit.....
7.5 Hugo Dummett Deposits.....
7.5.1 Hugo South Deposit.....
7.5.2 Hugo North Deposit.....
SECTION 8 - DEPOSIT TYPES.....
SECTION 9 - MINERALIZATION.....

May 2005

PAGE 1-2

[AMEC LOGO]

[IVANHOE MINES LOGO]

HUGO DUMMETT AND SOUTHERN OYU DEPOSITS
TECHNICAL REPORT
OYU TOLGOI, MONGOLIA

9.1 Southern Oyu Deposits.....
9.1.1 Southwest Deposit.....
9.1.2 South Deposit.....
9.1.3 Wedge Deposit.....
9.1.4 Central Deposit.....
9.2 Hugo Dummett Deposits.....
9.2.1 Hugo South Deposit.....
9.2.2 Hugo North Deposit.....
SECTION 10 - EXPLORATION.....
SECTION 11 - DRILLING.....
SECTION 12 - SAMPLING METHOD AND APPROACH.....
SECTION 13 - SAMPLE PREPARATION, ANALYSES, AND SECURITY.....
13.1 Sample Preparation and Shipment.....
13.2 Assay Method.....
13.3 QA/QC Program.....
13.3.1 Standards Performance.....
13.3.2 Blank Sample Performance.....
13.3.3 Duplicates Performance.....
13.3.4 Specific Gravity Program.....
13.4 Concluding Statement.....
SECTION 14 - DATA VERIFICATION.....
SECTION 15 - ADJACENT PROPERTIES.....
SECTION 16 - MINERAL PROCESSING AND METALLURGICAL TESTING.....
SECTION 17 - MINERAL RESOURCE AND MINERAL RESERVE ESTIMATES.....
17.1 Geologic Models.....
17.2 Data Analysis.....
17.2.1 Histograms and Cumulative Frequency Plots.....
17.2.2 Box-Plot and Contact Profile Analyses.....
17.2.3 Grade Scatter plots.....
17.2.4 Estimation Domains.....
17.3 Evaluation of Extreme Grades.....
17.4 Variography.....
17.4.1 Southern Oyu Deposits.....
17.4.2 Hugo North Deposit.....
17.5 Model Setup.....
17.6 Estimation.....
17.6.1 Validation.....

Edgar Filing: IVANHOE MINES LTD - Form 6-K

17.7 Mineral Resource Classification...
17.7.1 Measured Mineral Resources...
17.7.2 Indicated Mineral Resources...
17.7.3 Inferred Mineral Resources...
17.8 Mineral Resource Summary...
SECTION 18 - OTHER RELEVANT DATA AND INFORMATION...

May 2005

PAGE 1-3

[AMEC LOGO]

[IVANHOE MINES LOGO]

HUGO DUMMETT AND SOUTHERN OYU DEPOSITS
TECHNICAL REPORT
OYU TOLGOI, MONGOLIA

SECTION 19 - REQUIREMENTS FOR TECHNICAL REPORTS ON PRODUCTION AND DEVELOPMENT PROPERTIES...
SECTION 20 - CONCLUSIONS AND RECOMMENDATIONS...
SECTION 21 - REFERENCES...

TABLES

Table 1-1: Oyu Tolgoi Project Mineral Resources based on a 0.6% Cu Eq. Cutoff, 3 May 2005.
Table 13-1: Percent Difference at the 90th Population Percentile...
Table 17-1: Lithology and Structural Solids and Surfaces, Oyu Tolgoi Project...
Table 17-2: OTS Statistics for 5 m Composites - Cu % Data...
Table 17-3: OTS Statistics for 5 m Composites - Au g/t Data...
Table 17-4: Hugo North Statistics for 15 m Composites - Cu % Data...
Table 17-5: Hugo North Statistics for 15 m Composites - Au g/t Data...
Table 17-6: Cap Grades (Assays), Southern Oyu and Hugo North Deposits...
Table 17-7: Cu and Au Variogram Parameters for Southern Oyu Deposits...
Table 17-8: Azimuth and Dip Angles of Rotated Variogram Axes, Southern Oyu Deposits...
Table 17-9: Cu and Au Variogram Parameters for Hugo North Deposit...
Table 17-10: Azimuth and Dip Angles of Rotated Variogram Axes, Hugo North Deposit...
Table 17-11: Global Model Mean Grade Values by Domain in each Zone...
Table 17-12: Oyu Tolgoi Project Mineral Resources based on a 0.6% Cu Eq. Cutoff, 3 May 2005.
Table 17-13: Southern Oyu Deposits Mineral Resources in Ultimate Pit based on 0.6% and 0.3% Cutoff Grades, 3 May 2005...

FIGURES

Figure 4-1: Location Map...
Figure 4-2: Oyu Tolgoi Licence in Relation to Neighbouring Tenements...
Figure 5-1: Transportation Infrastructure...
Figure 7-1: Location of Oyu Tolgoi, Gurvansayhan Terrane, and Major Cenozoic Faults in South Mongolia...
Figure 7-2: Stratigraphic Column of Paleozoic Bedrock Units in the Oyu Tolgoi Project Area...
Figure 7-3: Simplified Geological Map of Oyu Tolgoi Concession...
Figure 7-4: Simplified Interpretation of Section 6200 N, Hugo South Deposit...
Figure 7-5: Simplified Interpretation of Section 7100N, Hugo North Deposit...
Figure 7-6: Simplified Interpretation of Section 7400N, Hugo North Deposit...
Figure 9-1: Sulphide Distribution in the Hugo South Deposit (Section 6200N)...
Figure 9-2: Cross-Section 6200N in the Hugo South Deposit...
Figure 9-3: Section 4767500N (7500N) in Hugo North Deposit...
Figure 13-1: SRM Failure Chart...

Edgar Filing: IVANHOE MINES LTD - Form 6-K

Figure 17-1: Southern Oyu Copper Estimation Domains.....
Figure 17-2: Southern Oyu Gold Estimation Domains.....
Figure 17-3: Hugo North Copper Estimation Domains.....
Figure 17-4: Hugo North Gold Estimation Domains.....

May 2005

PAGE 1-4

[AMEC LOGO]

[IVANHOE MINES LOGO]

HUGO DUMMETT AND SOUTHERN OYU DEPOSITS
TECHNICAL REPORT
OYU TOLGOI, MONGOLIA

APPENDICES

Appendix A Drill Hole Lists and Trace Views

- A-1 Southern Oyu Deposits
A-2 Hugo North Deposit

Appendix B Composite Data Lists

- B-1 Southern Oyu Deposits
B-2 Hugo North Deposit

Appendix C QA/QC Charts

- C-1 Standard Reference Materials Charts
C-2 Field Blanks Charts
C-3 Duplicate Sample Charts

Appendix D EDA Charts

- D-1 Histograms and CDF Plots - Southern Oyu Deposits
D-2 Histograms and CDF Plots - Hugo North Deposit
D-3 Boxplots
D-4 Contact Plots
D-5 Grade Scatter Plots

Appendix E Model Validation Charts

- E-1 HERCO Plots
E-2 Grade Swath Plots - Southern Oyu Deposits
E-3 Grade Swath Plots - Hugo North Deposits

Appendix F Block Model Sections and Plans - Southern Oyu Deposits

Appendix G Block Model Sections and Plans - Hugo North Deposit

May 2005

PAGE 1-5

[AMEC LOGO]

[IVANHOE MINES LOGO]

HUGO DUMMETT AND SOUTHERN OYU DEPOSITS
TECHNICAL REPORT
OYU TOLGOI, MONGOLIA

SECTION 1 - SUMMARY

Ivanhoe Mines Ltd. (Ivanhoe) has asked AMEC Americas Limited (AMEC) to provide an independent mineral resource estimate and Qualified Person's review and Technical Report for the Hugo Dummett (Hugo North deposit) and Southern Oyu deposits of the Oyu Tolgoi project in Mongolia. The work entailed estimating mineral resources in conformance with the CIM Mineral Resource and Mineral Reserve definitions referred to in National Instrument (NI) 43-101, Standards of Disclosure for Mineral Projects. It also involved the preparation of a Technical Report as defined in NI 43-101 and in compliance with Form 43-101F1 (the "Technical Reports"). The work represents a significant change in the size and

Edgar Filing: IVANHOE MINES LTD - Form 6-K

level of confidence of the Hugo North mineral resources since the last disclosure on this deposit in a Technical Report dated June 2004, and a smaller change in the Southern Oyu deposits since the last disclosure in a Technical Report on these deposits dated September 2004. Dr. Harry Parker, Ch.P.Geol., and Dr. Stephen Juras, P.Geol., directed the mineral resource estimation work and review of the geological data. Dr. Juras most recently visited the project site from 18 to 24 February 2005. Dr. Parker visited the site from 1 to 6 April 2004. Dr. Stephen Juras, P.Geol., an employee of AMEC, who served as the Qualified Person responsible for preparing the earlier Technical Reports, served in the same capacity for this version.

The Oyu Tolgoi project consists of copper-gold-molybdenum mineralization in a mid Paleozoic copper-gold porphyry system. It is located in the Aimag (Province) of Omnogov, in the South Gobi region of Mongolia, about 530 km south of the capital city of Ulaanbaatar and 80 km north of the border with China. The Oyu Tolgoi project comprises Mining License 6709A, which covers an area of 8,496 ha. Ivanhoe has been granted the exclusive right to explore within the bounds of its exploration licence.

Oyu Tolgoi occurs in an early to mid Paleozoic island arc environment that is part of the Gurvansayhan terrane. 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. Carboniferous sedimentary rocks overlie this assemblage. Property geology consists of two major stratigraphic sequences: 1) tuffs, basaltic rocks, and sedimentary strata of probable island arc affinity, assigned to the Upper Devonian Alagbayan Formation; and 2) an overlying succession containing conglomerates, fossiliferous marine siltstones, sandstones, waterlain tuffs, and basaltic to andesitic flows and volcaniclastic rocks, assigned to the Carboniferous Sainshandhudag Formation. The two sequences are separated by a regional unconformity that in the Oyu Tolgoi area is associated with a time gap of 10 Ma to 15 Ma. The southern edge of a large body of hornblende granodiorite outcrops along the northern margin of the exploration block. A wide variety of felsic to mafic dykes are found throughout the exploration block and in drill holes. These include porphyritic quartz monzodiorite dykes that may be genetically related to the copper-gold porphyry systems. Based on satellite imagery and geophysical interpretations, major structures trend N35E and N70E.

May 2005

PAGE 1-1

[AMEC LOGO]

[IVANHOE MINES LOGO]

HUGO DUMMETT AND SOUTHERN OYU DEPOSITS
TECHNICAL REPORT
OYU TOLGOI, MONGOLIA

The Southern Oyu deposits include the Southwest, Central, South, and Wedge deposits. These form contiguous zones of mineralization representing multiple mineralizing centres, each with distinct styles of mineralization, alteration, and host rock lithology. The boundaries between the individual deposits coincide with major fault zones. Strong high-sulphidation mineralization and associated advanced argillic alteration, hosted by dacite tuff and quartz monzodiorite, are characteristic of the Central and Wedge deposits, and grade downward into chalcopyrite-gold mineralization with associated biotite-chlorite alteration hosted within basalt. At Southwest the dacite tuff and overlying strata have been removed by erosion, exposing deeper-level chalcopyrite-gold mineralization with associated biotite-chlorite alteration, hosted within basalt. This gold-rich porphyry system is characterized by a southwest-plunging, pipe-like geometry with over 700 m vertical extent. Mineralization at the South deposit is chalcopyrite-bornite dominant with associated biotite-chlorite alteration and is hosted within quartz monzodiorite, basalt, and dacite tuff.

The Hugo Dummett deposit contains porphyry-style mineralization associated with

Edgar Filing: IVANHOE MINES LTD - Form 6-K

quartz monzodiorite intrusions, concealed beneath a deformed sequence of Upper Devonian and Lower carboniferous sedimentary and volcanic rocks. The deposit is highly elongate to the north-northeast and extends over 3.0 km. Although mineralization is continuous over this entire length, it thins marked and decreases in grade where the host strata are displaced by an east-west-striking, north-dipping fault, termed the 110 Fault. This fault defines the boundary between the Hugo South and the Hugo North deposits. The depth to the top of the high-grade zone (3% to 5% Cu) varies from 300 m at Hugo South to about 900 m at Hugo North.

The high-grade zone at Hugo North comprises relatively coarse bornite impregnating quartz and disseminated in wall rocks, usually intergrown with subordinate chalcopyrite. Pyrite is rare or absent, except in local areas where the host rocks are advanced argillically altered. In addition, high-grade bornite is associated with minor amounts of tennantite, sphalerite, hessite, clausenthalite, and gold. These minerals occur as inclusions or at grain boundaries. Elevated gold grades in the Hugo North deposit occur within the up-dip (western) portion of the intensely-veined high-grade core and within a steeply-dipping lower zone cutting through the western part of the quartz monzodiorite. Quartz monzodiorite in the lower zone exhibits a characteristic pink to buff colour, with a moderate intensity of quartz veining (25% by volume). This zone is characterized by finely disseminated bornite and chalcopyrite, although in hand specimen the chalcopyrite is usually not visible. The sulphides are disseminated throughout the rock in the matrix as well as in quartz veins.

The Hugo Dummett deposit has several features unusual to porphyry copper systems, including 1) the anomalously high copper and gold grades, particularly in the northern part of the deposit; 2) an unusually weakly altered pre-mineral sedimentary cover sequence that lies just above the porphyry system; 3) quartz + sulphide vein contents always exceeding 15%, and commonly over 90%, in the high-grade portion of the deposit; and 4) a highly-elongate gently-plunging tabular shape to the high-grade stockwork system.

The database used to estimate the mineral resources for the Southern Oyu and Hugo North deposits consists of samples and geological information from 583 drill holes for the Southern Oyu deposits

May 2005

PAGE 1-2

[AMEC LOGO]

[IVANHOE MINES LOGO]

HUGO DUMMETT AND SOUTHERN OYU DEPOSITS
TECHNICAL REPORT
OYU TOLGOI, MONGOLIA

and 156 drill holes, including daughter holes, for Hugo North. Samples from the drill programs were prepared for analysis at an on-site facility operated by SGS Mongolia LLC (SGS Mongolia). The samples were then shipped under the custody of Ivanhoe to Ulaanbaatar, where they were assayed at a facility operated by SGS Mongolia. Data transfer to the resource database was validated from original certificates through a 5% check of the database.

Ivanhoe employs a comprehensive QA/QC program. All sampling and QA/QC work is overseen on behalf of Ivanhoe by Dale A. Sketchley, M.Sc., P.Geo. Each sample batch of 20 samples contains four or five quality control samples consisting of 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 one or two standard reference material (SRM) samples (one