



BARRICK GOLD CORPORATION

TECHNICAL REPORT ON THE ZALDÍVAR MINE, REGION II, CHILE

NI 43-101 Report

**Qualified Persons:
Luke Evans, P.Eng.
Richard J. Lambert, P.E.**

March 16, 2012

ROSCOE POSTLE ASSOCIATES INC.



Report Control Form

Document Title

Technical Report on the Zaldívar Mine, Region II, Chile

Client Name & Address

Barrick Gold Corporation
Brookfield Place, TD Canada Trust Tower
Suite 3700, 161 Bay Street, P.O. Box 212
Toronto, Ontario
M5J 2S1

Document Reference

Project #1683

Status & Issue No.

Final
Version

Rev 0

Issue Date

March 16, 2012

Lead Author

Luke Evans, P.Eng.
Richard J. Lambert, P.E.

(Signed)
(Signed)

Peer Reviewer

Deborah A. McCombe,
P.Geo.

(Signed)

Project Manager Approval

Luke Evans, P.Eng.

(Signed)

Project Director Approval

Graham G. Clow, P.Eng.

(Signed)

Report Distribution

Name	No. of Copies
Client	
RPA Filing	1 (project box)

Roscoe Postle Associates Inc.

55 University Avenue, Suite 501
Toronto, Ontario M5J 2H7

Canada

Tel: +1 416 947 0907

Fax: +1 416 947 0395

mining@rpacan.com

TABLE OF CONTENTS

	PAGE
1 SUMMARY	1-1
Executive Summary.....	1-1
Technical Summary.....	1-5
2 INTRODUCTION.....	2-1
3 RELIANCE ON OTHER EXPERTS	3-1
4 PROPERTY DESCRIPTION AND LOCATION.....	4-1
5 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY	5-1
6 HISTORY	6-1
Exploration and Ownership History.....	6-1
Production History	6-1
7 GEOLOGICAL SETTING AND MINERALIZATION	7-1
Regional Geology.....	7-1
Local and Property Geology	7-3
Alteration	7-5
Mineralization	7-6
8 DEPOSIT TYPES.....	8-1
9 EXPLORATION.....	9-1
Exploration Potential.....	9-1
10 DRILLING.....	10-1
11 SAMPLE PREPARATION, ANALYSES AND SECURITY	11-1
Sampling Method and Approach.....	11-1
Sample Preparation, Analyses and Security	11-1
12 DATA VERIFICATION.....	12-1
13 MINERAL PROCESSING AND METALLURGICAL TESTING.....	13-1
Metallurgical Testing.....	13-1
14 MINERAL RESOURCE ESTIMATE.....	14-1
Summary	14-1
Geological Models	14-2
Geological Domains	14-7
Density Data.....	14-8
Cut-Off Grades	14-8
Capping of High Grade Values	14-8
Composites	14-9
Contact Plot Analysis.....	14-12
Variography.....	14-15

Resource Estimation Methodology	14-17
Resource Estimate Validation.....	14-20
Resource Classification	14-21
15 MINERAL RESERVE ESTIMATE.....	15-1
16 MINING METHODS	16-1
Production Schedule	16-7
Waste Rock.....	16-8
Mine Equipment	16-8
Mine Infrastructure.....	16-9
17 RECOVERY METHODS	17-1
Ore Processing.....	17-1
Dynamic Pad Leach Process.....	17-2
ROM Leach Pad.....	17-2
SX/EW Copper Recovery Circuit	17-2
Flotation Concentration Process.....	17-2
Copper Recovery.....	17-4
Copper Recovery Algorithms at Zaldívar	17-4
2011 Recovery Model.....	17-8
18 PROJECT INFRASTRUCTURE	18-1
19 MARKET STUDIES AND CONTRACTS.....	19-1
Markets	19-1
Contracts.....	19-1
20 ENVIRONMENTAL STUDIES, PERMITTING, AND SOCIAL OR COMMUNITY IMPACT	20-1
Environmental Studies.....	20-1
Project Permitting	20-1
Social or Community Requirements.....	20-2
Mine Closure Requirements	20-2
21 CAPITAL AND OPERATING COSTS.....	21-1
Capital Costs	21-1
Operating Costs	21-2
Manpower	21-3
22 ECONOMIC ANALYSIS	22-1
23 ADJACENT PROPERTIES	23-1
24 OTHER RELEVANT DATA AND INFORMATION	24-1
25 INTERPRETATION AND CONCLUSIONS.....	25-1
26 RECOMMENDATIONS	26-1
27 REFERENCES.....	27-1
28 DATE AND SIGNATURE PAGE.....	28-1
29 CERTIFICATE OF QUALIFIED PERSON	29-1

LIST OF TABLES

	PAGE
Table 1-1 Mineral Resources – December 31, 2011.....	1-1
Table 1-2 Mineral Reserves – December 31, 2011.....	1-2
Table 4-1 Exploitation Concessions	4-1
Table 6-1 Zaldívar Production – 2007-2011.....	6-3
Table 10-1 Drilling Summary	10-2
Table 11-1 QC Insertion Rates	11-2
Table 14-1 Mineral Resources – December 31, 2011.....	14-1
Table 14-2 Geological Estimation UGE Codes and Descriptions.....	14-7
Table 14-3 Tonnage Factors	14-8
Table 14-4 TCU Capping Levels	14-9
Table 14-5 ASCu Capping Levels	14-9
Table 14-6 TCU Composite Statistics By Geological Domain (UGE).....	14-11
Table 14-7 %TCu Variogram Parameters.....	14-15
Table 14-8 %TCu Estimation Search Ellipse Parameters	14-19
Table 15-1 Mineral Reserves – December 31, 2011.....	15-1
Table 16-1 Mine Design Parameters	16-4
Table 16-2 Mine Production Schedule.....	16-7
Table 16-3 Mine Equipment Fleet.....	16-9
Table 17-1 Metallurgical Model Algorithms	17-8
Table 21-1 Capital Costs	21-1
Table 21-2 Mine Operating Costs.....	21-2
Table 21-3 Unit Process Operating Costs	21-2
Table 21-4 G&A Costs	21-3
Table 21-5 Manpower	21-3

LIST OF FIGURES

	PAGE
Figure 4-1 Location Map.....	4-3
Figure 4-2 Zaldívar Exploitation Boundary.....	4-4
Figure 4-3 Mining Concession Boundary and Surface Rights.....	4-5
Figure 7-1 Regional Geology.....	7-2
Figure 7-2 Property Geology	7-4
Figure 7-3 Mineralization Section	7-8
Figure 10-1 Drill Plan.....	10-4
Figure 14-1 Lithology Zones.....	14-4
Figure 14-2 Alteration Zones	14-5
Figure 14-3 Mineralization Zones	14-6
Figure 14-4 Frequency Distribution of TCU Composites Versus Raw Sample Data	14-10
Figure 14-5 Boxplot of TCU Composites for Each UGE	14-11
Figure 14-6 Contact Plot Analysis of TCU for Leached and Oxide Domains	14-13
Figure 14-7 Contact Plot Analysis of ASCu for Leached and Oxide Domains.....	14-13
Figure 14-8 Semi-Soft and Semi-Hard Boundary Weights.....	14-14
Figure 14-9 TCU Correlogram Models for UGE 3.....	14-16

Figure 14-10	TCu Correlogram Models for UGE 7.....	14-17
Figure 14-11	TCu Blocks and Assays - Section 22,000N	14-20
Figure 14-12	Swath Plots	14-21
Figure 14-13	TCu Correlogram for UGE 7	14-23
Figure 16-1	Zaldívar Mine Phases.....	16-2
Figure 16-2	Ultimate Pit Design.....	16-5
Figure 16-3	Pit Slope Design Sectors.....	16-6
Figure 17-1	Process Flow Sheet	17-3
Figure 17-2	ASCu Recovery vs. ASCu Head Grade.....	17-5
Figure 17-3	SCu Recovery vs. SCu Head Grade	17-6
Figure 17-4	Metallurgical Recovery Model Curves	17-9
Figure 18-1	Site Infrastructure	18-3

1 SUMMARY

EXECUTIVE SUMMARY

Roscoe Postle Associates Inc. (RPA) was retained by Barrick Gold Corporation (Barrick) to prepare an independent Technical Report on the Zaldívar copper operation (the Project), located in northern Chile. The purpose of this report is to support public disclosure of Mineral Resource and Mineral Reserve estimates at the Project as of December 31, 2011. This Technical Report conforms to National Instrument 43-101 (NI 43-101) Standards of Disclosure for Mineral Projects. RPA visited the Zaldívar Mine on October 24 to 27, 2011.

The Zaldívar Mine is managed and operated by Compañía Minera Zaldívar Ltda. (CMZ), which is 100% owned by Barrick. Zaldívar is a large scale open pit operation utilizing a traditional truck and shovel fleet. Mining is carried out from one open pit at a rate of 83 million tonnes per annum (Mtpa), consisting of 22 Mtpa of crushed ore, 15 Mtpa of dump leach ore, and 46 Mtpa of waste. The ultimate pit will measure approximately 2.8 km east to west, 2.6 km north to south, and have an average depth of approximately 630 m. A total of 578 million tonnes grading 0.52% Cu representing 6.6 billion pounds of contained copper and 3.8 billion pounds of recoverable copper is projected to be produced between 2012 and 2028.

Table 1-1 summarizes open pit Mineral Resources exclusive of Mineral Reserves as of December 31, 2011.

TABLE 1-1 MINERAL RESOURCES – DECEMBER 31, 2011
Barrick Gold Corporation – Zaldívar Mine

Category	Tonnage (Mt)	Grade (% Cu)	Contained Metal (Mlb Cu)
Measured	71.3	0.432	679.5
Indicated	53.5	0.462	545.5
Total Measured and Indicated	124.8	0.445	1,225.0
Inferred	37	0.54	439

Notes:

1. CIM definitions were followed for Mineral Resources.
2. Mineral Resources are estimated based on a profit model using a copper price of US\$3.25 per pound and a CLP/US\$ exchange rate of 500.
3. Mineral Resources are exclusive of Mineral Reserves.
4. Numbers may not add due to rounding.

Table 1-2 summarizes the Zaldívar end of year 2011 (EOY2011) Mineral Reserve estimate.

TABLE 1-2 MINERAL RESERVES – DECEMBER 31, 2011
Barrick Gold Corporation – Zaldívar Mine

Category	Tonnage (Mt)	Cu (%)	Contained Metal (Mlb Cu).
Proven	386.3	0.528	4,496.5
Probable	191.7	0.498	2,105.5
Proven & Probable	578.0	0.518	6,602.0

Notes:

1. CIM definitions were followed for Mineral Reserves.
2. Mineral Reserves are estimated at a variable cut-off grade.
3. Mineral Reserves are estimated using an average long-term copper price of US\$2.75 per pound and a CLP/US\$ exchange rate of 500.
4. Numbers may not add due to rounding.

CONCLUSIONS

RPA offers the following conclusions:

GEOLOGY AND MINERAL RESOURCE ESTIMATION

- The EOY2011 Measured and Indicated Mineral Resource is 125 million tonnes at a total copper grade of 0.445% containing 1.225 billion pounds of copper. The Mineral Resources are exclusive of Mineral Reserves.
- The EOY2011 Inferred Mineral Resource is 37 million tonnes at a total copper grade of 0.54% containing 439 million pounds of copper.
- Mineral Resource estimates have been prepared utilizing acceptable estimation methodologies. The classification of Measured, Indicated, and Inferred Resources, stated in Table 1-1, meet the requirements of NI 43-101 and CIM Definition Standards for Mineral Resources and Mineral Reserves dated November 27, 2010 (CIM definitions).
- The methods and procedures utilized by CMZ at the Zaldívar Mine to gather geological, geotechnical, assaying, density, and other information are reasonable and meet generally accepted industry standards. Standard operating protocols are well documented and updated on a regular basis for most of the common tasks. CMZ carries out regular comparisons with blasthole data, previous models, and production reconciliation results to calibrate and improve the resource modelling procedures.
- The current drill hole database is reasonable for supporting a resource model for use in Mineral Resource and Mineral Reserve estimation.

- CMZ has conducted the exploration and development sampling and analysis programs using standard practices, providing generally reasonable results. The resulting data can effectively be used for the estimation of Mineral Resources and Mineral Reserves.
- Overall, RPA is of the opinion that CMZ has done very high quality work that exceeds industry practice.

MINING AND MINERAL RESERVES

- The EOY2011 Proven and Probable Mineral Reserves are 578 million tonnes at a total copper grade of 0.518% containing 6.602 billion pounds of copper.
- The Mineral Reserve estimates have been prepared utilizing acceptable estimation methodologies and the classification of Proven and Probable Reserves, stated in Table 1-2, conform to CIM definitions.
- The operating data provided by CMZ and the supporting documents were prepared using standard industry practices and provide reasonable results and conclusions.
- Standard operating protocols are well documented and updated on a regular basis for most of the common tasks.
- Recovery and cost estimates are based upon operating data and engineering to support a Mineral Reserve statement. Economic analysis using these estimates generates a positive cash flow, which supports a statement of Mineral Reserves.
- The current Zaldívar Life of Mine (LOM) plan provides reasonable results and, in RPA's opinion, meets the requirements for statement of Mineral Reserves. In addition to the Mineral Reserves in the LOM plan, there are Mineral Resources and potential sulphide resources that represent opportunities for the future.

PROCESSING

- The process includes heap leaching with copper recovery in a solvent extraction/electrowinning (SX/EW) process in the form of copper cathode.
- RPA has reviewed the recovery model and finds the development of the recovery formulas and the reconciliation to historic data to be reasonable. The metallurgical testwork, which supports the models, is also reasonable and adequate.
- In 2012, a revision will be made to the recovery model. The revised recovery model will account for the current operational parameters and results.

ENVIRONMENTAL CONSIDERATIONS

- The Project has approximately 140 active permits. All permits are in good standing and there is an extensive environmental monitoring program to ensure compliance with the requirements of these permits.

RECOMMENDATIONS

The Zaldívar LOM plan provides reasonable results and, in RPA's opinion, meets the requirements for statement of Mineral Reserves. This Technical Report is based on the LOM plan. In addition to the LOM plan, there are additional resources and potential resources that should be given further consideration in the future. Below is a list of recommendations to consider:

MINING

- The LOM plan is robust and Barrick should proceed to implement the plan as presented.
- There is a known primary sulphide resource below the current Proven plus Probable oxide and secondary sulphide reserves. Additional work to drill these resources and develop a Feasibility Study for the primary sulphide should also proceed.

ENVIRONMENTAL CONSIDERATIONS

- Evaluation of permit requirements, developing baseline studies, and starting a new Environmental Impact Assessment (EIA) for the sulphide project should proceed in unison with the primary sulphide feasibility study.

ECONOMIC ANALYSIS

RPA has performed an economic analysis of the Zaldívar Mine using the estimates presented in this report and confirms that the outcome is a positive cash flow that supports the statement of Mineral Reserves.

TECHNICAL SUMMARY

PROPERTY DESCRIPTION AND LOCATION

Zaldívar is located in the Andean Precordillera in Region II of northern Chile, approximately 1,400 km north of Santiago and 196 km southeast of the city of Antofagasta, a deepwater port with bulk loading and unloading facilities. Zaldívar is connected to Antofagasta by a paved highway as well as the Antofagasta Salta narrow-gauge railway. Antofagasta is served by national airlines, with several flights daily providing a link to Santiago and other major centres. The mine is located at an altitude of 3,200 m.

LAND TENURE

The Zaldívar mineral rights boundary is defined by ten overlapping exploitation concessions that have a combined area of approximately 1,295 ha. The mine is managed and operated by CMZ, which is 100% owned by Barrick through its acquisition of Placer on March 3, 2006. There are no royalties payable. Zaldívar is surrounded by concessions owned by Minera Escondida Limitada (MEL). CMZ has a number of easement or surface rights agreements with MEL. MEL has authorized CMZ to build infrastructure such as heap leach pads, the SX/EW plant, tailings and other facilities within the area covered by the MEL concessions.

EXISTING INFRASTRUCTURE

The Project infrastructure and services have been designed to support an operation of 65,000 tpd of ore to dynamic heap leach processing and a nominal 240,000 tpd of total material mined.

The existing infrastructure includes:

- Mine camp facilities sufficient for the current Zaldívar workforce of 863 people and the 1,146 contractors and consultants.
- A private two-lane paved road, shared by three major mines, Zaldívar, Escondida, and El Peñón, that leads to the Zaldívar camp and offices.
- Mine and heap leach facilities and an SX/EW plant located at the mine site.
- On-site facilities, including safety/security/first aid/emergency response building, assay laboratory, plant guard house, dining facilities, and offices.

- Related mine services facilities (truckshop, truck wash facility, warehouse, fuel storage and distribution facilities, reagent storage and distribution facilities) and other services facilities to support operations.
- Process water supplied from groundwater at Negrillar, 130 km east of Zaldívar.
- Rail service that transports sulphuric acid to the mine and copper cathode to the port of Antofagasta.
- A dual-circuit, 220 kV, 230 km long transmission line.

HISTORY

The Zaldívar deposit was discovered in 1979 and exploration drilling was carried out in 1981-1984. In 1989, the mining rights were sold to Sociedad Minera La Cascada Limitada, which in November 1989 transferred them to Outokumpu under a sales contract with Outokumpu Resources (Services) Limited. In December 1992, Outokumpu announced the formation of a 50/50 joint venture with Placer, at which time a joint venture company, CMZ, was formed.

In November 1995, commercial production started. The capital cost of the Project was at approximately \$600 million. In December 1999, Placer acquired Outokumpu's 50% interest in CMZ. In March 2006, Barrick acquired Placer and became owner of the Project.

GEOLOGY AND MINERALIZATION

The Zaldívar porphyry copper deposit is situated on the western margin of the Atacama Plateau in northern Chile. The deposit is part of a large Tertiary porphyry copper system that also includes the Escondida porphyry copper deposit. This porphyry complex occurs within the West Fissure structural system, a major regional feature that has controlled the emplacement of some of the largest porphyry copper deposits in northern Chile. The West Fissure system extends for approximately 1,000 km and separates Paleozoic rocks to the east from Mesozoic and Paleocene rocks to the west.

The Zaldívar deposit occurs at the intersection of three major sets of faults striking north-south, northwest-southeast, and northeast-southwest. This structural setting has controlled the emplacement of the intrusives and hypogene mineralization as well as leaching and secondary enrichment.

There are three main lithologic units at Zaldívar: the Zaldívar porphyry, the andesite unit, and the Llamo porphyry.

Most of the copper at Zaldívar occurs in a blanket of oxide and secondary sulphide mineralization that overlies deeper primary sulphide mineralization. The oxide mineralization mostly occurs in the andesite unit, whereas the secondary sulphide mineralization generally occurs in the Zaldívar porphyry. The most economically important mineralization types are secondary sulphide (chalcocite) and oxide (brochantite and chrysocolla). CMZ is currently investigating the economic potential of the primary sulphide mineralization, which consists of pyrite, chalcopyrite, bornite, and molybdenite.

EXPLORATION POTENTIAL

Zaldívar is a mature operation with a relatively small mining concession area. The major exploration programs took place prior to the completion of the feasibility study in 1993. A major drilling campaign was completed in 2000 to define the limits of the deposit within the mining concessions. That campaign marked the end of exploration activity targeting oxide mineralization at Zaldívar. More recently, deep drilling campaigns have targeted the underlying sulphide mineralization, Zaldívar Deeps Sulphide Cu-Mo-Au-Ag Project.

CMZ built a new block model for this primary sulphide mineralization as part of the 2010 mid-year update. There appears to be sufficient drill holes and technical studies completed to demonstrate that the mineralization meets the requirement for “reasonable prospects for economic extraction”.

MINERAL RESOURCES

The EOY 2011 open pit Mineral Resources exclusive of Mineral Reserves as stated in Table 1-1 include a Measured and Indicated Mineral Resource of 124.8 million tonnes grading 0.445% Cu containing 1.255 billion pounds of copper and an Inferred Mineral Resource of 37 million tonnes grading 0.54% Cu containing 439 million pounds of copper. The resource model was prepared by Barrick Senior Resource Geologist Cristian Monroy under the supervision of Barrick Superintendent of Resource and Reserve Modelling Benjamin Sanfurgo.

RPA reviewed the resource assumptions, input parameters, geological interpretation, and block modelling procedures and is of the opinion that the Mineral Resource estimate is appropriate for the style of mineralization and that the resource model is reasonable and acceptable to support the EOY2011 Mineral Resource and Mineral Reserve estimates.

RPA is not aware of any environmental, permitting, legal, title, taxation, socio-economic, marketing, political, or other issues that could materially affect the Mineral Resource and Mineral Reserve estimates.

MINERAL RESERVES

RPA reviewed the reported resources, production schedules, and cash flow analysis to determine if the resources meet the CIM definitions to be classified as reserves. Based on this review, it is RPA's assessment that the Measured and Indicated Mineral Resource within the final pit design at Zaldívar can be classified as Proven and Probable Mineral Reserves.

The open pit reserves are estimated to be 578 million tonnes at 0.518% Cu, containing 6.602 billion pounds of copper and are classified as Proven and Probable Reserves as presented in Table 1-2.

MINING METHOD

The Zaldívar Mine is a traditional open pit truck/shovel operation. The open pit has seven phases remaining. The ultimate pit will measure approximately 2.8 km east to west, 2.6 km north to south, and have a maximum depth of approximately 630 m. Waste and ore are mined on 15 m benches.

The current mine life is from 2012 to 2028. Mine production is 83 Mtpa over the first eleven years and then decreasing thereafter. This includes a nominal 46 Mtpa of waste and is based only on mining and processing oxide and secondary sulphide ores. Metallurgical investigations are underway to evaluate further leaching of primary sulphide material and/or primary sulphide milling and flotation.

There are three primary waste rock facilities, a heap leach facility, and a small tailings storage facility that handles tailings from the small flotation plant that processes fines from the primary heap leach crushing plant.

MINERAL PROCESSING

Processing is based on two heap leaching streams, one crushed and one ROM. Separation of the ore types is done by the mine department based on blasthole sample analysis. Primary processing is based on heap leaching a crushed material (80% passing 13 mm) utilizing a dynamic (on-off) heap leach facility. Additionally, marginal ores are processed through dump leaching at a ROM material size on a static pad. Pregnant solution from both leach pads is pumped to the SX/EW plant for metal extraction and production as copper cathodes. From the crushing circuit, 3% of the ore tonnage for the dynamic heap leach processing ends up in fines which are deposited in a sediment pond as a result of the washing system incorporated in the tertiary crushing system. These sediments are periodically processed through a small flotation plant and a copper concentrate is produced for sale.

The dynamic heap leach facility is based on a nominal 65,000 tpd operation (22 Mtpa). The ROM dump leach facility is based on the dynamic heap leach capacity and ore availability in the mine, and will average a nominal 15 Mtpa over the remaining mine life.

ENVIRONMENTAL, PERMITTING AND SOCIAL CONSIDERATIONS

The present operation of the Zaldívar Mine was approved in its original form called the "Zaldívar Project" in 1993 by the Comisión Regional del Medio Ambiente de la II Región de Antofagasta (COREMA). The project had, as its principal installation, an operating open pit mine, primary, secondary and tertiary crushing plants, a concentrating plant for fines, waste dumps, and tailings and a production line for copper cathodes that consists of a dynamic leach facility, ROM leach facility for low grade, and an SX/EW plant.

In 2009, an updated EIA was developed to optimize the mining processes and maintain production levels. The EIA was approved by COREMA in February 2010. On December 9, 2010, CMZ obtained its operational permits from the Servicio Nacional de Geología y Minería (SERNAGEOMIN) and expects to obtain other associated sectoral permits in due course.

The Zaldívar Mine has approximately 140 active permits. All permits are in good standing. The mine runs an extensive environmental monitoring program to ensure compliance with the requirements of these permits. For the major environmental issues identified, management plans have been developed that include rehabilitation, site decommissioning, and closure.

Zaldívar operates under Barrick's sustainability policy, which commits the operation to a corporate standard of environmental stewardship. This involves protecting human health, reducing the impact of mining on the ecosystem, and returning the site to a state compatible with a healthy environment. Zaldívar operates in an environmentally responsible manner with limited adverse impacts on the environment. Programs are in place that continuously monitor the process and surrounding areas and employ leak detection wells to detect any potential problems.

Mine closure plans are reviewed and analyzed annually. Current cost estimates for closure are \$36.2 million.

CAPITAL AND OPERATING COST ESTIMATES

Remaining capital costs at Zaldívar are all primarily sustaining capital, which includes mine equipment replacement. Total remaining capital costs are a nominal \$440 million. Mine prestripping capital of \$193 million has been treated as an operating cost for the purposes of this Technical Report. Engineering studies for a primary sulphide flotation and process plant expansion are also included in the sustaining capital.

The Zaldívar Mine has been in production since November 1995. Operating costs are tracked and well understood. Mine operating costs are a nominal \$1.47 per tonne of material mined or \$3.12 per tonne of ore mined. Process operating costs are \$7.35 per tonne ore processed and include the dynamic pad or heap leach and the dump leach, the crushing plant, acid, and all reagents. General and administrative costs (G&A) are \$1.25 per tonne ore processed and include all management salaries, camp operating costs, and environmental, health and safety.

Zaldívar Mine site manpower is a nominal 2,000 people. Direct Zaldívar employees are only 863 with 1,146 contractors and consultants as of November 2011.

2 INTRODUCTION

Roscoe Postle Associates Inc. (RPA) was retained by Barrick Gold Corporation (Barrick) to prepare an independent Technical Report on the Zaldívar copper operation (the Project), located in northern Chile. The purpose of this report is to support public disclosure of Mineral Resource and Mineral Reserve estimates at the Project as of December 31, 2011. This Technical Report conforms to NI 43-101 Standards of Disclosure for Mineral Projects.

Barrick is a Canadian publicly traded mining company with a large portfolio of operating mines and projects across five continents. Zaldívar is located in the Andean Precordillera in Region II of northern Chile, approximately 1,400 km north of Santiago and 196 km southeast of the city of Antofagasta.

The Zaldívar mining operation is managed and operated by Compañía Minera Zaldívar (CMZ), which is 100% owned by Barrick through its acquisition of Placer Dome Inc. (Placer) on March 3, 2006. There are no royalties payable. Zaldívar is surrounded by concessions owned by Minera Escondida Limitada (MEL). MEL has authorized CMZ to build infrastructure such as heap leach pads, the solution extraction/electrowinning (SX/EW) plant, and tailings facilities within the area covered by its mining concessions. MEL has begun mining the high walls that straddle the property boundary and stockpiling CMZ ore for CMZ.

Zaldívar is a large scale operation utilizing a traditional truck and shovel fleet. Mining is carried out from one open pit at a rate of 83 million tonnes per annum (Mtpa), consisting of 22 Mtpa of crushed ore, 15 Mtpa of dump leach ore, and 46 Mtpa of waste. The ultimate pit will measure approximately 2.8 km east to west, 2.6 km north to south, and have an average depth of approximately 630 m. A total of 578 million tonnes grading 0.52% Cu representing 6.6 billion pounds of contained copper and 3.8 billion pounds of recoverable copper is projected to be produced between 2012 and 2028.

SOURCES OF INFORMATION

RPA Principal Geological Engineer Luke Evans, M.Sc., P.Eng., and RPA Principal Mining Engineer Richard J. Lambert, MBA., P.E., visited the property from October 24 to 27, 2011.

Discussions were held with the following Barrick personnel:

- Leonardo González – General Manager of Operations
- Eduardo Jofré – Technical Services Superintendent
- Roberto Alfaro – Regional Superintendent of Long Range Mine Planning
- Guillermo Albornoz – Chief Geotechnical Engineer
- Eduardo Riveros - Chief Engineer
- Mauricio Rubio – Chief Geologist
- Norman Colón – Chief Metallurgist
- Ramón Guajardo – Environmental Superintendent
- Cristian Monroy – Senior Resource Geologist
- Benjamin Sanfurgo - Superintendent of Resource and Reserve Modelling
- Susy Solis –Geologist
- Romina Ganga – Ore Control Geologist
- Carolina Vera – Ore Control Geologist
- Victor Diaz- Mine Laboratory Manager
- Walter Hevia – Sample Preparation Shift Supervisor
- Jorge Vega – Land Manager
- Gregorio Olivares - Controller
- Carolina Vasquez – Accountant (Capital costs)
- Moises Bautista – Accountant (Operating costs)

The Zaldívar operation has been the subject of resource/reserve technical audits as follows:

- March 2009, Mineral Reserve and Resource Audit, Scott Wilson Roscoe Postle Associates Inc. (Scott Wilson RPA, a predecessor company to RPA).
- February 2007, Reserve Procedure Audit, Scott Wilson RPA.
- December 2006, Level 2 Resource and Reserve Audit, Placer Dome Inc.
- December 31, 2004, NI 43-101 Technical Report, AMEC Americas Limited (AMEC).
- November 2004, Resource and Reserve Audit, Placer Dome Inc.

Mr. Evans is responsible for the overall preparation of this report. Mr. Evans reviewed the geology, sampling, assaying, and resource estimate work and is responsible for Items 1 to 12 and 14. Mr. Lambert reviewed the metallurgy, mining, reserve estimate,

environment, and economics and is responsible for Items 13, and 15 to 26. RPA would like to acknowledge the excellent cooperation in the transmittal of data by Barrick personnel.

The documentation reviewed, and other sources of information, are listed at the end of this report in Section 27 References.

LIST OF ABBREVIATIONS

Units of measurement used in this report conform to the metric system. All currency in this report is US dollars (US\$) unless otherwise noted.

μ	micron	km ²	square kilometre
°C	degree Celsius	kPa	kilopascal
°F	degree Fahrenheit	kVA	kilovolt-amperes
μg	microgram	kW	kilowatt
A	ampere	kWh	kilowatt-hour
a	annum	L	litre
bbl	barrels	L/s	litres per second
Btu	British thermal units	m	metre
C\$	Canadian dollars	M	mega (million)
cal	calorie	m ²	square metre
cfm	cubic feet per minute	m ³	cubic metre
cm	centimetre	min	minute
cm ²	square centimetre	MASL	metres above sea level
d	day	mm	millimetre
dia.	diameter	mph	miles per hour
dmt	dry metric tonne	MVA	megavolt-amperes
dwt	dead-weight ton	MW	megawatt
ft	foot	MWh	megawatt-hour
ft/s	foot per second	m ³ /h	cubic metres per hour
ft ²	square foot	opt, oz/st	ounce per short ton
ft ³	cubic foot	oz	Troy ounce (31.1035g)
g	gram	ppm	part per million
G	giga (billion)	psia	pound per square inch absolute
Gal	Imperial gallon	psig	pound per square inch gauge
g/L	gram per litre	RL	relative elevation
g/t	gram per tonne	s	second
gpm	Imperial gallons per minute	st	short ton
gr/ft ³	grain per cubic foot	stpa	short ton per year
gr/m ³	grain per cubic metre	stdpd	short ton per day
hr	hour	t	metric tonne
ha	hectare	tpa	metric tonne per year
hp	horsepower	tpd	metric tonne per day
in	inch	US\$	United States dollar
in ²	square inch	USg	United States gallon
J	joule	USgpm	US gallon per minute
k	kilo (thousand)	V	volt
kcal	kilocalorie	W	watt
kg	kilogram	wmt	wet metric tonne
km	kilometre	yd ³	cubic yard
km/h	kilometre per hour	yr	year

3 RELIANCE ON OTHER EXPERTS

This report has been prepared by Roscoe Postle Associates Inc. (RPA) for Barrick Gold Corporation (Barrick). The information, conclusions, opinions, and estimates contained herein are based on:

- Information available to RPA at the time of preparation of this report,
- Assumptions, conditions, and qualifications as set forth in this report, and
- Data, reports, and other information supplied by Barrick and other third party sources.

For the purpose of this report, RPA has relied on ownership information provided by Barrick. RPA has not researched property title or mineral rights for the Zaldívar property and expresses no opinion as to the ownership status of the property.

RPA has relied on Barrick for guidance on applicable taxes, royalties, and other government levies or interests, applicable to revenue or income from Zaldívar.

Except for the purposes legislated under provincial securities laws, any use of this report by any third party is at that party's sole risk.

4 PROPERTY DESCRIPTION AND LOCATION

LOCATION

Zaldívar is located in the Andean Precordillera in Region II of northern Chile, approximately 1,400 km north of Santiago and 196 km southeast of the city of Antofagasta (Figures 4-1 and 4-2). Zaldívar is connected to Antofagasta by a paved highway as well as the Antofagasta Salta narrow-gauge railway. Antofagasta is a deepwater port with bulk loading and unloading facilities. The city is served by national airlines, with several flights daily providing a link to Santiago and other major centres. The mine is located at an altitude of 3,200 m.

LAND TENURE

Under Chilean regulations, the exploitation or mining concessions can be held indefinitely as long as the annual fees are paid to keep the permits in good standing. The exploitation concessions give the right to extract the ore and to sell the final products into the open market.

The Zaldívar mineral rights boundary is defined by combining ten overlapping exploitation concessions that have a total area of approximately 1,295 ha. The individual exploitation concessions are listed in Table 4-1 and the final official property boundary is shown in Figure 4-2.

TABLE 4-1 EXPLOITATION CONCESSIONS
Barrick Gold Corporation – Zaldívar Mine

Name	Registration #	Area (ha)*
Zaldívar 262/509	02201-1168-7	1,240
Ana 1/180	02201-2489-4	180
Antonia 1/191	02201-2493-2	191
Andrea 1/216	02201-2492-4	216
Aurora 1/201	02201-2491-6	201
Amanda 1/220	02201-2490-8	220
Angela 1/127	02201-2488-6	127
Berta 1/76	02201-2494-0	76
Rey 1/133	02201-2563-7	262
Reina 1/115	02201-2564-5	172

* Areas have considerable overlap, so total area is 1,295 ha.

The Zaldívar mining operation is managed and operated by Compañía Minera Zaldívar (CMZ), which is 100% owned by Barrick through its acquisition of Placer Dome Inc. (Placer) on March 3, 2006. There are no royalties payable. Zaldívar is surrounded by concessions owned by Minera Escondida Limitada (MEL). CMZ has a number of easement or surface rights agreements with MEL. MEL has authorized CMZ to build infrastructure such as heap leach pads, the SX/EW plant, tailings and other facilities within the area covered by the MEL concessions. The current areas covered by surface rights agreements are shown in Figure 4-3, which also shows the locations of the mine, surface infrastructure, and mining concessions for the Zaldívar operations. MEL has begun mining the high walls that straddle the property boundary.

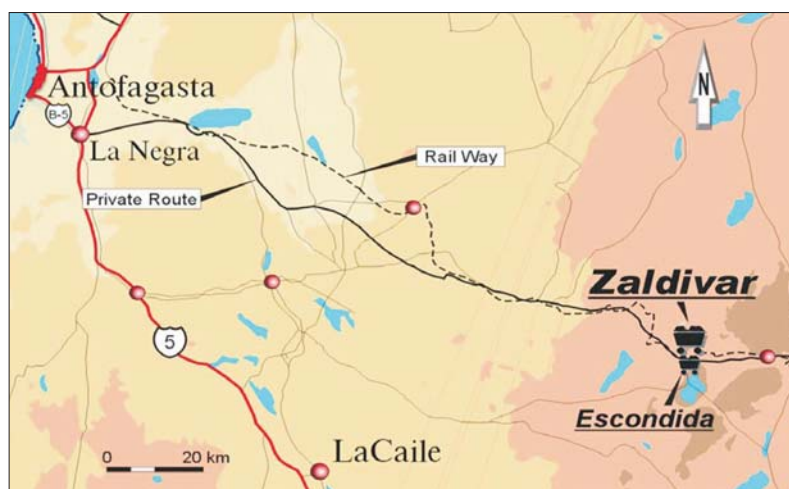
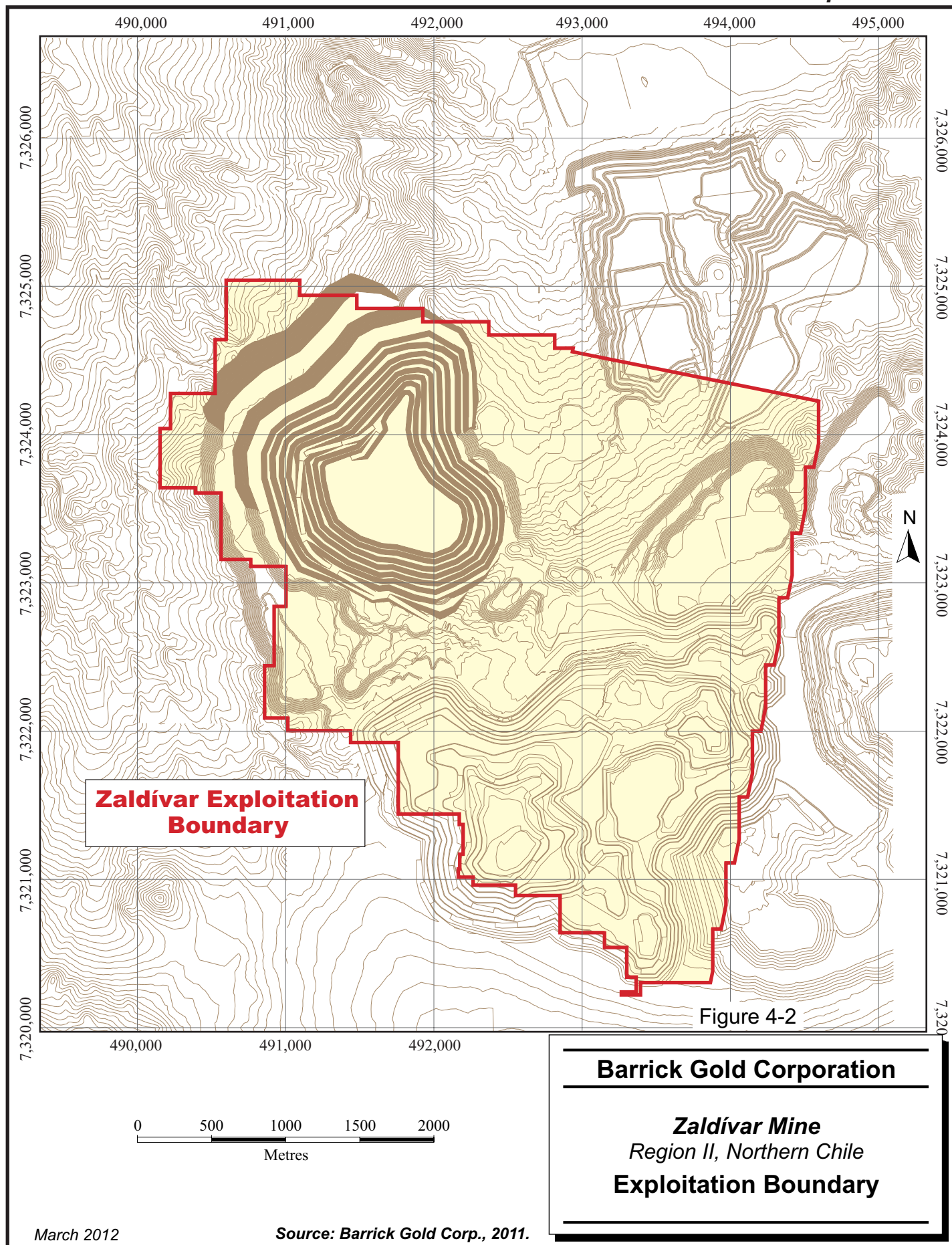


Figure 4-1

Barrick Gold Corporation

Zaldívar Mine
Region II (Antofagasta),
Northern Chile

Location Map



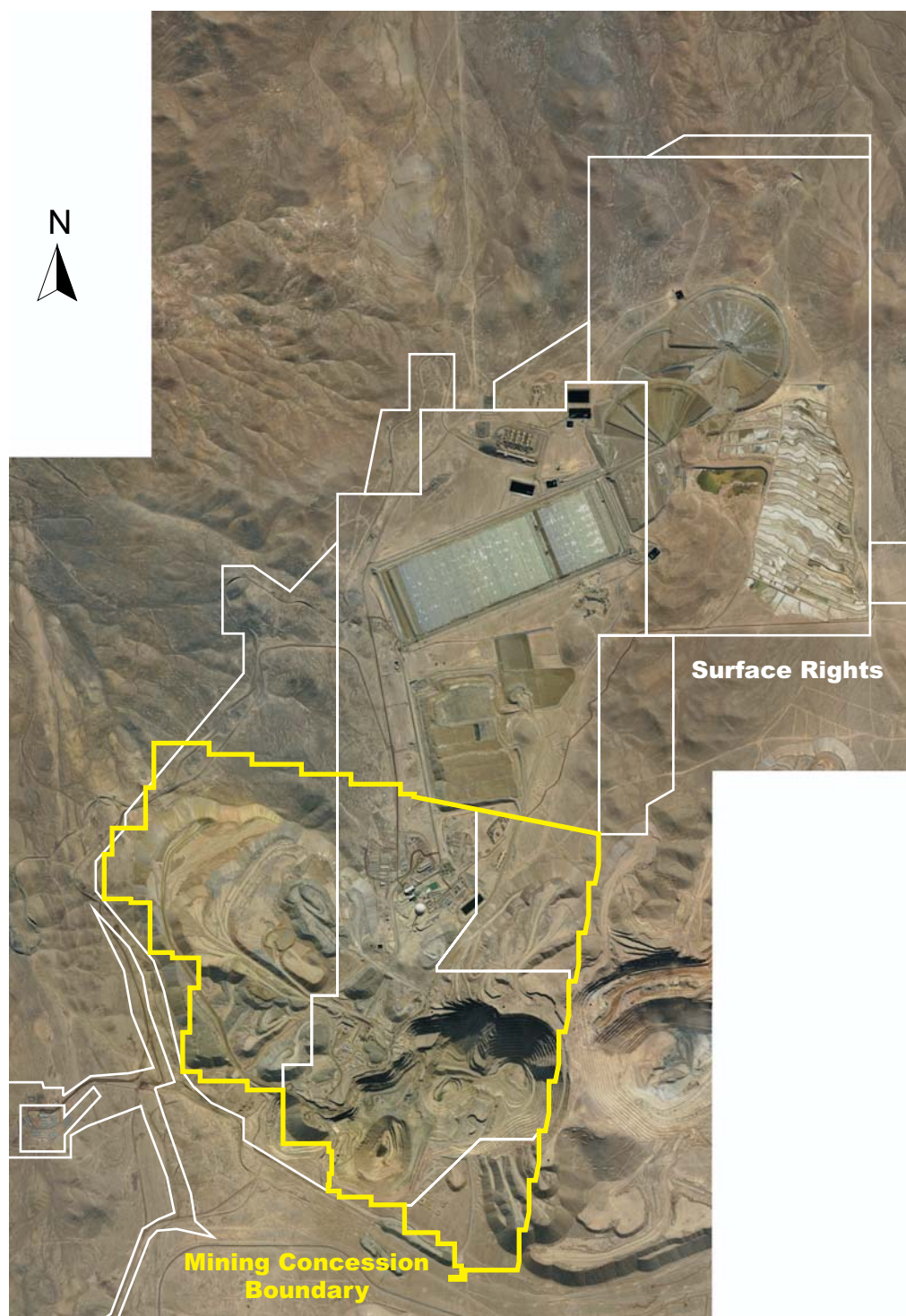


Figure 4-3

Barrick Gold Corporation

Zaldívar Mine

Region II, Northern Chile

**Mining Concession Boundary
and Surface Rights**

5 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

ACCESSIBILITY

Antofagasta is the Capital of Region II and is home to most employees at Zaldívar. Antofagasta has a population of 360,000 people (2009 census). There is daily commercial air service to Antofagasta from Santiago. There is a dirt airstrip at the Zaldívar mine site.

Access to the site is via a paved road from Antofagasta, following Highway 28 for 15 km to the southwest to the intersection with Route 5 (Pan-American Highway). From the intersection with Route 5, there is a private two-lane paved road that is shared by three major mines, Zaldívar, Escondida, and El Peñón, which heads to the east. It is 137 km to the Zaldívar turnoff. From the turnoff, it is seven kilometres to the Zaldívar camp and another eight kilometres to the Zaldívar mine offices. The total distance from Antofagasta is 170 km. Most consumables are transported along this route by truck.

The site is also serviced by rail with Ferrocarril Antofagasta - Bolivia (FCAB) transporting sulphuric acid to the mine and copper cathode to the port of Antofagasta.

CLIMATE

Zaldívar has an arid high desert climate. The mine lies 3,200 m above sea level. Temperatures range from -7°C in July to 22°C in January, with an average temperature of 10°C. Precipitation typically falls in the summer months, with 2 mm to 6 mm per annum. There is little precipitation and water from the area does not reach the sea.

Vegetation is almost absent and is restricted to areas with water accumulation, temporary runoff, or underground phreatic surfaces. Typical vegetation mostly consists of small flowering plants and cacti, such as oxalis hypsophila, cistanthe salsoloides, adesmia atacamensis, and sisymbrium philippianum.

LOCAL RESOURCES

The workforce consists of 835 employees. In addition, there are approximately 1,150 contractors. Camp facilities are provided on site for both company personnel and contractor personnel. Personnel generally work on a four day rotation and are transported to and from site by company bus or light vehicles.

INFRASTRUCTURE

WATER

Process water is supplied from groundwater at Negrillar, 130 km east of Zaldívar. The water is drawn from six production wells and pumped to the freshwater pond near the tertiary crushing facility at the plant site. Current use is approximately 220 L/s.

POWER

Zaldívar consumes a nominal 72 MWh to 76 MWh. The power supplier is AES Gener. The power transmission is part of Sistema Interconectado del Norte Grande (SING), the regional electrical grid for Northern Chile. A dual-circuit, 220 kV, 230 km long transmission line was constructed with MEL between the Zaldívar and Escondida Norte plant sites and the SING substation at El Crucero.

PHYSIOGRAPHY

Rugged mountains with incised steep-sided valleys characterize the Zaldívar Project area. Elevations in the region vary from approximately 1,500 m to 3,500 m, and the alpine climate is cold, dry, and windy. Vegetation is sparse. Rock outcrops and colluvial soils predominate in the valley walls with colluvium, alluvium, and moraine till exposed on the valley floors. The overburden is approximately 20 m to 50 m thick in the northern part of the property and up to 100 m thick to the south.

6 HISTORY

EXPLORATION AND OWNERSHIP HISTORY

The exploration and ownership history is summarized below:

- 1979 The initial declaration or statement of discovery (manifestación minera) was presented to the First Civil Court of Antofagasta by Mr. Pedro Buttazzoni Alvarez.
- 1981 Mr. Buttazzoni, through his company Sociedad Contractual Minera Varillas (SCMV), formed the company Sociedad Legal Minera Zaldívar 262 de Zaldívar. Shareholders in this new company were SCMV (88.33%) and Minera Utah de Chile Inc. and Getty Mining (Chile) Inc. (with a joint interest of 11.67%).
- 1981-1984 Exploration drilling was done in the area by Minera Utah de Chile Inc.
- 1989 As a result of various transactions during the previous eight years, SCMV held 51% and MEL the remaining 49%. In March 1989, the mining rights were sold to Sociedad Minera La Cascada Limitada (SMCL-Pudahuel). A sales contract was executed between SMCL-Pudahuel and Outokumpu Resources (Services) Limited. The mining claims were then transferred to Minera Outokumpu Chile Limitada (Outokumpu) in November.
- 1992 Outokumpu announced the formation of a 50/50 joint venture with Placer in December, at which time a joint venture company, CMZ, was formed.
- 1995 Commercial production started in November. The capital cost of the project was within budget at approximately \$600 million.
- 1999 Placer acquired Outokumpu's 50% interest in CMZ, effective December 13, 1999.
- 2006 Barrick acquired Placer on March 3, 2006.

PRODUCTION HISTORY

Since commencement of commercial operations in 1995, the following significant changes have been made:

- 1996 The feed system to the secondary crushers was improved in September 1996 by the addition of a feed bin with belt feeders controlling the material flow to each crusher.
- 1997 A pre-screening plant was installed in July 1997 to allow -12 mm material (approximately 40% of the heap leach ore) to bypass tertiary crushing. In January 1998 these screens were converted from the original wet design to dry operation.

The installation has not only alleviated problems in the tertiary crusher, but has also proven advantageous to leach performance by bypassing fine material directly to the heap leach pad.

- 1998 In January 1998 a flotation plant was put into operation to recover copper from the tertiary crusher circuit slimes.
- 1998 In May 1998, two-pass leaching was introduced by installing an intermediate PLS pond in the heap leach circuit. This has improved leach recovery by substantially increasing the wash rate and the PLS grade.
- 1999 In April 1999 the heap leach operation was converted to an on/off (dynamic) pad.
- 2000 In July 2000, a fifth tertiary crusher line was installed, enabling part of the wet flush crusher circulating load to be treated in open circuit by two MP500 crushers.
- 2001 In March 2001, the first PLS from dump leaching was introduced to the SX circuit.

The open pit fleet has been progressively upgraded and expanded as plant feed requirements have increased. The current open pit fleet has the capacity to move approximately 240,000 tpd of material.

The electrowinning plant has been modified to produce 150,000 tonnes (330.7 Mlb) of copper cathode per year, 20% over the original design capacity of 125,000 tonnes.

Table 6-1 shows the production from the Zaldívar Mine since 2007.

TABLE 6-1 ZALDÍVAR PRODUCTION – 2007-2011
Barrick Gold Corporation – Zaldívar Mine

Item	2007	2008	2009	2010	2011 (Jan-Oct)
Mine to Heap Leach (t)	16,144,945	15,141,101	15,708,166	14,506,756	12,782,070
TCu (%)	0.822	0.778	0.722	0.697	0.646
ASCu (%)	0.602	0.576	0.456	0.427	0.402
Mine to Stockpile (t)	7,839,300	9,940,350	16,542,135	13,087,447	4,852,549
TCu (%)	0.563	0.538	0.520	0.534	0.634
ASCu (%)	0.325	0.335	0.256	0.260	0.354
Mine to Dump Leach (t)	14,037,870	19,253,647	21,772,868	8,413,425	9,718,600
TCu (%)	0.348	0.364	0.404	0.386	0.349
ASCu (%)	0.177	0.183	0.165	0.173	0.176
Waste (t)	32,553,025	29,953,500	13,183,650	21,604,314	26,150,141
Total Mine (t)	70,575,140	74,288,598	67,206,819	57,611,942	53,503,360
Stockpile to Heap Leach (t)	3,169,034	4,027,521	5,436,157	6,560,624	4,736,268
TCu (%)	0.782	0.827	0.724	0.740	0.595
ASCu (%)	0.536	0.511	0.466	0.469	0.364
Stockpile to Dump Leach (t)	-	-	-	11,116,781	8,299,575
TCu (%)	-	-	-	0.510	0.392
ASCu (%)	-	-	-	0.459	0.190
Total Stockpile (t)	3,169,034	4,027,521	5,436,157	17,677,405	13,035,843
Total Mine and Stockpile (t)	73,744,174	78,316,119	72,642,976	75,289,347	66,539,203
Total to Heap Leach (t)	19,313,979	19,168,622	21,144,323	21,067,380	17,518,337
TCu (%)	0.816	0.789	0.723	0.710	0.632
ASCu (%)	0.591	0.562	0.458	0.440	0.391
Total to Dump Leach (t)	14,037,870	19,253,647	21,772,868	19,530,206	18,018,175
TCu (%)	0.348	0.364	0.404	0.456	0.369
ASCu (%)	0.177	0.183	0.165	0.336	0.183

7 GEOLOGICAL SETTING AND MINERALIZATION

REGIONAL GEOLOGY

The Zaldívar porphyry copper deposit is situated on the western margin of the Atacama Plateau in northern Chile. The deposit is part of a large Tertiary porphyry copper system that includes the Escondida porphyry copper deposit. This porphyry complex occurs within the West Fissure structural system, a major regional feature that has controlled the emplacement of some of the largest porphyry copper deposits in northern Chile (Figure 7-1). The West Fissure system extends for approximately 1,000 km and separates Paleozoic rocks to the east from Mesozoic and Paleocene rocks to the west. The Zaldívar porphyry system lies at the intersection of the West Fissure and a series of northwest and northeast striking faults.

Supracrustal rocks in the region range in age from Paleozoic to the Quaternary. Rhyolitic and andesitic flow units of the Upper Paleozoic La Tabla Formation and the Upper Triassic Agua Dulce Formation are exposed in the east. The southwestern portion of the area is overlain by marine sedimentary rocks assigned to the Upper Triassic–Lower Jurassic Profeta Formation and Cretaceous continental units of the Santa Ana Formation. Andesite volcanic and volcanoclastic units occupy the north and central parts of the area. These belong to the Upper Cretaceous–Eocene age Augusta Victoria Formation. Two periods of intrusive activity occurred in the region. Dioritic and monzonitic intrusives were emplaced during the Upper Cretaceous–Eocene age, and dioritic to rhyolitic porphyries occurred during Eocene–Oligocene times. Oligocene–Miocene age unconsolidated gravels, alluvium, and colluvium cover the older rock units.

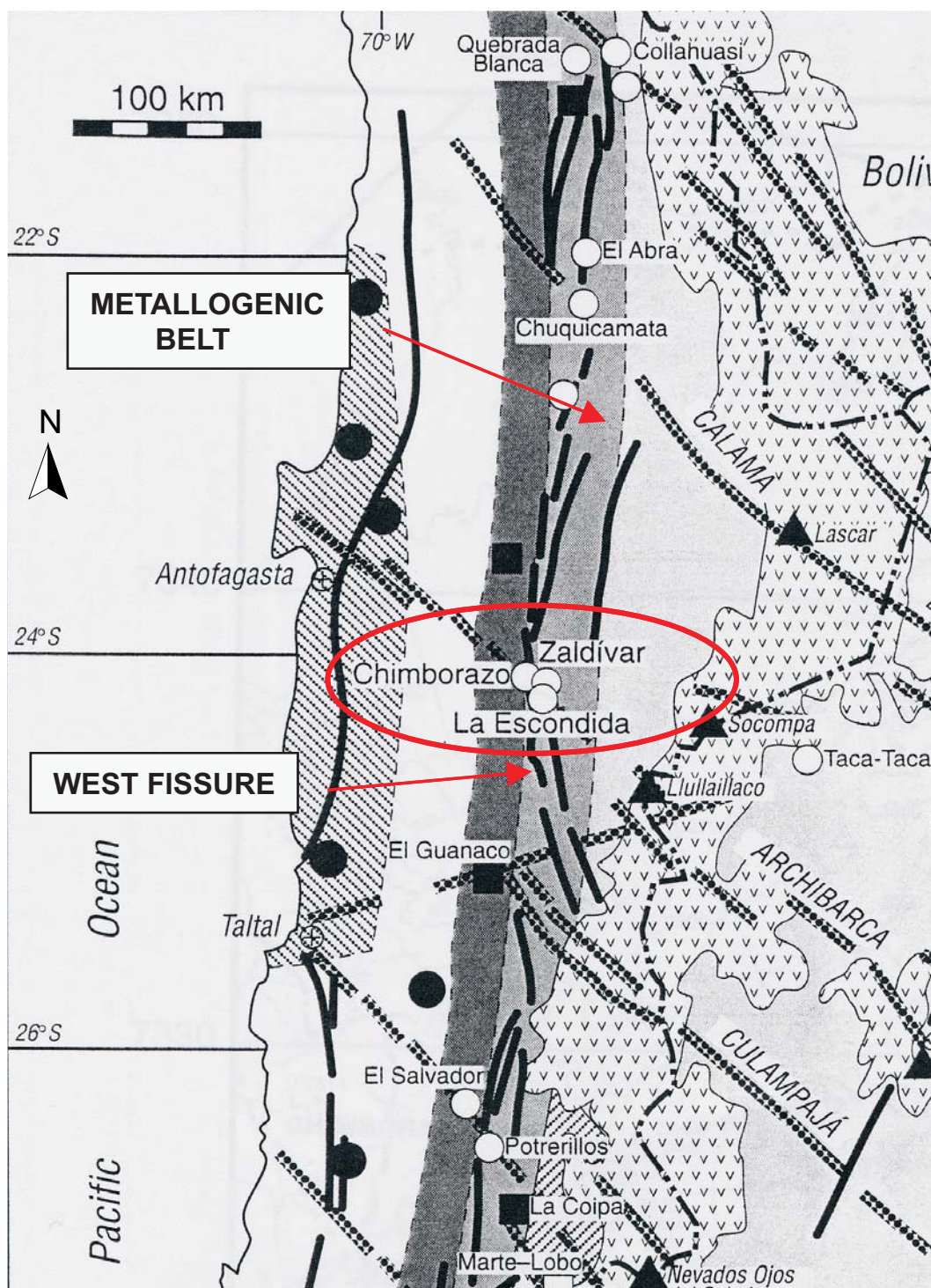


Figure 7-1

Barrick Gold Corporation

Zaldívar Mine
Region II, Northern Chile
Regional Geology

LOCAL AND PROPERTY GEOLOGY

The Zaldívar porphyry is located at the intersection of the north-south striking faults of the Domeyko Fault system with the northeast and northwest striking faults. The deposit is generally centred on a northeast striking granodiorite porphyry body that intrudes andesites and rhyolites, and cuts across the north-south striking Portezuelo Fault.

There are three main lithologic units at Zaldívar: the Zaldívar porphyry, the andesite unit, and the Llamó porphyry (Figure 7-2). At approximately 290 million years old (Richards et al., 1999), the Zaldívar porphyry is the oldest unit and occupies most of the area east of the Portezuelo Fault. This rock unit typically consists of grey rhyolitic feldspar-quartz porphyry. Phenocrysts are mainly quartz, K-feldspar, and plagioclase. The quartzo-feldspathic groundmass is variably obliterated by sericite due to prevalent phyllic (quartz-sericite) alteration.

The andesite unit correlates with the August Victoria Formation, which has been dated between 66.6 and 41.2 million years (Marinovic et al., 1995) and it is the dominant lithology west of the Portezuelo Fault. Rocks are greenish grey to dark grey and display a fine-grained porphyritic texture with an aphanitic groundmass. The Llamó porphyry is the most recent intrusive event in the area and is dated at approximately 37.4 million years old (Richards et al., 1999). The porphyry trends roughly northeast-southwest across the deposit, outcropping on either side of the Portezuelo Fault where it intrudes both the andesite unit and the Zaldívar porphyry. It occurs as irregularly shaped dikes to small stock-like bodies 50 m to 200 m wide. This rock unit, a feldspar-biotite-quartz porphyry, is typically light greyish green and fine grained.

Several hydrothermal and tectonic breccias bodies closely associated with major structures, such as the Portezuelo Fault, have been recognized in the mine area. Much of the lower slopes and valley floors in the area are covered with thick Quaternary alluvial/colluvial deposits. These deposits are locally derived and generally consist of dry, loose to dense, well-graded silt, sand, and gravel. Pockets of aeolian silt and fine sand also occur in the area.

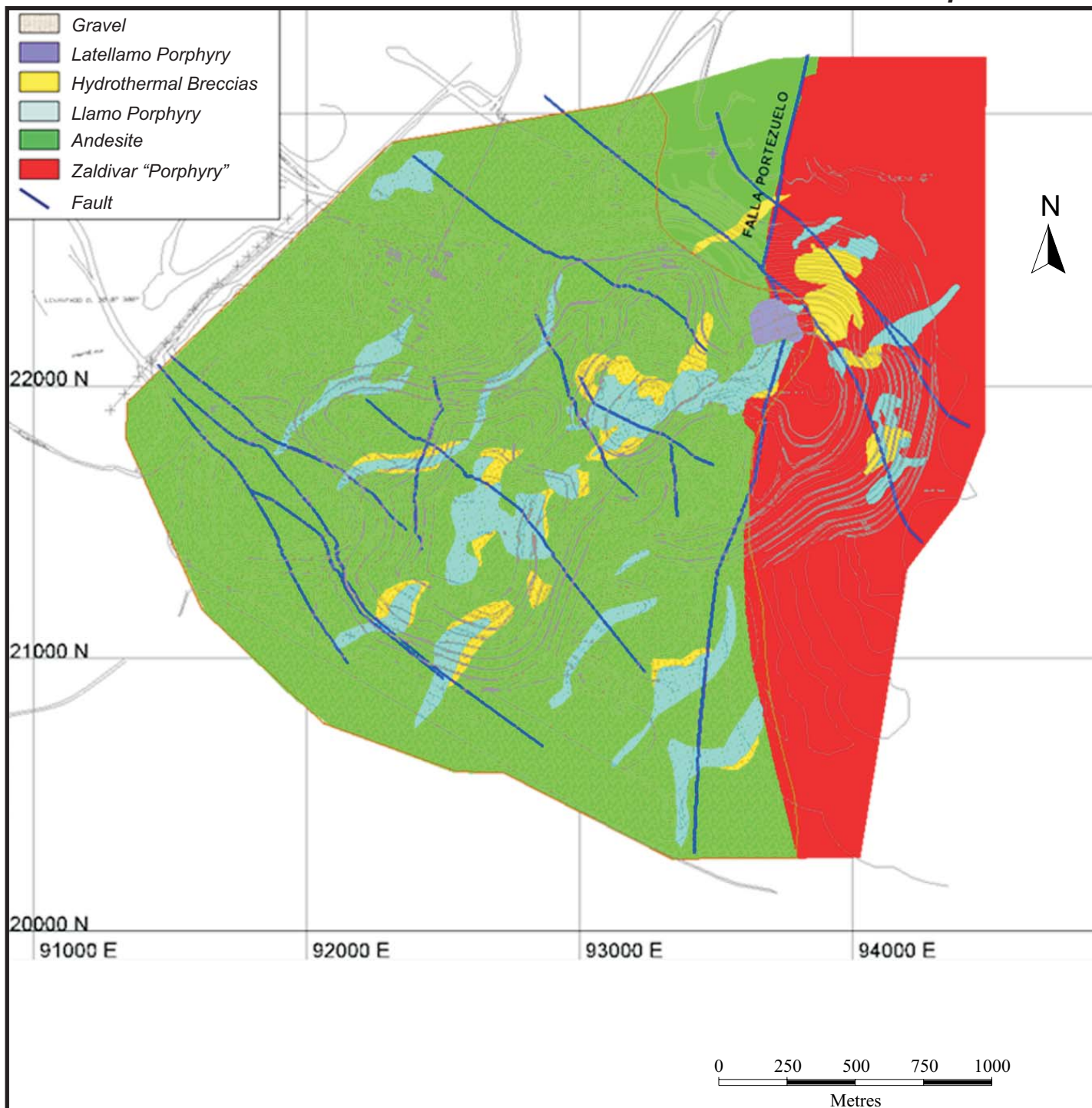


Figure 7-2

Barrick Gold Corporation

Zaldívar Mine
 Region II, Northern Chile
Property Geology

The Zaldívar deposit occurs at the intersection of three major sets of faults striking north-south, northwest-southeast, and northeast-southwest. This structural setting has controlled the emplacement of the intrusives and hypogene mineralization as well as leaching and secondary enrichment.

The most prominent structures strike north-south and northwest-southeast and dip moderately to steeply northeast to southwest. Breccia zones one metre to five metres wide are commonly associated with the north-south fault set. These faults mimic the regional structures. The north-south set parallels the West Fissure structural trend, which is approximately 10 km wide and consists of an arrangement of steeply dipping, north-south trending structures. The northwest-southeast set parallels a regionally continuous, secondary structural trend. Both fault sets appear to be pre-intrusive and presumably control the emplacement of subsequent intrusions. It is also at the intersection of these faults that copper mineralization is best developed. A second set of faults strike northeast-southwest with steep dips to the northwest and southeast. This set is weakly to moderately developed, however, it is closely associated with the Zaldívar deposit and may have controlled the emplacement of the Llamo porphyry.

ALTERATION

The alteration developed in the Zaldívar Porphyry correspond to an early potassic alteration event, represented by secondary K-feldspar, which affect the Llamo Porphyry and the Paleozoic rocks below the 3,050 m elevation, and by secondary biotite, which widely affects the andesitic rocks.

This alteration is overprinted by low temperature quartz-sericite hydrothermal alteration with two stages of development. An early wide spread stage of sericite-chlorite alteration followed by the principal stage with more penetrative quartz-sericite-pyrite alteration focused in the mid part of the deposit and with a clear association with the Llamo Porphyry intrusions. Strong sericite alteration is present as discontinuous bodies in the core of the quartz-sericitic alteration zones and typically destroys primary rock textures. Propylitic alteration with chlorite as the main mineral effects the andesitic rocks and the late Llamo Porphyry.

The final stage of the system is represented by very restricted advanced argillic alteration. Finally, as result of the leaching and oxidation of the rock column of the deposit, the supergene argillic alteration is developed, affecting all the lithological types with variable intensity, but being typically stronger in the andesitic rocks.

MINERALIZATION

The mineralization has an elongated shape trending northeast-southwest. This is the result of the overprinted hypogene and supergene processes, where the latter with its leaching and enrichment process, gave the deposit a characteristic vertical profile with a superior leached zone, an oxide copper zone, and a secondary sulfide zone located between the oxide and the basal primary sulfide zone.

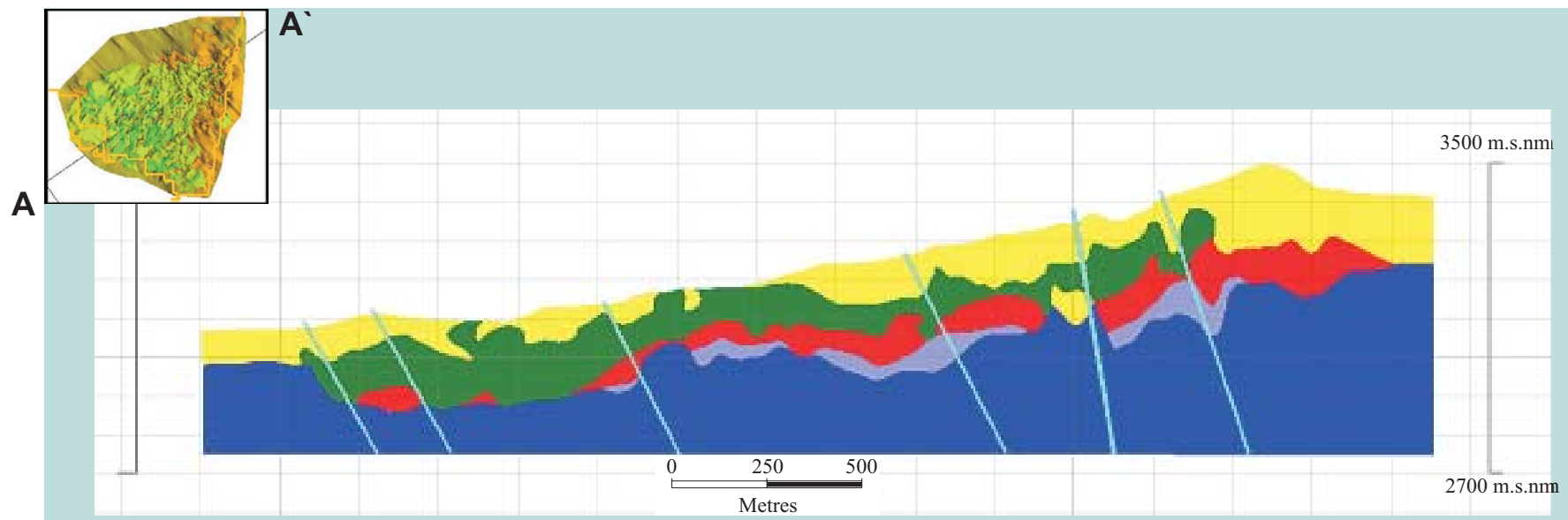
The leached zone is present as a continuous horizon in the upper part of the deposit, with local depths of up to 300 m. The typical mineralogy of this zone includes hydroxides and iron sulfates (hematite-goethite-jarosite) with copper phosphate (turquoise).

The oxide zone extends more or less continuously from the Portezuelo Fault and surrounding areas towards the southwest, covering an area of approximately 2 km by 1.5 km and with an average thickness of approximately 90 m. The oxide zone is incised locally by leached areas related to faults of the northwest-southeast structural system. The mineralogy varies according to lithology and dominant alteration. For example, brochantite-antlerite is found in the rhyolitic rocks and chrysocolla, “black copper”, and copper phosphate are found in the andesitic rocks with chlorite-biotite alteration.

The secondary sulfides cover an area of approximately 2.5 km by 1.5 km, with a variable thickness from a few metres in the southwest extremity up to over 300 m in the northeast extremity. Mineralogy in this area is represented by pyrite, chalcocite, covellite, chalcopyrite and minor sphalerite and molybdenite. Chalcocite is the dominant secondary sulfide mineral (over 80%). Covellite is the main sulfide mineral present in the transition zone to the underlying primary sulfides. Alunite dating indicates an age for the secondary enrichment process of approximately 18 My to 14.7 My (Monroy 2010).

The primary sulphide zone follows the Llamó Porphyry trends and over 70% of the mineralization occurs in veinlets. The primary sulfide body has a bornite-rich core with minor chalcopyrite that is located in the Llamó Porphyry and in the late magmatic breccias. The bornite-rich core is enveloped by a chalcopyrite-pyrite zone which in turn is surrounded by a pyritic halo. The primary mineralization age is 37.2 My (Morales 2010).

7-8



THE HYPOGENE MINERALIZATION IS CLOSELY RELATED TO THE LLAMO PORPHYRY AND THE ENRICHMENT ZONE OCCUR IN ALL ROCK UNITS PRESENT.

THE ENRICHMENT ZONE SHOWS A NE-SW ELONGATION WITH THE SULFIDE ZONE OPEN TO NORTHEAST.

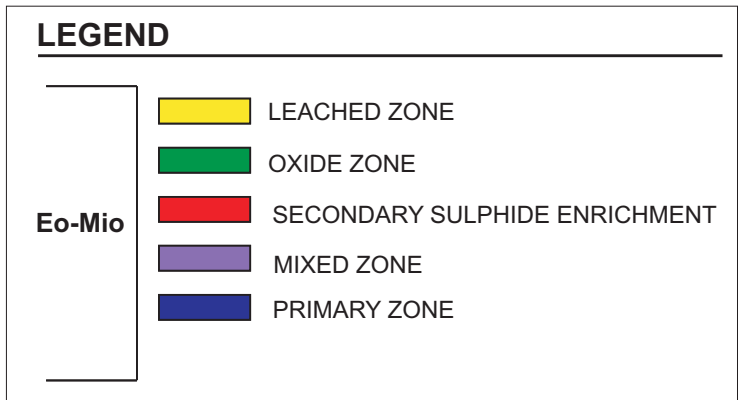


Figure 7-3

Barrick Gold Corporation

Zaldívar Mine
Region II, Northern Chile

Mineralization Section

8 DEPOSIT TYPES

Zaldívar is a porphyry copper deposit and together with the nearby Escondida and Chimbarazo deposits form part of the Eocene-Oligocene porphyry belt of Northern Chile. They are located at the intersections of the north-south regional faults belonging to the Domeyko Fault System with northwest and northeast fault systems.

The hypogene mineralogy of the deposit begins in the late magmatic stage where early veinlets of biotite and/or magnetite with bornite or minor chalcopyrite were developed. These are followed by “A” veinlets comprising quartz, K-feldspar, anhydrite, bornite, chalcopyrite, and primary chalcocite veinlets. These veinlets occur in strong potassic alteration characterized by biotite and secondary K-feldspar. In the transition from the late magmatic stage to early hydrothermal stage, a third generation of “B” veinlets is developed with quartz and minor K-feldspar and abundant chalcopyrite and/or molybdenite. For the principal hydrothermal event of quartz-sericite alteration two stages are recognized. The “C” veinlets, characterized by quartz with chalcopyrite, molybdenite, or chalcopyrite-pyrite with sericite-chlorite haloes, develop during the early stage. The main stage is represented by “D” veinlets with or without quartz, abundant pyrite, minor chalcopyrite and sphalerite and with quartz- sericite-pyrite alteration haloes.

Later, during the Miocene, the supergene processes associated with the uplift, erosion, oxidation and leaching of the deposit in a desert environment resulted in the leached horizon, immediately underlain by the oxide copper horizon, which is underlain by the secondary sulfide horizon, which all sits on top of the primary sulfide zone.

9 EXPLORATION

Zaldívar is a mature operation with a relatively small mining concession area. The major exploration programs took place prior to the completion of the feasibility study in 1993. A major drilling campaign was completed in 2000 to define the limits of the deposit within the mining concessions. More recently, deep drilling campaigns have targeted the underlying sulphide mineralization. CMZ drills approximately 15,000 m of infill reverse circulation drill holes each year.

EXPLORATION POTENTIAL

CMZ has been evaluating the economic potential of the primary copper mineralization for a number of years. RPA first reviewed the Zaldívar Deeps Sulphide Cu-Mo-Au-Ag Project in January 2009 (Scott Wilson RPA, 2009) after Barrick completed an internal scoping study in December 2008 (Croal and Tsafaras, 2008). A new scoping study by Barrick is almost complete.

CMZ built a new block model for this primary sulphide mineralization as part of the 2010 mid-year update. There appears to be sufficient drill holes and technical studies completed to demonstrate that the Zaldívar Deep Sulphide Cu-Mo-Au-Ag Project mineralization meets the requirement for “reasonable prospects for economic extraction”.

10 DRILLING

The resource model is based on 1,735 drill holes totalling 460,199 m that were drilled up to April 12, 2011 (Table 10-1). Approximately 60% of the drilling was by reverse circulation (RC) and the balance was diamond drill holes (DDH). Some 57 DDHs totalling 11,470 m were drilled from an underground bulk sample drift, which is now partly visible in the east wall.

Essentially all of the samples have total copper (TCu) grades, approximately 85% of the samples have acid soluble copper (ASCu) grades, and 43% of the samples have cyanide soluble copper (CNCu) grades. Approximately 21% of the samples have molybdenum (Mo), gold (Au), and silver (Ag) grades and these are mostly present in the primary sulphide mineralization.

Most of the resource definition drilling was completed in 1999 and 2000. Most holes were drilled vertically. When inclined, the drilled orientations were generally north-south, east-west, northeast-southwest, or northwest-southeast. Dip angles ranged from -40° to -90°, except for the east-west oriented holes where dip angles ranged from 0° to -90°.

The drill holes were mostly spaced approximately 100 m apart for the feasibility study and are now mostly spaced approximately 50 m apart. The mine plans to drill approximately 15,000 m annually to ensure that three years of production are always supported by approximately 50 m spaced holes.

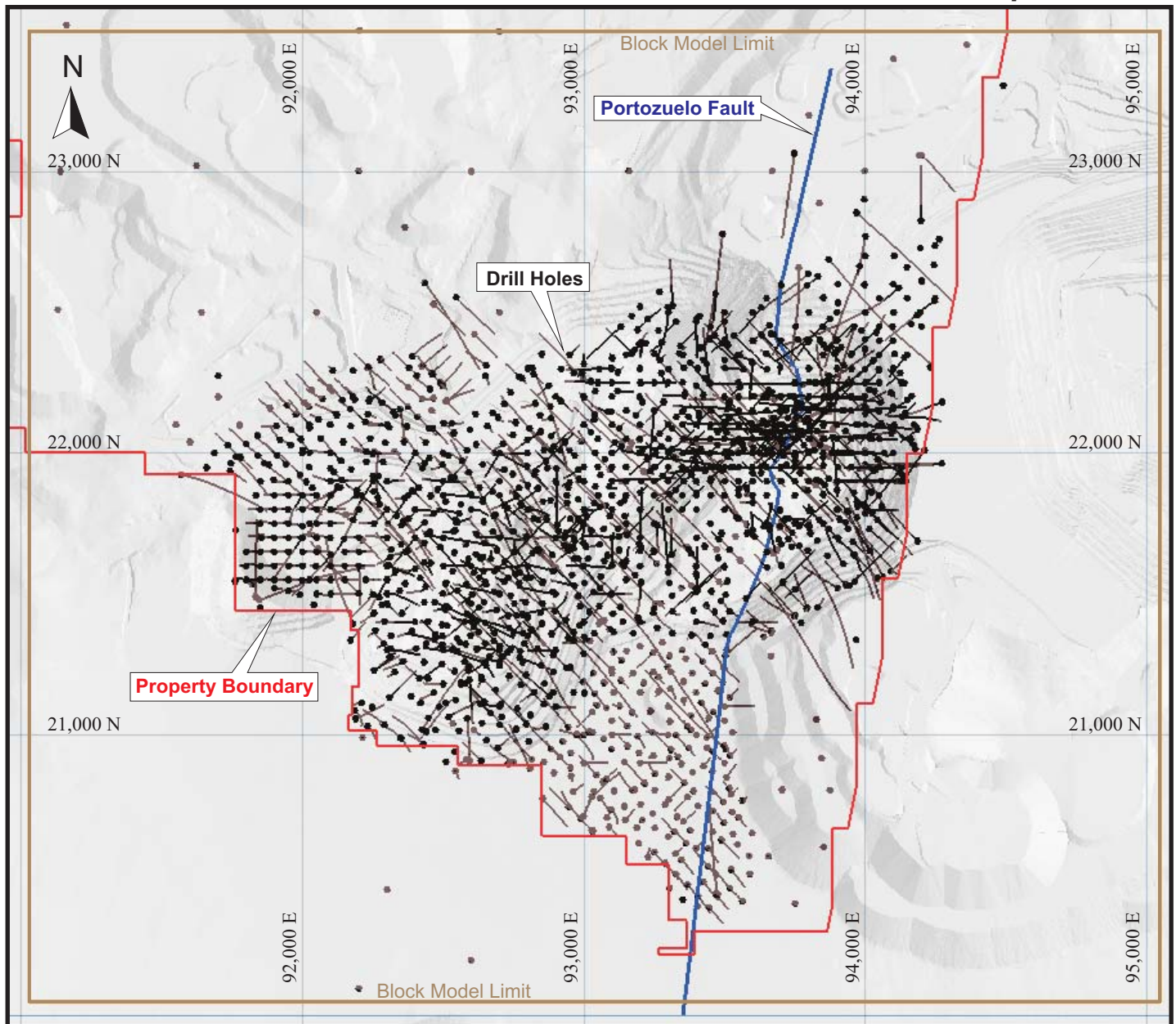
All drill collars were surveyed by mine survey staff and located relative to the mine grid. Drill holes were downhole surveyed using mostly a Sperry Sun instrument at an average interval of 30 m and more recently gyroscopic downhole surveys have been done by Wellfield Services Ltda. (WS) and Perfochile Ltda. personnel. WS has also scanned holes for detailed structural analyses using a process called “Televisor Acustico de Pozos” and this procedure also generates a second set of downhole survey readings that can be used to confirm the accuracy of the gyroscopic data.

TABLE 10-1 DRILLING SUMMARY
Barrick Gold Corporation – Zaldívar Mine

Description	Year	No. Holes	RC (m)	DDH (m)	Total (m)
1. Exploration Holes					
Utah	1981-1989	60	10,986.0	9,090.0	20,076.0
Cascada	1989	41	15,873.0		15,873.0
Outokumpu	1990-1992	308	32,814.0	42,479.0	75,293.0
Outokumpu /Placer Dome	1992	12	952.0	1,805.0	2,757.000
Placer Dome	1992-1993	80	8,910.0	5,736.0	14,646.0
Total Exploration Holes		501	69,535.0	59,110.0	128,645.0
2. Condemnation Holes					
Zaldívar/Escondida	1993-1993	35	4,624.0		4,624.0
Zaldívar	1995	5	1,556.0		1,556.0
Total Condemnation Holes		40	6,180.0		6,180
3.-CMZ Holes (Secondary Exploration/Production)					
Minera Zaldívar	1994-1998	243	37,777.0	4,463.0	42,240.0
Geotechnical Drilling	1998	9		2,224.7	2,224.7
Zaldívar Total Life Drilling	1999	151	21,690.0	6,485.7	28,175.7
Zaldívar Total Life Drilling	2000	247	41,558.0	20,045.0	61,603.0
Infill Drilling	2001	31	2,942.0		2,942.0
Infill Drilling	2003	22	2,600.0		2,600.0
Geotechnical Drilling	2003	9		1,920.0	1,920.0
Infill Drilling	2005	24	4,613.0		4,613.0
Infill Drilling	2006	24	5,756.0		5,756.0
Geotechnical Drilling	2006	15		4,595.7	4,595.7
Primary Drilling	2006	15	3,684.0		3,684.0
Primary Drilling	2006	3		1,401.7	1,401.7
Infill Drilling	2007	67	15,151.0		15,151.0
Primary Drilling	2007	2	600.0		600.0
Primary Drilling	2007	59		42,995.7	42,995.7
Geotechnical Drilling	2007	10		2,658.2	2,658.2
Geotechnical Drilling	2008	24		14,936.9	14,936.9
Hydrogeological	2008	6		3,615.0	3,615.0
Hydrogeological	2008	2	440.0		440.0
Infill Drilling	2008	70	17,172.0		17,172.0
Primary Drilling	2008	41		22,621.4	22,621.4
Primary Drilling (Metallurgical)	2008	2		612.9	612.9
Hydrogeological	2009	15	3,213.0		3,213.0
Infill Drilling	2009	37	11,000.0		11,000.0
Infill Drilling	2010	75	22,258.0		22,258.0
Hydrogeological	2010	13	2,954.0		2,954.0
Infill Drilling	2010	54	12,184.0		12,184.0
Infill Drilling	2011	13	3,530.0		3,530.0
Total		1,283	209,122.0	128,575.7	337,697.7
Grand Total (December 2011)		1,824	284,837.0	187,685.7	472,522.7

The holes have been logged properly and more recently (2007/2008) the mine has started logging directly into hand-held computers using PC Explorer software for the RC holes and GVMapper for the DDHs. The data captured includes lithology, type and degree of alteration, style and mineralogy of oxide and sulphide mineralization, structural observations, and style and frequency of fractures and veins. The blasthole chips are also logged.

A significant amount of core was relogged to update and standardize the lithology, alteration, and mineralization codes in the earlier drill holes. It is RPA's opinion that the CMZ drilling and logging procedures are of high quality and they exceed standard industry practices. The drill hole locations are shown in Figure 10-1.



0 200 400 600 800 1000
Metres

Figure 10-1

Barrick Gold Corporation

Zaldívar Mine
Region II, Northern Chile
Drill Plan

March 2012

11 SAMPLE PREPARATION, ANALYSES AND SECURITY

SAMPLING METHOD AND APPROACH

Core is sampled on one and two metre intervals and RC material is sampled on two metre intervals. Core samples are split, with half being submitted for analyses and the remaining half preserved and stored at a secure facility on site. Holes are commonly sampled in their entirety. The samples are tagged and transported by the geological staff to the respective assay laboratory.

The blasthole samples are taken with a 10 cm diameter by 0.7 m long tube from six locations from the piles around each hole. The blasthole samples are approximately 20 kg to 25 kg. The drills have skirts to help prevent loss of fines during strong winds.

RPA is of the opinion that the core, RC, and blasthole sampling procedures at Zaldívar are reasonable.

SAMPLE PREPARATION, ANALYSES AND SECURITY

In the early phases of drilling (prior to pre-production), outside assay laboratories such as Geoanalitica Ltda. (Geoanalitica), CIMM, and CESMEC were routinely used. Since the commissioning of the mine site assay laboratory in 1994, all drill samples have been prepared on site. CMZ has a large, well-organized, clean, ISO 17025 certified mine laboratory.

In 1996 and 2000, Francis Pitard developed sampling and preparation procedures for RC and blasthole samples. At least 20 kg of material is dried, crushed to 100% passing 10 mesh, passed through a rotary splitter, and approximately 250 g is pulverized to 90% passing 170 mesh. All samples are weighed and the weights are monitored by the geology department. Regular sieve tests are carried out and the CMZ mine lab pulps regularly achieve better than 95% passing 170 mesh.

CMZ has provided Geoanalitica with the CMZ analytical protocols for sequential copper analyses. The samples are analyzed for total copper (TCu), acid soluble copper (ASCu),

and cyanide soluble copper (CNCu) at the Geoanalitica laboratory in Coquimbo, Chile. The detection limit is 0.01% for TCu, ASCu, and CNCu.

The drill core, field duplicates, and reject material is stored for one year at a very well organized and secure location on site. The 250 g pulps are placed in small plastic screw-top containers and stored forever in 45 gal drums.

RPA is of the opinion that the sample preparation, analytical protocols, and security measures are very good and exceed industry standard practice.

QUALITY ASSURANCE AND QUALITY CONTROL

CMZ has very good quality control (QC) and quality assurance (QA) procedures that include the regular insertion of in-house standards, blanks, field duplicates, reject duplicates, and pulp replicates. In addition, pulps are sent to external laboratories on a regular basis.

Geoanalitica is the primary laboratory for the DDH and RC samples and the CMZ laboratory is the primary laboratory for the blasthole samples. The CMZ laboratory is the secondary laboratory for the external DDH and RC pulp replicates and Geoanalitica is the secondary laboratory for the external blasthole pulp replicates. In March 2007, CMZ implemented the Barrick QA/QC procedures and they are well documented in Morales (2009).

The approximate insertion rates for blasthole, RC, and DDH samples are essentially the same and are summarized in Table 11-1.

TABLE 11-1 QC INSERTION RATES
Barrick Gold Corporation – Zaldívar Mine

Description	Approximate Insertion Rate
Standards	5%
Blanks	2%
Pulp Replicates	2%
Reject duplicates	2%
Field Duplicates	2%
Sieve Tests	5%
External pulp replicates (more blanks and standards sent as well)	5%

The actual insertion rates vary slightly by year and sample type. For example, the 2010 exploration drilling program insertion rates for standards (8%), blanks (4%), and external checks (6%) exceeded those in Table 11-1.

Barrick personnel use a number of control charts and graphs to closely monitor the QA/QC results and re-analyses are periodically requested. The insertion rates and results are well-documented and reveal no significant biases or precision problems.

RPA is of the opinion that the QA/QC procedures are very good and exceed standard industry practice. Reduction in the QC insertion rates, particularly for the blasthole samples, might be warranted.

12 DATA VERIFICATION

The blasthole and exploration drill hole data have been stored in acQuire™ databases since 2000 and 2005, respectively. Most interaction with the database is through the acQuire™ front-end “Geoscientific Information Management System” (GIMS), which facilitates data entry and export, validation, QA/QC, and reporting. A geological database administrator based at the mine site is responsible for maintaining the data integrity and structure and ensuring back-ups and stored procedures are run correctly.

The Zaldívar exploration database is regularly validated by mine staff using validation routines in acQuire™ and other mining software. Mine personnel also visually check the drill hole data on-screen on a regular basis. Zaldívar has a well-established routine of extensively checking and validating data through all stages of data collection and data import.

CMZ has formal signed data verification reports supporting data verification work completed on exploration drill hole data generated from 2007 to 2011 (Solis, 2011, Monroy, 2008 to 2010, Perez, 2008, and Morales, 2008). In general, approximately 10% of the assays, 100% of the collar coordinates, and 10% of the downhole survey data are checked annually and prior to each resource model update.

The amount of actual historical database verification work that was completed prior to 2007 is not well documented. In 2004 and 2006, PDI carried out Level 2 audits and identified no problems with the exploration drill hole database (Placer 2004 and 2006). In 2004, AMEC reviewed the data verification process and results and concluded that the assay and survey data was sufficiently free of error to be adequate for resource estimation (AMEC, 2004).

The ultimate validation of the reliability of the exploration drill hole database is provided by the very good reconciliation between the resource model and production.

RPA used a number of data validation queries in Access and Vulcan and did some visual checks and found essentially no database validation problems, which is remarkable considering the database size. RPA is of the opinion that the drill hole database is valid and acceptable for resource estimation.

13 MINERAL PROCESSING AND METALLURGICAL TESTING

METALLURGICAL TESTING

Actual process copper recoveries are determined based on head grade samples to the crushed ore leaching process against tailings grade values for the spent ore determined from drill sampling of the ore prior to rehandling to the dump and reconciled with copper recovered to leach solutions and ultimately to cathode production. Leach solutions and volumes are sampled on a continuous basis from the various sources of pregnant solution (dynamic pad, ROM pad, and permanent secondary leach pad).

Metallurgical testing by CMZ and the University of Utah has demonstrated that the highest grade minerals have lower recoveries. With total copper above 1.3%, copper recovery drops by approximately 8% to 16%. This is due to the higher grade ores having a larger percentage of encapsulated copper. Recovery is discussed further in Section 17.

14 MINERAL RESOURCE ESTIMATE

SUMMARY

Table 14-1 summarizes open pit Mineral Resources exclusive of Mineral Reserves as of December 31, 2011, based on a \$3.25/lb copper price. The 2011 year-end Measured and Indicated Mineral Resources total 124.8 million tonnes averaging 0.445% TCu and contain 1.22 billion pounds of copper. In addition, the 2011 year-end Inferred Mineral Resources total 37 million tonnes averaging 0.54% TCu and contain 0.44 billion pounds of copper. The resource model was prepared by Barrick Senior Resource Geologist Cristian Monroy under the supervision of Barrick Superintendent of Resource and Reserve Modelling Benjamin Sanfurgo.

TABLE 14-1 MINERAL RESOURCES – DECEMBER 31, 2011
Barrick Gold Corporation – Zaldívar Mine

Category	Tonnage (Mt)	Grade (% Cu)	Contained Metal (Mlb Cu)
Measured	71.3	0.432	679.5
Indicated	53.5	0.462	545.5
Total Measured and Indicated	124.8	0.445	1,225.0
Inferred	37	0.54	439

Notes:

1. CIM definitions were followed for Mineral Resources.
2. Mineral Resources are estimated based on a profit model using a copper price of US\$3.25 per pound and a CLP/USD exchange rate of 500.
3. Mineral Resources are exclusive of Mineral Reserves.
4. Numbers may not add due to rounding.

RPA reviewed the resource assumptions, input parameters, geological interpretation, and block modelling procedures and is of the opinion that the Mineral Resource estimate is appropriate for the style of mineralization and that the resource model is reasonable and acceptable to support the 2011 year end Mineral Resource and Mineral Reserve (MRMR) estimates.

RPA is not aware of any environmental, permitting, legal, title, taxation, socio-economic, marketing, political, or other issues that could materially affect the MRMR estimates.

GEOLOGICAL MODELS

The CMZ geology department has developed a very good understanding of the Zaldívar geology. Geological models were constructed to provide geologic control for grade estimation and to provide parameters for mine planning. Geology models for lithology, alteration, and mineralization were built using Leapfrog™ software. The main faults have also been modelled. Interpretations were made by mine geology personnel on 25 m and 50 m cross sections looking 045°. Lines and control points based on the exploration drill holes, blastholes, and pit mapping were used in Leapfrog to create 3D geological wireframes. The geological wireframes were reviewed by mine personnel and minor revisions were made locally.

Wireframes were built for the main lithology, alteration, and mineralization zones listed below and they were used to assign codes to the block model.

Lithology Codes

- 1 = Andesite (AND)
- 2 = Hydrothermal Breccia (BXX)
- 3 = Late Llamó Porphyry (LPT)
- 4 = Llamó Porphyry (LPY)
- 5 = Zaldívar Porphyry (ZPY)
- 6 = Magmatic Breccia (BXP)
- 7 = Granite (GGB)
- 8 = Gravel (SCG)
- 9 = Deep Andesite (ANDP)

Alteration Codes

- 1 = Argillic (ARG)
- 2 = Biotitic (BIO)
- 3 = Chloritic (CLO)
- 4 = Potassic (POT)
- 5 = Quartz-Sericite (QSE)
- 6 = Sericitic (SER)
- 7 = Silicic (SIL)
- 8 = Gravel (SCG)

Mineralization Codes

- 1 = Oxide (OX)
- 2 = Leached (LIX)
- 3 = Secondary Sulphide (SEE)
- 4 = Secondary-Primary Mixed Sulphide (MSP)
- 5 = Primary Sulphide (PRI)
- 8 = Gravel (SGG)

The lithology, alteration, and mineralization models are shown in Figures 14-1 to 14-3, respectively.

The mineralization interpretation is based on a number of ASCu/TCu and (ASCu+CNCu)/TCu thresholds such as:

Leached:	$\text{TCu} < 0.25\%$ and $\text{ASCu/TCu} > 0.35$
Oxide:	$\text{TCu} > 0.25\%$ and $\text{ASCu/TCu} > 0.35$
Sulphide:	$\text{ASCu/TCu} < 0.35$
Secondary Sulphide:	$(\text{ASCu} + \text{CNCu})/\text{TCu} > 0.5$
Mixed Sulphide:	$(\text{ASCu} + \text{CNCu})/\text{TCu} > 0.5$ and < 0.35
Primary Sulphide:	$(\text{ASCu} + \text{CNCu})/\text{TCu} < 0.35$

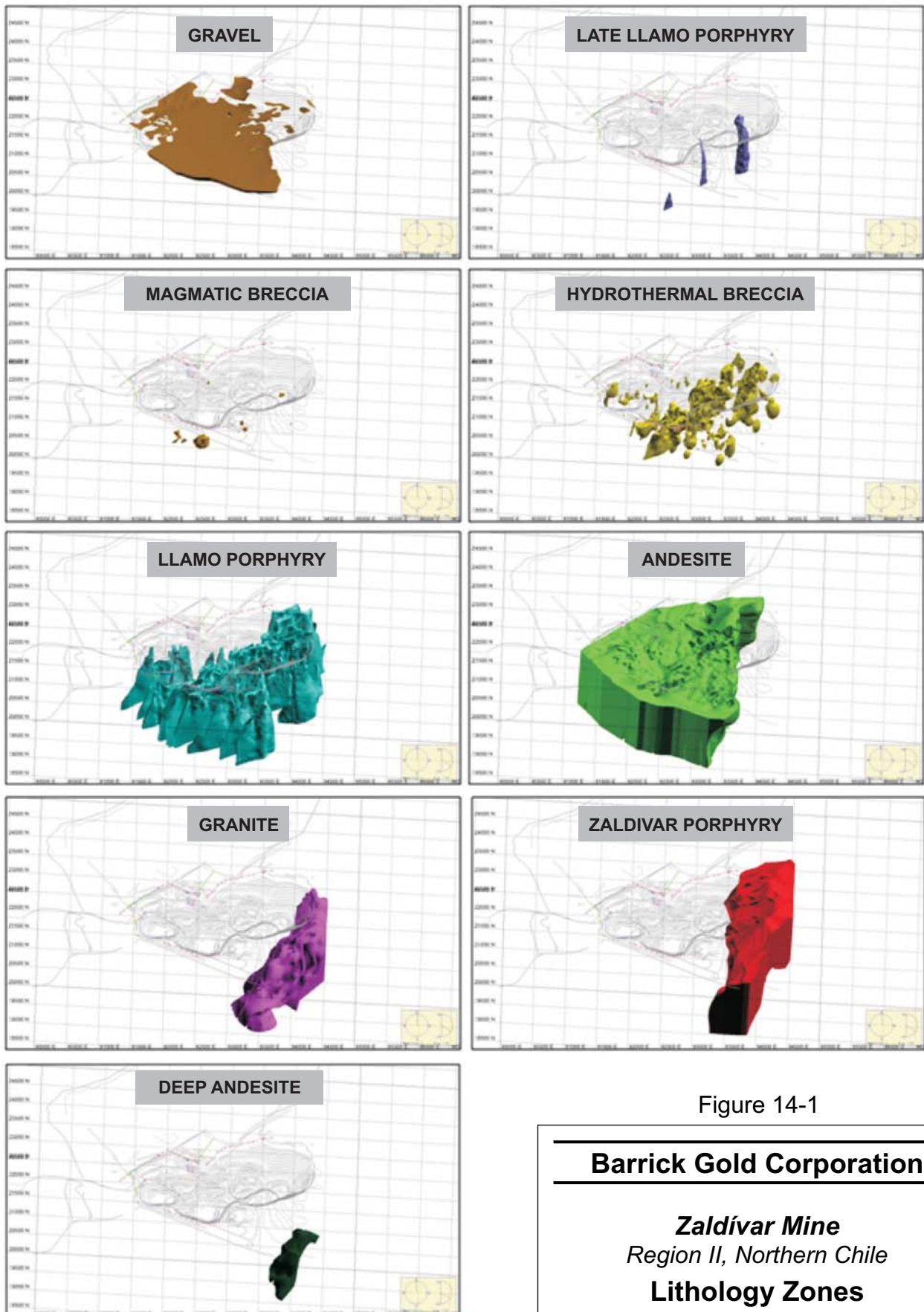


Figure 14-1

Barrick Gold Corporation

Zaldívar Mine
Region II, Northern Chile
Lithology Zones

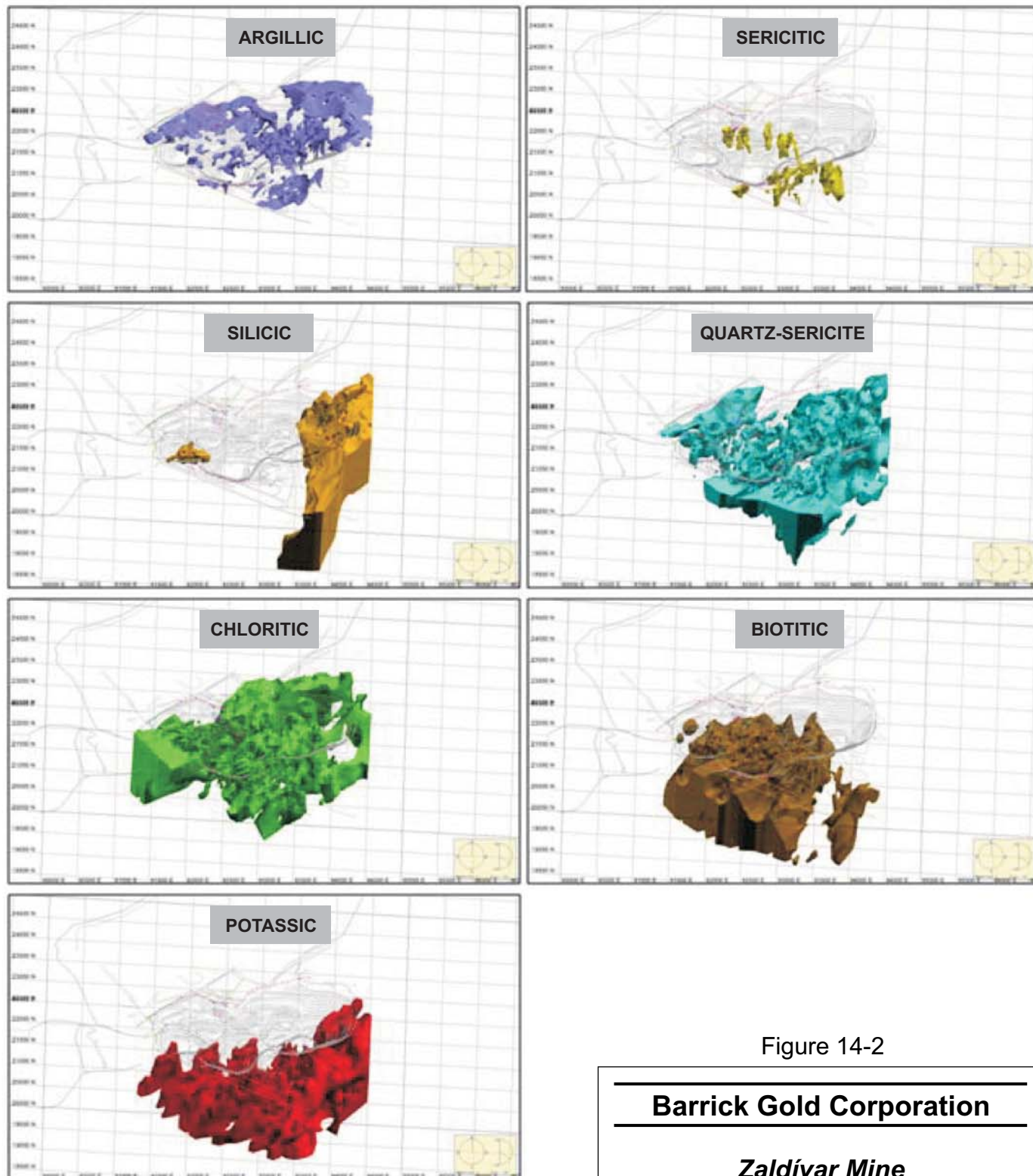


Figure 14-2

Barrick Gold Corporation

Zaldívar Mine
Region II, Northern Chile
Alteration Zones

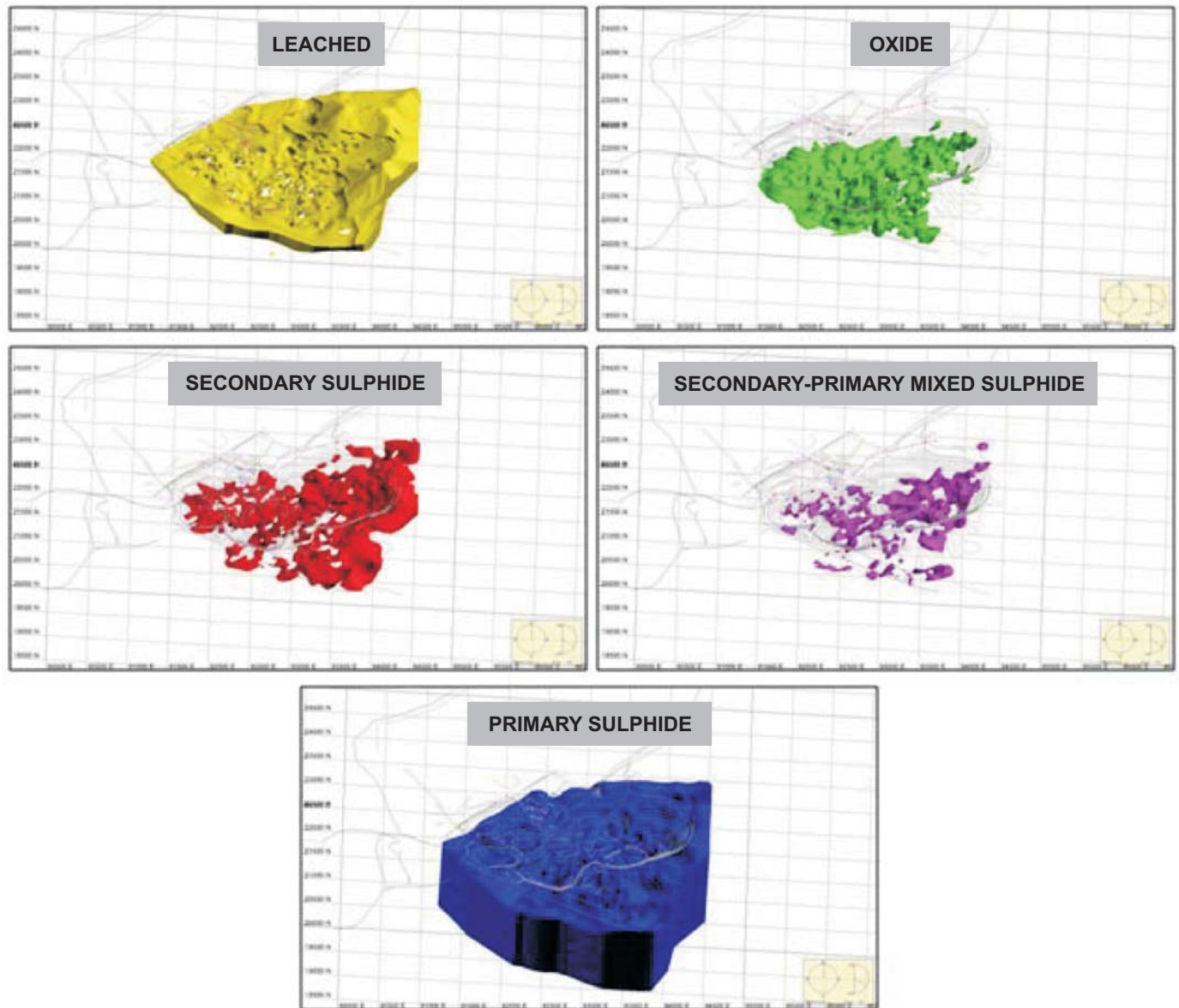


Figure 14-3

Barrick Gold Corporation

Zaldívar Mine
Region II, Northern Chile
Mineralization Zones

GEOLOGICAL DOMAINS

CMZ has defined 13 geological estimation domains (UGE). The alteration has been grouped into the more intense central alteration (QSE+POT) and weaker peripheral alteration (Arg-Bio-Clo-Si).

UGE1 and UGE2 represent barren gravel and barren post-mineralization late Llamo porphyry intrusions, respectively. UGE3 and UGE4 are the oxide mineralization split up by alteration intensity. Leached Domains UGE5 and UGE6 are subeconomic domains that were interpolated separately because the leached zone around the Zaldívar porphyry to the east averages only 0.06% TCu compared to the rocks to the west, which average 0.15% TCu. UGE7 to UGE9 are related to the secondary sulphide mineralization. UGE10 represents the mixed sulphide mineralization and UGE11 to UGE13 are used for the primary sulphide model. UGE2, UGE12, and UGE13 are volumetrically insignificant.

The estimation domains are summarized in Table 14-2. RPA has reviewed the geological reasoning and descriptive statistics for each UGE and is of the opinion that these geological domains are reasonable and acceptable.

TABLE 14-2 GEOLOGICAL ESTIMATION UGE CODES AND DESCRIPTIONS
Barrick Gold Corporation – Zaldívar Mine

UGE	Type	Description
1	Gravel	SCG
2	Late Llamo Porphyry	LPT
3	Oxide	(BIO + POT + SER)(AND-BXX-LPY) + AND(ARG) + BXP
4	Oxide	(QSE + SIL + CLO)(AND-BXX-LPY-ZPY) + ARG(BXX-LPY-ZPY)
5	Leached	AND + LPY + BXX + BXP
6	Leached	ZPY
7	Secondary Sulphide	(QSE + ARG)(BXX-LPY-ZPY) + SIL(BXX-LPY) + LPY(CLO-POT) + BXX(BIO-CLO-POT)
8	Secondary Sulphide	AND(QSE-SIL-CLO) + BXX(SER) + ZPY(CLO-POT-SIL)
9	Secondary Sulphide	BIO(AND-LPY-ZPY-BXP) + POT(AND-ZPY-BXP) + (ARG-SER)
10	Mixed Sulphide	MSP
11	Primary Sulphide	AND + ZPY + LPY + GGB + BXX
12	Primary Sulphide	BXP
13	Primary Sulphide	ANDP

DENSITY DATA

CMZ has compiled the density data by the main lithological units (Table 14-3). Most of the density tests are done on core samples using a paraffin immersion density approach. The results for over 2,000 density tests are available. CMZ has also estimated a separate set of tonnage factors for the primary sulphide rock types. RPA is of the opinion that the tonnage factors are reasonable and acceptable.

TABLE 14-3 TONNAGE FACTORS
Barrick Gold Corporation – Zaldívar Mine

Rock Type	Main Model (t/m ³)
Gravel Overburden (SCG)	2.101
Argillite (ARG)	2.451
Andesite (AND)	2.562
Breccias (BXX)	2.520
Llamo Porphyry (LPY)	2.490
Zaldívar Porphyry (ZPY)	2.523

CUT-OFF GRADES

Due to the complex processing strategy in use at Zaldívar where operating costs vary by process stream as well as ore types, multiple cut-off grade values are used. Separate resource and reserve cut-off grades, based on the resource and reserve copper prices, are used to report the resources and reserves. The cut-off grade is based on process cost, ore type, and recovery. All blocks that fail to meet the cut-off grade are classified as waste.

CAPPING OF HIGH GRADE VALUES

CMZ capped high TCu, ASCu, and CNCu assays prior to compositing based on examining log probability plots of the assays for the main types of mineralization, and inside the primary sulphide for each type of lithology. In general, the TCu assays are relatively insensitive to capping and the ASCu assays are moderately sensitive to capping. The decrease in metal due to capping is generally less than a few percent (Tables 14-4 and 14-5).

TABLE 14-4 TCU CAPPING LEVELS
Barrick Gold Corporation – Zaldívar Mine

Min Zone Raw Data Cut>0.01%			Total Copper Grade (%)								Total Copper Capp			
Description	Meters	% Meters	Mean	Std.dev	Min	1Q	Median	3Q	Max	CV	Capping	CV capped	GT lost	Percet
All zones	429320		0.417	0.799	0.002	0.100	0.230	0.430	45.800	1.92	15.00	1.83	0.3%	100.0%
CUO	95301	22.2%	0.655	0.994	0.003	0.250	0.400	0.701	45.800	1.52	12.00	1.41	0.6%	99.9%
LXX	100483	23.4%	0.157	0.272	0.004	0.030	0.100	0.210	15.800	1.73	1.50	1.17	3.5%	99.7%
SSE	72211	16.8%	0.887	1.317	0.005	0.260	0.500	1.040	42.200	1.48	15.00	1.39	0.6%	99.9%
MSP	19925	4.6%	0.362	0.337	0.010	0.190	0.280	0.427	10.250	0.93	2.00	0.79	1.6%	99.5%
PRI	114046	26.6%	0.242	0.258	0.002	0.110	0.200	0.310	27.700	1.07	1.50	0.79	1.3%	99.8%
GRAV	22691	5.3%	0.069	0.140	0.002	0.020	0.030	0.060	5.378	2.02	0.80	1.53	3.8%	99.6%
LPT	684	0.2%	0.120	0.229	0.005	0.010	0.020	0.080	1.850	1.91	0.50	1.40	12.0%	95.3%

From Monroy, 2011

TABLE 14-5 ASCU CAPPING LEVELS
Barrick Gold Corporation – Zaldívar Mine

Min Zone Raw Data CuS>0.001%			Soluble Copper Grade [%]								Soluble Copper Capp			
Description	Meters	% Meters	Mean	Std.dev	Min	1Q	Median	3Q	Max	CV	Capping	CV capped	GT lost	Perce
All zones	367381		0.155	0.427	0.001	0.010	0.040	0.130	15.240	2.75	7.00	2.60	0.7%	100.0%
CUO	89987	24.5%	0.439	0.724	0.001	0.100	0.220	0.490	15.240	1.65	7.00	1.54	0.9%	99.8%
LXX	68627	18.7%	0.082	0.228	0.001	0.010	0.030	0.080	15.200	2.79	1.50	1.77	5.2%	99.7%
SSE	66670	18.1%	0.132	0.296	0.002	0.040	0.080	0.140	13.300	2.24	3.50	1.85	2.0%	99.9%
MSP	17127	4.7%	0.040	0.064	0.005	0.016	0.030	0.040	3.750	1.61	0.40	1.12	2.6%	99.7%
PRI	105307	28.7%	0.019	0.030	0.001	0.005	0.010	0.020	1.600	1.60	0.30	1.26	1.6%	99.9%
GRAV	18116	4.9%	0.023	0.110	0.001	0.005	0.005	0.010	5.318	4.81	0.50	2.36	15.8%	99.4%
LPT	747	0.2%	0.012	0.034	0.005	0.005	0.005	0.010	0.570	2.83	0.10	1.05	16.0%	98.9%

From Monroy, 2011

CMZ also applied restricted search radii of 30 m to 45 m to passes 2 to 4 for oxide (UGE3 and 4) and secondary sulphide (UGE7 and 8) composites with grades above 3% TCu. In addition, a restricted search with 30 m radii was applied to passes 1 to 4 for the composites with ASCu grades above 1.5% in UGE3 and 3.0% in UGE4.

RPA concurs with the capping levels and restricted search conditions selected by CMZ. The production reconciliation results confirm that they are reasonable.

COMPOSITES

Drill hole sample data were composited into five metre lengths starting at the drill hole collars. Remnant composites shorter than three metres were discarded. Figure 14-4 shows the frequency distribution of the total copper grades in the five metre composites versus the raw sample data.

The histogram displays the percentage of data points in various classes of minimum copper grade for two datasets. The 'All 5m Composit' dataset (blue bars) shows a peak around 0.178, while the 'All raw Composit' dataset (yellow bars) shows a peak around 0.110. The 'All raw Composit' distribution is generally broader and shifted to the right, indicating higher minimum copper grades compared to the 'All 5m Composit' dataset.

Class Minimum Copper Grade (%)	All 5m Composit (%)	All raw Composit (%)
0.010	0.00	0.00
0.013	0.70	0.00
0.016	0.70	0.00
0.021	0.80	4.60
0.026	1.50	0.10
0.033	1.10	3.20
0.042	0.80	2.40
0.054	1.20	1.80
0.068	1.30	1.70
0.087	1.50	1.60
0.110	2.20	3.40
0.140	2.90	2.20
0.178	5.20	4.00
0.226	5.50	5.30
0.288	5.50	5.20
0.366	4.80	4.40
0.465	3.30	3.10
0.591	2.40	2.80
0.752	1.80	2.20
0.956	1.50	1.40
1.215	1.20	1.10
1.545	0.90	0.80
1.964	0.60	0.50
2.486	0.30	0.30
3.173	0.20	0.20
4.034	0.10	0.10
5.128	0.00	0.10
6.520	0.00	0.00
8.288	0.00	0.00
10.536	0.00	0.00
13.204	0.00	0.00

The composites with at least three metre lengths, which represent 99.5% of the whole sample data, were used for the estimate. A small number of composites with lengths less than three metres that were excluded are remnants located at mineralization contacts and hole bottoms.

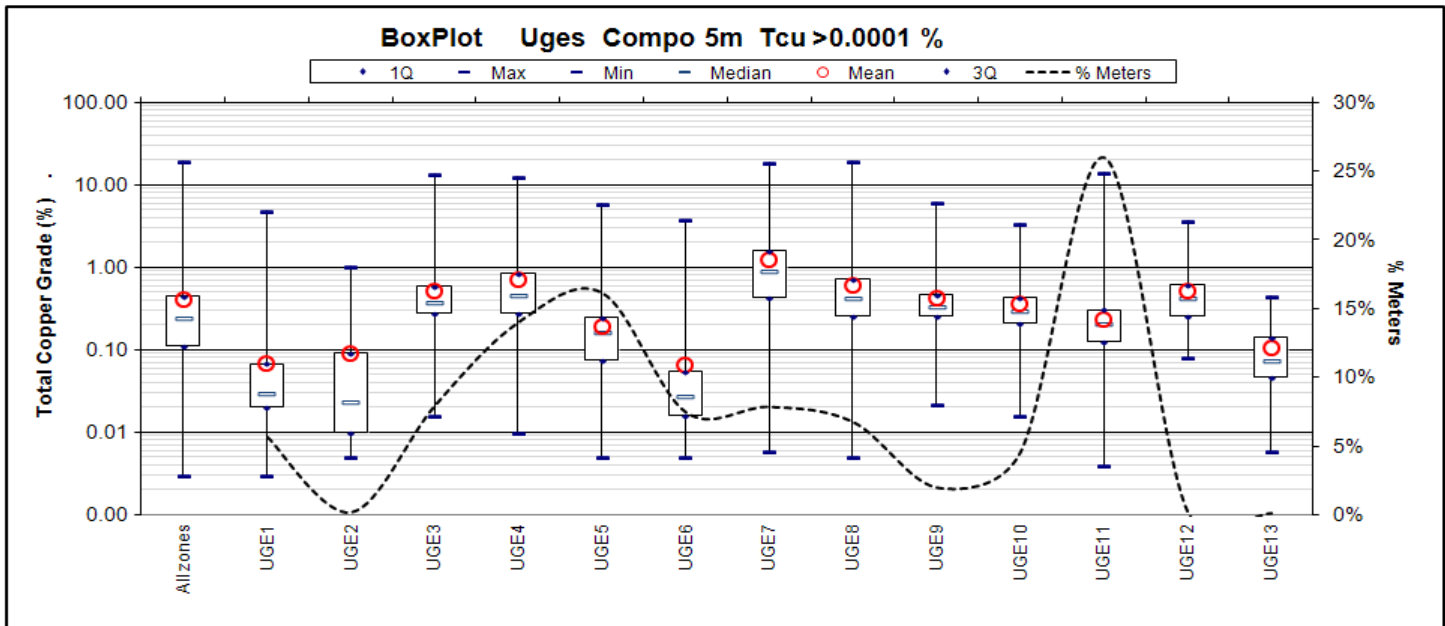
The composite statistics for each UGE are summarized in Table 14-6 and shown as boxplots in Figure 14-5. The relative abundance of composites in each domain is also summarized in Table 14-6. For example, 22% of the composites occur in oxide mineralization (UGE3 and UGE4) and 16.7% of the composites are in secondary sulphide mineralization (UGE7 to 9).

TABLE 14-6 TCU COMPOSITE STATISTICS BY GEOLOGICAL DOMAIN (UGE)
Barrick Gold Corporation – Zaldívar Mine

Domain	Code	Metres	%	Total Copper Grade (%)							
				Mean	Std Dev	Min	1Q	Median	3Q	Max	CV
All zones		435,414		0.412	0.662	0.003	0.110	0.244	0.442	19.350	1.61
UGE1	1	24,630	5.7%	0.070	0.140	0.003	0.020	0.030	0.068	4.861	2.00
UGE2	2	907	0.2%	0.093	0.158	0.005	0.010	0.024	0.092	1.034	1.70
UGE3	3	34,638	8.0%	0.520	0.493	0.016	0.278	0.387	0.594	13.706	0.95
UGE4	4	60,974	14.0%	0.731	0.881	0.010	0.280	0.464	0.838	12.308	1.21
UGE5	5	70,237	16.1%	0.195	0.211	0.005	0.074	0.163	0.250	5.826	1.08
UGE6	6	32,530	7.5%	0.067	0.176	0.005	0.016	0.028	0.054	3.728	2.60
UGE7	7	34,244	7.9%	1.248	1.335	0.006	0.428	0.898	1.565	18.702	1.07
UGE8	8	29,435	6.8%	0.601	0.736	0.005	0.252	0.425	0.714	19.350	1.23
UGE9	9	8,712	2.0%	0.423	0.345	0.022	0.254	0.336	0.465	6.216	0.82
UGE10	10	19,950	4.6%	0.362	0.268	0.016	0.210	0.298	0.426	3.372	0.74
UGE11	11	113,030	26.0%	0.239	0.205	0.004	0.126	0.206	0.306	13.986	0.86
UGE12	12	992	0.2%	0.529	0.485	0.082	0.256	0.424	0.622	3.712	0.92
UGE13	13	624	0.1%	0.105	0.084	0.006	0.046	0.074	0.142	0.442	0.80

From Monroy, 2011

FIGURE 14-5 BOXPLOT OF TCU COMPOSITES FOR EACH UGE



From Monroy, 2011

CONTACT PLOT ANALYSIS

Contact plots were generated for TCu, ASCu, and CNCu values to explore the relationship between the grade variable when moving from one geological domain (UGE) to another. The results showed that they were mostly hard boundaries.

The contact plots are constructed with Vulcan software. Vulcan searches for data with a given code (UGE) and then for data with another specified code (UGE) and groups the grades according to the distance between the two points. This allows for a graphical representation of the grade trends away from a “contact.” If average grades are reasonably similar near a boundary and then diverge as distance from the contact increases, then the particular boundary should probably not be used as a grade constraint (“soft”). If the averages are distinctly different across a boundary, then the boundary may be important in constraining the grade estimation (“hard”). Examples of contact plots are shown in Figures 14-6 and 14-7.

Hard boundaries were used for the box and first pass searches. For all UGEs except leached, weighted boundaries using 0.1 and 0.3 values in the composite length fields were used to simulate semi-hard and semi-soft contacts, respectively. These semi-hard and semi-soft boundaries were used for passes 2 to 5 and are shown in Figure 14-8. This weighted semi-soft approach was developed by Barrick to help reduce the estimated ASCu grades. The 0.1 and 0.3 values were selected after repeated comparisons with production reconciliation data. RPA concurs with this innovative approach.

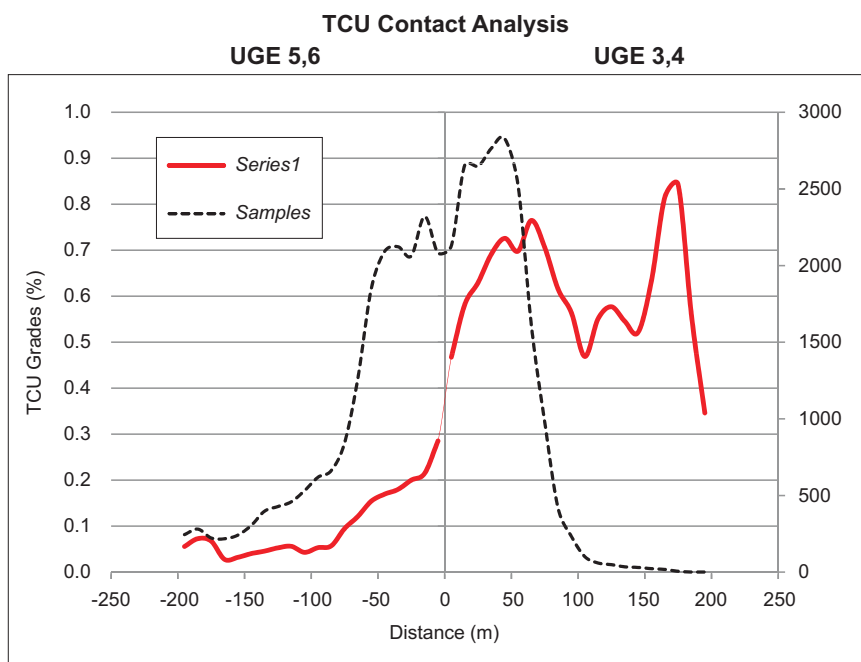


Figure 14-6: **Contact Plot Analysis of TCU for Leached and Oxide Domains**

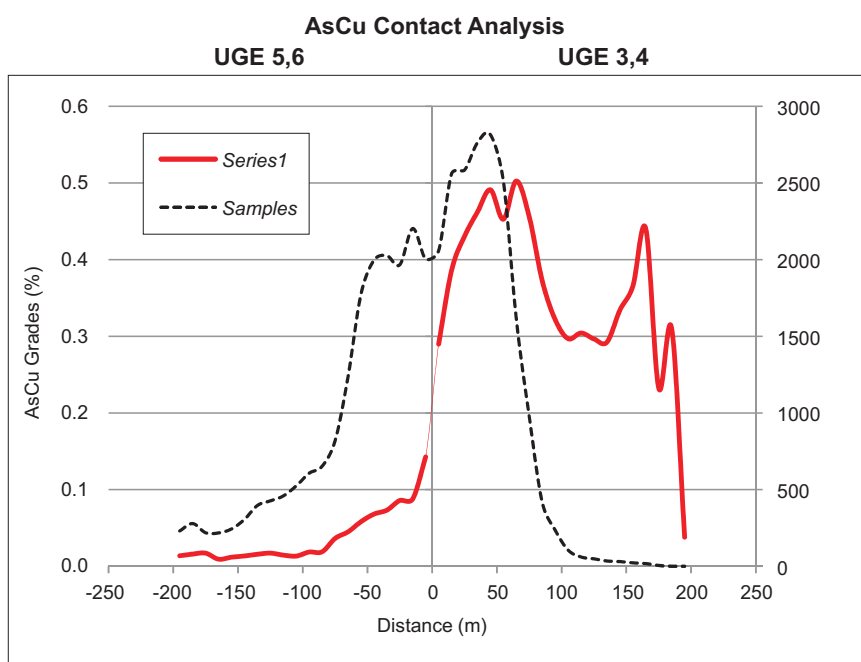


Figure 14-7: **Contact Plot Analysis of AsCu for Leached and Oxide Domains**

Barrick Gold Corporation

Zaldívar Mine
Region II, Northern Chile
Contact Plot Analysis

UGE - TCU	1	2	3	4	5	6	7	8	9	10
1	0	0								
2	0	0								
3	0	0								
4	0	0	0.3							
5	0	0	0.1	0.1						
6	0	0	0.1	0.1	0.1					
7	0	0	0.1	0.1	0.1	0.1				
8	0	0	0.1	0.1	0.1	0.1	0.1			
9	0	0	0.1	0.1	0.1	0.1	0.1	0.3		
10	0	0	0.1	0.1	0.3	0.3	0.1	0.1	0.3	
11	0	0	0.1	0.1	0.3	0.3	0.1	0.1	0.1	0.1
12	0	0	0.1	0.1	0.3	0.3	0.1	0.1	0.1	0.1
13	0	0	0.1	0.1	0.3	0.3	0.1	0.1	0.1	0.1

UGE - ASCU	1	2	3	4	5	6	7	8	9	10
1	0	0								
2	0	0								
3	0	0								
4	0	0	0.3							
5	0	0	0.1	0.1						
6	0	0	0.1	0.1	0.1					
7	0	0	0.1	0.1	0.1	0.1				
8	0	0	0.1	0.1	0.1	0.1	0.3			
9	0	0	0.1	0.1	0.3	0.3	0.1	0.3		
10	0	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	
11	0	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3
12	0	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3
13	0	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3

Figure 14-8

Barrick Gold Corporation

Zaldívar Mine

Region II, Northern Chile

**Semi-Soft and Semi-Hard
Boundary Weights**

VARIOGRAPHY

CMZ built a number of downhole, directional, and omni-directional correlograms using the composites for each geological domain. Triple nested spherical models were developed for each domain and the results are summarized in Table 14-7.

TABLE 14-7 %TCU VARIOGRAM PARAMETERS
Barrick Gold Corporation – Zaldívar Mine

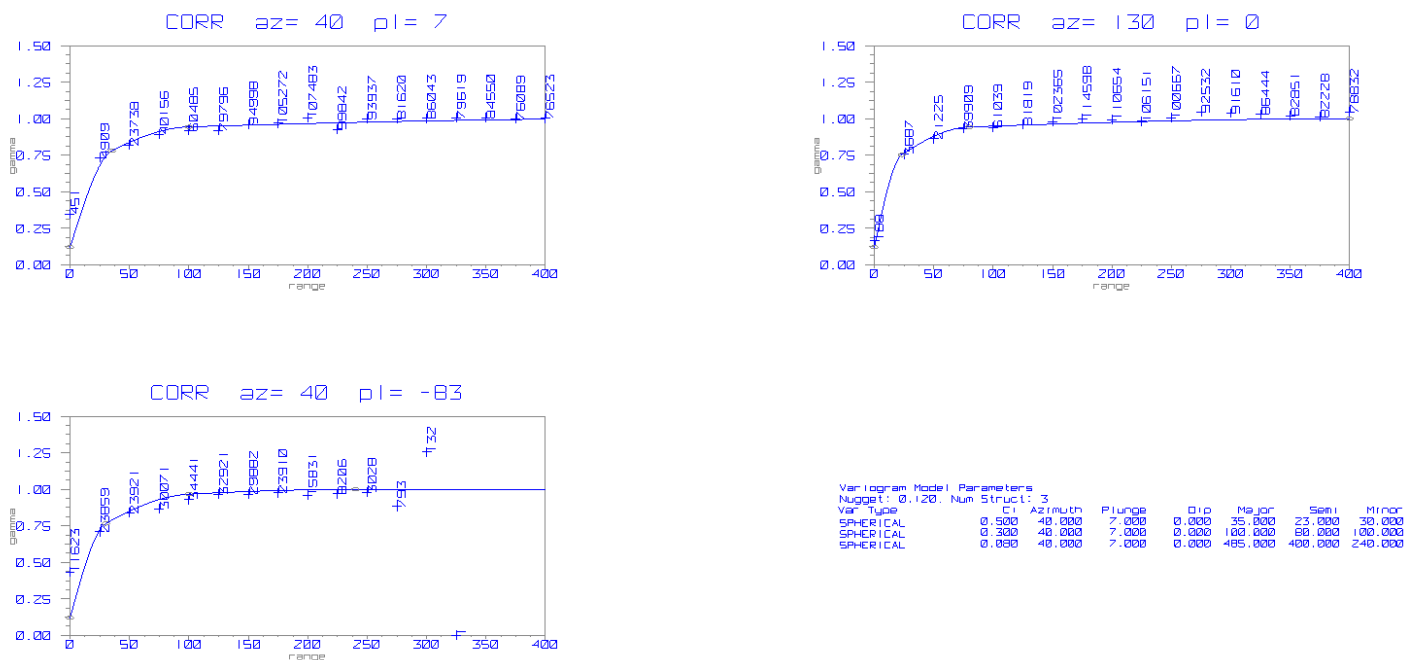
Estimation id	UGE	Var. Nugget	Model Type	Structure 1				Structure 2				Structure 3			
				Sill Differential	Major Axis	Semi-Major Axis	(Minor Axis	Sill Differential	Major Axis	Semi-Major Axis	Minor Axis	Sill Differential	Major Axis	Semi-Major Axis	Minor Axis
uge030	3	0.12	SPHERICAL	0.5	35	23	30	0.3	100	80	100	0.08	485	400	240
uge031	3	0.12	SPHERICAL	0.5	35	23	30	0.3	100	80	100	0.08	485	400	240
uge032	3	0.12	SPHERICAL	0.5	35	23	30	0.3	100	80	100	0.08	485	400	240
uge033	3	0.12	SPHERICAL	0.5	35	23	30	0.3	100	80	100	0.08	485	400	240
uge034	3	0.12	SPHERICAL	0.5	35	23	30	0.3	100	80	100	0.08	485	400	240
uge040	4	0.22	SPHERICAL	0.31	15	10	15	0.27	55	60	90	0.2	500	400	125
uge041	4	0.22	SPHERICAL	0.31	15	10	15	0.27	55	60	90	0.2	500	400	125
uge042	4	0.22	SPHERICAL	0.31	15	10	15	0.27	55	60	90	0.2	500	400	125
uge043	4	0.22	SPHERICAL	0.31	15	10	15	0.27	55	60	90	0.2	500	400	125
uge044	4	0.22	SPHERICAL	0.31	15	10	15	0.27	55	60	90	0.2	500	400	125
uge050	5	0.137	SPHERICAL	0.538	50	50	62	0.015	90	180	220	0.31	600	450	500
uge051	5	0.137	SPHERICAL	0.538	50	50	62	0.015	90	180	220	0.31	600	450	500
uge052	5	0.137	SPHERICAL	0.538	50	50	62	0.015	90	180	220	0.31	600	450	500
uge053	5	0.137	SPHERICAL	0.538	50	50	62	0.015	90	180	220	0.31	600	450	500
uge054	5	0.137	SPHERICAL	0.538	50	50	62	0.015	90	180	220	0.31	600	450	500
uge060	6	0.2	SPHERICAL	0.593	35	55	55	0.135	110	160	100	0.072	1400	300	230
uge061	6	0.2	SPHERICAL	0.593	35	55	55	0.135	110	160	100	0.072	1400	300	230
uge062	6	0.2	SPHERICAL	0.593	35	55	55	0.135	110	160	100	0.072	1400	300	230
uge063	6	0.2	SPHERICAL	0.593	35	55	55	0.135	110	160	100	0.072	1400	300	230
uge064	6	0.2	SPHERICAL	0.593	35	55	55	0.135	110	160	100	0.072	1400	300	230
uge070	7	0.12	SPHERICAL	0.48	20	25	35	0.4	125	135	125	0.01	600	450	276
uge071	7	0.12	SPHERICAL	0.48	20	25	35	0.4	125	135	125	0.01	600	450	276
uge072	7	0.12	SPHERICAL	0.48	20	25	35	0.4	125	135	125	0.01	600	450	276
uge073	7	0.12	SPHERICAL	0.48	20	25	35	0.4	125	135	125	0.01	600	450	276
uge074	7	0.12	SPHERICAL	0.48	20	25	35	0.4	125	135	125	0.01	600	450	276
uge080	8	0.15	SPHERICAL	0.4	31	50	35	0.33	80	90	55	0.12	620	250	80
uge081	8	0.15	SPHERICAL	0.4	31	50	35	0.33	80	90	55	0.12	620	250	80
uge082	8	0.15	SPHERICAL	0.4	31	50	35	0.33	80	90	55	0.12	620	250	80
uge083	8	0.15	SPHERICAL	0.4	31	50	35	0.33	80	90	55	0.12	620	250	80
uge084	8	0.15	SPHERICAL	0.4	31	50	35	0.33	80	90	55	0.12	620	250	80
uge090	9	0.16	SPHERICAL	0.15	40	120	40	0.6	130	250	100	0.09	180	400	120
uge091	9	0.16	SPHERICAL	0.15	40	120	40	0.6	130	250	100	0.09	180	400	120
uge092	9	0.16	SPHERICAL	0.15	40	120	40	0.6	130	250	100	0.09	180	400	120
uge093	9	0.16	SPHERICAL	0.15	40	120	40	0.6	130	250	100	0.09	180	400	120
uge094	9	0.16	SPHERICAL	0.15	40	120	40	0.6	130	250	100	0.09	180	400	120
uge100	10	0.138	SPHERICAL	0.35	32	25	40	0.348	70	75	110	0.164	180	160	350
uge101	10	0.138	SPHERICAL	0.35	32	25	40	0.348	70	75	110	0.164	180	160	350
uge102	10	0.138	SPHERICAL	0.35	32	25	40	0.348	70	75	110	0.164	180	160	350
uge103	10	0.138	SPHERICAL	0.35	32	25	40	0.348	70	75	110	0.164	180	160	350
uge104	10	0.138	SPHERICAL	0.35	32	25	40	0.348	70	75	110	0.164	180	160	350

From Monroy, 2011

The variography results were discussed with the CMZ geology personnel while at the site. The nugget effect was determined from downhole variograms. It was approximately 12% to 22% for the oxide domains (UGE3 and 4) and 12% to 16% for the secondary sulphide domains (UGE7 to 9).

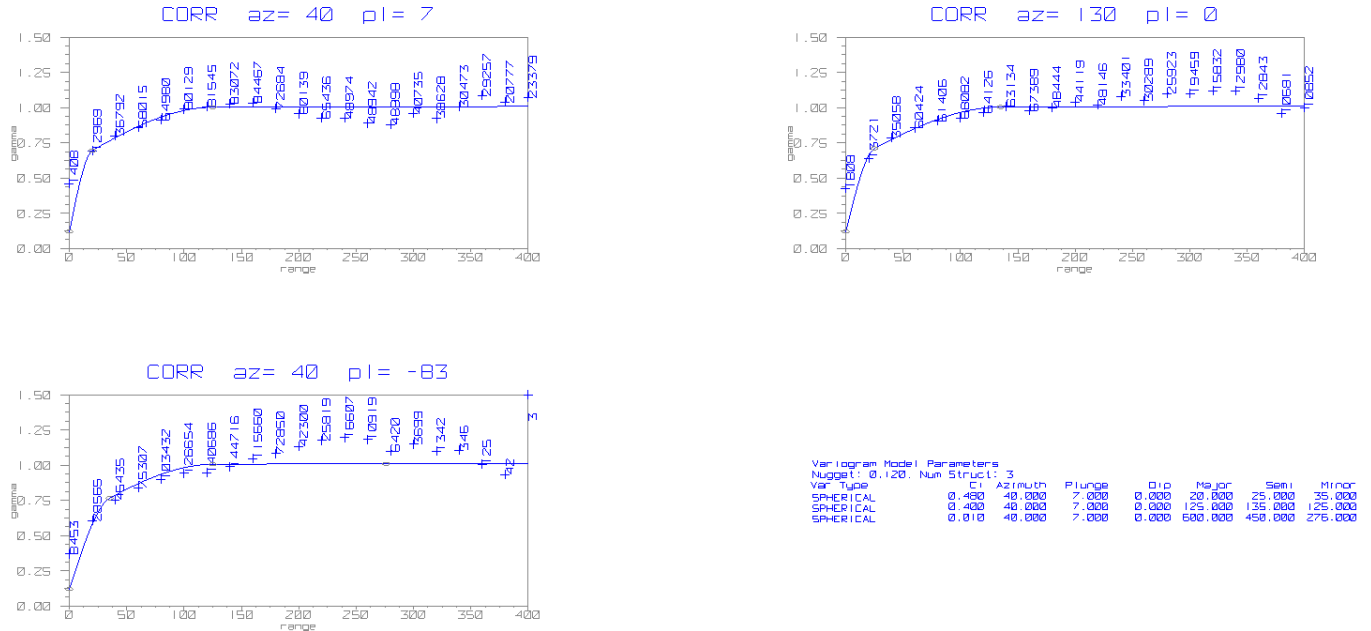
The directional variograms gave the ranges of continuity of the grades. The ranges are very long due to a slow rise from approximately 90% to 100% of the sill. Some examples of the modelled correlograms for the oxide and secondary sulphide composites are provided in Figures 14-9 and 14-10. RPA's opinion is that the CMZ geostatistical analysis is reasonable and acceptable.

FIGURE 14-9 TCU CORRELOGRAM MODELS FOR UGE 3



From Monroy, 2011

FIGURE 14-10 TCU CORRELOGRAM MODELS FOR UGE 7



From Monroy, 2011

RESOURCE ESTIMATION METHODOLOGY

The step by step resource estimation methodology is well described in Monroy (2011). The Vulcan C shell file (zald0511-1.csh) provides an excellent record of all the steps done in Vulcan to build the resource block model.

The Zaldívar mineral resource model extends from 91,030 m to 95,050 m East, 21,050 m to 23,500 m North, and 2,750 m to 3,710 m in elevation. The 5 m high by 15 m by 15 m block model is populated with the lithology, alteration, and mineralization codes and a separate script is run to assign the geological domain codes.

The capped assays were composited into five metre lengths. Remnant composites shorter than three metres were discarded. Composites for TCU, ASCu, and CNCu were created. The composite lithology, alteration, mineralization, and geological domain codes are back-flagged from the block model.

CMZ used multiple pass ordinary kriging (OK) to interpolate TCU and ASCu grades for all domains except UGE 1 and 2. The OK parameters were developed from directional

variograms for each UGE. The search ellipsoids are generally sub-horizontal pancakes oriented at 040° to 050° with a small plunge (0° to 7°) to the northeast. The search radii vary for each UGE. The longest radii are 500 m by 500 m by 400 m for UGE5 (leached) and the shortest pass radii are 40 m by 30 m by 35 m for UGE3 (oxide). UGE1 and 2 are barren domains and the blocks are directly assigned zero grades.

There are typically five OK passes used for each domain in addition to the general box pass, which is always run first and is based on 7.5 m by 7.5 m by 2.5 m radii and a minimum of one sample and a maximum of three samples from a drill hole.

The first passes use a minimum of four composites and a maximum of eighteen composites, with a maximum of three composites per hole. The first pass radii are the distance defined by 80% of the omni-directional sill. The second and third passes use a minimum of four composites and a maximum of eighteen composites with a maximum of three composites per hole. They also use an octant based search with a minimum of two samples per octant and a maximum of three samples per octant, and a minimum of two octants with samples. The second pass radii are the distance defined by 90% of the omni-directional sill. The third pass radii are longer than the second pass radii. The fourth and fifth passes are the same as the second and third passes except that the minimum number of composites is reduced to two so that only one hole is needed. The multi-pass interpolation parameters are summarized in Table 14-8.

TABLE 14-8 %TCU ESTIMATION SEARCH ELLIPSE PARAMETERS
Barrick Gold Corporation – Zaldívar Mine

Estimation id	UGE	Estimation Type	Bearing (Z)	Plunge (Y)	Dip (X)	Major Axis	Semi-Major Axis	Minor Axis	Min Samples per Est	Max Samples per Est	Use Octant Based Search	Max Samples per Octant	Min Octants With Samples	Min Samples per Octant	Maximun Sample per Drill Hole
box		ID 2	0	0	0	7.5	7.5	2.5	1	99					3
uge011	1	ID 2	50	0	0	65	65	40	2	3					1
uge012	1	ID 2	50	0	0	130	130	65	2	3					1
uge013	1	ID 2	50	0	0	520	520	65	2	3					1
uge030	3	OK	40	7	0	40	30	35	4	18					3
uge031	3	OK	40	7	0	70	55	65	4	18	1	3	2	2	3
uge032	3	OK	40	7	0	180	120	120	4	18	1	3	2	2	3
uge033	3	OK	40	7	0	70	55	65	2	18					3
uge034	3	OK	40	7	0	180	120	120	2	18					3
uge040	4	OK	50	7	0	40	40	40	4	18					3
uge041	4	OK	50	7	0	100	80	60	4	18	1	3	2	2	3
uge042	4	OK	50	7	0	400	320	120	4	18	1	3	2	2	3
uge043	4	OK	50	7	0	100	80	60	2	18					3
uge044	4	OK	50	7	0	400	320	120	2	18					3
uge050	5	OK	50	7	0	150	110	120	4	18					3
uge051	5	OK	50	7	0	290	220	250	4	18	1	3	2	2	3
uge052	5	OK	50	7	0	500	400	400	4	18	1	3	2	2	3
uge053	5	OK	50	7	0	290	220	250	2	18					3
uge054	5	OK	50	7	0	500	400	400	2	18					3
uge060	6	OK	50	7	0	30	40	40	4	18					3
uge061	6	OK	50	7	0	65	80	65	4	18	1	3	2	2	3
uge062	6	OK	50	7	0	500	250	230	4	18	1	3	2	2	3
uge063	6	OK	50	7	0	65	80	65	2	18					3
uge064	6	OK	50	7	0	500	250	230	2	18					3
uge070	7	OK	40	7	0	40	45	45	4	18					3
uge071	7	OK	40	7	0	75	80	75	4	18	1	3	2	2	3
uge072	7	OK	40	7	0	120	140	120	4	18	1	3	2	2	3
uge073	7	OK	40	7	0	75	80	75	2	18					3
uge074	7	OK	40	7	0	120	140	120	2	18					3
uge080	8	OK	40	7	0	40	45	25	4	18	1	3	2	2	3
uge081	8	OK	40	7	0	90	75	35	4	18	1	3	2	2	3
uge082	8	OK	40	7	0	300	230	80	4	18					3
uge083	8	OK	40	7	0	90	75	35	2	18					3
uge084	8	OK	40	7	0	300	230	80	2	18					3
uge090	9	OK	40	7	0	70	130	55	4	18					3
uge091	9	OK	40	7	0	90	180	70	4	18	1	3	2	2	3
uge092	9	OK	40	7	0	150	300	100	4	18	1	3	2	2	3
uge093	9	OK	40	7	0	90	180	70	2	18					3
uge094	9	OK	40	7	0	150	300	100	2	18					3
uge100	10	OK	40	7	0	40	40	65	4	18					3
uge101	10	OK	40	7	0	60	60	100	4	18	1	3	2	2	3
uge102	10	OK	40	7	0	180	160	300	4	18	1	3	2	2	3
uge103	10	OK	40	7	0	60	60	100	2	18					3
uge104	10	OK	40	7	0	180	160	300	2	18					3

The five metre high blocks were introduced in 2007 to better preserve the mineralization interpretation contacts. The 5 m high blocks are reblocked into the final resource model, which has 15 m high blocks. The reblocked grades are assigned based on volume weighting the original block grades and the geology and other codes are assigned based on majority rules. Over time and by using production reconciliation data, CMZ has developed a sophisticated multi-pass interpolation process that works well. RPA is of

the opinion that the CMZ resource estimation methodology is reasonable and acceptable.

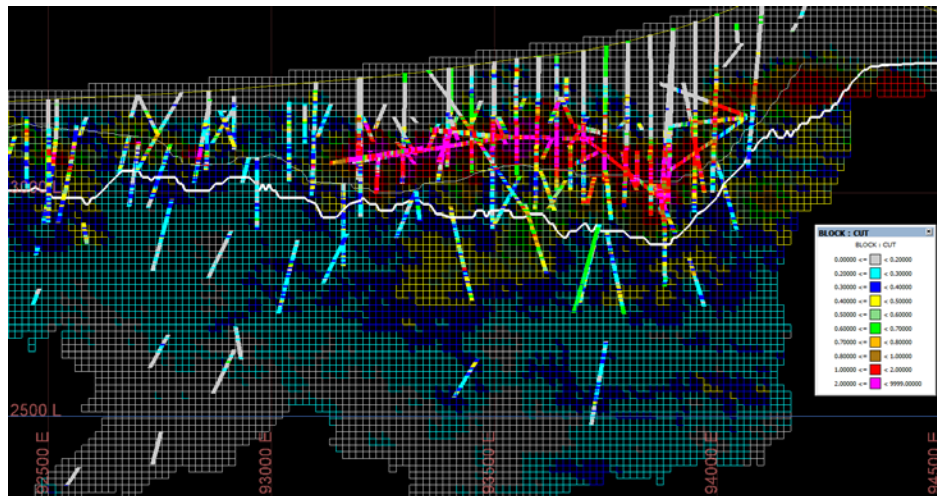
RESOURCE ESTIMATE VALIDATION

CMZ has validated the resource block model using six separate validation procedures. The results are provided in Monroy (2011) and the reconciliation and swath plot results are included below.

1. Visual inspection of block and composite values on sections and plans
2. Reconciliation with the ore control model
3. Tonnage-grade curve comparisons with blasthole data
4. Ordinary kriging versus nearest neighbor (NN) swath plots
5. Comparison between 2010 and 2011 estimates

CMZ and RPA visually compared the composite and block grades on plans and sections and found that they correlate very well spatially (Figure 14-11).

FIGURE 14-11 TCu BLOCKS AND ASSAYS - SECTION 22,000N



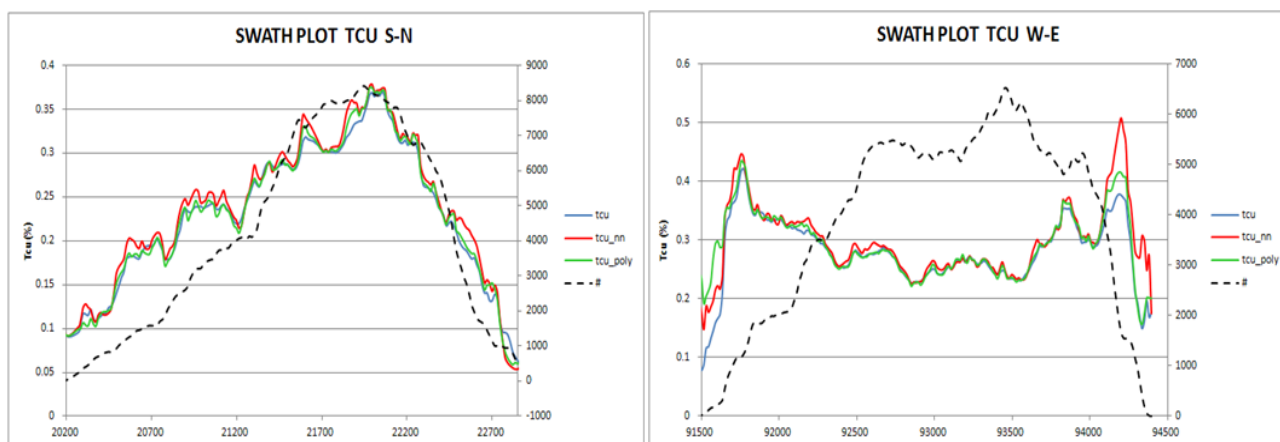
The official reconciliation data for 2011 indicates that the resource model underestimates the tonnage by 5%, estimates essentially the same total copper and acid soluble grades, and underestimates the contained copper by 5% compared to the ore control model (Table 14-9)

TABLE 14-9 2011 RECONCILIATION RESULTS
Barrick Gold Corporation – Zaldívar Mine

Month	Grade Control					2011 Resource Model				
	Tonnes	TCu (%)	K-TCu (Lbs)	ASCu (%)	K-ASCu (Lbs)	Tonnes	TCu (%)	K-TCu (Lbs)	ASCu (%)	K-ASCu (Lb)
Jan	2,407,557	0.645	34,235	0.320	16,985	2,380,630	0.617	32,367	0.308	16,178
Feb	2,840,299	0.557	34,902	0.268	16,792	2,522,104	0.559	31,088	0.289	16,092
Mar	3,177,559	0.522	36,572	0.256	17,954	2,835,984	0.567	35,471	0.294	18,364
Apr	3,185,183	0.520	36,528	0.268	18,830	2,764,089	0.532	32,427	0.258	15,720
May	2,953,598	0.450	29,286	0.292	18,997	2,320,660	0.515	26,348	0.363	18,572
Jun	2,251,120	0.415	20,591	0.252	12,506	1,906,706	0.473	19,883	0.289	12,148
Jul	2,057,023	0.548	24,848	0.378	17,122	2,152,624	0.504	23,906	0.342	16,234
Aug	1,901,062	0.525	22,011	0.354	14,816	2,313,399	0.493	25,130	0.339	17,280
Sep	2,947,332	0.575	37,345	0.395	25,674	3,412,730	0.475	35,743	0.311	23,436
Total	23,720,733	0.528	276,317	0.305	159,677	22,608,926	0.526	262,364	0.309	154,023

The NN and OK swath plots are very similar (Figure 14-12).

FIGURE 14-12 SWATH PLOTS



From Monroy, 2011

RESOURCE CLASSIFICATION

The classification criteria are based on distances from composites to block centroids and the number of holes. The distances have been customized for each geological domain based on omni-directional correlogram ranges at 80% and 90% of the sills. The

classification system is complex and could be simplified in the future. Figure 14-13 shows the omni-directional correlogram.

Measured Mineral Resources:

- Supported by composites from one hole during the 7.5 m by 7.5 m box search pass done first to all geological domains.
- Supported by composites from two holes situated within 45 m of a block centroid during the first pass with search radii set at 80% of the omni-directional sill for each geological domain.
- Supported by composites from two holes situated within 20 m of a block centroid during the second and third passes.

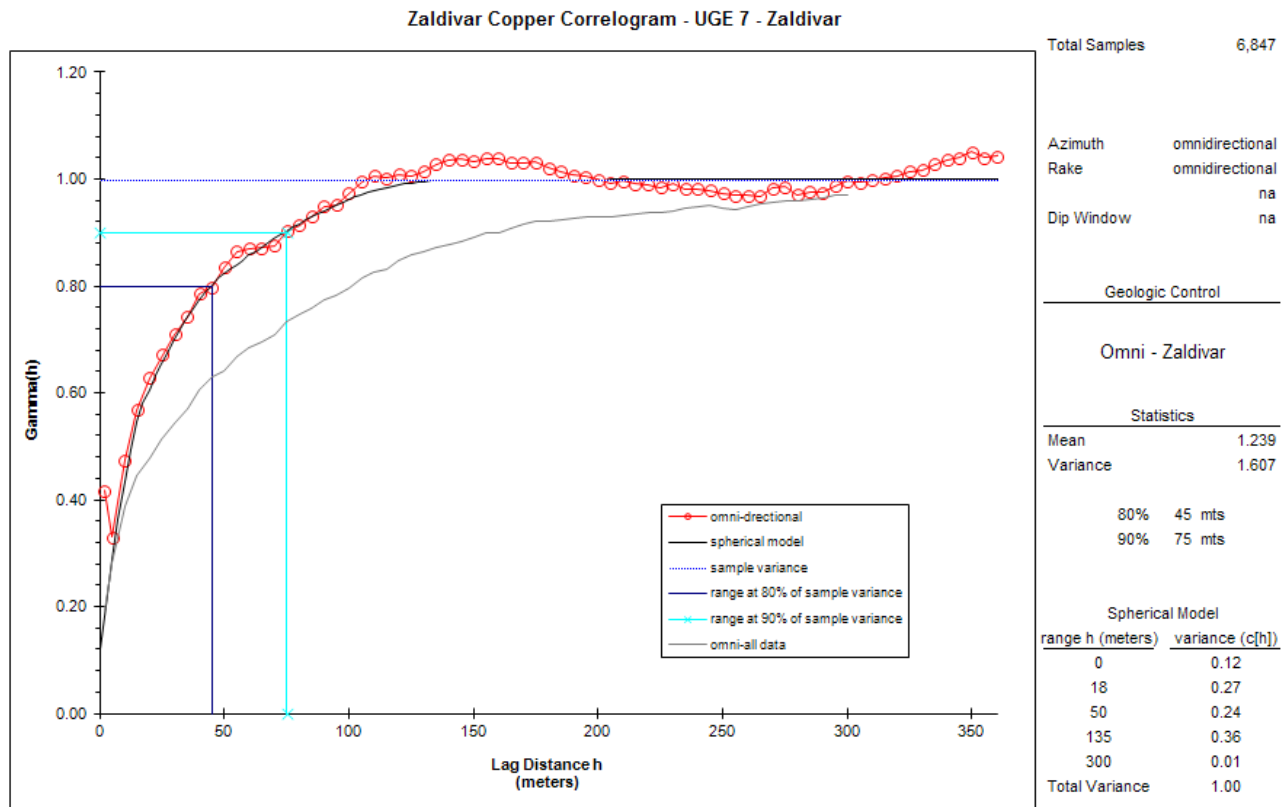
Indicated Mineral Resources:

- Supported by composites from two holes situated within 45 m for UGE 3, 6, 7, 8, and 10, and 50 m for UGE 4, 5, and 9, of a block centroid.
- Supported by composites from two holes situated within distances greater than 45 m and less than the search radii used during the first pass for UGE 5, 9, and 10.

Inferred Mineral Resources:

- Supported by composites from two holes situated within the distance defined by 90% of the omni-directional sill for each geological domain (75 m for UGE 3, 6, 7, 8, and 10, and 120 m for UGE 4, 5, and 9).
- Supported by composites from one hole situated within the distance defined by 80% of the omni-directional sill for each geological domain (45 m or 50 m depending on domain).

FIGURE 14-13 TCU CORRELOGRAM FOR UGE 7



CMZ also developed a classification clean-up script that helps convert the category of isolated blocks to that of the surrounding blocks. The script represents another innovative approach. In RPA's opinion, the classification results are reasonable and acceptable.

15 MINERAL RESERVE ESTIMATE

The resource estimates discussed in Section 14 were prepared using standard industry methods and appear to provide an acceptable representation of the deposit. RPA reviewed the reported resources, production schedules, and cash flow analysis to determine if the resources meet the CIM Definition Standards for Mineral Resources and Mineral Reserves, to be classified as reserves. Based on this review, it is RPA's assessment that the Measured and Indicated Mineral Resource within the final pit design at Zaldívar can be classified as Proven and Probable Mineral Reserves.

The open pit reserves are estimated to be 578 million tonnes at 0.518% Cu, containing 6,602 million pounds of copper and are classified as Proven and Probable Reserves as presented in Table 15-1.

TABLE 15-1 MINERAL RESERVES – DECEMBER 31, 2011
Barrick Gold Corporation – Zaldívar Mine

Category	Process	Tonnage (Mt)	Cu (%)	Contained Metal (Mlb Cu).
Proven	Heap Leach	245.0	0.616	3,328.0
	Dump Leach	75.4	0.263	436.8
	Stockpile	65.8	0.504	731.6
Proven	Subtotal	386.3	0.528	4,496.5
Probable	Heap Leach	151.6	0.558	1,865.1
	Dump Leach	40.1	0.272	240.4
Probable	Subtotal	191.7	0.498	2,105.5
Proven & Probable	Total	578.0	0.518	6,602.0

Notes:

1. CIM definitions were followed for Mineral Reserves.
2. Mineral Reserves are estimated at a variable cut-off grade based on process cost, recovery and profit.
3. Mineral Reserves are estimated using an average long-term copper price of US\$2.75 per pound and a CLP/USD exchange rate of 500.
4. Numbers may not add due to rounding.

16 MINING METHODS

The Zaldívar Mine is a traditional open pit truck/shovel operation. The open pit has seven phases remaining (10b, 10c, 9a, 9b, 9c, 6, and 11). The ultimate pit will measure approximately 2.8 km east to west, 2.6 km north to south, and have a maximum depth of approximately 630 m. The phases and relationship to Escondida Norte are shown in Figure 16-1. There are three primary waste rock facilities (WRF): the Main WRF, located to the northwest, the North WRF, located to the northeast and adjacent to the Escondida Norte concession boundary, and the South WRF, located to the southeast and also adjacent to the Escondida Norte concession boundary. The heap leach facilities are located to the north of the open pit on a separate parcel of land with agreement from MEL (Figure 18-1). There is a small tailings storage facility (TSF) located to the north that handles tailings from the small flotation plant that processes fines from the primary heap leach crushing plant.

Processing is based on two heap leaching streams, one crushed and one ROM. Separation of the ore types is done by the mine department based on blasthole sample analysis. Primary processing is based on heap leaching a crushed material (80% passing 13 mm) utilizing a dynamic (on-off) heap leach facility. This facility utilizes a RAHCO Stacker for the placement of ore on the pad and a bucket wheel system for the unloading of the spent ore for transport by a conveyor to a spent ore storage facility. Additionally, marginal ores are processed through dump leaching at a ROM material size on a static pad. Pregnant solution from both leach pads is pumped to the SX/EW plant for metal extraction and production as copper cathodes. From the crushing circuit, 3% of the ore tonnage for the dynamic heap leach processing ends up in fines which are deposited in a sediment pond as a result of the washing system incorporated in the tertiary crushing system. These sediments are periodically processed through a small flotation plant and a copper concentrate is produced for sale.

The dynamic heap leach facility is based on a nominal 65,000 tpd operation (22 Mtpa). The ROM dump leach facility is based on the dynamic heap leach capacity and ore availability in the mine, and will average a nominal 15 Mtpa over the remaining mine life.

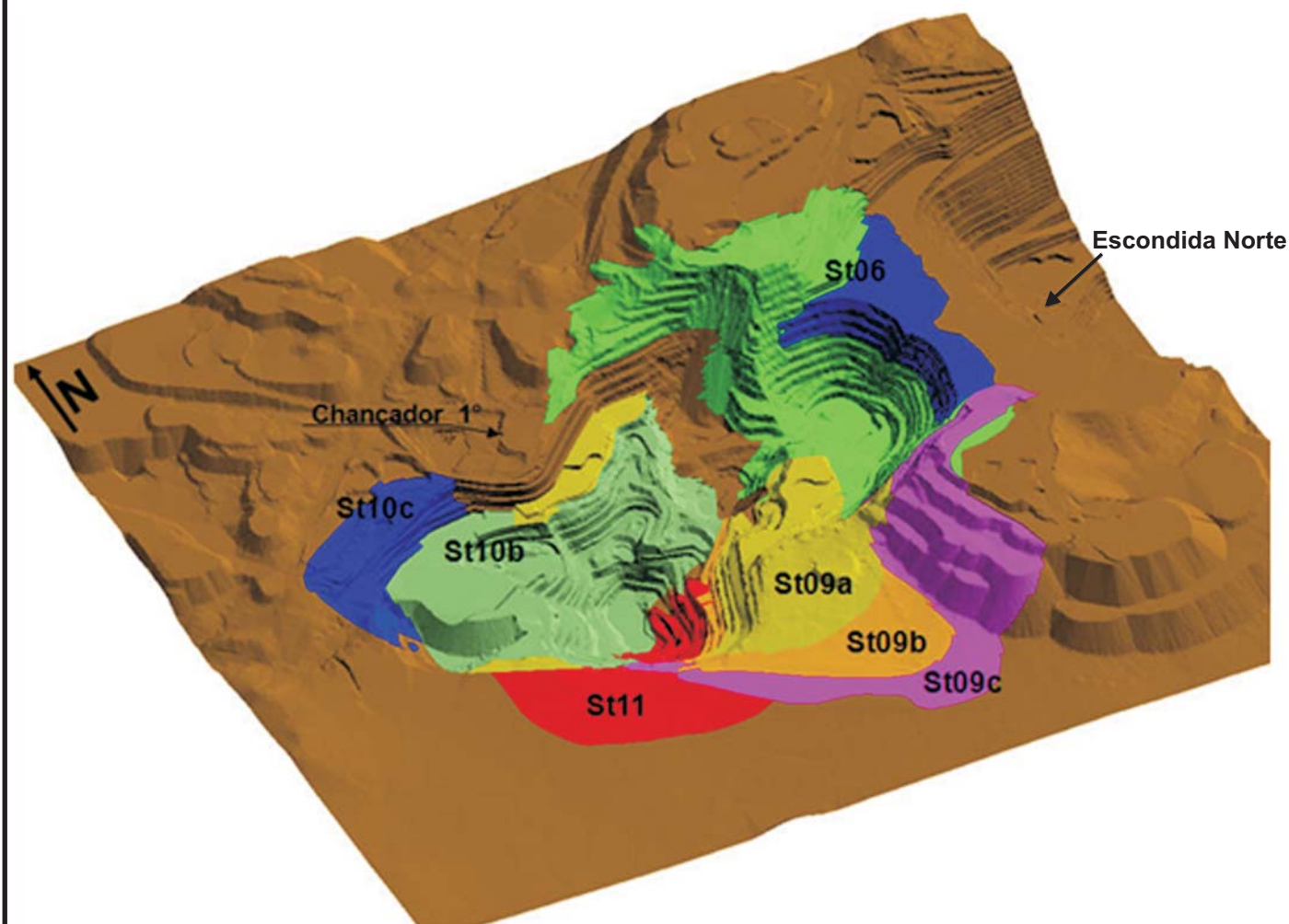


Figure 16-1

Barrick Gold Corporation

Zaldívar Mine
Region II, Northern Chile
Mine Phases

Mine production is 83 Mtpa including a nominal 46 Mtpa of waste. The current mine life is from 2012 to 2028, and the Mineral Reserves from Section 15 of this report are only based on mining and processing oxide and secondary sulphide ores. Metallurgical investigations are underway to evaluate further leaching of primary sulphide material and/or primary sulphide milling and flotation.

MINE DESIGN

The Life of Mine (LOM) is based on mining the remaining seven phases over a nominal 17-year mine life from 2012 to 2028. Mining will be with conventional open-pit mining equipment at a nominal 83 million tonnes per year over the first eleven years and then decreasing thereafter. Waste and ore are mined on 15 m benches.

The mine operations are typical truck/shovel open-pit operations. The current mining fleet is based on a fleet of thirty 218-tonne haul trucks increasing to thirty-four trucks by 2014. Loading operations are conducted using three 47 m³ electric shovels, and one 25 m³ wheel loader. RPA believes the mining equipment fleet is appropriate.

Mine models are developed using Maptek's Vulcan® software with the Lerchs-Grossmann (LG) pit optimization algorithm. The operational phase designs are completed using the same mine planning software. This software packages is well recognized and is commonly used for open-pit mine planning and design. Cut-off grades are based on ore type, process recovery, and acid consumption. Both a heap leach and dump leach cut-off grade are applied by rock type.

The pit optimization is based on a copper price of \$2.75 lb per pound and produces a single pit at a breakeven revenue factor for the last block mined. The optimized pit shell was smoothed for operability and ramps were added for the ultimate pit design (MY2011). The ultimate pit design had fewer ore tonnes (-4.7%) with a larger waste tonnage (+30.2%) after smoothing. These design changes allowed for ore losses under the primary crusher and isolated ore blocks, and allowed for smoother and flatter slopes for a safer pit design (CMZ, 2002). RPA believes the mine designs are appropriate.

Currently the ultimate pit crosses the east boundary of the Zaldívar property and falls on the Escondida Norte property. A layback agreement is currently in place with MEL where waste removal can be done, and if any ore grade material is intersected on the MEL side

of the property boundary, this would be stockpiled for MEL to process. Likewise, MEL can remove waste and stockpile ore grade material on the Zaldívar side of the property. RPA has not seen this agreement but believes that, as both parties have long-term plans to mine waste across the property boundary to access ore near the boundary, the agreement is in good standing.

Figure 16-2 shows the ultimate pit outline. The pit design is based on 15 m benches. Mine design parameters are presented in Table 16-1. Slopes vary based on location. Figure 16-3 shows the design sectors used for the final pit slope criteria discussed later in this section.

TABLE 16-1 MINE DESIGN PARAMETERS
Barrick Gold Corporation – Zaldívar Mine

Haul Road Width	30 m
Haul Road Grade	10%
Mining Bench Height	15 m
Minimum Mining Width	135 m
Interramp Slope Angles (vary by sector)	42°-52°
Slope Face Angles	75°

RPA reviewed the pit designs and is of the opinion that they follow good engineering practice. All phases are designed with sufficient operating width. All haul roads are designed at a 10% maximum grade. There is sufficient room between phases to allow for operating room, and roads and ramps have been delineated.

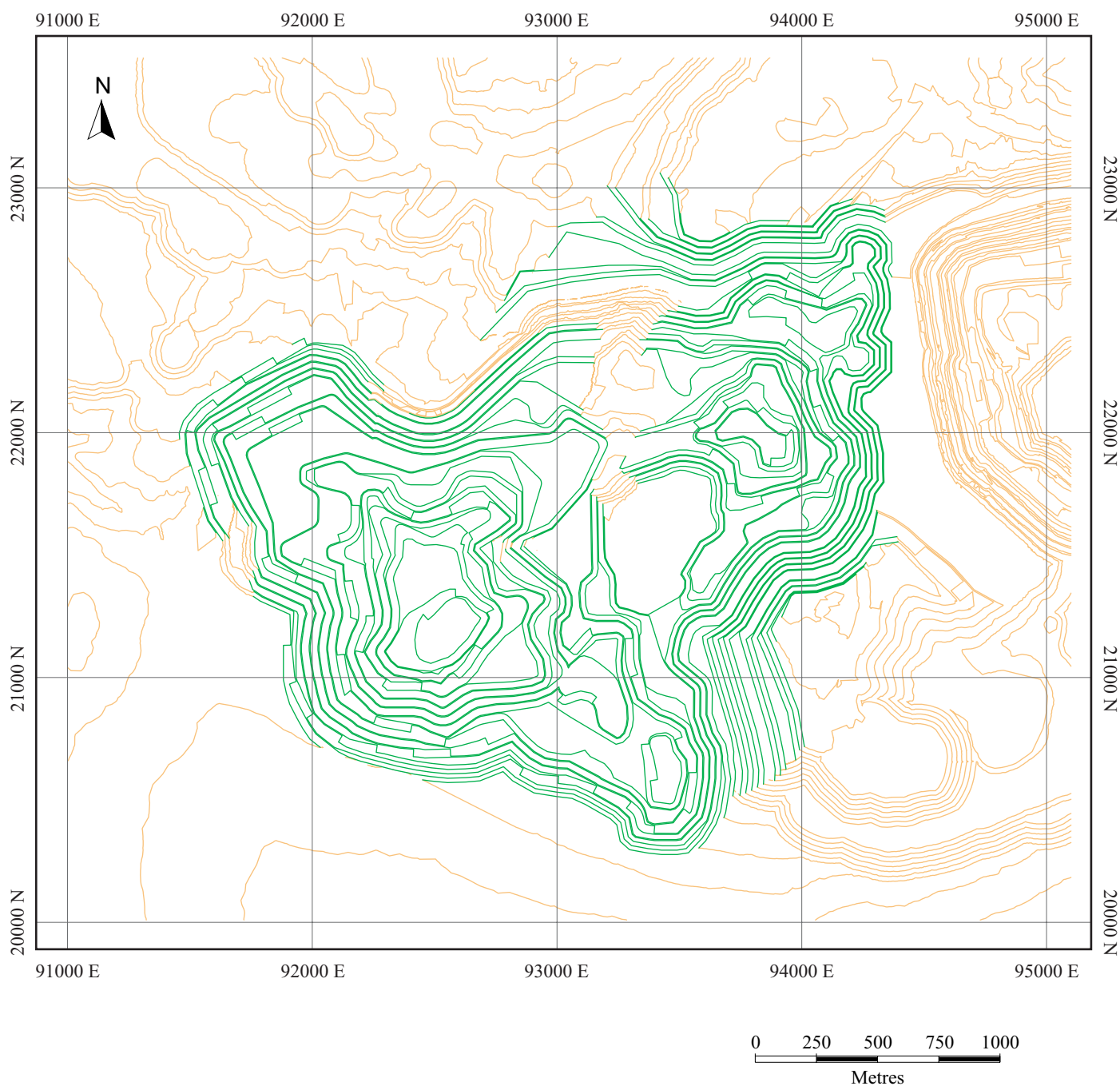


Figure 16-2

Barrick Gold Corporation

Zaldívar Mine
Region II, Northern Chile
Ultimate Pit Design

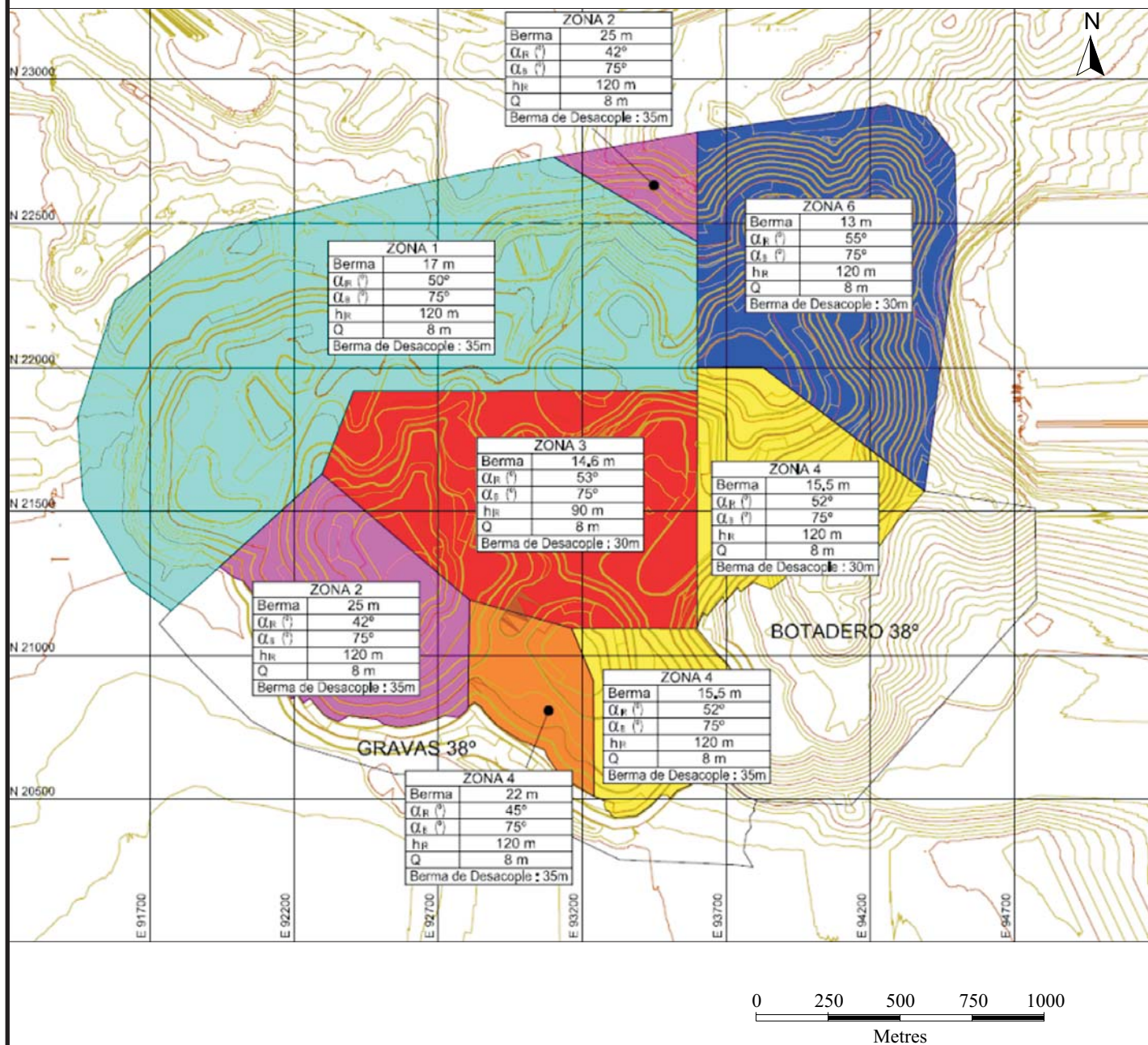


Figure 16-3

Barrick Gold Corporation

Zaldívar Mine
 Region II, Northern Chile
Pit Slope Design Sectors

GROUND CONDITIONS / SLOPE STABILITY

The geotechnical analysis to develop slope design parameters for Zaldívar was completed by A. Karzulovic & Asoc. Ltda. (AKL) in 2009. AKL has evaluated the pit slope design for the ultimate pit using new geologic, geotechnical, and structural information presented from recent mining of phases 5 and 8. A geotechnical assessment is carried out by AKL for each designed phase before starting its development.

The recommended interramp slope angles (IRAs) range from 42° to 55° with double (30 m high) benches in most areas of the proposed open pit. A maximum interramp slope height of 120 m is also implemented to provide stress de-coupling and operational flexibility to remediate interramp instabilities should they occur. Where no ramps are present, equivalent step-outs are placed in the design at nominally 120 m vertical intervals. A nominal ramp/step-out width of 30 m has been used for this retention berm.

When incorporating the recommended interramp slope angles, Zaldívar had further reduced the slope angles in Zones 3 and 6 from 53° and 55°, respectively, to 52°.

The final pit slope will achieve heights of 630 m. RPA is of the opinion that the work that has been completed by AKL was of an appropriate scope and the pit design is based on reasonable engineering analysis and assumptions.

PRODUCTION SCHEDULE

A mine production schedule was developed from the mine design. Production is based on moving a nominal 85 Mtpa through 2024 with production decreasing thereafter, with completion of mining in 2028. Table 16-2 shows the mine production schedule.

TABLE 16-2 MINE PRODUCTION SCHEDULE
Barrick Gold Corporation – Zaldívar Mine

Year	Heap Leach		Dump Leach		Waste kTonnes	Total kTonnes	Strip Ratio
	kTonnes	Cu (%)	kTonnes	Cu (%)			
2012	22,064	0.658	19,000	0.359	42,167	83,231	1.03
2013	22,184	0.699	19,000	0.405	41,041	82,225	1.00
2014	22,004	0.555	19,000	0.384	45,890	86,894	1.12
2015	22,201	0.526	19,000	0.309	45,277	86,477	1.10
2016	22,262	0.604	19,000	0.291	46,364	87,626	1.12

Year	Heap Leach		Dump Leach		Waste kTonnes	Total kTonnes	Strip Ratio
	kTonnes	Cu (%)	kTonnes	Cu (%)			
2017	22,176	0.692	13,121	0.326	54,519	89,816	1.54
2018	22,004	0.565	15,018	0.304	49,175	86,197	1.33
2019	22,176	0.597	13,194	0.309	52,637	88,008	1.49
2020	22,237	0.581	7,282	0.298	64,291	93,811	2.18
2021	22,176	0.796	8,812	0.285	52,116	83,104	1.68
2022	22,004	0.776	10,058	0.290	50,468	82,530	1.57
2023	22,176	0.807	7,768	0.337	47,784	77,728	1.60
2024	22,237	0.693	15,138	0.259	40,103	77,478	1.07
2025	22,176	0.509	18,676	0.269	13,931	54,783	0.34
2026	22,004	0.591	5,757	0.286	7,827	35,588	0.28
2027	22,176	0.644	0	0.000	790	22,966	0.04
2028	18,493	0.459	0	0.000	0	18,493	0.00
2029	0	0.000	0	0.000	0	0	N/A
Total	372,748	0.634	209,825	0.319	654,380	1,236,953	1.12

WASTE ROCK

Waste rock from the open pit goes to one of the three WRFs, with the largest being the Main WRF in the northwest part of the property. The top of the Main WRF will be approximately 450 m high from toe to crest at completion and the North WRF will be approximately 200 m high. There is sufficient capacity in the waste dump areas to handle the proposed production volumes.

A comprehensive WRF geotechnical report was prepared by AKL in 2001.

MINE EQUIPMENT

The Zaldívar Mine is a typical truck/shovel operation. Mine mobile equipment production rates were reviewed with availability and utilization to see if mining production rates and costs are appropriate. RPA is of the opinion that the equipment productivity for the truck and shovel fleet are appropriate. The current mine equipment fleet is listed in Table 16-3.

TABLE 16-3 MINE EQUIPMENT FLEET
Barrick Gold Corporation – Zaldívar Mine

Equipment	Manufacturer	Current 2011
Truck - 830E - DC	Komatsu	17
Truck - 793B	Caterpillar	3
Truck - MT4400	Terex	6
Truck - 830E - AC	Komatsu	4
Wheel Loader - L1800	LeTourneau	1
Electric Shovel - 4100	P&H	3
Motor Grader - 16H	Caterpillar	2
Track Dozer - D10R	Caterpillar	1
Track Dozer - D375A	Komatsu	4
Wheel Dozer - WD900	Caterpillar	1
Wheel Dozer - WD600	Komatsu	1
Electric Drill - D90K	Driltech	2
Diesel Drill - D75KS	Driltech	1
Water Truck - 777D	Caterpillar	1
Water Truck - 4900	Western Star	2

MANPOWER

The Zaldívar Mine operates on a 24-hour schedule, 365 days per year schedule. The mine operations and maintenance department work two 12-hour shifts, 7 days per week on a 7 days on, 7 days off schedule.

Mining operating manpower is based on four operators for each operating position. Mining manpower for operations, maintenance, and technical services starts at 251 people in 2012 and increases to 263 people in 2014. RPA considers the manpower estimates to be reasonable.

MINE INFRASTRUCTURE

The Zaldívar Mine has all the necessary infrastructure for a large mine operation. Mining related infrastructure includes a truck shop, truck wash facility, warehouse, fuel storage and distribution facility, and electrical power distribution and substations to support construction and mine operations.

17 RECOVERY METHODS

ORE PROCESSING

Ore is processed primarily through a heap leaching system utilizing sulphuric acid leaching solutions with copper recovery in a solvent extraction/electrowinning (SX/EW) process in the form of copper cathode. There are multiple stages and/or routes of heap leaching used at Zaldívar to treat various ore streams depending upon material characteristics. The primary leaching system involves crushing and leaching on a dynamic pad with a nominal leaching time of 360 days available for treatment. This process treats the bulk of the ore materials from the mine. The spent ore recovered from the crushed ore leach pad after leaching has been terminated is moved to a permanent dump where the material is subjected to further secondary leaching. Low grade ore materials are also leached on a permanent run-of-mine (ROM) or dump leach pad. Finally, high grade fines from the tertiary crushing circuit, approximately 3% of total material crushed, are treated through a milling and flotation concentrator to produce a copper concentrate as a final product.

Processing is based on two heap leaching streams, one crushed and one ROM. Primary processing is based on heap leaching a crushed material (80% passing 13 mm) utilizing a dynamic (on-off) heap leach facility. Additionally, marginal ores are processed through dump leaching at a ROM material size on a static pad. Pregnant solution from both leach pads is pumped to the SX/EW plant for metal extraction and production as copper cathodes. From the crushing circuit, 3% of the ore tonnage for the dynamic heap leach processing ends up in fines which are deposited in a sediment pond as a result of the washing system incorporated in the tertiary crushing system. These sediments are periodically processed through a small flotation plant and a copper concentrate is produced for sale.

The dynamic heap leach facility is based on a nominal 65,000 tpd operation (22 Mtpa). The ROM dump leach facility is based on the dynamic heap leach capacity and ore availability in the mine and will average a nominal 15 Mtpa over the remaining mine life.

DYNAMIC PAD LEACH PROCESS

ROM ore is primary crushed to 50 mm and secondary crushed to 35 mm at a rate of 65,000 tpd. Product from the secondary crushers is transported via overland conveyor to a covered stockpile with a capacity of 10,000 tonnes. Reclaim from the stockpile is tertiary crushed to 13 mm and screened, producing leach pad feed and a small fraction (3%) that is thickened for feed to flotation (see below for flotation process).

The finely crushed leach feed is placed in 10 m lifts with a RAHCO Stacker on the pad. A bucket-wheel excavator removes the spent ore after leaching for rehandling to the Ripios Alto Ley (RAL) or permanent secondary leach dump. The residence time on the dynamic pad is approximately 360 days. Acid leach solution is applied to the surface of the ore, with pregnant solutions collected at the base of the pad.

ROM LEACH PAD

The ROM dump leach processes low grade material directly from the mine. The material is not crushed and is placed on the ROM pad directly from haulage trucks. As with the dynamic pad, acid leach solution is applied to the surface of the ore, with pregnant solutions collected at the base of the pad.

SX/EW COPPER RECOVERY CIRCUIT

The pregnant solutions from both the heap and dump leach are directed to the SX/EW process. The plant includes four trains of low-head mixer-settler units, each followed by a two-series extraction stage – a wash stage and a strip stage. Cathodes are bundled in 3,000 kg lots for shipment by rail to the port of Antofagasta.

FLOTATION CONCENTRATION PROCESS

The thickened fines slurry is treated in the 1,850 tpd flotation plant. The final concentrate, containing approximately 35% Cu, is thickened, filtered, and shipped by truck to Xstrata's La Negra smelter near Antofagasta. The tailings from the flotation plant are transported by gravity through a four kilometre pipeline to a disposal site in the northeast corner of the property. A process flowsheet is presented in Figure 17-1.

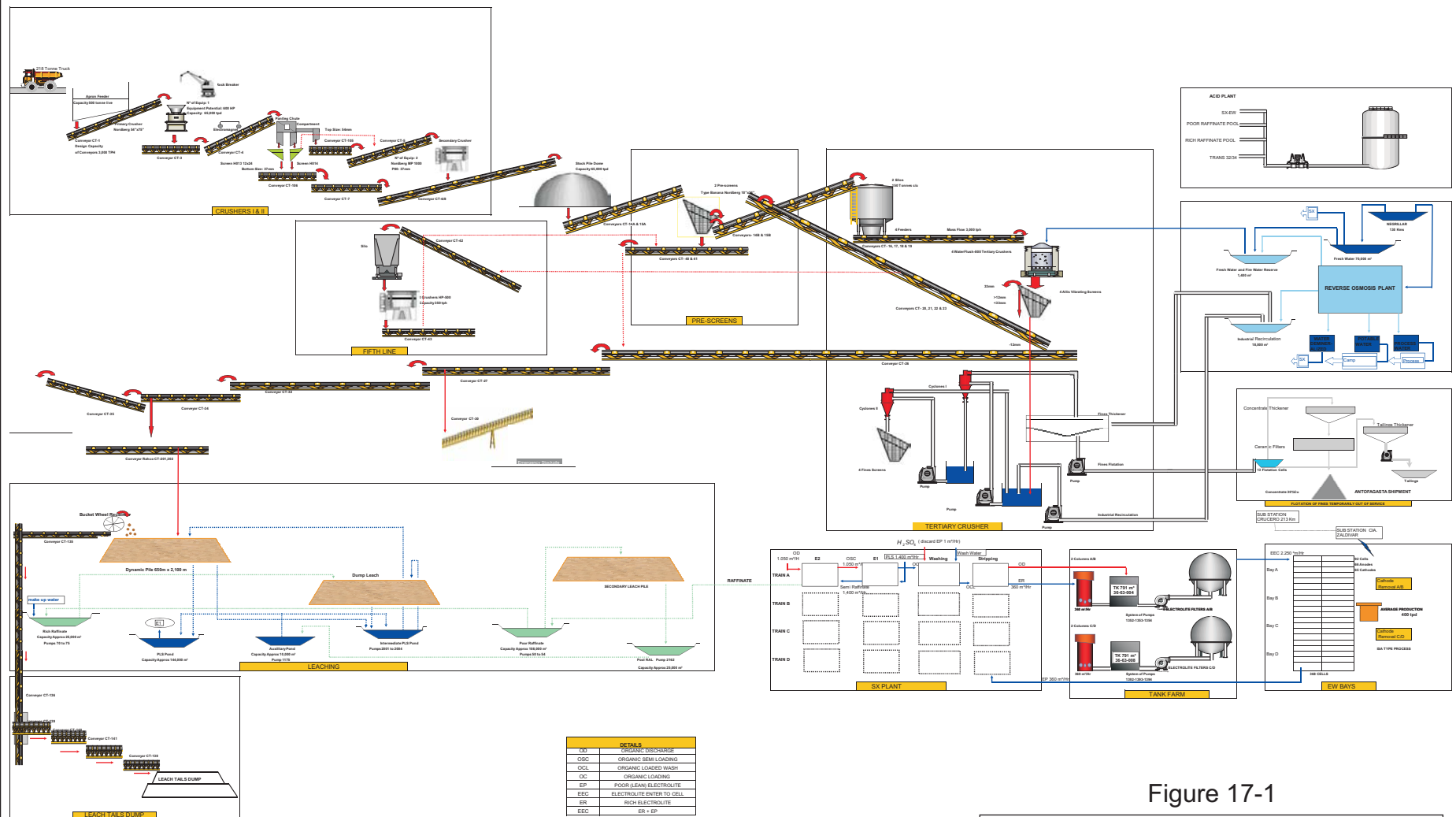


Figure 17-1

Barrick Gold Corporation

Zaldívar Mine
Region II, Northern Chile
Process Flow Sheet

COPPER RECOVERY

Copper sequential assay data from Zaldívar has been used to calculate and reconcile leach recoveries. Current laboratory results for copper assays will provide the following data:

TCu: total copper

ASCu: acid soluble copper

CNCu: cyanide soluble copper

SCu: insoluble or residual copper (TCu- ASCu- CNCu)

All copper mineral species in a heap will leach at different rates and the extent of reaction depends on leach time and conditions. The amount of leaching for each or group of species can be represented by the solubility ratios: ASCu/TCu, CNCu/TCu, and SCu/TCu.

Since the leaching kinetics are different for the different groups of minerals, an overall recovery for an ore can be correlated by a relation of the type:

$$\text{TCu recovery} = F1 * (\text{ASCu}/\text{TCu}) + F2 * (\text{CNCu}/\text{TCu}) + F3 * (\text{SCu}/\text{TCu})$$

Where:

F1: is a function of leach conditions, i.e., particle size, acid consumption, heap height, and leach time. F1 generally will have a value in the range of 90% to 98%;

F2: is also a function of the same variables described above, and its value is generally in the range of 70% to 85%;

F3: is also a function of the same variables described above, and its value is generally in the range of 30% to 50%.

To obtain the values for F1, F2, and F3 from operational data from heaps, it is possible to graph the recovery for each species as a function of the solubility ratio.

COPPER RECOVERY ALGORITHMS AT ZALDÍVAR

Zaldívar has been using copper recovery algorithms for reserve estimation developed from the results of Lift #6 in 2006.

Samples from the various panels from Lift #6 were assayed before and after leaching by auger drilling. These samples were assayed for TCu and ASCu.

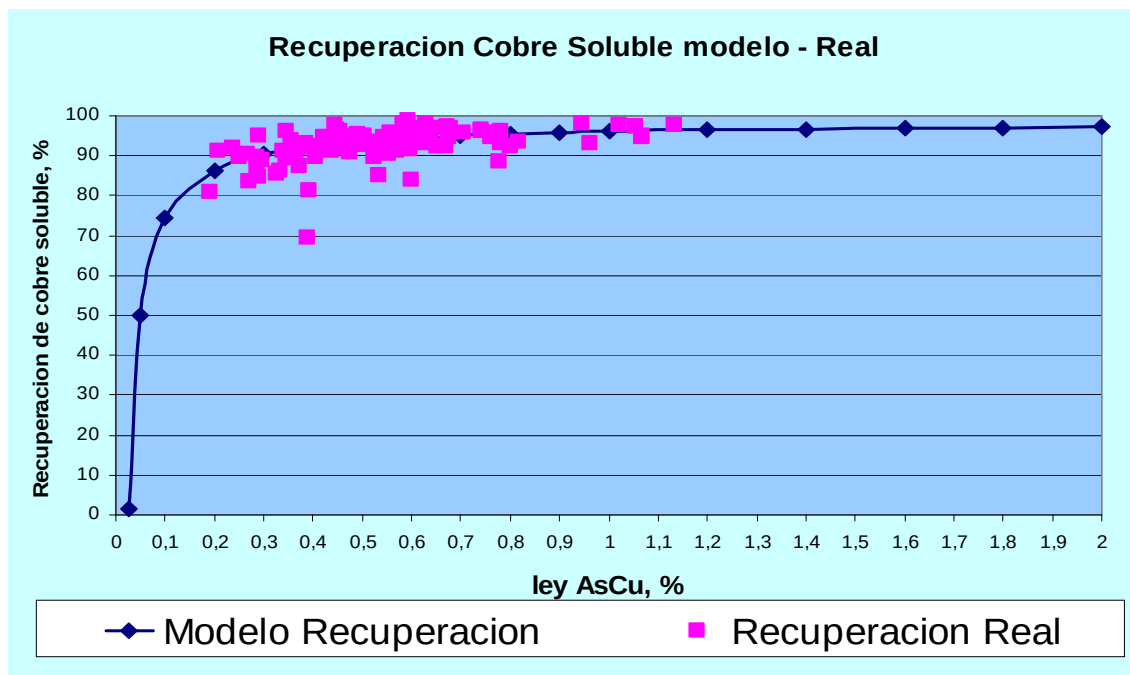
The recovery algorithms for ASCu and non-acid soluble (SCu = TCu – ASCu) were developed estimating the recovery from auger assays and correlating these values with the corresponding grades.

FOR ACID SOLUBLE COPPER:

ASCu Recovery = $100 * [\text{ASCu (head)} - \text{ASCu (leach residue)}] / \text{ASCu (head)}$.

Figure 17-2 below shows a plot of ASCu recovery versus ASCu head grade.

FIGURE 17-2 ASCU RECOVERY VS. ASCU HEAD GRADE



An empirical regression analysis suggested that the data could be adequately reproduced by the correlation:

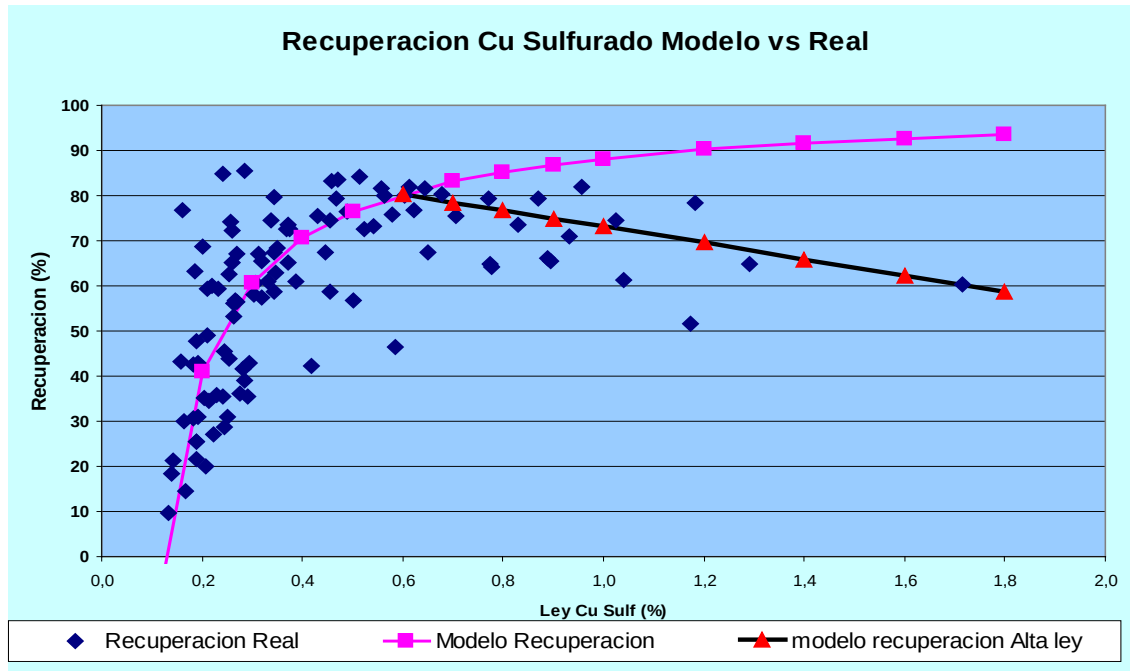
$$\text{ASCu recovery} = 98.47 - 2.42 / \text{ASCu (head)}$$

FOR NON-ACID SOLUBLE COPPER:

$$\text{SCu Recovery} = 100 * ([\text{TCu} - \text{ASCu}] (\text{head}) - [\text{TCu} - \text{ASCu}] (\text{leach residue}) / [\text{TCu} - \text{ASCu}] (\text{head})$$

Figure 17-3 below shows a plot of SCu recovery versus SCu head grade.

FIGURE 17-3 SCU RECOVERY VS. SCU HEAD GRADE



This graph suggested there were two populations of data SCu recovery: one for ores with SCu < 0.6% that was adequately reproduced by the empirical correlation:

$$\text{SCu} < 0.6\% \quad \text{SCu recovery} = 100 * [\text{SCu}(\text{head}) - 0.118] / \text{SCu}(\text{head});$$

and one for ores with SCu > 0.6% that was adequately reproduced by empirical correlation:

$$\text{SCu} > 0.6\% \quad \text{SCu recovery} = 91.06 - 17.93 * \text{SCu}(\text{head})$$

For ores with SCu > 0.6%, this correlation is valid for the dynamic pad leaching, but for reserve estimation purposes, a correlation is used that assumes a longer leaching period:

$$\text{SCu recovery} = 70 * \{[\text{SCu}(\text{head}) - 0.118] / \text{SCu}(\text{head}) + 30 * [91.06 - 17.93 * \text{SCu}(\text{head})] / 100\}$$

The total copper recovery was then calculated by the following correlation:

$$\text{TCu} = [\text{ASCu recovery} * \text{ASCu} + \text{SCu recovery} * \text{SCu}] / \text{TCu}$$

The recovery algorithms adequately represented the data obtained for Lift #6, as expected, since the equations were forced to fit the data, however, when they were used to calculate the recoveries from other lifts, the fit was less precise.

The results of this type can be expected because the methodology used does not recognize that sulphide copper occurs in several different mineralogical species which do not have the same leaching kinetics. Zaldívar considered an approach to deal with this topic in the development of a sequential copper assay that consists of:

- i. An ore sample is leached first with a 5% sulphuric acid solution at specified conditions;
- ii. The leach residue is then leached with a dilute solution of NaCN at pH of 12.

These tests allow each ore sample to have a TCu assay, an ASCu assay, and a CNCu assay.

The acid leach will mainly attack oxidized copper species, and the cyanide leach will attack primarily chalcocite and bornite, leaving behind a residual copper mainly as chalcopyrite and covellite. When a deposit is mainly primary sulphide with a majority of chalcopyrite, an additional ferric sulphate leach can be done.

These assays provide for an indirect measure of the mineralogy of the ores being treated. For Zaldívar, both an acid leach as well as a cyanide leach on the residues was conducted on all samples.

With this information, new algorithms were developed that more closely represented the future copper recoveries of the plant. The proposed recovery model was compared against actual Lift #6 data and against the CMZ reserve algorithms.

The values used for the correlation parameters were: F1= 96, F2= 78, F3= 40. It was thought that these values could be improved by comparing more of the existing data, and by introducing a grade relationship into the F functions.

$$\text{TCu recovery} = 96 * (\text{ASCu}/\text{TCu}) + 78 * (\text{CNCu}/\text{TCu}) + 40 * (\text{SCu}/\text{TCu})$$

The process recovery model discussed above is documented in the report titled Recovery CMZ dated 2006.

2011 RECOVERY MODEL

In general, historical information supports the results of this model; however, commencing in 2011, a modification to the dynamic heap leach insoluble copper recovery has been made limiting maximum insoluble copper recovery to 55%. Table 17-1 presents the metallurgical model algorithms applied to the economic evaluation of material within the block model.

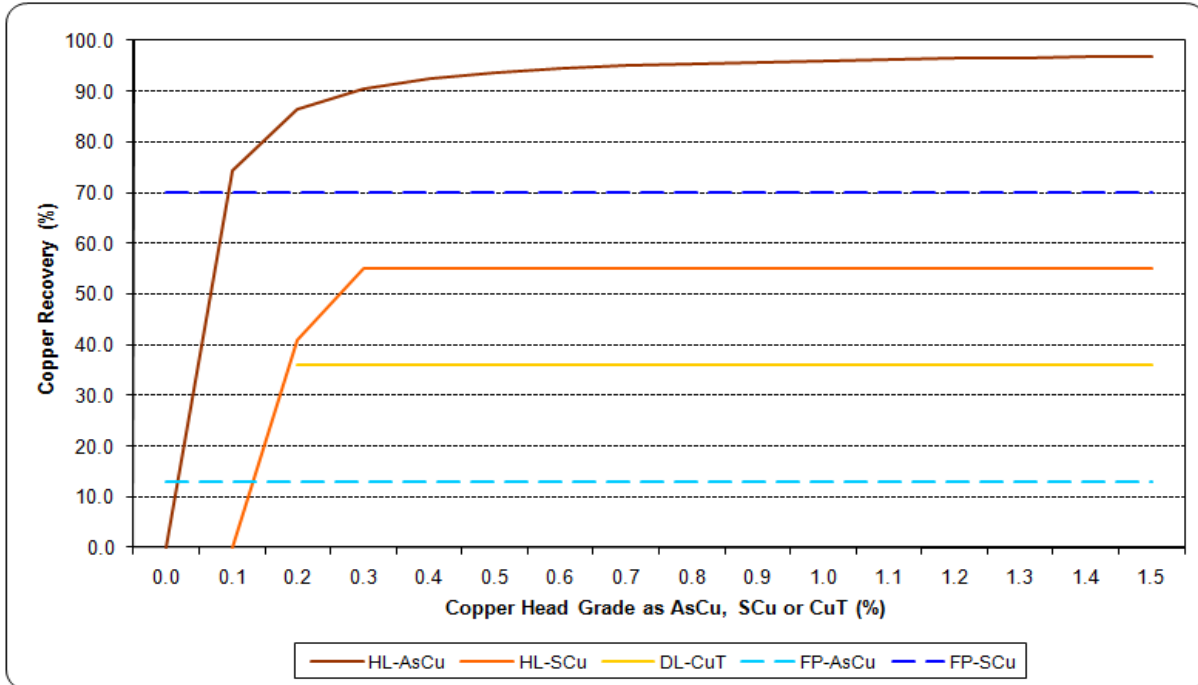
TABLE 17-1 METALLURGICAL MODEL ALGORITHMS
Barrick Gold Corporation – Zaldívar Mine

Met Type Designation	Copper Recovery Algorithm
Dynamic Heap Leach Acid Soluble Copper Insoluble Copper (SCu ≤ 0.6%) Insoluble Copper (SCu > 0.6%)	$\text{Cu}_{\text{rec}} = \text{if} (\text{ASCu} > 0.024576, 98.47 - (2.42/\text{ASCu}), 0)$ $\text{Cu}_{\text{rec}} = \text{min} (\text{if} (\text{SCu} > 0.118, (\text{SCu} - 0.118)/\text{SCu} * 100, 0), 55)$ $\text{Cu}_{\text{rec}} = \text{min} (94.24 - (17.93 * \text{SCu}), 55)$ A recovery correction factor of 0.788 is applied to Geol_Min codes 7, 8 and 13.
Dump Heap Leach Total Copper	$\text{Cu}_{\text{rec}} = \text{if} (\text{and} (\text{CuT} > 0.214, \text{ASCu} \geq 0.06), 36, 0)$ Valid for Geol_Min codes 5, 6, 9 and 11
Flotation Plant Acid Soluble Copper Insoluble Copper	$\text{Cu}_{\text{rec}} = 13\%$ $\text{Cu}_{\text{rec}} = 70\%$
Average Metallurgical Recoveries Dynamic Heap Leach Dump Heap Leach Average	$\text{Cu}_{\text{rec}} = 62.6\% \text{ on average}$ $\text{Cu}_{\text{rec}} = 36.0\% \text{ on average}$ $\text{Cu}_{\text{rec}} = 59.7\% \text{ on average}$

Where, Cu_{rec} = Copper recovery (%)
 ASCu = Acid soluble copper grade (%)
 SCu = Insoluble copper grade (%)
 CuT = Acid soluble + Insoluble copper grade (%)

The recovery algorithm curves are depicted in Figure 17-4.

FIGURE 17-4 METALLURGICAL RECOVERY MODEL CURVES



With this change in recovery formulas, it has been observed that the average calculated recovery for the remaining resources at Zaldívar decreases by approximately 9%. This is a direct result of the recovery capping of 55% applied to the insoluble copper component of the dynamic leach pad ore as well as the impact of an approximate 8% reduction in average grade of the insoluble copper included in the current geological model as a result of improvements in geological model reconciliation.

In 2012, a revision will be made to the recovery model. The revised recovery model will account for the current operational parameters and results.

RPA has reviewed the recovery model and finds the development of the recovery formulas and the reconciliation to historic data to be reasonable. The metallurgical testwork which supports the models is also reasonable and adequate.

18 PROJECT INFRASTRUCTURE

The Project infrastructure and services have been designed to support an operation of 65,000 tpd of ore to dynamic heap leach processing and a nominal 240,000 tpd of total material mined. Site infrastructure is shown in Figure 18-1.

ACCESS

Access to the Zaldívar site is via a paved road from Antofagasta, following Highway 28 for 15 km to the southwest to the intersection with Route 5 (Pan-American Highway). From the intersection with Route 5, there is a private two-lane paved road that is shared by three major mines, Zaldívar, Escondida, and El Peñón that heads to the east. It is 137 km to the Zaldívar turnoff. From the turnoff, it is 7 km to the Zaldívar camp and another 8 km to the Zaldívar Mine offices. Total distance from Antofagasta is a nominal 170 km. Most consumables are transported along this route by truck.

The site is also serviced by rail with Ferrocarril Antofagasta - Bolivia (FCAB) transporting sulphuric acid to the mine and transporting copper cathode to the port of Antofagasta.

MINE SITE FACILITIES

The mine and heap leach facilities are located at the mine site. Also, located here are the SX/EW plant; on-site facilities (safety/security/first aid/emergency response building, assay laboratory, plant guard house, dining facilities, and offices); related mine services facilities (truckshop, truck wash facility, warehouse, fuel storage and distribution facilities, reagent storage and distribution facilities); and other services facilities to support operations.

ACCOMMODATIONS

Mine camp facilities are located adjacent to the Zaldívar Mine and approximately eight kilometres from the plant at 3,085 masl. Permanent accommodations are located here. Contractor accommodations are also provided near the mine office. Accommodations are sufficient for the current Zaldívar workforce of 863 people and the 1,146 contractors and consultants.

WATER

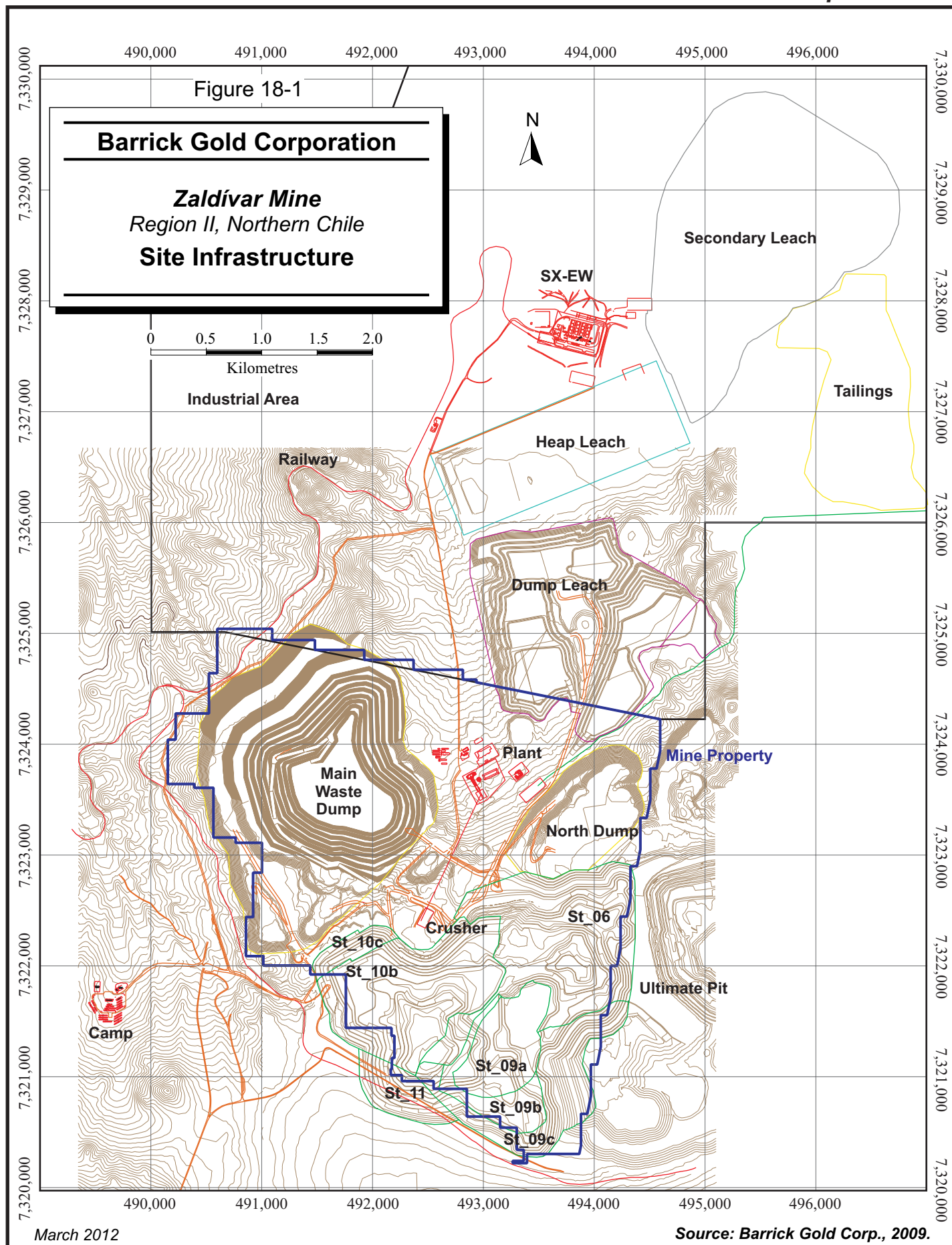
Process water is supplied from groundwater at Negrillar, 130 km east of Zaldívar. The water is drawn from six production wells and pumped to the freshwater pond near the tertiary crushing facility at the plant site. Current use is approximately 220 L/s.

PORT

Antofagasta port is one of the main harbour facilities in northern Chile. The port serves as an important location for incoming merchandise for Bolivia, Argentina, and Paraguay. It is the property of the State, administered by Empresa Portuaria Antofagasta which acts as the harbour authority. Cathode from Zaldívar is shipped from the port of Antofagasta.

ELECTRICAL

Zaldívar consumes a nominal 72 MWh to 76 MWh. The power supplier is AES Gener. The power transmission is part of Sistema Interconectado del Norte Grande (SING), the regional electrical grid for Northern Chile. A dual-circuit, 220 kV, 230 km long transmission line was constructed with MEL between the Zaldívar and Escondida Norte plant sites and the SING substation at El Crucero.



19 MARKET STUDIES AND CONTRACTS

MARKETS

Copper markets are mature global markets with reputable smelters and refiners located throughout the world. Copper is a principal metal traded on the London Metal Exchange (LME) and has total price transparency. Prices are quoted on the LME for Copper Grade A and can be found at www.lme.com. The average copper price for 2011 through December 31 was \$4.05 per pound. Current prices as of December 31, 2011, are \$3.43 per pound. The three-year and five-year rolling average prices through the end of December 2011 are \$3.25 and \$3.23 per pound, respectively. This technical report uses a price below the three-year average price for copper of \$2.75 per pound for the economic analysis.

Operations at the Zaldívar Mine are expected to produce an annual average of 228 million pounds of copper over a 17-year mine life.

CONTRACTS

Currently, there are no smelting and refining contracts, no forward sales, and no hedging.

20 ENVIRONMENTAL STUDIES, PERMITTING, AND SOCIAL OR COMMUNITY IMPACT

ENVIRONMENTAL STUDIES

The present operation of the Zaldívar Mine was approved in its original form called the “Zaldívar Project” through Resolution N° 574, in 1993, by the Comisión Regional del Medio Ambiente de la II Región de Antofagasta (COREMA). The project had as its principal installation, an operating open-pit mine, primary, secondary and tertiary crushing plants, a concentrating plant for fines, waste dumps, and tailings and a production line for copper cathodes that consists of a dynamic leach facility, ROM leach facility for low grade, and a solution extraction (SX) and electrowinning (EW) plant.

In 2009, an updated Environmental Impact Study (Estudio de Impacto Ambiental, or EIA) was developed to address “Modifications Works for the Zaldívar Mine”. The purpose of the EIA was to update the project that Zaldívar executed within the original permit area approved for the Zaldívar Project in 1993 with the purpose of optimizing the mining processes and maintaining production levels, and modifications to increase the production capacity involving some new areas of impact. The EIA was approved by COREMA in February 2010. On December 9, 2010, CMZ obtained its operational permits from the Servicio Nacional de Geología y Minería (SERNAGEOMIN) and expects to obtain other associated sectoral permits in due course.

PROJECT PERMITTING

The Zaldívar Mine has approximately 140 active permits. The operations reporting is to COREMA, with some minor reporting to Corporación Nacional de Medio Ambiente (CONAMA) and SERNAGEOMIN. Other public agencies include Seremía de Salud, Servicio Agrícola y Ganadero (SAG) and Dirección General de Agua (DGA). All permits have been obtained and are in good standing. The mine runs an extensive environmental monitoring program to ensure compliance with the requirements of these

permits. For the major environmental issues identified, management plans have been developed that include rehabilitation, site decommissioning, and closure.

SOCIAL OR COMMUNITY REQUIREMENTS

Zaldívar operates under Barrick's sustainability policy, which commits the operation to a corporate standard of environmental stewardship. This involves protecting human health, reducing the impact of mining on the ecosystem, and returning the site to a state compatible with a healthy environment. Zaldívar operates in an environmentally responsible manner with limited adverse impacts on the environment. Programs are in place that continuously monitor the process and surrounding areas and employ leak detection wells to detect any potential problems.

In 2001, Zaldívar instituted an Environmental Policy with a commitment to protect the workers, respect the existing surroundings, and maintain production of copper concentrate and cathodes. Zaldívar also committed to discussions with local and national authorities regarding sustainability issues. In July 2003, Zaldívar was certified under ISO 14001. This certification commits Zaldívar to maintain an environment that allows for continuous improvements and environmental performance. In 2010, the Certificate of Quality Standards was updated to ISO 9001:2008. Currently, all activities at Zaldívar were in compliance with applicable corporate standards and environmental regulations.

MINE CLOSURE REQUIREMENTS

Mine closure plans are reviewed and analyzed annually. Current cost estimates for closure are \$36.2 million.

21 CAPITAL AND OPERATING COSTS

CAPITAL COSTS

Remaining capital costs at Zaldívar are all primarily sustaining capital, which includes mine equipment replacement. Total remaining capital costs are a nominal \$440 million. Mine prestripping capital of \$193 million has been treated as an operating cost for the purposes of this Technical Report. Engineering studies for a primary sulphide flotation and process plant expansion are also included in the sustaining capital. Mine site exploration capital has been excluded as that capital should be expended against future mineral resources. Capital costs are in 4th Quarter 2011 US dollars. Table 21-1 shows the capital expenditure schedule.

TABLE 21-1 CAPITAL COSTS
Barrick Gold Corporation – Zaldívar Mine

	Sustaining Capital (from 2012 LOM, US\$ millions)						
	2012	2013	2014	2015	2016	2017	2018
Engineered Capital	19.6	69.5	56.9	18.1	2.4	13.0	5.1
Safety, Health & Environment	1.2	0.59	0	0	0	0	0
Sustaining Capital Other	33.0	28.9	32.0	16.9	14.6	42.8	17.0
Total Capital Expenditure	53.8	99.0	88.9	35.0	17.0	55.8	22.1

	Sustaining Capital (from 2019 LOM, US\$ millions)							
	2019	2020	2021	2022	2023	2024	2025	Total
Engineered Capital	10.7	0	9.0	4.1	4.1	1.4	0	214.0
Safety, Health & Environment	0	0	0	0	0	0	0	1.8
Sustaining Capital Other	18.2	7.2	4.3	4.9	2.6	1.5	1.2	225.1
Total Capital Expenditure	28.9	7.2	13.3	9.0	6.7	2.8	1.2	440.8

The following is excluded from the capital cost estimate:

- Project financing and interest charges
- Escalation during construction
- Working capital
- Costs of fluctuations in currency exchanges

OPERATING COSTS

Zaldívar Mine has been in production since November 1995. Operating costs are tracked and well understood. Mine operating costs are a nominal \$1.47 per tonne of material mined or \$3.12 per tonne of ore mined. Unit mine operating costs are presented in Table 21-2.

TABLE 21-2 MINE OPERATING COSTS
Barrick Gold Corporation – Zaldívar Mine

Mine Operating Costs	US\$	
Mine Overhead	0.207	
Drilling	0.087	
Blasting	0.143	
Loading	0.198	
Hauling	0.687	
Support	0.139	
Pit Dewatering	0.007	
Total	1.468	per tonne mined
	3.117	per tonne ore processed

Process operating costs include the dynamic pad or heap leach and the dump leach. This also includes the entire crushing plant, acid, and all reagents. Process operating costs are \$7.35 per tonne ore processed. Unit process operating costs are presented in Table 21-3.

TABLE 21-3 UNIT PROCESS OPERATING COSTS
Barrick Gold Corporation – Zaldívar Mine

Process Costs	US\$
Overhead	0.21
Leach Facility	6.24
Maintenance	0.90
Total	7.35

General and administrative costs (G&A) include all management salaries, camp operating costs, and environmental, health and safety. Administrative costs are \$1.25 per tonne ore processed. Unit operating costs are presented in Table 21-4.

TABLE 21-4 G&A COSTS
Barrick Gold Corporation – Zaldívar Mine

G&A Opex	US\$	
Salaries	0.461	
Camp	0.231	
Health & Safety	0.090	
IT & Communications	0.084	
Environmental	0.064	
Other	0.314	
Total	1.245	per tonne ore processed

Operating costs are based on 4th Quarter 2011 costs.

MANPOWER

Zaldívar Mine site manpower is a nominal 2,000 people. Direct Zaldívar employees are only 863 with 1,146 contractors and consultants. The breakdown of manpower by area is provided in Table 21-5.

TABLE 21-5 MANPOWER
Barrick Gold Corporation – Zaldívar Mine

Area	Quantity
Mine	251
Maintenance	273
Process	226
General	113
CMZ	863
Contractors	1,146
Total Site	2,009

22 ECONOMIC ANALYSIS

Under NI 43-101 rules, producing issuers may exclude the information required for Section 22 – Economic Analysis, on properties currently in production, unless the Technical Report includes a material expansion of current production. RPA notes that Barrick is a producing issuer, the Zaldívar Mine is currently in production, and a material expansion is not included in the current LOM plans. RPA has performed an economic analysis of the Zaldívar Mine using the estimates presented in this report and confirms that the outcome is a positive cash flow that supports the statement of Mineral Reserves.

23 ADJACENT PROPERTIES

The Zaldívar mining concessions are surrounded by mining concessions owned by MEL. MEL is best known as the largest producing copper mine in the world, with 5% to 8% of the world's annual copper production coming from the Escondida Mine.

Agreements are in place that allow use of MEL's land for some of Zaldívar's process infrastructure. Layback agreements related to pit wall pushbacks for the Zaldívar and Escondida Norte pits are also in place.

24 OTHER RELEVANT DATA AND INFORMATION

No additional information or explanation is necessary to make this Technical Report understandable and not misleading.

25 INTERPRETATION AND CONCLUSIONS

RPA offers the following conclusions:

GEOLOGY AND MINERAL RESOURCE ESTIMATION

- The EOY2011 Measured and Indicated Mineral Resource is 125 million tonnes at a total copper grade of 0.445% containing 1.225 billion pounds of copper. The Mineral Resources are exclusive of Mineral Reserves.
- The EOY2011 Inferred Mineral Resource is 37 million tonnes at a total copper grade of 0.54% containing 439 million pounds of copper.
- Mineral Resource estimates have been prepared utilizing acceptable estimation methodologies. The classification of Measured, Indicated, and Inferred Resources, stated in Table 14-1, meet the requirements of NI 43-101 and CIM definitions.
- The methods and procedures utilized by CMZ at the Zaldívar Mine to gather geological, geotechnical, assaying, density, and other information are reasonable and meet generally accepted industry standards. Standard operating protocols are well documented and updated on a regular basis for most of the common tasks. CMZ carries out regular comparisons with blasthole data, previous models, and production reconciliation results to calibrate and improve the resource modelling procedures.
- The current drill hole database is reasonable for supporting a resource model for use in Mineral Resource and Mineral Reserve estimation.
- CMZ has conducted the exploration and development sampling and analysis programs using standard practices, providing generally reasonable results. The resulting data can effectively be used for the estimation of Mineral Resources and Mineral Reserves.
- Overall, RPA is of the opinion that CMZ has done very high quality work that exceeds industry practice.

MINING AND MINERAL RESERVES

- The EOY2011 Proven and Probable Mineral Reserves are 578 million tonnes at a total copper grade of 0.518% containing 6.602 billion pounds of copper.
- The Mineral Reserve estimates have been prepared utilizing acceptable estimation methodologies and the classification of Proven and Probable Reserves, stated in Table 15-1, conform to CIM definitions.
- The operating data provided by CMZ and the supporting documents were prepared using standard industry practices and provide reasonable results and conclusions.

- Standard operating protocols are well documented and updated on a regular basis for most of the common tasks.
- Recovery and cost estimates are based upon operating data and engineering to support a Mineral Reserve statement. Economic analysis using these estimates generates a positive cash flow, which supports a statement of Mineral Reserves.
- The current Zaldívar LOM plan provides reasonable results and, in RPA's opinion, meets the requirements for statement of Mineral Reserves. In addition to the Mineral Reserves in the LOM plan, there are Mineral Resources and potential sulphide resources that represent opportunities for the future.

PROCESSING

- The process includes heap leaching with copper recovery in an SX/EW process in the form of copper cathode.
- RPA has reviewed the recovery model and finds the development of the recovery formulas and the reconciliation to historic data to be reasonable. The metallurgical testwork, which supports the models, is also reasonable and adequate.
- In 2012, a revision will be made to the recovery model. The revised recovery model will account for the current operational parameters and results.

ENVIRONMENTAL CONSIDERATIONS

- The Project has approximately 140 active permits. All permits are in good standing and there is an extensive environmental monitoring program to ensure compliance with the requirements of these permits.

26 RECOMMENDATIONS

The Zaldívar LOM plan provides reasonable results and, in RPA's opinion, meets the requirements for statement of Mineral Reserves. This Technical Report is based on the LOM plan. In addition to the LOM plan, there are additional resources and potential resources that should be given further consideration in the future. Below is a list of recommendations to consider:

MINING

- The LOM plan is robust and Barrick should proceed to implement the plan as presented.
- There is a known primary sulphide resource below the current Proven plus Probable oxide and secondary sulphide reserves. Additional work to drill these resources and develop a Feasibility Study for the primary sulphide should also proceed.

ENVIRONMENTAL CONSIDERATIONS

- Evaluation of permit requirements, developing baseline studies, and starting a new EIA for the sulphide project should proceed in unison with the primary sulphide feasibility study.

27 REFERENCES

- AMEC Americas Limited, 2004, Zaldívar Project, Chile, NI 43-101 Technical Report, Prepared for Placer Dome Inc., December 31, 2004, 77 pp.
- CIM, 2010, CIM Definition Standards - For Mineral Resources and Mineral Reserves, Prepared by the CIM Standing Committee on Reserve Definitions, Adopted by CIM Council on November 27, 2010.
- CMZ Geology Department, 2008, Zaldívar Geology PowerPoint Presentation Dated April 2008, 15 pp.
- CMZ, 2002: Determinación Máxima Altura Estable Botaderos de Lastre Rajo Zaldívar - Proyecto Factibilidad 2001, a report by A. Karzulovic & Asoc. Ltda, 22 p.
- Croal, A. and Tsafaras, M., 2008, Zaldívar Deeps Project: Scoping Study, Internal Barrick Report Dated December 10, 2008, 15 p.
- Marinovic, N.; Smoje, I.; Maksaev, V.; Herve, M.; Mpodozis, C., 1995, Hoja Aguas Blancas, Región de Antofagasta Servicio Nacional de Geología y Minería. Carta Geológica de Chile, N° 70, p. 75.
- Monroy, C., 2010, Reporte Validacion Collares Sondajes Infill 2010, Internal Barrick Memorandum Dated April 21, 2010, 3 p.
- Monroy, C., 2010, Reporte Validacion de Survey Sondajes Infill 2010, Internal Barrick Memorandum Dated April 20, 2010, 10 p.
- Monroy, C., 2009, Validacion Informacion de Survey Sondajes Infill 2008, Internal Barrick Memorandum Dated September 17, 2009, 5 p.
- Monroy, C., 2009, Validacion Informacion Collares Sondajes Infill 2008 (Fase 2) and Infill 2009, Internal Barrick Memorandum Dated September 17, 2009, 5 p.
- Monroy, C., 2008, Validacion Leyes en Carpetas Sondajes RC 2008, Internal Barrick Memorandum Dated September 17, 2008, 2 p.
- Monroy, C., 2008, Informe Modelamiento Geologico 2008, 15 p.
- Monroy, C. and Morales, P., 2008, Conciliacion Reservas y Recursos para el Banco 3125-ET8, October 28, 2008, 8 p.
- Monroy, C. and Morales, P., 2008, Conciliacion Reservas y Recursos para el Banco 2990-ET5, October 28, 2008, 8 p.
- Morales, P., 2009, Control de Calidad QA/QC para Muestras Pozo de Tronadura y Sondaje Tipo RC y DDH, CMZ Report Originally Dated March 2007, 10 p.
- Morales, P. and Monroy, C., 2009, Informe Trimestral QA/QC Corto Plazo, Julio a Septiembre 2008, 30 p.

- Morales, P., 2008, Validacion Leyes en Carpetas Sondajes Primarios 2007, Internal Barrick Memorandum Dated January 5, 2008, 2 p.
- Morales, P., 2007, Procedimiento Muestreo de Pozos de Tronadura, December 2007, 10 p.
- Monroy, C, and Morales, P., 2008, Conciliacion Anual Movil al 31 de Diciembre del 2008 Mo. Bloques Largo Plazo – Mod. Bloques Corto Plazo – Chancador Primario, December 6, 2008, 8 p.
- Richard, J., Noble, S., and Pringle, M., 1999, A Revised Late Eocene Age for Porphyry Cu Magmatism in the Escondida Area, Northern Chile.
- Perez, L., 2008, Validacion Informacion Collares Sondajes Etapa 10, Internal Barrick Memorandum Dated September 9, 2008, 2 p.
- Perez, L., 2008, Validacion Coordinadas Definitivas Sondajes Primarios 2008, Internal Barrick Memorandum Dated September 15, 2008, 2 p.
- Placer Dome Inc., 2006, Compania Minera Zaldívar Mineral Resource and Mineral Reserve Audit Level 2 Audit, December 2006, 62 p.
- Placer Dome Inc., 2004, Compania Minera Zaldívar Mineral Resource and Mineral Reserve Audit, November 2004, 39 p.
- Richards, J., Noble, S.; Pringle, M. 1999, A revised Late Eocene Age for Porphyry Cu Magmatism in the Escondida Area, Northern Chile. *Economic Geology*, Vol. 94, N°8, pp. 1231 to 1247.
- Sanfugo, B., 2008, Estimacion de Recursos Zaldívar, Barrick Draft Report Dated December 2008, 65 p.
- Scott Wilson RPA, 2009, Report on Audit of Mineral Resources and Mineral Reserves for the Zaldívar Mine, Chile, Prepared for Barrick Gold Corporation, Dated March 23, 2009, 71 p.
- Scott Wilson RPA, 2008, Review of the Zaldívar Deep Sulphide Cu-Mo-Au-Ag Project, Memorandum Prepared for Barrick Gold Corporation, Dated January 9, 2008, 2 p.
- Solis, S., 2011, Reporte Validacion Collares Sondajes Infill 2011, Internal Barrick Memorandum Dated June 15, 2011, 2 p.
- Solis, S., 2011, Reporte Validacion de Leyes Sondajes Infill 2011, Internal Barrick Memorandum Dated July 15, 2011, 1 p.
- Solis, S., 2011, Reporte Validacion de Survey Sondajes Infill 2011, Internal Barrick Memorandum Dated June 15, 2011, 14 p.

28 DATE AND SIGNATURE PAGE

This report titled "Technical Report on the Zaldívar Mine, Region II, Chile" and dated March 16, 2012, was prepared and signed by the following authors:

(Signed & Sealed) "*Luke Evans*"

Dated at Toronto, ON
March 16, 2012

Luke Evans, M.Sc., P.Eng.
Principal Geologist

(Signed & Sealed) "*Richard J. Lambert*"

Dated at Lakewood, CO
March 16, 2012

Richard J. Lambert, P.E.
Principal Mining Engineer

29 CERTIFICATE OF QUALIFIED PERSON

LUKE EVANS

I, Luke Evans, M.Sc., P.Eng., as an author of this report titled "Technical Report on the Zaldívar Mine, Region II, Chile" prepared for Barrick Gold Corporation, and dated March 16, 2012, do hereby certify that:

1. I am a Consulting Geological Engineer with Roscoe Postle Associates Inc. of Suite 501, 55 University Ave Toronto, ON, M5J 2H7.
2. I am a graduate of University of Toronto, Ontario, Canada, in 1983 with a Bachelor of Science (Applied) degree in Geological Engineering and Queen's University, Kingston, Ontario, Canada, in 1986 with a Master of Science degree in Mineral Exploration.
3. I am registered as a Professional Engineer in the Province of Ontario (Reg.# 90345885). I have worked as a professional geological engineer for over 25 years since my graduation. My relevant experience for the purpose of the Technical Report is:
 - Consulting Geological Engineer specializing in resource and reserve estimates, audits, technical assistance, and training since 1995.
 - Review and report as a consultant on numerous exploration and mining projects around the world for due diligence and regulatory requirements.
 - Senior Project Geologist in charge of exploration programs at several gold and base metal mines in Quebec.
4. I have read the definition of "qualified person" set out in National Instrument 43-101 (NI 43-101) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "qualified person" for the purposes of NI 43-101.
5. I visited the Zaldívar Mine on October 24 to 27, 2011.
6. I am responsible for the preparation of Sections 2 to 5, 7 to 12, 14, and 23 and collaborated with my co-author on Sections 1, 6, 25, 26, and 27 of the Technical Report.
7. I am independent of the Issuer applying the test set out in Section 1.5 of NI 43-101.
8. I visited the Zaldívar Mine on January 6 to 8, 2009 as part of an audit of the 2008 year-end resource and reserve estimates.
9. I have read NI 43-101, and the Technical Report has been prepared in compliance with NI 43-101 and Form 43-101F1.

10. At the effective date of the Technical Report, to the best of my knowledge, information, and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated this 16th day of March, 2012

(Signed & Sealed) "Luke Evans"

Luke Evans, M.Sc., P.Eng.

RICHARD J. LAMBERT

I, Richard J. Lambert, P.E., as an author of this report titled "Technical Report on the Zaldívar Mine, Region II, Chile" prepared for Barrick Gold Corporation, and dated March 16, 2012, do hereby certify that:

1. I am Principal Mining Consultant with Roscoe Postle Associates Inc. of Suite 505, 143 Union Boulevard, Lakewood, CO, USA 80227.
2. I am a graduate of Mackay School of Mines, University of Nevada, Reno, U.S.A., with a Bachelors of Science degree in Mining Engineering in 1980, and Boise State University, with a Masters of Business Administration degree in 1995.
3. I am a Registered Professional Engineer in the state of Wyoming (#4857), the state of Idaho (#6069), and the state of Montana (#11475). I am licensed as a Professional Engineer in the Province of Ontario (Reg. #100139998). I have been a member of the Society for Mining, Metallurgy, and Exploration (SME) since 1975, and a Registered Member (#1825610) since May 2006. I have worked as a mining engineer for a total of 31 years since my graduation. My relevant experience for the purpose of the Technical Report is:
 - Review and report as a consultant on numerous mining projects for due diligence and regulatory requirements
 - Mine engineering, mine management, mine operations and mine financial analyses, involving copper, gold, silver, nickel, cobalt, uranium, oil shale, phosphates, coal and base metals located in the United States, Canada, Zambia, Madagascar, Turkey, Bolivia, Chile, Brazil, Serbia, Australia, Russia and Venezuela.
4. I have read the definition of "qualified person" set out in National Instrument 43-101 (NI 43-101) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "qualified person" for the purposes of NI 43-101.
5. I visited the Zaldívar Mine on October 24 to 27, 2011.
6. I am responsible for the preparation of Sections 13 and 15 to 22 and collaborated with my co-author on Sections 1, 6, 25, 26, and 27 of the Technical Report.
7. I am independent of the Issuer applying the test set out in Section 1.5 of NI 43-101.
8. I have had no prior involvement with the property that is the subject of the Technical Report.
9. I have read NI 43-101, and the Technical Report has been prepared in compliance with NI 43-101 and Form 43-101F1.

10. At the effective date of the Technical Report, to the best of my knowledge, information, and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated this 16th day of March, 2012

(Signed & Sealed) “Richard J. Lambert”

Richard J. Lambert, P.E.