EXECUTIVE SUMMARY

Overview

The Brisas del Cuyuni deposit is a gold-copper deposit located in the Kilometer 88 mining district of Bolivar State in south-eastern Venezuela. Before its acquisition by Gold Reserve Inc. in 1992, the property had been worked on a small scale by local owners and also by illegal miners. Shallow pitting and hydraulic methods were used to mine the upper saprolite zone, and coarse gold was recovered by gravity concentration. Gold Reserve has carried out a major exploration drilling program on the concession, resulting in the definition of a large, gold-copper resource.

The feasibility study operating plan assumes a large open pit mine containing proven and probable reserves of approximately 9.2 million ounces of gold and 1.2 billion pounds of copper in 414 million tonnes of ore grading 0.69 grams of gold per tonne and 0.13% copper, at a revenue cutoff grade of $2.76 per tonne using a gold price of $350 per ounce and a copper price of $0.90 per pound. The project anticipates utilizing conventional truck and shovel mining methods with the processing of ore at full production of 70,000 tonnes per day, yielding an average annual production of 486,500 ounces of gold and 63 million pounds of copper over an estimated mine life of approximately 16 years.

The feasibility study assumed an economic base case utilizing $400 per ounce gold and $1.00 per pound copper. At such prices, cash operating costs (net of copper credits) are estimated at $154 per ounce of gold and total costs per ounce, including operating costs and initial and sustaining capital would be $263 per ounce of gold. Initial capital costs are currently estimated to be $552 million. All amounts are in U.S. dollars.

Operating supplies will be purchased in Venezuela and from other South American countries, but some will be imported from Europe, Canada and USA. Power is available from a major new transmission line which runs south from Puerto Ordaz into Brazil, passing within a few kilometers of the project site. A substation has been constructed at the km 88 location by the power company for connection to the project. Abundant water is available in the area, with the fresh water project requirements being met by water pumped from the pit dewatering system, and by rainfall recovered in the tailings pond. On-site accommodations will be provided for employees, who will be drawn both from local villages, and from the industrialized area around Puerto Ordaz. Over 2,000 personnel will be needed for the construction of the project and employment will peak at over 900 operating personnel. The mining and processing methods are all based on conventional technology and no new or unproven technology will be employed.

Study Conclusions

Key findings of the Feasibility Study are as follows:

- Using a $350/oz gold price and $0.90/lb copper price, Pincock Allen & Holt (PAH) has estimated that the Brisas del Cuyuni deposit contains a minable reserve of 414.6 million tonnes of ore grading 0.69 grams per tonne gold and 0.13 percent copper. The pit design contains waste rock material of 748.3 million tonnes resulting in a 1.8:1 (waste to ore) strip ratio. Total metal contained in the ore is 9.2 million ounces of gold and 1.2 billion pounds of copper,
- Brisas is a world-class gold and copper deposit with tremendous leverage to gold and copper prices,
- The ore-body is very large, predictable and open for further expansion,
- The ore-body is relatively simple to mine, although requires special attention to mine dewatering in order to insure mining efficiencies and pit slope stability,
- Metallurgy is straightforward with a gravity circuit, flotation to generate a gold-copper concentrate and cyanidation of cleaner tailings,
- SGS Lakefield Research confirmed the Brisas project's gold and copper metallurgical recovery profiles,
- Existing infrastructure (including transportation and power transmission) near the Brisas project minimizes capital and operating costs.

The following are the key assumptions and conclusions contained in the feasibility study:

Proven and Probable	414.6 million tonnes; 0.69 g/t gold and 0.13% copper
Strip ratio (waste: ore)	1.81:1
Mine Life	16 years
Mill throughout	70,000 tonnes per day "Hardrock" ore 6,000 tonnes per day "Sulfide" saprolite 6,000 tonnes per day "Oxide" saprolite
Plant Metal recoveries	gold 83% copper 87%
Net payable Metals	gold 82.4% copper 83.0%
Life of Mine Production (payable metals)	gold 7.59 million ounces copper 979 million pounds

Average annual gold production	486,500 ounces
Average annual copper production	63million pounds
Average annual copper concentrate production	124,000 mt

Preliminary Economic Indicators (Pre-Tax)

Gold price	$400 per ounce
Copper price	$1.00 per pound
Total cash operating cost (on site and off site)	$5.26 per tonne ore
Initial capital cost	$552.4 million
Working capital	$39.3 million
Ongoing capital	$132.3 million
Cash Operating cost *	$154 per ounce of gold
Production Taxes	$13 per ounce of gold
Total Cash costs *	$167 per ounce of gold
Capital Cost Amortization	$ 96 per ounce of gold
Total Cost	$263 per ounce of gold
Internal rate of return	12.0 %
Project net present value @ 0%	$1.04 billion
@ 5%	$388 million
Project payback - after tax	8 years

* Net of copper by product credit

Project Geology

The Brisas Del Cuyuní gold deposit is in Venezuela within the Guayana Shield in northern South America. The shield covers easternmost Colombia, southeastern Venezuela, Guyana, Suriname, French Guiana and northeastern Brazil. The Venezuelan portion is subdivided into five geological provinces with different petrological, structural and metallogenic characteristics. The provinces are, from oldest to youngest, Imataca, Pastora, Cuchivero, Roraima, and Parguaza. Only Imataca, Pastora and Roraima provinces are found in the vicinity of the Brisas deposit.

The Brisas Del Cuyuní concession lies within a portion of the lower Caballape Formation volcanic and volcanic-related sedimentary rocks. The units are andesitic to rhyolitic tuffaceous volcanic beds, related sedimentary beds, and a tonalitic intrusive body. All rocks have been tilted and subjected to lower greenschist facies metamorphism. It is thought, based on information from nearby properties, that Brisas occupies one limb of a large regional fold. Limited direction-indicating structures show the strata to be top-up. In the main mineralized trend, moderate to strong foliation is oriented N 10 E and dipping 30º to 55º NW. This foliation appears to be parallel to the original bedding, and tends to be strongest in the finer-grained rocks.

Dikes and quartz veins cut the lower Caballape Formation. The strata and intrusive rocks are cut by N30W-striking mafic dikes emplaced at regular intervals (200-600 meters), some of which

have displacement on the order of tens of meters. The most common quartz veins are sets of thick, boudinaged, and en echelon vein structures that follow foliation/bedding orientation.

Mineralization

There are four distinct types of Au and Cu mineralization present in the concession, defined by geometry, associated minerals, and the Au/Cu ratio. These zones are the Blue Whale body, disseminated gold+pyrite+/-Cu, disseminated high Cu, and shear-hosted Au. Only the former three types are encountered within the proposed pit geometry.

The Blue Whale mineralized body is a discrete, sharply bounded, flattened, cigar-shaped feature that trends more or less parallel to the local schistosity and plunges about 35º SW along foliation. It outcrops in the Pozo Azul pit in the NE portion of the concession, and is intersected by 45 drill holes. It is 20 meters in diameter at its widest point, and tapers off at depth. It is volumetrically a small fraction of the economically mineralized ground in Brisas, but it possesses the highest Au and Cu grades.

The bulk of the mineralization occurs in disseminated, coalescing, lensoid bodies, high in Au and in most cases low in Cu. These bodies lie almost exclusively in the lapilli-rich, rapidly alternating sequence of tuffaceous units, and are clearly aligned along foliation. Together, these lenses form a generally well defined mineralized band which mimics the dip of the foliation/bedding and remains open at depth. It maintains at a similar thickness of about 200 m from the northern concession boundary for a distance of 1.4 km south, after which it tapers rapidly. Alteration minerals characteristic of these lenses are epidote, chlorite, secondary biotite, and sericite.

Stratiform lenses of high Cu (with or without high Au) parallel and underlie the Au+pyrite lenses described above. These lenses outcrop in the northern part of the deposit, and plunge to the south along the bedding/foliation in a manner similar to the Blue Whale and high Au/low Cu lenses. Deep drilling has intersected these lenses down to the 681900N coordinate. Within the stratigraphic column, these lenses generally occupy the ash flow tuffs and crystal tuffs. Rock in the mineralized zones is characterized by a high degree of lapilli and crystal replacement by chalcopyrite, and in some cases, by bornite and covellite. High chalcopyrite in the rock matrix is often accompanied by high chlorite, secondary biotite, and in some cases molybdenite.

Shear-hosted gold occurrences exist in the southern part of the concession, running parallel to the foliation as with mineralization further north. Stratigraphically, they occur above the large disseminated lenses previously described. The gold grades are erratic and localized, up to 100 g/t Au over a three-meter core interval. There is a high degree of correlation between chalcopyrite and Au grade, though Cu grades in these shears is sub-economic.

Exploration

Gold Reserve, Inc. (GRI) began exploration on the Brisas property in late 1992 after its acquisition of the property. Prior to 1992, no known drill holes existed on the property. Initial work by GRI included surface mapping, regional geophysical surveys, and geochemical sampling. Several anomalies were identified on the property followed by drilling and assaying starting in 1993. Additional work followed with petrology, mineral studies, density tests, metallurgical sample collection and laboratory test work. Several drilling campaigns have taken

place at Brisas and continue to present times. A total of 811 drill holes with a total drilled length of 180,508 meters have been completed by GRI at Brisas as of May 2004.

Emphasis of exploration on the concession focuses on following the mineralized lenses downdip to the west and down plunge to the south. The convention of drilling at an inclination of 60º and at a bearing of N 90 E was established once it became known that the mineralized lenses closely followed the dip of bedding/foliation, and that this drilling orientation was perpendicular to both. Drill hole spacing within and around the planned pit area is about 50 meters or less. Drill hole spacing in the Disseminated High Cu/Low Au and Blue Whale areas is about 25 meters. The majority of the drilling was performed using standard diamond core-barrel recovery techniques.

The Brisas deposit is still open along the down-dip direction and the resource is mostly limited by drilling. Exploration potential on the Brisas property also exists to the south and southeast of the proposed pit where several narrow intercepts of medium to high-grade gold mineralization have been encountered by drilling. Some of these intercepts are near the surface topography.

Condemnation drilling has been performed on most of the Brisas concession. The company plans to complete condemnation drilling to test the plant site, waste dumps and tail disposal areas prior to the commencement of construction activities.

Resource Modeling

It has been observed for some time within the Brisas property that the mineralization generally follows a structural trend that is sub-parallel to the rock units' trend present in the area. Therefore, the resource model is based on constructing separate mineral envelopes for Au and Cu that follow the general geologic trend and structural control of the Brisas zone and, in the case of copper, the weathering profile as well. The Blue Whale is modeled separately.

Variograms were run on the drill hole data to evaluate the spatial variability and lateral grade continuity through the deposit and provide limits for the search radius used in the grade interpolation process. PAH ran variograms for both Au and Cu downhole composites. Three-dimensional variograms were run for different orientations including on strike, dip, and across the ore zones.

Gold and copper composite values were capped according to the statistical review of the data in order to prevent outlying values from unnecessarily influencing the model toward higher gold and copper values. PAH does not believe that the composite grade capping will have a great influence on the overall model but it could locally prevent grade overestimation.

The gold and copper grade interpolations for the mineral envelopes only used the 6m down hole composites that fell within the grade envelopes. Only blocks within the grade envelopes received an Au or a Cu grade. The ordinary rigging (OK) interpolation method was used for all runs.

Resource Statement

Table E-1 tabulates the measured, indicated and inferred resources at Brisas and shows the tonnage/grade variability at various gold equivalent cutoff grades. Gold equivalent calculations are based on metal prices of $350/ounce Au, and $0.90/lb Cu, anticipated metal recoveries, and smelter costs.

Cutoff grades for reporting the mineralized material are based on a gold equivalent which equates the copper grade to a gold grade based on the relative value and then adds the gold grade to get an overall grade. The value of the copper and gold were based on metal prices of $0.90/lb for copper and $350.00/oz for gold, and the relative recoveries.

At a 0.4 AuEq cutoff grade the measured and indicated resource is 503 million tonnes at a gold grade of 0.68 gpt and a copper grade of 0.13 percent. In addition, the inferred resource at Brisas is estimated as 127 million tonnes at 0.65 gpt gold grade and 0.13 percent copper grade at a 0.4 AuEq cutoff grade. The inferred resources include the inferred mineralization both within and outside the mineral envelopes.

PAH believes that the resource estimate included in this report conforms to international standards such as the Canadian Institute of Mining (CIM) definitions as adopted by Canadian National Instrument NI 43-101, and that the current drill hole database is sufficient for generating a feasibility level resource model.

TABLE E-1 Mineral Resource Estimate
Gold Reserve, Inc.
Las Brisas, Venezuela
Feasibility Study

Category	AuEq Cutoff	k tonnes	Gold		Copper	
			gpt	k ozs	%	m lbs
Measured	0.3	252,974	0.641	5,213	0.114	634
	0.4	217,883	0.700	4,905	0.118	566
	0.5	177,433	0.774	4,418	0.126	492
	0.6	139,905	0.858	3,860	0.134	412
	0.7	107,966	0.950	3,298	0.141	335
Indicated	0.3	348,070	0.586	6,558	0.130	995
	0.4	284,941	0.662	6,066	0.132	827
	0.5	226,512	0.742	5,406	0.138	688
	0.6	175,731	0.829	4,681	0.144	557
	0.7	134,161	0.921	3,975	0.147	434
Measured + Indicated	0.3	601,044	0.609	11,771	0.123	1,630
	0.4	502,824	0.678	10,971	0.126	1,393
	0.5	403,945	0.756	9,824	0.133	1,180
	0.6	315,636	0.842	8,541	0.140	969
	0.7	242,127	0.934	7,273	0.144	769

Note: AuEq based on the "Smelter Case". AuEq= Au (gpt) + Cu (%) * 0.9

Category	AuEq Cutoff	k tonnes	Gold		Copper	
			gpt	k ozs	%	m lbs
Inferred(*)	0.3	172,414	0.539	2,986	0.131	497
	0.4	126,561	0.649	2,641	0.133	370
	0.5	94,973	0.753	2,299	0.135	282
	0.6	68,723	0.875	1,933	0.139	210
	0.7	53,069	0.975	1,664	0.141	165

Note: AuEq based on the "Smelter Case". AuEq= Au (gpt) + Cu (%) * 0.90
(*) Inferred resources include both within and outside the mineral envelopes.

Mining and Reserves

The Brisas Project is an open-pit gold-copper mining project, which will utilize hydraulic shovels and 236-tonne trucks as the primary mining equipment. Production is scheduled for 25.2 million tonnes of hard rock ore and on average 46.8 million tonnes of waste per year over the 16 years of the project. During the first four years of the project 9.4 million tonnes of oxide saprolite ore and 12.6 million tonnes of sulfide saprolite ore are mined. Each saprolite ore type is stockpiled separately and fed to different crushers at a rate of 1.94 million tonnes per year.. Total reserves are estimated at 414.6 million tonnes of ore at a gold grade of 0.69 grams per tonne and a copper grade of 0.13 percent with a strip ratio of 1.81 tonnes of waste per tonne of ore. Reserves are based on $350/oz gold price and $0.90/lb copper price.

There are two hard rock ore types, which are referred to as north and south. Although the names imply a geographic relationship the two ores are actually defined based on the copper content. North ore is a gold-chalcopyrite-pyrite with a copper content greater than or equal to 0.05 percent. South ore is a gold-pyrite with a copper content less than 0.05 percent. In general the ore types split at 681,800 north; however, both occur on either side of this line.

Pincock Allen & Holt (PAH) developed the production schedule based on targeting a 50/50 blend of the two hard rock ores. Overall the split between these two ore types is 54 percent northern hard rock and 46 percent southern hard rock. Because of this split the target was to have at least 50 percent northern hard rock.

Mine Design

Design of the ultimate pit was based on the results of a Whittle Lerchs-Grosmann pit shell analysis. Whittle is a software package that uses the Lerchs-Grossmann algorithm to determine the approximate shape of a near-optimal pit shell based on applied cutoff-grade criteria and pit slopes. These shells are generated from the geologic grade models, and economic and physical criteria.

In the Whittle analysis, for the ultimate pit design, the pit shells were allowed to cross the northern Brisas concession boundary. All of the material in this area was treated as waste rock. Allowing the crossover into the Cristinas contract area that maximizes the metal recovery on the Brisas concession.

Both of the saprolite ores are stockpiled since they have to be mined at a rate that exceeds their milling rate in order to meet the hard rock ore production requirements. Oxide saprolite mining is completed in Year 3 but milling is not completed until Year 5. Mining of sulfide saprolite ore ends in Year 4 but milling is not completed until Year 7. Plans are for the hard rock to be dumped directly into the primary crusher, near the pit exit on the east side, to minimize stockpiling and rehandling.

All of the waste rock, except that used for tailings dam construction, will be disposed of in the waste rock dump located to the west of the pit. There is the potential for the waste rock dump to be located over the down-dip extension of the existing ore body. Placement of this dump was based on an allowance of 200 meters beyond the Whittle pit shell based on a gold price of $500 per ounce and measured, indicated, and inferred resources. Exploration drilling is ongoing on the west side of the pit, which could result in the pit expanding.

Reserve Estimate

Since Brisas has two primary metals, gold and copper, a cutoff grade based on a single metal does not account for the value provided by the other metal. At Brisas the breakeven mining costs increase with depth, which causes the breakeven cutoff grade to increase with depth as well. Because the internal cutoff grade does not include mining costs there is a single internal revenue cutoff grade. For reserve reporting, PAH used an internal revenue cutoff grade of $2.76 per tonne.

Using the revenue per tonne cutoff grade of $2.76, PAH calculated the reserves for the ultimate pit. Total proven and probable reserves for Brisas are estimated at 414.6 million tonnes of ore at a gold grade of 0.69 grams per tonne and a copper grade of 0.13 percent. There are a total of 748.3 million tonnes of waste in the pit resulting in a strip ratio (waste/ore) of 1.81. Table E-2 summarizes these reserves by category.

TABLE E-2
Gold Reserve Inc.
Las Brisas, Venezuela
Reserve Estimate

Reserve Category	Tonnage (000's)	Au Grade g/t	Au grams 000's	Au ounces 000's	Cu Grade %	Cu tonnes	Cu M pounds
Proven	193,248	0.71	136,826	4,399	0.12	237,985	525
Probable	221,315	0.68	149,548	4,808	0.13	296,823	654
Total Ore	414,563	0.69	286,375	9,207	0.13	534,808	1,179
Waste	748,333		Strip Ratio	1.81			
Total In-Pit	1,162,895						

Footnote: Based on Internal Cutoff Using Revenue of $2.76/tonne ($350/oz Au, $0.90/lb Cu)

The proven and probable reserve (within a pit design) has been estimated in accordance with the SME Reporting Guide, SEC Industry Guide 7 and CIMM Standards as adopted by CSA National Instrument 43-101. The qualified persons involved in the property evaluation and resource and reserve estimates were Raul Borrastero C.P.G. and Susan Poos P.E. of Pincock Allen & Holt, and Brad Yonaka of Gold Reserve.

The economic analysis, which can be found in Section 19 of this report, is positive at metal prices of $350/oz for gold and $0.90/lb for copper and the tonnages reported in Table E-2. Therefore the economic criteria are met and this can be classified as a reserve.

The reserve estimate in Table E-2 is based on the assumption that a back slope agreement will be reached with Las Cristinas. PAH believes that this assumption is valid because back slope agreements are a common practice in the mining industry and both the government, Corporacion Venezolana de Guyana (CVG) and Crystallex have indicated to GRI that a back slope is probable in order to maximize the recovery of the resource. Also, the back slope agreement would allow the CVG contractor to mine onto the Brisas concession in the event their mine plan reaches the border area first.

Mine Operations

Plans are for the Brisas mine to operate two 12-hour shifts per day, 7 days per week for a total of 14 shifts per week. The mine operation schedule allows for 26 shifts per year being lost due to weather delays in the mine. It is envisioned that mining of ore would occur on both shifts in order to minimize stockpiling and rehandling. Scheduled work time is 10.5 hours per shift, that allows 30 minutes for meals, 30 minutes of delays, and 30 minutes lost during shift change.

Mine equipment requirements were developed from the annual mine production schedule, based on the mine operation schedule, equipment availability, and equipment productivities. The mine equipment fleet will include 30m^3 hydraulic shovels, 18m^3 wheel loaders, 236-tonne class haul trucks, and 251mm diameter track-mounted rotary drills.

Mine personnel includes all the exempt and non-exempt people working in the mine operations, maintenance, engineering, and geology departments. This includes the Mine Manager position; however, the General Manager is included in the Project General and Administrative costs.

Salary staff requirements have been estimated for mine operations, maintenance, engineering, and geology personnel. A mine work schedule of two shifts per day and seven days per week was used requiring four work crews with a shift supervisor assigned to each crew. The salaried mine staff includes a maximum of 75 people during mine production with a maximum of eight expatriates. Expatriates are replaced over time with a reduction to 4 by Year 2 and down to 1 from Year 3 through Year 16.

Metallurgy and Milling

The final ore milling and copper and gold recovery processes used as the basis for this Final Feasibility Study were developed by way of an extensive metallurgical testing program. The initial phase of metallurgical testing was conducted prior to 1998 and was used to support a Pre-Feasibility Study prepared by JE MinCorp and issued in February, 1998. As part of the metallurgical test program for the Pre-Feasibility Study, heap leaching of the ore was investigated as a preferred processing route. The test work demonstrated that heap leaching was not a viable alternative for recovering precious metals due to high cyanide consumption and low gold recovery. High cyanide consumption was caused by cyanide soluble copper in the ore and low gold recovery was due to the very finely disseminated nature of the gold within the ore.

From 1999 through 2004, a significant amount of metallurgical testing ensued. Metallurgical testing was completed using both core samples and a bulk ore sample. The test work included bench scale testing on core samples and a portion of the bulk ore sample, and pilot plant testing using the bulk ore sample. The focus of the metallurgical testing included the following:

- Defining the grinding and flotation characteristics of the different ore types and ore blends
- Cyanide leaching characteristics of the 1st cleaner flotation tailing for recovery of additional gold
- Optimization of the flotation process

- Mineralogy of the four primary ore types and various flotation products
- Mineralogy of final tailing
- Metallurgical testing to support trade-off studies of alternative processing routes for the both ores and concentrates
- Detailed chemical analysis of concentrates and final tailing to support environmental studies and smelting inquiries
- Physical testing of ores, concentrates and tailing to support the engineering activities relevant to the completion of this Feasibility Study.

Testwork for Flotation

Three distinct test programs were pursued with respect to developing a concentrator flowsheet: a grinding study, bench scale grinding and flotation studies and cyanide leach testing, and pilot scale operation of the selected process. A.R. MacPherson Consultants Ltd. conducted tests to determine the size reduction characteristics of the various ore types. Grinding tests included determination of crushing work indices, autogenous mill work indices, Bond rod and ball mill work indices and abrasion indices. The data developed from the grinding tests was used along with the J.K SimMet grinding circuit simulation software to select the grinding mill circuit configuration and predict the power consumption of the grinding mills.

The latest in-depth flotation test work was conducted primarily by SGS Lakefield Research in Lakefield, Ontario, Canada. The bulk of the metallurgical testing was completed on core samples collected from various sections of the ore body and representing the four major ore types. Bench scale testing was used to determine basic flotation characteristics and reagent scheme for the four ore types.

Flotation tests indicated that including oxide saprolite in the flotation circuit feed resulted in the deterioration of the flotation process. The flowsheet was modified to bypass oxide saprolite around the flotation circuit and to set-up a separate circuit to slurry the oxide saprolite and feed it, at a controlled rate, directly to the cyanide leach. The sulfide saprolite had recoverable amounts of copper minerals which made direct leaching of the sulfide saprolite problematic. Test work indicated that introduction of sulfide saprolite at about 8% of the total feed (6,000 tonnes per day) does not harm the flotation circuits.

In addition, test work indicated that a mill feed grade equal to or greater than 0.10% copper was required to reliably produce a marketable concentrate. To maintain a minimum copper grade of 0.10% in the mill feed a blend of ores from the copper rich northern section of the mine and the copper poor southern section of the ore body was required to maintain the minimum copper grade throughout the life of the project.

Bench scale locked cycle tests were conducted to help determine final flotation kinetics and circulating loads. Triplicate locked cycle tests were also conducted to test the robustness and reproducibility of the final process flowsheet. The locked cycle tests were successful in confirming the process design and the data was used to finalize the details of the Final Feasibility Study Process Design Criteria.

Alternative Flowsheet Testwork

As part of the metallurgical test program, alternative hydrometallurgical processes were investigated, using copper concentrates, and high temperature pressure leaching that resulted in the production of copper cathode and the capture of the gold in the copper electrowinning circuit slimes and ultimately as a gold/silver doré. The hydrometallurgical processes investigated were the CESL process and a pressure oxidation process. To complete pilot scale hydrometallurgical testing, approximately 25-tonnes of copper concentrate with three distinct copper grades were required. To produce this copper concentrate 700-tonnes of ore was taken from the northern portion of the ore body. A pilot plant was assembled at SGS Lakefield that mimicked the selected concentrator flowsheet. While this sample was not representative of the ore body some significant general conclusions can be inferred from the pilot plant operation:

1. The ore responded very well to flotation with good copper recovery and marketable copper concentrates were easily produced;
2. Overall gold recovery remained remarkably consistent with the inclusion of the cyanide leach of the 1st cleaner tailing;
3. Operation of the pilot plant did not reveal any unforeseen operating problems such as an unusual buildup of circulating loads of middling particles.

Results of the bench scale batch hydrometallurgical tests were encouraging but larger scale semi-continuous tests performed with mixed results. As a result the hydrometallurgical test program was placed on hold. The majority of the copper concentrates produced by the pilot plant were stored for future test work.

Whole ore cyanidation tests of the north, south and a blended ore were completed at a grind size of 100-microns. Copper was not recovered in these tests. Gold recovery was equivalent to or slightly better than the concentrator flowsheet while cyanide consumption remained reasonable. The capital costs for the grinding circuit, leaching circuit, and cyanide destruction circuit were greater than the capital costs for the concentrator option with the loss of copper revenues and high capital cost, together with the loss of copper revenues dictated that the whole ore leaching processing route would not be considered further.

Testwork for Other Purposes

Additional process and material characterization tests were conducted to support environmental and engineering activities including: concentrate settling tests, tailing settling tests, multi-element analysis of concentrates and tailing, rheology tests of slurries, acid-base generation studies, cyanide destruction tests and concentrate transportable moisture limit testing.

Summary

A brief summary of the metallurgical parameters for the concentrator design are given in the following summary

Process Metallurgical Design Summary	
Ore Grade	
Au, g/t	0.691
Cu, wt%	0.129
Mill Throughput, avg. t/d	70,000
Primary Grind Size, P_{80} in microns	110
Rougher Conc. Regrind Size, P_{80} microns	37
Recovery of Metal to Concentrate	
Au, wt %	63
Cu, wt %	87
Recovery of Gold in 1st Cleaner Tailing	
Au, wt% of total Au in ore	22
Recovery of Metal to Products	
Au, wt %	83
Cu, wt %	87
Copper Concentrate Grade	
Au, g/t	92
Cu, wt %	24
Copper Concentrate Transportable Moisture Limit	
Moisture, wt %	9.7

The flowsheet developed as a basis for this feasibility evaluation includes:

- Primary crushing using a gyratory crusher (1372 mm x 1905 mm x 600 kW)
- Grinding by two SAG mills (11.0 m dia x 5.8 Long x 13,500 kW ea) and four ball mills (6.4 m dia x 11.4 long x 9,325 kW ea)
- Gravity concentration in the grinding circuit for coarse gold recovery estimated at 13%
- Rougher flotation yielding 95% copper recovery and 85% gold recovery;
- Regrinding and four-stage production cleaner flotation to produce a 24% copper concentrate, containing 61.3% of gold in the ore;
- Cyanidation of cleaner scavenger tailings and oxide saprolite;
- Gold and silver recovery by carbon-in-pulp adsorption, stripping, electrowinning and smelting to produce doré bars;
- Copper concentrate filtering, loading onto trucks, haulage to port, storage at port and loading into bulk material handling ships.
- The process plant based on a two grinding trains, using the equipment of proven size designed to process 70,000 tonnes per day or 25.2 million tonnes per year of ore. During the first seven years sulfide saprolite is added to the grinding circuit at the rate of 6,000 tpd.

Oxide saprolite is added directly to the cyanide leaching circuit at a rate of 6,000 tpd over the initial five years of operation.

Tailings Disposal and Management

Two tailings streams will be produced, one from the initial flotation process and one from the detoxified, cyanide leach process. The tailings from the leach step, which accounts for approximately 10% of the overall tailings stream, are detoxified by the INCO process. Flotation tailings (approximately 90% of the total tailings stream) will be co-mingled with the cyanide tailings after cyanide destruction and deposited into the tailings impoundment.

The proposed tailings facility is located approximately 7 km south-southeast of the pit and has been designed to store the entire volume of tailings from the Brisas ore bodies, which is currently estimated at approximately 414.6 million tonnes. Additionally, the facility is designed to be expandable to store up to 500 million tonnes to handle future ore reserves. The proposed tailings facility consists of a compacted earth and rock fill dam with a maximum upstream toe to crest height of approximately 52 meters.

A downstream method was chosen for dam raises in order to allow continuous operational expansion utilizing mine waste. A seepage control system and passive treatment of excess water in the impoundment form the basis of the environmental control strategy for the Brisas tailings facility. A seepage cutoff trench will be installed along the perimeter of the facility beneath the tailings embankments to limit excessive seepage within the impoundment basin and a geomembrane liner core will be used to control seepage through the embankments. The facility is intended to provide a final repository for the tailings, effectively isolating the processed ore from the environment.

Based upon the current data, the geochemistry of the tailings and of the supernatant solution indicate that the tailings are benign. The water quality indicated by the testing would suggest that no issues of concern exist in regard to potential discharges from the tailings facility. This is based upon no long-term kinetic behavior in relation to oxidation of residual sulfides and potential acid generation. With the current understanding of the proposed operation of the tailings impoundment, and considering the climatic conditions of the site, the presence of the acid neutralizing minerals and the saturated condition of the solids would suggest that oxidation and acid generation are unlikely to occur.

Hydrology

The site averages of approximately 3 meters of rainfall a year up to 3,864 cubic meters per hour (m^3/hr) (17,000 gallons per minute) could enter the pit as groundwater and surface water inflow. For this reason, pit dewatering is a crucial expectation of the overall operation of the pit. An optimal dewatering system would consist of a series of wells pumped using submersible pumps and be designed based on the simulation of the various phases of pit development. Towards this end, the best option consists of using 50 dewatering wells in combination with cutoff wells and temporary in-pit wells. This reduces the maximum groundwater inflow to 548 m^3/hr (2,411 gpm).

In the pit, localized dewatering techniques including vertical, inclined, or horizontal drains will most likely be required to enhance drainage. In addition, pressure relief wells may be required

for depressurizing the pit floor. The in-pit water control system would be phased in as the mining progresses and would consist of a series of submersible pumps on barges which could be placed in sumps at various levels in the pit. As the pit reaches the final depth, these pumps would be combined into one unit. As required, turbine pumps placed at booster stations will be used to lift water from the pit. If sediment becomes a problem, submersible pumps may be switched to slurry pumps or placed on barges. Water from the well dewatering system will be collected by a series of laterals connecting to two trunk lines on each side of the final pit.

Groundwater quality data collected to date indicates that groundwater is of good quality and could be discharged directly into the receiving waters. Discharge from the sump, if necessary will be placed in holding ponds outside of the pit for settling solids. However, an effort will be made for sediment to settle directly in the pit.

Site Water Management

The terrain of the project area is relatively flat with some rolling hills, is mostly covered by moderately dense Sub-Amazon type, tropical rain forest. Large trees typically range in height from 25 to 35 meters, and are often accompanied by thick, dense undergrowth. Temperatures typically range from 22^0 C to 36^0 C and more than 3 meters of rain falls on average per year. The rainy season typically extends from May through October, although there are significant rainfall events throughout the year.

The study identifies the appropriate hydrologic methodology and develops design storm events and flows for the project site for use in design of the storm water management, water retention, and milling and process facilities. The site water management plan addresses large amounts of water, both from rainfall and flooding. The Rio Cuyuni is the major hydraulic control in the area, and gradients are very flat in the area. Significant rainfall events quickly cause rises in water surface elevations of the main stems and result in backwater conditions that propagate upstream in adjacent tributaries. For this study, the 2-year, 5-year, 10-year, 50-year, 100-year, and probable maximum precipitation (PMP) events were developed using a methodology suitable for the site conditions, and the results were used to estimate rainfall runoff peaks and volumes for design.

Large areas will be disturbed by construction and mining activities and sediment control facilities were designed to store the 10-year, 24-hour design flow event and maintain discharged total suspended solid concentrations approximately equal to preexisting levels. The only two exceptions are the flocculation ponds west of the open pit that will treat the pumped water evacuated from the sumps in the pit before release back into the environment. The flocculation ponds are smaller than the majority of the sediment ponds and cannot store the larger storm events, but the flocculation will settle the suspended solids so that discharge levels are approximately equal to preexisting levels. There are several sediment ponds located throughout the site that range in size between 5,000 and 127,000 cubic meters. Best management practices are employed wherever mining or construction activities will be occurring and soils disturbed in order to reduce the sediment yield.

Roadways and local drainage from facilities will be sloped to drain, and the storm water facilities and diversions are designed to flow into the sediment basins. Wherever a facility crosses a drainage way, the channel is diverted around or culverts installed. The culverts for the access

and haul roads and diversion canals were designed with sufficient capacity to convey the 10-year, 24-hour design storm event without overtopping.

Ancillary Facilities

To support the mining and milling operations at Brisas, a number of ancillary facilities will be required. These include a mine equipment maintenance shop, warehouse, reagent storage building, laboratory and administration offices.

Two access roads from Highway 10 will be provided and improved, one leading to the mining area, and one to the process area. A network of service roads will be constructed to allow access to the camp facility, tailings dam, sedimentation ponds, explosives magazine and other remote installations.

A water supply and distribution system will be constructed, using the pit dewatering wells as a source of fresh water. The mill area, mining area and the campsite will each be provided with a sewage collection and treatment system.

Gold Reserve's existing offices in Puerto Ordaz and Caracas will be maintained to provide support to the operating plant.

Regional Infrastructure

The project site is located in the Guyana region, which makes up approximately one-third of Venezuela's national territory. The main city is Puerto Ordaz, with approximately 700,000 inhabitants, situated on the Orinoco River near its confluence with the Caroní River. Puerto Ordaz has major port facilities, accessible to ocean-going vessels from the Atlantic Ocean, via the Orinoco, a distance of about 200 km.

Puerto Ordaz is the center of major industrial developments in the area, including iron and steel mills, aluminum smelters, iron and bauxite mining, and forestry. These industries are supported by major dams and hydroelectric generating plants on the Caroní River, providing 12,900 MW of electricity.

Puerto Ordaz is a modern urban center with good road and air connections to the rest of Venezuela. There are regular scheduled flights to Caracas and other major cities several times daily.

There are also port facilities 428 km northwest of Puerto Ordaz on the Caribbean coast. Guanta, near Barcelona, would likely be the port of entry for most construction, mining and milling equipment. The port facilities at Puerto Ordaz are generally dedicated to serving bulk carriers. General cargo and containers are not regularly handled. However, it appears that Puerto Ordaz has potential for the development of facilities for the export of copper concentrates in bulk.

The highway system within Venezuela is good, with standards close to those of the United States and Canada. Paved roads in very good to excellent condition provide access to within 3.5 km of the site. Four-lane highways run from Puerto Ordaz both northwest to Barcelona and Guanta, and for 55 km south to Upata.

The CVG power authority, Electrificación del Caroní C.A. (EDELCA), has constructed power line south from Puerto Ordaz into Brazil. They have constructed a substation at Las Claritas to supply sufficient power for Gold Reserve's Brisas project.

Owner's Implementation Plan

Upon completion of the bankable feasibility, Gold Reserve Inc. plans to commence several activities in order to initiate the development and construction of the Las Brisas mine and mill complex. This includes initiating detailed engineering, hiring additional highly qualified managers, finalizing permitting to construct and complete financing of the project. In addition, orders will be placed for equipment that requires long lead times for manufacturing and delivery. Likewise, negotiations will be concluded for electrical power, concentrate smelting agreements and final port arrangements.

Detailed Engineering

Proposals will be solicited from major Engineering, Procurement and Construction Management firms (EPCM) with International experience for the detail design and construction management. This would include the geotechnical consultants required for the final tailings dam design. Gold Reserve would then enter a contract for these services with the selected EPCM firm and anticipates completion of this activity by the first Quarter of 2005. Detailed engineering for earthwork activities, the construction camp and other early construction facilities would commence immediately.

Environmental

Information from the feasibility study is being used to complete an Environmental and Social Impact Assessment (ESIA) and to complete the permitting required to initiate construction. The ESIA will meet the IFC and World Bank standards for financing international projects. Baseline data for the ESIA was collected in 2004 as well as consolidating data from previous studies in the area. The environmental analysis and assessment is scheduled for completion early in the second quarter of 2005.

At the same time, an Environmental Impact Study is being completed to meet Venezuela requirements. An application will also be prepared to obtain an "Authorization to Affect Natural Resources (AANR)" (*Autorización de Afectación de Recursos Naturales*), which is granted by the Ministry of Environment and Natural Resources (MARN). .

In addition, final assessments of air emissions, water quality, geochemistry of tailings and waste rock and other environmental impacts and mitigation are being addressed. This work will be completed and included in the above studies and permit documents. Mitigation of environmental impacts will be included in the detail design work that will commence in the second quarter of 2005.

Community assistance and development programs will be continued and refined. Gold Reserve and the selected EPCM firm will also develop and initiate basic skills training for construction in the km 88 area.

EPCM Implementation Plan

The EPCM contractor implementation plan will work in conjunction and supplement the owner's implementation plan the initial activities includes:

- Basic and Detail engineering utilizing technical skill and experience required to successfully execute the size of this project is available
- Negotiation with major equipment vendors for purchase of long lead process and mine equipment.
- Prepare and award subcontracts for camp, catering and aggregate crushing plant.
- Assist owners procure to procure and install pit dewatering system
- Prepare and award subcontracts for temporary utilities for construction requirement
- Prepare major subcontracts for work, cleaning of tailings dam area

Project Schedule

The project schedule was developed based on the following criteria and assumptions:

- The detail engineering, procurement, construction and commissioning planning of the Las Brisas project will be executed from the EPCM design office where the technical skill and experience is available.
- The award of the EPCM contract prior to project funded.
- Award and release for fabrication of major equipment such as SAG mills and Ball mills, crushers transformers and selected mine equipment to support early construction activities.
- Procurement of camp facility
- Start of pre-construction activities such as clearing of tailings dam area, install pit dewatering, constructing of access roads, haul roads and excavation of plant site.

The estimated duration for major activities are:

- Engineering and Procurement 18-20 months
- Construction 24-26 months
- Commissioning and Start up 3 months

Manpower Requirements

The manpower requirements for the project will include personnel from a major Engineering, Procurement and Construction Management (EPCM) firm, consultants for the mine and tailings dam design and Gold Reserve, Inc. general and administration. Mine maintenance and operations and mill maintenance and operation

The estimated manpower requirement was estimated based on:

- Manhour required for engineering and procurement
- Manhours for construction Management including local hire personnel supports
- Manhours required to design the Mine and Tailings dam
- List of Gold Reserve General and Administration personnel
- List of Mine maintenance and operation
- Mill maintenance and operation Organization Chart.

Manpower requirement in various phases of the project is summarized in Table E-4 below:

TABLE E-4
Gold Reserves, Inc.
Las Brisas, Venezuela
Feasibility Study

Manpower requirement in various phases of project is summarizes as follows:

	Engineering and Construction			**Operation**
	Mid Year -3	Mid Year -2	Mid Year -1	Year 1 to 15
Engineering and Procurement	67	58	0	
Construction Management	6	74	60	
Construction Labor	0	1,350	120	
Sub Contractor	0	440	0	
Commissioning and Start-up	0	0	15	
Subtotal	73	1922	195	
Contractor Services	0	40	40	25
Mine Operation	1	208	283	259-535
Mill Operation	1	3	74	156-235
Brisas Site G & A	2	6	60	104-124
Subtotal	4	257	457	643-903
Puerto Ordaz Admin	15	15	24	28
Caracas Admin	3	3	3	3
TOTAL	95	2197	679	674-934

The Las Brisas organization will employ a total of 18 expatriate in the first 5 years operation and this the number of expatriate will be phased down to 3 as the skill and the experience is transferred to local management personnel.

Reclamation and Closure

The objectives, criteria and conceptual plans proposed in the Reclamation and Closure Plan will be the subject of future mine management and planning and as such, subject to continuing refinement. The Plan is designed to provide practical onsite guidance for the implementation of the principles outlined and will undergo regular review as appropriate and necessary to update the Plan.

It should be noted that a complete environmental impact assessment program is being conducted according to the laws of Venezuela to satisfy the requirements of the Ministry of Environment and Natural Resources (MARN) and an International Environmental and Social Impact Assessment (ESIA) program is being conducted according to the guidelines of the World Bank Group (International Finance Corporation-IFC). The Plan will satisfy all requirements outlined in these assessments.

There are a number of significant remediation and reclamation components within the Plan, including:

- Closure and reclamation of the tailings storage facilities.
- Closure and reclamation of the open pit area.
- Closure and reclamation of the waste rock stockpile.
- Closure and reclamation of the sediment ponds.
- Closure and reclamation of the access and haul road between the crusher site and the tailings facility.
- Venezuelan Mining Regulations require that all buildings, facilities and equipment owned by GRI at the time of abandonment be turned over to the State. All the facilities will be left intact in anticipation of annexation to the local community for continued beneficial use.

Concentrate and Gold Sales

Operations at Brisas are expected to produce an annual average of 124,000 tonnes per year of copper concentrate, containing 63 million pounds of copper, and 359,000 ounces of gold. A further 127,500 ounces per year of gold will be produced in the form of doré.

A 20,000 metric tonne concentrate storage and ship loading facility will be constructed in Puerto Ordaz. Copper concentrate will be trucked to this facility for ocean shipment to a smelter, probably in Europe, Japan or Southeast Asia.

Doré will be sold in Venezuela or shipped to the United States, Canada or Europe for refining by one of the internationally-established refiners.

Project Economic Model

This feasibility study has established that the Las Brisas deposit can be economically developed by open pit mining followed by a gravity circuit, flotation to generate a gold-copper concentrate, and cyanidation of cleaner tailings for gold and silver recovery. This study indicates that 9.2 million ounces of gold in 414 million tonnes of ore at an average gold grade of 0.69 grams per tonne and an average copper grade of 0.13% can be mined and processed economically to recover 7.59 million ounces of gold and 979 million pounds of copper. In addition, approximately 5.6 million ounces of silver are anticipated to be recovered as a by-product with the gold.

Development of the project yields a pre-tax discounted cash flow rate of return of 12.0% and a net present value of $388 million (5% discount rate) at a gold price of $400/oz, a silver price of $5.50/oz, and a copper price of $1.00 per pound. Total pre-tax cash flow is $1.04 billion.

Likewise, the Brisas project yields an after-tax discounted cash flow rate of return of 9.1% and a net present value of $207 million (5% discount rate) at a gold price of $400/oz, a silver price of $5.50/oz, and a copper price of $1.00 per pound. Total after-tax cash flow is $711 million.

The total initial capital is approximately $552 million, with an additional $175 million of sustaining capital (includes final reclamation and VAT) required over the 16 year mine life. The cash operating cost per gold ounce produced is $154 after by-product credits. When additional production taxes and preproduction stripping are added to the capital costs, total cash and non-cash costs (fully-loaded) are $263 per ounce.

This feasibility study considers an average annual mining rate of 73 million tonnes over the 15.6 year mine life. This includes 47 million tonnes of waste and 26 million tonnes of ore for an average stripping ratio of 1.81 to 1. Conventional truck and shovel mining methods will be utilized with the processing of ore at 70,000 tonnes per day yielding an average annual production of 486,000 ounces of gold and 63 million pounds of copper over the mine life.

Reserve estimates were based on a gold price of $350 per ounce, copper price of $0.90 per pound, and no silver credits. Results from the economic analysis at these prices are shown in Table E-5. Since an after tax total cash flow of $384 million is achieved the economic criteria for the reserve statement are met.

Several economic analyses have been completed to provide information on the expected economic performance of the Las Brisas project. All of the economic analyses have been conducted on a 100% equity basis.

TABLE E-5
Gold Reserves, Inc.
Las Brisas, Venezuela
Feasibility Study
RESERVE CASE AND BASE CASE ECONOMIC EVALUATION

	Reserve Case	Base Case
Gold Price ($/troy oz)	$350	$400
Copper Price ($/pound)	$0.90	$1.00
Silver Price ($/troy oz)	$0.00	$5.50
Project Economics – Pre-Tax ($ millions)		
Cash Flow	543	1,037
NPV @ 5%	95	388
NPV @ 10%	(111)	76
IRR	6.8%	12.0%
Project Economics – After Tax ($ millions)		
Cash Flow	384	711
NPV @ 5%	12	207
NPV @ 10%	(157)	(33)
IRR	5.2%	9.1%
Cash Operating Cost ($ per oz Gold)[1]	$171	$154
Payback (years)	10.8	8.0

(1) Net of copper by-product credit.

Base Case Evaluation

A base case economic analysis was prepared for the Las Brisas project using a gold price of $400 per ounce, copper price of $1.00 per pound, and silver price of $5.50 per ounce. Results for the base case are summarized in Table E-5. Table E-6 provides a summary of some of the key assumptions and additional detail on the results of the analysis. Cash operating costs are presented for gold on a net of by-product credit basis. Capital costs are also in Table E-6. Project payback is eight years.

TABLE E-6
Gold Reserve Inc.
Las Brisas, Venezuela
Feasibility Study
BASE CASE KEY ECONOMIC ASSUMPTIONS AND RESULTS

Base Case Assumptions	
Daily Mill Through-Put	70,000 TONNES/DAY
Mine Life	15.6 Years
Gold Price	$400/troy ounce
Copper Price	$1.00/pound
Silver Price	$5.50/troy ounce
Metallurgical Recovery	
Plant Recovery – Gold	83.1%
Plant Recovery – Copper	86.6%
Net Payable Metal – Gold	82.4%
Net Payable Metal - Copper	83.0%
Life of Mine Production	
Payable Gold	7.59 million troy ounces
Payable Copper	979 million pounds
Average Annual Production	
Payable Gold/year	486,000 troy ounces
Payable Copper/year	63 million pounds
Initial Capital Cost [1] (in millions US 2004 $)	
MINE	$106.7 MILLION
Mill	$276.6 million
Tailings	$31.6 million
OWNER'S COSTS	$10.1 million
Pre-Stripping	$15.2 million
Indirect Costs (includes EPCM and Camp)	$57.3 million
Contingency	$54.8 million
Total Initial Capital	**$552.3 million**
Capital Costs (in millions US 2004 $)	
Initial	$552 million
ONGOING, YEARS 1-16	$157 million
VAT Expense	$4 million
Reclamation Expenditure	$14 million
Total Capital	**$727 million**
Working Capital	**$39 million**
Cash Operating Costs Per Ore Tonne (in US 2004 $)	
Mining and Dewatering	$1.70/ore tonne
Processing	$2.21/ore tonne
G & A	$0.39/ ore tonne
Transportation & Freight	$0.36/ ore tonne
Smelting & Refining	$0.60/ ore tonne
Total Cash Operating Cost/Ore Tonne	**$5.26/ ore tonne**
COST PER OUNCE OF GOLD	
Cash Operating Costs[2]	$154
EXPLOITATION TAX	$13
Capital Cost (initial and sustaining)	$96
Total Costs[3]	**$263**

(1) A value added tax (VAT) of 15% or $69 million, is not included in the initial capital as it should be recovered within the first few years of construction and mining.

(2) Net of copper by-product credit.

(3) Net of copper credit and excluding costs incurred to date of approximately US $80 million.

Major Assumptions

The following is a summary of major assumptions for the economic analysis:

1. The evaluation assumes 100% equity with no debt financing (or gold loan) for a 100% interest in the project.
2. The analysis was done in constant fourth quarter 2004, US dollars with no escalation of operating costs, capital costs, or revenue.
3. Pre-operating, preproduction, and development costs (prior to Year 1) are capitalized until the operation is determined to be substantially complete and ready for operation. These costs are then amortized against the gold ounces of production. In the case of the Las Brisas project the amortization of approximately $80 million sunk costs and preproduction costs of approximately $15 million are computed by the units of production method.
4. Working capital for the project consists of initial supply inventory, spare parts, and accounts receivable less accounts payable. Accounts receivable are calculated for monthly revenue based on a 30-day collection period. Accounts payable for cash operating costs are based on a 30-day payment cycle.
5. Income from salvage at the end of the project life is assumed to be zero.
6. Silver is not included in the mine geologic model but has been included in the economic model based on metallurgical test results. Silver provides $31 million in revenue over the life of the project and has a $10 million impact on NPV at 5%.
7. Value-added taxes are deducted as an after-tax operating expense and recovered after tax against exploitation tax and income tax. Remaining VAT CERTs are assumed to be sold at 95% of the face value in the open market after holding them in inventory for one year.
8. The study assumes a 34% Venezuelan Corporate income tax rate.
9. The Las Brisas Project is subject to the following exploitation tax which is included in the financial model:
    - 1% of the commercial value in Caracas of refined gold and silver sold in country,
    - 3% of the commercial value in Caracas of refined gold and silver exported (saprolite concession),
    - 4% of the commercial value in Caracas of refined gold and silver exported (hardrock concession),
    - 7% mine-mouth tax on production of copper (net of operating costs).
10. Venezuela is a member of the Andean Community and uses the Andean Community customs tariff. The duty is an ad valorem duty calculated on the cost plus insurance and freight (cif) value of the product. Venezuelan law allows for the exoneration of all or part of the import duties levied upon such equipment and related supplies that are indispensable for the various phases of the mining activities. Pursuant to the exoneration rules contained in the existing law, this feasibility study does not provide for duty taxes on imported goods but does contain a provision for the 1% administration fee, which is not subject to exoneration. With the majority of equipment manufactured outside of Venezuela, the import duty exoneration has been assumed for all major equipment.

Sensitivity Analysis

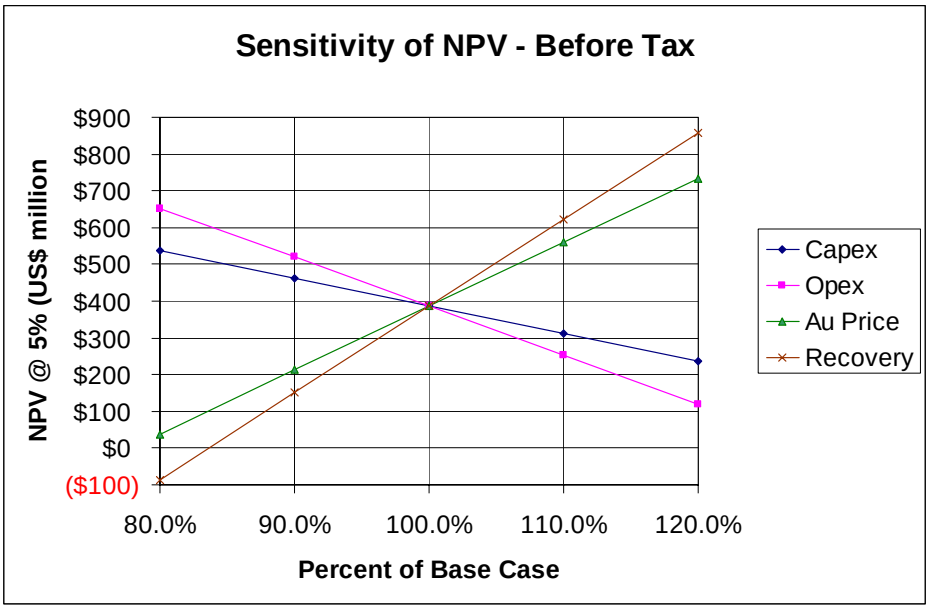
Sensitivity analyses were performed on gold price, copper price, metal recovery, capital cost, and operating cost. The sensitivity analyses indicate that project economics are most heavily influenced by metal recovery and the gold price. A 10% change in total metal recovery results in a ± $155 million change in after tax net present value at a 5% discount rate. A $25 per ounce change in the gold price results in approximately ± $72 million change in after tax net present value at a 5% discount rate. Project economics are also sensitive to changes in operating cost, with a 10% change resulting in a ± $89 million change in after tax net present value at 5%. Project economics are less sensitive to change in capital cost, with a 10% change resulting in a ± $61 million change in after tax net present value at 5%.

TABLE E-7
Gold Reserves, Inc.
Las Brisas, Venezuela
Feasibility Study
ECONOMIC EVALUATION - BASE CASE AND PRICE SENSITIVITY (Gold & Copper move together)

Gold Price ($/ounce)	$325	$350	$375	**Base Case $400**	$425	$450
Copper Price ($/pound)	$0.85	$0.90	$0.95	**$1.00**	$1.25	$1.50
Silver Price ($/troy oz)	$5.50	$5.50	$5.50	$5.50	$5.50	$5.50
Project Economics – Pre Tax ($ millions)						
Cash Flow	340	573	805	**1,037**	1,455	1,872
NPV @ 5%	(26)	113	251	**388**	634	880
NPV @ 10%	(188)	(99)	(11)	**76**	232	386
IRR	4.5%	7.2%	9.7%	**12.0%**	15.9%	19.4%
Cash Operating Cost ($ per oz Gold)	$174	$167	$161	**$154**	$122	$90

Gold Price ($/ounce)	$325	$350	$375	**Base Case $400**	$425	$450
Copper Price ($/pound)	$0.85	$0.90	$0.95	**$1.00**	$1.25	$1.50
Silver Price ($/troy oz)	$5.50	$5.50	$5.50	$5.50	$5.50	$5.50
Project Economics – After Tax ($ millions)						
Cash Flow	250	404	558	**711**	988	1,263
NPV @ 5%	(69)	24	116	**207**	369	531
NPV @ 10%	(209)	(149)	(90)	**(33)**	70	172
IRR	3.5%	5.5%	7.4%	**9.1%**	11.9%	14.5%
Cash Operating Cost ($ per oz Gold)	$174	$167	$161	**$154**	$122	$90
Payback (years)	12.2	10.5	9.2	**8.0**	6.4	5.4

Figure 1-1
Gold Reserves, Inc.
Las Brisas, Venezuela
Feasibility Study



NPV Sensitivity – Pre-Tax

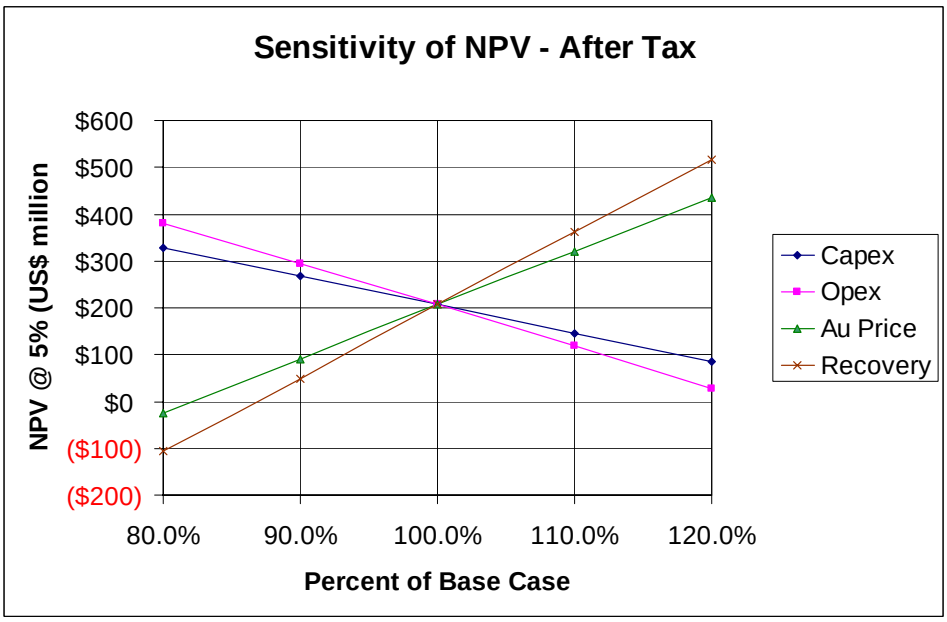



Figure 1-2
Gold Reserves, Inc.
Las Brisas, Venezuela
Feasibility Study
NPV Sensitivity – After Tax