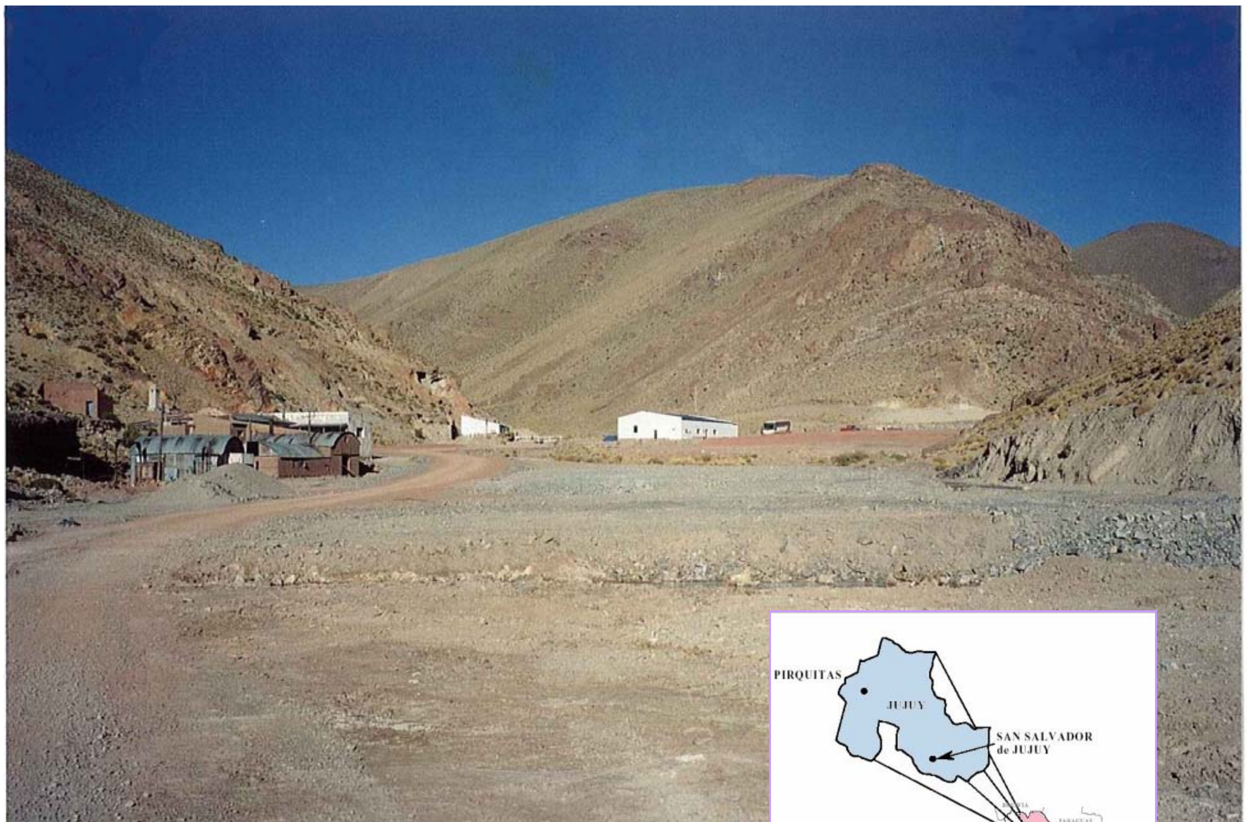
Silver Standard Resources

PIRQUITAS SILVER, ZINC & TIN PROJECT
JUJUY PROVINCE, ARGENTINA



43-101

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HATCH™

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3. Summary

In September 2005, Silver Standard awarded a Feasibility Study Update to Hatch and Mine Development Associates (MDA). This was completed in March 2006. Subsequently, Silver Standard Resources Inc. (Silver Standard) requested that Hatch and MDA complete a technical report of the Pirquitas silver, tin and zinc project. Silver Standard has rights to the project through its 100% owned subsidiary, Sunshine Argentina Inc.

Hatch has prepared Sections 1, 2, 4, 5, 16.2 and 18. MDA has prepared Section 9 – 16.1 and 19. Hatch and MDA both contributed to Section 3, 6, 7, 8, 16.3, 17 and 20 to 26 with input from Silver Standard. Note: all $ refers to US dollars.

Pirquitas is a polymetallic (silver, tin, and zinc) deposit situated in the Puna de Atacama of northwestern Argentina, in the Province of Jujuy. It is classed as one of the silver-tin deposits that lie within the Bolivian tin belt that begins in southern Peru and extends through Bolivia into northwestern Argentina, with the deposits becoming more silver-rich in the southern part of the belt. The project is located in mountainous terrain, with elevations ranging from 4,100 to 4,400 m above sea level.

The Pirquitas project area consists of 2,664 ha of mining concessions, 1177 ha of exploration concessions and 7,498 ha of surface rights. On the property are old underground mine workings, a former mill site, and Campamento Central (central camp). Remnants of the historic mining activities include derelict buildings, structures, and tailings. The project area is suitable for continued mining operations. Reported historic total production at Pirquitas is estimated at 777,600 kg of silver, 9,100 tonnes of tin from placer deposits, and 27,300 tonnes of tin mined from the vein systems and placer deposits.

Sunshine Argentina Inc. acquired Pirquitas in 1995 and began exploration of the property, including establishing survey controls, geophysical evaluation, underground geological mapping, sampling, underground drilling, and surface drilling. The exploration drilling is summarized in Table 3-1.

Table 3-1: Summary of Exploration Drilling

Area and Type of Drilling	**Meters**	**Number of Drill Holes**	**Percent of Total Meters Drilled**
Surface Core – Main Deposit	11,428	41	22.0
Surface Core – Condemnation	1,470	6	2.8
Underground Core – Main Deposit	33,927	159	65.4
Surface RC – Main Deposit	33,927	159	65.4
Surface RC – Condemnation	669	3	1.3
Other RC	95	4	0.2
Totals	**51,873**	**238**	**100.0**

Recovering tin, silver and zinc can be done with a combination of flotation and gravity concentration processes. An anticipated process plant described by independent consultant Jacobs Engineering in 1998 and updated by Hatch in 2005/06 envisioned that recovery would be by sequential crushing and pre-concentration jigging (gravity). The pre-concentrate would be treated by grinding, selective silver flotation and sulfide/zinc flotation (from which the zinc can be floated to a saleable grade concentrate). The sulfide/zinc tailings are then treated by gravity and flotation circuits for tin recovery to a saleable grade tin concentrate.

The Winters Company (Winters), an independent consulting firm, assessed the drilling data and sample integrity and concluded that the Pirquitas database was suitable for use in resource estimation. Mineral resources were modeled and estimated in 1999 by MDA and updated in 2005 and are summarized below; all reported resources are diluted to 5 m by 5 m by 6 m blocks. The total Measured and Indicated silver, tin and zinc mineral resources contained within the defined silver model are listed in Table 3-2.

Table 3-2: Measured and Indicated Mineral Resources

Cutoff (g Ag/t)	Tonnes	Grade (g Ag/t)	Ag (Ounces)	Grade (% Sn)	Sn (Pounds)	Grade (% Zn)	Zn (Pounds)
All Metals, Based on Silver cutoffs - Measured							
30	5,276,000	149	25,300,000	0.19	21,860,000	0.66	76,170,000
All Metals, Based on Silver cutoffs - Indicated							
30	28,043,000	128	115,540,000	0.13	79,730,000	0.54	336,230,000
All Metals, Based on Silver cutoffs - Measured and Indicated							
30	33,319,000	131	140,840,000	0.14	101,590,000	0.56	412,400,000

In addition to these in situ resources, there are high grade jig tailings that amount to 593,000 tonnes grading 234 g Ag/t, 0.37% Sn, and 0.127% Zn, classified as Measured and Indicated by Winters. The production schedule includes 400,000 tonnes of this material as mill feed in year one of the operation.

A feasibility study was completed in April 1999 by Jacobs Engineering Group, and later appended in January 2000. The Feasibility Study has been updated by Hatch and MDA in 2005/6. This update envisions an open pit mining operation based on commodity prices of US$ 5.35/oz silver, US$ 6063/t tin and US$ 926/t zinc. Pirquitas Proven and Probable mineral reserves were calculated by MDA to be 18.86 million tonnes grading 177g Ag/t, 0.21% Sn and 0.61% Zn including the jig tailings. The reserves were developed to meet the Canadian Institute of Mining, Metallurgy and Petroleum reserve definitions.

Presently, Silver Standard now plans to develop the Pirquitas project as a 6,000 mtpd of ore mining operation. From 2003 to 2005, Silver Standard carried out reclamation of jig tailings by isolating them from creeks, cleaned up an old assay lab, rehabilitated the existing camp buildings and conducted minor exploration on several targets outside the main zone. These targets were mapped in detail and sampled but compilation and interpretation are not complete.

Hatch has reviewed the previous feasibility study and the metallurgical testwork upon which the process plant was designed. The testwork was carried out by respected testing facilities and therefore reasonable confidence can be taken in the quality of the work. However, as the sampling, sample preparation and testwork was all carried out prior to Hatch's involvement, Hatch can only accept limited responsibility for the results of this "historic" work (see Section 16.2 of this Report).

Hatch has estimated the 4th Quarter 2005 capital cost of the Pirquitas project to be US$ 146 million, with an intended level of accuracy of +/- 15%. This includes US$ 40 million of mining related costs that were estimated by MDA of Reno, USA. It also includes US$ 6 million for tailings and water management, that were originally developed by Knight Piésold in 1998 and that were updated by Hatch with current unit-rates. This Capex compares to the 1999 Study capital estimate of US$ 124 million. It is Hatch's experience that capital equipment costs have escalated significantly during the past two years, and this is clearly illustrated by the vendor proposals received. As is well publicized, fuel and steel costs escalated significantly in 2004 and 2005, and this has impacted all costs, such as, freight.

Hatch have estimated life of mine operating costs to be US$ 259 million (with an intended level of accuracy of +/- 15%), equivalent to US$ 13.72/tonne of ore milled.

Hatch has carried out a financial evaluation of the project, using the model provided by Silver Standard. This indicates that using the last 18 months average metal prices (to December 31, 2005) the project has a rate of return of 19.2%.

Each of the capital cost estimate, the operating cost estimate and the financial evaluation referred to above are subject to important qualifications, assumptions and exclusions that are set out below in the relevant sections of this report.

A series of financial sensitivity analyses were carried out and the results summarized in Item 20.2 of this report.

Hatch consider that the following process issues are worthy of work during Basic Engineering:

- Specific jig testwork by the chosen equipment supplier, (this work is schedule for April and May 2006). The jig concentrate should be forwarded to a specialist laboratory for flotation testwork.
- Similar jig installations to be visited, to incorporate best available technology into the Pirquitas design.
- The jig concentrate produced from the vendor testwork to be returned to a specialist laboratory for silver, zinc and tin flotation testwork. The silver flotation concentrate to be subjected to in depth mineralogical evaluation to ascertain liberation characteristics, followed by further attempts to upgrade beyond the 20 kg/t level.
- Investigate tin flotation at a higher pH.
- Provide selected samples to vendors of centrifugal concentrators, such as Falcon and Knelson.

Hatch simplified the flowsheet and reduced capital and operating costs by combining the two tailings thickeners. This will result in more tailings reporting to the fines deposition area, and less to the coarse tailings stacking area. The difference in the split is relatively small, and Hatch considers this possible, but this does require some investigation to determine impact, if any, on the fine tin tailings impoundment.

During the period before EPCM or in Basic Engineering, prepared detailed equipment specifications and issue to all established vendors, as well as investigate possible second-hand equipment. Basic Engineering would also have as its prime objectives, finalization and sign-off of design criteria, equipment lists, mass balances, flowsheets and general arrangements.

4. Introduction

Silver Standard Resources Inc. requested that Hatch and MDA complete a technical report of the silver, tin and zinc project at Pirquitas, their 100% owned property in Jujuy Province, Argentina.

It is to be noted that much of the data on which this report is based is “historical” and is derived from work and data conducted and gathered by Sunshine Argentina Inc. a former subsidiary of Sunshine Mining and Refining Company, (collectively referred to simply as Sunshine in this report), prior to the involvement of MDA and Hatch, as described in Section 5.0 of this report. Neither Hatch nor MDA prepared or supervised this historical work and data. Nonetheless, this historical work and data has (to the extent relevant to their respective sections of this Report and as described in more detail in this Report) been carefully reviewed by Hatch and MDA and neither Hatch nor MDA has any specific reason to believe that any errors, omissions, misconduct or misrepresentations occurred during the course of, or were made in, this work.

Steve Ristorcelli, P. Geo. made a three day visit to the Pirquitas site in November, 1999 to tour the property, review relevant records and data, examine drill core, and visit accessible underground workings.

The resource estimate was conducted by Mr. Ristorcelli and Charlie Muerhoff, P. Geo., with assistance and support from Mr. Scott Hardy, P. Eng. The underlying data had been validated by the Winters Company (Winters). A complete feasibility was done by Jacobs Engineering Group (Jacobs) in 1999 and appended in 2000.

John Wells of Hatch, the Study Project Manager visited the site for two days in September 2005. Luis Miralles, the Hatch Cost Estimator visited the site in November, 2005.

DISCLAIMER

Hatch has prepared Sections 1, 2, 4, 5, 16.2 and 18 of this report. MDA has prepared Section 9 – 16.1 and 19. Hatch and MDA both contributed to Section 3, 6, 7, 8, 16.3, 17 and 20 to 26 with input from Silver Standard. Neither Hatch nor MDA accepts any responsibility or liability for the sections of the report that were prepared by the other party.

This Report is directed solely for the development and presentation of data with recommendations to allow for Silver Standard Resources to reach informed decisions. Except for the purposes legislated under provincial securities law, (a) any use of this report by any third party is at that party's sole risk, and neither Hatch nor MDA, nor any of their respective directors, officers or employees shall have any liability to any third party for any such use for any reason whatsoever, including negligence, and (b) Hatch and MDA disclaim responsibility for any indirect or consequential loss arising from any use of this report or the information contained herein.

This report is intended to be read as a whole, and sections should not be read or relied upon out of context. This Report contains the expression of the professional opinions of Hatch and MDA, based upon information available at the time of preparation. The quality of the information, conclusions and estimates contained herein is consistent with the intended level of accuracy as set out in this report, as well as the circumstances and constraints under which the report was prepared which are also set out herein.

As permitted by Item 5 of Form 43-101F1, Hatch and MDA have, in the preparation of this Report, relied upon certain reports, opinions and statements of lawyers and other experts. These reports, opinions and statements, the makers of each such report, opinion or statement and the extent of reliance is described in Section 5 of this Report. Hatch and MDA hereby disclaim liability for such reports, opinions and statements to the extent that they have been relied upon in the preparation of this Report, as described in Section 5.

As permitted by Item 16 of Form 43-101F1, Hatch and MDA have, in the preparation of this Report, relied upon certain data provided to Hatch and MDA by Silver Standard Resources and certain other parties. The relevant data and the extent of reliance upon such data is described in this Report.

Definitions

Currency used in this report is in United States dollars. At the time of writing this report, the United States dollar exchange rate with the Argentine Peso was 2.97 pesos to the dollar. Definitions of terms and acronyms used in this report are listed below:

AA	atomic absorption spectroscopy
Ag	silver
amsl	above mean sea level
AusIMM JORC	Australasian Institute of Mining and Metallurgy, Joint Ore Reserve Committee
CV	coefficient of variation (CV)
CIM	Canadian Institute of Mining, Metallurgy and Petroleum
g	gram
g/t	grams per tonne
ha	hectares
m	meter
NI 43-101	Canadian National Instrument 43-101
ppm	parts per million
RC	reverse circulation
Sn	tin
µm	micron
Zn	zinc

5. Reliance on Other Experts

In preparing this Report, both Hatch and MDA have relied upon certain reports, opinions and statements of lawyers and other experts. These reports, opinions and statements, the makers of each such report, opinion or statement and the extent of reliance is described below. Both Hatch and MDA hereby disclaim liability for such reports, opinions and statement to the extent that they have been relied upon in the preparation of this Report, as described below.

5.1 Legal

Certain legal opinions and other documents relating to the project were provided by Silver Standard to Hatch and MDA, and are included in Section 7.0 of the Feasibility Study Update report. For matters related to title to the property and related property rights, Hatch and MDA have relied on the opinion of Caparros & Randle Abogados, an Argentinian law firm retained by Silver Standard (see Sections 6.1 and 6.2).

5.2 Environmental and Tailings

The Environmental Impact Report was completed by Knight Piésold in 1998, and is available in a seven volume report, “Environmental Impact Report, prepared for Sunshine Argentina, Inc, December 1998”. Hatch have reviewed this work and it would appear to be complete and of a high technical standard. It is understood from Silver Standard that the environmental permits have been awarded and regularly updated and remain valid and in force. However, neither Hatch nor MDA have independently verified the information set out in Knight Piésold report and have relied on this report in preparing Section 6.3 of this Report.

5.3 Concentrate Marketing

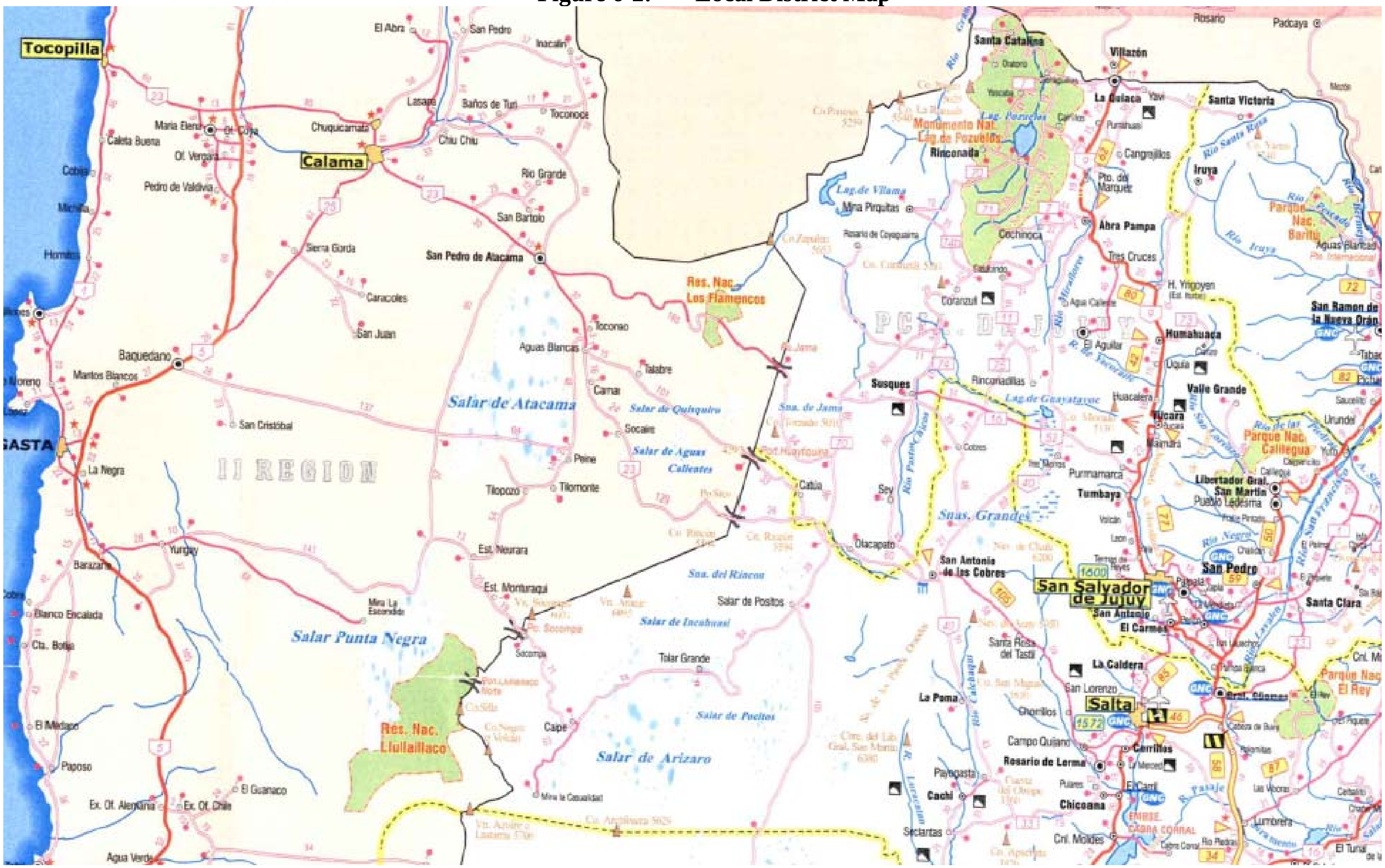
A study was done by Hamilton Associates and their report is provided in full in Section 6.0 of the Feasibility Study Update. This report provides current smelter terms for silver, tin and zinc concentrates and the possible buyers of the Pirquitas concentrates. This report has been relied upon in the preparation of Section 25.3 of this Report.

6. Property Description and Location

Pirquitas is a polymetallic (silver, tin, and zinc) deposit situated in the Puna de Atacama of northwestern Argentina, in the Province of Jujuy. The project site is located approximately 355 km northwest of the city of San Salvador de Jujuy (Figure 6-1). Access to the site is on public roads. The new paved Trans-Andean Highway allows access from the Chilean port of Antofagasta. The project is located in mountainous terrain with elevations ranging from 4,100 to 4,400 m above sea level.

Figure 6-1: Location Map

Figure 6-2: Local District Map



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The Pirquitas area saw production from 1933 to 1990; dredging of tin placers occurred from 1933 to 1949, while underground exploitation of tin-silver deposits began in 1936 and continued through 1990. It is estimated that during these periods, 27,300 tonnes of tin (including 9,100 tonnes from placer operations) and 777,600 kilograms of silver were produced. Twelve underground mines were active in the Pirquitas area, with the majority of production coming from the San Miguel and Potosí deposits.

6.1 Ownership

Silver Standard Resources, though its wholly owned subsidiary Sunshine Argentina, Inc. (Sunshine) owns the mining properties and related real estate located in the Rinconada Department, Province of Jujuy, Republic of Argentina. Sunshine acquired the property through a Bankruptcy sale, and Silver Standard acquired Sunshine through various transactions with Stonehill Capital Management, LLC, Stonehill Institutional Partners, L.P. and Stonehill Offshore Partners Limited and with Elliot International, L.P., The Liverpool Limited Partnership and Highwood Partners, L.P. At Silver Standard's request, Caparros & Randle Abogados, Cerrito 1186, Piso 3, Buenos Aires, Argentina, issued a title opinion dated June 17, 2004.

6.2 Land

Sunshine obtained the Pirquitas mining, exploration, and surface rights (Figure 6.2) by purchasing or applying for title to lands that fall into three basic categories, as follows:

Surface Rights – Title can be obtained for surface rights which can be used for purposes such as housing, infrastructure facilities, processing plants, waste and tailing disposal sites, and other facilities to support mining operations. The Pirquitas project's surface property boundary encompasses about 7,498 ha.

Parcel Number	Ha
530	500
531	1,000
532	1,000
533	750
534	749
535	999
536	1,000
537	1,005
538	495
Total	7,498

Cateo – A *cateo* is an exploration concession that allows individuals or companies to explore for various minerals. Each *cateo* comes with the exclusive right to convert the *cateo* into a *pertenencia* or exploitation concession once a discovery has been made. A *cateo* is subject to a payment or canon and is reduced in size over time if a discovery is not made. *Cateos* filed by Sunshine in 1996 include:

Cateo Name	Ha
Pirquitas Norte	487
Pirquitas Central	390
Pirquitas Sur	300 (pending)
Total	1,177

Pertenencia – A *pertenencia* is a concession for exploitation and is the basic unit for a mining concession. For lode deposits, the maximum dimension is 200 m by 300 m, and for disseminated deposits, the *pertenencia* cannot contain over 100 ha. The *pertenencia* must be rectangular and its borders are considered to extend vertically downward. These concessions are granted for an unlimited period of time provided that the concessionaire meets its obligation, principally the payment of the annual fee or *canon*. The concession is considered "real property" under Argentinean Law. The owner or owners of adjacent *pertenencias* may choose to consolidate *pertenencias* into a mining group called a *mina*. Each *pertenencia* within the group is still subject to the same obligations as the separate *pertenencias,* namely payment of the *canon.* Total *pertenencias* surface area is 2,664 ha; the Pirquitas *pertenencias* are listed in Table 6-1.

Table 6-1: Mineral Rights Owned by Sunshine Argentina Inc.

Espte. No.	Mine Name	Mineral	Cat.	No. Pert.	Hectares	Estado Expte.
206-B-1935	Segunda Cte. Perez	SnAluv	2	3	30	Mens. Aprobada
207-B-1935	Segunda Pirquitas	SnAluv	2	3	30	Mens. Aprobada
231-B-1936	San Marcos	SnAluv	2	1	10	Mens. Aprobada
257-B-1936	San Pablo	Sn	1	6	36	Mens. Aprobada
284-B-1937	General Urquiza	Sn	1	6	36	Mens. Aprobada
287-B-1937	Pampa	Sn	1	4	24	Mens. Aprobada
288-B-1937	Ramirez de Velazco	Sn	1	6	36	Mens. Aprobada
313-B-1938	Galvani	Sn	1	6	36	Mens. Aprobada
315-B-1938	Volta	Sn	1	6	36	Mens. Aprobada
158-C-1934	Antigua	SnAluv	2	3	30	Mens. Aprobada
248-C-1937	Gorriti	Sn	1	6	36	Mens. Aprobada
211-G-1935	Maria Cristina	Sn	1	6	36	Mens. Aprobada
212-G-1935	Blanca Fany	Sn	1	6	36	Mens. Aprobada
276-G-1937	Zegada	Sn	1	6	36	Mens. Aprobada
65-L-1934	Roma	SnAluv	2	5	50	Mens. Aprobada
66-L-1934	Varsovia	SnAluv	2	5	50	Mens. Aprobada
67-L-1934	Londres	SnAluv	2	5	50	Mens. Aprobada
68-L-1934	Buenos Aires	SnAluv	2	5	50	Mens. Aprobada
69-L-1934	Argentina	SnAluv	2	5	50	Mens. Aprobada
74-L-1934	Rosario	SnAluv	2	5	50	Sin Mensura
80-L-1935	La Cueva	Sn	1	6	36	Mens. Aprobada
92-L-1936	San Mateo	Sn	1	6	36	Mens. Aprobada
93-L-1936	San Santiago	Sn	1	6	36	Mens. Aprobada
94-L-1937	General San Martin	Sn	1	6	36	Mens. Aprobada
95-L-1937	General Belgrano	Sn	1	6	36	Mens. Aprobada
96-L-1937	General Lavalle	Sn	1	6	36	Mens. Aprobada
97-L-1937	9 de Julio	Sn	1	6	36	Mens. Aprobada
98-L-1937	12 de Octubre	Sn	1	6	36	Mens. Aprobada
99-L-1937	18 de Noviembre	Sn	1	6	36	Mens. Aprobada
87-L-1935	Santa Ana	Sn	1	6	36	Mens. Aprobada
100-L-1937	23 de Agosto	Sn	1	6	36	Mens. Aprobada
101-L-1937	25 de Mayo	Sn	1	6	36	Mens. Aprobada
102-L-1937	1 de Mayo	Sn	1	6	36	Mens. Aprobada
99-P-1929	Cabalonga	SnAluv	1	5	50	Mens. Aprobada
145-P-1932	Pirquitas	Sn	1	7	42	Mens. Aprobada
201-P-1934	Galan	SnAluv	2	5	50	Sin Mensura
319-P-1936	Potosi	Sn	1	6	36	Mens. Aprobada
320-P-1936	Bolivia	Sn	1	6	36	Mens. Aprobada
321-P-1936	Oruro	Sn	1	6	36	Mens. Aprobada
324-P-1936	Los Andes	Sn	1	6	36	Mens. Aprobada
325-P-1936	La Paz	Sn	1	6	36	Mens. Aprobada
329-P-1936	Nueva Granada	Sn	1	6	36	Mens. Aprobada
334-P-1936	Santa Cruz	Sn	1	6	36	Mens. Aprobada
476-P-1945	San Lucas	Sn	1	3	18	Sin Mensura
486-S-1973	Grupo Min. San Miguel	Sn	1	96	576	Sin Mensura
501-S-1974	Grupo Min. Rinconada	SnAluv	2	43	430	Mens. Aprobada
195-V-1945	Orosmayo	SnAluv	2	3	30	Mens. Aprobada

Silver Standard Resources (Sunshine Argentina) obtained a legal opinion on the property title from the Buenos Aries based law firm of Caparros & Randle Cerrito 1186, Piso 3, Buenos Aries, Argentina, issued a title opinion dated June 17, 2004. The opinion states:

"Therefore, in connection with the above mentioned considerations and qualifications [the summary of the acquisition proceedings], and to the best of our knowledge, Sunshine had as of the date of the Deed, and continues to have ownership of Pirquitas, which grants Sunshine the legal right, under Argentine Law, to:

a) Occupy and enter the Real Estate Property for purposes related to mining,

b) Build new facilities on the Real Estate Property,

c) Use and exploit the Real Estate Property, the Mining Property and the Tailings,

d) Extract ore from the Mining Property,

e) Refurbish old and build new ore processing and other facilities in the Real Estate Property,

f) Process ore into metal,

g) Engage in any process necessary for the concentrate produced in Pirquitas to be ready for sale, and,

h) Sell the concentrate from the Mining Property.

In view of the above, we can state that Sunshine (i) acquired Pirquitas by means of an Auction proceeding duly carried out under the pertaining rules set forth by the Procedure Code, (ii) fully complied with requirements established thereof by the Court, (iii) paid in due time the total purchase amount of US$1,720,000, (iv) executed the Deed and had it duly registered before the Registro Inmobiliaro de Jujuy and before the Escribania de Minas de Jujuy as required by Argentine law, which constitutes a valid ownership title for Pirquitas."

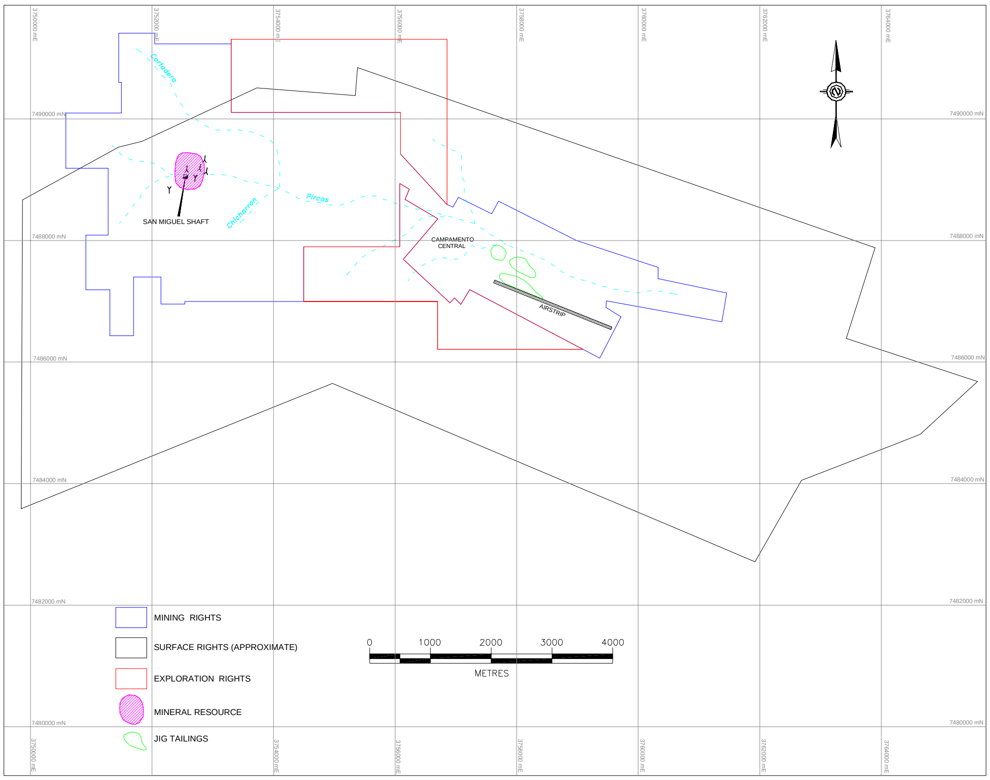
The opinion did not address the cateos covering the ground on the periphery of the project, which Sunshine filed after the property acquisition.

The project includes water rights in Permit No. 201/002 to withdraw a total of 32 liters/second from the Pirquitas, Collahuaima, and Porvenir rivers. The water rights were granted by the Dirección Provincial de Recursos Hidricos de Jujuy and recorded by the Ministerio de Obras y Servicios Publicos on July 23, 1998.

Ore produced at Pirquitas will be subject to a maximum three percent "mouth of mine value" royalty payable to the Province of Jujuy. The royalty is based on the net recoverable value of the contained metals less certain operating costs, depreciation and depletion.

An operating permit was issued in July 1999. On approval of the Feasibility Study submitted by Sunshine, they were issued a Memorandum of Understanding where they are entitled to enjoy the benefits of Fiscal Stability under the Mining Investment Law, this sets income tax at 33% even if future laws change the rate or add new taxes.

Figure 6-3: Pirquitas Land Map



Note: *pertenencia* locations and sizes are approximate.

6.3 Environmental

Sunshine initiated environmental studies in the project area in 1996, and commissioned an independent consultant, Knight Piésold LLC, to oversee the field programs and prepare the environmental baseline study. The baseline study report was issued in 1997 and documented the physical, chemical, biological, and human interest conditions in the area. Hatch and MDA have reviewed the Knight Piésold report but have no responsibility for this report or environmental matters. This 2006 Feasibility Study Update did not include any update of the previous environmental study.

Knight Piésold completed an environmental impact report (EIR) for Sunshine in 1999. The EIR describes and evaluates existing potential environmental problems and the foreseeable potential effects that development of the project would have on the surrounding environment. The scope of this EIR is commensurate with the norms for environmental protection associated with Law 24.585 of the Argentine

Mining Code (November, 1995) and with guidelines established by international lending institutions such as the World Bank. The following discussion is either paraphrased or taken directly from Knight Piésold's work.

The project area is known to be a "suitable habitat" for 26 animal species and one plant species that are considered to be protected. Of these 26, the plant (yareta), two mammals (vicuña and mountain vizcacha), and seven birds (lesser rhea, puna tinamou, Andean flamingo, puna flamingo, Andean condor, puna ground tyrant, and chestnut canastero) are known to inhabit the area. None of the protected species observed on the site are listed as threatened or endangered.

Remnants of the historic mining activities include derelict buildings, structures, and tin-silver jig tailings and tin placer tailings along the Río Pircas. Flotation tailings had been discharged into the Río Pircas. Scattered piles of gold placer tails were left about 150 m above the current level of the Río Pircas on paleo river terraces to the south of Campamento Central. These areas comprise some 107 ha of surface disturbance that existed prior to Sunshine Argentina's acquisition of the property, some of which are now associated with acid rock drainage into the Rio Pircas watershed.

Surface and ground water are known to be metalliferous and acidic down gradient from the existing mines above the Río Pircas canyon at Tres Placas. Acidic and metalliferous ground water is found in the underground workings, as well as some natural springs in the area, suggesting that natural weathering is also contributing to background surface water contamination.

Notably, according to Sunshine Argentina, the documents in the bankruptcy auction files did not mention environmental liabilities against the property, but did mention that Sunshine was "grandfathered" against environmental liabilities resulting from historic mining activities. Also mentioned is that the EIR by Sunshine was accepted by the government and that the only condition applied to the EIR, other than the standard two-year update, is that water quality monitoring shall be carried out. The June 2005 report has been filed and the next one is due in June 2007.

7. Accessibility, Climate, Local Resources, Infrastructure and Physiography

The Pirquitas area is typical of the Argentine Altiplano: steep, rugged terrain with a distinct wet-dry season with moderate to cool days, cool to cold nights, and frequent strong winds. However, the area proposed for the process plant and infrastructure facilities is flat and easily accessed. The climate of the project is typical for altitudes higher than 3000 m, with cold, dry conditions in winter, more evaporation than rainfall, and an annual temperature lower than 18°C. The average annual temperature in the Pirquitas project area is approximately 7°C. Annual precipitation is 259.4 mm. Wind speed averages 8.2 km/h from the west by northwest. Average humidity is 47%.

The patchy to sparse shrub and grass vegetation provides habitat for a variety of wildlife, with birds being the most diverse and numerous groups represented. The immediate area around the project is sparsely populated with little infrastructure development. Local houses are modest, with few of them having access to utilities or services. While in the past the local economy was largely supported by mining at Pirquitas, it has been far more reliant on subsistence ranching and some government service positions since the mine closure. Most of the historic and cultural influences identified in the area are also related to these past mining activities.

On the property are old underground mine workings, the former mill site, and Campamento Central. Remnants of the historic mining activities include derelict buildings, miscellaneous structures, and tailings.

The San Miguel mine is situated near the center of the current Pirquitas resource area. The San Miguel shaft is 200 m deep and provides access to six different levels spaced at 30 m vertical intervals. Sunshine was successful in dewatering the mine to below the fifth level, which provided exploration access to the deposit. Crosscuts driven by previous operators to the north on each of these levels provide access to the easterly trending vein systems. The crosscuts are situated along the hinge of the San Miguel anticline and thus provide excellent mineralized exposures in the heart of the deposit.

In 2005, the Chile-Argentina paved highway was completed, and will allow access from the Chilean port of Antofagasta, to the town of Susques in Argentina. From Susques to Pirquitas, (a total length of 110 km) is by roads 74 and 74B. These gravel roads will require upgrading prior to construction. An allowance of US$ 800,000 was included in the estimate for this work. This requires verification.

There is an existing 2 km long gravel airstrip at Pirquitas. Hatch estimate this can be extended to 3 km for US$ 300,000. This will allow access by light aircraft, that can fly to Calama (Chile) and Jujuy and Salta (Argentina) to connect with national airlines.

Electrical power at Pirquitas will be provided by using natural gas. The “Norandino” gas line was installed recently and passes to within 36 km of Pirquitas, where a 3” connection has been installed. Techint, a Buenos Aires consultant has evaluated the pipe route from there to Pirquitas, following highway 74B. Hatch evaluated the most suitable systems for generating power using this gas, and recommend reciprocating engines.

The nearest community is the Nuevo Pirquitas village, approximately 10 km from the minesite. This small community has a population of approximately 200 people, many of whom would directly benefit by the project. The nearest towns are Susques, situated on the new Trans-Andean Highway, and Abra Pampa, both are 2-3 hours driving time from the mine. The nearest larger towns or cities are Jujuy and Salta in Argentina (6 hours by road) and Calama and Antofagasta in Chile (8 hours by road).

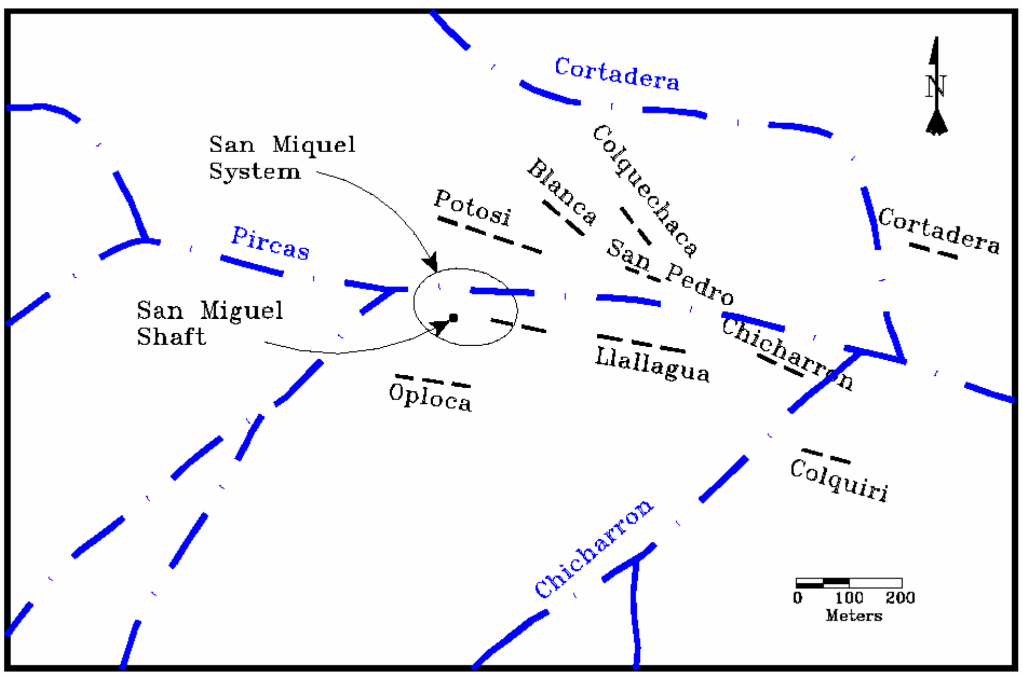
8. History

8.1 General Area History

Pirquitas is the largest historical producer of tin and silver in Argentina. Tin placer deposits were first discovered in the area in 1932 by Alberto Pichetti, who was investigating alluvial gold occurrences along the Orosmayo River drainage system. The tin placers were dredged between 1933 and 1949. The source was discovered and mining of the tin and silver lodes started in 1935, with high-grade veins being mined until 1990.

Twelve mines (Figure 8-1) operated in the area and it was often found that mineralization from one mine would turn out to be the same zone as in another, leading to the eventual interconnecting of the mines. The largest mines were San Miguel, Chocaya, Llallagua, and Potosí. Reported total production during this time is estimated to be 777,600 kg of silver, 9,100 tonnes of tin from placer deposits, and 18,200 tonnes of tin mined from the vein systems.

Figure 8-1: Locations of Major Mines



(Jacobs Engineering, 1999)

Sunshine Argentina acquired the Pirquitas property in a bankruptcy auction in November 1995. Sunshine's exploration program included survey control, geophysical surveys, geological mapping, sampling, and drilling. Survey control work included the conversion of the local mine survey grid and survey monuments to UTM coordinates. All accessible underground workings were sampled on continuous one-meter intervals perpendicular to the strike of the sheeted vein system or perpendicular to the strike of individual veins. The five levels at San Miguel and other existing workings in the Oploca, Potosí, Blanca, San Pedro, and Llallagua vein systems were channel sampled. The drifts and crosscuts of all sampled workings were also mapped at a scale of 1:200. In addition to the mapping of the underground workings, the San Miguel area was surface mapped at a scale of 1:1000. Sunshine also conducted extensive core and reverse circulation (RC) drilling from the surface and core drilling from underground.

8.2 Historic Resource and Reserve Estimates

Winters estimated a resource for Pirquitas in April 1999. Winters reported that the work was done using Canadian Institute of Mining and Metallurgy classifications and MDA believes the mineral resource estimate was done to standards that would satisfy Canadian National Instrument 43-101. The result of that work is given in Table 8-1.

Table 8-1: Pirquitas Mineral Resources – Winters Company, 1999

Cutoff Grade g/t Silver	Classification	Tonnes (million)	Silver (g/t)	Tin (%)	Zn (%)
60	Measured	7.1	242	0.32	0.62
	Indicated	15.7	165	0.29	0.60
	Total	22.8	189	0.30	0.61
80	Measured	5.7	283	0.35	0.60
	Indicated	12.0	195	0.32	0.59
	Total	17.7	223	0.33	0.59
100	Measured	4.9	316	0.37	0.59
	Indicated	9.4	224	0.35	0.57
	Total	14.3	256	0.35	0.58

In the April 1999 Feasibility Study, Jacobs Engineering and Winters based their estimate and compilation of mineable reserves on the resources summarized in Table 8-1, above. Criteria used in defining the reserve included: US$ 5.50/oz silver; US$ 5,600/t tin; mining extraction of 95%; and an external dilution factor of 5% at a grade of 60 g/t silver, 0.1% tin and 0.1% zinc. The net result of this 1999 study was an ore reserve of 21.6 million tonnes grading 167 g Ag/t, 0.33% Sn and 0.57% Zn. Total waste was 117.1 million tonnes, resulting in an overall waste:ore ratio of 5.4:1.

9. Geological Setting

9.1 Regional Geology

Geology in northwestern Argentina is divided into three subparallel north by northeasterly-oriented structural belts: the Sub-Andean Range, the Eastern Cordillera, and the Altiplano (Puna), in which Pirquitas is located. These belts are defined by differences in mineral deposits, tectonic activity, and igneous rocks.

The Sub-Andean Range is approximately 110 km wide, with elevations ranging from 300 to 2,500 m above sea level. This belt is mostly void of known mineral deposits, and is characterized by thick sequences of sedimentary rocks that have large open folds. The rocks range from Proterozoic to Recent, have no sign of volcanic activity and very little intrusive activity.

The Eastern Cordillera is 70 to 130 km wide, with elevations ranging from 1,300 to 6,200 m above sea level. Mineral deposits are mostly base metals. This belt contains granites intruding dissected sedimentary rocks. Regional high angle reverse faulting and associated uplift are present, separating it from the Sub-Andean Range to the east.

The Puna is 90 to 240 km wide, with elevations ranging from 3,900 to 6,700 m above sea level. Mineral deposits are dominated by base and precious metals but sulfur and borax deposits also exist. Proterozoic rocks are dominant and include interbedded sandstone and shale of the Ordovician Acoite formation. Pirquitas mineralization is located in the latter unit. Many volcanic centers and calderas are also present.

9.2 District Geology

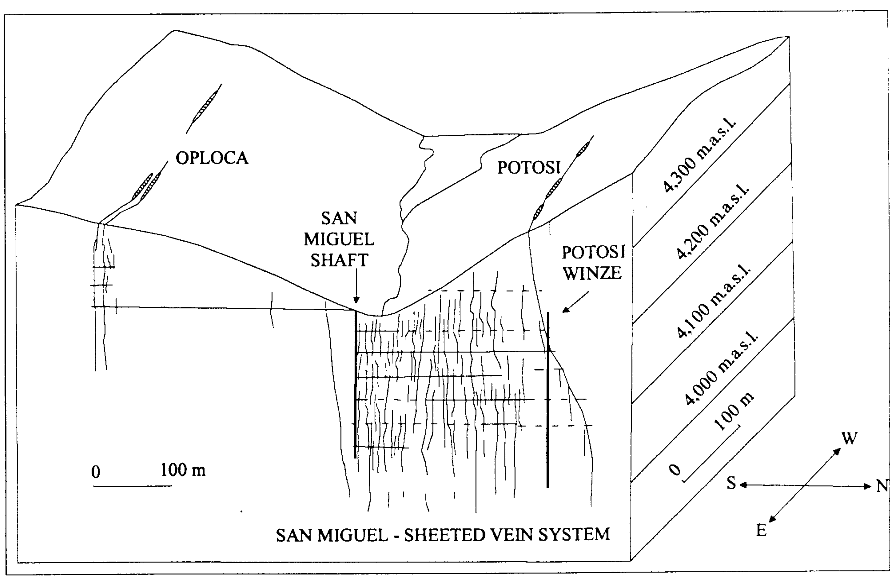
Pirquitas lies in the Puna structural belt in an area of Ordovician marine sediments, tertiary continental sediments, and younger volcanic rocks. Silver and tin mineralization is found in the Ordovician Acoite formation of shale, sandstone, and graywacke. The rocks are folded, typically with steeply dipping axes that strike between North to N30°W.

Deposits of the Bolivian Tin Belt are usually associated with small stocks, but no intrusive rocks crop out near Pirquitas; however, a dacitic intrusive lies seven kilometers east of Pirquitas. Dacitic pipe-like breccia zones and lenses have been recognized in underground workings and on the surface.

Silver, tin and, to some extent, zinc mineralization at Pirquitas occurs within veins and fracture systems characterized by three dominant structural orientations: east-southeast (100° to 110° azimuth), northwest (300° to 310° azimuth), and northeast (70° to 80° azimuth). Over 60% of the identified veins in the district occur along the east-southeast orientation.

The Pirquitas deposit includes the San Miguel zone, a broad area of sheeted veinlets and microveinlets, and the Potosí and Oploca veins. The two principal veins, Potosí and Oploca, occur to the north and south, respectively, of the main San Miguel area (Figure 9-1). The majority of structures that control mineralization strike east-southeast and dip steeply to vertically. The Oploca vein and San Miguel structures generally dip to the south, and the Potosí vein generally dips to the north.

Figure 9-1: Schematic Drawing of San Miguel, Potosí, and Oploco

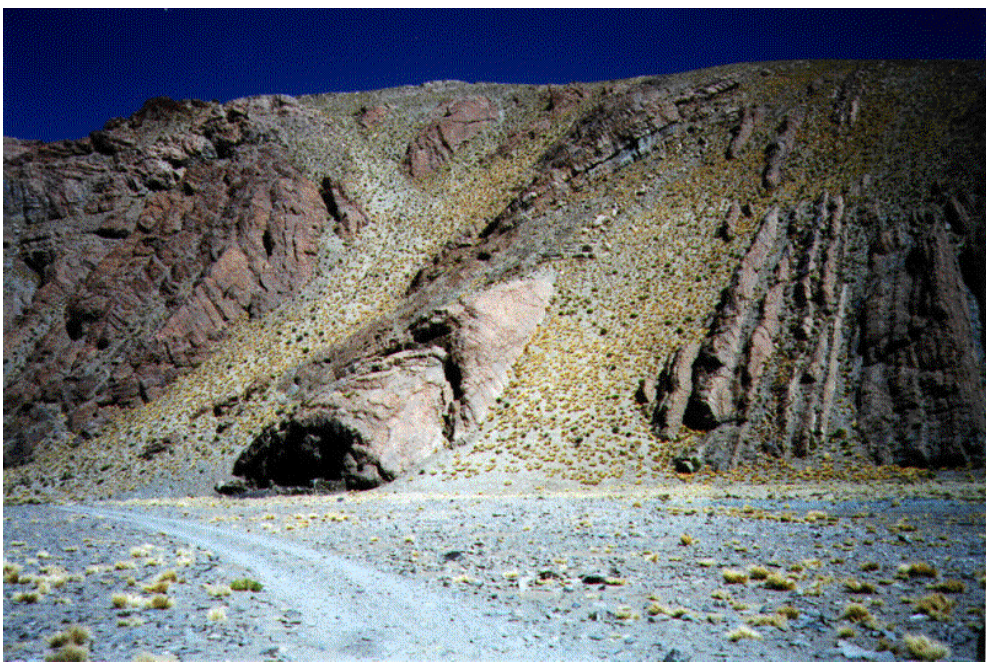


9.3 Structure

Within the San Miguel sheeted vein system, the host Acoite Formation is folded with near horizontal fold axes that trend north-northeast. A significant anticlinal fold axis exists in the central part of San Miguel and extends both north and south from that point. This fold axis and possible doming related to a hypothesized buried intrusive may have played a role in localizing higher-grade mineralization at San Miguel and Potosí. A typical fold axis in the Pirquitas area is shown in Figure 9-2.

The veining and sheeted zones (Figure 9-1) strike about S75°E and are reportedly both more common and better developed near the hinge of the north-trending anticline. The Potosí vein, on average, dips 85°N at 15°E, while the main San Miguel area dips 80°S at 15°W. A secondary structural set, principally defined by stoping (but only a very small portion of the stopes) in the San Miguel zone strikes east-northeast. These structures represent only a minority of the high-grade mineralization.

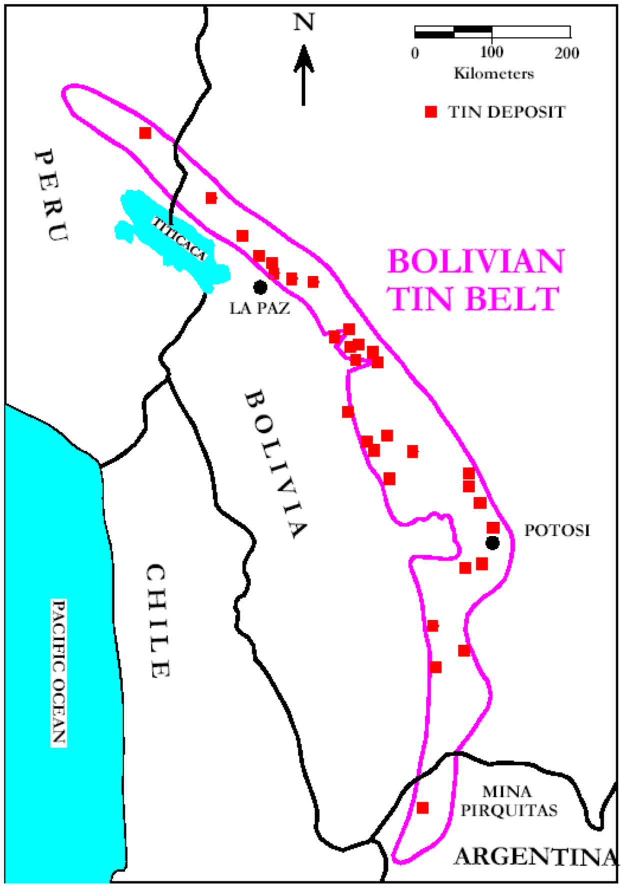
Figure 9-2: Folding near Pirquitas



10. Deposit Types

Pirquitas is classed as one of the silver-tin deposits that lie within the Bolivian Silver-Tin Belt. This belt begins in southern Peru and extends through Bolivia into northwestern Argentina (Figure 10-1) near Pirquitas. The deposits become more silver-rich in the southern parts. Tin mineralization occurrences are quite variable, as veins, stockwork, tectonic breccias, disseminated mineralization and even mantos (Turneaure, 1960). These deposits are often associated with small stocks one to two kilometers in diameter and have sometimes been considered as porphyry tin deposits.

Figure 10-1: Bolivian Tin Belt



(Dulskie, *et. al.*, 1982)

11. Mineralization

Mineralization is controlled by the dominant structural fabric and, to a lesser extent, by the permeability and porosity characteristics of the host rocks. Silver, tin, and zinc are spatially associated in a broad sense, but locally, the relationship is non-existent; there are veinlets with only one, all three, or any combination of the three metals. There are also veinlets of pyrite devoid of any silver, tin, and zinc.

There appear to be three principal styles of mineralization: low-grade disseminated/weak, discontinuous stockwork, sheeted zones of microveinlets, and veins/veinlets. The broad, low-grade halo of silver mineralization is centered on San Miguel, but in general, also encompasses the Potosí vein. Isolated, discontinuous zones of higher-grade micro-stockwork sporadically occur within this broad halo of low-grade mineralization.

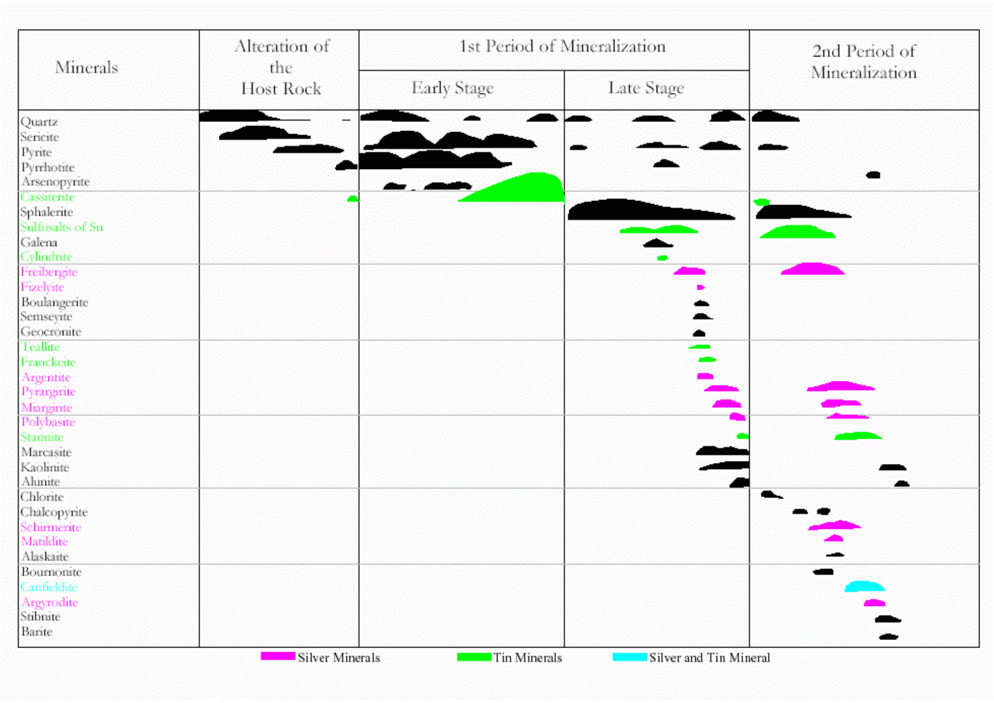
The tin mineralization includes a poorly defined, broad, low-grade zone of mineralization with very tight, narrow zones of higher-grade veinlets and veins, similar to the silver mineralization. In the central core of the deposit, these higher-grade zones exhibit good continuity and correlate well through the deposit.

Zinc mineralization has an inverted bowl-shaped geometry with a weakly to unmineralized core. Higher-grade zones also seem to trend east-southeast, but these merge into broad zones toward the west end of San Miguel. These broad zones of higher-grade mineralization are open-ended and appear to be made up of dense stockwork and/or narrow, steeply-dipping veinlets of sphalerite, often light-pale brown in color. Underground, veinlet mineralization occurs in a similar fashion to the silver and tin, but high-grade zinc is not confined to the narrow veinlets.

Paragenetic studies, summarized in Figure 11-1.

Figure 11-1, suggest nearly all of the tin, dominantly cassiterite, was deposited during the early stage of the first mineralizing event with silver-bearing minerals (dominantly freibergite, pyrargyrite, miargyrite, and acanthite) deposited during the later stage of the first mineralizing event. Additional deposition of silver plus tin sulfide minerals also occurred during a second mineralizing event. Sphalerite was dominantly formed in the later part of the first period of mineralization and, to a lesser extent, in the second mineralizing event. Mineralized structures also contain fine-grain aggregates of quartz, pyrrhotite, sphalerite, marcasite, and other subordinate sulfides. An enrichment of zinc (sphalerite) occurs as a halo around the upper levels of the San Miguel zone and may represent local base metal zonation of the hydrothermal system. The most profound aspect of the Pirquitas deposit is the spatial overprinting of the silver, tin and zinc mineralization, but without a correlation between the metals on a local basis.

Figure 11-1: Mineral Paragenesis



11.1 San Miguel Area

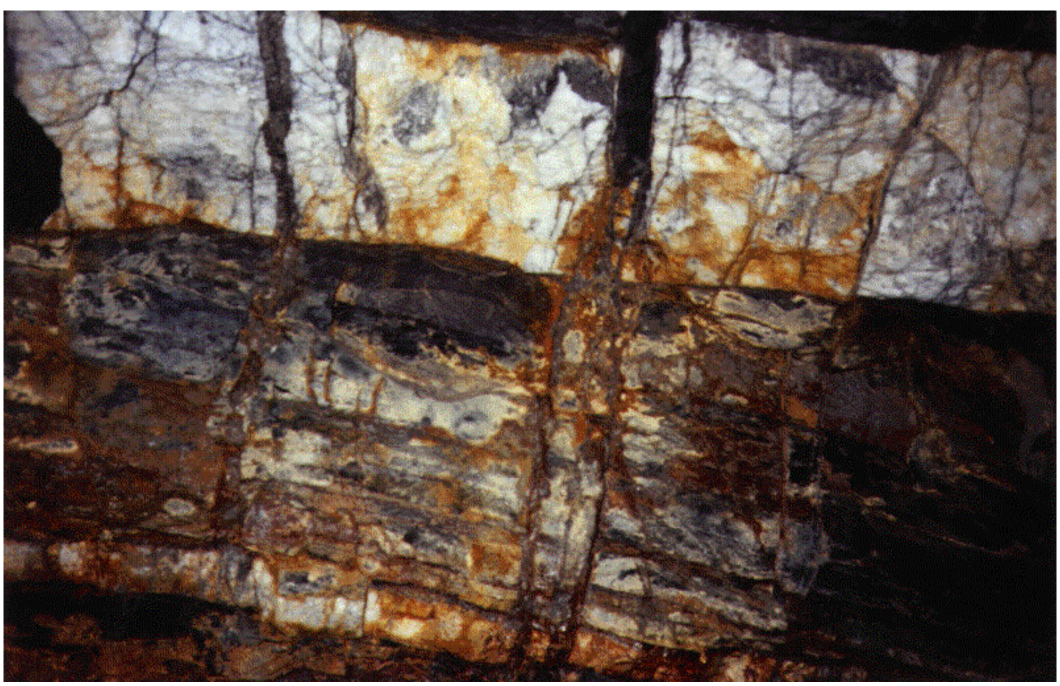
Within the overall low-grade zones, there are numerous sheeted microveinlet zones as well as distinct veins and veinlets. The higher-grade sheeted zones are steeply dipping and the majority trend east-southeast. Contacts of the sheeted zone with the low-grade halo can be both abrupt (<1 m) and gradational (5 m) for silver, while the tin contacts are generally sharp. The aggregate width of the San Miguel sheeted silver-tin zone is approximately 120 m, with local sheeted zones generally ranging from 5-20 m wide and extending up to 300 m in strike length. Sheeted networks of veinlets dominate this style of mineralization, though they can grade from weak to discrete veins.

At San Miguel, there are numerous, very thin high-grade veins, typically less than a few centimeters in width. Sampling at one-meter intervals gives them apparent widths of one meter at diluted grades. The diluted grade of these veins averages over 1,000 g Ag/t, (highest-grade silver sample to date: 1 m grading 65,899 g Ag/t) and can extend for tens to hundreds of meters along strike and dip. One such vein was mined from the lowest level of the mine (it remains open at depth) to the highest level of the mine, as well as from the most western portion of the mine to the most eastern portion of the mine (oral comm., Sr. Julio Garcia). This represents a total distance of about 400 m long by 120 m high.

Figure 11-2 shows an example of thin, near-vertical, high-grade silver ± tin veinlets and stockwork cutting bedding and a pre-mineral (barren) quartz vein concordant with bedding at San Miguel.

Figure 11-2: Example of Narrow High-Grade Veining at San Miguel

(dimensions in photograph approx. 0.75 x 1.0 m)



11.2 Potosí

Potosí is a more discrete structure, which locally bifurcates into several structural zones - veins, breccias, and faults - along strike and at depth. The thickness of the Potosí vein itself ranges from <1 m to 3 m wide and extends for nearly 400 m along strike and 300 m along dip. The vein is often haloed by +50 g Ag/t mineralization, which locally extends from less than one m to greater than five m outward from both the footwall and hanging wall of the vein.

The tin mineralization along the Potosí vein is more confined to a narrow tight vein and often occurs with the silver, though not necessarily.

The Potosí zinc mineralization is less well defined. Although there are high grades of zinc within the Potosí massive sulfide vein, there are also very high grades of zinc described as being within the Acoite Formation country rock as stockwork and disseminations outside of the vein.

12. Exploration

Exploration was undertaken by Sunshine starting in 1996 and included initial survey control work, geophysical evaluation, underground geologic mapping, sampling, underground drilling, and surface drilling. Sunshine's survey control work included the conversion of the local mine survey grid and survey monuments to UTM coordinates.

In 1996, Geodatos was contracted to conduct magnetic and induced polarization geophysical studies. The magnetic survey included 11 four-km lines that were spaced at 250 m intervals. The induced polarization survey had 16 1.2-km lines that were spaced at 100 m intervals. The magnetic results indicated several magnetic lows around the areas of known mineralization, which were speculated as being altered portions of an intrusive at depth. Two induced polarization anomalies, indicating sulfide-rich areas, were centered over two of these magnetic lows, located in the San Miguel and Oploca mineralized zones.

Sampling and mapping was conducted by Sunshine in all underground workings that were accessible. At San Miguel, underground channel samples were taken at continuous one meter intervals, perpendicular to the strike of the sheeted vein system. The samples were chiseled with air hammers as channels five centimeters wide by two centimeters deep by one meter long. Approximately 1,600 m in the main ore zone of San Miguel were sampled, and another 2,788 samples were taken from the Oploca, Potosí, Blanca, San Pedro, and Llallagua vein systems. Drifts and crosscuts were mapped at 1:200 scale; mapped data included lithology, structure/veins, bedding orientations, and sulfide content.

In addition to mapping the underground workings, the San Miguel area was surface mapped at a scale of 1:1000. The geologic features recorded were similar to those mapped in the underground workings, although more emphasis was placed on identifying lithologic units, folds, alteration, and structural features. The program was expanded in the proposed pit area to collect more detailed data on joint sets, faults, bedding plane orientations and other structures that could influence pit slope stability. The results were also incorporated into a database to establish geomechanical characteristics for the different sectors of the pit area.

Sunshine's drilling programs included underground core drilling, surface core drilling, and surface reverse circulation (RC) drilling that together totaled over 51,800 m. This total includes condemnation drilling in areas selected for waste dumps, processing facilities and tailings disposal. Each drill hole was sampled at one-meter intervals. Detailed logs were compiled that included information such as rock type, alteration, mineralization, sulfide content, percent core (sample) recovery, and geotechnical data. Details of the drilling are summarized in Section 13.0 (Drilling).

Underground core drilling took place on five levels of the San Miguel mine at orientations designed to cross-cut the easterly trending sheeted vein system. Surface RC drilling was the primary means employed to delineate the deposit beyond the limits of the underground workings. Surface core drilling helped confirm the results of the RC drilling.

13. Drilling

Sunshine was the first company to perform modern exploration drilling at Pirquitas. Sunshine completed 51,873 m of drilling. All holes were sampled continuously at one-meter intervals, and logs were recorded for information such as rock type, alteration, mineralization, sulfide content, sample recovery, and other geotechnical data. The total length of samples sent for analyses was 49,034 m, which excludes 2,839 m of no sample recovery and voids. Table 13-1 summarizes this drilling.

Table 13-1: Summary of Exploration Drill Holes

Area and Type of Drilling	Meters	Number of Drill Holes	Percent of Total Meters Drilled
Surface Core - Main Deposit	11,428	41	22.0
Surface Core - Condemnation	1,470	6	2.8
Underground Core - Main Deposit	4,284	25	8.3
Surface RC - Main Deposit	33,927	159	65.4
Surface RC - Condemnation	669	3	1.3
Other RC	95	4	0.2
Totals	51,873	238	100.0

(Jacobs, 1999)

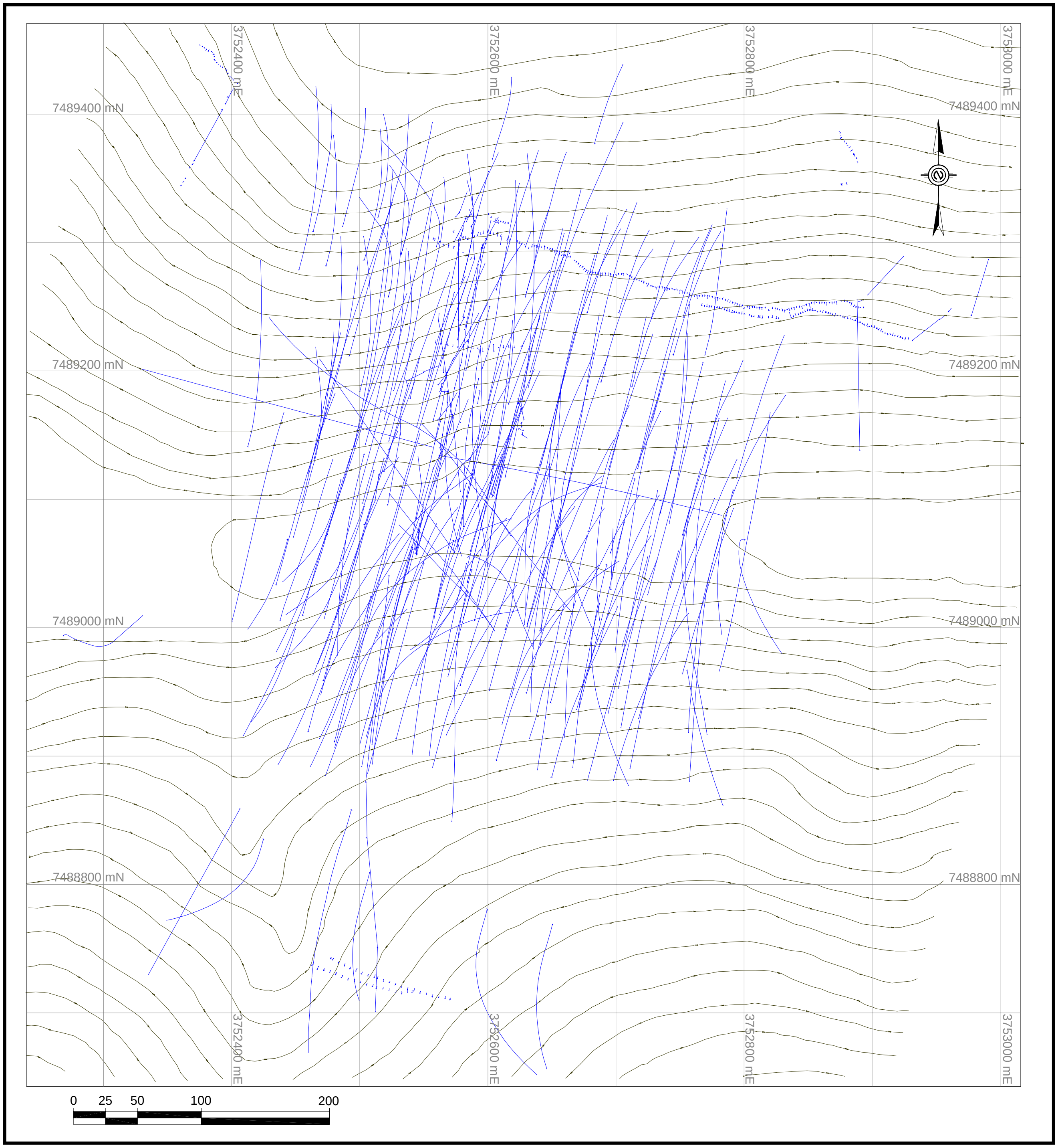
Reverse circulation drilling was used extensively because of its ability to continue drilling through open underground workings, thereby increasing the chance of reaching the desired depths. Core drilling augmented the RC drilling to verify results and better define the mineralized zones and obtain structural data.

Most of the drill holes were surveyed downhole using a continuous downhole survey tool and data was "composited" to three meter intervals. The RC holes were originally thought to have little deviation, so they were not surveyed in the beginning of the program. In fact, survey results when obtained showed that some RC holes did have significant deviation. Where possible, the older unsurveyed holes were re-entered and surveyed, but 40 RC and 14 core holes remain unsurveyed. For these holes, deviation was estimated based on the mean of adjacent hole deviations for similarly oriented holes drilled with the same type of rig. Sunshine believed that there was a “reasonably high probability” that the hole deviation was controlled by the geologic structure it was crossing. At Winters’ urging, Sunshine drilled nine additional holes in areas where Winters felt confirmation of mineralization identified by the unsurveyed holes was needed. Winters (1999) reported the new drill holes “confirmed the presence and grade of mineralization where it was indicated by the factored hole locations.”

Drill stations were excavated on all five underground levels at San Miguel. Drilling was generally oriented sub-horizontal at azimuths of 15° to 195°, or perpendicular to the mineralization.

Information derived from the surface core program was used to gain additional understanding of structural controls of mineralization and to add a level of confidence to the RC data. Again, the drilling was dominantly oriented from the horizontal 15° to 195°, though at steeper angles, but rarely vertical.

Figure 13-1: Drill Hole Location Map
(surface & underground drill holes; underground channel samples)



14. Sampling Method and Approach

Underground channel samples were taken at continuous one-meter intervals, perpendicular to the strike of the sheeted vein systems. The samples were chiseled as channels five centimeters wide, by two centimeters deep, by one meter long. Pneumatic chipping hammers and traditional hammering were used to chisel the channels. This sampling covered 1,600 m in the main ore zone of the San Miguel veins and another 2,788 samples were taken from the Oploca, Potosí, Blanca, San Pedro, and Llallagua vein systems. Sample weights averaged 2 kg for each linear meter.

Drill core was transported from the drill site to the geology lab, where measurements were taken for calculating the rock quality designation (RQD). Afterwards, the core was sawn in half with a diamond saw, with one half geologically logged in detail and stored on site. The other half was sent to the assay lab for preparation and analyses. Five percent of the locally stored samples were further split and sent to the lab as duplicates.

Reverse circulation cuttings were collected and split to 30 to 40 kg samples at the drill rig. This sample was split in half using a three-tier Jones splitter, with one-half stored at Pirquitas and 3 to 5 kg split from the second half sent to the lab for preparation and analyses. Five percent of the locally stored samples would be further split and sent to the lab as duplicates.

15. Sample Preparation, Analyses and Security

Sunshine's drilling program was done in two phases, marked by a change in laboratories from American Assay Laboratories to SGS Chile. The change was prompted by cost savings and greater efficiency in reporting results with SGS. Both labs took possession of the samples at Pirquitas and transported them to their respective labs for preparation and analyses.

Preparation procedures were the same for both labs. American Assay Laboratories set up sample preparation facilities at Pirquitas and SGS Chile transported the samples to their lab in Salta, Argentina. Samples were dried for two to three hours at 105°C. They were then crushed to <18 mm in a jaw crusher and further crushed to <2 mm and then <0.18 mm with a roll crusher. A split of about 250 g for American Assay and about 400 g for SGS was taken using a Jones riffle splitter. The split was pulverized in a ring/disk pulverizer to <0.102 mm, homogenized and packaged for analyses. All rejects from American Assay splits were stored at Pirquitas and a minimum of ¼ kg per sample was returned to Pirquitas from SGS Chile. A split of each pulp was also returned to Pirquitas so there is a split of each sample, coarse reject and pulp archived on site.

Sample pulps were digested in aqua regia and analyzed for silver and zinc using atomic absorption spectrometry (AA). Less than three percent of the samples assayed higher than 500 ppm Ag or Zn and those samples were analyzed a second time using fire assay methods. For tin analyses, the sample pulps were fused with sodium peroxide and caustic pellets to ensure the tin was completely dissolved before being analyzed by AA.

A total of six assay laboratories were used during the two phases of drilling. After the samples were prepared for the first phase, they were sent to: Guayaccan in La Serena, Chile for silver assaying, Centro de Investigacion Minera y Metallurgica in Santiago, Chile for check assaying of silver, American Assay Laboratories in Santiago, Chile for tin and zinc assaying, and Instituto de Investigaciones Minero-Metellurgicas in Bolivia for check assaying of tin.

For the second phase of drilling, samples were sent to SGS Laboratories in Chile for assaying and Acme Labs in Chile for check assaying. The laboratories received 60 g pulps for silver analyses and 20 g pulps for tin and zinc analyses.

Though no specific mention was made of sample security during the exploration at Pirquitas, no deliberate attempts of sample compromise would be expected or anticipated by the companies involved.

16. Data Verification

16.1 Mineral Resources and Mineral Reserves

Overall, MDA has found the work to be to industry standards or higher and MDA has no reason to doubt its integrity, except as noted in the body of this report. The Winters Company completed a review and sample integrity analyses of the Sunshine data and they found that the data was suitable for resource estimation, with exceptions as noted in the report. All verification of the drilling, sampling, analytical and other project data was performed prior to MDA's involvement with this project and therefore MDA is relying entirely on the data verification work performed by The Winters Company.

As Winters performed the data validation for Sunshine, information and conclusions regarding data verification are based entirely on their work, except where MDA's opinions or conclusions are specifically stated. In general, Winters states that "*a rigorous quality assurance/quality control (QA/QC) program was established for monitoring and validating analytical results reported by the Pirquitas exploration program*" and the reader is referred to either the Winters (1999) or Jacobs (1999) reports for details.

The initial quality control samples were constructed from sample pulps that were tested in Sunshine's lab in Idaho for assay verification. After enough RC sample rejects were available, American Assay Laboratories made a new set of standard samples. Assay analyses for the standard sample grades were analyzed by American Assay Laboratories, Sunshine's lab in Idaho, and ALS Geolab S.A. in Santiago, Chile.

New sample standards were made for the second phase of drilling. Hazen Research, Inc. made standards in four silver and tin grade intervals from 50 kg composite samples obtained from Sunshine's bulk sampling program. These composites were sent to Laboratory Quality Services International, who prepared the standards into 200 g samples. Five samples of each of the four grade intervals were sent to separate laboratories to establish the silver and tin grades. The labs used for this analyses included Sunshine's lab in Idaho, Bondar-Clegg, SGS Chile, ACME Analytical Chile, SERGEOMIN Argentina, and CESMEC Argentina.

Twelve sample standards would be submitted with roughly every 200 samples analyzed by SGS, or six percent. Nearly all of the silver analyses fell within the accepted error range of ten percent. The total average bias compared to the quality control standard was positive by about 3.3%. Tin standard analyses varied more than the silver, with the majority being 10% to 40% lower than expected. These results prompted Sunshine to send 3,252 samples back to SGS to be assayed again. Sunshine's chief chemist attributed the discrepancy to problems related to dissolved tin samples clogging the burner heads of inductively coupled plasma and atomic absorption units.

Blank samples were prepared from rocks of similar lithologies, but barren of silver and tin mineralization. The rocks were collected from a location 12 km east of Pirquitas. They were used to check if the preparation lab was responsible for any bias. The blank samples amounted to about five percent of the total samples analyzed. Most of the results were between zero and three grams of silver per tonne. Thirteen of the 615 blanks, or two percent, had silver results exceeding ten grams of silver per tonne. For tin, 18 out of the total 127 blank samples, or 14%, returned "unacceptable" amounts of tin reported as being present in the samples. These samples were split from the same prepared sample as the silver blanks, so it was concluded that the contamination occurred during assaying. Batches of samples corresponding to these contaminated blanks were re-assayed.

Duplicate sample pulps were submitted to check assay laboratories at a rate of one duplicate for every 10 to 15 samples for Phase I, and one for every 20 samples for Phase II. The database of this information included 2,870 duplicates for silver and 2,955 duplicates for tin in Phase I, and 365 duplicates for both silver and tin in Phase II. Winters examined the database of duplicates by comparing the relative percent difference between each of the duplicate sample values. Before this analyses, the database was reduced to 1,668 pairs for silver and 476 pairs for tin as a result of eliminating assay duplicates that were within ten times the detection limit of the assaying. The relative percent difference (RPD) results for silver in the 90^{th} percentile was about 25%. The RPD for tin in the 90^{th} percentile was 36%. The tin grades were consistently biased 10 to 25% higher in the check assay lab. A large number of the samples were re-assayed after the standard sample analyses showed the tin values were biased low.

In the end, Winters accepted the final database after survey data was modified and new tin grades were added to the database. They went on to say that Winters "*does not advocate the correcting or factoring the tin assays to higher levels preferring instead to use the assays as reported. However,* [Winters] *believes that the bias represents a possible upside to the tin content in the deposit*".

16.2 Metallurgical Testwork and Related Sampling

The metallurgical testwork was done in 1997 and 1998 and is summarized in reports that are attached to the Feasibility Study prepared by Jacobs Engineering Group dated April 1999. Hatch very carefully and comprehensively reviewed the testwork reports during a two week, detailed review of historical metallurgical testwork done in connection with the project. The laboratories are all well known companies with international reputations. The methodologies used, both to gather samples (e.g., sample selection and representivity) for the testwork and in the testwork itself, are appropriate and suitable for use in a feasibility study.

Hatch concludes that, based upon the testwork, the concentrate grades and recoveries used in the Feasibility Study Update, should be achievable and the testwork results are suitable for use in a feasibility study such as this Feasibility Study Update.

However, neither Hatch nor the QP were involved in the testwork and, therefore, this assessment is based solely upon a review of the relevant reports and other available information. Hatch does not accept liability or responsibility for (a) any errors or omissions made in the gathering of samples or during the testwork that are not properly disclosed in the testwork reports, or (b) any intentional misconduct or misrepresentations, whether fraudulent or otherwise, done or made during the course of the testwork. Although nothing in the testwork reports or other information provided to Hatch has given Hatch reason to believe that any such errors, omissions, misconduct or misrepresentations occurred or were made.

16.3 Other Information

MDA has relied on certain data and information provided by Silver Standard. This data and information and the extent of reliance is described at the beginning of this Section and Section 19.

Hatch has relied on certain data and information provided by Silver Standard in the preparation of the capital cost estimate and operating cost estimate set out in Section 25 of this Report and the financial analysis set out in Sections 20.2 and 25.3. In particular, Silver Standard has supplied information respecting the tax and royalties regime in Argentina, local salaries and labour cost information and pricing for fuel used in operations. Although Hatch has no reason to question the reasonableness of this information (and the information appears to be reasonable given Hatch's recent experience on other projects in South America), Hatch has relied on this information without independent verification.

Hatch has also used a financial model supplied by Silver Standard to generate the financial analysis set out in Sections 20.2 and 25.3. Although the structure of this model is, in Hatch's view, reasonable and suitable for the evaluation of the economic viability of projects such as this Project, Hatch did not create the model and take no responsibility for any errors in the model (although Hatch has no reason to believe that any such errors exist).

17. Adjacent Properties

There are no adjacent properties that impact the Pirquitas project nor from which any projections or conclusions regarding the Pirquitas property are made.

18. Mineral Processing and Metallurgical Testing

The following Sections 18.1-18.5 summarizes the work by others and are subject to the qualifications set out in Section 16.2 above. Hatch has evaluated the significant number of testwork reports written in 1997 and 1998 by various metallurgical research organizations. However, as noted in Section 5.0, Hatch were not involved with this testwork. Therefore the comments on samples and testwork are based upon a review of the relevant reports and other available information (and not on personal observation).

18.1 Introduction to Mineral Processing and Metallurgy

Bulk samples taken from the underground workings in San Miguel in 1997/8 were used to develop the process envisioned for metal recovery at Pirquitas. Core samples that came from other areas of the deposit were used to test the process. Eighty to ninety percent of the potentially economic material is made up of siliceous non-sulfide gangue composed of intergrown quartz and feldspar grains in a micaceous matrix. Five to twenty percent of the mineralization is made up of sulfides, which is mostly pyrite, and is commonly associated with silver and tin.

Tin occurs as aggregates of cassiterite crystals ranging from 5 to 15 µm, often intergrown with pyrite. Silver occurs as discrete grains of silver sulfides and sulfosalts that average between 20 and 100 µm. The sulfosalts are grouped as sulfides and antimony-bearing, tin-bearing, or bismuth-bearing sulfosalts, and all have high concentrations of silver.

Pre-concentrating the Pirquitas ore by jigging, after crushing to ½ inch, is expected to recover approximately 50% of the crushed ore as mill feed, while only losing three to five percent of the silver and tin.

18.2 Silver Recovery

The silver circuit is discussed in the 1998 Feasibility Study, together with testwork reports written by various research organizations. The silver mineralogy is complex. The silver is present as a series of sulphides and sulphosalts, containing silver–bismuth, and silver–antimony minerals. Electronmicroprobe analyses indicated the following principal silver minerals:

Freibergite	**Ag-Sb-Fe-Cu-S**
Maltidite	**$AgBiS_2$**
Pyrargyrite	**$AgSbS_3$**
Acanthite	**Ag_2S**

A complex sulphide mineral, Ag_2ZnSnS_4 has also been identified, and was named Pirquitasite, after the mine.

Hatch generally, concurs with the flowsheet as developed in the 1999 Study. Jig pre-concentration will remove 45-50% of the crusher product as waste, with a loss of 4-5% of the silver. In their report, the Colorado Minerals Research Institute summarized their silver flotation pilot plant tests, which are further summarized here in Table 18-1 and Table 18-2.

Table 18-1: Silver Recovery by Flotation

Test	Head * kg/t Ag	Ro + Scav Conc kg/t Ag	Ag % Distribution
1	0.47	9.12	86.0
2	0.38	4.94	81.8
3	0.44	4.57	68.9
4	0.55	8.90	86.9
Av	0.46	6.89	80.9

* After upgrading by Jigs

The 1997/8 test program was based on initial flotation of a silver concentrate, depressing the pyrite with sodium cyanide and zinc sulphate. This was said to be possible because the silver and silver minerals are generally not associated with pyrite or cassiterite, and are well liberated at a relatively coarse grind.

Silver flotation testwork was also developed at Dawson Metallurgical Laboratories, Inc., and their complete work is available in the 1998 Study.

Dawson reported "typical" results as follows:

Table 18-2: Silver Flotation

Product	Assay				Distribution		
	%wt	Ag kg/t	% Sn	% S	% Ag	% Sn	% S
Silver Cleaner Conc	1.9	29.06	5.97	37.0	74.5	5.3	5.2
Silver Ro + Scav Conc	5.5	11.01	2.98	31.7	81.8	7.7	12.8
Bulk Sulphide Ro Conc	21.6	0.45	1.84	45.3	13.1	18.6	71.7
Bulk Sulphide Ro tail	72.9	0.05	2.16	2.9	5.1	73.7	15.5
Total (Feed)	**100.0**	**0.74**	**2.14**	**13.6**	**100.0**	**100.0**	**100.0**

These results led to the selection of a silver flotation recovery of 79%, in the 1999 Study, at a grade of +/- 600 oz/t (20.5 kg/t) or alternatively a 76% recovery at a grade of 720 oz/t (24.5 kg/t). Sodium cyanide and zinc sulphate depressed significant pyrite (but clearly not all in view of the final concentrate grade), at a neutral flotation pH. However, Hatch notes the high silver and tin sample grades, compared to the 2005 LOM grades.

The results were relatively insensitive to the primary grind (in this case P_{80}=111µm), but it was noted that finer grinds led to lower concentrate grades, and regrinding of the rougher concentrate was not effective.

Dawsons second progress report indicates to Hatch that a silver recovery of approximately 80% to a 500 oz/t concentrate (17.0 kg/t) could be achieved. It also illustrates that the metallurgy is insensitive to the primary grinds between a P_{80} of 50 and 200µm, resulting in the selection of the P_{80}=180µm grind. It again indicated that regrinding of the rougher concentrate prior to cleaning is not beneficial.

Dawsons third progress report describes the 150 kg/h continuous pilot plant at CMRI (see 1999 Study Appendix B2). Hatch conclude that this work can at best be described as only moderately successful, in that the primary grind was P_{80}=110µm (target 180µm), and the two day run did not achieve circuit stability (described as due to “lack of ore” and “process upsets”). An 81.8% silver recovery was achieved, at a grade of 144 oz/t (5.0 kg/t Ag), reportedly due to 80% of the zinc reporting to this concentrate.

Further bench testwork is reported in Dawsons Fourth Progress Report. Seventeen tests are summarized, that yielded an average of 74.3% silver recovery from a 8.18 oz/t Ag (276 g/t) head grade. There is a reasonably clear correlation between head grade and recovery. The data presented in that report suggests to Hatch that silver recoveries of 76-78% can be achieved with concentrate grades of 500 oz/t Ag (17.0 kg/t).

The last report from Dawson was their Seventh Progress Report. This work focused on attempts to improve the silver recovery and concentrate grade. They stated that, “Attempts to increase the silver grade of the final silver concentrate by the use of CMC addition, concentrate regrinding, or gravity separation of the final concentrate were not successful”. There were indications that the grade could be improved by further cleaning stages with relatively little silver loss. The results presented in that report again indicate recoveries of 75-80% with concentrate grades in the order of 500-600 oz/t. The low grade silver concentrates, (20kg/t Ag is 2% Ag), must reflect the complex silver mineralogy and the flotation of other sulphide minerals. A complete analyses is provided in Table 6-4. Despite comments in some reports that silver minerals appear relatively well liberated and that pyrite can be effectively depressed, the Hazen Report indicates finely inter-grown particles of silver and other sulphosalts with pyrite and sphalerite. Thus, Hatch concludes that it will be difficult to separate silver into a higher grade concentrate than 20-22 kg/t Ag. The Dawson results are summarized in Table 18-3.

In their 1999 Due Diligence Report, Behre Dolbear provide a Table 5.7 that yields an average silver recovery of 80.5% to an 19.9 kg/t Ag (580 oz/t) concentrate. This, in Hatch’s view, is a closer assessment of the concentrate grade. Behre Dolbear concluded that “evidence is not conclusive that the concentrate grade can be achieved.”

While agreeing that a silver recovery of 79% may be possible, Hatch therefore proposes the selection of 78% silver recovery (from ore). Due to the lack of consistency in the test results, Hatch take a somewhat more conservative view of the concentrate grade, with a Base Case of 20 kg/t Ag, and a probable range between 18 and 22 kg/t, from the average mine head grade.

Figure 18-1: Test Results (Dawson Report 7)

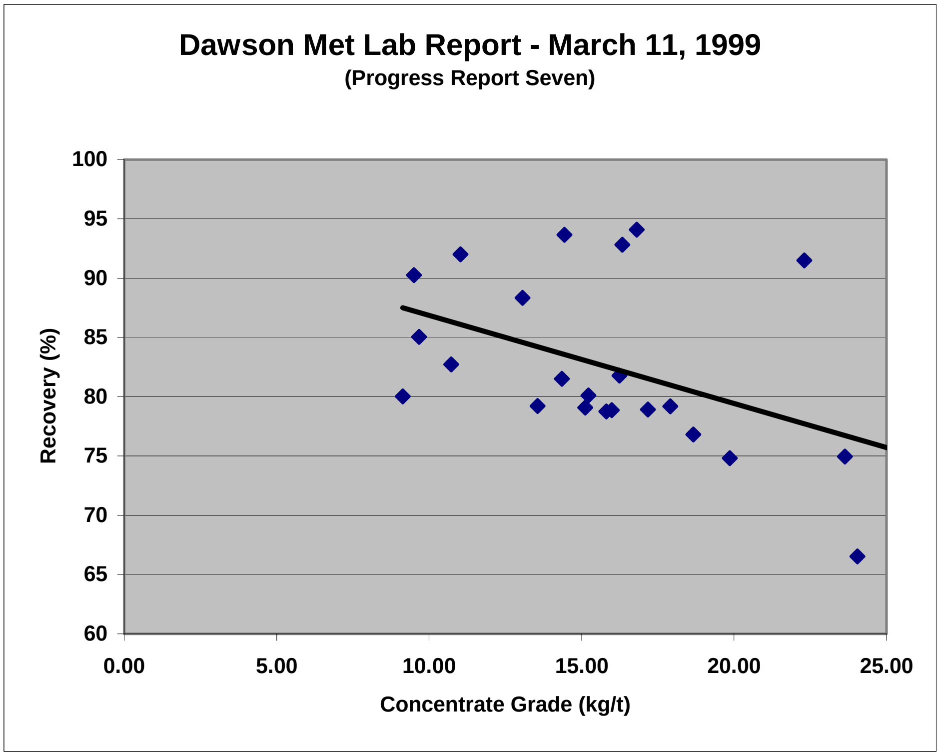


Table 18-3: Selected Silver Flotation Tests

Test no	Ag Oz/t*	Ag kg/t	Rec%
144	344.72	11.8	82.73
145	508.41	17.4	78.76
146	485.91	16.6	79.08
147	575.63	19.7	79.18
148	717.15	24.5	91.49
149	463.95	15.9	93.65
150	293.85	10.0	80.03
151	552.28	18.9	78.91
152	514.19	17.6	78.87
153	773.02	26.4	66.53
154	638.38	21.8	74.82
155	759.95	26.0	74.95
156	435.93	14.9	79.23
158	354.64	12.1	92.01
159	419.77	14.4	88.35
160	305.55	10.4	90.25
161	599.9	20.5	76.82
163	525.12	17.9	92.82
164	540.36	18.5	94.08
24	849.64	29.1	74.5
25	310.85	10.6	85.05
43	461.48	15.8	81.51
50	489.4	16.7	80.1
61	522.01	17.9	81.77

* Oz per short tonne

18.3 Zinc Recovery

Hatch concur with Behre Dolbear's comments regarding zinc recovery, in that an accurate assessment is difficult, due to the relatively little work done in the 1997/8 program specifically for zinc. The zinc feed grade is low and it is the smallest contributor to the overall revenue (less than 10%). Nonetheless, at current zinc prices, it is an economic product. The jig testwork indicates that 70-75% of the zinc will be recovered to the jig concentrate. The detailed mineralogical evaluation by Hazen, indicated that the sphalerite is generally mostly liberated at the chosen grind size, with only limited association with pyrite, which is favorable for the production of a sphalerite concentrate.

In the early testwork, no production of a sphalerite concentrate was investigated. The only reference found by Hatch to zinc is in a table in the 1999 Study, where 55% of the zinc reported to the sulphide bulk concentrate.

Testwork was carried out to separate a zinc concentrate from the reground bulk sulphide concentrate. Whereas regrinding of the silver rougher concentrate was found by Dawson to be of no value, regrinding of the bulk sulphide concentrate, (to a P_{80}=50-55µm), was found to be essential in order to liberate cassiterite from sulphides, as well as sphalerite from pyrite.

For the separation of zinc from pyrite, the bulk sulphide cleaner concentrate was conditioned at a pH of 12, and then floated in three stages of cleaning. Some test data shows 66.6% of the zinc in the bulk sulphide cleaner is recovered to a 43% Zn concentrate. In their narrative, Dawson quote zinc recoveries of over 80% from some core samples, producing concentrate grades of 57% zinc. However, they acknowledge the significant impact of the zinc feed grade on the metallurgical response.

In conclusion, Hatch concur with Behre Dolbear that an overall zinc recovery of 46% should be possible (73% to jig concentrate, then 63% by flotation, hence 73%x63%=46%). Fortunately the impact on Project economics would be very limited, should this recovery change by +/- 10%. In view of the current 0.61% Zn feed grade, which is higher than that in the 1999 Study, but which remains relatively low, Hatch consider a concentrate grade of 50% Zn is appropriate for the base case, (with 52% Zn as an upper value) at a recovery of 48%. However, in view of the very limited testwork, this number cannot be regarded as anything more than a reasonable estimate.

A new series of zinc flotation tests is recommended.

18.4 Tin Recovery

According to the 1997/8 mineralogical works, the tin at Pirquitas is almost entirely present as cassiterite, with less than 5% as other tin minerals. It is reported that a key aspect of the mineralogy is that most of the tin is present as 20-500µm aggregates of crystallites, which are individually 5-15µm in size.

Typically, one third of the tin occurs as fine grains of cassiterite, intergrown, primarily, with pyrite. Approximately 4 to 5% of the tin is rejected as jig tailings. In addition, 4-5% reports to the silver concentrate and 12% to the zinc flotation concentrate. The remaining 78% (of tin in ROM ore), reports to the tin circuit, (as the sulphide scavenger and cleaner tailings). The primary grind P_{80} of 180µm supports optimal silver recovery and liberation of cassiterite (refer to 1998 Study, "Effect of Primary Grind on Tin Rejection into Bulk Sulphide Tails").

A large amount of testwork, both bench and "pilot" was carried out to investigate the tin metallurgy. Although this work was comprehensive, it looked at unit operations, and not the overall, complex, multi-stage gravity and flotation circuits, with all of its circulating loads. (Hatch acknowledges that full piloting of such a complex circuit would be a major undertaking). There is no clear, calculated number presented in any of the reports that in Hatch's opinion clearly illustrate the basis of the 61% tin recovery used in the 1999 Study. Hatch has evaluated the data, to establish an independent assessment of the tin concentrate grade and recovery. The following is seen as key data:

- The average tin head grade is now 0.21% Sn, (this is significantly less than the value of 0.33% Sn in the 1999 Study and less than most of the samples tested, but in line with the Addendum report).
- Approximately 85% of the tin in the flotation feed reported to a 5% Sn rougher concentrate.
- This rougher concentrate can be upgraded to 20-27% Sn by cleaning, and this further upgraded by multi-gravity or centrifugal concentration to 50-60% Sn.
- Tin flotation is reported to be "relatively" insensitive to the slimes content of the flotation feed, between 4 and 17% -6µm appeared acceptable. However, experience at Wheal Jane and other tin operations indicate that less than 10% of – 6 µm produces the best results.
- A pH of 2 was used for tin flotation, no pH optimization appears to have been done. Current world practice is more frequently in the range 5 - 5.5.
- An overall tin balance in the 1999 Study provides the following:

Table 18-4: Tin Distribution

	% Sn Distribution
Silver Concentrate	6.7
Bulk Sulphide Cleaner Concentrate	16.1
Slimes (cyclone overflow)	10.3
Gravity Concentrate Feed	49.9
Tin Flotation Feed	16.9
Total	**100.0**

- Detailed release analyses was done on all size fractions, to a 5% Sn concentrate grade, summarized as follows:

Table 18-5: Release Analyses

Size Fraction	Total Sn in Size Fraction %	% Sn Recovered from Size Fraction at 5% Sn Grade	
		Fraction	Overall
+300	2.3	60	1.4
-300+212	14.7	90	13.2
-212+180	10.6	94	10.0
-180+150	13.0	93	12.1
-150+106	9.8	90	8.8
-106+75	8.1	80	6.5
-75+53	4.7	80	3.7
-53+45	6.2	78	4.9
-45+37	0.8	80	0.6
-37	29.9	23	6.9
Total	**100.0**		**68.0**

On the basis of this data, overall recovery from ROM feed would be:
0.96* (49.9 x 88% + 16.9 x 85%) = 58.3%
*(0.96 is 96% tin recovery to process plant feed from run-of-mine ore, i.e. Jig recovery).

In reality, the ore will be ground to P_{80}=180µm, and much of the -37µm will report to tin flotation. Thus, amending this release analyses data would indicate an overall recovery of about 85% from the tin circuit feed, equivalent to 61% from Run-of-Mine ore; (85% x 96% x 78%).

Hatch would therefore accept the conclusions of previous reports that a 61% overall tin recovery could be achieved, but in Hatch's view this should be considered the upper limit. However, the latest MDA mine plan has a tin head grade of 0.21% Sn, and Hatch therefore propose the base case tin recovery be reduced to 57%.

18.5 Assessment of Recoveries and Concentrate Grades

Based upon their assessment of the 1997/8 testwork reports, Hatch conclude that the following concentrate grades and metal recoveries appears to be possible:

Table 18-6: Concentrate Grades and Recoveries

	Head Grade (MDA, 2006)	Base Case		Limits	
		Concentrate Grade	Recovery	Concentrate Grade	Recovery
Silver	177 g/t	20 kg/t	78%	18-22.3 kg/t	75-79 %
Tin	0.21 %	50%	57%	47-55 %	55-61 %
Zinc	0.61 %	50%	48%	48-52 %	40-50 %

However, as stated elsewhere, due to the historic nature of this data, and Hatch's non-involvement with the testwork, no process guarantees can be provided by Hatch.

19. Mineral Resource and Mineral Reserve Estimates

MDA estimated resources using historic data dominantly collected by and provided by Sunshine. As Winters performed the data validation for Sunshine, information and conclusions regarding data verification are based entirely on their work, except where MDA's opinions or conclusions are specifically stated.

19.1 General

MDA completed the most recent resource and reserve estimates for the Pirquitas deposit in 1999 for Sunshine. The resource and reserve work was done to AusIMM JORC, CIM and to then not-yet-passed NI 43-101 standards; however, the resources were reported with Measured and Indicated combined and were not separated. This amended report has broken these out. Because silver is the metal of interest and principal value, only those resources with silver are now considered Measured or Indicated. This continues the reporting practices of Silver Standard. As before, the Measured and Indicated, albeit combined were originally classified by the Winters Company, this breakdown of Measured and Indicated is being done by MDA within the original constraints of the Winters Company's criteria and based on their classification.

MDA constructed a geologic model, performed a statistical and geostatistical analyses of silver, tin and zinc assay data, determined capping grades, and made an estimate of the silver, tin and zinc resources. MDA did not complete an audit of the project database nor sample integrity studies; the project data were reviewed and verified by Winters (Winters, 1999 and Jacobs, 1999), as discussed in previous sections.

19.2 Data

Data made available to MDA for the Pirquitas silver, tin, and zinc mineral resource estimates included topographic data, drill survey and sample data, channel sample data, underground level maps, and geologic drill logs. The reader is referred to the Pirquitas feasibility report prepared for Sunshine for detailed descriptions of the drilling, check assaying, and data collection. All the digital data arrived in Medsystem format from Winters. Minor modifications to the topography (10 m contour intervals) were necessary to smooth the valley bottom, round the tops of the ridges, and generate contours on 6 m intervals. The assay data was derived from core drill holes, reverse circulation (RC) drill holes, and underground channel samples. Analytical data for silver, tin, zinc, and iron is available, though the zinc and iron are not complete for all samples. A breakdown of the sample data is given in Table 19-1. Summary statistics of the assay database are given in Table 19-2.

As specified in the requested scope of work, MDA did not audit the database. However, in an effort to properly use the different sample types, MDA did a comparison of core, RC, and channel samples. It was found that the underground channel samples at San Miguel were significantly higher grade than the drill samples from the same area. MDA did not attempt to explain the differences, but the influence of the underground channel samples on the resource estimation was restricted at San Miguel.

Table 19-1: Summary of Sample Data by Type

Reverse Circulation Samples

Item	N	Mean	Std Dev	CV**	Min	Max	Units
HOLES	157						
FROM	31,259				-	352.0	meters
TO	31,259				1.00	353.0	meters
LENGTH	31,259	1.07			0.50	11.0	meters
AG	30,088	75.25	407.11	5.41	-	20,000.0	g/mt
SN	30,152	0.12	0.49	4.16	0.01	18.34	%
ZN	24,125	0.73	1.25	1.71	-	30.51	%
FE	21,803	5.01	2.46	0.49	0.05	38.48	%

Core Samples

Item	N	Mean	Std Dev	CV**	Min	Max	Units
HOLES	65						
FROM	15,371				-	832.0	meters
TO	15,371				1.00	832.3	meters
LENGTH	15,371	1.00			0.05	4.7	meters
AG	15,128	62.46	667.87	10.69	-	65,899.0	g/mt
SN	15,127	0.12	0.48	4.17	0.01	20.57	%
ZN	11,847	0.61	0.89	1.46	-	17.20	%
FE	9,549	5.02	2.50	0.50	0.10	29.90	%

Underground Channel Samples

Item	N	Mean	Std Dev	CV**	Min	Max	Units
SAMPLES	3,222						
FROM	3,222				-	161.0	meters
TO	3,222				0.03	162.0	meters
LENGTH	3,222	0.98			0.03	2.9	meters
AG	2,325	344.97	1,019.74	2.96	-	20,590.0	g/mt
SN	3,212	0.39	1.16	2.94	-	21.00	%
ZN	-	-	-		-	-	%
FE	-	-	-		-	-	%

**CV= Coefficient of Variation=St.Dev./Mean

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Table 19-2: Summary Statistics of Assay Database

Reverse Circulation Samples

Item	N	Mean	Std Dev	CV**	Min	Max	Units
HOLES	157						
FROM	31,259				-	352.0	meters
TO	31,259				1.00	353.0	meters
LENGTH	31,259	1.07			0.50	11.0	meters
AG	30,088	75.25	407.11	5.41	-	20,000.0	g/mt
SN	30,152	0.12	0.49	4.16	0.01	18.34	%
ZN	24,125	0.73	1.25	1.71	-	30.51	%
FE	21,803	5.01	2.46	0.49	0.05	38.48	%

Core Samples

Item	N	Mean	Std Dev	CV**	Min	Max	Units
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FROM	15,371				-	832.0	meters
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LENGTH	15,371	1.00			0.05	4.7	meters
AG	15,128	62.46	667.87	10.69	-	65,899.0	g/mt
SN	15,127	0.12	0.48	4.17	0.01	20.57	%
ZN	11,847	0.61	0.89	1.46	-	17.20	%
FE	9,549	5.02	2.50	0.50	0.10	29.90	%

Underground Channel Samples

Item	N	Mean	Std Dev	CV**	Min	Max	Units
SAMPLES	3,222						
FROM	3,222				-	161.0	meters
TO	3,222				0.03	162.0	meters
LENGTH	3,222	0.98			0.03	2.9	meters
AG	2,325	344.97	1,019.74	2.96	-	20,590.0	g/mt
SN	3,212	0.39	1.16	2.94	-	21.00	%
ZN	-	-	-		-	-	%
FE	-	-	-		-	-	%

**CV= Coefficient of Variation=St.Dev./Mean

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19.3 Geological Implications to Modeling

Silver mineralization at Pirquitas, and particularly at San Miguel, is dominated by extreme high grades in near-vertical, sharply-bounded, narrow structures associated with near-vertical sheeted stockwork zones of moderate grade. These zones are, in turn, surrounded by a broad halo of low-grade mineralization. Disseminations and subtle stockwork of microveinlets typify the lower-grade mineralization. The tin mineralization occurs in a similar fashion - in narrow, discrete, near-vertical veins and sheeted zones. The low-grade tin halo, however, is poorly defined and understood. Zinc mineralization is dominated by a broad weak stockwork with irregular vertically-dipping tabular zones of high-grade. The highest grades of zinc are less well understood and appear less continuous than the silver and tin veins. Although all the zones overlap, there is no correlation between the metals on a local scale.

19.4 Specific Gravity

Specific gravity values used in this study were taken from previous work without further evaluation. Alluvium was assigned a specific gravity of 1.80 g/cm3. Massive sulfide was given specific gravity value of 3.61 g/cm3 . All other rock was given a specific gravity of 2.67 g/cm3. The massive sulfide was confined to the high-grade silver zone at Potosí.

19.5 Methodology

To properly model the unique characteristics of the different styles of mineralization and maintain the integrity of each of the geometry, location and grade distribution of each mineralization types, MDA constructed separate hard boundary mineral domains for each metal based on grade and geology. Modeling of the mineral domains was done on 12.5 m and 25 m spaced cross sections oriented perpendicular to the main strike of mineralization (azimuth 105°). Assays were coded according to the domain in which they were located and only those assays that occur within a specific domain were allowed to estimate into that domain. Figures 19.1 through 19.3 are cross sections of the model of the silver, tin and zinc models. Once checks of the assay coding were completed, the assay data were composited to 2 m intervals honoring the zones for silver and tin and to 3 m intervals honoring the zones for zinc. The mineral domains and assay composite data were then taken to 6 m spaced level maps and refined. Kriging and inverse distance were chosen for estimating grades into the model.

MDA worked with Sunshine in building an underground mine model for San Miguel; the Potosí underground model was constructed by Winters. The San Miguel underground model used all available information, maps, and drill data to identify material believed to have been mined.

In 1999, MDA modified the Pirquitas resource model for Sunshine using a new underground mine model for San Miguel while using a pre-existing underground model for Potosí. MDA had extracted the underground-mined material at the average grade of each block. In May 2002, MDA performed an exercise modifying the methodology of extraction of previously mined material from the Pirquitas model. The new method removed high-grade material first, then lower-grade material from the blocks containing the underground workings, using the assumption that mining would have extracted the highest-grade material diluted with the lower-grade material. At Potosí, the pre-existing underground workings model did not follow the vein precisely and therefore extracted grades that did not necessarily represent the highest grades so MDA extracted all high-grade material around the stope model. The results of this study “mined” an additional 10 million ounces of silver. It is this model that is now being reported and on which all of the following work is done.

Figure 19-1: Silver Mineral Domains – Cross Section 0

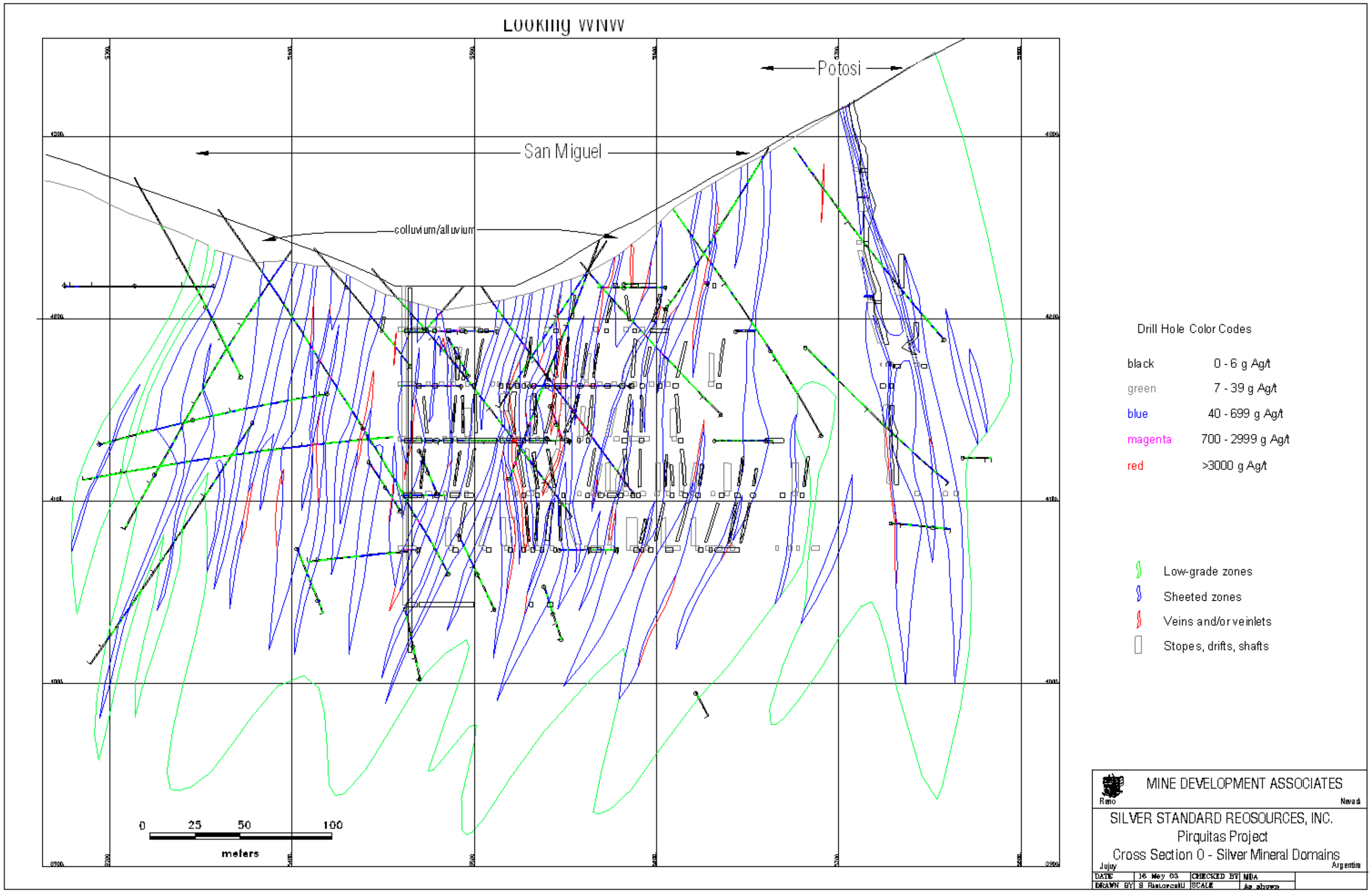


Figure 19-2: Tin Mineral Domains – Cross Section 0

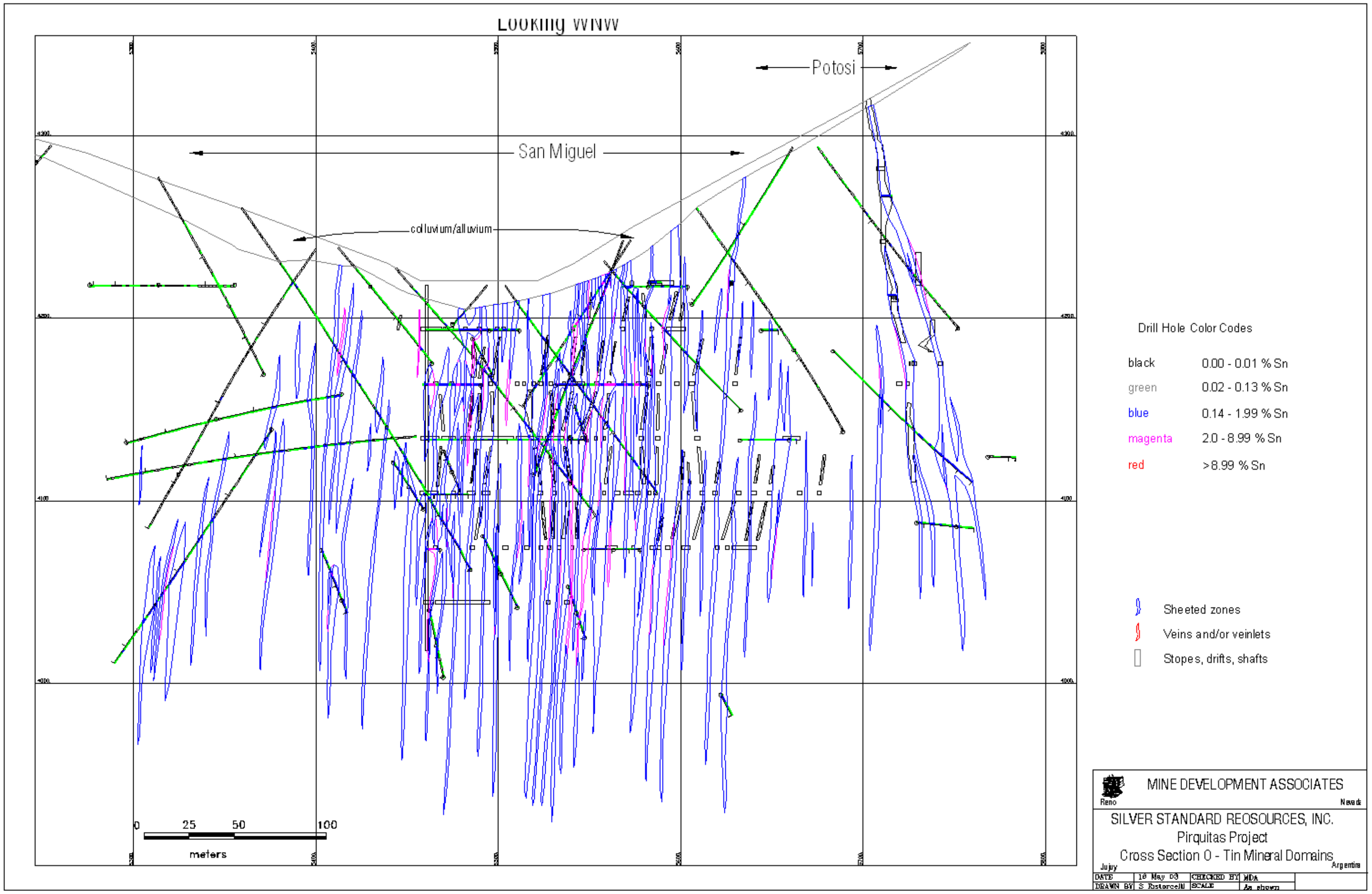
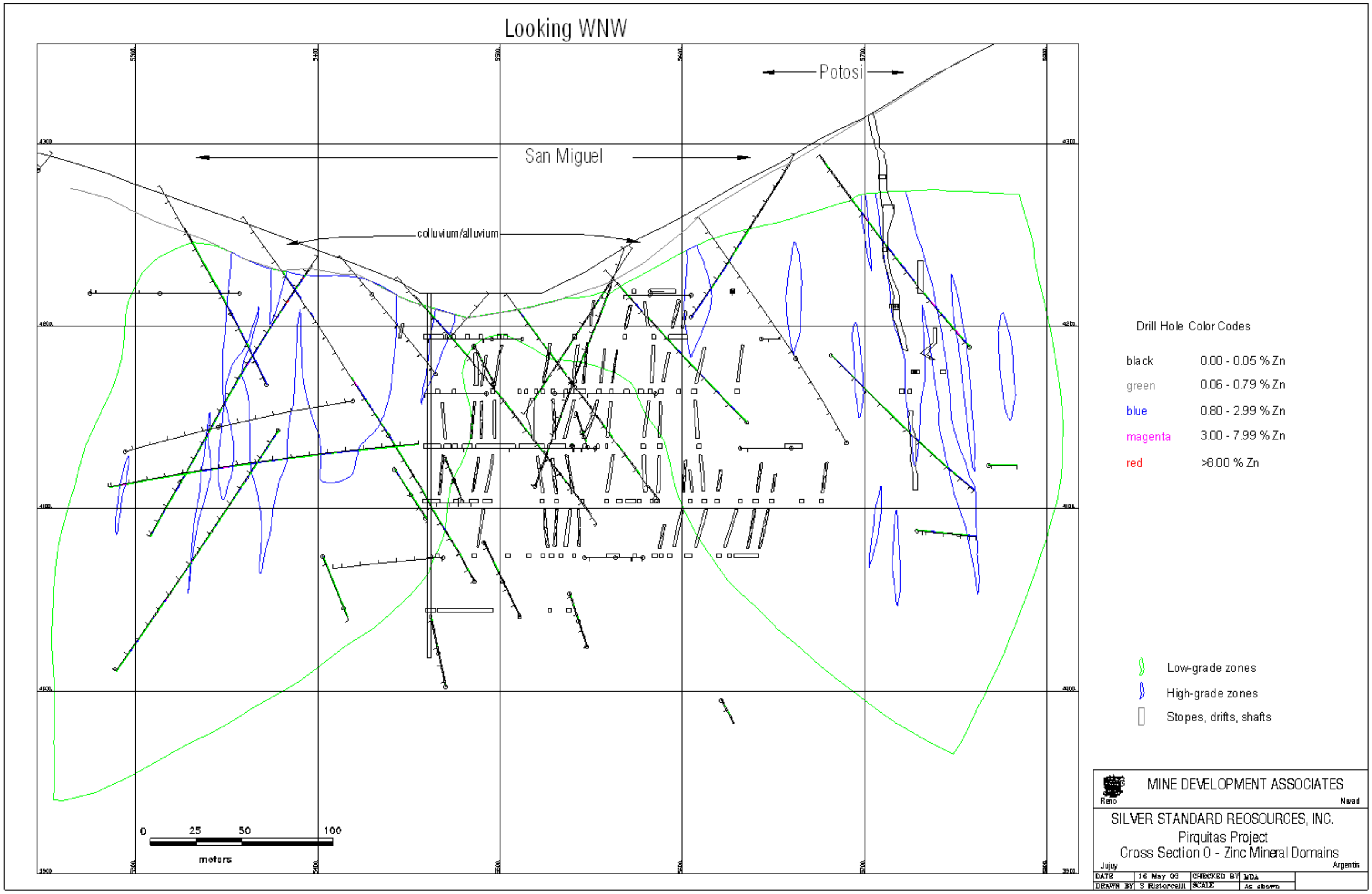


Figure 19-3: Zinc Mineral Domains – Cross Section 0



19.6 Mineral Resources

Measured and Indicated mineral resources for silver, tin and zinc contained within the limits of the defined silver resource are tabulated in Table 19-3 to Table 19-5 based on silver cutoff grades. Although decreasing in grade, the tin and silver resources are open ended on the east and west ends of the deposit and there is evidence that tin is open at depth. The higher-grade zinc mineralization is open to the west, while the low-grade zone is open in all directions, though weakening significantly at depth. The breakdown of Measured is that material that lies within seven meters of a composite sample while Indicated material is located beyond seven meters of a composite sample but still lies within the geologic domains constructed by MDA.

Table 19-3: Measured Mineral Resources

All Metals, Based on Silver cutoffs - Measured

Cutoff (g Ag/t)	Tonnes	Grade (g Ag/t)	Ag (Ounces)	Grade (% Sn)	Sn (Pounds)	Grade (% Zn)	Zn (Pounds)
10	9,067,000	94	27,490,000	0.14	27,780,000	0.68	136,490,000
20	6,628,000	124	26,360,000	0.17	24,390,000	0.67	98,310,000
30	5,276,000	149	25,300,000	0.19	21,860,000	0.66	76,170,000
40	4,392,000	172	24,310,000	0.21	19,840,000	0.63	61,270,000
50	3,766,000	193	23,410,000	0.22	18,180,000	0.62	51,460,000
60	3,271,000	214	22,540,000	0.23	16,730,000	0.61	43,830,000
70	2,882,000	235	21,730,000	0.24	15,500,000	0.60	38,360,000
80	2,576,000	253	20,990,000	0.26	14,480,000	0.60	34,180,000
90	2,314,000	273	20,280,000	0.27	13,520,000	0.60	30,400,000
100	2,096,000	291	19,610,000	0.27	12,610,000	0.60	27,760,000
120	1,756,000	326	18,420,000	0.29	11,110,000	0.60	23,190,000
140	1,503,000	359	17,370,000	0.30	10,040,000	0.59	19,550,000
160	1,309,000	391	16,440,000	0.32	9,150,000	0.59	16,940,000
180	1,153,000	421	15,590,000	0.33	8,410,000	0.57	14,430,000
200	1,019,000	451	14,770,000	0.34	7,680,000	0.57	12,780,000
300	615,000	588	11,620,000	0.39	5,320,000	0.54	7,290,000
400	396,000	721	9,190,000	0.43	3,740,000	0.54	4,750,000
500	261,000	863	7,250,000	0.46	2,640,000	0.57	3,270,000
600	176,000	1,018	5,750,000	0.49	1,900,000	0.52	2,030,000
700	136,000	1,125	4,930,000	0.51	1,530,000	0.55	1,650,000
800	98,000	1,272	4,010,000	0.52	1,130,000	0.54	1,170,000
900	81,000	1,364	3,530,000	0.52	910,000	0.49	870,000

Table 19-4: Indicated Mineral Resources

All Metals, Based on Silver cutoffs - Indicated

Cutoff (g Ag/t)	Tonnes	Grade (g Ag/t)	Ag (Ounces)	Grade (% Sn)	Sn (Pounds)	Grade (% Zn)	Zn (Pounds)
10	75,437,000	58	140,910,000	0.08	134,670,000	0.49	808,040,000
20	39,385,000	98	124,280,000	0.11	95,490,000	0.53	463,540,000
30	28,043,000	128	115,540,000	0.13	79,730,000	0.54	336,230,000
40	23,121,000	148	110,040,000	0.14	70,830,000	0.54	276,200,000
50	19,615,000	166	104,980,000	0.15	63,550,000	0.53	230,430,000
60	16,887,000	185	100,180,000	0.15	57,320,000	0.53	195,400,000
70	14,642,000	203	95,500,000	0.16	51,960,000	0.52	166,520,000
80	12,799,000	221	91,060,000	0.17	47,390,000	0.51	144,140,000
90	11,237,000	240	86,800,000	0.17	43,090,000	0.51	125,570,000
100	9,960,000	259	82,900,000	0.18	39,510,000	0.50	110,410,000
120	8,054,000	294	76,210,000	0.19	33,550,000	0.50	88,050,000
140	6,717,000	327	70,640,000	0.20	29,160,000	0.49	72,540,000
160	5,735,000	358	65,920,000	0.20	25,790,000	0.49	61,560,000
180	4,997,000	385	61,900,000	0.21	23,130,000	0.48	52,970,000
200	4,382,000	413	58,150,000	0.21	20,670,000	0.48	46,260,000
300	2,621,000	527	44,410,000	0.23	13,460,000	0.47	27,270,000
400	1,666,000	631	33,800,000	0.24	8,920,000	0.45	16,670,000
500	1,057,000	739	25,100,000	0.25	5,730,000	0.46	10,810,000
600	687,000	842	18,590,000	0.26	3,890,000	0.45	6,810,000
700	465,000	937	14,010,000	0.28	2,820,000	0.45	4,560,000
800	313,000	1,030	10,370,000	0.28	1,910,000	0.43	2,980,000
900	199,000	1,135	7,260,000	0.29	1,260,000	0.38	1,680,000

Table 19-5: Measured and Indicated Mineral Resources

All Metals, Based on Silver cutoffs - Measured and Indicated

Cutoff (g Ag/t)	Tonnes	Grade (g Ag/t)	Ag (Ounces)	Grade (% Sn)	Sn (Pounds)	Grade (% Zn)	Zn (Pounds)
10	84,504,000	62	168,400,000	0.09	162,450,000	0.51	944,530,000
20	46,013,000	102	150,640,000	0.12	119,880,000	0.55	561,850,000
30	33,319,000	131	140,840,000	0.14	101,590,000	0.56	412,400,000
40	27,513,000	152	134,350,000	0.15	90,670,000	0.56	337,470,000
50	23,381,000	171	128,390,000	0.16	81,730,000	0.55	281,890,000
60	20,158,000	189	122,720,000	0.17	74,050,000	0.54	239,230,000
70	17,524,000	208	117,230,000	0.17	67,460,000	0.53	204,880,000
80	15,375,000	227	112,050,000	0.18	61,870,000	0.53	178,320,000
90	13,551,000	246	107,080,000	0.19	56,610,000	0.52	155,970,000
100	12,056,000	264	102,510,000	0.20	52,120,000	0.52	138,170,000
120	9,810,000	300	94,630,000	0.21	44,660,000	0.51	111,240,000
140	8,220,000	333	88,010,000	0.22	39,200,000	0.51	92,090,000
160	7,044,000	364	82,360,000	0.23	34,940,000	0.51	78,500,000
180	6,150,000	392	77,490,000	0.23	31,540,000	0.50	67,400,000
200	5,401,000	420	72,920,000	0.24	28,350,000	0.50	59,040,000
300	3,236,000	539	56,030,000	0.26	18,780,000	0.48	34,560,000
400	2,062,000	648	42,990,000	0.28	12,660,000	0.47	21,420,000
500	1,318,000	763	32,350,000	0.29	8,370,000	0.48	14,080,000
600	863,000	877	24,340,000	0.30	5,790,000	0.46	8,840,000
700	601,000	980	18,940,000	0.33	4,350,000	0.47	6,210,000
800	411,000	1,088	14,380,000	0.34	3,040,000	0.46	4,150,000
900	280,000	1,199	10,790,000	0.35	2,170,000	0.41	2,550,000

In addition to the above Measured and Indicated resources, Winters (1999) also reported Inferred mineral resources of 17 million tonnes grading 80 g Ag/t, 0.05% Sn and 0.3% Zn, at a cutoff of 30 g Ag/t.

19.7 Mineral Reserves Estimates

Ore reserves for the Pirquitas project were developed by applying relevant economic and engineering criteria to MDA's estimated Measured and Indicated resources in order to define the economically extractable portions, or Proven and Probable reserves (Table 19-6). Included in the reserves are 400,000 tonnes of mill tailings remaining on the property from earlier mining operation. The reserves were developed to meet the Canadian Institute of Mining, Metallurgy and Petroleum reserve definitions, which are:

Probable Mineral Reserve

A 'Probable Mineral Reserve' is the economically mineable part of an Indicated, and in some circumstances, a Measured Mineral Resource demonstrated by at least a Preliminary Feasibility Study. This Study must include adequate information on mining, processing, metallurgical, economic, and other relevant factors that demonstrate, at the time of reporting, that economic extraction can be justified.

Proven Mineral Reserve

A 'Proven Mineral Reserve' is the economically mineable part of a Measured Mineral Resource demonstrated by at least a Preliminary Feasibility Study. This Study must include adequate information on mining, processing, metallurgical, economic, and other relevant factors that demonstrate, at the time of reporting, that economic extraction is justified.

Table 19-6: Pirquitas Proven & Probable Reserves

Class	Ore kt	Ag g/t	Sn %	Zn %	Waste kt	Total kt	Strip ratio
Proven	3,342	191	0.25	0.67			
Probable	15,118	172	0.19	0.62			
Total In-pit	18,460	175	0.21	0.62	91,068	109,528	4.9
Tailings * (probable)	400	234	0.37	0.13			
Total Project	**18,860**	**177**	**0.21**	**0.61**	**91,068**	**109,928**	**4.8**

* 400,000 tonnes of high grade jig tailings, stockpiled from previous operations.

Approximately 710 thousand tonnes of measured material, grading 112 Ag g/t, 0.17% Sn and 0.67% Zn, at a 30 g/t Ag cutoff and 7.91 million tonnes of indicated material, grading 95 Ag g/t, 0.09% Sn and 0.45% Zn at a 30 g/t Ag cutoff remain outside of the pit design. While this material is not economic to mine given the economic parameters used in this study some of this material may be mineable at higher metals prices.

19.8 Applied Methodologies

The Pirquitas reserves were derived from the resource model estimated by MDA. MDA used Medsystem-MineSight computer software to develop and report the reserves using the following procedure:

- Review and verify pertinent parameters, economic criteria and designs from the Jacobs feasibility study and ascertain applicability to this Study.
- Develop updated mining operating and capital costs.
- Using these input data, generate multiple “pit shells” using the Medsystem floating cone program. Each pit shell represents the maximum amount of material that can be mined economically using the given input parameters.
- Design an ultimate pit using the pit shells and the TWC pit as guides. This design includes haul roads and eliminates areas that could not be mined because of practical mining limitations.
- Use the TWC mining phases for the pit phases since the overall mining sequence has not changed. Minor modifications were made to the phase designs to better fit the ultimate pit design.

- Tabulate Proven and Probable material in the final pit design based on Measured and Indicated resource classifications.

19.9 Floating Cone Analyses

MDA used the MineSight floating cone algorithm to produce open pit cone shells using the parameters shown in Table 19-7. Only Measured and Indicated materials were allowed to make a positive economic contribution; Inferred material was considered to be waste. Processing costs, recoveries, and general and administration costs were provided by Hatch. Smelting, concentrate grades, freight and treatment costs, and slope design angles were taken from the 1999 Jacobs feasibility study. Metals prices, labor, fuel, explosives and commodity costs were supplied by Silver Standard. H. M. Hamilton & Associates Inc. reviewed the Jacobs values and researched current concentrate and smelting charges for Silver Standard in July 2005. Several cone runs were made to test for sensitivity to metals prices and the results are summarized in Table 19-8.

These runs were made early in the project before current processing costs were established and used processing and G&A costs totalling US$ 5.66/ore tonne, which is lower than the currently estimated US$ 6.30/ore tonne. The base cone was re-run using the updated processing/G&A cost of US$ 6.30/tonne resulting in a pit shell containing 18.5 million tonnes at grades of 176 g Ag/t, Sn 0.205% and Zn 0.622% with 91 million tonnes of waste. These costs were also used in cutoff calculations resulting in a cutoff grade, assuming only silver revenue, of 90g Ag/t. All $ refer to US dollars.

Table 19-7: Floating Cone Parameters

	Ag		Sn		Zn	
Base Price	$5.35	$/oz	$2.75	$/lb	$0.42	$/lb
Mill recovery	per equation		57%		per equation	
Concentrate grades	22300	g/DMT	55%		53%	
Smelting charges	$ 110	$/DMT	$ 233	$/DMT	$ 205	$/DMT
Payable metal	97.50%		95.23%		85%	
Refining	$0.45	$/oz	$0.00		$0.00	
Penalties	$ 78.00	$/DMT	$ 2.70	$/DMT	$ -	$/DMT
Freight total	$ 167.31	$/WMT	$ 200.14	$/WMT	$ 74.91	$/WMT
Losses	0.50%		0.25%		0.25%	
Moisture	8%		8%		8%	
Processing, w/G&A			$5.66	$/DMT		
Updated processing w/G&A			$6.40	$/DMT		
Mining	$1.15	$/DMT				
Ag recovery = 0.00000623*(Ag_grade^3) - 0.004*(Ag_grade^2) + 0.8633 * Ag_grade + 17.865						
Zn recovery = 32.925*Zn_grade^3 - 107.78*Zn_grade^2 + 130.78 * Zn_grade + 0.6629						
DMT = dry metric tonnne						
WMT = w et metric tonnne						

The floating cone shell for the base economic scenario is a close match for the TWC pit design, although slightly smaller.

Table 19-8: Floating Cone Results

Prices			Low-Grade Silver				High-Grade Silver				Total					
Ag	Sn	Zn	Ore kt	Ag g/t	Sn %	Zn %	Ore kt	Ag g/t	Sn %	Zn %	Ore kt	Ag g/t	Sn %	Zn %	Waste kt	Strip
$ 5.50	$ 3.17	$ 0.45	7,636	51.7	0.21	0.80	12,095	259.3	0.22	0.54	19,731	178.9	0.22	0.64	101,515	5.1
$ 6.00	$ 3.17	$ 0.45	7,604	48.5	0.21	0.80	13,062	247.1	0.22	0.54	20,666	174.0	0.21	0.64	103,561	5.0
$ 7.00	$ 3.17	$ 0.45	7,870	43.4	0.20	0.80	15,050	228.4	0.21	0.55	22,921	164.9	0.20	0.64	114,258	5.0
$ 5.50	$ 3.20	$ 0.45	7,672	51.6	0.21	0.80	12,083	259.5	0.22	0.54	19,755	178.7	0.22	0.64	101,142	5.1
$ 6.00	$ 3.20	$ 0.45	7,736	48.3	0.21	0.80	13,112	247.2	0.22	0.54	20,848	173.4	0.21	0.64	104,946	5.0
$ 7.00	$ 3.20	$ 0.45	7,902	43.2	0.20	0.80	14,989	228.4	0.21	0.55	22,891	164.5	0.20	0.64	112,505	4.9
$ 5.50	$ 3.50	$ 0.45	8,563	49.9	0.21	0.78	12,190	258.5	0.22	0.54	20,754	172.4	0.21	0.64	102,797	5.0
$ 6.00	$ 3.50	$ 0.45	8,678	46.7	0.20	0.78	13,280	246.4	0.21	0.54	21,958	167.5	0.21	0.64	108,089	4.9
$ 7.00	$ 3.50	$ 0.45	11,435	38.1	0.16	0.96	15,230	227.6	0.21	0.55	26,665	146.3	0.19	0.72	115,392	4.3
$ 5.50	$ 3.20	$ 0.56	10,002	46.6	0.18	0.98	12,123	259.1	0.22	0.54	22,125	163.0	0.20	0.74	99,720	4.5
$ 6.00	$ 3.20	$ 0.56	10,061	43.8	0.17	0.99	13,127	247.2	0.21	0.54	23,188	158.9	0.20	0.74	103,028	4.4
$ 7.00	$ 3.20	$ 0.56	10,540	39.2	0.17	0.98	15,187	227.8	0.21	0.55	25,727	150.5	0.19	0.73	115,156	4.5
$ 7.00	$ 3.50	$ 0.56	11,541	38.1	0.16	0.96	15,315	227.2	0.20	0.55	26,855	146.0	0.19	0.72	117,533	4.4
$ 6.00	$ -	$ -	31	76.4	0.12	0.64	10,688	253.9	0.22	0.55	10,719	253.4	0.22	0.55	71,001	6.6
$ 6.00	$ 3.20	$ -	5,662	50.3	0.25	0.49	13,009	247.2	0.22	0.54	18,671	187.5	0.23	0.53	103,994	5.6
$ 6.00	$ 3.20	$ 0.45	7,736	48.3	0.21	0.80	13,112	247.2	0.22	0.54	20,848	173.4	0.21	0.64	104,946	5.0
$ 5.35	**$ 2.75**	**$ 0.42**	**6,375**	**55.7**	**0.24**	**0.74**	**11,883**	**262.3**	**0.22**	**0.53**	**18,258**	**190.2**	**0.23**	**0.60**	**89,773**	**4.9**

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19.10 Mine Design

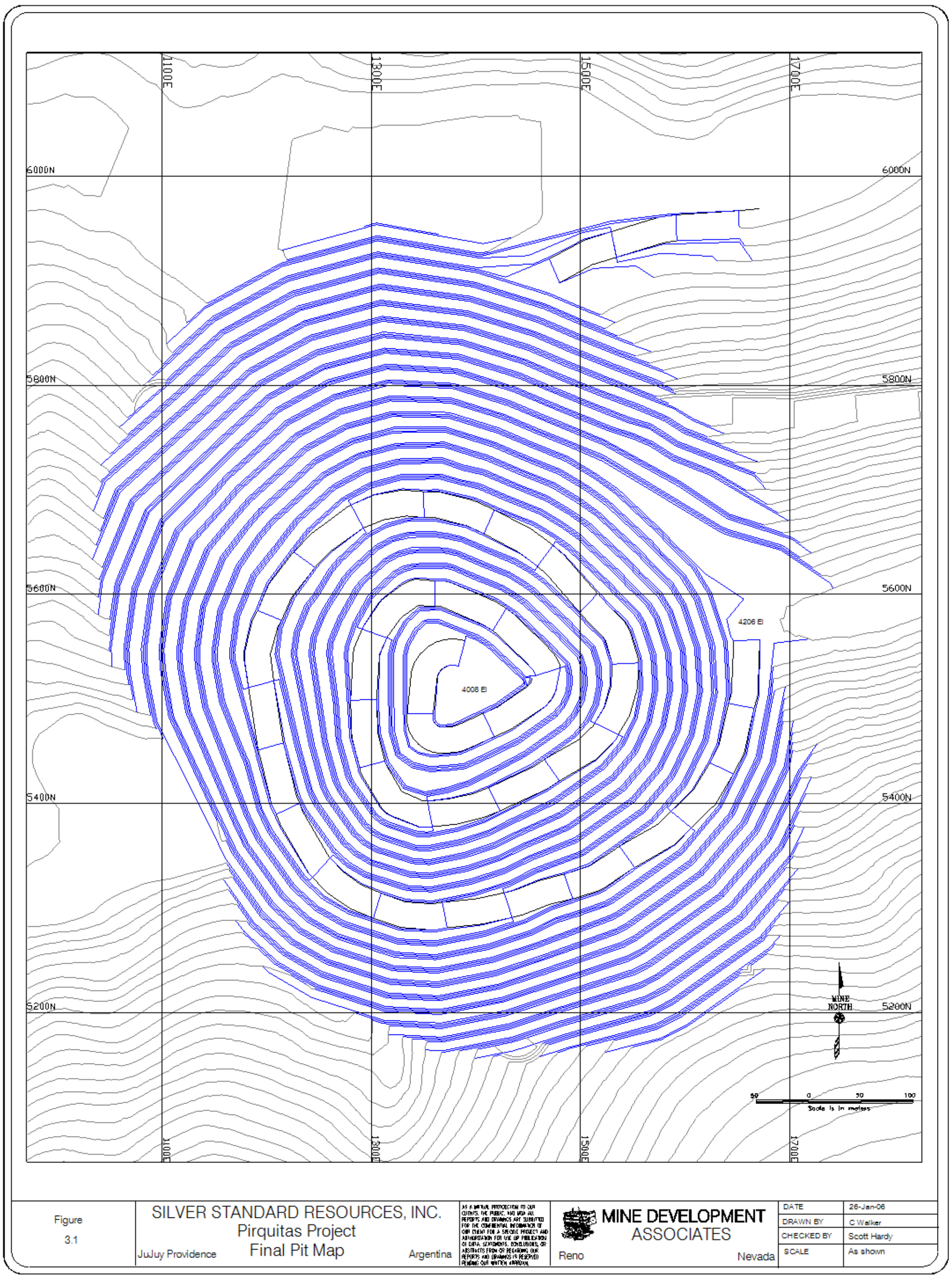
MDA designed a final pit using the base case floating cone (Ag US$ 5.35/oz, Sn US$ 2.75/lb and Zn US$ 0.42/lb) as a guide. The size of the pit is slightly larger than the cone in order to accommodate haul roads and switchbacks in the mining phases. Phase designs follow the same concept as the TWC phases but were modified slightly to better fit the smaller pit.

Haul roads were designed with a maximum 10% grade and a width of 25 meters including a safety berm. This should accommodate the proposed trucks, which are about 7 meters wide. The use of switchbacks was unavoidable due to the steep topography and size of the pit.

The pit was designed in the local mine grid system using digital surface topography from the Jacobs feasibility work. There currently is more detailed topography available in the UTM coordinate system. At this point in time the conversion from UTM coordinates to the mine grid coordinates is being determined. Once a correct conversion is established the mine design may need to be revised to reflect potential changes in the topography. It is likely that any differences would primarily impact the amount of waste in the pit design.

The ultimate pit design is shown in Table 19-4.

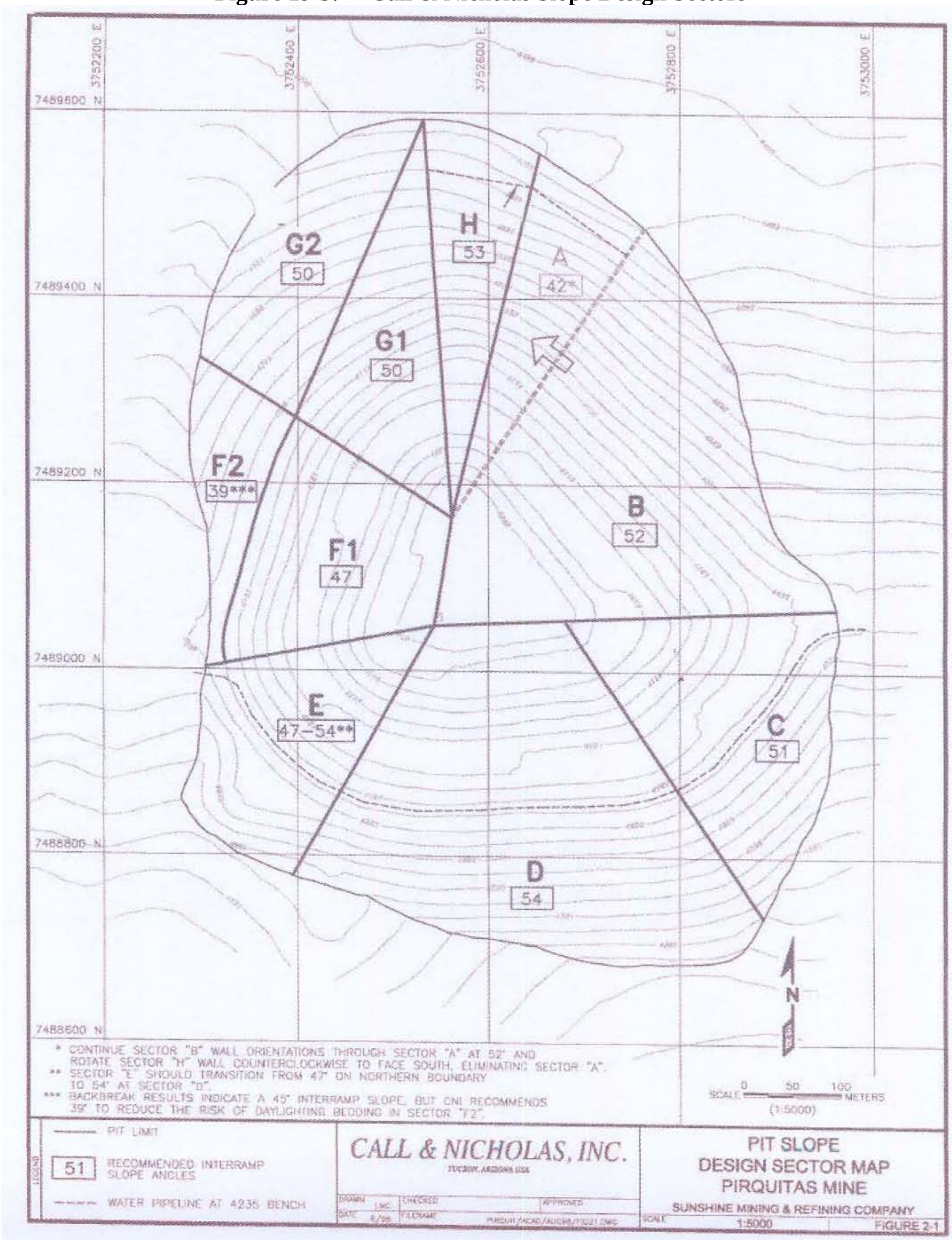
Figure 19-4: Ultimate Designed Pit



19.10.1 Pit Slopes

Call & Nicholas, Inc. (CNI) evaluated pit slope angles and provided recommendations for pit slope designs for the project in 1998. The recommended slope angles and design sectors are shown in Figure 19-5. These slope angles were used in the pit and phase designs.

Figure 19-5: Call & Nicholas Slope Design Sectors



19.10.2 Phase Designs

The pit has been divided into four mining phases. The first three phases are started on the north wall and the final two phases begin on the south wall.

The primary reasons for using these narrow phases rather than fewer wider phases are to minimize preproduction stripping and provide higher-grade mill feed early in the project. The disadvantages in doing so are that there are multiple switchbacks, mining areas are narrow and cramped, and a greater number of benches must be mined in any given period in order to maintain mill throughput.

The first three phases on the north wall are accessed by switchbacks and a road built midway up the hillside. Much of the waste in the first phase is mined during the preproduction period in order to expose enough ore to provide consistent mill feed. The fourth phase is the first significant mining on the south wall.

19.10.3 Production Grade Control

The mineralization in the deposit occurs as mostly narrow near-vertical veins or structure zones. In the heart of the deposit these veins or zones are typically surrounded by a halo of above-cutoff but lower-grade material that varies in width from nothing to tens of meters.

Wherever the narrow veins are surrounded by wide-enough bands of ore-grade material, conventional ore control techniques may perform acceptably well. However, where the narrow veins are not surrounded by halos of ore, conventional grade control methods using vertical drill holes will be ineffective.

After considerable discussion it has been decided to use angled drill holes to sample in areas of narrow veins. These holes will be drilled at the shallowest angle possible, and after operational experience is gained, may be drilled two or three benches at a time.

Many of the mineralized areas within the pit limits have been mined to some extent by underground methods. As a result there are a considerable number of openings in and around the ore zones. Mining in these areas will require additional diligence and care to provide a safe working environment as well as maximize productivity. It is expected that mining around the workings will cost more and be less productive. Both of these factors were taken into account in the economic and productivity calculations, but the exact method of dealing with the openings has yet to be determined.

It may be preferable to fill the openings with ore (to minimize dilution) or alternatively, to work around them. The best method to use will depend on the size and location of the openings. Once operating experience has been obtained the best methods of dealing with the situation can be optimized.

19.11 Production Schedule

A production schedule was developed to provide 6,000 dry tonnes per day of ore to the mill. The first quarter production is reduced to 490,000 tonnes, about 90% of the total throughput to account for plant startup. Additionally, 110,000 tonnes of ore is mined in the pre-production period and stockpiled. This material is processed during year 4 and at the end of the mine life.

Table 19-9: Pirquitas Mine Production Schedule

	Ore mined and sent directly to mill				Ore mined and sent to stockpile					
Period	Ore kt	Ag g/t	Sn %	Zn %	Stkp kt	Ag g/t	Sn %	Zn %	Waste kt	Total kt
Pre-prod					110	170	0.05	0.00	7,315	7,425
yr1 qtr1	90	248	0.04	0.00					2,900	2,990
yr1 qtr2	540	204	0.19	0.79					3,125	3,665
yr1 qtr3	540	176	0.22	0.70					3,300	3,840
yr1 qtr4	540	195	0.24	0.54					3,554	4,094
2	2,160	185	0.19	0.96					18,075	20,235
3	2,160	179	0.20	0.61					18,160	20,320
4	2,060	157	0.15	1.33					13,270	15,330
5	2,160	174	0.16	0.72					11,063	13,223
6	2,160	177	0.18	0.60					4,059	6,219
7	2,160	196	0.20	0.42					2,740	4,900
8	2,160	184	0.27	0.22					1,917	4,077
9	1,620	126	0.35	0.04					1,590	3,210
TOTAL	18,350	176	0.21	0.63	110	170	0.05	0.00	91,068	109,528

To this, is added 400,000 t of high grade “jig tailings” from previous operations, giving a total mill feed of 18,350 + 110 + 400 = 18,860 kt , as shown in Table 19-10.

Table 19-10: Total Ore to Mill

	Total ore to mill				Ore direct from mine to mill				Ore from stockpile to mill				Ore from tailings to mill			
Period	Ore kt	Ag g/t	Sn %	Zn %	Ore kt	Ag g/t	Sn %	Zn %	Ore kt	Ag g/t	Sn %	Zn %	Ore kt	Ag g/t	Sn %	Zn %
Pre-prod																
yr1 qtr1	490	237	0.31	0.10	90	248	0.04	0.00					400	234	0.37	0.13
yr1 qtr2	540	204	0.19	0.79	540	204	0.19	0.79								
yr1 qtr3	540	176	0.22	0.70	540	176	0.22	0.70								
yr1 qtr4	540	195	0.24	0.54	540	195	0.24	0.54								
2	2,160	185	0.19	0.96	2,160	185	0.19	0.96								
3	2,160	179	0.20	0.61	2,160	179	0.20	0.61								
4	2,160	157	0.14	1.26	2,060	157	0.15	1.33	100	170	0.05	0.00				
5	2,160	174	0.16	0.72	2,160	174	0.16	0.72								
6	2,160	177	0.18	0.60	2,160	177	0.18	0.60								
7	2,160	196	0.20	0.42	2,160	196	0.20	0.42								
8	2,160	184	0.27	0.22	2,160	184	0.27	0.22								
9	1,630	126	0.35	0.04	1,620	126	0.35	0.04	10	170	0.05	0.00				
TOTAL	18,860	177	0.21	0.61	18,350	176	0.21	0.63	110	170	0.05	0.00	400	234	0.37	0.13

Prior to pre-production temporary access roads need to be constructed on both walls. The portions of these roads inside the pit are mined out during phase 1 mining but the road outside the pit is used through phase 2. Construction of the roads is included in pre-production capital.

19.12 Waste Dumps

Waste dumps were designed by Knight Piésold for the Jacobs Feasibility and MDA considers that they are of sufficient size to contain the waste from this pit design. Productivities used to estimate equipment requirements include the additional haulage required to place materials at required locations at the waste dump.

19.13 Mine Equipment

The basic equipment selected in the Jacobs Feasibility was retained for this study because mining rates have not changed significantly. Many of the specific models selected have changed since 1999 so new specifications and quotes were obtained by Silver Standard. CAT and Komatsu were the two vendors from whom quotes were solicited. The Komatsu equipment was chosen primarily because of lower capital costs. The major mining equipment is shown in Table 19-11.

Table 19-11: Equipment Fleet

Equipment Type	Capacity	Manufacturer	Model	Quantity
Drills	165mm dia	Driltech	D45KS	3
Shovel	11 m3	Komatsu	PC1800	1
Loaders	11 m3	Komatsu	WA900	2
Trucks	90 tonne	Komatsu	HD785	5-12
Dozer		Komatsu	D375A	2
Rubber Tire Dozer		Komatsu	WD-500	1
Road Grader		Komatsu	GD825A	2
Water Truck	90 tonne	Komatsu	HD785	1

More detailed equipment parameters can be found in the 2006 Feasibility Study Update. The mine operating schedule is based on working two twelve-hour shifts per day, 350 days per year. The working hours per shift are estimated to be 9.6 based on the following calculation (Table 19-12).

Table 19-12: Shift Length

	Shift Length	720	Min
Less:	Inspection	30	Min
	Meal break	30	Min
	2-15 minute breaks	30	Min
	Net	630	Min
	Less: efficiency	52.5	min (55min/hour)
	Effective min/shift	577.5	Min

The major equipment requirements (Table 19-13) were calculated by period using these parameters, supported by data in the Appendix of the Feasibility Study Update, and the production schedule.

Table 19-13: Mine Equipment Requirements

	Yr -1	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Yr 8	Yr 9
Major Mining Equipment										
Drills, Driltech D45KS	2		1							
Shovel, Komatsu PC1800	1									
Loaders, Komatsu WA900	2									
Trucks, Komatsu HD785	5	2	1							
Trucks, Komatsu HD785 (leased)			2	4	1					
Dozer, Komatsu D375A	2					1				
Rubber Tire Dozer, Komatsu WD-500	1									
Road Grader, Komatsu GD825A	1	1								
Water Truck, Komatsu HD785	1									
Support Equipment										
Light Plant	8						4			
Steming Loader	1									
Low Boy (new) with Tractor (used)	1									
Explosives Truck	1									
Fuel/Lube Truck	1									
Mechanics Truck	2									
Pickup Trucks	8				8					
Welding Truck/Crane	1					1				
100 T Crane (used)	1									
Tire tool and loader	1									
1 CM Loader/Backhoe	1									
Flatbed Truck	1					1				
Crew Vans	2				2					
Forklift	1									
Portable Washing Unit	1						1			
Maintenance Tooling	1									
Warehouse Spare Parts	1									
Surveying and Engineer Equipment	1									

It was assumed that the hydraulic shovel would mine 55% to 75% of the total material mined. The remaining material is to be mined by the loaders. It is usually possible for the shovel to mine the full mine production during any year but the need to have at least two active mining locations dictates more than one primary loading unit. The second loader is used at the plant for stockpile and other work and as backup for the primary loaders.

Most of the major equipment will be at or just beyond its replacement life at the end of mining. As such, no major equipment replacements are planned for the life of the project. Trucks are leased in year 2 (2 trucks), year 3 (4 trucks) and year 4 (1 truck) in order to meet haulage requirements while minimizing capital expenditures. The lease costs, which add US$ 0.034/tonne over the mine life, are considered part of the mine operating cost.

19.13.1 Drilling and Blasting

The blasting parameters have not been changed from the 1999 Feasibility Study; however consideration has been added for controlled blasting near pit walls. Pre-shear holes and reduced powder factors in the vicinity of the walls are standard techniques used to ensure stable pit walls. It is possible that pre-shear holes can be drilled two or three benches in one pass and blast holes in waste drilled two benches in order to improve operating efficiency. The maximum number of drills required stays the same at three including the additional drilling.

19.13.2 Support Equipment

The support equipment was left basically unchanged from the 1999 Feasibility Study. The few changes that were made were the removal of the rock saw and the addition of crew vans, explosives vehicles, a welding truck and a few miscellaneous items. The list of equipment is shown in Table 19-11.

19.14 Manpower

Manpower requirements are shown in Table 19-3. The number of equipment operators is determined by the number of pieces of equipment being operated each shift. Salaried staff and other support personnel numbers are fixed on an annual basis.

Manpower levels have been kept to a minimum and all employees are assumed to be nationals or work for national-level wages.

Table 19-14: Manpower Requirements

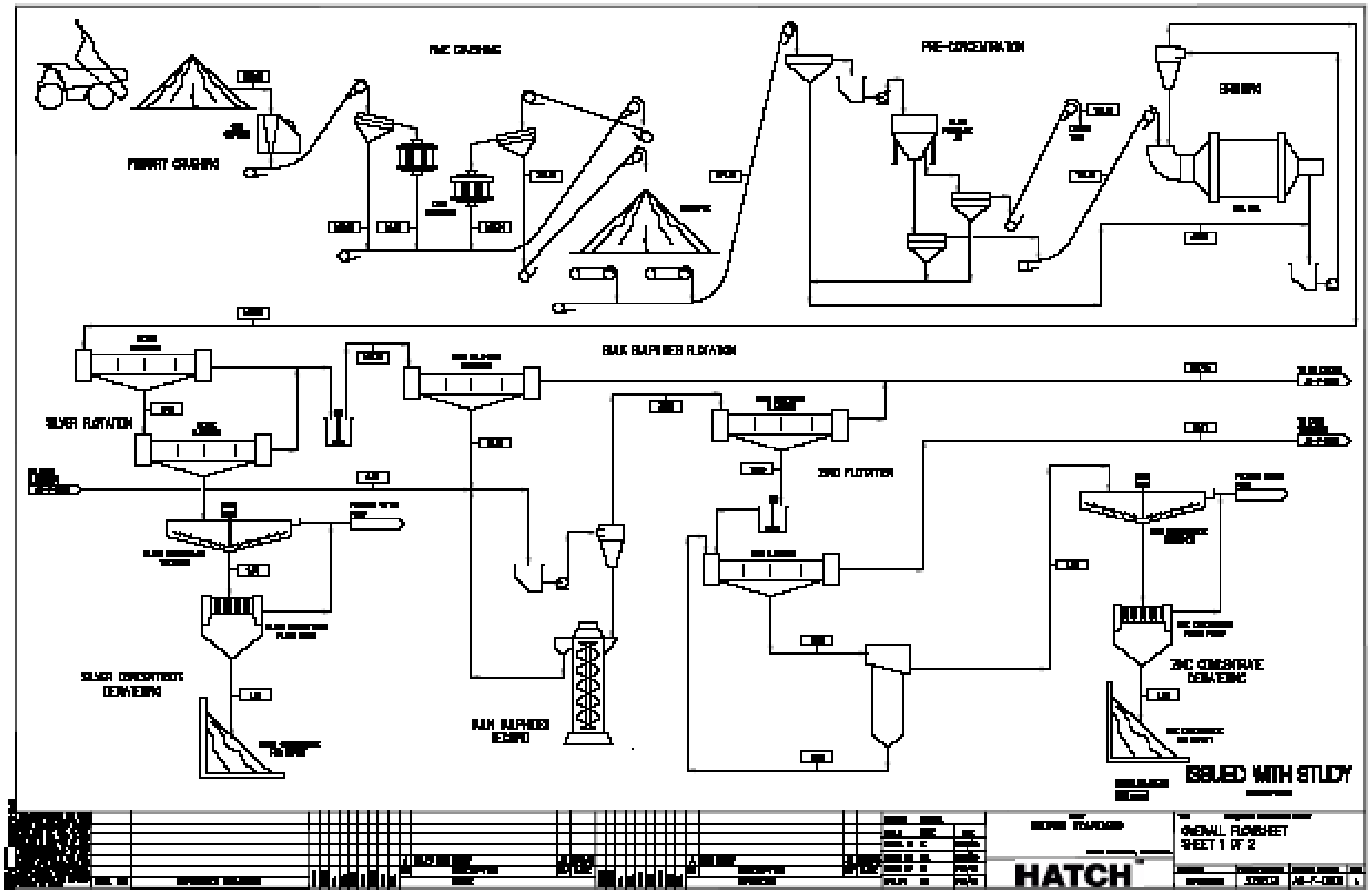
Mine Hourly Personnel		Yr 1 Qtr1	Yr 1 Qtr2	Yr 1 Qtr3	Yr 1 Qtr4	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Yr 8	Yr 9
Mine Operations													
Driller	#	8	8	8	12	12	12	8	8	4	4	4	4
Blaster	#	2	2	2	2	2	2	2	2	2	2	2	2
Blaster Helper	#	2	2	2	2	2	2	2	2	2	2	2	2
Loader Operator	#	10	10	10	10	10	10	10	10	6	6	6	6
Truck Driver	#	20	24	28	32	40	48	36	32	20	16	16	12
Mine Labor	#	16	16	20	20	20	20	20	20	20	20	20	20
Aux. Equip. Op.	#	30	30	30	30	30	30	30	30	30	30	30	30
Operations Total	**#**	**88**	**92**	**100**	**108**	**116**	**124**	**108**	**104**	**84**	**80**	**80**	**76**
Mine Maintenance													
Technician/Leadman	#	2	2	2	2	2	2	2	2	2	2	2	2
Mechanic	#	12	13	14	17	19	21	17	15	9	8	8	7
Assistant Mechanic	#	6	7	7	9	10	11	9	8	5	4	4	4
Welder	#	2	2	2	2	2	2	2	2	2	2	2	2
Electrician	#	1	1	1	1	1	1	1	1	1	1	1	1
Lube & Fuel	#	4	4	4	4	4	4	4	4	4	4	4	4
Tireman	#	4	4	4	4	4	4	4	4	4	4	4	4
Labor/Support	#	10	10	10	10	10	10	10	10	10	10	10	10
Maintenance Total	**#**	**41**	**43**	**44**	**49**	**52**	**55**	**49**	**46**	**37**	**35**	**35**	**34**
Total Mine	**#**	**129**	**135**	**144**	**157**	**168**	**179**	**157**	**150**	**121**	**115**	**115**	**110**

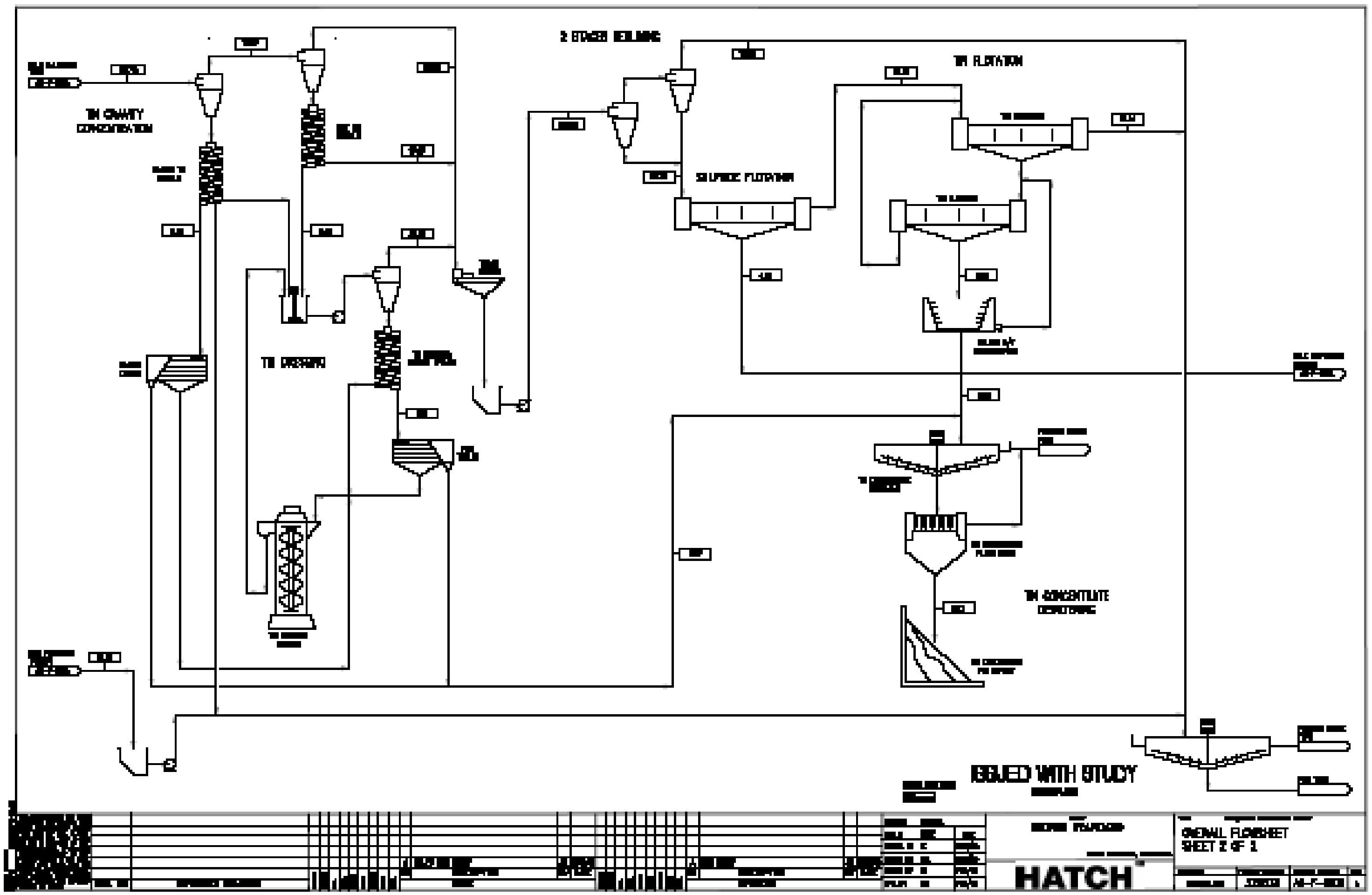
Mine Salaried Personnel		Yr 1 Qtr1	Yr 1 Qtr2	Yr 1 Qtr3	Yr 1 Qtr4	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Yr 8	Yr 9
Maintenance Superintendent	#	1	1	1	1	1	1	1	1	1	1	1	1
Mine Superintendent	#	1	1	1	1	1	1	1	1	1	1	1	1
Chief Engineer	#	1	1	1	1	1	1	1	1	1	1	1	1
Chief Geologist	#	1	1	1	1	1	1	1	1	1	1	1	1
Mine Supervisors	#	4	4	4	4	4	4	4	4	4	4	4	4
Maintenance Supervisors	#	4	4	4	4	4	4	4	4	4	4	4	4
Maintenance Planner	#	1	1	1	1	1	1	1	1	1	1	1	1
Mining Engineers	#	1	1	1	1	1	1	1	1	1	1	1	1
Geologist	#	1	1	1	1	1	1	1	1	1	1	1	1
Ore Control Technicians	#	4	4	4	4	4	4	4	4	4	4	4	4
Surveyors	#	4	4	4	4	4	4	4	4	4	4	4	4
Secretary	#	1	1	1	1	1	1	1	1	1	1	1	1
Clerks	#	1	1	1	1	1	1	1	1	1	1	1	1
Total Mine	**#**	**25**	**25**	**25**	**25**	**25**	**25**	**25**	**25**	**25**	**25**	**25**	**25**
Grand Total Mine	**#**	**154**	**160**	**169**	**182**	**193**	**204**	**182**	**175**	**146**	**140**	**140**	**135**

20. Other Relevant Data and Information

Hatch has produced new flowsheets and general arrangements. These are summarized in the two flowsheets attached.

20.1 Summary Flowsheets




TIN GRAVITY CONCENTRATION
SULPHIDE FLOTATION
TIN FLOTATION
TIN CONCENTRATE DEWATERING
ISSUED WITH STUDY
OVERALL FLOWSHEET
HATCH

20.2 Financial Analyses

The data generated in the study has been used to calculate the project IRR and NPVs for eight cases, as shown in the summary table. The reserves were calculated using the Case 1 metal prices.

Silver Standard and Hatch consider that the average metal prices of the last 18 months ending December 31, 2005 to be appropriate for project evaluation. However, the reader is able to make a judgement based on their own perceptions of future metal prices and costs, and in particular the value of the Argentinean Peso. Hatch can offer no comment as to future metal prices, exchange rates or costs, as these all depend on many factors, beyond the control of the project participants. These all have significant impact on the project economics. The project economics appear good for a wide range of metal prices, except if prices reverted to the average prices for silver, tin and zinc during the last 20 years.

Table 20-1: Summary of Financial Analyses

Pirquitas Project - Summary of Financial Analyse										
Case	**Description**	**Metal prices**							**Unit Costs**	
		Silver	**Tin**	**Zinc**	**NPV_0**	**NPV_5**		**Payback**	**Cash costs**	**Total costs**
		(US$/oz)	**(US$/lb)**	**(US$/lb)**	**(M US$)**	**(M US$)**	**IRR**	**(years)**	**(US$/oz)**	**(US$/oz)**
1	20 Years Average Metal Prices	5.35	2.75	0.42	50.6	3.9	5.1%	7.2	2.95	5.13
2	Selected Metal Prices	6.25	3.00	0.55	124.9	62.6	12.5%	5.2	2.72	4.86
3	18 Month Average Metal Price	7.16	3.56	0.58	195.3	117.5	19.2%	3.8	2.42	4.53
4	12 Month Average Metal Price	7.55	3.40	0.66	216.6	134.1	21.2%	3.4	2.46	4.54
5	Last 6 Month Average Metal Price	7.95	3.10	0.74	234.2	148.0	22.9%	3.2	2.57	4.63
6	Current Metal Prices	9.86	3.55	1.01	369.8	251.0	33.7%	2.3	2.17	4.16
7	Prices - April 4, 2006	11.75	3.79	1.23	495.6	346.0	42.2%	1.8	1.93	3.83
8	Prices - April 25, 2006	12.47	4.23	1.52	563.1	397.1	46.6%	1.7	1.49	3.36

Hatch has inserted the expected concentrate grades and recoveries, and capital and operating costs and mine schedule date generated by Hatch and MDA into the financial model. Hatch and MDA have relied upon data provided by Silver Standard with respect to the current tax regime and royalties applicable to Argentina.

21. Interpretation and Conclusions

21.1 Geology and Mining

The Pirquitas deposit represents a significant resource. Detailed and close-spaced drilling by Sunshine built confidence in the resource estimate and has compensated, at least in part, for the risk associated with the extreme high-grades, grade changes and narrow veins. To fully understand the deposit and model at Pirquitas, MDA presents the following interpretations:

- Since nearly half of the "economic" silver ounces and tin above 0.3% occur in narrow high-grade veins, the resource model is sensitive to the size of these domains.

- MDA did not build a model of the underground mine workings for Potosí to extract previously mined material from the resource model. MDA used the pre-existing mine model built by Sunshine and Winters; a later study done by MDA for Silver Standard showed that, interpreted differently, there could be a net loss of 10 million ounces of silver from the resource, reducing the mineable material by about five percent. Additional work should be done on the Potosí underground mine model. Marginal changes are expected, but additional accuracy will be gained.

- Between 6% and 33% of the high-grade silver, tin and zinc mineral zones in the resource model were unestimated; these model blocks were assigned the grade of the next lowest zone lying within the bounds of the block. This represents an upside potential in the immediate deposit area that is not present in the model.

- Tin and silver mineralization is open to the east and west at San Miguel, though apparently at decreasing grades. There are also indications that tin is open at depth. The extent of high-grade zinc mineralization has not been identified to the west, and some of the largest volumes of +1.5% zinc remain open.

- Potential for additional mineralization exists on some of the adjacent mined and mineralized areas that have not undergone substantial exploration.

21.2 Mineral Processing

Hatch gave particular attention to reviewing the extensive testwork that was accomplished in 1997/8. This was carried out on a variety of samples, by a large number of research organizations. It is concluded by Hatch (and also by the previous Due Diligence report) that this makes evaluation of the results more difficult then for a simple, one product concentrator, and introduces some risk, particularly as Hatch were not present during the sample collection, preparation and testwork. Hatch has assumed that all of this work was done to acceptable standards. However, the international reputation of the institutions and the amount of work carried out goes some way to offsetting the risks, as well as Hatch's approach to concentrate grades and recoveries. Furthermore, the flowsheet, although complex, is "typical" of such multi-metal processes, where both flotation of precious and base metals and tin gravity concentration are utilized. The equipment and the unit operations are all well proven.

- Hatch (nor the Due Diligence authors) is not convinced by the testwork that the silver concentrate grade of 22.3 kg/t can be consistently achieved, and Hatch therefore propose 20kg/t, at a 78% recovery.

- Tin recovery should be reduced to 57% (from 61%) in view of the significantly reduced life-of-mine tin head grade of 0.21% Sn (was 0.33% Sn in the 1999 Study).

- Zinc recovery should be increased from 46% to 48% in view of the higher life-of-mine zinc feed grade of 0.61% Zn (was 0.57% Zn). However with what is still a very low zinc feed grade, it is considered that a 50% Zn concentrate grade is likely to be the maximum. Very little zinc flotation testwork was carried out, further supporting a more cautious approach.

- The reader is reminded of the "Historic" nature of the testwork that was done by others under the supervision of others (see Section 16.2 above).

The jig operation will be critical to overall recoveries. The split to jig concentrate and jig tailings in the flowsheet is supported by the testwork. Hatch is encouraged by the development of a new generation of Jigs, as illustrated by the Gekko Machine, and considers that the application of these may lead to a more efficient split.

Hatch have omitted a scalping screen in the primary grinding circuit, due to the relatively secondary nature of tin in the process, and the very fine cut point for sizing. This requires final review during Basic Engineering.

The tin flotation circuit is based upon a flotation pH of 2.2, as used in the 1997/8 testwork. Most tin flotation is generally carried out at a much higher pH, typically 5-5.5. Hatch considers that this offers an opportunity for enhancing the process and reducing the operating cost. Both phosphonic acid and sulpho-succinamate flotation collectors should be tested at this high pH.

Silver is the largest contributor to the project revenue, by far. In view of the low silver concentrate grade (2% Ag), it remains as opportunity for improvement, and further testwork is warranted. However, a cautionary note is that attempts in 1998 to improve silver recovery and concentrate grade were not successful.

The environmental study was completed in 1998, and approval given for development of Pirquitas. However, environmental work was excluded from this Update Study, and Hatch did not verify or confirm the previous work or the current permits.

The tailings designs, to feasibility levels, were also completed in 1998. Further work and review was excluded from this Update. The previous designs were not updated, except that the 1999 capital estimate was revised with 2005 unit rates.

21.3 Capital and Operating Costs

Hatch has estimated the 4th Quarter 2005 capital cost of the Pirquitas project to be US$ 146 million. This includes US$ 40 million of mining related costs that were estimated by MDA of Reno, USA. It also includes US$ 6 million for a starter tailings dam, and water management, that were originally developed by Knight Piésold in 1998 and that were updated by Hatch with current unit-rates. This Capex compares to the JE-FS 1998/9 capital estimate of US$ 124 million. It is Hatch's experience that capital equipment costs have escalated significantly during the past two years, and this is clearly illustrated by the vendor proposals received. As is well publicized, fuel and steel costs escalated significantly in 2004 and 2005, and this has impacted all costs, such as, freight. These costs remain high and somewhat volatile at the time of this report.

Hatch have estimated life of mine operating costs to be US$ 258.8 million, equivalent to US$ 13.72 per tonne of ore milled. Costs have been estimated to an accuracy of +/- 15%.

Hatch has carried out a financial evaluation of the project. This indicates that with the 18 month average metal prices conditions, the project has a rate of return of 19.2%.

Each of the capital cost estimate, the operating cost estimate and the financial evaluation referred to above are subject to the qualifications set out in Sections 5 and 16 of this report, as well as the qualifications, assumptions and exclusions that are set out below in Section 25 of this report.

22. Recommendations

22.1 General Project Development

It is recommended that the Company retain an international recognized engineering firm, experienced in the mining industry, to perform the Engineering, Procurement and Construction Management (EPCM) services for this project. This work would begin with the detailed engineering, identifying and ordering the long lead time equipment, as well as identifying and retaining local and regional sub-contractors. This would be followed by materials procurements and actual construction of the mine. There may be some opportunity to source good, second hand equipment.

The Company should continue with its work of converting the mine coordinate system to UTM.

The Company should select a primary vendor for the mining equipment and place orders. Also, rehabilitation of the existing facilities and detailed design of the natural gas pipeline should continue. The upgrading and extension of the existing airstrip should begin. It is also recommended that the Company accelerate its efforts to hire key personnel.

The company should continue its metallurgical testing program for possible improvements in recoveries.

22.2 Geology and Mining

The conversion between the UTM coordinate system and the rotated mine grid coordinate system should be determined and the current detailed UTM topography converted into the mine grid. While it is not practical to convert the block model and geologic interpretation into the UTM system it is relatively straightforward to convert the detailed surface topography into the mine grid. It is important to make the conversion prior to performing detailed engineering so that any differences between topographies and underground workings can be incorporated in the detailed design work. Silver Standard report that this work has commenced.

The locations of the mapped underground workings should be verified.

The pit phases should be reviewed and redesigned as appropriate during detailed engineering in order to optimize mining and reduce costs. The narrow phases are a trade off with pre-stripping and associated costs but wider phases should be considered as a method of reducing risk and improving operating efficiency.

22.3 Mineral Processing

Hatch consider that the following process issues require work during Basic Engineering:

- Specific jig testwork by the chosen equipment supplier, (a testwork proposal was provided and this work is scheduled for the second quarter, 2006). The jig concentrate should then be returned to a specialist laboratory for flotation testwork, (this is planned for June 2006).

- Similar jig installations to be visited, to incorporate best available technology into the Pirquitas design.

- The jig concentrate produced from the vendor testwork to be used to produce a silver flotation concentrate. The silver flotation concentrate to be given in depth mineralogical evaluation to ascertain liberation characteristics, followed by further attempts to upgrade beyond the 20 kg/t level. Zinc floatation tests to also be carried out on silver floatation tailings. A proposal has been received from SGS for this work.

- Investigate tin flotation at the higher pH.

- Provide selected samples to vendors of centrifugal concentrators, such as Falcon and Knelson.

Hatch simplified the flowsheet by combining the two tailings thickeners. This will result in more tailings reporting to the fines deposition area, and less to the coarse tailings stacking area. The difference in the split is relatively small, and Hatch considers this possible, but this does require some investigation to determine impact, if any, on the fine tin tailings impoundment.

During the period before EPCM or in Basic Engineering, prepared detailed equipment specifications and issue to all established vendors, as well as investigate possible second-hand equipment, (this is suggested in view of the relatively short project life of 10 years). Basic Engineering would also have as its prime objectives, finalization and sign-off of design criteria, equipment lists, mass balances, flowsheets and principal general arrangements.

23. References

Hatch Engineering and Mine Development Associates, March 2006, Feasibility Study Update for Pirquitas Silver, and Tin Project, Jujuy Province, Argentina.

Behre Dolbear, 1999, Due Diligence Report on the Pirquitas Project.

H.M. Hamilton and Associates Inc., July 2005, Concentrate Marketing.

Dulski, P., Moeller, P., Billalpando, A., and Schneider, H.J., 1982, Correlation of Trace Element Fractionation in Cassiterites with the Genesis of the Bolivian Metallotectonic, Metallization Associated with Acid Magmatism, edited by A.M. Evans, J. Wiley & Sons Ltd.

Jacobs Engineering Group, Inc., April 1999, Feasibility Study Pirquitas Silver-Tin Project, Jujuy Province, Argentina (which includes all testwork reports)

Jacobs Engineering Group, Inc., January 2001, Feasibility Study Update Pirquitas Silver-Tin Project, Jujuy Province, Argentina

Knight Piésold LLC, December 2, 1999, Sunshine Argentina Inc., Pirquitas Project, Environmental Impact Report

Mine Development Associates, December 22, 1999, Pirquitas Silver, Tin, and Zinc Resources, Province of Jujuy, Argentina completed for Sunshine Argentina Inc.

Mine Development Associates, May 3, 2002, *Report on Changes in Underground Mined Material at Pirquitas, Province of Jujuy, Argentina*, for Silver Standard Resources, Inc.

The Winters Company, April 1999, Resource Estimation, Mine Planning and Scheduling and Ore Reserves, Pirquitas Silver-Tin Deposit, Jujuy Province, Argentina

Turneaure, F.S., 1960, A Comparative Study of Major Ore Deposits of Central Bolivia, Part I, in Economic Geology, Volume 55

24. Date and Signature Page

24.1 Hatch

STATEMENT OF QUALIFICATIONS

I, John Wells, do hereby certify that:

I I am currently employed as Consultant, Mineral Processing by:

HATCH
Suite 2200, Oceanic Plaza,
1066 West Hastings Street
Vancouver, British Columbia,
CANADA V6E 3X2

II I graduated with a Bachelor of Science degree in Mineral Processing from The Royal School of Mines in 1967 and a Master of Business Administration degree from the University of Sheffield in 1970.

III I am a fellow of the South Africa Institute of Mining and Metallurgy.

IV I have worked as a mineral processing engineer continuously for a total of 38 years since my graduation from undergraduate university.

V 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 purpose of NI 43-101.

VI I am responsible for the preparation of Sections 1 through 8, Sections 16.2, 18, 20, 21.2, 21.3, 22.1 and 22.3 of this technical report titled Pirquitas Silver, Zinc and Tin Project 43-101U dated April 28, 2006. I visited the project in September 2005 for two days.

VII I have no prior involvement with the property, other than the 2005 Feasibility Study Update.

VIII I am not aware of any material fact or material change with respect to the subject matter of the Technical Report that is not reflected in the Technical Report, the omission of which to disclose would make the Technical Report misleading.

IX I am independent of the issuer applying all of the tests in Section 1.4 of National Instrument 43-101.

X I consent to the filing of the Technical Report with any securities regulatory authority, stock exchange and other regulatory authority and any publication by them, including electronic publication in the public company files on their websites accessible by the public, of the Technical Report.

Dated this 9th day of May, 2006.

____
Signature of Qualified Person

John Wells
Print Name of Qualified Person

24.2 MDA

MINE DEVELOPMENT ASSOCIATES

MINE ENGINEERING SERVICES

AUTHOR'S CERTIFICATE

I, Steven Ristorcelli, P. Geo., do hereby certify that:

1. I am currently employed as Principal Geologist by:

   Mine Development Associates, Inc.
   210 South Rock Blvd.
   Reno, Nevada 89502

2. I graduated with a Bachelor of Science degree in Geology from Colorado State University in 1977 and a Master of Science degree in Geology from the University of New Mexico in 1980.

3. I am a Registered Professional Geologist in the states of California (#3964) and Wyoming (#153) and a Certified Professional Geologist (#10257) with the American Institute of Professional Geologists, and a member of the Geological Society of Nevada, Society for Mining, Metallurgy, and Exploration, Inc., and Prospectors and Developers Association of Canada.

4. I have worked as a geologist continuously for a total of 29 years since my graduation from undergraduate university.

5. 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.

6. I am responsible for the preparation of Sections 9 through 16.1, Sections 19.1 through 19.6, Section 21.1 and Section 22.2 of this technical report titled Silver Standard Resources, Pirquitas Silver, Zinc and Tin Project, Jujuy Province, 43-101 dated April 28, 2006. I visited the project on November 1, 2 and 3, 1999.

7. I have had prior involvement with the property that is the subject of this Technical Report. My prior involvement with the property included a site visit and resource estimation in 1999 for Sunshine Mining and Refining Company, resulting in defining Measured and Indicated resources. And the completion of a previous NI 43-101

775-856-5700

210 South Rock Blvd.
Reno, Nevada 89502
FAX: 775-856-6053

Technical Report titled Technical Report on the Pirquitas Silver, Tin and Zinc Deposits, Province of Jujuy, Argentina dated May 16, 2003, for Silver Standard Mining Company.

8. I am not aware of any material fact or material change with respect to the subject matter of the Technical Report that is not reflected in the Technical Report, the omission of which to disclose would make the Technical Report misleading.

9. I am independent of the issuer applying all of the tests in section 1.4 of National Instrument 43-101.

10. I have read National Instrument 43-101 and Form 43-101F1, and the work in this Technical Report has been done in compliance with that instrument and form.

11. I consent to the filing of the Technical Report with any securities regulatory authority, stock exchange and other regulatory authority and any publication by them, including electronic publication in the public company files on their websites accessible by the public, of the Technical Report.

Dated this 9th day of May, 2006

"Steven Ristorcelli"
Signature of Qualified Person

Steven Ristorcelli
Print Name of Qualified Person

MINE DEVELOPMENT ASSOCIATES

MINE ENGINEERING SERVICES

AUTHOR'S CERTIFICATE

I, Scott Hardy, P.Eng., do hereby certify that:

1. I am currently employed as Senior Engineer by:

   Mine Development Associates, Inc.
   210 South Rock Blvd.
   Reno, Nevada 89502.

2. I graduated with a Bachelor of Science degree in General Engineering from Oregon State University in 1978 and Bachelor of Science degree in Geology from the University of Wyoming in 1984.

3. I am a Registered Professional Engineer in the state of Nevada (#11891) and a member of the Society for Mining, Metallurgy, and Exploration, Inc.

4. I have worked as an engineer for a total of 21 years since my graduation from university.

5. 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.

6. I am responsible for the preparation of Sections 19.7 through 19.14, Section 21.1 and Section 22.2 of this technical report titled Silver Standard Resources, Pirquitas Silver, Zinc and Tin Project, Jujuy Province, 43-101 dated April 28, 2006. I have not visited the project.

7. I have had prior involvement with the property that is the subject of this Technical Report. My prior involvement with the property included resource estimation in 1999 for Sunshine Mining and Refining Company, resulting in defining Measured and Indicated resources.

8. I am not aware of any material fact or material change with respect to the subject matter of the Technical Report that is not reflected in the Technical Report, the omission of which to disclose would make the Technical Report misleading.

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Reno, Nevada 89502
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9. I am independent of the issuer applying all of the tests in section 1.4 of National Instrument 43-101.

10. I have read National Instrument 43-101 and Form 43-101F1, and this Technical Report has been prepared in compliance with that instrument and form.

11. I consent to the filing of the Technical Report with any securities regulatory authority, stock exchange and other regulatory authority and any publication by them, including electronic publication in the public company files on their websites accessible by the public, of the Technical Report.

Dated this 9th day of May, 2006.

"Scott Hardy"
Signature of Qualified Person

Scott Hardy
Print Name of Qualified Person

25. Additional Requirements for Technical Reports on Development Properties and Production Properties

25.1 Capital Cost

The full description ("Basis") of the estimate is provided in detail in Appendix A of Volume I, (Document, "Capital Cost Estimate", dated 4th January 2006), together with the detailed estimate itself. Hatch has estimated the Project based upon the flowsheets and equipment list prepared during this update, and with the vendor data and prices received during the 4th Quarter of 2005. Mining costs were prepared by MDA of Reno, Nevada and are included in this overall Project estimate, (un-audited by Hatch). The 1999 studies from Knight Piésold for tailings dams have been updated by Hatch using current unit-rates; no further engineering work was carried out by either company on tailings dams in this current study.

The Project capital cost has been estimated to be US$ 146 million, including an 11.9% contingency, to an accuracy of +/- 15%, based on 4th Quarter 2005 prices, and the exchange rates provided in Appendix A of Volume I. The development of the contingency is discussed in detail in Section 10 of Volume I.

Note:

- There is no allowance for project risk factors (e.g., force majeure, access to labour, severe weather, delay due to unforseen factors such as late delivery or unavailability of equipment or materials, delay in permitting, etc.),
- There is no allowance for political, legal or regulatory risk (e.g., changes to laws, expropriation, changes in taxation or royalty regimes in Argentina, non-issuance or cancellation of permits and licenses required to develop the property),
- No allowance for any permitting and licensing costs,
- An allowance for financing costs is included in owners costs,
- An allowance for cost of insurance is included in owners costs,
- There is no allowance for any possible risk related to soil conditions and subsurface conditions,
- Free access to local infrastructure is assumed to be available.

This estimate assumes a EPCM approach.

Specifically Hatch and MDA have relied upon certain third party information in the capital cost and operating cost estimates including a) the tailings dam, b) waste rock piles, c) river diversions, d) water dams, which adds an element of risk to the estimates.

25.1.1 Basis of Estimate

This cost estimate is based on the scope of work defined by engineering from the process discipline, scope of work areas, design criteria, flow diagrams, mechanical equipment list, general disposition drawings and sketches. The following documents were used in the estimate:

- Mechanical Equipment List.
- Project Drawings.
- Equipment & Material Quotations.
- Information for previous study.

25.1.2 Quantities

A revision and update of the quantities from the previous study was developed and included in the estimate.

Mass earthwork (Site preparation) quantities were developed by utilizing the study drawings.

Structural earthwork, concrete, steel, and architectural quantities for the process facilities were developed from the drawings and sketches prepared for this study.

Mechanical equipment was specified on the equipment list.

Mechanical platework quantities for bins, liners and tanks were developed from the equipment list and historical information.

Piping quantities were estimated and factored based on historical information.

Electrical equipment and materials were factored based on historical information.

Instrumentation was factored based on historical data.

25.1.3 Currency Exchange Rate

The estimate will be in US dollars at 4th Quarter 2005 price level. Future escalation is excluded.

The currency exchange rates used in the estimate are the average interbank rates for the month of November 2005. See table below:

BASE CURRENCY	RATE OF EXCHANGE CONVERSION = FOREIGN CURRENCY PER BASE CURRENCY	ORIGIN
US$ 1	= AUD 1.36	Australia
	= CLP 530.82	Chile
	= ARS 2.97	Argentina
	= CAD 1.182	Canada
	= EUR 0.848	Euro
	= ZAR 6.68	South Africa

VAT is not included in the capital cost estimate. It is fully refundable but is estimated to be US$10 million in the Jacobs Study and US$ 12 million in the Hatch update.

25.1.4 Contingency

Contingency is a cost element to cover the statistical probability of the occurance of unforeseen costs within the defined project scope due to a combination of uncertainties, intangibles and unforeseen/highly likely occurrences of future events, based on a management decision to assume certain risks. It is meant to cover normal variations in quantities and resulting costs and excludes scope changes and project risks.

A contingency evaluation of the risk on key project cost elements is included in the total project capital cost.

The risk profile of the Capital Cost Estimate was developed considering the following risks:

- Quantities Variations.
- Labor Rate Adjustment.
- Man-hours Installation Variations.
- Price Adjustment.
- Design Changes.

25.1.5 Contingency Calculation – Results

The risk model was performed using the @Risk software, with 10,000 iterations of the model; on each of the model's iterations, the software obtains values for the subtotals by discipline and risk code.

Only Hatch's scope of work was considered as part of the contingency analyses. Third party cost inputs from MDA and Knight Piesold were not considered. These were estimated a percentage of there total directs + indirect costs.

The model's results are explained below:

Base Estimated Cost: This amount comes directly from the Project's Capital Cost Estimate for Hatch's scope of work, which in this case USD 84,649 millions. (Direct + Indirect costs).

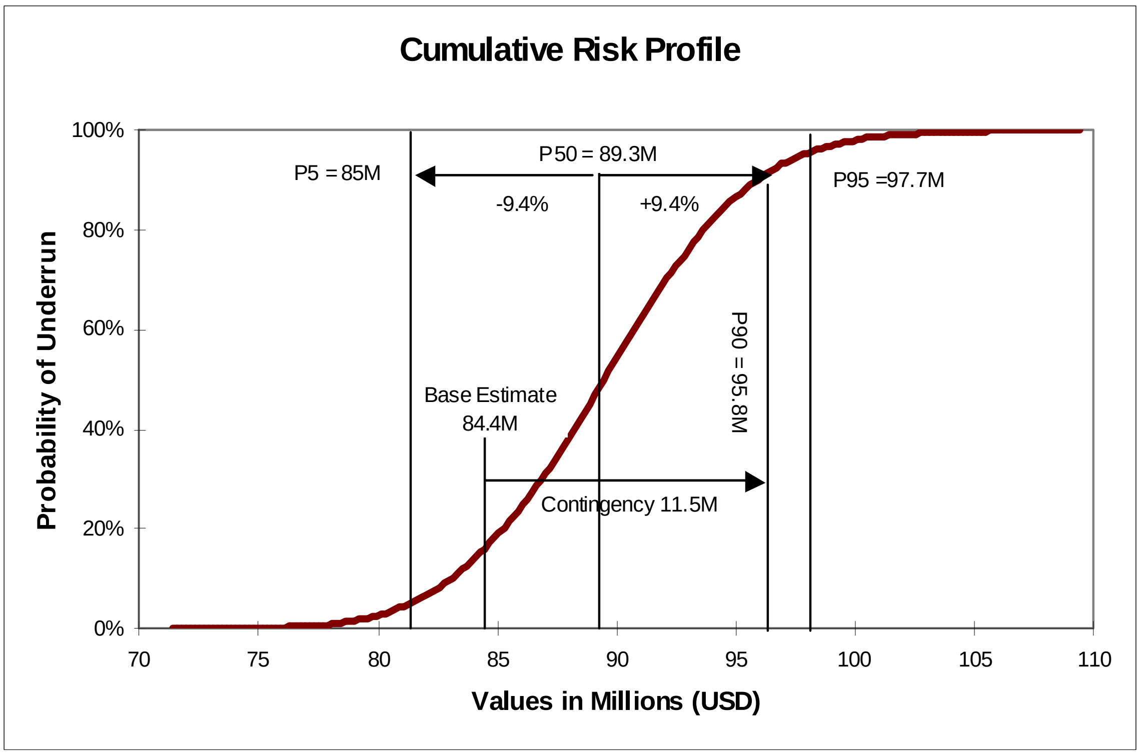
P5: This is the cost associated to a 5% probability of the Project's cost being lower than the Base Estimated Cost plus Contingency (under run), in this case USD 81,466 millions.

P50: This is the cost associated to a 50% probability of cost over run, in this case USD 89,689 millions.

P95: This is the cost associated to a 95% probability of cost over run, in this case USD 97,960 millions. The graph below shows the risk distribution of the Capital Cost Estimate for the Project as an ascending cumulative curve, it's used to graphically analyze the precision level of the estimate.

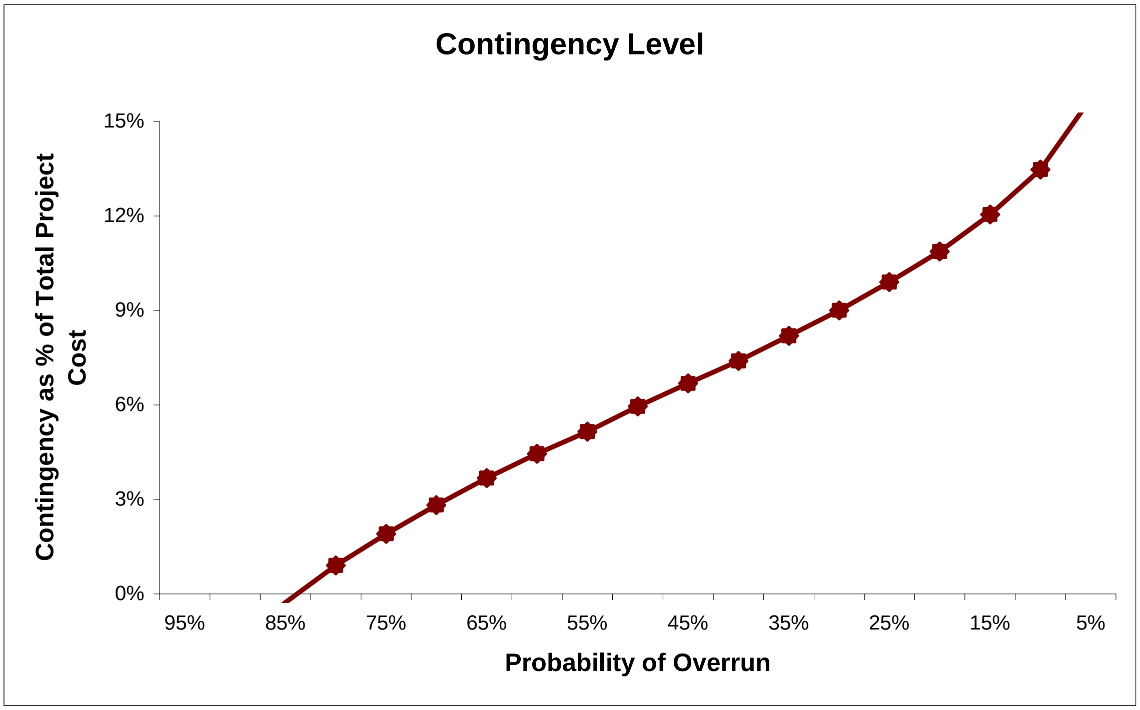
In this case, the confidence level of 90% from the P50 can be observed as the interval between the values P5 and P95. For this estimate and based on the level of engineering and the quality of information used, we can conclude that with a 90% confidence level for the estimate, the precision falls in between a – 9.2% / +9.2% for work performed under Hatch's work scope.

Item	Hatch	MDA	Knight Piesold	Total
Direct Costs	64,587	34,006	6,316	103,771
Indirect Costs	20,062	0	1,011	21,073
DIRECTS + INDIRECTS	84,649	32,868	7,327	124,844
CONTINGENCY	**11,402**	**2,301**	**1,099**	**14,802**
Contingency %	**13.5%**	**7.0%**	**15.0%**	**11.9%**



25.1.6 Capital Cost and Recommended Contingency

The contingency level for a Class 3 Estimate will depend on the risk exposure that Silver Standard considers appropriate. In order to graphically observe the trade-off between the contingency as a percentage of the total Project costs and the Project's probability of experiencing a cost overrun, the graph below has been included. In most cases a contingency of 80-90% probability of underrun (or 20-10% of overrun) is appropriate, Hatch recommends for this stand alone project a contingency of 90% probability of underrun, which in the case amounts to a USD 11,402 million in contingency.



25.1.7 Mine Capital Costs

Mine equipment capital costs were updated to reflect changes in prices since 1999. Quotes were obtained by Silver Standard from two major vendors supplying mining equipment, Caterpillar and Komatsu. After review it was decided to use the Komatsu quotes because they were lower, other factors being equal. Other equipment prices are based on recent experience with other mining operations in South America. Additional mine capital items include spare parts, initial haul road construction, pre-production mining, truck shop equipment and miscellaneous supplies. Ongoing mine capital includes purchase of additional haul trucks as well as replacement of light vehicles. No major mining equipment is replaced during the mine life.

25.1.8 Capital Cost Summary

The detailed estimate for all sections is provided in Appendix A, and is summarized as follows in Table 25-1:

Table 25-1: Summary – Capital Cost, US$ millions

Description	**Hatch (Plant & Infrastructure)**	**MDA (Mining)**	**Tailings**	**Owners Costs (Silver Standard)**	**Total**
Direct Costs					
Plant Equipment	32,378				32,378
Bulk Material	15,672				15,672
Labor Cost	13,726				13,726
Sub-Contracts	2,802				2,802
Mine (Equipment, Pre-Stripping, & Facilities)		32,868			32,868
Tailings & Water Management			6,316		6,316
Subtotal Direct Cost	**64,587**	**32,868**	**6,316**		**103,771**
Field Indirect Costs	3,875	0	379		4,254
Freight, Insurance & Customs	4,429	0	0		4,429
Capital Spares (4%)	1,395				1,395
Vendor Representatives	675				675
EPCM Services	9,688	0	632	0	10,320
Subtotal Indirect Costs	**20,062**	**0**	**1,011**	**0**	**21,073**
Subtotal Direct & Indirect Costs	**84,649**	**32,868**	**7,327**	**0**	124,844
Contingency	11,402(13.5%)	2,301 (5%)	1,099 (15%)	0	14,802 (11.9%)
Import Duty (Excluded)					
Total Project Cost (4th Quarter 2005)	**96,051**	**34,515**	**8,426**	**6,405**	**146,050**

25.2 Operating Cost

The life of mine operating costs in 4th Quarter 2005, US dollars, for the mining, processing and operation of this Pirquitas project are shown in Table 25-2 below. Pre-production operating costs, such as pre-stripping and site management, are capitalized, and included in the Capital Cost Estimate.

Table 25-2: Life of Mine Operating Costs

Life of Mine Costs	
Cost Center	**US$ million**
Mining #	119.1
Processing	139.7
Indirect	Included
Overhead	Included
Total	**258.8**

As the yearly stripping varies widely over the life-of-mine, costs shown here are the total over the life-of-mine. Mining operating costs have been generated independently by MDA and process costs by Hatch. Both overheads and indirect costs have been included in the processing costs.

Further summary data is provided in Section 11 of the Feasibility Study Update and the full details in Appendix B.

25.2.1 Basis of Operating Costs

Operating costs have been developed for the plan of operations for mining, milling, and administration of the Project. The mining plan, "Production Schedule" is as detailed in Section 19.

The Process Design Criteria, Appendix D in the Feasibility Study, forms the basis for the process plant estimates. Electric power requirements are derived for the flowsheets, equipment lists and vendor data.

Unit costs for operating costs are current, 4th 2005 Quarter vendor prices in Argentina and Chile, with freight to Site estimated by Hatch Chile.

Labor requirements were developed between Hatch and Silver Standard, and labor rates, including salaries and burdens, were provided by Silver Standard Argentina (and verified by Hatch as being representative of current Argentina salaries, expressed in US dollars).

Maintenance costs are derived from typical industry factors for mineral processing.

Reclamation costs and mine closure costs are not included in this operating cost estimate. These costs are included in the cash flows in the Financial Analyses.

Process and Administration costs have an accuracy of +/- 15%

25.2.2 Labor and Costs

Annual labor costs have been estimated on the basis of the staffing levels presented in Appendix B of Volume I, and the salaries provided by Silver Standard.

In contrast to the 1999 Study, Hatch suggests that the size of the expatriate group should be minimized, and in any case, "expatriates" should, where possible, be South America nationals, fluent in Spanish. One or two North Americans may however by employed in the early years. Some of the senior operating staff should be experienced mining industry personnel recruited in Chile or Peru (the current mine managers is Peruvian for example). Local personnel would form the large minority of the operating group, although early recruitment should be organized, with a well structured training program. This is discussed in Section 8.2, "Commissioning Plan" of Volume I.

The employees classified as expatriates, will be provided with suitable accommodation on Site. The bedrooms that are currently available or are in the process of being refurbished have been used by Hatch personnel and are regarded as acceptable. They will work a four (4) week in two (2) week off schedule, with fares paid to this point of origin. Benefits, such as medical and insurance, are estimated to be 30% of the base salary. Should they prefer, their families could be located in Salta. It is anticipated that they will use regularly Friday afternoon/Monday morning air charter to and from Salta. Argentinean employees, who will form over 95% of the workforce, typically receive employers paid benefit that are estimated to be 33% of the base salary as follows:

- Heath Benefits: 6%
- Workers Compensation: 2%
- State Pension Fund 16%
- Family Allowance Contribution 9%
- Total Benefits 33%

Argentinean salaried employees will work on the same basis:

25.2.3 Power

Power will be provided by a set of gas fueled generators, using the gas provided from the existing trans-Andean gas line connection that is 31 km from Pirquitas. Hatch estimate the cost of power, using gas, and including generator maintenance to be US$ 0.055/kwh, (gas line and generator reports provided in Appendices F&G of the Feasibility Study Update).

Electrical energy consumption has been estimated from the equipment list/vendor quotations, anticipated running times and power factors, and is detailed in Appendix B of the Feasibility Study Update.

25.2.4 Fuel

In 2005, fuel costs (diesel and gasoline) have reached new record highs and have varied between wide limits. At the time of preparing the estimate it is trading at US $60/barrel. The diesel fuel cost used in this study is US $0.50/litre, representing 4th Quarter 2005 levels, (compared to US $0.21/litre in the 1999 study).

25.2.5 Indirect Costs

Indirect costs will be incurred throughout the mine life, but are not attributed to mining or milling. The JE-FS costs have been updated and are summarized as follows:

Table 25-3: Summary of Indirect Costs

Indirect Expense	Life of Mine Average Cost $US/annum
Camp Operations (based on US $ 10/manday)	501,267
Assay Laboratory Service Contracts	15,000
Engineering	75,000
Aircraft Charter	100,000
Vehicle Operating Fees	10,000
Communications	96,000
Safety	15,000
Training	15,000
Consultants	25,000
Physical Exams, Medical Supplies	15,000
Insurance	500,000
Other	580,640
TOTAL	**2,020,907**

A description of these individual expenses is provided in the 1999 Study, Volume I, Section 14.

25.2.6 Mining Operating Costs

Mine operating costs were updated to reflect changes in prices and wages since 1999. Operating hours were adjusted to reflect the updated production schedule and the revised costs applied appropriately. Various commodity price quotes were obtained by Silver Standard from vendors supplying the local area, which were used to update hourly equipment operating costs. Price increases were noted for fuel, ANFO, tires and spare parts. Current labor rates were also obtained by Silver Standard and used in this update.

Table 25-4 is a summary of consumable costs.

Table 25-4: Consumable Costs, US$

Item	1999 Price	2006 Price
Diesel fuel	$ 0.21/litre	$ 0.50/litre
Spares 90-t truck	$ 25/hr	$ 30/hr
ANFO	$ 515/tonne	$ 550/tonne
Tires 90-t truck	$ 19/hr	$ 20/hr

Table 25-5 is a summary of mine operating costs, with details shown in Appendix J of the Feasibility Study.

Table 25-5: Mine Operating Costs

Cost Area	Yr-1 Qtr1	Yr-1 Qtr2	Yr-1 Qtr3	Yr-1 Qtr4	Yr 1 Q 1	Yr 1 Q 2	Yr 1 Q 3	Yr 1 Q 4	Yr 2 Q 1	Yr 2 Q 2	Yr 2 Q 3	Yr 2 Q 4	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Yr 8	Yr 9	Life w/pre-strip	Life w/o pre-strip
	Pre Strip																				
Labor																					
Operating Labor	0.00	0.09	0.09	0.09	0.08	0.07	0.07	0.07	0.06	0.06	0.06	0.06	0.06	0.07	0.08	0.14	0.17	0.20	0.24	0.088	0.088
Maintenance Labor	0.00	0.04	0.04	0.04	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.05	0.07	0.08	0.10	0.036	0.035
Salaried Labor	0.00	0.09	0.10	0.10	0.08	0.06	0.06	0.06	0.05	0.05	0.05	0.05	0.05	0.06	0.07	0.15	0.19	0.23	0.30	0.085	0.084
Total	**0.00**	**0.22**	**0.22**	**0.23**	**0.19**	**0.16**	**0.16**	**0.16**	**0.13**	**0.13**	**0.13**	**0.13**	**0.14**	**0.17**	**0.19**	**0.35**	**0.43**	**0.51**	**0.63**	**0.209**	**0.208**
Operating Consumables																					
Tires	0.00	0.08	0.08	0.08	0.09	0.08	0.09	0.09	0.09	0.09	0.09	0.09	0.10	0.11	0.11	0.20	0.14	0.15	0.16	0.109	0.112
GEC	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.011	0.011
Bits & Steel	0.00	0.03	0.03	0.03	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.041	0.042
Explosives & Supplies	0.00	0.13	0.13	0.13	0.13	0.13	0.13	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.135	0.136
Miscellaneous	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.015	0.015
Total	**0.00**	**0.27**	**0.27**	**0.27**	**0.28**	**0.28**	**0.29**	**0.29**	**0.30**	**0.30**	**0.30**	**0.30**	**0.31**	**0.32**	**0.32**	**0.40**	**0.34**	**0.35**	**0.37**	**0.312**	**0.315**
Maintenance Consumables																					
Lube	0.00	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.07	0.07	0.11	0.08	0.09	0.09	0.068	0.069
Repair Parts	0.00	0.14	0.14	0.14	0.14	0.13	0.13	0.13	0.22	0.22	0.22	0.22	0.31	0.36	0.35	0.50	0.42	0.45	0.49	0.296	0.308
Total	**0.00**	**0.20**	**0.20**	**0.20**	**0.20**	**0.18**	**0.19**	**0.19**	**0.27**	**0.27**	**0.27**	**0.27**	**0.37**	**0.43**	**0.42**	**0.61**	**0.50**	**0.54**	**0.59**	**0.364**	**0.377**
Fuel	0.00	0.18	0.18	0.18	0.20	0.19	0.20	0.20	0.20	0.20	0.20	0.20	0.22	0.23	0.23	0.36	0.27	0.29	0.31	0.230	0.233
GRAND TOTAL	**0.00**	**0.87**	**0.87**	**0.87**	**0.87**	**0.81**	**0.84**	**0.84**	**0.90**	**0.90**	**0.90**	**0.90**	**1.04**	**1.15**	**1.16**	**1.71**	**1.54**	**1.69**	**1.89**	**1.115**	**1.167**
Check																					-
kt		2,475	2,475	2,475	2,990	3,665	3,840	4,094	5,059	5,059	5,059	5,059	20,320	15,330	13,223	6,219	4,900	4,077	3,210	109,528	102,103
Labor																					
Operating Labor	0	217	217	231	231	242	260	284	306	306	306	306	1,310	1,130	1,086	856	812	812	768	9,682	9,016
Maintenance Labor	0	96	96	96	96	101	103	116	123	123	123	123	523	463	432	342	322	322	311	3,912	3,624
Salaried Labor	151	232	238	238	238	238	238	238	238	238	238	238	951	951	951	951	951	951	951	9,268	8,560

Cost Area	Yr-1 Qtr1	Yr-1 Qtr2	Yr-1 Qtr3	Yr-1 Qtr4	Yr 1 Q 1	Yr 1 Q 2	Yr 1 Q 3	Yr 1 Q 4	Yr 2 Q 1	Yr 2 Q 2	Yr 2 Q 3	Yr 2 Q 4	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Yr 8	Yr 9	Life	Life
		Pre Strip																		w/pre-strip	w/o pre-strip
Total	**151**	**545**	**551**	**565**	**565**	**581**	**602**	**637**	**667**	**667**	**667**	**667**	**2,785**	**2,544**	**2,469**	**2,149**	**2,086**	**2,086**	**2,031**	**22,862**	**21,201**
Operating Consumables																					
Tires	0	199	199	199	263	300	344	366	465	465	465	465	2,104	1,708	1,459	1,213	667	595	514	11,987	11,390
GEC	0	34	34	34	39	42	44	45	50	50	50	50	202	171	158	57	53	47	41	1,200	1,099
Bits & Steel	0	77	77	77	124	153	160	170	211	211	211	211	846	638	550	259	204	170	134	4,481	4,250
Explosives & Supplies	0	312	312	312	377	462	505	561	693	693	693	693	2,784	2,100	1,812	852	671	559	440	14,829	13,894
Miscellaneous	0	37	37	37	45	55	58	61	76	76	76	76	305	230	198	93	74	61	48	1,643	1,532
Total	**0**	**659**	**659**	**659**	**848**	**1,012**	**1,110**	**1,204**	**1,495**	**1,495**	**1,495**	**1,495**	**6,241**	**4,847**	**4,177**	**2,474**	**1,668**	**1,431**	**1,176**	**34,140**	**32,165**
Maintenance Consumables																					
Lube	0	141	141	141	179	206	228	242	295	295	295	295	1,299	1,060	920	657	398	353	302	7,448	7,023
Repair Parts	0	344	344	344	413	467	497	521	1,091	1,091	1,091	1,091	6,293	5,561	4,679	3,141	2,067	1,845	1,584	32,462	31,431
Total	**0**	**485**	**485**	**485**	**592**	**672**	**725**	**763**	**1,386**	**1,386**	**1,386**	**1,386**	**7,592**	**6,621**	**5,600**	**3,798**	**2,465**	**2,197**	**1,886**	**39,910**	**38,454**
Fuel	0	455	455	455	593	692	773	821	1,015	1,015	1,015	1,015	4,472	3,597	3,093	2,240	1,332	1,168	984	25,187	23,823
Truck Lease											500	500	2,000	500							
GRAND TOTAL	**151**	**2,144**	**2,149**	**2,163**	**2,598**	**2,957**	**3,209**	**3,424**	**4,563**	**4,563**	**5,063**	**5,063**	**23,089**	**18,108**	**15,338**	**10,660**	**7,551**	**6,882**	**6,076**	**122,099**	**119,143**

25.3 Financial Analyses

The data generated in the study has been used to calculate the project IRR and NPVs for eight cases, as shown in the summary table. The reserves were calculated using Case 1.

Silver Standard and Hatch agreed to use average metal prices for the 18 months ending December 31, 2005 and current costs as the basis for project evaluation. However, the reader is able to make a judgement based on their own perceptions of future metal prices and costs, and in particular the value of the Argentinean Peso. Hatch can offer no comment as to future metal prices, exchange rates or costs, as these all depend on many factors, beyond the control of the project participants. These all have significant impact on the project economics. The project economics appear robust for a wide range of metal prices, except if prices reverted to the average prices for silver, tin and zinc during the last 20 years.

Table 25-6: Summary of Financial Analyses

Pirquitas Project - Summary of Financial Analyse										
Case	**Description**	**Metal prices**							**Unit Costs**	
		Silver (US$/oz)	**Tin (US$/lb)**	**Zinc (US$/lb)**	**NPV_0 (M US$)**	**NPV_5 (M US$)**	**IRR**	**Payback (years)**	**Cash costs (US$/oz)**	**Total costs (US$/oz)**
1	20 Years Average Metal Prices	5.35	2.75	0.42	50.6	3.9	5.1%	7.2	2.95	5.13
2	Selected Metal Prices	6.25	3.00	0.55	124.9	62.6	12.5%	5.2	2.72	4.86
3	18 Month Average Metal Price	7.16	3.56	0.58	195.3	117.5	19.2%	3.8	2.42	4.53
4	12 Month Average Metal Price	7.55	3.40	0.66	216.6	134.1	21.2%	3.4	2.46	4.54
5	Last 6 Month Average Metal Price	7.95	3.10	0.74	234.2	148.0	22.9%	3.2	2.57	4.63
6	Current Metal Prices	9.86	3.55	1.01	369.8	251.0	33.7%	2.3	2.17	4.16
7	Prices - April 4, 2006	11.75	3.79	1.23	495.6	346.0	42.2%	1.8	1.93	3.83
8	Prices - April 25, 2006	12.47	4.23	1.52	563.1	397.1	46.6%	1.7	1.49	3.36

Table 25-7: Cashflow - 18 Month Average

Client	**Silver Standard Resources (Sunshine Argentina)**	**Date**	**27-Apr-06**	**Silver - $/oz**	**7.16**
Project	**Pirquitas Project**	**Version**	**PA (6,000 tpd, By-product Zinc)**	**Tin - $/tonne**	**7,850** REVISED SCHEDULE
Job No.	**H/320678**	**Case**	**18 Month Average**	**Zinc - $/lb**	**0.58**

Year		**Year -2**				**Year -1**				**Year 1**				**Year 2**				**Year 3**	**Year 4**	**Year 5**	**Year 6**	**Year 7**	**Year 8**	**Year 9**	**Year 10**	**Year 11**	**Total/ Average**
		1st Qrt	**2nd Qrt**	**3rd Qrt**	**4th Qrt**	**1st Qrt**	**2nd Qrt**	**3rd Qrt**	**4th Qrt**	**1st Qrt**	**2nd Qrt**	**3rd Qrt**	**4th Qrt**	**1st Qrt**	**2nd Qrt**	**3rd Qrt**	**4th Qrt**										
PRODUCTION																											
Tonnes Ore Mined	tonnes (000's)	-	-	-	-	-	-	-	-	**490**	**540**	**540**	**540**	**540**	**540**	**540**	**540**	**2,160**	**2,160**	**2,160**	**2,160**	**2,160**	**2,160**	**1,630**		-	18,860
Tin grade	%									**0.31%**	**0.19%**	**0.22%**	**0.24%**	**0.19%**	**0.19%**	**0.19%**	**0.19%**	**0.20%**	**0.14%**	**0.16%**	**0.18%**	**0.20%**	**0.27%**	**0.35%**	.		0.21%
Silver Grade	g/t									**235**	**204**	**176**	**195**	**185**	**185**	**185**	**185**	**179**	**157**	**174**	**177**	**196**	**184**	**126**			177
Zinc Grade	%									**0.10%**	**0.79%**	**0.70%**	**0.54%**	**0.96%**	**0.96%**	**0.96%**	**0.96%**	**0.61%**	**1.26%**	**0.72%**	**0.60%**	**0.42%**	**0.22%**	**0.04%**	.		0.61%
Tin Recovery to Sn Concentrate	%									57%	45%	57%	57%	57%	57%	57%	57%	57%	57%	57%	57%	57%	57%	57%			
Silver Recovery to Ag Concentrate	%									80%	79%	79%	79%	79%	79%	79%	79%	79%	78%	79%	79%	79%	79%	75%			
Zinc Recovery to Zn Concnetrate	%									13%	53%	51%	45%	56%	56%	56%	56%	48%	60%	51%	47%	39%	25%	6%			
Tin Recovered	t/y									866	462	677	739	585	585	585	585	2,462	1,724	1,970	2,216	2,462	3,324	3,252			22,493
Silver Recoverd	000 oz									2,948	2,810	2,408	2,683	2,539	2,539	2,539	2,539	9,808	8,488	9,513	9,690	10,787	10,099	4,922			84,312
Zinc Recovered	t/y									62	2,259	1,916	1,313	2,904	2,904	2,904	2,904	6,299	16,383	7,969	6,148	3,540	1,167	37			58,709
													10,848				10,157										
Tin Concentrate Produced	t/y									1,732	923	1,354	1,477	1,170	1,170	1,170	1,170	4,925	3,447	3,940	4,432	4,925	6,648	6,504			44,987
Silver Concentrate Produced	t/y									4,585	4,370	3,745	4,172	3,949	3,949	3,949	3,949	15,253	13,201	14,795	15,070	16,776	15,705	7,654			131,120
Zinc Concentrate Produced	t/y									124	4,517	3,832	2,627	5,807	5,807	5,807	5,807	12,598	32,766	15,938	12,297	7,079	2,335	75			117,418

Year			Year -2				Year -1				Year 1				Year 2				Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Total/ Average
			1st Qrt	2nd Qrt	3rd Qrt	4th Qrt	1st Qrt	2nd Qrt	3rd Qrt	4th Qrt	1st Qrt	2nd Qrt	3rd Qrt	4th Qrt	1st Qrt	2nd Qrt	3rd Qrt	4th Qrt										
REVENUE																												
+ Value of Tin Concentrate	000 $										-	6,797	3,624	5,316	5,799	4,591	4,591	4,591	19,088	14,980	14,980	16,913	18,846	24,403	25,668		-	170,187
+ Value of Silver Concentrate	000 $										-	21,313	20,316	17,408	19,394	18,358	18,358	18,358	71,538	63,752	66,926	69,739	76,007	74,256	44,939		-	600,662
+ Value of Zinc Concentrate	000 $										80	2,888	2,450	1,679	3,713	3,713	3,713	3,713	8,054	20,949	10,190	7,862	4,526	1,493	48		-	75,070
- Smelter Charges	000 $										33	5,072	4,348	3,831	5,017	4,717	4,717	4,717	15,872	19,602	15,586	15,263	15,010	14,207	9,623		-	137,615
- Cost of Sales	000 $										23	2,163	1,819	1,556	2,262	2,150	2,150	2,150	6,581	9,752	6,772	6,327	5,745	5,086	3,419		-	57,956
- Net Smelter Return	000 $										23	23,763	20,223	19,016	21,628	19,794	19,794	19,794	76,226	70,327	69,738	72,924	78,624	80,859	57,614		-	650,348
+ Salvage Value of Mine Equipment	000 $																										-	-
Revenue	000 $										23	23,763	20,223	19,016	21,628	19,794	19,794	19,794	76,226	70,327	69,738	72,924	78,624	80,859	57,614		-	650,348
Operating Costs																												
Mining	000 $										2,598	2,957	3,209	3,424	4,563	4,563	5,063	5,063	23,089	18,108	15,338	10,660	7,551	6,882	6,076		-	119,143
Milling	000 $						-	-	-	-	3,758	3,940	3,940	3,940	3,940	3,940	3,940	3,940	15,758	15,758	15,758	15,758	15,758	15,758	13,830		-	139,716
Indirect	000 $	included above									-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-
Overhead	000 $	included above									-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-
- Total Operating Cost	000 $										6,355	6,897	7,149	7,364	8,502	8,502	9,002	9,002	38,848	33,867	31,097	26,418	23,309	22,640	19,906		-	258,859
Income before Deductions	000 $										(6,332)	16,866	13,074	11,652	13,125	11,292	10,792	10,792	37,378	36,461	38,641	46,505	55,315	58,219	37,707		-	391,489
Provincial Royalty (3 month delay)	000 $		-	-	-	-	-	-	-	-	-	159	140	133	144	141	141	141	555	216	88	62	62	27	7		-	2,015
Amortization	000 $		-	-	-	-	-	-	-	-	1,866	1,805	1,625	1,748	1,684	1,684	1,684	1,684	6,579	3,788	4,245	4,324	4,814	4,507	2,196		-	44,231

Year		Year -2				Year -1				Year 1				Year 2				Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Total/ Average
		1st Qrt	2nd Qrt	3rd Qrt	4th Qrt	1st Qrt	2nd Qrt	3rd Qrt	4th Qrt	1st Qrt	2nd Qrt	3rd Qrt	4th Qrt	1st Qrt	2nd Qrt	3rd Qrt	4th Qrt										
Depreciation	000 $	-	-	-	-	-	-	-	-	12,288	12,288	12,288	12,288	11,823	11,823	11,823	11,823	47,669	3,533	2,233	983	2,861	892	839		-	155,451
Interest Expense	000 $	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-
Environmental Accrual	000 $	-	-	-	-	-	-	-	-	318	345	357	368	425	425	450	450	1,942	1,693	1,555	1,321	1,165	1,132	995		-	12,943
Total Deduction Before Op. Loss Carry Forward	000 $	-	-	-	-	-	-	-	-	14,471	14,596	14,410	14,536	14,076	14,072	14,097	14,097	56,746	9,230	8,122	6,690	8,902	6,557	4,038		-	214,640
Taxable Income Before Operating Loss Deduction	000 $	-	-	-	-	-	-	-	-	(20,803)	2,270	(1,335)	(2,884)	(950)	(2,780)	(3,305)	(3,305)	(19,368)	27,231	30,520	39,815	46,413	51,662	33,669		-	176,849
Operating Loss Carry Forward	000 $	-	-	-	-	-	-	-	-	-	2,270	-	-	-	-	-	-	-	27,231	25,230	-	-	-	-		-	54,731
- Total Deductions	000 $	-	-	-	-	-	-	-	-	14,471	16,866	14,410	14,536	14,076	14,072	14,097	14,097	56,746	36,461	33,351	6,690	8,902	6,557	4,038		-	269,371
Taxable Income	000 $	-	-	-	-	-	-	-	-	(20,803)	-	(1,335)	(2,884)	(950)	(2,780)	(3,305)	(3,305)	(19,368)	-	5,290	39,815	46,413	51,662	33,669		-	122,118
- Income Tax	000 $	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,746	13,139	15,316	17,048	11,111		-	58,360
Net Income	000 $	-	-	-	-	-	-	-	-	(20,803)	-	(1,335)	(2,884)	(950)	(2,780)	(3,305)	(3,305)	(19,368)	-	3,544	26,676	31,097	34,613	22,558		-	63,758
CASH FLOW																											
+ Depreciation	000 $	-	-	-	-	-	-	-	-	12,288	12,288	12,288	12,288	11,823	11,823	11,823	11,823	47,669	3,533	2,233	983	2,861	892	839		-	155,451
+ Operating Loss Carry Forward	000 $	-	-	-	-	-	-	-	-	-	2,270	-	-	-	-	-	-	-	27,231	25,230	-	-	-	-		-	54,731
+ Amortization	000 $	-	-	-	-	-	-	-	-	1,866	1,805	1,625	1,748	1,684	1,684	1,684	1,684	6,579	3,788	4,245	4,324	4,814	4,507	2,196		-	44,231
+ Export Rebate (6 month from production)	000 $	-	-	-	-	-	-	-	-	-	-	915	872	747	833	788	788	3,098	2,839	2,794	2,980	3,178	3,241	2,331		-	25,405
+ Environmental Accrual	000 $	-	-	-	-	-	-	-	-	318	345	357	368	425	425	450	450	1,942	1,693	1,555	1,321	1,165	1,132	995		-	12,943
- Initial Capital	000 $	1,228	2,743	12,446	24,036	19,486	40,729	24,101	14,673	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	139,443
- Ongoing Capital	000 $	-	-	-	-	-	-	-	-	-	-	2,106	-	-	-	1,137	-	2,484	1,188	270	3,978	-	76	-		-	11,238
- Capitalized Pre-stripping Costs	000 $	-	-	-	-	151	2,144	2,149	2,163	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	6,607

Year			Year -2				Year -1				Year 1				Year 2				Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Total/ Average
			1st Qrt	2nd Qrt	3rd Qrt	4th Qrt	1st Qrt	2nd Qrt	3rd Qrt	4th Qrt	1st Qrt	2nd Qrt	3rd Qrt	4th Qrt	1st Qrt	2nd Qrt	3rd Qrt	4th Qrt										
- Capitalized Interest	000 $		-	-	-	-	-	-	-	-																		-
- Working Capital	000 $									4,104																		4,104
- Reclamation Expense	000 $		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	167	-	140	-	622	-	-		-	929
- IVA Payments	000 $		258	576	2,614	5,048	4,092	8,553	5,061	3,081	863	6,460	6,055	5,280	6,075	5,667	5,905	1,705	4,345	4,693	3,948	4,621	3,673	3,541	2,726		-	94,841
+ IVA Receipts	000 $		-	258	576	2,614	5,048	4,092	8,553	5,061	3,091	5,444	4,629	4,320	5,017	4,608	4,608	4,608	10,211	4,693	3,948	4,621	3,673	3,541	2,726		-	95,941
+ Debt Financing	000 $		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-
- Principal Repayment	000 $		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-
+ Equity	000 $		1,486	3,062	14,484	26,470	18,682	47,334	22,758	18,961	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	153,236
Net Cash Flow (including Equity)	000 $		-	-	-	-	-	-	-	-	(4,104)	15,692	10,317	11,432	12,670	10,926	9,005	14,343	43,137	37,897	39,191	32,306	42,493	44,309	28,920		-	348,533
Cumulative Net Cash Flow	000 $		-	-	-	-	-	-	-	-	(4,104)	11,588	21,905	33,337	46,007	56,933	65,938	80,281	123,417	161,314	200,505	232,811	275,304	319,613	348,533		-	-
Net Cash Flow (excluding equity funding)	000 $		(1,486)	(3,062)	(14,484)	(26,470)	(18,682)	(47,334)	(22,758)	(18,961)	(4,104)	15,692	10,317	11,432	12,670	10,926	9,005	14,343	43,137	37,897	39,191	32,306	42,493	44,309	28,920		-	195,297
Cumulative Net Cash Flow	000 $		(1,486)	(4,547)	(19,031)	(45,501)	(64,183)	(111,517)	(134,275)	(153,236)	(157,340)	(141,648)	(131,331)	(119,899)	(107,229)	(96,303)	(87,298)	(72,955)	(29,819)	8,078	47,269	79,575	122,068	166,377	195,297		-	-
Annualized Net Cash Flow			(45,501)				(107,735)				33,337				46,944				43,137	37,897	39,191	32,306	42,493	44,309	28,920		-	195,297
Net Present Values @																												
0%	000 $	**195,297**	(1,486)	(3,062)	(14,484)	(26,470)	(18,682)	(47,334)	(22,758)	(18,961)	(4,104)	15,692	10,317	11,432	12,670	10,926	9,005	14,343	43,137	37,897	39,191	32,306	42,493	44,309	28,920		-	195,297
5%	000 $	**117,530**	(1,486)	(3,024)	(14,129)	(25,502)	(17,776)	(44,483)	(21,124)	(17,381)	(3,716)	14,032	9,112	9,972	10,915	9,296	7,568	11,905	35,489	29,693	29,245	22,959	28,761	28,562	18,642		-	117,530
10%	000 $	**64,991**	(1,486)	(2,987)	(13,786)	(24,580)	(16,925)	(41,836)	(19,625)	(15,951)	(3,368)	12,565	8,060	8,713	9,421	7,926	6,373	9,903	29,463	23,531	22,122	16,578	19,823	18,791	12,265		-	64,991
15%	000 $	**28,830**	(1,486)	(2,951)	(13,456)	(23,702)	(16,124)	(39,376)	(18,248)	(14,653)	(3,057)	11,266	7,140	7,625	8,146	6,770	5,379	8,257	24,664	18,841	16,943	12,145	13,891	12,595	8,221		-	28,830
20%	000 $	**3,581**	(1,486)	(2,916)	(13,137)	(22,866)	(15,369)	(37,087)	(16,983)	(13,475)	(2,778)	10,115	6,334	6,684	7,055	5,794	4,548	6,899	20,803	15,230	13,125	9,016	9,882	8,587	5,605		-	3,581

Year			Year -2				Year -1				Year 1				Year 2				Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Total/ Average
			1st Qrt	2nd Qrt	3rd Qrt	4th Qrt	1st Qrt	2nd Qrt	3rd Qrt	4th Qrt	1st Qrt	2nd Qrt	3rd Qrt	4th Qrt	1st Qrt	2nd Qrt	3rd Qrt	4th Qrt										
Internal Rate of Return **19.2%**	000 $	**6,990**	(1,486)	(2,921)	(13,187)	(22,995)	(15,485)	(37,437)	(17,175)	(13,653)	(2,820)	10,287	6,454	6,823	7,216	5,937	4,669	7,096	21,358	15,739	13,653	9,441	10,417	9,111	5,947		-	6,990

26. Illustrations

All illustrations are included in the relevant Sections in the Technical Report.