

Technical Report Gold –Silver Resource Estimate of the La Josefina Project Santa Cruz, Argentina



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September 29th, 2010.

Prepared for Hunt Mining Corp.

Gold - Silver Resource Estimate for the La Josefina Project



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1.0 Summary

UAKO Geological Consulting ("UAKO") has been engaged by Hunt Mining Corporation ("Hunt Mining") to prepare the first Mineral Resource estimates for the La Josefina gold-silver Project, Santa Cruz Province, Argentina. Hunt Mining is listed on the Toronto stock exchanges (TSXV: HMX). The La Josefina property is held by Cerro Cazador S.A. ("Cerro Cazador") a wholly owned subsidiary of Hunt Mining. This report and the resource estimates have been prepared in compliance with the disclosure and reporting requirements set forth in the Canadian Securities administrators[®] National Instrument 43-101 ("NI 43-101"), Companion Policy 43-101CP, and Form 43-101F1, as well as with the Canadian Institute of Mining, Metallurgy and Petroleum's "CIM Standards on Mineral Resources and Reserves, Definitions and Guidelines" ("CIM Standards") adopted in December 2005.

The La Josefina Project is situated about 450 km northwest of the city of Rio Gallegos, in the Department of Deseado, Santa Cruz Province, Argentina (Figure 1) within a scarcely populated steppe-like region known as Patagonia. The project consists of mineral rights composed by an area of 528 km² established in 1994 as a Mineral Reserve held by Fomento Minero de Santa Cruz Sociedad del Estado (Fomicruz), an oil and mining company owned by Santa Cruz provincial government. The Project comprises 16 Manifestations of Discovery (Manifestación de Descubrimiento, "MD") totaling 52,776 hectares which are partially covered by 399 mining claims (pertenencias), offering secure mineral tenure under Argentine mining law. In late-2006, Fomicruz put the project up for public bid and in July, 2007, Cerro Cazador S.A. won the rights to explore the project.

In the agreement between Cerro Cazador and Fomicruz, Cerro Cazador committed to spend US\$6 million in exploration and complete pre-feasibility and feasibility studies in a 4-year period at La Josefina in order to earn mining and production rights for a 40-year period in JV partnership with Fomicruz. The US\$6 million work commitment has now been fulfilled. Cerro Cazador may terminate this agreement at the end of each exploration stage. With the



successful completion of positive pre-feasibility and feasibility studies at the end of the 4th year, an S.A. company will be formed which will be 91%-owned by Cerro Cazador and 9%-owned by Fomicruz. Prior to formation of JV company, Fomicruz has only a one-time election to increase its interest in the company to either, 19%, 29% or 49% by reimbursing Cerro Cazador 10%, 20% or 40%, respectively, of Cerro Cazador's total investment in the project. Once the choice is made by FOMICRUZ, there are no means to modify the agreement. The royalty prescribed by Federal mining code will be a 1% minemouth royalty if the operation produces doré bullion within the province, which is required in the JV agreement. Also, because La Josefina is a Provincial Mining Reserve with the mineral rights belonging to Fomicruz, the project will carry an additional 5% mine-mouth royalty. In summary, the property carries a 6% total mine-mouth royalty under the current agreement.

In 1975, the first occurrence of metals known in the La Josefina area was publicly mentioned by the Patagonian delegation of the National Secretary of Mining. They reported the presence of an old lead-zinc mine in veins very near Estancia La Josefina (Viera and Marguez, 1975). In 1994, immediately after the La Josefina gold-silver discovery, Fomicruz claimed the area as a Provincial Mineral Reserve and explored the project in collaboration with the Instituto de Recursos Minerales (INREMI) of La Plata University. In 1998, after four years of exploring and advancing interest in the project, Fomicruz offered La Josefina for public bidding by international mining companies. In accordance with provincial law, the winner would continue exploring the project to earn the right to share production with Formicruz S.E. of any commercial discoveries. The bid was awarded to Minamérica S. A. (Minamerica), a small private Argentine mining company. Minamerica initiated a program of systematic surface geochemical sampling, completed several new IP-Resistivity geophysical survey lines and drilled the first exploration holes on the project -12 diamond core holes (HQ-size, 63.5mm diameter) totaling 1,320 meters in length. The results of this effort were relatively encouraging but Minamerica nevertheless abandoned the project a year later in 1999. In 2000, Fomicruz resumed exploration of the project and continued their efforts until 2006. Pits were dug to bedrock on 100-meter grids over some of the target areas, 3,900 meters of new trenches were dug and sampled, more than 8,000 float, soil and Gold - Silver Resource Estimate for the La Josefina Project Page 9



outcrop samples were collected for geochemical analyses, some new IP-Resistivity surveys were completed under contract to Quantec Geophysical Co., and 59 diamond core holes (total 3,680 meters) were drilled to average shallow depth below surface of 55 meters. In late-2006, the La Josefina Project was again opened to international bidding and in May, 2007, Cerro Cazador was awarded the right to explore and develop the project.

The La Josefina Project is emplaced in the center of the Deseado Massif, a 60,000 km² rigid crustal block between the Atlantic coast to the east and the Andean Cordillera to the west. A late Triassic- late Cretaceous (230-65Ma) extensional phase, linked to the opening of the South Atlantic Ocean, triggered extensive Mesozoic and Cenozoic magmatism throughout the massif. Magmatic activity commenced in the early Jurassic, followed by andesitic to rhyolitic volcanism that continued through the mid- and late Jurassic, culminating in the deposition of epiclastic sediments in the early Cretaceous. Basaltic volcanism commenced in the Cretaceous and continued throughout the Cenozoic. These units are overlain by extensive Pleistocene fluvial gravel terraces.

Geologically, the La Josefina Project is underlain by middle to late-Jurassic Age volcanic and volcaniclastic rock units . The rocks are composed predominantly of rhyolitic to rhyodacitic ignimbrite flows and lava domes. They are also composed of subordinate amounts of agglomerates, volcanic breccias and tuffs with lesser basalts, andesites and volcanic agglomerates which intercalate upward with mafic tuffs, conglomerates and sediments. Faults active during the period of intense Jurassic extension and volcanism trend mostly NNW-SSE.

They form a series of alternating graben and horst blocks. Since Jurassic time, the rocks have been cut by normal faults of several different orientations, but have undergone only a moderate amount of compression. In general, the Jurassic rocks remain relatively un-deformed and flat to gently dipping, except locally where they are close to faults, volcanic domes or similar features. Quaternary Age basalt flows conceal about half of the Jurassic age rocks on the La Josefina Project. These basalt flows are generally less than 10 meters in thickness.



The type of mineralization and alteration styles present across the project area are generally characteristic of many low-sulphidation, epithermal vein deposits. Gold and silver occur in fissure vein systems that have been localized by structures, often a meter or more wide and hundreds of meters long. The mineralized structures are composed of quartz veins, stockworks, and breccias. They are quartz/adularia-rich and contain some calcite. The veins carry gold, silver, electrum, and significant base metal sulfides. Vein textures include open spaces with multiple generations of quartz which is finely banded, colloform, and crustiform. Mineralization at the La Josefina Project is hosted by quartz/adularia veins within rhyolitic-rhyodacitic volcanics of the Chon Aike Formation. That formation hosts most of the mineral occurrences in the Deseado Massif. With one possible exception, the general mineralization at La Josefina is a variation of classic, structurally-controlled, low-sulphidation epithermal fissure-vein systems. The one exception, the Sinter target, is possibly sub-aqueous (lacustrine?), related to surface hot spring activity.

The historical exploration work completed by Fomicruz and Minamérica defined four general target areas in the La Josefina Project

- 1. Noreste (which includes the Sinter, Subsinter, and Lejano targets)
- 2. Veta Norte (which includes the Sur, Cecilia, and Amanda targets)
- 3. Central (which includes Belen, Ailin y Latitas)
- 4. Piedra Labrada

The La Josefina hosts a measured, indicated and inferred resource in four separate vein systems (targets or domains previously defined) that have been delineated with 18,645 samples from 240 drill holes totaling 37,499.3 m Geologic continuity has been established through diamond drilling over a number of drill campaigns with the various veins interpreted from reasonably spaced drill fences. Domains were defined based on lithology, structure and grade boundaries with structural orientation the primary determinant. La Josefina region is subject to very shallow weathering with primary outcrop encountered over much of the project area. The model has not been domained by weathering profile. All of the mineralization and surrounding country rock assumed as primary. Composites of 1 m were created within each domain. *Gold - Silver Resource Estimate for the La Josefina Project* Page 11



Correlograms were computed for Au and Ag to determine directions and distances of grade continuity within each domain. A spherical model with nugget effect fit adequately the experimental correlogram and it was, for each domain, the basis of kriging search criteria.

La Josefina block models were rotated to fit domains main orientation. Gold and silver were estimated using a classic Kriging methodology. Search ellipsoids used for the estimation passes had a radius that corresponded to 50, 100 and 150 % of the correlogram range in each of the anisotropic orientations. Mineral resources for La Josefina as defined by NI-43-101 are summarized as follows:

Measured Resources									
Cutoff	Tonnes x 1000	Grade	Grade	Grade	Ounces	Ounces	Ounces		
Au Eq g/t		Au g/t	Ag g/t	Au Eq g/t	Au	Ag	Au Eq		
0.2	4 998.67	0.72	16.60	0.97	115 538.19	2 668 357.67	155 561.55		
0.5	2 405.43	1.15	21.62	1.47	88 928.13	1 671 858.11	114 004.75		
0.8	1 404.57	1.52	24.63	1.89	68 697.97	1 112 370.51	85 382.69		

Indicated Resources									
Cutoff		Grade	Grade	Grade	Ounces	Ounces	Ounces		
Au Eq g/t	Tonnes x 1000	Au g/t	Ag g/t	Au Eq g/t	Au	Ag	Au Eq		
0.2	1 525.93	0.83	1.81	0.85	40 481.17	88 730.08	41 812.05		
0.5	815.95	1.27	1.95	1.30	33 420.29	51 214.99	34 188.47		
0.8	502.25	1.67	2.05	1.71	27 043.73	33 103.75	27 537.37		

Inferred Resources								
Cutoff		Grade	Grade	Grade	Ounces	Ounces	Ounces	
Au Eq g/t	Tonnes x 1000	Au g/t	Ag g/t	Au Eq g/t	Au	Ag	Au Eq	
0.2	452.14	0.45	1.21	0.46	6 479.89	17 577.67	6 743.54	
0.5	111.22	0.87	1.28	0.89	3 128.80	4 579.24	3 197.49	
0.8	34.87	1.44	2.21	1.47	1 615.07	2 476.21	1 652.21	

Conclusions and details in evaluation projects carried out indicate that the La Josefina is a worthy project and presents a viable development target suitable for evaluation to the scoping stage. The La Josefina Project results warrant further works, from advance exploration (brownfield) on targets as Amanda-Cecilia and Veta Sur, increase drilling to acquire a better geological understanding of Sinter; Ailin, Belen and Latitas veins. Also grass roots exploration in the whole property mainly focused on Piedra Labrada area. The La Josefina mineral resources remain open at depth and along strike. The *Gold - Silver Resource Estimate for the La Josefina Project* Page 12



mineralization is hosted on a main structure (sheeted vein) and its limits have not been defined precisely, possible leaving ore shoots untested along the strike. There are gaps without drilling between the main targets and future drilling should be focused on those areas where veins do not crop out on surface. Appropriate geophysical techniques certainly would help to find blind targets. A proposed exploration budget is displayed as follows:

PROGRAM	<u>Place / Amount</u>	<u>COST US\$</u>
Structural study	Property wide	50,000
Geophysics CSAMT - ET	Selected targets	350,000
Geophysics Interpretation	Property wide	50,000
Soil geochemistry, US\$ 20/sample	2000 samples	40,000
Geological Modeling	Property wide	100,000
Drilling, US\$ 120/m	15,000 m	1,800,000
Core Sample assays, US\$ 35/sample	15,000	525,000
Metallurgical testing	Selected targets	250,000
Geotechnical studies	Selected targets	250,000
	TOTAL	3,415,000

2.0 Introduction

UAKO Geological Consulting ("UAKO") has been engaged by Hunt Mining Corporation ("Hunt Mining") to prepare a gold and silver mineral resource estimates for the La Josefina gold-silver Project, Santa Cruz Province, Argentina. Hunt Mining is listed on the Toronto stock exchanges (TSXV: HMX). The La Josefina Project is held by Cerro Cazador S.A. ("Cerro Cazador") a wholly owned subsidiary of Hunt Mining. This report and the resource estimates have been prepared in compliance with the disclosure and reporting requirements set forth in the Canadian Securities administrators" National Instrument 43-101 ("NI 43-101"), Companion Policy 43-101CP, and Form 43-101F1, as well as with the Canadian Institute of Mining, Metallurgy and Petroleum ´s "CIM Standards on Mineral Resources and Reserves, Definitions and Guidelines" ("CIM Standards") adopted in December 2005.

Exploration of the La Josefina Project has previously delineated resource estimates for gold-silver plus base metals occurrences in three areas with



steeply dipping quartz veins and brecciation. Exploration is ongoing throughout the La Josefina Project.

2.1. Project Scope and Terms of Reference

The purpose of this report is to provide the first NI 43-101-compliant resource estimate for the La Josefina deposit. The work done for this report included site visits, auditing procedures for data gathering, auditing the database, Quality Assurance/Quality Control ("QA/QC") review and data analysis, data compilation, resource estimation, and finally reporting.

The mineral resources reported herein were estimated and classified under the supervision of C. Gustavo Fernandez, P.Geo., Senior Geologist for UAKO, qualified person under NI 43-101. There is no affiliation between Mr. Fernandez and Hunt Mining except that of an independent consultant/client relationship. This report has been prepared by Mr. Fernandez.

2.2. Frequently used acronyms, abbreviations, definitions and units of measure

- AAS atomic absorption spectrometry
- AR\$ Argentinean pesos
- Ag silver
- As arsenic
- Au gold
- AuEq Gold Equivalent
- CIM Canadian Institute of Mining, Metallurgy, and Petroleum
- Cu copper
- ^oC Celsius degrees
- g/t grams per metric tone
- ha hectare
- Hg mercury
- ICP inductively coupled plasma
- km kilometers
- km/h kilometers per hour
- L liters
- m meters
- Pb lead
- ppm part per million (equal that g/t)



QA/QC	quality assurance and quality control
RC	reverse-circulation drilling method
RQD	rock-quality designation
Sb	antimony
₽T	degrees relative to true north
t	tonnes
US\$	American dollars
Zn	zinc
4 km ²	square kilometer

3.0 Reliance on other experts

UAKO has relied on the data and information provided by Hunt Mining for the completion of this report, including the supporting data for the estimation of the resource. In addition, UAKO has relied upon the previous technical reports prepared by Klohn et.al. (2007), Ebisch (2009) and Hunt Mining' internals reports, as well as other references cited in Section 21.0

On this Resource Estimation technical report, the author relied primarily upon the drill results generated in 2007 and 2008 by Hunt Mining and the geological mineralization model developed by its geological team. The drill program was completed during 2007 and 2008 and consisted of a total of 37,604.65 meters in 240 diamond drill holes.

UAKO has checked the legal aspects of the ownership of the mineral claims, the rights and Cerro Cazador – Fomicruz agreement. Some points were clarified by Mr. Danilo Silva, country manager of Hunt Mining.

4.0 Property description and location

4.1. General

La Josefina Project is situated about 450 km northwest of the city of Rio Gallegos, in the Department of Deseado, Santa Cruz Province, Argentina (Figure 1) within a scarcely populated steppe-like region known as Patagonia.

The project consists of mineral rights composed by an area of 528 km² established in 1994 as a Mineral Reserve held by Fomento Minero de Santa Cruz Sociedad del Estado (Fomicruz), an oil and mining company owned by the Santa Cruz provincial government.



The boundaries of the property are summarized in Table 1:

Boundary	Latitude/Longitude	Gauss-Krüger *
North	47°45′00″ S	4,711,533 N
South	48°00'06" S	4,683,433 N
East	69°10′47″ W	2,486,505 E
West	69°30′08″ W	2,462,505 E

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Figure 1 – La Josefina project location



*The Argentine National Grid System (Gauss-Krüger) uses the Gauss-Krüger (also known as Transverse Mercator or TM) projection and is based on the Campo Inchauspe datum which uses the International 1924 (also known as Hayford) ellipsoid. Argentina is divided into seven zones which, similar to UTM zones, are north-south slices centered on 72°, 69°, 66°, 63°, 60°, 57° and 54° W longitude. Unlike UTM which effectively has two meridians of zero scale distortion, in Gauss-Krüger only the central meridian has zero scale distortion. Unlike UTM where the easting offset is always 500,000m, each zone in the Gauss-Krüger Campo Inchauspe system has a different offset to remove coordinate ambiguity between zones. Zone 1 has an easting offset of 1,500,000m with each successive zone adding 1,000,000m to the offset. Consequently, grid coordinates are often quoted without explicitly specifying the zone as would normally be done with UTM coordinates. A new national grid named POSGAR is currently being introduced. This datum uses the WGS84 ellipsoid and has already become common in some provinces.

4.2. Mineral tenure

The Project comprises 16 Manifestations of Discovery (Manifestación de Descubrimiento, "MD") totaling 52,776 hectares which are partially covered by 399 mining claims (pertenencias), listed in the following Table 2 and shown in Figure 2.

In Argentina, mineral rights are acquired by application to the Provincial Government through a system based entirely on paper staking. A mineral property may go through several stages of classification during its lifetime. This begins with a Cateo (exploration permit). Once an application for a Cateo has been made any mineral discoveries made by third parties belong to the Cateo applicant. A Cateo consists of one to twenty units – each unit being 500 ha in size. A fee, calculated per hectare, is required within five days of the Cateos approval. The term of a Cateo, the length of which varies based on size, begins 30 days after approval. A Cateo of one unit has a duration of 150 days and for each additional unit its duration is increased by an additional 50 days. An additional requirement is that larger





Figure 2 – Mineral tenure detail of La Josefina Project



MD	<u>File #</u>	Hectares
Julia	409.048/F/98	6
Miguel Ángel	409.058/F/98	3435
Diana	409.059/F/98	2995
Noemi	409.060/F/98	3013
Rosella	409.061/F/98	3227
Giuliana	409.062/F/98	5100
Benjamin	409.063/F/98	3500
Mariana T.	409.064/F/98	3500
Ailín	409.065/F/98	3500
Mirta Julia	409.066/F/98	3500
Ivo Gonzalo	409.067/F/98	3500
Maria José	409.068/F/68	3500
Matias Augusto	409.069/F/98	3500
Sofia Luján	409.070/F/98	3500
Lucas Marcelo	409.071/F/98	3500
Nicolás Alejandro	409.072/F/98	3500
	Total	52776

Table 2 – Mine tenements details

Cateos must reduce in size at certain times. At 300 days after approval, half of the area in excess of four units must be surrended. At 700 days after approval, half of the remaining area must be abandoned. To move to the next stage the Cateo holder must apply within the term of the Cateo by reporting a mineral discovery. Upon approval this will result in a Manifestacion de Descubrimiento "MD" or mining rights for an area up to 3,000 ha. Once this is approved the holder may conduct a Mensura or legal survey to apply for a Mina or mining lease. The property will generally stay in the Manifestacion stage until a mineral resource has been defined.

The 16 MDs which cover the La Josefina Project are additionally all or partly covered by 399 "pertenencias" which are mining claims or concessions.

Pertenencias provide the highest degree of mineral land tenure and rights in Argentina and permit mining on a commercial basis.

The La Josefina pertenencias consist of 398 disseminated pertenencias, each requiring an annual canon (tax) payment to the province of AR\$800 (approx. US\$204 based on June 10, 2010, exchange rate of AR\$3.92=US\$1.00) and one



common pertenencia which requires an annual canon of AR\$80 (US\$20.40). Therefore the pertenencias at La Josefina require annual canon payments totaling AR\$318,352.60 (approx. US \$81,212.40).

4.3. Cerro Cazador – Fomicruz agreement

In March 2007, Cerro Cazador won the rights through a required public bidding process to explore, develop and mine the La Josefina Project. As Fomicruz is a government company, it cannot make individual agreements with a private company without first publishing the offer and giving other private companies the opportunity to submit bids, but the first company making an offer has the right to match any new offer.

The definitive agreement between Cerro Cazador and Fomicruz was finalized in July, 2007. In the agreement, Cerro Cazador agrees to spend a minimum of US\$6 million in exploration and complete prefeasibility and feasibility studies at La Josefina over a 4-year period (excluding three months each year for winter holiday) in order to earn mining and production rights in JV partnership with Fomicruz for a 40-year period. The 4-year exploration period was originally planned to proceed in the following three stages (Table 3):

	Year 1	Year 2	Year 3	
Target	Up to July	<u>July 2008 –</u>	<u>July 2009 –</u>	<u>Subtotal</u>
	<u>2008</u>	<u>July 2009</u>	<u>July 2011</u>	
Noroeste Area	300,000	400,000	500,000	1,200,000
Veta Norte	500,000	800,000	800,000	2,100,000
Central Area	500,000	800,000	900,000	2,200,000
Piedra Labrada	200,000	100,000	200,000	500,000
Total	1,500,000	2,100,000	2,400,000	6,000,000

Table 3 – Agreement expenditures (*Values in US\$)

Up to June 2010, Cerro Cazador was significantly ahead of their exploration commitment, having spent about US \$ 9 million on the La Josefina Project.

Cerro Cazador could conclude this agreement at the end of each stage if results do not meet predictions. At the end of the fourth year, ending the successful completion of positive pre-feasibility and feasibility studies, an S.A. company will be formed to develop the project. This new company will have joint participating ownership with 91% owned by Cerro Cazador and 9% by *Gold - Silver Resource Estimate for the La Josefina Project* Page 20



Fomicruz. In that moment, Fomicruz has only a one-time election to define its participating interest in the company to either 19%, 29% or 49% by reimbursing Cerro Cazador 10%, 20% or 40%, respectively, of Cerro Cazador's total investment in the project. Once the choice is made by FOMICRUZ, there are no means to modify the agreement.

Other conditions of the agreement:

- Cerro Cazador must post a US\$600,000.00 bond (equal to 10% of the total proposed exploration investment). This obligation is extinguished, since Cerro Cazador already invested more than the obligation assumed, therefore, Fomicruz has returned the bonds back to Cerro Cazador.
- 2. Cerro Cazador must maintain the La Josefina mining rights by paying the annual canons due the province on the project's 398 pertenencias; this currently amounts to approximately US\$ 81,212.40 per year.
- 3. Cerro Cazador must complete surface agreements (lease or buy) with the surface landowners, as required by the Federal mining law, to gain legal access to the farms (estancias) that cover the project.

Most of the project and all the current target areas lie within two large farms which have been unoccupied for many years, Estancia La Josefina and Estancia Piedra Labrada. The major part of mineralization occurs on Estancia La Josefina. Cerro Cazador has purchased this farm, securing surface ownership over these mineralized areas. The old facilities on Estancia Piedra Labrada have been maintained or rebuilt by Cerro Cazador to serve as the exploration field camp.

4.4. Royalties

Mineral properties in Argentina carry no Federal royalties but the provinces are entitled to collect up to 3% mine-mouth royalty (MMR) from mines in their province. Mine mouth royalties are the least regressive type of royalty since they allow for the deduction of mineral processing charges.

In Santa Cruz, the province has opted to drop this MMR to 1% if the operation is a precious metals mine that produces doré bullion within the province. The agreement between Cerro Cazador and Fomicruz stipulates that any doré bullion resulting from future La Josefina operations must be produced in the province, so it is likely the project will carry the minimal 1% MMR. However, *Gold - Silver Resource Estimate for the La Josefina Project* Page 21



because La Josefina is a Mining Reserve in which the mineral rights belong to Fomicruz, the project also carries an additional 5 % MMR payable to the province. Therefore, the total MMR for any future gold/silver/base metal production at La Josefina under the current agreement total 6%.

4.5. Environmental aspects

There are no known environmental liabilities associated with the La Josefina property.

4.6. Permits Required

No permits of landowners are required to conduct the proposed exploration because Cerro Cazador owns the surface outright in those areas.

Environmental permits have been presented and approved by the mining provincial authority.

5.0 Accessibility, Climate, Local Resources, Infrastructure and Physiography

La Josefina Project is located in the Deseado Massif in the north-central part of Santa Cruz Province, the southernmost of several Argentine provinces comprising a vast, sparsely-populated, steppe-like region of South America known as Patagonia (Figure 1). The nearest town to the project, is Gobernador Gregores (population 2,500), about 110 kilometers to the southwest. The nearest Atlantic coastal town is Puerto San Julián (population 6,800), 190 kilometers to the southeast. The project is reached by driving east from Gobernador Gregores for 40 km on gravel Provincial Route 25 – or west from Puerto San Julián for 170 km on the same road – and then north on gravel Provincial Route 12 for 110 km. Provincial Route 12 crosses the edge of the project and continues another 240 kilometers north to the oil town of Pico Truncado (population 16,500) in the northeastern part of the province.

The provincial gravel roads are generally accessible via two-wheel drive vehicles in dry weather but can become slippery or cannot be traveled through for short periods when wet, so 4WD vehicles are encouraged. Gobernador Gregores and Puerto San Julián are both served by fix wing flights two or three times a week, to and from Comodoro Rivadavia (population 135,813), an important industrial center and port city. Comodoro Rivadavia lies 428



kilometers north of Puerto San Julián, It can be reached via paved National Route 3. Comodoro Rivadavia serves as the region's major supply center for the booming petroleum and mining industries and is served by several airline daily flights to Buenos Aires and other major cities in Argentina. National Route 3, Argentina's major coastal highway, runs from Buenos Aires on the north to Ushuaia at the southernmost tip of the continent and offers all-weather access to a number of sea ports.

The Patagonia region is classified as a continental steppe-like climate. It is arid, very windy and has two distinct seasons, cold and warm. As Patagonia is located in the southern hemisphere, the cold winter months are from May to September and the warmer summer months are from November to March. The average annual precipitation averages only 200 mm (8 inches), much of which occurs as winter snow. Average monthly temperatures range from 3°C to 14°C, but vary widely depending on elevation. The winds are persistent, cool, dry and gusty, averaging about 36 km/h and directed predominantly to the east-southeast off the Andean Cordillera.

La Josefina Project area consists largely of subdued hilly terrain with internal drainages and playa lakes. Elevations range from 300 meters to 800 meters above sea level. Hill slopes are not steep, usually less than 10 degrees, and the rock exposures on these hillsides are typically abundant. Almost all of the mineralization and significant geochemical and geophysical anomalies are found on the crests or the flanks of these subdued hills.

The area is covered by sparse vegetation, consisting mostly of scattered low bushes and grass. In the area the only inhabitants are farm owners and employees. The nearest farms are Los Ventisqueros, Maria Esther, Las Vallas, La Florentina, La Laguna, La Josefina and Piedra Labrada (La Josefina Project exploration camp).

The local economy was formerly based largely on sheep herding and marine fishing but in the late-1980s, sheep herding began a steep decline because of the Hudson volcano eruption and a descending economy, for those reasons many of the former large sheep farms (estancias) are now unoccupied and in disrepair. The prolific sheep herds have since been replaced by overpopulated herds of wild guanacos, ostriches and flamingos (in the playas). While marine fishing continues to be an important industry in the coastal areas and tourism



is increasing, the economy of the region is now based largely on petroleum and natural gas, and increasingly on gold and silver mining. One hundred kilometers southeast of the property is the gold-silver epithermal Cerro Vanguardia Mine owned by AngloGold and Fomicruz.

Away from the towns and villages in Patagonia, there are few power grids and scant telephone service. The many mineral exploration and development camps scattered widely throughout the Deseado Massif typically rely on diesel or gasoline generators for electrical power and satellite phones or radios for communications. Some communities in the region now count with wind power generating stations and experimental hydrogen plants (Pico Truncado for example) and it is possible such stations might someday be utilized in mining camps to supplement their power requirements. However, the recent effort by the Santa Cruz Provincial Government to pave the Provincial Route 12, which runs within several kilometers of the La Josefina Project, may also include the construction of a power line which runs along the highway.

Manpower is available in the larger communities to serve most exploration or mining operations.

6.0 History

Santa Cruz Province - and indeed much of Patagonia - has only a short history of mineral prospecting and mining. Unlike most other places in South America, Patagonia received almost no attention from the 16th and 17th century gold-seekers from Europe. Until Cerro Vanguardia mine was brought to world attention in 1989-1990, only a few mineral occurrences had been identified within the 100,000 square kilometer area of the Deseado Massif. It has since become recognized as a modern-day exploration frontier and an important emerging precious metals province, currently the site of four producing mines opened: Cerro Vanguardia Mine(AngloGold - Fomicruz), San Jose – Huevos Verdes Mine (Hochschild – Minera Andes), Martha Mine (Coeur d'Alene) and Manantial Espejo Mine (Pan American Silver). Additionally, several new mines are being readied for production, and many active advanced exploration projects are in progress.

In 1975, the first occurrence of metals known in the La Josefina area was publicly mentioned by the Patagonian delegation of the National Ministry of



Mining. They reported the presence of an old lead-zinc mine in veins very near Estancia La Josefina (Viera and Marquez, 1975). The mineralization received no further attention until 1994 when a research project by the Institute of Mineral Resources of the UNLP and the geology department of the University of Patagonia San Juan Bosco examined the occurrence. That investigation corroborated not only the presence of base metals (197 to 377 g/t Cu, 972 to 2549 g/t Pb, and 308 to 569 g/t Zn), but also found significant amounts of previously unknown precious metals (1 to 3 g/t Au and 5 to 21 g/t Ag).

In 1994, immediately after the La Josefina gold-silver discovery, Fomicruz claimed the area as a Provincial Mineral Reserve and explored the project in collaboration with the Instituto de Recursos Minerales (INREMI) of La Plata University. The geology and alteration of the project area was mapped at a scale of 1:20,000. Mineralized structures and zones of sinter were mapped at 1:2,500, trenches across the structures were continuously sampled and mapped at scales of 1:100 and ground geophysical surveys consisting of 6,000 m of IP-resistivity and 5,750 meters of magnetic surveys were completed over sectors of greatest interest (INREMI, 1996).

In 1998, after four years of exploring and advancing interest in the project, Fomicruz offered La Josefina for public bidding by international mining companies. In accordance with provincial law, the winner would continue exploring the project to earn the right to share production with Formicruz S.E. of any commercial discoveries. The bid was awarded to Minamérica S. A. (Minamerica), a small private Argentine mining company. Minamerica dug a limited number of new trenches, initiated a program of systematic surface geochemical sampling, completed several new IP-Resistivity geophysical survey lines and drilled the first exploration holes on the project – 12 diamond core holes (HQ-size, 63.5mm diameter) totaling 1320 meters in length. The results of this effort were relatively encouraging but Minamerica nevertheless abandoned the project a year later in 1999.

In 2000, Fomicruz resumed exploration of the project and continued their efforts until 2006. Pits were dug to bedrock on 100-meter grids over some of the target areas, 3,900 meters of new trenches were dug and sampled, more than 8,000 float, soil and outcrop samples were collected for geochemical analyses, some new IP-Resistivity surveys were completed under contract to *Gold - Silver Resource Estimate for the La Josefina Project* Page 25



Quantec Geophysical Co., and 59 diamond core holes (total 3,680 meters) were drilled to average shallow depth below surface of 55 meters. Of these holes, 37 were NQ-size core (47.6mm diameter) and 22 were HQ-size core (63.5mm).

Fomicruz reports spending more than US\$2.8 million in exploring and improving infrastructure on the La Josefina Project from 1994 to 2006.

In late-2006, the La Josefina Project was again opened to international bidding and in May, 2007, Cerro Cazador was awarded the right to explore the project. Throughout 2007 and 2008, Cerro Cazador was mainly focused on an intensive drill plan (37,604.65 m), and in 2009 and the first quarter of 2010 reviewed all the data gathered in order to generate a geological model for the La Josefina project, and continued working on regional exploration to define new additional targets for next drilling stages.

7.0 Geological Setting

7.1. Regional geology

La Josefina Project is located near the centre of a large, non-deformed stable platform known as the Deseado Massif, which covers an area of approximately 60,000 km² in the northern third of Santa Cruz Province. The Deseado Massif is a virtual twin of the Somun Curá Massif encompassing parts of the adjacent provinces of Patagonia to the north. The two massifs are major metallotectonic features of the Patagonia region and represent the products of massive continental volcanism formed following after extensional rifting caused by the dismember of Gondwana supercontinent (between South American and African continents) in Jurassic time. They are comprised largely of rhyolitic lavas, tuffs and ignimbrites which erupted over a 50 Ma period in middle- to late-Jurassic time (125 to 175 Ma ago), forming a vast volcanic plateau which was subsequently segmented into the two massifs. The massifs are separated and bounded by sediment-filled sag basins: Neuquina Basin to the north of the Somun Curá Massif, San Jorge Basin between the massifs, and Austral-Magallanes Basin south of the Deseado Massif. These basins, filled largely with Cretaceous-age, non-marine sedimentary rocks, are now sites of Argentina's largest oil and gas fields.



7.2. Geology of the Deseado Massif

The geology of the Deseado Massif region has been described and discussed in numerous papers and reports published during the last fifteen years and during this time the geology has been mapped at various scales by government agencies. Recently it was covered by a series of 1:250,000 geological charts published by the Instituto de Geología y Recursos Minerales and Servico Geológico Minero Argentino (SEGEMAR).

The Deseado Massif is dominated by felsic volcanic and volcaniclastic rock units belonging to a several major regional sequences deposited in middle to late Jurassic time (Figure 3). The rocks are broken into a series of regional fractures that probably represent reactivated basement fracture zones. Faults active during the period of intense Jurassic extension and volcanism trend mostly NNW-SSE and form a series of grabens, half-grabens and horst blocks which are tilted slightly to the east. Since Jurassic time, the rocks have been cut by normal faults of several different orientations, mainly NW-SE and ENE-WSW, but they have undergone only a moderate amount of compression. In general, the Jurassic rocks remain relatively undeformed and are flat to gently dipping, except locally where they are close to faults, volcanic domes or similar features.





Figure 3 – Geology of the Deseado Massif and Au-Ag occurrences

7.2.1. Pre-Jurassic rocks

Exposures of rocks older than Jurassic are limited. The oldest pre-Jurassic "basement" rocks are small outcrops of low to high grade metamorphic rocks thought to be late Precambrian to early Paleozoic in age (about 540 Ma). These

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rocks have been assigned to the La Modesta Formation in the western part of the area and to the Complejo Río Deseado in the eastern part. They consist of schists, phyllites, quartzites, gneisses and amphibolites and plutonic intrusions.

The Precambrian and older Paleozoic rocks are unconformably overlain by thick continental sedimentary sequences of late-Paleozoic to early-Mesozoic age, called La Golondrina Formation and El Tranquilo Group. La Golondrina Formation is Permian (299–251 Ma) and is up to 2,200m of arkosic to lithic sandstones, siltstones and conglomerates deposited in N-S to NW-SE rift basins along older reactivated basement structures. El Tranquilo Group is Triassic in age (251–200 Ma) and is up to 650m of rhythmically bedded arkosic sandstones and shales which grade upward into conglomerates and redbeds.

The Triassic sequence is intruded and overlain by the first indications of igneous activity related to the crustal separation and extension initiated in early Jurassic: La Leona and the Roca Blanca Formations. La Leona Formation, early Jurassic in age (175–200 Ma), is composed of calc-alkaline granitic intrusive bodies sparsely scattered throughout the northeastern part of the Deseado Massif. The Roca Blanca Formation is also early Jurassic age, and consists of up to 900m of a coarsening-upward fluvial to lacustrine mudstone and sandstone sequence deposited in grabens or other rift basins, mainly in the south-central part of the Deseado Massif. The upper third of the sequence is distinctly richer in volcanic tuffs and other pyroclastic materials.

7.2.2. Jurassic volcanics

The Jurassic volcanic rocks are divided into formal units, but can be treated as a single bimodal (andesite-rhyolite) Jurassic volcanic complex. There are three units in this volcanic complex: the Cerro Leon and Bajo Pobre Formations and the Bahía Laura Group. The last two units make up the most extensive unit in the massif.

The Cerro Leon unit (lower to middle Jurassic in age) are hypabyssal mafic rocks composed of andesitic to basaltic dykes and shallow intrusions located in the south-central part of the massif.

The Bajo Pobre Formation (middle to upper Jurassic in age) is typically 150-200m thick and is locally up to 600m thick. It is composed of andesites and volcanic agglomerates with minor basalts, which intercalate upwards with *Gold - Silver Resource Estimate for the La Josefina Project* Page 29



mafic tuffs, conglomerates and sediments. Olivine basalts, common in the lower part of the formation in the El Tranquilo anticline region are thought to be products of fissure eruptions from rifts related to the early stages of the Gondwana breakup and continental separation.

The Bahia Laura Group (middle to upper Jurassic in age) covers more than half the area of the massif and hosts more than 90 percent of the known gold-silver occurrences. It is a complex sequence of felsic volcanic-sedimentary rocks that has been divided into two formations according to whether there is a predominance of volcanic flows (Chon Aike Formation) vs. a predominance of volcaniclastic and sedimentary debris (La Matilde Formation). These two formations are complexly intercalated and have rapid lateral changes in facies and thickness which make it virtually impossible to define a coherent regional stratigraphy.

7.2.3. Tertiary to Quaternary Flood Basalts and Post-Jurassic deposits

Non-marine sediments of late Jurassic to early Cretaceous age occur at various places throughout the Deseado Massif filling structural or erosional basins in the underlying Jurassic terrain. The presence of continental sediments in these basins, typically less than 150 metres thick, indicates that the massif remained as a positive geological feature throughout the Cretaceous. The most extensive cover rocks are a series of young basalt lava flows, Miocene to Quaternary in age, which blanket large parts of the region. The flows are typically only a few meters thick except where they fill paleo-valleys in the old land surface. In some cases, these thicker lava accumulations stand in relief above the surrounding landscape, providing classic examples of inverted topography caused by differential erosion.

The youngest deposit consists of an extensive veneer of Quaternary gravels, especially in the eastern part of the massif.

7.3. Geology of La Josefina Project

The oldest unit in the area is the La Modesta Formation, which crops out west of La Josefina farm old facilities. It is formed mainly by grey to greenish micaceous-quartz schists and phyllites that occur in small outcrops. An angular unconformity separates the overlying La Modesta Formation from the mid-



Jurassic basic to intermediate volcanic rocks of the Bajo Pobre Formation. The most extensive unit is represented by the Jurassic Bahia Laura Group which is divided in the Chon Aike Formation and La Matilde Formation tuffs. The Chon Aike formation is divided into nine members (Moreira, 2005), representing each event a separated volcanic event. Each of the members is comprised of generally similar sequences consisting of basal surge breccia followed by pyroclastic flows (ignimbrites), ash-fall tuffs and finally by re-worked volcaniclastic detritus. Rhyolitic domes intrude the volcanic sequence, grading towards lavas in their upper parts (Schalamuk, 1997). The lava flows and breccias are best developed in the southern part of the prospect area, where they occur with small vitrophiric bodies. Those volcanic events took place along 4 million years (Moreira, 2005) in the upper Jurassic and emplaced the epithermal system that generated the mineralization. Around 800 m east of La Josefina farm old facilities there is a hill oriented north-south 200 m long and 20 m wide, with outcrops of a mega-breccia made out of ignimbrite boulders 2-3 m³. Cunningham and Arribas Moreno (1995) assign it to a collapse breccias associated to a caldera border. Finally, covering large extensions in the northern part of the area, Tertiary and Quaternary basaltic levels complete the geological sequence (Figure 4).

La Josefina basically draws matching geological features of The Deseado massif:

-There is one outcrop of metamorphic basement rocks belonging to the Paleozoic-age La Modesta Formation

-There are several small inliers of andesitic volcanics belonging to the Bajo Pobre Formation which underlies the Chon Aike Formation.

-The area is dominated by Jurassic-age rhyolitic volcanic units. They belong to Chon Aike Formation.

-Sedimentary and volcaniclastic units of Roca Blanca and La Matilde Formations are not present in the area, or perhaps have not been recognized or mapped yet.

-About half of the area is covered by thin Quaternary basalt flows

-The project is crossed by a number of conjugate NNW-SSE and NE-SW sets of strong fault lineaments which are similar to those occurring throughout the Deseado Massif region.





Figure 4 – Geology of La Josefina Project



8.0 Deposit Types

The Deseado Massif is characterized by the presence of "low-sulphidation type epithermal vein deposits"(LS) that are spatially, temporally and genetically related to a complex and long-lived (more than 30 Ma) Jurassic bimodal magmatic event associated with tectonic extension that spread out in a surface of 60,000 km². The Deseado Massif is now one of the most important mining regions in Argentina and hosts four active mines, including Cerro Vanguardia (AngloGold - Fomicruz), Mina Martha (Coeur D'alene), San José (Hochschild - Minera Andes) and Manantial Espejo (Pan American Silver). In addition, the region boasts a number of projects at the feasibility stage as well as more than 30 properties at the exploration stage.

Epithermal deposits are high-level hydrothermal systems which usually form within one kilometer of the surface at relatively low temperatures, generally in the range of 50°C to 200°C. They commonly represent deeper parts of fossil geothermal systems and some are associated with hot-spring activity at or near the surface. The term "low-sulphidation" represents a variety of epithermal deposits characteristically deficient in sulfide minerals. These lowsulphidation systems are also often called "quartz-adularia" vein systems after the two most common gangue (non-valuable) minerals in the veins – quartz and adularia (a potassium-aluminum bearing silicate mineral that forms from low-temperature hydrothermal solutions and is considered diagnostic of a "low-sulphidation environment). The known deposits are steeply-dipping to sub-vertical fissure vein systems associated with intermediate to felsic volcanic centers in areas of regional faulting and are localized by structures, up to a meter or more in width and hundreds of meters to several kilometers in length. Most of the epithermal systems in the Deseado Massif consist of steeply-dipping tabular veins and breccias. The mineralization of economic interest in these veins generally occurs over a limited vertical range and is concentrated in discrete bodies ("shoots") of comparatively small lateral dimensions. They are comprised of quartz veins, stockwork veins and breccias that carry gold, electrum (a gold-silver alloy), silver sulfosalts, and up to a few percent sulfide minerals, mainly pyrite, with variable, but usually small, amounts of base metal sulfides – sphalerite, galena, and/or chalcopyrite. The richest mineralization commonly occurs in dilational zones caused by structural Gold - Silver Resource Estimate for the La Josefina Project Page 33



irregularities along or down the vein. The thickening and thinning along and down the structure - often referred to as "pinch-and-swell" - is responsible for rod-like high-grade ore shoots – "bonanzas" – that are hallmarks of these systems. Common gangue minerals in the veins are quartz and other forms of silica, such as chalcedony, together with variable amounts of adularia, sericite, and sometimes distinct blades of calcite and rarely barite, either of which may be totally replaced by silica.

The metals associated with low sulphidation epithermal systems are commonly zoned laterally along strike and vertically with depth. The zonation can vary considerably from area to area, but the classic zonation pattern consists of a gold and silver top giving way vertically over a few hundred meters depth to a relatively silver-rich zone with continuously increasing base metals (dominantly lead and zinc with sparse copper) at increasing depth. Mineralized epithermal vein systems are also very commonly associated with anomalous amounts of arsenic, mercury, antimony, thallium and/or potassium. Any or all of these elements can form broad halos of varying widths and intensities around the vein systems and they often serve as pathfinder elements in the geochemical exploration for epithermal mineral deposits. The geochemical signature of the Deseado Massif's typical epithermal deposit is characterized by anomalous precious metals (gold-silver) and locally anomalous amounts of arsenic, mercury, antimony, mercury, lead, zinc, manganese and minor copper.

The alteration halos extending outward in the wall-rocks away from the vein systems are typically relatively small in extent. In the Deseado Massif, more than 90 percent of the epithermal occurrences are hosted by silica-rich rhyodacitic tuffs and ash flow tuffs of the Chon Aike Formation. These rocks are chemically non-reactive and thus not usually widely or conspicuously altered, except perhaps close to the vein where they may be intensely and pervasively silicified. Halos of argillic, sericitic and prophyllitic alteration typically extend outward from the vein for a few meters to rarely a few tens of meters. In contrast, the andesitic lavas and volcaniclastics of the underlying Bajo Pobre Formation, which host about 5 percent of the epithermal occurrences, often show conspicuous clay alteration envelopes of variable width and intensity extending outward from the silicification adjacent to the vein.



In addition to the classic low sulphidation epithermal vein systems, La Josefina contains an additional target that represents an uncommon variation of the epithermal deposit model known as "hot springs-type gold." Formed as the surface expression of an epithermal system at depth, hot springs-type deposits are characterized by laminated silica layers, known as "sinter," which occasionally may contain some gold. The feeder ("pipeline" conduit) for these sinters may contain hydrothermal breccias ("pipeline" breccias). The mineralization in these "pipeline breccias" can be high-grade.

9.0 Mineralization

9.1. General

The mineralization at La Josefina Project is contained in a vein system hosted by 151-153 ± Ma ignimbrites of Chon Aike Formation which is localized within geological structures and are often a meter or more wide and hundreds of meters to sometimes kilometers long. The dominant mineralization trend is N-NNW (10 km long), with minor ENE trends (1.2 km wide). Mineralization is comprised of steeply-dipping quartz veins and veinlets, vein stockworks, hydrothermal breccias and a sinter that carry gold, silver, electrum and some sulphides. Vein swarms are 1 to 18 m wide and have discontinuous strike lengths ranging from tens of meters to 1.500m. The veins commonly have open spaces and show evidence of multiple generations of quartz. Quartz textures include massive, brecciated, crustiform and colloform banding with comb, cockade and lattice bladed textures. The textures and other characteristics observed in these veins suggest that the veins representing high-level parts of epithermal systems. This suggests that mineralization in the veins could extend well below the depths tested by drilling. The richest mineralization commonly occurs in dilatational zones caused by structural irregularities along or down the vein.

Historical exploration completed by Fomicruz, Minamérica and Cerro Cazador defined four general target in the La Josefina Project (Figure 5):

- 1. Noreste Area (which includes the Sinter, Subsinter and Lejano targets)
- 2. Veta Norte Area (which includes the Veta Sur, Cecilia, and Amanda targets)
- 3. Central Area
- 4. Piedra Labrada Area





Figure 5 – Targets map of the La Josefina Project


9.2. Description of mineralized zones9.2.1. Noreste Area

Noreste area is a 28-square kilometer area in the northeast part of the project, consists of three separate target areas: Sinter, Subsinter and Lejano. The host rocks are various Chon Aike ignimbrite members exposed in large windows eroded through a cover of thin Cenozoic basalt flows. The Subsinter and Lejano targets have had limited surface sampling and no drilling to date; these targets are based largely on the presence of exposed surface alteration (mainly argillic with some silicification) and moderately anomalous amounts of possible pathfinder elements (As and Sb). Fomicruz believes these targets represent very high levels of hydrothermal systems because there are no obvious veins or gold anomalies at the surface.

9.2.1.1. Sinter target

The Sinter target (Figure 6) received its name from an outcropping layer of interlaminated silica-hematite interpreted to be a subaqueous, gold-bearing, hot spring sinter probably deposited in a lagoon or lake. The sinter layer is exposed discontinuously for 2.5 kilometers in a NW-SE direction over a width of 300 meters or more. Its maximum thickness in outcrop is about 2 meters. It dips moderately to the WSW, and rests on weakly silicified lapilli tuffs and reworked volcaniclastic units. The sinter consists of yellow and red iron oxides interlaminated with chert and in small scale very much resembles many classic exhalative laminated banded iron formations. The laminations are locally slightly contorted and show other features suggestive of soft-sediment deformation in a subaqueous environment. Occasional annular ring structures up to 15 cm in diameter are present; these have been interpreted as outgassing conduits in soft siliceous clay that was subsequently filled by chalcedonic silica. Regardless of origin, the Sinter target is very much different from the fissure vein systems common throughout the Deseado Massif.

The best exposure is Mogote Hormigas, a 600-meter long sinter-capped hill bounded on the east by a NW-SE fracture zone that displaces the sinter layer. The sinter exposures at Mogote Hormigas are locally gold-bearing with grains of electrum that are occasionally visible in outcrop samples. Breccias of probable hydrothermal origin are closely associated with the sinter zone and



appear to host the richest mineralization in the trenches and drill cores from this target. The breccias may be hydrothermal vents or feeders for mineralization because gold values in the sinter appear to decrease away from the breccia bodies, perhaps similar to the "hot springs-type" deposit model discussed previously in the chapter on Deposit Types. The gold-bearing sinter outcrop sample mentioned above is located within a few meters of an underlying breccia body exposed in a cross-cutting trench. Examples of highgrade gold over significant lengths within the breccia itself include: 3.0 m @ 176.9 Au g/t and 7.0 m @ 114.1 Au g/t in separate trenches. Previous drilling by Minamérica intercepted 12.0 m @ 22.9 Au g/t in core hole # DDH-12.

Minamérica and Fomicruz tested outcrop areas in the Sinter target with 22 core holes drilled to average depths of less than 60 meters. More than half these holes (12 total) tested the Mogote Hormigas zone but failed to demonstrate continuity of the high-grade gold either on strike or to the shallow depths tested by the drilling. Offsets to the high-grade interval hit in DDH-12, both along strike and under the interval at depth, failed to intersect any significant gold mineralization. Existing geophysical surveys show a high resistivity anomaly (possible silicification) and a chargeability anomaly (possible sulfides) about 225 meters beneath the strongest trench and drill samples at Mogote Hormigas, but the model for mineralization remains uncertain. This geophysical target has not yet been tested.

Cerro Cazador tested the Sinter target with 22 new drill holes in 2007-2008 (Figure 6). Most of the holes contained widespread shallow gold mineralization (up to 20 meters of 1.0 to 5.0 Au g/t) suggesting the existence of a possible large bulk-tonnage target in the tuffaceous units which lie immediately beneath the silica-iron sinter capping. Two of the new holes intercepted encouraging intervals of higher-grade gold mineralization at relatively shallow depth. Drill hole D08-074 intercepted 1.75 m averaging 14.1 Au g/t and 4.1 Ag g/t from 40.25 – 42.00 meters. Drill hole SSI-D08-167 intercepted 7.0 meters averaging 12.3 Au g/t and 2.6 Ag g/t from 27.0 - 34.0 meters.





Figure 6 – Sinter Target at Noroeste Area



9.2.2. Veta Norte Area

Veta Norte includes an area of 3 square kilometers in the northeast central part of the project between the Noreste and Central target areas (Figures 5). It consists of a prominent north-south fissure vein system hosted by a lithic-rich pumiceous ignimbrite which is strongly silicified within a few meters of the veins. The system is more than 1500 meters long, forming a broad sigmoidal curve along strike with intermittent widening (up to 7 meters) and narrowing in classic pinch-and-swell fashion. The system is divided into six segments, possibly separated and slightly offset along strike by NE-SW cross faults. Alternatively, they may be en echelon segments. From north to south, these segments are Veta Flaca, Veta Amanda/Veta Cecilia, Veta Cruzada, Veta Norte, and Veta Sur.

All of these segments are gold-bearing, with outcrop and trench samples across the veins commonly containing 2 to 5 g/t gold over lengths of 1 to 4 meters. The veins consist of colloform-banded quartz, quartz veinlets, and breccias. The veins contain adularia, bladed silica after calcite, barite, small amounts of visible gold, pyrite, chalcopyrite, bornite, specular hematite, galena, sphalerite, and silver-sulfosalt minerals. Some zoning of these minerals has been noted along strike – specifically, more adularia to the north and more barite to the south.

Prior to 2007, the Veta Norte system had been tested along 900 meters of strike with only 15 widely-spaced, shallow core holes to an average depth of less than 60 meters. Ten of these holes intersected gold with grades and widths similar to or better than the surface samples. The drilling completed by Cerro Cazador in 2008 and 2009 tested the Veta Norte vein targets with 174 core holes, establishing that the mineralization in the system locally extends to at least 250 meters below surface and defining significant mineralization in the Veta Sur, Veta Amanda, and Veta Cecilia targets described as follows:

9.2.2.1. Veta Amanda Target

One of the more promising of the mineralized vein segments tested to date is Veta Amanda target in the north-central part of the Veta Norte area vein system (Figure 7). Veta Amanda occurs at a prominent widening (swell) formed within a concave-east curve in the north-central part of the Veta Norte *Gold - Silver Resource Estimate for the La Josefina Project* Page 40



vein system. Six of the ten mineralized holes drilled by Fomicruz: and Minamérica in the Veta Norte vein system were in a 250-meter segment of Veta Amanda. Those holes demonstrated excellent continuity of mineralization along strike and to a depth of at least 40 or 50 meters. The mineralization occurs in as many as 7 closely-spaced, sub-parallel, intermittent veins having widths of 0.5 to 2.0 meters or more. Only two of these veins crop out at the surface; the others either pinch-out before reaching the surface or are covered by alluvium. The vein consisted mainly of colloform-banded quartz veinlets with adularia, silica blades after calcite and up to 2% fine-grained sulfides, features compatible with a high-level epithermal system. The host rock is a pervasively silicified tuff. Classic epithermal vein models suggest that these many closely-spaced, sub-parallel high-level veins could possibly merge at depth into a wide, gold-rich mineralized shoot.

Cerro Cazador completed 84 diamond drill holes that targeted both the Amanda Vein and the sub-parallel Cecilia Vein. Both of these veins had relatively good continuity over widths of up to 2 meters or more and the mineralization appears to go to depth. As most important results, drill hole SVN-D07-003 intercepted 1.1 m averaging 13.34 Au g/t, 254 Ag g/t and 4.65 % Cu from 124.2 – 125.3 m; drill hole SVN-D08-078 intercepted 0.85 meters averaging 2.3 Au g/t and 14.71 Ag g/t and 9.5 % Cu from 29.15 – 32.0 meters among others. Selected cross-sections can be seen in Appendix B.

9.2.2.2. Veta Cecilia Target

Veta Cecilia target is another promising objetive. Veta Cecilia is sub-parallel to Veta Amanda. It lies 20-50 meters to the east of Veta Amanda (Figure 7). Like Veta Amanda, it is a fissure vein with significant mineralization that varies in width from less than a meter to more than 2 meters. Most of the 84 drill holes completed by Cerro Cazador at Veta Amanda were designed to intercept both the Veta Cecilia and Veta Amanda in each drill hole. Both of those veins contain interesting gold values along with base metals. Significant results of the drilling are SVN-D08-057 intercepted 1.2 m averaging 37.62 Au g/t, 150.0 Ag g/t and 3.4 % Cu from 140.8 – 142.0 m; drill hole SVN-D08-089 intercepted 2.0 m averaging 13.34 Au g/t, 31.8 Ag g/t and 0.8 % Cu from 78.0 – 80.0 m among others. Selected cross-sections can be seen in Appendix B.





Figure 7 – Veta Amanda and Cecilia targets



9.2.2.3. Veta Sur target

Based upon the recent Cerro Cazador drill results, the Veta Sur target is perhaps the most promising target tested thus far at La Josefina (Figure 8).



Figure 8 – Veta Norte and Veta Sur targets



Veta Sur lies at the south end of the Veta Norte target area. It is similar to the other veins on the property, but is the widest overall. Veta Sur also contains the most robust mineralization of the vein systems tested thus far. The vein contains not only high grades of gold and silver over significant widths, but also high grades of base metals, at least locally. Cerro Cazador tested Veta Sur with 83 core holes, defining a southeast - plunging mineralized shoot about 120 meters by 350 meters in size, averaging 2-3 meters in thickness, and open to depth. Significant results of the Veta Sur drilling includes SVN-D08-129 intercepted 2.1 m averaging 1.03 Au g/t, 135.0 Ag g/t and 0.1 % Cu from 123.0 – 132.1 m; are SVN-D08-132 intercepted 9.0 meters averaging 3.08 Au g/t, 265.0 Ag g/t and 2.5 % Cu from 70.0 – 79.0 m among others. Selected cross-sections can be seen in Appendix B.

9.2.3. Central Area

The Central Area is just southwest of Veta Norte area and is centered on the abandoned former headquarters of Estancia La Josefina (Figures 5, 9, and 10). The area is crossed by at least 8 vein/veinlet systems exposed in a 2 square kilometer window through a thin cover of post-mineral basalts. The veins, which are hosted by crystal-rich ignimbrites of the Chon Aike Formation, are discontinuous, sigmoidal bodies up to 3.5 meters wide and 220 to 600 meters long. They trend NW-SE, disappearing in both directions along strike beneath the basalt cover. Individual veins consist of quartz veins and veinlets, 1 to 10 cm wide, with variable amounts of opal, adularia, pyrite, chalcopyrite, galena, sphalerite, specular hematite, tetrahedrite, bornite, silver sulfosalt minerals and occasional native gold. The veins each typically contain several or all of the following features: comb quartz, banded quartz, sugary quartz, silica replacing platy calcite, fillings of banded opal, and breccias with low temperature chalcedonic silica cement. These features are all suggestive of a high-level epithermal system that can be expected to continue to depth.

Fomicruz drilled 32 holes to average depths of less than 40 meters to test 3 of the 8 known vein systems in the Central Area (Figure 9). Veta Mariá Belén was tested with 20 holes over a strike length of 550 meters, Veta Las Latitas, 100 meters to the west, was tested with 3 holes over a length of 100 meters, and Veta Ailín, 250 meters further west, was tested with 9 holes over a 250-meter



length. Strong mineralization – from 0.5 to 7 meters with 1 Au g/t to a maximum of 164 g/t Au – was intersected in 6 holes at Veta Mariá Belén and in two holes at Veta Ailín.

Cerro Cazador completed an additional 46 diamond drill holes in the Central Area during 2008. A brief summary of those drill holes is shown in Table 4.

<u>Target</u>	<u>Cerro Cazador Drill Holes</u>
Veta Maria Belen	13
Veta Ailin	14
Veta Las Latitas	10
Veta Tonina	7
Water Well	2



Table 4 - Drill Hole Summary – Central Area

Figure 9 – Central area

At Veta Mariá Belén, some of the previous drilling demonstrated good continuity of the strong mineralization over 100-meter strike lengths and to depths of at least 40 meters interspersed with weakly mineralized gaps of about the same length along strike. This is probably a result of the pinching-and-swelling commonly seen in fissure vein systems. Drilling of deeper holes by Cerro Cazador thus far indicates lesser continuity at depth. From the drill hole



distribution seen in Figure 10, it seems that the drilling completed by Cerro Cazador provided a good test of some of the vein systems in the Central area, although drilling on Veta Ailín was not deep enough on the southern extent of the vein to intercept the vein. This is because the vein curved in a westerly direction near its south end.



Figure 10 – Central Area detail

9.2.4. Piedra Labrada Area

Piedra Labrada, in the south-central part of the La Josefina Project (Figure 5), includes a 2.5 kilometer by 5.0 kilometer area containing structural "fairways" with numerous zones of quartz veinlets and stockwork hosted by a crystal-rich Chon Aike ignimbrite. The zones are a few hundred meters long, up to 15 meters wide, and aligned more-or-less end-to-end in NW-SE to NNE-SSW directions over strike lengths of 1 to 2 kilometers. The veinlets consist almost entirely of quartz, but locally contain small amounts of adularia, barite, galena, chalcopyrite, pyrite (and boxworks after pyrite) and native gold. The quartz is coarsely crystalline containing open spaces with drusy quartz. Opal is the main silica mineral in some veinlets. In other veinlets, opal fills open spaces in crystalline quartz. Comb textures are also common. Samples are commonly



anomalous in gold, with values up to 9.0 Au g/t reported. The target has to date been tested only by two shallow holes drilled by Fomicruz in 2004. The quartz textures, presence of opal, and structural setting all suggest this is also a very high level part of an epithermal system.

In this target an intensive mapping and trenching sampling program is being conducted, displaying early encouraging results. Due that is an early stage of the program with preliminary results no further comments are added in this report.

10.0 Exploration

10.1. Current Exploration

Cerro Cazador acquired the La Josefina project in 2007 and has since focused largely on drilling the targets previously defined by the historical exploration and drilling efforts of Minamérica and Fomicruz. Results of Cerro Cazador's drilling (242 holes totaling 37607.9 meters and including two water wells) are discussed in the Drilling Chapter of this report. Other recent exploration work by Cerro Cazador includes:

- 1. Review of existing project data
- 2. Re-logging and re-sampling of core from several historical drill holes
- 3. Re-mapping and re-sampling of select outcrops and trenches
- 4. Compilation of regional geologic data to better understand structure, stratigraphy and mineralization.
- 5. Completion of 416 line kilometers of IP/Resistivity Survey

The IP/Resistivity Survey was done by AkuBra S.A. (Mendoza, Argentina) and consisted of gradient arrays at 25 meter X 50 meter spacings over a 5.5 kilometer grid. The technology employed was the same as that proven effective elsewhere in the Deseado Massif (e.g., San José, Cerro Negro) where similar vein systems have been successfully defined at depths of up to 120 meters. The survey undertaken at La Josefina delineated multiple zones of IP (chargeability) and resistivity anomalies, even under cover south of exposures in the Veta Sur area. Results have yet to be interpreted by a qualified geophysicist and a report is pending.



10.2. Historical Exploration

The historical exploration work, briefly summarized in the History chapter of this Technical Report, defined four general prospect areas with gold-silver targets in the La Josefina Project. The results of this historical work are described in this chapter.

10.2.1. Noroeste Area 10.2.1.1. Sinter target

The Sinter target (Figures 5 and 6) has been extensively mapped, sampled, trenched and surveyed with geophysics, and tested to average depths of less than 60 meters with 22 historic drill holes (see Historical Drilling in the Drilling chapter of this report). Surface sampling includes 300 outcrop samples, more than 300 trench samples, and 1100 soil samples. Outcrop and trench samples from the sinter, in underlying siliceous layers and hydrothermal breccias have returned significant gold values (up to 500 g/t in select samples), those analytical values are validated by the presence of visible gold. Two of the better trench results are:

- Trench #110 from 8.0 to 11.0m, hydrothermal (?) breccia, 3.0m @ 176.9 g/t Au
- Trench #120 from 4.0 to 11.0m, hydrothermal (?) breccia, 7.0m @ 114.1 g/t Au

Additionally, 25 line kilometers of conventional IP-Resistivity geophysical surveying and 3 line kilometers of Real Section-IP surveying has been done over the Sinter target. Discrete resistivity highs (probably from silica) and chargeability anomalies (probably from disseminated sulfide at depth) occur over the strongest gold showings.

10.2.1.2. Subsinter and Lejano target

The Subsinter and Lejano targets (Figure 5) have had limited surface and trench sampling, limited geophysical work, and no drilling. The Subsinter target is a 1-square-kilometer area of pervasively silicified rocks with zones of strong argillic alteration, perhaps products of steam heating and acid-leaching. It has been examined only with 22 outcrop samples and 100 soil samples. Moderate amounts of arsenic and antimony were detected, but the gold values were low. *Gold - Silver Resource Estimate for the La Josefina Project* Page 48



These results together with geologic evidence are interpreted as representing the very high levels of a hydrothermal system. Geophysical anomalies detected in the Sinter area have not yet been drill-tested.

Similarly, the Lejano target has also been scarcely explored. It is a 1-squarekilometer area of strongly silicified rocks, in part opaline, associated with patchy areas of argillic alteration and proximate to outcrops of stromatolitic carbonates. It has been examined by 32 outcrop samples, 31 samples in two trenches and 200 soil samples. Results show moderate amounts of arsenic and antimony but low gold values. These results, like those in the Subsinter target, are interpreted to represent the very high levels of a hydrothermal system.

10.2.2. Veta Norte Area

Veta Norte area, in the northeast central part of the project (Figures 5, 7 and 8), consists of a prominent fissure vein system, more than 1,500 meters long in a north-south direction and hosted by a lithic-rich pumiceous ignimbrite. The system is up to 3 meters wide, curves slightly in a sigmoidal fashion and intermittently widens and narrows along strike in classic pinch-and-swell fashion. The system has been divided into 6 separately named segments, each of which has been mapped, sampled and trenched in some detail. More than 600 samples were collected from 35 trenches cut across the system, and numerous float and MMI samples were also collected. In general, the float and MMI sampling found gold anomalies only near the outcropping veins.

Many of the outcrop and trench samples have significant amounts of gold. Some of the better trench results include the following:

- Trench #206 three separate 1.0 m samples @ 5.21, 4.81 and 3.50 g/t Au
- Trench #207 1.0 m @ 6.94 g/t Au
- Trench #211 2.0 m @ 3.60 g/t Au (including 1.0 m @ 4.43 g/t)
- Trench #213 4.0 m @ 3.83 g/t Au (including 1.0 m @ 7.37 g/t)
- Trench #214 3.0 m @ 4.14 g/t Au (including 1.0 m @ 9.77 g/t)
- Trench #216 19.8 m @ 4.99 g/t Au (including 1.0 m @ 33.10 g/t)
- Trench #222 2.0 m @ 2.96 g/t Au
- Trench #228 1.0 m @ 5.56 g/t Au



Of the 6 separate segments of the Veta Norte system examined by surface and trench sampling, only Veta Flaca, at the currently known north end of the system, failed to show any significant gold values. The strongest and most consistently anomalous values were from Veta Amanda, a broad swell located in the north-central part of the system, and from Veta Sur at the currently known south end of the system. Both of these areas received the majority of the attention during the 2007-2008 drilling program. The three targets tested there from 2007-2008 were the Veta Amanda, Veta Cecilia, and Veta Sur.

10.2.3. Central Area

The eight known vein systems in the Central Area (Figures 5 and 9) were examined by Fomicruz with 24 trenches on 6 vein systems and 32 drill holes on 3 vein systems (summarized in the Drilling Chapter of this report). Trench samples containing more than 1.0 g/t Au were returned from the Ailín, Las Latitas and Maria Belen veins systems, as follows:

- Veta Ailín, 1 of 4 trenches > 1.0 g/t Au, 1.2m @ 14.26 g/t Au and 196 g/t Ag
- Veta Las Latitas, 3 of 5 trenches > 1.0 g/t Au as follows:

1.0m @ 2.64 g/t Au, 0.6m @ 5.20 g/t Au, 0.6 m @ 4.40 g/t Au

• Veta María Belén, 1 of 3 trenches > 1.0 g/t Au, 0.5 m @ 1.00 g/t Au

11.0 Drilling

11.1. Historical Drilling Summary

Previous exploration work at La Josefina has defined four general areas with gold-silver targets. Drill holes have been completed in parts of all four areas, initially by Minamérica in two areas, and more recently by Fomicruz in all four areas (see detail on Table 5).

Minamérica drilled 12 holes totaling 1320 meters in 1998 and Fomicruz drilled 59 holes totaling 3,680 meters from 2003 to 2005. All 12 Minamérica holes and 22 of the Fomicruz holes were HQ-sized diamond drill core (63.5 mm diameter), with 37 Fomicruz holes of NQ-sized core (47.6 mm diameter). Core recoveries for the Minamérica drilling are unknown but probably similar to recoveries for the Fomicruz core drilling which is reported to have been consistently in the 95% or higher range. The drill holes were all sampled at



intervals averaging about 1-meter in length and assays are available for all these intervals. However, drill hole logs and archived core are available only for the Fomicruz drill holes.

<u>Target</u>	Minamérica (1998)	Fomicruz (2003-2005)	
Veta Amanda Cecilia	3	6	
Veta Sur	1	2	
Sinter	7	15	
Veta Maria Belen	0	20	
Veta Allin	0	9	
Veta Las Latitas	0	3	
Veta Tonina	0	0	
Veta Cruzada	0	2	
Veta Norte	1	0	
Veta Pequeña	0	0	
Veta Flaca	0	0	
Piedra Labrada	0	2	
Total holes (m)	12 (908.35 m)	59 (3674.86 m)	

Table 5 – Historical drilling Summary

11.2. Recent Drilling Summary

During 2007 and 2008, Cerro Cazador completed 37,604.65 meters of core drilling in 242 holes which tested several targets (Apendix A). This drilling confirmed the presence of at least 5 well-mineralized shoots. All core holes produced HQ-size core (63.5 mm in diameter). Core recovery was in excess of 95% overall. In no case was core recovery less than 80% over intervals greater than 2 meters. Core samples were sawed in half on site. Core samples of various lengths, dependent upon the variable mineralization encountered, were submitted to ALS Chemex for analysis. A drill hole summary is shown in Table 6.

<u>Target</u>	Historical Holes	<u>Cerro Cazador Holes</u>	
Veta Amanda Cecilia	9	84	
Veta Sur	3	83	
Sinter	22	22	
Veta Maria Belen	20	13	
Veta Allin	9	14	
Veta Las Latitas	3	10	
Veta Tonina	0	7	
Veta Cruzada	2	3	
Veta Norte	1	2	
Veta Pequeña	0	1	

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Veta Flaca	0	1
Water Well	0	2
Piedra Labrada	2	0
Total holes (m)	71 (4583.21 m)	242 (37604.9 m)

Table 6 - Drill Hole Summary

The drilling completed during the 2007-2008 drilling program at La Josefina generated an extensive database that is kept in digital format and hard copy in the field exploration office and Argentina head office.

11.3. Drilling Results

11.3.1. Noreste Area

11.3.1.1. Sinter target - Historical Drilling

The Sinter target was tested by 22 HQ-sized diamond drill core holes – 7 by Minamérica in 1998 and 16 by Fomicruz in 2004 – totaling 1638 meters (Figure 6). The holes are distributed over a 1300 meter x 500 m area in or near areas of known sinter outcrop with average drill depth below the surface of 54 meters. Most of the holes – 12 of the 22 – were along or under the 400-meter long segment of sinter outcrop known as Mogote Hormigas. Five of the Mogote Hormigas holes hit significant mineralization; all other holes in the Sinter target area were initially found to be weakly mineralized, although analysis of cores in July of 2009 that were previously un-split showed that significant, near-surface gold mineralization exists at Sinter. The mineralized Mogote Hormigas holes is described on Table 7.

Drill Hole	From	То	Thickness (m)	Au g/t	Comments
DDH-12	3.05	15.25	12.20	22.94	Hydrothermal? Breccia
SI 3	7.35	10.35	3.00	7.48	In fault zone
SI 6	4.60	5.60	1.00	2.51	
SI 7	43.10	45.00	1.90	2.96	Fault breccia
DDH-13	14.09	21.35	7.26	4.16	Hydrothermal? Breccia
	45.50	46.50	1.00	3.92	Fault zone

Table 7 - Sinter Target, historic Significant Drill Intercepts

11.3.1.2. Sinter target - Recent Drilling

Previously, 22 drill holes were completed at Sinter. Cerro Cazador finished an additional 22 drill holes (Figure 6). The additional 22 drill holes completed by Cerro Cazador intersected significant gold mineralization (>1 g/t) in about 40% *Gold - Silver Resource Estimate for the La Josefina Project* Page 52



of the holes. No other targets were tested at Noreste by Cerro Cazador during 2007 and 2008.

Despite strong and laterally extensive surface mineralization that extends over roughly 1500 meters in a northeasterly direction, mineralization documented at Mogote Divisoria has been tested by only one drill hole (Figure 6). A careful mapping and sampling of this 1500-meter long zone is warranted, especially given the difficulty of intercepting well-mineralized shoots. It seems likely that further, detailed mapping, sampling, and trenching along this extensive zone may generate a worthy drill target.

11.3.2. Veta Norte Area 11.3.2.1. Historical Drilling

The Veta Norte Area was initially drilled by Minamérica in 1998 (5 holes, 460 meters) and later by Fomicruz in 2004-2005 (10 holes, 588 meters). The drill holes are widely spaced along a 1-kilometer length of the north-trending vein system, with most holes concentrated in a broad 300-meter long segment known as Veta Amanda, in the northern part of the system, and a 300- meter long segment near the south end consisting of Veta Norte and Veta Sur (Figure 8). Ten of the fifteen holes drilled along the Veta Norte system hit significant mineralization, with six of the seven holes drilled in the Veta Amanda segment of the system mineralized, and three of the four drilled in the Veta Norte-Veta Sur segment also mineralized. This suggests that both of these 300-meter long vein segments, which occur at sigmoidal bends in the overall vein system, might be shallow parts of mineralized shoots localized at dilational swells. The historic significant mineralized drill intervals are as follows on Table 8:

Drill hole	From	То	Thickness (m)	Au g/t	Ag g/t	Comments
VN-01	73.00	76.00	3.00	7.76	155.30	
VN-02	16.35	18.80	2.45	4.65		17.5 to 85.2 contains
						many anomalous values
	69.40	71.10	1.70	1.21	114.60	
	71.90	72.80	0.90	5.65	429.00	
VN-03	24.50	25.45	0.95	2.25	3.60	
VN-06F	11.00	11.50	0.50	8.92	109.00	Drill hole lost at 12.37 m.
VN-06	11.50	12.50	1.00	3.16	2.90	Values in brecciaed zone.
VN-13	49.90	51.30	1.40	4.07	156.00	
DDH-01	28.18	28.70	0.52	23.84	52.50	

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	31.00	31.93	0.93	2.80	17.00	
	38.94	39.65	0.71	42.52	145.00	
	50.44	51.85	1.41	17.20	232.50	
DDH-03	17.00	19.80	2.80	3.48	7.00	
	31.05	32.78	1.73	12.64	12.40	
DDH-05	9.15	10.13	0.98	1.75	107.50	
DDH-06	23.45	27.45	4.00	3.04	19.20	

Table 8 - Veta Norte Target, historic Significant Drill Intercepts

11.3.2.2. Veta Norte Area- Recent Drilling

The Veta Sur target, which lies on the Veta Norte area, is currently the most encouraging target (Figure 7 and 8). Historical drilling and drilling of 83 holes completed by Cerro Cazador during 2007-2008 has defined a shoot of strong mineralization that is about 120 meters in height, at least 300 meters in length, and averages 2-3 meters in thickness. This shoot plunges to the southeast and is open at depth in that direction. Gold, silver, and base metals are widespread and have relatively good continuity in this shoot of mineralization. Veta Sur presently seems to have the widest and most robust mineralization of all the vein systems. A summary of several select intervals of Veta Sur mineralization can be seen in the following two tables (Table 9 and 10). In general, these selected intervals, although some of the widest and highest grade encountered, tend to reflect the overall character of the mineralization found at Veta Sur. Continuity of mineralization is good from hole to hole.

Drill Hole	From	То	Thickness (m)	Au g/t	Ag g/t	%Cu	%Zn	%Pb
SVN-D07-004	19.0	44.0	20.00	3.28				
SVN-D08-129	123.0	132.1	7.30	1.01	135.00	0.10	0.90	3.00
Including	123.0	128.5	4.40	1.37	142.00	0.20	0.90	4.40
SVN-D08-132	70.0	79.0	7.20	3.07	265.00	2.50		2.40
SVN-D08-134	97.7	104.0	5.00	2.73	643.00	0.40	0.40	3.50
SVN-D08-150	16.0	37.0	17.00	3.23				

Drill Hole	From	То	Thickness (m)	Au g/t	Ag g/t	%Cu	%Zn	%Pb
SVN-D08-127	125.65	127.2	1.20	4.10	247.00	9.70		
SVN-D08-130	114.3	116.9	2.10	4.10	175.00	3.80	0.20	0.60
SVN-D08-144	98.75	103.25	3.60	6.84	359.00	0.10	2.60	6.90
Including	100.2	102.35	1.70	10.04	469.00	0.10	4.90	12.40

Table 9 - Veta Sur, intervals of mineralization

Table 10 - Veta Sur – Intervals of base metal mineralization

Veta Amanda and Veta Cecilia (Figure 7 and 8), which also lie on the Veta Norte Property, are currently the next most encouraging targets. Veta Amanda and Veta Cecilia are sub-parallel vein systems, separated by about 50 meters of *Gold - Silver Resource Estimate for the La Josefina Project* Page 54



intervening rock. Most of the drilling was designed to test both vein systems with each drill hole. Historical drilling and the 84 holes completed by Cerro Cazador during 2007-2008 have defined a tabular body of mineralization at

both Veta Cecilia and Veta Amanda. Both of these targets average about 1-2 meters in width, with mineralization similar to that of Veta Sur. Veta Amanda plunges to the northwest while Veta Cecilia seems to plunge both to the southeast and the northwest. A summary of several select intervals of Veta Amanda and Veta Cecilia mineralization can be seen in Table 11 and 12. In general, these selected intervals, although some of the widest and highest grade encountered, tend to reflect the overall character of the mineralization found at Veta Amanda and Veta Cecilia. Continuity of mineralization is good from hole to hole.

Drill Hole	From	То	Thickness (m)	Au g/t	Ag g/t	%Cu	%Zn	%Pb
SVN-D07-003	124.2	125.3	0.90	13.34	254.00	4.65		
SVN-D08-057	140.8	152.25	9.20	5.33				
SVN-D08-078	29.15	32.0	2.30	14.71	95.80			
SVN-D08-102	30.3	32.7	1.90	6.84	42.80			
SVN-D08-181	139.8	166.6	21.30	2.06				

Drill Hole	From	То	Thickness (m)	Au g/t	Ag g/t	%Cu	%Zn	%Pb
SVN-D08-057	140.8	142.0	1.00	37.62	150.00	3.40		
SVN-D08-089	78.0	80.0	1.00	13.34	31.8	0.80		
SVN-D08-096	229.6	231.8	1.80	5.81	58.5	2.00		
SVN-D08-206	92.5	94.0	1.20	0.34	676.00	9.40		1.20

Table 11 - Veta Amanda – Selected Intervals

Table 12 - Veta Cecilia – Selected Intervals

Drilling of 3 holes to test Veta Cruzada, 2 holes to test Veta Norte, 1 hole to test Veta Pequeña, and 1 hole to test Veta Flaca by Cerro Cazador returned predominantly inconclusive results. The best assay from these 7 holes was from SVN-D08-018 in the interval 83.16-84.55 meters. This 1.39 m intercept averaged 3.41 g/t Au and 389 g/t Ag. Although this is a significant intercept, it was not replicated by adjacent holes.

11.3.3. Central Area

11.3.3.1. Historical Drilling

The Central Area consists of eight known vein systems, four of which have now been tested by recent drilling (Figure 9). A total of 32 holes totaling 1632 meters in length were drilled by Fomicruz in 2002-2003 in the Central Area to an average depth of 40 meters below the surface; Minamérica did not drill any holes in this target area.

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Most of these historic holes, 20 in total, were drilled at approximate 30-meter spacings to test a 600-meter long segment of the María Belén vein system to depths of 50 meters or less. Six of these holes intercepted significant mineralization as listed in the following table (holes prefixed by "MB"). The mineralization is continuous for short lengths (100 meters or less) along the vein segment, probably from pinch-and-swell in the high-level epithermal vein system. The nearby Las Latitas vein was tested with three holes to a depth of 30 to 50 meters; none were significantly mineralized. Veta Ailín, a 300-meter long sub-parallel vein, 400 meters southwest of María Belén, was tested by nine holes, two of which hit high-grade mineralization over narrow intervals, as shown in table 13 (prefixed by "A"):

Drill Hole	From	То	Thickness (m)	Au g/t	Ag g/t	Comments
A6	33.17	33.91	0.74	88.80	86.50	
A7	22.42	23.90	2.10	164.30	101.10	
MB1	29.73	30.20	0.47	20.00	75.60	
MB2	11.34	13.15	1.81	2.18	?	Other structures with
						max. value of 2.46 g/t Au
MB5	29.72	31.35	1.63	6.06	10.40	
MB9	24.64	31.65	7.01	1.62	7.80	Max. = 5.39 g/t Au
MB 17	25.62	30.63	5.01	1.31	5.60	Max. = 6.46 g/t Au
MB19	10.23	12.20	1.97	1.25	63.00	

Table 13 – Central area, historic Significant Drill Intercepts

11.3.3.2. Central Area – Recent Drilling

Previously, 32 drill holes were completed at Central, targeting Veta Maria Belen, Veta Las Latitas, and Veta Ailín (Figure 9). Deeper drilling of these veins and Veta Tonina consisted of 44 diamond drill holes completed by Cerro Cazador during 2007-2008 (Figure 10). These drill holes all intercepted relatively low grades of gold/silver mineralization over short widths. One example of the better mineralization at Central can be found in SVN-D08-18. In that drill hole, the 1.39 meter interval from 83.16-85.55 meters averaged 3.41 g/t Au and 389 g/t Ag. Another example of significant mineralization is found in hole SC-D08-030 from 63.42-65.35 meters, consisting of 1.93 meters averaging 4.85 g/t Au and 4.9 g/t Ag. Most of these 44 holes, however, intercepted gold grades of <1 g/t over 1 meter.

Many of the holes drilled by Cerro Cazador on Veta Ailín did not go deep enough to test the vein system. The vein, rather than being linear, apparently curved in a westerly direction on the southern part of the Veta Ailín vein system. This was not recognized until after the drilling was completed.



Essentially, much of the Veta Ailín vein system remains untested. Further drilling is warranted there.

11.3.4. Piedra Labrada Area 11.3.4.1. Historic Drilling

The Piedra Labrada Area is a complex system of veins still in early stages of exploration. It has been tested only with 2 holes (161 meters) drilled by Fomicruz in 2004. Neither hole intercepted significant mineralization.

11.3.4.2. Piedra Labrada Area – Recent Drilling

No drilling was completed by Cerro Cazador at Piedra Labrada during 2007-2008 drill programs.

12.0 Sampling Method and Approach

12.1. Historical surface samples

Previous workers on the property have taken both surface rock chip and trench samples, and results are discussed in the Exploration chapter of this report. Maps showing the sample location and analytical results were reviewed by the authors of the 2007 Technical Report (Klohn et al) in the Fomicruz office in Rio Gallegos and Cerro Cazador's offices in Puerto SanJulián and their field camp office at Estancia Piedra Labrada. Many details regarding size of the samples, methods, etc., are not known, but it is apparent that much of the sampling represents channel samples taken along trenches and across outcrops. Additionally, most of the sampling appears to have been focused on surface areas with relatively conspicuous mineralization or alteration.

12.2. Historical drill samples

The drill core consists of both HQ (63.5 mm diameter) and NQ (47.6 mm diameter) size core that was sawn in half with a diamond saw after being logged and the sampling intervals marked by a geologist. A one half split of the core for each interval was then sent for assay to either ALS Chemex, in the case of Minamérica, or Fomicruz's own laboratory. The remaining half of the sawn core was returned to the original core box and retained for archival purposes. The entire Fomicruz drill core is currently securely stored in a warehouse in the Estancia Piedra Labrada field camp where it was inspected by the author to be neatly stacked and clearly labeled. The Minamérica drill core until a few years ago was stored in a building in Puerto San Julián but unfortunately was all inadvertently destroyed when the building was demolished.



12.3. Recent surface samples

Surface sampling consists of channel-type samples, which is the most representative surface sampling method. Staff geologists decide where to sample based upon mineralization and alteration. They then mark the outcrop for the sample intervals with paint and describe the sample locations and alteration, mineralization, and lithologic features for each sample interval.

While documenting the sample details, they also supervise technical help to saw parallel cuts in the rock with a hand-held electric diamond saw (similar to a hand-held circular saw used in residential construction). The parallel cuts are 6.4 centimeters apart and 3.8 centimeters deep (roughly the size of split HQ drill core). The technicians then chisel out samples from between the sawn cuts in the rocks to a depth of 3.8 centimeters. The samples are bagged while chiseled, and then the bags are sealed upon completion

12.4. Recent drill samples

The drill core consists of HQ (63.5 millimeter diameter) size core. The drill core is removed from the core barrel by the drill crew and placed in "core" boxes with wooden blocks documenting the drilled core interval. The boxes are sealed and taken from the drill rig by technicians to tables in an indoor core logging facility. Staff geologists then log the core, which includes determining

core recovery for drilled intervals, documenting lithology, mineralization, alteration, and structural features. During this procedure, the geologist also marks the sample intervals based upon the geologic features noted. These sample intervals commonly range from 0.4 to 1.5 meters in length. The geologist also marks the cut line on the core to optimize the symmetry of the mineralization. The technicians then photograph the core, both in a wet and dry condition.

Next, they saw the core in half using a large diamond-bladed saw, returning both halves to the core box. The logging geologist then places one half of the sawn core sample into a sample bag marked with the appropriate sample number, and seals the bag with a "zip-tie". These samples are then organized according to sample number, at which time blanks and standards are randomly placed in the sample sequence within separate sample bags that will be submitted along with the actual core samples. The blanks and standards, with a known precious and base metal content, help to verify the accuracy of the lab results for the actual core samples. Finally, the sample bags are placed into large rice bags, secured with zip ties, and stored in a locked container until they are shipped by truck to a bus station for transport to the ALS Chemex



prep facility. These security procedures tend to preclude any tampering with the core samples.

12.5. Cerro Cazador sampling conclusions

The author reviewed and walked through the sampling protocols and procedures. Overall, the author finds that certain facets of the work on site are above industry average and have provided a dataset that can, except for those very few samples eliminated from use in estimation, be used confidently in resource estimation. The majority of the work done on site is considered high-quality.

13.0 Sample preparation, Analysis and Security

13.1. Historical sampling

Samples collected by Fomicruz were sent for preparation and analysis mainly to their own internal laboratory in Rio Gallegos for preparation and analysis and those of Minamérica were analyzed by Bondar Clegg ITS and ALS Chemex Laboratory in Mendoza. Few details are available regarding the handling of these samples; although it is obvious the drill core was examined by competent geologists who carefully marked sample intervals on the core for

splitting (sawing in half). In one historical report, it was mentioned that cross checking of some Fomicruz analyses by ALS Chemex in 2004 showed that gold values below 0.04 g/t Au were often over-estimated and that silver values below 10 g/t Ag were sometimes under-estimated.

Gold results in the 1 g/t Au range or greater were generally in agreement between the two labs. Almost no other information exists regarding the QA/QC sampling protocols of these two companies. Available data indicates that the other exploration methodologies used by these companies is in general of good professional quality and there is no reason to believe the sampling and analysis were not also carried out using acceptable procedures and methods.

13.2. Recent sampling

Samples collected by Cerro Cazador are sealed, organized, and stored in a locked container until shipped by truck to a bus station for transport to the ALS- Chemex prep facility located in Mendoza, Argentina. From Mendoza, the pulps are sent to the ALS Chemex (ALS lab), Mendoza, Argentina. The ALS Chemex laboratory is an ISO 9001:2000 and ISO 17025:1999 accredited facility. QA/QC procedures include the use of barren material to clean sample preparation equipment between well-mineralized samples and monitoring the *Gold - Silver Resource Estimate for the La Josefina Project* Page 59



particle size of crushed material and the fineness of the final sample pulp. Analytical accuracy and precision are monitored by the analysis of blanks, reference materials, and replicate samples. ALS Chemex also maintains an extensive library of international and in-house standards for quality control purposes.

The sample preparation procedures consist of drying, crushing and splitting a 300g subset from the original pulp and pulverizing to 75 microns, taking a 50g split of this for a 3-hour hot aqua regia digestion, and following with a fire assay for gold using an Atomic Absorption Spectrometry (AAS) finish. Samples were initially analyzed for 34 elements, including gold and silver. Elements other than gold were analyzed using a four acid digestion and ICP AES method.

For any samples with more than 5 g/t gold, a gravity finish is used. Other elements are analyzed with an ICP procedure, with samples having more than 100 g/t silver followed with fire assay and a gravity finish and samples with more than 1% copper, cobalt, molybdenum, nickel, lead or zinc followed with an AAS analysis. The author believes that the preparation, security and analytical procedures used for the verification samples are adequate and meet or exceed industry accepted standard

In each sequence of twenty samples, Cerro Cazador inserts three control samples for verification of laboratory quality. These include one blank sample (established barren crystal tuff), one core quarter duplicate, and one standard (3 different standards are purchased from an accredited lab and rotated periodically).

14.0 Data verification

Verification of the data on which the La Josefina resource estimate consisted of auditing the data in the electronic database provided by Cerro Cazador, reviewing and analysis of the results of Cerro Cazador QA/QC program.

A site visit was undertaken on March 15th to March 20th, 2010 and from April 19th to 21st 2010. All the areas and targets were examined in place. Twenty randomly chosen drill holes were audited at La Josefina logging facilities that includes checking marking, sampling, splitting and its matching with geological logs (lithology, alteration, structure).

14.1. Data Base audit

14.1.1. Drill Collar

For its drill-hole collar audit, Cerro Cazador obtained digital data files prepared by the surveyors who have surveyed collar locations for the company. The



digital data files were compared to the collar locations in Cerro Cazador's project database.

While on the site in March 2010, the author checked the locations of 25 drill holes spread over the property. Collar locations were collected using a handheld GPS, and thus are subject to the precision limits of such an instrument. This type of check does not provide survey-level accuracy but does confirm that drill holes are in the general location stated by the company, within about plus or minus five meters.

The azimuths and dips of the plastic pipes that are stuck in the tops of the drill holes to mark their locations were measured using a Brunton compass with a built-in clinometer. The plastic pipes do not necessarily mimic the exact orientations of the drill holes, but this type of check is likely to identify gross errors in reporting the drill-hole collar orientations.

Both the check using the surveyors' digital data files, and the field checks using a hand-held GPS and compass, indicated that the locations and collar orientations of the drill holes in the project database are correct.

14.1.2. Down-hole survey

The down-hole survey was done using a Reflex EZ-Shot – A single shot magnetic survey instrument that generates readings at the bottom of the drill hole and every 50 m towards surface. Those readings were corrected by magnetic declination to get true north azimuths. Hard copies data of downhole surveys were compared against Cerro Cazador digital data base and no major issues were found, only one reading was treated as outlier because the vein intersections in that drill hole was in a highly improbable location.

14.1.3. Geological Data

The author did not do a record-by-record audit of the geological data that are in the database, such as lithologies, structures and alteration types. However, the procedure used for modeling the mineralized zones and lithologies on sections is a very effective means of checking that the geological data in the database make sense. The modeling is done using drill-hole sections plotted on paper using the database data. The interpretations are done with the original drill logs at hand, as well as photographs of the core.

The modeling was done by the author and Cerro Cazador geologists working together. If there are issues with the geological data in the database, they become apparent.



14.1.4. Audit of Analytical Data

During the field visit on March 2010, Cerro Cazador provided an electronic data base for the La Josefina project, also including an electronic copy of the assay certificates. This made it possible for the author to check, independently of Cerro Cazador the data base integrity. Using queries in Microsoft Access©, assays were compared against lab assays certificates.

Experience shows no database is ever perfect, the La Josefina data base was found to be remarkably accurate, in the sense of being almost free of dataentry errors. Only minor issues were identified, and those were resolved through a series of email communications with the on-site database manager.

14.1.5. Specific Gravity Data

On site, Cerro Cazador does its own measurements of specific gravity, using a conventional water immersion method on pieces of drill core. The specimens used for specific gravity measurements are coated with paraffin wax to prevent water from entering pores and vugs. The weight of the wax is taken into account when calculating the specific gravity.

The author observed Cerro Cazador's technicians doing the specific gravity measurements and checked the calculation procedure. No procedural deficiencies were noted.

14.2. Quality Control and Quality Assurance

UAKO had undertaken a review and analysis of data obtained from the 2007-2009 diamond drilling exploration programs. For completion of this task, UAKO had access to the results obtained for 21727 core samples collected by Cerro Cazador and submitted for assays to three laboratories: ALS-Chemex, Alex Stewart Assayers and Acme Labs.

Core sampling was thorough and has been done to industry standards. Chain of custody and security issues are not addressed but given the nature of the program and volume of samples, no concerns have been raised. Sample preparation and analytical procedures also conform to industry standards.

QA/QC programs should be compliant to standards that are high enough to ensure that the accuracy and precision of the sampling and analytical process are at an acceptable level. This review was carried out with the purpose of having an assessment of quality of data and lab's performance in order to establish the most suitable QA/QC procedures to be applied in follow up exploration tasks and verify data validity to be used in resource estimation.

The assay QA/QC procedures performed by Cerro Cazador personnel was industry standard and included collection of core duplicate samples, insertion



of certified reference samples (standards) and blanks. Additionally, coarse reject and pulp duplicates assays were requested from the laboratories. A summary of control samples available to UAKO is presented in Table 14.

Type of Sample	# samples	%				
Total # of samples	21727	100,00%	Actual % after removing			
			duplicates *			
Control samples	3782	17,41%		14,57%		
Blanks	437	2,01%				
Standards	868	4,00%	Valid duplicates		Removed Dup	olicates*
Duplicate samples	2477	11,40%	(8,57%)	1861	Both, original	616
Core duplicate	875	4,03%	(3,01%)	655	below the	220
Coarse reject duplicates	797	3,67%	(2,83%)	615	detection limit	182
Pulp duplicate	805	3,71%	(2,72%)	591		214

Table 14 - Summary of Cerro Cazador QA/QC program

Control samples detailed in Table 14 (standards, blanks and duplicate samples), accounted for approximately 17.41 % of all the samples. The insertion frequency was as follows: 2–3 blanks, 3–4 standard and 15-20 duplicate samples per one hundred samples included in the submission batch. Reliable control of sample precision is achieved by using approximately 5% to 10% of field duplicates and 3% to 5% of coarse reject and pulp duplicates (Abzalov 2008). A total of 616 duplicate samples were removed because both, original and duplicate assays run below the detection limit, the actual percentage of control samples.

14.2.1. Blank Samples performance

Blanks are samples or pulps that are known to contain negligible (effectively zero) contents of an element or elements (metals) for which assays are being determined. They are used for two main purposes, (1) to monitor contamination during subsampling and (2) to monitor contamination in the analytical environment. Blanks are not particularly effective for this latter purpose because many of the low-grade/host rock samples can be near the analytical detection limit.

As the rest of samples, blanks were assayed by two labs: 37 samples by Alex Stewart (8% of all blanks) which returned results below the detection limit and 408 samples by ALS Chemex (92%), within this group 73 samples (18%) returned values more than detection limit for Au and 74 (18%) for Ag.

Practical detection limits were assumed to be as indicated by the laboratory and plotted as positive values in the following Figures 11 and 12.



Two warning lines, one at ten times the detection limit and the second at twenty times detection limit were plotted as references, none of the samples assayed by ALS Chemex exceeded twenty times the detection limit and only one of them returned more than ten times the detection limit. All 37 blank samples assayed by Alex Stewart show constant values below detection limit, this implies that blank samples were probably recognized by the laboratory personnel and likely to have not been assayed. (Figure 13)



Figure 11 – Results from blank samples for Au plotted in chronological order. Vertical line on the right side divides samples assayed by ALS Chemex and Alex Stewart respectively. There is only one sample exceeding ten times the detection limit value (Sample CCSA 29979), its preceding sample (Sample CCSA 29978) is a very low grade sample so the almost negligible contamination could be inside lab.



Figure 12 – Same as Figure 11 for Ag. The results are within acceptable limits because none sample reaches ten times the detection limit (5 g/t).





Figure 13 – Blanks against preceding samples. The highest value in blanks is not influenced by previous sample.

Blank sample assays in general returned low values and in the author's opinion they did not show any evidence of either significant contamination or incidents of switching during sample preparation. Figure 17 shows the relationship of blanks and preceding samples, high values of samples do not influence blank assays.

14.2.2. Reference Samples – Standards

A total of thirteen different certified reference samples were used for the QA/QC program addressed. Standards were obtained from three commercial suppliers: Geostats Pty Ltd, Rocklabs and Ore Research & Exploration Pty. Ltd.

Eleven standards for gold, one for gold-silver and one for gold-copper were inserted, this implies that the QA/QC procedures were strongly focused on gold assays and more assays of reference samples for base metals and silver should be considered regarding the polymetalic nature of La Josefina mineralized structures.

A summary of certified values for each standard provided by the supplier labs is shown in Tables 15, 16 and 17.

ROCKLABS CRM								
	Certified Control Values							
	50 gram Fire Assay							
Code	Au g/t	Std. Dev.	Conf.	COV %	Ag g/t	Std. Dev.	Conf.	COV %
			Int.+/-				Int.+/-	
OxN62 (148)	7.706	0,117	0,046	1,5				
OxC58 (77)	0,201	0,007	0,003	3,4				
OxN49 (10)	7.635	0,189	0,08	2,5				

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OxH52 (234)	1.291	0,025	0,011	1,9				
OxC44 (34)	0,197	0,013	0,005	6,5				
SN38 (162)	8.573	0,158	0,061	1,8				
SN16 (33)	8.367	0,217	0,087	2,6	17,64	0,96	0,42	5,4

GEOSTATS PTY LTD CRM							
	Certified Control Values						
Product Code	!	50 gram Fire	Fire Assay Aqua Regia Digest			Digest	
(assayed)	Au g/t	Std. Dev.	Conf. Int.+/-	Au g/t	Std. Dev.	Conf. Int.+/-	
G397-2 (26)	4,49	0,18	0,043	4,33	0,27	0,068	
G398-2 (12)	0,5	0,04	0,009	0,42	0,08	0,02	
G398-7 (4)	2,71	0,14	0,03	2,48	0,24	0,061	
G399-6 (28)	2,52	0,14	0,019	2,43	0,18	0,033	

Table 16 – Geostats CRM specifications

ORE RESEARCH & EXPLORATION PTY. LTD. CRM							
Code	Au g/t	Std. Dev.					
OREAS_10PB (50)	7,15	0,19					
OREAS_52PB (50)	307	17	3338	77			

Table 17 – Ore Research CRM specifications

14.2.2.1. Standards performance

For evaluating the standards sample's performance, control charts were constructed for each standard and for each documented element (gold, silver and copper). The values reported from the inserted standard samples were plotted in a time sequence. Lines corresponding to mean value of assays (green), certified mean (black), moving average for ten samples period (red curve), AV±2*SD (red lines) of samples and AV±2SD of certified data (blue lines) were also plotted. In principle, the standard values should lie within the AV±2*SD boundaries to be accepted. Otherwise, these values are qualified as outliers. However, isolated values within the AV±3*SD limits were also accepted. The following figures show the standard's performance (Figures 14 to 28).





Figure 14 - The sample assays show higher variability than that accounted for by certified material. The average is below the expected value. A few samples are out of control limits.



Figure 15 - Reasonable variability, average of samples is below the expected value, three samples out of limits one of them extremely low, the three low values influence the path of the moving average showing a downward trend more pronounced than it actually is. All assays by ALS Chemex in 2008.





Figure 16 - Reasonable variability, strong bias, all the samples are below the expected value, six of ten samples out of limits.



Figure 17 - High variability, average is below the expected value, one sample out of limits.





Figure 18 - Reasonable variability, bias average which is below the expected value, no samples out of limits.



Figure 19 - Many changes in variability, the average is below the expected value, seven samples out of limits and a strong trend downward for the last 30 samples.





Figure 20 - Some changes in variability, the average is over the expected value, two samples out of limits and a strong trend downward for the last 30 samples.



Figure 21 - Only 32 standard samples to monitor Silver assays. Some changes in variability, the average coincides with the expected value, two samples out of limits.





Figure 22 - Not so strong changes in variability, the average is below the expected value, one sample is out of limits.



Figure 23 - Not so strong changes in variability, the average coincides with the expected value, none sample is out of limits.





Figure 24 - No changes in variability, the average is below the expected value, two samples out of limits.



Figure 25 - Changes in variability, the average is slightly below the expected value, none sample is significantly out of limits but a strong trend upward is observed at the end of the line, also shown by the moving average.




Figure 26 - Weak changes in variability, the average is below the expected value, in the middle of the sequence several samples are over the sample's average. Downward trend strongly influenced by two outliers out of control limits.



Figure 27 - No changes in variability, the average is over the expected value, the last sample is out of control limits.





Figure 28 - Changes in variability, the average is below the expected value, too many samples out of AV±1SD, the last sample is out of control limits.

As a guide, the intervals generated by addition of SD to the average, can be regarded as informational (1SD), warning or rejection for multiple outliers (2SD), or rejection for individual outliers (3SD). The standard's results should be carefully monitored to solve problems in advance regarding the control of laboratory accuracy.

The reviewed standard's performance shows several issues, although it is between industry acceptable behaviors.

14.2.3. Duplicates

Three types of duplicates were included for monitoring lab's precision: core duplicates, coarse reject duplicates and pulp duplicates. Figures 29 to 38 show scatter plots of original versus duplicate samples for gold and silver separated by type of duplicate: core, coarse reject and pulp.

For evaluating the check samples, Reduction-to-Major-Axis (RMA) plots were constructed for the studied elements. The RMA method offers an unbiased fit for two sets of pair values (original samples and check samples) that are considered independent from each other.

Descriptive statistics for each one of the duplicate types (Table 18) shows high values of kurtosis and skewness which are out of limits of -2 and +2 that allow consideration of the data as having a normal distribution. These prevent the use of Thompson and Howarth approach to evaluate precision.

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Core Duplicates –Descriptive Statistics								
	AUO	AUD	AGO	AGD				
Mean	0,288	0,289	9,3051	10,008				
Median	0,029	0,027	2	2				
Std. Dev.	1,485	1,384	32,412	36,277				
Variance	2,206	1,914	1051,049	1315,999				
Kurtosis	166,735	132,484	115,666	75,707				
Skewness	11,790	10,426	9,382	8,140				
Minimum	0,005	0,005	0,5	0,5				
Maximum	24,9	21,1	508	419				
Frequency	655	655	575	575				

Coarse Reject Duplicates – Descriptive Statistics								
	AUO	AUD	AGO	AGD				
Mean	0,232	0,224	14,722	14,045				
Median	0,025	0,028	2,5	2,25				
Std. Dev.	0,986	0,959	79,063	78,280				
Variance	0,973	0,919	6250,967	6127,740				
Kurtosis	175,294	191,543	280,195	281,134				
Skewness	11,353	11,861	15,623	15,730				
Minimum	0,005	0,005	0,5	0,5				
Maximum	17,85	17,8	1490	1474				
Frequency	614	614	442	442				

Pulp Duplicates – Descriptive Statistics								
	AUO	AUD	AGO	AGD				
Media	0,428	0,424	14,215	13,168				
Median	0,032	0,03	2,6	2,2				
Std. Dev.	1,933	1,916	56,339	51,810				
Variance	3,736	3,671	3174,144	2684,246				
Kurtosis	101,983	107,495	136,267	127,336				
Skewness	9,151	9,378	10,439	10,161				
Minimum	0,005	0,005	0,5	0,5				
Maximum	26,1	26,4	875	783				
Frequency	590	590	449	449				

Table 18 – Dupl	icates descriptive	statistics
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*AUO= original sample assay value

*AUD= duplicate sample assay value

14.2.3.1. Core Duplicates

Core duplicates were obtained from splitting half core in two separate samples equivalent to 1/4 core, each one bagged and labeled separately. Core duplicates reflect all levels of errors from its first splitting to analytical error. These features are evidenced in the Figures 29 and 30 which show the moderate to high variability





Figure 29 – Scatter plots and RMA model line (black) for gold in core duplicates. The plot shows a bias in samples of high grades. The variability is likely due to the nature of sampling method, core splitting in the field.



Figure 30 – Scatter plots and RMA model line (black) for silver in core duplicates. The plot shows a bias in samples of high grades. The variability is likely due to the nature of sampling method, core splitting in the field.





14.2.3.2. Coarse Reject Duplicates

Figure 31 – Scatter plot and RMA model line (black) for gold in coarse reject duplicates. The plot shows a bias in samples of high grades. The only outlier has been removed.





The removed outlier (original and duplicate) is listed in the table below

Drill Hole	Removed Samples	Au g/t	Ag g/t	Cu g/t	Pb g/t	Zn g/t	Certificate	Lab
SVN-D07-009	CCSA13108	4,53	8,8	26	31	106	ME08005149	ALS
	CCSA13109	44,2	3,6	19	22	119	MEN09000746	ACME





Figure 33 - Relative difference plot for gold in coarse reject duplicates.



Figure 34 - Relative difference plot for silver in coarse reject duplicates.



14.2.3.3. Pulp Duplicates



Figure 35 – Scatter plot and RMA model for gold from pulp duplicates.



Figure 36 – Scatter plot and RMA model for silver from pulp duplicates.





Figure 37 - Relative difference plot for gold in pulp duplicates.



Figure 38 - Relative difference plot for silver in pulp duplicates.

14.2.3.4. An Alternative approach: The Hyperbolic Method

This evaluation procedure of duplicate samples involves the preparation of Min-Max plots, where the maximum and minimum values of the sample pairs *Gold - Silver Resource Estimate for the La Josefina Project* Page 80



are plotted in the y and x axis, respectively. This way, all the points are plotted above the x=y line.

Linear equations (y=mx; y=mx+b) are often used for evaluating the duplicate data, but the decrease of precision near the detection limits generally leads to conciliatory non-conventional solutions when dealing with such low values. To prevent this problem, with the hyperbolic method each duplicate pair ("oi" and "di", where "oi" is the original value and "di' is the duplicate value) is evaluated against the hyperbolic quadratic equation $y^2=m^2x^2+b^2$ (for x, y, where y is defined as max [oi, di], x is defined as min [oi, di], m is the slope of the asymptote and b the value of the intercept). Whereas near the detection limits the hyperbolic line (considered as the failure line) opens to allow for lower precision (higher acceptable values of the relative error), along the rest of the interval it tends asymptotically to a line with slope m.

The value of m depends on the limiting relative error required for the particular type of duplicate: 1.35 for twin samples (corresponding to a 30% relative error), 1.22 for coarse duplicates (corresponding to a 20% relative error) and 1.11 for pulp duplicates (corresponding to a 10% relative error). The value of b is conditionally established as a certain multiple of the detection limit (in this case, 20 times for twin samples, 10 times for coarse duplicates and 5 times for pulp duplicates). Sample pairs with relative errors exceeding the limiting values according to the equation (situated above the failure line) are considered failures and are flagged for review.

Figures 39 to 45 show the evaluation of duplicates samples using the hyperbolic approach, plots are Min-Max contrasting against a y=x line and a hyperbole.

^{*} Taken from Armando Simon, AMEC Chile.

¹ This procedure has been developed by Scott Long (AMEC).

² Relative error: calculated as the absolute value of the difference between the original and the duplicate values, divided by the average of the two values.





Figure 39 - Hyperbolic method for gold core duplicates.



Figure 40 - Hyperbolic method for silver core duplicates.





Figure 41 - Hyperbolic method for gold coarse reject duplicates.



Figure 42 - Hyperbolic method for silver coarse reject duplicates.





Figure 43 - Hyperbolic method for gold pulp duplicates.



Figure 44 - Hyperbolic method for silver pulp duplicates.



Pulp Duplicates - Ag - Low grade amples



Figure 45 - Low grade silver samples showing hyperbolic method detecting failed samples.

14.2.4. Conclusion and comments about QC Program

-On the basis of this review and data analysis, UAKO concludes that the Au accuracy during the 2007-2009 drilling exploration campaigns was acceptable.

-Ag accuracy was not properly assessed due to fact that only one inserted standard was used to do this. It presents the same situation for Copper.

-Blank samples were assayed and most of them yielded values either below the detection limits or below the ten times DL line, therefore, no obvious Au and Ag cross contamination was identified during sample preparation at labs.

-The RMA plots for Au and Ag. The RMA statistics can be seen as presented in Figures 39-40-41-42-45-and 46. After excluding a few outliers the plots indicated a good fit between the check assays and the original assays.

-UAKO also tried to evaluate the possible significance of the sampling error. With this purpose, UAKO prepared Max–Min plots for Au and Ag, and processed the duplicate samples. This test resulted in very low percentage of failures for Au (15,1 - 1,4 and 3,9 %) and similar low percentages of failure for Ag (4,3 - 2,3 and 9,1%). Precision determination for Au in core duplicates is 15,1 % which is considered acceptable despite the fact that it is higher than 10 % taking into account the likely nugget nature of gold that causes inhomogeneity in samples. Most of the failures were actually very close to the failure lines. Therefore, UAKO infers that no significant sampling error during the drilling campaigns was carried out.



15.0 Adjacent Properties

The Deseado Massif has a myriad of epithermal gold-silver and mesothermal lead-zinc-copper occurrences and prospects. The region currently has four producing mines, several developing operations, and numerous advanced exploration properties. Although none of the producing or developing properties are adjacent to La Josefina, they are mentioned here because they are all within the Deseado Massif epithermal district and have geology and styles of mineralization generally similar to La Josefina.

The producing mines are:

1) Cerro Vanguardia, a major gold-silver mine owned by Anglogold Ashanti and Fomicruz

2) Mina Martha, a small, but very high-grade silver operation owned by Coeur d'Alene Mines

- 3) San Jose, a recently opened joint operation by Hochschild and Minera Andes
- 4) Manantial Espejo, owned by Pan American Silver

The developing projects are:

- 1) Don Nicolas-Martinetas by Hidefield/MIRL Limited
- 2) Cerro Negro by Andean Resources
- 3) Cerro Moro by Extorre Fomicruz S.E.
- 4) Pinguino by Argentex
- 5) Lomada de Leiva by Patagonia Gold
- 6) Cap Oeste by Patagonia Gold
- 7) Las Calandrias by Mariana Resources

The La Josefina Project itself is surrounded on the west, south and in part on the east by a number of early-stage to semi-advanced mineral properties (Figure 2). The properties are held by a number of various companies and individuals, including Fomicruz on the west and Cerro Cazador on the east. Approximately half of the surrounding properties are cateos, exploration concessions with a life span of generally less than four years, and the other half consist of MD's which supposedly represent semi-advanced mineral properties with an indefinite life span. The surrounding ground north and northeast of La Josefina is mostly open and unclaimed. Public information is available only for the following two properties.



15.1. El Gateado – El Lobuno

El Gateado is a 100-square kilometer cateo adjacent to La Josefina on the west; the 70-square kilometer Lobuno cateo adjoins El Gateado on the south. They were acquired by Cerro Cazador in early-2006. According to public news releases, Cerro Cazador initiated drilling on the Gateado property in late-2006. The first hole drill hole on the property, GAT-DDH06 001, intersected strongly anomalous gold throughout its entire 150-meter depth, highlighted by a 11.3-meter interval averaging 3.65 g/t gold, including 8.2m @ 4.50 g/t Au, with thin high-grade assays such as 0.85m @ 11.7 g/t Au and 0.60m @ 8.24 g/t Au. The mineralization is in a breccia body following west-northwest structures in epithermally-altered felsic volcaniclastic rocks of the Chon Aike Formation. No work has been done on the El Lobuno cateo.

15.2. La Valenciana

The La Valenciana is another Provincial Mineral Reserve held by Fomicruz. It lies immediately adjacent to La Josefina on the west. La Valenciana was established by Fomicruz in 1994 when areas of anomalous gold and silver, as well as copper, lead, and zinc, were identified on the property. Their follow up work included trenching and diamond drilling. The area has been advanced to MD's.

16.0 Mineral Processing and Metallurgical Testing

To date there has been no mineral processing or metallurgical test work completed on samples from La Josefina.

17.0 Mineral Resource and Mineral Reserve Estimates

The resource estimate reported herein is a new resource estimate for the La Josefina Project including only gold and silver contents.

17.1. Drill Hole Database

The Project database was closed for resource estimation purposes as at April 2010. The database used contains whole information from the La Josefina Project and includes:

- 311 holes
- 44,398.0 m
- 22,476 assay determinations



This database was filtered for resources estimation and due to lack of QA/QC procedures on historical drilling (Minamerica and Fomicruz) only Cerro Cazador QA/QC compliant data was used. Data base was filtered down to:

- 240 core drill holes
- 37,499.40m
- 18,645 assay determinations

Although historical assay values were not included on resource estimation, historical drill holes were used as guides to confirm veins, lithology and structures continuity.

17.2. Construction of geological model

The geological model was constructed using Gems 6.1[®] commercial mine modelling software. Four domain zones were defined to represent the different vein systems at La Josefina. Domains were defined based on geology (lithology and structure) that reflect different styles of mineralization. These elements were interpreted on paper cross sections plotted with drill data (geology and assays values), topography and surface geology, and then compiled into solid shapes representing the mineralised domains. Geological model outlines for La Josefina deposit are shown in Figure 46 and 47.

At La Josefina deposit, domains are referred as Sinter area (Sinter), Amanda y Cecilia Veins (AYC), Sur Vein (VS), Belen, Ailín and Latitas Veins (BLA).

Each domain is made up of several discrete mineralised zones contained in a set of solid shapes generally parallel to each other, configuring a sheeted vein structure (Figure 48-49-50-51).

La Josefina region is subject to very shallow weathering with primary outcrop encountered over much of the project area. The model has not been domained by weathering profile. All of the mineralisation and surrounding country rock is assumed as primary.





Figure 46 - Plan view of different domains





Figure 47 - Isometric view looking NNE showing domains solids





Figure 48 - Isometric view, Sinter domain



Figure 49 - Isometric view, Amanda y Cecilia domain (AYC)





Figure 50 - Isometric view, Veta Sur domain (VS)



Figure 51 - Isometric view, Belen – Ailin and Latitas domain (BLA)



17.3. Exploration Data analysis

The database contains both raw assay data for gold, silver, copper, lead, zinc and certain other elements. Appendix C summarizes the statistics of raw data for gold and silver for La Josefina, based on the defined domains.

17.4. Composites

The majority of assays in mineralisation were sampled between 0.1 to 4.0 m lengths. The assays for Au and Ag were composited on 1 m downhole interval at the top of the drillhole. The 1 m interval was chosen to regularize the assays intervals which are predominantly 0.7 to 1.2 m length.

Composite samples were generated for all the drillholes, but statistics for composite samples within each domain is described on Appendix C. Residual composites were sometimes generated on both hanging wall and football boundaries when sampling interval exceeds domain boundaries. Residual composites less than 0.5m in length were disregarded in the grade estimation process.

Non-assayed intervals were assigned a value of 0 in the composite generation process.

17.5. Capping

The La Josefina database was examined for the presence of local high grade outliers that might adversely impact the quality of the resource estimate, and would require the assays grades to be capped.

An exploratory exercise with capping Au and Ag values was carried out on raw data prior to compositing .Individual gold assays were capped at 10, 20, 25 and 30 ppm and silver assays were capped at 200 ppm for all La Josefina data. All the four domains show amount of high values less than 2%. The results obtained from this exercise are shown in Appendix C.

It was determined that individual gold assays do not show a significant amount of values greater than 25 ppm Au and was decided do not conduct any capping procedure as well as for Ag.



17.6. Specific Gravity

Specific gravity data for all veins was estimated using an inverse distance squared (ID2) algorithm and a block model for each domain was built (Figure 52). Estimation was based on 1480 samples measured by Hunt Mining at field following international protocol and checked by the author. This working methodology calculates a specific gravity for each block that is more realistic than just averaging specific gravity sample population within domains.



Figure 52 – Specific gravity model for Amanda y Cecilia domain(AYC)

17.7. Variography

The most suitable way to evaluate the continuity of highly skewed regionalized variables such as Au and Ag is the correlogram.

Correlograms were computed for Au and Ag to determine directions and distances of grade continuity within each domain.

A spherical model with nugget effect fit adequately the experimental correlogram and it was, for each domain, the basis of kriging search criteria.



17.8. Block Model

Because of the size of project area and the location of the different domains, the resource area was split in three different block models. One of them for Sinter domain, another including AYC and VS domains for proximity reasons and the last one for BLA domain.

• Sinter model

The model include veins from Sinter domain

	Min	Max	Block size (m)	Number of blocks	
East	2473922.32	2474582.32	5	132	
North	4701636.86	4702616.86	5	196	
Elevation	330	810	5	96	

Rotation counters clockwise 12.66^o

• AYC and VS model

Because AYC and Vs domains are located close to each other, a single block model was used for both domains

	Min	Max	Block size (m)	Number of blocks	
East	2472931.59	2474121.59	5	238	
North	4699303.06	4700923.06	5	324	
Elevation	240	820	5	116	

Rotation counters clockwise 28.37^o

• BLA model

The model comprise veins from BLA domain

Min	Max	Block size (m)	Number of blocks	
2471843.71	2472943.71	5	220	
4697831.38	4698911.38	5	216	
490	810	5	64	
	Min 2471843.71 4697831.38 490	MinMax2471843.712472943.714697831.384698911.38490810	Min Block size (m) 2471843.71 2472943.71 5 4697831.38 4698911.38 5 490 810 5	

Rotation counters clockwise 47.4º

Block model construction data included:

- Block coordinates
- Gold and Silver grade estimation
- Specific gravity



17.9. Grade Estimation parameters

Gold and silver were estimated using Ordinary Kriging and grades were estimated for gold and silver only. The gold equivalent grades were calculated from the estimated gold and silver grades.

Domain	Flement	Pass	Search Ellinsoid (deg) Search Distances (m)			Min.	Max Comp. P/Drillboles			
Domain	Liement	F 833	Jearch	Linpsolu	ueg)	Jean	Semi-		comp.	r/Diminoles
			Rotation	Dip	Tilt	Major	Major	Minor		
		1	157.5	-22.5	247.5	25.1	13.8	26.4	5	2
Sinter	Au	2	157.5	-22.5	247.5	54.2	27.7	52.9	3	1
		3	157.5	-22.5	247.5	108.3	55.4	105.8	1	1
		1	46.6	-40.8	157.5	42.7	42.9	32.2	5	2
AYC	Au	2	46.6	-40.8	157.5	85.3	85.8	64.5	3	1
		3	46.6	-40.8	157.5	128.0	128.7	96.7	1	1
		1	45.0	0.0	135.0	41.7	44.3	39.0	5	2
VS	Au	2	45.0	0.0	135.0	83.3	88.5	78.1	3	1
		3	45.0	0.0	135.0	125.0	132.8	117.1	1	1
		1	135.0	-22.5	225.0	77.3	73.1	39.3	5	2
BLA	Au	2	135.0	-22.5	225.0	154.6	146.0	78.6	3	1
		3	135.0	-22.5	225.0	231.9	219.3	117.9	1	1
			0.0	0.0	67.5	24.0	45.0	10 5		2
Cistor	A =	1	0.0	0.0	67.5	34.9	15.0	10.5	5	2
Sinter	Ag	2	0.0	0.0	67.5	70.0	30.0	21.2	3	1
		3	0.0	0.0	67.5	140.0	60.1	42.4	1	1
		1	157.5	-67.5	157.5	40.7	44.8	44.3	5	2
AYC	Ag	2	157.5	-67.5	157.5	81.5	89.6	88.6	3	1
	_	3	157.5	-67.5	157.5	122.2	134.3	132.9	1	1
		1	135.0	0.0	45.0	42.9	42.5	30.2	5	2
VS	Ag	2	135.0	0.0	45.0	85.8	85.0	60.3	3	1
		3	135.0	0.0	45.0	128.6	127.5	90.5	1	1
		1	45.0	0.0	135.0	57.3	104.2	49.1	5	2
BLA	Ag	2	45.0	0.0	135.0	114.7	208.4	98.2	3	1
		3	45.0	0.0	135.0	172.0	312.5	147.3	1	1

<u>Estimation</u>	<u>Parameters</u>	

Table 24 – Search	ellipsoid	parameters
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Radius and ellipsoid orientations were based mainly on geological controls (vein orientation/width), sample distribution and variography (correlograms) results. Table 24 shows the ellipsoid orientations and radius used for all the domains at La Josefina. Grades were interpolated into the solid mineralized domains utilizing only composites that were constrained to the mineralized domain.

17.10. Model Validation

The blocks model was validated by visual inspection of grade blocks against composite by section, elevation and domain. As general rule the block grades compared appropriately to the composites grades and do not display anomalies.

Also a nearest neighbor estimation was completed and compared the two estimates visually and tested for global bias and conservation of metal by comparing statistics at 0.0 g/t Au. The contrast of the two methodologies returned differences of less than 2 %.

Figure 53 and 54 display gold and silver grade blocks within AyC domain.



Figure 53 – AYC domain, Silver grades blocks within domain





Figure 54 – AYC domain, Gold grades blocks within domain

17.11. Mineral Resource classification

Based on the study herein reported, delineated mineralization of the La Josefina deposit is classified as a resource according to the following definitions from National Instrument 43-101 and from CIM (2005):

"In this Instrument, the terms "mineral resource", "inferred mineral resource", "indicated mineral resource" and "measured mineral resource" have the meanings ascribed to those terms by the Canadian Institute of Mining, Metallurgy and Petroleum, as the CIM Definition Standards on Mineral Resources and Mineral Reserves adopted by CIM Council, as those definitions may be amended."

The terms Measured, Indicated and Inferred are defined by CIM (2005) as follows:

"A Mineral Resource is a concentration or occurrence of diamonds, natural solid inorganic material, or natural solid fossilized organic material including base and precious metals, coal and industrial minerals in or on the Earth's crust in such form and quantity and of such a grade or quality that it has reasonable prospects for economic extraction. The location, quantity, grade, geological characteristics and continuity of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge."

Gold - Silver Resource Estimate for the La Josefina Project



"The term Mineral Resource covers mineralization and natural material of intrinsic economic interest which has been identified and estimated through exploration and sampling and within which Mineral Reserves may subsequently be defined by the consideration and application of technical, economic, legal, environmental, socio-economic and governmental factors. The phrase 'reasonable prospects for economic extraction' implies a judgement by the Qualified Person in respect of the technical and economic factors likely to influence the prospect of economic extraction. A Mineral Resource is an inventory of mineralization that under realistically assumed and justifiable technical and economic conditions might become economically extractable. These assumptions must be presented explicitly in both public and technical reports."

Inferred Mineral Resource

"An 'Inferred Mineral Resource' is that part of a Mineral Resource for which quantity and grade or quality can be estimated on the basis of geological evidence and limited sampling and reasonably assumed, but not verified, geological and grade continuity. The estimate is based on limited information and sampling gathered through appropriate techniques from locations such as outcrops, trenches, workings and drillholes."

"Due to the uncertainty that may be attached to Inferred Mineral Resources, it cannot be assumed that all or any part of an Inferred Mineral Resource will be upgraded to an Indicated or Measured Mineral Resource as a result of continued exploration. Confidence in the estimate is insufficient to allow the meaningful application of technical and economic parameters or to enable an evaluation of economic viability worthy of public disclosure. Inferred Mineral Resources must be excluded from estimates forming the basis of feasibility or other economic studies."

Indicated Mineral Resource

"An 'Indicated Mineral Resource' is that part of a Mineral Resource for which quantity, grade or quality, densities, shape and physical characteristics, can be estimated with a level of confidence sufficient to allow the appropriate application of technical and economic parameters, to support mine planning and evaluation of the economic viability of the deposit. The estimate is based



on detailed and reliable exploration and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drillholes that are spaced closely enough for geological and grade continuity to be reasonably assumed."

"Mineralization may be classified as an Indicated Mineral Resource by the Qualified Person when the nature, quality, quantity and distribution of data are such as to allow confident interpretation of the geological framework and to reasonably assume the continuity of mineralization. The Qualified Person must recognize the importance of the Indicated Mineral Resource category to the advancement of the feasibility of the project. An Indicated Mineral Resource estimate is of sufficient quality to support a Preliminary Feasibility Study which can serve as the basis for major development decisions."

Measured Mineral Resource

"A 'Measured Mineral Resource' is that part of a Mineral Resource for grade or quality, densities, shape, which quantity, and physical characteristics are so well established that they can be estimated with confidence sufficient to allow the appropriate application of technical and economic parameters, to support production planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drillholes that are spaced closely enough to confirm both geological and grade continuity."

"Mineralization or other natural material of economic interest may be classified as a Measured Mineral Resource by the Qualified Person when the nature, quality, quantity and distribution of data are such that the tonnage and grade of the mineralization can be estimated to within close limits and that variation from the estimate would not significantly affect potential economic viability. This category requires a high level of confidence in, and understanding of, the geology and controls of the mineral deposit."

UAKO based the mineral resource classification according with CIM guidelines as a combination of number of composite samples, the confidence in geologic interpretations, and confidence in the samples used in a block's estimate.



Blocks that were estimated in the first pass, within 0.5 correlogram range and with a minimum of 5 composite samples, and maximum 2 samples per drill hole were classified as Measured Resources.

All the blocks that were estimated on the second pass, within 1 correlogram range with a minimum of 3 composite samples, and maximum 2 samples per drill hole were classified as Indicated Resources

Blocks estimated on the third pass, within 1.5 search distances and at least 1 composite sample from 1 drill hole were classified as Inferred Resources.

The resource cut-off grade was determined as 0.2 AuEq g/t based on the following discussion.

Discussion – cut-off and mining method selection

A resource estimate statement is a numeric way to display tonnage, grade, metal content and category from a particular ore-body.

NI-43-101reporting rules and CIMM guidelines require that the cut-off grade or economic limit used to define a Mineral Resource must provide "reasonable prospects for economic extraction".

In establishing the cut-off grades, it must realistically reflect the location, deposit scale, continuity, assumed mining method, metallurgical processes, costs and reasonable long-term metal prices appropriate for the deposit.

Cut-off grade is defined as:

"The grade of ore that just will cover all the costs incurred (or charged to) by the operation" (Ore Reserves Estimates in the Real World, Stone & Dunn, SEG Sp. Pub. 3, 1994)

"Being that grade at which potential revenue balances all costs" (Mineral Deposit Evaluation, Annels, A., Chapman & Hall, 1991).

At the present project stage, most of the cost parameters are still unknown. Then, a suitable cut-off grade for La Josefina has to be supported by assumed and gathered data from other similar sized project in the area such as:

• Lomada de Leiva (LS system, located in Santa Cruz province, Argentine).



-Open pit operation

-Cut-off 0.3 Au g/t (at US\$ 650.00 Au Oz or 0.195 Au g/t at US\$ 1000.00 Au Oz)

• San Jose Mine (LS system, located in Santa Cruz province, Argentine).

-Underground operation

-Cut-off US\$ 60.84 (2.37 Au g/t at US\$ 800.00 Au Oz, or 1.89 Au g/t at US\$ 1000.00 Au Oz)

• Manantial Espejo Mine (LS system, located in Santa Cruz province, Argentine).

-Combined underground / open pit operation

-Cut-off 73 Ag g/t. (1.12 Au g/t at US\$ 850.00 Au Oz, or 1.09 Au g/t at US\$ 1000.00 Au Oz)

As well as projects – mines in other regions as;

Gualcamayo (Sediment Hosted, located in San Juan province, Argentine)
 -Open pit operation

-Cut-off 0.3 Au g/t (at US\$ 400.00 Au Oz, or 0.12 Au g/t at US\$ 1000.00 Au Oz)

• **El Quevar** (LS system, located in Salta province, Argentine)

-Open pit operation and likely underground operation

-Cut-off 85 Ag g/t (at US\$ 12.00 Ag Oz, or 68 Ag g/t at US\$ 15.00 Ag Oz)

- La Arena (Epithermal Au-Cu system, located Huamachuco, Peru)
 - -Open pit operation

-Cut-off 0.15 Au g/t (at US\$ 900.00 Au Oz, or 0.135 Au g/t at US\$ 1000.00 Au Oz)

• Magistral Mine (LS, located in Sinaloa, Mexico)

-Open pit operation

-Cut-off 0.3 Au g/t (at US\$ 950.00 Au Oz, or 0.28 Au g/t at US\$ 1000.00 Au Oz)

A heap leaching process would be considered appropriated for this kind of deposit, and consequently, the following costs parameters inherent to the project were adopted for the cut-off calculation. These parameters are in



agreement with those derived from the Scoping Study of Lomada de Leiva Project (Patagonia Gold PLC., August 2008):

- Base Mining Cost US\$/t 1.75
- Processing Cost: US\$/t 3.75
- G&A: US\$/t 0.6
- Gold Price Oz US\$ 1000 (32.15 US\$/ Au g, 30 months weighted average, Feb-2008/Ago-2010).
- Metal recovery of 100%
- Royalty: 6 %

The cut-off grade was calculated by the following equation which is adequate for a very early stage project as La Josefina is. Accounting that many parameters remain unknown until a scoping study reveals the actual cost model (metal recovery, detailed capital costs, NSR, etc.):

(Process cost + Mining cost + G&A) / (Gold Price*Recovery - Royalty)

The calculation returns a cut-off value of 0.2 g/t Au Eq.

In order to verify the validity of the calculated cut-off, UAKO ran a Lerch-Grossman pit optimization exercise with positive results on the AYC and VS orebodies using tight parameters (Gold price US\$ 900.00 Oz, leach recovery 80%, processing costs US\$ 7 /t, etc). The two resulting small pits contain all the resources for AYC and VS at a cut-off 0.2 g/t AuEq (Figure 55).



Figure 55 – View of the open pits at AYC and VS, from pit optimization exercise



Cerro Cazador plans to mine the near surface material by open pit method and, eventually underground methods if further exploration finds additional high grade resources at depth.

The appropriateness of small open pits operation and its transition over the years to underground has been demonstrated at AngloGold Cerro Vanguardia mine, located 100 km East from La Josefina Project. Cerro Vanguardia mine started operation in 1996, mining steep dipping veins by small open pits, resulting in steep slope pits (Figures 56 and 57). Further exploration drilling found high grade resource at depth, allowing its underground extraction.



Figure 56 and 57 – Open pits at Cerro Vanguardia Mine

Based on the previous discussion, UAKO concludes that 0.2 AuEq g/t cut-off is a grade that has reasonable prospects for economic extraction by open pit/heap leach operation and is appropriate considering it as a minimal cut-off for the resource estimation at La Josefina Project.

Mineral resources at the La Josefina Project are summarized on Tables 25-26 and detailed for each domain on Table 27.

Measured Resources									
Cutoff	Tonnes x 1000	Grade	Grade	Grade	Ounces	Ounces	Ounces		
Au Eq g/t		Au g/t	Ag g/t	Au Eq g/t	Au	Ag	Au Eq		
0.2	4 998.67	0.72	16.60	0.97	115 538.19	2 668 357.67	155 561.55		
0.5	2 405.43	1.15	21.62	1.47	88 928.13	1 671 858.11	114 004.75		
0.8	1 404.57	1.52	24.63	1.89	68 697.97	1 112 370.51	85 382.69		

Table 25 - Measured Mineral Resource using AuEq (Gold Equivalent) cut-off*



Indicated Resources							
Cutoff		Grade	Grade	Grade	Ounces	Ounces	Ounces
Au Eq g/t	Tonnes x 1000	Au g/t	Ag g/t	Au Eq g/t	Au	Ag	Au Eq
0.2	1 525.93	0.83	1.81	0.85	40 481.17	88 730.08	41 812.05
0.5	815.95	1.27	1.95	1.30	33 420.29	51 214.99	34 188.47
0.8	502.25	1.67	2.05	1.71	27 043.73	33 103.75	27 537.37

 Table 26 – Indicated Mineral Resource using AuEq (Gold Equivalent) cut-off*

Inferred Resources							
Cutoff		Grade	Grade	Grade	Ounces	Ounces	Ounces
Au Eq g/t	Tonnes x 1000	Au g/t	Ag g/t	Au Eq g/t	Au	Ag	Au Eq
0.2	452.14	0.45	1.21	0.46	6 479.89	17 577.67	6 743.54
0.5	111.22	0.87	1.28	0.89	3 128.80	4 579.24	3 197.49
0.8	34.87	1.44	2.21	1.47	1 615.07	2 476.21	1 652.21

Table 27 – Inferred Mineral Resource using AuEq (Gold Equivalent) cut-off*

*Rounding as required by reporting guidelines may result in apparent differences between tonnes, grade and contained metal content.

*Tonnage and grade measurements are in metric units. Gold ounces are reported as troy ounces.

*Canadian Institute of Mining ("CIM") and Australasian Institute of Mining and Metallurgy ("The AusIMM") definitions were followed for Mineral Resource estimation and classification. As defined, Mineral Resources do not have demonstrated economic viability and Indicated Resources have a higher degree of confidence than do Inferred Resources. The Mineral Resources fall within a volume or shell defined using long term metal price estimates of US \$1000/oz for gold, US \$15/oz for silver (30 months weighted average, Feb-2008/Ago-2010).

*Gold equivalent calculation uses a 30 month weighted average. Gold and Silver were determined from Kitco Gold Precious Metals with a price in US\$. At this time no metallurgy has been completed on this property so 100% recoveries are assumed.

*The Gold Equivalent (AuEq) calculation is as follows:

AuEq = Au(g/t) + (Ag g/t / 66.67)

Au:Ag ratio 66.67



17.12. Discussion – Geological Modeling – Estimation Parameters and categorization

Previous resource estimates at La Josefina includes Au, Ag, Cu, Pb and Zn. Grades and metal contents were reported as individuals and as equivalent gold. The geological modeling process was based on generating a grade shell at 0.5 gold equivalent containing veins and mineralized vein wall rock. That model did not honor the true Au and Ag distribution because areas with dominant base metal contents were included within the grade shell.

Not all the elements included in gold equivalent calculation have reasonable potential to be recovered. Cerro Cazador opinion's was to review the resource estimate process focusing only on gold and silver contents, because base metals are not likely to be recovered as byproducts. So, a new geological modeling approach was applied in order to better reflect the structural control and ore body geometries allowing for a more detailed definition of vein structures. As a result, the new geological model shows that each domain is constituted by a set of thinner sub parallel mineralized structures reflecting in a more realistic way a sheeted vein structure than an isograde shell (Figures 48 to 51).

The grade continuity inside the domains was analyzed by correlograms instead of variograms because its higher robustness for the estimation of grade continuity in highly skewed distributions as Au and Ag showed in the La Josefina Project.

In former resources estimates (including base metals) variography of the different domains showed fairly good similar behavior and matching, supporting the use of the same search criteria for grade estimation in all of the veins.

The calculation of correlograms per domain differentiated a particular behavior of Au-Ag within each one of them. Therefore, the estimation parameters used in the current report were differently defined for every domain (see Table 24).

Resource classification is aimed at providing the estimation grade of a volume with an assessment of it confidence. At the La Josefina Project, resources were Gold - Silver Resource Estimate for the La Josefina Project Page 106



classified as measured, inferred and indicated based on a combination of kriging parameters and geometrical criteria, supported by geological model cross-validation and composite sample confidence, complying CIM guidelines.

Although the use of the same data set (drill holes and samples), the construction of an updated geological model, the use of correlograms to establish estimation parameters and the validation of the block models against geology and composite samples, provides a good confidence on resource classification. A good visual tool to understand the sense of confidence is the number and average distribution of drill holes per domain described as follows:

Domain	DDH	L1(m)	L2 (m)
Sinter	22	50.0	80.0
AYC	84	25.0	30.0
VS	83	25.0	30.0
BLA	47	50.0	25.0



For a detailed view of drill hole distribution see figures 6 to 10.

Previous resource calculation included only Inferred and Indicated resources but no Measured resources. The new resources classification includes Measured resources defined by the confidence in resources estimation process. The following table explains in detail the criteria for classification of Measured resources.

Domain	Element	Distance (max)	Samples (min)	DDH(min)
Sinter	Au	13.2	5	3
	Ag	17.45	5	3
AYC	Au	21.4	5	3
	Ag	22.4	5	3
VS	Au	22.1	5	3
	Ag	21.45	5	3
BLA	Au	38.6	5	3
	Ag	52.1	5	3



VS and AYC domains account for 95 % of the Measured resources, 72 % of Indicated resources and only 18 % of Inferred resources. Those numbers reflects the almost perfect drilling grid used to delineate these domains.

As shown in previous tables, there is a high level of confidence due that sampling locations are spaced closely enough to confirm geological and grade continuity.

A closer drilling or sampling would not greatly improve the geological interpretation and/or confidence in grade distribution, and consequently it would not result in a significantly improved estimate of tonnage, grade, shape and location of the mineralized bodies. After the verification that the quality of the data on which the estimate is based is acceptable, the section of the deposit comprised mainly by VS - AYC and in low proportion BLA, can be classified as Measured.

In the author's opinion, there is in this resource estimate sufficient data quantity and quality to allow the application of technical and economic parameters, and to enable an evaluation of economic viability.


	Measured Resources												
Vein	Cut-off	Tonnes x 1000	Grade	Grade	Grade	Ounces	Ounces	Ounces					
	Au Eq g/t		Au g/t	Ag g/t	Au Eq g/t	Au	Ag	Au Eq					
BLA	0.2	191.67	0.88	1.81	0.91	5 417.22	11 179.59	5 584.90					
Sinter	0.2	0.00	0.00	0.00	0.00	0.00	0.00	0.00					
AYC	0.2	2 844.24	0.71	7.21	0.82	64 903.98	659 085.09	74 789.76					
VS	0.2	1 962.76	0.72	31.66	1.19	45 216.99	1 998 092.99	75 186.89					
Total	0.2	4 998.67	0.72	16.60	0.97	115 538.19	2 668 357.67	155 561.55					
BLA	0.5	106.62	1.32	1.89	1.35	4 541.42	6 470.40	4 638.47					
Sinter	0.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00					
AYC	0.5	1 402.61	1.10	8.85	1.24	49 727.60	399 269.17	55 716.33					
VS	0.5	896.20	1.20	43.94	1.86	34 659.11	1 266 118.54	53 649.94					
Total	0.5	2 405.43	1.15	21.62	1.47	88 928.13	1 671 858.11	114 004.75					
BLA	0.8	76.80	1.60	1.92	1.62	3 939.34	4 746.25	4 010.53					
Sinter	0.8	0.00	0.00	0.00	0.00	0.00	0.00	0.00					
AYC	0.8	803.58	1.46	9.64	1.60	37 640.54	248 988.65	41 375.19					
VS	0.8	524.20	1.61	50.95	2.37	27 118.09	858 635.62	39 996.98					
Total	0.8	1 404.57	1.52	24.63	1.89	68 697.97	1 112 370.51	85 382.69					



Indicated Resources												
Vein	Cut-off	Tonnes x 1000	Grade	Grade	Grade	Ounces	Ounces	Ounces				
	Au Eq g/t		Au g/t	Ag g/t	Au Eq g/t	Au	Ag	Au Eq				
BLA	0.2	83.35	0.41	1.79	0.44	1 098.53	4 802.81	1 170.57				
Sinter	0.2	314.55	0.98	1.61	1.00	9 899.85	16 323.78	10 144.69				
AYC	0.2	507.64	0.69	3.05	0.74	11 282.54	49 716.59	12 028.25				
VS	0.2	620.40	0.91	0.90	0.93	18 200.26	17 886.90	18 468.55				
Total	0.2	1 525.93	0.83	1.81	0.85	40 481.17	88 730.08	41 812.05				
BLA	0.5	17.80	0.90	1.93	0.93	516.35	1 107.30	532.96				
Sinter	0.5	144.25	1.78	1.64	1.81	8 258.69	7 617.18	8 372.95				
AYC	0.5	262.10	1.03	3.48	1.08	8 653.53	29 287.64	9 092.82				
VS	0.5	391.80	1.27	1.05	1.29	15 991.71	13 202.87	16 189.75				
Total	0.5	815.95	1.27	1.95	1.30	33 420.29	51 214.99	34 188.48				
BLA	0.8	8.65	1.22	2.62	1.26	338.44	730.17	349.39				
Sinter	0.8	69.65	3.02	1.67	3.04	6 761.63	3 729.90	6 817.58				
AYC	0.8	154.54	1.30	3.90	1.36	6 469.08	19 375.08	6 759.69				
VS	0.8	269.40	1.56	1.07	1.57	13 474.58	9 268.60	13 613.60				
Total	0.8	502.25	1.67	2.05	1.71	27 043.73	33 103.75	27 540.26				



Inferred Resources												
Vein	Cut-off	Tonnes x 1000	Grade	Grade	Grade	Ounces	Ounces	Ounces				
	Au Eq g/t		Au g/t	Ag g/t	Au Eq g/t	Au	Ag	Au Eq				
BLA	0.2	5.13	0.21	1.55	0.23	33.99	256.35	37.83				
Sinter	0.2	358.88	0.44	1.43	0.47	5 133.89	16 478.39	5 381.05				
AYC	0.2	1.47	0.31	0.01	0.31	14.75	0.56	14.76				
VS	0.2	86.67	0.47	0.30	0.47	1 297.26	842.37	1 309.90				
Total	0.2	452.14	0.45	1.21	0.46	6 479.89	17 577.67	6 743.54				
BLA	0.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
Sinter	0.5	82.38	0.92	1.61	0.94	2 434.12	4 275.87	2 498.26				
AYC	0.5	0.01	0.71	0.03	0.71	0.19	0.01	0.19				
VS	0.5	28.83	0.75	0.33	0.75	694.49	303.37	699.04				
Total	0.5	111.22	0.87	1.28	0.89	3 128.80	4 579.24	3 197.49				
BLA	0.8	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
Sinter	0.8	28.30	1.51	2.55	1.55	1 373.35	2 321.36	1 408.17				
AYC	0.8	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
VS	0.8	6.57	1.15	0.74	1.16	241.72	155.76	244.05				
Total	0.8	34.87	1.44	2.21	1.47	1 615.07	2 477.12	1 652.22				

 Table 28 - Mineral Resource detailed by vein using AuEq (Gold Equivalent) cut-off



18.0 Other relevant data and information

-Mr. Pablo Andrada De la Palomera is conducting geological researching to get his PhD degree at Twente University, The Nederlands and is sponsored by FOMICRUZ. On October 2009 Mr Andrada De la Palomera presented at Geological Remote Sensing Group Annual Meeting, London, a technical paper that introduces a preliminary conceptual and hypothetical geological modeling for The La Josefina deposit. The model is based on variations in the spectral response of hydrothermal alteration minerals and interprets them in terms of their conditions of formation and their location in the paleo-epithermal system (Figure 58).

The geological model place the targets/areas at different levels within a typical ephitermal low sulphidation model, displaying elements and veins distribution suggesting a complete developed epithermal system for the La Josefina.

Using this concept, there is an increasing likelihood to find undiscovered ore shoots from Central Area towards Sinter target, being the former the shallower expression of the epithermal system. At the same time, it leaves the southern part of the project –Piedra Labrada area – in the base metals dominant zone, but preliminary data on the area suggest the opposite.

Although very graphical and useful, De la Palomera geological model is still preliminary and needs the integration of structural and geophysical data in order to generate a precise geological model. The model is based upon the existence of one single epithermal system, but the chance of finding over imposed or telescoped epithermal systems in the La Josefina project still remains open.





Figure 58 – The La Josefina geological model, taken from De La Palomera et.al



19.0 Interpretation and Conclusions

UAKO has visited the La Josefina project, worked with the data, reviewed the work done by Cerro Cazador and calculated mineral resources only for gold and silver.

Conclusions and details in evaluation projects carried out indicate that the La Josefina is a worthy project and presents a viable development target suitable for evaluation to the scoping stage.

Cerro Cazador technical work and efforts are above industry standards.

The La Josefina project results warrant further works (chapter 20), from advance exploration (brownfield) on targets as Amanda-Cecilia and Veta Sur, increase drilling to acquire a better geological understanding of Sinter; Ailin, Belen and latitas veins. Also grass roots exploration in the whole property, mainly focused on Piedra Labrada area.

20.0 Recommendations

The La Josefina mineral resources remain open at depth and along strike. The mineralization is hosted on a main structure (sheeted vein) and its limits have not been defined precisely, possible leaving ore shoots untested along the strike. There are gaps without drilling between the main targets and future drilling should be focused on those areas where veins do not crop out on surface. Appropriate geophysical techniques certainly would help to find blind targets.

The next proposed work program includes in chronological order:

-Detail Structural study of veins

-Interpretation of geophysics by a competent geologist-geophysicist. Also a new geophysical survey including Magnetotelluric techniques as CSAMT or Electrical Tomography will help to find resistive bodies at depth (not outcropping veins).

-Soil geochemical survey on lines oriented perpendicular where structures are supposed to be at depth.

-Geological modeling (data integration to generate and prove a geological model)



These set of studies, together with the geological 3D modeling of well drilled targets (as Veta Amanda and Cecilia) will bring a better framework of geological understanding for future drilling.

Drilling must be focused on three directions:

-Increase resources at Amanda y Cecilia, and Veta Sur, Sinter and Ailin, Belen and Latitas veins

-Build inferred resources in the gaps without drilling.

-At the same time, metallurgical studies and geotechnical studies are recommended to characterize Amanda y Cecilia veins and Veta Sur target.

Chronological steps are aimed to set the basis studies and data gathering for a Scoping study.

A cost estimation of the proposed advance exploration program is summarized in Table 29.

PROGRAM	Place / Amount	<u>COST US\$</u>
Structural study	Property wide	50,000
Geophysics CSAMT – ET	Selected targets	350,000
Geophysics Interpretation	Property wide	50,000
Soil geochemistry, US\$ 20/sample	2000 samples	40,000
Geological Modeling	Property wide	100,000
Drilling, US\$ 120/m	15,000 m	1,800,000
Core Sample assays, US\$ 35/sample	15,000	525,000
Metallurgical testing	Selected targets	250,000
Geotechnical studies	Selected targets	250,000
	TOTAL	3,415,000

Table 29 – Costs of proposed exploration program.



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22.0 Date and Signature Page

Effective Date of report: The date Completion Date of Report:

AAA

C. Gustavo Fernandez, P.Geo.

Date Signed: September 29th, 2010



23.0 Certificates of Author

CERTIFICATE – C. Gustavo Fernandez B.Sc., P.Geo.

- I, C. Gustavo Fernandez, B.Sc., P.Geo. do hereby certify that:
- **1.** I am a principal of UAKO Geological Consulting, Pedro De Valdivia 370(Este), Capital, San Juan, #5400, Argentina
- I graduated with B.Sc.in Geology from Universidad Nacional de San Juan in 1997.
- **3.** I am a member of the Association of Professional Geoscientists of Ontario (Reg. Number 1573).
- 4. I have worked as a geologist for a total of thirteen years since my graduation from university. My past experience with epithermal systems includes working on the advance exploration, geological modeling and resource estimation of Casposo Project Argentina (Battle Mountain Gold Intrepid Mines), Los Azules Project Argentina (Battle Mountain Gold), on Diablillos Project Argentina (Silver Standard Resources), on Lindero Project Argentina (Mansfield Minerals.), Rosario de Belen Peru (Century Mining), San Juan Mine Peru (Century Mining), Kori-Kollo Mine Bolivia (Battle Mountain Gold), Magistral Project Mexico (Nevada Pacific US Gold) and other epithermal occurrences in Argentina, Peru, Chile, Paraguay, Mexico and Bolivia.
- 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 the author of the report entitled "Gold Silver Resource Estimate of the La Josefina Project, Santa Cruz Province, Argentina" dated on September 29th 2010, and I am responsible for this report.
- **7.** I have had no prior involvement with the property or project
- **8.** I completed site visits to the La Josefina property on March 15th to 20th 2010, and April 19th to 21st, 2010.
- **9.** To the best of my knowledge, information and belief, this technical report contains all the scientific and technical information that is required to be disclosed to make this technical report not misleading.



- **10.** I am independent of Hunt Mining Corporation and all their subsidiaries as defined in Section 1.4 of NI 43-101 and in Section 3.5 of the Companion Policy to NI 43-101.
- **11.** I have read National Instrument 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form.

Dated this 29th day of September, 2010

HAR

Signature of Qualified Person C. Gustavo Fernandez





Appendix A – 2007-2008 Hunt Mining drill holes

<u>Hole</u>	Easting	<u>Northing</u>	<u>Elevatio</u>	<u>Azimut</u>	<u>Angle</u>	Depth	<u>Target</u>
	2/72016 11	1700787 16	<u>n (m)</u> 777 11	<u>n</u> 251	-50	<u>(m)</u> 152 55	SV/N
SVN-D07-001	2473010.11	4700787.40	778 52	251	-50	152.55	SVN SVN
SVN-D07-002	2473040.01	4700743.74	770.55	251	-50	1/0 20	SVN
SVN-D07-003	2473050.34	4700700.5	777.02	231	-50	1/12 15	SVN
SVN D07 005	2473000.03	4099929.00	790.10	235	-50	190.00	
SVN-D07-005	2473032.03	4700017.71	700.10	255	-50	100.00	SVIN
SVN-D07-000	24/298/.25	4099971.95	790.78	235	-50	90.85 140.25	SVIN
SVN-D07-007	2473130.02	4099827.43	702.84	235	-50	140.25	SVIN
SVN-D07-008	2472050.05	4700970.41	704.UI	250	-50	10.25	SVIN
SVN-D07-009	24/3058.01	4700632.80	781.19	251	-50	140.00	SVIN
SVN-D07-010	24/30/4.2	4700579.89	773.13	251	-50	149.00	SVIN
SVN-D07-011	24/294/.8/	4700195.68	772.60	205	-50	203.15	SVIN
SVN-D07-012	2472997.33	4700200.17	701 20	205	-50	113.15	SVIN
SVN-D07-013	2472963.93	4700077.86	781.38	235	-50	1/9.25	SVIN
SC-D08-014	24/1///.04	4698746.54	779.32	240	-50	148.25	SC
SC-D08-015	24/1/63.32	4698709.77	778.56	240	-50	113.25	SC
SVN-D08-016	2472956.62	4700323.05	/68.35	295	-50	80.45	SVN
SVN-D08-017	2472994.82	4700305.25	/63.4/	295	-50	140.15	SVN
SVN-D08-018	24/2986.38	4/00239.85	//2./6	295	-50	151.85	SVN
SVN-D08-019	2473059.15	4700465.07	768.86	260	-50	152.25	SVN
SC-D08-020	2471803.66	4698704.31	777.14	240	-50	152.15	SC
SC-D08-021	2471853.51	4698646.69	776.40	240	-50	104.15	SC
SC-D08-022	2471865.55	4698595.91	776.60	240	-50	90.00	SC
SC-D08-023	2471935.42	4698645.57	778.88	220	-63	113.35	SC
SC-D08-024	2471757.59	4698793.19	783.58	240	-50	152.25	SC
SC-D08-025	2471730.5	4698751.77	784.88	240	-50	110.15	SC
SC-D08-026	2471722.14	4698803.16	788.71	240	-50	122.35	SC
SC-D08-027	2471890.49	4698552.33	776.81	240	-50	119.15	SC
SC-D08-028	2472047.45	4698545.73	771.45	220	-55	114.65	SC
SC-D08-029	2472079.3	4698517.42	768.24	240	-50	117.55	SC
SC-D08-030	2472097.71	4698464.33	762.83	270	-50	131.25	SC
SC-D08-031	2472068.19	4698439.77	761.47	270	-50	56.15	SC
SC-D08-032	2472059.7	4698415.13	759.63	270	-50	50.15	SC
SC-D08-033	2471761.22	4698392.57	758.35	230	-50	90.15	SC
SC-D08-034	2471607.25	4698557.2	779.22	230	-50	80.25	SC
SC-D08-035	2471563.25	4698585.63	779.74	230	-50	50.15	SC
SC-D08-036	2471763.36	4698361.38	756.53	230	-50	50.25	SC
SC-D08-037	2471802.09	4698361.31	752.27	230	-50	116.35	SC
SC-D08-038	2471795.61	4698323.34	751.31	230	-50	62.25	SC
SC-D08-039	2471666.99	4698509.14	779.31	230	-50	90.75	SC
SC-D08-040	2471663.27	4698538.44	779.58	230	-50	122.15	SC
SC-D08-041	2471558.48	4698611.76	779.74	230	-50	105.00	SC



SC-D08-042	2472009.56	4698578.16	777.23	220	-60	110.25	SC
SC-D08-043	2471979.19	4698620.26	782.76	220	-60	164.25	SC
SC-D08-044	2471869.66	4698684.42	775.96	220	-50	113.25	SC
SC-D08-045	2471891.28	4698493.61	772.89	240	-50	62.15	SC
SVN-D08-046	2473062.04	4700775.32	777.19	251	-55	166.65	SVN
SVN-D08-047	2473080.97	4700730.34	777.20	251	-55	180.25	SVN
SVN-D08-048	2473099.99	4699958.78	771.84	235	-50	200.25	SVN
SVN-D08-049	2473084.28	4699887.04	771.91	235	-50	122.25	SVN
SVN-D08-050	2473023.9	4699844.98	779.55	235	-50	155.25	SVN
SVN-D08-051	2473076	4699790.06	766.40	235	-50	152.15	SVN
SVN-D08-052	2473135.87	4699770.57	761.53	235	-50	233.15	SVN
SC-D08-053	2472055.51	4698590.53	776.30	220	-52	167.25	SC
SC-D08-054	2472124.94	4698518.04	763.66	240	-50	149.25	SC
SC-D08-055	2472119.55	4698548.88	766.84	240	-50	191.25	SC
SVN-D08-056	2473107.04	4700618.36	774.38	251	-50	230.25	SVN
SVN-D08-057	2473069.48	4700777.99	776.56	251	-55	182.25	SVN
SC-D08-058	2472099.19	4698414.44	759.74	270	-55	80.20	SC
SC-D08-059	2471757	4699121.34	798.74	215	-50	60.70	SC
SC-D08-060	2471814.99	4699116.94	793.50	215	-50	99.70	SC
SC-D08-061	2471839.36	4699064.71	792.28	215	-50	60.70	SC
SC-D08-062	2471897.1	4699059.97	787.62	215	-50	99.70	SC
SC-D08-063	2471926.72	4699014.87	785.89	215	-50	69.70	SC
SC-D08-064	2471979.28	4699003.01	782.28	215	-50	93.70	SC
SC-D08-065	2472003.3	4698950.38	781.24	215	-50	63.70	SC
SC-D08-066	2471411.83	4698585.17	776.22	0	-90	53.50	SC
(water well)							
SC-D08-067	2471485.57	4698419.25	767.68	0	-90	52.00	SC
(water well)				• • • •	- 0		
SC-D08-068	24/1883.8/	4698332.74	/48.51	230	-50	200.20	SC
SC-D08-069	24/1845.08	4698296.98	/4/.15	230	-50	120.70	SC
SC-D08-070	24/18/8.52	4698261.79	/43.95	230	-50	120.70	SC
SC-D08-071	2471848.51	4698236.66	744.52	230	-50	62.25	SC
SC-D08-072	2471901.5	4698216.39	744.25	230	-50	119.25	SC
SSI-D08-073	2473988.32	4702266.09	797.84	75	-50	219.75	SSI
SSI-D08-074	2474148.05	4702313.84	796.82	255	-50	129.00	SSI
SSI-D08-075	2474194.58	4702331.32	794.69	255	-50	161.05	SSI
SVN-D08-076	2472980.1	4700785.9	779.73	251	-55	62.15	SVN
SVN-D08-077	2473027.74	4700801.93	776.52	251	-55	120.00	SVN
SVN-D08-078	2472953.24	4700697.53	788.00	251	-55	53.25	SVN
SVN-D08-079	2473039.48	4700832.3	775.55	251	-55	152.90	SVN
SVN-D08-080	2473091.14	4700823.64	779.56	251	-55	197.25	SVN
SVN-D08-081	2473110.44	4700752.08	776.62	251	-50	236.25	SVN
SVN-D08-082	2472993.46	4700737.52	782.07	251	-50	123.00	SVN
SVN-D08-083	2473004.49	4700714.76	782.97	251	-50	102.00	SVN
SVN-D08-084	2473110.83	4700777.07	777.17	251	-50	233.00	SVN
SVN-D08-085	2473029.29	4700696.91	783.14	251	-50	129.00	SVN



SVN-D08-086	2473134.48	4700706.02	774.83	251	-50	206.00	SVN
SVN-D08-087	2473004.39	4700662	786.93	251	-50	104.85	SVN
SVN-D08-088	2473107	4700644	776.04	251	-50	251.25	SVN
SVN-D08-089	2473063.48	4700681.94	780.58	251	-50	168.00	SVN
SVN-D08-090	2473070.82	4700657.98	780.20	251	-50	220.00	SVN
SVN-D08-091	2473162.7	4700636.26	771.84	251	-50	257.00	SVN
SVN-D08-092	2473102.87	4700563.34	768.80	251	-50	170.90	SVN
SVN-D08-093	2473123.59	4700674.75	775.08	251	-50	281.05	SVN
SVN-D08-094	2473158.02	4700581.15	767.39	251	-50	227.85	SVN
SVN-D08-095	2473123.16	4700595.35	770.65	251	-50	225.50	SVN
SVN-D08-096	2473181.46	4700749.88	777.64	251	-50	251.25	SVN
SVN-D08-097	2473022.73	4700640.41	786.41	251	-50	149.35	SVN
SVN-D08-098	2473045.58	4700595.4	779.91	251	-50	119.25	SVN
SVN-D08-099	2473055.55	4700546.67	773.68	251	-50	101.25	SVN
SVN-D08-100	2473007.31	4700609.9	786.15	251	-50	101.85	SVN
SVN-D08-101	2472962.03	4700621.43	789.07	251	-50	50.75	SVN
SVN-D08-102	2473026.32	4700563.28	779.00	251	-50	80.25	SVN
SVN-D08-103	2472947.79	4700642.79	788.73	251	-50	29.85	SVN
SVN-D08-104	2472977.26	4700600.22	789.64	251	-50	59.85	SVN
SVN-D08-105	2472999.33	4700528.6	781.50	251	-50	50.25	SVN
SSI-D08-106	2474193.63	4702220.04	796.71	255	-60	149.85	SSI
SSI-D08-107	2473990.25	4702165.35	793.39	75	-50	312.65	SSI
SSI-D08-108	2474142.87	4702206.31	803.77	255	-50	100.00	SSI
SSI-D08-109	2474192.12	4702157.58	798.71	255	-50	130.00	SSI
SSI-D08-110	2474031.88	4702114.61	795.15	75	-50	201.95	SSI
SSI-D08-111	2474267.01	4702239.56	791.17	255	-50	209.90	SSI
SSI-D08-112	2473957.81	4702017.23	782.50	75	-50	329.25	SSI
SSI-D08-113	2474148.28	4702114.15	803.28	255	-50	53.95	SSI
SSI-D08-114	2474293.49	4702142.97	789.01	255	-50	238.90	SSI
SSI-D08-115	2473968.73	4702056.12	784.70	75	-50	101.25	SSI
SSI-D08-116	2474203.5	4702059.23	799.57	255	-50	221.35	SSI
SVN-D08-117	2472927.62	4700743.33	784.42	251	-50	41.05	SVN
SVN-D08-118	2472921.17	4700758.33	782.83	251	-50	41.25	SVN
SSI-D08-119	2474211.33	4702014.11	800.64	255	-50	150.00	SSI
SVN-D08-120	2472938.84	4700716.83	787.17	251	-50	44.15	SVN
SVN-D08-121	2472963.06	4700673.27	787.83	251	-50	53.35	SVN
SSI-D08-122	2474242.54	4701973.86	797.73	255	-50	182.35	SSI
SVN-D08-123	2473144.92	4699932.96	766.54	235	-50	180.00	SVN
SVN-D08-124	2473184.07	4699955.88	765.16	235	-60	272.35	SVN
SVN-D08-125	2473155.96	4699938.91	766.56	235	-60	220.00	SVN
SVN-D08-126	2473145.86	4699989.55	768.49	235	-55	212.25	SVN
SVN-D08-127	2473190.38	4699840.6	759.20	235	-50	180.75	SVN
SVN-D08-128	2473155.31	4699965.85	767.59	235	-60	173.25	SVN
SVN-D08-129	2473128.7	4699948.53	768.54	235	-50	143.35	SVN
SVN-D08-130	2473163.16	4699880.98	762.92	235	-60	179.55	SVN



SVN-D08-131	2473126.36	4699979.25	770.00	235	-50	185.25	SVN
SVN-D08-132	2473108.06	4699903.85	768.98	235	-60	111.00	SVN
SVN-D08-133	2473114.03	4700000.7	772.28	235	-60	185.35	SVN
SVN-D08-134	2473116.4	4699939.51	769.35	235	-50	117.00	SVN
SVN-D08-135	2473086.98	4699919.61	772.74	235	-50	80.55	SVN
SVN-D08-136	2473054.89	4699897.18	778.16	235	-50	39.00	SVN
SVN-D08-137	2473081.69	4699947.56	774.23	235	-50	97.10	SVN
SVN-D08-138	2473022.13	4699965.63	784.70	235	-60	59.35	SVN
SVN-D08-139	2473045.1	4699982.06	781.01	235	-60	92.15	SVN
SVN-D08-140	2473048.42	4699953.53	779.69	235	-60	90.00	SVN
SVN-D08-141	2473070.77	4699969.31	776.53	235	-60	111.00	SVN
SVN-D08-142	2473067.97	4699997.54	778.24	235	-60	151.50	SVN
SVN-D08-143	2473089.06	4700014.3	776.23	235	-60	202.20	SVN
SVN-D08-144	2473074.27	4699971.17	775.96	235	-60	120.00	SVN
SVN-D08-145	2473092.11	4699984.64	774.07	235	-60	150.00	SVN
SVN-D08-146	2473109.56	4700028.83	774.65	235	-60	185.50	SVN
SVN-D08-147	2473077.88	4700035.08	778.07	235	-50	161.50	SVN
SVN-D08-148	2473002.62	4699984.93	788.32	235	-50	48.00	SVN
SVN-D08-149	2473024.56	4699999.46	785.63	235	-50	90.00	SVN
SVN-D08-150	2472982.56	4699999.4	788.83	235	-50	50.00	SVN
SVN-D08-151	2473103.1	4700051.72	775.70	235	-50	179.15	SVN
SVN-D08-152	2473028.59	4700030.23	782.71	235	-50	93.00	SVN
SVN-D08-153	2472974.26	4700023.76	786.01	235	-50	51.00	SVN
SVN-D08-154	2473050.86	4700046.81	779.57	235	-50	146.25	SVN
SVN-D08-155	2472998.99	4700040.95	783.29	235	-50	102.00	SVN
SVN-D08-156	2473020.59	4700056.39	781.52	235	-50	123.00	SVN
SVN-D08-157	2473073.86	4700062.97	776.82	235	-50	173.35	SVN
SVN-D08-158	2473049.4	4700076.71	778.23	235	-50	145.00	SVN
SVN-D08-159	2473075.53	4700094.79	774.78	235	-50	200.15	SVN
SVN-D08-160	2473008.53	4699956.09	787.40	235	-60	44.35	SVN
SSI-D08-161	2474135.33	4702359.57	796.98	255	-50	129.00	SSI
SVN-D08-162	2473046.76	4699919.77	779.71	235	-50	32.25	SVN
SSI-D08-163	2474209.07	4702379.35	795.05	255	-50	213.65	SSI
SSI-D08-164	2474121.76	4702407.73	797.92	255	-50	132.00	SSI
SSI-D08-165	2474194	4702427.23	797.04	255	-50	201.00	SSI
SSI-D08-166	2474203.32	4702274.35	793.98	255	-50	182.20	SSI
SSI-D08-167	2474160.81	4702263	797.78	255	-50	135.80	SSI
SVN-D08-168	2473224.7	4700737.03	775.30	251	-50	375.00	SVN
SVN-D08-169	2473188.99	4700698.14	773.51	251	-50	311.25	SVN
SVN-D08-170	2473204.47	4700756.18	776.73	251	-55	288.00	SVN
SVN-D08-171	2473171.8	4700798.08	780.07	251	-60	332.25	SVN
SVN-D08-172	2473150.12	4700763.93	778.36	251	-55	282.00	SVN
SVN-D08-173	2473154.4	4700818.89	782.17	251	-55	299.25	SVN
SVN-D08-174	2473187.14	4700777.13	778.10	251	-55	318.00	SVN
SVN-D08-175	2473120.85	4700806.94	780.73	251	-55	272.15	SVN



SVN-D08-176	2473205.16	4700730.48	775.78	251	-55	309.00	SVN
SVN-D08-177	2473143.45	4700789.05	779.52	251	-60	350.25	SVN
SVN-D08-178	2473143.92	4700656.74	773.79	251	-50	321.00	SVN
SVN-D08-179	2473173.77	4700719.69	775.48	251	-50	335.00	SVN
SVN-D08-180	2473143.89	4700656.62	773.84	251	-60	321.00	SVN
SVN-D08-181	2473086.64	4700795.21	777.40	251	-50	183.00	SVN
SVN-D08-182	2472977.63	4700652.9	787.67	251	-50	77.00	SVN
SVN-D08-183	2473030.95	4700671.38	784.93	251	-50	131.15	SVN
SVN-D08-184	2473094.72	4700692.86	776.98	251	-50	179.15	SVN
SVN-D08-185	2473220.51	4700735.42	775.17	251	-57	348.00	SVN
SVN-D08-186	2473125.13	4700756.03	776.95	251	-55	269.35	SVN
SVN-D08-187	2473079.48	4700713.73	777.84	251	-55	180.00	SVN
SVN-D08-188	2473118.81	4700727.23	776.04	251	-55	221.25	SVN
SVN-D08-189	2473134.13	4700680.01	774.48	251	-58	270.00	SVN
SVN-D08-190	2473212.28	4700706.33	774.00	251	-55	344.35	SVN
SVN-D08-191	2473095.12	4700666.17	777.38	251	-50	201.00	SVN
SVN-D08-192	2472981.57	4700707.18	785.39	251	-50	92.25	SVN
SVN-D08-193	2472961.02	4700726.99	786.35	251	-50	71.25	SVN
SVN-D08-194	2473047.18	4700650.35	784.26	251	-50	180.00	SVN
SVN-D08-195	2472993.47	4700631.89	787.98	251	-50	101.15	SVN
SVN-D08-196	2473228.85	4700686.64	772.83	251	-53	401.10	SVN
SVN-D08-197	2473074.51	4700754.67	776.86	251	-50	231.00	SVN
SVN-D08-198	2473044.92	4700770.85	777.20	251	-50	201.00	SVN
SVN-D08-199	2473182.97	4700617.24	769.99	251	-60	329.15	SVN
SVN-D08-200	2473042.27	4700727.96	779.85	251	-50	144.00	SVN
SVN-D08-201	2473137.27	4700548.8	765.89	251	-61	224.25	SVN
SVN-D08-202	2473027.7	4700618.41	784.70	251	-50	135.00	SVN
SVN-D08-203	2473171	4700560.08	765.05	251	-61	275.25	SVN
SVN-D08-204	2473001.29	4700554.91	782.65	251	-50	51.00	SVN
SVN-D08-205	2473037.73	4700515.02	773.92	251	-50	129.00	SVN
SVN-D08-206	2473094.6	4700534.08	767.90	251	-50	170.25	SVN
SVN-D08-207	2472974.31	4700574.04	790.86	251	-60	30.00	SVN
SVN-D08-208	2473142.64	4699806.02	760.71	235	-50	101.25	SVN
SVN-D08-209	2473021.8	4700590.01	782.83	251	-50	78.00	SVN
SVN-D08-210	2473168.9	4699824.51	759.70	235	-50	155.25	SVN
SVN-D08-211	2473217.15	4699858.33	759.88	235	-50	218.25	SVN
SVN-D08-212	2473217.58	4699858.61	759.92	235	-57	230.15	SVN
SVN-D08-213	2473125.96	4699793.96	762.36	235	-50	41.25	SVN
SVN-D08-214	2473191.5	4699809.29	757.37	235	-50	164.25	SVN
SVN-D08-215	2473167.46	4699792.68	758.67	235	-50	131.25	SVN
SVN-D08-216	2473218.1	4699828.04	757.82	235	-50	200.15	SVN
SVN-D08-217	2473259.9	4699857.72	765.01	235	-51	281.15	SVN
SVN-D08-218	2473080.06	4699854.88	772.07	235	-50	35.15	SVN
SVN-D08-219	2473102.85	4699869.38	768.22	235	-50	98.15	SVN
SVN-D08-220	2473127.19	4699887.13	766.32	235	-50	152.15	SVN



SVN-D08-221	2473152.3	4699904.95	764.65	235	-50	176.15	SVN
SVN-D08-222	2473187.36	4699928.23	764.22	235	-55	179.15	SVN
SVN-D08-223	2473208.14	4699943.21	763.91	235	-50	242.25	SVN
SVN-D08-224	2473176.58	4699890.82	762.57	235	-50	215.50	SVN
SVN-D08-225	2473202.81	4699909.17	762.35	235	-50	221.00	SVN
SVN-D08-226	2473208.62	4699913.32	762.53	235	-55	274.20	SVN
SVN-D08-227	2473210.45	4699730.94	755.59	235	-50	229.10	SVN
SVN-D08-228	2473177.74	4699769.15	757.42	235	-50	187.20	SVN
SVN-D08-229	2473133.3	4699860.61	764.78	235	-50	79.40	SVN
SVN-D08-230	2473105.08	4699841.31	766.62	235	-50	52.40	SVN
SVN-D08-231	2473117.19	4699818.31	764.12	235	-50	94.00	SVN
SVN-D08-232	2473161.58	4699849.33	761.57	235	-50	181.30	SVN
SVN-D08-233	2473192	4699870.71	760.80	235	-50	190.60	SVN
SVN-D08-234	2473209.04	4699882.7	761.10	235	-55	220.30	SVN
SVN-D08-235	2473237.88	4699902.65	762.62	235	-55	250.70	SVN
SVN-D08-236	2473230.61	4699836.68	758.91	235	-55	211.60	SVN
SVN-D08-237	2472950.22	4700037.24	785.87	235	-50	50.00	SVN
SVN-D08-238	2472974.19	4700054.27	782.81	235	-50	85.70	SVN
SVN-D08-239	2472998.46	4700071.86	780.77	235	-50	110.00	SVN
SVN-D08-240	2473324.94	4699412.33	740.09	235	-50	85.60	SVN
SVN-D08-241	2473268.75	4699924.36	762.44	235	-50	271.50	SVN
SVN-D08-242	2473031.42	4700095.75	777.86	235	-50	148.40	SVN

Targets description:

SVN= Veta Norte Area SC= Central Area SSI= Sinter Target















Appendix C - Sample and Composite Statistics By Domain.

1. Sample Statistics

The following tables show descriptive statistics of raw gold and silver values from the data base for each of the four mineralization sectors. For AYC (Amanda and Cecilia Veins) and for Veta Sur, which are the most important mineralized bodies, descriptive statistics was performed using capping limits of 25 ppm for gold and 200 ppm for Silver. Mean grades for both gold and silver doesn't have any significant changes after capping. Belen, Latitas and Ailin Veins (BLA) do not show any gold value higher than 10 ppm.

Gold grade values higher than 10, 20, 25 and 30 ppm were highlighted in order to evaluate its significance. As shown in the following tables the amount of high grade samples is always negligible for gold, and for silver but no enough for supporting capping procedures.

		Valid N	Min.	Max.	Mean	Median	Q1	Q3	Std. Dev.	CV
	Au	8294	0,005	71,10	0,29	0,02	0,01	0,068	1,76	6,03
AVC	AuC	<u>8288</u>	0,005	24,90	0,26	0,02	0,01	0,067	1,32	5,04
	Ag	8294	0,5	1125,00	5,54	0,80	0,5	2,2	29,73	5,37
	AgC	<u>8259</u>	0,5	193,00	3,98	0,80	0,5	2,2	13,07	3,28
	Au	5347	0,005	31,80	0,25	0,03	0,011	0,078	1,29	5,06
Veta	AuC	<u>5344</u>	0,005	24,50	0,24	0,03	0,011	0,078	1,08	4,55
Sur	Ag	5347	0,5	4720,00	18,91	2,40	1	6,9	123,50	6,53
	AgC	<u>5267</u>	0,5	199,00	8,25	2,40	0,9	6,5	19,63	2,38
RIA	Au	2076	0,01	6,31	0,05	0,01	0,01	0,02	0,30	5,68
DLA	Ag	2076	0,50	214,00	1,62	0,50	0,50	1,00	6,56	4,06
Sintar	Au	2221	0,01	79,60	0,11	0,01	0,01	0,03	1,75	16,57
Sinter	Ag	2221	0,50	147,00	1,11	0,50	0,50	1,00	3,57	3,21

	Assays	Au ppm> 10	Au ppm> 20	Au ppm> 25	Au ppm> 30	Ag ppm> 200
AVC	N	45	12	6	4	35
AIC	%	0.54	0.14	0.07	0.05	0.42
Veta	N	20	5	3	2	80
Sur	%	0.36	0.09	0.05	0.04	1.50
Sintar	N	2	1	1	1	0
Sinter	%	0.09	0.05	0,05	0,05	0



2. Composite Statistics by domain

Following tables show the descriptive statistics for 1m composites calculated by means of the software used for resource estimation (GEMS 6.1). Statistics shows the influence of samples which are inside the grade domains with increasing mean values in grouped data.

AYC (Amanda and Cecilia Veins) - Univariate Statistics						
	Gold		Silver			
Total Number of Samples Used	3112		3112			
Minimum Histogram Value	0.00		0.00			
Maximum Histogram Value	37.92		795.80			
Number of Class	30		50			
Class Interval	1.26		15.92			
Minimum Population Data point	0.00		0.00			
Maximum Population Data point	37.92		795.80			
Total Population	4065		4065			
	Ungrouped Data	Grouped Data	Ungrouped Data	Grouped Data		
Mean	0.40	0.87	7.01	12.18		
Median	N/A	0.67	N/A	8.67		
Standard Deviation	1.52	1.43	27.12	26.09		
Variance	2.30	2.05	735.67	680.86		
Coefficient of Variation	3.82	1.64	3.87	2.14		

BLA (Belen-Aylin-Latitas Veins) - Univariate Statistics					
	Gold		Silver		
Total Number of Samples Used	559		559		
Minimum Histogram Value	0.00		0.00		
Maximum Histogram Value	6.10		54.32		
Number of Class	30		30		
Class Interval	0.20		1.81		
Minimum Population Data point	0.00		0.00		
Maximum Population Data point	6.10		54.32		
Total Population	760		760		
	Ungrouped Data	Grouped Data	Ungrouped Data	Grouped Data	
Mean	0.10	0.17	2.36	2.49	
Median	N/A	0.11	N/A	1.27	
Standard Deviation	0.40	0.38	4.93	4.85	
Variance	0.16	0.14	24.28	23.58	
Coefficient of Variation	4.01	2.26	2.09	1.95	



Sinter Area - Gold Univariate Statistics					
	Gold		Silver		
Total Number of Samples Used	281		281		
Minimum Histogram Value	0.00		0.00		
Maximum Histogram Value	14		147.00		
Number of Class	30		30		
Class Interval	0.47		4.90		
Minimum Population Data point	0.00		0.00		
Maximum Population Data point	14.10		147.00		
Total Population	295		295		
	Ungrouped Data	Grouped Data	Ungrouped Data	Grouped Data	
Mean	0.31	0.45	2.47	3.30	
Median	N/A	0.27	N/A	2.57	
Standard Deviation	1.17	1.12	9.06	8.76	
Variance	1.36	1.27	82.14	76.77	
Coefficient of Variation	3.77	2.50	3.68	2.65	

Veta Sur - Univariate Statistics					
	Gold		Silver		
Total Number of Samples Used	5705		4543		
Minimum Histogram Value	0.00		0		
Maximum Histogram Value	31.80		3		
Number of Class	60		30		
Class Interval	0.53		0.97		
Minimum Population Data point	0.00		0		
Maximum Population Data point	31.80		2.91		
Total Population	5705		5705		
	Ungrouped Data	Grouped Data	Ungrouped Data	Grouped Data	
Mean	0.16	0.37	14.02	55.14	
Median	N/A	0.28	N/A	49.50	
Standard Deviation	0.85	0.82	78.52	73.42	
Variance	0.72	0.67	6165.57	5389.92	
Coefficient of Variation	5.23	2.21	5.60	1.33	