

**MINERAL RESOURCE ESTIMATE
YAXTCHE CENTRAL ZONE SILVER DEPOSIT
EL QUEVAR PROJECT
SALTA PROVINCE, ARGENTINA**

Prepared for:
Golden Minerals Company

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097183

Prepared by:
Chlumsky, Armbrust & Meyer, LLC

Fred Barnard PhD., CCPG
Robert L. Sandefur P.E.

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1.0 SUMMARY

1.1 Background

Chlumsky, Armbrust and Meyer, LLC (herein “CAM”) was engaged by Golden Minerals Company (“Golden Minerals”) to prepare a Technical Report on the Yaxtché Central Zone of the El Quevar Project (“El Quevar” or the “Project”) to meet the requirements of Canadian National Instrument 43-101 (“NI 43-101”) report disclosing updated mineral resources in the Yaxtché Central Zone. Golden Minerals is the successor to Apex Silver Mines Limited (“Apex”). The Yaxtché Central Zone contains silver mineralization, with values in lead, zinc, copper, and gold.

El Quevar is in Salta province, Argentina, about 260 kilometers by road west of the city of Salta. It lies at high elevation (4,000 to 5,500 meters above sea level) in the Andean cordillera. The property consists of 20 mineral concessions, of which 12 are held directly by Silex Argentina S.A. (“Silex”), a wholly-owned subsidiary of Golden Minerals. The other 8 concessions have been optioned by Silex from three other owners, under terms described in Section 4 below. Five of the concessions are subject to a joint venture agreement with Hochschild Mining plc. The concessions total 64,326.51 hectares in area, and encompass 3 main areas of current exploration: Quevar Sur, including Yaxtché; Quevar Norte; and Viejo Campo. This report deals specifically with the Yaxtché Central Zone in Quevar Sur.

1.2 Geology and Exploration

Golden Minerals and its predecessor Apex have been exploring at El Quevar since 2004. El Quevar is within a Tertiary volcanic complex consisting of sub-volcanic and volcanic rocks 10 to 20 million years old.

The Yaxtché Central Zone is tabular, striking WNW 290 degrees, exposed at or near surface and about 650 meters along strike. The zone is 40 to 150 meters wide, and contains 4 to 5 semi-continuous mineralized zones, dipping on average 50 degrees to the north. The Yaxtché Central Zone is apparently offset slightly by faulting at both east and west ends, with some continuity of mineralization into the Yaxtché East and West zones, but the East and West zone mineral resources have not been estimated in this Technical Report.

The Yaxtché Central Zone contains silver mineralization with credits in lead and zinc, and lesser amounts of gold, copper, bismuth, and antimony. Mineralization is hosted in tabular structures within deformed and altered intermediate (mainly dacitic) volcanic and intrusive rocks of the El Quevar volcanic edifice, of mid-Tertiary age. The principal minerals of economic interest are argentiferous sulfosalts and galena, with many other metallic minerals also present.

Golden Minerals has undertaken exploration since late 2004, at Yaxtché and elsewhere on the El Quevar project. Exploration data from programs prior to 1997 was not available, although data from Hochschild Mining and from Mansfield Minerals was available. None of the drilling or sampling undertaken by Hochschild or Mansfield Minerals was used for resource estimation in this report. Golden Minerals' work was carried out in three named exploration areas: Quevar Sur, Quevar Norte, and Viejo Campo. The Yaxtché deposit is in Quevar Sur.

1.3 Drilling

Golden Minerals provided to CAM a database containing 81 diamond core drillholes and 24 trenches at El Quevar. Trenches were treated geostatistically as low-angle drillholes. This initial database was filtered to exclude drillholes and trenches assayed later than June 2009, those outside the Yaxtché Central Zone, and those drilled too far north or south, or too shallow to pass through overburden, and thus did not intercept the zone. A total of 39 holes, 3,173 samples, and 4,792.83 meters of Ag assays were used in the resource estimation. These are the same drillholes and trenches used by SRK Consulting (2009) for resource estimation, with the addition of three drillholes in the current database.

1.4 Mineral Resource Estimation

CAM completed NI 43-101-compliant resource estimates for the Yaxtché Central Zone silver deposit, using the multiple indicator kriged (MIK) method. The MIK model was undertaken after a nearest-neighbor estimate by CAM indicated that significantly higher grades were possible, compared to an ordinary-kriging inside a grade shell, undertaken by SRK Consulting in 2009. CAM's nearest-neighbor estimate was done, using only the 39 drillholes in the Yaxtché Central Zone which were numbered through QVD-081, and 5 trenches. These are the same sample openings used by SRK Consulting. The estimation was performed by Robert Sandefur of CAM, whose Certificate appears in Section 23.2 of this Technical Report.

The Central Zone of Yaxtché is characterized by a trend approximately 700 meters along strike, 300 meters down-dip and about 100 meters wide. Strike of the zone on the local grid (not parallel to the UTM grid), is about 352° and the dip averages about 45°. The zone is bounded on the on Grid East, Grid North and Grid West by interpreted faults. Almost every hole drilled across this zone hits significant mineralization.

Some of the high-grade intercepts are quite narrow (one meter); thus it is likely that highly selective underground mining will be required for the successful exploitation of this deposit. CAM constructed variograms, both log and indicator, along the principal axes of the zone using 1-m length composites, but

did not obtain satisfactory variograms indicating good mineable continuity along strike and down dip. This is not surprising given the geometry of the drilling in the deposit.

The philosophical difference between the SRK Consulting estimate and the CAM MIK estimate is that SRK Consulting assumed that ore control would be done on the basis of blastholes in an open-pit type mining scenario, utilizing a large selective mining unit (SMU) on the order of 5 by 5 by 5 meters . In contrast, the CAM estimate assumes the SMU is smaller than a cubic meter, and that mineable continuity along strike and down dip will be demonstrated.

There is certainly continuity of mineralization in the Central Zone, as almost every hole piercing the zone has encountered economic-grade assay intervals. However, mineable continuity along strike is yet to be demonstrated.

To further investigate the continuity along strike, CAM constructed 2-D variograms of mineralization thickness and grade-thickness at various cutoffs, but did not obtain satisfactory variograms indicating good mineable continuity along strike and down-dip.

For deposits of this type, it is often difficult to obtain good across strike variograms because of the uncertainty in relative hole locations. Therefore, CAM elected to use the downhole variogram in the Central Zone and assume that this variogram applies down dip and along strike. Based on the geometry of the ore body this assumption is probably conservative, but this has not been confirmed by actual close space drilling along strike and down dip.

Resource estimation was done by indicator kriging at various cutoffs up to 500 parts per million (ppm). The grade of each indicator class was determined by the class mean, except for the highest class, where the average of all the composites within the search volume was used. The search volume was a box with half dimensions of 50 by 5 by 5 meters oriented at a Grid azimuth at 352° and dipping at 45°. The nearest six composites contained in the pyramid defined by the centroid of the search volume and the six box faces were used for the estimate. A minimum of three composites were required for a block indicator to be estimated. For the grade of the highest indicator class, the same search parameters were used, but the maximum number of composites was relaxed to one.

To calculate the grade at a cutoff for any MIK estimate, the fraction of the block above the indicator cutoff is multiplied by the density and by the block volume, to obtain a tonnage. The amount of contained metal is calculated as the sum of the fraction of the block times the grade of that fraction.

There are two ways to interpret the fraction given by indicator model. It can be considered as either:

- 1) The expected fraction of the block above that cutoff grade, or

- 2) The probability that the whole block will be above the cutoff.

When calculating a mineable resource, it is usual practice to exclude any block that is less than a certain increment above cutoff. For epithermal gold deposits CAM has found this increment is about 15%. Given the selectivity possible in small underground mines and the availability of visual clues as to the grade of silver-base-metal mineralization, this increment might be lower at Yaxtché. However, CAM excluded any blocks of less than 15% from the resource estimate.

CAM did not cap the high-grade composites, because a cumulative frequency plot does not indicate a compelling reason to do so, and because the high-grade intercepts constitute a significant fraction of the resource. The statistical uncertainty associated with the highest grade indicator is higher than plus-or-minus 33 percent at the 90% level of confidence for contained ounces.

CAM's estimates of the resource at various MIK cutoffs, assuming a density of 2.3, are given in Table 1-1. Note that resources in the Table 1-1 are reported by the interpreted oxidation class. However, the resource was estimated with no constraints on the oxidation class, in order to avoid any possibility of geometric bias.

Because of the assumptions about continuity along strike and down-dip, all of the resource is classified as inferred. CAM's resource estimate is in situ, without any dilution. The quantity and grade of these inferred resources are conceptual in nature, as there has been insufficient exploration to define an indicated mineral resource on the property. It is uncertain if further exploration will result in discovery of an indicated or measured mineral resource on the property. Although NI 43-101 regulations allow a preliminary economic assessment to use inferred resources, the inferred resource estimate presented here is only suitable for determining whether further exploration is warranted.

Table 1-1 Summary of inferred resources, Yaxtché Central Zone.				
Cutoff ppm Ag	Tonnes	Contained grams Ag	Grade g/t Ag	Contained ounces Ag
OXIDE				
500	31,067	41,046,051	1321.22	1,319,661
400	41,916	45,738,747	1091.20	1,470,535
300	55,535	50,519,459	909.69	1,624,238
200	69,185	53,714,980	776.39	1,726,977
100	127,772	61,876,079	484.27	1,989,362
70	202,400	68,027,340	336.10	2,187,130
MIXED				
500	44,530	72,484,813	1627.78	2,330,441
400	53,101	76,192,166	1434.85	2,449,635
300	65,066	80,392,294	1235.55	2,584,672

Table 1-1 Summary of inferred resources, Yaxtché Central Zone.				
Cutoff ppm Ag	Tonnes	Contained grams Ag	Grade g/t Ag	Contained ounces Ag
200	83,686	84,751,204	1012.73	2,724,814
100	151,363	94,178,480	622.20	3,027,908
70	219,649	99,807,029	454.39	3,208,870
SULFIDE				
500	157,470	164,270,580	1043.19	5,281,422
400	182,591	175,136,231	959.17	5,630,761
300	261,684	202,900,998	775.37	6,523,419
200	402,825	235,942,011	585.72	7,585,712
100	796,216	290,740,812	365.15	9,347,534
70	1061,022	312,567,673	294.59	10,049,284
ALL				
500	233,067	277,801,444	1191.94	8,931,524
400	277,608	297,067,144	1070.10	9,550,930
300	382,285	333,812,751	873.20	10,732,329
200	555,696	374,408,195	673.76	12,037,503
100	1,075,351	446,795,371	415.49	14,364,805
70	1,483,071	480,402,042	323.92	15,445,284

Mineral resources which are not mineral reserves do not have demonstrated economic viability. The estimate of mineral resources may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant issues.

The mineral resources in this estimate were calculated using the Canadian Institute of Mining, Metallurgy and Petroleum (CIM), Standards on Mineral Resources and Reserves, Definitions and Guidelines prepared by the CIM Standing Committee on Reserve Definitions and adopted by CIM Council on Dec 11, 2005.

1.5 Conclusions

1. Mineralization in the Yaxtché Central Zone is of epithermal type, hosted in Tertiary volcanic and associated rocks. The mineralization geometry and controls are sufficiently understood to enable realistic resource estimates to be made.
2. Drilling to date by Golden Minerals/Silex has been successful in defining a large body of silver and base-metal mineralization of potential economic importance.
3. Preliminary metallurgical tests show that the mineralization generally responds well to a combination of sulfide flotation (silver followed by pyrite) and cyanidation of flotation tailings, yielding over 89% silver extraction except on the low-grade oxide composite (63%). Whole-ore

cyanidation results yielded lower silver extractions, 44% to 83%. Leach times are short, with almost all the leachable silver extracted within 48 hours.

4. Good potential exists for an economically viable deposit in the Yaxtché Central Zone, if mineable continuity can be demonstrated.
5. Further work needs to be done to more accurately determine the bulk densities of the various rock types.

1.6 Recommendations

1. Later (post-QVD-81) drilling should be incorporated into an updated database, and used to reinterpret the model to allow for changes to the bounding faults and any high-grade shoots which can be interpreted. Then a revised resource estimate should be carried out.
2. The short-range mineable continuity along strike and down dip should be investigated by dedicated strategic drilling, or by an adit.
3. Re-assaying of pulps rejects and (where half core is available) quarter core is recommended, to verify reproducibility of the high silver values, since the resource estimate is highly sensitive to the treatment of high grades.
4. Further metallurgical testing should be undertaken, on composites from Yaxtché Central which are representative of the oxide, mixed, and sulfide zones, at grades approximating those of resources at assumed economic cutoff grades.
5. As a first drilling priority, the resource potential of the remainder of the Yaxtché structural zone should be further investigated by:
 - a) Infill drilling of Yaxtché Central to 25-meter spacing, and
 - b) Further drilling of Yaxtché West and East, at 50-meter or 25-meter spacing.
6. Lower priority should be given to drilling of identified targets elsewhere, as described in Section 10.2 of this report.
7. Rigorous procedures should be used for additional bulk-density measurements on samples from within the Yaxtché mineralized grade shell.
8. A work program costing about US \$ 2.3 million is recommended for the period through the first quarter of 2010. This program should include further drilling at Yaxtché and elsewhere, additional metallurgical tests, resource estimation, property payments, and other components as shown in Section 21.2.

2.0 INTRODUCTION

This Technical Report was prepared by CAM at the request of Golden Minerals Company, for use by Golden Minerals to provide an independent updated mineral resource estimate for the Yaxtché Central mineralized zone on the El Quevar property in Salta Province, northwestern Argentina (Figure 2-1). A previous NI 43-101 Technical Report had been prepared in January 2009 by SRK Consulting, based on less-developed knowledge of the geology and mineralization controls.

Golden Minerals is the successor to Apex Silver Mines Limited (herein “Apex”). Many documents cited in this report were prepared by, or addressed to, Apex. The Argentine exploration company, Silex Argentina, S.A. (herein “Silex”) was formerly a wholly-owned subsidiary of Apex, and is now a wholly-owned subsidiary of Golden Minerals. References in this report to Golden Minerals may be construed as references to Apex in early 2009 and before, or to Silex.

This Technical Report discloses mineral resources based on holes drilled in the Yaxtché Central Zone through March 2009.

CAM’s opinion contained herein is based on information provided to CAM by Golden Minerals and verified by CAM, and by CAM’s own independent observations on-site, analysis and conclusions. The principal written references are listed in Section 23 (References) of this report.

Fred Barnard, geologist and Qualified Person, who is one of the authors of this report, visited the El Quevar project in July 2009. Dr. Barnard was at the project site from mid-day on July 15 through the early morning on July 19, a total of three and one-half working days. During that time he reviewed drill core stored on-site, discussed geological and sampling protocols with project staff (Messrs. Nestor Alvarez, Juan Carlos James, and others), and visited the Yaxtché Central mineralized zone three times. In addition, he visited several nearby mineralized zones on the property which do not have mineral resources disclosed in this report, but which have good mineral potential and are in similar geologic settings.

2.1 References

References to published or substantial unpublished documents are listed in Section 22, References.

2.2 Abbreviations, Symbols and Acronyms

Following are lists of abbreviations, symbols and acronyms used in this report:

Abbreviations and Symbols

Ag	Silver	lb	Pound(s)
Au	Gold	m	Meter
cm	centimeter	mm	Millimeter
cm ³	cubic centimeter	m ³	Cubic meter
CN	Cyanide	m.a.s.l.	Meters above sea level
Cu	Copper	m/min	Meters per minute
°C	Degrees Celsius	m/s	Meters per second
D	Day	Mt	Million tonnes
d/yr	Days per year	min	Minute (time)
g or gm	Gram	O ₂	Oxygen
gpt or g/t	Grams per tonne	oz	Ounce (Troy)
ha	Hectare (10,000 m ²)	Pa	Pascal
Hg	Mercury	ppb	Parts per billion
Hp	Horsepower	ppm	Parts per million
h or hr	Hour	psi	Pounds per square inch
h/d	Hours per day	rpm	Revolutions per minute
h/wk	Hours per week	S	Sulfur
h/yr	Hours per year	SO ₂	Sulfur dioxide
in.	Inch	s or sec	Second (time)
K	Kilo (thousand)	t	Metric ton (tonne)1,000 kg
kg	Kilogram	tpd or t/d	tonnes per day
kg/m ³	Kilograms per cubic meter	tph or t/h	tonnes per hour
kg/h	Kilograms per hour	tpy or t/y	tonnes pre year
km	Kilometer	US\$	United States Currency
km/h	Kilometers per hour	yr	Year
kt	Thousand tonnes	µm	Micron (10 ⁻⁶ meters)
kV	Kilovolt	%	Percent
kVA	Kilovolt-ampere	>	Greater than
kW	Kilowatt	<	Less than
kWh	Kilowatt hour	/	per or divided by
kWh/yr	Kilowatt hours per year	X	Multiplied by
L	Liter	=	Equal to
L/min	Liters per minute	°	Degree

Acronyms

Apex	Apex Silver Mines Corporation	Hochschild	Hochschild Mining plc
CAM	Chlumsky, Armbrust & Meyer LLC	NI 43-101	Canadian National Instrument 43-101
El Quevar	Project name	Project	El Quevar
Golden Minerals	Golden Minerals Mines Company	Silex	Silex Argentina S.A.

3.0 RELIANCE ON OTHER EXPERTS

Golden Minerals provided a list of mineral concessions and their validity, information about agreements and payment terms for those concessions which are not wholly-owned by Golden Minerals, and information about operating and environmental permits. This information is reported in Section 4.0 of this report, Property Description and Location.

CAM reviewed a letter in English dated 27 July, 2009, from Dr. Diego Mendilaharsu, lawyer with the law firm of Estudio Pérez Alsina in Salta City. This letter expresses the opinion that all the mineral properties listed (the same as those in Table 4-1, below) are in good legal standing, and are not subject to any judicial or arbitration proceedings against them or against Silex, nor are any such proceedings expected.

4.0 PROPERTY DESCRIPTION AND LOCATION

4.1 Property Location

The El Quevar property is in San Antonio de los Cobres municipality, Salta province, northwestern Argentina (Figure 4-1). Geographic coordinates are near 24.3 deg S and 66.8 deg W. UTM coordinates of the Yaxtché Central Zone are approximately 3,418,000 E, 7,307,000 N. The property lies about 200 airline kilometers west of Salta, the capital city of the province. Altitude on the concession block ranges from 3,800 to 6,130 meters above sea level. The concessions are located within a mountain massif referred to as “Nevados de Pastos Grandes”, or sometimes as “El Quevar”

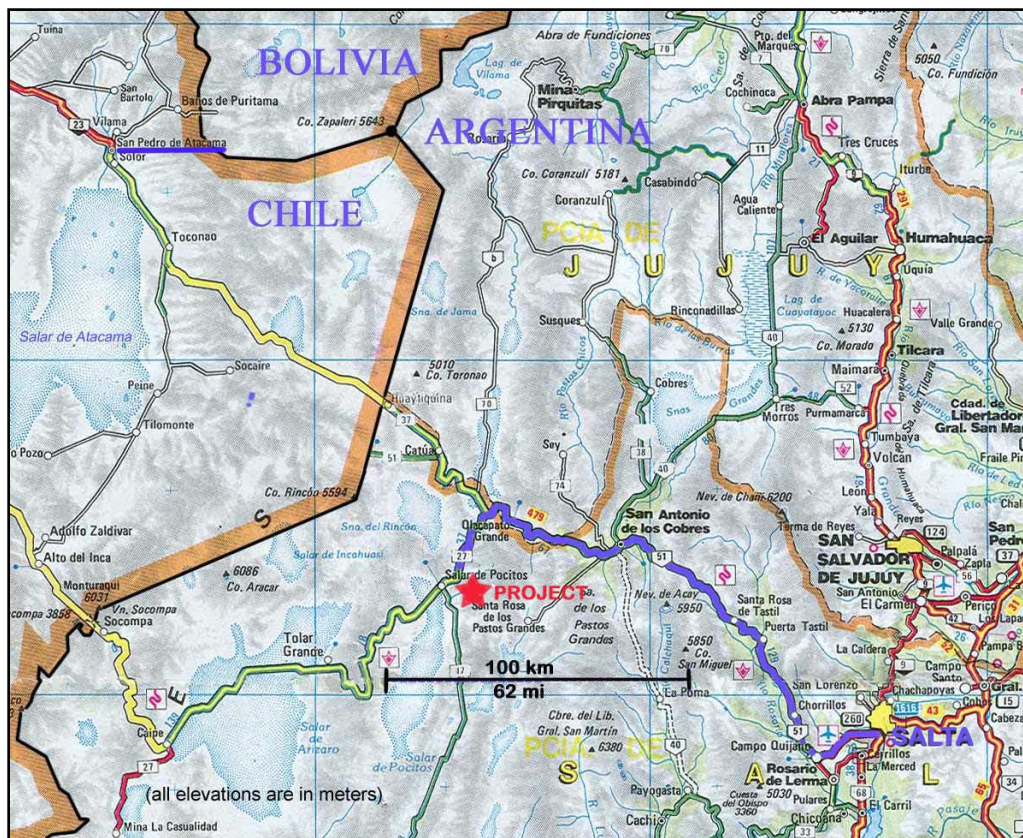


Figure 4-1
Location of El Quevar Project

4.2 Mineral Title in Argentina

Argentina is one of relatively few countries in which mineral rights are owned by the provinces, not by the central (federal) government. The Federal Constitution vests mineral rights with the provinces, which administer claims and assess royalties, although increasingly in line with Federal policies. Under the Federal Mining Code, which is adhered to by all provinces, minerals are divided into several categories, among which one includes metal ores, and another includes construction materials.

The types of mineral concessions relevant to the El Quevar project are *cateos* (claims) for exploration, and *minas* (mines) for exploitation. These are granted by a judge of the Salta Mining Court, and entered into a public register.

Exploration claims (cateos) are granted for up to 1,100 days depending on the size. The size of each must be reduced periodically, unless application is made to convert it to exploration (mina) status. Cateos are subject to a yearly rental payment, (canon), which is fixed each year by the federal government. Those for 2009 are listed on Table 4-1.

An exploration plan must be filed for each cateo, along with an environmental report that must be approved by the provincial mining authority. Additional environmental reports are required on a bi-annual basis while the exploration concession is valid. On expiration of the exploration concession, all data and documentation from the activities must be filed with the provincial mining authority. Exploration cannot be conducted near certain infrastructure facilities such as roads, pipelines, etc.

Exploitation concessions (minas) are granted if any mineral discovery is made either by the concessionaire or third parties. They also have yearly canons fixed by the National Ministry of Economy. A mina may be maintained indefinitely by timely payment of annual fees, a reasonable level of capital investment, and continuity of work program (exploration, infrastructure, or mining).

Under the laws of Salta Province, metals mines are subject to a royalty of 3% NSR (Net Smelter Return).

4.3 Mineral Concessions at El Quevar

The Project includes 14 exploitation concessions (“claims”) totaling 27,554.96 hectares and six exploration concessions (“cateos”) totaling 36,771.55 hectares, for a total of 64,326.51 hectares. A total canon (“rental”) payment US\$28,256 will be assessed on the exploitation concessions in 2009. All past annual payments have been made. All exploration and exploitation concessions are listed in Table 4-1 and are shown in Figure 2-2.

As explained in Section 3.0, the concessions in Table 4-1 are certified as being in good standing, according to a law firm retained by Golden Minerals in Salta.

The Yaxtché Central Zone is located on the Armonia exploitation concession, which is subject to a joint-venture agreement between Golden Minerals and Hochschild (see Section 4.4, below). CAM determined by use of GPS that the Yaxtché Central Zone is located as shown on Figure 4-2.

Table 4-1 Mineral Concessions at El Quevar - Data as of July 2009						
Expedient No.	Property	No. of Hectares	Type Of Concession	Owner	Date Granted By The Mines Dept.	Annual Payment Canon US\$
18036	Quirincolo I	3.500,00	Claim	Silex Argentina S.A.	03-jun-05	7,368,42
18037	Quirincolo II	3.500,00	Claim	Silex Argentina S.A.	03-jun-05	7,368,42
3902	Castor	101.79	Claim	SESA	19-dic-05	842.11
17114	El Quevar II	329.08	Claim	SESA	Title	842,11
3902	Castor	101,79	Claim	MH Argentina S.A.	19-dic-05	
1578	Vince	44.72	Claim	MH Argentina S.A.	07-ago-96	105,26
1542	Armonia	17,90	Claim	MH Argentina S.A.	26-jul-04	42,11
12222	Quespejahuar	18.00	Claim	MH Argentina S.A.	02-feb-04	63.16
18332	Toroi	436.60	Claim (Provisory)	MH Argentina S.A.	In process	947.37
18359	Nevado 1	2.161.39	Claim (Provisory)	Saravia Carlos A.	19-oct-06	4,631,58
18745	Quevar I	4.626.00	Cateo	Silex Argentina S.A.	07-Mar-08	
19534	Quevar Primera	2.626,20	Claim (Provisory)	Silex Argentina S.A.	In process	
18784	Quevar III	5.995.63	Cateo	Silex Argentina S.A.	12-Mar-08	
19557	Quevar Tercera	3.995.63	Claim (Provisory)	Silex Argentina S.A.	In process	
18786	Quevar IV	5.977,72	Cateo	Silex Argentina S.A.	12-Mar-08	
19558	Quevar Cuarta	3.977,72	Claim (Provisory)	Silex Argentina S.A.	In process	
18785	Quevar V	4.242.74	Cateo	Silex Argentina S.A.	12-May-08	
19617	Quevar Quinta	2.242.74	Claim (Provisory)	Silex Argentina S.A.	In process	
19136	Quevar VI	6.987,05	Cateo	Silex Argentina S.A.	In Process	
19195	Quevar VII	8.942,76	Cateo	Silex Argentina S.A.	In Process	
18079	Viejo campo	4.411.05	Claim (Provisory)	SESA	In process	6,315,79
TOTAL		64.236,51	Subtotal Annual Canon, USD			28.526

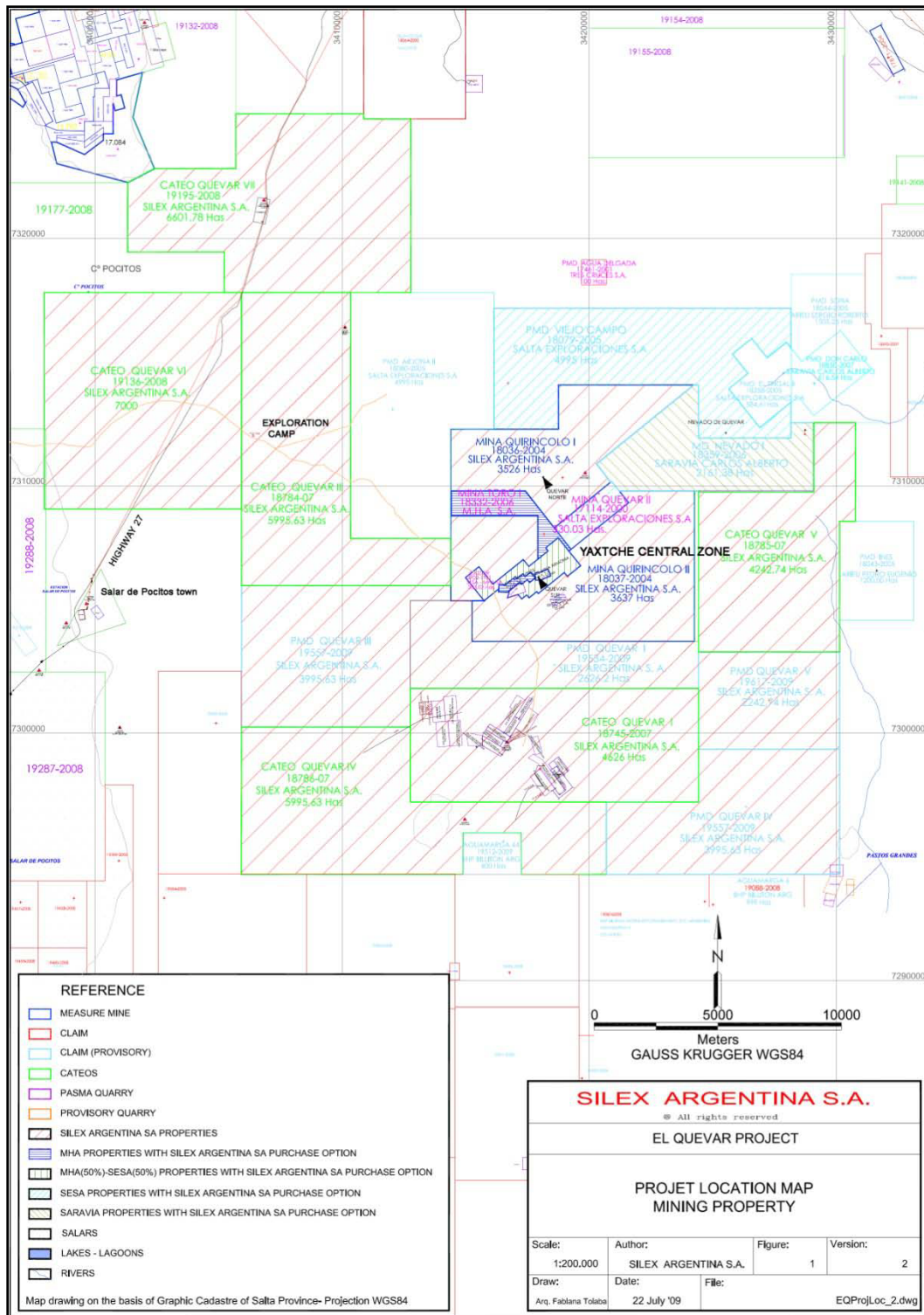


Figure 4-2
Concession Map for El Quevar Project

4.4 Mineral Agreements and Encumbrances

Those concessions not controlled outright by Silex are listed in Table 4-2. The terms for each are shown in the table. Note that the Castor property has two underlying owners, and is subject to two separate agreements by Golden Minerals.

Production of metals from any property is subject to a 3% NSR (Net Smelter Return) royalty payable to the province of Salta, in addition to the royalties to private parties, as mentioned below.

The Hochschild Joint Venture was signed in 2006, with respect to five Hochschild exploitation concessions: Castor (50% owned by Hochschild), Vince, Armonia, Quespejahuar, and Toro I; and five Silex-controlled exploitation concessions: Castor (50% owned by SESA), Quirincolo I, Quirincolo II, Quevar II and Nevado I. Golden Minerals and Hochschild formed the company Minera El Quevar, owned 65% by Golden Minerals and 35% by Hochschild. All properties mentioned in this paragraph will be transferred to this new company.

The JV agreement gives Golden Minerals a 65% interest and management control of these properties, in return for spending USD 1.0 million by May 22, 2009. The expenditure commitment has already been met. Golden Minerals can earn an 80% interest by completing a Feasibility Study by 2010.

The Viejo Campo agreement with SESA stipulates that Golden Minerals can earn a 60% interest in the property after a US\$600,000 payment and a US\$1,000,000 investment. After the initial payment and investment, Golden Minerals can do either of the following:

1. Form a JV with Golden Minerals as operator, with a 60% interest. Upon the formation of any JV, SESA has 90 days to agree to enter into the JV, or to convert its 40% interest into either:
 - 3% NSR (the “First NSR”) on precious metal from Viejo Campo; or,
 - 1% NSR (the “Second NSR”) on the remaining metals from Viejo Campo.

Should SESA elect to exchange its 40% interest for the NSR's discussed above, Golden Minerals has the right to purchase, within the first 3 years of commercial production, 50% of the First NSR for US\$2,000,000 and 50% of the Second NSR for US\$1,000,000. To maintain these options for three years after the commencement of production, Golden Minerals must make an annual payment of US\$100,000 to SESA. This will be allocated to the final price of the option if Golden Minerals exercises it within three years.

2. Acquire an additional 20% interest in Viejo Campo for a total of an 80% interest, by a) a payment of US\$ 250,000, and b) initiating a feasibility study at Viejo Campo within three years from the exercise of the option.

According to Golden Minerals staff, the work commitment of US\$250,000 for the Viejo Campo concession for the year ending October 27, 2009 has been met, as of early August, 2009

The Castor-Quevar II agreement with SESA requires additional staged payments by Golden Minerals in 2010 and 2011, totaling US\$ 1,600,000, to acquire all of SESA's interest in these two properties, but subject to a 1% NSR royalty to SESA for any production from the Quevar II concession and for 50% of the production from the Castor concession.

The Nevado I Agreement with Mr. Carlos Alberto Saravia calls for annual payments as shown on Table 4-2, to acquire 100% of the rights to Nevado I. A 1 percent NSR royalty on production is payable, and may be bought out within the first 2 years of commercial production for US\$ 1,000,000.

Table 4-2 Concession Agreements – El Quevar Project											
Owner	File No.	Property	No. of Hectares	Type	Type Of Contract	Contract Term	% Acquired	Remaining Payments		Remaining Work Commitment	
								Due Date	Amount, US\$	Expiry Date	Amount US\$
SESA	3902 17114	CASTOR (50% interest) EL QUEVAR I	101.79 329.08	Mine Mine	exploration with purchase option	16-Mar-06 to 16-Mar-11	50% of Castor, 100% of Quevar II, 1% NSR to SESA, Silex can buy it out for USD 1,000,000	16-Mar-10 16-Mar-11	500,000 1,100,000	none	none
	1807	VIEJO CAMPO	101.79 329.08	Mine	exploration with purchase option	27-Oct-08 to 27 Oct-12	60%	27-Oct-09 27-Oct-10 27-Oct-11 27-Oct-12	50,000 100,000 200,000 200,000	27-Oct 09 27-Oct 10 27-Oct 11 27-Oct 12	150,000 250,000 250,000 350,000 1,000,000
	3902 1578 1542 12222 18332	CASTOR (50% interest) VINCE ARMONIA QUESPEJAH UAR TORO I	101.79 44.72 17.90 18.0 436.6	Mine Mine Mine Mine Mine	JOINT VENTURE	22-May-06	65% of 50% MHA 65% of 100% MHA 65% of 100% MHA 65% 65%				completed
SARAVIA CARLOS ALBERTO	18359	NEVADO I	1,200.00	Mine	exploration with purchase option	22-Jun-07 to 22 June 12	100% 1% NSR to owner, Silex can buy it out for USD 1,000,000 within first 2 years of beginning commercial production.	22-Jun-10 22-Jun-11 22-Jun-12	200,000 300,000 750,000	none	none

4.5 Perlite Properties

There are 22 perlite mining concessions inside Silex's El Quevar property perimeter. (Perlite is an altered volcanic rock which expands upon heating in a furnace, and is used in the expanded form as an insulator and soil-conditioner.) Several of the perlite quarries are in sporadic production. Because perlite is a construction material ("roca de aplicacion" under Argentine mining law), it is in a separate legal category from metal ores. Therefore, the perlite properties do not conflict with Silex's concessions in theory, nor, to date, in fact.

4.6 Environmental Liabilities and Permitting

The El Quevar project does not encompass any obvious environmental liabilities or restrictions. The project is inside the Reserva Natural Los Andes, which was established principally to provide habitat for vicuñas. However, the reserve is designated for multiple uses (Categoría de Manejo de Uso Múltiple VIII) which permits mineral exploration and mining.

The holder of any mineral concession in Salta province must submit an Environmental Information Report prior to exploration or mining activity. This report must be re-submitted every two years. There are three levels of permitting:

- Prospecting, requiring an EIR Stage 1;
- Drilling and exploration, requiring an EIR Stage 2; and
- Mineral production, requiring an EIR Final Stage.

At this time, all the El Quevar concessions are permitted for exploration.

4.7 Surface Ownership

The surface rights at El Quevar are controlled by Salta Province; there are no private properties within the concession area. To date no issues involving surface rights have impacted the Quevar project.

5.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

5.1 Geographic Setting

The El Quevar project lies in northwestern Argentina near 24.3 deg S and 66.8 deg W, within the tundra-like puna or altiplano region of the central Andes (Figure 2-1). This region is dominated by extensive arid flats at 3,700 to 4,200 meters above sea level, punctuated by peaks, usually of volcanic origin, rising to 5,000 meters or more. The property is on the western slope of a volcanic massif dominated by the peaks Nevado de Queva (6,130 meters) and Cerro El Azufre (5,840 meters). Canyons draining the project area descend to the west to an extensive complex of alluvial fans grading into the salt flats (salares) of Pocitos (elevation 3,700 meters) to the southwest, Rincon (3,800 meters) to the west, and Cauchari (3,900 meters) to the northwest. Most of the mineralized areas are at 4,500 to 5,100 meters above sea level, with the Yaxtché Central Zone being at 4,800 to 4,900 meters.

Soil development is limited, and vegetation is sparse, consisting mainly of clumps of spiny grass (*Stipa*) known as coirón or ichu. There are no native trees or large shrubs in the project area, most of which consists of barren outcrop, talus, alluvium, and landslide blocks. Water occurs seasonally in the larger arroyos. 5-1 displays views of the Yaxtché Central Zone. The photo on the left is a view of the collar of hole QVD-118, looking to southeast across Yaxtché Central Zone to distant trenches on Copan prospect, while on the right is a view of Trench 21 in Yaxtché Central, looking north.



Figure 5-1
Views of Yaxtché Central Zone

Wildlife is generally not conspicuous in the project area, due to the altitude and aridity. The name “El Quevar” means in Spanish “place of quevas” or “queva nest”, the queva (a.k.a. quiula) being a heavy-bodied wild fowl which lives in these mountains. Most likely the queva species in this area is *Tinamotis pentlandii* (a.k.a. *Nothoprocta pentlandii*), known in English as the “puna tinamou”, a member of the tinamou family of birds. The only large native mammals known to be present are the vicuña (*Vicugna vicugna*) and the mountain lion (*Felis concolor*). Domesticated burros, sheep, cattle, llamas, and alpacas are occasionally seen as well.

The climate is typical of the puna in the central Andes – arid, with moderate temperatures, high diurnal temperature fluctuations, and lesser seasonal fluctuations. Night-time temperatures of minus 15 degrees Celsius occur in winter at 4800-meter elevation, rising to plus 25 degrees Celsius in summer daytime. Precipitation falls mainly during November to March as rain, and during July and August as light snowfalls which gradually evaporate. Total precipitation is on the order of 10 to 20 cm annually.

Exploration and mining activity is possible all year, although slightly less efficient during seasons of precipitation.

5.2 Access

The El Quevar project lies about 270 kilometers by road from the capital city of Salta. The road, passing through San Antonio de los Cobres, is paved or well-maintained gravel, and is generally well-engineered, except for a stretch of about 50 kilometers in the Quebrada del Toro, between Rosario de Lerma and Puerta Tastil. This segment follows a steep-walled river gorge, within which the road is narrow, twisting, and gravel-surfaced. Driving time by SUV from Salta to the project camp is 4 to 5 hours, plus any stops.

The camp is about 10 kilometers from the highway on a gravel road. Several gravel roads, in good condition except after major storms, connect the camp to Yaxtché and other areas.

5.3 Infrastructure

Infrastructure in the project vicinity is currently sparse, but is sufficient for exploration needs, and can be readily improved to support a mining project.

Some of the information in this section is from Silex Argentina (2008a).

Camp facilities are owned by Silex, with services provided by a contractor at a modular camp on the alluvial fan north of Salar de Pocitos, at 4,000 m elevation, on the El Quevar III concession. This camp has several buildings for living, eating, and office quarters, core splitting and logging, and equipment

maintenance. Rated capacity is 96 persons; additional facilities would be needed to house sufficient workers for a mine.

Camp power is supplied by two 275 kVA diesel generators which operate 24 hours per day. Water comes from a nearby well. A satellite dish provides telephone and internet communications. The camp lies 10 kilometers by dirt road from the Yaxtché Central Zone at El Quevar.

Camp wastewater is treated and injected into disposal wells. Solid wastes are stored in sealed containers and sent to Salar de Pocitos town for final disposal. The small quantities of industrial wastes are temporarily stored on site, pending later transfer.

Towns are sparse in this part of Argentina, but Salar de Pocitos (“Pocitos”) lies 20 kilometers southwest of the camp. It is on the rail line to Chile and at a road junction at the north end of the Salar de Pocitos salt flat. Originally a community of herders and railroad workers, the town at 3,700 meters elevation has shrunk from over 200 people in 2000 to about 80 now, since the railroad is inoperative and subsistence herding is no longer attractive to most Argentines. Currently the town has a church, a medical clinic, a school, two small general stores (all small), and a natural-gas compressor plant. The compressor plant belongs to a FMC-controlled borate operation located about 100 kilometers to the south, at Salar del Hombre Muerto. Compressed natural gas is trucked to that operation for processing of borate brines. Substantial office and housing buildings and switching facilities exist at the train station, but only a few railroad caretakers live in Pocitos.

The next nearest town is San Antonio de los Cobres, about 90 kilometers to the northeast of El Quevar, on the road to Salta. San Antonio is a seat of the local departmental (similar to a county in North America), and a substantial town of about 4,000 people. At 3,750 meters, it is the highest departmental seat in Argentina. Modest supplies and services are available, including a Level II hospital.

Salta, the capital of the province, has about 500,000 inhabitants and all major services.

Railroad tracks lie within less than 10 kilometers west from the camp, on the narrow-gauge (3 feet) line which connects Salta and San Antonio de los Cobres with Antofagasta, Chile. This line, the Northern Transandean Line (Transandino del Norte, C14), part of the General Belgrano narrow-gauge system in Argentina, was closed in 2001 due to political and business issues between Argentina and Chile. There is still an infrequent tourist-only passenger service between Salta and San Antonio de los Cobres, known as “Tren a los Nubes” (“Train to the Clouds”). The line in Chile is well-maintained, and a station with switching facilities exists at Salar de Pocitos town. The line in each country is owned by each respective government. The line could probably be reopened to Salar de Pocitos, and possibly into Chile, if sufficient guaranteed freight traffic were committed.

Natural gas is available at Pocitos via the “Gasoducto Minero” pipeline, runs from Salta to Pocitos. Gas is available for projects in Salta province, specifically mining projects. The high-pressure pipeline passes through the El Quevar concessions, about 5 kilometers west of the Silex camp. It has a capacity of 210,000 m³/day.

Grid Electricity is potentially available from a 354 kVA, high-voltage power line which passes 30 kilometers north of Yaxtché. It is owned by Termo Andes. There is currently no external electric power to El Quevar.

Water for camp use is pumped from a 100-meter deep well in the alluvial fan at the camp. It has a capacity of 29 m³/day. Additional water could be supplied by drilling more wells.

Manpower for exploration activities comes from various places in Salta province, with professionals (mainly geologists) from various places in South America. Mining employees would be mainly from within Argentina.

5.4 Land Use

There are no privately-held surface rights within the project area, and only one human inhabitant. All surface rights are controlled by Salta Province. A few ruined adobe buildings, formerly used seasonally by herders or prospectors, occur in some of the major canyons below 4,500 meters.

Pending definitive project studies, there appears to be sufficient land with acceptable slopes and stability to locate tailings storage areas, waste disposal areas, heap leach pads, and processing plants near the Yaxtché Central Zone.

6.0 HISTORY

Small-scale mining and prospecting in the El Quevar massif is rumored to have been carried out intermittently since the 1800's. With increasing access after 1930, the tempo of activity increased somewhat, but was never of more than local importance. Lead and silver were produced from several small, non-mechanized workings, including the Quespe Jaguar Mine near Yaxtché Central, sometimes referred to as the El Quevar (El Queva) Mine, in the area now referred to as Mani. According to Sillitoe (1975) *"El Queva mine has produced a little over 3,000 tons of ore during its intermittent operating life from 1968 to early 1973, with a maximum output of 1,270 tons in 1970. Ore grades are difficult to estimate but hand-cobbed material seems to have averaged about 8 percent lead and 0.2 percent silver."*

Scattered prospects pits and minor working also occur in the massif, and presumably in the sulfur-bearing outcrops on Cerro El Azufre to the south of Yaxtché.

In the 1970's the government-sponsored Plan NOA-1 was carried in northwest Argentina, including the El Quevar area. This program included geological field work and prospecting in 1971 to 1974, some of which was reported by Sillitoe (1975).

Recorded systematic exploration on the property began in the mid-1970's, when the Argentine government-owned company Fabricaciones Militares drilled 3 or 4 holes, probably in Quevar Norte. No records of results have been located.

Later in the 1970's BHP-Utah Minerals International drilled 3 holes in the Mani-Copan area just south of Yaxtché Central. No data have been located to document this work, which is believed to have focused on porphyry-copper potential.

In the 1990's, the Mexican company Industrias Peñoles undertook surface sampling in Quevar Sur. No locality data nor assay results from this work are available to Golden Minerals.

In 1997, Minera Hochschild completed 6 reverse circulation and diamond core holes in the Mani and Yaxtché West area, as well as trenching across the Mani structure. Results of this work are available to Golden Minerals.

In 1999, Mansfield Minerals collected surface and pit samples at Yaxtché. Golden Minerals has the results of this work.

Neither Golden Minerals nor CAM is aware of any estimates of mineral resources made prior to 2004.

Beginning in 2004, Golden Minerals (and its predecessor Apex) have undertaken exploration at El Quevar through its Argentine subsidiary Silex. These exploration campaigns and results are discussed in Section 10, Exploration.

Mineral titles on the El Quevar property are discussed in Section 4.0, Property Description and Location.

The volcanic complex is bounded by regional 125° structures: the Calama-Olacapato-Toro lineament on the north, and a parallel one on the south. A lesser, secondary set of regional lineaments, bearing 025°, are interpreted as older and related to folding in the Paleozoic basement rocks (Petrinovic, 1999). These do not show on Figure 7-1. There is a suggestion on satellite imagery that an ovoid structure centered on the El Quevar property might be the rim of a caldera; however it does not appear on the generalized government map shown on Figure 7-1.

The El Quevar volcanic complex formed during Miocene to early Quaternary time, with main volcanic events dated at 19 to 17Ma, 13 to 12Ma, 10Ma, 7 to 6Ma and 1 to 0.5Ma. The dominant volcanic products were extensive pyroclastic flows (including ignimbrites of lithic and crystal-lithic tuffs), overlain by rhyolite flows equivalent to the Quirón rhyolite, followed by intermediate volcanic rocks including andesitic flows and resurgent domes of dacitic composition. Doming is associated with multiple intrusions of different phases and mineralizing events.

Post-volcanic erosion has created windows which expose the earlier volcanic phases, with intrusive domes and areas of extensive hydrothermal alteration. The southern window includes the Quevar Sur and Quevar Norte mineralized areas, while Viejo Campo is in the northern window seen in Figure 7-1.

Locally, the volcanic rocks interfinger with Miocene to Pliocene age red sandstone that is correlative to the Pastos Grandes Group. Late Pleistocene glaciation and fluvial and mass-wasting processes have eroded the complex, creating erosional windows, landslides, and extensive alluvial fans.

7.2 Local Geology

7.2.1 Stratigraphy

The El Quevar property has not been completely mapped geologically, but it is clear that the rocks within the erosional windows are entirely Tertiary volcanic flows, tuffs, and intrusive rocks overlain in places by Pleistocene moraine and Quaternary rockslide, alluvium and colluviums. The principal lithologic sequence is shown in Table 7-1. Some of the dacitic intrusive domes are also believed to be post-mineral.

Table 7-1 Stratigraphy – El Quevar			
Name	Logging Abbrev.	Lithology	Mineralization
Quaternary deposits	QA, QC, QM	alluvium, colluviums, moraine, landslides	post-mineral
Unconformity			
dacitic flows	LD	flow-banded biotite dacite	post-mineral
Unconformity			
lithic tuffs	TDL	mainly dacitic tuffs, locally bedded	altered, rarely mineralized (may be post-mineral ?)

Table 7-1 Stratigraphy – El Quevar			
Name	Logging Abbrev.	Lithology	Mineralization
El Quevar breccia	BXQ	dacitic or locally rhyolitic breccia (tuff-breccia ?)	principal mineral host
dacitic intrusive domes	DD	porphyritic dacite	locally mineralized
perlite and volcanic glass	PE	perlite, obsidian	rarely mineralized
Unconformity			
Paleozoic phyllites	(not drilled)	shales, slates, phyllites	(not drilled)

The various lithologies are described in somewhat more detail by SRK Consulting (2009), but as is typical of volcanic edifices, there is considerable variation in compositions and textures.

The main portion of Quevar Sur, containing Yaxtché, has been mapped, as shown in Figure 7-2

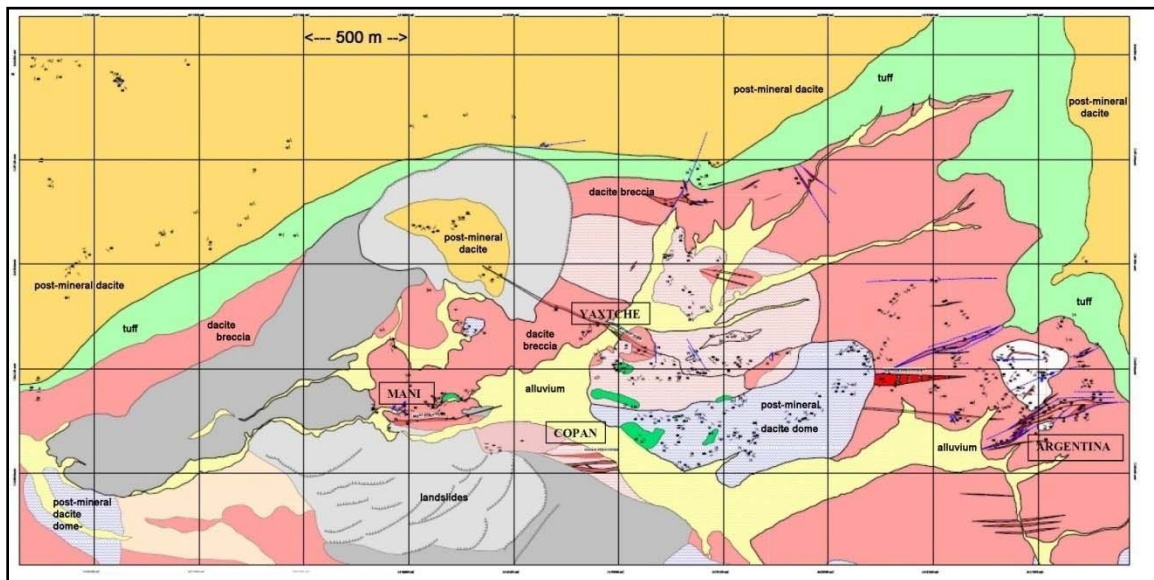


Figure 7-2
Geology of Quevar Sur area, including Yaxtché
(adapted from SRK Consulting (2009) Figure 5-2)

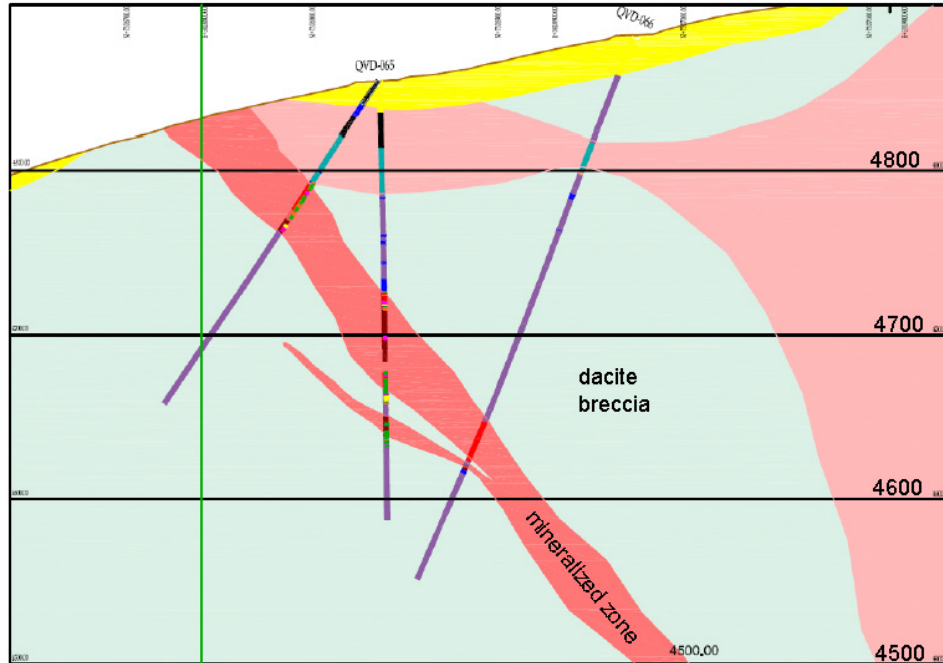


Figure 7-3
Cross-section looking west along Yaxtché Central Zone
 (adapted from SRK Consulting (2009) Figure 5-3)

7.2.2 Structure

The principal structural trend at Quevar Sur is the Yaxtché structural trend, which strikes 290 degrees. It dips to the north at 65 to 70 degrees near surface, shallowing to 45-55 degrees at depth. It is exposed at surface or lies beneath talus and landslide deposits, for about 750 meters along strike. The zone is 40 to 150 meters wide, and contains 4 to 5 semi-continuous mineralized zones. The nature of the Yaxtché trend is apparently a weakly-sheared structural corridor, containing fault breccias in addition to the El Quevar tuff breccia.

Surface mapping and drilling at Yaxtché have identified a sub-parallel fault, the North Fault, dipping steeply to the northeast, which cuts off the Yaxtché structure at depth to the north. Drilling indicates that another fault, the South Fault, is parallel to the North Fault, at the south edge of the mineralized zone.

Cross-structures striking about 020 degrees cut the Yaxtché trend, and divide it into three sectors, labeled Yaxtché East, Central, and West.

7.2.3 Alteration

Hydrothermal alteration is widespread in the volcanic rocks exposed in the erosional windows. The types identified are described by SRK Consulting (2009), as summarized below in Table 7-2.

Table 7-2 Alteration Types			
Alteration Type	Logging Code	Diagnostic Minerals	Comments
unaltered	UA	original volcanic minerals	--
propylitic	PR	chlorite, disseminated pyrite	distal to mineralization
argillic	AR	kaolinite, illite and smectite	associated with mineralization
advanced argillic	AA	kaolinite, alunite and dickite	associated with mineralization
silicification	SI	vuggy quartz, alunite	restricted to mineralized structures

Alteration tends to be concentrated within specific structures, except that propylitic alteration is widespread distal to structures. Within the mineralized areas, alteration displays lateral zoning, from pervasive silicification at the center, extending outward into advanced argillic, then argillic, then propylitic or no alteration. Higher-grade areas are associated with hydrothermal breccia zones showing strong and pervasive silicification, with vuggy silica. The vuggy silica is interpreted to be the result of acid leaching and preceded the deposition of galena and sphalerite. These silica zones may be up to 10m thick.

In mapping and core-logging, alteration is indicated as shown in Table 7-3.

Table 7-3 Alteration Acronyms	
Type of Alteration	Acronym Used
INTENSE	I
STRONG	S
MEDIUM	M
WEAK	W
TRACES	T

8.0 DEPOSIT TYPES

The silver-base-metal mineralization at Yaxtché is clearly of epithermal origin. The cross-cutting nature of the mineralization, the assemblage of sulfide and alteration minerals, and the presence of open spaces with euhedral minerals, all point to an origin at shallow to moderate depths (a few hundred meters below surface) from hydrothermal solutions. Mineralization is hosted in volcanic rocks and minor associated intrusive and sedimentary rocks. Epithermal deposits are common in the Andes and in other cordilleran environments, especially in proximity to Tertiary volcanic rocks.

Upper parts of the Yaxtché mineralization have been oxidized and leached by meteoric waters, forming an oxidized (supergene) zone with distinctive mineralogy. Beneath the oxide zone is a mixed zone, containing secondary minerals (both oxides and sulfides) deposited on primary sulfides. This is the zone of secondary enrichment, which on average has the highest silver grades. At depth is the primary (hypogene) zone of original sulfide minerals. This vertical succession of hypogene-enriched-supergene zones is common in epithermal systems which have been subjected to erosion, especially in arid environments.

Other mineralized prospects within the El Quevar volcanic complex may be of deeper or more shallow origin than Yaxtché. The native sulfur at high elevations on Cerro Azufre, and the possible hot-spring sinters at over 5,000 meters elevation at Claudia were almost certainly emplaced at the top of an epithermal plumbing system. Although drill information is lacking it is widely postulated (e.g. Sillitoe, 1975) that a porphyry-copper system may underlie the El Quevar complex at depth within the area of extensive hydrothermal alteration. Pudack, et al. (2009) have postulated such a relationship in the Nevados de Famatina district in adjacent La Rioja province, Argentina.

Yaxtché has been interpreted by Golden Minerals staff as being of intermediate sulfidation (“IS”) epithermal type, which in general are higher in base-metal content than high-sulfidation (“HS”) epithermal deposits.

9.0 MINERALIZATION

9.1 Distribution and Character of Mineralization

Mineralization at Yaxtché Central, and at El Quevar in general, occurs in strongly-altered, structurally-controlled zones within the older volcanic (and locally intrusive) rocks. Sulfide minerals occur variously as open space filling and in massive veinlets or clots, and less commonly as disseminations.

The Yaxtché Central Zone is characterized by strong to moderate silica alteration, and vuggy quartz-alunite rock. It is bounded by faults in both the hangingwall and footwall of the mineralized zone. The El Quevar Breccia, a dacitic tuff breccia of probable ash-flow origin, is the principal host for mineralization at Yaxtché Central. Mineralized fault breccias and hydrothermal breccias also occur.

Figures 9-1, 9-2, and 9-3 show mineralized rocks in outcrop and in core. The silver mineralization occurs mainly as fine-grained black sulfides, which are not highly photogenic.



Figure 9-1
Exposure of oxidized sulfides in Trench 21, Yaxtché Central



Figure 9-2
Late barite filling open spaces



Figure 9-3
Core from newly-drilled hole QVD-136,
showing some vuggy zones

9.2 Mineralogy of Yaxtché Central

The principal metal value at Yaxtché Central is silver, with lesser amounts of lead, zinc, and copper minerals, and possible credits in gold and antimony. The principal gangues are quartz, pyrite, and barite. A large number of minerals have been reported from Yaxtché Central, many of which are fine-grained sulfosalts or other minerals difficult to identify in hand specimen. Table 9-1 below has been compiled from polished-section and microprobe studies carried out by B&F Consultores (2008a, 2008b), from Silex reports, and from discussions with Silex staff on-site. It is likely that additional investigations at Yaxtché Central will result in changes and additions.

Table 9-1 differs in some respects from previous reports in assigning some metallic minerals (notably argentite, native silver, chalcocite, and covellite) to supergene (weathering) origin, rather hypogene (hydrothermal) origin. This is based on the polished-section observations showing these minerals commonly rimming and replacing other sulfides.

While Table 9-1 is specific to Yaxtché Central, the mineralogy at other prospects on the El Quevar property at moderate (4,000 to 5,000 meters) elevations appears at this point to be rather similar to Yaxtché Central. Important differences in mineralogy may occur at lower and higher levels in the volcanic edifice.

Table 9-1 Yaxtché Central, Selected Minerals of Economic Interest							
Name	Mineral Type	Formula	% Metal	Stage	Phase	Abundance	Comments
IMPORTANT SILVER-BEARING MINERALS							
galena	Sulfide	PbS	86.6% Pb, Ag varies	late? hypogene	IV	moderate	may contain Ag
pyrargyrite	Sb-sulfosalt	Ag ₃ SbS ₃	57.75% Ag 22.5% Sb	hypogene	IV	sparse	forms series w/ proustite (As)
tennantite	As-sulfosalt	(Cu,Fe,Zn,Ag) ₁₂ As ₄ S ₁₃	max 5% Ag	hypogene	IV	sparse	forms series with tetrahedrite
tetrahedrite	Sb-sulfosalt	(Cu,Fe,Zn,Ag) ₁₂ Sb ₄ S ₁₃	varies: max 18% Ag, to 34.8% Cu, 29.6% Sb,	hypogene	IV	rare	forms series with tennantite
pearceite	As-sulfosalt	(Ag,Cu) ₁₆ As ₂ S ₁₁	77.45% Ag	hypogene	IV	sparse	compare polybasite
silver (native)	native metal	Ag	100% Ag	probably supergene	VI	sparse	often rims other sulfides
argentite/ acanthite	Sulfide	Ag ₂ S	87.1% Ag	probably supergene	VI	sparse	forms rims on tennantite
chlorargyrite (cerargyrite)	Chloride	AgCl	75.3% Ag	supergene	VI	sparse	forms rims and fillings
argentojarosite	Sulfate	AgFe ₃ (SO ₄) ₂ (OH) ₆	18.9% Ag	supergene	VI	moderate/ sparse	
OTHER HYPOGENE (PRIMARY) MINERALS							
quartz	Silicate	SiO ₂	None	hypogene	I, IV	abundant	several generations
barite	Sulfate	BaSO ₄	58.8 % Ba	late hypogene	V	moderate	coarse crystals
pyrite	Sulfide	FeS ₂	47% Fe, 53% S	hypogene	I, IV	approx half of sulfides	several generations; may contain As
enargite	Sulfosalts	Cu ₃ AsS ₄	48.4% Cu low Ag	hypogene	IV	moderate	forms series with famatinite (Sb)
famatinite	Sb-sulfosalt	Cu ₃ SbS ₄	low Ag	hypogene	IV	sparse	forms series with enargite (As)
sphalerite	Sulfide	ZnS	c. 64% Zn, no Ag	hypogene	IV	sparse	not often reported in polished secs.
bismuthinite	Sulfide	Bi ₂ S ₃	81.3% Bi	hypogene	IV	sparse	
bourmonite	Sb-sulfosalt	PbCuSbS ₃	13.0 % Cu 24.9 % Sb	hypogene	IV	rare	"cog-wheel ore"
stibnite	Sulfide	Sb ₂ S ₃	71.68% Sb	hypogene	IV	rare	see bismuthinite
chalcocopyrite	Sulfide	CuFeS ₂	34.6% Cu	hypogene	IV	traces	
giessenite	Sb-sulfosalt	Cu ₂ Pb ₂₆ (Bi,Sb) ₂₀ S ₅₇	c. 0.1% Ag	hypogene	IV	rare/ unknown	presence uncertain
gold/electrum	native metal	Au,Ag	100% Au-Ag	hypogene ?	?	not reported	not reported
OTHER SUPERGENE (SECONDARY) MINERALS							
plumbojarosite	Sulfate	PbFe ₆ (SO ₄) ₄ (OH) ₆	18.3% Pb, minor Ag	supergene	VI	moderate/ sparse	
jarosite	Sulfate	KFe ₃ (SO ₄) ₂ (OH) ₆	33.4% Fe	supergene	VI	moderate/ sparse	
stibiconite	oxide, hydrated	Sb ₃ O ₆ (OH)		supergene	VI	rare	alters from stibnite
chalcocite	Sulfide	Cu ₂ S	80% Cu	supergene or hypogene	IV, VI,	sparse	
triphyte	Oxide	FeSbO ₄	50.4% Sb	supergene or hypogene	?	rare	
limonite	oxide- hydroxide mixture	fine-grained mixtures of goethite FeO.OH, lepidocrocite FeO.OH, hematite Fe ₂ O ₃ ; others	Fe	supergene	VI	moderate	
gypsum	Sulfate	CaSO ₄ .6H ₂ O	None	supergene	VI	sparse	
covellite	Sulfide	CuS	66.5% Cu	supergene	VI	sparse	forms rims on Cu sulfides
ALTERATION MINERALS							
smectite, e.g. montmorillonite		e.g. Na _{0.33} (Al,Mg) ₂ Si ₄ O ₁₀ (OH) ₂ .nH ₂ O	None	alteration, supergene	I, VI	abundant	replaces glass in volcanics
alunite	Sulfate	KAl ₃ (SO ₄) ₂ (OH) ₆	None	alteration, supergene	I, VI	moderate	both hypogene and supergene
hyalophane	silicate, feldspar	(K,Ba)AlSi ₃ O ₈ see	None	alteration	I ?	sparse	

Table 9-1 Yaxtché Central, Selected Minerals of Economic Interest							
Name	Mineral Type	Formula	% Metal	Stage	Phase	Abundance	Comments
calcite	Carbonate	CaCO ₃	None	alteration	I	sparse	
illite-sericite	mica/clay	(K,H ₃ O)(Al,Mg,Fe) ₂ (Si,Al) ₄ O ₁₀ (OH) ₂ ·H ₂ O	None	alteration	I	abundant	a.k.a. hydro-mica
chlorite	silicate(mica)	(Al,Fe) ₄₋₆ (Al,Si) ₄ O ₁₀ (OH) ₈	None	late magmatic alteration	I	abundant	after biotite, hornblende
goethite	oxide-hydroxide	α-Fe ³⁺ O(OH)	Fe	supergene	I	abundant	
kaolin	silicate clay	Al ₂ Si ₂ O ₅ (OH) ₄	None	alteration or supergene	I	abundant	
rutile	Oxide	TiO ₂	59.9% Ti	alteration	I	sparse	accompanies pyrite ?
MINERALS INHERITED FROM HOST ROCKS							
plagioclase	silicate, feldspar	NaAlSi ₃ O ₈ to CaAl ₂ Si ₂ O ₈	None	pre-mineral, volcanic	0	abundant, c. 10% of rock	usually altered
quartz	Silicate	SiO ₂	None	pre-mineral, volcanic	0	common, c. 5% of rock	mainly eyes of alpha-quartz
biotite	silicate, mica	K(Mg,Fe) ₃ AlSi ₃ O ₁₀ (F, OH) ₂	None	pre-mineral, volcanic	0	moderate, c. 2%	may be altered
orthoclase (sanidine)	silicate, feldspar	KAlSi ₃ O ₈	None	pre-mineral, volcanic	0	sparse, <1% of rock	may be altered
others	Varies	varies	None	pre-mineral, volcanic	0	sparse, < 0.5%	zircon, apatite, hornblende
glass	amorphous silicate	indefinite, SiO ₂ -rich	None	pre-mineral, volcanic	0	abundant, to 50% of rock	in matrix of volcanics, often altered/devitrified

9.3 Oxidation Classes of Yaxtché Central Mineralization

Based on the minerals found at Yaxtché Central and their relative abundances by depth, Silex geologists have classified the mineralization by oxidation state, as shown in Table 9-2. It is normally possible to identify these classes by visual examination of core. The mixed zone of secondary enrichment contains minerals such as argentite, chalcocite, chlorargyrite, covellite, and native silver, often as rims or coatings on hypogene sulfide grains.

Table 9-2 Oxidation Classes of Yaxtché Central Mineralization			
Class	Location	Key Diagnostic Minerals	Origin
oxide	near-surface	jarosite (plumbo-, argento-), limonite, stibiconite,	supergene
mixed	Intermediate	chalcocite, covellite, argentite, native silver, chlorargyrite: when rimming hypogene sulfides	secondary enrichment
sulfide	Deep	pyrite, galena, sphalerite, sulfosalts, bismuthinite, stibnite, chalcopyrite	hypogene

Naturally, there is often overlap between the oxidation classes, with remnants of hypogene or secondary sulfides sometimes found in the oxide zone. Due to the importance of the mineralogy in mineral processing, the classification of drill intervals into oxidation classes will become more important as the project advances.

9.4 Mineral Paragenesis

It is possible to establish a general sequence of geologic events which gave rise to the mineralization at Yaxtché Central, although some uncertainties remain. It is not yet clear whether this tentative paragenesis will also apply to other mineralized areas at El Quevar.

Table 9-3 is modified from Tables 5.2.1.1 and 5.2.1.2 of SRK Consulting (2009), with information from the mineralogical studies of B&F (2008a, 2008b), discussions with Silex staff on-site, and CAM's examination of core. It is likely that this sequence will be further modified as the project advances.

Table 9-3 Sequence of Events - Yaxtché Central Zone				
Time Sequence	Phase*	Event	Minerals	Comments
0	--	original host rocks	mainly silicates	
1	I	propylitic alteration	chlorite, disseminated pyrite, clays	some hydrothermal brecciation
2	II		pyrite, gray silica, white silica,	hydrothermal brecciation
	III			
3	IV	acid leaching	clays, alunite	formation of vugs
		argillic alteration	clays, hypogene sulfides: galena, sulfosalts, sphalerite, chalcopryrite, Sb and Bi sulfides; late galena	hydrothermal brecciation
4	V	Silicification	drusy quartz, late barite	partial filling of vugs
5	--	uplift and erosion	oxidation of hypogene sulfides, secondary enrichment	minor angular unconformity
6	--	post-mineral dacite flows	mainly silicates in dacite	
7	--	modern erosion, glaciation	continued oxidation and secondary enrichment	

9.5 Controls on Mineralization

The controls on silver mineralization at Yaxtché Central, as currently understood, are:

- an exposed window of older volcanics
- the faulted and sheared Yaxtché structure
- the receptive El Quevar Breccia unit
- areas of intensive hydrothermal alteration
- elevation control with respect to hydrothermal solution sources (?)
- oxidation resulting in secondary enrichment

It is likely that further work in the El Quevar district will serve to elucidate the controls.

10.1 Exploration to Date

Golden Minerals' work was carried in three named exploration areas: Quevar Sur, Quevar Norte, and Viejo Campo. The Yaxtché deposit is in Quevar Sur (Figure 10-1).



Since late 2004, the following work has been carried out by Golden Minerals:

1. Geologic mapping in Quevar Sur area at 1:5,000 and 1:10,000 scales.
2. Surface sampling by channel, panel and chip samples in all three areas.
3. Surface geophysics (3-D, pole-dipole resistivity IP in late 2007 to early 2008, carried out by Quantec Geoscience Argentina S.A. based in Mendoza, Argentina. Line separation was at 200 and 400m with markers at 50m intervals along lines at Quevar Sur.
4. Petrographic and analytical study of 24 samples from 6 drillholes at Yaxtché, carried out by B&F Consultores (B & F, 2008a, 2008b), to characterize the mineralogy.
5. Trenching and diamond drilling in Quevar Sur and Quevar Norte , as described for Yaxtché Central in Section 11, Drilling.

Most of the prospects named by Silex geologists do not have indigenous names, but names of people or of Mayan deities (Yaxtché, Mani, Copan).

10.2 Exploration Potential

In addition to Yaxtché Central, discussed in this Technical Report, considerable potential exists on the El Quevar properties for additional epithermal silver-base-metal-gold mineralization. These can be categorized as follow:

1. Yaxtché Zone (East, Central, and West). Drilling and trenching to date have shown well-mineralized intercepts in all three along-strike zones in the Yaxtché structure, which has now been defined along 1,900 meters of strike length. Some especially good drill intercepts were announced by Golden Minerals in a News Release dated 29 July 2009, including hole QVD-086 in Yaxtché West, with 8.0 meters grading 748 g/t Ag, and QVD-079 in Yaxtché East, with 3.0 meters grading 250 g/t Ag. These are intercept lengths; true widths range from 75% to 90% of the reported intercept lengths.
2. Other prospects in Quevar Sur, near Yaxtché. These include the formerly-mined area at Mani, and the Copan trend, both south of the Yaxtché trend; the Gold Zone north of Yaxtché East; and the Argentina area to the east of Copan. These have been tested in a preliminary fashion by limited drilling and surface sampling, with encouraging results.
3. Quevar Norte. Limited drilling (two holes) and extensive surface sampling has identified a number of mineralized prospects and Claudia, Sharon, and other areas. The geology is suggestive of possible sinter or hot-spring gold-silver mineralization at high elevations, above 5,100 meters.
4. Viejo Campo. Work at Viejo Campo is at an early stage, but is highly encouraging for mineralized breccias and veins. An initial drill program was in progress on the date of this report.

5. Other targets could include one or more deep porphyry-copper systems beneath the El Quevar volcanic complex, and solfateric or hot-spring gold deposits at high levels in Quevar Norte. Viejo Campo also have promising exploration

11.0 DRILLING

11.1 Drilling and Trenching Campaigns

Four drilling campaigns in 2006 through 2008 provided assay data used in this Technical Report. Golden Minerals has continued drilling into mid-2009; the 2009 drilling is not reported here. A total of 15,506.3m of diamond drilling was completed in 81 drillholes between 2006 and 2008 (see Table 11-1). Two of the holes were drilled at Quevar Norte and the remainder were drilled at Quevar Sur, including Yaxtché.

Trenching by backhoe was also undertaken in 2007 and 2008, but it was found that trenching was slow and sometimes encountered thick overburden, so it was discontinued. Assays of trench walls are treated as low-angle drillholes in this report.

Table 11-1 Sample Openings at El Quevar.				
Campaign	Drill Contractor	Locations	No. of Holes	Meters
June-Aug 2006	Major Perforaciones (Mendoza, Arg.)	Quevar Sur (Mani, Copan, Yaxtché)	17 DDH	2,373.8
March-June 2007	Bolland Minera (Buenos Aires)	Quevar Sur (Yaxtché, Mani, other); Quevar Norte	19 DDH	2,481.75
March-June 2007	Silex	Quevar Sur, Quevar Norte	16 trenches	3,300
January-June 2008	Patagonia/Boart	Quevar Sur (Yaxtché, Copan)	35 DDH	8,415.75
January-June 2008	Falcon Drilling		8 DDH	2,235.0
January-June 2008	Silex		21 trenches	n.a.

11.2 Drilling Procedures

All core was of HQ size (6.35 centimeters), except in hole QVD-063, where the diameter was reduced in mid-hole to NQ size (4.76 centimeters), due to poor ground conditions. Most holes in the Yaxtché Central Zone were drilled so as to cut the mineralized zone at a high angle in terms of dip, and nearly all holes were at right angles to the strike. The angle of intercept averaged perhaps 80 degrees. Core recovery averaged over 90 percent.

Drilling programs and results were reported by Silex, (2007, 2008b), and in various electronic spreadsheets sent to CAM. The Yaxtché Central Zone holes are shown in Figure 11-1, and are listed in Tables 11-2 and 14-1. Drilling elsewhere is not discussed in this Technical Report.

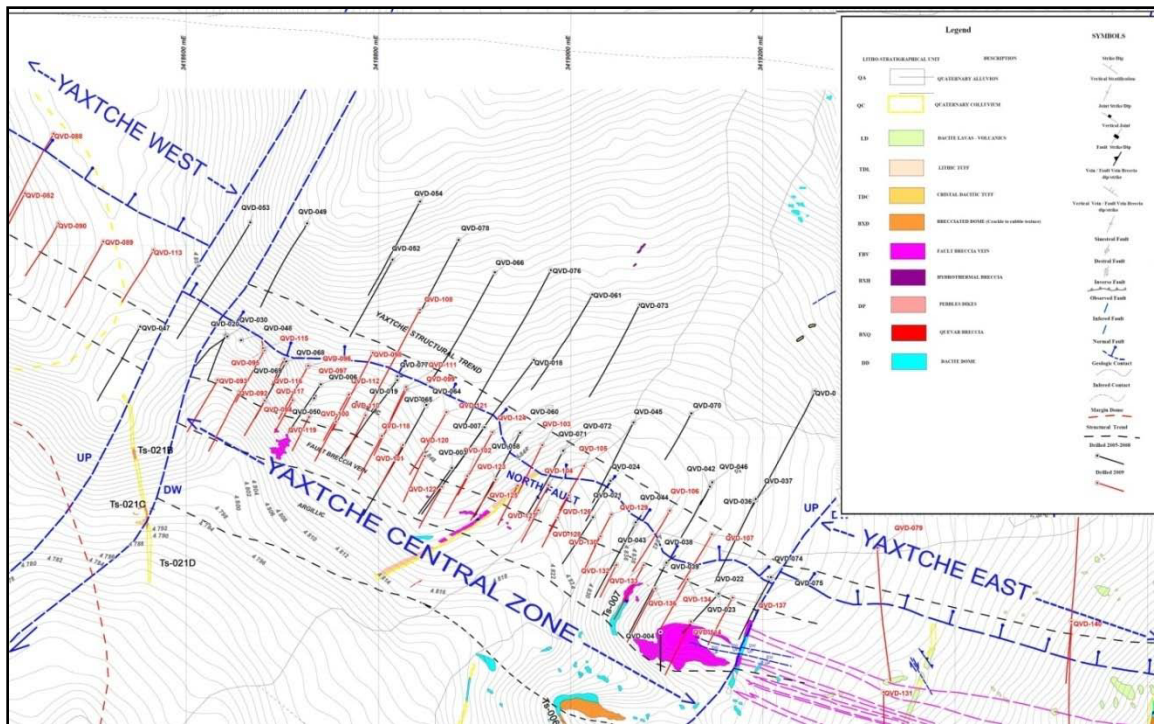


Figure 11-1
Drill Plan of Yaxtché Central Zone

Only some drillholes numbered up to QVD-081, and those trenches labeled here, were used in the resource estimate.

Drill sites were located by Silex personnel using a handheld GPS unit. Access roads and drill pads were constructed by bulldozer, and the drill location verified by a Silex geologist, who staked the hole location and orientation. The drill was then set up to drill within 2° of azimuth and 1° of inclination of the programmed orientation.

Standard procedure was for the drilling contractor to tricone through the overburden to solid rock and set casing in the upper part of the hole before coring. Drilling was performed in two 12-hour shifts. Water trucks for drilling were provided by the drilling contractor. Drilling fluids were collected in a sump, and decanted clear water was discarded. CAM noted that drill sites were very clean.

Drilling was monitored by Silex operations chiefs, one per shift, who divide their time between drilling and camp responsibilities

Downhole surveys were performed on all drillholes, using a Sperry Sun or a Reflex Photobor. Readings were made at 25m intervals. After surveying is completed, a PVC pipe was placed in the hole and the

collar cemented (see Figure 5-1). The drillhole number, total depth, azimuth and inclination were stamped into a metal plate cemented into the collar pad.

11.3 Logging of Drill Samples

Core was picked up twice daily, then placed in wooden boxes holding 3m of core at the drill and moved to the core shed at the Silex camp by a Silex operations chief or a technician. A shift report on drilling activities was provided at that time by the drilling contractor. During drilling, active drills are visited two to three times per day by a geologist or the operations chief.

In the core shed, a technician cleans the core with water and a brush, marks the box at meter intervals, and verifies the depths. The technician also marks the start and end of the interval and writes the drillhole number on the top and side of the core box. He then measures and records geotechnical information including recovery and RQD.

Geologists described the core on paper logs, and then enter the data into a computer, using standardized terminology as described in Section 9, Mineralization. The paper log has sections for comments and a graphic log with a separate area for drawing fractures. Mineralization, alteration and alteration intensity are also recorded on the log sheet and there is an area for sample interval, sample number and analytical results. The geologist marks the core for any additional observations including passive infrared mineral analyzer (“PIMA”) measurements. The geologist then selects sample intervals and samples for density measurements.

Once these procedures are completed, the core is photographed and split for analysis. Sample length within mineralized zones is at nominal one-meter intervals, but may vary due to changes in lithology and mineralization. The entire mineralized zone is sampled as well as 2 to 3m on either side of the zone.

A paper file is maintained for each stored drillhole, and a checklist for each item that must be completed for every hole is included in the file. This includes a hole summary, geological log, geotechnical log, analytical results, drill reports, certificate from the surveyor, photographs, downhole survey information and density measurements. Drill core is stored onsite in a locked facility at the Silex camp.

Sample preparation, analyses and security for drill/trench samples are described below in Section 13.

11.4 Drilling Results

Assay intercepts greater or equal to 200 ppm silver in the Yaxtché Central Zone are listed in Table 11-2.

Table 11-2 Significant intercepts at Yaxtché Central			
Hole number	from	to (m)	Ag ppm
QVD-003	18.00	19.00	756
QVD-003	23.00	24.00	267
QVD-003	72.00	73.00	264
QVD-003	73.00	74.00	269
QVD-003	74.00	75.00	1857
QVD-003	75.00	76.00	1876
QVD-006	55.80	57.00	1626
QVD-006	57.00	58.00	210
QVD-006	61.30	61.60	370
QVD-006	65.00	66.00	406
QVD-019	113.00	114.00	243
QVD-019	116.00	118.00	391
QVD-020	79.00	80.00	1020
QVD-020	80.00	81.00	7304
QVD-020	84.00	85.00	528
QVD-020	97.00	98.00	2778
QVD-021	27.00	27.60	1445
QVD-021	49.00	50.00	727
QVD-021	50.00	51.00	306
QVD-022	53.00	54.00	209
QVD-022	61.00	62.00	560
QVD-022	72.00	74.00	504
QVD-023	7.00	8.00	225
QVD-023	35.00	36.00	478
QVD-023	36.00	37.00	251
QVD-023	72.00	74.00	209
QVD-023	74.00	76.00	1372
QVD-023	76.00	78.00	694
QVD-024	77.00	78.00	340
QVD-024	88.00	89.00	201
QVD-024	91.00	92.00	1217
QVD-030	92.00	93.00	1249
QVD-030	93.00	94.00	322
QVD-030	96.00	97.00	310
QVD-030	97.00	98.00	215
QVD-030	98.00	99.00	535
QVD-030	102.00	103.00	370

Table 11-2
Significant intercepts at Yaxtché Central

Hole number	from	to (m)	Ag ppm
QVD-030	103.00	104.00	294
QVD-030	106.00	107.00	758
QVD-030	107.00	108.00	3658
QVD-030	108.00	109.00	583
QVD-036	95.25	96.30	767
QVD-036	116.35	117.40	295
QVD-038	27.00	28.00	449
QVD-038	40.00	41.00	380
QVD-038	41.00	42.00	372
QVD-038	42.00	43.00	681
QVD-039	12.00	13.00	351
QVD-039	70.00	71.00	776
QVD-039	96.00	97.00	256
QVD-039	97.00	98.00	694
QVD-039	98.00	99.00	379
QVD-039	99.00	100.00	311
QVD-039	100.00	101.00	231
QVD-039	154.00	155.00	1035
QVD-043	61.00	62.00	403
QVD-043	62.00	63.00	717
QVD-043	72.00	73.00	955
QVD-043	73.00	74.00	386
QVD-043	130.00	132.00	437
QVD-044	51.00	52.00	246
QVD-044	52.00	53.00	1175
QVD-044	53.00	54.00	581
QVD-044	57.00	58.00	230
QVD-045	147.00	148.00	368
QVD-048	114.00	115.00	203
QVD-048	117.00	118.00	1330
QVD-048	118.00	119.00	282
QVD-050	75.00	76.00	231
QVD-050	76.00	77.00	351
QVD-050	81.00	82.00	376
QVD-050	82.00	83.00	553
QVD-050	89.00	90.00	620
QVD-050	90.00	91.00	321
QVD-050	93.00	94.00	224
QVD-058	80.00	81.00	1010
QVD-058	91.00	92.00	405
QVD-060	138.00	139.00	256
QVD-060	142.00	143.00	1260
QVD-060	183.00	184.00	537

Table 11-2 Significant intercepts at Yaxtché Central			
Hole number	from	to (m)	Ag ppm
QVD-060	184.00	185.00	223
QVD-064	105.00	106.00	207
QVD-064	106.00	107.00	572
QVD-065	129.00	130.00	979
QVD-065	131.00	132.00	881
QVD-065	132.00	133.00	528
QVD-065	133.00	134.00	435
QVD-065	155.00	156.00	236
QVD-065	178.00	179.00	206
QVD-065	179.00	180.00	375
QVD-065	190.00	191.00	216
QVD-068	92.00	93.00	4470
QVD-071	88.00	89.00	241
QVD-071	89.00	90.00	208
QVD-072	136.00	137.00	241
QVD-077	189.00	190.00	270
QVD-077	190.00	191.00	347
QVD-077	196.00	197.00	1070
QVD-077	197.00	198.00	252
QVD-077	198.00	199.00	729
QVD-077	199.00	200.00	723
Ts-007	53.87	55.04	312
Ts-007	55.04	56.04	1610
Ts-007	56.04	56.97	452
Ts-007	58.18	59.13	985
Ts-007	59.13	60.21	341

Drilling to date by Golden Minerals/Silex has been successful in defining a large body of silver and base-metal mineralization of potential economic importance.

12.0 SAMPLING METHOD AND APPROACH

The silver-base-metal mineralization is readily visible to the geologist logging core or mapping trenches. Sampling methods used in the Yaxtché Central Zone resource estimate were described in detail in SRK Consulting's (2009) Section 10, and are herein incorporated by reference. CAM also reviewed the sampling methods on-site, and considers that protocols were consistent with NI 43-101 criteria. Golden Minerals has standardized protocols for logging of core and surface samples.

13.0 SAMPLE PREPARATION, ANALYSES AND SECURITY

Sample preparation, analyses, security and QA/QC (Quality Assurance/Quality Control) for the samples used in the Yaxtché Central Zone resource estimate were described in detail by SRK Consulting (2009) in detail in Section 11, and are herein incorporated by reference. CAM considers that the treatment of the samples was consistent with NI 43-101 criteria.

No officer, director, or employee of Golden Minerals was involved in sample preparation once samples were received by the laboratory.

14.0 DATA VERIFICATION

Golden Minerals provided to CAM a large database of drillholes and trenches (which were treated as geostatistically as drillholes) at El Quevar. This database included 81 drillholes and 24 trenches. After excluding those drillholes numbered higher than QVD-081, and after zeroing all missing intervals, the basic statistics on the database are as shown in Table 14-1. Only 45 of these drillholes are within the Yaxtché Central Zone.

Table 14-1 Statistics from Drillhole Assay Database		
Item	Number	Length (m)
Holes (diamond drill holes and trenches)	105	17481.0
Holes with non-collar downhole surveys	105	17481.0
Non-collar survey records	1517	17314.1
Downhole surveys up	546	509.5
Downhole surveys down	1076	16804.6
Assay intervals (m)	10543	17481.0

The initial database was filtered to exclude drillholes and trenches outside the Yaxtché Central Zone, and those drilled too far north or south, or too shallow to pass through overburden, and which thus did not intercept the zone. A total of 39 holes, 3173 samples, and 4792.83 meters of Ag assays were used in the estimate. Holes used in the estimate are listed in Table 14-2. These are the same drillholes and trenches as used by SRK Consulting (2009).

Table 14-2 Drillholes used in Resource Estimation				
Hole ID	East DG	North DG	elev (m)	TD
QVD-003	4984.84	3796.12	4848.63	111.10
QVD-004	4936.41	3524.57	4867.84	32.10
QVD-006	4997.45	3957.26	4849.33	120.90
QVD-020	4996.15	4068.72	4838.70	103.00
QVD-007	5038.04	3785.84	4855.27	193.90
QVD-021	5008.47	3642.44	4829.63	102.95
QVD-022	4997.95	3490.15	4857.45	85.90
QVD-023	4999.87	3489.93	4857.51	95.90
QVD-024	5050.44	3644.25	4833.81	122.25
QVD-043	5022.71	3600.66	4834.87	134.25
QVD-044	5024.77	3600.81	4834.93	193.35
QVD-045	5115.10	3651.43	4843.35	209.45

Table 14-2 Drillholes used in Resource Estimation				
Hole ID	East DG	North DG	elev (m)	TD
QVD-046	5098.74	3550.04	4845.34	305.45
QVD-060	5050.37	3750.52	4849.98	221.50
QVD-048	4998.90	4051.97	4839.35	200.65
QVD-064	5028.98	3850.23	4853.98	235.35
QVD-065	5029.96	3850.27	4853.98	266.65
QVD-066	5184.95	3851.90	4882.11	356.40
QVD-068	5000.03	4000.06	4845.66	130.00
QVD-069	5001.69	4000.20	4845.70	159.65
QVD-004A	4936.41	3524.57	4867.84	103.00
QVD-030	4995.49	4066.46	4838.72	169.10
QVD-018	5123.72	3773.24	4863.01	251.00
QVD-019	5038.43	3888.92	4854.99	200.45
QVD-036	5103.21	3501.80	4851.72	179.15
QVD-050	4981.46	3956.47	4845.27	180.70
QVD-038	5000.73	3552.78	4844.51	131.25
QVD-039	5002.80	3552.92	4844.61	197.15
QVD-053	5111.28	4100.82	4879.27	350.25
QVD-058	5050.33	3750.43	4849.76	158.25
QVD-071	5053.44	3702.11	4837.19	150.15
QVD-072	5054.99	3702.31	4837.20	182.55
QVD-076	5214.35	3801.50	4882.00	357.15
QVD-077	5042.13	3890.81	4855.22	231.55
Ts-006	4824.26	3581.15	4839.62	55.80
Ts-007	4904.28	3554.90	4843.25	68.81
Ts-021B	4955.28	4023.74	4815.00	11.72
Ts-021C	4935.98	3994.93	4815.00	40.60
Ts-021D	4885.31	3961.27	4808.00	2.93
Total, 39 drillholes/trenches				6402.26
NOTE: Ts denotes trench				

For this estimate, CAM used the assays to 9 June 2009, and downhole survey data to 12 June 2009. Only portions of these holes were of use in resource estimation, as parts of some holes were outside the fault-bounded Yaxché Central Zone, and/or were in overburden.

CAM uses automated data-processing procedures as much as possible in constructing and auditing geologic databases, in order to assure consistency and minimize errors and costs. These procedures depend heavily on consistent alphanumeric attribute codes, and consistent and non-duplicated field labels and drillhole IDs. While many of the issues flagged by these automated procedures are obvious to a reviewer, CAM requires a clean and consistent database before proceeding with electronic geological modeling. Common inconsistencies include:

- Misspellings.

- Confusion of 0 (zero) and O or o.
- Inconsistent use of upper and lower case.
- Inconsistent usage of space _ and -.
- Trailing, leading or internal blanks. (CAM routinely changes all blanks to _ to positively identify this problem)
- Inconsistent use of leading zeros in hole IDs.
- Inconsistent analytical units (e.g. PPM, PPB, opt %)
- Inconsistent coordinate systems and units (e.g. NAD27 and state plane and mine grid: ft and m)

For manually generated databases, CAM generally regards an error rate of less than one in 500 good, an error rate of less than one in 100 acceptable and an error rate greater than two in 100 as unacceptable. The acceptability or unacceptability of the database also depends heavily on the impact of the errors. Hence the values for acceptability or unacceptability may easily change by an order of magnitude depending on the nature of the errors. For example a dropped decimal point in a value of 37 for an actual value is 0.37 is much more serious than the entry of a 0.36 for a 0.37. For computer-generated databases any errors may be indicative of problems in data processing procedures and these require resolution of the source of the problem.

The CAM check procedure generates a number of false positives (possible issues which are actually correct). In general if the number of items flagged is less than 2% of the total records, the database is acceptable.

CAM also reviews the procedures used to prepare the database and is particularly critical of the common practice of cutting and pasting to obtain the database.

Different companies and even geologists within the same company have different methods for drilling, sampling, sample preparation, and analysis and record-keeping. In some cases it may be necessary to de-weight the results of certain drilling campaigns or types of drilling.

Over the years CAM personnel have developed a procedure for mathematical and statistically validating exploration databases. This check procedure includes:

- Check for duplicate collars.
- Check for twin holes.
- Check of surface collared holes against surface topography
- Check for statistically anomalous downhole surveys.
- Check for overlapping assays
- Check for 0 (zero) length assays

- Review of assay statistics by grade class.
- Review of assay statistics by length class.
- Checks for holes bottomed in ore
- Check for assay values successively the same.
- Check for assay spikes.
- Check for downhole contamination by decay analysis.
- Check of total grade thickness overall, and by mineral zone

In evaluating an existing database CAM uses values flagged by these automated procedures as a starting point for database review and has found that if the error rates in the statistically anomalous values is acceptable then the entire database is generally acceptable.

Some anomalies were noted, and were forwarded to Golden Minerals, but the number and type of anomalies were within industry norms for databases of this size, and even if the anomalies turn out to be errors, they would have no effect on the overall resource estimate.

On the basis of these statistical checks, and the checks of data entry discussed previously, CAM believes that the Yaxtché Central Zone exploration database has been prepared according to industry norms and is suitable for the development of geological and grade models.

On the basis of the above checks, CAM did not independently collect samples from the Yaxtché, and did not arrange for independent assays of samples.

15.0 ADJACENT PROPERTIES

All of the drilling used in the resource estimation presented in this report, and all the resources disclosed herein, are on the properties controlled by Silex, as shown in Section 4 of this report.

16.0 MINERAL PROCESSING AND METALLURGICAL TESTING

El Quevar is not yet at the stage of economic evaluation, but in order to guide exploration, Golden Minerals in early 2008 commissioned Dawson Metallurgical Laboratories, Inc. of Salt Lake City, Utah, to complete test work on six sample composites from the project (Dawson, 2008). The tests were intended to determine the response the samples to whole ore cyanidation, sulfide flotation, and a combination of flotation and tailings.

16.1 Metallurgical Samples

Forty-five individual mineralized core samples from drillholes QVD-018 through QVD-022, and QVD-024 were composited into six composites for the metallurgical test program. All of these drillholes are in the Yaxtché Central Zone.

Individual core splits weighed between 1200 and 2000 g, with only a few higher or lower. The composites were crushed to 10 Tyler mesh size, and split into 1 kg charges. One charge from each composite was then split into four 250g samples with two of the splits pulverized and submitted for head analysis, as shown below. The composites were classified by degree of oxidation, and by grade, as shown in Table 16-1.

Table 16-1 Composites for Metallurgical Testing - from Dawson (2008)															
Type	Grade	Ag	Au	Pb	Pb _{ns}	Zn	Zn _{ns}	Fe	Bi	As	Sb	Cu	S _{tot}	S _{sulf}	S _{ns}
		ppm	ppm	%	%	%	%	%	%	%	%	%	%	%	%
Oxide	low	58	<0.17	0.41	0.02	0.023	0.0019	3.25	0.008	0.17	0.061	0.013	3.64	0.751	2.89
Mixed Ox-Sul	medium	251	<0.17	0.15	0.00	0.004	0.0019	2.18	0.082	.08	0.095	0.048	4.37	0.761	3.61
	high	2,020	0.27	1.02	0.12	0.022	0.002	4.16	0.086	0.37	0.302	0.016	3.24	1.04	2.20
Sulfide	low	72	<0.17	0.11	0.00	0.022	0.0018	4.83	0.022	0.04	0.042	0.07	7.50	0.376	7.12
	medium	193	0.17	0.28	0.03	0.097	0.002	4.06	0.043	0.05	0.8	0.136	6.28	0.498	5.78
	high	832	0.58	1.60	0.18	1.70	0.0283	12.50	0.184	0.21	0.396	0.822	17.20	0.6	16.60
Note: tot, ns, sulf refer to total, sulfide, and non-sulfide, respectively															

It should be noted that the silver head assays of the six composites were in general lower than the values for inferred resources reported in Section 17, below.

16.2 Testing

All tests were performed at a fine primary grind of approximately 80% passing 74 microns. It should be noted that these tests were preliminary in nature and no attempt was made to optimize either the cyanidation or flotation parameters. Processing parameters for the tests are detailed in Dawson (2008).

In summary, the following procedures were used:

- Whole ore cyanidation.
- Selective silver flotation followed by bulk sulfide pyrite flotation of the silver tailings. A sequential silver-lead, zinc, and pyrite flotation scheme was evaluated on a high grade sulfide sample containing significant amounts of silver, lead, and zinc.
- Cyanidation of the pyrite flotation tailings.

16.3 Test Results

The samples generally responded well to a combination of sulfide flotation (silver followed by pyrite) and cyanidation of flotation tailings. According to Dawson (2008), whole-ore cyanidation results yielded lower silver extractions than the leaching of flotation concentrates and tails. Cyanide consumptions for the whole-ore leach tests varied from 1.4 to 10.4 kg/ton depending upon the sample tested, when 5 gram/liter NaCN leach solution strength was used. Leach kinetic curves indicated that almost all the leachable silver was extracted in 48 hours. A summary of results is shown in Table 16-2.

Table 16-2 Summary of Test Results - from Dawson (2008)						
Composite	AG RECOVERED, % FROM ORE				Head Assay	
	Rotation	Flot Tails Leach	Total*	Whole Ore Leach	Ag (opt)	S= wt%
Low Grade Oxide	36.2	27.2	63.4	53.0	65.0	2.81
Medium Grade	74.5	15.2	89.7	83.0	314.0	3.48
Mixed High. Grade	78.1	11.6	89.7	83.4	1785.0	2.30
Sulfide Low Grade	79.1	11.8	90.9	44.2	80.0	6.58
Sulfide Medium Grade	88.1	8.4	96.5	56.9	189.0	6.15
Sulfide High Grade	95.7	3.7	99.4	62.4	839.0	16.56
*Flotation + Flotation Tails Leach						
**Head assay back-calculated from flotation tests						

Based on the metallurgical test results, Dawson (2008) envisioned a flowsheet for the process plant with the following processes:

- Primary crushing;

- • SAG and ball mill grinding with a vibrating screen and cyclones for size classification;
- • Rougher and cleaner flotation with regrind for the production of a final sulfide silver concentrate;
- • Thickening, filtering, and packaging for shipment of final sulfide silver concentrate;
- • Leaching (cyanide) of the flotation tailings;
- • Counter-current decantation circuit with thickeners producing a silver-bearing PLS (Pregnant Leach Solution);
- • Merrill-Crowe circuit for processing the PLS solution producing a doré for shipment to an off-site refinery;
- • Cyanide destruction circuit; and
- • Disposal of final plant tailings.

Dawson recommended that future metallurgical tests should investigate various flow sheet designs for the process plant, so that individual processing circuit can be bypassed to optimize the plant operation and metal recoveries.

17.0 MINERAL RESOURCE AND MINERAL RESERVE ESTIMATES

17.1 Mineral Resource Estimation

CAM completed NI 43-101-compliant resource estimates for the Yaxtché Central Zone silver deposit, using the multiple indicator kriged (MIK) method. The MIK model was undertaken after a nearest-neighbor estimate by CAM indicated that significantly higher grades were possible, compared an ordinary-kriging inside a grade shell, undertaken by SRK Consulting in 2009. CAM's nearest-neighbor estimate was done only using the 39 drillholes/trenches in the Yaxtché Central Zone which were numbered through QVD-081. These are the same holes used by SRK Consulting. The estimation was performed by Robert Sandefur of CAM, whose Certificate appears in Section 23.2 of this Technical Report.

17.2 Estimation Methodology

The Yaxtché Central Zone is approximately 700 m along strike, 300 m down-dip and about 100 m wide. Strike of the zone on the local grid (not parallel to the national Gauss-Kruger variant of the UTM grid), is about 352° and the dip averages about 45°. The zone is bounded on the on Grid East, Grid North and Grid West by interpreted faults. Almost every hole drilled across this zone hits significant mineralization.

Some of the high-grade intercepts are quite narrow (one meter); thus it is likely that highly selective underground mining will be required for the successful exploitation of this deposit. CAM constructed variograms, both log and indicator, along the principal axes of the zone using 1-m length composites, but did not obtain satisfactory variograms indicating good mineable continuity along strike and down dip. This is not surprising given the geometry of the drilling in the deposit.

To further investigate the continuity along strike, CAM constructed 2-D variograms of mineralization thickness and grade-thickness at various cutoffs, but did not obtain satisfactory variograms indicating good mineable continuity along strike and down-dip.

For deposits of this type, it is often difficult to obtain good across strike variograms because of the uncertainty in relative hole location. Therefore, CAM elected to use the downhole variogram in the Central Zone and assume that this variogram applies down dip and along strike. Based on the geometry of the ore body this assumption is probably conservative, but this has not been confirmed by actual close space drilling along strike and down dip.

Resource estimation was done by indicator kriging at various cutoffs up to 500 parts per million. The grades of each indicator class was determined by the class mean, except for the highest class, where the

average of all the composites within the search volume was used. The search volume was a box with half dimensions of 50 meters by 50 meters by 5 meters oriented at a grid azimuth at 352° and dipping at 45°. The nearest six composites contained in the pyramid defined by the centroid of the search volume and the six box faces were used for the estimate. A minimum of three composites were required for a block indicator to be estimated. For the grade of the highest indicator class, the same search parameters were used, but the maximum number of composites was relaxed to one.

To calculate the grade at a cutoff for any MIK estimate, the fraction of the block above the indicator cutoff is multiplied by the density and by the block volume, to obtain a tonnage. The amount of contained metal is calculated as the sum of the fractions of a block times the grade of that fraction.

There are two ways to interpret the fraction given by indicator model. It can be considered as either:

- 1) the expected fraction of the block above that cutoff grade, or
- 2) the probability that the whole block will be above the cutoff.

When calculating a mineable resource, it is usual practice to exclude any block that is less than a certain increment above cutoff. For epithermal gold deposits, CAM has found this increment is about 15 percent. Given the selectivity possible in small underground mines and the availability of visual clues as to the grade of silver-base-metal mineralization, this increment might be lower at Yaxché. However, CAM excluded any blocks of less than 15 percent from the resource estimate.

17.3 Specific Gravity

Apex has undertaken bulk-density (specific gravity) measurements on core samples, using procedures outlined in an undated internal memorandum, “Medida de la Densidad de Roca”.

The protocol uses the water-immersion method, as follows:

- Core samples 10centimeters in length were selected at a frequency of about 10 to 15meters downhole;
- Samples were dried and if necessary, coated with varnish to make the sample impermeable;
- The rock type and oxidation state were noted on the data sheet as well as the length of the sample and whether it was whole or half core;
- The scale was set to 0 and the core sample was weighed;
- A graduated test tube was filled 1,000 milliliters of water, and the level was noted on the data sheet;
- The sample was placed in the water and the water level was noted;

- The density was calculated according to the following equation;

$$\text{Weight of Rock (gm)} / (\text{Volume of water (ml)} - \text{Volume of sample in ml})$$

Prior to 2009, 260 density measurements were made on core samples from 17 drillholes using this method. Twenty-one measurements were within the Yaxtché Central Zone mineralized envelope including sixteen breccia samples. Within the mineralized envelope, one sample is oxide, three are mixed and the remainder are sulfide. The mean value for the 260 samples, including the 21 samples in Yaxtché Central, was 2.36 grams per cubic centimeter. Data from these measurements were scrutinized at length by SRK Consulting (2009).

During 2009, Golden Minerals measured an additional 600 plus samples from previous and current drilling, most of which were from outside the Yaxtché Central Zone, using the same methodology. Table 17-1 presents the mean values by lithology for all the Golden Minerals measurements

Table 17-1 Summary of Bulk-Density Results		
Rock Type	No. Measured	Mean (gm/cubic cm)
tuffs (TD, TDG)	290	2.24
breccias, all	57	2.37
dacite (DD)	51	2.31
rock type not shown (2009)	646	2.27

CAM notes that the measurement protocol used by Golden Minerals does not meet rigorous quality standards:

1. very small samples, often only 10 centimeters long, are used.
2. 24-hour oven drying of samples at 105 degrees Celsius prior to measurement is not called for.
3. the procedure of varnishing samples to seal against porosity does not accurately represent the volumes of breccias containing large open spaces.
4. the criteria for selecting samples is not specified rigorously, and could possibly lead to selection of the least-fractured (and therefore most-dense) rock for measurement.

CAM prepared a scatter diagram, showing bulk density as a function of downhole distance below collar. There was no significant correlation.

CAM is of the opinion that further work needs to be done to accurately determine the bulk densities of the various rock types. More rigorous procedures should be used to ensure that samples are thoroughly dry, and that volumes are accurately measured (e.g. by sealing cores in cellophane). Nevertheless, CAM

believes that the bulk-density in the vicinity of 2.3 grams per cubic centimeter (tonnes per cubic meter) is satisfactory for the definition of inferred resources at the current stage of the project.

17.4 Estimation Results

CAM's estimate of the resource at various MIK cutoffs, assuming a density of 2.3 grams per cubic centimeter, are given in Table 1-1. Note that resources in the table below are reported by the interpreted oxidation class. However, the resource was estimated with no constraints on the oxidation class, in order to avoid any possibility of geometric bias.

Because of the assumptions about continuity along strike and down-dip, all of the resource is classified as inferred. The above resource estimate is in situ, without any dilution. The quantity and grade of these inferred resources are conceptual in nature, as there has been insufficient exploration to define an indicated mineral resource on the property. It is uncertain if further exploration will result in discovery of an indicated or measured mineral resource on the property. Although NI 43-101 regulations allow a preliminary economic assessment to use inferred resources, the inferred resource estimate presented here is only suitable for determining whether further exploration is warranted.

Table 17-2 Summary of inferred Resources - Yaxtché Central Zone				
Cutoff (ppm Ag)	Tonnes	Contained grams Ag	Grade (gpt Ag)	Contained ounces Ag
OXIDE				
500	31,067	41,046,051	1321.22	1,319,661
400	41,916	45,738,747	1091.20	1,470,535
300	55,535	50,519,459	909.69	1,624,238
200	69,185	53,714,980	776.39	1,726,977
100	127,772	61,876,079	484.27	1,989,362
70	202,400	68,027,340	336.10	2,187,130
MIXED				
500	44,530	72,484,813	1627.78	2,330,441
400	53,101	76,192,166	1434.85	2,449,635
300	65,066	80,392,294	1235.55	2,584,672
200	83,686	84,751,204	1012.73	2,724,814
100	151,363	94,178,480	622.20	3,027,908
70	219,649	99,807,029	454.39	3,208,870
SULFIDE				
500	157,470	164,270,580	1043.19	5,281,422
400	182,591	175,136,231	959.17	5,630,761
300	261,684	202,900,998	775.37	6,523,419
200	402,825	235,942,011	585.72	7,585,712
100	796,216	290,740,812	365.15	9,347,534
70	1061,022	312,567,673	294.59	10,049,284

Table 17-2 Summary of inferred Resources - Yaxtché Central Zone				
Cutoff (ppm Ag)	Tonnes	Contained grams Ag	Grade (gpt Ag)	Contained ounces Ag
ALL				
500	233,067	277,801,444	1191.94	8,931,524
400	277,608	297,067,144	1070.10	9,550,930
300	382,285	333,812,751	873.20	10,732,329
200	555,696	374,408,195	673.76	12,037,503
100	1,075,351	446,795,371	415.49	14,364,805
70	1,483,071	480,402,042	323.92	15,445,284

Mineral resources which are not mineral reserves do not have demonstrated economic viability. The estimate of mineral resources may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant issues.

The mineral resources in this estimate were calculated using the Canadian Institute of Mining, Metallurgy and Petroleum (CIM), CIM Standards on Mineral Resources and Reserves, Definitions and Guidelines prepared by the CIM Standing Committee on Reserve Definitions and adopted by CIM Council on Dec 11, 2005.

CAM did not cap the high-grade composites, because a cumulative frequency plot does not indicate a compelling reason to do so, and because the high-grade intercepts constitute a significant fraction of the resource. The statistical uncertainty associated with the highest grade indicator is higher than plus-or-minus 33 percent at the 90% level of confidence for contained ounces.

The philosophical difference between SRK Consulting estimate and the CAM MIK estimate is that SRK Consulting assumed that ore control would be done on the basis of blastholes in an open-pit type mining scenario, utilizing a large selective mining unit (SMU) on the order of 5 by 5 by 5 meters. In contrast, the CAM estimate assumes the SMU is smaller than a cubic meter, and that mineable continuity along strike and down dip will be demonstrated.

There is certainly continuity of mineralization in the Central Zone, as almost every hole piercing the zone has encountered economic-grade assay intervals. However, mineable continuity along strike is yet to be demonstrated.

18.0 OTHER RELEVANT DATA AND INFORMATION

The authors are not aware of any other available information, the exclusion of which would tend to make this report misleading

19.0 ADDITIONAL REQUIREMENTS FOR TECHNICAL REPORTS ON DEVELOPMENT PROPERTIES AND PRODUCTION PROPERTIES

El Quevar is an exploration project, not yet at the stage of development or exploration.

20.0 INTERPRETATION AND CONCLUSIONS

1. Mineralization in the Yaxtché Central Zone is of epithermal type, hosted in Tertiary volcanic and associated rocks. The mineralization geometry and controls are sufficiently understood to enable realistic resource estimates to be made.
2. Drilling to date by Golden Minerals/Silex has been successful in defining a large body of silver and base-metal mineralization of potential economic importance.
3. Composites of samples of from six drillholes in the Yaxtché Central Zone were subjected to various combinations of flotation and cyanide leaching by Dawson (2008). The samples generally responded well to a combination of sulfide flotation (silver followed by pyrite) and cyanidation of flotation tailings, yielding over 89% silver extraction except on the low-grade oxide composite (63%). Whole-ore cyanidation results yielded lower silver extractions, 44% to 83%. Cyanide consumptions were reasonable. Leach kinetic curves indicated that almost all the leachable silver was extracted in 48 hours.
4. A potential exists for an economically viable deposit in the Yaxtché Central Zone, if mineable continuity can be demonstrated.
5. Further work needs to be done to more accurately determine the bulk densities of the various rock types.
- 6). Significant exploration potential exists on the property, not only on the Yaxtché structural zone, but also in other settings in Quevar Sur, Quevar Norte, and Viejo Campo.

21.0 RECOMMENDATIONS

21.1 Exploration and Resource Estimation

1. Later (post-QVD-81) drilling should be incorporated into an updated database, and used to reinterpret the model to allow for changes to the bounding faults and any high-grade shoots which can be interpreted. Then the resource estimate should be re-run, with a quantitative assessment of risk based on the ounces associated with each hole, and the ounces associated with each composite.
2. The later drilling should be reviewed to determine if the short-range mineable continuity along strike and down dip can be reasonably determined. If conclusive data are not available, consider obtaining more short range data by either
 - a) An adit
 - b) Additional drilling, involving either wedging of existing holes or closely-spaced drilling. In any event, precise gyroscopic downhole surveys are necessary and the reproducibility of these downhole surveys must be documented.
3. The new resource estimate should be re-done at various composite lengths, with the lengths measured perpendicular to the dip and strike of the vein. This will allow a first cut at the amount of dilution that may be expected with various mining methods.
4. Re-assaying of pulps rejects and (where half core is available) quarter core is recommended, to verify reproducibility of the high silver values, since the resource estimate is highly sensitive to the treatment of high grades.
5. Further metallurgical testing should be undertaken, on composites from Yaxtché Central which are representative of the oxide, mixed, and sulfide zones, at grades approximating those of resources at assumed economic cutoff grades.
6. As a first drilling priority, the resource potential of the remainder of the Yaxtché structural zone should be further investigated by:
 - a) Infill drilling of Yaxtché Central to 25-meter spacing, and
 - b) Further drilling of Yaxtché West and East, at 50-meter or 25-meter spacing.
7. Lower priority should be given to drilling of identified targets elsewhere, as described in Section 10.2 of this report.
8. Rigorous procedures should be used for further bulk-density measurements, to ensure that larger samples, selected at random, are used, that samples are thoroughly dried, and that volumes are accurately measured (e.g. by sealing cores in cellophane). This work should be carried on samples from within the Yaxtché mineralized grade shell.

21.2 Recommended Work Program

Based on the above data and conclusions, CAM recommends further work at El Quevar, with the objective of achieving mineral resources of sufficient size and grade for economic exploitation. The program is shown in Table 21-1.

Table 21-1 Recommended Work Program					
Component	Nature Of Activity	Quantity Of Work	Unit Cost, US\$	Amount, US\$	Timing
Camp and infrastructure	maintain camp, infrastructure	8 months	20,000/mo	160,000	'09 Q3 & 4 & '10 Q1
Yaxtché Central Zone infill drilling @25 m	diamond core holes	65 holes, ave. 125 meters	120/m incl assays	975,000	'09 Q3 & Q4
Yaxtché West drilling @ 50 m lines	diamond core holes	50 holes @ 120 meters	120/m incl assays	720,000	'09 Q3 & Q4
Gold Zone, Andrea Breccia	diamond core holes	10 holes @ 200 meters	120/m incl assays	240,000	'09 Q4 & '10 Q1
Metallurgy	tests on Yaxtché Central Zone core: oxide, mixed, sulfide	6 samples, flotation and leach tests	10,000	60,000	'09 Q4
Bulk density database improvement	generate and analyze tests	0.5 man-mo geol, 1.0 man-mo technical	2,000/mo	3,000	'09 Q3
Geology	map prospects, control drilling, resource est.	24 man-mo.s, vehicles, etc.	4,000	96,000	'09 Q3, Q4
Resource estimation	resources est. update	by contract	30,000	30,000	'09 Q3
Property payments	for Viejo Campo	by Oct 27	50,000	50,000	'09 Q4
TOTAL				2,335,000	to 2010 Q1

22.0 REFERENCES

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23.0 DATE AND SIGNATURE PAGE

23.1 Certificate of Author Fred Barnard

I, Fred Barnard,
1835 Alkire Street
Golden, Colorado 80401 USA

hereby attest that:

- a) I am a Consulting Geologist, affiliated with Chlumsky, Armbrust and Meyer LLC at affiliated with Chlumsky, Armbrust and Meyer LLC at 12600 W. Colfax Avenue, Suite A-250, Lakewood, Colorado 80215, USA.
- b) I am Professional Geologist # 7432 in the state of California, USA, a Fellow of the Society of Economic Geologists, and a member of the Geological Society of America.
- c) I graduated from the University of California at Berkeley with a B.A. degree in Geology 1963, and from the University of Colorado at Boulder with a Ph.DS. degree in Geology in 1968.
- d) I have practiced my profession as an economic geologist continuously since 1968, having worked on exploration and mining projects, mainly for metallic minerals, in 45 countries.
- e) 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, and past relevant work experience, I fulfill the requirements to be a “qualified person” for the purposes of NI 43-101.
- f) I am responsible for the preparation of sections 2 to 13, 15, 16, 18, 19, 22, and relevant portions of sections 1, 20, 21, and 23 of the report entitled "NI 43-101 Technical Report, Yaxtché Central Zone, El Quevar, Argentina, dated 15 August, 2009, and for which the effective date is 1 June, 2009.
- g) I visited the Yaxtché Central Zone on July 15, 17, and 18, 2009, and other areas on the El Quevar property on Jul 15, 16, 17, and 18, 2009.
- h) As defined in Section 1.5 of National Instrument 43-101, I am independent of the issuer, Golden Minerals Company.
- i) I am not aware of any material fact or change with respect to the subjects of this report which is not reflected in this report, the exclusion of which would make this report misleading.
- j) I have read National Instrument 43-101 and Form 43-101F1, and the report has been prepared in compliance with that Instrument and Form.

- k) I hereby notify the Ontario Securities Commission of my consent to the filing of this Technical Report with stock exchanges and other regulatory authorities in Canada, and any publication by them, including electronic publication in the public company files on their website accessible by the public, of the Technical Report.

Dated this 15th of August, 2009

Signed

Fred Barnard, Ph.D.



23.2 Certificate of Author Robert L. Sandefur

I, Robert L. Sandefur
1139 S Monaco Pkwy
Denver, CO 80224

hereby attest that:

- a) I am a Consulting Geostatistician, affiliated with Chlumsky, Armbrust and Meyer LLC at 12600 W. Colfax Avenue, Suite A-250, Lakewood, Colorado 80215, USA.
- b) I am a Certified Professional Engineer (Number 11370) in the state of Colorado, USA, and a member of the Society for Mining, Metallurgy, and Exploration (SME).
- c) I graduated from the Colorado School of Mines with a Professional (BS) degree in engineering physics (geophysics minor) in 1966 and subsequently obtained a Master of Science degree in physics from the Colorado School of Mines in 1973.
- d) I have practiced my profession as a geostatistical resource analyst continuously since 1969.
From 1969 to present, I have worked on mining projects in over 20 countries, have statistically analyzed more than 400 mineral deposits, and have personally visited more than 50 operating metal mines.
- e) 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.
- f) I am responsible for the preparation of sections 14 and 17 and the relevant portions of sections 1, 20, 21, and 23, of the report entitled "NI 43-101 Technical Report, Yaxtché Central Zone, El Quevar, Argentina, dated 15 August, 2009, and for which the effective date is 1 June, 2009.
- g) I have not visited the subject property.
- h) As defined in Section 1.5 of National Instrument 43-101, I am independent of the issuer, Golden Minerals Company.
- i) I am not aware of any material fact or change with respect to the subjects of this report which is not reflected in this report, the exclusion of which would make this report misleading.
- j) I have read National Instrument 43-101 and Form 43-101F1, and the report has been prepared in compliance with that Instrument and Form.

- k) I hereby notify the Ontario Securities Commission of my consent to the filing of this Technical Report with stock exchanges and other regulatory authorities in Canada, and any publication by them, including electronic publication in the public company files on their website accessible by the public, of the Technical Report.

Dated this 15th of August, 2009

Signed Robert L. Sandefur
Robert L. Sandefur, P.E.

