NI 43-101 Technical Report for Resources
Yaxtché Silver Deposit,
El Quevar Property
Salta Province, Argentina

Prepared for

Golden Minerals Company

June 8, 2012

DE-00196

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1.0 EXECUTIVE SUMMARY

1.1 *Property*

The El Quevar property is located in northwestern Argentina within the Antonio de los Cobres municipality, Salta Province (Figure 4-1). The project is located close to geographic coordinates 24.3° south and 66.8° west. The project is approximately 300 km northwest of Salta, which is the provincial capital, with the mineral concessions located within a mountain massif which is referred to as "Nevados de Pastos Grandes," or sometimes as "El Quevar."

Mining concessions currently held by Silex Argentina in the El Quevar Project include 20 exploitation concessions totaling 36,177.79 hectares and 12 claims totaling 18,620.09 hectares for a total land extension of 54,797.99 hectares. The canon payment for the second semester of 2012, which expires on or before June 30, 2012, is AR$ 68,360. The canon is a bi-annual payment due June 30th and December 31st of each year, in two equal installments. The Yaxtché zone is located primarily on the Castor exploitation concession, with the northwestern portion located on the Toro 1 and Quirincolo 1 concessions.

The Quevar Project lies completely within the Andean Natural Reserve Zone (La Reserva Natural Los Andes) which is classified as a multi-use area (Categoría de Manejo de Uso Múltiple VIII). This classification allows production/extraction activities including exploration and mining. The main purpose of the reserve is to provide habitat for vicuñas.

Holders of any mining concessions in the province of Salta are required to submit an Environmental Impact Assessment (EIA) which should be approved prior the commencement of any exploration or exploitation activities. Such EIA should be updated every two years. To the extent of Silex Argentina's knowledge, to date, the El Quevar Project does not have any environmental liabilities or restrictions placed on it.

1.2 *Project History*

The exploration history of the El Quevar property is summarized from the CAM Technical Report (January 2010). No modern, large scale production is reported from the property. Small scale, non-mechanized production of lead and silver has been reported from the Jaguar mine in the Mani exploration area.

> *"In the 1970's the government-sponsored Plan NOA-1 was carried out 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. 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. Neither 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."

"Beginning in 2004, Golden Minerals (and its predecessor Apex) have undertaken exploration at El Quevar through its Argentine subsidiary Silex." These exploration campaigns are ongoing.

1.3 *Regional and Local Geologic Setting*

El Quevar is situated in the eastern part of the Puna Block, within the Andean Cordillera. The project area is within the Tertiary age El Quevar volcanic complex, which covers more than 1,000 square kilometers (km^2). It is of shoshonitic affinity and is thought to have formed in a rift basin of Cretaceous to Paleocene age. The volcanic complex is bounded by regional 125° striking structures: the Calama- Olacapato-Toro lineament to the north, and a parallel one to the south. A lesser, secondary set of regional lineaments, bearing 025°, is interpreted as older and related to folding in the Paleozoic basement rocks.

The El Quevar volcanic complex formed during Miocene to early Quaternary time, with main volcanic events dated at 19 to 17 Ma, 13 to 12 Ma, 10 Ma, 7 to 6 Ma and 1 to 0.5 Ma. 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.

Geological field studies conducted by Cumming (2010) provide the geological framework and structure in the vicinity of the Yaxtché silver deposit.

Recent mapping shows a complex of sparse feldspar-phyric dacite domes with associated breccias (monomictic clast supported and matrix supported dacitic breccias termed "El Quevar breccia") which overlie southward dipping, polymictic hematitic breccias encountered in deep core intersections and outcrop.

The dacite complex and breccias are overprinted by weak to intense argillic and silicic alteration which is controlled by intersecting planar, shallow dipping, early E-W striking faults which are offset by later sub vertical NE-SW faults. Silica-pyrite alteration with vuggy silica domains, associated with mineralization, occurs along these earlier structures at the margin between coherent, weakly porphyritic dacite and autobreccia (monomictic dacitic breccia).

An extensive domain of flow banded, feldspar-sanidine dacite was observed flanking the highest northern and eastern areas. The dacite is largely unaltered and appears to drape the argillic-altered and variably-silicified monomictic dacitic breccia in the east and at Yaxtché. In other domains variably clay- altered and silicified parts of the dacite occurs (in the north and at Mani).

At Yaxtché West a large domain of weakly consolidated monomictic dacitic, boulder breccia occurs. The clasts contain sanidine and probably represent the resedimented part (debris flow) of the feldspar-sanidine flow which flanks the succession. As well as poorly consolidated boulder breccia facies a large outcrop with coherent (porphyritic) matrix with fluidal and blocky clasts (reflecting autobrecciation) may represent the dislodged or in situ margin to the overlying dacite. This zone is thought to represent a large dislodged block which has been relocated from higher up in the succession.

A wide domain of argillic alteration occurs at Yaxtché and the eastern valleys at El Quevar Sur. Silica-pyrite alteration after argillic alteration occurs along the E-W trending mineralized structures. The silicified domains occur as narrow halos to fault and fracture sets. Patches of advanced argillic alteration were mapped. Propylitic/chlorite alteration was observed in the upper domains of the succession and around the perimeter of the main mineralized E-W trending structures.

1.4 *Mineralization*

The following description of mineralization is quoted from the CAM Technical Report of January 2010.

> *Mineralization at Yaxtché, 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 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. Mineralized fault breccias and hydrothermal breccias also occur."*
>
> *"The hypogene silver mineralization occurs mainly as fine-grained black sulfides."*

"The principal metal value in Yaxtché zone is silver, with lesser amounts of lead, zinc, and copper minerals, and accessory gold and antimony. The principal gangues are quartz, pyrite, and barite."

"A large number of minerals have been reported from the Yaxtché zone, many of which are fine-grained sulphosalts or other minerals difficult to identify in hand specimen."

PAH (2012) makes the following comments on the contact style of mineralization in the Yaxtché deposit.

PAH investigated and quantified the style of silver mineralization in the eastern and western areas of the Yaxtché deposit. This study was conducted to provide a geological interpretation of silver mineralization that is hosted in the intercalated volcanic rocks that have been logged as Quevar Breccia (BXQ), Massive Dacite (DM) and Lavas (LV). The objective was to provide a descriptive, *facies model of silver mineralization* in addition to the silver grade shell (10 ppm) model discussed in Section 14 of this report. PAH's approach was initially based on observations made on graphical drill logs that the strongest silver mineralization is often associated with logged fault or lithologic contacts and that a more extensive "cloud" of lower grade silver mineralization (10-100 ppm Ag) occurs in pervasively-altered rocks.

PAH coded every assay interval greater than 10 ppm silver into one of the contact types. Having done this, PAH was able to construct three dimensional Contact Domains (FC, LC, NC,) and waste zones by interpolation methods as described in Section 14.9 of this report. Contact Domains were subsequently used to constrain interpolation of silver grades in the PAH block model.

1.5 *Deposit Type*

A description of the deposit type is quoted from the Micon Technical Report of August 2010 with additional attribution to the CAM Technical Report (January 2010).

"The silver-base-metal mineralization at Yaxtché is of epithermal origin. The cross-cutting nature of the mineralization, the assemblage of sulphide 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 metres 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." "Yaxtché has been interpreted by Golden Minerals staff as being of intermediate sulphidation (IS) epithermal type, which in general are higher in base-metal content than high-sulphidation (HS) epithermal deposits."

1.6 *Exploration*

In 2011, Golden Minerals completed installation of an adit and decline to access the eastern part of the Yaxtché zone and to investigate the continuity of the mineralization by drifting, channel sampling and bulk sampling of development rounds. Surface support facilities constructed include a mine maintenance shop, compressor and generator stations, a laboratory, and a fuel depot.

In total approximately 1,250 lineal meters of ramps and drifts were completed. Underground core drilling was not undertaken.

Mapping shows the configuration of underground workings and mineralized structures at the end of 2011 is given in Figure 9-1. Notable are the exploration drifts driven on nominal 65^o – 70^o azimuths which followed structural zones of vuggy, intensely silicified breccia containing discontinuous, typically high-grade veinlets of white clay and black sulfides. These small but often rich veinlets have been referred to as gash or tension veinlets.

Golden Minerals stockpiled and sampled the muck piles produced from each blasted round as the exploration drifts advanced. Approximately 19,161 tonnes of broken material is currently stockpiled in 158 discreet piles which have been sampled by Golden Minerals who provided PAH with the stockpile assay results. The following are the grade – tonnage relationships in the stockpiled material at various cutoff grades

- 19,161 tonnes at 113 g/t Ag (zero cutoff)
- 18,392 tonnes at 120 g/t Ag (30 g/t cutoff)
- 5,854 tonnes at 240 g/t Ag (100 g/t cutoff)

Golden Minerals also conducted an extensive 1-meter, chip-channel sampling program in the underground workings. The sampling consisted of chip-channels cut at the mining face, in the roof, ribs and fault zone as exposed in the workings. Virtually all openings were sampled including the exploration drifts from which stockpiled bulk samples were excavated.

PAH observes that the average grade of the bulk samples (113-120 ppm Ag) and the channel samples from the mining faces (131 ppm) and ribs (127 ppm) are very similar, along with the average silver grade of 133 g/t Ag for all 2,184 channel samples from different underground locations. The sampling also reveals the distinctive geochemical signature of high sulfidation epithermal systems, as reflected in the average grades of the channel samples for arsenic (747 ppm), antimony (387 ppm) and bismuth (392 ppm) and weak concentrations of copper (0.15%), lead (0.08%) and zinc (0.007%). PAH notes a striking consistency in silver grade between the bulk mining samples and the channel samples cut from the same openings from which the bulk samples were excavated.

Golden Minerals conducted exploration work on other prospects in the Quevar Sur and Quevar Norte exploration areas in 2010-2011. The prospects included Carmen, Mani Sub, Yaxtché West Extension and Quevar Norte.

The Carmen structural zone is located some 325 meters NE of Yaxtché and has an average strike of 309° which is sub-parallel to the Yaxtché zone. The Carmen zone has a known length of about 500 meters. Four holes were drilled to test the zone in 2011 for a total of 1,164.4 meters. Elevated zinc values were encountered in QVD-261 (1.66 percent Zn over 3 m). In QVD-261, Ag values of 212 ppm and 365 ppm were encountered over 1 meter widths with low gold values. The highest silver intersection was 365 ppm Ag over 1 meter in drill hole QVD-261.

The Mani Sub structural zone is located 500 meters SW of Yaxtché. Eighteen drill holes were completed in the zone in 2011 for a total of 6,370.9 meters. Vein widths up to 3 meters were intercepted between 150 and 345 meters depth. Silver values in this area are associated with the Quevar breccia unit while higher base metal values are associated with the dacitic lavas. The best silver intercepts obtained in the recent drilling at Mani Sub are summarized below.

- QVD-316, 5,331 ppm Ag over 1 meter
- QVD-321, 1,229 ppm Ag over 3 meters
- QVD-319, 334 ppm Ag over 3 meters
- QVD-326, 378 ppm Ag over 2 meters
- QVD-328, 235 ppm Ag over 2 meters

Quevar Norte: Exploration interest in 2012 is focusing on the Quevar Norte area specifically to follow up on the previous results of surface sampling and drilling on the Sharon prospect and along the Quevar Norte trend to the east. Several discrete target areas comprise the Quevar Norte exploration area. Silex controls three exploration claims that cover the targets in the Quevar Norte area: Quirincolo I, Quevar II and Nevado I.

Surface samples from the Quevar Norte zone east of Sharon show consistently anomalous rock chip sample values for arsenic with sporadic but interesting silver values. The Sharon - Rocio trend is the main Quevar Norte structure and is continuous with some offsets on N-S normal faults and has a local post mineral intrusion between Sharon and Amanda.

Based on current exploration by Silex, the Quevar Norte trend is thought to be a parallel listric normal fault structure filled with Yaxtché-style alteration and mineralization. While similar to Yaxtché in size and style, it is believed to be better preserved and exposed at the surface at a higher level within an epithermal system. The Sharon block is up-faulted relative to the other targets to the east, Amanda through Rocio. As reported in Micon (2010), a 25 kg/t surface sample was collected at the Sharon target. Silver values in surface samples of 10 ppm and 15 ppm were obtained at Amanda and Rocio, respectively, along with a broad area of anomalous arsenic values between the two targets.

In the early part of 2010 four (4) holes were drilled in the Sharon target for which the most significant intercept occurred in QND-002 which cut 28 m (63 m to 91 m) that averaged 1.3 kg/t silver, 1.26 percent copper and 0.44 percent zinc.

In 2012, Silex will continue to follow-up on previous drilling on the Mani Sub and Carmen targets and to explore with additional surface prospecting and drilling the Quevar Norte structure.

1.7 *Drilling*

In 2011, Golden Minerals conducted two diamond drilling campaigns in the Quevar Sur exploration area which includes the Yaxtché silver deposit. In total, 133 holes were completed comprising 37,792 total meters from which 12,051, samples were submitted to Alex Stewart Laboratory for analysis. Thirty two percent (32%) of the total meterage was sampled and submitted for assay.

The first drilling campaign from January 22 to June 7, 2011, included the following target areas: Yaxtché West, Mani Sub, Yaxtché Central, Carmen and Condemnation areas I, II. A second campaign of infill drilling (38 holes) was conducted in the Western Yaxtché area from June 11 to December 14, 2011. In 2011, Major Perforaciones S.A., was the drilling contractor who operated 2-4 core rigs on site at various times.

The drilling history of the El Quevar property under Golden Minerals' tenure is summarized in Table 10-1. The significant drill hole intersections from the 2011 campaigns are compiled in Table A-1, Appendix A.

In total, 372 core holes have been completed in both the Quevar Norte and Quevar Sur exploration areas from 2006 to 2011. The current Resource Model of the Yaxtché deposit located in the Quevar Sur exploration area utilizes 270 holes, comprising 69,094 m with an average hole depth of 256 m. The effective date of the drilling information used in this report is February 9, 2012. The nominal drill hole spacing is approximately 20-25 meters.

From the drilling perspective, PAH believes that the drilling density, core recovery, and drill hole location surveying are industry standard and acceptable for use in resource estimation.

1.8 *Sample Preparation Analysis and Security*

During the site visit to the El Quevar property, PAH observed and interviewed Golden Minerals personnel in the procedures of core handling, sampling, logging and sample security that are performed at the Company base camp. Having done the site inspection, PAH believes that these procedures are being performed with diligence, care and are industry standard for advanced exploration projects like El Quevar.

Subsequent to the site visit, PAH reviewed sample preparation procedures, assaying methods and QAQC protocols.

With respect to QA/QC procedures, the Company's guidelines for insertion of control samples are as follows:

- *Standard: one per 20 samples (5 percent).*
- *Coarse Duplicate: one per 20 samples (5 percent).*
- *Pulp Duplicate: one per 20 samples (5 percent).*
- *Core Duplicate: one per 50 samples (2 percent).*

- *Pulp Blank and Coarse Blank: one per 20 samples (5 percent)."*

PAH believes that these guidelines are acceptable and industry standard for this type of project.

During the course of the QA/QC review, PAH observed a lapse in the insertion of Standard Reference Materials (SRM) in the sample stream from approximately December 2009 to December 2011. Other control samples, blanks and duplicates were inserted according to protocol during that time period. Prior to approximately December 2009, SRMs were inserted at an acceptable rate.

PAH recommends that Golden Minerals acquire suitable silver SRMs and reestablish the practice of inserting them in the sample stream at the rate of 5 percent.

Also during the course of the QA/QC review, PAH observed that Alex Stewart Laboratories of Mendoza, Argentina, as a matter of the internal QA/QC practice, does not insert silver SRMs for the high-grade assay reruns analyzed by fire assay – gravimetric method. PAH believes that using high-grade SRMs in the analysis of high-grade samples (>200 ppm Ag) provides another level of confidence in reporting of accuracy and precision.

In this regard, PAH recommends that Alex Stewart Laboratory utilize suitable high-grade (>200 ppm) silver SRMs and establish the practice of inserting them as internal standards in the fire assay – gravimetric sample stream.

Apart from the above mentioned issues on the use of SRM's in the sample stream from Silex and the internal use of high-grade silver SRM's by the laboratory, PAH believes that sample preparation, analysis and security are industry standard and do not introduce a general bias into resource estimation.

1.9 *Data Verification*

Beginning with the site visit, as part of the data verification process, PAH conducted a detailed review and analysis of the drill hole assay database used in the current resource estimate. The PAH approach was to compile and examine all past and current QA/QC control sample results and to treat them as one large data set, specifically, with respect to three types of control samples:

- The control samples inserted by Silex into the sample stream sent to the laboratory;
- The internal lab control samples assayed by Alex Stewart Laboratory in Mendoza, Argentina; and
- Conduct an independent, blind check sample program to confirm the accuracy and precision of silver analyses on high-grade samples greater than 200 ppm Ag.

The results of PAH's examination of Golden Minerals QA/QC results are given in Section 12 of the present report. Based on PAH's detailed review of QA/QC and control sample results, PAH believes that the assay database is industry standard and suitable for resource estimation.

1.10 *Metallurgical Studies*

Golden Minerals received a memorandum dated June 14, 2010 with backup documentation from Dawson Metallurgical Laboratories describing the results of the metallurgical testwork conducted on Yaxtché West composite sample. The following material has been adapted and quoted from this supplementary information.

"Overall silver recovery, using the procedure developed for the central composite (flotation concentrate for sale, with leaching of the flotation tails to produce bullion for sale) was 98.6%. This was from the production of a cleaner concentrate at 5.5% of the feed weight, followed by a 24-hour leach of the tails and of the cleaner tails."

"The metallurgical response of the two composites was significantly different. For the central composite, 58.4% of the silver was recovered into a high-grade flotation concentrate, with an additional 25.3% recovered in the leach of the flotation tails, for an overall 84% silver recovery. For the west composite, 97.3% of the silver was recovered into the flotation concentrate, with an additional 1.3% recovered in the tails leach, for an overall 99% recovery."

"The difference in response may be due to differences in the silver mineralogy between the two areas. In the central composite it was possible to make a selective initial flotation concentrate using a limited amount of copper mineral-selective collector (recovery of 86% of the copper but only 55% of the silver). Increasing amounts of collector in subsequent stages increased the silver recovery significantly and the copper recovery marginally. It is advantageous economically to recover as much of the silver as possible in to bullion, since the smelter charges for flotation concentrate are quite high, due primarily to the presence of As, Sb, and Bi."

"Increasing collector dosage in subsequent flotation stages for the west composite, up to and including a bulk concentrate, floated more weight but with little significant improvement in overall silver recovery."

"The microscopy work done by Prof. Erich Petersen on the central composite flotation products did not show significant differences in the silver mineralogy between the initial and subsequent flotation concentrates, but his report does discuss possible reasons for a slower-floating fraction. Further testwork could be carried out on the west composite to determine if it would be possible to reject some silver minerals from the initial flotation concentrate to be recovered by leaching of the tails, as with the central composite; but based on the results shown, this seems unlikely."

"Cleaning the high-grade rougher concentrate for both composites resulted in the rejection of a large amount of gangue material, with a resultant 50% reduction in concentrate weight and a corresponding increase in the assays of smelter penalty elements. For the west composite the cleaner flotation tails were leached, and much of the silver here was recovered. Because of insufficient sample, the cleaner tails from the central cleaner test were not leached."

"Testwork at both 45 and 75 micron grinds was evaluated, and although the difference is small, preliminary calculations indicate that the finer grind would be economically warranted."

1.11 *Mineral Resource Statement*

Mineral Resources are reported in accordance with NI 43-101 and were estimated in conformity with the generally accepted CIM guidelines. Mineral resources are not mineral reserves and may not be economically viable. There is no certainty that all or any part of the mineral resource will be converted into mineral reserves. There are no Mineral Reserves reported for the Yaxtché deposit on the El Quevar Property. Mineral Resources are inclusive within the Block Model Mineral Inventory.

The audit of this resource estimate was performed by Craig Horlacher, Principal Geologist with PAH, an independent qualified person and Mr. Paul Gates, Principal Mining Engineer with PAH, and an independent qualified person as this term is defined in NI 43-101 as revised.

This Mineral Resource estimate is for the Yaxtché deposit, which is currently the main target of interest at the El Quevar project. The Mineral Resource estimate utilizes preliminary mining shapes, conceptual economic factors and proposes to recovery silver resources by open pit mining methods on the eastern and central Yaxtché deposit and by bulk underground mining on the western portion of the deposit. The recovery of copper which occurs in low concentrations in the deposit is not considered in the conceptual economic parameters used in the current resource estimate. However the grade and amount of contained copper in the Yaxtché deposit has been included in the mineral inventory statement in Section 14.18.

The combined (global) Mineral Resource estimate for the open pit and underground mining scenarios is given on Table 1-1. This global estimate includes the "In-Pit" Mineral Resources reported on Table 1-2 and the underground Mineral Resources reported on Table 1-3.

TABLE 1-1
Golden Minerals Company
El Quevar Project - Yaxtché Deposit
NI 43-101 Compliant Combined Open Pit and Underground Mineral Resources

Mineral Resource Class	Tonnes ('000)	Ag Grade g/t	Contained Ag Ounces[1]
Indicated (Oxide + Sulfide)	7,053	141.3	32,041,545
Inferred (Oxide + Sulfide)	6,163	152.3	30,168,686

[1] Contained Ounces for Indicated and Inferred are added from Indicated and Inferred in Table 1-2 and Table 1-3

TABLE 1-2
Golden Minerals Company
El Quevar Project - Yaxtché Deposit
NI 43-101 Compliant In-Pit Mineral Resources

Mineral Resource Class	Ag Cutoff Grade g/t	Tonnes (000)	Ag Grade g/t	Contained Ag Ounces
Indicated (Oxide)	30.9	1,861	109.2	6,533,544
Indicated (Sulfide)	21.3	2,146	109.4	7,545,014
Inferred (Oxide)	30.9	766	101.0	2,486,643
Inferred (Sulfide)	21.3	1,248	99.2	3,981,170

TABLE 1-3
Golden Minerals Company
El Quevar Project - Yaxtché Deposit
NI 43-101 Compliant Underground Mineral Resources

Mineral Resource Class	Ag Cutoff Grade g/t	Tonnes (000)	Ag Grade (g/t)	Contained Ag Ounces
Indicated (Sulfide)	75	3,046	183.4	17,962,987
Inferred (Sulfide)	75	4,149	177.7	23,700,873

The following notes are integral to the above Mineral Resource estimates.

1. Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability. This resource estimate includes inferred mineral resources which are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as Mineral Reserves. There is no certainty that the results projected in this Technical Report will be realized and actual results may vary substantially.

2. The effective date for technical information used in this resource estimate is February 9, 2012.

3. A uniform bulk density of 2.60 g/cc, the average of 190 measurements on core was used.

4. The drilling database used in this resource estimate contained records for 270 diamond drill holes and over 21,000 silver analyses completed by the Company since 2006. Drill hole samples were composited to 1m lengths. Assays were completed at several commercial laboratories: Alex Stewart Argentina (74%), ALS-Chemex (15%), ACME (10%) and SGS (1%). QA/QC on the assay data and a blind check sampling program on high-grade silver sample pulps had acceptable results. Mineral Resources are inclusive within the Block Model Mineral Inventory.

5. Resource estimates assume the following conceptual economic parameters: metal price, three year average of US$24.41/oz Ag, metallurgical recovery (61% oxide material, 88.5% sulfide material). Total processing cost $13.57 per tonne processed; total refining and freight cost $2.00/ounce. Resource estimate assumes a mining recovery of 95 percent and approximately 10 percent dilution resulting from “regularization” of 3 x 3 x 3 m blocks to 6 x 6 x 6 m blocks in the Vulcan software. Resource estimates for open pit and underground areas assume mining recovery of 95 percent and approximately 10 percent mining dilution as a result of the “regularization” of 3 x 3 x 3 m blocks to 6 x 6 x 6 m blocks in Vulcan® software.

6. Resource Classification - The resource estimate has been classified as Indicated and Inferred Resources based on sample spacing within the 10 ppm grade shell. For Indicated mineral resources a minimum of 2 holes and an average sample distance of less than 25 m from the block centroid are required to show continuity and proximity. Inferred Resources require one hole at any distance from the block centroid but within the grade shell.

7. “In-pit” Mineral Resources were reported from the Whittle pit optimization software using reasonable assumptions about commodity prices, metal recoveries and conceptual operating costs. Mineral resources reported are constrained to the 10 ppm Ag shell, the Contact Mineralization Domains and a conceptual mining shape (Whittle pit shell). The “In-Pit” Mineral Resources are reported at a marginal cutoff grade of 31 g/t Ag (oxide) and 21 g/t Ag (sulfide) mineralization.

8. Mineral Resources in the western Yaxtché deposit that are potentially mineable by underground methods are estimated using conceptual stope shapes queried to the Vulcan® block model. The underground resource occurs from 4,480 m to 4,732 m elevation.

9. Underground Modeling Method: To estimate underground Mineral Resources, 6 m-high test levels were defined over a vertical test interval of 36 m. The block model mineral inventory for the test interval zone was estimated and compared to the test interval in which the mineralized blocks were constrained by conceptual stope shapes. A 75 g/t Ag cutoff grade was assumed. The block model uses regularized, 6 x 6 x 6 m blocks. The minimum stope size considered was 6 x 6 x 12 m with the long dimension oriented parallel to the NW-trend of the mineralization. The ratio of the Mineral Resources, expressed in tonnes and ounces, and constrained by conceptual stopes to the Mineral Inventory generates the Modeled Mineral Resource Factors for the test interval. The Modeled Mineral Resource Tonnage Factor in the test interval was 86 percent and the Modeled Mineral Resource Metal Factor (ounces Ag) was 89 percent. These Factors were then multiplied by the tonnes and ounces of contained silver in the Mineral Inventory to estimate the Mineral Resources from the underground portion of the deposit.

1.12 *Interpretations and Conclusions*

The current Resource Model of the Yaxtché deposit located in the Quevar Sur exploration area utilizes 270 holes, comprising 69,094 meters of drilling with an average hole depth of 256 m. The nominal drill hole spacing is approximately 20-25 meters. The effective date of the drilling information used in this report is February 9, 2012.

PAH has reviewed the drilling database, sampling methodology, core handling, logging, QA/QC results, analytical methods and sample security procedures employed by Golden Minerals and finds that the quality of the resultant technical data is industry standard and is suitable for use in mineral resource estimation.

Since the last previous resource estimate of the Yaxtché deposit was prepared by Micon and reported in their August 2010 Technical Report, Golden Minerals has pursued an aggressive exploration program on their Quevar Sur and Quevar Norte exploration areas.

The Yaxtché deposit is located in the Quevar Sur area and consists of silver mineralization at relatively shallow depth in the eastern portion of the deposit and at greater depth in the western portion. The Mineral Resource estimate reported in the current report includes the eastern and western portions of the Yaxtché deposit which is the main target of interest at the El Quevar project.

Since the Micon report of August 2010, one hundred and one (101) more drill holes are available to support resource estimation in the Yaxtché deposit. Since the Micon report, more than 1,200 m of underground excavations have been completed and sampled by 158 bulk samples taken at the mining face and more than 2,000 chip-channel samples taken from the ribs, back and mining faces of the same excavations. The underground samples provide assay datasets that allow comparison and confirmation of silver grades reported from the 2012 resource model.

Apart from the greater drilling support for the PAH (2012) resource estimate, salient differences between the Micon (2010) and PAH (2012) resource estimates are given as follows:

- Within the alteration package, Micon (2010) constrained the high grade silver mineralization to 75 narrow pods defined by a 100 g/t silver cutoff grade and a minimum width of 3 m. Silver grades were interpolated for each pod using IDS. PAH (2012) constrained the mineralization to a 10 ppm Ag grade shell within the alteration envelope. Within the grade shell PAH modeled the silver mineralization using three Contact Domains that were interpreted from graphical drill logs which recognized the association of higher grade mineralization with fault contacts (FC) and lithologic contacts (LC). PAH also recognized a diffused domain of lower grade silver mineralization not associated with contacts, called non-contact type (NC) mineralization. All intersections greater than 10 ppm Ag were classified by the three Contact Domains which were then used to further restrict grade interpolation.

- PAH interpolated silver grades of each Contact Domain using ordinary kriging. Samples less than 10 ppm silver within the grade shell were modeled in a waste domain. For grade interpolation, Micon used inverse distance squared restricted to each of the 75 pods.

- PAH used a more conservative assay capping strategy than Micon. PAH capped silver values at three times the standard deviation (3-sigma), confirmed by probability plots, for each Contact Domain. This affected approximately 1.5 percent of the assay data. PAH compared the capped and uncapped assay data and found that capping 1.5 percent of the drill hole assays reduced the average silver grade in the deposit by 15 percent. Micon (2010) used a straight 3,000 g/t silver cap based on probability plots which affected 20 samples in the database.

- PAH compiled and conducted a rigorous review of the results of all control sample analyses for standards, blanks and duplicates that were inserted in the sample stream sent to laboratories. PAH reviewed QA/QC procedures and control assay results over the life of the project. While results of this analysis were acceptable, several areas for improvement were noted. Micon relied on previous reviews of QA/QC control samples provided in earlier reports by CAM and SRK.

- PAH constrained the Resource Estimate to mining shapes using preliminary economic and technical factors. Whittle pit shells constrained shallow mineralization in the eastern part of the deposit. Conceptual stope designs were developed at 100 g/t and 75 g/t Ag cutoffs in the block model to constrain potentially mineable underground resources. Micon (2010) did not use conceptual mining shapes or preliminary economic factors to constrain their resource estimate. The recovery of copper which occurs in low concentrations in the deposit was not considered in either the PAH or Micon resource estimates.

- Both the PAH (2012) and Micon (2010) used a bulk density of 2.60 g/cc from 190 core samples analyzed by an independent lab.

A comparison of PAH's average silver grades in the combined resource estimate for in-pit and underground mineral resources as shown on Table 1-1. The grade range for the indicated and inferred resources is 141 g/t Ag and 152 g/t Ag, respectively.

Micon's (2010) average silver grades for indicated and inferred resources that are constrained to 75 narrow pods and not constrained by conceptual economic parameters are 310 g/t Ag and 336 g/t Ag, respectively.

In this regard bulk samples from underground excavations in the eastern portion returned an average grade of 113 g/t Ag a zero cutoff grade, 120 g/t Ag a 30 g/t cutoff grade and 240 g/t Ag a 100 g/t Ag cutoff grade. Over two thousand, chip-channel samples from the same underground excavations in the form of roof, rib and mining-face samples, averaged 133 g/t Ag. These grades at the specified cutoffs are more representative of the anticipated mining head grades and compare well to the grades estimated from PAH's resource model.

While PAH and Micon used different modeling approaches and assumptions, the recent underground bulk sampling and chip-channel sampling support the potential for bulk mining a lower grade silver deposit by surface methods in the eastern portion and by underground methods in the western portion of the deposit.

1.13 *Recommendations*

PAH has constructed a resource model for the Yaxtché silver deposit using conceptual economic parameters and conceptual mining shapes to constrain the Mineral Resource estimate. Results from the underground bulk sampling of excavations in 2011 and the extensive chip-channel samples from the same excavations are more representative of the anticipated head grades and compare well to the silver grades estimated from the PAH resource model at specific cutoffs.

1. With respect to further geological work, PAH recommends that the core be re-examined to differentiate the breccia types within the Quevar Breccia using simple descriptive criteria such as the monomictic and polymictic types recognized in surface exposures by Cumming (2010). The objective would be to test the hypothesis that specific breccia horizons may be more favorable for silver mineralization within the dacitic volcanic package. If favorable breccia horizons can be recognized, then the relationship of these horizons to the Contact Domains defined in the current report should be examined.

2. With respect to further exploration work, Golden Minerals has identified seven early-stage exploration targets in its Quevar Norte exploration area which contain high-grade silver values, copper and bismuth associated with structural and alteration patterns similar to the Yaxtché deposit. Further exploration is warranted in this area where geological structures and alteration are well exposed. PAH recommends that detailed mapping (1:500 scale) and sampling be conducted on the exploration targets known as Sharon, Julia, Amanda and Luisa. If the expanded sampling yields encouraging results, then trenching across the delineated structures should follow.

3. With respect to QA/QC procedures, detailed review of control samples found inconsistent insertion of standard reference materials (SRMs) into the sample stream submitted to the laboratory, PAH recommends that Golden Minerals acquire SRM's, over a range of low to high silver grades, that are compatible with analytical methods currently used in the Project. The SRM's should be consistently inserted in the data stream according to the Company's guidelines at the rate of 5 percent. Further to the recommendations made by Micon in their technical report of August 2010, PAH has assembled a current compilation of all QA/QC data for the El Quevar Project.

4. PAH makes the broader recommendation that a corporate level database manager be engaged to create and maintain the Company's drilling databases and to monitor and ensure that quality assurance and quality control is maintained at a high level and ensure prompt action when analytical anomalies occur.

5. With respect to further mining studies, PAH recommends expanding the underground mine modeling to include the full vertical height of mineralization (252 m) which is approximately from 4,480 m to 4,732 m RL. Resource estimates from underground mine modeling presented in the current report are based on tonnage and metal recovery factors deduced from design of conceptual stopes on six test levels over a vertical height of 36 m and then applied to a grade shell of specified cutoff grade over the height of mineralization. Design of conceptual stopes over the full height of mineralization at specified cutoff grades, will support mineability studies that address specific mining methods and related costs.

6. Subsequent to refinement in the understanding of the ore controls and expanded modeling of the underground portion of the Yaxtché deposit, PAH recommends that the project be advanced to the Preliminary Economic Assessment (PEA) stage, incorporating additional metallurgical test work and concentrate marketing studies.

2.0 INTRODUCTION

At the request of Mr. Robert B. Blakestad, Senior Vice President Exploration and Chief Geologist of Golden Minerals Company (Golden Minerals), Pincock, Allen and Holt (PAH), a division of Runge, has been retained to provide an independent Technical Report for the El Quevar silver property in Salta Province, Argentina.

The current resource estimate is based on data from 270 diamond drilling holes as supplied by Golden Minerals in a database compiled by Golden Minerals and validated by PAH from the Company's 2006-2011 drilling campaigns. An internal PAH audit procedure was utilized for the assessment of data quality and integrity as described in Section 12 of this report. The effective date of the drilling information used in this report is February 9, 2012.

The PAH model discussed in this report was developed from first principals at the request of Golden Minerals and is not an update of the previous models. The PAH model incorporated 85 new drill holes completed in 2011 which comprised some 25,389 m of drilling in the Yaxtché deposit. From this meterage 12,051 samples were analyzed by the Alex Stewart Laboratory in Mendoza, Argentina and made available to PAH.

In contrast to previous resource estimates, the PAH approach was to consider conceptual economic parameters and a conceptual development plan to extract shallow mineralization by surface mining in the eastern part of the Yaxtché deposit and by underground methods in the deeper Western part of the deposit. This approach contemplates the use of underground and surface bulk mining methods. In both areas, mineral resources are constrained by their respective surface and underground mining shapes.

Previous resource estimates for the Yaxtché deposit are provided by CAM (January 2010) and Micon (August 2010). The effective date of the previous Micon model was August 6, 2010 at which time the drilling database was frozen at hole QVD-204 for the purpose of resource estimation.

PAH's resource estimate complies with the Canadian Institute of Mining, Metallurgy and Petroleum (CIM) standards and definitions, as required by Canadian National Instrument 43-101 (NI 43-101).

The geological setting of the property, mineralization style and occurrences, and exploration history were described in reports that were prepared by Micon (2010), CAM (2010, 2009a and 2009b), SRK Consulting (SRK) (2009) and in various government and other publications listed in Section 19 "References." The relevant sections of those reports are quoted herein.

Golden Minerals is the successor to Apex Silver Mines Corporation (Apex). Many documents cited in this report were prepared by, or addressed to, Apex. The Argentine exploration company, Silex Argentina, S.A. (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 in prior years, or to Silex.

The term “El Quevar property” refers to the El Quevar concessions where Golden Minerals conducted its exploration program and resource estimate. The current resource estimate is for the Yaxtché silver deposit which is located in the El Quevar Property. There are no Mineral Reserves on the El Quevar Project. The term “El Quevar project” refers to the entire land package acquired or held by Golden Minerals or its subsidiary Silex, in the province of Salta, Argentina.

All currency amounts are stated in US dollars or Argentinean pesos, as specified, with costs and commodity prices typically expressed in US dollars. Quantities are generally stated in metric (SI) units, the standard Canadian and international practice, including metric tons (tonnes, t) and kilograms (kg) for weight, kilometers (km) or meters (m) for distance, hectares (ha) for area, grams (g) and grams per metric tonne (g/t) for gold and silver grades (g/t Au, g/t Ag). Wherever applicable, any Imperial units of measure encountered have been converted to Système International d’Unités (SI) units for reporting consistency. Precious metal grades may be expressed in parts per million (ppm) or parts per billion (ppb) and their quantities may also be reported in troy ounces (ounces, oz), a common practice in the mining industry.

PAH’s site visit to the Property was conducted by Mr. Craig Horlacher and Mr. John Zeise, both of PAH, from October 4-7, 2011. PAH personnel were accompanied by Mr. Bob Blakestad, Senior Vice President Exploration and Chief Geologist for Golden Minerals. During the site visit, PAH personnel spent four days reviewing core samples, core logging, sampling and assaying procedures; reviewing the general exploration, drilling and QA/QC data; in addition, reviewing the recently completed underground exploration development.

The review of the El Quevar property was based on published material researched by PAH, as well as data, professional opinions and unpublished material submitted by the professional staff of Golden Minerals or its consultants. Much of the data came from reports prepared and provided by Golden Minerals or from previous operators and government reports.

PAH is pleased to acknowledge the helpful cooperation of Golden Minerals’ management and personnel, all of whom made any and all data requested available and responded openly and helpfully to all questions, queries and requests for material.

The Qualified Persons responsible for the preparation of this report are Mr. Craig Horlacher, MSc., Principal Geologist with PAH and Mr. Paul Gates, PE.,MBA, Principal Mining Engineer with PAH who prepared the in-pit mineral resource estimate.

The block model used in resource estimation was completed by Mr. John Zeise, Senior Consulting Geologist with PAH. The underground resource estimate was prepared by Mr. Gordon Sobering, Principal Mining Engineer with PAH.

PAH does not have nor has it previously had any material interest in Golden Minerals or related entities. The relationship with Golden Minerals is solely a professional association between the client and the independent consultant. This report is prepared in return for fees based upon agreed commercial rates and the payment of these fees is in no way contingent on the results of this report.

This report includes technical information which requires subsequent calculations or estimates to derive sub-totals, totals and weighted averages. Such calculations or estimations inherently involve a degree of rounding and consequently introduce a margin of error. Where these occur, PAH does not consider them to be material.

2.1 *Source of Information*

The primary source documents for this report are:

- Barnard, F and Sandefur, R., (August, 2009), NI 43-101 Technical Report, Mineral Resource Estimate, Yaxtché Central Zone silver deposit, El Quevar Project, Salta Province, Argentina: consulting report prepared for Golden Minerals Company by Chlumsky, Armbrust and Meyer, LLC (CAM), Posted on SEDAR on September 21, 2009, 98 p.

- Barnard, F., and Sandefur, R., (October, 2009), NI 43-101 Technical Report, Mineral Resource Estimate, Yaxtché Silver Deposit, El Quevar Project, Salta Province, Argentina: consulting report prepared for Golden Minerals Company by CAM, Posted on SEDAR on November 13, 2009, 88p.

- Barnard, F and Sandefur, R., (January, 2010), NI 43-101 Technical Report, Mineral Resource Estimate Update, Yaxtché Silver Deposit, El Quevar Project, Salta Province, Argentina: consulting report prepared for Golden Minerals Company by CAM, Posted on SEDAR on January 19, 2010, 100 p.

- Lewis, W.J. and San Martin, A. J., NI 43-101 Technical Report, and Updated Mineral Resource Estimate for the Yaxtché Silver Deposit, El Quevar Project, Salta Province, Argentina: consulting report for Golden Minerals Company by Micon International Ltd. Posted on Sedar August 10, 2010, 138 pp.

2.2 *Participants*

The El Quevar Project was visited by Mr. Craig Horlacher, Principal Geologist with PAH and Mr. John Zeise, Senior Geologist with PAH, from October 4-7, 2011. Mr. Horlacher, a Qualified Person under National Instrument 43-101 (NI 43-101), has overall responsibility for preparation of this Technical Report. Mr. Zeise prepared the Block Model and Mineral Inventory for this report. Table 2-1 lists the Participants and the Technical Report section contributions.

2.3 *Qualified Persons and Responsibilities*

The information in this report that relates to the in-pit Mineral Resources was prepared by Mr. Paul Gates, who is a full time employee of PAH – Denver and Professional Engineer (Colorado). Mr. Gates has sufficient experience, which is relevant to the style of mineralization and type of deposit under consideration, as well as the work he has undertaken, to qualify as a Qualified Person as defined by NI 43-101.

Mr. Craig Horlacher, Principal Geologist of PAH, supervised the work of the PAH staff and edited all portions of the final report. He is a Qualified Person under NI 43-101.

TABLE 2-1
Golden Minerals Company
El Quevar Project - Yaxtché Deposit
Participants - Report Contribution Responsibility

Participants	Contribution Section of Report	Comment
Paul Gates, PE.,MBA QP	14	Mining Cost,Whittle Pit Shell, In-pit mineral Resource
Craig Horlacher, QP	1 to 20	Site Visit, Geology, Mineral Resources, Data Verification, and Report preparation
John D. Zeise, P.G.	11, 12, 14	Site visit, Sample Preparation, Data Verification, Block Modeling and Block Model Mineral Inverntory estimate
Gordon Sobering	14	Underground Mine Modeling
Perry Allen	13	Metallurgy Studies

2.4 *Limitations and Exclusions*

The Technical Report is based on various reports, plans and tabulations provided by Golden Minerals either directly from the exploration offices, or from reports by other organizations whose work is the property of Golden Minerals. PAH has not been advised of any material change, or event likely to cause material change, to the operations or forecasts since the date of asset inspections. PAH has no reason to believe that the information provided is inaccurate or misleading.

The work undertaken for this report is that required for the preparation of a Technical Report including reviews of technical information, coupled with such inspections as PAH considered appropriate to prepare this report. It specifically excludes all aspects of legal issues, commercial and financing matters, land titles and agreements.

PAH has specifically excluded making any comments on the competitive position of the Project compared with other similar and competing silver producers around the world. PAH strongly advises that any potential investors make their own comprehensive assessment of both the competitive position of the Project in the market, and the fundamentals of the market at large.

2.5 *Cautionary Statement*

This report is intended to be used by Golden Minerals subject to the terms and conditions of its contract with Pincock, Allen and Holt. That contract permits Golden Minerals to file this report as a Technical Report with Canadian Securities Regulatory Authorities pursuant to provincial securities legislation. Except for the purposes legislated under provincial securities laws, any other use of this report by any third party is at that party's sole risk.

2.6 *Capability and Independence*

PAH provides advisory services to the mining and finance sectors. Within its core expertise it provides independent technical reviews, resource evaluation, mining engineering and mine valuation services to the resources and financial services industries.

All opinions, findings and conclusions expressed in this Technical Report are those of PAH and its specialist advisors as outlined under Participants.

Drafts of this report were provided to Golden Minerals but only for the purpose of confirming the accuracy of factual material and the reasonableness of assumptions relied upon in this Technical Report.

PAH has been paid, and has agreed to be paid, professional fees for its preparation of this Report. None of PAH or its directors, staff or specialists who contributed to this report have any interest or entitlement, direct or indirect, in:

- Golden Minerals, securities of Golden Minerals or companies associated with Golden Minerals; or
- "The Project."

This Technical Report was prepared on behalf of Golden Minerals by the signatory to this Technical Report. The specialists who contributed to the findings within this Technical Report have each consented to the matters based on their information in the form and context in which it appears. Details of the specialist's qualifications and experience are set out in Section 20.

2.7 *Units*

All units are carried in metric units unless otherwise noted. Grades are described in terms of percent (%) or grams per metric tonne (gptonne or g/tonne), with tonnages stated in metric tonnes. Salable metals are described in terms of tonnes, or troy ounces (precious metals) and percent weight.

Unless otherwise stated, Dollars are US Dollars. The following abbreviations are used in this report:

Abbreviation	**Unit or Term**
AR$	Argentinean Peso
CAM	Chlumsky, Armbrust and Meyer, LLC.
CIM	Canadian Institute of Mining, Metallurgy and Petroleum
cm	Centimeter(s)
Dawson Metallurgical	Dawson Metallurgical Laboratories
˚	Degrees
˚C	Degrees Celsius

EIR	Environmental Information Report
EM	Electromagnetic
g	Gram(s)
g/t	Grams per metric tonne
Geostats	Geostats Pty Ltd.
Golden Minerals	Golden Minerals Company
ha	Hectare(s)
Hochschild	Hochschild Mining Plc.
kg	Kilograms
kg/t	Kilograms per metric tonne
km	Kilometer
km^2	Square Kilometers
k	Thousands
L	Liter(s)
LOM	Life of Mine
m	Meters
m^3	Cubic meters
m^3/d	Cubic meters per day
M	Million
masl	Meters Above Sea Level
Mansfield	Mansfield Minerals
mg	Milligram(s)
Micon	Micon International Limited
Mm	Millimeter(s)
Mt	Million Tonnes
NI 43-101	Canadian National Instrument 43-101
NPV	Net Present Value
NSR	Net smelter return
n/a	Not available/applicable
Oz (oz/t)	Troy Ounces (troy ounce/metric tonne)
%	percent(age)
ppb	Parts per billion
ppm	parts per million
QA/QC	Quality Assurance/Quality Control
Quantec	Quantec Geoscience Argentine S.A.
s	Second
SESA	Salta Exploraciones, S.A.
SG	Specific gravity

SI	Systéme Internationa d'Unités
Silex	Silex Argentina, S.A.
SRK	SRK Consulting
t	Metric tonne
TMI	Total Magnetic Intensity
tpa	Tonnes per annum
tpy	Tonnes per year
tpd	Tonnes per day
USGS	United States Geological Survey
UTM	Universal Transverse Mercator
US$	United States Dollars
VTEM	Vertical-Axis Time Domain Electromagnetic

3.0 RELIANCE ON OTHER EXPERTS

This Technical Report was prepared for Golden Minerals by PAH and is based on information prepared by other parties with the exception of Sections 17, 18, 19 and 20. PAH has relied on information provided by others as follows:

- Block Modeling and grade estimation by John D. Zeise, Senior Geologist.
- Underground Mining Resource estimate by Gordon Sobering, Principal Mining Engineer.
- Metallurgical Test was reported by Dawson Metallurgical Laboratories of Midvale, Utah.

PAH believes that this information is reliable for use in this report, without a need to further independently verify its accuracy. PAH has not conducted land status evaluations, and has relied upon Golden Minerals Co. and PGS's statements regarding property status, legal title, and environmental compliance for the Project.

Table 3-1 shows other experts involved in the project.

TABLE 3-1
Golden Minerals Company
El Quevar Project - Yaxtché Deposit
Project Participants - Other Experts

Other Experts	Position	Employer	Professional Area	Contribution Section of Report	Comment
John D. Zeise, P.G.	Senior Geologist	Pincock Allen & Holt	Geology, Resource Modeling	11,12 and14	Sample Preparation, Data Varifications, Block Modeling and Resource Estimation.
Gordon Sobering	Principal Mine Engineer	Pincock Allen & Holt	Underground Mining	14	Underground Mine Resources
Perry Allen	Metallurgist	FLSmidth- Dawson Metallurgical Laboratories	Metallurgy	13	Metallurgical Testing

John D. Zeise, P.G., Senior Geologist. Mr. Zeise has over ten years experience in the mining industry. He has expertise in geostatistical resource modeling, geologic mapping, drilling design and supervision as well as geotechnical analyses and environmental assessments. He has worked on a broad range of projects including precious metals, base metals, iron, coal and uranium. He is an expert Vulcan® user.

Gordon Sobering, Principal Mining Engineer. Mr. Sobering has over 25 years experience in the minerals industry including senior positions with Barrick Gold Corp., Newmont Mining Corporation, Goldcorp Inc., and ASARCO Inc. He has organized and executed scoping, prefeasibility and feasibility studies and supervised site technical personnel and consultants. Mr. Sobering has participated in the start up and staffing of underground mine engineering departments including engineering plans, schedules, budgets, procedures and policies.

4.0 PROPERTY DESCRIPTION

Section 4 has been quoted and adapted from the Micon Technical Report of August 2010.

The El Quevar property is located in northwestern Argentina within the Antonio de los Cobres municipality, Salta Province (Figure 4-1). The project is located close to geographic coordinates 24.3° south and 66.8° west. The UTM coordinates for the Yaxtché zone are approximately 3,418,000 E, 7,307,000 N.

The project is approximately 300 km northwest of Salta, which is the provincial capital, with the mineral concessions located within a mountain massif which is referred to as "Nevados de Pastos Grandes," or sometimes as "El Quevar."

4.1 *Mineral Title in Argentina*

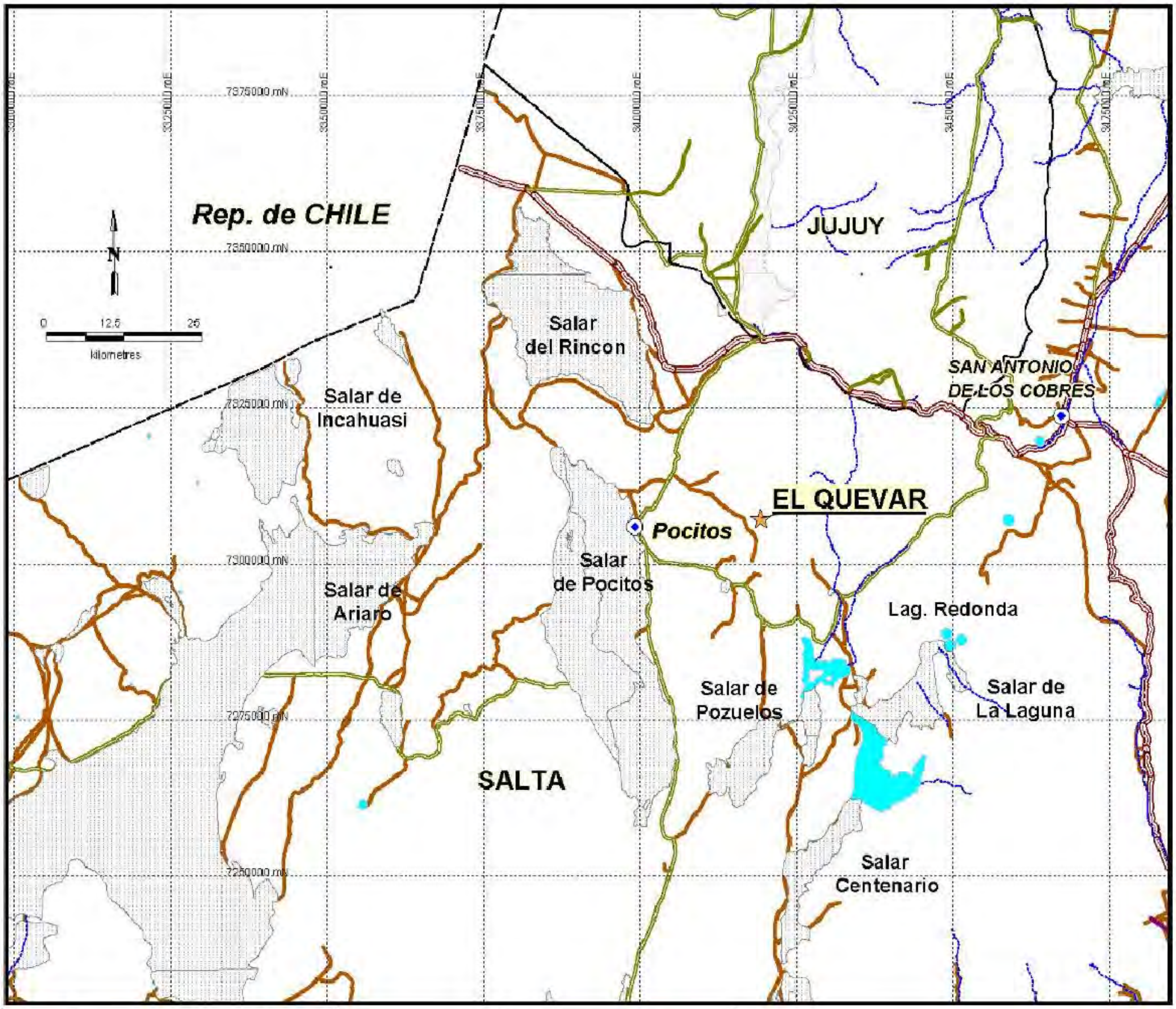
Argentina is a federal republic which is composed of 23 provinces and one autonomous city (Buenos Aires). The federal, provincial and municipal governments all have input into mining regulations but the National Mining Code regulates the mining activities in Argentina. The code is administered by the federal government and adhered to by the provinces. However, the natural resources are owned by the individual provinces which regulate the mining laws within their boundaries. The provinces grant the various mineral concessions and enforce compliance through regular investigations.

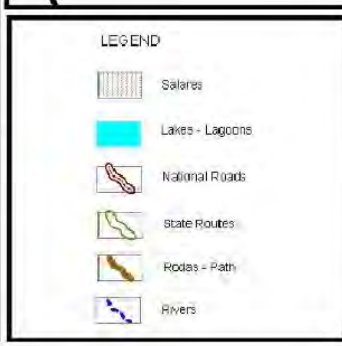
There are four types of mineral properties; three are various types of exploration concessions and the other is mine or exploitation concession.

- A *cateo* or claim (exploration concession).
- An air survey permit (exploration concession).
- An underground survey (exploration concession).
- A minas or mines (exploitation concession).

All concessions are granted by the regulating province either by a judicial or administrative decision. Exploration concessions are essentially paper locations while exploitation concessions must be surveyed and marked by the placement of monuments at the corners.

In the province of Salta, all concessions are granted by a judge in the Mining Court. Each property is recorded by number in the Mining Court registry and has its own judicial file. Additionally, the Mining Secretariat records the property in the Land Register Office and adds the property to a digital map of the area. If a submission is made for an exploration concession to be changed to an exploitation concession, a survey of the concession must be conducted prior to granting the change. The survey must be conducted according to specific procedures and requirements as defined by the law and must include the participation of the mining office authorities.





SILEX ARGENTINA S.A.

EL QUEVAR PROJECT

SALTA PROVINCE

EL QUEVAR
Project Location Map

Scale: Grafica	Author: N. Alvarez	Figure No. 4.1
Draw: A.Ridl	Date: June 10	File: Quevar_ubi.wor

Prepared by
pincock, allen & holt
165 S. Union Boulevard, Suite 950
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Phone (303) 986-6950

Project No. DE-00196

Drawing Provided by/Prepared for
Golden Minerals Company

Project Name
El Quevar Project

FIGURE 4-1
Location Map for the El Quevar Property

Date of Issue
May 2012

Drawing Name
Fig.4-1.dwg

In the case of exploration concessions, the air and underground surveys are seldom used and such concessions are predominantly cateos. In the case of the El Quevar property, the concessions consist of cateos and minas.

All exploration concessions are granted for a limited surface area and period of time. The concessions are divided into surface units of 500 ha with each concession allowed to contain a maximum of 20 units or 10,000 ha. A 500 ha concession can be held for 150 days with an increase of 50 days for each additional unit of 500 ha for a maximum of 1,100 days for a 10,000 ha concession. Unless the concessionaire declares the property to be a mine and applies for an exploitation concession, the total hectares must be reduced incrementally at 300 days and 700 days after the exploration concession is granted.

The maximum number of exploration concessions which can be held by a single entity or individual per province is 20 or 200,000 ha. Exploration concessions are subject to a yearly rental payment (canon), which is fixed for a given year by the National Ministry of Economy.

Landowners within a concession area must be notified but cannot oppose the concession; however, they can request a bond from the concessionaire. Exploration activities cannot be conducted near crops and gardens, buildings and facilities and require acceptance by the property owner. Other areas excluded from exploration activities are cemeteries, infrastructure including roads, pipelines and railroads, public water or any public facilities.

Each individual concession requires the filing of an exploration plan which must be implemented, with failure to do so possibly resulting in the termination of the concession. In addition, prior to any activity, an environmental report must be filed with, and approved by, the provincial mining authority. Additional environmental reports are required on a bi-annual basis as long as the exploration concession is valid. Upon the termination of expiration of the exploration concession, all data and documentation from the exploration activities must be filed with the provincial mining authority.

Exploitation concessions are granted if any mineral discovery is made by either the concessionaire or third parties within the area and term of the concession. Exploitation concessions have annual payments which are fixed by the National Ministry of Economy. While there are no fixed time limits associated with the exploitation concessions, the duration can be affected by the following three conditions:

- Timely payment of annual fees.
- An appropriate and reasonable capital investment.
- Continuous workflow.

According to the laws of the province of Salta, metal mines are subject to a 3 percent net smelter return (NSR) royalty.

4.2 *El Quevar Mineral Concessions*

Mining concessions currently held by Silex Argentina in El Quevar Project include 20 exploitation concessions totaling 36,177.79 hectares and 12 claims totaling 18,620.09 hectares for a total land extension of 54,797.99 hectares.

The canon payment for the second semester of 2012, which expires on or before June 30, 2012, is AR$ 68,360. The canon is a bi-annual payment due June 30th and December 31st of each year, in two equal installments.

The Yaxtché zone is located primarily on the Castor exploitation concession, with the northwestern portion located on the Toro 1 and Quirincolo 1 concessions.

Table 4-1 summarizes the exploration and exploitation concessions contained within the El Quevar property. Figures 4-2, 4-3 and 4-4 are claim maps indicating the locations of the various claims in relation to one another and the Yaxtché zone.

4.3 *Royalties, Agreements and Encumbrances*

Surface rights are owned and administered by the province of Salta, and as a result there are no agreements required for access. In addition, the El Quevar area has no existing private properties or infrastructure limiting exploration activities.

Production of metals from any mine is subject to a 3 percent NSR royalty payable to the province of Salta which is in addition to any royalties paid to private parties.

The concessions controlled by Silex are listed in Table 4-2. The terms for each concession are also contained in the table. Silex owns 50 percent of the Castor concession and has an option agreement to acquire 100 percent interest in this concession.

Agreements still in force for Silex Argentina S.A.:

1. SESA's Option Agreement. In March 2011, Silex Argentina exercised the option acquiring 50 percent interest over the Castor Mine (the remaining 50% interest was already owned by Silex Argentina) and 100 percent interest over the Quevar II Mine. Silex Argentina has to pay to SESA a 1 percent NSR as per the following detail: (i) on 50 percent of the value of the mineral mined and processed from the Castor Mine; and (ii) on 100 percent of the value of the mineral mined and processed from the Quevar II Mine. Fifty percent of the SESA NSR can be acquired by Silex Argentina by paying US$1,000,000 within two years of production.

2. The Nevado I Option Agreement, as amended, requires a total payment of US$1,500,000 to acquire the Nevado I Mine. To date, payments for a total of US$740,000 have been made. On or before June 22, 2013, Silex Argentina S.A. has to make the remaining payments if it wants to acquire

TABLE 4-1
Golden Minerals Company
El Quevar Project - Yaxtché Deposit
Property Mineral Concessions (as of June, 2010)

Expedient Number	Property	Number of Hectares	Type of Concession	Owner	Date Granted By The Mines Department	Annual Payment (Canon) AR$	Annual Payment (Canon) US$*
18036	Quirincolo I	3,500.00	Mine	Silex	3-Jun-05	28,000	7,107
18037	Quirincolo II	3,500.00	Mine	Silex	3-Jun-05	28,000	7,107
3902	Castor	384.11	Mine	50% SESA, 50% Silex	19-Dec-05	3,200	812
17114	El Quevar II	330.04	Mine	SESA (100% option to Silex)	29-May-06e	3,200	812
1578	Vince	44.73	Mine	Silex	7-Aug-96	400	101
1542	Armonia	17.91	Mine	Silex	26-Jul-04	160	41
12222	Quespejahuar	18.00	Mine	Silex	2-Feb-04	240	61
18332	Toro I	436.61	Mine	Silex	28-Aug-28	4,000	1,015
18359	Nevado I	2,096.58	Mine	Saravia C.A. and Rodriguez S.R. (100% option Silex)	19-Oct-06	16,800	4,264
18745	Quevar I	3,313.00	Cateo	Silex	7-Mar-08	none	0
19534	Quevar Primera	2,626.07	Mine	Silex	In process	none	0
20215	Quevar Novena	1,312.99	Mine	Silex	In process	none	0
18784	Quevar III	3,997.82	Cateo	Silex	12-Mar-08	none	0
19557	Quevar Tercera	3,995.63	Claim (Provisory)	Silex	In process	none	0
20219	Quevar Decima	1,997.82	Mine	Silex	In process	none	0
18786	Quevar IV	3,988.86	Cateo	Silex	12-Mar-08	none	0
19558	Quevar IV	3,500.00	Mine	Silex	In process	none	0
20240	Quevar Decimo Primera	1,988.03	Claim (Provisory)	Silex	In process	none	0
18785	Quevar V	4,242.74	Cateo	Silex	l2-May-08	none	0
19617	Quevar Quinta	2,242.73	Mine	Silex	In process	none	0
20359	Quevar Decimo Segunda	1,121.37	Claim (Provisory)	Silex	In process	none	0
19136	Quevar VI	4,493.52	Cateo	Silex	10-Dec-08	none	0
19992	Quevar Sexta	2,493.42	Claim (Provisory)	Silex	In process	none	0
19195	Quevar VII	6,641.75	Cateo	Silex.	11-Apr-09	none	0
20319	Quevar Septima	2, 301.03	Cateo	Silex	6-May-10	none	0
18079	Viejo Campo	3, 000.00	Claim (Provisory)	SESA (option to Silex)	In process	24,000	6,091
15190	Mariana	26.31	Mine	Silex	29-Apr-10	60	15
18080	Arjona	3,000.00	Mine	Silex	13-May-10	22,400	5,685
20501	Quevar Decimo Tercera	3,349.00	Mine	Silex			
19557	Quevar Tercera	3,000.00	Mine	Silex			
21043	Quevar Vigesimo Tercero	995.63	Claim	Silex			
20997	Quevar Vigesimo Tercero	3,997.00	Claim (under appeal)	Silex			
21044	Quever Vigesimo Cuarto	468.00	Claim	Silex			
20360	Quevar Decimo Segunda	1,121.37	Claim	Silex			
20445	Quevar Decimo Quinta	3,121.48	Claim	Silex			
19992	Quevar Sexta	2,493.41	Claim	Silex			
20706	Quevar Decimo Novena	4,493.52	Claim	Silex			
21042	Quevar Vigesimo Segundo	2,150.72	Claim	Silex			
20319	Quevar Septima	2,301.02	Mine	Silex			
20988	Quevar Veinteava	2,150.00	Claim	Silex			
20655	Quevar Decima Septima	98.10	Claim	Silex			
20656	Quevar Decima Octava	40.24	Claim	Silex			
15190	Mariana	26.31	Quarry (Cantera)	Silex			
18080	Arjona II	2,786.58 (3.000)	Mine	Silex			
21054	Quevar Vigesimo Quinta	1,993.00	Claim	Silex			
Total Hectares		**65,940.97**	**Annual Payment (Canon) in AR$ and US$**			**130,460**	**33,112**

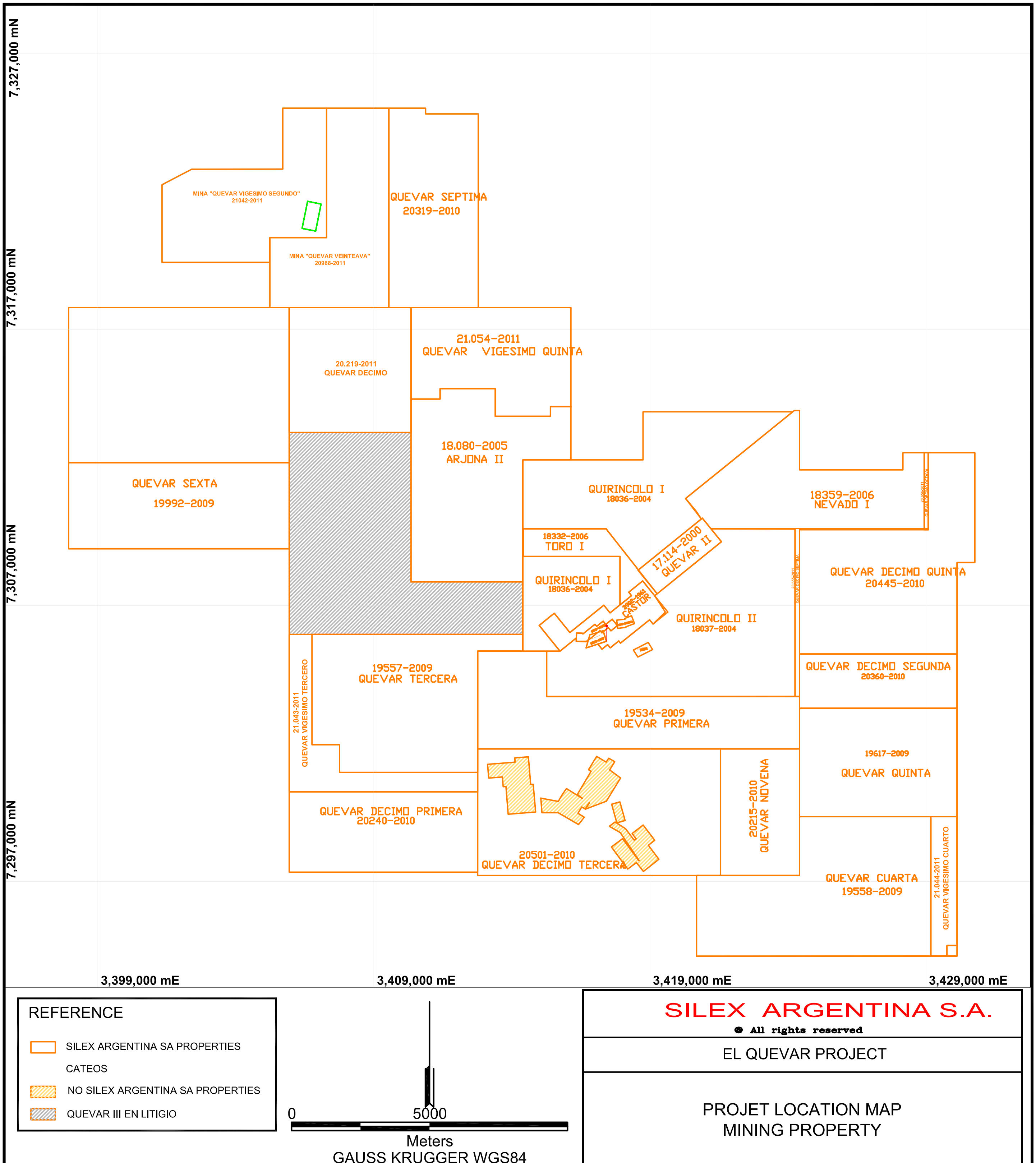
Table supplied by Golden Minerals Company.

* The conversion from the Argentinean Peso to the US$ uses the official exchange rate of 3.94 pesos per US$ dollar.

TABLE 4-2
Golden Minerals Company
El Quevar Project - Yaxtché Deposit
Agreements for Mineral Concessions on the El Quevar Property

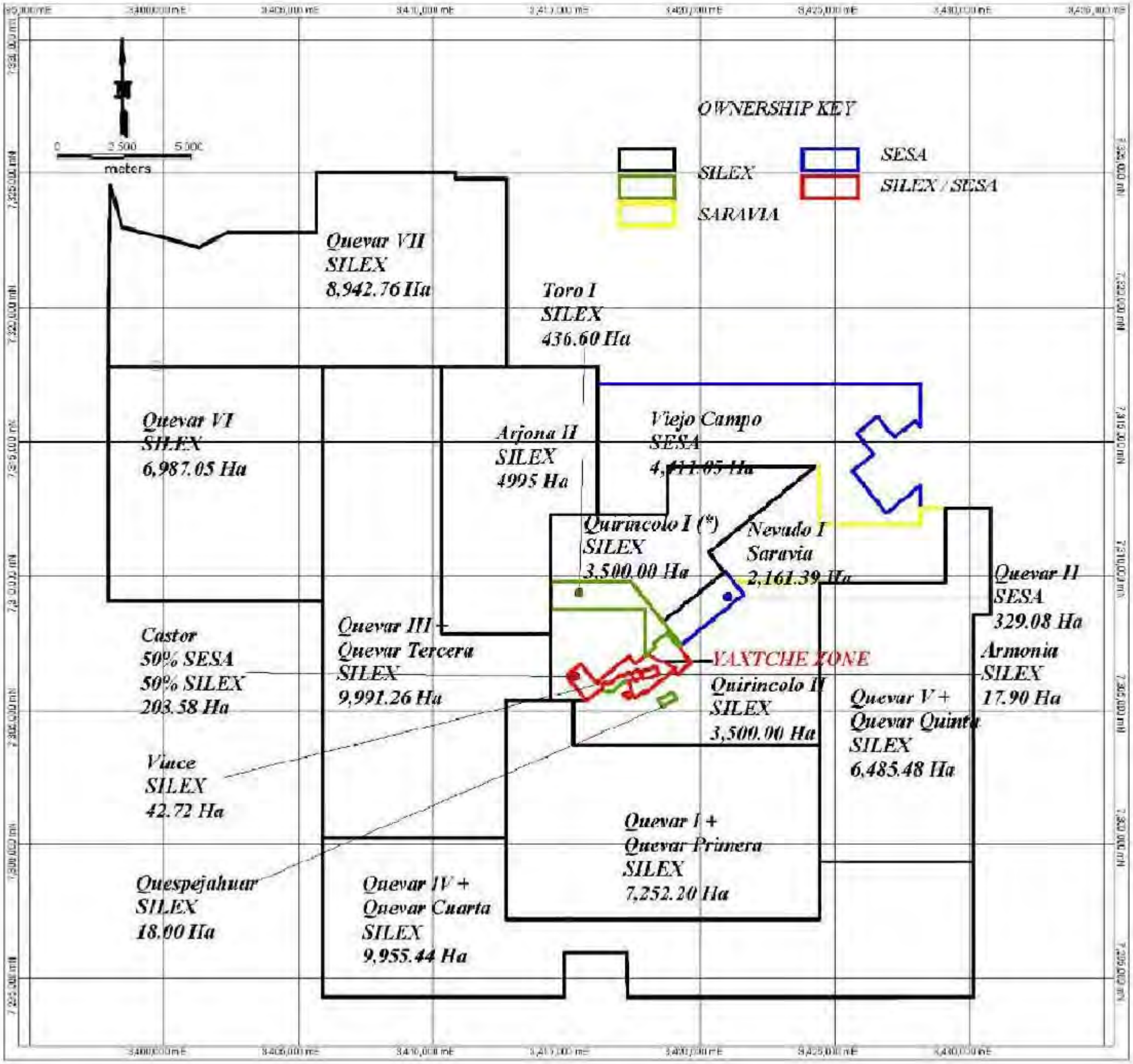
Owner	File No.	Property	No. of Hectares	Type	Type of Contract	Contract Term	% Acquired	Remaining Payments		Remaining Work Commitment	
								Due Date	Amount US$	Expiry Date	Amount US$
SESA	3902 17114	CASTOR (50% interest) EL QUEVAR II	384.1 330.03	Mine Mine	exploration with purchase option	16-Mar-06 to 16-Mar-11	50% of Castor, 100% of Quevar II, 1% NSR to SESA, on 50% of production from Castor and 100% production from El Quevar II; Silex can buy 50% of total NSR for US$ 1,000,000.	16-Mar-10 16-Mar-11	500,000 1,100,000	none	none
	1807	VIEJO CAMPO	3,000	Mine	exploration with purchase option	27-Oct-08 to 27 Oct-12	60%	27-Oct-10 27-Oct-11 27-Oct-12	100,000 200,000 200,000	27-0ct 10 27-0ct 11 27-0ct 12	250,000 350,000 1,000,000
Saravia, Carlos Alberto Rodriguez, Silvia Rene	18359	NEVADO I	2,096.57	Mine	exploration with purchase option	22-Jun-07 to 22-June-12	100% 1% NSR to owner, Silex can buy it out for US$ 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

Table supplied by Golden Minerals Company.

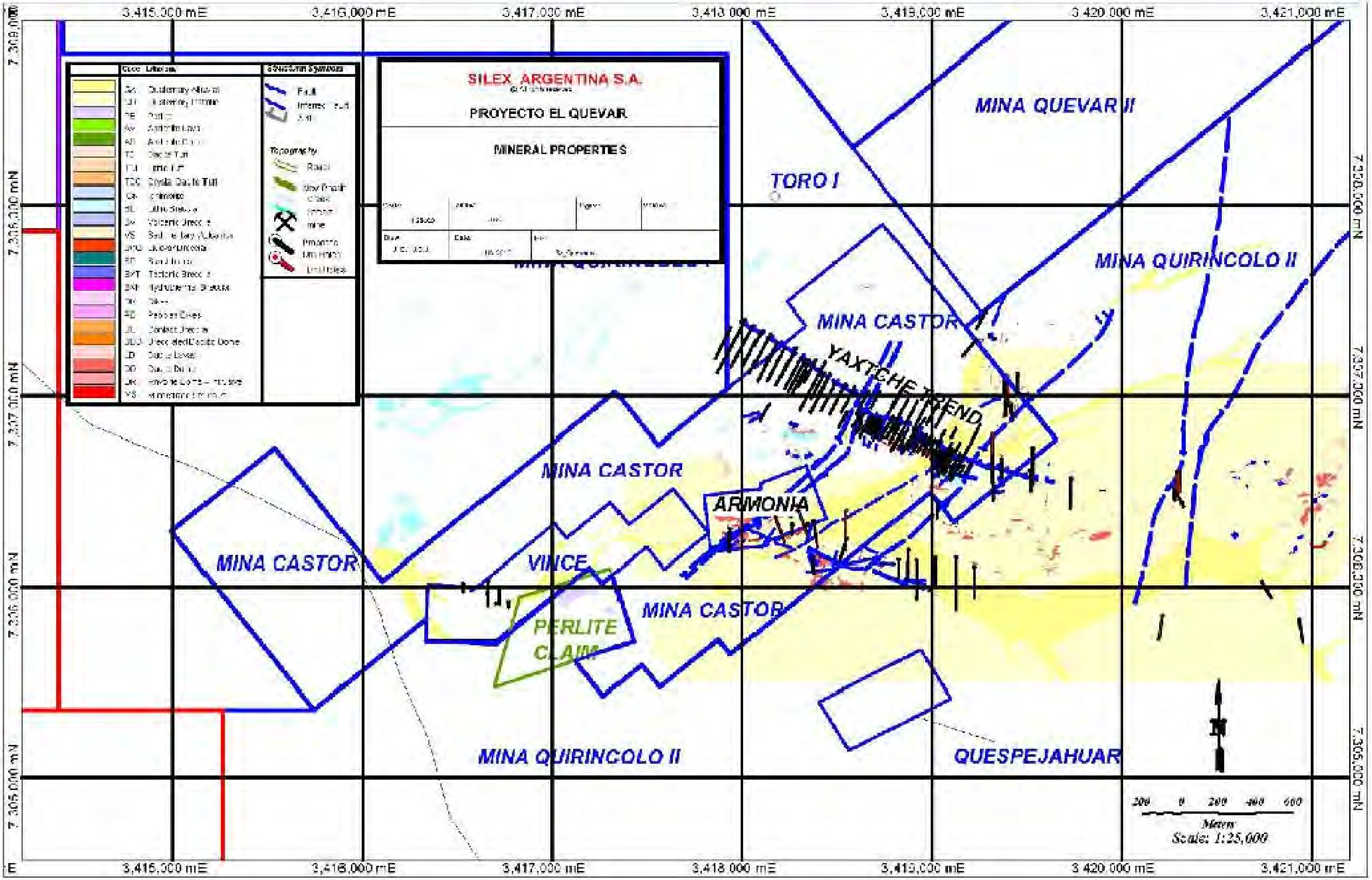


SILEX ARGENTINA S.A.			
EL QUEVAR PROJECT			
PROJET LOCATION MAP MINING PROPERTY			
Scale: 1:200.000	Author: SILEX ARGENTINA S.A.	Figure: 1	Version: 4
Draw: Arq. Teresa Castro	Date: DICIEMBRE,21, 2011	File: Propiedad Minera.dwg	

Prepared by **pincock, allen & holt** 165 S. Union Boulevard, Suite 950 Lakewood, Colorado 80228 Phone (303) 986-6950	Drawing Provided by/Prepared for ***Golden Minerals Company***	FIGURE 4-2 Exploitation and Exploration Concession Map for the El Quevar Property	Date of Issue May 2012
Project No. DE-00196	Project Name El Quevar Project		Drawing Name Fig.4-2.dwg



Prepared by	Drawing Provided by/Prepared for		Date of Issue
pincock, allen & holt 165 S. Union Boulevard, Suite 950 Lakewood, Colorado 80228 Phone (303) 986-6950	Golden Minerals Company	FIGURE 4-3 Silex Exploitation and Exploration Concession Map for the El Quevar Property	May 2012
Project No. DE-00196	Project Name El Quevar Project		Drawing Name Fig.4-3.dwg



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Project No. DE-00196

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Project Name
El Quevar Project

FIGURE 4-4
Mineral Concession Map for the Yaxtche Area
El Quevar Property

Date of Issue
May 2012

Drawing Name
Fig.4-4.dwg

Nevado I Mine. Under the Nevado I Option Agreement, Silex Argentina S.A. is entitled to acquire the 1 percent NSR royalty within the first 2 years of commercial production for US$1,000,000.

4.3.1 Perlite Properties

Perlite is an altered volcanic rock which expands upon heating and is used in the expanded form as an insulator and soil conditioner.

There are 22 perlite mining concessions inside the perimeter of Golden Minerals' El Quevar property. Several of the perlite quarries were in sporadic production. Because perlite is a construction material under Argentine mining law, it is in a separate legal category from metal ores.

While the perlite properties did not conflict with Golden Minerals' concessions, in order to maintain the conditions of the roadbeds and limit access to the project, Golden Minerals purchased the perlite operations in February 17, 2010. The perlite operations were purchased from Perlita Salta S.R.L. (Perlita Salta) by Silex for US$200,000.

The perlite property, which was called Cantera Mariana (File No. 15.190), was requested as a perlite quarry by Perlita Salta on April 25, 1996. The quarry was originally registered as a 10 year concession and the concession was extended for a further ten years in 2006.

Golden Minerals declared that it had discovered silver on the property and, according to the mining code, applied for a change in the file from a Quarry (Cantera) to a first category mine (Mina de 1º categoría). The concession has been renamed to Mina Mariana (File No. 15.190) and has a total area of 26 ha which has been surveyed in compliance with the mining code.

4.4 *Environmental Liabilities and Permitting*

To the extent of Silex Argentina's knowledge, to date, the El Quevar Project does not have any environmental liabilities or restrictions placed on it.

The Quevar project lies completely within the Andean Natural Reserve Zone (La Reserva Natural Los Andes) which is classified as a multi-use area (Categoría de Manejo de Uso Múltiple VIII). This classification allows production/extraction activities including exploration and mining. The main purpose of the reserve is to provide habitat for vicuñas.

Holders of any mining concessions in the province of Salta are required to submit an Environmental Impact Assessment (EIA) which should be approved prior the commencement of any exploration or exploitation activities. Such EIA should be updated every two years. There are three levels of permitting:

- Prospecting requiring an EIR Stage 1.
- Drilling and exploration requiring an EIR Stage 2.
- Production requiring an EIR Final Stage.

Before starting any drilling program or building a new underground tunnel (underground works), a new EIA needs to be submitted and approved by the Salta Mining Secretariat.

Silex Argentina SA's environmental permits are in order. To the extent of Silex Argentina's knowledge there are no environmental claims against it.

5.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE, AND PHYSIOGRAPHY

Section 5 has been quoted and adapted from the Micon Technical Report of August 2010.

The El Quevar property is accessed from Salta (capital of Salta Province) by following National Road 51 (NR51) to the turnoff to Provincial Road 27 (PR27) for approximately 226 km. From Salta to San Antonio de los Cobres, NR51 consists of either a paved or well maintained gravel surface. Beyond San Antonio de los Cobres, NR51 is a well maintained gravel road to the junction with PR27. From the intersection, the El Quevar property is accessed by driving south for approximately 30 km to the junction with the access road and then east, with the camp currently located approximately 10 km from the junction. Driving time from Salta to the project camp is 4 to 5 hours.

Salta is accessed by a number of highways and roads which connect it with the rest of Argentina, as well as Chile and Bolivia. Salta has a major airport with daily flights to Buenos Aires, as well as a number of other Argentinean and Bolivian cities.

A railway which connects Salta with the city of Antofagasta in Chile passes within 5 km of the project area. This government-owned railway is currently undergoing maintenance and restoration which is expected to take 1 to 2 years. Currently the railroad runs from Salta to San Antonio de los Cobres as a tourist venue known as the “Train to the Clouds.”

5.1 *Geographic/Physiographic and Climatic Setting*

The El Quevar project lies in northwestern Argentina near latitude and longitude 24.3°S and 66.8 °W, within the tundra-like puna or altiplano region of the central Andes. This region is dominated by extensive arid flats at 3,700 to 4,200 m above sea level, punctuated by peaks, usually of volcanic origin, rising to 5,000 m or more. The property is on the western slope of a volcanic massif which is dominated by the two peaks, Nevado de Queva (6,130 m) and Cerro El Azufre (5,840 m). The canyons draining the project area descend to the west to an extensive complex of alluvial fans grading into the salt flats, Salar de Pocitos (elevation 3,700 m) to the southwest, Rincon (3,800 m) to the west, and Cauchari (3,900 m) to the northwest. Most of the mineralized areas are located between 4,500 and 5,100 m above sea level, with the Yaxtché zone located between 4,800 and 4,900 m. The camp facilities are located west of the resource area where the canyon opens up into a large alluvial fan at an elevation of 4,000 m.

The El Quevar project lies in the physiographic region of the Puna Block, an extension of the Bolivian antiplano which is marked by high plateaus and broad valleys flanked by even higher mountains. The Puna in this area has a median elevation of 3,800 m with a further 2,470 m of vertical relief between the Salar de Pocitos and the peak of Nevado de Pastos.

The El Quevar project is located within the Domino Andino-Patagónico (Andean Patagonian Domain) biogeographical province of Argentina. In Argentina this province parallels and includes the Andes

Mountains from north to south and it extends from the mountains across Argentina to the Atlantic Ocean at approximately 45°S latitude. The Andean Patagonian Domain is dominated by mineral soils consistent with arid, low moisture environments showing no diagnostic horizon development. The soils, which are classified as aridisols and entisols, support limited vegetation characteristic of steppe climates adapted to harsh conditions. In the project area vegetation is sparse, consisting of mainly clumps of spiny grass known as coirón or ichu with no native trees or large shrubs. Most of the project area consists of barren outcrop, talus, alluvium and landslide blocks.

Wildlife is not always 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 the mountains. 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.

5.2 *Local Resources and Infrastructure*

The project area is sparsely populated, but the town of Pocitos lies 20 km 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 m elevation has diminished from over 200 people in 2000 to about 80 in 2010, since the railroad has been inoperative until recently and subsistence herding is no longer attractive to most Argentines. Currently the town has a church, a medical clinic, a school, two general stores, and a natural-gas compressor plant. The compressor plant belongs to a borate operation located about 100 km 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 closest community is San Antonio de los Cobres, about 90 km to the southeast of El Quevar, on the road to Salta. San Antonio is the seat of the local departmental government (similar to a county in North America), and a substantial town of about 4,000 people. At 3,750 m, 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 approximately 500,000 inhabitants, all major services and is the main supply center for the region.

Natural gas is available at Pocitos via the Gasoducto Minero pipeline, which 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 concession about 5 km west of the Silex camp. It has a capacity of 210,000 m^3/d.

Grid electricity is potentially available from a 354-kV high-voltage power line which passes 30 km 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 m deep well in the alluvial fan at the camp. It has a capacity of 29 m3/d. 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 primarily hired from within Argentina.

Infrastructure in the project vicinity is currently sparse, but is sufficient for exploration needs, and can be readily improved to support a mining project. There are a few ruined adobe buildings, formerly used seasonally by herders or prospectors, in some of the major canyons below 4,500 m.

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 km by dirt road from the Yaxtché zone at El Quevar.

Camp waste water 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.

6.0 HISTORY

Section 6 has been quoted and adapted from the Micon Technical Report (August 2010) with additional attribution to the CAM Technical Report (January 2010). Comments by PAH are so indicated in the text.

The CAM Technical Report (January 2010).

> *"In the 1970's the government-sponsored Plan NOA-1 was carried out 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. 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. Neither 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."*
>
> *"Beginning in 2004, Golden Minerals (and its predecessor Apex) have undertaken exploration at El Quevar through its Argentine subsidiary Silex." These exploration campaigns are ongoing.*

6.1 *Historical and Recent Resource/Reserve Estimates*

According to the previous Technical Reports by CAM (January 2010) and Micon (August 2010) neither Golden Minerals, CAM nor Micon are aware of any mineral resource estimates conducted on the property prior to 2004.

Since 2004, SRK Consulting has completed one NI 43-101 Technical Report (February 27, 2009); CAM has completed three reports (August 15, 2009, October 12, 2009 and January 14, 2010) whilst MICON has completed one report (August 10, 2010) concerning resource estimates on the El Quevar property.

The CAM and Micon resource estimates are considered in the context of Section 14 of the present report by PAH (April 2012).

6.2 *Historical Mining and Production*

According to the most recent CAM Technical Report (2010), small scale mining and prospecting on the El Quevar property is reported to have occurred intermittently since the 1800s. After 1930, with improved access into the region, mining and prospecting activity increased but only at the local level.

CAM (2010) noted that "lead and silver was produced from several small, non-mechanized workings, including the Jaguar Mine just south of Yaxtché, sometimes referred to as the El Quevar (El Queva) Mine, in the area now referred to as Mani."

It was noted by Sillitoe (1975) that "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 prospecting pits and minor workings also occur in the area of the El Quevar property.

7.0 GEOLOGICAL SETTING AND MINERALIZATION

Section 7 has been quoted and adapted in part from the Micon Technical Report of August 2010 with additional attribution to the CAM Technical Report of January 2010.

7.1 *Regional Geology*

El Quevar is located in the eastern part of the Puna Block, within the Andean Cordillera. The older bedrock in this area is an Ordovician-Silurian marine sedimentary clastic suite, mainly shales and sandstones which are now highly-folded greenschist-facies metapelites.

The project area is within the Tertiary age El Quevar volcanic complex, which covers more than 1,000 square kilometers (km^2). It is of shoshonitic affinity (mildly alkalic), and is thought to have formed in a rift basin of Cretaceous to Paleocene age. Figure 7-1 is a map showing the regional geology.

The volcanic complex is bounded by regional 125° striking structures: the Calama- Olacapato-Toro lineament to the north and a parallel one to the south. A lesser, secondary set of regional lineaments, bearing 025°, is interpreted as older and related to folding in the Paleozoic basement rocks. The older structures are not shown 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.

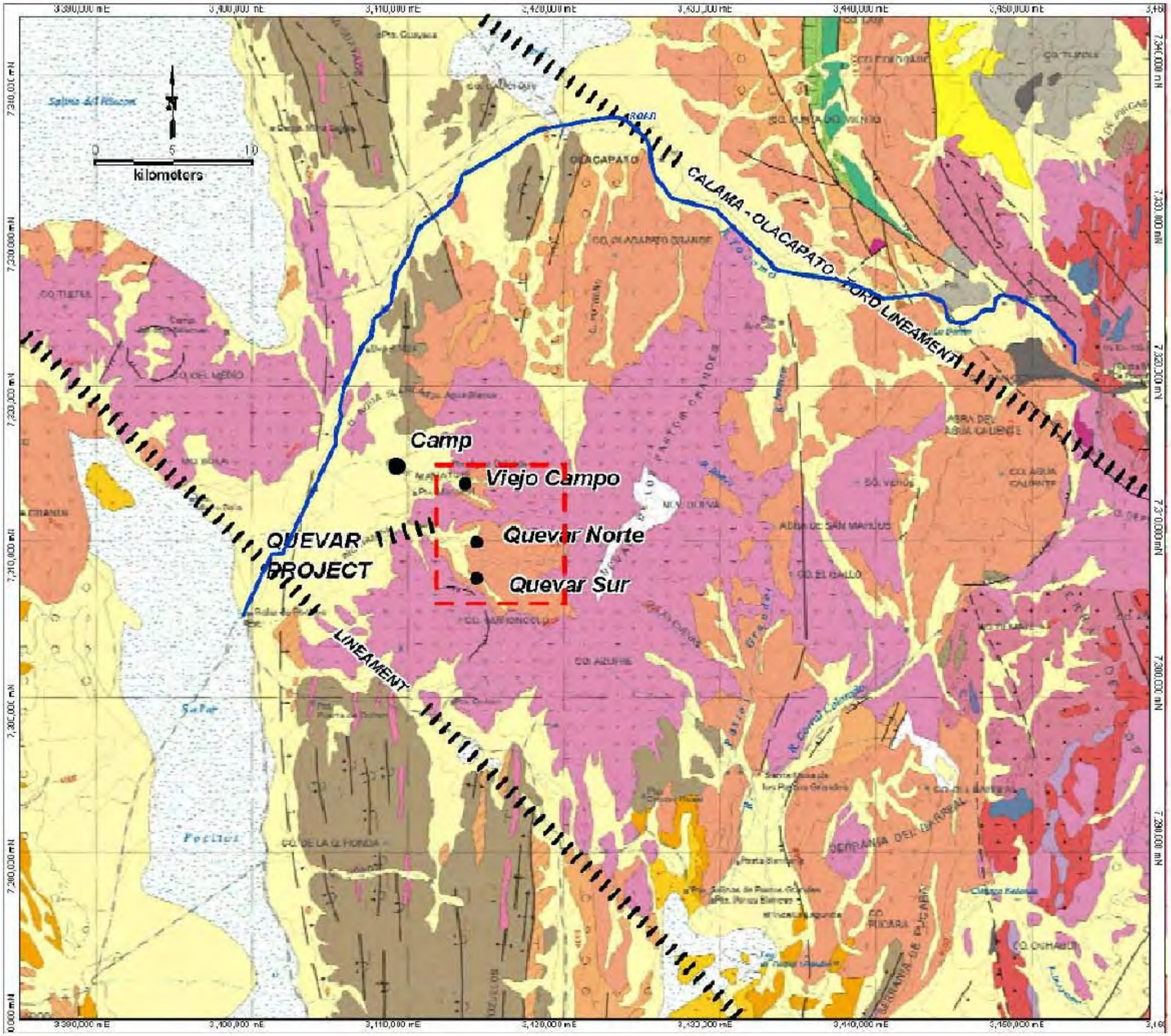
The El Quevar volcanic complex formed during Miocene to early Quaternary time, with main volcanic events dated at 19 to 17 Ma, 13 to 12 Ma, 10 Ma, 7 to 6 Ma and 1 to 0.5 Ma. The dominant volcanic products were extensive pyroclastic flows (including ignimbrites of lithic and crystal-lithic tuffs), overlain 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*

On the El Quevar property Tertiary volcanic flows, tuffs and intrusive occur in erosional windows overlain in places by Pleistocene moraine and Quaternary rockslide, alluvium and colluvium. The principal



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Project No.
DE-00196

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Golden Minerals Company

Project Name
El Quevar Project

FIGURE 7-1
Regional Geology of the El Quevar Property

Date of Issue
May 2012

Drawing Name
Fig.7-1.dwg

lithologic sequence is shown in Table 7-1. Some of the dacitic intrusive domes are also believed to be post-mineral.

TABLE 7-1
Golden Minerals Company
El Quevar Project - Yaxtché Deposit
El Quevar Stratigraphy

Stratigraphic Horizon	Logging Abbreviations	Lithology	Mineralization
Quaternary deposits	QA, QC, QM	alluvium, colluviums, moraine, landslides	post-mineral
Unconformity			
Dacitic flows	LD/LV	flow-banded biotite dacite	post-mineral
Unconformity			
Lithic tuffs	TDL	mainly dacitic tuffs, locally bedded	altered, rarely mineralized (may be post-mineral ?)
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)

Note: Table adapted from the January, 2010, CAM Technical Report.

The various lithologies are described in somewhat more detail by SRK in its 2009 Technical Report than in the CAM Technical Reports. However, the stratigraphic units have considerable variation in the compositions and textures of the units, which is typical of a volcanic sequence.

Golden Minerals is currently exploring the mineralization along the Yaxtché structural trend which is the principal structural trend on the El Quevar property. The Yaxtché structural trend strikes at 112° and dips to the north at 65° to 70° near surface, shallowing to 45° to 55° at depth, and averaging 52°. The zone is 30 m or more wide. The Yaxtché structural trend is exposed at surface or lies beneath talus and landslide deposits and has been traced for over 2,000 m along strike.

The nature of the Yaxtché trend is apparently a weakly-sheared structural corridor, containing fault breccias in addition to the El Quevar tuff breccia. Due to cover by colluvium, landslide blocks and glacial debris, the zone is poorly exposed.

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° cut the Yaxtché trend, and divide it into three sectors, labeled Yaxtché East, Central and West.

Hydrothermal alteration is widespread in the volcanic rocks exposed in the erosional windows. The alteration types identified are summarized in Table 7-2.

TABLE 7-2
Golden Minerals Company
El Quevar Project - Yaxtché Deposit
El Quevar 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
Intensive Silicification	SI	vuggy quartz, alunite	associated with mineralization

Note: Table adapted from the January, 2010, CAM Technical Report which was a summary of the SRK (2009) descriptions.

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 centre, 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.

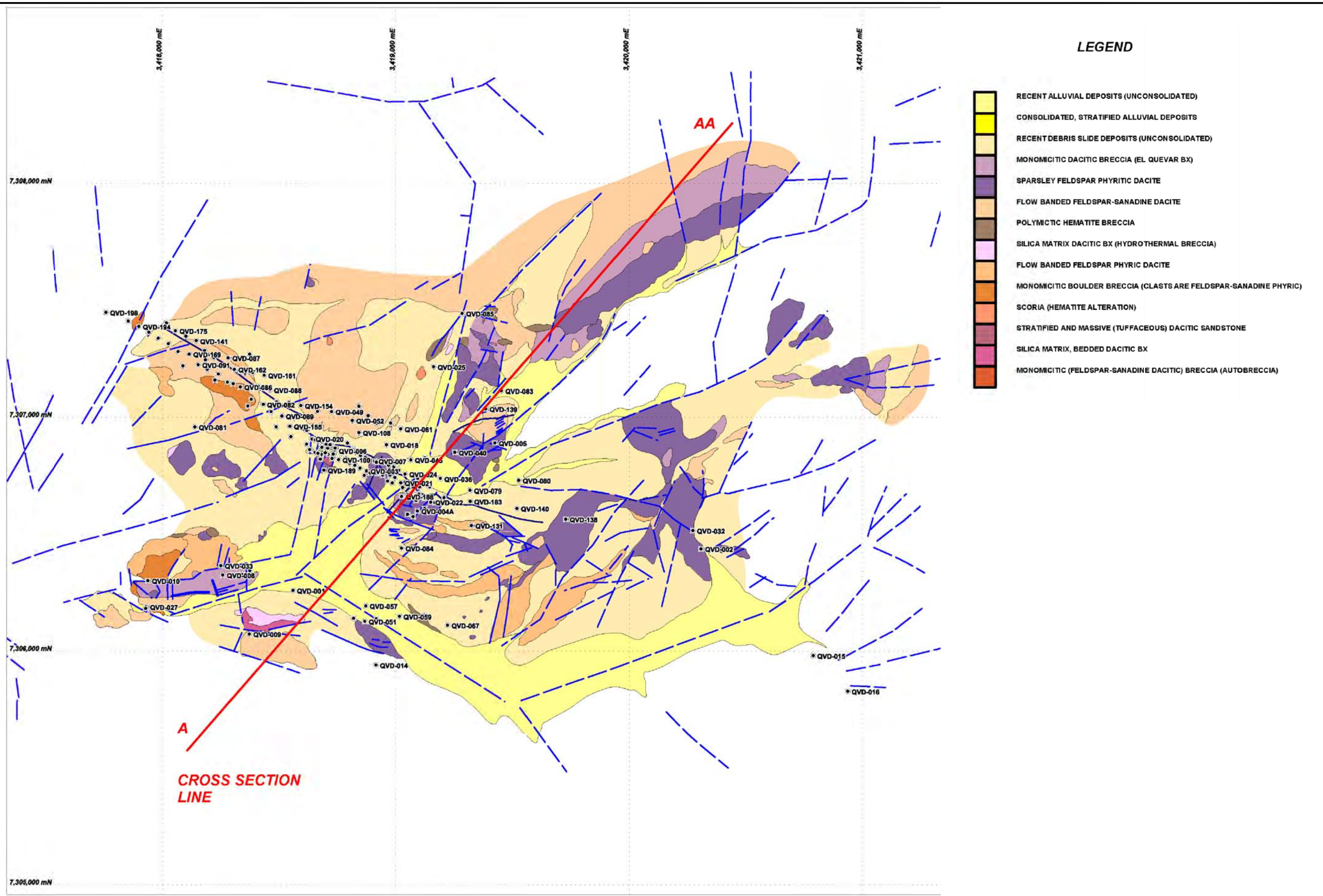
The following discussion on surface geology and mapping in the vicinity of the Yaxtché deposit has been adapted from a recent study by G. Cumming (May 2010) who provides the geological map and section.

The geology map shows a complex of sparsely feldspar-phyric dacite domes with associated breccias (monomictic clast supported and matrix supported dacitic breccias termed “El Quevar breccia”) which overlie southward dipping, polymictic hematitic breccias encountered in deep core intersections and outcrop (Figure 7-2).

The dacite complex and breccias are overprinted by weak to intense argillic and silicic alteration which is controlled by intersecting planar, shallow dipping, early E-W striking faults which are offset by later sub vertical NE-SW faults. Silica-pyrite alteration with vuggy silica domains, associated with mineralization, occurs along these earlier structures at the margin between coherent, weakly porphyritic dacite and autobreccia (monomictic dacitic breccia).

An extensive domain of flow banded, feldspar-sanidine dacite was observed flanking the highest northern and eastern areas. The dacite is largely unaltered and appears to drape the argillic-altered and variably-silicified monomictic dacitic breccia in the east and at Yaxtché. In other domains variably clay- altered and silicified parts of the dacite occurs (in the north and at Mani).

Similar, tabular, flow banded feldspar phyric dacite was observed flanking the lower hillsides in the SE quadrant and in the Mani area. These dacite flows lack the large (2-4 cm) tabular sanidine phenocrysts



Note: Drilling data as of early 2010
Source: Golden Mineral, Prepaired by Grace Cumming, Consulting Geologist (May 2010)

Prepared by pincock, allen & holt 165 S. Union Boulevard, Suite 950 Lakewood, Colorado 80228 Phone (303) 986-6950	Drawing Provided by/Prepared for **Golden Minerals Company**	FIGURE 7-2 Geologic Map Yaxtché Deposit and Vicinity	Date of Issue May 2012
Project No. DE-00196	Project Name El Quevar Project		Drawing Name Fig.7-2.dwg

but in all other ways resemble the uppermost dacite flow. These thin flows are variably argillic altered and exhibit some minor silica-chlorite alteration. They have been named "feldspar phyric dacite" or "flow banded-feldspar phyric dacite."

At Yaxtché West a large domain of weakly consolidated monomictic dacitic, boulder breccia occurs. The clasts contain sanidine and probably represent the resedimented part (debris flow) of the feldspar-sanidine flow which flanks the succession. Some clasts are large, 3-4 m sized blocks of feldspar-sanidine phyric autoclastic facies. As well as poorly consolidated boulder breccia facies a large outcrop with coherent (porphyritic) matrix with fluidal and blocky clasts (reflecting autobrecciation) may represent the dislodged or in situ margin to the overlying dacite. This zone is thought to represent a large dislodged block which has been relocated from higher up in the succession.

A wide domain of argillic alteration occurs at Yaxtché and the eastern valleys at El Quevar Sur. Silica-pyrite alteration after argillic alteration occurs along the E-W trending mineralized structures. The silicified domains occur as narrow halos to fault and fracture sets. Patches of advanced argillic alteration were mapped. Propylitic/chlorite alteration was observed in the upper domains of the succession and around the perimeter of the main mineralized E-W trending structures.

In the high eastern region of the area stock work gypsum veinlets crosscut argillic altered domains and occur at the perimeter of grey silica pyrite matrix hydrothermal breccias.

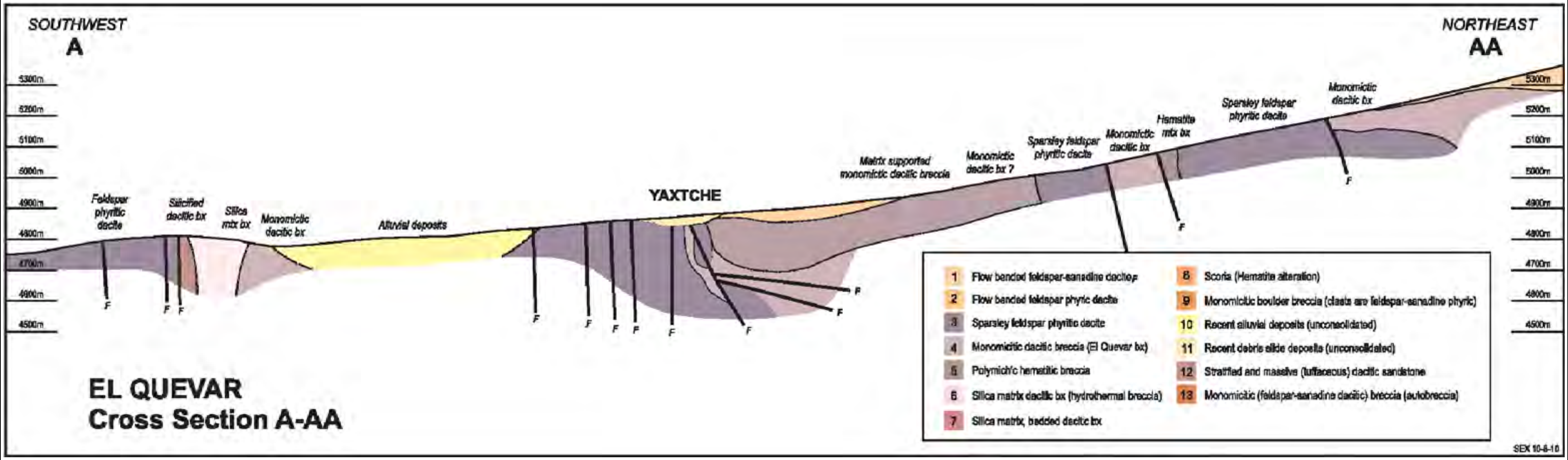
Silica matrix hydrothermal breccias were also observed along E-W structural trend at Copan and as patchy zones at Yaxtché West. Generally E-W trending, hematite matrix breccias were patchy in extent but seemed to be gradational into silica matrix breccia domains at Andrea. The hematite matrix breccia extends westward from the Andrea zone and appears to contain similar matrix character to the underlying, graded, polymictic hematitic breccia.

The geological cross-section is based on geological data collected in the field and includes observations from a drill core logged section (Figure 7-3). The approximate location of the geological cross-section is given in Figure 7-2.

Section 7.3 has been quoted and adapted in part from the Micon Technical Report of August 2010 with additional attribution to the CAM Technical Report of January 2010.

7.3 *Mineralization*

> *Mineralization at Yaxtché, 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 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*



Source: Gold Minerals, Grace Cumming Consulting Geologist (May 2010)

Prepared by	Drawing Provided by/Prepared for		Date of Issue
pincock, allen & holt 165 S. Union Boulevard, Suite 950 Lakewood, Colorado 80228 Phone (303) 986-6950	***Golden Minerals Company***	FIGURE 7-3 Geologic Cross-Section A-AA Yaxtché Deposit and Vicinity	May 2012
Project No. DE-00196	Project Name El Quevar Project		Drawing Name Fig.7-3.dwg

El Quevar Breccia, a dacitic tuff breccia of probable ash-flow origin, is the principal host for mineralization at Yaxtché. Mineralized fault breccias and hydrothermal breccias also occur."

"The hypogene silver mineralization occurs mainly as fine-grained black sulfides."

"The principal metal value in Yaxtché zone is silver, with lesser amounts of lead, zinc, and copper minerals, and accessory gold and antimony. The principal gangues are quartz, pyrite, and barite."

"A large number of minerals have been reported from the Yaxtché zone, many of which are fine-grained sulphosalts or other minerals difficult to identify in hand specimen. Table 7-3 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 will result in changes and additions."

Table 7-3 differs in some respects from previous reports in assigning some metallic minerals (notably argentite, native silver, chalcocite, and covellite) to supergene (weathering) origin, rather than hypogene (hydrothermal) origin. This is based on the polished-section observations showing these minerals commonly rimming and replacing other sulfides.

While Table 7-3 is specific to the Yaxtché zone, the mineralogy at other prospects on the El Quevar property at moderate (4,000 to 5,000 m) elevations appears at this point to be rather similar to the Yaxtché zone. Important differences in mineralogy may occur at lower and higher levels in the volcanic edifice.

"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 7-4. 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."

Section 7.4 was prepared by PAH (2012)

7.4 *Contact Style of Mineralization*

PAH investigated and quantified the style of silver mineralization in the eastern and western areas of the Yaxtché deposit. This study was conducted to provide a geological interpretation of silver mineralization that is hosted in the intercalated volcanic rocks that have been logged as Quevar Breccia (BXQ), Massive Dacite (DM) and Lavas (LV). The objective was to provide a descriptive, *facies model of silver mineralization* in addition to the silver grade shell (10 ppm) model discussed in Section 14 of this report. PAH approach was initially based on observations made on graphical drill logs that the strongest silver mineralization is often associated with logged fault or lithologic contacts and that a more extensive "cloud" of lower grade silver mineralization (10 - 100ppm Ag) occurs in pervasively-altered rocks

TABLE 7-3
Golden Minerals Company
El Quevar Project - Yaxtché Deposit
Selected Minerals of Economic Interest in the Yaxtché Zone

Name	Mineral Type	Formula	% Metal	Stage	Phase	Abundance	Comments
IMPORTANT SILVER-BEARING MINERALS							
Galena	Sulphide	PbS	86.6% Pb, Ag varies	late? hypogene	IV	moderate	may contain Ag
Pyrargyrite	Sb-sulphosalt	Ag_3SbS_3	57.75% Ag 22.5% Sb	hypogene	IV	sparse	forms series w/ proustite (As)
Tennantite	As-sulphosalt	$(Cu,Fe,Zn,Ag)_{12}As_4S_{13}$	max 5% Ag varies: max	hypogene	IV	sparse	forms series with tetrahedrite
Tetrahedrite	Sb-sulphosalt	$(Cu,Fe,Zn,Ag)_{12}Sb_4S_{13}$	18% Ag, to 34.8% Cu, 29.6% Sb,	hypogene	IV	rare	forms series with tennantite
Pearceite	As-sulphosalt	$(Ag,Cu)_{16}As_2S_{11}$	77.45% Ag	hypogene	IV	sparse	compare polybasite
Silver (native)	native metal	Ag	100% Ag		VI	sparse	
Argentite/ acanthite	Sulphide	Ag_2S	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	Sulphate	$AgFe_3(SO_4)_2(OH)_6$	18.9% Ag	supergene	VI	moderate/ sparse	
OTHER HYPOGENE (PRIMARY) MINERALS							
Quartz	Silicate	SiO_2	None	hypogene	I, IV	abundant	several generations
Barite	Sulphate	$BaSO_4$	58.8 % Ba	late hypogene	V	moderate	coarse crystals
Pyrite	Sulphide	FeS_2	47% Fe, 53% S	hypogene	I, IV	approx half of sulphides	several generations; may contain As
Enargite	Sulphosalts	Cu_3AsS_4	48.4% Cu low Ag	hypogene	IV	moderate	forms series with famatinite (Sb)
Famatinite	Sb-sulphosalt	Cu_3SbS_4	low Ag	hypogene	IV	sparse	forms series with enargite (As)
Sphalerite	Sulphide	ZnS	c. 64% Zn, no Ag	hypogene	IV	sparse	not often reported in polished secs.
Bismuthinite	Sulphide	Bi_2S_3	81.3% Bi	hypogene	IV	sparse	
Bournonite	Sb-sulphosalt	$PbCuSbS_3$	13.0 % Cu 24.9 % Sb	hypogene	IV	rare	“cog-wheel ore”
Stibnite	Sulphide	Sb_2S_3	71.68% Sb	hypogene	IV	rare	see bismuthinite
Chalcopyrite	Sulphide	$CuFeS_2$	34.6% Cu	hypogene	IV	traces	
Giessenite	Sb-sulphosalt	$Cu_2Pb_{26}(Bi,Sb)_{20}S_{57}$	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	Sulphate	$PbFe_6(SO_4)_4(OH)_6$	18.3% Pb, minor Ag	supergene	VI	moderate/ sparse	
Jarosite	Sulphate	$KFe_3(SO_4)_2(OH)_6$	33.4% Fe	supergene	VI	moderate/ sparse	
Stibiconite	oxide, hydrated	$Sb_3O_6(OH)$		supergene	VI	rare	alters from stibnite
Chalcocite	Sulphide	Cu_2S	80% Cu	supergene or hypogene	IV, VI,	sparse	
Tripuhyite	Oxide	$FeSbO_4$	50.4% Sb	supergene or hyprgene	?	rare	
Limonite	oxide-hydroxide mixture	fine-grained mixtures of goethite FeO.OH, lepidocrocite FeO.OH, hematite Fe_2O_3; others	Fe	supergene	VI	moderate	
Gypsum	Sulphate	$CaSO_4.6H_2O$	None	supergene	VI	sparse	
Covellite	Sulphide	CuS	66.5% Cu	supergene	VI	sparse	forms rims on Cu sulphides
ALTERATION MINERALS							
Smectite, e.g. montmorillonite		e.g. $Na_{0.33}(Al,Mg)_2Si_4O_{10}(OH)_2.nH_2O$	None	alteration, supergene	I, VI	abundant	replaces glass in volcanics
Alunite	Sulphate	$KAl_3(SO_4)_2(OH)_6$	None	alteration, supergene	I, VI	moderate	both hypogene and supergene
Hyalophane	silicate, feldspar	$(K,Ba)AlSi_3O_8$ see	None	alteration	I ?	sparse	
Calcite	Carbonate	$CaCO_3$	None	alteration	I	sparse	
Illite-sericite	mica/clay	$(K,H_3O)(Al,Mg,Fe)_2(Si,Al)_4O_{10}(OH)_2.H_2O$	None	alteration late	I	abundant	a.k.a. hydro-mica
Chlorite	silicate(mica)	$(Al,Fe)_{4-6}(Al,Si)_{410}(OH)_8$	None	magmatic alteration	I	abundant	after biotite, hornblende
Goethite	oxide-hydroxide	3 a-Fe O(OH)	Fe	supergene	I	abundant	
Kaolin	silicate clay	$Al_2Si_2O_5(OH)_4$	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	$NaAlSi_3O_8$ to $CaAl_2Si_2O_8$	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	$K(Mg,Fe)_3AlSi_3O_{10}(F, OH)_2$.	None	pre-mineral,	0	moderate, c. 2%	may be altered
Orthoclase (sanidine)	silicate, feldspar	$KAlSi_3O_8$	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

surrounding the high-grade zones. Detailed review of graphical logsheets revealed that local high-grade zones also occur unrelated to logged faults or lithologic contacts.

TABLE 7-4
Golden Minerals Company
El Quevar Project - Yaxtché Deposit
Yaxtché Central Mineralization

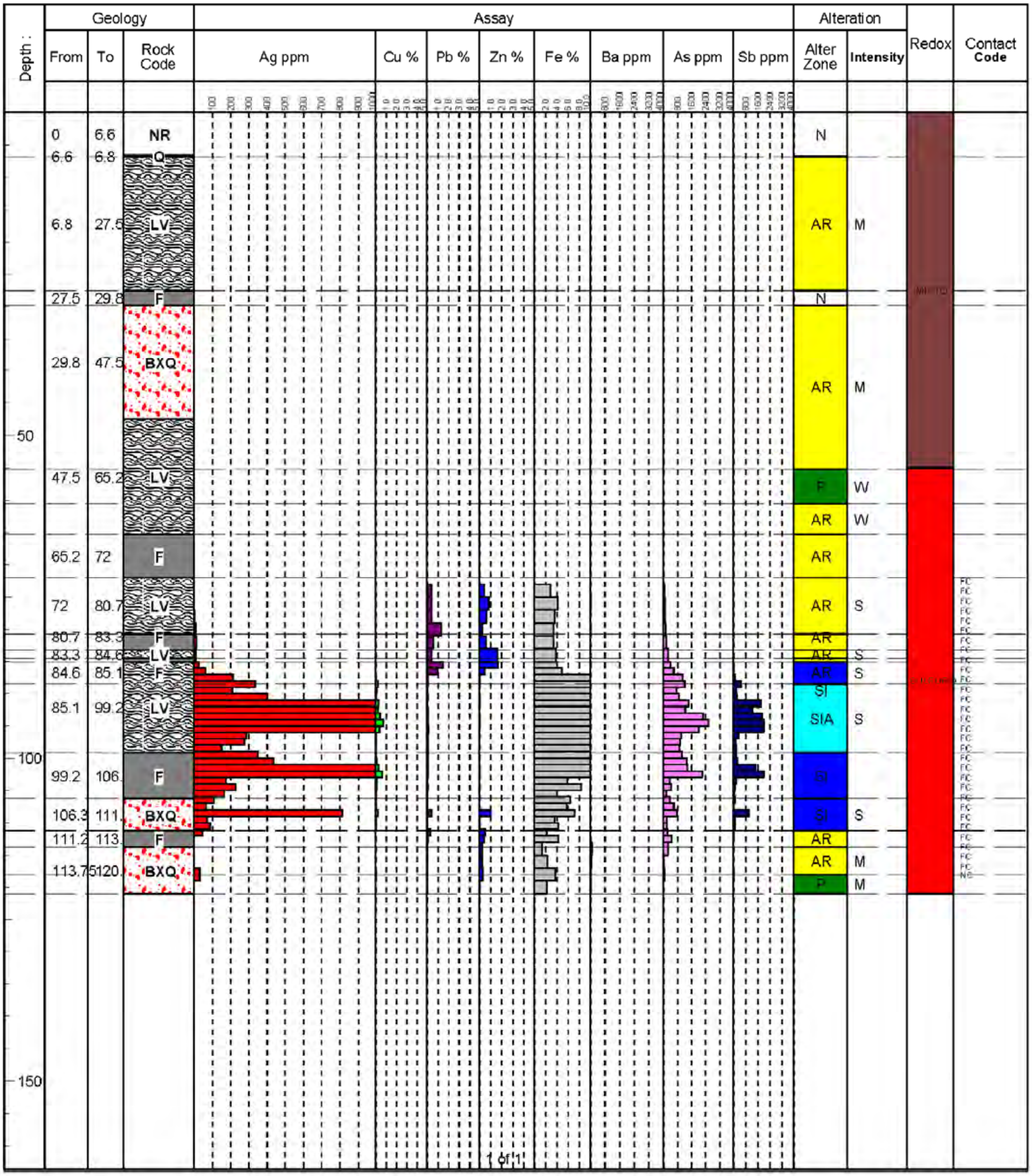
Class	Location	Key Diagnostic Minerals	Origin
Oxide	Near-surface	jarosite (plumbo-, argento-), limonite, stibiconite,	supergene
Mixed	Intermediate	chalcocite, covellite, argentite, native silver, chlorargyrite: when rimming hypogene sulphides	secondary enrichment
Sulphide	Deep	pyrite, galena, sphalerite, sulphosalts, bismuthinite, stibnite, chalcopyrite	hypogene

Note: Table adapted from the January, 2010, CAM Technical Report.

The PAH approach was to generate graphical logsheets for all drill holes from the drilling database to display lithology, alteration and grades as bar graphs for which an example is given on Figure 7-4. More than 7,281 mineralized intervals having a minimum GT of 10 (1 m @ 10 ppm Ag) were interpreted and classified according to their contact relationships with logged faults (FC) and lithologic contacts (LC). In cases where a mineralized interval is not associated with logged fault contacts (FC) or lithologic contacts (LC) then the intervals is classified as a non-contact (NC) type interval. The interpreted intervals were also classified into broad silver grade ranges: Low (10-100 ppm), Moderate (100-500 ppm) and Strong (> 500 ppm).

Statistically for the 7,281 interpreted mineralized intervals in the Yaxtché deposit, 49.4 percent of intervals are non-contact (NC) intervals, 40.3 percent are fault contact (FC) intervals, 9.7 percent are lithologic contact (LC) intervals and 0.5 percent are associated with faulted, lithologic contacts (FCLC). This means that approximately half of the mineralized intervals are not spatially associated with logged fault zones which most commonly occur as distinctive intervals of broken, light grey, argillized core. Approximately 40 percent of the intervals are associated with logged faults in which mineralization can occur above, below, within or on both sides of the logged fault zone. Mineralization associated with lithologic contacts typically occurs at contacts between the Quevar Breccia and intercalated porphyritic lavas.

Azimuth: 208	**El Quevar Project, Argentina**	HoleID: QVD-116
Dip: -75	**Yaxchte Deposit**	Easting: 3418702.23
Total Depth (m): 120.95	**Golden Minerals, Inc.**	Northing: 7306882.35
	Updated Compilation Logsheet by PAH (10-13-11)	Elev(m): 4845.58
	Effective Date of Database: 19 September 2011	
	Updated with Holes #360 - 372 - February 25, 2012	



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pincock, allen & holt 165 S. Union Boulevard, Suite 950 Lakewood, Colorado 80228 Phone (303) 986-6950	***Golden Minerals Co.***	FIGURE 7-4 Graphical Drill Log Compiled in Coreview Software	May 2012
Project No. DE-00196	Project Name El Quevar Project		Drawing Name Fig.7-4.dwg

With respect to the intervals classified as FC-type (N=2937), 46.1 percent, 20.7 percent and 33.2 percent occur in the low, moderate and strong silver grade ranges, respectively.

With respect to the intervals classified as NC-type (N=3599), 66.7 percent, 11.9 percent and 21.4 percent occur in the low, moderate and strong silver grade ranges, respectively.

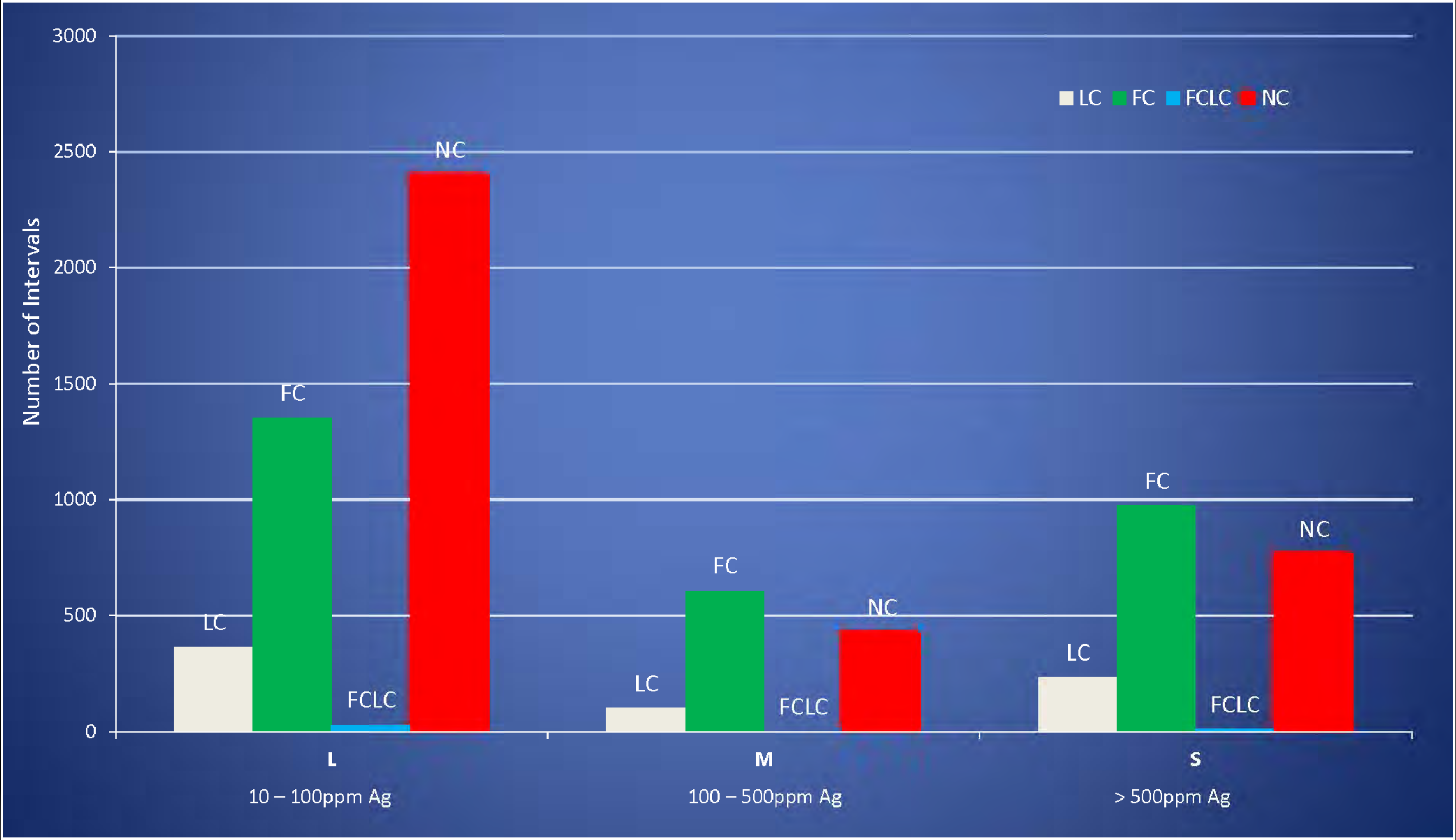
Statistics on the interpreted types of contact mineralization and associated silver grade ranges are given in Table 7-5 and shown graphically in Figure 7-5.

TABLE 7-5
Golden Minerals Company
El Quevar Project - Yaxtché Deposit
Contact Types of Mineralization in Assay Intervals, Yaxtché Deposit

Contact Type	Code	Grade Class	Frequency	Cum Freq.	FREQ-%	CUMF-%	Total Intervals
Fault Contact	FC	L	1,353	1,353	46.07	46.07	
		M	609	1,962	20.74	66.80	
		S	975	2,937	33.20	100.00	2,937
Lithologic Contact	LC	L	367	367	52.06	52.06	
		M	102	469	14.47	66.52	
		S	236	705	33.48	100.00	705
Lithologic/Fault Contact	FCLC	L	30	30	75.00	75.00	
		M	0	30	-	75.00	
		S	10	40	25.00	100.00	40
Non-Contact Type	NC	L	2,402	2,402	66.74	66.74	
		M	428	2,830	11.89	78.63	
		S	769	3,599	21.37	100.00	3,599

Assay Intervals are nominal 1-m in length w ith grade >= to 10 ppm Ag.
For modeling purposes FCLC type intervals w ere combined w ith FC type.
L - low grade interval (< 100 ppm Ag), M - medium grade interval (100 - 500 ppm Ag); S - High grade interval > 500 ppm Ag.

Except for the association of fault and/or lithologic contacts in the FC- and LC-classes, mineralized core in the breccia unit has similar characteristics to the NC-type mineralization. Typically there is moderate to very strong, pervasive silicification of the host rock which imparts to hard, unoxidized core, a dark grey to greenish-grey, mottled texture in which black sulfide mineral grains are dispersed throughout the breccias matrix and in volcanic clasts. Pyrite may or may not be associated with the black sulfide mineralization. Accumulations of fine-grained black sulfide minerals and/or pyrite occasionally form massive irregular clots several centimeters wide in breccia. Isolated, wispy veinlets of black sulfide minerals and white clay, generally <5 to 25 mm wide, occur within these broader zones of silicified breccia. The sulfide–clay veinlets locally comprise the high-grade silver mineralization that has been variously called gash or tension veining that was recognized and mapped underground in the eastern part of the deposit (Byington 2011). Barren zones of pervasive silica-pyrite alteration in breccia were noted in several drill holes examined during the site visit.



Fault Contact (FC) - Lithologic Contact (LC) - No Contact (NC) (N=7281 Interpreted Mineralized Intervals)

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Project No. DE-00196	Project Name El Quevar Project		Drawing Name Fig.7-5.dwg

PAH observed in core that zones of pervasive silicification and silver mineralization may be subsequently leached, resulting in a vuggy, broken texture in the Quevar Breccia. Abundant, white blades of barite may partially fill the vugs in leached core intervals – a texture that is generally indicative of good silver grade.

Based on PAH's interpretation of mineralized intervals in drill core from the Yaxtché deposit, PAH finds that for NC-type intervals:

- Approximately 50 percent (3,599) of the total interpreted mineralized intervals (7,281) are NC-style mineralization associated with pervasive zones of alteration and dispersed silver-copper mineralization not directly associated with logged fault or lithologic contacts. Narrow, black sulfide-white clay, tension veinlets, typically less than 25 mm thick and locally of high silver grade are common in NC-style intervals.

- Approximately two-thirds of the NC-style intervals (3,599) are low-grade (10-100 ppm Ag), whereas one-third of these intervals are moderate to strongly mineralized (> 100 ppm Ag).

- The aggregate length of NC-style mineralized intervals ranges from approximately 5 to 40 meters in 169 drill holes. However, 15 of these holes in the western part of the deposit have aggregate lengths of intervals in the 5 to 75 meters range. The average length of NC-style intervals ranges from approximately 15-25 m per hole. Based on observations of core, core photos and graphical logsheets, PAH opines that a combination of lithologic permeability, reactivity in the breccia and structure, combined to form pervasively-altered zones that contain the NC-style mineralization.

Based on PAH's interpretation of mineralized intervals in drill core from the Yaxtché deposit, PAH finds that for FC-type intervals:

- Approximately 40 percent (2,937) of the total interpreted mineralized intervals (7,281) are FC-style mineralization associated with fault zones and pervasive silicification and dispersed silver mineralization. Faults in core are typically argillized, broken intervals that vary in width from less than 1 m to several meters. Lower core recovery may be associated with these faults while silver mineralization in the clay-altered, fault proper is less common. FC-style mineralization displays dispersed silver mineralization in pervasively altered host rocks similar to NC-style mineralization. The narrow, black sulfide-white clay, tension veinlets, typically less than 25 mm wide and locally of high silver grade also occur sporadically in FC-style intervals. However, in the FC-style, the mineralization may be disposed in zones (less than 1 m up to approximately 10-15 m wide) along the upper, lower and on both the upper and lower fault contacts. Statistical analysis of 2,937 mineralized core intervals shows that FC-style mineralization occurs on the upper, lower and both the upper and lower fault contacts in proportions of about 33 percent for each contact type.

- Approximately 46 percent of the FC-style intervals (2,937) are in the low-grade range (10-100 ppm Ag), 21 percent in the medium grade range (100-500 ppm) and 33 percent in high-grade range (> 500 ppm).

Photographs of the LC, FC and NC-contact types and their relationship to silver mineralization are provided on Figures 7-6, 7-7 and 7-8, respectively. The contact between breccia and overlying dacitic lava is shown on Figure 7-6. The highest grade interval from 80 to 81 m exceeds 1,000 g/t silver in intensely silicified breccia with dark greenish-grey to black mottling reflective of abundant silver sulfosalt minerals in matrix and clasts. FC-type mineralization is exemplified by Figure 7-7, where very strong mineralization occurs over about 35 m, within and on either side of a broken, clay-altered fault zone, indicated by "FC." NC-type mineralization (Figure 7-8) shows a strongly silicified interval with greenish-grey mottling due to dark sulfide mineralization in the matrix and clasts of the breccia. Porous vuggy texture is noted from 265 to 270 m. The highest grade interval (> 1,000 ppm silver) from 276 to 278.5 shows mesoscopic clots and stringers of dark grey silver sulfosalts and/or argentite.

PAH coded every assay interval greater than 10 ppm silver into one of the contact types. Having done this, PAH was able to construct three dimensional Contact Domains (FC, LC, NC,) and waste zones by interpolation methods as described in Section 14.9 of this report. Contact Domains were subsequently used to constrain interpolation of silver grades in the PAH block model.

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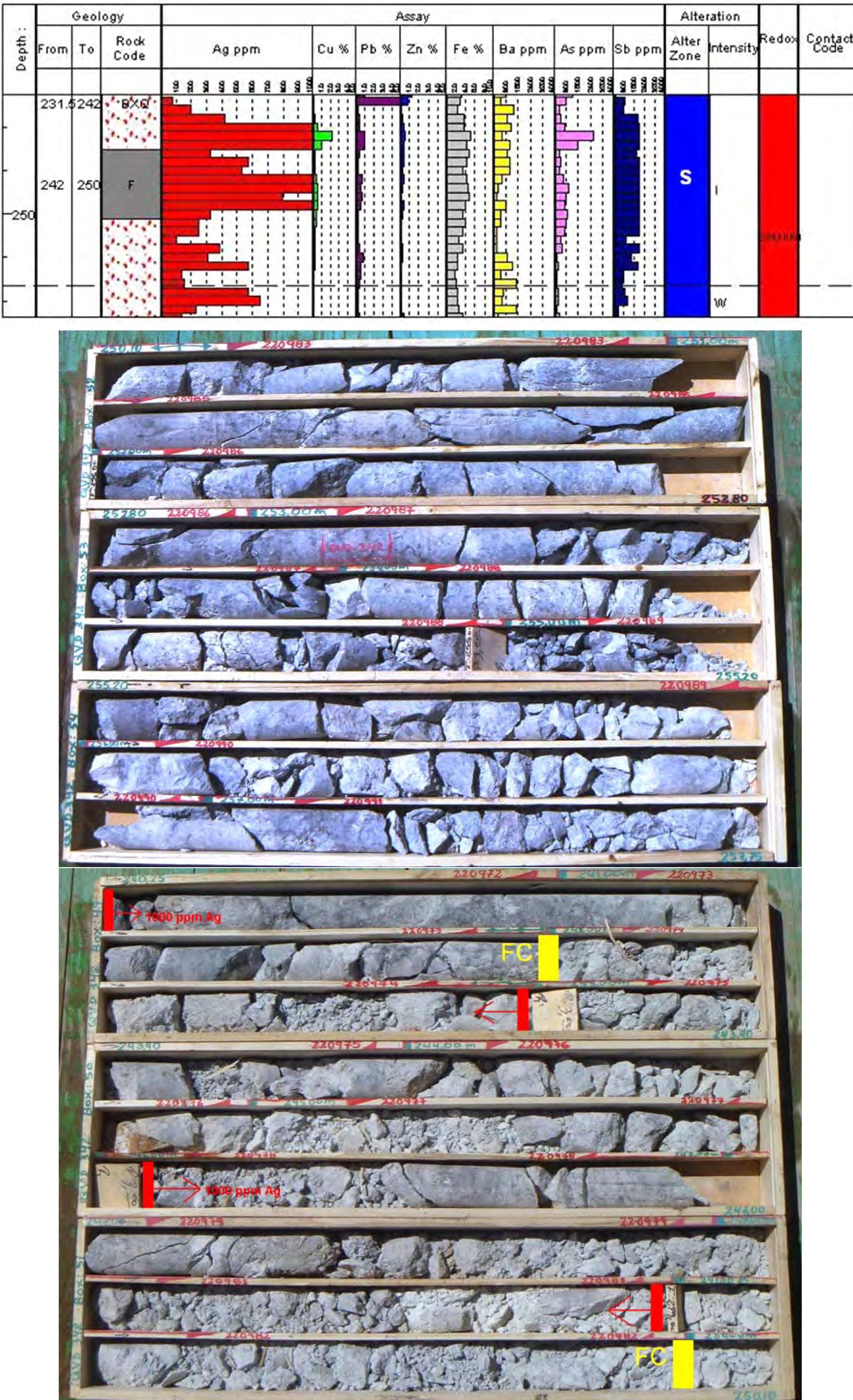
FIGURE 7-6
Lithologic Contact Type (LC) Mineralization
QVD-058 (72.90 - 83.85m)

Date of Issue
May 2012

Drawing Name
Fig.7-6.dwg



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pincock, allen & holt 165 S. Union Boulevard, Suite 950 Lakewood, Colorado 80228 Phone (303) 986-6950	***Golden Minerals Company***	FIGURE 7-7 Fault Contact Type (FC) Silver Mineralization QVD-342 (240.25 - 257.75m)	May 2012
Project No. DE-00196	Project Name El Quevar Project		Drawing Name Fig.7-7.dwg

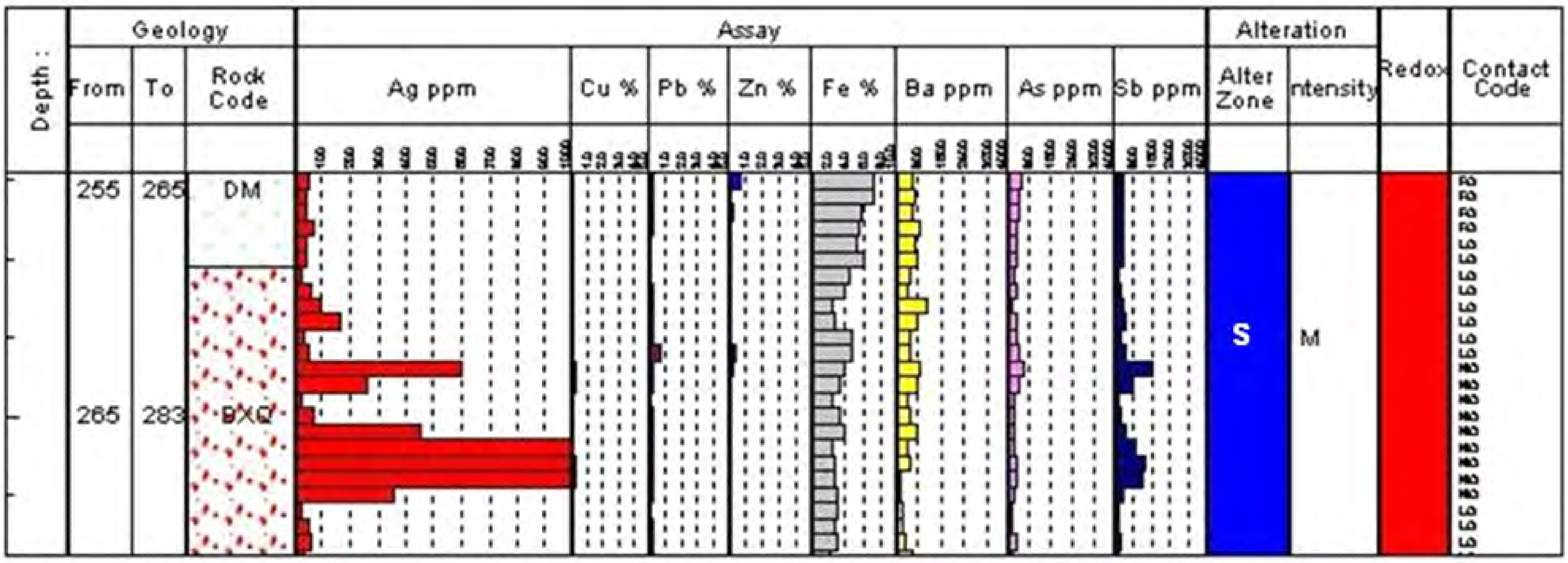

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FIGURE 7-8
Non-Contact (NC) Type Silver Mineralization
QVD-182 (262.00 - 278.40m)

Date of Issue
May 2012

Drawing Name
Fig.7-8.dwg

8.0 DEPOSIT TYPE

Section 8 has been quoted and adapted from the Micon Technical Report of August 2010 with additional attribution to the CAM Technical Report (January 2010).

> *"The silver-base-metal mineralization at Yaxtché is of epithermal origin. The cross-cutting nature of the mineralization, the assemblage of sulphide 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 metres 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 sulphides) deposited on primary sulphides at depth is the primary (hypogene) zone of original sulphide 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 shallower origin than Yaxtché. The native sulphur at high elevations on Cerro Azufre, and the possible hot-spring sinters at over 5,000 m elevation at Claudia were almost certainly emplaced at the top of an epithermal system. Although drill information is lacking it is widely postulated 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 sulphidation (IS) epithermal type, which in general are higher in base-metal content than high-sulphidation (HS) epithermal deposits."*

The El Quevar property lies within the extension of the Bolivian metallogenic province that extends from Bolivia north into Peru and south into northern Argentina and Chile. The El Quevar project is specifically located in the Altiplano and Cordillera Occidental Polymetallic Belt, which is the westernmost region of this metallogenic province

9.0 EXPLORATION

9.1 *Underground Exploration – Yaxtché Zone (2011)*

Comments by PAH

In 2011, Golden Minerals completed installation of an adit and decline to access the eastern part of the Yaxtché zone and to investigate the continuity of the mineralization by drifting, channel sampling and bulk sampling of development rounds. Surface support facilities constructed include a mine maintenance shop, compressor and generator stations, a laboratory, and a fuel depot.

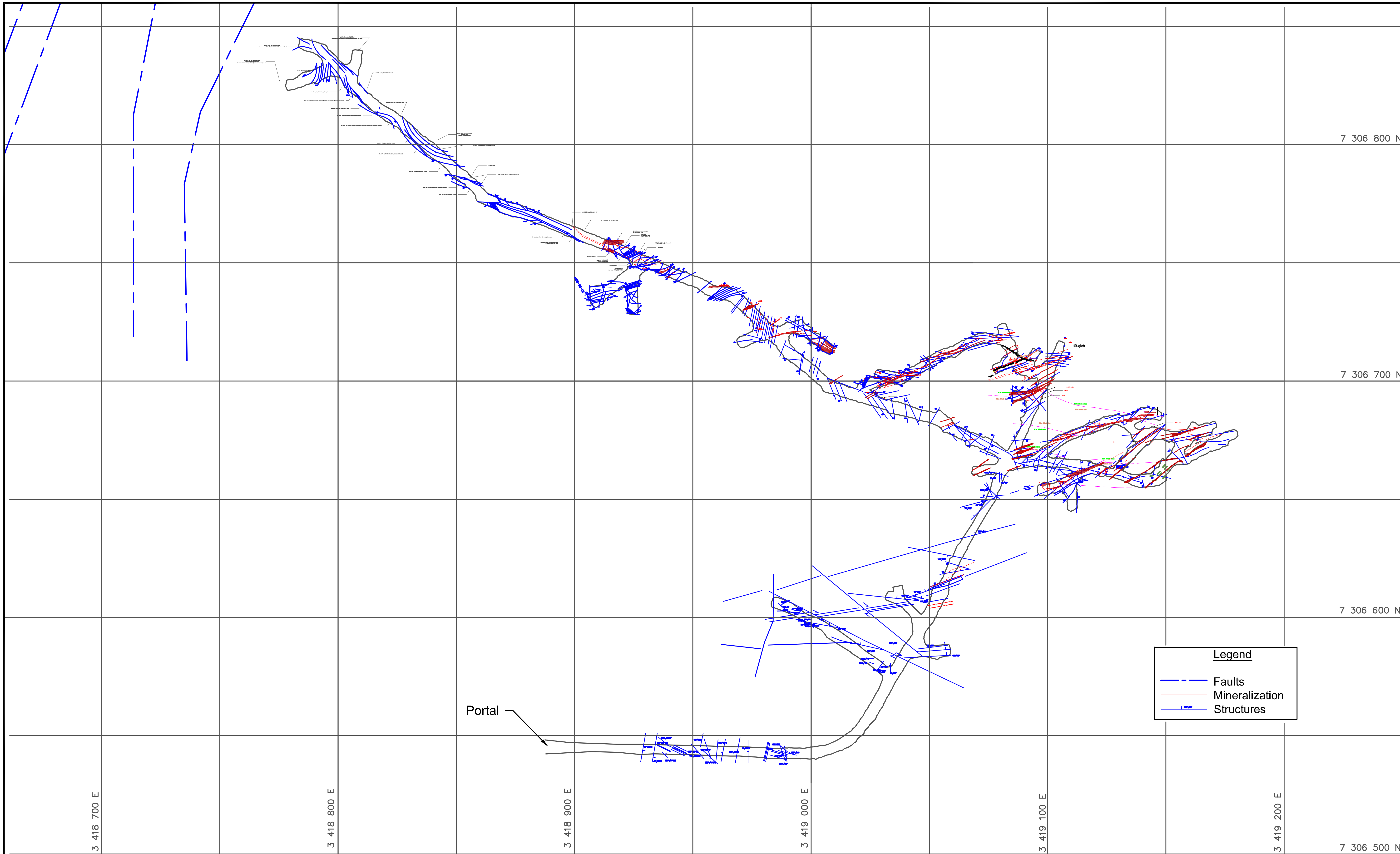
The main features of the underground workings are an adit decline driven northward 260 m to the 4,774 m level, exploration drifts on mineralized structures and an exploration decline driven westward (~300^{o} az) from the main crosscut. The decline was stopped approximately 350 m west of the crosscut due to poor ground conditions. In total approximately 1,250 lineal meters of ramps and drifts were completed. Underground core drilling was not undertaken.

A map showing the configuration of underground workings and mineralized structures at the end of 2011 is given in Figure 9-1. Notable are the exploration drifts driven on nominal 65^{o} – 70^{o} azimuths which followed structural zones of vuggy, intensely silicified breccia containing discontinuous, typically high grade veinlets of white clay and black sulfides. These small but often rich veinlets have been referred to as gash or tension veinlets.

Initially the adit and decline were intended as primary underground access for mining the Yaxtché zone. However, recent preliminary mining studies by PAH are investigating exploitation of the eastern Yaxtché zone by surface mining as discussed in Section 14 of this report. The deeper, western part of the Yaxtché zone would require underground access for exploitation.

Golden Minerals stockpiled and sampled the muck piles produced from each blasted round as their exploration drifts advanced. PAH personnel visited the stockpile area during the site visit in October 2011.

Drifts are nominal 4 x 4 m with each shot advancing the face approximately 3-4 m. The muck generated by each round was hauled to the surface and stockpiled in discreet, numbered piles which in total comprise approximately 19,161 tonnes of material in 158 discreet piles for which assays are available. Each pile averaged approximately 121 tonnes. Working at night to eliminate bias in selecting higher grade samples, Company personnel sampled the stockpiles by digging 4 to 8 channels down the flank of each pile, the material from each channel was bagged and sent for analysis. PAH reviewed the assay data reported from each sampled stockpile and compiled a table of summary statistics which shows the average grade – tonnage relationships at three cutoff grades as seen in Table 9-1.



Prepared by	Drawing Provided by/Prepared for		Date of Issue
pincock, allen & holt 165 S. Union Boulevard, Suite 950 Lakewood, Colorado 80228 Phone (303) 986-6950	Golden Minerals Company	FIGURE 9-1 Structural Map of Underground Workings	May 2012
Project No. DE-00302	Project Name El Quevar Project		Drawing Name Fig.9-1.dwg

TABLE 9-1
Golden Minerals Company
El Quevar Project - Yaxtché Deposit
Summary Statistics on Stockpiled Underground Muck Samples

Cutoff Grade Ag (g/t)	Total Tonnes	Average Grade Ag (g/t)	Avg. Grade (weighted by tonnes) Ag (g/t)	Median Grade Ag (g/t)	STDEV Ag (g/t)	Coefficient of Variation	Avg. Number Channel Samples per Pile	Avg Tonnes per Stockpile	Number of Stockpiles
0	19,161	113	116	80	154	1.33	5.8	121	158
30	18,392	120							
100	5,854	240							

9.2 *Underground Channel Sampling*

Golden Minerals conducted an extensive 1-meter, chip-channel sampling program in the underground workings described in the previous section. The sampling consists of chip-channels cut at the mining face, in the roof, ribs and fault zone as exposed in the workings. Assays of channel samples from these underground locations are compiled in Table 9-2. The underground locations with the highest silver grade were 43 channel samples taken in the north fault zone having an average grade of 639 g/t Ag. Channel samples from the working faces (N=498) and the rib samples (N=1,355) were similar, averaging 131 ppm and 127 ppm Ag, respectively, while roof samples (N=210) averaged 109 ppm.

While virtually all openings shown on Figure 9-1 were sampled, the high sample density in the exploration drifts is shown in Figure 9-2, the same area from which most of the stockpiled bulk samples were excavated. PAH observes that the average grade of the bulk samples (113 -120 ppm Ag) and the channel samples from the mining faces (131 ppm) and ribs (127 ppm) are virtually the same, along with the average silver grade for all 2,184 channel samples from different underground locations (Table 9-3). The table also reveals the distinctive geochemical signature of high sulfidation epithermal systems with enrichment in arsenic, antimony and bismuth and weak concentrations of base metals.

TABLE 9-3
Golden Minerals Company
El Quevar Project - Yaxtché Deposit
Underground 1-m Channel Samples - Average Grades

	Ag g/t	Ag oz/t	% Cu	% Pb	% Zn	As ppm	Bi ppm	Sb ppm
Average Grade (N=2184)	133.3	4.3	0.15	0.08	0.007	747	392	387

* includes roof, rib and face channel samples.

Scatter plots were prepared for selected element pairs to check for inter-element correlations within the channel sample database. As shown on the Table 9-4, there is generally poor correlation between the selected element pairs. However, a weak statistical correlation is noted between silver – antimony and bismuth.

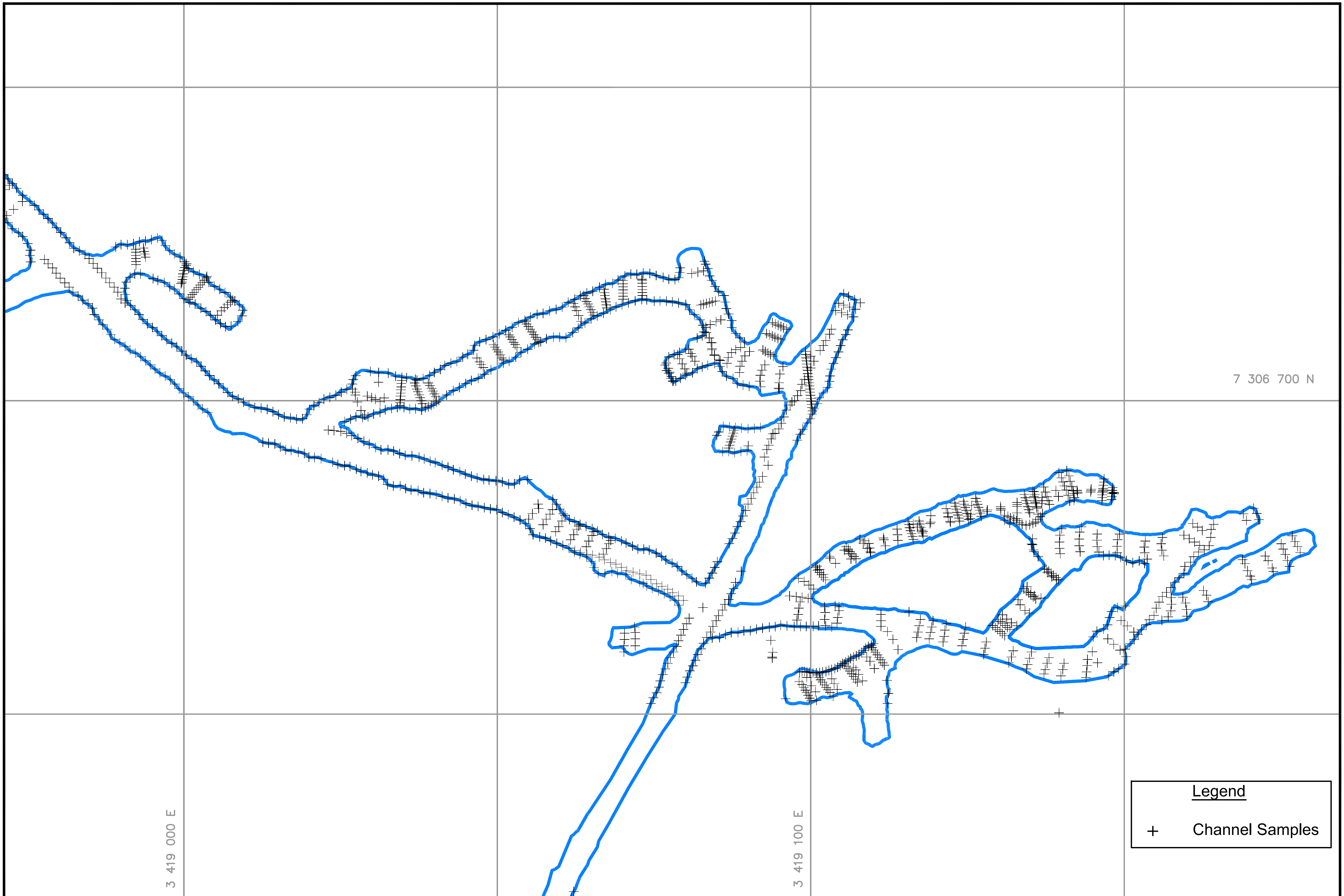
TABLE 9-2
Golden Minerals Company
El Quevar Project - Yaxtché Deposit
1-m Underground Channel Samples - Summary Assay Statistics

Sample Type	Statistics	Ag_COM gm/t	Ag oz/t	Al ppm	As ppm	Ba ppm	Bi ppm	Ca ppm	Cd ppm	Co ppm	Cr ppm
CANALETA DE FRENTE	**Mean**	130.65	4.22	5.14	777.83	612.81	434.90	0.06	2.60	7.51	24.02
(Face Channel Sample)	**Median**	41.48	1.33	6.27	352.28	388.81	159.42	0.04	0.50	7.42	23.70
	Standard Deviation	308.54	9.92	3.15	1220.25	547.84	592.43	0.09	6.36	5.85	8.72
498 Samples	**Coefficient Variation**	2.36	2.35	0.61	1.57	0.89	1.36	1.40	2.45	0.78	0.36
	Max	3438.94	110.56	10.00	10000.00	2000.00	2000.00	1.16	60.68	43.85	53.15
	Min	0.93	0.03	0.11	33.65	80.25	2.50	0.01	0.50	0.50	6.05
CANALETA DE PARED	**Mean**	126.69	4.08	5.79	627.84	608.83	349.12	0.07	2.60	6.27	25.83
(Rib Channel Sample)	**Median**	36.05	1.16	6.65	337.00	376.04	119.82	0.06	0.50	5.58	25.67
	Standard Deviation	397.50	12.78	3.17	940.17	543.76	534.05	0.08	9.08	6.24	9.51
1355 Samples	**Coefficient Variation**	3.14	3.13	0.55	1.50	0.89	1.53	1.11	3.50	0.99	0.37
	Max	5639.11	181.32	10.00	10000.00	2000.00	2000.00	0.85	140.00	61.59	110.71
	Min	0.96	0.03	0.11	14.04	69.00	2.50	0.01	0.50	0.50	4.39
CANALETA DE TECHO	**Mean**	109.19	3.51	4.11	873.39	695.43	519.22	0.04	2.65	8.04	22.73
(Roof Channel Sample)	**Median**	38.01	1.22	4.77	375.37	420.90	209.98	0.04	1.12	7.64	21.75
	Standard Deviation	183.45	5.90	3.31	1272.96	639.84	639.61	0.03	4.23	8.31	9.54
210 Samples	**Coefficient Variation**	1.68	1.68	0.81	1.46	0.92	1.23	0.83	1.60	1.03	0.42
	Max	1051.06	33.80	10.00	8401.43	2000.00	2000.00	0.20	36.43	88.32	55.30
	Min	2.88	0.09	0.12	35.97	65.44	2.50	0.01	0.50	0.50	6.94
CHANNEL	**Mean**	53.44	1.76	6.45	401.53	766.07	167.60	0.18	13.29	8.81	22.47
(Crosscut)	**Median**	19.15	0.60	7.02	249.07	675.47	53.80	0.10	2.35	8.10	21.60
	Standard Deviation	102.25	3.27	2.07	420.70	365.78	253.87	0.27	27.02	2.87	7.98
58 Samples	**Coefficient Variation**	1.91	1.86	0.32	1.05	0.48	1.51	1.53	2.03	0.33	0.35
	Max	535.00	17.20	10.00	2179.10	2000.00	967.89	1.76	138.37	20.23	42.90
	Min	0.25	0.02	0.20	21.93	255.20	2.50	0.00	0.50	3.92	9.65
CHIP SAMPLE	**Mean**	49.94	1.61	5.76	456.29	361.74	189.99	0.08	3.97	7.93	26.23
(Eastern Face Channel Sample)	**Median**	20.89	0.67	6.68	180.87	292.92	23.74	0.07	2.82	7.18	28.08
	Standard Deviation	69.38	2.23	2.29	636.02	219.95	388.55	0.03	5.22	2.33	6.41
12 Samples	**Coefficient Variation**	1.39	1.39	0.40	1.39	0.61	2.05	0.39	1.32	0.29	0.24
	Max	217.88	7.01	7.66	2241.55	822.44	1328.81	0.12	18.16	15.09	33.64
	Min	5.22	0.17	0.32	47.56	126.31	2.50	0.01	0.50	6.62	13.76
MUESTRA BARRENO	**Mean**	30.54	0.98	4.40	252.77	580.67	80.37	0.06	1.12	8.47	24.42
(Percussion Drill Sample)	**Median**	18.05	0.58	5.16	155.88	325.99	59.38	0.07	0.50	8.71	25.75
	Standard Deviation	28.42	0.91	2.79	266.25	619.22	58.65	0.04	1.20	0.91	9.11
8 Samples	**Coefficient Variation**	0.93	0.93	0.63	1.05	1.07	0.73	0.61	1.07	0.11	0.37
	Max	79.70	2.56	7.23	865.37	1978.53	174.92	0.10	3.64	9.45	34.16
	Min	6.73	0.22	0.16	64.11	112.17	26.71	0.01	0.50	6.40	11.79
MUESTRA FALLA	**Mean**	639.41	20.56	7.22	4171.59	710.33	1055.24	0.11	28.63	15.20	27.55
(Fault Sample)	**Median**	211.71	6.81	8.04	2566.24	433.54	955.35	0.10	4.98	4.60	24.61
	Standard Deviation	1028.73	33.07	2.91	3615.53	584.17	771.08	0.06	48.80	27.79	12.77
43 Samples	**Coefficient Variation**	1.61	1.61	0.40	0.87	0.82	0.73	0.57	1.70	1.83	0.46
	Max	5024.32	161.54	10.00	10000.00	2000.00	2000.00	0.28	208.08	159.08	62.11
	Min	3.26	0.10	0.46	343.26	163.23	2.50	0.01	0.50	0.50	8.00

Sample Type	Statistics	Cu ppm	Cu %	Fe %	Ga ppm	Hg ppm	K %	La ppm	Li ppm	Mg ppm	Mn ppm	Mo ppm	Na ppm	Nb ppm	Ni ppm	P ppm
CANALETA DE FRENTE	**Mean**	1885	0.19	3.96	48.23	1.11	1.44	24.85	22.28	0.03	231.67	4.15	0.34	4.37	16.50	546.29
(Face Channel Sample)	**Median**	313	0.03	3.28	43.46	1.00	1.56	25.20	4.78	0.01	49.35	4.11	0.26	3.46	16.50	615.46
	Standard Deviation	4165	0.42	2.48	40.99	1.31	1.16	15.65	38.05	0.12	1572.54	1.54	0.30	3.49	8.99	322.83
498 Samples	**Coefficient Variation**	2	2.21	0.63	0.85	1.18	0.81	0.63	1.71	4.44	6.79	0.37	0.90	0.80	0.54	0.59
	Max	33090	3.31	10.00	259.02	20.07	5.24	104.14	202.26	0.97	20000.00	9.73	1.29	13.43	76.86	1520.95
	Min	10	0.00	0.61	1.00	1.00	0.01	0.50	1.00	0.01	9.01	0.50	0.01	0.50	1.09	10.25
CANALETA DE PARED	**Mean**	1044	0.10	3.43	51.19	1.00	1.62	27.40	21.29	0.01	53.09	4.50	0.44	4.62	15.35	589.11
(Rib Channel Sample)	**Median**	136	0.01	2.77	42.79	1.00	1.84	27.56	4.71	0.01	47.71	4.39	0.35	3.66	13.73	637.10
	Standard Deviation	3356	0.33	2.46	43.86	0.05	1.20	16.73	38.88	0.06	28.93	1.84	0.37	3.40	11.13	349.50
1355 Samples	**Coefficient Variation**	3	3.25	0.72	0.86	0.05	0.74	0.61	1.83	4.22	0.54	0.41	0.84	0.74	0.73	0.59
	Max	54432	5.44	10.00	357.92	2.71	6.59	88.78	243.44	0.63	355.99	21.46	1.56	15.15	145.80	3191.83
	Min	4	0.00	0.23	1.00	1.00	0.01	0.50	1.00	0.01	0.50	0.50	0.01	0.50	0.50	5.00
CANALETA DE TECHO	**Mean**	2601	0.26	3.62	40.35	1.00	0.96	19.04	27.02	0.01	59.63	4.13	0.21	4.74	15.64	418.41
(Roof Channel Sample)	**Median**	702	0.07	3.17	33.04	1.00	0.33	21.68	3.46	0.01	59.55	3.83	0.19	3.29	13.85	494.34
	Standard Deviation	4554	0.46	2.13	47.39	0.00	1.04	12.73	46.78	0.01	24.00	2.16	0.22	3.69	13.31	299.01
210 Samples	**Coefficient Variation**	2	1.75	0.59	1.17	0.00	1.08	0.67	1.73	1.30	0.40	0.52	1.02	0.78	0.85	0.71
	Max	29313	2.93	10.00	318.16	1.00	3.53	50.08	201.68	0.11	144.82	18.87	0.97	12.44	141.50	1163.40
	Min	12	0.00	0.72	1.00	1.00	0.01	0.50	1.00	0.01	14.07	0.50	0.01	0.50	3.29	5.00
CHANNEL	**Mean**	995	0.10	3.35	35.85	1.00	2.47	37.34	27.63	0.20	2134.07	3.93	0.28	7.29	15.83	788.63
(Crosscut)	**Median**	305	0.03	3.12	31.15	1.00	2.53	38.29	10.93	0.01	60.09	3.84	0.23	8.76	14.66	852.34
	Standard Deviation	1525	0.15	0.99	26.66	0.00	1.52	16.97	32.28	0.32	4623.91	1.34	0.22	3.31	5.43	258.11
58 Samples	**Coefficient Variation**	2	1.55	0.29	0.74	0.00	0.62	0.45	1.17	1.62	2.17	0.34	0.81	0.45	0.34	0.33
	Max	7237	0.72	6.53	119.40	1.00	4.84	111.67	136.79	1.36	20000.00	7.86	0.76	11.48	36.10	1301.84
	Min	11	0.00	2.10	1.00	1.00	0.00	1.57	1.00	0.00	25.60	1.38	0.01	0.50	9.20	29.80
CHIP SAMPLE	**Mean**	1170	0.12	4.75	28.94	1.00	1.63	23.99	8.75	0.01	43.86	3.83	0.51	6.52	14.81	644.34
(Eastern Face Channel Sample)	**Median**	350	0.03	3.32	29.14	1.00	1.91	25.86	4.48	0.01	42.84	3.94	0.60	7.26	14.28	683.06
	Standard Deviation	1853	0.19	2.79	10.86	0.00	0.65	9.25	9.09	0.00	9.08	0.73	0.27	2.51	3.45	244.40
12 Samples	**Coefficient Variation**	2	1.58	0.59	0.38	0.00	0.40	0.39	1.04	0.00	0.21	0.19	0.54	0.38	0.23	0.38
	Max	6423	0.64	10.00	44.03	1.00	2.18	36.54	31.88	0.01	61.83	4.72	0.83	9.42	22.79	877.15
	Min	93	0.01	2.77	1.00	1.00	0.03	1.30	2.10	0.01	30.85	2.37	0.01	2.23	10.06	25.64
MUESTRA BARRENO	**Mean**	781	0.08	5.69	24.07	1.00	1.38	18.35	5.24	0.01	43.60	4.81	0.34	4.86	19.18	445.76
(Percussion Drill Sample)	**Median**	384	0.04	5.47	30.26	1.00	1.54	19.31	4.97	0.01	42.38	4.54	0.42	6.05	18.53	588.58
	Standard Deviation	978	0.10	1.20	13.79	0.00	0.91	7.77	2.92	0.00	7.96	1.85	0.24	2.74	5.07	264.85
8 Samples	**Coefficient Variation**	1	1.25	0.21	0.57	0.00	0.66	0.42	0.56	0.00	0.18	0.38	0.69	0.56	0.26	0.59
	Max	3037	0.30	8.04	37.08	1.00	2.43	27.34	10.27	0.01	57.43	8.03	0.66	7.42	26.42	654.90
	Min	100	0.01	4.50	1.00	1.00	0.01	4.16	1.00	0.01	31.71	2.12	0.01	0.50	14.10	20.67
MUESTRA FALLA	**Mean**	5726	0.57	5.71	72.46	1.00	1.92	22.38	49.66	0.04	62.45	7.21	0.39	2.49	45.74	1100.87
(Fault Sample)	**Median**	258	0.03	4.96	62.10	1.00	1.74	17.02	11.50	0.02	39.66	6.01	0.34	0.50	21.13	967.39
	Standard Deviation	13823	1.38	3.25	42.30	0.00	1.60	17.54	67.34	0.10	73.61	3.88	0.22	3.11	59.45	663.57
43 Samples	**Coefficient Variation**	2	2.41	0.57	0.58	0.00	0.83	0.78	1.36	2.77	1.18	0.54	0.57	1.25	1.30	0.60
	Max	64560	6.46	10.00	179.63	1.00	6.55	84.40	281.58	0.67	312.09	19.61	0.85	14.04	330.17	3672.61
	Min	30	0.00	0.13	3.62	1.00	0.06	0.50	2.07	0.01	5.35	1.88	0.02	0.50	0.50	137.10

Sample Type	Statistics	Pb %	S %	Sb ppm	Sc ppm	Se ppm	Sn ppm	Sr ppm	Ta ppm	Te ppm	Ti %	Tl ppm	V ppm	W ppm	Y ppm	Zn %	Zr ppm
CANALETA DE FRENTE	**Mean**	0.07	6.36	409.48	3.70	5.43	18.38	485.17	5.00	14.79	0.19	2.98	55.12	11.12	3.58	0.02	48.68
(Face Channel Sample)	**Median**	0.05	6.86	170.86	2.50	5.00	10.00	459.81	5.00	5.00	0.16	2.50	56.00	10.00	3.04	0.00	40.97
	Standard Deviation	0.10	2.74	514.01	2.29	2.13	21.67	286.45	0.00	17.83	0.10	3.07	38.55	5.01	2.38	0.07	24.18
498 Samples	**Coefficient Variation**	1.44	0.43	1.26	0.62	0.39	1.18	0.59	0.00	1.21	0.54	1.03	0.70	0.45	0.67	4.74	0.50
	Max	1.24	10.00	2000.00	15.36	27.79	172.29	1742.23	5.00	208.18	0.51	38.20	209.35	47.80	20.84	0.75	123.91
	Min	0.00	0.42	2.50	2.50	5.00	10.00	15.63	5.00	5.00	0.04	2.50	2.28	10.00	0.50	0.00	11.18
CANALETA DE PARED	**Mean**	0.08	6.07	346.47	9.07	5.31	15.85	567.91	10.97	14.93	0.49	2.64	54.66	11.63	3.51	0.00	47.74
(Rib Channel Sample)	**Median**	0.06	6.22	151.00	2.50	5.00	10.00	533.64	5.00	5.00	0.17	2.50	56.71	10.00	3.00	0.00	42.68
	Standard Deviation	0.10	2.69	496.34	54.58	2.05	18.76	354.15	45.60	31.89	2.78	1.73	34.95	8.30	2.10	292.73	24.15
1355 Samples	**Coefficient Variation**	1.20	0.44	1.43	6.02	0.39	1.18	0.62	4.16	2.14	5.70	0.66	0.64	0.71	0.60	33.83	0.51
	Max	1.62	10.00	2000.00	1153.94	29.69	225.49	2000.00	530.34	848.97	62.09	34.32	173.78	84.62	19.23	10000.00	138.84
	Min	0.00	0.00	2.35	2.50	2.50	5.00	10.00	5.00	5.00	0.04	0.08	2.50	3.54	0.50	0.00	0.00
CANALETA DE TECHO	**Mean**	0.04	5.17	478.79	3.16	5.00	21.49	460.21	5.00	14.62	0.19	3.03	48.80	11.18	3.11	0.01	45.52
(Roof Channel Sample)	**Median**	0.03	5.64	196.15	2.50	5.00	10.00	437.73	5.00	5.00	0.14	2.50	42.30	10.00	2.78	0.00	40.88
	Standard Deviation	0.07	2.89	577.67	1.61	0.00	26.34	269.60	0.00	16.33	0.10	2.65	42.99	4.36	1.55	0.04	19.89
210 Samples	**Coefficient Variation**	1.72	0.56	1.21	0.51	0.00	1.23	0.59	0.00	1.12	0.54	0.87	0.88	0.39	0.50	4.01	0.44
	Max	0.90	10.00	2000.00	10.57	5.00	172.15	1479.04	5.00	118.86	0.41	27.70	198.11	31.44	8.85	0.50	112.09
	Min	0.00	0.37	2.50	2.50	5.00	10.00	23.92	5.00	5.00	0.05	2.50	3.16	10.00	0.50	0.00	11.14
CHANNEL	**Mean**	0.11	5.45	236.40	3.85	5.00	13.26	487.27	5.00	6.89	0.29	3.23	75.36	10.22	6.80	0.02	77.50
(Crosscut)	**Median**	0.05	5.83	97.31	2.50	5.00	10.00	519.91	5.00	5.00	0.32	2.50	80.68	10.00	5.84	2.62	78.46
	Standard Deviation	0.16	2.64	365.45	1.67	0.00	10.64	316.77	0.00	4.64	0.10	2.11	27.79	1.65	3.23	1321.85	19.79
58 Samples	**Coefficient Variation**	1.44	0.48	1.55	0.43	0.00	0.80	0.65	0.00	0.67	0.35	0.65	0.37	0.16	0.48	5.66	0.26
	Max	0.73	10.00	1629.20	7.10	5.00	74.52	1208.51	5.00	24.60	0.43	14.55	130.40	22.60	15.96	10000.00	110.96
	Min	0.00	1.51	2.50	2.50	5.00	10.00	35.53	5.00	5.00	0.07	2.50	3.23	10.00	1.99	0.00	35.76
CHIP SAMPLE	**Mean**	0.03	8.53	243.99	2.50	5.00	10.00	565.11	5.00	10.41	0.24	2.50	53.07	10.00	2.48	0.04	39.67
(Eastern Face Channel Sample)	**Median**	0.02	8.45	102.75	2.50	5.00	10.00	512.89	5.00	5.00	0.26	2.50	65.38	10.00	2.46	0.00	39.87
	Standard Deviation	0.02	1.06	309.83	0.00	0.00	0.00	256.12	0.00	10.08	0.07	0.00	20.56	0.00	0.56	0.14	9.28
12 Samples	**Coefficient Variation**	0.62	0.12	1.27	0.00	0.00	0.00	0.45	0.00	0.97	0.31	0.00	0.39	0.00	0.23	3.20	0.23
	Max	0.08	10.00	941.83	2.50	5.00	10.00	1041.58	5.00	31.43	0.35	2.50	72.73	10.00	3.44	0.50	56.21
	Min	0.01	7.20	2.50	2.50	5.00	10.00	120.98	5.00	5.00	0.10	2.50	5.37	10.00	1.71	0.00	25.45
MUESTRA BARRENO	**Mean**	0.02	8.46	181.46	2.50	5.00	11.41	293.42	5.00	8.01	0.21	2.50	42.15	10.00	2.92	0.00	44.81
(Percussion Drill Sample)	**Median**	0.02	8.59	66.55	2.50	5.00	10.00	350.55	5.00	5.00	0.25	2.50	48.74	10.00	2.84	0.00	43.29
	Standard Deviation	0.01	1.70	257.84	0.00	0.00	4.00	155.39	0.00	4.39	0.08	0.00	25.39	0.00	0.68	0.00	8.67
8 Samples	**Coefficient Variation**	0.54	0.20	1.42	0.00	0.00	0.35	0.53	0.00	0.55	0.39	0.00	0.60	0.00	0.23	1.16	0.19
	Max	0.03	10.00	776.08	2.50	5.00	21.31	464.80	5.00	15.21	0.28	2.50	68.35	10.00	3.87	0.01	58.47
	Min	0.00	4.91	2.50	2.50	5.00	10.00	39.13	5.00	5.00	0.08	2.50	3.60	10.00	2.20	0.00	34.96
MUESTRA FALLA	**Mean**	0.53	6.41	1242.69	5.89	11.54	42.26	1163.79	5.12	106.82	0.11	16.62	105.31	19.83	2.57	0.04	37.60
(Fault Sample)	**Median**	0.21	5.93	1606.29	5.66	5.00	10.00	1109.45	5.00	67.12	0.07	6.77	102.09	10.00	1.90	0.02	36.14
	Standard Deviation	0.96	2.93	766.15	3.95	10.40	71.36	578.74	0.79	113.35	0.11	21.04	54.28	14.07	2.80	0.07	22.44
43 Samples	**Coefficient Variation**	1.83	0.46	0.62	0.67	0.90	1.69	0.50	0.15	1.06	0.96	1.27	0.52	0.71	1.09	1.58	0.60
	Max	4.84	10.00	2000.00	20.56	44.73	410.84	2000.00	10.20	633.97	0.47	83.30	237.52	68.20	16.13	0.37	120.17
	Min	0.02	1.31	46.84	2.50	5.00	10.00	244.49	5.00	5.00	0.01	2.50	8.13	10.00	0.50	0.00	0.50

Data provided by Golden Minerals Co. from underground sampling 2010-2011.
Values like 10000, 2000 indicate actual value is above upper limit of analytical method.



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Project No.
DE-00196

Drawing Provided by/Prepared for
Golden Minerals Company

Project Name
El Quevar Project

FIGURE 9-2
Eastern Yaxtché Deposit
Underground Channel Sample Locations

Date of Issue
May 2012

Drawing Name
Fig.9-2.dwg

TABLE 9-4
Golden Minerals Company
El Quevar Project - Yaxtché Deposit
Underground 1-m Channel Samples - Correlation of Elements

Element Pair	Coefficient of Correlation	Comment
Ag - Cu	0.070	no correlation
Ag - As	0.090	no correlation
Ag - Pb	0.020	no correlation
Ag - Bi	0.250	weak correlation
Ag - Sb	0.370	weak correlation
Cu - Pb	0.002	no correlation
Pb - Zn	0.010	no correlation

*Coefficient of Correlation = R^2 determined by linear regression model applied to scatter plots of element pairs.
Number of Samples: 2,184

9.3 *Exploration in Satellite Targets, El Quevar Property (2010 -2012)*

Golden Minerals and its predecessor Apex have undertaken exploration on the El Quevar property since late 2004 and, in particular, at the Yaxtché zone. Exploration data from programs prior to 1997 were not available, although data from Hochschild and from Mansfield Minerals were 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 two named exploration areas: Quevar Sur and Quevar Norte. The main Yaxtché deposit is in Quevar Sur.

The previous exploration programs are discussed in detail in the CAM Technical Report (January 2010) and in the Micon Technical Report (August 2010). The current report focuses on the late 2010 and 2011 exploration programs conducted after the exploration previously presented in the CAM and Micon technical reports (2010). In 2011, drilling programs were completed on the Carmen, Mani Sub and the Yaxtché West Extension. These target areas are in the vicinity of the Yaxtché deposit (Figure 9-3). The collar locations for holes from these target areas are summarized on Table 9-5, while the corresponding assay results are given on Table 9-6.

9.3.1 Carmen

The Carmen structural zone is located some 325 meters NE of Yaxtché and has an average strike of 309° which is sub-parallel to the Yaxtché zone. The Carmen zone has a known length of about 500 meters. Four holes were drilled to test the zone in 2011 for a total of 1,164.4 meters. Elevated zinc values were encountered in QVD-261 1.66 percent over 3 m. In QVD-261 Ag values of 212 ppm and 365 ppm were encountered over 1 meter widths with low gold values. The highest silver intersection was 365 ppm Ag over 1 meter in drill hole QVD-261.

TABLE 9-5
Golden Minerals Company
El Quevar Project - Yaxtché Deposit
Drilling in the Quevar Sur and Quevar Norte Areas July 2010 to December 2011

HOLE	EAST	NORTH	RL	DEPTH	AZ	DIP	AREA
QVD-221	3416703	7308178	4763.726	480.4	208	-61	YEX
QVD-222	3416575	7308144	4726.045	227.5	208	-61	YEX
QVD-223	3419447	7306994	4922.704	212	163	-61	CB
QVD-224	3416695	7308284	4745.749	247.6	208	-62	YEX
QVD-225	3416670	7308377	4756.235	185.4	208	-61	YEX
QVD-226	3419435	7307047	4931.449	299	163	-65	CB
QVD-227	3416575	7308144	4726.045	239.5	208	-82	YEX
QVD-228	3419405	7306961	4910.467	419	163	-61	CB
QVD-229	3416703	7308178	4763.726	329.8	0	-90	YEX
QVD-230	3416703	7308178	4763.726	451.3	208	-45	YEX
QVD-231	3419349	7306976	4898.729	213	163	-62	CB
QVD-233	3419336	7307014	4899.276	400.5	163	-65	CB
QVD-234	3419426	7306890	4907.327	371	163	-60	CB
QVD-236	3421077	7310923	5100.345	174	236	-48	QN
QVD-237	3417566	7307088	4761.267	416.5	208	-61	MANSU
QVD-238	3420994	7310970	5095.686	188	236	-45	QN
QVD-239	3419299	7306969	4890.534	344	163	-62	CB
QVD-240	3419248	7306963	4880.013	395.5	163	-62	CB
QVD-241	3419290	7306999	4889.862	443.5	208	-68	CB
QVD-242	3419168	7307069	4890.506	496	165	-65	CB
QVD-244	3419239	7306998	4883.033	209.4	208	-65	CB
QVD-245	3419170	7307069	4890.353	206.5	208	-65	CB
QVD-246	3419572	7306939	4926.668	332.6	208	-67	CB
QVD-247	3419113	7307087	4899.205	191	208	-62	CB
QVD-248	3417610	7307061	4752.653	206.35	208	-61	MANSU
QVD-249	3419252	7307022	4892.062	344.5	208	-65	CB
QVD-250	3419369	7306926	4901.843	378	208	-80	CB
QVD-253	3419572	7306939	4926.673	357.8	208	-47	CB
QVD-255	3419095	7307147	4909.091	101.5	208	-68	CB
QVD-258	3419621	7306936	4935.014	311.3	208	-67	CB
QVD-260	3419621	7306936	4935.015	314.6	208	-85	CB
QVD-261	3419664	7306913	4933.695	437	208	-51	CB
QVD-282	3418367	7307369	4863.81	453.5	150	-70	CON
QVD-284	3418460	7307336	4849.95	416	150	-60	CON
QVD-287	3418443	7307248	4844.918	419	150	-60	CON
QVD-288	3418513	7307113	4840.773	324	150	-60	CON
QVD-290	3418532	7307220	4844.69	230	150	-60	CON
QVD-291	3418572	7307006	4846.793	128.7	150	-60	CON
QVD-291A	3418572	7307006	4846.793	248	150	-60	CON
QVD-294	3418634	7307192	4852.18	238.5	150	-60	CON
QVD-296	3418613	7307079	4853.732	300	150	-60	CON
QVD-299	3418481	7307446	4876.519	221	150	-60	CON
QVD-300	3418556	7307316	4852.445	215	150	-60	CON
QVD-303	3418575	7307415	4868	195	150	-60	CON
QVD-304	3419003	7307002	4884.826	191	150	-60	CON
QVD-305	3418643	7306362	4767.497	368	150	-62	MANSU
QVD-306	3419078	7306968	4879.865	235	150	-60	CON
QVD-308	3419095	7307147	4909.096	194	150	-60	CON
QVD-309	3419049	7307103	4903.761	200	150	-60	CON
QVD-310	3418695	7306374	4772.837	365	150	-62	MANSU
QVD-312	3419117	7306991	4881.25	149.5	150	-60	CON
QVD-313	3418987	7307121	4912.875	179	150	-60	CON
QVD-314	3418609	7306319	4761.525	348	150	-62	MANSU
QVD-315	3418933	7307114	4915.384	134	150	-60	CON
QVD-316	3418549	7306399	4761.131	371.2	140	-58	MANSU
QVD-319	3418662	7306324	4766.084	329.5	150	-58	MANSU
QVD-321	3418541	7306393	4760.777	371	140	-58	MANSU
QVD-323	3418694	7306377	4772.987	338	170	-62	MANSU
QVD-324	3418550	7306390	4761.076	350	140	-58	MANSU
QVD-325	3418694	7306378	4773.042	356	170	-59	MANSU
QVD-326	3418543	7306398	4760.97	368	140	-58	MANSU
QVD-327	3418448	7306422	4750.269	362	145	-65	MANSU
QVD-328	3418396	7306408	4743.801	342.2	150	-60	MANSU
QVD-329	3418431	7306372	4746.812	389	150	-60	MANSU
QVD-330	3418338	7306444	4741.812	374.4	150	-55	MANSU
QVD-331	3418189	7306619	4742	382.9	150	-60	MANSU
QVD-332	3418039	7306694	4742	381	150	-55	MANSU
QVD-333	3417890	7306727	4718	288.2	162	-55	MANSU
QVD-334	3417589	7307025	4749.84	286.5	162	-60	MANSU

The Yaxtche deposits is located in the Quevar Sur Area

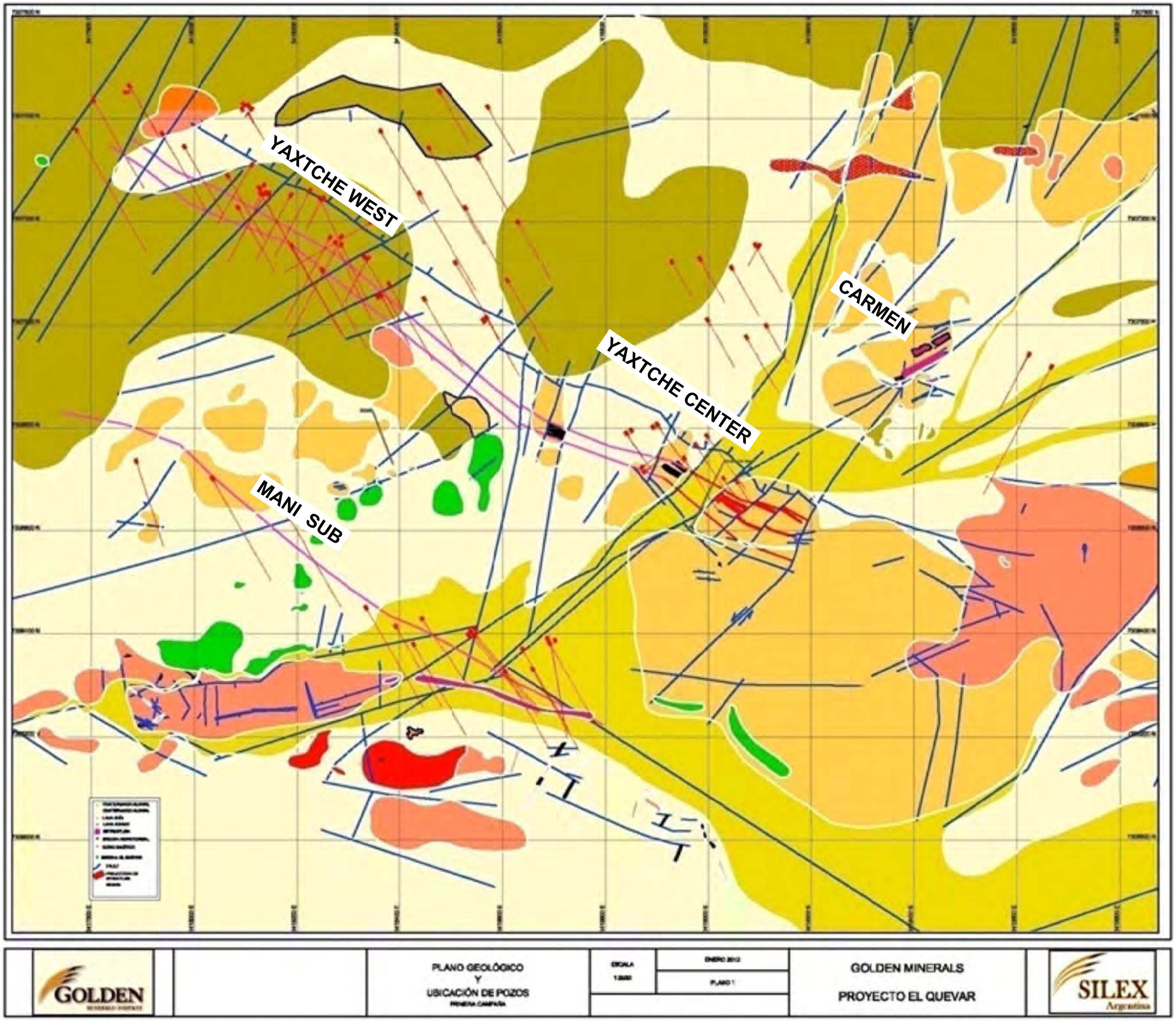
Locations:

YEX	YAXTCHE EXTENSION OESTE
CB	CARMEN BRECHA
MANSU	MANI SUB
QN	QUEVAR NORTE
CON	CONDENACION

TABLE 9-6
Golden Minerals Company
El Quevar Project - Yaxtché Deposit
Significant Drilling Results from the Quevar Sur Area July 2010 - December 2011

HOLE	FROM (m)	TO (m)	LENGTH	Au PPM 0.01	Ag PPM 5	Cu % 0.005	Pb % 0.01	Zn % 0.01	LOCATION
QVD-258	185	186	1	0.01	6.0	0.01	0.02	1.26	CB
	190	191	1	0.01	7.1	0.01	0.13	1.1	CB
	231	232	1	0.01	6.2	0	0.46	1.1	CB
	232	233	1	0.01	6.4	0	0.39	1.19	CB
QVD-261	116	117	1	0.01	1.1	0	0.22	1.07	CB
	135	136	1	0.01	0.8	0	0.15	1.14	CB
	136	137	1	0.01	5.7	0	0.69	2.57	CB
	137	138	1	0.01	9.0	0	0.8	1.27	CB
	138	139	1	0.01	2.9	0	0.38	1.35	CB
	215	216	1	0.14	365.2	0.01	0.03	0.01	CB
	270	271	1	0.01	0.5	0	0.28	1.48	CB
	271	272	1	0.01	0.5	0	0.28	1.43	CB
	347	348	1	0.36	212.7	0.24	0.09	0.01	CB
	383	384	1	0.23	60.4	1.5	0	0.01	CB
QVD-287	357	358	1	0.47	100.3	3.77	0.15	0.26	CON
	359	360	1	0.42	37.8	1.18	0.04	0.08	CON
	360	361	1	0.88	46.7	1.47	0.05	0.14	CON
	365	366	1	0.41	46.2	1.79	0.08	0.21	CON
	392	393	1	0.01	6.7	0	0.36	1.18	CON
	395	396	1	0.01	0.7	0.01	0.15	1.08	CON
QVD-288	259	260	1	0.23	67.1	1.29	0.03	0.34	CON
	260	261	1	0.3	96.3	1.85	0.02	0.5	CON
	272	273	1	0.58	63.7	1.59	0.03	0.22	CON
	273	274	1	0.38	51.1	1.1	0.07	0.15	CON
QVD-296	250	251	1	0.01	11.6	0.01	0.16	1.3	CON
QVD-305	281	282	1	0.01	5.3	0	0.27	1.17	MANSU
	282	283	1	0.01	27.1	0	1.43	1.33	MANSU
	283	284	1	0.01	34.7	0	1.71	0.7	MANSU
QVD-310	300	301	1	0.01	3.2	0	0.27	1.09	MANSU
QVD-314	244	245	1	0.01	229.9	0.09	0.07	0.02	MANSU
	288	289	1	0.05	618.5	0.37	5.92	0.33	MANSU
	289	290	1	0.01	60.8	0.01	1.79	0.14	MANSU
	290	291	1	0.01	69.7	0.04	1.25	0.43	MANSU
	306	307	1	0.01	7.7	0	0.8	2.67	MANSU
QVD-316	326	327	1	0.06	5331.1	2.96	0.04	0.51	MANSU
	327	328	1	0.07	589.2	0.29	0.03	0.07	MANSU
	336	337	1	0.09	599.6	1.28	0.12	0.33	MANSU
	338	339	1	0.11	334.9	0.3	0.01	0.06	MANSU
QVD-319	258	259	1	0.01	272.7	0.07	0.11	0.56	MANSU
	259	260	1	0.01	473.8	0.13	0.13	1.02	MANSU
	260	261	1	0.01	255.7	0.04	0.07	0.04	MANSU
	306	307	1	0.01	3.1	0	0.46	1.03	MANSU
QVD-321	323	326	3	0.17	1299.6	1.98	0.03	0.41	MANSU
	336	337	1	0.19	484.2	1.16	0.04	0.27	MANSU
QVD-323	284	285	1	0.01	8.1	0	0.69	1.4	MANSU
	285	286	1	0.01	189.1	0.01	4.4	0.77	MANSU
	288	289	1	0.07	439.6	0.14	0.04	0.03	MANSU
QVD-324	304	305	1	0.09	341.0	0.32	0.19	0.12	MANSU
	313	314	1	0.01	41.6	0.02	0.38	1.31	MANSU
	315	316	1	0.01	334.0	0.21	0.97	0.15	MANSU
	330	331	1	0.01	87.3	0	2	0.22	MANSU
QVD-325	279	280	1	0.01	21.5	0	0.66	1.2	MANSU
	343	344	1	0.01	44.6	0.02	1.24	0.75	MANSU
QVD-326	323	324	1	0.01	0.5	0	0.16	1.33	MANSU
	328	329	1	0.01	204.5	0.26	0.19	0.09	MANSU
	329	330	1	0.08	551.7	0.81	0.87	0.32	MANSU
QVD-327	292	293	1	0.01	237.0	0.1	0.11	0.05	MANSU
	307	308	1	0.04	357.0	0.5	0.01	0.08	MANSU
QVD-328	258	259	1	0.01	226.4	0.06	0.07	0.11	MANSU
	260	261	1	0.01	243.5	0.05	0.27	0.14	MANSU
	287	288	1	0.01	828.9	0.22	0.42	0.06	MANSU
	288	289	1	0.01	304.2	0.08	0.41	0.03	MANSU
	289	290	1	0.01	55.0	0.01	2.01	0.71	MANSU
QVD-329	237	238	1	0.06	270.2	0.13	0.35	0.22	MANSU
QVD-330	268	269	1	0.01	29.3	0	2	0.07	MANSU
	285	286	1	0.01	26.5	0	0.84	1.7	MANSU
	289	290	1	0.01	15.1	0	0.37	1.23	MANSU
	290	291	1	0.01	15.5	0	0.42	1.11	MANSU
	307	308	1	0.01	12.1	0	0.27	1.07	MANSU
QVD-332	154	155	1	0.01	0.5	0	0.25	1.22	MANSU
	336	337	1	0.01	8.2	0	0.32	2.45	MANSU
	343	344	1	0.01	4.5	0	0.22	1.34	MANSU

Locations:
YEX YAXTCHE EXTENSION OESTE
CB CARMEN BRECHA
MANSU MANI SUB
QN QUEVAR NORTE
CON CONDENACION



Note:
Drilling is current to end of 2011. Yaxtché central area is the "Eastern Shallow Area" of mineralization as used by PAH in preparation of the block model.

Prepared by pincock, allen & holt 165 S. Union Boulevard, Suite 950 Lakewood, Colorado 80228 Phone (303) 986-6950	Drawing Provided by/Prepared for ***Golden Minerals Company***	FIGURE 9-3 Yaxtché Deposit and Vicinity Showing Exploration Areas	Date of Issue May 2012
Project No. DE-00196	Project Name El Quevar Project		Drawing Name Fig.9-3.dwg

9.3.2 Mani Sub

The Mani Sub structural zone is located 500 meters SW of Yaxtché. Eighteen drill holes were completed in the zone in 2011 for a total of 6,370.9 meters. Vein widths up to 3 meters were intercepted between 150 and 345 meters depth. Silver values in this area are associated with the Quevar breccia unit while higher base metal values are associated with the dacitic lavas. The best silver intercepts obtained in the recent drilling at Mani Sur are summarized below.

- QVD-316, 5,331 ppm Ag over 1 meter
- QVD-321, 1,229 ppm Ag over 3 meters
- QVD-319, 334 ppm Ag over 3 meters
- QVD-326, 378 ppm Ag over 2 meters
- QVD-328, 235 ppm Ag over 2 meters

9.3.3 Yaxtché West Extension

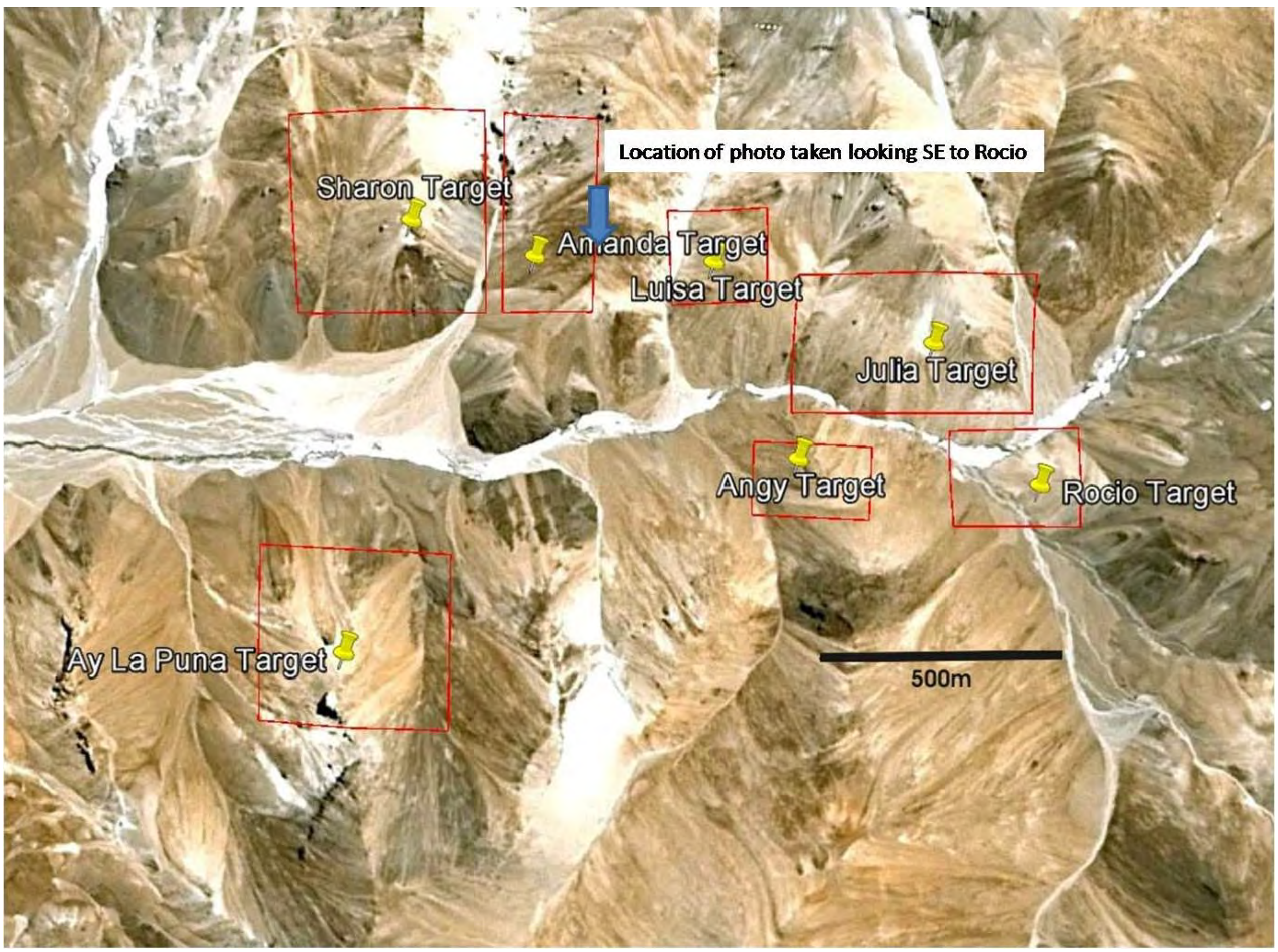
Holes in the Yaxtché West Extension were drilled approximately 1.6 km west of the main Yaxtché deposit on the other side of a post-mineral flow. The seven holes drilled in this area did not encounter any significant Ag values, although anomalous Ag with high As and up to 2.5 percent Pb over 5 meters with high values of Zn and Sb was cut in hole QVD-222. Drilling on the Yaxtché West Extension is outside of the resource model discussed in the present report.

9.3.4 Quevar Norte Area

Exploration interest in 2012 is focusing on the Quevar Norte area specifically to follow up on the previous results of surface sampling and drilling on the Sharon prospect and along the Quevar Norte trend to the east. As shown on Figure 9-4, several discrete target areas comprise the Quevar Norte exploration area. Details of previous work in this area were presented in the Micon Technical Report (August 2010). Silex controls three exploration claims that cover the targets in the Quevar Norte area: Quirincolo I, Quevar II and Nevado I.

Surface samples from the Quevar Norte zone east of Sharon show consistently anomalous rock chip sample values for arsenic with sporadic but interesting silver values. Figure 9-4 shows an oblique view of the central and eastern portions of the alteration and anomalous zone in a photo taken from the Amanda target looking eastward towards the Rocio Target. The Sharon - Rocio trend is the main Quevar Norte structure and is continuous with some offsets on N-S normal faults and has a local post mineral intrusion between Sharon and Amanda.

Based on current exploration by Silex, the Quevar Norte trend is thought to be a parallel listric normal fault structure filled with Yaxtché-style alteration and mineralization. While similar to Yaxtché in size and style it is believed to be better preserved and exposed at the surface at a higher level within an epithermal system. The Sharon block is up-faulted relative to the other targets to the east, Amanda



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Project Name: El Quevar Project

FIGURE 9-4
Mineral Prospects in the Quevar Norte Trend, Argentina

Date of Issue: May 2012

Drawing Name: Fig.9-4.dwg

through Rocio. As reported in Micon (2010), a 25 kg/t surface sample was collected at the Sharon target. Silver values in surface samples of 10 ppm and 15 ppm were obtained at Amanda and Rocio, respectively, along with a broad area of anomalous arsenic values between the two targets.

In the early part of 2010 four (4) holes were drilled in the Sharon target for which the most significant intercept occurred in QND-002 which cut 28 m (63 m to 91 m) that averaged 1.3 kg/t silver, 1.26 percent copper and 0.44 percent zinc.

In 2012, Silex will continue to follow-up previous drilling on the Mani Sub and Carmen targets and to explore with additional surface prospecting and drilling the Quevar Norte structure.

10.0 DRILLING

Section 10.0 has been quoted from the Micon Technical Report (August 2010).

Golden Minerals and its predecessor Apex have undertaken exploration on the El Quevar property since late 2004 and, in particular, at the Yaxtché zone. Exploration data from programs prior to 1997 were not available, although data from Hochschild and from Mansfield Minerals were available. None of the drilling or sampling undertaken by Hochschild or Mansfield Minerals was used for resource estimation in this report.

In 2011, Golden Minerals' work was carried out in the named exploration areas: Quevar Sur and Quevar Norte. The Yaxtché deposit is in Quevar Sur.

The previous exploration programs are discussed in detail in the CAM Technical Report (January 2010). This report will focus on Golden Mineral's drilling campaign of 2011.

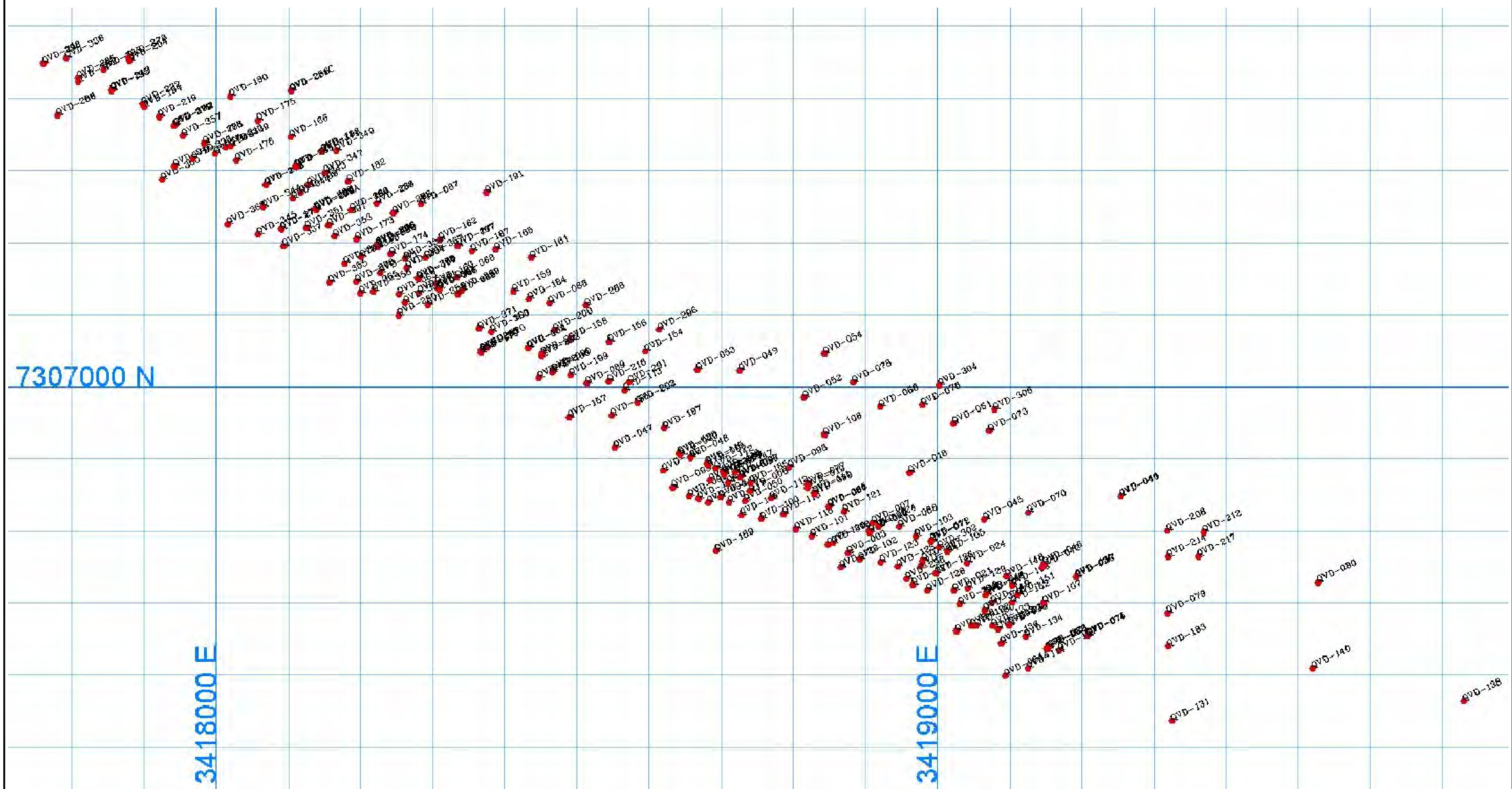
10.1 *Drilling by Golden Minerals*

In 2011, Golden Minerals conducted two diamond drilling campaigns in the Quevar Sur exploration area which includes the Yaxtché silver deposit. In total 133 holes were completed comprising 38,967 total meters from which 12,051, samples were submitted to Alex Stewart Laboratory for analysis. Thirty one percent (31%) of the total meterage was sampled and submitted for assay. This percentage reflects the significant meterage of barren overburden (alluvium and post-mineral flows) drilled by rotary methods that is not sampled, primarily in the deeper western part of the Yaxtché deposit. This percentage also reflects intervals of unmineralized internal waste within the deposit.

The first drilling campaign from January 22 to June 7, 2011, included the target areas: Yaxtché West, Mani Sub, Yaxtché Central, Condemnation areas I and II, and Carmen. A second campaign of infill drilling (38 holes) was conducted in the Western Yaxtché area from June 11 to December 14, 2011. In 2011, Major Perforaciones S.A., was the drilling contractor who operated 2 – 4 core rigs on site at various times. Details of the drilling program are found in the Annual Report of the Drilling Campaign for the El Quevar Project, January 2012, by the geological staff of Silex.

The drilling history of the El Quevar property under Golden Minerals' tenure is summarized in Table 10-1. The significant drill hole intersections from the 2011 campaigns are compiled in Table A-1, Appendix A.

A drill hole location map showing the holes used in the current Yaxtché resource model is given in Figure 10-1. In total, 372 core holes have been completed in both the Quevar Norte and Quevar Sur exploration areas from 2006 to 2011. The current Resource Model of the Yaxtché deposit located in the Quevar Sur exploration area utilizes 270 holes, comprising 69,094 m with an average hole depth of 256 m. The effective date of the drilling information used in this report is February 9, 2012. The nominal drill hole spacing is approximately 20-25 meters.



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Project No. DE-00196

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Golden Minerals Company

Project Name
El Quevar Project

FIGURE 10-1
Drill Hole Location Map, Yaxtché Silver Deposit, Argentina

Date of Issue
May 2012

Drawing Name
Fig.10-1.dwg

TABLE 10-1
Golden Minerals Company
El Quevar Project - Yaxtché Deposit
Summary of Exploration Drilling at El Quevar Property (2006 - 2011)

Year	Number of Holes	Total Length (m)	Core Size	Samples Analyzed	Comments
2006	18	2,628	Diamond, HQ (NQ)	1057	
2007	16	2,231	Diamond, HQ (NQ)	1314	1 hole redrilled due to technical problems
2008	43	10,651	Diamond, HQ (NQ)	5307	
2009	114	17,338	Diamond, HQ (NQ)	6592	Drilled in Castor and Quevar II areas in Quevar Sur
2010	64	19,804	Diamond, HQ (NQ)	5,746	Holes drilled (meters): Yaxtché West - 28 (8,677 m); Yaxtché East - 4 (1,659 m); Yaxtché Extension - 7 (2,161 m), Carmen - 17 (5,613 m) Mani Sub - 4 (1,332 m); Sharon - 2 (362 m)
2011	118	37,792	Diamond, HQ (NQ)	10,283	Holes drilled (meters): Yaxtché West - 36 (10,357 m); Yaxtché West - Infill - 38 (13,656 m); Yaxtché Centro - 11 (1378); Condenacion1 - 12 (3,389 m); Condenacion2 - 7 (1,283 m); Carmen - 3 (677 m) Mani Sub - 18 (6,371 m)
Totals	**373***	**90,444**		**30,299**	

Source: Silex Drilling Database
Samples analyzed are exclusive of control samples.
* Excludes 14 drill holes that were lost from 2006 to 2011.

Section 10.2 has been adapted from the Micon Technical Report (August 2010) with additional attribution to the CAM Technical Report (January 2010). Updated information and comments by PAH are indicated in the text.

10.2 *Drilling Procedures and Logging*

The majority of the core was HQ (63.5 mm); however, it is common practice to reduce the core diameter to NQ (47.6 mm) when poor ground conditions are encountered. The average angle of intercept was approximately 80° with the core recovery averaging over 90 percent. All drilling completed by Golden Minerals has the QVD prefix before the hole number.

Most holes in the Yaxtché zone were drilled so as to cross-cut the mineralized zone at a high angle in terms of dip, and nearly all holes were at right angles to the strike of the mineralized Quevar Breccia.

PAH observes that drill collar azimuths are variable; 158 holes (58%) oriented on an average azimuth of 209^{o} and 69 of the later holes (25%) were oriented at an average azimuth of 155^{o}. The remaining 43 holes ranged from vertical (15) to 180^{o} azimuth to variable azimuths. The principal azimuth of 209^{o} was oriented perpendicular to the strike of the mineralized Quevar Breccia (120^{o} az). In 2011, Golden Minerals changed the drilling azimuth to 155^{o} perpendicular to the 60^{o} – 70^{o} strike of extensional structures noted in the eastern underground workings. Later it was observed that holes drilled on the

155° azimuth encountered the mineralized structure at greater depth and had the same mineralized thicknesses indicting that holes with the 155° azimuth were cutting the principal structure on an oblique angle.

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 was 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. Following hole completion the collar location was surveyed by a licensed surveyor.

The standard procedure is for the drilling contractor to use a tricone bit through the overburden to solid rock and then set casing in the upper part of the hole before coring. Drilling was performed on a 24-hour basis using two 12-hour shifts. The drilling contractor is responsible for providing water trucks for the drilling. Drilling fluids are collected in a sump and decanted, with the clear water discarded.

Drilling is monitored by Silex supervisors, one per shift, who divide their time between drilling and camp responsibilities.

Downhole surveys were performed on all drill holes, generally using a Reflex Photobor and in some cases a Sperry Sun. Readings were made at 25 m intervals. After surveying was completed, a PVC pipe was placed in the hole and the collar cemented. The drill hole number, total depth, azimuth and inclination were stamped into a metal plate cemented into the collar pad. Due to the nature of the mineralization occurring as shoots and veins, the true width of the mineralization will vary both along strike and in the down dip direction. In areas where the strike and dip of the mineralization are well established, a true width for the mineralized intersection may be estimated. However, in areas of poor surface exposure or where there is no drilling or poor drilling, the true width of the mineralization may be impossible to estimate until further work is conducted.

The drill core is placed in wooden boxes holding 3 m of core at the drill and moved to the core shed at the Silex camp by a Silex supervisor or a technician. Active drills are visited two to three times per day by a geologist or the supervisor and the core is picked up twice daily. A shift report on drilling activities is provided by the drilling contractor.

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 drill hole number on the top and side of the core box. The technician also measures and records the geotechnical information including core recovery and rock quality designation (RQD).

The core is described on paper logs by the geologists who then enter the data into a computer. 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 a minimum of 2 to 3 m on either side of the zone.

A paper file is maintained for each stored drill hole, and a checklist for each item that must be completed for every hole is included in the file. The file includes a drill 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 on site primarily in a locked facility at the Silex camp.

10.3 *Quality of Drilling Data*

From the drilling perspective, PAH believes that the drilling density, core recovery, and drill hole location surveying are industry standard and acceptable for use in resource estimation.

11.0 SAMPLE PREPARATION, ANALYSIS, AND SECURITY

Section 11 has been adapted from the Micon Technical Report (August 2010) with additional attribution to the CAM Technical Report (January 2010). Updated information and comments by PAH are indicated in the text.

11.1 *Drill Core Handling and Sampling*

The treatment of drill samples prior to 2009 is discussed in the February 2009 SRK Technical Report. The January 2010 Technical Report by CAM discusses the treatment of 5,177 samples collected during the early 2009 drilling campaign. CAM concluded that "*the Yaxtché samples from early 2009 were prepared and assayed with acceptable precision and accuracy for a database destined for use in resource estimation."*

This section discusses the additional sampling undertaken by Silex during late 2009 and early 2010 drilling campaign. Micon considers that, based on its discussions with Golden Minerals and Silex personnel during the site visit, the treatment of drill samples was conducted to the same high standards of Quality Assurance/Quality Control (QA/QC) that were previously described by both SRK and CAM.

11.2 *Sample Security*

The security protocols mentioned in the SRK and CAM reports continue to be in effect and, after the samples are received by the assay laboratory, Golden Minerals and Silex have no further involvement with the sample preparation.

The drill core is maintained in a locked facility at the El Quevar campsite, before and directly after splitting. Older core is stored on pallets at the campsite. Golden Minerals' personnel are responsible for logging, sampling, splitting and shipping core to the laboratory facilities, as is standard practice in exploration programs. The insertion of standards and blanks is carried out at the core logging facilities at the camp. The duplicate coarse rejects and pulps are created at a fixed rate by each commercial laboratory upon Golden Minerals' instructions and these are returned to Golden Minerals where they re-enter the sample stream.

CAM noted in its January 2010, report that "*split core was formerly sent to the Silex office in Salta by Silex transport, then to the Alex Stewart lab in Mendoza by commercial carrier. Once the samples were received by Alex Stewart, Silex had no further contact with the samples. Starting in June, 2009, Silex personnel transport the split core directly from the project camp to Mendoza."* Micon discussed this procedure with Golden Minerals and confirmed that it is still being followed.

11.3 *Sample Preparation and Assaying Methods*

Three laboratories have prepared and assayed the samples from the El Quevar property. The QA/QC program for ALS Chemex was described by SRK in its 2009 Technical Report, and only one additional hole (QVD-078) assayed by ALS Chemex was used for the CAM resource estimation. Readers of this report are referred to the 2009 SRK report for details on the procedures employed by ALS Chemex.

11.3.1 PAH Comment

In Section 12 of the present report PAH provides a chronology and summary of the analytical work performed by four laboratories during Golden Minerals' tenure on the El Quevar property.

The following descriptions for the sample preparation methods for both Alex Stewart and ACME were obtained from the January 2010 CAM Technical Report.

"Sample Preparation and Assaying Methods – Alex Stewart Laboratory

> *Samples were shipped to the Alex Stewart laboratory in Mendoza, Argentina by Silex, where they were prepped and analyzed. Alex Stewart in Mendoza has ISO 9001: 2000 certification but does not have laboratory certification."*
>
> *The sample preparation procedure (P-5) consists of the following steps:*
>
> - *Receiving and checking sample identification numbers against submittal form.*
> - *Weighing.*
> - *Primary and secondary crushing to 80 percent passing 10 mesh.*
> - *Splitting in a riffle splitter to 800 grams +/- 100 grams.*
> - *Grinding to 85 percent passing 200 mesh.*
> - *200-gram sample is placed in a sample envelope.*
>
> *"The samples were analyzed for 39 elements by ICP (ICP-MA-390) with four-acid digestion of a 0.2-gram sample. The lower and upper detection limits for silver in this package are 5 and 2,000 ppm, respectively. All samples were analyzed for silver and gold by fire assay of a 50-gram sample with gravimetric finish for silver (AG4A-50) and Atomic Absorption (AA) finish for gold (Au4-50). The lower detection limit is 2 ppm for silver and 0.01 ppm for gold."*

"Sample Preparation and Assaying Methods – Acme Laboratories

> *The samples were shipped to the Acme facility in Mendoza, Argentina by Silex, where the samples were prepped. The pulps were returned to the Silex office in Mendoza where new sample identification numbers were assigned to the samples and QA/QC samples were inserted. The sample prep procedures (R-200) consist of the following:*

- *Receiving and checking sample identification numbers against the submittal form.*
- *Weighing.*
- *Crushing to 80 percent passing 10 mesh.*
- *Splitting to 250 grams.*
- *Pulverizing to 85 percent passing 200 mesh.*
- *Placing sample in sample envelope.*

"Samples are analyzed for 39 elements by ICP-MS (Group 1DX) analysis. Sample splits of 0.5 grams are leached in hot (95 degree Celsius) aqua regia. The silver over-limits are analyzed by gravimetric finish (AG-G6-Grav) with lower and upper detection limits of 5 and 10,000 ppm, respectively. Gold is analyzed (Au-GRA22), with lower and upper detection limits of 0.05 and 1,000 ppm respectively. Over-limit samples of lead, zinc, and copper are analyzed by 7AR with a multi-acid digestion."

11.4 *QC/QC Procedures*

This section is largely reproduced from the January 2010 Technical Report by CAM. Micon discussed the QA/QC procedures with Golden Minerals and there have been no significant changes to the procedures since the publication of the CAM report.

"Golden Minerals currently has a QA/QC program comprising two types of blanks, three types of duplicates, six precious-metal standard reference samples and four base-metals standards. For surface samples such as trenches (none of which were added in the 2009 campaign) Golden Minerals inserts a standard, coarse blank and pulp blank at a frequency of one per 50 samples or approximately 2 percent. For the 2009 drilling program, the following QA/QC samples were inserted into the sample stream:

- *Standard: one per 20 samples (5 percent).*
- *Coarse Duplicate: one per 20 samples (5 percent).*
- *Pulp Duplicate: one per 20 samples (5 percent).*
- *Core Duplicate: one per 50 samples (2 percent).*
- *Pulp Blank and Coarse Blank: one per 20 samples (5 percent)."*

"The QA/QC samples for the 2009 drill campaign reported here totaled 1,125 samples, or 21.73 percent of the shipped samples."

"Blanks. *The coarse blank and precious metal standards are site-specific. The coarse blank is from an unaltered, post-mineral dacite flow, 3.5 kilometres southeast of the El Quevar camp. Apex Silver purchased a fines blank from Alex Stewart Assay (ASA)."*

"Standards. *The precious-metal standards were generated from material collected at the site and prepared by Alex Stewart Assay. Base-metal standards are certified reference material purchased from Geostats Pty Ltd. in Australia."*

*“**Core Duplicates.** One-quarter of the original core was collected from every 50th split core sample, to ensure that the assay results represent the natural variability of mineralization.”*

*“**Coarse Reject Duplicates.** A coarse sample-preparation was collected by the lab after the crushing stage, in order to test the adequacy of the crushing size. Golden Minerals requested that coarse duplicates be made at a frequency of 1 in 20 samples.”*

*“**Pulp Duplicates.** Pulp duplicates were made after the pulverization stage to test the accuracy of the laboratory. Golden Minerals requested that pulp duplicates be made at a frequency of 1 in 20 samples.”*

11.5 *QA/QC Results*

11.5.1 PAH Comments

As part of the data verification process, PAH conducted a detailed review and analysis of the drill hole assay database used in the current resource estimate. The PAH approach was to compile and examine all past and current QA/QC control sample results and to treat them as one large data set, specifically, with respect to three types of control samples:

- The control samples inserted by Silex into the sample stream sent to the laboratory;
- The internal lab control samples assayed by Alex Stewart Laboratory in Mendoza, Argentina;
- Conduct an independent, blind check sample program to confirm the accuracy and precision of silver analyses on high-grade samples greater than 200 ppm Ag.

The results of PAH’s examination of Golden Minerals QA/QC results are given in Section 12 of the present report. Based on PAH’s detailed review of QA/QC and control sample results, PAH believes that the assay database is industry standard and suitable for resource estimation.

12.0 DATA VERIFICATION

12.1 *Site Visit*

Craig Horlacher and John Zeise of PAH visited the El Quevar Project with representatives from Golden Minerals Company from October 4-7, 2011.

During the site visit, PAH personnel spent four days reviewing core from 12 drill holes including the core logging, sampling and assaying procedures and the general exploration, drilling, QA/QC and the recently completed underground exploration development.

Cores from 12 drill holes were examined to confirm accuracy and consistency of the sampling and geological logging. By visual comparison of the core with the corresponding logsheets and assays PAH verified that the logging and sample intervals had been correctly recorded.

Drill collar locations were checked by comparison of collar locations with digital topography of the Project area. PAH observed that the collar elevations for approximately 12 drill holes were inconsistent with the current digital topography. Golden Minerals then provided updated collar elevation information for these holes.

PAH reviewed 78 drill holes, approximately 29 percent of the drill holes in the February 9, 2012 database and checked the database assays against the lab certificates. As discussed in Section 14.1, PAH identified several inconsistencies in the assay database for which the corresponding corrective actions were taken.

During this visit, a validation of several hole collar positions was undertaken by PAH using GPS. Many hole collars had been obliterated due to the Company's site reclamation activities.

12.2 *Database Validation*

PAH completed a review of Golden Minerals' drill hole database which included a review of assay certificates, drill logs, samples books and historical database. PAH found robust records allowing easy data auditing. A comparison was made between assay certificates for the 26 holes available at the time of the site visit.

During this review and audit by PAH, a number of observations were noted, including:

- Field checking, original drill logs, and database were all consistent showing the appropriate angle and inclination of the drill holes completed;
- Sample intervals were correct for assays entered. PAH noted only one error in the updated database caused by typographical error;

- The assay certificates, drill logs and sample sheets were available for all drill holes;
- Loading of assay data from laboratory certificates was correct;
- During the 2011 drilling program, Golden Minerals assayed all intervals for silver by two analytical methods, ICP with reruns greater than 200 ppm Ag by the fire assay-gravimetric method (50 gram charge) at the same laboratory (Alex Stewart Lab, Mendoza);
- During the 2011 drilling program approximately 12,051 samples, including control samples, were submitted for analysis. The total meterage drilled in 2011 was 38,967 m; and
- During this audit, no issues with the conversion of the database were identified.

12.3 *Core Handling and Sampling Procedures*

Processing and sampling of core is performed in a well-appointed metal building at the El Quevar camp. The facility has separate rooms for a geology office, core cutting and a large area for laying out, sampling and storage of core. During the site visit, PAH observed the handling and sampling of core which is industry standard. New NQ-size core is laid out, washed, measured from block to block to determine recovery which is typically 90 percent overall. A technician marks sample intervals for bulk density measurements every 4-6 boxes and performs RQD measurements. The geologist lays out the 1-m sample intervals and logs the core. The practice is to sample 10-15 meters above and below the mineralized zone. The core is cut by a diamond saw into 1 meter samples weighing about 2-3 kg and bagged. Sample tags are a fixed on the inside and outside of the bags. Multiple sample bags are placed in large rice bags and sealed with wire. The rice bags are stored in the shed which is generally not locked but the remote location and 24 hr security guards provide a measure of sample security. Depending on the drill production, a third party contractor is consigned to haul the samples to Salta where they are stored until shipped to ASL in Mendoza. In times of high drilling activity, the samples are sent directly from the camp to the lab in Mendoza. Chain of custody is maintained in the form of commercial shipping documents.

Coarse reject samples are paletted, covered in plastic and stored in the camp yard while sample pulps are boxed and stored at the camp or at the laboratory.

12.4 *Sample Preparation and Assaying Methods*

As part of the data verification process, PAH conducted a detailed review and analysis of the drill hole assay database. The PAH approach was to organize and examine three types of analytical data:

- The control samples inserted by Silex into the sample stream sent to the laboratory;
- The internal lab control samples assayed by Alex Stewart Laboratory in Mendoza, Argentina; and

- Conduct an independent, blind check sample program to confirm the accuracy and precision of silver analyses on high-grade samples greater than 200 ppm Ag.

Since initiation of the El Quevar Project in 2006, four commercial laboratories have prepared and assayed the samples from the property, including ALS Chemex laboratory (ALS), Alex Stewart laboratory (ASA), ACME laboratory (ACME) and SGS laboratory (SGS). The QA/QC program for ALS Chemex was described by SRK in the 2009 Technical Report. The QA/QC programs for Alex Stewart and ACME was described by Micon in the 2010 Technical Report. Readers of this report may refer to those Technical Reports for additional details regarding sample preparation and assaying methods. To date, almost 74 percent of assays have been analyzed by ASA laboratory in Mendoza, followed by ALS laboratory at 15 percent of samples (Figure 12-1).

The following contains a brief description of the sample preparation methods for both Alex Stewart and ACME taken from the January, 2010, CAM Technical Report.

12.4.1 Alex Stewart Laboratory: Sample Preparation and Assaying Methods

Samples were shipped to the Alex Stewart laboratory in Mendoza, Argentina by Silex, where they were prepped and analyzed. Alex Stewart in Mendoza has ISO 9001: 2000 certification but does not have laboratory certification.

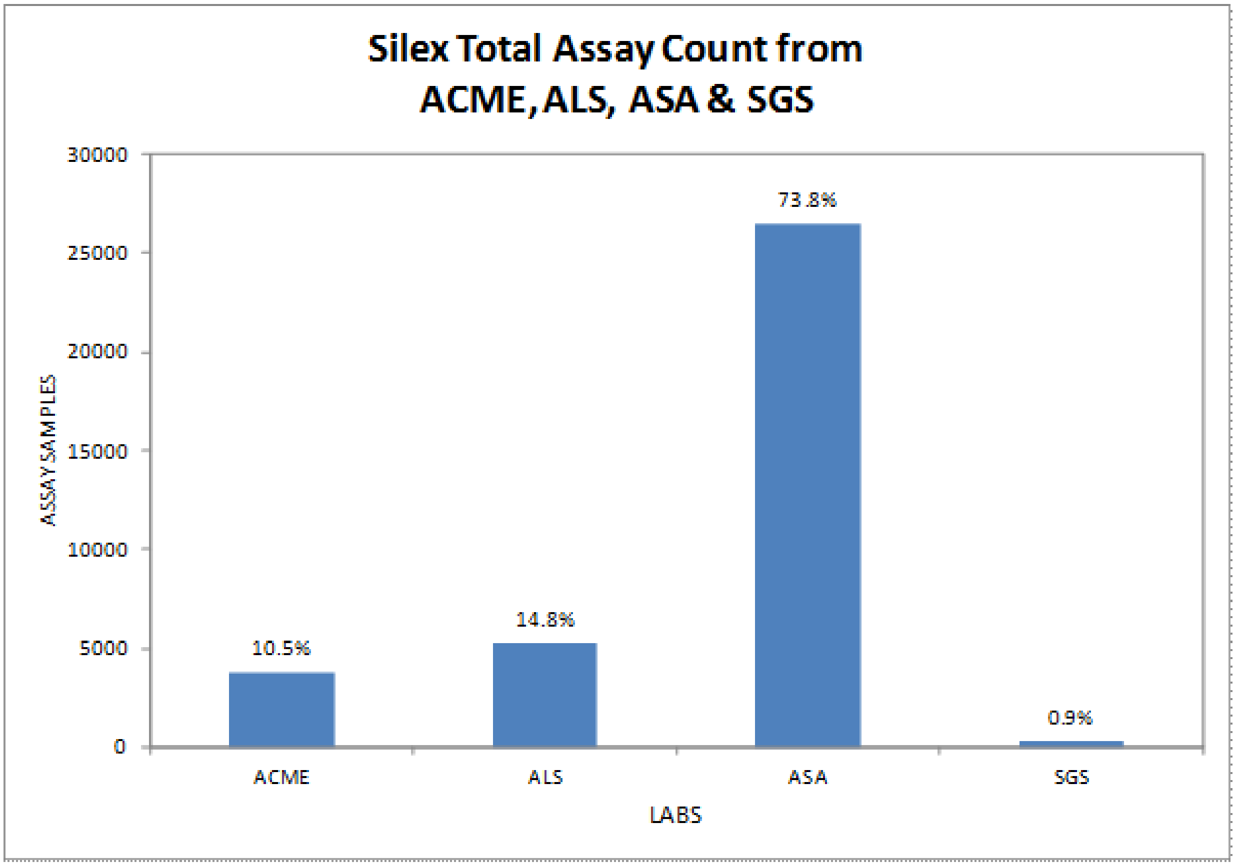
- *Receiving and checking sample identification numbers against submittal form.*
- *Weighing.*
- *Primary and secondary crushing to 80 percent passing 10 mesh.*
- *Splitting in a riffle splitter to 800 grams +/- 100 grams.*
- *Grinding to 85 percent passing 200 mesh.*
- *200-gram sample is placed in a sample envelope.*

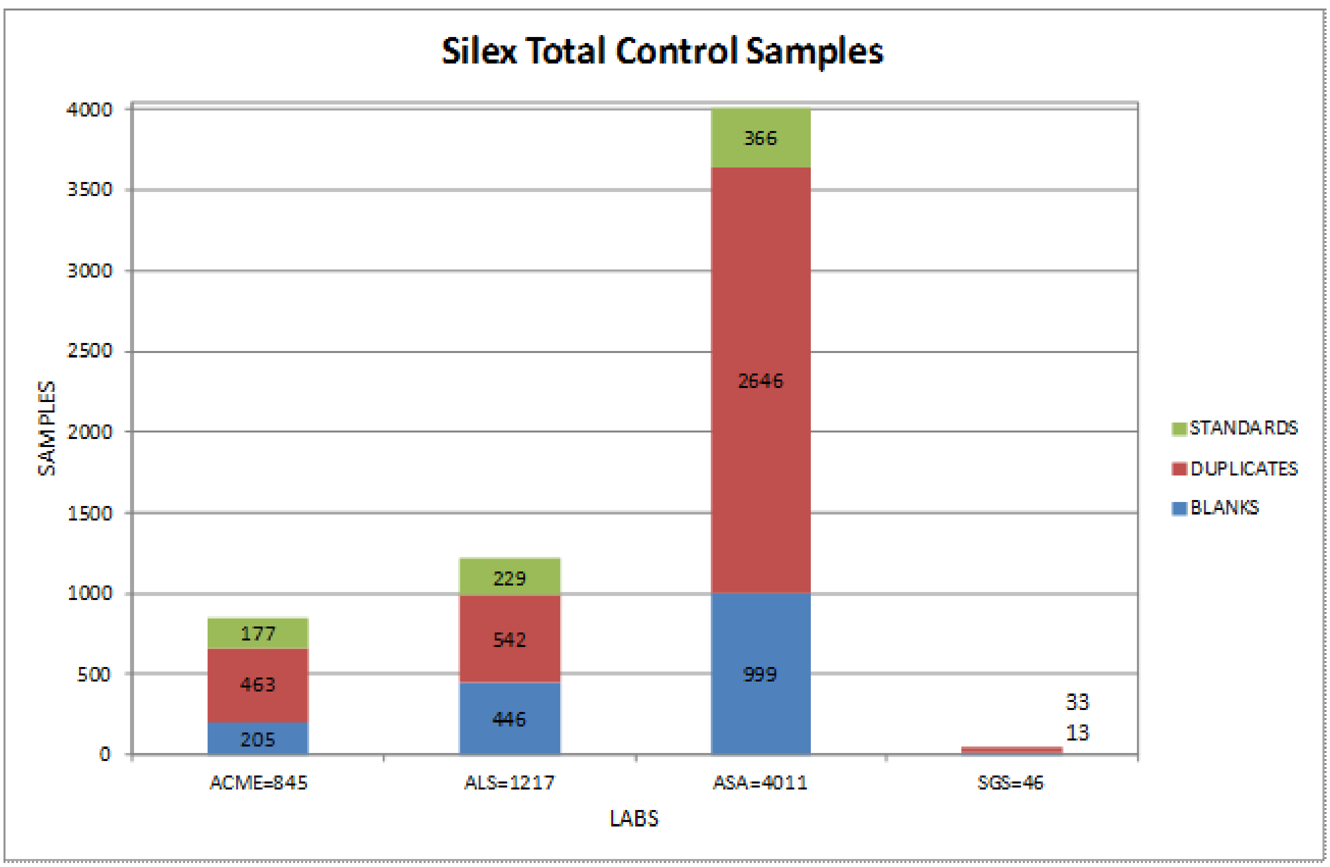
The samples were analyzed for 39 elements by ICP (ICP-MA-390) with four-acid digestion of a 0.2-gram sample. The lower and upper detection limits for silver in this package are 5 and 200 ppm, respectively. All samples greater than 200 ppm silver were analyzed for silver and gold by fire assay of a 50-gram sample with gravimetric finish for silver (AG4A-50) and Atomic Absorption (AA) finish for gold (Au4-50). The lower detection limit is 2 ppm for silver and 0.01 ppm for gold.

12.4.2 Acme Laboratories: Sample Preparation and Assaying Methods

The samples were shipped to the Acme facility in Mendoza, Argentina by Silex, where the samples were prepped. The pulps were returned to the Silex office in Mendoza where new sample identification numbers were assigned to the samples and QA/QC samples were inserted. The sample prep procedures (R-200) consist of the following:

- *Receiving and checking sample identification numbers against the submittal form.*
- *Weighing.*





Prepared by pincock, allen & holt 165 S. Union Boulevard, Suite 950 Lakewood, Colorado 80228 Phone (303) 986-6950	Drawing Provided by/Prepared for ***Golden Minerals Co.***	FIGURE 12-1 Summary of Assays and Control Samples by Lab	Date of Issue May 2012
Project No. DE-00196	Project Name El Quevar Project		Drawing Name Fig.12-1.dwg

- *Crushing to 80 percent passing 10 mesh.*
- *Splitting to 250 grams.*
- *Pulverizing to 85 percent passing 200 mesh.*
- *Placing sample in sample envelope.*

"Samples are analyzed for 39 elements by ICP-MS (Group IDX) analysis. Sample splits of 0.5 grams are leached in hot (95 degree Celsius) aqua regia. The silver over-limits are analyzed by gravimetric finish (AG-G6-Grav) with lower and upper detection limits of 5 and 10,000 ppm, respectively. Gold is analyzed (Au-GRA22), with lower and upper detection limits of 0.05 and 1,000 ppm respectively. Over-limit samples of lead, zinc, and copper are analyzed by 7AR with a multi-acid digestion."

The following description for ALS Chemex was taken from the February, 2009 Technical Report by SRK Consulting.

12.4.3 ALS Chemex: Sample Preparation and Assaying Methods

Samples were shipped to the ALS Chemex laboratory in Mendoza, Argentina by Silex, where the samples were prepped. The pulps were returned to the Silex office in Mendoza where new sample identification numbers were assigned to the samples and QA/QC samples were inserted. The sample prep procedures (Prep-31) consist of the following:

- *Receiving and checking sample identification numbers against the submittal form.*
- *Weighing.*
- *Crushing to 70% passing 10 mesh.*
- *Splitting to 250g.*
- *Pulverizing to 85% passing 200 mesh.*
- *Placing sample in envelope.*

12.4.4 SGS: Sample Preparation and Assaying Methods

Samples are analyzed for 39 elements by ICP-MS (Group IDX) analysis. The silver over-limit analyses are analyzed by fire assay with gravimetric finish (AG-G6-Grav) with lower and upper detection limits of 5 and 10,000 ppm. Gold is analyzed (Au-GRA22), with lower and upper detection limits of 0.05 and 1,000 ppm respectively. Over limit samples of lead, zinc, and copper are analyzed by 7AR with a multi-acid digestion.

12.5 *Silex Quality Assurance/Quality Control Procedures*

The following brief descriptions of Silex's control samples are taken from the August 10, 2010 Micon Technical Report.

"Blanks. *The coarse blank and precious metal standards are site-specific. The coarse blank is from an unaltered, post-mineral dacite flow, 3.5 kilometres southeast of the El Quevar camp. Apex Silver purchased a fine blank from Alex Stewart Assay (ASA)."*

"Standards. *The precious-metal standards were generated from material collected at the site and prepared by Alex Stewart Assay. Base-metal standards are certified reference material purchased from Geostats Pty Ltd. In Australia."*

"Core Duplicates. *One-quarter of the original core was collected from every 50th split core sample, to ensure that the assay results represent the natural variability of mineralization."*

"Coarse Reject Duplicates. *A coarse sample-preparation was collected by the lab after the crushing stage, in order to test the adequacy of the crushing size. Golden Minerals requested that coarse duplicates be made at a frequency of 1 in 20 samples."*

"Pulp Duplicates. *Pulp duplicates were made after the pulverization stage to test the accuracy of the laboratory. Golden Minerals requested that pulp duplicates be made at a frequency of 1 in 20 samples."*

A total of 35,910 samples were submitted by Silex for assay. Of these samples, 5,877 or (16%) comprised the several types of control samples shown on Table 12-1.

TABLE 12-1
Golden Minerals Company
El Quevar Project - Yaxtché Deposit
Summary of Control Samples 2006 to 2011

Sample Type	Number of Samples	R^2 Value
Coarse Blank	1,283	
Fine Blank	380	
Coarse Duplicate	1,424	0.95
Fine Duplicate	1,408	0.98
Field Duplicate	673	0.88
Duplicate	10	0.69
Standard	699	
Total Control Samples	5,877	
Assays	29,777	

Data compiled from Silex drilling database of February 9, 2012.
Percentage of control samples to assays: 20%
R^2 - correlation coefficient from scatter plots.

PAH compiled 35,910 assay determinations of which 35,654 could be used for analysis. 256 entries (less than 1%) could not be used due to errors and inconsistencies with the labs. Examples of these errors include; 169 duplicate samples contained no sample numbers or original sample numbers; of the 772 standards 73 contained no sample number or standard name; two samples contained no lab or sample number; and 12 samples were aborted. Those samples containing errors were not included in the analysis. Figure 12-1b shows the distribution of control sample types by lab.

12.5.1 Blanks

A total of 380 fine blanks and 1,283 coarse blanks were analyzed to test for cross-contamination from sample to sample during crushing and pulp separation. Of the 380 fine blanks assayed, only one sample was above 1 ppm Ag. Of the 1,283 coarse blanks assayed, 23 were above 1 ppm Ag. The results from the blank sample analysis indicate there has been no contamination during the sample preparation stage.

12.5.2 Duplicates

Three types of duplicates were inserted into the sample stream; these included 2,816 fine duplicate pairs, 1,424 coarse duplicate pairs and 673 field duplicate pairs. The graphs show good correlation between original and duplicate samples analyzed for silver with the correlation coefficient R^2-values ranging from 0.8756 to 0.9849. The three types of duplicate sample analyses that were routinely submitted by Silex show acceptable level levels of variance.

12.5.3 Standards

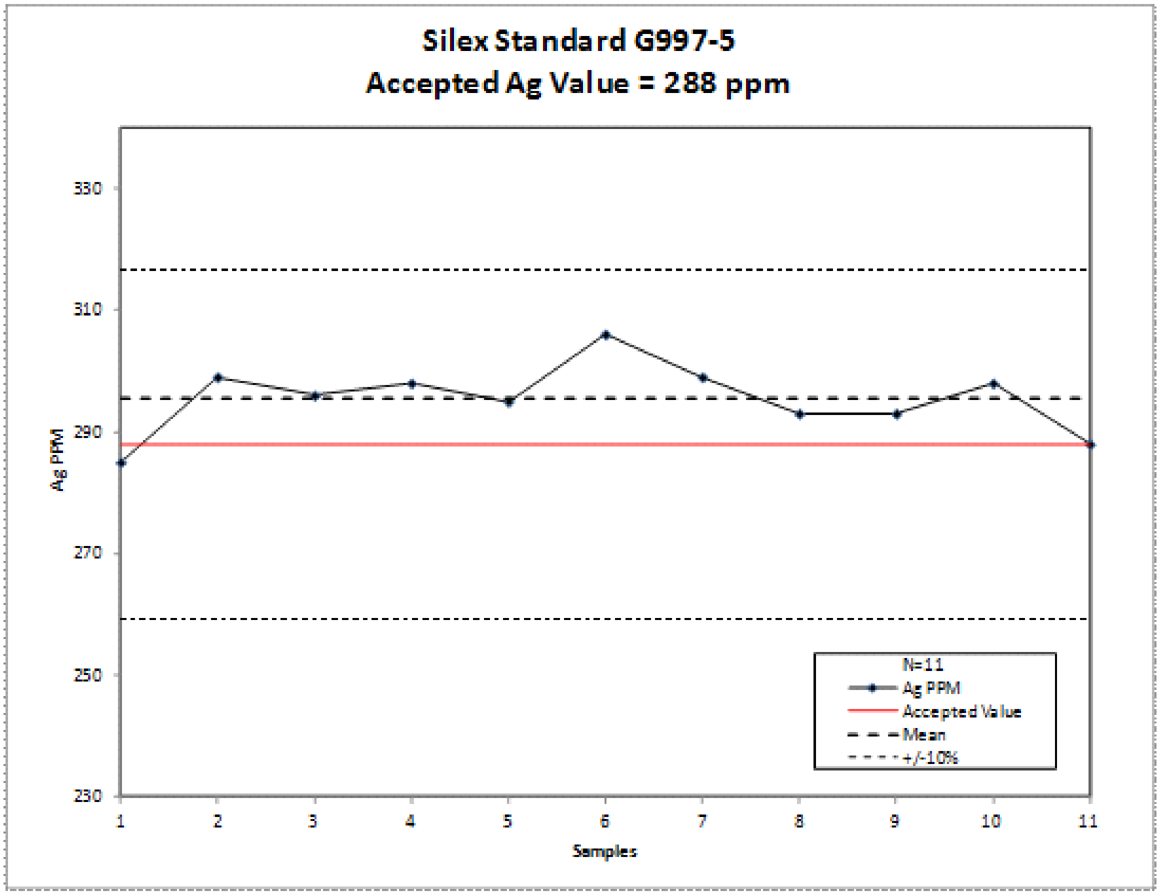
Table 12-2 lists standard reference materials that PAH chose to review and graphically display. These standards were chosen to show a range of silver concentrations.

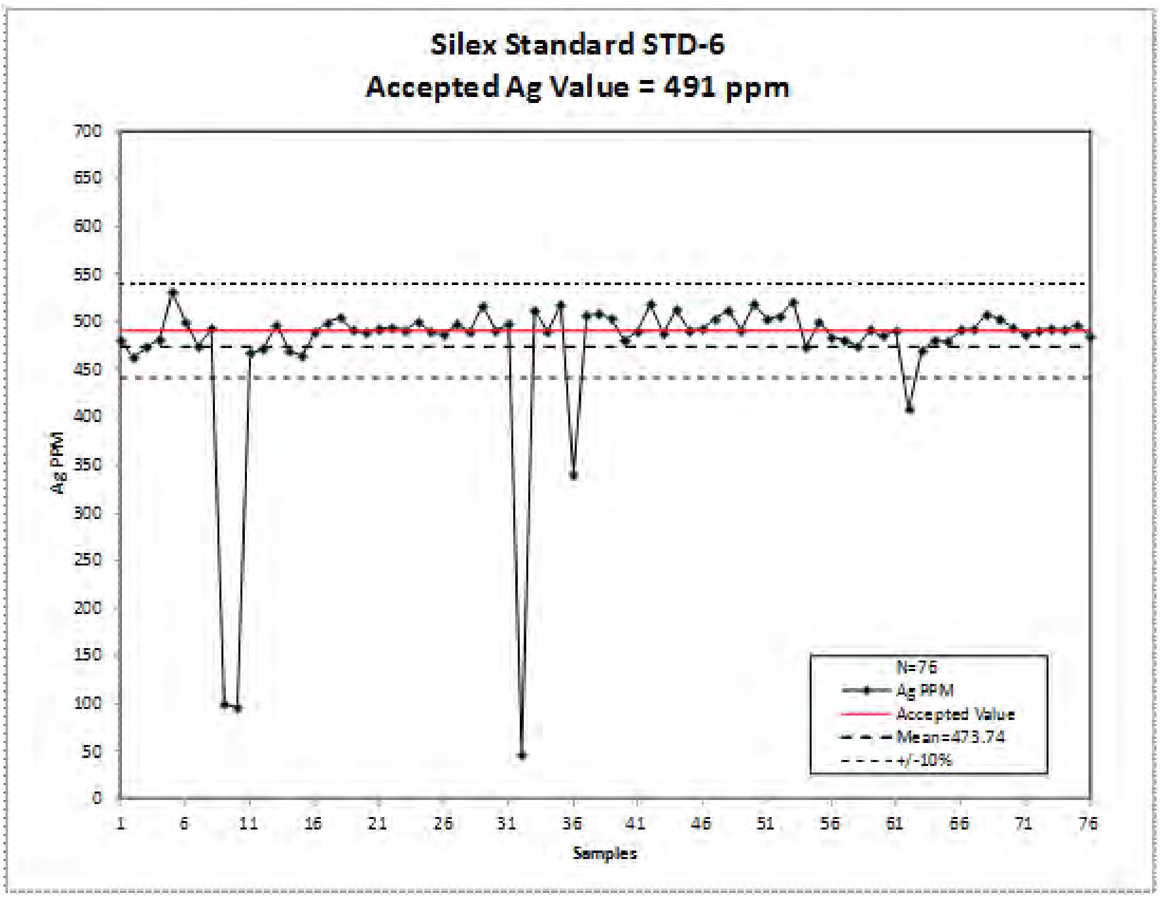
TABLE 12-2
Golden Minerals Company
El Quevar Project - Yaxtché Deposit
Summary of Standard Materials used in Plots

Standard	Number of Samples	Accepted Value Ag PPM
STD-54002417	16	12
G301-5	11	154
G997-5	11	288
STD-54003845	10	885
STD-1	85	18
STD-4	91	34
STD-3	73	129
STD-6	76	491

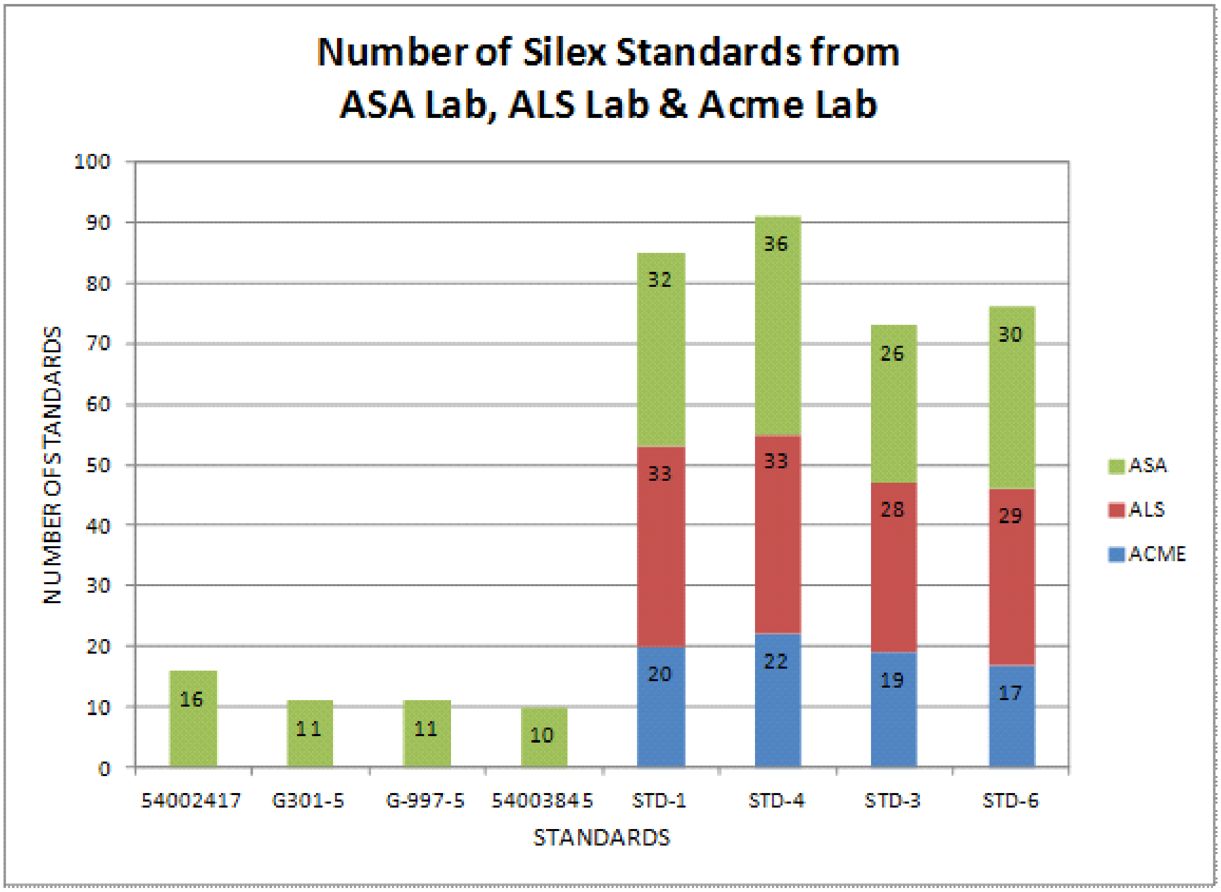
Figure 12-2 shows that Silex standard G997-5 was the only standard to stay within +/- 10 percent of the accepted value. The other 7 graphs, exemplified by the graph for standard STD-6, show anomalous spikes perhaps due to laboratory errors or mislabeling. If one ignores the five outlier points, the graph of STD-6 also displays good accuracy and precision over a long time period. Figure 12-3 displays the number of Silex standards processed by the labs.

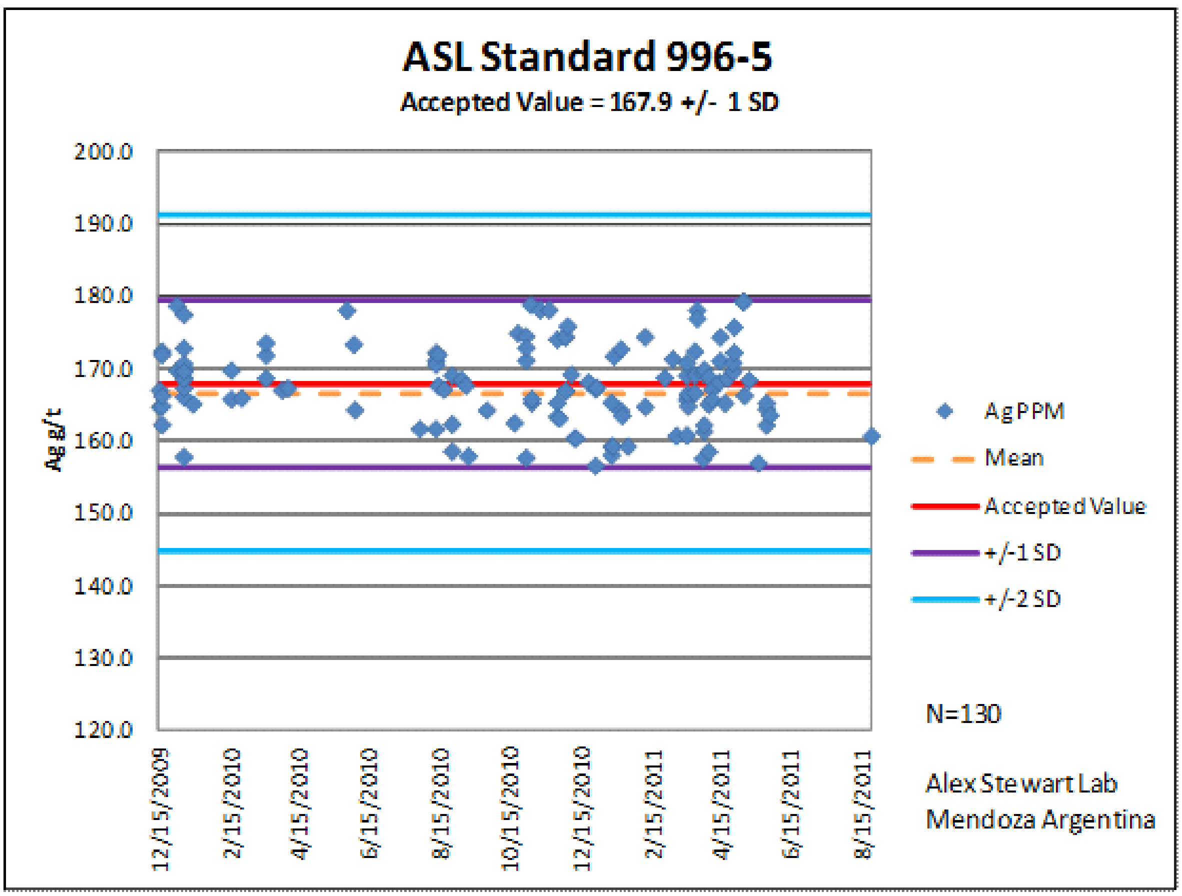
Review of the blank sample results does not indicate signs of sample cross contamination during sample prep. Analysis of duplicates and standard materials suggest that silver assays are reasonably accurate





Prepared by	Drawing Provided by/Prepared for		Date of Issue
pincock, allen & holt 165 S. Union Boulevard, Suite 950 Lakewood, Colorado 80228 Phone (303) 986-6950	***Golden Minerals Co.***	FIGURE 12-2 Standards G997-5 & STD-6	May 2012
Project No. DE-00196	Project Name El Quevar Project		Drawing Name Fig.12-2.dwg





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pincock, allen & holt 165 S. Union Boulevard, Suite 950 Lakewood, Colorado 80228 Phone (303) 986-6950	***Golden Minerals Co.***	FIGURE 12-3 Graph of Standards by Labs	May 2012
Project No. DE-00196	Project Name El Quevar Project		Drawing Name Fig.12-3.dwg

and precise. PAH's analysis of blanks, duplicates and standard reference materials submitted by Silex to the labs are positive indications that assay results from 2006 to 2011 are reliable and suitable for use in resource estimation.

PAH did note a gap in Silex's submission of standard materials to the labs between approximately December 2009 and December 2011. Lacking Silex's standard analyses, instead PAH reviewed the internal control sample results reported by Alex Stewart Laboratory to assess QA/QC as discussed below.

12.6 *Laboratory Internal Control Sample Program*

Golden Minerals requested that Alex Stewart Laboratory provide its internal control sample results for the period December 2009 to August 2011. Having reviewed the lab's internal control sample data, PAH found that ASL was not inserting high-grade silver standards in the sample stream going to the fire assay-gravimetric analysis. Approximately 9 percent of the samples (~1,100) assayed were >200 ppm and did not have corresponding standards analyzed by fire assay gravimetric.

The high-grade silver standard 999-3 has an accepted value of 291 ppm Ag (+/- 16). When inserted into the sample stream its analysis would be reported in the ICP field as ">200 ppm" with no value reported in the fire assay-gravimetric data field.

Another issue regarding the internal control sample program was an insufficient quantity of high-grade silver standards inserted, knowing the previous samples assayed originated from a high-grade silver deposit. For example, standard G 397-8 has an accepted silver value of 410 ppm and only 4 standards were inserted into the sample stream. The low to high-grade silver standards chosen for graphical representation all fall within their respective +/- 1 standard deviation. Figure 12-3 graphically shows standard 996-5 falling within +/- one standard deviation of the accepted value.

12.7 *High-Grade Check Sample Program*

Due to the absence of fire assay gravimetric analyses on high-grade silver standards from December 2009 to August 2011, PAH requested a blind check sample program to confirm the accuracy and precision of high-grade silver analyses. One hundred and fifty two high-grade silver pulp samples were retrieved from storage in Argentina and forwarded to Minerals Exploration Geochemistry (Reno) where the pulps were dried, blended and repackaged with new sample numbers. Three high-grade certified standards were inserted in the renumbered sample stream. MEG forwarded 170 blinded splits to Alex Stewart Lab in Argentina and the American Assay Lab (Reno). The high-grade check samples ranged from 200 to 9,500 ppm Ag, averaging 1,185 ppm with a median value of 642 ppm Ag. The samples were rerun for silver at the laboratories by fire assay-gravimetric on 25 gram assay charges, necessitated by the shortage of material for some samples. The list of check samples with original analyses was kept confidential until the program was completed.

12.7.1 American Assay Laboratory Check Sample Results

Of the 152 pulps, only 151 were re-assayed by American Assay Laboratory and compared to the original samples assayed by Alex Stewart Laboratory. Figure 12-4 graphically compares the results from the two labs and displays an acceptable correlation with an R^2 value of 0.9205.

PAH requested that MEG (Reno) insert three high-grade standards into the sample stream. Table 12-3 displays the two internal standards inserted by American Assay Laboratory and the three standards requested by PAH.

TABLE 12-3
Golden Minerals Company
El Quevar Project - Yaxtché Deposit
American Assay (Reno) Standards Analyzed During Check Sample Test

AAL Standard	Number of Standards	Accepted Value Ag ppm	Std. Dev.
CU154 (internal)	4	174.6-213.4	
OXQ75 (internal)	4	138.5-169.3	
CU112	5	358.9	9.28
PB131	6	262	
PM1140	4	1658	

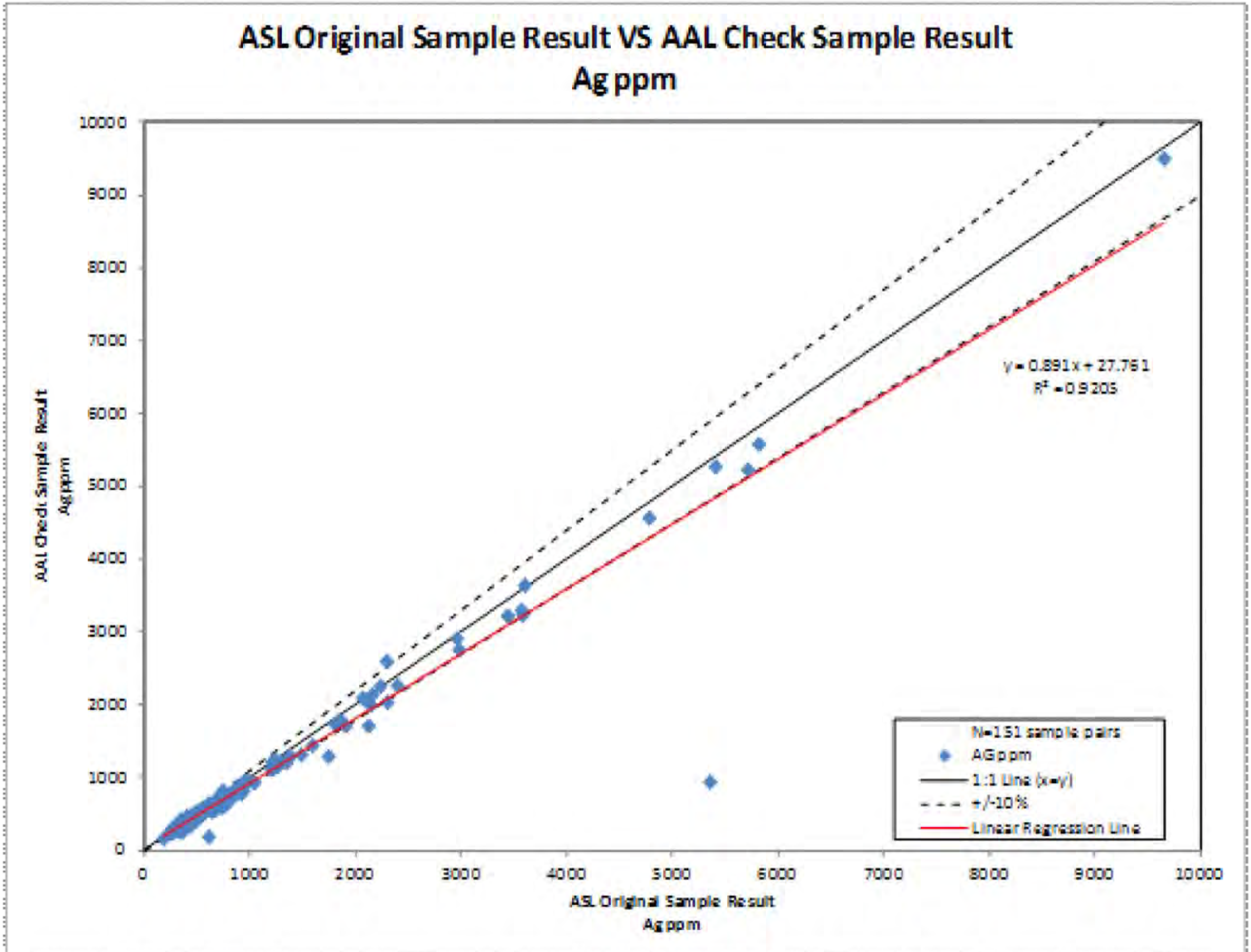
Standard CU112 had one sample that fell just below two standard deviations of the 358.9 ppm accepted silver value and the other two standards fell within +/-10 percent of the accepted value. Figures 12-5 and 12-6 graphically display standards CU112, PB131 and PM1140 which show acceptable accuracy and precision for the small number of standards analyzed in the check sample program.

The two internal standards CU154 and OXQ75 inserted by American Assay Laboratory also fell within satisfactory upper and lower accepted ranges. In addition to the standards, American Assay Laboratory conducted sixteen repeats of samples, and analysis of these samples revealed an R^2 value of 0.9994.

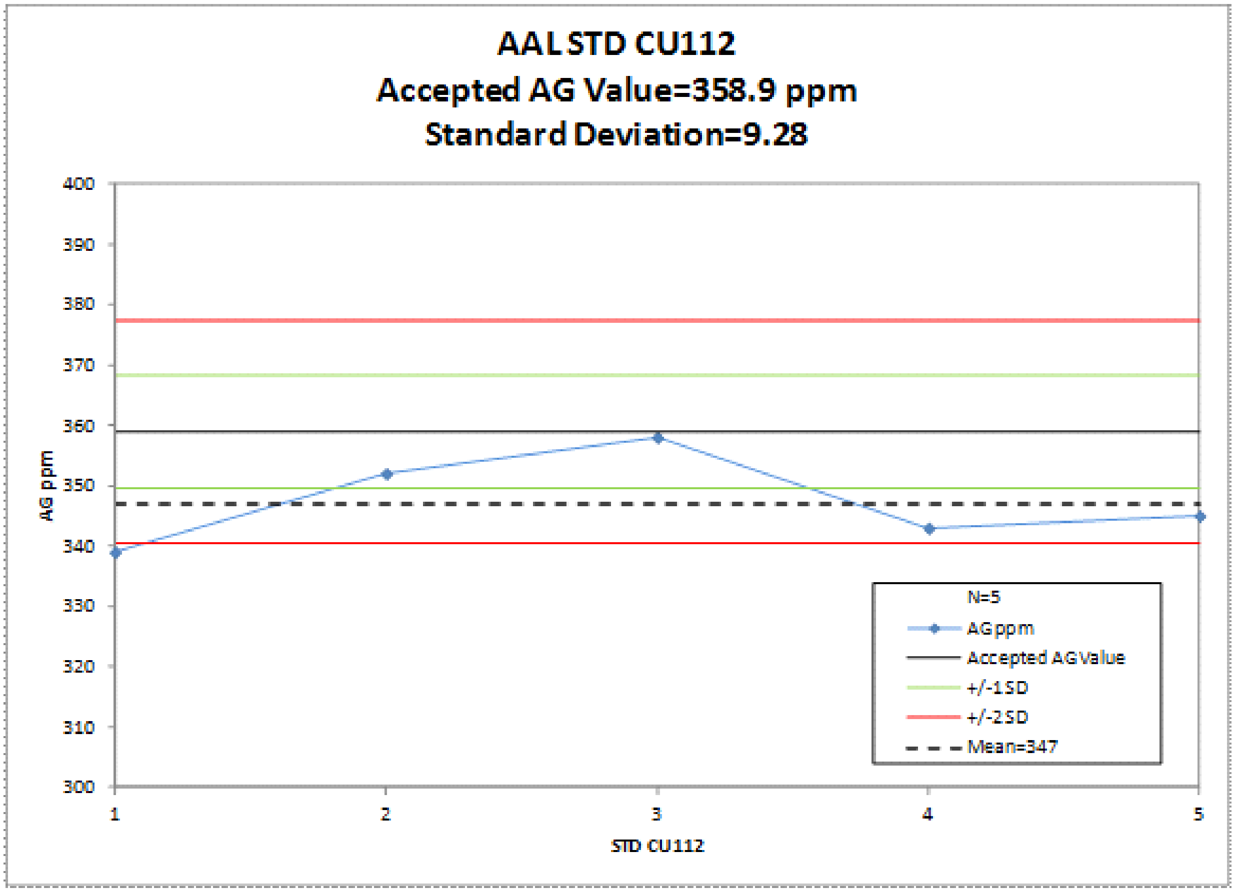
12.7.2 Alex Stewart Laboratory Check Sample Results

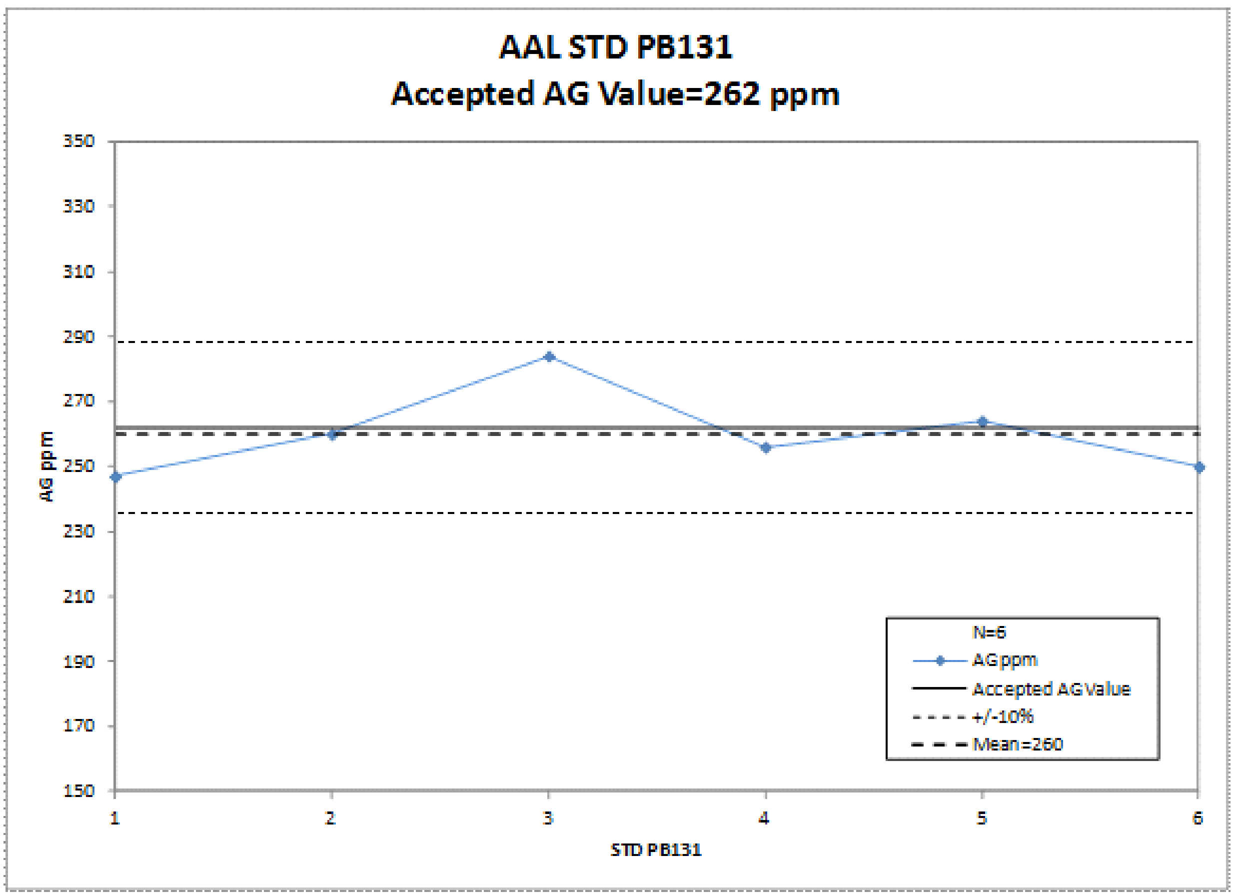
One hundred and seventy high-grade samples were re-assayed by Alex Stewart Laboratory and were compared to their original samples assayed. Figure 12-6 graphically compares the Alex Stewart Laboratory original sample results with the re-assay sample results, showing a good correlation with an R^2 value of 0.9249.

The three internal standards inserted by Alex Stewart Laboratory and the three standards requested by PAH are summarized on Table 12-4.



Prepared by **pincock, allen & holt** 165 S. Union Boulevard, Suite 950 Lakewood, Colorado 80228 Phone (303) 986-6950	Drawing Provided by/Prepared for ***Golden Minerals Company***	FIGURE 12-4 Graph Comparing High Grade Silver Values Assayed by Alex Stewart Lab and American Assay Lab	Date of Issue May 2012
Project No. DE-00196	Project Name El Quevar Project		Drawing Name Fig.12-4.dwg





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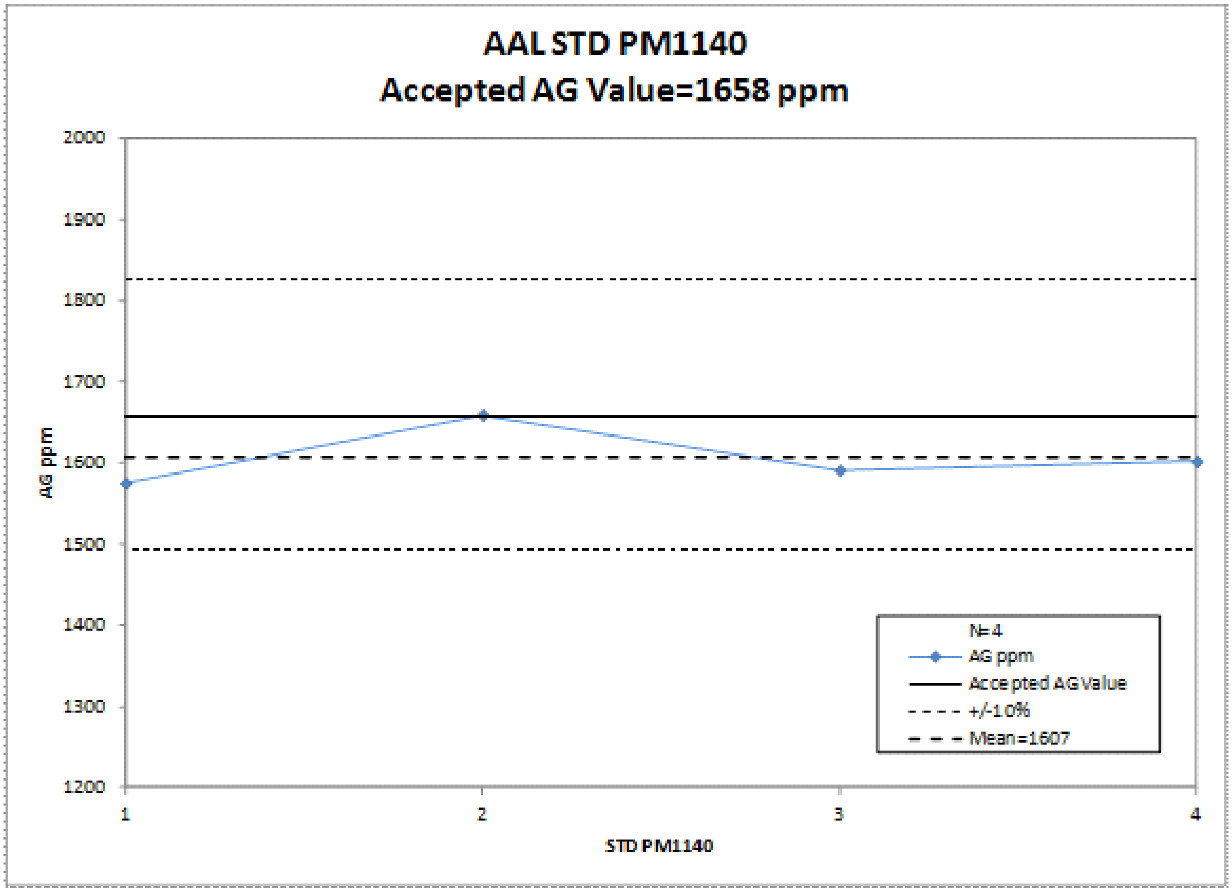
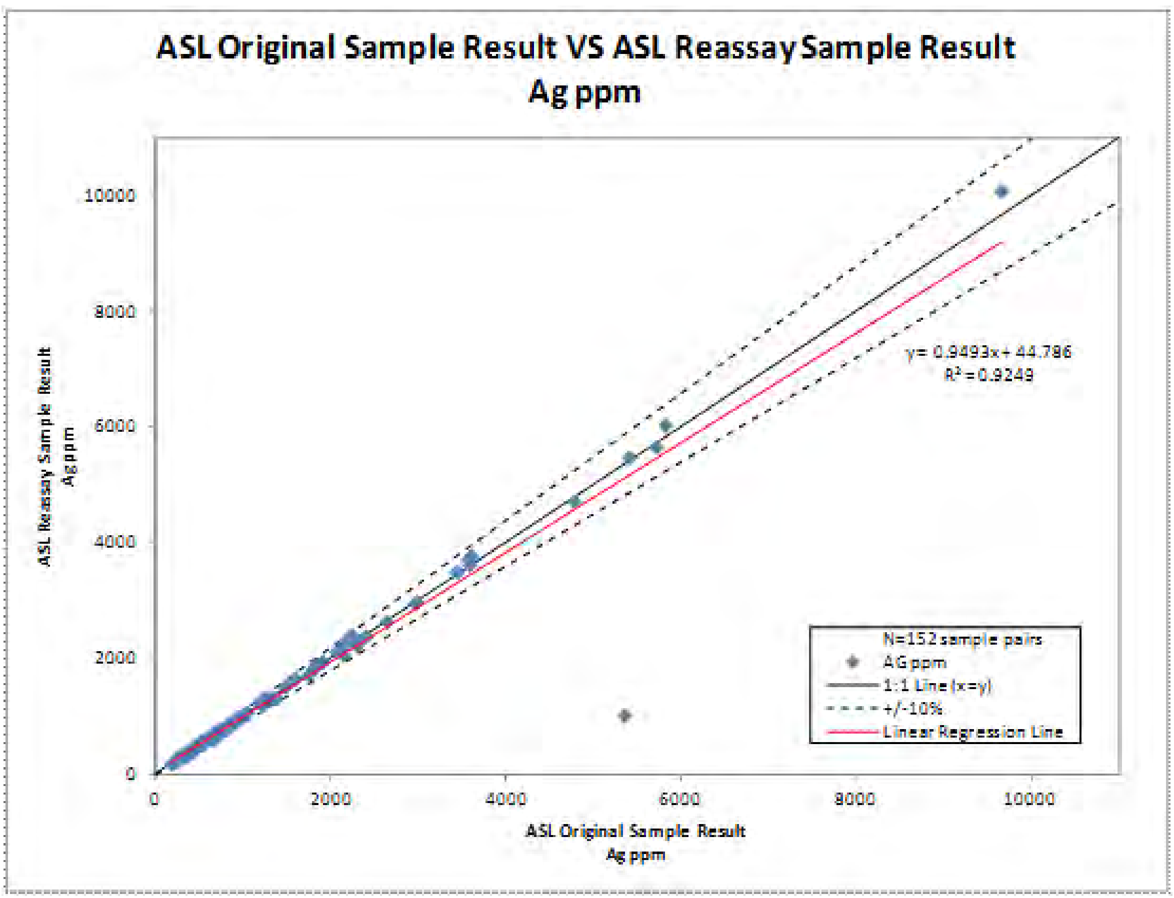
pincock, allen & holt 165 S. Union Boulevard, Suite 950 Lakewood, Colorado 80228 Phone (303) 986-6950	**Golden Minerals Co.**	FIGURE 12-5 Standards CU112, PB131 Assayed by American Assay Laboratory	May 2012
Project No. DE-00196	Project Name El Quevar Project		Drawing Name Fig.12-5.dwg





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pincock, allen & holt 165 S. Union Boulevard, Suite 950 Lakewood, Colorado 80228 Phone (303) 986-6950	***Golden Minerals Co.***	FIGURE 12-6 Comparison of Alex Stewart Laboratory Original Samples vs. Reassay Samples	May 2012
Project No. DE-00196	Project Name El Quevar Project		Drawing Name Fig.12-6.dwg

TABLE 12-4
Golden Minerals Company
El Quevar Project - Yaxtché Deposit
Alex Stewart Lab (Mendoza), Internal and External Standards Analyzed During Check Sample Program

ASL Standard	Number of Standards	Accepted Value Ag ppm
305-3 (internal)	6	5
310-8 (internal)	4	24
SP49 (internal)	5	60.2
CU112	5	358.9
PB131	6	262
PM1140	4	1,658

Figure 12-7 graphically displays the analyses of the standards requested by PAH. All standards are within +/- 10 percent of their respective accepted values.

Two of the three internal standards inserted by Alex Stewart Laboratory also fell within +/- 10 percent of their respective accepted values. Standard 305-3 shows one sample falling below 10 percent. Alex Stewart assayed eighteen duplicate pairs, and analysis of these samples revealed an R^2 value of 0.9944.

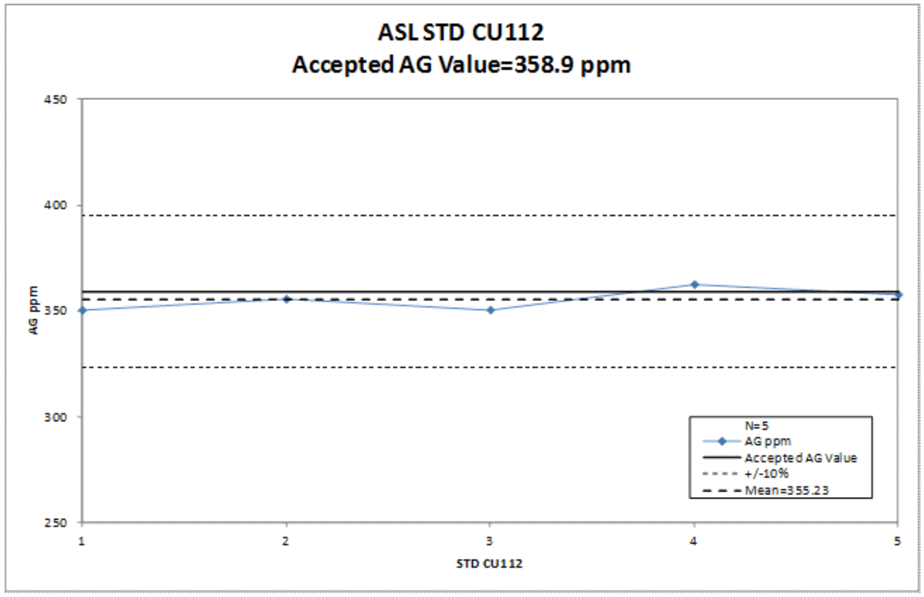
12.8 *Recommendations*

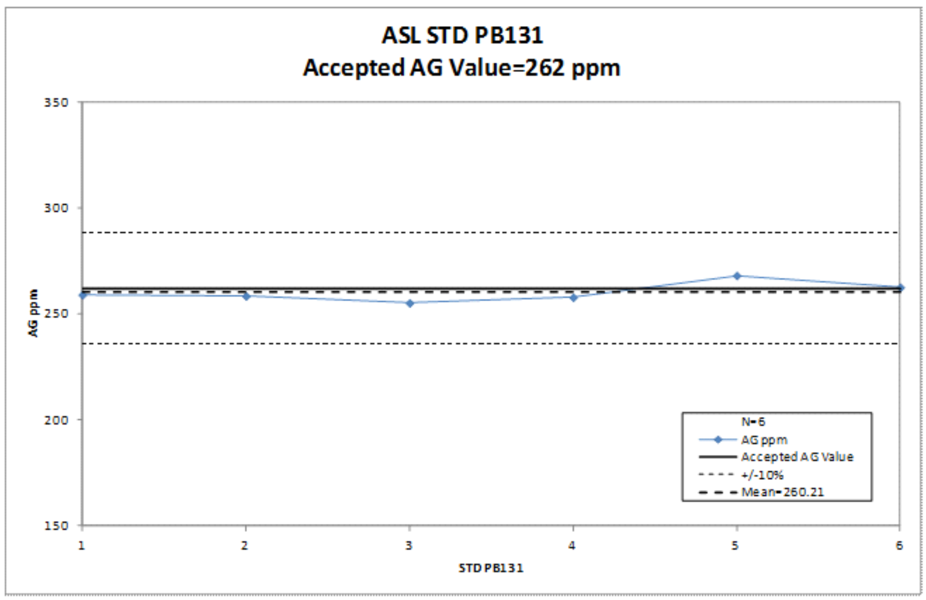
PAH recommends that a corporate level database manager be hired to monitor and ensure quality assurance and quality control is maintained at a high level of execution. This database manager would enforce quality assurance and quality control policies of the company, take immediate action when anomalies occur, and monitor quality assurance and quality control results in a timely manner. It is imperative that analysis of control sample results be done promptly to ensure that potential analytical problems are addressed. It is also vital to perform check analysis at different labs on a regular basis throughout the duration of the drilling and sampling program. Action must be taken to increase diligence on how the control samples are taken, recorded and reported.

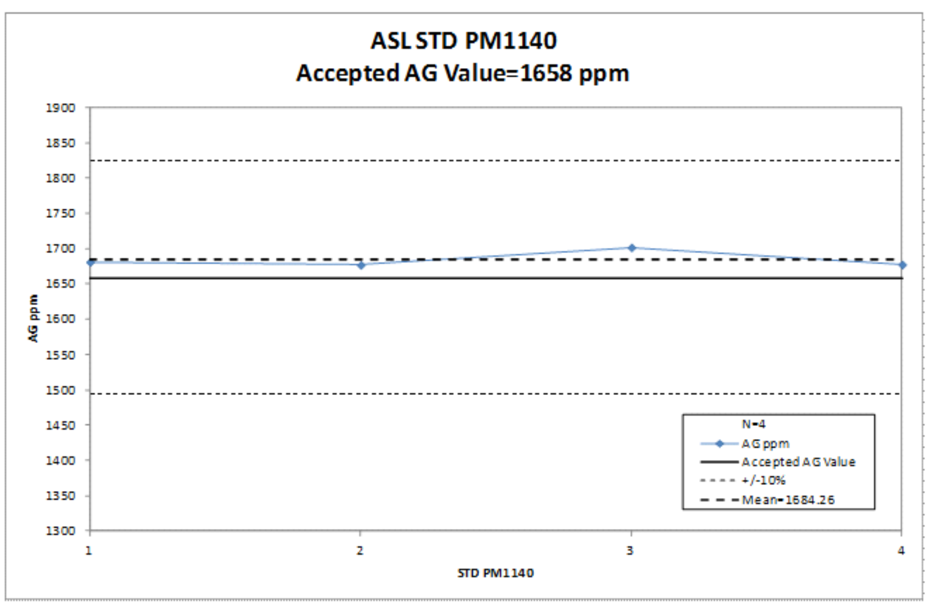
Based on PAH's detailed review of QA/QC and control samples, PAH believes that the assay database is industry standard and suitable for resource estimation.

12.9 *Assessment of Project Database*

The audit of Golden Minerals' data collection procedures and resultant database by PAH has resulted in a digital database that is supported by verified certified assay certificates, original drill logs and sample books. PAH has confidence that the silver assays used in the Mineral Resource Estimate are consistent with information in drill logs and sample books. A comparison of the assay certificates and drill hole logs show consistency for the 2009-2011 drill holes. PAH believes there is sufficient data to enable their use in a Mineral Resource estimate and resultant classification following NI 43-101.







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pincock, allen & holt 165 S. Union Boulevard, Suite 950 Lakewood, Colorado 80228 Phone (303) 986-6950	***Golden Minerals Co.***	FIGURE 12-7 Internal Standards Assayed by Alex Stewart Laboratory	May 2012
Project No. DE-00196	Project Name El Quevar Project		Drawing Name Fig.12-7.dwg

The un-sampled zones within the host rocks appear to be significant to the deposit, comprising zones of barren overburden or inter-burden. As a result, PAH believes these zones should be classified as internal waste zones in any resource calculation.

Based on data supplied by Golden Minerals, PAH believes that the analytical data has sufficient accuracy for use in resource estimation for the Yaxtché deposit.

13.0 MINERAL PROCESSING AND METALLURGICAL TESTING

The January, 2010, CAM Technical Report contains a summary of the previous metallurgical work by Dawson Metallurgical Laboratories, Inc. (Dawson Metallurgical) of Salt Lake City, Utah. Dawson Metallurgical completed testwork on sample composites from the project in two campaigns (Dawson, 2008; Silex, 2010). The tests were intended to determine the response of the samples to whole ore cyanidation, sulphide flotation, and a combination of flotation and cyanide leaching of tailings.

The initial test results were included in CAM's previous (2009) Technical Report. A brief summary of further test results (Silex, 2010) is presented in Section 16.4 of the January 2010, CAM report.

Since the January, 2010, Technical Report was completed, Dawson Metallurgical has submitted two further reports to Golden Minerals. A summary of both reports is included below.

13.1 *Dawson Metallurgical Report Dated January 21, 2010*

The text in this section has been adapted and quoted from the January 21, 2010, Dawson Metallurgical report.

> *"Laboratory testwork was performed to investigate silver recovery by a combination of flotation and cyanidation of ore and flotation products from three (3) new samples of ore from Golden Minerals El Quevar project. Previous work performed on El Quevar samples from this project had indicated good silver recovery by flotation (+90%), but not by whole ore cyanidation (±60%, July 2, 2008 report). Attempts to increase silver extraction by ultra fine grinding of float concentrate and two stage, high cyanide leaching gave 72% Ag overall extraction with extremely high cyanide consumption (Sept 21, 2009 report)."*
>
> *"A grind fineness of 80% minus 325 mesh was selected for the present study. Also, the leach cyanide concentration was determined according to the copper content of each ore sample, to limit cyanide consumption. The NaCN concentration was added at a CN:Cu ratio of 4.0, to supply sufficient cyanide for copper complexing, with only another 2 gpl NaCN added in excess. The following tests were performed:*
>
> 1. *Whole ore cyanide leach with assay screen analysis of the leach residue.*
> 2. *Bulk sulphide flotation with assay screen analysis of the rougher tailings.*
> 3. *Cyanide leach of reground float concentrate with assay screen analysis of the leach residue.*
> 4. *Cyanide leach of rougher tailings with assay screen analysis of the leach residue.*
> 5. *Selective flotation for silver recovery.*
> 6. *Gravity concentration of ground ore for free silver determination."*

"Items 1-4 were performed on each of the 3 samples and on an equal weight master composite (MC). Items 5-6 were performed only on the master composite."

"Sample Description

The samples were received on September 5th and 6th, 2009, and assigned our project No. P-4111. The samples were assay rejects, and 116 samples were received. Of the 116 samples received, 65 were used to make up the three ore composites. An equal weight of each individual sample was split out and combined to form the composites as follows:

West Composite:	*0.9 kg split out from each of 16 individual samples (14.4 kg).*
Central Composite:	*1.33 kg split out from each of 13 individual samples (17.3 kg).*
East Composite:	*0.5 kg split out from each of 36 individual samples (18.0 kg).*
West Composite:	*6.0 kg split out from each of 3 composite samples (18.0 kg)."*

"The samples were each blended, and 1.0 kg charges were split out for the testwork using a rotary splitter. Six charges of each of the three composites were combined to produce an 18 kg master composite (MC). Head samples were sub-split, pulverized, and submitted for analysis."

Results of the head analyses are given in the Table 13-1.

TABLE 13-1
Golden Minerals Company
El Quevar Project - Yaxtché Deposit
P-4111, Golden Minerals Head Analysis

	Head Grades									
	ppm		Weight (%)							
Composite	**Au**	**Ag**	**Cu**	**Fe**	**Pb**	**Zn**	**S=**	**As**	**Bi**	**Sb**
Master	0.185	517	0.41	4.24	0.46	0.16	4.02	0.15	0.1	0.15
West Zone	<0.001	529	0.11	5.07	0.25	0.02	5.35	0.07	0.04	-
Central Zone	0.008	313	0.03	2.64	0.9	0.35	2.13	0.06	0.05	-
East Zone	0.218	658	1.02	4.7	0.22	0.09	4.89	0.28	0.22	

Note: Table adapted from the January, 2010, Dawson Metallurgical report.

"Discussion

The ore was treated by a combination of cyanide and flotation test procedures at a grind of 80% minus 45 µm. About 51% of the silver was leached from the master composite utilizing a whole ore leach, whereas 81% was recovered by bulk sulphide flotation. The float concentrate was reground and leached, and the flotation tails leached separately, for a combined float/leach recovery of 60%. A total of 90% recovery was obtained from the combined bulk float concentrate plus leaching of the rougher tailings."

"Very high cyanide consumption was noted for the cyanide leach of the master and east composites due mainly to the presence of copper in the ore. Cyanide consumption of about 14 kg/t and 41 kg/t

of ore was determined for the two samples, respectively, and 1-2 kg/t for the other two samples, for the combined regrind concentrate and tailings leaches. The consumption was about the same as for the whole ore leaches (the east composite was slightly less due to insufficient NaCN), even though the silver and copper extraction was significantly greater."

Table 13-2 summarizes the flotation and leach silver recovery.

TABLE 13-2
Golden Minerals Company
El Quevar Project - Yaxtché Deposit
Summary of Flotation and Leach Silver Recovery

Composite	Whole Ore Leach - % Extraction	Float Recovery %	Leach Extraction - %		Overall Ag Recovery - %	
			Conc. Leach	Ro Tails Leach	Float Con. Tails & Leach	Con. Leach & Tails Leach
Master	51.2	81.2	61.9	49.8	90.6	59.6
West	59.3	90.6	61.5	52.1	95.5	60.6
Central	66.8	61	81.1	49.2	80.2	68.7
East	18.1	88.5	60.6	37.4	92.8	57.9

Note: Table adapted from the January, 2010, Dawson Metallurgical report.

13.2 *Dawson Metallurgical Report Dated March 10, 2010*

The text in this section has been adapted and quoted from the March 10, 2010, Dawson Metallurgical report.

"Laboratory testwork was performed previously to investigate silver recovery from three (3) individual composites of ore from Golden Minerals El Quevar project which were received in early September. A master composite (MC) was also constructed from the three individual composites and tested. The testwork included a combination of flotation, followed by cyanidation of both flotation concentrate and flotation tailings on the three composites plus MC. Results were given in our report dated January 21, 2010. Testwork has been continued on the MC sample to investigate the effect of variations in the test procedure on overall silver recovery."

"The following list and table show the parameters selected for the current study on the MC sample. The baseline procedure consisted of selective flotation of a silver/copper concentrate at ambient pH, followed by cyanide leaching of the flotation tailings. An assay screen analysis was determined on both the rougher tailings and the leach residue. The reagents selected for the selective float were a dithiophosphinate (Aerophine 3418A) and a dithiophosphate (Aerofloat 242).

1. *Selective flotation at grind fineness of P80 = 45 and 75 µm, using 1 or 2 rougher stages.*

    a. *A float test was run with reduced reagent (Aerophine only).*

b. A float test was run including bulk sulphide recovery.
c. A float test was conducted at 12 pH with lime addition.

2. Rougher tailings of the above tests were leached with 2 g/L NaCN solution.
3. Assay screen analysis of rougher tails of the above tests was performed (except T34).
4. Assay screen analysis of leach residue of the above tests was performed.
5. A selective float test was run followed by cleaner flotation."

"Float-Leach Summary

Silver flotation recovery ranged from 56 to 86% depending on the test conditions. Subsequent leaching of the flotation tailings resulted in an overall silver recovery (combined float concentrate plus leach solution) ranging from 82 to 91%, as summarized below. Cyanide consumption was relatively low, averaging 1.0 kg/t, since most of the copper was removed into the float con, which was not leached. An average of 7% of the copper reported to the leach solution, for 220 ppm copper solution average."

TABLE 13-3
Golden Minerals Company
El Quevar Project - Yaxtché Deposit
Summary of Float/Tails Leach Tests

				Silver Distribution - %				Copper Distribution - %			
Test No.	Grind P80 µm	Number of Ro Stages	Float Conditions	Flot. Con.	Leach Soution	Leach Residue	Total Concentrate + Solution	Flot. Con.	Leach Solution	Leach Residue	Total Concentrate + Solution
21, 27	45	1	Baseline	58.4	26.2	15.4	84.6	83.7	8.9	7.3	92.7
22, 28	45	2	Extended Time	76.6	11.8	11.5	88.5	90.9	5.3	3.8	96.2
23, 29	75	1	Coarser Grind	55.6	26.9	17.58	82.5	79	11	10	90
24, 30	75	2	Coarse Grind + Time	73.3	13.7	13.1	86.9	86.8	6.7	6.6	93.4
25, 31	75	4	Bulk Sulfide	80.9	9.7	9.4	90.6	88	6	6	94
26A, 32A	45	3	12 pH	85.5	5.7	8.8	91.2	95.4	1.4	3.2	96.8
34, 35	45	1	Decreased Reagent	57.4	24.6	18	82	80.3	10.7	8.9	91.1

Note: Table adapted from the March, 2010, Dawson Metallurgical report.

13.3 *Memo for the Yaxtché West Metallurgical Results Dated June 14, 2010*

Golden Minerals recently received a memorandum and backup documentation describing the results of the metallurgical testwork conducted on the Yaxtché West composite sample. The following material has been adapted and quoted from this supplementary information.

Table 13-4 summarizes the assay head for the Yaxtché West composite sample.

TABLE 13-4
Golden Minerals Company
El Quevar Project - Yaxtché Deposit
Head Grade for the Yaxtché West Composite Sample

	Head Grades				
	g/t	Weight (%)			
Composite	Ag	Cu	As	Bi	Sb
West Composite	2,900	0.27	0.04	0.08	0.32

Note: Table adapted from the June 2010, Dawson Metallurgical report.

"Overall silver recovery, using the procedure developed for the central composite (flotation concentrate for sale, with leaching of the flotation tails to produce bullion for sale) was 98.6%. This was from the production of a cleaner concentrate at 5.5% of the feed weight, followed by a 24-hour leach of the tails and of the cleaner tails."

"The metallurgical response of the two composites was significantly different. For the central composite, 58.4% of the silver was recovered into a high-grade flotation concentrate, with an additional 25.3% recovered in the leach of the flotation tails, for an overall 84% silver recovery. For the west composite, 97.3% of the silver was recovered into the flotation concentrate, with an additional 1.3% recovered in the tails leach, for an overall 99% recovery."

"The difference in response may be due to differences in the silver mineralogy between the two areas. In the central composite it was possible to make a selective initial flotation concentrate using a limited amount of copper mineral-selective collector (recovery of 86% of the copper but only 55% of the silver). Increasing amounts of collector in subsequent stages increased the silver recovery significantly and the copper recovery marginally. It is advantageous economically to recover as much of the silver as possible in to bullion, since the smelter charges for flotation concentrate are quite high, due primarily to the presence of As, Sb, and Bi."

"Increasing collector dosage in subsequent flotation stages for the west composite, up to and including a bulk concentrate, floated more weight but with little significant improvement in overall silver recovery."

"The microscopy work done by Prof. Erich Petersen on the central composite flotation products did not show significant differences in the silver mineralogy between the initial and subsequent flotation concentrates, but his report does discuss possible reasons for a slower-floating fraction. Further testwork could be carried out on the west composite to determine if it would be possible to reject some silver minerals from the initial flotation concentrate to be recovered by leaching of the tails, as with the central composite; but based on the results shown, this seems unlikely."

"Cleaning the high-grade rougher concentrate for both composites resulted in the rejection of a large amount of gangue material, with a resultant 50% reduction in concentrate weight and a corresponding increase in the assays of smelter penalty elements. For the west composite the cleaner flotation tails were leached, and much of the silver here was recovered. Because of insufficient sample, the cleaner tails from the central cleaner test were not leached."

"Testwork at both 45 and 75 micron grinds was evaluated, and although the difference is small, preliminary calculations indicate that the finer grind would be economically warranted."

14.0 MINERAL RESOURCE ESTIMATES

In this report, the terms “Mineral Resource,” “Inferred Mineral Resource,” “Indicated Mineral Resource,” and “Measured Mineral Resource” have the meanings ascribed to those terms by the Canadian Institute of Mining, Metallurgy and Petroleum, as the CIM Definition Standards on Mineral Resources and Mineral Reserves adopted by the CIM Council. There are no Mineral Reserves disclosed in this report.

The CIM standards explicitly state that a Mineral Resource “is an inventory of mineralization that under realistically assumed and justifiable technical and economic conditions might become economically extractable. These assumptions must be presented explicitly in both public and technical reports.”

PAH’s approach to satisfying the CIM standard of the *reasonable prospect of economic extraction* is to further analyze the mineral inventory generated by the block model and to constrain the reported Mineral Resource estimate to mining shapes.

As the current mining concept for the Yaxtché deposit is to develop the shallow eastern mineralization by surface mining, the current Mineral Resource estimate for the eastern area of the deposit is reported from conceptual pit shells generated in the Whittle® software. PAH believes that incorporation of reasonable, conceptual economic parameters into the Whittle® analysis satisfies the CIM standard of “reasonable prospects” and permits the reporting of Mineral Resources constrained by a conceptual pit shell.

For the western deep mineralization in the Yaxtché deposit, Golden Minerals is considering extraction by underground mining methods in which case the Mineral Resource from the western area is reported from volumes of material constrained to conceptual stopes. Stopes are designed in the Vulcan® software for a selected vertical interval within the deposit in which the resource blocks meet the desired cutoff grade and satisfy the Engineer’s judgment with respect to continuity of the blocks. Within this underground “test zone,” a comparison is then made between grade and tonnes of material in the block model mineral inventory at the desired cutoff grade and the material constrained by the conceptual stopes. This method calculates as a percentage the modeled resource tonnage and metal recovery factors. The modeled factors are applied to the mineral inventory within the cutoff grade shell and the Mineral Resource is reported.

The Block Model used to estimate the Block Model Mineral Inventory (BMMI) for the Yaxtché deposit was completed by Mr. John Zeise, Senior Consulting Geologist with PAH, who is considered an expert in resource modeling.

For shallow mineralization in the eastern part of the Yaxtché deposit, the Mineral Resource estimate is reported from conceptual pit shells generated in the Whittle® software. The estimate was prepared by Mr. Paul Gates, PE and Principal Mining Engineer with PAH, who is considered to be a Qualified Person under NI 43-101 rules as revised on June 30, 2011. A consent form from Mr. Gates is found in Section 20.

For deep mineralization in the western part of the Yaxtché deposit, the Mineral Resource estimate is reported using conceptual underground stopes generated in the Vulcan® software and queried to the block model. The estimate was prepared by Mr. Gordon Sobering, Principal Mining Engineer with PAH, who is considered an expert in underground mining and design for purposes of this Technical Report.

The current resource estimate is based on data from 270 diamond drilling holes as supplied by Golden Minerals in a database compiled by Golden Minerals and validated by PAH from the Company's 2006-2011 drilling campaigns. An internal PAH audit procedure was utilized for the assessment of data quality and integrity as described in Section 12 of this report. The effective date of the drilling information used in this report is February 9, 2012.

Previous resource estimates for the Yaxtché deposit are provided by CAM (January 2010) and Micon (August 2010) and discussed later in this section. The effective date of the Micon model was August 6, 2010 at which time the drilling database was frozen at hole QVD-204 for the purpose of resource estimation.

The PAH model discussed in this report was developed from first principals at the request of Golden Minerals and is not an update of the previous models. The PAH model incorporated 85 new drill holes completed in 2011 which comprised some 25,389 m of drilling in the Yaxtché deposit. From this meterage 12,051 samples were analyzed by the Alex Stewart Laboratory in Mendoza, Argentina and made available to PAH.

In contrast to previous resource estimates, the PAH approach was to consider conceptual economic parameters and a conceptual development plan to extract shallow mineralization by surface mining in the eastern part of the Yaxtché deposit and by underground methods in the deeper Western part of the deposit. This approach contemplates use of underground and surface bulk mining methods. In both areas, mineral resources are constrained by their respective surface and underground mining shapes.

This approach was investigated based on recognition of substantial lengths of dispersed, typically low (<100 ppm Ag) to medium (<500 ppm Ag) grade sulfide mineralization in pervasively silicified breccias in core samples. As this type of mineralization often appears to envelope the high-grade mineralization typically associated with logged structures such as fault contacts (FC) or lithologic contacts (LC), this suggested the presence of broader zones of lower-grade mineralization that are potentially amenable to bulk mining methods.

A different approach was used to create geological domains to constrain grade estimation based on the association of mineralization with types of contacts, including fault contacts (FC), lithologic (LC) and no-contacts (NC). The domains honor the higher-grade zones while controlling the grade smearing of high-grade into lower-grade zones within the PAH block model. Like the previous models, the estimation was also constrained to a 10 ppm grade shell which generally defines the boundaries of the strongly silicified Quevar breccia and dacitic lavas that host the silver mineralization.

This chapter discusses the PAH mineral resource estimate for the Yaxtché silver deposit, which has been prepared in compliance with NI 43-101 and CIM standards.

14.1 *Drill Hole Database*

PAH received a drill hole database from Golden Minerals with an effective date of February 09, 2012. The database included holes QVD-002 to QVD-372 which were completed by Golden Minerals from 2006 to 2011 in the Yaxtché deposit, as well as in several satellite deposits in the surrounding area. Two hundred and seventy (270) of these holes are from the Yaxtché area and are used to define the 10 ppm silver grade shell and to estimate mineral resources. Drill hole collar identifications are listed in Appendix A. The drill hole database includes the following information:

- Collar
- Survey
- Assay
- Lithology
- Alteration
- Oxidation
- Structure

The database contained assays for multiple elements including: silver ppm, gold ppm, copper percent, lead percent, and zinc percent. Assays for silver were performed by either multi-element, aqua-regia digestion and analyzed by ICP or by fire assay with gravimetric finish. The drill hole database contained only combined silver assays of either ICP or fire assay designated by the field header Ag_com. The convention for ICP analysis which exceeded 200 ppm Ag was to reanalyze by fire assay. In some cases, both fire assay and ICP analysis were performed on the samples.

PAH reviewed 78 drill holes, approximately 29 percent of the drill holes in the February 9, 2012 database and checked the database assays against the lab certificates. As summarized in Table 14-1, PAH identified several inconsistencies in the assay database for which the corresponding corrective action is also shown.

TABLE 14-1
Golden Minerals Company
El Quevar Project - Yaxtché Deposit
PAH Corrections to Validated Drill Hole Assay Data

Inconsistency	Correction
Lower detection limit recorded in database at the lower detection limit value.	Lower detection limits set at half the lab lower detection limit.
Higher assay value selectively assigned regardless of analysis type.	Corrected checked drill holes by using only ICP values for assays under 200 ppm and FA grav values when the ICP upper detection limit of 200 ppm is exceeded.
High-grade transcription errors - (13 errors noted in 9 holes)	Assay values in database were corrected to match lab certificates.

14.2 *Contact Domains of Mineralization*

As discussed later in Section 14.5, a 10 ppm silver grade shell was constructed between the hanging wall and footwall of the mineralized zone which principally comprises the silicic and silicic-argillic altered Quevar Breccia, lavas and dacitic intrusions. Examination and interpretations of graphical logsheets and drill core indicated that silver mineralization was spatially related to several contact types, including: fault contacts (FC), lithologic contacts (LC) or neither contact type in which case silver mineralization was classified as non-contact-type (NC). Recognition of the association of silver mineralization with different contact types was the basis for coding each assay intersection as FC, LC or NC and construction of contact domains in the block model by determining the probability of occurrence of a contact type through the use of indicators and Ordinary Kriging. The silver grade of each domain was modeled using Ordinary Kriging selecting only samples from their respective contact domains. Samples less than 10 ppm silver within the grade shell were modeled within a waste domain. The contact domains of mineralization which were used to geologically constrain the silver grade interpolation in the block model for the Yaxtché deposit were previously discussed in Section 7 of this report.

14.3 *General Statistics and Capping*

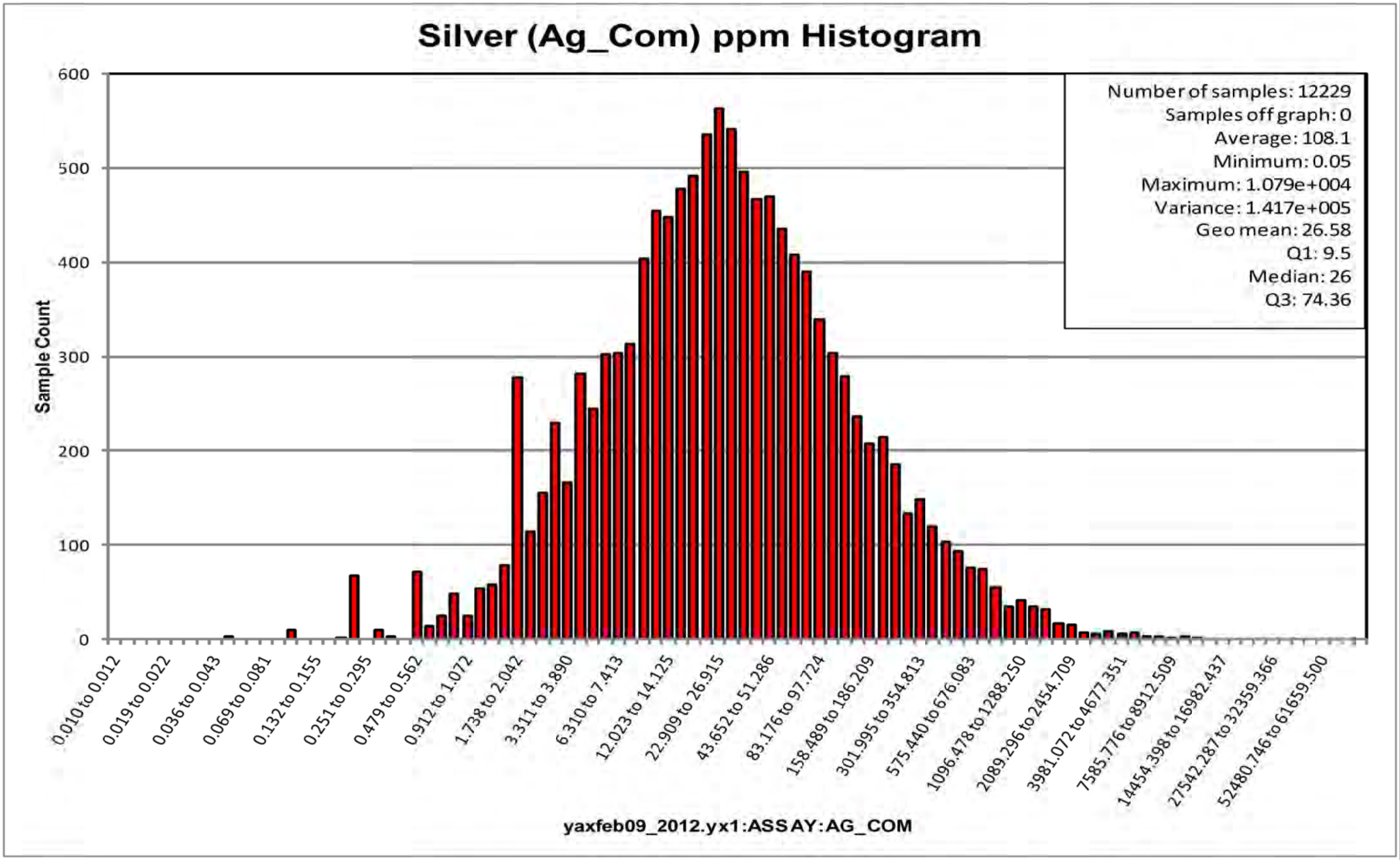
PAH performed general statistics on silver assays in the drill hole database for each contact domain.

Based on statistical analysis and the graphical display of silver assays on histograms, the Yaxtché deposit exhibits a lognormal distribution with isolated, nuggety occurrences of high-grade mineralization (Figure 14-1). Univariant statistics shown in Table 14-2 and probability plots were used to define capping values on silver grades for the three contact domains (FC, LC, NC) at approximately three times the standard deviation or 3-sigma. Although natural high-grade breaks on probability plots for each contact domain were difficult to assess, subtle inflections in the probability curves close to the 3-sigma values were apparent and used to select the capping value on silver grades for the FC, LC and NC domains at 1,977 ppm, 1,331 ppm and 945 ppm, respectively (Figure 14-2).

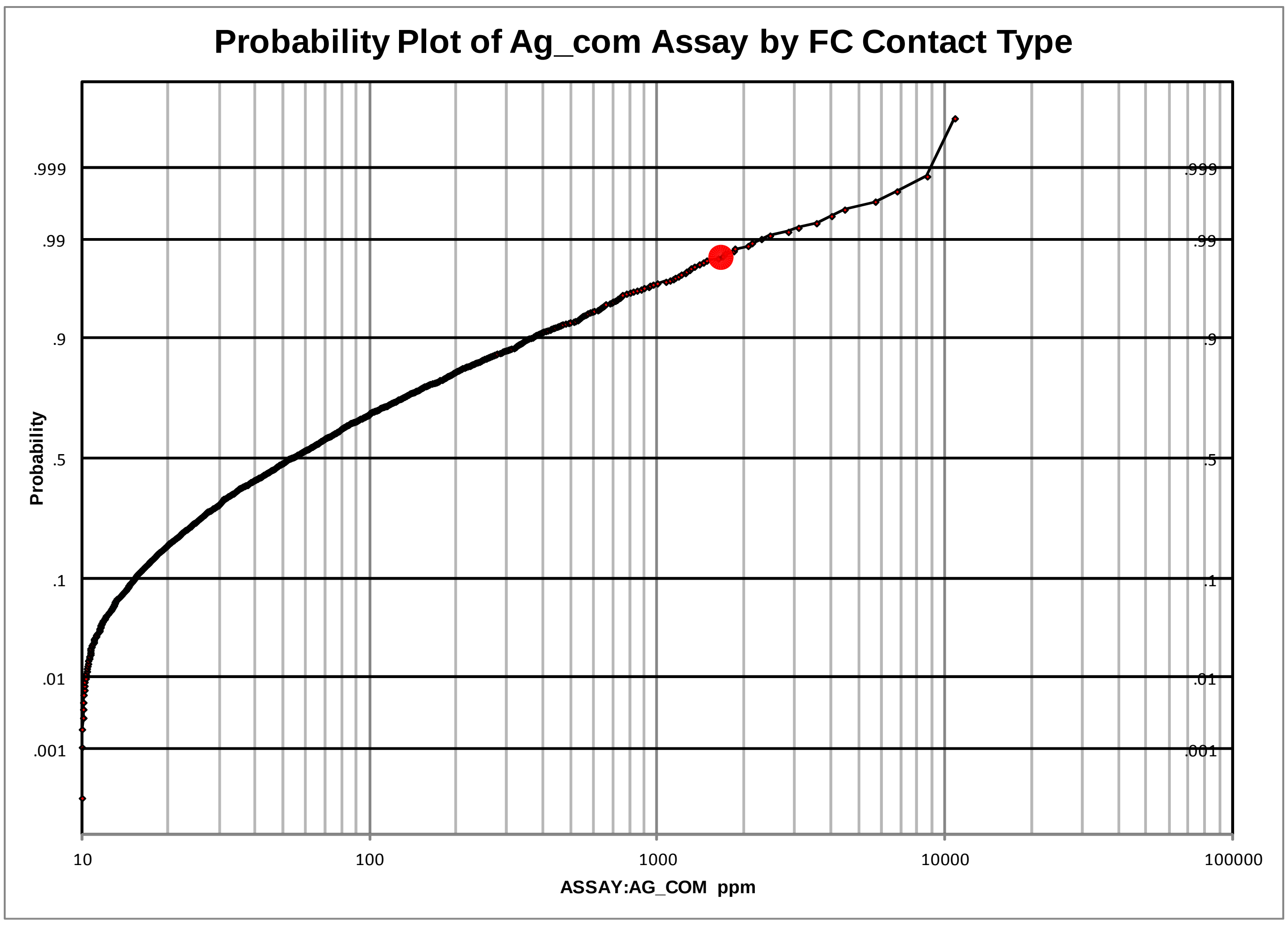
TABLE 14-2
Golden Minerals Company
El Quevar Project - Yaxtché Deposit
Univariate Statistics for Silver Assays in Drillholes by Contact Domain

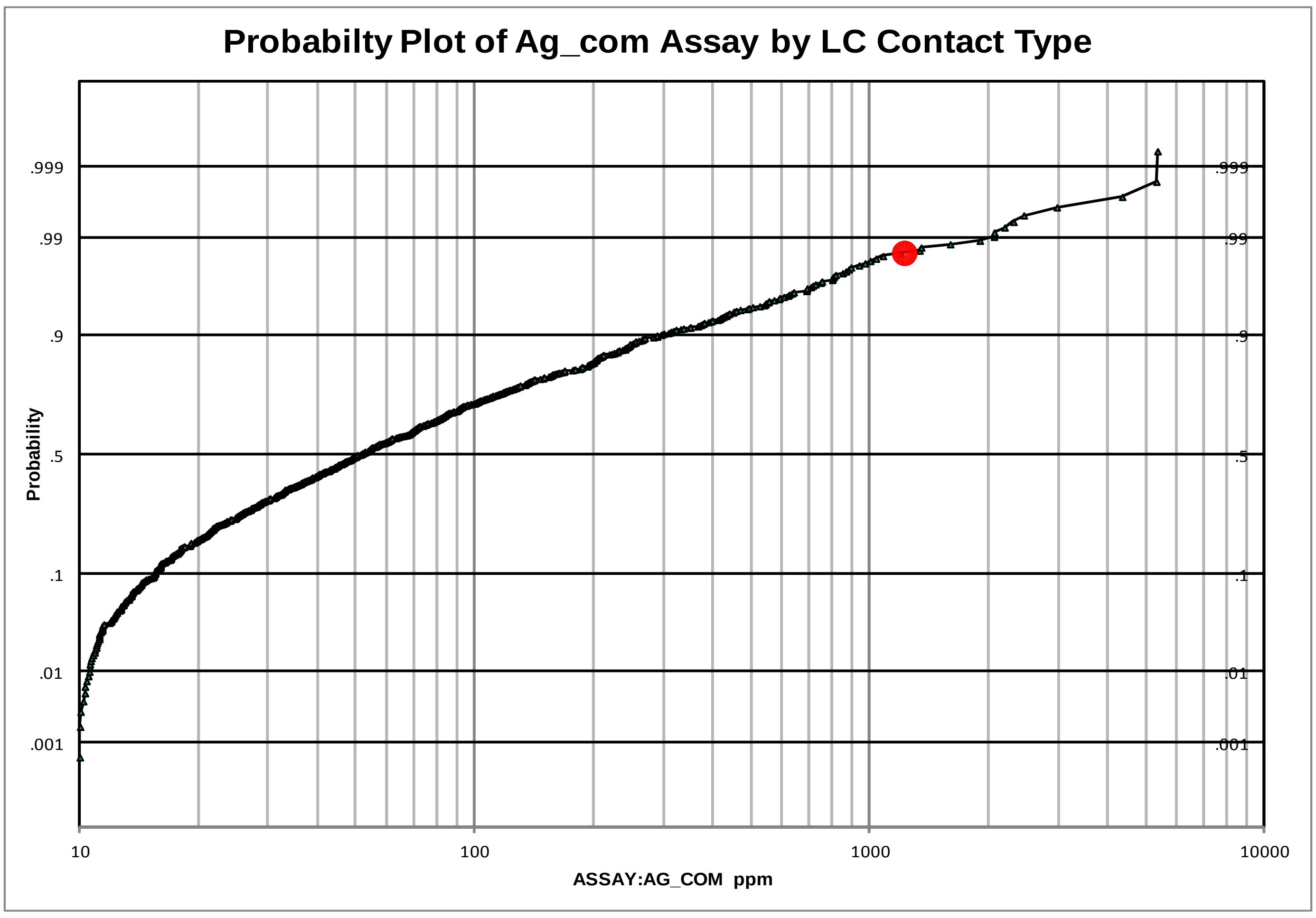
Contact	Samples	Min	Max	Mean	StoDev	Cv
FC	3,266	10	10,793.00	189.1	595.8	3.151
LC	862	10	5,348.60	149.9	393.0	2.621
NC	3,266	10	5,403.00	112.6	277.0	2.459

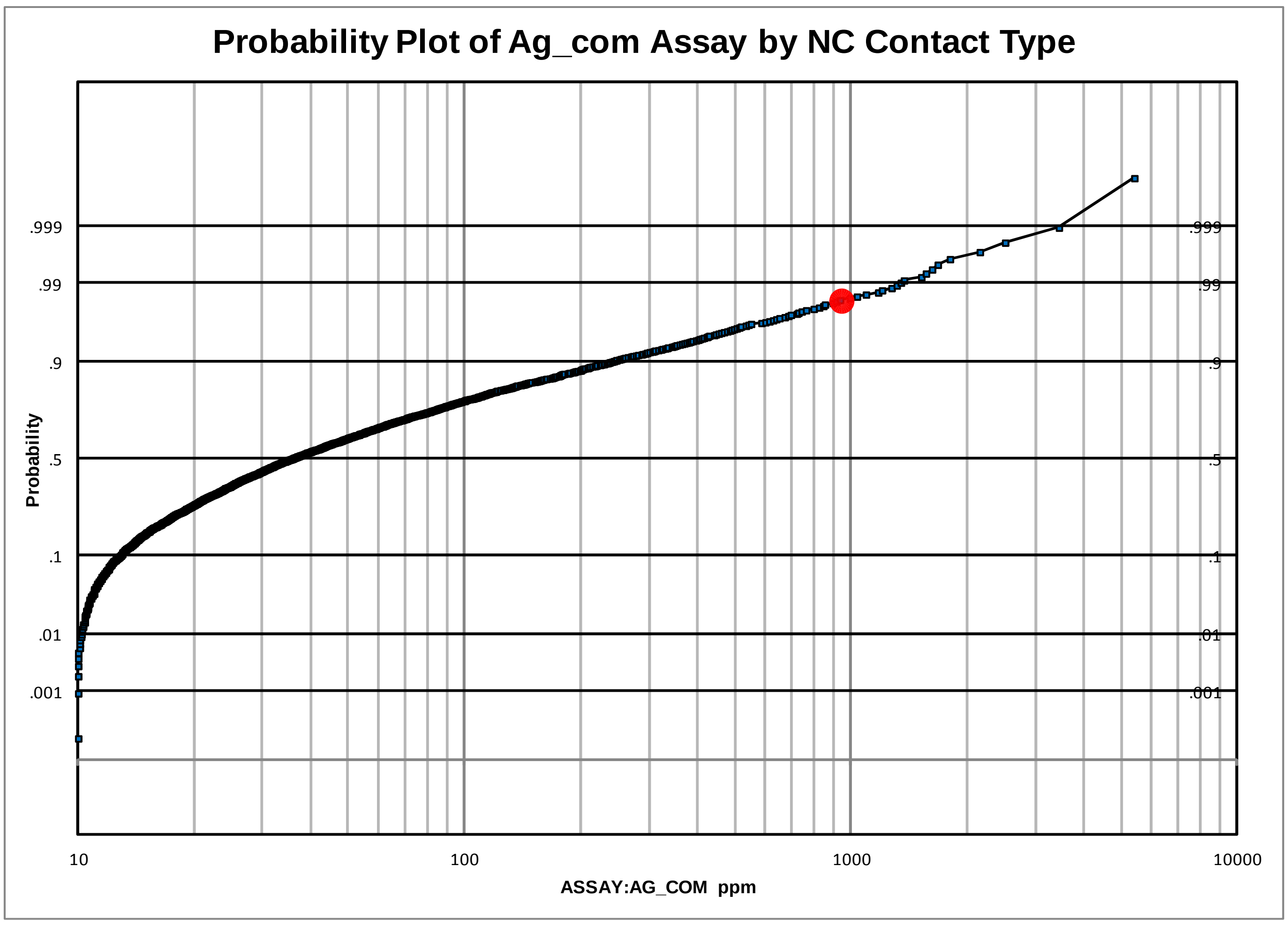
Approximately 1.2 percent to 1.8 percent of the drill hole assay samples were capped resulting in a reduction of the average silver grade by 12 percent to 18 percent in the three contact domains. The nuggety character of the deposit is reflected in the fact that approximately 1.5 percent of the drill hole assays in the database can affect a 15 percent change in the average silver grade of the deposit.



Prepared by	Drawing Provided by/Prepared for		Date of Issue
pincock, allen & holt 165 S. Union Boulevard, Suite 950 Lakewood, Colorado 80228 Phone (303) 986-6950	***Golden Minerals Company***	FIGURE 14-1 Histogram of Silver Assays (Ag_Com)	May 2012
Project No. DE-00196	Project Name El Quevar Project		Drawing Name Fig.14-1.dwg







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Lakewood, Colorado 80228
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Project No. DE-00196

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Project Name
El Quevar Project

FIGURE 14-2
Probability Plots Silver Assays in Contact Domains

Date of Issue
May 2012
Drawing Name
Fig.14-2.dwg

Capping was selected in lieu of performing a restricted modeling search to prevent grade smearing as the high-grade dark sulfide-bearing veinlets were observed to be only a few meters long in underground working as observed in Byington (2011) and by PAH during the site visit. Table 14-3 shows the effect of capping and the reduction of average silver grade for each contact domain.

TABLE 14-3
Golden Minerals Company
El Quevar Project - Yaxtché Deposit
Silver Grade Capping on Assays and the Effect on Average Grade in Assay Database

Contact Domain	Total Samples	Number of Capped Samples	Cap Value (ppm)	% Capped	Mean Uncapped (Ag ppm)	Mean Capped (Ag ppm)	Difference Grade Pct
FC	3,266	40	1,977	1.2%	189.09	158.78	16%
LC	862	13	1,331	1.5%	149.94	129.13	14%
NC	5,004	88	945	1.8%	112.65	99.14	12%

Cap is approximately at the 3-sigma value in a sample population of approximately 9,000 silver assays within the grade shell, the capping value confirmed graphically on log probability plot.

14.4 *Topography and Underground Workings*

Golden Minerals provided topography which was flown by PDOP Servicios Topograficos in May and June of 2008. Topography data was provided in a digital exchange format (dxf) which was imported into Vulcan® mine modeling software version 8.3.1. Topography is in the Gauss-Kruger Projection, Datum WGS-84.

Golden Minerals provided updated AutoCAD® drawings of the workings from their underground exploration project. PAH imported the outline of the workings into Vulcan® and registered the outline to rib survey points provided by Golden Minerals. The workings outline was expanded by two meters up and down to create a four meter vertical solid wireframe of the underground workings. PAH cannot verify the accuracy of the underground survey points.

14.5 *Grade Shell*

PAH analyzed the occurrence of the mineralized intervals within the silicic alteration zone. PAH found that while the mineralization predominantly occurs in either silicic or silicic-argillic altered zones of the host rock, a minor amount of mineralized intervals are associated with argillic alteration and rarely with propylitic alteration. Rather than creating a wireframe restricted to a specific alteration type, PAH created semi-continuous grade shells in Vulcan® software based on a 10 ppm silver cutoff grade. This method was selected as mineralization was not exclusively limited to the silicic or silicic-argillic logged intervals. The grade shell wireframe was snapped to drill hole intercepts. The grade shell is broken into six distinct zones, separated by either lack of mineralization or lack of drilling support. The grade shell encompasses the contact domains of mineralization described previously. Based on drill logs, the high-grade mineralized zones appear to preferentially occur along the hanging and foot wall contacts of the silicic/silicic-argillic alteration zone in the Quevar Breccia. Two images of the 10 ppm silver grade shell and the drilling support are given on Figure 14-3. The gap in the grade shell between the western and eastern areas results from limited drilling support and weak mineralization in available holes in what is considered a zone of north-east trending cross faults. The second image shows the 10 ppm grade shell constraining resource blocks in the model for which silver grades have been estimated. The distribution of the silver grades estimated by the block model shows a somewhat irregular, patchy distribution. However, the images suggest better grade and continuity of mineralization along the hanging wall contact of the silicified breccia in both the eastern and western areas of the deposit.

14.6 *Compositing*

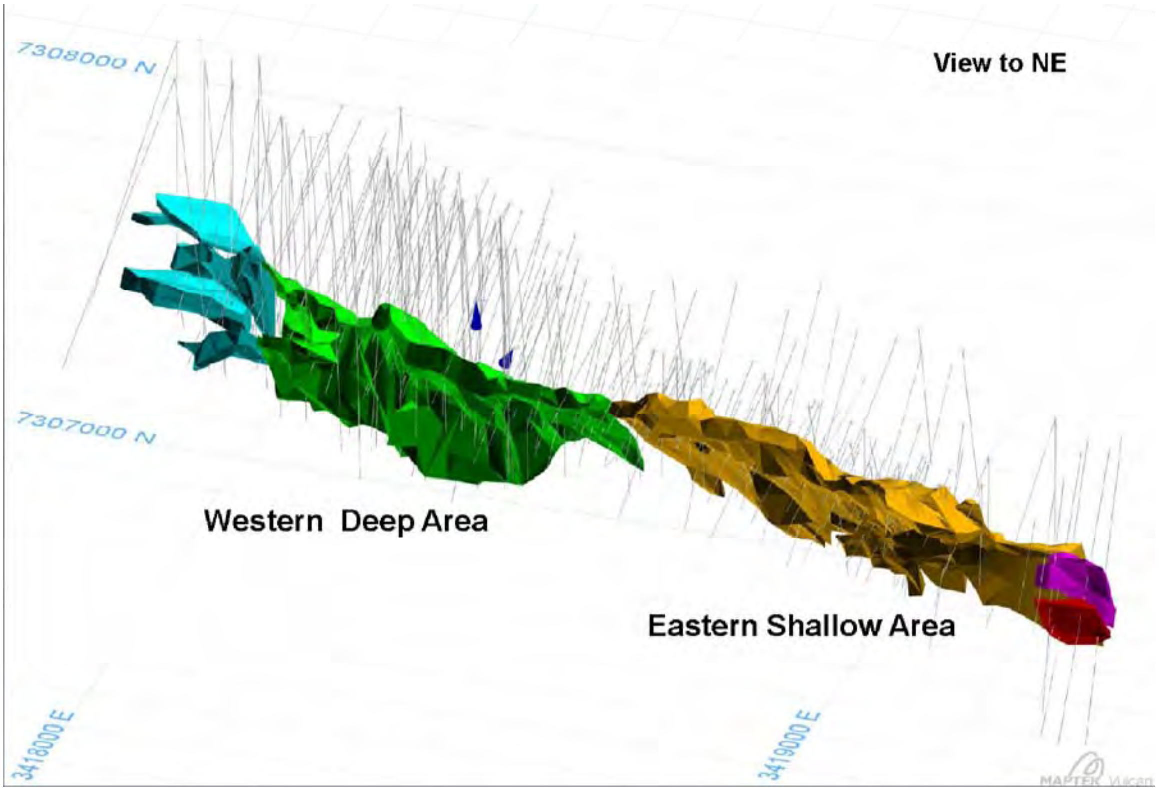
The drill hole assays were composited to 1 meter composite lengths to normalize the database. The composite length was chosen as the majority of the sample intervals in the drill hole data base were 1 meter in length, averaging 1.12 m. Composite intervals were back coded as either inside or outside of the grade shell based on location of the composite centroid. Contact domain codes were carried over in the compositing process as a majority code. Some contact domain codes were corrected after compositing because composite breaks resulted in silver assays greater than 10 ppm being classified as waste. General statistics on assays, composite samples and estimated block values for silver are compared in Table 14-4.

TABLE 14-4
Golden Minerals Company
El Quevar Project - Yaxtché Deposit
General Statistics on Assays Samples - Composite Samples and Interpolated Block Values by Contact Domain

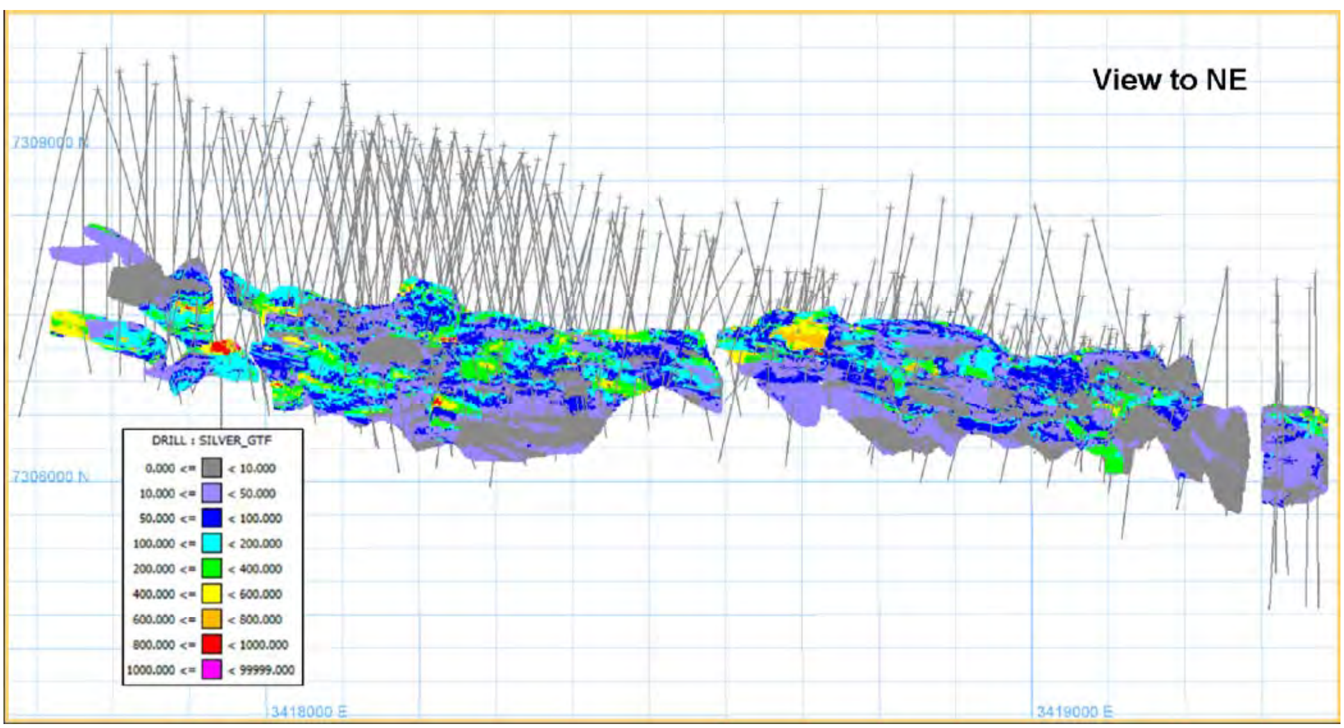
Sample Type	Contact Domain*	No. Samples	Min Ag ppm	Max Ag ppm	Mean Ag ppm	Std Dev	CV**	Cap (3σ) Value Ag ppm***	Percrent of Data Capped ****
ASSAY SAMPLES (capped)	**FC**	3,263	8.0	10,790	**189.1**	596.0	3.2	1,977	**1.3%**
	LC	859	10.0	5,349	**149.9**	393.6	2.6	1,331	**1.5%**
	NC	4,985	3.1	5,403	**112.8**	277.5	2.5	945	**1.8%**
COMPOSITE SAMPLES (1m)	**FC**	3,463	10.0	1,977	**155.8**	304.2	2.0		
	LC	918	10.0	1,331	**131.1**	222.9	1.7		
	NC	5,100	10.0	945	**98.4**	171.2	1.7		
BLOCK VALUES (3X3X3m blocks)	**FC**	149,966	3.6	1,861	**133.3**	142.9	1.1		
	LC	4,591	12.4	975	**92.1**	91.0	1.0		
	NC	212,391	10.3	934	**85.9**	91.7	1.1		
	Waste	157,502	0.2	10	**4.4**	1.6	0.4		
BLOCK MEAN SILVER GRADE @ 95% C.I.	**Ag ppm at 95% C.I. (Low)**	**Ag ppm at 95% C.I. (High)**							
FC	132.5	134.0							
LC	89.5	94.7							
NC	85.5	86.2							
Waste	4.3	4.4							

*Contact Domains reflect the association of silver mineralization (> 10 ppm Ag) with fault contacts (FC), lithologic contacts (LC) or not associated with contacts (NC).
** Coefficient of Variation (CV) is the standard deviation divided by the mean value. It is a normalized measure of dispersion around the mean value.
*** The 3-sigma capping level was corroborated graphically on log probability plots for the respective Contact Domains.
**** Note that the FC Domain, having the highest mean grade (189 ppm) and variation around the mean (3.2) has the least number of samples affected by the cap.
This reflects the approach to domaining the deposit so that the "high-grade" character of the FC domain is preserved.
The effective date of the drilling data used in this table is February 9, 2012.

The normal smoothing of the average silver grade, progressing from raw assays to composites to estimated values in the block model, is reflected in the progressive decrease in the coefficient of variation



Yaxchté Deposit - 10ppm Silver Wireframe and Drill Hole Traces (N=270) (April 2012)



Yaxchté Deposit - Oblique Longitudinal View Showing Estimated Silver Grades in Block Model (April 2012)

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pincock, allen & holt 165 S. Union Boulevard, Suite 950 Lakewood, Colorado 80228 Phone (303) 986-6950	***Golden Minerals Co.***	FIGURE 14-3 Silver Wireframe (10ppm) Estimated Ag Grades in Block Model	May 2012
Project No. DE-00196	Project Name El Quevar Project		Drawing Name Fig.14-3.dwg

(CV) within the grade shells for each of the contact domains. It is noteworthy that the Fault Contact domain (FC) which incorporates many high-grade assays associated with faulting along the foot and hanging walls maintains its higher-grade characteristics relative to the LC and NC domains from assay samples to estimated block values.

14.7 *Variography*

Variography was performed for each of the contact domain codes (FC, LC, NC) in the composite sample database with the exception of Waste, defined as composites with silver values less than 10 ppm. PAH used an indicator methodology to create contact domains within the 10 ppm wireframe. This was done by creating a new field in the composite database for each of the three contact types. Each field was coded with a one (1) if that contact type occurred or a zero (0) if that contact type was absent from the composited interval. Variography was performed on the FC, LC and NC contact domains to determine the search distances and orientations shown in Table 14-5. The resulting variograms can also be considered 10 ppm indicator variograms for each contact group as only grades greater than 10 ppm were coded as FC, LC, or NC. Figure 14-4 shows the resulting orthogonal indicator variograms for each contact group.

TABLE 14-5
Golden Minerals Company
El Quevar Project - Yaxtché Deposit
Variography by Contact Domain Type

Contact	Variogram			Orientation			Distance		
Domain	Model	Nugget	Sill Diff.	Bearing	Plunge	Dip	Major	Semi-Major	Minor
FC	Exponential	0.009	0.176	120	0	-80	65	60	35
LC	Exponential	1.530	8.590	300	0	-52	40	35	50
NC	Exponential	0.038	0.212	280	0	-50	54	50	18

[1] 1st axis of rotation (bearing) around z axis. 2nd axis of rotation (plunge) around x' axis. 3rd axis of rotation (dip) around y'' axis.
[2]positive plunge and dips are up, negative dow n

14.8 *Block Model*

PAH constructed a 3 x 3 x 3 m block model rotated to the 120 degree strike direction to match the overall orientation of the ore body. Block size within the grade shell wireframes was constrained to the 3 x 3 x 3 m block size. The block size was selected to provide enough variation and is approximately half the expected bench height for open pit mining and approximately the minimum dimension defining underground stopes. Table 14-6 shows the block model dimensions.

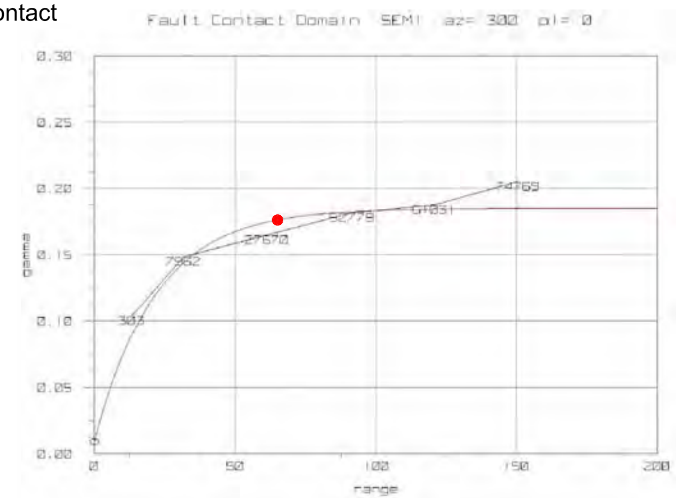
TABLE 14-6
Golden Minerals Company
El Quevar Project - Yaxtché Deposit
Block Model Dimensions

Dimension	Origin	Offset	Block size (m)	Number of Blocks
X Easting	3,417,330	2,400	3	800
Y Northing	7,306,930	1,515	3	505
Z Elevation	4,300	765	3	255

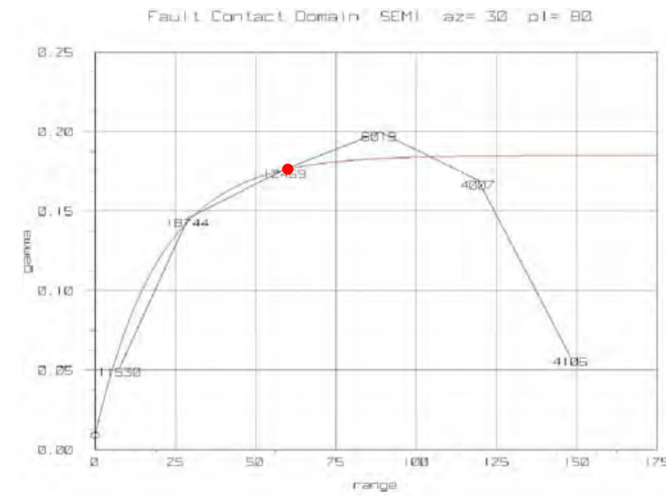
X axis rotated to 120 degree bearing

FC Contact

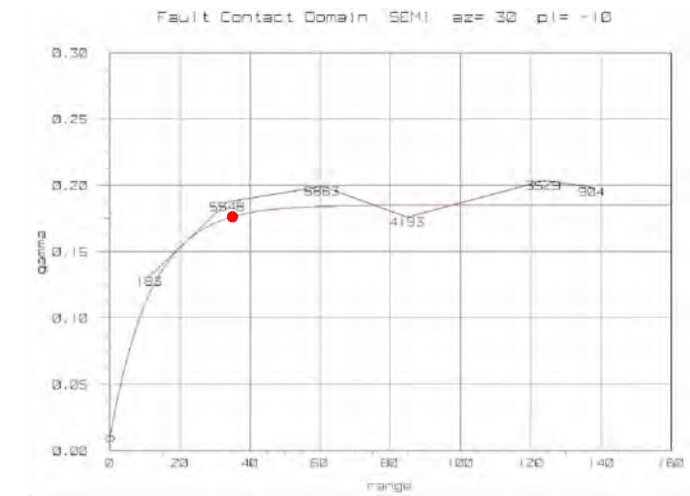
Major



Intermediate

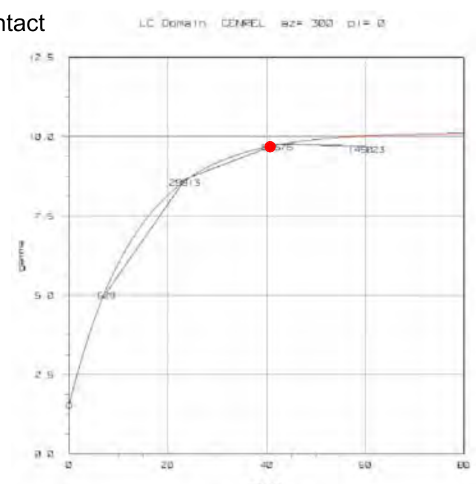


Minor



LC Contact

Major



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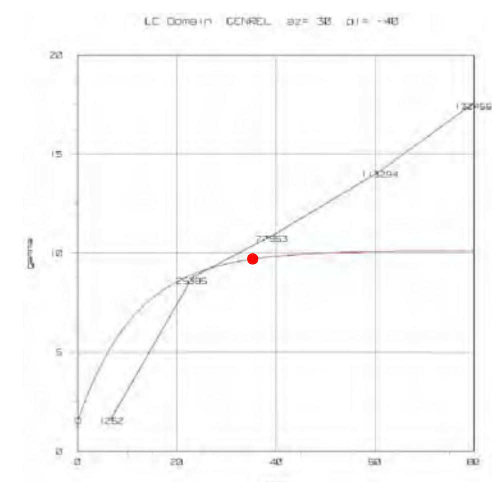
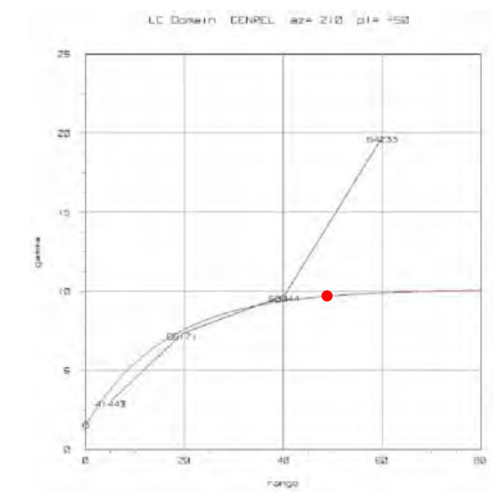
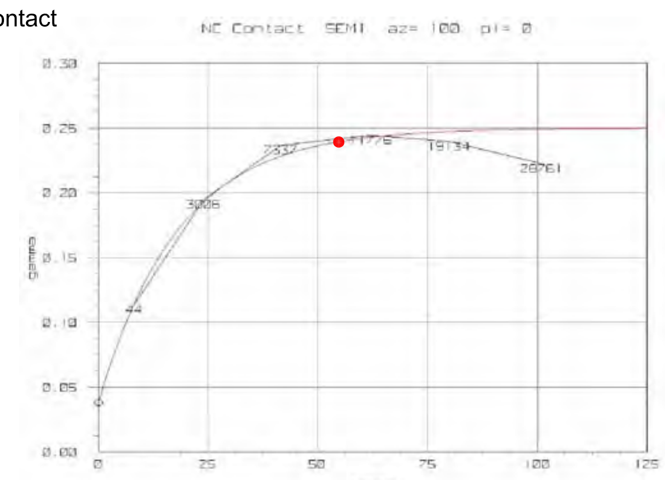


Minor

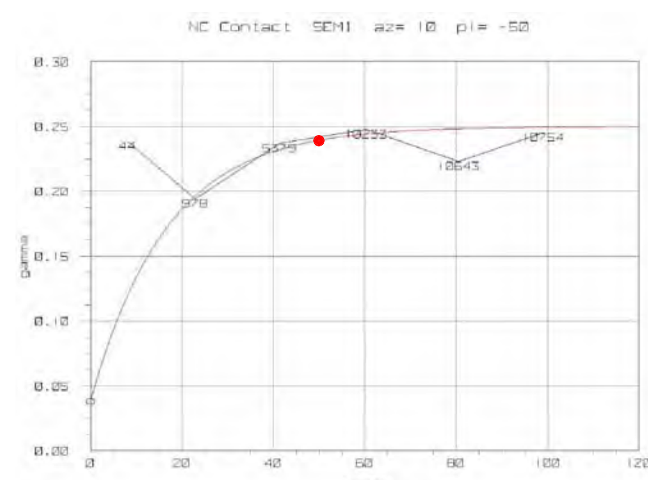


NC Contact

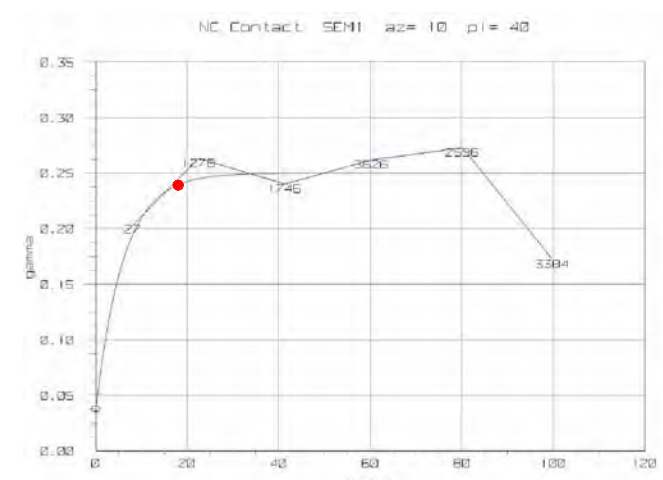
Major



Intermediate



Minor



Note: Sill indicator marked by red dot.

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pincock, allen & holt 165 S. Union Boulevard, Suite 950 Lakewood, Colorado 80228 Phone (303) 986-6950	Golden Minerals Company	FIGURE 14-4 Contact Domain Variography	May 2012
Project No. DE-00196	Project Name El Quevar Project		Drawing Name Fig.14-4.dwg

Topography in the block model was controlled by coding the percentage of rock in each of the blocks. For example, a block with percentage of 35 indicates that 35 percent of the block is below topography and contains rock while the remaining 65 percent contains air. This variable was also applied to underground workings to subtract out any mined ore from the block model.

The name of the block model used in the present resource estimate is Feb09_2012_3x3.bmf which is unregularized and uses the 3 x 3 x 3 m blocks. The model was prepared in the Vulcan® (version 8.1.3) software.

14.9 *Domain and Grade Estimation*

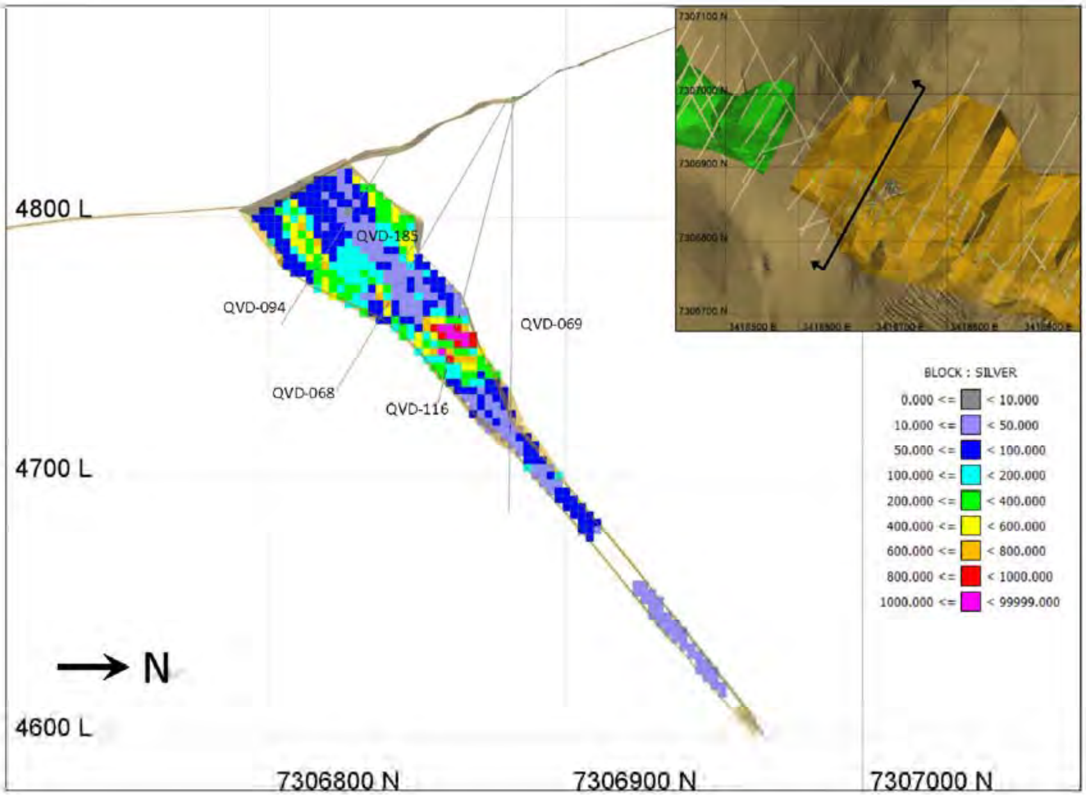
Prior to grade estimation, the contact types were estimated into the block model by performing ordinary Kriging on the indicators for each contact type. Each contact zone was modeled with its corresponding variography to determine a probability of that contact type occurring in a particular block. Waste composites, having silver values less than 10 ppm, were modeled using the variography for the NC contact type. After the contact type probability was estimated into blocks, the blocks were then coded by the contact type with the greatest probability of occurring in a particular block.

Each contact type was estimated using two passes. The first, more restrictive pass used a search ellipsoid that was half the variogram range and required a minimum 4 to a maximum of 12 composites with a maximum of 3 composites per drill hole. This forced the requirement of 2 drill holes for grade estimation to occur. A second, less restrictive pass used a search ellipsoid at one variogram range and required a minimum of 2 to 12 composites for estimation. A maximum 4 composites could be selected per hole thus losing the 2 hole requirement for estimation. Both estimation passes utilized an octant based search with a maximum of 3 composites per octant. This was to prevent/limit shadow effects of high-grade composites which often result in negative kriged weights and thus potential negative grades.

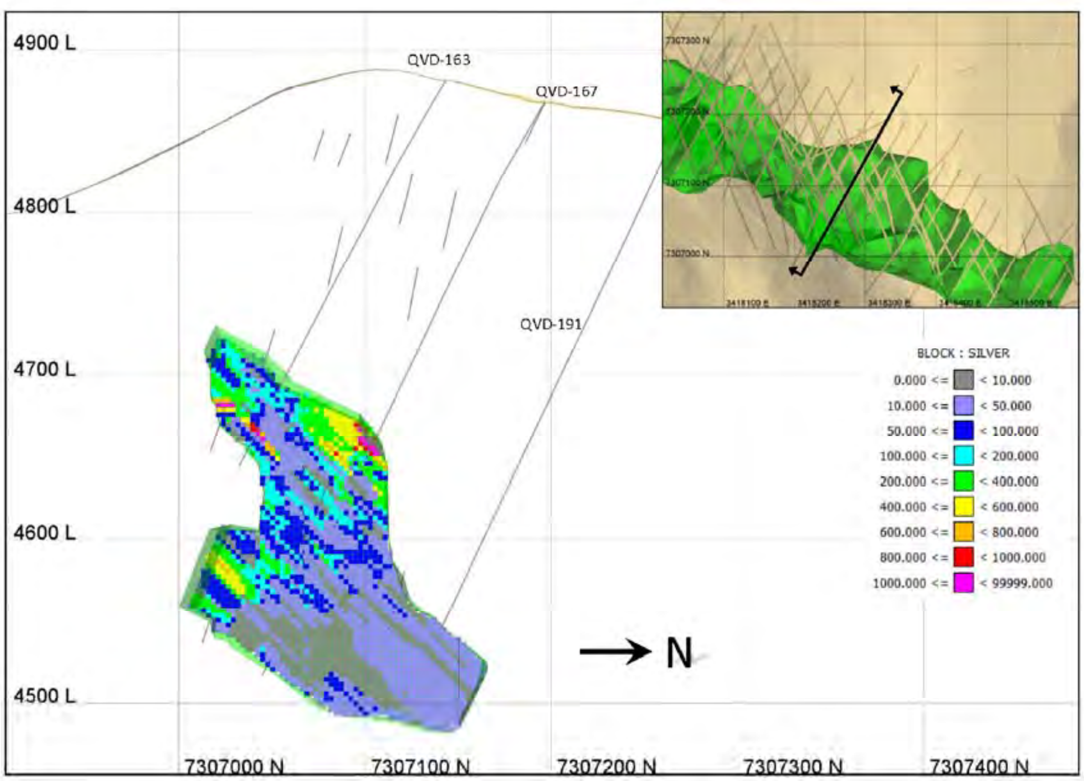
Grade estimation used the same estimation passes for each contact type as the indicator estimation to define contact domains. Composites were selected from their respective domains and for blocks coded by that domain, making the contact domains hard boundaries.

The estimation parameters for contact domaining and grade estimation steps and their respective search orientations and distances are given on Tables 14-7 and 14-8, respectively.

The overall distribution of silver grades constrained to the wireframe was shown previously in Figure 14-3. Cross-sectional views showing the distribution of estimated silver grades in the 3 m^3 block model in the eastern and western portions of the Yaxtché deposit are given on Figure 14-5. The cross-section through the eastern area shows that the estimated silver blocks constrained to the 10 ppm wireframe form a tabular structure, dipping -50 degrees to the north. Current drilling suggests that mineralization thins and decreases in grade in the down-dip direction giving the deposit carrot-shape geometry. The higher-grade blocks tend to be distributed along the faulted hanging and footwall contacts of the zone. Review of graphical drill logs shown on this section indicate that their respective mineralized intersections are associated with faulting and therefore, those intersections have been coded “FC” in the database



Yaxchté - Eastern Shallow Area: Section on 7,306,850E with Estimated Silver Grades (g/t) in Block Model



Yaxchté Deposit - Western Deep Area: Section on 7,307,080E with Estimated Silver Grades (g/t) in Block Model

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pincock, allen & holt 165 S. Union Boulevard, Suite 950 Lakewood, Colorado 80228 Phone (303) 986-6950	***Golden Minerals Co.***	FIGURE 14-5 Cross-Sections Yaxtché Deposit	May 2012
Project No. DE-00196	Project Name El Quevar Project		Drawing Name Fig.14-5.dwg

indicating the Fault Contact domain. The trace of QVD-116 occurs near a cluster of very high-grade blocks near the hanging wall. Review of the graphical logs for this hole indicates that high-grade mineralization occurs in a 26 m long core interval associated with multiple faults that juxtapose the Quevar Breccia against dacitic lavas.

TABLE 14-7
Golden Minerals Company
El Quevar Project - Yaxtché Deposit
Contact Domain and Grade Estimation Parameters

Estimation Type	Contact Zones		Grade Estimation	
	Pass 1	Pass 2	Pass 1	Pass 2
Min/Max	4 to 9	2 to 12	4 to 9	2 to 12
Max allowed per hole	3	4	3	4
Minimum holes required for estimation	2	1	2	1
Search distance times variogram distance	0.5x	1.0x	0.5x	1.0x
Soft boundaries used?	no	no	no	no
Maximum per octant	3	3	3	3

Variograms derived from silver grades coded by their respective contact type.
Each of the four passes shown in the table were completed for FC, LC, NC, and waste zones.
Octant based search is used to minimize shadow effect which may result in negative krige weights.

TABLE 14-8
Golden Minerals Company
El Quevar Project - Yaxtché Deposit
Search Passes and Orientation

Zone	Search Ellipsoid Orientation[1]			1st Pass Distance			2nd Pass Distance		
	Bearing	Plunge	Dip[2]	Major	Semi-Major	Minor	Major	Semi-Major	Minor
FC	120	0	-80	32	30	17.5	65	60	35
LC	300	0	-52	20	17.5	25	40	35	50
NC	280	0	-50	27	25	9	54	50	18
Waste	280	0	-50	27	25	9	54	50	18

[1] 1st axis of rotation (bearing) around z axis. 2nd axis of rotation (plunge) around x' axis. 3rd axis of rotation (dip) around y'' axis.
[2]positive plunge and dips are up, negative down.

The cross-section through the western area shows that the highest silver-mineralized blocks constrained to the wireframe form a broader structure, dipping -30 to -40 degrees to the north. As in the eastern cross-section, the higher-grade blocks are distributed along the faulted hanging and footwall contacts of the zone. Review of graphical drill logs for QVD-163 and QVD-167 indicate that their respective mineralized intersections are associated with strong faulting along the contact and therefore, those intersections have been coded “FC” in the database indicating the Fault Contact domain. Hole QVD-191 reported approximately 100 m of low-grade silver mineralization (10 – 50 ppm) in intense, silica – pyrite altered breccia not associated with FC- or LC-type mineralization. Therefore, this mineralization has been coded “NC” in the assay database indicating the Non-Contact domain. This diffuse “cloud” of low-grade silver mineralization surrounding high-grade zones is a typical feature of the Yaxtché deposit. Although generally of lower-grade, it is common that narrow (1-3 m) intervals of high-grade mineralization occur in the NC domain as well, often associated with the white clay + dark sulfide minerals disposed in millimeter wide veinlets.

14.10 *Bulk Density Determination*

As reported in the Micon 43-101 Technical Report (2010), 190 core samples were submitted to the independent laboratory of SGS del Peru, S.A.C., in July 2010, for determination of bulk density by the classical Archimedean method. The resulting average density of these samples was 2.60 grams per cm^3. This density value was used for all resource calculations.

14.11 *Resource Classification*

PAH classified the mineral inventory as Indicated and Inferred Resources in compliance with CIM Definition Standards for Mineral Resources and Reserves as shown in Table 14-9. PAH did not believe that the level of knowledge of the subsurface faulting and the longer range continuity of the silver mineralization is well enough understood to warrant definition of Measured Resources.

TABLE 14-9
Golden Minerals Company
El Quevar Project - Yaxtché Deposit
CIM Definitions of Mineral Resources

Measured	A "Measured Mineral Resource" is that part of a Mineral Resource for which quantity, grade or quality, densities, shape, and physical characteristics are so well established that they can be estimated with confidence sufficient to allow the appropriate application of technical and economic parameters, to support production planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough to confirm both geological and grade continuity.
Indicated	An "Indicated Mineral Resource" is that part of a Mineral Resource for which quantity, grade or quality, densities, shape and physical characteristics, can be estimated with a level of confidence sufficient to allow the appropriate application of technical and economic parameters, to support mine planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough for geological and grade continuity to be reasonably assumed.
Inferred	An "Inferred Mineral Resource" is that part of a Mineral Resource for which quantity and grade or quality can be estimated on the basis of geological evidence and limited sampling and reasonably assumed, but not verified, geological and grade continuity. The estimate is based on limited information and sampling gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes.

CIM Definition Standards – For Mineral Resources and Reserves, CIM Standing Committee on Reserve Definitions, CIM Council, Dec. 11, 2005

To define Indicated and Inferred Resources, two criteria were used, as shown in Table 14-10. For Indicated Resources a minimum of two drill holes are required for grade estimation having an average Cartesian sample distance of less than or equal to 25 m to “reasonably assume the continuity of mineralization” (CIM Definition Standards, 2005). Drill holes were originally drilled on fans with an average spacing of approximately 20 m apart with some infill drilling. Inferred Resources included all other estimated blocks within the 10 ppm grade shell that used either a single hole in estimation or where the average Cartesian sample distance was greater than 25 m.

TABLE 14-10
Golden Minerals Company
El Quevar Project - Yaxtché Deposit
Resource Classification Scheme

Classification	Indicated	Inferred
Minimum number of holes required	2	1
Average Cartesian distance of samples from block centroid	≤ 25m	any distance

Compilation of the block estimation statistics on Table 14-11 indicates robust composite sample support for block grade estimates that relates to the variography and to the relatively tight drill hole spacing on the Yaxtché deposit. For all potential resources, on average, seven composite samples from two drill holes were used in grade estimation. Mean Cartesian distances from block centroids to samples is reasonably short, averaging 25 m for potential Indicated and Inferred Resources.

TABLE 14-11
Golden Minerals Company
El Quevar Project - Yaxtché Deposit
Block Estimation Statistics

	All Potential Resource			Potential Indicated			Potential Inferred		
Parameter	**min**	**max**	**mean**	**min**	**max**	**mean**	**min**	**max**	**mean**
Number of composites used in estimation	2	12	7	2	12	7	2	12	7
Number of holes used in estimation	1	8	2	2	7	2	1	8	2
Average sample Cartesian distance used per block estimation (meters)	1	65	25	1	25	18	1	65	31

14.12 *Block Model Regularization*

The final 3 x 3 x 3 m block model was regularized to a 6 x 6 x 6 m block size for incorporation into the Whittle® software for pit shell analysis in the eastern zone and for underground mine modeling in the western deep portion of the deposit. Due to the regularizing process, the regularized blocks incorporate some waste material along the periphery where blocks outside but along the edge of the 10 ppm grade shell are coded as 0 ppm silver. In simplest terms regularization of the block model is an operation in the Vulcan® software where estimated values associated with 8 smaller blocks are averaged into one set of estimated values now associated with a single larger block. As this averaging effect may incorporate some waste material into the new larger blocks, there is commonly a dilution effect on the grade associated with the larger blocks. Because of this effect, PAH did not apply a separate grade dilution factor in estimation of Mineral Resources in either the Whittle® runs or in underground mine modeling. To do so would introduce "double dilution" to the resource estimate.

14.13 *Block Model Validation*

As a check for global bias, PAH performed a block model validation test using nearest neighbor estimation of the silver composite samples. A comparison is made at the zero silver cutoff grade between the average silver grade by nearest neighbor and the grade estimated by ordinary kriging, which was the interpolation method used in the current model. The nearest neighbor grade at the zero Ag ppm cutoff produces a theoretically unbiased average grade estimate suitable for comparison with other estimation techniques. PAH found that the nearest neighbor and the estimated grades of the Yaxtché deposit at the 0 ppm cutoff differed by only 1.9 percent.

PAH reviewed cross-sections generated in the Vulcan® software and compared the block grades to the composite grades and found that the block grades honored the composite samples.

From these checks PAH believes that the block model is industry standard and suitable for use in Mineral Resource estimation.

14.14 *Conceptual Economic Basis of Mineral Resource Estimate*

As stated in Section 14.0, Golden Minerals' approach to satisfying the CIM standard of the *reasonable prospect of economic extraction* is to further analyze the mineral inventory generated by the block model using the Whittle® software and conceptual underground mine modeling.

Specifying conceptual economic parameters that are both reasonable and technically justifiable to define an open pit using the Whittle® software satisfies the CIM standard and allows reporting of Mineral Resources from Whittle® pit shells.

Salient points in a conceptual development plan for the Yaxtché deposit might include the following:

- A shallow open pit mine in the eastern portion of the Yaxtché deposit.
- An underground mine to access the deeper mineralization in the western portion of the Yaxtché deposit.

Conceptual economic parameters required for preparation of Whittle® shells and underground mine models were provided by Golden Minerals based on their six years of operational experience in mineral exploration and mining in Argentina and in other countries in Latin America. Their recent technical activities included the excavation of new underground workings to explore and bulk sample the eastern Yaxtché deposit from 2010 to 2011. Processing costs were also provided by Golden Minerals based on test work conducted by their metallurgical consultants through 2011. PAH believes these economic parameters are reasonable and justifiable for use in this early stage evaluation.

14.15 *In-pit Mineral Resources, Eastern Yaxtché Deposit*

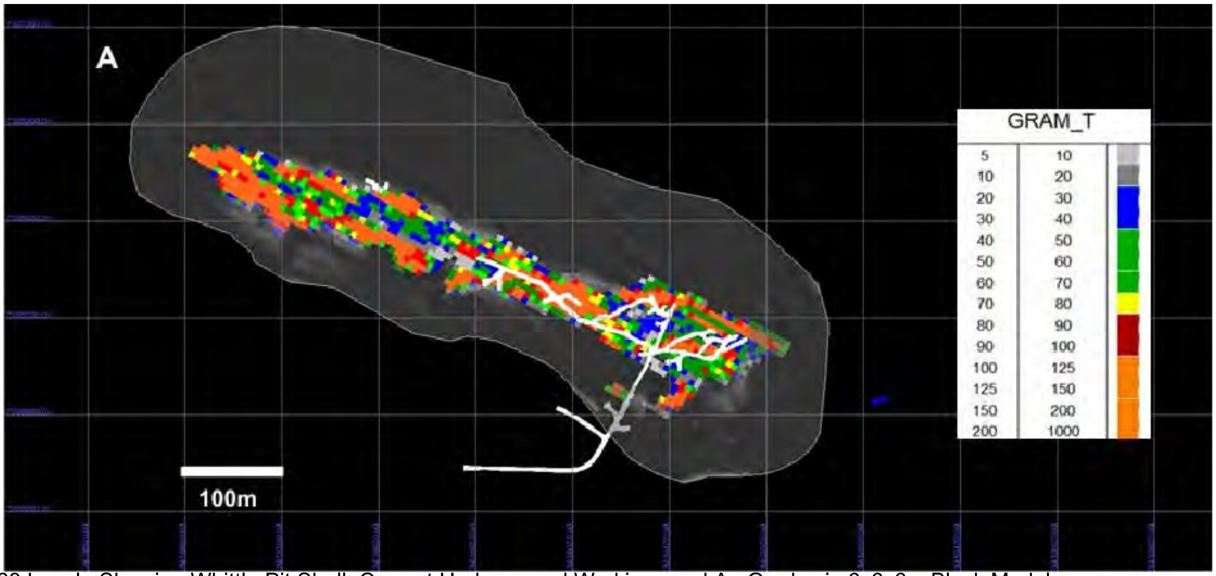
A Whittle® pit analysis was conducted to evaluate the potential extraction of the shallow oxide and sulfide silver mineralization by surface mining in the eastern portion of the deposit. Conceptual but technically-justifiable operating costs were input into the Whittle® analysis for mining, processing, G&A, sustaining capital and selling costs (Table 14-12). A metal price of US$24.41 per ounce of silver was used. This is the three year average based on Platt's monthly price guide for the period March 2009 to February 2012. Silver grade is the only grade value that was used to calculate the value of the blocks in the Whittle® software. Within the block model, blocks have been coded as either oxide or non-oxide. Based on early-stage test work on samples from the Yaxtché deposit, the metallurgical recoveries used in this resource estimate are 88.5 percent Ag for non-oxide resources and 61 percent Ag for oxide resources. The marginal cutoff grades calculated in the Whittle® pit analysis are 31 g/t Ag for oxide resources and 21 g/t Ag for sulfide resources. As the Whittle analysis was run on the *regularized,* 6 x 6 x 6 m block model, an explicit dilution factor was not input into the Whittle® runs as the regularization process introduces about 10 percent grade dilution. A mining recovery factor of 95 percent was input to the program. The calculated strip ratio from Whittle is 2.96 (waste/ore).

TABLE 14-12
Golden Minerals Company
El Quevar Project - Yaxtché Deposit
Conceptual Economic Parameters Used in the Whittle® Pit Shell Analysis*

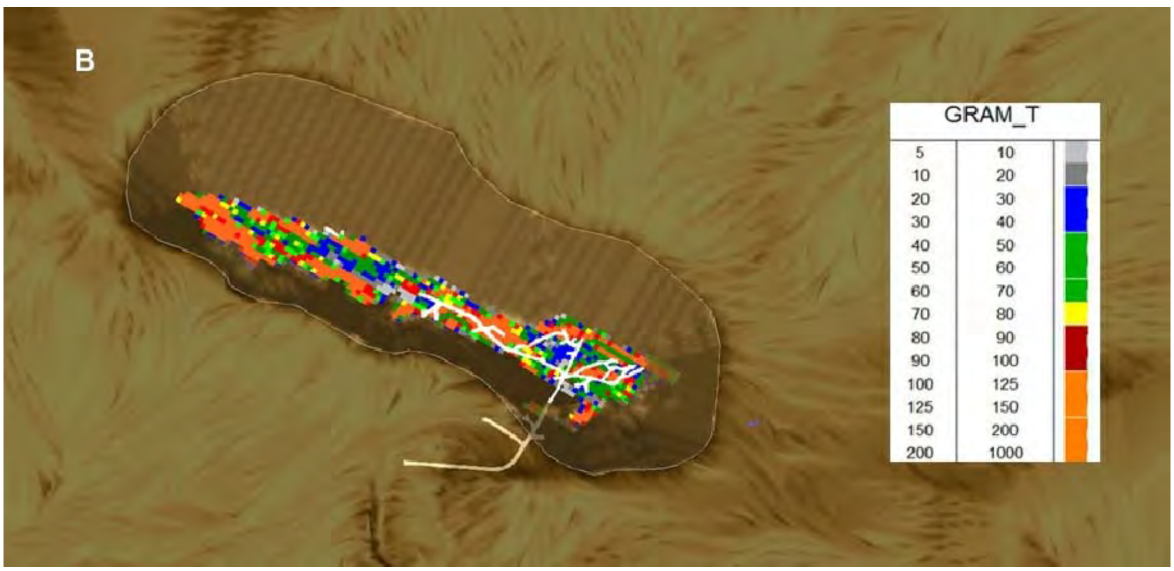
Parameter	Units	Value
Mining Cost	$tonne mined	3.00
Processing Cost	$/tonne processed	11.00
G&A	$/tonne processed	2.07
Sustaining Capital	$/tonne processed	0.50
Total Processing Cost	$/tonne processed	13.57
Refining Cost Ag	$/oz	0.50
Freight	$/oz	1.5
Ag Recovery (sulfide ore)	%	88.5
Ag Recovery (oxide ore)	%	61.0
Ag Metal Price (3 yr average)	$/oz	24.41

*Whittle® (Ver. 4.3) Pit Optimization Software
Conceptual economic parameters are in 2011 (US$).

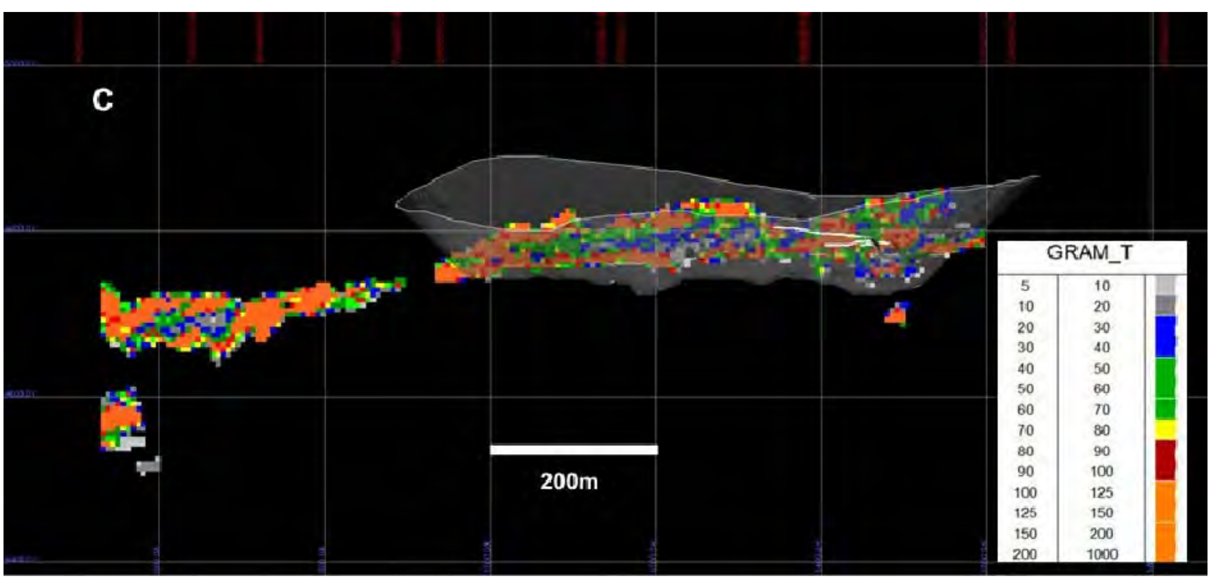
Images of the pit shell generated in this evaluation are given on Figure 14-6. They show the distribution of silver grades in the 6 x 6 x 6 m blocks at an elevation close to the elevation at the base of the access



A) Plan 4768 Level: Showing Whittle Pit Shell, Current Underground Workings and Ag Grades in 6x6x6m Block Model.



B) Plan 4768 Level: Showing Whittle Pit Shell, Current Underground Workings, Topography and Ag Grades in 6x6x6m Block Model.



C) NW - SE Longitudinal Section looking Northeast Showing Shallow Eastern and Deep Western Portions of the Yaxchté with Silver Grades

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pincock, allen & holt 165 S. Union Boulevard, Suite 950 Lakewood, Colorado 80228 Phone (303) 986-6950	Golden Minerals Co.	FIGURE 14-6 In-Pit Silver Resources, Eastern Yaxtché Deposit	May 2012
Project No. DE-00196	Project Name El Quevar Project		Drawing Name Fig.14-6.dwg

ramp. Pit dimensions are approximately 725 m long by 275 m wide. The pit is approximately 125 m deep and bottoms at 4,720 m RL.

The In-pit Mineral Resources for the eastern Yaxtché deposit are reported below in Section 14.17.

14.16 *Underground Mineral Resources, Western Yaxtché Deposit*

PAH completed a conceptual underground mining assessment of the Western Yaxtché Deposit which included an estimate of underground Mineral Resources.

4.16.1 Underground Mine Modeling Methodology

To estimate underground Mineral Resources in the Western Yaxtché deposit, PAH selected a 36-meter high mineralized test zone and calculated the mineral inventory for the area and compared it to the same area constrained by conceptual stope shapes using PAH's latest block model which incorporates 6 x 6 x 6 m blocks in block model file (feb09_2012_Mod_6X5A_Reg_west.bmf).

The ratio of the mineral inventory to mineral resources for this test area was then applied to the entire mineralized zone. For clarity, the term "mineral inventory" means a block model mineral inventory. In this case the mineral inventory was a grade shell with silver grades greater than 75 g/t.

PAH reviewed photos of uncut diamond drill cores and the resource model in the Vulcan® software to ascertain general rock strength and mineralized zone dimensions. From additional discussions with PAH geologists on the project, it was concluded that the rock is fairly competent with both discontinuous and continuous mineralized zones. PAH assumed that stopes could be developed parallel to the overall WNW strike of the mineralized zone.

As a result, longhole sublevel stoping was chosen as the conceptual underground mining method. Stope blocks were chosen at 6 m wide by 36 m high with delayed cemented rock fill or pastefill to allow subsequent secondary mining blocks to be extracted beside or below primary mining blocks. Stope length was not considered, since a given stope block would be mined in a retreat fashion with paste or cemented rock fill emplaced before the stope became unstable; subsequent to the curing of the fill, stoping would resume in a retreat mode. However, PAH determined that mineralized areas must be greater than 12 m long in order to be considered a stope.

Based on a stoping operating cost of US$40 per tonne, an underground cutoff grade of 100 grams per tonne of silver was calculated (Table 14-13). A silver price of US$24.41 per ounce was used with no credits given for copper, assuming copper credits would cover its downstream costs.

PAH also considered a more aggressive 75 grams per tonne cut off grade. Given the current strong market for silver, Golden Minerals reports the underground mineral resource at the lower 75 g/t silver cutoff grade.

TABLE 14-13
Golden Minerals Company
El Quevar Project - Yaxtché Deposit
Underground Cutoff Grade Parameters and Assumptions

Parameter	Units	Value
Mining Cost	US$tonne mined	40.00
Processing Cost	US$/tonne processed	11.00
G&A	UG$/tonne processed	1.00
Refining & Transport Cost Ag	US$/oz	1.50
Ag Recovery (sulfide ore)	%	88.5
Ag Metal Price	US$/oz	24.41

Cutoff grades of 100 and 75 grams per tonne silver were computed with the following formula:

$$\text{Cutoff Grade} = \frac{\text{(Mining + Milling+ G\&A costs)}}{\text{\% Mill Recovery} * \text{(Silver Price – Refining Cost)}}$$

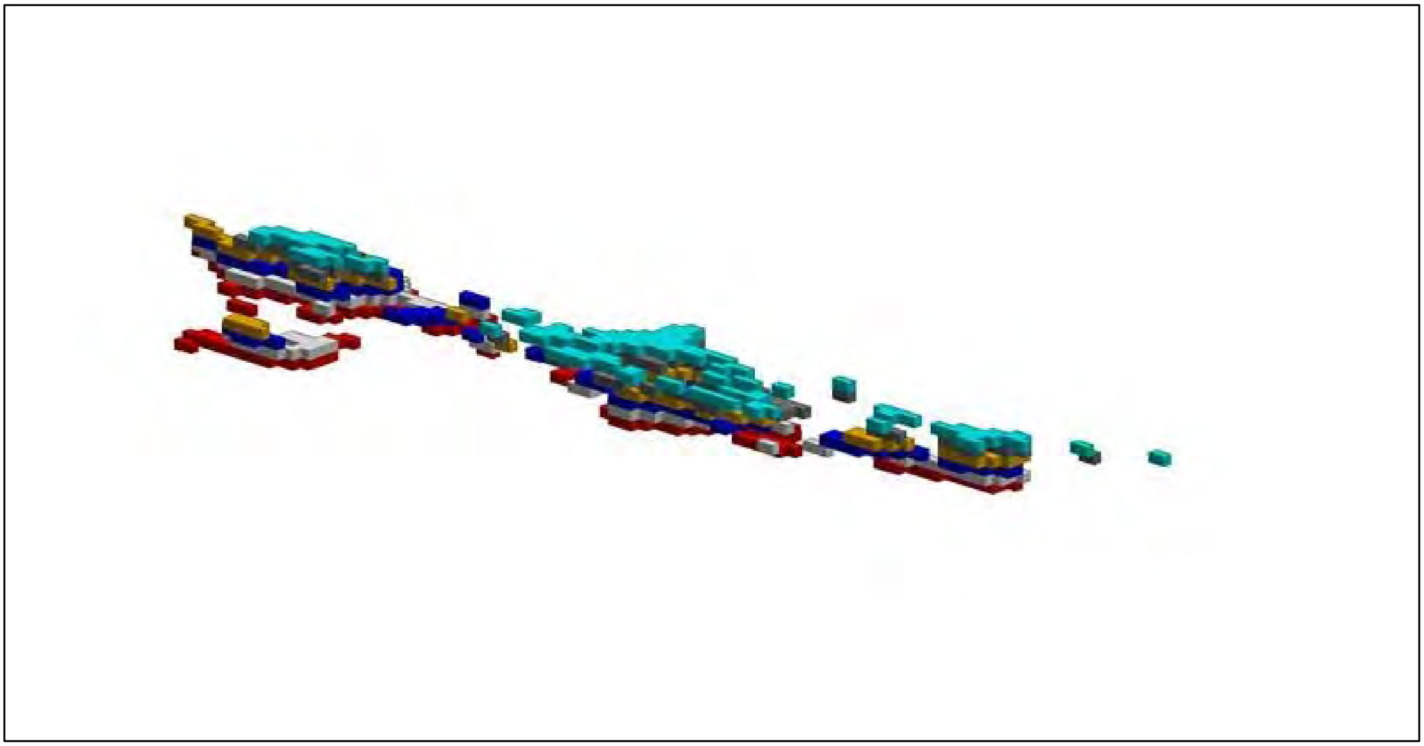
Based on the cutoff grade calculation, mineral inventory blocks greater than 100 g/t silver were generated every 6 m in the test zone from the 4,624 m to 4,660 m levels using the latest PAH block model (6 levels in total). Stope shapes with the above mentioned dimensions were designed for the six test levels. Three-dimensional images of the stope shapes in the test zone and the 100 g/t grade shell are presented on Figure 14-7.

The unconstrained mineral inventory and the mineral resources constrained to conceptual stope shapes on the six test levels were both calculated from the block model. A reasonable mining recovery of 95 percent was applied to the mineral resource tonnes with no mine dilution, since PAH assumes that there is some dilution in the larger 6 m block size. PAH feels both of these factors are reasonable at this stage of the study.

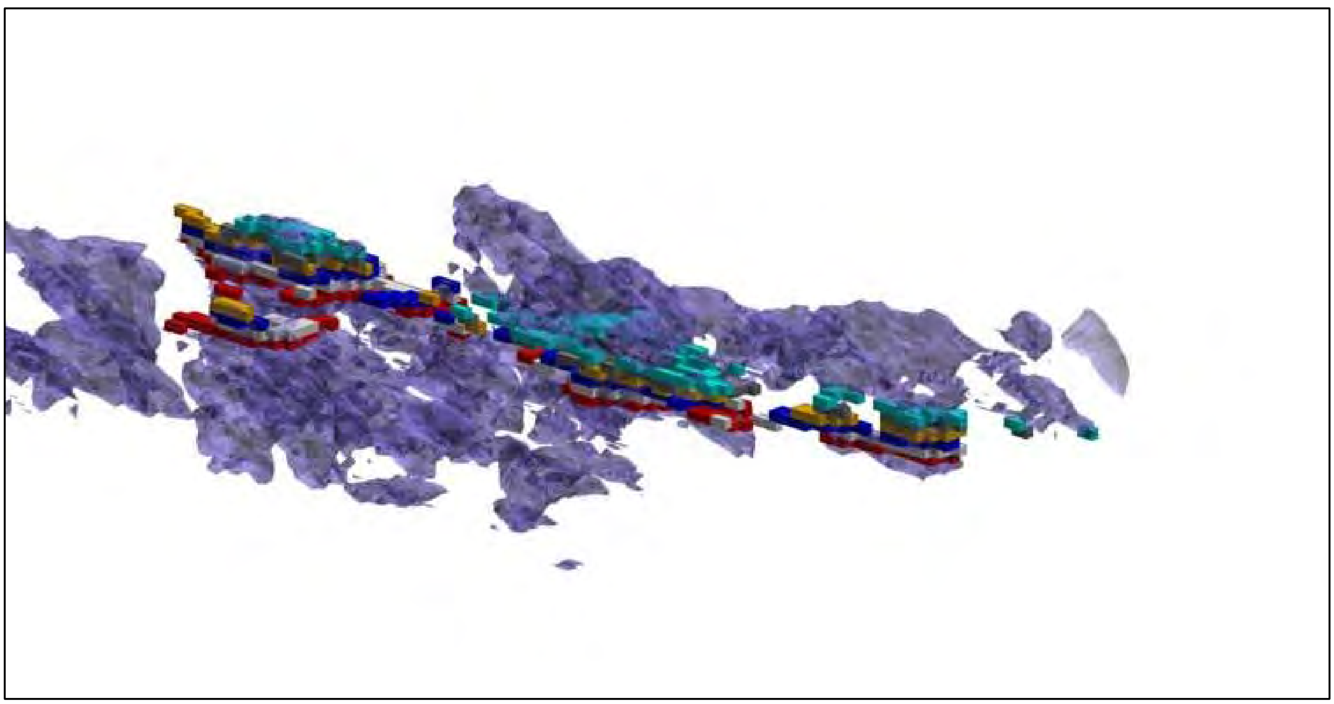
Table 14-14 summarizes the comparison between the mineral inventory and mineral resources for the test levels.

The spatial relationship of the six test levels, the conceptual stope shapes and the mineral inventory are shown graphically on Figures 14-8 and 14-9. The plan map on Figure 14-8 suggests that that individual stopes may range from 25 m to 100 m in length along the trend of mineralization. Cross-sections #1 and #2 suggest that vertical continuity of mineralized blocks, greater than 100 ppm Ag, is locally in the range of 60 m to 80 m in height while horizontal continuity of blocks range from 30 m to 50 m wide.

The results, shown on Table 14-14, found that by constraining mineral resources to the stope shapes on the test levels, 86 percent of the tonnes and 89 percent of the silver ounces were extracted from the mineral inventory on those test levels assuming a 100 g/t Ag cutoff grade. These percentages represent the Mineral Resource Tonnage Factor (86%) and the Mineral Resource Metal Factor (89%).



3D View of Six Test Zones Created Within Block Model



3D View of Six Test Zones Within 100 g/t Ag Grade Shell Created in Block Model

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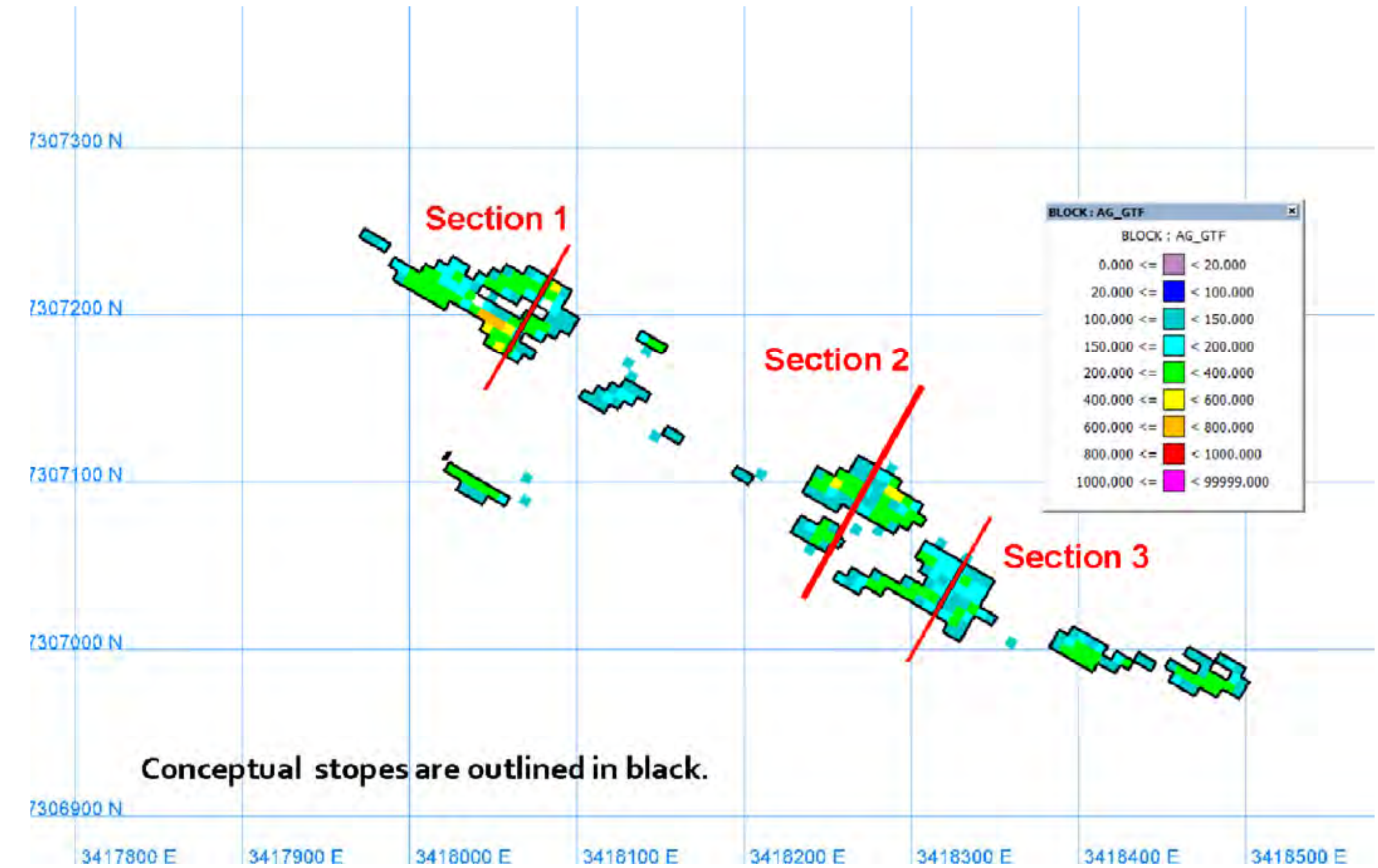
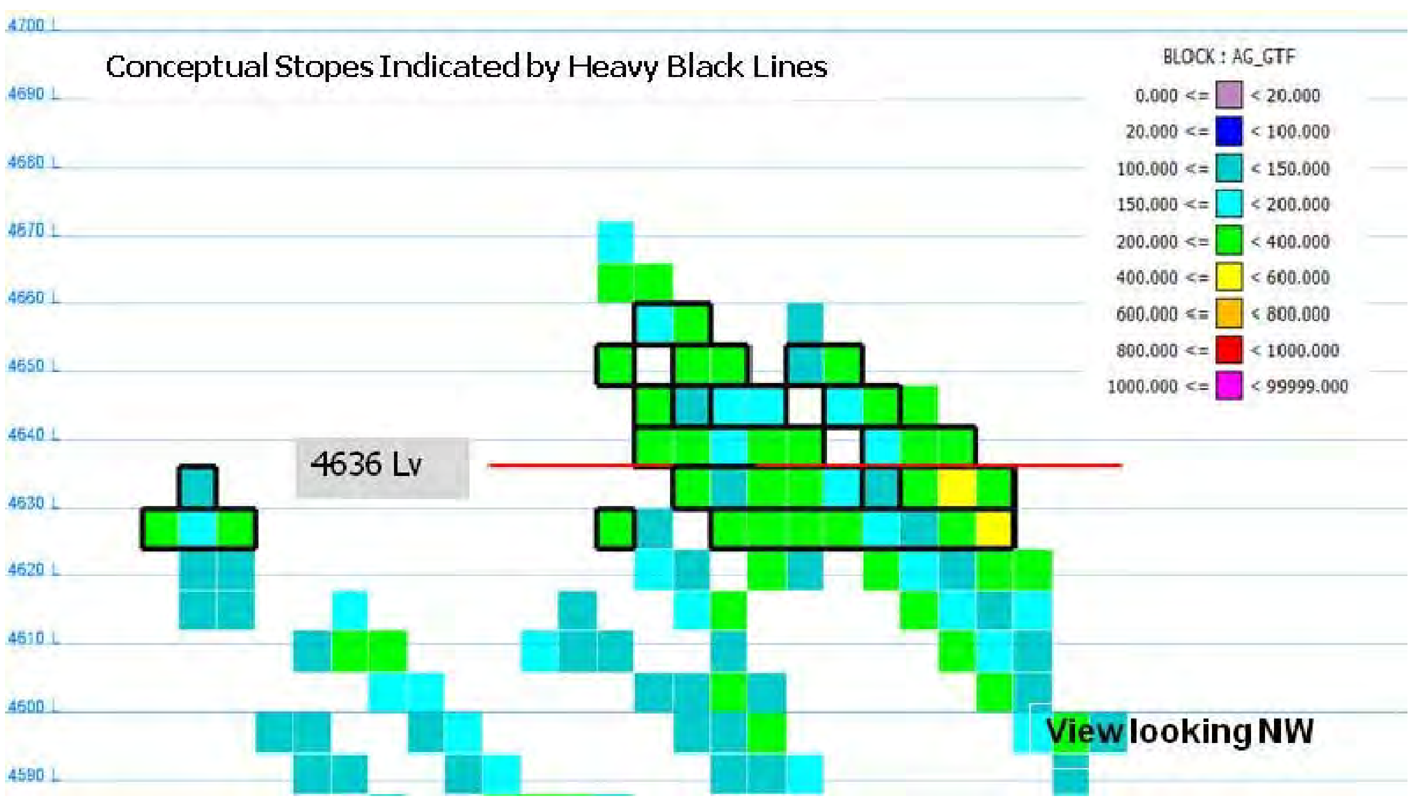
pincock, allen & holt 165 S. Union Boulevard, Suite 950 Lakewood, Colorado 80228 Phone (303) 986-6950	***Golden Minerals Co.***	FIGURE 14-7 Yaxtché - Western Deep Area Underground Test Zones	May 2012
Project No. DE-00196	Project Name El Quevar Project		Drawing Name Fig.14-7.dwg



Plan of 4636m Level - Conceptual Underground Stopes (100 g/t Ag COG)



Section 1: Conceptual Stopes in Test Zone (100 g/t Ag COG)

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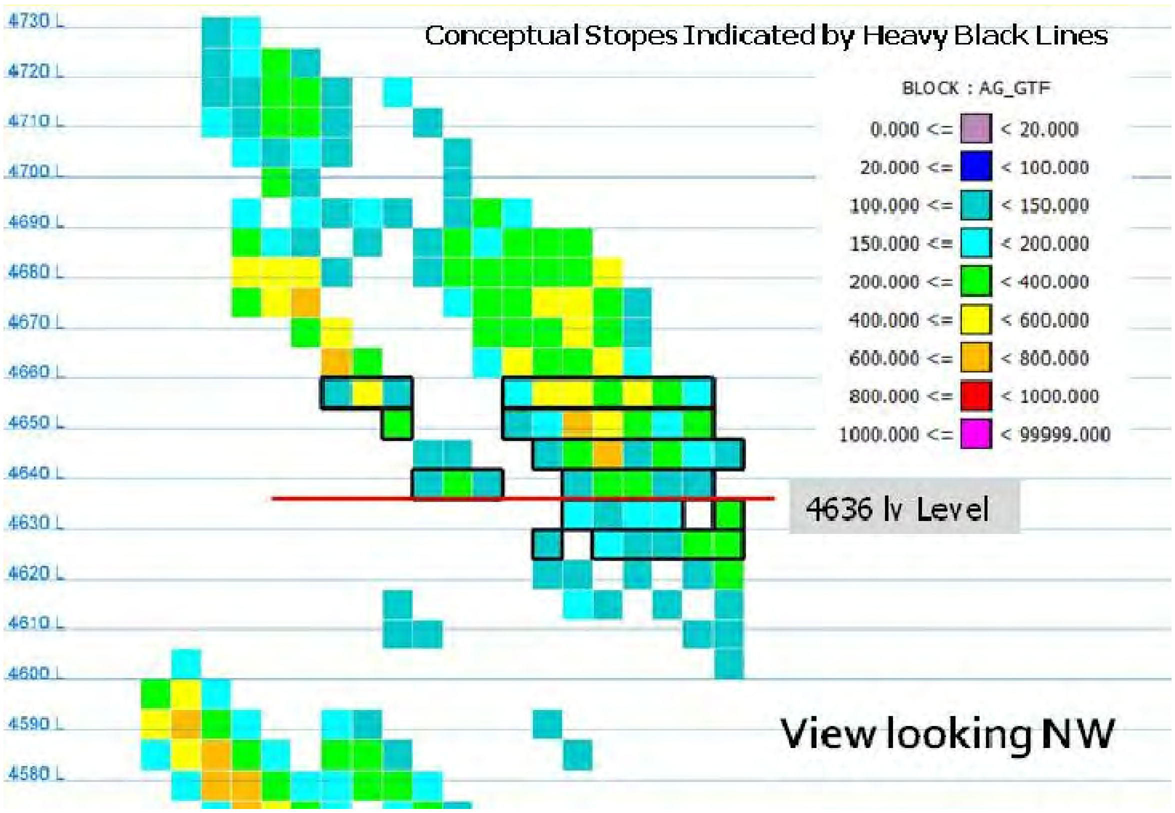
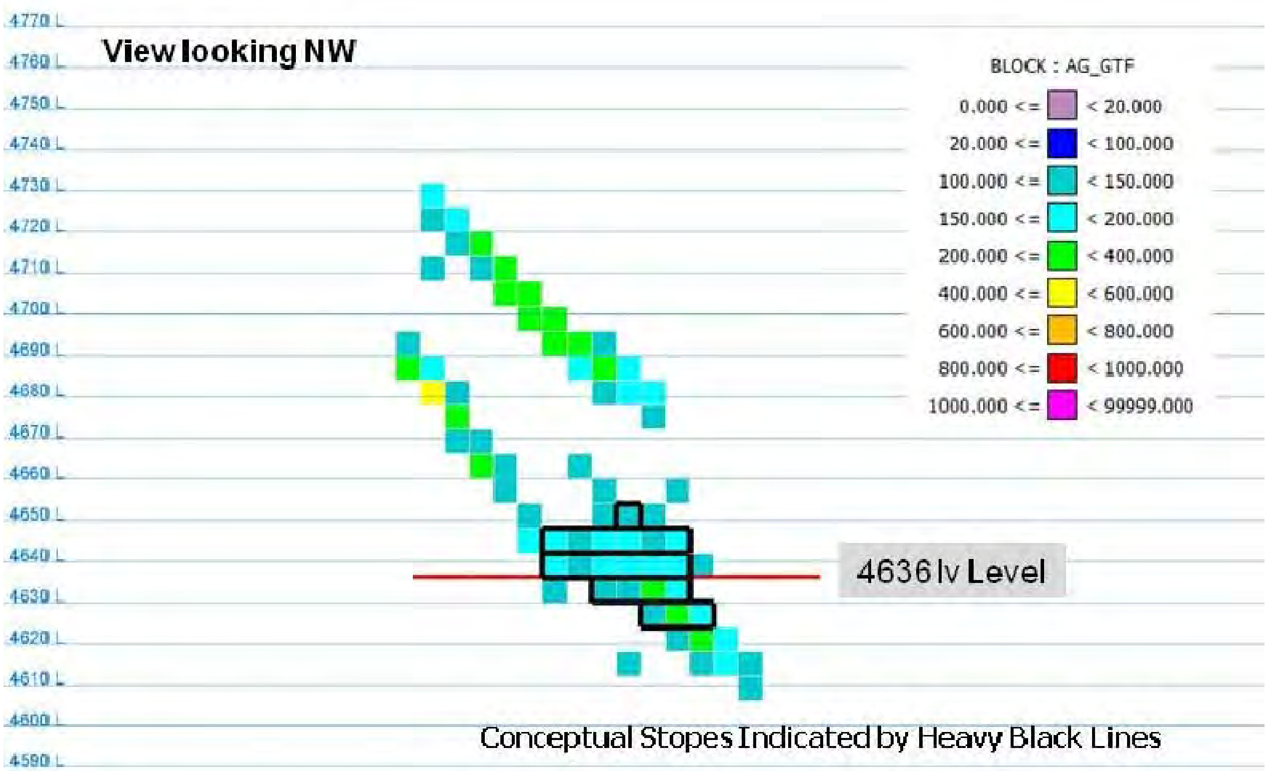
pincock, allen & holt 165 S. Union Boulevard, Suite 950 Lakewood, Colorado 80228 Phone (303) 986-6950	***Golden Minerals Co.***	FIGURE 14-8 Plan and Sections Underground Mine Model	May 2012
Project No. DE-00196	Project Name El Quevar Project		Drawing Name Fig.14-8.dwg



Section 2: Conceptual Stopes (100 g/t Ag COG)



Section 3: Conceptual Stopes (100 g/t Ag COG)

Prepared by	Drawing Provided by/Prepared for		Date of Issue
pincock, allen & holt 165 S. Union Boulevard, Suite 950 Lakewood, Colorado 80228 Phone (303) 986-6950	***Golden Minerals Co.***	FIGURE 14-9 Cross-Sections Underground Mine Model	May 2012
Project No. DE-00196	Project Name El Quevar Project		Drawing Name Fig.14-9.dwg

TABLE 14-14
Golden Minerals Company
El Quevar Project - Yaxtché Deposit
Underground Mine Modeling between 4,624 m to 4,660 m Elevation*

Block Model Mineral Inventory From 4,624 m to 4,660 m Elevation												
	Indicated				**Inferred**				**Summary**			
	Tonnes	**Grade (g/t)**	**Grade (oz/t)**	**Ounces**	**Tonnes**	**Grade (g/t)**	**Grade (oz/t)**	**Ounces**	**Tonnes**	**Grade (g/t)**	**Grade (oz/t)**	**Ounces**
TOTAL	**449,280**	**197**	**6.35**	**2,845,610**	**500,947**	**204**	**6.55**	**3,285,595**	**950,227**	**200.8**	**6.46**	**6,131,205**
Mineral Resources From 4,624 m to 4,660 m Elevation**												
	Indicated Resource				**Inferred Resource**				**Summary**			
Elevation Range	**Tonnes**	**Grade (g/t)**	**Grade (oz/t)**	**Ounces**	**Tonnes**	**Grade (g/t)**	**Grade (oz/t)**	**Ounces**	**Tonnes**	**Grade (g/t)**	**Grade (oz/t)**	**Ounces**
4624 to 4630	108,960	203.9	6.6	714,193	89,847	227.4	7.3	656,978	198,806	214.5	6.9	1,371,171
4630 to 4636	78,062	201.6	6.5	506,008	83,117	213.5	6.9	570,576	161,179	207.8	6.7	1,076,584
4636 to 4642	65,717	211.7	6.8	447,272	86,477	192.8	6.2	535,910	152,194	200.9	6.5	983,182
4642 to 4648	51,667	203.3	6.5	337,633	77,501	187.5	6.0	467,262	129,168	193.8	6.2	804,895
4648 to 4654	50,001	214.3	6.9	344,556	58,406	203.6	6.5	382,235	108,408	208.5	6.7	726,791
4654 to 4660	59,576	186.5	6.0	357,229	49,430	252.1	8.1	400,610	109,007	216.2	7.0	757,839
SUB TOTAL	**413,983**	**203.4**	**6.5**	**2,706,890**	**444,778**	**210.7**	**6.8**	**3,013,572**	**858,761**	**207.2**	6.7	**5,720,462**
Mine Recovery (95%)	393,284	203.4	6.5	2,571,546	422,539	210.7	6.8	2,862,893	815,823	207.2	6.7	5,434,439
TOTAL	**393,284**	**203.4**	**6.5**	**2,571,546**	**422,539**	**210.7**	**6.8**	**2,862,893**	**815,823**	**207.2**	**6.7**	**5,434,439**
% Difference (Mineral Resource/Mineral Inventory)									**86%**			**89%**

**Mineral resources are based on conceptual stope shapes queried to the block model.
100 g/t Ag cutoff grade
Silver Price = US$24.41
Silver Recovery = 88.5%
Dilution approximately 10% by "regularization" of 3 x 3x 3 meter blocks to 6 x 6 x 6 meter blocks in Vulcan softw are.
Mining Recovery Factor = 95%
Modeled Mineral Resource Tonnage Factor = 86%
Modeled Mineral Resource Metal Factor = 89%
*This Test Interval Used to Determine the Percent Recoverable Mineral Resources

These factors were then applied to the entire underground mineral inventory, from below the current open pit at 4,730 m elevation down to the 4,480 m level. The ratio of indicated (43%) to inferred (57%) in the mineral inventory was also applied to the mineral resource. At the 100 g/t Ag cutoff grade, the mineral resource estimated using the above tonnage and metal factors was the following:

- Indicated Resources: 2,319,214 tonnes at an average grade of 211.8 g/t Ag containing 15,791,395 ounces of silver. Inferred Resources: 3,097,428 tonnes at an average grade of 206.0 g/t Ag containing 20,511,978 ounces of silver.

At the request of Golden Minerals, PAH conducted a second iteration of underground mine modeling assuming a lower cutoff grade of 75 g/t Ag. In this scenario, the mineral inventory was calculated from the bottom of the open pit at the 4,732 m down to the 4,480 m elevation. This mineral inventory was then reduced by applying the same tonnage factor (86%) and metal factor (89%) to yield an estimate of mineral resources at the 75 g/t Ag cutoff.

PAH believes that preparation of more detailed conceptual stopes designed using the 75 g/t cutoff grade may increase the conversion rate of the mineral inventory to mineral resources; however, PAH feels the current methodology is appropriate for the accuracy of the data at this stage of the project.

The Underground Mineral Resources Statement for the Yaxtché deposit is reported in Section 14.17.

14.17 *Mineral Resource Statement*

Mineral Resources are reported in accordance with NI 43-101 and were estimated in conformity with the generally accepted CIM guidelines. Mineral Resources are not Mineral Reserves and may not be economically viable. There is no certainty that all or any part of the Mineral Resource will be converted into Mineral Reserves. There are no Mineral Reserves reported for the Yaxtché deposit on the El Quevar Property. Mineral Resources are inclusive within the Block Model Mineral Inventory.

The audit of this resource estimate was performed by Craig Horlacher, Principal Geologist with PAH, an independent qualified person and Mr. Paul Gates, Principal Mining Engineer with PAH, and an independent qualified person as this term is defined in NI 43-101 as revised.

This Mineral Resource estimate is for the Yaxtché deposit, which is currently the main target of interest at the El Quevar project. The Mineral Resource estimate utilizes preliminary mining shapes, conceptual economic factors and proposes to recover silver resources by open pit mining methods on the eastern and central Yaxtché deposit and by bulk underground mining on the western portion of the deposit. The recovery of copper which occurs in low concentrations in the deposit is not considered in the conceptual economic parameters used in the current resource estimate. However the grade and amount of contained copper in the Yaxtché deposit has been included in the mineral inventory statement in Section 14.18.

The combined (global) Mineral Resource estimate for the open pit and underground mining scenarios is given on Table 14-15. This global estimate includes the "In-Pit" Mineral Resources reported on Table 14-16 and the underground Mineral Resources reported on Table 14-17.

TABLE 14-15
Golden Minerals Company
El Quevar Project - Yaxtché Deposit
NI 43-101 Compliant, Combined Open Pit and Underground Mineral Resources

Mineral Resource Class	Tonnes ('000)	Ag Grade g/t	Contained Ag Ounces[1]
Indicated (Oxide + Sulfide)	7,053	141.3	32,041,545
Inferred (Oxide + Sulfide)	6,163	152.3	30,168,686

[1] Contained Ounces for Indicated and Inferred are added from Indicated and Inferred in Table 14-16 and Table 14-17

TABLE 14-16
Golden Minerals Company
El Quevar Project - Yaxtché Deposit
NI 43-101 Compliant In-Pit Mineral Resources

Mineral Resource Class	Ag Cutoff Grade g/t	Tonnes (000)	Ag Grade g/t	Contained Ag Ounces
Indicated (Oxide)	30.9	1,861	109.2	6,533,544
Indicated (Sulfide)	21.3	2,146	109.4	7,545,014
Inferred (Oxide)	30.9	766	101.0	2,486,643
Inferred (Sulfide)	21.3	1,248	99.2	3,981,170

TABLE 14-17
Golden Minerals Company
El Quevar Project - Yaxtché Deposit
NI 43-101 Compliant Underground Mineral Resources

Mineral Resource Class	Ag Cutoff Grade g/t	Tonnes (000)	Ag Grade (g/t)	Contained Ag Ounces
Indicated (Sulfide)	75	3,046	183.4	17,962,987
Inferred (Sulfide)	75	4,149	177.7	23,700,873

The following notes are integral to the above Mineral Resource estimates.

1. Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability. This resource estimate includes Inferred Mineral Resources which are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as Mineral Reserves. There is no certainty that the results projected in this Technical Report will be realized and actual results may vary substantially.

2. The effective date for technical information used in this resource estimate is February 9, 2012.

3. A uniform bulk density of 2.60 g/cc, the average of 190 measurements on core was used.

4. The drilling database used in this resource estimate contained records for 270 diamond drill holes and over 21,000 silver analyses completed by the Company since 2006. Drill hole samples were composited to 1m lengths. Assays were completed at several commercial laboratories: Alex Stewart Argentina (74%), ALS-Chemex (15%), ACME (10%) and SGS (1%). QA/QC on the assay data and a blind check sampling program on high-grade silver sample pulps had acceptable results. Mineral Resources are inclusive within the Block Model Mineral Inventory.

5. Resource estimates assume the following conceptual economic parameters: metal price, three year average of US$24.41/oz Ag, metallurgical recovery (61% oxide material, 88.5% sulfide material). Total processing cost $13.57 per tonne processed; total refining and freight cost $2.00/ounce. Resource estimate assumes a mining recovery of 95 percent and approximately 10 percent dilution resulting from "regularization" of 3 x 3 x 3 m blocks to 6 x 6 x 6 m blocks in the Vulcan® software. Resource estimates for open pit and underground areas assume mining recovery of 95 percent and approximately 10 percent mining dilution as a result of the "regularization" of 3 x 3 x 3 m blocks to 6 x 6 x 6 m blocks in Vulcan® software.

6. Resource Classification - The resource estimate has been classified as Indicated and Inferred Resources based on sample spacing within the 10 ppm grade shell. For Indicated mineral resources a minimum of 2 holes and an average sample distance of less than 25 m from the block centroid are required to show continuity and proximity. Inferred Resources require one hole at any distance from the block centroid but within the grade shell.

7. "In-pit" Mineral Resources were reported from the Whittle pit optimization software using reasonable assumptions about commodity prices, metal recoveries and conceptual operating costs. Mineral resources reported are constrained to the 10 ppm Ag shell, the Contact Mineralization Domains and a conceptual mining shape (Whittle pit shell). The "In-Pit" Mineral Resources are reported at a marginal cutoff grade of 31 g/t Ag (oxide) and 21 g/t Ag (sulfide) mineralization).

8. Mineral Resources in the western Yaxtché deposit that are potentially mineable by underground methods are estimated using conceptual stope shapes queried to the Vulcan® block model. The underground resource occurs from 4,480 m to 4,732 m elevation.

9. Underground Modeling Method: To estimate underground Mineral Resources, 6 m-high test levels were defined over a vertical test interval of 36 m. The block model mineral inventory for the test interval zone was estimated and compared to the test interval in which the mineralized blocks were constrained by conceptual stope shapes. A 75 g/t Ag cutoff grade was assumed. The block model uses regularized, 6 x 6 x 6 m blocks. The minimum stope size considered was 6 x 6 x 12 m with the long dimension oriented parallel to the NW-trend of the mineralization. The ratio of the Mineral Resources, expressed in tonnes and ounces and constrained by conceptual stopes, to the Mineral Inventory constrained only by a grade shell, generates the Modeled Mineral Resource Factors for the test interval. The Modeled Mineral Resource Tonnage Factor in the test interval was 86 percent and the Modeled Mineral Resource Metal Factor (ounces Ag) was 89 percent. These Factors were then

multiplied by the tonnes and ounces of contained silver in the Mineral Inventory to estimate the Mineral Resources from the underground portion of the deposit.

14.18 *Block Model Mineral Inventory*

The basis of the Golden Minerals Mineral Resource estimate is the Vulcan® block model whose evolution and characteristics have been discussed previously in Section 14.14. The Mineral Resources reported above are inclusive within the Block Model Mineral Inventory.

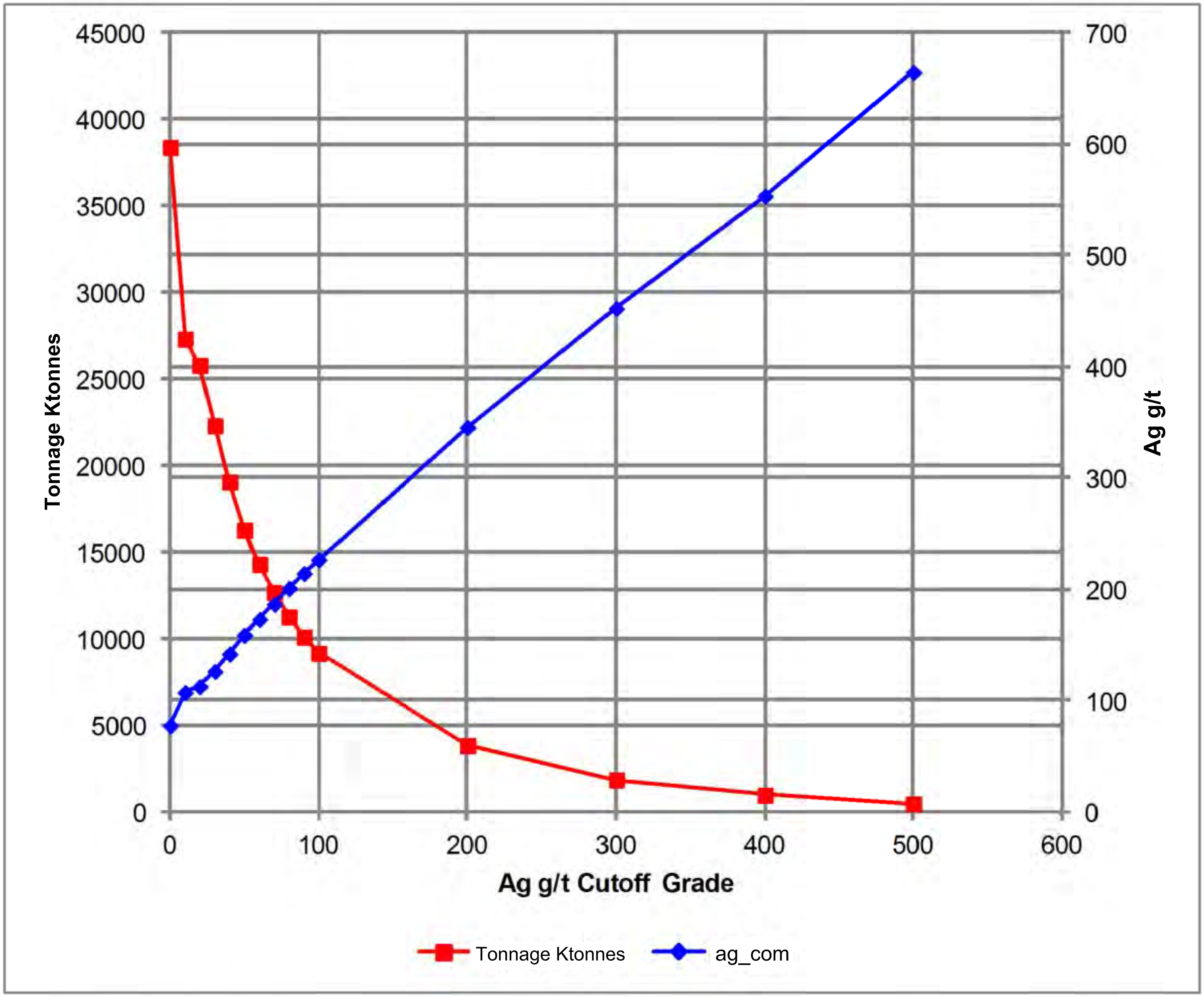
For purposes of this Technical Report, the most recent revision of the Vulcan® block model was used to estimate a block model mineral inventory that is the basis for reporting mineral resources estimated from the Whittle® software and from the underground mine modeling performed in Vulcan® .

PAH interrogated the 3 x 3 x 3 m block model at various grade cutoffs shown in Table 14-9.

Figure 14-10 shows the Block Model Mineral Inventory grade-tonnage curve for silver and copper. The values reported in Table 14-18 are constrained within the 10 ppm silver grade shell and are not considered to be a Mineral Resource.

TABLE 14-18
Golden Minerals Company
El Quevar Project - Yaxtché Deposit
Block Model Mineral Inventory for Contained Silver and Copper at Various Cutoffs

Cutoff	Silver g/t	Tonnage x 1,000	Contained Ag Ounces	Copper %	Contained Cu lbs.
0	77.8	38,379	96,010,800	0.09	76,150,104
10	107.5	27,328	94,459,954	0.11	66,272,731
20	112.8	25,813	93,638,422	0.11	62,598,727
30	126.6	22,325	90,833,204	0.11	54,140,029
40	142.2	19,073	87,186,358	0.12	50,458,529
50	158.9	16,279	83,170,626	0.12	43,066,869
60	173.2	14,311	79,704,732	0.12	37,860,432
70	186.9	12,704	76,354,342	0.12	33,609,037
80	201.1	11,281	72,930,215	0.13	32,331,458
90	214.5	10,112	69,735,734	0.13	28,981,092
100	226.8	9,174	66,880,121	0.13	26,292,775
200	345.5	3,846	42,719,210	0.17	14,414,266
300	452.5	1,876	27,291,238	0.21	8,685,333
400	553.3	973	17,308,390	0.25	5,362,745
500	664.6	483	10,320,136	0.31	3,300,982



Prepared by **pincock, allen & holt** 165 S. Union Boulevard, Suite 950 Lakewood, Colorado 80228 Phone (303) 986-6950	Drawing Provided by/Prepared for ***Golden Minerals Company***	FIGURE 14-10 Silver Grade - Tonnage Curve, Block Model Mineral Inventory, Yaxtché Deposit (April 2012)	Date of Issue Dec 2011
Project No. DE-00196	Project Name El Quevar Project		Drawing Name Fig.14-10.dwg

15.0 ADJACENT PROPERTIES

Section 15 has been quoted and adapted from the Micon Technical Report (August 2010). Comments by PAH are so indicated in the text.

There are no immediately adjacent properties which directly affect the interpretation and evaluation of the mineralization or anomalies found on the El Quevar property. Adjacent properties include exploration permits and exploitation concessions held by various mining companies and individuals. None of the adjacent properties has published resources and the El Quevar project mineralization does not extend onto the adjacent properties.

To the north, the El Quevar project shares boundaries with SESA, Argentina Diamonds, Ltd. and ADY Resources. On the east, the concession boundaries are shared with Desarrollo de Proyectos Mineros S.A., Arieu Sergio Roberto, Carlos Saravia and Arieu Pedro Eugenio, and BHP Billiton Exploration, Inc. SUC Argentina holds concessions adjacent to the south and west of the project area. Also on the south is an adjacent concession held by La Milagros S.R.L., and on the west a concession held by FMC Minera del Altiplan, a subsidiary of FMC Corporation.

There are other mineral properties in the region but production from these properties is confined to lithium, boron and potash from the brines and sediments contained in the salares or salt lakes.

As mentioned in Section 4, there were 22 perlite concessions within the El Quevar property boundaries. While these concessions did not interfere with Golden Minerals' rights, exploration practices or potential development strategies, Golden Minerals decided to purchase the perlite concessions as a means of limiting access to the site and improving conditions of the access road to the project.

The perlite concessions in relation to the El Quevar property boundary and the various mineralized zones on the property have been shown previously in Figure 4-4 of this report.

16.0 OTHER RELEVANT DATA AND INFORMATION

All relevant data and information regarding the Golden Minerals El Quevar project are included in other sections of this report. All of the data presented or disclosed in this report are for the properties controlled by Golden Minerals or its subsidiary Silex.

17.0 INTERPRETATIONS AND CONCLUSIONS

The current Resource Model of the Yaxtché deposit located in the Quevar Sur exploration area utilizes 270 holes, comprising 69,094 meters of drilling with an average hole depth of 256 m. The nominal drill hole spacing is approximately 20-25 meters. The effective date of the drilling information used in this report is February 9, 2012.

PAH has reviewed the drilling database, sampling methodology, core handling, logging, QA/QC results, analytical methods and sample security procedures employed by Golden Minerals and finds that the quality of the resultant technical data is industry standard and is suitable for use in mineral resource estimation.

Since the last previous resource estimate of the Yaxtché deposit was prepared by Micon and reported in their August 2010 Technical Report, Golden Minerals has pursued an aggressive exploration program on their Quevar Sur and Quevar Norte exploration areas.

The Yaxtché deposit is located in the Quevar Sur area and consists of silver mineralization at relatively shallow depth in the eastern portion of the deposit and at greater depth in the western portion. The Mineral Resource estimate reported in the current report includes the eastern and western portions of the Yaxtché deposit which is the main target of interest at the El Quevar project.

Since the Micon report of August 2010, one hundred and one (101) more drill holes are available to support resource estimation in the Yaxtché deposit. Since the Micon report, more than 1,200 m of underground excavations have been completed and sampled by 158 bulk samples taken at the mining face and more than 2,000 chip-channel samples taken from the ribs, back and mining faces of the same excavations. The underground samples provide assay datasets that allow comparison and confirmation of silver grades reported from the 2012 resource model.

Apart from the greater drilling support for the PAH (2012) resource estimate, salient differences between the Micon (2010) and PAH (2012) resource estimates are given as follows:

- Within the alteration package, Micon (2010) constrained the high grade silver mineralization to 75 narrow pods defined by a 100 g/t silver cutoff grade and a minimum width of 3 m. Silver grades were interpolated for each pod using IDS. PAH (2012) constrained the mineralization to a 10 ppm Ag grade shell within the alteration envelope. Within the grade shell PAH modeled the silver mineralization using three Contact Domains that were interpreted from graphical drill logs which recognized the association of higher grade mineralization with fault contacts (FC) and lithologic contacts (LC). PAH also recognized a diffused domain of lower grade silver mineralization not associated with contacts, called non-contact type (NC) mineralization. All intersections greater than 10 ppm Ag were classified by the three Contact Domains which were then used to further restrict grade interpolation.

- PAH interpolated silver grades of each Contact Domain using ordinary kriging. Samples less than 10 ppm silver within the grade shell were modeled in a waste domain. For grade interpolation, Micon used inverse distance squared restricted to each of the 75 pods.

- PAH used a more conservative assay capping strategy than Micon. PAH capped silver values at three times the standard deviation (3-sigma), confirmed by probability plots, for each Contact Domain. This affected approximately 1.5 percent of the assay data. PAH compared the capped and uncapped assay data and found that capping 1.5 percent of the drill hole assays reduced the average silver grade in the deposit by 15 percent. Micon (2010) used a straight 3,000 g/t silver cap based on probability plots which affected 20 samples in the database.

- PAH compiled and conducted a rigorous review of the results of all control sample analyses for standards, blanks and duplicates that were inserted in the sample stream sent to laboratories. PAH reviewed QA/QC procedures and control assay results over the life of the project. While results of this analysis were acceptable, several areas for improvement were noted. Micon relied on previous reviews of QA/QC control samples provided in earlier reports by CAM and SRK.

- PAH constrained the Resource Estimate to mining shapes using preliminary economic and technical factors. Whittle pit shells constrained shallow mineralization in the eastern part of the deposit. Conceptual stope designs were developed at 100 g/t and 75 g/t Ag cutoffs in the block model to constrain potentially mineable underground resources. Micon (2010) did not use conceptual mining shapes or preliminary economic factors to constrain their resource estimate. The recovery of copper which occurs in low concentrations in the deposit was not considered in either the PAH or Micon resource estimates.

- Both the PAH (2012) and Micon (2010) used a bulk density of 2.60 g/cc from 190 core samples analyzed by an independent lab.

A comparison of PAH's average silver grades in the combined resource estimate for in-pit and underground mineral resources as shown on Table 1-1. The grade range for the indicated and inferred resources is 141 g/t Ag and 152 g/t Ag, respectively.

Micon's (2010) average silver grades for indicated and inferred resources that are constrained to 75 narrow pods and not constrained by conceptual economic parameters are 310 g/t Ag and 336 g/t Ag, respectively.

In this regard bulk samples from underground excavations in the eastern portion returned an average grade of 113 g/t Ag a zero cutoff grade, 120 g/t Ag a 30 g/t Ag cutoff grade and 240 g/t Ag a 100 g/t Ag cutoff grade.   Over two thousand, chip-channel samples from the same underground excavations in the form of roof, rib and mining-face samples, averaged 133 g/t Ag. These grades at the specified cutoffs are more representative of the anticipated mining head grades and compare well to the grades estimated from PAH's resource model.

While PAH and Micon used different modeling approaches and assumptions, the recent underground bulk sampling and chip-channel sampling support the potential for bulk mining a lower grade silver deposit by surface methods in the eastern portion and by underground methods in the western portion of the deposit.

18.0 RECOMMENDATIONS

PAH has constructed a resource model for the Yaxtché silver deposit using conceptual economic parameters and conceptual mining shapes to constrain the Mineral Resource estimate. Results from the underground bulk sampling of excavations in 2011 and the extensive chip-channel samples from the same excavations are more representative of the anticipated head grades and compare well to the silver grades estimated from the PAH resource model at specific cutoffs.

1. With respect to further geological work, PAH recommends that the core be re-examined to differentiate the breccia types within the Quevar Breccia using simple descriptive criteria such as the monomictic and polymictic types recognized in surface exposures by Cumming (2010). The objective would be to test the hypothesis that specific breccia horizons may be more favorable for silver mineralization within the dacitic volcanic package. If favorable breccia horizons can be recognized, then the relationship of these horizons to the Contact Domains defined in the current report should be examined.

2. With respect to further exploration work, Golden Minerals has identified seven early-stage exploration targets in its Quevar Norte exploration area which contain high-grade silver values, copper and bismuth associated with structural and alteration patterns similar to the Yaxtché deposit. Further exploration is warranted in this area where geological structures and alteration are well exposed. PAH recommends that detailed mapping (1:500 scale) and sampling be conducted on the exploration targets known as Sharon, Julia, Amanda and Luisa. If the expanded sampling yields encouraging results, then trenching across the delineated structures should follow.

3. With respect to QA/QC procedures, detailed review of control samples found inconsistent insertion of standard reference materials (SRMs) into the sample stream submitted to the laboratory, PAH recommends that Golden Minerals acquire SRM's, over a range of low to high silver grades, that are compatible with analytical methods currently used in the Project. The SRM's should be consistently inserted in the data stream according to the Company's guidelines at the rate of 5 percent. Further to the recommendations made by Micon in their technical report of August 2010, PAH has assembled a current compilation of all QA/QC data for the El Quevar Project.

4. PAH makes the broader recommendation that a corporate level database manager be engaged to create and maintain the Company's drilling databases and to monitor and ensure that quality assurance and quality control is maintained at a high level and ensure prompt action when analytical anomalies occur.

5. With respect to further mining studies, PAH recommends expanding the underground mine modeling to include the full vertical height of mineralization (252 m) which is approximately from 4,480 m to 4,732 m RL. Resource estimates from underground mine modeling presented in the current report are based on tonnage and metal recovery factors deduced from design of conceptual stopes on six test levels over a vertical height of 36 m and then applied to a grade shell of specified cutoff grade

over the height of mineralization. Design of conceptual stopes over the full height of mineralization at specified cutoff grades, will support mineability studies that address specific mining methods and related costs.

6. Subsequent to refinement in the understanding of the ore controls and expanded modeling of the underground portion of the Yaxtché deposit, PAH recommends that the project be advanced to the Preliminary Economic Assessment (PEA) stage, incorporating additional metallurgical testwork and concentrate marketing studies.

19.0 REFERENCES

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20.0 STATEMENTS OF QUALIFIED PERSONS

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I, Craig F. Horlacher, am a Principal Geologist employed at Pincock, Allen & Holt, 165 South Union Blvd., Suite 950, Denver, Colorado 8228-2226. This certificate applies to the “NI 43-101 Technical Report for Resources, Yaxtché Silver Deposit, El Quevar Property, Salta Province, Argentina,” prepared on behalf of Golden Minerals, Company (the “Issuer”), dated June 8, 2012, (the “Technical Report for Resources”).

1. I am a Professional Geologist registered (1494620RM) under the Society for Mining, Metallurgy, and Exploration (SME) and also a member of the Australian Institute of Mining and Metallurgy (#303156).

2. I graduated from Lawrence University, Appleton, Wisconsin with a Bachelor’s Degree in Geology in 1975 and subsequently obtained a Master of Geology from the Colorado School of Mines in 1987, and I have practiced my profession continuously since 1987.

3. Since 1987, I have been involved in mineral exploration, project management and evaluation of mineral properties for gold, silver, copper, lead, zinc, uranium, molybdenum, diatomite, tungsten, potash, iron ore and chrome, in the United States, Canada, Mexico, Panama, Venezuela, Slovakia, Sweden, Argentina, Turkey, Liberia and Senegal I am past president of the Denver Region Exploration Society (2001-2003).

4. I have read the definition of “qualified person” set out in National Instrument 43-101 (“NI 43-101”) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a “qualified person” for the purposes of NI 43-101.

5. I am presently Principal Geologist with the international resource and mining consulting company of Pincock, Allen & Holt (PAH), and have been so since January 2008.

6. As a result of my experience and qualification I am a Qualified Person as defined under the terms of NI 43-101 as revised on June 30, 2011.

7. I have overall responsibility for preparation of this report in collaboration with Mr. Gates who is Qualified Person as defined under the terms of NI 43-101 as revised on June 30, 2011.

8. For purposes of this Technical Report for Resources, John Zeise, Senior Geologist and Craig Horlacher, Principal Geologist with PAH who are considered to be a Qualified Persons under the Society for Mining, Metallurgy, and Exploration (SME), conducted the site visit to the Project during the week of October 3rd, 2011 to review existing geology, core logging and the project setting.

9. I have not had prior involvement with the property that is the subject of this report. I have not received, nor do I expect to receive, any interest, directly or indirectly, from Golden Minerals Company, any affiliate, or associate company.

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

11. I am independent of the Issuer in accordance with the application of Section 1.5 of National Instrument 43-101.

12. I have read NI 43-101, Form 43-101F1, and the Companion Policy 43-101CP, and this Technical Report for Resources has been prepared in compliance with NI 43-101 and Form 43-101F1 as revised on June 30, 2011.

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

Dated at Lakewood, Colorado, this 8th day of June, 2012.

"Craig F. Horlacher"

Craig F. Horlacher, (1494620RM)

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I, Paul A. Gates, P.E., am a Principal Mine Engineer employed at Pincock, Allen & Holt, 165 South Union Blvd., Suite 950, Denver, Colorado 8228-2226. This certificate applies to the "Ni 43-101 Technical Report for Resources, Yaxtché Silver Deposit, El Quevar Property, Salta Province, Argentina," prepared on behalf of Golden Minerals Company, dated June 8, 2012, (the "Technical Report for Resources").

1. I am a Professional Mining Engineer registered with the State of Colorado, #43794.

2. I graduated with a Bachelor of Science degree in Mining Engineering from Montana College of Mineral Science and Technology in 1984. In addition, I have obtained a Master of Business Administration degree from Western New Mexico University in 1997.

3. I have worked as a mining engineer for a total of 28 years since my graduation from university.

4. I have read the definition of "qualified person" set out in National Instrument 43-101 ("NI 43-101") and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "qualified person" for the purposes of NI 43-101.

5. I am presently a Principal Mine Engineer with the international resource and mining consulting company of Pincock, Allen & Holt, Inc. and have been employed in this capacity since December 2009.

6. I am responsible for the preparation Section 14, of the Technical Report titled the "Technical Report for Resources of the Yaxtché Silver Deposit, El Quevar Property, Salta Province, Argentina," prepared for Golden Minerals Company.

7. Prior to the preparation of the Technical Report for Resources, I have had no involvement with the Golden Minerals Project.

8. To the best of my knowledge, information and belief, the Technical Report for Resources contains all scientific and technical information that is required to be disclosed to make the Resource estimate not misleading.

9. I am independent of Golden Minerals Company in accordance with the application of Section 1.5 of National Instrument 43-101.

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

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

Dated in Lakewood, Colorado, this 8th day of June, 2012.

"Paul A. Gates"

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Paul A. Gates, P.E.

APPENDIX A

Significant Drill Hole Intersections - 2011 Drilling Campaign

TABLE A-1
Golden Minerals Company
El Quevar Project - Yaxtché Deposit
Significant Drill Hole Intersections from 2011 Drilling Campaigns in the Yaxtché Deposit

HOLE	FROM	TO	LENGTH	Au COM PPM 0.01	Ag COM PPM 5 - 2000	Ag oz/t	Cu % 0.005 - 30	Pb % 0.01 - 30	Zn % 0.01 - 50	LOCATION
QVD-257	274	275	1	0.01	2.75	0.09	0	0.46	1.55	YW
	275	276	1	0.01	6.28	0.2	0	0.79	1.99	YW
	312	313	1	0.01	308.58	9.6	0.08	0.2	0.04	YW
	313	314	1	0.01	737.8	22.95	0.14	0.21	0.1	YW
	319	320	1	0.01	246.93	7.68	1.64	0.07	0.06	YW
	371	372	1	0.74	74.37	2.31	1.74	0.34	0.1	YW
	379	380	1	0.64	78.94	2.46	1.91	0.43	0.26	YW
	380	381	1	0.82	101.18	3.15	2.05	0.95	0.63	YW
	384	385	1	0.28	84.04	2.61	1.78	0.35	0.07	YW
	385	386	1	0.28	88.8	2.76	2.15	0.19	0.05	YW
	391	392	1	0.01	5.18	0.16	0	0.38	1.05	YW
QVD-258	185	186	1	0.01	6.02	0.19	0.01	0.02	1.26	CB
	190	191	1	0.01	7.07	0.22	0.01	0.13	1.1	CB
	231	232	1	0.01	6.17	0.19	0	0.46	1.1	CB
	232	233	1	0.01	6.36	0.2	0	0.39	1.19	CB
QVD-259	256	257	1	0.01	250.97	7.81	0.93	0.6	0.32	YW
	269	270	1	0.01	830.3	25.83	0.73	0.05	0.09	YW
	270	271	1	0.01	735.99	22.89	0.37	0.03	0.04	YW
	363	364	1	1.8	180.85	5.63	4.61	0.2	0.05	YW
	365	366	1	1.58	133.06	4.14	2.7	0.24	0.06	YW
	368	369	1	0.78	74.1	2.3	1.76	0.1	0.03	YW
	380	381	1	1.08	49.15	1.53	0.45	0.07	0.03	YW
QVD-261	116	117	1	0.01	1.12	0.03	0	0.22	1.07	CB
	135	136	1	0.01	0.82	0.03	0	0.15	1.14	CB
	136	137	1	0.01	5.71	0.18	0	0.69	2.57	CB
	137	138	1	0.01	9	0.28	0	0.8	1.27	CB
	138	139	1	0.01	2.87	0.09	0	0.38	1.35	CB
	215	216	1	0.14	365.23	11.36	0.01	0.03	0.01	CB
	270	271	1	0.01	0.5	0.02	0	0.28	1.48	CB
	271	272	1	0.01	0.5	0.02	0	0.28	1.43	CB
	347	348	1	0.36	212.65	6.61	0.24	0.09	0.01	CB
	383	384	1	0.23	60.39	1.88	1.5	0	0.01	CB
QVD-262	220	221	1	0.01	11.17	0.35	0	1.22	0.76	YW
	224	225	1	0.01	2,120.21	65.95	0.57	13.75	0.61	YW
	225	226	1	0.01	507.52	15.79	0.14	0.56	0.1	YW
	272	273	1	0.01	10.84	0.34	0	0.76	2.33	YW
	277	278	1	0.01	0.5	0.02	0	0.52	1.48	YW
	278	279	1	0.01	0.72	0.02	0	0.64	1.2	YW
	279	280	1	0.01	4.09	0.13	0	1.45	1.09	YW
	280	281	1	0.01	443	13.78	0.03	0.39	0.08	YW
	282	283	1	0.01	326	10.14	0.08	0.2	0.08	YW
	283	284	1	0.01	462	14.37	0.12	0.19	0.05	YW
	285	286	1	0.01	224	6.97	0.05	0.27	0.04	YW
	287	288	1	0.01	1,606	49.95	0.57	0.26	0.25	YW
	288	289	1	0.01	1,535	47.74	0.45	0.15	0.12	YW
	319	320	1	0.01	632	19.66	0.05	0.22	0.02	YW
	320	321	1	0.01	828	25.75	0.05	0.22	0.02	YW
	322	323	1	0.01	308	9.58	0.01	0.4	0.08	YW
	336	337	1	0.03	162.77	5.06	1.36	0.21	0.17	YW
	339	340	1	0.02	135.77	4.22	1.14	0.02	0.08	YW
	352	353	1	0.01	321	9.98	0.42	0.12	0.06	YW
	355	356	1	0.01	256	7.96	0.37	0.1	0.09	YW
	357	358	1	0.01	294	9.14	0.2	0.08	0.04	YW
	362	363	1	0.01	628	19.53	0.24	0.1	0.07	YW
	366	367	1	0.01	254	7.9	0.01	0.06	0.02	YW
QVD-263	185	186	1	0.01	364.98	11.35	0.02	1.41	0.03	YW
	188	189	1	0.01	414.86	12.9	0.03	0.4	0	YW
	195	196	1	0.01	402.07	12.51	0.03	0.27	0.01	YW
	196	197	1	0.01	901.27	28.03	0.09	0.14	0.02	YW
	197	198	1	0.01	445.19	13.85	0.07	0.17	0.01	YW
	198	199	1	0.01	607.41	18.89	0.09	0.25	0.01	YW
	199	200	1	0.01	550.07	17.11	0.07	0.22	0.01	YW
	204	205	1	0.01	241.66	7.52	0.04	0.18	0	YW
	206	207	1	0.01	215.66	6.71	0.03	0.25	0	YW
	207	208	1	0.01	238.27	7.41	0.02	0.17	0	YW
	208	209	1	0.01	3,447.67	107.24	0.35	0.2	0.06	YW
	212	213	1	0.01	212.75	6.&	0.01	0.28	0	YW
	213	214	1	0.01	550.82	17.13	0.04	0.31	0	YW
	227	228	1	0.01	52.07	1.62	0.02	1.68	1.12	YW
	228	229	1	0.01	2.83	0.09	0	1.21	0.75	YW
	229	230	1	0.01	0.84	0.03	0	1.29	0.57	YW
QVD-264	298	299	1	0.04	1,356.46	42.19	0.95	0.24	0.11	YW
	299	300	1	0.05	540.96	16.83	0.45	0.36	0.06	YW
	300	301	1	0.06	1,134.97	35.3	0.65	0.47	0.08	YW
	301	302	1	0.03	373.06	11.6	0.39	0.19	0.09	YW
	302	303	1	0.08	700.36	21.78	0.4	0.13	0.05	YW
	303	304	1	0.1	876.59	27.27	0.47	0.17	0.2	YW
	304	305	1	0.09	200	6.22	0.24	0.06	0.02	YW
	305	306	1	0.09	241.6	7.51	0.4	0.07	0.08	YW
	306	307	1	0.16	601.03	18.69	0.59	0.27	0.36	YW

	307	308	1	0.14	734.8	22.86	0.91	0.09	0.12	YW
	308	309	1	0.21	366.22	11.39	0.66	0.17	0.03	YW
	344	345	1	0.14	456.6	14.2	0.25	0.1	0.06	YW
	345	346	1	0.04	208.51	6.49	0.12	0.06	0.03	YW
	381	382	1	0.8	56.61	1.76	1.1	0.12	0.17	YW
QVD-266	198	200	2	0.01	267	8.3	0.02	0.75	0.01	YW
	200	202	2	0.01	602	18.72	0.02	0.48	0.02	YW
	202	204	2	0.01	238	7.4	0.01	0.31	0.02	YW
QVD-267	254	255	1	0.01	55.76	1.73	0	0.84	1.14	YW
	255	256	1	0.01	344	10.7	0.03	0.13	0.02	YW
	261	262	1	0.08	323	10.05	0.39	0.26	0.05	YW
	262	263	1	0.15	518	16.11	0.68	0.31	0t10	YW
	263	264	1	0.09	224	6.97	0.38	0.3	0.11	YW
	312	313	1	0.06	259	8.06	0.12	0.54	0.27	YW
	314	315	1	0.03	210	6.53	0.18	0.23	0.06	YW
QVD-269	234	235	1	0.01	288.12	8.96	0.01	1.12	2.96	YW
	235	236	1	0.01	117.19	3.65	0	2.24	1.44	YW
	236	237	1	0.01	120.09	3.74	0	2.91	4.19	YW
	239	240	1	0.01	10.36	0.32	0	0.74	1.52	YW
	240	241	1	0.01	213.72	6.65	0.01	5.69	0.21	YW
	241	242	1	0.01	44.84	1.39	0	1.12	0.05	YW
	242	243	1	0.02	52.26	1.63	0	1.2	0.03	YW
	244	245	1	0.01	376.64	11.72	0	6.38	0.35	YW
	245	246	1	0.01	168.69	5.25	0.02	3.22	0.08	YW
	246	247	1	0.01	88.06	2.74	0.02	1.12	0.06	YW
	247	248	1	0.01	1,156.61	35.98	0.35	1.23	0.18	YW
	250	251	1	0.01	275	8.55	0.11	0.1	0.09	YW
	265	266	1	0.02	542	16.86	0.18	0.9	0.15	YW
	266	267	1	0.03	751	23.36	0.42	0.14	0.1	YW
	267	268	1	0.05	396	12.32	0.3	0.06	0.06	YW
	268	269	1	0.02	214	6.66	0.16	0.12	0.06	YW
	270	271	1	0.01	549	17.08	0.19	0.17	0.07	YW
	272	273	1	0.01	218	6.78	0.15	0.17	0.05	YW
	273	274	1	0.01	202	6.28	0.19	0.18	0.04	YW
	276	277	1	0.01	327	10.17	0.12	0.11	0.03	YW
	277	278	1	0.1	2,633	81.9	1.21	0.32	0.26	YW
	283	284	1	0.01	331	10.3	0.11	0.19	0.08	YW
	284	285	1	0.01	319	9.92	0.02	0.13	0.01	YW
	285	286	1	0.01	378	11.76	0.03	0.16	0.01	YW
	339	340	1	0.13	486	15.12	2.66	1.03	0.16	YW
	345	346	1	0.07	340	10.58	1.7	0.47	0.15	YW
	372	373	1	0.3	280	8.71	3.31	0.07	0.1	YW
	374	375	1	0.29	244	7.59	0.26	0.12	0.06	YW
	375	376	1	0.17	238	7.4	0.14	0.11	0.05	YW
	376	377	1	0.14	423	13.16	0.1	0.08	0.04	YW
QVD-270	304	305	1	0.01	6.14	0.19	0	0.29	1.21	YW
	313	314	1	0.01	496	15.43	0.35	0.6	0.22	YW
	360	361	1	0.01	339	10.54	0.85	0.18	0.09	YW
	361	362	1	0.01	718	22.33	0.42	0.25	0.05	YW
	362	363	1	0.01	226	7.03	0.35	0.2	0.04	YW
	364	365	1	0.01	1,170	36.39	1.44	0.27	0.17	YW
	376	377	1	0.02	189.3	5.89	2.09	0.19	0.03	YW
	434	435	1	0.1	47.38	1.47	1.25	0.12	0.03	YW
QVD-271	264	265	1	0.01	469.68	14.61	0.79	0.27	0.13	YW
	265	266	1	0.01	587.9	18.29	0.4	0.6	0.15	YW
	266	267	1	0.01	205.63	6.4	0.23	0.42	0.38	YW
	269	270	1	0.01	264.39	8.22	0.37	0.19	0.09	YW
	270	271	1	0.01	243	7.56	0.15	0.14	0.04	YW
	271	272	1	0.01	236.16	7.35	0.11	0.13	0.04	YW
	272	273	1	0.01	240.02	7.47	0.12	0.15	0.06	YW
	288	289	1	0.01	231.94	7.21	0.05	0.04	0.02	YW
QVD-272	341	342	1	0.16	116.76	3.63	1.11	0.12	0.12	YW
	416	417	1	0.07	49.05	1.53	1.33	0.04	0.12	YW
	417	418	1	0.78	134.8	4.19	3.32	0.17	0.21	YW
QVD-273	235	236	1	0.01	191.63	5.96	0.07	0.37	1.77	YW
	236	237	1	0.01	81.51	2.54	0.02	2.67	1.64	YW
	237	238	1	0.01	467	14.53	0.19	0.58	0.08	YW
	238	239	1	0.01	642	19.97	0.39	0.15	0.12	YW
	239	240	1	0.01	286	8.9	0.11	0.07	0.03	YW
	240	241	1	0.01	538	16.73	0.13	0.08	0.04	YW
	241	242	1	0.01	2,393	74.43	0.45	0.2	0.13	YW
	242	243	1	0.01	746	23.2	0.27	0.25	0.07	YW
	243	244	1	0.01	265	8.24	0.12	0.1	0.06	YW
	244	245	1	0.01	236	7.34	0.05	0.07	0.02	YW
	245	246	1	0.01	487	15.15	0.24	0.08	0.06	YW
	246	247	1	0.01	296	9.21	0.11	0.13	0.05	YW
	254	255	1	0.31	178.49	5.55	1.04	0.04	0.12	YW
	263	264	1	0.82	354	11.01	1.27	0.09	0.35	YW
	281	282	1	0.05	336	10.45	0.4	0.18	0.13	YW
	282	283	1	0.06	230	7.15	0.32	0.17	0.05	YW
	296	297	1	0.2	201	6.25	0.25	0.19	0.03	YW
	315	316	1	0.03	277	8.62	0.08	0.29	0.07	YW
	316	317	1	0.03	271	8.43	0.05	0.22	0.07	YW
	326	327	1	0.04	393	12.22	0.41	0.16	0.2	YW
	331	332	1	0.25	1,437	44.7	4.59	0.27	0.07	YW
	366	367	1	0.15	135.46	4.21	1.45	0.17	0.1	YW
	399	400	1	0.17	42.13	1.31	1.03	0.14	0.05	YW

QVD-274	405	406	1	1.63	160.86	5	4.51	0.14	0.76	YW
	407	408	1	3.66	222	6.91	3.99	0.23	0.75	YW
	408	409	1	3.92	305	9.49	6.48	0.28	0.67	YW
	409	410	1	0.88	75	2.33	1.22	0.04	0.14	YW
	410	411	1	0.99	123.45	3.84	1.57	0.13	0.23	YW
	411	412	1	0.98	76.58	2.38	0.47	0.23	0.7	YW
	412	413	1	1.6	93.81	2.92	0.08	0.57	2.64	YW
QVD-275	207	208	1	0.01	0.5	0.02	0	0.32	1.44	YW
	208	209	1	0.01	0.5	0.02	0	0.49	1.22	YW
	216	217	1	0.01	0.5	0.02	0	0.3	1.15	YW
	217	218	1	0.01	39.41	1.23	0	1.52	2.03	YW
	219	220	1	0.01	320	9.95	0.01	3.77	0.22	YW
	233	234	1	0.01	290	9.02	0.01	0.05	0.02	YW
	234	235	1	0.01	568	17.67	0.01	0.13	0.08	YW
	254	255	1	0.01	131.71	4.1	0.02	1.01	0.17	YW
	255	257	2	0.01	78.46	2.44	0.01	4.69	1.18	YW
	257	258	1	0.01	13.71	0.43	0	4.69	0.75	YW
	258	259	1	0.01	16.57	0.52	0	1.93	0.3	YW
	259	260	1	0.01	11.59	0.36	0	2.33	0.66	YW
	260	261	1	0.01	8.2	0.25	0	2.8	0.9	YW
	265	266	1	0.01	6.23	0.19	0	2.93	0.44	YW
	266	268	2	0.01	50.26	1.56	0	4.12	1.01	YW
	299	300	1	0.01	461.48	14.35	0.17	0.14	0.03	YW
	304	305	1	0.01	657.74	20.46	1.43	0.13	0.07	YW
	305	306	1	0.01	201.45	6.27	0.24	0.13	0.02	YW
	311	312	1	0.01	387.06	12.04	0.25	0.19	0.05	YW
	312	313	1	0.01	587.32	18.27	0.23	0.16	0.05	YW
	316	317	1	0.01	324.88	10.11	0.23	0.04	0.05	YW
	317	318	1	0.01	1,181.75	36.76	1.38	0.06	0.07	YW
	318	319	1	0.01	1,665.66	51.81	0.51	0.11	0.07	YW
	319	320	1	0.01	200.77	6.24	0.24	0.32	0.64	YW
	320	321	1	0.01	523.98	16.3	0.85	1.2	0.96	YW
	324	325	1	0.01	367.59	11.43	0.49	0.2	0.07	YW
	325	326	1	0.01	205.66	6.4	0.41	0.16	0.06	YW
	331	332	1	0.01	406.8	12.65	0.18	0.09	0.03	YW
	333	334	1	0.03	203.4	6.33	0.55	0.12	0.05	YW
	340	341	1	0.2	193.63	6.02	1.61	0.61	0.15	YW
	341	342	1	0.22	359.58	11.18	0.26	0.47	0.2	YW
	343	344	1	0.2	336.42	10.46	1.54	0.18	0.11	YW
	344	345	1	0.18	321.78	10.01	0.53	0.1	0.05	YW
	346	347	1	0.25	291.79	9.08	0.72	0.14	0.07	YW
	347	348	1	0.25	660.56	20.55	0.94	0.08	0.09	YW
	348	349	1	0.14	1,101.68	34.27	0.45	0.1	0.08	YW
	349	350	1	0.1	255.89	7.96	0.51	0.11	0.15	YW
QVD-276	223	224	1	0.01	70.17	2.18	0.08	2.1	2.18	YW
	224	225	1	0.01	44.6	1.39	0.06	2.54	1.71	YW
	226	227	1	0.01	94.27	2.93	0	1.13	0.59	YW
	230	231	1	0.01	402	12.5	0.02	0.35	0.11	YW
	231	232	1	0.01	10,793	335.71	0.39	1.64	0.09	YW
	232	233	1	0.01	9,441	293.65	0.4	3.24	1.51	YW
	234	235	1	0.01	594	18.48	0.02	0.28	0.15	YW
	235	236	1	0.01	433	13.47	0.06	0.2	0.02	YW
	238	239	1	0.01	248	7.71	0.16	0.21	0.03	YW
	239	240	1	0.01	932	28.99	0.26	0.16	0.05	YW
	240	241	1	0.01	4408	137.11	0.77	0.26	0.16	YW
	257	258	1	0.01	483	15.02	0.21	0.11	0.05	YW
QVD-277	281	282	1	0.01	0.5	0.02	0	0.17	1.22	YW
	282	283	1	0.01	1518.76	47.24	0.21	1.58	1.29	YW
	283	284	1	0.01	647.6	20.14	0.71	0.18	0.24	YW
	286	287	1	0.01	225.04	7	0.13	0.25	0.06	YW
	305	306	1	0.01	454.55	14.14	0.63	0.11	0.03	YW
	311	312	1	0.01	1230	38.26	2.17	0.11	0.03	YW
QVD-279	240	242	2	0.01	248	7.71	0.51	0.52	0.79	YW
	242	243	1	0.01	224	6.97	0.59	0.58	0.76	YW
	245	246	1	0.01	67.7	2.11	0.04	1.78	0.85	YW
	249	250	1	0.01	14.68	0.46	0	2.19	2.04	YW
	250	251	1	0.01	58.94	1.83	0	4.42	0.92	YW
	251	252	1	0.01	72.19	2.25	0	6.07	0.62	YW
	252	253	1	0.01	66.9	2.08	0	3.75	0.68	YW
	253	254	1	0.01	55.88	1.74	0	2.89	0.76	YW
	254	255	1	0.01	76.69	2.39	0.01	2.47	0.48	YW
	255	256	1	0.01	79.56	2.47	0	2.16	0.65	YW
	256	257	1	0.01	155.98	4.85	0.01	2.47	2.6	YW
	257	258	1	0.01	145.22	4.52	0.03	1.21	4.57	YW
	258	259	1	0.01	153.11	4.76	0.02	1.84	1.45	YW
	259	260	1	0.01	234.64	7.3	0.01	5.16	0.35	YW
	260	261	1	0.01	100.12	3.11	0	3.48	0.29	YW
	261	262	1	0.01	97.44	3.03	0	5.31	1.32	YW
	262	263	1	0.01	95.09	2.96	0	4.95	0.45	YW
	263	264	1	0.01	64.94	2.02	0	3.55	1.11	YW
	264	265	1	0.01	8.09	0.25	0	1.26	3.76	YW
QVD-280	185	186	1	0.01	116.62	3.63	0	1.89	0.08	YW
	186	187	1	0.01	1653	51.42	0.05	0.24	0.05	YW
	197	198	1	0.01	753	23.42	0.08	0.11	0.03	YW
	229	230	1	0.01	233	7.25	0.05	0.18	0.04	YW
	230	231	1	0.01	1283.34	39.92	0.26	0.22	0.17	YW
	231	232	1	0.01	544.68	16.94	0.09	0.27	0.08	YW

	232	233	1	0.01	237.45	7.39	0.04	0.13	0.05	YW
	233	234	1	0.01	1697.93	52.81	0.24	0.13	0.1	YW
	234	235	1	0.01	273.46	8.51	0.03	0.24	0.26	YW
	235	236	1	0.01	11.15	0.35	0	0.32	1.03	YW
QVD-283	245	246	1	0.01	10.21	0.32	0	1.01	0.64	YW
	246	248	2	0.01	336	10.45	0.06	2.38	0.44	YW
	248	249	1	0.01	358	11.14	0.08	0.26	0.06	YW
	251	252	1	0.04	1007	31.32	0.6	0.02	0.14	YW
	252	253	1	0.11	735	22.86	0.75	0.08	0.18	YW
	253	254	1	0.16	415	12.91	0.98	0.24	0.21	YW
	278	279	1	0.01	29.08	0.9	0	1.1	1.02	YW
	280	281	1	0.01	401	12.47	0.03	0.21	0.1	YW
	295	296	1	0.01	112.91	3.51	0.02	3.47	0.39	YW
	296	297	1	0.01	52.55	1.63	0	2.57	0.31	YW
	301	302	1	0.01	0.5	0.02	0	0.26	1.13	YW
QVD-285	277	278	1	0.01	1.27	0.04	0	0.1	1.23	YW
	304	305	1	0.01	5.06	0.16	0	0.35	1.12	YW
	305	306	1	0.01	5.73	0.18	0	0.48	0.98	YW
	329	330	1	0.01	1.05	0.03	0	0.28	1.18	YW
QVD-286	303	304	1	0.01	30.45	0.95	0	1.67	3.93	YW
	304	305	1	0.01	12.76	0.4	0	0.36	1.29	YW
	316	317	1	0.01	0.5	0.02	0	0.25	1.39	YW
	318	319	1	0.01	12.03	0.37	0	0.96	0.7	YW
	344	345	1	0.01	6.98	0.22	0	0.41	1.19	YW
	346	347	1	0.01	0.5	0.02	0	0.22	1.12	YW
	348	349	1	0.01	0.5	0.02	0	1.2	3.09	YW
	349	350	1	0.01	0.5	0.02	0	0.44	1.93	YW
	350	351	1	0.01	0.5	0.02	0	0.2	1.18	YW
QVD-287	357	358	1	0.47	100.27	3.12	3.77	0.15	0.26	CON
	359	360	1	0.42	37.77	1.17	1.18	0.04	0.08	CON
	360	361	1	0.88	46.67	1.45	1.47	0.05	0.14	CON
	365	366	1	0.41	46.17	1.44	1.79	0.08	0.21	CON
	392	393	1	0.01	6.67	0.21	0	0.36	1.18	CON
	395	396	1	0.01	0.68	0.02	0.01	0.15	1.08	CON
QVD-288	259	260	1	0.23	67.13	2.09	1.29	0.03	0.34	CON
	260	261	1	0.3	96.33	3	1.85	0.02	0.5	CON
	272	273	1	0.58	63.71	1.98	1.59	0.03	0.22	CON
	273	274	1	0.38	51.09	1.59	1.1	0.07	0.15	CON
QVD-292	185	186	1	0.01	218.5	6.8	0.08	1.1	0.48	YW
	200	201	1	0.01	716	22.27	1.05	0.49	0.28	YW
	201	202	1	0.03	1355	42.15	1.68	0.76	0.37	YW
QVD-293	185	186	1	0.01	54.76	1.7	0.01	0.38	1.15	YW
	191	192	1	0.01	5.02	0.16	0	0.53	1.11	YW
	205	206	1	0.01	1739.02	54.09	0.53	0.17	0.14	YW
	206	207	1	0.01	713.18	22.18	0.17	0.13	0.04	YW
	207	208	1	0.01	966.67	30.07	0.33	0.28	0.08	YW
	208	209	t	0.01	744.5	23.16	0.55	0.09	0.07	YW
	209	210	1	0.01	401.85	12.5	0.4	0.04	0.06	YW
	210	211	1	0.01	1005.4	31.27	0.91	0.04	0.13	YW
	211	212	1	0.01	322.95	10.05	0.1	0.19	0.02	YW
	212	213	1	0.01	350.41	10.9	0.04	0.12	0.02	YW
	214	215	1	0.01	517.44	16.09	0.25	0.22	0.05	YW
	223	224	1	0.01	3567.06	110.95	1.07	0.68	0.44	YW
	224	225	1	0.01	394.86	12.28	0.11	0.17	0.14	YW
	227	228	1	0.01	19.99	0.62	0	0.26	1.09	YW
	228	229	1	0.01	9.04	0.28	0	0.25	1.65	YW
	234	235	1	0.01	2.71	0.08	0	0.32	1.15	YW
QVD-295	190	191	1	0.01	62.66	1.95	0	0.79	2.8	YW
	191	192	1	0.01	1619.15	50.36	0.08	0.26	0.38	YW
	192	193	1	0.01	409.46	12.74	0.02	0.18	0.1	YW
	193	194	1	0.01	261.09	8.12	0.01	0.18	0.16	YW
	195	196	1	0.01	296.6	9.23	0.01	0.11	0.02	YW
	196	197	1	0.01	566.04	17.61	0.1	0.07	0.03	YW
	197	198	1	0.01	976.37	30.37	0.35	0.11	0.16	YW
	199	200	1	0.01	223.31	6.95	0.52	0.19	0.36	YW
	200	201	1	0.01	209.79	6.53	0.58	0.23	0.29	YW
	204	205	1	0.01	499.61	15.54	0.23	0.27	0.16	YW
	209	210	1	0.01	683.19	21.25	0.25	0.42	0.23	YW
	243	244	1	0.01	286.4	8.91	0.41	0.09	0.07	YW
	245	246	1	0.01	328.3	10.21	0.11	0.07	0.1	YW
	246	247	1	0.01	399.01	12.41	0.62	0.12	0.53	YW
	247	248	1	0.01	652.53	20.3	0.61	0.12	0.56	YW
	248	249	1	0.01	468.1	14.56	0.29	0.07	0.08	YW
	253	254	1	0.01	28.06	0.87	0.01	1.79	0.17	YW
	254	255	1	0.01	25.26	0.79	0.01	3.17	0.86	YW
QVD-296	250	251	1	0.01	11.59	0.36	0.01	0.16	1.3	CON
	55	56	1	0.01	107.06	3.33	0.01	1.2	0.02	YC
	58	59	1	0.06	49.18	1.53	0.02	1.98	0.07	YC
	61	62	1	0.12	422.37	13.14	0.3	2.76	0.06	YC
	62	63	1	0.17	1303.19	40.53	1.51	3.44	0.07	YC
	63	64	1	0.11	527.23	16.4	0.58	0.74	0.03	YC
	64	65	1	0.35	350.05	10.89	0.52	0.34	0.02	YC
	65	66	1	0.04	209.24	6.51	0.16	0.24	0.01	YC
	66	67	1	0.01	201.27	6.26	0.05	0.14	0.01	YC
	67	68	1	0.01	787.13	24.48	0.34	0.11	0.03	YC
	69	70	1	0.01	197.54	6.14	0.09	0.07	0.01	YC
	71	72	1	0.01	735.12	22.87	0.29	0.17	0.01	YC

QVD-297	72	73	1	0.01	306.34	9.53	0.23	0.09	0.01	YC
	77	78	1	0.01	835.49	25.99	0.14	0.07	0	YC
	78	79	1	0.01	334.16	10.39	0.39	0.04	0.01	YC
	80	81	1	0.01	477.74	14.86	1.69	0.08	0.01	YC
	82	83	1	0.01	223.34	6.95	0.49	0.04	0	YC
	83	84	1	0.01	644.54	20.05	0.19	0.09	0	YC
	84	85	1	0.01	688.47	21.41	0.15	0.08	0	YC
	85	86	1	0.01	311.9	9.7	0.05	0.07	0	YC
	96	97	1	0.01	214.37	6.67	0.01	0.02	0	YC
	107	108	1	0.11	598.05	18.6	0	0.08	0	YC
	110	111	1	0.01	9.51	0.3	0.59	1	1.86	YC
	111	112	1	0.01	4.83	0.15	0.02	1.59	3.37	YC
	112	113	1	0.01	3.48	0.11	0	0.65	2.11	YC
	113	114	1	0.01	2.59	0.08	0	0.6	1.6	YC
QVD-298	20	21	1	0.01	352.36	10.96	0.01	0.45	0$_{t}$02	YC
	21	22	1	0.01	225.67	7.02	0.01	0.32	0.02	YC
	23	24	1	0.01	357.09	11.11	0.01	0.42	0.02	YC
	25	26	1	0.01	371.3	11.55	0	0.21	0.01	YC
	35	36	1	0.01	750.38	23.34	0.09	0.06	0	YC
	36	37	1	0.01	691.01	21.49	0	0.2	0	YC
	64	65	1	0.01	64.41	2	0.02	1.98	0.01	YC
	132	133	1	0.01	48.69	1.51	0.06	0.46	1.8	YC
	134	135	1	0.01	12.63	0.39	0	0.72	1.59	YC
	135	136	1	0.01	32.45	1.01	0.28	0.98	0.95	YC
	136	137	1	0.01	392	12.19	0.5	0.21	0.13	YC
	138	139	1	0.01	64.29	2	0.99	0.69	1	YC
	140	141	1	0.01	7.28	0.23	0.01	0.25	1	YC
QVD-301	222	223	1	L_P.O1	13.92	0.43	0	0.17	0	YW
	233	234	1	0.01	247.45	7.7	0.22	0.12	0.13	YW
	225	226	1	0.01	298.46	9.28	0.31	0.14	0.03	YW
	237	238	1	0.01	330.13	10.27	0.04	0.31	0.13	YW
	220	221	1	0.01	427.92	13.31	0.74	0.06	0.05	YW
	196	197	1	0.01	480.95	14.96	0.05	0.05	0.07	YW
	217	218	1	0.01	517.96	16.11	0.12	0.08	0.05	YW
	218	219	1	0.01	642.17	19.97	0.61	0.05	0.07	YW
	224	225	1	0.01	1153.11	35.87	1.63	0.11	0.09	YW
QVD-302	97	98	1	0.01	0.95	0.03	0	0.41	1.22	YC
	95	96	1	0.01	2.86	0.09	0	0.41	1.05	YC
	96	97	1	0.01	5.42	0.17	0	1.09	1.18	YC
	98	99	1	0.01	6.89	0.21	0	0.38	1.48	YC
	94	95	1	0.01	15.15	0.47	0	0.59	0.95	YC
	168	169	1	0.01	22.37	0.7	0.01	0.81	1.28	YC
	111	112	1	0.02	333	10.36	0.02	0.02	0	YC
	112	113	1	0.04	348	10.82	0.02	0.01	0	YC
	143	144	1	0.2	358	11.14	0.29	0.03	0.01	YC
QVD-305	281	282	1	0.01	5.32	0.17	0	0.27	1.17	MAN
	282	283	1	0.01	27.12	0.84	0	1.43	1.33	MAN
	283	284	1	0.01	34.67	1.08	0	1.71	0.7	MAN
QVD-307	83	84	1	0.01	4.15	0.13	0	0.87	1.47	YC
	82	83	1	0.1	23.57	0.73	0.12	0.98	1.02	YC
	24	25	1	0.01	73.63	2.29	0.05	1.45	0.01	YC
	25	26	1	0.01	134.88	4.2	0.02	1.26	0.02	YC
	67	68	1	0.01	219.69	6.83	1.91	0.05	0.01	YC
	61	62	1	0.11	244.84	7.62	1.43	0.02	0.01	YC
	66	67	1	0.01	350.6	10.91	2.02	0.02	0.02	YC
QVD-310	300	301	1	0.01	3.2	0.1	0	0.27	1.09	MAN
QVD-311	25	26	1	0.01	375.66	11.68	0.01	0.66	0.02	YC
	31	32	1	0.01	826.09	25.69	0.01	0.06	0	YC
	32	33	1	0.01	277.58	8.63	0	0.11	0	YC
	34	35	1	0.01	217.09	6.75	0.01	0.07	0	YC
	36	37	1	0.1	1527.29	47.51	0.08	0.41	0.01	YC
	37	38	1	0.03	388.98	12.1	0.02	0.16	0	YC
	38	39	1	0.01	625.12	19.44	0.01	0.14	0	YC
	39	40	1	0.01	936.2	29.12	0	0.07	0	YC
	40	41	1	0.01	1323.86	41.18	0.15	0.08	0	YC
	41	42	1	0.01	1142.77	35.54	0.95	0.06	0	YC
	42	43	1	0.01	506.68	15.76	0.54	0.03	0	YC
	43	44	1	0.01	384.44	11.96	0.03	0.06	0	YC
	44	45	1	0.01	457.47	14.23	0	0.08	0	YC
	72	73	1	0.01	9.15	0.28	0.12	1.34	2.4	YC
	73	74	1	0.01	1.77	0.06	0	0.54	1.21	YC
QVD-314	244	245	1	0.01	229.91	7.15	0.09	0.07	0.02	MAN
	288	289	1	0.05	618.48	19.24	0.37	5.92	0.33	MAN
	289	290	1	0.01	60.77	1.89	0.01	1.79	0.14	MAN
	290	291	1	0.01	69.74	2.17	0.04	1.25	0.43	MAN
	306	307	1	0.01	7.66	0.24	0	0.8	2.67	MAN
QVD-316	326	327	1	0.06	5331.08	165.82	2.96	0.04	0.51	MAN
	327	328	1	0.07	589.18	18.33	0.29	0.03	0.07	MAN
	336	337	1	0.09	599.61	18.65	1.28	0.12	0.33	MAN
	338	339	1	0.11	334.94	10.42	0.3	0.01	0.06	MAN
QVD-317	68	69	1	0.01	225.93	7.03	0.03	0.14	0	YC
	91	92	1	0.02	64.24	2	0	1.01	0	YC
	92	93	1	0.01	228.83	7.12	0	0.37	0	YC
	93	94	1	0.01	1305.2	40.6	0.01	0.51	0	YC
	96	97	1	0.01	391.12	12.17	0.19	0.21	0	YC
	98	99	1	0.01	68.58	2.13	0.05	1.68	0.92	YC
	99	100	1	0.01	9.21	0.29	0.02	0.88	3.72	YC

QVD-318	44	45	1	0.01	555.57	17.28	0	0.16	0.01	YC
	45	46	1	0.01	712.93	22.18	0.05	0.04	0.01	YC
	46	47	1	0.01	1260.97	39.22	0.16	0.01	0.02	YC
	47	48	1	0.01	392.64	12.21	0.05	0.12	0	YC
QVD-319	258	259	1	0.01	272.7	8.48	0.07	0.11	0.56	MAN
	259	260	1	0.01	473.79	14.74	0.13	0.13	1.02	MAN
	260	261	1	0.01	255.68	7.95	0.04	0.07	0.04	MAN
	306	307	1	0.01	3.08	0.1	0	0.46	1.03	MAN
QVD-320	105	106	1	0.01	639.88	19.9	0	0.1	0	YC
	126	127	1	0.01	74.14	2.31	0.01	1.06	0	YC
	127	128	1	0.01	19.04	0.59	0.36	1.15	0.16	YC
QVD-321	323	326	3	0.17	1299.58	40.42	1.98	0.03	0.41	MAN
	336	337	1	0.19	484.19	15.06	1.16	0.04	0.27	MAN
QVD-322	75	76	1	0.01	44.66	1.39	0.02	0.25	1.27	YC
	79	80	1	0.01	21.28	0.66	0	0.16	1.39	YC
	80	81	1	0.01	159.8	4.97	0	2.39	7.53	YC
	81	82	1	0.01	55.89	1.74	0	1.67	7.43	YC
	82	83	1	0.01	22.06	0.69	0	0.32	1.43	YC
	83	84	1	0.01	14.67	0.46	0	1.02	2.16	YC
	84	85	1	0.01	23.86	0.74	0.01	0.79	1.94	YC
	85	86	1	0.01	22.09	0.69	0.01	0.89	1.57	YC
	88	89	1	0.01	4.28	0.13	0	0.72	1.34	YC
	89	90	1	0.01	48.93	1.52	0.01	1.24	1.2	YC
	90	91	1	0.01	97.06	3.02	0.2	2.66	3.91	YC
	91	92	1	0.01	66.18	2.06	0.04	1.18	0.54	YC
	93	94	1	0.01	567.97	17.67	0.09	0.15	0.01	YC
	97	98	1	0.01	413.66	12.87	0	0.17	0	YC
	103	104	1	0.02	626.13	19.48	0.01	1.01	0.01	YC
QVD-323	284	285	1	0.01	8.07	0.25	0	0.69	1.4	MAN
	285	286	1	0.01	189.11	5.88	0.01	4.4	0.77	MAN
	288	289	1	0.07	439.59	13.67	0.14	0.04	0.03	MAN
QVD-324	304	305	1	0.09	341	10.61	0.32	0.19	0.12	MAN
	313	314	1	0.01	41.64	1.3	0.02	0.38	1.31	MAN
	315	316	1	0.01	334	10.39	0.21	0.97	0.15	MAN
	330	331	1	0.01	87.34	2.72	0	2	0.22	MAN
QVD-325	279	280	1	0.01	21.46	0.67	0	0.66	1.2	MAN
	343	344	1	0.01	44.62	1.39	0.02	1.24	0.75	MAN
QVD-326	323	324	1	0.01	0.5	0.02	0	0.16	1.33	MAN
	328	329	1	0.01	204.53	6.36	0.26	0.19	0.09	MAN
	329	330	1	0.08	551.74	17.16	0.81	0.87	0.32	MAN
QVD-327	292	293	1	0.01	237	7.37	0.1	0.11	0.05	MAN
	307	308	1	0.04	357	11.1	0.5	0.01	0.08	MAN
QVD-328	258	259	1	0.01	226.41	7.04	0.06	0.07	0.11	MAN
	260	261	1	0.01	243.51	7.57	0.05	0.27	0.14	MAN
	287	288	1	0.01	828.94	25.78	0.22	0.42	0.06	MAN
	288	289	1	0.01	304.22	9.46	0.08	0.41	0.03	MAN
	289	290	1	0.01	54.99	1.71	0.01	2.01	0.71	MAN
QVD-329	237	238	1	0.06	270.16	8.4	0.13	0.35	0.22	MAN
QVD-330	268	269	1	0.01	29.33	0.91	0	2	0.07	MAN
	285	286	1	0.01	26.49	0.82	0	0.84	1.7	MAN
	289	290	1	0.01	15.1	0.47	0	0.37	1.23	MAN
	290	291	1	0.01	15.53	0.48	0	0.42	1.11	MAN
	307	308	1	0.01	12.11	0.38	0	0.27	1.07	MAN
QVD-332	154	155	1	0.01	0.5	0.02	0	0.25	1.22	MAN
	336	337	1	0.01	8.22	0.26	0	0.32	2.45	MAN
	343	344	1	0.01	4.49	0.14	0	0.22	1.34	MAN
QVD-335	285	286	1	0.01	28.78	0.9	0	1.14	0.23	YW
	286	287	1	0.01	35.65	1.11	0	2.03	0.44	YW
	385	386	1	0.01	3.31	0.1	0	0.27	1.35	YW
	387	388	1	0.01	7.38	0.23	0	0.44	1.1	YW
	407	408	1	0.01	271.82	8.45	0.04	1.28	0.85	YW
	411	412	1	0.01	71.01	2.21	0.09	1.43	0.21	YW
	412	413	1	0.01	59.32	1.85	0.1	1.26	0.12	YW
	413	414	1	0.01	100.81	3.14	0.16	1.08	0.19	YW
	417	418	1	0.01	110.46	3.44	0.04	3.62	0.28	YW
QVD-336	267	268	1	0.01	723.18	22.49	0.55	0.15	0.31	YW
	343	345	2	0.01	16.8	0.52	0	0.49	4.64	YW
	345	346	1	0.01	13.98	0.43	0	0.43	1.85	YW
	346	347	1	0.01	8.64	0.27	0	0.28	1.91	YW
	349	350	1	0.01	5.3	0.16	0	0.21	1.24	YW
	350	351	1	0.01	3.71	0.12	0	0.16	1.09	YW
	351	352	1	0.01	3.55	0.11	0	0.16	1.16	YW
	353	354	1	0.01	4.43	0.14	0	0.2	1.08	YW
	357	358	1	0.01	5.27	0.16	0	0.2	1.36	YW
	401	402	1	0.01	6.33	0.2	0	0.39	1.81	YW
	402	403	1	0.01	3.38	0.11	0	0.38	1.1	YW
	404	405	1	0.01	3.26	0.1	0	0.55	1.35	YW
	406	407	1	0.01	244.5	7.6	0.12	0.27	0.18	YW
	407	408	1	0.01	326.33	10.15	0.17	0.27	0.2	YW
	409	410	1	0.01	259.42	8.07	0.23	0.5	0.22	YW
	410	411	1	0.01	216.3	6.73	0.22	0.47	0.21	YW
	411	412	1	0.01	317.03	9.86	0.38	0.53	0.38	YW
	412	413	1	0.01	215.03	6.69	0.24	0.44	0.26	YW
	416	417	1	0.01	203.32	6.32	0.12	0.47	0.05	YW
QVD-337	248	249	1	0.01	0.5	0.02	0	0.06	1.5	YW
	265	266	1	0.01	5.2	0.16	0	0.33	1.56	YW
	228	230	2	0.01	9.96	0.31	0	1.03	0.79	YW

QVD-338	230	232	2	0.01	21.09	0.66	0	0.72	2.1	YW
	232	234	2	0.01	101.03	3.14	0.06	0.46	1.31	YW
	235	236	1	0.01	573.31	17.83	0.39	0.93	0.32	YW
	236	237	1	0.01	452.82	14.08	0.23	0.67	0.44	YW
	237	238	1	0.01	196.12	6.1	0.14	0.42	0.14	YW
	242	243	1	0.01	286.38	3.91	0.14	0.35	1.63	YW
	254	255	1	0.01	637.09	19.82	0.03	0.09	0.14	YW
	255	256	1	0.01	664.2	20.66	0.02	0.15	0.14	YW
	256	257	1	0.01	235.51	7.33	0.01	0.58	0.27	YW
	257	258	1	0.01	465.4	14.48	0.01	0.3	0.17	YW
QVD-339	265	266	1	0.01	4.27	0.13	0	0.56	1.99	YW
	266	267	1	0.01	615.08	19.13	0.65	2.23	4.23	YW
	283	285	2	0.01	110.55	3.44	1.06	0.24	0.2	YW
	292	293	1	0.01	67.07	2.09	0	4.82	0.07	YW
QVD-340	315	316	1	0.01	0.5	0.02	0	0.2	1.11	YW
	316	317	1	0.01	0.5	0.02	0	0.29	1.4	YW
QVD-341	237	238	1	0.01	97.62	3.04	0	5.56	3.29	YW
	244	245	1	0.01	406	12.63	0.08	0.13	0.08	YW
	256	257	1	0.01	200	6.22	0.11	0.11	0.04	YW
	268	269	1	0.01	270	8.4	0.11	0.09	0.03	YW
	271	272	1	0.01	413	12.85	0.06	0.12	0.03	YW
	279	280	1	0.01	380	11.82	0.07	0.25	0.02	YW
	280	281	1	0.01	391	12.16	0.13	0.27	0.03	YW
	284	285	1	0.01	200	6.22	0.1	0.2	0.07	YW
	285	286	1	0.01	698	21.71	0.48	0.36	0.12	YW
	288	289	1	0.01	235	7.31	0.05	0.11	0.03	YW
	290	291	1	0.01	273	8.49	0.26	0.18	0.05	YW
	292	293	1	0.01	200	6.22	0.18	0.08	0.01	YW
	303	304	1	0.01	295	9.18	0.46	0.22	0.11	YW
	317	318	1	0.17	852	26.5	5.37	0.12	0.06	YW
	318	319	1	0.2	818	25.44	3.05	0.11	0.05	YW
	319	320	1	0.07	288	8.96	0.5	0.21	0.14	YW
	320	321	1	0.27	1555	48.37	3.38	0.22	0.29	YW
	321	322	1	0.04	200	6.22	1.75	0.36	0.07	YW
	355	356	1	0.54	220	6.84	3.79	0.39	0.25	YW
	356	357	1	0.54	134.89	4.2	2.09	0.35	0.16	YW
	358	359	1	0.53	116.42	3.62	1.53	0.34	0.31	YW
	359	360	1	0.75	176.58	5.49	2.21	0.4	0.35	YW
	366	367	1	0.92	121.28	3.77	1.19	0.09	0.16	YW
QVD-342	235	236	1	0.01	0.5	0.02	0	0.87	1.23	YW
	236	237	1	0.01	72.37	2.25	0	5.49	0.7	YW
	238	239	1	0.01	420.92	13.09	0.15	0.31	0.16	YW
	239	240	1	0.06	1342.66	41.76	0.49	0.32	0.23	YW
	240	241	1	0.07	2458.65	76.47	2.21	0.85	0.47	YW
	241	242	1	0.05	2296.38	71.43	1	0.85	0.27	YW
	242	243	1	0.05	318.68	9.91	0.12	0.23	0.31	YW
	243	244	1	0.04	570.27	17.74	0.16	0.19	0.23	YW
	244	245	1	0.02	533.33	16.59	0.13	0.2	0.15	YW
	245	246	1	0.04	1156	35.96	0.37	0.61	0.26	YW
	246	247	1	0.07	998.29	31.05	0.49	0.38	0.16	YW
	247	248	1	0.08	803.49	24.99	0.4	0.54	1.59	YW
	248	249	1	0.09	1202	37.39	0.53	0.41	0.29	YW
	249	250	1	0.05	326	10.14	0.31	0.09	0.09	YW
	250	251	1	0.04	241	7.5	0.3	0.1	0.06	YW
	251	252	1	0.01	245	7.62	0.21	0.12	0.04	YW
	253	254	1	0.08	384	11.94	0.23	0.26	0.1	YW
	254	255	1	0.02	303	9.42	0.08	0.81	0.08	YW
	255	256	1	0.02	570	17.73	0.12	0.47	0.05	YW
	258	259	1	0.01	578	17.98	0.03	0.21	0.03	YW
	259	260	1	0.01	650	20.22	0.05	0.14	0.04	YW
	260	261	1	0.01	226	7.03	0.01	0.16	0.03	YW
QVD-343	268	269	1	0.01	456	14.18	0.08	0.08	0.02	YW
	273	274	1	0.01	244	7.59	0.03	0.18	0.01	YW
	277	278	1	0.01	514	15.99	0.12	0.41	0.04	YW
	280	281	1	0.01	219	6.81	0.04	0.1	0.01	YW
	295	296	1	0.01	210	6.53	0.27	0.16	0.12	YW
	298	299	1	0.01	1382	42.99	1.5	0.1	0.03	YW
	299	300	1	0.01	447	13.9	0.41	0.09	0.01	YW
	300	301	1	0.01	756	23.51	0.92	0.77	0.16	YW
	308	309	1	0.01	600	18.66	0.04	0.17	0	YW
	323	324	1	0.01	349	10.86	0.04	0.41	0.01	YW
	377	378	1	0.47	114.98	3.58	2.02	0.16	0.11	YW
	389	390	1	0.02	47.64	1.48	0.01	1.84	0.64	YW
QVD-344	214	215	1	0.01	1.96	0.06	0	1.41	1.5	YW
	215	216	1	0.01	51	1.59	0	1.47	0.26	YW
	249	250	1	0.01	108.8	3.38	0	4.45	0.52	YW
	250	251	1	0.01	37.53	1.17	0	1.91	2.85	YW
	251	252	1	0.01	26.03	0.81	0	1.35	3.27	YW
	252	253	1	0.01	6.59	0.21	0	1.01	3.1	YW
	273	274	1	0.01	1.47	0.05	0	0.41	1.62	YW
	276	277	1	0.01	1062	33.03	0.32	0.46	0.09	YW
	289	290	1	0.01	384	11.94	0.3	0.17	0.11	YW
	290	291	1	0.02	263	8.18	0.07	0.3	0.58	YW
	293	294	1	0.02	1182	36.77	0.69	0.45	0.44	YW
	294	295	1	0.01	1227	38.16	0.25	0.38	0.54	YW
	296	297	1	0.07	323	10.05	0.7	0.28	0.39	YW
	299	300	1	0.01	1397	43.45	0.01	0.52	0.78	YW

	322	323	1	0.01	201	6.25	0.28	0.25	0.01	YW
	323	324	1	0.01	208	6.47	0.29	0.23	0.01	YW
	325	326	1	0.01	205	6.38	1.24	0.35	0.02	YW
	345	346	1	0.15	188.15	5.85	2.3	0.11	0.08	YW
	354	355	1	0.15	497	15.46	0.09	0.14	0.06	YW
	355	356	1	0.48	339	10.54	0.49	0.18	0.16	YW
	367	368	1	0.01	38.49	1.2	0	1.37	2.56	YW
	368	369	1	0.01	10.34	0.32	0	0.76	2.28	YW
	369	370	1	0.01	9.33	0.29	0	0.47	1.48	YW
	370	371	1	0.01	18.46	0.57	0	0.38	1.17	YW
	373	374	1	0.01	10.7	0.33	0	0.32	1.1	YW
	234	235	1	0.01	261.7	8.14	0.04	0.12	0.01	YW
	236	237	1	0.01	490.74	15.26	0.02	0.22	0.1	YW
	239	240	1	0.01	548.4	17.06	0.09	0.35	0.13	YW
	240	241	1	0.01	1147.19	35.68	0.06	0.66	0.19	YW
	241	242	1	0.01	976.13	30.36	0.08	0.1	0.01	YW
QVD-346	253	254	1	0.01	345.19	10.74	0.11	0.23	0.08	YW
	254	255	1	0.01	244.86	7.62	0.12	0.11	0.04	YW
	259	260	1	0.01	279.1	8.68	0.23	0.23	0.04	YW
	273	274	1	0.01	452.39	14.07	0.08	0.14	0.02	YW
	278	279	1	0.01	853.19	26.54	0.38	0.13	0.09	YW
	300	301	1	0.01	258	8.02	0.08	0.14	0.05	YW
	311	312	1	0.01	3.06	0.1	0	0.23	1.01	YW
	312	313	1	0.01	9.07	0.28	0	0.58	1.69	YW
	317	318	1	0.04	289	8.99	0.21	0.04	0.01	YW
	320	321	1	0.03	309	9.61	0.49	0.1	0.07	YW
	321	322	1	0.03	309	9.61	0.51	0.04	0.04	YW
	322	323	1	0.09	243	7.56	0.52	0.05	0.02	YW
	325	326	1	0.17	436	13.56	0.63	0.06	0.03	YW
	328	329	1	0.12	258	8.02	0.15	0.04	0.02	YW
	331	332	1	0.63	297	9.24	1.48	0.07	0.11	YW
	388	389	1	0.3	81.25	2.53	1.24	0.04	0.13	YW
	389	390	1	0.97	352	10.95	6.47	0.03	0.36	YW
QVD-347	390	391	1	0.96	297	9.24	5.45	0.06	0.32	YW
	391	392	1	0.43	86.9	2.7	1.53	0.07	0.15	YW
	395	396	1	0.32	60.32	1.88	0.99	0.06	0.2	YW
	396	397	1	1.76	115.24	3.58	1.03	0.13	0.16	YW
	397	398	1	0.86	131.84	4.1	1.31	0.17	0.21	YW
	399	400	1	0.54	85.71	2.67	0.95	0.12	0.13	YW
	405	406	1	0.01	1.31	0.04	0	0.29	1.12	YW
	406	407	1	0.01	1.84	0.06	0	0.35	0.97	YW
	407	408	1	0.01	0.92	0.03	0	0.27	0.98	YW
	412	413	1	0.01	9.72	0.3	0.2	0.29	1.27	YW
	428	429	1	0.01	21.88	0.68	0.07	2.3	1.41	YW
	429	430	1	0.01	3.84	0.12	0.06	0.8	1.71	YW
	244	245	1	0.01	602.62	18.74	0.11	0.3	0.02	YW
	245	246	1	0.01	563.03	17.51	0.04	0.3	0.01	YW
	246	247	1	0.01	955.57	29.72	0.11	0.22	0.02	YW
	247	248	1	0.01	865.25	26.91	0.24	0.27	0.04	YW
	253	254	1	0.01	311.12	9.68	0.07	0.23	0.02	YW
	256	257	1	0.01	267.03	8.31	0.08	2.5	0.26	YW
	258	259	1	0.01	10.13	0.32	0	0.67	2.57	YW
	259	260	1	0.01	11.01	0.34	0	0.68	1.98	YW
	260	261	1	0.01	8.18	0.25	0	0.44	1.13	YW
	261	262	1	0.01	40.99	1.28	0	2.11	1.08	YW
	262	263	1	0.01	1134.8	35.3	0.28	2.53	0.67	YW
	274	275	1	0.01	68.41	2.13	0.01	2.38	0.34	YW
	275	276	1	0.01	88.04	2.74	0.01	3.13	1.75	YW
	277	278	1	0.01	231.61	7.2	0.04	2.17	0.62	YW
	284	285	1	0.01	2.05	0.06	0	0.14	1.04	YW
	285	286	1	0.01	2.72	0.08	0	0.3	1.28	YW
	286	287	1	0.01	3.7	0.12	0	0.3	1.15	YW
	296	297	1	0.01	2.37	0.07	0	0.2	1.12	YW
	323	324	1	0.01	32.19	1	0.01	0.72	1.69	YW
QVD-348	325	326	1	0.01	17.81	0.55	0	0.6	2.43	YW
	329	330	1	0.01	20.85	0.65	0	0.43	1.99	YW
	332	333	1	0.01	31.83	0.99	0.01	0.31	1.18	YW
	334	335	1	0.01	202.97	6.31	0.16	0.12	0.2	YW
	335	336	1	0.01	652.28	20.29	1.23	0.43	0.2	YW
	336	337	1	0.01	311.27	9.68	0.56	0.12	0.18	YW
	339	340	1	0.01	890.64	27.7	0.17	0.05	0.04	YW
	340	341	1	0.01	678.8	21.11	0.4	0.05	0.03	YW
	341	342	1	0.03	455.68	14.17	0.23	0.03	0.03	YW
	342	343	1	0.01	910.2	28.31	0.32	0.04	0.03	YW
	343	344	1	0.01	1675.68	52.12	1.1	0.06	0.08	YW
	344	345	1	0.01	2331.24	72.51	1.45	0.05	0.1	YW
	345	346	1	0.01	1271.93	39.56	0.48	0.06	0.04	YW
	346	347	1	0.01	547.14	17.02	0.19	0.06	0.07	YW
	347	348	1	0.01	1344.52	41.82	0.22	0.04	0.01	YW
	348	349	1	0.01	1588.82	49.42	0.16	0.03	0	YW
	349	350	1	0.01	1070.08	33.28	0.21	0.04	0.01	YW
	365	366	1	0.23	652.95	20.31	0.05	0.08	0.03	YW
	368	369	1	0.24	425.31	13.23	0.19	0.04	0.03	YW
	369	370	1	0.11	347.6	10.81	0.02	0.05	0.02	YW
	374	375	1	0.01	12.93	0.4	0	0.69	1.41	YW
	297	298	1	0.01	251.67	7.83	0.69	0.27	0.14	YW
	300	301	1	0.01	253.35	7.88	0.37	0.16	0.05	YW

	301	302	1	0.01	854.94	26.59	0.94	0.08	0.07	YW
	302	303	1	0.01	264.32	8.22	0.32	0.26	0.08	YW
	304	305	1	0.01	291	9.05	0.44	0.19	0.15	YW
QVD-350	305	306	1	0.01	425.54	13.24	0.68	0.15	0.13	YW
	307	308	1	0.01	411.33	12.79	0.34	0.16	0.09	YW
	392	393	1	1.41	116.52	3.62	2.1	0.22	0.64	YW
	393	394	1	1.78	111.68	3.47	2.29	0.09	0.27	YW
	401	402	1	0.98	195.34	6.08	4.08	0.06	0.16	YW
	405	406	1	0.01	13.87	0.43	0.02	0.21	1.24	YW
	269	270	1	0.01	12.96	0.4	0	0.66	2.11	YW
	270	271	1	0.01	3.74	0.12	0	0.26	1.06	YW
	297	298	1	0.01	14.69	0.46	0	0.28	1.52	YW
	303	304	1	0.01	694	21.59	0.22	0.13	0.04	YW
	306	307	1	0.01	210	6.53	0.02	0.13	0.02	YW
	307	308	1	0.01	381	11.85	0.03	0.45	0.07	YW
	308	309	1	0.01	257	7.99	0.03	0.44	0.06	YW
	309	310	1	0.01	1362.72	42.39	0.72	1.92	0.54	YW
	310	311	1	0.01	640	19.91	0.12	0.39	0.1	YW
	312	313	1	0.01	291	9.05	0.47	0.29	0.04	YW
	321	322	1	0.01	0.5	0.02	0	0.2	1.24	YW
QVD-351	322	323	1	0.01	0.5	0.02	0	0.19	1.2	YW
	335	336	1	0.01	0.5	0.02	0	0.3	1.19	YW
	336	337	1	0.01	0.5	0.02	0	0.37	1.27	YW
	337	338	1	0.01	0.5	0.02	0	0.21	0.97	YW
	338	339	1	0.01	0.5	0.02	0	0.24	1.22	YW
	340	341	1	0.01	1.22	0.04	0	0.54	1.87	YW
	341	342	1	0.01	8.85	0.28	0	1.51	3.08	YW
	342	343	1	0.01	3.62	0.11	0	0.74	2.91	YW
	343	344	1	0.01	2.27	0.07	0	0.49	1.89	YW
	344	345	1	0.01	0.5	0.02	0	0.38	1.16	YW
	345	346	1	0.01	0.61	0.02	0	0.36	1.57	YW
	346	347	1	0.01	0.5	0.02	0	0.29	1.26	YW
	245	246	1	0.01	691.99	21.52	0.47	0.66	0.2	YW
	246	247	1	0.01	727.71	22.63	0.11	0.21	0.17	YW
	247	248	1	0.01	1718.16	53.44	0.09	0.24	0.03	YW
	248	249	1	0.01	381.18	11.86	0.02	0.15	0.01	YW
	251	252	1	0.01	429.26	13.35	0.03	0.4	0.39	YW
	252	253	1	0.01	487.26	15.16	0.06	0.13	0.01	YW
	253	254	1	0.01	1344.92	41.83	0.07	0.19	0.02	YW
	256	257	1	0.01	659.21	20.5	0.03	0.17	0.01	YW
	257	258	1	0.01	1518.89	47.24	0.21	0.18	0.04	YW
	258	259	1	0.01	2622.2	81.56	0.43	0.15	0.08	YW
	259	260	1	0.01	820.16	25.51	0.24	0.17	0.04	YW
QVD-352	260	261	1	0.01	433.13	13.47	0.11	0.17	0.02	YW
	261	262	1	0.01	849.61	26.43	0.56	0.35	0.09	YW
	269	270	1	0.01	252.31	7.85	0	0.11	0.01	YW
	280	281	1	0.01	389.85	12.13	0.36	0.18	0.04	YW
	282	283	1	0.01	73.37	2.28	0.01	0.6	1.42	YW
	286	287	1	0.01	236.78	7.36	0.27	0.08	0.03	YW
	299	300	1	0.01	464.5	14.45	0.24	0.12	0.01	YW
	326	327	1	0.01	233.65	7.27	0.28	0.05	0.09	YW
	327	328	1	0.09	298.6	9.29	1.56	0.18	0.26	YW
	342	343	1	0.16	779.73	24.25	1.29	0.05	0.11	YW
	406	407	1	0.09	59.29	1.84	0.98	0.2	0.06	YW
	408	409	1	0.3	126.06	3.92	1.87	0.57	0.35	YW
	411	412	1	0.01	0.5	0.02	0	0.26	1.4	YW
	233	234	1	0.01	22.07	0.69	0	0.94	1.84	YW
	234	235	1	0.01	203	6.31	0.01	4.53	1.17	YW
	235	236	1	0.01	185.06	5.76	0.01	1.12	0.93	YW
	236	237	1	0.01	10.57	0.33	0	0.26	1.48	YW
	239	240	1	0.01	3.54	0.11	0	0.17	1.09	YW
	240	241	1	0.01	17.89	0.56	0	0.3	1.48	YW
	241	242	1	0.01	61.13	1.9	0	1.09	0.24	YW
	247	248	1	0.01	418	13	0.02	0.22	0.03	YW
	248	249	1	0.01	65.4	2.03	0	1.58	0.19	YW
QVD-353	249	250	1	0.01	26.66	0.83	0	1.24	0.65	YW
	291	292	1	0.01	52.68	1.64	0	1.08	0.11	YW
	298	299	1	0.01	221	6.87	0.01	0.09	0.01	YW
	327	328	1	0.01	438	13.62	0.18	0.09	0.05	YW
	328	329	1	0.01	591	18.38	0.14	0.09	0.05	YW
	329	330	1	0.01	505	15.71	0.1	0.15	0.08	YW
	330	331	1	0.01	247	7.68	0.13	0.1	0.05	YW
	331	332	1	0.01	210	6.53	0.02	0.06	0.03	YW
	334	335	1	0.01	309	9.61	0.19	0.1	0.05	YW
	374	375	1	0.13	88.71	2.76	1.44	0.22	0.16	YW
	322	323	1	0.11	155.89	4.85	1.4	0.07	0.14	YW
	328	329	1	0.22	133.58	4.15	1.17	0.29	0.28	YW
	334	335	1	0.01	354	11.01	0.04	0.14	0.01	YW
QVD-354	359	360	1	0.79	30.94	0.96	1.3	0.13	0.01	YW
	406	407	1	0.29	42.57	1.32	0.99	0.22	0.04	YW
	407	408	1	0.99	57.64	1.79	1.85	0.14	0.04	YW
	413	414	1	0.01	2.16	0.07	0	0.33	1.33	YW
	156	157	1	0.01	240.15	7.47	0.01	0.45	0.01	YW
	158	159	1	0.01	203.64	6.33	0.02	0.61	0.01	YW
	159	160	1	0.01	267.64	8.32	0.02	2.28	0	YW
	160	161	1	0.01	895.64	27.86	0.01	0.56	0	YW
	161	162	1	0.01	1348.11	41.93	0.02	0.98	0.01	YW

QVD-355	162	163	1	0.01	200	6.22	0.01	0.34	0	YW
	164	165	1	0.01	2192.13	68.18	0.01	0.39	0	YW
	194	195	1	0.01	202.88	6.31	0.02	0.22	0.01	YW
	195	196	1	0.01	209.62	6.52	0.08	0.06	0.01	YW
	198	199	1	0.01	219	6.81	0.14	1.57	0.81	YW
	200	201	1	0.01	5.2	0.16	0.01	1.3	1.22	YW
	201	202	1	0.01	0.5	0.02	0	0.32	1.08	YW
	211	212	1	0.01	0.5	0.02	0	0.34	0.99	YW
	213	214	1	0.01	0.5	0.02	0	0.18	1.22	YW
	214	215	1	0.01	0.5	0.02	0	0.23	0.99	YW
QVD-356	191	192	1	0.01	0.5	0.02	0	0.57	1.92	YW
	192	193	1	0.01	2.5	0.08	0	5.29	2.21	YW
	193	194	1	0.01	29.45	0.92	0	2.6	0.58	YW
	195	196	1	0.01	35.01	1.09	0	2.01	0.61	YW
	196	197	1	0.01	18.76	0.58	0	0.97	0.01	YW
	197	198	1	0.01	20	0.62	0	2.01	0.86	YW
	198	199	1	0.01	20.01	0.62	0.01	1.1	2.25	YW
	201	202	1	0.01	18.96	0.59	0	4.64	0.91	YW
	202	203	1	0.01	3.98	0.12	0	4.2	1.33	YW
	203	204	1	0.01	22.95	0.71	0	1.45	1.38	YW
	204	205	1	0.01	95.34	2.97	0	7.44	0.19	YW
	205	206	1	0.01	32.79	1.02	0	14.19	0.65	YW
	206	207	1	0.01	178.45	5.55	0	8.36	0.12	YW
	207	208	1	0.01	20.49	0.64	0	3.59	0.71	YW
	208	209	1	0.01	8.18	0.25	0	0.73	2.68	YW
	209	210	1	0.01	3.49	0.11	0	0.52	1.68	YW
	210	211	1	0.01	30.16	0.94	0.01	1.53	1.07	YW
	214	215	1	0.01	250	7.78	0.02	0.66	0.16	YW
	215	216	1	0.01	327	10.17	0.02	0.37	0.04	YW
	224	225	1	0.01	274	8.52	0.05	0.21	0.05	YW
	225	226	1	0.01	345	10.73	0.09	0.37	0.04	YW
	234	235	1	0.01	526	16.36	0.08	0.26	0.03	YW
	235	236	1	0.01	216	6.72	0.07	0.21	0.03	YW
	290	291	1	0.01	7.33	0.23	0	0.32	1.04	YW
QVD-357	217	218	1	0.01	8.44	0.26	0	1.04	0.33	YW
	218	219	1	0.01	32.62	1.01	0	1.2	0.4	YW
	219	220	1	0.01	46.34	1.44	0	1.06	0.42	YW
	220	221	1	0.01	37.49	1.17	0	1	0.83	YW
	221	222	1	0.01	3.54	0.11	0	0.32	1.26	YW
	239	240	1	0.01	401	12.47	0.32	0.22	0.15	YW
	241	242	1	0.01	405	12.6	0.2	0.29	0.13	YW
	245	246	1	0.01	0.5	0.02	0	0.51	0.99	YW
	246	247	1	0.01	0.94	0.03	0	0.26	1.81	YW
	247	248	1	0.01	9.18	0.29	0	0.6	1.25	YW
	257	258	1	0.01	9.92	0.31	0	1.33	1.8	YW
	258	259	1	0.01	0.64	0.02	0	0.29	1.3	YW
QVD-358	203	204	1	0.01	442	13.75	0.02	0.18	0.02	YW
	206	207	1	0.01	317	9.86	0.01	0.1	0.02	YW
	211	212	1	0.01	1584	49.27	0.08	0.33	0.06	YW
	212	213	1	0.01	724	22.52	0.07	0.18	0.04	YW
	213	214	1	0.01	4354	135.43	0.76	0.16	0.14	YW
	214	215	1	0.01	3578	111.29	0.33	0.18	0.09	YW
	237	238	1	0.01	23.78	0.74	0.01	0.15	1.04	YW
	251	252	1	0.01	203	6.31	0.02	0.17	0.02	YW
	252	253	1	0.01	884	27.5	0.39	0.24	0.13	YW
	256	257	1	0.01	9.15	0.28	0	0.26	1.21	YW
QVD-359	214	215	1	0.01	20.65	0.64	0	0.45	1.53	YW
	219	220	1	0.01	209	6.5	0.02	0.16	0.12	YW
	220	221	1	0.01	335	10.42	0.02	0.2	0.07	YW
	223	224	1	0.01	760	23.64	0.34	0.32	0.1	YW
	224	225	1	0.01	1308	40.68	0.33	0.3	0.12	YW
	266	267	1	0.01	220	6.84	0.02	0.07	0.01	YW
	269	270	1	0.01	13.63	0.42	0	0.34	2.03	YW
	271	272	1	0.01	4.51	0.14	0	0.42	1.47	YW
	272	273	1	0.01	7.23	0.22	0	0.27	1.12	YW

Data Source: Golden Minerals January 2012

TABLE A-1b
Golden Minerals Company
El Quevar Project - Yaxtché Deposit
Significant Drill Hole Intersections by Grade and Length of Intercept, 2011 Drilling Campaigns in the Yaxtché Deposit

HOLE	LENGTH	Au COM PPM	Ag COM PPM	Ag oz/t	Cu %	Pb %	Zn %	LOCATION
QVD-257	6	0.01	201.8	6.28	0.04	0.18	0.03	YW
QVD-259	2	0.01	195.98	6.1	0.65	0.51	0.22	YW
QVD-259	4	0.01	437.83	13.62	0.29	0.05	0.04	YW
QVD-259	4	1.13	100.02	3.11	2.12	0.2	0.03	YW
QVD-261	2	0.15	209.23	6.51	0.01	0.03	0	CB
QVD-262	8	0.01	693.03	21.56	0.19	3.63	0.2	YW
QVD-262	10	0.01	506.02	15.74	0.14	0.2	0.08	YW
QVD-262	6	0.01	325.33	10.12	0.02	0.3	0.04	YW
QVD-262	12	0.01	199.54	6.21	0.17	0.1	0.05	YW
QVD-263	6	0.01	229.92	7.15	0.02	0.73	0.02	YW
QVD-263	19	0.01	457.3	14.22	0.05	0.24	0.01	YW
QVD-264	15	0.08	520.75	16.2	0.44	0.21	0.09	YW
QVD-264	3	0.08	243.74	7.58	0.14	0.09	0.04	YW

QVD-266	16	0.01	206.12	6.41	0.05	0.4	0.01	YW
QVD-267	9	0.04	200.42	6.23	0.18	0.25	0.06	YW
QVD-269	2	0.01	202.66	6.3	0.01	1.68	2.2	YW
QVD-269	12	0.01	210.03	6.53	0.05	1.77	0.24	YW
QVD-269	15	0.02	431.05	13.41	0.21	0.21	0.09	YW
QVD-269	3	0.01	342.67	10.66	0.05	0.16	0.03	YW
QVD-269	4	0.07	230.42	7.17	1.02	0.63	0.08	YW
QVD-269	2	0.06	226.21	7.04	1	0.56	0.08	YW
QVD-269	7	0.19	207.95	6.47	0.65	0.1	0.05	YW
QVD-270	2	0.01	251.07	7.81	0.18	0.44	0.72	YW
QVD-270	6	0.01	460.5	14.32	0.59	0.22	0.07	YW
QVD-271	11	0.01	236.74	7.36	0.23	0.25	0.1	YW
QVD-273	12	0.01	552.43	17.18	0.18	0.39	0.34	YW
QVD-273	2	0.77	226.89	7.06	0.91	0.08	0.21	YW
QVD-273	3	0.08	229.14	7.13	0.35	0.18	0.09	YW
QVD-274	3	0.02	207.23	6.45	0.06	0.2	0.06	YW
QVD-274	6	0.06	356.1	11.08	0.85	0.12	0.05	YW
QVD-274	3	2.82	200.67	6.24	3.90	0.18	0.52	YW
QVD-274	3	1.5	120.54	3.75	2.23	0.19	0.58	YW
QVD-275	2	0.01	233.77	7.27	0.01	2.11	0.14	YW
QVD-275	4	0.01	266.09	8.28	0.01	0.13	0.05	YW
QVD-275	5	0.01	329.33	10.24	0.4	0.13	0.03	YW
QVD-275	3	0.01	362.86	11.29	0.2	0.14	0.04	YW
QVD-275	30	0.08	348.46	10.84	0.5	0.2	0.13	YW
QVD-276	2	0.01	249.44	7.76	0.1	0.12	0.02	YW
QVD-277	7	0.01	370.08	11.51	0.17	0.35	0.42	YW
QVD-277	7	0.01	272.27	8.47	0.42	0.19	0.01	YW
QVD-279	4	0.01	213.74	6.65	0.53	0.57	0.73	YW
QVD-280	2	0.01	884.81	27.52	0.03	1.07	0.07	YW
QVD-280	2	0.01	425.69	13.24	0.05	0.1	0.02	YW
QVD-280	6	0.01	711.64	22.14	0.12	0.19	0.12	YW
QVD-283	11	0.04	326.71	10.16	0.32	0.43	0.19	YW
QVD-283	2	0.01	297.42	9.25	0.02	0.25	0.09	YW
QVD-292	3	0.02	718.54	22.35	0.91	0.46	0.22	YW
QVD-293	11	0.01	644.45	20.04	0.32	0.14	0.06	YW
QVD-293	3	0.01	1378.73	42.88	0.4	0.37	0.31	YW
QVD-295	21	0.01	308.05	9.58	0.14	0.23	0.25	YW
QVD-295	8	0.01	324.71	10.1	0.38	0.09	0.24	YW
QVD-297	31	0.04	313.3	9.74	0.27	0.45	0.01	YC
QVD-297	2	0.06	354.55	11.03	0	0.14	0	YC
QVD-298	18	0.01	200.93	6.25	0.01	0.2	0.01	YC
QVD-298	2	0.01	219.73	6.83	0.29	0.14	0.07	YC
QVD-301	4	0.01	214.55	6.67	0.03	0.06	0.04	YW
QVD-301	9	0.01	366.36	11.4	0.4	0.1	0.04	YW
QVD-301	5	0.01	204.53	6.36	0.16	0.12	0.1	YW
QVD-302	3	0.02	255.37	7.94	0.01	0.02	0	YC
QVD-307	7	0.02	202.46	6.3	0.99	0.02	0.01	YC
QVD-311	20	0.02	477.61	14.86	0.09	0.16	0	YC
QVD-314	4	0.02	235.2	7.32	0.12	2.32	0.27	MAN
QVD-316	5	0.06	1204.63	37.47	0.66	0.12	0.43	MAN
QVD-316	3	0.08	329.23	10.24	0.56	0.05	0.14	MAN
QVD-317	2	0.01	202.18	6.29	0.02	0.1	0	YC
QVD-317	9	0.01	272.29	8.47	0.05	0.59	0.52	YC
QVD-318	5	0.01	589.94	18.35	0.05	0.07	0.01	YC
QVD-319	3	0.01	334.06	10.39	0.08	0.1	0.54	MAN
QVD-320	3	0.01	290.94	9.05	0	0.08	0	YC
QVD-321	14	0.1	202.73	6.31	0.42	0.07	0.15	MAN
QVD-322	12	0.01	205.44	6.39	0.02	0.34	0.01	YC
QVD-323	2	0.04	239.46	7.45	0.08	0.05	0.02	MAN
QVD-324	2	0.05	214.15	6.66	0.2	0.18	0.1	MAN
QVD-324	2	0.01	263.32	8.19	0.16	0.92	0.15	MAN
QVD-326	4	0.07	231.14	7.19	0.32	0.42	0.15	MAN
QVD-327	2	0.01	190.04	5.91	0.08	0.11	0.05	MAN
QVD-327	2	0.03	247.17	7.69	0.4	0.01	0.06	MAN
QVD-328	4	0.01	334.31	10.4	0.08	0.72	0.2	MAN
QVD-336	5	0.01	272.27	8.47	0.23	0.22	0.2	YW
QVD-336	11	0.01	205.8	6.4	0.17	0.42	0.17	YW
QVD-338	8	0.01	212.45	6.61	0.13	0.4	0.36	YW
QVD-338	5	0.01	403.93	12.56	0.02	0.39	0.3	YW
QVD-339	3	0.01	231.02	7.19	0.26	0.99	2.1	YW
QVD-341	3	0.01	208.02	6.47	0.04	0.08	0.05	YW
QVD-341	4	0.01	219.53	6.83	0.05	0.1	0.03	YW
QVD-341	15	0.01	202.2	6.29	0.1	0.18	0.09	YW
QVD-341	8	0.1	503.14	15.65	1.8	0.18	0.08	YW
QVD-342	27	0.03	607.18	18.89	0.28	0.55	0.26	YW
QVD-343	2	0.01	294.49	9.16	0.07	0.15	0.11	YW
QVD-343	5	0.01	214.84	6.68	0.07	0.2	0.03	YW
QVD-343	9	0.01	355.15	11.05	0.39	0.21	0.09	YW
QVD-343	5	0.01	207.5	6.45	0.02	0.11	0	YW
QVD-344	3	0.01	422.43	13.14	0.14	0.32	0.08	YW
QVD-344	17	0.02	352.43	10.96	0.15	0.22	0.21	YW
QVD-344	2	0.01	204.5	6.36	0.29	0.24	0.01	YW
QVD-344	4	0.21	263.19	8.19	0.19	0.14	0.09	YW
QVD-346	27	0.01	208.44	6.48	0.04	0.2	0.08	YW
QVD-346	7	0.01	250.4	7.79	0.09	0.17	0.02	YW
QVD-347	10	0.07	205.96	6.41	0.28	0.05	0.02	YW

QVD-347	4	0.66	204.29	6.35	3.67	0.05	0.24	YW
QVD-348	21	0.01	258.84	8.05	0.05	0.64	0.41	YW
QVD-348	18	0.01	796.71	24.78	0.42	0.08	0.07	YW
QVD-348	5	0.29	329.43	10.25	0.07	0.05	0.02	YW
QVD-350	11	0.01	285.47	8.88	0.39	0.15	0.08	YW
QVD-350	6	0.98	68.73	2.14	1.09	0.1	0.24	YW
QVD-351	16	0.01	292.16	9.09	0.15	0.35	0.17	YW
QVD-352	26	0.01	534.69	16.63	0.1	0.18	0.06	YW
QVD-352	2	0.01	207.8	6.46	0.18	0.13	0.03	YW
QVD-352	2	0.01	207.42	6.45	0.16	0.09	0.02	YW
QVD-352	3	0.01	213.45	6.64	0.09	0.11	0.01	YW
QVD-352	3	0.04	233.35	7.26	0.65	0.09	0.14	YW
QVD-352	5	0.06	270.25	8.41	0.53	0.07	0.04	YW
QVD-353	2	0.01	241.7	7.52	0.01	0.9	0.11	YW
QVD-353	11	0.01	266.28	8.28	0.11	0.08	0.04	YW
QVD-354	2	0.01	214.31	6.67	0.03	0.15	0.01	YW
QVD-355	10	0.01	553.96	17.23	0.01	0.64	0	YW
QVD-355	2	0.01	206.25	6.42	0.05	0.14	0.01	YW
QVD-356	3	0.01	210.19	6.54	0.01	0.43	0.07	YW
QVD-356	5	0.01	207.14	6.44	0.05	0.24	0.02	YW
QVD-357	4	0.01	245.96	7.65	0.18	0.31	0.22	YW
QVD-358	14	0.01	816.56	25.4	0.09	0.19	0.08	YW
QVD-358	5	0.01	272.21	8.47	0.09	0.16	0.07	YW
QVD-359	13	0.01	254.88	7.93	0.09	0.24	0.25	YW

Data Source: Golden Minerals January 2012

APPENDIX B

Drill Holes Used in Resource Modeling

HOLEID	HOLEID	HOLEID	HOLEID	HOLEID	HOLEID	HOLEID
QVD-002	QVD-069	QVD-112	QVD-152	QVD-192	QVD-267A	QVD-337
QVD-003	QVD-070	QVD-113	QVD-153	QVD-193	QVD-268	QVD-338
QVD-004A	QVD-071	QVD-114	QVD-154	QVD-194	QVD-269	QVD-339
QVD-006	QVD-072	QVD-115	QVD-155	QVD-195	QVD-270	QVD-340
QVD-007	QVD-073	QVD-116	QVD-156	QVD-196	QVD-271	QVD-341
QVD-018	QVD-074	QVD-117	QVD-157	QVD-197	QVD-272	QVD-342
QVD-019	QVD-075	QVD-118	QVD-158	QVD-198	QVD-273	QVD-343
QVD-020	QVD-076	QVD-119	QVD-159	QVD-199	QVD-274	QVD-344
QVD-021	QVD-077	QVD-120	QVD-160	QVD-200	QVD-275	QVD-345
QVD-022	QVD-078	QVD-121	QVD-161	QVD-201	QVD-276	QVD-346
QVD-023	QVD-079	QVD-122	QVD-162	QVD-202	QVD-277	QVD-347
QVD-024	QVD-080	QVD-123	QVD-163	QVD-203	QVD-278	QVD-348
QVD-030	QVD-082	QVD-124	QVD-164	QVD-204	QVD-279	QVD-349
QVD-032	QVD-086	QVD-125	QVD-165	QVD-205	QVD-280	QVD-350
QVD-036	QVD-087	QVD-126	QVD-166	QVD-206	QVD-281C	QVD-351
QVD-037	QVD-088	QVD-127	QVD-167	QVD-207	QVD-283	QVD-352
QVD-038	QVD-089	QVD-128	QVD-168	QVD-208	QVD-285	QVD-353
QVD-039	QVD-090	QVD-129	QVD-169	QVD-209	QVD-286	QVD-354
QVD-040	QVD-091	QVD-130	QVD-170	QVD-211	QVD-288	QVD-355
QVD-041	QVD-092	QVD-131	QVD-171	QVD-212	QVD-289	QVD-356
QVD-042	QVD-093	QVD-132	QVD-172	QVD-213	QVD-291	QVD-357
QVD-043	QVD-094	QVD-133	QVD-173	QVD-214	QVD-292	QVD-358
QVD-044	QVD-095	QVD-134	QVD-174	QVD-216	QVD-293	QVD-359
QVD-045	QVD-096	QVD-135	QVD-175	QVD-217	QVD-295	QVD-360
QVD-046	QVD-097	QVD-136	QVD-176	QVD-218	QVD-296	QVD-361
QVD-047	QVD-098	QVD-137	QVD-177	QVD-219	QVD-297	QVD-362
QVD-048	QVD-099	QVD-138	QVD-178	QVD-232	QVD-298	QVD-363
QVD-049	QVD-100	QVD-140	QVD-179	QVD-243	QVD-301	QVD-364
QVD-050	QVD-101	QVD-141	QVD-180	QVD-251	QVD-302	QVD-365
QVD-052	QVD-102	QVD-142	QVD-182	QVD-252	QVD-304	QVD-366
QVD-053	QVD-103	QVD-143	QVD-183	QVD-254	QVD-306	QVD-367
QVD-054	QVD-104	QVD-144	QVD-184	QVD-256	QVD-307	QVD-368
QVD-058	QVD-105	QVD-145	QVD-185	QVD-257	QVD-311	QVD-369
QVD-060	QVD-106	QVD-146	QVD-186	QVD-259	QVD-317	QVD-370
QVD-061	QVD-107	QVD-147	QVD-187	QVD-262	QVD-318	QVD-371
QVD-064	QVD-108	QVD-148	QVD-188	QVD-263	QVD-320	QVD-372
QVD-065	QVD-109	QVD-149	QVD-189	QVD-264	QVD-322	
QVD-066	QVD-110	QVD-150	QVD-190	QVD-265	QVD-335	
QVD-068	QVD-111	QVD-151	QVD-191	QVD-266	QVD-336	