Technical Report and Mineral Resource Estimate for the Las Chispas Property Sonora, Mexico

PRESENTED TO
SilverCrest Metals Inc.

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EXECUTIVE SUMMARY

Tetra Tech Canada Inc. (Tetra Tech) was retained by SilverCrest Metals Inc. (SilverCrest) to prepare a National Instrument 43-101 (NI 43-101) Technical Report to document the maiden Mineral Resource Estimate for the Las Chispas Property (Las Chispas or the Property), located in the State of Sonora, Mexico. The effective date of this report is February 12, 2018.

Las Chispas is the site of historical production of silver and gold from narrow high-grade veins in numerous underground mines dating back to approximately 1640. The bulk of historical mining occurred between 1880 and 1930 by the Pedrazzini Gold and Silver Mining Company. Minimal mining activity is believed to have been conducted on the Property since this time. In 1910, annual production for three years trailing ranged between 3,064 and 3,540 tonnes with grades on average over the period of 1.29 ounces per tonne gold and 173 ounces per tonne silver. High-grades in the mine are a result of the concentration and formation of numerous secondary sulphide and antimonide minerals, mainly argentite/acanthite, stephanite, polybasite and pyrargyrite. Numerous mineral specimens from the mine were donated to museums and educational institutions, most notably those on display at the American Museum of Natural History in New York City.

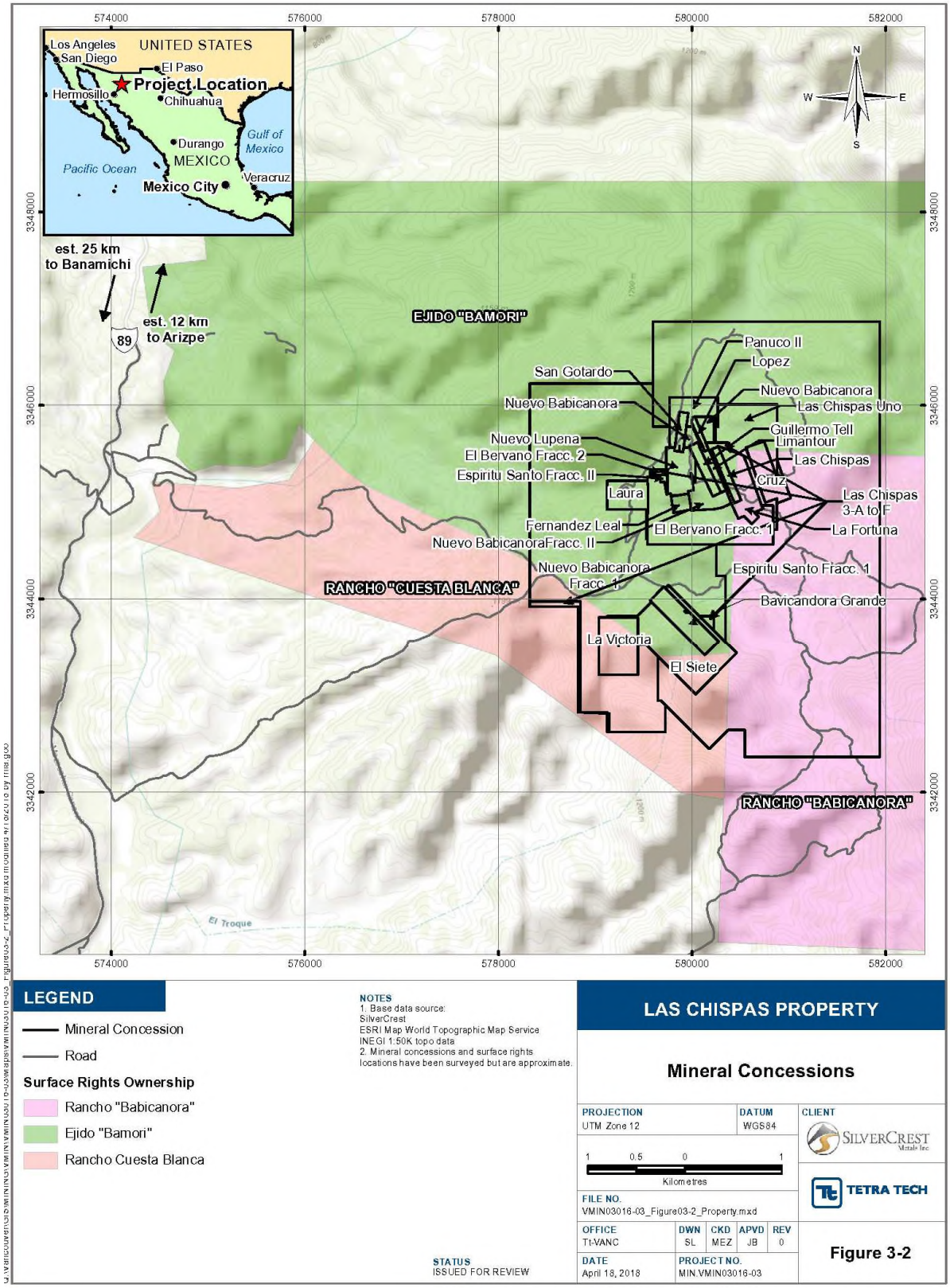
Historical mining was conducted along three main structures which are being identified by SilverCrest as the Las Chispas Vein, the William Tell Vein, and the Babicanora Vein. Each of these structures has various extents of underground development and many of the workings are restricted to small scale development on one or two working levels. The most extensive development appears to be along the Las Chispas Vein, where per historical records mining has occurred over a strike length of approximately 1,250 m to a maximum depth of approximately 350 m. Mining at Las Chispas has targeted high-grade mineralization through a series of interconnected stopes. Small scale mining was also conducted from three 30 m tunnels at the La Victoria prospect, located on the southwest portion of the Property.

SilverCrest has gained access to many of the historical workings through extensive mine rehabilitation of approximately 10 km of a known 11.5 km of underground development. Further rehabilitation is programed through 2018.

Access to the Property is very good. A 10 km dirt road, which connects to the paved Highway 89, has been upgraded. The highway connects to Hermosillo, approximately 220 km to the southwest, to Cananea 150 km to the north, or to Tucson, Arizona, approximately 350 km to the northwest. Nearby communities include Banamichi, located 25 km to the south, which is the service community for the nearby Santa Elena Mine operated by First Majestic Silver Corp., and Arizpe located 12 km to the north. The Mercedes Mine operated previously by Yamana, and now Premier Gold Mine Limited, is located 33 km northwest of Las Chispas.

The Property is comprised of 28 mineral concessions totaling 1,400.96 hectares. La Compañia Miñera La Llamarada S.A. de C.V. (Llamarada), which is a Mexican wholly-owned subsidiary of SilverCrest, has acquired title to, or entered into option agreements to purchase the with five concession holders. SilverCrest owns approximately two thirds of the surface rights covering its optioned mining concessions. A 20 year lease agreement for land access and exploration activities to the remaining one third of the surface rights on the mineral concessions is in place with the local Ejido (Ejido Bamori). The map shown in Figure 1 shows the Property layout including mineral concessions and surface rights ownership.

Figure 1: Las Chispas Property and Mineral Concessions Map



Las Chispas will require ongoing exploration permits to continue with drilling and exploration activities. SilverCrest currently holds an exploration permit for surface drilling which will need to be extended as of March 28, 2020. SilverCrest submitted an environmental impact statement (MIA) to the Mexican Government's Secretariat of Environment and Natural Resources (SEMARNAT) along with an application for an underground drilling permit. The permit was authorized on September 19, 2016, for a 10-year period and also authorizes a proposed program to extract a bulk sample up to 100,000 tonnes for off-site test work. Future amendments to the MIA will be required for exploration drifting outside historic areas and building onsite facilities.

No known environmental liabilities exist on the Property from historical mining and processing operations. Soil and tailings testing was conducted as part of the overall sampling that has been ongoing onsite. To date there are no known contaminants. Water quality testing is currently ongoing for a baseline environmental study that is being done onsite.

The mineral deposits are classified as low-intermediate sulphidation epithermal veins, stockwork and breccia zones, where silver mineralization is present as primary minerals argentite/acanthite and secondary minerals stephanite, polybasite and pyrargyrite/proustite. Gold concentration is related to silver mineralization and may occur in trace quantities within the silver-sulphosalts, in addition to an electrum phase. Historical records document the irregular ore shoots of extreme high-grade mineralization which often occur in contact with, and likely in relation to, zones of leached and barren quartz and calcite filled fractures. Dufourcq (1910) describes these zones as commonly occurring horizontally and are a result of leaching, concentrating and redistributing the primary silver sulphides.

The deposits have been emplaced through a felsic to more mafic volcaniclastic sequence associated with volcanism of the upper portion of the Lower Volcanic Series, a dominant member of the Sierra Madre Occidental terrane which hosts similar deposits in northeastern portions of the State of Sonora and northwestern portions of the state of Chihuahua.

Previous exploration work was conducted by Minefinders Corporation Ltd. (Minefinders) between 2008 and 2011. During this period, Minefinders conducted exploration on the Property which was, however, limited by mineral concession rights. Regional activities consisted of geologic mapping and a geochemical sampling program totaling 143 stream sediment and bulk leach extractable gold (BLEG) samples, 213 underground rock chip samples, and 1,352 surface rock chips. The work was successful in identifying three gold targets along the 3 km long structural zone. The most prospective of these targets was interpreted to be an area between the Las Chispas Vein and the Babicanora Vein. Minefinders focused on the furthest western extension of the Babicanora Vein called El Muerto which is the only part of the trend that was acquired by concession and accessible for exploration work. They drilled seven reverse circulation holes, totaling 1,842.5 m from the road to the west and off the main mineralized trends. The program returned negative results and Minefinders dropped the Property in 2012.

SilverCrest Mines Inc. (now a subsidiary of First Majestic Silver Corp.), through its subsidiary Nusantara de Mexico S.A. de C.V., executed options agreements to acquire rights to 17 mineral concessions in September 2015. On October 1, 2015, these mineral concessions were transferred to SilverCrest's subsidiary Llamarada further to an arrangement agreement among SilverCrest, SilverCrest Mines Inc., and First Majestic Silver Corp. After October 2015, Llamarada obtained the rights to 11 additional mineral concessions.

Before SilverCrest acquired the Las Chispas Property in October 2015, no drilling had been completed on the northwest to southeast mineralized trend which contains the Las Chispas and Babicanora areas.

SilverCrest exploration began work on the Property in February 2016 with a primary focus on the Las Chispas, William Tell and Babicanora veins. From February to October 2016, the Phase I exploration program consisted of surface and underground mapping and sampling, and rehabilitating an estimated 6 km of underground workings. From November 2016 to February 2018, the Phase II exploration program consisted of additional surface and

underground mapping and sampling, further rehabilitation of 4 km of underground workings plus auger and trenching of approximately 150,000 tonnes of surface historic waste dumps. The extensive mapping and sampling program being undertaken by SilverCrest has identified that many of the mineralized showings are comprised of narrow and high -grade mineralization as low to intermediate sulphidation epithermal deposits hosted in volcaniclastic rocks.

SilverCrest completed a Phase I and Phase II surface and underground drill program totalling approximately 45,771.8 m in 183 core holes starting in March 2016 and continuing through to February 2018.

Phase I core drilling of 22 holes totaling 6,392.6 m and 4,331 samples targeted near surface mineralization and lateral extensions of previously mined areas in the Las Chispas Vein, in addition to the William Tell Vein and the La Victoria prospect. Phase II core drilling of 161 drillholes totaling 39,379.2 m and 23,121 samples targeted testing unmined portions of the Las Chispas Vein, delineation of the Giovanni, Giovanni Mini, La Blanquita and other unnamed veins, in addition to exploration of the La Varela Vein, all within the Las Chispas Area. Drilling at Babicanora focused on delineating the down plunge and vertical extents of the Babicanora Vein, in addition to exploratory drilling on the Amethyst Vein and the Granaditas target, all within the Babicanora Area.

Drilling on the Babicanora Vein has identified significant silver and gold mineralization along a regional plunging trend which has been named Area 51, based on anchor mineral intersection in hole BA-17-51. The area measures approximately 600 m along strike, 500 m vertically, and remains open down plunge. The top of Area 51 is located at approximately the same elevation as the valley bottom or 200 vertical metres from the ridge crest.

Select highlights of the Phase I drilling results are shown in Table 1, and select highlights from the Phase II drilling results are shown in Table 2. The location of the SilverCrest drilling in the Las Chispas Area is shown in Figure 1 and in the Babicanora Area in Figure 2. Surface collar locations were initially surveyed using a handheld GPS unit, then by a professional surveyor using a differential Trimble GPS. All hole inclinations were surveyed utilizing single shot measurements with a Flex-it® tool. Underground collar locations were surveyed relative to the underground survey network which has been tied in by a professional survey contractor.

Table 1: Select Highlights from Phase I Drilling Results

Hole No.	Area	From (m)	To (m)	Drilled Thickness (m)	Est. True Thickness (m)**	Au gpt	Ag gpt	AgEq* gpt
LC-16-03	William Tell Vein	172	176	4	1.5	2.03	683	835
includes	William Tell Vein	173	175	2	0.8	3.81	1,102	1388
LC-16-05	Unnamed Vein	149	150	1	0.9	2.10	226	383
and	Las Chispas Vein	167	172	5	4.6	4.56	621	963
includes	Las Chispas Vein	171	172	1	0.8	18.55	2,460	3,851
LC-16-06	Las Chispas Vein	66	67	1	0.7	14.9	1,815	2,932
LC-16-08	Unnamed Vein	143	145	2	1.4	1.58	163	282
and	Las Chispas Vein	171	182	11	7.2	2.41	311	492
includes	Las Chispas Vein	171	176	5	3.3	2.25	276	444
includes	Las Chispas Vein	181	182	1	0.7	14.4	1,900	2,980
LC-16-12	William Tell Vein	118	119	1	0.9	2.40	229	409
LC-16-13	William Tell Vein	168	172	4	3.2	1.08	141	222
includes	William Tell Vein	168	169	1	0.8	3.58	249	517
LC-16-13	New Vein	180	181	1	0.8	4.79	364	723
LC-16-15	William Tell Vein	197.5	199	1.5	1.3	1.94	352	497
LC-16-16	New Vein	93	94	1	0.9	6.57	395	888
LC-16-17	Las Chispas Vein	81	82	1	1	2.27	306	476
LC-16-18	Las Chispas Vein	80	81	1	1	1.55	706	822

Note: all numbers are rounded.

*AgEq based on 75:1 Ag:Au

** All holes were drilled at angles to mineralization and adjusted for true thickness.

Table 2: Select Highlights from Phase II Drilling Results

Hole No.	From (m)	To (m)	Est. True Width (m)	Au gpt	Ag gpt	AgEq* gpt	Vein
BA17-04	43.9	53.4	6.6	1.03	328.5	406	Babicanora
BA17-07	207.6	219.6	4.8	4.63	250.9	598	Babicanora
BA17-17	273	276	2.9	5.62	172.7	594	Babicanora
BA17-18	148.9	152.9	3	4.34	130.4	456	Babicanora
BA17-23	131	136	4	0.05	397.4	401	Babicanora
BA17-27	286.5	291	4.1	3.56	137	404	Babicanora
BA17-31	313.7	317.5	3.8	5.65	451.5	875	Babicanora
BA17-33	225.7	228.9	3.1	5.08	570.5	951	Babicanora
BA17-36	241.4	243.5	2	3.65	451.6	725	Babicanora
BA17-38	15	18.6	3.6	4.21	165	481	Babicanora
BA17-42	279.8	282.4	2.2	3.79	388.1	673	Babicanora
BA17-43	324.4	328	3.2	26.95	1,493.60	3,515	Babicanora
BA17-46	6.5	8.1	1.2	54.2	2,020.70	6,086	Babicanora
BA17-47	268.5	272	3.2	4.96	859.1	1,231	Babicanora
BA17-48	289.8	293.2	3.1	6.82	343.1	855	Babicanora
BA17-48	324.2	325.8	1.4	5.1	438.8	821	Babicanora
BA17-49	324.3	326.5	2	18.2	1,791.40	3,158	Babicanora
BA17-50	313.3	318.7	5	1.95	265.2	411	Babicanora
BA17-51	265.9	269.2	3.1	40.45	5,375.20	8,409	Babicanora
BA17-52	340.4	343.9	2.7	7.2	593.9	1,134	Babicanora
BA17-53	363.8	366.7	2.2	3.15	378.9	615	Babicanora
BA17-58	340.7	345.7	3.3	1.96	176.3	323	Babicanora
BA17-63	468.7	473.3	3.5	41.05	1,074.50	4,153	Babicanora
BA18-64	380	383	2.6	2.21	273.3	439	Babicanora
BA18-65	382.6	387.6	3.9	12.13	1,411.60	2,321	Babicanora
UB17-01	33.5	40.9	4.5	1.3	343	440	Babicanora
UB17-03	23	29.9	2.8	3.29	447.2	694	Babicanora
UB17-04	9.1	15.6	5	3.91	182.5	476	Babicanora
UB17-05	7.7	14.5	6.1	4.84	383	746	Babicanora
UB17-09	70.2	77.8	7.6	4.08	196.1	502	Babicanora
UB17-11	85.1	92.5	3.7	2.58	332.6	526	Babicanora

Hole No.	From (m)	To (m)	Est. True Width (m)	Au gpt	Ag gpt	AgEq* gpt	Vein
LC17-35	106.5	108.6	2.1	3.4	329.7	585	Giovanni
LC17-37	205.3	207.6	2.3	3.57	577.8	845	Giovanni
LC-17-45	222.3	227.1	4.1	1.71	231.8	360	Giovanni
LC17-68	106	108	2	5.85	1,191.50	1,630	Giovanni
LC17-72	115	119	4	18.61	696.2	2,092	Giovanni
LCU17-04	34.3	42.5	6.3	1.97	241.4	389	Giovanni
LC17-60	100.6	102.7	2.1	2.28	469.5	641	La Blanquita
LC17-61	115.5	117.1	1.6	2.39	516	695	La Blanquita
LC-17-45	159.6	161.9	1.9	50.56	5,018.80	8,803	Las Chispas
LC-17-58	440.8	443	1.32	0.85	172.5	236	Las Chispas
LCU17-02	6.8	10	2.2	9.42	1,369.3	2,076	Las Chispas
LC17-65	243	244.5	1.5	13.22	2,006.7	2,999	Luigi
LC16-30	249.85	251.75	1.5	0.39	427.8	457	William Tell

*AgEq based on 75:1 Ag:Au

** All holes were drilled at angles to mineralization and adjusted for true thickness.

Figure 2: Las Chispas Drilling Overview Map

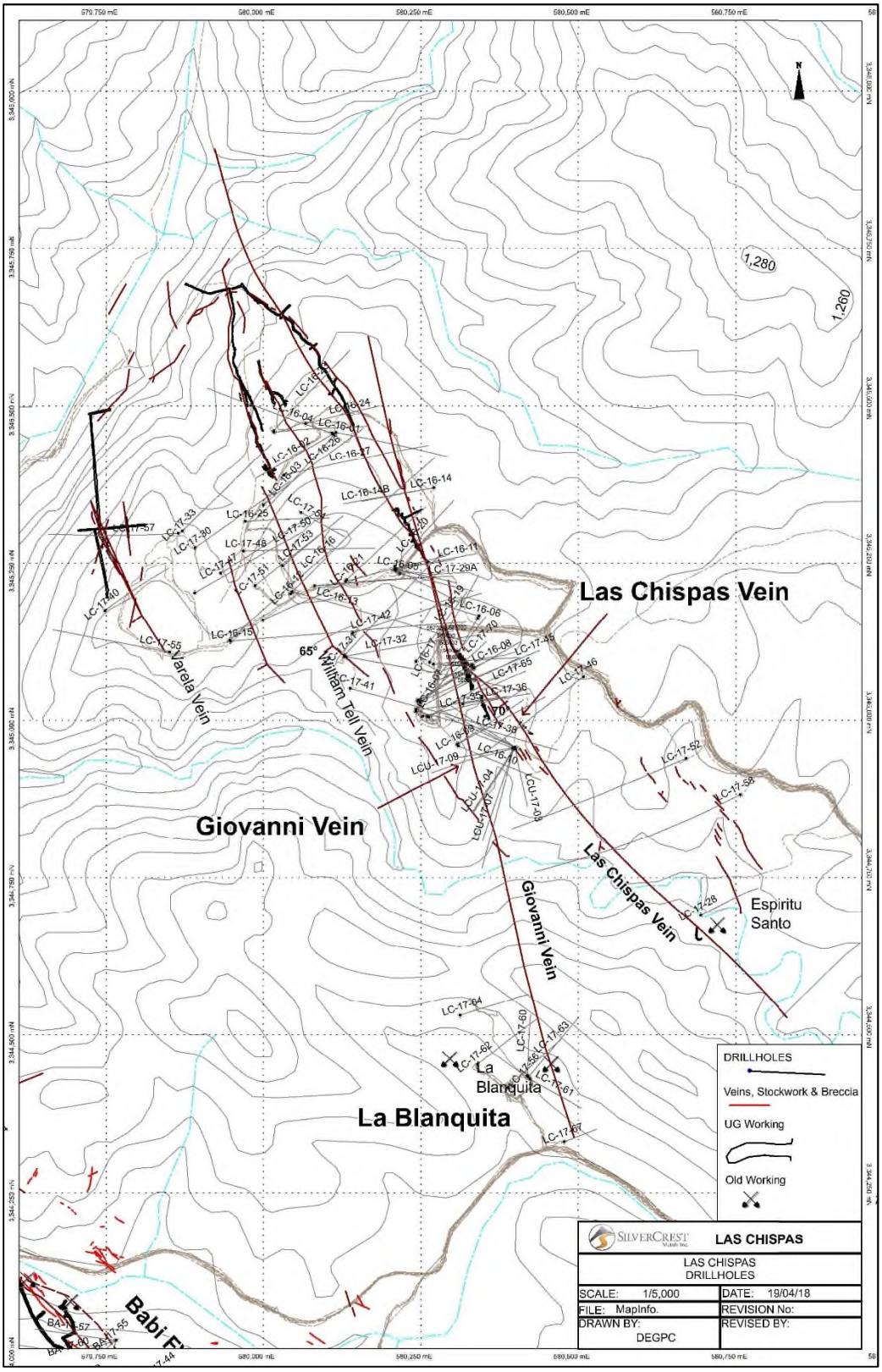
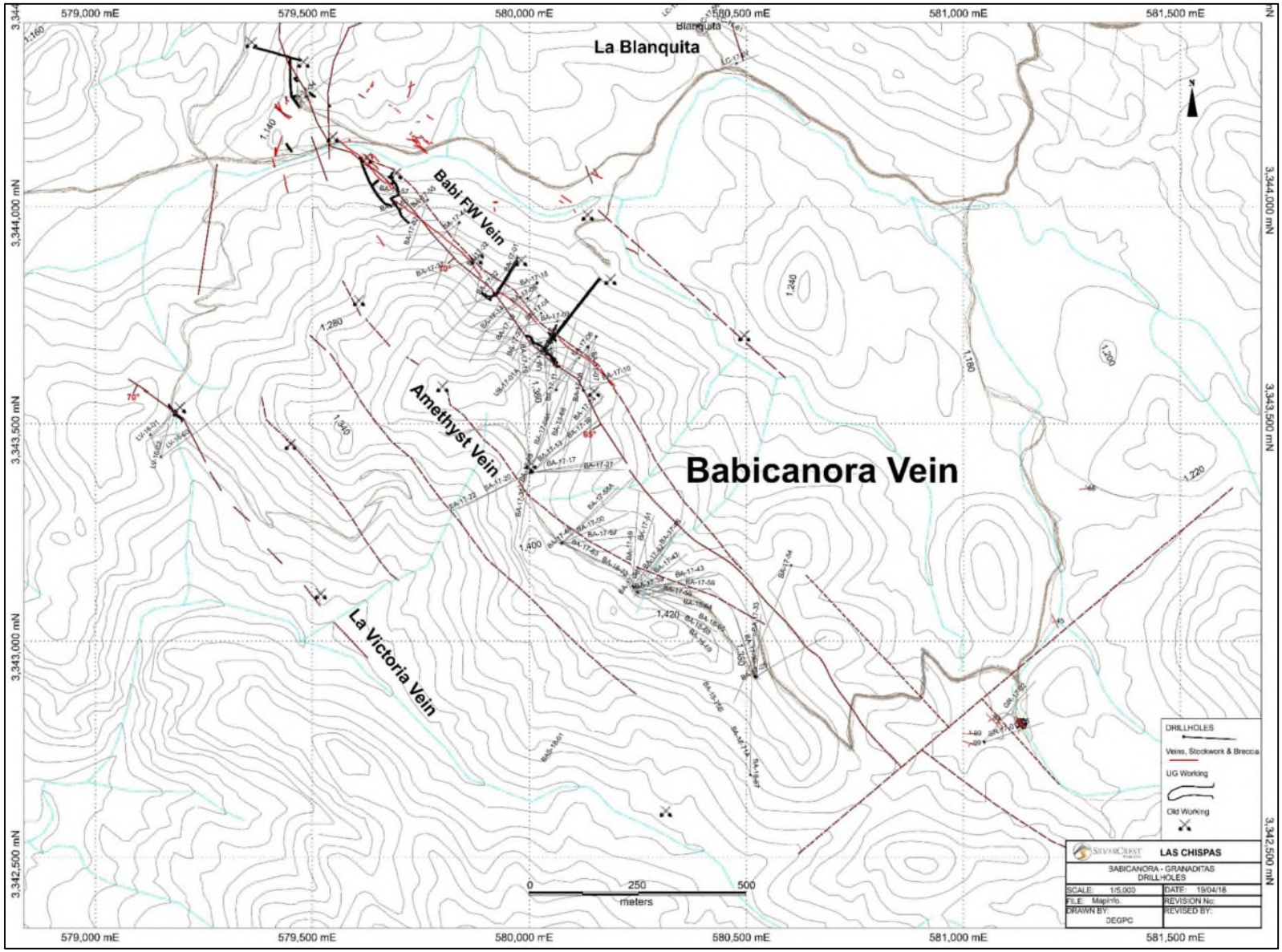


Figure 3: Babicanora Drilling Overview Map



Two mineral resource estimates have been prepared for the Las Chispas Property. The first encompasses in situ vein hosted material at the Babicanora, Las Chispas, William Tell and Giovanni veins, and the second encompasses surface stockpiled material remaining from historical operations as waste dumps, waste tailings deposits and as recovered underground muck material.

The vein models were constructed by SilverCrest and reviewed by Tetra Tech using Aranz Leapfrog Geo v.4.1. Block models were constructed by Tetra Tech using Geovia GEMS v.6.2. Data was reviewed by Tetra Tech in Phinar X10-Geo v.1.4.15.8. The vein models were used to constrain drill hole samples and underground channel samples to be representative of the mineralized vein. Drillhole assays were composited within the vein solid to 1 m intervals, and channel samples were kept at the original sample length which was approximately 1 m. A total of 865 composite drillcore data points and 2,722 underground channel data points were used as the basis for the mineral resource estimate.

One block model was developed for the veins in the Las Chispas Area, which included Las Chispas, William Tell, Giovanni, Giovanni Mini, and La Blanquita, and a second block model was developed for veins in the Babicanora Area which included Babicanora Main, Babicanora Hangingwall and Babicanora Footwall. Area 51 is defined within the Babicanora Main vein model. The block models were established on 2 m by 2m by 2m blocks using the percent model methods in Geovia GEMs to accommodate the vein widths averaging approximately 3 m.

Input parameters for block model interpolation included Ag and Au grades. Metal grades were interpolated using ordinary kriging and inverse distance squared methods using search parameters based on variographic assessment. Where inputs grades were used from underground sampling and drillhole sampling, multiple interpolation passes were used to first isolate underground sample in short range searches, following by larger searches which included both underground sampling and drillhole sampling. Where only drillhole sampling was available, single interpolation passes were used.

A fixed bulk density value of 2.55 t/m^3 was applied to all materials within the block model. Bulk density was measured in 72 laboratory wax coated bulk density tests on mineralized and non-mineralized rock samples, and 641 insitu specific gravity measurements collected by SilverCrest. Additionally, independent bulk density testwork completed by Tetra Tech were undertaken.

Excavation models were developed for historical underground workings within the Las Chispas vein, William Tell Vein and Giovanni veins based on SilverCrest underground mapping and historical records when available. The excavation models were superimposed onto the vein models, and the material volumes removed from the mineral resource estimate computations. Additionally, the Las Chispas estimate did not include any material below the 900 level workings (approximately 900 metres above sea level (masl)) due to limited mapping and sampling in this area.

A total of 41 historical stockpiles were mapped, surveyed and sampled by SilverCrest between July 2017 and January 2018. The sample collection program included trenching and auger sampling resulting in 1,340 samples. The stockpile surveys were used in combination with average trench depths and an estimated bulk density value of 1.7 t/m^3 to estimate volume and tonnages for each stockpile, and the sample grades were averaged. Stockpiles with average grade of >100 gpt AgEq, were tabulated and classified as Inferred Mineral Resources.

The estimates are effective as of February 12, 2018, and are summarized in Table 2. A detailed breakdown of the vein estimates is included in Table 3 and details of the stockpile estimate are included in Table 4. These estimates adhere to guidelines set forth by National Instrument 43-101 and the Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Best Practices. All estimates prepared for the Las Chispas Property have been classified as Inferred using CIM Definition Standards.

Table 2: Summary of Mineral Resource Estimates for In Situ Vein Material and Surface Stockpile Material at the Las Chispas Property, Effective February 12, 2018

Type	Cut-off Grade (gpt AgEq[2])	Classification[1]	Tonnes	Au (gpt)	Ag (gpt)	AgEq [2] gpt	Contained Gold Ounces	Contained Silver Ounces	Contained AgEq [2] Ounces
In Situ Vein	150	Inferred	3,269,000	3.75	305	586	394,000	32,011,000	61,580,000
Stockpile	100	Inferred	174,500	1.38	119	222	7,600	664,600	1,246,100
Overall		**Inferred**	**3,443,500**	**3.63**	**296**	**568**	**401,600**	**32,675,600**	**62,826,100**

1) Conforms to NI 43-101, Companion Policy 43-101CP, and the CIM Definition Standards for Mineral Resources and Mineral Reserves, as amended. Inferred Resources have been estimated from geological evidence and limited sampling and must be treated with a lower level of confidence than Measured and Indicated Resources.
2) AgEq based on 75 (Ag):1 (Au) and 100% metallurgical recovery.
3) All numbers are rounded. Overall numbers may not be exact due to rounding.
4) Insitu vein resource is reported using a 150 gpt AgEq cut-off grade and minimum 1.5 m minimum true width, and surface stockpile resource is reported using a 100 gpt AgEq cut-off.

Table 3: Mineral Resource Estimate for In Situ Vein Material at the Las Chispas Property, Effective February 12, 2018

Vein	Classification[1]	Average True Width	Tonnes	Au (gpt)	Ag (gpt)	AgEq[2] gpt	Contained Gold Ounces	Contained Silver Ounces	Contained AgEq [2] Ounces
Babicanora [4]	Inferred	3.2	1,894,000	5.41	361	766	329,000	21,952,000	46,640,000
Includes Area 51	Inferred	2.7	967,000	7.43	469	1,026	231,000	14,581,000	32,247,000
Las Chispas	Inferred	3	171,000	2.39	340	520	13,000	1,874,000	2,861,000
Giovanni [4]	Inferred	2	607,000	1.37	237	340	27,000	4,633,000	6,641,000
William Tell	Inferred	1.5	595,000	1.32	185	284	25,000	3,543,000	5,438,000
Total	**Inferred**		**3,269,000**	**3.75**	**305**	**586**	**394,000**	**32,011,000**	**61,580,000**

1) Conforms to NI 43-101, Companion Policy 43-101CP, and the CIM Definition Standards for Mineral Resources and Mineral Reserves, as amended. Inferred Resources have been estimated from geological evidence and limited sampling and must be treated with a lower level of confidence than Measured and Indicated Resources.
2) AgEq based on 75 (Ag):1 (Au) and 100% metallurgical recovery.
3) All numbers are rounded. Overall numbers may not be exact due to rounding.
4) Babicanora resource includes the Babicanora Vein and Babicanora Footwall Vein and Giovanni resource includes the La Blanquita extension and Giovanni mini Vein.
5) Resource is reported using a 150 gpt AgEq cut-off grade and minimum 1.5 m minimum true width.

Table 4: Mineral Resource Estimate for Surface Stockpile Material at the Las Chispas Property, Effective February 12, 2018

Stockpile Name	Tonnes	Au (gpt)	Ag (gpt)	AgEq (2) (gpt)	Contained Gold Ounces	Contained Silver Ounces	Contained AgEq (2) Ounces
North Chispas 1	1,200	0.54	71	111	20	2,700	4,200
La Capilla	14,200	4.92	137	506	2,300	62,700	231,600
San Gotardo	79,500	0.79	121	180	2,000	308,100	459,600
Lupena	17,500	1.38	79	182	800	44,300	102,700
Las Chispas 1 (LCH)	24,200	0.78	125	183	600	97,000	142,500
Las Chispas 2	1,100	1.23	236	329	40	8,100	11,300
Las Chispas 3 (San Judas)	1,000	2.05	703	857	100	22,400	27,300
La Central	3,800	0.75	116	172	100	14,300	21,200
Chiltepines 1	200	0.87	175	240	0	800	1,200
Espiritu Santo	1,700	0.52	94	133	30	5,000	7,100
La Blanquita 2	4,600	0.53	118	158	100	17,500	23,400
El Muerto	5,800	2.52	79	268	500	14,900	50,200
Sementales	800	4.38	47	376	100	1,200	9,700
Buena Vista	400	4.62	57	403	100	700	5,100
Babicanora	10,300	1.81	56	192	600	18,500	63,300
Babicanora 2	1,000	2.63	276	473	100	8,900	15,300
El Cruce & 2,3	100	0.75	39	96	3	200	400
Babi stockpiled fill	800	1.80	120	255	50	3,100	6,600
LC stockpiled fill	300	2.50	243	431	20	2,300	4,200
Las Chispas u/g backfill	2,000	2.10	243	431	100	16,500	26,600
Babicanora u/g backfill	4,000	1.80	120	255	200	15,500	32,800
TOTAL	**174,500**	**1.38**	**119**	**222**	**7,600**	**664,600**	**1,246,100**

1) All numbers are rounded. Overall numbers may not be exact due to rounding.
2) AgEq based on 75 (Ag):1 (Au) and 100% metallurgical recovery.
3) Resource is reported using a 100 gpt AgEq cut-off grade.

In August, 2017, SilverCrest conducted preliminary metallurgical testwork using 19 drillcore samples from the Las Chispas and Babicanora veins that were combined into three composite samples. The testwork conducted at SGS Mineral Services in Durango, Mexico, included standard bottle rolls with 85% of material passing 150 mesh, pH at 11-11.5, 48% solids, and retention time of 50 hours. The results after 50 hours were an average of 98.9% gold recovery and 86.6% silver recovery. NaCN consumption rates averaged 1.5 Kg/t and CaO consumption rates averaged 1.4 Kg/t.

Based on the exploration results received to date, Tetra Tech concluded that the Las Chispas Property comprises an extensive mineralizing system and merits further work to continue to characterize the internal variability and extents of the Las Chispas, Babicanora, William Tell and Giovanni Veins, and to explore the numerous veins not yet tested. A Phase III program including additional underground channel sampling, dedicated metallurgical testwork on the historical in situ/muck/stockpiles, expansion and infill drilling along multiple veins, exploration decline at Area 51, baseline work and permitting has been recommended. Results should be incorporated into an updated mineral resource technical report and preliminary economic assessment. A cost estimate for this program is included below.

Table 5: Cost Estimate for Recommended Work on the Las Chispas Property

Item	Units	Cost Estimate (USD$000)
Additional underground channel sampling and structural mapping	4,000 samples	300
Dedicated sampling and metallurgical testwork on historical insitu and muck material	50 samples and testwork	100
Expansion and infill drilling along multiple veins	45,000 m (surface and underground)	9,000
Area 51 decline and exploration	1,000 m	3,000
Baseline work and permitting	Decline, explosives, added drilling	200
Water exploration, permitting and purchase	All rights for water use	300
Update resource and technical report	Technical Report	100
Preliminary economic assessment		200
Mexico admin and labor		1,300
Corporate support		500
Total		**15,000**

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APPENDIX SECTIONS

Appendix A Statement of Qualifications

ACRONYMS & ABBREVIATIONS

Acronyms/Abbreviations	Definition
Ag	silver
AgEq	silver equivalent
Au	gold
Ba	barium
BLEG	bulk leach extractable gold
Ca	calcium
CaO	calcium oxide
CIM	Canadian Institute of Mining Metallurgy and Petroleum
Cu	copper
ETT	estimated true thickness
Fe	iron
FW	footwall
gpt	grams per metric tonne
km	kilometre(s)
Llamarada	La Compañia Miñera La Llamarada S.A. de C.V.
m	metre(s)
masl	metres above sea level
NaCN	sodium cyanide
NI 43-101	National Instrument 43-101
opt	troy ounces per short ton
Pb	lead
RC	reverse circulation
ROM	run-of-mine
RPD	relative percent difference
Sb	antimony
SEMARNAT	Mexican Government's Secretariat of Environment and Natural Resources
SilverCrest	SilverCrest Metals Inc.
Tetra Tech	Tetra Tech Canada Inc.
U	uranium
UTM	Universal Transverse Mercator
QAQC	quality assurance and quality control
QP	Qualified Person
Zn	zinc

1.0 INTRODUCTION

Tetra Tech Canada Inc. (Tetra Tech) was retained by SilverCrest Metals Inc. (SilverCrest) to prepare a National Instrument 43-101 (NI 43-101) Technical Report to document the maiden Mineral Resource Estimate for the Las Chispas Property (Las Chispas or the Property), located in the State of Sonora, Mexico. The effective date of this report is February 12, 2018.

Las Chispas is the site of historical production of silver and gold from narrow high-grade veins in numerous underground mines. SilverCrest has obtained some records from the most recent operations which occurred between 1880 and 1930. No additional mining or metal production is known to have been conducted on the Property since this time.

Since February 2016, SilverCrest has conducted mapping, sampling, and drilling as part of their early exploration efforts to identify the extent of historical development and to delineate targets for further exploration. Over 10 km of historical underground development has been made accessible by an extensive underground rehabilitation program. Core drilling has been completed on 183 holes for a total of 45,771.8 m and 27,452 core samples.

Terms of reference for Las Chispas throughout this report include the following:

- The Las Chispas Property: this encompasses all mineral occurrences and land underlying the mineral concessions under option to SilverCrest.
- The Las Chispas District: this is a general term used in historical context for the various mines which operated in the area prior to the 1930's. The District consists of the Las Chispas Area and Babicanora Area which are approximately 1.5 km apart.
- The Las Chispas Area consists of the Las Chispas Vein and Historic Mine, Giovanni & La Blanquita Veins, William Tell Vein, Varela Veins, and various other unnamed veins.
- The Babicanora Area consists of the Babicanora Vein, Babicanora Footwall (FW) Vein, Granaditas Vein, Babi Sur Vein, La Victoria Vein and various other unnamed Veins.
- The Las Chispas Mine: this refers to a historical shaft and series of underground developments believed to be sunk under the original discovery outcrop that was located in the 1640's.
- Area 51: the high-grade mineralized area of the Babicanora Vein defined by the Company as having average resource grades greater than 1,000, gpt AgEq.
- Vein: this is a current term used by SilverCrest that encompasses the various mineral showings, underground developments and shafts which exist along a semi-continuous north to northwest trending structures consisting of quartz veins, stockwork and breccia.
- Bonanza grade or zone: the term bonanza grade is used in the report to describe mineral concentration of >1,000 gpt AgEq.

1.1 SITE VISIT

Three site visits have been completed by Mr. James Barr, P.Geo., starting from August 30-September 1, 2016, January 15-19, 2017, and November 21-22, 2017. During the site visits, Mr. Barr reviewed the Property layout, drill

operations, sample collection methods, QA protocols and collected independent verification samples. Conversations with on-site SilverCrest technical personnel including;

- Stephany (Rosy) Fier, Exploration Manager;
- Maria Lopez, Regional Manager;
- Nathan Fier, Mining Engineer;
- Pasqual Martinez, Senior Geologist; and
- N. Eric Fier, CPG, P.Eng, and CEO of SilverCrest

Topics covered during review related to Property geology, drilling methods, sample collection methods, analytical methods, surface Property ownership, mineral tenure, and other project considerations.

In accordance with NI 43-101 guidelines, the qualified persons (QP) for this report is Mr. James Barr, P.Geo, Senior Geologist and Team Lead, with Tetra Tech.

1.2 Effective Date

The Effective Date of February 12, 2018, applied to this report reflects the cut-off date by which all scientific and technical information was received and used for the preparation of the Technical Report and the mineral resource estimate. For drilling, the last holes to receive assay data for inclusion to the mineral resource estimate are as follows:

- Drillholes at Las Chispas: up to and including holes LC-17-73 and LCU-18-20, and
- Drillholes at Babicanora: up to and including holes BA-18-69, UB-17-13.

1.3 Reporting of Grades by Silver Equivalent

Throughout the report, reference is made to silver equivalent (AgEq) grade to aid in assessment of the polymetallic nature of the mineralization. For the purpose of this report, the calculation uses trailing three year metal prices of US$16.60 per ounce silver and US$1,224 per ounce gold. Metallurgical recovery is assumed equal for the metals. These parameters result in a silver to gold ratio of 73.7:1, which has been approximated to 75:1 for use in this assessment.

2.0 RELIANCE ON OTHER EXPERTS

With respect to information regarding mineral tenure and ownership of surface rights described in Section 3.0, Tetra Tech has relied on information in a title opinion dated February 20, 2018, from SilverCrest's Mexican legal counsel, Urias Romero y Associados, S.C., including maps and copies of Property transactions and/or agreements. Tetra Tech has not sought legal verification of the information, but believes the information to be true.

3.0 PROPERTY DESCRIPTION AND LOCATION

The Property is in the State of Sonora, Mexico, at approximate lat/long of 30.233902°N, and 110.163396°W (Universal transverse Mercator [UTM] WGS84: 580,500E, 3,344,500N) within the Arizpe Mining District. The city of Hermosillo is approximately 220 km, or a three-hour drive, to the southwest, Tucson, Arizona, is approximately 350 km via Cananea, or a five-hour drive, to the northwest, and the community and mine in Cananea is located approximately 150 km, or a two-and-a-half-hour drive, to the north along Highway 89. Figure 3-1 provides a location map for the Property and Figure 3-1 shows the general topography of the area surrounding Las Chispas.

Other nearby communities include Banamichi which is located 25 linear km to the southwest, and Arizpe which is located approximately 12 linear km to the northeast. The area is covered by the 1:50,000 topographic mapsheet “Banamichi” H12-B83.

Few remnants exist on the Property which expose the active mining history and community development which once existed in this district. There are numerous historic mine portals and shafts which are partially overgrown with vegetation.

Photo 3-1: Las Chispas Property Looking East

3.1 Mineral Tenure

Las Chispas is comprised of 28 mineral concessions, totaling 1,400.96 hectares, shown in Figure 3-2. La Compañia Miñera La Llamarada S.A. de C.V. (Llamarada), which is a Mexican wholly-owned subsidiary of SilverCrest has acquired title to, or entered into option agreements to purchase the concessions listed in Table 3-1.

Figure 3-1: Location of the Las Chispas Property

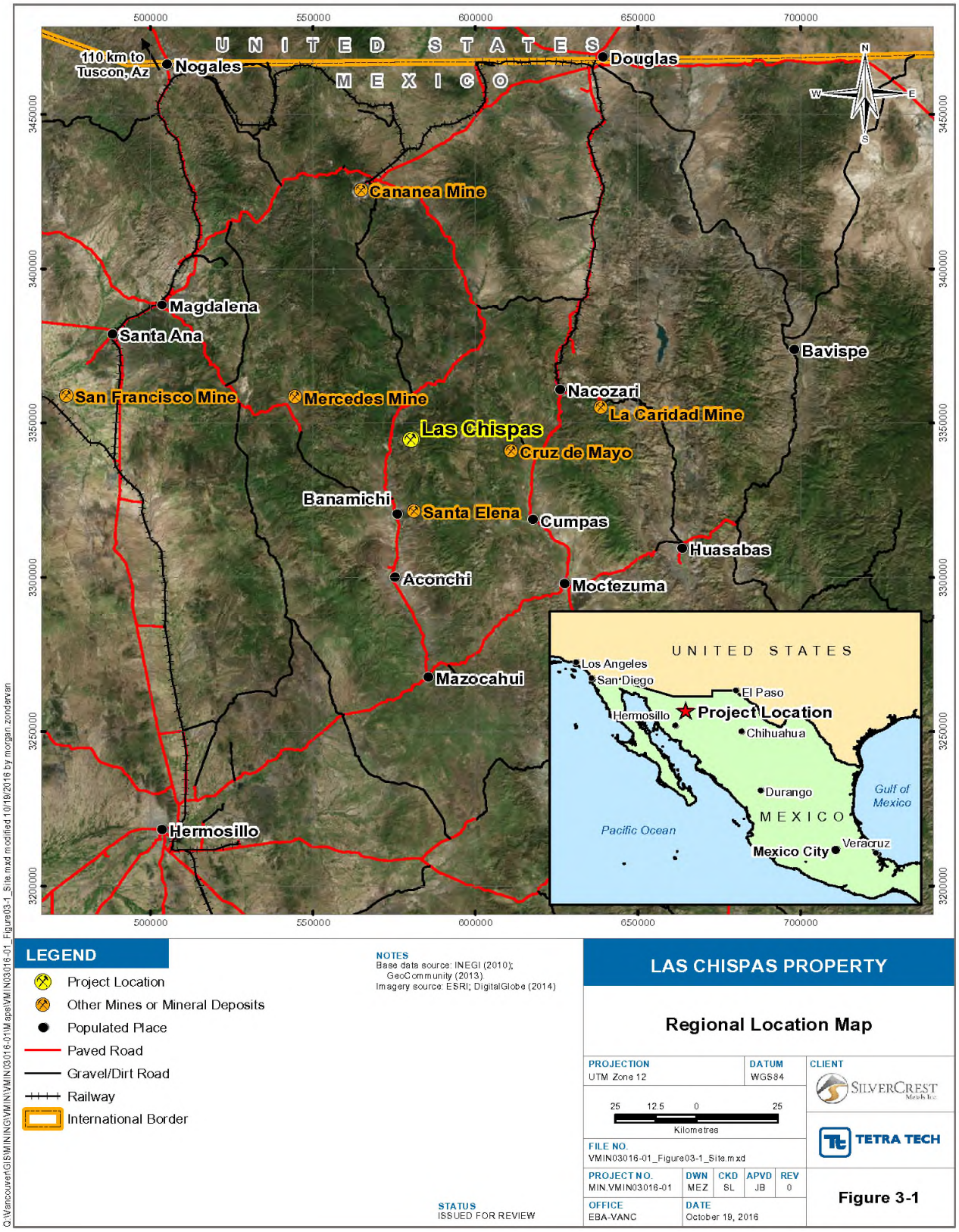


Figure 3-2: Mineral Concession Map for the Las Chispas Property

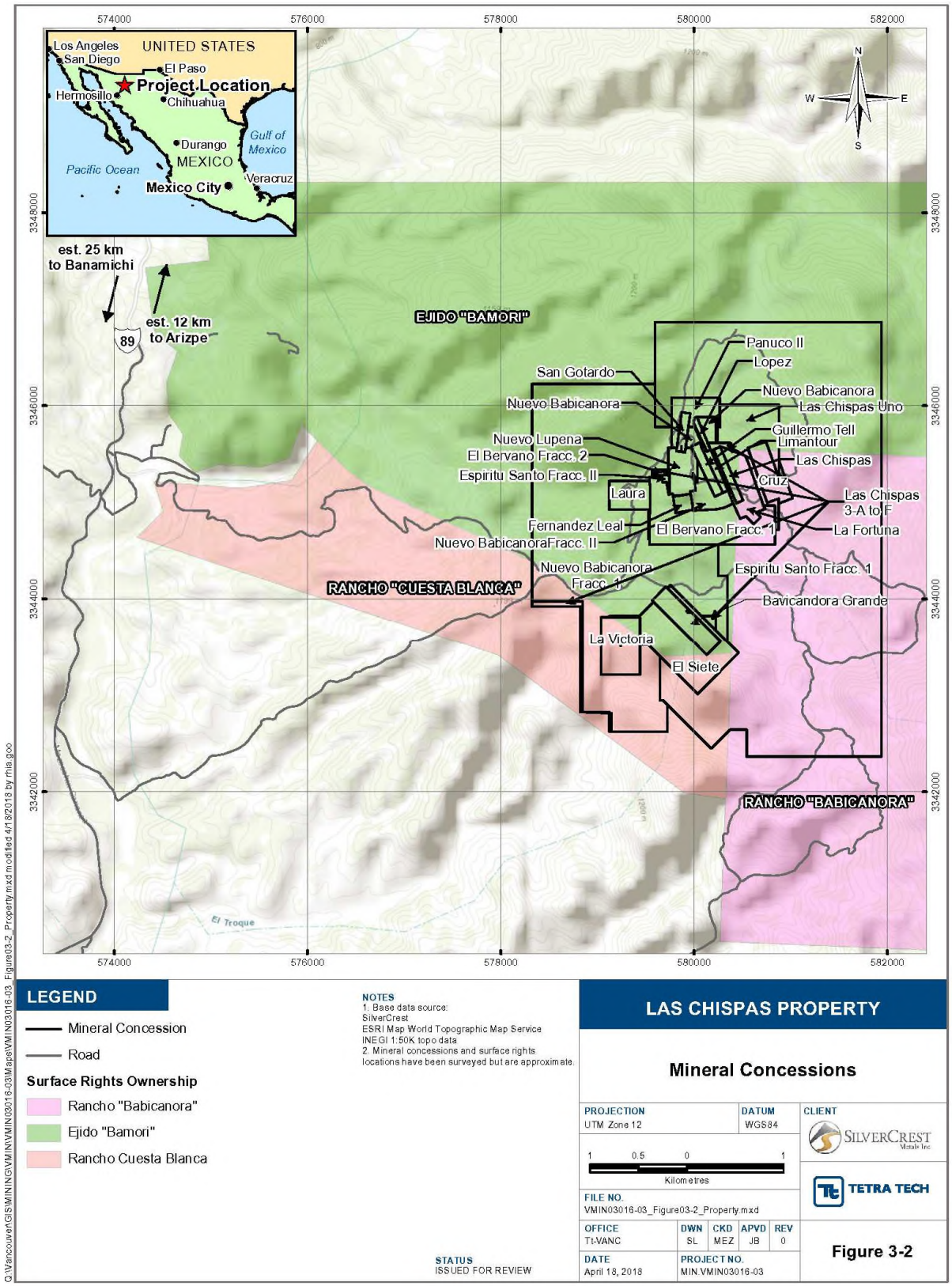


Table 3-1: Mineral Concessions held by SilverCrest for the Las Chispas Property

Concession Name	Title Number	Registration Date	End Date	Surface Area (ha)	Concession Holder
EL BERVANO FRACCION 1	212027	8/25/2000	8/24/2050	53.4183	(3) Local Mexican company
EL BERVANO FRACCION 2	212028	8/25/2000	8/24/2050	0.9966	(3) Local Mexican company
LAS CHISPAS UNO	188661	11/29/1990	11/28/2040	33.711	(3) Local Mexican company
EL SIETE	184913	12/6/1989	12/5/2039	43.239	(3) Local Mexican company
BABICANORA GRANDE	159377	10/29/1973	10/28/2023	16.00	(3) Local Mexican company
FERNANDEZ LEAL	190472	4/29/1991	4/28/2041	3.1292	(3) Local Mexican company
GUILLERMO TELL	191051	4/29/1991	4/28/2041	5.6521	(3) Local Mexican company
LIMANTOUR	191060	4/29/1991	4/28/2041	4.5537	(3) Local Mexican company
SAN GOTARDO	210776	11/26/1999	11/25/2049	3.6171	(3) Local Mexican company
LAS CHISPAS	156924	5/12/1972	5/11/2022	4.47	(3) Local Mexican company
LA FORTUNA	*	Pending	Pending	15.28	5) Local Mexican company
ESPIRITU SANTO FRACC. 1	217589	8/6/2002	8/5/2052	733.3232	(3) Local Mexican company
ESPIRITU SANTO FRACC. II	217590	8/6/2002	8/5/2052	0.877	(3) Local Mexican company
LA CRUZ	223784	2/15/2005	2/14/2055	14.436	(3) Local Mexican company
LOPEZ	190855	4/29/1991	4/28/2041	1.7173	(3) Local Mexican company
NUEVO BABICANORA FRACC. I	235366	11/18/2009	11/17/2059	392.5760	(2) Cirett-Cruz
NUEVO BABICANORA FRACC. II	235367	11/18/2009	11/17/2059	9.8115	(2) Cirett-Cruz
NUEVO BABICANORA FRACC. III	235368	11/18/2009	11/17/2059	2.2777	(2) Cirett-Cruz
NUEVO BABICANORA FRACC. IV	235369	11/18/2009	11/17/2059	3.6764	(2) Cirett-Cruz
NUEVO LUPENA	212971	2/20/2001	2/19/2051	13.0830	Llamarada
PANUCO II	193297	Cancelled (legal recourse pending)	Cancelled (legal recourse pending)	12.93	Llamarada
LA VICTORIA	216994	6/5/2002	6/4/2052	24.0000	(4) Morales-Fregoso
Las Chispas 3-A	245423	01/24/2017	01/23/2067	1.0809	Llamarada
Las Chispas 3-B	245424	01/24/2017	01/23/2067	0.3879	Llamarada
Las Chispas 3-C	245425	01/24/2017	01/23/2067	0.3413	Llamarada
Las Chispas 3-D	245426	01/24/2017	01/23/2067	0.3359	Llamarada
Las Chispas 3-E	245427	01/24/2017	01/23/2067	0.4241	Llamarada
Las Chispas 3-F	245428	01/24/2017	01/23/2067	5.6112	Llamarada
TOTAL (28)				**1400.96**	

*Non-titled applications No.082/39410 and 082/38731

Taxes are based on the surface area of each concession and are due in January and July of each year at a total annual cost of approximately US$20,000. All tax payments have been paid by Llamarada to date.

3.1.1 Mineral Concession Payment Terms

Payment terms under each option agreement is included below. All dollar figures are in USD, unless stated otherwise.

Concession Holder 1: Adelaido Gutierrez Arce (34%), Luis Francisco Perez Agosttini (33%) y Graciela Ramírez Santos (33%)

Llamarada has agreed for the following payment terms with Gutierrez-Perez-Ramirez: four payments totaling $150,000; first payment of $10,000 was due on December 11, 2015, (paid), second payment of $10,000 due on December 11, 2016 (paid), third payment of $30,000 due on December 11, 2017 (paid), and final payment of $100,000 due on December 11, 2018 (paid).

In February 2018, Llamarada exercised its option for the Nuevo Lupena concession by paying the final balance as specified in the option agreement. Upon payment and execution of an Assignment of Mining Concession Agreement dated February 10, 2018, title of this mining concession was transferred to Llamarada.

Pánuco II was cancelled in 1999; public notice of open ground has not been published as a legal recourse for reinstatement of concessions was filed by concession owner and it is still ongoing as of this date. At the time of cancellation, the registered owner was Gutierrez. The Nuevo Lupena agreement has an area of influence that covers the Pánuco II concession; therefore, the terms of this agreement apply to Pánuco II.

Concession Holder 2: Jorge Ernesto Cirett Galán (80%) y María Lourdes Cruz Ochoa (20%)

Llamarada has agreed for the following payment terms with Cirett-Cruz: five payments totaling $575,000; first payment of $30,000 was due on May 20, 2016, (paid), second payment of $35,000 due May 20, 2017 (paid), third payment of $60,000 due May 20, 2018, fourth payment of $100,000 due May 20, 2019, and final payment of $350,000 due May 20, 2020.

Concession Holder 3: Local Mexican Company

Llamarada has agreed for the following payment terms with a Local Mexican company: four cash payments totaling $2,450,000; first payment of $50,000 was due on December 3, 2015, (paid), second payment of $75,000 due on June 3, 2016, (paid), third payment of $100,000 due June 3, 2017 (paid), the fourth payment of $200,000 due September 22, 2017, the fifth payment of $1,012,500 due June 3, 2018 and the final payment due December 3, 2018 of $1,012,500. Llamarada has also agreed to issue SilverCrest Shares equal to $250,000 on each of June 3, 2018 and December 3, 2018.

The Lopez concession is 66.7% owned by Llamarada, but under Mexican law the owner of the remaining 33.3% is required to consent to such transfer to Llamarada. Such consent has not been obtained as of this date.

Concession Holder 4: Felizardo Morales Baldenegro (70%) y Martha Silvia Fregoso (30%)

Llamarada has agreed for the following payment terms with Morales-Fregoso: three payments totaling $150,000, first payment of $30,000 was due on June 15, 2016 (paid), second of $20,000 due June 15, 2017 (paid), and third of $100,000 due June 15, 2019.

Concession Holder 5: Minerales de Tarachi S. de R.L. de C.V.

On February 21, 2018 Llamarada acquired from Minerales Tarachi, S. de R.L. de C.V. an option to purchase the rights to the La Fortuna mining concession applications no, 082/39410 and 082/38731 which cover the Pánuco II and Carmen Dos Fracción II mineral lots on payment of $500,000 Mexican Pesos (paid) and $150,000 payable on acquisition of title by Llamarada or withdrawal of application on request by Llamarada.

3.2 Land Access and Ownership Agreements

The surface rights overlying the Las Chispas mineral concessions and road access are either owned by Llamarada or held by Llamarada under a negotiated 20-year lease agreement.

Ejido Bamori

On November 18, 2015, Llamarada signed a 20-year lease agreement with the Ejido Bamori for surface access and use of facilities. Compensation for exploration activities will be paid at a rate of MXN$ 700 per hectare, up to a total of 315.5 hectares. After exploration and announcement of mine construction/production, compensation will be paid on a scaled timeframe at a rate of MXN$ 2,000 per hectare in construction and production years 1-4 and MXN$ 4,000 per hectare on the fifth year and beyond.

Cuesta Blanca Ranch

In February 2018, Llamarada purchased the Cuesta Blanca Ranch covering 671.9 hectares of surface rights.

Babicanora Ranch

In April 2017, Llamarada purchased from Maprejex Distributions Mexico, S.A. de C.V. the Babicanora Ranch of 2,500 hectares of land situated in Arizpe, Sonora.

Tetuachi Ranch

In November 2017, Llamarada signed a lease agreement for a term of 20 years with Maria Dolores Pesqueira Serrano for the lease of the Tetuachi Ranch of 32.3 ha of land situated in Arizpe, Sonora, on payment of a rental fee of US$2,000 during exploration phase and US$7,000 during exploitation phase.

3.3 Royalties

A 2% Net Smelter Return royalty is payable to the current concession holder, Gutierrez-Perez-Ramirez, of the Nuevo Lupena and Pánuco II (pending registry) concessions for material that has processed grades of equal to or greater than 40 ounces per tonne of silver and 0.5 ounce per tonne of gold, combined.

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

4.1 Climate

The climate is typical for the Sonoran Desert, with a dry season from October to May. Seasonal temperatures vary from 0ºC to 40ºC. Average rainfall is estimated at 300 mm per annum. There are two wet seasons, one in the

summer (July to September) and another in the winter (December). The summer rains are short with heavy thunderstorms whereas the winter rains are longer and lighter. Summer afternoon thunderstorms are common and can temporarily impact the local electrical service.

4.2 Physiography

The Property is located on the western edge of the north trending Sierra Madre Occidental mountain range geographically adjacent to the Sonora River Valley. The Property surface elevation ranges from 950 m above sea level (masl) to approximately 1,250 masl; the San Gotardo portal to the Las Chispas and William Tell Veins is located at 982 masl. Hillsides are often characterized with steep colluvium slopes or sub-vertical scarps resulting from fractures through local volcaniclastic bedrock units.

Drainage valleys generally flow north to south, and east to west towards the Rio Sonora. Flash flooding is common in the area.

Vegetation is scarce during the dry season, limited primarily to juvenile and mature mesquite trees and cactus plants. During the wet season, various blooming cactus, trees, and grasses are abundant in drainage areas and on hillsides.

4.3 Property Access

From Banamichi, the paved Highway 89 is followed for approximately 25 km. Access to the Property is gained via secondary gravel roads, as shown in Figure 3-2, approximately 10 km off the paved highway. Fording across the Rio Sonora river bed is required, typically the water levels in the river are low and easily passed, but can raise to temporary unpassable levels following major rain events. The remainder of the road has been upgraded by dozer/grader. Net elevation gain to the Property from the highway is approximately +250 vertical metres.

4.4 Local Resources

4.4.1 Water Supply

Current water requirements during exploration are minimal, where diamond drilling requires the greatest capacity. Some wells have been established to supply local ranches. Hydrogeological testing has not yet been conducted to determine depth to water table; historical underground workings have been noted to be dry, with some locally perched water noted in a few internal shafts and stopes.

4.4.2 Power

Low voltage power lines and generators exist on the Property to supply local ranches. This amount of power is sufficient for exploration requirements. Provision of grid power to a potential operation may be possible in the future, but would require permitting and a significant capital expenditure.

4.4.3 Infrastructure

No infrastructure from the historical mining industry remains on the Property except for roads and a few eroding rock foundations.

4.4.4 Community Services

Mining supplies and services are available from Cananea, north of Las Chispas, Hermosillo, to the southwest, and Tucson, Arizona, to the northwest.

5.0 HISTORY

Historical records indicated mining around the Las Chispas Property started as early as the 1640's. There are incomplete records and history available on mining activities which took place in the 1800's and 1900's. There is also a gap in records of mining activity for Las Chispas between the mid-1930's through to 1974. In 2008, exploration activities resumed on Las Chispas with modern techniques.

A summary of Las Chispas' history has been extracted from the limited documentation available to SilverCrest in the public domain and private libraries. Numbers and mine descriptions extracted from these documents are historical in nature and cannot be relied upon and should only be used in context for the rich mining history in the Las Chispas district.

5.1 1800's and Early 1900's

Mining interest on the Las Chispas Property is believed to have begun in 1640 when outcrop of Las Chispas Vein was discovered by a Spanish General named Pedro de Perra (Wallace, 2008), which led to the development of the Las Chispas Mine. Through to 1880, small scale mining was intermittently conducted along this trend with significant interference from local Apache resistance. The company operating the mine at this time was called the Santa Maria Mining Company (Russell, 1908).

The Las Chispas Mine was operated intermittently from the 1880's onwards by John (Giovanni) Pedrazzini, as President, whom maintained control of the development along the Las Chispas Vein and the William Tell Vein through the company Minas Pedrazzini Gold and Silver Mining Company (Minas Pedrazzini) (est. February 1907). In an article in the Mining and Scientific Press from 1897, it was noted that Giovanni Pedrazzini sold the El Carmen Mine for US$1,500,000. Antonio Pedrazzini, cousin of Giovanni, was reportedly a former accountant of the Santa Maria Mining Company, and he received the Las Chispas Mine as compensation for unpaid back wages. Antonio Pedrazzini (Photo 5-1) maintained an active role in the operation and management of the mine into the 1920's. From 1904, Edward Dufourcq, a well-known mining engineer, was appointed as general manager of the mine. The Minas Pedrazzini was the first operator to drive an adit into the Las Chispas Vein known as the San Gotardo Tunnel or 600 level an estimated length of 1,250 m. Referenced historical levels, i.e., 600 level, are marked as the depth in feet from the Las Chispas shaft collar.

Photo 5-1: Giovanni Pedrazzini and Family at Las Chispas, Circa Early 1880's

Pedrazzini's company was one of three to be working in the area at this time. At least two other companies focused efforts on the El Carmen, located approximately 5 km to the southeast of the Las Chispas Mine and the Babicanora area approximately 2 km south of the Las Chispas Mine. Little is known about the historical production and operations of these companies; however, it is understood that small mills were installed at Babicanora and El Carmen to process ores of Babicanora, El Carmen and Granaditas Veins in a similar manner to the San Gotardo (Las Chispas) mill (Russell, 1907). The district had a mix of 6 operating flotation & cyanidation mills from the late 1880 to 1984.

The San Gotardo Mill, operated by Minas Pedrazzini, was located at the northern portal to the 600 level of the Las Chispas and William Tell Veins, and consisted of rock breakers, five gravity stamps, two Wilfley tables, and three amalgamation pans, with reported recovery of 70% - 75% (Russell, 1907). The mill developed up to 20 operating stamps and four pans in 1910, when total recovery was noted then to be between 71% and 84%. An estimate of about 26,000 tonnes were treated in the mill, and over 12,000 tonnes of tailings were estimated to have been deposited as tails into ponds below the mill. In 1910, a 24-inch gauge tramway was built from the San Gotardo portal to the new mill, anticipating daily production to increase to 60 tonnes per day. Wallace (2008) reports that in the 1970's the mill was salvaged and hauled away with old mine buildings and much of the tailings for reprocessing.

In 1910, the decision was made to install a cyanide plant at the Las Chispas Mine in an effort to reduce overall processing costs, enable reprocessing of the earlier deposited tailings and to attempt higher metal recoveries, with a throughput of 30 - 40 tonnes per day. Construction of the plant occurred during and was delayed by the occurrence of the Mexican Revolution (Dufourcq, 1912). Mulchay (1935) indicates that this plant was used for less than six months due to interference from sulphides in the ore with cyanidation. A small flotation plant was installed prior to 1926 (Mulchay, 1935).

Water for the operations was supplied via a 5 km long pipe line from the Sonora River, and power reportedly from a small power line running from a diesel generator at Nacozari. In 1918, the pumping station along the Rio Sonora was destroyed by a flood; the mine resorted to pumping from within the mine to supply the mill with water (Wallace, 2008). Dufourcq (1910) indicates that water was originally intersected below the 900 level of the mine.

In 1917, it is reported that the mine was confiscated by local government whom operated and extracted “rich ore” before eventually returning the mine back to Pedrazzini (Montijo Jr, 1920).

Two versions exist of how the mine was taken over and eventually closed. Mulchay (1935) suggests that in 1935, Minas Pedrazzini was taken over under option by Douglas-Williams associated with the Phelps-Dodge Corporation. The mine was managed by Henry Bollweg at this time. Whereas Wallace (2008) reports the mine was acquired by a French corporate subsidiary Corporación Miñera de Mexico, S.A. in 1921. This company was reported to have remodelled the power plant and continued mining until its eventual closure in 1930.

A French company under the name Camou Brothers are reported to have re-developed the Babicanora Mine around 1865 (internal SilverCrest report, September 2015). The Babicanora area was most recently mined by Chinese immigrants whom originally settled in Baja, relocated to the State of Sinaloa in the late 1800’s for agriculture and were eventually pushed inland by competition. Here they found occupation in the mines. The portal construction and dimensions of underground development in Babicanora is notably different than that of the Las Chispas and William Tell workings. The main access is a 4 m by 4 m drift approximately 230 m in length to intersect the Babicanora Vein.

Photo 5-2: Antonio Pedrazzini and Family at Las Chispas, Circa Early 1900’s

From 1900 to 1926, production from the Las Chispas and William Tell Veins is reported to have been interrupted several times due to numerous interventions including theft of high-grade ore, the Mexican revolution from 1910 - 1920, the Mexican National Catholic Church revolution in 1925, mill flooding/fire, and the government took over the mine with no economic plan (Montijo, 1920).

The limited information that is available on metal production suggests approximately 100 million ounces of silver and 200 thousand ounces of gold were recovered from mines within the loosely defined Las Chispas District, including approximately 20 to 40 million ounces of silver estimated to have been recovered from the Las Chispas and William Tell Veins. Wallace (2008) estimates that in the period between 1907 and 1911, annual production at the Las Chispas Mine achieved approximately 3,000 to 12,000 *(estimated projected budget for 1911) tonnes producing 1.5 million ounces of silver and 10,000 ounces of gold per year with an estimated average grade of 1.1 ounces per tonne gold and 146.8 ounces per tonne silver (Table 5-1). Reports indicate that gold and silver was produced from both quartz/amethyst veinlets less than 5 cm thick and local high-grade shoots up to 4 m thick.

Table 5-1: Las Chispas Mine Production, 1908 – 1911 (Dufourcq, 1910)

	1908	1909	1910	1911*	Total
Tons	3,286	3,064	3,540	12,000	21,890
Gold ounces per ton	1.5	1.4	1.0	1.0	1.1
Silver ounces per ton	199.9	187.2	136.9	125.0	146.8
Gold ounces	4,876	4,189	3,615	12,000	24,680
Silver ounces	656,882	573,448	484,746	1,500,000	3,215,076

*(Estimated projected budget for 1911)

Some records suggest that small scale mining at Espiritu Santo and operation of a small mill at Babicanora occurred in 1935 (Mulchay, 1935). Espiritu Santo workings consist of a small inclined shaft approximately 80 cm wide which declines below a small drainage to two short ore drifts where grades up to 500 ounces per tonne silver where noted. Approximately 13.2 tonnes of ore reported to have been shipped from this small mine in 1934 and ranged in grade from 0.17 to 1.36 ounces per tonnne gold and 79.2 to 490 ounces per tonnne silver.

Another small mining operation at La Victoria was estimated around 1940. The workings consist of three short ore drives on separate levels approximately 30 m in length with gold grades up to 6 ounces per tonne over one metre (Mulchay, 1941).

Photo 5-3 provides an overview of the Las Chispas valley and highlights the locations of where the community of Las Chispas once stood in addition to the original San Gotardo mill and the later developed rail-connected mill near the community. Historical Photos 5-3 through 5-6 are from various locations around the historical operation. Photo 5-8 is a rendering of the current view to the Upper Babicanora portal.

Photo 5-3: View Looking to the North Down to Main Valley where the Las Chispas Community and Processing Plants were Located, Photo taken September 2016

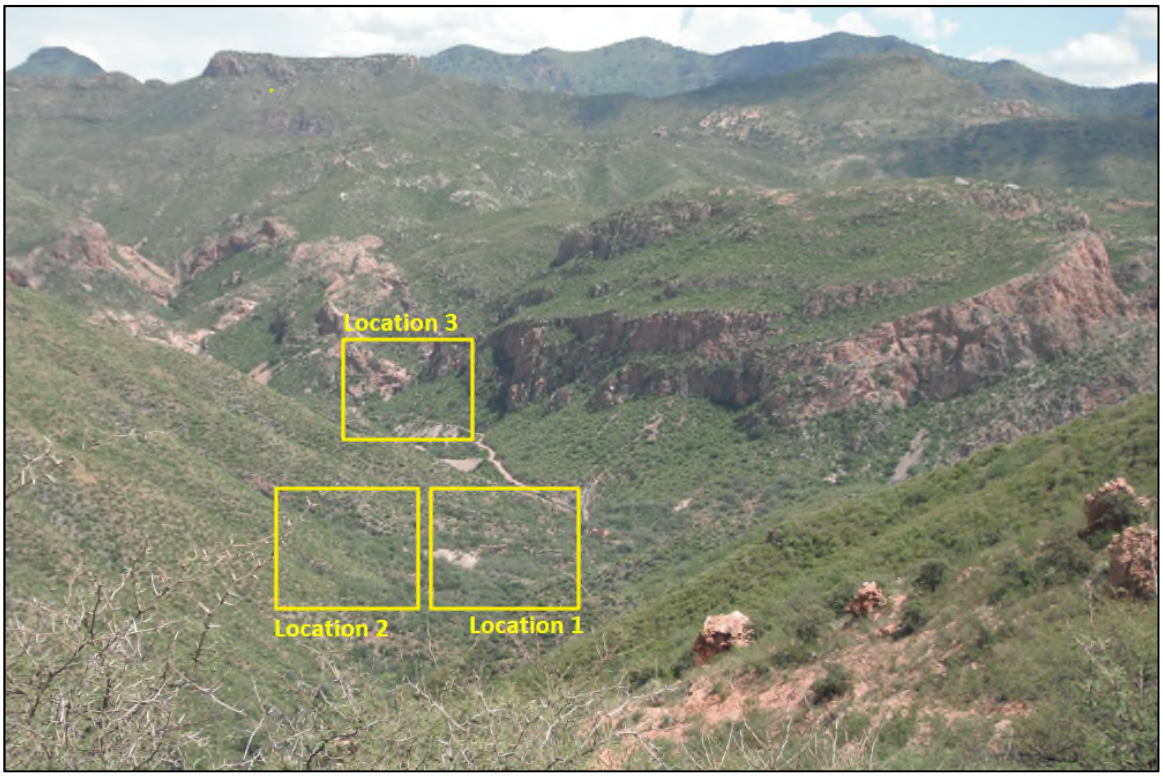


Photo 5-4: Historical Photo of Former Las Chispas Community, shown as Location 1 in Photo 5-2 (Circa Mid-Late 1920's)

Photo 5-5: Historic Photo of a Processing Facility at Northwest of Community, Identified as Location 2 in Photo 5-2, circa (mid-late 1920's)

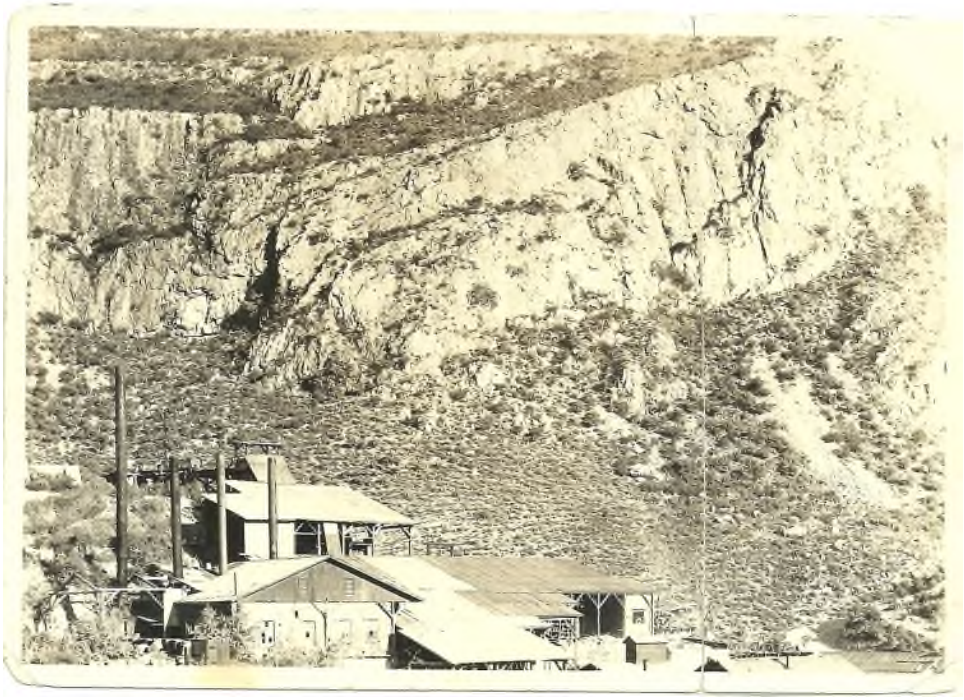


Photo 5-6: Historic Photo of San Gotardo Mill at Location Identified as Location 3 in Photo 5-2, near San Gotardo Portal, circa (early 1910's)

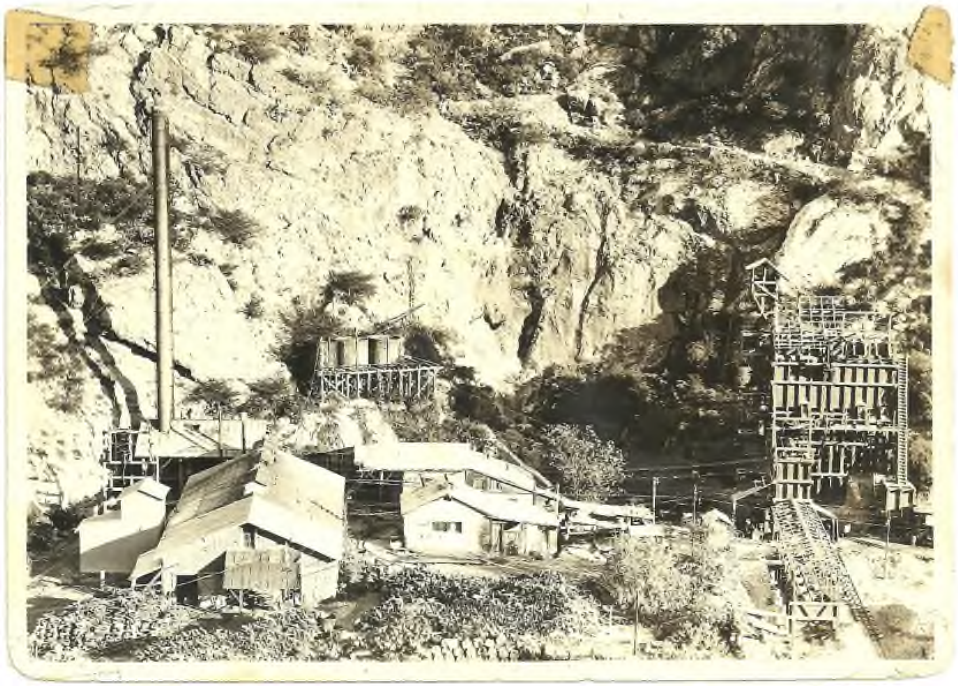


Photo 5-7: Photo of Historical Processing Facility at Babicanora, Year est. 1921

Photo 5-8: Current View of Babicanora Portal and Site of Historical Processing Facility, November 2017

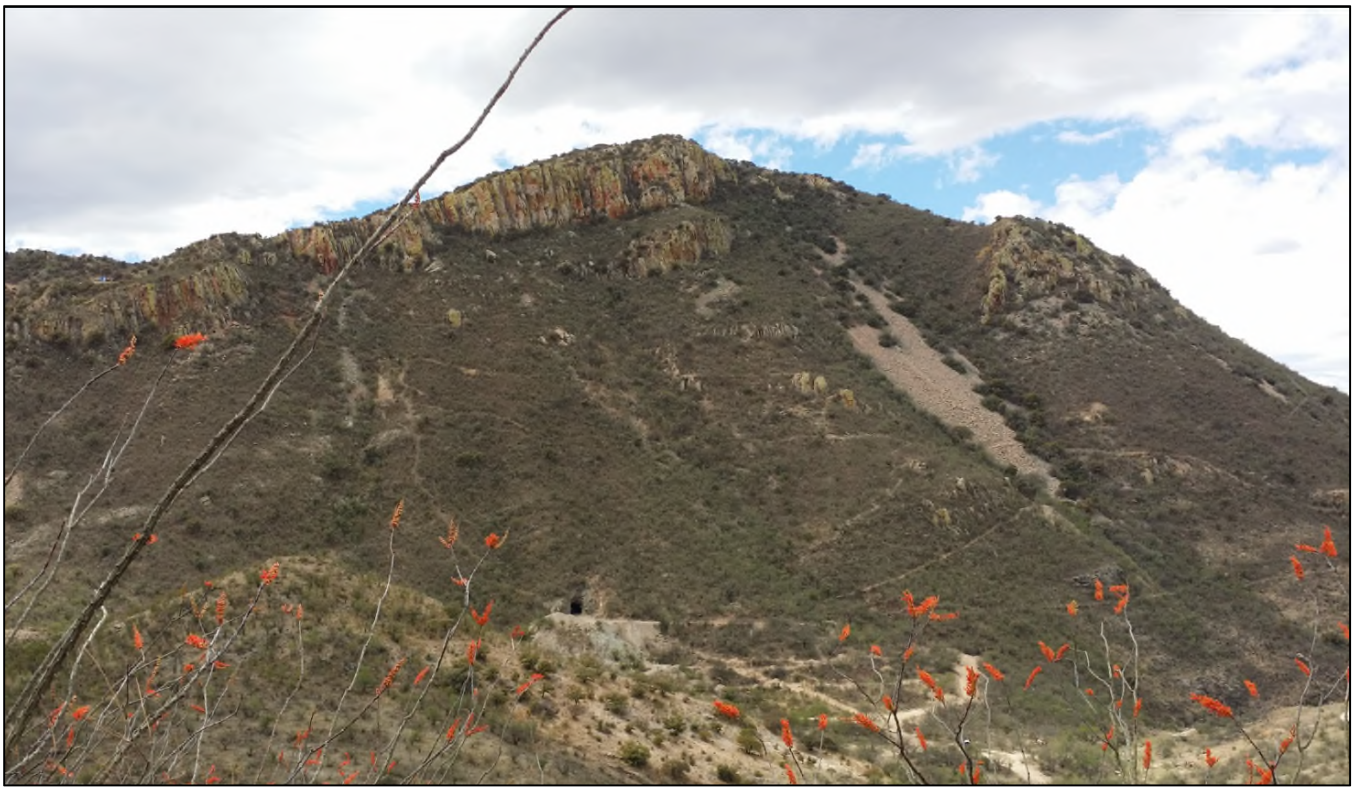
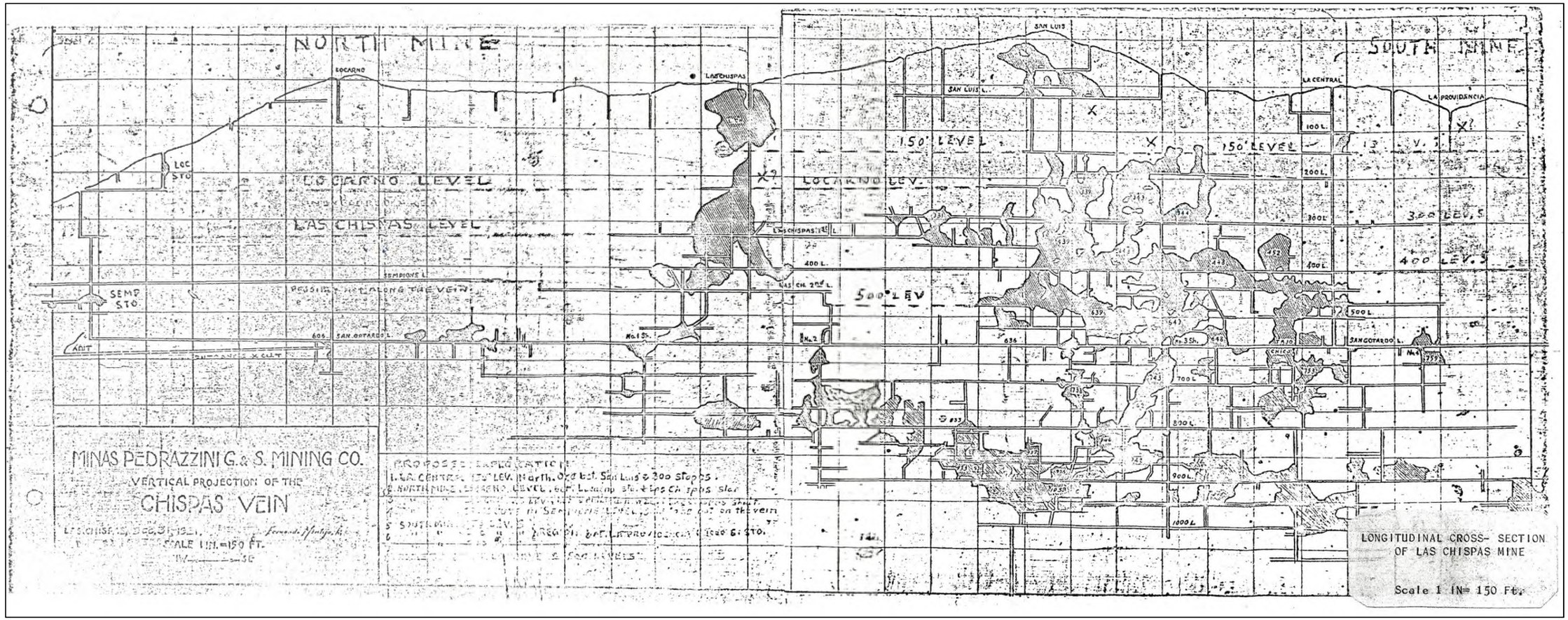


Figure 5-1: Long Section of the Historical Las Chispas Underground Development (circa 1921) and SilverCrest Resource Target Area, Looking Northeast



5.2 Mid-Late 1900's to Early 2000's

No written documented information is available for the Property during this period. Verbal discussions with Luis Perez, a local operator, indicate from 1974 to 1984 a small cyanide leach mill was constructed near the highway entrance to the Property. During this period, approximately 75,000 tonnes of historic waste was processing with dore poured on site. No estimation of production was available.

It is assumed that sometime between the mid-1930's and 2008, the historic and 1974 processing plants were dismantled and transported from the area and that both concession and surface Property ownership likely changed hands at least once from the mining companies to their current owners. It is seen in Table 3-1 that the current mineral concessions (excluding the Nuevo Babicanora concessions) were registered, or reregistered under new mining regulation, from 1972 to as recent as 2002.

5.3 Minefinders (2008 – 2011)

In 2008, Minefinders Corporation Ltd. (Minefinders) operating under their Mexican affiliate, Miñera Minefinders, acquired the Cirett concessions under option (Nuevo Babicanora I to IV, Table 3-1, Figure 3-2) but were unable to negotiate with the main district concession owners. Subsequently, Minefinders completed initial exploration work on the district which they referred to as collectively the Babicanora Project. They drilled seven reverse circulation holes off the main mineralized trends with negative results and then dropped the Property option in 2012.

Minefinders conducted a systematic exploration program across these concessions between the years 2008 and 2011. Regional activities consisted of geologic mapping and a geochemical sampling program totaling 143 stream sediment and bulk leach extractable gold (BLEG) samples, 213 underground rock chip samples, and 1,352 surface rock chip. The work was successful in identifying three gold targets along the 3 km long structural zone. The most prospective of these targets was interpreted to be an area between the Las Chispas Vein and the Babicanora Vein. Minefinders focused on the furthest western extension of the Babicanora Vein called El Muerto which is the only part of the trend that was acquired by concession and accessible for exploration work.

Targeted exploration conducted solely within the Babicanora Project area included the collection of 24 stream sediment and BLEG samples, 184 select surface rock chip samples, 474 grid rock chip samples, and drilling of seven reverse circulation drill holes for a total of 1,842.5 m. The drill hole locations are provided in Figure 9-1.

5.3.1 Minefinders Surface Sampling

Turner (2011) describes the work by Minefinders on the Babicanora Project in detail. Outcrop in the area is variable and the sampling was adjusted based on terrain limitations. Minefinders determined that high-grade gold and silver (1-2 gpt Au and 30-60 gpt Ag) occurrences noted in mine workings and outcrops occurred mainly as discontinuous and narrow quartz stockwork zones. Notable exceptions were a 5 m zone of 1.53 gpt Au and narrow veins up to 13 gpt Au with 439 gpt Ag from El Muerto north of the Babicanora Mine workings.

Twenty-four stream sediment samples were collected from drainages in Las Chispas area as part of a regional sampling program. The large samples were analyzed as both 2 kg BLEG samples and by more conventional analysis of a -80 mesh sieved product. The material utilized for the -80 mesh analysis was obtained after splitting of the initial 2 kg used for BLEG analysis. Anomalous zones defined by the regional stream sediment program were later confirmed by a follow-up rock chip grid sampling program.

All surface rock chip and stream sediment samples were collected by the staff of Miñera Minefinders and submitted to ALS-Chemex in Hermosillo. Coverage and results of the sampling are summarized in Figures 5-1 and 5-2.

Figure 5-2: Minefinders Rock Chip Sample Locations and Ag Results (after Turner, 2011).

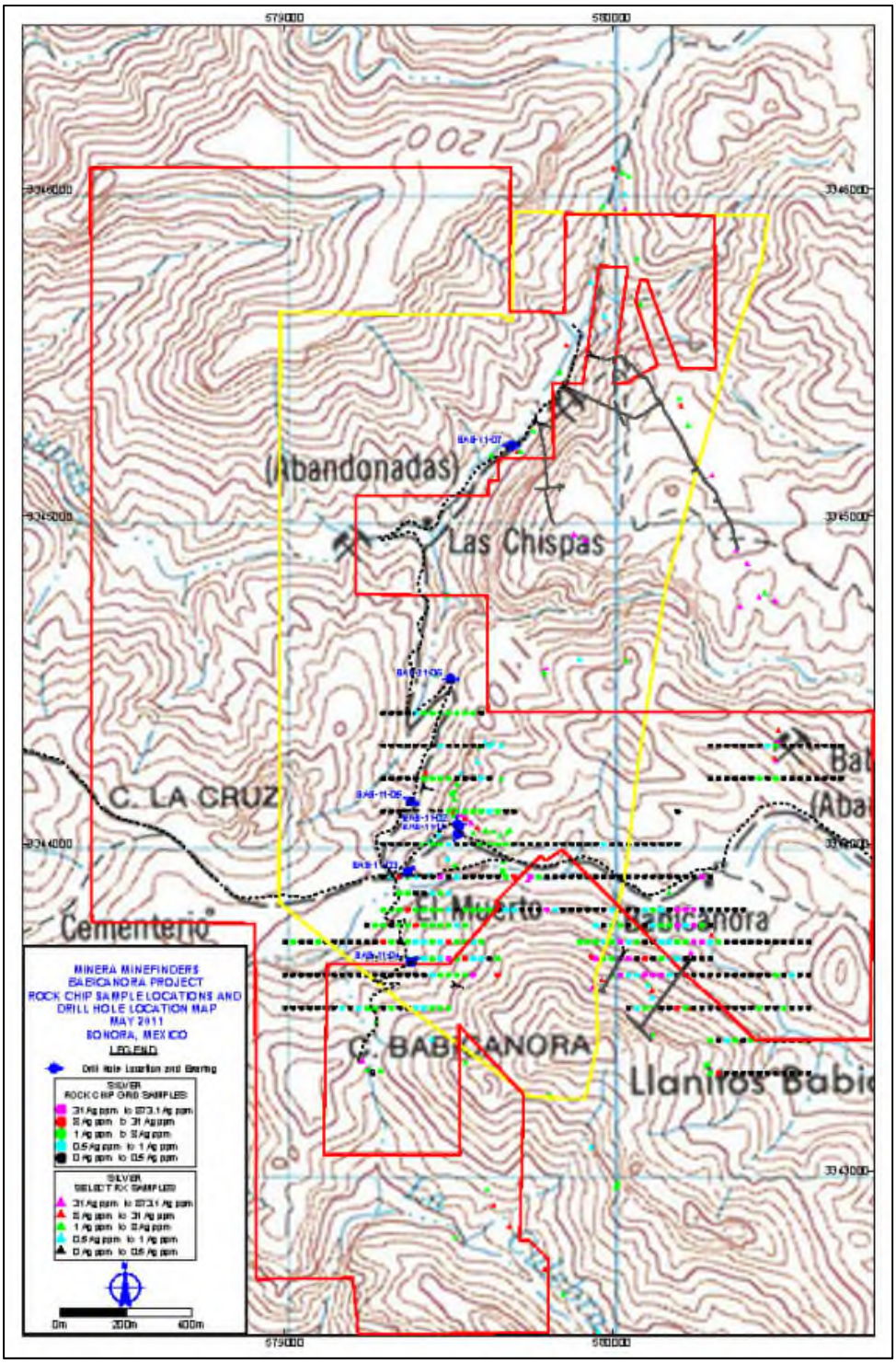
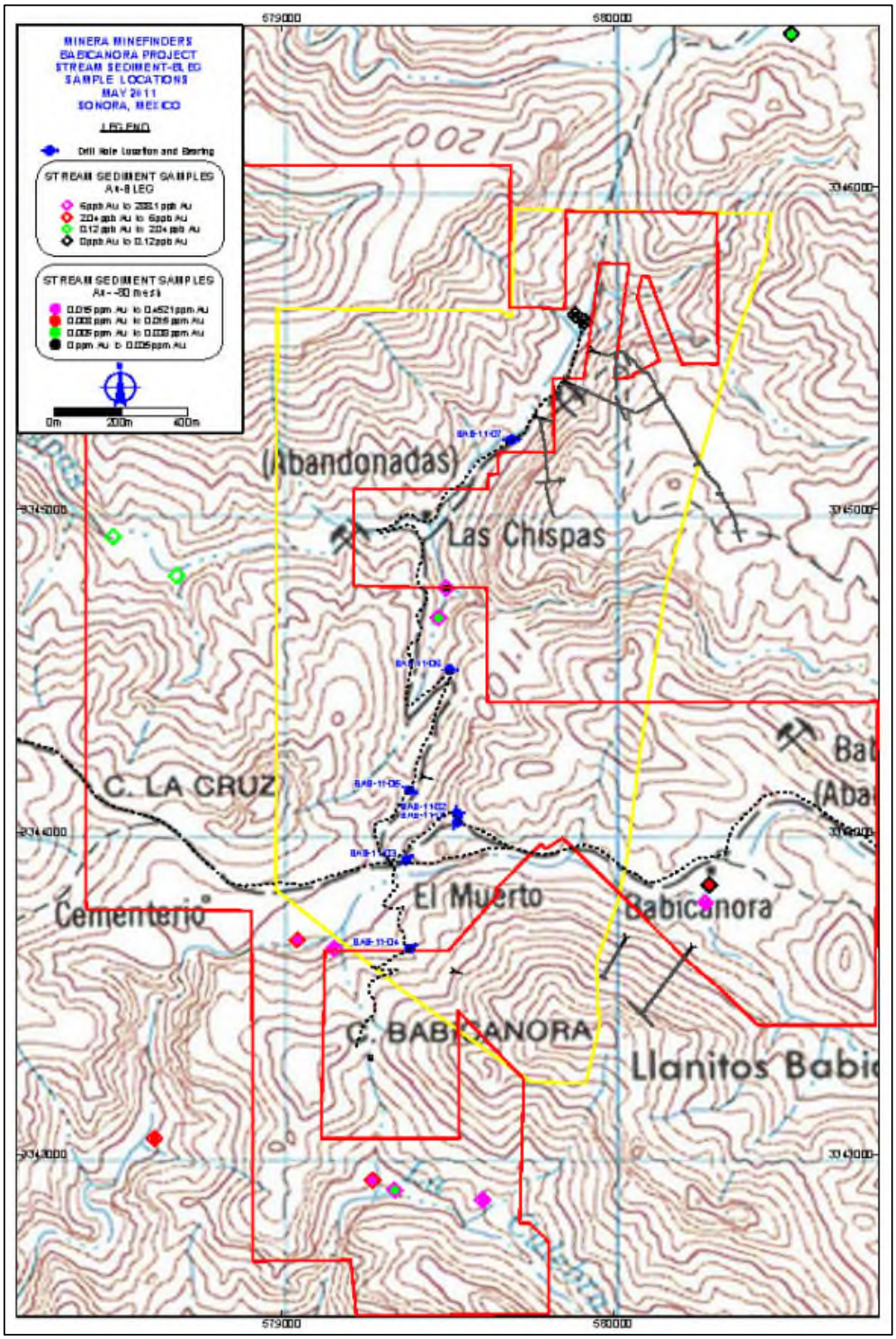


Figure 5-3: Minefinders Stream Sediment Sample Ag Results - BLEG and 80 Mesh (after Turner, 2011)



5.3.2 Minefinders Drilling, 2011

Minefinders carried out a seven hole RC drill program in 2011. The purpose of the program was to test a porous volcanic-agglomerate (i.e., lithic tuff) unit located along a 1.5 km structural zone located adjacent to the Babicanora and Las Chispas historical workings.

Minefinders contracted Drift Drilling to drill seven holes utilizing a MPD-1000 reversed circulation drill rig. The drilling was conducted from existing roads with drill pads enlarged to allow for safe and effective operations. Environmental permitting with SEMARNAT was prepared by Bufete Miñera y Servicios de Ingenieria S.A. de C.V. and completed on March 23, 2011. All assay work was conducted by Inspectorate Laboratories of Hermosillo & Reno.

The program was conducted during the period of April 7, 2011, through May 3, 2011, with a total of 1,842.5 m drilled. The drill holes were oriented to intercept a range of host rocks in areas of anomalous precious metals or adjacent to mine workings. The hope was that bulk tonnage targets might exist within more porous or chemically reactive rocks. A summary of the drilling is provided in Table 5-2 and collar locations shown in Figure 9-1.

Table 5-2: Summary of Minefinders 2011 RC Drill Program

Hole ID	Easting	Northing	Elev.	Dip	Azimuth	Depth (m)	Depth (ft.)
BAB-11-01	579527	3344033	1,135	-60	30	304.8	1,000
BAB-11-02	579526	3344060	1,130	-90	0	324.6	1,065
BAB-11-03	579372	3343914	1,091	-60	50	242.3	795
BAB-11-04	579382	3343638	1,132	-55	60	350.5	1,150
BAB-11-05	579386	3344130	1,053	-45	115	198.12	650
BAB-11-06	579507	3344503	1,009	-70	90	182.9	600
BAB-11-07	579693	3345216	977	-70	90	239.3	785
Total						**1,842.52**	**6,045**

The drill results were disappointing in that none of the holes are interpreted to have intersected the mineralized structure beneath the historic workings. Only narrow zones of gold mineralization at scattered depths were encountered and only one hole, BAB-11-02, intercepted significant mineralization in four narrow intervals of greater than 900 gpt Au. The most significant of these intercepts was 4.6 m of 1.1 gpt Au and 2 gpt Ag including a 1.5 m interval of 2.9 gpt Au at a depth of 292.6 m. This mineralized interval occurs within basal volcaniclastic sandstones and rhyodacitic tuffs cut by propyllitic altered dacite dikes.

Results of the drilling indicate that several phases of quartz veining accompanied by broad zones of argillic and propylitic alteration are present in the 1.5 km long target zone. Mineralization was determined to occur as low sulphidation Au-Ag epithermal quartz and calcite veins and stockwork within an Oligocene volcanic sequence consisting of volcaniclastic sediments interbedded with rhyolitic tuff and andesitic dikes/flow cut by dacitic dikes.

In 2012, Minefinders dropped their interest in the Nuevo Babicanora I to IV mineral concessions which returned to Cirett as having controlling interest.

5.4 SilverCrest, 2013 to Start of Phase I Drilling in 2016

Following Minefinders' retreat, SilverCrest Mines Inc. (now a subsidiary of First Majestic Silver Corp.) through its subsidiary Nusantara de Mexico S.A. de C.V. initiated their interest in Las Chispas in 2013. Legal issues in the main Las Chispas District were settled and SilverCrest could negotiate option agreements with all the concession holders

through their Mexican subsidiary Nusantara de Mexico S.A. de C.V. By the end of September 2015, SilverCrest Mines Inc. executed options agreements to acquire rights to 17 concessions.

On October 1, 2015, pursuant to an arrangement agreement, SilverCrest Mines Inc. was acquired by First Majestic Silver Corp. and these mineral concessions were transferred to SilverCrest's subsidiary La Compañia Miñera La Llamarada S.A. de C.V. pursuant to an arrangement agreement between SilverCrest, SilverCrest Mines Inc., and First Majestic Silver Corp. SilverCrest, a company spun out from the arrangement, was listed on the TSX Venture Exchange on October 9, 2015, and subsequently obtained rights to 11 additional mineral concessions for a total of 28 concessions.

6.0 GEOLOGICAL SETTING AND MINERALIZATION

6.1 Regional Geology

The Las Chispas Property is located in northwestern Mexico where much of the exposed geology can be attributed to the subduction and related magmatic arc volcanism of the Farallon Plate beneath the North American Plate. The east-directed subduction of the Farallon Plate began in early Jurassic (~ 200 Ma) with the tectonic rifting of the supercontinent Pangea (Rogers, 2004). The resulting NW-SE trending Sierra Madre Occidental extends over 1200 km from the USA-Mexican border to Guadalajara in the southeast.

Delgado-Granados et al. (2000) propose that subduction of the Farallon Plate occurred at a relatively shallow angle, resulting in continental uplift across northern Mexico with accretionary terranes developing along the western fringes of the pre-existing Jurassic continental and marine sediments, and crystalline Cambrian basement rocks.

Volcanism is related to fractional crystallisation of mantle sourced basalts during subduction (Johnson, 1991; Wark, 1991). The widespread volcanic deposits and intrusive stock development from emplacement of the regional batholith typify the upper Cretaceous record in the area, which was followed by dramatic accumulation of volcanic flows, pyroclastics, and volcano-sedimentary rocks during the Upper Cretaceous through to the Eocene.

Continental arc volcanism culminated with the Laramide orogeny in the early to late Eocene (Alaniz-Alvarez et al., 2007). The waning of compression coincides with E-W directed extension between late Eocene to the early Oligocene (Wark et al., 1990; Aguirre-Diaz and McDowell, 1991, 1993) along the eastern Sierra Madre Occidental flank and is considered to be the first formation stage of the Basin and Range province.

By early to mid-Miocene, extension migrated west into Northern Sonora and along the western flank of the Sierra Madre Occidental resulting in NNW-SSE trending, west dipping, and normal faults. This extensional regime caused major deformation across the Sierra Madre Occidental resulting in localized exhumation of pre-Cambrian basement rocks within horst structures, especially in the Northern Sierra Madre Occidental (Ferrari et. al., 2007). Bimodal volcanic flows capped the volcano-sedimentary deposit of the late-Eocene. Migration of later hydrothermal fluids along the pre-existing structures are related to the cooling of the orogenic system.

The Pliocene-Pleistocene is characterized by a general subsidence of volcanic activity, with deposition of some basalt flows, and accumulation of conglomerate, locally known as the Baucarit Formation.

1. Ferrari et al. (2007) summarizes five main igneous deposits of the Sierra Madre Occidental:

2. Plutonic/volcanic rocks: Late Cretaceous –Paleocene.

3. Andesite and lesser Dacite-Rhyolite: Eocene (Lower Volcanic Complex).

4. Felsic dominant and silicic ignimbrites: Early Oligocene and Miocene (Upper Volcanic Complex).

5. Basaltic-andesitic flows: late stage of and after ignimbrite pulses.

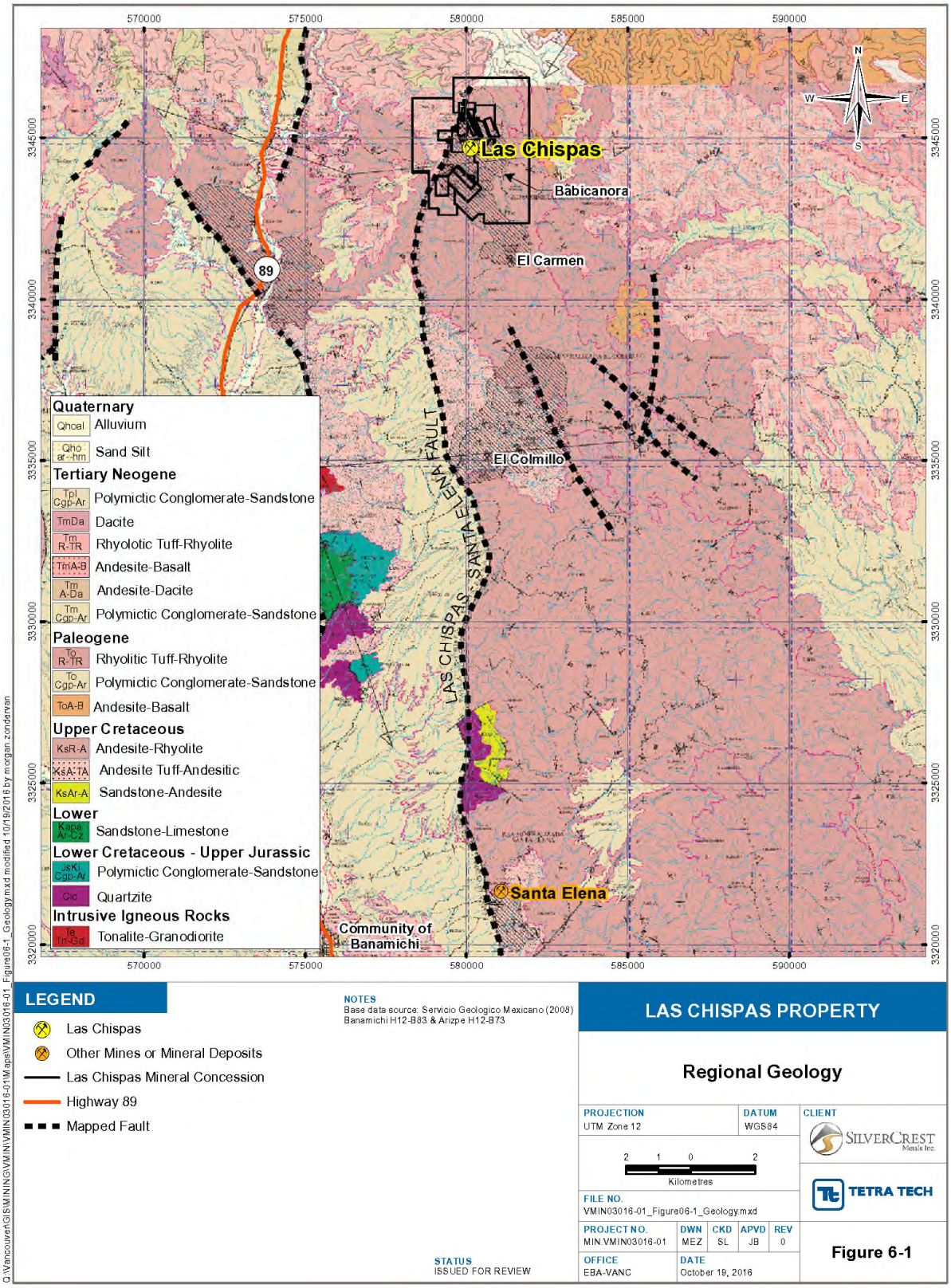
6. Alkaline basalts and ignimbrites: Late Miocene-Pleistocene (Post-subduction volcanism).

Mineralizing fluids are likely sourced from mid-Cenozoic intrusions. The structural separation along the faults formed conduits for mineral bearing solutions. The heat source for the mineralizing fluids was likely from the plutonic rocks that commonly outcrop in Sonora.

Many significant porphyry deposits of the Sierra Madre Occidental occur in the Lower Volcanics and are correlated with the various Middle Jurassic through to Tertiary aged intrusions. These deposits include Cananea, Nacozari and La Caridad. (Ferrari et. al., 2007). In Sonora, emplacement of these systems are considered to be influenced by E-W and ENE-WSW directed extension. Early Eocene tectonic activity which resulted in northwest trending shear and fault zones appears to be an important control on mineralization in the Sonora region.

Figure 6-1 provides a regional view of the major geological features that exist near the Las Chispas Property.

Figure 6-1: Regional Geology Showing Major Graben of the Rio Sonora and Continuous Normal Fault between Santa Elena and Las Chispas



6.2 Local Geology

The western and south-western portion of the Las Chispas Property is overlain by a series of young Oligocene aged reddish dark brown vesicular dacitic-andesitic to basaltic lava flows (Upper Volcanic Complex) with subordinate pyroclastic to lapilli tuff interbeds (Gonzalez-Becuar et al., 2017). The exposed thickness of these units on site is 150 m (~500 feet). Underlying this package (Lower Volcanic Complex), and exposed in the eastern portion of the land package is a thick sequence (>500m) of Early Tertiary rhyodacitic to andesitic lapilli to variably welded ash tuffs (Colombo, 2017). Both sequences are intruded by two phases of intermediate intrusive rocks. The volcanic rocks are variably altered, brecciated, mineralized, and display a range of intensities of brittle deformation. Outcrop exposure is moderate to poor on slopes, with most areas covered by a mantle of colluvium at the lower elevations and along the valley bottoms. Exceptions are intensely silicified rocks which often form resistant ridges, ledges and ribs.

The Upper Volcanic Complex including felsic volcanics and ignimbrites are primarily composed of lava flows, with lesser lapilli tuffs and volcanic breccias. These rocks are widespread at higher elevations and cap the surrounding mountains in the western and southwestern portion of the Property. This upper volcanic unit conformably overlay the lower Early Tertiary rhyodacitic to andesitic volcanics. The lava flows consist of strongly erosion resistant, reddish brown crystal-rich dacites with intercalated, dark brown, fine grained crystal-poor dark brown to black andesitic to basalt flows. Individual flows vary in thickness from 0.5 m to 10's of metres with easily identified flow tops consisting of increasing vesicles to angular broken rubbly breccia. Beds of lapilli ash also outcrop on bluffs and are observed in the typically recessive cliffs. The lapilli ash and airfall tuffs are poorly sorted, angular, and theorised to be basal surge or pyroclastic flows. These members typically have an upper ash layer, reverse grading of pumice and lapilli clasts (rare blocks) with a lower basal ash layer, with evidence of welding observed in the ash unit. Laterally, these sub-intervals are continuous throughout the Property and region (Gonzalez-Becuar et al., 2017).

The upper part of the Lower Volcanic Complex hosts the presently identified mineralization on the Property. These units are comprised of rhyodacitic to andesitic flows and volcanic rocks that vary widely in texture and genesis, from course pyroclastic, air fall breccias to finely laminated ash, and from welded tuff through reworked volcano-lithic greywackes. There are also interbedded flows of a similar composition to the volcaniclastics that infill distinct local basins based on the local paleo topography during the eruption, adding complexity in identifying these restricted sub-intervals. The source of the clastic, and flow lithologies infilling the basin is local, within 5km. The thin section study undertaken by SilverCrest demonstrates that most quartz fragments are angular throughout all the clastic units. This indicates that there has been little transport in the high-energy environment of pyroclastic flows and air fall tuffs. Most mineralization is located within a lapilli lithic tuff that is approximately 200 m thick.

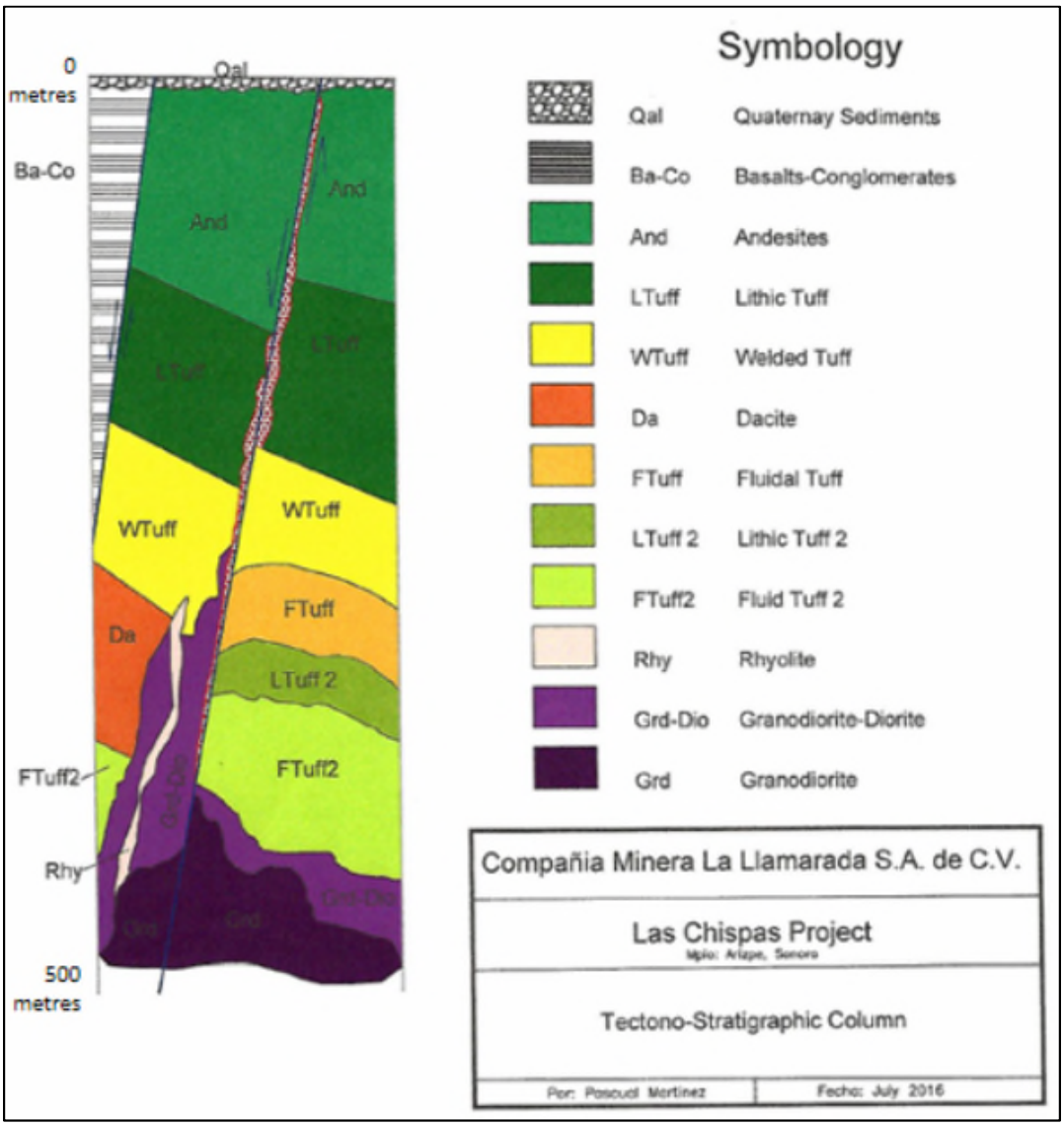
Intrusive rocks are noted throughout the Property. Several phases are currently recognized, such as rhyodacite intrusives cross cut many of the local Oligocene volcanic sequence as NW trending dykes and intrusive plugs at intersection points between major structures. Often the intrusive dykes and plugs exploit the same faults used by the mineralizing fluids. Both styles of intrusives vary from mafic, andesitic-dacitic to rhyolitic and are very fine grained to aphanitic. In the courser grained samples the mineral assemblage is dominated by white laths of plagioclase with rare trigonal K-feldspar, quartz grains and elongate hornblende. Typically, all intrusives are weakly to strongly magnetic unless strongly clay altered.

The Las Chispas Property is comprised of a sequence of coarse to fine grained dacitic, andesitic and rhyolitic interbedded volcaniclastics, flows and pyroclastics (Figures 6-2). These units are crosscut by several late, fine-to-medium grained, steeply dipping andesitic dykes.

To summarize, host rocks in the Las Chispas District are generally pyroclastic, tuffs, and rhyolitic flows which are interpreted as members of the Lower Volcanic Complex. Locally, volcanic pyroclastic units mapped within the

underground workings include rhyolite, welded rhyodacite tuff, lapilli lithic tuff, and volcanic agglomerate. Figure 6- 2 provides a schematic summary of the local stratigraphy.

Figure 6-2: Sample Stratigraphic Section for the Las Chispas and William Tell Vein Areas



The volcanics are cut by several different types of intrusive dykes and appear to have some influence on the distribution of mineralization. Large rhyodacite intrusives cross cut much of the volcanic sequence as NW trending dikes; however, dykes of andesitic, diorite, rhyolitic (youngest), and granodiorite composition have also been noted in drill core. Early dykes appear to be related to mineralization influencing ground preparation (fracturing) of host rocks. Rhyolite flow domes are suggested in the area and radial structural features are noted from surface lineament mapping.

The volcanics form a gentle syncline across the Property, which is cross cut nearly perpendicular to the fold axis by the Las Chispas Vein (Mulchay, 1935). Figure 6-3 shows a typical section looking towards the northwest through the Las Chispas Property.

Numerous mineral occurrences around the Las Chispas Mine were identified by previous operators on the Property with historic reports of up to 14 nearly parallel veins (Russell, 1908). Many of these veins fall along, parallel to, the Las Chispas and William Tell Veins. Each structural zone occurs along a consistent orientation and may be comprised of pinch and swell veins, stockwork, parallel sheet veins, or breccia. Varying degrees of mining has occurred within these structures; however, based on historical records, the mining appears to have been selective based on grade cut-offs of greater than 1,000 gpt Ag. Material grading below these cut-offs may have been considered sub-economic to previous operators and remain in situ today. These remaining deposits along with high-grade vein splays and fault-displaced unmined veins are the main targets of SilverCrest exploration.

6.2.1 Geochemistry

Thin section and TerraSpec studies show that the mineralizing fluids on the Las Chispas Property are dominantly neutral with separate acidic fluid pulses overprinting alteration and mineralization. Relative metal abundance and correlation coefficients have been calculated to characterize the geochemistry of the Las Chispas deposits and showings.

Both the thin section report and TerraSpec work indicates that the alteration generated during the mineralization events are dominantly multi-pulse neutral and consistent with Low-Sulphidation mineralization. The typical alteration assemblage is montmorillonite-illite +/- kaolinite +/- MgFe chlorite +/- pyrite. However, more acidic species of minerals and clays are also present, such as alunite, dickite and ammonium. In conjunction with the more acidic alteration, magmatically derived orthoclase is noted in thin sections as fine grained interlobated aggregates that occupy the interstices between the course grained quartz. This indicates that the quartz-rich mineralizing fluids and the orthoclase are syngenetic. Thus, both the orthoclase and quartz are part of the same event (Colombo, 2017). To produce these near neutral clays and minerals in conjunction with the more highly acidic species, two or more distinct fluid pulses are plausible.

A review of the core database, comprised of 19,234 samples, from all known deposits within the Las Chispas Property was undertaken. The review centered on the correlation coefficient (Table 6-1) and modal abundance (Table 6-2) of the anomalous and expected elements typically associated with Low to Intermediate Sulphidation deposits. The correlation complex was used to determine the relationship between elements and the modal abundances of those relationships.

Table 6-1: Correlation Coefficient Table, Anomalous Values Highlighted, >0.25 and <-0.25

Field	Au	Ag	Cu	Pb	Zn	As	Ba	*Cd	Co	Fe	*Hg	Mn	*Mo	S	Sb
Au	1.000	0.630	0.108	0.555	0.520	-0.008	0.024	0.719	-0.037	-0.035	-0.110	0.079	-0.054	0.099	0.348
Ag	0.630	1.000	0.310	0.529	0.565	0.061	0.212	0.722	0.003	0.032	0.095	-0.067	0.267	0.091	0.429
Cu	0.108	0.310	1.000	0.081	0.093	0.102	0.367	-0.005	0.056	0.071	-0.001	-0.017	0.983	-0.051	0.056
Pb	0.555	0.529	0.081	1.000	0.870	0.050	-0.015	0.803	0.019	0.156	-0.100	0.121	-0.025	0.380	0.414
Zn	0.520	0.565	0.093	0.870	1.000	0.105	-0.055	0.906	0.033	0.186	-0.169	0.056	-0.012	0.390	0.562
As	-0.008	0.061	0.102	0.050	0.105	1.000	0.102	0.239	0.172	0.378	0.132	-0.007	0.085	-0.099	0.471
Ba	0.024	0.212	0.367	-0.015	-0.055	0.102	1.000	-0.068	-0.018	-0.071	0.144	0.155	0.473	-0.219	0.137
*Cd	0.719	0.722	-0.005	0.803	0.906	0.239	-0.068	1.000	-0.171	0.000	0.963	-0.044	-0.094	0.344	0.803
Co	-0.037	0.003	0.056	0.019	0.033	0.172	-0.018	-0.171	1.000	0.808	0.029	0.306	0.100	0.368	0.019
Fe	-0.035	0.032	0.071	0.156	0.186	0.378	-0.071	0.000	0.808	1.000	-0.073	0.319	0.104	0.454	0.239
*Hg	-0.110	0.095	-0.001	-0.100	-0.169	0.132	0.144	0.963	0.029	-0.073	1.000	0.002	0.030	-0.236	0.494
Mn	0.079	-0.067	-0.017	0.121	0.056	-0.007	0.155	-0.044	0.306	0.319	0.002	1.000	-0.024	0.082	0.106
*Mo	-0.054	0.267	0.983	-0.025	-0.012	0.085	0.473	-0.094	0.100	0.104	0.030	-0.024	1.000	-0.083	-0.040
S	0.099	0.091	-0.051	0.380	0.390	-0.099	-0.219	0.344	0.368	0.454	-0.236	0.082	-0.083	1.000	0.160
Sb	0.348	0.429	0.056	0.414	0.562	0.471	0.137	0.803	0.019	0.239	0.494	0.106	-0.040	0.160	1.000

*Low statistical population

Table 6-2: Basic Statistics, with Sample Population and Modal Abundance of Elements

Field	Count n	Minimum	Maximum	Median	Variance	Percentile25	Percentile50	Percentile75	Percentile99
Au ppm	19238	0.00	137.50	0.05	1.27	0.01	0.05	0.05	0.66
Ag ppm	19238	0.00	13560.00	5.00	11963.72	0.40	5.00	5.00	87.00
Cu ppm	19238	0.00	2080.00	1.00	330.09	0.00	1.00	3.00	42.00
Pb ppm	19238	0.00	2060.00	3.00	1573.32	0.00	3.00	10.00	57.00
Zn ppm	19238	0.00	3060.00	5.00	4024.33	0.00	5.00	27.00	134.00
As ppm	19238	0.00	186.00	0.00	108.95	0.00	0.00	6.00	47.00
Ba ppm	19238	0.00	10000.00	10.00	36255.30	0.00	10.00	60.00	720.00
Cd ppm	19238	0.00	25.50	0.00	0.28	0.00	0.00	0.00	0.60
Co ppm	19238	0.00	41.00	0.00	10.71	0.00	0.00	1.00	17.00
Fe_pct	19238	0.00	6.27	0.39	0.69	0.00	0.39	1.00	3.94
Hg ppm	19238	0.00	386.00	0.00	21.51	0.00	0.00	0.00	1.00
Mn ppm	19238	0.00	45900.00	36.00	488829.41	0.00	36.00	542.00	1790.00
Mo ppm	19238	0.00	1290.00	0.00	87.44	0.00	0.00	0.00	3.00
S ppm	19238	0.00	2.61	0.00	0.03	0.00	0.00	0.02	0.90
Sb ppm	19238	0.00	184.00	0.00	29.68	0.00	0.00	0.00	22.00

Au and Ag have a strong positive correlation coefficient. Emplacement of both silver and gold seems to be strongly related, although there is thin section evidence of a quartz+Ag only event at Babicanora. The core low to intermediate sulphidation elements (Au, Ag, Cu, Pb, Zn and Sb) all have a strong affinity for one another. Mercury does not have a conclusive positive or a negative correlation and has negligible values. Pb and Zn have a very high correlation coefficient 0.870. However, base metals and accessory minerals have low abundance within all the targets. There is a slight increase in base metal content in the targets located deeper in the eastern portion of the Property. This may indicate an evolution of the fluids as they ascend or separate base metal rich pulses, the mode of which emplacement is unclear. Sulphur has a moderate correlation with Zn and Pb, likely due to sulphur in their respective sulphides. The gold and silver mineralization in the upper portion of the targets has been oxidized and the sulphides leached out, resulting in a lower sulphur signature.

6.2.2 Alteration

All rock types on Las Chispas show signs of extensive hydrothermal alteration. Thin section and TerraSpec spectral analysis was completed on drill core samples from DDH BA-17-9A, which cuts all the major lithologies on the Babicanora target and the alteration is generally consistent with the all the showings on the Property. The TerraSpec work was completed using the MDRU TerraSpec 4 at UBC. Both studies identified alteration consistent with argillic and advanced argillic alteration. The alteration minerals identified throughout the Las Chispas Property include smectite, illite, kaolinite, chlorite, carbonate, Fe oxy/hydroxides, probable ammonium, gypsum/anhydrite, silica and patch trace alunite.

The dominant alteration mineralogy throughout the drill hole is montmorillonite-illite +/- kaolinite+/- MgFe chlorite. This is consistent with argillic and possibly advanced argillic alteration. Most the alteration shows a progression of alteration minerals consistent with lower hydrothermal fluid temperatures. These low temperature clays and minerals indicate a near neutral pH with decreasing depth and distance from the conduit of flow.

White clay composition is predominantly low Al (phengitic) but there are several interbedded narrow intervals of typical alumina bearing muscovitic illite zones at the top and base of sampling. This variation may be due to lithological variations of the parent rock. Sericitic alteration occurs as widespread fine-grained aggregates that form

anhedral grains. These grains replace the fine-grained matrix and feldspar phenocrysts. White clay crystallinity ranges from poor to moderate, indicting lower temperatures of emplacement.

Chlorite is relatively common and two phases have been identified, Mg>Fe, with minor intervals of Fe>Mg chlorite. These differences may be related to parent lithologies or relative Fe-Mg. Localized, coarse clots of chlorite can replace small clasts, although fine-grained pervasive chlorite is more common.

Pyrite is consistently observed throughout the target, overprinting the host rock and associated with the silicification adjacent to, and within, the mineralized zones. Forms include cubic disseminations, aggregates and veins. Pyrite is often weathered to Fe-oxides to depths of >200m within the mineralized zones.

Silicification ranges from white to pale massive chalcedonic and saccharoidal to coarse crystalline comb quartz. Despite the visual identification of silicification in the core, little silica was noted in spectra. Silica is not infrared active but is suggested by the presence of strong groundwater features in the spectra. The groundwater features were largely absent, but their absence may be due to destructive reheating of the silica due to multiple pulses of fluids and/or syngenetic reactivation of fault structures causing damage to the previously emplaced quartz veins. Reactivation of faulting is noted within the mineralization and the generation of cataclastic breccias which are, in turn, re-cemented with later pulses of coarse to microcrystalline silica.

Calcite with trace anhydrite +/- gypsum is abundant throughout the Property. It is emplaced during and after the mineralizing events. In thin section, coarse-grained equigranular aggregates of quartz hosts rare interstitial crystals of calcite (up to 3 mm), in the mineralized zone. Late fine- to coarse-grained calcite veins and veinlets crosscut the mineralization. The northwest part of the Babicanora Vein shows late stage, coarse-grained white and black banded (+manganese) calcite infills open spaces and crosscuts mineralization (Photo 6-1).

Photo 6-1: Coarse-Grained White and Black Banded (+Manganese) Calcite Vein

Near-neutral pH and reduced fluids form low-sulphidation state sulfide minerals and alteration mineralogy (Barton and Skinner, 1979). However, within the Babicanora samples there is sporadic localized potassic alunite, dickite and ammonium identified at ~90m depth indicating a more acidic environment. This change in pH may be due to the incorporation of higher volumes of magmatic fluids or changes in the volumes of the meteoric fluids content. Thin section work notes a change in the chemical environment within this zone, “Euhedral to subhedral phenocrysts of orthoclase are immersed within a heterogeneous groundmass. The heterogeneity of the groundmass suggests that a strong alteration event altered the groundmass. K-feldspar-K-bearing clays comprise the groundmass. The

clays are weak to moderate after the plagioclase, strong after biotite with weak quartz within the groundmass (Colombo, 2017).

Generally, the host rocks are above the water table. Oxidation of sulphides is noted from near surface to depths greater than 300 m and the presence of secondary minerals are noted from the Las Chispas underground workings approximately 60 m to 275 m depth from surface. Hematite mineralization occurs as halos around small veins due to percolated meteoric water along small faults and fractures. Strong and pervasive near surface oxidation is noted to occur in the Babicanora Area where host rocks have experienced faulting and advanced weathering to limonite, hematite, and clays.

6.2.3 Mineralization

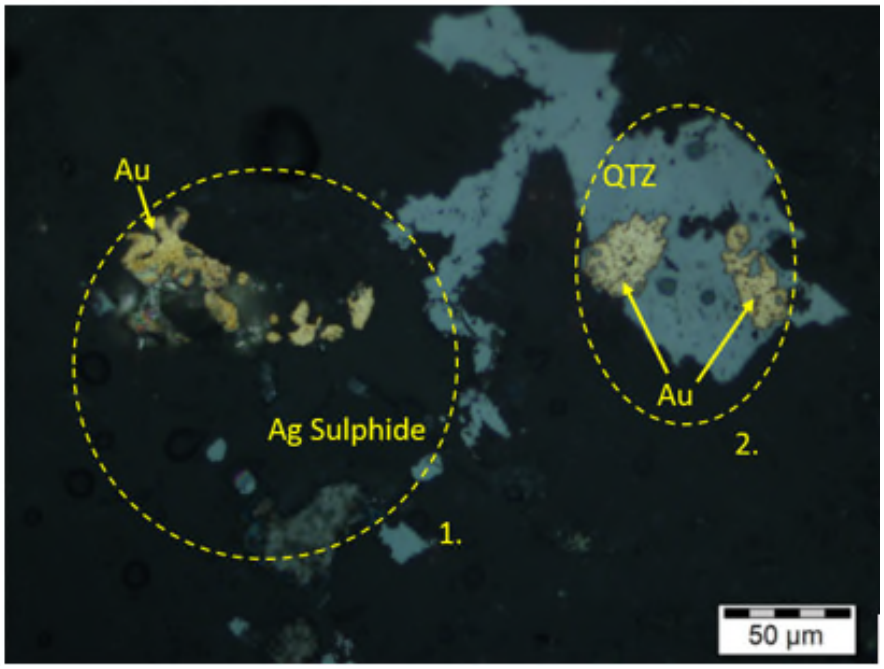
Mineralization at the Las Chispas Property is characterized as a deeply emplaced low to intermediate sulphidation system, with mineralization hosted in hydrothermal veins, stockwork and breccia. Emplacement of the mineralization is influenced by fractures and low-pressure conduits formed within the rocks during tectonic movements. Mineralization can be controlled lithologically along regional structures, local tension cracks, and faulted bedding planes. Brecciated mineralization forms in two ways, in zones of low pressure as hydrothermal brecciation and mechanical breccias. Both are interpreted to occur most often at the intersection of two or more regional structural trends. Historic reports and work conducted by SilverCrest have further investigated the gold, silver, base metals and gangue minerals associated with the mineralization.

The width of mineralization is 0.5 m to 7.0 m in true width that typically encompasses a central quartz +/-calcite mineralized corridor with narrow veinlets within the adjacent fault damage zone. Stockwork and breccia zones are centered on structurally controlled hydrothermal conduits.

Historical reporting has identified economic mineralization in the form of silver sulphides and sulfosalts as the primary silver mineral species, and in association with pyrite. Secondary silver enrichment is indicated by the gradation from chlorargyrite near the surface to pyrargyrite at depth. Dufourcq (1910) noted the variability of the mineralization within the Las Chispas Vein and attributed the variation to changing elevations of water tables, late stage hydrothermal pulses and supergene remobilization. Current thin section work and observations during SilverCrest's ongoing field work support Dufourcq's historic observations.

Silver mineralization is dominant throughout the Las Chispas Property. Typical ratios of Ag:Au are: Babicanora Vein at 64:1, Babicanora bonanza zone (Area 51) at 63:1, Las Chispas Vein at 142:1, Giovanni Vein at 172:1, and William Tell Vein at 140:1. Overall, a 100:1 silver to gold ratio is considered for the Las Chispas Property. Stronger gold mineralization is noted within the Babicanora Area than the Las Chispas Area. The modes of gold mineralization currently identified are, gold associated with pyrite and chalcopyrite, gold emplacement with silver sulphides (typically argentite), and as native gold flakes in quartz (Figure 6-3).

Figure 6-3: Thin Section of Gold and Silver Emplacement at Las Chispas



Other sulphide species identified at the Las Chispas Property include minor chalcopyrite, sphalerite, and galena. The Las Chispas Veins are conspicuously low in base metal mineralization except for the Granaditas Vein located in the southeastern part of the district. Historic documents show that base metal abundances are significantly higher in El Carmen area, a historic mine to the south of the Property. In addition to the petrographic findings in Babicanora samples of an early sphalerite phase followed by a later galena phase of mineralization (see 6.2.3.1), visual inspection of the base metal mineralization also shows galena and sphalerite emplaced at the same time within the same discrete vein. This observation indicates that there are multiple pulses of base metal-rich fluids of variable composition that comprise the mineralization at the Las Chispas Property. Furthermore, there seems to be an increasing base metal content to the southeast and to depth. Government geophysical maps note a large magnetic anomaly to the east of the Property which could be a buried intrusive and potentially the main source of the district's mineralization.

The veins and stockwork within the Las Chispas Vein consist of fine to medium grained, subhedral to euhedral interlocking quartz with minor cavities lined by comb quartz (typically crystals are 5-10 mm in length). SilverCrest geologists have not noted any quartz-pseudomorphed blades after platy carbonate or other textures that would indicate a shallow environment. Vein emplacement and form are structurally and lithologic controlled. The rheology of the host rock plays an important role in structural preparation and emplacement of the mineralization. Within the fine grained welded tuff, veining is narrow and chaotic. Veins and breccia emplacement in the more competent, medium-grained lapilli tuffs are wider and focused along the main structure with denser veining in the adjacent fault damage zone.

The two types of breccias associated with mineralization at Las Chispas, hydrothermal breccia and re-cemented mechanical breccia, are hosted differently. In the hydrothermal breccia, mineralization is hosted in a siliceous matrix of hydrothermal quartz +/-calcite, and previously formed vein clasts that have been brecciated and re-cemented (Figure 6-4 A, B). Clasts are typically homolithic, angular and show minimal signs of milling and rounding by hydrothermal processes. Although heterolithic breccias are present, they tend to be at the intersection points of the

cross cutting faults (striking 360°) to the main trend and at depth. The gold values increase with increasing visible pyrite and chalcopyrite within the quartz matrix.

Re-cemented mechanical breccia generated by the reactivation of the fault hosting the mineralization are also present. These breccias are comprised of fault gouge and have a cataclasite texture and are recemented with quartz and calcite. This mechanism also produces open-space filling ores including narrow stockwork quartz +/- calcite +/- adularia veins. Other textures include banding, crustiform, comb and chalcedonic silica-calcite veins. Often the matrix has fine disseminated to course banded sulphides associated with the cement.

Figure 6-4: Breccias at Las Chispas

(A) Hydrothermal angular homolithic breccia, siliceous matrix with calcite and fine-grained sulphides weathering red.
(B) Heterolithic breccia with minor rounding of clasts and open space filling. Fine grained black sulphides and manganese hosted in the crystalline quartz matrix.

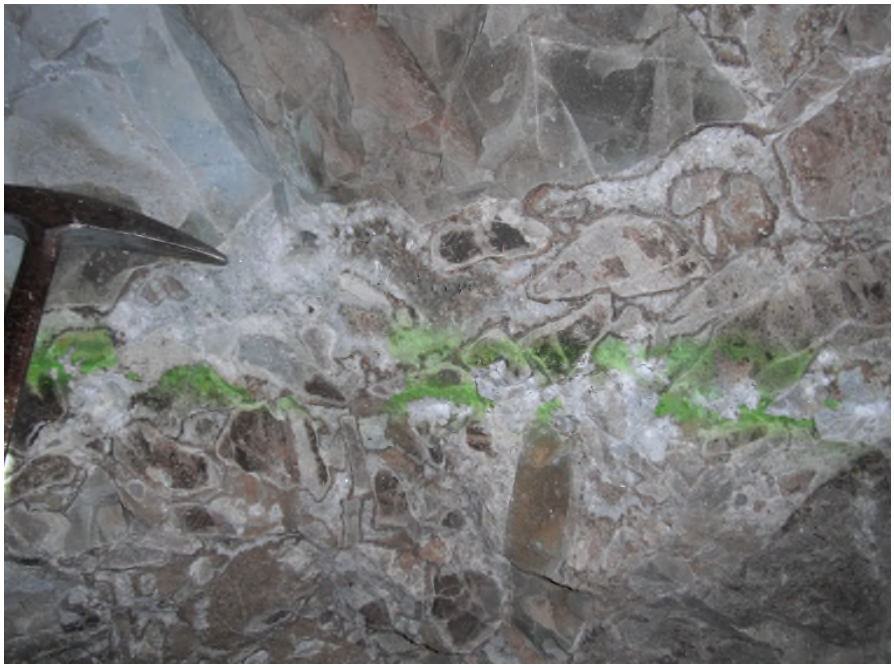
Argentite is the principle silver mineral in association with galena, pyrite +/- marcasite and chalcopyrite. Silver and gold values have a strong correlation with one another and are likely precipitated together during the crystallization of quartz. Base metals are low in veins. Minor zinc and lead are principally found in black sphalerite and galena as blebs and veinlets. Arsenic and mercury are noticeably absent from the geochemistry. Minor antimony is present. Minor secondary copper minerals as chrysocolla and malachite are noted in the underground in association with oxidized chalcopyrite.

Styles of mineralization present on the Property include laminated veins (Photo 6-2), stockwork and quartz-calcite filled hydro-brecciated structures (Photo 6-3). The presence of epithermal textures, such as bladed calcite (replaced by quartz), miarolitic cavities, and chalcedony/crustiform banding mapped underground, suggest multiple phases of fluid pulses have contributed to the mineral deposits.

Generally, it appears that epithermal mineralization is higher in the system (closer to the paleo-surface) on the west side (i.e. La Victoria Vein and historic mine) of the district versus the east side (Granaditas Vein and historic mine) where there is a noted increase in base metals. Government geophysical maps note a large magnetic anomaly to the east of the Property which could be a buried intrusive and potentially the main influence of district mineralization.

Photo 6-2: Laminated (banded) Vein Style Mineralization along Las Chispas Vein, tip of Rock Hammer shown on Upper Left (near SilverCrest sample 227908, 1.04 gpt Au and 197 gpt Ag over 1.33 m)

Photo 6-3: Breccia Style Mineralization along Las Chispas Vein (base of Las Chispas Gallery near SilverCrest sample 617179, 2.34 gpt Au and 343.5 gpt Ag, or 519 AgEq over 1.46 m)



6.2.3.1 Petrographic Analysis

Thin section work on Babicanora indicates that there are discrete base metal pulses within the fluids, and consequently within the quartz veining. Thin sections show that clusters of anhedral sphalerite are associated with subordinate fine-grained blebs of galena and lesser chalcopyrite. The microstructure shown by sphalerite and galena indicates that galena post-dated the crystallization of the sphalerite, which was fractured then partially replaced by the galena. This indicates that there was an early phase of sphalerite with a later galena pulse of mineralization (Colombo, 2017).

Gangue minerals, from visual inspection of core and underground workings include calcite, pyrite, goethite, adularia, chlorite, sericite, epidote (dykes only), barite, manganese oxides (e.g., pyrolusite), and rhodonite. Adularia and manganese oxides are noted to occur within quartz veining and cavities. Amethyst and fluorite are present at Babicanora, William Tell and the Las Chispas Vein. Abundant limonite +/- jarosite are commonly in association with goethite and pyritic alteration in proximity to, and within the mineralized faults and dikes, of all the targets to depths of +175 m below surface.

6.2.3.2 Fluid Inclusion Study

The fluid inclusion study for the Las Chispas Property found depths of emplacement of mineralization ranging from approximately 100 m to >2 km. The shallow depth of emplacement readings are outside the main mineralized zones. Depth of emplacement in the main mineralized zone are well below 1,000 m with a maximum depth of >2 km (Pérez, 2017). These deeper depths of emplacement are complicated by possible caldera collapse with a change in the paleo-surface.

Overprinting of low and high sulphidation mineralization and alteration with conflicting depths of formation are noted in the fluid inclusion, TerraSpec, and thin section studies that point towards caldera collapse as a mechanism of emplacement.

6.2.4 Structural Geology

Mapping and interpretation of the structural controls on mineralization and post-mineral displacement is ongoing by SilverCrest (Figures 6-5, 6-6 and 6-8). Regionally, the Las Chispas Property is situated in an extension basin related to a Late Oligocene half graben of the Sonora basin. Multiple phases of normal faulting affect the basin. The main structures are steep, west dipping (80°) and sub-parallel to the Granaditas normal fault located along the western margin of the Property, striking ~030°. The basin is further cross cut by younger NW-SE normal faults dipping to the south-west, creating both regional and local graben structures (Carlos et al., 2010).

Three local grabens have been identified on the Property, referred to as the Las Chispas, Babicanora and El Carmen grabens. All three grabens are bounded by: 1) steeply dipping (80-90°) oblique strike-slip sinistral faults trending northeast and south-south-west, and 2) oblique strike-slip dextral faults trending southeast dipping (60-80°) to the northeast.

Locally, graben structures are complicated by probable caldera collapse. Circular structures noted in the lineament analysis in conjunction with locally derived immature volcanic fill containing sharp primary quartz clasts indicate local volcanism (Colombo, 2018). Within a collapsed caldera, telescoping, juxtaposing or overprinting deep mineralization, is common. Paleo-surfaces may be easily lowered by 1.0 km, leading to vertical compression of contained ore deposits (Sillitoe, 1994).

Current understanding suggests that mineralized structures are oriented along a northwest-southeast trend. Three structural controls, excluding bedding contacts, are considered to influence alteration and mineralization;

- 150° to 170° and are inclined at approximately 65° to 75° to the southwest,
- 340° to 360° and are inclined 75° west to 75° east, and
- 210° to 230° and are inclined 70° to 85° to the northwest.

Russell (1908) states that a total of 14 veins were mapped by Pedrazzini concordant to this trend near the Las Chispas Mine. SilverCrest has defined 19 epithermal veins on the Property to date.

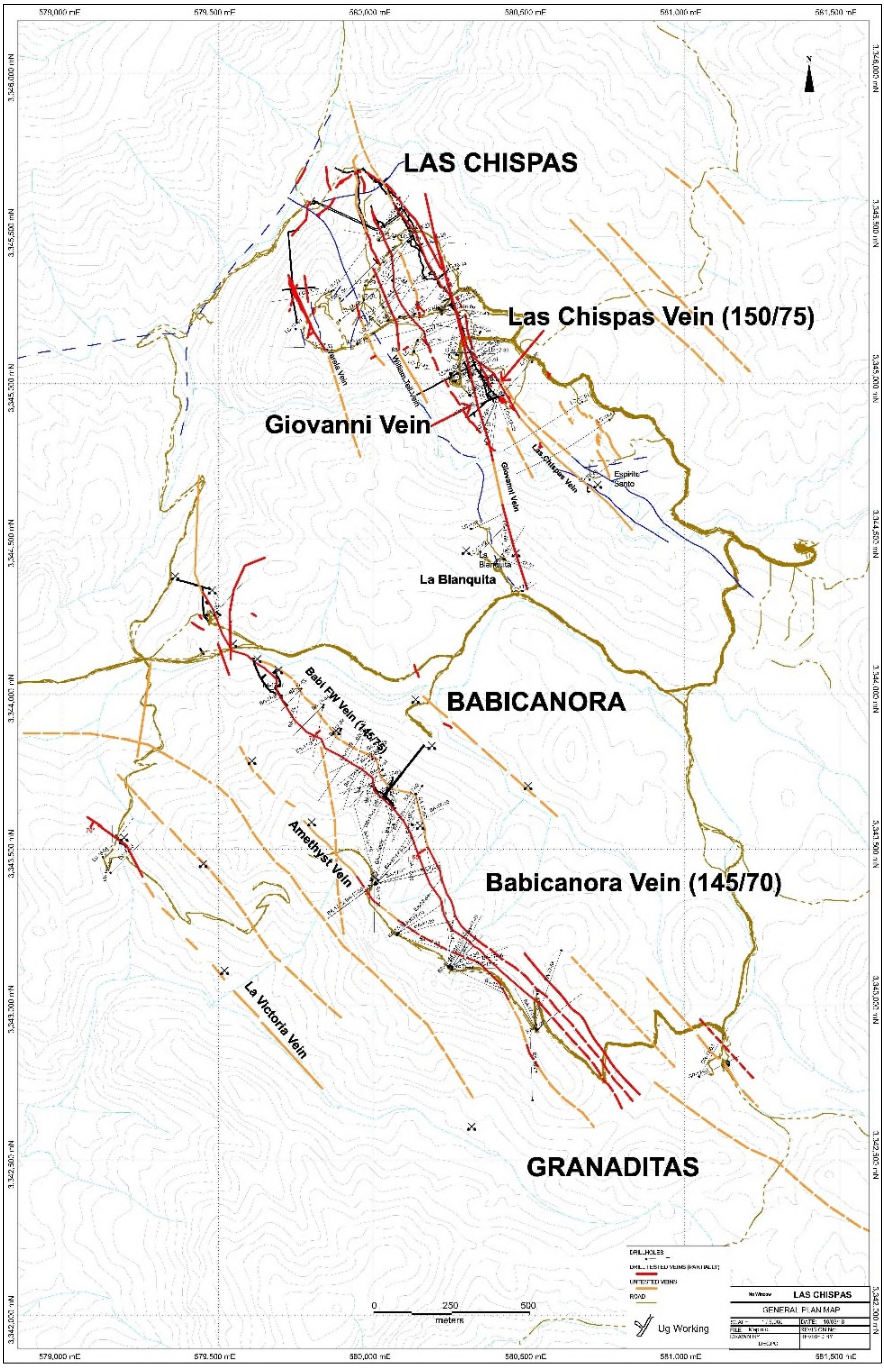
Vein and stockwork mineralization is influenced by fractures and low pressure conduits formed within the rocks during tectonic movements. These can be controlled along regional structures, local tension cracks, and along broken or sheared bedding planes. Brecciated mineralization forms in zones of low pressure and is interpreted to occur at the intersection of two or more regional structural trends.

Regionally, the mineralized structures are terminated against the northeast trending regional fault (Las Chispas-Santa Elena Fault) which is a normal fault that has down dropped to the west. Absolute direction and magnitude of movement along the fault in this area is not known. At the nearby Santa Elena mine, this post mineralization normal fault is down dropped on the west side by approximately 400 m (drill-tested). This normal fault is also considered a major controlling feature for important regional aquifers.

6.2.5 Deposits and Mineral Occurrences

The Las Chispas District with subsequent mineral deposit is split into the Las Chispas Area and the Babicanora Area and currently consists of 19 epithermal veins (Figure 6-5). Of the 19 veins, SilverCrest has partially drilled 9 and has intercepted high-grade mineralization in all. The maiden resource presented in the report is based on 5 of the 19 veins.

Figure 6-5: Plan Overview of the Las Chispas and Babicanora Areas



6.2.5.1 Babicanora and Babicanora Footwall (FW) Veins

The Babicanora Vein is located in the southern portion of the Las Chispas Property. Historically, the Babicanora Vein and surrounding area was considered the largest mineralized system in the Las Chispas District. Mineralization is hosted in structurally controlled veins with associated stockwork and breccias. The strike length of the surface exposures of mineralization and old workings is approximately 3.2 km. The historic workings are in the hanging wall of the vein and are reported to be as much as 450 feet deep (Dahlgren, 1883).

Underground workings along the Babicanora Vein are located to the northwest portion of the vein, and is currently accessed by several adits including a 4 m by 4 m adit (Photo 6-4). Mineralization is characterized as quartz veins, stockwork, and breccias. The structural zone is oriented along strike between 140° - 150° with inclination of approximately 60 to 70° to the southwest. The Babicanora Mine had hangingwall stopping from the main adit level (1,152 masl) to the surface, approximately 150 m. Depth of underground workings is approximately 25 m below the main adit. SilverCrest removed and stockpiled approximately 800 tonnes of material for underground drill access in 2017 (Photo 6-5). The Babicanora Vein is in the footwall of the historic stopping with no known mining in this area. Geological mapping in the Babicanora Area is shown in Figure 6-6 and a typical cross section is shown in Figure 6-7.

Photo 6-4: Main Portal at Babicanora, 4 m by 4 m, built in 1860's

Photo 6-5: Babicanora Stockpile Removed For Babicanora Main Adit

Figure 6-6: Plan View of Geological Mapping at the Babicanora Area

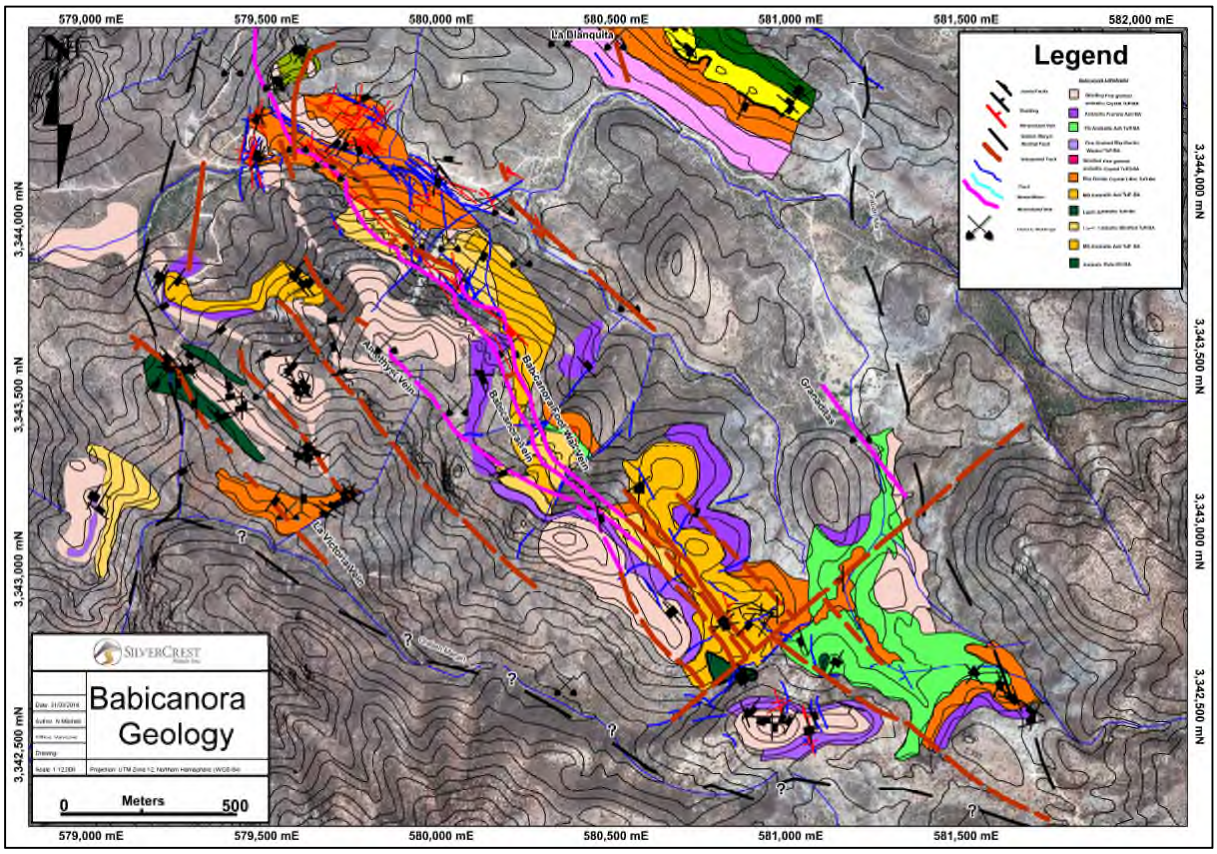
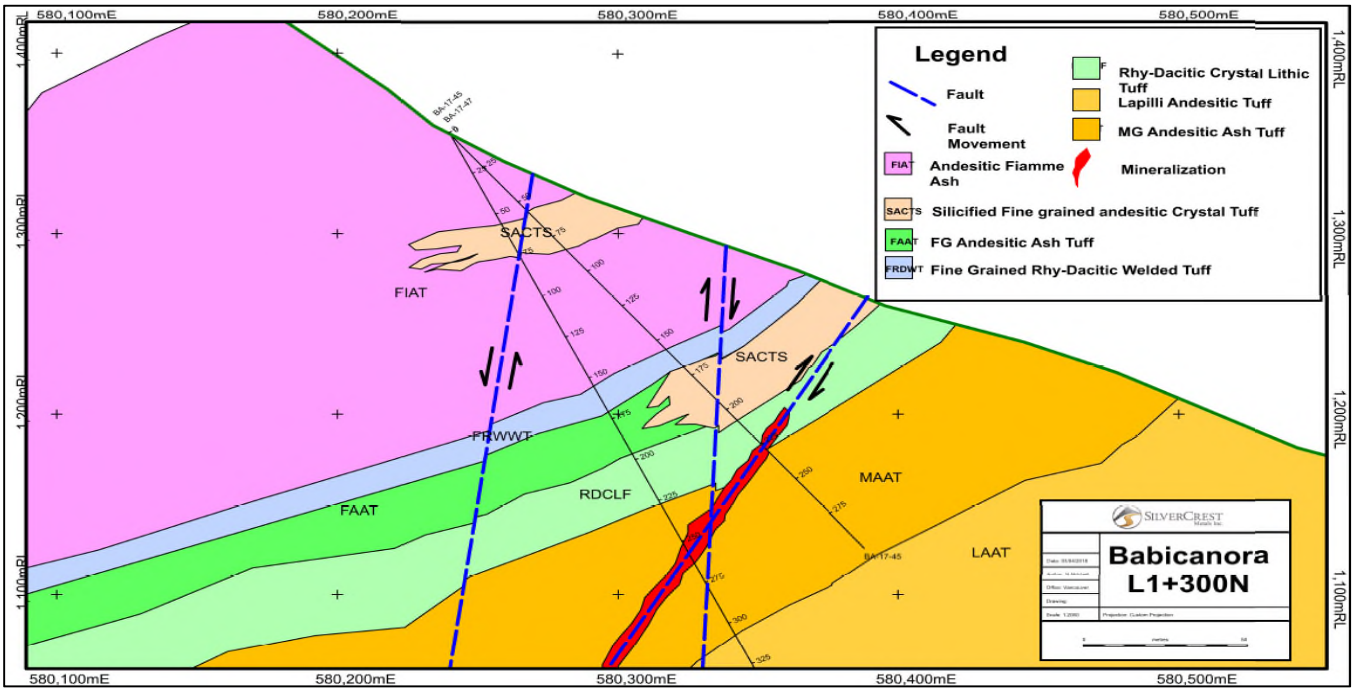


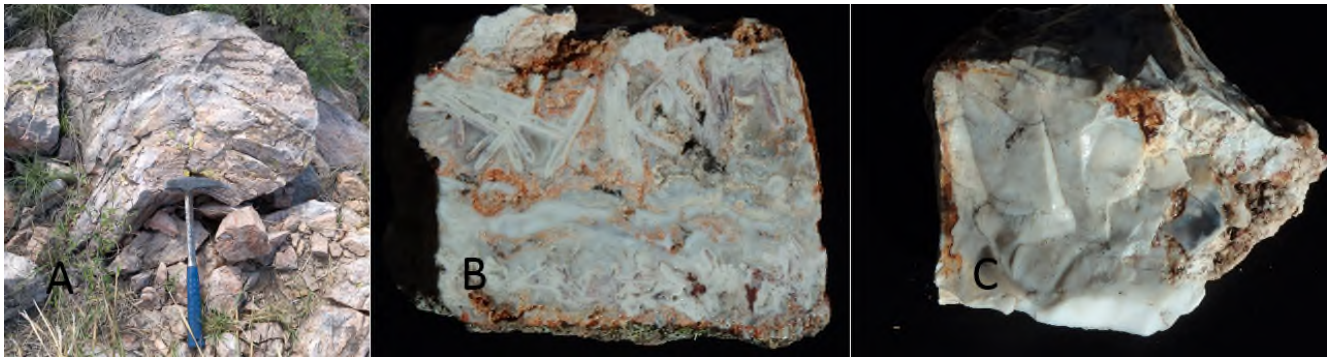
Figure 6-7: Vertical Cross-Section through Babicanora, Line 1+300N, looking to the Northwest



Lithologies are andesitic to dacitic with rhyolitic interbeds. These units are cross cut by andesitic dykes. Strong to intense silicification caps the ridges in the area with a 300 m by 400 m zone of strong to intense silicification interpreted as sinter (Figure 6-8A) covering the slopes of the eastern portion of the area.

Mineralization of the Babicanora Vein is characterized as a low to intermediate sulphidation system. SilverCrest has identified numerous sulphidation features including; sinter capping on the ridges which indicate the silica saturated fluids have reached the surface and cooled, generating hard siliceous terraces. Quartz after calcite, bladed textures (Figure 6-8B), were found at high elevations on the western side of the Property. This texture and composition is comprised of intersecting blades where each blade consists of a series of parallel seams. This texture indicates boiling. It is typically caused when an ascending fluid undergoes rapid expansion, and the vapour pressure exceeds hydrostatic pressure causing boiling and a dramatic decrease in metal solubility. Massive chalcedonic textured silica (Figure 6-8C) were also identified on the western portion of the Property, indicating low temperatures before and after deposition, Morrison, G et al., 1990. These high-level features and textures point to the preservation of the mineralized system below and at depth.

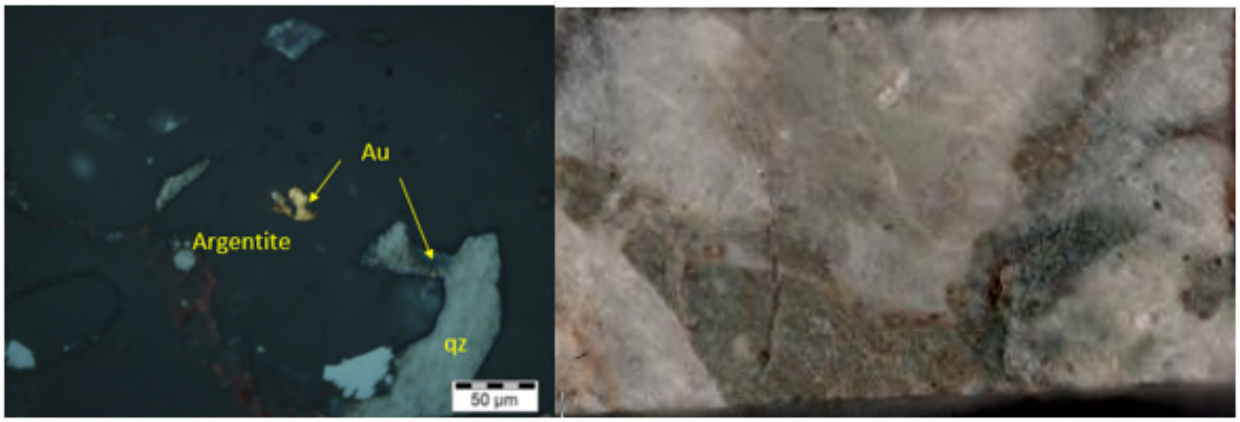
Figure 6-8: A. Sinter lamina., B. Quartz Replacement of Bladed Calcite with Minor Amethyst., C. Massive Chalcedonic Quartz



The depths from the fluid inclusion study concluded that emplacement of the mineralization ranges from 1,000 to 1,800 m and that the mineralization is confined to 140-150° trending faults that dip 65° southwest. Ongoing drilling has defined a well mineralized zone over 1.5 km in the Babicanora Area.

The mineralization at Babicanora has a strong magmatic component. The potassic alteration observed in thin section is crystalline, orthoclase and is magmatically derived. Adularia is also present but in limited zones. Argentite is the principle silver mineral, gold occurs as native flakes and as in association with pyrite and chalcopyrite (Figure 6-96. Silver and gold values have a strong correlation with one another and are likely precipitated together during the crystallization of quartz, thus belonging to the infill paragenesis, Heiberline K, 2018.

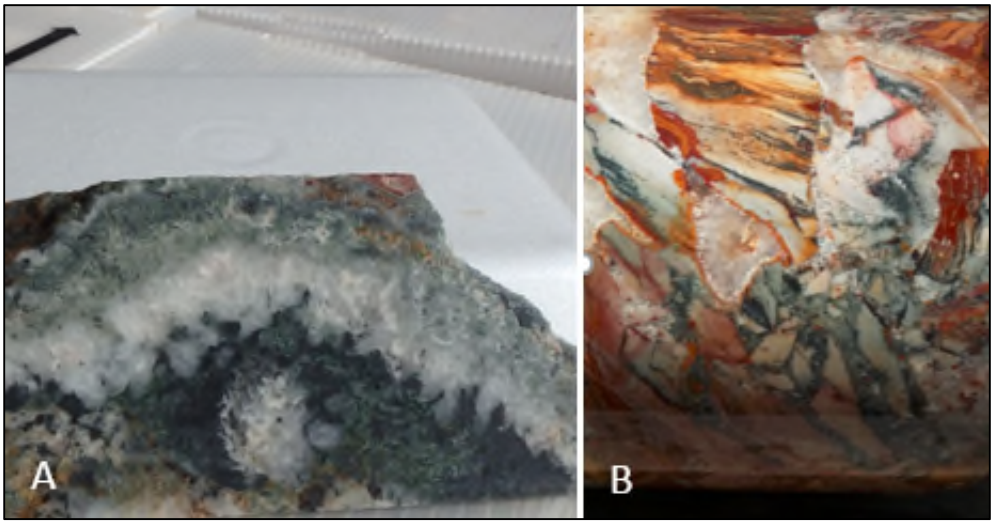
Figure 6-9: BA17-11 90.40-90.50 m



(A) Thin section. A very fine particle of gold is dispersed within the quartz, and it is spatially associated with the argentite. Plane-polarized reflected light.
(B) core, taupe, brecciated fine-grained quartz brecciated and recemented with course white quarts, fine grained disseminated pyrite throughout.

Base metals are low in Babicanora. Zinc and lead are principally found in black sphalerite and galena. Early stages of galena are noted in the thin section study. With clusters of anhedral sphalerite (up to 1 mm long) are associated with subordinate fine-grained blebs of galena and lesser chalcopyrite (up to 0.2 mm). Microstructures shown in the sphalerite and in the galena indicate that the galena post-dates the crystallization of the sphalerite which is partly replaced by the galena. Indicating galena only pulses of mineralization. Arsenic and mercury are noticeably absent from the geochemistry. Silver and gold mineralization can be characterized with three end-member types; breccia hosted, vein hosted and vuggy quartz hosted.

Figure 6-10: (A) Multiphase Vein Hosted Crudely Crustiform with Sulphides BA-17-51; from 267.45 to 268.75 grading 96.3 gpt Au and 12,773.5 gpt Ag, or 19,996 gpt AgEq. (B) Breccia hosted mineralization BA-17-04; 2.21 gpt Au and 437 gpt Ag, 602.75 gpt AgEq over 3.1 m.



Newly discovered Area 51, named after hole BA-17-51, is the southeast extension of the Babicanora Vein and represents the bonanza zone of a typical epithermal system. This high-grade zone is located 200 to 300 m from surface and is over 400 m long by 200 m high by 2.7 m in true width (Photo 6-6).

Photo 6-6: Area 51 Mineralization, Babicanora Hole Hole BA17-51 (Discovery Hole); from 265.9 to 269.2m, 3.3 (3.1m true width) metres grading 40.45 gpt Au and 5375.2 gpt Ag, or 8,408.95 gpt AgEq, with hematite breccias, coarse banded argentite, native silver, electrum and visible gold.

The Babicanora FW Vein is sub-parallel to the Babicanora Vein. This vein is approximately 30 m north of the Babicanora Vein in the northwestern part of the area. The vein appears to intersect the Babicanora Vein near Area 51.

6.2.5.2 Las Chispas Vein

The Las Chispas Vein is located in the northern portion of the Las Chispas Property and is the most extensively mined vein in the district (Figure 6-5). Mining along the Las Chispas Vein is well documented in the historical longitudinal section published by Minas Pedrazzini G&S Mining Co., Circa December 31, 1921 (Figure 5-1).

SilverCrest's exploration work has focused on defining the lithology, structure, alteration, mineralization and channel sampling in unmined pillars and surrounding intact vein. Vein mineralization is described as an undulating and dilating quartz stockwork and breccia zone, as defined in underground mapping and in drill core, of 0.5 m to 7.0 m in true width which typically encompass narrow veins of quartz, visible sulphides, and calcite (Photo 6-7).

The Las Chispas Vein strikes 150° and inclined at approximately 75° to the southwest. Cross cutting the Las Chispas Vein are normal secondary faults trending 220° and dipping 65°. These secondary faults seem to play an important role in generating zones of dilatation for the emplacement of high-grade shoots and breccia zones. Flat to steeply inclined bedding parallel to faults are also noted to off-set the late stage andesitic dykes by 10-20 m and are a common feature of drag folds (Schlische, 1995). Geological mapping in the Las Chispas Area is shown in Figure 6-11 and a typical cross section is shown in Figure 6-12.

Alteration is similar to the other veins on the Property. Silicification is extensive in mineralized zones with multiple generations of quartz and chalcedony commonly accompanied by calcite with minor adularia. Pervasive silicification in vein envelopes is flanked by sericite and clay alteration of the host rock. Intermediate argillic alteration (likely kaolinite-illite-smectite) forms adjacent to some veins. Advanced argillic alteration (kaolinite-alunite) is suspected within the Las Chispas Vein, but formal studies of the alteration mineralogy have not been completed to confirm their presence. Propylitic alteration dominates at depth and peripherally to the mineralization with abundant fine-grained chlorite and pyrite proximal to the mineralization. Fe-oxyhydroxides, manganese after pyrite and other fine-grained sulphides are closely associated with the mineralization. Reactivation of the central fault hosting the mineralization provided a conduit for deep weathering of the sulphides and possible supergene enrichment of the silver mineralization. The andesitic dykes are weakly to moderately clay altered with weak epidote along their narrow chill margins.

Recent mapping by SilverCrest, confirms the location and extent of mining indicated on the historical longitudinal section as being representative and accurate. At the date of the QP site visit, access, and mine rehabilitation had been completed to the western boundary of the main San Luis stopes on the 150 level. Mapping on levels below 600 level has commenced, but is not yet complete.

Photo 6-7: Hole LC17-45; from 159.6 to 161.9 at 2.3m (1.9m true width) grading 50.56 gpt Au and 5,018.8 gpt Ag, or 8,810.8 gpt AuEq

Figure 6-11: Plan View of Geological Mapping at the Las Chispas Area

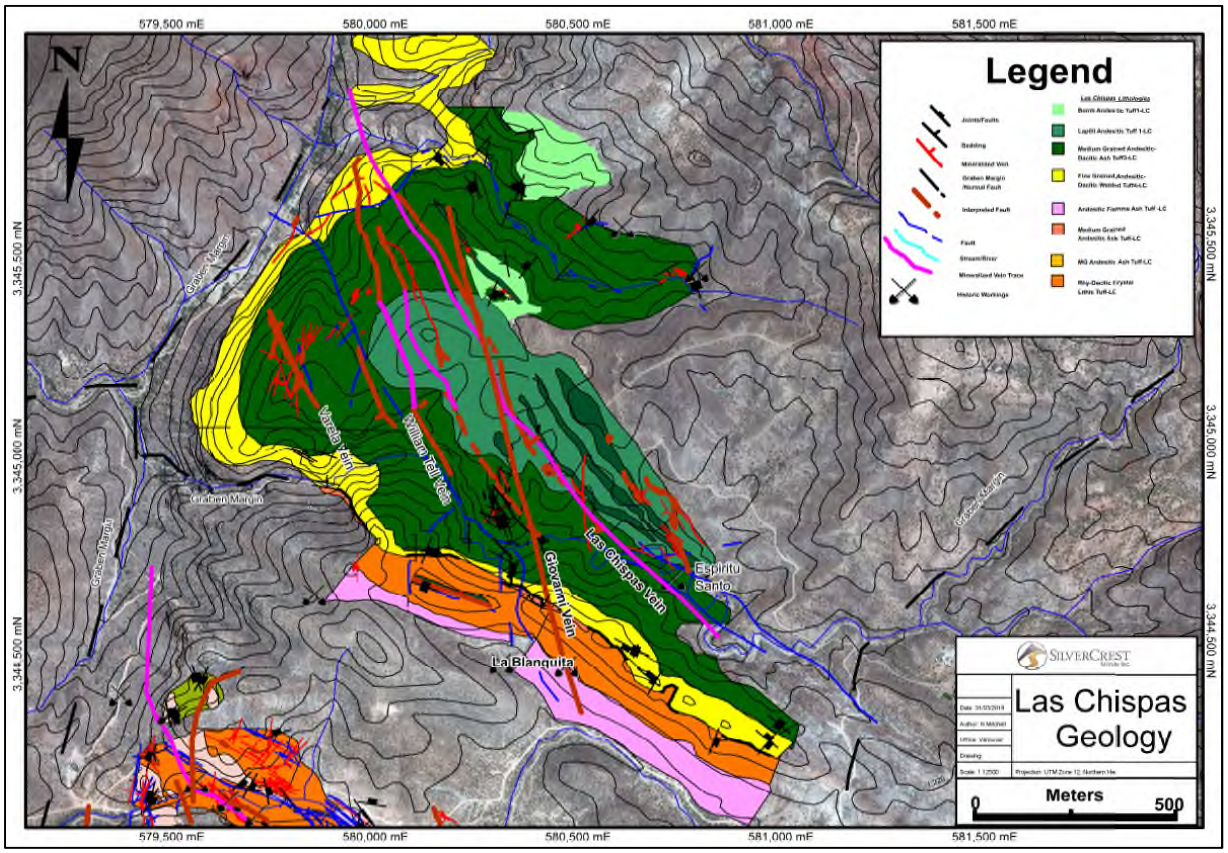
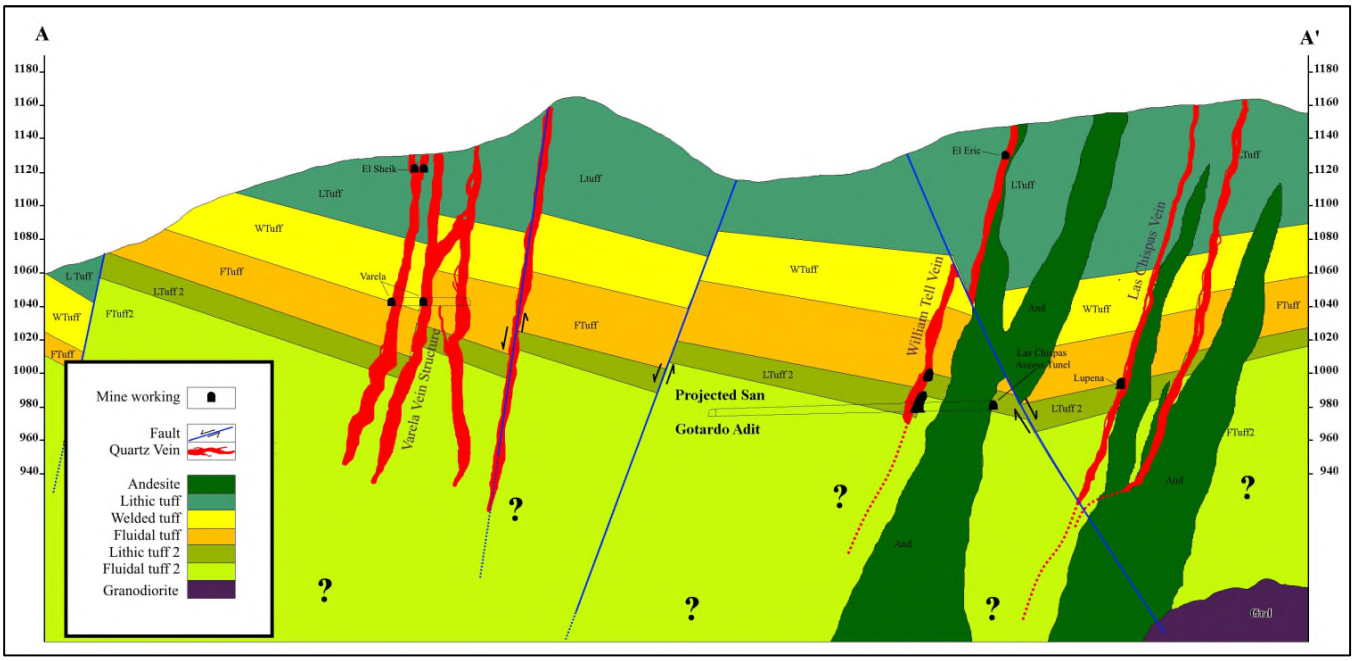


Figure 6-12: Typical Geological Cross-Section through the Las Chispas Property, looking to the Northwest



6.2.5.3 William Tell Vein

The William Tell Vein is located 115 m to the west, and is oriented roughly sub-parallel to, the Las Chispas Vein. The vein intersects and cross cuts the Las Chispas Vein

The mineralization is characterized as a quartz stockwork zone in the footwall of a continuous NE-SW fault striking 140° and dipping 65°. Underground mapping by SilverCrest indicates that mining from the main San Gotardo adit terminated against a cross cutting fault (040°/70°), which SilverCrest interprets to have approximately 10 m of left lateral displacement, based on drilling results.

The William Tell Vein is hosted in the same sequence of course to fine grained volcaniclastic, flows and pyroclastics that are detailed in the Las Chispas vein description. Alteration is comprised of; white clays, sericite, fine grained chlorite with strong silicification. Within the mineralized structure and central vein; fine pyrite, limonite and Fe-oxides are present.

Historic mining of the structure is contemporaneous to mining within the Las Chispas Vein, although there is limited historic documentation available. The northern portion of the historical workings can be accessed from the same adit that connects with the San Gotardo level within the Las Chispas Vein. The extents of mapped workings total approximately 3 km horizontally over three levels, and approximately 60 m vertical (450 level to 650 level). A shaft, and/or small stope, from the lower working level exists. The vertical extent of this shaft/stope cannot be confirmed but based on the historical long section and drilling in the area it is not believed to be significant.

Mining activity along this structure south of the projected fault cannot be confirmed; however, no voids were intersected by SilverCrest drilling where the structure was interpreted to be and no surface workings are noted.

In 2016, underground channel sampling by SilverCrest was completed with high-grade mineralization defined in pillars and intact exposures (Figure 6-8).

Photo 6-8: William Tell Underground Channel Sample No. 144840 grading 13.4 gpt Au and 1,560 gpt Ag, or 2,565 gpt AgEq

Photo 6-9: William Tell Vein, drillhole LC16-03; from 172m to 176m, 4m (1.5m true width) grading 2.03 gpt Au and 683 gpt Ag, or 835.25 gpt AgEq

6.2.5.4 Giovanni and La Blanquita

Giovanni and La Blanquita Veins were discovered by SilverCrest in 2016 while drill testing the Las Chispas Vein from surface. The La Blanquita may be the southern extension of the Giovanni Vein with similar orientation.

The mineralization is hosted in a quartz stockwork zone striking 340° to 10°, near vertical dipping, and cross cutting the same volcanic units as the Las Chispas Vein. The best lithologic host appears to be a lapilli lithic tuff approximately 200 m in thickness. The zone is near-parallel to an andesite dyke.

The Giovanni Vein is exposed in several historic cross cuts in the Las Chispas Vein historic workings but was never historically mined. A photo of the vein intersection in drillhole LC-17-69 is shown in Photo 6-10.

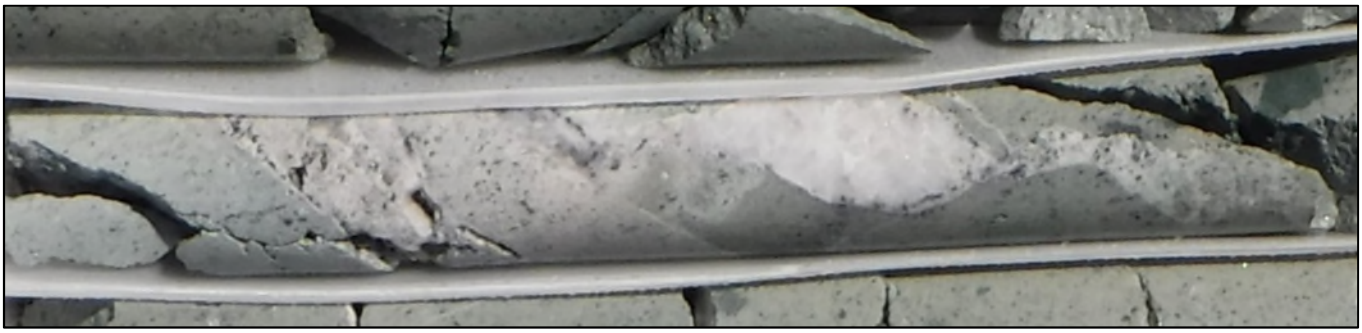
Photo 6-10: Drillhole LC-17-69; from 168.2 to 169.75 m, includes 1.6 m True Width, Grading 1.95 gpt Au and 252.0 gpt Ag, or 398.25 gpt AgEq

La Blanquita is located 250 m southwest of the projected extension of the Giovanni Vein on the south-western flank of a south-east trending ridge. Historic information on the target is limited, although there are historic trenches pits and what look to be waste dumps (Photo 6-11).

Photo 6-11: La Blanquita historical dumps in distance to right, looking NW

At surface, the host rocks are strongly clay altered with moderate to strong sericite. Fine grained chlorite is also noted, but is confined to a fine-grained crystal crowded rhyo-dacitic ash. Chalcedonic and saccharoidal silicification and veining is noted along the surface trace of the mineralized zone, infilling joints and fractures (Photo 6-12).

Photo 6-12: Drill Core, LC-17-61 at La Blanquita, 116.0-116.55 m, 6.65 gpt Au and 1,445 gpt Ag, or 1,943.8 gpt AgEq in a Saccharoidal-Comb Quartz Vein



6.2.5.5 Other Structures or Mineral Occurrences of Significance

Amethyst Vein

The Amatista Vein is located 200m southeast of, and parallel to the Babicanora Vein. Historic information is limited, but there are numerous historic workings pits and trenches along the 1 km strike length of the surface lineament.

The Amatista Vein is steeply dipping and strikes 140°. It is cross cut by several Property scale 045° faults that offset the adjacent Babicanora Vein up to 65 m. The mineralization is hosted in sequence of 10-15°, northeast dipping, andesitic to dacitic course to fine grained volcaniclastic, flows and pyroclastics. The individual units and lithology details are detailed in the Babicanora target write-up. BA-17-20 drill-intercepted high-grade mineralization from 75.7 m to 78.2 grading 3.05 gpt Au and, 77.8 gpt Ag, Photo 6-13.

Photo 6-13: Drillhole BA-17-20, from 75.7 m to 78.2 m Grading 3.05 gpt Au and, 77.8 gpt Ag, or 306.55 gpt AgEq

La Victoria Vein

This area is defined by small workings near surface on the southwest portion of the Property. The workings consist of three short and vertically offset tunnels, each approximately 30 m in length, and trending 320° with inclination of approximately 70 degrees to the northeast. SilverCrest has constructed new overhead reinforcement due to the highly oxidized and soft nature of the host rock, comprised of strongly clay altered breccia. SilverCrest recent sampling of old underground workings suggests this structure to be gold-dominated with assays up to 100 gpt Au.

Historical sampling from three levels of the La Victoria Mine by Ronald Mulchay in 1941 assayed as high as 6.5 ounces per tonne gold (approximately 220 gpt Au) with minor silver with a gold to silver ratio of 1:1 for high-grade mineralization.

In June 2016, three drill holes were drilled down-dip of the workings by SilverCrest. Significant mineralization was not intersected by the drill holes, suggesting a possible offset in the mineral continuity at depth or epithermal zonation. Significant alteration was encountered in the drill holes along with multiple stages of intrusive activity. The nature of the mineralization and alteration at La Victoria is currently not well understood. Future additional work is proposed by SilverCrest.

Espiritu Santo Vein

The Espiritu Santo workings are developed to the southeast of the Las Chispas Vein and William Tell Vein. Two adits are accessible, leading from and below a local drainage (arroyo).

Two structural trends appear to have been mined in the workings. The first, on an upper level of strikes 150° with a dip of 60°. The second, on the lower level strikes 290° with a dip of 48°. The latter mineralization is as stockwork within the footwall and parallel to the volcanic bedding contact. At surface, the andesitic volcanics that are exposed are strongly silicified with moderate to strong clay alteration focused along the above noted structures. Historic selective underground sampling shows grades at Espiritu Santo as high as 500 ounces per tonne silver (Mulchay). Modern dump samples returned seven samples greater than 111 gpt Au and 100 gpt Ag to 892 gpt Ag. One drill hole was completed at the target with negligible results.

La Varela Veins

The La Varela workings are located approximately 300 m to the west of the William Tell Vein. The workings are oriented along strike 170° and are near vertical with an average vein width of 1 m. Higher grade precious metal mineralization is dominant in the southern part of the two noted veins. SilverCrest has rehabilitated the existing underground workings (est. 400 m) with mapping and sampling.

Granaditas Vein

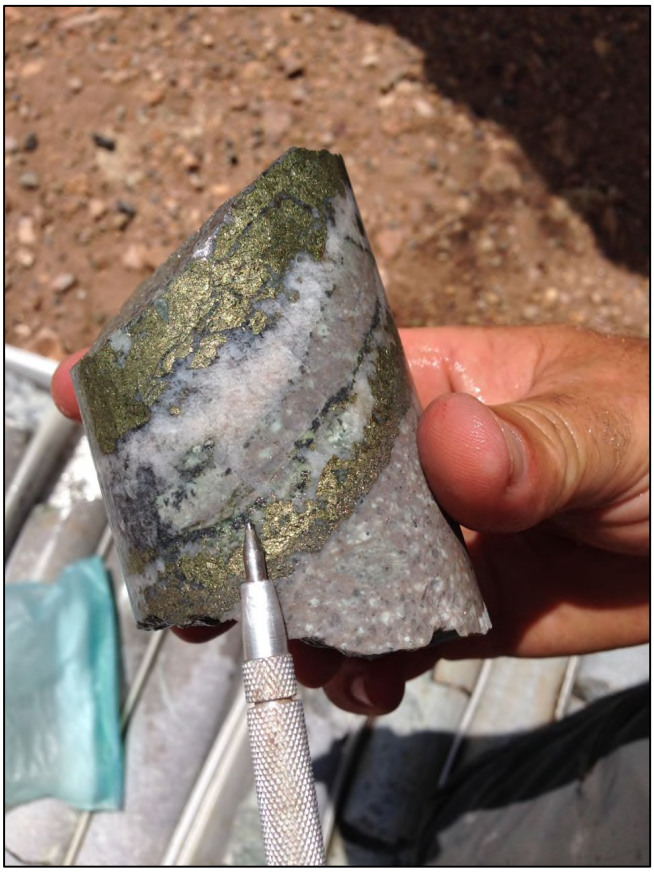
The Granaditas Vein is located to the southeast of Babicanora in the eastern portion of the Property. The Spaniards discovered the Granaditas Mine in 1845 (Dahlgren, 1883) with subsequent mining. Little information is available on this historic mine. Mining appears to have been to a depth of 90 feet with about US$300,000 (historic dollars) in ore extracted. After a local rancher provided an 1882 district map, SilverCrest was able to locate several adits, shafts, and dumps in the area.

The showing is located within 75 m of the confluence of two major lineaments interpreted as faults. The first trends 040° has a strike length of 3.5 km and is interpreted to be the eastern bounding structure to the Las Chispas graben. The second trends is mineralized, and strikes 145° and parallels the Babicanora trend. The interpreted mineralized strike length is over 500m. Both drill holes had significant broken zones and encountered mafic andesitic dykes at depth.

Alteration at the target is consistent with the low-sulphidation model with strong silicification in patches, strong clay alteration with minor zones of sericite and chlorite.

Seven surface outcrop samples have been collected on the target. Two diamond drill holes were completed on the target. The highest assay was from GR-17-02, which returned values of 387 gpt Ag, 8.15 gpt Au with highly anomalous Pb (600 ppm), Cu (10,250 ppm) and 595 ppm Zn over 0.7 m (Photo 6-14). Copper and base metals are elevated over 20-40 m with grades of 0.5% Pb and 0.3% Zn. These elevated base metal metals suggest that base metals increase to the southeast and may indicate deeper depths of emplacement of the mineralization.

Photo 6-14: Drillhole GR-17-02; from 139.85 m to 140.55 m, 0.7 m Grading 8.15 gpt Au, 387 gpt Ag (998.3 gpt AgEq) and 1.02% Cu



7.0 DEPOSIT TYPES

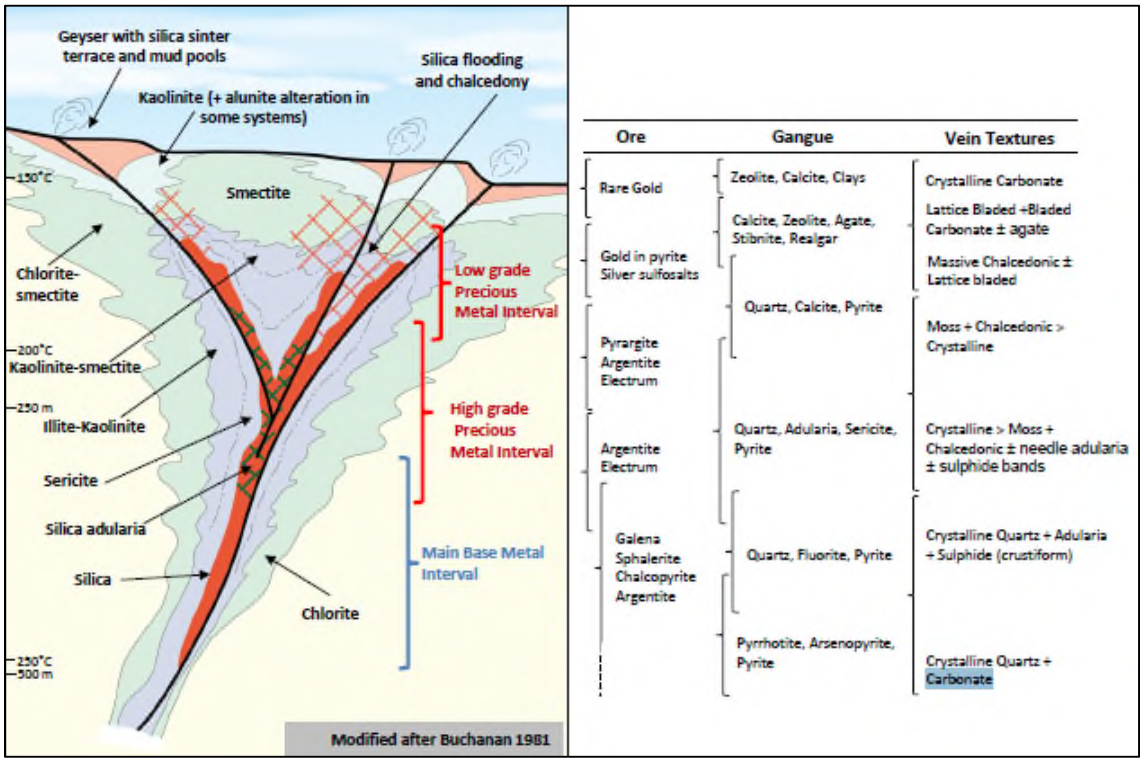
Mineral deposits in the Las Chispas district are classified as silver and gold low to intermediate sulphidation epithermal systems, typical of many local deposits in northeastern Sonora, including the nearby Santa Elena mine (First Majestic Silver) and the Mercedes Mine (Premier Gold). Elsewhere in the Sierra Madre, other examples include the Dolores mine (Pan American Silver) in the state of Chihuahua and Piños Altos mine (Agnico Eagle) also in Chihuahua.

Low-Sulphidation:

The terms low and intermediate sulphidation are based on the sulphidation state of the sulphide assemblages. In low-sulphidation epithermal deposits are formed at shallow depths from hydrothermal systems related to volcanic activity (Figure 7-1). Low-sulphidation deposits typically display all or most of the following characteristics (e.g., Sillitoe, 1991; White and Hedenquist, 1990):

- Hosted in volcanic rocks ranging from andesite to rhyolite in composition.
- Hydrothermal fluids are characterized to be lower temperatures, have circumneutral pH and are reduced.
- Alteration consists of quartz, sericite, illite, adularia and silica. Barite and fluorite may also be present.
- Mineralization hosted in quartz and quartz-carbonate veins and silicified zones.
- Silica types range from opal through chalcedony to massive quartz. Textures include crustiform and colloform banding, drusy, massive and saccharoidal varieties. Calcite may form coarse blades, and is frequently replaced by quartz.
- Deposits of this type may be overlain by barren zones of opaline silica.
- Sulphides typically comprise less than 5% by volume.
- Sulphides average up to several per cent and comprise very fine-grained pyrite, with lesser sphalerite, galena, tetrahedrite and chalcopyrite sometimes present.
- Gold may be present as discreet, very fine grains or may be silica or sulphide refractory.
- Gold and silver grades are typically low, but may form extremely high-grade “bonanza” ore shoots.
- Common associated elements include Hg, As, Sb, Te, Se, and Mo.

Figure 7-1: Detailed Low-Sulphidation Deposit with ore, Gangue and Vein Textures, Buchanan, 1981.



Low-sulphidation gold-silver epithermal systems commonly precipitate gold from hydrothermal fluids in near-surface hot spring environments. The mechanism most commonly evoked for gold precipitation is boiling. As pressure decreases in fluid rising to the surface, boiling occurs. The physical and chemical changes that accompany boiling cause breakdown of the gold-bearing chemical complexes and result in gold precipitation. Because pressure from the overlying fluid column or rock column constrains the level at which boiling occurs, the location of the boiling zone commonly lies within a particular vertical range. However, this depth can change significantly with changes in the water table, sealing of the system, burial of the system through deposition of volcanic rocks, or emergence due to tectonic uplift. The boiling zone is typically within 500 m, and rarely more than 1 km of the surface at the time of mineralization.

Intermediate Sulphidation

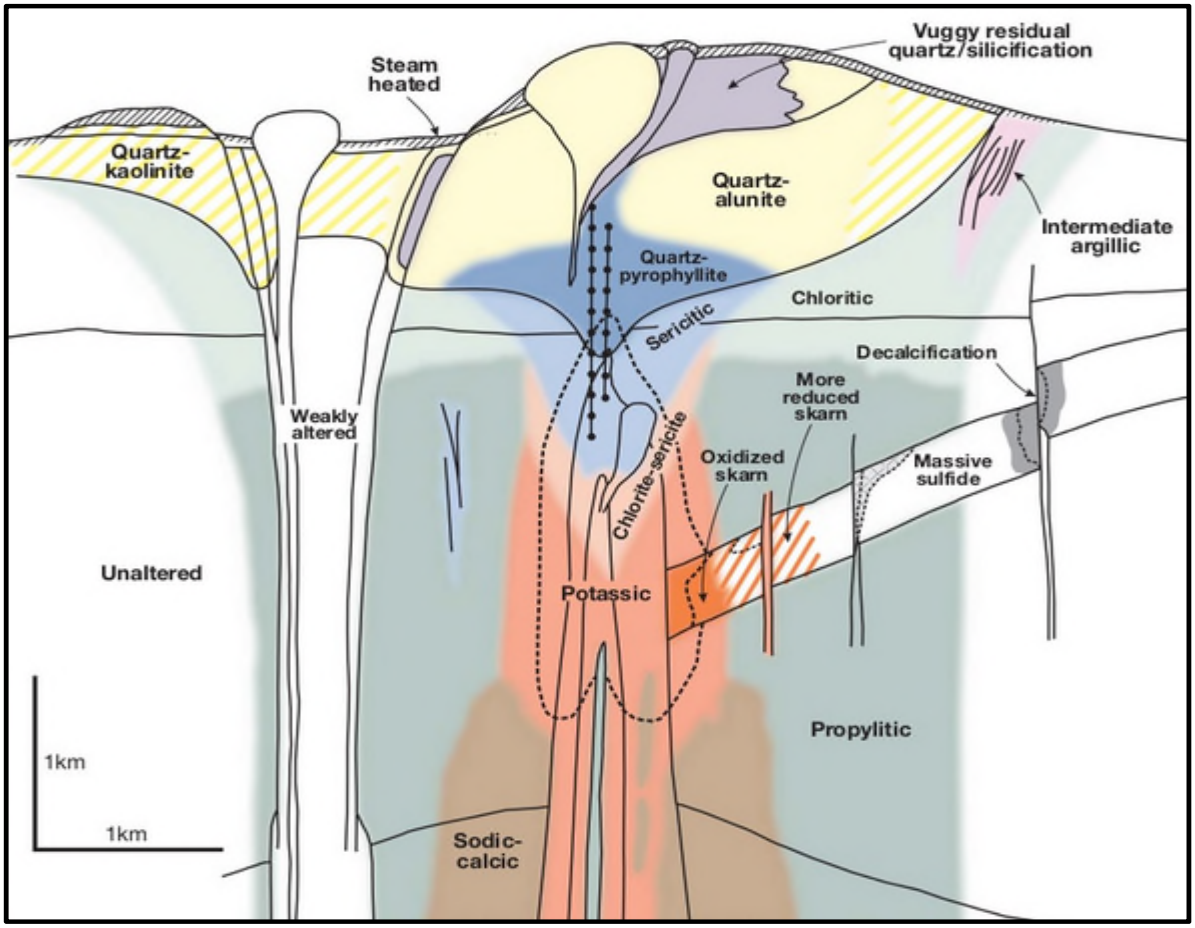
Intermediate-sulphidation epithermal systems are less common but share some characteristics of both the high and the low types. Like the high-sulphidation types, they also occur in mainly in volcanic sequences of andesite to dacite composition within volcanic arcs.

Like the low-sulphidation systems, the mineralization normally occurs in veins, stockworks and breccias. The veins can be rich in quartz, with manganiferous carbonates like manganese-rich calcite or rhodochrosite plus adularia, which typically hosts the gold mineralization. Gold is present as the native metal but is also found as tellurides and in a variety of gold-rich base metal sulphides and sulfosalts. Low iron sphalerite, tetrahedrite-tennantite and galena often are the dominant sulfide minerals. The overall sulfide content of the deposits is in the range of 5 to 20 percent by volume.

Alteration consists of a mixture High and Low-Sulphidation assemblages that may overprint one another depending on the evolution of the fluids. Silica (vuggy), advance argillic (alunite, pyrophyllite, diaspore, dickite, sericite), argillic (kaolinite), anhydrite, barite, sericite, illite and adularia may be present or absent within the system (Figure 7-2).

Permeable host rocks within the deposit may allow the mineral fluids to form a large tonnage of low-grade, bulk-minable stockwork mineralization, Ralf, C, 2017.

Figure 7-2: Illustration of Intermediate Sulphidation Hydrothermal Systems, Sillitoe, 2010



8.0 EXPLORATION

Before SilverCrest acquired the Las Chispas Property in 2015, no drilling had been completed on the northwest to southeast mineralized trend which contains the Las Chispas and Babicanora Areas. This trend is approximately 2.5 km long and 3.5 km wide.

SilverCrest exploration began work on the Property in February 2016 with a primary focus on the Las Chispas, William Tell and Babicanora Veins. From February to November 2016, Phase I exploration program consisted of surface and underground mapping and sampling, and rehabilitating an estimated 6 km of underground working. Drilling of 22 holes during Phase I is described in Section 9 below.

From November 2016 to February 2018, Phase II exploration program consisted of additional surface and underground mapping and sampling, further rehabilitation of 4 km of underground working plus auger and trenching of approximately 186,000 tonnes in 42 surface historic waste dumps. Drilling of 161 additional holes during Phase II is described in Section 9 below.

8.1 Underground Exploration

Initial access to the historical workings, a majority located in the Las Chispas Mine, and commencement of the underground rehabilitation program began in February 2016. Rehabilitation has included removal of backfill, construction of a network of bridges and ladders across open stopes, installation of safety cables, removal of obstructions and unsafe overhead supports, construction of new overhead supports, rough rock scaling and development of a control survey (Figure 8-1). At the effective date, SilverCrest has estimated that approximately 10 km of 11.5 km of underground workings have been rehabilitated.

An ongoing underground sampling program began in February of 2016 in sequence with the underground mine rehabilitation. Collection of a series of select chip samples was followed by a systematic and continuous chip sampling program along the underground development. Chip samples were collected perpendicular to mineralization as transverse samples and as longitudinal samples along footwall or hanging wall contacts through stopes. More than 6,000 chip and channel samples had been collected at the effective date of this report. Of these, 1,094 sample results graded above a cut-off of 150 gpt AgEq with averages of 4.05 gpt Au and 504.4 gpt Ag, or 807.9 gpt AgEq. At the time of the QP site visit, detailed channel samples were being collected at a ratio of one saw sample to ten chip samples for verification purposes.

A total of 94 muck samples have been collected at Las Chispas, grading in average 2.1 gpt Au and 256 gpt Ag, or 414 gpt AgEq.

Summary statistics of underground chip and channel sampling are summarized for the Las Chispas Workings Table 8-1, other workings in the Las Chispas Area in Table 8-2 and workings in the northwest portion of the Babicanora Area in Table 8-3.

Table 8-1: Las Chispas Vein – Significant Channel Sampling Results

Las Chispas	Mean Au	Mean Ag	Mean AgEq
200L	0.050	7.4	11.1
300L	1.008	141.0	216.6
350L	2.329	333.2	507.9
400L	1.688	266.2	392.8
450L	3.237	439.9	682.6
500L	2.549	336.6	527.8
550L	1.784	256.1	389.9
600L	0.410	57.6	88.3
700L	0.121	15.5	24.5
743L	0.615	118.2	164.3
Average	**0.903**	**131.4**	**199.17**
Number of Samples	3,923	3,923	3,923
Max Value	136	10,000	20,200
Min Value	0.002	0.2	0.575
Standard Deviation	3.713	444.5	704.0
Number of Samples >150 AgEq			805

*AgEq based on 75:1 Ag:Au

Table 8-2: Las Chispas Area, Other Vein Targets – Significant Channel Sampling Results

Las Chispas	Mean Au	Mean Ag	Mean AgEq
El Erick	1.85	117.8	256.4
El Sheik	1.16	75.8	162.8
Espiritu Santo	0.02	11.2	12.4
Lupena	0.45	39.4	73.0
Varela	0.22	26.5	43.1
WT500L	1.05	62.8	141.4
WT600L	1.29	145.8	242.4
Average	**0.91**	**73.9**	**142.0**
Number of Samples	1,292	1,292	1,292
Max Value	52.2	3,220	5,455
Min Value	0.01	0.2	0.0
Standard Deviation	3.44	221.4	431.1
Number of Samples >150 AgEq			237

*AgEq based on 75:1 Ag:Au

Table 8-3: Babicanora Area, Other Vein Targets – Significant Channel Sampling Results

Las Chispas	Mean Au	Mean Ag	Mean AgEq
Babicanora	0.41	26.1	56.6
Babicanora de abajo	0.07	7.7	12.6
Bertina	0.08	4.6	10.9
Buena Vista	0.03	7.1	9.1
El Muerto	0.62	33.4	80.1
Jabali	0.15	10.3	21.9
Sementales	0.49	18.7	55.0
Average	**0.31**	**16**	**39**
Number of Samples	756	756	756
Max Value	20.80	821.0	2,381
Min Value	0.01	0.2	1.0
Standard Deviation	1.22	51.9	135.8
Number of Samples >150 AgEq			52

*AgEq based on 75:1 Ag:Au

Figure 8-1: Photos of Las Chispas Underground Rehabilitation Activities

8.1.1 Underground Surveying

A network of control points is first established by a SilverCrest surveying crew once accesses to workings have been rehabilitated and secured. Control points were established at approximately 15 m intervals using portable drills, survey chains, distance lasers and handheld Brunton compass. The control network was then re-surveyed by Precision GPS, with professional surveying crew using a Trimble VX Total Station on level 600 to level 150. The center line of each drift was collected, this included a data set of 178 points. The purpose of this survey was to adjust the tape and Brunton survey completed by the SilverCrest Staff. This underground control network is the base reference for all underground sampling and drilling activities.

8.2 Surface Exploration

Surface exploration has focused on geological mapping and delineation of the numerous historical shafts and portals present across the Property. To the effective date, a total of 1.2 square kilometres has been remapped by SilverCrest geologists.

Surface dump augering, trenching and sampling has been completed. Analytical results received as of the effective date total 1,340 surface dump samples averaging 1.12 gpt Au and 106.6 gpt Ag, or 185.2 AgEq. Select grades from the dump sampling range up to 4,548 gpt AgEq. The mapping data is georeferenced and being used to develop a GIS database for Las Chispas.

In 2017, historical waste dumps were sampled by a trenching and auger program, to collect data, identify dump volumes, and calculate precious metal grades. Data was collected from field measurements using a GPS and trenching rock and sediment material in the dumps. The dumps were later surveyed between December 14th, 2017, and January 26th, 2018, using a Trimble Spectra Total Station Model TS-415. Samples were sent to ALS CHEMEX in Hermosillo, Mexico for preparation and then sent to its Northern Vancouver lab for analysis of gold and silver.

In total, 41 dumps at 20 locations within the Las Chispas Project were sampled by an auger or trenching process between July 2017 and January 2018. The dump names are summarized in Table 8-4 and Figure 8-2.

Table 8-4: List of Surface Stockpiles (dumps, muck and tailing) Mapped on the Las Chispas Property

Dump Name	Sample Style
North Chispas 1, 2	Trench
La Capilla (LCA), tailings	Auger
San Gotardo (LCD)	Trench
Lupena (LUP)	Trench
El Eric	Trench
Locarno 1, 2, 3, 4	Trench
Las Chispas 1, 2, 3 (LCH)	Trench
La Central	Trench
Maria	Trench
Chiltepines 1, 2, 3	Trench
La Providenca 1, 2, 3	Trench
Espiritu Santo 1, 2	Trench
La Blanquita 1, 2	Trench
La Curva 1, 2	Trench
La Bertina 1, 2	Trench
El Muerto 1, 2	Trench
Sementales 1, 2	Trench
Buena Vista 1. 2, 3	Trench
Babicanora 1, 2	Trench
El Cruce 1, 2, 3	Trench
TOTAL	**41**

To initially determine the feasibility of evaluating historical dumps, an auger program was tested in July 2017. Auger drilling was only found to be useful for one dump (La Capilla tailings), due to problems occurring with large rocks and low recovery. A standard mechanical gas-powered auger was used to complete the auger program.

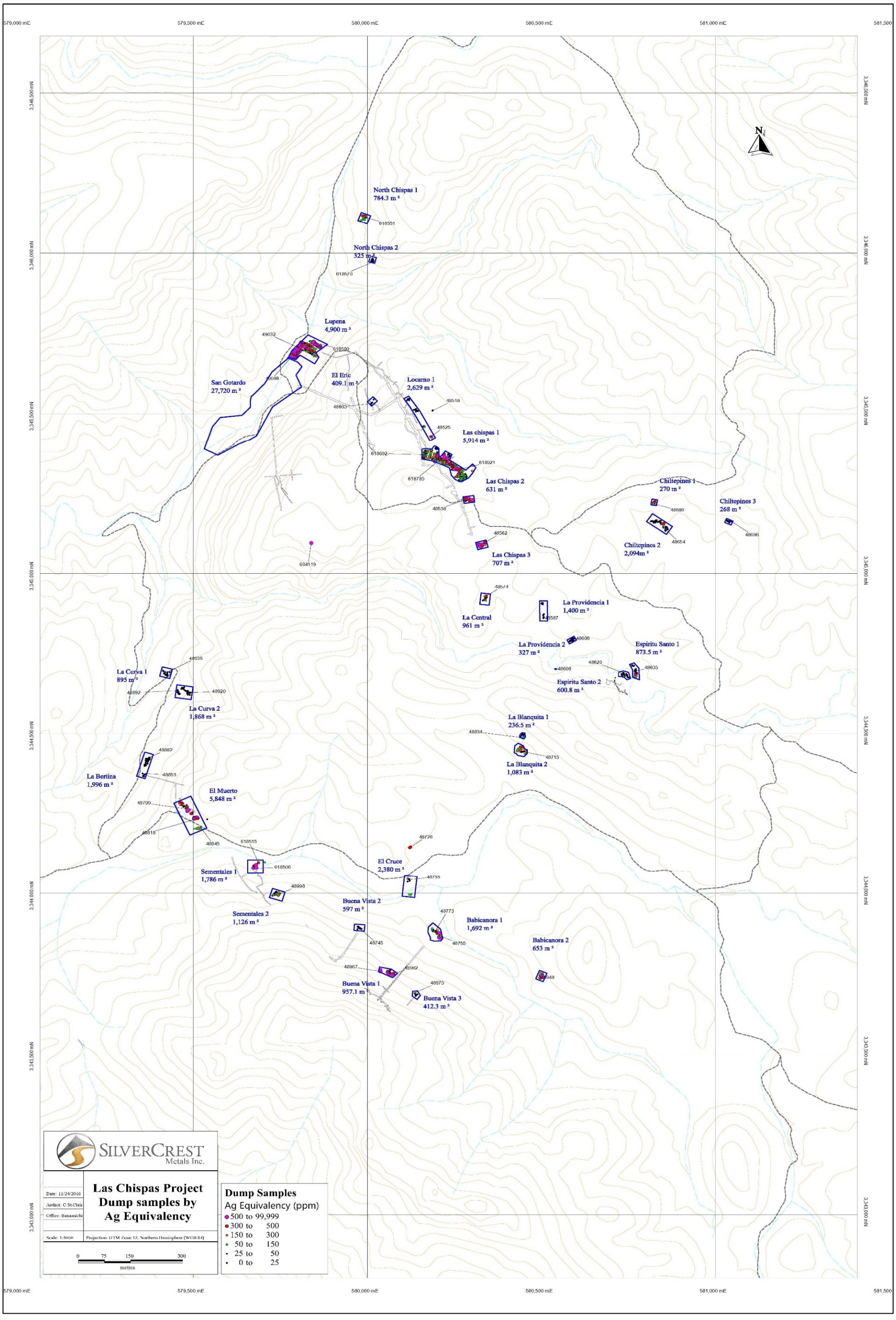
The auger program began by setting up the base grid lines with a north-south direction near the centre of a dump. First, a compass, GPS and tape was used to mark a hole, then flag and tag it with 10 m between each flag. Depending on the site's size, a specific number of gridlines were placed running parallel east-west 10 m away from the base gridline. Second, a tripod was situated over the surface of a flagged hole and a pulley attached at the top. Next, the standard penetration test equipment was aligned at the tripod's centre and the initial hole within 1 m proximity to the flagging. Two personnel man the sampler and one on the capstan, to drive the sampler into the soil surface and down until either the sampler hits a fixed depth of 1 m or it until it cannot gain depth. If a rock prevents

downward movement of the auger, it must either drill down by uplifting it or pushing it into the wall, or the piercer can be used to pulverize the rock. Once a fixed depth or bedrock reached, the sampler is pulled up to the surface placing the contents on a tarp to spread and homogenize the mixture. Each interval was bagged with the hole ID and interval. The process of three personnel manning the sampler and capstan was repeated at 1 m interval depths.

In 2016 and early 2017, initial testing of waste dump material was completed by hand cut trenches for sample collection. Trenches were hand excavated to approximately 0.5 m in the face of dumps with collection of samples every 1 m down strike. This program identified that most dump had significant precious metals that warranted further evaluation.

From mid-2017 to January 2018, mechanical trenching was completed on all accessible historic dumps. A backhoe with used to dig trenches approximately 1.5 m deep and pile materials next to the trench for sampling and description. Samples were collected with and approximate weight of 3 to 5.0 kilograms. Samples were labelled with an interval ID, GPS coordinate, and depth recorded. The backhoe continued to work on an interval until either the soil was reached or the walls collapsed into the trench. The removal process repeats until the backhoe reached the marked end of the trench. Additionally, a supervisor analyzed the piles for quartz percentage, historical trash, and describing the grain size and rock type.

Figure 8-2: Location of Surface Stockpiles and Waste Dumps Mapped and Sampled by SilverCrest



9.0 DRILLING

9.1 Program Overview

SilverCrest completed a Phase I and Phase II surface and underground drill program totaling approximately 45,772 m in 183 core holes starting in March of 2016 and continuing through to February 2018. The Phase I drill program targeted near surface mineralization, lateral extensions of previously mined areas, and potential deep extensional mineralization proximal to the historical workings. The Phase II drill program focused extensive surface drilling at Las Chispas, Babicanora, William Tell, and Giovanni veins and underground drilling at Las Chispas and Babicanora veins.

The Phase II drilling program commenced in November 2016, and was completed in February of 2018. The program included the completion of 161 drillholes totaling 39,379.2 m, and includes 126 holes totaling 35,930.5 m of surface drilling, and 35 holes totaling 3,448.7 m of underground drilling. This drilling program focused on testing unmined portions of the Las Chispas Vein, delineation of the Giovanni, Giovanni Mini, La Blanquita and other unnamed veins, in addition to exploration of the La Varela vein, all within the Las Chispas Area (drillholes ending LC-18-73 and LCU-18-20). Drilling at Babicanora focused on delineating the down plunge and vertical extents of the Babicanora vein, in addition to exploratory drilling on the Amethyst Vein and the Granaditas target, all within the Babicanora Area (drillholes ending BA-18-69 and UB-17-13).

A summary of drilling is provided in Table 9-1 and Figure 9-1. Surface collar locations were initially surveyed using a handheld GPS unit, then professionally surveyed by local contractor. The most recent surface survey was done by external consultant, David Chavez Valenzuela between December 14th, 2017, and January 26th, 2018. This survey was done using a Trimble Spectra Total Station Model TS-415. The purpose of this survey was to survey surface drill hole collars, locations of adits and shafts, additional roads and the crest and toe of the larger dumps.

Underground collars were surveyed using the underground control points established for each of the workings, which were professionally surveyed. All holes were surveying as single shot measurements with a Flex-it® tool starting at 15 m with measurements at every 50 m to determine deviation. The survey measurements were monitoring for significant magnetic interference from the drill rods which would prevent accurate readings.

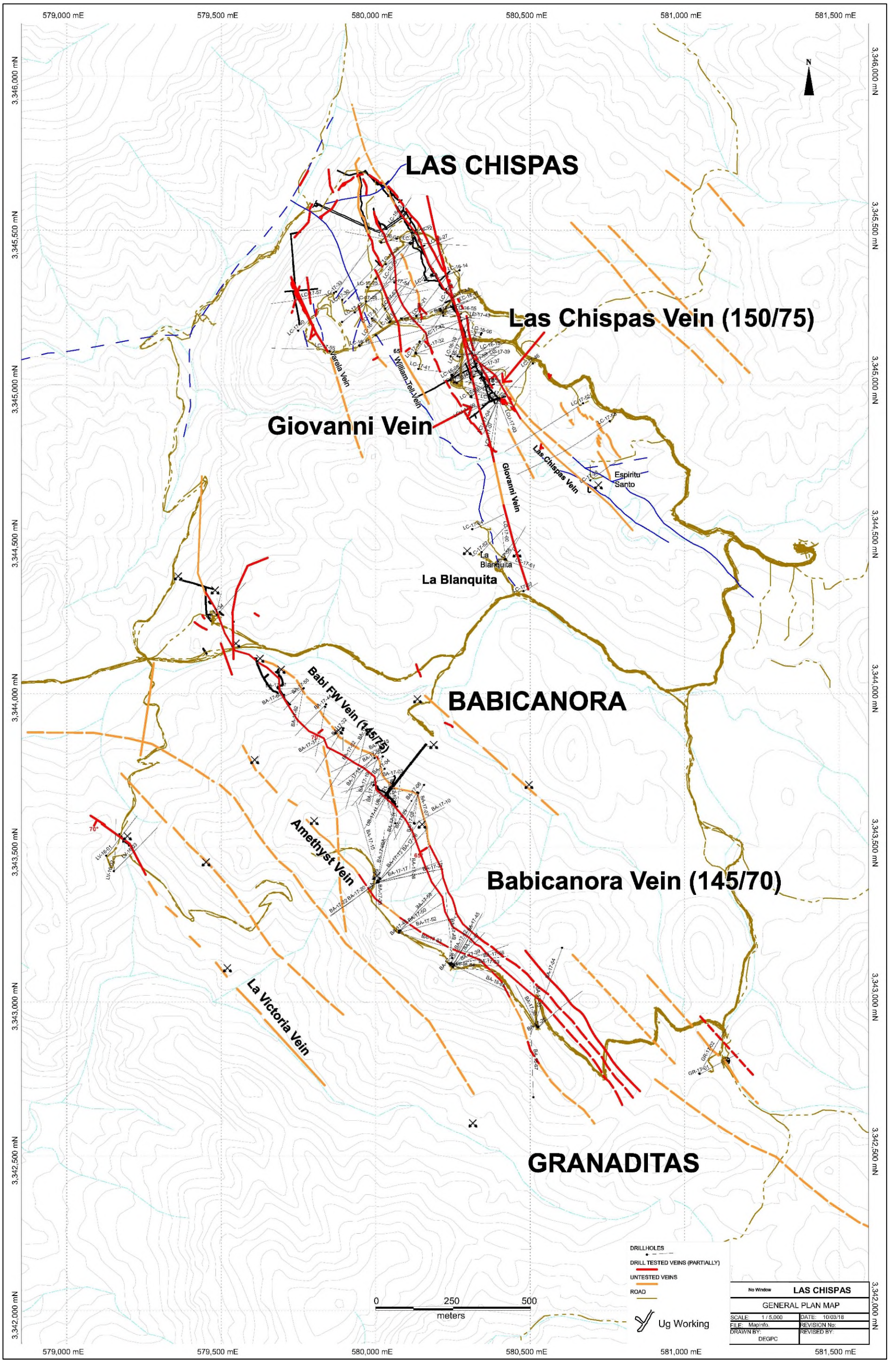
Table 9-1: Summary of Phase I and Phase II Drilling Completed by SilverCrest

Phase	Main Area	Drill Location	Number of Drillholes	Length Drilled (m)	Number of Samples	Length of Samples (m)
Phase I						
	Las Chispas[1]	Surface	19	5,461.4	3,620	5,402.42
	La Victoria	Surface	3	931.2	711	924
Subtotal			**22**	**6,392.6**	**4,331**	**6,326**
Phase II						
	Las Chispas[1]	Surface	54	14,136.85	10,664	11,518.16
		Underground	21	1,998.35	1,764	1,771.65
	Babicanora[2]	Surface	70	21,140.20	8,848	9,838.95
		Underground	14	1,450.35	1,251	1,414.65
	Granaditas	Surface	2	653.45	594	653.45
Subtotal			**161**	**39,379.2**	**23,121**	**25,196.9**
Total			**183**	**45,771.8**	**27,452**	**31,523.3**

[1] Las Chispas totals include some re-drilled holes, includes holes drilled at William Tell, Giovanni, Giovanni Mini, La Blanquita, La Varela, and other unnamed veins in the Las Chispas Area.

[2] Includes Amethyst Vein and other unnamed veins in the Babicanora Area.

Figure 9-1: Map of Drilling Completed by SilverCrest on the Property



9.2 Drilling Results

9.2.1 Phase I

A total of 4,331 core samples, totaling 6,326.4 m, were collected and assayed during the Phase I program. The program targeted the historical Las Chispas vein to verify location of the vein and existence of mineralization along trend of mapped historical workings. All drill holes intercepted quartz stockwork veinlets, veining and/or breccia along with variable amounts of Au and Ag mineralization. The results confirmed the historic mineralized structure and suggest that relatively unexplored and unmined areas exist proximal to the historic workings. Hole LC-16-05 intercepted 4.6 m (true) at 4.56 gpt gold and 622 gpt silver, or 963 gpt AgEq, in a breccia. The intersection is near the location of an underground channel sampling grading 1,163 gpt AgEq over 8 m in vein strike length and 1 m width.

Additional drilling targeting the William Tell Vein intercepted the mineralized structure in four of seven holes with grades greater than 400 gpt AgEq over estimated true widths of 0.8 to 1.5 m.

The 2016 program also included three holes (LV-16-01, LV-16-02 and LV-16-03) in the La Victoria area, located 800 m southwest of the Babicanora Vein. These holes intersected only low-grade mineralization.

Significant results for this drilling were reported in the Qualifying Report for Las Chispas, with effective date September 15, 2016 (Tetra Tech., 2016).

9.2.2 Phase II

A total of 23,121 core samples, totaling 25,196 m, were collected and assayed during the Phase II program. The program targeted delineation and expansion of known vein targets at Las Chispas, William Tell and Babicanora, and tested new targets such as at La Varela, La Blanquita, Granaditas and Amethyst veins. Significant drillhole intercepts for these areas are presented in Table 9-2.

Babicanora

Underground drilling at Babicanora was undertaken from the footwall of the vein while access roads were developed for surface drilling. Underground drilling intercepted the northwestern portions of the vein with highlights including UB-17-05 which intercepted 6.1 m (true) of 4.84 gpt Au and 383 gpt Ag, or 746 AgEq. The northwestern portion of the vein was accessed by lower elevation drill roads which permitted access to the vein from the footwall side. Mineralization intercepted in this area appears to be related to higher levels within the epithermal system.

The northwestern and southeastern portions of vein are believed to be offset by a cross cutting fault intercepted by holes BA-17-24 and BA-17-07. The southeastern portion of the vein was accessed via a high elevation road from the ridge crest permitting drill access to the vein from the hangingwall side. Numerous high-grade intercepts were made in this area, including the most significant in hole BA-17-51 with estimated true thickness of 3.1 m grading 40.45 gpt Au and 5,375 gpt Ag, or 8,409 gpt AgEq. Fourteen drillholes have been drilled in this area which have intercepted additional high-grade intervals. This area was named Area 51 following confirmation of a bonanza grade mineral trend plunging approximately 19 degrees to the southeast for approximately 550 m and with approximately 200 m of vertical extent. This area represents a deeper portion of the epithermal system within the precious metal zone compared to intercepts in the northwestern portion of the vein.

Las Chispas

Surface drilling of the Las Chispas Vein in continuity with Phase I drilling to test unmined area from historical operations, test the vein extents to the southeast and to depth, and to delineate numerous unnamed veins intercepted in previous drilling. Hole LC-17-58 intercepted 1.5 m (true) of 0.85 gpt Au and 172 gpt Ag, or 235.8 gpt AgEq, at 400 m downhole depth which represents the deepest and furthest intercept to the southeast to be intercepted along the projected Las Chispas Vein by SilverCrest. Underground drilling from within the historical workings targeted vein mineralization proximal to Las Chispas, mainly Giovanni and Giovanni Mini. A significant intercept from this program include hole LCU-17-04 which intercepted the Giovanni Vein over 6.3 m (true) grading 1.97 gpt Au and 241 gpt Ag, or 388.8 gpt AgEq.

William Tell

Drilling at William Tell continued to intercept mineralized vein material over narrower vein widths than Las Chispas. A significant drill intercept from the Phase II program includes hole LC-16-30 which represents the down dip continuation of the vein with intercept of approximately 1.5 m (true) grading 0.39 gpt Au and 427.7 gpt Ag, or 457 gpt AgEq.

La Blanquita

A total of seven drillholes were completed to test the La Blanquita mineralized area, with anomalous mineralization intercepted in six of the holes. The vein is approximately 1 m true thickness with a significant intercept represented by hole LC-17-61 which intercepted 1 m (true) grading 2.39 gpt Au and 516 gpt Ag, or 695.3 gpt AgEq.

La Varela

The vein sits approximately 200 m southwest of William Tell and was tested by three drillholes (LC-17-40, LC-17-55, and LC-17-57). The holes intercepted a mineralized quartz structure with highlights including 2.9 m (downhole) grading 0.44 gpt Au and 73 gpt Ag, or 106 gpt AgEq.

Granaditas

This area was tested by two drillholes testing interpreted vein mineralization adjacent small historical workings. Mineralization intercepted in the vein was characterized as subdominant silver and gold bearing with more significant sulphide hosting elevated base metal concentrations, including a 0.7 m intercept with 8.15 gpt Au, 387 gpt Ag (998.3 gpt AgEq), 1.02% Cu, 0.06% Pb and 0.06% Zn. The areas are interpreted to represent deeper portions of the epithermal mineralizing system, if in continuity with mineralization observed to the north west, approximately 750 m to the northwest, in the Babicanora Area.

Table 9-2: Most Significant Drill Holes for Las Chispas

Hole No.	From (m)	To (m)	Est. True Width (m)	Au gpt	Ag gpt	AgEq* gpt	Vein
BA17-04	43.9	53.4	6.6	1.03	328.5	406	Babicanora
BA17-07	207.6	219.6	4.8	4.63	250.9	598	Babicanora
BA17-17	273	276	2.9	5.62	172.7	594	Babicanora
BA17-18	148.9	152.9	3	4.34	130.4	456	Babicanora

Hole No.	From (m)	To (m)	Est. True Width (m)	Au gpt	Ag gpt	AgEq* gpt	Vein
BA17-23	131	136	4	0.05	397.4	401	Babicanora
BA17-27	286.5	291	4.1	3.56	137	404	Babicanora
BA17-31	313.7	317.5	3.8	5.65	451.5	875	Babicanora
BA17-33	225.7	228.9	3.1	5.08	570.5	951	Babicanora
BA17-36	241.4	243.5	2	3.65	451.6	725	Babicanora
BA17-38	15	18.6	3.6	4.21	165	481	Babicanora
BA17-42	279.8	282.4	2.2	3.79	388.1	673	Babicanora
BA17-43	324.4	328	3.2	26.95	1,493.60	3,515	Babicanora
BA17-46	6.5	8.1	1.2	54.2	2,020.70	6,086	Babicanora
BA17-47	268.5	272	3.2	4.96	859.1	1,231	Babicanora
BA17-48	289.8	293.2	3.1	6.82	343.1	855	Babicanora
BA17-48	324.2	325.8	1.4	5.1	438.8	821	Babicanora
BA17-49	324.3	326.5	2	18.2	1,791.40	3,158	Babicanora
BA17-50	313.3	318.7	5	1.95	265.2	411	Babicanora
BA17-51	265.9	269.2	3.1	40.45	5,375.20	8,409	Babicanora
BA17-52	340.4	343.9	2.7	7.2	593.9	1,134	Babicanora
BA17-53	363.8	366.7	2.2	3.15	378.9	615	Babicanora
BA17-58	340.7	345.7	3.3	1.96	176.3	323	Babicanora
BA17-63	468.7	473.3	3.5	41.05	1,074.50	4,153	Babicanora
BA18-64	380	383	2.6	2.21	273.3	439	Babicanora
BA18-65	382.6	387.6	3.9	12.13	1,411.60	2,321	Babicanora
BA18-82	270.2	275.1	4.9	0.35	179.4	205	Babicanora
UB17-01	33.5	40.9	4.5	1.3	343	440	Babicanora
UB17-03	23	29.9	2.8	3.29	447.2	694	Babicanora
UB17-04	9.1	15.6	5	3.91	182.5	476	Babicanora
UB17-05	7.7	14.5	6.1	4.84	383	746	Babicanora

Hole No.	From (m)	To (m)	Est. True Width (m)	Au gpt	Ag gpt	AgEq* gpt	Vein
UB17-09	70.2	77.8	7.6	4.08	196.1	502	Babicanora
UB17-11	85.1	92.5	3.7	2.58	332.6	526	Babicanora
LC16-06	66	67	0.7	14.9	1,815.00	2,933	Giovanni
LC17-35	106.5	108.6	2.1	3.4	329.7	585	Giovanni
LC17-37	205.3	207.6	2.3	3.57	577.8	845	Giovanni
LC-17-45	222.3	227.1	4.1	1.71	231.8	360	Giovanni
LC17-68	106	108	2	5.85	1,191.50	1,630	Giovanni
LC17-72	115	119	4	18.61	696.2	2,092	Giovanni
LCU17-04	34.3	42.5	6.3	1.97	241.4	389	Giovanni
LC17-60	100.6	102.7	2.1	2.28	469.5	641	La Blanquita
LC17-61	115.5	117.1	1.6	2.39	516	695	La Blanquita
LC16-08	171	182	7.2	2.41	311.5	493	Las Chispas
LC-17-45	159.6	161.9	1.9	50.56	5,018.80	8,803	Las Chispas
LC-17-58	440.8	443	1.32	0.85	172.5	236	Las Chispas
LCU17-02	6.8	10	2.2	9.42	1,369.3	2,076	Las Chispas
LC17-65	243	244.5	1.5	13.22	2,006.7	2,999	Luigi
LC16-30	249.85	251.75	1.5	0.39	427.8	457	William Tell

*AgEq based on 75:1 Ag:Au

** All holes were drilled at angles to mineralization and adjusted for true thickness.

10.0 SAMPLE PREPARATION, ANALYZED, AND SECURITY

To date, four types of sample collection programs have been conducted on the Property:

1. Underground and Surface Sampling as chip samples and/or channel samples.
2. Stockpile/Backfill Sampling as in situ muck from draw points and/or placed/remobilized muck within underground development.
3. Drill Core Sampling as hand split core and/or wet saw cut core.
4. Surface dump trenching and sampling.

The sample collection approaches being conducted by SilverCrest are described below. A sample processing facility has been established by SilverCrest on the Property where core samples are logged, SG measurements collected, photographed, sampled, bagged and tagged, and stored on site prior to being transported to the laboratory by SilverCrest staff. Underground chip samples are bagged and tagged at the point of collection and are also stored at the sample processing facility. All CRM and blank materials are stored indoors within the facility.

10.1 Underground Chip Sample Collection Approach

The following describes SilverCrest's approach to underground in situ rock sample collection:

- Underground continuous chip samples were being marked by a geologist per lithology/mineralization contacts using spray paint prior to sample collection;
- The chip samples were collected using a small sledge hammer, a hand maul/chisel and a small tarp on the floor to collect the chips;
- The chip samples were then collected and placed into clear plastic sample bags with a sample tab, secured with a zip tie, labelled and stored in the semi-secure core storage facility at Las Chispas prior to be transported to the ALS Chemex preparation facility located in Hermosillo;
- The chips were collected along development ribs as longitudinal samples, along backs and overhead stope pillars as transverse samples, and along some cross cuts as transverse samples. The SilverCrest collection program was eventually modified to allow identification of each sample type in the geological database;
- A follow-up program has been initiated by SilverCrest where duplicate samples were collected using a power saw to cut a channel along the initial chip path; saw cut samples were being collected at approximately every 5 to 8 samples, depending on access;
- Each sample path is labelled with a sample number written on a piece of flagging and anchored to the development wall; and
- Follow-up review of the sampling program is conducted by the Senior Project Geologist and the Exploration Manager to ensure that all development tunnels near the mineralized zone have been sampled, that transverse samples were properly collected across veins, and that the samples were clearly and properly labelled.

10.2 Underground Muck/Stockpile Sample Collection Approach

The following describes SilverCrest's approach to underground muck and/or stockpile sample collection:

- Samples have been conducted at random within the existing muck and material stockpiles in the Las Chispas, William Tell and Babicanora workings;
- The average mass of the sample that were collected was approximately 4 kg;
- Sample spacing along continuous muck piles was approximately 10 m, suggesting each sample could represent approximately 20-40 tonnes of material, depending on the size of the pile;
- Sample collection is understood to be completed by hand or shovel, from near surface material, as non-selective collection to be representative of both the fine and coarse fragment portions of the muck piles;
- The muck samples were then collected and placed into clear plastic sample bags with a sample tab, secured with a zip tie, labelled and stored in the semi-secure core storage facility at Las Chispas prior to be transported to the ALS Chemex preparation facility located in Hermosillo; and

- Follow-up review of the sampling program is conducted by SilverCrest's Senior Geologist and Exploration Manager to ensure that all appropriate muck piles have been sampled, and that the samples were clearly and properly labelled.

10.3 Drill Core Sample Collection Approach

The following describes SilverCrest's approach to drill core sample collection:

- The drill holes were logged by project geologists, and reviewed by the Senior Project Geologist;
- Sample intervals were laid out for the entire hole, roughly adhering to minimum 1 m sample lengths in mineralized material up to a maximum of 3 m (more generally 2 m) in non-mineralized rock;
- Each sample interval has been either split using a hand splitter or cut by wet core saw perpendicular to veining as much as possible to leave a representative core in the box and to reduce bias in mineral submitted with the sample;
- Half of the core is placed into clear plastic sample bags with a sample tab, secured with a zip tie, labelled and stored in the semi-secure core storage facility at Las Chispas before being transported to the ALS Chemex preparation facility located in Hermosillo; and
- Follow-up review of the core sampling program is conducted by SilverCrest's Senior Geologist and Exploration Manager to ensure that each core sample has been properly split/cut, that the sample intervals were clearly marked, representative core samples remain in the corebox, and that sample tags were stapled to the core boxes in sequential order.

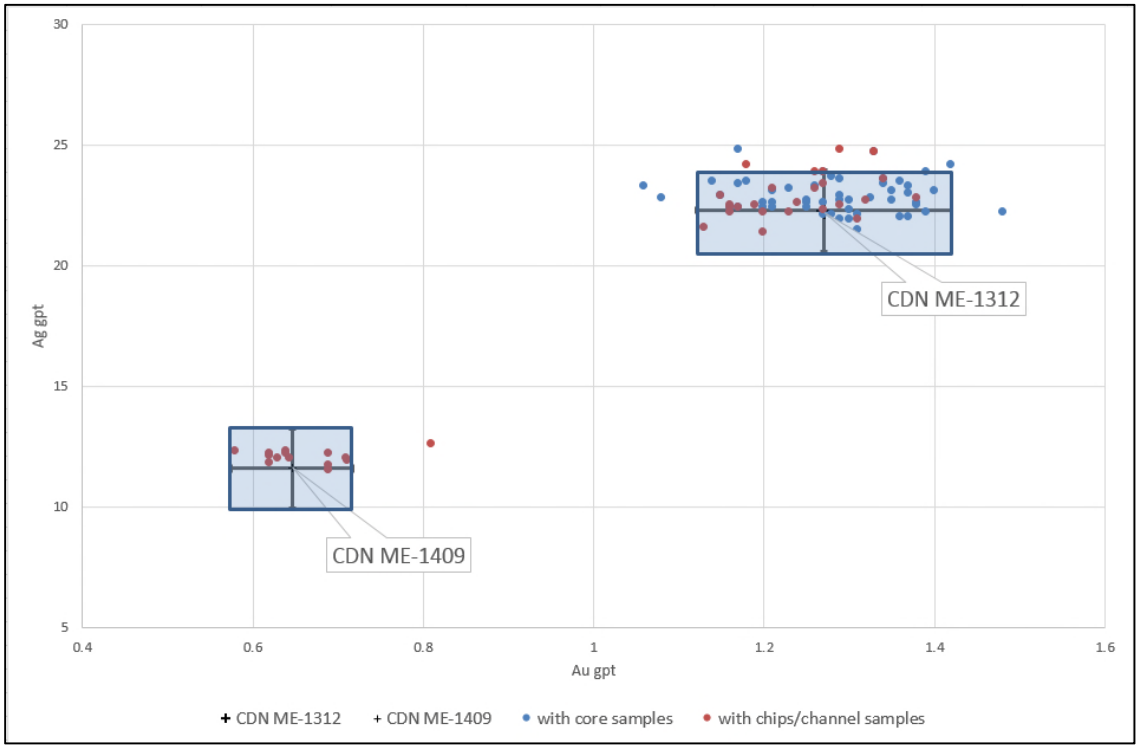
10.4 SilverCrest Internal QA/QC Approach

At the exploration stage, SilverCrest is currently implementing a program of certified reference material (CRM), blank sample insertions for all sample types being collected, and duplicate samples for some underground chip samples.

10.4.1 SilverCrest, Phase I Program

For review and assurance of analytical accuracy in the lab, insertion of CRMs are made at an interval of 1:50. The CRMs being used by SilverCrest alternate between CDN-ME-1312 and CDN-ME-1409. A total of 99 CRM samples were noted in the database reviewed by Tetra Tech. A scatter plot showing the analytical results for the CRMs and in relation to their referenced error of two standard deviations is shown in Figure 10-1.

Figure 10-1: Scatter Plot of CRM Results, Showing Two Distinct CRM Populations, and Point Deviation Around CDN-ME-1312 Greater than Two Standard Deviations (SD)



For monitoring of in situ contamination or contamination of sample crushing, grinding and sorting equipment, SilverCrest inserted a benign rock sample at an interval of 1:50. The material used for blanks was collected from a nearby silica cap. A total of 101 blank insertions were noted in the database was reviewed by Tetra Tech. Of these, only one is located adjacent a sample with >50 gpt Ag. The analytical results for the blank samples are shown in Figures 10-2 and 10-3.

A high level review of the sample insertions (CRMs and blanks) in the SilverCrest database indicated the following:

Figure 10-2: Analytical Results for Gold Grades from QAQC Blank Sample Insertions

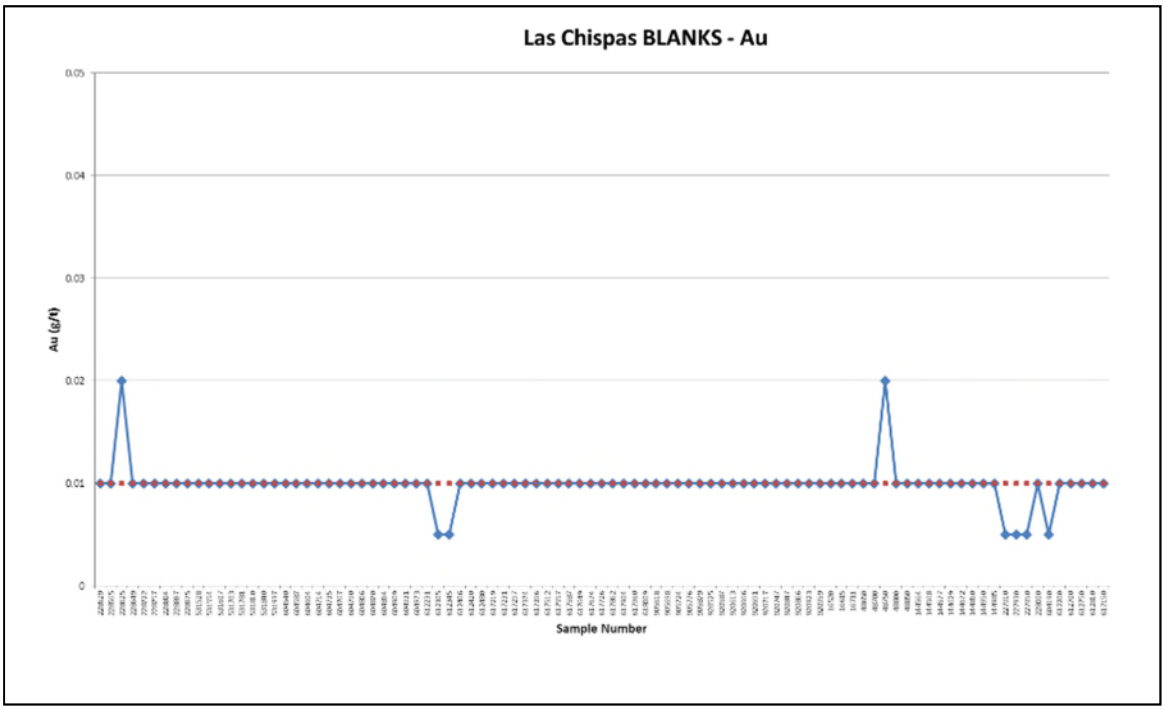
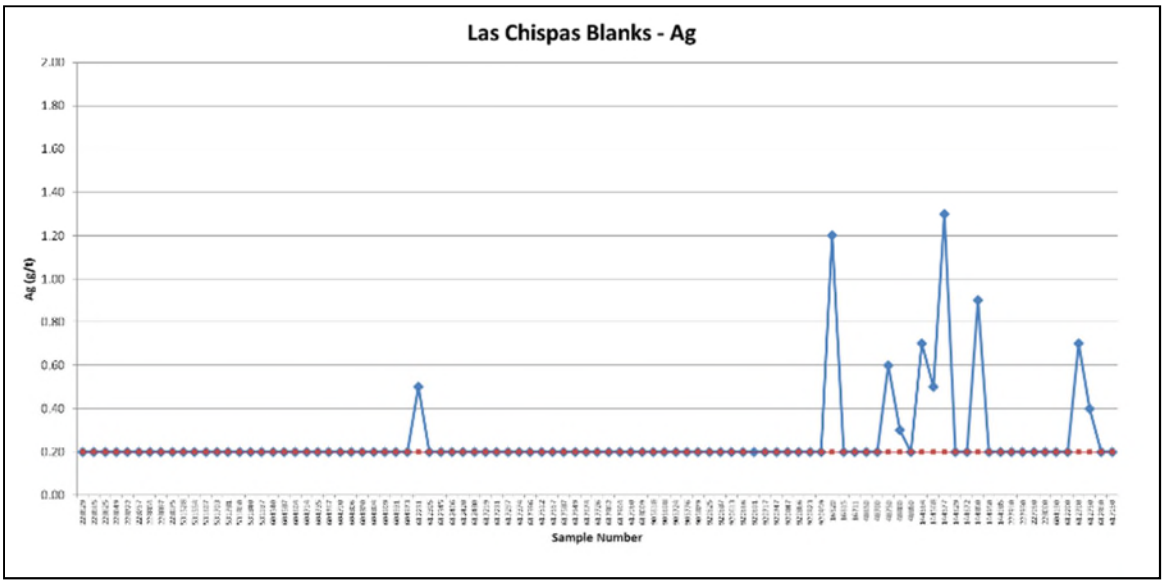


Figure 10-3: Analytical Results for Silver Grades from QAQC Blank Sample Insertions



10.4.2 SilverCrest, Phase II Program

During the Phase II program, SilverCrest implemented a program of certified reference material (CRM), blank sample insertions for all sample types being collected, and duplicate samples for some underground chip samples, core pulps and coarse rejects.

10.4.2.1 Certified Reference Standards

Commercial standards in 1 kg plastic bottles were sourced from CDN Resource Laboratories Ltd. (CDN Labs). The CRM material is selected to contain Ag/Au grades and a matrix that is consistent with the grades of the known mineralization and with a similar host rock lithology to the host rocks. At the Property's core logging facility, 70 grams of the reference material is weighed, placed in a paper envelope and added to the sample stream as directed by the field geologists. These samples are used to test the precision and accuracy of both gold and silver assays, and to monitor the consistency of the laboratory's performance. Insertion frequency of the standards is approximately 1:50 samples.

A total of 612 standards were inserted into the sample stream during this phase of drilling. Each standard, and corresponding sample number, was recorded in a QA / QC sample tracking spreadsheet. The standards expected values and failure rates are shown in Table 10-1.

A CRM failure is defined by receipt of a standard greater than three standard deviations above or below the expected value in either silver or gold. In cases where the standard failures occurred in "non-mineralized" rock (generally in zones returning < 0.1 g/t Au or < 5 ppm Ag), no action is taken.

The protocol for re-assaying the standard failures is to re-analyse the pulps within a range of 10 samples above and 10 samples below the failed standard. The results of the CRM performance analysis are charted in Figures 10-4 through 10-9.

Table 10-1: Standards Expected Ag and Au Values and the Failure Rates for the Drill Program

Standards	Expected Ag Values, ± 3SD	Expected Au Values, ± 3SD	Sent	Failures %
CDN-ME-1505	360 gpt, ±18 gpt	1.29 gpt, ± 0.165 gpt	341	7
CDN-ME-1301	26.1gpt, ±3.3 gpt	0.4437 gpt, ±0.066 gpt	191	45
CDN-ME-1312	22.3 gpt, ±2.55 gpt	1.27 gpt ±0.15, ±0.225 gpt	74	3
CDN-ME-1601	0.613 gpt, ± 0.069 gpt	39.6 gpt, ± 2.7 gpt	6	67

Figure 10-4: CRM CDN-ME-1301 Analysis

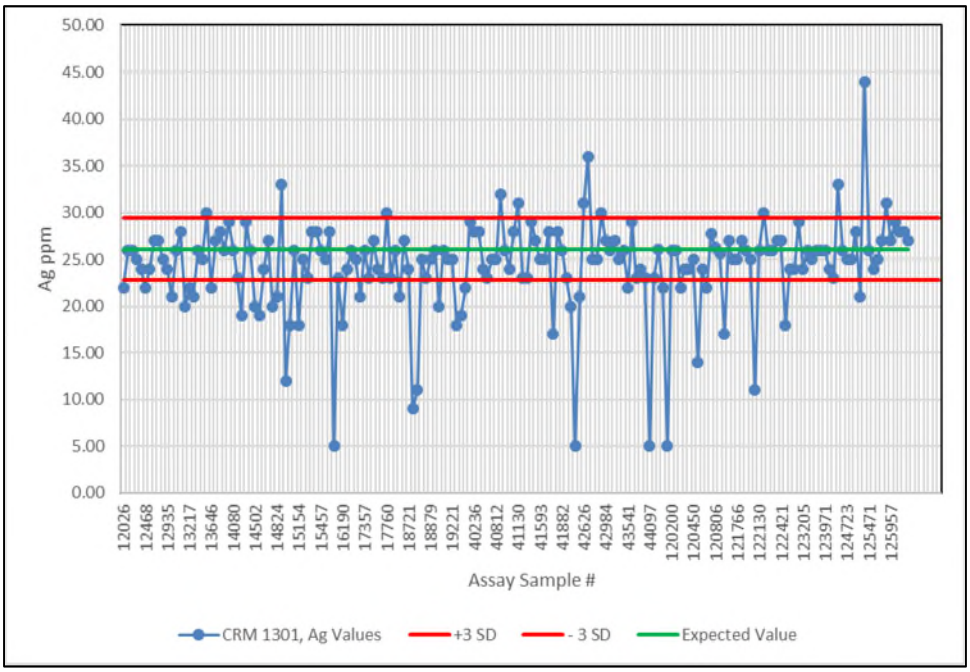


Figure 10-5: STD CDN-ME-1301 Analysis

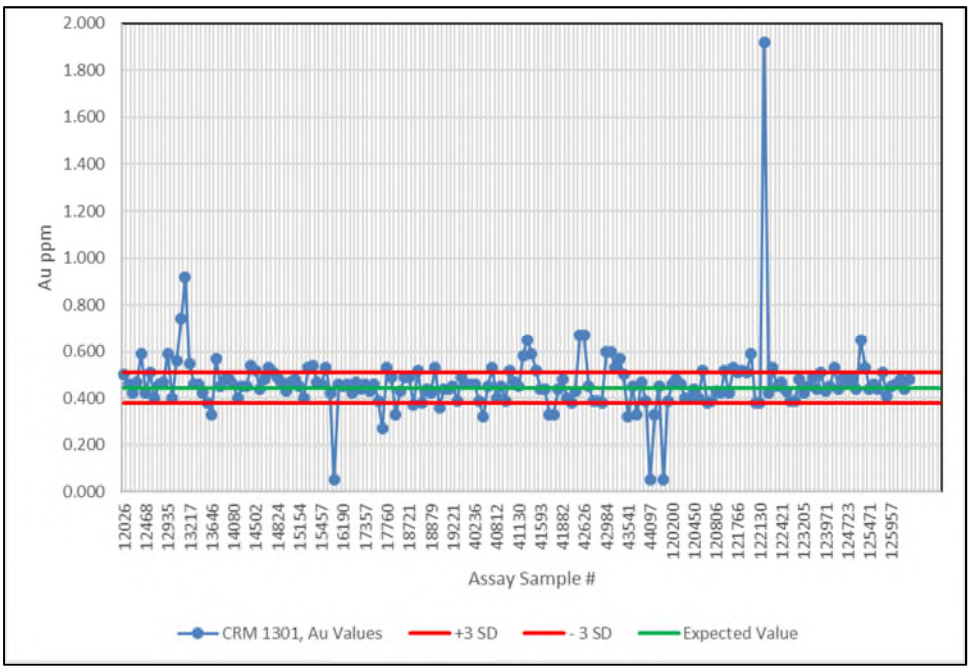


Figure 10-6: Ag STD CDN-ME-1312 Analysis

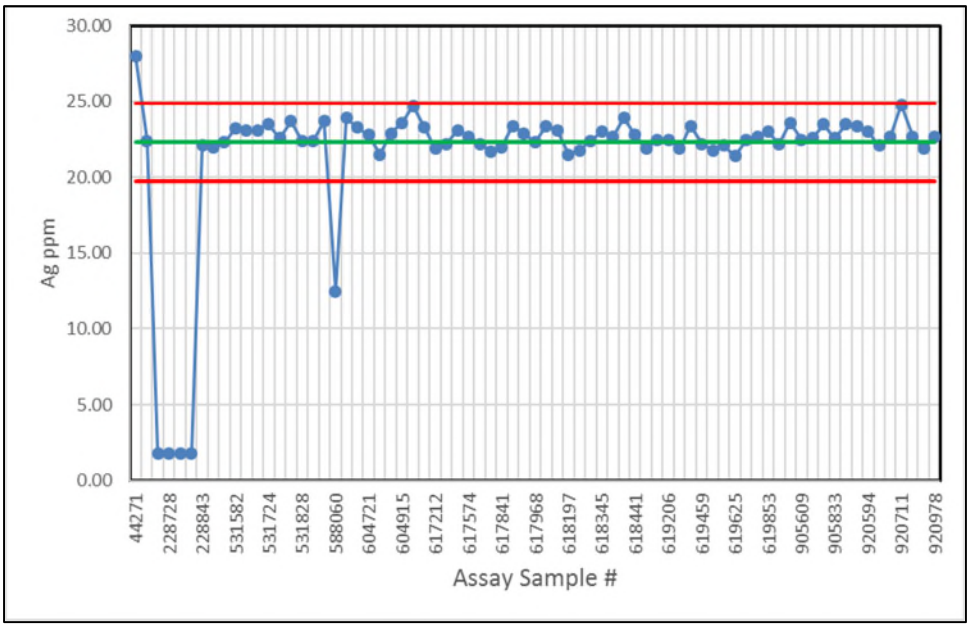


Figure 10-7: Au STD CDN-ME-1312 Analysis

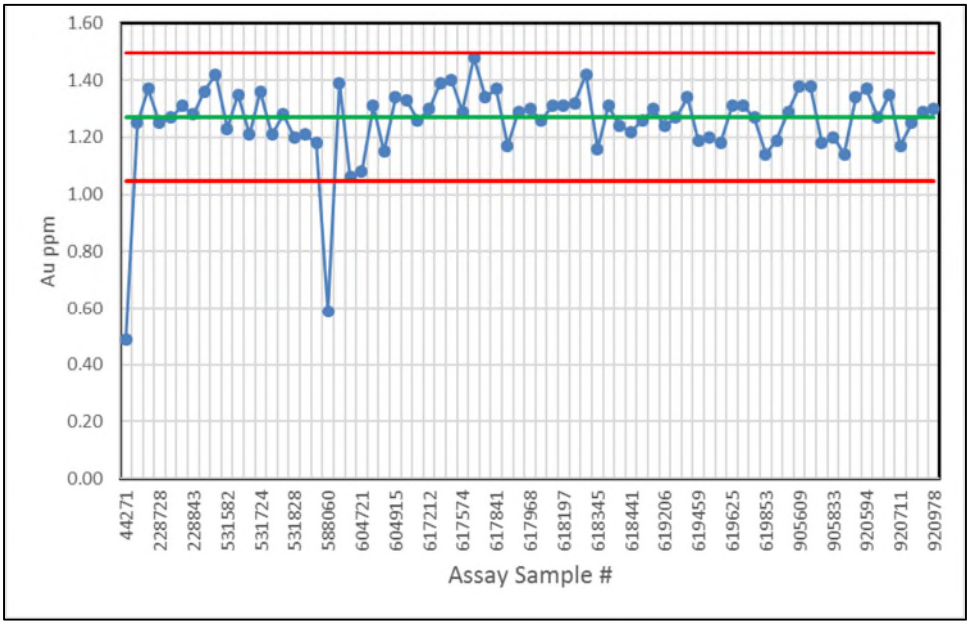


Figure 10-8: Ag STD CDN-ME-1505 Analysis

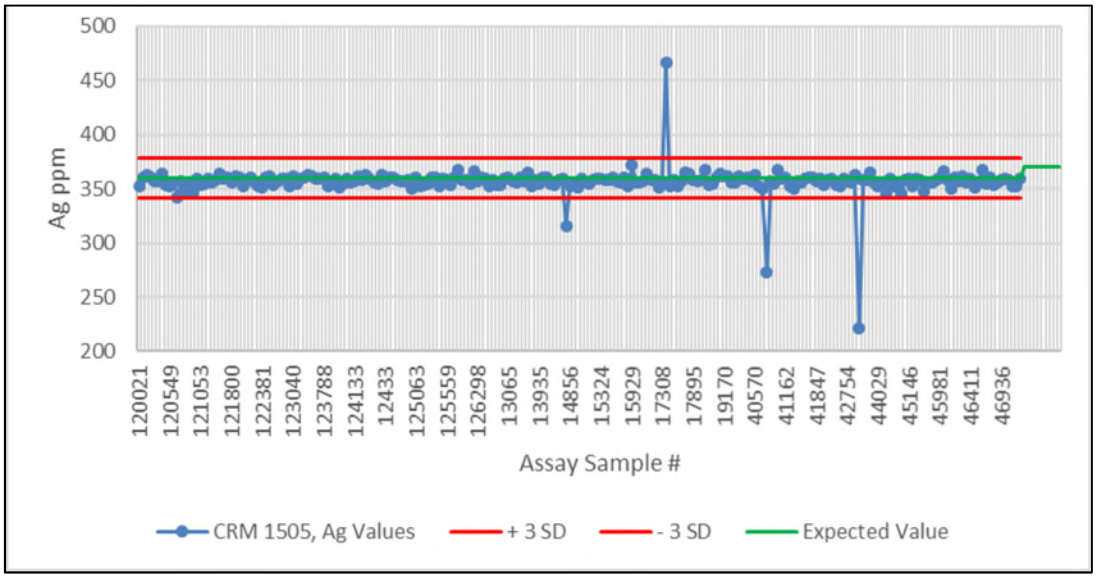
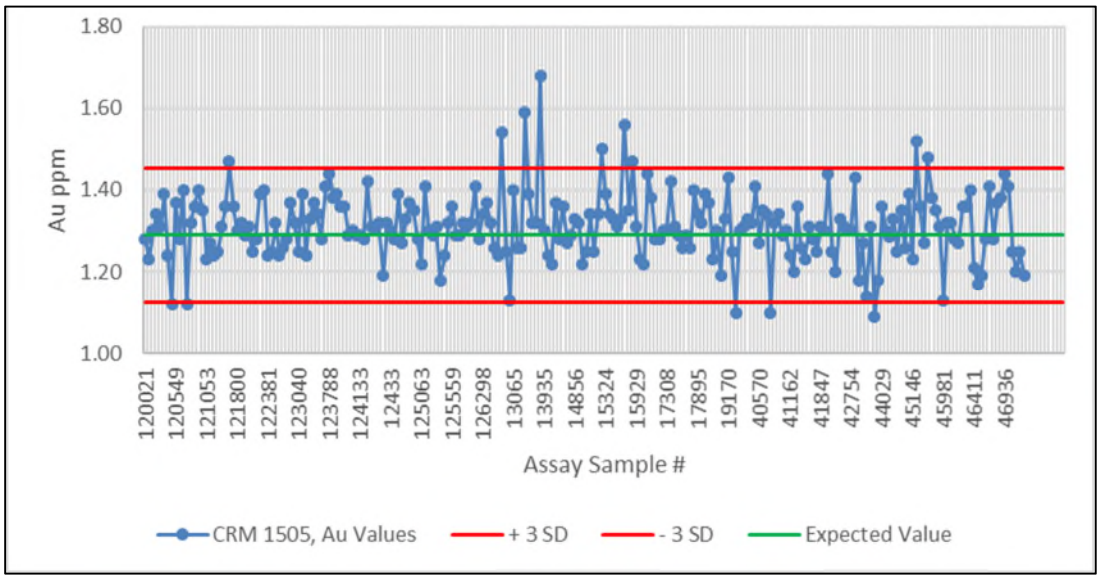


Figure 10-9: Au STD CDN-ME-1505 Analysis



10.4.2.2 Assay confirmation and re-analysis

Assessment of the CRM performance concluded that CDN-ME-1301 had a significant number of failures (47%). While CDN-ME-1505 and CDN-ME-1312 had relatively fewer failures. CDN-ME-1601 had a high failure rate, but with a statistically insignificant population. A total of 16 batches, including 306 samples, which were identified as having potential error due to performance of the CRMs CDN-ME-1301 and CDN-ME-1505 were re-submitted to ALS using coarse reject materials. New reference standard sample material was added at the lab by a SilverCrest geologist. At the time of the re-runs, CDN Labs Ltd. had run out of CDN-ME-1301, so CDN-ME-1601 was used instead, as the Ag/Au values are similar.

Comparison of the re-analyses and the original silver and gold assay grades were completed using an relative percent difference (RPD) and scatterplot approach. The approach was selected to assess whether the assays reproduced with a reliable precision and to identify whether high RPD values were associated with high or low-grade ranges. Since the re-analyses were conducted using coarse reject material, the expected performance threshold would be 90% of the samples with less than 20% RPD. As shown in Figure 10-10 and 10-11, the results of the analysis indicate that approximately 81% of silver assays and 63% of gold assays reproduced with less than 20% RPD. It is noted however, that the sample pairs with anomalous RPD values are in the low-grade range where Ag<45 gpt and Au <0.65 gpt.

Figure 10-10: RPD and Scatter Plot Assessment of Assay Re-analyses for Silver Grades

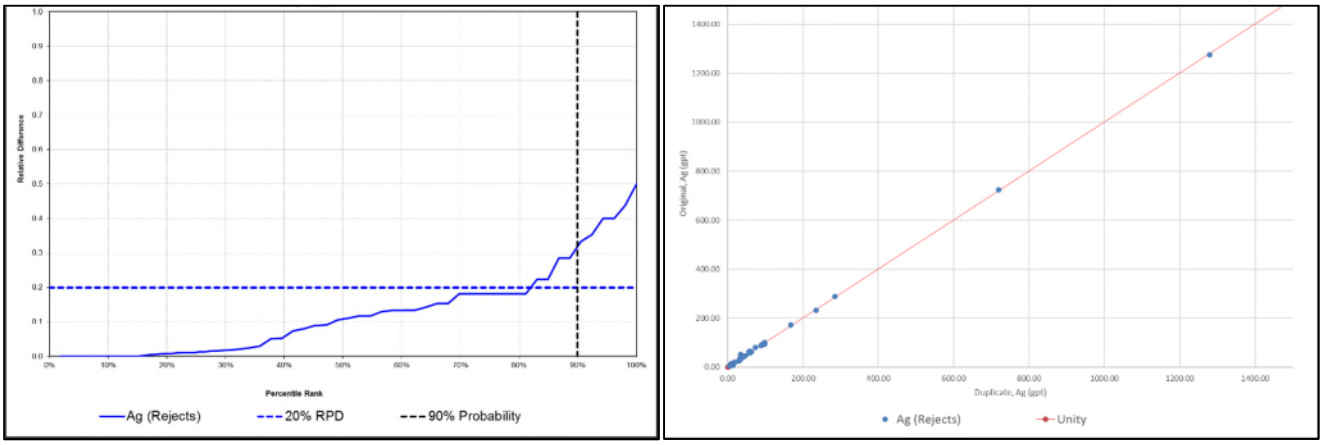
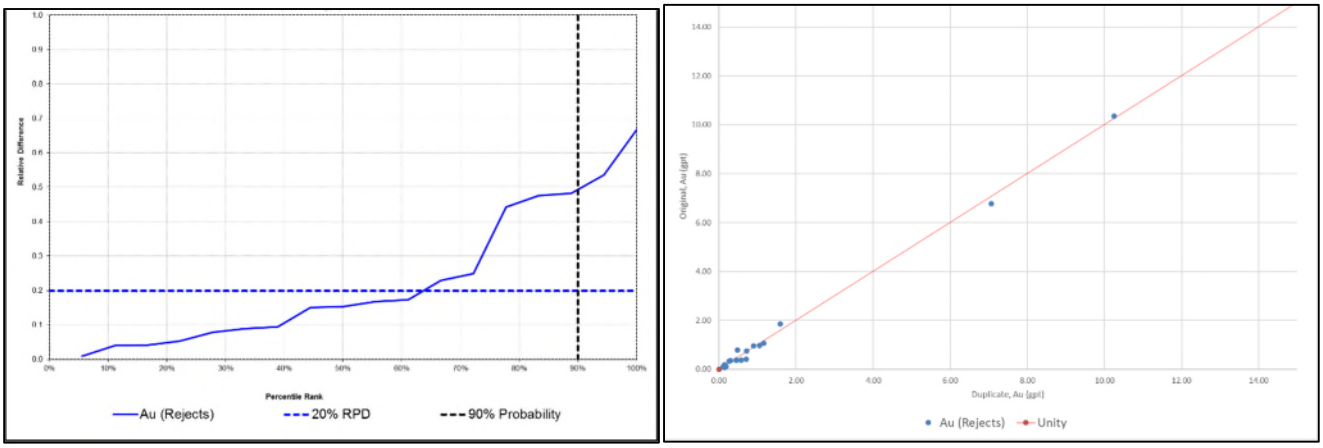


Figure 10-11: RPD and Scatter Plot Assessment of Assay Re-analyses for Gold Grades



A total of 16 CRMs were inserted with the batch re-analyses. The results of the CRM re-runs are presented in Table 10-2. The CRM performance results show that there were no failures with CRM ME-1505 and 40% failure rate of CRM ME-1601, consistent with the original analyses. The results suggest that analytical method during the fire assay fluxing process may affect the results, however, the likely error may be produced during the manual preparation of the CRM for sample insertion. To resolve these issues the standards are now ordered pre-packaged to solve the homogeneity issue.

Table 10-2: Re-run Standards Expected Ag and Au Values and the Failure Rates for the Drill Program

Standards	Expected Ag Values, ± 3SD	Expected Au Values, ± 3SD	Sent	Failures %
CDN-ME-1505	360 gpt, ±18 gpt	1.29 gpt, ± 0.165 gpt	6	0
CDN-ME-1601	0.613 gpt, ± 0.069 gpt	39.6 gpt, ± 2.7 gpt	10	40

10.4.2.3 Blanks

For monitoring of in situ contamination or contamination of sample crushing, grinding and sorting equipment, SilverCrest is inserting ~1 kg of non-mineralized rock samples at a sample interval of 1:50. The material being used for blanks is collected from a nearby silica cap and the particle size is >3/4 inch. Blanks were inserted both randomly and at the end of suspected mineralized intervals to check for carry-over between samples.

The failure threshold for the blanks is five times the detection limits of the analytical equipment, 25 gpt Ag and 0.25 gpt Au, for fire assay (gravimetric) method.

A total 555 blank samples were inserted during the drill program. Table 10-3 listed the various analytical methods tested by the blanks with respective failure rate measured as the percentage of samples returning greater of 5 time the detection limit. No evidence of sample contamination was observed through assessment of the analytical results.

Table 10-3: Summary of Blank Sample Insertion Performance for the Phase II Exploration Campaign

Element	Method	Number of Samples	Detection Limit	# Samples greater than DL	# Samples greater than 5x DL	Failure Rate
Au	FA, Gravity	453	0.05 ppm	3	3	0.6%
Ag		453	5 ppm	3	1	0.2%
Au	Aqua Regia, ICP	102	0.01 ppm	6	5	5%
Ag		102	0.2 ppm	2	0	0%

10.4.2.4 Duplicate Program

A total of 126 duplicate samples were collected for assessment of sample analytical precision. The samples were collected from drillcore (n = 38), underground channel samples (n = 56) and surface stockpile samples (n = 32). Sample rejects were first homogenized and a subsample was prepared from a 250 g split. This subsample split was then pulverized. Both pulp duplicates (analytical duplicates) were the selected from this split. This method of duplicate preparation allows for assessment of sample preparation at the reject stage (comparison of original assay with assay from the new coarse reject split), in addition to assessment of sample preparation at the pulp stage by comparing the two new pulp splits.

The duplicates sample pairs were assessed using RPD and scatterplot methods. The approach was selected to assess whether the assays reproduced with a reliable precision and to identify whether high RPD values were associated with high or low-grade ranges. The expected performance threshold for re-analyzed using coarse reject material would be 90% of the samples with less than 20% RPD, and for pulp materials would be 90% of the samples with less than 10% RPD. As shown in Figures 10-12 to 10-15, the results of the analysis indicate that Ag duplicate analysis reproduce successfully above the 90% threshold for both coarse reject and pulp samples, where the Au

duplicate analysis do not reproduce above approximately 81% of silver assays and 63% of gold assays reproduced with less than 20% RPD. It is noted however, that the sample pairs with anomalous RPD values are in the low-grade range where Ag<45 gpt and Au <0.65 gpt.

Figure 10-12: Duplicate Analysis, Relative Percent Difference Versus Percentile Rank, Silver Grades

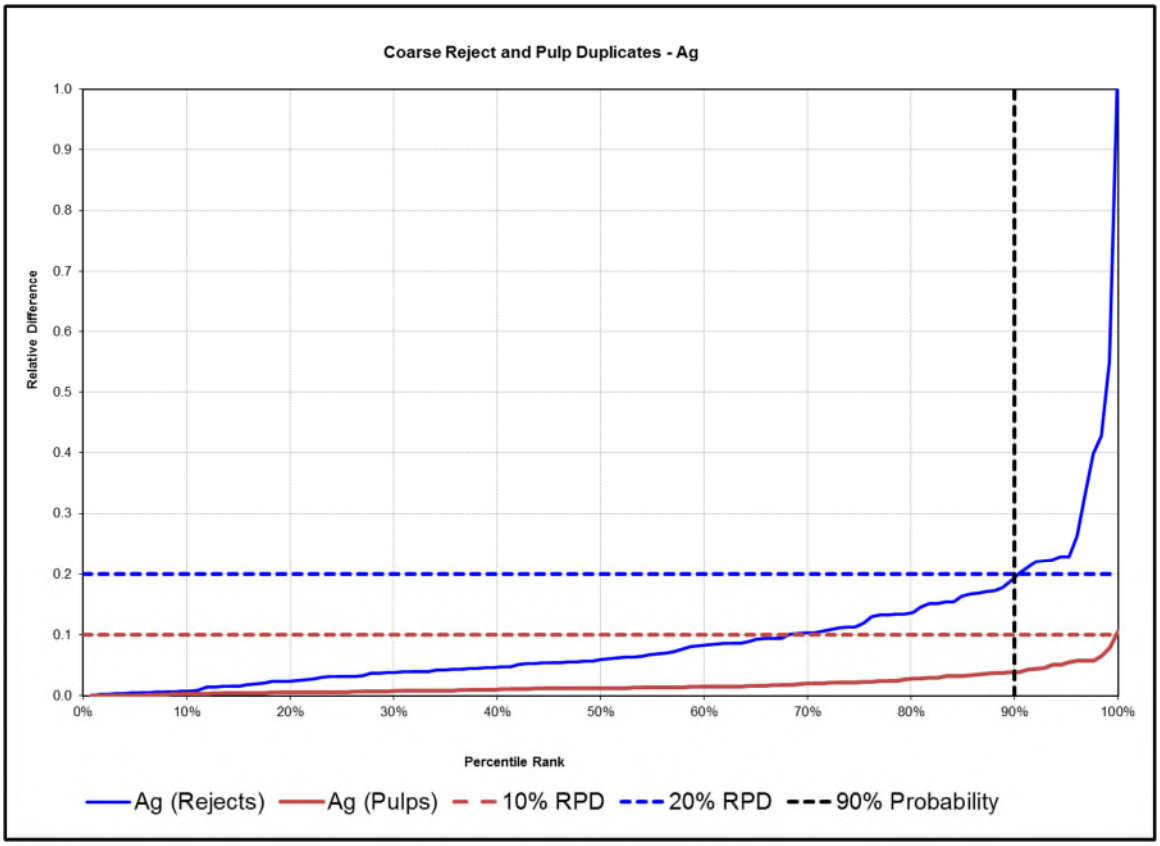


Figure 10-13: Scatter Plots of Duplicate Assay Results for Silver Grade, A) Coarse Rejects, B) Pulps

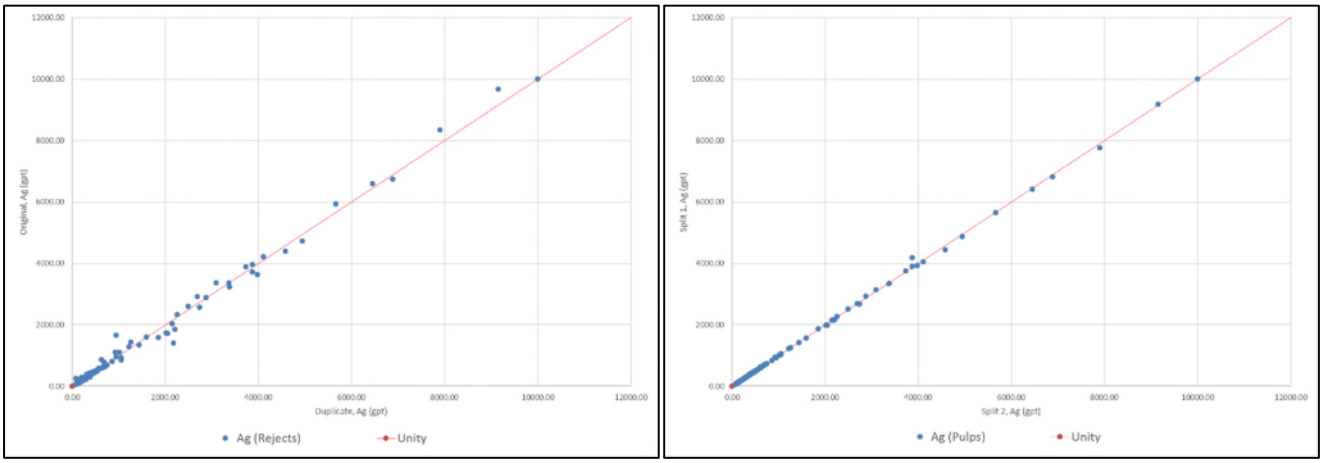


Figure 10-14: Duplicate Analysis, Relative Percent Difference Versus Percentile Rank, Gold Grades

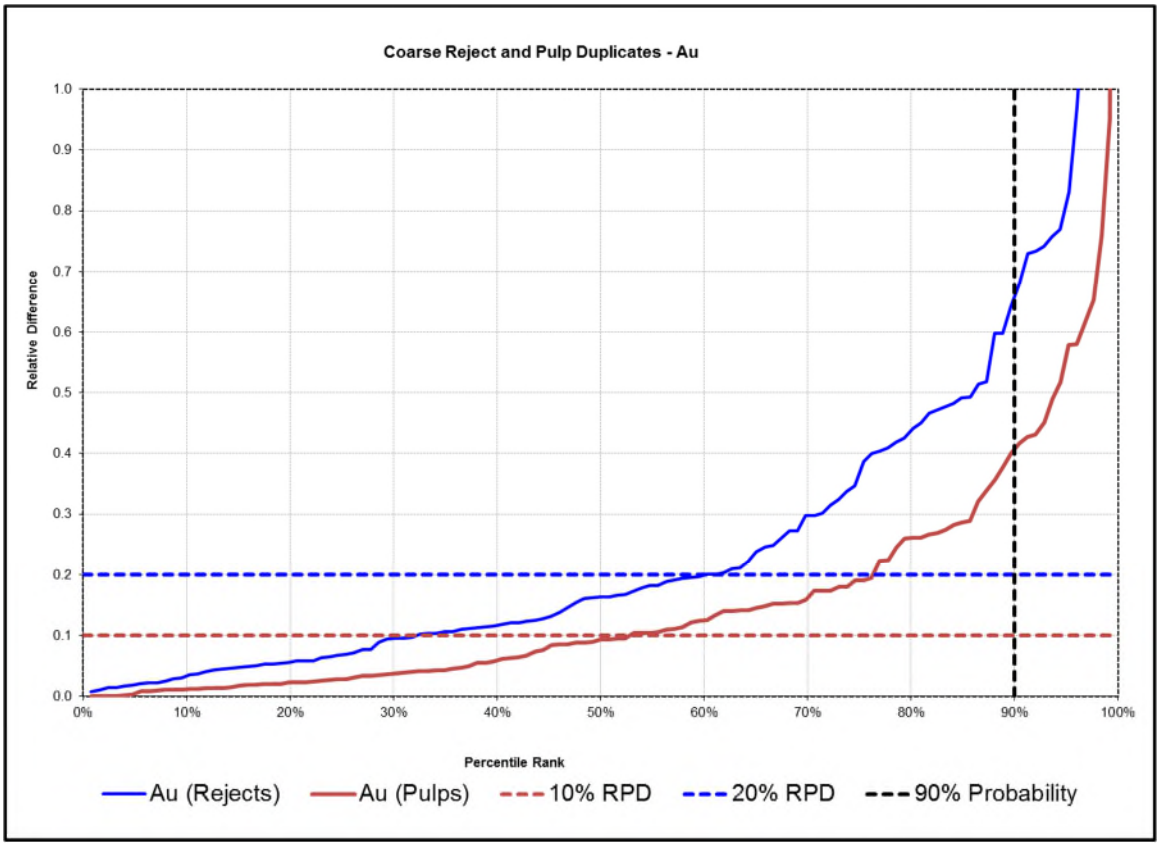
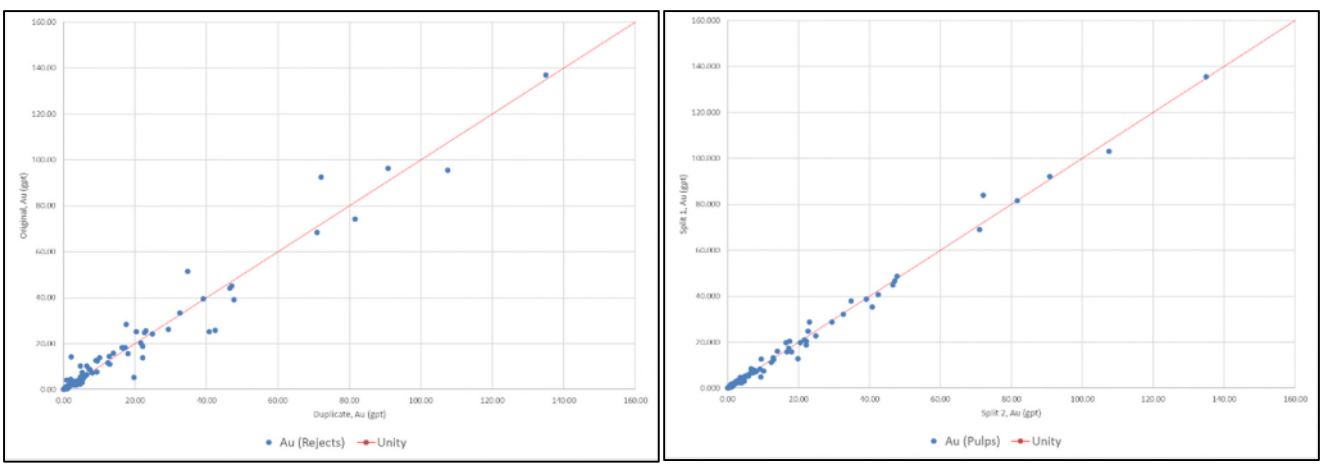


Figure 10-15: Scatter Plots of Duplicate Assay Results for Gold Grade, A) Coarse Rejects, B) Pulps



10.5 QP Opinion on Sample Preparation, Analysis and Security

The sample preparation, analyzed and security program implemented by SilverCrest was designed with the intent to support collection of a large volume of data. Sample collection and handling routines were well documented. The laboratory analytical methods, detection limits and ore grade assay limits are suited to the style and grade of mineralization.

The QAQC methods implemented by SilverCrest enabled assessment of sample security, assay accuracy, assay precision and potential for contamination. The results of the QAQC program did not identify any significant concerns related to the integrity of sample collection and analysis.

The QP has reviewed the sample collection and handling procedures, laboratory analytical methods, QAQC methods and the results of the QAQC program and believes these methods are adequate for mineral resource estimation, as used in this Technical Report.

11.0 DATA VERIFICATION

11.1 Tetra Tech Site Visit 1 – August 30 to September 1, 2016

11.1.1 Underground Chip Samples

Two verification samples were collected from the underground workings as duplicates to the existing chip sample records. At the time of the visit, neither of these samples had been channel cut. Due to the large number of underground samples, Tetra Tech did not attempt to collect a representative proportion of samples for verification. The purpose of these samples was to evaluate reproducibility of chip samples, however, due to the inherent sampling bias naturally introduced with chip samples, it was not anticipated that the duplicate sample grades will be equal. The results indicate poor reproducibility of the chip sample grades, with no apparent bias indicated.

Tetra Tech collected the samples along the existing chip sampling path using a geological rock hammer. The chips were collected in a plastic bag with a sample tag, sealed, and submitted to ALS by the QP for analysis. Table 11-1 lists the two samples with comparison between the analytical results reported by SilverCrest and the results of Tetra Tech's independent sample analysis.

Table 11-1: List of Verification Samples Collected by Tetra Tech from Underground Chip Samples

Location	Source	Sample ID	Description	Au (gpt)	Ag (gpt)	Cu (ppm)	Pb (ppm)	Zn (ppm)
Las Chispas	SIL	144712	Silicified lithic tuff, quartz veining, FeOx	7.99	867	56	201	401
	Tt	500458		0.10	6	7	31	78
	% Diff			**>100%**	**>100%**	**>100%**	**>100%**	**>100%**
William Tell	SIL	144843	Lithic tuff, propylitic alt with Py cubes, qtz-calcite veining with MnOx, weak malachite precip on walls	0.07	237	115	71	49
	Tt	500459		1.86	248	384	197	125
	% Diff			**<-100%**	**-4%**	**<-100%**	**<-100%**	**<-100%**

11.1.2 Core Samples

Numerous holes and core intersections were inspected for review during the QP site visit. The intervals were selected to provide good coverage of hanging wall, mineralized zone and footwall intersections. The intervals were retrieved from storage and laid out in core boxes.

Seven verification samples from drill core were selected from the available core. These verification samples are listed in Table 11-2 below with comparison between the analytical results reported by SilverCrest and the results of Tetra Tech's independent sample analysis. Each interval was marked with orange flagging, photographed and quarter cut by diamond blade. Sample tickets were stapled to the core boxes for record of sampling.

Table 11-2: List of Verification Samples Collected by Tetra Tech from Surface Diamond Drill Core Samples

Hole ID	From	To	Sample ID	Source	Au (gpt)	Ag (gpt)	Cu (ppm)	Pb (ppm)	Zn (ppm)
LC-16-05	169	170	604951	SIL	2.28	354	31	98	142
			500460	Tt	0.49	64	17	25	48
				% Diff	**>100%**	**>100%**	**82%**	**>100%**	**>100%**
LC-16-05	170	171	604952	SIL	0.67	71	7	30	40
			500461	Tt	1.70	198	20	73	71
				% Diff	**-61%**	**-64%**	**-65%**	**-59%**	**-44%**
LC-16-05	171	172	604953	SIL	18.55	2,460	190	881	2150
			500462	Tt	23.00	3,340	234	886	2670
				% Diff	**-19%**	**-26%**	**-19%**	**-1%**	**-19%**
LC-16-06	66	67	612229	SIL	14.90	1,815	44	105	146
			500463	Tt	0.04	537	62	108	150
				% Diff	**>100%**	**>100%**	**-29%**	**-3%**	**-3%**
LC-16-06	67	68	612230	SIL	0.02	5	8	17	40
			500464	Tt	0.01	6	9	15	47
				% Diff	**100%**	**-11%**	**-11%**	**13%**	**-15%**
LC-16-13	168	169	920833	SIL	3.58	249	18	46	102
			500465	Tt	5.74	269	21	53	109
				% Diff	**-38%**	**-7%**	**-14%**	**-13%**	**-6%**
LC-16-13	169	170	920834	SIL	0.47	62	17	36	101
			500466	Tt	0.10	14	9	36	93
				% Diff	**>100%**	**>100%**	**89%**	**0%**	**9%**

Photo 11-1: Photo of Mineralized Zone in Hole LC-16-05; Includes Tetra Tech Verification Samples 500460-500462 (SilverCrest samples 604951 to 604953, 169 to 172 m)

11.1.3 Underground Stockpile Samples

Historical muck that has been stockpiled by SilverCrest in the Upper Babicanora workings, was sampled to verify reported grades. The samples were collected at two locations. The first sample location was at a draw point where coarse rock material in fist size grab sample was collected. This sample underrepresents bulk grade as the fine fragment portion was selectively omitted from the sample.

The second location was from the muck pile which has been created by SilverCrest using material from the draw points. Here, two samples were collected: one to represent to coarse fragment portion (fist size fragments), and a second sample represents the smaller fragment portion (gravels through to clays).

Sample descriptions and comparison between the analytical results reported by SilverCrest and the results of Tetra Tech's independent sample analysis are listed in Table 11-2. The results for Tetra Tech samples 500468 and 500469 have been averaged per proportional mass and compared to the composite sample collected by SilverCrest. It is acknowledged, that the proportion of 'coarse fraction' collected in sample 500468 in relation to the 'fine fraction' collected in sample 500469 is not representative of the actual fragment/grain size distributions with the muck. A further analysis of this was conducted, and is presented in Section 11.1.4.

Table 11-2: List of Verification Samples Collected by Tetra Tech from Underground Stockpiles in the Babicanora Workings

Location	Source	Sample ID	Comment	Au (gpt)	Ag (gpt)	Cu (ppm)	Pb (ppm)	Zn (ppm)
Babicanora Drawpoint	SIL	612656	Composite sample collected by SilverCrest	1.29	122	32	81	123
	Tt	500467	Mixed, coarse and fine, qtz +/- silicified tuff fragments, stockwork-breccia	2.40	58	37	51	118
	% Diff			**-46%**	**>100%**	**-14%**	**59%**	**4%**
Babicanora stockpile in adit	SIL	16507	Composite sample collected by SilverCrest	3.44	213	39	39	64
	Tt	500468	Coarse fraction, green silicified tuff, prominent quartz, visible Ag-sulphides	30.00	689	113	186	340
	Tt	500469	Finer fraction, soft brown clayey-sand, with 10% qtz pebbles	5.97	372	74	115	182
	Tt	Average (by %mass)		20.53	564	98	158	278
	% Diff			**-83%**	**-62%**	**-60%**	**-75%**	**-77%**

11.1.4 Grain Size and Metal Distribution Testwork

For the purposes of verification and to develop insight into metal distribution in the various fragment/grain size fractions, Tetra Tech requested that a grain size gradation test fine fragment sample collected in Babicanora (Tt sample number 500459). Screen sizes were set up to roughly separate cobbles, from sand from fines using a 12.5 mm screen and a 0.15 mm screen. The three size fractions were then submitted for metals analysis. The results of this testwork are summarized in Table 11-3.

Table 11-3: Assay Results by Grain Size Distribution for Tetra Tech Sample 500459

Size Fraction	Mass (g)	Percentage	Au (gpt)	Ag (gpt)	Zn (ppm)	Pb (ppm)	Cu (ppm)	Al (pct)	Fe (pct)	Mn
+12.5 mm	896	25%	4.65	286	173	89	99	0.93	1.46	363
-12.5 mm, +150 um	2,275	64%	6.40	398	184	124	64	1.70	1.73	706
-150 um	45	1%	10.85	807	238	179	103	2.67	2.42	985
Sum weights	**3,216**	**90%**	**5.97**	**372**	**182**	**115**	**74**	**1.50**	**1.66**	**614**
Moisture content	344	10%								
Total sample weight	3,560	100%								

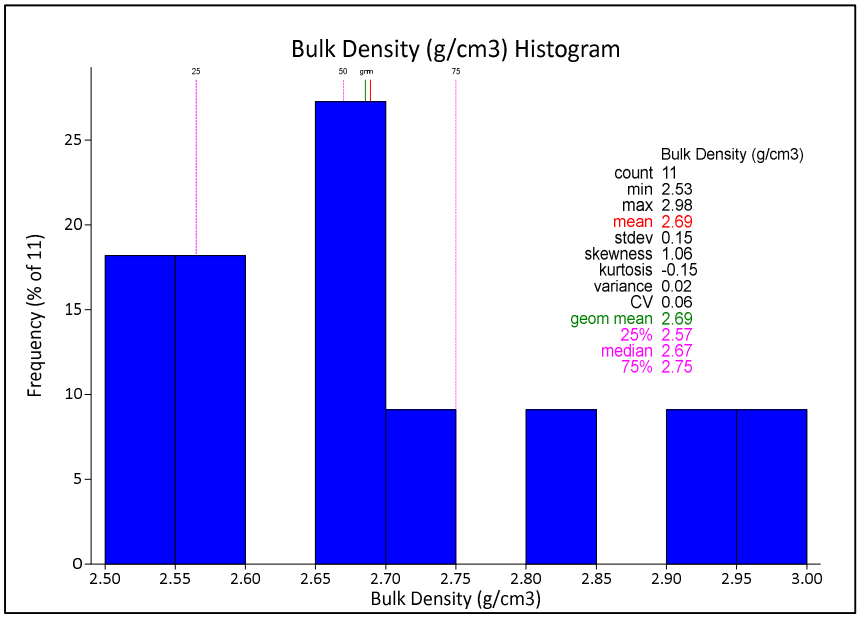
11.1.5 Bulk Density Testwork

Tetra Tech requested that bulk density measurement using wax coating (OA-GRA09a) be performed on all samples except 500459. The results of the measurements are shown in Table 11-4, and show a mean value of 2.69 g/cm^3. A histogram is provided in Figure 11-1 as a visual display of the distribution.

Table 11-4: Results of Bulk Density Measurements

Sample ID	Sample Weight (kg)	Bulk Density (g/cm3)
500458	0.22	2.98
500459	0.21	2.67
500460	0.16	2.8
500461	0.16	2.54
500462	0.17	2.57
500463	0.16	2.91
500464	0.15	2.56
500465	0.14	2.53
500466	0.17	2.67
500467	0.41	2.7
500468	0.36	2.65
Mean		**2.69**

Figure 11-1: Histogram Plot of Bulk Density Measurements



The measurements were compared with grade, and there does not appear to be an obvious relationship between bulk density and metal grade, however, this is not conclusive as the sample population is small.

11.1.6 Tetra Tech Verification Samples, Laboratory Analysis

All Tetra Tech independent samples collected from the Las Chispas site were delivered to the ALS Chemex preparation facility in Hermosillo, Sonora, by the QP. To be consistent with current SilverCrest analytical procedures, the same procedures were requested for the verification samples. The standard analytical procedures are as follows:

- All samples were received, registered, and dried;
- All samples were crushed to 70% <2 mm, then mixed and split with a riffle splitter;
- A split from all samples were then pulverized to 85% <75 μm;
- All pulverized splits were submitted for multi-element aqua regia digestion with ICP-MS detection (ME ICP41);
- All pulverized splits were submitted for gold fire assay fusion with AAS detection (30 g, Au AA25);
- Ore grade analysis is conducted on samples which return results at ICP-MS upper detection limits, per the following criteria:
  - Samples returning grades of >100gpt from ICP-MS analysis were then re-run using aqua regia digestion and ICP-AES detection, (Ag OG46) and diluted to account for ore grade detection limits;
  - Sample returning grades of >10gpt Au from ICP-MS were then re-run using fire assay fusion with gravimetric detection (Au GRA-21);
  - Samples returning grades of >10,000 ppm Zn, Pb or Cu from ICP-MS analysis were then re-run using aqua regia digestion with ICP-AES finish (Pb/Zn/Cu OG46);
- Ore grade analysis returning Ag grades of >1,500 Ag were then re-run again fire assay fusion with gravimetric detection (Ag GRA-21).

11.2 Tetra Tech Site Visit 2 - January 15 to 19, 2017

A second site visit was completed by Tetra Tech QP, James Barr, between January 15-19, 2017. The four-day site visit allowed for discussions with project geologists, a more thorough inspection of drill core to understand local stratigraphy, and more thorough inspection of the underground workings to understand various structural controls on mineralization across the Property. The inspections were not conducted as a strict verification of SilverCrest assay results.

A total of 33 samples were collected, as 22 from underground workings and 11 from drill core. The samples were collected by Tetra Tech, bagged and delivered directly to the ALS preparation lab located in Hermosillo where the samples were weighted, crushed and pulverized prior to being shipped for analysis to the ALS Minerals Laboratory located in North Vancouver, British Columbia. The samples were submitted for 35 element trace geochemistry (aqua regia, ICP-AES), whole rock (fusion, XRF) and analysis of gold and silver by fire assay and gravimetric finish. Representative hand specimens of the samples were packaged in buckets and shipped to Tetra Tech's laboratory in Kelowna, British Columbia, for further inspection and preservation.

11.3 Tetra Tech Site Visit 3 - November 21 to 22, 2017

A third site visit was conducted by Tetra Tech QP, James Barr, between November 21-22, 2017. The two-day site visit included review of recent Phase II drillcore and related assay results, review of on-site core handling and processing methods, and to view newly accessible portions of the underground workings at Las Chispas.

Three composite samples were collected from three drill holes to verify reported assay grades. Composites were prepared from consecutive samples which occurred within demarcated mineralized zones. Composite samples reduce the amount of local variability which can be observed in individual samples.

The samples were collected by Tetra Tech, bagged and delivered directly to the ALS preparation lab located in Hermosillo where the samples were weighted, crushed and pulverized prior to being shipped for analysis to the ALS Minerals Laboratory located in North Vancouver, British Columbia. The samples were submitted for 35 element trace geochemistry (aqua regia, ICP-AES), whole rock (fusion, XRF), analysis of gold by fire assay (AAS finish), silver (aqua regia, ICP-AES), silver by fire assay (gravimetric finish), and bulk density.

The results of the verification sampling were compared using relative percent difference which showed good to excellent reproduction. Sample TTLC-02 did not reproduce the same concentration of gold as the SilverCrest sample, however, the magnitude of gold returned in the verification sample of 20.1 gpt Au was indicative of the high-grade gold reported by SilverCrest assays with value of 41.27 gpt Au. The verification samples are compared in Table 11-4, below.

Table 11-4: Summary of Independent Verification Samples Collected November 2017

Sample No.	Hole ID	Sample	From	To	Length	Au (ppm)	Ag (ppm)
SilverCrest	BA-17-42	125673	279.3	279.8	0.5	0.03	3
	BA-17-42	125675	279.8	280.45	0.65	8.03	787
	BA-17-42	125676	280.45	280.95	0.5	1.58	37
	Length Weighted Average					5.84	500
Tetra Tech - Field Duplicate		TTLC11-01				5.34	478
RPD (%)						**0.10**	**4.6**
SilverCrest	LC-17-72	125846	115	115.8	0.8	74.08	2,312
	LC-17-72	125847	115.8	116.8	1	0.20	416
	Length Weighted Average					41.27	1516
Tetra Tech - Field Duplicate	Composite	TTLC11-02				21.10	1620
RPD (%)						**64.67**	**6.7**
SilverCrest	BA-17-17	19171	274	275	1	14.75	182
	BA-17-17	19172	275	276	1	0.05	285
	Length Weighted Average					7.40	234
Tetra Tech - Field Duplicate	Composite	TTLC11-03				3.31	546
RPD (%)						**0.01**	**0.01**

Sample No.	Hole ID	Sample	From	To	Length	Au (ppm)	Ag (ppm)
Standard CRM	n/a	CDN-ME-19	n/a	n/a	n/a	0.62 +/- 0.062	103 +/-7
Tetra Tech - Field Duplicate		TTLC11-04				0.66	104
RPD (%)						**0.04**	**0.97**

11.3.1 Bulk Density Testwork

Using the samples collected during the November 2017 site visit, was coated bulk density tests were conducted at ALS prior to sample preparation and analysis. The results of the measurements are shown in Table 11-5, and show a mean value of 2.56 g/cm3.

Table 11-5: Results of Bulk Density Measurements, November 2017

Sample ID	Sample Weight (kg)	Bulk Density (g/cm3)
TTLC-01	2.74	2.59
TTLC-02	2.48	2.57
TTLC-03	1.50	2.52
Mean		**2.56**

11.4 QP Opinion on Data Verification

An extensive dataset has been developed by SilverCrest for the Las Chispas Property which is saved and managed using a Geospark database. Tetra Tech has reviewed the data compilation and management procedures, and has audited the Geospark database on January 6, 2018, with findings provided as a memo to SilverCrest. The Geospark database was reviewed again following corrections that were applied based on recommendations in the memo.

Additionally, Tetra Tech has undertaken independent sample analysis of drill core, underground channel samples and underground muck sample to verify the reported assays in the database.

Based on the results of the data audit and independent verification samples, the QP believes the data is adequate for mineral resource estimation, as used in this Technical Report.

12.0 MINERAL PROCESSING AND METALLURGICAL TESTING

In August 2017, nineteen (19) core samples from the Las Chispas and Babicanora areas were combined into three (3) representative bulk composites for metallurgical testing as follows;

- Composite 1 – Babicanora Vein near the defined top of the precious metal zone, approximately 50 m from surface. Sample included partly oxidized quartz veining, stockwork and breccia.
- Composite 2 – Babicanora Vein near the defined bottom of the precious metal zone, approximately 220 m from the surface. Sample included partly oxidized quartz veining, stockwork, breccia and visible sulfides.
- Composite 3 – Las Chispas & Giovanna Veins near the center of the known high-grade mineralization, approximately 175 m from surface and near historic underground workings. Sample included quartz veining and stockwork with visible argentite (silver sulphide).

Location and analytical results for the core used in composites are presented in the following Table 12-1:

Table 12-1: List of Drillcore Samples used for Metallurgical Testwork Bulk Composite Sample

Composite ID	Location	Hole ID	Sample ID	From	To	Interval	Au ppm	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Ba ppm	Ca %	Cd ppm	Fe %	Mn ppm	S %	Sb ppm
1	Babicanora	UB-17-09	46897	70.2	71.7	1.5	0.05	218.0	14.0	9.0	86.0	40.0	0.5	0.6	1.1	356	0.0	2.0
1	Babicanora	UB-17-09	46898	71.7	73.5	1.8	0.09	321.0	28.0	24.0	46.0	40.0	0.7	1.0	1.0	279	0.0	5.0
1	Babicanora	UB-17-09	46899	73.5	75.6	2.0	3.11	87.0	50.0	70.0	49.0	20.0	1.9	3.9	0.9	78	0.0	5.0
1	Babicanora	UB-17-09	46900	75.6	77.8	2.3	10.80	181.0	74.0	127.0	158.0	40.0	1.7	0.7	0.9	635	0.0	2.0
2	Babicanora	UB-17-11	13137	89.3	89.8	0.6	0.10	221.0	73.0	83.0	76.0	500.0	0.1	<0.5	0.9	189	0.0	19.0
2	Babicanora	UB-17-11	13138	89.8	90.3	0.6	12.55	853.0	133.0	122.0	106.0	220.0	0.1	<0.5	0.7	171	0.0	10.0
2	Babicanora	UB-17-11	13139	90.3	90.9	0.6	12.60	1,590.0	161.0	185.0	186.0	330.0	0.1	<0.5	0.9	255	0.0	6.0
2	Babicanora	UB-17-11	13140	90.9	91.9	1.0	4.33	279.0	31.0	47.0	93.0	20.0	0.1	<0.5	0.7	137	0.0	6.0
3	Las Chispas	LC-16-08	905684	171.0	172.0	1.0	2.39	271.0	36.0	84.0	88.0	20.0	0.7	0.6	2.8	841	1.6	23.0
3	Las Chispas	LC-16-08	905685	172.0	173.0	1.0	0.88	137.0	33.0	120.0	57.0	50.0	1.5	0.5	2.0	1,060	1.1	13.0
3	Las Chispas	LC-16-08	905686	173.0	174.0	1.0	0.05	6.6	22.0	25.0	39.0	30.0	0.9	<0.5	1.9	793	1.2	2.0
3	Las Chispas	LC-16-08	905687	174.0	175.0	1.0	2.29	323.0	27.0	239.0	280.0	30.0	0.4	1.7	2.2	1,500	1.0	10.0
3	Las Chispas	LC-16-08	905688	175.0	176.0	1.0	5.62	644.0	37.0	921.0	927.0	100.0	1.1	5.8	2.4	1,450	1.4	24.0
3	Las Chispas	LC-16-08	905689	176.0	177.0	1.0	0.01	1.5	2.0	17.0	27.0	50.0	0.4	<0.5	1.1	447	0.6	<2.0
3	Las Chispas	LC-16-08	905690	177.0	178.0	1.0	0.01	1.0	3.0	15.0	26.0	130.0	0.5	<0.5	1.2	452	0.8	<2.0
3	Las Chispas	LC-16-08	905691	178.0	179.0	1.0	0.37	60.9	8.0	50.0	46.0	70.0	0.4	<0.5	1.4	497	0.7	2.0
3	Las Chispas	LC-16-08	905692	179.0	180.0	1.0	0.36	53.1	6.0	43.0	57.0	110.0	1.5	<0.5	1.3	922	0.4	2.0
3	Las Chispas	LC-16-08	905693	180.0	181.0	1.0	0.17	28.4	6.0	28.0	51.0	110.0	0.5	<0.5	1.4	526	0.5	<2.0
3	Las Chispas	LC-16-08	905694	181.0	182.0	1.0	14.40	1,900.0	88.0	1,465.0	1,600.0	130.0	0.6	11.8	1.5	492	1.0	25.0

Metallurgical testwork, including geochemical analysis, was completed by SGS Mineral Services in Durango, Mexico. Criteria for testing included standard bottle rolls using the following common processing parameters:

- 85% passing 150 mesh,
- pH 11-11.5,
- 48% solids, and
- Retention time of 50 hours.

The following Table 12-2 summarizes initial metallurgical test results for Las Chispas:

Table 12-2: Initial Metallurgical Test Results for Las Chispas

Sample ID	Assay Head Au g/t	Assay Head Ag g/t	Head Calculated Au g/t	Head Calculated Ag g/t	% Recovery Gold	% Recovery Silver
Composite 1 (oxide)	3.61	180.0	3.66	203.4	99.2	77.8
Composite 2 (mixed)	6.19	500.0	5.63	552.7	98.6	85.9
Composite 3 (sulfide)	2.95	274.0	2.15	295.0	99.1	96.2
Average	4.25	318.0	3.81	350.3	98.9	86.6

Note: all numbers are rounded.

NaCN consumption rates averaged 1.5 Kg/t and CaO consumption rates averaged 1.4 Kg/t. The NaCN consumption rate is similar to that at Santa Elena, while the CaO rate is marginally lower at Santa Elena (“Update to Santa Elena Pre-Feasibility Study” dated December 31, 2014, available under First Majestic Silver Inc.’s SEDAR profile). Lead nitrate and oxygen were also applied in the testing at the equivalent rates used at Santa Elena.

Further metallurgical testing is recommended to increase sample distribution and confidence for continuing studies.

13.0 MINERAL RESOURCE ESTIMATES

Two mineral resource estimates are presented in this report; a new estimate for in situ vein material, and a new estimate for stockpiled mineralized material on surface from historical operations.

13.1 Basis of Current Mineral Resource Estimate

Mineral resource estimates have been prepared for in situ vein hosted material at the Babicanora, Las Chispas, William Tell and Giovanni Veins. Vein models were constructed by SilverCrest and reviewed by Tetra Tech using Aranz Leapfrog Geo v.4.1. Block models were constructed by Tetra Tech using Geovia GEMS v.6.2. Data was reviewed by Tetra Tech in Phinar X10-Geo v.1.4.15.8. Further details on development of the block models and in situ vein resources are included in Section 13.2 below.

Mineral resource estimates have also been prepared for surface stockpiled material remaining from historical operations as waste dumps, waste tailings deposits and as recovered underground muck material. A total of 41 material stockpiles were mapped, surveyed and sampled by SilverCrest between July 2017 and January 2018. Further details on development of the stockpile resources are included in Section 13.3 below.

13.2 In Situ Vein Models

13.2.1 Geological Interpretation for Model

Mineral resource estimates have been prepared for four areas located on Las Chispas Property. Each area is considered to be part of the same regional mineralizing system, however, each are characterized by unique mineralization and dimensions. These areas are described further in Section 6.2.5 and are summarized below.

13.2.1.1 Babicanora

The Babicanora Veins include the Babicanora Main Vein, Babicanora FW and the Babicanora HW Vein. The Babicanora Main Vein is transected by a cross cutting north-south directed fault which divides the vein into an east area (to the southeast) and west area (to the northwest). A subzone entirely within the eastern portion of the Main Vein with elevated mineralization is named Area 51.

The veins are hosted within a structural zone oriented variably between 140° - 150° azimuth and with inclination of approximately 70° to the southwest. The Main Vein has been intersected by drilling over a strike length of approximately 1.5 km and to a depth of approximately 400 m from the valley bottom (approximately 1150 masl), or 500 m from the outcrop along the ridge slope (approximately 1300 masl). This vein was modelled using only drilling intercepts with elevated Ag and Au grades with a minimum width of 1.5 m, and resulted in an average true thickness of 3.2 m.

The Hangingwall Vein has been identified by drilling over a strike length of 900 m and down to 100 m below the valley bottom. The Babicanora FW Vein has been intercepted by drilling over a strike length of 500 m and down to approximately 250 m below valley bottom.

Areas of known historical workings are located in the west portion of the Babicanora Main Vein and Babicanora FW Vein and have been mapped by SilverCrest. These excavations have been excluded from the vein model based on void intercepts logged from surface drilling and positioning of underground drilling.

13.2.1.2 Las Chispas

Extensive underground rehabilitation has enabled SilverCrest access to the historical workings for mapping and sampling over one kilometer of strike length and over 300 m of vertical elevation. Drilling has intersected the vein down to 350 m depth from valley bottom (approximately 990 masl), or 560 m depth from outcrop along the ridge crest (approximately 1200 masl). The vein was modelled using drilling intercepts with elevated Ag and Au grades, and underground sampling and mapping to have a minimum width of 1.5 m, and resulted in an average true thickness of 3.0 m.

The vein is hosted within a structural zone oriented variably between 140° - 150° azimuth and with inclination of approximately 70° to the southwest. The Las Chispas Vein has been mapped with various splays and anastomosing structures, however, has been modelled as a single continuous vein solid as the basis for mineral resource estimation respecting drillhole intersections, and underground sampling where possible.

Some manual adjustments were required to reconcile vein contacts interpreted from underground sampling with the vein contacts delineated by drilling due to a slight shift identified in the underground surveying. The resulting vein model will require correction to the surveying before the vein is ready for detailed mine planning, however, is believed to be suitable for initial estimation of mineral resources.

Portions of the vein with known historical workings were removed from mineral resource estimate following grade interpolation. These stoped areas are located throughout the Las Chispas Vein from surface (0 Level) to depth of at least 1,000 Level, and total approximately 62,923 cubic metres excluding drifts, cross-cuts and sumps, based on the void model. The Mineral Resource Estimate was limited to data collected from the 900 Level (approximately 900 masl) and above.

13.2.1.3 William Tell

The William Tell Vein is located 115 m to the west, and is oriented roughly subparallel to, the Las Chispas Vein. The William Tell Vein has been modelled as a single continuous vein solid approximately 600 m along strike and to depth of approximately 100 m below valley bottom (approximately 990 masl), or 300 m below outcrop along the ridge crest (approximately 1,200 masl).

This vein was modelled using drill hole intersections with elevated Ag and Au grades, and limited underground mapping and sampling data to have a minimum and average width of 1.5 m. Historical workings exist within the northwestern portion of the vein. Portions of the vein with known historical workings were removed from mineral resource estimate following grade interpolation.

13.2.1.4 Giovanni, La Blanquita and Giovanni Mini

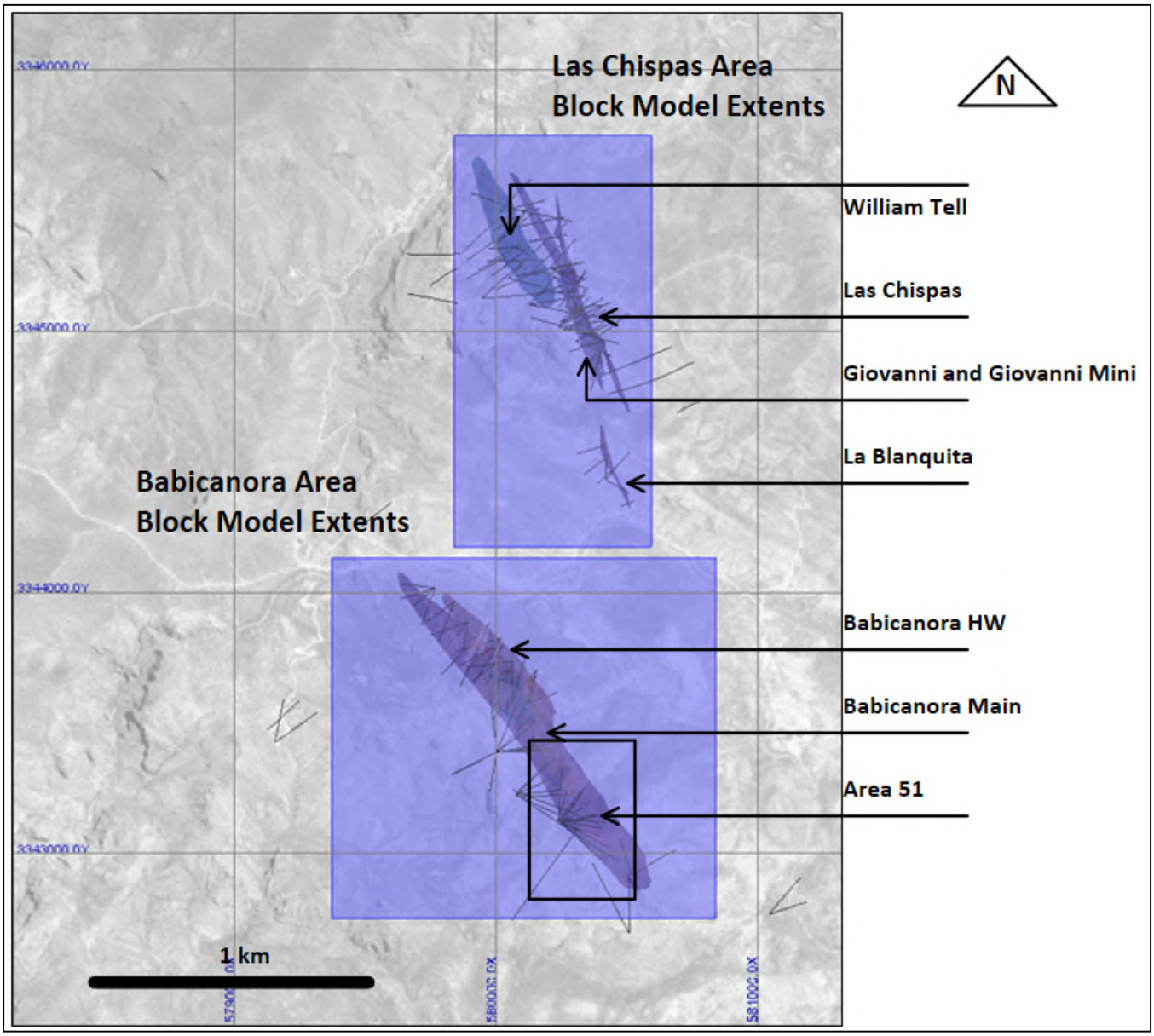
The Giovanni Model Vein includes the Giovanni and La Blanquita Veins. The Giovanni Mini Vein is located in the hangingwall and is parallel to the Giovanni Vein.

The Giovanni Vein was modelled using drill hole intersections, and limited underground mapping and sampling data to have a minimum width of 1.5 m and resulted in an average true width of 2.0 m, strike length of approximately 700 m and depth of 100 m below valley bottom (approximately 990 masl), depth of 300 m from outcrop along the ridge crest (approximately 1,200 masl). The vein strikes at approximately 330 degrees azimuth and is subvertical to slightly inclined with east facing dip of 85 degrees. Historical workings exist within the northwestern portion of the vein, and these volumes were removed following grade interpolation.

The Giovanni Mini Vein was modelled using drill hole intersections with elevated Ag and Au grades, and limited underground mapping and sampling data to have a minimum width of 1.5 m, strike length of approximately 530 m and depth of 100 m below valley bottom (approximately 990 masl), depth of 300 m from outcrop along the ridge crest (approximately 1,200 masl). The vein is approximately parallel to the Giovanni Vein.

The La Blanquita Vein is located approximately 300 m to the south of the Giovanni Vein with strike of approximately 340 degrees azimuth and slight inclination of 85 degrees to the west. It may represent the continued trend of the Giovanni Vein; however, more work is required to support geological continuity between these mineralized areas. The vein was modelled using only drillhole intersections with elevated Ag and Au grades to have a minimum width of 1.5 m and average true thickness of 2.0 m. The vein model strikes approximately 300 m.

Figure 13-1: Plan Map Showing Location of Block Models and Veins Modelled for Mineral Resource Estimation



13.2.2 Input Data and Analysis

13.2.2.1 Database

Data is managed by SilverCrest using Geospark, a relational database designed for collection of exploration information, drill logs, assay and QAQC results. The database can be accessed by multiple users, however, is generally administered by one user.

The current mineral resource estimate has been based on information collected from surface and underground geological mapping, 865 1 m samples taken from drill holes, 2,722 underground exploration channel samples, and

1,340 surface stockpile samples collected by SilverCrest since project inception in March 2016. All data received by SilverCrest up to and including the Effective Date of February 12, 2018, has been incorporated into the mineral resource estimate.

Summarized descriptive geostatistics for each of the input files used for interpolation of grade into the block model are shown in Table 13-1 below. Where underground and drilling data exists.

Table 13-1: Summary of Basic Statistics for Input Composite Data Used for Block Model Interpolation

Table		Au				Ag				AgEq			
	n	Mean	Var	SD	CoV	Mean	Var	SD	CoV	Mean	Var	SD	CoV
Babicanora, DH	389	2.86	100	10.01	3.5	243	558,463	747	3.1	457	1,989,035	1,410	3.1
William Tell, DH	63	0.45	1.0	1.00	2.2	98	47,659	218	2.2	131	76,340	276	2.1
William Tell, UG	331	1.77	16	4.04	2.3	165	113,793	337	2.1	298	341,704	585	2.0
William Tell, ALL	394	1.56	14	3.75	2.4	154	103,821	322	2.1	271	302,990	550	2.0
Giovanni, DH	136	1.08	9	2.92	2.7	150	125,572	354	2.4	230	323,055	568	2.5
Giovanni, UG	464	0.80	4	2.10	2.5	132	86,778	295	2.2	202	283,374	532	2.6
Giovanni, ALL	600	0.98	14	3.68	3.8	139	105,673	325	2.3	214	383,456	619	2.9
Giovanni Mini, DH	88	0.38	0.7	0.85	2.2	46	8,341	91	2.0	66	22,185	149	2.2
Giovanni Mini, UG	40	1.04	9.4	3.07	2.9	122	120,589	347	2.8	201	332,900	577	2.9
Giovanni Mini, ALL	128	0.59	3.5	1.88	3.2	70	44,692	211	3.0	108	123,154	351	3.2
La Blanquita, DH	15	0.74	1.7	1.30	1.8	152	82,624	287	1.9	207	148,078	385	1.9
GIO, GIOmini, La Blanquita, ALL	749	0.91	12	3.41	3.8	127	95,395	309	2.4	196	335,845	580	3.0
Las Chispas, DH	174	1.79	143	11.98	6.7	201	1,422,142	1,193	5.9	335	4,366,831	2,090	6.2
Las Chispas, UG	1887	1.45	15	3.93	2.7	212	261,712	512	2.4	318	623,668	790	2.5
Las Chispas, ALL	2050	1.42	18	4.19	3.0	205	275,960	525	2.6	309	677,259	823	2.7

A total of 14 drillholes have been omitted from the from the mineral resource estimate. These holes are listed in Table 13-2 with description for why they were omitted.

Table 13-2: List of Drillholes Omitted from the Mineral Resource Estimation Database

Hole	SIL Comment
LC-17-29A	LC-17-29A – same hole as 29 just had to reenter 29 and they started back up as 29A
LC-17-67	LC-17-67 – not sampled
LCU-17-07	LCU-17-07 – its 07A
LCU-17-10	LCU-17-10 – stopped at 5 m due to cave on top of drill. 10A lost hole before target
BA-17-21	issues with drilling and did not go through the vein
UB-17-01A	Displacement, bad survey
BA-17-54	Drilled in the footwall, did not reach the vein
BA-17-59	the continuation for reaching the vein is 59A
UB-16-02	Issues with drilling and did not go through the vein
UB-17-12	Issues with drilling and did not go through the vein
BA-17-34	Drilled voids, more drilling needs to be in area to include
BA-17-38	Drilled voids, more drilling needs to be in area to include
BA-17-09	ignored because it was deviated and called before hitting the vein
BA-18-69	need to reenter hole because it was not drilled deep enough

13.2.2.2 Compositing

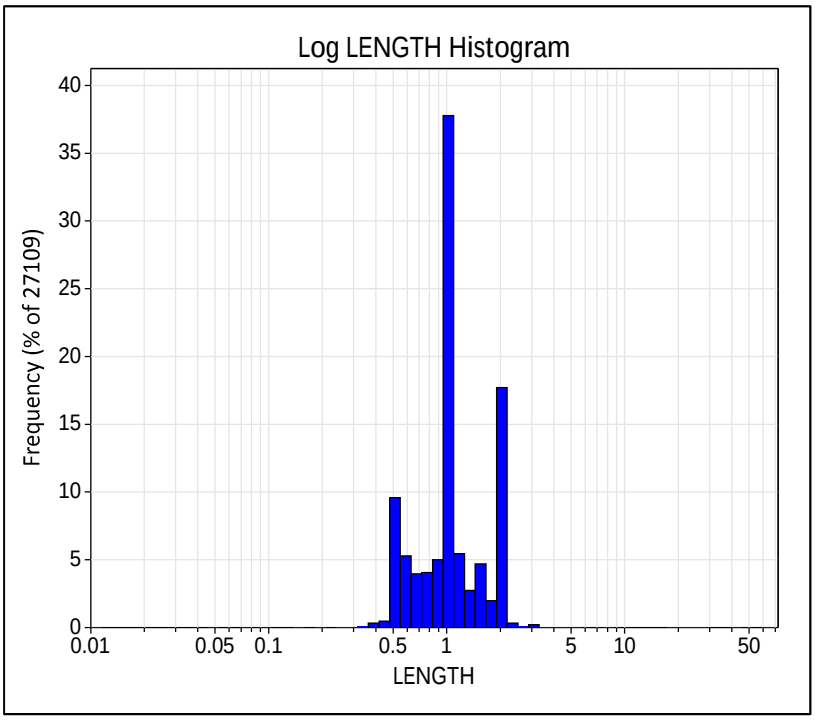
Samples were collected from drill core at various interval lengths ranging from 0.10 m to 7.9 m with the average length of approximately 1 m (Figure 13-2). Sample intervals were selected by SilverCrest geologists to respect lithological and mineralization contacts.

The raw assay data was composited to 1 m sample lengths within the vein model boundaries starting from the uphole contact. Residual intervals at the downhole contact less than 0.25 m were ignored. This resulted in an increase from 817 raw samples to 865 composite samples. The mean values and overall sample distribution was not significantly impacted by the compositing process.

In Figure 13-2 below, the predominant sample length is 1 m, with range from 0.6 m to 4.0 m with standard deviation of +/-0.51 m.

Underground samples were collected along 1 m channel lengths perpendicular to vein and were not composited for use in the mineral resource estimate.

Figure 13-2: Length Histogram Showing Predominant 1 m Drill Core Sample Length



13.2.2.3 Capping Analysis

Grade capping assessment was undertaken separately for each vein area and individual caps were applied, where deemed appropriate to do so, for both drillhole and underground drilling data. Data was capped based upon a statistical analysis which included examination of probability plots, and decile analysis to remove potential outlier sample grades. Capping analysis was performed on the 1 m composite sample grades for both silver and gold. A summary of the capping values applied to the data are shown in Table 13-3.

Table 13-3: Summary of Grade Capping Applied to Drilling and Underground Channel Samples

Dataset	Au Capping				Ag Capping			
	Au Cap	Percentile	Number Samples Capped	% Metal Value Lost From Capping	Ag Cap	Percentile	Number Samples Capped	% Metal Value Lost from Capping
Babicanora, DH	61	98	5	11	2,228	98	6	15
William Tell, DH	4.5	98.39	1	1.6	842	98.39	1	8.4
William Tell, UG	17.5	98.78	4	5.6	1,910	99.39	2	2
Giovanni and La Blanquita, DH	18.4	99.33	2	26	1,880	98	3	6.4
Giovanni and La Blanquita, UG	9.2	99.13	3	5.7	1,425	99.13	3	3.9
Giovanni Mini, DH	4.2	98.85	2	4.1	463	98.85	1	1.8
Giovanni Mini, UG	11.4	97.44	1	9.1	1,175	97.43	1	12

Dataset	Au Capping				Ag Capping			
	Au Cap	Percentile	Number Samples Capped	% Metal Value Lost From Capping	Ag Cap	Percentile	Number Samples Capped	% Metal Value Lost from Capping
Las Chispas, DH	13	98.76	2	39	1,738	98.15	3	30
Las Chispas, UG	44.1	99.9	2	0.5	4,390	99.79	4	0.8

13.2.2.4 Block Model Dimensions

Two block models were developed for the mineral resource estimate. One model was established in the Babicanora area which includes Area 51, and the second model was established in the Las Chispas area for modelling of the Las Chispas, William Tell, Giovanni, Giovanni Mini and La Blanquita Veins.

Both block models were built using 2 m by 2 m by 2 m blocks to reflect narrow vein nature of mineralization and to reflect minimum underground mining widths of 1.5 m. The block model dimensions are listed in Table 13-4. The models are referenced in zone 12R of the Universal Transverse Mercator (UTM) grid with World Geodetic System (WGS) 84 as reference datum.

Table 13-4: Babicanora and Las Chispas Block Model Dimensions (ref. UTM WGS84 z12R)

	Origin X	Origin Y	Origin Z	Rotation (deg)	Columns	Rows	Levels	Block Size (m)
Babicanora	579,370	3,342,750	1,350	0	735	690	295	2
Las Chispas	579,840	3,344,174	1,240	0	377	788	250	2

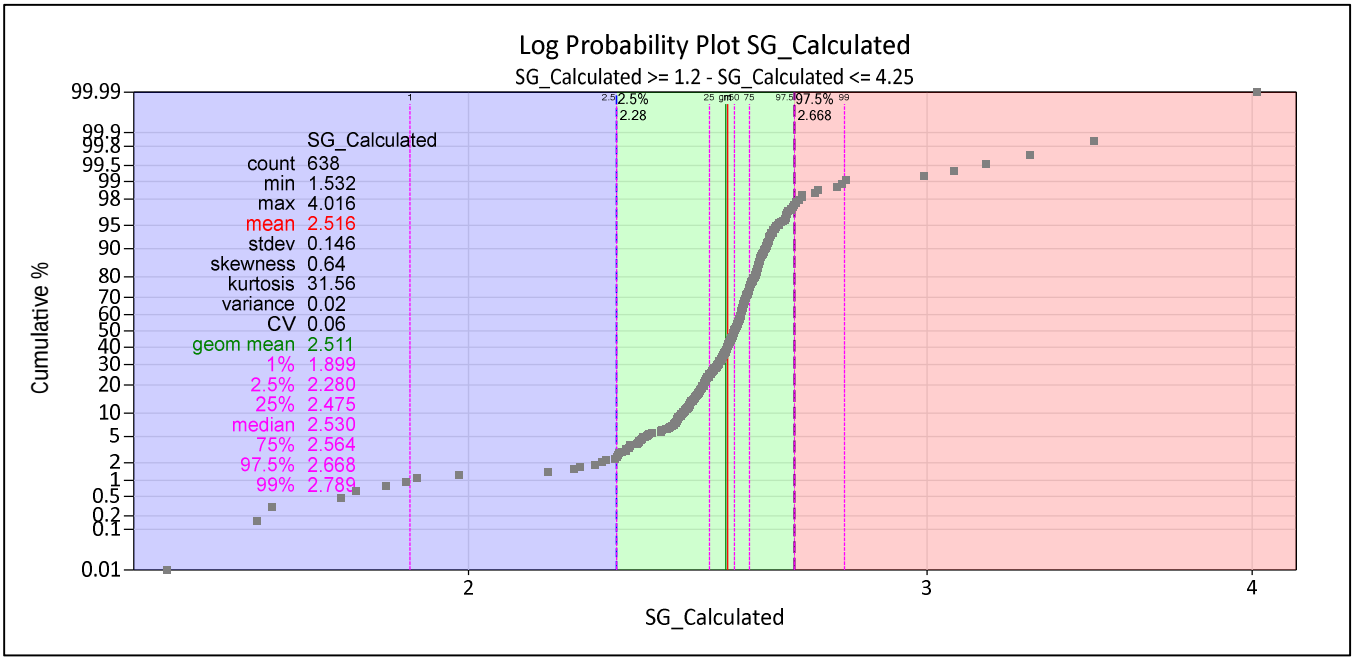
13.2.2.5 Bulk Density Estimation

In situ specific gravity (SG) measurements were collected at SilverCrest's core processing facility. A total of 641 SG measurements were collected using measurement apparatus made of a water bucket and scale. Core fragments greater than 5 cm in length were dried and weighed prior to being suspended and submerged from a scale in a buck et of water using a wire basket. The mass of the submerged core sample was recorded. The scale was reset and tared between each measurement.

The measurements tested various mineralized and unmineralized material types at approximately 20 m downhole intervals. Where rock material was highly fragmented or strongly clay altered, in situ SG measurements were not collected.

When plotted, the in situ measurements form a log-normal distribution with mean value of 2.516 and standard deviation of 0.146, and geometric mean of 2.511 (Figure 13-3). Three outliers have been removed from the sample data in this figure (n = 638).

Figure 13-3: Log Probability Plot of Field SG Measurements, Data Cut Above 1.2 and Below 4.25 (n=638, m = 2.516)



Seventy-two (72) samples were shipped to ALS for wax coated bulk density (BD) testing to validate the in situ measurements. The samples were collected from non-mineralized hangingwall and footwall materials, and mineralized material, free of clay alteration. The results of the bulk density tests are shown in Table 13-5 below.

Table 13-5: Summary of Bulk Density Measurements on Babicanora and Las Chispas

Las Chispas		Babicanora		Combined Las Chispas and Babicanora	
Number of samples	27	Number of samples	45	Number of samples	72
Mean (g/cm3)	2.50	Mean (g/cm3)	2.49	Mean (g/cm3)	2.50
Standard Deviation	0.06	Standard Deviation	0.10	Standard Deviation	0.08
Minimum (g/cm3)	2.36	Minimum (g/cm3)	2.18	Minimum (g/cm3)	2.18
Maximum (g/cm3)	2.65	Maximum (g/cm3)	2.59	Maximum (g/cm3)	2.65

A mean bulk density of 2.55 g/cm3 was applied to the mineral resource estimate based on the results of the in situ testwork, bulk density testwork completed by SilverCrest and previous bulk density testwork completed by Tetra Tech.

13.2.2.6 Variography Assessment

Experimental variogram modelling was undertaken on drill core samples for the Babicanora and the Las Chispas Veins where sample spacing and sample density were considered sufficient. Silver and gold grades were transformed into log10 values prior to experimental variogram analysis and back-transformed following the analysis. Anisotropic search parameters were based on factored ranges extracted from the experimental variogram model.

Variogram assessment was not undertaken for the Giovanni, Giovanni Mini, La Blanquita and William Tell Veins.

Downhole variograms were not successful in defining nugget due to the narrow mineralized zone in proportion to the number of samples collected within each hole. Nugget, sill, range and structures were estimate purely from spherical experimental semi-variogram plots of composited data contained within the vein models. These values are listed in the Table 13-6 below.

Table 13-6: Experimental Variogram Parameters for Babicanora

Vein	Metal	Nugget	Total Sill	Range Total Sill (m)
Babicanora	Au	1.5	5.93	200
	Ag	1.4	708	200
Las Chispas (underground samples)	Au	5.1	15.5	11.5
	Ag	36	50.8	119
Las Chispas (underground samples and drill samples)	Au	5.1	15.5	125
	Ag	1.6	1,919	125

13.2.2.7 Interpolation Parameters

Grade interpolation parameters were performed using the Ordinary Kriging (OK) for the Babicanora and Las Chispas models, and Inverse Distance squared to second power (ID2) for the Giovanni, Giovanni Mini, La Blanquita and William Tell models

Interpolation search ellipse anisotropies and orientation were defined for each vein and were based on variography where information was available. Where variography was not available, search ellipses were defines based on average drill spacing and ellipses parameters in adjacent veins. All searches were performed with major and intermediate axes orientation parallel to the average plane of the vein model.

Where underground sampling data was available, multiple interpolation passes were used to first isolate underground sampling from drillhole data in the short range, followed by longer range searches using combined underground and surface drilling data.

Details of the interpolation search anisotropy and orientation are listed in the tables below for Babicanora (Table 13-7), Las Chispas (Table 13-8), Giovanni, Giovanni Mini and La Blanquita (Table 13-9) and William Tell (Table 13-10).

Table 13-7: Interpolation Search Anisotropy and Orientation for Babicanora

Ellipse	min comp	max comp	Max comp per hole	P.Azi	P.Dip	Int. Azi	Major (m)	Semi-major (m)	Minor (m)
PASS 1	3	12	3	216	-63	138	200	175	75

Table 13-8: Interpolation Search Anisotropy and Orientation for Las Chispas

Ellipse	Min Comp	Max Comp	Max Comp Per Hole	P.Azi	P.Dip	Int. Azi	Major (m)	Semi-Major (m)	Minor (m)	Comment
PASS 1	2	4	3	344	23	132	25	15	10	u/g samples only
PASS 2	3	9	3	344	23	132	50	35	20	u/g samples and dh
PASS 3	2	12	3	344	23	132	100	60	30	u/g samples and dh

Table 13-9: Interpolation Search Anisotropy and Orientation for William Tell

Ellipse	Min Comp	Max Comp	Max Comp Per Hole	P.Azi	P.Dip	Int. Azi	Major (m)	Semi-Major (m)	Minor (m)	Comment
PASS 1	2	4	3	340	20	105	20	20	15	u/g samples only
PASS 2	3	15	3	340	20	105	125	100	50	u/g samples and dh

Table 13-10: Interpolation Search Anisotropy and Orientation for Giovanni, Giovanni Mini, and La Blanquita

Ellipse	min comp	max comp	Max comp per hole	P.Azi	P.Dip	Int. Azi	Major (m)	Semi-major (m)	Minor (m)	Comment
PASS 1	2	4	3	338	-22	159	20	20	15	u/g samples only
PASS 2	3	15	3	(rot_Z) 280	(rot_X) -89	(rot_Z) 15	125	100	50	u/g samples and dh

13.3 Surface Stockpile Material Models

13.3.1 Calculation of Estimated Tonnage and Grade

Stockpiles that were trenched with subsequent assay results were initially estimated for tonnage by calculating length x width x height x rock density. Following a visual estimation, a surveyor was hired to provide more accurate estimation of the perimeter and surface area measurements. The survey was completed between December 14th, 2017, and January 26th, 2018, using a Trimble Spectra Total Station Model TS-415.

Based on the average profile depths of the trenches, depth of the stockpiles was estimated to have an average depth of 2.0 m, except for La Capilla (2.5 m) and San Gotardo (3.0 m). The density of the stockpiles was estimated to have an average density of 1.7 g/cm^3, including the tailings material at La Capilla. Thus, the estimated tonnage of each stockpile was calculated using the average depths, estimated density, and measured surface area of each dump.

Average grades were estimated for each stockpile area based on the samples collected for each stockpile. The tonnage and average grades for stockpiles with average AgEq >100 AgEq were then tabulated for the mineral resource estimate.

13.3.2 Potential Error and Inaccuracy

Potential sources of error during the trenching program include the high degree of inaccuracy of GPS measurements for profile elevations and cross-sections. Additionally, samples may not completely be random and representative enough of the entire dump and human error is a factor. The intervals used in the trenching process were not measured with a set length but estimated by the length of the backhoe bucket.

Assumptions incorporated into the stockpile estimates include:

- Estimation of density to be the same across all stockpiles
- Estimation of depth to be 2.0 m across all stockpiles, except for La Capilla and San Gotardo

- Perimeter measurements used to calculate surface areas were performed by a surveyor may not be accurate.
- Stockpiles not on a horizontal plane are more open to visual estimation for depth and area.
- Grade of Au and Ag measured from assay results are averaged for each stockpile, even though there can be a significant standard deviation, and difference between the minimum and maximum result. Grade capping was not applied.

13.4 Mineral Resource Estimate

The Mineral Resource Estimate for the Las Chispas Property are summarized in Table 13-11. This estimate is effective as of February 12, 2018. This estimate adheres to guidelines set forth by NI 43-101 and the CIM Best Practices and Definition Standards.

Table 13-11: Summary of Mineral Resource Estimates for In Situ Vein Material and Surface Stockpile Material at the Las Chispas Property, Effective February 12, 2018

Type	Cut-off Grade (gpt AgEq[2])	Classification[1]	Tonnes	Au (gpt)	Ag (gpt)	AgEq[2] gpt	Contained Gold Ounces	Contained Silver Ounces	Contained AgEq [2] Ounces
In Situ Vein	150	Inferred	3,269,000	3.75	305	586	394,000	32,011,000	61,580,000
Stockpile	100	Inferred	174,500	1.38	119	222	7,600	664,600	1,246,100
Overall		**Inferred**	**3,443,500**	**3.63**	**296**	**568**	**401,600**	**32,675,600**	**62,826,100**

1) Conforms to NI 43-101, Companion Policy 43-101CP, and the CIM Definition Standards on Mineral Resources and Mineral Reserves adopted by CIM council, as amended. Inferred Resources have been estimated from geological evidence and limited sampling and must be treated with a lower level of confidence than Measured and Indicated Resources.
2) AgEq based on 75 (Ag):1 (Au) and 100% metallurgical recovery.
3) All numbers are rounded. Overall numbers may not be exact due to rounding.
4) Insitu vein resource isreported using a 150 gpt AgEq cut-off grade and minimum 1.5 m minimum true width, and surface stockpile resource is reported using a 100 gpt AgEq cut-off.

13.4.1 In Situ Vein Mineral Resource Estimate

The Mineral Resource Estimate for in situ vein material was calculated using Geovia GEMs v6.8 using vein models developed with Aranz Leapfrog Geo v.4.2.3 and sample data collected underground mapping, underground drilling and surface drilling. Silver and gold assay grades were interpolated into a block model. Block volumes were reduced based on the proportion of each block which is bisected by the vein solid. A fixed bulk density value of 2.55 t/m3 was applied to the volumes. The Mineral Resource estimate reports average silver and gold grades on block volume weighted basis.

The estimate is reported using a 150 gpt AgEq grade based on three year trailing metal prices of US$16.60 per ounce silver and US$1,224 per ounce gold, preliminary and approximate metallurgical recovery of 90% gold and 90% silver, and possible operating cost of $60/tonne. A comparable figure was reported for the Santa Elena Mine, which report mineral resources at a 145 gpt AgEq cut-off. (First Majestic, AIF 2017).

This estimate is listed in Table 13-14 and is effective as of February 12, 2018. This estimate adheres to guidelines set forth by NI 43-101 and the CIM Best Practices and Definition Standards.

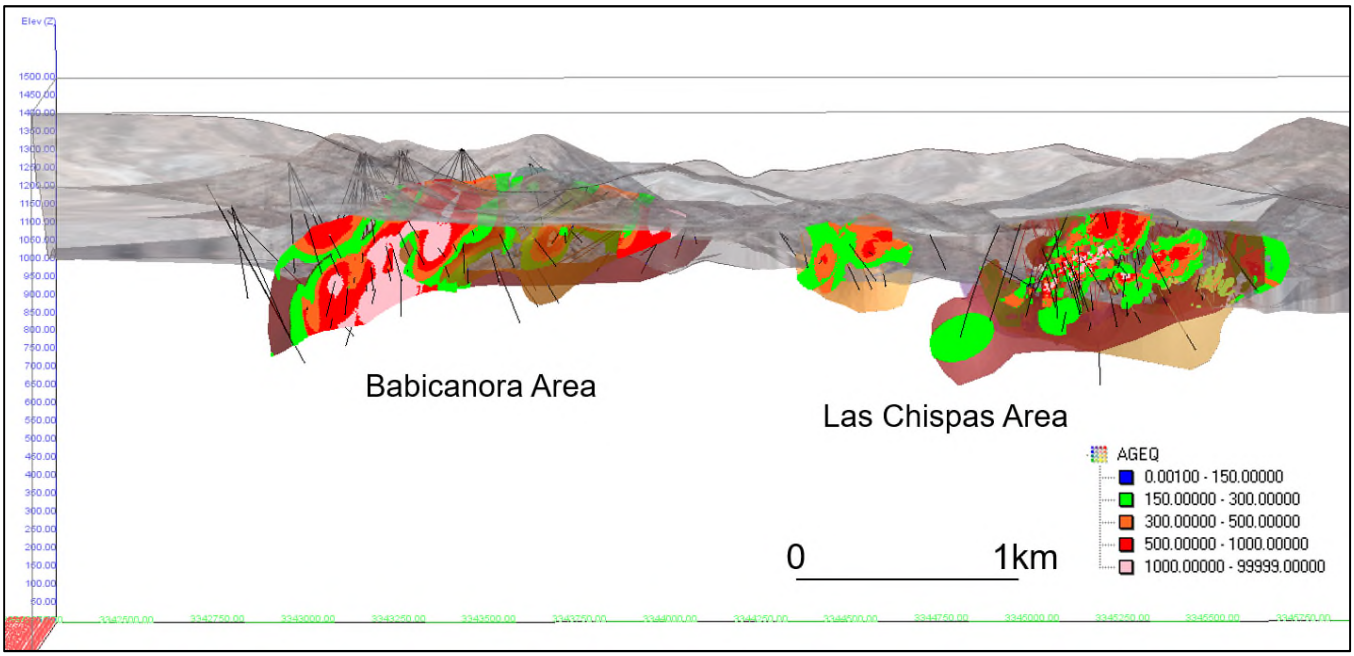
Table 13-14: Mineral Resource Estimate for In Situ Vein Material at the Las Chispas Property, Effective February 12, 2018

Vein	Classification[1]	Average True Width	Tonnes	Au (gpt)	Ag (gpt)	AgEq[2] (gpt)	Contained Gold Ounces	Contained Silver Ounces	Contained AgEq [2] Ounces
Babicanora[4]	Inferred	3.2	1,894,000	5.41	361	766	329,000	21,952,000	46,640,000
Includes Area 51	Inferred	2.7	967,000	7.43	469	1,026	231,000	14,581,000	32,247,000
Las Chispas	Inferred	3	171,000	2.39	340	520	13,000	1,874,000	2,861,000
Giovanni[4]	Inferred	2	607,000	1.37	237	340	27,000	4,633,000	6,641,000
William Tell	Inferred	1.5	595,000	1.32	185	284	25,000	3,543,000	5,438,000
Total	**Inferred**		**3,269,000**	**3.75**	**305**	**586**	**394,000**	**32,011,000**	**61,580,000**

1) Conforms to NI 43-101, Companion Policy 43-101CP, and the CIM Definition Standards on Mineral Resources and Mineral Reserves, as amended. Inferred Resources have been estimated from geological evidence and limited sampling and must be treated with a lower level of confidence than Measured and Indicated Resources.
2) AgEq based on 75 (Ag):1 (Au) and 100% metallurgical recovery.
3) Resource is reported using a 150 gpt AgEq cut-off grade and minimum 1.5 m minimum true width.
4) All numbers are rounded.
5) Babicanora resource includes the Babicanora Vein, Babicanora Footwall Vein and Babicanora Hanginwall Vein. Giovanni resource includes the La Blanquita and Giovanni-mini Vein.

A perspective view of the block models filtered to >150 gpt AgEq is shown in Figure 13-4.

Figure 13-4: Vein Block Models, >150 gpt AgEq, Looking West



13.4.2 Surface Stockpile Mineral Resource Estimate

A total of 21 surface dumps, stockpile, and back fill are estimated to have a AgEq value of > 100 gpt, out of the total 42 sampled by auger and trenching. The 21 surface dumps, stockpile and back fill are estimated to total 172,491 tonnes, and have an average grade of 1.37 gpt Au (containing 7,618 oz of gold), 116.85 gpt Ag (containing 648,108 oz), and 219.86 gpt AgEq (containing 1,219,426 oz). This estimate is summarized in Table 13-15 and is effective as of February 12, 2018. This estimate adheres to guidelines set forth by NI 43-101 and the CIM Best Practices and Definition Standards.

Table 13-15: Mineral Resource Estimate for Surface Stockpile Material at the Las Chispas Property, Effective February 12, 2018

Stockpile Name	Tonnes	Au (gpt)	Ag (gpt)	AgEq (2) (gpt)	Contained Gold Ounces	Contained Silver Ounces	Contained AgEq (2) Ounces
North Chispas 1	1,200	0.54	71	111	20	2,700	4,200
La Capilla	14,200	4.92	137	506	2,300	62,700	231,600
San Gotardo	79,500	0.79	121	180	2,000	308,100	459,600
Lupena	17,500	1.38	79	182	800	44,300	102,700
Las Chispas 1 (LCH)	24,200	0.78	125	183	600	97,000	142,500
Las Chispas 2	1,100	1.23	236	329	40	8,100	11,300
Las Chispas 3 (San Judas)	1,000	2.05	703	857	100	22,400	27,300
La Central	3,800	0.75	116	172	100	14,300	21,200
Chiltepines 1	200	0.87	175	240	0	800	1,200
Espiritu Santo	1,700	0.52	94	133	30	5,000	7,100
La Blanquita 2	4,600	0.53	118	158	100	17,500	23,400
El Muerto	5,800	2.52	79	268	500	14,900	50,200
Sementales	800	4.38	47	376	100	1,200	9,700
Buena Vista	400	4.62	57	403	100	700	5,100
Babicanora	10,300	1.81	56	192	600	18,500	63,300
Babicanora 2	1,000	2.63	276	473	100	8,900	15,300
El Cruce & 2,3	100	0.75	39	96	3	200	400
Babi stockpiled fill	800	1.80	120	255	50	3,100	6,600
LC stockpiled fill	300	2.50	243	431	20	2,300	4,200
Las Chispas u/g backfill	2,000	2.10	243	431	100	16,500	26,600
Babicanora u/g backfill	4,000	1.80	120	255	200	15,500	32,800
TOTAL	**174,500**	**1.38**	**119**	**222**	**7,600**	**664,600**	**1,246,100**

1) All Stockpile mineral resource estimates are classified as Inferred. This conforms to NI 43-101, Companion Policy 43-101CP, and the CIM Definition Standards on Mineral Resources and Mineral Reserves, as amended. Inferred Resources have been estimated from geological evidence and limited sampling and must be treated with a lower level of confidence than Measured and Indicated Resources.
2) AgEq based on 75 (Ag):1 (Au) and 100% metallurgical recovery.
3) Resource is reported using a 100 gpt AgEq cut-off grade.

13.4.3 Classification

Work undertaken by SilverCrest has set a solid foundation in support of a geological model and demonstrated grade continuity from drilling and underground mapping activities.

All Mineral Resource Estimates prepared for Las Chispas as of the Effective Date February 12, 2018, are classified as Inferred. It cannot be assumed that all or any part of an Inferred Mineral Resource will be upgraded to an Indicated or Measured Mineral Resource as a result of continued drilling and exploration.

The basis for the classification are as following:

- Current drill spacing is not currently sufficient to identify the various short range complexities mapped within the veins such as splays, faults offsets, and pinch and swell structures.
- Vein models have been used to constrain the interpolation, however, search ellipses used in the interpolation are quite broad resulting in smearing of high-grades along the fringes of some veins. Although geological continuity is believed to exist in these areas, the presence and concentration of Ag and Au mineralization has not been confirmed.
- Use of extensive underground mapping and channel sampling has helped delineate areas of mineralization not extracted from previous mining operations. Currently at Las Chispas and Giovanni, the number of underground samples far outweigh the number of drillhole samples used to define the geological structure and metal concentration. The mineralization should continue to be drill tested to confirm grade continuity outward into wall from best underground sample targets.
- Some uncertainty exists in the underground survey reconciliation with drilling intercepts.

13.4.4 Validation

Model validation is undertaken to demonstrate that the input data has been fairly and accurately represented in outputs of the block modelling process. Substantial deviations to the data distribution or mean tendency, or inflations to high-grade ranges can lead to misrepresentation or overstatement of the mineral resource estimate.

Methods used to validate the models include visual spatial comparison of input data (i.e., drillhole and underground sampling) on cross-section with block model output, and swath plot analysis. Additionally, the results of the Ordinary Kriging models developed for Babicanora and Las Chispas were also compared to the results of Inverse Distance Weighted (ID, to power of 3) interpolation model. These methods provide qualitative comparison of the results. Quantitative comparison of results can be more challenging to achieve, particularly in widely spaced data, as the results of the model and the input composite data have vastly different sample density to volume relationships (i.e., sample support) due to the large search parameters that are required to support grade continuity.

Visual comparison of the input data with the output block model resulted in decent correlation. The modelled grade trends in certain areas did not appear to follow consistent trends, however, this can be improved in future modelling by incorporating additional geological and structural controls.

In general, the ID methods resulted in slightly higher average grades with lower tonnages and sharper contrasts (i.e., steeper gradients) between high and low-grade samples compared to the Ordinary Kriging model. The effect of Kriging the mineral grades is higher grades can be slightly reduced and lower grade are slightly increased resulting in an overall smoother correlation between the input data.

Swath plots provide a qualitative method to observe preservation of the grade trends on a spatial basis. The data is plotted with average values along discrete intervals along the Cartesian X, Y and Z axis (i.e., easting, northing,

and elevation). Sample data used for these swath plots is composited and capped, resulting in a slightly smoother trend than raw data. However, the sample data can be clustered and may misrepresent areas of high-grade mineralization that have been oversampled. The block data is based on the composited and capped data but is non-clustered. Both datasets have been constrained to the vein models. Swath plots for Babicanora are shown below in Figure 13-5, for Las Chispas in Figure 13-6, for Giovanni, Giovanni Mini and La Blanquita in Figure 13-7, and for William Tell in Figure 13-8.

The model validation indicates that the input data has been reasonably represented in the model, at a confidence level of an Inferred Mineral Resource.

Figure 13-5: Babicanora, Swath Plots for AgEq Comparing Composite and Block Model Data

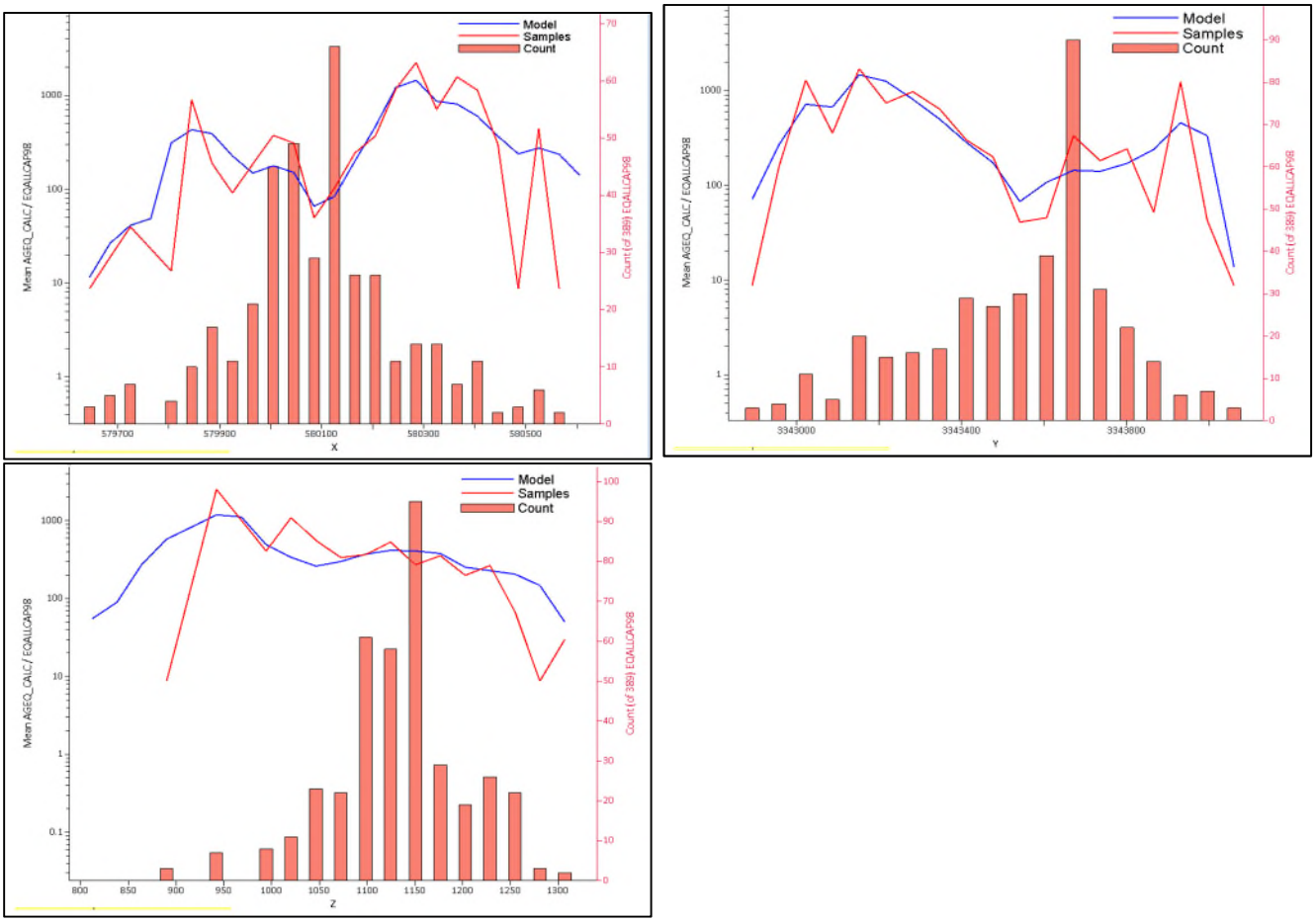


Figure 13-6: Las Chispas, Swath Plots for AgEq Comparing Composite and Block Model Data

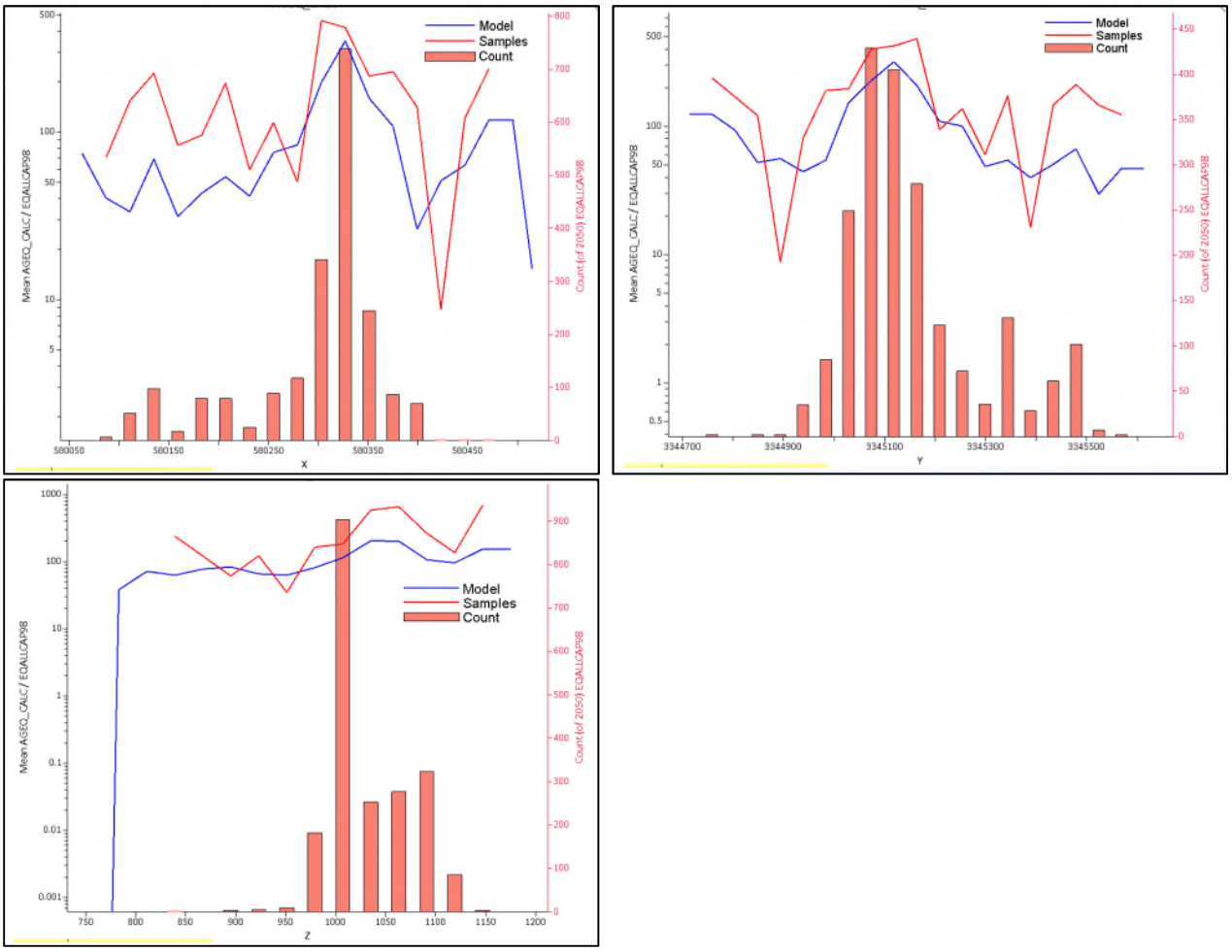


Figure 13-7: Giovanni, Giovanni Mini and La Blanquita, Swath Plots for AgEq Comparing Composite and Block Model Data

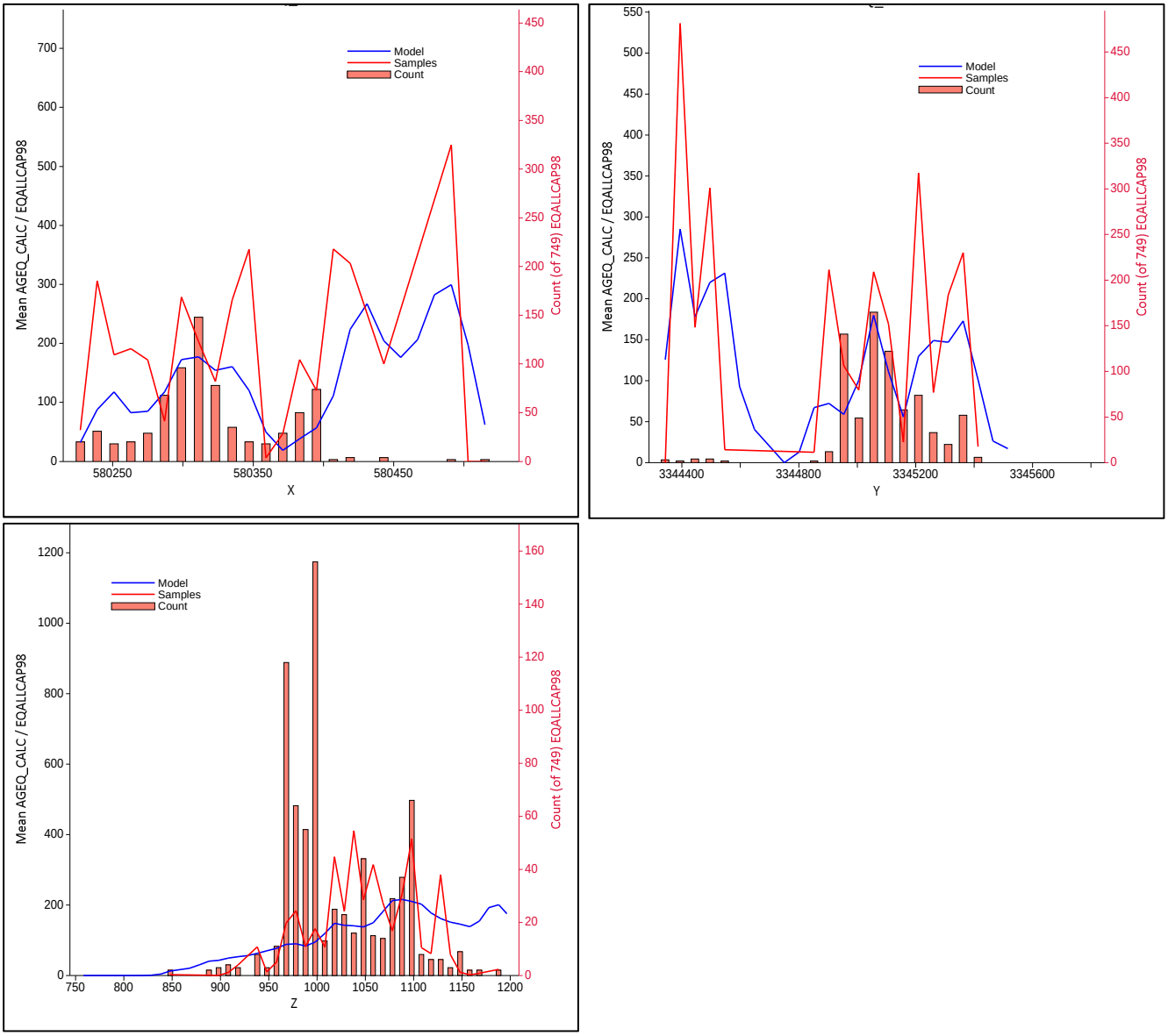
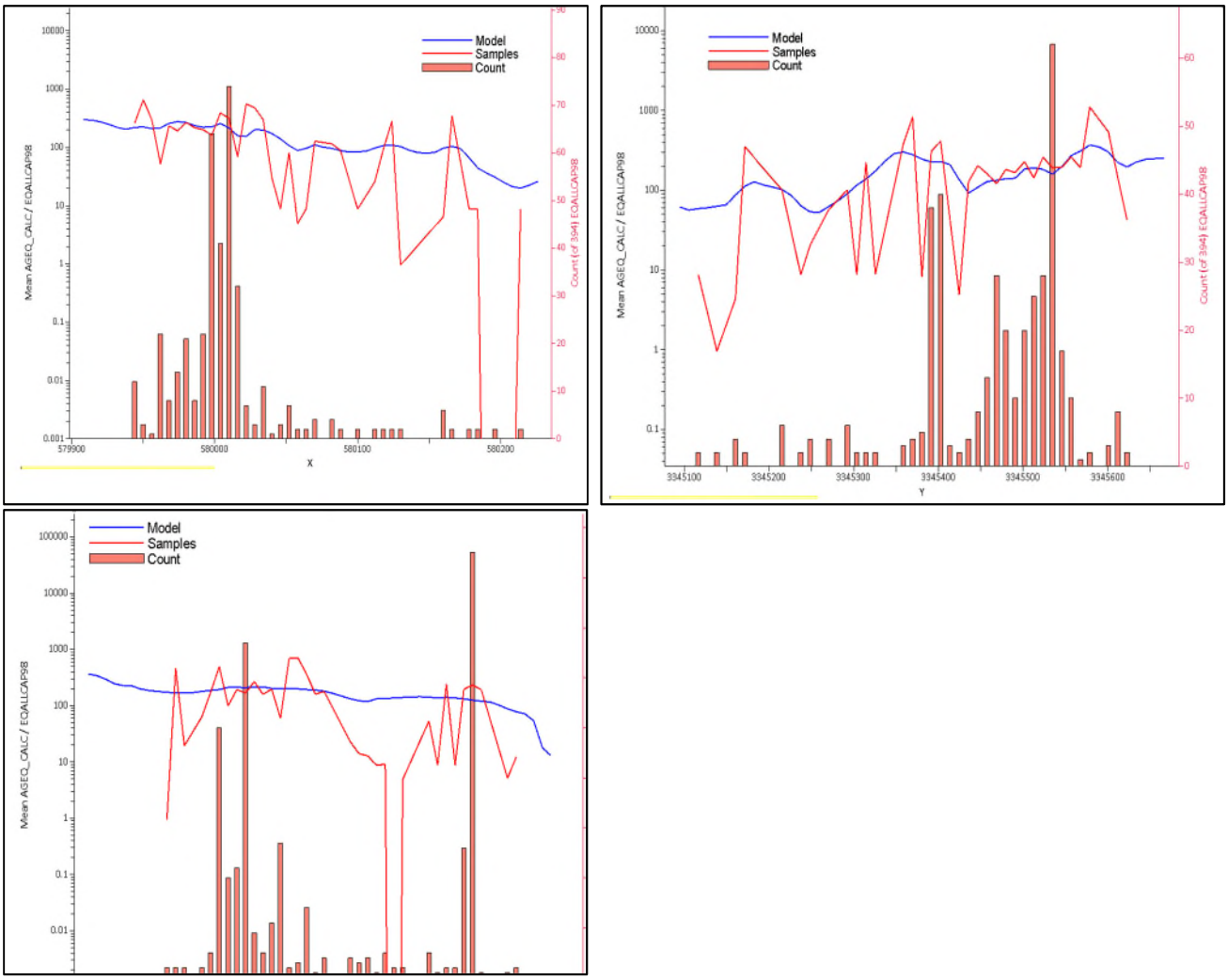


Figure 13-8: William Tell, Swath Plots for AgEq Comparing Composite and Block Model Data



13.4.5 Grade-Tonnage Curves

Grade-tonnage curves provide an indication of average grade and tonnage sensitivity to various cut-off grades based on the existing block model and constraining parameters. True increase or reduction of the cut-off grades could alter the limits of the vein model which would have an influence on the volume, and tonnage, of material available to the model resulting in different grade-tonnage plot than those shown below.

Grade-tonnage plots are included below for the Babicanora Area block model in Figure 13-9, for the Area 51 domain within the Babicanora model in Figure 13-10, and for the entire Las Chispas Area block model, including Las Chispas, Giovanni, Giovanni Mini and La Blanquita in Figure 13-11.

Figure 13-9: Grade-tonnage Plots for the Babicanora Area

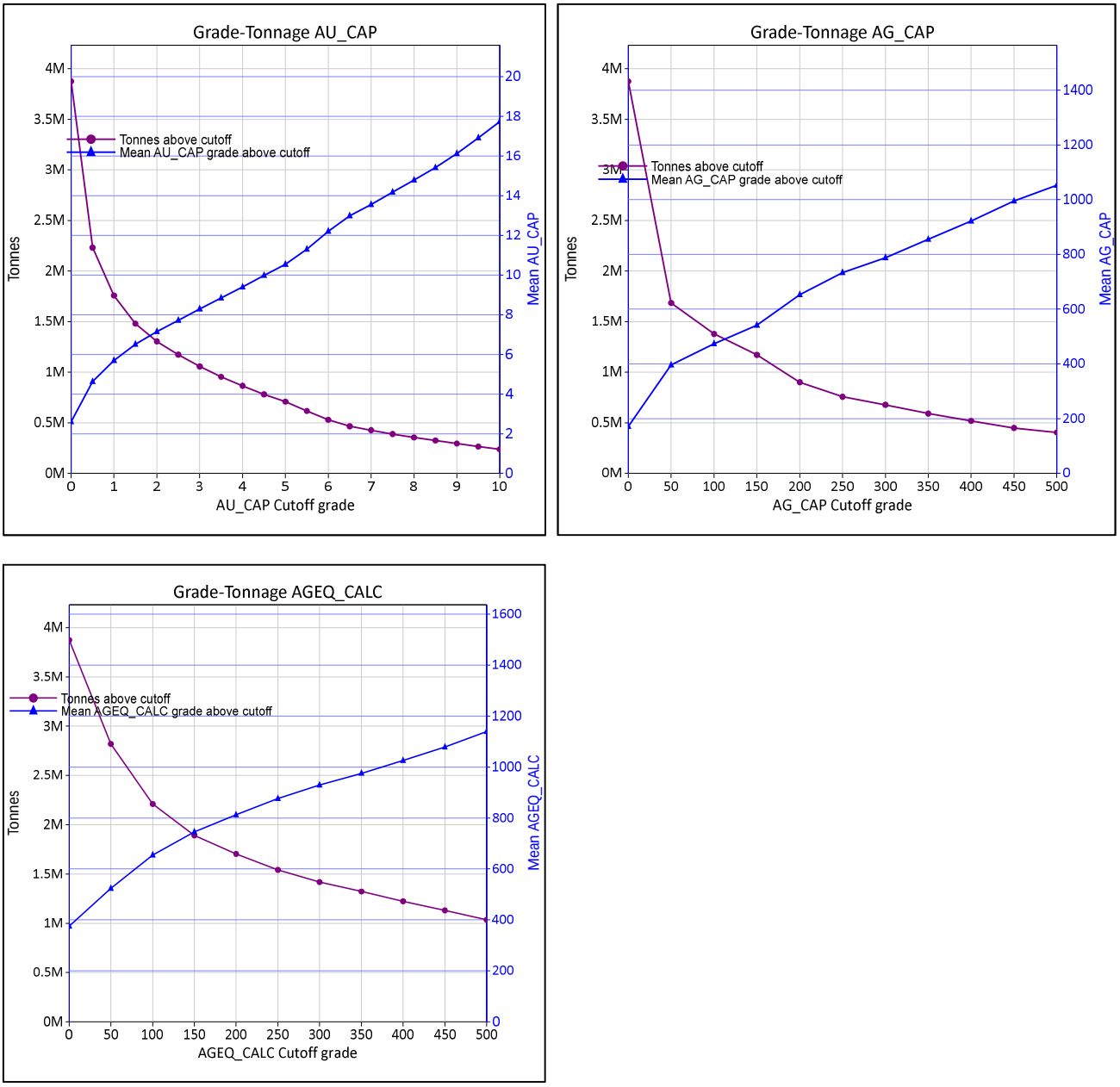


Figure 13-10: Grade-tonnage Plots for Area 51 within the Babicanora Area

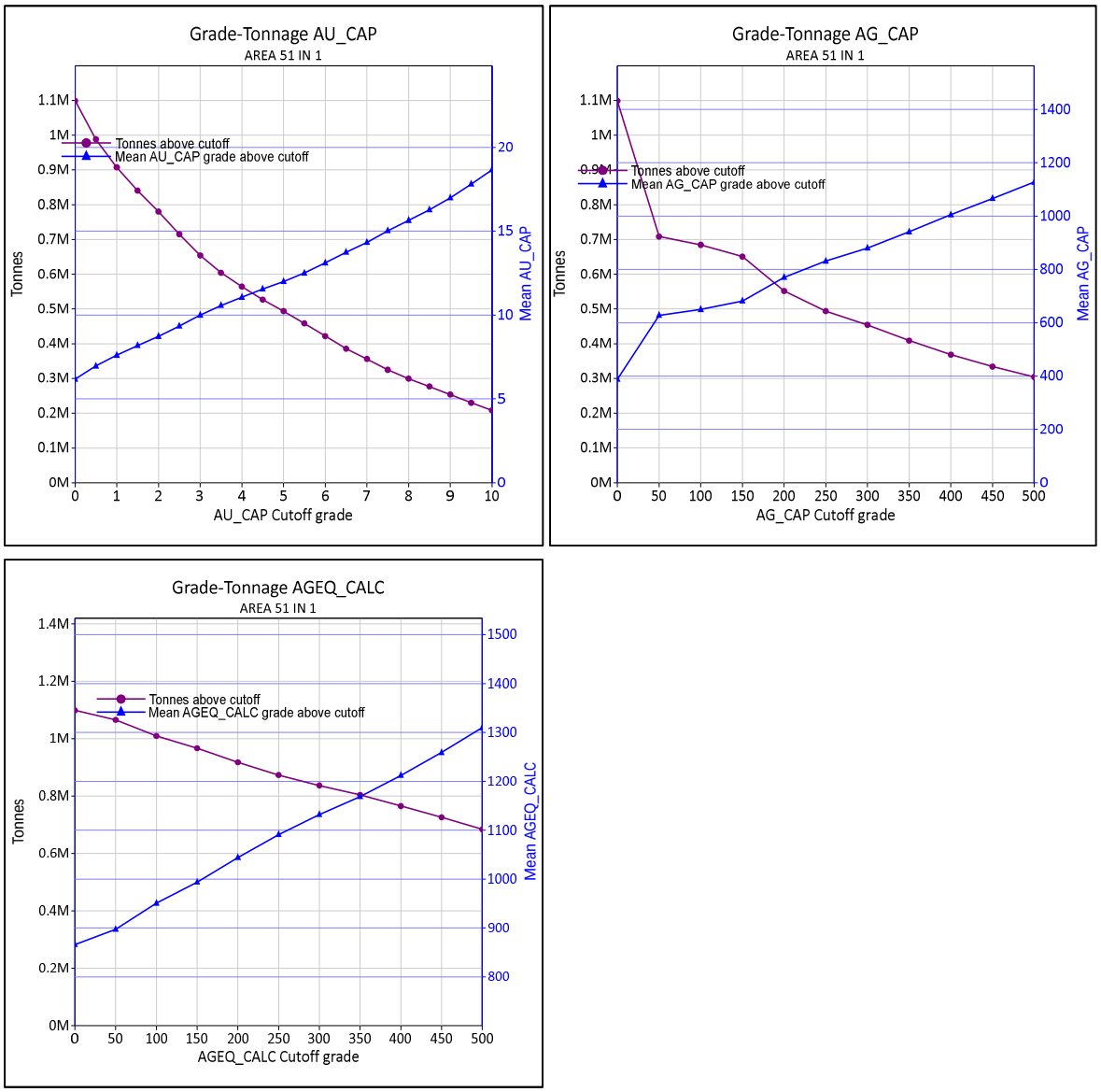
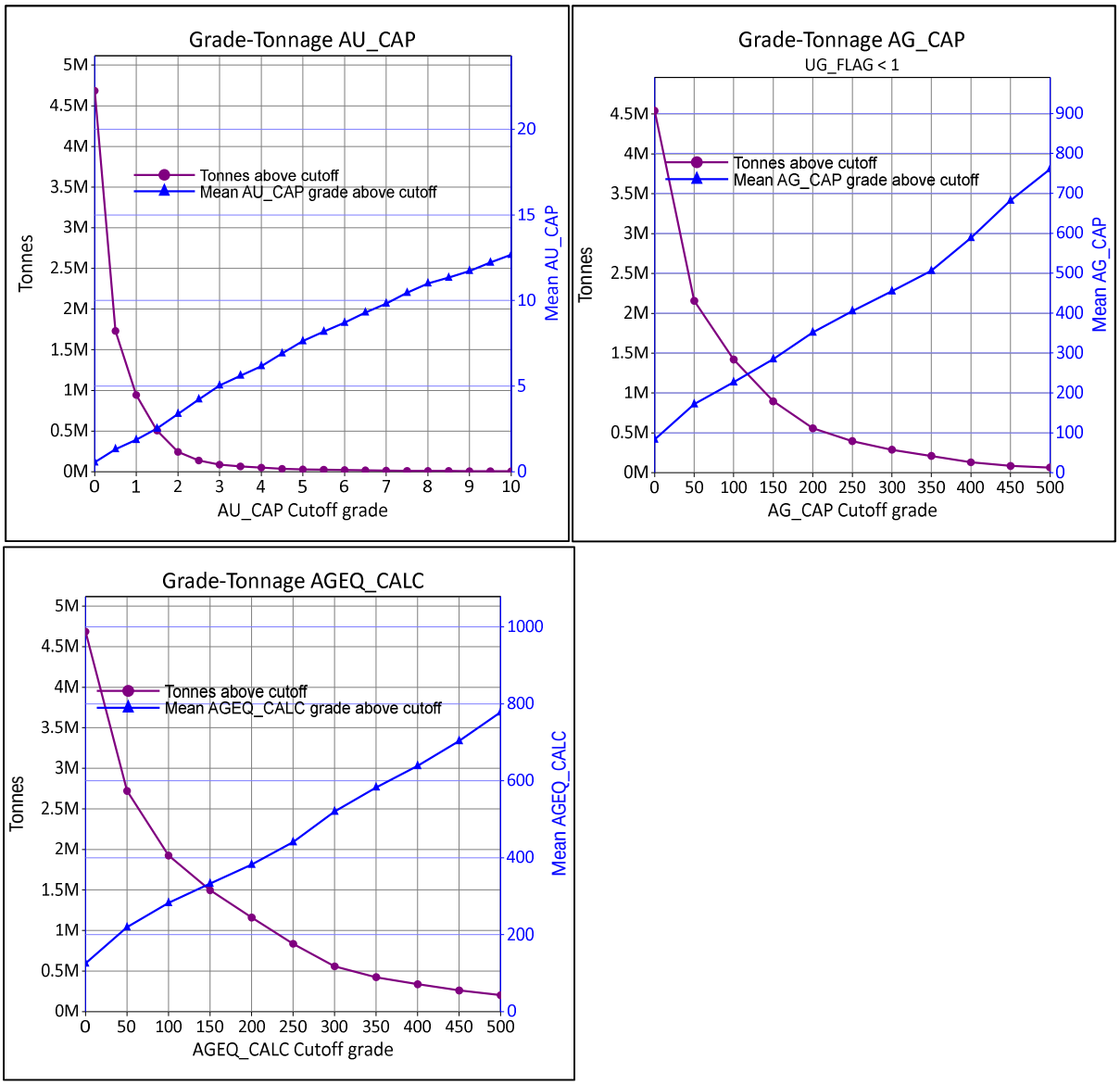


Figure 13-11: Grade-tonnage Plots for the Las Chispas Area (Las Chispas, Giovanni, Giovanni Mini, La Blanquita)



14.0 ENVIRONMENTAL STUDIES, PERMITTING, AND SOCIAL OR COMMUNITY IMPACT

14.1 Permitting

Las Chispas will require ongoing exploration permits to continue with drilling and exploration activities. SilverCrest currently holds an exploration permit for surface drilling which will need to be extended as of March 28, 2020.

14.2 Environmental Impact Statement for Exploration and Bulk Sampling

SilverCrest submitted an environmental impact statement (MIA) to the Mexican Government's Secretariat of Environment and Natural Resources (SEMARNAT) along with an application for an underground drilling permit. The permit was authorized on September 19, 2016 for a 10 year period and also authorizes a proposed program to extract a bulk sample up to 100,000 tonnes for off-site testwork. Amendments to the MIA will be required to conduct exploration activities beyond the historical mining areas, and also prior to the construction of any building facilities on site.

14.3 Environmental Liabilities

No known environmental liabilities exist on the Property from historical mining and processing operations. Soil and tailings testing was conducted as part of the overall sampling that has been ongoing onsite. To date there are no known contaminants in the soils. Water quality testing is currently ongoing for a baseline environmental study that is being done onsite.

15.0 ADJACENT PROPERTIES

No advanced exploration or operating properties are known to exist immediately adjacent the Las Chispas Property, which have relevance to this report.

The Santa Elena Mine (Au-Ag, 3,000tpd, underground), operated by First Majestic Silver Corp. is located approximately 22 km south-southwest of Las Chispas, and the Los Mercedes Mine (Au-Ag, 2,000 tpd underground) operated by Premier Gold Mines Ltd., is located approximately 33 km to the northwest.

16.0 CONCLUSIONS AND RECOMMENDATIONS

The vein models currently assume that all mineralization is hosted in competent and homogenous material. Zones of strong clay alteration or brecciation have been observed to exist at vein contacts and internal to vein structures. The veins should be modelled with representation of significant features such as these which may have impact on mining considerations

Las Chispas Property contains numerous formerly producing silver and gold mines which are reported to have mined exceptionally high-grade deposits. Many of the old workings are accessible today and are being rehabilitated by SilverCrest as part of an ongoing exploration program. SilverCrest completed the Phase I program which focused

on rehabilitation and exploration of the Las Chispas Vein, drilling on the Las Chispas and La Victoria Vein, and regional mapping of other historical adits and workings on the property. The Phase II program was initiated in November 2016 and was completed on the Effective Date of this report. The Phase II work included: further rehabilitation, mapping and sampling within the Las Chispas workings; extensive surface drilling at Las Chispas, Babicanora, William Tell, and Giovanni; underground drilling at Las Chispas and Babicanora; and surficial mapping and sampling including mineral inventory collection from 41 historical dumps, stockpiles and tailings. To date, a total of 27,453 samples have been collected from drilling and 5,291 samples have been collected from underground workings.

Drilling on the Babicanora Vein has identified significant silver and gold mineralization along a regional plunging trend which has been named Area 51, based on anchor mineral intersection in hole BA-17-51. The area measures approximately 600 m along strike, 500 m vertically, and remains open down plunge. The top of Area 51 is located at approximately the same elevation as the valley bottom or 200 vertical metres from the ridge crest.

The extensive mapping and sampling program being undertaken by SilverCrest has identified that many of the mineralized showings are comprised of narrow and high -grade mineralization as low to intermediate sulphidation epithermal deposits hosted in volcaniclastic rocks.

16.1 Recommendations

Based on the results of exploration work completed to date, it is concluded that the Las Chispas Property comprises an extensive mineralizing system, with numerous veins, or portions of veins, that remain intact and potentially undiscovered.

Tetra Tech concluded that the Las Chispas Property comprises an extensive mineralizing system and merits further work to continue to characterize the internal variability and extents of the Las Chispas, Babicanora, William Tell and Giovanni Veins, and to explore the numerous veins not yet tested. A Phase III program including additional underground channel sampling, dedicated metallurgical testwork on the historical in situ/muck/stockpiles, expansion and infill drilling along multiple veins, exploration decline at Area 51, baseline work and permitting has been recommended. Results should be incorporated into an updated mineral resource technical report and preliminary economic assessment. A cost estimate for this program is included below.

Table 16-1: Cost Estimate

Item	Units	Cost Estimate (USD$000)
Additional underground channel sampling and structural mapping	4,000 samples	300
Dedicated sampling and metallurgical testwork on historical insitu and muck material	50 samples and testwork	100
Expansion and infill drilling along multiple veins	45,000 m (surface and underground)	9,000
Area 51 decline and exploration	1,000 m	3,000
Baseline work and permitting	Decline, explosives, added drilling	200
Water exploration, permitting and purchase	All rights for water use	300
Update resource and technical report	Technical Report	100
Preliminary economic assessment		200
Mexico admin and labor		1,300
Corporate support		500
Total		**15,000**

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APPENDIX A

STATEMENT OF QUALIFICATIONS

James Barr, P.Geo.

I, James Barr, P.Geo., of Kelowna, British Columbia, do hereby certify:

- I am Senior Geologist and Team Lead with Tetra Tech Canada Inc. with a business address at Suite 150 - 1715 Dickson Avenue, Kelowna, BC, V1Y 9G6.
- I am a registered Professional Geoscientist with the Engineers and Geoscientists of British Columbia (#35150).
- Since 2003 I have worked as an exploration and resource geologist for numerous precious and base metal projects in Canada, Africa and Mexico, and have been preparing mineral resource estimates since 2008, including for underground gold and silver vein hosted deposits.
- I graduated from the University of Waterloo in 2003 with a B.Sc. (Honours) in Environmental Science, Earth Science and Chemistry.
- This certificate applies to the technical report entitled Technical Report and Mineral Resource Estimate for the Las Chispas Property Sonora, Mexico with effective date of February 12, 2018 (the “Technical Report”).
- I visited the Property that is the subject of the Technical Report from August 30, 2016, through to September 1, 2016, from January 15, 2017, through to January 19, 2017, and November 21, 2017, through to November 22, 2017.
- I am independent of SilverCrest Metals Inc., as defined by Section 1.5 of the Instrument.
- Previous to this report, I authored a Qualifying Report for SilverCrest Metals Inc. entitled “Technical Report on the Las Chispas Property, Sonora, Mexico”, with effective date September 15, 2016.
- I am responsible for the contents of this Technical Report.
- I confirm that I have read NI 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with them.
- At the effective date of the Technical Report, to the best of my knowledge, information, and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Signed and dated this 23 day of April, 2018 at Kelowna, British Columbia

Original has been signed and sealed

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James Barr, P.Geo.
Senior Geologist and Team Lead - Geology
Tetra Tech Canada Inc.