National Instrument 43-101 Technical Report: Updated Mineral Resource and Reserve Estimates for the Guanaceví Project, Durango State, Mexico

Report Date: March 3, 2017
Effective Date: December 31, 2016
Amended Date: March 27, 2018

Prepared for:

ENDEAVOUR SILVER

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IMPORTANT NOTICE

This report was prepared as a National Instrument 43-101 Technical Report for Endeavour Silver Corp. ("EDR") by Hard Rock Consulting, LLC ("HRC"). The quality of information, conclusions, and estimates contained herein is consistent with the scope of HRC's services based on: i) information available at the time of preparation, ii) data supplied by outside sources, and iii) the assumptions, conditions, and qualifications set forth in this report. This report is intended for use by EDR subject to the terms and conditions of its contract with HRC, which permits EDR to file this report with Canadian Securities Regulatory Authorities pursuant to National Instrument 43-101, Standards of Disclosure for Mineral Projects. Except for the purposes legislated under provincial securities law, any other use of this report by any third party is at that party's sole risk.

CERTIFICATES OF QUALIFIED PERSONS

I, Zachary J. Black, SME-RM, do hereby certify that:

1. I am currently employed as Principal Resource Geologist by:

   Hard Rock Consulting, LLC
   7114 W. Jefferson Ave., Ste. 308
   Lakewood, Colorado 80235 U.S.A.

2. I am a graduate of the University of Nevada, Reno with a Bachelor of Science in Geological Engineering, and have practiced my profession continuously since 2005.

3. I am a registered member of the Society of Mining and Metallurgy and Exploration (No. 4156858RM)

4. I have worked as a Geological Engineer/Resource Geologist for a total of ten years since my graduation from university; as an employee of a major mining company, a major engineering company, and as a consulting engineer with extensive experience in structurally controlled precious and base metal deposits.

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

6. I personally inspected the Guanaceví Project June 26th through June 27th, 2016.

7. I am responsible for the preparation of the report titled "National Instrument 43-101 Technical Report, Updated Mineral Resource and Reserve Estimates for the Guanaceví Project, Durango State, Mexico," dated March 3rd, 2017, with an effective date of December, 31 2016 and an amended date of March 27th, 2018, with specific responsibility for Sections 1.4, 1.6 and 9 through 12 and 14 of this report.

8. I have had prior involvement with the property that is the subject of this Technical Report as a QP co-author of a previous (2016) NI 43-101 Technical Report.

9. As of the date of this certificate and as of 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 required to be disclosed to make the report not misleading.

10. I am independent of the issuer applying all the tests in section 1.5 of NI 43-101.

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

Dated this 27th day of March, 2018.
"Signed" Zachary J. Black

Signature of Qualified Person

Zachary J. Black, SME-RM
Printed name of Qualified Person

CERTIFICATES OF QUALIFIED PERSONS

I, Jennifer J. Brown, P.G., do hereby certify that:

1. I am currently employed as Principal Geologist by:

   Hard Rock Consulting, LLC
   7114 W. Jefferson Ave., Ste. 308
   Lakewood, Colorado 80235 U.S.A.

2. I am a graduate of the University of Montana and received a Bachelor of Arts degree in Geology in 1996.

3. I am a:
   - Licensed Professional Geologist in the State of Wyoming (PG-3719)
   - Registered Professional Geologist in the State of Idaho (PGL-1414)
   - Registered Member in good standing of the Society for Mining, Metallurgy, and Exploration, Inc. (4168244RM)

4. I have worked as a geologist for a total of 19 years since graduation from the University of Montana, as an employee of various engineering and consulting firms and the U.S.D.A. Forest Service. I have more than 10 collective years of experience directly related to mining and or economic and saleable minerals exploration and resource development, including geotechnical exploration, geologic analysis and interpretation, resource evaluation, and technical reporting.

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

6. I am responsible for the preparation of the report titled "National Instrument 43-101 Technical Report, Updated Mineral Resource and Reserve Estimates for the Guanaceví Project, Durango State, Mexico," dated March 3rd, 2017, with an effective date of December, 31 2016 and an amended date of March 27th, 2018, with specific responsibility for Sections 1.1 through 1.3 and Sections 2 through 8 of this report.

7. I have had prior involvement with the property that is the subject of this Technical Report as a QP co-author of a previous (2016) NI 43-101 Technical Report.

8. As of the date of this certificate and as of 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 required to be disclosed to make the report not misleading.

9. I am independent of the issuer applying all the tests in section 1.5 of NI 43-101.

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

Dated this 27th day of March, 2018.

"Signed" Jennifer J. (J.J.) Brown

JJBrown

Jennifer J. (J.J.) Brown, SME-RM
Printed name of Qualified Person

Hard Rock Consulting, LLC

Certificates of Qualified Persons

I, Jeffery W. Choquette, P.E., do hereby certify that:

1. I am currently employed as Principal Engineer by:

   Hard Rock Consulting, LLC
   7114 W. Jefferson Ave., Ste. 308
   Lakewood, Colorado 80235 U.S.A.

   I am a graduate of Montana College of Mineral Science and Technology and received a Bachelor of Science degree in Mining Engineering in 1995.

2. I am a:

   - Registered Professional Engineer in the State of Montana (No. 12265)
   - QP Member in Mining and Ore Reserves in good standing of the Mining and Metallurgical Society of America (No. 01425QP)

3. I have nineteen years of domestic and international experience in project development, resource and reserve modeling, mine operations, mine engineering, project evaluation, and financial analysis. I have worked for mining and exploration companies for fifteen years and as a consulting engineer for three and a half years. I have been involved in industrial minerals, base metals and precious metal mining projects in the United States, Canada, Mexico and South America.

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

5. I personally inspected the Guanaceví Project June 26th through June 27th, 2016 and October 12th through October 15th, 2016.

6. I am responsible for the preparation of the report titled "National Instrument 43-101 Technical Report, Updated Mineral Resource and Reserve Estimates for the Guanaceví Project, Durango State, Mexico," dated March 3rd, 2017, with an effective date of December, 31 2016 and an amended date of March 27th, 2018, with specific responsibility for Sections 1.5, 1.7, 1.8, 13, and 15 through 27 of this report.

7. I have had prior involvement with the property that is the subject of this Technical Report as a QP co-author of a previous (2016) NI 43-101 Technical Report.

8. As of the date of this certificate and as of 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 required to be disclosed to make the report not misleading.

9. I am independent of the issuer applying all the tests in section 1.5 of NI 43-101.

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

Dated this 27th day of March, 2018.

"Signed" Jeffery W. Choquette

Jeffery W. Choquette, P.E.
Printed name of Qualified Person

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HARD ROCK CONSULTING, LLC

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3D	Three Dimensional
AA	Atomic Absorption
AES	Atomic Emission Spectrometry
CAHECOMI	Campos Hernandez Contratistas Mineros, S.A. de C.V.
CCD	Counter-Current Decantation
CEMEFI	Mexican Center for Philanthropy
CIM	Canadian Institute of Mining, Metallurgy and Petroleum
CL	Control Limit
CMC	Compañia Minera del Cubo S.A. de C.V.
CV	Coefficient Variation
EDR	Endeavour Silver Corp.
ESR	Socially Responsible Company
FSE	Frankfurt Stock Exchange
g/t	Grams per Tonne
HDPE	High Density Polyethylene
HP	Horsepower
HRC	Hard Rock Consulting
ICP	Inductively Coupled Plasma
ID	Inverse Distance
LL	Lower Control Limit
LOM	Life of Mine
MG	Metalurgica Guanaceví
MSO	Mineable Shape Optimizer
NN	Nearest Neighbor
NYSE	New York Stock Exchange
OK	Ordinary Kriging
QA/QC	Quality Assurance/Quality Control
REE	Rare Earth Element
RQD	Rock Quality Designation
SRM	Standard Reference Material
TSX	Toronto Stock Exchange
UL	Upper Control Limit
VLP	Vertical Longitudinal Projection
WGM	Watts, Griffis & McQuat, Ltd

1. EXECUTIVE SUMMARY

1.1 Introduction

Hard Rock Consulting, LLC ("HRC") was retained by Endeavour Silver Corp. ("EDR") to complete an independent technical audit and to update the mineral resource and reserve estimates for the Guanaceví Project (the "Project") located in Durango State, Mexico. This report presents the results of HRC's efforts, and is intended to fulfill the Standards of Disclosure for Mineral Projects according to Canadian National Instrument 43-101 ("NI 43-101"). This report was prepared in accordance with the requirements and guidelines set forth in Companion Policy 43-101CP and Form 43-101F1 (June 2011), and the mineral resources and reserves presented herein are classified according to Canadian Institute of Mining, Metallurgy and Petroleum ("CIM") Definition Standards - For Mineral Resources and Mineral Reserves, prepared by the CIM Standing Committee on Reserve Definitions and adopted by CIM Council on May 10, 2014. The mineral resource and mineral reserve estimates reported here are based on all available technical data and information as of December 31, 2016.

1.2 Property Description and Ownership

The Guanaceví Project is located in the northwest portion of the Mexican state of Durango, approximately 3.6 km west of the town of Guanaceví and 260 km northwest of the capital city of Durango. The approximate geographic center of the Project is 105°58'20"W longitude and 25°54'47"N latitude. At present, the Project is comprised of 51 mineral concessions for a total property area of 4,171.5546 ha.

EDR controls the Guanaceví Project through its 100% owned Mexican subsidiary, Endeavour Gold Corporation S.A. de C.V. (Endeavour Gold). Endeavour Gold holds the project through its two 100% owned subsidiaries, Minera Plata Adelante S.A. de C.V. (Minera Plata Adelante) and Refinadora Plata Guanaceví S.A. de C.V. (Refinadora Plata Guanaceví).

1.3 Geology and Mineralization

The Guanaceví silver-gold district hosts classic, high-grade silver-gold, epithermal vein deposits characterized by low sulphidation mineralization and adularia-sericite alteration. The Guanaceví veins are typical of most other epithermal silver-gold vein deposits in Mexico in that they are primarily hosted in the Tertiary Lower Volcanic series of andesite flows, pyroclastics and epiclastics, overlain by the Upper Volcanic series of rhyolite pyroclastics and ignimbrites. Evidence is accumulating in the Guanaceví mining district that the mineralization is closely associated with a pulse of silicic eruptions that either signaled the end of Lower Volcanic Sequence magmatism or the onset of Upper Volcanic Sequence activity.

Mineralization at Guanaceví occurs in association with an epithermal low sulphidation, quartz-carbonate, fracture-filling vein hosted by a structure trending approximately N45°W, dipping 55° southwest. The Santa Cruz vein is the principal host of silver and gold mineralization at Guanaceví, and is located on the west side of the horst of the Guanaceví Formation. The mineralized vein is part of a major fault system that trends northwest and principally places the Guanaceví Formation in the footwall against andesite and/or rhyolite in the hanging wall. The fault and vein comprise a structural system referred to locally as the Santa Cruz vein structure or Santa Cruz vein fault. The Santa Cruz vein itself has been traced for 5 km along trend, and averages approximately 3.0 m in width. High-grade mineralization in the system is not continuous, but occurs in steeply northwest-raking shoots up to 200 m in strike length. A secondary mineralized vein is located sub-parallel and subjacent to the Santa Cruz vein, in the footwall, and while less continuous is economically significant in the Porvenir Dos and North Porvenir portions of the Project.

1.4 Status of Exploration

In 2016, EDR spent US $1,297,698 (including property holding costs) on exploration activities, primarily at the Porvenir and Santa Cruz mines. Surface and underground drilling programs were carried out at both mine localities, totaling 6,985 m in 30 holes, with a total of 3,070 samples submitted for assay. Regional field exploration was conducted over several concessions peripheral to the Guanaceví Project, and included collection and analysis of 323 rock samples.

Since acquisition of the Guanaceví Project in 2004, and prior to the 2016 exploration season, EDR had completed 690 diamond drill holes totaling 191,116 m and 22 reverse circulation drill holes totaling 2,977 m on the entire Guanaceví Mines Project. Of this total, approximately 147,718 m of diamond drilling in 504 holes were completed on the Santa Cruz vein structure. Holes were drilled from both surface and underground drill stations, and 54,799 samples were collected and submitted for assay.

1.5 Development and Operations

Conventional cut and fill mining or by long hole stope methods are employed at Guanaceví. Cut and fill stopes are generally 15m long and 5m high, and long hole stopes are 15m long and 20m high. Access to the stoping areas is provided by a series of primary and secondary ramps located in the footwall. The ramps have grades from minus 15% to plus 12%, with plus or minus 12% as standard. The cross-cuts are 4 m by 4 m for the primary ramps and 3.5 m by 3.5 m for the secondary ramps.

In the upper parts of the mine, stope access is by short (10m to 40m) cross-cuts from the ramp to the vein/stope. These cross-cuts are generally 3.5m by 3.5m in cross-section and are usually driven down at minus 18% to intersect with the stope. As the stope advances up-dip on the vein, the back is taken down the cross-cuts to maintain access until the cross-cut reaches a maximum inclination of 15%. In the lower parts of the mine (below the water table) stope access is by 90m long cross-cuts to the vein/stope. The cross-cuts are generally 3.0m by 3.5m in cross-section and are driven at plus 1% to intersect the stope (for water drainage). As the stope advances up-dip on the vein, the back is taken down in these cross-cuts to maintain access until the cross-cut reaches a maximum inclination of plus 15%.

Mining in the stopes is done with jackleg drills. Back cuts are taken 2m to 2.5m high via vertical up-hole drilling or by breasting. The broken material is mucked out using scooptrams (2 yard or 3.5 yard depending on vein width). Waste fill from mine development is placed in the stope by the same scooptrams to within 2 m to 2.5 m of the back. When the vein is less than minimum mining width, the footwall is slashed to provide adequate width. This slashing is done during the fill cycle and the slashed material remains in the stope as fill.

In 2016, the total ore production was approximately 19% from the Porvenir North mine, 74% from the Santa Cruz mine and 7% from Porvenir 4.

The production from the Porvenir North mine was distributed in three main areas of the mine (Upper Porvenir North, Deep Porvenir North and Central Porvenir North). The area of Upper Porvenir North, provided 34% of production from the mine. The stopes that contributed the most in this area were the R-3122, 3123-R and R-3124. In Deep Porvenir North, production was from the R-3133 and R-3134 stopes which represented 8% of the production. Central Porvenir North produced the most tonnage providing 39% of the total production. Stopes that contributed from this were the R-3145-2, R-3146-2, R-3149 and R-3150. The development from Porvenir North produced 15% of production from the mine. In the Upper Porvenir North mine development was from the S-3117, S-3122 and S-3123 levels. In Central Porvenir North mine development was from the S-3149, 3150-S and S-3157 levels.

In the Santa Cruz mine, the main ramp development was advanced to the 3359 and 3360 levels. During 2016 continued side ramps were developed to enter the main vein at the southern end of mine. Lateral ramps were developed from the ramp on the 4118, R-3348, 3349-R, R-3350 and R-3351 levels. Historic workings on level 13 were also opened to extract remnant ore zones. Production from stopes concentrated on the R-3352, R-3353, R-3354, R-3356, 3357-R and R-3359 stoping levels with R-3352 being the largest contributor. These stopes presented approximately 80% of the total production from Santa Cruz during 2016. Development ore represented approximately 7% of the total production.

In the Porvenir 4 mine development concentrated on the 3508 and 3509 ramps. Production from the mine was mainly from the S-3507, S-3508 and B S-3509 levels. Ore from these stopes represented approximately 24% of ore generated from the mine. Stope production concentrated on the R-3506, R-3507, R-3508, R-3508 B INT B Y R-3509 stopes.

As of December 31, 2016, the Guanaceví mines project had a roster of 546 employees and an additional 387 contractors. The mine operates on two 10-hour shifts, 7 days a week, whereas the mill operates on a 24/7 schedule.

1.6 Mineral Resource Estimate

Resource geologist Zachary J. Black, SME-RM, of HRC is responsible for the mineral resource estimate presented in this report. Mr. Black is a Qualified Person as defined by NI 43-101, and is independent of EDR. The mineral resources reported herein are classified as Measured, Indicated and Inferred according to CIM Definition Standards.

HRC estimated the mineral resource for the Guanaceví Project based on drillhole data constrained by geologic vein boundaries with an Inverse Distance Weighted (“ID”) algorithm. Datamine Studio RM® V1.0.73.0 (“Datamine”) software was used to complete the resource estimate in conjunction with Leapfrog Geo® V.3.0.0 (“Leapfrog”), which was used to produce the geologic model. The metals of interest at Guanaceví are gold and silver.

The Guanaceví mineral resource is comprised of 22 individual veins. The veins are further subdivided by area and modeling method. The mineral resources have been estimated using either a Vertical Longitudinal Projection (VLP) polygonal method (4 veins) or as 3-dimensional (“3D”) block model (18 veins).

The resources based on the 2D polygonal methods are estimated by using a fixed distance VLP from sample points. The VLPs are created by projecting vein geology and underground workings onto a vertical 2D long section. The 2D estimates were classified based on the distance to the nearest sample. Measured mineral resources are the area of the defined resource blocks within 10 meters of a sample. Indicated mineral resources are the area of the defined resource blocks within 20 meters of a sample. Inferred mineral resources are those blocks greater than 20 meters from a sample and have a value for estimated silver.

HRC constructed the 3D vein models using Leapfrog. Eighteen veins were modeled using a linear interpolation methodology and sample intervals. Cross-sections orthogonal to the strike of the vein were used to select intervals from drillholes representing the vein material. Level sections were used to select vein material from channel samples. Points representing the hanging wall and footwall contacts were extracted by the software to interpolate hanging wall and footwall surfaces. These surfaces were used to delineate each vein solid. The surfaces were evaluated in 3-dimensions to ensure that both the down dip and along strike continuity was maintained throughout the model. Veins were clipped against younger veins, topography, and the concession boundaries.

The mineral resource estimate includes all analytical data obtained as of December 31, 2016. Mineral resources are not mineral reserves and may be materially affected by environmental, permitting, legal, socio-economic, political, or other factors. Mineral resources are reported above a silver equivalent grade of 198 gpt, assuming a silver price of $16.29 per ounce. HRC used a cutoff grade to test for reasonable prospects for economic extraction.

The mineral resources for the Guanaceví mine as of December 31, 2016, are summarized in Table 1-1. The resources are exclusive of the mineral reserves.

Table 1-1 Mineral Resource Estimate, Effective Date December 31, 2016

Classification	Tonnes	Silver Equivalent	Silver		Gold	
		g/t	g/t	oz.	g/t	oz.
Measured	69,000	284	248	550,300	0.47	1,000
Indicated	2,271,000	351	296	21,595,600	0.72	52,800
Measured + Indicated	2,340,000	349	295	22,145,900	0.71	53,800
Inferred	638,000	441	379	7,769,400	0.82	16,900

1. Measured, Indicated and Inferred resource cut-off grades were 198 g/t silver equivalent at Guanaceví.
2. Mineral resources are not mineral reserves and do not have demonstrated economic viability. There is no certainty that all or any part of the mineral resources estimated will be converted into mineral reserves.
3. Metallurgical recoveries were 82.5% silver and 85.4% gold.
4. Silver equivalents are based on a 75:1 silver: gold ratio
5. Price assumptions are $16.29 per ounce for silver and $1,195 per ounce for gold for resource cutoff calculations.
6. Mineral resources are estimated exclusive of and in addition to mineral reserves.

1.7 Mineral Reserve Estimate

Mr. Jeff Choquette, P.E., MMSA-QP, of HRC is responsible for the mineral reserve estimate presented in this report. Mr. Choquette is Qualified Person as defined by NI 43-101 and is independent of EDR. The mineral reserve estimate for EDR's Guanaceví Project has an effective date of December 31st, 2016. The mineral reserve estimate includes the Santa Cruz and Porvenir Norte areas of the mine and the ore stockpiles at the mill site. Stope designs for reporting the mineral reserves were created utilizing the updated resources and cutoffs established for 2016. All the stopes are within readily accessible areas of the active mining areas. Ore is processed in the on-site mill, leaching circuit and Merrill Crowe process capable of processing 1,300 tpd.

HRC utilized Datamine's Mineable Shape Optimizer ("MSO") program to generate the stopes for the reserve mine plan. The MSO stope designs are then used to design stopes on levels along with the required development for the final mine plans. The stopes were created based solely on Measured and Indicated resources above the calculated cutoff, which have demonstrated to be economically viable; therefore, Measured and Indicated mineral resources within the stopes have been converted to Proven and Probable mineral reserves as defined by CIM. Inferred mineral resources are classified as waste. Dilution is applied to Measured and Indicated resource blocks depending on the mining method chosen.

The mining breakeven cut-off grade, which includes internal stope dilution, was utilized in Datamine's MSO to generate the stope designs for defining the reserves. The cut-off is stated as silver equivalent since the ratio between gold and silver is variable and both commodities are sold. The average cut-off grade used for the Guanaceví property is 198 g/t Ag equivalent. Silver equivalent grade is calculated as the silver grade + (gold grade * 75), taking into account gold and silver prices and expected mill recoveries.

Mineral reserves are derived from Measured and Indicated resources after applying the economic parameters as stated above, and utilizing Datamine's MSO program to generate stope designs for the reserve mine plan. The Guanaceví Project mineral reserves are derived and classified according to the following criteria:

- Proven mineral reserves are the economically mineable part of the Measured resource for which mining and processing / metallurgy information and other relevant factors demonstrate that economic extraction is feasible. For Guanaceví Project, this applies to blocks located within approximately 10m of existing development and for which EDR has a mine plan in place.
- Probable mineral reserves are those Measured or Indicated mineral resource blocks which are considered economic and for which EDR has a mine plan in place. For the Guanaceví mine project, this is applicable to blocks located a maximum of 35m either vertically or horizontally from development with one exception in the main lower Santa Cruz vein the maximum distance to development was extended to 110m as this area is currently being developed.

The Proven and Probable mineral reserves for the Guanaceví mine as of December 31, 2016 are summarized in Table 1-2. The reserves are exclusive of the mineral resources reported in Section 14 of this report.

Table 1-2 Mineral Reserve Estimate

Classification	Tonnes (t x 1,000)	AgEq g/t	Ag g/t	Ag (oz) * 1,000	Au g/t	Au (oz) * 1,000	% Dilution
Proven	86.5	284	247	686.2	0.49	1.37	26%
Probable	508.2	311	262	4,285.20	0.64	10.48	30%
Total Proven and Probable Reserves	**594.7**	**307**	**260**	**4,971.40**	**0.62**	**11.84**	**29%**

1. Reserve cut-off grades are based on a 198 g/t silver equivalent.
2. Metallurgical Recoveries were 82.5% silver and 85.4% gold.
3. Mining Recoveries of 95% were applied.
4. Minimum mining widths were 1.4 meters.
5. Dilution factors averaged 29%. Dilution factors are calculated based on internal stope dilution calculations and external dilution factors of 15% for cut and fill and 30% for long hole.
6. Silver equivalents are based on a 75:1 silver:gold ratio.
7. Price assumptions are $16.29 per ounce for silver and $1,195 per ounce for gold.
8. Mineral resources are estimated exclusive of and in addition to mineral reserves.
9. Figures in table are rounded to reflect estimate precision; small differences generated by rounding are not material to estimates.

1.8 Conclusions and Recommendations

The QP considers the Guanaceví resource and reserve estimates presented here to conform with the requirements and guidelines set forth in Companion Policy 43-101CP and Form 43-101F1 (June 2011), and the mineral resources and reserves presented herein are classified according to Canadian Institute of Mining, Metallurgy and Petroleum ("CIM") Definition Standards - For Mineral Resources and Mineral Reserves, prepared by the CIM Standing Committee on Reserve Definitions and adopted by CIM Council on May 10, 2014. These resources and reserves form the basis for EDR's ongoing mining operations at the Guanaceví Mines Project.

The QP is unaware of any significant technical, legal, environmental or political considerations which would have an adverse effect on the extraction and processing of the resources and reserves located at the Guanaceví Mines Project. Mineral resources which have not been converted to mineral reserves, and do not demonstrate economic viability shall remain mineral resources. There is no certainty that all or any part of the mineral resources estimated will be converted into mineral reserves.

The QP considers that the mineral concessions in the Guanaceví mining district controlled by EDR continue to be highly prospective both along strike and down dip of the existing mineralization.

EDR's Guanaceví Mines Project has an extensive mining history with well-known silver and gold bearing vein systems. Ongoing exploration has continued to demonstrate the potential for the discovery of additional resources at the project and within the district surrounding the mine. Since EDR took control of the Guanaceví mines Property, new mining areas have enabled EDR to increase production by providing additional sources of mill feed. EDR's operation management teams continue to search for improvements in efficiency, lowering costs and researching and applying low-cost mining techniques.

2017 exploration budgets for Guanaceví are approved for 8,000 meters of drilling. The approved budget for this drilling is estimated at US $1,200,000 for the year.

HRC recommends that the continuation of the conversion of all resources into reserves from 2D polygons to 3D block models be continued. During 2015 and 2016, considerable progress was made in this regard. Additional modeling efforts should be made to define the mineralized brecciated areas as they have been an import source of economic material encountered in the current operation, and could provide additional tonnage to support the mine plan.

Currently EDR utilizes the exploration drilling and chip and muck samples in their resource and reserve calculations. HRC recommends that future efforts focus on constructing block models for resource and reserve reporting utilizing only the exploration and underground drilling results. The chip and muck samples should be used to develop the production model. This will help in keeping data densities consistent in each modeling effort and allow another level into the reconciliation process to compare modeling results.

Although the reconciliations conducted by EDR show good comparisons on planned values versus actual values the reconciliation process should be improved to include the estimated tonnes and grade from the resource models. By comparing the LOM plan on a monthly basis to the plant production the actual physical location of the material mined may be different in the plan versus the actual area that was mined. Due to the many faces that are mined during a day this can only be completed on an average monthly basis to account for the blending of this material at the mill. The monthly surveyed as mined areas should be created and saved on a monthly basis for reporting the modeled tonnes for each month. The combination of the 3D block models and 2D and polygonal reserves makes this process difficult but considerable progress has been made during the last year to get all resources and reserves into 3D block models. The model predicted results versus actuals can then be used to determine if dilution factors need to be adjusted or perhaps the resource modeling parameters may require adjustment if there are large variances. On a yearly basis, the mill production should be reconciled to the final concentrate shipments and resulting adjustment factors should be explained and reported.

2. INTRODUCTION

2.1 Issuer and Terms of Reference

Endeavour Silver Corp. ("EDR") is a Canadian based mining and exploration company actively engaged in the exploration, development, and production of mineral properties in Mexico. EDR is headquartered in Vancouver, British Columbia with management offices in Leon, Mexico, and is listed on the Toronto (TSX:EDR), New York (NYSE:EXK) and Frankfurt (FSE:EJD) stock exchanges. The company has three currently active mining properties in Mexico, the Guanaceví Property in northwest Durango State, and the Bolañitos and the El Cubo properties, both located in Guanajuato State. EDR has retained HRC to complete an independent technical audit and update of the mineral resource and reserve estimates for the Guanaceví Project (the "Project") located within the Municipality of Guanaceví. This report presents the results of HRC's efforts, and is intended to fulfill the Standards of Disclosure for Mineral Projects according to Canadian National Instrument 43-101 ("NI 43-101").

This report was prepared in accordance with the requirements and guidelines set forth in NI 43-101 Companion Policy 43-101CP and Form 43-101F1 (June 2011), and the mineral resources and reserves presented herein are classified according to Canadian Institute of Mining, Metallurgy and Petroleum ("CIM") Definition Standards - For Mineral Resources and Mineral Reserves, prepared by the CIM Standing Committee on Reserve Definitions and adopted by CIM Council on May 10, 2014. The mineral resource and mineral reserve estimates reported here are based on all available technical data and information as of December 31, 2016.

2.2 Sources of Information

A portion of the information and technical data for this study was obtained from the following previously filed NI 43-101 Technical Reports:

Hard Rock Consulting LLC (2016). NI 43-101 Technical Report: Updated Mineral Resource and Mineral Reserve Estimates for the Guanaceví Project, Durango State, Mexico.

Munroe, M.J., (2015). NI 43-101 Technical Report, Resource and Reserve Estimates for the Guanaceví Mines Project, Durango State, Mexico.

Munroe, M.J., (2014). NI43-101 Technical Report, Resource and Reserve Estimates for the Guanaceví Mines Project, Durango State, Mexico.

HRC also relied in part on background information presented in the following unpublished technical reports prepared on behalf of EDR:

Lewis, W.J., Murahwi, C., and San Martin, A.J., (2013). NI 43-101 Technical Report Resource and Reserve Estimates for the Guanaceví Mines Project, Durango State, Mexico: unpublished NI 43-101 technical report prepared by Micon International for Endeavour Silver, effective date December 15, 2012.

Lewis, W.J., Murahwi, C., and San Martin, A.J., (2012). NI 43-101 Technical Report Resource and Reserve Estimates for the Guanaceví Mines Project, Durango State, Mexico: unpublished NI 43-101

technical report prepared by Micon International for Endeavour Silver, effective date December 31, 2011.

Lewis, W.J., Murahwi, C., Leader, R.J. and Mukhopadhyay, D.K., (2011). NI 43-101 Technical Report Audit of the Resource and Reserve Estimates for the Guanaceví Mines Project, Durango State, Mexico: unpublished NI 43-101 technical report prepared by Micon International for Endeavour Silver, effective date December 31, 2010.

Lewis, W.J., Murahwi, C., Leader, R.J. and Mukhopadhyay, D.K., (2010). NI 43-101 Technical Report Audit of the Resource and Reserve Estimates for the Guanaceví Mines Project, Durango State, Mexico: unpublished NI 43-101 technical report prepared by Micon International for Endeavour Silver, effective date December 31, 2009.

Lewis, W.J., Murahwi, C., Leader, R.J. and Mukhopadhyay, D.K., (2009). NI 43-101 Technical Report Audit of the Resource and Reserve Estimates for the Guanaceví Mines Project, Durango State, Mexico: unpublished NI 43-101 technical report prepared by Micon International for Endeavour Silver, effective date December 31, 2008.

Devlin, B.D., (2008). NI 43-101 Technical Report on the Resource and Reserve Estimates for the Guanaceví Mines Project, Durango State, Mexico: unpublished NI 43-101 technical report prepared by B. Devlin, V.P. Exploration for Endeavour Silver, effective date December 31, 2007.

Lewis, W.J. Leader, R.J. and Mukhopadhyay, D.K., (2007). NI 43-101 Technical Report Audit of the Resource and Reserve Estimates for the Guanaceví Mines Project, Durango State, Mexico: unpublished NI 43-101 technical report prepared by Micon International for Endeavour Silver, effective date December 31, 2006.

Olson, A. E., (2006). Technical Report, Mineral Resource and Mineral Reserve Estimate, Guanaceví Mines Project, Durango, Mexico: unpublished NI 43-101 technical report prepared by Range Consulting for Endeavour Silver, effective date March 31, 2006.

Spring, V., (2005). A Technical Review of the North Porvenir Zone, Santa Cruz Mine, Guanaceví Mines Project in Durango State, Mexico: unpublished NI 43-101 technical report prepared by Watts, Griffis, McOuat for Endeavour Silver, effective date May 10, 2005.

The information contained in current report Sections 4 through 8 was largely presented in, and in some cases, is excerpted directly from, the technical reports listed above. HRC has reviewed this material in detail, and finds the information contained herein to be factual and appropriate with regard to guidance provided by NI 43-101 and associated Form NI 43-101F1.

2.3 Qualified Persons and Personal Inspection

This report is endorsed by the following Qualified Persons, as defined by NI 43-101: Mr. Zachary Black, Ms. J.J. Brown, P.G., and Mr. Jeff Choquette, P.E., all of HRC.

Mr. Black, SME-RM, has nearly 15 years of experience working on structurally controlled gold and silver resources in the Sierra Madre Occidental of Mexico and the southern United States. Mr. Black completed the mineral resource estimate for the Guanaceví Project and is specifically responsible for Sections 1.4, 1.6, 9 through 12, and 14 of this report.

Ms. Brown, P.G., SME-RM, has 20 years of professional experience as a consulting geologist and has contributed to numerous mineral resource projects, including more than twenty gold, silver, and polymetallic resources throughout the southwestern United States and South America over the past five years. Ms. Brown is specifically responsible for report Sections 1.1 through 1.3 and Sections 2 through 8.

Mr. Choquette, P.E., is a professional mining engineer with more than 20 years of domestic and international experience in mine operations, mine engineering, project evaluation and financial analysis. Mr. Choquette has been involved in industrial minerals, base metals and precious metal mining projects around the world, and is responsible for the current report Sections 1.5, 1.7, 1.8, 13, and 15 through 27.

As Qualified Persons and representatives of HRC, Mr. Black and Mr. Choquette conducted an on-site inspection of the Guanaceví property during June 26th to June 27th, 2016. While on site, HRC reviewed EDR's current operating procedures and associated drilling, logging, sampling, quality assurance and quality control (QA/QC), grade control, and mine planning (short, medium, and long term) procedures. During 2015 visits HRC also inspected the laboratories at the Bolañitos and Guanaceví mine properties, as well as each of the plants and the underground operations. Mr. Choquette visited the Guanaceví project again from October 12th through the 15th, 2016 to assist in developing the reserve mine plans with the onsite EDR personnel.

HRC met with the geology department to review the geologic understanding, sampling methods and types, modeling (resources, reserves, and grade control), prior to inspecting the procedures in the mine and office for collecting and handling the data. Once the geology department processes were understood, HRC discussed with the mine planning and survey department the process for short, medium, and long term mine planning. Reconciliation was discussed with both departments and the plant supervisors. The laboratories were toured and the procedures were reviewed with the laboratory managers.

2.4 Units of Measure

Unless otherwise stated, all measurements reported here are in U.S. Commercial Imperial units, and currencies are expressed in constant 2012 U.S. dollars.

3. RELIANCE ON OTHER EXPERTS

HRC has fully relied upon and disclaims responsibility for information provided by EDR regarding property ownership and mineral tenure for the Guanaceví Project. HRC has not reviewed the permitting requirements nor independently verified the permitting status or environmental liabilities associated with the Project, and also disclaims responsibility for that information, which is presented in current report Sections 4 and 20 and which is presented as provided by EDR.

4. PROPERTY DESCRIPTION AND LOCATION

4.1 Project Location

The Guanaceví Project is located in the northwest portion of the Mexican state of Durango, approximately 3.6 km west of the town of Guanaceví and 260 km northwest of the capital city of Durango (Figure 4-1). The approximate geographic center of the Project is 105°58'20"W longitude and 25°54'47"N latitude.

Figure 4-1 Project Location Map

The Project is comprised of 51 mineral concessions for a total property area of 4,171.5546 ha (Figure 4-2). The mineral concessions vary in size and are not all contiguous. The annual 2016 concession tax for the Guanaceví Properties is estimated to be approximately 516,992 Mexican pesos (pesos), which is equal to about US $28,722 at an exchange rate of 18.00 pesos to US $1.00. Mineral concession information is summarized in Tables 4-1 and 4-2.

The Guanaceví Project consists of the plant facility which was the Formento Minero plant just outside of the town of Guanaceví and 3 mines (Porvenir 4, North Porvenir and Santa Cruz), which all are on the Santa Cruz vein. The mines are approximately 5 km from the plant. The North Porvenir and the Santa Cruz mines are accessed using the same Portal while the Porvenir 4 mine is 2 km north of the Santa Cruz portal.

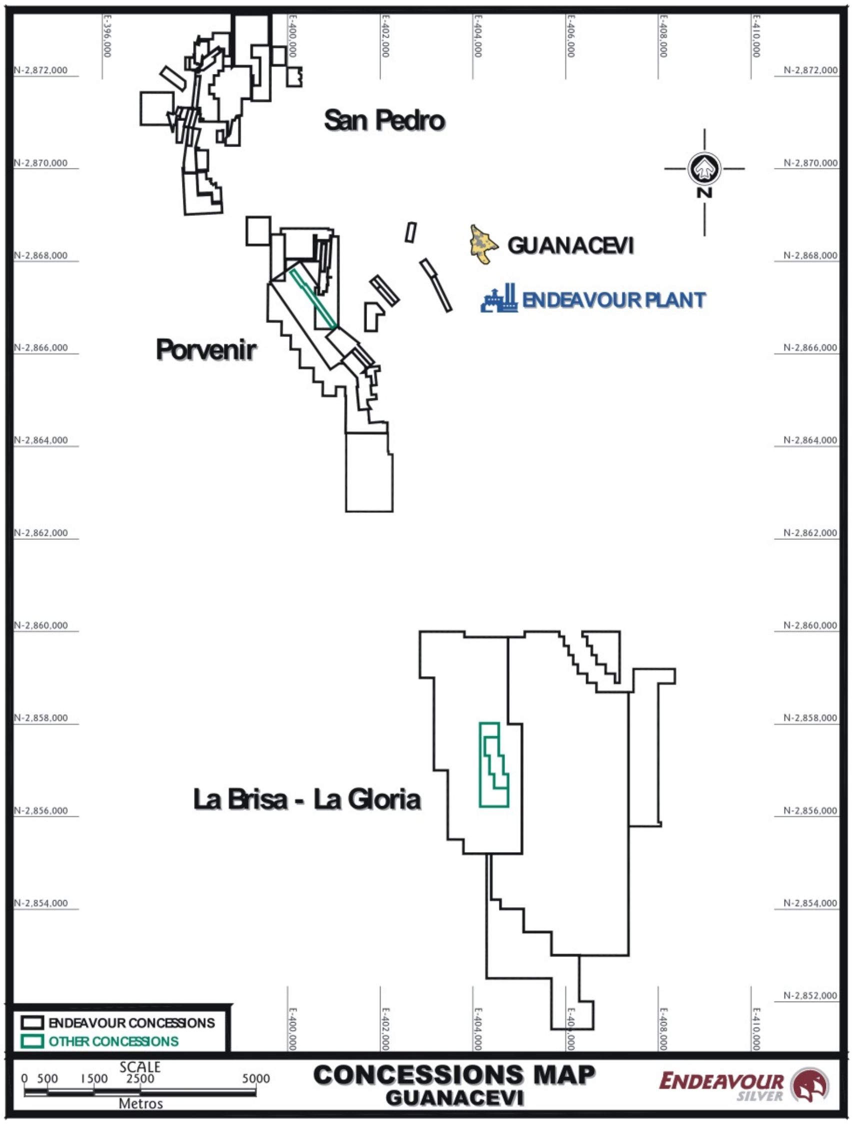

Figure 4-2 Guanaceví Mines Project, Mineral Concessions Map

Table 4-1 Guanaceví Mines Concessions Controlled by EDR

Concession Name	Title Number	Term of Mineral Concession		Hectares	2016 Annual Taxes (pesos)	
		From	To		1st Half	2nd Half
Santa Cruz Dos	191773	12/19/1991	12/18/2041	113.5387	16,274	16,274
El Pelayo Y Anexas	193392	12/19/1991	12/18/2041	56.2519	8,063	8,063
Unif. Santa Cruz	186577	4/24/1990	4/23/2040	28.5896	4,098	4,098
San Guillermo	179601	12/11/1986	12/10/2036	5.0000	717	717
Unificacion Flora	189233	12/5/1990	12/4/2040	36.5506	5,239	5,239
San Marcos	185486	12/14/1989	12/13/2039	5.5469	795	795
San Vicente	187020	5/29/1990	5/28/2040	8.0000	1,147	1,147
Nuestra Senora	185412	12/14/1989	12/13/2039	5.6000	803	803
San Pedro Uno	191143	4/29/1991	4/28/2041	49.8437	7,144	7,144
El Porvenir Dos	161449	4/10/1975	4/9/2025	30.0000	4,300	4,300

Table 4-2 Guanaceví Mines Concessions Controlled by EDR (Cont.)

Concession Name	Title Number	Term of Mineral Concession		Hectares	Term of Mineral Concession	
		From	To		1st Half	2nd Half
La Sultana	162915	8/8/1978	8/7/2028	11.5889	1,661	1,661
El Milache	163509	10/10/1978	10/9/2028	42.8866	6,147	6,147
Veronica	167013	8/11/1980	8/10/2030	11.7648	1,686	1,686
El Desengaño	187018	5/29/1990	5/28/2040	19.4747	2,791	2,791
El Calvario	191733	12/19/1991	12/18/2041	1.3098	188	188
Elizabeth	180568	6/13/1987	6/12/2037	16.9973	2,436	2,436
El Rocio	227665	7/28/2006	7/27/2056	51.2334	7,343	7,343
La Brisa 3	236564	7/16/2010	7/15/2060	715.8666	29,157	29,157
La Gloria	238353	9/23/2011	9/22/2061	309.9369	6,276	6,276
La Brisa 4	240296	5/17/2012	5/16/2062	1584.4986	32,086	32,086
La Brisa 4, Fracc.	239873	2/29/2012	2/28/2062	51.8008	1,049	1,049
La Brisa 5	239874	2/29/2012	2/28/2062	214.6744	4,347	4,347
Ampl. Al Bajo Del Nvo. P.	184074	2/15/1989	2/14/2039	7.3062	1,047	1,047
La Mazatleca	186475	4/2/1990	4/1/2040	14.1797	2,032	2,032
La Guirnalda	187771	9/17/1990	9/16/2040	46.7611	6,702	6,702
La Guirnalda 2	219707	4/3/2003	4/2/2053	5.9915	859	859
San Pablo	216716	5/28/2002	5/27/2052	3.3972	487	487
Ana Maria	214167	8/18/2001	1/17/2051	3.2320	463	463
El Martir	215925	4/2/2002	4/1/2052	8.8675	1,271	1,271
Ampl. Del Soto	191987	12/19/1991	12/18/2041	3.9998	573	573
IDA	191659	12/19/1991	12/18/2041	4.9086	704	704
Epsilon	195079	8/25/1992	8/24/2042	7.0622	1,012	1,012
El Terremoto	193869	12/19/1991	12/18/2041	12.0000	1,720	1,720
Alajaa	183881	11/23/1988	11/22/2038	11.2050	1,606	1,606
Barradon 7	214162	8/18/2001	1/17/2051	37.1376	5,323	5,323
Santa Isabel	204725	4/25/1997	4/24/2047	84.0000	12,040	12,040
Noche Buena	167563	11/26/1980	11/25/2030	79.8962	11,452	11,452
El Porvenir 4	168105	2/13/1981	2/12/2031	30.0000	4,300	4,300
La Brisa	224158	4/19/2005	4/18/2055	25.5518	3,662	3,662
El Cambio	205475	9/17/1997	9/16/2047	11.9962	1,719	1,719
La Onza	211502	5/30/1991	5/29/2041	18.2376	2,614	2,614
San Nicolas	191543	12/19/1991	12/18/2041	4.4838	643	643
Ampl. de San Nicolas	191675	12/19/1991	12/18/2041	2.5934	372	372
Garibaldi	224396	5/4/2005	5/3/2055	165.4490	23,714	23,714
Santa Cruz Ocho	215911	3/19/2002	3/18/2052	165.6280	23,739	23,739
El Pelayo	219709	4/3/2003	4/2/2053	5.8881	844	844
El Aguaje De Arriba	170158	3/17/1982	3/16/2032	5.0000	717	717
A. El Aguaje De Arriba	170159	3/17/1982	3/16/2032	7.0000	1,003	1,003
La Plata	170156	3/17/1982	3/16/2032	2.0000	287	287
La Prieta	148479	10/29/1967	10/28/2017	7.0000	1,003	1,003
San Fernando	160545	8/23/1979	8/22/2029	19.8279	2,842	2,842
Totals				**4,171.5546**	**258,496**	**258,496**

4.2 Mineral Tenure, Agreements and Encumbrances

EDR controls the Guanaceví Project through its 100% owned Mexican subsidiary, Endeavour Gold Corporation S.A. de C.V. (Endeavour Gold). Endeavour Gold holds the project through its three 100% owned subsidiaries, Minera Plata Adelante S.A. de C.V. (Minera Plata Adelante), Minera Santa Cruz SA de CV (Minera Santa Cruz) and Refinadora Plata Guanaceví S.A. de C.V. (Refinadora Plata Guanaceví).

EDR has executed a number of agreements with respect to the Guanaceví Project over the years. In May 2014, EDR acquired an option on the Garibaldi Property (165 ha), located approximately 2.5 km southeast of EDR's active Porvenir silver/gold mine. The option agreement requires EDR to make a total of US $150,000 in cash payments over a 3-year period (US $50,000 per year). With the exception of the Garibaldi Agreement, which is currently in good standing, all other agreement obligations have been met.

EDR also maintains access agreements with various private ranch owners and two local ejidos (El Hacho and San Pedro) to ensure access for exploration and mining. Surface access agreements as of December 31, 2013 are summarized in Table 4-3.

Table 4-3 Summary of Endeavour Silver's Surface Access Rights

Owner	Area Name	Validity	Term	Drill Pads (Pesos)	ANNUAL PAYMENT (PESOS)
Comunidad De San Pedro	San Pedro	4 Years	10/10/2012 - 2016	8,000	None
Ejido Arroyo Del Hacho	Guanaceví	15 Years	27/11/2005 - 2020	None	10,000
Ejido La Soledad	La Brisa	5 Years	26/06/2011 - 2016	6,000	None
Alfonso Flores Varela	La Brisa	5 Years	15/06/2011 - 2016	7,000	None
Taurino Cisneros Haros	La Brisa	5 Years	16/06/2011 - 2016	7,000	None
Rosa Elena Rivera Carrera (Laurencio Ayala)	Santa Cruz Sur	3 Years	04/02/2014 - 2017	15,000	None

Royalties currently associated with the Guanaceví Project are summarized in Table 4-4

Table 4-4 Summary of Endeavour Silver's Royalties

Agreement	NSR	Concession Name	Title Number	Hectares
Minera Las Albricias	1%	Ampl. Al Bajo Del Nvo. P.	184074	7.3062
		La Mazatleca	186475	14.1797
		La Guirnalda	187771	46.7611
		La Guirnalda 2	219707	5.9915
		San Pablo	216716	3.3972
		Ana María	214167	3.2320
		El Martir	215925	8.8675
		Ampl. Del Soto	191987	3.9998
		Ida	191659	4.9086
		Epsilon	195079	7.0622
		El Terremoto	193869	12.0000
		Alajaa	183881	11.2050
		Barradon 7	214162	37.1376
		Santa Isabel	204725	84.0000
		Noche Buena	167563	79.8962
Minera Capela	3%	Santa Cruz Dos	191773	113.5387
		El Pelayo y Anexas	193392	56.2519
		Unif. Santa Cruz	186577	28.5896
		San Guillermo	179601	5.0000
		Unificación Flora	189233	36.5506
		San Marcos	185486	5.5469
		San Vicente	187020	8.0000
		Nuestra Señora	185412	5.6000
		San Pedro Uno	191143	49.8437
Ignacio Barraza	2%	Garibaldi	224396	165.449

4.3 Permits and Environmental Liabilities

EDR holds all environmental and mine permits required to conduct planned exploration and mining operations on the Guanaceví Project, and reports that it is in compliance with all environmental monitoring requirements and applicable safety, hygiene and environmental standards. Environmental permitting and liabilities are discussed in greater detail in Section 20 of this report.

HRC knows of no existing or anticipated significant factors which might affect access, title, or the right or ability to perform work on the Guanaceví Project.

5. ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

5.1 Access and Climate

The Guanaceví Property is readily accessible from the city of Durango via paved roads. Primary access is provided by State Highway 45 north from Durango to the town of Canatlan, continuing on State Highway 23 through Santiago Papasquiaro and Tepehuanes to the town of Guanaceví. The total distance between Durango and the town of Guanaceví is approximately 260 km, which requires roughly 4.5 hours of drive time. Guanaceví has a small, unmaintained airport with a 1,000-m unpaved landing strip capable of handling light aircraft.

The Guanaceví Project is located just 3.6 km from the town of Guanaceví, which is economically dependent on regional mining and milling operations. The town of Guanaceví boasts a population of approximately 2,087 and all standard modern services. The town, mine and plant are connected to the national land-based telephone system that provides reliable national and international direct dial telephone communications, as well as stable internet connections and satellite television.

The local climate poses no limitations to the length of the operating season at the Guanaceví Project. The dry season runs from October through June, and the wet season from July to September. Total average annual rainfall varies from about 65 to 105 mm. Winter temperatures vary from a maximum of 15°C to a minimum of -14°C, while summer temperatures range from a minimum of 20°C to a maximum of 30°C. Freezing temperatures can occur overnight, but quickly warm to above freezing during daylight hours. Occasional snow does occur in the area but quickly melts on all but the most protected slopes.

5.2 Local Resources and Infrastructure

The city of Durango is the closest major population center to the Guanaceví Project, with a population of approximately 580,000. Durango is a mining, agricultural, commercial and tourist center with all of the associated municipal amenities, including an international airport with numerous regional flights to other major Mexican cities and the United States.

At each of the mine sites, the water required is supplied from the dewatering of the mines. Industrial water for the flotation and cyanide plant is recycled, and additional water (60,000 m^3/y of fresh water) is obtained from a nearby underground mine. The tailings facility at the plant is set up to recycle all water back into the ore processing plant.

Electrical power from the Federal Power Authority (34 kV) supplies both the plant and mine. In 2011, EDR completed an upgrade of the power to the mine and mill sites by installing a second line into main power supply.

An upgrade to the tailings dam was completed in 2010, when dry stacking of the tailings began, and current capacity is sufficient for many years of production.

Apart from offices, warehouses and other facilities, EDR also provides dormitories and limited housing facilities for employees working on a rotational schedule. Much of the labor work force lives in Guanaceví and nearby communities. The area has a rich tradition of mining and there is an ample supply of skilled personnel sufficient to man both the underground mining operations and the surface facilities.

5.3 Physiography

The town of Guanaceví is located on the altiplano at about 2,170 m elevation. Both the town and the Project lie east of the Sierra Madre Occidental mountain range among low, rounded mountains with relief of about 650 m from the valley bottoms (~2,100 m) to the mountain crests (~2,750 m). The mountains are predominately covered by scrub oak, pine trees and occasional cactus, with the pine trees more prevalent at the higher elevations. Wildlife in the area consists generally of deer, badgers, foxes, coyotes, squirrels, rabbits and mice.

5.4 Surface Rights

EDR has negotiated access and the right to use surface lands sufficient for many years of operation. Sufficient area exists at the property for all needed surface infrastructure related to the life-of-mine plan, including processing, maintenance, fuel storage, explosives storage and administrative offices. There exists sufficient capacity in existing tailing impoundments for tailings disposal.

6. HISTORY

6.1 Historical Exploration

The extent of historical exploration on the Guanaceví Project is relatively unknown. Prior to management by EDR, production was supported by three mines without the benefit of any systematic exploration drilling, geological mapping or mine planning. Documented historical exploration activities are summarized as follows:

- During the 1920's, Peñoles purchased several mines including the Santa Cruz mine, where from 1921 to 1924, the 330-m inclined shaft and several kilometers of underground workings on Levels 6, 7, 8, 10, 11 and 13 were developed that partially explored the vein ore shoots.
- The Guanaceví Mining Company operated from the 1930's until production ceased in 1942. In the 1970's, the Comisión de Fomento Minero (Federal Mining Commission) (Fomento Minero), a Federal government agency charged with the responsibility of assisting the small scale Mexican mining industry, constructed a 400 t/d flotation plant, now the MG plant.
- In the early 1960's, Engineer Mejorado of Peñoles Mining Company recommended additional exploration to prove up the mineral resource estimate at the time. Engineer P. Sanchez Mejorado mapped and sampled the mine underground and recommended diamond drilling below Level 13. Watts, Griffis and McOuat Limited (WGM) noted that the exploration works conducted by Peñoles consisted of channel sampling across the mineralized zone coupled with short, lateral, approximately 1-inch diameter diamond drillholes, and detailed surveying and geological mapping of the underground workings (WGM,2005). WGM (2005) further noted that the limited exploration by Peñoles was well conducted and blocked out several areas of potential resources, but also stated that more than half of the areas of potential resources, except for those below the water table (below Level 13), had been mined out.
- In the early 1990's, Fomento Minero started construction of a 600 t/d cyanide leach plant but construction ceased when it was only 30% complete due to the lack of funding.
- In 1992, MG, a private company, purchased the Fomento Minero facilities and completed the construction of the leach plant. MG used the leach circuit to process the old tailings from the flotation plant. During 2002, total plant production included 170 t/d to 250 t/d coming from the three mines: Santa Cruz, Barradón and La Prieta mines, with approximately 700 to 800 t/d of additional feed purchased from other small scale operations.
- Pan American Silver Corp. (Pan American) conducted an eight-month evaluation program in 2003 that consisted of an extensive, systematic, underground channel sampling and surveying program and included three diamond drillholes in the North Porvenir area.

6.2 Historical Production

6.2.1 Mining

The Guanaceví mining district and the Guanaceví Mines Project area are riddled with mine openings and old workings which occur in a haphazard fashion near ground surface, representing the earliest efforts at extraction, and more systematic fashion at depth, which is indicative of later, better organized and engineered mining. Associated with these openings and workings are a number of old ruins representing the remains of historic mine buildings and other structures.

The vast bulk of the material which has been extracted from underground operations through the tunnels, shafts and winzes is scattered over the hillsides in waste dumps and beneath the foundations of the ruins and modern buildings. Historically, individual veins or deposits had separate owners and, in the case of some of the larger veins or deposits, had several owners along the strike length which resulted in a surfeit of adits and shafts and very inefficient operations. The mines within the Guanaceví mining district have been developed primarily by using open stope/shrinkage and cut and fill underground mining methods.

Both the ground conditions, which vary from good to poor, and the deposit geometries tend to favor the higher cost, cut and fill mining method, with development waste used for backfill.

6.2.2 Production

Mining in the Guanaceví district extends back to at least 1535 when the mines were first worked by the Spanish. During the late sixteenth century silver production accounted for 80% of all exports from Nueva España (New Spain), although, by the mid-seventeenth century silver production collapsed when mercury, necessary to the refining process, was diverted to the silver mines of Potosí in present day Bolivia. Collapse of the seventeenth century mining led to widespread bankruptcy among the miners and hacienda owners; however, in the latter half of the seventeenth century silver mining began to recover in Nueva España. By the start of the 18th century, Guanaceví had become an important mining center in the Nueva Vizcaya province. The peasant uprisings of 1810 to 1821 were disastrous to the Mexican mining industry with both the insurgents' soldiers and royalist troops all but destroying the mining production in Mexico, and the Guanaceví mining district was not spared during this period.

The vast majority of production came prior to the 1910 Mexican Revolution with the Guanaceví mining district being known for its high silver grades. Previous reports noted that the official production records indicate that a total value of 500 million pesos, or approximately 500 million ounces of silver and silver equivalents, with a present-day value of about US $3.25 billion, had been extracted from this mining district. This makes the Guanaceví district one of the top five silver mining districts in Mexico on the basis of past production, though production has been sporadic since the 1910 Revolution.

Historical production at the Guanaceví Mines Project for the years 1991 to 2003 is roughly estimated in Table 6-1.

Table 6-1 Summary of the Production for the Guanaceví Property (1991 to 2003)

Year	Tonnes	Silver (g/t)	Gold (g/t)
1991 (from July)	2,306 est.	470 est.	1.0 est.
1992	10,128	340 est.	1.3 est.
1993	12,706	320 est.	0.8 est.
1994	18,256	190 est.	0.5 est.
1995 (until May)	5,774	280 est.	0.5 est.
1996	11,952	315	0.74
1997	13,379	409	0.87
1998	11,916	550	0.92
1999	6,466	528	0.84
2000	18,497	538	1.01
2001	13,150	510	1.09
2002	NA	NA	NA
2003	1,531	550	8,902

6.3 Historical Mineral Resource and Mineral Reserve Estimates

Mineral resource and reserve estimates which were produced prior to EDR's involvement with the Guanaceví Mines Project are not discussed in this report as they are historical in nature, were not completed according to modern reporting standards, and are not considered reliable or relevant to the present-day Project.

7. GEOLOGICAL SETTING AND MINERALIZATION

The regional and local geology of the Guanaceví Project is described in detail in a number of existing internal and previously published technical reports. The following descriptions of geology and mineralization are excerpted and/or modified from Munroe (2014). HRC has reviewed the available geologic data and information, and finds the information presented here in reasonably accurate and suitable for use in this report.

7.1 Regional Geology

The rock types of the Guanaceví district can be divided into three principal stratigraphic groups based on stratigraphic studies by the Consejo de Recursos Minerales and observations of drill core during exploration programs carried out by EDR.

7.1.1 Guanaceví Formation

The oldest unit in the district is the Guanaceví Formation, a polymictic basal conglomerate composed of angular to sub-angular fragments of quartz and metamorphic rocks set in a sandy to clayey matrix within sericitic and siliceous cement. It is assigned to the Upper Jurassic or Lower Cretaceous periods on the basis of biostratigraphic indicator fossils mentioned but not detailed in the Durango State Geological Reference Report (1993). At least 450 m of thickness has been reported in the Guanaceví area for this basal unit, the lower contact of which has not been observed. In most areas, the upper contact is structural on high-angle normal faults but, in the San Pedro area, the upper contact is abrupt from Guanaceví conglomerate rocks to fairly fresh, dark colored andesitic flows of the Lower Volcanic Sequence that appear conformable to the underlying Guanaceví Formation. The Jurassic assignment of the Guanaceví Formation has been in question, and at least two reports in the 1990's considers it to be Tertiary (Durning and others, unpublished reports). A Tertiary age for the unit mitigates the idea of a transitional unit persisting through the Cretaceous; alternatively, it is possible that paraconformities in the package may be present but unreported to date.

Regional studies in Mexico demonstrate that Mesozoic rocks basal to the Tertiary section are strongly deformed with the development of sericitic alteration, shearing and microfolding in local shear zones and stronger deformation associated with overthrust nappe folds of Laramide age (late Cretaceous to end of the Paleocene). This type of strong deformation is not visible in the Guanaceví Formation, further raising questions about the validity of a Mesozoic assignment for this unit.

The Guanaceví Formation has been structurally defined as a horst, occupying the central portion of the northwest trending Guanaceví erosional window and flanked by sets of northwest striking normal faults that offset the Upper and Lower Volcanic Sequences down to the southwest and northeast on corresponding sides of the window. Mineralization within the horst is hosted by the conglomerate, both as dilatational high-angle fracture-filled structures and, in the San Pedro area, as manto-like replacement bodies below the upper contact of the conglomerate with overlying andesitic units of the Lower Volcanic Sequence.

7.1.2 Lower Volcanic Sequence

Using an inherited stratigraphic framework for the area, andesitic rocks and associated sedimentary units are placed in a loosely-defined package of flows and volcaniclastic sediments correlated with Eocene volcanism throughout the Sierra Madre of Mexico. No radio isotope age determinations have been made on volcanic units of the Guanaceví district, and lithological correlations to the Lower Volcanic Sequence appear to be reasonable for the andesitic flows and associated volcaniclastic units.

It has been observed in the rocks that host the Porvenir and Santa Cruz mine workings that the andesite occurs as a pale green to nearly black volcanic flow ranging from aphyric to plagioclase-hornblende phyric. Plagioclase is the common phenocryst type with crystals ranging from 1 to 2 mm up to 10 mm. Hornblende phenocrysts are 1 mm to 4 mm in length. In porphyritic andesites, feldspar phenocryst abundance approaches 5%, and hornblende abundance is generally less than 3%.

The sequence of rock types in the Lower Volcanic Sequence, as presently understood, is a coarsening-upward series of volcaniclastic sediments capped by an andesite flow as described above. The sedimentary lithologies are siltstones overlain by sandstone with minor intercalations of conformable conglomerate beds. The siltstone-sandstone sequence becomes transitionally dominated by conglomeratic beds at the top of the volcaniclastic package. Overall thickness of the siltstone-sandstone beds is up to 120 m.

Conglomerate beds of the Lower Volcanic Sequence are from a few centimeters to 150 m thick at the top of the package, and differ from the conglomerates of the Guanaceví Formation in that Lower Volcanic Sequence clasts are mainly andesite of varying textural types.

7.1.3 Upper Volcanic Sequence

The Upper Volcanic Sequence consists of rhyolite crystal-lapilli tuff units unconformably overlying the andesites which are generally structurally disrupted and altered by oxidation and silicification. The rhyolite is strongly argillically altered with silicification overprinting argillic alteration in the immediate hanging wall of quartz veins and other silicified structures. The rhyolite commonly contains rounded quartz ‘eyes’ up to 4 mm in diameter, and the matrix consists of adularia, kaolinite and quartz. Local concentrations of biotite crystals up to 2 mm are not uncommon. The rhyolite has variable textures from thin-bedded ash flows to coarse lapilli tuffs with lithic clasts of andesite or rhyolite up to 50 cm in diameter. These latter commonly exhibit alteration rims indicating high temperatures and fluids in the volcanic environment. The thickness of the rhyolite tuff assemblage has not been measured at this time, but appears to exceed 300 m.

Geochemically, the lower portion of the rhyolites has been demonstrated by rare earth element (REE) data, from a series of samples taken from East Santa Cruz drilling, to be magmatically linked to the underlying andesites. The similarity between REE patterns of the rhyolite crystal-lapilli tuff and the andesitic rock units in this data set suggests a common source for the two volcanic packages that is difficult to reconcile with the idea of many millions of years of volcanic quiescence (from Lower Volcanic to Upper Volcanic Sequences). This raises the possibility that regional correlations for Guanaceví rhyolite based on radio isotope age determinations may result in assignment of the rhyolite (of the Santa Cruz/Porvenir mine area) to the Lower Volcanic Sequence rather than the Upper. In the San Martin de Bolaños district of Jalisco and also in the Topia district of Durango State, uppermost volcanic lithologies of the Lower Volcanic Sequence are rhyolitic and directly associated with mineralization. This may be true for the Guanaceví mining district as well.

See Figure 7-1 for a map of the regional geology in the area surrounding the Guanaceví mining district. See Table 7-1 for a generalized stratigraphic column in the Guanaceví mining district.

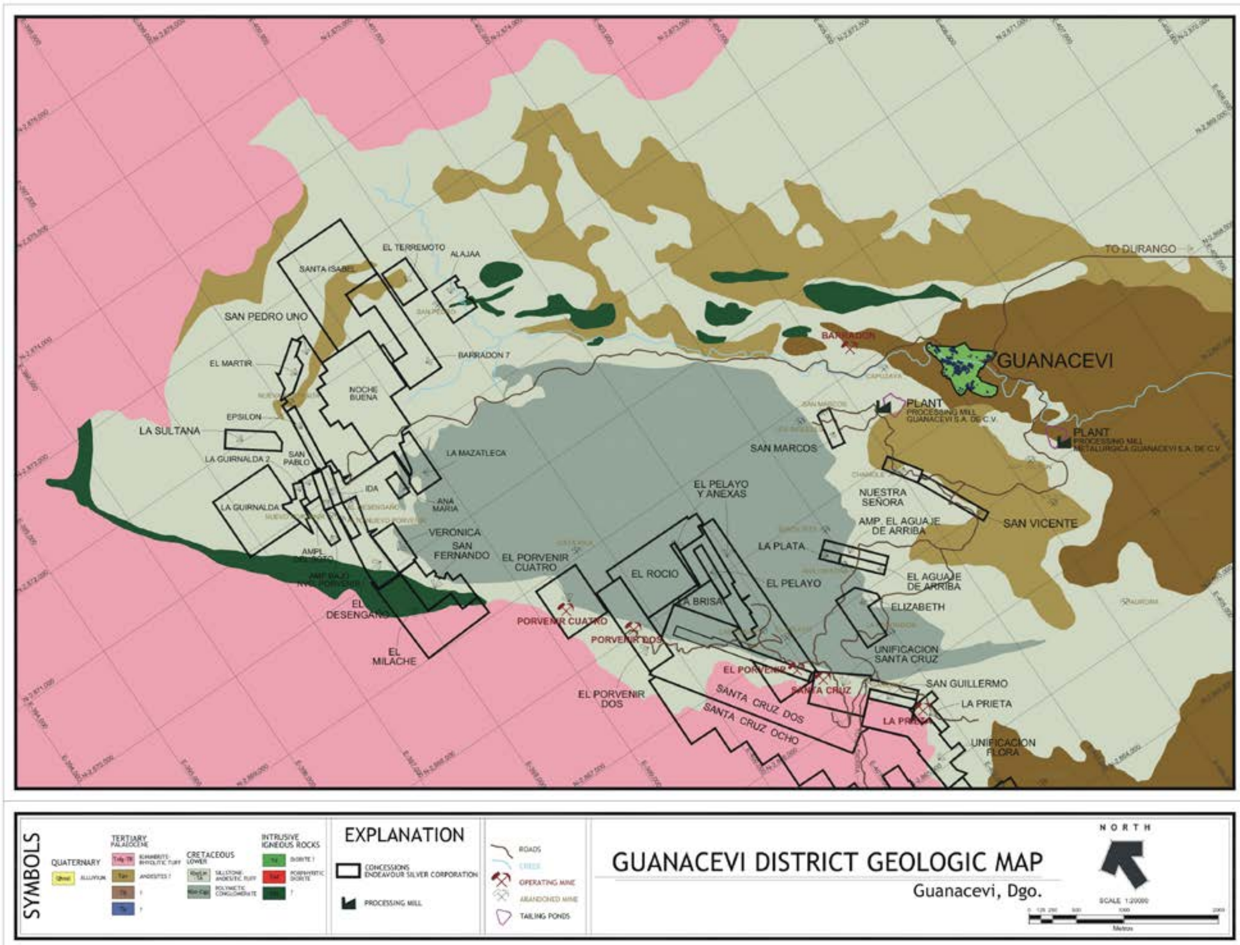

Figure 7-1 Regional Geology Map for the Guanaceví Mining District

Table 7-1 Generalized Stratigraphic Column in the Guanaceví Mining District

Geological Age		Stratigraphic Units and Lithologies	Thickness (m)
Tertiary	Oligocene	**Upper Volcanic Sequence** Rhyolitic tuffs and ignimbrites	300
	Eocene	**Lower Volcanic Sequence** Andesite porphrytic flow Andesite conglomerate Volcanic sandstone/siltstone	 ≤ 70 ≤ 150 ≤ 120
Jurassic ()	(Late)	Guanaceví Formation	450

Note: Table reproduced from the March, 2006 Technical Report by Range Consulting

7.1.4 Structural Setting

Figure 7-1, shows major faults of the Guanaceví mining district on a simplified geologic map of the region. The map pattern constitutes an erosional window caused by crustal uplift apparently centered about 3 km west of Guanaceví. With some exceptions, fracture-filling vein mineralization is localized on the flanks of the uplift center, suggesting a genetic relationship between uplift and mineralization. The three principal trends of high-angle normal faults that characterize the region are as follows:

- The dominant structural trend in the region is northwest, with significant north-northeast faults in a likely conjugate relationship. This generation of structures hosts most of the mineralization in the district.
- Northeast faults postdate the mineralized structures.
- East-west faults appear last.

This pattern sequence would appear to indicate an early extension in a northeast-southwest direction, followed by a later extension in an east-northeast–west-southwest direction, followed by a northwest-southeast extension and finally ending with the latest extension in a north-south direction. This clockwise evolution of principal stress directions is similar to that of other regions in the American Cordillera, including the Sierra Madre of Mexico.

Timing of uplift of the Guanaceví window is constrained by the following considerations:

- Dilatational fractures flanking the uplift are dominantly northwest trending, with subordinate north and north-northeast components. Northeast and east-west fractures are not significant in controlling the uplift pattern. Thus, uplift is early in the structural evolution described above.
- The northeast-southwest extension in Mexico is generally associated with opening of the Gulf of California, and dated as Oligocene to Miocene.
- Uplift therefore may be coeval with the onset of silicic volcanism of the Upper Volcanics, which are considered Oligocene in age.

It is reasonable to conclude that uplift occurred at the onset of Upper Volcanic Sequence eruptions (Oligocene), northeast-southwest extension, and was coeval with mineralization. The cause of uplift, however, is left unexplained by these considerations. Alternative explanations include magmatic upwelling at depth, resurgent doming within a cryptic caldera, or tectonic transpression resulting from large-scale lateral displacement

7.2 Project Geology

The Santa Cruz mine property, which forms part of the main portion of the Guanaceví Mines Project, covers about a 3.0 km strike length of the Santa Cruz fault/vein system. The Santa Cruz vein is similar in many respects to other veins in the Guanaceví district, except that it is the only one to lie on the west side of the horst of Guanaceví Formation and associated facies, and it dips west instead of east. See Figure 7-2 for the Guanaceví Mines Project geology map.

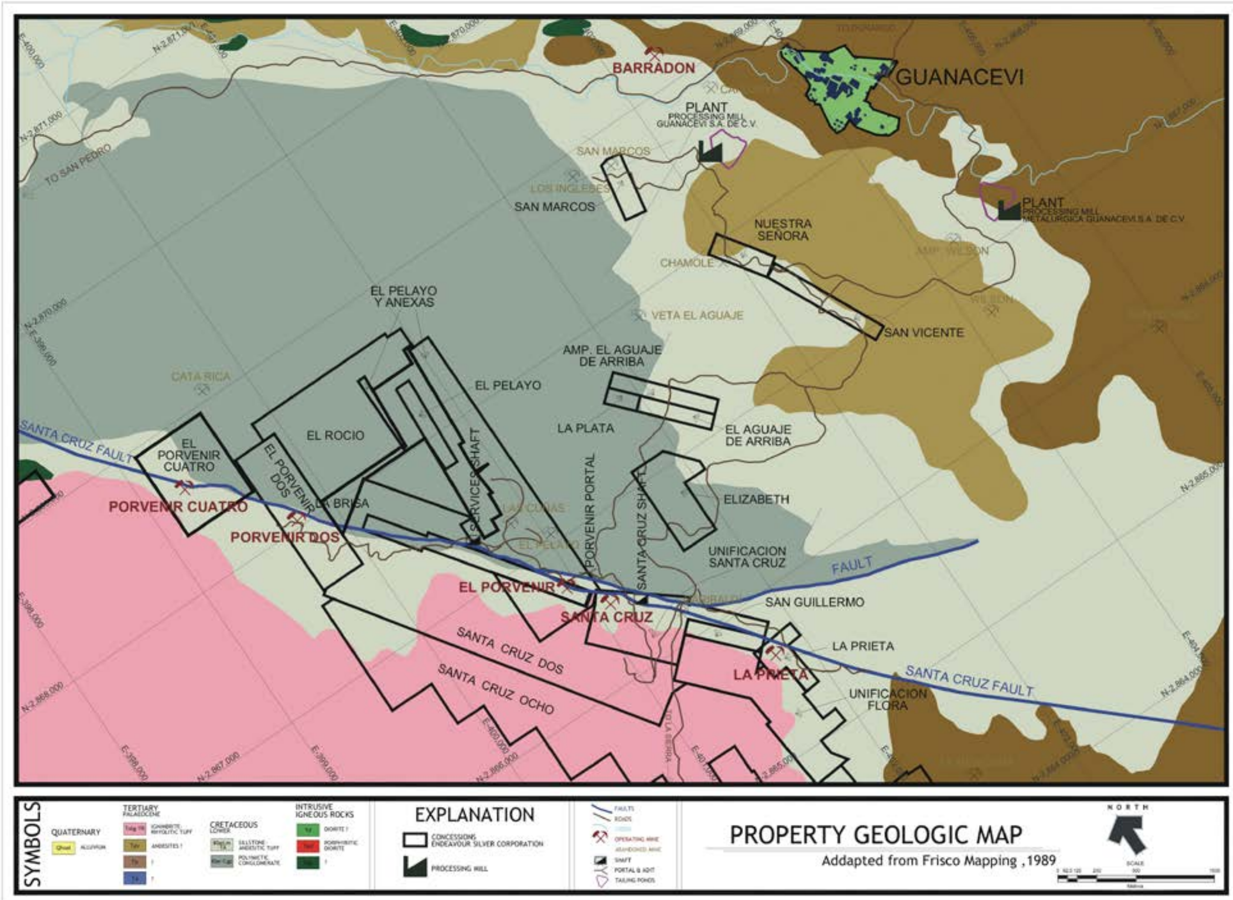

Figure 7-2 Guanaceví Mines Project Geology Map

In the Porvenir Dos area and the Deep Santa Cruz mine workings, a low angle rhyolite crystal-lapilli tuff and andesitic contact occurs high in the hanging wall of the Santa Cruz vein indicating a fault contact with Guanaceví Formation, which obviously cuts the contact.

7.2.1 Local Structure

The Santa Cruz vein, the principal host of silver and gold mineralization, is located on the west side of the horst of the Guanaceví Formation. The mineralized vein is part of a major fault system that trends northwest and principally places the Guanaceví Formation in the footwall against andesite and/or rhyolite in the hanging wall. The vein/fault presents a preferred strike of N45°W with dips from 45° to 70° to the southwest. From La Prieta to Porvenir Dos, it extends a distance of 5 km and averages approximately 3 m in width.

The broader and higher-grade mineralized ore shoots tend to occur along flexures in the Santa Cruz vein structure, where sigmoidal loops are developed both along strike and down dip. The vein in Deep Santa Cruz for instance splays into two, three or four separate mineralized structures with the intervening wall rocks also often well mineralized, giving mining widths up to 20 m in some places. These sigmoidal loops tend to develop with some regularity along strike and all of the ore shoots at the Santa Cruz mine have about a 60° plunge to the northwest. A shallow northwest plunging striation, raking at 15°-30°, is noted on a number of fault planes within the Santa Cruz structure; these striations appear to be consistent with an observed sinistral movement seen on minor faults which produce small offsets of the Santa Cruz vein.

Particularly around the peripheral ore zones the vein is observed to develop imbricate structures, either as imbricate lenses shallowly oblique to the principal Santa Cruz trend or as vein segments offset by similarly trending minor faults. The trend of these structural features is generally slightly more westerly than the Santa Cruz vein/fault trend and steeper dipping. Veining is also often affected by north-south structures, which rarely seem to offset the main fault but do cause minor jogs in the vein; often the north-south structures are associated with manganese oxide concentrations and elevated silver grades.

7.2.2 Alteration

The sedimentary and volcanic rocks are hydrothermally altered with propylitization (chlorite) the most widespread, up to 150 m from the veins, with narrower bands of potassic and argillic alteration (kaolinite and adularia) typically up to 25 m thick in the hanging wall and with silicification near the veins. Phyllic alteration, however, is absent in the Guanaceví district.

7.3 Mineralization

The principal mineralization within the Santa Cruz-Porvenir mines is an epithermal low-sulfidation, quartz-carbonate, fracture-filling vein hosted by a fault-structure that trends approximately N45°W and dips 55° southwest. The fault and vein comprise a structural system referred to locally as the Santa Cruz vein structure or Santa Cruz vein fault. The Santa Cruz vein structure has been traced for 5 km along the trend and averages about 3 m in width. Mineralization in the system is not continuous, but occurs in steeply northwest-raking shoots up to 200 m in strike length. A second vein, sub-parallel to the Santa Cruz vein but less continuous, is economically significant in the Porvenir Dos zone and in the northern portion of deep North Porvenir. It is referred to in both areas as the “Footwall vein”, although in Porvenir Dos, the term “Conglomerate vein” has also been employed.

7.3.1 Santa Cruz Vein

The Santa Cruz vein is a silver-rich structure with lesser amounts of gold, lead and zinc. Mineralization has averaged 500 g/t silver and 1 g/t gold over 3 m true width. The minerals encountered are argentite-acanthite, limited gold, galena, sphalerite, pyrite and manganese oxides. Gangue minerals noted are barite, rhodonite, rhodochrosite, calcite, fluorite and quartz. The mineralization down to Level 6 in the Santa Cruz mine is mainly oxidized, with a transition zone of oxides to sulfides occurring between Levels 6 to 8, although some sulfide ore was mined above Level 6.

Mineralization exhibits evidence of episodic hydrothermal events which generated finely banded textures. The higher-grade mineralization in the district is commonly associated with multiple phases of banding and brecciation. The first phase, deposition of white quartz, white calcite and pyrite in stockwork structures, often exhibits horse-tail structures bifurcating both in the horizontal and vertical sense to form imbricate pods. The second phase deposited semi translucent quartz with argentite, scarce gold, and oxides of manganese (2%) and rare lead and zinc sulfide (4%), the latter particularly in the lower part of the hydrothermal system. The second phase was accompanied by the deposition of barite, rhodonite, rhodochrosite, fluorite and calcite.

This second phase comprises multiple pulses of mineralization expressed in the vein structures as bands of massive, banded or brecciated quartz. Massive and massive-to-banded quartz are commonly associated with carbonate which is predominantly manganoan calcite and calcitic rhodochrosite. Rhodonite is much less abundant than carbonates but is not uncommon.

According to results obtained through diamond drilling, the lead and zinc mineralization occurs more commonly in the vein below the water table which, in the Santa Cruz mine, is just below the 13 Level.

7.3.2 Footwall Veins

In the Porvenir Dos area and in the deeper portion of North Porvenir, a footwall-hosted vein lies in the footwall of the Santa Cruz vein structure. In both areas, this footwall vein is either within Guanaceví Formation footwall rocks or is at the structural contact between the Guanaceví Formation and the Lower Volcanic Sequence andesite. It is banded to brecciated quartz plus carbonate and contains local scatterings (<1%) of sulfides (pyrite>sphalerite> galena>chalcopyrite) and rare pods (<50 cm) of sulfides. It appears likely from drill sections that these footwall vein occurrences are splays of the main Santa Cruz vein structure and are largely sympathetic to it. At the north end of North Porvenir, the footwall vein attains a true width of over 7 m with silver grades of approximately 400 g/t in some areas. In Porvenir Dos, the footwall vein is narrower than the Santa Cruz vein and is overall a lower-grade vein, although one high grade intercept (uncapped) has been recorded in drillhole PD 36-3, at 2,548 g/t silver over 1.25 m.

8. DEPOSIT TYPES

The type of mineral deposit which is the target of exploration and mining activity at the Guanaceví Project is described in detail in a number of existing internal and previously published technical reports. The following description of the mineral deposit type is excerpted and/or modified from Munroe (2014).

The Guanaceví silver-gold district comprises classic, high-grade silver-gold, epithermal vein deposits, characterized by low sulphidation mineralization and adularia-sericite alteration. The Guanaceví veins are typical of most other epithermal silver-gold vein deposits in Mexico in that they are primarily hosted in the Tertiary Lower Volcanic series of andesite flows, pyroclastics and epiclastics, overlain by the Upper Volcanic series of rhyolite pyroclastics and ignimbrites. Evidence is accumulating in the Guanaceví mining district that the mineralization is closely associated with a pulse of silicic eruptions that either signaled the end of Lower Volcanic Sequence magmatism or the onset of Upper Volcanic Sequence activity.

Low sulphidation epithermal veins in Mexico typically have a well-defined, sub-horizontal ore horizon about 300 m to 500 m in vertical extent where the bonanza grade ore shoots have been deposited due to boiling of the hydrothermal fluids. Neither the top nor the bottom of the Santa Cruz ore horizon has yet been found but, given that high-grade mineralization occurs over a 400-m vertical extent from the top of the Garibaldi shaft (south of the Santa Cruz mine) to below Level 13 in Santa Cruz, it is likely that erosion has not removed a significant extent of the ore horizon.

Low sulphidation deposits are formed by the circulation of hydrothermal solutions that are near neutral in pH, resulting in very little acidic alteration with the host rock units. The characteristic alteration assemblages include illite, sericite and adularia that are typically hosted by either the veins themselves or in the vein wall rocks. The hydrothermal fluid can travel either along discrete fractures where it may create vein deposits or it can travel through permeable lithology such as a poorly welded ignimbrite flow, where it may deposit its load of precious metals in a disseminated deposit. In general terms, this style of mineralization is found at some distance from the heat source. Figure 8-1 illustrates the spatial distribution of the alteration and veining found in a hypothetical low sulphidation hydrothermal system.

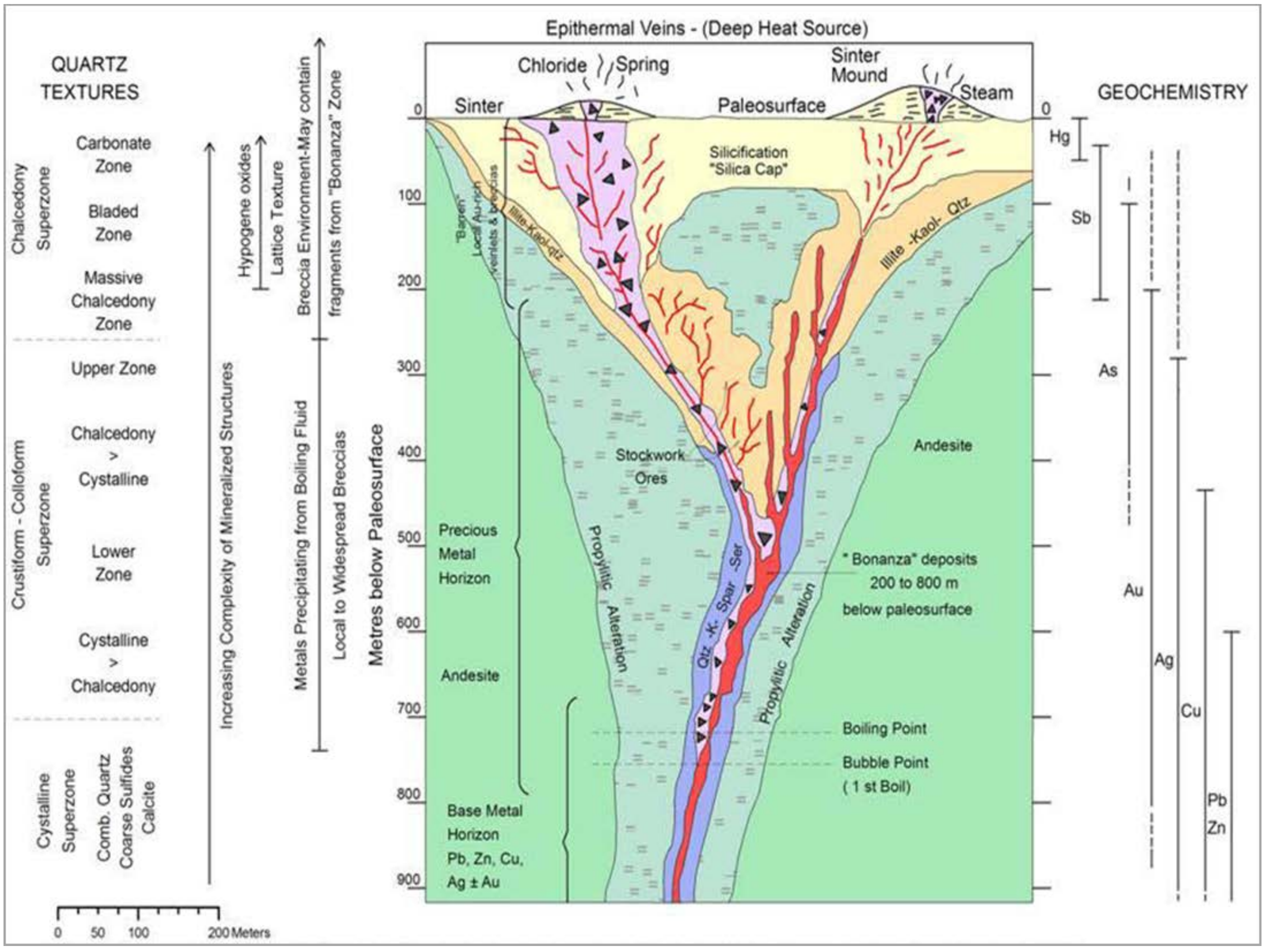

Figure adapted from Berger & Eimon (1983), Buchanan (1981), Corbett & Leach (1996) and Hollister (1985) and others and dated December, 2013.

Figure 8-1 Alteration and Mineral Distributions within a Low Sulphidation Epithermal Vein System

9. EXPLORATION

9.1 EDR Exploration Prior to 2016

Exploration activities conducted by EDR in recent years prior to 2016 are summarized in the following paragraphs, and are discussed in greater detail in the technical reports prepared by HRC (2016) and Munroe (2014, 2015).

During 2013, surface geological mapping and sampling was conducted by EDR at Guanaceví focused, from north to south, on San Pedro (El Cambio-PP), Milache, El Rocio and Santa Cruz South. Regionally, a total of 17 exploration targets were defined in a radius of approximately 70 km around the Guanaceví Project.

During 2014, exploration field activities were conducted by EDR at Guanaceví mainly in the Rocio-Pelayo, Porvenir 4, El Aguaje Mine and Santa Cruz South areas. These activities were undertaken to define targets of interest with possible potential of mineralization in order to develop possible drilling programs. A total of 655 samples were collected and submitted for assays.

In 2015, EDR spent US $1,548,683 (including property holding costs) on exploration activities, including drilling, at the Guanaceví Project. Local field exploration activities in 2015 included geological mapping, sampling, and interpretation in the La Guirnalda, Santa Cruz West, and Garibaldi claim areas.

9.2 2016 Exploration Activities

In 2016, EDR spent US $1,297,698 (including property holding costs) on exploration activities, including drilling, at the Guanaceví Project.

9.2.1 Sampling Method and Approach

In order to establish exploration drill hole targets, EDR has collected surface outcrop, underground channel, surface channel samples, and conducted numerous surface geologic mapping campaigns.

9.2.1.1 Surface Channel Samples

Chip channel samples are marked by a line at each end of the channel and are collected across zones of mineralization, alteration, and structure by taking continuous (approximately 10 cm width) chips from a geologically defined traverse. The sample is chipped from the face with a mallet and chisel and captured by a large canvas. The canvas is cleaned after each sample has been taken and a lithologic description is recorded. The samples range from 1 to 2 meters long, depending on degree of mineralization and weigh approximately 3 to 6 kilograms. Their location is recorded by a hand-held GPS unit.

9.2.1.2 Rock Chip Samples

As with the channel samples, single point rock chip samples are collected from an area of 1 to 2 meters in diameter. Multiple chips are collected from different points in the sampling area with a resulting weight from 1 to 3 kilograms. The chips are bagged and the same protocol is applied as with the channel samples. The location is recorded with a hand-held GPS unit.

9.2.1.3 Soil Chip Samples

The soil sample method is primarily utilized in areas with a higher degree of weathering. Where appropriate, soil samples were taken from just below the organic horizon in pits dug by hand with shovels; in other areas, soil samples constituted fine-grained material collected from weathered slopes. Soil samples constituted approximately 400 g to 600 g of material with as much organic matter removed as possible by screening or hand-picking. Soil sampling typically occurred on lines or grids with one sample taken every 50 m to 100 m. The grids or lines are oriented perpendicular to the structure being tested. Samples and sample location were described by the geologist / sampling technician and location recorded by handheld GPS.

9.2.2 2016 Local Field Exploration

Field exploration activities in 2016 included geological mapping and sampling over several concessions peripheral to the Guanaceví Project, with the intent of identifying mineralized zones for which additional exploration and drilling might be warranted. A total of 323 rock samples were collected from a variety of properties within four general project areas (Table 9-1).

Table 9-1 2016 Regional Exploration, External Concessions, Guancеví

Project	Owner	Location	Number of Samples Taken	Concession	Title
Mineral de Santa Cruz	Minera Plata Adelante	Municipality of Santa Maria del Oro, Durango, at NE of the Guanaceví town.	161	Alma	243551
	Ignacio Barraza			La Bufa 1	E-25/38499
	Ignacio Barraza			La Bufa 2	E-25/38544
	Francisco Macias Altamirano			La Ilusión	235908
	Juan Ramon Holguin Moriel / Enrique Corral Ceniceros / Ismael Hernandez Mariscal			La India	230142
	Georgina Castrejon			La India 2	234818
	Georgina Castrejon			La India 2	234819
El Pino	Daniel Cano Rodriguez	Municipality of Tepehuanes, Durango, at South of Guanaceví, near the Pitorreal town.	46	El Pino	214761
Maira-Las Zetas	Arnoldo Sanchez, Ignacio Barraza and Roby Gaitan	Mining Region of La Aurora-La Tinaja, at SE of the Guanaceví town.	91	Maira	242493
				Las Zetas	242413
San Juan	Roberto Velazquez	NW of San Pedro	25	San Juan	226391
				San Juan 2	234668

10. DRILLING

Diamond drilling at the Guanaceví Project is conducted under two general modes of operation: one by the exploration staff (surface exploration drilling) and the other by the mine staff (production and underground exploration drilling). Production drilling is predominantly concerned with definition and extension of the known mineralized zones in order to guide development and mining. Exploration drilling is conducted further from the active mining area with the goal of expanding the resource base. Drilling results from both programs were used in the mineral resource and mineral reserve estimates presented in this report. To date, all drilling completed at the mine has been diamond core.

10.1 Drilling Procedures

Surface drillholes are generally oriented to intersect the veins as close to perpendicular as possible. The drillholes are typically drilled from the hanging wall, perpendicular to, and passing through the target structure into the footwall, and no drilling is designed for intercepts with angles less than about 30° to the target. Drillholes extend an average of 50 m beyond the target zone.

Underground drillholes are typically drilled from the hanging wall, and are ideally drilled perpendicular to structures, but oblique intersection is required in some instances due to limitations of the drill station. Underground positive angled holes (up holes) are generally drilled from the footwall using the same criteria. All holes are designed to pass through the target and into the hanging or footwalls. Both surface and underground drillholes are typically HQ to NQ in size.

On the drill site, the drill set-up is surveyed for azimuth, inclination and collar coordinates, with the drilling subject to daily scrutiny and coordination by EDR geologists. Since 2010, surface holes are surveyed using a Reflex multi-shot down-hole survey instrument normally at 50 m intervals from the bottom of the hole back up to the collar. At underground drill stations, azimuth orientation lines are surveyed in prior to drilling. Inclination of underground holes is collected using the Reflex EX-Shot® survey device prior to starting drilling.

The survey data obtained from the drillholes are transferred to databases in Vulcan® and AutoCAD®, and are corrected for local magnetic declination, as necessary. Information for each drillhole is stored in separate folders.

Drill core is collected daily and is transported to the core logging facility under EDR supervision. The core storage facilities at Guanaceví are well protected by high level security fences, and are under 24-hour surveillance by security personnel to minimize any possibility of tampering with the dill cores.

When assay results are received from the laboratory, they are merged into an Excel® spreadsheet for importation and interpretation in AutoCAD® software. The starting and ending point of each vein and/or vein/vein breccia intercept is determined from a combination of geology notes in the logs and assay results. Using approximate vein and drillhole orientation information a horizontal width is calculated for the intercept to be used as part of a Vertical Longitudinal Projection ("VLP").

The center point of the intercept, horizontal width, and gold and silver assay values are plotted on VLPs of each vein. These are used to guide further drilling, interpret mineralization shoots, and as the basis of polygonal resource estimation.

10.2 EDR Core Logging Procedures

As the core is received at the core facility, geotechnical data is logged manually on paper sheets and entered into Excel®. The core is then manually logged for geological data and marked for sampling. Geological data and sample information are entered directly into Excel® spreadsheets.

10.3 EDR Drilling Programs and Results

Since acquisition of the Guanaceví Project in 2004, and prior to the 2016 exploration season, EDR had completed 690 diamond drill holes totaling 191,116 m and 22 reverse circulation drill holes totaling 2,977 m on the entire Guanaceví Project (Table 10-1). Of this total, approximately 147,718 m of diamond drilling in 504 holes were completed on the Santa Cruz vein structure. Holes were drilled from both surface and underground drill stations, and 54,799 samples were collected and submitted for assay.

Table 10-1 Drilling Summary for Santa Cruz Vein Structure at Guanaceví Mines Project (as of December, 2016)

Project	Diamond Drillholes	Meters
North Porvenir	233	65,414
Porvenir Dos	24	5,062
Porvenir 4	38	10,100
La Prieta	12	2,627
Santa Cruz	96	22,067
Alex Breccia	27	8,614
Milache	51	24,931
Santa Cruz South	23	8,902
Total	**504**	**147,718**

EDR's drilling exploration programs through 2015 are well described in previous technical reports (HRC, 2016; Munroe 2013, 2014, 2015; Lewis 2009, 2010, 2011). To provide continuity, a brief description of the 2016 exploration program is provided in the following paragraphs.

In 2016, underground and surface drilling conducted at Guanaceví focused on exploring the Santa Cruz vein in the (deep) North Porvenir area (between the Porvenir and Santa Cruz Mines, below level 3148) and Trinche and La Negra portions of the Santa Cruz mine (Figures 10-1 through 10-3). The underground drilling program included a total of 4,556 m in 22 holes, and the surface drilling program included a total of 2429.5 m in 8 holes.

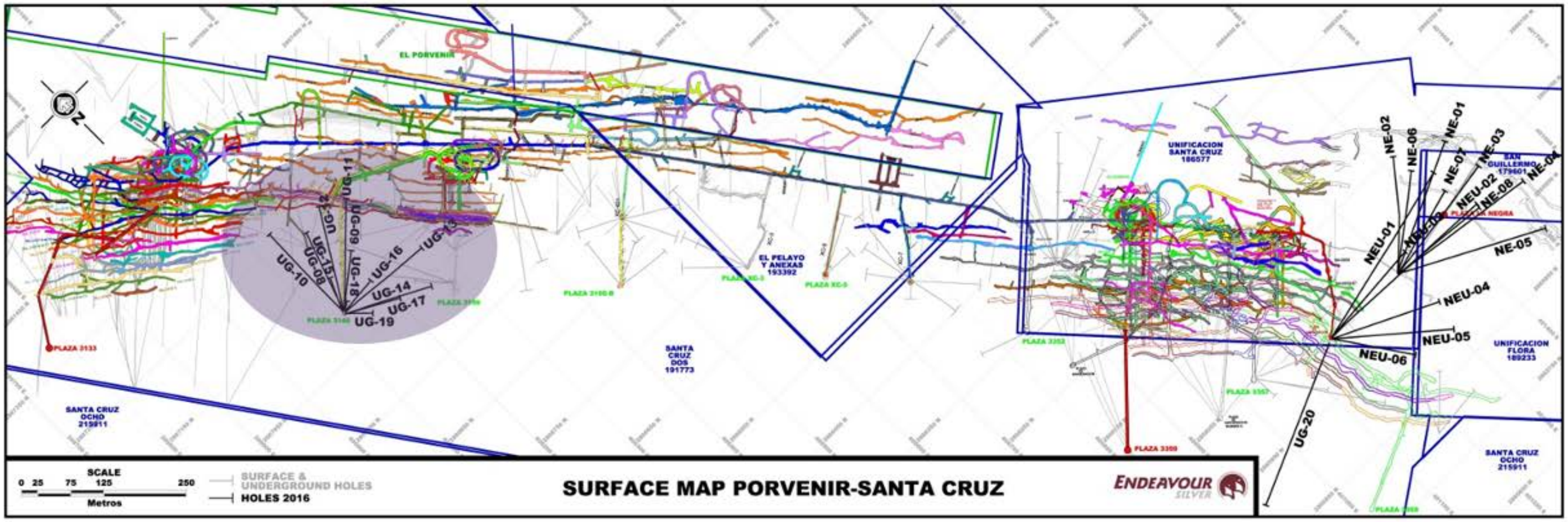

Figure 10-1 2016 Drilling (Underground), North Porvenir

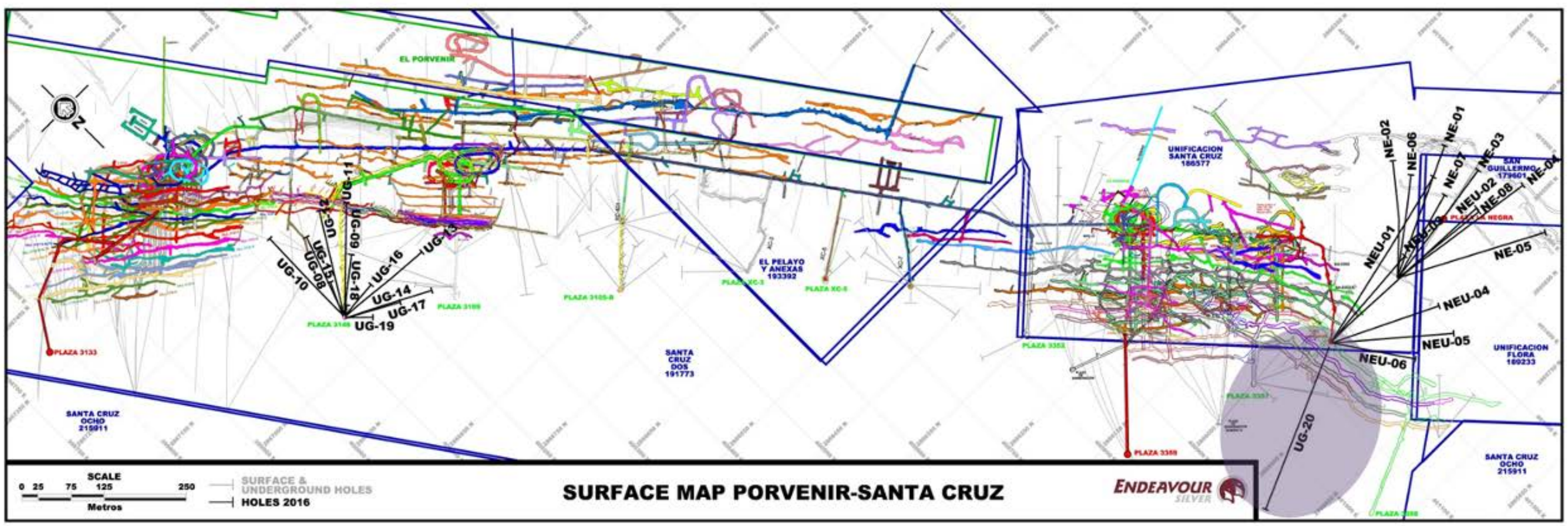

Figure 10-2 2016 Drilling (Underground), Trinche

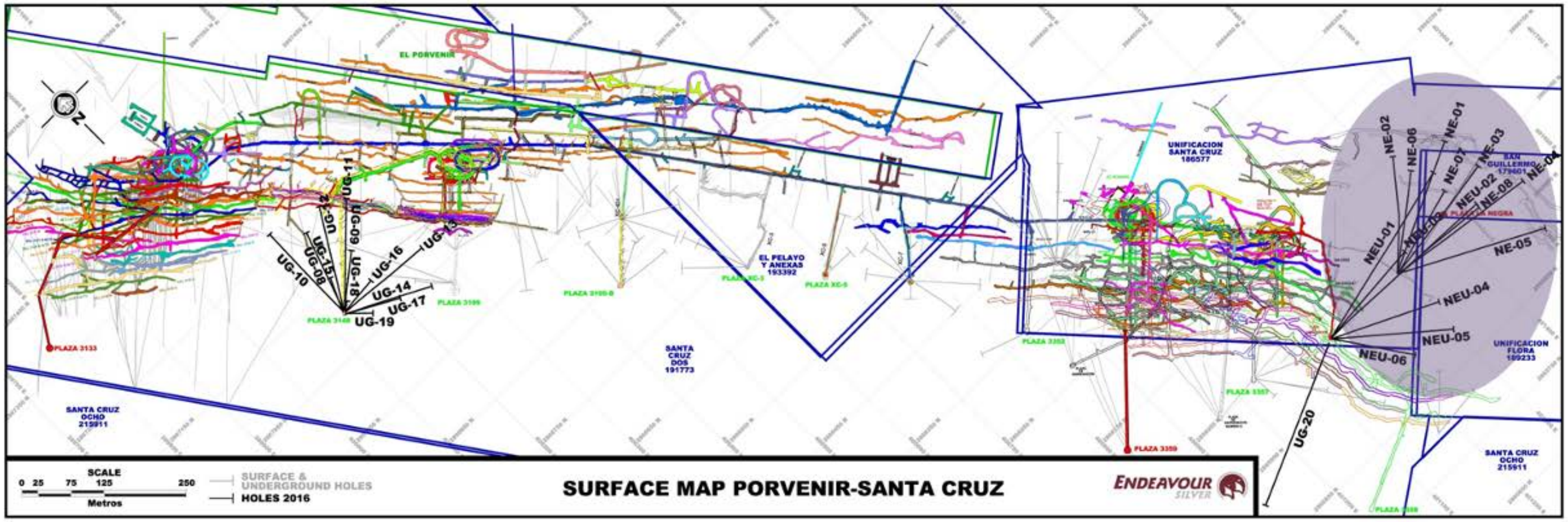

Figure 10-3 2016 Drilling (Surface and Underground), La Negra

10.3.1 North Porvenir

At North Porvenir, EDR completed 14 underground diamond drill holes (Table 10-2) in an effort to determine the extent of mineralization identified during the 2016 drilling program below the 3,148 level. Drilling was conducted by Versa Perforaciones S.A. de CV ("Versa"). Versa is a contract drilling company and is independent of EDR.

Table 10-2 2016 Drilling Summary, North Porvenir

Hole	Azimuth	Dip	Diameter	Total Depth (m)	Start Date	Finish Date
UG-08	19 º	-53 º	HQ-NQ	212.50	24/05/2016	02/06/2016
UG-09	52 º	-66 º	HQ-NQ	215.65	05/06/2016	12/06/2016
UG-10	358 º	-45 º	HQ-NQ	227.20	13/06/2016	25/06/2016
UG-11	347 º	-27 º	HQ-NQ	186.20	27/06/2016	08/07/2016
UG-12	30 º	-36 º	HQ-NQ	197.00	09/07/2016	17/07/2016
UG-13	96 º	-48 º	HQ-NQ	218.45	18/07/2016	25/07/2016
UG-14	117 º	-61 º	HQ-NQ	266.10	25/07/2016	04/08/2016
UG-15	26 º	-76 º	HQ-NQ	272.25	05/08/2016	11/08/2016
UG-16	93 º	-77 º	HQ-NQ	251.30	12/08/2016	18/08/2016
UG-17	223 º	-72 º	HQ-NQ	269.50	19/08/2016	29/08/2016
UG-18A	85 º	-86 º	HQ	13.20	29/09/2016	30/09/2016
UG-18	85 º	-86 º	HQ-NQ	266.20	30/08/2016	09/09/2016
UG-19A	135 º	-82 º	HQ	12.90	10/09/2016	10/09/2016
UG-19	135 º	-82 º	HQ-NQ-BQ	290.30	11/09/2016	26/09/2016
			Total	**2,898.75**		

All holes drilled at North Porvenir in 2016 intercepted the Santa Cruz vein, and an ore shoot was defined with a lateral and vertical extent of about 200 m by 200 m. Drilling results are summarized in Table 10-3.

Table 10-3 2016 Drilling Results, North Porvenir

Drill Hole ID	Structure	Mineralized Interval				Assay Results	
		From (m)	To (m)	Core Length (m)	True Width (m)	Silver (g/t)	Gold (g/t)
UG-08	Santa Cruz Vein	155.45	157.30	1.85	1.7	37	0.15
	Santa Cruz Composite	**156.10**	**157.30**	**1.20**	**1.1**	**39**	**0.12**
	Including	156.60	157.30	0.70	0.6	43	0.11
UG-09	**Santa Cruz Vein**	**148.80**	**150.50**	**1.70**	**1.5**	**11**	**0.05**
	Including	149.65	150.50	0.85	0.8	13	0.04
	Fw Santa Cruz Vein	166.35	166.65	0.30	0.3	186	0.56
	Fw SCV Composite	**164.65**	**166.65**	**2.00**	**1.8**	**61**	**0.15**
	Including	166.35	166.65	0.30	0.3	186	0.56
UG-10	Santa Cruz Vein	181.50	182.60	1.10	0.9	53	0.14
	Santa Cruz Composite	**181.50**	**183.30**	**1.80**	**1.5**	**51**	**0.13**
	Including	181.50	182.10	0.60	0.5	67	0.14
UG-11	**Santa Cruz Vein**	**130.05**	**131.25**	**1.20**	**1.2**	**195**	**0.30**
	Including	130.05	130.70	0.65	0.6	287	0.50
	Fw Santa Cruz Vein	140.30	144.60	4.30	4.2	52	0.26
	Fw SCV Composite	**141.95**	**143.40**	**1.45**	**1.4**	**74**	**0.37**
	Including	141.95	142.70	0.75	0.7	98	0.49

Drill Hole ID	Structure	Mineralized Interval				Assay Results	
		From (m)	To (m)	Core Length (m)	True Width (m)	Silver (g/t)	Gold (g/t)
UG-12	**Santa Cruz Vein**	**146.65**	**147.90**	**1.25**	**1.2**	**148**	**0.34**
	Including	147.20	147.90	0.70	0.7	238	0.41
UG-13	Santa Cruz Vein	154.00	158.85	4.85	3.8	36	0.11
	Santa Cruz Composite	**155.95**	**157.30**	**1.35**	**1.0**	**100**	**0.25**
	Including	156.60	157.30	0.70	0.5	181	0.45
	Fw Santa Cruz Vein	179.95	180.25	0.30	0.2	43	0.11
	Fw SCV Composite	**179.95**	**181.80**	**1.85**	**1.3**	**10**	**0.04**
	Including	179.95	180.25	0.30	0.2	43	0.11
UG-14	Santa Cruz Vein	197.10	197.60	0.50	0.3	11	0.06
	Santa Cruz Composite	**196.05**	**197.60**	**1.55**	**1.0**	**5**	**0.02**
	Including	197.10	197.60	0.50	0.3	11	0.06
	Fw Santa Cruz Vein	226.10	230.85	4.75	2.8	40	0.12
	Fw SCV Composite	**226.90**	**228.60**	**1.70**	**1.0**	**58**	**0.21**
	Including	227.45	228.05	0.60	0.4	70	0.20
UG-15	Santa Cruz Vein	185.55	186.10	0.55	0.4	24	<0.05
	Santa Cruz Composite	**185.55**	**187.25**	**1.70**	**1.3**	**81**	**0.29**
	Including	186.10	186.80	0.70	0.5	139	0.49
	Veinlet	194.20	194.65	0.45	0.2	44	0.07
	Veinlet	196.85	198.50	1.65	0.6	352	0.39
	Veinlet Composite	**196.30**	**199.10**	**2.80**	**1.1**	**306**	**0.36**
	Veinlet	198.85	199.10	0.25	0.1	756	1.18
	Vein	200.15	201.30	1.15	0.4	140	0.42
	Vein Composite	**200.55**	**203.00**	**2.45**	**1.1**	**118**	**0.28**
	Including	201.30	201.60	0.30	0.1	318	0.44
	Fw Santa Cruz Vein	203.45	208.55	5.10	3.7	62	0.17
	Fw SCV Composite	**205.25**	**206.70**	**1.45**	**1.0**	**79**	**0.18**
	Including	205.90	206.25	0.35	0.3	154	0.39
UG-16	Santa Cruz Fault	171.35	175.15	3.80	3.4	168	0.17
	SCF Composite	**173.70**	**175.15**	**1.45**	**1.3**	**399**	**0.31**
	Including	174.30	175.15	0.85	0.8	576	0.46
	Santa Cruz Vein	**180.50**	**182.10**	**1.60**	**1.2**	**56**	**0.11**
	Including	180.50	180.85	0.35	0.3	146	0.25
	Fw Santa Cruz Vein	197.65	202.55	4.90	3.5	19	0.06
	Fw SCV Composite	**199.25**	**201.00**	**1.75**	**1.2**	**24**	**0.06**
	Including	199.80	200.10	0.30	0.2	36	0.14
UG-17	Santa Cruz Vein	209.25	209.70	0.45	0.2	7	0.06
	Santa Cruz Composite	**208.40**	**210.75**	**2.35**	**1.2**	**7**	**0.02**
	Including	209.70	210.75	1.05	0.6	11	0.01
	Fw Santa Cruz Vein	217.50	220.75	3.25	2.0	257	0.41
	Fw SCV Composite	**218.10**	**221.20**	**3.10**	**1.9**	**324**	**0.46**
	Including	218.10	218.45	0.35	0.2	607	0.67
	Fw Santa Cruz Vein	242.45	243.50	1.05	0.6	4	0.02
	Fw SCV Composite	**241.95**	**244.05**	**2.10**	**1.2**	**4**	**0.03**
	Including	243.50	244.05	0.55	0.3	5	0.06
UG-18	Santa Cruz Vein	210.55	214.05	3.50	2.2	16	0.06
	Santa Cruz Composite	**210.55**	**212.30**	**1.75**	**1.1**	**18**	**0.06**
	Including	211.20	211.80	0.60	0.4	35	0.12
	Fw Santa Cruz Vein	223.55	224.30	0.75	0.5	100	0.26
	Fw SCV Composite	**222.15**	**224.30**	**2.15**	**1.4**	**180**	**0.42**
	Including	223.00	223.55	0.55	0.4	296	0.64

Drill Hole ID	Structure	Mineralized Interval				Assay Results	
		From (m)	To (m)	Core Length (m)	True Width (m)	Silver (g/t)	Gold (g/t)
UG-19	Santa Cruz Vein	230.05	237.40	7.35	4.1	644	0.59
	Santa Cruz Composite	**231.40**	**237.40**	**6.00**	**3.4**	**786**	**0.71**
	Including	234.50	235.10	0.60	0.3	2,260	1.73
	Fw Santa Cruz Vein	249.70	250.70	1.00	0.6	30	0.05
	Fw SCV Composite	**250.05**	**251.75**	**1.70**	**1.0**	**19**	**0.57**
	Including	250.70	251.75	1.05	0.6	14	0.90

10.3.2 Trinche

A single underground drillhole was drilled in the Trinche vein area, from Level 13 in the Santa Cruz mine along the hanging wall of the Santa Cruz vein. The intent of the drillhole was to define the Trinche vein further to the south, but drilling results were generally negative.

10.3.3 La Negra

A total of 15 drillholes were drilled in the La Negra portion of the Santa Cruz mine in order to define potential mineralization in close proximity to existing mine access. Drilling results indicate a mineralized zone below Level 6, with a lateral extent of about 200 m and vertical extent of roughly 70 m, and open on all sides. Drillholes completed in the La Negra area are summarized in Tables 10-4 and 10-5, and drilling results are presented in Tables 10-6 and 10-7.

Table 10-4 2016 Underground Drilling Summary, La Negra

Hole	Azimuth	Dip	Diameter	Total Depth (m)	Start Date	Finish Date
NEU-01	76º	12 º	HQ-NQ	303.00	03/10/2016	21/10/2016
NEU-02A	92 º	10 º	HQ	22.75	22/10/2016	25/10/2016
NEU-02	92 º	10 º	HQ-NQ	318.00	26/10/2016	09/11/2016
NEU-03	85 º	-24 º	HQ-NQ	198.50	10/11/2016	18/11/2016
NEU-04	115 º	-21 º	HQ-NQ	186.00	19/11/2016	28/11/2016
NEU-05	131 º	-16 º	HQ-NQ	159.50	28/11/2016	07/12/2016
NEU-06	143 º	-45 º	HQ-NQ	205.50	08/12/2016	14/12/2016
			Total	**1,393.25**		

Table 10-5 2016 Surface Drilling Summary, La Negra

Hole	Azimuth	Dip	Diameter	Total Depth (m)	Start Date	Finish Date
NE-01	65 º	-45 º	HQ-NQ	312.00	22/09/2016	30/09/2016
NE-02	47º	-45 º	HQ-NQ	252.50	30/09/2016	07/10/2016
NE-03	84°	-45 º	HQ-NQ	300.00	08/10/2016	20/10/2016
NE-04	100 º	-45 º	HQ-NQ	328.50	21/10/2016	31/10/2016
NE-05	119º	-45 º	HQ-NQ	330.00	03/11/2016	14/11/2016
NE-06	52 º	-59 º	HQ-NQ	307.50	15/11/2016	24/11/2016
NE-07	74 º	-59 º	HQ-NQ	293.50	29/11/2016	08/12/2016
NE-08	79 º	-59 º	HQ-NQ	304.50	09/12/2016	15/12/2016
			Total	**2,428.50**		

Table 10-6 2016 Underground Drilling Results, La Negra

Drill Hole ID	Structure	Mineralized Interval				Assay Results	
		From (m)	To (m)	Core Length (m)	True Width (m)	Silver (g/t)	Gold (g/t)
NEU-01	La Negra	120.35	120.55	0.20	0.1	1	0.02
	La Negra Composite	**119.30**	**120.90**	**1.60**	**1.1**	**2**	**0.01**
	Including	120.55	120.90	0.35	0.2	4	0.01
	Santa Cruz Vein	169.00	169.50	0.50	0.3	14	0.06
	Santa Cruz Composite	**168.00**	**170.10**	**2.10**	**1.1**	**4**	**0.02**
	Including	169.00	169.50	0.50	0.3	14	0.06
	Fw SCV	232.25	240.60	8.35	4.8	12	0.05
	Fw SCV Composite	**232.25**	**234.20**	**1.95**	**1.1**	**23**	**0.09**
	Including	232.75	233.45	0.70	0.4	31	0.13
NEU-02	La Negra	156.50	159.45	2.95	1.9	2	0.01
	La Negra Composite	**157.85**	**159.45**	**1.60**	**1.0**	**2**	**0.01**
	Including	158.25	158.55	0.30	0.2	3	0.01
	Santa Cruz Vein	189.45	189.70	0.25	0.1	8	0.06
	Santa Cruz Composite	**189.45**	**192.55**	**3.10**	**1.1**	**3**	**0.02**
	Including	189.45	189.70	0.25	0.1	8	0.06
	Fw SCV	229.80	235.55	5.75	2.3	16	0.06
	Fw SCV Composite	**231.80**	**234.60**	**2.80**	**1.1**	**17**	**0.08**
	Including	232.25	232.60	0.35	0.1	24	0.16
NEU-03	Santa Cruz Vein	96.15	100.30	4.15	3.5	222	0.42
	Santa Cruz Composite	**96.45**	**99.90**	**3.45**	**2.9**	**260**	**0.47**
	Including	97.30	97.60	0.30	0.3	554	0.85
	Fw SCV	149.35	149.65	0.30	0.3	6	0.01
	Fw SCV Composite	**149.35**	**150.65**	**1.30**	**1.2**	**2**	**0.01**
	Including	149.35	149.65	0.30	0.3	6	0.01
	Fw SCV	160.90	161.15	0.25	0.2	15	0.01
	Fw SCV Composite	**160.90**	**162.00**	**1.10**	**1.0**	**4**	**0.01**
	Including	160.90	161.15	0.25	0.2	15	0.01
NEU-04	Santa Cruz Vein	108.75	112.55	3.80	2.4	69	0.14
	Santa Cruz Composite	**111.10**	**112.55**	**1.45**	**0.9**	**63**	**0.11**
	Including	111.10	111.45	0.35	0.2	213	0.37
	Fw SCV	148.70	149.15	0.45	0.3	1	<0.005
	Fw SCV Composite	**148.70**	**150.40**	**1.70**	**1.2**	**1**	**<0.005**
	Including	148.70	149.15	0.45	0.3	1	<0.005
NEU-05	Santa Cruz Vein	146.30	147.50	1.20	0.6	5	0.01
	Santa Cruz Composite	**145.65**	**147.80**	**2.15**	**1.1**	**7**	**0.02**
	Including	147.50	147.80	0.30	0.2	11	0.02
NEU-06	Santa Cruz Vein	103.35	114.20	10.85	6.5	142	0.15
	Santa Cruz Composite	**107.80**	**112.10**	**4.30**	**2.6**	**334**	**0.33**
	Including	107.80	109.10	1.30	0.8	683	0.53
	Fw SCV	179.40	179.80	0.40	0.2	10	0.04
	Fw SCV Composite	**179.40**	**182.15**	**2.75**	**1.5**	**3**	**0.02**
	Including	179.40	179.80	0.40	0.2	10	0.04

Table 10-7 2016 Surface Drilling Results, La Negra

Drill Hole ID	Structure	Mineralized Interval				Assay Results	
		From (m)	To (m)	Core Length (m)	True Width (m)	Silver (g/t)	Gold (g/t)
NE-01	La Negra Vein (Hw)	166.30	168.95	2.65	2.6	134	0.3
	La Negra Composite	**166.30**	**168.35**	**2.05**	**2.0**	**163**	**0.3**
	Including	167.85	168.35	0.50	0.5	310	0.5
	La Negra Vein ()	171.90	174.80	2.90	2.9	181	0.3
	La Negra Composite	**172.80**	**174.80**	**2.00**	**2.0**	**259**	**0.4**
	Including	174.00	174.80	0.80	0.8	439	0.4
	Santa Cruz Vein	232.05	234.20	2.15	2.1	41	0.1
	Santa Cruz Composite	**232.05**	**233.35**	**1.30**	**1.3**	**59**	**0.1**
	Including	232.50	232.75	0.25	0.2	99	0.2
	Fw SCV	251.65	253.80	2.15	2.1	43	0.1
	Fw SCV Composite	**252.00**	**253.20**	**1.20**	**1.2**	**71**	**0.1**
	Including	252.65	252.90	0.25	0.2	283	0.2
NE-02	La Negra Vein	171.50	177.85	6.35	5.8	92	0.1
	La Negra Composite	**171.50**	**177.00**	**5.50**	**5.1**	**104**	**0.2**
	Including	176.70	177.00	0.30	0.3	188	0.2
	Santa Cruz Vein	237.80	238.50	0.70	0.6	8	0.0
	Santa Cruz Composite	**237.80**	**239.20**	**1.40**	**1.3**	**92**	**0.1**
	Including	238.50	239.20	0.70	0.6	176	0.2
	Santa Cruz Vein	240.65	240.95	0.30	0.3	258	0.6
	Santa Cruz Composite	**240.65**	**241.75**	**1.10**	**1.0**	**85**	**0.2**
	Including	240.65	240.95	0.30	0.3	258	0.6
	Fw SCV	245.60	250.35	4.75	4.4	48	0.1
	Fw SCV Composite	**242.90**	**246.40**	**3.50**	**3.3**	**127**	**0.1**
	Including	242.90	243.40	0.50	0.4	262	0.1
NE-03	La Negra Vein	167.00	174.75	7.75	7.7	42	0.1
	La Negra Composite	**171.95**	**173.50**	**1.55**	**1.5**	**111**	**0.1**
	Including	173.00	173.50	0.50	0.5	199	0.2
	Vein	209.00	211.40	2.40	1.9	134	0.4
	Vein Composite	**208.65**	**211.40**	**2.75**	**2.2**	**132**	**0.4**
	Including	209.35	209.85	0.50	0.5	258	0.8
	Santa Cruz Vein	236.20	237.75	1.55	1.5	29	0.1
	Santa Cruz Composite	**236.20**	**237.40**	**1.20**	**1.2**	**32**	**0.1**
	Including	237.10	237.40	0.30	0.3	43	0.1
	Fw SCV	252.50	257.45	4.95	4.8	12	0.0
	Fw SCV Composite	**252.50**	**253.60**	**1.10**	**1.1**	**23**	**0.1**
	Including	252.50	253.05	0.55	0.5	32	0.1
	Fw SCV	259.30	261.20	1.90	1.9	54	0.1
	Fw SCV Composite	**259.30**	**260.50**	**1.20**	**1.2**	**75**	**0.1**
	Including	259.70	260.50	0.80	0.8	111	0.2
NE-04	La Negra Vein	169.05	179.70	10.65	9.4	71	0.1
	La Negra Composite	**177.30**	**179.30**	**2.00**	**1.8**	**141**	**0.2**
	Including	178.50	179.30	0.80	0.7	227	0.2
	Santa Cruz Vein	242.70	245.25	2.55	2.5	58	0.1

Drill Hole ID	Structure	Mineralized Interval				Assay Results	
		From (m)	To (m)	Core Length (m)	True Width (m)	Silver (g/t)	Gold (g/t)
	Santa Cruz Composite	**243.95**	**245.25**	**1.30**	**1.3**	**92**	**0.2**
	Including	244.85	245.25	0.40	0.4	194	0.3
	Fw SCV	266.20	268.30	2.10	1.9	17	0.0
	Fw SCV Composite	**267.10**	**268.30**	**1.20**	**1.1**	**20**	**0.1**
	Including	267.60	267.80	0.20	0.2	54	0.1
NE-05	La Negra Vein	193.70	207.40	13.70	9.0	68	0.1
	La Negra Composite	**204.00**	**207.40**	**3.40**	**2.2**	**161**	**0.2**
	Including	206.35	206.65	0.30	0.2	556	0.4
	Santa Cruz Vein	261.15	267.30	6.15	4.9	28	0.1
	Santa Cruz Composite	**264.95**	**266.20**	**1.25**	**1.0**	**82**	**0.1**
	Including	264.95	265.20	0.25	0.2	320	0.2
	Fw SCV	292.60	296.20	3.60	2.8	8	0.0
	Fw SCV Composite	**292.60**	**294.20**	**1.60**	**1.2**	**9**	**0.0**
	Including	292.60	292.95	0.35	0.3	22	0.1
NE-06	La Negra Vein	179.00	182.85	3.85	3.4	91	0.1
	La Negra Composite	**181.60**	**182.85**	**1.25**	**1.1**	**204**	**0.1**
	Including	182.15	182.60	0.45	0.4	404	0.1
	Santa Cruz Vein	245.75	246.00	0.25	0.2	38	0.1
	Santa Cruz Composite	**245.75**	**247.05**	**1.30**	**1.3**	**23**	**0.0**
	Including	245.75	246.00	0.25	0.2	38	0.1
	Fw SCV	259.15	259.95	0.80	0.7	65	0.1
	Fw SCV Composite	**258.80**	**259.95**	**1.15**	**1.1**	**47**	**0.1**
	Including	259.15	259.60	0.45	0.4	100	0.2
	Fw SCV	269.20	270.85	1.65	1.5	221	0.3
	Fw SCV Composite	**269.20**	**270.30**	**1.10**	**1.0**	**323**	**0.4**
	Including	269.20	269.95	0.75	0.7	468	0.6
NE-07	La Negra Vein	170.65	177.90	7.25	6.6	54	0.1
	La Negra Composite	**170.65**	**172.00**	**1.35**	**1.2**	**138**	**0.3**
	Including	170.65	171.25	0.60	0.5	275	0.5
	Santa Cruz Vein	247.55	251.70	4.15	3.9	12	0.1
	Santa Cruz Composite	**247.55**	**248.85**	**1.30**	**1.2**	**18**	**0.1**
	Including	247.55	247.80	0.25	0.2	38	0.2
	Fw SCV	260.90	263.50	2.60	2.5	48	0.1
	Fw SCV Composite	**261.85**	**263.00**	**1.15**	**1.1**	**85**	**0.1**
	Including	262.60	263.00	0.40	0.4	208	0.1
NE-08	La Negra Vein	173.30	178.45	5.15	4.7	75	0.1
	La Negra Composite	**176.00**	**177.35**	**1.35**	**1.2**	**153**	**0.3**
	Including	176.00	176.40	0.40	0.4	221	0.4
	Santa Cruz Vein	256.50	260.15	3.65	3.3	22	0.0
	Santa Cruz Composite	**258.45**	**259.75**	**1.30**	**1.2**	**32**	**0.1**
	Including	258.45	258.75	0.30	0.3	55	0.1
	Fw SCV	**263.85**	**265.20**	**1.35**	**1.3**	**19**	**0.0**
	Including	264.90	265.20	0.30	0.3	15	0.1

11. SAMPLE PREPARATION, ANALYSES AND SECURITY

The sample data relied upon during completion of the mineral resource and reserve estimates presented in this report are from diamond drill core and underground chip channel samples.

11.1 Methods

11.1.1 Underground Sampling

Sampling intervals range from about 0.3m to 2.5m, with most in the 0.5m to 1.5m range. EDR's geologists use geological criteria to select sample intervals. Quartz vein material is separated from hanging wall and footwall horizons, and internal vein samples are broken out by texture type. Three principal types of vein textures are recognized: (a) massive, (b) banded and (c) brecciated. As much as possible, vein samples are selected to represent mineralization episodes.

Mine samples are collected principally for grade control purposes but are also used to build up a channel sample database for resource estimation purposes. Samples are collected from sills and in stopes. Sill samples are taken from the development face on a blast-by-blast basis. All sampling starts from the footwall and proceeds towards the hanging wall, with sample limits based on geological contacts. In stopes, and in sills if time permits, samples are taken from the back and footwall side-wall. In general, footwall waste samples are not taken systematically, although at least one footwall sample is normally taken in a sampling session, depending on wherever the footwall is veined or sulfide rich. If the vein is present in the footwall side-wall, it is sampled. Side-wall channel samples are measured vertically, whilst back samples are measured horizontally. Channel sampling is generally at 2.5 m intervals but can be increased to 5 m intervals in areas where the geology and grade distribution are well known. Samples are taken using a hammer and chisel; if the back is too high, a scaling bar is also used to chip the sample off.

Sample locations underground are measured from a known reference point, usually an identified control point installed by EDR surveyors. All grade control samples are bagged in heavy duty polyurethane bags with a commercially prepared sample ticket inserted in the bag, and the sample number marked on the bag exterior with marker pen. All sample information is noted in a field notebook and later transferred to daily information sheets in the office. Basic sample information is also noted on sample ticket slips which are stored in the mine geology department office.

11.1.2 Exploration Sampling

EDR's exploration staff are responsible for regional and mine exploration within the Guanaceví mining district, including the management, monitoring, surveying, and logging of surface and underground diamond drilling.

Regardless of which program the core comes from, the process is the same. Core from diamond drilling is placed in boxes which are sealed shut at the drill site. EDR personnel transport the core to the core facility. Sample handling at the core facility follows a standard general procedure, during which depth markers are checked and confirmed; the outside of the boxes are labeled with interval information; core is washed and photographed; and the recovery and modified rock quality designation (RQD) are logged for each drillhole.

All of EDR's surface and underground exploration drillholes are processed at the exploration core facility.

A cutting line is drawn on the core with a colored pencil, and sample tags are stapled in the boxes or denoted by writing the sample number with a felt tip pen.

11.2 Sample Preparation and Analysis

11.2.1 Underground Channel Samples

Mine production sampling including plant feed samples and doré, are sent to EDR's in-house Metalurgica Guanaceví (MG) assay laboratory. The MG laboratory is ISO certified and is set up in a single facility at the Guanaceví mine with separate enclosed sections for sample preparation, fire assay with gravimetric finish, and atomic absorption facilities. The facilities are located within the Guanaceví plant compound and operate 24 hours per day.

Grade control channel samples, which are used for stope based reserve estimates, are prepared and analyzed at the in-house laboratory. The sample preparation procedure for samples is as follows: Samples are received and checked in by laboratory staff; moist samples are dried for 2 to 4 hours; otherwise samples are crushed to -½ inch in a primary jaw crusher; samples are split using a 1 inch or ½ inch Jones splitter; 100 to 150 g of sample is retained for pulverizing and is put in a metal tray, along with a pulp envelope; remaining coarse rejects are returned to their original bag along with the sample ticket and stored; the 150 g crushed sample is then dried at a temperature of 100° C. The dried sample is pulverized in a ring pulverizer to -80 mesh; the pulverized sample is stored in a numbered envelope. The procedures for the mine channel sample preparation have been the same since 2008.

11.2.2 Exploration Drilling

All exploration drill core is transported under supervision of the EDR's geologist to the secure core storage facility at the Santa Cruz mine site. Sampling procedures typically begin with splitting by either a wheel-driven manual splitting device or an electric diamond-bladed core saw. The wheel-driven manual splitting device is generally used only when the core is badly broken-up and cannot be effectively cut by the diamond-bladed core saw. One half of the core is replaced in the original core box with depth markers, and the other half is bagged with sample tickets and recorded in the sample record. Once samples are bagged, they are transported to an outside laboratory.

All of EDR's exploration samples of rock and drill core were bagged and tagged at the Guanaceví warehouse and shipped to the ALS preparation facility in Chihuahua, Mexico. After preparation, the samples were shipped to the ALS laboratory in Vancouver, Canada, for analysis. An initial series of samples are sent to the MG Laboratory to screen the samples for ore grades and allow for a faster turnaround of assays and selection of drill sites. The ALS Chemex assays are used as the final grade for resource estimation.

Upon arrival at the ALS preparation facility, all of the samples are logged into the laboratory's tracking system (LOG-22). Then the entire sample is weighed, dried if necessary, and fine crushed to better than 70% passing 2 mm (-10 mesh). The sample is then split through a riffle splitter and a 250-g split is then taken and pulverized to 85% passing 75 microns (-200 mesh).

EDR uses a two-phase analysis process of the samples to reduce.

11.2.2.1 *First phase*

Gold is fire assayed followed by an atomic adsorption (AA) analysis. A 30-g nominal pulp sample weight is used. The detection range for the gold assay is 0.005 to 10 ppm.

The analytical procedure for Silver and multi-elements is through an aqua regia digestion followed by inductively Coupled Plasma-Atomic Emission Spectroscopy (ICP-AES). The detection range for the silver assay is 0.2 ppm to 100 ppm.

11.2.2.2 *Second Phase*

The assays for evaluation of higher-grade silver (+/- gold) mineralization were also optimized for accuracy and precision at higher concentrations. All EDR samples originally assaying >20 ppm silver are then re-assayed using a fire assay followed by a gravimetric finish. A 30-g nominal pulp sample weight is used. The detection ranges are 0.05 to 1,000 ppm for the gold assay and 5 to 3,500 ppm for the silver assay.

As an economical tool for first pass exploration geochemistry, the pulps are sometimes subjected to aqua regia digestion and inductively coupled plasma (ICP) multi-element analysis. The data reported from an aqua regia leach are considered to represent the leachable portion of the particular analyte. These analytical methods are optimized for low detection limits. Over-limits (>10,000 ppm) determined for lead and zinc by ICP are re-analyzed using atomic emission spectroscopy (AES). The analytical procedure is an aqua regia digestion followed by an ICP-AES finish. The detection ranges are 0.001% to 20% for lead and 0.001% to 30% for zinc.

ALS is an independent, ISO-certified, analytical laboratory company which services the mining industry around the world. ALS employs a rigorous quality control system in its laboratory methodology as well as a system of analytical blanks, standards and duplicates. Details of its accreditation, analytical procedures and QA/QC program can be found at http://www.alsglobal.com/.

11.3 Quality Control / Quality Assurance (QA/QC) program

In order to monitor the sampling, preparation and assaying process EDR has established a QA/QC program, in an effort to control or minimize possible errors, including the use of duplicate, blanks, standards and cross checks.

The QA/QC protocol for production samples involves repeat assays on pulp and reject assays, along with in-house prepared blanks and control samples. No commercially available standards were used in 2016. EDR creates standards in-house using selected pulp rejects which are prepared by a third-party laboratory. Roughly 3% to 5% of production grade control sample are submitted for re-assay.

11.3.1 Underground Channel Sample QA/QC

11.3.1.1 *Blank Performance*

In August 2009, the geology department began collecting and sending blanks along with production samples. This practice has continued through to the end of 2016. Currently, blanks are inserted at a frequency of approximately 1 sample per day. Blanks are collected as run-of-mine material from waste headings such as the development ramps. These samples are usually of sufficiently low silver grade to be useful in detecting laboratory errors such as sample swaps and contamination, however, there is always the possibility that the samples will contain anomalous values. Blanks are submitted blind, that is, they are inserted into the sample stream using the same sample sequence and identifiers as any other sample collected.

Results of the blank assays are shown in Figures 11-1 and 11-2. Approximately 2.5% of the 550 samples sent for assay in 2014 returned silver grades greater than 20 times the detection for silver and 4.5% were between 5 and 20 times the detection limit for silver. Sample values less than 25 g/t (5x detection) are considered acceptable.

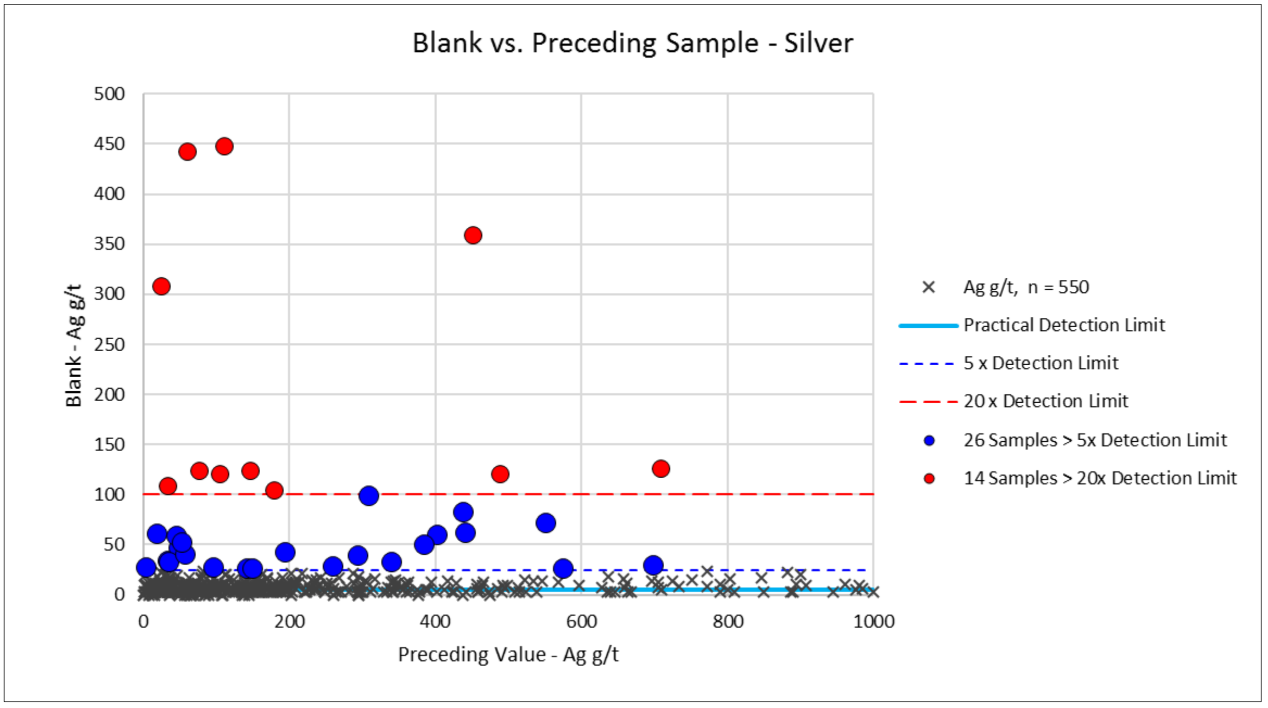

Figure 11-1 Production Samples Blank Analysis for Silver

Gold values were slightly better with only 1.5% of the 358 samples sent for assay returning gold grades greater than 20 times the detection, and 3.3% between 5 and 20 times the detection limit for gold. Sample values less than 0.15 g/t (5x detection) are considered acceptable.

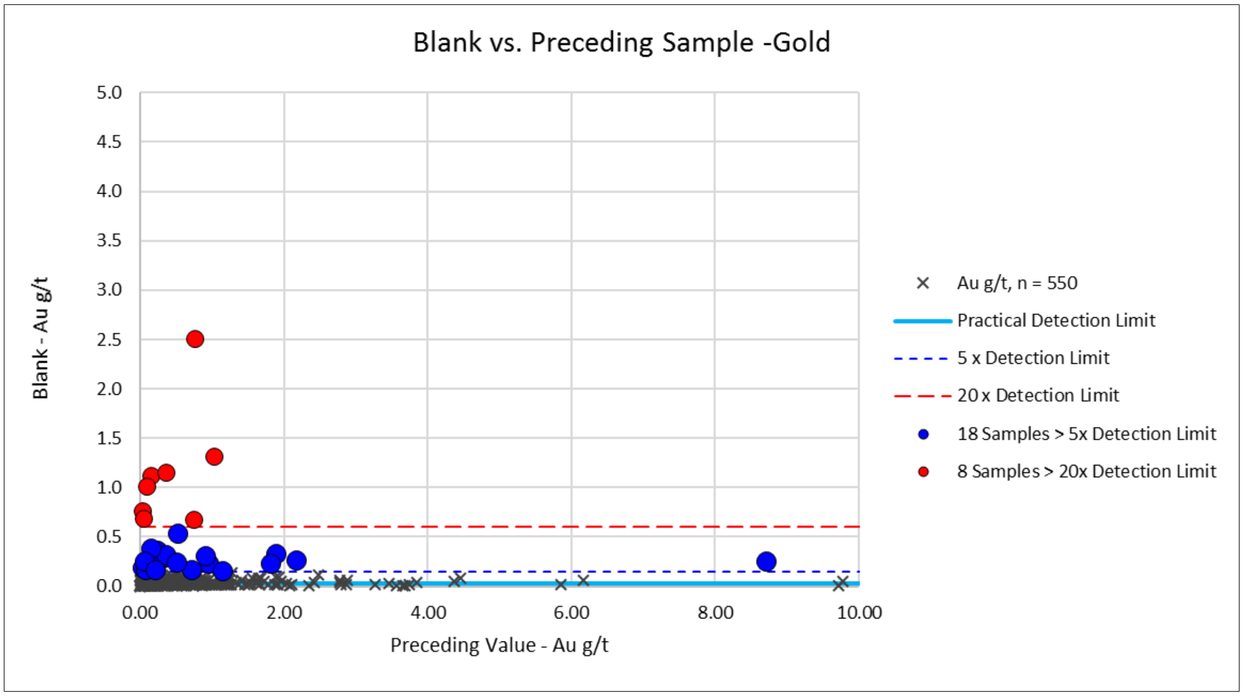

Figure 11-2 Production Samples Blank Analysis for Gold

11.3.1.2 Precision Demonstrated by Duplicate Results

Maximum-minimum scatter plots for duplicate samples are shown in Figure 11-3 through Figure 11-8. In general, results of the duplicate re-assays indicate a good correlation for silver and moderate to poor correlation for gold. Acceptable failure rate for pulp duplicates is 10%. Silver pulps show a 11% failure rate while gold shows a 23% failure rate.

Acceptable failure rate for reject duplicates is 20%. Silver rejects show a 28% failure rate while gold shows a 24% failure rate.

Finally, failure rate for mine duplicates is 30%. Silver duplicates show a 46% failure rate while gold shows a 28% failure rate.

Silver pairs with a mean value of 10x the detection limit were excluded. Gold pairs with a mean value of 15x the detection limit were excluded. The higher failure rate may be caused by low precision near the origin. Eliminating pairs that are close to detection will reduce the failure rate. Overall the results are acceptable but could be improved

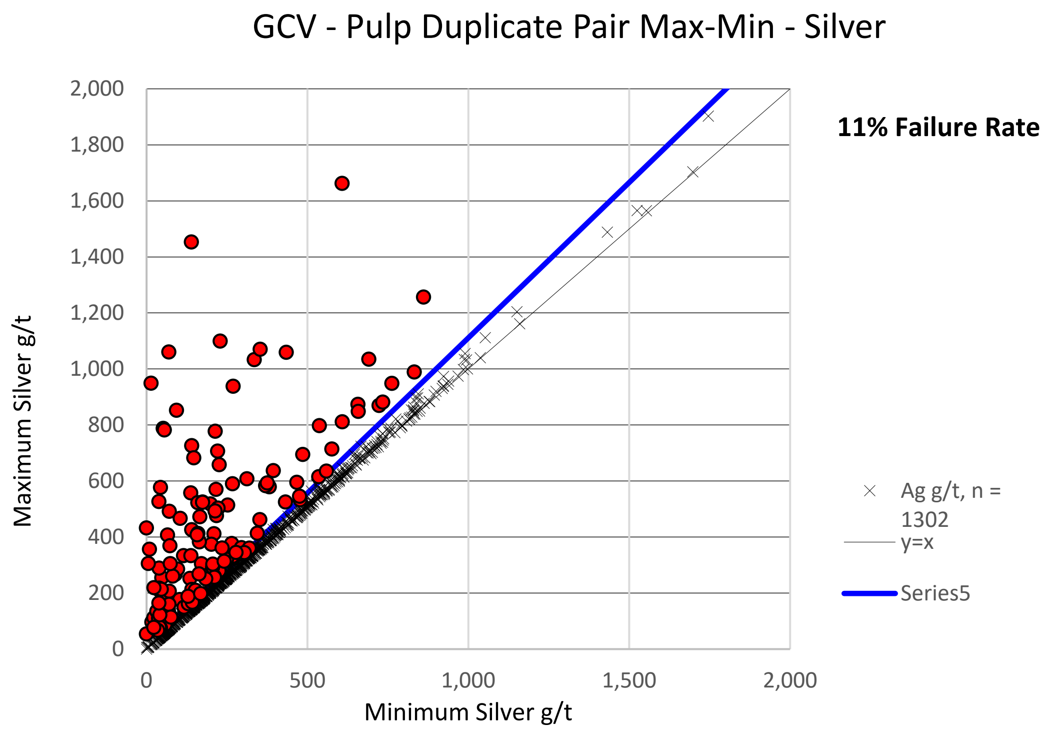

Figure 11-3 Silver Pulp Duplicates

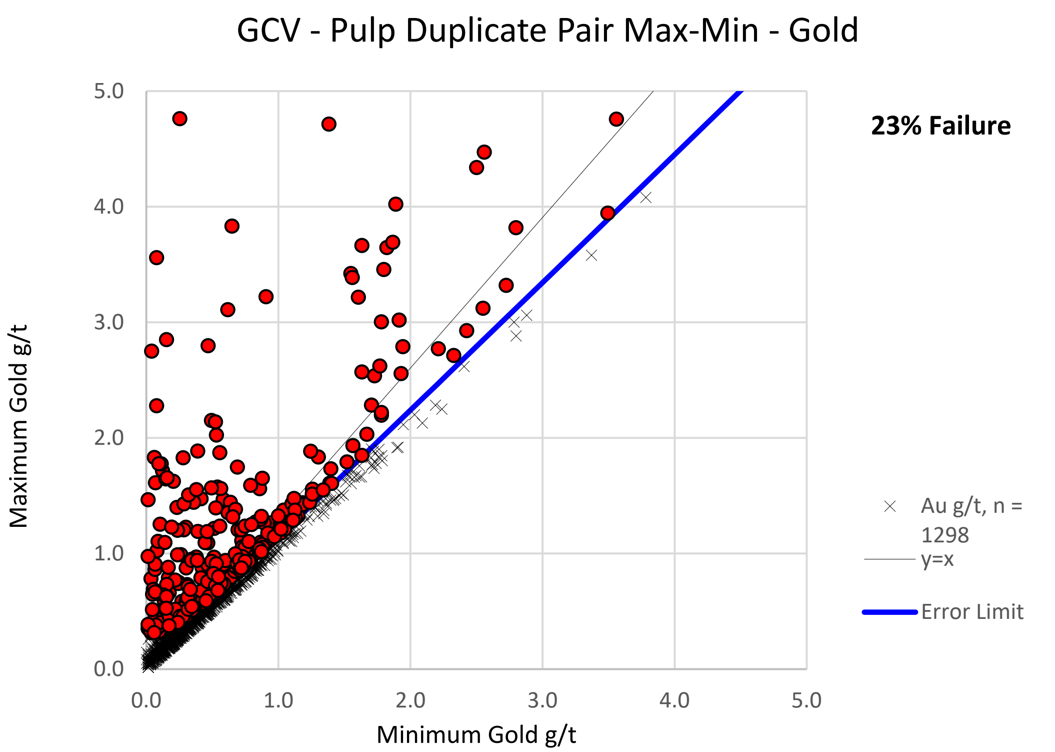

Figure 11-4 Gold Pulp Duplicates

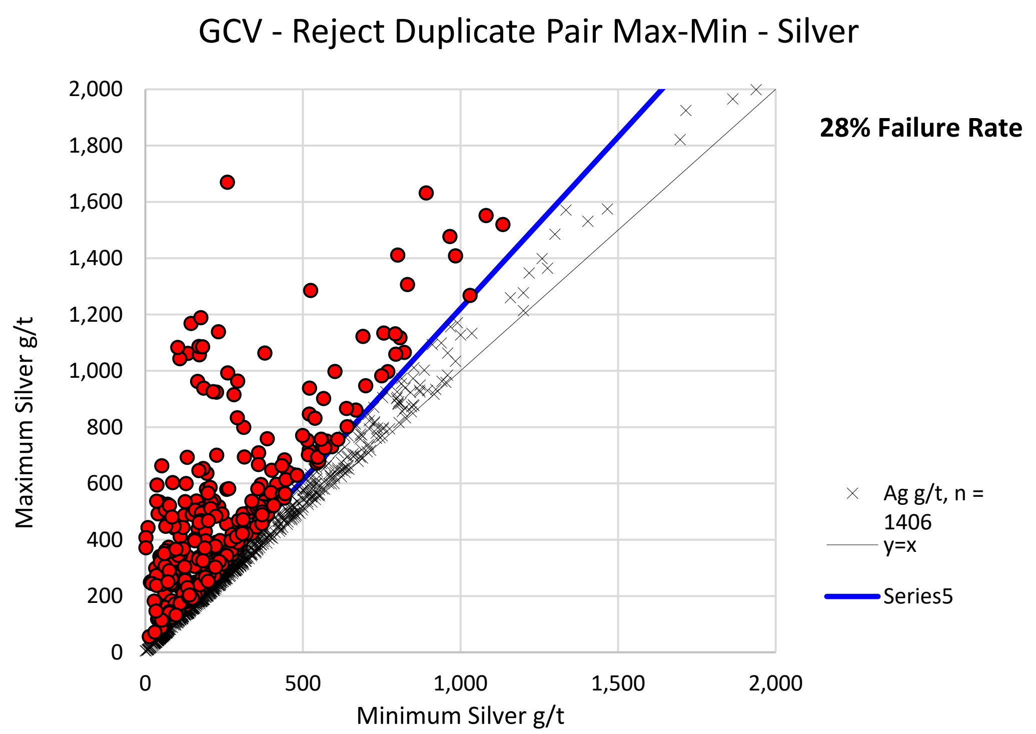

Figure 11-5 Silver Reject Duplicates

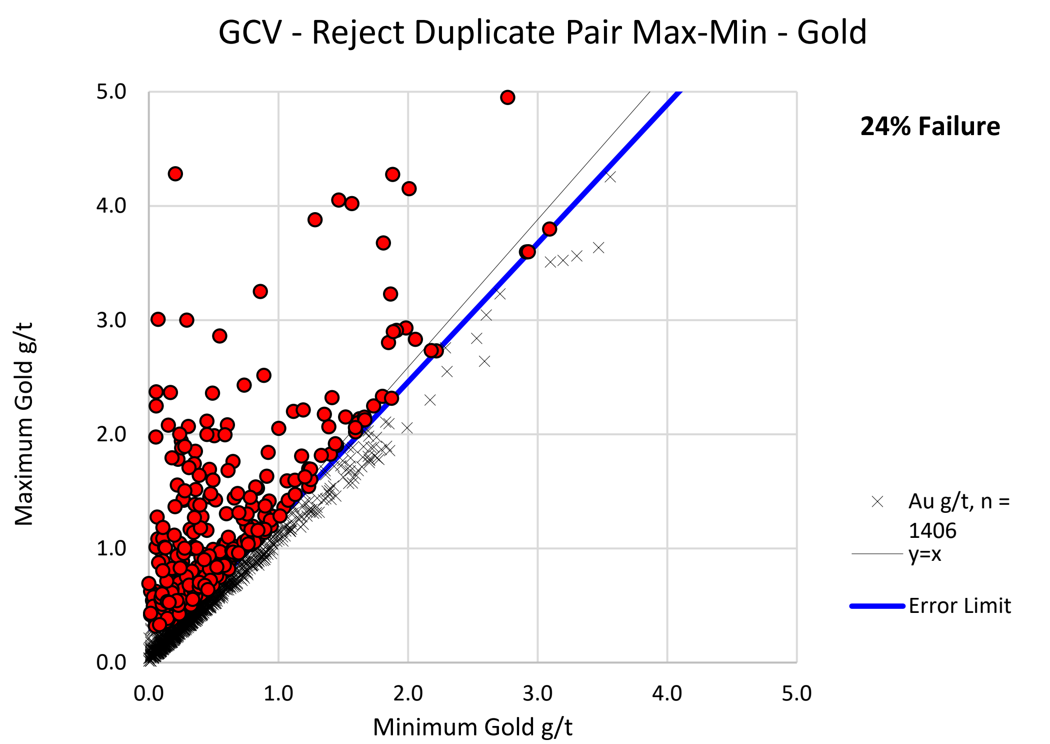

Figure 11-6 Gold Reject Duplicates

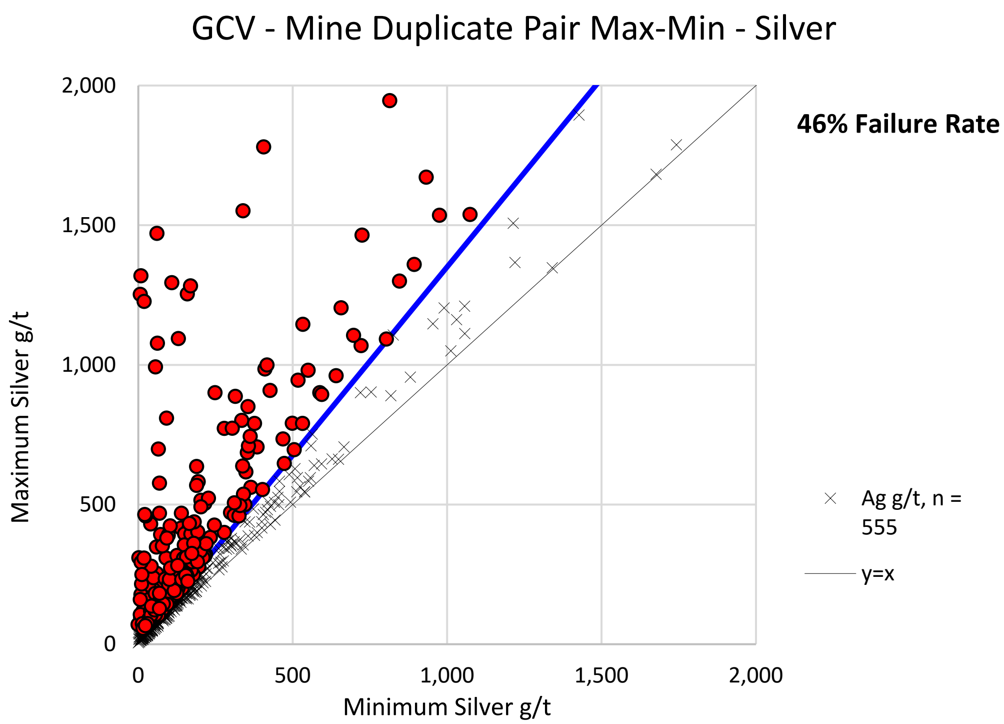

Figure 11-7 Silver Field Duplicates

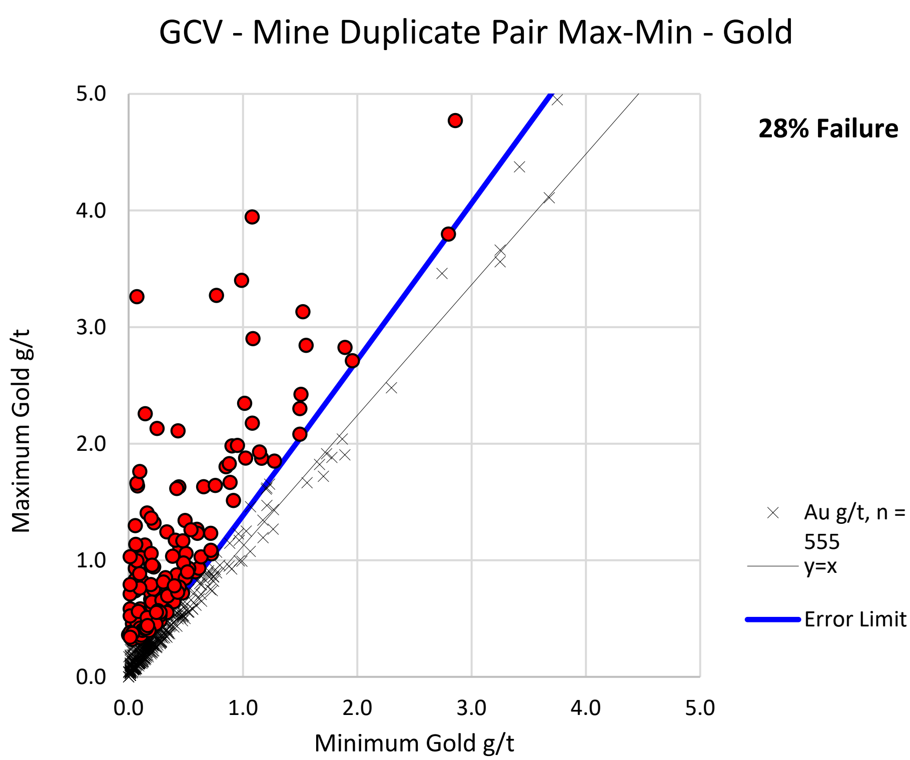

Figure 11-8 Gold Field Duplicates

11.3.1.3 Mine Standard Reference Material

No mine standards are used.

11.3.1.4 Accuracy Demonstrated by Check Assays

Check assaying is performed to check the precision and accuracy of the primary laboratory, and to identify errors due to sample handling. Check assaying consists of sending pulps and rejects to a secondary lab for analysis and comparison against the primary lab.

No check assays were sent to secondary labs for analysis in 2014.

11.3.2 Surface and Underground Exploration

During 2016, drilling was supported by a QA/QC program to monitor the integrity of all assay results. Each batch of 20 samples included one blank, one duplicate and one standard. Check assaying is also conducted at a frequency of approximately 5%. Discrepancies and inconsistencies in the blank and duplicate data are resolved by re-assaying either the pulp or reject or both.

A total of 3,826 samples, including control samples, were submitted during EDR's surface & underground drilling programs at Guanaceví in 2016, as shown in Table 11-1.

A total of 194 pulps were also submitted for check assaying.

EDR's sampling process, including handling of samples, preparation and analysis, is shown in the quality control flow sheet, Figure 11-9.

Table 11-1 Summary of Control Samples Used for the 2016 Surface & Underground Exploration Program

Samples	No. of Samples	Percentage (%)
Standards	172	4.5%
Duplicates	177	4.6%
Blanks	192	5.0%
Normal	3285	85.9%
Total	**3,826**	**100%**
Check Assays	194	5.1%

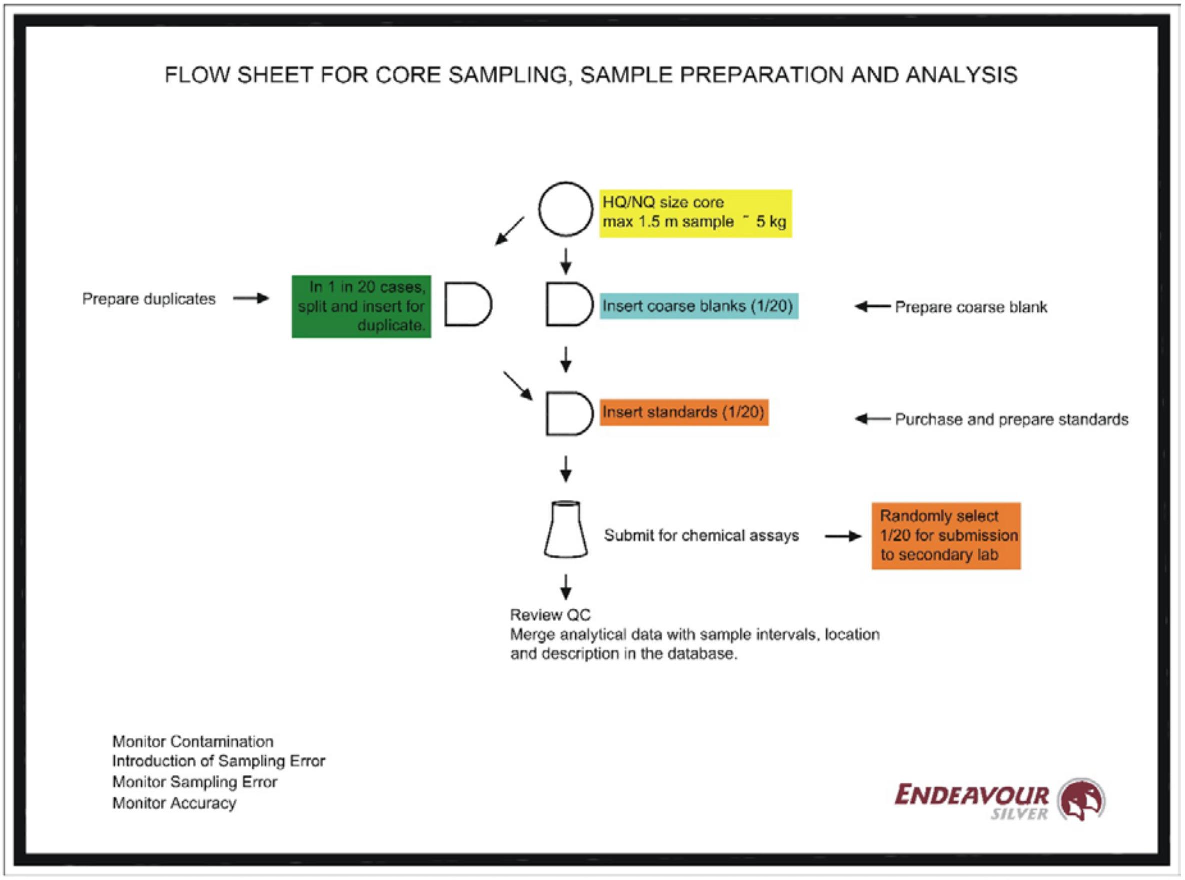

Figure 11-9 Flow Sheet for Core Sampling, Sample Prep and Analysis

11.3.2.1 *Surface and Underground Exploration Blank Performance*

Blank samples were inserted to monitor possible contamination during the preparation process and analysis of the samples in the laboratory. The blank material used was commercial bentonite purchased for EDR's drilling programs on the Guanaceví mines project. The bentonite used was Enviroplug Coarse (1/4"). Blank samples are inserted randomly into the sample batch and given unique sample numbers in sequence with the other samples before being shipped to the laboratory.

Blank samples were inserted at an average rate of approximately 1 for each 20 original samples. Only a limited number of blank samples returned assay values above the detection limits for gold and silver. Blank samples were also assayed for copper, lead and zinc but little or no contamination was observed for these metals.

Based on the results obtained from the blank samples, for gold no samples were outside the recommended value; for silver only three samples returned outside the upper limit (DH49760, DH50032 & DH50983), out of them only the last one is associated to a mineralized zone, but the value (4.8 g/t Ag) is not significant comparing the contiguous samples in the hole, which is why it is considered that the assay results for the drilling programs are for the most part free of any significant contamination Guanaceví mine (Figures 11-10 and 11-11).

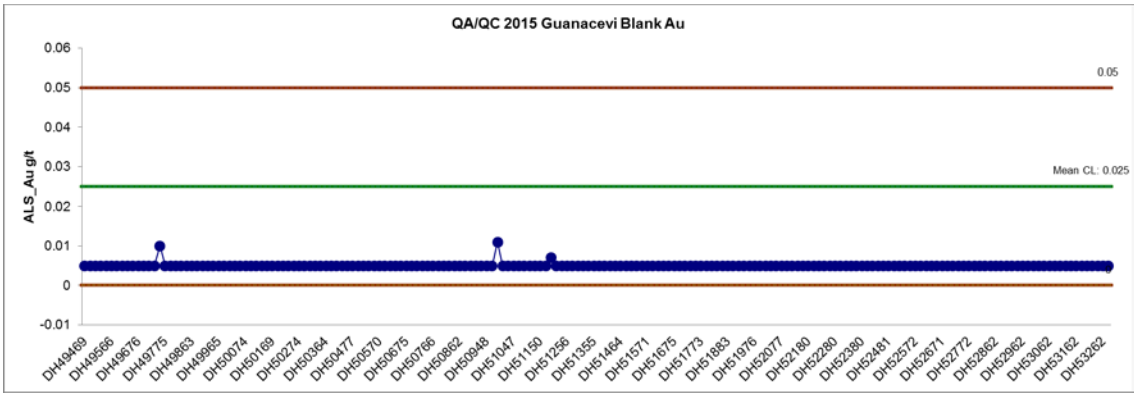

Figure 11-10 Control Chart for Gold Assay from the Blank Samples Inserted into the Sample Stream

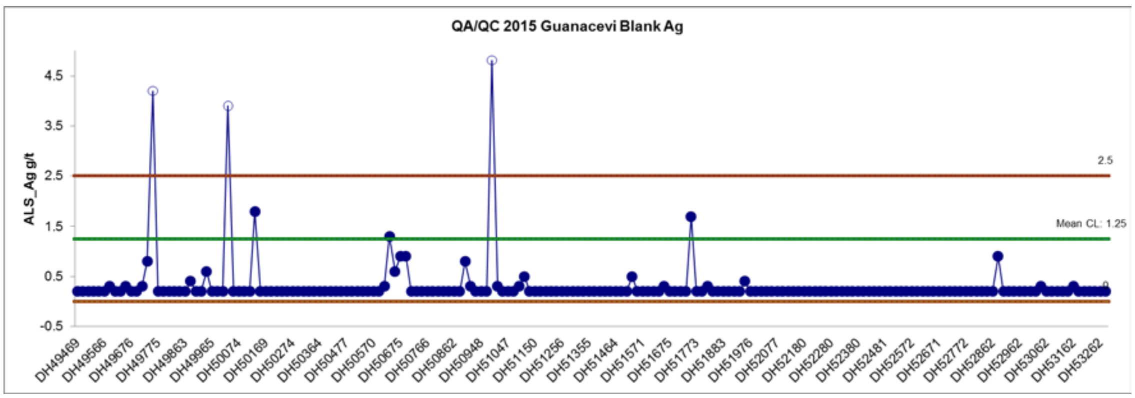

Figure 11-11 Control Chart for Silver Assay from the Blank Samples Inserted into the Sample Stream

11.3.2.2 Precision Demonstrated by Duplicate Results

Duplicate samples were used to monitor (a) potential mixing up of samples and (b) variability of the data as a result of laboratory error or the lack of homogeneity of the samples.

Duplicate core samples were prepared by EDR personnel at the core storage facility at the Guanaceví mines project. Preparation first involved randomly selecting a sample interval for duplicate sampling purposes. The duplicates were then collected at the time of initial sampling. This required first splitting the core in half and then crushing and dividing the half-split into two portions which were sent to the laboratory separately. The duplicate samples were ticketed with the consecutive number following the original sample. One duplicate sample was collected for each batch of 20 samples.

Discrepancies and inconsistencies in the duplicate sample data are resolved by re-assaying either the pulp or reject or both.

For the duplicate samples, graphical analysis shows moderate correlation coefficient for both gold (0.60) and silver (0.73). Scatter diagrams for core duplicate samples are shown in Figures 11-12 and 11-13.

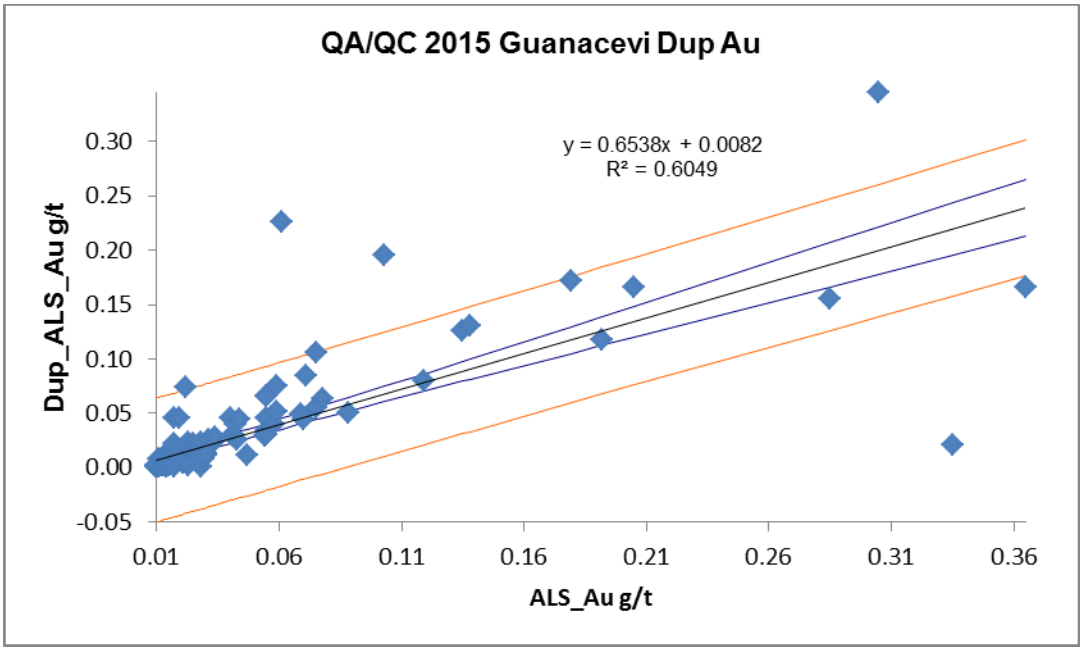

Figure 11-12 Scatter Plot for Duplicate Samples of Gold

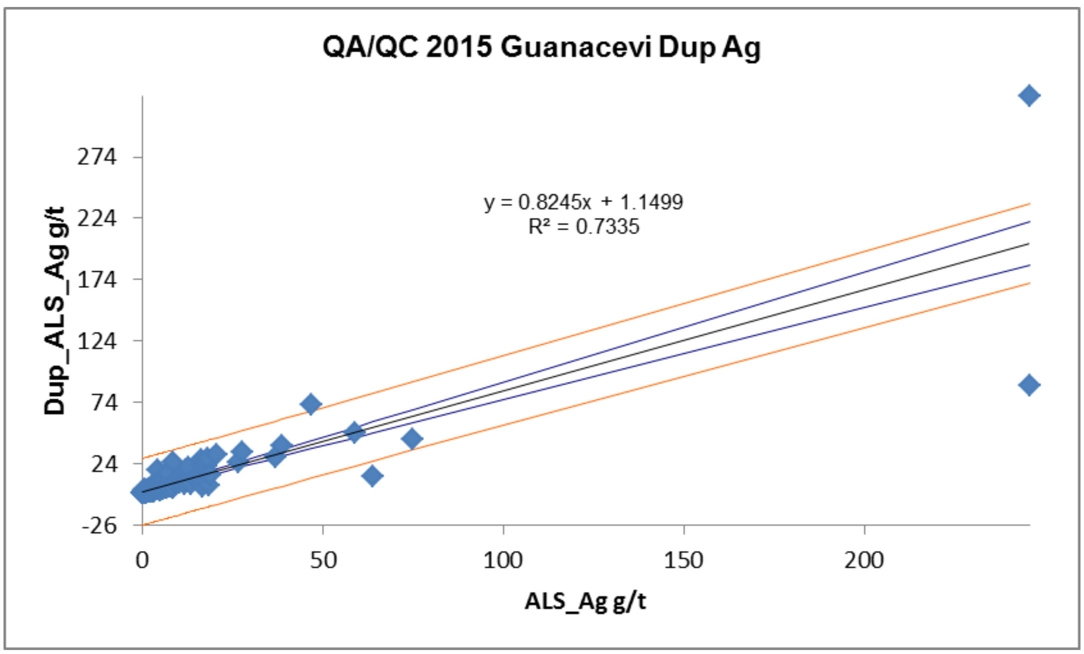

Figure 11-13 Scatter Plot for Duplicate Samples of Silver

11.3.2.3 Surface Exploration Standard Reference Material

EDR uses commercial reference standards to monitor the accuracy of the laboratories. Standard reference material (SRM) has been purchased from CDN Resource Laboratories Ltd. Each reference standard was prepared by the vendor at its own laboratories and shipped directly to EDR, along with a certificate of analysis for each standard purchased.

In 15, standard reference control samples were submitted at an average frequency of 1 for each batch of 20 samples. Reference standards were ticketed with pre-assigned numbers in order to avoid inadvertently using numbers that were being used during logging.

Three different standards were submitted and analyzed for gold and silver. The reference standards used during EDR's drilling programs are described in Table 11-2.

For the process to establish the control limits of the SRM, in 2013 EDR modify the protocols, until 2012 the used value was the recommended for the SRM (Certificate), and the control limits were defined as a function of the standard deviation resulting from the round robin (the assays of a SRM at various laboratories). This has to do with precision, not with accuracy, which is the control that is wanted with the use of this material ("Simon, M.A. 2011"), therefore the mean of the ALS assays results is used once a standard has been analyzed 25 or more times by ALS. The SRM results are used for standards that have not been analyzed 25 times by ALS.

For graphical analysis, results for the standards were scrutinized relative to the mean or control limit (CL), and a lower control limit (LL) and an upper control limit (UL), as shown in Table 11-3.

Table 11-2 Reference Standards Used for Endeavour Silver's Drilling Programs

Reference Standard	Reference Number	Reference Source	Reference Standard Assays (Certificate)		Reference Standard Assays (Calculated)	
			Gold (g/t)	Silver (g/t)	Gold (g/t)	Silver (g/t)
EDR-31	CDN-FCM-6	Cdn Resource Lab	2.15	157	2.18	151
EDR-39	CDN-ME-1305	Cdn Resource Lab	1.92	231	1.93	226
EDR-43	CDN-ME-1307	Cdn Resource Lab	1.02	54	NA	NA

NA - Not applicable

Table 11-3 Basis for Interpreting Standard Sample Assays

Limit	Value
UL	Plus 2 standard deviations from the mean
CL	Recommended or calculated value (mean) of standard reference material)
LL	Minus 2 standard deviations from the mean

EDR's general rules for a batch failure are as follows:

- A reported value for a standard greater than 3 standard deviations from the mean is a failure.
- Two consecutive values of a standard greater than 2 standard deviations from the mean is a failure.
- A blank value over the acceptable limit is a failure.
- Results are reported to EDR's Qualified Person every month.

Results of each standard are reviewed separately. Table 11-4 summarizes the analysis of the behavior of these materials and the taken actions.

With the exception of the cases mentioned in Table 11-4, most values for gold and silver were found to be within the control limits, and the results are considered satisfactory. The mean of the ALS assays agrees well with the mean value of the standard. Examples of control charts generated by EDR are shown in Figures 11-14 through 11-19 for the standard reference materials.

Table 11-4 Summary of analysis of Reference Standards.

Reference Standard	Element	Observations	Comments
EDR-31	Au	2 Flyers: DH50626 (2.52 ppm Au) & DH52049 (1.79 ppm Au); values between 2 and 3 standard deviations; not consecutive.	Within the protocols
	Ag	No flyers	Within the protocols
EDR-39	Au	No flyers	Within the protocols
	Ag	2 Flyers: DH49711 (206 ppm Ag) & DH52467 (206 ppm Ag) with values >3 standard deviations; only DH49711 in mineralized zone.	Batch in process of reassays
		1 Flyer: DH52996 (213 ppm Ag) with value between 2 and 3 standard deviations; not consecutive.	Within the protocols
EDR-43	Au	1 Flyer: DH52806 (1.15 ppm Au); value between 2 and 3 standard deviations; not consecutive	Within the protocols
		2 Flyers; DH53136 (0.92 pp Au) & DH53176 (0.93 ppm Au); values between 2 and 3 standard deviations, not mineralized zone; other reference material in between.	Within the protocols
	Ag	2 Flyers: DH52796 (58.1 ppm Ag) & DH53096 (58.2 ppm Ag); values between 2 and 3 standard deviations, not consecutive.	Within the protocols

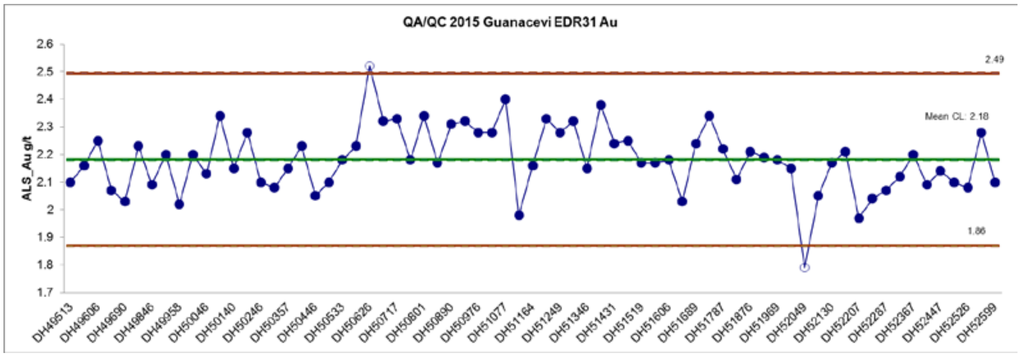

Figure 11-14 Control Chart for Gold Assays from the Standard Reference Sample EDR-31

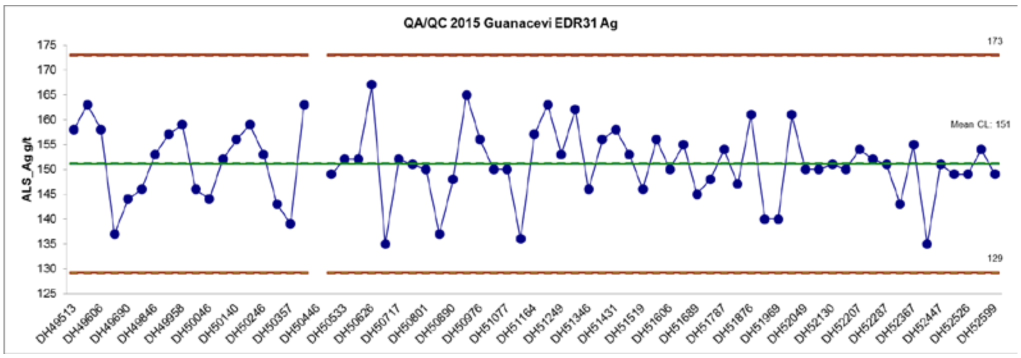

Figure 11-15 Control Chart for Silver Assays from the Standard Reference Sample EDR-31

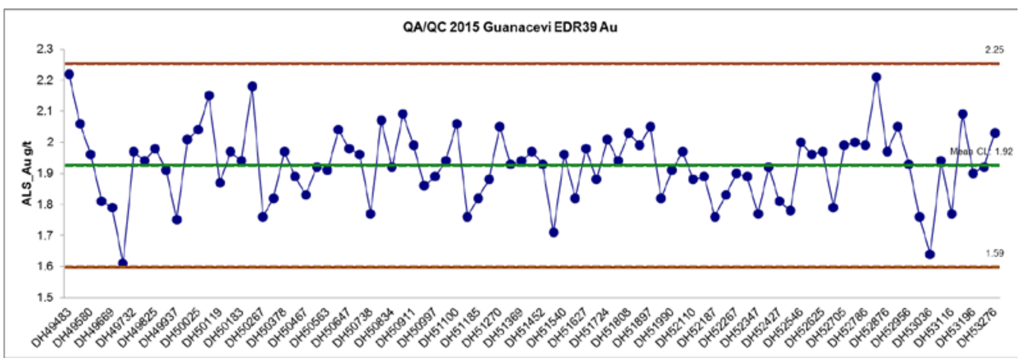

Figure 11-16 Control Chart for Gold Assays from the Standard Reference Sample EDR-39

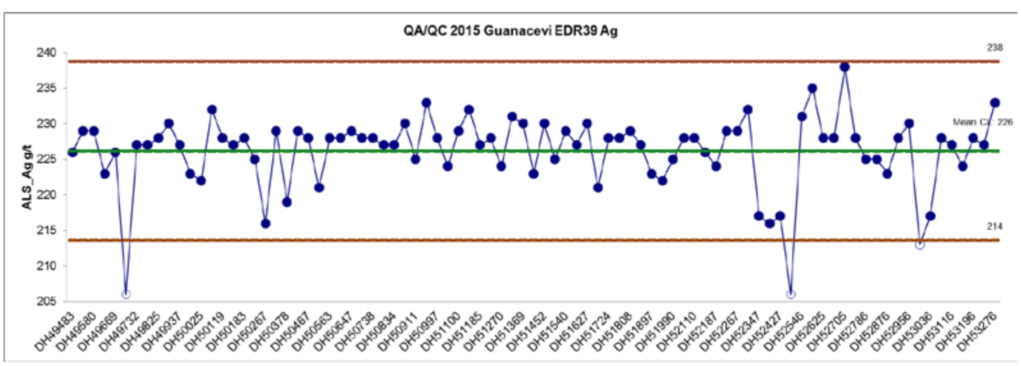

Figure 11-17 Control Chart for Silver Assays from the Standard Reference Sample EDR-39

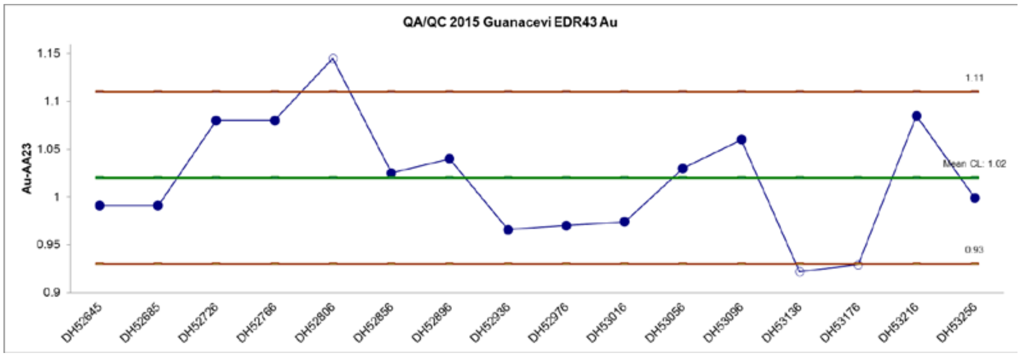

Figure 11-18 Control Chart for Gold Assays from the Standard Reference Sample EDR-43

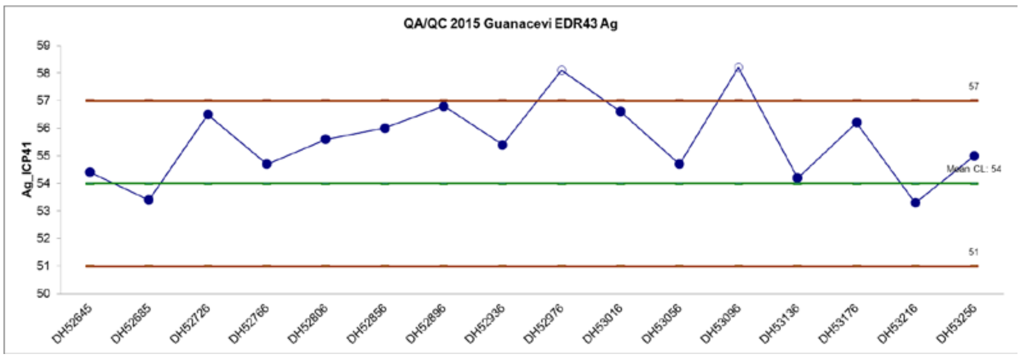

Figure 11-19 Control Chart for Silver Assays from the Standard Reference Sample EDR-43

11.3.2.4 Surface and Underground Accuracy Demonstrated by Check Assays

To evaluate the accuracy of the primary laboratory, EDR periodically conducts check analyses. Random pulps are selected from original core samples and send to a second laboratory to verify the original assay and monitor any possible deviation due to sample handling and laboratory procedures. EDR uses the BSI-Inspectorate laboratory in Durango, Mexico, for check analyses.

Correlation coefficients are high (>0.98) for both silver and gold, showing a high level of agreement between the original ALS assay and the BSI-Inspectorate check assay. Figure 11-20 and Figure 11-21 show the correlation between the values of Gold and Silver.

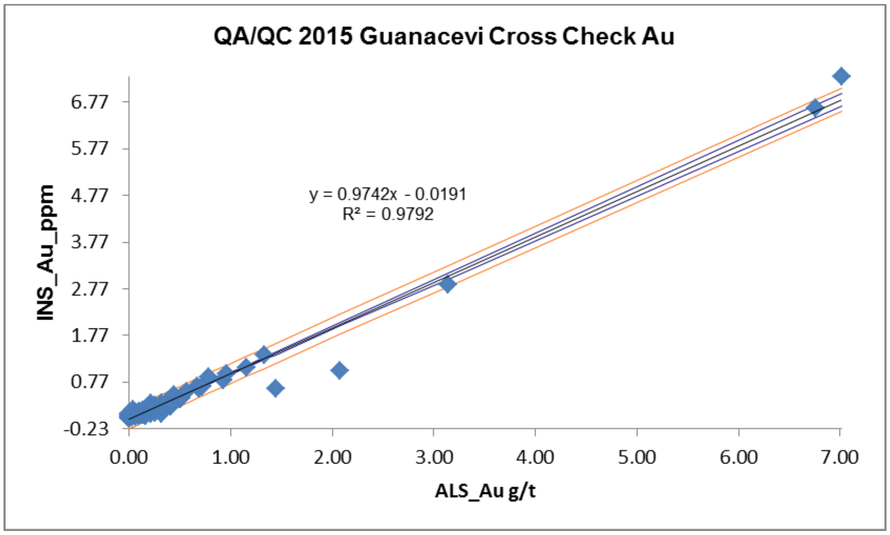

Figure 11-20 Scatter plot of Check Assays for Gold

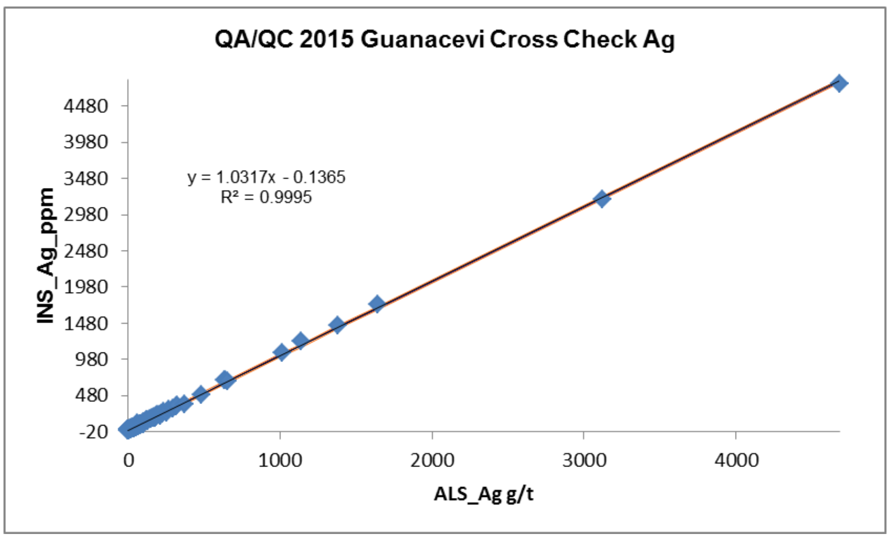

Figure 11-21 Scatter plot of Check Assays for Silver

11.4 Adequacy of Data

HRC concludes that the exploration and production sample preparation, security and analytical procedures are correct and adequate for the purpose of this technical report. The sample methods and density are appropriate and the samples are of sufficient quality to comprise a representative, unbiased database.

12. DATA VERIFICATION

The mineral resource estimate presented in report Section 14 is based on the following information provided to HRC by EDR with an effective date of December 31, 2016:

- Discussions with EDR personnel;
- Personal investigation of the Guanaceví Project office;
- A surface exploration and underground drilling database (base_datos_2014) received as csv files;
- Production channel sample database (canales) received as csv files on October 23, 2016
- Modeled solids for veins Santa Cruz, A12 Principal, A12 Trinche, A13 Trinche, R1, R2, Rint, and Bajo by EDR;
- The Technical Report "NI43-101 Technical Report Resource and Reserve Estimates for the Guanaceví Mines Project Durango State Mexico" dated February 25, 2015 and authored by Michael J. Munroe., RM-SME;
- Polygonal 2-dimensional long sections for veins Epsilon Soto, La Blanca, Mi Niña, and San Joaquin with resource and reserve calculations.

12.1 Database Audit

The surface drilling, underground drilling, and underground channel samples were combined into a single database for mineral resource estimation. HRC conducted a thorough audit of the current EDR exploration and operation sample databases. The following tasks were completed as part of the audit:

- Performed a mechanical audit of the database;
- Validated the geologic information compared to the paper logs;
- Validated the assay values contained in the exploration database with assay certificates from the EDR Guanaceví mine laboratory; and
- Validated the assay values contained in the 2D polygonal long sections by comparing with select, relevant historical assays and the original drawings.

HRC limited the audit to the rock-type, assay, drillhole collar, and survey data contained in the exploration database.

12.2 Mechanical Audit

A mechanical audit of the combined database was completed using Leapfrog Geo® software. The database was checked for overlaps, gaps, duplicate channel samples total drillhole length inconsistencies, non-numeric assay values, and negative numbers. The following list of drillhole s were missing information:

- No Assay Data
    - Surface Drilling
        - PS-589-01
        - PS-656-02
        - SC1-1
        - TDH-19

A total of 335 surface drillholes, 188 underground drillholes, and 3,778 underground channel samples were imported into Leapfrog for validation. Data with missing information were not used in the estimation of mineral resources.

12.2.1 Overlaps

Overlaps identified in the audit were corrected with EDR personnel.

Gaps, Non-numeric Assay Values, and Negative Numbers

The software reported missing intervals for silver and gold. Below detection limit samples are reported as a non-positive value of 0. All of the non-positive numbers (<0) were assumed to be non-sampled intervals and were omitted from the dataset. No non-numeric assays were encountered in the audit. Table 12-1 below summarizes the number of intervals imported, the number of missing intervals, the number of non-positive values and the number of valid assays for each element.

Table 12-1 Database Import Summary

Element	Missing	Non-Positive Values	Assay Values
Ag (g/t)	2,272	461	46,623
Au (g/t)	2,272	1,195	46,594

12.2.2 Table Depth Consistency

The survey, assay, and geology tables maximum sample depth was checked as compared to the maximum depth reported in the collar table for each drillhole. No intervals exceeded the reported drillhole depths.

12.3 Certificates

HRC received original assay certificates in excel format for the samples collected in 2015 in the current database. A random manual check of 10% of the database against the original certificates was conducted. The error rate within the database is considered to be less than 1% based on the number of samples spot checked.

12.4 Adequacy of Data

HRC has reviewed EDR's check assay programs and believes the programs provide adequate confidence in the data. Samples that are associated with failures and the samples associated with erroneous blank samples are infrequent and are reviewed prior to inclusion in the production database.

All drill cores and cuttings from EDR's drilling have been photographed. Drill logs have been digitally entered into exploration database organized and maintained in Vulcan. The split core and cutting trays have been securely stored and are available for further checks.

13. MINERAL PROCESSING AND METALLURGICAL TESTING

13.1 Metallurgical Testing

13.1.1 Mineralogy

Several ore and cyanide leach residues were analyzed at the University of San Luis Potosi in 2012:

- Mill feed combined ore
- Porvenir North ore and cyanide leach residue
- Porvenir 2 ore and cyanide leach residue

The most abundant silver mineral was Argentite (Ag_2S). The less frequent minerals were Stromeyerite, not specified Sulfosalts, native silver and gold in various sizes and occluded in quartz or Mn-oxides. The size of silver and gold mineral grains varies from less than 1 micrometer (native gold and silver) up to 120 micrometers (Argentite) (Table 13-1). Metal sulfides were found (Pyrite, Sphalerite, Galena, and Arsenopyrite) (Table 13-2).

Table 13-1 Silver and Gold Distribution in Ore and Leach Residue Samples

Mill feed ore	Porvenir 2 ore	Porvenir 2 Leach Residue	Porvenir 4 ore	Porvenir 4 Leach Residue
Ag 295 gpt	**Au 1.6 gpt**	**Au 0.30 gpt**	**Au 2.1 gpt**	**Au 0.6 gpt**
Au 2.1 gpt	**Ag 261 gpt**	**Ag 132 gpt**	**Ag 234 gpt**	**Ag 53 gpt**
100% of silver as Argentite Ag_2S from which 80% is liberated, size from 9 to 20 µm, and 20% is locked in quartz.	96% of silver as Argentite Ag_2S from which 85% is liberated, size from 35 to 120 µm, and 15% is associated with Stromeyerite, Galena and Pyrite as particles with size <3µm; 4% of silver as Stromeyerite $(Ag,Cu)_2S$ and associated with Argentite.	100% of silver as native silver in particles smaller than <1µm.	Argentite (Ag_2S) grains smaller than 10 µm and locked in Mn,Ca-oxides. Stromeyerite, $(Ag,Cu)_2S$, particles smaller than 10 µm and locked in Mn,Ca-oxides; Ag-sulfosalts grains smaller than 10 µm and locked in Mn,Ca-oxides.	Argentite Ag_2S particles smaller than 5 µm; As native gold in particles smaller than 1µm.

Table 13-2 Summary of Mineralogical Analysis of Ore and Leach Residue Samples

Mineral	Mill feed ore	Porvenir 2 Ore	Porvenir 2 Leach residue	Porvenir 4 Ore	Porvenir 4 Leach residue
Ag-minerals	0.035	0.03	0.01	0.037	
Sphalerite	0.27	0.08	0.08		
Arsenopyrite		0.019			
Galena	0.1	0.028			
Pb-minerals			0.03		
Pyrite	0.88	2.88	1.34	1.2	1.18
Fe-oxides	1.1		1		
Mn-oxides	1.2		1	2.5	
Mn-minerals		1.2			
Quartz	57.5	90	90	80.5	83
K-Feldspar	37.2	5			
Ca,Fe-silicates				14	14
Kaolinite			6.04		
Barite			0.5		
Others	1.66	0.76		1.8	1.82

13.1.2 Flotation

Flotation of Santa Cruz ore recovered 75% of silver and 82% of gold obtaining a saleable concentrate with silver grade 11 kg/t. However, the flotation recovery is lower than by cyanide leaching and in addition the concentrate sale costs are considerably higher than Dore selling costs. Both lower recovery and higher sale costs make flotation less economic option than cyanide leach.

13.1.3 Hot cyanide leach

Hot cyanide leach tests showed faster leaching rate. An economic evaluation suggests that it is not economic at this time.

13.1.4 Leach tests of exploration samples (Milache)

Bottle roll tests conducted on the Milache vein resulted in relatively high metal recoveries as presented in Table 13-3.

Table 13-3 Results of Bottle Roll Tests on Milache Ore Samples

Sample	Head grade		Recovery	
	Au g/t	Ag g/t	% Au	% Ag
MCHT-01	1.53	434	98.0%	92.4%
MCHT-02	0.89	375	96.5%	90.8%
MCHT-03	0.9	292	98.9%	92.1%
MCHT-04	2.52	1105	98.7%	96.3%

13.2 Process Plant

The current process plant is discussed in Section 17.2.

13.3 Comments on Section 13

The Guanaceví mine has a long history of successful operation and processing and has plans to continue. The QP is of the opinion that the level of metallurgical testing is appropriate for the duration of the life of the mine plan and is unaware of any processing factors or deleterious elements that could impact the potential economic extraction of metal from the Guanaceví mines ore.

14. MINERAL RESOURCE ESTIMATES

Zachary J. Black, SME-RM, a Resource Geologist with HRC is responsible for the estimation of the mineral resource herein. Mr. Black is a qualified person as defined by NI 43-101 and is independent of EDR. HRC estimated the mineral resource for the Guanaceví mine Project from drillhole data, constrained by geologic vein boundaries with an Inverse Distance Weighted ("ID") algorithm. Datamine Studio RM® V1.0.73.0 ("Datamine") software was used for the resource estimate in combination with Leapfrog Geo® V.3.0.0 ("Leapfrog") for the geologic model. The metals of interest at Guanaceví are gold and silver.

The Mineral Resources contained within this Technical Report have been classified under the categories of Measured, Indicated and Inferred in accordance with standards as defined by the Canadian Institute of Mining, Metallurgy and Petroleum ("CIM") "CIM Definition Standards - For Mineral Resources and Mineral Reserves", prepared by the CIM Standing Committee on Reserve Definitions and adopted by CIM Council on May 10, 2014. Classification of the resources reflects the relative confidence of the grade estimates.

14.1 Density

HRC applied a density of 2.55 t/ m^3 to convert volume into tonnage. The density is taken directly from the "NI43-101 Technical Report Resource and Reserve Estimates for the Guanaceví Mines Project Durango State Mexico" dated February 25, 2015 and authored by Michael J. Munroe. EDR has completed 179 bulk sample density measurements (Table 14-1). A specific gravity value of 2.55 based on past production data was used for converting volumes to tonnes for the December 2016 resources. This value is within the acceptable range based on the results to date.

Table 14-1 Statistical Summary of Density Data

Statistics	Porvenir North	Porvenir Dos	Porvenir 4	Santa Cruz
Number of Data	134	35	4	6
Mean	2.53	2.5	2.59	2.51
Median	2.52	2.49	2.59	2.52
Standard Deviation	0.088	0.124	0.023	0.07
Sample Variance	0.008	0.015	0.001	0.005
C.V.	0.035	0.049	0.009	0.028
IQR	2.47 - 2.57	2.46 - 2.54	2.58 - 2.61	2.45 - 2.56
Minimum	2.26	2.29	2.56	2.43
Maximum	2.94	3	2.61	2.6
Range	0.68	0.72	0.05	0.17

14.2 Methodology

The Guanaceví mineral resource is comprised of 22 individual veins. The veins are further subdivided into areas and modeling method. The mineral resources have been estimated using either a Vertical Longitudinal Projection (VLP) polygonal method (4 veins) or as 3-dimensional ("3D") block model (18 veins). The 3D models have been split into 5 areas based on the vein location within the deposit. Table 14-2 summarizes the vein by the modeling method and area.

Table 14-2 Summary of Veins included in the Mineral Resource Estimate

Principal Area				
Vein		**Strike°**	**Dip°**	**Dip Direction°**
Santa Cruz		140	55	230
A12 Principal		140	55	230
A12 Trinche		145	50	55
A13 Trinche		150	55	60
R1		140	60	230
R2		140	60	230
R2 (Lower)		140	60	230
R3		140	60	230
Rint		155	40	245
Bajo Area				
Vein		**Strike°**	**Dip°**	**Dip Direction°**
Bajo		135	55	225
Bajo 2		130	50	220
Porvenir Norte				
Vein		**Strike°**	**Dip°**	**Dip Direction°**
Porvenir Norte Z2		140	55	230
Porvenir Norte ZN		140	55	230
Milache				
Vein		**Strike°**	**Dip°**	**Dip Direction°**
Milache FW		140	60	230
Milache		140	60	230
Santa Cruz South				
Vein		**Strike°**	**Dip°**	**Dip Direction°**
Santa Cruz South		135	70	225
Santa Cruz South FW1		135	70	225
Santa Cruz South FW2		135	70	225
2D Veins				
Vein		**Strike°**	**Dip°**	**Dip Direction°**
Epsilon Soto	Soto	-	57	-
	HW Soto	-	45	-
	FW Soto	-	65	-
	Epsilon	-	85	-
	Manto	-	15	-
La Blanca		-	71	-
Mi Niña		-	70	-
San Joaquin		-	45	-

14.3 Vertical Longitudinal Projection

The resources based on the 2D polygonal methods are estimated by using a fixed distance Vertical Longitudinal Projection (VLP) from sample points. The VLPs are created by projecting vein geology and underground workings onto a vertical 2D long section. Figure 14-1 displays the VLP for the Epsilon - Soto veins. Resource blocks are constructed on the VLP based on the sample locations in the plane of the projection. EDR geologists review the data for sample trends and delineate areas with similar characteristics along the sample lines. The areas are then grouped based on mining requirements and the average grades and thicknesses of the samples are tabulated for each block. Resource volumes are calculated from the delineated area and the horizontal thickness of the vein, as recorded in the sample database. The volume and density are used to determine the overall resource tonnage for each area, and the grades are reported as a length weighted average of the samples inside each resource block.

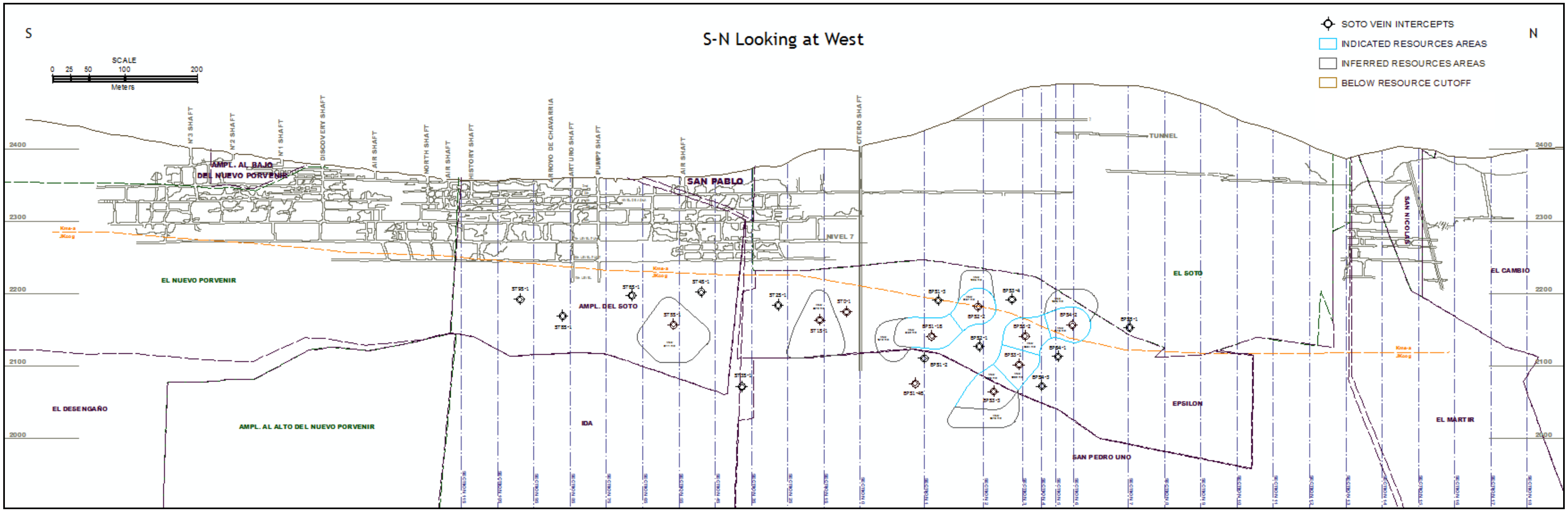

Figure 14-1 VLP Showing the Epsilon - Soto Vein with Indicated (blue), and Inferred (grey) Resource Blocks

14.3.1 Composite Calculations

Composites for 2D estimates are calculated from drillhole intercepts and trench samples. The samples are grouped into a uniform composite length by using a length weighted average to determine the grade. A single or multiple composites are then used to determine the average grade of a resource block.

14.3.2 Area and Volume Calculations

HRC confirmed the areas reported in EDR resource sheets loading AutoCAD® long VLP's provided by EDR into ArcGIS® software, and tracing the perimeter of the resource blocks and measuring the area with the built-in measuring tool. The dip of the vein and true thickness are known variables. Volume is calculated by multiplying the area of the resource block by the horizontal thickness. The horizontal thickness is used for volume calculations to compensate for the reduction in area when translating the vein to a VLP (Figure 14-2).

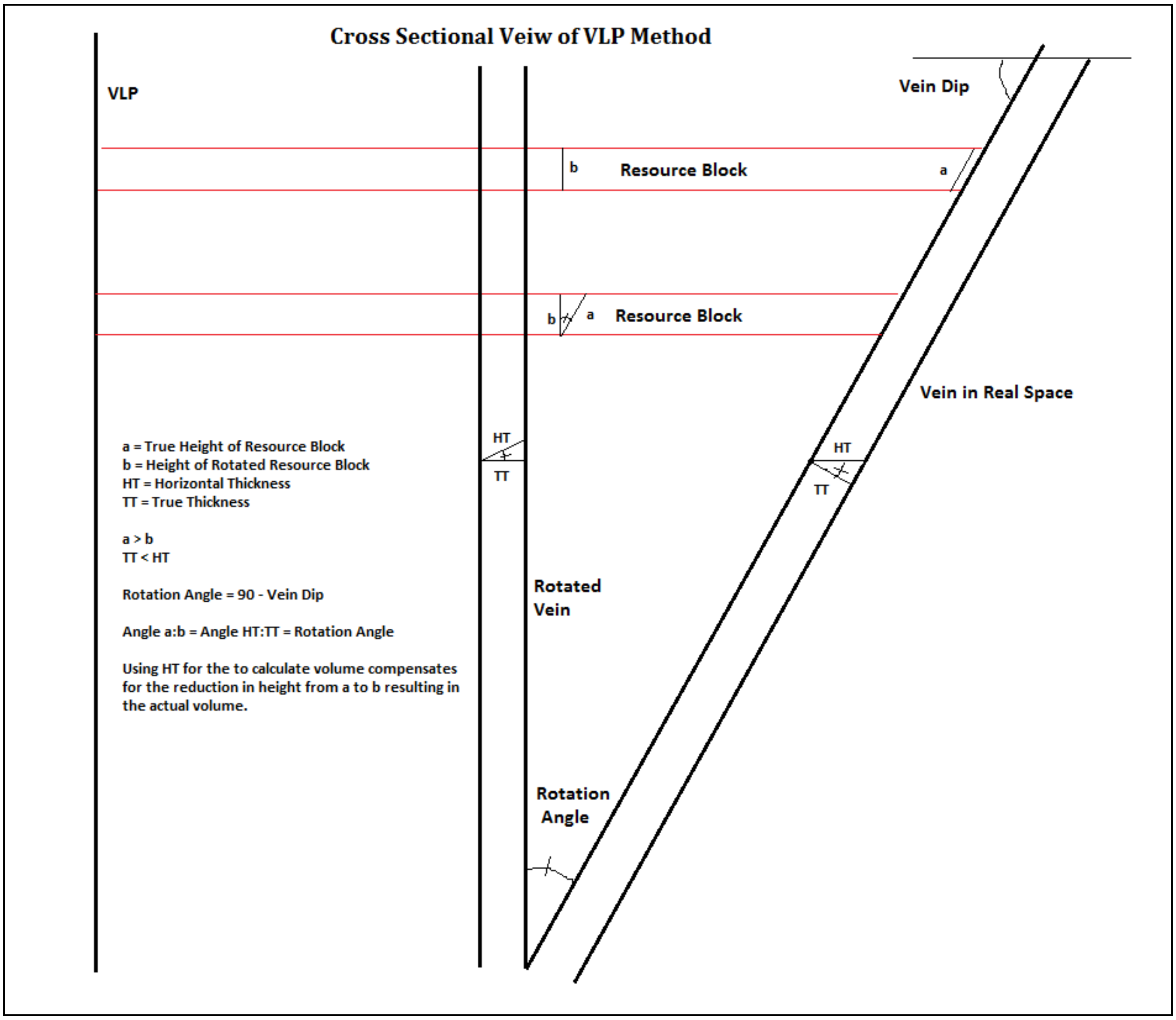

Figure 14-2 Cross Section Diagram of VLP Method

14.3.3 VLP Mineral Resource Classification

The 2D estimates were classified based on the distance to the nearest sample. Measured mineral resources are the area of the defined resource blocks within 10 meters of a sample. Indicated mineral resources are the area of the defined resource blocks within 20 meters of a sample. Inferred mineral resources are those blocks greater than 20 meters from a sample and have a value for estimated silver.

14.4 3D Block Model Method

14.4.1 Geologic Model

HRC constructed the vein models using Leapfrog. Eighteen veins were modeled using a linear interpolation methodology and drillhole sample intervals. Cross-sections orthogonal to the strike of the vein were used to select intervals from drillholes representing the vein material. Points representing the hanging wall and footwall contacts were extracted by the software to interpolate hanging wall and footwall surfaces. These surfaces were used to delineate each vein solid. The surfaces were evaluated in 3-dimensions to ensure that both the down dip and along strike continuity was maintained throughout the model. Veins were clipped against younger veins, topography, and the concession boundaries. Figures 14-3 through 14-9 are orthogonal view of the modeled veins sub-divided into 6 areas.

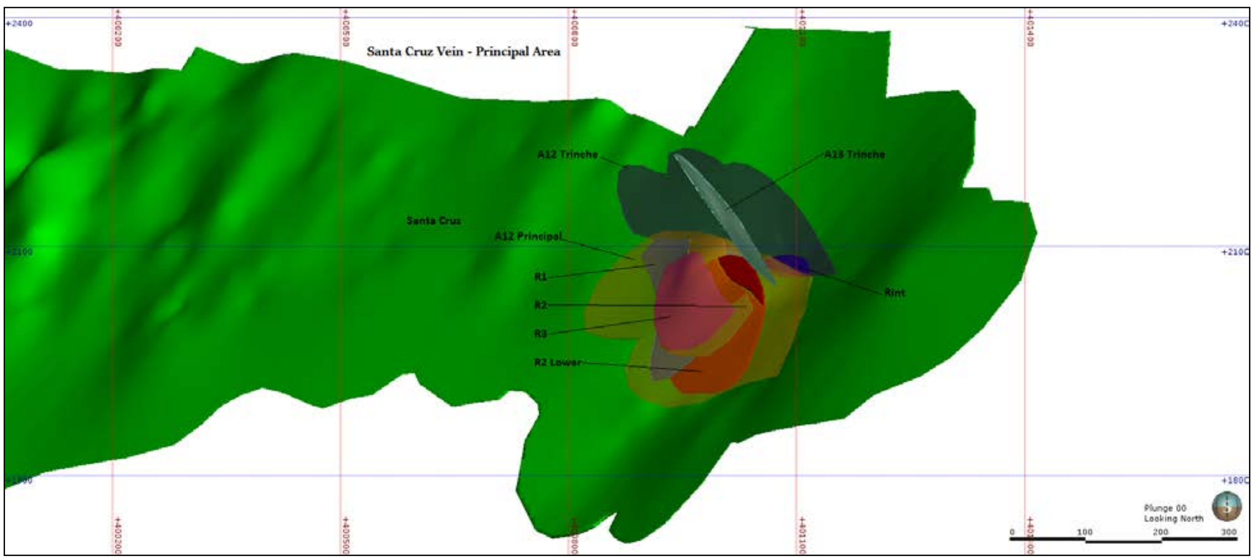

Figure 14-3 Santa Cruz Vein – Principal Area (Viewing the Southern Extent of the Main Santa Cruz Vein, A12 Principal, A12 Trinche, A 13 Trinche, R1, R2, R2 (lower), R3, and Rint)

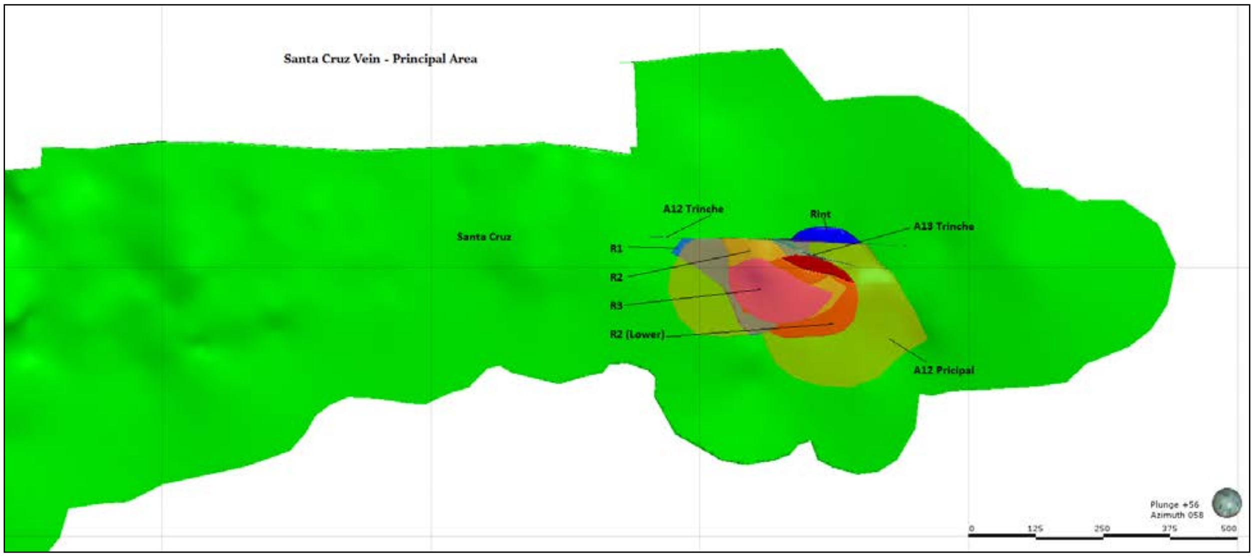

Figure 14-4 Santa Cruz Vein – Principal Area (Viewing the Southern Extent of the Main Santa Cruz Vein, A12 Principal, A12 Trinche, A 13 Trinche, R1, R2, R2 (lower), R3, and Rint)

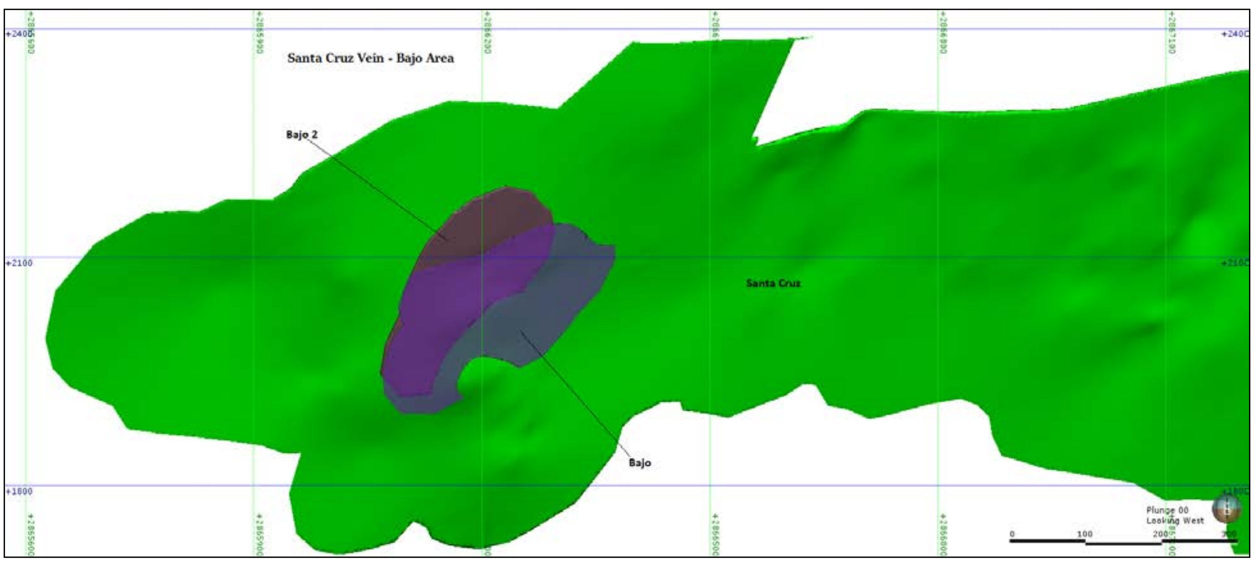

Figure 14-5 Santa Cruz Vein – Bajo Area (Viewing the Southern Extent of the Main Santa Cruz Vein, Bajo, and Bajo 2)

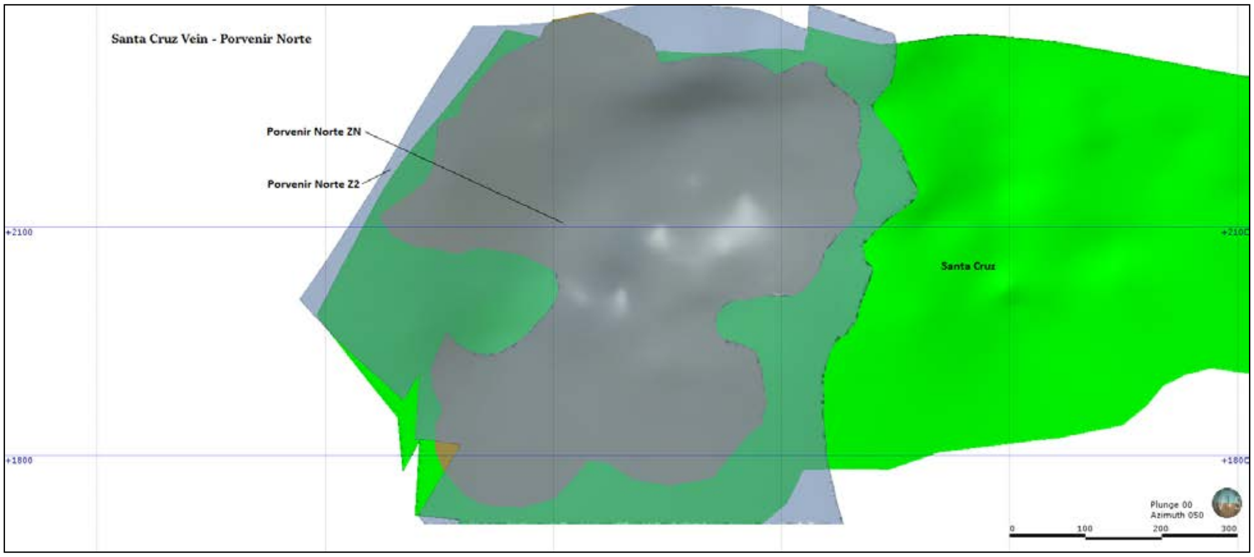

Figure 14-6 Santa Cruz Vein – Porvenir Norte Area (Viewing the Northern Extent of the Main Santa Cruz Vein, Porvenir Norte ZN, and Porvenir Norte Z2)

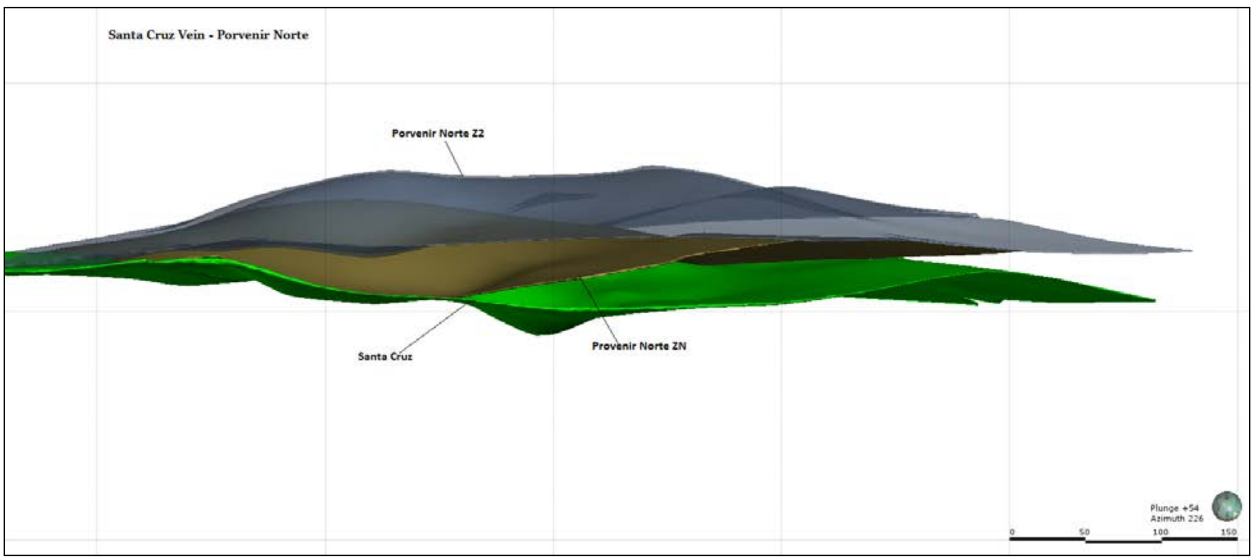

Figure 14-7 Santa Cruz Vein – Porvenir Norte Area (Viewing the Northern Extent of the Main Santa Cruz Vein, Porvenir Norte ZN, and Porvenir Norte Z2)

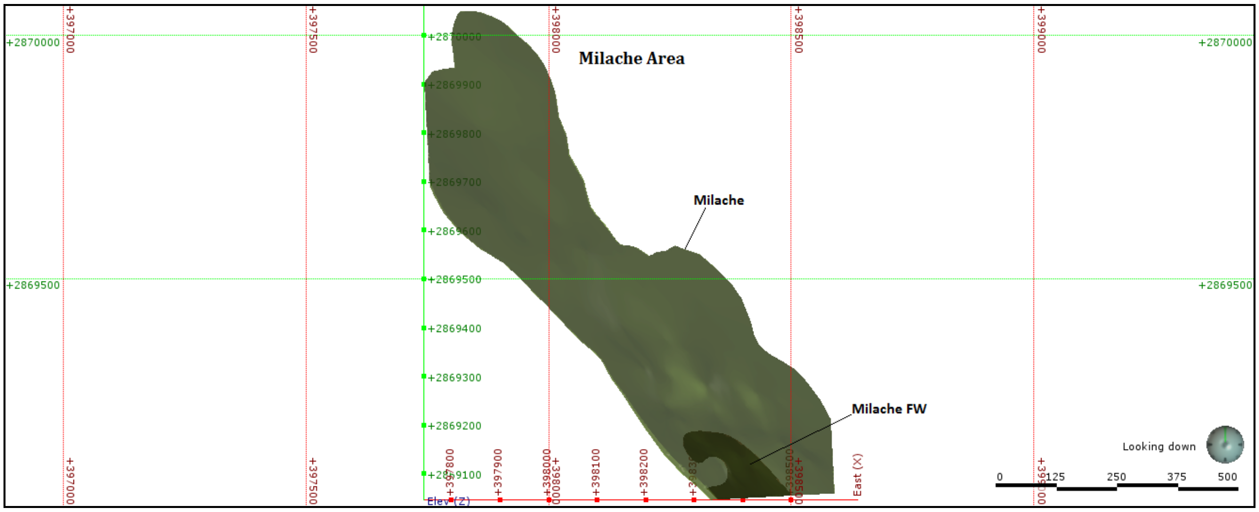

Figure 14-8 Milache Vein Area (Viewing Milache and Milache FW)

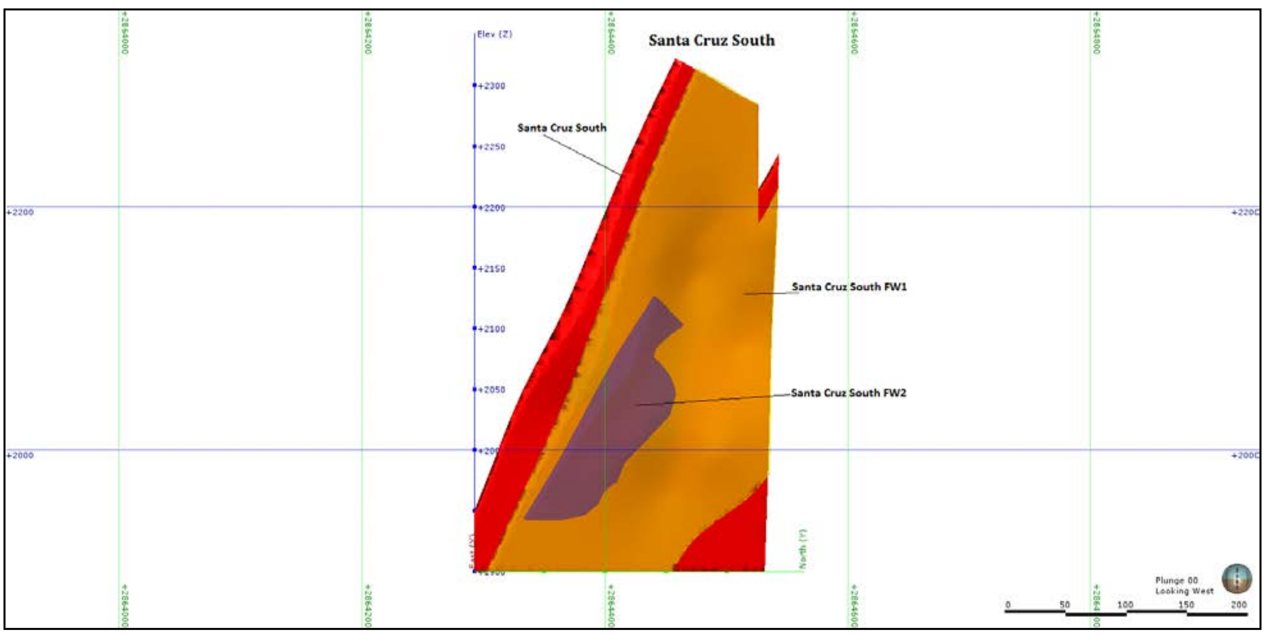

Figure 14-9 Santa Cruz South Vein Area (Viewing Santa Cruz South, Santa Cruz South FW1, and Santa Cruz South FW2)

14.4.2 Block Model

The 3D geologic solids were converted to block models using Datamine. Four block model prototypes were created for each structural regime. The model prototypes are rotated along strike and down dip and encompass the entire vein. A block size of 2.5m x 2.5m was determined to be an appropriate size along strike and down dip. The blocks for thickness were sub-blocked to the vein thickness. A summary of the block model parameters is shown in Table 14-3. The volume, tonnage, and average statistics for sample length, silver, and gold are presented in Table 14-4.

Traditional 3D narrow vein estimates can require the assumption of a constant dip and dip direction. However, narrow vein deposits often exhibit subtle changes in strike and dip. In order to account for changes in orientation, HRC projects the block model and composites onto a 2D plane. Doing so removes the problem of fluctuating strike and dip, while adding the benefit of simplifying the variogram modeling process.

Table 14-3 Guanaceví Block Model Parameters

Model Prototype	Vein	Origin			Rotation			Block Size			Number of Blocks			Maximum Extent		
		X	Y	Z	Z	Y	X	X	Y	Z	X	Y	Z	X	Y	Z
scm	A12 Principal Bajo Bajo 2 Porvenir Norte Z2 Porvenir Norte ZN R1 R2 R2 (Lower) R3 Rint Santa Cruz	401,130	2,865,430	1,760	-38	-38	0	250	2.5	2.5	1	1112	380	401,380	2,868,210	2,710
scmt	A12 Trinche A13 Trinche	401,130	2,866,050	2,020	-23	43	0	100	2.5	2.5	1	200	96	401,230	2,866,550	2,260
scs	Santa Cruz South Santa Cruz South FW1 Santa Cruz South FW2	401,840	2,864,550	1,880	45	0	18	2.5	100	2.5	180	1	220	402,290	2,864,650	2,430
mch	Milache FW Milache	397,560.0000	2,869,830.00	1,800.0000	48	0	28	2.5	100	2.5	512	1	300	398840	2869930	2550

Table 14-4 Vein Model Sample Statistics

Vein	Volume	Tonnage	Average			
	(m^3)	(tonne)	Interval Length	Length (%)	Ag (g/t)	Au (g/t)
A12 Principal	181,820	454,550	2,132	0.99%	250	0.43
A12 Trinche	34,551	86,378	650	0.30%	202	0.44
A13 Trinche	26,165	65,413	476	0.22%	131	0.41
Bajo	112,240	280,600	562	0.26%	152	0.30
Bajo 2	157,040	392,600	1,305	0.61%	175	0.37
Milache FW	27,119	67,798	22	0.01%	168	0.56
Milache	1,232,800	3,082,000	132	0.06%	259	0.73
Porvenir Norte Z2	962,030	2,405,075	265	0.12%	172	0.36
Porvenir Norte ZN	575,330	1,438,325	257	0.12%	255	0.50
R1	47,278	118,195	423	0.20%	229	0.34
R2	18,733	46,833	97	0.05%	163	0.38
R2 (Lower)	37,668	94,170	229	0.11%	101	0.19
R3	13,232	33,080	130	0.06%	106	0.23
Rint	5,030	12,575	28	0.01%	375	0.57
Santa Cruz South	372,890	932,225	131	0.06%	240	0.73
Santa Cruz South FW1	176,540	441,350	73	0.03%	289	0.95
Santa Cruz South FW2	38,286	95,715	27	0.01%	290	0.34
Santa Cruz	3,239,000	8,097,500	11,180	5.20%	193	0.37

14.4.3 Compositing

The assays intervals used to define the hanging wall and footwall intercepts within each vein were composited into a single intercept and the true thickness was calculated using the vein dip and dip direction. Descriptive statistics for the vein true thickness composites are presented in Table 14-5. Composite summary statistics for silver and gold are presented in Tables 14-6 and 14-7 respectively.

Table 14-5 Composite True Thickness Statistics by Vein

Vein	Dip°	Dip Direction°	Minimum (m)	Maximum (m)	Mean (m)	Std. Dev
A12 Principal	55	230	0.14	6.3	2.26	0.74
A12 Trinche	50	55	0.13	4.6	1.93	0.97
A13 Trinche	55	60	0.39	4.3	2.29	0.72
Bajo	55	225	0.45	8.1	2.70	1.23
Bajo 2	48	39	0.24	10.7	3.17	1.40
Milache FW	60	230	0.18	8.4	1.89	1.87
Milache	60	230	1.28	3.6	2.08	0.83
Porvenir Norte Z2	55	230	0.10	9.2	2.43	1.95
Porvenir Norte ZN	55	230	0.41	7.3	2.20	1.40
R1	60	230	0.17	5.5	2.31	1.06
R2	60	230	0.57	3.4	1.50	0.58
R2 (Lower)	60	230	0.17	3.8	2.30	0.80
R3	60	230	0.21	3.2	1.73	0.54
Rint	40	245	1.07	2.8	1.80	0.40
Santa Cruz South	70	225	0.48	16.4	5.25	4.36
Santa Cruz South FW1	70	225	0.24	10.7	2.92	3.20
Santa Cruz South FW2	70	225	0.42	13.2	4.96	4.89
Santa Cruz	86	19	0.14	12.6	2.84	1.22

Table 14-6 Composite Silver Summary Statistics within Veins

Silver Composite Statistics						
Vein	Count (n)	Minimum (g/t)	Maximum (g/t)	Mean (g/t)	Std. Dev.	COV
A12 Principal	793	0	3,370	246	268	1.09
A12 Trinche	271	0	1,836	192	236	1.23
A13 Trinche	180	0	487	130	82	0.63
Bajo	174	0	1,617	144	221	1.54
Bajo 2	327	0	2,692	135	255	1.89
Milache FW	51	0	836	187	241	1.29
Milache	6	19	324	149	126	0.85
Porvenir Norte Z2	95	0	579	133	142	1.07
Porvenir Norte ZN	88	0	1,458	172	244	1.42
R1	178	0	2,974	215	265	1.23
R2	58	0	573	150	148	0.98
R2 (Lower)	85	0	808	94	134	1.42
R3	67	0	709	92	117	1.28
Rint	11	79	1,418	383	355	0.93
Santa Cruz South	17	30	1,077	247	249	1.01
Santa Cruz South FW1	17	11	554	175	156	0.89
Santa Cruz South FW2	4	65	604	316	192	0.61
Santa Cruz	3,292	0	3,895	194	276	1.42

Table 14-7 Composite Gold Summary Statistics within Veins

Gold Composite Statistics						
Vein	Count (n)	Minimum (g/t)	Maximum (g/t)	Mean (g/t)	Std. Dev.	COV
A12 Principal	793	0.00	8.18	0.41	0.61	1.51
A12 Trinche	271	0.00	6.89	0.42	0.64	1.54
A13 Trinche	180	0.00	1.70	0.42	0.30	0.72
Bajo	174	0.00	2.53	0.28	0.41	1.46
Bajo 2	327	0.00	6.39	0.28	0.56	2.01
Milache FW	51	0.01	2.33	0.50	0.65	1.29
Milache	6	0.04	1.28	0.51	0.45	0.88
Porvenir Norte Z2	95	0.00	1.50	0.27	0.32	1.21
Porvenir Norte ZN	88	0.00	4.88	0.34	0.67	1.95
R1	178	0.00	3.14	0.32	0.37	1.16
R2	58	0.00	6.53	0.32	0.85	2.65
R2 (Lower)	85	0.00	1.22	0.18	0.25	1.36
R3	67	0.00	1.73	0.20	0.28	1.44
Rint	11	0.17	1.20	0.56	0.33	0.59
Santa Cruz South	17	0.11	1.88	0.62	0.50	0.81
Santa Cruz South FW1	17	0.05	2.22	0.60	0.57	0.95
Santa Cruz South FW2	4	0.11	0.83	0.44	0.27	0.62
Santa Cruz	3,292	0.00	10.17	0.36	0.51	1.43

14.4.4 Capping

Grade capping is the practice for replacing any statistical outliers with a maximum value from the assumed sampled distribution. This is done statistically to better understand the true mean of the sample population. The estimation of highly skewed grade distribution can be sensitive to the presence of even a few extreme values.

HRC utilized cumulative frequency plots, and sample statistics to determine appropriate capping values for silver and gold in each vein. The final dataset for grade estimate in the block model consists of composites capped as presented in Table 14-8. Descriptive statistics for the capped silver and gold composites are presented in Tables 14-9 and 14-10, respectively.

An additional gold cap 2.5ppm was placed on the composite from drillhole UNP4-3. This was done because previous estimates using cap value of 9.0ppm gold smeared more high grade gold than mining engineers on site expected to encounter.

Table 14-8 Silver and Gold Vein Capped Assay Value

Vein	Silver Cap (g/t)	Gold Cap (g/t)
A12 Principal	1,550	3.15
A12 Trinche	750	3.00
A13 Trinche	300	1.20
Bajo	600	1.30
Bajo 2	750	2.00
Milache FW	600	1.50
Milache	600	1.50
Porvenir Norte Z2	500	1.00
Porvenir Norte ZN	1,000	1.50
R1	700	1.60
R2	500	0.60
R2 (Lower)	500	1.00
R3	300	1.00
Rint	500	1.00
Santa Cruz South	500	1.50
Santa Cruz South FW1	500	1.50
Santa Cruz South FW2	500	1.50
Santa Cruz	1,800	9.00

Table 14-9 Capped Silver Summary Statistics within Veins

Capped Silver Composite Statistics						
Vein	Count (n)	Minimum (g/t)	Maximum (g/t)	Mean (g/t)	Std. Dev.	COV
A12 Principal	793	0	1,550	242	239	0.99
A12 Trinche	271	0	750	178	161	0.91
A13 Trinche	180	0	300	128	74	0.58
Bajo	174	0	600	127	150	1.19
Bajo 2	327	0	750	119	142	1.20
Milache FW	51	0	600	176	218	1.24
Milache	6	19	324	149	126	0.85
Porvenir Norte Z2	95	0	500	131	138	1.05
Porvenir Norte ZN	88	0	1,000	167	221	1.32
R1	178	0	700	201	164	0.82
R2	58	0	500	148	143	0.96
R2 (Lower)	85	0	500	90	117	1.30
R3	67	0	300	82	79	0.96
Rint	11	79	500	296	147	0.50
Santa Cruz South	17	30	500	210	149	0.71
Santa Cruz South FW1	17	11	500	172	148	0.86
Santa Cruz South FW2	4	65	500	290	155	0.53
Santa Cruz	3,292	0	1,800	191	252	1.32

Table 14-10 Capped Gold Summary Statistics within Veins

Capped Gold Composite Statistics						
Vein	Count (n)	Minimum (g/t)	Maximum (g/t)	Mean (g/t)	Std. Dev.	COV
A12 Principal	793	0.00	3.15	0.39	0.47	1.21
A12 Trinche	271	0.00	3.00	0.39	0.44	1.11
A13 Trinche	180	0.00	1.20	0.41	0.28	0.68
Bajo	174	0.00	1.30	0.26	0.29	1.13
Bajo 2	327	0.00	2.00	0.25	0.33	1.32
Milache FW	51	0.01	1.50	0.45	0.53	1.18
Milache	6	0.04	1.28	0.51	0.45	0.88
Porvenir Norte Z2	95	0.00	1.00	0.26	0.29	1.12
Porvenir Norte ZN	88	0.00	1.50	0.28	0.40	1.40
R1	178	0.00	1.60	0.31	0.29	0.96
R2	58	0.00	0.60	0.20	0.18	0.91
R2 (Lower)	85	0.00	1.00	0.18	0.24	1.33
R3	67	0.00	1.00	0.18	0.23	1.24
Rint	11	0.17	1.00	0.54	0.30	0.55
Santa Cruz South	17	0.11	1.50	0.60	0.45	0.75
Santa Cruz South FW1	17	0.05	1.50	0.55	0.44	0.81
Santa Cruz South FW2	4	0.11	0.83	0.44	0.27	0.62
Santa Cruz	3,292	0.00	9.00	0.36	0.50	1.41

14.4.5 Variography

A variography analysis was completed to establish the continuity of silver and gold within the modeled veins. Variography establishes the appropriate contribution that any specific composite should have when estimating a block volume value within a model. This is performed by comparing the orientation and distance used in the estimation to the variability of other samples of similar relative direction and distance.

Variography was analyzed using Snowden Supervisor Version 8.4. The continuity is established by analyzing variogram contour fans, in the horizontal, across-strike, and dip planes to determine the direction of maximum continuity within each plane. The subsequent variograms defining the maximum continuity along the strike of the vein were modeled with a spherical variogram. Silver and gold variograms were modeled (Figure 14-10) for the Santa Cruz vein. Table 14-11 summarizes the variogram parameters used for the analysis for silver and gold. The search volume defined by the variogram models was used for all the veins estimated. The search ellipse defining the direction of maximum continuity is oriented along the strike of the vein with a steeply dipping plunge to the north of 80-degrees (Figure 14-11).

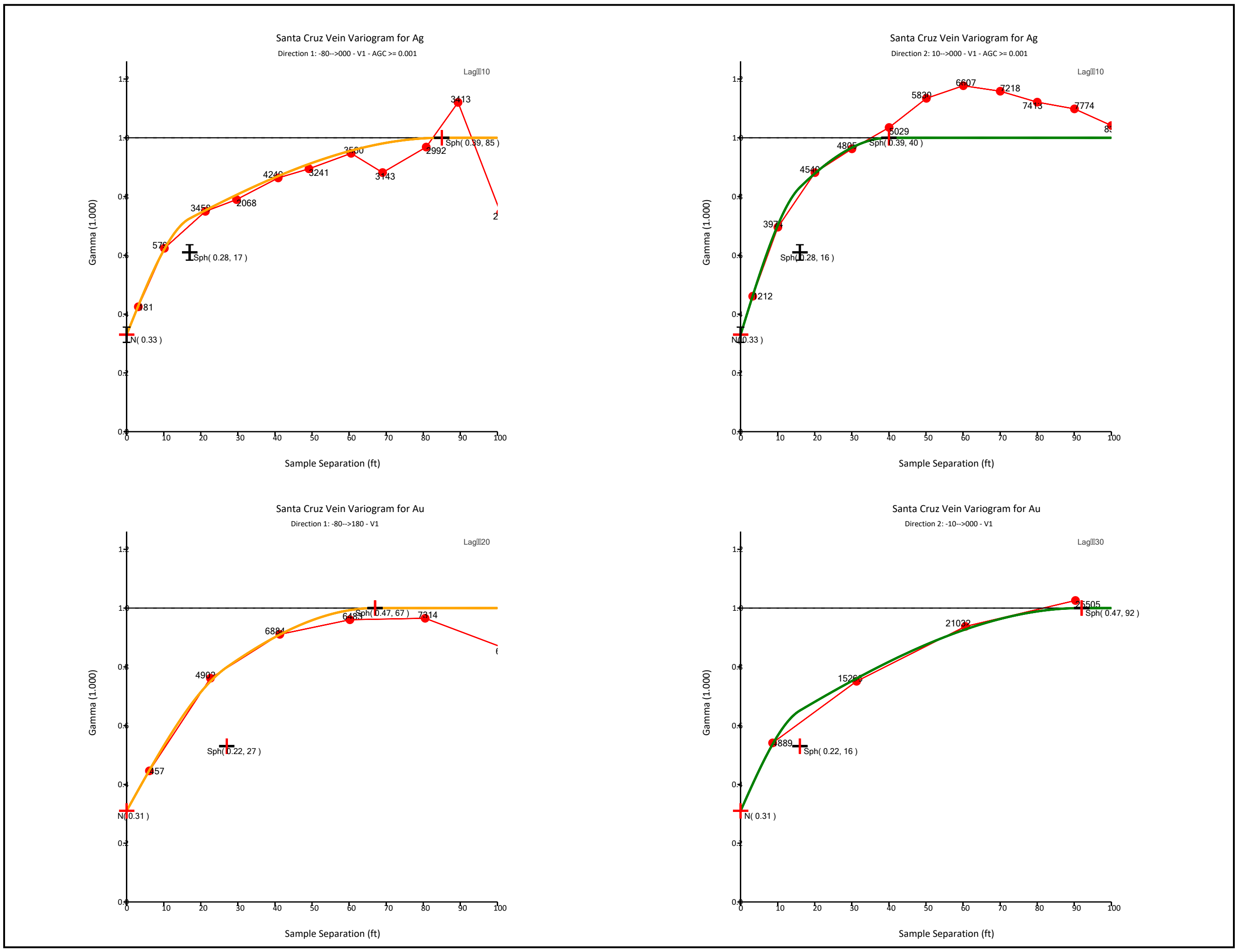

Figure 14-10 Santa Cruz Vein Variogram Models for Silver (top) and Gold (bottom)

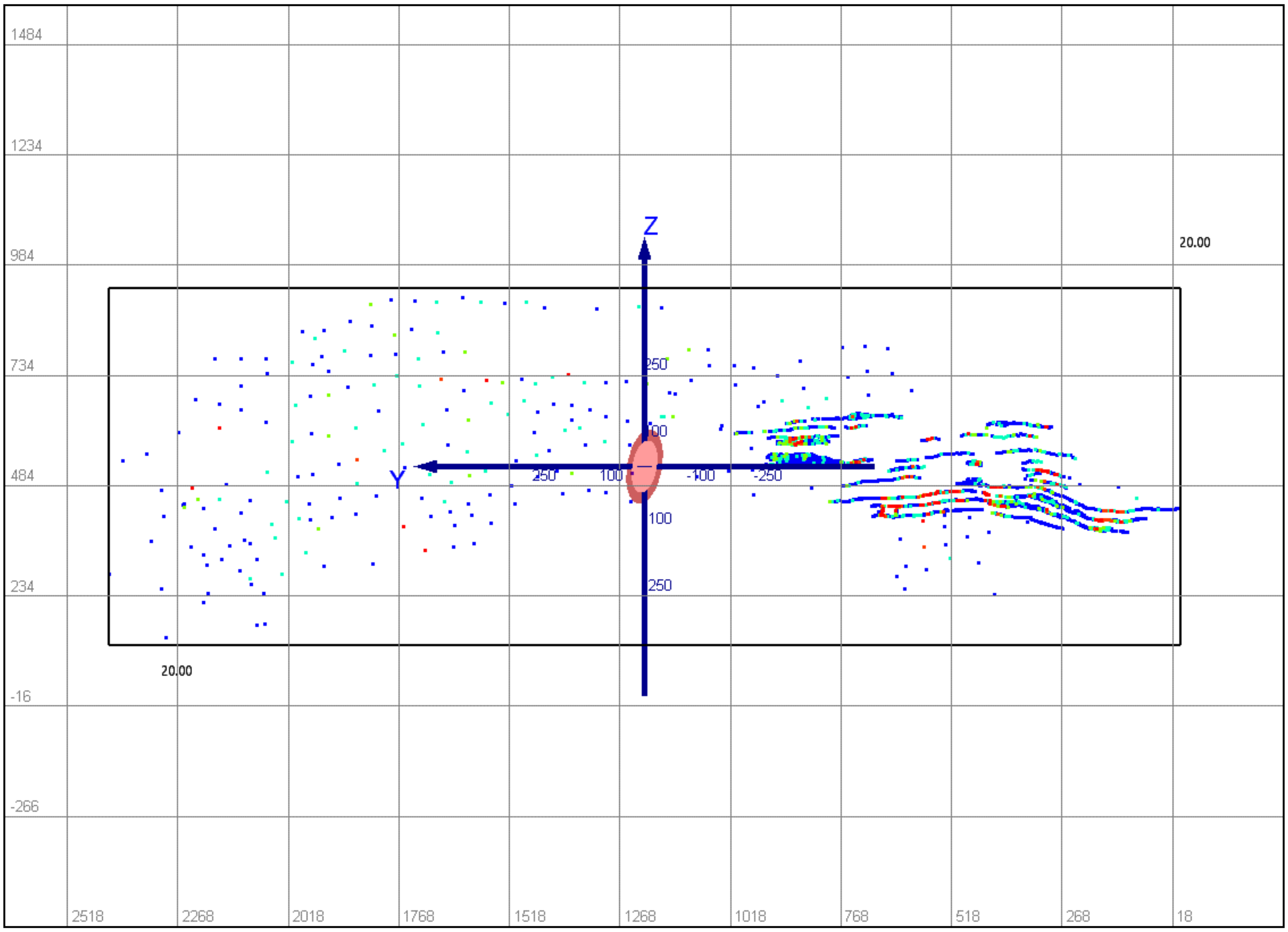

Figure 14-11 Silver Search Volume as Defined by the Variogram Model (Figure displayed in 2D local coordinates)

Table 14-11 Summary of Silver and Gold Variogram Parameters

Silver			Gold		
Nugget (C_0)	*C_1*	*C_2*	*Nugget (C_0)*	*C_1*	*C_2*
0.450	0.250	0.300	0.520	0.200	0.280
	$Distance_1$	*$Distance_2$*		*$Distance_1$*	*$Distance_2$*
Rotated Dip	14	88	Z	19	72
Rotated Strike	16	38	X	27	72

14.4.6 Estimation Parameters

Comparisons were made with ordinary kriging (“OK”) and inverse distance-squared (“ID”) methods. The ID method was selected for reporting due to better fit with drillhole data throughout the model. The search ellipse parameters used for estimation are shown in Table 14-12.

Silver and gold grades were estimated in each vein by using a single search ellipse. The size, direction, and anisotropy of the search ellipse depended on the variography, number of composites, the number of mine levels sampled, and the practitioner’s experience with similar resource estimates.

A true thickness composite length weighted ID to the power of 2.5 was used to estimate grade for all veins. Estimation parameters for the x-rotated direction and y-rotated direction are presented in Table 14-12.

Table 14-12 Estimation Parameters

Ellipse ID	X Axis	Y Axis
Number of Composites		
Min	2	2
Max	24	24
Search Ellipsoid Rotation*		
Primary	180	90
Secondary	-75	90
Tertiary	90	-100
Search Ellipsoid Distance		
Primary	132	132
Secondary	57	57
Tertiary	20	20
***Rotations based on local coordinates**		

14.4.7 Model Validation

The Guanaceví models were validated by the following methods:

- Comparison of the global descriptive statistics from the Inverse Distance Weighting (“ID”), Ordinary Krige (“OK”), Nearest Neighbor (“NN”), and composite data, and
- Inspection of the ID block model on long section in comparison to the composite grades.

14.4.7.1 Comparison with Ordinary Krige and Nearest Neighbor Models

The OK and NN models were run to serve as comparison with the estimated results from the ID method. Descriptive statistics for the ID method along with those for the OK, NN, and drillhole composites for gold and silver are shown in Tables 14-13 through 14-15, and 14-16 through 14-18, respectively.

Table 14-13 Silver Model Descriptive Statistical Comparison

Vein	Model	Samples (n)	Minimum (g/t)	Maximum (g/t)	Mean (g/t)	Std. Dev.	COV
A12 Principal	Composite	793	0	1550	242	239	0.99
	$ID^{2.5}$	15168	0	1284	170	140	0.83
	OK	15168	0	793	160	123	0.77
	NN	15168	0	1550	136	195	1.44
A12 Trinche	Composite	271	0	750	178	161	0.91
	$ID^{2.5}$	6233	0	712	216	127	0.59
	OK	6233	7	409	176	64	0.36
	NN	6233	0	750	158	166	1.05
A13 Trinche	Composite	180	0	300	128	74	0.58
	$ID^{2.5}$	3586	20	195	121	30	0.25
	OK	3586	45	186	121	30	0.24
	NN	3586	0	300	113	79	0.70
Bajo	Composite	174	0	600	127	150	1.19
	$ID^{2.5}$	11151	0	596	118	112	0.95
	OK	11151	0	487	127	92	0.73
	NN	11151	0	600	107	167	1.57
Bajo 2	Composite	327	0	750	119	142	1.20
	$ID^{2.5}$	8969	0	739	121	105	0.87
	OK	8969	0	606	113	84	0.74
	NN	8969	0	750	95	145	1.53
Milache FW	Composite	51	0	600	176	218	1.24
	$ID^{2.5}$	45151	0	600	157	170	1.08
	OK	45151	0	600	155	153	0.99
	NN	45151	0	600	148	204	1.38

Table 14-14 Silver Model Descriptive Statistical Comparison (Cont.)

	Model	Samples (n)	Minimum (g/t)	Maximum (g/t)	Mean (g/t)	Std. Dev.	COV
Milache	Composite	6	19	324	149	126	0.85
	ID$^{2.5}$	5137	19	324	147	96	0.65
	OK	5137	19	324	138	77	0.56
	NN	5137	19	324	140	123	0.88
Porvenir Norte Z2	**Model**	**Samples (n)**	**Minimum (g/t)**	**Maximum (g/t)**	**Mean (g/t)**	**Std. Dev.**	**COV**
	Composite	95	0	500	131	138	1.05
	ID$^{2.5}$	56840	0	500	116	117	1.01
	OK	56840	0	384	114	101	0.88
	NN	56840	0	500	109	133	1.22
Porvenir Norte ZN	**Model**	**Samples (n)**	**Minimum (g/t)**	**Maximum (g/t)**	**Mean (g/t)**	**Std. Dev.**	**COV**
	Composite	88	0	1000	167	221	1.32
	ID$^{2.5}$	42910	0	999	160	175	1.09
	OK	42910	0	689	140	137	0.98
	NN	42910	0	1000	141	203	1.44
R1	**Model**	**Samples (n)**	**Minimum (g/t)**	**Maximum (g/t)**	**Mean (g/t)**	**Std. Dev.**	**COV**
	Composite	178	0	700	201	164	0.82
	ID$^{2.5}$	4914	1	604	165	79	0.48
	OK	4914	20	431	150	61	0.41
	NN	4914	0	700	139	156	1.12
R2	**Model**	**Samples (n)**	**Minimum (g/t)**	**Maximum (g/t)**	**Mean (g/t)**	**Std. Dev.**	**COV**
	Composite	58	0	500	148	143	0.96
	ID$^{2.5}$	3859	0	478	97	89	0.92
	OK	3859	0	335	91	64	0.71
	NN	3859	0	500	70	120	1.72
R2 (Lower)	**Model**	**Samples (n)**	**Minimum (g/t)**	**Maximum (g/t)**	**Mean (g/t)**	**Std. Dev.**	**COV**
	Composite	85	0	500	90	117	1.30
	ID$^{2.5}$	4820	0	370	67	50	0.75
	OK	4820	3	295	68	48	0.70
	NN	4820	0	500	60	97	1.62

Table 14-15 Silver Model Descriptive Statistical Comparison (Cont.)

Zone	Model	Samples (n)	Minimum (g/t)	Maximum (g/t)	Mean (g/t)	Std. Dev.	COV
R3	Composite	67	0	300	82	79	0.96
	$ID^{2.5}$	2793	0	274	71	42	0.60
	OK	2793	5	200	63	40	0.64
	NN	2793	0	300	51	79	1.54
Rint	Composite	11	79	500	296	147	0.50
	$ID^{2.5}$	519	126	500	390	121	0.31
	OK	519	184	500	370	88	0.24
	NN	519	79	500	394	146	0.37
Santa Cruz South	Composite	17	30	500	210	149	0.71
	$ID^{2.5}$	840	30	500	219	120	0.55
	OK	840	30	500	209	94	0.45
	NN	840	30	500	222	160	0.72
Santa Cruz South FW1	Composite	17	11	500	172	148	0.86
	$ID^{2.5}$	10819	11	500	184	130	0.70
	OK	10819	11	500	171	119	0.70
	NN	10819	11	500	167	151	0.90
Santa Cruz South FW2	Composite	4	65	500	290	155	0.53
	$ID^{2.5}$	1871	65	500	272	106	0.39
	OK	1871	65	500	280	94	0.34
	NN	1871	65	500	319	151	0.47
Santa Cruz	Composite	3292	0	1800	191	252	1.32
	$ID^{2.5}$	197210	0	1764	167	177	1.06
	OK	197210	0	1523	168	152	0.91
	NN	197210	0	1800	173	270	1.56

Table 14-16 Gold Model Descriptive Statistical Comparison

Zone	Model	Samples (n)	Minimum (g/t)	Maximum (g/t)	Mean (g/t)	Std. Dev.	COV
A12 Principal	Composite	793	0.00	3.15	0.39	0.47	1.21
	$ID^{2.5}$	15168	0.00	2.88	0.34	0.40	1.17
	OK	15168	0.00	1.89	0.30	0.30	1.01
	NN	15168	0.00	3.15	0.27	0.52	1.94

Zone	Model	Samples (n)	Minimum (g/t)	Maximum (g/t)	Mean (g/t)	Std. Dev.	COV
A12 Trinche	Composite	271	0.00	3.00	0.39	0.44	1.11
	$ID^{2.5}$	6233	0.00	2.85	0.58	0.54	0.94
	OK	6233	0.01	1.58	0.43	0.26	0.59
	NN	6233	0.00	3.00	0.39	0.51	1.31

Zone	Model	Samples (n)	Minimum (g/t)	Maximum (g/t)	Mean (g/t)	Std. Dev.	COV
A13 Trinche	Composite	180	0.00	1.20	0.41	0.28	0.68
	$ID^{2.5}$	3586	0.07	0.71	0.39	0.09	0.22
	OK	3586	0.14	0.62	0.40	0.09	0.22
	NN	3586	0.00	1.20	0.36	0.28	0.77

Zone	Model	Samples (n)	Minimum (g/t)	Maximum (g/t)	Mean (g/t)	Std. Dev.	COV
Bajo	Composite	174	0.00	1.30	0.26	0.29	1.13
	$ID^{2.5}$	11151	0.00	1.29	0.24	0.21	0.87
	OK	11151	0.00	0.91	0.26	0.17	0.66
	NN	11151	0.00	1.30	0.23	0.33	1.44

Zone	Model	Samples (n)	Minimum (g/t)	Maximum (g/t)	Mean (g/t)	Std. Dev.	COV
Bajo 2	Composite	327	0.00	2.00	0.25	0.33	1.32
	$ID^{2.5}$	8969	0.00	1.95	0.24	0.24	0.98
	OK	8969	0.00	1.23	0.23	0.17	0.74
	NN	8969	0.00	2.00	0.19	0.30	1.59

Zone	Model	Samples (n)	Minimum (g/t)	Maximum (g/t)	Mean (g/t)	Std. Dev.	COV
Milache FW	Composite	51	0.01	1.50	0.45	0.53	1.18
	$ID^{2.5}$	45151	0.01	1.50	0.40	0.42	1.05
	OK	45151	0.01	1.50	0.39	0.37	0.96
	NN	45151	0.01	1.50	0.38	0.49	1.31

Table 14-17 Gold Model Descriptive Statistical Comparison (Cont.)

	Model	Samples (n)	Minimum (g/t)	Maximum (g/t)	Mean (g/t)	Std. Dev.	COV
Milache	Composite	6	0.04	1.28	0.51	0.45	0.88
	$ID^{2.5}$	5137	0.04	1.28	0.54	0.35	0.64
	OK	5137	0.04	1.28	0.52	0.29	0.56
	NN	5137	0.04	1.28	0.52	0.48	0.92
Porvenir Norte Z2	**Model**	**Samples (n)**	**Minimum (g/t)**	**Maximum (g/t)**	**Mean (g/t)**	**Std. Dev.**	**COV**
	Composite	95	0.00	1.00	0.26	0.29	1.12
	$ID^{2.5}$	56840	0.00	1.00	0.21	0.22	1.05
	OK	56840	0.00	0.77	0.21	0.19	0.90
	NN	56840	0.00	1.00	0.20	0.27	1.35
Porvenir Norte ZN	**Model**	**Samples (n)**	**Minimum (g/t)**	**Maximum (g/t)**	**Mean (g/t)**	**Std. Dev.**	**COV**
	Composite	88	0.00	1.50	0.28	0.40	1.40
	$ID^{2.5}$	42910	0.00	1.50	0.35	0.39	1.12
	OK	42910	0.00	1.20	0.29	0.28	0.95
	NN	42910	0.00	1.50	0.31	0.45	1.46
R1	**Model**	**Samples (n)**	**Minimum (g/t)**	**Maximum (g/t)**	**Mean (g/t)**	**Std. Dev.**	**COV**
	Composite	178	0.00	1.60	0.31	0.29	0.96
	$ID^{2.5}$	4914	0.00	1.34	0.26	0.14	0.53
	OK	4914	0.03	0.65	0.26	0.12	0.45
	NN	4914	0.00	1.60	0.28	0.33	1.17
R2	**Model**	**Samples (n)**	**Minimum (g/t)**	**Maximum (g/t)**	**Mean (g/t)**	**Std. Dev.**	**COV**
	Composite	58	0.00	0.60	0.20	0.18	0.91
	$ID^{2.5}$	3859	0.00	0.56	0.13	0.11	0.81
	OK	3859	0.00	0.39	0.12	0.08	0.67
	NN	3859	0.00	0.60	0.10	0.15	1.54
R2 (Lower)	**Model**	**Samples (n)**	**Minimum (g/t)**	**Maximum (g/t)**	**Mean (g/t)**	**Std. Dev.**	**COV**
	Composite	85	0.00	1.00	0.18	0.24	1.33
	$ID^{2.5}$	4820	0.00	0.73	0.13	0.09	0.69
	OK	4820	0.02	0.49	0.14	0.09	0.65
	NN	4820	0.00	1.00	0.12	0.21	1.70

Table 14-18 Gold Model Descriptive Statistical Comparison (Cont.)

	Model	Samples (n)	Minimum (g/t)	Maximum (g/t)	Mean (g/t)	Std. Dev.	COV
R3	Composite	67	0.00	1.00	0.18	0.23	1.24
	$ID^{2.5}$	2793	0.00	0.90	0.16	0.10	0.62
	OK	2793	0.01	0.40	0.13	0.09	0.64
	NN	2793	0.00	1.00	0.10	0.20	1.90
Rint	Composite	11	0.17	1.00	0.54	0.30	0.55
	$ID^{2.5}$	519	0.20	1.00	0.75	0.27	0.36
	OK	519	0.33	1.00	0.70	0.19	0.28
	NN	519	0.17	1.00	0.76	0.32	0.42
Santa Cruz South	Composite	17	0.11	1.50	0.60	0.45	0.75
	$ID^{2.5}$	840	0.12	1.50	0.64	0.35	0.54
	OK	840	0.12	1.50	0.59	0.27	0.46
	NN	840	0.11	1.50	0.60	0.47	0.79
Santa Cruz South FW1	Composite	17	0.05	1.50	0.55	0.44	0.81
	$ID^{2.5}$	10819	0.05	1.50	0.58	0.36	0.55
	OK	10819	0.05	1.50	0.53	0.29	0.43
	NN	10819	0.05	1.50	0.48	0.42	0.87
Santa Cruz South FW2	Composite	4	0.11	0.83	0.44	0.27	0.62
	$ID^{2.5}$	1871	0.11	0.83	0.38	0.19	0.48
	OK	1871	0.11	0.83	0.42	0.16	0.38
	NN	1871	0.11	0.83	0.50	0.27	0.53
Santa Cruz	Composite	3292	0.00	9.00	0.36	0.50	1.41
	$ID^{2.5}$	197210	0.00	5.64	0.34	0.33	0.97
	OK	197210	0.00	2.89	0.35	0.28	0.81
	NN	197210	0.00	9.00	0.35	0.58	1.64

The overall similarities of the statistical comparisons between the composites and models represent an appropriate amount of smoothing to account for the narrow vein mining method with minimum dilution. The ID, OK, and NN models generally show similar means to the composites. The ID model has similar variance to the composites based on the Coefficient of Variation ("CV"). This is based on the stopes having similar statistics to the composites in operations; however, this will need to be continually examined as additional data is made available.

14.4.7.2 Sectional Inspection

A visual comparison of block grades with drillhole and channel composites was made in long section. The block models follow the grade trends in the data with higher variability in the areas of denser sampling and additional smoothing of the estimate as the distance from data increases. Figures 14-12 and 14-13 display silver and gold long sections, respectively. Each long section is zoomed to a scale for viewing of the Santa Cruz vein as estimated with the composites overlaying the block grades.

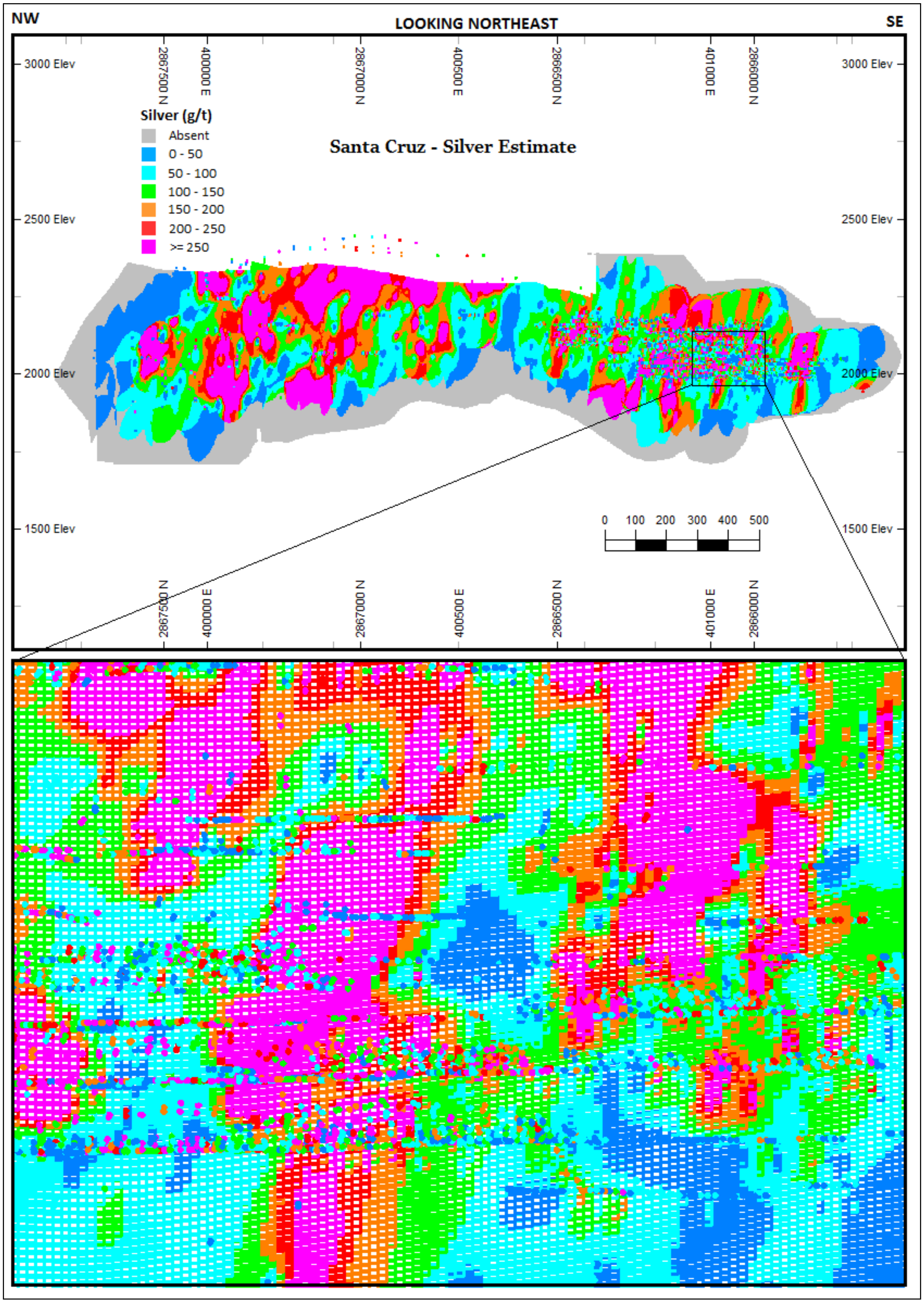

Figure 14-12 Long Section view of Santa Cruz Vein Block Model showing the Estimated Silver Grades and Composites

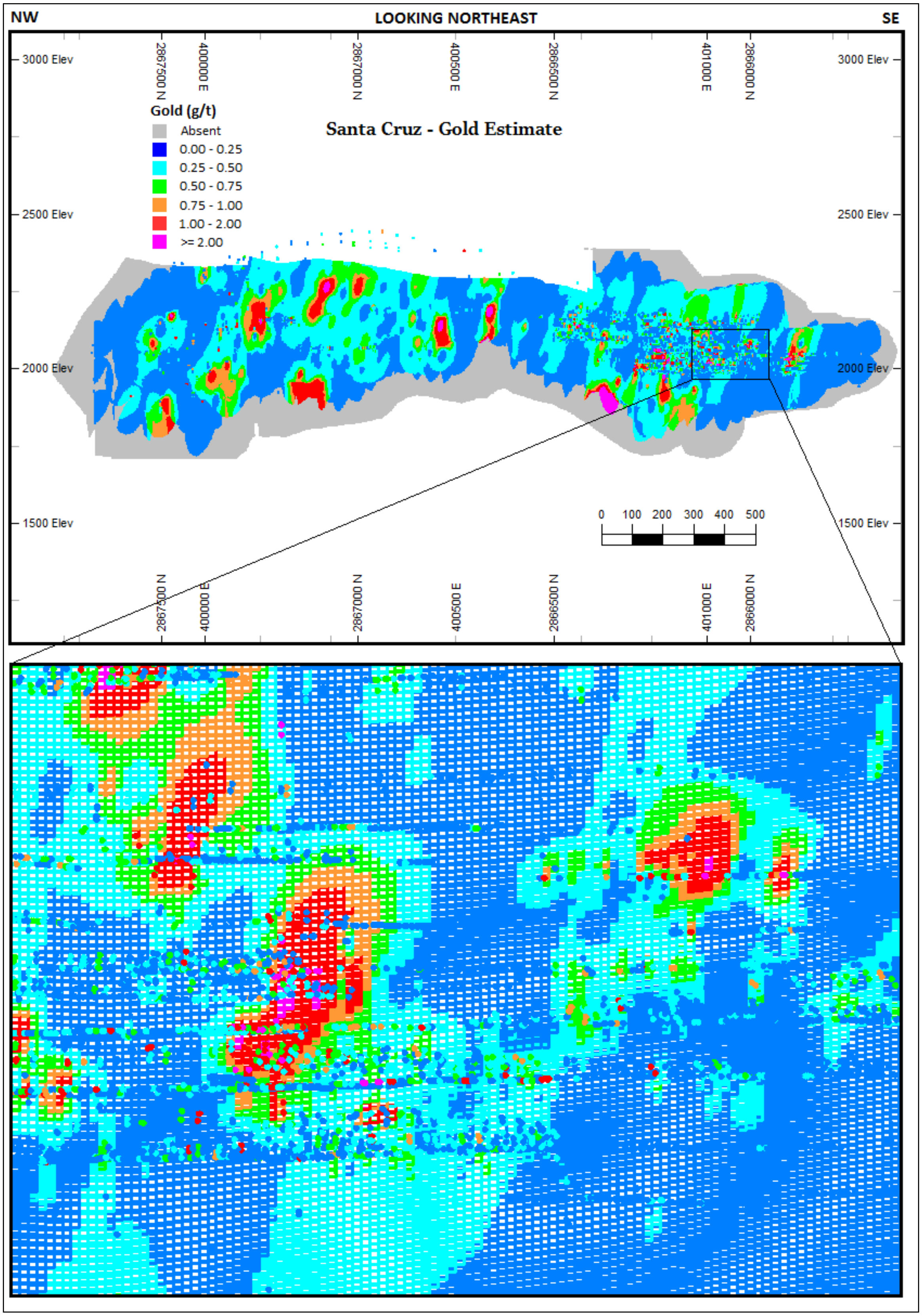

Figure 14-13 Long Section view of Santa Cruz Vein Block Model showing the Estimated Gold Grades and Composites

14.4.7.3 *Mineral Resource Classification*

HRC used rectangular search ellipses from channel sample and drillhole composites to classify the mineral resource. Measured mineral resources are those blocks within 10 meters of a channel sample, and have a silver estimate greater than or equal to 0 g/t. Indicated mineral resources are those blocks within 40 meters of a channel sample or drillhole sample, and have a silver estimate greater than or equal to 0 g/t. Inferred mineral resources are those blocks greater than 40 meters from a sample and have a value for estimated silver.

14.5 Guanaceví Mineral Resource Statement

The mineral resource estimate includes all analytical data obtained as of December 31, 2016. Mineral resources are not mineral reserves and may be materially affected by environmental, permitting, legal, socio-economic, political, or other factors.

Mineral resources are reported above a silver equivalent grade of 198 gpt, assuming a silver price of $16.29 per ounce. HRC used a cutoff grade to test for reasonable prospects for economic extraction. Baseline assumptions for breakeven cutoff grade are based on Table 14-19:

Table 14-19 Cutoff Grade Assumptions for Guanaceví Mine

Guanaceví Resource Cutoff	
Ag $/oz	$16.29
Au $/oz	$1,195.00
Recovery Ag	0.825
Recovery Au	0.854
Smelter Payable Ag	0.99
Smelter Payable Au	0.99
Mining Cost $/t	$34.66
Process Cost $/t	$26.64
G&A Cost $/t	$20.22
SRF Costs $/t	$3.38
NSR Ag $/g	$0.43
NSR Au $/g	$32.50
Mine Cutoff $/t	$84.90
Mine Cutoff AgEq g/t	**198**

Based on these assumptions, HRC considers that reporting resources at a 182 g/t cutoff constitutes reasonable prospects for economic extraction based on the current mining method and demonstrated recoveries.

14.5.1 VLP Mineral Resource Estimate

The VLP mineral resource presented in Table 14-20 is exclusive of the mineral reserves.

Table 14-20 Polygonal Resource at the Guanaceví, Effective Date of December 31, 2016

Area	Classification	Tonnes	Silver Equivalent	Silver		Gold	
			g/t	g/t	oz.	g/t	oz.
Epsilon - Soto	Measured	0	0	0	0	0.00	0
	Indicated	57,300	379	336	619,122	0.56	1,037
	Measured + Indicated	57,300	379	336	619,122	0.56	1,037
	Inferred	153,800	686	597	2,953,833	1.17	5,795
La Blanca - Mi Niña	Measured	0	0	0	0	0.00	0
	Indicated	58,800	324	276	522,097	0.63	1,189
	Measured + Indicated	58,800	324	276	522,097	0.63	1,189
	Inferred	0	0	0	0	0.00	0
San Joaquin	Measured	0	0	0	0	0.00	0
	Indicated	0	0	0	0	0.00	0
	Measured + Indicated	0	0	0	0	0.00	0
	Inferred	0	0	0	0	0.00	0
TOTAL	Measured	0	0	0	0	0.00	0
	Indicated	116,100	351	306	1,141,219	0.60	2,225
	Measured + Indicated	116,100	351	306	1,141,219	0.60	2,225
	Inferred	153,800	686	597	2,953,833	1.17	5,795

14.5.2 3D Block Model Mineral Resource Estimate

The VLP mineral resource presented in Tables 14-21 through 14-23 is exclusive of the mineral reserves.

Table 14-21 3D Block Model Resource at the Guanaceví Mine, Effective Date of December 31, 2016

Zone	Classification	Tonnes (metric)	Silver Equivalent	Silver		Gold	
			(g/t)	(g/t)	(oz)	(g/t)	(oz)
A12 Principal	Measured	4,379	368	319	44,861	0.65	92
	Indicated	20,560	321	280	185,106	0.54	356
	Measured + Indicated	24,940	329	287	229,966	0.56	448
	Inferred	12,213	275	239	93,875	0.47	185
A12 Trinche	Classification	Tonnes (metric)	Silver Equivalent	Silver		Gold	
			(g/t)	(g/t)	(oz)	(g/t)	(oz)
	Measured	1,301	271	235	9,843	0.47	20
	Indicated	12,700	407	327	133,554	1.05	430
	Measured + Indicated	14,001	395	319	143,397	1.00	450
	Inferred	2,857	335	278	25,559	0.75	69
A13 Trinche	Classification	Tonnes (metric)	Silver Equivalent	Silver		Gold	
			(g/t)	(g/t)	(oz)	(g/t)	(oz)
	Measured	523	206	167	2,802	0.52	9
	Indicated	884	205	166	4,708	0.51	15
	Measured + Indicated	1,407	205	166	7,510	0.52	23
	Inferred	88	205	166	470	0.52	1
Bajo	Classification	Tonnes (metric)	Silver Equivalent	Silver		Gold	
			(g/t)	(g/t)	(oz)	(g/t)	(oz)
	Measured	22	212	182	126	0.39	0
	Indicated	1,119	246	210	7,573	0.46	17
	Measured + Indicated	1,141	245	210	7,699	0.46	17
	Inferred	226	327	285	2,068	0.55	4
Bajo 2	Classification	Tonnes (metric)	Silver Equivalent	Silver		Gold	
			(g/t)	(g/t)	(oz)	(g/t)	(oz)
	Measured	3,592	329	286	33,078	0.55	64
	Indicated	25,822	324	282	234,084	0.56	464
	Measured + Indicated	29,414	325	283	267,162	0.56	528
	Inferred	4,510	228	198	28,685	0.40	58
Milache FW	Classification	Tonnes (metric)	Silver Equivalent	Silver		Gold	
			(g/t)	(g/t)	(oz)	(g/t)	(oz)
	Measured	0	0	0	0	0	0
	Indicated	57,457	309	247	455,702	0.82	1,509
	Measured + Indicated	57,457	309	247	455,702	0.82	1,509
	Inferred	12,268	248	176	69,492	0.94	371
Milache	Classification	Tonnes (metric)	Silver Equivalent	Silver		Gold	
			(g/t)	(g/t)	(oz)	(g/t)	(oz)
	Measured	0	0	0	0	0	0
	Indicated	437,676	438	366	5,155,135	0.94	13,269
	Measured + Indicated	437,676	438	366	5,155,135	0.94	13,269
	Inferred	47,056	353	294	444,185	0.78	1,183

Table 14-22 3D Block Model Resource at the Guanaceví Mine, Effective Date of December 31, 2016 (Cont.)

Area	Classification	Tonnes	Silver Equivalent	Silver		Gold	
			g/t	g/t	oz.	g/t	oz.
Porvenir Norte Z2	Measured	3,185	241	207	21,227	0.45	46
	Indicated	400,024	318	276	3,548,564	0.56	7,150
	Measured + Indicated	403,209	318	275	3,569,791	0.56	7,196
	Inferred	30,189	285	249	241,499	0.48	464
	Classification	Tonnes	Silver Equivalent	Silver		Gold	
			g/t	g/t	oz.	g/t	oz.
Porvenir Norte ZN	Measured	2,223	278	261	18,685	0.22	16
	Indicated	84,164	351	311	841,341	0.53	1,429
	Measured + Indicated	86,387	349	310	860,026	0.52	1,445
	Inferred	52,980	328	279	474,887	0.64	1,094
	Classification	Tonnes	Silver Equivalent	Silver		Gold	
			g/t	g/t	oz.	g/t	oz.
R1	Measured	759	231	212	5,180	0.25	6
	Indicated	16,793	266	237	128,035	0.38	205
	Measured + Indicated	17,551	265	236	133,215	0.37	211
	Inferred	2,495	246	217	17,392	0.39	31
	Classification	Tonnes	Silver Equivalent	Silver		Gold	
			g/t	g/t	oz.	g/t	oz.
R2	Measured	16	305	279	142	0.34	0
	Indicated	2,142	254	232	15,993	0.28	19
	Measured + Indicated	2,158	254	233	16,135	0.28	20
	Inferred	-	-	-	-	-	-
	Classification	Tonnes	Silver Equivalent	Silver		Gold	
			g/t	g/t	oz.	g/t	oz.
R2 (Lower)	Measured	263	275	238	2,014	0.48	4
	Indicated	614	207	182	3,597	0.32	6
	Measured + Indicated	877	227	199	5,611	0.37	10
	Inferred	70	202	178	400	0.31	1
	Classification	Tonnes	Silver Equivalent	Silver		Gold	
			g/t	g/t	oz.	g/t	oz.
R3	Measured	-	-	-	-	-	-
	Indicated	-	-	-	-	-	-
	Measured + Indicated	-	-	-	-	-	-
	Inferred	-	-	-	-	-	-
	Classification	Tonnes	Silver Equivalent	Silver		Gold	
			g/t	g/t	oz.	g/t	oz.
Rint	Measured	-	-	-	-	-	-
	Indicated	-	-	-	-	-	-
	Measured + Indicated	-	-	-	-	-	-
	Inferred	-	-	-	-	-	-

Table 14-23 3D Block Model Resource at the Guanaceví Mine, Effective Date of December 31, 2016 (Cont.)

Area	Classification	Tonnes	Silver Equivalent	Silver		Gold	
			g/t	g/t	oz.	g/t	oz.
Santa Cruz South	Measured	-	-	-	-	-	-
	Indicated	443,684	319	255	3,643,091	0.83	11,869
	Measured + Indicated	443,684	319	255	3,643,091	0.83	11,869
	Inferred	120,133	324	267	1,032,092	0.75	2,882
Santa Cruz South FW1	Measured	-	-	-	-	-	-
	Indicated	261,536	402	334	2,807,836	0.89	7,495
	Measured + Indicated	261,536	402	334	2,807,836	0.89	7,495
	Inferred	17,864	391	336	192,958	0.72	412
Santa Cruz South FW2	Measured	-	-	-	-	-	-
	Indicated	70,196	309	282	636,828	0.36	806
	Measured + Indicated	70,196	309	282	636,828	0.36	806
	Inferred	3,656	315	289	33,974	0.34	40
Santa Cruz	Measured	52,747	278	243	412,385	0.46	780
	Indicated	319,044	300	259	2,653,236	0.54	5,523
	Measured + Indicated	371,791	297	256	3,065,621	0.53	6,303
	Inferred	177,456	435	378	2,158,049	0.75	4,285
TOTAL	Measured	69,008	284	248	550,343	0.47	1,037
	Indicated	2,154,416	351	295	20,454,383	0.73	50,563
	Measured + Indicated	2,223,424	349	294	21,004,725	0.72	51,600
	Inferred	484,060	364	309	4,815,585	0.71	11,081

14.5.3 Guanaceví Mineral Resource Statement

The mineral resources for the Guanaceví mine as of December 31, 2016, are summarized in Table 14-24. The resources are exclusive of the mineral reserves.

Table 14-24 Mineral Resource Estimate, Effective Date December 31, 2016

Classification	Tonnes	Silver Equivalent	Silver		Gold	
		g/t	g/t	oz.	g/t	oz.
Measured	69,000	284	248	550,300	0.47	1,000
Indicated	2,271,000	351	296	21,595,600	0.72	52,800
Measured + Indicated	2,340,000	349	295	22,145,900	0.71	53,800
Inferred	638,000	441	379	7,769,400	0.82	16,900

1. Measured, Indicated and Inferred resource cut-off grades were 198 g/t silver equivalent at Guanaceví.
2. Mineral resources are not mineral reserves and do not have demonstrated economic viability. There is no certainty that all or any part of the mineral resources estimated will be converted into mineral reserves.
3. Metallurgical recoveries were 82.5% silver and 85.4% gold.
4. Silver equivalents are based on a 75:1 silver: gold ratio
5. Price assumptions are $16.29 per ounce for silver and $1,195 per ounce for gold for resource cutoff calculations.
6. Mineral resources are estimated exclusive of and in addition to mineral reserves.

15. MINERAL RESERVE ESTIMATES

Mr. Jeff Choquette, P.E., MMSA QP Member, of HRC is responsible for the mineral reserve estimate presented here. Mr. Choquette is Qualified Person as defined by NI 43-101 and is independent of EDR. The mineral reserve calculation was completed in accordance with NI 43-101, Mexico and has an effective date of December 31st, 2016. HRC completed the mineral reserve estimate based on the Santa Cruz and Porvenir Norte areas of the mine and the ore stockpiles at the mill site. Stope designs for reporting the reserves were created utilizing the updated resources and cutoffs established for 2016. All of the stopes are within readily accessible areas of the active mining areas. Ore is processed in the on-site mill, leaching circuit and Merrill Crowe process capable of processing 1,300 tpd.

15.1 CALCULATION PARAMETERS

HRC utilized Datamine's Mineable Shape Optimizer ("MSO") program to generate the stopes for the reserve mine plan. The MSO stope designs are then used to design stopes on levels along with the required development for the final mine plans. The parameters used to create the stopes are listed below;

- Cutoff Grade: 198 g/t AgEq
- Minimum Mining Width: 1.4 m.
- Cut and Fill Stope Size: 15m W x 5m H
- Long Hole Stope Size: 15m W x 20m H
- External Dilution Cut and Fill: 15%
- External Dilution Long Hole: 30%
- Silver Equivalent: 75:1 silver to gold
- Gold Price: US $1,195/oz.
- Silver Price: US $16.29/oz.
- Gold Recovery: 85.4%
- Silver Recovery: 82.5%

The stopes were only created with the updated Measured and Indicated mineral resources above the calculated cutoff and have demonstrated to be economically viable, therefore Measured and Indicated mineral resources within the stopes have been converted to Proven and Probable mineral reserves as defined by NI 43-101. All Inferred material has been classified as waste.

EDR also has ore grade stockpiles from current and past mining areas which are classified as part of the overall mineral reserve. These stockpiles are used frequently to balance the feed into the plant.

15.1.1 Dilution

Dilution is applied to Measured and Indicated resource blocks depending on the mining method chosen. For blocks to be exploited using conventional cut and fill methods, external dilution was applied in the amount of 15% at a grade of zero. For blocks to be exploited using long hole methods, external dilution was applied in the amount of 30% at a grade of zero. Internal dilution is also applied based on any blocks that fall inside the stope shape but are below cutoff. A mining recovery is also applied to converted resources and is estimated at 95%. The overall result of these factors resulted in and overall dilution factor of 29% for Guanaceví.

There is no supporting documentation to support these dilutions or mining recovery estimates. HRC recommends that individual dilution and recovery studies be performed on various veins and types of reserve blocks to refine the global estimates used for dilution and mining recovery.

The global dilution and mining recovery factors at Guanaceví have varied over time depending on company philosophy and experience in reconciling estimated mine production with mill sampling. Dilution and mining recoveries are functions of many factors including workmanship, design, vein width, mining method, extraction, and transport. Currently, there is limited information upon which to measure actual dilution and recovery in the stopes, and transport system. The majority of stoping is now done using long hole methods. Without a cavity measuring survey instrument, measuring dilution in these types of stopes is problematic.

15.1.2 Cutoff Grade

The mining breakeven cut-off grade was utilized in Datamine's MSO program to generate the stope designs for defining the reserves. The MSO stope designs are then used to design stopes on levels along with the required development for the final mine plans. The actual production cost data from the third quarter of 2016, reserve price assumptions, and mill recoveries are used to calculate the reserve breakeven cut-off grade. The parameters used for the calculation are presented in Table 15-1.

The cut-off is stated as silver equivalent since the ratio between gold and silver is variable and both commodities are sold. The average cut-off grade used for the Guanaceví Property is 198 g/t Ag equivalent. Silver equivalent grade is calculated as the silver grade + (gold grade * 75), taking into account gold and silver prices and expected mill recoveries.

Table 15-1 Mineral Reserve Breakeven Cutoff for the Guanaceví Property

Guanaceví Reserve Cutoff	
Ag $/oz	$16.29
Au $/oz	$1,195.00
Recovery Ag	0.825
Recovery Au	0.854
Smelter Payable Ag	0.99
Smelter Payable Au	0.99
Mining Cost $/t	$34.66
Process Cost $/t	$26.64
G&A Cost $/t	$20.22
SRF Costs $/t	$3.38
NSR Ag $/g	$0.43
NSR Au $/g	$32.50
Mine Cutoff $/t	$84.90
Mine Cutoff AgEq g/t	**198**

15.1.3 Reconciliation of Mineral Reserves to Production

Production monitoring and reconciliation of mineral reserves are the ultimate activities by which the mineral reserve estimate can continuously be calibrated and refined. The only valid confirmation of both the mineral resource and mineral reserve estimate is through appropriate production monitoring and reconciliation of the estimates with mine and mill production. Proper reconciliation is required to validate the mineral reserve estimates and allows a check on the effectiveness of both estimation and operating procedures. Reconciliations identify anomalies which may prompt changes to the mine/processing operating practices and/or to the estimation procedure.

The geology staff at Guanaceví prepare reconciliations of the Life of Mine plan (LOM) to actual production from sampling on a monthly basis.

The reconciliation compares the LOM with geology estimates from chip sampling and plant estimates based on head grade sampling. Reconciliation estimates a positive variance on tonnes for both geology and LOM as compared to the plant reported tonnes for 2016 (Table 15-2). Estimated tonnage was 17% lower for geology and 27% lower for the plant than specified in the LOM. Silver equivalent grades were 2.5% lower for geology and 7% lower for the plant than specified in the LOM. The differences in less tonnage and lower grades than the LOM can be attributed to lower silver prices and thus development was limited during 2016.

Table 15-2 Mine to Plant Reconciliation

	LOM_2016	Geology Short Term	Plant
Ore Mined	455,967	388,888	357,225
Grade Au	0.46	0.45	0.46
Grade Ag	247	241	228
Grade AgEq	282	275	263
Ounces Au	6,765	5,665	5,254
Ounces Ag	3,618,537	3,007,142	2,617,010
Ounces AgEq	4,132,693	3,437,700	3,016,319

Although the reconciliations conducted by EDR show fair comparisons on planned values versus actual values the reconciliation process should be improved to include the estimated tonnes and grade from the resource models. By comparing the LOM plan on a monthly basis to the plant production the actual physical location of the material mined may be different in the plan versus the actual area that was mined. Due to the many faces that are mined during a day this can only be completed on an averaged monthly basis due to blending of these areas into the mill. The monthly surveyed as mined areas should be created and saved on a monthly basis for reporting the modeled tonnes for each month. The combination of the 3D block models and 2D and polygonal reserves makes this process difficult, but considerable progress has been made during the last year to get all resources and reserves into 3D block models. The model predicted results versus actuals can then be used to determine if dilution factors need to be adjusted or perhaps the resource modeling parameters may require adjustment if there are large variances.

15.2 Mineral Reserves

Mineral reserves are derived from Measured and Indicated resources after applying the economic parameters as stated previously, and utilizing Datamine's MSO program to generate stope designs for the reserve mine plan. The MSO stope designs are then used to design stopes on levels along with the required development for the final mine plans. The Guanaceví Project mineral reserves have been derived and classified according to the following criteria:

- Proven mineral reserves are the economically mineable part of the Measured resource for which mining and processing / metallurgy information and other relevant factors demonstrate that economic extraction is feasible. For Guanaceví Project, this applies to blocks located within approximately 10m of existing development and for which EDR has a mine plan in place.
- Probable mineral reserves are those Measured or Indicated mineral resource blocks which are considered economic and for which EDR has a mine plan in place. For the Guanaceví mine project, this is applicable to blocks located a maximum of 35m either vertically or horizontally from development with two exceptions in the main lower Santa Cruz vein and the A12 Principle vein. Reserves for these two veins were defined in areas that have development designed and approved for 2017.

Figure 15-1 shows reserve blocks depicted on a portion of a typical longitudinal section. Proven reserve blocks are shown in red, Probable reserve blocks are shown in green. The mine planners have determined that extraction of the blocks is feasible given grade, tonnes, costs, and access requirement.

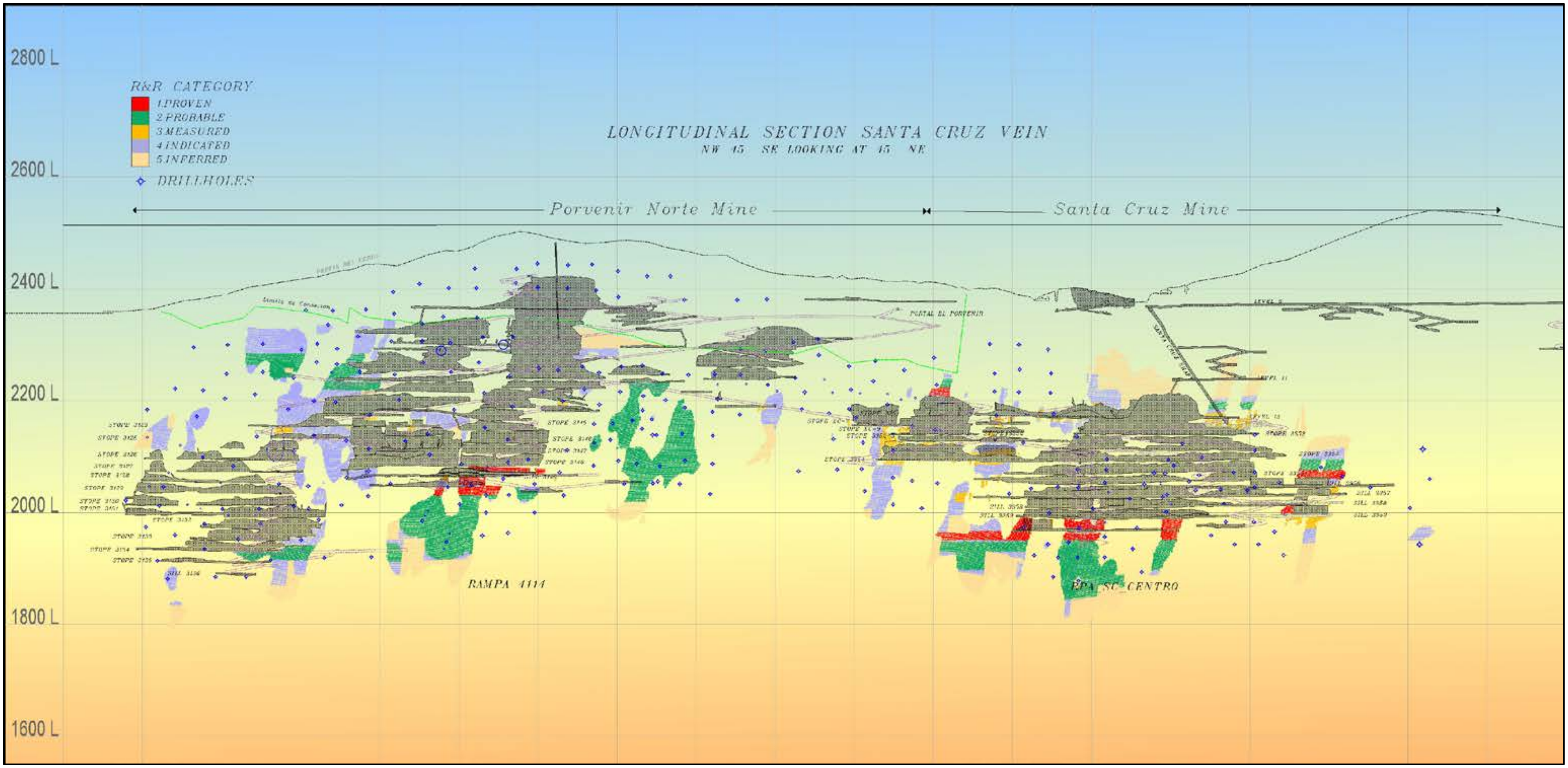

Figure 15-1 Santa Cruz Vein Resource and Reserve Section

15.3 Reserve Classification

The Proven and Probable mineral reserves for the Guanaceví mine as of December 31, 2016 are summarized in Table 15-3. The mineral reserves are exclusive of the mineral resources reported in Section 14 of this report.

Table 15-3 Proven and Probable Mineral Reserves, Effective Date December 31, 2016

Classification	Vein	Tonnes (t x 1,000)	AgEq g/t	Ag g/t	Ag (oz) * 1,000	Au g/t	Au (oz) * 1,000	% Dilution
Proven	A12 Principal	26.6	277	240	204.8	0.49	0.42	29%
	A12 Trinche	0.3	218	187	1.7	0.41	0.00	20%
	Bajo 2	10.6	218	188	64.0	0.39	0.13	20%
	Santa Cruz Vein	49.0	303	264	415.7	0.52	0.81	26%
Proven Total		**86.5**	**284**	**247**	**686.2**	**0.49**	**1.37**	**26%**
Probable	A12 Principal	83.8	321	260	700.6	0.80	2.15	27%
	Porvernir Norte ZN	64.5	270	235	486.3	0.47	0.97	26%
	Santa Cruz Vein	359.9	316	268	3,098.3	0.64	7.35	31%
Probable Total		**508.2**	**311**	**262**	**4,285.2**	**0.64**	**10.48**	**30%**
Total Proven and Probable Reserves		**594.7**	**307**	**260**	**4,971.4**	**0.62**	**11.84**	**29%**

1. Reserve cut-off grades are based on a 198 g/t silver equivalent.
2. Metallurgical Recoveries were 82.5% silver and 85.4% gold.
3. Mining Recoveries of 95% were applied.
4. Minimum mining widths were 1.4 meters.
5. Dilution factors averaged 29%. Dilution factors are calculated based on internal stope dilution calculations and external dilution factors of 15% for cut and fill and 30% for long hole.
6. Silver equivalents are based on a 75:1 silver:gold ratio.
7. Price assumptions are $16.29 per ounce for silver and $1,195 per ounce for gold.
8. Mineral resources are estimated exclusive of and in addition to mineral reserves.
9. Figures in table are rounded to reflect estimate precision; small differences generated by rounding are not material to estimates.

15.4 Factors that may affect the Reserve Calculation

The Guanaceví operation is an operating mine with a relatively long history of production. The mine staff possess considerable experience and knowledge with regard to the nature of the orebodies in and around the Guanaceví Property. Mine planning and operations need to continue to assure that the rate of waste development is sufficient to maintain the production rates included in the mine plan.

It is unlikely that there will be a major change in ore metallurgy during the life of the current reserves, as nearly all of the ore to be mined will come from veins with historic, recent, or current production.

The process of mineral reserve estimation includes technical information which requires subsequent calculations or estimates to derive sub-totals, totals and weighted averages. Such calculations or estimations inherently involve a degree of rounding and consequently introduce a margin of error. The QP does not consider these errors to be material to the reserve estimate.

Areas of uncertainty that may materially impact the Mineral Reserves presented in this report include the following:

- Mining assumptions,
- Dilution assumptions,
- Exchange rates,
- Changes in taxation or royalties,
- Variations in commodity price,
- Metallurgical recovery, and
- Processing assumptions.

16. MINING METHODS

16.1 Mining Operations

Since January 1, 2007, EDR has been in control of the day-to-day mining operations at the Guanaceví Project. EDR assumed control of the mining operations from a local mining contractor in order to allow for more flexibility in operations and to continue optimizing the costs.

As of December 31, 2016, the Guanaceví mines project had a roster of 546 employees and an additional 387 contractors. The mine operates on two 10-hour shifts, 7 days a week, whereas the mill operates on a 24/7 schedule. The miners are skilled and experienced in vein mining and are currently unionized. There is an incentive system in place rewarding personnel for good attendance, safety and production. Technical services and overall supervision are provided by EDR staff. The mine employs geology, planning and surveying personnel and has detailed production plans and schedules. All mining activities are being conducted under the direct supervision and guidance of the mine manager.

16.2 Geotechnical Factors

The Porvenir mine is a high-grade silver-gold, epithermal vein deposit, characterized by low sulphidation geochemistry and adularia-sericite alteration. The Santa Cruz vein is the host of the silver and gold mineralization. It is oriented northwest and occurs principally within the Guanaceví Formation, with a preferred strike of N45°W and dips of between 50° and 55° to the southwest.

The footwall is an unaltered andesite that has rock quality determinations (RQD) ranging from 80 to 100. This is competent ground that only occasionally requires additional support such as 6-foot spilt-set bolts or shotcrete.

The vein is a classic quartz vein that varies from 1 to 5m wide, with an average width of approximately 3m. The footwall contact is defined by a clear change of rock type from vein material to unaltered andesite. The hanging wall contact is typically defined by a clear structural boundary between the vein and the hanging wall rocks, with the contact usually defined as the Santa Cruz fault, a normal fault characterized by striations and fault gouge. The gouge material is typically white clay that can range from 5mm up to 2m in thickness. The vein is generally self-supporting over the entire width and requires no mechanical supports. When vein widths increase beyond 5m, some local support in the form of split-set bolts and welded wire mesh may be required. In some areas, post-mineral movement of the fault has caused some fracturing along the vein.

In the Porvenir Deep zone, mineralization is hosted both in the vein and in altered and weakly to moderately oxidized wall rocks. The vein and argillic altered andesitic hosts to mineralization are moderately fractured with RQDs ranging from <20% locally to typically 50 to 80%. Mine workings in the lower levels have openings up to 12m in width without experiencing serious ground problems, but requiring ground support. Typically, the wider mineralized zones are not close to the hanging wall fault and are less prone to the hanging wall instability issues seen in some other parts of the mine.

The footwall to the Porvenir Deep zone in its central part consists of oxidized and argillic altered andesite with a number of faults, the latter generally requiring support in the form of split sets. The immediate footwall zone is moderately competent but, from about 10 m to 40 m from the vein, systematic ground support is required, consisting of both split sets and wire mesh. One major fault zone requires more extensive support in the form of timber or steel sets due to water lubrication of the clay-filled fault plane.

The hanging wall is an andesite with adularia-sericite alteration which varies locally from very weak to very strong, depending on the amount of argillic phases. In the zones of intense argillic hanging wall alteration, ground support such as 1.8 m Split set bolts and welded mesh support straps are required on a 1.5 m by 1.5 m spacing to maintain stability. Occasionally, a thin cap of vein material is left on the hanging wall to prevent weathering of the clay and assist with stability.

16.3 Mining Method

Conventional cut and fill mining or by long hole stope methods are employed at Guanaceví. Cut and fill stopes are generally 15m long and 5m high, and long hole stopes are 15m long and 20m high. Access to the stoping areas is provided by a series of primary and secondary ramps located in the footwall. The ramps have grades from minus 15% to plus 12%, with plus or minus 12% as standard. The cross-cuts are 4 m by 4 m for the primary ramps and 3.5 m by 3.5 m for the secondary ramps.

In the upper parts of the mine, stope access is by short (10m to 40m) cross-cuts from the ramp to the vein/stope. These cross-cuts are generally 3.5m by 3.5m in cross-section and are usually driven down at minus 18% to intersect with the stope. As the stope advances up-dip on the vein, the back is taken down in these cross-cuts to maintain access until the cross-cut reaches a maximum inclination of 15%.

In the lower parts of the mine (below the water table) stope access is by 90m long cross-cuts to the vein/stope. The cross-cuts are generally 3.0m by 3.5m in cross-section and are driven at plus 1% to intersect the stope (for water drainage). As the stope advances up-dip on the vein, the back is taken down in the cross-cuts to maintain access until the cross-cut reaches a maximum inclination of plus 15%.

Mining in the stopes is done with jackleg drills. Back cuts are taken 2m to 2.5m high via vertical up-hole drilling or by breasting. The broken material is mucked out using scooptrams (2 yard or 3.5 yard depending on vein width). Waste fill from mine development is placed in the stope by the same scooptrams to within 2 m to 2.5 m of the back. When the vein is less than minimum mining width, the footwall is slashed to provide adequate width. This slashing is done during the fill cycle and the slashed material remains in the stope as fill.

In 2013 there was a move to using long hole methods in the narrower parts of the mine. The long hole method increases production heights from typically 1.8m to up to 15m and at a reduced cost. Dilution and hanging wall failure is controlled using cemented 11m long fortifying cable bolts.

Mining dilution has been estimated by EDR as variable with a minimum of 0.4m of over break dilution and a minimum operational width of 2.2m. Additional dilution is derived from the footwall especially in sill development, from occasional hanging wall failure and from re-mucking of floor fill. In general, dilution is estimated at being between 15% and 32%, while unrecoverable ore is estimated at approximately 5%. The dilution material in almost all cases is mineralized.

Sill development that have high-grade ore in the floor are candidates for installing a concrete pillar. The sill is filled with one meter of cemented rock fill when stoping begins which allows for recovery of the sill pillar. The cemented rock fill consists of development waste mixed with 5% by weight ordinary Portland cement which is placed over a 5mm steel welded mesh on the sill floor. The cemented rock fill is mixed in a muck bay adjacent to the stope by the same scooptrams that place it into the stope. The cemented rock fill is placed into the sill starting at the entrance so that the scooptram is driving on top of the fresh fill to provide compaction. This method works well and is common in Mexico.

16.4 Mine Equipment

Ore and waste transportation is by scooptram and truck haulage. Ore and waste haulage is performed using three 15-tonne underground trucks which are complemented with thirteen tonne capacity diesel highway trucks. For stope and development mucking, EDR and the contractor have scooptrams ranging in size from 1-yard to 4.5 yards. Single boom jumbo drills and jacklegs are used for development headings and conventional cut and fill stope drilling is by jackleg and long hole stopes are drilled using three pneumatic long hole machines. A scissor lift truck is used for services including bolting, and installing piping and ventilation. Complete maintenance and service facilities for the underground mobile equipment are located near the mine portal and two underground shops one in Porvenir North and the other in Santa Cruz. Table 16-1 lists the EDR owned equipment and Table 16-2 lists the contractor equipment.

Table 16-1 EDR Mine Equipment

Loaders	Capacity	Model	Qty
Scoop Tram	2 yds	TORO 151	3
Scoop Tram	2yds	LH-203	3
Scoop Tram	3.5 yds	TORO 006	4
Scoop Tram	3.5 yds	LH-307	6
Trucks	**Capacity**	**Model**	**Qty**
Truck	110 Hp	JOB 1264	1
Truck	15 t	TORO EJC 522	1
Truck	113 Hp	600R	1
Drills	**Capacity**	**Model**	**Qty**
Drill	12 ft	QUASAR	2
Drill	16 ft	DD311-40	1
Drill	14 ft	OLDENBURG	1
Drill L.H.		STOPE MATE	1
Drill L.H.		RAPTOR 44 RESEMIN	1
Drill L.H.		MUKY LH RESEMIN	1
Jacklegs		RPN	29
Other	**Capacity**	**Model**	**Qty**
Tractor	75 hp	TT-75	4
Tractor	80 Hp	575	5
Scissor lisft	128 hp	RDH	1
Vehicles		Varies	22

Table 16-2 Contractor Mine Equipment

GCVI Contractors Mine Equipment			
Loaders	**Capacity**	**Model**	**Qty**
Scoop Tram	1 yds	WAGNER	2
Scoop Tram	1.25 yd	MTI 210	1
Scoop Tram	1.5 yd	TAMROCK T151, JOY LT 270	2
Scoop Tram	2 yds	WAGNER ST 2 B	1
Scoop Tram	3.5 yds	WAGNER	1
Scoop Tram	4.5 yds	JOY LT 650, LH-307	4
Drills	**Capacity**	**Model**	**Qty**
Drill	14 ft	Triodon D55 XP	1
Drill	14 ft	VEIN RUNNER II	1
Drill	10 ft	Muki FF-JMC 280	1
Jacklegs		RPN/REPEMEX	35
Other	**Capacity**	**Model**	**Qty**
Vehicles		Varies	6
Conventional Trucks	7 m^3	varies	13

16.5 Mine Production

In 2016, the total ore production was approximately 19% from the Porvenir North mine, 74% from the Santa Cruz mine and 7% from Porvenir 4.

The production from the Porvenir North mine was distributed in three main areas of the mine (Upper Porvenir North, Deep Porvenir North and Central Porvenir North). The area of Upper Porvenir North, provided 34% of production from the mine. The stopes that contributed the most in this area were the R-3122, 3123-R and R-3124. In Deep Porvenir North, production was from the R-3133 and R-3134 stopes which represented 8% of the production. Central Porvenir North produced the most tonnage providing 39% of the total production. Stopes that contributed from this were the R-3145-2, R-3146-2, R-3149 and R-3150. The development from Porvenir North produced 15% of production from the mine. In the Upper Porvenir North mine development was from the S-3117, S-3122 and S-3123 levels. In Central Porvenir North mine development was from the S-3149, 3150-S and S-3157 levels.

In the Santa Cruz mine, the main ramp development was advanced to the 3359 and 3360 levels. During 2016 continued side ramps were developed to enter the main vein at the southern end of mine. Lateral ramps were developed from the ramp on the 4118, R-3348, 3349-R, R-3350 and R-3351 levels. Historic workings on level 13 were also opened to extract remnant ore zones. Production from stopes concentrated on the R-3352, R-3353, R-3354, R-3356, 3357-R and R-3359 stoping levels with R-3352 being the largest contributor. These stopes presented approximately 80% of the total production from Santa Cruz during 2016. Development ore represented approximately 7% of the total production.

In the Porvenir 4 mine development concentrated on the 3508 and 3509 ramps. Production from the mine was mainly from the S-3507, S-3508 and B S-3509 levels. Ore from these stopes represented approximately 24% of ore generated from the mine. Stope production concentrated on the R-3506, R-3507, R-3508, R-3508 B INT B Y R-3509 stopes.

Total mine reported production for 2016 was 367,441 tonnes at 232 g/t Ag and 0.51 g/t Au as shown in Table 16-3 below.

Table 16-3 2016 Actual Production

Total	Qrt 1	Qrt 2	Qrt 3	Qrt 4	Total
Production Tonnes	98,776	98,756	82,059	87,850	**367,441**
Development Tonnes	49,355	76,765	72,234	65,677	**264,031**
Total Tonnes	**148,131**	**175,521**	**154,293**	**153,527**	**631,472**
Ag (g/t)	249	232	235	211	**232**
Au (g/t)	0.56	0.49	0.51	0.49	**0.51**
Ag (oz)	651,731	629,221	542,385	540,708	**2,364,045**
Au (oz)	1,568	1,365	1,163	1,232	**5,328**
Waste meters	1,647	2,478	2,902	2,685	**9,712**
Meters on Vein	586	635	1,133	1,322	**3,676**
Total Meters	**2,233**	**3,113**	**4,035**	**4,007**	**13,388**

The remaining reserve life-of-mine plan is based on a nominal production rate of 1,300 tonnes per day of ore mined from underground. This plan is also based on $16.29/oz silver and $1195/oz gold, and additional parameters as shown in Table 15-1. Utilizing nominal production rates, the remaining reserves show an expected mine life of 1.4 years. Total development planned for 2017 is 18,567 meters with 13,072 of those meters in waste development and 5,495 meters in ore.

As stated previously in section 15.1.1 dilution is applied to Measured and Indicated resource blocks depending on the mining method chosen. For blocks to be exploited using conventional cut and fill methods, external dilution was applied in the amount of 15% at a grade of zero. For blocks to be exploited using long hole methods, external dilution was applied in the amount of 30% at a grade of zero. Internal dilution is also applied based on any blocks that fall inside the stope shape but are below cutoff. A mining recovery is also applied to converted resources and is estimated at 95%. The overall result of these factors resulted in an overall dilution factor of 29% for Guanaceví.

17. RECOVERY METHODS

The beneficiation plant at Guanaceví utilizes a standard process of dynamic leaching and Merrill Crowe process capable of processing 1,300 tons of ore daily.

17.1 Production

For the year ending December 31, 2016, silver production was 2,364,045 oz and gold production was 5,328 oz. Plant throughput for 2016 was 367,441 tonnes at an average grade of 232 g/t silver and 0.51 g/t gold. Mill recoveries averaged 86.3% for silver and 88.4% for gold during 2016.

In 2016, the Guanaceví mill processed ore from the Porvenir mine (North Porvenir and El Porvenir), Porvenir 4 and the Santa Cruz mine.

17.2 Mineral Processing

The mill was originally built in 1970 by the Mexican government and was designed to custom mill ores from various mines in the district. Figure 17-1 is a partial view of the mill.

Figure 17-1 View of Leach Tanks and CCD Circuits

The Guanaceví processing plant consists of the following circuits:

- Crushing: ore bins, conventional crushing with a 30"x42" jaw crusher, 24"x36" jaw crusher, a 4-foot secondary cone and 3-foot tertiary cone crushers, a 5'x10' vibrating screen (-½" to -5/8").
- Grinding: 5 ball mills, a 10.5'x12' Hardinge, two 7'x7.5' Denver, a 5'x 6' Fimsa ball mill and an Allis-Chalmers 5'x4'.
- Cyanidation and counter-current decantation (CCD) circuit: 16 leach tanks in two series (12 tanks of 20'x20' and 4 tanks of 30'x30').
- Merrill-Crowe circuit with 2 leaf clarifiers and one de-aeration tower.
- Refinery: two gas fired furnaces.
- Filtration: two filter presses, each with 131 plates of size 2,000x2,000 mm. Figure 18-3 is a view of the filter presses in operation.
- Filters for dry tailings, and
- Final disposal of dry tails.

The primary crushing circuit consist of the following process. Trucks loaded with ore from the mine arrive at the plant and are first weighed at the truck scale to keep track of the ore tonnage entering the plant. The trucks then dump the ore into the feed hopper of the primary crusher. The primary crusher is a jaw crusher with a capacity to process 400 tons per hour and crushes the material to 4". The ore is stacked by a conveyor stacker in the patio area of the primary crusher. Material is then transported by truck to the coarse ore bins at the front end of the tertiary crushing stage.

The tertiary crushing circuit consist of the following process. Material from the coarse ore bins is fed by apron feeder to the conveyor belts carrying the mineral to a screen for classification by size. The fine ore, -1/2", is fed directly to the fine ore bins. The mineral that does not pass the screen size is sent to the tertiary crushers. During 2015 the area was remodeled to increase production capacity. The upgrades include:

- Symons 4' crusher. Receives the larger mineral 4" or less.
- Telsmith 4' crusher. Receives material larger than 4". This also has the option of receiving a little finer product, 1½" or finer.
- Telsmith 3' crusher. Receives smaller fragments, 1" to ½".
- New FL Smith 20' x 6' screen.

The tertiary crushing circuit is a closed circuit meaning that the ore will be returned to the crushers as many times as necessary until it is reduced to a size of -1/2". The final crushed material is stored in the fine ore bins to await further processing.

Material from the fine ore bins (material -1/2") is transported to the mills through conveyors. Sodium cyanide in solution is added to begin the extraction kinetics of the silver and gold particles. Inside the ball mills the direct impact from the steel balls and the abrasive grinding of the steel balls on the ore combined with the action of the cyanide solution begin to leach the silver and gold from the ore.

Pulp leaving the mills has a 70-75% solid density, this pulp is sent to one or more hydrocyclones where centrifugal forces separate the fine particles from the coarser material. During 2015 a new hydrocyclone battery tower was constructed inside the mill area. The pulp containing fine particles is then sent to the primary thickener. This pulp has an average size of 60% passing 200 mesh, equivalent to 70 microns. The thick pulp or low flow from the hydrocyclones is returned to the mill to be processed again. This process is also a closed circuit, meaning that all ore must pass the desired particle size to exit the milling process. Fine solids passing 200 mesh are sent to the primary thickener tank where flocculating agents are added. The solids settle in the bottom of the tank where the pulp has a density of about 50%. These solids are pumped to the leach tanks. The clarified solution or overflow is sent to Merrill Crowe area. The leach process uses 16 lined agitator tanks in 3 circuits. Circuits #1 and #2 consist of 6 inline tanks. Each tank has a capacity of 178 m^3. The #3 circuit consists of 4 tanks with capacity of 600 m^3. Oxygen is injected into the first tank in each circuit to increase the kinetic reaction. Air is injected into the rest of the tanks in each circuit. The solution from the leaching tanks is processed in a counter-current decantation circuit through five thickeners. The pregnant solution goes to the Merrill-Crowe plant for clarification and precipitation of the silver and gold. The retention time in the leaching plant is about 72 hours.

The tailings filtration circuit was commissioned in May 2012 and is producing dry stackable tailings with moisture from 14% to 18%. The circuit consists of 2 filter presses supplied by DIEMME and each filter has 132 plates of size 2,000 x 2,000 mm. The filtration circuit is operated continuously with shutdowns only for maintenance.

In 2009, hydrated lime was switched to quicklime to reduce the consumption and reduce flocculent and diatomaceous earth consumptions in the pregnant solution clarification stages. There was not much improvement and flocculent and diatomaceous earth consumption did not decrease significantly.

In the refinery, two gas furnaces smelt the precipitate to produce Doré bars, which typically averages 92% silver and are shipped for final refining at the Peñoles Met-Mex facility in Torreón. The refined gold and silver is sold through Auramet in London, England.

The assay laboratory utilizes wet assaying, fire assaying and atomic absorption methods. The laboratory does all of the assaying required for mill processing, as well as assaying mine and exploration samples. Duplicates and blanks are run on a regular basis, as well as check assays at outside laboratories. Procedural and operational aspects have been discussed in Section 11 of this report. The assay lab has fulfilled the ISO 9001 standard and has received recertification in October 2016. A program for audits and certificate renewal is in place.

18. PROJECT INFRASTRUCTURE

EDR has all of the necessary mine and mill infrastructure to operate the Guanaceví mines efficiently and operates within all the regulatory standards imposed on the project by the various government agencies. Figure 18-1 is view of the portal of the Porvenir 4 mine on the Guanaceví Project.

18.1 Mine Pumping, Ventilation and Electrical

At shallower depths in the Porvenir mine, drainage and pumping was minimal as very little ground water was encountered. Water was also brought in from the surface for drilling and dust control. As mining proceeded to depth, a second pump station was built at the bottom of the second ventilation borehole to handle water produced from below the water table; the mine is currently pumping to surface between 1,500 and 2,000 gallons per minute, utilizing two pump stations. A third pump station is located in the Santa Cruz area and is pumping 2,000 to 2,500 gallons per minute to surface.

Principal mine ventilation is provided by one 500 HP exhaust fan, located on surface at the top of a 292m long by 2.4m diameter borehole. Two exhaust fans of 100 HP are located 400 m away on a second ventilation borehole, 292m long and 2.4m diameter. Fresh air is drawn down the principal ramp and Santa Cruz area, through the workings and exhausted out to the surface through the boreholes. This circuit is moving approximately 210,000 cfm of air. A third ventilation borehole, 285m long and 2.4m diameter, is located to the south in the Santa Cruz mine. Secondary ventilation is by conventional axial-vane mine fans that are from 24 to 36 inches in diameter and range in size from 25 HP to 50 HP. These fans blow fresh air into the workings through ventilation ducting.

Electrical power for the mine is distributed by a series of substations connected to the public power grid, with additional underground transformers added as required. Backup substations are also available.

Electric power arrives at the mine site via 34.5 kV overhead transmission lines and is reduced by a 2,000-kVA transformer to 13.2 kV and distributed to the Santa Cruz mine surface, the Porvenir mine (ramp 4114), surface compressor station and secondary pump station transformers. The power is taken underground at the Porvenir mine at 13.2 kV via the ventilation borehole to the principal underground transformer. Power is then distributed to portable underground mine transformers, where it is reduced further to 480 V. The Porvenir mine also has 2,000 kW diesel generators capable of maintaining pumping, secondary ventilation and a compressor in case of any power outage. There is a 350-kW diesel generator in Porvenir 4 and a 950-kW diesel generator in Robbins 1 (Table 18-1).

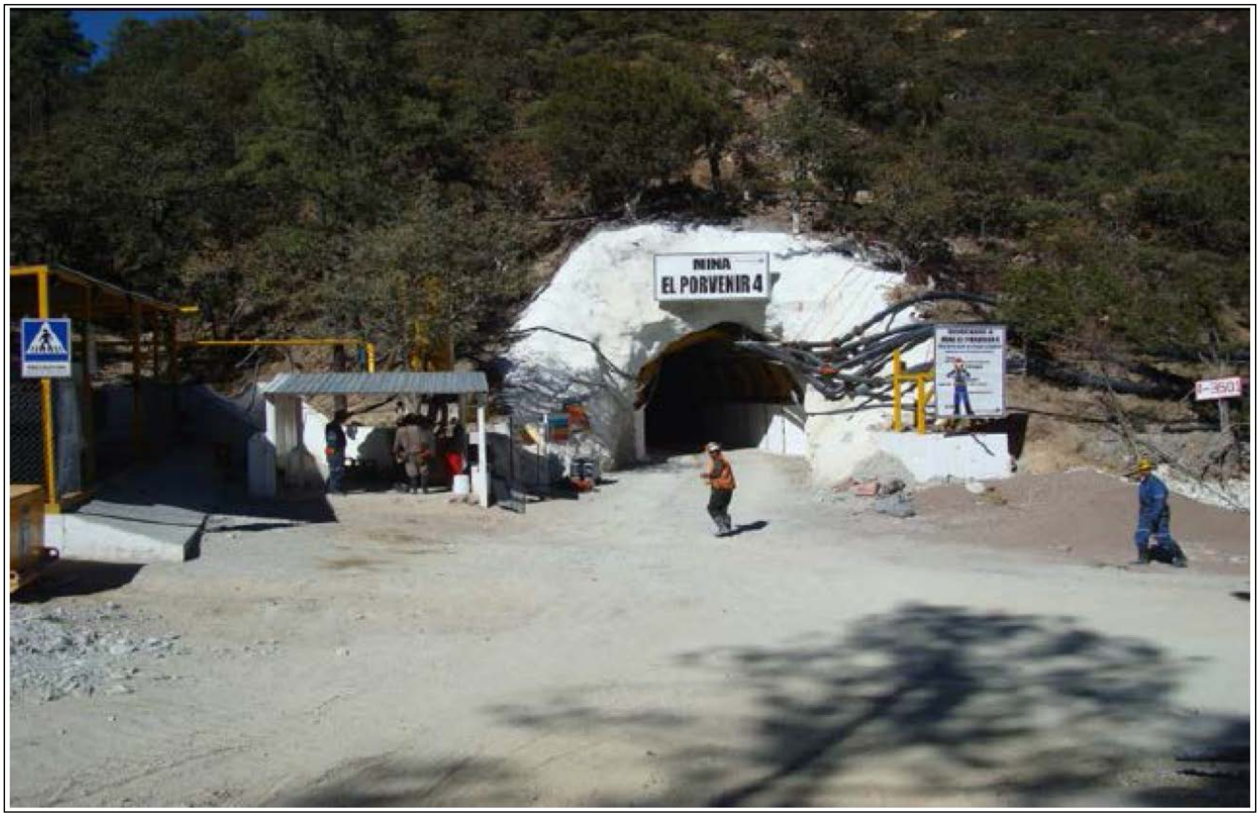

Figure 18-1 Portal for the Porvenir 4 Mine

Table 18-1 Standby Mine Generators

Equipment	Type	Capacity	Location
Generator 1	Caterpillar 3508	950 kW	Porvenir North (Robbins 1)
Generator 2	Caterpillar 3516	2,500 kW	Porvenir North (Robbins 2)
Generator 3	Caterpillar 3516	2,500 kW	Porvenir North (Robbins 2)
Generator 4	Caterpillar 3406	350 kW	Porvenir 4
Generator 5	Kholer 2000 Reozm	2,000 kW	Porvenir North (Robbins 2)

Compressed air is provided by eight electric compressors installed on the surface. Compressed air is brought into the mine by a six-inch diameter pipe that passes down the principal ventilation borehole and then branches up and down the ramps in four-inch diameter airlines, reducing two inch airlines that enter the individual working faces (Table 18-2).

Table 18-2 Mine Compressors

Equipment	Type	Capacity	Location
Compressor 1	IR SSR-EP150	670 CFM	Porvenir North (Robbins 1)
Compressor 2	IR IRN200HCC	900 CFM	Porvenir North (Robbins 1)
Compressor 3	Twistair Joy (Denver) D25	1,200 CFM	Porvenir North (Robbins 1)
Compressor 4	IR SSR 1500 LAAM55	1,500 CFM	Porvenir 2
Compressor 5	IR SSR 650R-AA15	670 CFM	Porvenir 4
Compressor 6	Atlas Copco GA807	670 CFM	Porvenir 2
Compressor 7	IR SSR 1500 LAAM55	1,500 CFM	Porvenir North (Robbins 1)
Compressor 8	SSR-EPE 300	1,363 CFM	Porvenir 4

Complete maintenance and service facilities for the underground mobile equipment are located near the Porvenir North mine portal.

18.2 Tailings Dam

The new tailings dam currently in use (Figure 18-2) was constructed using the centerline method and is completely lined. The process water is recycled back to the mill.

In 2010, a new access road around the tailings pond was completed. Construction began in 2011 on the installation of two filter presses with a capacity of 1,350 tonnes each of dry tailings (Figure 18-3). Dry stacking of tailings allows the life of the tailings pond to be increased.

A new storm water pond with a capacity 10,000 m^3 was built on the top of the old Rosario tailings dam, located to the South of the cyanide leach plant (Figure 18-2 and 18-4). Figure 18-5 shows the south water pond and water extraction wells which are recycled as process water.

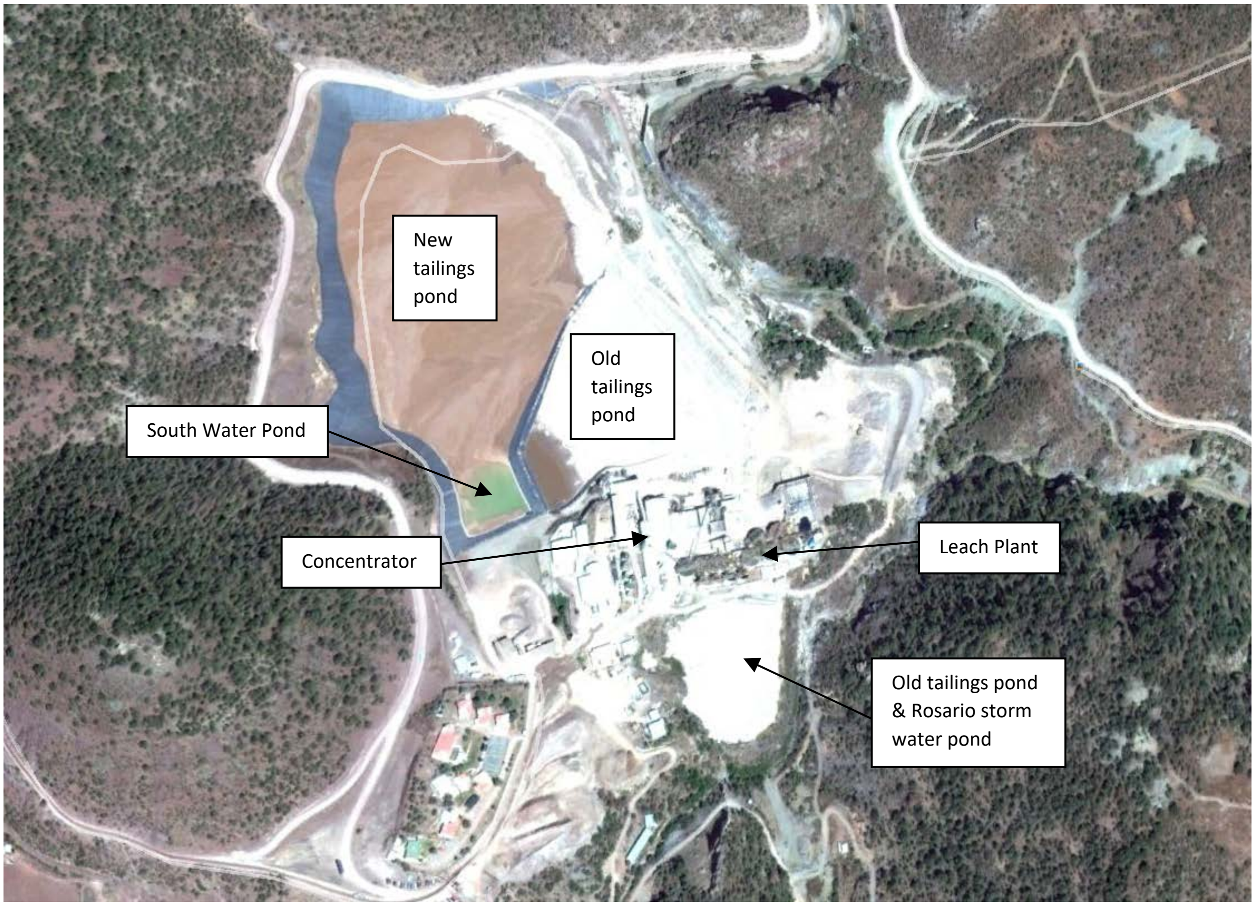

Figure 18-2 Aerial View of the Plant and Tailing Facilities of the Guanaceví Mines Project

Figure 18-3 Aerial Filtration Circuit Building (left); Two Diemme Filter Presses (right)

Figure 18-4 View of the new Rosario Tailings Water Pond with Capacity 10,000 m^3 (on the left); View of the Dry Stack Tailings Dam from the Northwest to Southeast (on the right)

Figure 18-5 View to Water Extraction Wells (left); and to the South, Water Pond (right)

19. MARKET STUDIES AND CONTRACTS

EDR has neither a hedging nor forward selling contract for any of its products. As of the issue date of this report, the company has not conducted any market studies, as gold and silver are commodities widely traded in the world markets. Due to the size of the bullion market, which in 2014 saw a demand for silver of 1.07 billion ounces, EDR's activities will not influence silver prices (it produced 7.2 million ounces, or less than 1% of world demand).

EDR produces doré silver-gold bars which it then ships for further refining. The doré produced by EDR's Guanaceví mine is further refined by third parties before being sold as bullion (99.99% pure silver). To a large extent, silver bullion is sold at the spot price.

Table 19-1 summarizes the high and low average annual London PM gold and silver price per ounce from 2000 to 2016. For the purposes of this report, the resources and reserves are stated at the 2-year average metal prices for silver and gold as of October 1st, 2016. The two-year averages are $16.29/oz for silver and $1,195/oz for gold.

Table 19-1 Average Annual High and Low London PM Fix for Gold and Silver from 2000 to 2016 (prices expressed in US$/oz)

Year	Gold Price (US$/oz)			Silver Price (US$/oz)		
	High	Low	Average	High	Low	Average
2000	312.70	263.80	279.12	5.45	4.57	4.95
2001	293.25	255.95	271.04	4.82	4.07	4.37
2002	349.30	277.75	309.67	5.10	4.24	4.60
2003	416.25	319.90	363.32	5.97	4.37	4.88
2004	454.20	375.00	409.16	8.29	5.50	6.66
2005	536.50	411.10	444.45	9.23	6.39	7.31
2006	725.00	524.75	603.46	14.94	8.83	11.55
2007	841.10	608.40	695.39	15.82	11.67	13.38
2008	1,011.25	712.50	871.96	20.92	8.88	14.99
2009	1,212.50	810.00	972.35	19.18	10.51	14.67
2010	1,421.00	1,058.00	1,224.53	30.70	15.14	20.19
2011	1,895.00	1,319.00	1,571.52	48.70	26.16	35.12
2012	1,791.75	1,540.00	1,668.98	37.23	26.67	31.15
2013	1,693.75	1,192.00	1,411.23	32.23	18.61	23.79
2014	1,385.00	1,142.00	1,266.40	22.05	15.28	19.08
2015	1,295.75	1,049.40	1,160.06	18.23	13.71	15.68
2016	1,341.09	1,097.37	1,248.34	19.93	14.02	17.1

Over the period from 2000 to 2011, world silver and gold prices have increased significantly. This had a favorable impact on revenue from production of most of the world's silver mines, including the Guanaceví Project. Beginning 2011 there has been a consistent reduction in the silver and gold prices, which has caused increased stress for mining companies around the world.

EDR has no contracts or agreements for mining, smelting, refining, transportation, handling or sales, that are outside normal or generally accepted practices within the mining industry. EDR has a policy of not hedging or forward selling any of its products.

The doré produced by the Guanaceví mill typically averages 93.5% silver. The doré is shipped for final refining at the Peñoles Met-Mex facility in Torreón, or to Republic Metal in Miami, and the refined gold and silver is sold through Auramet in London, England, or through INTLfc Stone, respectively.

In addition to its own workforce, EDR has a number of contract mining companies working on its mine sites such as Porvenir 4 and Santa Cruz. Table 19-2 is a summary of the main contracts that EDR has in place at the Guanaceví Mines Project.

Table 19-2 Contracts Held by the Guanaceví Project

Contract Description	Contracting Organization	Date-Expiry/ Renewal
Mining Contractor	Campos Hernandez Contratistas Mineros, S.A. de C.V. (CAHECOMI)	7-Mar-18
Surface haulage	Roberto Arzola Castro, Marisol Vazquez Rivera, Alejandro Alberto Cazares Arzola, Silvia Margarita Alanis Mariscal, Juan Armando Flores Barraza y Jose Evaristo Rivera Macho	29-Dec-18
Haulage underground to surface	Roberto Arzola Castro, Marisol Vazquez Rivera, Alejandro Alberto Cazares Arzola, Silvia Margarita Alanis Mariscal, Juan Armando Flores Barraza y Jose Evaristo Rivera Macho	29-Aug-18
Haulage surface plant area	Magdalena Vazquez Duran, Jose Gabriel Velazquez Martinez, Jose Evaristo Rivera Macho, Edgar Ruben Velazquez Cisneros y Luis Antonio Rivera Nuñez	29-Nov-18
Equipment Contracting	Arrendamiento de Maquinaria, S.A. de C.V.	Valid & Updating
Road Watering	Marisol Vazquez Rivera Gutierrez	Valid & Updating
Waste Material Removal	Carmina Manuela Ayala Arzola	31-Aug-17
Security and Surveillance Services	Hammer Seguridad Privada, S.R.L. de C.V.	12-Dec-17

The Guanaceví Mining Unit maintains a collective bargaining agreement with the National Mining Workers Union. This agreement is for an indefinite term and has a yearly general salaries revision each April.

Third party contractors have been engaged to carry out civil engineering works in the Guanaceví Mining Unit. As of 2016 some have been engaged for works to be carried out in the mid – long term range, but most are engaged for works in the short-term range. They are hired on a case by case basis.

20. ENVIRONMENTAL STUDIES, PERMITTING AND SOCIAL OR COMMUNITY IMPACT

20.1 Environmental and Sustainability

Guanaceví operates under the policy of zero industrial discharges into the environment. Surface water in the tailings disposal facilities are pumped back into the process. Running water in the intermittent streams within the property is tested for mineral elements and contaminants. Some water pumped from the underground workings is discharged in the water storage reservoir at the surface.

The following aspects are treated with special care by the company as they represent potential risks to the operation. To reduce the possibility of an incident regarding any of these issues, Guanaceví has established strict procedures of operation and monitoring in accordance with accepted standards.

- The tailing dams require strict environmental and operation control because the proximity to the Guanaceví community represents a risk.
- Testing for water pollutants into rivers near the tailings dams.
- Testing of discharge sewage pollutants.
- Water recovery in tailings dams is to be returned to the plant for processing.
- Testing of the combustion gases from laboratory's chimneys and foundry, and lead exposure for lab workers.

20.2 Closure Plan

The Guanaceví closure budget includes funds for covering the tailings ponds and securing and cleaning up the other surface and underground mine facilities (Table 20-1).

Table 20-1 Reclamation Budget

Facilities	Item	US$
Underground Mines	Surface Roads	36,000
	Santa Cruz Area	98,000
	North & El Porvenir	108,000
	La Prieta	5,000
	Porvenir Dos	47,000
	Porvenir 4	52,000
	La Peleya	2,000
	Stockpile/Colonia	67,000
Sub-Total		**415,000**
Milling and Cyanidation Plant	Plant Site	76,000
	Crushing Area	94,000
	Milling Area	74,000
	Cyanidation Area	160,000
	Precip/Foundry Area	139,000
	Related Facilities	239,000
Sub-Total		**782,000**
Tailings Dams	NW Area	205,000
	East Area	26,000
	South Area	32,000
Sub-Total		**263,000**
Administrative Personnel		323,000
Sub-Total		**323,000**
Support Services	Post Closure Costs	308,000
Sub-Total		**308,000**
Grand Total		**2,091,000**

20.3 Permitting

EDR holds all necessary environmental and mine permits to conduct planned exploration, development and mining operations on the Guanaceví Project.

Tailing ponds were constructed at Guanaceví before environmental legislation was approved in 1998 (La Ley General del Equilibrio Ecológico y la Protección al Ambiente), as a result Guanaceví was not required to apply for permits for these facilities. For pre-existing facilities, a mining company must get an update permit whenever there is a change in the processes, capacities, or facilities. Permits are issued by the Secretaría de Medio Ambiente y Recursos Naturales (Semarnat) – Secretary of the Environment and Natural Resources. An annual operation card must be presented to Semarnat at the end of each year.

Table 20-2 lists the existing permits governing the mining and milling operations.

Table 20-2 Summary of Environmental and Mining Permits for the Guanaceví Project

Permit Type	Permit	Issuing Agency	Date-Expiry/ Renewal
LAU - Project Unique Environmental License	LAU-10/021-2007	SEMARNAT	Mine Closure
LAU - Project Unique Environmental License Modification	SG/130.1/000419	SEMARNAT	Mine Closure
(MIA) Enlargement of the actual Tailings Dam & rerouting of access road to the Guanaceví mining unit	SG/130.2.1.1/000640	SEMARNAT	Mine Closure
(CUS) Enlargement of the actual Tailings Dam & rerouting of access road to the Guanaceví mining unit	SG/130.2.2/000647	SEMARNAT	Mine Closure
(MIA) installation of a substation and electric transmission line	SG/130.2.1.1/001318/11	SEMARNAT	Valid until 2025
(CUS) installation of a substation and electric transmission line	SG/130.2.2/001234/11	SEMARNAT	Valid until 2025
(MIA) Ore Surge Pile station and access through the local neighborhood	SG/130.2.1.1/001647/10	SEMARNAT	Valid until 2025
(CUS) Ore Surge Pile station and access through the local neighborhood	SG/130.2.2/0000625/11	SEMARNAT	Valid until 2025
(MIA) Rampa Santa Cruz Sur	SG/130.2.1.1/002067/15	SEMARNAT	Mine Closure
Presa la negra	SG/130.2.1.1/000613/12	SEMARNAT	Valid until 2022
(MIA) Enlargement of additional Tailings Dam & rerouting of access from principal road	SG/130.2.1.1/000244/12	SEMARNAT	Valid until 2022
(CUS) Enlargement of additional Tailings Dam & rerouting of access from principal road	SG/130.2.2/002059/11	SEMARNAT	Valid until 2022
(MIA) Porvenir IV Operation	SG/130.2.1.1/000221	SEMARNAT	Valid until 2021
(CUS) Porvenir IV Operation	SG/130.2.2/000044	SEMARNAT	Valid until 2021
(CUS) Porvenir II - Road modification for access to the mine	SG/130.2.2/001362	SEMARNAT	Mine Closure
(MIA) Haul Road, installation of Robbins facility & warehouse pad in Santa Cruz mining unit	SG/130.2.1/000295	SEMARNAT	Mine Closure
(CUS) Haul Road, installation of Robbins facility & warehouse pad in Santa Cruz mining unit	SG/130.2.2/002175	SEMARNAT	Valid until 2019
(CUS) Porvenir II - Ventilation station & road modification for mine access	SG/130.2.2/002075	SEMARNAT	Mine Closure
(MIA) Enlargement of Robbins II - ventilation station enhancement	SG/130.2.1.1/001986	SEMARNAT	Mine Closure
(CUS) Enlargement of Robbins II - ventilation station enhancement	SG/130.2.2/002175	SEMARNAT	Mine Closure
(MIA) Norte Porvenir II road access	SG/130.2.1.1/001101/12	SEMARNAT	Mine Closure
(CUS) Norte Porvenir II road access	SG/130.2.2/001279/12	SEMARNAT	Valid until 2019
Superficial Water Concession ZOFEMAT	07DGO100908/36FDGE06	CONAGUA	Apr 2017
Residual Water Concession	07DGO118917/36EQOC09	CONAGUA	Valid until 2019

20.4 Social and Community Impact

EDR considers nearby communities as important stakeholders and, as such, the company pays special attention to their problems and requests for support. A good neighbor and open-door policy characterizes the relations with the eleven communities inside and around the area of operations. A company representative interacts with the local authorities frequently.

According to the population and housing census of 2010, the inhabitants in the surrounding communities include 11,562 people living in the 11 locations. Women are 51.3% of the population. Table 20-3 presents population by gender in the communities, and shows the relationship of Guanaceví with them, whether directly or indirectly. The relationship with a community is indirect whenever it has a direct relationship with another mining company. Regardless of the indirect relationship with these communities, Guanaceví considers that it has a shared commitment with them.

Table 20-3 Neighboring Community Population

Location	Relationship	Population		
		Total	Male	Female
Aguacaliente	Direct	113	56	57
Arroyo del Hacho	Direct	34	20	14
Cebollas	Direct	70	38	32
Coscomate	Direct	89	45	44
Cienega de la Vaca	Direct	151	78	73
El Zape	Direct	370	186	184
El Portero	Direct	56	30	26
Guanaceví	Direct	10224	5250	4974
La Rosilla	Direct	236	119	117
Los Nopales	Direct	68	35	33
San Pedro	Direct	151	74	77
Total		**11562**	**5931**	**5631**

Guanaceví has a policy of social responsibility based on community development. The tactic used to achieve this strategic principle is focused on:

- Education and Employability: Promoting learning opportunities ranging from basic education to technical skills and supporting the creation and development of small business that provide an economic alternative to mining related jobs.
- Infrastructure: Supporting construction, improvement or rehabilitation of community facilities, such as the Church, the playgrounds, or the roads.
- Health: In partnership with government institutions, EDR promote several health campaigns in the communities such as dental, vaccines, nutrition, pet control, and others.
- Sports: Also in partnership with government institutions and NGOs, EDR supports summer camps for children and in the last two years has sponsored one of the main races that happen in Guanajuato.
- Environment: EDR runs different environmental campaigns in the communities, such as the recycling of electronics, the reuse of tires to rehabilitate recreational sites, reforestation initiatives, cleaning up campaigns, and others.
- Traditions and Culture: EDR supports throughout the year the different celebrations that happen in the community, such as the day of the miner, mother´s day, day of the death, children´s day, Christmas celebrations, and others.

EDR responds to ongoing requests from the community. A large majority of the requests are for discarded materials, but there are also some requests for in kind donations such as transportation of materials, transportation to events, gifts for community celebration (such as children´s day), food, and other assistance.

In order to carry out social responsibility actions, Guanaceví has an internal procedure intended to channel the demands of the local communities, to assess their needs, to prioritize them, and to evaluate donations to be made to improve quality of life. The company is interested in maintaining a social license to operate by working together with the communities, providing communication support in resolving problems, promoting good practices in social solidarity through a work plan with the localities, and aiming for sustainability in all its actions. To make public its commitment to its stake-holders, the company pursued an ESR acknowledgement (Socially Responsible Company), which was obtained the March 1, 2014, from the Mexican Center for Philanthropy (CEMEFI).

The company works respectfully and in coordination with the natural leaders in the surrounding communities, and with local authorities, educational institutions, and government agencies to achieve sustainable development. Actions are mainly aimed at promoting education, sports, culture, health, and environmental care.

Guanaceví's community library and school were remodeled with the support of the company. EDR donated books and computers to promote education and access to technology.

EDR works in coordination with the municipal government to promote cultural activities in the communities. The company has a cultural center open to the public where workshops of handicrafts, music, and painting are conducted. In addition, EDR promotes the realization of festivals, theater plays, and cinema for children and adults, and facilitates transportation of students to civic and cultural events and sports competitions.

The company provides garbage collection service to contribute to environmental sanitation and prevent gastrointestinal diseases. The company also supplies medical services and medicines in cases of emergency or whenever the community service is not available, assisting between 10 and 15 persons each week. The company's ambulance is available as needed.

EDR operates by the Gender Equality Model MEG: 2003, awarded by the National Women's Institute in November 2013. This model helps to ensure equal opportunities for internal and external community by socially responsible actions.

21. CAPITAL AND OPERATING COSTS

21.1 Capital Costs

In 2016, EDR's Guanaceví Project consisted of a modest size underground mining operation based at the Porvenir 4, Porvenir North and Santa Cruz mines. The 2016 budget versus actual 2016 capital costs for the Guanaceví Project are summarized in Table 21-1. For 2017, EDR has budgeted of US $23.8 million for capital projects at Guanaceví.

The 2017 budget includes all planned capital expenditure for Guanaceví with the exception of regional exploration. An additional US $1.2 million is planned on exploration drilling at Guanaceví.

Table 21-1 Capital Costs for the Guanaceví Mine

Description	Actual 2016 Cost (US$)	Budget 2016 Cost (US$)	Planned 2017 Costs (US$)
Mine Development	12,913,022	13,356,436	20,599,000
Mine Equipment	1,069,174	136255	1,272,000
Plant Equipment/Infrastructure	474,647	484,000	885,000
Vehicles	114,675	113,000	338,000
Office and IT	128,069	27,200	518,000
Buildings	102,632	56,455	226,000
Total	**14,802,219**	**14,173,346**	**23,838,000**

21.2 Operating Costs

The cash operating cost of silver produced at the Guanaceví mines project in fiscal year 2016 was $10.13 per oz, compared to $8.66 in 2015. Cash operating cost per ounce of silver is calculated net of gold credits and royalties. On a per tonne of ore processed basis at the Guanaceví mines, the cash operating costs in 2016 averaged US $ 84.94 per tonne, compared to US $88.04 in 2015.

Table 21-2 summarizes operating cost by department before adjustment for finished goods. The planned estimated cost per ton of ore mined for 2017 is also presented in Table 21-2.

Table 21-2 Operating Costs for the Guanaceví Mine

Department	Actual 2015 (US$/t)	Actual 2016 (US$/t)	Planned 2017 (US$/t)
Mining	39.31	40.71	38.00
Processing	28.18	25.23	22.50
G&A	20.55	19	14.6
Total	**88.04**	**84.94**	**75.10**

22. ECONOMIC ANALYSIS

EDR is a producing issuer as defined by NI 43-101. An economic analysis has been excluded from this technical report as the Guanaceví mine is currently in production and this technical report does not include a material expansion of current production.

23. ADJACENT PROPERTIES

The Guanaceví Project is located within the Guanaceví mining district, which hosts a number of historically productive mines and in which mining has been carried out for more than 450 years. While a majority of the past producers in the district are located on quartz veins similar or related to those located on the mine property, there are no immediately adjacent properties which might materially affect the interpretation or evaluation of the mineralization or exploration targets of the Guanaceví Project.

24. OTHER RELEVANT DATA AND INFORMATION

This report summarizes all data and information material to the Guanaceví Project as of December 31, 2016. HRC knows of no other relevant technical or other data or information that might materially impact the interpretations and conclusions presented herein, nor of any additional information necessary to make the report more understandable or not misleading.

25. INTERPRETATION AND CONCLUSIONS

EDR's Guanaceví Mines Project has an extensive mining history with well-known silver and gold bearing vein systems. Ongoing exploration has continued to demonstrate the potential for the discovery of additional resources at the project and within the district surrounding the mine.

Since EDR took control of the Guanaceví mines Property, new mining areas have enabled EDR to increase production by providing additional sources of mill feed. EDR's operation management teams continue to search for improvements in efficiency, lowering costs and researching and applying low-cost mining techniques.

25.1 December 31, 2016 Mineral Resource Estimate

The mineral resources for Guanaceví mine as of December 31, 2016, are summarized in Table 25-1. The resources are exclusive of the mineral reserves.

Table 25-1 Mineral Resource Estimate, Effective Date December 31, 2016

Classification	Tonnes	Silver Equivalent	Silver		Gold	
		g/t	g/t	oz.	g/t	oz.
Measured	69,000	284	248	550,300	0.47	1,000
Indicated	2,271,000	351	296	21,595,600	0.72	52,800
Measured + Indicated	2,340,000	349	295	22,145,900	0.71	53,800
Inferred	638,000	441	379	7,769,400	0.82	16,900

1. Measured, Indicated and Inferred resource cut-off grades were 198 g/t silver equivalent at Guanaceví.
2. Mineral resources are not mineral reserves and do not have demonstrated economic viability. There is no certainty that all or any part of the mineral resources estimated will be converted into mineral reserves.
3. Metallurgical recoveries were 82.5% silver and 85.4% gold.
4. Silver equivalents are based on a 75:1 silver: gold ratio
5. Price assumptions are $16.29 per ounce for silver and $1,195 per ounce for gold for resource cutoff calculations.
6. Mineral resources are estimated exclusive of and in addition to mineral reserves.

For the year end 2016 there was a decrease of 154,700 measured and indicated tonnes from the 2015 reported resources and a decrease of 512,6000 inferred tonnes. The decrease in inferred is mainly attributed to removal of areas that are not accessible to mining.

25.2 December 31, 2016 Mineral Reserve Estimate

The mineral reserves for the Guanaceví mine as of December 31, 2016, are summarized in Table 25-2. The reserves are exclusive of the mineral resources.

Table 25-2 Mineral Reserve Estimate, Effective Date December 31, 2016

Classification	Tonnes (t x 1,000)	AgEq g/t	Ag g/t	Ag (oz) * 1,000	Au g/t	Au (oz) * 1,000	% Dilution
Proven	86.5	284	247	686.2	0.49	1.37	26%
Probable	508.2	311	262	4,285.20	0.64	10.48	30%
Total Proven and Probable Reserves	**594.7**	**307**	**260**	**4,971.40**	**0.62**	**11.84**	**29%**

1. Reserve cut-off grades are based on a 198 g/t silver equivalent.
2. Metallurgical Recoveries were 82.5% silver and 85.4% gold.
3. Mining Recoveries of 95% were applied.
4. Minimum mining widths were 1.4 meters.
5. Dilution factors averaged 29%. Dilution factors are calculated based on internal stope dilution calculations and external dilution factors of 15% for cut and fill and 30% for long hole.
6. Silver equivalents are based on a 75:1 silver:gold ratio.
7. Price assumptions are $16.29 per ounce for silver and $1,195 per ounce for gold.
8. Mineral resources are estimated exclusive of and in addition to mineral reserves.
9. Figures in table are rounded to reflect estimate precision; small differences generated by rounding are not material to estimates.

For the year end 2016 there was a decrease of 310,600 tonnes from the 2015 reported reserves. The decrease is attributable to the material mined during the year. For the long-term, sustainability will require maintaining the current levels of development, exploration activities and budgets.

25.3 Conclusions

The mine staff possess considerable experience and knowledge with regard to the nature of the orebodies in and around the Guanaceví Property. Mine planning and operations need to continue to assure that the rate of waste development is sufficient to maintain the production rates included in the mine plan.

A major change in ore metallurgy during the life of the current reserves is very unlikely, as nearly all of the ore to be mined will come from veins with historic, recent, or current production.

Areas of uncertainty that may materially impact the Mineral Resources and Reserves and subsequent mine life presented in this report include the following:

- Mining assumptions
- Dilution assumptions
- Exchange rates
- Changes in taxation or royalties
- Variations in commodity price
- Metallurgical recovery
- Processing assumptions

The QP considers the Guanaceví resource and reserve estimates presented here to conform with the requirements and guidelines set forth in Companion Policy 43-101CP and Form 43-101F1 (June 2011), and the mineral resources and reserves presented herein are classified according to Canadian Institute of Mining, Metallurgy and Petroleum ("CIM") Definition Standards - For Mineral Resources and Mineral Reserves, prepared by the CIM Standing Committee on Reserve Definitions and adopted by CIM Council on May 10, 2014. These resources and reserves form the basis for EDR's ongoing mining operations at the Guanaceví Mines Project.

The QP is unaware of any significant technical, legal, environmental or political considerations which would have an adverse effect on the extraction and processing of the resources and reserves located at the Guanaceví Mines Project. Mineral resources which have not been converted to mineral reserves, and do not demonstrate economic viability shall remain mineral resources. There is no certainty that all or any part of the mineral resources estimated will be converted into mineral reserves.

The QP considers that the mineral concessions in the Guanaceví mining district controlled by EDR continue to be highly prospective both along strike and down dip of the existing mineralization.

26. RECOMMENDATIONS

Outside of the currently known reserve/resource areas, the mineral exploration potential for the Guanaceví mines are considered to be very good. Parts of the known vein splays beyond the historically mined areas also represent good exploration targets for additional resource tonnage. The concession areas contain many veins and the QP considers there to be reasonable potential of discovering new veins and splays besides those that are currently mapped.

An exploration budget has been developed for 2017 and discussed in the following section.

26.1 Exploration Program

Exploration budgets for Guanaceví are approved for 8,000 meters of drilling during 2017. Table 26-1 summarizes the planned 2017 exploration budget for Guanaceví.

Table 26-1 Guanaceví 2017 Exploration Budget

Project Area	2017 Program	
	Meters	Budget US $
Guanaceví	8,000	1,200,000
Total	**8,000**	**1,200,000**

26.2 Geology, Block Modeling, Mineral Resources and Reserves

HRC recommends that the continuation of the conversion of all resources into reserves from 2D polygons to 3D block models be continued. During 2015 and 2016, considerable progress was made in this regard. Additional modeling efforts should be made to define the mineralized brecciated areas as they have been an import source of economic material encountered in the current operation, and could provide additional tonnage to support the mine plan.

Currently EDR utilizes the exploration drilling and chip and muck samples in their resource and reserve calculations. HRC recommends that future efforts focus on constructing block models for resource and reserve reporting utilizing only the exploration and underground drilling results. The chip and muck samples should be used to develop the production model. This will help in keeping data densities consistent in each modeling effort and allow another level into the reconciliation process to compare modeling results.

Although the reconciliations conducted by EDR show good comparisons on planned values versus actual values, the reconciliation process should be improved to include the estimated tonnes and grade from the resource models. By comparing the LOM plan on a monthly basis to the plant production, the actual physical location of the material mined may be different in the plan versus the actual area that was mined. Due to the many faces that are mined during a day this can only be completed on an average monthly basis to account for the blending of this material at the mill. The monthly surveyed as mined areas should be created and saved on a monthly basis for reporting the modeled tonnes for each month. The combination of the 3D block models and 2D and polygonal reserves makes this process difficult but considerable progress has been made during the last year to get all resources and reserves into 3D block models. The model predicted results versus actuals can then be used to determine if dilution factors need to be adjusted or perhaps the resource modeling parameters may require adjustment if there are large variances. On a yearly basis, the mill production should be reconciled to the final doré shipments and resulting adjustment factors should be explained and reported.

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