Independent Technical Report for the Evolución Polymetallic Project, Miguel Auza, Zacatecas, Mexico

Report Prepared for Excellon Resources Inc.





Report Prepared by



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Independent Technical Report for the Evolución Polymetallic Project, Miguel Auza, Zacatecas, Mexico

Excellon Resources Inc.

10 King Street East, Suite 200 Toronto, Ontario, Canada M5C 1C3 E-mail: <u>info@excellonresources.com</u> Website: <u>www.excellonresources.com</u> Tel: +1 416 364 1130 Fax: +1 416 364 6745

SRK Consulting (Canada) Inc.

Suite 1500, 155 University Avenue Toronto, Ontario, Canada M5H 3B7 E-mail: toronto@srk.com Website: www.srk.com Tel: +1 416 601 1445 Fax: +1 416 601 9046

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Effective date: August 31, 2020 Signature date: October 30, 2020

Authored by:

[Original signed] Joycelyn Smith, PGeo Consultant (Resource Geology) [Original signed] Aleksandr Mitrofanov, PGeo Senior Consultant (Resource Geology)

[<u>Original signed</u>] Alfonso Soto, CPG Geologist

Peer Reviewed by:

<u>[Original signed]</u> Glen Cole, PGeo Principal Consultant (Resource Geology)

Cover: Evolución Project site looking southeast towards the town of Miguel Auza.

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Executive Summary

Introduction

The Evolución Project is an intermediate stage polymetallic silver-zinc-lead-gold exploration project near Miguel Auza on the border of Durango and Zacatecas States, Mexico. Excellon Resources Inc. (Excellon) owns 100% of the Evolución Project through its wholly owned Mexican subsidiaries, San Pedro Resources, S.A. de C.V. (San Pedro), Minera Excellon de Mexico, S.A. de C.V. (MEM), and Excellon New Mining Projects (ENMP).

This technical report documents a Mineral Resource Statement for the Evolución Project prepared by SRK Consulting (Canada) Inc. (SRK). It was prepared following the guidelines of the Canadian Securities Administrators' National Instrument 43-101 and Form 43-101F1. The Mineral Resource Statement reported herein was prepared in conformity with generally accepted CIM *Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines* (November, 2019).

In accordance with National Instrument 43-101 guidelines, Ms. Anna Fonseca, PGeo (APGO# 2194) visited the property from February 25 to 28, 2018, followed by Mr. Alfonso Soto, CPG (AIPG#11938) on July 22 and July 23, 2020 accompanied by Mr. Jorge Ortega, Geo (OGQ#626), Excellon's Exploration Manager.

Property Description and Ownership

The Evolución Project covers approximately 45,433 hectares, comprising 22 mineral concessions (Table 1). Excellon holds, through its wholly owned Mexican subsidiaries, San Pedro, ENPM, and MEM, a 100% interest in these concessions

The Evolución Project is located in northern Zacatecas State on the high plateau of central Mexico, and surrounds and extends northwest of the town of Miguel Auza. The closest international airport is located in Torreón, Coahuila. The Project is approximately 200 kilometres by road south of Torreón. It can be reached via the highway system for a total travel time of approximately 2.5 hours. Toll Highway 40 south connects Cuencamé to Torreón, then paved Highway 49 is taken south-southeast to Miguel Auza.

Geology and Mineralization

The Evolución Project occurs on the Mesa Central physiographic province of central Mexico along the boundary between the Parral and Oaxaquia terranes of Gondwanic affinity, previously interpreted as the Sierra Madre Terrane.

The property is underlain by the upper Cretaceous Caracol Formation, which locally consists of a thick sequence of interbedded mudstone, siltstone, and lesser sandstones. Several small intrusive bodies of unknown age are present on the property, including a monzonite porphyry stock in the Miguel Auza area, and a smaller monzonitic stock that has been identified between the villages of

Miguel Auza and Juan Aldama. Additional rhyolitic intrusions have been characterized to the east of Juan Aldama. Andesite and lamprophyre dykes occur proximal to areas of past historical production.

Polymetallic epithermal mineralization occurs within veins that consist of massive to disseminated sulfide minerals with associated calcite, ankerite and quartz. Sulphide minerals include argentiferous galena, argentite with other silver sulphosalts, sphalerite, pyrite and arsenopyrite. Sulfide mineral content within the veins generally ranges between 15% to 25%. Oxidation processes produce alteration products of cerussite, smithsonite and various iron oxides.

Exploration Status

Since becoming the operator of the property, Excellon has conducted geological mapping, rock and soil geochemical sampling, ground geophysical surveys, fluid inclusion studies, and diamond drilling documented by detailed core logging.

Between 2005 and 2019, a total of 298 core drillholes (91,527 metres) were drilled throughout the Evolución Project by SEM and Excellon. The mineral resource evaluation discussed herein considers drilling information completed by SEM and Excellon. Drilling conducted by SEM focused on delineating the Calvario zone. Between 2010 and 2019, Excellon completed 58 core drillholes (24,555 metres) on the Evolución Project, of which 41 drillholes (17,244 metres) were drilled within the resource area, the majority of which focused on delineating the Lechuzas zone.

SRK is of the opinion that the drilling and sampling procedures adopted by Excellon are consistent with generally recognized industry best practices. The resultant drilling pattern is sufficiently dense to confidently interpret the geometry and the boundaries of the polymetallic mineralization.

Sample Preparation, Analyses, Security, and Data Verification

The exploration work conducted by Excellon was carried out using a quality assurance and quality control program meeting industry best practices. Standardized procedures were used in all aspects of the exploration data acquisition and management including mapping, surveying, drilling sampling sample security, assaying and database management.

Excellon employed analytical quality control measures as part of the routine standard core sampling procedures since starting drilling on the Evolución Project in 2010. Analytical quality control measures for the 2010, 2018 and 2019 drilling programs, and the 2017 and 2019 resampling programs involved the regular insertion of blank and certified reference materials.

In October 2019, intervals within the Evolución Project evaluation domains were selected for field duplicate analysis across a variety of silver assay grades. Excellon quartered core from this selection for repeat analyses of silver, lead, zinc and gold at an umpire laboratory. The data validation program was undertaken to verify historical exploration data, including re-assaying archived core, where available, and where the mineral resources are informed by historical data. The ultimate objective of the work was to increase the confidence of the historical assay data used to calculate the mineral resource estimate presented in this report.

SRK reviewed the field procedures and analytical quality control measures used by Excellon and historical operators, where possible. The analysis of the analytical quality control data is presented in Section 11 below. In the opinion of SRK, Excellon personnel used care in the collection and management of the field and assaying exploration data. Based on historical reports and data, SRK is confident in the reliability of exploration and drilling information provided by previous operators.

In the opinion of SRK, the sampling preparation, security and analytical procedures used by Excellon are consistent with industry best practices and are, therefore, adequate for the purpose of informing mineral resources.

Mineral Resource and Mineral Reserve Estimates

The mineral resources have been estimated in conformity with CIM Estimation of Mineral Resource and Mineral Reserves Best Practices Guidelines and are reported in accordance with the Canadian Securities Administrators' National Instrument 43-101.

Dr. Antoine Cate of SRK initiated geological wireframing in September 2019. The resource wireframing, geostatistical analysis, grade estimation and classification was completed by Ms. Joycelyn Smith, PGeo (APGO#2963) under the supervision of Dr. Aleksandr Mitrofanov, PGeo (APGO#2824) with geostatistical support from Dr. Oy Leuangthong, PEng (PEO#90563867). Additional contributions including quality control analyses and technical report compilation were provided by Ms. Smith.

The database used to evaluate the mineral resources of the Evolución Project includes 273 diamond drillholes (82,871 metres). The final header, down-hole survey, lithology intervals, and assay results were received by SRK on March 2, 2020.

The mineral resource domains of the Evolución Project include the geology, structural and grade distribution criteria. The model comprises twelve high-grade veins (8 at Calvario and 4 at Lechuzas) constructed in Leapfrog modelling software.

SRK chose to composite the assays to 2 metres to avoid splitting the assay intervals. To further limit the influence of high-grade outliers during grade estimation, SRK chose to cap composites. Capping was performed for the grouped mineralized subdomains for each zone.

A block size of 10 metres by 10 metres by 5 metres was selected for parent cells, with subcells of 2 metres by 2 metres by 1 metres resolution in the X, Y and Z axes, respectively, to honour the geometry of the modelled mineralization. The block model was rotated 315 degrees to better reflect the dip direction of the mineralized zones.

The block model was populated with values using ordinary kriging in the mineralized domains, informed by capped composite data for each variable (silver, gold, lead and zinc) separately, and three estimation passes with progressively larger search ellipsoids and data requirements. Specific gravity within the Lechuzas veins, low-grade and weathered zones were estimated using inverse distance weighting with a power of 2. Silver equivalent values were subsequently calculated for each block using the estimated values for gold, silver, lead and zinc.

The block classification strategy considers drillhole spacing, geologic confidence and continuity of category. SRK considers that there are no blocks estimated in the Measured Resource category within the Evolución Project. An Indicated Resource category was assigned to blocks within the Calvario and Lechuzas zones informed within a 50-metre and 40-metre search radius for vein and low-grade domains, respectively, using a minimum of three drillholes. An Inferred category was assigned to all blocks not classified as Indicated, and within the Calvario and Lechuzas zones. Blocks within the Capilla-Mantos zone were left unclassified.

SRK considers that the Evolución Project is primarily amenable to underground extraction by longhole stoping method. Through discussions with Excellon, SRK considers that it is reasonable to report Evolución as an underground mineral resource above a cut-off grade of 90 grams per tonne (g/t) silver equivalent for both the Calvario and Lechuzas zones.

SRK is satisfied that the mineral resources were estimated in conformity with the widely accepted CIM *Estimation of Mineral Resource and Mineral Reserve Best Practices Guidelines (November 2019).* The mineral resources may be affected by further infill and exploration drilling that may result in increases or decreases in subsequent mineral resource estimates. The mineral resources may also be affected by subsequent assessments of mining, environmental, processing, permitting, taxation, socio-economic, and other factors. The Mineral Resource Statement for the Evolución Project is presented in Table i.

The effective date of the Mineral Resource Statement is August 31, 2020.

					Grade					Metal		
Category	Zone	Quantity (000' t)	Silver (g/t)	Gold (g/t)	Lead (%)	Zinc (%)	AgEq (g/t)	Silver (000' oz)	Gold (000′ oz)	Lead (000' lb)	Zinc (000' lb)	AgEq (000′ oz)
Indicated	Calvario	6,407	64	0.09	1.00	1.14	170	13,154	19	140,741	161,548	35,091
Total Ind	icated	6,407	64	0.09	1.00	1.14	170	13,154	19	140,741	161,548	35,091
Informed	Calvario	5,626	53	0.09	0.82	1.08	149	9,570	16	102,223	134,447	26,902
menea	Lechuzas	9,335	30	0.11	0.71	1.18	126	8,953	33	145,235	243,300	37,911
Total Infe	erred	14,960	39	0.10	0.75	1.15	135	18,524	49	247,459	377,747	64,813

Table i: Mineral Resource Statement*, Evolución Polymetallic Project, Miguel Auza, Zacatecas, Mexico, SRK Consulting (Canada) Inc., August 31, 2020

Mineral resources are not mineral reserves and have not demonstrated economic viability. All figures are rounded to reflect the relative accuracy of the estimate. Composites have been capped where appropriate. Mineral Resources are reported at a cut-off grade of 90 g/t silver equivalent. Cut-off grades are based on a silver price of US\$17.00 per troy ounce and a silver recovery of 76%; a gold price of US\$1,550 per troy ounce and a gold recovery of 20%; a lead price of US\$0.90 per pound and a lead recovery of 90%; and a zinc price of US\$1.15 per pound and a zinc recovery of 88%.

Conclusion and Recommendations

A total of 273 diamond drillholes (82,871 m) completed by previous operators and Excellon between 2005 and 2019 have been included in the geological and mineral resource modeling of the Evolución Project.

SRK is of the opinion that the drilling and sampling procedures adopted by Excellon are consistent with generally recognized industry best practices. The resultant drilling pattern is sufficiently dense to interpret the geometry and the boundaries of the polymetallic mineralization with confidence.

SRK constructed a block model using a conventional geostatistical block modeling approach constrained by high- and low-grade domains. The block model was populated with silver, lead, zinc and gold values estimated by ordinary kriging information from capped composited data and estimation parameters derived from variography. After verification and validation, block estimates were classified considering the confidence in the quality and quantity of informing data, the confidence in the geological continuity and the confidence in the quality of the estimates

SRK recommends multi-disciplinary technical studies and exploration drilling aimed at expansion, de-risking and further conceptual characterization of the project to evaluate the conceptual economic viability of the Evolución Project.

SRK supports Excellon's proposed core drilling program, which includes approximately 25,000 metres of drilling with the following objectives:

- Delineate the southwest extension of the Lechuzas zone mineralization, as indicated by recent drilling.
- Expand Indicated mineral resources at the Calvario zone and upgrade the mineral resources from Inferred to Indicated at the Lechuzas zone.
- Delineate the mineralization in the Capilla-Mantos zone to gain a better understanding of the orientation of mineralizing structures, with the potential of upgrading material in this zone to Inferred.

The total cost of the recommended work program is estimated at C\$4,500,000

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Figure 25: Adjacent Properties to the Evolución Project

1 Introduction and Terms of Reference

The Evolución Project (the Project) is a polymetallic silver-zinc-lead-gold exploration project, located in Zacatecas, Mexico. It is located nearby and within the boundaries of the town of Miguel Auza, on the border of Durango and Zacatecas States, Mexico. Excellon Resources Inc. (Excellon) owns 100% of the Evolución Project through its wholly owned Mexican subsidiaries, San Pedro Resources, S.A. de C.V. (San Pedro) and Minera Excellon de Mexico, S.A. de C.V. (MEM).

In February 2020, Excellon commissioned SRK Consulting (Canada) Inc. (SRK) to visit the property and prepare a geological and mineral resource model for the Evolución Project. The services were rendered between March and May 2020, leading to the preparation of the mineral resource statement reported herein that was disclosed publicly by Excellon in a news release on September 17, 2020. The last technical report for this property was documented in a historical Preliminary Feasibility Study for the previous operator Silver Eagle Mines Inc. (SEM) and was prepared by Valliant et al (2008).

The current technical report documents a mineral resource statement for the Evolución Project prepared by SRK. It was prepared following the guidelines of the Canadian Securities Administrators' National Instrument 43-101 and Form 43-101F1. The mineral resource statement reported herein was prepared in conformity with generally accepted CIM *Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines*.

1.1 Scope of Work

The scope of work, as defined in a letter of engagement executed on February 4, 2020 between Excellon and SRK, includes the preparation of a mineral resource model for the polymetallic mineralization delineated by drilling on the Evolución Project and the preparation of an independent technical report in compliance with National Instrument 43-101 and Form 43-101F1 guidelines. This work typically involves the assessment of the following aspects of this project:

- Topography, landscape, access
- Regional and local geology
- Exploration history
- Audit of exploration work carried out on the project
- Geological modelling
- Mineral resource estimation and validation
- Preparation of a Mineral Resource Statement
- Recommendations for additional work

1.2 Work Program

The mineral resource statement reported herein is a collaborative effort between Excellon and SRK personnel. The exploration database was compiled and maintained by Excellon and was audited by

SRK. The geological model and outlines for the polymetallic mineralization were constructed by SRK from drilling data, geological maps and mine plans provided by Excellon. In the opinion of SRK, the geological model is a reasonable representation of the distribution of the targeted mineralization at the current level of sampling. The geostatistical analysis, variography and grade models were completed by SRK during March and May 2020. The mineral resource statement reported herein was presented to Excellon in a memorandum report on August 31, 2020 and disclosed publicly by Excellon in a news release dated September 17, 2020.

The technical report was assembled in Toronto during July and August 2020.

1.3 Basis of Technical Report

This report is based on information collected by SRK provided by Excellon throughout the course of SRK's investigations and during a site visit performed between July 22 and July 23, 2020. SRK has no reason to doubt the reliability of the information provided by Excellon. Other information was obtained from the public domain. This technical report is based on the following sources of information:

- Discussions with Excellon personnel.
- Inspection of the Evolución Project area, including drill core.
- Review of exploration data collected by Excellon.
- Additional information from public domain sources.

1.4 Qualifications of SRK and SRK Team

The SRK Group comprises more than 1,400 professionals, offering expertise in a wide range of resource engineering disciplines. The independence of the SRK Group is supported by the fact that it holds no equity in any project it investigates and that its ownership rests solely with its staff. These facts permit SRK to provide its clients with conflict-free and objective recommendations. SRK has a proven track record in undertaking independent assessments of mineral resources and mineral reserves, project evaluations and audits, technical reports and independent feasibility evaluations to bankable standards on behalf of exploration and mining companies, and financial institutions worldwide. Through its work with a large number of major international mining companies, the SRK Group has established a reputation for providing valuable consultancy services to the global mining industry.

The data verifications and site visit were performed by Mr. Alfonso Soto, CPG (AIPG#11938), an independent geological consultant. Dr. Antoine Cate of SRK constructed preliminary geological domains in September 2019. The resource wireframing, geostatistical analysis, grade estimation and classification was completed by Ms. Joycelyn Smith, PGeo (APGO#2963) under the supervision of Dr. Aleksandr Mitrofanov, PGeo (APGO#2824) with geostatistical support from Dr. Oy Leuangthong, PEng (PEO#90563867). Additional contributions including quality control analyses and technical report compilation were provided by Ms. Smith. By virtue of their education, membership to a recognized professional association and relevant work experience, Mr. Soto, Ms. Smith and Dr. Mitrofanov are independent Qualified Persons as this term is defined by National Instrument 43-101.

In this report, the authors and qualified persons (QPs) of this report are collectively referred to as SRK.

Mr. Glen Cole, PGeo (APGO#1416), a Principal Consultant with SRK, reviewed drafts of this technical report prior to their delivery to Excellon as per SRK internal quality management procedures. Mr. Cole did not visit the Project.

1.5 Site Visit

Two site visits to the Project were completed by SRK personnel, in accordance with National Instrument 43-101 guidelines, since Excellon became the operator of the Project in 2010.

The initial site visit was completed from February 25 to 28, 2018, by Ms. Anna Fonseca, PGeo (PGO# 2194) of SRK. The site visit involved a structural review of Excellon's Evolución property, with focus on the Madera vein system.

More recently, Mr. Alfonso Soto, CPG (AIPG#11938) visited the Evolución Project on July 22 and July 23, 2020 accompanied by Mr. Jorge Ortega, Geo (OGQ#626) Excellon's Exploration Manager. The purpose of the site visit was to review the digitalization of the exploration database and validation procedures, review exploration procedures and geological modelling procedures, examine drill core, interview project personnel, and collect all relevant information for the preparation of a revised mineral resource model and the compilation of a technical report. During the visit, particular attention was given to the validation of drilling data.

The recent site visit also aimed at investigating the geological and structural controls on the distribution of the gold mineralization to confirm the accuracy of drill logs in relation to the three-dimensional polymetallic mineralization domains.

The QP was given full access to relevant data and conducted interviews with Excellon personnel to obtain information on past exploration work, to understand procedures used to collect, record, store and analyze historical and current exploration data.

1.6 Acknowledgement

SRK acknowledges the support and collaboration provided by Excellon personnel for this assignment. Their collaboration was greatly appreciated and instrumental to the success of this project.

1.7 Declaration

SRK's opinion contained herein and effective <u>August 31, 2020</u> is based on information collected by SRK throughout the course of SRK's investigations. The information in turn reflects various technical and economic conditions at the time of writing this report. Given the nature of the mining business, these conditions can change significantly over relatively short periods of time. Consequently, actual results may be significantly more or less favourable.

This report may include technical information that requires subsequent calculations to derive subtotals, totals, and weighted averages. Such calculations inherently involve a degree of rounding and consequently introduce a margin of error. Where these occur, SRK does not consider them to be material.

SRK is not an insider, associate or an affiliate of Excellon, and neither SRK nor any affiliate has acted as advisor to Excellon, its subsidiaries or its affiliates in connection with this project. The results of the technical review by SRK are not dependent on any prior agreements concerning the conclusions to be reached, nor are there any undisclosed understandings concerning any future business dealings.

2 Reliance on Other Experts

SRK has not performed an independent verification of land title and tenure information as summarized in Section 3 of this report. SRK did not verify the legality of any underlying agreement(s) that may exist concerning the permits or other agreement(s) between third parties but has relied on a legal opinion provided by Excellon's legal representative Jose Enrique Rodriguez del Bosque on August 27, 2019. A copy of the title opinion is provided in Appendix A. The reliance applies solely to the legal status of the rights disclosed in Sections 3.1 and 3.2.

3 Property Description and Location

The Evolución Project is located nearby and within the boundaries of the town of Miguel Auza in northern Zacatecas State, central Mexico (Figure 1). The Project area extends several kilometres in all directions from the town center, and lies adjacent to main paved Highway 49, 200 kilometres south of the city of Torreón, Coahuila. The centre of the property is located at approximately 103°27' W longitude and 24°18' N latitude. The UTM WGS84 Zone 13N coordinates are 656,954.89 east and 2,688,199.89 north. An operational flotation processing and toll milling facility, owned by Excellon, is located on the property. This plant currently processes ore from Excellon's Platosa operation, located about 200 kilometres away.



Figure 1: Location Map

3.1 Mineral Tenure

Excellon's Evolución Project covers approximately 45,280 hectares, comprising 22 mineral concessions (Table 1). Excellon holds, through its wholly owned Mexican subsidiaries, San Pedro, Excellon New Mining Projects (ENMP), and MEM, a 100% interest in these concessions, subject to royalties described below. Aventura, Evolución and Evolución F-1 are held by ENMP.

Excellon reports all applicable concession payments of mining duties and work commitments are in good standing in terms of the Mexican mining law. The mineral resources discussed herein are located within concessions Ampl. Thelma Fraccion 2, Antigua, El Calvario, El Rayo, La Zacatecana, Mariana Fracc. A, Negrillas Fracc. A, Nergrillas Fracc. B, Olivia, Santa Maria, and Thelma.

The property limits are illustrated in Figure 2. Details of the mineral concessions are summarized in Table 1.

Lisenses	Title Nome	Title	Area	Effective Date	Date of Expiry
Licensee	The Name	Number	(ha)	(d/m/y)	(d/m/y)
San Pedro	Ampl. Thelma	220891	3,975	10/24/2003	10/23/2053
San Pedro	Ampl. Thelma Fracción 1	220892	1	10/24/2003	10/23/2053
San Pedro	Ampl. Thelma Fracción 2*	220893	0	10/24/2003	10/23/2053
Javier Martinez Lomas [†]	Antigua*	195443	73	9/14/1992	9/13/2042
San Pedro	Aventura	246164	153	3/2/2018	3/1/2068
San Pedro	El Calvario*	151840	3	9/23/1969	9/22/2069
MEM	El Pipila	238293	70	8/26/2011	8/25/2061
San Pedro	El Rayo*	186878	25	5/16/1990	5/15/2040
ENMP	Evolución	246481	30,827	8/3/2018	8/2/2068
ENMP	Evolución F 1	246578	453	9/18/2018	9/17/2068
San Pedro	La Zacatecana*	152166	9	12/15/1969	12/14/2069
San Pedro	Mariana Fracc. A*	224078	47	3/30/2005	3/29/2055
San Pedro	Mariana Fracc. B	224077	1	3/30/2005	3/29/2055
San Pedro	Mariana Fracc. C	224076	1	3/30/2005	3/29/2055
San Pedro	Negrillas Fracc. A*	222856	28	9/9/2004	9/8/2054
San Pedro	Negrillas Fracc. B*	222857	13	9/9/2004	9/8/2054
San Pedro	Olivia*	151839	11	9/23/1969	9/22/2069
San Pedro	Reducción Don Pedro	244224	6,854	6/30/2015	11/7/2056
San Pedro	Reducción El Siete	244238	2,427	7/14/2015	5/17/2056
San Pedro	Santa Fe	151825	3	9/18/1969	9/17/2069
San Pedro	Santa Maria*	144880	28	2/2/1969	2/1/2066
Productos Canadienses	Tholmo*	210620	100	2/26/2002	2/25/2052
S.A. de C.V. (PROCAN) [†]	Пеша	219029	433	3/20/2003	3/23/2053
	Total		45,280		

Table 1: Mineral Tenure Information

* Location of Mineral Resources

† See section 3.2, Underlying Agreements



Figure 2: Land Tenure Map

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3.2 Underlying Agreements

Excellon acquired a 100% interest of Silver Eagle Mines Inc. (SEM) and its Mexican Subsidiary, San Pedro in 2009. The following royalties, back-in rights, payments, or other agreements and encumbrances were inherited from SEM:

- The Thelma concession exploration and exploitation rights were acquired from Michael Francis Florence Neumann on September 17, 2003 and contained a 1% net smelter return (NSR) royalty. On November 27, 2006, a renegotiated agreement was concluded with Michael Francis Florence Neumann and Javier Aguirre Sanchez, as co-owners of the claim, containing a 3% NSR royalty with a minimum payment requirement of US\$20,000 per month, and the option to acquire the claim and NSR for US\$2,000,000. On January 28, 2010 the agreement was renegotiated with Productos Canadienses S.A. de C.V. the current NSR holder, containing the minimum monthly NSR payment of US\$5,000.
- Exploration and exploitation rights for the La Antigua concession were acquired from Javier Martinez Lomas on December 2, 2003 and contained a 3% NSR royalty with a current minimum payment requirement of US\$2,500 per month, and the option to acquire the claim and NSR for US\$500,000.

3.3 Permits and Authorization

Excellon's Evolución Project operates under exploration licenses issued by the Government of Mexico. Surface rights in Mexico are commonly owned either by communal agricultural groups (ejidos) or by private owners.

The surface rights overlying the Evolución mineral concessions are owned by a combination of private owners and ejidos. Federal or state laws allow permission to access federal or state lands without other requirements through access easement rights, as mining concessions in Mexico are federal grants. However, in many cases it is necessary to negotiate access to the land with individual owners or communities. Excellon has agreements with various local farmers, landowners, and ejidos to access their ground for exploration purposes.

The Mexican mining law includes provisions to facilitate purchasing land required for mining activities, installations, and development. Excellon owns surface rights totalling 133 hectares, which include all processing facilities, office buildings and area surrounding the access to the historical El Rey Mine at the Calvario deposit. No other formal agreements for surface rights are currently in place.

Excellon's Miguel Auza concentrator and associated facilities located within the Evolución Project area are operated under permits issued by the Government of Mexico. Excellon has obtained all necessary permits to allow for exploration activities and the operation of these facilities.

The La Antigua concession is the subject of an ongoing litigation between a subsidiary of Excellon and a plaintiff (the concession holder). Approximately 12% of the tonnage within the MRE (26% of the indicated tonnage and 6% of the inferred tonnage) is located within the La Antigua concession.

The initial decision in respect of this litigation does not affect Excellon's contractual rights to this concession.

SRK was informed by Excellon that there are no other known litigation actions potentially affecting the Evolución Project. Since the legal opinion was completed, concessions El Calvario, La Zacatecana, Olivia and Sante Fe (title numbers 151840, 152166, 151839 and 151825, respectively) have been successfully approved for extension and are in good standing.

3.4 Environmental and Social Considerations

San Pedro carries a current Environmental Impact Statement (MIA) regarding older buildings in poor condition made of rustically crafted solid mud bricks called adobes, located within the property. These are the remnants of old mining facilities, including an old shaft, headframe and ramp. Some of the buildings were rehabilitated and purposed for operation. It is assumed that sites do not represent a threat to future development.

According to Excellon's community agreements with agricultural landowners, no traces of drilling (including cement collar monuments) may be left upon completion of drilling activities on these properties. The town of Miguel Auza is located above a portion of the resource, which presents a potential challenge for future development of the Project. Underground mining operations could result in subsidence and vibrations from mining activity may have an affect on the buildings, residences and could generate concern from local residents.

The facilities at Miguel Auza town owned by Excellon have a relatively small footprint and therefore environmental impacts are few and of modest significance. Mine waste and associated water management and discharge, emissions to air, handling, storage and disposal of solid and hazardous waste, and storage and handling of chemicals are among the main environmental aspects associated with Excellon's current concentrator operations. Tailings from the Miguel Auza concentrator are discharged by gravity pipeline to tailings management facility (TMF) #2, with water recycled back to the concentrator.

The primary liabilities currently associated with Excellon's concentrator relate to the presence of buildings and other facilities used to support metal concentrate production, the former Miguel Auza ramp and associated waste storage area, and TMF #1 and TMF #2. TMF #1 has been closed, covered and re-vegetated. TMF #2 is currently active and being expanded to accommodate future production.

3.5 Mining Rights in Mexico

Mining and exploration rights in Mexico are controlled by the Federal Government. Prior to 2006, exploration and mining rights were assigned to private Mexican individuals and companies incorporated under Mexican laws, including those companies fully financed by foreign investment, by the granting of "exploration" and "exploitation" concessions, each with differing validity periods and tax and assessment obligations.

The mining law reform of April 2005 simplified the concession regime, and all new concessions are now "mining concessions", which are valid for a 50-year period and are renewable for an additional 50-year period. Upon enactment of the mining law reform, all previously issued "exploration" and "exploitation" concessions were automatically converted to "mining concessions" without changing the effective date of the title.

Mining concessions are administered by the Dirección General de Minas (DGM), a subsecretariat of the Subsecretaría de Minería under the cabinet-level Secretaria de Economia. To maintain concessions in good legal standing, concession holders are obligated to pay semi-annual duties and to file annual documentation of exploration or development work (a minimum investment as provided in applicable Mexican mining legislation) on the concession. Concession holders are also obligated to file production reports for statistical purposes. Both the semi-annual duties and the minimum investment increase each year in accordance with rates published by the Mexican Government in the official gazette: the older the mining concession, the higher the duties payable and the amount to be invested. When the concessions are in their 7th year of issuance or greater, the amount to be invested reaches the maximum rate applicable; when the concessions are in their 11th year of issuance or greater, the amount of payable taxes reaches the maximum rate applicable.

In addition, as part of the obligations derived from titles of mining concessions, concessionaires have the obligation to file after the sixth year of the term of the concession: (i) production reports on mineral obtained from the concessions; and, (ii) technical reports on works carried out by the concessionaires, this last obligation must be fulfilled only once after the sixth year of the term of the mining concession.

4 Accessibility, Climate, Local Resources, Infrastructure, and Physiography

4.1 Accessibility

The Evolución Project is located in northern Zacatecas State, on the high plateau of central Mexico. The Project is within the boundaries of and surrounding the town of Miguel Auza, extending to the northwest. The closest international airport is located in Torreón, Coahuila, approximately 200 kilometres by road north of the Project.

The Project can be reached via the highway system for a total travel time of approximately 2.5 hours. Toll Highway 40 south connects Cuencamé to Torreón, then paved Highway 49 is taken southsoutheast to Miguel Auza.

4.2 Local Resources and Infrastructure

Excellon's exploration facilities are located in the town of Miguel Auza. According to the 2015 Census, the population of Miguel Auza is reported to be 23,827. Paved highways and secondary municipal roads serve local access to the town. Most services required to support exploration and operations are available in Miguel Auza and the nearby town of Juan Aldama, Durango.

Agriculture and livestock are the main economic activities in the region, with grains, corn and beans as the principal crops. Within the Excellon mining concessions and near to Miguel Auza, much of the surface land is used for farming and raising livestock, called Parcelas or Milpas, respectively. After completing any exploration activity on the agricultural lands, all evidence of the activity must be removed. For collar pictures, a portable cement monument is placed and later removed.

The Calvario mineralized system is located under the town of Miguel Auza (Figure 3). According to Excellon personnel, the Evolución property does not conflict with any National Institute of Anthropology and History (INAH) records of anthropological historical sites, natural areas protected by the Mexican government, or indigenous group interests.

The closest major city is Torreón, Coahuila (population 608,836 in 2010) which acts as a major supply centre to Miguel Auza. Other major cities include Torreón's twin city Gomez Palacio, Durango (population 257,352 in 2010), located approximately 200 kilometres north by highway, and the city of Fresnillo (population 213,199 in 2010), located 130 kilometres south-southeast by highway. The state capital, Zacatecas (population 138,176 in 2010), is 65 kilometres further south of Fresnillo.



Figure 3: Satellite Imagery of the Town of Miguel Auza with the Mineralization Domains Projected to Surface

For centuries, the State of Zacatecas has been, and still is, one of the world's leading silverproducing districts. In the Miguel Auza district, however, underground mining has ceased with the exception of the San Sebastien mine located 40 kilometres west northwest of Excellon's processing facilities and approximately 11 kilometres west from the Evolución Project perimeter.

The Excellon Mill facility is operated by Excellon's subsidiary, San Pedro, and is one of the largest employers in town of Miguel Auza. Mineralized material from Excellon's Platosa mine, located

approximately 220 kilometres by road north of Miguel Auza, is transported by truck and processed at this facility.

Excellon's facilities, including the processing plant, tailings dam, and several heavy pieces of equipment, are located on private property on the northwestern outskirts of the town of Miguel Auza. The facilities, storage warehouses and offices are fenced and protected. Security protocols exist to allow access to the property.

Buildings inside this fenced area are in poor condition; they are remnants of old mining facilities. San Pedro has an in-force MIA (Manifestación de Impacto Ambiental or Declaration of Environmental Impact) because it is assumed that sites do not represent a threat to future development. Some of the buildings were rehabilitated and purposed for operation.

Electrical power to the Project is provided by a dedicated transmission line from the local electrical grid. A high-tension 13.2 kilovolt (kV) line has been connected to the processing plant with additional trunk lines to the main ramp, tailings dam, and the Martinez Shaft. These additional transmission lines acted as the main feed for the limited underground operations that took place during the 2000's; these workings are currently inactive.

4.3 Climate

The climate is hot and arid, with mean daily temperatures ranging from 12 degrees Celsius (°C) in January to 27°C in June. The maximum temperature ranges from 21°C in December to 31°C in June. The minimum temperature ranges from 5°C in January to 20°C from June to August. Temperatures rarely reach below zero, although occasional snowfall occurs.

The rainy season typically occurs from May through to September. The annual average rain is approximately between 400 millimetres to 500 millimetres. The average recorded annual precipitation was 420 millimetres between 2003 and 2016. The rainy season occurs in the late summer and autumn period, and is the most important for agricultural activities, as this is the only source of water for irrigation of crops. The average annual humidity is around 50%.

Windstorms are common between February to the end of April. the prevailing winds come from the northwest in spring and summer and from the north in autumn and winter.

4.4 Physiography

The surface property of Evolución Project is generally flat with some sparse small hills on the property (Figure 4). The project is located within the Sierras and Llanuras Potosino-Zacatecanas subprovince of the Mesa Central physiographic province. The surface elevation ranges on the property between 1,950 to 2,000 metres above sea level.

Vegetation in the area is sparse, with desert thorn bushes and some hardy trees growing only on shaded slopes and in areas where the water table is close to the surface. Shrubs and small bushes are the most common type of vegetation in the area, and prickly pear cactus, huisache, and mesquite are the most abundant species in the region.



Figure 4: Typical Landscape and Infrastructure in the Project Area

- A: Agricultural Lands on the Evolución Project
- B: Private Land for Historical Benefit Plant with historic abode buildings
- C: Buildings near the Mill in the Lechuzas Zone
- D: Core Storage Facility
- E: Mill

5 History

5.1 Historical Exploration Work and Ownership

A variety of owners and operators have explored and mined the Miguel Auza area since the 1500's (Table 2). Mining activity was first recorded in the 1560s by colonial miners during the Spanish Conquest. Multiple mines were established in the area to exploit silver-, lead- and zinc-bearing hydrothermal quartz veins. The thriving mining activity at the time led to the establishment of the town of Miguel Auza. According to historical records, at least twelve vertical shafts were constructed in the late 1800s to access polymetallic veins, ranging in depth from 49 metres to 114 metres (Foster 1921). The mines used horse-powered winders to facilitate the hoisting of ore. Remnants of these mines and associated surface infrastructure are still visible in the region.

Table 2: Ownership History of the Evolución Project	t
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Year	Owner
1560's to 1910	Private Ownership Spaniard Colony to Mexican Revolution
1966 to 1970	Alejandro Gaitan
1984 to 1987	Javier Martinez Lomas
2003 to 2005	A.J. Resources Inc.
2005 to 2009	Silver Eagle Mines Inc.
2009 to present	Excellon Resources Inc.

Five major vein systems were exploited historically in the Evolución Project area, including the San Ramon, Escondida, Esperanza, Union, and Calvario veins, as well as numerous minor vein systems. Mining of these systems ceased around 1900 due to a limited ability to manage the high volumes of water, as well as metallurgical problems related to sulphide-associated mineralization. The workings were allowed to flood subsequent to the withdrawal of mining activities.

From 1966 to 1970, Alejandro Gaitan reopened the Calvario Shaft and produced approximately 16,000 tonnes of material grading 0.8 grams of gold per tonne (g/t gold), 583 g/t silver, 9% lead, and 9% zinc from the main Calvario vein system. Hand-sorted ore was shipped to the Asarco and Peñoles smelters in Chihuahua and Torreón, respectively, for processing.

From 1984 to 1987, Javier Martinez Lomas mined several thousand tonnes of high-grade mineralization from the Antigua Vein via the Martinez Shaft. The production comprised hand-cobbed mineralization, as well as some concentrate. Martinez constructed a processing plant in the 1980s, which included a ball mill, coarse and fine ore bins, and one set of flotation cells. The processing plant was designed with a capacity of 50 tonnes to 100 tonnes per day, however the plant did not operate as efficiently as expected.

In 1987, Consejo de Recursos Minerales (CRM), now Mexican Geological Survey, conducted a small sampling program consisting of 33 underground chip samples of the Ramal and Antigua vein systems.

AJ Resources Inc. (AJ Resources), through its 80% ownership of San Pedro, acquired the property in December 2003. AJ Resources conducted exploration programs consisting mainly of surface geological mapping (Table 3), trenching, mine rehabilitation, ramping, and diamond drilling. The surface diamond drilling program in 2005 consisted of 9,768 metres of drilling in 48 holes.

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Area	Company	Year	Scale	Description				
Mine area	AJR	2003	N/A	Mapping and prospecting				
Las Lechuzas	SEM	2005	N/A	Mapping and prospecting				
Calvario	SEM	2005	N/A	Mapping and prospecting				
Miguel Auza concessions	SEM	2007	1:10,000	Mapping and prospecting				

In 2003, AJ Resources commissioned Charles Lammle, PEng, to complete an independent mineral resource estimate and technical report on the Project. AJ Resources officially changed their name to Silver Eagle Mines Inc. (SEM) in December 2005.

After an extensive drilling program involving 38,000 metres, SEM commissioned Scott Wilson Roscoe Postle Associates Inc. (RPA) to complete an estimate of mineral resources in June of 2008, supported by a Technical Report.

The historical exploration activities completed in the area of the Evolución Project are summarized in Table 4.

Company	Year	Exploration Work			
Colonial Miners	1560s to 1910	12 shafts and U/G mining of San Ramon, Escondida, Esperanza, Union and Calvario.			
	1900	Mines closed and flooded.			
Alejandro Gaitan	1966 to 1970	Reopening of Calvario Shaft and production of approx.16,000 tonnes of material.			
Javier Martinez Lomas	1984 to 1987	Mining of Antigua Vein by Martinez Shaft and production of approx. 867 tonnes of material. Construction of processing plant.			
CRM	1982 1987	Limited U/G sampling. 33 underground chip samples.			
AJ Resources Inc.	2003	Surface mapping of the mine area, trenching, mine rehabilitation, ramping and diamond drilling. Non-compliant, independent Mineral Resource Estimate completed by Charles Lammle, PEng.			
	2004	Reopening of Negrillas, San Jose, Martinez and Compromiso Shafts			
Silver Eagle Mines Ltd.	2005	Mapping and prospecting of the Calvario and Lechuzas areas. Diamond drilling (9,768 m).			
	2006	NI 43-101 Mineral Resource Estimate and technical report completed by Wayne Valliant, PGeo			
	2006 to 2007	Diamond drilling (38,000 m) Construction of a 1.2 kilometres ramp 1.66 kilometres of lateral U/G development Construction of a 150 tpd mill			
	2007	Mapping of Miguel Auza concessions at a 1:10,000 scale.			
	2008	Two NI 43-101 Mineral Resource Estimates and technical report completed by RPA in January and July.			

Table 4: Exploration	History o	of the Evolución	Project

5.2 Previous Mineral Resource Estimates

Historical mineral resource estimates presented in this section are superseded by the mineral resource estimate discussed herein. The QP has not done sufficient work to classify the historical estimate as a mineral resource or mineral reserve. Excellon is not treating the historical estimate as current mineral resources or mineral reserves. The information presented in this section is relevant to provide context but should not be relied upon.

In 2003, SEM (then AJ Resources) commissioned Charles Lammle, PEng, to complete a Mineral Resource Estimation supported by an independent technical report. The estimation was generated considering the underground sampling results conducted by CRM, and the smelter returns of Gaitan and Martinez. Lammle (2003) estimated an Inferred resource of 269,000 tonnes grading 0.5 g/t gold, 680 g/t silver, 6.0% lead and 5.5% zinc based on this information.

Wayne Valliant, PGeo, of Scott Wilson Roscoe Postle Associates Inc. (RPA) prepared a mineral resource estimate for the Calvario Zone in January 2006 for SEM that was accompanied by a technical report compiled in compliance with NI 43-101 guidelines (Valliant et al., 2008) to support a public offering.

RPA updated the mineral resource estimate of the Calvario Zone in both December 2007 and January 2008 (Valliant et al 2008). Both the 2007 and 2008 estimates were completed in accordance with CIM's *Best Practice Guidelines for the Estimation of Mineral Resources and Mineral Reserves* and were supported by National Instrument 43-101 Technical Reports.

The results of the 2007 and 2008 estimates are summarized in Table 5. The supporting technical reports are filed and available on SEDAR.

Effective Date	Category	Tonnage ('000)	Au (g/t)	Ag (g/t)	Pb (%)	Zn (%)
February 28, 2006	Total Indicated	186	0.31	243	2.53	2.86
	Total Inferred	740	0.18	150	2.43	2.34
December 31, 2007	Total Indicated	2,031	0.18	142	2.06	2.25
	Total Inferred	768	0.24	252	1.27	1.12
June, 2008	Total Indicated	2,058	0.19	152	2.30	2.41
	Total Inferred	858	0.23	242	1.55	2.42

Table 5: Historical Mineral Resource Estimates Completed by RPA Between 2006 and 2008

6 Geological Setting and Mineralization

6.1 Regional Geology

The Project is located in the Mesa Central physiographic province of central Mexico (Figure 5), along the boundary between the Parral and Oaxaquia terranes of Gondwanic affinity, previously interpreted as the Sierra Madre Terrane. The Parral terrane is the least studied and least understood of all Mexican terranes. It has a basement of Paleozoic schist overlain by Triassic to Cretaceous supracrustal sedimentary rocks. The Mesozoic sedimentary rocks deposited along a series of northwesterly elongated troughs and highs formed during the Triassic breakup of Pangea, opening of the Atlantic Ocean, and opening of the Gulf of Mexico.



Figure 5: Mesa Central Physiographic Province Source: Modified after Nieto-Samaniego (2007)

The Parral terrane and the Evolución Project have a key location in the Mexican terranes. They are located where large volumes of easterly migrating crustal fluids, generated by the Cretaceous to Eocene Laramide compression, met supracrustal rocks undergoing crustal extension. This extension occurred at the eastern front of the Basin and Range physiographic province and was compounded by the overlapping Rio Grande Rift deformation.

The Mesa Central physiographic province is an elevated plateau which extends 400 kilometers south-southeast. It is bound to the north and east by the Sierra Madre Oriental, to the west by the Sierra Madre Occidental, and to the south by the Trans-Mexican volcanic belt (Nieto-Samaniego et al., 2007). The northwest-trending San Luís-Tepehuanes fault system, which extends 1,600 kilometres, divides the Mesa Central into two regions.

The northern region is characterized by lower elevations (typically below 2,000 metres above mean sea level) exposing Mesozoic supracrustal rocks. The Mesozoic Basin dominates the northern part of the Mesa Central and is comprised of an ancient sedimentary ocean basin filled with alluvial and lake sediments, overlying a thick sequence of calcareous siltstones and sandstone. Basin rocks are overlain by sandstones that contain volcanic rock fragments.

The southern region is characterized by minimal erosion where rugged Cenozoic volcanic rocks are abundant, with elevations typically over 2,000 metres above sea level. The region is cut by the Aguascalientes valley.

The Mesa Central consists of a Paleocene to Pliocene sequence of dacite-rhyolite, and esite, and basalt, and related intrusive bodies and intercalated local basin fill deposits of coarse sandstones and conglomerates (Figure 6; Nieto Samaniego et al., 2005).

The dominant intrusive rocks of the region range from late Cretaceous and mid-Tertiary in age. The Cretaceous intrusions formed during a tectonic regime of east-west compression resulting in folding of limestones. The mid-Tertiary intrusive rock were emplaced during a reversal in tectonic regime to extension, resulting in a Basin and Range geomorphological feature.

Erosion and volcanism occurred in the interval between the two intrusive events, creating continental conglomerates and rhyolite flow, breccias, and ash deposits. Erosion continued after the mid-Tertiary intrusive events, forming additional conglomerate layers. Lastly, during the late Tertiary, mafic volcanic rocks were extruded locally onto pre-existing strata. Much of the area is covered now by rocky Quaternary soils and caliche.

Like the intrusions, mineralization is classified into two stages. The first stage is associated with the late Cretaceous intrusive event and is base-metal-dominant. The second stage is associated with mid-Tertiary intrusions and is polymetallic, with silver, lead, zinc and, in locally, gold-bearing minerals. A large number of ore deposits of the Central Altiplano are located along the San Luís-Tepehuanes fault system.



Figure 6: Regional Geology Setting Source: Nieto Samaniego et al., 2005

6.2 Property Geology

The property is underlain by the upper Cretaceous Caracol Formation (Figure 7), which locally consists of a thick sequence of interbedded mudstone, siltstone, and lesser sandstones. The Caracol Formation rocks are gently folded along northwest-southeast trending fold axes. Caracol strata strike north-easterly with gentle to moderate dips to the west.

Tertiary rhyolites form distinctive ridges south of the village of Miguel Auza. These in turn are capped by extensive conglomerate beds, also of Tertiary age.

Several small intrusive bodies of unknown age are present on the property, including a monzonite porphyry stock in the Miguel Auza area, and a smaller monzonitic stock that has been identified between the villages of Miguel Auza and Juan Aldama. Additional rhyolitic intrusions have been characterized to the east of Juan Aldama. Andesite and lamprophyre dykes occur in proximity to areas of historic metal production.

This suite of intrusive rocks is closely associated with polymetallic veins at the Evolución Project. The large mesocratic medium-grained central intrusion is oval in shape, approximately five square kilometres in extent, and elongated northeast southwest. This unit is expressed as a laccolith and dips gently to the northeast. The extension at depth and laterally to the northeast is unknown. The known vertical depth varies from 0 metres to 125 metres where it has been intersected by drilling. The contact between the monzonite and the underlying Caracol Formation dips shallowly to the northeast and is expressed by a brittle fault zone.

Exposed intermediate to low sulphidation epithermal mineralization includes the approximately northeast-trending iron-oxide-carbonate-quartz veins and stockworks of the Lechuzas and Calvario zones, as well as the northwest-southeast-trending quartz +/-carbonate veins of the Madera vein system. The Capilla-Mantos zone dips shallowly northeast and underlies the monzonitic intrusion contact with the Caracol Formation. The various zones at the Evolución Project are displayed in Figure 8.


Figure 7: Local Geological Setting of the Evolución Project

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Figure 8: Geological Map of the Calvario Vein System Area Showing the Calvario, Lechuzas and Capilla-Mantos Mineralized Zones. Source: Excellon, 2020

The Calvario and Lechuzas zones are poorly exposed on surface, with significant portions located beneath the town of Miguel Auza and Excellon's processing plant. The Calvario vein system was mined by previous operators.

The Madera vein system to the northeast of the project area includes the El Cobre, Gatuno, Vibora, Jabali, Abejas and Pastizal veins.

The temporal and kinematic relationships between Calvario and Lechuzas vein systems, and the Madera vein systems in the northeastern portion of the property are not well understood. Likewise, the kinematic relationship between the Capilla-Mantos and Lechuzas vein systems are also not well understood. Future work is expected to further understand these relationships.

6.2.1 Structure and Veining

From Paleozoic to present time, the rocks of the Evolución Project underwent at least three major deformational events (Fonseca and Siddorn, 2018) (Figure 9).





The compressional tectonics of the Larámide Orogeny at the end of the Cretaceous generated a shortening of the Cretaceous sedimentary crust, manifested by the emplacement of northwest-southeast folds and northwest-southeast thrust faults dipping southwest (Silver Eagle Mines, 2010, internal report).

A simple model to explain the structures found in the Miguel Auza area is presented in Figure 10. This figure represents northwest-southeast trend folding and thrust faults structures, normal faults with northeast-southwest orientation and strike slip faults with east-west direction complementing the compressional tectonics. In addition, secondary normal faults formed during the extension or post-orogenic stages with northwest-southeast orientation and movements along northeast-southwest normal faulting primary system. (Silver Eagle Mines, 2010, internal report).



Figure 10: Structural Model of the Evolución Project Area

- A: Structural plan map
- B: Strain ellipse

Source: Silver Eagle Mines, 2010, internal report

6.2.2 Mineralization and Veining

The descriptions of mineralization at the Project are summarized after Valliant (2008).

Mineral occurrences and prospects of the Miguel Auza area comprise polymetallic epithermal veins, hosted in the Caracol Formation. Copper mineralization is present in epithermal quartz veins three kilometres northeast of the historical mine district and hosted in monzonitic rocks.

Polymetallic veins at the Evolución Project are broadly similar in age, lithology, and structural geology to other deposits on the Mesa Central, such as Fresnillo, Juanicipio, Velardeña, San Sebastian, San Martin, and La Colorada. These deposits are all hosted within the Caracol Formation or other Cretaceous sedimentary units and are structurally controlled and related to mid-Tertiary intrusive activity.

The Calvario Vein System

The Calvario vein system is poorly exposed on surface, with significant portions located beneath the Miguel Auza town and Excellon's processing plant. The veins were mined by previous operators, hosted mainly by the Caracol Formation and locally by monzonite and andesite dykes and sills.

Centuries of historical mining activities have eliminated nearly all surficial exposures of the main Calvario vein system. The Calvario vein system is northeast- to southwest-trending, characterized by iron oxide-carbonate-quartz veins and stockworks associated with silver- and base metal-bearing sulphides. The veins are epithermal and display vuggy, open space filling, cockscomb crystal growth and colloform banding textures.

Mineralization within the veins consists of massive to disseminated sulfide with associated calcite, ankerite and quartz. Sulphide minerals include argentiferous galena, argentite, silver sulphosalts, sphalerite, pyrite and arsenopyrite. Sulfide mineral content within the veins is generally between 15% to 25%. Oxidation processes produce alteration products of cerussite, smithsonite and various iron oxides.

The Calvario Zone is comprised of multiple parallel veins, historically known as the Calvario A and B, Ramal 1 to 5 and Milagro veins. These veins are in the area of the Martinez #1 and #2 shafts. The vein system is traced laterally by drilling for at least 1,500 metres. Veins in the Calvario zone are characterized by elevated sulphide mineral abundance, with a silver composition averaging around 50% of the total metal value.

The Lechuzas zone comprises five or more parallel, northeast-trending veins, also termed the Mill Zone veins. The veins dip approximately 70 degrees to the southeast and have a strike length of at least 1,000 metres. The principal veins are the San Ramon, La Colorada, Esmeralda, El Carmen and Las Lechuzas. The veins of Lechuzas zone are exposed within historic workings up to depths of 16 metres to 20 metres.

Madera Vein System

Unlike the veins of the Calvario vein system, the northwest-southeast trending Madera vein system is well-exposed in outcrop. The veins are located to the northeast of the main deposit area and comprise intermediate to low sulphidation epithermal quartz +/- carbonate tabular bodies. The system has been explored by surface sampling and pitting, limited drilling by Excellon and previous operators, and small-scale underground development in the El Cobre vein. A description of the main veins of this system are summarized in Table 6.

Vein Name	Orientation	Surface Extent	Width	Description
El Cobre	Dips 45º NE	500 m	~1m	White quartz with lesser Fe-rich carbonate. Finely recrystallized white quartz after chalcedony, and abundant quartz after bladed calcite. Kinematics and steep plunge of historical workings suggest sinistral-normal movement on NW- trending faults during emplacement.
Abejas	Steeply dipping towards NE-SW	>3km	1-2m	Quartz-calcite-Fe-carbonate. Recrystallized white quartz after chalcedony and bladed quartz after calcite Localized quartz cemented monomict breccia. Slickenlines indicating dip-slip movement along NW-trending fault.
Pastizal	Dips 60° NE		2-3m	and lesser white quartz. Crustiform and bladed calcite, and bladed quartz after calcite. Crosscut by calcite+/-siderite veins. Growth fibres indicate dip slip to oblique slip movement during emplacement. Appears to truncate Calvario vein.

Table 6: Vein Descriptions of the Regional Madera System

7 Deposit Types

The mineralization at the Evolución Project is characteristic of a structurally controlled, polymetallic hydrothermal vein deposit.

The veins display classic epithermal textures, including open space filling, cockscomb crystal growths, colloform banding and vugs. Vein mineralization includes massive to disseminated sulphide minerals, including argentiferous galena, argentite with other silver sulfosalts, sphalerite, pyrite and arsenopyrite. Sulfide mineral content ranges between 15% to 25%. Oxidation alteration products includes cerussite, smithsonite and various iron oxides.

Epithermal deposits are classified by Hedenquist et al. (2000; Figure 11) according to the sulphidation state of the fluids, i.e. high, intermediate and low sulfidation. Mexico hosts many silverrich epithermal deposits, the majority of which are classified as either low- or intermediatesulphidation, having formed under alkaline/neutral regimes.



FIG. 1. Cartoon to illustrate schematically the various processes deduced for volcanic-hydrothermal and geothermal systems, and the respective environments of high-sulfidation and low-sulfidation styles of epithermal ore deposits relative to the intrusive engine. We do not infer necessarily this spatial relationship between all systems (from Hedenquist and Lowenstern, 1994, integrated from many sources, including Sillitoe, 1975; Giggenbach, 1981; Henley and Ellis, 1983).

Figure 11: Genetic Model for Epithermal Deposit Types.

Source: Hedenquist et al. (2000),

Most epithermal deposits in Mexico are Tertiary in age, distributed in association Sierra Madre Occidental and Sierra Madre del Sur related volcanism (Damon et al., 1981; Clark et al., 1981; Camprubi et al., 1982, 2003a). Most hydrothermal deposits within the Mesa Central are also located near major faults that separate the plateau from other geological provinces of the Sierra Madre Oriental, Sierra Madre Occidental, and the Trans-Mexican Volcanic Belt (Camprubi and Albinson, 2007).

The majority of intermediate- to low-sulphidation epithermal deposits in Mexico are several kilometres long, with variable vertical extents. The epithermal veins are usually generated through multiple phases of fluid migration, not all of which are mineralizing. The cracking and sealing of veins through the multiphase generation results in internal banding of metals and gangue minerals.

Intermediate- and low-sulphidation epithermal deposits of Mexico typically contain a mineral assemblage, including base metal sulfides (in the order of pyrite, galena and chalcopyrite), coppersilver sulfosalts, and silver-lead sulfosalts. Many deposits also become richer in base metals with depth (Camprubi and Albinson, 2007).

8 **Exploration**

Historical exploration work in the area of the Evolución Project is discussed in Section 5.

Prior to 2010 when Excellon commenced exploration, work such as drilling, sampling, and geochemistry was concentrated on the Carmen vein set, El Cobre, Negrillas, and Pastizal veins of the Madera system, Lechuzas and the main Calvario mine area. Excellon continued exploration in these areas after becoming operator in 2010, along with further prospects including Abejas, Jabali, Lomo de los Gatos, Loma de las Minas, and La Vibora.

8.1 Exploration by Excellon

Since becoming the operator of the property in 2009, Excellon has conducted geological mapping, rock and soil geochemical sampling, ground geophysical surveys, fluid inclusion studies, and diamond drilling documented by detailed core logging. A compilation of exploration activities conducted by Excellon is shown in Figure 12.

Historical data recorded on paper were digitized and incorporated into Excellon's GIS and drilling and sampling databases. This includes historical surface mapping, sampling, interpretation, mine sampling, as well as historical surface drilling.

No exploration was conducted between 2011 and 2016. A thorough and comprehensive review of data and historical programs was performed between 2016 and 2017, involving the sampling of a small selection of historic drillhole intervals that had not previously been sampled. Excellon recommenced exploration work on the Evolución property in 2017; this included prospecting, sampling, mapping, and re-logging of historic drill core. Drilling activities recommenced in 2018 and 2019.



Figure 12: Compilation of Exploration Work Completed by Excellon

8.1.1 Geological Mapping

Geological mapping at a variety of scales has been performed by Excellon in several areas of the property and is summarized in Table 7. Reconnaissance mapping at 1:1,000 scale is being undertaken in areas of the project that have not been adequately mapped and sampled. These programs will continue through 2020.

A total of 1,108 surface rock samples have been collected by Excellon in conjunction with geological mapping. A total of 212 samples were collected in 2017, followed by 896 samples in 2018. These samples were submitted to the SGS Laboratory in Durango, Mexico for geochemical testing by inductively coupled plasma-mass spectroscopy (method code ICP40B).

A summary of the surface samples collected in 2017 and 2018 mapping programs and organized by area are shown in Table 8.

Table 7: Geological Mapping Programs Conducted by Excellon at the Evolución Project

Area	Company	Year	Scale	Purpose
Miguel Auza concessions	Excellon	2018	1:2,000	Detailed mapping and prospecting
Lomo de los Gatos	Excellon	2019	1:1,000	Follow up detailed mapping and prospecting
Loma de las Minas	Excellon	2019	1:1,000	Follow up detailed mapping and prospecting

Table 8: Conventional Rock Samples Collected by Excellon Between 2017-2018

Compony	Samples					
Company	2017	2018				
Excellon	212	896				

8.1.2 Geochemical Soil Sampling

Excellon completed a trial soil geochemical survey with 25-metre by 25-metre spacing in 2018 to determine whether mineralization on the Evolución Project has a soil geochemical response. The assay results identified discrete anomalies over Loma de las Minas, which were followed up on with diamond drilling in 2019, which returned anomalous silver, lead and zinc in drillhole EX19MAZ-261.

8.1.3 Geophysical Surveys

Induced Polarization Surveys

In 2018, four geophysical surveys were conducted on the Evolución Project. These included two lines of two-dimensional Induced Polarization (IP) surveys over El Carmen, and three threedimensional (IP) surveys conducted over Abejas-Pastizal, El Cobre, and Loma de las Minas zones. These surveys were used to detect sulphide bodies, geological contacts, structures, and intrusive bodies in the area. The location of these geophysical surveys is shown in Figure 12. All surveys yielded significant results that increased geological knowledge and assisted with targeting. The two-dimensional induced polarization (IP) survey over the El Carmen-Lechuzas area included 2,000 metres in two sets of lines (1700N and 2000N), oriented with an azimuth of 125 degrees and a line spacing of 40 metres. Both lines were acquired as single 2D lines with accompanying offset current lines.

The survey conducted over the Abejas-Pastizal zone involved a three-line acquisition swathe survey of two line-km with a line spacing of 50 metres. The lines were oriented at an azimuth of approximately 47 degrees. The survey comprised a single two-dimensional line with two offset transmitting lines.

Three sets of lines (800E, 850E and 900E), 500 metres in length, oriented approximately northeastsouthwest, were acquired over the El Cobre area. Each line was acquired with a two-dimensional IP pole-dipole approach with additional current acquired from two currents lines, 50 metres to each side. Handheld GPS data was used for the inversion modeling. As a result, the location data required some extra filtering to provide a smooth surface model such that for each pass of the survey line, the data had consistent elevation data.

For the Loma de las Minas area, three sets of lines (1000N, 1100N and 1200N), 1,000 metres in length and oriented east-west, were used. Each line was acquired with a two-dimensional IP poledipole approach with additional current acquired from two currents lines, 50 metres to each side.

For all surveys, both two- and three-dimensional models were completed utilizing UBC-GIF's inversion codes.

9 Drilling

Between 2005 and 2019, a total of 298 core drillholes (91,527 metres) were completed throughout the Evolución property by SEM and Excellon. The mineral resource evaluation discussed herein considers drilling information completed by SEM and Excellon. A summary of drilling completed by each company, by year, is contained in Table 9 and displayed in Figure 13.



Figure 13: Drilling Completed on the Evolución Project

				S	ilver Eagl	e Mines								Excello	n			
	200	5	200	6	200	7	200	8	Subto	otal	201	0	201	8	201	9	Subto	tal
Area	No.	Metres	No.	Metres	No.	Metres	No.	Metres	No.	Metres	No.	Metres	No.	Metres	No.	Metres	No.	Metres
Abejas	-	-	-	-	-	-	-	-	-	-	2	668	3	1,211	-	-	5	1,879
Calvario	48	8,975	20	5,093	52	20,970	26	7,932	146	42,970			-	-	-	-	-	-
Carmen	1	201	12	2,162	8	2,447			21	4,810			1	600			1	600
El Cobre	-	-	-	-	-	-	9	1,511	9	1,511	2	631	5	1,439	-	-	7	2,070
Jabali	-	-	-	-	-	-	-	-	-	-	1	619	-	-	-	-	1	619
Laika	-	-	-	-	-	-	-	-	-	-			-	-	2	1,095	2	1,095
Lechuzas	-	-	4	696	-	-	1	264	5	960			12	4,254	16	8,449	28	12,703
Loma de las Minas		-	-	-	-	-	-	-	-	-			-	-	2	622	2	622
Negrillas	1	410	39	11,041	5	1,336	13	3,570	58	16,357	1	540	3	1,088	1	502	5	2,130
Pastizal	-	-	-	-	1	364	-	-	1	364	5	2,065	1	251	-	-	6	2,316
Vibora	-	-	-	-	-	-	-	-	-	-	1	521	-		-	-	1	521
Total									240	66,972							58	24,555

Table 9: Summary of Drilling Completed on the Evolución Project Between 2005 and 2019

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9.1 Drilling by Silver Eagle Mines Ltd. (2005-2009)

Historical drilling on the Evolución Project was carried out in a number of drilling campaigns by SEM until 2008. Most of the historical drilling was completed at and around the Calvario Zone. Between 2005 and 2008, a total of 240 core drillholes (66,972 metres) were completed by SEM on the Evolución Project, of which 232 drillholes (65,627 metres) are located within the Evolución Project resource area.

Drilling was carried out by Tecmin Services Ltd. and SEM drilling operators until 2008 using Longyear 38 drills. Prior to 2010 drillholes were collared in NQ tubing which produces 47.6-millimetre diameter core, and BQ which produces 36.5-millmetre diameter core.

Further drilling and logging procedures used by SEM are not well known.

9.2 Drilling by Excellon (2010-2019)

Excellon assumed control of the project in mid 2009, with drilling commencing in 2010. In 2010, Excellon drilled a total of 12 drillholes (5,044 metres) on the Evolución property. No drilling was conducted between the end of 2010 and start of 2018. Between 2018 and 2019, Excellon completed 46 core drillholes (19,510 metres) on the Evolución property, of which 41 drillholes (17,244 metres) were drilled within the resource area, the majority of which focused on delineating the Lechuzas zone.

Since 2010 drillholes have been collared in HQ tubing which produces 63.5-millmetre diameter core. In cavities or bad ground, the core diameter is reduced to NQ tubing.

Drilling was carried out by Major Drilling in 2010 and by Maza Drilling S.A. de C.V. from 2018 to present. Drilling programs were carried out using a variety of diamond drills, 24 hours a day, 7 days a week until completion.

Upon recovery from the drill, core was placed into wooden or plastic core boxes, appropriately labelled and secured by the drilling contractor. Core was then delivered in the core boxes twice a day to the core storage facilities, located in Miguel Auza. The core handling at the drill rig was conducted by the drill contractor.

Upon receipt at the logging facility, the core is geotechnically logged. The information captured involves measurements of recovery, RQD, basic rock strength assessment, and qualitative and quantitative information on jointing. Through this process the core is oriented, and an orientation line is drawn in blue coloured wax pencil with arrows pointing down hole. Samples are then selected for specific gravity analysis.

Core logging is performed on laptop computers. Data is entered directly into an Access form housed in an SQL database. The type of information captured includes collar information, lithology, sampling intervals, specific gravity analyses, Reflex IQ Logger orientation data and geotechnical information. Logging procedures are well documented in Excellon's Core Verification procedural form (Excellon Resources Inc., 2017b). Core selected for sampling is marked with red wax pencil, respecting lithological, structural and mineralization boundaries.

The drillhole data information is stored on a company central server located at La Platosa mine facility near Torreón, Mexico owned by Excellon Resources.

9.3 Surveying

Drillhole collar locations were surveyed using a Wild T1 theodolite until mid-2006. All collars were resurveyed at least three times using point averaging with either a Garmin or Magellan hand-held GPS.

Prior to 2010, downhole orientation surveys were conducted with a Pajari instrument. Measurements were generally collected every 100 metres.

In 2010, downhole surveys were conducted with an Excellon-owned Icefield instrument, with measurements generally collected every 18 metres.

From 2018 to present, downhole orientation surveys have been conducted with a Devico DeviShot instrument, with measurements collected every 15 metres for the first 60 metres of drilling and every 50 metres subsequently.

9.4 Drill Pattern and Density

Drilling at Evolución varies from 10 metres to 50 metres within the Evolución resource areas. Outside of the Evolución resource area, drill spacing drops off significantly and is localized around regional exploration targets.

In the Calvario zone area, the drill spacing ranges from approximately 10 metres to 50 metres. The drilling spacing in the Lechuzas zone typically is between 50 metres and 100 metres. The angle of drilling in these zones is between 28 degrees and 85 degrees dip, typically 45 degrees, which intersects the mineralized zones at a perpendicular to high angle. SRK believes that the drill spacing in these zones is adequate to delineate the polymetallic mineralization.

9.5 SRK Comments

SRK is of the opinion that the drilling and sampling procedures adopted by Excellon are consistent with generally recognized industry best practices. The resultant drilling pattern is sufficiently dense to confidently interpret the geometry and the boundaries of the polymetallic mineralization. The core samples were adopted by competent personnel using procedures that meet generally accepted industry best practices. The sampling was undertaken or supervised by qualified Excellon geologists. SRK concludes that the samples are representative of the source materials and there is no evidence that the sampling process introduced a bias.

10 Sample Preparation, Analyses, and Security

Exploration samples collected by SEM prior to 2006 were prepared at the SGS Laboratory facilities in Durango, Mexico, and analyzed at the SGS laboratory (SGS) in Toronto, Ontario. Umpire check samples were completed by Activation laboratories (Actlabs) in Ancaster, Ontario.

Samples collected by SEM between 2006 and 2007 were sent to ALS in Guadalajara or Chihuahua for preparation, and ALS in Vancouver for analyses. Umpire samples were sent to ACME Analytical Laboratories Ltd. (ACME) in Vancouver.

In 2008, SEM submitted samples to an on-site laboratory (San Pedro) for geochemical assaying. San Pedro is not considered an independent geochemical laboratory of SEM. Umpire check samples were sent to ALS in Vancouver.

SGS in Toronto, Actlabs, ALS in Guadalajara, Chihuahua, and Vancouver and ACME are autonomous, commercial geochemical laboratories that operate independently of SEM.

Exploration samples collected by Excellon between 2010 and 2019 were submitted to SGS de México, S.A. DE C.V. (SGS) in Durango, Mexico. The Durango Laboratory is accredited ISO 17025 by the Standards Council of Canada (accreditation no. 657) for a number of specific test procedures, including the method used to assay samples submitted by Excellon. SGS Minerals laboratories also participate in a number of international proficiency tests, such as those managed by CANMET and Geostats. SGS is an autonomous, commercial geochemical laboratory that operates independently of Excellon.

10.1 Sample Preparation and Analyses

10.1.1 Silver Eagle Mines (2005-2008)

The following summary is modified from Valliant et al. (2008):

During the pre-2006 drill campaign, samples were prepared at the SGS laboratory in Durango, Mexico. Samples were dried, and crushed, using a jaw crusher, to <2 millimetres. The crusher was cleaned between samples using an air gun and wire brush. Crushed samples were split with a Jones riffle to 200 grams and pulverized to 90% to 95% passing 200 mesh. The pulverized samples were sent to the SGS laboratory in Toronto, Ontario, for analyses. Gold analyses were done by fire assay with an atomic absorption finish (SGS procedure FAA313). The detection limit for this method is 5 parts per billion. Silver analyses were by multi- acid digestion and flame atomic absorption (SGS procedure AA50). Silver results greater than 1,000 g/t were re-assayed by fire assay. Assays for lead and zinc were by sodium peroxide fusion/ICPOES analyses with a detection limit of 0.01%. SGS inserted duplicate samples every 12 samples or less to ensure batch precision and a blank in every batch of 28 to monitor contamination. SEM contracted ALS for the sample preparation and analyses of drill core samples from the 2006-2007 program. The ALS quality management system has been certified as ISO 9001:2000 compliant

Samples were prepared at either the Guadalajara or Chihuahua facility. The preparation method was the same at both laboratories (PREP-31) and comprised weighing, drying, crushing of the entire sample to a minimum of 70% minus 10 mesh, riffle splitting, and pulverizing a 250-gram split to a minimum of 85% minus 200 mesh. A 100 g sample was shipped to the Vancouver facility for analysis. The balance is stored until notification by SEM.

Assays were performed for gold and silver by fire assay with gravimetric finish (ALS method GRA41). Lead and zinc were analyzed by aqua regia digestion followed by atomic absorption finish (ALS method AA46) and subsequently by ICP finish (ALS method OG46). Later in the campaign, analyses were first carried out for 35 elements by ICP method from an aqua regia leach. Any sample with results exceeding the analytical limit of the method (100 g/t silver, 1% lead and 1% zinc) for any one of these principal metals was reanalyzed for Au, Ag, Pb, and Zn by the GRA41 (or OG46) and AA46 methods cited. ALS inserts duplicate samples every 20 samples and one blank and one standard sample every 40 samples for AA and ICP analyses. For fire assays, ALS inserts two standards, three duplicates, and one blank for a rack size of 80 samples.

SEM has been operating an on-site assay laboratory (San Pedro) since February 2008 for underground and diamond drill samples, including diamond drill core samples from twelve holes; 2008-170 to 2008-184. The data from only one of the holes was used for estimating indicated mineral resources. The others were drilled in either inferred mineral resources or in waste outside the limits of mineral resources.

The SPR sample preparation comprises crushing to -2 millimetres. The crusher is cleaned between samples with an air gun and metal brush. The sample is quartered using a Jones splitter to 200 grams and pulverized to 90% to 95% minus 200 mesh. Rejects are stored in the core shack and pulps are stored in the laboratory for four months. Assaying for gold and silver is by fire assay with a gravimetric finish using 30 samples. Assaying for lead and zinc is by atomic absorption with aqua regia digestion. Internal laboratory quality assurance/quality control (QA/QC) includes repeats from the same pulp every five samples and re-assay from the pulp at an external laboratory every ten samples. Detection limits for the method are 0.02 g/t for gold and silver and 0.001% for lead and zinc.

10.1.2 Excellon (2010-2020)

The drilling, sampling, and logging are done under the supervision of experienced technical personnel. Logged and sampled drill core is stored in a fenced and access-controlled area of the Miguel Auza office. The core boxes are labelled, and depth markers are inserted at appropriate intervals.

Drill core samples are prepared using the following protocol:

- 1. Air dry if possible; maximum 120°C if oven-drying is necessary.
- 2. Crush entire sample to greater than 90% passing 2 millimetres.

- 3. Riffle split 250 grams.
- 4. Pulverize 250 grams to greater than 90% passing 75 microns.

Drill core samples used for mineral resource estimation have been analyzed for 33 elements including silver, lead, and zinc using a four-acid leach method followed by Inductively Coupled Plasma - Atomic Emission Spectroscopy (ICP-AES) determination (ICP40B). Gold was analyzed by fire assay with atomic absorption finish.

High-grade samples, with silver greater than 100 g/t and lead and zinc greater than 1%, are analyzed a second time using a fire assay with gravimetric finish for silver and a sodium peroxide fusion with ICP-AES finish (ICP90Q). If necessary, lead and zinc may be measured using titration if the quantity exceeds the upper limit of 30%. Gold is reanalyzed by gravimetric finish if the values returned are greater than 10 g/t.

The analytical methods used from 2010 to December 31, 2019 are summarized in Table 10. The lower and upper limits for the four-acid digest method (ICP40B) are shown in Table 11.

 Table 10: Summary of SGS Preparation and Assay Methods Used for the Evolución Project (2010–2019)

Analyte	Method Code	Detection Limit	Digest	Instrumentation
33 elements	ICP40B	Variable; see below	four-acid: HNO3 + HClO4 +HF + HCl digest plus HCl leach	ICP-AES
Au	FAA313	0.01–10 ppm	Fire assay	AAS
Over-limit and	alysis methods:			
Ag	FAG313	10–5000 ppm	Fire assay	Gravimetric
Au	FAA303	0.01–100 ppm	Fire assay	AAS
Pb	ICP90Q	0.01–30%	Sodium Peroxide Fusion	ICP-AES
Zn	ICP90Q	0.01–30%	Sodium Peroxide Fusion	ICP-AES

Table 11: Summary of Upper and Lower Limits for SGS's Four-Acid ICP Method (20)10-2019)
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Analyte	Lower Limit	Upper Limit	Analyte	Lower Limit	Upper Limit	Analyte	Lower Limit	Upper Limit
Ag (ppm)	2	100	Fe (%)	0.01	15	S (%)	0.01	5
AI (%)	0.01	15	K (%)	0.01	15	Sb (ppm)	5	10000
As (ppm)	3	10000	La (ppm)	0.5	10000	Sc (ppm)	0.5	10000
Ba (ppm)	1	10000	Li (ppm)	1	10000	Sn (ppm)	10	10000
Be (ppm)	0.5	2500	Mg (%)	0.01	15	Sr (ppm)	0.5	10000
Bi (ppm)	5	10000	Mn (ppm)	2	10000	Ti (%)	0.01	15
Ca (%)	0.01	15	Mo (ppm)	1	10000	V (ppm)	2	10000
Cd (ppm)	1	10000	Na (%)	0.01	15	W (ppm)	10	10000
Co (ppm)	1	10000	Ni (ppm)	1	10000	Y (ppm)	0.5	10000
Cr (ppm)	1	10000	P (%)	0.01	15	Zn (ppm)	1	10000
Cu (ppm)	0.5	10000	Pb (ppm)	2	10000	Zr (ppm)	0.5	10000

10.2 Specific Gravity Data

Samples taken for specific gravity test work are selected from cut core during the logging process. They are wrapped in Parafilm tape to eliminate the effect of buoyancy in plastic, as well as to seal the porosity and open spaces observed in core. The samples are then analyzed following the methodology laid out in the company's standard operating procedure for taking specific gravity measurements. The procedure consists of suspending the sample in water, correcting for temperature, and weighing it on a calibrated scale. Results are recorded in a dedicated database form which is used to calculate the specific gravity for each sample.

10.3 Sample Security

Excellon's dispatch procedure for sample shipping is outlined in the Standard Operative Procedure Shipping Order (Excellon Resources Inc., 2017a) form. Representatives from the SGS laboratory pick up the sample batches from Excellon's core storage facility in Miguel Auza (Figure 14). Sample batches are shipped upon the completion of a drillhole in sacks containing up to 10 samples with an estimated weight of approximately 30 kilograms. The pulp and reject material were returned by SGS to Excellon's storage facility approximately 30 days after analysis was completed.

Excellon and SGS staff maintain the chain of custody (COC) throughout the shipment process, until returned to Excellon's secure storage location. The sample batches are affixed with a COC form that contains the preparation method, type of analysis, samples numbers, batch numbers and shipping date.



Figure 14: Excellon's Sample Storage Facility for the Evolución Project

- A: Core box storage
- B: Sample pulp and coarse reject storage

10.4 Quality Assurance and Quality Control Programs

Quality assurance and quality control (QA/QC) programs are typically established to ensure the reliability and trustworthiness of the exploration data. They include written field procedures and independent verifications of aspects such as drilling, surveying, sampling and assaying, data management, and database integrity. Appropriate documentation of quality control measures and regular analysis of quality control data are important as a safeguard for the project data and form the basis for the quality assurance program implemented during exploration.

Analytical control measures typically involve internal and external laboratory control measures implemented to monitor the precision and accuracy of the sampling, preparation, and assaying. They are also important to prevent sample mix-up and monitor the voluntary or inadvertent contamination of samples. Assaying protocols typically involve regular duplicate and replicate assays and insertion of quality control samples. Check assaying typically performed as an additional reliability test of assaying results. This typically involves re-assaying a set number of rejects and pulps at a second umpire laboratory.

10.4.1 Silver Eagle Mines (2005-2008)

QA/QC procedures instituted by SEM are described in Valliant et al. (2008) and summarized below.

Prior to 2008, quality control measures included some field duplicate, umpire checks and laboratory internal checks. Industry standard quality control systems were not instituted on the Evolución Project for this period. The quality control program for the 2005 period comprised field and umpire duplicate samples. Between 2006 and 2007, SEM completed field and umpire duplicate sample checks.

SEM instituted a more robust quality control program for samples analyzed at SPR in 2008. This program included standards, blanks, field and umpire duplicates, amounting to approximately 14% of sample data.

10.4.2 Excellon (2010-2020)

The exploration work conducted by Excellon was carried out using a QA/QC program consistent with generally recognized industry best practices. Standardized procedures were used in all aspects of the exploration data acquisition and management including mapping, surveying, drilling sampling, sample security, assaying, and database management.

Excellon employed analytical quality control measures as part of the routine standard core sampling procedures since starting drilling of the Evolución Project in 2010. Analytical quality control measures for the 2010, 2018 and 2019 drilling programs, and the 2017 and 2019 resampling programs involved the regular insertion of blank and certified reference material at a rate of approximately 1 in 20. Excellon used a total of 9 standard reference materials with silver values ranging from 49 to 972 g/t, sourced from CDN Resource Laboratories Ltd. (CDN) in Langley, British Columbia, Ore Research & Exploration Pty Ltd. (OREAS) in Australia, and WCM Sales Ltd. (WCM)

in Burnaby, British Columbia (Table 12). In addition to the inserted control samples, Excellon collected one field duplicate every 40 samples from core drillholes.

The blank material was sourced from a barren marble quarry of the Trevino Formation in Bermejillo, Durango. Approximately, 1 kilogram of blank material chips are sent to the lab and inserted into the sample stream for preparation and assaying. Assayed values for blank material should not exceed 0.05 g/t for gold, 3 g/t for silver and 0.015% for lead and zinc. If the values exceeded such limits, an automatic batch failure was triggered.

	Silve	er	Lead	ł	Zind	;	Gol	d	
	Expected		Expected		Expected		Expected		Incorte
Standard ID	value	SD	value	SD	value	SD	value	SD	11136113
	(g/t)		(%)		(%)		(g/t)		
CDN-SE-1	172	28.5	1.92	0.045	2.65	0.1	0.48	0.17	29
CDN-SE-2	354	10.5	0.957	0.044	1.34	0.055	0.242	0.009	45
PB146	81.71	3.468	1.922	0.0594	2.5	0.051	-	-	35
PM1147	225.75	8.075	-	-	-	-	0.307	0.007	38
OREAS 133a	99.9	2.42	4.9	0.162	10.87	0.354	<0.5	-	2
OREAS 134b	209	9	13.36	0.743	18.03	0.755	<0.5	-	3
OREAS 135	55.7	1.92	1.7	0.052	2.8	0.067	0.006	-	51
OREAS 136	151	5	4.76	0.169	3.63	0.058	0.019	-	46
OREAS 601	49.2	2.02	0.0329	0.002	1330	64.2	0.78	0.031	21
OREAS 602	120	2.3	0.1022	0.0055	0.419	0.012	1.95	0.066	97
OREAS 603	298	8.1	0.1908	0.0125	0.92	0.031	5.18	0.151	18
OREAS 605	972	27.8	0.1297	0.0136	0.216	0.009	1.67	0.086	2

Table 12: Specifications of Control Samples Used Between 2010 and December 2019

Suspicious quality control sample assay results are detected by the Database Administrator who would inform the relevant Geologist. Re-assaying is performed in cases where data entry and sample collection issues (such as sample swaps) are ruled out by the Geologist.

In 2019, Excellon conducted an umpire laboratory testing program on a selection of drillhole intervals from historical drill core to increase the confidence of historical assay data. A total of 304 sample intervals from drillholes drilled between 2005 and 2008 were collected and submitted for assay to SGS laboratory in Durango, Mexico, for geochemical analyses (Table 13).

Table 13: Summary of Duplicate Samples Collected by Excellon for Historical Drillholes
Drilled Between 2005 and 2008 for the Evolución Project

Year	Drillholes	Duplicate Count
2005	3	76
2006-2007	15	192
2008	2	36
Total	20	304

Additional to Excellon's QA/QC programs, SGS in Durango conducts routine instrument calibration and quality control checks and maintains a database of the results.

10.5 SRK Comments

SRK reviewed the field procedures and analytical quality control measures used by Excellon and historical operators where possible. The analysis of the analytical quality control data is presented in Section 11 below. In the opinion of SRK, Excellon personnel used care in the collection and management of the field and assaying exploration data. Based on historical reports and data, SRK is confident in reliability of exploration and drilling information provided by previous operators.

In the opinion of SRK, the sampling preparation, security and analytical procedures used by Excellon are consistent with generally accepted industry best practices and are, therefore, adequate for the purpose of informing mineral resources.

11 Data Verification

11.1 Verifications by Excellon

Core logging procedures include capturing drillhole data, lithology, geotechnical information, sampling intervals and specific gravity measurements using Access entry forms that enforce code integrity and identify any gaps or overlaps during data entry. The information is then housed in SQL database format and is further checked for errors using queries.

Assay data were verified against original certificates when possible. Assay results received from contract laboratories are merged with their unique sample number within the database to minimize the possibility of error. As needed, certificates issued to SEM were re-issued to Excellon by the analyzing laboratory to verify that historical data was accurate.

11.1.1 Historical Drilling Verification Program

In October 2019, Excellon commissioned SRK to propose a data validation and re-sampling program for the Evolución Project for particularly historically-derived data. Sample intervals within the Project evaluation domains were selected for field duplicate analysis across a variety of silver assay grades. Excellon quartered core from this selection for repeat analyses of silver, lead, zinc and gold at an umpire laboratory. Samples were chosen with the intention of having equal distribution between four silver-equivalent grade categories (<40 parts per million [ppm], 40 ppm to 80 ppm, 80 ppm to 150 ppm, >150 ppm), where possible, with representative sample coverage for these value groupings.

The data validation program aimed to verify historical exploration data, including re-assaying archived core where available and where the mineral resources are informed by historical data, with the goal of increasing the confidence of historical assay data informing the mineral resource estimate herein. The results of this program are presented in Section 11.2.2.

11.2 Verifications by SRK

The authors of this report undertook various steps to verify the data applied for mineral resource estimation. These measures included detailed analysis and interrogation of the provided digital exploration data as well as steps undertaken during site visits to verify logged information.

SRK analyzed the analytical quality control data produced by Excellon and SEM from 2005 to 2019 drilling programs. All available data were provided to SRK in Microsoft Excel spreadsheets. SRK aggregated the assay results of the external analytical quality control samples for further analysis. Control samples (blanks and certified reference materials) were summarized in time series plots to highlight their performance. Paired data (field and umpire duplicate assays) were analyzed using bias charts, quantile-quantile, and relative precision plots. The type of analytical quality control data collected, and their associated performances are discussed in Section 11.2.2.

11.2.1 Site Visit

Ms. Anna Fonseca of SRK conducted a site visit and structural review of Excellon's Evolución property in Zacatecas state from February 25 to 28, 2018. The site visit was focused on understanding the structural controls on the Madera Vein System, with particular attention given to the El Cobre vein. Additionally, SRK investigated epithermal vein textures exposed in outcrop and in drillholes to understand the depth of the exposed vein system relative to the paleosurface and to interpret the down-dip potential of the veins.

The initial site visit included the following verification activities:

- Desktop reviews and discussions with Excellon geologists about the current structural geology interpretations for the Madera and Lechuzas-Carmen-San Ramón vein systems.
- Examination of drillhole 2008-200, and of selected vein and fault intervals of drillholes 2010-220, 2010-221, 2010-222, 2010-223, and 2010-225.
- Field investigations of the Pastizal, El Cobre, Abejas, Jabali, and Gatuño veins
- Brief visit to the San Isidro vein, San Joaquin vein, Lechuzas test pit, and Carmen road subcrop.

In accordance with National Instrument 43-101 guidelines, Mr. Alfonso Soto, CPG (AIPG#11938) of Instituto de Innovación y Desarrollo Tecnológico Minero, S.C.(CITDM) visited the Evolución property between July 22 and July 23, 2020. During his visit, Mr. Soto was accompanied by Mr. Jorge Ortega, Geo (OGQ#626) Excellon's Exploration Manager.

All aspects that could materially impact the integrity of the exploration database (i.e. core logging, sampling, security and database management) were reviewed with Excellon staff. Mr. Soto was given full access to all relevant project data and was able to interview exploration staff to ascertain exploration procedures and protocols. The storage facility on site containing drill core, pulp and coarse reject material was visited.

During the site visit, the QP personally inspected and verified drill collars in the Calvario and Lechuzas areas. Of the 18 collars selected, 10 were inaccessible due to the erection of residential and commercial buildings in the town of Miguel Auza. Where collars still existed, these locations were captured by Garmin GPS Navigator (Gpsmap 62s) as digital control points.

Many collars within the Lechuzas area remain intact (Figure 15), however not all collar monuments are still present. The collars were surveyed by handheld GPS and the results of this survey are presented in Table 14. The majority of the collars compare well with digitally logged collar locations provided to SRK for mineral resource modeling.



Figure 15: Drill Collar for Core Drillhole EX18MAZ-255 on the Evolución Project

Drillhole ID	Original East	Original North	Verified East	Verified North	Difference East (m)	Difference North (m)	Comments
EX19MAZ-259	656309	2688028	656307	2688030	-1.671	2.02	Cement monument
EX19MAZ-257	656015	2687825	656013	2687825	-1.176	-0.507	No evidence
EX19MAZ-256	656136	2687635	656137	2687636	1.384	1.277	Cement monument
EX18MAZ-255	656267	2687765	656234	2687770	-32.698	4.501	Cement monument
EX18MAZ-253	656121	2687880	656122	2687881	1.203	1.161	No evidence
EX18MAZ-251	656080	2687821	656079	2687820	-0.46	-0.357	No evidence
EX18MAZ-250	656422	2688783	656421	2688782	-0.379	-0.178	No evidence
EX18MAZ-235	656238	2687581	656238	2687585	-0.526	3.69	Cement monument

Table	14:	Drillhole	Collar	Location	Verification
Iabic			oonar	Location	VCINCALION

The QP examined core from several drillholes and found that logged lithologies to generally be accurate in the digital logsheets. The primary rock type is detrital sedimentary rocks of Late Cretaceous Caracol Formation. Logged structures similar to sills / dykes of monzonitic and andesitic composition, calcite and local quartz veins, and faults were appropriately identified and described. In addition, sample intervals corresponded with lithological and mineralization boundaries. High assay values correspond and correlate with logged mineralization, confirming a strong understanding of the mineralization controls.

11.2.2 Verifications of Analytical Quality Control Data

Silver Eagle Mines (2005-2009)

Quality control assay data produced by SEM were unavailable to SRK, so findings by Valliant et al (2008) were referenced to assess the reliability of assay results from this period. SRK understands that aside from some field duplicate, umpire checks and laboratory internal checks, industry standard quality control systems were not considered on the Project prior to 2008.

The quality control program for the 2005 period comprised field and umpire duplicate samples amounting to approximately 5% of assay data. RPA concluded that the duplicate samples taken by SEM demonstrated high homogeneity of pulps and the umpire samples demonstrated a good reproducibility between SGS and Activation Laboratories.

Between 2006 and 2007, SEM completed field and umpire duplicate sample checks as part of their quality control system which amounts to less than 4% quality control data coverage for this period. In RPA's opinion, the field duplicate samples exhibit a large variance, with silver, lead, and zinc duplicate grades at 6% higher, 9% higher and 2% lower than the original values, respectfully. RPA notes, however, that the average grades are comparable and within acceptable limits considered for mineral resource estimation. The results from the umpire duplicate samples demonstrate good accuracy and reproducibility between laboratories.

SEM incorporated a quality control program including standards, blanks, field and umpire duplicates for samples analyzed at SPR in 2008, which amount to approximately 14% of sample data. RPA observed a consistent low bias in standard reference material performance during SPR's operation of from 2% to 5% for silver, and 2% to 4% for lead. This bias was likely attributed to issues during start-up. RPA notes that field and umpire duplicate samples demonstrated good homogeneity and repeatability, respectively.

Excellon (2010-2020)

SRK analyzed the analytical quality control data produced by Excellon from 2008 to 2019. All data were provided to SRK in Microsoft Excel spreadsheets and PDF laboratory certificates. SRK aggregated the assay results for further analysis. Control samples (blanks and certified reference materials) were summarized on time series plots to analyze their performance. Paired data were analyzed using bias charts, quantile-quantile, and relative precision plots.

The external analytical quality control data produced by Excellon from 2010 to 2019 are summarized in Table 15 and a selection of the charting of this data generated by the QP is presented in Appendix B.

In general, analyses of blank samples consistently yielded silver and gold values below ten times the detection limit. Over 99% of blanks returned values for silver and gold below 10 times the detection limit, indicating no apparent contamination during the sample preparation stage. Lead performed acceptably, with 10% of assay values above ten times the detection limit. However, zinc performed poorly with over 60% of blank samples returning assay values above ten times the detection limit.

The performance of blank samples for zinc analysis improved in the latter half of 2019, however contamination with zinc should be diligently monitored and corrected when appropriate.

	Core	(%)	Comment
Sample Count	4,973		
Blanks	384	7.72	Barren Trevino Formation marble
QC samples	386	7.76	
CDN-SE-1	29		CDN Resource Laboratories Ltd.
CDN-SE-2	45		CDN Resource Laboratories Ltd.
PB146	35		WCM Sales Ltd.
PM 1147	37		WCM Sales Ltd.
OREAS 133a	2		Ore Research & Exploration Pty Ltd.
OREAS 134b	3		Ore Research & Exploration Pty Ltd.
OREAS 135	51		Ore Research & Exploration Pty Ltd.
OREAS 136	46		Ore Research & Exploration Pty Ltd.
OREAS 601	21		Ore Research & Exploration Pty Ltd.
OREAS 602	97		Ore Research & Exploration Pty Ltd.
OREAS 603	18		Ore Research & Exploration Pty Ltd.
OREAS 605	2		Ore Research & Exploration Pty Ltd.
Field Duplicates	299	6.01	-
Total QC Samples	1,069	21.50	

 Table 15: Summary of Analytical Quality Control Data Produced by Excellon on the Evolución

 Project (2010-2019)

Certified standards generally assayed within two manufacturer provided standard deviations of the expected value; however, minor bias is observed with reference materials PB146, OREAS 602 and CDN-SE-1 for silver and zinc, silver and zinc, and lead and zinc respectively. Silver, zinc, and zinc and lead exhibit minor negative biases for PB146, OREAS 602 and CDN-SE-1, respectively, and zinc and silver exhibit minor positive biases for PB146 and OREAS 602, respectively. The results indicate moderate to poor analytical accuracy for these standards. Analytical bias is not detected for other reference materials used during the same time period. OREAS 602 has since been replaced with OREAS 136, which exhibited improved performance. Continued diligence in monitoring quality control results is strongly encouraged.

Paired field duplicate data submitted by Excellon indicated a good reproducibility. Ranked HARD plots suggest that over 86% of duplicate samples have HARD values below 10% for silver, lead, zinc and gold assays with no obvious bias detected.

Reproducibility of historic core assays from field duplicate material at the umpire SGS laboratory was satisfactory with correlation coefficients over 0.88 for silver, zinc, lead and gold. Although the available dataset for this type of analytical quality control sample was small with 304 sample pairs, duplicate data for core samples had good reproducibility with no obvious evidence of analytical bias for all grade intervals. Recent exploration data trends are therefore comparable with those from previous operators.

In general, the analytical quality control data reviewed by the QP confirm that the assay results delivered by the primary laboratory used by Excellon are sufficiently reliable for the purpose of resource estimation. The datasets examined by SRK do not present evidence of obvious analytical bias.

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12 Mineral Processing and Metallurgical Testing

This section has been summarized from Valliant et al., 2008. No new metallurgical test work has been completed since the previous technical report. All existing work was conducted on the Calvario zone.

12.1 Metallurgical Testing

12.1.1 Composite Sampling (2005)

SEM generated a composite sample from drill core representing a small tonnage sample from the main Calvario vein. This sample was used for bench scale metallurgical test work to develop a process flowsheet. The sample was sent to SGS Lakefield Research Ltd (SGS) in Lakefield, Ontario.

The processing flowsheet was generated using differential floatation method to produce a silver-rich lead concentrate and a zinc concentrate. The composite was named Composite 4, and was characterized by high pyrite and marcasite content, which floated readily in both circuits. The presence of clay-like material required adequate controls in flotation. SGS concluded that the mineralized material was thought to have originated from a transitional zone with oxidized mineralization and supergene enrichment, documented in a report by SGS entitled "The Recovery of Lead, Zinc and Silver from Miguel Auza (Mexico) Ore Samples - Report 1", dated January 27, 2006.

12.1.2 Oxide Sample Test work (2006-2007)

In 2006, SEM generated a number of small composites from drill core and underground face samples. The samples were collected from Ramal I and Ramal II veins, adjacent to the Calvario vein. The samples were taken near surface and contained low-lead and high-silver contents, which were highly oxidized. Test work in January 2007 produced a bulk lead/silver concentrate.

12.1.3 Sulphide Composite Test work (2007)

SEM conducted metallurgical laboratory test work on a sample taken from the Calvario vein to develop a flowsheet. Through this work, SEM produced preliminary engineering data to support plans for upgrading the process plant. The primary test work data is described in SGS's report entitled "An Investigation into the Recovery of Lead, Zinc and Silver from Miguel Auza Calvario Ore - Report 3", dated November 20, 2007. SBM Mineral Process and Engineering Services Ltd. (SBM) summarized additional data in a report titled "Mass Balance and Engineering Data for the Miguel Auza Concentrator", dated September 28, 2007.

The metallurgical test work was completed on a composite sample named Calvario Composite No. 1, generated from two other samples called Calvario Underground Composite (20%) and Calvario Surface Composite (80%). These two samples comprised mineralized core intercepts from the Calvario vein system. The Composite No. 1 sample totalled 67 kilograms. The sample was selected by SEM as a representative of the expected head grade for the commercial mill operation (Table 16).

Component	UG Composite – 20% (Calculated)	Surface Composite – 80% (Calculated)	Composite No. 1 (Assayed)
Lead	2.65%	2.88%	2.85%
Zinc	2.88%	2.64%	2.74%
Silver	333 g/t	141 g/t	223 g/t

Table 16: Results from the Metallurgical Composite Samples Collected by SEM (2007)

Test work on Composite No. 1 consisted primarily of flotation test work. Initial batch testing obtained an optimal primary grind of a P₈₀ of 79 microns. No work index tests were performed; however, SMB estimated a Bond Ball Mill Work Index of 11.2 kilowatt hours per tonne (kWh/t).

Six batch cleaner tests were performed on each of the Calvario Underground Composite and Composite No. 1, followed by two locked cycle tests using the optimized conditions from the earlier batch testing. The test work focused on a differential separation flowsheet with a lead-silver circuit consisting of a rougher-scavenger circuit followed by three stages of cleaning to produce a saleable lead concentrate. A zinc circuit consisting of a rougher scavenger, also followed by three stages of cleaning, produced a reasonable quality zinc concentrate.

Valliant et al. (2008) notes that regrinding of the zinc rougher concentrate to a P_{80} of 26 microns is required to obtain the desired metallurgical separation.

12.1.4 Mineralogy

A mineralogical study was completed by European Mineral Resource on two separate samples of the Calvario vein mineralization, described in the report by SGS dated January 27, 2006 and summarized below.

Silver Mineralogy:

- Principal silver minerals are stromeyerite (45%), pyrargyrite (30%) and argentite (25%).
- Grain size varied from 5 microns to 30 microns.
- Silver minerals occur primarily as inclusions in galena; however, the next most abundant occurrence is as inclusions in the pyrite.

Gold Mineralogy:

• Mainly associated with the pyrite.

Lead Mineralogy:

- Galena is the primary lead mineral and is usually free; however, intergrowths with pyrite, sphalerite and gangue minerals were observed.
- Grain size generally less than 100 microns.
- Complex intergrowths with sphalerite and inclusions in pyrite were observed.
- Lead-arsenic oxide (paulmooreite) is associated with galena and arsenopyrite.

Zinc Mineralogy:

- Intergrowths with other sulphides (mainly pyrite) and gangue minerals.
- Liberated grain sizes are typically 26 microns to 32 microns with middling grains up to 200 microns.
- Franklinite occurs as intergrowths with sphalerite.

12.1.5 Reagents

The flotation reagents would be adsorbed onto the mineral surfaces to either enhance or prevent mineral floatability. Most of the reagents are therefore on the surface of the concentrate particles leaving the flotation plant or the discharge final tailings to be impounded in the tailings pond. The pH modifiers, clay dispersants and frothers are the only reagents that would not be adsorbed onto the solid surfaces. The reagent usage and addition scheme estimated by SEM are summarized in Table 17.

Reagent	Reagent Description	kg/t	kg/day (850 tpd basis)
Na ₂ CO ₃	Sodium Carbonate	3.9	3,315
NaCN	Sodium Cyanide	0.06	51
Thiourea	-	0.04	34
$Na_2S_2O_5$	Sodium Bisulphite	0.175	149
$Na_2S_2O_3$	Sodium Sulphite	0.175	149
ZnSO ₄	Zinc Sulphate	0.35	298
CMC 7LT	Carboxymethyl Cellulose	0.134	113
Dispersogen		0.134	113
Na ₂ SiO ₃	Sodium Silicate	0.402	342
Na ₂ S 9H ₂ O	Sodium Sulphide	0.5	425
NaOH	Sodium Hydroxide	0.25	213
CuSO ₄	Copper Sulphate	0.6	510
CaO	Lime	0.7	595
R241		0.018	15.3
3418A		0.018	15.3
3894		0.01	8.5
PAX	Potassium Amyl Xanthate	0.038	32.3
MIBC	-	0.01	8.5
Dow 250		0.01	8.5

Table 17: Reagent Usage

JCS / ah - vp - mml

12.1.6 Concentrate Analysis

Lead and zinc concentrates generated through the first locked-cycle test underwent multi-element analysis for the purposes of negotiations for smelter off-take (Table 20).

		Assays				
Element	Unit	Lead Zinc				
		Concentrate	Concentrate			
Lead	%	57.6	0.98			
Zinc	%	6.31	54.1			
Copper	%	0.13	0.32			
Iron	%	9.91	10			
Arsenic	%	0.14	0.13			
Antimony	%	0.15	0.017			
Tin	%	0.004	<0.002			
Bismuth	g/t	<20	<20			
Cadmium	g/t	560	3,700			
Cobalt	g/t	26	15			
Nickel	g/t	31	34			
Alumina	%	0.17	0.18			
Calcium	%	<0.40	<0.40			
Magnesia	%	0.11	0.035			
Silica	%	1.05	0.43			
Titanium	%	0.029	0.0048			
Germanium	g/t	<10	<10			
Selenium	g/t	70	<50			
Tellurium	g/t	<20	<20			
Carbon	%	0 35	0.08			
Total	70	0.00	0.00			
Sulphur	%	21	34.4			
Sulphide	g/t	20.8	33.7			
Chlorine	g/t	186	197			
Fluorine	%	<0.01	<0.01			
Mercury	g/t	4.1	16.3			
Gold	g/t	0.8	0.22			
Silver	g/t	2,920	725			

Table 18: Concentrate Analysis

12.2 Mineral Processing

The property hosts an operational flotation processing and toll milling facility owned by Excellon through San Pedro, which currently processes ore from Excellon's Platosa operation, located about 200 kilometres away.

The metallurgical test work that was completed by SEM lead to the design of process flowsheets. The processing plant capacity was expanded to 600 tonnes per day (tpd) in 2008, with the capability of producing two separate high-silver concentrates of lead and zinc.

13 Mineral Resource Estimates

13.1 Introduction

The construction of the conceptual mineral resource evaluation model was a collaborative effort between Excellon and SRK staff. Excellon provided the technical support and assistance related to the drilling database and geological modelling. Dr. Antoine Cate of SRK constructed preliminary geological domains in September 2019. The resource wireframing, geostatistical analysis, grade estimation and classification was completed by Ms. Joycelyn Smith, PGeo (APGO#2963) under the supervision of Dr. Aleksandr Mitrofanov, PGeo (APGO#2824) with geostatistical support from Dr. Oy Leuangthong, PEng (PEO#90563867). Additional contributions including quality control analyses and technical report compilation were provided by Ms. Smith. The overall process was reviewed by Mr. Glen Cole, PGeo (APGO#1416).

This section describes the resource estimation methodology and summarizes the key assumptions considered by SRK. In the opinion of SRK, the resource evaluation reported herein is a reasonable representation of the global polymetallic mineral resources found in the Evolución Project at the current level of sampling. The mineral resources have been estimated in conformity with generally accepted CIM *Estimation of Mineral Resource and Mineral Reserves Best Practices Guidelines* and are reported in accordance with the Canadian Securities Administrators' National Instrument 43-101. Mineral resources are not mineral reserves and have not demonstrated economic viability. There is no certainty that all or any part of the mineral resource will be converted into mineral reserve.

The database used to estimate the Evolución Project mineral resources was audited by SRK. SRK is of the opinion that the current drilling information is sufficiently reliable to interpret with confidence the boundaries for polymetallic mineralization and that the assay data are sufficiently reliable to support mineral resource estimation.

Leapfrog Edge[™] software (version 5.0.4) was used to construct the geological solids. SRK used a combination of Leapfrog Edge[™] software, and the Geostatistical Software Library (GSLib) software to prepare assay data for geostatistical analysis, construct the block model, estimate polymetallic grades, and tabulate mineral resources.

13.2 Resource Estimation Procedures

The evaluation of mineral resources for the Evolución Project involved the following procedures:

- Database compilation and verification of data including QA/QC performance.
- Construction of implicit wireframe domains for mineralization using geological indices, and structural trends.
- Definition of resource domains.
- Data conditioning (compositing and capping) for geostatistical analysis and variography.
- Grade interpolation in a 3D block model.

- Validation, classification, and tabulation.
- Assessment of "reasonable prospects for eventual economic extraction" and selection of appropriate cut-off grades, including grade sensitivity analysis.
- Preparation of the Mineral Resource Statement.

13.3 Resource Database

Excellon provided the mineral resource database as comma-separated values (CSV). The database used to evaluate the mineral resources of the Evolución Project includes 273 core drillholes (82,871 metres), summarized in Table 19. The final header, down-hole survey, lithology intervals, and assay results were received on March 2, 2020.

A total of 232 drillholes drilled by SEM and 41 drillholes drilled by Excellon are included in the resource database, with a total of 19,428 assayed intervals. There are 20 drillholes within the resource model that do not contain assay information. Twenty-five additional drillholes (7,558 metres with 1,631 assays) were drilled outside of the block model boundary, and therefore, were disregarded during the estimation. All drillholes contain down-hole survey measurement data.

Compony		Duillhalaa	Longth Complete		Assays			
Company	rear	Drilinoles	Length	samples-	Silver	Gold	Lead	Zinc
	2005	50	9,586	2,672	1,180	2,326	1,857	2,460
SEM 200 200	2006	75	18,992	3,206	2,826	2,480	2,942	3,106
SEIVI	2007	66	25,117	2,048	2,048	677	2,048	2,048
	2008	41	11,933	1,309	1,308	712	1,273	1,292
200 200 Excellon 200 200	2010	7	2,733	1,013	1,013	1,013	1,013	1,013
	2018	20	7,403	4,255	4,255	4,255	4,255	4,255
	2019	14	7,108	4,925	4,925	4,925	4,925	4,925
Total		273	82,871	19,428	17,555	16,388	18,313	19,099

Table 19: Summary of Drilling* on the Evolución Project, Miguel Auza, Mexico

* Contained within the geological model

13.4 Geological Interpretation and Modelling

The Evolución Project mineralized system can be subdivided into three main areas (Figure 8):

- The Calvario vein system was the focus of the previous resource evaluation work and concentrates most of the past drilling. It is located at the south-southwest extremity of the intrusive bodies in detrital sediments and consists of a series of subparallel northeasttrending subvertical quartz-calcite-sulfide veins, veinlets, and disseminated sulfides hosted within an interpreted fault zone.
- 2. The Lechuzas area is located in detrital sedimentary rocks and consists of a series of faulthosted mineralization with trends similar to the Calvario area. Wide low-grade haloes corresponding to disseminated sulfides and a loose veinlet stockwork are associated with the main veins.
- 3. The Capilla-Mantos area is located in sedimentary rocks below the monzonite intrusion. Metal grades show less continuity than in the other zones despite the presence of high-

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grade intersections. A mineralized trend subparallel to the monzonite contact is interpreted with low confidence and requires further work.

The mineral resource model of the Evolución Project includes the geology, structural and grade distribution criteria. SRK used the available data to create a geological model delimiting the different mineralized domains in Leapfrog Geo[™]. The model comprises twelve high-grade veins (8 at Calvario and 4 at Lechuzas) (Figure 16).



Figure 16: View of the Geological Model Looking North-Northeast High grade veins = red, low grade haloes = blue

Table 22 tabulates the domains constructed for the Evolución Project mineral resource model, and their associated rock codes (see Figure 17).

Zone	Domain Name	Domain Code
	Calvario low-grade	100
	Vein 1	101
	Vein 2	102
	Vein 3	103
Calvario Zone	Vein 4	104
	Vein 5	105
	Vein 6	106
	Vein 7	107
	Vein 8	108
	Lechuzas low-grade	200
	Vein 9	201
Lechuzas Zone	Vein 10	202
	Vein 11	203
	Vein 12	204
Capilla-Mantos Zone	Capilla-Mantos low-grade	300
Waste	Waste	1000





Figure 17: Plan Map of the Evolución Project Evaluation Domains
The high-grade vein domains were generated using a combination of geological descriptions, where they were available, and silver equivalent values. The high-grade domains were constrained based on economic composites greater than 10 grams per tonne (g/t) silver equivalent threshold and a maximum waste inclusion of 1 metre. Low-grade domains were modelled based on economic composites of 2 g/t silver equivalent threshold and a maximum of 3 metres waste inclusion, and further constrained using interval selections based on structural trends. The silver equivalency calculations are based on a silver price of US\$17.00 per troy ounce (t oz) and a silver recovery of 76%; a gold price of US\$1,550 per t oz and a gold recovery of 20%; a lead price of US\$0.90 per pound and a lead recovery of 90%; and a zinc price of US\$1.15 per pound and a zinc recovery of 88%. Recovery values are based upon the total overall recovery values documented by RPA (2008), determined by the metallurgical work completed by SEM and summarized in Section 12.

The Calvario zone is oriented northeast-southwest and subvertical. Dense drilling (approximately 50 metres spacing) shows relatively good continuity of the high-grade zones, and a thin low-grade halo is locally present. Historic underground chip sampling data conform well with the mineralized domains defined in this study.

The Lechuzas zone is sub-parallel to the Calvario zone and contains only sparse drilling (approximately 50 metres to 150 metres spacing) which introduces uncertainty in the modelling of the high-grade zones. Several significant high-grade intervals could not be matched to any high-grade trend, which suggests other trends with unknown orientations and structural controls are present but not recognized.

The Capilla-Mantos zone includes several high-grade intervals and relatively dense drilling (approximately 50 metres), however these high-grade intervals do not exhibit strong spatial continuity. An overall trend of this zone dipping 20 degrees to 25 degrees to the north and parallel to the neighbouring monzonite intrusion contact has been interpreted.

A weathering surface was constructed by Excellon based on the logged downhole data and core photographs and was provided to SRK as a three-dimensional wireframe. The weathering profile was used in the estimation and assignment of density values.

13.5 Assays, Compositing and Capping

Table 23 summarizes the assay statistics for the core samples within the Evolución Project tagged by mineralized domains. Figure 18 summarizes the length statistics of the core sample intervals. Given that the average assay interval within the modelled veins is approximately 1 metre and the relatively thin vein domains widths, SRK chose to composite the assays to 2 metres to avoid splitting the assay intervals. Approximately 97% of assay samples within the mineralized domains measure 2 metres or less.

					Silver					Gold					Lead					Zinc		
Zone	Code	Count	Mean	Std	Min	Max	CoV	Mean	Std	Min	Max	CoV	Mean	Std	Min	Max	CoV	Mean	Std	Min	Max	CoV
			(g/t)	(g/t)	(g/t)	(g/t)	COV	(g/t)	(g/t)	(g/t)	(g/t)	COV	(%)	(%)	(%)	(%)	COV	(%)	(%)	(%)	(%)	COV
	100	1,790	42	160	0.0001	3,662	3.77	0.05	0.28	0.0001	4.1	3.45	0.21	0.82	0.0004	19.6	3.81	1.24	0.90	0.0025	21.1	3.78
	101	751	146	270	0.0001	2,187	1.85	0.08	1.06	0.0001	35.0	5.56	0.84	1.72	0.0020	19.7	2.05	0.9	1.86	0.0090	23.1	2.06
	102	903	143	284	0.5395	3,217	1.99	0.19	0.31	0.0001	11.6	2.57	0.84	1.80	0.0024	23.4	2.13	1.09	2.4	0.0097	24.9	2.21
	103	210	111	252	4.8741	2,620	2.26	0.12	0.33	0.0001	3.2	2.50	0.64	1.50	0.0076	15.2	2.36	0.60	1.29	0.0372	12.0	2.14
Calvario	104	41	189	357	10.0381	1,712	1.90	0.13	0.61	0.0170	2.2	1.13	0.72	1.53	0.0193	6.5	2.12	0.90	2.16	0.0200	11.2	2.40
	105	131	92	195	1.5065	1,775	2.12	0.54	0.24	0.0001	1.7	2.28	0.59	1.32	0.0100	11.8	2.24	0.65	1.51	0.0200	14.2	2.31
	106	39	115	281	4.0835	2,731	2.44	0.11	0.22	0.0001	1.2	0.95	0.68	2.02	0.0123	22.2	2.97	0.71	2.03	0.0215	16.6	2.86
	107	322	87	157	0.9325	1,592	1.80	0.23	0.13	0.0001	0.8	1.18	0.49	0.93	0.0028	15.8	1.91	0.78	1.54	0.0021	17.3	1.99
	108	162	96	194	2.4858	1,452	2.03	0.11	0.07	0.0001	0.4	1.15	0.46	1.10	0.0097	8.6	2.37	0.91	1.92	0.0185	16.1	2.11
	200	5,554	19	59	0.5395	1,724	3.08	0.07	0.13	0.0001	6.8	4.03	0.10	0.38	0.0001	11.4	2.90	0.17	0.56	0.0003	16.7	3.22
	201	427	86	111	1.4242	1,110	1.29	0.03	0.12	0.0025	1.7	1.71	0.40	0.63	0.0001	6.6	1.57	0.90	1.20	0.0003	10.7	1.34
Lechuzas	202	587	70	119	1.2996	1,226	1.70	0.11	0.23	0.0001	3.	2.23	0.29	0.65	0.0011	8.3	2.25	0.73	1.24	0.0016	12.1	1.68
	203	242	130	206	1.3125	1,316	1.59	0.12	0.22	0.0025	2.1	1.82	0.79	1.37	0.0025	11.0	1.73	1.09	1.85	0.0027	11.8	1.70
	204	235	60	98	0.4170	1,192	1.64	0.10	0.23	0.0001	3.2	2.35	0.38	0.77	0.0008	11.9	2.03	0.54	0.83	0.0033	7.8	1.52
Capilla-Mantos	300	1,423	50	312	0.0024	7,874	6.24	0.07	0.23	0.0001	4.4	3.32	0.08	0.34	0.0001	6.4	4.16	0.08	0.29	0.0006	5.3	3.77
Waste	1000	6,611	10	121	0.0001	7,368	11.70	0.02	0.23	0.0000	2.3	3.30	0.03	0.25	0.0001	20.9	8.17	0.04	0.28	0.0003	14.3	6.74
Total		19,428	40	161	0.0001	7,874	4.04	0.05	0.08	0.0000	35.0	4.97	0.20	0.79	0.0001	23.4	3.91	0.28	0.28	0.0003	24.9	3.61

Table 21: Assay Statistics* for Core Samples in Evolución Project

* Statistics are length-weighted. Std = standard deviation; Min = minimum; Max = maximum; CoV = coefficient of variation



Figure 18: Length Statistics for Core Sample Intervals

13.5.1 Evaluation of Outliers

To limit the influence of high-grade outliers during grade estimation, SRK chose to cap composites, as these are the data used explicitly in estimation. Capping was performed for grouped mineralized subdomains (i.e. 100, 199, 200, 299 and 300), separating veins and low-grade halos for each zone. SRK relied on a combination of probability plots and capping sensitivity plots. Separation of grade populations characterized by inflections in the probability plot or gaps in the high tail of the grade distribution were indicators of potential capping values. The capping values used for each domain grouping are summarized in Table 24.

					Capped	Values	
Capping Group	Domains	Description	Code:	Silver (g/t)	Gold (g/t)	Lead (%)	Zinc (%)
100	100	Calvario low-grade	100	300	3	3.5	4
199	101-108	Calvario veins	101-108	600	2	no cap	10
200	200	Molino low-grade	200	80	0.6	no cap	5
299	201-204	Molino veins	201-204	120	0.6	4	4
300	300	Capilla-Mantos low-grade	300	600	0.3	0.7	0.8

Table 22: Capping Values for the Evolución Project, Miguel Auza, Mexico

Table 25 summarizes the uncapped and capped statistics of these composites. SRK analyzed the statistics on the basis of domain type (veins and haloes) and found that the core data vary significantly in summary statistics. As such, capping was performed on a by-domain-type basis and considered each estimation variable (silver, gold, lead and zinc) separately. Probability plots and sensitivity curves were assessed in determining an appropriate capping value. Appendix C contains the summary statistics and relevant figures for silver, gold, lead and zinc by domain.

		Unca	apped C	Compos	sites	Cap	ped Co	mposi	tes	Mean	
Domain	Count	Mean	Std.	Max.	Coeff.	Mean	Std.	Max.	Coeff.	Diff	Vol. %‡
		(g/t)	(g/t)	(g/t)	Var.	(g/t)	(g/t)	(g/t)	Var.	(%)†	
101	455	132	198	1,641	1.49	131	192	1,396	1.46	-0.7%	8.1%
102	568	131	202	1,657	1.55	130	198	1,588	1.52	-0.7%	12.3%
103	126	110	159	1,047	1.45	110	159	1,047	1.45	0.0%	1.9%
104	22	189	292	1,089	1.54	189	292	1,089	1.54	0.0%	0.4%
105	69	87	107	447	1.22	87	107	447	1.22	0.0%	1.3%
106	32	110	144	486	1.31	110	144	486	1.31	0.0%	1.3%
107	362	58	111	987	1.92	58	111	980	1.91	0.0%	5.3%
108	122	75	155	1,396	2.07	75	155	1,396	2.07	0.0%	3.9%
201	191	86	86	624	1.00	84	36	647	2.08	-2.0%	23.7%
202	237	70	89	673	1.27	67	79	505	0.93	-4.5%	21.6%
203	96	129	143	697	1.11	124	73	510	1.09	-4.3%	7.2%
204	151	52	71	516	1.38	51	127	513	1.02	-0.8%	13.1%
Subtotal	2,431	101	150	1,657	1.50	100	143	1,588	1.52	-1.1%	100.0%
100	1,653	27	102	2,051	3.79	25	63	675	2.68	-8.0%	19.3%
200	3,025	18	41	905	2.31	17	36	647	2.08	-2.2%	69.9%
300	797	37	149	2,501	3.99	31	85	680	2.71	-17.3%	10.8%
Subtotal	5,475	23	75	2,501	3.00	22	64	680	2.35	-7.9 %	1 00 %
Total	7,906	47	98	2,501	2.54	46	80	1,588	2.09	-3.5%	

Table 23: Uncapped and Capped Silver Equivalent Composite Statistics*

* Statistics are length-weighted. Std = standard deviation; Min = minimum; Coeff. Var. = coefficient of variation

† Difference of uncapped and capped composite silver-equivalent mean value

[‡] Percentage of domain wireframe volume proportional to the vein and low-grade halo domain groupings

13.6 Specific Gravity

Specific gravity was measured using a standard weight in water/weight in air methodology on core from 10-centimetre intervals. The specific gravity database contains 5,106 measurements across veins and low-grade halos from Lechuzas and Capilla-Mantos zones. Specific gravity measurements were capped based on domain type to avoid any extreme outlier values for estimation. The distribution of samples and chosen cap values for specific gravity are provide in Table 24.

Weathering Zone	Domains	Code	Count	Capped Limits (lower - upper)	Mean Capped SG*	SG Estimated or Assigned?
Oxide	All	499			2.51	Assigned
	Calvario LG	100			2.68	Assigned
	Calvario Veins	101-108			2.78	Assigned
	Lechuzas LG	200	3,360	2.1 - 3.5	2.68	Estimated
		201	338			
Fresh		202	427		2 70	Estimated
	Lechuzas veins	203	193	2.5 - 4.5	2.70	Estimated
		204	64			
	Capilla-Mantos LG Halo	300	283	no cap - 3	2.65	Assigned
	Total		5,106			

Table 24: Uncapped and Capped Core Statistics* for Specific Gravity

* Based on 10-cm samples

Based on a significant difference in mean specific gravity in the first 30 to 50 metres below surface, demonstrated by plotting specific gravity values by depth (Figure 19), a weathering surface was used to isolate weathered material from relatively unweathered material. Only 441 samples were taken above the weathering surface, all of which were in the Lechuzas low-grade zone. As the bulk of the mineralization lies below this surface, an overall capped average was assigned to all material above this weathered surface.





- A: All available domains
- B: Lechuzas low-grade domain
- C: Lechuzas vein domains
- D: Capilla-Mantos low-grade domain

*Cross plot values are coloured according to point density (purple = low point density, yellow = high point density)

13.7 Statistical Analysis and Variography

SRK used the Geostatistical Software Library (GSLib, Deutsch and Journel, 1998) to calculate and model variograms for the mineralized domains Table 27. For each domain group, SRK assessed two different metrics (traditional semi-variograms and correlograms) for each variable (silver, gold, lead, zinc). Downhole variograms were calculated to determine the nugget effect. Figure 20 shows an example variogram model for the Lechuzas low-grade zone. All variograms are provided in Appendix C.

					Silver					G	Gold		L	ead		Zinc
Description	Group	Domain	Leapfrog dip/dip az/pitch	Str.	Туре	Nug.	Sill	Range (max-int-min)	Nug.	Sill	Range (max-int-min)	Nug.	Sill	Range (max-int-min)	Nug. Sill	Range (max-int-min)
Calvario LG	100	100	90 / 325 / 150	1 2	sph. sph.	0.2	0.4 0.4	70-30-20 75-50-25	0.15	0.85	105-105-8.5	0.3	0.7	100-70-7.5	0.25 0.45 0.3	85-25-16 100-95-16
Calvario Veins	199	101-108	90 / 325 / 150	1 2	sph. sph.	0.3	0.3 0.4	25-80-8.5 155-100-8.5	0.2	0.45 0.35	125-40-11 130-125-11	0.4	0.2 0.4	70-80-7 150-95-10	$0.05 \overset{0.55}{}_{0.4}$	70-30-19 120-90-22
Lechuzas LG	200	200	70 / 145 / 160	1 2	sph. sph.	0.15	0.4 0.45	80-40-6 80-120-16	0.15	0.4 0.45	95-55-3.5 195-150-9.5	0.15	0.4 0.45	110-60-4 110-100-19	0.1 0.5 0.4	85-90-5 85-90-20
Lechuzas Veins	299	201-204	70 / 145 / 160	1 2	sph. sph.	0.3	0.3 0.4	130-70-11 135-210-14	0.2	0.25 0.55	100-125-5 200-125-5	0.25	0.25 0.5	145-130-18 150-200-18	0.2 ^{0.5} 0.3	100-50-3 260-170-11
Capilla- Mantos LG	300	300	25 / 350 / 20	1 2	sph. sph.	0.3	0.5 0.2	40-30-9 150-30-15	0.3	0.4 0.3	50-45-5 125-70-14	0.3	0.4 0.3	50-40-8 60-40-10	0.3 0.4 0.3	50-50-5 100-40-22

Table 25: Variogram Parameters for the Evolución Project, by Domain Group



Variogram analysis Miguel Auza D200

Figure 20: Variogram Models for Silver, Gold, Lead and Zinc for the Lechuzas Low-Grade Zone (200) for the Intermediate (Red), Maximum (Yellow) and Minor (Blue) Directions

13.8 Block Model Parameters

The selection of the block size considered the drillhole spacing, composite length, the geometry of the modelled zone and the anticipated mining method. Block size was set at 10 metres by 10 metres by 5 metres for parent cells, and subcells at 2 metres by 2 metres by 1 metre resolution in the X, Y and Z axes, respectively, to honour the geometry of the modelled mineralization. Sub-cells were assigned the same values as their parent cell. The block model was rotated 315 degrees to better reflect the dip direction of the mineralized zones. The block model definition is summarized in Table 28.

Avia	Block	Size (m)	Origin	Number of Colle
AXIS	Parent	Sub Cell	(WGS84 z13N)	Number of Cells
Х	10	2	656,410	202
Υ	10	2	2,686,655	147
Z	10	1	2,057	121

Table 26: Evolución Block Model* Specification

13.9 Estimation

The block model was populated with grade values using ordinary kriging in the mineralized domains, informed by capped composite data for each variable (silver, gold, lead and zinc) separately. Estimation was performed in three passes with progressively relaxed search ellipsoids and data requirements. Specific gravity within the Lechuzas veins, low-grade and weathered zones were estimated using inverse distance weighting with a power of 2. Table 29 summarizes the search parameters used for each estimation pass for all attributes. Search ellipse orientations were set to the average geometric orientation of each domain zone. The first estimation pass is based on a search radii up to the full variogram range. The second and third passes are set to 2 and at least 3 times the full variogram range, respectively. In all cases, the metals and specific gravity were estimated using a hard boundary approach.

Silver equivalent values were subsequently calculated for each block using the estimated values for gold, silver, lead and zinc. Variable specifications for metal prices and recoveries are reported in Table 30. The resultant formula for calculating silver equivalency values was Ag (g/t) + 42.99*Pb (%) + 23.99*Au (g/t) + 53.71*Zn (%).

		Variogram			Ellipse (m	ax/int/min)	
Group	Domain	dip/dip az/pitch (Leapfrog Convention)	min/max/ maxkey	Silver	Gold	Lead	Zinc
100	100	90 / 325 / 150	7 / 12 / 3 4 / 15 / 3 2 / 18 / 3	70 / 50 / 30	105 / 105 / 30	100 / 70 / 30	100 / 95 / 30
199	101-108	90 / 325 / 150	7 / 12 / 3 4 / 15 / 3 2 / 18 / 3	155 / 100 / 30	130 / 125 / 30	70 / 80 / 30	70 / 30 / 30
200	200	70 / 145 / 160	7 / 12 / 3 4 / 15 / 3 2 / 18 / 3	80 / 120 / 30	195 / 150 / 30	110 / 100 / 30	85 / 90 / 30
299	201-204	70 / 145 / 160	7 / 12 / 3 4 / 15 / 3 2 / 18 / 3	135 / 210 / 30	200 / 125 / 30	150 / 200 / 30	260 / 170 / 30
300	300	25 / 350 / 20	7 / 12 / 3 4 / 15 / 3 2 / 18 / 3	150 / 30 / 30	125 / 70 / 30	60 / 40 / 30	100 / 40 / 30

Table 27: Summar	y of Estimation S	Search Parameters
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Table 28: Specifications for Silver Equivalent Calculation

	Silver	Gold	Lead	Zinc
Price (US\$/lbs)			0.90	1.15
Price (US\$/oz)	17	1,550	0.06	0.08
Recovery* (%)	76	20	90	88

Recovery values are sourced from the Preliminary Feasibility Study completed on the Evolución Project dated July 25, 2008, by Scott Wilson Roscoe Postle Associates Inc.

13.10 Model Validation and Sensitivity

SRK validated the block model using a visual comparison of block estimates and informing composites, and statistical comparisons between composites and block model distributions, and statistical comparisons between ordinary kriging estimates and alternate estimators at zero cut-off. Figure 21 shows an example of a cross section for the Lechuzas zone, which compares the composite data to the estimated block grades.



Figure 21: Cross Section for Lechuzas Zone (looking northeast): Comparison of Block Estimates and Informing Composites

Swath plots considering all domains for each zone were generated, along the mineralization trend for each zone. For each swath, SRK compared composite values and nearest neighbour de-clustered distribution using 5-metre composites against the ordinary kriging estimate in the block model. The profiles of the ordinary kriging grades adequately reflect the nearest neighbour de-clustered distribution and the original composite dataset and follow along the same general trends. Figure 22 and Appendix E contains Swath plots for each domain.



Figure 22: Swath Plot Grade Comparison of Block Estimates with Composites and Nearest Neighbour Estimator for Calvario Veins

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Histogram in each swath plot corresponds to the tonnage distribution within the block model

Additionally, SRK considered global statistical comparison between the ordinary kriging estimation and nearest neighbour declustered dataset. Table 31 shows there is less than 2% global difference in the contained metal.

Table 29:	Global	Comparison	of	Estimators
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Cut-off Grade (g/t)	Estimation Method	Quantity (x1000 t)	AgEq Grade (g/t)	AgEq Metal (oz)	Difference in Metal [*] (%)
0	OK	256,924	33.96	280,549	
0	NN	256,924	33.43	276,158	-1.57

* At 0 g/t silver equivalent cut-off, and relative to the OK estimates

OK = Ordinary kriging

NN = Nearest neighbour

13.11 Mineral Resource Classification

Mineral resource classification is typically a subjective concept. Industry best practices suggest that resource classification should consider the confidence in the geological continuity of the mineralized structures, the quality and quantity of exploration data supporting the estimates, and the geostatistical confidence in the tonnage and grade estimates. Appropriate classification criteria should aim at integrating these concepts to delineate regular areas at similar resource classification.

The block classification strategy considers drillhole spacing, geologic confidence and continuity of category. SRK considers that there are no Measured blocks within the Evolución Project. To differentiate between Indicated and Inferred, a separate block model was created solely to assist with block classification using an estimation run. Criteria used for block classification are:

- Indicated: Blocks within the Calvario and Lechuzas zones estimated within a 50-metre and 40-metre search radii for vein and low-grade domains, respectively, using a minimum of three drillholes. This corresponds to a mean average distance of informing composites of 50 metres (Figure 23).
- Inferred: All blocks not classified as Indicated, and within the Calvario and Lechuzas zones.

SRK is satisfied that the geological modelling honours the current geological information and knowledge. The location of the samples and the assay data are sufficiently reliable to support resource evaluation.

SRK examined the classification visually by inspecting sections and plans through the block model. SRK concludes that the material classified as Indicated reflects estimates made with a moderate level of confidence within the meaning of CIM *Definition Standards for Mineral Resources and Mineral Reserves* (May 2014), and all other material is estimated at a lower confidence level. Additionally, SRK generated a wireframe to smooth the classified material to ensure continuity within the classification categories.



Figure 23: Distribution and Cumulative Distribution of Average Distance of Informing Composites for Indicated Blocks

13.12 Mineral Resource Statement

CIM *Definition Standards for Mineral Resources and Mineral Reserves* (May 2014) defines a mineral resource as:

"A Mineral Resource is a concentration or occurrence of solid material of economic interest in or on the Earth's crust in such form, grade or quality and quantity that there are reasonable prospects for eventual economic extraction.

The location, quantity, grade or quality, continuity and other geological characteristics of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge, including sampling."

The "reasonable prospects for eventual economic extraction" requirement generally implies that quantity and grade estimates meet certain economic thresholds and that mineral resources are reported at an appropriate cut-off grade that considers extraction scenarios and processing recovery. SRK considers that the Evolución Project is potentially amenable to extraction by underground mining methods. Through discussions with Excellon and by comparison with comparable deposits, SRK considers that it is reasonable to report as underground mineral resource above a cut-off grade of 90 g/t silver equivalent for both the Calvario and Lechuzas zones.

SRK is satisfied that the mineral resources were estimated in conformity with the widely accepted CIM *Estimation of Mineral Resource and Mineral Reserve Best Practices Guidelines* (November 2019). The mineral resources may be affected by further infill and exploration drilling that may result in increases or decreases in subsequent mineral resource estimates. The mineral resources may

also be affected by subsequent assessments of mining, environmental, processing, permitting, taxation, socio-economic, and other factors. The Mineral Resource Statement for the Evolución Project presented in Table 32 is the responsibility of Mr. Aleksandr Mitrofanov, PGeo (APGO#2824). The overall process was reviewed by Mr. Glen Cole, PGeo (APGO#1416). Dr. Mitrofanov is an appropriate independent Qualified Persons as this term is defined in NI 43-101.

The effective date of the Mineral Resource Statement is August 31, 2020.

Table 30: Mineral Resource Statement*, Evolución Polymetallic Project, Miguel Auza,	
Zacatecas, Mexico, SRK Consulting (Canada) Inc., August 31, 2020	

			Grade				Metal					
Category	Zone	Quantity (000' t)	Silver (g/t)	Gold (g/t)	Lead (%)	Zinc (%)	AgEq (g/t)	Silver (000' oz)	Gold (000' oz)	Lead (000' lb)	Zinc (000' lb)	AgEq (000′ oz)
Indicated	Calvario	6,407	64	0.09	1.00	1.14	170	13,154	19	140,741	161,548	35,091
Total Indicated		6,407	64	0.09	1.00	1.14	170	13,154	19	140,741	161,548	35,091
Inferred	Calvario	5,626	53	0.09	0.82	1.08	149	9,570	16	102,223	134,447	26,902
	Lechuzas	9,335	30	0.11	0.71	1.18	126	8,953	33	145,235	243,300	37,911
Total Inferred		14,960	39	0.10	0.75	1.15	135	18,524	49	247,459	377,747	64,813

Mineral resources are not mineral reserves and have not demonstrated economic viability. All figures are rounded to reflect the relative accuracy of the estimate. Composites have been capped where appropriate. Mineral Resources are reported at a cut-off grade of 90 g/t silver equivalent. Cut-off grades are based on a silver price of US\$17.00 per troy ounce and a silver recovery of 76%; a gold price of US\$1,550 per troy ounce and a gold recovery of 20%; a lead price of US\$0.90 per pound and a lead recovery of 90%; and a zinc price of US\$1.15 per pound and a zinc recovery of 88%.

13.13Grade Sensitivity Analysis

The mineral resources of the Evolución Project are fairly sensitive to the selection of the reporting cut-off grade. To illustrate this sensitivity, block model quantities and grade estimates at various cut-off grades are presented in Table 33 and grade tonnage curves are presented in Figure 24.

		ndicated		Inferred				
Eq Grade	Quantity	Ag Eq Ag Eq Grade Metal		Quantity	Ag Eq Grade	Ag Eq Metal		
<u>(g/t)</u>	(000' t)	(g/t)	(000'oz)	(000' t)	(g/t)	(000'oz)		
0	22,789	67	48,805	212,052	31	208,379		
10	16,766	88	47,699	138,033	44	193,953		
30	11,640	120	44,860	67,097	72	154,540		
50	9,701	136	42,404	42,111	91	122,998		
70	7,937	153	39,003	25,102	112	90,561		
90	6,407	170	35,091	14,961	135	64,813		
110	5,052	189	30,744	9,872	153	48,652		
130	3,993	208	26,669	6,404	172	35,357		
150	3,195	225	23,085	4,085	190	24,975		
170	2,439	245	19,190	2,440	211	16,535		
190	1,823	267	15,633	1,500	231	11,132		
210	1,401	287	12,925	893	252	7,236		
230	1,118	304	10,929	496	278	4,441		
250	864	323	8,980	274	310	2,724		
270	669	342	7,352	178	336	1,928		
290	495	364	5,791	129	359	1,482		
310	383	383	4,711	106	372	1,270		

Table 31: Global Block Model Quantities and Grade Estimates* at Various Cut-Off Grades

* The reader is cautioned that the figures in this table should not be misconstrued with a Mineral Resource Statement. The figures are only presented to show the sensitivity of the block model estimates to the selection of a cut-off grade.

The silver equivalency calculations are based on a silver price of US17.0 per troy ounce and a silver recovery of 76%; a gold price of US1,550 per troy ounce and a gold recovery of 20%; a lead price of US0.90 per pound and a lead recovery of 90%; and a zinc price of US1.15 per pound and a zinc recovery of 88%.



Figure 24: Grade-Tonnage Sensitivity to Cut-Off Grade for Mineralized Domains (Veins and Halos) and Veins

13.14 Reconciliation with 2008 Mineral Resource Statement

For comparison, the June 2008 Mineral Resource Statement, generated by RPA for the Calvario zone, is presented in Table 34. Although a comparison is presented in this section, the QP of this report considers the estimation methodology applied for the 2008 mineral resource estimate to not be fully compliant with current CIM *Estimation of Mineral Resource and Mineral Reserve Best Practices Guidelines* (November 2019).

	Zone	Tannaga	Grade				Metal			
Category		('000) Ag (g/t)	Ag	Au	Pb	Zn	Ag	Au	Pb	Zn
			(g/t)	(g/t)	(%)	(%)	('000 oz)	('000 oz)	('000 lb)	('000 lb)
Indicated	Calvario	2,058	152	0.19	2.30	2.41	10,087	12	104,349	109,252
Total Indicated		2,058	152	0.19	2.30	2.41	10,087	12	104,349	109,252
Inferred	Calvario	858	152	0.23	2.30	2.42	6,684	6	29,344	45,852
Total Inferred		858	152	0.23	2.30	2.42	6,684	6	29,344	45,852

Table 32: Mineral Resource Statement*, Evolución Polymetallic Project, Miguel Auza, Zacatecas, Mexico, Roscoe Postle Associates Inc., June 2008

¹ Mineral resources are not mineral reserves and have not demonstrated economic viability. All figures have been rounded to reflect the relative accuracy of the estimates. Reported at underground resource cut-off NSRs of US\$40 per tonne for Indicated and US\$30 per tonne for Inferred material. A minimum width of 1.0 metre was used. Metallurgical recoveries were 76% for silver, 88% for zinc, and 90% for lead.

The June 2008 mineral resource model was restricted to the Calvario A, Calvario B, Calvario C, North and Milagro veins of the Calvario zone, using a polygonal estimation method considering drilling completed up to April 2008.

SEM drilled 28 additional drillholes for 6,517 metres, and Excellon drilled an additional 41 drillholes for 17,244 metres of drilling contained within the resource area since the June 2008 resource model, an increase of 40% in metres. This largely contributed to the extension of the model by delineating an additional three vein domains and low-grade halo in the Calvario zone, as well as the addition of the Lechuzas zone domains.

All Indicated material in both the 2008 and 2020 estimates are contained within the Calvario zone. Approximately a third of the Inferred material difference between these estimates occurs in the Calvario zone, with the remainder from the introduction of Lechuzas.

The consequence of the increased volume of the grade domains, including the incorporation of a low-grade halo domain for Calvario, is a reduction in the average grade for all variables. The low-grade domain for Calvario contributes to the overall dilution of grades for this zone. Additionally, the Lechuzas zone is on average lower in grade than the Calvario zone, with 43% lower silver grade, and 9% higher zinc grade for Inferred material.

The drop in grade may also be in part attributed to the differing estimation methods since a polygonal approach has more opportunity for grade smearing to occur, especially in areas of increased drillhole spacing where the grades may be considered high.

The impact of the additional drilling performed by Excellon and the updated three-dimensional modeling is a significant increase in Indicated tonnage, accompanied by a decrease in average grade, for an overall significant increase in Indicated metal content. The overall increase in Inferred tonnage is largely attributed to the addition of the Lechuzas zone, as well as the addition of the three vein domains and low-grade domain of the Calvario zone.

The polymetallic epithermal-style mineralization at the Evolución Project is similar to other deposits within the Mesa Central physiographical province. These include Fresnillo, Juanicipio, Velardeña, San Sebastian, San Martin, La Colorada and Avino (Figure 25), all of which are hosted by the Caracol Formation or other Cretaceous sedimentary rocks and are structurally controlled epithermal deposits related to mid-tertiary igneous activity.



Figure 25: Adjacent Properties to the Evolución Project

14.1 Fresnillo

The Fresnillo Mine is an active underground silver mine 100% wholly owned by Fresnillo plc (Fresnillo) located in Zacatecas, Mexico, approximately 150 kilometres southeast from the Evolución Project. The average ore grade of the reserves is 234 g/t silver and 0.76 g/t gold. In 2019, Fresnillo produced 13,007,000 ounces of silver, 52,259 ounces of gold, 21,472 tonnes of lead and 31,530 tonnes of zinc.

The Juanicipio Project is a joint venture between Fresnillo (56%) and MAG Silver Corporation (MAG) (44%). It is located 14 kilometres from the Fresnillo Mine. Juanicipio consists of the Valdecañas and Juanicipio epithermal vein systems. The metal content transitions with depth from silver- and gold-rich to increased lead and zinc.

Information on the Fresnillo Mine and Juanicipio deposit is sourced from Fresnillo's company website, https://fresnilloplc.com.

14.2 Velardeña

The Velardeña silver-gold skarn-epithermal project in Durango is 100% owned by Golden Minerals Company (Golden Minerals). The narrow epithermal to mesothermal quartz-calcite to quartzsulphide veins are hosted in Cretaceous Aurora Formation limestone, a diorite intrusion and related skarn, located at the boundary between the Sierra Madre Oriental and Mesa Central subprovince, approximately 100 kilometres northwest from the Evolución Project.

The mineralization includes silver and gold with lead and zinc by-products at the Velardeña and Chicago underground mines. The project was placed on care and maintenance in 2015 due to low metal prices, dilution and metallurgical challenges. The most recent Mineral Resource Statement was completed by Tetra Tech, supported by a National Instrument 43-101 compliant technical report dated March 2020.

Information on the Velardeña Project is sourced from Golden Minerals company website, https://goldenminerals.com.

14.3 San Sebastián

The San Sebastián Project is located in Durango, approximately 50 kilometres west of the Evolución Project and hosts a silver and gold mine that began production in December 2015. Hecla Mining Company (Hecla) wholly owns 100% of the Project. Mineralization exists in a high-grade silver-gold vein system hosted by sedimentary rocks.

Information on the San Sebastian Project is sourced from Hecla's company website, https:// heclamining.com.

14.4 La Colorada

The La Colorada Mine is located in Zacatecas, Mexico, approximately 80 kilometres southwest of the Evolución Project. The project is 100% owned by Pan American Silver Inc. and hosts epithermal silver-gold mineralization with a transition to increased base metal composition at depth. Three separate mining areas exist on the property, including Candelaria, Estrella and Recompensa.

Information on the La Colorada Project is sourced from Pan American Silver's company website, https:// panamericansilver.com.

14.5 Avino

The Avino Mine is located in Durango, Mexico, approximately 100 kilometres northwest of the Evolución Project. Avino Silver and Gold Mines Ltd. (Avino) holds 99.67% interest in the project through its subsidiaries, Compañía Minera Mexicana de Avino, S.A. de C.V. (CMMA) and Promotora Avino, S.A. de C.V. Silver, gold and copper mineralization exists in three deposits within the project, including the Avino Vein, the San Gonzalo Vein and the oxide tailings deposits.

Information on the Avino Mine is sourced from Avino's company website, https:// avino.com.

15 Other Relevant Data and Information

There is no other relevant data available about the Evolución Project.

16 Interpretation and Conclusions

The Evolución Project is a sedimentary hosted epithermal polymetallic vein system characterized by silver-zinc-lead with significant gold mineralization. Intermediate to low sulphidation epithermal mineralization exposed include the approximately northeast-trending iron-oxide-carbonate-quartz veins and stockworks Calvario vein system, as well as the northwest-southeast-trending quartz +/- carbonate veins of the Madera vein system.

A total of 273 core drillholes (82,871 metres) drilled by SEM and Excellon between 2005 and 2019 have been considered to model the geology and the mineral resources of the Evolución Project.

SRK is of the opinion that the drilling and sampling procedures adopted by Excellon are consistent with generally recognized industry best practices. The resultant drilling pattern is sufficiently dense to interpret the geometry and the boundaries of the polymetallic mineralization with confidence.

With the assistance of Excellon, SRK constructed a geology model for the Evolución Project. A total of 12 high-grade and three low-grade domains were constructed. The mineral resource model of the Evolución Project considers the geology, structural data and metal grade distributions.

SRK constructed a block model using a conventional geostatistical block modeling approach constrained by high- and low-grade domains. The block model was populated with silver, lead, zinc and gold values estimated by ordinary kriging information from capped composited data and estimation parameters derived from variography. After verification and validation, block estimates were classified considering the confidence in the quality and quantity of informing data, the confidence in the geological continuity and the confidence in the quality of the estimates.

SRK considers that there are no Measured blocks within the Evolución Project. An Indicated category was assigned to blocks within the Calvario and Lechuzas zones informed within a 50-metre and 40-metre search radius for vein and low-grade domains, respectively, using a minimum of three drillholes. An inferred category was assigned to all blocks not classified as Indicated, and within the Calvario and Lechuzas zones. The Capilla-Mantos zone was left unclassified.

SRK is not aware of any significant risks and uncertainties that could be expected to affect the reliability or confidence in the early stage exploration information discussed herein. SRK notes that the mineral resources occupy only a small footprint of the very large Evolución property. Regional exposures of similar type veins of the Madera system, and the Mill vein system extension to the north of the Lechuzas zone, received comparatively less exploration work. The exploration potential outside of the resource area remains excellent.

17 Recommendations

The geological setting, character of the polymetallic mineralization delineated, and the exploration results to date are of sufficient merit to justify additional exploration and technical study expenditures.

SRK recommends multi-disciplinary technical studies and exploration drilling aimed at expansion, de-risking and further conceptual characterization of the project to evaluate the conceptual economic viability of the Evolución Project.

Additional definition drilling is warranted around the Lechuzas and Capilla-Mantos zones, particularly laterally and at depth, to improve the geological confidence and extent of the polymetallic mineralization with the potential to expand the mineral resources and improve their classification. The spatial and temporal relationship between these two zones remains largely unknown.

Additional information is required to increase the confidence in the recovery values for the individual zones, including the low- and high-grade domains for each. The most recent metallurgical study was conducted on the main Calvario vein zone in 2008. SRK recommends additional flotation test work on representative composite Lechuzas oxide and sulphide mineralized material to better understand the metallurgical differences between the Calvario and Lechuzas zones and how this could impact the design of a process flowsheet that could cater for material from both zones.

The mineral resources at the Evolución Project occupies only a small footprint of the Evolución property. The exploration potential on the rest of the property is strong, demonstrated by the presence of multiple, sparsely or undrilled vein occurrences identified by Excellon. In this context, additional regional exploration expenditures are also warranted to follow up on regional targets already identified associated with the Madera vein system to the north and northeast of the resource area.

The proposed work program includes:

- Infill and step-out core drilling at the Lechuzas and Capilla-Mantos zones to expand mineral resources and upgrade their classification.
- Definition drilling between the Lechuzas and Capilla-Mantos zones to better understand the spatial and temporal relationship of these zones.
- Drill testing parallel structures between the Lechuzas and Calvario Zones where historical drilling and mapping indicate the presence of mineralized veins.
- Program involving the collection of specific gravity measurements to better define density for the Calvario zone.
- Metallurgical studies at Lechuzas required to increase confidence in the polymetallic recoveries.
- Structural geological study involving the Lechuzas and Capilla-Mantos zones to better understand the vein and potential fault geometries.

• Regional exploration elsewhere on the Evolución property.

SRK supports Excellon's proposed core drilling program, which includes approximately 30,000 metres of drilling with the following objectives:

- Delineate the southwest extension of the Lechuzas zone mineralization, as indicated by recent drilling.
- Expand Indicated mineral resources at the Calvario zone and upgrade the mineral resources from Inferred to Indicated at the Lechuzas zone.
- Delineate the mineralization in the Capilla-Mantos zone to gain a better understanding the orientation of mineralizing structures, with the potential of upgrading material in this zone to Inferred.
- Test geological structures between the Lechuzas and Calvario zones

The total cost of the recommended work program is estimated at C\$4,500,000 (Table 33).

Table 33: Estimated Cost for the Exploration Program Proposed for the Evolución Project

Description	Units	Total Cost (C\$)
Delineation Drilling (infill and step out)	12,000	1,800,000
Diamond drilling (Regional)	12,000	1,800,000
Subtotal		
Geological Studies		60,000
Subtotal		
Engineering Studies (Scoping Study)		85,000
Update resource model		70,000
Environmental and social impact baseline studies		20,000
Metallurgical testing		75,000
Mineralogy studies		15,000
Geotechnical studies		25,000
Mine engineering design		75,000
Preparation of PEA technical report		75,000
Subtotal		4,100,000
Total		
Contingency (~10%)		400,000
Total		4,500,000

Approximately 12% of the tonnage within the MRE (26% of the indicated tonnage and 6% of the inferred tonnage) is located within the La Antigua concession (part of the Evolución Project), which is the subject of litigation between a subsidiary of Excellon and a plaintiff. The initial decision in respect of this litigation does not affect Excellon's contractual rights to this concession.

References

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APPENDIX A

Summarized Legal Title Opinion





Insurgentes Sur 1787 piso 6 Colonia Guadalupe Inn Mexico D.F. C.P 01020 M E X I C O

Documentation consulted:

In connection with this legal title report, we have examined the following documents available at the MMB and Registry:

i) Informative Data Cards of the Concessions (Tarjetas Informativas del Registro)

ii) Mining Concessions Books of the Registry (Libros de Registro de Concesiones Mineras)

iii) Statements of the Mining Concessions available at the Obligations Compliance Department containing the following information: (a) status of compliance with the payment of mining duties; and (b) status of compliance with the filing of work assessment reports.



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CONCLUSIONS

Based on the foregoing, as of the date hereof, we are of the opinion that:

a) SAN PEDRO is the sole current legal and beneficial holder of the Mining Concessions described above and the rights deriving therefrom and has good marketable title; except for "Thelma", title number 219629, "Antigua", title number 195443 and "El Pipila" (owned by Minera Excellon de México, S.A. de C.V. ("<u>MEM</u>") a Mexican subsidiary of Excellon. SAN PEDRO can explore and exploit the aforementioned mining concessions in accordance to terms and conditions of the Agreements described below;

b) The Mining Concessions are valid and existing and SAN PEDRO is able to conduct exploration and exploitation works thereon;

c) SAN PEDRO is up to date and in compliance with payment of mining duties (*derechos mineros*) except for "Reducción Don Pedro", title number 244224 and "Reducción El Siete", title number 244238 (please refer to notes 7 and 8).

d) All the Mining Concessions have filed the relevant work assessment reports (*informes para comprobar la ejecución de las obras y trabajos de exploración o de explotación*) for the past five years. We only verified the past five years since the statute of limitations (*prescripción*) for the reviewing of the work assessment reports expires in 5 (five) years.

e) There are no adverse claims or challenges against the ownership of or title to the Mining Concessions and/or any rights thereunder, which have been recorded on title or are listed in any public registry; except for "Reducción Don Pedro", title number 244224, which appears as cancelled at the Registry (please refer to note 7).

f) To the best of our knowledge, based on the cartography available at the MMB, the Mining Concessions are not located in protected natural areas in terms of the General Law of Ecological Balance and Environmental Protection, allowing the exploration and/or exploitation works in the Mining Concessions.

The results of the due diligence conducted by this Firm are the following:



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NOTES

Note 1. Please be informed that the information on mining duties compliance (including if they were paid in full or not) is information obtained from an unofficial source in the MMB. Said information is not public or official. The only way to support that information, is requesting from the Mining Obligations Compliance Department at the MMB the issuance of Official Certificates including status of mining taxes compliance. These Official Certificates do not show the owed amounts, they only show if the semi-annual mining duties payments were made or not, or if they were made correctly.

Mining duties compliance reported on this Title Opinion exclusively makes reference to the mining duties stated in the Mining Law and its Regulation.

Mining duties payable in accordance with Article 268 and 270 of the Federal Duties Law, stating: (i) a mining duty payable in a yearly basis of a 7.5 per cent of the income of the sale of the minerals extracted from a mining concession minus the authorized deductions and (ii) a mining duty payable in yearly basis of a 0.5 per cent of the income for the sale of gold, silver or platinum minerals, (the "Governmental Royalties") are not reflected in this Opinion.

Note 2. Please be informed that the information on compliance with the filing of work assessment reports is information obtained from an unofficial source in the MMB. Said information is not public or official. The only way to support that information, is requesting from the Mining Obligations Compliance Department at the MMB the issuance of Official Certificates including status on compliance with the filing of work assessment reports. These Official Certificates do not show if the work assessment reports filed before the MMB were correctly and duly completed, they only show if these reports were filed or not and if they were opportunely or extemporarily submitted.

Note 3: It was stated a 3% NSR Royalty payable by SAN PEDRO in favor of PROCAN over this mining concession. The foregoing NSR Royalty was stated derived from the following Agreements described above: (i) Mr. Neumann Agreement; (ii) Amendment to Mr. Neumann Agreement; (iii) Mr. Neumann-Mr. Aguirre Assignment Agreement; (iv) PROCAN Assignment Agreement and (iv) PROCAN Amendment Agreement.

Note 4. It was stated a 3% NSR Royalty payable by SAN PEDRO in favor of Mr. Martínez over this mining concession. The foregoing NSR Royalty was stated derived from the Mr. Martínez Agreement described above.



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Note 5. At the PRM, usually royalties' obligations, including those payable to the Mexican Geological Service, are not reflected.

Please be informed that except for royalties included in agreements subject to registration under the Mexican Mining Law and its rules, the PRM does not register royalty obligations.

Note 6. SAN PEDRO requested the extension of term of existence of this mining concession for additional 50 years and the relevant extension was granted by the MMB. Excellon's officers provided to this Firm evidence of the foregoing.

Note 7. The MMB cancelled this mining concession because in its files no evidence of payment of governmental fees appeared corresponding to first and second semester of 2015 and first semester of 2016. All payments were credited to the original mining concession (Don Pedro). In order to correct the foregoing and have the mining concession in good standing, SAN PEDRO is in the process to file an administrative appeal against the MMB in order to revoke the cancellation of the mining concession. After reviewing the records of the MMB relating to such cancellation and documentation provided by SAN PEDRO this Firm is of the opinion that SAN PEDRO have enough legal arguments to challenge the cancellation of this mining concession.

Note 8. By mistake SAN PEDRO paid the mining fees corresponding to first semester of 2016 to El Siete mining concession that was the original mining from which the Reducción El Siete mining concession derived. In order to correct the foregoing and to credit payments to Reducción El Siete mining concession, SAN PEDRO has started the corresponding administrative proceedings before the MMB.

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APPENDIX B

Analytical Quality Control Data and Relative Precision Charts Time Series Plots for Blank Material Samples Assayed by SGS, Durango, Between 2017 and 2019.

-√= srk	consulting	Statistics	Ag	Pb	Zn	Au	
Project	Evolucion	Sample Count	332	383	332	332	
Data Series	2012 - 2015 Blanks	Expected Value	2.000	0.0002	0.0001	0.0100	
Data Type	Core Samples	Standard Deviation	-	-	-	-	
Commodity	various	Data Mean	1.032	0.001	0.003	0.003	
Laboratory	SGS	Upper Limit (10xDL)	0%	10%	61%	0%	
Analytical Method	various						
Detection Limit	various						


Time Series Plots for Certified Reference Material Samples Assayed by SGS, Durango, Between 2017 and 2019.



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Time Series Plots for Certified Reference Material Samples Assayed by SGS, Durango, Between 2017 and 2019.





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Time Series Plots for Certified Reference Material Samples Assayed by SGS, Durango, Between 2010 and 2019.

-∀= srk	consulting	Statistics	OREAS 0 602	OREAS 136	CDN- SE-1	PB146	OREAS 135	CDN- SE-2
Project	Evolucion	Sample Count	97	21	26	35	51	29
Data Series	2010-2019 Standards	Expected Value	0.419	3.630	2.650	2.500	2.800	1.340
Data Type	Core Samples	Standard Deviation	0.012	0.058	0.100	0.051	0.067	0.055
Commodity	Zn	Data Mean	0.404	3.869	2.267	2.589	2.809	1.273
Laboratory	SGS	Outside 2StdDev	31%	48%	38%	37%	18%	45%
Analytical Method	ICP40B	Below 2StdDev	27	3	10	0	4	12
Detection Limit	0.0001% Zn	Above 2StdDev	3	7	0	13	5	1



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Bias Charts and Precision Plots for Umpire Field Duplicate Core Samples for Historic Core (SGS)



Bias Charts and Precision Plots for Umpire Field Duplicate Core Samples for Historic Core (SGS)



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APPENDIX C

Capping Statistics, Probability Plots and Capping Sensitivity Curves

Uncapped and Capped Silver Composite Statistics*											
	_	Unca	apped (Compo	sites	Cap	oed C	ompo	sites	Mean	
Domain	Count	Mean	Std.	Max.	Coeff.	Mean	Std.	Max.	Coeff.	Diff	Vol. %‡
	Count	(g/t)	(g/t)	(g/t)	Var.	(g/t)	(g/t)	(g/t)	Var.	(%)†	
101	455	55	90	845	1.65	54	86	600	1.59	-1.0%	8.1%
102	568	43	68	669	1.58	43	67	600	1.56	-0.3%	12.3%
103	126	49	81	561	1.65	49	81	561	1.65	0.0%	1.9%
104	22	103	150	578	1.46	103	150	578	1.46	0.0%	0.4%
105	69	29	36	177	1.24	29	36	177	1.24	0.0%	1.3%
106	32	46	73	296	1.60	46	73	296	1.60	0.0%	1.3%
107	362	16	32	240	1.98	16	32	240	1.98	0.0%	5.3%
108	122	21	54	530	2.64	21	54	530	2.64	0.0%	3.9%
201	191	5	13	285	2.62	5	9	80	2.02	-5.2%	23.7%
202	237	19	21	163	1.11	19	19	120	1.02	-1.6%	21.6%
203	96	16	27	262	1.73	14	18	120	1.26	-7.9%	7.2%
204	151	34	41	201	1.19	32	32	120	1.02	-7.7%	13.1%
Subtotal	2,431	34	55	845	1.71	33	52	388.	2.64	-1.2%	100.0%
100	1,653	13	68	1692	5.40	11	42	600	3.76	-11.6%	19.3%
200	3,025	5	13	285	2.62	5	9	80	2.02	-5.2%	69.9%
300	797	31	137	2353	4.45	25	75	600	2.98	-18.0%	10.8%
Subtotal	5,475	11	48	2353	3.72	10	23	312	3.76	-12.8%	100%
Total	7,906	18	50	2353	3.11	17	36	336	3.76	-6.1%	

* Statistics are length-weighted. Std = standard deviation; Max = maximum; Coeff. Var. = coefficient of variation

† Difference of uncapped and capped composite silver-equivalent mean value

‡ Percentage of domain wireframe volume proportional to the vein and low-grade halo domain groupings

		Unca	oped	Compo	osites	Capped Composites				Mean	
Domain	C	Mean	Std.	Max.	Coeff.	Mean	Std.	Max.	Coeff.	Diff	Vol. %‡
	Count	(g/t)	(g/t)	(g/t)	Var.	(g/t)	(g/t)	(g/t)	Var.	(%)†	
101	455	0.12	0.44	8.57	3.58	0.11	0.20	1.89	2.00	-11.9%	8.1%
102	568	0.06	0.15	1.74	2.46	0.06	0.15	2.46	1.74	0.0%	12.3%
103	126	0.06	0.16	1.60	2.73	0.06	0.16	2.73	1.60	0.0%	1.9%
104	22	0.27	0.46	1.76	1.72	0.27	0.46	1.72	1.76	0.0%	0.4%
105	69	0.05	0.12	0.96	2.75	0.05	0.12	2.75	0.96	0.0%	1.3%
106	32	0.06	0.10	0.40	1.83	0.06	0.10	1.83	0.40	0.0%	1.3%
107	362	0.03	0.07	0.62	2.40	0.03	0.07	2.40	0.62	0.0%	5.3%
108	122	0.03	0.05	0.28	1.53	0.03	0.05	1.53	0.28	0.0%	3.9%
201	191	0.07	0.09	0.82	1.21	0.07	0.08	1.10	0.60	-1.6%	23.7%
202	237	0.10	0.16	1.27	1.52	0.10	0.13	1.28	0.60	-6.1%	21.6%
203	96	0.12	0.19	1.61	1.62	0.11	0.12	1.15	0.60	-9.0%	7.2%
204	151	0.05	0.13	1.10	2.43	0.05	0.10	2.09	0.60	-7.1%	13.1%
Subtotal	2431	0.07	0.19	8.57	2.40	0.07	0.13	2.75	1.19	-5.5%	100.0%
100	1653	0.02	0.12	3.19	5.10	0.02	0.12	5.00	3.00	-0.5%	19.3%
200	3025	0.03	0.08	2.15	2.87	0.03	0.05	2.01	0.60	-5.6%	69.9%
300	797	0.04	0.13	1.92	3.06	0.03	0.06	1.73	0.30	-20.5%	10.8%
Subtotal	5475	0.03	0.10	3.19	3.57	0.03	0.06	5.00	1.28	-7.7%	100%
Total	7906	0.04	0.13	8.57	3.21	0.04	0.09	5.00	1.25	-6.5%	

Uncapped and Capped Gold Composite Statistics*

* Statistics are length-weighted. Std = standard deviation; Max = maximum; Coeff. Var. = coefficient of variation

† Difference of uncapped and capped composite silver-equivalent mean value

[‡] Percentage of domain wireframe volume proportional to the vein and low-grade halo domain groupings

Uncapped and Capped Lead Composite Statistics*											
		Unca	pped	Compo	osites	Сар	ped C	Mean			
Domain	Count	Mean	Std.	Max.	Coeff.	Mean	Std.	Max.	Coeff.	Diff	Vol. %‡
	Count	(g/t)	(g/t)	(g/t)	Var.	(g/t)	(g/t)	(g/t)	Var.	(%)†	
101	455	0.74	1.13	9.06	1.53	0.74	1.13	9.06	1.53	0.0%	8.1%
102	568	0.76	1.26	11.78	1.66	0.76	1.26	11.78	1.66	0.0%	12.3%
103	126	0.62	0.99	6.01	1.59	0.62	0.99	6.01	1.59	0.0%	1.9%
104	22	0.73	1.41	5.86	1.93	0.73	1.41	5.86	1.93	0.0%	0.4%
105	69	0.56	0.73	3.33	1.31	0.56	0.73	3.33	1.31	0.0%	1.3%
106	32	0.66	0.96	3.92	1.46	0.66	0.96	3.92	1.46	0.0%	1.3%
107	362	0.32	0.61	5.38	1.90	0.32	0.61	5.38	1.90	0.0%	5.3%
108	122	0.37	0.89	8.11	2.43	0.37	0.89	8.11	2.43	0.0%	3.9%
201	191	0.40	0.50	3.79	1.24	0.40	0.50	3.79	1.24	0.0%	23.7%
202	237	0.29	0.50	4.29	1.75	0.29	0.49	4.00	1.73	-0.4%	21.6%
203	96	0.78	0.98	5.58	1.25	0.76	0.89	4.00	1.17	-2.6%	7.2%
204	151	0.31	0.53	4.04	1.73	0.31	0.53	4.00	1.73	-0.1%	13.1%
Subtotal	2431	0.56	0.90	11.78	1.66	0.56	0.90	7.26	2.43	-0.2%	100.0%
100	1653	0.13	0.47	11.89	3.67	0.12	0.36	3.50	2.99	-5.0%	19.3%
200	3025	0.09	0.26	6.85	2.95	0.09	0.26	6.85	2.95	0.0%	69.9%
300	797	0.06	0.20	2.75	3.40	0.05	0.12	0.70	2.37	-16.0%	10.8%
Subtotal	5475	0.10	0.32	11.89	3.23	0.09	0.40	4.94	2.99	-3.6%	100%
Total	7906	0.24	0.50	11.89	2.75	0.24	0.46	5.65	2.99	-1.2%	

* Statistics are length-weighted. Std = standard deviation; Max = maximum; Coeff. Var. = coefficient of variation

† Difference of uncapped and capped composite silver-equivalent mean value

‡ Percentage of domain wireframe volume proportional to the vein and low-grade halo domain groupings

		Unca	pped	Compo	osites	Cap	ped C	ompos	sites	Mean	
Domain	Count	Mean	Std.	Max.	Coeff.	Mean	Std.	Max.	Coeff.	Diff	Vol. %‡
	Count	(g/t)	(g/t)	(g/t)	Var.	(g/t)	(g/t)	(g/t)	Var.	(%)†	
101	455	0.80	1.31	10.34	1.64	0.80	1.30	10.00	1.64	-0.1%	8.1%
102	568	0.99	1.73	14.43	1.75	0.98	1.64	10.00	1.68	-1.5%	12.3%
103	126	0.60	0.79	4.46	1.32	0.60	0.79	4.46	1.32	0.0%	1.9%
104	22	0.90	1.69	6.83	1.88	0.90	1.69	6.83	1.88	0.0%	0.4%
105	69	0.62	0.81	3.36	1.31	0.62	0.81	3.36	1.31	0.0%	1.3%
106	32	0.65	0.97	4.66	1.49	0.65	0.97	4.66	1.49	0.0%	1.3%
107	362	0.50	1.10	10.13	2.19	0.50	1.09	10.00	2.18	-0.1%	5.3%
108	122	0.71	1.46	10.01	2.07	0.71	1.46	10.00	2.07	0.0%	3.9%
201	191	0.90	0.94	6.73	1.05	0.87	0.82	4.00	0.94	-2.9%	23.7%
202	237	0.73	0.90	6.54	1.22	0.70	0.74	4.00	1.05	-4.3%	21.6%
203	96	1.09	1.18	5.24	1.08	1.06	1.08	4.00	1.03	-3.0%	7.2%
204	151	0.45	0.60	3.75	1.32	0.45	0.60	3.75	1.32	0.0%	13.1%
Subtotal	2431	0.77	1.22	14.43	1.61	0.76	1.17	7.74	2.18	-1.3%	100.0%
100	1653	0.15	0.52	10.72	3.42	0.14	0.41	4.00	2.89	-5.0%	19.3%
200	3025	0.16	0.38	7.93	2.40	0.16	0.35	5.00	2.24	-1.2%	69.9%
300	797	0.06	0.17	<u>2.18</u>	2.94	0.05	0.11	0.80	2.26	-10.3%	10.8%
Subtotal	5475	0.14	0.39	10.72	2.79	0.14	0.52	4.08	2.89	-3.1%	100%
Total	7906	0.33	0.65	14.43	2.43	0.33	0.59	5.21	2.89	-1.9%	

Uncapped and Capped Zinc Composite Statistics*

* Statistics are length-weighted. Std = standard deviation; Max = maximum; Coeff. Var. = coefficient of variation

† Difference of uncapped and capped composite silver-equivalent mean value

‡ Percentage of domain wireframe volume proportional to the vein and low-grade halo domain groupings







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APPENDIX D

Variograms



Variogram analysis Miguel Auza D100

100

200 Distance 300

400

20 Distance

30

100

200 Distance 300

400



Variogram analysis Miguel Auza D199



APPENDIX E

Swath Plots



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CERTIFICATE OF QUALIFIED PERSON

To Accompany the report entitled: Independent Technical Report for the Evolución Polymetallic Project, Miguel Auza, Zacatecas, Mexico, dated October 30, 2020 (effective date August 31, 2020)

I, Aleksandr Mitrofanov, do hereby certify that:

- 1) I am a Senior Consultant (Resource Geology) with the firm of SRK Consulting (Canada) Inc. (SRK) with an office at Suite 1500, 155 University Avenue, Toronto, Ontario, Canada;
- 2) I am a graduate of Moscow State University, where in 2013 I obtained a doctorate in geology, in 2010 I obtained a MSc and in 2008, a BSc. I have practiced my profession continuously since 2009. I have experience in exploration projects, geological modelling and mineral resource estimation. Since joining SRK Consulting in 2013, my responsibilities have included geological and structural modelling, preparation of geological chapters on mineral resources for 43-101 and JORC-code reports: scoping study, pre-feasibility study, feasibility study and all other geological activities;
- 3) I am a professional Geologist registered with the Association of Professional Geoscientists of Ontario (APGO#2824);
- 4) I have not personally visited the project area;
- 5) I have read the definition of Qualified Person set out in National Instrument 43-101 and certify that by virtue of my education, affiliation to a professional association, and past relevant work experience, I fulfill the requirements to be a Qualified Person for the purposes of National Instrument 43-101 and this technical report has been prepared in compliance with National Instrument 43-101 and Form 43-101F1;
- 6) I, as a Qualified Person, I am independent of the issuer as defined in Section 1.5 of National Instrument 43-101;
- 7) I am the co-author of this report and responsible for Section 13, 16 and 17 and accept professional responsibility for those sections of this technical report;
- 8) I have had no prior involvement with the subject property;
- 9) I have read National Instrument 43-101 and confirm that this technical report has been prepared in compliance therewith;
- 10) SRK Consulting (Canada) Inc. was retained by Excellon Resources Inc. to prepare a technical audit of the Evolución Project. In conducting our audit, a gap analysis of project technical data was completed using CIM *Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines* and Canadian Securities Administrators National Instrument 43-101 guidelines. The preceding report is based on a site visit, a review of project files and discussions with Excellon Resources Inc. personnel;
- 11) I have not received, nor do I expect to receive, any interest, directly or indirectly, in the Evolución Project or securities of Excellon Resources Inc.; and
- 12) That, as of the date of this certificate, to the best of my knowledge, information and belief, this technical report contains all scientific and technical information that is required to be disclosed to make the technical report not misleading.

["Original signed and sealed"] Aleksandr Mitrofanov, PhD, PGeo (APGO#2824) Senior Consultant (Resource Geology)

Toronto, Ontario October 30, 2020

CERTIFICATE OF QUALIFIED PERSON

To Accompany the report entitled: Independent Technical Report for the Evolución Polymetallic Project, Miguel Auza, Zacatecas, Mexico, dated October 30, 2020 (effective date August 31, 2020)

I, Joycelyn Smith, do hereby certify that:

- 1) I am a Consultant (Resource Geology) with the firm of SRK Consulting (Canada) Inc. (SRK) with an office at Suite 1500 155 University Avenue, Toronto, Ontario, Canada;
- 2) I am a graduate of Brock University in Saint Catharines with a BSc (Hons) in Earth Sciences in 2013; I obtained an MSc (Geology) from the Laurentian University in Sudbury in 2016. I have practiced my profession continuously since 2013. I specialize in precious metal exploration in hard-rock terrain. My areas of expertise include data collection and quality control analysis for various deposit types, including narrow-vein and disseminated-type precious metal deposits.
- 3) I am a Professional Geoscientist registered with the Association of Professional Geoscientists of the province of Ontario (APGO#2963);
- 4) I have not personally visited the project area;
- 5) I have read the definition of Qualified Person set out in National Instrument 43-101 and certify that by virtue of my education, affiliation to a professional association, and past relevant work experience, I fulfill the requirements to be a Qualified Person for the purposes of National Instrument 43-101 and this technical report has been prepared in compliance with National Instrument 43-101 and Form 43-101F1;
- 6) I, as a Qualified Person, I am independent of the issuer as defined in Section 1.5 of National Instrument 43-101;
- 7) I am the co-author of this report and responsible for Sections 1-3, 5-10.1.1, 10.4-10.5, 11.1, 11.2.2, 12, 14-15 and accept professional responsibility for those sections of this technical report;
- 8) I have had no prior involvement with the subject property:
- 9) I have read National Instrument 43-101 and confirm that this technical report has been prepared in compliance therewith;
- 10) SRK Consulting (Canada) Inc. was retained by Excellon Resources Inc. to prepare a technical audit of the Evolución Project. In conducting our audit, a gap analysis of project technical data was completed using CIM *Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines* and Canadian Securities Administrators National Instrument 43-101 guidelines. The preceding report is based on a site visit, a review of project files and discussions with Excellon Resources Inc. personnel;
- 11) I have not received, nor do I expect to receive, any interest, directly or indirectly, in the Evolución Project or securities of Excellon Resources Inc.; and
- 12) That, as of the date of this certificate, to the best of my knowledge, information and belief, this technical report contains all scientific and technical information that is required to be disclosed to make the technical report not misleading.

["Original signed and sealed"]Hermosillo, Sonora, MexicoJoycelyn Smith, MSc, PGeo (APGO#2963)October 30, 2020Consultant (Resource Geology)

CERTIFICATE OF QUALIFIED PERSON

To Accompany the report entitled: Independent Technical Report for the Evolución Polymetallic Project, Miguel Auza, Zacatecas, Mexico, dated October 30, 2020 (effective date August 31, 2020)

I, Alfonso Soto, do hereby certify that:

- 1) I am a President and Director with the firm of Rocks Mining Exploration Consultants Inc. (SRK) Cibuta #58, Col.Olivares, CP 83180, Hermosillo,Sonora, Mexico;
- I am a graduate of the University of Sonora, Mexico in 1986, I obtained a BSc in Geology. I have practiced my profession continuously since September 1986 in exploration, production and the evaluations of precious metals, porphyry systems and base metals deposits.
- 3) I am a certified professional geologist (Geoscientist, Engineer) registered with the American Institute of Professional Geologist (AIPG, CPG -11938).
- 4) I have personally inspected the subject project from July.21 to 24 ,2020;
- 5) I have read the definition of Qualified Person set out in National Instrument 43-101 and certify that by virtue of my education, affiliation to a professional association, and past relevant work experience, I fulfill the requirements to be a Qualified Person for the purposes of National Instrument 43-101 and this technical report has been prepared in compliance with National Instrument 43-101 and Form 43-101F1;
- 6) I, as a Qualified Person, I am independent of the issuer as defined in Section 1.5 of National Instrument 43-101;
- 7) I am a co-author of this report and responsible for sections 4, 10.12-10.3 and 11.2.1, and accept professional responsibility for those sections of this technical report;
- 8) I have had no prior involvement with the subject property.
- 9) I have read National Instrument 43-101 and confirm that this technical report has been prepared in compliance therewith;
- 10) SRK Consulting (Canada) Inc. was retained by Excellon Resources Inc. to prepare a technical audit of the Evolución Project. In conducting our audit, a gap analysis of project technical data was completed using CIM *Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines* and Canadian Securities Administrators National Instrument 43-101 guidelines. The preceding report is based on a site visit, a review of project files and discussions with Excellon Resources Inc. personnel;
- 11) I have not received, nor do I expect to receive, any interest, directly or indirectly, in the Evolución Project or securities of Excellon Resources Inc.; and
- 12) That, as of the date of this certificate, to the best of my knowledge, information and belief, this technical report contains all scientific and technical information that is required to be disclosed to make the technical report not misleading.

["Original signed and sealed"]

Hermosillo, Sonora, Mexico October 30, 2020 Luis Alfonso Soto C. Geologist and AIPG, CPG-11938] Senior Geologist