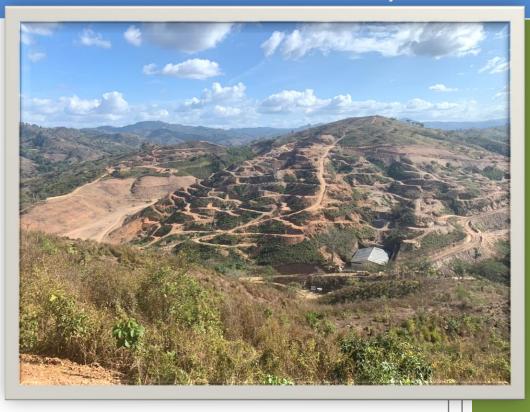


### MINE DEVELOPMENT ASSOCIATES

A DIVISION OF RESPEC



# TECHNICAL REPORT AND ESTIMATE OF MINERAL RESOURCES FOR THE SAN ALBINO PROJECT, NUEVA SEGOVIA, NICARAGUA



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#### **MINE DEVELOPMENT ASSOCIATES**

#### MINE ENGINEERING SERVICES

#### 1.0 SUMMARY (ITEM 1)

Mine Development Associates ("MDA"), a division of RESPEC, has prepared this Technical Report on the San Albino gold project, located in Nueva Segovia, Nicaragua (the "San Albino project") at the request of Mako Mining Corp. ("Mako"). This report and the resource estimates herein have been prepared in accordance with the disclosure and reporting requirements set forth in the Canadian Securities Administrators' National Instrument 43-101 ("NI 43-101"), Companion Policy 43-101CP, and Form 43-101F1, as well as with the Canadian Institute of Mining, Metallurgy and Petroleum's "CIM Definition Standards - For Mineral Resources and Reserves, Definitions and Guidelines" ("CIM Standards") adopted by the CIM Council on May 10, 2014.

#### 1.1 Property Description and Ownership

The San Albino mining property is located in Nueva Segovia Department of the Republic of Nicaragua, 173km north of the city of Managua, and approximately 15km southeast of the northern border of Nicaragua with Honduras. The San Albino property consists of four contiguous mining concessions referred to as: 1) San Albino-Murra, 2) El Jicaro, 3) La Segoviana, and 4) Potrerillos concessions, respectively, and comprise a total of 18,816.72 hectares (188.17km²). Mako holds surface rights totaling 474.921 hectares (4.75km²) and the associated processing and mining infrastructure.

Mako, indirectly through their subsidiary, Nicoz Resources, S.A., holds a 100% interest in the San Albino-Murra, La Segoviana and Potrerillos concessions. Mako, indirectly through their subsidiary, Gold Belt, S.A., holds a 100% interest in the El Jicaro concession. Annual fee payments on the mineral concessions are required on a semi-annual basis, payable in January and July each year. The payments escalate from US\$0.25 per hectare to US\$8.00 per hectare over the first 10 years and are US\$12.00 per hectare thereafter. Concession fees and taxes have been paid in full to December 31, 2020. The annual holding costs for all four concessions are estimated at \$180,612.

Make has purchased the surface rights over 100% of the area covering the San Albino Deposit. Additional surface rights were purchased to cover all the area permitted for processing infrastructure and mining activities, as well as additional properties at the Las Conchitas area. The Company has acquired surface rights totaling 674.022 manzanas (474.921 hectares) in 57 individual properties. The Company is currently negotiating the purchase of additional properties on future exploration areas.



#### 1.2 Exploration and Mining History

Gold-bearing quartz vein mineralization was discovered at the San Albino project area around 1790 by Spaniards who initially mined gold at the San Albino Deposit from an open pit and subsequently by underground methods. Flooding eventually stopped the early work. From 1885 to 1926 and possibly into the 1930s, the property was worked by several operators. In 1922 to 1926, Charles Butters, an American metallurgist, built a mill on site. In 1926, the operation was seized by Augusto Sandino, leader of the Nicaraguan revolution.

The first modern-era exploration was conducted by Western Mining starting in 1996 on the Quilali-Murra exploration concession. Work included stream-sediment and rock-chip sampling, as well as soil sampling along trails and footpaths. Two vertical core holes were drilled to shallow depths. Beginning in 1997 through 2006, Resources and Mining S.A. ("REMISA") controlled the property and focused its efforts on the historical San Albino mine. REMISA reopened historical cross cuts but could not reach the main drift. A soil survey and shallow core drilling were conducted from the hanging wall of the mineralized structure. During the second half of 2003, Pila Gold Ltd. ("Pila") identified and mapped showings of mineralization, collected rock samples, soil samples, and silt samples from the San Albino vein and adjacent Murra area. Additionally, Pila hand-excavated and sampled 24 trenches. Most work was concentrated around the Las Conchitas target and the historical San Albino mine. In 2006 to early 2009, Condor Gold Plc. ("Condor") explored the San Albino and Arras veins. Condor collected 2,398 samples from 75 trenches and a total of 694 samples were taken from 82 road cuts. Condor mapped or inspected 246m along eight adits from which 246 samples were taken. Twenty-two reverse-circulation ("RC") drill holes and two core holes (2,754m) were drilled at the Arras and San Albino veins. In 2009, Golden Reign Resources Ltd. ("Golden Reign") acquired the San Albino-Murra concession. In 2018, Golden Reign merged with Marlin Gold Mining Ltd. ("Marlin") to form Mako. Exploration at the San Albino project area has been ongoing since it was acquired by Golden Reign (now Mako).

#### 1.3 Geology and Mineralization

Rocks at the San Albino property consist of black, occasionally carbonaceous, argillite or metapelite. Folds and thrusts have been recognized within these meta-sedimentary rocks. Regional metamorphism and deformation are thought to predate the Dipilto batholith. The schistose foliation is attributed to shortening that preceded emplacement of the Dipilto batholith. The meta-sedimentary rocks at the San Albino project are cut by dikes of intermediate composition.

Low- and moderate-angle faults control the distribution of gold-bearing quartz veins. At the San Albino project, quartz-bearing shear zones up to several meters thick are stacked in subparallel fashion (e.g., San Albino, Naranjo, and Arras veins) to comprise the San Albino Deposit. The separation between shears averages just under 100m. The shear-related veins and their enclosing faults have anastomosing, pinch-and-swell geometries. The continuity between shear zones and metamorphic foliation is consistent with a thrust geometry.

The mineralization in the San Albino project area is best interpreted in the context of an "orogenic gold" deposit model based on the association of gold mineralization with metamorphic host rocks, the textures and mineralogy of the San Albino veins, the wallrock alteration, and the "gold-only" character of mineralization. The veins are hosted in lower greenschist-facies metamorphic rocks, and their geometries



indicate that veins formed in response to contractional deformation. Other common orogenic gold deposit features present in the San Albino system include ribbon-textured shear veins containing milky quartz, visible gold, relatively high Au:Ag ratios, and low percentages of base metal sulfides.

#### 1.4 Metallurgical Testing and Mineral Processing

Based on the recent metallurgical test work, the selected processing approach includes milling of all material followed by cyanide extraction of gold and silver using a carbon-in-leach ("CIL") plant, which yielded optimized overall recoveries ranging from 86.1% to 96.9%, depending on the mineralization type and despite the presence of carbonaceous material in the samples. Tests were completed in 2016 through 2020 and were designed to confirm conclusions from work done in 2013 and 2014, as well as provide further design parameters for the mill flowsheet and the associated mill operations and tailings management. Overall, the latest programs supported conclusions of previous process development work and the current mill design parameters. Gravity recoveries averaged 36.3% with higher gravity recoveries possible when higher-grade material is processed through the plant. Metallurgical tests of the mine dumps and San Albino vein oxide material, which are likely to be the first materials processed for eventual economic extraction, have shown gold recoveries in excess of 95%.

It has been determined that 95% is a reasonable gold recovery percentage for the purposes of reporting the current resource estimate.

#### 1.5 Mineral Resource Estimate

Three principal veins (San Albino, Naranjo, and Arras), along with several smaller veins with seemingly less continuity, were modeled to estimate the mineral resource estimate in this report for the San Albino Deposit. The veins usually have a low-grade halo of mineralization. Vein locations are predictable, the style of mineralization is well understood, and the deposit is open down dip and along strike.

Classification of the resources considered adequacy and reliability of sampling, geologic understanding, results of quality control analyses, geologic complication, and apparent grade continuity. A Measured classification was permitted only in the San Albino vein, because there is a very good understanding of San Albino vein geology and because there is extensive drilling and trench channel sampling. Indicated resources were permitted only in the San Albino and Arras veins. Because the Naranjo vein is poorly understood, it has only Inferred resources, but those, like all the Inferred, will most likely be upgraded with additional drilling. The other ("miscellaneous") veins are either poorly drilled or lack drill-supported evidence of continuity and are classified as Inferred. Areas around suspected workings have been classified as Inferred as well as areas around known faulting. All resource model blocks that rely on trench data more than drill data are classified as Inferred.

Mining dilution is an important factor at the San Albino Deposit in part because the veins are one to two meters thick, but also because the open-pit operation is practicing meticulous grade control. The potentially open-pittable resources include one-half-meter rinds of dilution on the top and on the bottom of the veins. The dilution grade varies from close to nothing to half a gram of gold per tonne, depending on whether or not the halo mineralization is present. The underground dilution will be larger because of ground conditions, shallow dip, minimum mining height, and less control on locating hanging wall and footwall.



The block model is rotated in a horizontal plane  $40^{\circ}$  clockwise, and the blocks are 2m along strike by 1m vertical by 1m across strike. Four estimates were completed: polygonal, nearest neighbor ("NN"), inverse distance to the third power ("ID³"), and kriged. Except the polygonal method, each of these models were run over a dozen times to optimize estimation parameters. One single estimation pass was run for each of the halo and vein domains in each of the six estimation areas. The search distance was set to "fill" all blocks coded to veins and halos. In the San Albino vein, about half of the blocks' grade estimates were based on samples that were  $\leq 10$ m away, and 85% of all blocks were located within 30m of a composite sample. About 1.5% if the blocks are based solely on trench samples and 92% are based solely on drilled data.

For reporting, technical and economic factors likely to influence the "reasonable prospects for eventual economic extraction" were evaluated using the best judgement of the author. For evaluating the open-pit potential, MDA ran a series of optimized pits using variable gold prices and parameters. The accepted mining cost was \$2/t, processing cost \$60/t, G&A cost \$5/t and metallurgical recoveries were 95% and 70% for gold and silver, respectively. For evaluating the potential for underground mining, MDA ran a series of stope optimizations at variable cutoffs and for the reporting cutoff grade the author assumes an average mining cost of \$70/t, processing cost of \$60/t and G&A of \$10/t. The factors used in defining cutoff grades are based on US\$1,750/oz Au. The San Albino project's reported Mineral Resource is based on potentially open-pittable as well as potentially underground-minable material (Table 1-1).

Table 1-1 Total Resources at the San Albino Project

Open Pit and Underground and Dumps										
Measured										
Cutoff	Tonnes	g Au/t	Oz Au	g Ag/t	Oz Ag					
various	115,200	11.74	43,500	17.6	65,100					
	Indicated									
Cutoff	Tonnes	g Au/t	Oz Au	g Ag/t	Oz Ag					
various	426,300	9.86	135,100	17.4	238,600					
	Me	asured an	d Indicated							
Cutoff	Tonnes	g Au/t	Oz Au	g Ag/t	Oz Ag					
various	541,500	10.21	177,800	17.4	303,700					
		Infer	red							
Cutoff	Tonnes	g Au/t	Oz Au	g Ag/t	Oz Ag					
various	421,600	7.44	100,900	12.6	170,600					

#### 1.6 Conclusions, Interpretations and Recommendations

The authors believe that the San Albino project is a project of merit and warrants additional exploration and development work. The known veins are open down dip and along strike, which suggests significant potential to expand the resources estimated in this report. Additionally, the stacked nature and even distribution of the veins parallel to the regional foliation provide a proven exploration strategy.

Overall, the San Albino project benefits from a team of mining professionals that have spent multiple years working on the project, as well as a similar narrow vein, open-pit project. The technical team has shown a commitment to collecting quality data and innovative thinking toward developing the project.



The authors are not aware of any significant risks or uncertainties that could reasonably be expected to affect the reliability or confidence in the exploration information as applied to the estimated mineral resources.

The San Albino project shows excellent potential for expanding the gold and silver resources. Exploration work at the Las Conchitas area should continue with the goal of compiling enough data to complete a resource estimation. A comprehensive exploration program is needed to evaluate the Potrerillos and La Segoviana concessions and prioritize drill targets. Mapping and sampling of surface outcrops should be followed by channel sampling of trenches and exploration pits. Additionally, the mapping and sampling data collected on the El Jicaro concession should be reevaluated in light of this resource estimation with particular emphasis on the historic El Golfo mine area. Encouraging results from the surface sampling programs should be followed up with core drilling. Table 1-2 summarizes the recommended program.

Table 1-2 Mako Mining Corp. Cost Estimate for the Recommended Program

Category	Objective	Drilling Meters	USD
	Arras	3,700	\$ 555,000
	San Albino – Northwest of Open-pit	4,800	\$ 720,000
Open Pit Resource	San Albino - Downdip Extension	2,900	\$ 432,000
Definition	Arras Veins 2 and 3	5,000	\$ 750,000
	SW Pit	6,000	\$ 900,000
	Subtotal	22,400	\$ 3,357,000
	Naranjo and Arras Veins	15,000	\$ 2,250,000
Underground Resource  Definition	Other Areas	3,000	\$ 450,000
Definition	Subtotal	18,000	\$ 2,700,000
	Las Conchitas Resource Definition	10,000	\$ 1,500,000
December 5-timetics	Las Conchitas Reporting and Geologic Studies		\$ 60,000
Resource Estimation	Las Conchitas Metallurgy		\$ 100,000
	Subtotal	10,000	\$ 1,660,000
	Potrerillos Concession Mapping and Sampling		\$ 75,000
	Potrerillos Concession Exploration Drilling	1,500	\$ 225,000
Exploration	Other Concessions Mapping and Sampling		\$ 50,000
	Other Concessions Exploration Drilling	1,000	\$ 150,000
	Subtotal	2,500	\$ 500,000
	Contingency (~10%)		\$ 800,000
	Total	52,900	\$ 9,000,000

Phase II recommendations are dependent upon success at the San Albino Deposit, Las Conchitas target, and other concessions. Given success in the above recommended programs, follow-up work would include economic studies on the newly discovered resources at San Albino, a resource estimate for Las Conchitas, and follow up drilling. Approximate costs for those follow up tasks would be \$30,000, \$100,000, and \$1,500,000, respectively. Of course, there is always the chance that new discoveries will support much larger drilling expenditures.



#### 2.0 INTRODUCTION AND TERMS OF REFERENCE (ITEM 2)

Mine Development Associates ("MDA"), a division of RESPEC, has prepared this Technical Report on the San Albino gold project, located in Nueva Segovia, Nicaragua (the "San Albino project") at the request of Mako Mining Corp. ("Mako"), a Canadian company based in Vancouver, British Columbia, Canada. Mako is listed on the TSX Venture Exchange (MKO-TSXV) and trades over-the-counter (MAKOF-OTCMKTS). This report has been prepared in accordance with the disclosure and reporting requirements set forth in the Canadian Securities Administrators' National Instrument 43-101 ("NI 43-101"), Companion Policy 43-101CP, and Form 43-101F1, as amended.

#### 2.1 Project Scope and Terms of Reference

The purpose of this report is to provide an updated estimate of mineral resources and technical summary of the San Albino project which is located about 175km north of Managua, Nicaragua. The San Albino project is undergoing development for potential mining with open-pit extraction. This Technical Report builds upon and supersedes the Technical Reports of Kowalchuk (2011) and Puritch et al. (2013), and the Technical Report and preliminary economic assessment ("PEA") of Puritch et al. (2015).

The mineral resources were estimated and classified under the supervision of Steven J. Ristorcelli, Principal Geologist for MDA and Mr. Derick L. Unger, Project Geologist for MDA. Mr. Ristorcelli and Mr. Unger are qualified persons under NI 43-101 and have no affiliations with Mako, or their subsidiaries, except that of independent consultant/client relationship. The mineral resources reported herein are estimated to the standards and requirements stipulated in NI 43-101. Mr. Ross MacFarlane, P. Eng. an Associate Metallurgist of Watts, Griffis and McOuat Limited ("WGM") is the Qualified Person with respect to metallurgy. Mr. MacFarlane supervised the preparation of and takes responsibility for Section 13 Mineral Processing and Metallurgical Testing. Mr. MacFarlane has no affiliations with Mako except that of independent consultant/client relationship.

The scope of this study included a review of pertinent technical reports and data provided to MDA by Mako relative to the general setting, geology, project history, exploration activities and results, methodology, quality assurance, interpretations, drilling programs, and metallurgy. This report is based almost entirely on data and information derived from work done by historical operators and Mako. Mr. Ristorcelli and Mr. Unger have reviewed much of the available data, visited the project site, and made judgments about the general reliability of the underlying data. Where deemed either inadequate or unreliable, the data were either eliminated from use or procedures were modified to account for lack of confidence in suspect information. Mr. Ristorcelli and Mr. Unger have made such independent investigations as deemed necessary in their professional judgment to be able to reasonably present the conclusions, interpretations, and recommendations presented herein.

The term San Albino is used in multiple ways throughout this report. For clarity, the following describes each use:

- *San Albino property*: This refers explicitly to the four concessions: 1) San Albino-Murra, 2) El Jicaro, 3) La Segoviana, and 4) Potrerillos.
- San Albino-Murra concession: This is one of four concessions that comprise the San Albino property and contains the San Albino Deposit.



- San Albino project: This is a general term that includes activities, exploration and engineering programs, infrastructure and the geographic area of the four concessions but does not refer explicitly to only mineral tenure (e.g. San Albino property).
- San Albino Deposit: The principal components of the San Albino Deposit are the Arras, Naranjo, and San Albino quartz veins, the smaller El Jobo and a few other less continuous unnamed veins.
- San Albino vein: This use of San Albino explicitly refers to the one vein that holds the majority of open-pit resources and is the stratigraphically highest of all the veins within the San Albino Deposit.

Steven J. Ristorcelli, Principal Geologist for MDA and Mr. Derick L. Unger, Project Geologist for MDA, visited the San Albino project on February 18 through February 21, 2020, accompanied by Akiba Leisman, Frank Powell, and Zoran Pudar of Mako. This site visit included a review of recently drilled core, observation of core logging and sampling procedures, observation of density data collection, field checks of drill collar locations, field visits to channel sampling locations in trenches and outcrops, visits to active exploration drill sites and a review of Mako's geologic model. The authors observed that the procedures were satisfactory and that the work was completed with careful attention to generating quality data. Mr. MacFarlane has not visited the project site.

The Effective Date of this Technical Report is November 2, 2020.

#### 2.2 Frequently Used Acronyms, Abbreviations, Definitions, and Units of Measure

In this report, measurements are generally reported in metric units. Where information was originally reported in Imperial units, the authors have made the conversions as shown below. In some cases where there are tables of historical resource estimates or production totals, the authors did not convert the original units for historical completeness or to avoid changes to precision due to rounding.

Currency, units of measure, and conversion factors used in this report include:

#### **Linear Measure**

1 centimeter = 0.3937 inch

1 meter = 3.2808 feet = 1.0936 yard

1 kilometer = 0.6214 mile

Area Measure

1 hectare = 2.471 acres = 0.0039 square mile



#### **Capacity Measure (liquid)**

1 liter = 0.2642 US gallons

Weight

1 gram = 0.03215 troy ounces

1 kilogram = 2.205 pounds

1 tonne = 1.1023 short tons = 2,205 pounds

**Currency** Unless otherwise indicated, all references to dollars (\$) in this report refer to currency of the United States.

#### Frequently used acronyms and abbreviations

3D three dimensional

AA atomic absorption analytical method

Ag silver
As arsenic
Au gold

AuEq gold equivalent

Bi bismuth Ca calcium

CIL carbon-in-leach cm centimeters cm<sup>3</sup> cubic centimeters CO<sub>2</sub> carbon dioxide

core diamond core-drilling method

C carbon

°C degrees centigrade

CN cyanide

CRM certified reference material

Cu copper

CV coefficient of variation

Fe iron g grams

GPS global positioning system

GRA gravimetric ha hectares

ICP inductively coupled plasma analytical method

INORG inorganic kg kilograms km kilometers

## Technical Report and Estimate of Mineral Resources for the San Albino Project, Nueva Segovia Nicaragua Mako Mining Corp. Page 9

km<sup>2</sup> square kilometers

kW kilowatt l liter m meters

Ma million annum
mg milligram
mm millimeters
Mo molybdenum
NaCN sodium cyanide

Ni nickel
oz ounce
ORG organic
Pb lead

ppm parts per million ppb parts per billion

QA/QC quality assurance and quality control RC reverse-circulation drilling method

S sulfur
Se selenium
SiO2 silicon dioxide

SO4 sulfate

SG specific gravity
Sb antimony

Std Dev standard deviation
t metric tonne or tonnes
Ton or ton Imperial short ton

TOT total Zn zinc



#### 3.0 RELIANCE ON OTHER EXPERTS (ITEM 3)

Mr. Ristorcelli and Mr. Unger are not experts in legal matters, such as the assessment of the validity of mining claims, mineral rights, and property agreements in Nicaragua or elsewhere. Furthermore, the authors did not conduct any investigations of the environmental, social, or political issues associated with the San Albino project, and are not experts with respect to these matters. The authors have therefore relied fully upon information and opinions provided Mr. Oscar Molina, Country Manager for Mako, with regards to the following:

- Section 4.2, which pertains to land tenure; and
- Section 4.3, which pertains to legal agreements and encumbrances.

The authors have relied fully upon information and opinions provided by Mr. Ramon Encinas of Mako, an expert in environmental and permitting matters for Section 4.4 and Section 4.5, which pertain to environmental permits and liabilities.



#### 4.0 PROPERTY DESCRIPTION AND LOCATION (ITEM 4)

The authors are not experts in land, legal, environmental, and permitting matters and express no opinion regarding these topics as they pertain to the San Albino project. Subsections 4.2 and 4.3 were prepared under the supervision of Mr. Oscar Molina, Country Manager for Mako. A legal Title Opinion and limited due diligence was provided by Signature Regional Law Firm as Nicaraguan legal counsel for Mako through an underwriting agreement with Stifel Nicolaus Canada Inc., Eight Capital and INFOR Financial Inc. on July 16, 2020. Mr. Ramon Encinas of Mako, an expert in environmental and permitting matters, prepared and reviewed Sections 4.4 and 4.5.

Mr. Ristorcelli and Mr. Unger do not know of any significant factors and risks that may affect access, title, or the right or ability to perform work on the property, beyond what is described in this report.

#### 4.1 Location and Land Area

The San Albino project and mining property is located in Nueva Segovia Department of the Republic of Nicaragua, 173km north of the city of Managua, and approximately 15km southeast of the northern border of Nicaragua with Honduras (Figure 4.1). The Nueva Segovia Department has a population of 211,200 (2005 census). Within the property, the San Albino gold deposit (the "San Albino Deposit") is located at Latitude 13° 41' 23"N and Longitude 86° 06' 04"W (597,200E; 1,513,600N, UTM Zone 16,WGS 84 Datum). The small town of El Jicaro is located 6km northwest of the San Albino Deposit and the town of Murra (population 1,000) is located 11.7km northeast of the San Albino Deposit, within the northern part of the concessions (Figure 4.2).

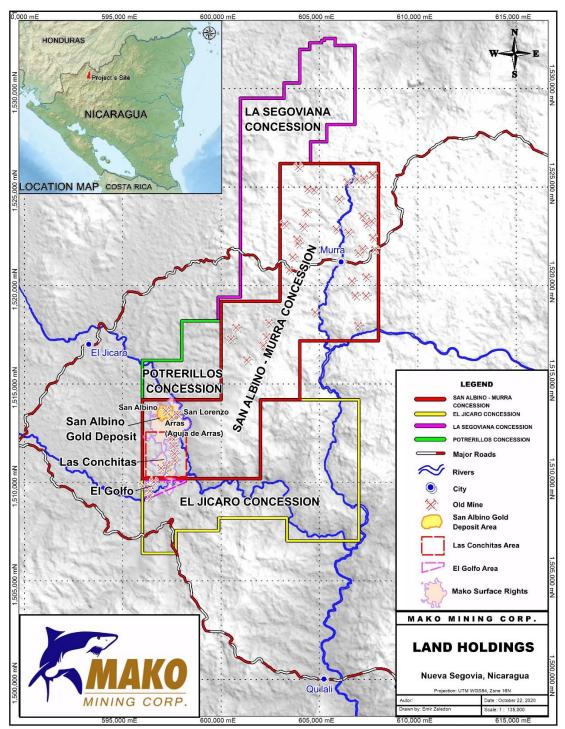


Figure 4.1 Location of the San Albino Project (from Mako, 2020)



The San Albino property consists of four contiguous mining concessions (Figure 4.2) referred to as: 1) San Albino-Murra, 2) El Jicaro, 3) La Segoviana, and 4) Potrerillos concessions, respectively, and comprise a total of 18,816.72 hectares (188.17km<sup>2</sup>).

**Figure 4.2 San Albino Property Map** (from Mako, 2020; 5km UTM grid lines for scale)





#### 4.2 Mineral Title

Mako Mining Corp., indirectly through their subsidiary, Nicoz Resources, S.A., holds the legal titles of the San Albino-Murra, La Segoviana and Potrerillos concessions according to the Nicaraguan Ministry of Mining Resolution Numbers 611-RN-MC/2006, 008-DM002-2020, and 025-DM-003-2020, respectively. Mako Mining Corp., indirectly through their subsidiary, Gold Belt, S.A., holds the legal title of the El Jicaro concession according to the Nicaraguan Ministry of Mining Resolution Number 012-DM-330-2012. Details of the individual concessions as well as the geographical UTM coordinates are shown in Table 4-1.

Mako provided MDA with letters dated July 16, 2020 from Signature Regional Law Firm as Nicaraguan legal counsel for Mako through an underwriting agreement with Stifel Nicolaus Canada Inc., Eight Capital and INFOR Financial Inc., confirming that:

- 1. Nicoz Resources, S.A. holds the legal titles of the San Albino-Murra, and La Segoviana concessions;
- 2. Nicoz Resources, S.A. is a wholly owned subsidiary of Mako Mining Corp.;
- 3. Gold Belt, S.A. is the holder of the mining concession "El Jicaro";
- 4. Gold Belt S.A. is a wholly owned subsidiary of Mako Mining Corp.; and
- 5. Both Gold Belt S.A. and Nicoz Resources S.A. are validly existing legal entities in good standing of all their technical and economic obligations with the Ministry of Energy and Mining of the Republic of Nicaragua in accordance with the provisions of the Law, as of July 16, 2020.

The Potrerillos concession was awarded to Nicoz resources on Sept 24, 2020 by the Ministry of Energy and Mining of the Republic of Nicaragua according to ministerial agreement number 025-DM-003-2020 and is considered to be in good standing as of this date. A copy of the award letter was provided to MDA.

Nicoz Resources, S.A. is registered under number 26810-B5, page 24/39, entry 921-B5 of the Second Book of Corporations; and under number 36,118, pages 105/106; entry 169 of the Book of Legal Persons, both Books recorded by the Public Registry of Managua. Gold Belt, S.A. is registered under number 2188, page 502/514, entry 921-B5 of the Second Book of Corporations; and under number 8,011, pages 267/268; entry XXI of the Book of Legal Persons, both Books recorded by the Public Registry of Masaya.

Annual fee payments on the mineral concession are required on a semi-annual basis, payable January 1 to 30 and July 1 to 30 each year. The payments escalate from US\$0.25 per hectare to US\$8.00 per hectare over the first 10 years, and are US\$12.00 per hectare thereafter (Table 4-2).

Concession fees and taxes have been paid in full to December 31, 2020. The annual holding costs for the San Albino concessions are estimated at \$180,612 (Table 4-3).



**Table 4-1 Details of San Albino Project Concessions** 

			UTM Co	oordinates
		Vertex	Easting	Northing
Concession Name	San Albino-Murra	1	603000	1526000
Mining Concession Title	611-RN-MC/2006	2	608000	1526000
Area (Hectares)	8,700.00	3	608000	1517000
Title Holder	Nicoz Resources, S.A.	4	604000	1517000
Expiry Date	February 3, 2027	5	604000	1514000
Renewal	may be renewed for a further 25 years	6	602000	1514000
Teories at	may so renow so for a factor 25 years	7	602000	1510000
		8	596000	1510000
		9	596000	1514000
		10	600000	1514000
		11	600000	1519000
		12	603000	1519000
Concession Name	El Jicaro	1	602000	1514000
Mining Concession Title	012-DM-330-2012	2	607000	1514000
Area (Hectares)	5,070.92	3	607000	1506845
Title Holder	Gold Belt, S.A.	4	603351	1506845
Expiry Date	September 29, 2033	5	603351	1507994
Renewal	may be renewed for a further 25 years	6	599875	1507994
recirew ar	may be renewed for a further 25 years	7	599875	1507350
		8	597700	1507350
		9	597700	1506200
		10	596000	1506200
		11	596000	1510000
		12	602000	1510000
Concession Name	La Segoviana	1	605800	1532360
Mining Concession Title	008-DM002-2020,	2	605800	1532000
Area (Hectares)	3,845.80	3	606800	1532000
Title Holder	•	4	606800	1527978
Expiry Date	Nicoz Resources, S.A.	5	605371	
Expuy Date Renewal	June 3, 2045	6	605371	1527978
Kellew al	may be renewed for a further 25 years	7	604547	1527107 1527107
		8		
		9	604547	1526000
			603000	1526000
		10	603000	1519000
		11	600000	1519000
		12	600000	1518000
		13	599850	1518000
		14	599850	1519222
		15	600980	1519222
		16	600980	1529314
		17	603200	1529314
		18	603200	1530100
		19	604000	1530100
		20	604000	1531800
		21	604500	1531800
		22	604500	1532140
		23	605110	1532140
		24	605110	1532260
		25	605260	1532260
		26	605260	1532360
Concession Name	Potrerillos	1	596000	1514000
Mining Concession Title	025-DM-003-2020	2	596000	1516000
Area (Hectares)	1,200.00	3	598000	1516000
Title Holder	Nicoz Resources, S.A.	4	598000	1518000
Expiry Date	July 25,2032	5	600000	1518000
Renew al	may be renewed for a further 25 years	6	600000	1514000



**Table 4-2 Annual Concession Fees** 

ANNUAL CONCESSION FEE \$US/HECTARE							
1 Year	\$0.25						
2 Year	\$0.75						
3 and 4 Year	\$1.50						
5 and 6 Year	\$3.00						
7 and 8 Year	\$4.00						
9 and 10 Year	\$8.00						
11 Years or more	\$12.00						

**Table 4-3 Summary of Annual Property Tenure Costs** 

MINING CONCESSION	AREA (Hectares)	GRANTED	EXPIRES	2020 ANNUAL SURFACE FEE	TOTAL US\$ ANNUAL AMOUNT	SURFACE FEE PAYMENT STATUS
San Albino - Murra 007-DM-548-2014	8700.00	June 27, 2006	June 26, 2031	U\$12.00 X Hect	\$104,400.00	Valid to Dec 31, 2020
La Segoviana 008-DM-002-2020	3845.80	June 3th,2020	June 2th,2045	U\$0.25 X Hect.	\$961.45	Valid to Dec 31, 2020
Potrerillos 025-DM-003-2020	1200.00	July 26, 2007	July 25,2032	U\$12.00 X Hect	\$14,400.00	Valid to Dec 31, 2020
El Jicaro 012-DM-330-2012	5070.92	Sep 29 ,2008	Sep,28,2033	U\$12.00 X Hect	\$60,851.04	Valid to Dec 31, 2020

TOTAL LAND PACKAGE

18816.72

TOTAL ANNUAL FEE 2020 \$180,612.49

#### **Surface Rights**

Make has purchased the surface rights over 100% of the area covering the San Albino Deposit. Additional surface rights were purchased to cover all the area permitted for infrastructure and mining facilities, as well as additional properties in the Las Conchitas area. Make has acquired surface rights, as shown in Figure 4.3, totaling 674.022 manzanas (474.921hectares) in 57 individual properties and is currently negotiating the purchase of additional properties on future exploration areas.



(from Mako, 2020; 1km UTM grid lines for scale) 596,000 mE 598,000 mE 600,000 mE **POTRERILLOS CONCESSION** SAN ALBINO - MURRA CONCESSION San Albino San Lorenzo Arras (Aguja de Arras) **LOCATION MAP** El Tirado San Pable CONCESSION EL JICARO CONCESSION Mina Franci LA SEGOVIANA CONCESSION POTRERILLOS CONCESSION Major Roads Crucita City **Old Mine** Mina Bonanza San Albino Gold Deposit Area Las Conchitas Area El Limon El Golfo Area Mako Surface Rights **Limits of Resources** Las Conchitas Los Centeno drilling program San Ricardo MAKO MINING CORP. **LAND HOLDINGS** 

MINING CORP

Figure 4.3 Surface Rights Owned by Mako

El Golfo T. 4

**EL JICARO CENCESSION** 

Nueva Segovia, Nicaragua



#### 4.3 Agreements and Encumbrances

The San Albino-Murra concession was originally granted to Delgratia Mining Corporation by Decree No 179-RN-MC/2002, dated February 4, 2002. On November 10, 2003, the property was transferred to Chorti Holdings, S.A., by Decree No 346-RN-MC/2003. The property was transferred to Nicoz Resources, S.A., ("Nicoz") the present title holder, by Decree No 611-RN-MC/2006, dated June 22, 2006. The concession is valid for a period of 25 years ending on February 3, 2027 and may be renewed for a further 25 years.

On May 7, 2012, Golden Reign announced the completion of an 80% earn-in interest in the San Albino-Murra concession pursuant to the terms of a four-year property option agreement dated June 26, 2009, with Nicoz, a private Nicaraguan company. Under the terms of the property option agreement, consideration paid for the 80% interest consisted of:

- Aggregate cash payments totaling US\$450,000;
- The issuance of 4,000,000 common shares of Golden Reign; and
- Completion of exploration expenditures of US\$5,000,000.

On October 31, 2012, Golden Reign announced an agreement to acquire the remaining 20% interest in the San Albino-Murra concession by making cash payments totaling US\$650,000 and issuing 2,100,000 common shares from its treasury over a period of 12 months. The acquisition of the remaining 20% was completed in October 2013, as reported in Golden Reign's Management Discussion and Analysis for the six months ending October 31, 2013.

The El Jicaro concession was acquired in February 2012 from a Nicaraguan title-holder. Aggregate costs incurred to purchase and transfer title of the mining exploration and exploitation license were US\$120,000. The El Jicaro concession license is valid for a period of twenty-five years, until September 28, 2033, and may be renewed for a further 25 years.

The San Albino-Murra concession is subject to annual exploration reports, to be submitted to the Government of Nicaragua, and annual taxes. All concessions are subject to a 3% net smelter return ("NSR") royalty on gold production, payable to the Government of Nicaragua.

On July 11, 2014, Golden Reign announced the completion of a US\$15.0 million gold streaming facility with Marlin Gold Mining Ltd. ("Marlin") to provide financing for the development of the San Albino project. Under the terms of the facility, a wholly owned subsidiary of Marlin ("Marlin subsidiary") will be entitled to purchase 40% of gold production at US\$700 per ounce until Golden Reign has repaid US\$19.6 million. Prior to commercial production, the Marlin subsidiary will be entitled to an 8% semi-annual coupon on the US\$15.0 million. On commercial production, Golden Reign is required to make minimum monthly payments of US\$282,800. After Golden Reign has repaid the US\$19.6 million, the Marlin subsidiary will be entitled to purchase 20% of the gold production at US\$700/ounce subject to a 1% annual price escalation after three years of commercial production, plus 50% of the price differential should the gold price exceed US\$1,200/ounce.

Mako was formed on August 3, 2018, when Golden Reign, Marlin and Sailfish Royalty Corp. ("Sailfish") entered into a definitive agreement whereby Mako acquired all of the issued and outstanding shares of Marlin (the "Marlin Transaction"). As a condition to closing the Marlin Transaction, Mako and its



subsidiaries, Marlin and one of its subsidiaries, and Sailfish entered into a master agreement (the "Sailfish Master Agreement") whereby:

- (a) the parties agreed to restructure the existing gold stream on a certain area of interest on the San Albino Deposit totaling approximately 3.5km<sup>2</sup> (the "AOI") (refer below);
- (b) Marlin will make cash payments to Sailfish in respect of any amounts recovered by Marlin in certain lawsuits Marlin has filed against the Mexican tax authority for the purpose of obtaining previously denied Mexican value added tax refunds, net of certain interest and inflation adjustments and applicable legal fees;
- (c) Sailfish extinguished the Mako's liability of \$1,100,985 associated with the existing gold stream on the AOI;
- (d) Sailfish's existing funding obligation of approximately \$13.9 million was eliminated; and
- (e) Marlin assigned to Sailfish its El Compas Royalty and La Cigarra Royalty and granted an option to Sailfish to purchase its Gavilanes property in Mexico.

Under the terms of the Sailfish Master Agreement, Mako, Marlin and Sailfish restructured the gold stream arrangement (the "Amended and Restated Gold Purchase Agreement") whereby the terms and conditions of the Amended and Restated Gold Purchase Agreement provide Sailfish with the right to purchase 4% of the mineral resources for 25% of the spot price of gold at the time of sale with respect to the AOI.

In addition, the parties agreed to a new royalty agreement whereby Mako and its subsidiaries have granted Sailfish a 2% NSR royalty on production from the San Albino-Murra Mining concession (exclusive of the AOI) and the El Jicaro concession.

The only registered encumbrance on Title of the San Albino-Murra concession is a mortgage in favor of Sailfish, registered under number 1, Book 1, pages 6 and 7, entry 3<sup>rd</sup>, from the Mortgages Section of the Special Book of Concessions recorded by the Public Registry of Nueva Segovia.

There are no registered encumbrances on Titles of the El Jicaro, La Segoviana, or Potrerillos concessions.

#### 4.4 Environmental Liabilities

No environmental liabilities were identified in the Environmental Impact Study and the Environmental Permit was issued on September 12, 2017 following the public consultation meeting.

#### 4.5 Environmental Permitting

In order to conduct exploration activities in Nicaragua such as geophysics, geochemistry, trenching and drilling, an environmental permit is required from the Ministry of Natural Resources and Environment ("MARENA"). The permits require submittal of a plan of work report and Environmental Impact Study. The permit does not specify an expiration date; however, exploration activities must commence within 18 months from the date of issue or the permit is invalidated.

In addition, MARENA, requires the company to submit a bi-monthly environmental status report and conducts site inspections several times a year to ensure the company is in compliance. Once the



established limits of drill holes and trenches are reached, the company can apply for an addendum to extend the permit.

#### San Albino - Murra Concession

Nicoz Resources, S.A. submitted a plan of work report and an Environmental Impact Study to MARENA, and was permitted to conduct exploration work including diamond drilling, trenching, soil sampling and geological mapping under Administrative Resolution No. DGCA-P0040-1111-030-2012, (San Albino-Murra Geological Exploration) on September 12, 2012.

#### **El Jicaro Concession**

The El Jícaro Exploration Environmental Permit was issued by MARENA to Nicoz Resources S.A. by Administrative Resolution DGCA-P0028-0812-023-2013, (Geological Exploration El Jícaro) on December 3, 2013. The El Jicaro environmental permit specifies 301 diamond drillholes or 100,000 linear meters and 400 trenches with dimensions of 50m to 70m long, 2m deep and 1m wide.

The El Jicaro Exploration Environmental Permit is in the process of being renewed.

#### Potrerillos and La Segoviana Concessions

The company is in the process of applying for environmental permits on the Potrerillos and La Segoviana concessions. To date, no activities requiring a permit have been conducted on these concessions.



## 5.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE, AND PHYSIOGRAPHY (ITEM 5)

The information summarized in this section is derived from publicly available sources, as cited. The authors have reviewed this information and believe this summary is materially accurate.

#### 5.1 Access to Property

Access to the property from Managua City, the national capital and closest international airport, is via the Pan American Highway (Highway CA-1) 193km to the paved road Highway CA-6, then continuing another 20km north to Ocotal City. From Ocotal City the paved road Highway NIC-29 travels 33km east. There a turn is made onto paved road NN-16 on which one continues for 13km east to the town of Susucayan. At Susucayan NN-16 becomes the paved road NIC-55, which continues another 7km north to the village of El Jicaro. From El Jicaro, a well-maintained dirt road leads to the San Albino project. The drive time to the project from Mako's offices in El Jicaro is typically 15 to 20 minutes.

The surface rights as described in Section 4 are sufficient for the mining and exploration activities proposed in this report. The authors are not aware of any concerns that would prevent access to the property.

#### 5.2 Climate

The climate in Nicaragua is tropical. Mining and exploration can be conducted year-round. The area experiences dry and rainy seasons. The dry season runs from December to May during which there is virtually no rain. The rainy season begins in late May; it often rains once a day for generally short periods of time. The heaviest rains usually occur in September and October and can bring strong tropical downpours. Temperatures are warm to hot throughout the year and show very little variability (Table 5-1).

Table 5-1 Climate Data for El Jicaro, Nicaragua (modified from https://en.climate-data.org/, 2020)

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Average Min. Temperature (°C)	15.8	15.9	16.8	18	19.2	19.3	19.1	18.9	18.8	18.8	17.3	16.4
Average Max. Temperature (°C)	28.5	29.6	31.2	32	31.9	29.9	29.3	29.2	29.5	29.5	28.6	28.1
Precipitation (mm)	24	7	4	66	87	255	178	169	226	201	74	33

#### 5.3 Physiography

The San Albino property lies in an area of moderate to steep relief with elevations at the property mainly ranging from 450 to 650m. In the northern portion of the San Albino-Murra concession the elevation reaches up to 1,218m above sea level and the highest elevation within the La Segoviana concession is 1,250m above sea level. Soil cover is usually less than half a meter with saprolite development grading into oxidized rock beneath. The active weathering environment means that rock outcrops are rare in the



hilly areas and more common in the drainages. Vegetation ranges from dense tree cover to thick brush and undergrowth. Most of the developed land is devoted to small-scale farming of crops or pasture for cattle.

#### 5.4 Local Resources and Infrastructure

Nicaragua has moderately well-developed infrastructure including a network of roads, communications, airports and seaports. The area has a long history of small-scale mining and Nicaragua has several active mines elsewhere in the country. A skilled work force is available by ground transport from Managua, about 200km to the south, and other, closer towns within the country. Many of the geologists working at the San Albino project studied geology at the university in Managua.

Electrical power for the San Albino project can be obtained from the national grid system that passes less than 1km from the San Albino Deposit (Puritch, et al., 2015). Make currently has trackhoes, bulldozers, haul trucks, and blast-hole drills onsite and additional heavy equipment is available to be contracted locally. Water for drilling is readily available from the El Jicaro, Murra, and Susucayon rivers as well as several creeks that flow through property year-round. There are adequate locations for potential tailings storage areas, waste-rock disposal areas, and potential processing sites within the property.



#### 6.0 HISTORY (ITEM 6)

This section is modified from Puritch et al. (2015) which drew on the information summarized by Puritch et al. (2013), Kowalchuk (2011), and Price (2009). Mr. Unger has reviewed this information and believes it is a materially accurate summary of the history of the San Albino project.

The early history of the property was summarized by Peale (1948). Gold-quartz vein mineralization was discovered at the San Albino project area (Figure 6.1) around 1790 by Spaniards during placer mining activities on the Rio Cocos. Spaniards initially mined gold at the San Albino Deposit from an open pit and subsequently by underground methods. Flooding eventually stopped the early work. From 1885 to 1926 and possibly into the 1930s, the property was worked by several operators. The last significant work was from 1922 to 1926, when Charles Butters, an American metallurgist, built a mill on site and mined approximately 3,000 tons. The operation was seized in 1926 by Augusto Sandino, leader of the Nicaraguan revolution.

Historical mining and production at the El Jicaro concession (Figure 6.1) was centered primarily in the El Golfo area, which was mined for gold by the Spaniards in the 18<sup>th</sup> century. Later mining was by underground methods until 1915 when a flood destroyed a wooden dam and part of the mill.

The historical exploration and mining at the San Albino project area, prior to the work of the issuer of this report, is summarized in Table 6-1, from Price (2009), Kowalchuk (2011), Puritch et al. (2013) and sources cited therein.



LA SEGOVIANA CONCESSION San Rafael MURRA EXPLORATION AREA Murra El Soc San Gregorio Mina Bonanza Noth CENTRAL EXPLORATION AREA LEGEND SAN ALBINO - MURRA CONCESSION POTRERILLOS EL JICARO CONCESSION LA SEGOVIANA CONCESSION CONCESSION POTRERILLOS CONCESSION Major Roads Rivers City San Albino Gold Deposit Old Mine San Albino Gold Deposit Area Las Conchitas Area as Conchitas El Golfo Area MAKO MINING CORP El Golfo Area **LAND HOLDINGS** EL JICARO CONCESSIÓN Nueva Segovia, Nicaragua

Figure 6.1 Areas of Historical Exploration, San Albino Project (from Mako, 2020; grid lines at 2.5km for scale)



Table 6-1 Historical Exploration and Mining of the San Albino Project

Table 6-1 Historical Exploration and Mining of the San Albino Project							
Year	Company	Exploration					
1885-1899	Ramon Raudales	Reportedly mined 12,000 tons of material at an estimated recovery of \$12.00/ton and an estimated head grade of \$15/ton.					
1899-1906	San Albino Mines Ltd.	2,000 tons of material, that averaged \$17.00/ton, was mined from stopes and pillars.					
1906-1912	Jicaro Gold Estates Ltd.	11,000 tons of "ore", valued at \$7.00/ton was mined from pillars and dumps.					
1912-1920	John May and G.J. Williams	Mined 7,000 tons at an estimated value of \$11.00/ton. 1,500 tons was stoped and the remainder was taken from development and pillars.					
1922-1926	Charles Butters	Heavy mill equipment brought to property, small production of about 10 tons per day. Dam built on the El Jicaro River for power. 3,000 tons mined.					
1926	Augusto Sandino	Took over the mine with the miners and milled the 3,000 tons of stockpiled material previously mined by Charles Butters.					
1935	New York and Honduras Rosario Mining Co.	Sampling conducted on the 400 level.					
1938	General Anastasio Somosa	Intermittent operations in late 1930s and early 1940s. Closed down after the hydroelectric dam on the El Jicaro river was lost. No production records exist.					
1948	Luis Somosa	Property inspected by Rodgers Peale, a mining consulting engineer, who wrote a compilation report of work done to 1948.					
1981		The historic San Albino mine plant was burned down by Sandinista revolutionaries and the remains of the mill equipment were scattered at the plant site.					
1996	Western Mining Corporation	The 200L, 400L and Naranjo cross cut were channel sampled at 1.5m intervals. The 300L cross cut was reopened for a distance of 87m but didn't reach the 300L main drift. The 300L cross cut was channel sampled at 1.5m intervals from the entrance to 44.2m.					
1996-1997	Western Mining Corporation	Conducted the first modern exploration on the Quilqli-Murra concession, an area covering 106,600 hectares, which included the 8,700 hectares that later became the San Albino-Murra Mining concession. Exploration work included a stream-sediment survey, and rock chip and soil sampling. Two shallow, vertical holes were drilled.					
1997-2006	Resources and Mining S.A.; Pila Gold Ltd	Reopened old cross-cuts at different levels but could not reach the main drift. A soil survey and shallow core drilling were done at the San Albino hanging wall. Geological mapping, rock, soil, stream-sediment and trench sampling were conducted.					
2006-2009	Condor Gold Plc.	Excavated and sampled 75 trenches totaling 2,250m; collected 1,100 rock and soil samples, and drilled 22 reverse-circulation and two core holes.					

### 6.1 Modern-Era Exploration History

Modern-era exploration began in the late 1990s and was focused on the San Albino and Arras veins, within the San Albino Deposit area shown in Figure 6.1. Other significant prospects and workings are shown as well.

#### 6.1.1 1996-1997 Western Mining Corporation

Western Mining conducted the first modern exploration from 1996 to 1997 on the Quilali-Murra exploration concession, which included the San Albino-Murra concession. Work included stream-



sediment and rock-chip sampling over the San Albino-Murra concession area. Soil samples were collected on 500m intervals along trails and footpaths crossing the area. Two vertical core holes were drilled to shallow depths. The details of this drilling are summarized in Section 10.2.

#### **6.1.2** 1997-2006 Resources and Mining S.A.

In 1997 through 2006, Resources and Mining S.A. ("REMISA") controlled the property and focused its efforts on the historical San Albino mine. REMISA reopened historical cross-cuts at different levels but could not reach the main drift. An unknown number of shallow core holes were drilled, as discussed further in Section 10.3. Additionally, soil samples and rock chip samples were collected.

#### 6.1.3 2003 Pila Gold Ltd.

During the second half of 2003, Pila identified and mapped 350 showings of mineralization, and collected 893 rock samples, 189 soil samples, and 43 silt samples from the San Albino vein and adjacent Murra area. Pila hand-excavated and sampled 24 trenches. Most work was concentrated in the Las Conchitas area and the historical San Albino mine.

#### 6.1.4 2006-2009 Condor Gold Plc.

In 2006 to early 2009, Condor Gold Plc. ("Condor") focused its exploration on the San Albino and Arras vein areas of the property (Figure 6.1). Condor collected 2,398 samples from 75 trenches totaling 2,250m. A total of 694 samples were taken from a total of 584m in 82 road cuts. Condor mapped or inspected 246m of eight adits from which 246 samples were taken. Also, 1,100 rock chip and soil samples were taken. Twenty-two reverse-circulation ("RC") drill holes and two RC holes finished with core tails, having a cumulative total of 2,754m, were drilled at the Arras and San Albino veins. The details of this drilling are summarized in Section 10.4.

#### 6.1.5 2009-2018 Golden Reign Resources, Ltd.

Golden Reign Resources, Ltd. ("Golden Reign") acquired the San Albino-Murra concession in 2009. In 2018, Golden Reign merged with Marlin Gold Mining Ltd. ("Marlin") to form Mako Mining Corp. The exploration conducted in 2009 through 2018 by Golden Reign (now Mako) is summarized in Section 9.0 together with Mako's exploration in 2019 and 2020 to the Effective Date of this report.

#### 6.2 Historical Mineral Resource Estimates

The authors are aware of five historical resource estimates for the San Albino project, which includes the adjacent, historical San Albino and Arras underground workings. These workings were formerly identified as separate mines (the San Albino and Aguja de Arras mines). These estimates are relevant for historical completeness.

#### 6.2.1 1948 Peale Historical Estimate, San Albino and Arras

A historical resource estimate for what were then known as the San Albino and Aguja de Arras mines was reported by Peale (1948) and is shown in Table 6-2 This estimate combined mapping and sampling work



at Aguja de Arras by that author, Rogers Peale, along with past work by Charles Janin, who mapped, sampled, and assayed the San Albino and Aguja de Arras underground workings circa 1934, and a 1921 report written by A.W. Newberry for Charles Butters. The current mineral resources for the San Albino project are discussed in Section 14.9.

Table 6-2 Historical 1948 Resource Estimate, San Albino and Aguja de Arras Mines (modified from Peale, 1948)

Mine Tons		Vein Width (feet)	Value* (USD/ton)	US\$**			
San Albino 80,486		8.5	18.60	1,497,151.55			
Aguja de Arras 1,981		4.0	25.81	51,133.50			
GRAND TOTAL	82,467	8.4	18.77	\$ 1,548,285.05			
*The price of gold in 1948 was \$35/oz; **1948 dollars							

The authors have not done sufficient work to classify the historical estimates summarized in Table 6.2 as current mineral resources or mineral reserves, which are relevant only for historical context, and Mako is not treating these historical estimates as current mineral resources or mineral reserves. The classification terminology is presented as described in Price (2009) and these terms do not conform to the Measured, Indicated, and Inferred mineral resource classifications as set out in the CIM Definition Standards. The author are unaware of the key assumptions, parameters, and methods used to prepare the historical estimates. Accordingly, these estimates should not be relied upon. The current mineral resources for the San Albino project are discussed in Section 14.9. The value of mineralized material in the Peale estimate was calculated based on a gold price in 1948 of \$35 per troy ounce. The historical San Albino mine workings were not accessible at the time of Price's visit in 2009.

Janin's original maps (1934) and cross sections are archived at the Huntington Library in San Marino, California. Additional data from Janin's (1934) work at the San Albino mine are held in the Thayer Lindsley Collection at the University of Wyoming. Copies from both libraries were obtained by Mako personnel. The present authors have not assessed these historical records.

#### 6.2.2 2008 Arras Mine Historical Resource Estimate

In 2008, Geosure Geological Consultants of Australia completed a resource estimate for the Arras vein about 0.5km southeast of the historical San Albino underground mine for Condor (Montgomery, 2008) as summarized in Table 6-3. The estimate was apparently based upon sampling from 15 drill holes and an unspecified number of trenches. At the time of the estimate, Condor was in an earn-in agreement with Nicoz Resources S.A., a private Nicaraguan company.

Table 6-3 Geosure 2008 Historical Resource of the Arras Mine

(from Montgomery, 2008)

Cut-off Grade g Au/t	Tonnes	Average Grade g Au/t	Contained Ounces Au
0.5	480,000	5.1	78,000
0.8	410,000	5.8	77,000
1.0	390,000	6.1	76,000



The authors have not done sufficient work to classify the 2008 historical estimate summarized in Table 6-3 as current mineral resources or mineral reserves, which are relevant only for historical context, and Mako is not treating these historical estimates as current mineral resources or mineral reserves. The key assumptions, parameters, and methods were given in Montgomery (2008). The resources were classified as Inferred by Montgomery (2008) due to several "significant risk" factors including low data density, lack of geologic understanding, and poor data quality. The current mineral resources for the San Albino Deposit are discussed in Section 14.0.

#### 6.2.3 San Albino 2013 Historical Resource Estimate, P & E Consultants, Inc.

In 2013, P & E Consultants of Toronto, Ontario performed a resource estimate for the San Albino project (Table 6-4) that was presented in the Technical Report of Puritch et al. (2013). The resource estimate included the San Albino, Naranjo, and Arras vein systems, a series of stacked, shallowly west-dipping veins. The estimate was based on data from 154 core holes and 12 trenches, and included 16,798 samples containing gold and silver assays. With some exceptions, according to Puritch et al. (2013), the resource estimate included only vein domains that showed spatial and geologic continuity at or greater than 1.5g Au/t, and domains were generally not permitted to extend beyond 25m of drill hole piercements. Individual blocks in the block model measured 2m (x-direction) by 6m (y-direction), by 2m (z-direction). The estimate was based on a gold price of \$1,592/oz and a silver price of \$32/oz.

Open Pit Resource Estimate at 0.50 g AuEq/t Cut-Off Grade										
Classification	Tonnes	g Au/t	g Ag/t	g AuEq/t	Au (oz)	Ag (oz)	AuEq (oz)			
Indicated	247,000	9	10.8	9.18	71,000	86,000	73,000			
Inferred	682,000	8.25	10.7	8.42	181,000	234,000	185,000			
	Underground Resource Estimate at 1.50 g AuEq/t Cut-Off Grade									
Classification	Tonnes	g Au/t	g Ag/t	g AuEq/t	Au (oz)	Ag (oz)	AuEq (oz)			
Indicated	101,000	6.59	9.7	6.76	21,000	31,000	22,000			
Inferred	2,689,000	7	10.6	7.17	605,000	912,000	620,000			
	Total Open Pit and Underground Resource Estimate									
Classification	Tonnes	g Au/t	g Ag/t	g AuEq/t	Au (oz)	Ag (oz)	AuEq (oz)			
Indicated	348,000	8.3	10.5	8.47	92,000	117,000	95,000			
Inferred	3,371,000	7.25	10.6	7.43	786,000	1,146,000	805,000			

Table 6-4 P & E 2013 San Albino Historical Resource Estimate

The authors have not done sufficient work to classify the historical estimates in Table 6-4 as current mineral resources or mineral reserves. The estimates in Table 6-4 are relevant only for historical context, Mako is not treating these historical estimates as current mineral resources or mineral reserves, and these estimates should not be relied upon. Although Puritch et al. (2013) used the CIM Definition Standards to classify the mineral resources, these historical resources have been superseded by the current mineral resources discussed in Section 14.9.

#### 6.2.4 2015 San Albino Historical Resource Estimate, P & E Consultants, Inc.

P & E Consultants provided another resource estimate in 2015 following more drilling and trenching by Golden Reign (now Mako). These are reported in the Technical Report by Puritch et al. (2015) and



summarized in Table 6-5. The 2015 estimate included 193 drill holes (177 core holes and 16 RC holes) and 36 trenches, which collectively contained 26,654 gold assays and 25,422 silver assays. A total of 11 mineral domains were used, each of which were, according to Puritch et al. (2015):

"defined by continuously mineralized structures along strike and down dip, and assay intervals equal to or greater than 0.75g AuEq/t for the potential open pit mining area, and 2.0g AuEq/t for the potential underground mining area using an optimized pit shell as a guideline."

Table 6-5 P & E 2015 San Albino Historical Resource Estimate

	Zone	CLASS	Cut-off	Tonnage	Au	Contained Au	Ag	Contained Ag	AuEq	Contained AuEq
			g AuEq/t	Tonnes	g/t	OZ	g/t	OZ	g/t	OZ
	Oxide	Indicated	0.75	485,000	6.26	97,700	12.9	200,700	6.40	99,900
		Inferred	0.75	313,000	5.05	50,900	9.5	95,600	5.16	51,900
In-pit	Sulfide	Indicated	0.75	171,000	9.59	52,700	12.2	67,000	9.77	53,700
,	Sumae	Inferred	0.75	567,000	7.74	141,100	10.82	197,700	7.90	144,000
	Sub-Total	Indicated	0.75	656,000	7.13	150,400	12.7	267,700	7.28	153,600
		Inferred	0.75	880,000	6.78	192,000	10.4	293,300	6.93	195,900
	Oxide	Indicated	2.0	9,000	3.36	1,000	5.3	1,500	3.41	1,000
		Inferred	2.0	15,000	2.89	1,400	11.8	5,800	3.02	1,500
Out	Sulfide	Indicated	2.0	13,000	3.57	1,500	6.4	2,700	3.66	1,500
of pit		Inferred	2.0	2,172,000	8.51	594,400	13.7	955,200	8.72	608,700
	Sub-Total	Indicated	2.0	22,000	3.48	2,500	5.9	4,200	3.56	2,500
		Inferred	2.0	2,187,000	8.47	595,800	13.7	961,000	8.68	610,200
	Oxide	Indicated	0.75/2.0	494,000	6.21	98,700	12.7	202,200	6.35	100,900
		Inferred	0.75/2.0	328,000	4.95	52,300	9.6	101,400	5.06	53,400
Total	CIf:do	Indicated	0.75/2.0	184,000	9.17	54,200	11.8	69,600	9.34	55,200
lotai	Sulfide	Inferred	0.75/2.0	2,739,000	8.35	735,500	13.1	1,152,900	8.55	752,700
		Indicated	0.75/2.0	678,000	7.01	152,900	12.5	271,800	7.16	156,100
	Total	Inferred	0.75/2.0	3,067,000	7.99	787,800	12.7	1,254,300	8.17	806, 100

<sup>(1)</sup> The Ag:Au ratio used for Oxide Mineralization was 92:1, and 67:1 for Sulfide mineralization

Puritch et al. (2015) used a gold price of \$1,404/oz and a silver price of \$23.47/oz. The estimate was reported using a cut-off of 0.75g Au/t for open-pit resources and 2.0g Au/t for underground resources. Although the Puritch et al. (2015) estimate used the CIM Definition Standards to classify the mineral resources, the authors have not done sufficient work to classify the historical estimates summarized in Table 6-5 as current mineral resources or mineral reserves, but have made a preliminary review as summarized in Section 14.10. The 2015 estimates are relevant only for historical context, Mako is not treating these historical estimates as current mineral resources or mineral reserves, and these estimates should not be relied upon. These historical resources have been superseded by the current mineral resources discussed in Section 14.9.

#### 6.2.5 January 2020 Historical Resource Estimate by Ginto Consulting Inc.

In January 2020, Ginto Consulting Inc. ("Ginto") of Toronto, Ontario completed an in-house resource estimate on the San Albino vein for Mako as summarized in Table 6-6. The estimate does not include the Arras, Naranjo or any other veins and the authors have not done sufficient work to classify the historical estimates summarized in Table 6-6 as current mineral resources or mineral reserves, which are relevant



only for historical context, and Mako is not treating these historical estimates as current mineral resources or mineral reserves. The authors have not reviewed the model and procedures but note that the results are substantially the same as those presented in this Technical Report. The classification terminology used by Ginto (2020) does not conform to the Measured, Indicated, and Inferred mineral resource classifications as set out in the CIM Definition Standards. Accordingly, these estimates should not be relied upon and have been superseded by the current mineral resources are discussed in Section 14.9.

Table 6-6 Ginto 2020 San Albino Vein In-House Resource Estimate

(from Ginto, 2020; does not include Arras or Naranjo or any other veins)

Domain	Cutoff Grade (g Au/t)	Tonnes	Average Grade (g Au/t)	Au Content (oz)	Average Grade (g Ag/t)	Ag Content (oz)
SA Vein	0.5	438,822	9.06	127,766	14.72	207,676
SA FW	0.5	34,049	1.3	1,422	3.78	4,138
SA HW	0.5	35,989	0.91	1,058	2.87	3,321
SA2 Vein	0.5	39,223	6.97	8,786	16.9	21,312
SA2 FW	0.5	3,407	1.13	124	4.94	541
SA2 HW	0.5	3,202	0.76	78	1.27	131
Total	0.5	554,692	7.81	139,233	13.3	237,119
SA Vein	1.0	417,548	9.48	127,264	15.34	205,931
SA FW	1.0	14,569	2.13	995	5.01	2,347
SA HW	1.0	6,750	1.93	419	7.37	1,599
SA2 Vein	1.0	38,917	7.02	8,780	17.02	21,296
SA2 FW	1.0	906	2.51	73	10.49	306
SA2 HW	1.0	24	1.06	1	3.2	2
Total	1.0	478,714	8.94	137,532	15.04	231,481

#### 6.3 Historical Production

The earliest exploitation is considered to have taken place during the Colonial era in the late 1700s, although no records of production are known from that time. More recent, albeit incomplete production records are known from underground mining during 1885 through 1926 under several operators (Peale, 1948). The estimated gold production from the historical San Albino mine, based on these records, is about 18,200 ounces as summarized in Table 6-7. The authors have no information on the production from the historical El Golfo mine in the El Jicaro concession.



# Table 6-7 Historical Gold Production, San Albino Underground Mine

(modified from Peale, 1948)

Years	Owner	Owner Mined Tons Recovered Grade US\$/ton		Approximate Production Au* (oz)	
1885-1899	Ramon Raudales	12,000	\$12.00	7,000	
1899-1906	San Albino Mines Ltd.	2,000	\$17.00	1,600	
1906-1912	Jicaro Gold Estates Ltd.	11,000	\$7.00	3,700	
1912-1920	John May and G.J. Williams	7,000	\$11.00	3,700	
1922-1926	Charles Butters	3,000	15	2,200	
	Total	35,000	10.8*	18,200	

<sup>\*</sup>Using the pre-1935 gold price of \$20.67/oz.



#### 7.0 GEOLOGIC SETTING AND MINERALIZATION (ITEM 7)

The information presented in this section of the report is derived from multiple sources, as cited. The authors have reviewed this information and believe this summary accurately represents the San Albino project geology and mineralization as it is presently understood.

#### 7.1 Regional Geologic Setting

Northwestern Nicaragua, which includes the San Albino project area, is partly underlain by arc-related sedimentary rocks. These strata are included into the Chortis Block ("CB"), which includes pre-Cenozoic basement rocks ranging in age from Proterozoic through middle Mesozoic in neighboring Honduras, El Salvador, and Guatemala. The CB includes the only exposed cratonic basement of the Caribbean Plate (Rogers et al., 2007). Regional correlations suggest some CB strata were deposited along the continental margin of the North American plate after its separation with South America (Burianek and Dolnicek, 2011).

The eastern part of the CB in southern Honduras and adjacent northwestern Nicaragua comprises a regionally metamorphosed Jurassic sedimentary sequence that also includes tectonic inliers as old as Paleozoic (Mann, 2007). The eastern CB is separated from older rocks of the central CB in Honduras by the northeast-striking Guayape fault, a major Quaternary sinistral-slip fault. Regional metamorphism in the eastern CB ranges from lower greenschist through amphibolite facies, although the youngest strata commonly lack metamorphic textures. An important and widely distributed unit in the Honduras part of the eastern CB is the Middle Jurassic Agua Fría Formation, which is at least 1.7km thick and consists of metamorphosed marine turbidites, as well as conglomerate and sandstone, and scarce carbonate strata. The Agua Fría was subsequently correlated by Burianek and Dolnicek (2011) with rocks exposed in northwestern Nicaragua, including the San Albino project area. Viland et al. (1996) suggest regional metamorphism and contractional deformation in the Agua Fría Formation predate late Cretaceous overlap strata (Mann, 2007; Rogers et al., 2007).

Rocks of the eastern CB in northern Nicaragua were intruded by Cretaceous granitic rocks including the >800km² Dipilto batholith, which yielded variable isotopic ages of between 83 and 140 Ma (Rogers et al., 2007; Burianek and Dolnicek, 2011). Importantly, the oldest batholith age constrains deformation and regional metamorphism in the intruded wall rocks to between late Jurassic and earliest Cretaceous (Rogers et al., 2007). Cretaceous granitoids of northern Nicaragua range from cordierite-bearing granite to calcalkaline tonalite and granodiorite with less abundant diorite and gabbro. A contact metamorphic aureole up to a few kilometers wide extends beyond the Dipilto batholith, further obscuring original wall rock textures and making correlation difficult.

Rocks of the CB and Cretaceous plutons are largely buried by thick and laterally extensive arc-related volcanic rocks of Neogene age in northwestern Nicaragua, except for some areas of Nueva Segovia. Neogene volcanic rocks comprise a continuous northwest-trending belt about 80km wide in western Nicaragua that lies about 40km east of the modern volcanic arc. The two arcs are separated by the Nicaraguan Depression, a major arc-parallel valley (McBirney and Williams, 1965). Volcano-sedimentary rocks associated with Neogene volcanism extend over a much broader region of the country. Equivalent volcanic and volcaniclastic rocks unconformably overlie deformed and metamorphosed rocks of the CB about 15km southeast of the San Albino project.



The regional geologic setting of the property is shown in Figure 7.1. The gold deposits of the San Albino project are situated ~three kilometers east of the east-central edge of the exposed Dipilto batholith.

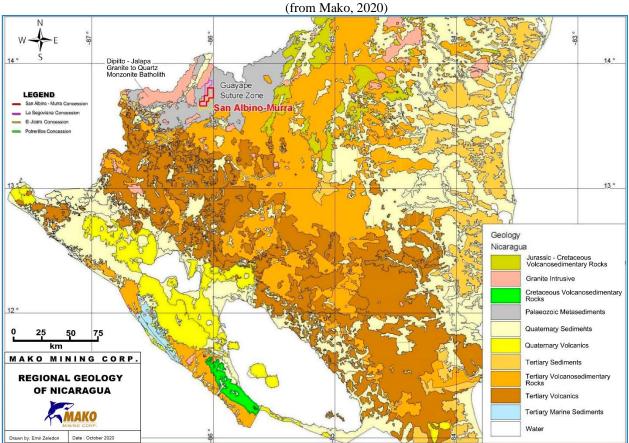


Figure 7.1 Regional Geologic Setting of the San Albino Project

## 7.2 Property and Project Area Geology

The San Albino property is situated in mountainous terrain along the southeast flank of the Dipilto-Jalapa Mountains, the highest range in Nicaragua. The core of the range consists of granitoids of the Dipilto batholith. On the flanks of the range, west and north of the property, the Dipilto batholith intruded phyllite and carbonaceous schist. These deformed and variably metamorphosed, originally fine-grained basinal strata underlie most of the property and have been assigned to the probably Paleozoic Palacaguina Formation and related units (Sundblad et al., 1991) or, more recently, to the mid-Jurassic Agua Fría Formation and equivalent units (Rogers et al., 2007; Burianek and Dolnicek, 2011; Viland et al., 1996).

Nearly all of the property is underlain by schist and phyllite that Mako geologists assign to the Agua Fría Formation. The phyllite likely is of volcaniclastic derivation (Kowalchuk, 2011). Figure 7.2 shows the geology of the San Albino-Murra concession, which is the portion of the project where the San Albino Deposit is located.



LEGEND Quaternary Cover Schist Phyllite Quartz Body Contacts Structural Lineaments San Albino / Arras Prospect San Albino Gold Deposit Las Conchitas Area El Golfo Area Quartz vein, Vertical No dip Foliation, Vertical Mine Dump  $\otimes$ Shaft Ω **Potrerillos** El Jicaro Concession Geology Map Scale: 1:75,000

Figure 7.2 Geologic Map of the San Albino-Murra Concession, San Albino Project (from Mako, 2020)



Rocks at the San Albino project consist of black, occasionally carbonaceous argillite or metapelite (i.e., locally termed "graphitic schist") derived from shale protoliths. We use the term carbonaceous argillite instead of graphitic schist in describing unoxidized host rocks in the San Albino Deposit area based on preliminary metallurgical testing that indicates most carbon is of lower maturity than graphite (Puritch et al., 2015). Outboard of the historical mine areas and argillite exposures, quartz-muscovite phyllite (i.e., locally termed "gray phyllite") is predominant.

Southeast-vergent folds and thrusts have been recognized within the meta-sedimentary rocks of the San Albino Deposit area. Regional metamorphism and deformation are thought to predate the Dipilto batholith (Rogers et al., 2007; Burianek and Dolnicek, 2011). The schistose foliation is attributed to shortening that preceded emplacement of the Dipilto batholith.

The earliest structures affecting metamorphic rocks in the immediate San Albino Deposit area include: 1) northeast-striking, shallowly to moderately northwest-dipping faults and more broadly distributed shear zones; 2) subparallel open to tight folds, and 3) steeply dipping northeast- and northwest-striking faults These observations were originally reported by Goerse (1996) and were later summarized in Kowalchuk (2011).

The meta-sedimentary rocks at the San Albino Deposit are cut by dikes of intermediate composition that strike, in part to the northeast, subparallel to the prevailing foliation in the meta-sedimentary rocks and to the contact with the Dipilto batholith. However, the age and relationships of these dikes to exposed granitic rocks of the Dipilto batholith and to the regional metamorphism and deformation are not known.

#### 7.3 Mineralization

The principal commodity exploited in the historical San Albino and nearby mines was gold, which was extracted from both placer workings and quartz-bearing lodes sporadically since the Spanish Colonial period (Roberts and Irving, 1957). Silver accompanies gold at the San Albino Deposit, but its economic significance is relatively low.

Lode gold deposits at the San Albino project are largely hosted in shallow- to moderate-dipping, northeast-striking quartz veins and thin vein margins concordant with the metamorphic fabric developed in carbonaceous schist (English, 2009). The gold-bearing quartz veins dip to the west and appear to be localized in zones that show greater degrees of strain than surrounding argillite, suggesting these dominant veins are shear-parallel veins (or, "shear veins"), although the similarity in footwall and hanging wall rocks suggests modest displacement.

Mining at the historical San Albino mine occurred on three separate vein systems: Arras, Naranjo, and San Albino. Subsequent exploration drilling by Mako confirmed that the three gold-bearing vein systems exhibit down-dip continuity and comprise a stacked set of subparallel veins, with a regular spacing of about 90m between the veins (Figure 7.3). The shear-hosted quartz veins dip on average about 40° northwest, but dips range from nearly flat to about 60°. Veins pinch and swell (i.e., boudinage) in both their dip and strike directions but, commonly, thicker shear-hosted vein intervals and higher-grade gold in workings of the historical San Albino mine appear to be in "flats" flanking antiformal fold hinges or "crests" in the foliation.

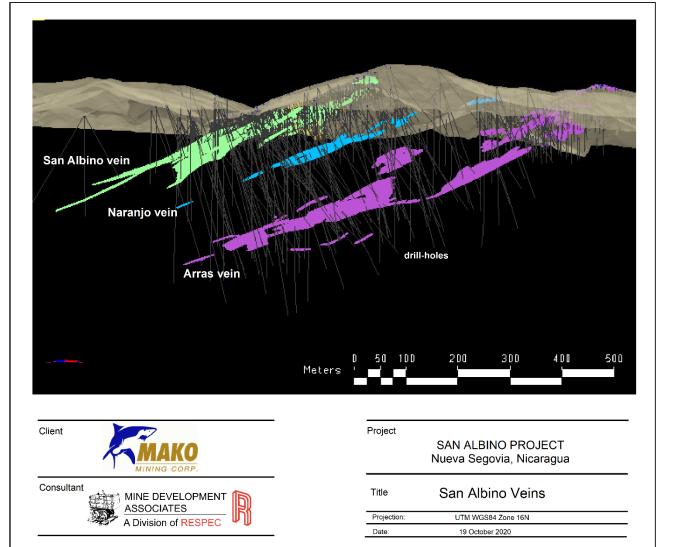


Figure 7.3 3D Rendering of the San Albino Deposit Veins

Much thinner veins, commonly with steeper orientations that cut foliation, occur in the footwall and hanging wall of the principal shear-hosted veins. These gold-bearing veins are consistent with extensional veins. Extensional veins or veinlets commonly occur proximal to the shear-hosted veins, and they may also form late brittle quartz-filled fractures within the shear veins themselves. At San Albino, such extensional veins are developed mainly within a 1.0m rind adjacent to the primary shear-hosted veins; the extensional veins cut foliation and thereby exhibit greater degrees of folding.

The principal components of the San Albino Deposit are the San Albino, Naranjo, and Arras quartz veins, as well as the smaller El Jobo vein. Quartz veins at the San Albino Deposit have distinctive characteristics according to Gray (2019), who distinguished six vein types based on their mineralogy, texture, and geographic location. In general, veins are distinctively milky white but vary based on the degree of deformation observed, sulfide and carbonate contents, degree of banding, and gold contents. Many veins exhibit complex textures that indicate multiple stages of quartz deposition, internal deformation, and



mineralization. Thus, an individual vein may possess characteristics of more than one vein type. In addition to diagnostic milky quartz, the San Albino veins commonly contain ankerite and/or siderite, possibly albite, and variable amounts of sulfide minerals up to 3% by volume. The sulfide grains are generally paragenetically late and consist of pyrite, arsenopyrite, galena, and sphalerite, which form weblike veinlets and clots as well as more regular bands within milky quartz. Visible gold and higher gold contents in assayed samples typically occur in zones containing greater sulfide contents. Sulfide banding may result from the concentration of late sulfides along quartz vein 'ribbons', which reflect early crack-seal textures associated with vein growth. Such ribbon quartz is commonly defined by parallel bands of carbonaceous wall rock.

Wallrock hydrothermal alteration associated with gold-bearing veins at San Albino is subtle. In saprolite, removal of carbon from argillite reveals abundant muscovite and minor chlorite (English, 2009) together with pyrite. However, it is unclear to what degree this alteration reflects primary or diagenetic effects, metamorphism, or late hydrothermal fluids. Below the weathered zone, wall rocks immediately adjacent to gold-bearing veins at the San Albino Deposit have bleaching interpreted to be sericite alteration typical of many gold-bearing quartz vein-hosted systems in metamorphic rocks.

In summary, the following conclusions are drawn regarding the gold mineralization at the San Albino Deposit based upon descriptions of the mineralized material, vein geometries, textures, and ore minerals:

- Gold-bearing quartz veins were emplaced into shears (i.e., shears defined as brittle-ductile faults associated with metamorphism and contractional deformation);
- Shears and their enclosed veins have corrugated or anastomosing geometries, and typically veins are pinch-and-swell type, with thicker intervals in "flats";
- Milky colored, massive-textured veins are characteristic, most of which are concordant with foliation in enclosing metamorphic rocks;
- "Ribbon quartz" is common and reflects shear-parallel crack-seal replacement processes wherein wallrock is incorporated during vein growth;
- Visible gold is present in late brittle fractures; and
- Gold occurs in association with generally low amounts (up to 3%) of pyrite, arsenopyrite, galena, and sphalerite in quartz veins.

The mean gold concentration (4,474 individual samples with >200ppb Au) from Mako's San Albino verified drill holes at the San Albino Deposit is 7.16 Au g/t whereas the mean silver is 14.3 Ag g/t, yielding a relatively high Au:Ag ratio of 0.5. Copper in chalcopyrite was reported in the deeper workings of the historical San Albino mine, but no production records for copper are known (Roberts and Irving, 1957). The mean values of other metals from drilling at the San Albino Deposit from Mako's drilling database (for Au>200ppb) are 95ppm Cu, 2,296ppm Pb, and 623ppm Zn. From composited drill samples wherein lead concentration was >500ppm, the average contents of metals and semi-metals are: 4,365ppm As, 0.8ppm Hg, 6.6ppm Sb, and 3.1ppm Tl. Gold and silver correlate moderately. Silver also correlates moderately with lead, and zinc correlates poorly with the other metals. These data support mineralogic information from drill hole core logging, surface sampling, and mining at the historical San Albino mine that indicate visible gold, probably as electrum, most commonly occurs in milky quartz veins in spatial association with pyrite, arsenopyrite, galena, and sphalerite. The moderate to poor inter-element



correlations further suggest that although gold is spatially correlated with silver, lead, and zinc, the metals were partitioned differently among various ore minerals and therefore were deposited in differing amounts during more than one stage of mineralization.

Metallurgical testing discussed in Section 13, found that an average of 36% of gold reported to gravity concentration; with a total recovery from gravity and leach of about 95%. Over 90% of the gold occurs as native gold, or gold electrum, with only trace quantities in other gold minerals. The size of the gold grains averages 12.4 to 30 microns, with more than 50% coarser than 30 microns. Silver occurrences show 60 to 90% containment in the gold particles or gold minerals.

The low- and moderate-angle faults mentioned in Section 7.2 control the distribution of gold-bearing quartz veins. At the San Albino Deposit, quartz vein-bearing shear zones up to several meters thick are stacked in subparallel fashion (e.g., San Albino, Naranjo, and Arras). The separation between shears and the enclosed veins averages about 90m. The shear-related veins and their enclosing faults have anastomosing, pinch-and-swell geometries. The continuity between shear zones and metamorphic foliation is consistent with a thrust-fault geometry, although no kinematic indicators are documented. Both quartz vein-bearing shears and early folds possibly were later folded; re-folded folds affecting schistose rocks are commonly overturned or even recumbent with southeast-directed vergence, whereas late folding of shear zones and veins produced discontinuous and broad, east-southeast vergent open folds (English, 2009; Kowalchuk, 2011).

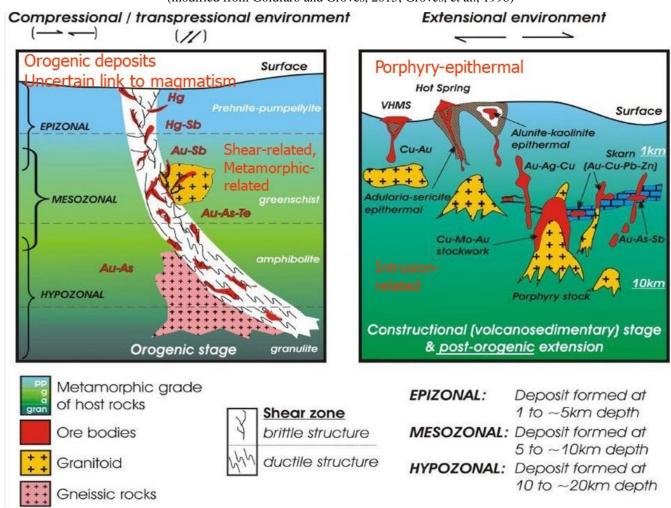
High-angle faults that cut gold-bearing veins were summarized in English (2009) as having normal slip, with strikes that either are subparallel with, or nearly orthogonal to, earlier-formed low- to moderate-angle shear-hosted veins. The northeast-striking set of high-angle faults may also contain quartz veins and these possibly reflect extensional veins between shear strands. In contrast, no additional information exists on the timing and geometries of northwest-striking high-angle faults that are orthogonal to gold-bearing shear-hosted veins; possibly, these originated as tear faults developed by differential strain between thrust segments. Farther north in the Murra sector of the property, quartz-bearing shear zones with similarities to those at the San Albino Deposit are flat-lying or have shallow dips to the east or southeast.



#### 8.0 DEPOSIT TYPES (ITEM 8)

The mineralization in the San Albino project area is best interpreted in the context of an "orogenic gold" deposit model (e.g., Goldfarb and Groves, 2015) based on the association of gold mineralization with metamorphic host rocks, and the textures and mineralogy of the San Albino veins, the wallrock alteration, and the "gold-only" character of mineralization. Orogenic gold deposits are fundamentally linked with orogenesis, or collisional plate tectonic settings. Unlike many other base- and precious-metal deposit types that formed in the shallow crust, orogenic gold deposits have formed over great intervals of depth. As such, orogenic gold deposits vary widely in characteristics that reflect variable formation depth and therefore, variable degree of metamorphism (Figure 8.1).

Figure 8.1 Diagrammatic Orogenic Gold Deposit Model (modified from Goldfarb and Groves, 2015; Groves, et al., 1998)



Orogenic gold deposits, although diverse in several respects because of their varied age and broad formation depth, share many characteristics that are used to define the class (e.g., Goldfarb and Groves, 2015; Bierlein et al., 2009; Goldfarb et al., 2005), which include: 1) an association with orogens, or collisional tectonic settings, 2) metamorphic host rocks, and typically rocks that have undergone greenschist- to lower amphibolite facies metamorphism, 3) deep-penetrating faults that transitioned



between brittle and ductile conditions, 4) CO<sub>2</sub>-rich fluids thought to derive from prograde metamorphic processes, including dehydration and decarbonation reactions, 5) a gold-only character and world-wide association with placer camps. Textural and mineralogic features of orogenic veins include milky, coarse-grained quartz, common 'ribbon' quartz reflecting vein growth through crack-seal, replacement processes, quartz-sericite-carbonate wall rock alteration, and an association with small quantities of base metal sulfides, including galena and sphalerite.

The veins at the San Albino project share most of the important characteristics of orogenic gold deposits. The gold-bearing veins are not only hosted in lower greenschist-facies metamorphic rocks, but their geometries indicate that veins formed during contractional deformation. Other features that are distinctive of orogenic deposits present at the San Albino project include ribbon-textured shear-hosted veins containing milky quartz, visible gold, relatively high Au:Ag ratios (i.e., "gold-only"), low percentages of base metal sulfides including galena and sphalerite, and the presence of placer gold. Other features of orogenic deposits have yet to be confirmed including the presence of iron-rich carbonate (siderite or ankerite) and quartz-sericite alteration. The lack of recognized alteration assemblages may reflect the relatively low degree of metamorphism, which has retained a significant amount of organic carbon from the protoliths. The low degree of metamorphism (i.e., argillite host) and greater control by thrust faults at San Albino, rather than large-scale, steep-dipping shear zones, is similar to orogenic gold deposits that formed in higher levels of orogens. Examples of geologically analogous high-level orogenic gold deposits include Juneau, Alaska; Muruntau, Uzbekistan; and Paracatu, Brazil.



#### 9.0 EXPLORATION (ITEM9)

This section summarizes the exploration work carried out by Mako, including that by Golden Reign prior to their name change to Mako. Drilling conducted by Mako is described in Section 10.5 and was on-going as of the Effective Date of this report. The authors have drawn on information presented in prior reports by Puritch, et al. (2015), Puritch, et al. (2013) and Kowalchuck (2011), with confirmation and additional detail provided by Mako. The authors believe this information is materially accurate as summarized in this report.

#### 9.1 San Albino-Murra Concession

Exploration work began on the San Albino-Murra concession in 2009 and is ongoing as of the date of this report, primarily focused at and around the San Albino Deposit. In 2019, Mako conducted an induced potential and resistivity ("IP/Res") survey at the San Albino Deposit. The IP/Res survey was carried out by Investigaciones Geologicas y Geofisicas S.A. ("I GEOS") of Managua using an ABEM Terrameter LS (Lund System). Approximately 15.2 line-kilometers were surveyed on lines oriented NE-SW and spaced 10m apart. The objective of the survey was to determine whether IP and/or resistivity could be used to define: 1) historical dumps and workings, 2) mineralized veins and 3) faults and fractured rock. Results of the survey were mixed, there is not a clear IP and/or resistivity response for the mineralized veins; historical dumps and workings had a marginal response, while faults and fractured rock had a clear response.

## 9.1.1 San Albino-Murra Concession Mapping and Surface Sampling

Since 2009, Mako has completed mapping covering the entire concession at 1:20,000 scale and has collected over 26,000 surface samples in the concession. This total number of samples includes 3,022 surface samples (grab, float, channel and underground), 6,278 soil samples covering an area of around 23km², and 16,816 channel samples from exploration pits and trenches. The results of the surface rock chip sampling are rendered immaterial in the area of the resources since so many trench and channel samples were taken. The channel sample results are, in some cases, used in the estimation of resources at the San Albino Deposit.

Numerous surface exposures of veins at the San Albino Deposit have been developed by trenching, which makes channel sampling a useful exploration and delineation technique. Mako initiated channel sampling of trenches and exploration pits in 2010 at the San Albino vein and in 2012 expanded to the Arras vein. A total of 3,703 channel samples were collected from 245 trenches or exploration pits beginning in the year 2010 (Table 9-1; see Section 10.1 for the locations of the channel samples which are shown, together with drillhole collars, in Figure 10.1). Channel samples generally ranged from 0.5 to 3m in length and averaged 1.5m.

Table 9-1 Channel Sampling at the San Albino Deposit

Location	Total Samples	Number of Trenches/Pits
Arras	1,738	80
San Albino	1,965	165
Total	3,703	245



Channel samples collected by Mako from trenches and exploration pits were collected carefully and are well documented. The authors believe the channel samples are representative and of generally adequate quality to use for resource modeling, subject to those exclusions discussed in Sections 11.0 and Section 14.0.

Sampling has been focused on the San Albino and Arras veins and associated splays. In 2010, eight samples were collected from eight sites at the San Albino vein. In 2011, trenching at four additional sites collected 29 samples at the San Albino vein. In 2012, sampling continued at the San Albino vein with 196 samples being collected from eight sites and at the Arras vein with six sites and 83 samples. In 2013, sampling at the San Albino vein from 12 sites totaled 478 samples and 965 samples were collected from 41 sites at the Arras vein. In 2014, sampling at one site at the San Albino vein collected nine samples and 14 samples were collected at two sites from the Arras vein. No samples were collected in 2015.

In 2016, sampling resumed with 198 samples collected from nine sites at the San Albino vein and 344 samples collected from 14 sites at the Arras vein. In 2017 no samples were collected. In 2018, sampling focused on the Arras vein with 263 samples collected from five sites. Sampling resumed at the San Albino vein in 2019 with 918 samples collected from 119 sites. Sampling at the Arras vein also occurred with 23 samples collected from eight sites. Sampling is ongoing in 2020 and as of the Effective Date of this report, 129 samples have been collected at the San Albino vein from four sites and 46 samples collected from four sites at the Arras vein. The relevant results are summarized in Section 14.9 and 14.10. Channel sampling procedures are discussed in Section 11.1.1.

## 9.1.2 San Albino-Murra Concession Underground Sampling

Mako has had limited access to the historical San Albino mine workings via four adits on the 150, 200, 300 and 400 levels. All of the tunnels had collapsed blocking access to the veins and mineralization. Mako conducted a small amount of channel sampling outside the mineralized zones. Existing and recorded historical underground sampling was more useful, although these historical data are not in the resource database and were not used in estimation. At the Arras tunnel 3, Mako collected 31 samples over a 10m to 15m strike length.

## 9.1.3 San Albino-Murra Concession, Las Conchitas Area Exploration

The Las Conchitas area (Figure 4.2 and Figure 4.3) comprises approximately  $5 \text{km}^2$  and is located immediately south of the San Albino Deposit in the San Albino-Murra concession (Figure 6.1). Make has conducted mapping and soil sampling covering the entire Las Conchitas area. In addition, Make excavated and sampled 283 trenches and exploration pits. A total of almost 6,800 samples were collected representing an aggregate length of approximately 5,400m sampled as of the Effective Date of this report.

Make commenced core drilling in the Las Conchitas area in 2011. A total of 24,359m have been drilled in 310 core holes as of the Effective Date of this report. Drilling in the Las Conchitas area is summarized in Section 10.6.

## 9.2 El Jicaro Concession

The El Jicaro concession was acquired by Mako in early 2012. Initial work by Mako consisted of mapping and sampling. An auger soil-sampling program was conducted over an area of 15.17km<sup>2</sup> (covering



approximately half of concession) and 3,414 soil samples were collected in total. In late 2015, a trenching program was conducted at the historical El Golfo mine area. A total of seven trenches totaling 134m in length, and seven exploration pits across 50m, were excavated by hand.

#### 9.3 Potrerillos Concession

The Potrerillos concession was acquired in 2019. Preliminary geological mapping, sampling and prospect evaluation has been conducted. The results were disclosed in the press releases by Mako on August 10, 2020 and September 9, 2020.

## 9.4 La Segoviana Concession

The La Segoviana concession was acquired in 2020. Prospect evaluation and limited surface sampling have been conducted but the authors are unaware of the results, if any.



## **10.0 DRILLING (ITEM 10)**

This section summarizes the drilling conducted in the San Albino Deposit and the Las Conchitas area of the San Albino-Murra concession. The authors are unaware of any drilling conducted in other portions of the property. The information presented in this section of the report is derived from multiple sources, as cited. Mr. Unger has reviewed this information and believes this summary accurately represents the drilling done at the San Albino project as of the Effective Date of this report.

### 10.1 Summary

A total of 97,571m have been drilled in 1,315 diamond-core and RC holes since 1996 as summarized in Table 10-1. Approximately 6% of the meters and 16% of the holes were drilled using RC methods and the balance were drilled with diamond core methods. A map showing the locations of the drill holes and trench samples in the San Albino, Naranjo, and Arras vein areas of the property is presented in Figure 10.1. The relevant results are summarized in Section 14.9 and 14.10. Representative drilling cross-sections are shown in Section 14.3.

Table 10-1 Summary of San Albino Deposit and Las Conchitas Area Drilling

Year	Company	Туре	Holes	Meters	Drill Rig						
1996-1997	Western Mining Corporation	Core	2	52	Winkie core drill						
1997-2005	Resources and Mining S.A.	n/a	n/a	n/a	Details not available						
2006-2009	Condor Resources	RC and Core	24	2,754	UDR650 multi-purpose drill						
2010-2020	Mako Mining/Golden Reign	Core and RC	1,289	94,765	Various						
Total			1,315	97,571							

#### 10.2 Historical Drilling by Western Mining Corporation

Western Mining attempted to drill two core holes using a JKS Boyles Winkie drill rig. However, that small drill rig was under-powered for the drilling conditions encountered. The first core hole only reached a depth of 29m and the second only reached 23m. No additional drilling was attempted (Kowalchuk, 2011).

# 10.3 Historical Drilling by Resources and Mining S.A.

Both English (2009) and Kowalchuk (2011) report REMISA (also known as "EMSA") drilled an unknown number of shallow core holes. The drill rig was reported to be under-powered and unable to reach target depths.



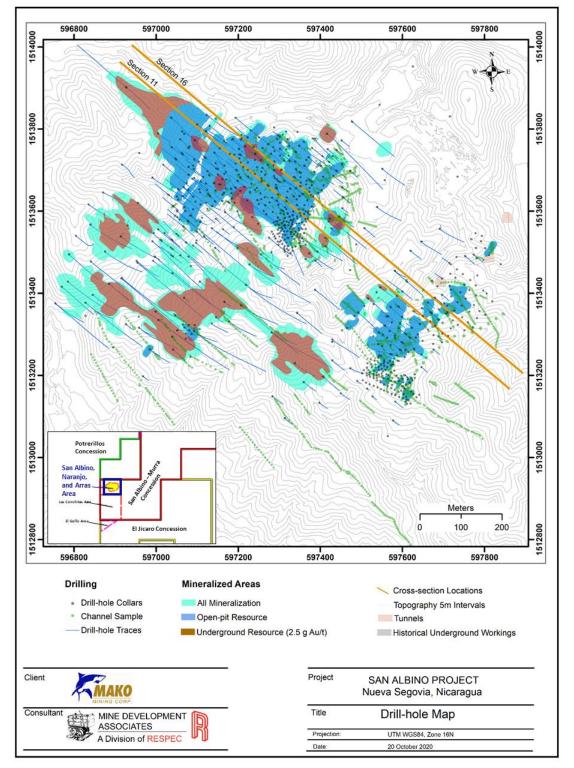


Figure 10.1 Map of San Albino Project Drill Holes and Channel Samples

Note: property lines are outside the coverage of this map; the relationship of the resources to property boundaries are given in Figure 4.2 and Figure 4.3.



## 10.4 Historical Drilling by Condor Gold Plc.

Condor drilled a total of 24 RC holes, of which two were finished with core tails (English, 2009). The San Albino vein was tested by three holes totaling 283m. In the Arras area, 21 RC holes were drilled with two having core tails for a total of 2,471m of drilling. Condor's drilling was conducted using a UDR650 drill. The authors are unaware of the drilling contractor or further information on the methods and procedures used.

## 10.5 Mako Mining Corp. Drilling – San Albino Deposit Area

Mako (then Golden Reign) began drilling in 2010 and since then a total of 70,406m have been drilled in 979 core and RC holes in the San Albino Deposit area (Table 10-2). From 2010 through 2013, 226 core holes were drilled totaling 41,164m. All drilling utilized HQ size core. Drilling in 2010 was completed by R&R Drilling of Honduras using a Longyear Super 38 man-portable drill. In the years 2011 through 2013, drilling was performed by Canchi Perforaciones de Nicaragua, S.A. using a JS 1500 self-propelled drill.

 San Albino Resource Area

 Type
 Holes
 Meters

 Core
 788
 67,166

 RC
 191
 3,240

 Total
 979
 70,406

Table 10-2 San Albino Deposit Area Drilling 2010 - 2020

No drilling was conducted in 2014 or 2015. Drilling resumed in 2016 with 266 holes totaling 6,560m. This included 75 core holes totaling 3,320m; 56 of these holes were drilled for metallurgical samples. Exploration holes were drilled with HQ size core and metallurgy holes were drilled with PQ size core. Exploration and metallurgical core drilling was performed by Canchi Perforaciones de Nicaragua, S.A. using a JS 1500 self-propelled drill. RC methods were used to drill 191 holes for 3,240m. The RC drilling was conducted by Continental Drilling S.A. of Nicaragua using a MPD 1000 track-mounted RC drill using a five-inch tricone bit or face-discharge hammer.

No drilling was done in 2017 or 2018. Drilling resumed in 2019 and is ongoing as of the Effective Date of this report. Drilling during 2019 and 2020 was conducted by three drilling contractors: Continental Drilling S.A. using a Boart Longyear LF90 drill with HQ size core; Rodio Swissboring, S.A., using a Christensen CS 1000 with HQ size core; and Kluane Nicaragua, S.A., using a KD600 man-portable drill with HTW size core.

#### 10.6 Mako Mining Corp. Drilling – Las Conchitas Area

Trench channel sampling and diamond-core drilling commenced in the Las Conchitas area in 2011. As of the Effective Date of this report, 24,359m have been drilled in 310 core holes (Table 10-3). Figure 4.3 shows the locations of the Las Conchitas area drill holes.

**Table 10-3 Las Conchitas Drilling 2011 – 2020** 

Туре	Holes	Meters
Core Drill Hole	310	24,359



Drilling at the Las Conchitas area occurred in tandem with the drilling at the San Albino Deposit and thus the contractors, rigs, and core sizes were the same as those used at San Albino, discussed in Section 10.5. The Las Conchitas area drilling is included in this Technical Report for full disclosure. No work has been done by the authors on the Las Conchitas data and no conclusions or interpretations or recommendations are made on or about the Las Conchitas area.

#### 10.7 Drill-Hole Collar Surveys

Historical drill sites in the San Albino Deposit area were originally located using a handheld GPS unit. The authors have no further information on the methods or procedures used. Beginning in 2011, Mako's drill hole locations were surveyed using total station surveying equipment, which included re-surveys of Mako's previous drilling. During the site visit, Mr. Unger measured the coordinates of 17 drill-hole collars with a handheld Garmin GPS-64 GPS receiver. The Garmin GPS-64 receiver does not have the precision of total station survey equipment, but the results substantially support the collar coordinates in the database. The results of this comparison are discussed in Section 12.4.

## 10.8 Down-Hole Surveys

Downhole surveys for inclination and magnetic azimuth were carried out at approximately 50m intervals using a Reflex Multishot survey instrument. The downhole surveys were conducted by the drill crews.

### 10.9 Summary Statement

The authors believe that the drill sampling procedures provided samples that are representative and of sufficient quality for use in the resource estimations discussed in Section 14.0, subject to those exclusions discussed in Sections 11.0. The authors are unaware of any sampling or recovery factors that materially impact the mineral resources discussed in Section 14.0.



## 11.0 SAMPLE PREPARATION, ANALYSIS, AND SECURITY (ITEM 11)

This section summarizes all information known to Mr. Unger relating to sample preparation, analysis, and security, as well as quality assurance/quality control ("QA/QC") procedures and results, that pertain to the San Albino Deposit. The information has either been compiled by MDA personnel under direction of the authors, or provided to MDA by the Mako database manager, Ms. Natalia Cherepanova.

## 11.1 Sample Preparation

#### 11.1.1 Channel Samples of Exploration Pits and Trenches

Numerous channel samples have been collected on the property from vein exposures created by digging pits or trenches. The authors observed that the channel sample sites were carefully marked with spray paint to indicate the area of each sample.

Channel samples were collected using a saw when possible. If the area to be sampled was broken or very soft material, a chisel was used. In the years 2010-2012 locations were originally surveyed using a handheld GPS. Beginning in 2013, locations were surveyed using a total station and trench beginning and end locations from 2010-2012 were resurveyed using a total station. Samples were collected in multiple orientations, depending on location and exposure, including vertically, parallel to the dip of the vein, and across the true thickness of the vein. When possible, a vein exposure was excavated in a hand-dug exploration pit of less than 2m depth and width to expose the vein in all three dimensions. Separate samples were typically about 1.0m in length, 5cm wide and approximately 3cm in depth, collected along each channel from visible veins and separately from adjacent sheared wallrock. Each sample was placed in its entirety in a sample bag and the sample numbers and type of material was recorded. Each channel sample location was photographed and logged. In some cases, one or both of the trench walls were mapped and in all cases plan maps of the trenches were made.

#### 11.1.2 Reverse-Circulation Drilling Samples

RC drilling at the San Albino Deposit was done only in 2016. Drilling was done without water injection using either a five-inch tricone bit or center-return hammer and bit. Sample intervals were 1m in length. Samples were double bagged with a sample tag inserted into the bag then zip-tied shut. RC field duplicate samples were collected every 20 intervals by splitting the total sample in half with a riffle splitter and then splitting one half again so the original and duplicate each represented one quarter of the total sample.

#### 11.1.3 Core Drilling Samples

Core samples were transported from the drill site to the core logging facility in the nearby town of El Jicaro by company personnel. Core was then logged, photographed wet and dry, and marked for sampling by the geologists. In the mineralized zones, the geologists used wax pencils to indicate the start and end point of the sample interval by marking the core perpendicular to the core axis. To prevent bias in the sampling, the geologists rotated the core in the core box so that the foliation dipped toward the geologist, a cut-line was then drawn down the center of the core, parallel to the core axis. The half of core on the right side of the cut line was always sampled and the left side was always retained for reference. Samples generally did not extend across geologic breaks with special attention given to separating quartz veins



from the surrounding hanging wall and footwall zones. Sample lengths were limited to a minimum of 0.5m so smaller zones of texturally distinct vein were often included together in one sample. Outside the mineralized zones, the samples were generally taken on 1.5m intervals. The authors reviewed sample selections on the drill core being logged and found it to be reasonable. Samples intervals were dominantly 1.0m long, in the better mineralized areas, or 1.5m long, in the clearly unmineralized areas. Samples were then placed in samples bags and assigned a sample number from preprinted sample tags. A portion of the sample tag with the sample number was placed in the bag and a portion retained. Mako staff recorded the drill-hole number and depth intervals that corresponded to each sample number. Sample bags were then closed with ties and placed in much larger sample sacks labeled with the first and last sample number contained in each sack.

## 11.1.4 Sample Security

At the time of the authors' site visit, the drill and channel samples were being picked up at Mako's El Jicaro core logging facility by the Bureau Veritas laboratory personnel and transported by truck to Managua for sample preparation and analysis at the Bureau Veritas laboratories in Nicaragua and/or Canada. The author observed that Mako's core logging facility in El Jicaro had 24-hour security personnel and that previously logged and sampled core was stored at a separate secure warehouse.

In 2010, samples were shipped via United Parcel Service ("UPS") to Inspectorate's preparation facility in Guatemala. The samples were first transported directly to the UPS facility in Managua, Nicaragua accompanied by a Golden Reign representative. Currently, and in years 2011-2019, samples are transported from the drill or channel sample site to the logging facility in El Jicaro under the supervision of a Mako geologist. Samples are stored at the logging facility in El Jicaro until a representative from Bureau Veritas or its subsidiaries pick up the samples, or occasionally, the samples are transported to the laboratory by a company representative. Samples are delivered to the laboratory on a weekly basis. On the day of delivery, samples are loaded into the transportation vehicle and the vehicle is locked. The transportation vehicle then drives directly to the laboratory in Managua without stopping.

#### 11.2 Sample Analysis

The authors are unaware of the laboratories or methods of analysis utilized by historical operators focusing on the San Albino Deposit. Assays of historical operators have not been utilized for the modeling of mineralized domains and the estimation of the mineral resources presented in Section 14.9 of this report.

All of Mako's assays of rock and drill samples from the San Albino project were carried out by Bureau Veritas Laboratories, or its subsidiaries AcmeLabs and Inspectorate, herein collectively referred to as "Bureau Veritas". Bureau Veritas and its subsidiaries are certified commercial laboratories independent of Mako and its subsidiaries. The authors have no information on the methods of analysis or the elements assayed in the soil samples collected at the property.

In 2010, samples were prepared in Guatemala at a sample preparation facility operated by Inspectorate. In the following years, the samples were prepared in the Bureau Veritas preparation laboratory in Managua, Nicaragua where they were crushed, split to 1.0kg or less with a riffle splitter, and the splits were pulverized until 85% of the material passed a 200-mesh screen. An extra "wash" of barren silica material was run through the crusher between each sample. The pulverized "pulps" were then shipped by



air freight to Bureau Veritas' assay laboratory in Vancouver, Canada for assaying. In addition to gold and silver, multiple elements including As, Ca, Cu, Fe, Mo, Ni, Pb, S, Sb, and Zn were analyzed using *aqua regia* digestion and inductively coupled plasma ("ICP").

In 2010, analyses for silver were completed using *aqua regia* digestion followed by ICP analysis. Testing was also completed for ore-grade levels of zinc and lead using a four-acid digestion followed by atomic absorption ("AA") analysis. In 2011, gold was determined by fire assay using a metallic screening at 150 mesh with a nominal pulp weight of 500g. Gold analyses of the coarse and fine fractions were done by fire-assay fusion with an AA finish. Analyses for silver were initially completed using an aqua regia digestion followed by ICP analyses. In cases where silver exceeded the upper detection limit of 100g Ag/t, the sample was re-analyzed using AA following *aqua regia* digestion. Analyses were also completed for overlimit ore-grade levels of zinc and lead using *aqua regia* digestion with an AA finish.

In 2012, gold was analyzed at Inspectorate using either metallic-screen fire assays as in 2011 or fire-assay fusion of a 30g aliquot with AA finish. Gold assays greater than 10g Au/t on the 30g pulps were then analyzed by fire assay fusion with a gravimetric finish. Analyses for silver were initially completed using an aqua regia digestion followed by ICP analyses. In cases where silver exceeded the upper detection limit of 100g Ag/t, the sample was re-analyzed using AA following *aqua regia* digestion. Analyses were also completed for ore-grade levels of zinc and lead using *aqua regia* digestion with an AA finish.

In 2013 and 2014, the samples were analyzed at AcmeLabs in Vancouver, Canada, also a subsidiary of Bureau Veritas, who apparently took over the facilities previously operated by Inspectorate in Managua, Nicaragua. Sample-preparation work was completed primarily in Managua and occasionally in Vancouver. Gold analyses were completed in Vancouver by 30g fire assay fusion with AA finish; samples with greater than 10g Au/t were re-analyzed using fire assay fusion with a gravimetric finish. Additionally, some samples were analyzed for gold using metallic-screen fire assays at 150-mesh size with a nominal pulp weight of 500g. Silver was analyzed using *aqua regia* digestion followed by ICP. In cases where silver exceeded the upper detection limit of 100g Ag/t, the sample was re-analyzed using *aqua regia* digestion followed by either ICP or fire assay fusion with a gravimetric finish. Analyses were completed for ore-grade levels of lead using *aqua regia* digestion with an AA finish.

The author did not find any records showing that drilling or channel samples were analyzed in the year 2015. In 2016, 2017, and 2018, samples were delivered to the Bureau Veritas facility in Managua, Nicaragua. Gold analyses were completed at the Bureau Veritas facilities in Vancouver, Canada by 30g fire-assay fusion with AA finish. Samples that exceeded 10g Au/t were re-analyzed using fire-assay fusion followed by a gravimetric finish. Additionally, some samples were analyzed for gold using metallic-screen fire assays at 150-mesh size with a nominal pulp weight of 500g. Silver was analyzed using *aqua regia* digestion followed by ICP. In cases where silver exceeded the upper detection limit of 100g Ag/t, the sample was re-analyzed using *aqua regia* digestion followed by either ICP or fire assay fusion with a gravimetric finish.

In 2019 and 2020, Mako's samples were delivered to the Bureau Veritas facility in Managua, Nicaragua. Gold analyses were completed at the Bureau Veritas facilities in Vancouver, Canada by 30g fire-assay fusion with AA finish. Samples that exceeded 10g/t Au were re-analyzed using fire-assay fusion with a gravimetric finish. Additionally, some samples were analyzed using metallic-screen fire assays at 150-mesh size with a nominal pulp weight of 500g. Silver was analyzed using *aqua regia* digestion followed



by ICP. In cases where silver exceeded the upper detection limit of 100g Ag/t, the sample was re-analyzed using *aqua regia* digestion followed by either ICP or fire assay fusion with a gravimetric finish.

### 11.3 Quality Assurance/Quality Control

## 11.3.1 Historical Operators' Quality Assurance/Quality Control

The author is unaware of any QA/QC data collected by historical operators of the San Albino Deposit. Assays of historical operators have not been utilized for the modeling of mineralized domains and the estimation of the mineral resources presented in Section 14.9 of this report.

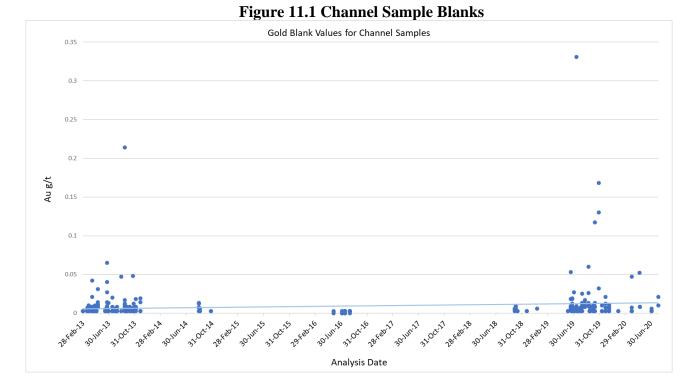
## 11.3.2 San Albino Project Channel Samples

The channel samples at the San Albino project were monitored for QA/QC purposes beginning in 2013. Blank materials, standards and duplicates were inserted into the sample stream, prior to shipment to the assay laboratory, at a rate of every five to 10 samples. Blank material consisted of crushed granite or locally sourced barren rock. Standards consisted of prepackaged pulps of certified reference material ("CRM"). Duplicates were collected by sampling the same channel, either beside or deeper into the channel, twice and analyzing each sample separately.

#### 11.3.2.1 Blanks Inserted with Channel Samples

The author reviewed 217 blanks inserted with channel samples from the year 2013 to 2020. Figure 11.1 shows the variability of gold values in blanks relative to the date analyzed. Two blanks had gold values greater than 0.2g Au/t. One of these blanks had a gold value of 0.21g Au/t, but the previous sample did not have detectable amounts of gold. It is possible this sample was a mislabeled channel sample because the following samples had similar gold values. The other anomalous blank immediately followed a sample a with gold values of 545.9g Au/t. Overall, the results suggest a small amount of cross-contamination occurred during sample preparation.





## 11.3.2.2 Channel Sample Standards

A total of eleven CRMs was inserted as standards with the channel samples. Only CRMs with 30 or more analyses were considered to have sufficient data to evaluate for failure rate and weighted-average bias (Table 11-1). They showed a failure rate of 3% when failure is defined as a value greater than or less than the accepted standard value plus or minus three standard deviations, respectively. The weighted-average bias for these CRM samples shows an overall positive bias of 1%. These samples amount to 230 of the 255 CRM samples analyzed. If the additional 25 analyses covering seven different CRMs are factored in, the failure rate remains 3% and the weighted average bias increases to 1.5%. The only CRM with a notable number of failures is OREAS-10C. It is unclear if this is due to a sample mislabeling/mishandling issue or actual failures. Additionally, four samples were removed from the failure rate calculation because they had improbably low values and thus likely were caused by sample mislabeling/mishandling. Standard OREAS-203 exhibited a high bias rate of +8.2%.

**Table 11-1 Channel Sample Standards** 

	Table 11-1 Chamiel Bample Standards											
CRM ID	Grades in g Au/tonne			Total	Samples	Dates	Used	Failı Cou	_	Failure	Bias	
CHIVITE	Certified Value	Average	Max	Min	Samples	Deleted	First	Last	High	Low	Rate	Dias
OREAS-203	0.825	0.893	0.994	0.794	31	1	10-Apr-13	8-Oct-14	0	0	0.0%	8.2%
OREAS-66a	1.237	1.253	1.359	1.009	52	0	12-Feb-13	8-Oct-14	0	1	1.9%	1.3%
OREAS-10C	6.600	6.529	7.073	5.934	70	0	12-Feb-13	8-Oct-14	0	6	8.6%	-1.1%
OREAS-12a	11.790	11.782	12.300	10.300	77	3	12-Feb-13	8-Oct-14	0	1	1.4%	-0.1%

Note: only CRMs with more than 30 analyses shown.



## 11.3.2.3 Channel Sample Duplicates

The author evaluated the performance of duplicates by calculating the relative percent difference ("Rel Pct Diff") between the duplicate sample compared to the original sample expressed as percent. The relative percent difference listed in Table 11-5 is an average of individual relative differences, each of which is calculated as:

$$100 x \frac{(Duplicate - Original)}{Lesser of (Duplicate, Original)}$$

Additionally, an alternative calculation, which MDA has also done as part of this evaluation, but whose results are not listed in Table 11-5 is:

$$100 x \frac{(Duplicate - Original)}{Mean of (Duplicate, Original)}$$

A total of 320 sample duplicates were inserted by Mako for the channel samples from trenches and exploration pits. Twelve had highly anomalous values greater than 500% difference between the original and duplicate sample, though only six had a gold content of greater than 1.0g Au/t in either the original or duplicate sample. Additionally, 40 samples were ignored because one or both samples had gold grades below detectable. Overall, the duplicates show a positive bias of around four percent and an average absolute relative difference around 45% (Table 11-2), both of which, given the difficulty and human error involved in channel sampling, can be considered good data reproducibility. Figure 11.2 and Figure 11.3 show relative percent bias and absolute relative present bias, respectively; of note is the somewhat expected increased variability in samples averaging more than 1.0g Au/t.

**Table 11-2 Channel Sample Duplicates** 

= = = = = = = = = = = = = = = = =										
				Samples		Averages as Percent				
							Relative %	Absolute %		
Duplicate Type	Year	Lab	Metal	Total	Used	Outliers	Difference	Difference		
Channel Sample Field	2013-2020	Inspectorate/ Bureau Veritas	Au	320	308	12	4.5	45.2		

#### 11.3.3 Drill Sample Blanks

Drill samples were monitored for QA/QC purposes in part by inserting blank material consisting of crushed granite or locally derived barren rock every 10 samples and randomly after suspected high-grade vein intervals. A total of 1,926 blanks have gold values in Mako's database. One blank returned a significant value (0.62g Au/t), but it did not follow a mineralized sample. Thus, it may represent sample mishandling and/or mislabeling. Two other blanks had values greater than 0.2g Au/t, one followed a sample with insignificant gold. The other followed a sequence of five samples with grades ranging from 1.2 to 8.7g Au/t gold and thus could represent cross-contamination during sample preparation. This amount of potential cross-contamination, while measurable, is not significant.

Figure 11.4 shows all gold values in blanks and the dates they were received. It is noteworthy that increased variability in the blank gold values occurs over a period of August to December 2019. All the samples showing increased variability where prepared and analyzed by Bureau Veritas.



A total of 1,926 blanks have silver values in Mako's database. One blank returned a significant value (10.3g Ag/t). This is the same sample mentioned above that returned a high gold value. It did not follow a mineralized sample, and may represent sample mishandling and/or mislabeling. Figure 11.5 shows all silver values in blanks and the dates they were received. It is noteworthy that increased variability in the blank silver values occurs over a period of December 2019 to March 2020. All samples showing increased variability where analyzed at Bureau Veritas.

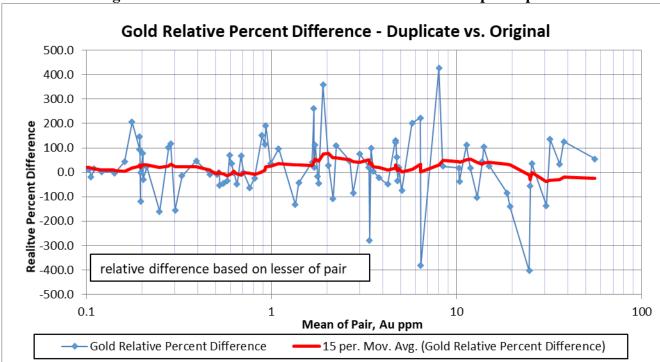


Figure 11.2 Relative Percent Difference of Channel Sample Duplicates

Note: a positive relative percent difference means the duplicate sample had a higher assay value than the original sample.



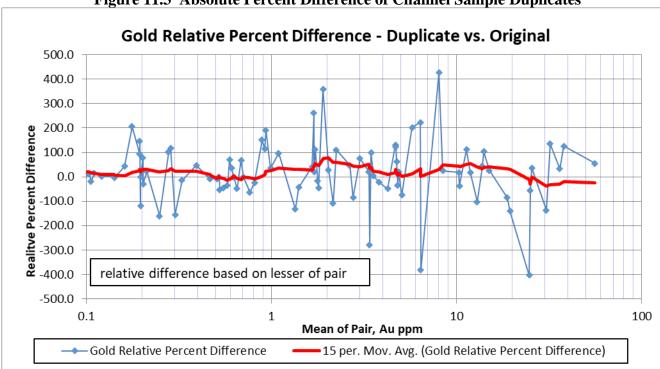
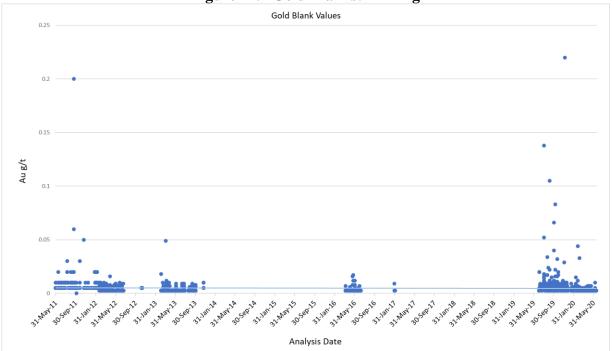


Figure 11.3 Absolute Percent Difference of Channel Sample Duplicates





Note: One sample at 0.62g Au/t not shown

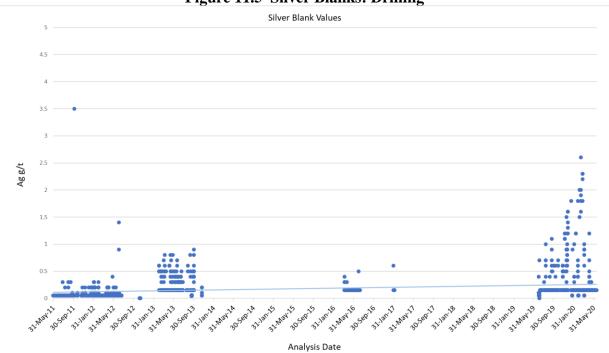


Figure 11.5 Silver Blanks: Drilling

Note: One sample at 10.3g Ag/t not shown.

## 11.3.4 San Albino Project Drill Sample Standards

Drill sample QA/QC was also monitored by inserting CRMs every 10 samples. The CRMs consisted of prepackaged pulps of certified reference material. The author only evaluated results for the 16 CRMs with 30 or more analyses, which totaled 1,443 insertions, as summarized in Table 11-3. The failure rate for gold CRMs was 4% when using the definition for failures as greater than or less than the certified grade, plus or minus three standard deviations, respectively. The author found 30 failures that appear to be mislabeled CRMs. With these samples removed from consideration, the failure rate drops to 1% (Table 11-3). The weighted-average bias for all CRMs was found to be +2%.

Although not of primary economic interest, Mako did have one higher-grade CRM for silver. This standard had no failures and showed a bias of -3% (Table 11-4). Four other CRMs for silver all had certified values less than 1.5g Ag/t. These were considered inconsequential because the data lacked adequate precision and the silver grade is well below a grade likely to have reasonable prospects for eventual economic extraction. Thus, this silver CRM data was excluded from the QA/QC evaluation.



Table 11-3 Gold CRMs, San Albino Project Drill Samples

				Table	11-2 000	i Citivis, i	san Albino Pi	roject Dim i	Jampics			
	G	rades in g A	\u/tonne		Samples	Samples	Dates	Used	Failure	Counts	Failure	
Standard ID	Certified Value	Average	Max.	Min.	Used	Deleted	First	Last	High	Low	Rate	Bias
OREAS-203	0.825	0.876	0.935	0.668	41	5	5-Mar-13	3-Feb-17	0	0	0.0%	6.2%
OREAS-15h	1.019	0.990	1.074	0.938	51	3	8-Mar-12	4-Apr-20	0	2	3.9%	-2.8%
OREAS-221	1.042	1.070	1.155	0.741	88	2	20-Jul-19	6-Mar-20	0	1	1.1%	2.7%
OREAS-222	1.206	1.227	1.301	1.180	44	0	11-Jul-19	23-Jan-20	0	0	0.0%	1.7%
OREAS-205	1.210	1.226	1.292	1.171	56	0	9-Apr-16	23-Jun-16	0	0	0.0%	1.3%
OREAS-253	1.220	1.186	1.239	1.095	48	0	20-Jul-19	8-Jun-20	0	0	0.0%	-2.8%
OREAS-66a	1.237	1.232	1.429	1.085	96	1	15-Jun-12	5-Jul-19	1	0	1.0%	-0.4%
OREAS-239	3.410	3.585	3.764	3.383	92	0	20-Jul-19	16-Apr-20	0	0	0.0%	5.1%
OREAS-210	5.040	5.433	5.740	4.304	156	1	18-Apr-16	25-Feb-20	0	0	0.0%	7.8%
OREAS-226	5.360	5.419	5.733	5.160	34	0	11-Jul-19	15-May-20	0	0	0.0%	1.1%
OREAS-10C	6.600	6.479	6.902	6.111	209	14	8-Mar-12	4-Apr-20	0	4	1.9%	-1.8%
OREAS-256	7.540	7.740	8.137	7.306	72	1	20-Jul-19	25-Apr-20	0	0	0.0%	2.6%
OREAS-228	8.720	8.713	9.062	8.224	46	2	20-Jul-19	3-Feb-20	0	0	0.0%	-0.1%
OREAS-208	8.810	9.406	9.950	8.833	69	0	13-Apr-16	13-Aug-19	1	0	1.4%	6.8%
OREAS-12a	11.790	11.732	12.548	11.022	201	1	8-Mar-12	3-Feb-17	1	4	2.5%	-0.5%
OREAS-229b	11.860	12.054	15.800	10.900	110	0	11-Jul-19	18-Jun-20	4	0	3.6%	1.6%

Table 11-4 Silver CRMs, San Albino Project Drill Samples

Grades in g Ag/tonne				Total	Samples	Dates	Used	Failure	Counts	Failure		
Standard ID	Certified Value	Average	Maximum	Minimum	Samples	Deleted	First	Last	High	Low	Rate	Bias
OREAS-66a	18.9	18.3	21.1	15.9	91	0	15-Jun-12	3-Oct-13	0	0	0.0%	-3.3%



## 11.3.5 Duplicate Drilling Samples

Three types of duplicates were inserted by Mako: quarter-core samples, coarse-rejects of core samples, and field duplicates collected at the RC drill. Quarter core samples show the highest degree of variability as expected, while the coarse reject and RC field duplicates show lower levels of variability. This illustrates the effect crushing the sample, whether at the lab or during the drilling process, has on reducing heterogeneity.

Table 11-5 Duplicates for San Albino Project Drill Samples

Developto Tono	V	Lak	Matal		Sample	2S	Averages as Percent		
Duplicate Type	Year	Lab	Metal	Total	Used	Outliers	Relative Difference	Absolute Difference	
		Inspectorate/							
Quarter Core	2012, 2013, 2020	Bureau Veritas	Au	183	172	11	0.6	74.4	
	2010-2013, 2016,	Inspectorate/							
Core Coarse Reject	2019-2020	Bureau Veritas	Au	2,456	2,441	15	1.2	26.8	
RC Field Duplicate	2016	Bureau Veritas	Au	177	176	1	-2.1	21.9	

It should be noted that a higher relative difference is seen in the 2020 quarter core samples analyzed by Bureau Veritas compared to the samples analyzed by Inspectorate in 2012-2013. This difference is caused by the number of Bureau Veritas samples available, only 22, and by the sample selection. Only 11 of the Bureau Veritas samples have average gold grades greater than 1.0g Au/t. If only the higher-grade samples are considered, the average relative difference drops to -3.0% and average absolute relative difference drops to 57.6%, which both compare very favorably with the 2012-2013 Inspectorate samples. This illustrates the distortions that very low-grade samples can introduce in the data averages.

## 11.3.5.1 Drill Samples – Core Duplicates

Core duplicates consist of sawn quarter-core samples submitted for assay and compared to the original half-core assay. These were prepared by cutting the retained half-core lengthwise into two quarters and submitting one of the quarters as a duplicate of the original half-core sample. Analysis of the relative percent difference shows a generally low bias below gold grades of 1.0g Au/t and a high bias above 2.0g Au/t. Figure 11.6 shows duplicate samples versus original. Figure 11.7 shows the relative difference as an absolute value.

#### 11.3.5.2 Drill Samples – Coarse-Reject Duplicates

Coarse reject material from analyzed core samples was selected and re-submitted as a type of duplicate. These duplicate samples were then analyzed at the same laboratory as the original samples. Very little bias is observed in these samples as shown in Figure 11.8 and Figure 11.9.



## 11.3.5.3 Reverse-Circulation Drilling Field Duplicates

RC field duplicates show very little bias below 1.0g Au/t and a slight positive bias between 1.0 to 6.0g Au/t in the duplicate sample (Figure 11.10 and Figure 11.11).

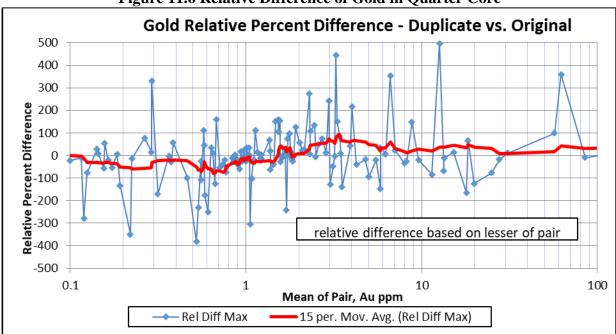
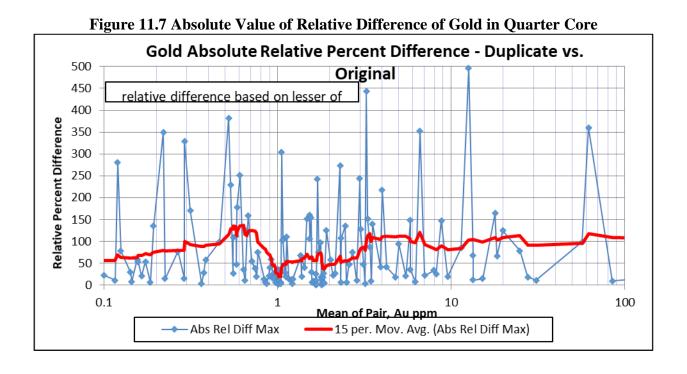


Figure 11.6 Relative Difference of Gold in Quarter Core

Note: a positive relative percent difference means the duplicate sample had a higher assay value than the original sample.





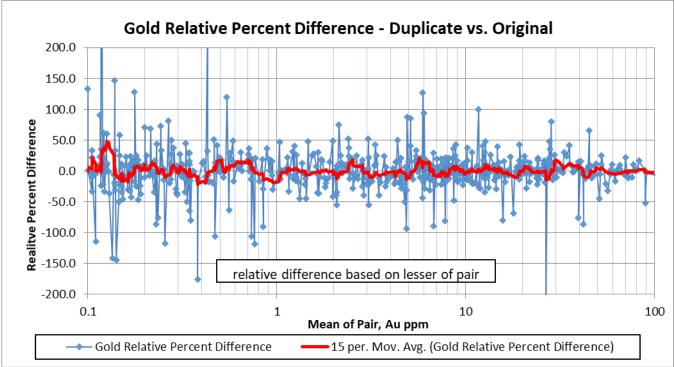


Figure 11.8 Relative Difference of Gold in Coarse-Reject Material

Note: a positive relative percent difference means the duplicate sample had a higher assay value than the original sample

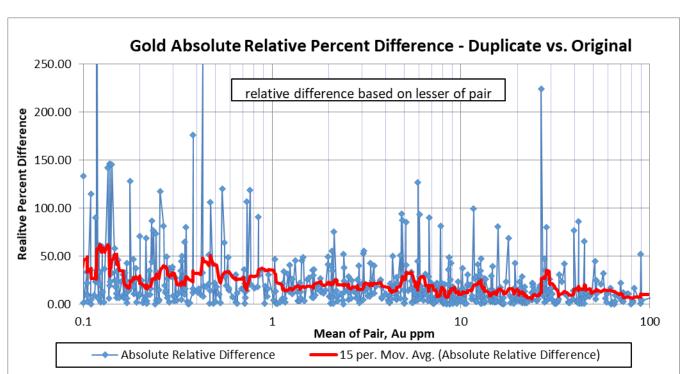


Figure 11.9 Absolute Value of Relative Difference of Gold in Coarse Rejects



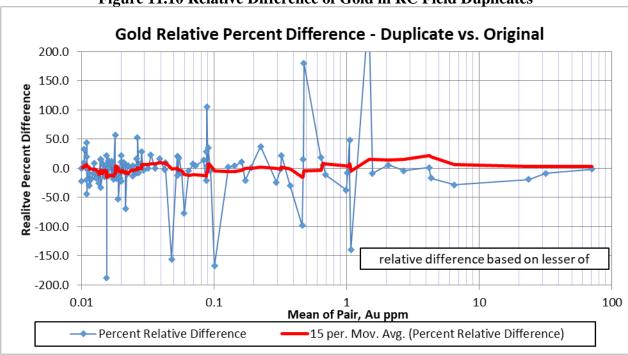
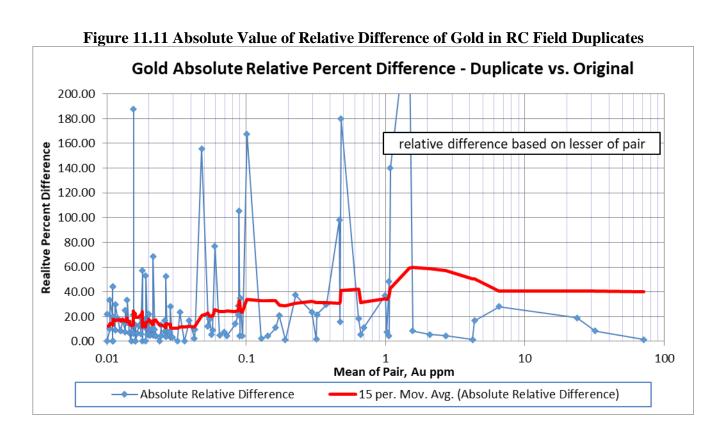


Figure 11.10 Relative Difference of Gold in RC Field Duplicates

Note: a positive relative percent difference means the duplicate sample had a higher assay value than the original sample.





## 11.3.6 Metallic Screen Fire Assays

Mako completed 1,891 metallic-screen analyses of drill samples as of February 28, 2020 when on site. The screen-fire assays were compared to the standard 30g fire assays done on the same sample. A breakdown of data available and data used is given in Table 11-6. Graphs in Figure 11.12 and Figure 11.13 show plots of the maximum relative differences and the absolute values of the relative differences between metallic-screen analyses and 30g analyses. Analyzing all the data together, the maximum relative difference graph shows that, for the most part, at the lower grades (<2g Au/t) the metallic-screen assay values have a high bias (around 10%-20%) when compared to the paired 30g analyses. For the most part, except the two sets of data above around 3g Au/t, the tendency is for the metallic-screen analyses and 30g sample analyses to be similar. The absolute value of the relative difference graph shows that the relative differences are around 50% at the low grades, dropping to around 15% at the highest grades.

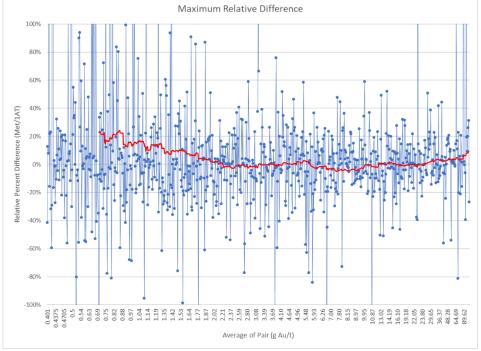
**Table 11-6 Number of Gold Metallic-Screen Analyses** 

	San Albino	Las Conchitas	Total
Total number of metallic-screen assays	1,599	292	1,891
Number of sample pairs with mean grade <0.4g Au/t	911	151	1,062
Number pairs with differences in grade >1000% diff.	20	3	23
Number pairs with differences in grade >1000% diff. and mean grade >0.4g Au/t	17	1	18
Data used in evaluations and graphing	671	140	811



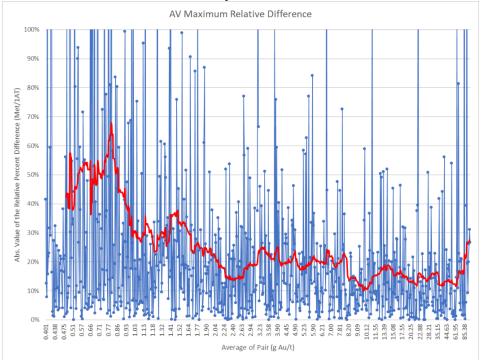
Figure 11.12 Maximum Relative Difference of Metallic-Screen vs. 30 Gram Fire Assay Gold Values

Maximum Relative Difference



(Excluding all samples with differences of >1000%, and two samples at 3g Au/t with ~500% difference)

Figure 11.13 Absolute Value of the Relative Difference from Mean of Metallic-Screen vs. 30 Gram Fire Assay Gold Values



(Excluding all samples with differences of >1000%, and two samples at 3g Au/t with ~500% difference)



## 11.4 Density Data

For each drill hole, multiple density measurements were collected. Sample selection focused on getting at least one sample of regolith, as well as multiple oxidized and unoxidized rock samples, and at least one sample in the mineralized zone. Samples were selected to be between 5cm and 10cm long in length. After recording the length, sample depth and hole number, the samples were placed in a mesh bag and weighed with a hanging scale in air, in water, and in air after being submersed in water. These measurements were then used to calculate the density as a specific gravity ("SG") measurement. The author checked the calculated drill core specific gravity using Mako's measurements of "Final Dry Sample Weight" and "Submerged Sample Weight" with the formula:

Specific Gravity = Dry Sample Weight / (Dry Sample Weight – Submerged Sample Weight)

During the site visit in 2020, the author observed Mako personnel measuring the density of core samples using the submersion method for core. Overall, the data looks reasonable and there were no impossible values in the dataset.

### 11.5 Summary Statement

The author concludes that the sample preparation, security, analytical procedures, and QA/QC methods and results are adequate, and the channel and drill sample data are acceptable for use in resource estimation of the San Albino Deposit. Mako benefits from the fact that Mr. Zoran Pudar, Exploration Manager, has been part of the technical team since 2009 and has consistently and carefully applied the proper sample preparation, security, analytical procedures. Mako used well-known certified laboratories for all sample preparation and analyses. Sample preparation, analysis, security and QA/QC monitoring have been and are done well and provide the project with a reliable set of analytical data.



#### 12.0 DATA VERIFICATION (ITEM 12)

Mr. Unger has verified the San Albino project database and compiled and analyzed available QA/QC data collected by Mako (see Section 11.0). Data verification, as defined in NI 43-101, is the process of confirming that data has been generated with proper procedures, has been accurately transcribed from the original source and is suitable to be used. There were no limitations on, or failure to conduct, the data verification for this report.

#### 12.1 Site Visit

Mr. Unger visited the San Albino project site from February 18 through February 21, 2020, accompanied by Mr. Ristorcelli. During the site visit, the project geology and drilling procedures were reviewed. This included: a) a field tour of the San Albino Deposit and Las Conchitas areas; b) visual inspection of core drilling procedures at active drill sites; c) discussion of the current geologic interpretations with Mako personnel; d) reviewing sampling and logging procedures; e) independently verifying selected drill-hole collar locations; and f) visited several trench and exploration pits to review channel sampling procedures.

Mr. Unger has also maintained a relatively continual line of communication through emails and video conferences with Mako project personnel in which the project status, procedures, and geologic ideas and concepts have been discussed. The result of the site visit and communications is that the author has no significant concerns with the project procedures.

#### 12.2 Database Verification

The current drill-hole databases, which support the resource estimations of the San Albino Deposit were created and maintained by Mako. This original drill-hole information was received during the site visit in February 2020, but the final database from which the resources were estimated dates to July 1, 2020.

The San Albino Deposit data was delivered to MDA in a SQL database. The database contained information for 979 drill holes, 788 of which were core holes, and 191 reverse circulation holes. The core hole data included 2,620 down-hole survey measurements of azimuth and inclination which were checked only for reasonableness as no original-source documentation existed. Mr. Unger found 32 entries in the database that had greater that 15% deviation in either the azimuth or dip between two survey points. These anomalous deviations were reported to Mako and either confirmed, corrected, or excluded from the database used for the resource estimation.

Collar coordinates for all drill holes where checked against limited collar survey records, and minor corrections were made where the database entries did not match the survey records. Because most of the surveying was done in-house, the coordinates were only questioned during verification by the authors if they did not fit with the topography well.

The geologic log data was tested for consistency of rock type and alteration intensity, and as a consequence of working with it during modeling. Only minor inconsistencies were found and corrected. When a few holes were clearly mis-located compared to surrounding holes and geology, Mako corrected the inaccurate data or the holes and their data were deemed unusable and flagged for exclusion from further use.



MDA personnel, under the direction of Mr. Unger compared 45,615 drill sample intervals in the database received from Mako to assay certificates received directly from Bureau Veritas, representing almost 82% of the drilling assays. The remainder of the assays were verified by comparison to assay certificates supplied by Mako personnel. MDA created a new database from the laboratory-supplied and client-supplied certificates to compare to the Mako database. The certificates that MDA used to create the new database comprised 49,514 total samples, with some samples analyzing the same drill sample interval with different assay methods.

After several rounds of corrections to the assay database, mostly to prioritize the use of metallic-screen fire assay data, consistency between the MDA-created database and the Mako master database was determined by Mr. Unger to be acceptable. In the final comparison between the MDA-created assay database and the original Mako database, there were 24 sample intervals with differences in gold values and 67 intervals with differences in silver values. These were all due to missing data in the MDA database.

## 12.3 Independent Verification Sampling

Mr. Unger collected six core samples for independent verification. Mr. Unger selected samples of half core retained from then recently drilled holes and supervised the cutting to quarter-core samples that were placed in individual, numbered sample bags. MDA sample numbers were chosen randomly and kept confidential from Mako. The samples were then placed together in a large sample bag and inserted with Mako's regular sample shipment to Bureau Veritas in Managua for sample preparation and analysis. Results were transmitted to MDA and Mako. All verification samples differed from the original gold and silver assays by less than 25% except for one high-grade sample. That sample, numbered 168683, showed a difference of 173% with the MDA sample being significantly higher than the original sample. This amount of variation is not outside of what could reasonably be expected in duplicate samples in a high-grade deposit of this type and the results support the general tenor and style of mineralization portrayed in the original samples.

Sample Number	Drill Hole	From meters	To meters	MDA assay value g Au/t	Original assay value g Au/t	Relative Difference
168657	SA19-194	11.10	12.25	0.835	0.77	8%
168670	SA19-205	44.15	45.45	2.562	2.73	-7%
168677	SA19-213	36.65	38.30	17.400	15.49	12%
168682	SA19-225	62.00	63.00	52.800	43.28	22%
168683	SA19-229	56.00	57.20	21.200	7.76	173%
168699	SA19-155	18.50	19.50	1.600	1.64	-2%

**Table 12-1 MDA's Independent Core Sampling** 

## 12.4 Independent Verification of Drill Hole Collars

Mr. Unger verified 17 drill collar locations using a handheld Garmin GPS-64 GPS receiver to confirm the locations of drill holes. Mr. Unger's measurements are compared to the Mako database entries in Table 12-2. The handheld Garmin GPS-64 does not have the precision of total station GPS but these results substantially support the surveys in the database and are considered acceptable.



Table 12-2 MDA's Checks of Drill Hole Collar Locations

	MDA	A GPS, UTM	meters	Di	fference (me	eters)	Mako D	Database, UT	M meters
Drill Hole	Easting	Northing	Elevation meters	Easting	Northing	Elevation	Easting	Northing	Elevation meters
SA19-144	597327	1513600	625	7	0	-15	597334	1513600	610
SA19-265	597359	1513594	606	2	-1	-3	597361	1513593	603
SA19-270	597377	1513644	597	0	-5	-3	597377	1513639	594
SA19-155	597224	1513680	568	1	3	1	597225	1513683	569
SA19-196	597329	1513552	616	-1	-3	-1	597328	1513549	615
SA19-192	597330	1513578	594	3	-1	15	597333	1513577	609
SA19-270	597377	1513644	594	0	-5	0	597377	1513639	594
SA19-336	597287	1513687	592	0	-1	-3	597287	1513686	589
SA19-276	597253	1513699	584	2	-4	-8	597255	1513695	576
SA19-155	597221	1513686	574	4	-3	-5	597225	1513683	569
SA19-158	597204	1513730	567	-1	-1	-1	597203	1513729	566
AR20-159	597577	1513229	601	-1	-2	-1	597576	1513227	600
AR20-167	597624	1513316	569	0	-1	5	597624	1513315	574
LC11-01	597202	1511011	625	-2	-3	1	597200	1511008	626
LC19-67	597204	1510951	621	4	-2	1	597208	1510949	622
LC19-80	597181	1510849	603	6	-1	-3	597187	1510848	600
LC19-78	597231	1510830	606	4	0	-1	597235	1510830	605

# 12.5 Specific Gravity Data

During the site visit in 2020, Mr. Unger observed Mako personnel measuring the density of core samples using the submersion method. Overall, the procedures and resulting data was found to be reasonable for a quartz-vein gold deposit hosted in metamorphic rock and the dataset did not contain any impossible values.

# 12.6 Summary Statement on Data Verification

The author experienced no limitations with respect to data verification for the San Albino Deposit. In consideration of the information summarized in this and other sections of this report, including the acceptable QA/QC methods and results summarized in Section 11.3, the author concludes that the San Albino Deposit data are acceptable as used in this report, most significantly to support the estimation and classification of the mineral resources reported herein.



#### 13.0 MINERAL PROCESSING AND METALLURGICAL TESTING (ITEM 13)

All sample preparation, compositing, and test work were performed or overseen by Bureau Veritas Laboratories in Vancouver, Canada. Their processes and assaying results met the requirements of Mako and its employees, including Senior Metallurgical Engineer Craig L. McKenzie, and are traceable and well documented. Ross MacFarlane, P. Eng. and Associate Metallurgist of Watts, Griffis and McOuat Limited ("WGM") and Joe Hinzer, P.Geo., the President and Director of WGM, both independent of Mako and "Qualified Persons" under NI 43-101, have reviewed and approved the written scientific and technical disclosure contained in this section.

# 13.1 Summary

Metallurgical test work has been completed for the San Albino project during five distinct periods as shown in Figure 13.1. Based on the recent metallurgical test work, Mako has decided on a processing approach with milling of all material followed by cyanide extraction of gold and silver using a carbon-in-leach ("CIL") plant. The expected optimized overall recoveries range from 86.1% to 96.9%, depending on the mineralization type despite the presence of carbonaceous material in the samples.

Tests completed in 2019 and 2020 were designed to confirm conclusions from work done in 2013 and 2014, as well as provide further design parameters for the mill flowsheet and the associated mill operations and tailings management. Overall, the latest programs supported conclusions of previous process development work and the current mill design parameters. Gravity recoveries averaged 36.3% with higher gravity recoveries possible when higher-grade material is processed through the plant.

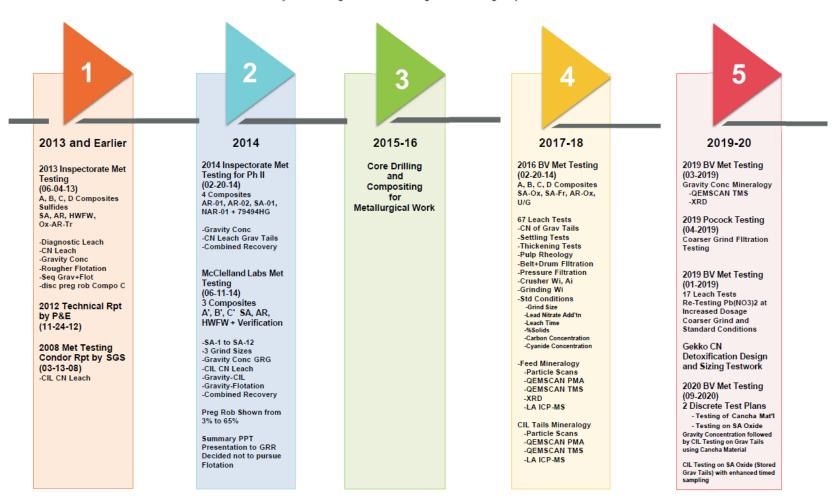
Recent metallurgical tests of the mine dumps and San Albino vein oxide material, which are likely to be the first materials processed through the plant, have shown gold recoveries in excess of 95%. It has therefore been determined that 95% is a reasonable gold recovery percentage for the purposes of reporting the current resources.

The most recent metallurgical test work was designed to subject each of the samples to bench-scale tests of the chosen flowsheet for the San Albino project from comminution, gravity concentration, CIL cyanide leaching, cyanide destruction in tailings, and separation of solids from liquids in the tailings.



Figure 13.1 San Albino Deposit Metallurgical Test History

# San Albino Metallurgical Development Early Golden Reign Resources through Mako Mining Corporation





The scope of work completed in 2019 and 2020 includes:

- Sample selection;
- Head sample characterization;
- Carbon content;
- Mineralogical studies;
- Comminution studies;
- Gravity recovery of gold;
- Metallurgical response tests;
- Cyanide consumption;
- Optimized leach tests;
- Factors affecting gold recovery;
- Detoxification of the leach circuit tailings; and
- Metallurgical analysis of historic dump materials.

A summary of each of these items is provided in the following sub-sections.

# 13.2 Sample Selection for 2019 – 2020 Test Work

As with previous process development testing, the sample material used for the 2019 to 2020 testing program represented the three styles of mineralization at the San Albino Deposit recognized as sulfide, oxide and mixtures of oxide and sulfide. Four composite samples were assembled from drill core to represent the deposit as follows: (1) the San Albino oxide composite ("SA-Ox"); (2) the San Albino fresh composite ("SA-Fresh"); (3) the Arras oxide composite, and (4) the underground composite. The four composites were selected by Mako's metallurgist working with the geologist and are considered by Mr. MacFarlane and Mr. Hinzer to be representative of the deposit.

# 13.3 Head Sample Characterization

With the recognized impact of the free gold in the deposit, the head grade of the samples was determined in triplicate by fire assay and cross-checked with metallic-screen fire assays. The silver assays were completed by AA while the sulfur and carbon analyses were done by microbalance measurements and Leco furnace gas detection. The grades of the four composites used in the testing program are shown in Table 13-1 and Table 13-2 below.

**Table 13-1** Composite Gold Head Grade Analysis

Composite ID	Au (g/t)	by fire	-assays	on 30g splits	Au (g/t) by metallic-screen,	Average
Composite ib	Cut A	Cut B	Cut C	REP Cut A	~500g splits with 30g fire assay	Average
San Albino Oxide	8.69	12.75	9.38	11.65	10.14	10.52
San Albino Fresh	11.60	11.81	9.99	11.45	8.57	10.6
Arras Oxide	4.28	3.86	3.96	3.62	4.71	4.09
Underground	7.86	5.79	4.86	8.60	6.85	6.79

Overall Average 8.02



Table 13-2 Other Head-Grade Analyses

	Table 13-2 Other fread Grade Finally ses										
Items	Unit		Composite ID								
items	Oille	San Albino Oxide	San Albino Fresh	Arras Oxide	Underground						
Ag	ppm	21.30	16.3	12.90	11.5						
TOT/C	%	0.22	1.34	0.10	1.65						
C/ORG	%	0.17	0.65	0.08	0.80						
C/INORG	%	<0.01	0.43	<0.01	0.71						
C/GRA	%	0.05	0.26	0.01	0.28						
TOT/S	%	0.23	1.72	0.10	1.58						
ELM/S	%	0.01	<0.01	<0.01	<0.01						
S/S-	%	0.06	1.50	0.09	1.31						
S(SO4)	%	0.21	0.02	0.21	0.05						
As	ppm	2650.0	5368.0	9647.0	2570.0						
Sb	ppm	7.5	7.1	10.6	5.2						
Bi	ppm	34.5	20.9	<0.5	8.9						
Se	ppm	18.0	12.0	22.0	14.0						
SiO2	%	73.77	75.0	75.0	79.72						

#### 13.4 Carbon Content

The four composites in the 2019-2020 test work had a total carbon content ranging from 0.10 to 1.65% with the potential gold absorbing levels ranging from <0.01 to 0.71% inorganic carbon. The underground composite had the highest level of potential "preg-robbing" carbon with the SA-Fresh composite having somewhat less.

The proposed CIL leach circuit will employ activated carbon to address the known carbon content at San Albino. The use of CIL versus carbon-in-pulp ("CIP") or standard cyanide leaching was validated by tests completed in 2019 on three composites. Table 13-3 shows the different extraction percentages for the three composites. Note: SA-Ox is slightly preg robbing at approximately 5% lower, and the SA-Fresh is significantly preg robbing at 66% lower.

Table 13-3 Effect of Standard Leaching versus CIL, San Albino Deposit Composites

CIL Au EXTRACTION %	DIFFERENCE	STANDARD CIP Au
		EXTRACTION %
94.00%	5.2%	88.8%
74.03%	66.23%	7.8%
89.15%	1.35%	87.8%
	94.00% 74.03%	94.00% 5.2% 74.03% 66.23%

## 13.5 Mineralogical Studies

The four composite samples were subjected to mineralogical studies to characterize the gold and silver occurrences, assess particle size and shape, and levels of liberation. The studies showed that over 90% of



the gold in the four composites occurred as native gold, or gold electrum, with only trace quantities in other gold minerals. The size of the gold grains averaged 12.4 to 30 microns, with more than 50% coarser than 30 microns and generally conducive to gravity concentration. The particle shape was mostly circular. There was a high proportion of liberation of the gold particles at 80% passing 150 microns and conducive to cyanide leaching. The silver occurrence had 60% to 90% containment in the gold particles or gold minerals and could be recovered in conjunction with the gold.

#### 13.6 Comminution Studies

In support of comminution in the crushing and grinding of the San Albino Deposit mineralization, the crusher work index tests averaged 4.72kW/t with the abrasion index average at 0.2882. The work index for grinding averaged 15.4kW/t indicating a moderately hard rock to grind to liberation of the gold and silver at 80% passing 75 microns.

## 13.7 Gravity Recovery

Gravity recovery of the four composites showed good results and ranged from 28.8% to 50.1% with the highest gravity recovery result on the Arras oxide composite.

# 13.8 Metallurgical Response Tests

Metallurgical response tests were carried out on the four composites for grinding, gravity recovery and cyanidation of the gravity tails with CIL. Four different grind sizes were tested for each composite sample. The testing showed gold recoveries by gravity ranging from 24.7 to 50.1% with overall gold recoveries from combined gravity and CIL ranging from 70.2% to 96.8%. The oxide samples showed the highest recoveries, and the fresh composite sample showed the lowest. Although there were four size distributions used in the testing from 80% passing 50 microns to 150 microns there was no appreciable trend in recoveries on the finer sizes as would be expected.

## 13.9 Cyanide Consumption

The cyanide leach conditions were maintained with sodium cyanide ("NaCN") consumption ranging from 0.97 kg/t to 2.65kg/t and lime consumption ranging from 0.62 to 1.89kg/t. The lowest reagent consumption indicated was on the SA-Fresh composite sample. Preliminary optimization testing showed no improvement with the addition of lead nitrate, but some improvement with extension of the leach time from 24 to 48hr for the SA-Fresh composite sample with the leach-time extension increasing the cyanide consumption.

# 13.10 Optimized Leach Tests

The optimized leach tests on the three composites showed overall gold recoveries averaging 86.1% for the SA-Fresh composite, 92.3% for the Arras oxide composite and 96.9% for the SA-Ox composite (each averages of four CIL tests, respectively). Gravity recovery for the three composite samples averaged 36.3%. Silver recovery was relatively constant for the three composites tested, averaging 67.5%, with the highest silver recovery at 74.1% reported on the lower grade Arras oxide composite. The leach conditions were optimized for three tests on each composite with the grind at 80% passing 75 microns.



# 13.11 Factors Affecting Recovery

Comparisons of the overall flowsheet performance to the sulfur content of the mineralization and the acidinsoluble carbon showed strong correlations with both constituents in the mineralization contributing to decreases in gold recovery.

# 13.12 Detoxification of the Leach Circuit Tailings

Detoxification of the leach circuit tailings showed that the INCO/SO2 treatment could achieve less than 1 mg/l of WAD CN in the tailings with cyanide lowered to less than the compliance level. Settling and filtration testing of the leach tailings showed that pressure filtration would be required to achieve a tailings moisture level suitable for conveying and dry stacking. Work is continuing on defining tailings treatment procedures.

# 13.13 Metallurgical Analysis of Historical Dump Material

Metallurgical analysis performed in 2020 by Bureau Veritas tested mill feed material from the historical dump material ("cancha") at the San Albino Deposit for the start of operations (Table 13-4). The first stage utilized a benchtop Knelson concentrator for gold and silver recovery. The second portion of the test focused on passing the tails generated from the gravity concentrator through a simulation of the CIL circuit. The overall average recovery of 96.4% compared favorably to the SA-Ox composite, which had an overall average recovery of 96.9%.

Table 13-4 Summary of 2020 Results for Historic Dump Material Overall Recovery

Test No	Gravity		O	IL .	Overall	
Test No	Au %	Ag %	Au %	Ag %	Au %	Ag %
G1 and CIL-1	48.6	18.2	47.9	70.9	96.6	89.1
G1 and CIL-2	48.6	18.2	47.6	69.2	96.3	87.4
Average	48.6	18.2	47.8	70.01	96.4	88.3

<sup>\*</sup> metallic-screen analysis

One result of the test work performed on the historic dump material is an estimate of the rate of consumption of NaCN. The preliminary test work had shown a consumption rate of 5.44kg/t of material where previous test work had shown NaCN consumption rates at 3.07kg/t with both tests at 72hrs of leaching. This difference impacts the cost of recovery, while the test work shows slightly improved recovery. This difference in reagent consumption will remain a parameter for ongoing study.



#### 14.0 MINERAL RESOURCE ESTIMATES (ITEM 14)

#### 14.1 Introduction

The mineral resource estimation for the San Albino Deposit was completed for disclosure in accordance with Canadian National Instrument 43-101 ("NI 43-101"). The modeling and estimation of the mineral resources were completed in October 8, 2020 under the supervision of Mr. Steven Ristorcelli, a qualified person with respect to mineral resource estimations under NI 43-101. The Effective Date of the resource estimate is October 8, 2020. Mr. Ristorcelli is independent of Mako and its subsidiaries by the definitions and criteria set forth in NI 43-101; there is no affiliation between Mr. Ristorcelli and Mako or its subsidiaries except that of independent consultant/client relationships. Mr. Ristorcelli is not aware of any environmental, permitting, legal, title, taxation, socio-economic, marketing, or political factors, beyond those discussed in this report, that may materially affect the San Albino Deposit mineral resources as of the date of this report. No mineral reserves have been estimated for the San Albino Deposit.

The San Albino Deposit mineral resources are classified in order of increasing geological and quantitative confidence into Inferred, Indicated, and Measured categories in accordance with the "CIM Definition Standards - For Mineral Resources and Mineral Reserves" (2014) and therefore NI 43-101. CIM mineral resource definitions are given below, with CIM's explanatory text shown in italics:

#### **Mineral Resource**

Mineral Resources are sub-divided, in order of increasing geological confidence, into Inferred, Indicated and Measured categories. An Inferred Mineral Resource has a lower level of confidence than that applied to an Indicated Mineral Resource. An Indicated Mineral Resource has a higher level of confidence than an Inferred Mineral Resource but has a lower level of confidence than a Measured Mineral Resource.

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.

Material of economic interest refers to diamonds, natural solid inorganic material, or natural solid fossilized organic material including base and precious metals, coal, and industrial minerals.

The term Mineral Resource covers mineralization and natural material of intrinsic economic interest which has been identified and estimated through exploration and sampling and within which Mineral Reserves may subsequently be defined by the consideration and application of Modifying Factors. The phrase 'reasonable prospects for eventual economic extraction' implies a judgment by the Qualified Person in respect of the technical and economic factors likely to influence the prospect of economic extraction. The Qualified Person should consider and clearly state the basis for



determining that the material has reasonable prospects for eventual economic extraction. Assumptions should include estimates of cutoff grade and geological continuity at the selected cut-off, metallurgical recovery, smelter payments, commodity price or product value, mining and processing method and mining, processing and general and administrative costs. The Qualified Person should state if the assessment is based on any direct evidence and testing.

Interpretation of the word 'eventual' in this context may vary depending on the commodity or mineral involved. For example, for some coal, iron, potash deposits and other bulk minerals or commodities, it may be reasonable to envisage 'eventual economic extraction' as covering time periods in excess of 50 years. However, for many gold deposits, application of the concept would normally be restricted to perhaps 10 to 15 years, and frequently to much shorter periods of time.

#### **Inferred Mineral Resource**

An Inferred Mineral Resource is that part of a Mineral Resource for which quantity and grade or quality are estimated on the basis of limited geological evidence and sampling. Geological evidence is sufficient to imply but not verify geological and grade or quality continuity.

An Inferred Mineral Resource has a lower level of confidence than that applying to an Indicated Mineral Resource and must not be converted to a Mineral Reserve. It is reasonably expected that the majority of Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration.

An Inferred Mineral Resource is based on limited information and sampling gathered through appropriate sampling techniques from locations such as outcrops, trenches, pits, workings and drill holes. Inferred Mineral Resources must not be included in the economic analysis, production schedules, or estimated mine life in publicly disclosed Pre-Feasibility or Feasibility Studies, or in the Life of Mine plans and cash flow models of developed mines. Inferred Mineral Resources can only be used in economic studies as provided under NI 43-101.

There may be circumstances, where appropriate sampling, testing, and other measurements are sufficient to demonstrate data integrity, geological and grade/quality continuity of a Measured or Indicated Mineral Resource, however, quality assurance and quality control, or other information may not meet all industry norms for the disclosure of an Indicated or Measured Mineral Resource. Under these circumstances, it may be reasonable for the Qualified Person to report an Inferred Mineral Resource if the Qualified Person has taken steps to verify the information meets the requirements of an Inferred Mineral Resource.

#### **Indicated Mineral Resource**

An Indicated Mineral Resource is that part of a Mineral Resource for which quantity, grade or quality, densities, shape and physical characteristics are estimated with sufficient



confidence to allow the application of Modifying Factors in sufficient detail to support mine planning and evaluation of the economic viability of the deposit.

Geological evidence is derived from adequately detailed and reliable exploration, sampling and testing and is sufficient to assume geological and grade or quality continuity between points of observation.

An Indicated Mineral Resource has a lower level of confidence than that applying to a Measured Mineral Resource and may only be converted to a Probable Mineral Reserve.

Mineralization may be classified as an Indicated Mineral Resource by the Qualified Person when the nature, quality, quantity and distribution of data are such as to allow confident interpretation of the geological framework and to reasonably assume the continuity of mineralization. The Qualified Person must recognize the importance of the Indicated Mineral Resource category to the advancement of the feasibility of the project. An Indicated Mineral Resource estimate is of sufficient quality to support a Pre-Feasibility Study which can serve as the basis for major development decisions.

#### **Measured Mineral Resource**

A Measured Mineral Resource is that part of a Mineral Resource for which quantity, grade or quality, densities, shape, and physical characteristics are estimated with confidence sufficient to allow the application of Modifying Factors to support detailed mine planning and final evaluation of the economic viability of the deposit.

Geological evidence is derived from detailed and reliable exploration, sampling and testing and is sufficient to confirm geological and grade or quality continuity between points of observation.

A Measured Mineral Resource has a higher level of confidence than that applying to either an Indicated Mineral Resource or an Inferred Mineral Resource. It may be converted to a Proven Mineral Reserve or to a Probable Mineral Reserve.

Mineralization or other natural material of economic interest may be classified as a Measured Mineral Resource by the Qualified Person when the nature, quality, quantity and distribution of data are such that the tonnage and grade or quality of the mineralization can be estimated to within close limits and that variation from the estimate would not significantly affect potential economic viability of the deposit. This category requires a high level of confidence in, and understanding of, the geology and controls of the mineral deposit.

Mr. Ristorcelli reports resources at cutoffs that are reasonable for deposits of this nature given anticipated mining methods and plant processing costs, while also considering economic conditions, because of the regulatory requirements that a resource exists "in such form and quantity and of such a grade or quality that it has reasonable prospects for eventual economic extraction."



#### 14.2 Database

The resource estimate in this report used drill and channel sample data discussed in Sections 9.1, 10.0 and 11.0. The database used for the resource estimate was received on July 1, 2020. The Effective Date of the database is July 1, 2020 and the resource estimate is October 8, 2020. Drill data received after July 1, 2020 were not used to estimate resources presented in the report. However, post-July 1, 2020 drill data were used to evaluate the accuracy of the October 8, 2020 resource block model (Section 14.10).

Descriptive statistics of that database are given in Table 14-1. The resource database does include channel samples from 245 trenches and pits in the San Albino resource area. A total 1,177 samples were eliminated from use for resource estimation because some aspect made them less reliable. The vast majority of less reliable data were assays from 1,055 trench samples whose locations were suspect. Most uncertain trench locations have since been corrected in the database but were not incorporated in the resource estimate. Ninety core samples were removed from the database because they had less than 45% core recovery, and 32 RC samples were removed where there was evidence of potential down-hole contamination.

Results from channel samples taken from trenches and shallow surface exploration pits are treated as "drill holes" in the database. All the samples were coded for type: core, RC and channel samples. In addition to those data shown in Table 14-1, logged geologic data as well as 33-element trace-element geochemistry was available and loaded. The database MDA used for this estimate is comprehensive, well maintained and extremely useful.

**Table 14-1 Descriptive Statistics of the Resource Database** 

	Valid	Median	Mean	Std Dev	CV	Minimum	Maximum	Units
From	53,980					0.00	392.00	m
То	53,980					0.05	393.20	m
Length	53,980	1.30	1.50			0.05	58.50*	m
Au	44,541	0.016	0.585	4.731	8.1	0.002	546	g/t
Ag	44,468	0.40	1.71	18.24	10.6	0.05	3086	g/t
Cu	44,398	54	70	120	1.7	1	12500	ppm
Pb	44,364	15	192	1298	6.8	1	50400	ppm
Zn	44,341	185	258	533	2.1	1	58900	ppm
As	44,464	17	293	1232	4.2	1	12500	ppm
Core recovery	39,853	91	86	15	0.2	0	174**	%
Density	2,094	2.50	2.47	0.23	0.1	1.50	4.09	g/cm3

<sup>\*</sup> Long sample lengths were just intervals without samples.

#### 14.3 Mineral Domains

Mako and its predecessor have modeled the geology of the San Albino gold deposits for a decade and Mr. Ristorcelli relied heavily on their interpretations. Little was changed from Mako's overall geologic interpretation. However, Ristorcelli added more detail based on core and trench logs, collar and down-

<sup>\*\*</sup> Core recovery was not audited; a few samples with over 100% recovery were noted

<sup>&</sup>quot;CV" is Coefficient of Variation (standard deviation divided by the mean)



hole survey data, and photographs. A three-dimensional ("3D") model was created using cross-sectional interpretations looking N40°E and spaced at 10m intervals. In the end, the interpretation was reviewed by MDA and Mako. The combined geologic and domain model that included quartz veins, "halos" of mineralized hanging wall sheared rock, halos of mineralized footwall sheared rock, dumps, and surfaces for the limits of overburden, and completely oxidized material and transitional oxidation was accepted by both parties.

Three major veins and subsidiary veins at the San Albino Deposit were grouped as shown in Table 14-2. The veins were numbered, and higher numbers indicate structurally higher levels. Each vein shape was modeled based on drill and trench data. For the San Albino vein, the hanging wall halo mineralization was modeled separately from the footwall halo, while the mineralized halos around the Arras and Naranjo veins were modeled as envelopes without a distinction of hanging wall and footwall. MDA did not separate vein versus halo for the El Jobo vein or the unnamed "miscellaneous" veins. El Jobo and the miscellaneous veins are entirely categorized as Inferred resources because of uncertain continuity due in part to insufficient drilling.

Table 14-2 Modeled Geological and Mineral Domains, San Albino Deposit

Geologic Domain Name	Comment	Domain Number
Miscellaneous veins	poorly defined, uncertain continuity	95
El Jobo vein	poorly defined in San Albino hanging wall*	75
San Albino hanging wall	hanging wall halo	57
San Albino II vein	hanging wall splay of San Albino vein	55
San Albino vein	main vein	55
San Albino footwall	footwall halo	53
Naranjo halo	footwall and hanging wall halo	37
Naranjo vein	main vein	35
Arras halo	footwall and hanging wall halo	17
Arras vein	main vein	15
*Modeled with San Albino and	considered part of San Albino main vein	

Cumulative probability plots of major and trace elements, including gold and silver, were made; Figure 14.1 shows cumulative probability plots of gold, silver, lead and arsenic. The gold cumulative probability plot is interpreted in context of the San Albino Deposit geology: unmineralized country rock constitutes about 80% to 90% of assayed samples; halo or hanging wall and footwall mineralization fills the range between about 90% and 98% of assays, and the mineralized veins at the San Albino Deposit comprise the upper ~2% of all assayed samples. The highest gold grades, likely represented by veins with "stylolitic" textures and galena, are a subset of the vein domain. Arsenic forms a broader halo around the veins than gold. Lead, contained in galena, occurs mainly in the mineralized veins, with low concentrations in the halos and wall rocks. Mako had recognized these relationships.

Two mineral domains – almost coincident with and driven by the geologic model domains – were used to control the gold resource estimate: a low-grade, vein halo domain containing mineralized wall rock with grades generally between ~0.1g Au/t and ~2-4g Au/t, and a vein domain beginning at ~2-4g Au/t. The gold mineralization in the low-grade domain is in sheared and/or brecciated wallrock in the margins of



gold-bearing quartz veins and contains sparse, often broken or brecciated, discontinuous quartz veins. The mid-grade vein domain is made up of vein quartz with minor sulfides, and minor intensely sheared and mineralized wall rock. The probability plots indicate the presence of a third and higher-grade domain with grades greater than ~20-30g Au/t. This high-grade mineralization is contained in quartz veins with "styolitic" textures, galena, and commonly contain visible gold. Although distinct, the higher-grade quartz vein domain was not modeled separately from the vein domain because of volume and continuity considerations. While the mid- and high-grade domains are primarily composed of quartz veins, several instances of strongly brecciated and gold-mineralized material with quartz vein clasts were observed as well.

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Figure 14.1 Cumulative Probability Plot for All Veins and Country Rock: Au, Ag, Pb and As

(yellow – gold; blue – silver; gray – lead; red - arsenic)

The gold and silver probability plots have similar forms suggesting that both metals were similarly introduced in quartz veins, with only minor and local differences. Because silver represents a small portion of the economic value of the deposit, and the spatial distribution between gold and silver are substantially similar, the gold domains were used to control the silver estimation.

The definitions and spatial distributions of the geologic mineral domains were previously established by Mako from their logging of drill core and channel samples, and Mako's geologic modeling. Those interpretations were subsequently modified by the author. For resource estimation purposes, Mr. Ristorcelli retained the low-grade domain but combined the high- and mid-grade domains into a single vein domain. Thus, the following mineral domains were used to constrain the estimate:



- Sheared low-grade halo domain from ~0.1g Au/t to ~2-4g Au/t. Hanging wall and footwall zones of ductile and brittle shearing; gold likely associated with stringer veins and clasts of vein incorporated into the breccias; and
- Vein domain from ~2-4g Au/t to ~20-30g Au/t. White, stylolitic quartz veins with minor amounts of sulfides including galena; can contain visible gold as grains less than 1mm; includes internal zones with greater than ~20-30g Au/t.

Dikes have been logged in 248 drill samples out of 55,174 lithology intervals and an example is shown in Figure 14.2. The example in Figure 14.2 is distinctly different from the country rock and mineralization. The author attempted to include the dikes in the 3D geologic model but was unable to confidently correlate individual dikes between drill holes. To further evaluate the relationship of dikes to mineralization, the author tabulated the gold grade in dikes intersected in drilling. Sixty-nine dike intercepts were not sampled or analyzed; 167 had non-detectable gold grades to grades up to 0.1g Au/t; nine had grades between 0.1 and 1.0g Au/t; and only three samples logged as dikes had grades greater than 5.0g Au/t. The effect of the thin dikes on dilution was considered minimal to non-existent.



Figure 14.2 Core with Dikes

A typical dike interval is shown by the light coloration from 37.2m to 37.7m and 39.3m to 39.5m.

In addition to the vein domains, historical mine dumps at the San Albino Deposit were modeled and estimated for their contained gold resources. Descriptive information for the San Albino mineral domains, country rock, and the mine dumps at the San Albino Deposit are given in Table 14-3. Geologic cross sections showing the veins are given in Figure 14.3 and Figure 14.4. It is noteworthy and expected that grades of the halo material have substantially higher coefficients of variation ("CV") because of the local



and discontinuous nature of its vein mineralization. The vein material, however, has relatively low coefficients of variation even with uncapped assays.

Table 14-3 Descriptive Statistics of Samples by Vein and Domain

	14010 14-51	o cocripu	Arras Vein	Pres sy	vem and D						
	Samples	Modian	Mean	Std Dev	CV	Minimum	Maximum	Units			
Au	503	<b>Median</b> 7.65	14.93	22.44	1.50	0.04	234.19	g/t			
-	503	7.65	14.25	17.82	1.25	0.04	100.00	g/t g/t			
Au Capped	498	18.30		29.52	1.25	0.04	204.20				
Ag Carrand			27.13					g/t			
Ag Capped	498	18.30	26.75	27.69	1.03	0.20	150.00	g/t			
		"		Arras Halo							
	Samples	Median	Mean	Std Dev	CV	Minimum	Maximum	Units			
Au	853	0.29	0.67	1.16	1.72	0.01	15.23	g/t			
Au Capped	853	0.29	0.66	1.07	1.61	0.01	10.00	g/t			
Ag	847	1.70	3.31	5.80	1.75	0.05	92.50	g/t			
Ag Capped	847	1.70	3.16	4.40	1.39	0.05	30.00	g/t			
Naranjo Vein											
	Samples	Median	Mean	Std Dev	CV	Minimum	Maximum	Units			
Au	92	13.48	19.21	18.77	0.98	0.06	89.87	g/t			
Au Capped	92	13.48	18.65	17.05	0.91	0.06	65.00	g/t			
Ag	92	19.51	27.97	30.29	1.08	2.10	193.00	g/t			
Ag Capped	92	19.50	25.39	20.96	0.83	2.10	80.00	g/t			
Naranjo Halo											
	Samples	Median	Mean	Std Dev	CV	Minimum	Maximum	Units			
Au	125	0.38	0.81	0.89	1.10	0.03	3.73	g/t			
Au Capped	125	0.38	0.81	0.89	1.10	0.03	3.73	g/t			
Ag	124	1.61	2.98	3.81	1.28	0.15	26.80	g/t			
Ag Capped	124	1.60	2.93	3.50	1.19	0.15	20.00	g/t			
			San	Albino Footwa	II						
	Samples	Median	Mean	Std Dev	CV	Minimum	Maximum	Units			
Au	743	0.31	0.82	2.25	2.72	0.02	51.54	g/t			
Au Capped	743	0.31	0.75	1.15	1.54	0.02	7.00	g/t			
Ag	733	2.19	4.62	16.98	3.67	0.15	423.00	g/t			
Ag Capped	733	2.20	3.76	4.49	1.20	0.15	25.00	g/t			
			Sa	an Albino Vein							
	Samples	Median	Mean	Std Dev	CV	Minimum	Maximum	Units			
Au	617	9.87	17.28	20.21	1.17	0.05	136.00	g/t			
Au Capped	617	9.87	17.00	18.82	1.11	0.05	100.00	g/t			
Ag	617	19.11	27.92	27.63	0.99	0.20	189.00	g/t			
Ag Capped	617	19.10	27.80	27.02	0.97	0.20	150.00	g/t			
				bino Hanging V		·					
	Samples	Median	Mean	Std Dev	CV	Minimum	Maximum	Units			
Au	484	0.31	0.74	1.40	1.90	0.02	20.40	g/t			
Au Capped	484	0.31	0.67	0.87	1.30	0.02	4.00	g/t			
Ag	483	1.61	3.07	5.19	1.69	0.05	52.80	g/t			
Ag Capped	483	1.60	2.84	3.67	1.29	0.05	22.00	g/t			
AS capped	703	1.00	∠.∪+	3.07	1.23	0.03	22.00	5/ د			

(see Table 14-7 for capping details)



Table 14-3 Descriptive Statistics by Vein and Domain (continued) El Jobo

	Valid	Median	Mean	Std Dev	CV	Minimum	Maximum	Units
Au	35	0.19	0.79	2.23	2.83	0.01	10.90	g/t
Au Capped	35	0.19	0.79	2.23	2.83	0.01	10.90	g/t
Ag	35	0.90	2.09	4.17	2.00	0.15	24.60	g/t
Ag Capped	35	0.90	2.09	4.17	2.00	0.15	24.60	g/t

#### **Miscellaneous Veins**

	Valid	Median	Mean	Std Dev	CV	Minimum	Maximum	Units
Au	74	1.48	11.27	23.46	2.08	0.05	125.12	g/t
Au Capped	74	1.48	3.17	3.06	0.97	0.05	7.00	g/t
Ag	74	5.50	16.89	24.89	1.47	0.05	101.30	g/t
Ag Capped	74	5.50	10.98	11.62	1.06	0.05	30.00	g/t

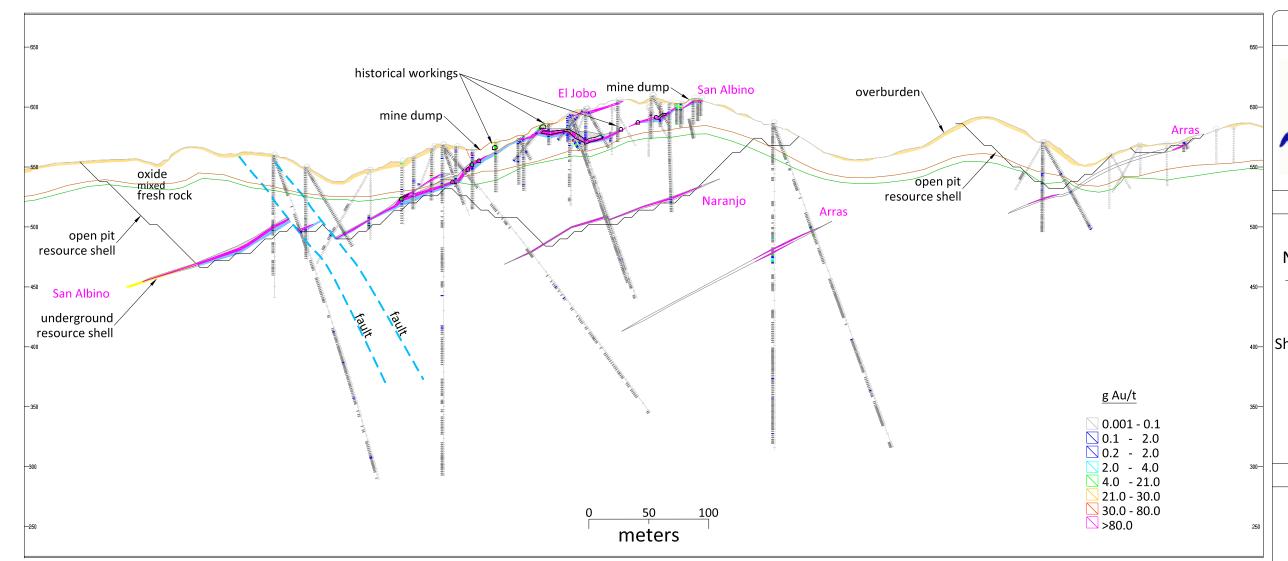
## **Country Rock**

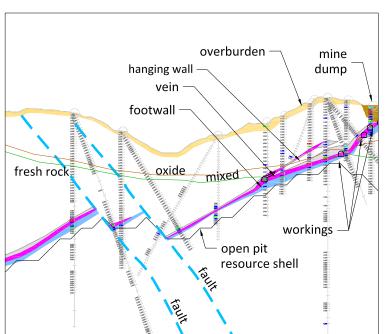
	Valid	Median	Mean	Std Dev	CV	Minimum	Maximum	Units
Au	38,824	0.01	0.07	2.88	39.18	0.00	545.96	g/t
Au Capped	38,824	0.01	0.04	0.20	5.22	0.00	3.00	g/t
Ag	38,776	0.40	0.72	12.90	17.84	0.05	1969.00	g/t
Ag Capped	38,776	0.40	0.56	0.87	1.55	0.05	10.00	g/t

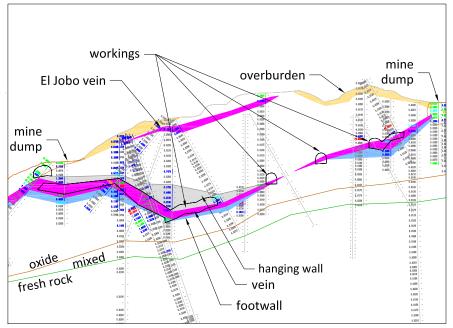
#### **Dumps**

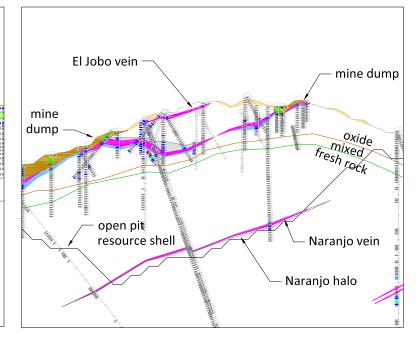
	Valid	Median	Mean	Std Dev	CV	Minimum	Maximum	Units
Au	961	1.36	5.03	11.28	2.24	0.00	136.40	g/t
Au Capped	961	1.36	4.11	6.39	1.55	0.00	25.00	g/t
Ag	961	3.98	10.59	18.94	1.79	0.05	212.00	g/t
Ag Capped	961	4.00	9.88	14.74	1.49	0.05	70.00	g/t

(see Table 14-7 for capping details)









Company

Project

SAN ALBINO PROJECT NUEVA SEGOVIA, NICARAGUA

MINING CORP

Figure 14.3
Cross Section 11
Showing Albino Project Gold Veins,
Underground Workings,
and Resource Shell

Legend

drill-hole collar and trace with gold assays (see legend in drawing)

historical workings

Consultant

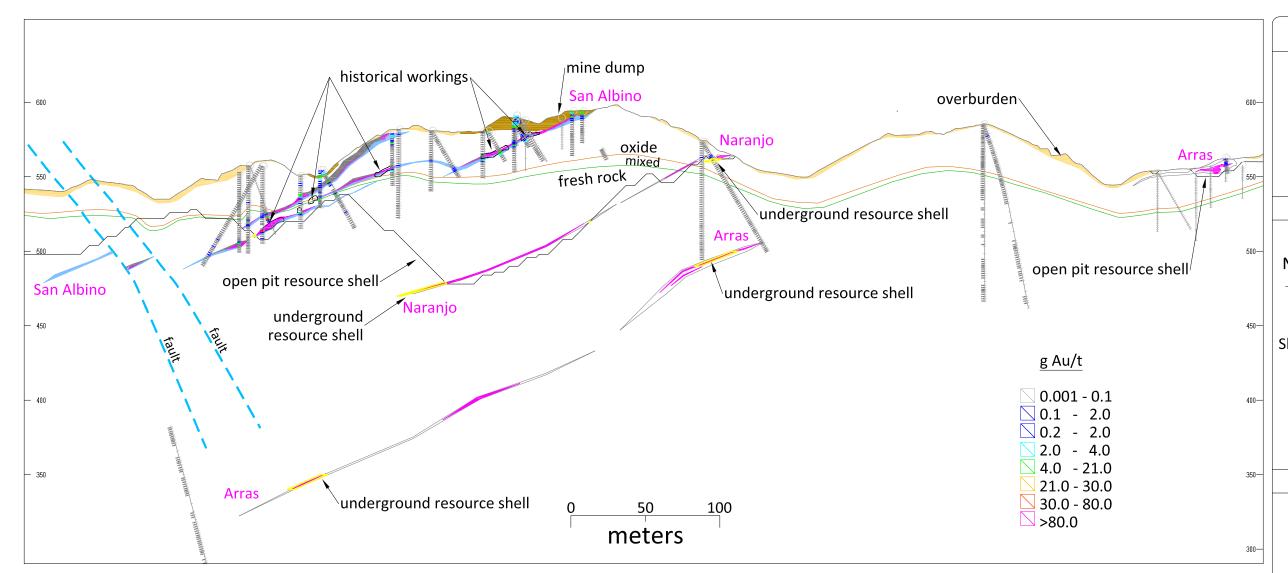


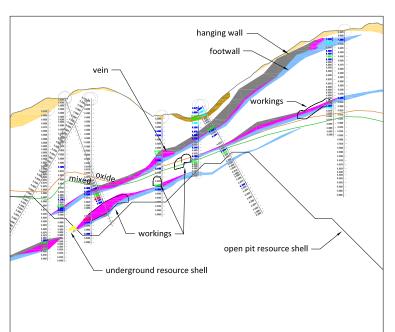
19-Oct-20 Section 11.dwg

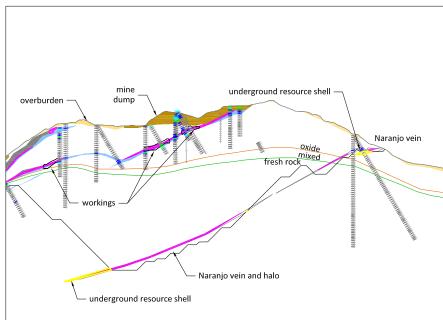
San Albino Vein

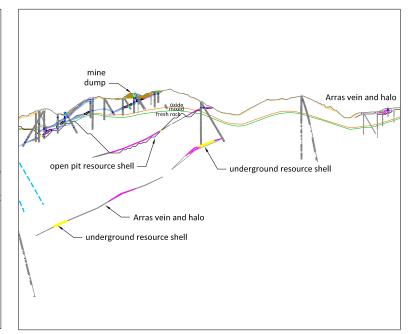
San Albino Vein

Naranjo Vein









Company Project SAN ALBINO PROJECT NUEVA SEGOVIA, NICARAGUA Figure 14.4 Cross Section 16 Showing San Albino Project Veins, Underground Workings, and Resource Shells Legend drill-hole collar and trace, gold assays (see legend in drawing) historical workings

Consultant



19-Oct-20 Section 16.dwg



# 14.4 Density

There are 2,094 rock density measurements determined for rocks from the San Albino Deposit. Most density samples were collected from unmineralized country rock, but recently more density samples of vein and halo material were also taken and measured. MDA subdivided density measurements based on material type, including vein and halo categories, and whether or not a material was oxidized, mixed oxidized or fresh (the term used by Mako for unoxidized rock). Taking these data into account, MDA summarizes the densities of different materials in Table 14-4. The values assigned to the resource block model are presented in Table 14-5.

Table 14-4 Descriptive Statistics of Density Data by Vein and Domain

	Valid	Median	Mean	Std Dev	CV	Minimum	Maximum	Units
Arras - Fresh Rock	9	2.63	2.61	0.07	0.03	2.48	2.71	g/cm3
Arras - Oxide	22	2.43	2.40	0.21	0.09	2.00	2.69	g/cm3
Naranjo - Fresh Rock	3	2.64	2.77	0.24	0.09	2.63	3.04	g/cm3
Naranjo - Oxide	1	2.54	2.54	0.00	0.00	2.54	2.54	g/cm3
San Albino - Fresh Rock	53	2.65	2.65	0.13	0.05	2.26	3.12	g/cm3
San Albino - Oxide	67	2.52	2.49	0.19	0.08	1.96	2.86	g/cm3
El Jobo - Fresh Rock	none							g/cm3
El Jobo - Oxide	2	2.12	2.15	0.04	0.02	2.12	2.18	g/cm3
Miscellaneous - Fresh Rock	6	2.77	2.77	0.36	0.13	2.26	3.38	g/cm3
Miscellaneous - Oxide	none							g/cm3

	Valid	Median	Mean	Std Dev	CV	Minimum	Maximum	Units
Arras Halo - Fresh Rock	4	2.66	2.66	0.11	0.04	2.53	2.81	g/cm3
Arras Halo - Oxide	32	2.42	2.40	0.19	0.08	2.03	2.68	g/cm3
Naranjo Halo - Fresh Rock	2	2.34	2.43	0.13	0.05	2.34	2.52	g/cm3
Naranjo Halo - Oxide	2	2.23	2.37	0.20	0.08	2.23	2.51	g/cm3
San Albino footwall - Fresh Rock	12	2.55	2.58	0.12	0.05	2.41	2.81	g/cm3
San Albino footwall - Oxide San Albino hanging wall - Fresh	38	2.40	2.38	0.23	0.10	1.71	2.72	g/cm3
Rock	8	2.56	2.57	0.20	0.08	2.18	2.80	g/cm3
San Albino hanging wall - Oxide	18	2.40	2.43	0.19	0.08	2.11	2.78	g/cm3

	Valid	Median	Mean	Std Dev	CV	Minimum	Maximum	Units
Country Rock- Fresh Rock	635	2.65	2.64	0.17	0.06	2.05	4.09	g/cm3
Country Rock - Oxide	1,067	2.43	2.40	0.19	0.08	1.50	3.66	g/cm3

Note: Oxide includes mixed material (oxide and sulfide); Std Dev = standard deviation; CV = coefficient of variation



**Table 14-5 Assigned Density Values** 

Tubic 14 5 Hooighed Delisity	7 332 32 32
Vein Name	g/cm <sup>3</sup>
Overburden	1. 80
Dumps	1. 80
Oxide country rock	2.42
Fresh country rock	2.65
Oxide halo	2.42
Fresh halo	2.65
Miscellaneous vein oxide	2.50
Miscellaneous vein fresh	2.65
San Albino vein oxide	2.50
San Albino vein fresh	2.65
Naranjo vein oxide	2.50
Naranjo vein fresh	2.65
Arras vein oxide	2.42
Arras vein fresh	2.62

Note: El Jobo vein is assigned along with San Albino vein.

# 14.5 Core Recovery and Reverse-Circulation Down-Hole Contamination

During the site visit the authors observed Mako's core recovery measurement method and found it to be correct. At a project level, core recovery is considered average. Core recovery based on domain type is presented in Table 14-6. The association of relatively high-grade mineralized veins with shear zones makes it particularly important to assess sample recovery because difficult drilling conditions and lower recoveries commonly are encountered in fault zones in general, and the mineralization at the San Albino Deposit specifically. Mineralized domains consistently yielded lower core recovery than the country rock.

**Table 14-6 Core Recovery** 

Domain	Valid Samples	Median	Mean	Standard Deviation	cv	Minimum	Maximum
Arras vein	162	82%	75%	23%	0.3	0%	100%
Arras halo	365	83%	77%	22%	0.3	0%	100%
Naranjo vein	27	83%	76%	20%	0.3	35%	99%
Naranjo halo	58	86%	76%	22%	0.3	11%	99%
San Albino footwall	640	84%	77%	22%	0.3	0%	100%
San Albino vein	504	85%	73%	29%	0.4	0%	100%
San Albino hanging wall	398	87%	79%	22%	0.3	0%	100%
El Jobo	15	81%	82%	11%	0.1	61%	98%
Miscellaneous vein(s)	51	93%	88%	13%	0.2	40%	100%
Country rock	47,862	92%	85%	17%	0.2	0%	100%



An analysis of gold and silver grades by core recovery for San Albino vein and halo was completed. There is little apparent relationship between gold and silver grades and core recovery. However, both gold and silver grades show greater variability at or below 45% core recovery. Consequently, ninety samples with core recoveries less than 45% were coded as not usable.

Several phases of RC drilling were completed. The results appear reasonable although there is a small amount of down-hole contamination magnifying the apparent footwall thickness. MDA removed those samples from the database that were deemed to be *potentially* contaminated.

#### 14.6 Other 3D Models

# 14.6.1 Overburden, Oxide and Fresh Rock

Mako provided detailed drill-hole logging data that includes assignment of fresh (unoxidized) rock, mixed or transitional rock, and oxidized rock. These data were used to build cross-sectional interpretations, which in turn were used to build 3D surfaces. By far, volumetrically fresh rock dominates, the mixed zone is thin (absent to about 5m thick and averaging a few meters thick) and the remainder is oxidized. The oxidized rock extends from the surface and is usually 20m to 30m thick. The mixed zone and oxidized zone can follow the mineralized structures, as would be expected. The qualitative logging data is augmented by quantitative geochemical data. Variations in sulfur concentrations in drill hole samples helped define and support the interpretation of the oxide boundaries and clearly show the weathering. Low sulfur values correlate with logging of oxide and mixed zones. Sulfur values are an order of magnitude lower in the oxidized zone. Iron and calcium concentrations show reasonable correlation to the logged oxidation state, but these elements define a more diffuse contact than either the logging or sulfur values. Figure 14.3 gives an example of the oxidation surfaces. The base of overburden was also interpreted from hole-to-hole on the cross sections and a 3D surface was built for that, too.

## **14.6.2 Mine Dumps**

Make previously interpreted a solid of the historical mine waste dumps. This was modified by MDA based on data from drilling, selected trenches, and a topographic survey of the toes of the dumps. Figure 14.5 shows these mine dumps. There are about 140,000 tonnes of historical mine dump material around the San Albino Deposit excluding the Arras vein and assuming a density value of 1.8g/cm<sup>3</sup>. The 3D mine dump solids were used to code drill hole and channel samples, which in turn were used to estimate the average dump grades.



Note: yellow solids represent differnt generations of historical mine dumps at San Albino Client Project SAN ALBINO PROJECT Nueva Segovia, Nicaragua INING CORP Consultant Title San Albino Mine Dumps MINE DEVELOPMENT ASSOCIATES Projection: UTM WGS84 Zone 16N A Division of RESPEC Date 13 October 2020

Figure 14.5 3D Perspective View of the San Albino Mine Dumps

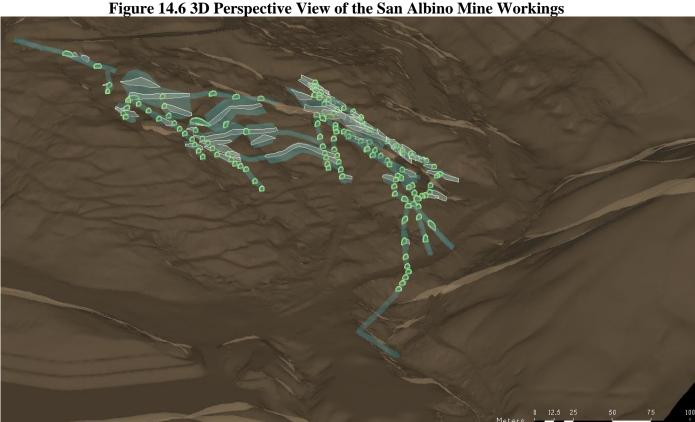
(different shades only denote different mine dumps)

# 14.6.3 Historical Underground Workings

Mako provided MDA with 3D solids representing the underground workings at the historical San Albino mine and had identified a discrepancy between reported underground production tonnage versus tonnage estimates based on surveyed mined voids and mine waste dumps. Mako's estimated volume of underground workings from historical level plans and other maps is about one fifth of that based on reported historical production. It is acknowledged that the historical production is poorly documented, which could account for some of this discrepancy. Consequently, these differences were addressed by adding or modifying modeled underground workings based on where drill holes hit voids, had no core recovery, or had logged "wood" or "mine fill". MDA began with Mako's model of the workings and modified those very slightly to respect the drill data, and then built 3D models of stopes. MDA's 3D perspective of the underground workings is given in Figure 14.6 MDA estimates that approximately 87,000 tonnes of material were historically mined based on all the modeled underground workings



including the historical development at San Albino. A polygonal estimate of material mined from MDA's model of the workings, and assuming no dilution of the vein material, totals 45,800 tonnes grading 18.7g Au/t and 29g Ag/t, for about 27,500oz of gold and 43,000oz of silver. This correlates to reported production of 35,000 imperial tons likely around 11g Au/t. Reported production is commonly less than actual production, and the actual historical production from the old San Albino mine is probably higher.



Note: light green polygons show the historical workings as modeled by Mako in cross-sections; green solids show the updated

historical workings model created by MDA; newly defined stopes modeled by MDA are shown as white polygons.

# 14.7 Assay Capping and Sample Composites

Capping of samples was done prior to compositing. Details of capping levels and number of samples are given in Table 14-7. Capping levels were determined considering coefficients of variation, cumulative probability plots, and outlier sample locations. Descriptive statistics of the composite samples are given in Table 14-8. Because high-grade material likely is represented by volumes of ore-car size, capping was rather harsh in the dumps.

Capped drill-hole and channel-sample assays were composited to a length of 1.0m. The composite lengths are 1.0m to support a resource block dimension of one meter. The majority of sample lengths are one meter or less in the veins and halos but not all are 1.0m or less in length, so some de-compositing has also taken place. Mr. Ristorcelli evaluated iterations of the block models using 1.0m and 1.5m composites, and the estimate performed better using 1.0m composite intervals favoring the estimation results over de-



compositing drill data. In the country rock, about half of the samples are one-meter length or shorter, and about half are longer than one meter. Therefore, de-compositing was more extensive. As the country rock is by far unmineralized, with only a few random intersections with gold grades locally, decompositing is not material to the resource estimate.

Table 14-7 Capping Grades and Number of Samples by Vein and Domain

Domain	Au Capping level (g/t)	Number capped	Ag Capping level (g/t)	Number capped
Arras vein	100	7	150	7
Arras halo	10	2	30	7
Naranjo vein	65	5	80	5
Naranjo halo	none	none	20	1
San Albino footwall	7	9	25	13
San Albino vein	100	7	150	5
San Albino hanging wall	4	15	22	9
El Jobo vein	none	none	none	none
Miscellaneous veins	7	23	30	15
Country Rock	3	188	10	209
Dumps	25	42	70	21



Table 14-8 Descriptive Statistics of Composites by Vein and Domain

			Α	rras Vein							
	Valid	Median	Mean	Std Dev	CV	Minimum	Maximum	Units			
Au	698	7.65	14.30	19.26	1.35	0.04	212.69	g/t			
Au Capped	698	7.65	13.91	16.71	1.20	0.04	100.00	g/t			
Ag	693	19.00	27.23	28.73	1.06	0.40	204.20	g/t			
Ag Capped	693	19.00	26.90	27.21	1.01	0.40	150.00	g/t			
			Α	rras Halo							
	Valid	Median	Mean	Std Dev	CV	Minimum	Maximum	Units			
Au	1,189	0.31	0.72	1.26	1.76	0.01	15.23	g/t			
Au Capped	1,189	0.31	0.70	1.14	1.61	0.01	10.00	g/t			
Ag	1,184	1.70	3.38	5.13	1.52	0.05	67.10	g/t			
Ag Capped	1,184	1.70	3.29	4.44	1.35	0.05	30.00	g/t			
			Na	ranjo Vein							
	Valid	Median	Mean	Std Dev	CV	Minimum	Maximum	Units			
Au	121	13.80	20.99	20.82	0.99	0.06	89.87	g/t			
Au Capped	121	13.80	20.20	18.69	0.93	0.06	65.00	g/t			
Ag	121	19.50	29.34	32.29	1.10	2.10	193.00	g/t			
Ag Capped	121	19.50	26.27	21.40	0.81	2.10	80.00	g/t			
Naranjo Halo											
	Valid	Median	Mean	Std Dev	CV	Minimum	Maximum	Units			
Au	170	0.37	0.77	0.86	1.11	0.03	3.73	g/t			
Au Capped	170	0.37	0.77	0.86	1.11	0.03	3.73	g/t			
Ag	169	1.60	2.64	3.22	1.22	0.15	24.26	g/t			
Ag Capped	169	1.60	2.60	3.00	1.16	0.15	19.90	g/t			
				bino Footwa							
	Valid	Median	Mean	Std Dev	CV	Minimum	Maximum	Units			
Au	930	0.31	0.80	2.04	2.55	0.02	51.54	g/t			
Au Capped	930	0.31	0.73	1.08	1.48	0.02	7.00	g/t			
Ag	921	2.28	4.47	15.49	3.46	0.15	423.00	g/t			
Ag Capped	921	2.28	3.66	4.18	1.14	0.15	25.00	g/t			
				Albino Vein							
	Valid	Median	Mean	Std Dev	CV	Minimum	Maximum	Units			
Au	750	9.42	16.25	18.16	1.12	0.05	136.00	g/t			
Au Capped	750	9.42	16.03	17.08	1.07	0.05	100.00	g/t			
Ag	750	17.90	26.42	25.52	0.97	0.30	177.00	g/t			
Ag Capped	750	17.90	26.35	25.17	0.96	0.30	150.00	g/t			
				no Hanging V				1			
_	Valid	Median	Mean	Std Dev	CV	Minimum	Maximum	Units			
Au	635	0.33	0.78	1.58	2.03	0.02	20.40	g/t			
Au Capped	635	0.33	0.68	0.86	1.26	0.02	4.00	g/t			
Ag	634	1.60	3.03	5.06	1.67	0.05	49.30	g/t			
Ag Capped	634	1.60	2.79	3.50	1.25	0.05	22.00	g/t			



# Table 14-8 Descriptive Statistics of Composites by Vein and Domain (continued) El Jobo

	Valid	Median	Mean	Std Dev	cv	Minimum	Maximum	Units
Au	42	0.19	0.69	2.05	2.97	0.01	10.90	g/t
Au Capped	42	0.19	0.69	2.05	2.97	0.01	10.90	g/t
Ag	42	0.90	2.12	3.91	1.84	0.15	24.60	g/t
Ag Capped	42	0.90	2.12	3.91	1.84	0.15	24.60	g/t

#### **Miscellaneous Veins**

	Valid	Median	Mean	Std Dev	CV	Minimum	Maximum	Units
Au	75	1.39	8.91	18.06	2.03	0.05	107.82	g/t
Au Capped	75	1.39	2.81	2.74	0.98	0.05	7.00	g/t
Ag	75	4.80	13.68	19.73	1.44	0.05	84.80	g/t
Ag Capped	75	4.80	9.51	9.91	1.04	0.05	30.00	g/t

#### **Country Rock**

	Valid	Median	Mean	Std Dev	CV	Minimum	Maximum	Units
Au	52,447	0.01	0.07	2.51	34.90	0.00	545.96	g/t
Au Capped	52,447	0.01	0.04	0.21	5.18	0.00	3.00	g/t
Ag	52,405	0.40	0.69	10.65	15.52	0.05	1969.00	g/t
Ag Capped	52,405	0.40	0.56	0.84	1.52	0.05	10.00	g/t

## Workings

	Valid	Median	Mean	Std Dev	CV	Minimum	Maximum	Units
Au	28	5.58	14.28	19.66	1.38	0.01	63.10	g/t
Au Capped	28	4.00	2.50	1.74	0.70	0.01	4.00	g/t
Ag	28	14.90	21.44	17.44	0.81	0.20	60.00	g/t
Ag Capped	28	14.90	20.03	15.30	0.76	0.20	40.00	g/t

#### **Dumps**

	Valid	Median	Mean	Std Dev	CV	Minimum	Maximum	Units
Au	1,357	1.56	5.74	12.78	2.23	0.00	136.40	g/t
Au Capped	1,357	1.56	4.49	6.73	1.50	0.00	25.00	g/t
Ag	1,357	4.70	11.70	20.98	1.79	0.05	212.00	g/t
Ag Capped	1,357	4.70	10.74	15.76	1.47	0.05	70.00	g/t

## Overburden

	Valid	Median	Mean	Std Dev	CV	Minimum	Maximum	Units
Au	1,936	0.02	0.15	1.58	10.90	0.00	46.38	g/t
Au Capped	1,936	0.01	0.07	0.25	3.40	0.00	2.00	g/t
Ag	1,933	0.15	2.33	70.25	30.20	0.05	3086.20	g/t
Ag Capped	1,933	0.15	0.65	1.87	2.88	0.05	20.00	g/t



#### 14.8 Gold and Silver Grade Estimation

The block model is rotated in a horizontal plane 40° clockwise, and the blocks are 2m along vein strike, by 1m vertical, by 1m across strike. Four estimates for gold and silver each were completed: polygonal, nearest neighbor ("NN"), inverse distance to the third power ("ID³"), and kriged. With the exception of the polygonal method, each of these types of estimates was run almost two-dozen times in order to optimize estimation parameters and provide better resource estimates.

The San Albino Deposit was divided into six broad estimation areas to control and vary the search orientation and anisotropy in estimation in different portions of the deposit (see Table 14-9). The six estimation areas to guide the estimate are based on a generalized orientation of the vein-controlling shear zones.

**Table 14-9 Estimation Areas – Search Ellipse Orientations** 

Area	Rotation Azimuth	Dip
1	130°	-15°
2	130°	-25°
3	130°	-30°
4	130°	0°
5	130°	-25°
6	130°	-40°

One single estimation pass was run for each of the halo and vein domains in each of the six estimation areas. The search distance was set to "fill" all blocks coded to veins and halos. In the San Albino vein, about half of the blocks' grade estimates were based on samples that were ≤10m away, and 85% of all blocks were located within 30m of a composite sample. About 1.5% if the blocks' grades are based solely on channel samples and 92% are based solely on drilled sample data. The areas outside modeled geologic and mineral domains were estimated in one single orientation. The maximum search distance outside the domains was 30m from composites, but a very stringent pullback on "higher" gold grades was used. A minimum of two composites was required to estimate a block outside modeled domains, compared to one within domains. Estimation parameters are given in Table 14-10 and Table 14-11.



Table 14-10 Estimation Parameters for Gold in San Albino Vein, Halo and Outside Domains

(for all rotations/dip/tilt and search distance values, see Table 14-9)

(for all rotations/dip/tilt and search distance values, see Table 14-9)						
Description	Parameter					
Vein Domain						
Search: San Albino; all others	quadrant / no restriction					
Samples (minimum-maximum per hole) San Albino	1 - 2					
Samples: maximum San Albino / Narjano / Arras / El Jobo / Miscellaneous	8/8/6/8/8					
Rotation/Dip/Tilt (variogram and searches): (see Table 14-9)	varies by estimation area					
Search (m): major/semimajor/minor (perpendicular) all except	90m / 90m / 22.5m*					
El Jobo	24m / 24m / 6m					
Inverse-distance power (except those below)	3					
Naranjo	2					
High-grade restrictions (grade in g/t and distance in m) San Albino	20 / 20					
Naranjo	none					
Arras	20 / 30					
El Jobo	2/3					
Miscellaneous	5 / 15					
Halo Domain						
Search: San Albino / all others	quadrant / no restriction					
Samples (minimum-maximum per hole) San Albino; all others	1 – 3; 1 – 2					
Samples: maximum San Albino / Narjano / Arras / El Jobo / Miscellaneous	12/10/10/8/8					
Rotation/Dip/Tilt (variogram and searches): (see Table 14-9)	varies by estimation area					
Search (m): major/semimajor/minor (perpendicular)	90m / 90m / 22.5m					
Inverse-distance power (except those below)	3					
High-grade restrictions (grade in g/t and distance in m) San Albino Footwall	2/4					
San Albino Hanging Wall	1.5 / 4					
Naranjo	1 / 4					
Arras	2/4					

Outside Domains					
Samples: minimum-maximum-maximum per hole	2 – 10 – 2				
Rotation/Dip/Tilt (variogram and searches):	310 / -20 / 0				
Search (m): major/semimajor/minor (vertical)	30 / 30 / 10				
Inverse distance power	3				
High-grade restrictions (grade in g/t and distance in m)	0.2 / 3				

Dumps					
Samples: minimum-maximum-maximum per hole	1 – 8 – 2				
Rotation/Dip/Tilt (variogram and searches):	0/0/0				
Search (m): major/semimajor/minor (vertical)	30 / 30 / 10				
Inverse distance power	4				
High-grade restrictions (grade in g/t and distance in m)	2.5 / 4				

<sup>\*</sup> Effective search distances are controlled by the vein name, domain and the number of samples per hole; the thin veins, number of samples per hole, and vein coding would restrict searches greatly and if the search distances expanded, it would be immaterial to the estimate.



Table 14-11 Estimation Parameters for Silver in San Albino Vein, Halo and Outside Domains

(for all rotations/dip/tilt and search distance values, see Table 14-9)

Description	Parameter				
Vein Domain					
Search: San Albino ; all others	quadrant / no restriction				
Samples (minimum-maximum per hole) San Albino; all others	1 - 3; 1 - 2				
Samples: maximum San Albino / Narjano / Arras / El Jobo / Miscellaneous	12/8/6/8/8				
Rotation/Dip/Tilt (variogram and searches): (see Table 14-9)	varies by estimation area				
Search (m): major/semimajor/minor (perpendicular) all except	90m / 90m / 22.5m				
El Jobo	24m / 24m / 6m				
Inverse-distance power	3				
High-grade restrictions (grade in g/t and distance in m) San Albino	40 / 40				
Naranjo	none				
Arras	none				
El Jobo	10/3				
Miscellaneous	10 / 15				
Halo Domain					
Search: San Albino / all others	quadrant / no restriction				
Samples (minimum-maximum per hole) San Albino and Naranjo; all others	1 - 3; 1 - 2				
Samples: maximum San Albino / Narjano / Arras / El Jobo / Miscellaneous	12/12/10/8/8				
Rotation/Dip/Tilt (variogram and searches): (see Table 14-9)	varies by estimation area				
Search (m): major/semimajor/minor (perpendicular)	90m / 90m / 22.5m				
Inverse-distance power (except those below)	3				
High-grade restrictions (grade in g/t and distance in m) San Albino Footwall	6 / 4				
San Albino Hanging Wall	7 / 4				
Naranjo	7 / 4				
Arras	5 / 4				

Outside Domains					
Samples: minimum-maximum per hole 2 - 10 - 2					
Rotation/Dip/Tilt (variogram and searches):	310 / -20 / 0				
Search (m): major/semimajor/minor (vertical)	30 / 30 / 10				
Inverse distance power	3				
High-grade restrictions (grade in g/t and distance in m)	0.2 / 3				

Dumps					
Samples: minimum-maximum-maximum per hole	1 - 8 - 2				
Rotation/Dip/Tilt (variogram and searches):	0/0/0				
Search (m): major/semimajor/minor (vertical)	30 / 30 / 10				
Inverse distance power	4				
High-grade restrictions (grade in g/t and distance in m)	2.5 / 4				

<sup>\*</sup> Effective search distances are controlled by the vein name, domain and the number of samples per hole; the thin veins, number of samples per hole, and vein coding would restrict searches greatly and if the search distances expanded, it would be immaterial to the estimate.



#### 14.9 Mineral Resources

For reporting, technical and economic factors likely to influence the "reasonable prospects for eventual economic extraction" were evaluated using the best judgement of the author responsible for this section of the report. For evaluating the open-pit potential, a series of optimized pits were run using variable gold prices and parameters. The accepted mining cost was \$2/t, processing cost \$60/t, G&A cost \$5/t and metallurgical recoveries were 95% and 70% for gold and silver, respectively. For evaluating the potential for underground mining, a series of stope optimizations were run at variable cutoffs and for the reporting cutoff grade an average mining cost of \$70/t, processing cost of \$60/t and G&A of \$10/t were assumed. The factors used in defining cutoff grades are based on a gold price of US\$1,750/oz.

Table 14-13, Table 14-14, Table 14-15, and Table 14-16 present the estimates of the Measured, Indicated and Inferred resources at San Albino. Classification of the resources considered adequacy and reliability of sampling, geologic understanding, results of quality control analyses, geologic complication, and apparent grade continuity. A Measured classification was permitted only in the San Albino vein, because there is a very good understanding of the San Albino Deposit geology and because there is extensive drilling and channel sampling. Indicated resources were permitted only in the San Albino and Arras veins. Because Naranjo is poorly understood, it has only Inferred resources, but those, like all the Inferred, will most likely be upgraded with additional drilling. El Jobo and other ("miscellaneous") veins are either inadequately drilled or lack drill-supported continuity, and are classified as Inferred. Workings at Arras are likely substantially underreported so an area around suspected workings has been classified as Inferred. Any block that intersects modeled workings has been classified as Inferred, in addition to the reduction of tonnes for historical mining. Table 14-12 presents the criteria for classification.

The author has used his judgment with respect to the technical and economic factors likely to influence the "prospects for eventual economic extraction" and the estimates listed in those tables do fulfill that requirement. The San Albino Deposit reported mineral resources are based on potential open pit as well as potential underground mining scenarios.

The resources potentially minable by open pit include a 0.5m rind of dilution along the hanging wall and footwall (Table 14-13). Effectively, all estimated vein material is above cutoff so all vein material and the 1m of total dilution is the reported resource because the author assumes that selective mining cannot be done to better than 0.5m on the upper and lower margins of all veins. If mining selectivity can be better than the total 1.0m, then the potentially minable resource will change to higher cutoff grades as shown in Appendix A.

The resources potentially minable by underground methods are presented in Table 14-14. The underground resources are reported at a cutoff of 2.5g Au/t and lie within optimized stopes.

There are estimated resources in the historic mine dumps, all of which are classified as Inferred because of the difficulty in estimating mine-dump material. These are presented in Table 14-15.

The total resources potentially minable by open-pit and potentially minable by underground methods, as well as the dumps, are presented in Table 14-16. Additional breakdowns of tonnes, grade and ounces by deposit are presented in Appendix A. Cross sections of the San Albino and Arras veins for gold and silver are presented in Figure 14.7 and Figure 14.8.



**Table 14-12 Mineral Resource Classification** 

Description Description	Parameter
Measured (in San Albino vein only)	
In domains and	
Minimum holes; minimum composites; maximum distance to closest comp	2; NA; 10m
or	
Minimum holes; minimum composites; maximum distance to closest comp	2; NA; 5m
and	
Average distance of all composites used to estimate the block	<25m
and	
Block is influenced more by drill holes than by channel samples	
Indicated (in San Albino and Arras veins	only)
In domains and	
Minimum holes; minimum composites; maximum distance to closest comp	3; NA; 35m
or	
Minimum holes; minimum composites; maximum distance to closest comp	2; 3; 25m
or	
Minimum holes; minimum composites; maximum distance to closest comp	1; 2; 15m
and	
Average distance of all composites used to estimate the block	<60m
and	
Block is influenced more by drill holes than by chan	nel samples
Inferred in Domains	
Any block within the domains not classified as Measure or Indicated or interest.	ersecting workings and all dumps,
Inferred outside Domains	
Number of composites	2
Range to closest composite (m)	20
Note that there is an extreme restriction limiting the projection of high grades	



Table 14-13 All Veins in San Albino Deposit: Open-Pit Resources

Open Pit								
	Measured							
	Tonnes	g Au/t	Oz Au	g Ag/t	Oz Ag			
Fully Diluted	114,700	11.78	43,400	17.5	64,700			
	Indicated							
Tonnes g Au/t Oz Au g Ag/t Oz Ag								
Fully Diluted	196,200	8.25	52,000	15.6	98,500			
		Measured an	d Indicated					
	Tonnes g Au/t Oz Au g Ag/t Oz Ag							
Fully Diluted	310,900	9.54	95,400	16.3	163,200			
Inferred								
Tonnes g Au/t Oz Au g Ag/t Oz Ag								
Fully Diluted	226,700	8.50	62,000	14.1	102,400			

Table 14-14 All Veins in San Albino Deposit: Underground Resources

Underground							
		Mea	sured				
Cutoff (g Au/t)	Tonnes	g Au/t	Oz Au	g Ag/t	Oz Ag		
2.5	500	10.20	100	28.9	400		
	Indicated						
Cutoff (g Au/t)	Tonnes	g Au/t	Oz Au	g Ag/t	Oz Ag		
2.5	230,100	11.24	83,100	18.9	140,100		
	N	1easured a	nd Indicated				
Cutoff (g Au/t)	Tonnes	g Au/t	Oz Au	g Ag/t	Oz Ag		
2.5	230,600	11.22	83,200	19.0	140,500		
Inferred							
Cutoff (g Au/t)	Tonnes	g Au/t	Oz Au	g Ag/t	Oz Ag		
2.5	116,100	8.42	31,400	13.7	51,200		

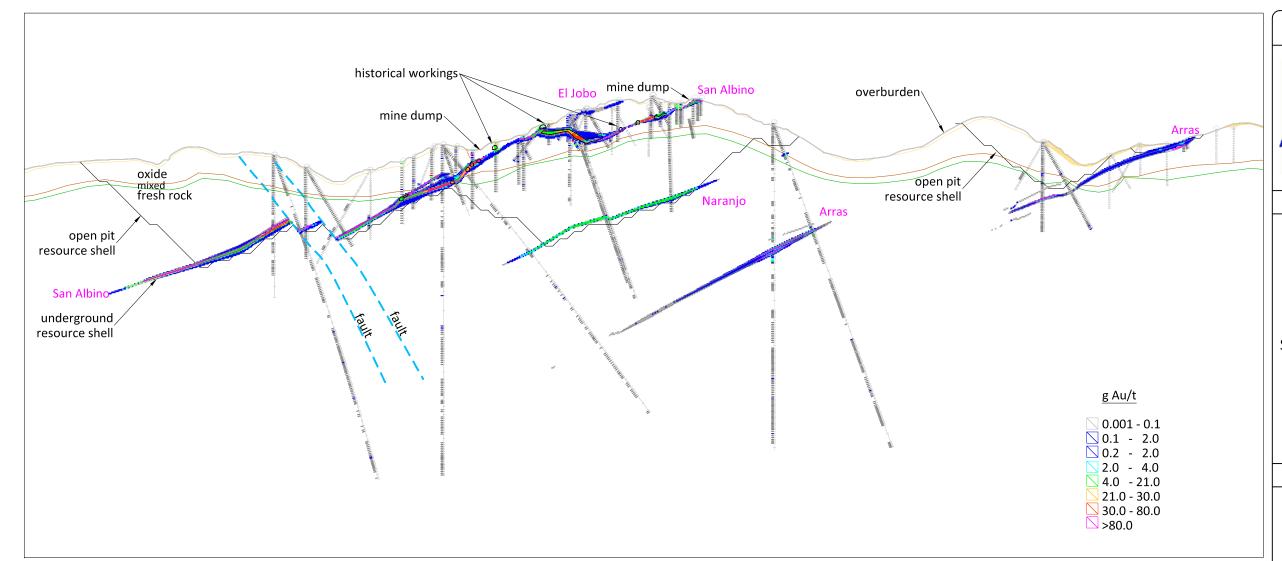
**Table 14-15 San Albino Deposit: Inferred Mine-Dump Resources** 

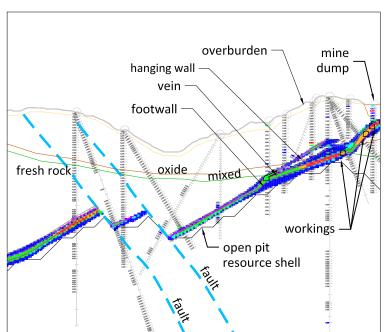
Dumps, all Inferred					
Cutoff (g Au/t) Tonnes g Au/t Oz Au g Ag/t Oz Ag					Oz Ag
1.0	78,800	2.95	7,500	6.7	17,000

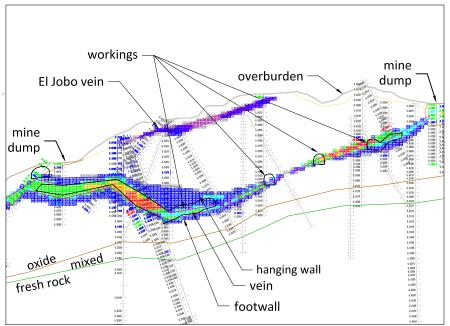


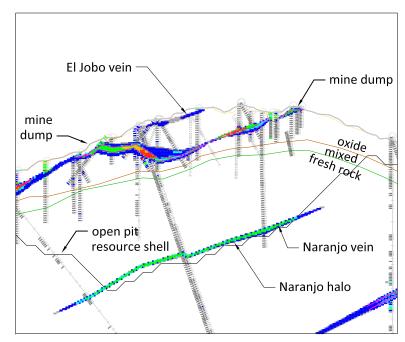
# Table 14-16 All Veins in San Albino Deposit: Open-Pit, Underground and Dump Resources

Open Pit and Underground and Dumps					
All Measured					
Cutoff (g Au/t	Tonnes	g Au/t	Oz Au	g Ag/t	Oz Ag
various	115,200	11.74	43,500	17.6	65,100
All Indicated					
Cutoff (g Au/t	Tonnes	g Au/t	Oz Au	g Ag/t	Oz Ag
various	426,300	9.86	135,100	17.4	238,600
All Measured and Indicated					
Cutoff (g Au/t	Tonnes	g Au/t	Oz Au	g Ag/t	Oz Ag
various	541,500	10.21	177,800	17.4	303,700
All Inferred					
Cutoff (g Au/t	Tonnes	g Au/t	Oz Au	g Ag/t	Oz Ag
various	421,600	7.44	100,900	12.6	170,600









Naranjo Vein

Company



Project

SAN ALBINO PROJECT NUEVA SEGOVIA, NICARAGUA

Figure 14.7 Cross Section 11 Showing San Albino Project Veins, Underground Workings, Resource Shells, and **Block Model** 

# Legend

drill-hole collar and trace with gold assays (see legend in drawing)



historical workings

model block with gold block grade (same as drill-hole legend)

#### Consultant

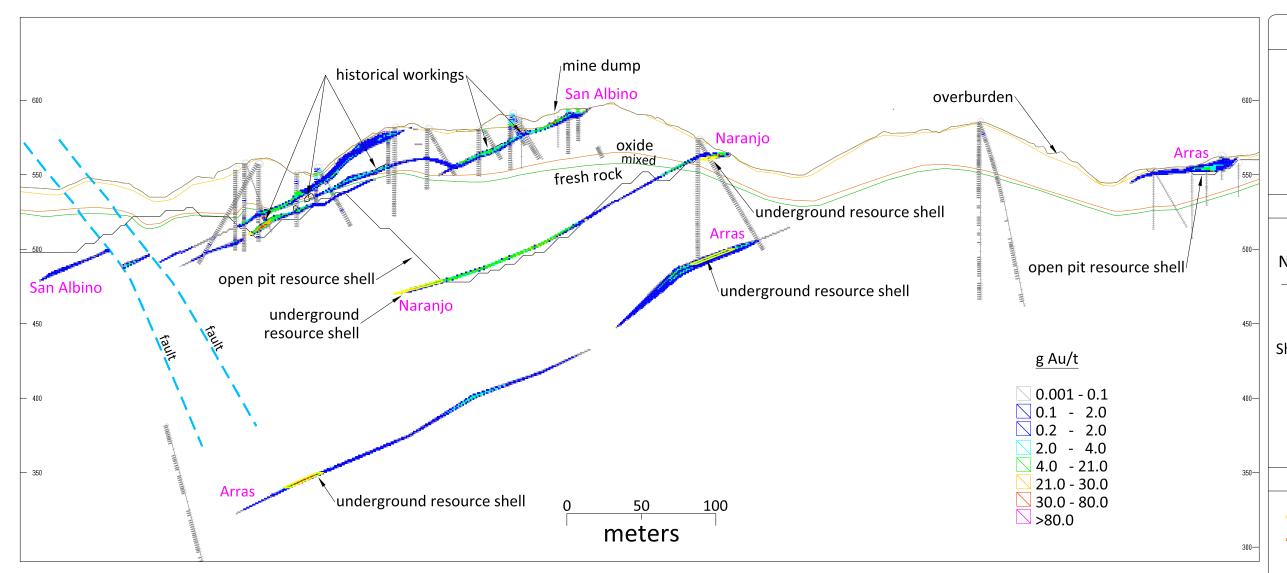


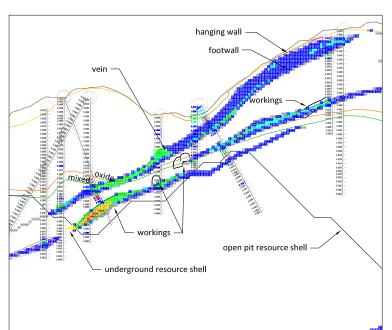
MINE DEVELOPMENT ASSOCIATES

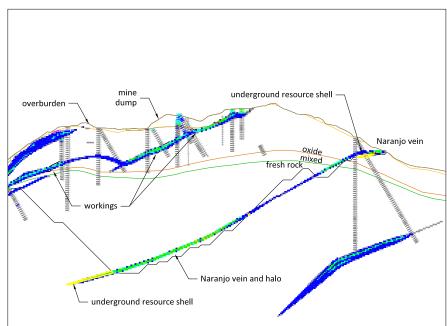
A DIVISION OF **RESPEC** 

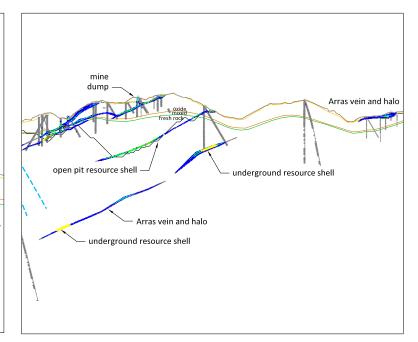
19-Oct-20 Section 11.dwg

San Albino Vein San Albino Vein









Company

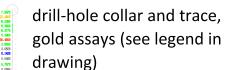


Project

SAN ALBINO PROJECT NUEVA SEGOVIA, NICARAGUA

Figure 14.8
Cross Section 16
Showing San Albino Project Veins,
Underground Workings,
Resource Shells, and
Block Model

# Legend



historical workings

model block with gold block grade (same as drill-hole legend)

#### Consultant



19-Oct-20 Section 16.dwg

San Albino Vein Naranjo Vein Naranjo Vein



#### 14.10 Discussion of Resources

The exploration procedures, sampling and data derived from Mako's work are high quality and can be used to support the resource estimate. Mako's geologic interpretations were sound and required few changes besides more detail for the domain model to be used in controlling the estimate. The deposit's location is predictable in that drilling intersects the structure close to where it is predicted. The veins of the San Albino Deposit are high grade as shown in the resource tables listed above. The estimated undiluted vein grades are 15.0g Au/t, 16.9g Au/t, and 15.4g Au/t for the San Albino, Naranjo, and Arras veins, respectively. These vein grades are consistent for a high-grade vein system, decreasing towards the margins of the veins. The style of mineralization is well understood. The deposits are open ended along strike and down dip.

The author observed Mako's core sampling procedures and found them to be well done with careful consideration paid to reducing sampling bias. Specific methods are discussed in Section 11.1.3. Sampling is generally done on geologic breaks with special attention given to separating quartz veins from the surrounding hanging wall and footwall zones. The Mako geologists are very good at determining general grades of the different portions of the vein, particularly those portions likely to contain very high grades versus those that are low grade. MDA found that high-grade portions of the vein sometimes were included in sample intervals that contained material that may be substantially lower grade. The resulting concealment of the high-grade limits the ability to accurately estimate the spatial extents of the highest-grade zones and creates an inherent risk in the resource estimation. This risk is somewhat mitigated by the closely spaced drilling, though in some areas it did contribute to portions of the resource estimate being classified at a lower confidence level.

When there was some doubt in any of the samples' reliability, they were eliminated from use. One issue with sampling that imparts some risk is the moderate core recovery; however, graphic representations of the grades plotted against core recovery show effectively no differences until reaching around 45% recovery at which point there is high grade variability. Samples with recoveries below 45% were eliminated from use in the estimate. A few low-grade RC samples below the San Albino vein with indications of potential contamination were also eliminated from use in the estimate. And there were quite a few channel samples that were eliminated because their locations were suspect. Mako has since corrected the surveying of those channel samples and they will be suitable for use in future estimations.

Mining dilution is an important factor at the San Albino project in part because the veins are in some places so thin that the dilution can render it uneconomic, but also because the operation requires detailed grade control. In many places the veins have visually distinct hanging wall and footwall contacts, which help with grade control. The estimated resources include approximately 0.5m rind of dilution on the hanging wall and 0.5m rind of dilution the footwall of each vein. The average dilution grade varies from almost zero to up to 0.5g Au/t, depending on whether or not the halo mineralization is present. In all cases, the dilution grade is taken from the estimation and is not a single grade applied globally. It is expected that dilution during underground mining will be greater because of ground conditions, shallow dip, minimum mining height, and less data, and therefore control on locating hanging wall and footwall. The author is reporting full-block-diluted grades for material within the optimized underground stopes at a cutoff of 2.5g Au/t.



Modeling and extracting volumes of underground workings is always difficult in part because full survey data is usually missing. The San Albino Deposit is not an exception. For the San Albino Deposit, the dumps are estimated to contain around 144,000 tonnes of rock. The total estimated amount of material mined from the modeled underground working is 87,000 tonnes at the San Albino vein, which includes stopes and drifts, production, and development workings. In addition to the historical underground workings, there are some historical pit excavations. MDA's block model estimates total diluted material of 68,400 tonnes grading 12.8g Au/t and 21.1g Ag/t for about 28,040oz Au and 36,400oz Ag. MDA's block model of undiluted vein material contains 45,800 undiluted tonnes grading 18.9g Au/t and 29g Ag/t for about 27,900oz Au and 42,700oz Ag, respectively. This correlates to reported production of 31,750 tonnes likely at around 18g Au/t. There remains a shortfall of ~15,000 tonnes, part of which can be explained by the mine dumps, as there are some high grades in the dumps, and in part because of the incomplete underground survey data. Within the total 144,000 tonnes of dump material are an estimated 10,900 tonnes grading 10.28g Au/t and 20.2g Ag/t (Appendix A).

In 2015, P & E estimated resources (Table 6-5) totaled 152,000 Indicated ounces of gold and 787,000 Inferred ounces of gold. The 2020 current estimated resources presented in this Technical Report are materially less than that of P & E with 177,800 Measured plus Indicated ounces and 100,900 Inferred ounces of gold (Table 14-16). In comparing the 2015 and current block models, it was evident that the locations of the 2015 mineralized zones were modeled appropriately with respect to general locations of the principal domains but were generous in thickness and extrapolation. Several of the P & E modeled volumes of mineralized solids have since been drilled. This drilling found that mineralization does not exist in some of the areas that had been interpolated and extrapolated as having mineralization in the 2015 estimate. Therefore, those gold and silver ounces were removed from the estimated resources. Another reason for the difference is that MDA took a more conservative approach to modeling extensions and projections from drill data because the additional drilling completed post-2015 indicated the high-grade mineralization was not as continuous or thick as previously modeled. The 2020 volume of modeled veins was 89% lower compared to the 2015 single domain volumes. The 2020 volume of modeled veins-plus-halo domains were 46% lower compared to the 2015 single domain volumes.

Another and equally important difference between the two resource models is the interpretations of modeled vein. The vein zones (averaging around 15g Au/t) have distinct, sharp-bounded contacts usually within low-grade halos (averaging less than say 0.5g Au/t; Section 14.3). By modeling these domains as one in 2015, namely the 15g Au/t vein and the less than say 0.5g Au/t halos together, the extreme high-grades in the veins, which are in reality confined to the narrow veins, are spread out into the larger volume of the halo, thereby over-estimating metal, albeit at lower grades than exist in the veins proper. For example, P & E modeled zones averaged 2.5m thick while the veins alone are 1.2m thick on average for the majority of the deposit.

The author had some difficulty with the estimate caused by extensive drilling in the higher-grade parts of the deposit. This clustering of high-grade data resulted in the use of a quadrant search to minimize spreading out the high grades. This clustering is clearly demonstrated by the difference in Measured and Indicated grades (Table 14-13, Table 14-14 and Table 14-16). While higher grade in higher-classification material is not unusual, at the San Albino Deposit the effect was exaggerated by their normal exploration and follow-up drilling to better define the higher grades. Given that history, the Indicated material may also increase in grade as those high-grade zones are drilled out.



That clustering of data imparted a complication in estimation in that higher than expected biases were present between the inverse distance, kriged, and nearest-neighbor estimations. Well over a dozen iterations comparing the three interpolation methods were completed prior to arriving at the final reported estimate. The use of mineralization domains to control the estimation decreases this risk substantially. The author verified this reasonableness by visually comparing the interpolated grades in the block model to the mineralization domains modeled using the drilling and channel sample data and evaluating grade distributions graphically. In all cases, the grade, tonnes and ounces were close to the polygonal estimation.

The author compared drill results received after July 1, 2020 and not available for the 2020 resource block model. There were seven new holes with assays in or through projections of the mineralized zones. Four of those holes drilled areas where the geologic and domain models projected no mineralization, and none was found. The other holes intersected mineralization as projected. One of the holes hit the mineralization precisely where it was predicted to be and the drill hole encountered good vein mineralization where the model predicted a low-grade halo. Another drill hole intersected good grade mineralization where adjacent holes intersected lower grades. The location of the intersection was substantially displaced from that anticipated because of two splay faults that offset the mineralized zone. All mineralization around these faults is classified as Inferred because of the lack of certainty of location. The third post-July 1, 2020 drill hole intersected the vein where predicted but encountered better than expected grade.

It is important to note that those ounces currently reported in the resource that have "...reasonable prospects for eventual economic extraction" are not all the ounces estimated at and for San Albino. Figure 14.9 shows these relationships.

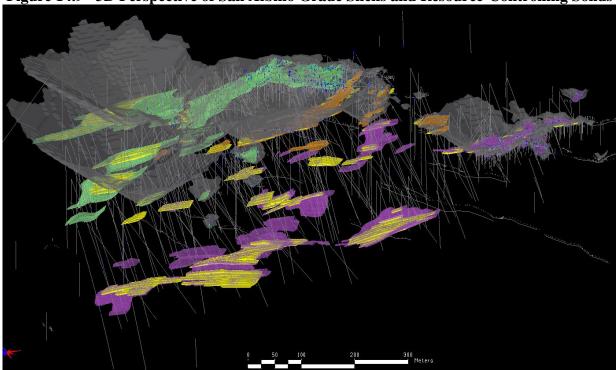


Figure 14.9 3D Perspective of San Albino Grade Shells and Resource-Controlling Solids

Note: Gray is the \$1,750/gold oz pit; green, orange and purple are the 2g Au/t grade shells for San Albino, Naranjo and Arras, respectively; yellow shows the underground potentially economic material; vein material outside the pit and underground shells was estimated but is not reported.



# 23.0 ADJACENT PROPERTIES (ITEM 23)

There is neither commercial production nor serious exploration on adjacent properties that would affect the conclusions or interpretations of this report.



# 24.0 OTHER RELEVANT DATA AND INFORMATION (ITEM 24)

Mako applied for a new concession to the Nicaraguan Ministry of Mines on October 22, 2020. The new concession is contiguous with and will become part of the San Albino property but remains in application as of the Effective Date of this report and has no material impact on the conclusions or interpretations given in this Technical Report.



## 25.0 INTERPRETATION AND CONCLUSIONS (ITEM 25)

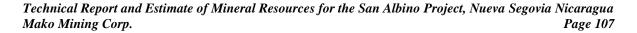
The work done to date at the San Albino project has provided reliable data on which to base resource estimates and future exploration. Mr. Ristorcelli and Mr. Unger reviewed the project data, including Mako's drill-hole database and geologic interpretations, and visited the project site for multiple days in February 2020. Mr. Ristorcelli and Mr. Unger believe that the data provided by Mako, as well as the geological interpretations derived from the data, are accurate and reasonably represent the geology at the San Albino project.

The mineralization at the San Albino project is best interpreted in the context of an "orogenic gold" deposit model (e.g., Goldfarb and Groves, 2015). The veins at the San Albino Deposit share most of the important characteristics of orogenic gold deposits. The gold-bearing veins are hosted in lower greenschist-facies metamorphic rocks and their geometries indicate that veins formed in response to contractional deformation. Other features that are distinctive of orogenic deposits present in the San Albino system include ribbon-textured shear veins containing milky quartz, visible gold, relatively high Au:Ag ratios, low percentages of base metal sulfides including galena and sphalerite, and the presence of placer gold.

The resource estimate took several factors into account. The deposit's location is predictable in that drilling intersects the structure close to where it is predicted, the style of mineralization is well understood, and the deposits are open ended down dip and along strike. Some risk is imparted by the moderate core recoveries observed in the veins. However, there are indications that core recovery did not affect the grades until recoveries dropped below about 45% and those samples were eliminated from use in the estimate. More than normal biases between the inverse distance, kriged and nearest neighbor models was observed in the initial estimate. To better understand the differences, well over a dozen estimates comparing these three estimates were completed with varying estimation parameters prior to choosing the final estimate. In all cases, the grade, tonnes and ounces all were close to the preliminary polygonal estimate.

Classification of the resources considered adequacy and reliability of sampling, geologic understanding, results of quality control analyses, geologic complication, and apparent grade continuity. A Measured classification was permitted only in the San Albino vein, because there is a very good understanding of the San Albino vein geology and because there is extensive drilling and trench channel sampling. Indicated resources were permitted only in San Albino and Arras veins. Because Naranjo is poorly understood, it has only Inferred resources, but those, like all the Inferred, will most likely be upgraded with additional drilling. El Jobo and other ("miscellaneous") veins are either poorly drilled or lack drill-supported evidence of continuity and also are only Inferred. Workings at Arras are likely substantially underreported so an area around suspected workings has been classified as Inferred. Any block that touches modeled workings is classified as Inferred, in addition to reducing tonnes for mining.

Mining dilution is an important factor at the San Albino Deposit in part because the veins are in some places so thin that the dilution can render them uneconomic, but also because the open-pit operation is practicing meticulous grade control. This resource estimate includes approximately one-half-meter rind of dilution on the top and on the bottom of the veins. The dilution grade varies from close to nothing to averaging up to half a gram of gold per tonne (very small and local volumes can have higher grades), depending on whether or not the halo mineralization is present. In all cases, the dilution grade is taken





from the estimate. Unusually, the underground dilution will be larger because of ground conditions, shallow dip, minimum mining height, and less control on locating hanging wall and footwall.

Overall, the San Albino project benefits from a team of mining professionals that have spent multiple years working on the project, as well as a similar narrow vein open pit project. The technical team has shown a commitment to collecting quality data and innovative thinking toward developing the project. The authors are not aware of any significant risks or uncertainties that could reasonably be expected to affect the reliability or confidence in the exploration information as applied to the estimated mineral resources.



# **26.0 RECOMMENDATIONS (ITEM 26)**

The authors believe that the San Albino project is a project of merit and warrants the proposed program and level of expenditures outlined below. The San Albino project contains a series of stacked gold-silver bearing veins hosted in metamorphic rocks. The project should continue to be evaluated on multiple fronts to further characterize the nature of the deposits and seek to expand the size of the resources. The project has multiple target areas at various stages of development that should be advanced simultaneously. The known veins are open down dip and along strike, which suggests significant potential to expand the resources estimated in this report. Additionally, the stacked nature and even distribution of the veins parallel to the regional foliation provide a proven exploration strategy. The cost estimate for the recommended program is presented in Table 26-1.

# 26.1 San Albino, Arras and Naranjo Veins

The mineral resources estimated in the San Albino, Arras, and Naranjo vein systems, detailed in this report, are open down dip and along strike. Additional drilling is needed to convert the Inferred resources to a higher classification and to test their lateral extent. Particular focus should be given to expanding near-surface resources northwest of the proposed open-pit, an area the Mako geologists call the Mine Creek fault. To the east of the current resource area, the Arras veins should be evaluated for additional near surface resource potential. Additionally, the area southwest of the pit should be evaluated for potential additional resources.

#### 26.2 Las Conchitas Area

Exploration work at Las Conchitas should continue with the goal of compiling enough data to complete a resource estimation. This work should include metallurgy and geologic studies to understand the characteristics of the vein systems.

#### 26.3 Other Areas

In 2019 and 2020 Mako acquired the rights to the Potrerillos and La Segoviana concessions (Figure 4.2). Both are adjacent to the San Albino-Murra concession. A comprehensive exploration program is needed to evaluate these concessions and prioritize drill targets. The Potrerillos concession is immediately north of the resources established in this report so exploration work should be concentrated there first, with some work also devoted to the La Segoviana concession. Mapping and sampling of surface outcrops should be followed by channel sampling of trenches and exploration pits. Additionally, the mapping and sampling data collected on the El Jicaro concession, discussed in Section 9.2, should be reevaluated in light of this resource estimation with particular emphasis on the historic El Golfo mine area. Encouraging results from the surface sampling programs should be followed up with core drilling.



Table 26-1 Mako Mining Corp. Cost Estimate for the Recommended Program

Category	Objective	<b>Drilling Meters</b>		USD
	Arras	3,700	\$	555,000
	Arras  San Albino – Northwest of Open-pit  San Albino - Downdip Extension  Arras Veins 2 and 3  SW Pit  Subtotal  Naranjo and Arras Veins  Other Areas  Subtotal  Las Conchitas Resource Definition  Las Conchitas Reporting and Geologic Studies	4,800	\$	720,000
Open Pit Resource	San Albino - Downdip Extension	2,900	\$	432,000
Definition	Arras Veins 2 and 3	5,000	\$	750,000
	SW Pit	6,000	\$	900,000
	Subtotal	22,400	\$	3,357,000
	Naranjo and Arras Veins	15,000	\$	2,250,000
Underground Resource Definition	Other Areas	3,000	\$	450,000
Definition	Subtotal	18,000	\$	2,700,000
	Las Conchitas Resource Definition	10,000	\$	1,500,000
Danas Fatimatian	Las Conchitas Reporting and Geologic Studies		\$	60,000
Resource Estimation	Las Conchitas Metallurgy		\$	100,000
	Subtotal	10,000	\$	1,660,000
	Potrerillos Concession Mapping and Sampling		\$	75,000
	Potrerillos Concession Exploration Drilling	1,500	\$	225,000
Exploration	Arras 3,700  San Albino – Northwest of Open-pit 4,800  San Albino - Downdip Extension 2,900  Arras Veins 2 and 3 5,000  SW Pit 6,000  Subtotal 22,400  Naranjo and Arras Veins 15,000  Other Areas 3,000  Subtotal 18,000  Las Conchitas Resource Definition 10,000  Las Conchitas Reporting and Geologic Studies  Las Conchitas Metallurgy 10,000  Potrerillos Concession Mapping and Sampling Potrerillos Concession Exploration Drilling 1,500  Other Concessions Mapping and Sampling 1,000  Subtotal 2,500  Contingency (~10%)	\$	50,000	
	Other Concessions Exploration Drilling	3,700 4,800 2,900 5,000 6,000 22,400 15,000 3,000 10,000  10,000  1,500  1,000 2,500	\$	150,000
	Subtotal	2,500	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	500,000
	Contingency (~10%)		\$	800,000
	Total	52,900		\$ 9,000,000

### 26.4 Phase II

Success at San Albino, Las Conchitas, and other concessions would be defined, respectively, as finding additional resources, defining a resource, and discovering deposits deserving follow-up drilling. Given success in the above recommended programs, follow-up work would include economic studies on the newly discovered resources at San Albino, a resource estimate for Las Conchitas, and follow up drilling. Approximate costs for those follow up tasks would be \$30,000, \$100,000, and \$1,500,000, respectively. Of course, there is always the chance that new discoveries will support much larger drilling expenditures.



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# 28.0 DATE AND SIGNATURE PAGE (ITEM 28)

Effective Date of report: November 2, 2020

Completion Date of report: November 25, 2020

<u>"Steven J. Ristorcelli"</u> Date Signed:

Steven J. Ristorcelli, C.P.G. November 25, 2020

"Derick L. Unger" Date Signed:

Derick L. Unger, C.P.G.

November 25, 2020

<u>"Ross MacFarlane"</u> Date Signed:

Ross MacFarlane, P. Eng. *November 25, 2020* 



### 29.0 CERTIFICATE OF QUALIFIED PERSONS (ITEM 29)

#### STEVEN RISTORCELLI, C. P. G.

I, Steven Ristorcelli, C. P. G., do hereby certify that I am currently employed as Principal Geologist by Mine Development Associates, Inc., a division of RESPEC, 210 South Rock Blvd., Reno, Nevada 89502.

I am one of the authors of the report entitled "*Technical Report and Estimate of Mineral Resources for the San Albino Project, Nueva Segovia, Nicaragua*" (the "Technical Report"), prepared for Mako Mining Corp. with an Effective Date of November 2, 2020. I take joint responsibility for Section 1 through 10, full responsibility for Section 14, and joint responsibility for Sections 15 through 27, all subject to the comments in Section 3.0.

I graduated with a Bachelor of Science degree in Geology from Colorado State University in 1977 and a Master of Science degree in Geology from the University of New Mexico in 1980. I am a Certified Professional Geologist (#10257) with the American Institute of Professional Geologists.

I have worked as a geologist continuously for 42 years since graduation from undergraduate university. During that time, I have been engaged in the exploration, definition, and modeling of dozens of epithermal gold-silver deposits in North America, Central America and South America, and have estimated the mineral resources for many such deposits.

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

I visited the San Albino project from February 18 through February 21, 2020.

I am independent of Mako Mining Corp. and all their subsidiaries as defined in Section 1.5 of NI 43-101 and in Section 1.5 of the Companion Policy to NI 43-101.

I have had no prior involvement with the property.

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

As of the Effective Date of this report, to the best of my knowledge, information and belief, the parts of this Technical Report that I am responsible for contain all the scientific and technical information that is required to be disclosed to make this Technical Report not misleading.

Dated this 25<sup>th</sup> day November, 2020

"S Ristorcelli"

Signature of Qualified Person Steven Ristorcelli, C. P. G.



# DERICK L. UNGER, C.P.G.

I, Derick Unger, C. P. G., do hereby certify that I am currently employed as Project Geologist by Mine Development Associates, Inc., 210 South Rock Blvd., Reno, Nevada 89502.

I am one of the authors of the report entitled "Technical Report and Estimate of Mineral Resources for the San Albino Project, Nueva Segovia, Nicaragua" (the "Technical Report"), prepared for Mako Mining Corp. with an Effective Date of November 2, 2020. I take joint responsibility for Section 1 through 10, full responsibility for Sections 11 and 12, and joint responsibility for Sections 15 through 27, all subject to the comments in Section 3.0.

I graduated with a Bachelor of Science degree in Geology from Indiana State University in 2005 and a Master of Science degree in Geology from Auburn University in 2008. I am a Certified Professional Geologist (#11927) with the American Institute of Professional Geologists.

I have worked as a geologist continuously since 2007. During that time, I have engaged in the exploration, definition, and modeling of precious and base-metal deposits in North America and have assisted with evaluations of mineral resources for many such deposits.

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

I visited the San Albino project from February 18 through February 21, 2020.

I am independent of Mako Mining Corp. and all their subsidiaries as defined in Section 1.5 of NI 43-101 and in Section 1.5 of the Companion Policy to NI 43-101.

I have had no prior involvement with the property.

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

As of the Effective Date of this report, to the best of my knowledge, information and belief, this Technical Report contains all the scientific and technical information that is required to be disclosed to make this Technical Report not misleading.

Dated this 25th day of November, 2020

"Derick L. Unger"

Signature of Qualified Person Derick Unger



#### ROSS MACFARLANE, P.ENG.

I, Ross MacFarlane, P. Eng., do hereby certify that I am currently employed as Senior Associate Metallurgist by Watts, Griffis and McOuat Limited, 10 King Street East, Suite 300, Toronto, Ontario, M5C 1C3.

I am one of the authors of the report entitled "Technical Report and Estimate of Mineral Resources for the San Albino Project, Nueva Segovia, Nicaragua" (the "Technical Report"), prepared for Mako Mining Corp. with an Effective Date of November 2, 2020. I take joint responsibility for Section 1, and full responsibility for Section 13, all subject to the comments in Section 3.0.

I am a graduate from The Technical University of Nova Scotia with a Bachelor of Engineering. in Mining Engineering in 1973. I am a registered member of "*Professional Engineers of Ontario*" (Member # 28062503), and I have worked as a Mining and Metallurgical Engineer continuously since my graduation from university in 1973.

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

I have not visited the San Albino project.

I am independent of Mako Mining Corp. and all their subsidiaries as defined in Section 1.5 of NI 43-101 and in Section 1.5 of the Companion Policy to NI 43-101.

I have no prior involvement with the property.

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

As of the Effective Date of this report, to the best of my knowledge, information and belief, this Technical Report contains all the scientific and technical information that is required to be disclosed to make this Technical Report not misleading.

Dated this 25<sup>th</sup> day of November 2020

"Ross MacFarlane"

Signature of Qualified Person Ross MacFarlane

DETAILED TABLES OF TONNES, GRADE AND OUNCES, REPORTED RESOURCES

Appendix A Page 1 of 7

	Open Pit							
Measured								
Cutoff Fully Diluted	Tonnes 114,700	MD g Au/t 11.78	Oz Au 43,400	MD g Ag/t 17.5	Oz Ag 64,700			
1.0	108,700	12.39	43,300	18.4	64,200			
1.2	107,300	12.55	43,300	18.6	64,000			
1.4	105,700	12.71	43,200	18.8	63,800			
1.5	104,900	12.80	43,200	18.9	63,700			
1.6	104,200	12.87	43,100	19.0	63,600			
1.8	102,600	13.05	43,000	19.2	63,300			
2.0	101,100	13.21	42,900	19.4	63,000			
2.5	97,400	13.63	42,700	19.9	62,300			
3.0	93,500	14.08	42,300	20.4	61,300			
4.0	85,600	15.06	41,400	21.5	59,100			
5.0	78,200	16.06	40,400	22.6	56,700			
6.0	71,400	17.07	39,200	23.6	54,100			
8.0	58,500	19.29	36,300	25.9	48,800			
10.0	48,500	21.42	33,400	28.2	43,900			

Note: MD is the model grade with expected mining dilution

Indicated							
Cutoff	Tonnes	MD g Au/t	Oz Au	MD g Ag/t	Oz Ag		
Fully Diluted	196,200	8.25	52,000	15.6	98,500		
1.0	175,900	9.14	51,700	17.1	96,900		
1.2	172,300	9.31	51,600	17.4	96,500		
1.4	168,700	9.48	51,400	17.7	95,900		
1.5	166,800	9.57	51,300	17.8	95,700		
1.6	165,200	9.65	51,200	18.0	95,400		
1.8	161,700	9.82	51,100	18.2	94,800		
2.0	158,300	9.99	50,800	18.5	94,200		
2.5	149,300	10.46	50,200	19.2	92,300		
3.0	140,300	10.95	49,400	20.0	90,100		
4.0	121,900	12.08	47,300	21.6	84,600		
5.0	105,900	13.23	45,000	23.2	78,900		
6.0	92,200	14.38	42,600	24.7	73,300		
8.0	69,800	16.76	37,600	27.9	62,600		
10.0	54,000	19.05	33,100	30.6	53,200		

Note: MD is the resource block model grade with expected mining dilution

Appendix A Page 2 of 7

Open Pit									
Measured and Indicated									
Cutoff	Tonnes	MD g Ag/t	Oz Au	MD g Ag/t	Oz Ag				
Fully Diluted	310,900	9.54	95,400	16.3	163,200				
1.0	284,600	10.38	95,000	17.6	161,100				
1.2	279,600	10.56	94,900	17.9	160,500				
1.4	274,400	10.72	94,600	18.1	159,700				
1.5	271,700	10.82	94,500	18.2	159,400				
1.6	269,400	10.89	94,300	18.4	159,000				
1.8	264,300	11.07	94,100	18.6	158,100				
2.0	259,400	11.24	93,700	18.8	157,200				
2.5	246,700	11.71	92,900	19.5	154,600				
3.0	233,800	12.20	91,700	20.1	151,400				
4.0	207,500	13.30	88,700	21.5	143,700				
5.0	184,100	14.43	85,400	22.9	135,600				
6.0	163,600	15.55	81,800	24.2	127,400				
8.0	128,300	17.92	73,900	27.0	111,400				
10.0	102,500	20.18	66,500	29.5	97,100				

Note: MD is the resource block model grade with expected mining dilution

Note: Wib	Inferred								
Cutoff	Tonnes	MD g Au/t	Oz Au	MD g Ag/t	Oz Ag				
Fully Diluted	226,700	8.50	62,000	14.1	102,400				
1.0	207,900	9.22	61,600	15.1	101,100				
1.2	203,900	9.38	61,500	15.4	100,700				
1.4	200,300	9.53	61,400	15.6	100,200				
1.5	198,300	9.61	61,300	15.7	99,900				
1.6	196,400	9.69	61,200	15.8	99,700				
1.8	192,600	9.84	61,000	16.0	99,100				
2.0	188,800	10.00	60,700	16.2	98,400				
2.5	179,800	10.39	60,100	16.7	96,700				
3.0	170,200	10.82	59,200	17.3	94,500				
4.0	152,100	11.70	57,200	18.4	89,800				
5.0	134,600	12.63	54,700	19.6	84,600				
6.0	117,800	13.65	51,700	20.8	78,900				
8.0	90,600	15.66	45,600	23.4	68,200				
10.0	69,200	17.73	39,400	26.2	58,200				

Note: MD is the resource block model grade with expected mining dilution

Appendix A Page 3 of 7

Underground									
Measured									
Cutoff	Tonnes	BD g Au/t	Oz Au	BD g Ag/t	Oz Ag				
1.0	900	5.77	200	17.8	500				
1.2	900	6.14	200	18.9	500				
1.4	800	6.57	200	20.2	500				
1.5	800	6.64	200	20.4	500				
1.6	600	8.39	200	25.0	500				
1.8	600	8.51	200	25.2	500				
2.0	500	9.59	200	27.4	400				
2.5	500	10.20	100	28.9	400				
3.0	400	10.29	100	29.2	400				
4.0	400	11.10	100	31.5	400				
5.0	400	11.38	100	32.1	400				
6.0	300	11.92	100	33.4	400				
8.0	300	13.03	100	36.6	300				
10.0	200	13.88	100	38.8	300				

Note: BD is the resource block model grade with expected UG mining dilution

Indicated								
Cutoff	Tonnes	BD g Au/t	Oz Au	BD g Ag/t	Oz Ag			
1.0	273,600	9.72	85,500	16.6	145,900			
1.2	264,700	10.01	85,200	17.0	145,100			
1.4	258,500	10.22	84,900	17.4	144,400			
1.5	255,400	10.32	84,800	17.5	144,000			
1.6	252,600	10.42	84,600	17.7	143,600			
1.8	246,700	10.63	84,300	18.0	142,800			
2.0	241,600	10.81	84,000	18.3	142,100			
2.5	230,100	11.24	83,100	18.9	140,100			
3.0	219,400	11.65	82,200	19.6	138,000			
4.0	198,000	12.53	79,800	20.9	132,700			
5.0	175,700	13.55	76,600	22.3	126,000			
6.0	152,400	14.79	72,500	24.1	118,100			
8.0	115,400	17.29	64,200	27.2	100,800			
10.0	86,700	20.06	55,900	30.2	84,100			

Note: BD is the resource block model grade with expected UG mining dilution

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Underground									
Measured and Indicated									
Cutoff	Tonnes	BD g Ag/t	Oz Au	BD g Ag/t	Oz Ag				
1.0	274,500	8.57	85,700	16.6	146,400				
1.2	265,600	10.00	85,400	17.1	145,600				
1.4	259,300	10.21	85,100	17.4	144,900				
1.5	256,200	10.32	85,000	17.5	144,500				
1.6	253,200	10.42	84,800	17.7	144,100				
1.8	247,300	10.63	84,500	18.0	143,300				
2.0	242,100	10.82	84,200	18.3	142,500				
2.5	230,600	11.22	83,200	19.0	140,500				
3.0	219,800	11.65	82,300	19.6	138,400				
4.0	198,400	12.53	79,900	20.9	133,100				
5.0	176,100	13.55	76,700	22.3	126,400				
6.0	152,700	14.79	72,600	24.1	118,500				
8.0	115,700	17.29	64,300	27.2	101,100				
10.0	86,900	20.04	56,000	30.2	84,400				

Note:  $\ensuremath{\mathsf{BD}}$  is the resource block model grade with expected UG mining dilution

Inferred								
Cutoff	Tonnes	BD g Au/t	Oz Au	BD g Ag/t	Oz Ag			
1.0	150,600	6.87	33,300	11.5	55,500			
1.2	144,600	7.11	33,100	11.8	55,000			
1.4	139,700	7.31	32,900	12.1	54,500			
1.5	137,300	7.42	32,700	12.3	54,200			
1.6	134,100	7.56	32,600	12.5	53,700			
1.8	129,100	7.78	32,300	12.8	53,100			
2.0	125,200	7.97	32,100	13.1	52,600			
2.5	116,100	8.42	31,400	13.7	51,200			
3.0	107,700	8.86	30,700	14.4	49,700			
4.0	92,600	9.73	29,000	15.6	46,400			
5.0	77,000	10.78	26,700	17.0	42,000			
6.0	64,400	11.82	24,500	18.3	37,900			
8.0	42,300	14.39	19,600	20.9	28,400			
10.0	27,100	17.42	15,200	23.3	20,300			

Note: BD is the resource block model grade with expected UG mining dilution

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Open Pit and Underground									
Measured									
Cutoff	Tonnes	g Au/t	Oz Au	g Ag/t	Oz Ag				
1.0	109,600	12.34	43,500	18.36	64,700				
1.2	108,200	12.50	43,500	18.5	64,500				
1.4	106,500	12.68	43,400	18.8	64,300				
1.5	105,700	12.77	43,400	18.9	64,200				
1.6	104,800	12.85	43,300	19.0	64,100				
1.8	103,200	13.02	43,200	19.2	63,800				
various	115,200	11.74	43,500	17.6	65,100				
2.0	101,600	13.19	43,100	19.4	63,400				
2.5	97,900	13.60	42,800	19.9	62,700				
3.0	93,900	14.04	42,400	20.4	61,700				
4.0	86,000	15.01	41,500	21.5	59,500				
5.0	78,600	16.03	40,500	22.6	57,100				
6.0	71,700	17.05	39,300	23.6	54,500				
8.0	58,800	19.25	36,400	26.0	49,100				
10.0	48,700	21.40	33,500	28.2	44,200				

Indicated									
Cutoff	Tonnes	g Au/t	Oz Au	g Ag/t	Oz Ag				
1.0	449,500	9.49	137,200	16.80	242,800				
1.2	437,000	9.74	136,800	17.2	241,600				
1.4	427,200	9.92	136,300	17.5	240,300				
1.5	422,200	10.03	136,100	17.7	239,700				
1.6	417,800	10.11	135,800	17.8	239,000				
1.8	408,400	10.31	135,400	18.1	237,600				
various	426,300	9.86	135,100	17.4	238,600				
2.0	399,900	10.48	134,800	18.4	236,300				
2.5	379,400	10.93	133,300	19.1	232,400				
3.0	359,700	11.38	131,600	19.7	228,100				
4.0	319,900	12.36	127,100	21.1	217,300				
5.0	281,600	13.43	121,600	22.6	204,900				
6.0	244,600	14.64	115,100	24.3	191,400				
8.0	185,200	17.10	101,800	27.4	163,400				
10.0	140,700	19.67	89,000	30.4	137,300				

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Open Pit and Underground									
Measured and Indicated									
Cutoff	Tonnes	g Au/t	Oz Au	g Ag/t	Oz Ag				
1.0	559,100	10.05	180,700	17.11	307,500				
1.2	545,200	10.29	180,300	17.5	306,100				
1.4	533,700	10.47	179,700	17.8	304,600				
1.5	527,900	10.58	179,500	17.9	303,900				
1.6	522,600	10.66	179,100	18.0	303,100				
1.8	511,600	10.86	178,600	18.3	301,400				
various	541,500	10.21	177,800	17.4	303,700				
2.0	501,500	11.03	177,900	18.6	299,700				
2.5	477,300	11.48	176,100	19.2	295,100				
3.0	453,600	11.93	174,000	19.9	289,800				
4.0	405,900	12.92	168,600	21.2	276,800				
5.0	360,200	14.00	162,100	22.6	262,000				
6.0	316,300	15.18	154,400	24.2	245,900				
8.0	244,000	17.62	138,200	27.1	212,500				
10.0	189,400	20.12	122,500	29.8	181,500				

Inferred								
Cutoff	Tonnes	g Au/t	Oz Au	g Ag/t	Oz Ag			
1.0	358,500	8.23	94,900	13.59	156,600			
1.2	348,500	8.44	94,600	13.9	155,700			
1.4	340,000	8.63	94,300	14.2	154,700			
1.5	335,600	8.71	94,000	14.3	154,100			
1.6	330,500	8.83	93,800	14.4	153,400			
1.8	321,700	9.02	93,300	14.7	152,200			
various	342,800	8.47	93,400	13.9	153,600			
2.0	314,000	9.19	92,800	15.0	151,000			
2.5	295,900	9.62	91,500	15.5	147,900			
3.0	277,900	10.06	89,900	16.1	144,200			
4.0	244,700	10.96	86,200	17.3	136,200			
5.0	211,600	11.97	81,400	18.6	126,600			
6.0	182,200	13.01	76,200	19.9	116,800			
8.0	132,900	15.26	65,200	22.6	96,600			
10.0	96,300	17.63	54,600	25.4	78,500			

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Mine Dumps								
Cutoff	Tonnes	BD g Ag/t	Oz Au	BD g Ag/t	Oz Ag			
1.0	78,800	2.95	7,500	6.7	17,000			
1.1	72,300	3.12	7,300	7.0	16,300			
1.2	66,100	3.31	7,000	7.4	15,700			
1.3	60,600	3.49	6,800	7.8	15,200			
1.4	55,800	3.68	6,600	8.2	14,700			
1.5	51,800	3.85	6,400	8.6	14,200			
1.6	48,500	4.01	6,200	8.9	13,900			
1.7	32,900	5.13	5,400	11.0	11,600			
1.8	30,400	5.41	5,300	11.6	11,300			
1.9	27,800	5.73	5,100	12.3	11,000			
2.0	25,400	6.09	5,000	13.1	10,700			
2.5	18,900	7.44	4,500	15.5	9,500			
3.0	16,700	8.07	4,300	16.6	8,900			
3.5	14,800	8.69	4,100	17.5	8,300			
4.0	13,200	9.31	3,900	18.5	7,800			
4.5	12,000	9.78	3,800	19.4	7,500			
5.0	10,900	10.28	3,600	20.2	7,100			