Title Page

VVC EXPLORATION CORPORATION

MINERAL EVALUATION, FORM 43-101F1 TECHNICAL REPORT

PROJECT: **SAMALAYUCA**

LOCATION: **SAMALAYUCA, CHIHUAHUA, MEXICO**

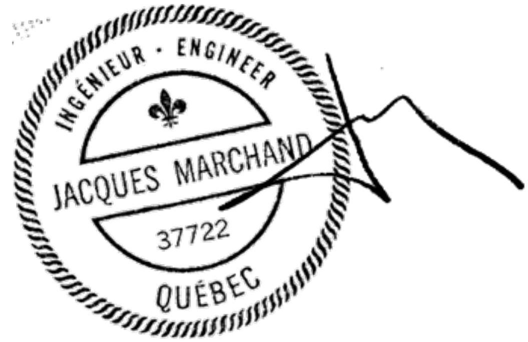
QUALIFIED PERSON: **JACQUES MARCHAND, ENG GEOLOGY**

EFFECTIVE DATE: **APRIL 21, 2019**

Jacques Marchand Eng Geo **992 Ave. Brown, Québec, Québec, Canada G1S2Z5**
Tel : +1 418 569 8473 **email: marchaja@egeolog.com** **Web : www.egeolog.com**

Date and Signature Page

April 21, 2019



Jacques Marchand

Engineer Geology

Table of Contents

Figures

Item 1: Summary

At the request of André St-Michel PM BSc Engineering Geology, Senior Consultant, Mexican Operations for VVC Exploration Corp. (VVC), Jacques Marchand Eng. Geology (Author) is commissioned to prepare a mineral resource evaluation (Report) for the Samalayuca exploration project (Project).

The Author visited the Project area the 18/19th of June 2011 and on the 28/29th of June 2018.

The Project covers an exploration mining concession (Permit), named Kaity, with the title number 226924, covering an area of 1622.5675 ha. The Permit registration point (PP) is located at position 351981E, 3470407N (WGS84, zone 13). As specified by the "Dirección General de Minas", the Permit is 100% owned by Minera Ches Mex, S de R.L. de C.V. (MCM). Samalayuca de Cobre S.A. de C.V, (SC), the VVC Mexican subsidiary, own a transfer of rights contract "Promesa de cesión" from MCM to obtain 100% of the rights.

The region is easily accessible from Ciudad Chihuahua and Juarez via Federal highway 45 to the village of Samalayuca which is located approximately 10 km east from the centre of the Project. A network of dirt roads cross the Project area.

The Sierra de Samalayuca geology is part of the Chihuahua Through, which is interpreted as a late Mesozoic feature. Geological units range from Precambrian to recent and have undergone a long history of deformation including Arc-continent collisions, continent-continent collisions, subduction and rifting. The general structural orientation is NW. The Samalayuca area is characterised by a north westerly trending homoclinal Cretaceous sedimentary sequence mostly composed of polymetric bands of fine to coarse grained sandstones intercalated with metric bands of shale and small conglomeratic units as elongated decametric lenses.

The mineralized sequence is hosted by greenish, siliceous sedimentary units (green sandstone) invaded by a pervasive copper mineralization as oxide, carbonate and sulphide. Several mineralized zones are present as elongated hectometric pods along the same, wide, composite unit. The mineralized units are up to 25m in thickness and is distributed over a 5km long by 500m wide area. The metallogenic interpretation indicates it is a sediment hosted, stratiform, copper mineralization with an expected supergene copper enrichment at shallow depth.

Exploration work by Samalayuca Cobre consisted of surface grab and chip channel sampling and metallurgy testing in 2010/11 and channel surface sampling, shallow drilling and metallurgy testing from 2017 to the present. A ground magnetic survey is carried out in 2017.

Considering the sampling parameters and verification, the Author considers that the available exploration work information is suitable to be included in the database for a Resource evaluation.

The actual Resource evaluation by the Author covers the Concha, Gloria North, Gloria, Gloria Extension, Juliana, Suerte, Zorra and Trinidad copper mineralized zones. The Base Case uses a lower cut-off grade of 0.15% copper.

	Indicated			**Inferred**		
Lower Cut= 0.15% Cu	**M Ton**	**Cu %**	**Cu KTon**	**M Ton**	**Cu %**	**Cu KTon**
Concha	3.162	0.302	9.538	6.151	0.267	16.397
Gloria North	0.000	0.000	0.000	1.435	0.274	3.933
Gloria	2.265	0.291	6.586	2.707	0.261	7.053
Gloria Extension	4.141	0.261	10.820	2.542	0.237	6.022
Juliana	0.000	0.000	0.000	0.425	0.234	0.994
Suerte	0.000	0.000	0.000	0.098	0.285	0.280
Zorra	0.000	0.000	0.000	0.628	0.728	4.571
Trinidad	0.000	0.000	0.000	0.412	0.308	1.268
Total	**9.567**	**0.282**	**26.945**	**14.398**	**0.281**	**40.517**

Statement: A mineral Resource that is not a mineral Reserve does not have demonstrated economic viability.

It is concluded that the Project has a short-term exploitation and longer-term exploration potential.

The author proposes a linked two-phase program totaling 10.8 million CAD to clearly demonstrate the economic potential of the more promising zones. The first program is totals 1.7 million CAD and if successful, a second phase totaling 9.1 million CAD is presented.

Item 2: Introduction

At the request of André St-Michel, PM, BSc Engineering Geology, Senior Consultant, Mexican Operations for VVC Exploration Corp. (VVC), Jacques Marchand Eng. Geology (Author) is commissioned to prepare a mineral resource evaluation (Report) for the Samalayuca exploration project (Project).

The current address of VVC is: 2369 Kingston Road, PO Box 28059 Terry Town, Scarborough, Ontario, Canada, M1N 4E7. VVC is a publicly traded (VVC on TSX.V) Canadian junior mining company, focused on open-pit mining and exploration in Northern Mexico.

Samalayuca de Cobre S.A. de C.V. (SC), RFC: SCO 100818 3B6 Boulevard Ortiz Mena 2807-22, Col: Cumbres Quintas Del Sol Chihuahua, Chihuahua, Mexico, CP 31214, is the VVC Mexican operator. SC has the following shareholders: Camex Mining Development Group Inc., 33.75%; Invesmin San Miguel, S. de R.L. de C.V., 28.13%; Inversiones Agrofinancieras de Panamá. S.A., 13.12%, and Firex, S.A. de C.V., 25%. VVC is the owner of Camex Mining Development Group Inc.

This report is written to comply with National Instrument 43-101. It is prepared with the objectives of evaluating the Project's economic potential of the subsurface copper mineralization and to support the general exploration needs and financing activities of VVC.

The Author visited the Project terrain on June 18/19, 2011 and June 28/29, 2018.

The Author rely mostly upon information provided by SC and on several verbal and written discussions with A. St-Michel, Jocelyn Pelletier P.Geo., André Gauthier PhD P.Geo. Ember Lopez Ingeniero Geológico and Jose Lopez Ingeniero Geológico. English and Spanish translation is done by the Author. The author believes the information is verifiable in the field and it is a reasonable representation of the Project.

The software used for the Report includes: Mapinfo and Canvas for GIS registration, image processing and drawing presentation. Vertical Mapper for numerical data treatment, Discover for mapping and resource block model construction. Microsoft Word for report writing and presentation and Microsoft Excel for numerical treatment and database tables.

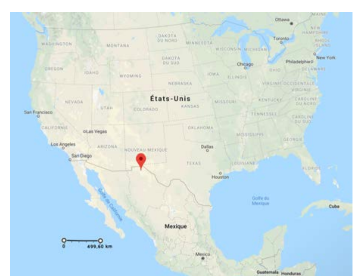


Figure 1: World Location

In this report, the International System (SI) is used for numbers, measures, money and abbreviations. To conform with English writing notation, the decimal point is used instead of a coma for numbers.

Geographical Setting

When not specified otherwise, the geographical information for the Project is as follows:

Mexico Datum	ITRF08 época 2010.0, GRS80		
GPS datum system:	WGS 84, UTM zone 13		
Project center:	31˚21’43,73”N 106˚34’19,18”W		
	350489mE 3470805mN		
Magnetic declination:	8˚ 4.14' E changing by 0° 6' W/year		
UTM grid declination:	8˚ 53.22'		
UTM grid Azimuth:	359.182˚		
WGS 84 spheroid elevation to EGM96 geoid (MSL):	-24,46m		
NAD27 Conus to WGS84:	-203,7968mN	49,9027mE	32,2849mZ
NAD27 Mexico to WGS84:	-200,1261mN	45,2324mE	-0,5283mZ
ITRF94 to WGS84:	0,9175mN	-0,9733mE	-0,0892mZ

Transformation between ITRF08 and WGS 84 is zero for all parameter.

All elevation information is reduced to the 5-meter resolution official INEGI terrane model.

Item 3: Reliance on Other Experts

The author is responsible for all Items of the report. This report uses excerpts and quotes from several sources and individuals that may or may not be a Qualified Person under National Instrument 43-101. The Author believes that the information provided is verifiable and that it is a reasonable representation of the Project facts.

In “Item 4: Property Description and Location”, the Permit ownership and related agreements have been verified with all instances concerned but it does not constitute a legal opinion.

All written sources used in preparation of the Report are mentioned in “Item 27: References”.

Item 4: Property Description and Location

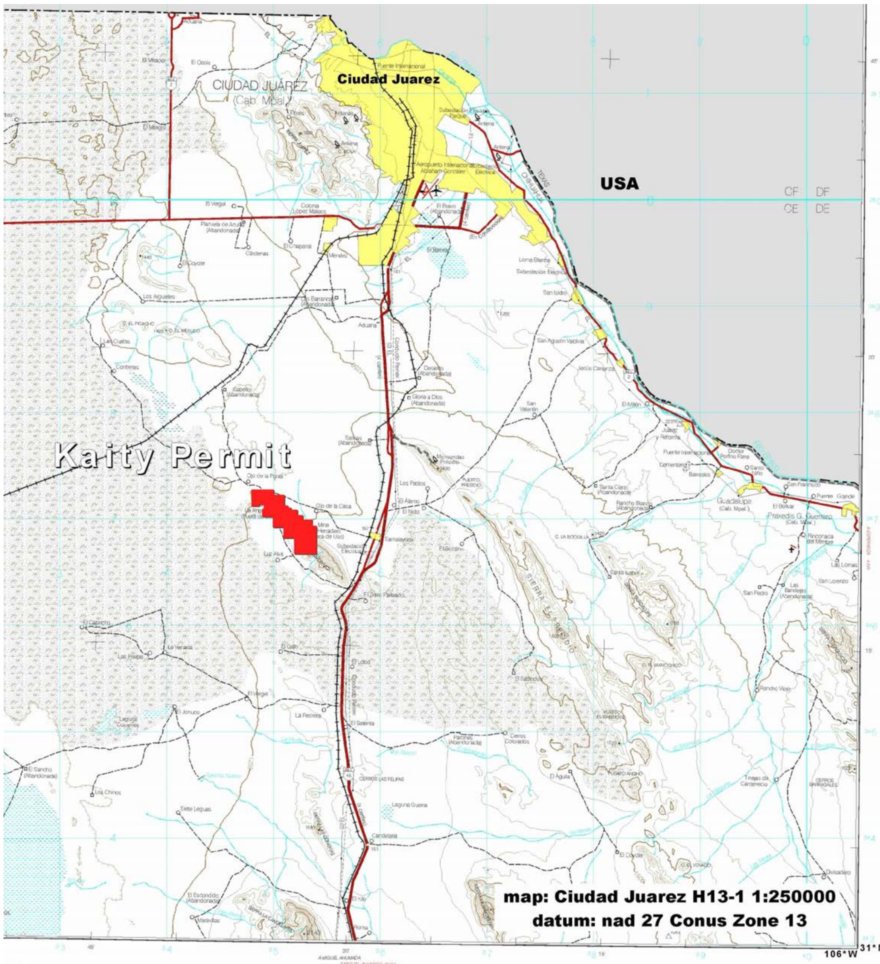


Figure 2: Regional location, 1:250 000

The Project covers on one exploration permit described as follow (Permit):

- Type: Exploration mining concession
- Name: **Kaity**
- Title Number: **226924**
- Area: 1622.5675 ha.
- PP: NAD27 (conus): 352029,0mE 3470207,5mN,
  WGS84: 351981,0mE, 3470406,7mN


DUPLICADO

TITULO
DE
CONCESION MINERA
NUMERO 226924

The Permit is issued under the authority of the Mexican Mining Law. It is administered by the “Secretaria de Economía, Dirección General de Minas, Subdirección de Minería” and it is currently in good standing.

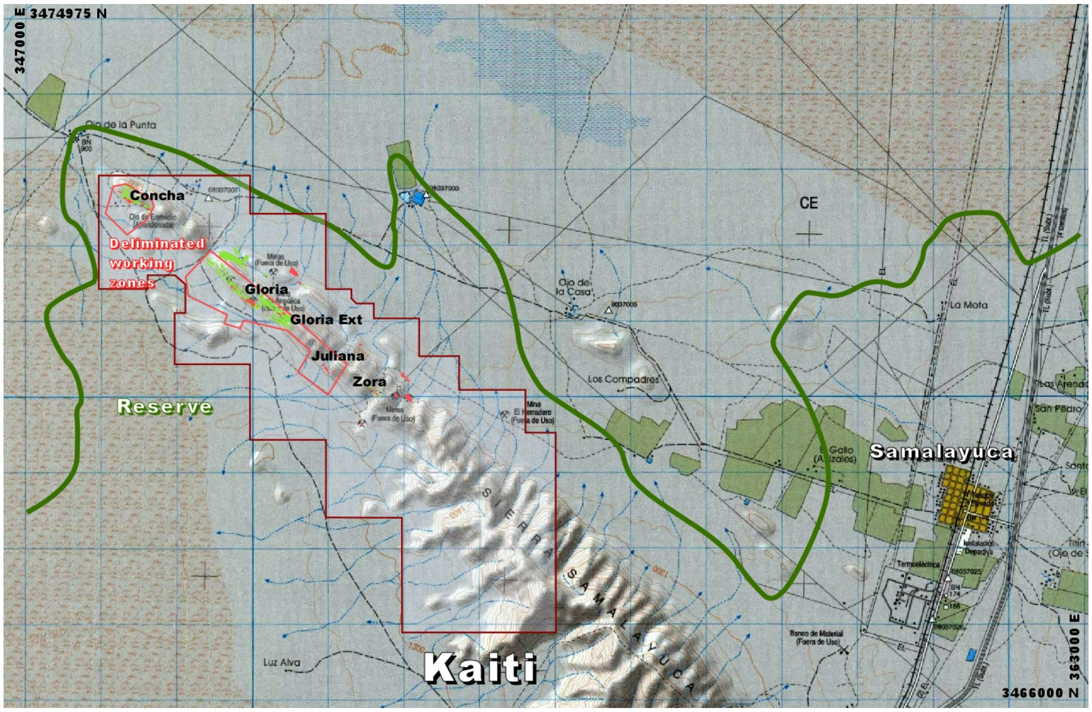


Figure 3: Title location, 1:100 000

As specified by the "Dirección General de Minas", the Permit is 100% owned by Minera Ches Mex, S de R.L. de C.V. (MCM) of Chihuahua, Chihuahua, Mexico. A transfer of rights contract "Promesa de cesión" between MCM and SC allow SC 100% of the rights to carry all activities inherited to mining regarding the Permit.

No permits are required for surface geochemistry and hand-dug trenching.

In order to develop the Project SC must obtain a "Temporary Occupational Contracts" with the Ejidatarios of the Ojo de la Casa Ejido, which effectively granted SC the right to occupy 100% of the land covered by the Permit until 2033.

SC need to obtain a necessary environmental permit from SEMARNAT (Secretary of Environment and Natural Resources of Mexico) to be able to conduct exploration activities, open pit mining, all processing and lixiviation (Heap Leaching), construction and access. As of October 29th, 2018, SC received an "Accepted Resolution" from SEMARNAT.

The Permit is now located outside of the "Natural Protected Area", and it is no longer considered a protected area, the Decree that declared the land as a "Natural Protected Area" is now null.

To the best of the Author's knowledge the Project Permit is staked and recorded according to the best practices of the industry. There are no other significant factors and risks besides that could affect access, title, or the right or ability to perform work on the Permit.

MCM Purchase Contract

On October 11, 2010, amended on July 14, 2011; a contract “Promesa de cesión” between MCM and SC is concluded:

- SC obtained the exclusive rights to evaluate, explore and exploit the concession in exchange for a total payment of 1 950 000 USD.
- The MCM will provide a Mineral Rights Assignment Contract to SC once the total price is fully paid.
- Before the exploitation and production of the mine lot begins, SC will pay 25 000 USD each July 15th and January 15th until the designated total price is paid or production starts.
- When production begins, payments are based on production, with payments made each July 15th and January 15th until the total price is paid.
- SC is obliged to maintain as a minimum a payment of 25 000 USD.
- Once total price is paid, SC grants a 1% royalty on production to MCM; with payments every six months throughout the operational phase.
- The contract is valid until full payment is reached, which has to be paid no later than February 15th, 2050.

In carrying out the exploration work, SC is obligated to:

- Adhere to all exploration and exploitation requirements under the Mexican Mining Law, and any other applicable legal provisions;
- Keep the concession in good standing;
- Make payments and pay taxes punctually under all the legal obligations;
- Prepare reports semi-annually describing the metallurgical balance of copper production, and the price of copper, in order to allow calculations based on the head grades of copper (Cu) ore and to confirm the payments made.

The original contract has several addendums. Some payments have been divided and obligation of payment has been postponed and the finale purchase price has been lowered following the acceptation by MCM of VVC shares instead of cash payment.

As of January 31st, 2019, SC has complied with its payment obligations.

Surface Right Contract

Temporary Occupational Contracts – Ejidatarios

The Permit is located in the Ejido Ojo de la Casa, an area that is parceled and assigned, it does not correspond to common lands of the Ejido. The following is a *general resume of the temporary surface use contract, signed with the owners of lots 81, 92, 96, 106 and 114, in which the entire Permit is located.*

On December 20th, 2010, SC signed six individual “Temporary Occupational Contracts” with six different Ejidatarios of the Ojo de la Casa Ejido.

- The contract corresponds to a temporary occupancy for an Ejidal parcel, for exploration, exploitation and mining profit. (As stated in the preamble and body of the legal document).
- The contract covers the entire surface of the mining lot, which is located within the parcel. (In response to what is indicated in the context section and other clauses of the contract, in which the area "Occupation Area" is named).
- Grants the right to SC to carry out all activities inherent to mining. (As stated in the section on Antecedents, in the First, Second and Fifth clauses).
- The parties agree that the contracts have a 15-years period duration from the signing date.
- The Ejidatarios expressly granted to SC the rights to use and temporarily occupy their individual parcels for any kind of mining activities, that it is mandatory for the Ejidatarios, but optional for SC.
- The parties stipulated as remuneration for the rights granted, the amount of 6 000.00 MXN.
- Additionally, to the remuneration indicated above for the right of occupancy, SC agrees to pay a one-time amount of 100 000.00 MXN to each of the six Ejidatarios.
- The contract allows SC, the faculty for the benefit of third parties, the rights it acquires and the obligation resulting from the conclusion of the contract. (Which is clear from the eighth clause).

An addendum signed by all parties on May 10, 2017 specify that, the duration of the contract is extended until January 18, 2033

As of January 31st, 2019, SC has complied with its payment obligations.

Servitude of Passage Contracts

On December 2nd, 2011, SC signed eighteen individual “Servitude of Passage Contracts” with eighteen different Ejidatarios of the Ojo de la Casa Ejido.

- The parties agree a duration of 15 years from the date of the contract;
- This situation doesn’t cancel, stop or impede SC the full access to the Samalayuca location since there are various access roads in use. Each of Ejidatarios, in exercise of their rights on their land parcels, grant authorization for easements, giving unlimited right of way to SC, during the term of the contracts.

- In return for the rights granted by the Ejidatarios, SC has to pay 3000 MXN annually to each of the Ejidatarios on the anniversary of their contracts.

As of January 31st, 2019, SC has complied with its payment obligation.

Temporary Occupational Contracts - Ejido

On January 19th, 2011, SC signed an Agreements for Temporary Occupation with Ejido Ojo de la Casa. The parties agree:

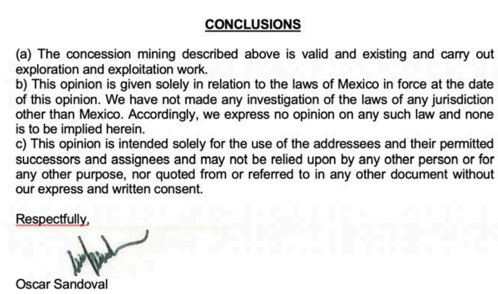
- That the contract has a duration period of 15 years mandatory to the Ejido, but optional for SC, which has the right to terminate at any time without liability;
- The Ejido expressly grants to SC the rights to use and temporarily occupy some common land parcels that belong to the Ejido for any kind of mining activities SC may need;
- The right of occupancy granted by the common land parcels affects common and specific common use areas 2 (43-58-04.254 ha) and 3 (133-86-56.789 ha), which are necessary for SC to carry out its activities;
- The parties stipulated that by obtaining these rights, SC must pay for the first 8 years between January 19th, 2011 and January 18th, 2019, the amount of 2 604 000.00 MXN in 16 semi-annual payment of 162 750.00 MXN at the beginning of each semi-annual period.
- At the beginning of the 9th year, starting on January 19, 2019 to January 18rh, 2026, until the end of the fifteenth year of the contract life, SC shall pay the total amount of 3 726 002.00 MXN distributed in 14 semi-annual payment of 266 143.00 MXN at the beginning of each semester and that will be updated according to the National Consumer Prices Index. The Ejido made a request to SC in order to have an advance payment of its Agreement for Temporary Occupation regarding the payment due on January 2012 for 162 750.00 MXN. This payment was made on December 2011 to the Ejido.

However, an Addendum is signed by the contracting parties on May 10th, 2017 that specify in broad terms that the duration of the contract is extended until January 18th, 2033.

As of January 31st, 2019, SC has complied with its payment obligation.

Legal opinion for the Kaity permit

On April 05, 2019, Oscar Sandoval of the firm "SG Abogados", Georgia No. 10-01, Colonia Nápoles, Delegación Benito Juárez, Ciudad de México, C.P. 03810, Tel: 55 5687 9038, Cel: 55 2114 6715, conducted an audit of the Kaity mining permit (Permit) as described in the following section:



CONCLUSIONS

(a) The concession mining described above is valid and existing and carry out exploration and exploitation work.
b) This opinion is given solely in relation to the laws of Mexico in force at the date of this opinion. We have not made any investigation of the laws of any jurisdiction other than Mexico. Accordingly, we express no opinion on any such law and none is to be implied herein.
c) This opinion is intended solely for the use of the addressees and their permitted successors and assignees and may not be relied upon by any other person or for any other purpose, nor quoted from or referred to in any other document without our express and written consent.

Respectfully,

Oscar Sandoval

(a) The Mining Concession is valid and available for mineral exploration and mining / processing.

(b) This opinion is given solely in relation to the laws of Mexico in force at the date of this opinion. We have not made any investigation of the laws of any jurisdiction other than Mexico. Accordingly, we express no opinion on any such law and none is to be implied herein.

(c) This opinion is intended solely for the use of the addressees and their permitted successors and assignees and may not be relied upon by any other person or for any other purpose, nor quoted from or referred to in any other document without our express and written consent.

Legal Analysis on Exploration Activity

On April 2019, Lic. Luis Javier Corrales Lerma produces legal analysis of the Project.

Mining Concession

The mining concession issued by the Ministry of Economy, General Mining Coordination, General Mining Department, through the Mining Concession Title number 226924, is valid from March 31, 2006 to March 30, 2056, all allows the development of the activities inherent to mining, such as the exploration, exploitation and benefit of minerals.

Environmental Permits

Authorisation Conditional according to:

1. On August 20th, 2018 an environment impact manifestation is presented to (SEMARNAT) the Mexican Secretary of Environment and Natural Resources Authority for the development of the activities proposed in the mining project. As stated in the Official Letter SG.IR.08-2018 / 283 issued by the Delegación de la Secretaría del Medio Ambiente y Recursos Naturales, based in the City of Chihuahua, dated October 29th, 2018, it emitted its “accepted resolution”, in terms of environmental impact, the development of the project in accordance with the terms and conditions set forth therein. The environment impact manifestation accepted resolution covers 458.79 hectares, and has a duration of 16 years.

2. In order to develop the Pilot Mining Project, on November 13th, 2018, present at SEMARNAT a Change of Land Use of 78.265 hectares necessary in order to execute all inherited mining activities such as exploration, exploitation and benefit of minerals. The resolution of such request is still pending.

Por lo antes expuesto esta Delegación:

RESUELVE:

ÚNICO. - AUTORIZAR DE MANERA CONDICIONADA, en Materia de Impacto Ambiental, el desarrollo del proyecto, para las etapas de preparación del sitio, operación y abandono del sitio, con pretendida ubicación en el municipio de Juárez, en el Estado de Chihuahua, sujeto a los siguientes:

Proyecto "Unidad Minera La Gloria"
Municipio de Juárez, Estado de Chihuahua
Hoja 8 de 30

Item 5: Accessibility, Climate, Local Resources, Infrastructure and Physiography

The region is easily accessible from Ciudad Chihuahua traveling northerly on Carretera Federal 45 for 315 km and from Ciudad Juarez traveling southerly on Carretera Federal 45 for 35 km to the village of Samalayuca. The village is located approximately 10 km east of the centre of the project. A network of dirt road surrounds the Project area and one road crosses the sierra in the NW area.

The topography of the area is characterised by the Sierra de Samalayuca, a NW trending narrow mountain range about 20 km long and 1,5 km wide. The ridge reaches 1700 m above sea level (asl) in the SE portion. A flat plateau with an elevation of 1200 m asl surrounds the Sierra.

The region is semi desert with rare trees and with sand dunes to the south. The sierra is free of trees however cactus and low vegetation is present. Average temperature varies from -2˚ in January to 35˚C in August Average precipitation varies from 4mm in March to 58mm in August. Average annual pan evaporation is about 280cm, with the relative humidity less than 50 %. Snowfalls occur once or twice every winter. Evapotranspiration is several times greater than the precipitation.

	January	February	March	April	May	June	July	August	September	October	November	December
Avg. Temperature (°C)	6.7	8.8	12	17.1	22.1	26.6	27.8	26.7	23.5	17.9	10.8	7.2
Min. Temperature (°C)	-1.9	-0.4	2.5	7	11.6	16.5	19.1	18.1	14.5	8.6	1.4	-1.4
Max. Temperature (°C)	15.4	18.1	21.6	27.2	32.6	36.8	36.6	35.4	32.5	27.3	20.2	15.9
Avg. Temperature (°F)	44.1	47.8	53.6	62.8	71.8	79.9	82.0	80.1	74.3	64.2	51.4	45.0
Min. Temperature (°F)	28.6	31.3	36.5	44.6	52.9	61.7	66.4	64.6	58.1	47.5	34.5	29.5
Max. Temperature (°F)	59.7	64.6	70.9	81.0	90.7	98.2	97.9	95.7	90.5	81.1	68.4	60.6
Precipitation / Rainfall (mm)	9	10	9	4	6	16	49	44	38	19	8	15

Drainage consists of small internal systems, forming ephemeral beach lakes located at local base levels. Locally, the drainage consists of discontinuous, intermittent, streams which form in response to the rather scarce and seasonal precipitation.

Vegetation is typical of the Chihuahua desert biome exposing xerophitic plants and rough grass, known as desert pavement. The dominant plant by far is the gobernadora or creosote bush. Other less abundant plants include: mesquite, wait-a-minute bush, tar-bush, ocotillo, cholla, pitalla, nopal, sotol, candelilla, lechuguilla, tasajillo, palmilla, yucca, and a few juniper trees. Commonly fluff grass is supported by a thin, deflated, rocky soil.

The prevalent desert weather is suitable for a yearlong exploration period.

All modern specialised services and people are available in Chihuahua or in Juarez, including 2 international airports (Juarez and Chihuahua), a sea access via the Topolobampo Port (Los Mochis, California Gulf), railroads (Mexico-USA), highways (Chihuahua-El Paso) and an electrical power plant in Samalayuca. Communication services are adequate with an excellent internet and cell phone coverage.

There is plenty of unused land for all required mining infrastructures.

The city of Chihuahua (pop. 868 062) is the state capital of Chihuahua. The predominant activity is industrial, including domestic heavy and light industries, and production of consumer goods with more than 300 assembly plants located in and around the city.

Item 6: History

1950's: J.G. Tinoco:

Copper mining and flux (Si) mining and shipping to Asarco in El Paso

1956-57: Compañía Minera Sentar S.A.:

Open Pit copper mining operations.

1960-64: Various Local miners including Sra. Solis de Cardoza (operated by Sr. Quesada):

An estimated volume of 13 400 t at 1.55% Cu and 15 g/t Ag is shipped to the El Paso Smelter.

In 1964, I.F. Wilson mentions a possible volume of 16 to 160 Mt of copper ore reserve. Statement: The Author has not done sufficient work to classify the historical estimate as a current mineral resource and VVC is not treating the historical estimate as a current mineral resource or mineral reserve.

1965: Minera Fresnillo Cie:

Drilling: 5 drill holes for a total of 854m in the Gloria pits area.

Mining: Concha, Gloria, Juliana, Zorra, Trinidad, Suerte open pits and shallow excavation, access trail and ore pile stocking.

1967: Pemex:

Exploration: detail mapping.

1969: Edgar L. Berg, University of Texas at Austin:

Exploration: Geological studies and mapping for a master thesis. An evaluation of the economic potential of the copper mineralization is also presented.

1970: Earth Resources

Drilling: 2 rotary drill holes, unknown coordinates.

1975: Local Miners (gambusinos):

Artisanal Mining: Hand sorted and shipping of ore material to Asarco Smelter in El Paso.

1992-1994: MXUS

Exploration: Mapping and sampling.

Drilling: 51 air track holes in Concha pits area.

4 reverse circulation drill holes in Concha Pits area.

2 core drill holes in Gloria area.

The air track result is encouraging but the RC give low values, with indicated recovery problems. The DDH missed the Gloria target.

The copper zone defined as 11 m thick with a resource estimate of 39-52 million tons at 0,4% to a depth of 40 m. Statement: The Author has not done sufficient work to classify the historical estimate as a current mineral resource and VVC is not treating the historical estimate as a current mineral resource or mineral reserve.

1995: Craig Benjamin Bruno, B.A. Queen College, New York

Exploration: Geological Studies and Mapping for a master thesis.

The Sierra de Samalayuca host a sandstone-hosted copper deposits similar to many deposits of this type in the world. An early Cretaceous age is suggested for the sandstone deposition and mineralization prior to the Laramide Orogeny.

1997: Minera Phelps Dodge Mexico S. de R.L. de C.V.:

Induced polarization (IP)/Resistivity survey of the Gloria, Pass and Concha pits: The observed IP values are low, generally not much higher than background, indicating very low sulphide content over significant thickness. High IP zones (sulphides) correspond well with the high-resistivity values (quartzites). Resistivity maps and sections show a close correspondence to mapped lithology and structure. The conductive, lacustrine, clay-rich gypsiferous beds are clearly visible lapping onto the strongly resistive steeply-dipping quartzite.

A regional airborne magnetic survey is flown over the Samalayuca Sierra: The Sierra is characterized by a NW trending magnetic low surrounded by magnetic highs at the NW end. A strong NW striking magnetic high in the north-central portion is interpreted to be the result of a normal Basin and Range high-angle fault. Some magnetic highs are correlated with diabase dykes. A topographic break at the Pass related to a NE oriented magnetic low is suggestive of a major offset along a high angle fault.

A total of 245 rock chips and shallow trench grab samples are collected in and around excavated pits on outcrop and sub-outcrop.

Eight DDH holes are sunk for a total of 3 540 m: These holes investigated the mineralized areas around the Concha, Gloria, Angelica, Trinidad and Zorra pits.

> Near the Concha open pit (holes SA-96-07 and 08), the drill cut through 160-170m of moderately to strongly chloritized sandstone, hosting two copper zones 65m apart. The upper zone ranges from 2 to 30m and averages 0.17wt. % Cu. The lower zone occurs in 3 beds separated by 3 to 10m. The upper bed ranges from 1.5 to 6.7m and averages 0.47wt. % Cu; the middle bed ranges from 1.5 to 9m and averages 0.44wt. % Cu and the lower bed is 3m thick and averages 0.36wt. % Cu. The two copper zones are interpreted as the downdip extensions of the Concha pit (lower zone) and of the scattered outcrops of oxide Cu found stratigraphically above the pit (upper zone).
>
> At the Gloria pit, hole SA-96-04 intersected 109m of moderately to strongly chloritized sandstones hosting two copper zones separated by 67m. Upper zone is 3m thick and averages 0.15wt. % Cu. The lower zone is 9m thick and averages 0.43wt. % Cu. Projected intercepts are approximately 650m NW of the La Gloria pit. Lower zone is assumed to be a thin down-dip extension of the zone found in the pit. Holes SA-96-05 and 06 failed to intercept significant chloritic alteration or Cu mineralization.
>
> The three drill holes in Angelica-Trinidad- Zorra (SA-96-01, 02, 03) do not intersect significant chloritic alteration or copper mineralization. Thick sections of conglomeratic sandstone intercepted in SA-96-01 and SA-96-03 are interpreted as occurring in the lower plate of an inferred low-angle fault.

Item 7: Geological Setting and Mineralization

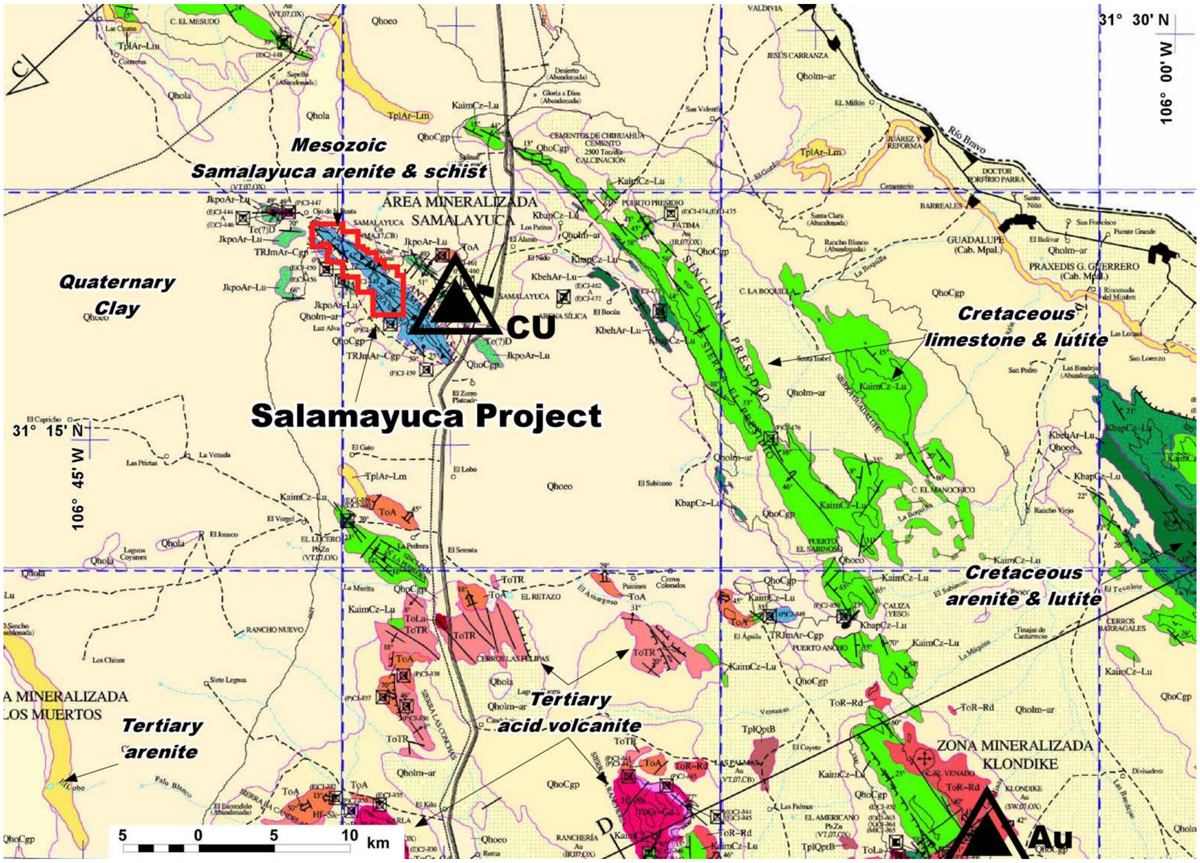


Figure 4: Regional geology, 1:500 000

Regional Geology

The Sierra de Samalayuca geology covers the Northern Chihuahua, Southern New Mexico and Western Texas and is part of the Chihuahua Trough, which is interpreted as a late Mesozoic feature. It is bounded to the NE by the Diablo platform, a Pennsylvanian feature (Texas) and to the SW by the Aldama platform. The geological units range from Precambrian to recent and have undergone a long history of deformation including Arc-continent collisions, continent-continent collisions, subduction and rifting. The general structural orientation is NW.

Lithology

Proterozoic

The oldest rocks in the region are the three major Precambrian units, all present in the Trans-Pecos Texas:

- Carrizo Mountain Group
- Allamoore Formation
- Hazel Formation.

The combined thickness of these units is approximately 8 km. Rock types include quartzite, slate, limestone, stomatolithic dolomite, shale, conglomerate, meta-volcanic and pegmatite.

Paleozoic

Five major Paleozoic units are present in the Sierra de Samalayuca region:

- Bliss sandstone (Cambrian-Ordovician);
- El Paso Limestone (Ordovician);
- Montoya dolomite (Ordovician);
- Powwow Member (Permian);
- Hueco Limestone (Permian).

The total thickness of the Paleozoic section is approximately 800 m. The units comprise, sandstone (some of which are red) limestone, dolomite, shale and conglomerate. In places the Powwow conglomerate rests directly on the older Precambrian metamorphic rocks.

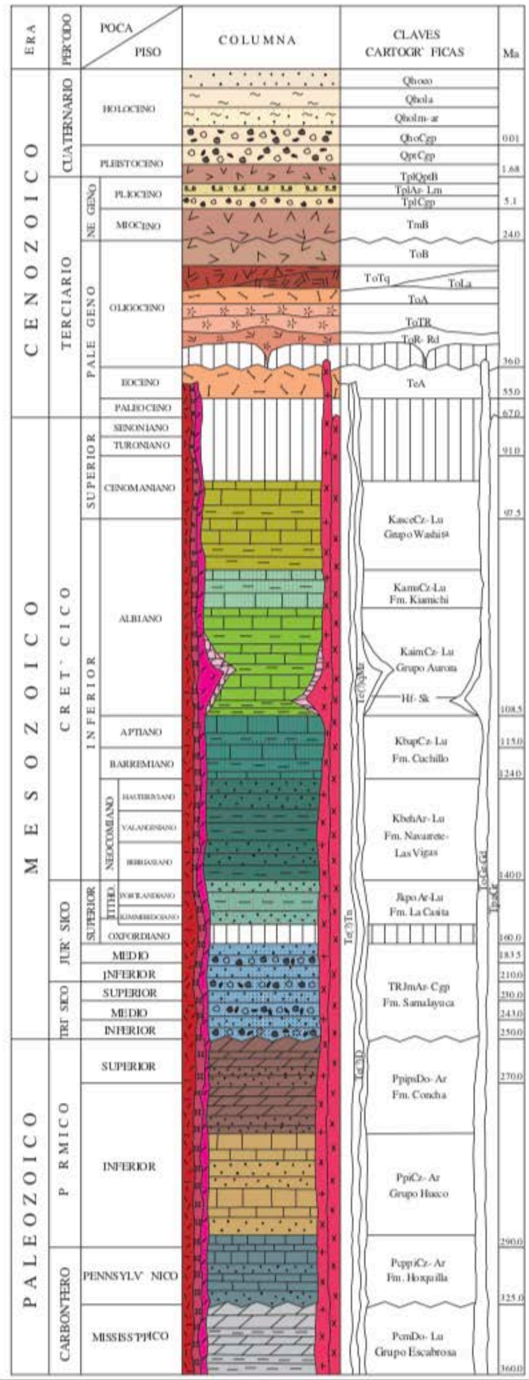
The Samalayuca rock, which bears obvious lithological and textural similarity to the Van Horn Sandstone of the Powwow Member, may be correlative with or reworked from (Berg, 1970).

Mesozoic

Mesozoic units are rarely found in the Samalayuca region:

- Some Triassic rocks occur in south-central New Mexico, the Dockum Group is composed of the Santa Rosa sandstone and the Chinle shale.
- The Chihuahua Trough, a deep basin located in northern Chihuahua host the Jurassic evaporites.

COLUMNA GEOLÓGICA



- Cretaceous rock units of the region consist of series of sandstone, limestone, shale and evaporitic shale that average 1500 m in thickness. These rocks record transgressive/regressive depositional marine sequences. The Yucca Formation contains red-bed sandstone sequence with red to white sandstone, conglomerate and limestone.

Cenozoic

In the Cenozoic:

- The tertiary was a time of major volcanic activity with presence of the tuff, lava flow, and volcaniclastite;
- Followed by the Quaternary alluvium and pocket fill.

Basin and Range topography, developed during the Cenozoic, dominates the region. The broad desert floor extends 10 kilometers between isolated mountain ranges. Gravel, sand, silt and clay are the dominant modern depositional material, which locally exceed thickness of 335 meters (Bruno, 1995).

Tectonic / Structure

From the Precambrian to the present, the region has undergone several tectonic events. Arc-continent collisions, continent-continent collisions, subduction and rifting have greatly affected the topography and geology, producing folding, thrusting, and faulting, with the most common structures related to the Laramide orogeny.

Three principal extensional tectonic episodes are interpreted from the Proterozoic to the Eocambrian (Marshak and Paulsen, 1996). The first occurred at 1.5-1.3 Ga and is represented by a series of west to northwest trending inter-continental rifts. The second epeirogenic movement occurred around 1.1 Ga and was dominated by north to northeast trending rifts and related faults. The third period (0.7-0.6 Ga) is postulated to have reactivated the rifts through north to northeast trending faults and lead to the breakup of Laurentia.

In the Mesozoic, the first major deformation event produced the Jurassic Mojave-Sonora Megashear which, with the opening of the Gulf of Mexico, is contemporaneous with formation of the Chihuahua Trough. Later in the Mesozoic and into the Cenozoic, the Laramide orogeny produced two periods of deformation. The first is folding (NW) and thrust faulting, followed by basin and range normal faulting (Price, 1985). Subduction is the major tectonic event, with back arc deformation and marine transgression and regression.

The Cenozoic era is dominated by Basin and Range extension, which still continue to this day. It is responsible for the Tertiary to Recent normal faulting, strike-slip faulting and other structures like graben, horst and tilt blocks. The onset of this extension also produced abundant Eocene and Oligocene calderas and intrusive igneous activity. Early extension produced normal north to NE faults later followed by an ENE to NE trend. Typical Basin and Range faults dip 50 to 90˚ with most steeper than 70˚often showing pluri kilometric displacement.

Mineralization

The region is considered to be a Pb-Zn-Ag deposits belt, however the Metallogenic map of Mexico but the Samalayuca mineralization is located in the small narrow Cu-Ba province.

In general, most of ore deposits in Mexico are related to either the convergent plate margin along the Pacific coast with the resulting magmatic activity since the Jurassic, or the fluid dynamics and geochemical processes in the sedimentary basins that are part of the Gulf of Mexico mega-basin, which also hosts the Mexican oil and gas fields.

The metallic deposits in northwestern Mexico are the culmination of superposed magmatism, tectonism, erosion, and burial over more than 150 million years. Metallogenic factors such as enrichment, preservation, and erosion play major roles in the present distributions of minerals and are related to the overall metallogenic framework of northwestern Mexico. By using structurally restored time slices, it becomes clear that older deposit types tend to be those formed at greater depths and more proximal to intrusions, whereas younger deposits formed at shallower depths are less eroded and are more commonly volcanic-rock hosted. These characteristics express themselves in the regional distribution of deposit types. Mineralization of widely differing ages is spatially superposed, commonly associated with coeval magmatic and tectonic events. The metallogenic history of northwestern Mexico is defined by structural and magmatic events (Staude 2001)

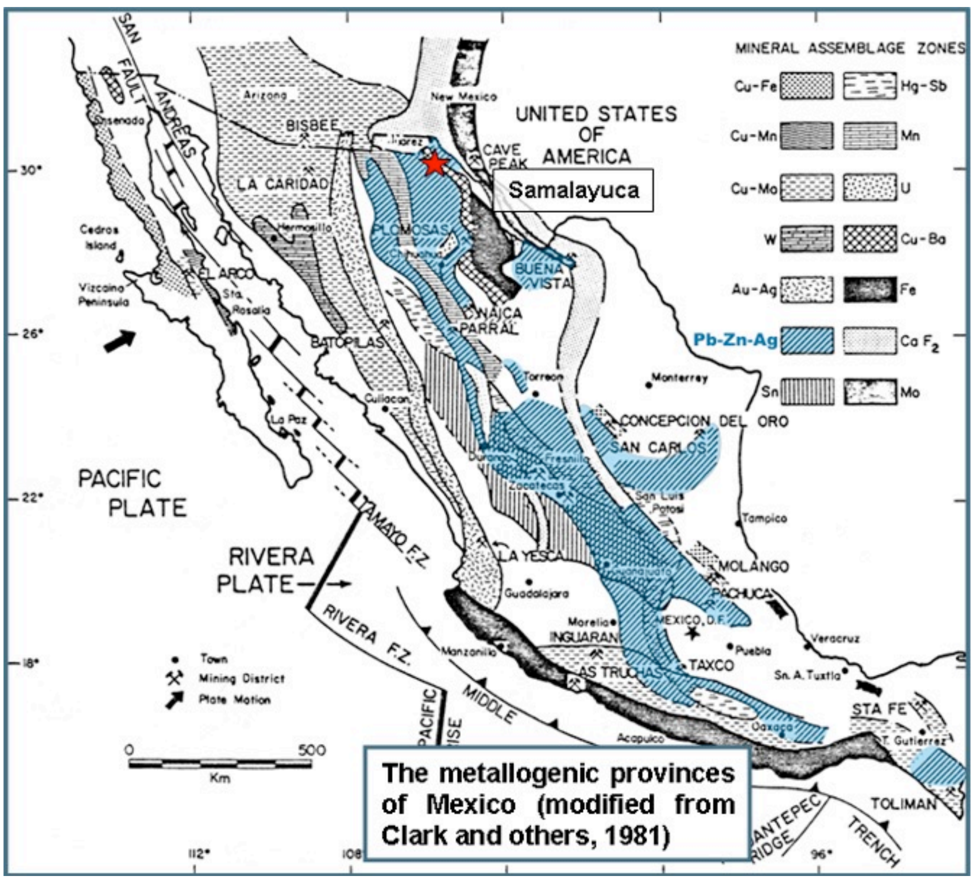


Figure 5: The metallogenic provinces of Mexico (from Damo 1984)

Regional mineralization similar to Samalayuca:

- The Proterozoic Hazel Formation host copper mineralized beds within a red-bed sandstone sequence. The Hazel mine produced mostly silver, up until the 1950's. It is located about 10 km NW of Van Horn, Texas, some 150 km ESE of Samalayuca.

- The Permian Powwow Member host a copper-silver-lead deposit within a red-bed sandstone sequence. These sandstones were mined at the Plata Verde Mine, about 20 kilometers south-southwest of Van Horn, Texas.
- The Triassic Dockum Group host a sediment-hosted copper deposit, it is located in Texas some 425 km East of Samalayuca.
- In the Cretaceous Yuca formation, the Indio Mountains Prospect is a copper-silver-lead deposit is hosted by a red-bed sandstone sequence, with conglomerate and limestone units. This mineralization is located 25 kilometers southwest of Van Horn, in Trans-Pecos, Texas.
- Regional structures, especially basins and high areas may have an important relationship to movement of basinal brines, which is the origin of diagenetic copper mineralization (Bruno, 1995).

Local Geology

The geology of the northern part of Chihuahua State corresponds to a basin and range style geomorphology, underlain by mostly Proterozoic and Paleozoic sedimentary rock.

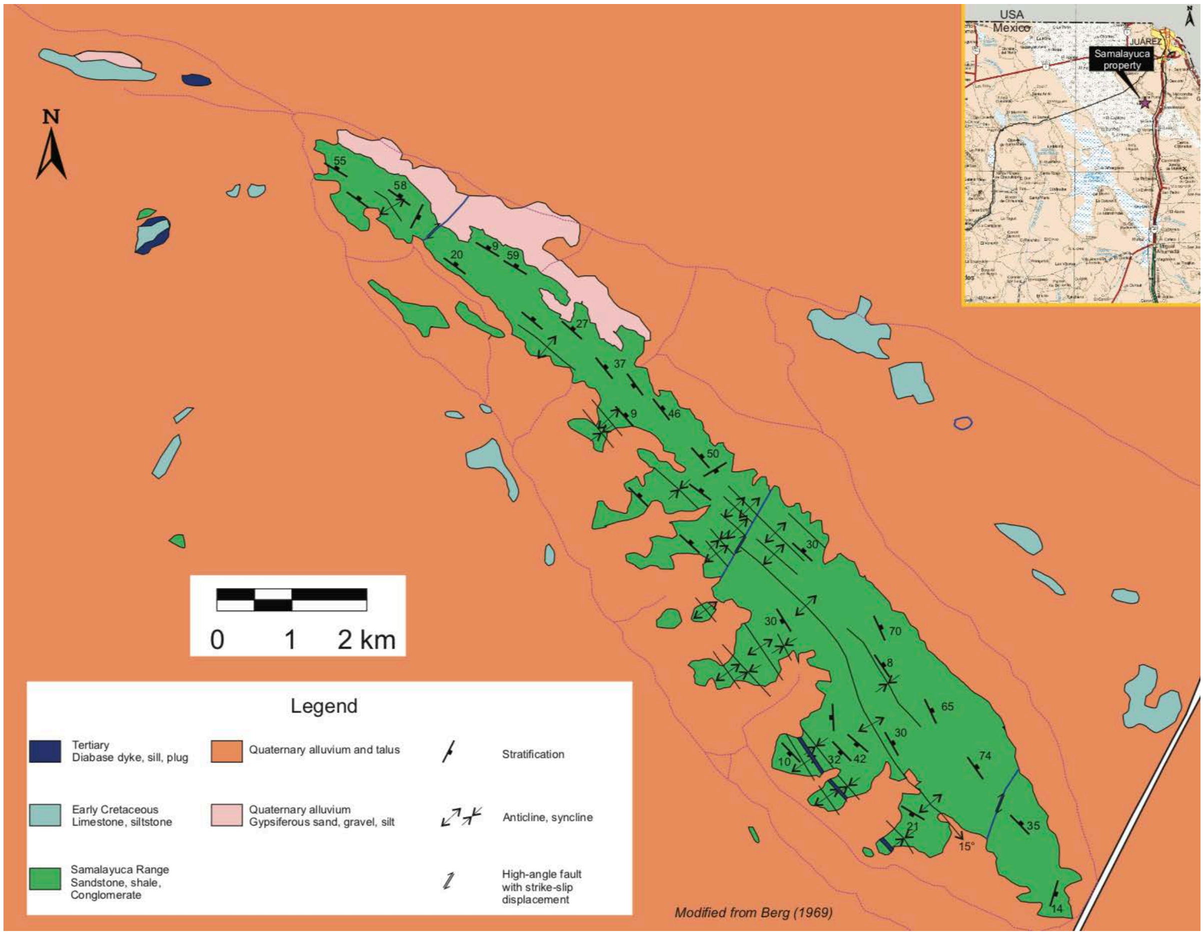


Figure 6: Samalayuca Geology

The Samalayuca area is characterised by an homoclinal sedimentary sequence mostly composed of polymetric bands of fine to coarse grained sandstones intercalated with metric bands of shale and small conglomeratic units, as elongated decametric lenses. No organic matter is observed. The lack of fossils in the Samalayuca Sierra sedimentary rocks makes the age determination difficult.

Small exposures of mafic intrusive rocks of probable Cenozoic age are present in the Sierra.

Lithology

Following is a description of the rock types compiled from MXUS drill core:

- Green Sandstone (70%): composed of millimetric quartz (75%), calcite (10%), sericite (7%) and chlorite (7%). Contains variable combinations of disseminated bornite, chalcopyrite, digenite, chalcocite, covellite, pyrite, magnetite, ilmenite, hematite, goethite and rutile. It is a copper mineralized unit.

- Rusty brown-red sandstone (15%): without chlorite and with about 10% goethite and oxide copper minerals.
- Gray-white sandstone (6%): abundant sericite, no chlorite, large pyrite crystals and trace of chalcopyrite.
- Dark purplish gray sandstone (4%): rich in calcite and magnetite with trace of chlorite and hematite.
- Dark purplish-gray shale (3%): fine grained sericite rich, disseminated calcite, fine grained quartz and magnetite, trace of chlorite, hematite and goethite.
- Green argillite (2%): very fine-grained, composed of sericite.
- Red shale: hematite rich.

The four main mineral rocks constituents are quartz, calcite, muscovite (sericite), and chlorite (Bruno, 1995). The sandstones have near-zero porosity, little or no direct fabric, and are completely lacking in plagioclase or potassium feldspar.

The most common sedimentary structures are mudcracks, trace fossils, cross bedding, lamination, shale partings and current and wave ripples. Sudden changes in the sandstone granulometry and in bed thickness, testify to the turbulent conditions of their deposition. The sandstone beds show a normal polarity

Structure

The general trend of the rocks is to the NW with a steep dip to the NE, with the SE side showing a tendency to flatten and further to the south, as an undulating surface, representing a decametric M type fold structure. This structure is gently plunging to the NW. An overprinted, orthogonal phase produces a long gentle waving of the axis.

A sub vertical, NW trending penetrative fracturing parallel to the interpreted axial plane of the folds is present. Most of the area shows conjugate fractures with one dipping steeply to the NE and the other dipping steeply to the SW. Another set of sub vertical fractures, trending NE, overprints the earlier one.

Faulting displays two preferential orientations. The dominant orientation is 310˚ to 330˚ and is referred as the northwest-trending system. This fault system controls, to a large extent, the topographic shape of the ridge. It is composed largely of thrust and normal faults. The second system is subordinate and perpendicular to the former one. It is referred to as the northeast-trending system. This fault system is composed largely of tear and normal faults.

- NW normal faults are present along the main ridge. They usually follow the same orientation as the compressional structures (folds and thrusts) and, very often, are reactivated thrusts. These normal faults are the equivalent to the transverse joints, but with sufficient displacement to qualify as faults. Like the rest of the large structural discontinuities, these normal faults are hard to identify in the field. Normal faulting is most evident along the northwestern end of the main ridge. The NW normal faults are related to an extensional event, probably an early phase of the Rio Grande Rift.
- The NE faults are mostly vertical and show vertical fault striation suggesting that they are related to extension. These faults are commonly brecciated (cataclastite), up to 2m in width, with quartz-carbonate-specularite veins. The cataclastite is surrounded by a pinkish hematization halo and composed of strongly hematised cm to dm sub-angular fragments with sub-parallel quartz-calcite-siderite veinlets next to these faults. Gorski (1997) interpreted these structures as tear faults.

Quartz veining is present with conjugate veins in some the NW trending fracturing.

The rocks are very slightly metamorphosed as shown by the presence of sericite and chlorite.

The Sierra de Samalayuca is affected by both Laramides and Basin and Range deformation as expected by, the anticlinal structure with high angle normal and strike slip faulting present in its units.

Mineralization

Essentially, the Project mineralization is related to greenish silicious sedimentary units (green sandstone) invaded by a copper mineralization. Several mineralized zones are present as elongated hectometric pods along the same wide composite unit. The mineralized units reach 25m in thickness and are distributed over a 5km long by 500m wide area.

Within the mineralized unit, opaque minerals, green oxidized copper minerals, and rusty iron oxides are present (2-8%). These are bornite, chalcopyrite, digenite, chalcocite, covellite, pyrite, magnetite/ilmenite, hematite, goethite and rutile. The oxide copper minerals are chrysocolla and malachite with lesser amount of, azurite, brocanthite and volborthite (Gorski, 1993). Accessory minerals include: zircon, sphene, tourmaline, apatite, rutile, barite, gypsum and dolomite.

Figure 7: Fe-Cu-Mn oxides in altered sandstone bed

- Bornite is the most abundant copper sulphide. It is frequently rimmed and/or intergrown with digenite, chalcopyrite, covellite and chalcocite. The bornite is fine to very fine-grained and locally surrounded by a green oxidized-copper mineral which is then in turn surrounded by goethite. It is never associated with pyrite. Bornite occurs as irregularly-shaped grains both as pore-filler and replacement of magnetite (Bruno, 1995).
- Chalcopyrite is the next most abundant hypogene copper sulphide. It is commonly intergrown with bornite, rimming and cutting bornite, suggesting that it formed later, but just as frequently bornite rims chalcopyrite. Chalcopyrite also replaces pyrite but never occurs with chalcocite, digenite or hematite. Chalcopyrite, like bornite, also occurs as a pore filler and is frequently associated with chlorite.
- Digenite is rare and commonly rims or replaces bornite.
- Chalcocite is even rarer and in some cases rims bornite and is intergrown with covellite. The latter is an abundant replacement mineral which occurs with all of the other copper sulphides and is commonly associated with oxidized copper minerals and goethite. This suggests a supergene origin.
- Magnetite consists of intergrown magnetite/ilmenite detrital grains (Bruno, 1995). It is abundant in many rocks but always absent in all the copper-sulphide zones. Fine-grained hematite is not typically associated with the copper sulphides but occurs with goethite and magnetite/ilmenite. Hematite and goethite seem to replace magnetite.

Geochemically, high-grade copper value shows a strong correlation with Ag, Ni, Zn Implying the destruction of mafic silicate, magnetite and feldspar as a possible source. It also has a negative correlation with Mn suggesting a late destruction of copper minerals by weathering.

The core examination of the UMSX drilling (Gorski, 1993; Bruno, 1995) revealed a systematic zoning patterns of copper-iron minerals observed within and between the mineralized zones. Covellite and chalcocite occurs randomly and frequently throughout the zonation. The zonation is interpreted vertically and laterally as follow from deepest to shallowest:

- Oxidized zones dark purplish-grey sandstone and shale
- Quartz vein, fractured;
- Pyrite in grey-white sandstone;
- Chalcopyrite ± pyrite;
- Bornite and chalcopyrite;
- Bornite;
- Bornite ± digenite;
- Quartz veins, magnetite ± hematite;
- Oxidized zones dark purplish-grey sandstone and shale.

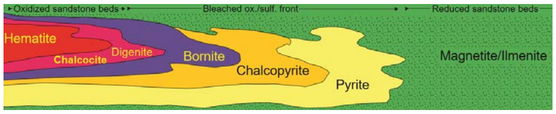


Figure 8: Mineral paragenesis and distribution of the copper and oxide minerals
Modified from Bruno (1995)

The original sandstone appears to be made up mainly of quartz, feldspar, magnetite, clays and accessory minerals with porosity of 15-20%. Montmorillonite is converted to montmorillonite-illite and then to muscovite. Calcite, chert and muscovite appear to act as early cements and pore fillers as the feldspars and unstable minerals are destroyed. Latest in the sandstone's hypogene history, copper sulphides began to form as a replacement of magnetite. Chlorite formed as a final pore filler along with pore-filling copper sulphides. Chlorite also formed as a late replacement of sericite.

Magnetite is detrital and is part of the original sandstone. It is replaced by copper sulphides, then later by oxidized copper minerals, goethite, and hematite. Pyrite appears to be the first sulphide to form at the expense of magnetite, followed by pyrite-chalcopyrite formation. Bornite and chalcopyrite coexist next and pyrite is no longer present. Zoning suggests that bornite replace chalcopyrite. Late in the paragenetic sequence, bornite and digenite coexist, forming after bornite. Latest, hematite appears without sulphide. (Bruno, 1995).

Laramide folding and faulting would have disrupted the sedimentary basin, and would prevented movement of the formation waters thought to be responsible for the transportation and deposition of copper. Importantly, sediment deposition and precipitation of its associated mineral deposit, must have taken place before Laramide deformation (Bruno, 1995).

The system is affected by an anticlinal structure and associated late fracturing that have remobilised and concentrated the mineralization and produced larger mineralized pods with a higher grade.

Copper Mineralized Zones

The following mineralized zones are the most notable:

Concha

Located at the north extremity of the sierra (348318E, 3472607N). It consists of polymetric arenite beds, affected by NE trending fractures with malachite staining and iron oxide alteration in the adjacent walls. The mineralization is variable erratically in different beds. Augmentation of the density of shale beds to the north mark the end of the mineralization.

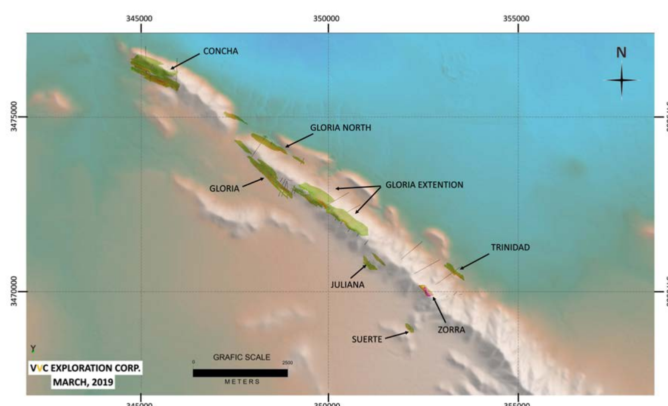


Figure 9: Copper Mineralized Zones. 1/200k

Gloria

The zone is located in the north central part of the project (349971E, 3471242N). The mineralization is similar to Concha but the pit appears to be controlled by the axial plane fault system. A steep SW dipping fault is present in the northern part of the pit and a NE abrupt dipping fault is present in the center of the pit. The latter is marked by a quartz-calcite veining system, with gash veins system present over 2 meters, on both side of the vein. On the north side (pit zone) the veins strike NW with a moderate dip to the NE, on the south side the veins are verticals and strikes to the SW. At the NE side of the pit the malachite staining seems to be associated mostly with subvertical NE trending fractures.

Gloria Extension

Located to the SE of the Gloria zone (350440E, 3471078N). The small north pit has a quartz/carbonate vein conformal to the lithology with some malachite. The axial plane fracturing is subvertical dipping to the NE. The South pit present erratic plating of malachite in axial plane fracturing zones but also at the base of some the schist units. Up to 5% of globular mm pyrite is present in surrounding arenites and chalcopyrite/chalcocite is suspected.

Gloria Extension

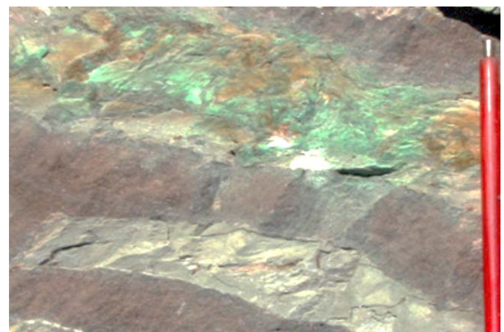


Figure 10: Copper in greenish reduced stratas adjacent to reddish oxidized ones.

Juliana

Located in the south part of the project (350980E, 3470330N). Wrapped arenite, fracturing, slump back and variable lithological attitudes from 70 NE to 0°.

Zorra

Located in the south part of the project (351620E, 3470070N). The malachite occurs within fractures in sandstone and is also present, sometimes heavily within the surrounding walls.

Item 8: Deposit Types

VVC's objective is to economically evaluate the Project copper mineralization. The following describe the mineral deposit types being investigated and explored, the geological model and concepts being applied in the investigation and the basis of which the exploration program planned.

Stratiform diagenetic type

Sedimentary Stratiform Copper (SSC) deposits are characterized by a narrow range of layers within a sedimentary sequence. They are epigenetic and diagenetic, since they are formed after the host sediment is deposited, but in most cases, prior to lithification of the host rocks. Their depositional environment consists of shallow-marine basins near the paleoequator and sabkhas in areas of high evaporation rate and within highly permeable sediments. High-energy host rocks exhibit conglomerate and sandstone filled channels, contain scour and fill, cross bedding, parallel lamination and ripple marks. Stratiform Cu deposits are formed in intracontinental rifts, aulacogens and passive continental margins (Cox et al., 1997).

Sediment hosted copper deposits are formed by fluid mixing in permeable sedimentary rocks. Two fluids are involved:

1. an oxidized brine carrying copper as a chloride complex;
2. and a reduced fluid, commonly formed in the presence of anaerobic sulfate-reducing bacteria.

For a sediment hosted copper deposit to form, some conditions are required:

1. There must be an oxidized source rock in which hematite is stable and ferromagnesian minerals or mafic rock fragments provides copper by leaching and
2. A source of brine is required to mobilize copper. Evaporites are commonly interbedded with red beds and act as brine sources, but any sedimentary environment in which evaporation exceeds rainfall will produce brines
3. The precipitation of copper necessitates a source of reduced fluid that can be derived from organic-rich shales, carbonate rocks, from any sedimentary fluid in equilibrium with pyrite or from reduction of sulfate by carbonaceous material and
4. There must be conditions favorable for fluid mixing.

Permeability in shale provides sites for fluid mixing, whereas faulting or folding may produce a hydraulic head that causes one fluid to invade the site of another. A permeable host rock or other open space must be present in which the fluids can circulate in intergranular space in fine-grained sediments prior to compaction and lithification.

Berg (1970), Bruno (1995) Hemming (1997) Gauthier (2011) classified the Samalayuca copper deposit as the stratiform diagenetic type. This hypothesis is corroborated by the Author and based on the following observation:

- When not affected by a slaty cleavage, the mineralization is conformable with strata;
- Where investigated, there is absence of deep pluton related dykes, with the exception of a faulted lamprophyre type dyke;
- Sedimentary rocks do not show any metasomatism that could be related to deep hydrothermal activity;
- Metamorphism is not of the contact type related to a deep intrusion but is of the dynamic type with chlorite and sericite developed in the slate cleavage;

- Copper mineralization shows a spatial link with oxide facies (red) passing to reduced facies (green), which is typical of a diagenetic copper deposit.

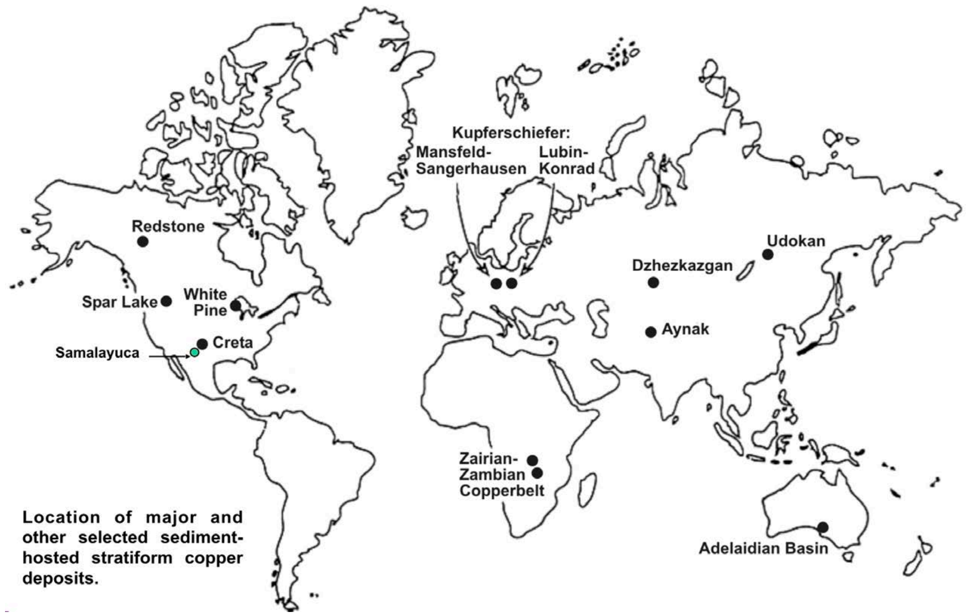


Figure 11: World Sediment-hosted stratiform copper deposits

Figure from Brown, A.C., 1993. Sediment-hosted stratiform copper deposits, in Sheahan, P.A., et Chery, M.E., Ore deposit models, volume II. Geoscience Canada, reprint series 6, Fig. 1, p. 99.)

Bridges (1962) mention that the Samalayuca lithologies are similar to the Permian rocks of Mina Plomosa in Aldana, Chihuahua, Mexico. The Permian age hypothesis allows linking the Samalayuca copper deposits with the ones of the Permian copper province of the southwestern United States (Branam and Ripley, 1990; Lapoint, 1991). Within this sedimentary stratiform copper province, the Creta mine produced, approximately 1.8 Mt @ 2.3% Cu and 5.5 g/t Ag, between 1965 and 1975 (Branam et Ripley, 1990). Statement: This information is not necessarily indicative of the mineralization on the Permit that is the subject of the Report. The Creta deposit is located in the Permian strata of the autochthonous North-American platform while the Project ones show clearly the effects of transport and dynamo-metamorphism of the Cordillera. Such a parautochthonous tectonic location is similar to the geological setting of the large Permian sedimentary stratiform deposits of Poland (Piexzonka et al., 2001) and the Proterozoic ones of Congo and Zambia (Unrug, 1988, et Kirkham, 1996).

Supergene enrichment perspective

This hypothesis is mention first by Hemming (1997) and corroborate by Gauthier (2011).

Supergene enrichment, is not common in sediment-hosted copper deposits and the surface geological observations cannot alone confirm the presence of supergene enrichment but allow envisaging it. In a desert setting like Sierra de Samalayuca since the Tertiary period, a supergene enrichment zone is more than probable.

> Supergene enrichment deposits are generated when typically, low-grade (0.05-0.35wt.% Cu) primary pyrite / chalcopyrite mineralization is exposed to oxygenated groundwaters (Anderson 1982; Titley and Marozas, 1995).
>
> Oxidation of pyrite above the water table forms sulphuric acid and ferric sulfate that react completely with chalcopyrite to form soluble cupric sulfate and ferrous sulfate. This process leaves behind a leached unit that is typically devoid of copper and contains a mixture of the iron oxide, sulphate minerals, hematite, goethite, and jarosite (Blanchard, 1968; Anderson, 1982). Copper in solution migrates downward to a redox (reduction/oxidation) boundary at or below the water table where it reacts with the reduced sulphur in chalcopyrite and pyrite and forms secondary copper sulphides forming in an enriched zone. Downward zoning of secondary copper sulphides reflects changing Eh-pH conditions and solution chemistry that yields a suite of secondary copper minerals with variable copper to sulphur ratios. This mineral suite typically includes: chalcocite, digenite, covellite and bornite as a series of replacements of each other and of chalcopyrite and pyrite (Sikka et al., 1991).
>
> Replacement textures range from complete volume for volume replacement to thin coatings on grain boundaries. Early cycle leaching and enrichment processes typically result in an enrichment of copper grade by a factor of at least 2. This process is cyclical and reflects episodic vertical changes in the position of the redox boundary as a result of tectonic, physiographic, and climatic changes. Where there is insufficient pyrite to oxidize and mobilize copper from either secondary or primary minerals or in the presence of acid consuming wall rocks such as limestones, skarns, or feldspar and biotite-bearing intrusive rocks, the minerals are oxidized insitu with only minor transportation of copper. This results in a complex assemblage of copper oxide minerals including chalcanthite, brocanthite, tenorite, cuprite, native copper, malachite, azurite, chrysocolla and a number of other secondary oxide minerals depending on Eh, pH, PCO2, PO2, SO42 and a variety of other environmental and geochemical conditions.
>
> Alteration of K-Al silicate minerals in the host rocks typically accompanies supergene enrichment. The reactions during supergene enrichment are the same as typical acid weathering (Titley and Marozas, 1995). This involves the conversion of feldspar to muscovite or muscovite to kaolinite. Acids formed by the dissolution of pyrite also react with K-Al silicate host rocks to produce alunite and jarosite under high acid and sulphate conditions.

Supergene enrichment characterizes the large copper oxide deposits of the Atacama Desert of Chile, Sonora in Mexico and New Mexico and Arizona in the United States (Chavez, 2000). These are high value targets since the advent of the SX-EW method (‘*Solvent Extraction Electrowinning*), as much for low-grade extraction as for a reduced environmental impact.

This type of supergene enrichment comprises:

- an upper zone, porous, leached and coppers impoverished where only malachite and chrysocolla remain; and
- a lower zone corresponding to the phreatic water impregnation level which is enriched in copper and carrying chalcocite is located within 50 m below surface.

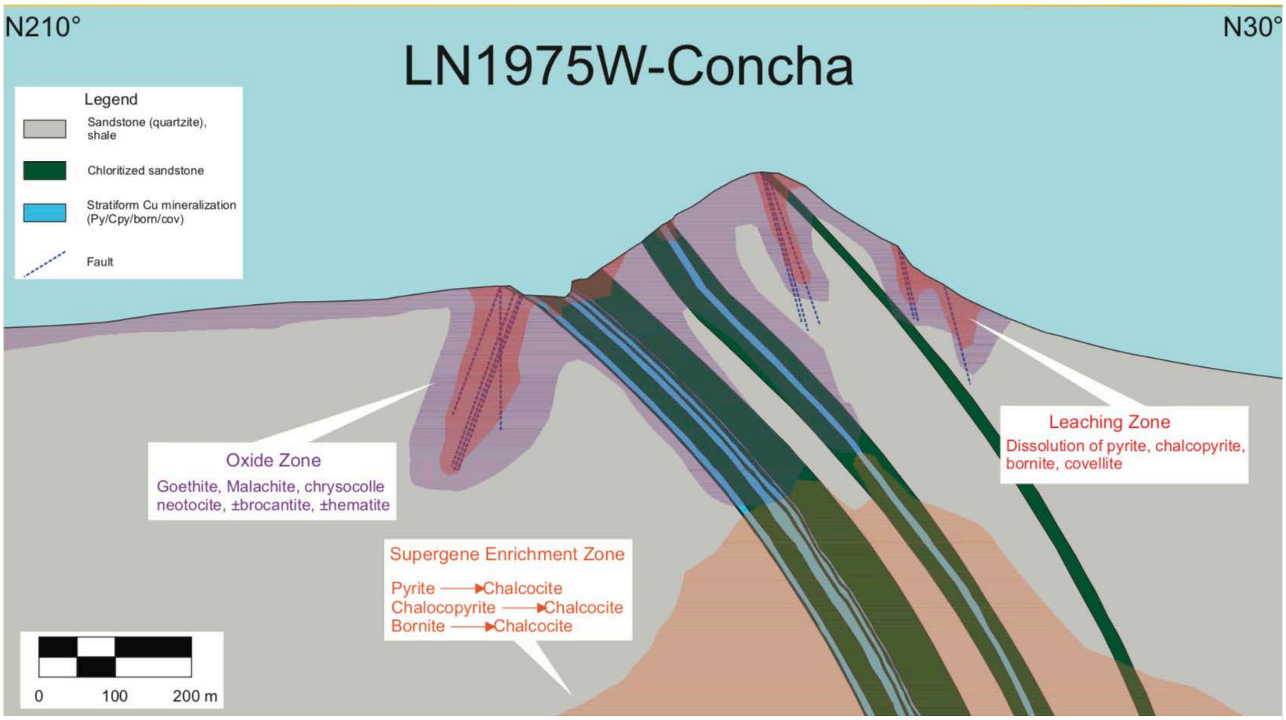


Figure 12: Hypothetical supergene enrichment profile for the Concha Zone, 1/10k

Two geological pre-meteoric impregnation characteristics are favourable for a supergene enrichment zone at depth in Samalayuca. They are:

1. A multi-kilometer copper-rich horizon which indicates the hypogene copper source is not punctual, like for a porphyry copper, nor carries erratic grades, like a vein type mineralization. The "proto-ore" potential is vast and homogeneous.
2. The permeability and porosity of the hypogene environment. The copper-rich horizon is in porous / permeable sedimentary rocks which, have been deformed by an intense slaty cleavage developed in incompetent siltstone and mudstone and by a conjugated fracture cleavage affecting competent litharenite with a siliceous cement.

Item 9: Exploration

This Item briefly describes the nature and extent of all relevant exploration work other than drilling, conducted by, or on behalf, of SC.

2010 Visit / Sampling

The first investigation consisted of a reconnaissance geological evaluation of the Permit area, conducted by André St-Michel PM, MSc, Engineering Geology. Chip and grab samples, are collected from historically mined zones.

April 2010, sampling of the principal historical mined pits, with 130 channel chip samples totaling 252m, is carried out by Eduardo Palacios Castro, ingeniero geológico, under the supervision of Luis Medrano, ingeniero geológico.

There is no report that conciliate the work with only database sheet and assay certificates available.

2011 Mapping / Sampling

In January 2011, Jocelyn Pelletier, P.Geo, with the help of three technicians, maps the geology and structure of the principal mineralized areas of the Project area. Geological and structural cross-sections are established using 30˚ oriented grid lines spaced at 100m. A total of 180 chip channel samples are collected, mostly chip samples. Geological maps of the main pits (i.e. Concha, Gloria, Gloria Extension, Juliana and Zorra) are produced at a 1:2000 scale, subsequently digitalized and georeferenced.

Geological and structural mapping by Jocelyn Pelletier, systematically on the gridlines, includes the study of lithological units, alteration, indicative of copper mineralization, type of faulting and degree of fracturing and folding. The Cu-mineralized zones are identified and described.

March 2011 compilation of geological data and maps (1:10000 scale) of the three principal mineralized zones (Concha, Gloria, Gloria Extension) are made. Following the recommendations of A. St-Michel, a revision and digitalization of geological sections (1:2000 scale) are constructed for the Gloria and Gloria Extension open pits. A more detailed mapping of the Concha, Gloria and Gloria Extension pits is performed in order to create a second set of geological sections (1:500 scale). During this campaign, 264 channel chip samples that totalize 773m are taken.

No report documents the exploration with only database data sheets and assay certificates available

Mid April 2011, Julio Pintado, PhD, P.Geo, a specialist in Mexican ore deposits, visits the Permit area to evaluate the potential of the previously mined zones (Gloria Extension, Gloria and Concha).

May 2011, Michel Gauthier, PhD, P.Geo., a stratiform copper deposit specialist, visits the Permit area.

2011 Camex Development Mining Group Inc

In June 2011 the Author visits de Project area and the visit report presents recommendation in view of a first NI43-101compliant report on the resource. This include:

- Complete the geological mapping and sampling program with quality control samples.
- Samples from the mineralized area should be bigger to avoid the high variability of the mineralization and the length should be reported adequately.
- Produce a georeference revision of the current and old data and a standardization of all databases
- Produce a detailed set of cross sections within the pits.

Following the recommendations, a series of geological sections (1:500) are generated every 25m across the Concha, Gloria and Gloria Extension pits. The databases are verified and standardized.

2012 Camex MGD

M. Boily PhD P. Geo, visits the Samalayuca Permit on February, 2012. The visit included a thorough inspection of the historical open mined pits and trenches dug on the Permit, the review of the mineralization associated with the sedimentary rocks, wallrock alteration and a general tour of the local geology. The visit is in relation with the production of a NI43-101 compliant report including a resource evaluation.

2017 Geophysical Survey

Ground Magnetic Survey

From October 24th to November 9th, 2017, Geofisica TMC carry out a 120 line-km ground magnetic survey on the Project.

The ground magnetic lines were surveyed in the GPS assisted mode, without any prior line cutting. The grid as illustrated on the geophysical maps is virtual and, therefore does not exist as such on the ground. The main grid consists of one hundred (100) 30˚ lines every 50 m, successively labelled L-20+50W to L-29+00E. Each of them was read over distances ranging between 0.65 and 1.2km. Another perpendicular grid of eleven (11) 30˚ lines, every 50 m, was also completed at the beginning of the campaign and overlaps the July 2017 grid. Lines are 1.0km long and labelled L 0+00 to L 5+00N on the geophysical maps.

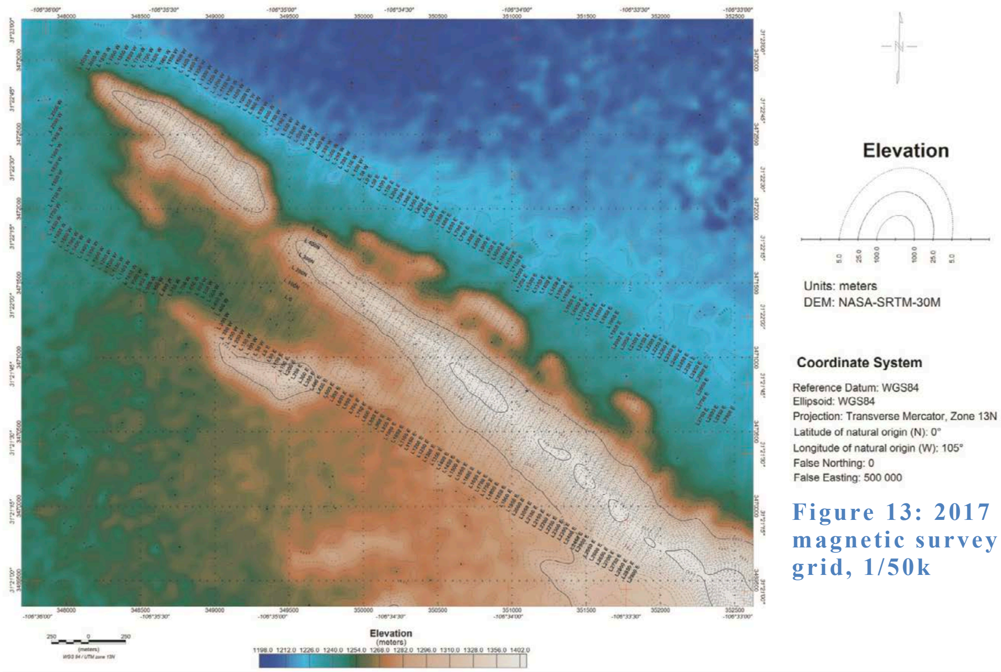


Figure 13: 2017 magnetic survey grid, 1/50k

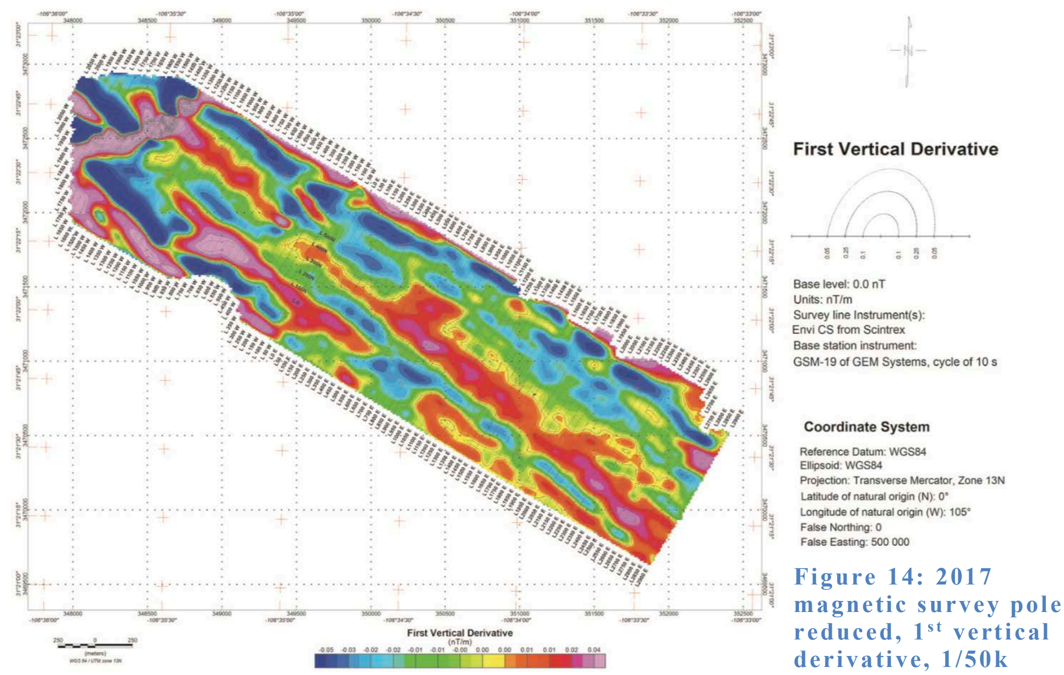


Figure 14: 2017 magnetic survey pole reduced, 1st vertical derivative, 1/50k

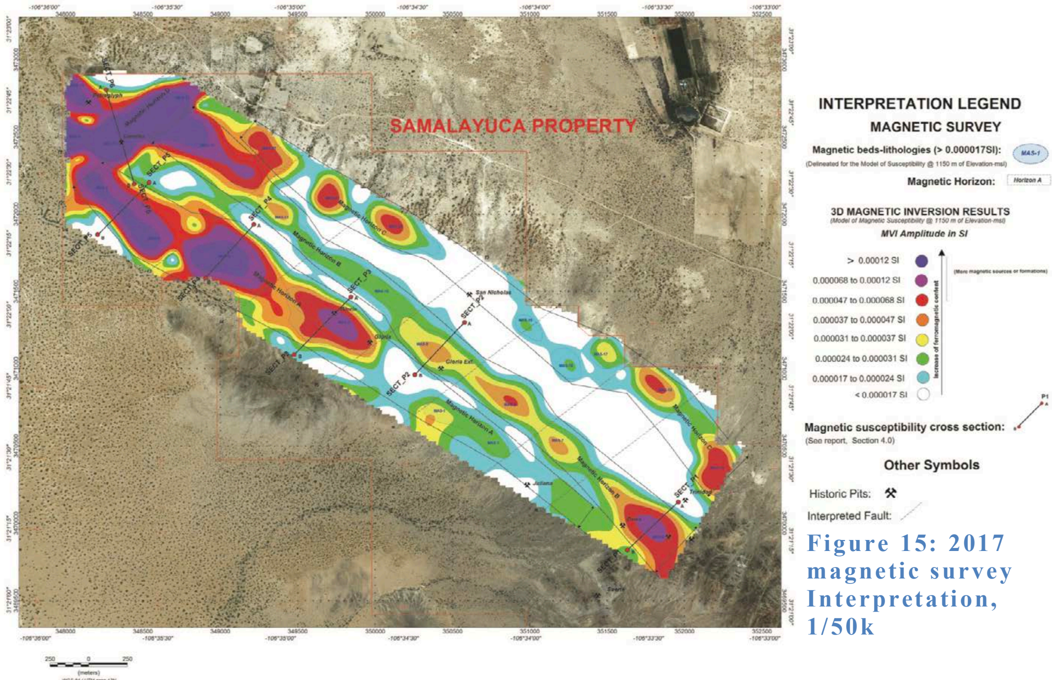


Figure 15: 2017 magnetic survey Interpretation, 1/50k

Conclusions

1. The main MAG anomalies are likely distributed along three NW/SE trending magnetic horizons. A fourth one is also observed in the northwestern part of the grid, but it is discordant compared with the other three, as it has a NE/SW trend instead.
2. These magnetic horizons are possibly indicative of sandstone beds that have been slightly enriched with ferromagnesian minerals as well as copper, and developed along or on the margins of NW or NE trending faults. Most of the historically important sandstone beds that have been mined in this area are located within the confines of magnetic anomalies or on their vicinity.
3. Insofar that we can confirmed the magnetic signature of the known mineralization, we recommend initially prioritizing anomalies MAS-2, MAS-3, MAS-4, MAS-12 & MAS- 13. They are indicative of more magnetic and relatively broad sandstone beds that are observed in the northwestern part of the grid; where the Concha and Gloria exploration sites are located. On a larger scale, the magnetic sandstone beds observed in the northwestern part of the Permit seem to trace a broad northwestern-pointing fold.
4. Based on the description of the known mineralized zones, the induced polarisation method could be applied, as an additional method, to precisely determine the outlines of the sulphide rich bodies. The final choice of drill targets could then be based on the review of both the MAG and IP data. For the time being, the MAG anomalies that were delineated in the NW part of the grid are the most favourable. However, their respective mineral potential remains to be ascertained based on the available geological information.

We recommend that pole-dipole (a= 50, n= 1 to 10 or 12) IP surveys be carried out, which would then allow us to attain a depth of penetration of approximately 225 to 275m. The nominal spacing between the lines should not exceed 100m and the lines should be read over a minimum distance of 500m on either side of the target (anomaly) to be investigated.

2018 Sampling

On June 2018, the Author visits the Project and made a verification of the exploration work in preparation for the Report, including a resource evaluation. Methodology including a QAQC procedure is elaborated for all type of sampling. A surface channel sampling program is suggested along the DDH sections.

From November to December 2018, 261 channel samples totaling 392m are taken under the supervision of Jose Lopez ingeniero geológico. Databases, plans and sections are systematically updated under the supervision of Ember Lopez ingeniero geológico, in Excel and MapInfo/Discover.

2019 Sampling

From January to February 2019, 232 channel samples totaling 348m are taken under the supervision of Jose Lopez ingeniero geológico.

Item 10: Drilling

This Item present information for the drilling campaign by SC.

2017 Drilling Campaign

August to December 2017, 23 DDH totaling 2738m are completed under the supervision of Jose Lopez ingeniero geológico. Zone tested include: Gloria, Gloria NW, Gloria Extension, Zorra and Thor.

Hole ID	Easting	Northing	Elevation	Azimuth	Dip	Depth	Area	Start	End	Geologist
SC17_001	350021	3471350	1342	205	-60	375	La Gloria	2017/8/23	2017/8/28	Jose Lopez
SC17_002	350024	3471344	1342	181	-50	269	La Gloria	2017/8/29	2017/9/1	Jose Lopez
SC17_003	350006	3471372	1340	210	-50	188	La Gloria	2017/9/1	2017/9/4	Jose Lopez
SC17_004	350129	3471255	1347	205	-50	92	La Gloria	2017/9/4	2017/9/5	Jose Lopez
SC17_005	350116	3471296	1343	207	-50	209	La Gloria	2017/9/5	2017/9/8	Jose Lopez
SC17_006	350029	3471364	1346	0	-90	344	La Gloria	2017/9/8	2017/9/12	Jose Lopez
SC17_007	349940	3471227	1283	30	-45	71	La Gloria	2017/11/6	2017/11/7	Jose Lopez
SC17_008	349940	3471227	1283	210	-50	98	La Gloria	2017/11/8	2017/11/9	Jose Lopez
SC17_009	349842	3471445	1317	210	-50	141	La Gloria	2017/11/10	2017/11/11	Jose Lopez
SC17_010	349764	3471889	1250	225	-45	125	La Gloria NW	2017/11/12	2017/11/13	Jose Lopez
SC17_011	349838	3471820	1255	210	-50	101	La Gloria NW	2017/11/13	2017/11/14	Jose Lopez
SC17_012	350195	3471587	1271	210	-50	59	Thor	2017/11/15	2017/11/15	Jose Lopez
SC17_013	350218	3471623	1275	210	-50	56	Thor	2017/11/16	2017/11/16	Jose Lopez
SC17_014	349838	3471820	1255	200	-50	23	La Gloria NW	2017/11/17	2017/11/17	Jose Lopez
SC17_015	349838	3471820	1255	225	-50	44	La Gloria NW	2017/11/17	2017/11/18	Jose Lopez
SC17_016	349973	3471388	1334	220	-50	89	La Gloria	2017/11/18	2017/11/20	Jose Lopez
SC17_017	352027	3470026	1290	205	-50	71	La Zorra	2017/11/22	2017/11/24	Jose Lopez
SC17_018	349972	3471289	1302	210	-60	59	La Gloria	2017/11/24	2017/11/27	Jose Lopez
SC17_019	352096	3470003	1281	245	-50	53	La Zorra	2017/11/24	2017/11/26	Jose Lopez
SC17_020	350035	3471239	1301	210	-50	44	La Gloria	2017/11/29	2017/11/30	Jose Lopez
SC17_021	351914	3469990	1331	210	-50	32	La Zorra	2017/12/1	2017/12/2	Jose Lopez
SC17_022	350490	3471065	1392	210	-50	90	Gloria Extension	2017/12/8	2017/12/10	Jose Lopez
SC17_023	350439	3471107	1390	0	-90	105	Gloria Extension	2017/12/11	2017/12/15	Jose Lopez

There is a control for azimuth and angle every 50m.

Databases, plans and sections are systematically updated under the supervision of Ember Lopez ingeniero geológico, in Excel and MapInfo/Discover.

2018 Drilling Campaign

From May to November 2017, 39 DDH totaling 3962m are completed under the supervision of Jose Lopez ingeniero geológico. The zone investigated are, Gloria Extension, Concha, Juliana and Suerte.

Hole ID	Easting	Northing	Elevation	Azimuth	Dip	Depth	Area	Start	End	Geologist
SC18_025	350439	3471107	1390	30	-70	153	Gloria Extension	2018/5/1	2018/6/6	Jose Lopez
SC18_024	350439	3471107	1390	210	-50	103	Gloria Extension	2018/5/23	2018/5/30	Jose Lopez
SC18_026	350490	3471065	1392	0	-90	161	Gloria Extension	2018/6/9	2018/6/15	Jose Lopez
SC18_027	350490	3471065	1392	30	-70	131	Gloria Extension	2018/6/15	2018/6/18	Jose Lopez
SC18_028	350408	3471118	1388	0	-90	136	Gloria Extension	2018/6/21	2018/6/24	Jose Lopez
SC18_029	350408	3471118	1388	210	-50	114	Gloria Extension	2018/6/24	2018/6/27	Jose Lopez
SC18_030	350408	3471118	1388	30	-70	102	Gloria Extension	2018/6/28	2018/6/30	Jose Lopez
SC18_031	350373	3471140	1376	0	-90	108	Gloria Extension	2018/7/2	2018/7/4	Jose Lopez
SC18_032	350373	3471140	1376	210	-50	96	Gloria Extension	2018/7/5	2018/7/7	Jose Lopez
SC18_033	350520	3471022	1396	0	-90	90	Gloria Extension E	2018/7/10	2018/7/12	Jose Lopez
SC18_034	350520	3471022	1396	210	-50	96	Gloria Extension E	2018/7/12	2018/7/16	Jose Lopez
SC18_035	350558	3471008	1404	210	-50	90	Gloria Extension E	2018/7/18	2018/7/19	Jose Lopez
SC18_036	350558	3471008	1404	0	-90	99	Gloria Extension E	2018/7/20	2018/7/22	Jose Lopez
SC18_037	350558	3471008	1404	30	-70	99	Gloria Extension E	2018/7/24	2018/7/25	Jose Lopez
SC18_038	350619	3470935	1425	210	-50	102	Gloria Extension E	2018/7/28	2018/7/30	Jose Lopez
SC18_039	350619	3470935	1425	0	-90	102	Gloria Extension E	2018/7/30	2018/8/1	Jose Lopez
SC18_040	350619	3470935	1425	30	-70	120	Gloria Extension E	2018/8/3	2018/8/5	Jose Lopez
SC18_041	350683	3470892	1430	210	-50	96	Gloria Extension E	2018/8/8	2018/8/11	Jose Lopez
SC18_042	350683	3470892	1430	0	-90	98	Gloria Extension E	2018/8/11	2018/8/13	Jose Lopez
SC18_043	350683	3470892	1430	30	-70	102	Gloria Extension E	2018/8/15	2018/8/16	Jose Lopez
SC18_044	350766	3470799	1428	210	-50	96	Gloria Extension E	2018/8/18	2018/8/19	Jose Lopez
SC18_045	350766	3470799	1428	0	-90	99	Gloria Extension E	2018/8/20	2018/8/22	Jose Lopez
SC18_046	350766	3470799	1428	30	-70	99	Gloria Extension E	2018/8/23	2018/8/24	Jose Lopez
SC18_047	350878	3470750	1447	210	-50	102	Gloria Extension E	2018/8/28	2018/8/30	Jose Lopez
SC18_048	350878	3470750	1447	0	-90	99	Gloria Extension E	2018/8/30	2018/9/1	Jose Lopez
SC18_049	350878	3470750	1447	30	-70	102	Gloria Extension E	2018/9/3	2018/9/5	Jose Lopez
SC18_050	350971	3470648	1413	210	-50	102	Gloria Extension E	2018/9/8	2018/9/9	Jose Lopez
SC18_051	350971	3470648	1413	0	-90	63	Gloria Extension E	2018/9/10	2018/9/11	Jose Lopez
SC18_052	350985	3470369	1331	0	-90	60	La Juliana	2018/9/16	2018/9/16	Jose Lopez
SC18_053	350985	3470369	1331	30	-50	60	La Juliana	2018/9/17	2018/9/18	Jose Lopez
SC18_054	351478	3469595	1312	0	-90	60	La Suerte	2018/9/22	2018/9/23	Jose Lopez
SC18_055	351478	3469595	1312	260	-50	51	La Suerte	2018/9/24	2018/9/25	Jose Lopez
SC18_056	348395	3472606	1280	0	-90	99	La Concha	2018/10/11	2018/10/12	Jose Lopez
SC18_057	348395	3472606	1280	210	-50	99	La Concha	2018/10/13	2018/10/15	Jose Lopez
SC18_058	348355	3472659	1288	210	-50	99	La Concha	2018/10/17	2018/10/18	Jose Lopez
SC18_059	348355	3472659	1288	0	-90	126	La Concha	2018/10/19	2018/10/21	Jose Lopez
SC18_060	348355	3472659	1288	250	-50	100.5	La Concha	2018/10/21	2018/10/26	Jose Lopez
SC18_061	348436	3472725	1321	240	-50	129	La Concha	2018/10/28	2018/11/2	Jose Lopez
SC18_062	348436	3472725	1321	180	-50	120	La Concha	2018/11/3	2018/11/6	Jose Lopez

There is no control for azimuth and angle at depth.

Databases, plans and sections are systematically updated under the supervision of Ember Lopez ingeniero geológico, in Excel and MapInfo/Discover.

Item 11: Sample Preparation, Analyses, and Security

The following describe the tracing information regarding the sample methodology from the collection to the analytical result.

2010-2011 Surface Sampling

The author observed the sampling and manipulation of sample by the Samalayuca Cobre team and consider that it conforms to the industry actual standard.

Surface rock sampling

- Identification of the mineralized zone and estimate of sample true thickness. If zone in zone is larger than 4 m, it is subdivided into shorter samples.
- In the pits, transversal (vertical) sampling along well exposed mineralized strata is done.
- Position with GPS-62ST, UTM-Nad27 Mexico, Zone13N, combined with direct map representation of the mineralized zone and samples position.
- Hammer chisel chip sampling. During sampling, supervision is made to avoid, high grading samples by collected malachite coating or low grading samples from sampling lixiviated surface.
    - Stratiform mineralization: produce a channel sample crosscutting perpendicular to stratification. Break lixiviated surface to expose the fresh rock, collect equal size of fragments in fine channel sample to imitate a core drill core intersection.
    - Structural mineralization: take a panel sample crosscutting perpendicular to structure. Collect equal size of fragments in a larger channel sample which covers more area.
- Measure true sample thickness with measuring tape.

Samples are placed in plastic bag, locked, transported by pack sack to the vehicle, conserved in a secured place and deposited to the lab within a few days by the geologist.

During this period there is no field QAQC procedure. However, the Author controlled some channel chip sample during the field visit (Marchand 2011).

2017-Present, Surface / Core Sampling

The author observed the sampling and handling of sample by the Samalayuca Cobre team and is satisfied that it conforms to the actual industry standards.

The laboratory used by Samalayuca Cobre for all sample is: ALS Chemex, Av. de las Industrias 6500, Col. Nombre de Dios, C.P. 31156, Chihuahua, Chih. Tel. +52 614 417 9728, Accredited Laboratory No. 579 (Conforms with requirements of ISO/IEC 17025:2005, RG-MINERAL).

Surface rock sampling

Under the supervision of a geologist the following procedure is followed:
Sampling

- Cleaning: The sample surface area is cleaned to lower the contamination.
- Marking: A line marking the sample area or influence is directly marked on the sampling surface.

- Size and weight: The minimum weight is 1kg and the maximum 3kg and is representative of the sample width.
- Collection: The sample is taken with hammer and chisel, gathered and separated in representative amount of the channel or area according to the sample influence.
- Bagging: Once cut and separated, the pieces of rock are placed in a bag duly labeled with corresponding ticket number.
- Labeling: A label is inserted in the bag.

Transportation and Storage:

- The field crew pack the samples and transport it to the secured warehouse.
- Company personal and vehicle is use for transportation to a registered carrier or directly to the lab with a package analysis slip.
- At the Laboratory reception a receipt is sent by email or by mail.

Drill core sampling

The geologist in charge oversees each step of the procedure.

Cores boxes are transported from the field to the secured core shack by the driller crew after each working shift. The boxes are verified and cleaned by the core shack personal.

Boxes preparation:

- Check that the length markers are in order and well placed;
- Control and review the final footage;
- Boxes are labelled with Box # and core footage / meterage.

Logging is done by marking the core and reporting handwritten descriptions and graphics on a spreadsheet tables according to the following:

- Selection: lithology structures and alteration.
- Marking: lithology, structures, alteration and samples.
- Control samples: Samples are taken to evaluate the quality of the laboratory and sampling, preferably with blank, duplicate and standard.
- Cut: The sampling core interval is cut in half, the 2 parts corresponding to the sample and to the witness.
- Bagging and labelling: the sample is bagged in a plastic bag marked with is label number, a label ticket is also inserted and the bag is prepared for shipment to the laboratory.
- Once the logging process is completed, the samples are sent to the laboratory:
- Company personal and vehicle is used to transport the samples directly to the laboratory or to a carrier with a sample form for the analyses request.
- At the reception, the laboratory returns a receipt by mail.

Item 12: Data Verification

2011 Author Sampling Verification

On the June 2011 visit, the Author took samples in different area. Here follow the characteristic and results.

All sample are taken, by the Author or by MM. J. Pelletier and A. Aragon under the Author direct supervision. They are essentially strip chip samples.

Sample No	UTM x	UTM y	Length (m)	Au (ppm)	Cu (ppm)	Description
JM20110619s1	348318	3472607	1,35	0,009	14500	Arenite, verification of sample 918567
918567			*2*		*7400*	*Concha, Historic sample from 2010*
JM20110619s2	349993	3471248	1,3	0,014	4480	Verification of sample JP369B
JP369B(378217)			*1,2*	*0,010*	*2310*	*Gloria, Historic sample from 2011*
JM20110619s3	350340	3471079	1,6	<0,005	4170	Verification of sample 918621
918621			*2*		*5110*	*Gloria Ext., Historic sample from 2010*
JM20110619s4	351660	3470018	1,5	0,012	21600	Verification of sample 918604
918604			*2*		*12200*	*Zorra, Historic sample from 2010*

Except for the Copper no other element presents an anomalic concentration. The correlation with historical sampling is highly variable (up to 100%) but it is considered acceptable related to where the sampling was done, in remobilized area. However, there is an over estimation of the length in some sample.

Procedure

The sampling procedures is as follow:

- Localisation of historical sample;
- Identification;
- Hammer chisel chip sampling along the same historical sample strip using the sample bag to collect fines as needed;
- Identification of the bag;
- Transport by packsack to the vehicle;
- Storage within the locked vehicle and later in a secure warehouse;
- Transport by the crew to the lab.

This verification also includes the observation of the methodology used by current field geologists.

Laboratory

A All samples were dropped off by the Author at:

ALS Chemex De Mexico, S A De C V
Ignacio Salazar No 688
Hermosillo, SON 83127, Mexico

Assays asked were for Gold (Au-ICP21) and ICP 4-acid (ME-MS61)

2017-18 Drilling

For the drill result from 2017 to June 2018, there was no QAQC to verify the analytical result, consequently in June 2018 the Author designed a QAQC procedure for the analytical result: Recuperation of the ALS preparation reject, selection of one reject every sequential 10 samples (10%) and selected reject analyses by two different independent laboratories after riffle splitting.

Sample Control

A total of 69 ALS original reject samples are analysed by both:

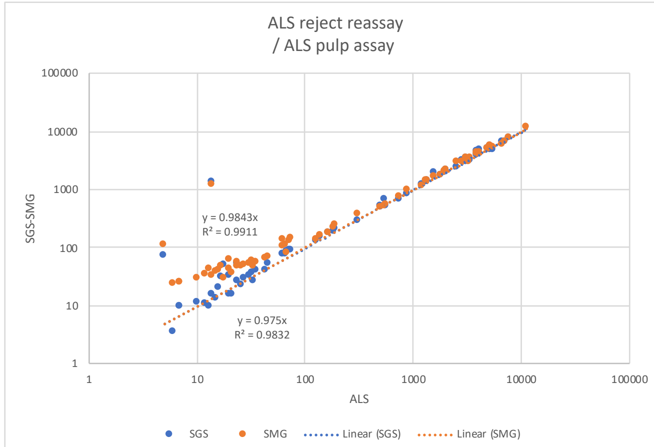
- SGS, Calle Industrial 6 Lote 6 Int. 1y2, Col. Zona Industrial Robinson, C.P. 31074 Chihuahua, Chih. Tel. +52 614 459 0816. Accredited Laboratory No. 657 (Conforms with requirements of CAN-P-1579 , CAN-P-4E (ISO/IEC 17025:2005)));
- SMG, Av. de las Industrias 6500, Col. Nombre de Dios, C.P. 31156, Chihuahua, Chih. Tel. +52 614 417 9728. No accreditation.

Reprise of the original ALS analysis result do not present a signifiant bias for all ICP elements packages analysis.

Two reprises are considered outliners and are attributed to an original ALS sample reject identification error sent to the verification laboratories.

Hole	Sample ALS	Certificate Chemex	Sample SGS	Certificate SGS	Sample SGM	Certificate SGM
SC17_006	626888	CH17203138	259802	DU39384	259871	OT-26584
SC17_016	373523	CH17266695	259820	DU39384	259889	OT-26584

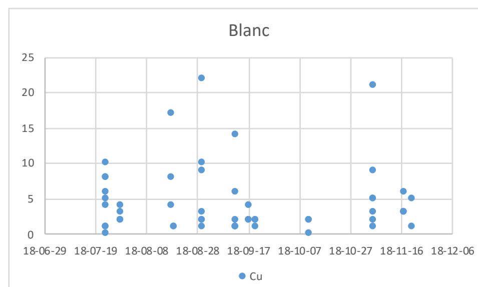
The following graph represent the copper result linear regression plot. Both SGS and SMG have a perceptible variation below the 100ppm level, with the SMG result giving higher values related to the analysis methodology.



Following the Author's visit in June 2018 a QAQC procedure is established. For holes SC18_027 and above; sample 0 is a blank, sample 10 is a standard and sample 20 is a duplicate.

A total of 1586 samples are analysed by ALS including 53 blanks, 53 standards and 53 duplicates. Assay control correspond to 11% of analysed core samples.

Blank



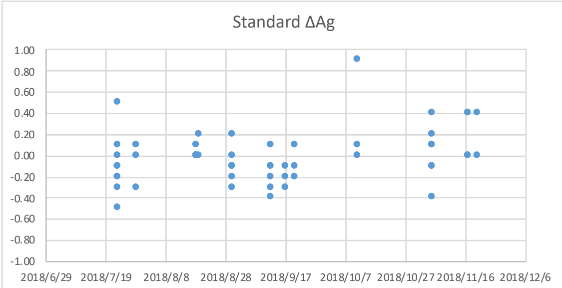
There is no significant bias revealed by the Blank treatment. There is an inversion for the Blank sample 259495 registered as 259494.

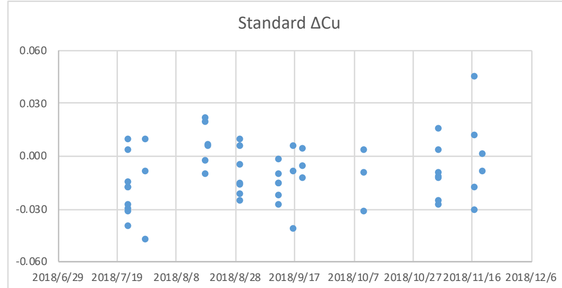
Standard

The Standard used is CDN-CM-38 from CDN Resource Laboratories Ltd.

Gold	0.942 g/t	±	0.072 g/t	Certified value	30g FA / ICP or AA
Silver	6.0 g/t	±	0.4 g/t	Certified value	4-acid / ICP or AA
Silver	6.0 g/t	±	0.4 g/t	Certified value	Aqua regia / ICP or AA
Copper	0.686 %	±	0.032 %	Certified value	4-acid / ICP or AA
Copper	0.681 %	±	0.032 %	Certified value	Aqua regia / ICP or AA
Molybdenum	0.0181 %	±	0.0011 %	Certified value	4-acid / ICP or AA
Molybdenum	0.0174 %	±	0.0016%	Certified value	Aqua regia / ICP or AA

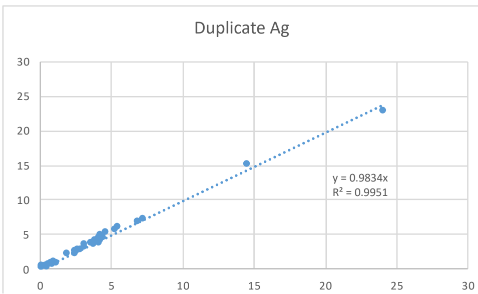
There is no significant bias revealed by the Standard treatment. All Ag differences from the Standard are below ±10% except for sample 283035 dated 2018/10/11 which is 15% higher. All Cu differences from the Standard are below ±10%.

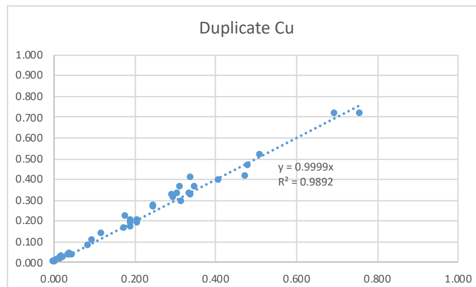




Duplicate

There is no significant bias revealed by the Duplicate treatment. A more important variation is present for copper especially around the 0.3% value is present.





Laboratory Control

The reanalyses of ALS reject duplicate from the 2017 to SC18_026 drilling, visual observation done by the Author, for the 2 reanalyses and one duplicate done internal by SGS and the 6 internal duplicates done by SGM, show no significant bias.

For the SC18_027 and above, visual observation, by the Author, did not reveal any anomaly.

Item 13: Mineral Processing and Metallurgical Testing

2010-2011 Samalayuca Cobre

From June 2010 to July 2011 Samalayuca Cobre carried out 5 metallurgical tests, comprising 19 bottle tests and 9 column tests (6 Vat Leaching, 3 Heap Leaching), on samples from Gloria pit:

Test 1: Sulphuric acid dissolution

3 tests done with 54,44% passing 200 mesh, at 24, 48 and 72 hours, with reactive type acid (99% pure). Dissolution is more than 97% with 50 kg/t

acid. Next step electro winning precipitation will normally regenerate 30% of the acid.

9 tests done to calibrate the fraction. Dissolution is 71,75% for the -3/4" fraction.

1 column flooded (Vat Leaching) test recovered 46,86% of copper in 20 days for the -3" fraction.

Test 2: Vat Leaching (Column flooded) test

Test with fraction -1 ¼" to -3/4". 2 tests with -3/4 reported 78,40% and 72,83% copper dissolution.

Test 3: 3 type of acid tests

Reactive (99%), technical (80%), industrial (50%) with concentration 2, 3, 4 and 5% on a -3/8" fraction. Best result is from industrial acid at 3% concentration with a dissolution at 81,57% with an acid consumption of 17,74% g/l.

Test 4: 3 Vat Leaching vs 6 Heap Leaching (irrigated column) tests

9 tests with Samalayuca water. Best result was dissolution of 79.13% in 32 days, with consumption of 67.75 kg of acid at a rate of 15 $l/h/m^2$ by the irrigation method.

Test 5: fraction -2 ½" with previous tests

Head 0.532% Cu and 0.942% Fe. Heap Leach test with -2 ½" fraction with industrial acid at 3% concentration and a rate of 15 $l/h/m^2$. Result is 42.97% recovery in 60 days with a consumption of 26.24 kg of acid.

The figures above do not include the regeneration of acid during Cu precipitation.

Generally, companies using these methods develop a process with variable rates of acid influx around 15 $l/h/m^2$, with rest and prolonged washing periods. The objective is to obtain dissolution around 75% with a reasonable consumption of sulphuric acid including acid regeneration at the time of copper precipitation. For Samalayuca it is believed that a -3" fraction is possible however it would need prolonged periods of acid application. Bulk sample tests will be necessary to determine the optimum crushing and acid application.

2017-Present, Samalayuca Cobre

2019 Column Test

From June 2018 to January 2019, Samalayuca Cobre carried out 2 column tests. The columns are 30,5cm in diameter and are 4 meters high.

Column no 1, from 20 June 2108 to 29 January 2019

94 days with lixiviation and 30 days without. Input: 426.9 kg at 0.838% Cu of mineralized rock from Gloria Extension Open pit

- 35 days 5% $H2SO4$ with 6 liter/hour/m^2
- 25 days 3% $H2SO4$ with 6 liter/hour/m^2
- 30 days without lixiviation
- 4 days 5% $H2SO4$ with 6 liter/hour/m^2
- 30 days 5% $H2SO4$ with 6 liter/hour/m^2

66.05% Cu recovery with acid consumption of 66,388kg/ton.

Column no 2, from 4 September 2108 to 29 January 2019

75 days with lixiviation and 30 days without, 401.0 kg at 0.576% Cu mineralized rock from Gloria Extension Open pit

- 10 days 5% $H2SO4$ with 5 liter/hour/m^2
- 35 days 3% $H2SO4$ with 6 liter/hour/m^2
- 30 days without lixiviation
- 6 days 10% $H2SO4$ with 6 liter/hour/m^2
- 24 days 5% $H2SO4$ with 6 liter/hour/m^2

42.26% Cu recovery with acid consumption of 40.872kg/ton

Item 14: Mineral Resource Estimates

Considering the information already known, the Author do not actually identify legal, political, environmental, or other risk that could materially affect the potential development of the mineral Resource.

Historical Estimate

2011 Camex Development Mining Group Inc

In 2011, J. Marchand produces an unpublished NI43-101 compliant report comprising a resource evaluation. The methodology used is by geologically interpreted section using a 2.7 t/m^2 density. The resource is classed as Inferred. The following table is a resume of the revised original.

Zone	Section Count	Surface Length(m)	Downdip Length(m)	Thickness (m)	Tonnage (kT)	Cu (wt %)
Concha	4	388	50	8.9	466.8	0.42
Petroglyph	1	100	50	16.0	216.0	0.44
Gloria	9	613	50	6.7	552.0	0.40
Gloria Extension Lower	2	100	50	16.7	225.5	0.29
Gloria Extension Upper	2	150	50	11.8	237.9	0.44
Juliana	3	175	50	4.2	99.1	0.24

Zone	Section Count	Surface Length(m)	Downdip Length(m)	Thickness (m)	Tonnage (kT)	Cu (wt %)
Zorra	3	225	50	5.8	176.3	1.34
Suerte	1	100	50	2.8	37.8	0.39
San Nicolas	3	300	50	3.8	155.3	0.34
Trinidad	3	250	50	5.4	182.3	0.43
Total	**31**	**2401**	**50**	**7.2**	**2348.8**	**0.46**

This work conciliated 2.3 million tons at 0,46% copper to 50m depth.

2012 Camex MGD / 2013 VVC Exploration Corporation

In 2012, M. Boily produces a NI43-101 compliant evaluation report including a resource evaluation (Boily 2012 and Boily 2013) . The methodology used is by geologically interpreted section using a 2.82 t/m^2 density. The resource is classed as Inferred

Zone	Section Count	Surface Length(m)	Downdip Length(m)	Thickness (m)	Tonnage (kT)	Cu (wt %)	Ag (ppm)
Concha	6	460	100	6.8	866.7	0.39	6.3
Petroglyph	1	100	100	16	451.2	0.44	-
Gloria	11	593	100	6.2	836.3	0.46	5.9
Gloria Extension	3	150	100	13.4	566.8	0.38	6.0
Juliana	3	175	100	4.2	206.9	0.22	1.6
Zorra	3	225	100	5.8	368.4	1.22	9.2
Suerte	1	100	100	2.8	79.0	0.39	4.5
San Nicolas	3	300	100	3.8	324.3	0.34	6.4
Trinidad	3	250	100	5.4	380.7	0.42	6.7
Total	**34**	**2363**	**100**	**6.6**	**4100.3**	**0.47**	**5.8**

This work conciliated 4.1 million tons at 0,47% copper to 100m depth.

2019 Actual Resource Estimate

The Author produced the resource evaluation. The actual resource evaluation is conciliated in the Author report “Technical Report on the February 2019 Resource Evaluation” (Marchand 2019). The resource is evaluated for the Concha, Gloria North, Gloria, Gloria Extension, Juliana, Suerte, Zorra and Trinidad copper mineralized zones.

Mineral resources that are not mineral reserves do not have demonstrated economic viability.

Database

The database is prepared by Ember Lopez ingeniero geológico, director técnico, Samalayuca Cobre.

Author partially restructured the database to conform to the MapInfo/Discover software.

The Author verified and controlled historical information and information on the recent surveys. In addition, he compiled and validated the database and considers that the information included in the database is adequate and valid to allow production of a resource calculation, with the following remarks:

- There is no systematics sampling control on wall of the high-grade.
- The QAQC procedure is not uniform.

Database Statistic

Diamond Drill Hole

Number:	81
Total length :	10 512m
Total sample:	2164 spl, totaling 2182.35m

Trenches and Surface Sample

Number:	656
Total length :	1417m
Total sample:	656 spl, totaling 1416.80m

Spatial envelope partly covered:	5 by1.5 km
Grid: Variable normally	~100*100m
Total Sample Count:	2820

Evaluation Methodology

The Block Model gridding is calculated using the Inverse Distance Weighted interpolation method (IDW).

IDW Method

To predict a value for any unmeasured location, IDW uses the measured values surrounding the prediction location. The measured values closest to the prediction location have more influence on the predicted value than those farther away. IDW assumes that each measured point has a local influence that diminishes with distance. It gives greater weights to points closest to the prediction location, and the weights diminish as a function of distance.

Parameter

Grid parameter are:

	Concha	Gloria N	Gloria	Gloria Ext	Juliana	Suerte	Zorra	Trinidad
Input								
Grid Type	IDW	IDW	IDW	IDW	IDW	IDW	IDW	IDW
Segment	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Coincident	Not Modify	Not Modify	Not Modify	Not Modify	Not Modify	Not Modify	Not Modify	Not Modify
Conditioning								
Cap Below	0	0	0	0	0	0		0
Cap Above	No	No	No	No	No	No	No	No
Convert Null To	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
Grid Size								
Cell X	115	216	140	192	87	20	40	110
Cell Y	123	160	140	165	51	20	25	75
Cell Z	90	80	72	102	33	20	20	75
Bock X	5	5	5	5	5	5	5	5
Block Y	5	5	5	5	5	5	5	5
Block Z	5	5	5	5	5	5	5	5
Total Cell	1273050	2764800	1411200	3231360	146421	8000	20000	618750
Origin X	0	0	0	0	0	0	0	0
Origin Y	0	0	0	0	0	0	0	0
Origin Z	0	0	0	0	0	0	0	0
Extend X	348150	349140	349380	350025	350925	351425	351550	351575
Extend Y	3472362.5	3471540	3471140	3470575	347025	3469550	3470000	3470050
Extend Z	912.5	920	1000	945	1260	1230	1350	900
Rotation X	0	0	0	0	0	0	0	0
Rotation Y	0	0	0	0	0	0	0	0
Rotation Z	0	0	0	0	0	0	0	0
Start X	348150	349140	349380	350025	350925	351425	351550	351575
Start Y	3472362.5	3471540	3471140	3470575	347025	3469550	3470000	3470050
Start Z	912.5	920	1000	945	1260	1230	1350	900
End X	348725	350220	350080	350985	351360	351525	351750	352125
End Y	3472977.5	3472340	3471840	3471400	347280	3469650	3470125	3470425
End Z	1362.5	1320	1360	1455	1425	1330	1450	1275
Length X	575	1080	700	960	435	100	200	550
Length Y	615	800	700	825	255	100	125	375
Length Z	450	400	360	510	165	100	100	375
Volume	159131250	345600000	176400000	403920000	18302625	1000000	2500000	77343750
Grid Search								
Search Ellipse	Anisotropic	Anisotropic	Anisotropic	Anisotropic	Anisotropic	Anisotropic	Anisotropic	Anisotropic
Expansion	2	1	1	1	1	1	1	1
Pass	2	2	2	2	2	2	2	2
Sector	2z	2z	2z	2z	2z	2z	2z	2z
Min per Sector	2	2	2	2	2	2	2	2
Max per Sector	16	16	16	16	16	16	16	16
At Least	1	1	1	1	1	1	1	1
In Sector	2	2	2	2	2	2	2	2
Major	60	60	60	60	60	60	60	60
Minor	30	30	30	30	30	30	30	30
Depth	3	3	3	3	3	3	3	3
Bearing	290	305	315	305	310	310	320	310

	Concha	Gloria N	Gloria	Gloria Ext	Juliana	Suerte	Zorra	Trinidad
Dip	0	0	0	0	0	0	0	0
Tilt	55	50	70	55	50	50	50	50
Method								
Weight	Power	Power	Power	Power	Power	Power	Power	Power
Type	Elliptical	Elliptical	Elliptical	Elliptical	Elliptical	Elliptical	Elliptical	Elliptical
Power	2	2	2	2	2	2	2	2
Exact Hit	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Taper	No	No	No	No	No	No	No	No

Classification

The density is determined to be 2.8 g/cm3, based on previous work.

The definition of the resource is based on

- the distance between the sample and the center of the estimated block;
- the presence of sample in three dimensions, as trenches and DDH for the Measured / Indicated.

The classification is arbitrary, depending on the observed visual continuity for the blocks content.

- Measured: Not Used;
- Indicated: <=40 m, 3D;
- Inferred:< 100 m.

Resource Base Case

The base case is based on a lower cut-off grade of 0.15% Copper grade.

	Indicated			Inferred		
Lower Cut= 0.15% Cu	**M Ton**	**Cu %**	**Cu KTon**	**M Ton**	**Cu %**	**Cu KTon**
Concha	3.162	0.302	9.538	6.151	0.267	16.397
Gloria North	0.000	0.000	0.000	1.435	0.274	3.933
Gloria	2.265	0.291	6.586	2.707	0.261	7.053
Gloria Extension	4.141	0.261	10.820	2.542	0.237	6.022
Juliana	0.000	0.000	0.000	0.425	0.234	0.994
Suerte	0.000	0.000	0.000	0.098	0.285	0.280
Zorra	0.000	0.000	0.000	0.628	0.728	4.571
Trinidad	0.000	0.000	0.000	0.412	0.308	1.268
Total	**9.567**	**0.282**	**26.945**	**14.398**	**0.281**	**40.517**

Resource Alternate Case

To illustrate the sensibility to the lower cut-off grade, different scenarios are presented for all zones.

Zones

Concha	Indicated			Inferred		
Lower cut Cu%	M Ton	Cu %	Cu KTon	M Ton	Cu %	Cu KTon
None	18.529	0.079	14.620	88.047	0.036	31.509
0.10	4.849	0.239	11.611	10.769	0.205	22.086
0.15	3.162	0.302	9.538	6.151	0.267	16.397
0.20	2.054	0.372	7.643	3.472	0.342	11.862
0.25	1.584	0.416	6.593	2.621	0.381	9.974
0.30	1.242	0.456	5.658	2.113	0.406	8.579

Gloria North	Indicated			Inferred		
Lower cut Cu%	M Ton	Cu %	Cu KTon	M Ton	Cu %	Cu KTon
None	7.628	0.030	2.251	50.080	0.007	3.545
0.10	0.739	0.246	1.816	1.247	0.217	2.706
0.15	0.518	0.298	1.544	0.869	0.258	2.240
0.20	0.395	0.337	1.330	0.602	0.295	1.775
0.25	0.304	0.370	1.125	0.404	0.329	1.328
0.30	0.229	0.402	0.920	0.251	0.362	0.910

Gloria	Indicated			Inferred		
Lower cut Cu%	M Ton	Cu %	Cu KTon	M Ton	Cu %	Cu KTon
None	19.816	0.047	9.381	67.009	0.017	11.441
0.10	2.995	0.250	7.494	3.699	0.224	8.284
0.15	2.265	0.291	6.586	2.707	0.261	7.053
0.20	1.708	0.329	5.616	1.881	0.298	5.611
0.25	1.209	0.372	4.494	1.281	0.333	4.264
0.30	0.852	0.413	3.522	0.810	0.368	2.977

Gloria Extension	Indicated			Inferred		
Lower cut Cu%	M Ton	Cu %	Cu KTon	M Ton	Cu %	Cu KTon
None	27.198	0.063	17.061	43.980	0.030	13.224
0.10	5.920	0.220	13.012	4.155	0.192	7.996
0.15	4.141	0.261	10.820	2.542	0.237	6.022
0.20	2.902	0.298	8.659	1.546	0.278	4.295
0.25	1.792	0.344	6.169	0.850	0.323	2.745
0.30	1.067	0.393	4.194	0.476	0.362	1.725

Juliana	Indicated			Inferred		
Lower cut Cu%	M Ton	Cu %	Cu KTon	M Ton	Cu %	Cu KTon
None	0.000	0.000	0.000	25.533	0.008	2.071
0.10	0.000	0.000	0.000	0.772	0.184	1.421
0.15	0.000	0.000	0.000	0.425	0.234	0.994
0.20	0.000	0.000	0.000	0.239	0.282	0.673
0.25	0.000	0.000	0.000	0.136	0.327	0.445
0.30	0.000	0.000	0.000	0.080	0.366	0.292

Suerte	Indicated			Inferred		
Lower cut Cu%	M Ton	Cu %	Cu KTon	M Ton	Cu %	Cu KTon
None	0.000	0.000	0.000	2.382	0.024	0.567
0.10	0.000	0.000	0.000	0.169	0.217	0.368
0.15	0.000	0.000	0.000	0.098	0.285	0.280
0.20	0.000	0.000	0.000	0.065	0.343	0.223
0.25	0.000	0.000	0.000	0.042	0.409	0.172
0.30	0.000	0.000	0.000	0.033	0.445	0.147

Zorra	Indicated			Inferred		
Lower cut Cu%	M Ton	Cu %	Cu KTon	M Ton	Cu %	Cu KTon
None	0.000	0.000	0.000	3.172	0.149	4.713
0.10	0.000	0.000	0.000	0.677	0.684	4.633
0.15	0.000	0.000	0.000	0.628	0.728	4.571
0.20	0.000	0.000	0.000	0.574	0.780	4.479
0.25	0.000	0.000	0.000	0.538	0.817	4.398
0.30	0.000	0.000	0.000	0.502	0.857	4.297

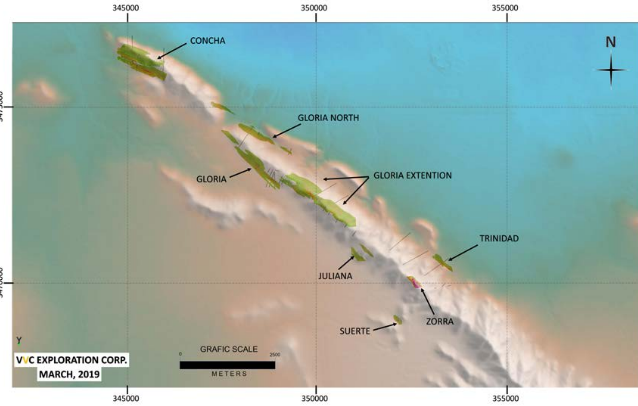
Trinidad	Indicated			Inferred		
Lower cut Cu%	M Ton	Cu %	Cu KTon	M Ton	Cu %	Cu KTon
None	0.000	0.000	0.000	82.303	0.003	2.219
0.10	0.000	0.000	0.000	0.592	0.252	1.489
0.15	0.000	0.000	0.000	0.412	0.308	1.268
0.20	0.000	0.000	0.000	0.303	0.356	1.079
0.25	0.000	0.000	0.000	0.220	0.407	0.894
0.30	0.000	0.000	0.000	0.163	0.453	0.738

All Zones

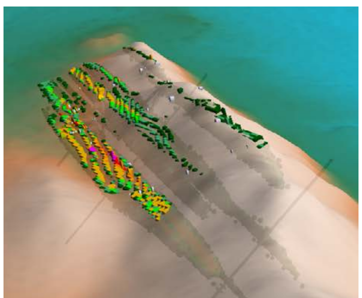
All Zones	Indicated			Inferred		
Lower cut Cu%	M Ton	Cu %	Cu KTon	M Ton	Cu %	Cu KTon
None	65.542	0.063	41.062	370.437	0.019	71.729
0.10	13.764	0.233	32.118	22.880	0.223	50.966
Base Case: 0.15	9.567	0.282	26.945	14.398	0.281	40.517
0.20	6.664	0.329	21.917	9.110	0.345	31.451
0.25	4.584	0.376	17.256	6.422	0.396	25.453
0.30	3.161	0.423	13.375	4.679	0.442	20.683

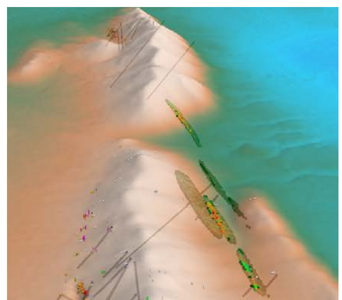
Resource Map

Location of the copper mineralized zones with a calculated resource, 1/200k.

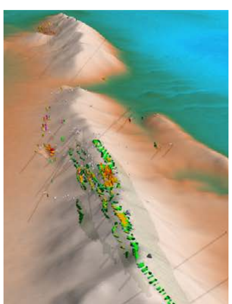


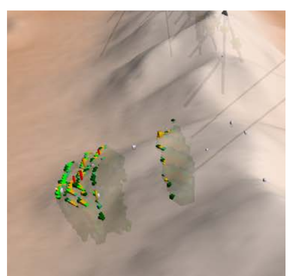
Zone 3D view, Azimuth: 315˚, Angle: -30˚, ±1/50k

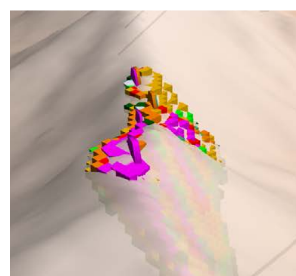

Concha


Gloria north

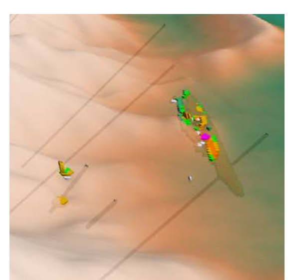

Gloria


Gloria Extension

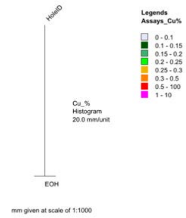

Juliana


Zorra


Suerte


Trinidad

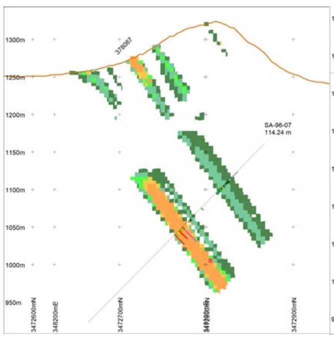
Transversal Section



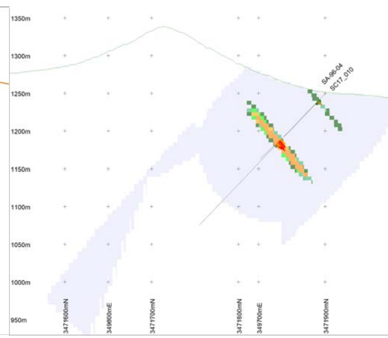
Legend

Representative transversal section of the resource zones at a 1/10k scale

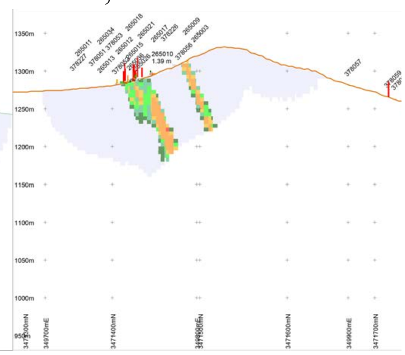
Concha, SecW2175



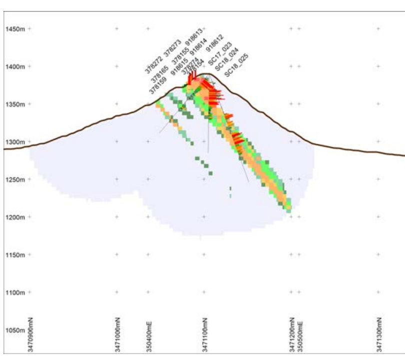
Gloria North, SecW0475



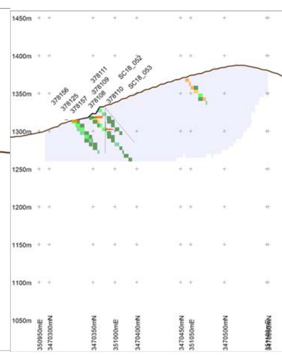
Gloria, SecW0275



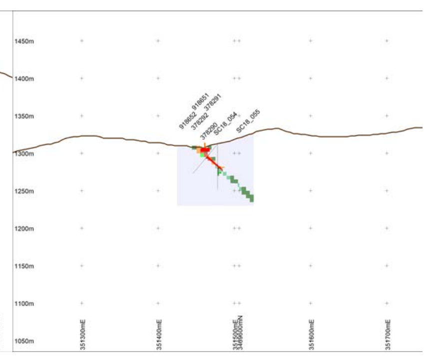
Gloria Extention SecE0525



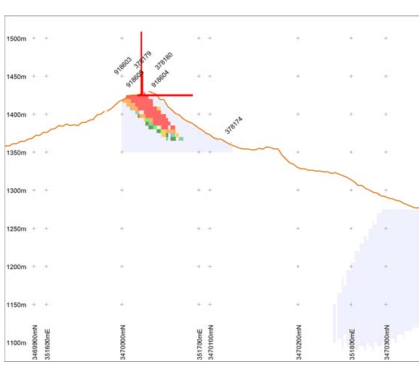
Juliana SecE1375



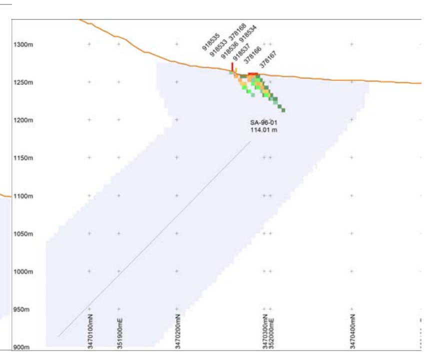
Suerte SecN0025



Zorra SecE2125



Trinidad SecE2275



QAQC

The Author produced different vertical cross-sections using the copper content and a distance cut off of 100m and did not find any significant bias in the block model versus the drill intersection.

ADDITIONAL REQUIREMENTS FOR ADVANCED PROPERTY TECHNICAL REPORTS

Item 15 to 22 are not relevant.

Item 15: Mineral Reserve Estimates

Item 16: Mining Methods

Item 17: Recovery Methods

Item 18: Project Infrastructure

Item 19: Market Studies and Contracts

Item 20: Environmental Studies, Permitting, and Social or Community Impact

Item 22: Economic Analysis

REQUIREMENTS FOR ALL TECHNICAL REPORTS

Item 23: Adjacent Properties

There is no adjacent property.

Item 24: Other Relevant Data and Information

The copper stratiform deposits are part of the principal copper sources (23%) in the world, which include the supergene enriched zones. Generally, of these deposits are low grade and high tonnage, the supergene zone gives values up to 2% copper sulphides.

Item 25: Interpretation and Conclusions

The mineralized zone is part of a monocline sandstone unit that carries pervasive copper mineralization as oxides, carbonates and sulphides. Based on the metallogenic interpretation, it is a sediment hosted, stratiform copper mineralization with an expected supergene copper enrichment at shallow depth, as seen in the characteristically copper oxides deposits of Chile's Atacama Desert, the Mexico's Sonora desert and USA's New-Mexico and Arizona deserts.

This type of deposits is suitable for the SX-EW (Solvent Extraction Electro-Winning) extraction method. This method has low grade extraction potential combined with a relatively low environmental impact and its low cost.

Historically, in the area, spasmodic small scale copper production using hand sorting started in early 1960's.

The combined folding / faulting style is favourable for the thickening of the mineralized host unit, so it is expected that thicker mineralized zones might be present at depth. However, on surface the mineralization is variable spatially over short distance.

The actual resource evaluation base case, using a lower cut-off grade of 0.15% Cu, gives an Indicated Resource of 9.6 million tonnes at a grade of 0.28% copper and an Inferred Resource of 14.4 million tonnes at a grade of 0.28% copper. The Resource is contained in 8 zones occurring in a 5.5 kilometer long by 0.5 kilometer wide, Northwesterly oriented ridge. The largest zones are :

- Gloria Extension, with 4.1 million tonnes at 0.26% copper Indicated Resource and 2.5 million tonnes at 0.24% copper Inferred Resource;
- Concha, with 3.2 million tonnes at 0.30% copper Indicated Resource and 6.2 million tonnes at 0.27% copper Inferred Resource.

The Gloria extension and the Concha zones are actually the most favorable areas for the delimitation of a measured resource. The position of the Gloria extension on the top of the hill and is dipping at shallow deep along the Northeast slope present an ideal situation for the perspective of a low cost exploitation. The Concha zone mineralization has good potential for more resources with good continuity at depth.

Having thoroughly evaluated the geological and metallogenic data, it is concluded that the Project has a short-term exploitation and longer-term exploration potential.

The Author proposes a linked two-phase program totaling 10.8 million CAD to clearly defined the economic potential of the more promising zones. First program phase is totals 1.7 million CAD and if positive, a second phase totaling 9.1 million CAD is presented.

Item 26: Recommendations

Following a positive conclusion and to qualify the economic potential of the project, we recommend the following fieldwork program. The program is constrained by the surface rights access and is aimed at defining an economic, near surface, copper deposit.

Phase I:

This phase is composed of two parts;

The first will further define the quality of the resource at low depth as well as verify the possibility of supergene enrichment at moderate depth:

- Completion of a detailed structural geological study;
- Detailed surface channel sampling in mineralized zones (20m spacing lines):
- Close spaced drilling of mineralized zones (40 by 40m staged grid);
- New Resource evaluation.

The second verify the economic possibility of an open pit extraction of the near surface copper resource.

- Further metallurgy tests / studies;
- Preliminary economic assessment study.

Phase II:

This phase is subject to a positive evaluation from the Phase I work results and is also composed of two parts;

The first will further define the resource at moderate depth in the supergene enrichment zone.

- Geological complement following the previous drilling result.
- An extended core drilling program to upgrade the resource quality and to complete the economic assessment for an exploitation.
- Resource calculation and delimitation of extracting bloc.

The second will be the processing of a 1 M tons bulk sample to realize the possibility of an open pit extraction of the near surface copper mineralization in the Concha - Gloria Extension area.

- Preparation of the area; camp, garage, laboratory, water well, electricity, levelling etc.;
- Buying and renting production and transport equipment;
- Construction and renting of crushing plant, leach pad, processing plant;
- Rights compensation for environment and land owner.

Budget

Work item includes all costs for the evaluation.

Work Type	Unit	Unit cost	Value CAD
Phase 1: Verification			
Data review, restructuring of databases, planning and material, geological survey	90 dy	1 200 $	108 000 $
Channel Sampling	2000 m	200 $	400 000 $
Core drilling	3000 m	220 $	660 000 $
Metallurgy	20	4 000 $	80 000 $
Resource Evaluation	4	10 000 $	40 000 $
Preliminary Economic Assessment	1	60 000 $	60 000 $
Administration, Supervision & Report	10%	1 348 000 $	134 800 $
Contingencies	~15%	1 482 800 $	217 200 $
TOTAL PHASE I			**1 700 000 $**
Phase II: Definition / 1,000,000 tonnes Bulk Sample			
Geology	40 dy	1 200 $	48 000 $
Core drilling	4000 m	220 $	880 000 $
Resource Evaluation	4	10 000 $	40 000 $
Field preparation / organization	1	1 100 000 $	1 100 000 $
Equipment	1	1 000 000 $	1 000 000 $
Plant and Leach Pad	1	3 200 000 $	3 200 000 $
Rights Compensations	1	700 000 $	700 000 $
Administration, Supervision & Report	15%	6 968 000 $	1 045 200 $
Contingencies	~14%	8 013 200 $	1 086 800 $
TOTAL PHASE II			**9 100 000 $**
TOTAL PROGRAM			**10 800 000 $**

Item 27: References

Berg, E.L., 1969, Geology of Sierra de Samalayuca, Chihuahua, Mexico, dans Twentieh Field Conferences. New Mexico Geological Survey, pages 176-182.

Boily, M., 2012, The Samalayuca stratiform sediment-hosted copper mineralization, Northern Chihuahua State, Mexico, Camex MDG

Boily, M., 2013, The Samalayuca stratiform sediment-hosted copper mineralization, Northern Chihuahua State, Mexico, VVC Exploration Corp.

Branam, T.D. et Ripley, M., 1990, Genesis of Sediment-Hosted Copper Mineralization in South-Central Kansas: Sulfur /Carbon and Sulfur Isotope Systematics. Economic Geology, vol. 85, pages 601-621

Bridges, L. W., 1962, Geology of mina plomosas area, chihuahua, Mexico, PhD thesis, University of Texas, Austin, Texas.

Bruno, B., 1995, A Mineralogical and Geochemical Study of the Sandstone-hosted Stratiform Copper Deposits at Sierra Samalayuca, Chihuahua, Mexico. University of Colorado at Boulder, Department of Geological Sciences.

Cantú-Chapa, A., 1970, El Kimeridgiano Inferior de Samalayuca, Chi- huahua: Revista del Instituto Mexicano del Petróleo, 11(3), 40- 44.

Chavez, W. X., 2000, Supergene Oxidation of Copper Deposits: Zoning and Distribution of Copper Oxide Minerals. SEG Newsletter, No. 41, pages 1 and 10 to 21.

Clark, K.F., Ponce, B.F. 1983. Summary of the Lithologic Framework and Contained Mineral Resources in North-Central Chihuahua. In Clark, K.F. and Goodell, P., eds., Geology and Mineral Resources of North Central Chihuahua, El Paso Geological Society, publication. no. 15; pp. 76-93.

Corrales Lerma, L.J., 2019?, Análisis Proyecto Minero Samalayuca Cobre, Samalayuca Cobre, S.A. De C.V.

Cordoba, D.A., Rodriguez, T.R., Guerrero, J.G. 1970. Mesozoic Stratigraphy of the Northern Portion of the Chihuahua Trough. In Seewald, K. and Sundeen, D., eds., The Geologic Framework of the Chihuahua Tectonic Belt, West Texas Geological Society; pp. 83-97.

Cox, D.P., Lindsey, D.A., Singer, D.A., Moring, B.C., Diggles, M.F. 2007. Sediment-Hosted Copper Deposits of the World: Deposit Models and Database. USGS Open File Report, 03- 1017; 53 pp

Craig, B. B., 1993, Master Thesis, B.A. Queen College, New York.

Damo, P.E., Shafiqullah, M., et Clark, K.F., 1984. Age trends of igneous activity in relation to metallogenesis in the southern cordillera.

Drewes, H. 1978. The Cordilleran orogenic belt between Nevada and Chihuahua. Geological Society of America, v. 89; p. 641-657.

Drewes, H. 1991. Description and Development of the Cordilleran Orogenic belt in the Southwesten United States and Northern Mexico. U.S. Geological Survey Professional Paper no. 1512; 92 pp.

Duarte, Erasmo A., 1966, Yacimientos cupriferos en la Sierra de Samalayuca, Chihuahua, Technical paper of Compania Fresnillo.

Gauthier, M., 2011, Rapport de visite au projet Samalayuca du 9 au 13 mai 2011, Exploración Meus de Mexico SA de CV.

Gerst, M.D., 2008, Revisiting the Cumulative Grade-Tonnage Relationship for Major Copper Ore Types. Economic Geology, v. 103, p. 615-628.

Gorski, D.E. 1993, Samalayuca project report, MXUS S.A. de C.V.

Haenggi, W. T., 1966, Geology of El Cuervo area, northeastern Chihuahua, Mexico, Ph.D.Dissertation, University of Texas at Austin.

Haenggi, W. T., 2001, Tectonic history of the Chihuahua trough, Mexico and adjacent USA, Part I, Boletín De La Sociedad Geológica Mexicana, Tomo LIV, 2001, P. 28-66

Haenggi, W. T., 2002, Tectonic history of the Chihuahua trough, Mexico and adjacent USA, Part II, Boletín De La Sociedad Geológica Mexicana,Tomo LV, Núm. 1, 2002, P. 38-94

Hemming, R.F., 1997, Letter of termination, Samalayuca Exploration Agreement dated August 12, 1992. MXUS, unpublished internal report, 8 pages.

King, P. B., 1947, Cartas geologicas y mineras de la Republica Mexicana.

Kirkham, R.V., 1996, Gîtes stratiformes de cuivre dans des roches sédimentaires in Eckstrand, O.R., Sinclair, W.D., et Thorpe, R.I., (éds.), Géologie des types de gîtes minéraux du Canada. Commission géologique du Canada, Série de la Géologie du Canada, No. 8, p. 249-260.

LaPoint, D.J., 1991, A Model for the Diagenetic Formation of Sandstone Copper Deposits in Sedimentary Rocks of Permian and Triassic Age, in New Mexico, U.S.A., dans Boyle, R.W., Brown, A.C., Jefferson, C.W., Jowett, E.C., and Kirkham, R.V., Sediment-Hosted Stratiform Copper Deposits, Geological Association of Canada Special Paper 36, p. 357-370.

Marchand J., 2011, June 2011 Field Trip Report, Exploración Meus de Mexico SA de CV.

Marchand J., 2011, Mineral Evaluation, Form 43-101f1 Technical Report, Project Samalayuca, Camex Development Mining Group Inc.

Marchand J., 2018, June 2018, Technical Field Trip Report, Samalayuca Cobre SA de CV.

Marchand J., 2019, Technical Report on the February 2019 Resource Evaluation, Samalayuca Cobre SA de CV.

Pelletier J., 2011a, Exploration Report, Salamayuca Cobre SA de CV.

Pelletier J., 2011b, Presentation of Grade control envisioned at Samalayuca, Grade and Tonnage Implication, Salamayuca Cobre SA de CV.

Pelletier J., 2018, Preliminary report on Resources calculation parameters for Sediment Stratiform Copper deposit, VVC Exploration Corporation.

Pelletier J., Lopez, E., 2018, Presentation on Intern Resources for Samalayuca Project, VVC Exploration Corporation.

Pieczonka, J., Piestrzynski, A., and Sawlowicz, Z., 2001 : Copper-silver deposists in the Lubin-Glogow district (Poland), in Sawlowicz, Z., ed., Mineral deposits at the beginning of the 21st century, geological excursion guide. The joint 6th Biennial S.G.A-S.E.G Meeting, Cracow, pages 5.

Sandoval, O., SG Abogados, 2019, Legal Title Report, Kaity. Samalayuca Cobre, S.A. De C.V.

SGM, 2010a, Estudio metalurgico preliminar a través de percolación en columna para la recuperación de cobre, Invesmin San Miguel S. de R.L. de C.V.

SGM, 2010b, Secunda parte Experimental realizada a través de percolación en columna, Invesmin San Miguel S. de R.L. de C.V.

SGM, 2010c, Tercera parte Experimental realizada a través de lixiviación dinámica, Samalayuca Cobre S.A. de C.V.

SGM, 2011a, Cuarta parte Experimental realizada a través percolación en columna (irrigación e inundación), Samalayuca Cobre S.A. de C.V.

SGM, 2011b, Quinta parte Experimental realizada a través percolación en columna (No.9), Samalayuca Cobre S.A. de C.V.

Shenk, J.D. 1997. Samalayuca project, final report. Internal report prepared for Minera Phelps Dodge, Mexico, S. de R.L. de C.V.; 16 pp.

Soleto, C.M. 1997. Stratigraphy and structure of the Sierra Samalayuca, Northern Chihuahua, Mexico. MSc. thesis, University of Texas at El Paso.

Staude, J-M, and Barton M.D., 2001, Jurassic to Holocene tectonics, magmatism, and metallogeny of northwestern Mexico, Bullettin G.S.A. 2004.

St-Michel A., 2011, Memo, test métallurgique projet samalayuca résumé.

Titley, S.R., Marozas, D.C. 1995. Processes and Products of supergene copper enrichment. In Porphyry copper deposits of the American Cordillera, Arizona Geological Society Digest 20, Pierce, F.W. and Bolm, J.G., editors; p. 156-168.

Unrug, R., 1988, Mineralization controls and source of metals in the Lufilian fold belt, Shaba (Zaire), Zambia and Angola. Economic Geology, vol. 83, p. 1249-1252.

Universidad Autónoma de Chihuahua, facultad de Ingenería, 2011, Determinación del índice de trituración, Invesmin San Miguel S. de R.L. de C.V.

Wilson, I. F., 1964, Copper deposits in the Sierra de Samalayuca, Chihuahua, Technical paper of Compania Fresnillo.