REPORT ON
GROUND GEOPHYSICAL SURVEYS
PERFORMED ON THE
LAS MINAS PROJECT
VERACRUZ STATE, MEXICO
SUBMITTED TO
SOURCE EXPLORATION CORPORATION
THUNDER BAY, CANADA
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Map C111-3: Geophysical Interpretation

MAGNETIC SURVEY

Map C111-1a: Total Field

Map C111-1b: Total Field Reduced to Pole Map C111-1c: First Vertical Derivative

INDUCED POLARIZATION SURVEY

IP Pseudo sections (1/10000): Three (3) interpreted apparent resistivity and chargeability color IP sections with 2-D inversion models of resistivity and chargeability plotted along the topography.

Map C111-2a: Apparent resistivity, True depth model at 150 m

Map C111-2b: Apparent chargeability, True depth model at 150 m

1. INTRODUCTION

In November of 2012, Source Exploration Corporation requested that Geofisica TMC SA de CV carry out ground geophysical surveys on their Las Minas property located 150 NW of Veracruz in Mexico (figure 1). The work included a high-resolution magnetometer survey covering a total area of 13.5 km² as well as three reconnaissance IP lines (ref. contract VER-102). The surveys were carried out between November 2012 and January 2013, and interrupted by the Christmas holidays.

Mining at Las Minas goes back to the time of the Aztec civilization and several historical small-scale operations, where high-grade gold and copper was mined are present. Economic Ag-Au-Cu mineralisations are associated with skarn type deposits or with networks of sulphide (Py, Po) and magnetite bearing hydrothermal veins. The geophysical data will be used to identify MAG and IP signatures of mineralised bodies and/or structures as well as to delineate favourable geological and structural settings that could have led to their emplacement.

The first part of the report summarises the surveys that were carried out, whereas the second part describes the semi-qualitative interpretation of the data as well as recommendations for follow-up work within the framework of the exploration program at Las Minas.

2. THE LAS MINAS PROJECT

2.1 Location and access

The Las Minas project is located in the state of Veracruz near the border of the state of Puebla and 150 km NW of the city of Veracruz (pop. 500 000) located on the Gulf of Mexico. The village of Las Minas, located in the centre of the area covered by the magnetic survey, is also located close to many former mines and mineralised showings that have been recently delineated by drilling. The project is accessed by means of secondary road that joins up, 15 km to the south, with Federal Highway 140 between Veracruz and Heroica Puebla de Zaragoza (figure 1). A railway located approximately 10 km south of the property that leads to Veracruz also intersects the area.

Zacatlán Las Minas Project acapoaxtia Chignahuapan Tetela de Teziutlan Ocampo Altotonga Xalapa erote Enriquez FI Salado Coatepec Zempoala Cofre de Perote Apizaco Teocelo Rafael Lara Zacatelco Totutla Paso de Ovejas 121 Tlachichuc Dos Bocas Heroica Puebla Coscomatepec Soledad de de Zaragoza Ciudad Tepeaca Macho Córdoba

Orizaba Parque Nacional Tuxpanguillo Cañón del

Zongolica

Tezonapa

Río Blanco

Figure 1 **General Location**

Description 2.2

Huatlatlauca

Tecamachalco

Tlacotepec de

The Las Minas project consists of five (5) mining concessions located in the north-central part of the state of Veracruz, and covering a total area of approximately 1271 hectares. The topography of the property is very steep with many deep valleys through which the local watershed drains. The altitude difference between the peaks and troughs can be up to 1000 metres. The vegetation cover is locally dense and consists of trees and shrubs. These difficult conditions significantly contributed in slowing down the progress of the survey.

The area surveyed by magnetics is more or less centred on the village of Las Minas and is shaped like a 5.5 km E/W * 2.5 km N/S rectangle. The three IP test lines were implemented east of the village of Las Minas, within the confines of the area covered by the magnetic survey. Figure 2 illustrates the location of the survey area overlain on the map illustrating the claims either owned by Source Exploration or under option.

Tlalixcovan

-97°10' 692000 -97°09' 694000 -97°06′ 698000 688000 690000 IP Survey lines Magnetic survey area 19°43' 19°42' as Minas (Pepe) San Valer Claims owned or Optioned to Source Exploration 692000 -97°10' 698000 694000 696000 -97°08′ -97°07 -97°09' -97°06′

Figure 2 Location of the survey grids on the Las Minas Project

2.3 Survey Grid

The magnetic survey lines were laid out by using GPS assisted navigation, as ground stakes were not used. The virtual grid consisted of a set of 110 N/S lines every 100 m labelled L 1+00E to L110+00E, each being 2.5 km in length. In order to carry out the IP survey, line cutting was done in order to "create" lines L70E, L74E and L78E along the trace of their equivalent magnetic survey lines. The positioning of the IP lines as well as the surveying of the pickets every 25m was done by using a Garmin GPS receiver model MAP-60CSX. The data was then converted to the WGS-84, UTM-Zone14N datum and this information was then used to geo-reference the IP database.

3. TECHNICAL SPECIFICATIONS OF THE SURVEYS

3.1 Overview

The geophysical surveys were carried out between 3 November 2012 and 15 January 2013, with a pause from the third week of December to early January for the Christmas holidays. Mr. Gerardo Del Val was the main operator for the magnetic and induced polarisation surveys. He was under the direct supervision of Mr. Simon McCrory, field crew coordinator with Geofisica TMC (Table 1).

Table 1 Fieldwork schedule and particulars of ground covered

Type of work	Time Frame	Operators	Production
Magnetometer-GPS Survey	03/11/2012 to 15/01/2013	Gerardo Del Val, Pedro Baez, Obiel Esparza & Fernando Medina	
GPS-Line cutting & Induced Polarization Survey	13/12 to 21/12/2012	Gerardo Del Val	7.5 km

3.2 Magnetometer Survey

Four operators were involved in the ground magnetic survey. Two of these operators were using GEM systems GSM-19W Overhauser effect magnetometers, whereas the other two used Scintrex ENVI Cs Caesium Vapour magnetometers (Table 2). Total magnetic field readings were continuously taken with a sampling rate of 0.5 Hz (every 2.0 s). The location of the readings was done in real time by using GPS receivers that were part of the magnetometer consoles. The diurnal corrections were done by using a GSM-19 Base Station that recorded values of the total magnetic field every 10 seconds throughout the day. The final database was geo-referenced to the WGS-84, UTM-Zone14N datum (Table 3).

 Table 2
 Magnetic Survey Equipment

MAGNETOMETERS	SPECIFICATIONS	GPS POSITIONING
	GEM GSM19-W V 7.0	NOVATEL OEMV-1
ROVING UNITS	- Overhauser Effect Proton Precession . Sampling Rate: 2.0 s . Resolution: 0.01 nT . Absolute Accuracy: 0.2 nT . Gradient Tolerance: 10 000 nT/m - Sensor Height: ≈1.8 m	 Compatibility: (CDGPS, SBAS, DGPS, OMNISTAR) L1 –Lband & SBAS signal tracking X, Y Precision: ≈ 1 m
	SCINTREX ENVI Cs	WI-SYS WS5012
	. Self-oscillating split-beam caesium vapour . Sampling rate: 2.0 s . Resolution: 0.01 nT - Sensitivity: < 0.003 nT/√ Hz RMS . Gradient Tolerance: 40 000 nT/m . Sensor Height: ≈1.8 m	- Compatibility (SBAS, WAAS, EGNOS) - 16 channels parallel ST Teseo GPS - X, Y Precision: ≈ 2 m (autonomous) < 1.0 m (SBAS)
	GEM GSM19	
BASE STATION	. Overhauser Effect Proton Precession . Resolution: 0.1 nT . Absolute Accuracy: 0.2 nT . Reading Interval: 10 s	-

Table 3 Local Projection Parameters

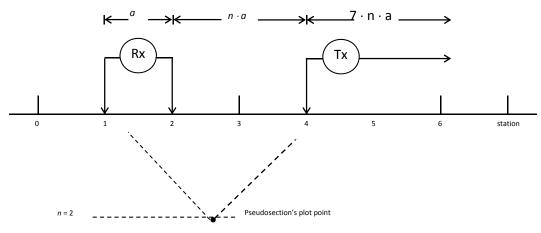
Datum	WGS84
Name	UTM, Zone 14N
Ellipsoid	WGS84
Maj. Axis	6 378 137.00
Inverse flattening	298.25722
Туре	Transverse Mercator
Central meridian	99° W
Latitude of origin	0° N
False Easting	500 000 m
False Northing	0 m
Scale factor	0.9996

3.3 Induced Polarization Survey

3.3.1 Electrode array

The pole-dipole (dipole-pole) array was chosen for this survey (see figure 3). The nominal a spacing between the electrodes was set to 100 meters and eight (8) dipoles were read.

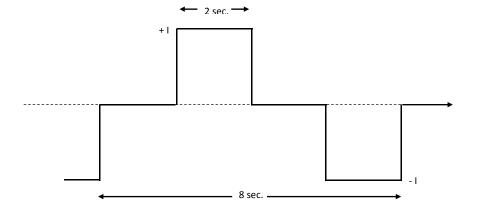
Figure 3 The pole-dipole electrode array



3.3.2 Equipment use...

The induced polarization equipment consisted of a transmitting and receiving apparatus using a commuted signal. A motor generator drove the TX 9000 Walcer Geophysics transmitter capable of supplying 9.0 kW of continuous power. Stainless steel electrodes were used to inject a stable current. The bipolar current waveform had an 8-second period with a 50% duty cycle (figure 4).

Figure 4 Transmitted signal at C₁-C₂



The primary voltage, denoted Vp and chargeability, denoted M were measured every 100 metres using an Iris Instrument Elrec Pro Time Domain Receiver. The decay curve was separated into 20 pre-programmed slices (figure 5). Slices M_1 to M_{20} were then normalized to a standard decay curve representing a pure electrode effect.

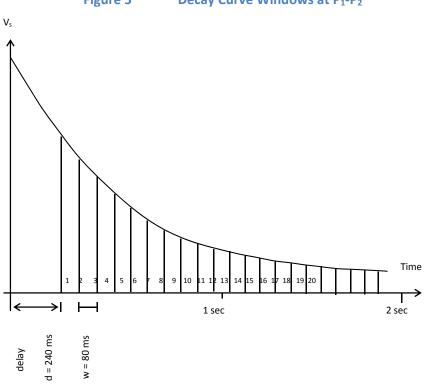


Figure 5 Decay Curve Windows at P₁-P₂

3.3.3 Calculation of ρ_a and M_a

Apparent resistivity was calculated according to the following formula:

```
Pole-dipole array:  \rho_a = 2\pi \ n \ (n+1) \ a \ V_P/I \ (in \ ohm-m)  where:
```

```
    a = dipole separation (a = 100 meters)
    n = multiple of dipoles (n = 1 to 8)
    Vp = Primary Voltage (mV)
    I = Transmitted Current (mA)
```

Chargeability M is the average of the twenty (20) normalized windows, expressed in mV/V.

4. DISCUSSION OF RESULTS

4.1 Geological Setting *

Mining at Las Minas dates back to Aztec period when the indigenous people in the area mined gold to pay taxes to the Aztec empire. The district was exploited from Spanish Colonial times until the Mexican Revolution. Thirty small-scale, high-grade mines operated in the district between 1870 and 1910. High-grade ore shipped from Las Minas to smelters in Mexico and elsewhere graded from 15 to 30 percent copper and 20 to 40 grams per tonne gold. The area was essentially idle from 1910 until the 1970's when the Consejo De Recursos Minerales (CRM), a mining division of the Mexican government, evaluated the area. Their mapping and sampling concluded that the central part of the district (controlled by Source) has a potential of 80 million tonnes of mineralized skarn, which, while relevant from an exploration perspective, is not 43-101 compliant and cannot be relied upon.

The district lies within the neo-volcanic province, which is aligned along a major east- west crustal break that bisects the country. These younger ash flow tuffs overlie a Tertiary age multi-phase granitic to dioritic batholith that intrudes Cretaceous limestone. The main intrusive complex is more than 10 kilometres in diameter.

Gold and copper mineralization is exposed along an irregular two-kilometre zone at the base of several drainages. Mineralization in the exoskarn consists of gold, native copper, chalcopyrite, bornite, pyrrhotite, pyrite, magnetite and hematite. Mineralization is localized in zones along the contact between the overlying limestones and intrusive rocks. Porphyry and epithermal occurrences are also present in the district (figure 6).

A number of mineralized deposits are located within the concessions and include both metasomatic and hydrothermal deposits. The metasomatic deposits are located at the contact of the granitic and granodiortic rocks in endo and exoskarn exposed along a two kilometre zone at the base of the stream beds. Mineralization in the exoskarn consists of gold, native copper, chalcopyrite, bornite pyrrhotite, pyrite, magnetite and hematite. Mineralization is localized in zones along the contact between the overlying limestones and intrusive rocks. Gold mineralization is associated with sulfide development, and commonly runs from 1 to 5 g/t with locally higher values over 30 g/t. Native copper has been observed in the core, and copper grades can range up to 5.0 %.

Several hydrothermal vein type deposits exist on the La Miquita concession in the northern part of the property. The veins vary from 0.50 to 2.20 metres in width with lengths of 100 to 300 metres and dip at 70 degrees. The mineralization consists of mainly

free gold associated with chalcopyrite, pyrite, pyrrhotite, arsenopyrite and iron oxides in a gangue of quartz and calcite.

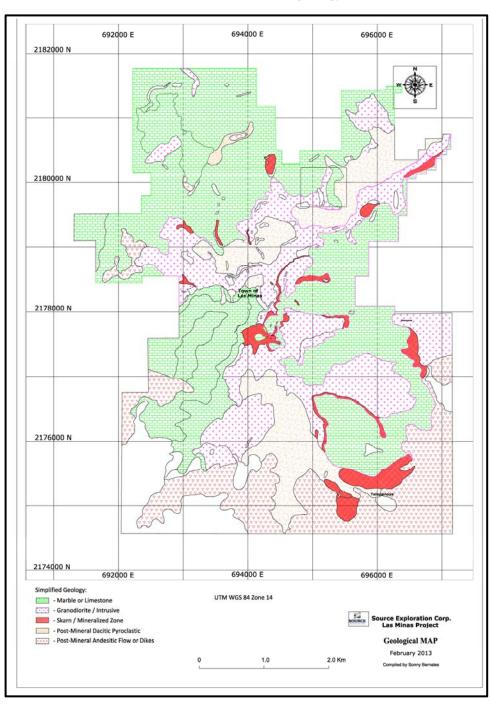


Figure 6 Local geology

^{*} From Source Exploration's website: <u>www.sourceexploration.com</u>

4.2 Magnetic Survey

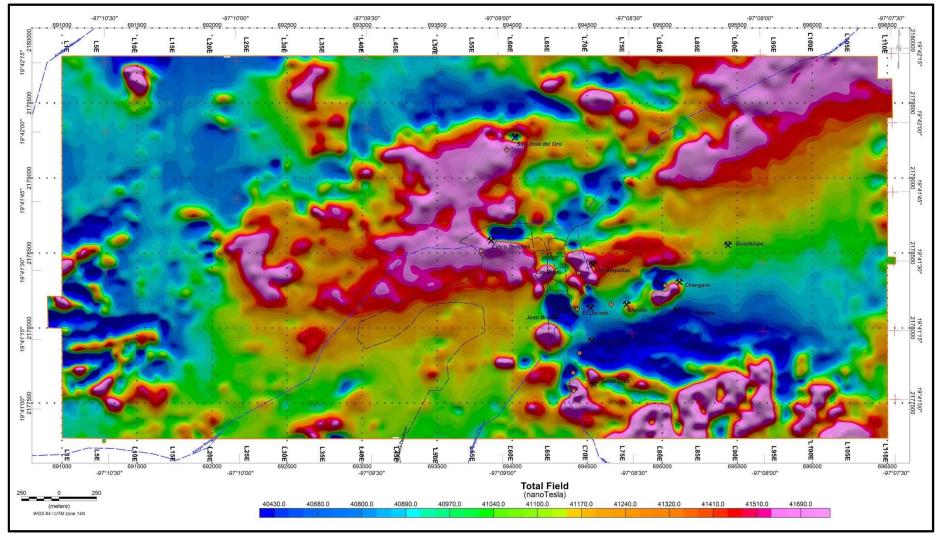
4.2.1 Survey Data

- * Total Magnetic Field (figure 7): The daily-recorded values of the total magnetic field taken by the roving units were corrected for diurnal drift and then checked for quality control before being merged into the database. Gridding of the values was based on a non-directional kriging algorithm, where each grid cell is given a weight and preferential interpolation direction based on a geo statistical analysis of the entire dataset; the objective being to highlight the different strikes and structural trends that are to be found in the survey area. The grid cell size was set to 12.5 m and the maximum interpolation distance to 150 m. The results are presented as a colour contour map at a 1/5000 scale (map C111-1a).
- * Total Magnetic Field Reduced to Pole (figure 8): The shape of a magnetic anomaly profile is a direct function of the inclination and declination of the ambient magnetic field at any given point on Earth. The reduction to pole is used in order to alleviate the shortcomings of the variation of inclination and declination as one gets farther from the magnetic poles: 90° inclination and zero declination at the magnetic poles as well as 0° inclination and variable declination at the magnetic equator.

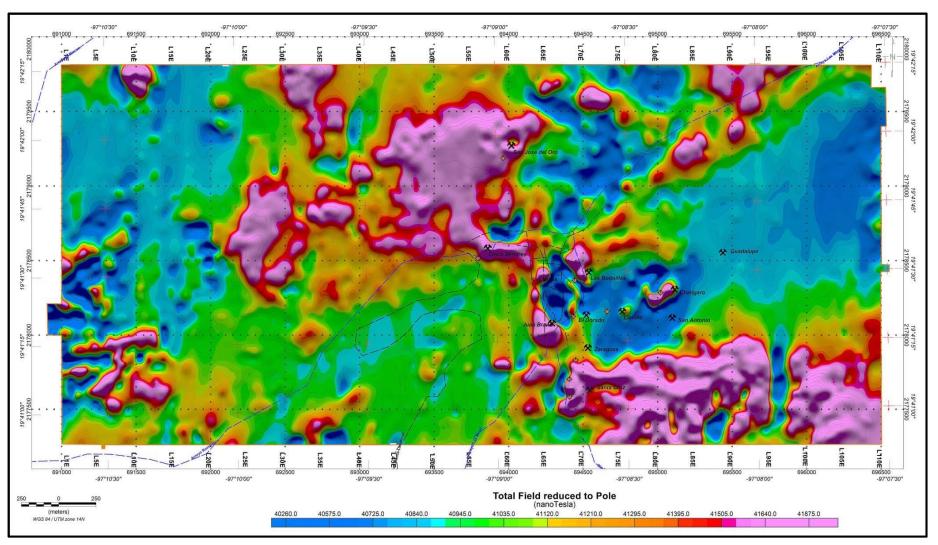
In order to simplify the interpretation of the magnetic data, the total magnetic field values were reduced to pole, whilst using inclination and declination values of 47.90°N and 4.40°E respectively for the Las Minas area (map C111-1b). This type of processing is more efficient for E/W striking structures and/or spherical *orebodies*.

* First Vertical Derivative: The first order vertical derivative quantifies the variation of the magnetic field as a function of height. It is equivalent to what would be obtained if we measured the magnetic field with separate magnetometers vertically spaced apart and by dividing the measurement difference by the distance between the two sensors. The purpose of this type of filter is to eliminate the long wavelength signatures and thus facilitate the discrimination of close or even superimposed anomalies. This filter also increases the noise level, which limits the use of higher order derivatives (n=2 for example). The vertical derivative is used to delineate the contacts between large-scale magnetic domains because its value is zero over vertical contacts (map C111-1c).







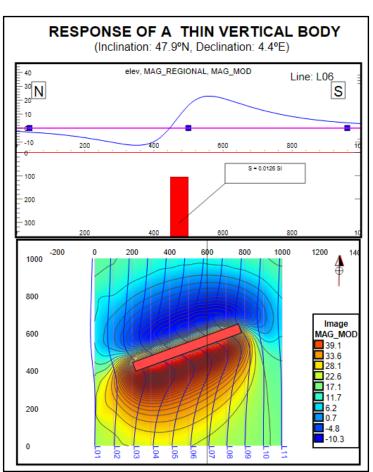


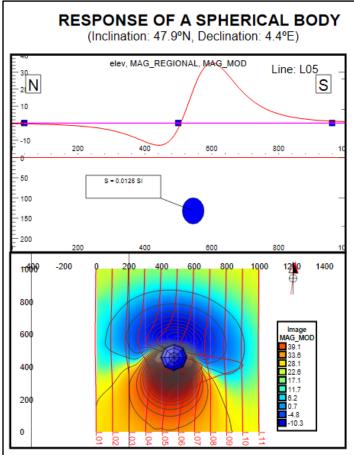
4.2.2 Interpretation

The magnetic database consists of more than 750 000 readings taken every 0.30 m along N/S lines every 100m. The surveyed area totals 13.75 km² and encompasses several former mines or mineralised showings.

Prior to the analysis of any magnetic results, one should keep in mind the shape of an anomalous source in the total field component over the area of interest. To illustrate this point, the typical total magnetic field response of a thin vertical dyke as well as a spherical ore body were calculated for the Las Minas area (see figure 9). In both cases, the magnetic response was characterised by a bi-polar (+/-) anomaly, and the anomalous source more or less centered on the inflexion point between the two poles. The use of the reduced to pole total magnetic field map is recommended as this greatly facilitates the delimitation of the magnetic anomalies.

Figure 9 Typical magnetic signature of thin vertical and spherical bodies





The magnetic susceptibility of rock samples mainly depends on their ferromagnesian content as well as the grain size and their distribution. Most magnetic minerals are iron-titanium oxides and pyrrhotite (sulphides). The content of magnetic minerals considerably increases the magnetic susceptibility. At Las Minas, the weakest susceptibilities should be indicative of sedimentary (0.0001 to 0.0002 SI*) or metasedimentary formations. Higher values are indicative of intrusive rocks such as granodiorites (0.001 to 0.05 SI*) or extrusive rocks such as andesites (0.002 to 0.02 SI*). Mineralised and altered limestones (skarn), that are typically magnetite-rich (1-20 SI*), should be indicated by magnetic anomalies whose amplitude will depend on the magnetite and pyrrhotite content (?), as well to the size and depth of the mineralised body. The magnetic data could also be used to delineate certain vein-type mineralisations associated with faults; depending upon the ferromagnesian concentrations of these structures and of their size.

A statistical analysis of the data indicates that the total magnetic field intensity values vary from 29050 to 57825 nT, with an average value of 41125 nT. The amplitude of the anomalies varies between 5-10 nT and can reach more than 10,000 nT. The magnetic map indicates that some former mines are characterised by strong but very circumscribed anomalies. The most interesting signatures are observed in the Cinco Senores, Las Boquillas, Changaro, Juan Brand and Santa Cruz areas. What remains to ascertain is the extent of the former mines versus their associated magnetic anomalies in order to circumscribe the areas to be followed up for further exploration work. The mineralised areas are located within the confines of a locally N/S and generally and mostly NE corridor that crosses the heart of the area surveyed by magnetics.

Towards the NW and SE of the village of Las Minas, two more or less homogenous and broad anomalous magnetic areas are also observed. These areas could be essentially of lithological origin and/or caused by deep ferromagnesian rich layers located at the contact between the carbonates and the intrusives. In order to remove the magnetic effects of mostly shallow targets, an upper continuation filter to 100m above surface was used (figure 10). The resulting image enables us to better define the outline of certain anomalies, once part of the surface noise has been removed, as well as tending to increase the importance, according to us, of the Cinco Senores, Santa Cruz and Las Boquillas areas.

^{*} Typical susceptibility values of these types of lithologies and minerals (handbook values); these have not been followed up in the field.

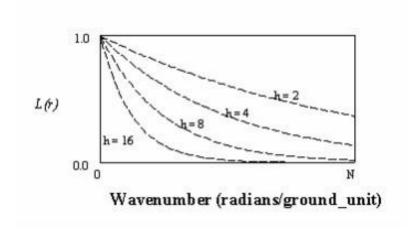
On the interpretation map, only those anomalies whose amplitude exceeded 50 nT were plotted. In order to attain this objective, the database was examined in order to est

ablish a background value that can be removed from the total field reduced to pole map (grid image), to allow us to isolate the anomalies that were considered to be significant. Beyond this threshold, the delineated anomalies are presented on the interpretation map by anomalous trends whose coloring depends on their amplitude (see map C111-3 and figure 13).

→→ Remarks/recommendations:

 Δ We recommend that a certain number of barren and mineralised grab samples be taken in the skarn in order to ascertain the magnetic susceptibility value. The same steps should be taken for the host rocks in order to make better use of the magnetic data.

 Δ Upward continuation (CNUP): It is considered a clean filter because it produces almost no side effects that may require the application of other filters or processes to correct. Because of this, it is typically used to remove or minimize the effects of shallow sources and noise in grids

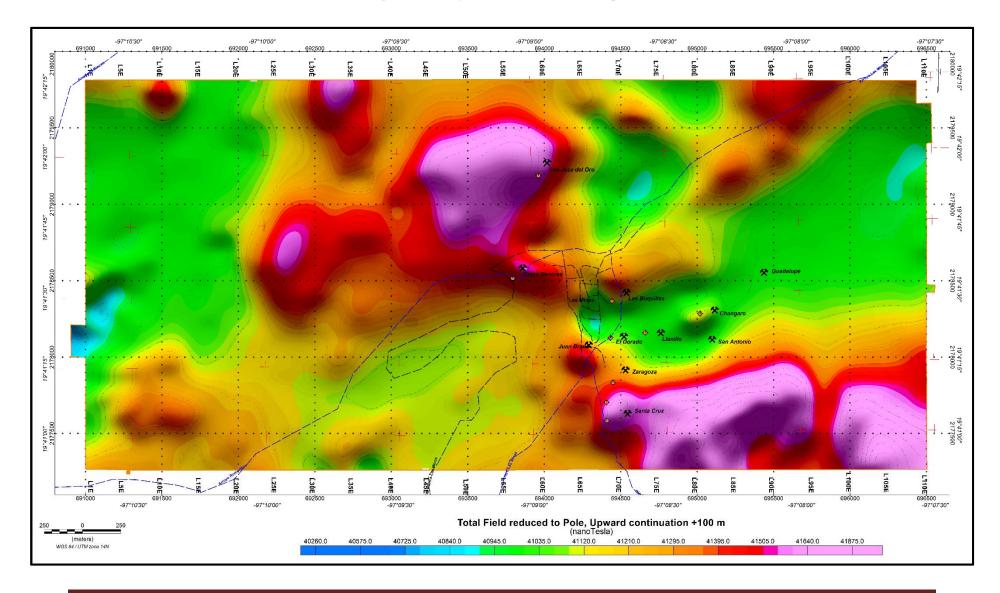


Parameters:

h: the distance in ground units, to continue up relative to the plane of observation.

r: wavenumber (radians/ground_unit) see r = 2pk where k is cycles/ground_unit





4.3 Induced Polarization Survey

4.3.1 Survey Data

- **IP Pseudo Sections:** The resistivity (R) and chargeability (C) readings taken along each of the three (3) IP lines that were surveyed are initially presented as interpreted colour pseudo-sections at a scale of 1/10000. On each of these pseudo-sections, a 2D inversion model illustrating the resistivity and chargeability values with the surface topography and vertical depth in metres is shown. The RES2DINV program, by Geotomo, was used to carry out the inversion models.
- Δ **IP Maps:** The inversion results of resistivity/chargeability obtained at 150 meters of vertical depth were used to create maps. As for the magnetic data, gridding of the IP-RES values was based on the non-directional kriging algorithm. The grid cell was set to 12.5 m and the maximum interpolation distance to 500 m. The results are presented as colour contours maps at a 1/5 000 scale (maps C111-2a & C111-2b). Figures 11 and 12 illustrate a reduced-scale colour version on these maps.

4.3.2 Interpretation

Three 400 m test IP lines were implemented east of the village of Las Minas. These lines intersect to the south an area where many former mines were located. The readings were taken using the pole-dipole electrode array (a= 100 m, n= 1 to 8), which should yield a theoretical depth of penetration of approximately 400 m. In order to carry out the inversion of the IP data, these values were corrected for topography, which particularly affect the first separations (n= 1 to 3).

Δ 2D inversion models and maps:

The 2D inversion models indicate that the resistivity of the underlying formations typically varies between 50 and 2000 ohm*m. Localised and well-defined mostly near surface resistivity increases are also observed; likely caused by layers or bodies that have low concentrations in polarisable minerals. Towards the south, these could be locally due to carbonates, whereas towards the north, they are observed mostly where pyroclastics have been mapped. The most important chargeability anomalies (Ma > 12-15 mV/V) have been delineated in the centre and north of the grid and best defined at vertical depths exceeding 50 to 75 m. These anomalies have also been delineated near the contact between areas of different resistivities (e.g. geological contact?)

Δ Main IP axes:

Based on the available information, the chargeability signature of the *sought-after* mineralisations in the area could be partially due to the presence of copper minerals such as native copper, chalcopyrite or bornite. Otherwise the concentrations of accessory minerals such as pyrite, pyrrhotite, arsenopyrite or magnetite when present, will be in fact the key element for the indirect delineation of the mineralised structures, layers or bodies (see Table 4). The percentage content of sulphides, thickness as well as lateral and depth extent of the mineralised structures will ultimately determine the strength of the anomaly. Given the nature of the host rocks, as well as the expected concentrations of polarisable minerals, the chargeability anomalies will probably be moderate to strong.

Toble 4	Chargoshilit	. values of	contain	main a vala
Table 4	Chargeability	y values of	certain	minerais

Mineral	Chargeability (ms)*
Pyrite	13.4
Chalcocite	13.2
Copper	12.3
Chalcopyrite	9.4
Bornite	6.3
Magnetite	2.2

The inversion models, as illustrated on the IP pseudo sections, allow us to estimate the location and, to a certain extent, the shape of the anomalous targets. However, these models are always more extensive than the targets that created them in the first place. The chargeability and resistivity anomalies have been indicated on the IP sections and then graded according to their relative strength. Those chargeability anomalies that are deemed to be caused by the same anomalous target are grouped together in what is called a polarisable axis, and then transposed onto the interpretation map (plan C111-3 and figure 13). All in all, three (3) polarisable axes were delineated, successively labelled from IPM-1 to IPM-3 (see Table 5).

Axes IPM-2 and IPM-3 (?), being associated with magnetic anomalies, have the potential to be most likely indicative of skarn type mineralisations. They are also located close to former mine sites, which makes them more interesting. Axis IPM-2 is better defined and stronger and should be a primary target in our opinion. Towards the north, axis IPM-1 is indicative, over a distance of 800 m, of a geological contact (granodiorite/pyroclastics), where sulphide mineralisations could have been remobilised.

^{*-} The duration of the square wave was 3 s and the decay was integrated over 1s (1% vol. concentration).

Figure 11 IP Survey, Apparent resistivity True depth model at 150 m

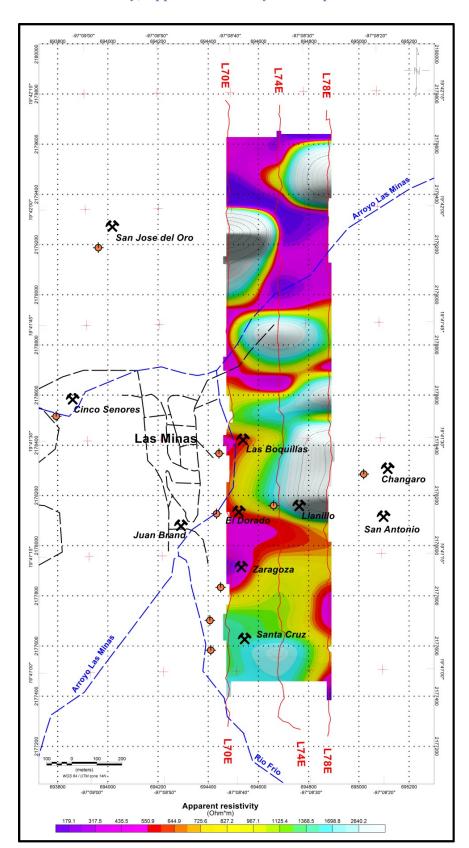
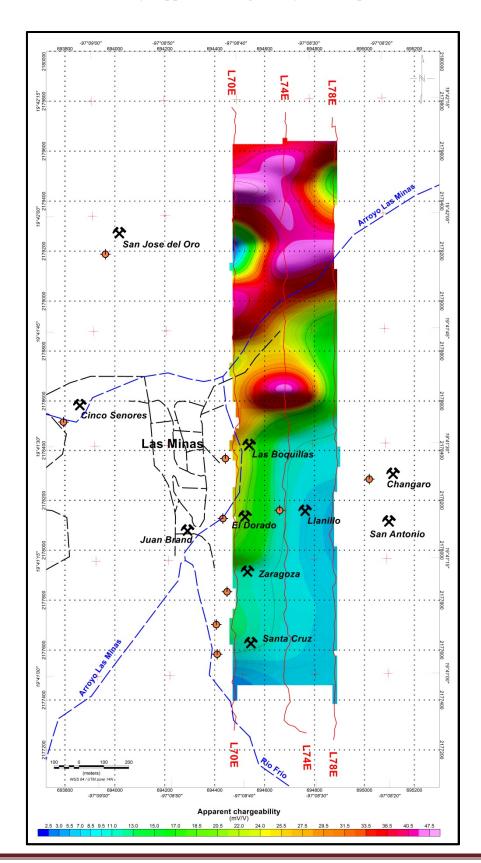


Figure 12 IP Survey, Apparent chargeability, True depth model at 150 m



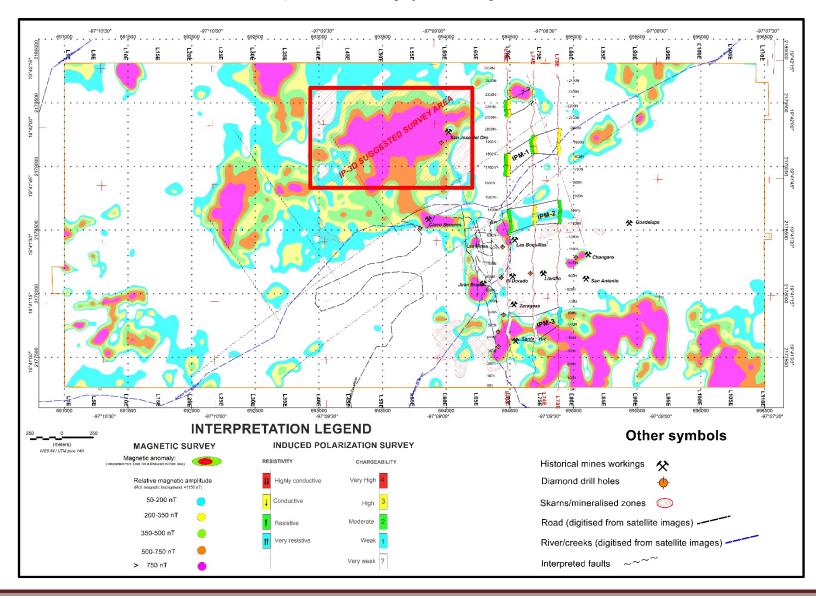


Figure 13 Geophysical Interpretation

Table 5 Description of the IP anomalies

Anomaly	Loca	ation	Cont	trast	Comments	Priority (1 to 5)
	Line	Station	Charg.	Res.		(1.10.0)
	70E	1700N	3	1	- Strong anomaly (Ma > 12-15 mV/V) and open at both ends;	
IPM-1	74E	1850N	3	1	- Indicative of a geological contact (pyroclastic dacite vs. granodiorite); - Signature of an altered/fault zone with sulphide remobilisation?; - Origin to be ascertained by ground mapping on lines 74E and 78E, where the anomalous target is	2
	78E	1900N	3	1	either outcropping or close to surface; - Steeply to slightly dipping towards the south (?)	
IPM-2	70E	1250N	2	-	 Anomalous axis (Ma > 12-15 mV/V) delineated in the granodioritic formations; Towards the west, is located immediately to the north of the Las Boquillas former mine; Mag association (Amp. > 200 nT); Likely indicative of ferromagnesian rich mineralisations that are known in this area, and possibly delineated over a distance of more than 800 m; The inversion models indicate that the anomalous target is close to surface on line 74E, which would allow follow-up mapping 	
	74E	1300N	3	-		1
	78E	1400N	2	-		
IPM-3	70E	475N	?	-	- Very weak anomaly (Ma < 4.0 mV/V) located in the southern part of the three lines and open at both ends;	
	74E	500N	?	-	The western part of the anomaly is located very close to the north of the Santa Cruz former mine as well as close to three recent drillholes located approximately 50 m west of line 70E; Located on the northern side of a very strong magnetic anomaly (Amp. > 750 nT) Interest to be ascertained based on available geological (deep anomaly?)	3-4
	78E	575N	1	-		

IP-RES Qualitative Interpretation: Chargeability contrast: ?= Marginal, 1= Weak, 2= Moderate, 3= High, 4= Very High Resistivity contrast: ↑= Resistive, ↑↑= Highly resistive, ↓= Conductive, ↓↓= Highly conductive

5. CONCLUSION

A total of 280 line-km of ground magnetics as well as 7.5 line-km of IP were surveyed between 3 November 2012 and 15 January 2013. The magnetic data density (\approx 750 000 readings) allowed us to produce very sharp images of the magnetic maps.

Magnetic survey: Some anomalies are most probably indicative of mineralised showings that have been mapped on the property. The most interesting signatures are observed in the Cinco Senores, Las Boquillas, Changaro, Juan Brand and Santa Cruz areas. Overlaying the geological data gleaned from past reports onto the magnetic map should allow us to determine the areas where follow up work is worthwhile.

Induced polarisation survey: Axes IPM-1 and IPM-2 are the strongest and best-defined chargeability anomalies. Towards the north, axis IPM-1 is indicative of a geological contact along which sulphide mineralisations could have been remobilised. In the centre of the grid close to the Las Boquillas former mine, axis IPM-2 is well correlated with a magnetic anomaly and could be indicative of skarn type mineralisations.

→ Remarks / Recommendations:

- * Ferromagnesian rich mineralisations are likely to develop at depth at the contact between the carbonates and the intrusive. According to our assessment, one of the potential targets is located NW of Las Minas, where mapped carbonate formations are observed to be within the confines of a broad magnetic anomaly whose origin remains to be ascertained (see also section 4.2.2). A follow up 3D IP survey is recommended in this area in order to verify this hypothesis. The outline of the follow-up area is illustrated in figure 13.
- * It would be worthwhile to carry out some magnetic susceptibility and intrinsic chargeability measurements on mineralised and barren grab samples as well as on hostrocks grab samples. This will allow us a better understanding of the geophysical data and also allow us to confirm which geophysical method is best suited for follow up work in regards to the local geological setting.

The interpretation of the geophysical data embodied in this report is essentially a geophysical appraisal of the surveys completed on the Las Minas Project. As such, it incorporates only as much geo-scientific information as the author has on hand at this time. Source Exploration geologists thoroughly familiar with this area are in a better

position to assess the geological significance of the various geophysical signatures. Moreover, as time passes by and information provided by follow-up exploration programs is compiled, the exploration targets recognized in this study might be downgraded or up-graded.

Respectfully submitted,

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