



Technical Report on SALOBRO Zinc Project, Porteirinha Municipality, Minas Gerais State, Brazil.

NI 43-101 Report

Effective Date: March 23, 2017

Report Date: August 23, 2017

Prepared by: Carlos H C Costa, P. Geo (APGO #1971).

Table of Contents

1 - Summary.....	4
2 - Introduction and Terms of Reference	7
3 - Reliance on Other Experts	8
4 - Property Description and Location	8
5 - Accessibility, Climate, Local Resources, Infrastructure and Physiography	13
5.1 - Accessibility	13
5.2 - Climate	14
5.3 - Local Resources	14
5.4 - Infrastructure	14
5.5 – Physiography	14
6 – History.....	15
7 - Geological Setting and Mineralization.....	18
7.1 - Regional Geology.....	18
7.2 - Local Geology.....	21
7.3 - Mineralization.....	28
8 - Deposit Type.....	30
9 - Exploration	33
10 - Drilling	39
11 - Sample Preparation, Analysis and Security	42
12 - Data Verification	42
13 - Metallurgical Testing	52
14 - Mineral Resource Estimates	54
15 - Adjacent Properties	54
16 - Other Relevant Data and Information	54
17 - Interpretation and Conclusions	54
18 – Recommendations	54
19 – References	56
20 – Date and Signature Page.....	57

List of tables, figures and photos

- Figure 1** – *Salobro's Property Claims (SAD 69– lat/Long grid)*
- Figure 2** – *Project Location Map*
- Figure 3** – *Longitudinal Section*
- Figure 4** – *BIMA (Itacambira Monte Azul Block) Regional Geologic Map*
- Figure 5** – *Stratigraphic Column*
- Figure 6** – *Local Geologic Map with Property Boundaries*
- Figure 7** – *Local Geologic Map*
- Figure 8** – *Vertical Section LT 1100 NE*
- Figure 9** – *Mineralization Features*
- Figure 10** – *Alteration Process and Tectonic Features*
- Figure 11** – *Proposed Metallogenic Model*
- Figure 12** – *Aeromagnetic Map – Analytical Signal (nT)*
- Figure 13** – *Aeromagnetic Contours over Gorotuba Target Geologic Map*
- Figure 14** – *Stream Sediment and Soil Sampling Survey Results*
- Figure 15** – *Drill holes' location check (2017 GeoEye Image)*

- Table 1** – *List of Salobro Project Claims*
- Table 2** – *Vale Mineral Resource Estimate Summary*
- Table 3** – *Vale's Exploration Work*
- Table 4** – *Geodesic Landmarks*
- Table 5** – *Drilling Summary*
- Table 6** – *Drilling Results Summary*
- Table 7** – *Chemical, Mineralogical and WI Sample Results*
- Table 8** – *Flotation Results*
- Table 9** – *Initial Program Budget (2017)*

- Photo 1** – *Project Core Shack (March 21st, 2017)*
- Photo 2** – *FD 09*
- Photo 3** – *FD 09 (FUX, 47.00m)*
- Photo 4** – *FD 09 (GBX, 85.00m).*
- Photo 5** – *FD 09 (GAXB, 112.00m)*
- Photo 6** – *FD 09 (UXL, 119,00m)*
- Photo 7** – *FD 09 (FFAM, 128.00m)*
- Photo 8** – *FD 09 (UXL, 180.00m)*
- Photo 9** – *FD 09 (BR, 236.00m)*
- Photo 10** – *FD 09 (AM, 262.00m)*
- Photo 11** – *FD 09 (ORE, 274.00m, Sphalerite)*
- Photo 12** – *FD 09 (ORE, 274.00m, Reddish and Brownish Sphalerite)*
- Photo 13** – *FD 09 (CS, 283.00m)*
- Photo 14** – *Drilling Site View*
- Photo 15** – *Drilling Site View Detail*
- Photo 16** – *FFAM + AM at the top of the hill in the right with trench trace. Location at figure 15 above*
- Photo 17** – *Amphibole Metachert (AM) in trench*

1 – Summary

Emerita Resources Corp. (“Emerita”) retained Carlos H C Costa P.Geo. (the “Author”) to prepare an independent National Instrument 43-101 compliant technical report on the Salobro Zinc deposit, located in the Porteirinha Municipality, Minas Gerais State, Brazil.

Emerita is a natural resource company engaged in the acquisition, exploration and development of mineral properties in Europe and South America, with a primary focus on Spain and Brazil.

Emerita has entered into an agreement with Vale S.A. (“Vale”) and IMS Engenharia Mineral Ltda. (“IMS”) dated July 14, 2017 (the “Definitive Agreement”) pursuant to which Emerita has agreed to acquire the Salobro zinc project (the “Project” of the “Property”). In connection with entering into the Definitive Agreement, Emerita and IMS have entered into a binding letter of intent (“LOI”) pursuant to which Emerita has agreed to incorporate and organize a Brazilian subsidiary (“PurchaseCo”) to formally acquire the Salobro Project from IMS. Emerita will initially own 75% of PurchaseCo with an exclusive right to acquire the remaining 25% interest of PurchaseCo from IMS at its sole option.

Pursuant to the Definitive Agreement, Emerita agrees to pay USD\$6.5 million in cash to Vale. The cash payments will be made by Emerita over seven (7) years.

There is no agreed royalty payment between the parties.

The Salobro Project is comprised of two (2) mining applications (the “Mining Applications”) covering 1,209.75 hectares in the Municipality of Porteirinha, Minas Gerais State, Brazil.

The Property claims are contiguous as shown in Figure 1 below. With reference to the Latitude and Longitude grid, the claims are located within the rectangle defined by the following coordinates: 43.12°W / 15.46°S (NW corner), 43.08°W / 15.46°S (NE corner), 43.12°W / 15.50°S (SW corner) and 43.08°W / 15.50°S (SE corner).

The Riacho dos Machados Group occurs as segmented layers oriented in a general N-S direction. They are embedded in basement rocks, with contacts marked by medium to high angle shear zones (*Guimarães et al., 1993*). The lithotypes that constitute this group were the object of several studies (*ECOGEO, 1991, 1992, Guimarães et al., 1993, Fonseca et al., 1997*) including lithological associations, structural patterns and their lithogeochemical compositions. The various studies conclude that the rocks of this group can be divided into two groups: 1) Rocks of a clearly sedimentary nature and 2) Rocks of supposed igneous origin. However, none of the papers defines a clear stratigraphic framework for the different lithology’s within this group.

Abreu & Belo de Oliveira (1998), a study of the Riacho dos Machados Group of rocks in the Salobro region, presented the first stratigraphic proposal for these lithological successions. They define the “Salobro Sequence” and identify three distinct lithostratigraphic units that were informally named from base to top: A, B and C. Unit A consists of quartz-muscovite-chlorite schist. Unit B brings together chlorite-quartz schist, amphibolite, amphibolitic schist, ferruginous metachert, quartzite, ferruginous quartzite,

conglomerate and magnetic iron formations. Unit C corresponds to a package of banded schist, composed of varied proportions of quartz, muscovite and chlorite, locally with graphite or garnitiferous layersevels.

The zinc and lead mineralization of the Salobro Project deposit is hosted in the amphibole metachert layer of Unit B of the Riacho dos Machados Group, more precisely at the top of the Base Level, as described above.

The metachert layer has thickness varying between 15 and 40 m and continuous distribution for more than 2,000 m, only displaced by faults. The layer is structured as a homoclinal with N65°E orientation and 55°SE dip.

Since it is always hosted at the metachert level, the mineralization can be defined as strata-bound, with a simple ore mineralogy. The Salobro Project deposit's zinc mineral is sphalerite and the lead mineral is galena. No other minerals have been observed with respect to these two metals in the Salobro Project deposit.

Previous exploration work done by Vale identified a historical Mineral Resource estimate of 8,292,708 tons grading 7.12% (Zn + Pb), using a 3.5% (Zn + Pb) cut off, and a minimum width of 2.00 m (*Vale 2003, Depósito de Zinco e Chumbo do Salobro, Município de Porteirinha (MG), Avaliação de Recursos Geológicos, Internal report*).

A qualified person has not done sufficient work to classify the historical estimate as current mineral resources or mineral reserves. Emerita is not treating the historical estimate as current mineral resources or mineral reserves. Further work must be completed to demonstrate whether a reasonable expectation for commercial extraction exists. These should not be relied upon.

The mineralized zones remain open in several areas and there is potential to expand the resource with further diamond drilling.

The best intercept to date is from drill hole PRM-SALO-FD009 (262.50 to 276.42) which intersected 13.92m grading 10.39% Zn and 2.13% Pb (see Table 6 on the Drilling Section for details).

Currently there is no exploration, development or operation activity on the Salobro Project.

The local infrastructure supports the initial phases of the exploration and development program.

Based on the data and information gathered by the Author it is possible to conclude that:

- The Property presents a high potential to host significant zinc deposits. This is supported by the geological setting similarities between the Salobro Project deposit area and a number of projects around the world, and by the reporting of mineralized intersections throughout the Property.
- No significant risk is expected to affect the reliability or confidence in the exploration information.

The following exploration program is suggested by the Author:

- Re-log and interpret existing drill holes particularly to identify structural controls on the mineralization. To date, little has been done with respect to structural controls on the mineralization, and given the metamorphic and deformational history of rocks, potential for grade and thickness to be enhanced, by fold structures for example should be examined.
- Re-assay 10% of existing intercepts to establish a QA/QC data base in support of completing a NI 43-101 compliant resource estimate.
- Drill 2,000m twin holes to validate historical data.
- Interpretation and integration of drilling results to identify the zinc rich intervals.
- Develop a conceptual mining study to prioritize future drilling.
- In the event structural controls of high grade and good thickness mineralization are identified early in the program, it is recommended that the Emerita proceed directly to resource delineation in the area where such mineralization is identified.
- Design environmental studies (EIA/RIMA).

The cost, in Canadian dollars, for the initial 2017 program is approximately \$1 million.

2 - Introduction and Terms of Reference

Emerita has retained Carlos H C Costa P.Geol. to prepare an independent National Instrument 43-101 compliant technical report on the Salobro Zinc deposit, located in the Porteirinha Municipality, Minas Gerais State, Brazil.

The Salobro Project deposit is located near the town of Porteirinha in the northern part of Minas Gerais State, in an area with excellent infrastructure.

A regional exploration program was carried out by Vale in the 1970's for gold and base metals deposits which led to the discovery of the Salobro Zn-Pb deposit among others.

Three units were defined in the Riacho dos Machados Group (A, B, C from base to top), an Archean or Paleoproterozoic metasedimentary sequence. This sequence hosts the mineralization in a metachert layer of unit B. The mineralization is essentially stratabound. Sphalerite and galena are the ore minerals. Grain size is relatively coarse as a result of recrystallization related to metamorphic processes.

Carlos H C Costa, P.Geol. is the Qualified Person responsible for the preparation of this Technical Report as defined in National Instrument 43-101, Standards of Disclosure for Mineral Projects and in compliance with Form 43-101F1.

Mr. Costa has 34 years of experience in mineral exploration, having twenty-four years' work experience in base metals, gold (Serra Pelada, Volta Grande – Au, Belo Sun) and PGE (Luanga – Au, Pt and Pd) exploration throughout Brazil. Mr. Costa also has ten years of work experience in mine geology, including underground (Fazenda Brasileiro – Au) and open pit (Andrade, Brucutu and Córrego do Meio – Fe), having managed in both cases the geology departments.

Mr. Costa is independent of Emerita, Vale and IMS.

The purpose of this Technical Report is to present the information available on the potential for zinc-lead mineralization on the Salobro Project. This Technical Report was prepared based on information supplied by Vale, IMS and publicly available information from the CPRM (Brazilian Geological Survey).

The scope of the field visits, completed from March 21st to 23rd 2017, was to check the local infrastructure and access and to inspect the mineralization that occurs in the area. No exploration work has been conducted by Emerita to date. The geological interpretation of the area is based on existing literature, and core from previous drilling programs on the Property. The site visit was done together with the Senior Geologist, Fernando Crocco, IMS's consultant that worked on the Salobro Project and previously Vale's Chief Geologist for the Salobro Project.

3 - Reliance on Other Experts

The Author has prepared this Technical Report specifically for Emerita. The findings and conclusions are based on information developed by the Author available at the time of preparation and data supplied by outside sources.

The Author relied on a title opinion (the “Title Opinion”) provided by Azevedo Sette Advogados Associados, an independent law firm in Brazil, to confirm the validity and standing of the Mining Applications (“*Title Opinion – Salobro Zinc Project*” - *Azevedo Sette Advogados Associados – July 14th, 2017*). According to the Title Opinion, the Mining Applications are active and in good standing. The Author is relying on the Title Opinion with respect to the ownership and good standing of the Property under the section of this Report entitled “Property Description and Location”.

4 - Property Description and Location

The Property claims are in the Municipality of Porteirinha in Minas Gerais State. The claims are contiguous as shown in Figure 1 below. With reference to the Latitude and Longitude grid, the claims are located within the rectangle defined by the following coordinates: 43.12°W / 15.46°S (NW corner), 43.08°W / 15.46°S (NE corner), 43.12°W / 15.50°S (SW corner) and 43.08°W / 15.50°S (SE corner).

The total area covered by the 2 Mining Applications is 1,209.75 ha. Table 1 below shows the number, status, type of tenure, and area of the claims. The Mining Applications do not have an expiration date and are in good standing.

The claims boundaries are in accordance with the DNPM requirements, which consists of the definition of a ‘tie point’ that it is usually the coordinates of a surveyed cartographic monument or the confluence of two rivers. From this ‘tie point’ a vector with the azimuth and length to the first corner of the claim is established. From the first corner the direction, which can only be North, South, East or West is assigned with the length defining the first borderline. The same procedure is used as many times necessary until the closing of the polygonal at the first corner. This polygon defines the extent of the claim application.

Upon the receiving and approval of the Mining Application, the DNPM will convert each of the Mining Application into an Exploitation Permit (or Mining Concession). Annual fees only apply to Exploration Permits after the publication of this permit in the Brazilian Official Gazette.

Brazil’s Constitution provides that, the survey, exploration and exploitation of mineral resources shall occur under federal authorization or concession and only Brazilian citizens or companies organized under Brazilian laws with headquarters located in the country may be entitled to practice such activities and to obtain mining rights.

In addition, mining rights in Brazil are governed by the Mining Code Decree 227, February 27, 1967 and further rules enacted by DNPM, the governmental agency, which controls mining activities in the country.

As described in article 14 and article 18 of the Mining Code, mineral exploration comprises the work necessary to measure and evaluate a resource and its technical and economic feasibility. The legislation also determines that the exploration may be carried out by means of on-site and laboratory studies, geological and geophysical studies, and any other type of geological exploration work.

#	Process Number	Year	Area (ha)	Legal Situation	Name	Location
1	831.911	1993	718.58	Mining Application	Ims Engenharia Mineral Ltda	MG
2	831.912	1993	491.17	Mining Application	Ims Engenharia Mineral Ltda	MG
			1,209.75			

Table 1 - List of Salobro Project Claims.

DNPM’s Local Officer grants the authorization to an interested party by means of an Exploration Permit, the “Alvará de Pesquisa”. To obtain the Exploration Permit, the titleholder files an application with the DNPM. After analysis of the application, DNPM may issue an Exploration Permit valid for a period of one to three years. This period may be extended, subject to analysis of the exploration by the DNPM. The holder of an Exploration Permit can (as described in the mineral code):

- (i) may assign or transfer it, if the assignee fulfills the legal conditions to hold the title;
- (ii) may, at any time, waive the Exploration Permit;
- (iii) shall be exclusively responsible for damages caused to third parties because of the performance of the exploration; and
- (iv) That the holder shall submit to DNPM a detailed report on the exploration activities prior to the final term of the Exploration Permit.

After the revision of DNPM of the technical report on the exploration activities, it can decide if the development is technically and economically feasible. DNPM may withhold approval of the exploration process in cases where the work is insufficient or in the case of the report presents technical deficiencies.

If exploitation (mining) is considered technically and economically feasible, the DNPM will approve the project and the holder of the Exploration Permit will have one year to apply for the mining exploitation permit or negotiate the mining right with third parties. DNPM will only provide one extension to this period and the extension must be obtained before the expiration date of the first one-year term.

The interested party may apply for the concession of the mining exploitation granted by Brazil’s Ministry of Mines and Energy through DNPM. The mining exploitation permit is titled “Concessão de Lavra” (“Exploitation Permit”). Before granting the Exploitation Permit, DNPM will verify if all legal requirements are fulfilled, including the prior exploration and the approval of the technical report by DNPM.

The holder of the Exploitation Permit, based on the mining code, can:

- (i) exploit the mine until it is completely exhausted;
- (ii) assign or transfer the title, if the assignee fulfills the legal conditions to hold the title; and
- (iii) waive the Exploitation Permit, subject to authorization by DNPM.

The responsibilities of the holder of the Exploitation Permit are:

- (i) exploit the mine per a mining plan previously approved by DNPM;
- (ii) not interrupt its mining operations for a period of more than six consecutive months after the beginning of exploitation operations;
- (iii) extract only minerals expressly mentioned in the Exploitation Permit;
- (iv) respect the applicable environmental laws; and
- (v) pay a financial compensation for the exploitation, the Financial Compensation for the Exploitation of Mineral Resources (CFEM).

Pursuant to the Definitive Agreement, Emerita has agreed to acquire the Salobro Project from Vale and IMS. In connection with entering into the Definitive Agreement, Emerita and IMS have entered into the binding LOI pursuant to which Emerita has agreed to incorporate and organize a Brazilian subsidiary to formally acquire the Salobro Project from IMS. Emerita, will initially acquire a 75% interest in the Salobro Project with an exclusive right to acquire the additional 25% interest in the Salobro Project from IMS, to own 100% at its option.

The two Mining Applications are currently subject to litigation between Vale and IMS. In connection with this transaction, Vale will withdraw its claims pending against IMS in the Civil Court of Belo Horizonte in respect of the amounts Vale claims are owing to it in relation to IMS's previous acquisition from Vale of the Salobro Project.

Such claims currently are registered as encumbrances on the Mining Applications. Emerita will pay Vale's legal fees and court costs in connection with withdrawing such claims. Vale's legal fees are R\$750,000 (approximately CAD\$300,000) and its court costs are estimated to be R\$10,000 (approximately USD\$245,000 or CAD\$315,000 in total).

Pursuant to the Definitive Agreement, Emerita agrees to pay USD\$6.5 million in cash to Vale. The cash payments will be made by Emerita over seven (7) years on the following schedule:

- US\$350,000 within 30 days from the date that the request for assignment of the mining rights which comprise the Salobro Project to PurchaseCo is filed by IMS or Emerita with the DNPM, and subsequent to Vale extinguishing its pending claims against IMS;
- US\$1,650,000 on or before the first anniversary of the Definitive Agreement;
- US\$1,500,000 on or before the third anniversary of the Definitive Agreement; and
- US\$3,000,000 on or before the seventh anniversary of the Definitive Agreement.

As consideration for IMS transferring the rights to the Salobro Project to PurchaseCo, Emerita shall issue 1,000,000 common shares in the capital of Emerita (the “Emerita Shares”) to IMS or its nominee on the date the DNPM approves the transfer of the Mining Rights from IMS to PurchaseCo.

Emerita has the right to acquire IMS’s 25% interest in PurchaseCo, up to 48 months from the date of Definitive Agreement execution, by paying CAD\$2,000,000 in cash to IMS or its nominee and issuing an additional 1,000,000 Emerita Shares to IMS or its nominee.

There is no agreed royalty payment between the parties

The Salobro Project is currently waiting DNPM approval of the Mining Applications request that was submitted to DNPM by IMS on January 2014.

According to the Brazilian Mining Code, Emerita will be able to drill test these areas to convert mineral resources into reserves. “Vegetal Suppression” license will be necessary where applicable.

No environmental study has been completed on the Property to date.

The owner of the surface rights at the Salobro Project is Ms. Dona Bela. There is no signed contract or formal agreement between Ms. Bela and Emerita, Vale or IMS with respect to granting either party access or surface rights to the Salobro Project area. Neither Vale nor IMS has historically had any problems accessing the Property or performing any exploration activities and the Author does not believe there is any significant risk that Emerita will not have the requisite access to the Property.

Currently Emerita is not planning to acquire the Salobro Project surface rights.

Brazilian Law (Mining Code, Article 27) grants to the titleholder of an exploration permit or mining concession the right to enter into the area comprised by the mineral right and execute the exploration and exploitation activities. This establishes the legal means by which the development of mining activities cannot be stopped.

The access to the surface areas may occur by means of a private agreement with the landowner or by means of a judicial authorization, issued through a specific lawsuit, under which the local court will guarantee the access of the area by exploration permit or mining concession holder and define the amount of the indemnification and rent to be paid to the landowner.

The owner of the surface rights where the core shack and field office facilities are located, is Mr. José Alves da Silva “Zequinha”. Currently, a monthly payment R\$ 1,457.90 is being made by IMS in compensation for this.

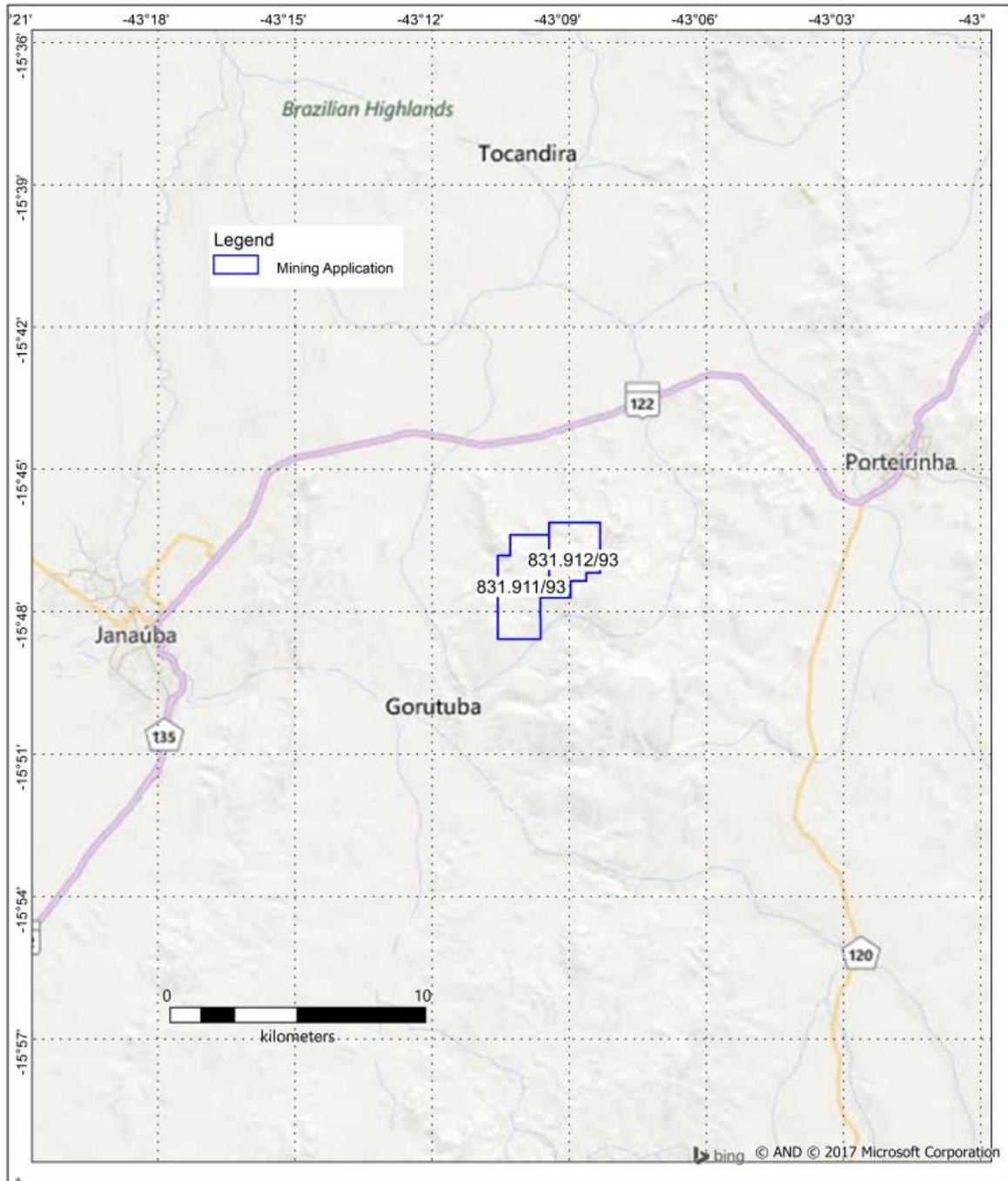


Figure 1 – Salobro’s Property Claims (SAD 69– lat/Long grid).

5.2 - Climate

The average rainfall of the region is less than 650 mm/year (*Emprapa, 2010*). Data from the Janaúba weather station indicate four months of drought per year (May to August) and a rainy season (> 100 mm) that runs from October to December.

Per the Janaúba weather station, the average annual temperature is 25°C, with a maximum of 31°C and a minimum of 18°C. The driest months correspond to the coldest ones which are between May and August.

Based on the classification of Köppen, one can characterize the climate of the region as AW - humid tropical climate of savannas, with a very sharp dry season coinciding with winter. In portions of the Porteirinha municipality, there is a restricted Cwa - tropical climate with hot and rainy summers (*Santos, 1977*), influenced by the Northern Espinhaço mountain range.

5.3 - Local Resources

The urban population of the cities of Porteirinha and Janaúba is of about 19,000 and 50,000 inhabitants, respectively. In both municipalities, the economy is based on agricultural activities and both cities have good service and infrastructure and were used as a base for Vale's exploration activities at the Salobro Project.

5.4 - Infrastructure

The regional transport infrastructure includes a railroad (the Centro Atlântica, which operates the branch line that passes through Janaúba, 23 km from the Salobro Project) and a very dense network of paved roads.

The city of Montes Claros is served by an airport for small aircrafts, with daily flights to Belo Horizonte.

The electricity supply is provided by CEMIG - Minas Gerais Power Plants from the Três Marias plant. Power supply is abundant and sufficient to cover the demand for a mining project of the sort contemplated within the Salobro Project area.

To carry out the exploration work, about 20 km of roads were previously opened by Vale in the area. The region has cellular telephone coverage.

5.5 - Physiography

The relief of the region is characterized by an area of undulating relief, surrounded by the Serra do Espinhaço mountains. The alignment direction of mountain ridges in the area is NNE-SSW, and characterized by quartzites that form steep cliffs due to their resistance to erosion. The altitude of this rugged relief surpasses 1,300m above sea level. In the flat depressed area, the elevation varies between 600 and 900 m above sea level. The Salobro Project is located in the transition between these two elevations.

The drainage network is not very dense and many of the streams are intermittent in character. The slopes are short to medium and have convex-concave / concave-convex profiles, with high slopes, generally higher than 30%. The main watercourse of the region - the Gortuba River, which is part of the São Francisco river basin, is in the vicinity of the city of Janaúba.

The characteristic vegetation of the deposit area, in general, can be differentiated per its location with respect to the elevation. Because it is a mountainous region, there is significant variation as a function of altitude, generally ranging between areas dominated by cerrado or by caatinga. In the higher areas, usually above 800 m, there is the occurrence of typical cerrado (forested savannah) with arboreal species of ranging from one to seven meters in height.

An herbaceous stratum dominated by grasses and cyperaceous covers the soil. In the relief portions below the 800m height, the occurrence of the caatinga, is characterized by the presence of a tree cover, which height varies between 3 and 5 m, of very branched species, with abundant presence of thorns. Near the river banks, there are large trees that can reach 20 m in height.

6 – History

In 1978, DOCEGEO, the exploration branch of Vale, began geological reconnaissance work in the northern part of the state of Minas Gerais, targeting favorable environments for the exploration of base metals and gold.

Exploration activity in the Salobro region confirmed the occurrence of massive sulphides by means of geological mapping at 1: 50,000 scale (*ECOCEO, 1992*), previously documented in the Porteirinha - Monte Azul Project from CPRM – Companhia de Pesquisa de Recursos Minerais (*Drumond et al., 1980*).

The Exploration Permits covering the Salobro Project area were then required by DOCEGEO in 1993.

This occurrence, located along the Salobro river, was tested for gold mineralization by a 150-meter exploratory hole, executed by DOCEGEO in 1993. This hole intersected two levels of massive sulphides (pyrite + pyrrhotite) that totaled 9.1 meters true thickness. The gold analysis results for this hole were negative. Concomitant to the exploratory hole, a soil geochemical sampling campaign was carried out to investigate the origin of a As, Zn, Pb and Cu anomaly, defined in a stream sediment campaign, performed in early 1993.

The results of the soil campaign indicated a significant Zn anomaly of 2.5 km in length with values over 320 ppm and frequent values between 640 and 3680 ppm, associated with Pb and locally with As and Cu. No significant gold values were identified in the survey, apart from an anomalous concentration at the SW end of the grid, with a maximum value of 83 ppb Au, associated to an As anomaly correlated with a Banded Iron Formation.

In 1994, a geology team from Vale conducted two exploratory drill holes to test an Arsenium soil anomaly at the SW end of the grid. The holes reached a depth of around 170 m, and although they had intersected intense sulphidation, only a level with 5.0 m of thickness was identified, with gold grades generally below 1.0 g/t Au and occasionally up to 2.0 g/t Au. The holes did not intercept any rock units that could be associated with the base metal soil anomalies and were therefore considered negative.

In 1997, during the Vale privatization process, all of its Exploration Permits were re-evaluated to either be dropped or prioritized for additional work. The Salobro Project area was judged to be of interest for base metals, and follow-up work was initiated.

In 2003, Vale completed a mineral resource estimate at the Salobro Project (*Depósito de Zinco e Chumbo do Salobro, Município de Porteirinha (MG), Avaliação de Recursos Geológicos, Internal report, 2003*), which is provided here for information only.

A qualified person has not done sufficient work to classify the historical estimate as current mineral resources or mineral reserves. Emerita is not treating the historical estimate as current mineral resources or mineral reserves. Further work must be completed to demonstrate whether a reasonable expectation for commercial extraction exists. These should not be relied upon.

No attempt has been made by Emerita to classify it as an “inferred mineral resource”, “indicated mineral resource” or “measured mineral resource”, as such terms are defined by the Canadian Institute of Mining, Metallurgy and Petroleum.

The Vale mineral resource estimate, employed a “Vertical Sections” methodology for the estimation (Figure 3).



Figure 3 – Longitudinal Section.

The database used to estimate the mineral resource comprises 40 boreholes (13,884.94 meters), including 6 reverse circulation (RC) boreholes and 34 diamond drill (DD) boreholes.

Mineralized zones were interpreted in vertical sections with approximately 200m spacing between them and were modelled using 2.0m minimum thickness and a cutoff grade of 5% (Zn+Pb).

These modelled ore zones were then extrapolated considering a 200m influence from each section (100m to each side) with a density of 3.1 g/cm³.

In the Vale study, resources classified as Indicated were situated up to 50m from a mineralized intersection in the section and up to 50m to each side of the section. Inferred Resources, occur up to 50m from an Indicated portion of the resource in the section to a maximum of 100m to each side of the section.

Respecting the thickness criteria, Marginal ore were included with grades ranging from 3.5% to 5.0% (Zn+Pb) and up to 100m influence area.

Oxidized mineral resources were not estimated due to the lack of information.

The Mineral Resource summary is presented in the table below.

CORPO 1	INDICATED	INFERRED	MARGINAL	TOTAL
Tonnes	3,491,372	2,076,687	624,721	6,192,780
ZN+PB (%)	8.34	8.19	4.50	7.72
Avg. Thickness (m)	7.24	7.51	2.67	6.76
CORPO 2	INDICATED	INFERRED	MARGINAL	TOTAL
Tonnes	839,480	610,815	649,633	2,099,928
ZN+PB (%)	5.13	5.15	4.10	4.82
Avg. Thickness (m)	2.43	2.07	1.76	2.12
TOTAL 1 + 2	INDICATED	INFERRED	MARGINAL	TOTAL
Tonnes	4,330,852	2,687,502	1,274,354	8,292,708
ZN+PB (%)	7.72	7.50	4.30	7.12
Avg. Thickness (m)	6.31	6.27	2.20	5.66

Table 2 – Vale Mineral Resource Estimate Summary.

7 - Geological Setting and Mineralization

7.1- Regional Geology

In a geotectonic context, the Salobro Project area is located at the center-east border of the São Francisco Archean Craton (*Almeida, 1977*), approximately on the Bouguer border, between the São Francisco Province and the Mantiqueira Province (*Almeida and Hasui, 1984*).

Pioneering work on the recognition of the Riacho dos Machados Group lithotypes was carried out in the mid-1930s by *Moraes (1936)*. Reconnaissance work was carried out again only in the 1970s, when this region was included at the southeast end of the area mapped by the LETOS Project – East of Tocantins/West of São Francisco river (*Moutinho da Costa, 1976*).

The Folha Brasília Explanatory Note of the Brazil Geological Chart (*DNPM, 1976*), which used the LETOS Project as a reference, positions these rocks stratigraphically within the Precambrian (1,700-2,200 Ma) and encompasses them within the "Metamorphic Complex".

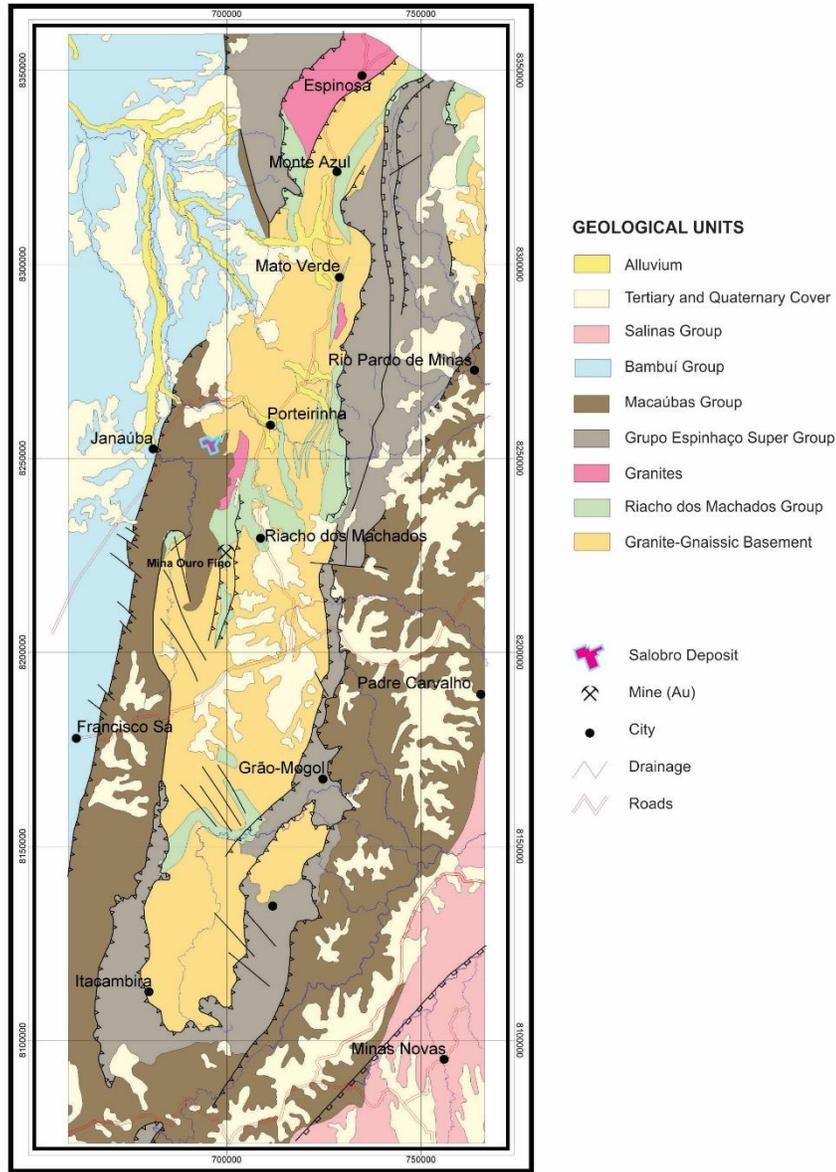
The Porteirinha-Monte Azul Project, carried out by the CPRM – Companhia de Pesquisa Mineral (*Drumond et al., 1980*), conducted 1:50,000 scale mapping of this region and defined, among others, the "Gneissic-Migmatitic Association". This association encompasses about 21 different litho-types, with the rocks of the Riacho dos Machados Group, grouped within the "Riacho dos Machados Metabasites unit", and those occurring in the Salobro stream region, differentiated as "Basic Bodies of the Coco Mountain". In this place, where currently the Salobro Project area is located, the authors indicate the presence of massive sulfide bodies.

Pursuant to more recent studies by *ECOGEO (1992)* and *Guimarães et al. (1993)*, the Salobro Project area is regionally included in the structural framework of the Itacambira - Monte Azul Block – BIMA (Figure 4),

This cratonic portion, which extends for about 300 km and is located between the cities mentioned above, is characterized as a structural window, with smooth relief, underlain by gneisses and migmatites of Archean age. This crystalline terrain constitutes the foundation where the units of the Riacho dos Machados Group are inserted. The rocks belonging to the Espinhaço Supergroup and the metasedimentary rocks of the Macaúbas Group occur bordering and defining the structural window of the BIMA. (*Crocco-Rodrigues et al., 1993*).

Guimarães et al. (1993), completed 1:50,000 scale mapping and describe an extensive NS zone, defined by six units for the Pre-Espinhaço rocks: Córrego do Cedro Metamorphic Complex, Pedra do Urubu Granitoid Suite, Gororoba Granitoid Suite, Riacho dos Machados Group, Paciência Monzonitic Suite and Confisco Granitic Suite.

The Riacho dos Machados Group occurs as narrow and segmented layers of general N-S direction. They are embedded in basement rocks, with contacts marked by shear zones of medium to high angle (*Guimarães et al., 1993*). The lithotypes that constitute this group were the object of several studies (*ECOGEO, 1991, 1992, Guimarães et al., 1993, Fonseca et al., 1997*) as a function of lithological associations, structural patterns and their litogeochemical compositions. The different workers agree that the rocks of this group can be divided into two groups: 1) Rocks of a clearly sedimentary nature and 2) Rocks of supposed igneous origin. However, none of the papers defines a stratigraphic framework for the different lithologies of this group.



Regional Geology

Figure 4 – BIMA (Itacambira/Monte Azul Block) Regional Geologic Map.

Abreu & Belo de Oliveira (1998), studying the Riacho dos Machados Group of rocks in the Salobro region, presented the first stratigraphic proposal for these lithological successions. They define the "Salobro Sequence" and identify three distinct lithostratigraphic units that were informally named from base to top: A, B and C. Unit A consists of quartz-muscovite-chlorite schist. Unit B brings together chlorite-quartz schist, amphibolite, amphibolitic schist, ferruginous metachert, quartzite, ferruginous quartzite, conglomerate and magnetic iron formations. Unit C corresponds to a package of banded schist, composed of varied proportions of quartz, muscovite and chlorite, locally with graphite or garniferous levels.

The units of the Macaúbas Group form the highest mountains. In the region, this group is composed of metadiamictites, quartzites and metassiltstone, which interdigitate laterally and vertically. The contacts between the Macaúbas Group and the units that constitute its base are marked by sub-horizontal shear zones or by high-angle reverse faults (*Guimarães et al., 1993*).

Crocco-Rodrigues et al. (1993) indicate the presence of at least four deformational events in the region. The oldest event (Dn) in the area refers to the development of the gneissic banding and the migmatization registered in the Córrego do Cedro metamorphic complex. According to these authors, this structural fabric is obliterated by the following phases, the structural framework of the BIMA being overwhelmed, essentially, by the structures developed during the later event (Dn + 1).

The Dn + 1 event has cratonic expression forming structures of NS orientation (faults or schistosity). The last two tectonic events are related to the Neoproterozoic Brasiliano Cycle, whose records are impressed on the rocks of the Macaúbas Group. The first one (Dn + 2) corresponds to the extension that accompanied the deposition of the São Francisco Supergroup; The second (Dn + 3), refers to the inversion of the basin imposed by the development of the Araçuaí belt during the Brasiliano Orogenesis. The events Dn + 2 and Dn + 3 also exhibit NS oriented structures. For this reason, the reactivation of Dn + 1 structures must have been frequent.

The Riacho dos Machados Group metamorphism is quite heterogeneous, with regions more affected by the regional metamorphism in the amphibolite facies, others more influenced by the green schist facies retrograde metamorphism, which may be regional or dynamo-thermal.

The nature of the protoliths and the geotectonic context of the Riacho dos Machados Group is quite controversial, e.g., *Inda et al. (1984)* considers them representative of a greenstone belt-type volcanosedimentary sequences and correlates them to similar sequences in the State of Bahia. The lithogeochemical and petrographic work, carried out by *Fonseca (1993)* and *Fonseca et al. (1997)*, postulate that the geotectonic environment for the deposition of the Riacho dos Machados Group is related to a continental volcanic arc. *Abreu & Belo de Oliveira (1998)* consider that the "Salobro Sequence" was deposited in an extensional context, in a rift basin.

Dating of rocks in the Itacambira-Monte Azul Block is very scarce, being restricted only to cataclastic gneisses located near the cities of Botumirim and Barroço (*Siga Jr. 1986, Siga Jr. et al., 1987*). These rocks were dated by Rb-Sr and Pb-Pb, in total rock, and K-Ar, with ages of $2,640 \pm 130$ Ma (Rb-Sr) and $2,780 \pm 100$ Ma (Pb-Pb) Botumirim and $2,230 \pm 60$ Ma (Rb-Sr) and $2,020 \pm 120$ Ma (Pb-Pb) near Barroço. Biotite analyzed using the K-Ar method presented ages of 632 ± 22 Ma and 670 ± 18 Ma.

7.2 - Local Geology

Three of the geological units previously described in the Regional Geology section above, are present in the Salobro region. These are: the Pedra do Urubu Orthogneiss, the Riacho dos Machados Group and the Macaúbas Group. The description of the units and their relationships can be seen in Figure 5 below, which presents the local stratigraphic column.

7.2.1 Pedra do Urubu Orthogneiss

The Pedra do Urubu orthogneisses, which form the local basement, are leucocratic gneisses composed of felsic quartz-feldspathic bands and biotite rich mafic bands. The segregation, in the bands, is always low, sometimes giving a diffuse aspect to the banding. These are rocks, both in the compositional and textural aspects, have orthoderivation characteristics.

7.2.2 Riacho dos Machados Group

The metasedimentary sequence of the Riacho dos Machados Group rests in unconformity on the orthogneiss. The stratigraphic division proposed by *Abreu & Belo de Oliveira (1998)* for the Riacho dos Machados Group in the Salobro region will be described here. The authors divided this group into 3 units informally denominated as A, B and C.

UNIT A

Unit A, at the base, consists of quartz-chlorite-muscovite schists (CUX). The layer extends for 2,200 m along strike, reaching 150 m in thickness. It is poorly exposed in outcrop as it is commonly covered by talus.

The rocks are greyish-green color, usually highly weathered when outcropping. The minerals grain size is fine with a strongly penetrative foliation. The effects of metamorphism, deformation and weathering make it difficult to define the origin of these rocks. It is suggested to be detritic sediments deposited at the beginning of the depositional process of the Riacho dos Machados Group basin under shallow marine conditions.

UNIT B

The contact between unit B and unit A is sharp and concordant. As can be seen on the map, the units of the Riacho dos Machados Group show a progressive thinning from west to east. This behavior is even more characteristic in unit B (Figure 6 and 7, below).

Unit B of *Abreu & Belo de Oliveira (1988)* is best described if viewed as two distinct levels. The first, at the base, is composed by a package with lateral continuity of its layers: - a calcsilicatic (CS) and a metachert (AM). The second, at the top, consists of a package with numerous layers of highly varied and laterally discontinuous compositions, and a layer of garnet + quartz + biotite, which marks the top of the depositional sequence of unit B.

Stratigraphic Column

Regional Geological Units		Code	Litotypes	
		Ta	Talus	
Macaúbas Group		GMs	Metaparaconglomerate	
		Gmm	Quartzites	
		GMi	Metaconglomerate	
		GMb		
		Intrusive Rocks		PEGM
GABRO	Gabro			
Riacho dos Machados Group	Local Units	C		
		FBX	Feldspar-Biotite Schist	
		FUX	FUX: Feldspar-Muscovite Schist	
		FUXC	FUXC: Feldspar-Muscovite Carbonaceous Schist	
		B		
		Top Level	GAXB/GAXBT	GAXB/GAXBT: Garnet-Anfibole Banded Schist
			GBX/GBXT	GBX/GBXT: Garnet-Biotite Schist
			GAXB	GAXB: Garnet-Anfibole Banded Schist
			FFAM	FFAM: Magnetic Anfibole Iron Formation
			UXLC	UXLC: Carbonatic Breccias
			UXL/UXLT	UXL/UXLT: Laminade Muscovite Schist
		Base Level	AM	Anfibole Metachert (AM) , Esphalerite Bodies (E) and Massive Pyrite-Pyrrhotite Bodies (PPM)
			E	
			PPM	
	CS	Calciosilicatic		
A		CUX	Quartz-Muscovite-Chlorite Schist	
Pedra do Urubú Orthognaisses		Opu	Orthognaisses	

Obs.: Without vertical scale.

Stratigraphic Column

Salobro Deposit

Figure 5 – Stratigraphic Column.

The metachert layer deserves special attention as it hosts the zinc and lead mineralization of the Salobro deposit. This layer has variable thickness. In holes FD011 and FD023 it can reach more than 40 m, while in holes FD009 and FD013 the thickness is reduced to 15 m. Coincidentally the lower thicknesses correspond to the richest intersections. In several holes (FD003, FD005, FD010, FD012) the metachert is thinner, on the order of 2 to 6 m, but in these cases, faults and intrusive contacts are responsible for layer thinning.

The amphibole-metachert, that hosts the mineralization, contains sphalerite-rich or massive sphalerite bands, in which galena crystals are disseminated.

In the metachert layer, the presence of massive sulphide lenses composed of varied proportions of pyrrhotite + pyrite + magnetite, which have a thickness between 1.00 and 18.80 m, is highlighted.

UNIT C

The contact between units B and C can be considered sharp and concordant, although there is a 2 m thick transition zone, between the units.

Unit C consists of feldspar + biotite + quartz schists, and some minor percentage of muscovite is always present. The package is rather monotonous, with a minimum of 1,000 m of thickness.

At the base of the unit, approximately a 100 m thick hydrothermal alteration zone is marked by transformation of the biotite into muscovite. In the unit, there are also carbonaceous levels that are laterally discontinuous and with thicknesses on the order of 2.00 m.

These rocks are interpreted as turbidite sediments deposited in deep waters.

7.2.3 Confisco Granite

At the eastern end of the Salobro deposit area, there is a small stock, approximately 600 m in diameter, which is part of the regionally extensive Confisco Granite.

It is a leucocratic rock, with a typical granitic composition, fine to medium equigranular texture, undeformed or slightly deformed. Among the most important characteristics is that it preserves original igneous mineralogy. Metamorphic effects of low green schist facies are observed only in shear zones.

The intrusive nature of this granitic body into the units of the Riacho dos Machados Group is evident. Throughout the pile of sediments there are aplite apophyses and pegmatitic bodies of that are up to several meters in thickness.

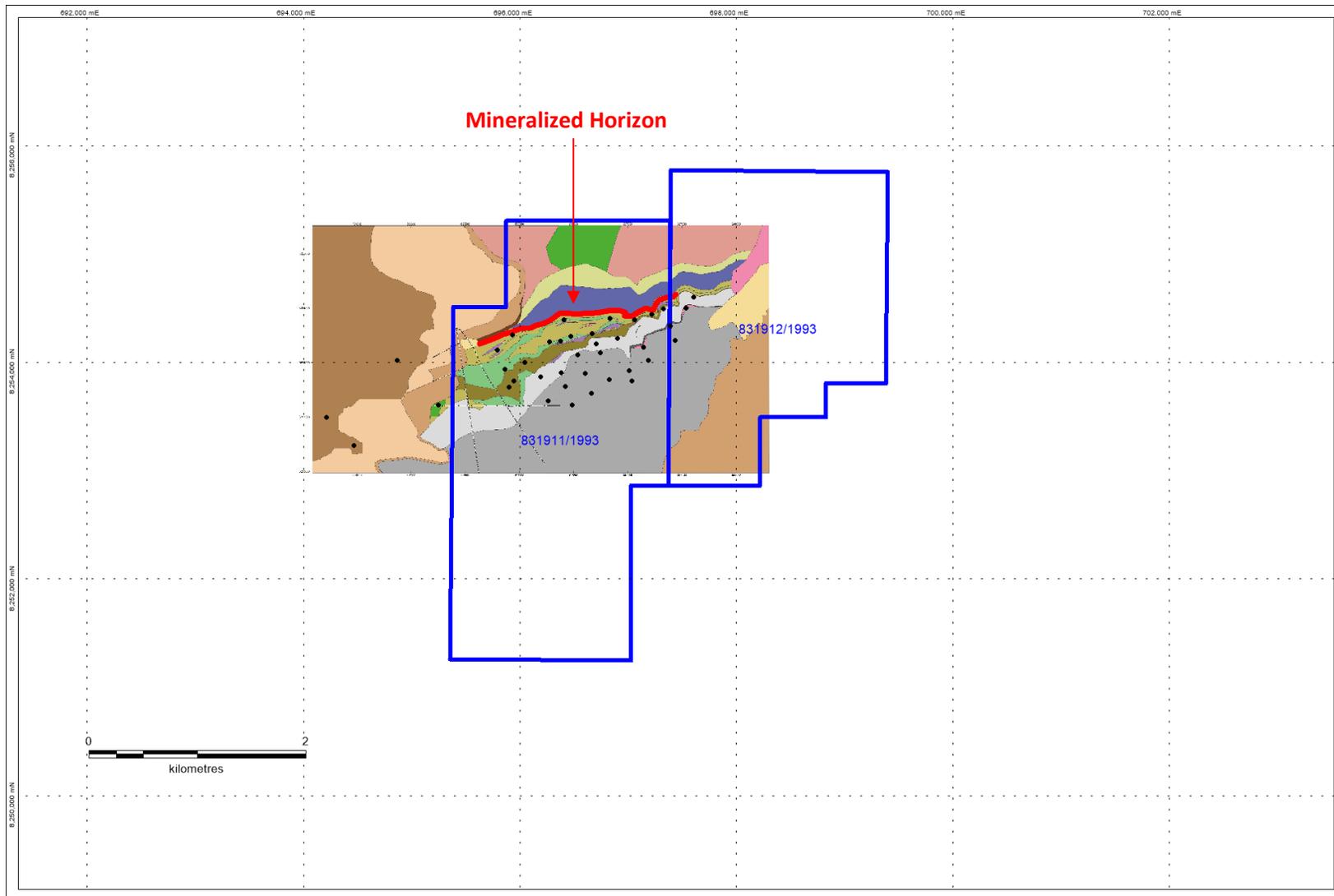


Figure 6 – Local Geologic Map with Property Boundaries and Drill Holes Location

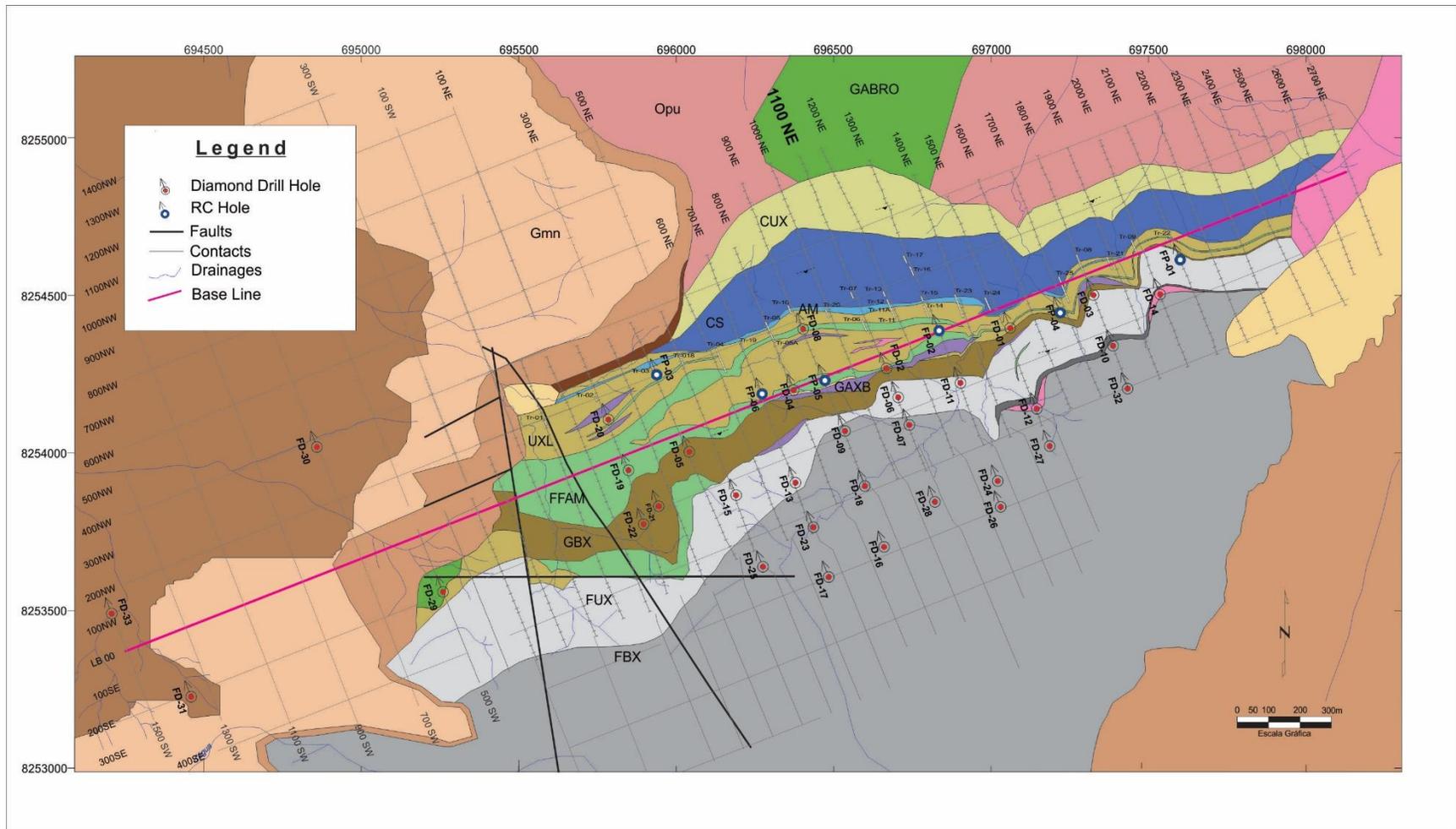


Figure 7 – Local Geologic Map. See figure 5, for lithological details

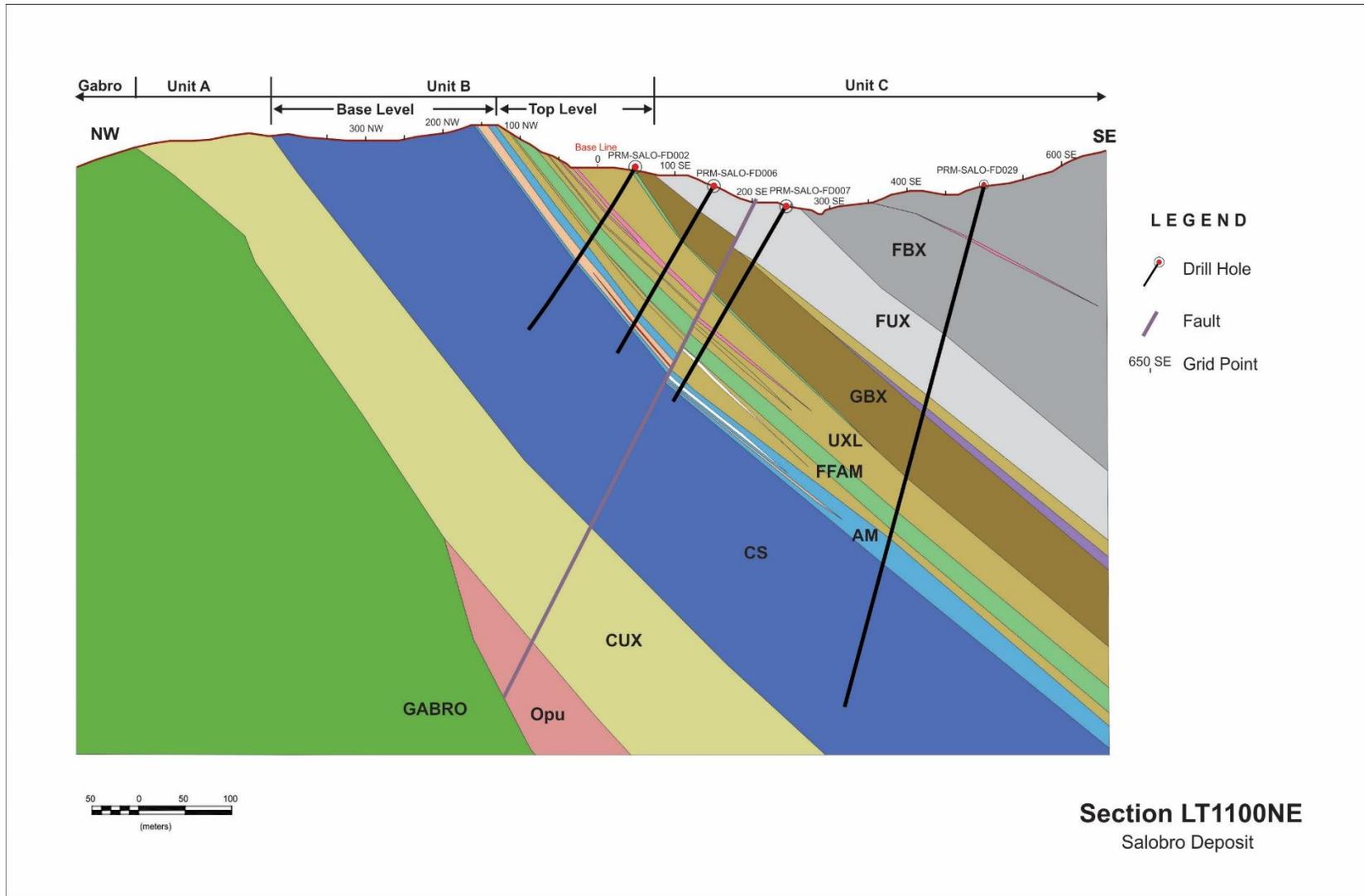


Figure 8 – Vertical Section LT 1100 NE. See figure 7 for location

7.2.4 Gabbroic Intrusion

Immediately to the north of the Riacho dos Machados sedimentary sequence there is a gabbroic stock with a general north-south general orientation, in a clear intrusive relationship with the Pedra do Urubu orthogneiss.

The gabbro is a medium to coarse-grained phaneritic rock. At the contact with host rocks, the gabbro commonly exhibits late igneous processes related to fluids percolation acquiring an aphanitic texture.

This body is also intrusive into the Riacho dos Machados Group, although its relation on the surface geological map indicates otherwise. This outcropping gabbro extends into subsurface to form a stock of apparently even larger dimensions between LT 600NE and 700SW.

7.2.5 The Macaúbas Group

The Macaúbas Group sediments are deposited over the previously described units in angular and erosive unconformity.

In the Salobro region, the sedimentary sequence is divided into three units, referred to as lower, mid and upper. Due to the intense lateral and vertical facies variation of the Macaúbas Group, this “stacking” may not be applicable in the region outside of the Salobro area.

The lower unit is composed of diamictites that exhibit intense compositional and grain size variation. The matrix, varies from fine to coarse, may be sandy or contain proportions of clay. It can correspond to 30 to 50% of the rock. Pebbles can be made of quartz, various schists, carbonates, granites and gneisses, among others, and vary in diameter from sand to boulders in size.

A level with especially coarse pebbles stands out at the base of the unit and is exposed along the slope between the LT's 500NE and 100SW. This lower unit has an average thickness of 130 m.

The mid unit is formed by fine to coarse quartzites. They are usually impure with the presence of kaolinitic material. The layer has an average thickness of 150 m.

In the upper unit, there are predominantly carbonaceous phyllites, in which fine meta-paraconglomerates can occur. The minimum thickness for this unit is estimated to be 300 m.

7.2.6 Unconsolidated Sediments

Due to the irregular and steep topography of the Salobro region, talus deposits have formed on some slopes. It is possible that the deposits are controlled by neotectonic reactivations.

7.3 – Mineralization

The zinc and lead mineralization of the Salobro Project deposit is hosted in the amphibole metachert (AM) layer of Unit B of the Riacho dos Machados Group, more precisely at the top of the Base Level, as described above (figures 6, 7 and 8)

The metachert layer has thickness varying between 15 and 40 m and continuous distribution for more than 2,000 m, displaced only by faults. The layer is structured as a homocline with a N65°E orientation and 55°SE dip.

Since mineralization is always hosted at the metachert level, the mineralization can be defined as strata-bound. It has a simple ore mineralogy: The zinc mineral is sphalerite and the lead mineral is galena. No other zinc or lead bearing minerals have been observed to date. In the core samples analyses, values of silver are in general below 4 ppm and cadmium values averages 20 ppm.

The best intercept to date is in drill hole PRM-SALO-FD009 (262.50 to 276.42) which intersected 13.92m grading 10.39% Zn and 2.13% Pb. The values of gold at the mineralized level are very low, usually below the limit of detection.

Immediately above the iron-formation layers of Unit B, in a garnet-biotite schist, there is a gold mineralized level, marked by the presence of disseminated arsenopyrite in the rock. The Au values are below 2.5 g / t over thicknesses of 1.00 m and are not considered commercially significant.

In the Salobro Project deposit, the sphalerite is coarse grained. It occurs as massive sulphides, in bands, laminations, disseminations and in veinlets. It is presented in carmine and light orange colors, with gradation of color between the types. The coloration is directly linked to the iron content in the sphalerite structure. Galena also has coarse granulation and occurs predominantly disseminated within the sulphide.

The levels of zinc and lead in the mineralized horizons reached concentrations of up to 24% and 6.7%, respectively. The average ratio of zinc to lead is 82.86% and can reach up to 88%. There is a non-linear tendency for lead contents to be proportionally richer when mineralization is poorer in zinc.

Various minerals make up the gangue of the Salobro ore. The most prominent are quartz, amphibole (commonly grunerite) and magnetite. Minor biotite, sericite, garnet, carbonate, tourmaline, pyrite and pyrrhotite also occur.

Although the Salobro Project deposit can be described as massive sulphide bodies and pyrite and pyrrhotite are always present in the metachert layer, it is important to note the presence of another barren massive sulphide layer, isolated from the mineralization, with thicknesses of up to 19 meters.

The gangue mineralogy provides information about the hydrothermal, metasomatic paragenesis. Independently of genetic interpretations, the metachert layer, within the lithological pile of the Salobro sequence, represents the apex of the hydrothermal alteration effects.

Around the layer it is possible to draw an alteration halo that starts a few meters below the metachert layer (no more than 15 m) and extends up to 200 m in the C unit of the sequence. Thus, the entire unit B is positioned within the hydrothermal alteration halo.

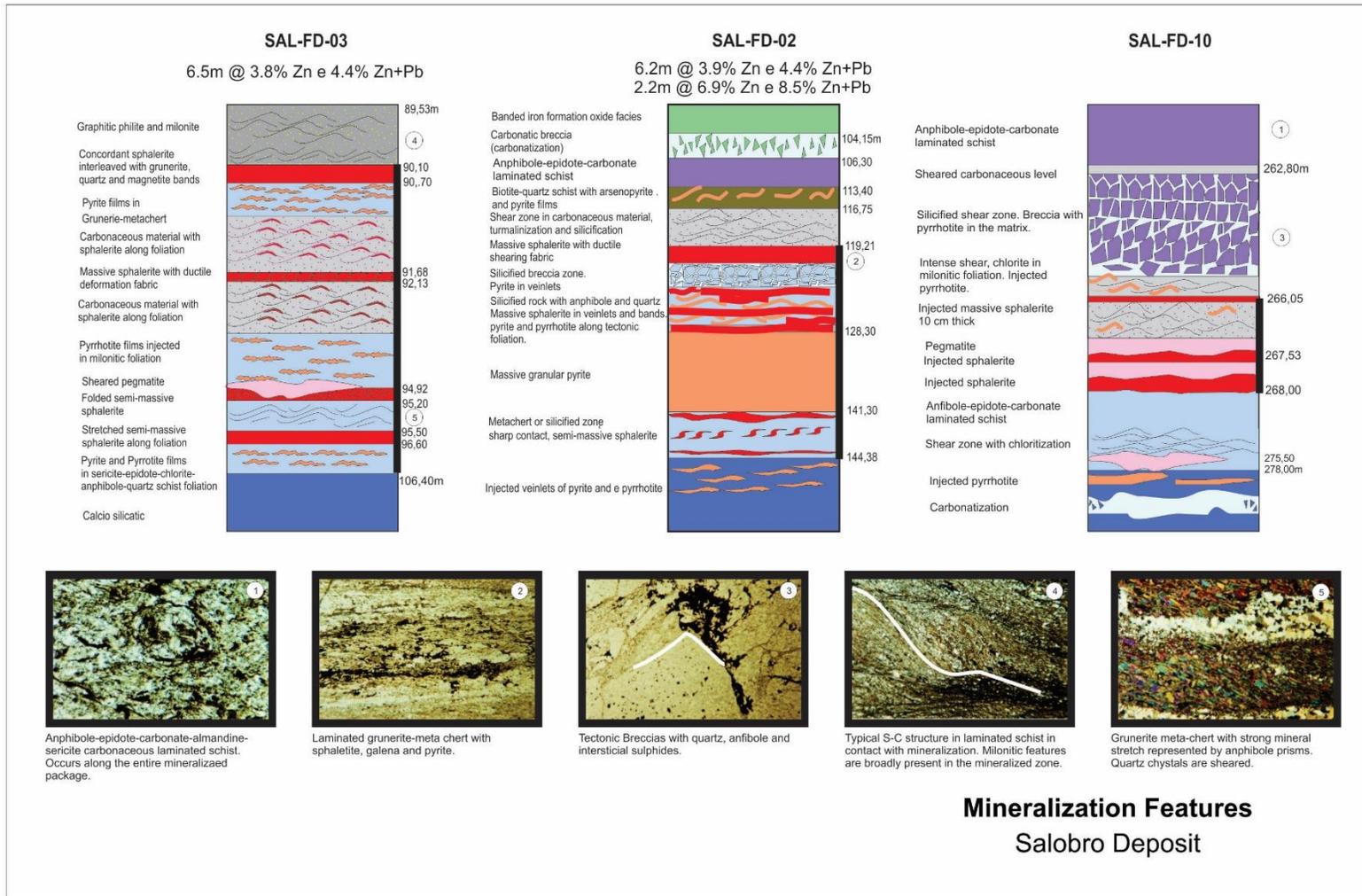


Figure 9 – Mineralization Features.

8 - Deposit Type

The geological modelling of the Salobro Project mineralization has a certain limitation related to the maximum possible age for the deposit, 1.78 b.a as there are few zinc and lead deposits dated from the Neoproterozoic to the Archaean.

During the discovery and initial research phase of the Salobro Project deposit, the observed zinc and lead mineralization features were interpreted as genetically related to a sedex model.

Among the characteristics that led to such interpretation are the fact that mineralization is hosted in a metasedimentary sequence without significant volcanic contribution, marked by a sequence of clastic-chemical and detrital sediments, with mineralization hosted by the clastic-chemical level. In addition, the restricted rift basin characteristics, with intense and rapid lateral and vertical variation of facies, mineral paragenesis compatible with exhalative processes, the stratabound character of the mineralization and the siliceous character of the mineralized level, among other features support this model.

The age limitation is one of the points that oppose a sedex model for the Salobro Project deposit. In addition, the sedex deposits present, in the base of the basin, thick package of detrital sediments, which is not observed in the Salobro Project deposit. Among others, features contrary to the sedex model can be presented, or controversially discussed, as the non-preservation of primary structures by the action of metamorphism in the amphibolite facies or particularities of the mineral paragenesis.

During technical visits to the Property, many geologists discussed the genesis of the deposit and some presented the “skarn model” as an alternative. Others, despite the restrictions presented above, preferred to consider the sedex model.

Teixeira (2001), based on field observations, drill cores descriptions and petrographic and petrochemical analyzes, proposed two genetic models for the Salobro Project deposit, which are embodied in Figures 9 and 10 below. A synthesis of the work discussed by Teixeira (op.cit.), which considers the deposit as epigenetic with metasomatic replacement, is therefore presented below, thus separating it in time from the sedex model.

A) Contemporaneous precipitation to the oxidized exhalative strata: Reduced mineralized brines with temperatures in the order of 100°C to 250°C, with high salinity, when inoculating oxidized strata induce the precipitation of zinc and lead sulfides. This can occur due to lowering of temperature, oxidation and increase of pH.

B) Late sulphurization of oxidized strata: Hydrothermal magmatic/metamorphic fluids, with high temperatures (> 350°C), high salinity, metasomatically interacted with exhalative iron rich lenses, can convert magnetite to sulfides, precipitating iron, zinc and lead sulfides. Such a process would accompany the original oxidized levels. It is assumed that the mineralizing fluids initially presented low fO_2 and fS_2 , forming high iron pyrrhotite and sphalerite. Progressively the sulfur activity would have intensified, accompanying the lowering of the temperature forming pyrite-sphalerite-galena sulphides.

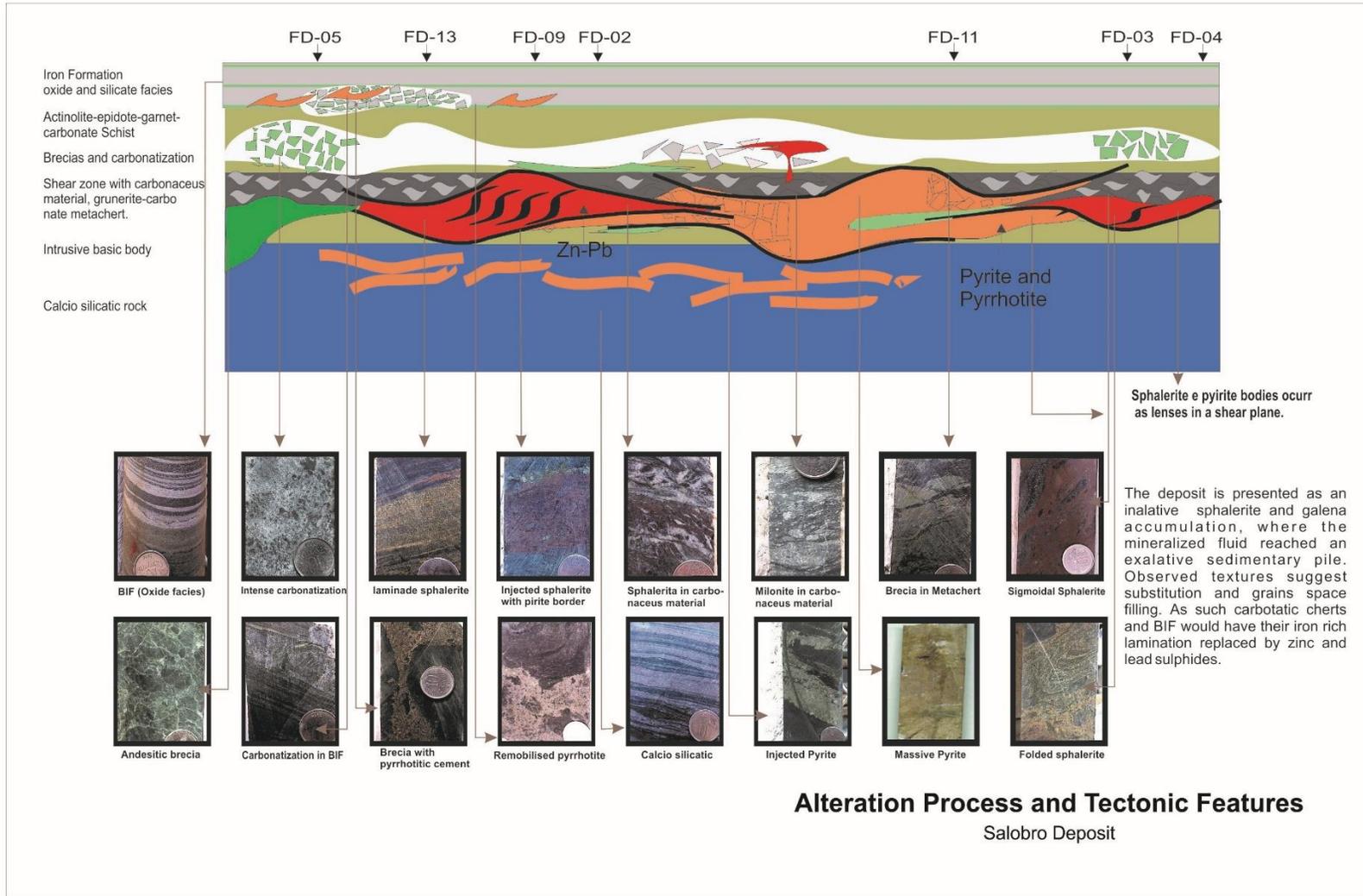
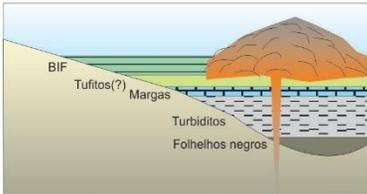
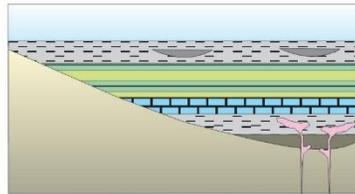


Figure 10 – Alteration Process and Tectonic Features.

Phase 1 - First turbiditic cycle and intense exhalative activity.

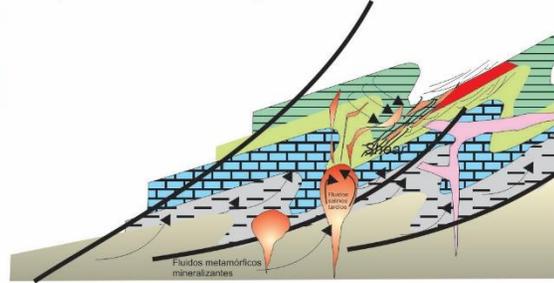


Phase 2 - Second turbiditic cycle with weaker exhalative activity.



Carbonaceous Schists and turbidites association, have indicated anoxides deep water conditions. The clastic-chemical sedimentation could have been deposited in shallower water conditions.

Phase 3 - Deformation, metamorphism (500-650°C, 4 kbar), granites and pegmatites sintectonic implantment , shearing e metassomatism.

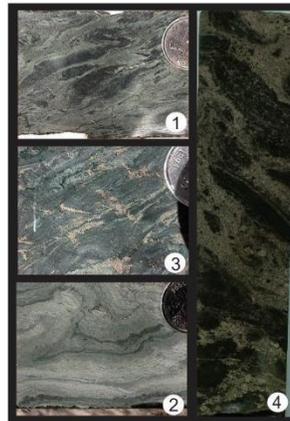
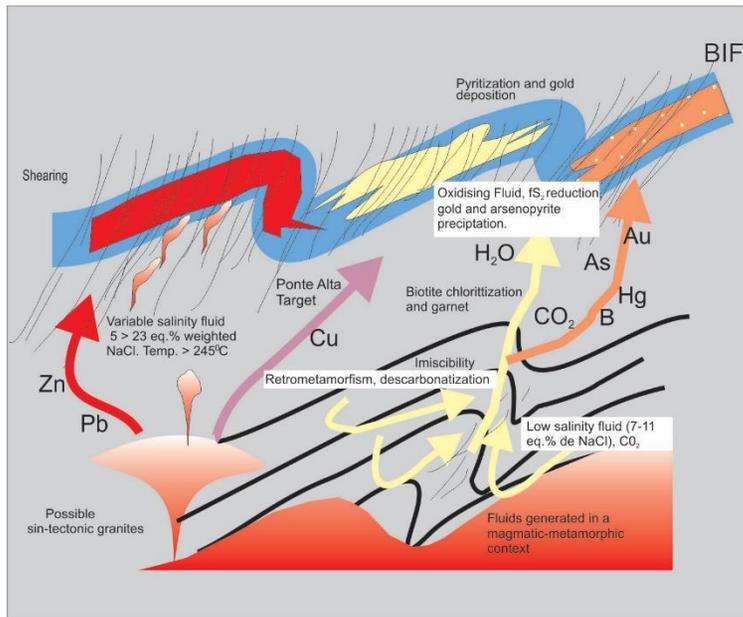


The entire Salobro mineral assemblage were already in place during metamorphism.

Salines hidrothermal fluids with temperatures (>250 C), interacting with iron exhalatives lenses, were able to sulphurizing the magnetite, precipitating iron, zinc and lead sulphides.

The localized presence of gold could be explained by a decarbonatization process during metamorfism.. The gold would have been transported (Au (HS)₂⁻), by low salinity fluids rich in CO₂.

Salobro Deposit: Estratiform Metassomatic Replacement.



Photos 1, 2, 3, e 4 showing shearing deformation process and BIF sulphurization.

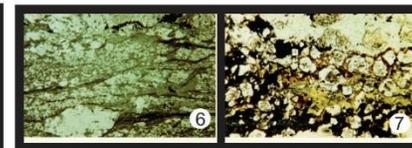


Photo 6: Milonite at the hanging wall of the zinc mineralization. Photo 7: Retrometamorfism with sulphide introduction.



Photo 5: Turmaline veinlet with arsenopyrite in garnet-biotite schist. Gold grades occur at this point.



Photo 8: Hand specimen showing sphalerite banding in a magnetite rich rock. The sulphurization of BIFs is proposed to explain this feature.

Metallogenetic Model
Salobro Deposit

Figure 11 – Proposed Metallogenetic Model.

9 – Exploration

No exploration work has been carried out by Emerita on the Property to date

Table 3 below summarizes the exploration work done by Vale. Topography, soil sampling program and Geophysical surveys will be detailed in this section.

Activity	Year	#	Unit
Regional Geological Mapping	1992	1,325	Km2
Stream Sediment Sampling	1992/1997	190	Samples
Soil Sampling	1993/1997/2000	1,674	Samples
Trench Sampling	1999	825	Samples
Topography	1993/1997/2000	57	Line Km
Topographic Monuments	2002	7	Points
Aerial Geophysics - Mag/Gama/TEM	1992	280	Km2
Ground Geophysics - IP	1999	15	Line Km
Ground Geophysics - Mag/Gama/VLF	1999	27.5	Line Km
Ground Geophysics - TEM in loop	1999	29.3	Line Km
Ground Geophysics - TEM/Mag	2000/2001	36	Line Km
Ground Geophysics - NSAMT/CSAMT	2001	3.5	Line Km
Ground Geophysics - Gravimetry	2001	7.2	Line Km
RC Drilling	2000	853.00 (6 holes)	Meters
Diamond Drilling	1993/1994/1999/2000/2001	13,031.94 (34 holes)	Meters
Density Tests (ore)	2001	14	Samples
Density Tests (Waste)	2001	16	Samples
Petrography	1994/2001	190	Samples

Table 3 – Vale’s Exploration work.

9.1 – Topographic Survey

The exploration grid was established in 1993 to follow up stream sediment anomalies.

This regular grid was opened with compass and theodolite, with azimuth of 68°, approximately rectangular in shape, with unit cells of 100 x 25 m, with 2,700 m of baseline and 24,525 m of transverse lines distributed between the transverse lines LT00 and LT2700NE. The local grid stations were designated according its offsets, in meters, to the northwest and southeast of the baseline and a point of local coordinates (0,0).

Currently, the base line has 4,800 m of extension; 57,075 km of transverse lines (LT) and 32.90 km of longitudinal lines (LL).

The topographic surveys carried out during the various stages of the research (initially with compass/theodolite and after with a handheld GPS Garmim 45) were integrated in 2002 by the company Exitus (contracted by Vale) on a unified basis. An integrated topographic map of the target area was developed with 5 m spaced contours and 1: 5,000 scale. This planialtimetric base is tied to the UTM coordinate system.

Seven Geodesic landmarks (monuments) were placed in the deposit area (Table 4). These landmarks were located using a pair of Differential GPS (Trimble ET GPS 4700 - L1 and L2 frequencies) by the contracted company Exitus in 2001 and have horizontal precision equal to 5 mm +/- 1 ppm and vertical equal to 10 mm +/- 1 ppm. The starting point was the Pedra Branca landmark, located in the vicinity of Rima Industrial Ltda., in the Riacho dos Machados region.

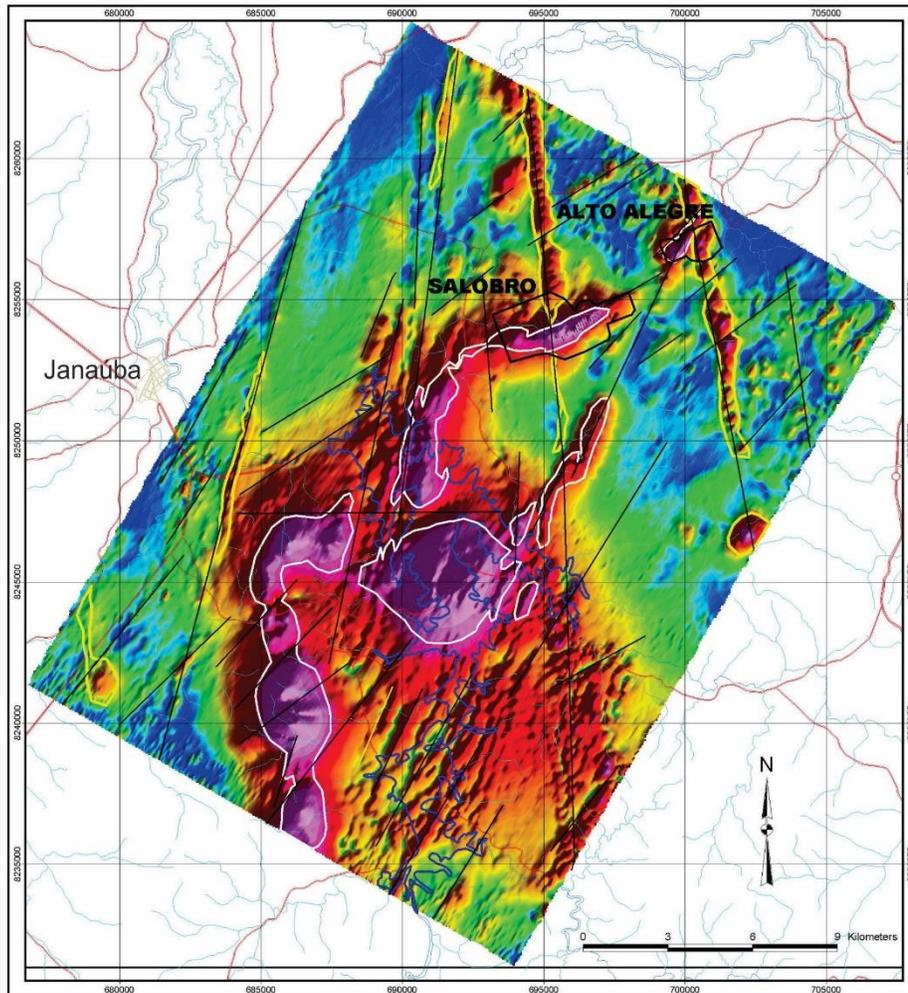
Point	Location	X	Y	Z
Pedra Branca	Rima Industrial	703,195.78	8,209,285.89	981.57
Igreja Salobro	Vila do Salobro	697,180.49	8,257,224.46	589.61
PRM-SALO-MG-01	LT580NE/550NW	695,987.77	8,254,669.67	977.68
PRM-SALO-MG-02	Serra do Coco	697,593.49	8,253,713.02	1,029.28
M-01	LB00/350NE	696,009.48	8,254,107.53	935.25
M-02	LT2300NE/25NW	697,775.99	8,254,806.85	779.77
M-03	LT950NE/250NW	696,420.40	8,254,502.95	913.19

Table 4 – Geodesic Landmarks.

9.2 – Geophysics

In 1992, an airborne magnetometer (Mag/Gama) and electromagnetic survey (TEM) was carried out by a contractor, PROSPEC, in an area defined by the coordinates UTM 690.200E/8,264,700N, 707,450E/8,254,750N, 694,000E/ 8,251,500N and 677,800E/8,241,500N. In the survey area, the flight lines were oriented at 300° azimuth, height around 130 m and a line spacing of 250 m. The projection system used was the Transverse Universal Mercator with SAD-69 spheroid (South American Datum), central meridian 45° (spindle 23S) and scale factor equal to 0.99960.

In Figures 12 and 13, the result of this survey (airborne magnetometry - analytical signal) on the area under discussion is illustrated. The detected aeromagnetic anomaly, in which the Salobro Project deposit is located, was previously identified in the airborne geophysical survey from the Brazil-Germany Geophysical program (1975), and interpreted as linked to magnetic iron formations and eventually associated with a large deep magnetic body, probably an igneous intrusion.



Vértices: 690.200; 8.264.700
 707.450; 8.254.750
 694.000; 8.251.500
 677.800; 8.241.500

Vôo: azimute 300°
 Altura 130m
 Espaçamento entre as linhas de vôo 250m

Sistema de projeção: Universal Transverse Mecartor

Esferóide SAD-69 (South American Datum)
 Meridiano central =45° (fuso=23)
 Fator de escala=0,99960.

Interpretação

-  Corpos Magnéticos
-  Corpos Magnéticos Associados a Corpos Intrusivos Básicos

Legenda

-  Falhas
-  Alvos
-  Estradas
-  Represa

Mapa Aeromagnetométrico
 Depósito Salobro

Figure 12 – Aeromagnetic Map – Analytical Signal (nT).

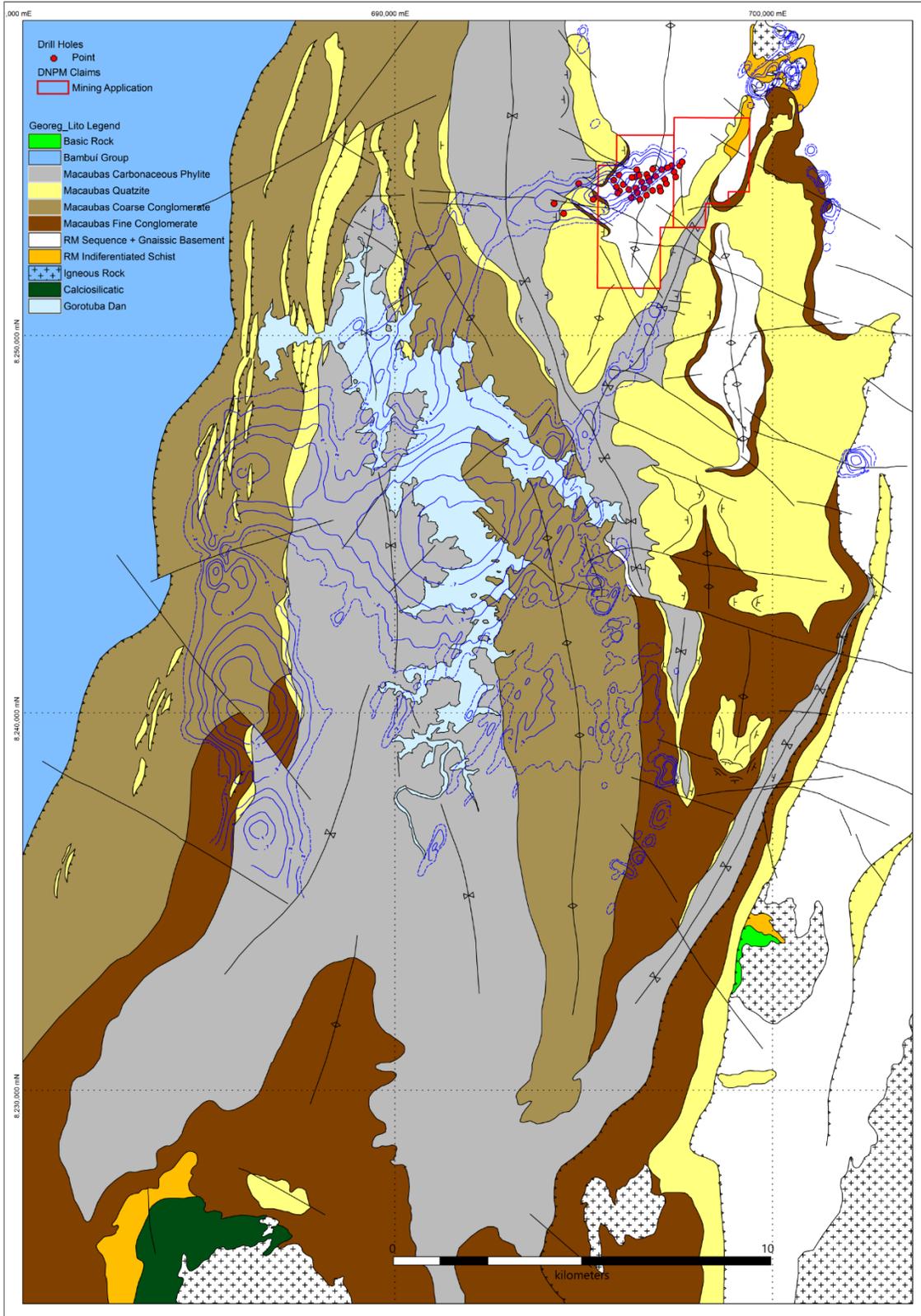


Figure 13 – Aeromagnetic Contours over Gorotuba target Geologic Map.

Ground geophysical surveys included magnetic, gamma spectrometry and gravimetric methods, as well as several types of electromagnetic surveys (TEM with fixed loop, TEM with mobile loop, VLF, IP, NSAMT and CSAMT). These methods investigated the expression of magnetic/conductive bodies in their dimensions of orientation, distribution, geometry, depth and intensity of response, as well as providing parameters on the compositional possibilities of anomalies sources.

The magnetic survey shows strong anomalies of up to 2,100 nT related to iron formation, which guide the zinc mineralization in the Salobro target. In the eastern part of the target the strongest magnetic anomaly disappears giving rise to a trend with weak magnetic anomalies, showing that the level of iron formation narrows, but maintains some vestige in the contact between amphibolitic schists and quartz muscovite schists.

The magnetic anomaly associated with the deposit extends beneath the Macaúbas Group's sedimentary coverages forming a large anomaly below the Gorutuba water reservoir.

The induced polarization survey shows high chargeability and low resistivity anomalies, both at the top and at the base of the mineralized zone, which is interpreted to be related to pyrite levels. TEM also shows the areas with low resistivity related to the sulphide-rich areas in the footwall of the mineralized zone. Measurements of physical properties performed in drill core samples showed host rocks resistivity around 30,000 to 40,000 Ohm and sulphide zones with low resistivity, between 25 and 116 Ohm, contrast reflected in strong IP anomalies with low resistivity also indicated by TEM.

9.3 - Soil Sampling Program

Following up on As, Zn, Pb and Cu anomalies identified in the stream sediment campaign carried out in 1993, a soil sampling program in a 100x25 m grid was performed covering an initial surface of 2.7 x 1 km.

Sampling was performed at regular intervals, spaced 25 to 25 m apart, by means of manual excavations, using levers and collecting through auger drilling. About 3 liters of soil sample were collected in the B horizon, which were placed in previously numbered plastic bags and sent for geochemical analysis at Vale's laboratories in Santa Luzia (BH).

In the laboratory, the samples were sieved to a fraction of less than 80 meshes, and this fraction, after aqua regia digestion, was measured for Cu, Pb, Zn, Cr, Ni and Co, at ppm level by atomic absorption. Gold was determined, at ppb level, using plasma reflux.

After statistical treatment of the results, the distribution maps of the various elements in the soils of the research grid were constructed and zinc showed a more coherent distribution, as shown in Figure 14, below, where the mineralized body can be defined, in surface, by zinc anomalies with values above 120 ppm and with a maximum of 3,580 ppm Zn.

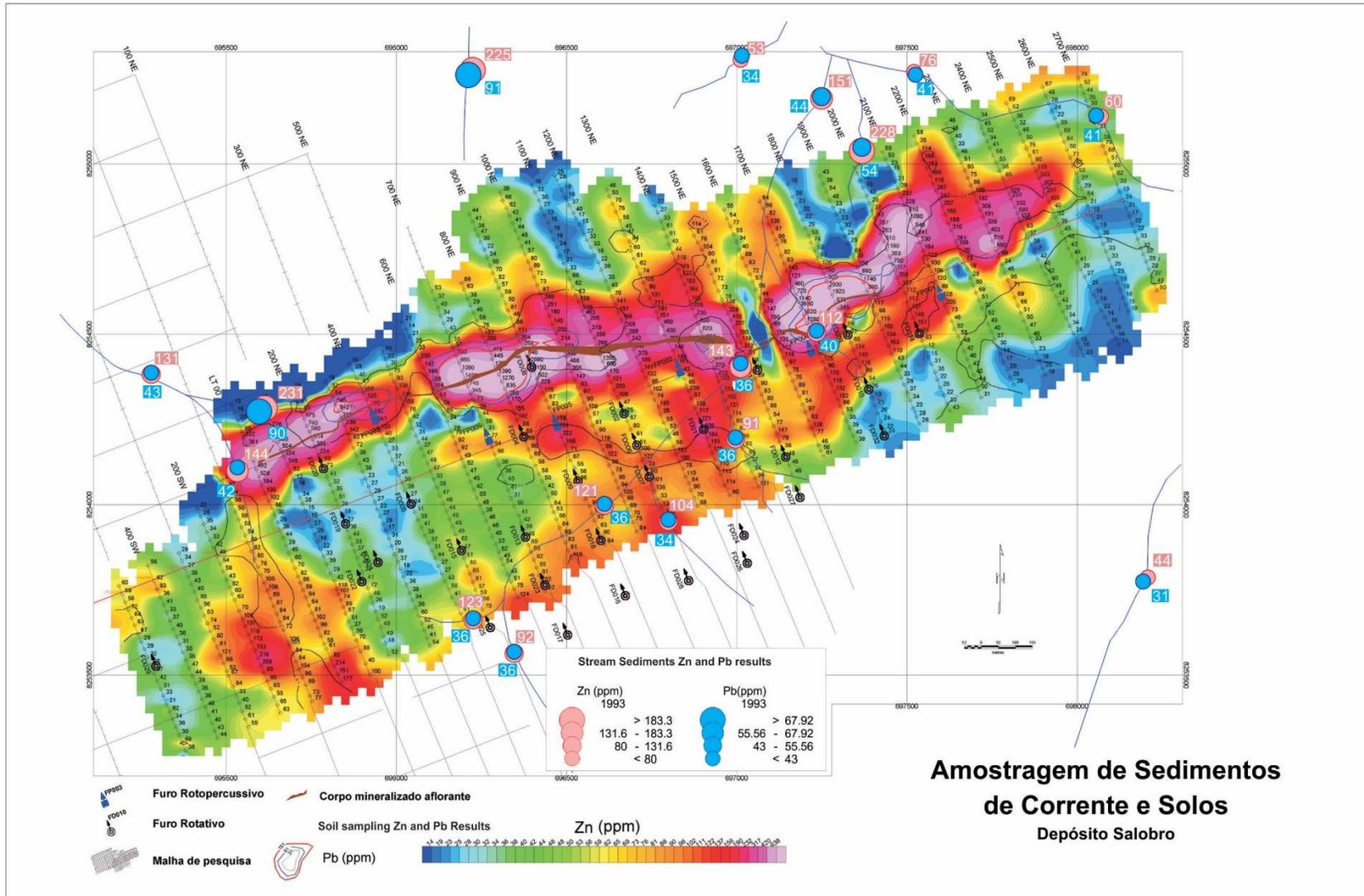


Figure 14 – Stream Sediment and Soil Sampling Survey Results.

10 - Drilling

No drilling has been carried out by Emerita on the Property to date.

Table 5 below summarizes Vale's Diamond and Percussion drill holes' collars and depth as they are in the database.

#	HOLE-ID	LOCATIONX	LOCATIONY	LOCATIONZ	LENGTH	
1	PRM-SALO-FD001	697,060.64	8,254,395.08	770.00	150.00	
2	PRM-SALO-FD002	696,666.95	8,254,267.28	815.00	250.80	
3	PRM-SALO-FD003	697,325.84	8,254,498.47	786.49	129.60	
4	PRM-SALO-FD004	696,373.74	8,254,199.75	830.55	160.90	
5	PRM-SALO-FD005	696,044.03	8,254,002.74	904.37	309.40	
6	PRM-SALO-FD006	696,706.15	8,254,174.83	789.28	246.80	
7	PRM-SALO-FD007	696,740.41	8,254,087.91	763.34	288.95	
8	PRM-SALO-FD008	696,403.25	8,254,392.46	900.41	113.80	
9	PRM-SALO-FD009	696,533.42	8,254,068.95	823.42	298.80	
10	PRM-SALO-FD010	697,387.88	8,254,338.29	831.74	298.95	< 70% Ore Rec
11	PRM-SALO-FD010A	697,387.88	8,254,338.29	831.74	270.30	
12	PRM-SALO-FD011	696,902.85	8,254,220.78	753.89	341.15	
13	PRM-SALO-FD012	697,144.06	8,254,140.06	790.79	403.55	
14	PRM-SALO-FD013	696,379.58	8,253,904.90	821.19	376.95	
15	PRM-SALO-FD014	697,536.12	8,254,502.42	800.81	199.95	
16	PRM-SALO-FD015	696,191.38	8,253,865.53	840.19	400.15	
17	PRM-SALO-FD016	696,659.00	8,253,717.00	851.00	700.50	
18	PRM-SALO-FD017	696,484.00	8,253,607.00	835.00	726.89	
19	PRM-SALO-FD018	696,600.00	8,253,899.00	780.00	424.40	
20	PRM-SALO-FD019	695,861.00	8,253,936.00	912.00	312.90	
21	PRM-SALO-FD020	695,792.00	8,254,117.00	858.00	251.80	
22	PRM-SALO-SUMEN-FD021	695,945.00	8,253,830.00	835.00	168.85	
23	PRM-SALO-SUMEN-FD022	695,898.00	8,253,774.00	815.00	177.15	
24	PRM-SALO-FD023	696,417.00	8,253,778.00	783.00	526.40	
25	PRM-SALO-FD024	697,009.00	8,253,926.00	818.00	589.60	
26	PRM-SALO-FD025	696,260.00	8,253,648.00	799.00	679.60	
27	PRM-SALO-FD026	697,031.00	8,253,828.00	837.00	708.20	
28	PRM-SALO-FD027	697,186.00	8,254,021.00	823.00	580.00	
29	PRM-SALO-FD028	696,822.00	8,253,843.00	791.00	696.35	
30	PRM-SALO-FD029	695,247.90	8,253,608.00	799.00	493.80	
31	PRM-SALO-FD030	694,864.10	8,254,023.00	708.00	240.85	
32	PRM-SALO-FD031	694,465.00	8,253,234.00	787.50	644.80	
33	PRM-SALO-FD032	697,433.00	8,254,202.00	851.00	525.25	
34	PRM-SALO-FD033	694,213.00	8,253,496.00	714.50	344.55	13,031.94
1	PRM-SALO-FP001	697,604.00	8,254,601.00	785.00	150.00	
2	PRM-SALO-FP002	696,829.00	8,254,405.00	806.52	148.00	
3	PRM-SALO-FP003	695,931.00	8,254,257.00	873.00	100.00	
4	PRM-SALO-FP004	697,220.00	8,254,443.00	775.00	150.00	
5	PRM-SALO-FP005	696,467.00	8,254,242.00	818.00	150.00	
6	PRM-SALO-FP006	696,272.00	8,254,189.00	860.00	155.00	853.00
40	Total				13,884.94	

Table 5 – Drilling Summary.

The reverse circulation drilling (RC) was carried out in the second half of 2000 by a contractor, Sedna Geotech do Brasil Ltda (Geosedna), and had as its objective in-fill drilling, to assist in the economic evaluation of the deposit.

A total of 853 meters of RC drilling were completed in 6 holes, with had depths ranging from 100 to 155 meters. The dip of the holes varied between 60° to 90°.

Reverse circulation drilling is considerably cheaper and quicker than core drilling, and is also environmentally preferable. On the other hand, the destructive nature of this drilling technique with respect to the rock samples results in failure to reveal much of the internal geological and mineralogical character of the target.

The diamond drilling on the target was performed in five steps (1993, 1994, 1999, 2000 and 2001) which are described below. The locations of the diamond drill collars are in Table 5, above. A total of 13,031.94 m of diamond drilling was executed.

In 1993, DOCEGEO conducted a 150 m exploratory drill hole close to the Salobro river (PRM-SALO-FD001) to assess the potential for gold mineralization of an outcropping massive sulphide (Pyrite).

Subsequently, in 1994, the exploration team of the Ouro Fino Mine - CVRD / SUMEN, carried out a 346 m drilling program, through a GEOSOL contractor, distributed in two holes of 168.85 and 177.15 m (PRM-SALO-SUMEN-FD021 and FD022, respectively), in the As geochemical soil anomaly at the SW end of the grid.

Later, with the recommencement of work, a total of 12,535.94 m of rotary diamond drilling was executed, corresponding to 31 drill holes (60° to 75° dip) and 338° azimuth, which were drilled by GEOSERV and GEOSOL in 1999, 2000 and 2001.

This diamond drilling program had the objective to investigate at depth the Zn mineralization defined in surface in 1999, mainly by trenches mapping and sampling survey. The drill holes were mostly located in sections spaced from 100m to 200m, and perpendicular to the regional average strike (68°) of the mineralized trend. They have varying depths from 113.80 (e.g. FD008) to 726.89 m (e.g. FD017).

Dip and azimuth downhole measurements were made using the Fotobor equipment (FD010, 012, 018, 024 and 025) and Maxibor (FD001 to 003, 016, 017, 023, 026 to 029, 031 and 032), at intervals of 30 to 30 meters.



Photo 1 – Project Core shack (March 21st, 2017).

The drilling results summary, available to date, can be seen in Table 6 below.

HOLE-ID	FROM	TO	LENGTH	ZN%	PB%	ZN+PB%	ZNEQUIV%
PRM-SALO-FD002	119.60	125.44	5.84	4.03	0.57	4.60	4.55
PRM-SALO-FD002	141.15	142.66	1.51	10.13	2.38	12.51	12.30
PRM-SALO-FD003	90.10	92.13	2.03	6.39	0.98	7.37	7.28
PRM-SALO-FD003	94.92	96.60	1.68	6.43	0.72	7.15	7.09
PRM-SALO-FD006	187.67	193.50	5.83	5.60	0.90	6.50	6.42
PRM-SALO-FD006	209.19	210.13	0.94	6.66	0.63	7.29	7.23
PRM-SALO-FD007	258.86	259.45	0.59	3.21	0.69	3.90	3.84
PRM-SALO-FD007	273.78	275.82	2.04	2.31	0.47	2.78	2.74
PRM-SALO-FD009	262.50	276.42	13.92	10.39	2.13	12.52	12.33
PRM-SALO-FD010	266.08	267.48	1.40	7.26	0.76	8.02	7.95
PRM-SALO-FD013	328.24	338.58	10.34	6.09	0.73	6.82	6.75
PRM-SALO-FD014	184.45	185.15	0.70	12.50	1.36	13.86	13.74
PRM-SALO-FD017	655.25	655.75	0.50	3.44	0.03	3.47	3.47
PRM-SALO-FD018	372.20	374.20	2.00	4.49	0.45	4.94	4.90
PRM-SALO-FD023	457.80	460.50	2.70	12.77	4.10	16.87	16.50
PRM-SALO-FD023	483.00	483.97	0.97	11.71	3.29	15.00	14.70
PRM-SALO-FD023	494.30	494.85	0.55	9.56	0.25	9.81	9.79
PRM-SALO-FD024	538.05	539.55	1.50	7.48	1.09	8.57	8.47
PRM-SALO-FD026	627.43	627.93	0.50	11.80	0.92	12.72	12.64
PRM-SALO-FD028	489.90	500.00	10.10	3.70	0.72	4.42	4.36
PRM-SALO-FD032	463.70	464.70	1.00	10.13	2.41	12.54	12.32
PRM-SALO-FD032	471.70	472.70	1.00	13.95	1.04	14.99	14.90
PRM-SALO-FP004	73.00	76.00	3.00	2.34	0.16	2.50	2.49
PRM-SALO-FP005	89.00	91.00	2.00	6.00	1.55	7.55	7.41

OBS: ZNEQUIV% based on US\$ 1.00/lb Pb, US\$ 1.10/lb Zn

Table 6 – Drilling Results Summary.

11 - Sample Preparation, Analysis and Security

No drill sampling has been carried out by Emerita on the Property to date.

Vale's procedures of handling drill core during the drilling program were comprised of initial description and logging onto a paper logging sheet. The drill holes were described in detail and marked for sampling. Sampling respected geological contacts and samples had a minimum length of 0.2m and maximum length of 1.0m. As a standard procedure, only ¼ of the core was sampled and put into plastic sample bags and sealed. The remaining portion was returned to the core box and stored for future reference or study.

Drill holes FD019, 020, 030, 033 were not sampled because they did not contain any mineralized interval.

These samples were then delivered to CVRD/GAMIC Labs facility at Santa Luzia. The samples were then fine-crushed to 3 mm, with an assay pulp split of up to 300 grams pulverized to better than 95% passing 200 mesh screen. Samples were assayed using aqua regia digestion followed by ICP for (As, B, Ba, Cd, Co, Cr, Cu, K, Na, Nb, Ni, Sb, Zr), Inductive Plasma Spectrometry for (Bi, Al, Ca, Fe, Mg, Mn, P, Pb, Si, Sn, Ti, W, Zn), and in addition, AAS for Hg, Fire Assay for Au and XR for Cl and S. Assay standard and "Blank" samples were inserted every 20th sample by the lab. The Salobro Project has not inserted any sort of control samples.

Eighty-eight samples were sent to Bondar Clegg Lab in Canada for check assay.

12 - Data Verification

The Author conducted a field visit to the Property from March 21st to 23rd, 2017.

During this visit, selected drill cores and outcrops were inspected.

No drill pad was located due to the poor conditions of the road to the drilling site.

Drill locations were checked using GeoEye image (Digitalglobe 2017) in a Mapinfo Geographic Information System (GIS) software. As can be seen in Figure 15 below, current drill holes' coordinates, which were surveyed at different times using different equipment, Datum and coordinate systems, should be verified.

The Author considers the exploration data collected by Vale to be of sufficient quality for the purpose of this Technical report.

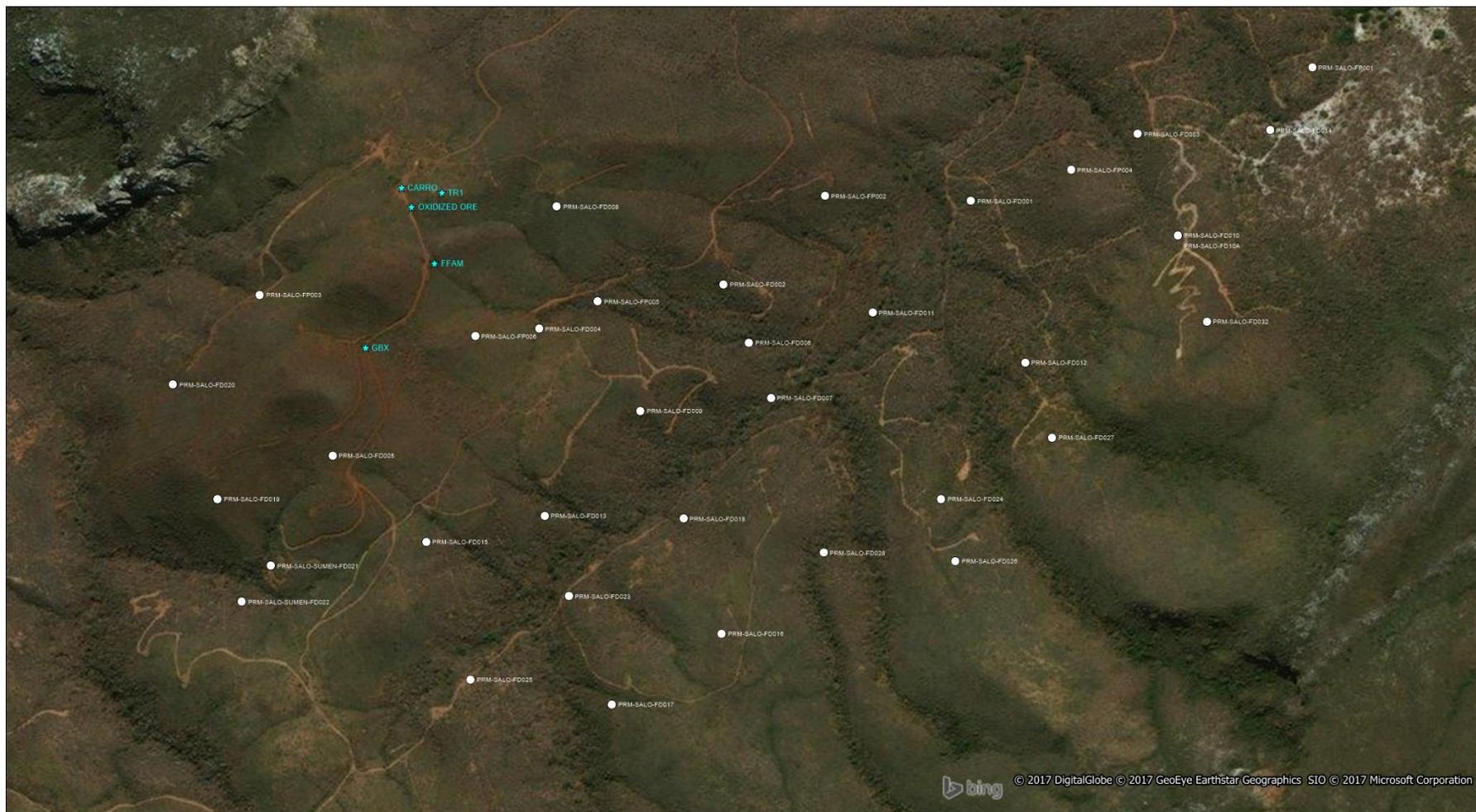


Figure 15 – Drill holes' location check (2017 GeoEye Image).

Inspection of cores drilled on the Salobro Project were done by the Author to confirm the nature and dimension of this mineralization (see photos below).



Photo 2 – FD 09.



Photo3 – FD 09 (FUX, 47.00m).



Photo 4 – FD 09 (GBX, 85.00m).



Photo 5 – FD 09 (GAXB, 112.00m).



Photo 6 – FD 09 (UXL, 119,00m).



Photo 7 – FD 09 (FFAM, 128.00m).



Photo 8 – FD 09 (UXL, 180.00m).



Photo 9 – FD 09 (BR, 236.00m).



Photo 10 – FD 09 (AM, 262.00m).



Photo 11 – FD 09 (ORE, 274.00m, Sphalerite).



Photo 12 – FD 09 (ORE, 274.00m, Reddish and Brownish Sphalerite).



Photo 13 – FD 09 (CS, 283.00m).



Photo 14 – Drilling Site View.



Photo 15 – Drilling Site View Detail.



Photo 16 – FFAM + AM at the top of the hill in the right with trench trace. Location at figure 15 above.



Photo 17 – Amphibole Metachert (AM) in trench.

13 - Metallurgical Testing

No metallurgical testing has been carried out by Emerita on the Property to date.

In 2004, Vale sent one sample from the Salobro Project deposit weighing approximately 100 kilograms to their CDM – Mineral Development Center Lab, in Santa Luzia (MG) and to CETEM – Mineral Technological Center Lab from Universidade Federal do Rio de Janeiro – UFRJ, in Rio de Janeiro for technological characterization.

A summary of the results is compiled in Tables 7 and 8 below:

Sample	Zn (%)	Pb (%)	Fe (%)	Cu (%)	S (%)
	6.8	1.2	7.9	0.01	6.2

Mineral	Rietveld	Stequiometry	Final (%)
Sphalerite	8.0	10.13	10.1
Galena	1.7	1.39	1.4
Pyrite	0.7	5.00	5.0
Chalcopyrite		0.03	
Albite	2.4		2.2
Biotite	1.8		1.7
Chlorite	4.3		4.0
Quartz	64.1		59.7
Hornblende	15.1		14.1
Pyrophyllite	1.9		1.8

Test	WI (KWh/st)	WI (KWh/t)
1	11.94	13.13
2	11.91	13.10

Table 7 – Chemical, Mineralogical and WI Sample Results.

The tests carried out confirm the possibility of obtaining zinc and lead concentrates with specifications compatible with the quality of the zinc and lead concentrates used in the metallurgical industry.

Zinc concentrates were obtained with Zn grades varying from 48 to 57%, and more than 80% recovery. Lead concentrates were also obtained with Pb grades from 63 to 72%, and recoveries of the order of 80% as shown below and using industry standard reagent consumption for flotation.

Sphalerite Scavenger flotation was not studied at that time and would be expected to further improve the results.

Test #	Sample	(%)	Grade (%)					Recovery (%)	
			Zn	Pb	Fe	Cu	S	Zn	Pb
5	Pb Concent.	1.6	7.3	63.80	2.2	0.01	16.5	1.7	80.9
	Rej. CL Pb	2.2	8.9	4.50	7.2	0.01	8.9	2.8	7.8
	Zn Concent.	12.0	48.6	0.54	8.4	0.04	33.0	83.0	5.1
	Rej. CL Zn	9.6	5.9	0.26	17.0	0.01	13.0	8.1	2.0
	Rej. Final	74.6	0.42	0.07	6.3	0.01	1.2	4.5	4.1
7	Pb Concent.	1.4	6.2	72.90	1.2	0.01	16.4	1.2	75.3
	Rej. CL Pb	2.6	10.1	7.90	7.1	0.01	9.6	3.5	15.1
	Zn Concent.	10.6	57.3	0.41	5.5	0.04	32.9	81.1	3.2
	Rej. CL Zn	6.8	9.4	0.35	15.9	0.02	13.6	8.5	1.8
	Rej. Final	78.6	0.54	0.08	7.9	0.01	2.1	5.7	4.6

Table 8 – Flotation Results.

Reagents consumption used for Galena flotation:

- NaCN – 150 a 200 g/t;
- ZnSO₄ – 300 a 400 g/t;
- Isopropil xantato de sódio – 40 a 60 g/t (para flotação “RG”);
- MIBC – 10 a 25 g/t (para a flotação “RG”).
- Isopropil xantato de sódio – 10 a 15 g/t (para flotação “CL1”);
- MIBC – 0 a 5 g/t (para a flotação “CL2”).

Reagents consumption for sphalerite flotation:

- CuSO₄ – 300 a 400 g/t;
- Isobutil xantato de sódio – 60 a 100 g/t (para flotação “RG”);
- MIBC – 10 a 15 g/t (para a flotação “RG”);
- Isobutil xantato de sódio – 10 a 15 g/t (para flotação “CL1”);
- MIBC – 0 a 5 g/t (para a flotação “CL2”).

14 - Mineral Resource Estimates

There are no current mineral resource estimations on the Property.

15 - Adjacent Properties

There are no zinc mines operating near the Salobro Project deposit.

16 - Other Relevant Data and Information

There is, to the Author's knowledge, no additional data or information, of either a positive or negative aspect, that would change the data presented or contained in the recommended program.

17 - Interpretation and Conclusions

Based on the data and information gathered by the Author it is possible to conclude that:

- The Property presents a high potential to host significant zinc deposits. This is supported by the geological setting similarities between the Salobro Project deposit area and a number of projects around the world, and by the reporting of mineralized intersections throughout the Property.
- No significant risk is expected to affect the reliability or confidence in the exploration information.
- The local infrastructure supports the initial phases of the exploration and development program.

18 – Recommendations

The following exploration program is suggested by the Author:

- Re-log and interpret existing drill holes particularly to identify structural controls on the mineralization. To date, little has been done with respect to structural controls on the mineralization, and given the metamorphic and deformational history of rocks, potential for grade and thickness to be enhanced, by fold structures for example should be examined.
- Re-assay 10% of existing intercepts to establish a QA/QC data base in support of completing a NI 43-101 compliant resource estimate.
- Drill 2,000m twin holes to validate historical data.
- Interpretation and integration of drilling results to identify the zinc rich intervals.
- Develop a conceptual mining study to prioritize future drilling.
- In the event structural controls of high grade and good thickness mineralization are identified early in the program, it is recommended that the Emerita proceed directly to resource delineation in the area where such mineralization is identified.
- Design environmental studies (EIA/RIMA).

The cost, in Canadian dollars, for the initial 2017 program is approximately \$1 million.

		PROPOSED INITIAL PROGRAM BUDGET	R\$	CAD\$
GEOLOGY	Diamond Drilling (inc. Assays and Services)	2,000 m	1,152,000	460,800
	Technical Staff		675,000	270,000
	Field Costs		156,200	62,480
	Land Fees		47,000	18,800
	TOTAL 1		2,030,200	812,080
ENGINEERING	NI 43-101 Compliant Resource Estimate		195,000	78,000
	Mining Plan		162,500	65,000
	TOTAL 2		357,500	143,000
ADM	Administrative Costs		150,000	60,000
	TOTAL 3		150,000	60,000
GRAND TOTAL (US\$)			2,537,700	1,015,080

Table 9 – Initial Program Budget (2017). 1 CAD\$ = R\$ 2.50

19 – References

- ABREU, F.R. & OLIVEIRA, O.A. B. (1998) – Geologia e Ocorrências de Zinco e Chumbo do Prospecto Salobro, Porteirinha (MG). Anais do XL Cong.Bras.Geol., Belo Horizonte (MG), p.140.
- ALMEIDA, F.F.M. de (1977) - O Cráton do São Francisco. Rev. Bras. Geoc., V. 7, n.4, p.349-364.
- ALMEIDA, F.F.M. de & HASUI, Y. (1984) - O Pré-Cambriano do Brasil. Ed. Edgard Blucher Ltda, 282-307.
- COSTA, M.T. da & ROMANO, A.W. (1976) - Mapa Geológico do Estado de Minas Gerais e Texto Explicativo (1:1.000.000), IGA. Belo Horizonte.
- CROCCO-RODRIGUES, F.A., GUIMARÃES, M.L.V., de ABREU, F.R., BELO DE OLIVEIRA, O.A. & GRECO, F.M. (1993) – Evolução Tectônica do Bloco Itacambira-Monte Azul entre Barroco e Porteirinha (MG). Anais IV Simp.Nac.Est.Tect., Belo Horizonte, p.212-216.
- DANIEL, P.G.; ELENA, C.L.; CARINA, A.B., EMBRAPA (2010), Áreas Homogêneas de Precipitação no Estado de Minas Gerais.
- DRUMMOND, J.B.V.; von SPERLING, E.; RAPOSO, F.O. (1980) – Projeto Porteirinha-Monte Azul; relatório final, Belo Horizonte: CPRM,559p.
- GUIMARÃES, M.L.V. & GROSSI SAD, J.H., 1997 – Projeto Espinhaço: Mapa Geológico da Folhas Francisco Sá, Minas Gerais (1:100.000) e Nota Explicativa. Companhia Mineradora de Minas Gerais (COMIG) / Universidade Federal de Minas Gerais (UFMG), Belo Horizonte (MG). CD-ROM.
- GUIMARÃES, M.L.V., CROCCO-RODRIGUES, F.A., de ABREU, F.R., BELO DE OLIVEIRA, O.A. & GRECO, F.M. (1993) – Geologia do Bloco Itacambira-Monte Azul entre Barroco e Porteirinha (MG). Anais IV Simp.Nac.Est.Tect., Belo Horizonte, p.74-78.
- KARFUNKEL, B & KARFUNKEL, J. (1977) - Fazielle Entwicklung der mittleren Espinhaço -Zonemitbesonderer Berücksichtigung des tilit -problema, Minas Gerais, Brasilien. Geol. Jahrb. Beih., Hannover, (24):3-91.
- MACHADO, N.; SCHRANK, A.; ABREU, F.R. de; KNAUER, L.G.; ALMEIDA ABREU, P.A. (1989) -. Resultados preliminares da Geocronologia U/Pb na Serra do Espinhaço Meridional. Anais do Vo. Simp.Geol. do Núcleo 11G e Io. Simp.Geol.Núcleo Brasília, SBG, Bol.10, pp171.
- NEVES, B.B. de B.; KAWASHITA, K.; CORDANI, U.G. & DELHAL, J. (1979) - A Evolução Geocronológica da Cordilheira do Espinhaço; dados novos e integração. Rev.Bras.Geol., 9(1):71-85. São Paulo.
- PENNA, M.; TEIXEIRA, N.; CROCCO, F.A.; MACIEL, J.D.; LUZ, A.B.; ALMEIDA, S.L.M.; NEUMANN, R. (2004) - Aspectos Geológicos e Tecnológicos do Depósito de Zinco/Chumbo de Salobro - Porteirinha - MG. In: XX ENCONTRO NACIONAL DE TRATAMENTO DE MINÉRIOS E METALURGIA EXTRATIVA. Florianópolis. Trabalhos. Universidade do Extremo Sul Catarinense, 2004.
- SIGA Jr, O. (1986) - A Evolução Geotectônica da porção Nordeste de Minas Gerais, com base em interpretações Geocronológicas. Dissertação de Mestrado. IGUSP, 140p.
- TEIXEIRA, N. (2001) – Relatório de atividades – Projeto Riacho dos Machados. NTX Consultoria S/C. Belo Horizonte. DOCEGEO/CVRD. Relat. Interno.
- Vale (2003), Depósito de Zinco e Chumbo do Salobro, Município de Porteirinha (MG), Avaliação de Recursos Geológicos, Relatório Interno.
- Vale (2005) - GERÊNCIA GERAL DE EXPLORAÇÃO – GEGEK -RELATÓRIO FINAL DE PESQUISA, PORTEIRINHA – MG.
- Title Opinion – Salobro Zinc Project” - Azevedo Sete Advogados Associados – July 14 th 2017.

20 – Date and Signature Page

Certificate of Carlos Henrique Cravo Costa

I, Carlos Henrique Cravo Costa, P.Geo. of Belo Horizonte, Minas Gerais, Brazil, do hereby certify that:

- I am a Senior Geologist Consultant owner of CHC Consultoria Mineral Ltda with business address of: Av. Amazonas, n° 2904, Loja 513, Bairro Prado, Cep 30411-186, Belo Horizonte, Minas Gerais – Brazil.
- I graduated with a degree in Geology, (B.Sc. Geology) from the Federal University of Rio de Janeiro in 1982.
- I am a member in good standing of the Association of Professional Geoscientists of Ontario (APGO # 1971).
- I have worked as a geologist for a total of 34 years since my graduation from university. As a geologist, I have been involved in base metals, gold and PGE exploration projects and have also mining experience, including underground and open pit operations throughout Brazil.
- I have read the definition of “qualified person” set out in National Instrument 43-101 (“NI 43-101”) and certify that, because of my education, affiliation with a professional association (as defined by NI 43-101) and past relevant work experience, I fulfill the requirements to be a “qualified person” for the purpose of NI 43-101.
- I am responsible for all sections of the Technical Report titled “**Technical Report on Salobro Zinc Project**” relating to a Zinc Project in the Minas Gerais State. I have visited the Property area on the 21st of March 2017 for 3 days. I visited the Salobro core storage facility to inspect selected drill cores drilled to date.
- I did not have prior involvement with the Property that is the subject of the Technical Report.
- I am not aware of any material fact or material change with respect to the subject matter of the Technical Report that is not reflected in the Technical Report, the omission to disclose which makes the Report misleading.
- As of the date of this certificate, to the best of my knowledge, information and belief, this Technical Report contains all scientific and technical information that is required to make this Technical Report not misleading.
- I am independent of Emerita Resources Corp., Vale S.A. and IMS Engenharia Mineral Ltda.
- I have read NI 43-101 and confirm that the Technical Report has been prepared in compliance with NI 43-101 and Form 43-101F1.

Signed and dated, this 23rd day of August 2017 **with an Effective Date of March 23rd, 2017**

Carlos H. C. Costa, B.Sc, P.Geo

PROFESSIONAL SEAL

To: Ontario Securities Commission
Alberta Securities Commission
British Columbia Securities Commission

I, Carlos Henrique Cravo Costa do hereby consent to the public filing of the technical report entitled **Technical Report on SALOBRO Zinc Project, Porteirinha Municipality, Minas Gerais State, Brazil** and dated March 23rd (the "Technical Report") by Emerita Resources Corp. (the "Issuer"), with the TSX Venture Exchange under its applicable policies and forms in connection with the agreement with Vale S.A. and IMS Engenharia Mineral Ltda. pursuant to which Emerita has agreed to acquire the Salobro zinc project and I acknowledge that the Technical Report will become part of the Issuer's public record.

Signed and dated, this 23rd day of August 2017

Carlos H. C. Costa, B.Sc, P.Geo