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PRELIMINARY REVIEW ON THE IBEROMINAS PROPERTY

CHINANDEGA DEPARTMENT, NICARAGUA.



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1. SUMMARY

The mining property is located in the Chinandega Department the North-West sector of Nicaragua. The village of Somotillo is basically well centered in the sector. Access can be done by vehicle from Managua city through a paved road (200 Km) using the paved road Managua-Leon-Somotillo.

Topography is semi-regular with elevations ranging between 185 to 900 m.a.s.l. Climate is hot and humid with an average temperature of 34°C and precipitation of 1,800 mm/m2. Raining season runs from May to November.

The Company Iberoamericana de Minas S.A. (IBEROMINAS) has started exploration activities since 1994. Today the mining concessions are being grouped into two main mining blocks called Iberominas I and Iberominas II. The main explored and mined targets are belonging to the Iberominas I package.

The project includes with a cyanide gold processing plant. The plant capacity of processing is 125 t/day, but it has been working with an average capacity of 100 t/day and average recovery of 80%. There is a camp close to the Somotillo town and close to the paved road Managua-Leon-Somotillo. Heavy machinery (bulldozer, excavators, etc.) has been observed in the camp and in the surrounding area of prospects.

The Central America isthmus form a parallel arc system with the subduction trench of the region, where the Cocos plate is being subducted underneath of the Caribbean plate. Nicaragua has been also divided into five geological terranes: **The Pacific Coast** (Paleozoic to Pliocene volcanic and sedimentary sequences), the **Nicaragua Depression** (emplacement of an ocean crust nature terrane during the late Miocene and covered by Pliocene-Pleistocene volcanic rocks), **Central Nicaragua** (Tertiary volcanic rocks), the **Northern terrane** (Paleozoic and Mesozoic rock units of continental nature); and **Atlantic Coast** (Miocene-Recent sedimentary and volcanic units).

The rocks in the area of study are belonging to an active continental margin environment, which has originated an intense cal-alkaline volcanic activity forming an association of intermediate to felsic volcanic rocks. Mineralization is mainly hosted into Middle to Upper Miocene andesitic volcanic sequence (Coyol Group) and younger intrusive rocks.

Mineralization is related to gold bearing pinch and swelling mesothermal-epithermal quartz veins hosted into Tertiary andesitic volcanic rocks (Somotillo sector) and gold bearing mesothermal-epithermal quartz veins and stockwork mineralization related to Tertiary volcanic and intrusive rocks (Cinco Pinos sector). Historically, in the region, gold has been mined from three deposits—Limon, Bonanza, and La Libertad. Nicaragua is the leading gold-producing country in Central America and the Caribbean Basin. Significant interesting gold and silver grades are more related to veins; but, the stockwork (disseminated gold mineralization) deposits yielded low grades in general.



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Several vein and stockwork prospects were visited and described in the present report and other prospects are being mentioned. A dozen of chip channel samples were collected for control purposes.

Current calculations (Espinoza, 2008) indicate hypothetical resources of about 100,000 insitu Troy ounces of gold between several veins/prospects considering a depth of only 20 m. It is inferred that resources could be triplicated with drilling exploration and evaluation. Special care should be taken with the pinch and swelling vein behavior and the variable gold and silver grades along vein strike.

2. INTRODUCTION

John E. Bolaños has been retained as a consulting geologist by Mr. Christopher Werner Chief Executive Officer of River Hills Resource Corp.

The purpose of the present work is to determine the geological potential of the gold bearing quartz veins occurring in the mining properties of the company “Iberoamericana de Minas S.A. (IBEROMINAS)”.

The field visit took place during the days of April 17th to April 19th 2012. The visitors included Mr. Bernardo Posada (Ejecutive President of Iberominas), Mr. Christopher Werner (CEO River Hills Resource Corp.), Mr. Gilberto Pineda and Mr. Alvaro Meneses.

3. DISCLAIMER

The author has relied upon the data provided by Iberominas (Mr. Bernardo Posada) in formulating his opinion and conclusions.

The present document is a River Hills’ internal report to evaluate the mining potential of the Iberominas mining concessions to be considered for a potential future negotiation; and does not intent to fulfill any international geological-mining requirements such as the NI 43-101 Canadian Instrument or similar.

Sincerely,

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4. LOCATION AND ACCESS

Nicaragua has been divided into 15 departments and 2 autonomous territories, within an area of 130,700 km². The mining property is located in the Chinandega Department the North-West sector of Nicaragua. The village of Somotillo is basically well centered in the topographical map (Fig. 1 and Fig. 2).

Access can be done by vehicle from Managua city through a paved road (200 Km) in the direction of Leon town and later Somotillo town located in the western part of the mining concessions zone (Plate 1). The area comes with a very dense system of secondary local well compacted roads which provide access to the entire concession areas (Plate 2). Paths, tracks and trails are available everywhere to have final access to the mineralization spots/targets. The entire driving from Managua takes about 3 hours.

5. TOPOGRAPHY AND CLIMATE

The topography corresponds to a low elevation land ranging in altitude from 185 m.a.s.l. in the Somotillo town to about 900 m.a.s.l. in the mountainous zones.

The weather is hot and humid with temperatures that could reach 32°- 36°C at noon time. The raining season runs from May to November. Average precipitation in the zone is 1,800 mm/m² based on Köppen scale for the period of 1971-2000 (Edigol, 2008).

6. MINING PROPERTY AND MINING CONCESSIONS

The Iberominas concessions is divided into two main blocks: Iberominas I and Iberominas II. In 1994 the two blocks added in total a dozen of mining concession summarizing an overall amount of 415,000 mining hectares for exploration (Fig. 7).

Today the mining concessions have been reduced by Iberominas (Mr. Bernardo Posada) remaining about 145.000 mining hectares in concessions (personal communication B. Posada, 2012). The legal status and concessions good standing was not very clear at the time of the field visit. It is highly recommended that an adequate due diligences will be performed on this regard.

7. REGIONAL GEOLOGY

It is well known that the Central America isthmus form a parallel arc system with the subduction trench of the region, where the Cocos plate is being subducted underneath of the Caribbean plate (Fig. 3).

Central America has been also divided (Dengo 19973; Donnelly et. al., 1990; in Rodriguez 1998) into two main tectonic blocks (Fig. 4):



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a) Northern Central America: A continental crust block formed by Guatemala (to the South of the fault system Polichic-Motagua-Jocotan), El Salvador, Honduras and the northern portion of Nicaragua.

The basement of the northern central America is composed by Paleozoic rocks mainly phyllite and low metamorphic grade schist. Overlying this metamorphic basement, there are layers of clastic (sedimentary) rocks and Jurassic-Cretaceous carbonate rocks. Intrusive rocks took place (intrusions) in late Cretaceous.

b) Southern Central America: It is an uplifted belt of oceanic crust that comprises the southern portion of Nicaragua, Costa Rica and Panama. The basement in this region is composed by Mesozoic rocks, mainly tholeiitic basalt, marine sediments all intruded by Tertiary intrusions. It is remarkable the intense cal-alkaline volcanic activity that took place during the Tertiary; these volcanic rocks cover the contact of the two mentioned blocks.

Rodriguez 1998 indicates that Nicaragua has been also divided into five geological *terrane*s (Fig. 4):

7.1. THE PACIFIC COAST TERRANE: Presents volcanic and sedimentary units from Paleozoic to Pliocene covering the continental crust. The thickness of this terrane is of about 8,000 m (Kuang, 1971 & Parson Corporation, 1972; in Rodriguez 1998) suggesting a subsidence basin. Deformation processes during late Miocene originated low grade folding and parallel faulting to the subduction direction of the Cocos plate.

7.2 THE NICARAGUA DEPRESSION: It corresponds to the emplacement of an ocean crust nature terrane during the late Miocene (Martinez 1993 in Rodriguez 1998). The current volcanic ridge emplaced into the depression was preceded by Pliocene-Pleistocene vulcanism of the “Grupo Las Sierras” composed of agglomerate basalt, pyroclastics, and lava flows.

7.3 CENTRAL NICARAGUA TERRANE: Composed by a set of Tertiary volcanic rocks. It has been divided by two main units: The Matagalpa group and the Coyol group (McBirney and Williams, 1965; Parson Corporation, 1972; Hodgson, 1971; Ehrenborg, 1996, Rodriguez, 1998). The nature of this terrane is oceanic, continental or transitional between both.

The Eocene-Oligocene Matagalpa group was formed into an island arc environment composed by basaltic and andesitic rocks and dacitic-rhyolitic pyroclastic flows. The Miocene-Pleistocene Coyol group was formed into an active continental margin domain, and it is composed of mafic lava flows and andesitic-dacitic pyroclastic flows.

7.4 THE NORTHERN TERRAIN: It is part of the Northern Central America and it is characterized by Paleozoic and Mesozoic rock units of continental nature that suffered



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deformation and metamorphic processes. In late Cretaceous a granite batholith and other intrusive plugs were emplaced following a main direction north-east.

7.5 ATLANTIC COAST TERRANE: It is characterized for the occurrence of Miocene-Recent sedimentary and volcanic units. The continental Caribbean plate is underlain by 4,000 m of Mesozoic-Cenozoic terrigenous and carbonatic sediments which form the named “Promontorio de Nicaragua” which is being extended until Jamaica. These units overlain unconformably the Paleozoic-Mesozoic continental plate.

In general the geologic environments include Paleozoic crystalline basement rocks, Mesozoic sedimentary and intrusive rocks, nearly continuous sedimentary sequences of Late Cretaceous to Pleistocene age, a broad area of Tertiary volcanic rocks, and Quaternary sedimentary and volcanic rocks that include several active volcanoes. These rocks have a dominant continental crust affiliation and are assigned to the Chortis Block, although there is evidence of fragments of oceanic-crust material. The structural framework is controlled largely by the NW-trending Middle America Trench, which marks the boundary between the Cocos and Caribbean plates. This trend is manifest in the Nicaraguan Depression, the chain of volcanoes that extend from western Panama to El Salvador, as well as fold axes within a forearc depositional basin. East of the Nicaraguan Depression, a northeast structural trend becomes important (Arengi J. & Hodgson G., 2010).

8. MINING POTENTIAL OF NICARAGUA

According to Arengi J. & Hodgson G. (2010), there are some 94 metallic (Fig. 6) deposits within the various geologic environments. Gold has been mined from three deposits—Limon, Bonanza, and La Libertad. Nicaragua is the leading gold-producing country in Central America and the Caribbean Basin. Since the late 1930s more than eight million ounces of gold have been mined, mainly from epithermal and mesothermal veins (Limon, Bonanza), skarn zones (Siuna, Rosita), and various placer deposits. Geologic reserves are estimated at 6.5 million ounces. Other mineral commodities include silver, copper, zinc, limestone, aggregates, gypsum, and clay minerals.

As a result of political unrest and nationalization of many foreign assets during the 1970s and 1980s, little exploration was conducted. However, the election of a stable, democratic government in the early 1990s and a revision of foreign investment regulations has resulted in an increase in exploration activity; nevertheless, much of the country remains underexplored

9. LOCAL GEOLOGY, MINERALIZATION AND ALTERATION

The rocks in the area of study are belonging to an active continental margin environment, which has originated an intense cal-alkaline volcanic activity forming an association of intermediate to felsic volcanic rocks (Fig. 4 and Fig. 5).



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Mineralization is mainly hosted into Middle to Upper Miocene andesitic volcanic sequence (Coyol Group) and younger intrusive rocks (Fig. 5). It has been observed (Rodriguez, 1998) that mineralization is occurring in the volcanic rocks as well as into the intrusive rocks indicating that mineralized veins are younger than the two mentioned type of rocks.

In the area of study, two different geological terranes have been described (Rodriguez, 1998):

a) Somotillo Area: With the occurrence of gold bearing mesothermal-epithermal quartz veins hosted into Tertiary andesitic volcanic rocks.

b) Cinco Pinos: With occurrence of gold bearing mesothermal-epithermal quartz veins and mineralization (stockwork) related to Tertiary volcanic and intrusive rocks.

The observed mineral assemblage in the studied veins is: Au-Ag-sulphides (Pyrite) quartz. Typical of mesothermal-epithermal quartz veins.

The host volcanic rocks are widespread weathered and hydrothermally altered (propylitic alteration and silicification locally).

The Tertiary intrusive rocks outcrop along a belt of approximately 20 Km width and 60 Km length with general direction north-west.

10. OVERALL IDENTIFIED MINERALIZED PROSPECTS

According to Espinoza (2008) the Iberominas property has been divided into two big mining blocks (Iberominas I and Iberominas II, Fig. 7):

10.1. IBEROMINAS I: Composed of four mining polygons with the corresponding mineralized/vein prospects:

- a) Polygon A: La Hoya and El Chaparral.
- b) Polygon B: San Diego, El Achiote, Chilamatillo, Loma Verde, El Puercal, El Nancital and Las Carolinas.
- c) Polygon F: Danto, Chamuscada
- d) Polygon G: Los Cocos, Las Minitas and La Chaperna.

“Iberominas I” has been the subject of detailed geological exploration activities and mining. Regional Geological mapping, detailed geological mapping, geochemistry, exploratory trenches, ground magnetometry, reverse air circulation drilling (about 5,000



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m). Unfortunately the technical information such as drilling logs and reports have not been adequately preserved. The chips from RC drilling were not adequately storage.

10.2. IBEROMINAS II: Containing four mining polygons: A, B, C and D. This block has limited exploration and geological studies (geological mapping, regional geochemistry and located mineral observations. Ten anomalous sectors have been identified up to now and deserve detailed exploration. Gold values from surface ground geochemistry (chips from veins) yielded gold values up to 10.8 g/t at Dipilto prospect; but in general the gold grades are low (< 1g/t Au).

11. VISITED MINERALIZED PROSPECTS

During the present visit carried out in April 2012, the author has visited the following mineralized prospects:

11.1 EL DANTO VEIN:

The “El Danto Sector” is located in the El Danto village at approximately 30 Km to the NE of Somotillo town in the Department of the Chinandega The area is located at UTM (WGS84) coordinates 525000 to 526000 E and 1446000 to 1447000 N. Topography is semi-regular with hills that reach up to 150 m.a.s.l.

The el Danto vein (Plate 4) has been known since the Spanish times. Later the vein has been mined by local miners at a small scale. It has been reported (Rodriguez, 1998) that El Danto has been drilled by an unknown company (Mina El Limon ?) about 20 years ago; but unfortunately drilling data/cores has not been encountered today.

The host rock is formed by andesitic volcanic porphyritic tuffs with weak silicification and moderate supergene argillic alteration. The vein corresponds to a mesothermal-epithermal pinch and swelling vein composed by fractured massive milky quartz with patches of chalcedonic and opaline silica. Iron oxides were observed in fractures and pervasive and local jarosite coating.

The El Danto vein’s bearing is N30°E dipping 52° NW, vein thickness ranges from 1.0 to 5.0 m. It has been reported (Rodriguez, 1998; Espinoza, 2008) that the vein’s strike runs in surface about 1,000 m.

Two chip channel samples across the vein were collected at El Danto (IB-01 and IB-02, see Annex 1). Assay results yielded 0.32 and 3.96 g/t Au; 4.1 and 69.1 g/t Ag (Annex 1). These values make this vein an interesting prospect that deserves further exploration/evaluation.



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11.2 EL ESPINO VEIN

It is located at UTM (WGS84) coordinates 512392 E, 1458904 N in the road from Somotillo to Cinco Pinos. The vein corresponds to a mesothermal-epithermal pinch and swelling vein composed by fractured massive milky quartz with patches of sericite, iron oxides in fractures and pervasive, coating of jarosite, manganese oxides in fractures and pervasive coating. Vein bearing N60°E dipping 78° NW. Vein width 2.5 m (Plate 5). Mr. Bernardo Posada (pers. com.) has indicated that the El Espino vein is a prologation of the Las Carolinas vein.

The topography is semi-regular with hills up to 430 m.a.s.l. There are not any known old mines in the area.

Rodriguez, 1998 reports geochemical (stream sediments) and geophysical (ground magnetometry) anomalies for the sector which suggest mining potential for the area.

A chip channel sample (IB-03, Annex 1) across the vein was taken at the mentioned coordinates the assay results yield a gold grade of 0.01 g/t Au and 0.3 g/t Ag. In spite that results are low, it is recommended to follow up a more detail exploration of the vein/sector.

11.3 CINCO PINOS STOCKWORK

The Cinco Pinos sector (stockwork) is located close to the village of Cinco Pinos (to the north and east) at UTM (WGS84) 515072 E, 1462982 N. The area of interest covers a surface of approximately 3 Km² (Rodriguez, 1998).

The local geology is characterized by the occurrence of porphyritic andesitic lava flows of the Miocene Coyol Group hosting a stockwork structure compose by a swarm of quartz veinlets \leq 5 mm width and iron oxide veinlets \leq 3 mm which also fill fractures (Plate 6). The rocks are strongly weathered with pervasive hematite, disseminated fine pyrite (1%), manganese oxides in fractures – veinlets and pervasive, iron oxides coating; moderate silicification, weak to moderate phyllic alteration (quartz-sericite) superimpose by a moderate argillic alteration (kaolinite - montmorillonite).

Two continuous chip channel samples (IB-04 and IB-05) were taken in outcrops (stockwork) located in the paved road Somotillo – Cinco Pinos. Assay results from the two samples showed low grades for gold and silver (Annex 1).

11.4 LA HOYA VEIN

It is located close to the boundary with Honduras. In the sector called “La Virgen” it has been observed several ancient/old works (adits) corresponding to the Spanish times and later local miners.



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The altered and mineralized zone has been described (Espinoza, 2008) as a surface area of about 3 Km². The topography is irregular with elevations up to 870 m.a.s.l. Geology comprises Tertiary andesitic volcanic tuffs intruded by granodiorite intrusive rocks.

Espinoza M. (2008) describes a stockwork structure in the sector La Virgen. The stockwork is composed by a swarm of quartz veinlets. It has also been described a swarm structure of quartz veinlets forming a stockwork zone that could be treated as disseminated gold target (potential open pit). Previous sampling into the main area of 3 Km² yields gold grades between 0.3 and 1.00 g/t Au. During the field visit carried out in April 2012, the author did not find the stockwork structure but it was observed a large area (about 3 Km²) with outcrops of porphyritic andesitic crystal tuff, moderately magnetic, moderately weathered with presence of oxidized fine to medium grained pyrite. The local rocks showed moderate silicification, weak quartz-sericite alteration with an overprinting of supergene argillic alteration.

There is the occurrence of a fracture filled vein of grey-white grained massive quartz of 1.0 to 3.0 m width. The vein has phreatic breccia structures on the selvages (Plate 7). Two old adits (ancient local miners works) were found in the sector of La Virgen. Three chip channel samples (IB-06 to IB-08) across the vein were collected from three different localities of the La Hoya vein (two adits and one outcrop), samples returned with general low gold and silver grades (Annex 1). However one sample from the lower adit/tunnel yielded a gold grade of 1.47 g/t Au.

The vein has a general bearing of N45°E dipping 72° NW, vein width ranges from 1.0 to 3.0 m. Mineral assemblage includes: disseminated pyrite ($\leq 1\%$), iron oxides in fractures and pervasive, tourmaline strings, manganese oxides in fractures and pervasive, disseminated hematite, etc. Quartz druses are occasionally occurring in the vein texture.

According to Espinoza (2008), 540 chip samples were collected from 19 exploration trenches on surface and perpendicular to the main structures width. Gold assays returned values up to 14 g/t Au and also gold values for the walls up to 1 g/t Au. A preliminary geological potential for the main vein structures made by Espinoza M. (2004) indicates that considering only 20 m depth it could be obtained about 78,000 tonnes with an average gold grade of 7.8 g/t Au obtaining about 20,000 Oz of insitu gold.

11.5 SAN PEDRO VEIN

Close to the village of San Pedro at UTM (WGS84) coordinates 514058 E, 1468489 N at about 500 m to the north in the San Pedro stream, a new vein was found close to a small trail (Plate 8)

The vein has a bearing of N40°E dipping 70° SW with a vein width of 3 m. It correspond to a mesothermal-epithermal fractured quartz vein. It shows colloform textures and breccia



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(phreatic?) bodies on the vein selvages, and patches of opaline silica, disseminated pyrite ($\leq 1\%$), coating of hematite and iron oxides in fractures. Local hydrothermal alteration on the vein includes sericite

A chip channel sample across the vein was collected (IB-09) yielding low gold and silver values (Annex 1).

11.6 EL CHAPARRAL VEIN

The “El Chaparral Project” is located 2 Km to the SE of the San Pedro town at UTM (WGS 84) coordinates 513741 E, 1466901 N, 645 m.a.s.l.

This prospect mainly consists in a mesothermal- epithermal pinch and swelling fractured quartz vein system (two veins) with presence of phreatic silicified breccia bodies on the selvages, calcedonic silica, pink quartz (amethyst ?). Local faulting is affecting the strike of veins displacing them locally for few metres. Secondary late local quartz veinlets (≤ 3 mm) are also crossing the main structure; this could correspond to the last mineralization stage. Pervasive iron oxides and filling fractures have been observed in the veins. These structures are hosted in andesitic Tertiary volcanic rocks (tuffs) of the Coyol Group (Fig. 5). Some altered rhyolitic rocks (domes ?) has been also described (Espinoza, 2008). The host rock (andesitic tuff) is moderately affected by argillic alteration. Two veins have been observed during the present field visit

a) THE CENTRAL VEIN: The first vein called “Central Vein” (Plate 9) outcrops approximately along 50 m with a bearing direction N60°W dipping 80° SW with a variable vein width of 1.0 to 3.0 m and. In spite that past gold grades have been reported ranging between 1 and 4 g/t Au (Espinoza, 2008), this author found gold grades up to 1.46 g/t Au and 2.1 g/t Ag (samples IB-10 and IB-11, Annex 1). Additional mineralization corresponds to disseminated and pervasive hematite, pervasive jarosite, disseminated oxidized pyrite ($\leq 1\%$). Some colloform textures were also observed.

Espinoza (2008) describes that this vein structure has continuity to the SE in an approximate length of 300 m with gold values of 1 to 1.5 g/t. It is believed that the structure could continue in the same direction for about 1,200 m more.

b) SUB-PARALLEL VEIN: There is a second vein which also outcrops in the sector with strike direction W-E and a vein width 2 m, dipping 70° S. Gold values have been reported (Espinoza, 2008) ranging between 0.50 to 0.75 g/t Au.

These vein structures have been explored by Iberominas (Espinoza, 2008) through perpendicular trenches (535 m of trenching) obtaining 779 samples along of 375 m along strike structure.



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Local miners worked the area in 1940 and later in 2004 the Iberominas company explored the veins of “El Chaparral”. This last company performed a program of reverse circulation drilling but apparently the results were not encouraging at depth (Espinoza, 2008).

With the existing information it has been attempted (Espinoza, 2008) to make a preliminary calculation of insitu hypothetic resources considering 1,000 m of vein strike, vein width 3 m, depth 20 m (bench) average insitu gold grade 2.75 g/t, rock specific gravity 2.0. It has been obtained 120,000 metric tonnes of ore containing about 10,600 Troy Ounces if insitu gold.

11.7 LOS COCOS PROSPECT

It is located inside of the Iberominas 1 mining concessions package. The project is located 3 Km to the NE of the Somotillo townat UTM (WGS 84) coordinates 513417 E, 1437865 N, 210 m.a.s.l. Access is good by paved road and dirty compacted road for only 1 Km.

It corresponds to mesothermal-epithermal fractured grained textured quartz vein with a bearing N70°W dipping sub-vertically and vein width of 3 m. Mineralization contains pervasive iron oxides, manganese oxides coating. Secondary late local crystalline quartz veinlets (≤ 3 mm) are also crossing the main structure; this could correspond to the last mineralization stage. Phreatic micro-breccia bodies are present on the selvages. Texture includes quartz druzes with iron oxides.

One sample (IB-12) was taken by the author in this field visit. Assay results for gold and silver returned low (Annex 1).

Espinoza (2008) indicates that the total length could reach about 800 m; considering this strike length and an average vein width of 3 m with an average gold grade of 5.24 g/t Au and an specific gravity of 2.5, and considering 20 m depth, the insitu geological potential tonnage could be a block of about 120,000 tonnes obtaining about 20,000 Troy Oz of insitu gold.

12. OTHER PROSPECTS DESCRIBED BY OTHER AUTHORS

The following prospects have been described in previous reports of Rodriguez (1998) and Espinoza (2008) as part of the internal reports from the IBEROMINAS Company. The author is making only a summary of the content in the mentioned reports.

12.1 “SAN DIEGO” PROSPECT

It is located approximately at 4.5 Km from the town Cinco Pinos. The geology comprises hydrothermal altered andesitic volcanic rocks intruded by granodioritic rocks.



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The main structure in the area corresponds to a quartz vein called “San Diego”. Strike N70°E with a variable vein width of 2 to 4 m. It has been observed that the vein outcrops along strike for approximately 200 m, but it is inferred that vein extension could continue to the NE. According to the structural description (Espinoza, 2008) it seems that the vein could correspond to structure with associated phreatic breccia with banded textures (crustiform) and colloidal textures (low sulphidation epithermal system?). Reported gold grades range between 1.70 and 6.30 g/t Au. It is inferred that the vein structure could continue along strike to the NE for approximately 700 m, where it seems to be cut by a regional fault (El Gallo River Fault N-S).

Considering a strike vein longitude of 700 m with an average vein thickness of 3 m, average gold grade 4 g/t, depth 20 m (bench) , specific gravity 2.0, it has been obtained 84,000 metric tonnes containing about 10,800 Oz of insitu gold

12.2 “EL ACHIOTE-CHIMLAMATILLO-LOMAVERDE” PROSPECT

It is located in the same sector of the San Diego vein at 6 Km to the E of the Cinco Pinos town. It corresponds to a grass roots prospect.

The geology comprises andesitic Tertiary volcanic rocks and agglomerates. In the Chilamatillo and el Achiote sector the Andesitic rocks are intensely hydrothermally altered (alteration type not described). The alteration zone covers an approximate surface of 2 Km². The topography is irregular with elevations ranging between 340 to 600 m.a.s.l.

Preliminary sampling has not been encouraging. However, the intense mineralization and calcedonic quartz veinlets observed sporadically determine that this area needs initial exploration.

12.3 “EL PUERCAL” PROSPECT

It is located 6.5 Km to the NE of the Cinco Pinos town. Geology comprises Andesitic volcanic rocks and basaltic volcanics which are intruded by granodiorite rocks outcropping in the river valleys.

It has been observed by Espinoza (2008) that the hydrothermal alteration area covers an approximate surface of 1 Km².

Mineralization has been described (Espinoza, 2008) related to a quartz vein (epithermal) 3 m wide. Superficial sampling yields gold values ranging between 1.0 and 1.5 g/t Au. It is inferred that this vein could correspond to an extension of the San Diego vein.



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12.4 “NANCITAL” PROSPECT

Located about 8 Km to the SE of the Cinco Pinos town. Nancital vein outcrops on surface in an area of contact between andesitic-basaltic volcanic lithologies and intrusive rocks (granodiorite). It could be related to a shear zone.

It has been described (Rodriguez, 1998 and Espinoza, 2008) that the gold bearing vein has a strike of N55°E with a vein thickness of 2 to 5 m. The described textures suggest banding and breccia textures. It could correspond to a low sulphidation epithermal vein system with crustiform and colloform textures. However, considering the previous description of the other prospects it could correspond to mesothermal-epithermal structures. The mineralogical assemblage is described as quartz-turmaline, manganese oxides, iron oxides, sulphides (pyrite) and breccia structures into the vein. The vein structures has been mapped on surface for about 200 m but it is inferred that it could continue on both strike ends.

12.5 OTHER PROSPECTS IN CONSIDERATION

The block of “Iberominas II” has had limited exploration. The block comprises a large area of about 80,000 Ha and previous descriptions indicate vein structures and mineralogical occurrences that need attention/exploration.

13. INFRASTRUCTURE

The Iberominas property includes a cyanide gold processing plant (Plate 3) which started operating about 18 years ago. It comes with a camp close to the Somotillo town and close to the paved road Managua-Leon-Somotillo. Heavy machinery (bulldozer, excavators, etc.) has been observed in the camp and in the surrounding area of prospects.

The camp/plant counts with electrical supply, underground (well) water, good access, workers, etc. The town of Somotillo counts with all facilities and supplies.

The owner Mr. Bernardo Posada has indicated (pers. com.) that the cost of the plant is about 1.5 M US\$. He indicated that the plant capacity of processing is 125 t/day, but it has been working with an average capacity of 100 t/day and average recovery of 80%. No records of the past production has been maintained by Iberominas.

14. HYPOTHETICAL RESOURCES

According with Espinoza (2008) and based on the calculations made up to a maximum depth of 20 m for the different main prospects in the Iberominas I block it has been calculated a hypothetical resource of about insitu 100,000 Troy Ounces. It can be expected that resources could be duplicated or triplicated at depth with drilling.



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15. CONCLUSIONS

- The Iberominas Company mining concessions comprise two main blocks: Iberominas I and Iberominas II. Both blocks add in total about 145,000 Hectares. The Block of Iberominas I is the most explored/mined while Iberominas II block needs additional exploration.
- The exploration carried out in the block of Iberominas I comprises mainly regional recognition/mapping, detailed geological mapping (scale 1:10,000), stream sediments geochemical survey, geophysics (ground magnetometry), trenching in the main discovered veins and drilling (about 5,000 m of reverse circulation) in the main targets. Unfortunately drill logs are not available and chip trays have not been adequately preserved.
- The mining area has been approach by Iberominas Company with superficial (open pit) mining method using excavator and bulldozer. The mining works reached in the best case 20 m of depth at maximum. The mineral potential at depth is being preserved and matter of further exploration drilling and evaluation.
- Based on the geological characteristics, mineralization, textures and nature of gold bearing veins it is believed that they correspond to mesothermal-epithermal vein structures with a strong structural control.
- Considering the pinch and swelling behavior of veins and the fact that gold grades are very variable along vein strike, the evaluation process (calculation of resources/reserves) will not be easy.
- Considering that significant gold and silver grades (during this field visit sampling, April 2012) are confined to some vein structures, it could be inferred that gold mineral potential for stockwork structures (potential open pit) is very limited. However it has to be highlighted that few samples do not show the real potential of a large area and it deserves further exploration.
- The tectonism (faulting) affects the vein structures braking up the continuity of them. The structural control of the area is remarkable and needs special attention and future specialized mapping to recognize the direct relationship between the structural component and mineralization.
- The size of the area (145,000 Ha) makes this property a very interesting sector for exploration and the possibility of finding new targets is really high.



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16. RECOMMENDATIONS

- The proximity of the Iberominas project with the boundary between Nicaragua and Honduras could bring some political inconvenience. It is recommended to investigate (due diligences) on this regard to be sure if the local Law allows normal mining activity specially in the veins close to the border such as La Hoya.
- The corresponding due diligences should be carried out with regards to the legal status and good standing of each individual concession forming the two mentioned mining blocks/polygons (Iberominas I and Iberominas II).
- A structural regional and local mapping is highly recommended in the area to compare the close relationship between structures and tectonism/faulting.
- Airborne magnetometry should be carried out in the entire region/zone to identify high and low magnetic sectors that could be related to gold bearing mineralization (veins).

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ANNEXES



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SAMPLES FOR SURFACE CONTROL OF MINERALIZATION - IBEROMINAS PROPERTY - J-BOLAÑOS - APRIL 2012

ID SAMPLE	UTM (WGS84) COORDINATES (16P)		LOCATION SECTOR	SAMPLE TYPE	VEIN WIDTH (m)	BEARING (°)	DIP ANGLE (°)	Au (g/t)	Ag (g/t)	COMMENTS
	EASTING	NORTHING								
IB-01	525604	1446617	EL DANTO	Chip Channel Across Vein	3.0	N30°E	52° NW	3.96	69.1	Sample taken in the mined trench
IB-02	525579	1446534	EL DANTO	Chip Channel Across Vein	5.0	N30°E	51° NW	0.32	4.1	Sample taken about 100 m to the NW of IB-01
IB-03	512392	1458904	EL ESPINO	Chip Channel Across Vein	2.5	N60°E	78° NW	0.01	0.3	On the paved road Somotillo - Cinco Pinos
IB-04	515072	1462982	CINCO PINOS	Chip Channel across Stockwork	3.0	NA	NA	0.01	0.1	On the paved road Somotillo - Cinco Pinos
IB-05	515121	1463083	CINCO PINOS	Chip Channel across Stockwork	3.0	NA	NA	0.01	0.1	On the paved road Somotillo - Cinco Pinos
IB-06	514453	1470633	LA HOYA	Chip Channel Across Vein	1.0	N50°E	70° NW	1.47	0.6	Lower old adit from past mining
IB-07	514514	1470536	LA HOYA	Chip Channel Across Vein	3.0	N45°E	72° NW	0.03	0.6	Upper old adit from past mining
IB-08	514428	1469968	LA HOYA	Chip Channel Across Vein	3.0	N45°W	70°SW	0.01	0.1	Upper sector close to the trail.
IB-09	514058	1468489	SAN PEDRO	Chip Channel Across Vein	3.0	N40°E	70° SW	0.01	0.3	San Pedro Stream approx. 500 from San Pedro Village.
IB-10	513741	1466901	EL CHAPARRAL	Chip Channel Across Vein	2.0	N60°W	80° SW	0.01	0.3	In mined trench
IB-11	513741	1466901	EL CHAPARRAL	Chip Channel Across Vein	2.0	N60°W	80° SW	1.46	2.1	In mined trench
IB-12	513417	1437865	LOS COCOS	Chip Channel Across Vein	3.0	N70°E	90°	0.04	0.4	In mined trench

Annex 1 Assay results summary table for the samples taken by J. Bolaños in April 2012. Assay samples were shipped to the Inspectorate Lab in Nicaragua and analysis (FA/AA – Au, Ag and ICP package) were executed in Inspectorate Lab Reno- Nevada-USA.



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FIGURES



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Fig. 1 The Iberominas mining Property located in the Chinandega Department to the NW of Nicaragua.



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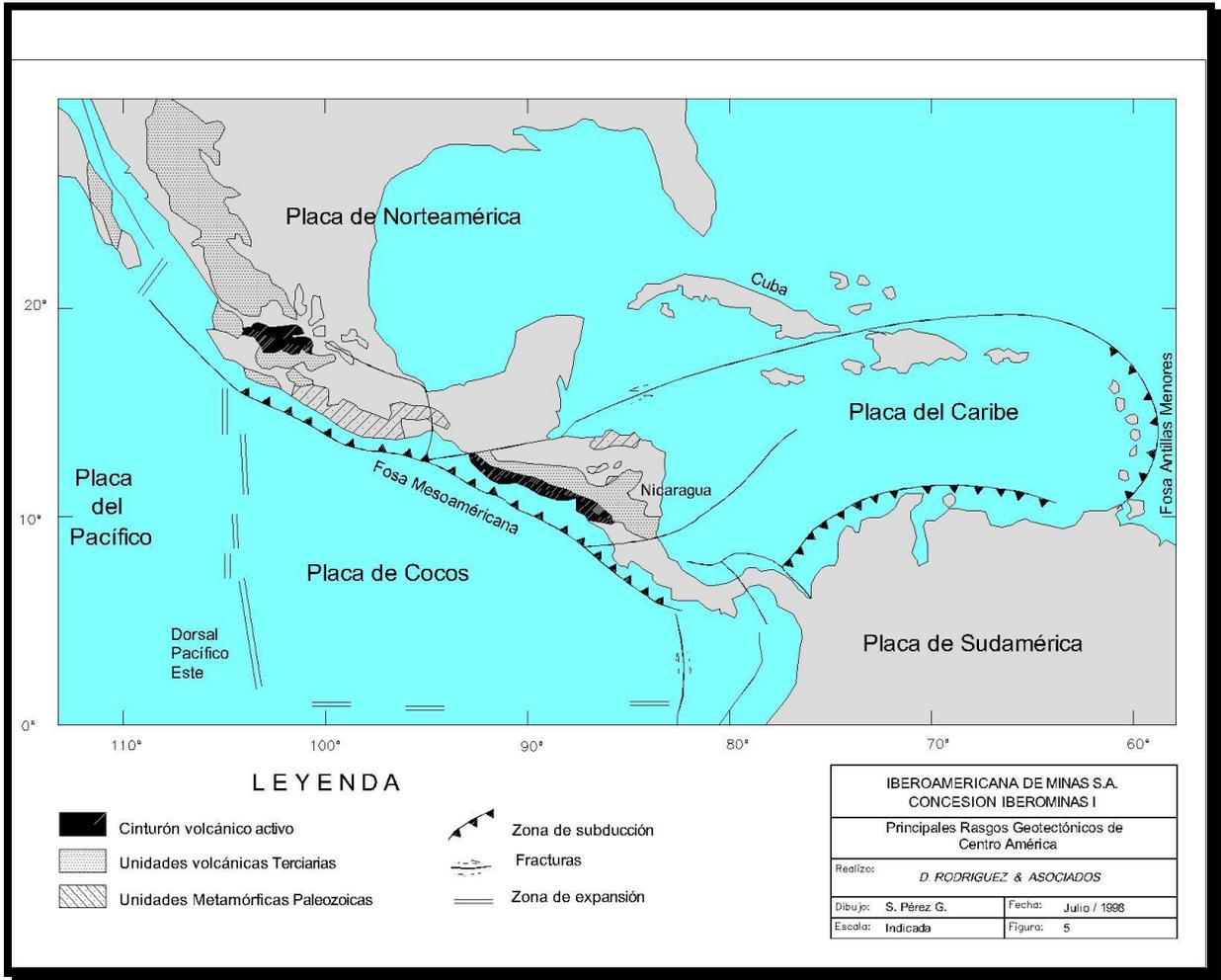


Fig. 3 Main Geo-tectonic features of Central America (Rodriguez, 1998)



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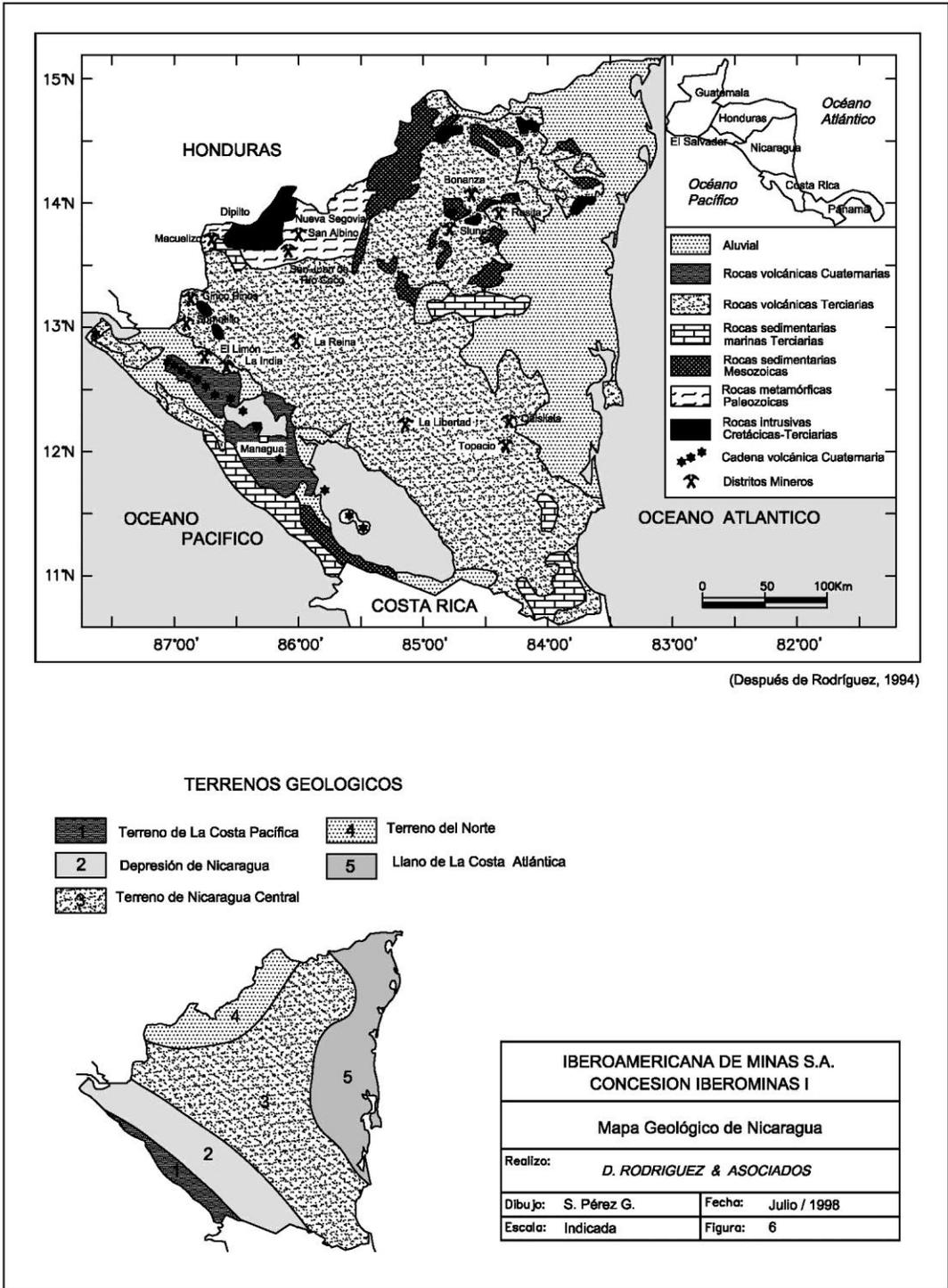


Fig. 4 Geological Map of Nicaragua (Rodriguez, 1998)



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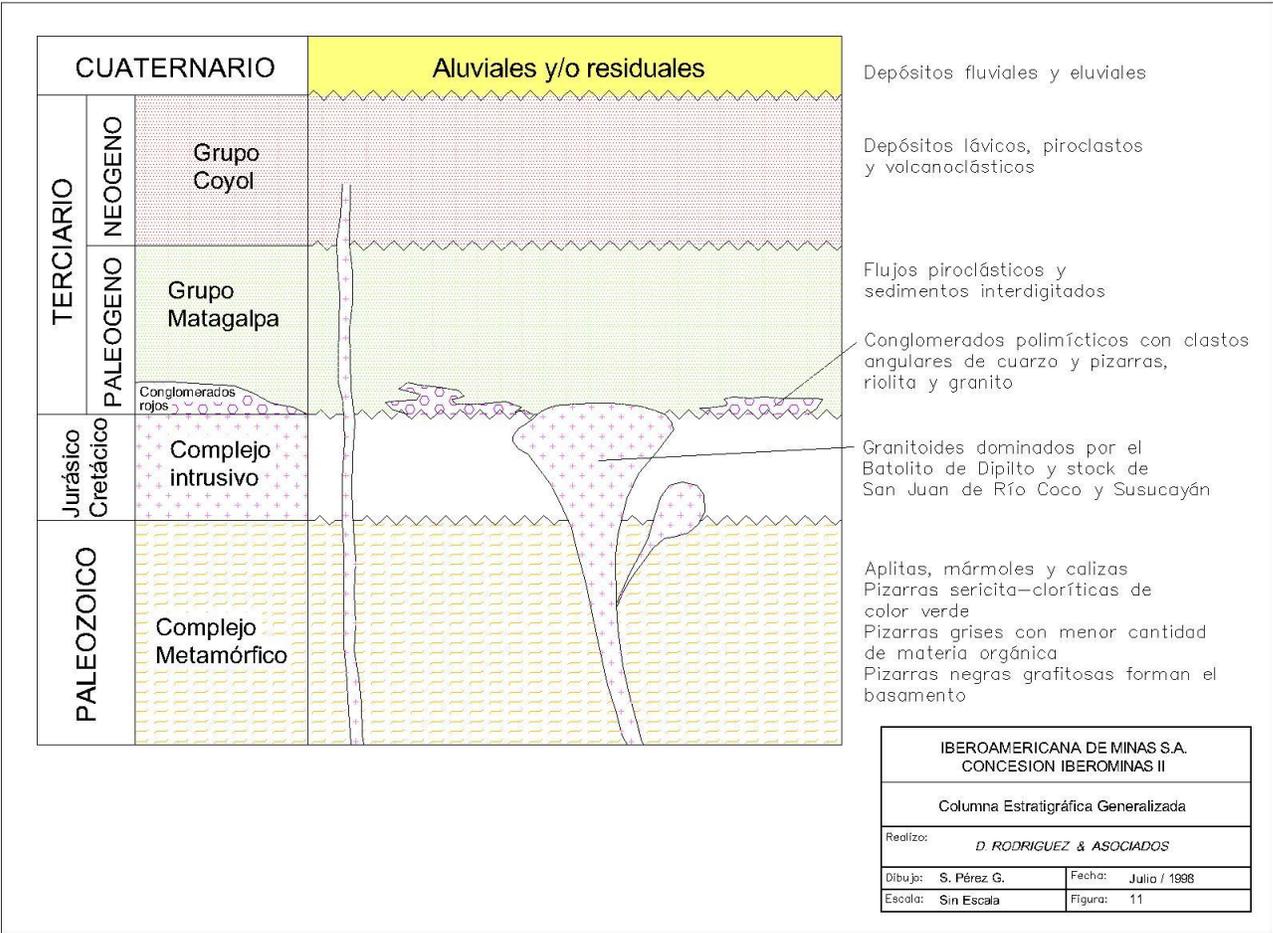
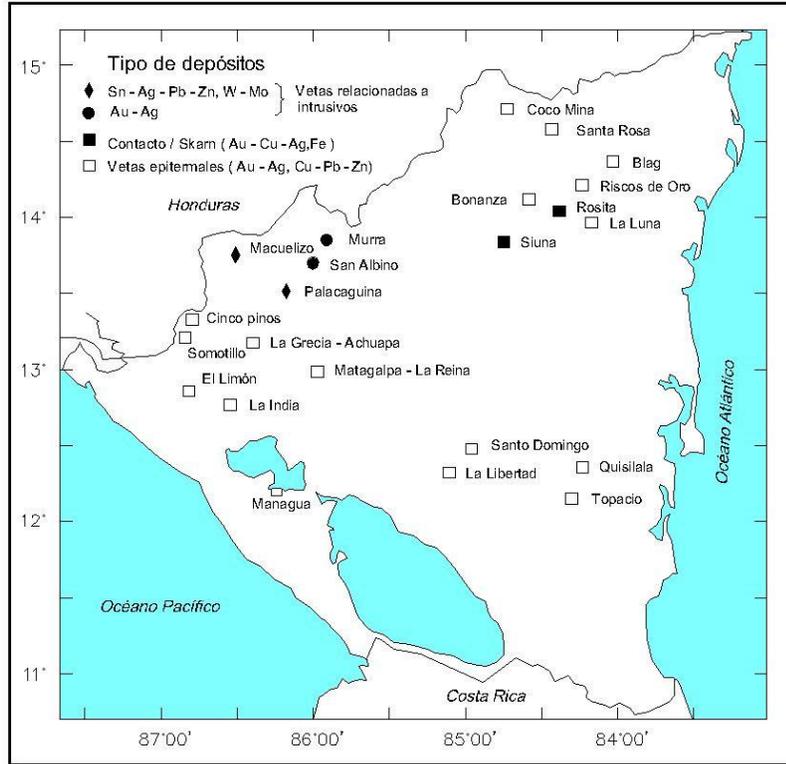


Fig. 5 Stratigraphic Column (Rodriguez, 1998)



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(Después de Rodríguez; 1994, 1997)

IBEROAMERICANA DE MINAS S.A.	
CONCESION IBEROMINAS I	
Principales Depósitos Minerales en Nicaragua	
Realizo: <i>D. RODRIGUEZ & ASOCIADOS</i>	
Dibujo: S. Pérez G.	Fecha: Julio / 1998
Escala: Indicada	Figura: 8

Fig. 6 Main mining ore deposits in Nicaragua (Rodriguez, 1998)



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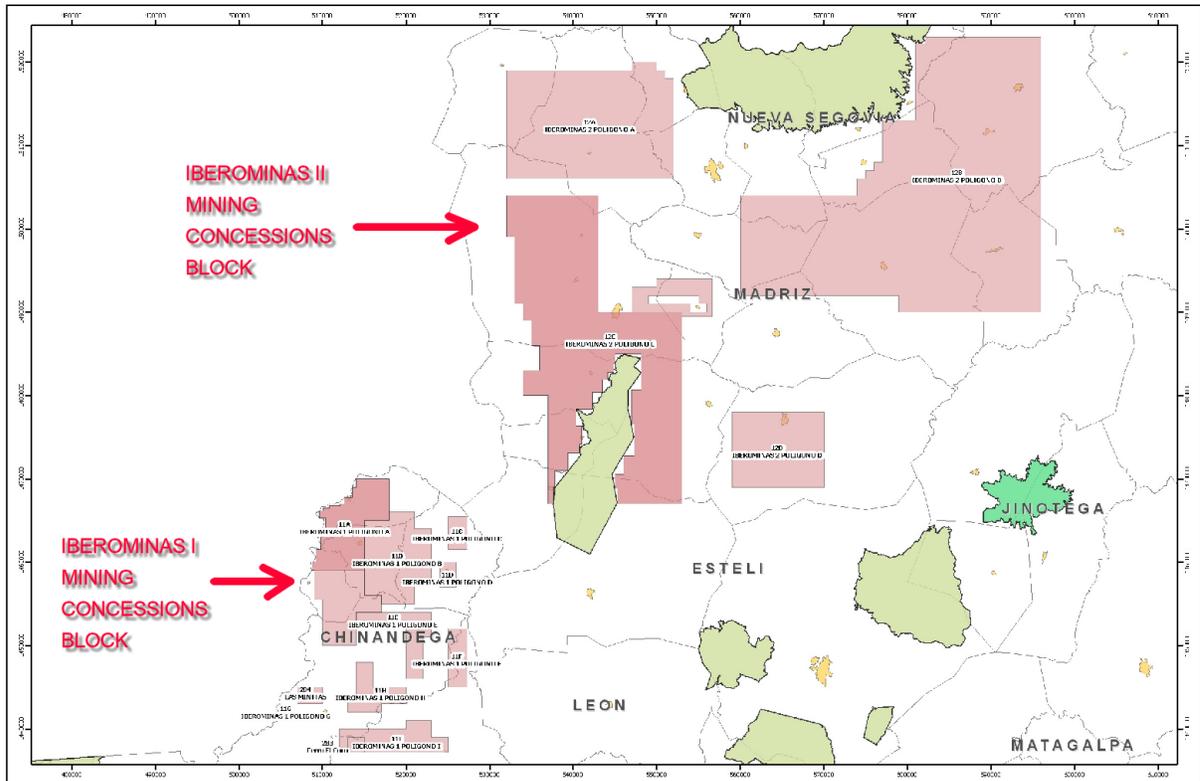


Fig. 7 Original mining concession áreas (Iberominas I and II), 1994. Today they have been reduced to approximately 145,000 Ha. (Personal Com. Bernardo Posada, April, 2012).



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PLATES



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Plate 1. 200 Km paved road Managua-Somotillo

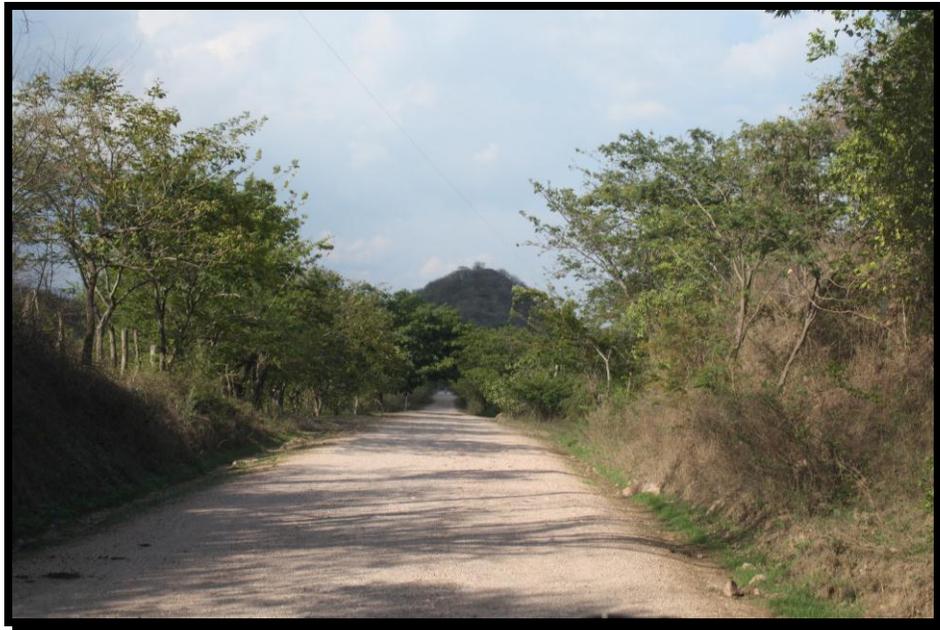


Plate 2. Local well compacted roads providing access to the entire concession areas



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Plate 3 Cyanide Gold Processing Plant at Iberominas



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Plate 4 El Danto vein. Notice the pinch and swelling structure.



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Plate 5 El Espino vein. Fractured weatahered quartz vein with brecciated texture.



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Plate 6 Stockwork structure at Cinco Pinos. Notice the quartz veinlets up to 0.5 cm wide into a swarm disposition.



Plate 7 La Hoya vein. Notice the phreatic breccias on the selvages



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Plate 8 San Pedro vein. Mesothermal-epithermal fractured quartz vein.



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Plate 9. El Chaparral vein. Mesothermal-epithermal fractured quartz vein.