



**GORGONA GOLD S.A.C.**

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**TECHNICAL SUMMARY OF THE MINING PROJECTS  
PERU AND USA**



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## TECHNICAL SUMMARY OF THE MINING PROJECTS PERU AND USA

### 1. INTRODUCTION

The Company has two earn-in-options negotiated with existing companies in Peru (S.A.) and Nevada (USA).

Gorgona Gold Peru S.A.C. is a Peruvian corporation engaged in the acquisition, exploration, and potential development of precious minerals properties principally in Peru. (Gorgona Gold Peru S.A.C. incorporated in October 2012).

### 2. MINING PROPERTIES

The targeted projects in Peru are:

1. Lagartos	2. Peña Blanca
3. Suriloma	4. Carlos V
5. San Miguel	6. Midas
7. Naranjo	8. Illinois
9. Cerro Cobre	10. Celice-Ancash

The company presently controls 10 projects comprising 22 individual mining concessions encompassing approximately 15,000 hectares of surface. Projects are mainly porphyry copper-molybdenum, volcanic hosted massive sulphides (gold, silver, lead, zinc, copper) and epithermal (gold-silver).



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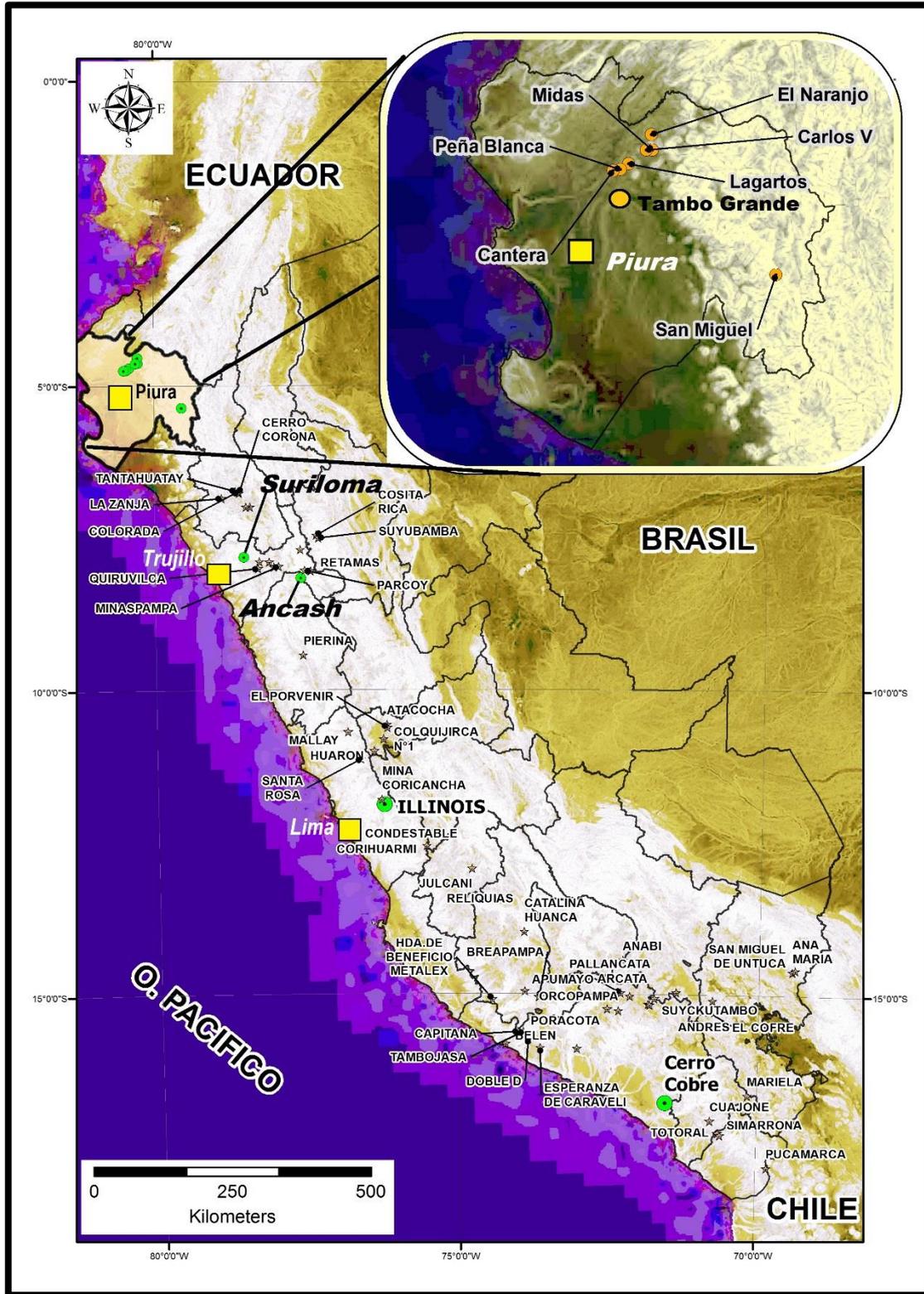


Fig. 1 Map of the Mining Project Locations in Peru



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## 3. GENERAL ASPECTS PERU

The 2011 USGS Minerals Yearbook – Peru, estimates the country to hold 2000 metric tons of proven gold reserves, making it the sixth largest gold producing country in the world and the first in Latin America. Even though this is the case, currently Barrick and Newmont Mining Corporations are the only major producers operating in the country, together with a handful of small exploration and production companies. Disorganized small scale and artisan miners comprise the majority of Peru's gold mining operations, creating a considerable opportunity for international investor-backed companies to gain a significant presence within the country's gold mining industry.

In spite of a modern mining technology void, Peru's land registration system for mineral title is one of the most modern systems in the world, affording resource companies with an important measure of transparency and confidence. Peru's policy with respect to foreign ownership of mines is one of the most equitable in Latin America, offering wholly owned subsidiary companies fair but governed access to mineral resources in exchange for compliance with environmental and social sustainability regulations plus a 3.75% (approx.) of net profit contribution to fund social development projects.

Peru has free trade agreements with Canada, the United States and China, and exports its gold to fourteen international markets including Canada, the United States, and Switzerland. In addition to Peru's free trade agreements the country also maintains favorable long-term taxation, which has helped spur investment over the last decade. Peru is economically and politically stable and is committed to growing relationships with responsible and non-exploitive resource companies for the foreseeable future.

With that said, the administration seems committed to Peru's free-trade path. Since 2006, Peru has signed trade deals with the US, Canada, Singapore, China, Korea, Mexico, and Japan, concluded negotiations with the European Free Trade Association and Chile, and begun trade talks with Central American countries and others. The US-Peru Trade Promotion Agreement entered into force 1 February 2009, opening the way to greater trade and investment between the two economies. Trade agreements with South Korea, Japan, and Mexico also were signed in 2011.

Peru has a long standing tradition of being friendly to the mining industry, and it's easy to understand why:

- Peru is one of the six richest mineral countries in the world.
- 38% of the country's GDP is attributable to this industry.
- Several of the world's largest mineral deposits have been found in Peru.
- In 2012, Peru was the world's top silver producer, the second-largest producer of zinc and copper, and the world's sixth-largest gold producer.
- In 2012, Peru was the leading producer of silver, zinc, tin, lead, and gold in Latin America.
- Traditionally mining has provided about half of Peru's export revenues.



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## 4. GEOLOGY

### 4.1 Mineralized Metallogenic Belts

The following figure shows the main metallogenic belts hosting a great variety of ore deposit types in Peru. Notice that the Lancones basin is located on the north-west Peru and it is well known to host volcanogenic massive sulphide deposits as well as porphyry mineralization and related mineralized deposits.

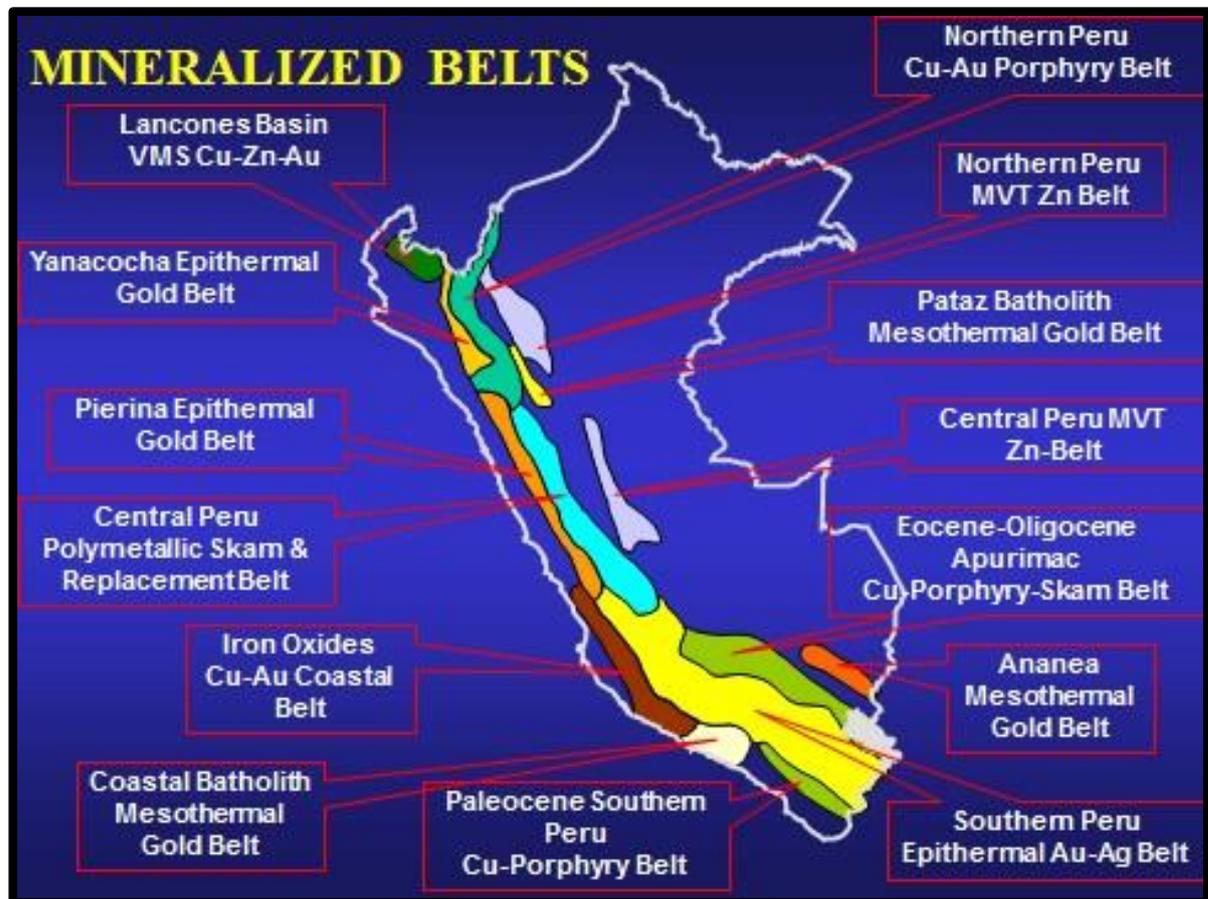


Fig. 2 Metallogenic Mineralized Belts in Peru

### 4.2 The Lancones Basin (a Jurassic-Cretaceous rift)

The Lancones basin is a belt (90x50 Km) that runs with NE trending; it is located to the northwest of the Peruvian territory, Department of Piura, but also in the southern part of the Ecuadorian territory called Celica basin in the Loja Province. The magmatic evolution model of the Lancones basin was originated from a "rift" with NNE - SSO orientation under an extensional regime in the middle Jurassic until forming a marginal basin, this was product of the separation between Gondwana and Laurasia. The deformation style of the Lancones basin consists on block tectonics.

The E-W fault systems represent the main lineations, which limit the Lancones basin as part of the Jubones-Huaypira structural domain in the Huancabamba deflection.



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In the Upper Cretaceous, there were multiple plutonic and sub-volcanic intrusions, which gave origin to a magmatic-hydrothermal belt of porphyry copper, skarns and polymetallic vein deposits. In late stages high and low sulphidation epithermal systems were emplaced, especially to the north of the basin. There have been identified five metallogenic provinces: (1) copper-zinc-gold related to volcanogenic massive sulphides; (2) lead, zinc and copper related to volcanogenic massive sulphides; (3) copper and molybdenum porphyry style mineralization; (4) Iron skarn mineralization; and (5) gold and silver epithermal deposits; they have different lithological, structural and metallogenic characteristics. Three metallogenic events have been identified: (1) An Upper Jurassic – Lower Cretaceous event that corresponds to the Cu-Zn-Au Tambogrande Volcanogenic Massive Sulphide giant deposit, hosted in volcanic sequences of tholeiitic affinity of the Ereo Formation; (2) A Cenomanian event, Pb-Zn-Cu Kuroko type Volcanogenic Massive Sulphides hosted in volcano-sedimentary sequences of the La Bocana Formation; and, (3) An Upper Cretaceous (Campanian) event Cu-Mo porphyry style mineralization, iron skarn mineralization and Au-Ag epithermal deposits. Cretaceous-Paleocene intrusions are believed to be responsible for late phases of mineralization.

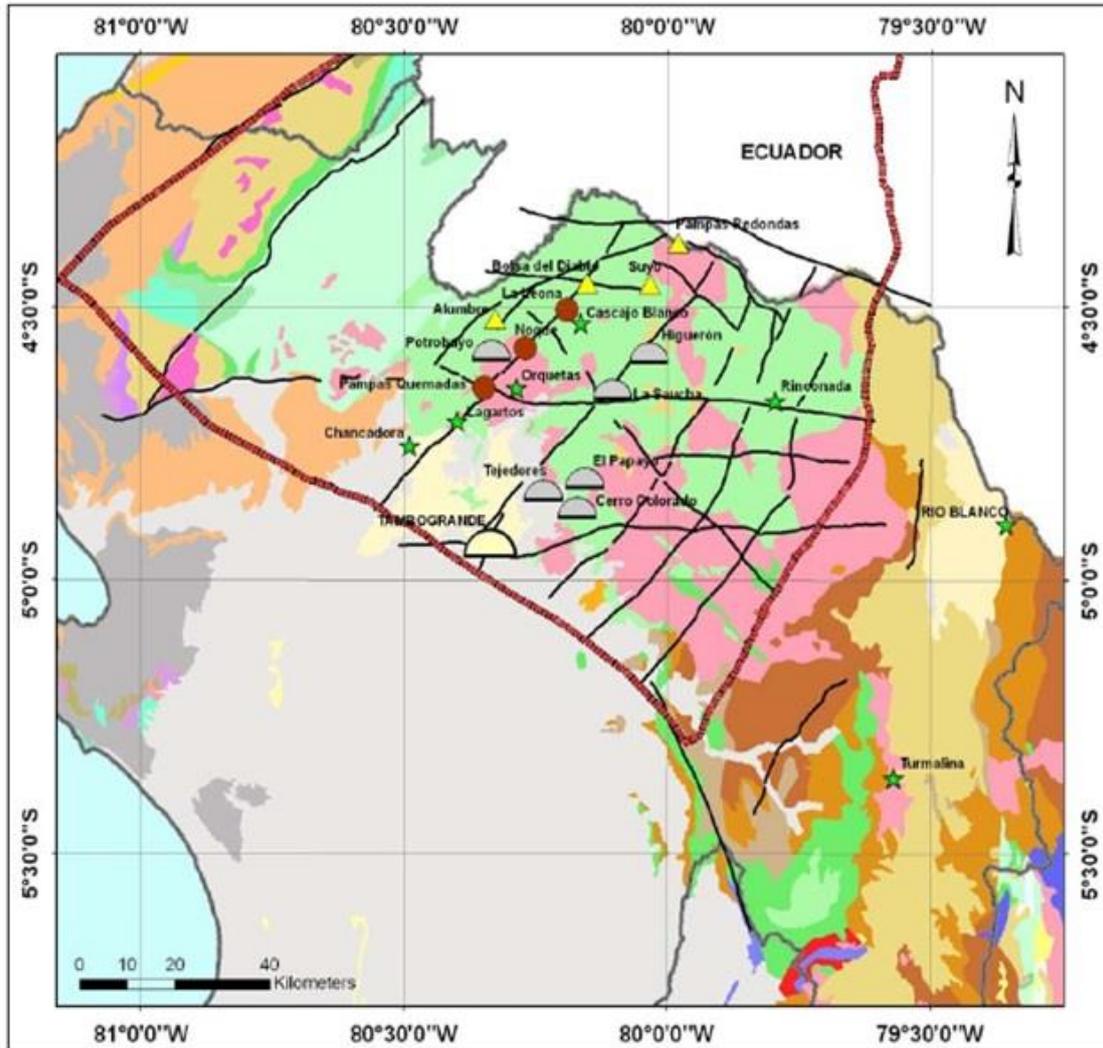


Fig. 3 The Lancones Basin and main structures



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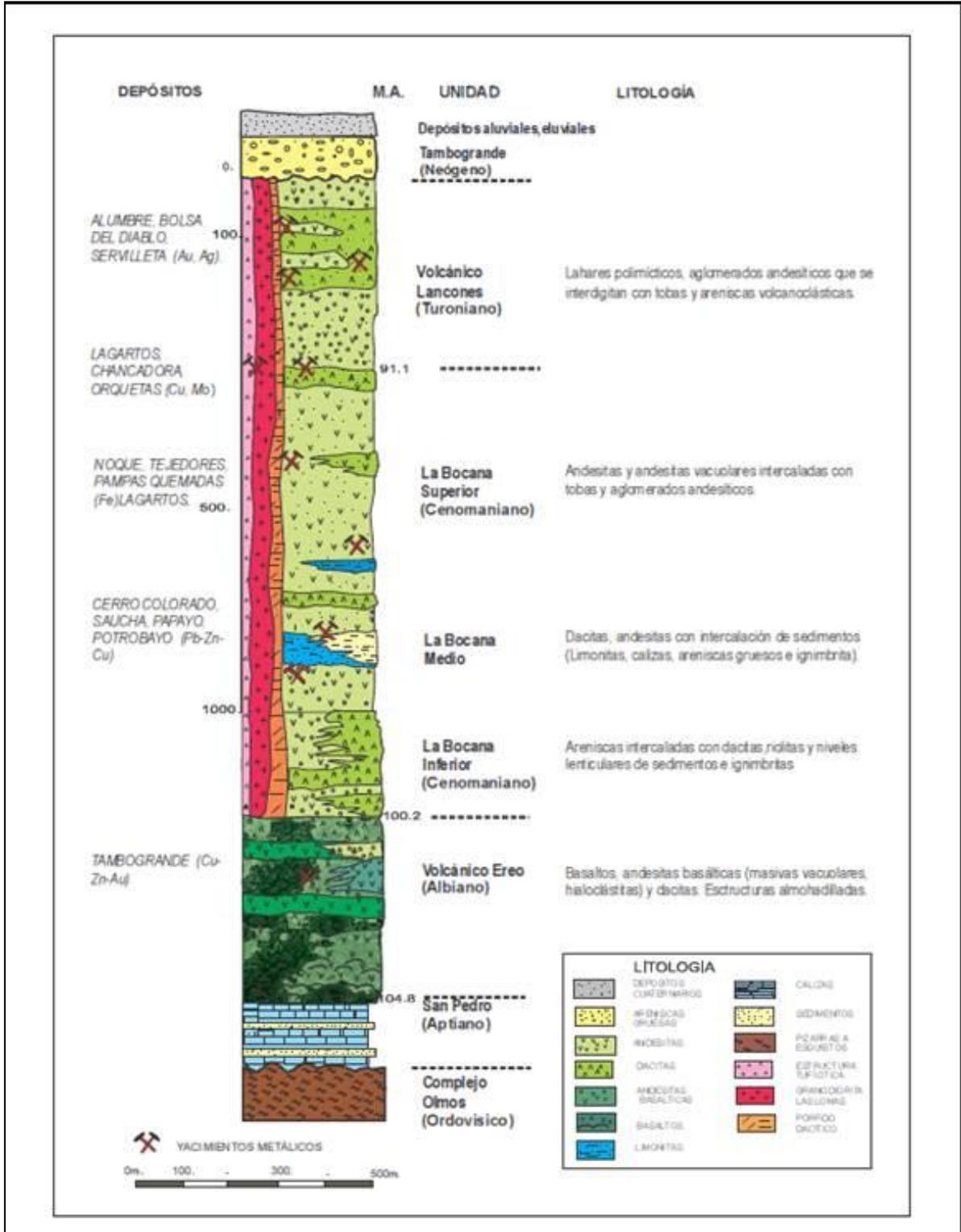


Fig. 4 Stratigraphic column, Volcanic - Sedimentary Domain, Eastern Sector of the Lancones Basin, Northern Peru.



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## 5. MINING PROJECTS PERU

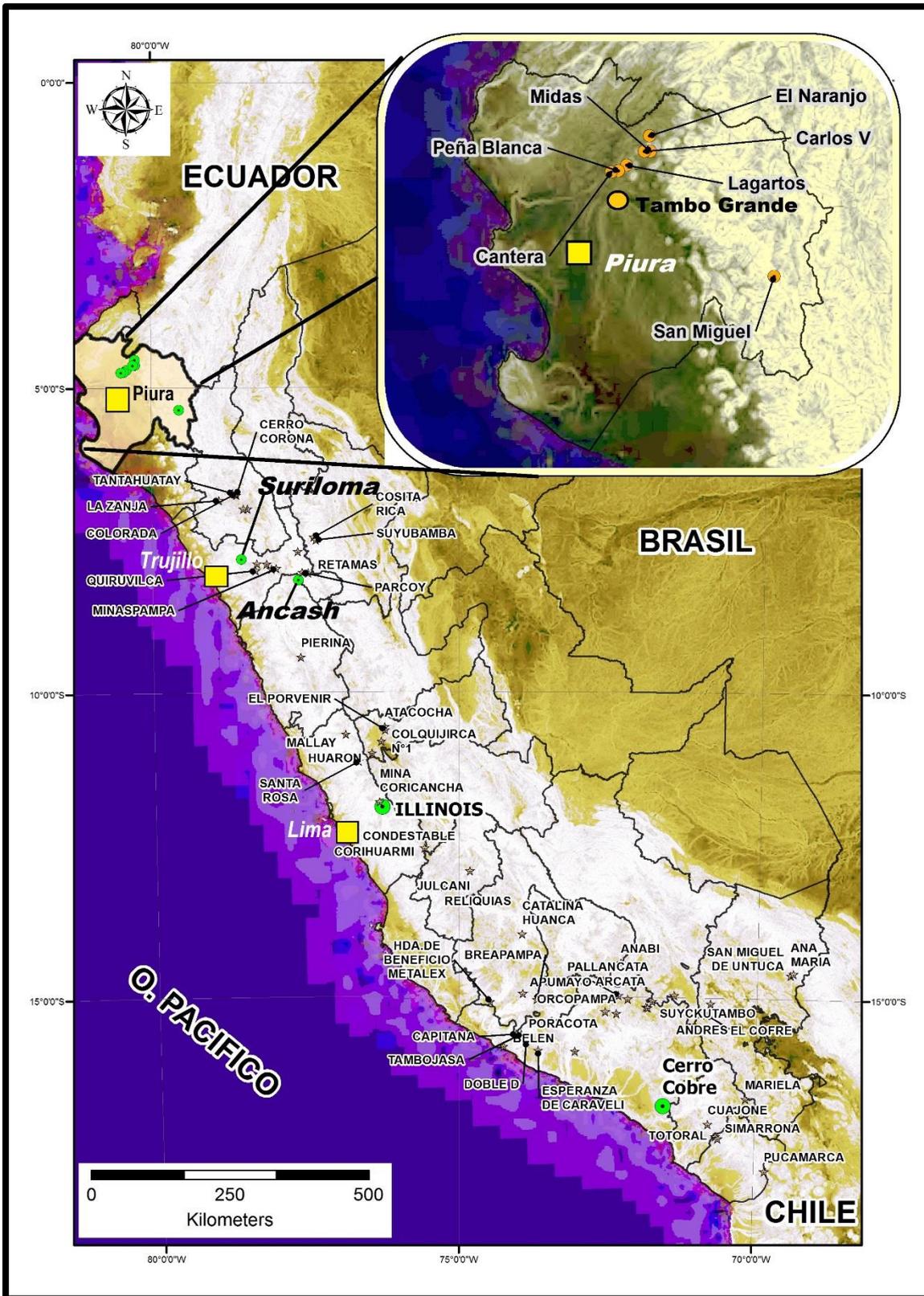


Fig. 5 Map of the location of the mining projects in Peru



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## 5.1 Peña Blanca Project (Copper-Molybdenum+/-Gold Porphyry)

The Peña Blanca-001 mining concession (code: 030023706) has a surface of 700 hectares and it is located in the Piura Department, northern Peru. This concession is also part of the Celica-Lancones basin, a major mining district located in the north-west of Peru and south of Ecuador. The basin hosts major World Class deposits as observed in Fig. 6

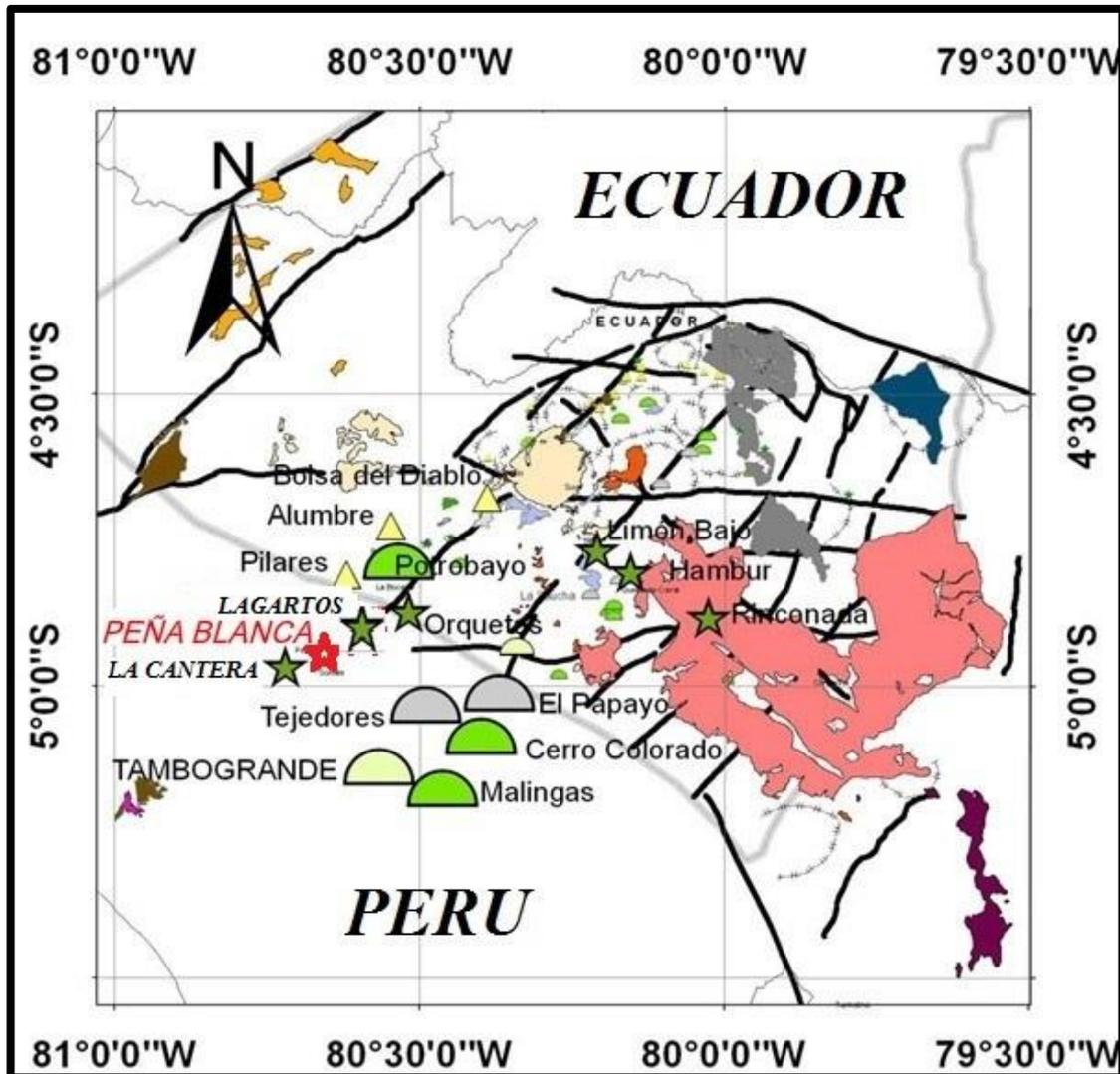


Fig. 6 Location of the Peña Blanca Projects within the major known deposits such as Tambo Grande in the Celica-Lancones basin.

Access to the area and infrastructure is very good. The zone is crossed by the paved Pan-American high way that joints Peru and Ecuador. The town of Las Lomas (10,000 inhabitants) is located in the area of influence and it counts with services such as local transportation, hotels, banks, phone service, restaurants, gas stations, workers, etc. Topography is quite flat with an average elevation of 240 m.a.s.l. The weather is dry subtropical with average temperature of about 19°C. The zone counts with dendritic drainage system and good electrical supply.



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This project is located on the west side of the Jurassic-Cretaceous rift developed structure. It is also located to the north of the copper-molybdenum+/-gold La Cantera (Chancadora porphyry) and to the south of the Lagartos porphyry (Fig. 7).

The geology of the property corresponds to two lithologies: The first corresponds to widespread chloritized outcrops of volcanic rocks (Bocana Formation) such as porphyritic andesitic lavas and tuffs; these rocks also show pervasive chlorite and locally epidote +/- calcite (propylitic hydrothermal alteration). The second corresponds to intermediate to acid coarse grained intrusive showing stockwork development with pervasive phyllic alteration superimposed by argillic and advance argillic hydrothermal alterations.

Northeast-Southwest and Northwest-Southeast structural control have been identified in the zone. These lineaments are controlling the mineralization emplacement. These faults can be seen in Fig. 3

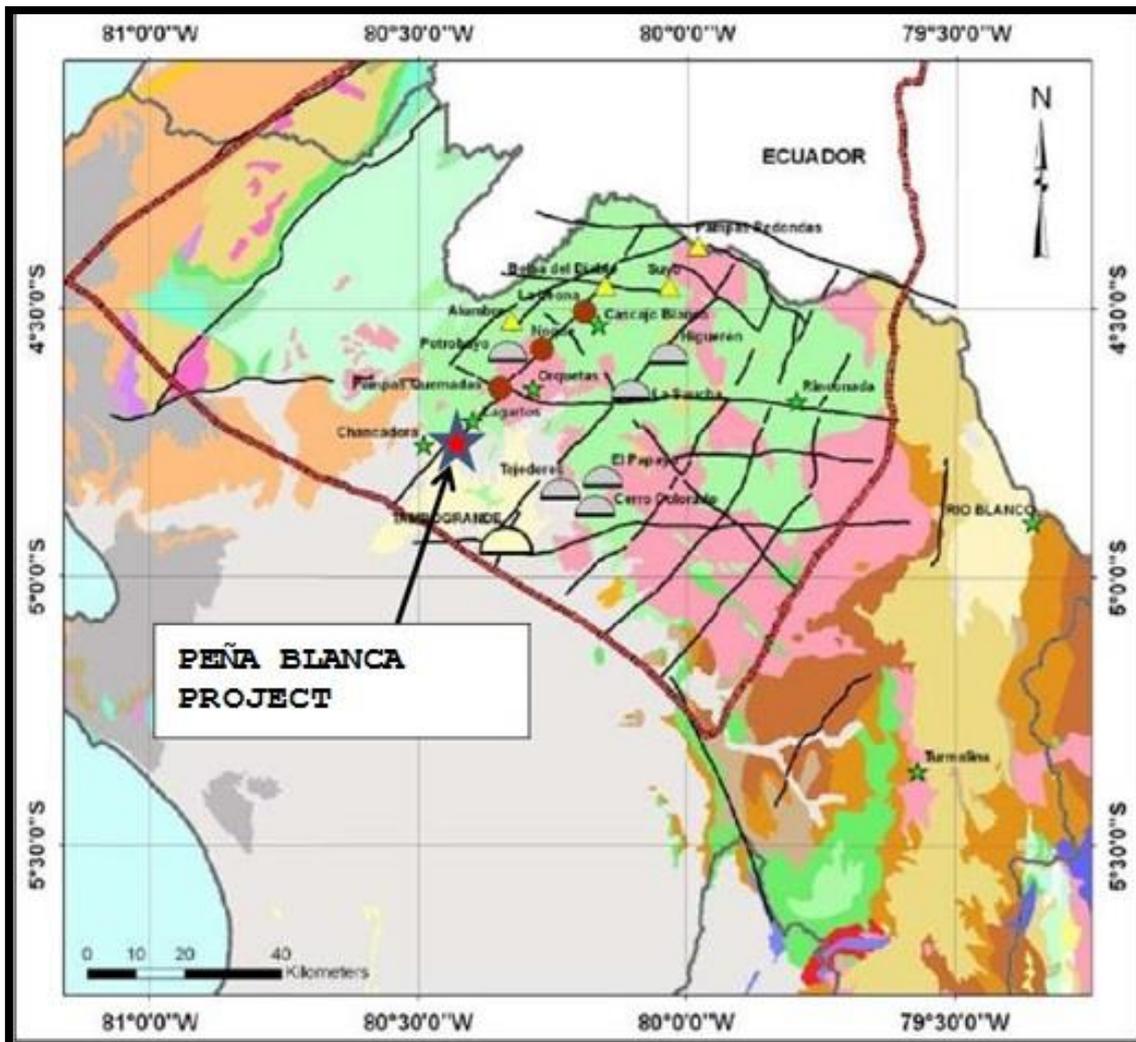
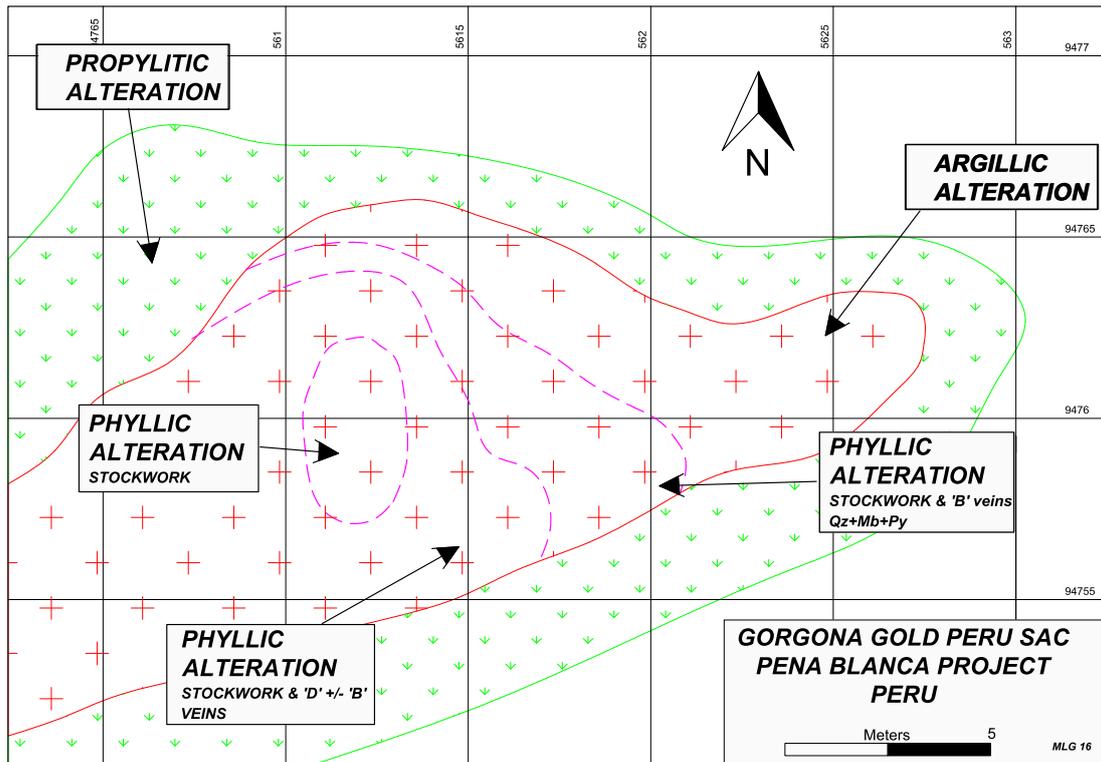


Fig. 7 *Peña Blanca Project, regional location within the Upper Cretaceous porphyry belt and structural control lineaments.*



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*Fig. 8 Schematic plan view showing the main lithologies and hydrothermal alterations within the Peña Blanca property, the thick black lines are showing the border of the concession, The S-SE contact between Intrusive / Volcanic.  $078^{\circ}/60^{\circ}$  NW could be related to an intra-mineral andesitic dyke.*

In 2008 the mining company AndeanGold Ltd. carried out a surface geochemical recognition. The result of this short study yielded 17 rock samples (chip and channel). Three samples came from quartz-molybdenite-chalcopryrite veins with thickness ranging between 10 and 40 cm. The other 14 samples were taken in stockwork outcrops affected by phyllic alteration. Assay results yielded values up to 0.14% Cu and 0.038% Mo (Aldaz J., 2008). Considering that surface rocks indicate propylitic and phyllic hydrothermal alterations, it is inferred that mining potential could remain at depth. There are no additional records from other mining companies exploring this property.

In 2013 Gorgona Gold S.A.C. carried out its own exploration, consisting in geological mapping, structural mapping, mapping of hydrothermal alterations and rock geochemistry. The result finished on the discovery of a stockwork system (quartz veinlets extending for about 400 m in length) at UTM coordinates PSAD56 (561235, 9476035) affected by pervasive phyllic hydrothermal alteration. At UTM coord. PSAD56 (561900, 9465750) a conspicuous outcrop of quartz-molybdenite B type veins porphyry related was observed.



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Additionally, some porphyry related D type veins were also observed. This veining system led us to conclude the existence of a copper-molybdenum+/-gold porphyry deposit. The outcrops rock geochemistry yielded values up to 0.17% Cu in the phyllic altered stockwork. In a quartz-molybdenite marginal vein of 40 cm wide it was obtained a molybdenum value of up to 0.33% Mo; and 0.02 g/t Au in the surface phyllic altered stockwork.



*Photo 1 Las Peñas Project (UTM Coord PSAD56: 561575, 9475783, 119) Coarse-grained acid intrusive (021° / 72° NW). The rock shows a stockwork veining and phyllic alteration.*



*Photo 2 173°/65° SW quartz-molybdenum veins, 5 to 15 cm width, the rock shows a phyllic altered stockwork.*



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**Photo 3** Las Peñas Project (UTM COORD. PSAD56: 561622, 9475628, 119). Quartz-sericite-FeOx+/-Py+CuOx subvertical vein swarm. Veins show predominant NW-SE bearing. Host rock is a coarse grained acid intrusive.



**Photo 4** Las Peñas Project, (561575 E, 9475783 N / 119 m.a.s.l) Coarse grained acid intrusive with stwk and phyllic alteration hosting 173°/65° SW quartz veins + Mo, thickness is ranging between 5 cm up to 15 cm.



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*Photo 5 Las Peñas Project (UTM COORD. PSAD56: 561575, 9475783, 119) Quartz Molybdenite veins. Thickness 5 to 15 cm.*



*Photo 6 Las Peñas Project, (UTM COORD. PSAD 56: 561235, 9476035, 119). Stockwork showing sericite + isolated rare magnetite and some colors of CuOx hosted in phyllic altered coarse grained acid intrusive.*



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*Photo 7 Las Peñas Project (UTM COORD. PSAD 56: 561835, 9475730, 118) Coarse grained acid intrusive with marginal Phyllic alteration, joints / veins 160° - 170° / 90° , Quartz + sericite + molybdenite + traces of py., thickness 5 to 30 cm.*

### **5.2 Suriloma Project (Gold-Silver Intermediate to Low Sulphidation mineralization with porphyry at depth).**

The Suriloma property is located in the Department of La Libertad, Peru, 60 Km northeast of the city of Trujillo, at an elevation between 3200-3900 meters (Figs. 9 and 10). The property lies within a mineral belt containing several World-Class gold deposits. Suriloma is 30 Km west of Barrick's Lagunas Norte mine (2011 production: 763,000 Oz gold) and 50 Km west of Rio Alto's La Arena gold mine (2012 production: 212,000 Oz gold – Rio Alto Mining website, 2013). The Shahuindo gold-silver deposit in the Department of Cajamarca is located 50 Km to the north (4M Oz gold endowment: Sulliden Gold Corporation, 2012). The huge Yanacocha gold deposit (70M Oz gold endowment: Teal and Benavides, 2010) lies 100 Km to the north.

The Suriloma Project is composed by two contiguous mining concessions Santa Felicita 2 of 657 hectares (code: 630006209) and Surupampa III 2009 of 800 hectares (code: 630006809) [Fig. 10].

In 2012 a company called Darwin Resources Corp. (Darwin) acquired the Suriloma mineral concessions, this company carried out a surface exploration program consisting in mapping and rock geochemistry to identify mineralized targets. The result of this program generated several targets for future drilling but the area never was drilled. Conclusions at the end of the exploration indicated that Suriloma corresponds to an intermediate to low sulphidation gold-silver epithermal vein system (ore deposit).



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No Mineral Resource or Mineral Reserve has been calculated. Two styles of mineralization occur on the property: (a) Stockwork gold mineralization; and (b) Quartz vein silver - gold - base metal mineralization; mineralization is hosted by the Calipuy Group volcanic rocks of mid-Tertiary age, and Goyllarisquizga Group quartz sandstones of Cretaceous age (Fig. 11). The mineralization occurs over a discontinuous strike length of 7 kilometers, and over a vertical interval of some 700 meters between 3,200 meters and 3,900 meters above sea level (elevation).

Old artisanal mine workings for silver and antimony veins are present in the area. At least seven target areas for gold and silver mineralization have been identified at Suriloma. Darwin has collected around 650 surface samples (rock geochemistry), most of which are continuous channel samples averaging 2m in length.

Darwin's report (NI 43-101) indicates rock geochemistry for gold and silver (Figs. 12 and 13) and also for other elements. The *La Puerta* target is the principal gold oxide target hosted by epithermal quartz stockwork mineralization within andesite host rocks associated with argillic (illite-smectite) alteration. A total of 309 channel samples were collected and assayed from 24 channels dug perpendicular to the strike of the gold structure over a 1 Km length. An epithermal gold stockwork zone has been identified in two sub-parallel mineralized zones with a combined width of up to 60 meters. Highlights of the channel sampling from the *La Puerta* area include 29 meters @ 1.6g/t gold + 4.5g/t silver, 26 meters @ 1.28g/t gold + 0.5g/t silver, and 16 meters @ 2.2g/t gold + 2g/t silver. The average grade of all 309 channel samples, including unmineralized samples, is 0.90 g/t gold (ranging from <0.005 to 12.8 g/t Au) and 15 g/t silver (ranging from <0.2 to 171 g/t Ag). Nine samples are anomalous in arsenic, and there is a strong positive correlation between gold and arsenic. Base metal values in the stockwork are low. Gold mineralization is related to the density of quartz stockwork veinlets, and is disseminated in the hydrothermally altered rocks. The stockwork mineralization is believed to have formed at around 160 to 200 °C in a shallow epithermal environment based on the clay mineralogy. Outcrops of the stockwork are now oxidized containing no sulfide. The western end of the mineralized structure at *La Puerta* is interpreted to lie beneath shallow post-mineral volcanic cover. The stockwork mineralization at the *La Puerta* target has the potential to host a large tonnage, low grade, oxide gold deposit. The initial conceptual target has a strike length of 1,000 meters, a depth potential of 200 meters (i.e., to the base of the mineralized volcanic unit) and width of 50+ meters.

Potential exists for the gold mineralization to extend into the Mesozoic sediments that underlie the volcanic host rocks. Other gold stockwork targets at Suriloma include the *Inmaculada* and *Santa Felicita* areas (Fig. 14). At *Santa Felicita* gold mineralization is hosted in quartz sandstones, with reconnaissance samples grading up to 4.4 g/t gold in hydrothermal breccia. Further work is required to define the exploration potential at these areas explained by Darwin. Quartz sandstones are the host of major gold deposits in the La Libertad region of Peru, including Lagunas Norte and La Arena, so these targets warrant further work.



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Darwin also reports a metallurgical cyanide leach test of representative material from surface samples at *La Puerta* grading 1.48 g/t gold returned a gold recovery of 90.7% gold from a cyanide bottle roll test within a 24 hour period, with cyanide consumption of 0.4 kg/t. This was a highly favorable result, indicating the vast majority of gold

mineralization in surface outcrops is easily leachable with low cyanide consumption. It is noted that this was a preliminary metallurgical test from surface mineralization, and is not necessarily representative of mineralization in the sub-surface. Further metallurgical testing is recommended once drill cores will be available.

Darwin's report shows that silver - gold - base metal quartz veins that vary in width from <1 meter to 4 meters occur at several areas on the property including *Surupampa*, *La Puerta*, *Edelmira*, *Mina Leje*, and *Guadalupe*. These veins commonly have small old artisanal workings developed along them, and can contain significant base metals and silver-antimony sulfosalts and/or stibnite while gold grades are variable from low to high. A vein at *Surupampa* returned the highest gold values yet at the property, 0.3 meters @ 132g/t gold + 45 g/t silver from a narrow oxidized quartz vein. A quartz vein at *La Puerta* returned a channel result of 2 meters @ 658 g/t silver, 1.33 g/t gold, 0.2 % antimony with coarse-grained stibnite. Sulfide mineralization in the veins typically comprises around 10% by volume as pyrite, stibnite, sphalerite, galena, and silver-antimony sulfosalts including polybasite. The vein gangue is mostly crystalline and drusy-textured quartz. The quartz - base metal sulfide veins are interpreted to have formed under high temperature intermediate sulfidation epithermal conditions or mesothermal conditions (250 to 300 °C). The presence of copper sulfosalts (including bournonite) and tin sulfide (stannite) in some of the quartz veins suggests a nearby mineralizing intrusion.

An exploration program is recommended including at least 5,000 meters of diamond drilling at the *La Puerta* area, focusing on the oxide gold potential and the epithermal stockwork mineralization.

A recommended exploration program will involve the checking activities to control geological and assaying information of targets (Fig. 14) released by Darwin and a program of at least 5,000 m of diamond drilling. It is being estimated a total cost of about US\$ 4 million.



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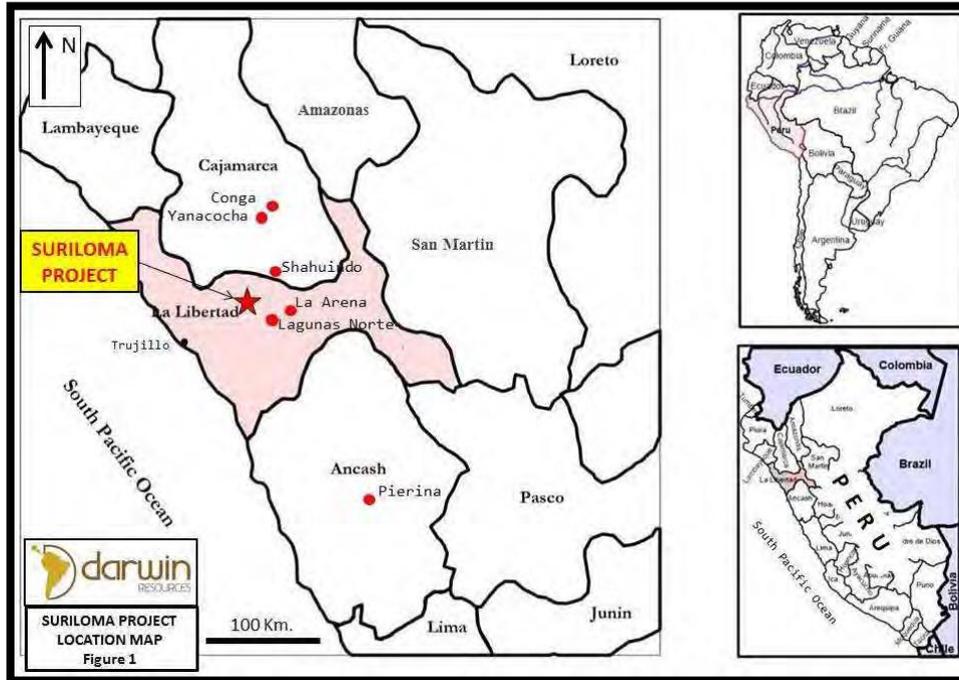


Fig. 9 Location of the Suriloma Project

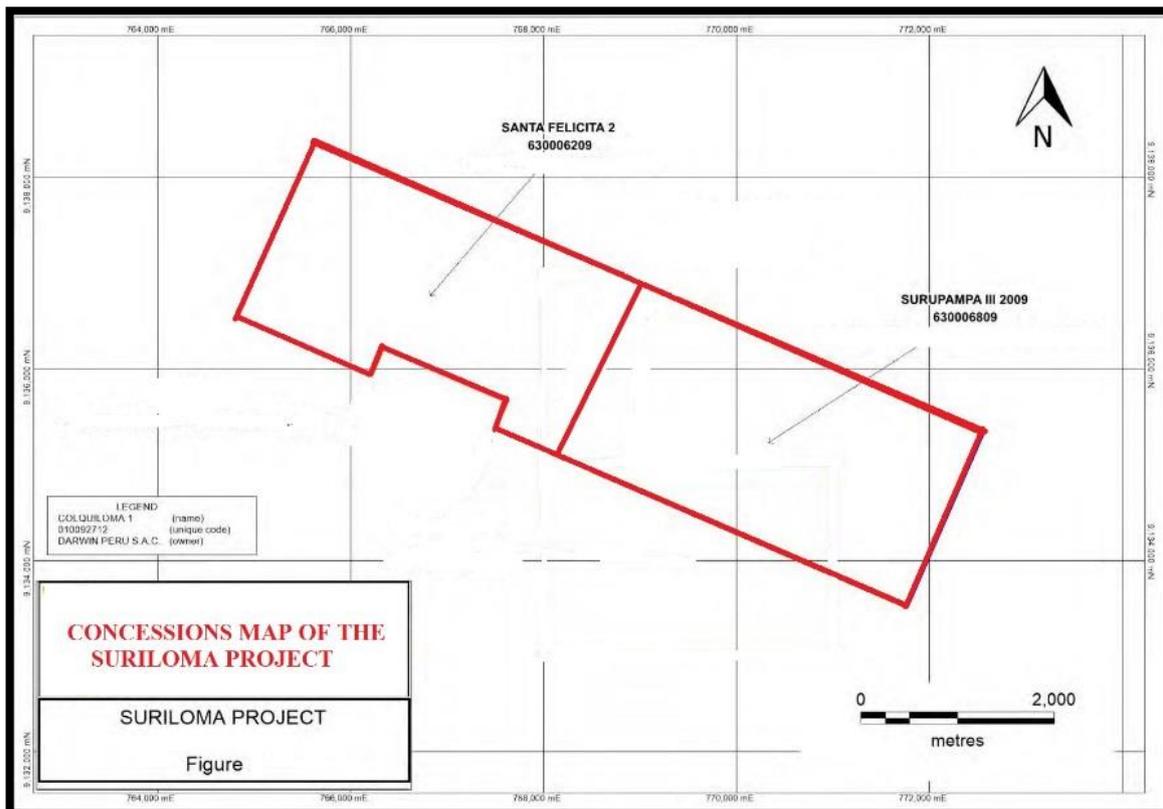


Fig. 10 The two concessions forming the Suriloma Project (Source: Darwin, 2013)





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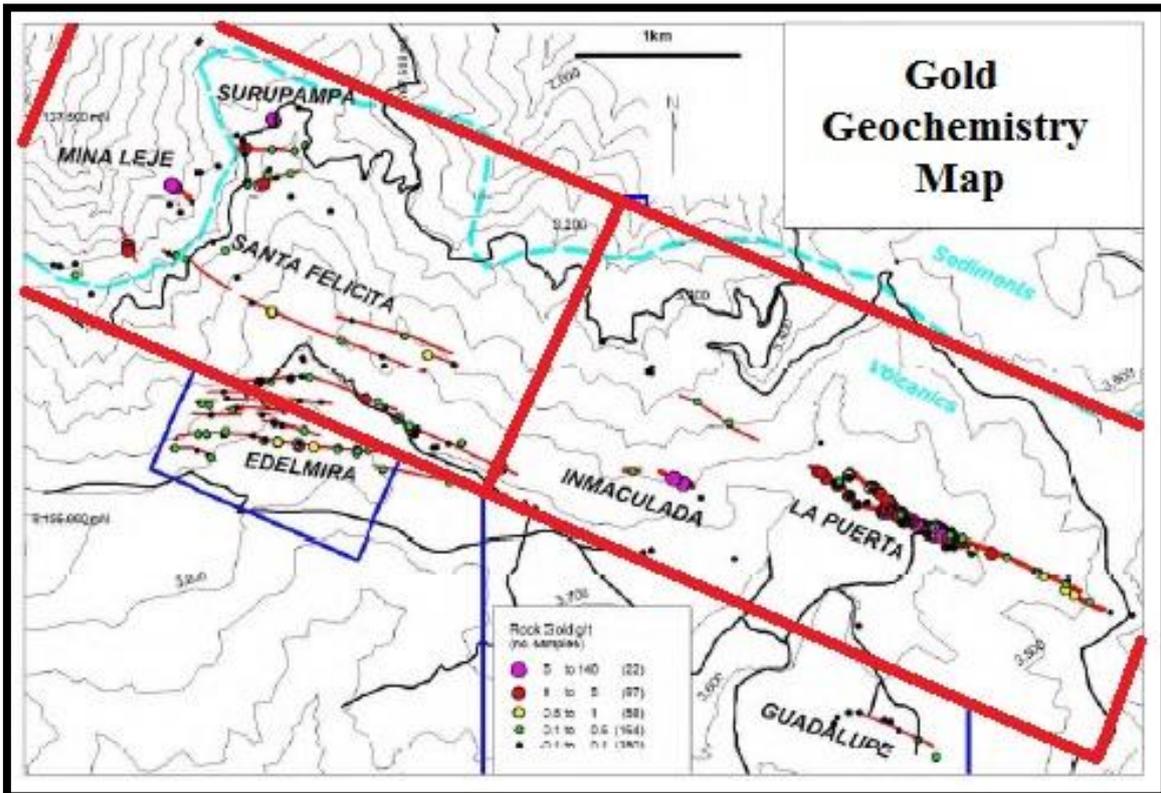


Fig. 12 Gold Geochemistry Map at the Suriloma Project (Source: Darwin, 2013)

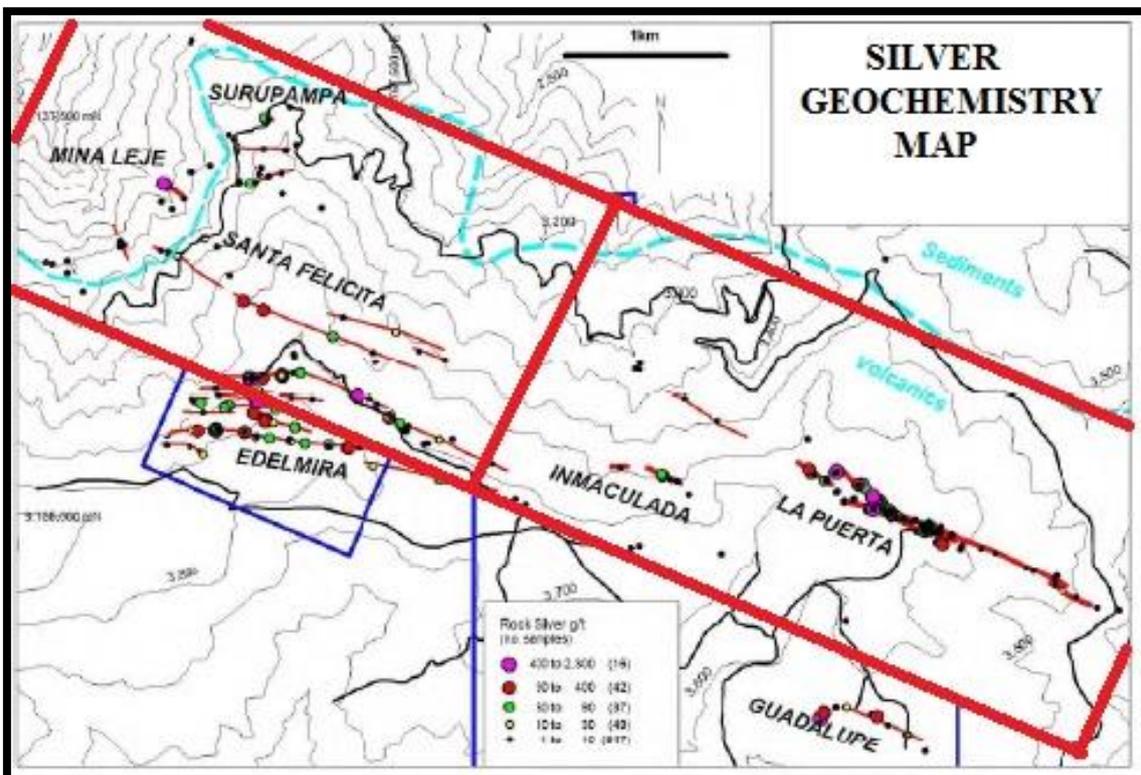


Fig. 13 Silver Geochemistry Map at the Suriloma Project (Source: Darwin, 2013)



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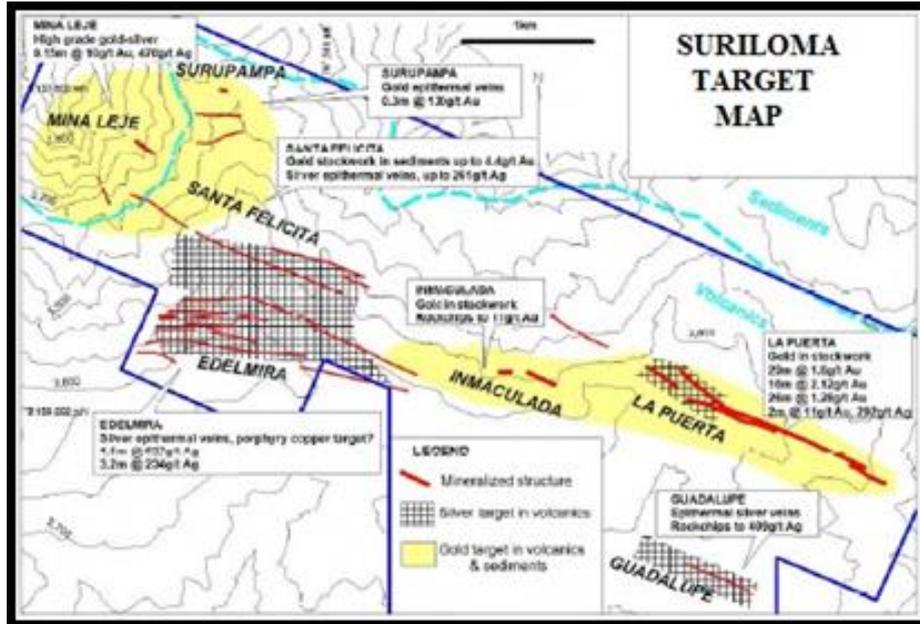


Fig. 14 Targets at the Suriloma Project (Source: Darwin, 2013)

### 5.3 Lagartos Project (Copper-Gold Porphyry)

The Lagartos Project covers a surface of 3,000 hectares (Ha) composed by 1 mining concessions (Lagartos-I-2006 of 1,000 Ha) and two new applications Lagartos-II-2015 and Lagartos-III-2015 of 1,000 hectares each one; all areas are contiguous. The project is located in the Piura Department, northern Peru (Fig. 15). This Project is also part of the Celica-Lancones basin, a major mining structural district located in the north-west of Peru and south of Ecuador. The basin hosts major World class deposits as observed in Figure 16.



## GORGONA GOLD S.A.C.

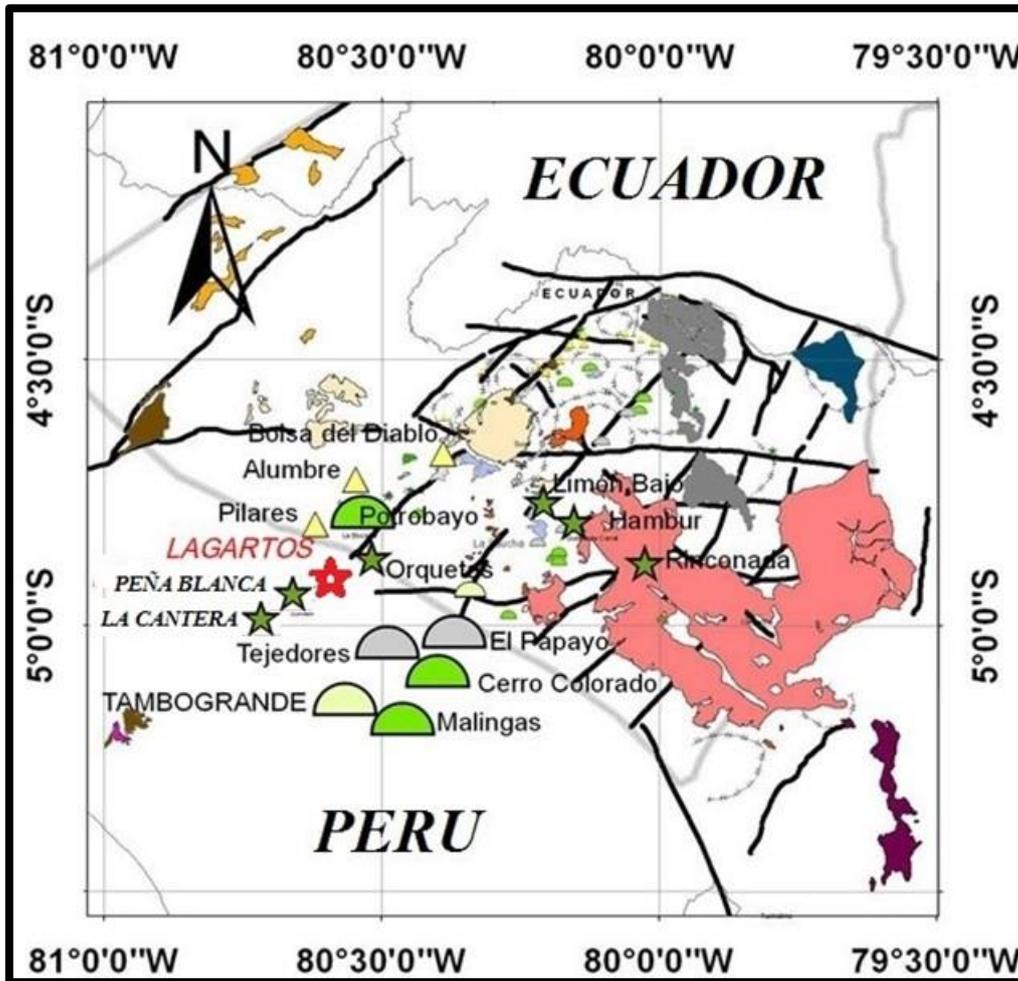


Fig. 15 Location of the Lagartos Project together with major known deposits such as Tambo Grande in the Celica-Lancones basin.

Access to the area and infrastructure is very acceptable. The zone is crossed by the paved Pan-American high way that joints Peru and Ecuador. The town of Las Lomas (10,000 inhabitants) is located in the area of influence and it counts with the basic services such as local transportation, hotels, banks, phone service, restaurants, gas stations, workers, etc. Topography is quite flat with an average elevation of 200 m.a.s.l. The weather is dry subtropical with average temperature of about 20°C. The zone counts with dendritic drainage system and good electrical supply.

This project is located to the north of the La Cantera and Peña Blanca porphyries forming a cluster of porphyries mining trend. This porphyry belt is located to the west side of the Jurassic-Cretaceous rift developed structure (Fig. 15).



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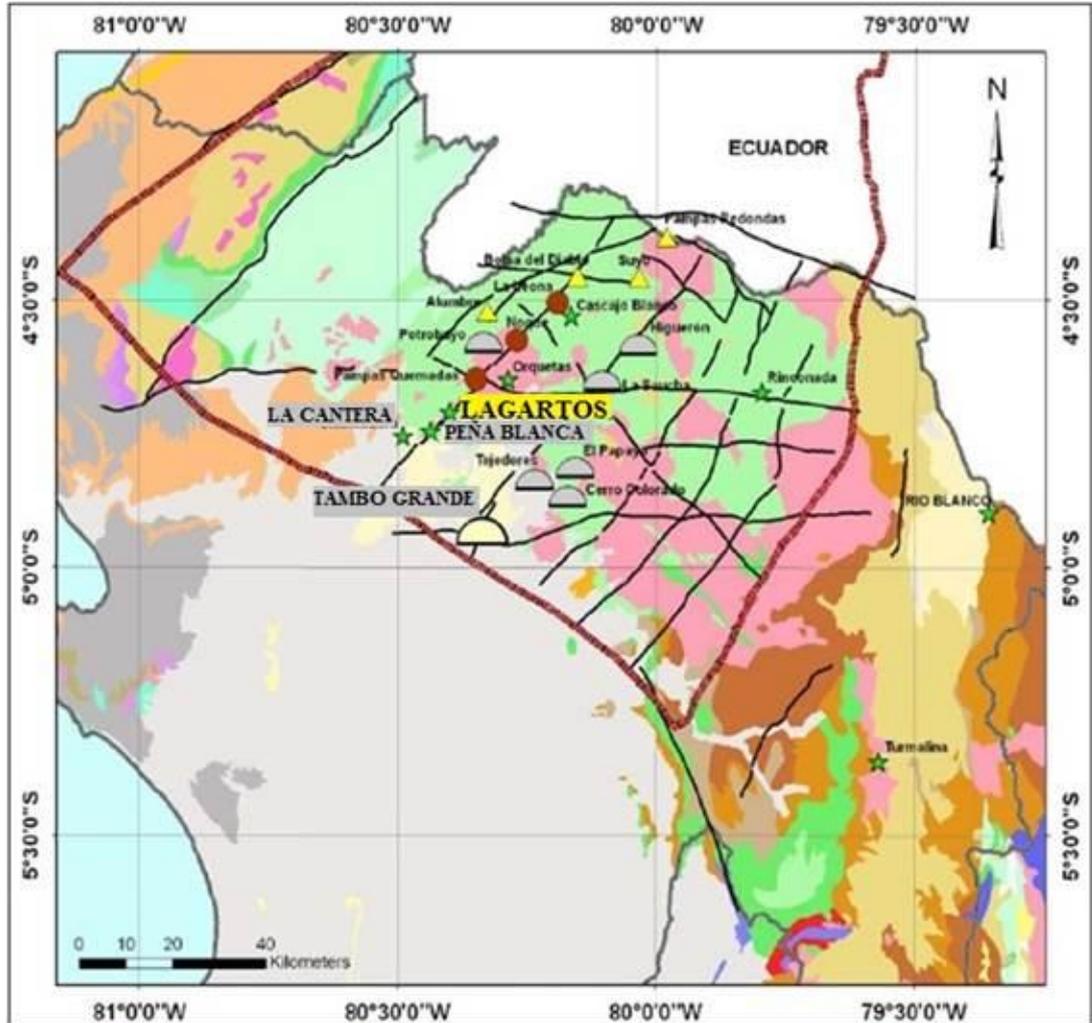


Fig. 16 Lagartos Porphyry Project location into the porphyry mining trend

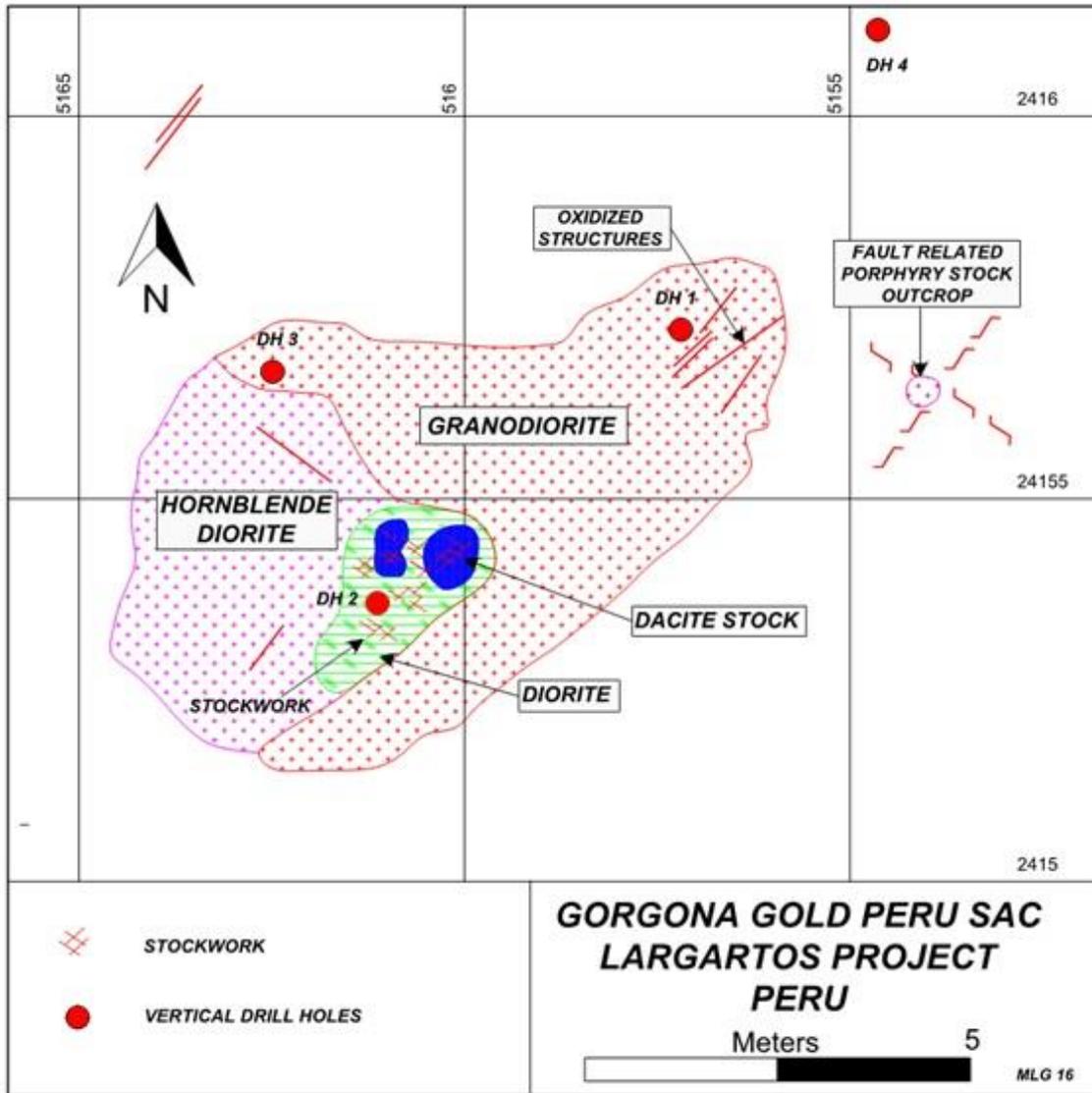
Porphyry emplacement and mineralization seems related to the strong structural control with northwest-southeast and northeast-southwest directions. Additional west-east structures are cutting the previous setting and they seem to be related to the Huancabamba deflection. Additionally, and within the concession, narrow argillic altered and limonitized northwest and northeast structures (< 20 cm) and parallel to the main regional structures have been observed.

The geology of the property corresponds to at least four lithologies: (1) Moderately weathered granodiorite (host rock); (2) Intermediate hornblende diorite; (3) Medium grain size diorite; and (4) Medium grain size subvolcanic dacite with quartz phenocrysts.

Mineralization has been observed in stockwork structures (quartz veining) emplaced in phyllic altered (quartz + pyrite in boxworks + sericite) dacite. In the central zone, the stockwork occurs as small outcrops on the apical zone of the dacite, which is also intruding diorite and granodiorite rocks. Very important were the observations (Moncayo, 2013) of the occurrence of potassic hydrothermal alteration in the stockwork zones (Fig. 17)



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**Fig. 17** Simplified geology and structures at the Lagartos Project.

History of the project starts at the 80's when Buenaventura Company carried out some basic initial exploration. Results of those studies are not available presently.

In 2010 the company called Estrella Gold Corp carried out initial exploration in the area. Samples (rock geochemistry) taken by geologists from this company yielded gold values up to 5.46 g/t gold, 0.97 % Cu and 0.13 % Mo into a porphyry related quartz veins.

Yellow circles in Fig. 17 indicate four diamond drill hole collars (average depth only 250 m) found in the field (executed by Estrella Gold Corp.). As it can be observed one is located in the potassic alteration zone, the other three holes are located 500 to 1500 meters apart from the interpreted zone of interest (potassic alteration zone). No information related to the drill holes (executer, core, logging and/or assaying) is available today.

In 2013 Gorgona Gold S.A.C. carried out some exploration works in the area obtaining the following information/conclusions: The area is being interpreted as a gold-copper+/-molybdenum porphyry with serious potential for further exploration. There have been



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identified at least four different rock intrusions at different ages. Aporphyry related hydrothermal alteration pattern has been observed in the concession area; potassic alteration is outcropping (surface); seven rock geochemical samples were collected on the main outcrops; rock assays yielded values up to 0.3 g/t gold, 0.44 % Cu and traces of molybdenum into the stockwork structure; the area definitely deserves a systematic exploration program.



*Photo 8 Lagartos Project, (UTM Coord. PSAD56: 566974, 9479423, 179). Outcrop of phyllic altered porphyritic intrusive rocks showing quartz veining (stockwork). Observe the porphyry related veining in the samples.*



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*Photo 9 Lagartos Project, (UTM Coord. PSAD56: 566937, 9479394, 176). Outcrop showing melanocratic fine to medium grain size potassic altered diorite. Observe A+B+D porphyry veining development. Magnetite veinlets are conspicuous. Other minerals are biotite, chlorite, pyrite, chalcopyrite, copper oxides, iron oxides and quartz veinlets.*



*Photo 10 Lagartos Project (UTM PSAD56: 566937, 9479394, 176). Red line (030° direction) marks the contact between the mineralized diorite with stockwork development (right) and a dacitic stock (left).*



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## 5.4 Cerro Cobre Project (Porphyry Cu-Mo prospect). - 2,600 Ha

This Cu-Mo porphyry Project is located approximately 60 Km to the south-east of Arequipa city, in the Cocachacra District, Islay Province, Department of Arequipa, Peru. It corresponds to a project in the initial exploration phase. This project is located in the Paleocene-Eocene Copper-Molybdenum porphyry belt situated to the south of Peru. The average elevation is about 2,800 m.a.s.l. The mining project is composed of four contiguous mining concessions adding in total 2,600 Ha. The area is located immediately to the north of the Minera Milpo's concessions (<http://www.milpo.com.pe/Content/Index.aspx>) a successful company formed by Peruvians but operating in Chile and Peru in Co-Mo porphyry World-Class deposits.

Additionally, this mining prospect is located between important operating mines such as: "Chapi" from Milpo (IOCG with a processing plant 30,000 tpd); and "Cerro Verde" mine a Cu-Mo porphyry deposit; considered one of the most important copper producers (plant and concentrator) in Peru; and being exploited through an open pit system operated by a joint-venture between Freeport McMoRan Copper & Gold Inc. and Sumitomo Metal Mining Company Ltd and Buenaventura S.A.A. In 2016, Cerro Verde will expand its processing to 360,000 tpd

The Project needs initial exploration work such as geochemistry, geophysics, geological mapping to produce anomalous targets for further drilling. It is estimated an exploration budget of about US\$ 4M to create resources.

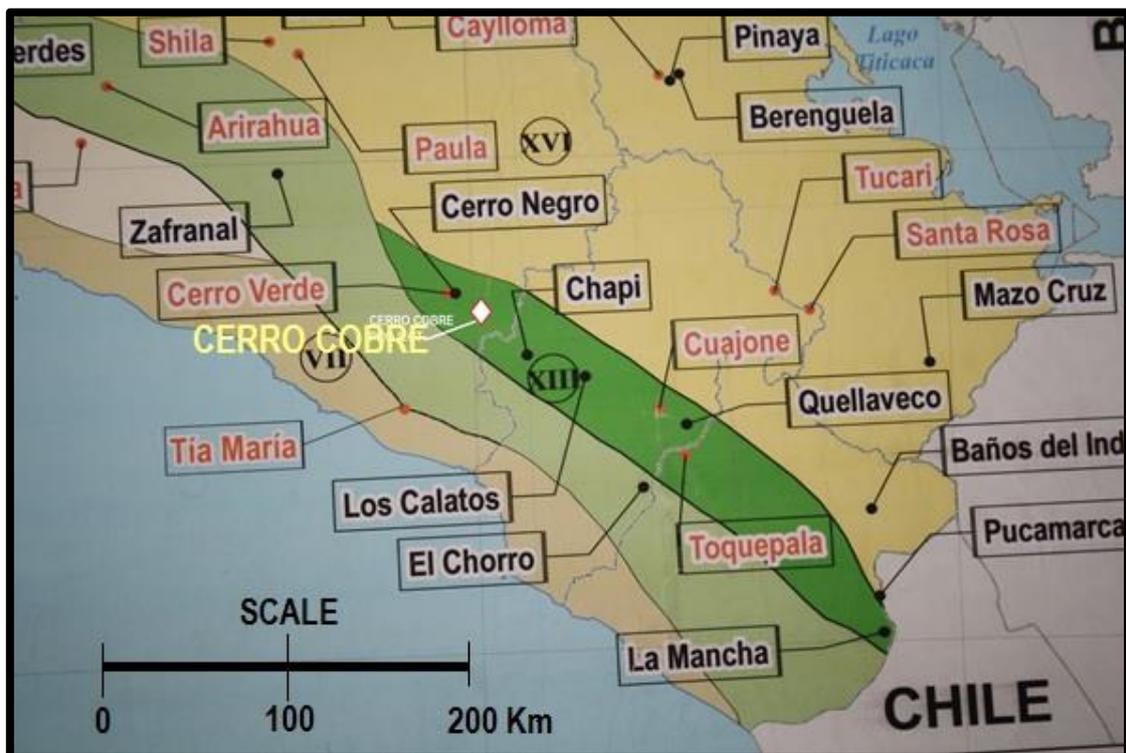


Fig. 18 Location of the Cerro Cobre project



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### 5.5 Carlos V Project (Cu-Au porphyry and VHMS). - 1,500 Ha

“Carlos V” is a copper-gold porphyry project with occurrence of local horizons of Volcanogenic Hosted Massive Sulphides mineralization type. It is located on the northern portion of Peru, in the Las Lomas District, Sullana Province, and Department of Piura.

Average elevation is 250 m.a.s.l. It is located about 1,000 Km to the north-west of Lima. Access is excellent by air and land; all kind of logistics are available in the area of influence. The project is composed by two contiguous concessions forming a total of 1,500 Ha.

Nine vertical diamond drill holes tested the porphyry sector: Minera Urumalqui – SIMSA, 1994; and in 2001 Buenaventura Mines developed in conjunction with BHP Billinton semi detailed geological mapping, geochemistry and geophysics (gravimetry).

Local geology (Fig. 19) comprises the following lithologies: granodiorite, tonalite, quartz monzonite, and gabros and diorites in the periphery. Trenching in 1994 – 1995 showed silicification and wide spread phyllic hydrothermal alterations. Stockwork structures are very conspicuous in the oxidized zone of the granodiorite. Observed mineral assemblage include limonite, hematite, pyrite, malachite and chrysocolla

The concessions are located in the mineralized plutonic complex belt of the Las Lomas (mining district). Two distinct gold – copper mineralization have been described in this project: (a) Disseminated mineralization (1,500 x 500 m) hosted into the oxidized porphyritic quartz monzonite and yielding grades up to 0.36 g/t Au and 0.12 % Cu (surface rock geochemistry); and (b) Mineralization associated to gold-copper bearing structures (veins) with grades up to 5.39 g/t Au and 5.71 % Cu.

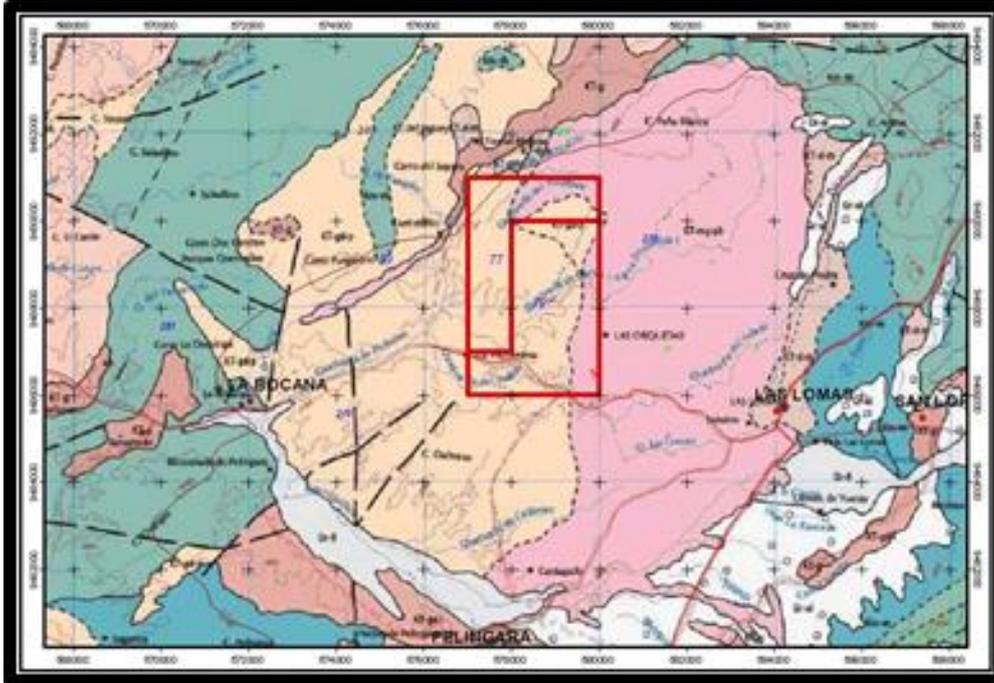
Additionally, Buenaventura has described some local horizons corresponding to mineralization of the VMS type that are still unexplored. It has to be remarked that this project is located only 30 Km to the north-east of the “giant” VMS ore deposit of Tambo Grande.

The Tambogrande Volcanogenic Hosted Massive Sulphides (VHMS) deposit within the Cretaceous Celica-Lancones basin is located to the north-west of Peru and it is one of the largest copper-zinc-gold-silver bearing known World class ore bodies. This ore body is known to be containing three mineralized targets: TG1 with 109Mt @ 1.6% Cu, 1.0% Zn, 0.5 g/t Au and 22 g/t Ag; TG3 with 82Mt @ 1.0% Cu, 1.4% Zn, 0.8 g/t Au and 25 g/t Ag; and B5, with comparable massive sulphides intersections to TG1 and TG3. The TG1 deposit also hosts an oxide zone with 16.7Mt @ 3.5 g/t Au and 64 g/t Ag. All classified as indicated and inferred resources.

The Project needs initial exploration work such as geochemistry, geophysics, geological mapping to produce anomalous targets for further drilling. It is estimated an exploration budget of about US\$ 4M to create resources.



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*Fig. 19 Geology of the Carlos V project*

## **5.6 Midas Project (VHMS: Cu, Zn, Pb, Au, Ag). - 1,600 Ha**

This is a Volcanogenic Hosted Massive Sulphide (copper, gold, silver, lead, zinc) prospect. It is located immediately to the east of the “Carlos V” project concessions in the same VHMS metallogenic belt of Tambo Grande which runs with north-east direction. The area is located on the north-western portion of Peru, in the Las Lomas District, Sullana Province, and Department of Piura. The average elevation is about 265 m.a.s.l. and it is located about 1,034 Km to the north-west of Lima. Access is excellent by plain and vehicle; all kind of logistics are available in the area of influence. The project is composed by 3 contiguous concessions forming a total of 1,600 Ha. Land surface rights belong to the local communities and topography is relatively flat.

Geology mainly comprises Cretaceous sediments and volcanics locally intruded by Late Cretaceous monzogranite, granodiorite, tonalite and diorite rocks. Structurally the area is located on regional anticline and syncline structures (Cerro Cabujal) as part of the evolution of the Lancones-Celica basin.

It is known that Buenaventura Mining Company developed some exploration works (geological mapping, geophysics, geochemistry and some diamond drilling) with the intention of identifying VHMS mineralization. This project is located in the same metallogenic belt of the giant Tambo Grande VHMS deposit.

The Tambogrande Volcanogenic Hosted Massive Sulphides (VHMS) deposit within the Cretaceous Celica-Lancones basin is located to the north-west of Peru and it is one of the largest copper-zinc-gold-silver bearing known World-Class ore bodies. This ore body is known to be containing three mineralized targets: TG1 with 109Mt @ 1.6% Cu, 1.0% Zn, 0.5 g/t Au and 22 g/t Ag; TG3 with 82Mt @ 1.0% Cu, 1.4% Zn, 0.8 g/t Au and 25 g/t Ag; and B5, with comparable massive sulphides intersections to TG1 and TG3.





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### 5.7 El Naranjo Project (VHMS: Au, Pb, Ag, Zn, Cu).- 2,500 Ha

The “El Naranjo” corresponds to a VHMS deposit prospect; it takes the name of the village with the same name located in the Lancones District, Sullana Province, and Department of Piura. This project lies at about 1,040 Km to the north-west of the Lima city. The average altitude is about 300 m.a.s.l. Access is excellent by plain and vehicle; all kind of logistics are available in the area of influence including water, electricity, labor, etc. The property is composed of 3 contiguous concessions forming a total surface of 2,500 Ha.

In the last decade the Peruvian company Buenaventura developed some exploration works such as geological mapping and geochemistry. In 2001 Buenaventura formed a joint venture with BHP Billiton to develop a regional geophysical survey (gravimetry) in the entire Lancones basin.

Local geology (Fig. 21) comprises Cretaceous sediments and volcanics intruded by Late Cretaceous intrusive rocks. Observed mineralization corresponds to iron oxide stained silicified andesites, gossans outcrops and barite veining, suggesting the existence of a Volcanogenic Hosted Massive Sulphides deposit. A vuggy silica rock with presence of hematite and jarosite (Cerro Gustavo) and hydrothermal alterations such as silicification, argillitization, and quartz-sericite assemblage corroborates the existence of VHMS mineralization type. Some breccia bodies have been also recorded.

Surface initial rock geochemistry carried out by MRC1 company in the last years in El Naranjo shows gold values ranging from 0.04 g/t Au to 0.5 g/t Au at the Cerro Gustavo target; while in the breccia bodies yielded up to 1.8 g/t Au.

This prospect needs exploration works such as detailed geological mapping plus hydrothermal alteration mapping, rock geochemistry, soil geochemistry, geophysics and diamond drilling with an approximate overall cost of about US\$ 3M.



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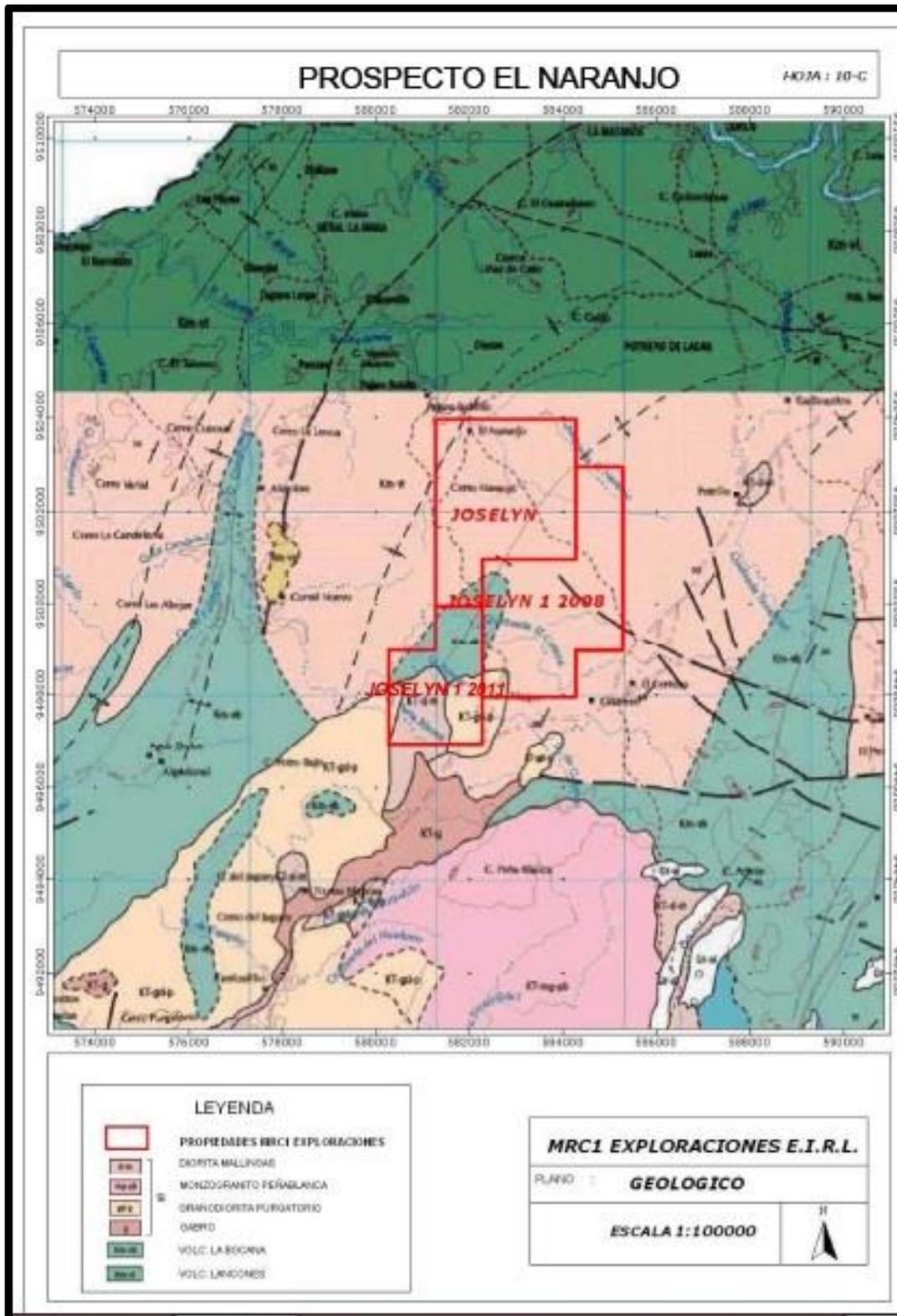


Fig. 21 Geology of the El Naranjo Project



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## 5.8 San Miguel Project (Cu-Mo Porphyry and related breccia). - 413 Ha

This is a Copper-Molybdenum porphyry Project with associated mineralized tourmaline breccia. It is located in the Canchaque district, Huancabamba Province, Piura Department, Peru. Land surface belongs to the local community. The area of study is located 950 Km to the NW of the Lima city. Access is excellent by air and land; all kind of logistics are available in the area of influence including water, electricity, labor, etc.

The property is composed of 2 contiguous concessions forming a total surface of 413 Ha. The concession lies on the western slopes of the Western Cordillera at an average altitude of 2,840 m.a.s.l., close to the site called Cerro Minas (Mines Mountain). Vegetation corresponds mostly to agriculture and pasture. The dry season runs from April to November and the raining season from December to March.

Regionally, the project is located in the metallogenic belt of the Majaz-Conga-Michiquillay deposits. Geology (Fig. 22) comprises Paleozoic metamorphic and Cretaceous volcanic rocks being intruded by Late Cretaceous intrusive rocks (tonalite and diorite) forming copper-molybdenum porphyry related mineralization. Associated tourmaline breccia bodies yield copper-molybdenum-lead-tungsten mineralization. The observed hydrothermal alterations are silicification, argillic and quartz-sericite suggesting porphyry type mineralization. Preliminary surface rock geochemistry shows values up to 1.0 g/t Au, 0.37% Cu, 0.2% Sb, 0.06% Pb.

The area is surrounded by similar breccia bodies out of the concessions which are currently being exploited by other mining groups with copper grades up to 2.5%.

Further work will involve land permitting, detailed geological mapping, rock and soil geochemistry, geophysics and diamond drilling. This exploration plan could cost about US\$ 3M.

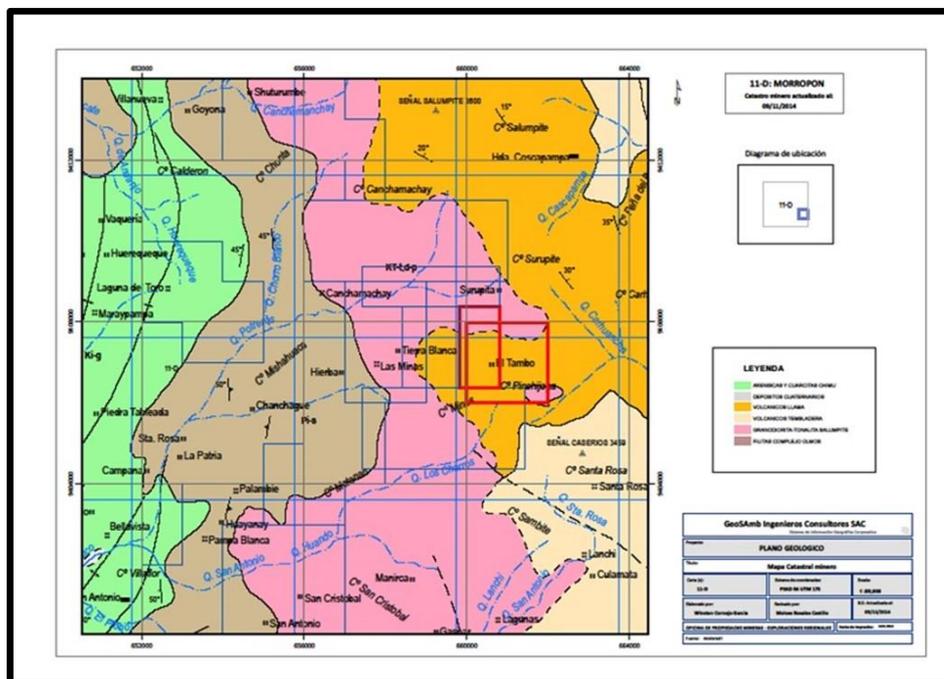


Fig. 22 Geology of the San Miguel Project



# GORGONA GOLD S.A.C.

## 6. GENERAL ASPECTS NEVADA - USA

**Aurica Resources LLC** is a Nevada Corporation that holds two Nevada claim packages. The targeted projects in Nevada are Golden Wonder Group and PEQUOP. Mining has been integral to Nevada's history, from Native American use of its mineral wealth to fashion arrowheads, spear points, and tools to today's modern industrial mining operations. Nevada's silver deposits were the key to statehood; a driving force in the state's economy in the mid-nineteenth century, they were a major reason for Nevada's admission into the United States in 1864. While gaming and tourism now dominate the state's economy, Nevada remains a nationally and internationally significant source of metals and minerals.

**Gold mining in Nevada** is a major industry, and one of the largest sources of gold in the world. Nevada currently mines 79% of all the gold in the United States, which is equivalent to 5,640,000 troy ounces (175 t) in 2009. Total gold production from Nevada recorded from 1835 to 2008 totals 152,000,000 troy ounces (4,700 t), worth over US \$228 billion at 2011 prices. Almost all the gold in Nevada comes from large open pit mining and cyanide heap leaching recovery. A number of major mining companies, such as Newmont Mining, Goldcorp and Barrick Gold Corporation, operate gold mines in the state. Active gold mines include those at Jerritt Canyon and Carlin.

Unlike coal and oil extraction, where mining companies pay royalties for minerals obtained from public lands, gold mining companies do not pay any royalties for deposits claimed on federal public lands. This is because gold mines on public land operate under the General Mining Act of 1872.

Although Nevada was known much more for silver in the 19th century, many of the early silver-mining districts also produced considerable quantities of gold. The Comstock Lode, for instance, produced 8,600,000 troy ounces (270 t) of gold through 1959, and the Eureka district produced 1,200,000 troy ounces (37 t). And the Robinson copper mine has produced well over 2,700,000 troy ounces (84 t) gold, along with over 4 billion pounds (1,500,000 tonnes) of copper.

### 6.1 Golden Wonder Group (Nevada)

This Nevada claim package consists of three contiguous claim groups (*Golden Phoenix, Golden Wonder and Golden Nugget*) covering a north-south distance totaling approximately 3.5 miles and comprising about 2,000 acres. A total of eight Tertiary volcanic units are mapped in this north-south claim group. The mineralization consists of porous Siebert tuff unit hosting conformable sinter deposits identical to the planned mine at Hasbrouck Mountain 4 miles to the northwest and situated on a regional unconformity traced for 8,000 feet along strike with related underlying quartz vein feeder swarms and intrusive heterolithic breccias.

Structural mapping indicates these claims occur at the intersection of the famous northwest-southeast trending Walker Lane structure containing numerous productive mines and a south plunging breached anticline. The Golden Phoenix mineralization in the north consists of well-developed auriferous chalcedonic system as veins, overlying edded deposits and heterolithic breccia masses in a highly altered and sheared reworked tuff.



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This recognized paleo-hot spring environment conforms to a well-defined paleo topographic surface exhibiting high precious metal values. In addition, high pathfinder element values occur in eruption debris at the top of each fumarole system. Auiferous silica flooded flow brecciated tuffs are integrated within this complex hot spring system traced into a large pediment.

Southward in the Golden Wonder group a north-south quartz-adularia stock work system hosts high grade gold and silver values (21.8 ppm Au and 148 ppm Ag) in volcanics, water laid tuffs and related rhyolite intrusives. The Siebert water laid tuff units within the projected graben structure in the Golden Nugget group to the south contain potential important blind ore producing units similar to the Hasbrouck Divide Mining District 4 miles northward. These favorable zones occur on the basement unconformity and also in the overlying porous and permeable tuffaceous units which are also found in the Golden Phoenix claims.

### 6.2 PEQUOP Property (Nevada)

This 340 acre claim group, located in the Pequop Mountains northern Elko County Nevada, is within the recently recognized *New Carlin Gold Belt trend* immediately west of the developing Long Canyon Mine recently purchased by Newmont Mining. In addition, this property occurs immediately north of high grade intercepts at the Agnico Eagle West Pequop property confirming at least two major developing mines forming a triangle with this offered property. These three well-mineralized areas share the same geophysical gravity anomaly.

Claim mapping in the 17 PEQ claim group reveals a complex NNE trending recumbent folded anticline consisting of mineralized axial plane breccia containing a multiple jasper phase covering 94 acres in the mapped Devonian Guilmette Formation. This anticline further to the northeast along strike contains a 100 foot wide karstified breccia with attendant dolomitic alteration. This feature contains mineralized gossans, jasper and barite. Gold values reach 3,888 ppb in this structure. Contoured gold values reveal a 5,000 foot anomalous trend coinciding with this fold axes. There are seven distinct mineralization types each having complimentary anomalous hydrothermal pathfinder geochemistry with gold suggesting multiple and related mineralization events. Negative correlation coefficients between gold and calcium enhance a Carlin style deposit interpretation. These folded Paleozoic dolomitic limestone host rocks are sandwiched between complex normal and thrust fault structural patterns.