

ARGENTINE FRONTIER RESOURCES INC (AFRI)

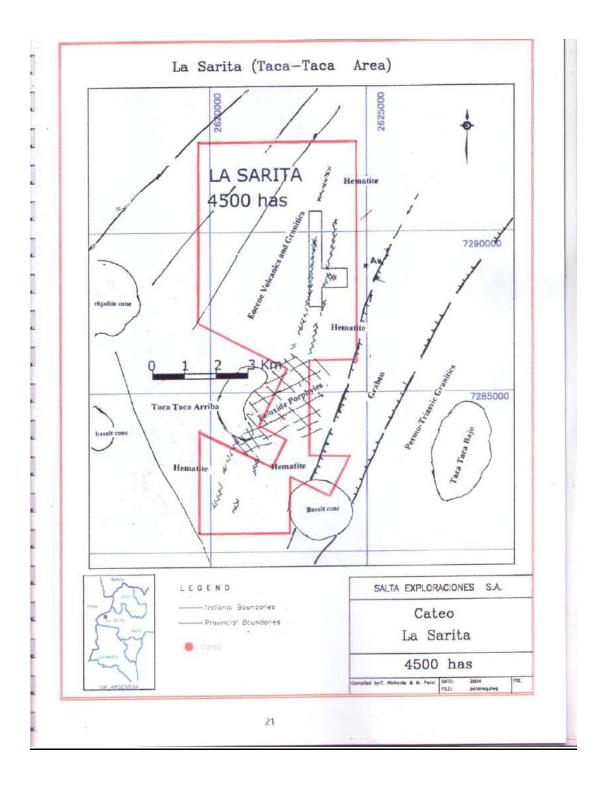
SALTA EXPLORACIONES SA (SESA)

LA SARITA

IOCG-Porphyry Copper-Gold

August 2006

La Sarita Cateo



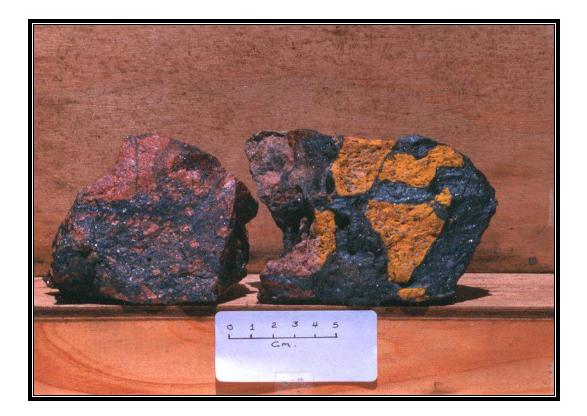


La Sarita - bleached center is Taca Taca Arriba. The hematite zone crosses the lower two-thirds of the photo and extends either direction to the north and south.

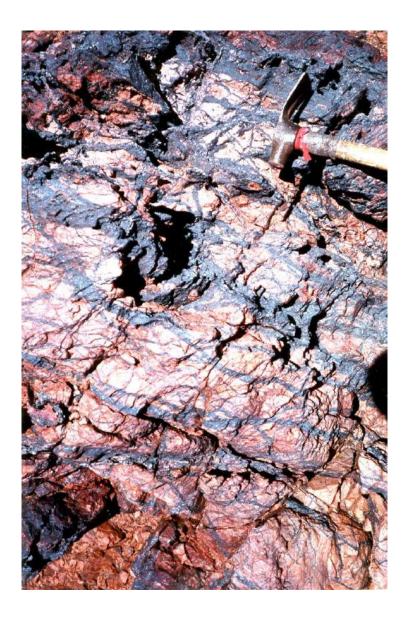


La Sarita - from NW corner of Sierra Taca Taca. Hematite (+/- Cu, fluorite) occupy the dark bands. The pinkish rock is potash altered volcanic and granitic rocks. Taca Taca Abajo is in the center left of the photo.





<u>La Sarita</u> – hand specimens from veins & breccias. Hematite with clasts of K-spar altered granitic & volcanic rocks. Orange patches are stained K-spar.



La Sarita IOCG style outcrop

SUMMARY

The western Puna is a newly recognized IOCG belt of Tertiary age that includes the 500 million tonne El Laco magnetite-hematite deposit in Chile and the Rio Grande-Arizaro Cu/Au prospects in northwestern Argentina. These deposits are characterized by not only the abundant presence of hematite and/or magnetite, but also by anomalous to economic quantities of Cu, Au, REE, Co, U and Ag. A process suggested that may account for the size and metal content of certain IOCG deposits is for the hydrothermal solutions to be of a very high salinity that has been enhanced from contemporaneous (salars) or older evaporitic (paleosalars) sequences (Barton and Johnson 1996).

In the western Puna, Miocene to recent volcanics and high level intrusions host a wide variety and number of mineral showings and alteration zones that overlie and intrude the Late Eocene-Oligocene evaporite red-bed assemblages. Mineralization is best developed along transverse and longitudinal faults west of Salar Arizaro. Of these, the La Sarita prospect has recognized IOCG signatures that include the presence of hematite and magnetite, anomalous to highly anomalous Cu, Au, REE, Co, P and F in association with wide spread regional potash feldspar and hematite alteration.

The La Sarita cateo is located 30 km west of the village of Tolar Grande, some 300 km from the city of Salta. The cateo is reached by an all-weather road to the western edge of Salar Arizaro and the Taca Taca Abajo prospect; from there by 4 x 4 track and all terrane vehicles. A railway between Chile and Argentina lies to the immediate north of the property.

La Sarita prospect underlies the prominent northeast trending Sierra Taca Taca horst block located along the northwestern margin of Salar Arizaro. This horst is host to a variety of styles of mineralization that include Taca Taca Abajo and Arriba porphyry copper/gold systems and Taca Taca Sur low sulphidation system. The main range is underlain by Eocene volcanic rocks cut by numerous dykes, sills and plugs that in part host the Taca Taca Arriba prospect and older (Permian?) granitic rocks. East of the main ranges, separated by a prominent northeast trending graben, the dominant bed rock is comprised of Paleozoic granites intruded by a small stock (3 x 1.75 km) that hosts the 29-35 Ma Taca Taca Abajo porphyry. The Sierra Taca Taca horst is transected by northeast trending structures and by a major transverse northwest trending structure marked by numerous linear features the Taca Taca Arriba and Abajo porphyries and by an aligned suite of Quaternary to Recent rhyolite and basalt cones.

Mineralization on the La Sarita cateo comprises two interrelated mineralized systems: a regionally extensive vein-stockwork-breccia hematite system traceable for 16+ km and an easterly trending 5 x 3 km hybrid iron-oxide-copper porphyry system of which the original Taca Taca Arriba prospect forms the western half.

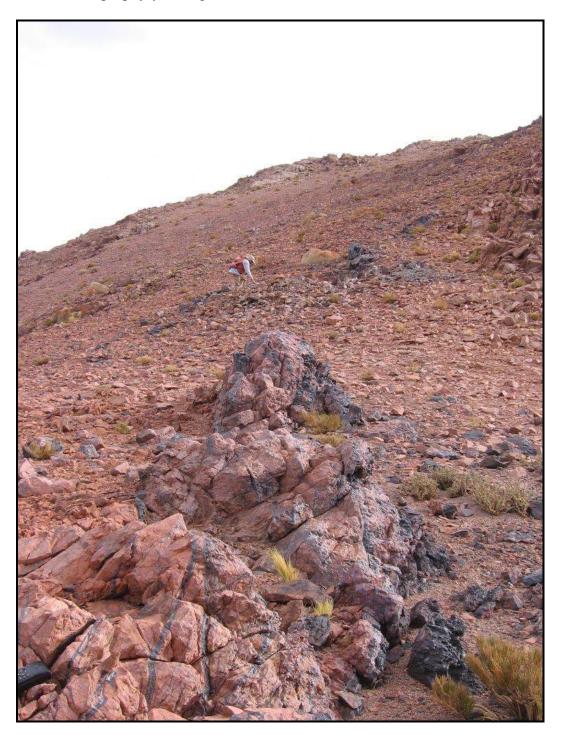
Along the length of the property, two parallel systems (to 10 m width) comprised of veins, breccias, stockwork, replacements, stringers and masses of specular hematite are traceable for some 12 km along the length of the cateo and its known extent is in excess of 16 km. Associated with the hematite development is a strong potash feldspar alteration.

Quartz, fluorite and magnetite are common accessories with the hematite and locally constitute an important component. Copper mineralization, as secondary copper mineralization was noted sporadically with these vein structures. Anomalous values of REE (lanthanum up to 250 ppm) and cobalt (to 450 ppm) are reported with this system. In the northern parts of the system, off the immediate flanks of the hematite vein-breccia system a small pit revealed gold values in excess of 30 gm/t and >1% copper associated with hematite-sericite-quartz alteration. Although the belt is dominated by these two northeasterly trending hematite-dominant systems, similar styles of mineralization are widespread throughout the eastern flanks of the main Sierra Taca Taca range. In addition copper mineralization has been noted from a number of localities along the western flank of the Sierra.

The south central part of the cateo is underlain by a hybrid IOGC porphyry system that includes the Taca Taca Arriba porphyry, together measuring some 5 x 3 km. The Taca Taca Arriba setting represents a dominantly argillic and phyllic altered western shell to this porphyry and is known to contain numerous occurrences of hematite, copper phosphate and tourmaline. On the La Sarita cateo (and extending beyond its eastern border), volcanic and granitic rocks are extensively k-feldspar, phyllic and argillic altered. Within this zone, extensive areas contain veins, veinlets, stockwork and fractures containing hematite, quartz, jarosite, and copper (copper phosphate) mineralization. The sequential development of this mineralization shows early wide spread development of specularite, followed by sequences of hematite-quartz, hematite-quartz-jarosite+/- copper (turquoise) and quartz-jarosite-copper. These systems are variants of a porphyry copper system. This IOCG style porphyry locally hosts gold in the 100+ ppb range.

The La Sarita-Taca Taca Arriba system of mineralization is a variant of the IOGC system. The porphyry system, marked by Taca Taca Arriba and its eastern continuation on the La Sarita cateo, is located at the intersection of the northeast trending, 16 km+ long hematite vein-breccia system and a major northwest trending transverse cross-structure marked by the presence of two porphyry systems, strong linears as well as young basalt cones and rhyolite domes. The whole of the system is known to be anomalous in copper, gold, REE, cobalt, phosphorus and fluorite associated with hematite, magnetite and potash feldspar alteration. Recognition of this area as an IOGC setting is recent and known only by few exploration geologists (Dow and Hitzman: see below). The area possesses all the ingredients for the possible presence of significant mineralization related to this style of mineralization including size, structural setting, known mineralization and easy access.

The work done on the La Sarita prospect has been restricted mainly to reconnaissance prospecting. The only drill holes known have been related to the early



investigation of the Taca Taca Arriba porphyry which has been earlier treated as a classic calc-alkaline porphyry setting.

La Sarita Looking southeast

