



## **EXPLORATION UPDATE**

### **VOLUME TWO - ISSUE FOUR**

**CASCADERO COPPER CORPORATION  
(TSXV: CCD)**

**TACA TACA GEOCHEMICAL PROGRAM**

**TACA TACA MINERAL DISTRICT**

**NORTH WESTERN ARGENTINA**

**JUNE 18<sup>th</sup> 2012**

**BILL MCWILLIAM**

**Chief Executive Officer**

**Cascadero Copper Corporation**

## PHOTO ONE



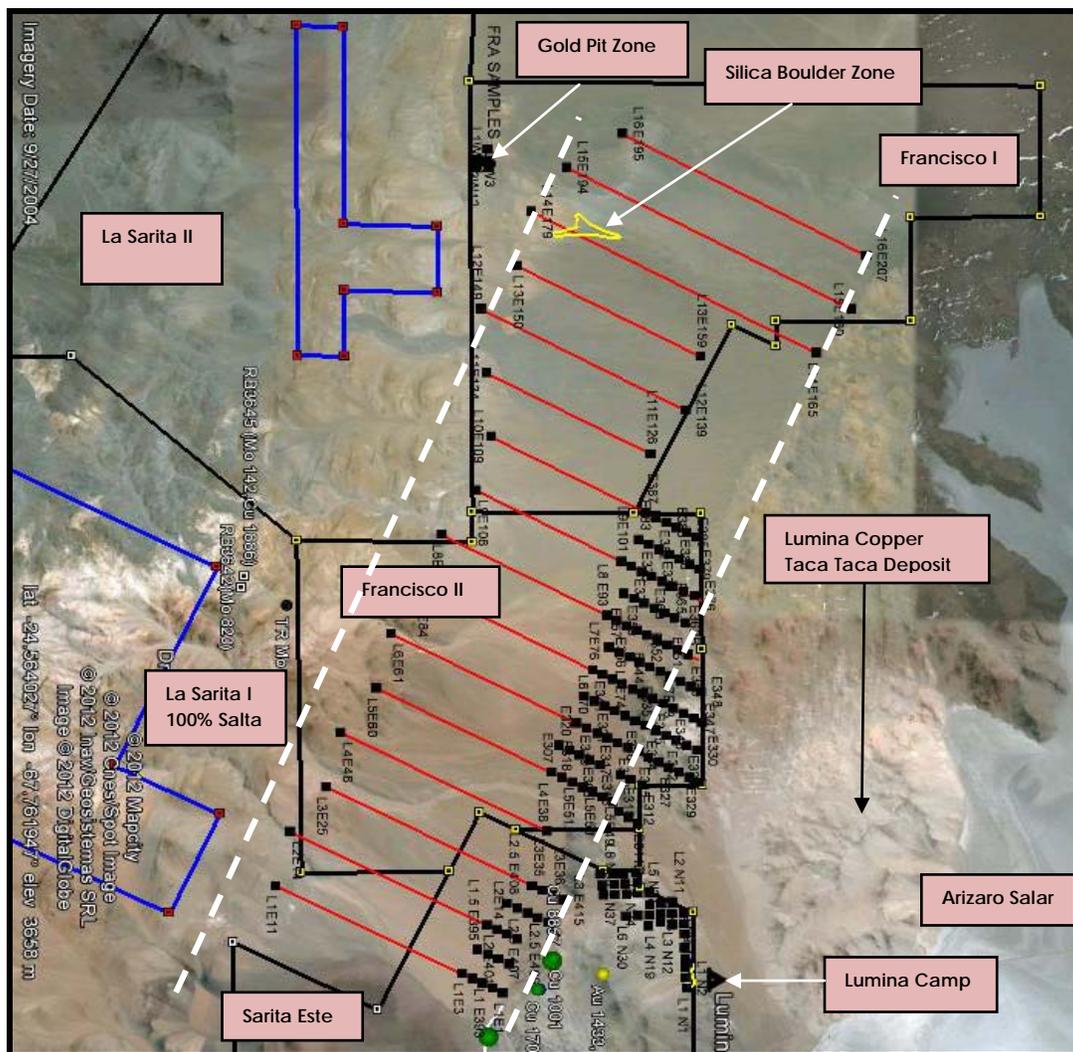
**PHOTO ONE** is taken from Sarita Este with a view to the south east into the Lumina property. A cement cairn with a metal post can be seen on the left in the photo. This is one of the common corner boundary markers between the Lumina property and the Francisco II property. Two drills are working about 100 to 200 metres to the east of the common boundary. The greyish area in the background is the Arizaro Salar, the largest in Argentina.



Sampling was focused Salta's 50% owned Francisco I, 50% owned Francisco II and 100% owned Sarita Este. Cascadero owns 50% of Salta. **MAP ONE** above shows the three properties subject to the geochemical program, which border Lumina's Taca Taca Bajo 1.762 billion tonne Cu-Mo-Au porphyry deposit to its immediate west. The majority of the sampling was on Francisco II and Sarita Este. Due to Taca Taca Bajo's location with respect to the Arizaro Salar, it will likely be mined from the west, northwest or north first. Francisco I and Francisco II cover the majority of this area.

Francisco I and Francisco II also cover the majority of a geological formation called a Graben, which is a down dropped block of rock bordered by parallel faults. The dashed white lines on **MAP ONE** below show the approximate location of the Graben. The Graben area is a high-priority exploration target as explained later in this update.

**MAP ONE**  
**LUMINA, SALTA PROPERTIES AND GRABEN**



### Exploration Discussion

New zones of mineralization were discovered on Francisco I and Francisco II that require follow up trenching, mapping, sampling, Gravity geophysics and core drilling, including an area of leached cap alteration present to the west of the Lumina - Sarita Este boundary in the area of the Lumina camp. The

survey was conducted to determine if Mobile Metal Ion (MMI) geochemical survey is an effective exploration tool to detect sub-surface mineralization in this area. The belief is that Taca Taca porphyry related mineralization crosses the common boundaries. In addition, the historic evidence supports the belief that stand-alone porphyry, epithermal and IOCG mineralization are present on the Salta properties. MMI and chip samples were also taken from trenches at the Gold Pit Zone on Francisco I where historic assays of high-grade copper and gold are noted. The location of all samples is shown on the accompanying Google image. **TABLE ONE** displays the distribution of samples by property and sample type. A total of 270 samples were taken.

**TABLE ONE**  
**SALTA PROPERTIES AND SAMPLE DISTRIBUTION**

CLAIM ID	Hectares	Salta Interest	MMI Samples	Rock Samples	Target Metals
Francisco I	1,000	50%	14	18	Cu-Au
Francisco II	1,313	50%	102	4	Cu-Au
Sarita Este	830	100%	55	77	Cu-Au
<b>Total</b>		<b>1,986 (net)</b>	<b>171</b>	<b>99</b>	

#### **Francisco I and Francisco II**

While laying out the grid lines on Francisco I, a previously unknown and sizeable area of an epithermal style quartz boulder train was found in the north western area of the property. The boulder train is traceable for ~300 metres along the flank of a small knoll and is spread out down slope for another 350 metres to a wide canyon. The boulders appear to be a silicified sediment or tuff and often display relict pyrite box works. One boulder was noted to have minor barite. The boulders vary in color from grey, white, grey-white to red. The red colored boulders have more of the pyrite box works. More similar silicified rocks, although smaller in size, were noted on the pediment across the deep gully to the north. The way the boulders are situated along the east facing slope, suggests that an underlying mineral system may exist and dips westerly, which could host multiple veins, or stockwork.

At the Francisco I Gold Pit Zone, a 12-sample MMI grid was located. The Gold Pit Zone lies just within the Francisco I eastern boundary (~40 metres) and is poorly exposed due to pediment. Similar angular float is present upslope from the Gold Pit Zone as well as to the east across a shallow Quebrada. The backhoe was used to open up the Gold Pit Zone to determine the trend of the system. Two five to ten metre trenches, were dug on either side of the historic pit. Narrow veins are present that trend about 140 degrees and dip at a 45 degrees to the southwest towards the historic iron showings.

The veins consist of a quartz-jasperoid rock with exotic copper, chalcocite as well as specular hematite hosted in an intensely sheared and fractured granite(?), which has a pervasive reddish color. There is an array of smaller quartz veins in the fractured rocks with spotty malachite as well as specular hematite. Three one-metre chip samples and one 40 cm chip sample were taken.

Some of the MMI pits encountered similar rock present in the Gold Pit Zone trenches although no copper was seen. Generally the rock in the pits and in the immediate area displays the reddish color mentioned above and is likely a result of the abundant local iron here and upslope at the old iron mine. Historic samples were taken from locations away from the pit, which assayed elevated copper values in a reddish colored rock.

**Recommendations: Francisco I**

1. At the Gold Pit Zone an excavator is necessary to trench across the entire area of interest, which is at least 200-metres wide and trends a few degrees west of north into the Salta La Sarita II property and southerly towards the newly discovered Silica Boulder Zone. This is a high-priority exploration showing.
2. At the Silica Boulder Zone, an excavator should do two or three trenches across the area where the mineral system, veins, and stockworks occur.
3. If the MMI sampling is an effective exploration tool in this area, then the present small grid be extended to cover this entire area to the north, east and south using the same sample spacing and offset.
4. Gravity geophysics.

**PHOTO TWO  
MMI SAMPLE PIT AT GOLD PIT ZONE**

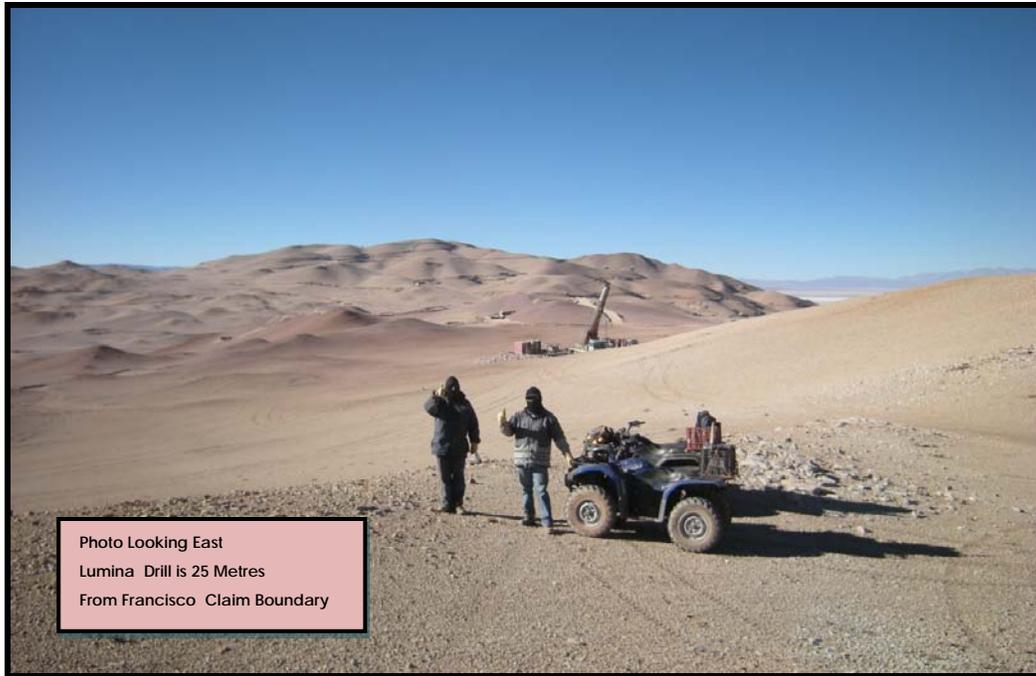


**Francisco II**

The majority of the MMI samples were taken from the Francisco II property. The original grid was designed to cover the entire Graben at a line spacing of 400-metres by sample spacing of 200-metres with an offset of 100-metres on the sample spacing to give a tighter spacing for the samples. All of the lines were

put in at the original designed spacing and approximate north northwest direction. In the field, and proximal to the boundary with the Lumina project, the spacing was changed to 250-metres by 100-metres, still retaining the offset, and the sampling was confined to that area proximal to the Lumina boundary where trenching and drilling was carried out by Corriente in the late 1990s. All sample sites were not completed.

**PHOTO THREE  
VIEW OF TACA TACA DEPOSIT FROM FRANCISCO II**



**MMI SURVEY DETAILS**

The MMI geochem survey provides excellent coverage along the Salta - Lumina common boundary. During the survey, good alteration was noted in the Lumina drill access road, which is located on part of the Cascadero property. One rock sample was taken and a number of geochem style samples.

More geology needs to be done in the Francisco II property, especially along the common boundary. IOCG alteration and rocks with IOCG affinities exist from MMI grid line 1 on Sarita Este to MMI grid line 8.5 on Francisco II where it appears to be cut off. The host rock appears to be a sequence of fine-to-medium-to-coarse sediments with possible interbedded clastic volcanics(?). The entire unit dips westerly into and across Francisco II (Graben area) between Taca Taca Bajo and Taca Taca Alto. Alteration is variably epidote, hematite, and quartz with mineralization consisting primarily of specular hematite, magnetite, epidote and exotic copper with rare chalcopyrite. Epidote and specular hematite are the most common minerals noted along the length of this alteration. The best copper mineralization noted in this area is in the rubble of a filled in trench between MMI grid line 6 and grid line 6.5. Other significant mineralization was noted in the two open trenches that cut the IOCG style alteration between MMI grid line 6 and grid line 6.5.

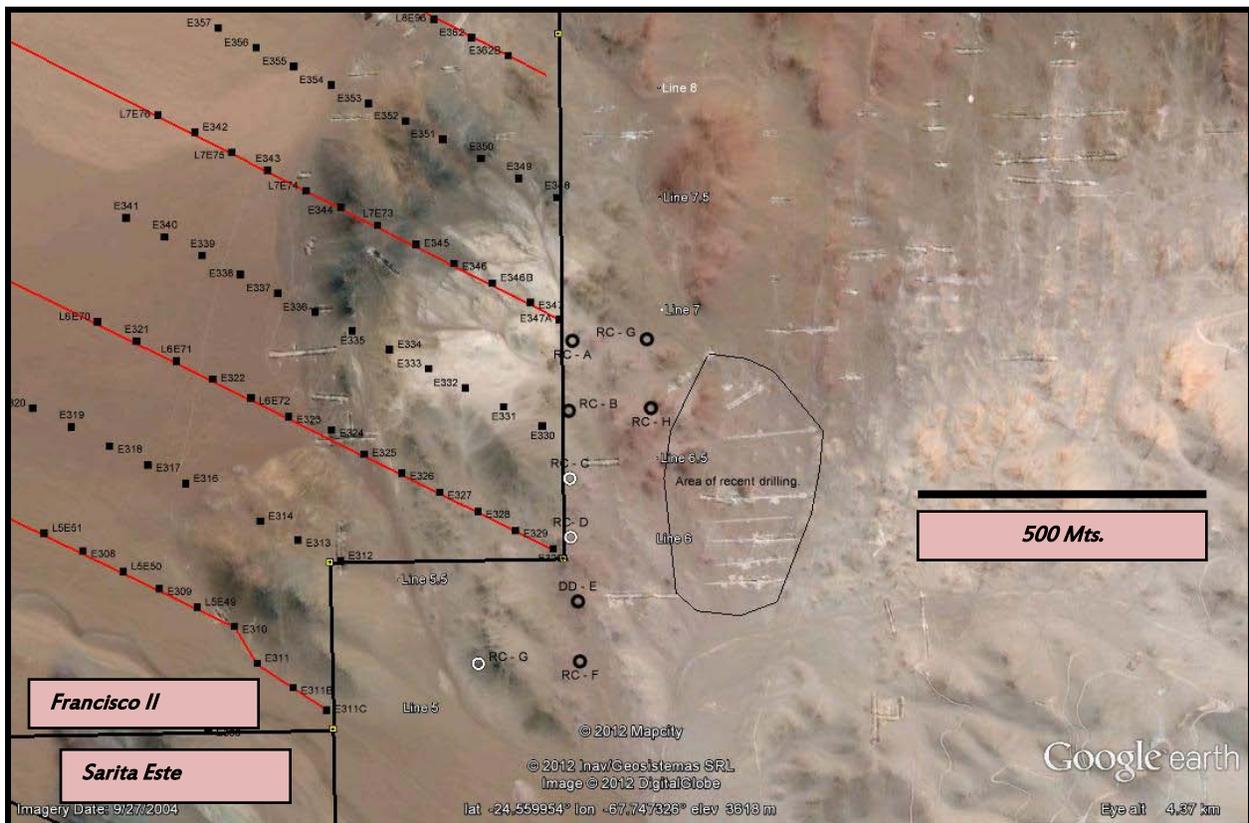
Between MMI grid lines 7.5 and 10, west of the IOCG style alteration, there is not an abundance of mineralization although occasional malachite is noted as well as considerable black copper specs (neotocite) and dendrites throughout this area. Argillic and sericitic alteration are also noted and seem to be more intense in the trenches that are closer to the Lumina boundary. It must be remembered that the

pediment cover comes down close to these trenches so the alteration could extend further out to the west under the pediment.

During the past month, Lumina focused on extending the mineralization in two areas. First, in an altered area northeast of the known resource and second, along the boundary with the Francisco II property with reverse circulation (RC) scout style drilling. Within the last ten days, Lumina moved drills from the northeast to the north central alteration area.

Noted on the Google sketch below are some of the RC drill holes, as well as an area where two or three RC holes are located, near and along the Salta - Lumina claim boundary. This area could include RC hole #19 mentioned in a recent Lumina press release. The drill collars marked with a black icon are recent and it is not likely that results are back for any of these. The drill collars marked with a white icon are an earlier scout drilling program. The area of current Lumina drilling to the northwest of the deposit.

### GOOGLE IMAGE ONE LOCATION OF LUMINA RECENT DRILLING



#### Recommendations: Francisco II

**Initial mapping next phase** – One geologist with helper to map the alteration along the Cascadero - Lumina boundary. This work should include mapping the open trenches as well as the rubble of the filled in trenches. Addition mapping is required in the IOCG, Lumina Camp and the South Gold Pit. Gravity geophysical survey.

**Sarita Este** – The focus of the MMI sampling on the Sarita Este property was its boundary with Lumina in the camp area and to review the alteration present in the southern central portion of the property where

previous work returned a number of anomalous gold bearing samples. Unfortunately there was not enough time for the latter and the work in this area was confined to three backhoe trenches on the last day of the program.

Of the fifty-five MMI samples from the Sarita Este property, twenty-two of these samples are part of the original grid layout that was designed to cover the large north to northeast trending basin between Taca Taca Alto and Taca Taca Bajo (Lumina). The remaining thirty-three samples were taken near the Lumina camp right along the boundary of the properties to test the possible extension of mineralization to the southwest. Near the Lumina camp area on the Sarita Este side of the boundary, a number of outcrops are present and were sampled. The rock here displays alteration similar to what is expected in a leached- cap environment. Quartz veining and stockworks are also noted. This area is ~600 metres southwest of the Taca Taca resource.

There are five areas of interest on Sarita Este include the Lumina Camp Zone (mentioned above), the Silica Knob Zone which overlooks the Lumina camp, the southern extension of the IOCG Zone, mentioned in the Francisco II notes and the South Central Gold anomaly and alteration.

The MMI samples tested the Lumina Camp Zone as well as the western edge of the IOCG Zone. The Silica Knob Zone has over 50 historic samples of which 20 assayed >100 ppb gold. Seventy-seven new samples were taken over a larger area in the Silica Knob Zone and the results of these should determine whether this area deserves more attention.

The South Central Gold Zone and related alteration had the least amount of exploration. Salta has taken quite a few rock samples from this area but the size and geological setting of this highly prospective gold zone are not yet properly defined or interpreted. The sampling in the past has shown that gold is the key element present in this area but the historic samples are from vein material which, being less recessive, protrudes out of thin pediment.

On the last day of the survey, three trenches were cut in the areas where the best historic gold values occur. In this area, once the trenches exposed bedrock it was noted that there are many smaller veins present and that alteration and veining are fairly continuous over the length of the trenches. In a number of areas, black spots and dendrites, likely neotocite, are present and this may explain the elevated copper assays in the historic samples. While reviewing the trenches, it was noted that the veins are random as in a stockwork pattern and are not confined to one or even two sets of directions.

The alteration in the South Central Gold Zone is present over an area of about 300-metres by 750-metres and is located within a broader, 750-metre wide zone with a complex set of fractures and structures that trend at ~345 degrees. The alteration is more consistent near the center of the zone and patchy towards

the outer areas although some outcrops of very intense alteration (argillic, sericitic) were noted in these outer regions.

**Recommendations:**

1. A geological map is recommended for the entire Sarita Este property with possibly more emphasis placed on the area near the Lumina Camp and along the boundary of the properties to the north.
2. A few days should be spent better defining the alteration in the South Central Gold Zone to determine how this alteration fits into the regional geological setting.
3. Excavator trenching is required in all mineralized parts of Sarita Este.

## **SURVEY SUMMARY**

In general, the MMI and rock sampling program proceeded as planned. There is some uncertainty regarding sampling the active pediment environment where the pediment is often rich in the elements we are analysing for (copper, iron, gold). The entire Taca Taca region is subject to significant Aeolian disturbance and potential surface contamination. The MMI sampling protocol may eliminate this risk as all the samples are taken from backhoe pits from a 20 to 30 cm horizon below the pediment surface. Also, in many sample holes there is an abundance of crystalline salts and there is risk that the salt may mask or interfere with the assay tenor of the target elements.

The backhoe is definitely the tool to use to expedite the program in a quick and efficient manner. The pits were put in very quickly and the sampling was probably done in a quarter to a fifth of the time required if digging by hand. Also, the pits were back filled as sampling areas were completed. At some of the pits pieces of bedrock were set aside to assist in future mapping.

It is clear that the survey area has many high-priority exploration targets that require much more work. The area of mineralization and the size of the systems on surface are impressive. The Taca Taca Mineral District is located within a major north west trending crustal suture called the Colama-Olacapato-Toro (COT) transverse zone. This massive zone is cut by several north and north east trending major regional faults.

Taca Taca Bajo is a 1.762 billion tonne Cu-Mo-Au deposit, which grades 0.66% CuEq and hosts 26.5 billion pounds of CuEq, of which copper contributes 80% of the gross value. It is a world class deposit in a world class structural setting. Escondida, the world's single largest copper producer, and other large copper mines are located to the west of Taca Taca in a similar structural settings in Chile.

Lumina continues to drill Taca Taca Bajo and its resource continues to increase in tonnage. In addition, to Cascadero's highly prospective but early stage prospects that adjoin Taca Taca Bajo to the west, the La Sarita I and La Sarita II claims further to the west of the Graben are virtually unexplored and have potential to host IOCG and hybrid porphyry style copper-gold mineralization.

The Salta planned to explore the Taca Taca area in January to March 2013. The emergence of Taca Taca Bajo as a world class copper deposit encouraged the Company rethink its portfolio exploration plan and that generated the project described in this brief. The program is more successful than contemplated as large-scale previously unrecognized alteration and mineralization are present.

There are good reasons for Salta Expl and Cascadero Copper management to believe that there may be more than one world class mineralised system in the Taca Taca Mineral District.

MAP  
TACA TACA MINERAL DISTRICT  
SALTA AND LUMINA PROPERTIES

