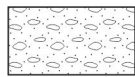
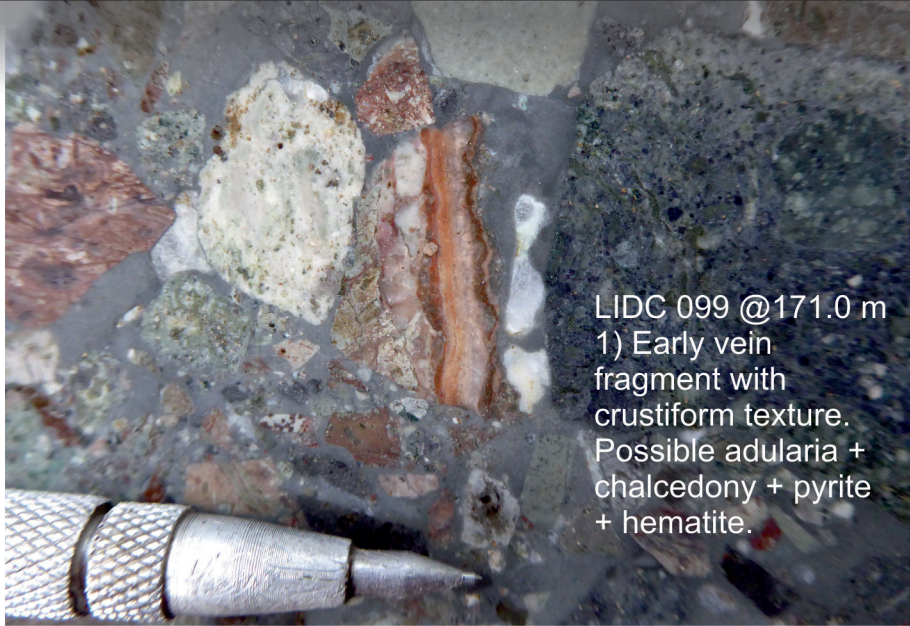


TARGET EVALUATION, LA INDIA, NICARAGUA

October 2016

By: Warren Pratt
Specialised Geological Mapping Ltd



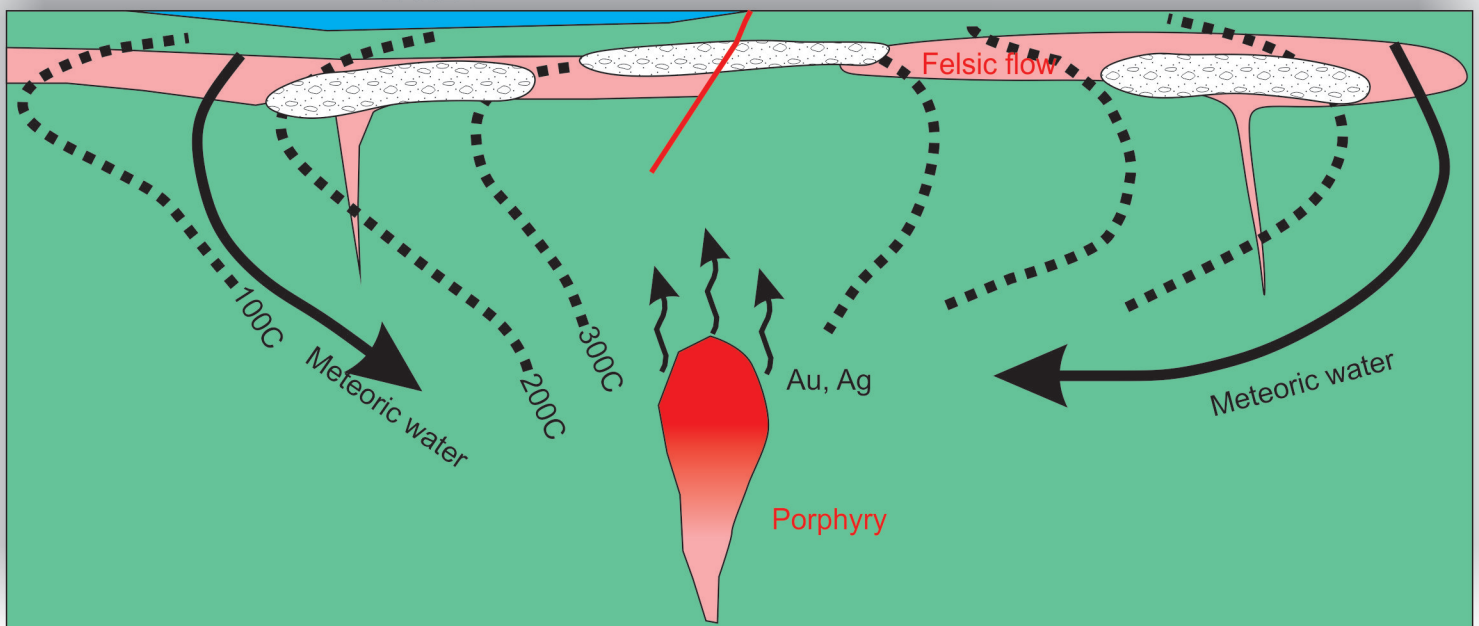
BOILING or MIXING ZONE



PORPHYRY

LAKE

Low relief, Maar volcanoes, base surges



info@geologicalmapping.com
Tel: ++ 44 (0) 1343 842813

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APPENDICES

Appendix 1 A3 drill logs.

Appendix 2 Soil geochemistry plots.



1 EXECUTIVE SUMMARY

The author was tasked to examine, summarize the exploration potential of, and design drilling for, targets at the La India project (Condor Gold plc) in Nicaragua. These targets are: Cacao, Tatascame (also known as Cristalito), Central Breccia and San Lucas.

The objectives were expanded during the visit and Mestiza, Real de la Cruz, Santa Barbara, Andrea and Los Limones, a recent discovery, were added. I was also asked to comment on the soil geochemistry program.

Nineteen days were spent making field visits, mapping, and logging relevant drill core and modelling in Mapinfo/Discover 3D. Mark Child (Chairman) commissioned the work.

Drill programs are designed based only on 'piercement' points (the point where drill holes cut veins) on long sections.

Summary of individual targets:

Santa Barbara – attractive target, should be drilled soon. 300 m total.

Andrea – a very attractive target, should be drilled soon. 500 m total.

Cascabel – a long shot, but well worth taking. 300 m total.

Mestiza – drill ready. Attractive target, probably a shallow oxidised high grade gold resource. Drill spacing to be established by resource modeler. Careful drilling required because of friable material.

Real de la Cruz – not drill ready and a less attractive target because of the difficulty in identifying continuous veins. 300 m total.

Cacao – drill-ready, an attractive target. 2100 m total, to be reduced if initial holes are disappointing.

Los Limones – virtually drill ready. 300 m total.

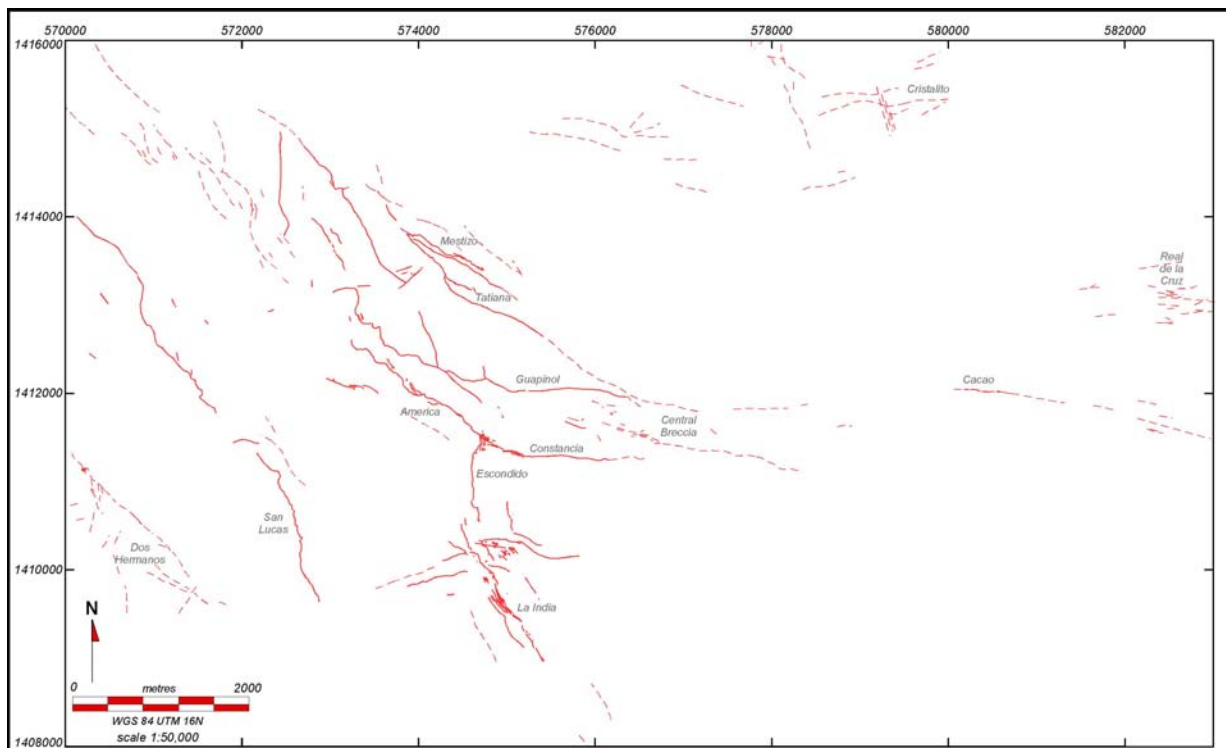
Tatascame (Cristalito) – very attractive target. Drill ready. 850-900 m of drilling.

San Lucas – less attractive target, not recommended for drilling in the short term. Possibilities for oxidised resource in the N and high grade resource in the S.

Central Breccia – difficult to develop a reliable geological model. Pencil-like oreshoots? Not recommended for drilling until after further 3D modelling.

2 INTRODUCTION

Most of the targets are shown on the figure below (from Tony Starling report, dated 2015). Andrea and Los Limones lie several km to the N.



Aside from the principal resources in the La India District (La India, America, Mestiza), there are four smaller resources: Central Breccia (57,000 oz Au), San Lucas (59,000 oz), Cristalito-Tatascame (34,000 oz) and Cacao (58,000 oz). The main objective of this site visit was to assess these four targets and make recommendations on how, and if, the resources can be enlarged.

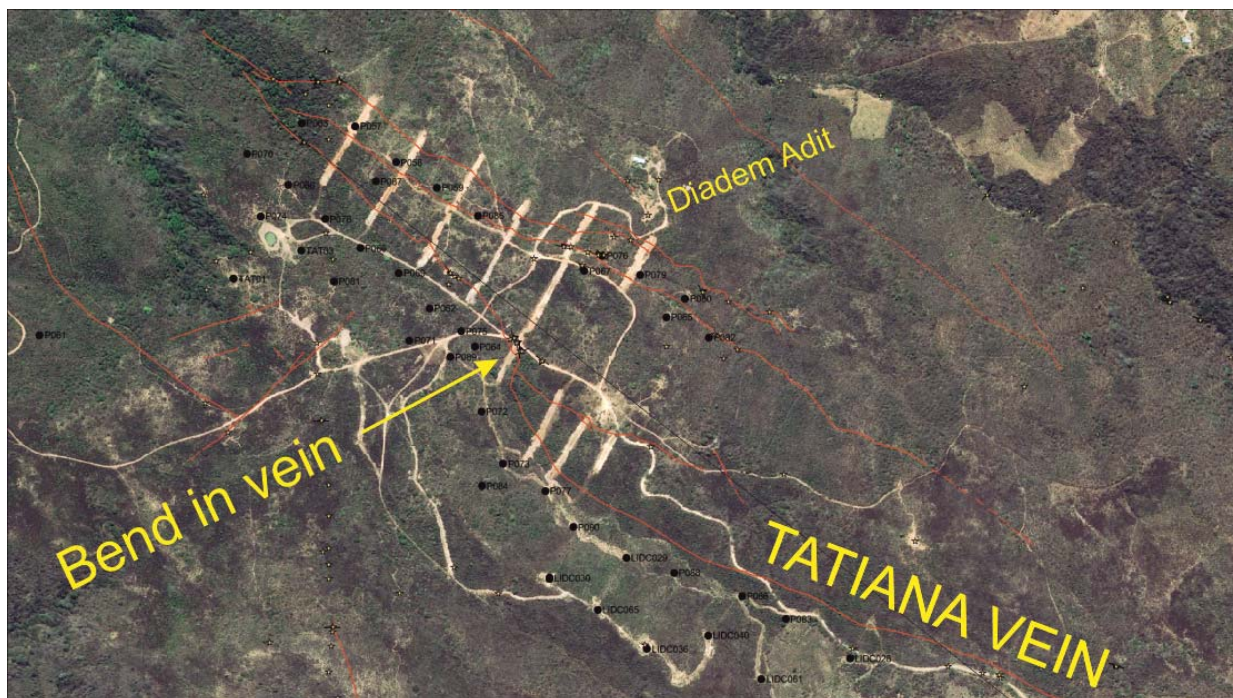
During the visit, the objectives were expanded to include most of the other targets in the district, with a view to recommending some for early scout drilling.

Appendix 1 shows my scanned A3 drill hole logs. A few have been drawn up neatly in Coreldraw and show representative photographs of drill core. Appendix 2 shows plots of soil geochemistry.

3 TARGETS

3.1 MESTIZA

Stratigraphy. The swarm of SE-striking veins at Mestiza is hosted by a thick glassy ignimbrite with common pumice fiamme. This is probably a good, brittle host for mineralization. The strike length with decent, potentially economic grades, proven by drilling, is at least 1.1 km, which is very encouraging.



Mineralization. The veins North of Tatiana, cut by the Diadem adit, are thin. Stopes and shafts mostly display post-mineral fault breccia, commonly limonite-rich and with smectite, up to 0.5 m wide. Quartz vein clasts occur within the breccias.

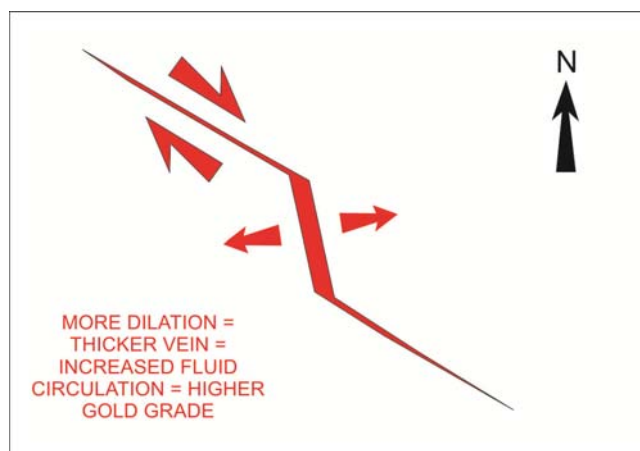
The informal miners like this because it is easily worked; gold is 'free' because the material is oxidised (no sulphides). I strongly suspect that the smectite is gold-enriched because of supergene enrichment. Some workings show friable 'vuggy' quartz veins up to 0.2 m wide. This vein material is widespread and comprises sugary, intergrown euhedral, locally drusy, quartz and coarse calcite (rhombohedral, not bladed), partly replaced by quartz. These veins are not crustiform, but instead comprise simple crackle breccia with wall rock fragments floating in the quartz/calcite matrix. (The textures are not as promising as La India, which shows numerous hydrothermal events and good crustiform banding.) Examples are shown below.



The veins N of Tatiana are very thin, making them unattractive drill targets. My examinations of workings in those veins generally show intact quartz + quartz-replaced calcite veins up to 0.2 m wide and post-mineral fault breccias, with quartz vein fragments, up to 0.6 m wide. The miners are targeting the latter with stopes because the material is soft and oxidised.

Tatiana should be the first focus for drilling at Mestiza. Exposures in the ‘bend’ in the Tatiana Vein, where it swings almost N-S, show by far the widest zones of vein crackle breccia and stockworks. A small trench at [574307 1413362] displays a footwall of at least 1 m of quartz vein matrix crackle breccia, 0.5 m of post mineral fault breccia, and a hanging wall of at least 2 m of quartz matrix crackle breccia. This is much wider than the more SE-striking segments of the Tatiana Vein. For example, stopes at [574195 1413488] show only 0.75 m of post mineral fault breccia with quartz vein fragments. The footwall shows an unknown thickness of crackle and transported, quartz-cemented breccia; the matrix of this breccia comprises rather massive, euhedral fine grained comb quartz with local late cream smectite (frequently stained orange with limonite).

The wide 'vein' within the North-striking segment of the Tatiana Vein implies a probable dextral component of movement on the vein set, which means that it is probably more dilational (wider). This is explained in the cartoon below. Russian drilling is fairly sparse in this segment and there is upside potential here for an oreshoot.



I logged the entire length of TAT 002. The vein comprises a zone of quartz cemented crackle breccia about 10 m wide (not true width). It contains only trace disseminated pyrite. Igneous magnetite is preserved in the wall rocks and ore zone, indicating the hydrothermal fluids were probably reducing, neutral or alkaline. There is virtually no clay alteration of the wall rocks. I have noted a similar tendency at La India, but the alteration at Tatiana is even weaker. The hydrothermal fluids simply did not penetrate far into the wall rock or were in equilibrium with the rock mineral assemblages.

The vein textures in drill core from Tatiana are simple, similar to those seen on surface. There is little sign of the crustiform banding of La India, suggesting only a few hydrothermal events. Rare bladed calcite (replaced by quartz) was seen. The quartz in the breccia is mostly comb type, with minor chalcedony. Some clasts contain quartz veins. Vugs occur after minor clay, possibly smectite. Some quartz veins in the wall rocks contain epidote, a normal indicator of higher temperature conditions (*normally higher than that for epithermal gold deposition, though it is important to look at the entire assemblage of alteration minerals*).

The long section of the Tatiana Vein is shown in Figure 1. The Russian drill holes (prefix P) mostly intersect the vein at shallow depth and show decent grades. No drill core remains. The deeper drill intersections (with LIDC or TAT prefixes) mostly have lower grades. Trenching gave erratic values, with some high grades (up to 25 g/t Au), but other trenches with disappointing grades (< 2 g/t Au). It is difficult to see a pattern, or understand controls on grade, in the trench results.

Future exploration. This very much depends on the geological model to explain gold grade at Mestiza. Is gold controlled by a boiling/mixing level? If so, where is it? Or are grades controlled by structurally controlled oreshoots, such as dilational jogs? I believe we can rule out lithology as the main control on grades; the same rock seems to occur from surface to great depth.

The Russian holes were mostly designed to cut the vein about 75 m below surface. They show good grade intersections over much of the strike length of the vein, which is very encouraging. These drill results also suggest that structurally controlled oreshoots are not the main control on gold grade at Mestiza, since gold is distributed widely. (Though I do not rule out the

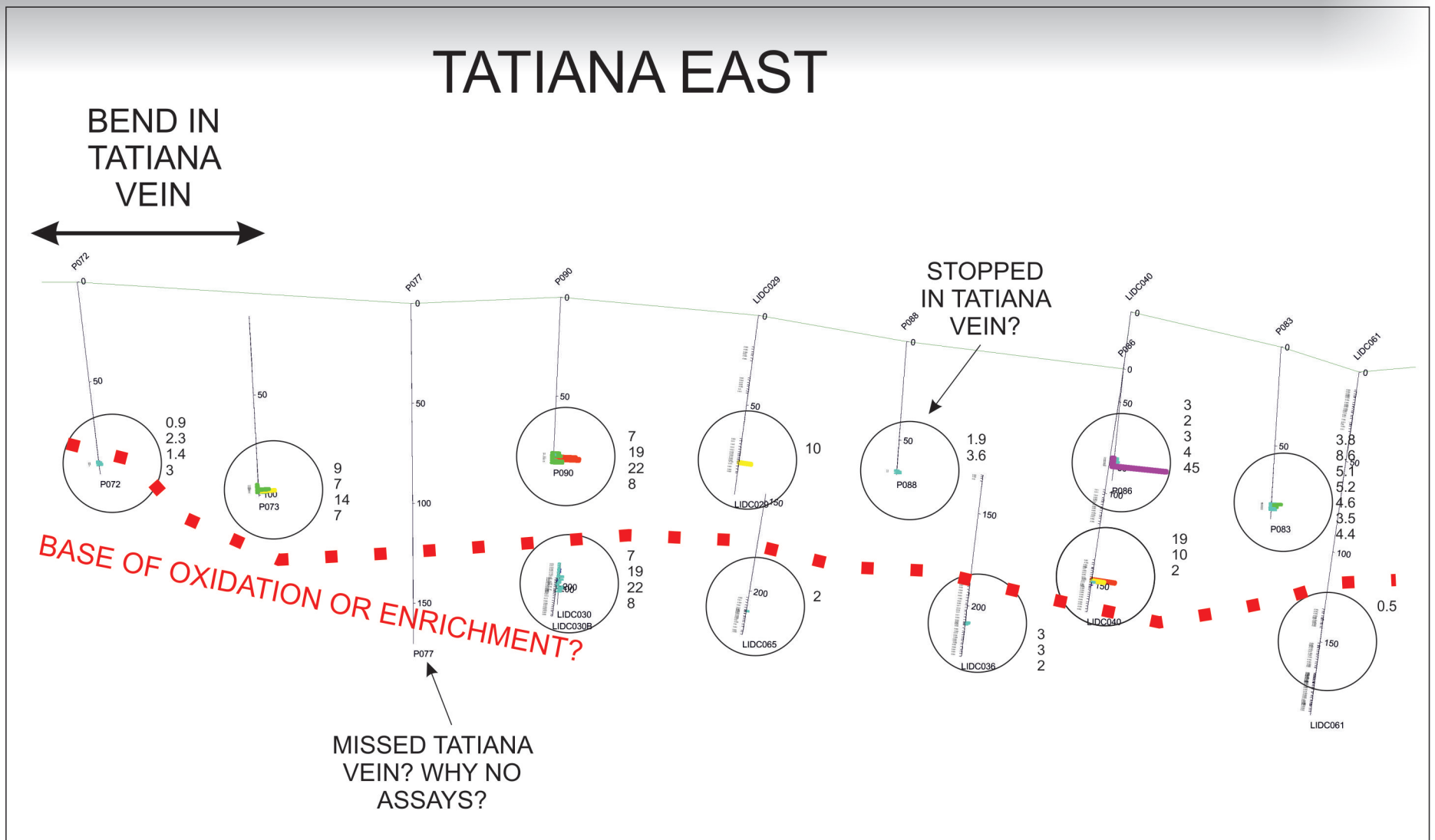
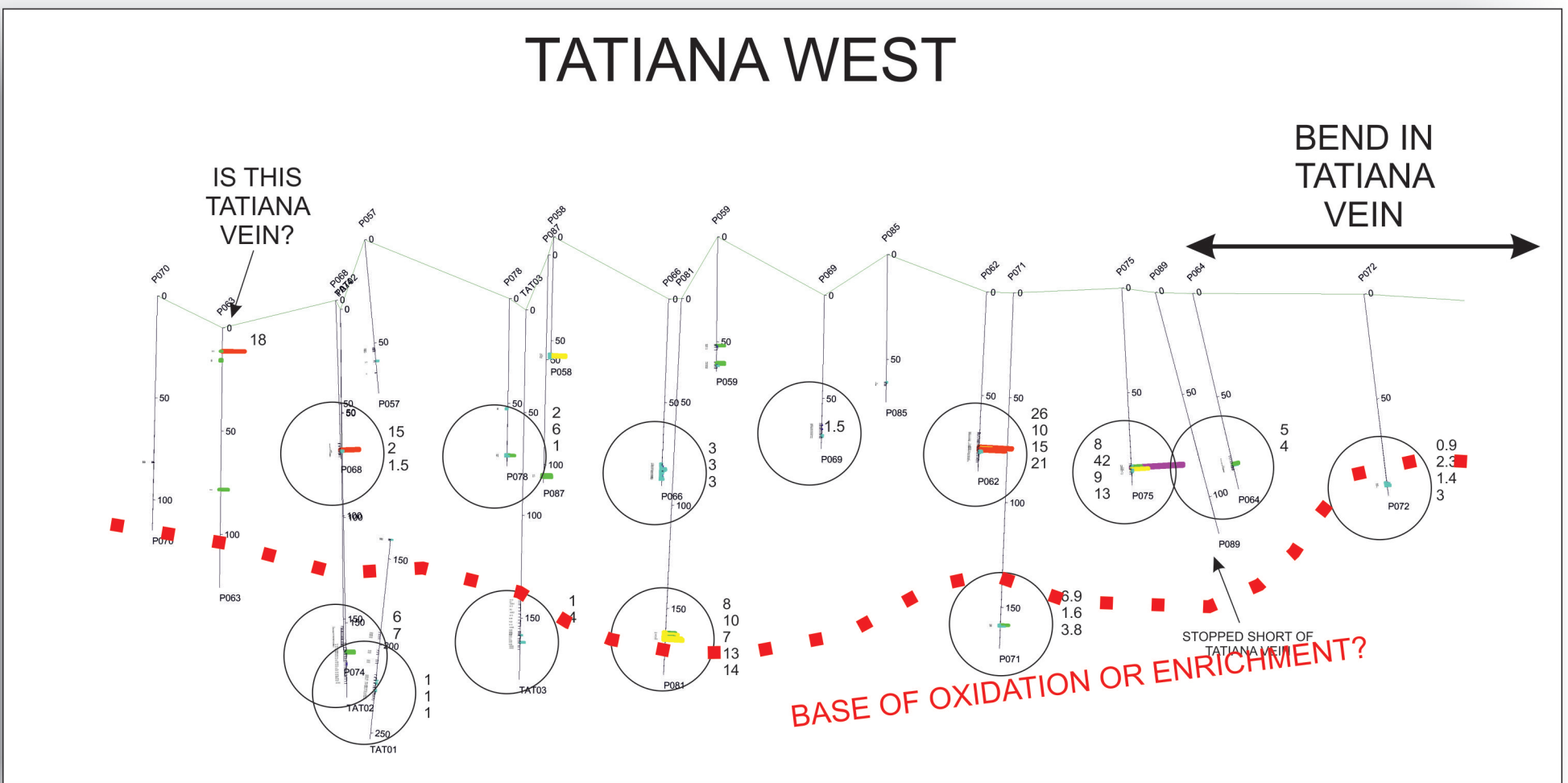
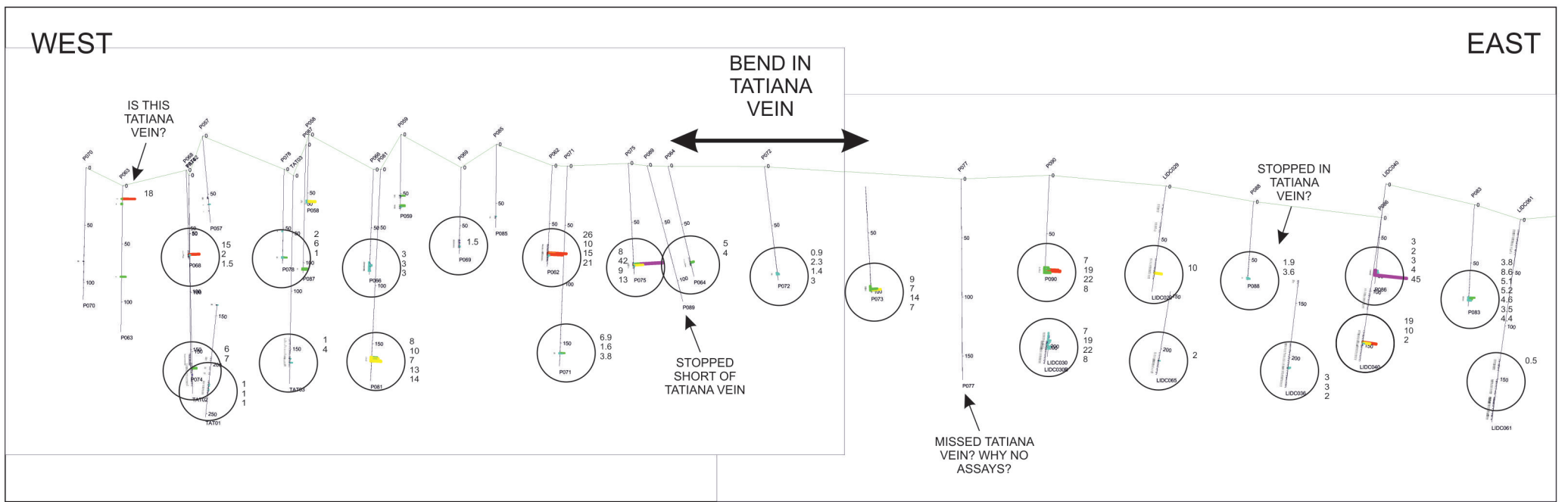


Figure 1 Long sections of Tatiana Vein (Mestiza target). Drill holes that cut the Tatiana Vein are shown with circles. Significant gold values are shown in g/t to the right of each circle.

potential for the short N-striking portion to have higher grades.)

The deeper, later holes clearly hoped to find a higher grade zone, perhaps related to boiling. Instead, they mostly show lower grades. I have only been able to examine core from one hole (TAT 002), and it shows discouraging, simple vein textures and minimal wall rock alteration, similar to textures at surface. This suggests that the best has already been seen at Mestiza. I would recommend a couple of deep drill holes to remove doubt, but I believe it is highly unlikely that there is a deeper, flat-lying 'boiling/mixing' zone with higher grades. Overall, the Mestiza set of veins does not seem to be a major upwelling zone, like La India. It looks more distal or lateral to the main upwelling zones. This fits with the weaker wall rock alteration, simple textures and lack of sulphides.

The key to understanding grade at Mestiza may be oxidation and supergene enrichment. I strongly suspect that gold grade has been upgraded by weathering and percolation of water down the vein/fault. Gold, and other metals, have an affinity to iron oxides/hydroxides, smectite and other clays. The strongly limonitic, smectite-rich post-mineral fault breccias are targeted by the small scale miners precisely for this reason (and because they are easier to mine and extract gold from, since it is free and not encapsulated in sulphides).

I have drawn a red dashed line on the long section (Figure 1). I suggest this is the depth of oxidation (or at least the limit of supergene enrichment). This may be an undulating contact; the tuff wall rocks are fresh and non-oxidised in TAT 002 at about 100 m depth, but this depth is not representative of the fault/vein zone, which will be much more permeable. If this model is correct, new drilling beneath this approximate red dashed line will give disappointing results.

The Russian drilling was spaced at about 70-80 m intervals and intersected the vein about 75 m depth. To meet the objective of converting these results into a 43-101 compliant Inferred Resource, and designing the new holes, requires the following guidance from the resource modeller:

- 1) a decision whether to include the Russian drilling or not. There is no core available (to my knowledge). There are no certificates or pulps/reject material available (to my knowledge). And there is no verifiable QA/QC?
- 2) whether to include trench samples in the resource model.
- 3) guidance regarding spacing of piercement points required for Inferred Resource category. That means a statistical analysis of the drill (and trench?) data. I would suggest doing this for both: a) the entire Tatiana drill hole database b) only holes that cut Tatiana Vein above my oxidation front line in Figure 1.

Once we have this guidance, we can design new drill holes. But my preliminary plan would be to target the vein using fences at shallow depth (c. 40 m depth), with careful triple tube drilling to ensure recovery (the material will be friable and oxidised). Then again at about 110-120 m depth. The intention would be to define an oxidised gold resource. I would begin the program straddling the best drill holes from previous drilling.

Quality control. There are some sampling issues in the Tatiana hole I saw. A very conservative approach was taken and some stockworked portions were not sampled. I don't expect these to give high grades, but they may extend the low-grade envelopes. The hanging wall in TAT 002 is under-sampled and sampling should be extended up to 155 m. For example, a 0.1 m thick vein in this interval has not been sampled. Are there any other holes which are under-sampled? This needs to be checked.

3.2 CACAO

Stratigraphy. This vein, which strikes almost E-W and is very steep (a positive feature when it comes to underground mining) is hosted by at least two andesite flows, separated by a thin interval of pumice lapilli tuff. The andesites have variable texture, depending on position in the flow; some parts are strongly amygdaloidal and flow foliated, others more massive or glassy and perlitic. There is definitely scope for improving the long section and cross sections by separating these units and this should be done.

Mineralization. My comments about the surface textures in previous reports are reinforced by a second field visit. The vein zone shows many characteristics of the very shallow part of an epithermal system. There is widespread phreatic breccia, abundant chalcedony, siliceous spirit levels (geopetal structures) and, at the W end, probable sinter float (see below). There is widespread kaolinite at surface and I strongly suspect this is due to an acid sulfate ('steam-heated') overprint.



There is not much drill core available because much of the drilling was RC (above vein zones), core recovery was poor in some vein intersections (e.g. CCDC 020) and sampling has left little material in the boxes.

The vein zone in CCDC 020 (Figure 2), one of the deepest intersections, comprises a major footwall fault with poor recovery. The hanging wall of the fault includes a good crustiform, dilational vein with zoned (white-translucent) euhedral quartz, colloform chalcedony, hematite and late coarse calcite (not replaced by quartz). There is trace illite in the vein. This vein runs up to 5 g/t Au. Higher in the hanging wall there is a phreatic (?) breccia which includes calcite vein fragments and has siliceous sediment spirit levels (geopetal structures) similar to those at Central Breccia. The breccia passes up into a massive, crudely banded calcite vein.

The wall rocks in CCDC 020 show extensive weak calcite + pyrite + clay (illite?) + sphene alteration. Pyrite rises to about 2% close to the vein. The abundance of calcite, both replacing phenocrysts and in amygdales, suggests that the hydrothermal fluids were alkaline and reduced. The 'illite' may well be mixed layer illite-smectite.

CCRD 004 (Figure 2) displays good grades, but core is very broken, with poor recovery.

WEST

CACAO VEIN

EAST

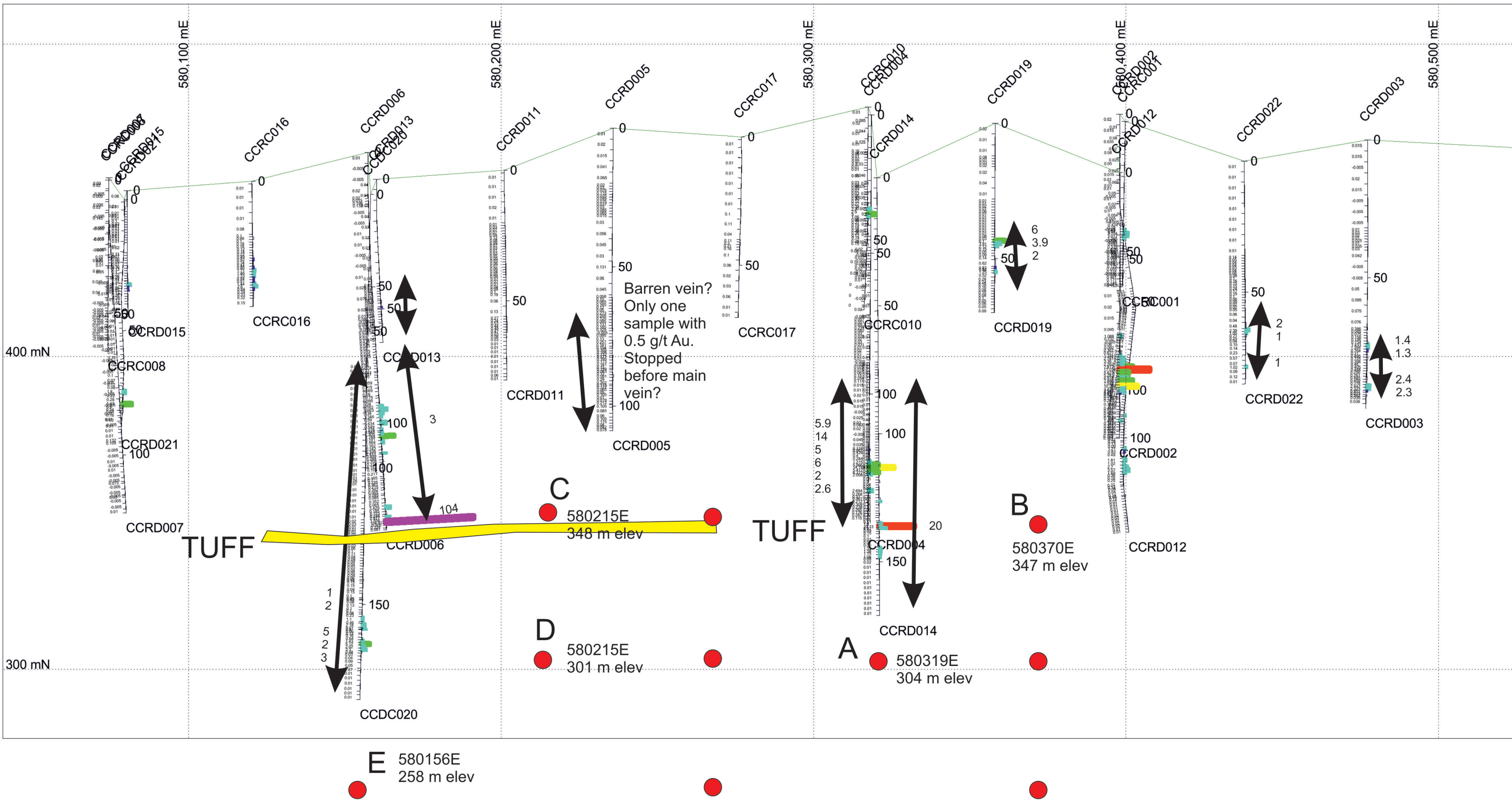


Figure 2 Long section of the Cacao Vein. Logged portions shown with arrowed lines. Significant gold values are shown in g/t beside the arrows. Red dots, spaced at approximately 50 m intervals, show suggested drill piercement points.

(Clearly, recovery is going to be a big issue for drilling in the future.) The gold occurs in a deeply oxidised and broken syn-mineral (?) breccia with common vein fragments. The quartz is sugary. There is also a post-mineral fault with smectite.

CCRD 005 cut a narrow vein of granular quartz and chalcedony, which seems to be barren. There is an andesitic autobreccia (?) with quartz-rich matrix, overprinted by a stockwork of fine grained quartz and chalcedony veinlets. The direction was not optimal and it is possible the hole was stopped before reaching the main vein.

CCRD 006 is very encouraging. The foot wall (N wall) displays a moderate stockwork and minor crackle breccia of quartz + calcite + chalcedony veinlets. Individual veins are up to 0.2 m, with a variety of directions. The main vein intersection, about 125 m depth, comprises massive white calcite (locally bladed) + rare bands of fine grained pyrite. The vein locally comprises a mix of dogs-tooth (scalenohedral) calcite and colloform chalcedony. Wall rock alteration actually increases towards the end of the hole, to about 2% disseminated pyrite. But the hole was stopped only a few metres below the vein intersection. Maybe for technical reasons? There is a 104 g/t Au result from the massive vein. There was no sign of a post-mineral fault. It may have jumped to the hanging wall side of the vein?

CCRD 013 was a shallow hole with no assay results above 1 g/t Au. The core is very broken, one core box is 'back to front' (driller's mistake?). A major post mineral fault defines the top of the zone. The footwall comprises a hydrothermal breccia with a fine-grained quartz + pyrite matrix. Clasts of andesite show clay alteration. There is late drusy quartz. The hydrothermal breccia is locally 'sandy' resembling the phreatic breccias from Central Breccia. It passes down into a massive vein with colloform chalcedony + fine grained quartz + pyrite + minor late drusy quartz.

CCRD 019. This core is very broken, with poor recovery. The decent grades (up to 6 g/t Au) come from a vein of fine grained quartz and chalcedony, with local disseminated pyrite. Only small vein fragments are present in the core box. Below 50 m depth there is a long run of breccia (poor recovery). The top part is clearly syn-mineral vein breccia, with kaolinite-altered clasts cemented by sugary massive quartz (or cristobalite?). Lower down is a hydrothermal breccia with numerous oxidised red porphyritic andesite clasts. It includes scattered small vein clasts. The hole is interesting. There is no single good vein, but a long run of probable phreatic breccia. This looks high level. The kaolinite and possible cristobalite imply an acid sulphate overprint at the top of an epithermal vein system.

CCRD 022 also shows poor recovery and broken core. A vein runs 2.3 g/t Au and comprises colloform chalcedony, fine quartz and local coarse euhedral quartz. Local bladed calcite is replaced by quartz. This is a typical boiling level texture and occurs only 75 m below the surface. However, this texture is rare in core from Cacao.

Future exploration. The full potential of Cacao has not been tested. There are some spotty, very high grades from deeper holes which demonstrate the clear potential. There is a good chance that the main boiling level, with higher grades, has not been drilled yet. Drilling to date shows similar high level textures throughout, with no obvious improvement in textures downwards. But I don't find that discouraging.

Figure 2 shows suggested 50 m-spaced piercement points for drilling. The total drilling is approximately 1850 m. The order of drilling is labelled with A, B etc. Non-labelled holes are lower priority. There seems no evidence of a structurally controlled oreshoot (as we have in La



India); I prefer an elevation (boiling or mixing) control. However, I cannot rule out the possibility that a subtle bend or jog in the vein is an oreshoot.

There is more upside potential at Cacao. It is probable that, as close to Real de la Cruz (in the river valley downstream of the dam), the andesites overlie rhyolite (or other felsic) and that this is a more favourable host for veining (as at La India). We really have no idea of the depth of the felsic 'basement' below Cacao; it occurs about 410-420 m elevation in the dam river valley, which is only about 50 m below ground surface at Cacao. But if we can develop an internal stratigraphy for the 'andesites' (and it clearly does show an internal stratigraphy) then it may be possible to extrapolate the depth to basement. This a big ask in the short term.

Quality control. What is going on with downhole survey in CCRD012? It is all over the place. Does this hole need to be removed from resource calculation? Carlos Pullinger pulled all available documentation for the hole, but there is no record of downhole surveys.

Core recovery was poor and it is frustrating working with so little core.

3.3 LOS LIMONES

This area was visited for a full day on the 14th September with Carlos Pullinger. The topography is very well featured, with classic dip and scarp slopes. This is a real bonus for mapping and, with the help of Carlos' previous mapping, enabled me to make a partial map quickly (Figure 3). Textures are shown in Figure 4.

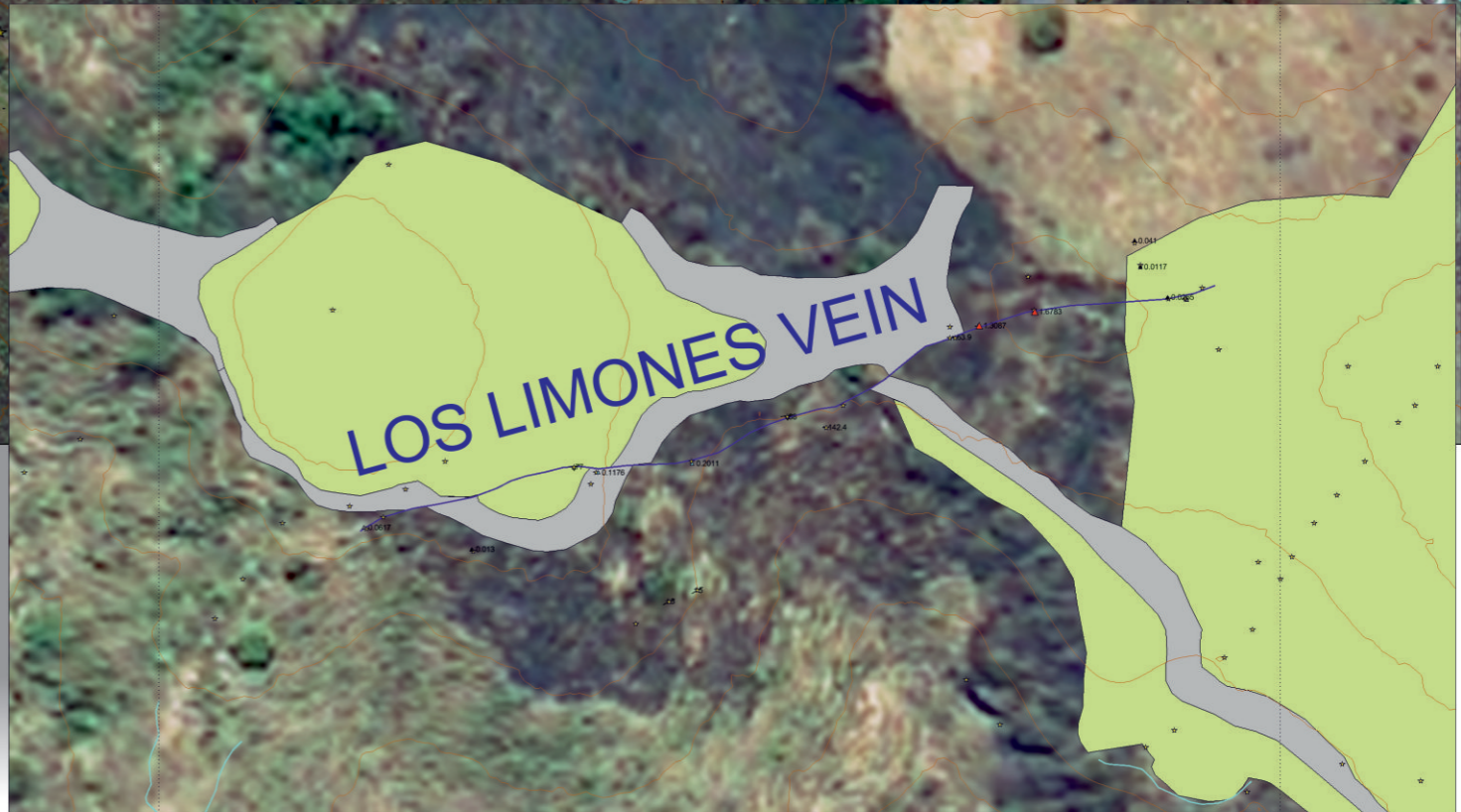
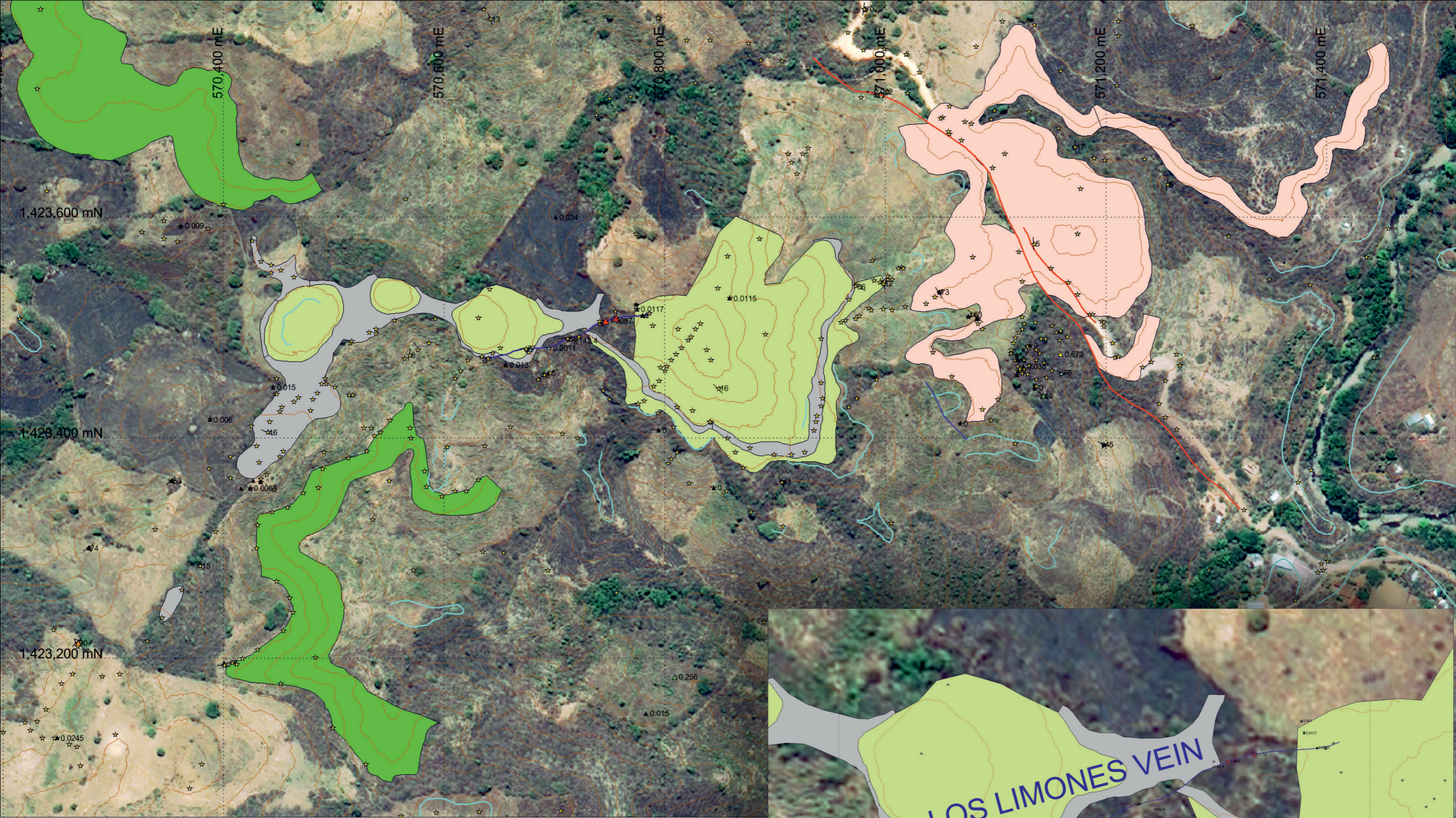
The stratigraphic sequence, probably younger than La India, comprises an andesite overlain by a relatively thick andesitic, pumice-poor lapilli tuff (not coloured in Figure 3), forming a distinct scarp feature. The tuff is overlain by a very distinctive, organic rich, black tuffaceous mudstone; an excellent marker. In turn, this is overlain by brown weathered, andesitic crystal tuffs and tuffaceous sandstones.

In a new trench, the vein is narrow (0.5 m). This trench coincides with a 53 g/t Au grab sample. The vein is hosted within a deeply weathered coarse volcanic sandstone or crystal tuff. The vein has a simple crustiform texture, with minor amethystine quartz. There are some possible white adularia bands and late light green chalcedony. Minor pyrite shows black coats, possible supergene chalcocite (?).

Most of the exposures and semi *in situ* rock I saw comprise silicified rock, with only minor veining. A new trench at [570712 1423489], only about 40 m W of the 'bonanza' sample, comprises a 0.1 m wide quartz vein within a halo of white, limonite stained kaolinite + quartz altered crystal tuff (?). An exposure at [570674 1423481] comprises a 0.5 m wide zone of silicified rock and veinlets. Previously reported 'quartz breccia veins' up to 3 m wide were not seen: I suspect silicified and clay altered rock, with scattered veinlets, was mistaken for a single vein. It stands up proud from the hillside and forms exposures. Interestingly, no post mineral faults were seen in any of the trenches.

The strike length of the main vein occurrence is about 160 m. I didn't examine the East extension. Towards the West there is a discouraging lack of float, or exposures, suggesting the vein has died out (at least at surface). It reappears farther West, where float includes bladed calcite (replaced by quartz) (Figure 4). Overall, if the vein is continuous at depth, this would make the strike length over 400 m. The discontinuous nature of the vein suggests it may be 'en echelon' in style.

Future exploration. The Los Limones Vein is thin and has a short strike length (or has gaps). The steep orientation is favourable. The vein textures are certainly encouraging and the presence of adularia, if confirmed, implies the boiling level. I suspect the lack of post mineral faulting is important; the Los Limones vein could be a linking structure between more continuous and extensive NW-striking faults. A cartoon model is shown below. This means that it is unlikely to be a long vein, like La India.



- | | | | |
|--|---------------------------------|---|---|
|  | Mudstones, tuffaceous sandstone |  | Felsic lava |
|  | Andesite |  | Crudely bedded tuffaceous ssts and crystal tuffs. |

Figure 3 Partial geological map of Los Limones. Cyan lines are crests (scarps). Yellow stars show field localities. Faults in red, veins in blue.



LEFT. Temporary locality 356 Crustiform vein with cockade quartz, quartz replacing bladed calcite.



RIGHT. Temporary locality 393. Sugary quartz vein with late euhedral adularia in vug.

BELOW. Temporary locality 340. Sheeted quartz veinlets within silicified rock.

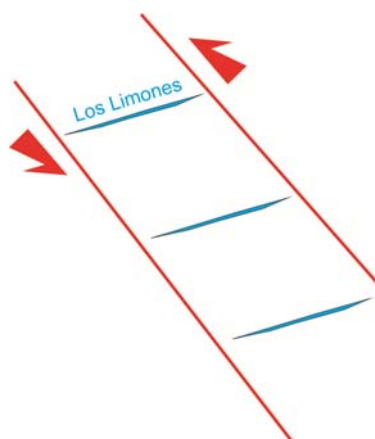


BELOW. Temporary locality 336. Silicified rock with irregular stockwork with drusy, euhedral quartz.



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Figure 4 Example textures from Los Limones.



The host rocks at surface are not mechanically good for vein development. However, the andesite at depth may be much better. This presents upside potential. More mapping, cross sections are required. I recommend only 2 drill holes, perhaps from the same platform, to test the vein at approximately 75 m and 150 m depth. But first, cross sections or 3D modelling are required. Total meterage approximately 300 m.

3.4 TATASCAME (CRISTALITO)

Carlos and I made two half day visits to this area, which has considerable upside potential. A partial geological map (work in progress) is shown in Figure 5. I also logged a lot of the available drill core (see Figure 6).

The prospect sits at the intersection of ENE-striking veins and the Highway Fault. It also marks the point at which a major felsic lava flow starts to swing eastwards towards Real de la Cruz and Santa Barbara.

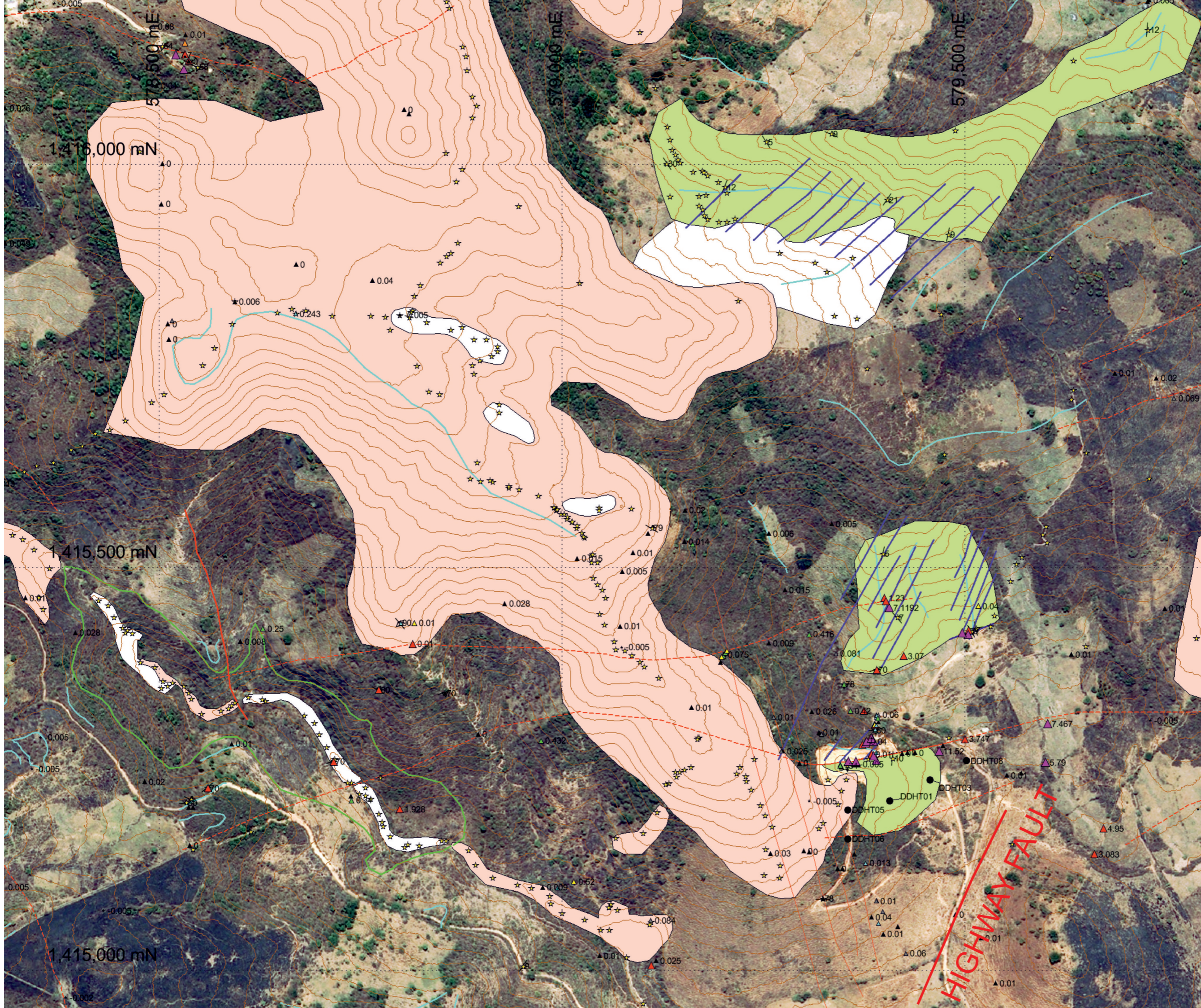
Stratigraphy. The lithostratigraphy is dominated by a major felsic flow or sill. This is pink or buff and frequently shows intense flow foliation. The rock weathers into distinctive fissile sheets, like slate. I hesitate to call it a rhyolite, because we have seen at La India how the tops and bottoms of flows resemble rhyolites, but the cores are more like dacite or possibly even dacitic andesite. But ‘rhyolite’ is a good field term and this is undoubtedly the same unit that tracks eastward towards the ‘rhyolite’ at Real de la Cruz.

The rhyolite seems to sit with angular unconformity on a variety of rocks. A creek to the W, with excellent, continuous exposure, shows a major welded ignimbrite, with large pumice fiamme, below rhyolite. But the small open pit at Tatascame is more complex; there the rhyolite seems to sit unconformably on bedded tuffs; there is no sign of the welded tuff. Drill holes show the presence of different lava flows and a porphyritic microdiorite at depth. Clearly there is a structural story here which needs to be unravelled. (*Angular unconformities in volcanic sequences are frequently due to tilting by contemporaneous faulting, sometimes listric. I can think of quite a few low sulfidation epithermal deposits which are similar. Los Gatos, Mexico; Corani, Peru; Navidad, Argentina.*)

There are small outliers above the rhyolite of a rhyolitic, quartz-crystal rich tuff which has extensive chalcidonic alteration, kaolinite and possible local hypogene alunite. This needs to be confirmed by Terraspec and I have taken samples.

Mineralization. The sequence is cut by at least two ENE-striking veins which seem to dip





LEGEND

- Bedded tuffs
- Felsic rocks



Figure 5 Partial geological map of Tatascame. Cyan lines are crestlines (scarps). Purple lines are structure contours. Yellow stars show field localities. Veins in red. Triangles show gold assays in g/t. Drill hole collars are solid black circles.

steeply S. Direct examination of workings is difficult because of collapses or open stopes. The small open pit, which targets the main 'Tatascame Vein' shows no vein, only a moderately S-dipping fault. But clearly, mining took place here, so a vein must have been present; it may pinch and swell or be cut out by post-mineral faulting.

The drill holes show that the wall rocks have widespread chlorite + epidote alteration. This propylitic assemblage is so pervasive that it cannot be simply a halo to the (narrow) veins. It probably represents an alteration related to semi-regional burial diagenesis, a deeper porphyry system, or a local effect due to the microdiorite at depth. A similar alteration is seen at the SE end of La India.

DDHTO 01 shows a thick sequence of crudely bedded lapilli tuffs, overlying a lava or sill of porphyritic dacitic andesite. The Tatascame Vein comprises several metres of banded calcite and colloform chalcedony, but the core is very broken and recovery was poor. There is also a crackle breccia with coarse calcite matrix in both the hanging and foot wall. These display local geopetal (spirit levels) of laminated fine calcite. Gold grades are only 1 g/t (Figure 5), however not all the core is sampled – it should be extended several metres into the hanging wall since there are non-sampled calcite veins up to 70 mm thick. I don't expect these to carry high grade, but we need to know and they should have been sampled at the time. Calcite + epidote veinlets occur within the hanging wall. The remainder of the hole comprises andesite-microdiorite with an almost intersertal texture. It may be a sill.

DDHTO 04 shows coarse polymict lapilli tuff down to 45 m, then two porphyritic andesite or dacitic andesite flows, separated by a thin sandstone. The base of the lower andesite comprises hematitic, amygdaloidal autobreccia (?). The vein is a good intact dilational vein with excellent botryoidal sprays of bladed calcite (intergrown with quartz?) with a later fill of coarse calcite and euhedral quartz (see Figure 7). Grade is only 1 g/t Au. There are two missing core boxes from the vein zone (accident in core shed?) and the following box looks suspiciously as if it comes from another drill hole. The lithologies make no sense.

DDHTO 05 Shows the bedded lapilli tuffs again underlain by andesite, autobrecciated locally. The andesite hosts scattered calcite and coarse zeolite (laumontite?) veins and weak crackle breccias. There is an upper vein, about 0.5 m (true thickness) of mostly massive coarse calcite. It runs 1.3 g/t Au. The main 'vein' includes several 1 to 2.3 g/t Au samples (Figure 6). However, recovery is poor or there is missing core? Remnants in the boxes imply the vein is a crackle breccia and intense stockwork of coarse grey calcite, with a local botryoidal texture, and colloform chalcedony.

DDHTO 09 is a critical hole. It cuts felsic lava at the top, underlain by a probably crudely bedded pumice-rich lapilli tuff. This is underlain by a very unusual 'limestone', a rock comprising concretionary fine grey calcite with remnant pumice lapilli (see Figure 7). It is about 0.5 m thick. The underlying andesite is mostly autobrecciated. Several veins occur at the approximate contact between andesite and the microdiorite at depth. The veins show banded coarse calcite + chalcedony + coarse adularia + trace grey sulphides (silver?) + hematite + light green clay (Figure 7). Local coarse calcite crystals are rimmed by chalcedony or very fine adularia. Grade in this vein swarm is good, up to 10 g/t Au.

I did some 3D modelling which shows excellent continuity of the main Tatascame Vein (see screenshots in Figure 6). It dips steeply S.

Future exploration. The epithermal system has a very low overall sulphide content (in vein and wallrocks). There are propylitically altered (chlorite + epidote) host rocks. There is virtually no clay alteration of the wall rocks. So again, as at La India and Mestiza, the hydrothermal fluids were alkaline and did not give the normal weakly acidic assemblage of pyrite + illite. This is not necessarily negative; some epithermal systems are dominated by calcite and alkaline fluids, particularly in back-arc settings far removed from igneous intrusions (e.g. Patagonia, Cerro Vanguardia).

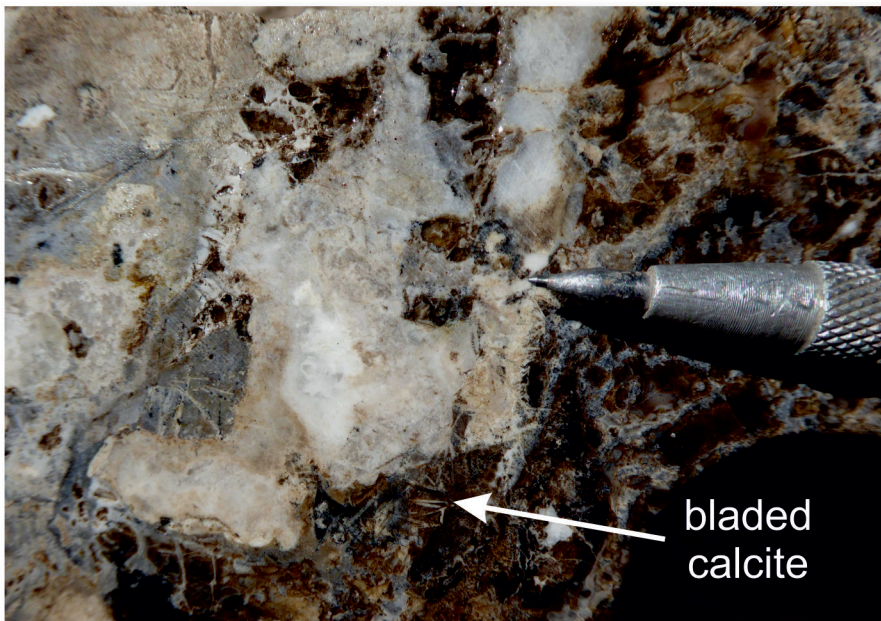
The bedded lapilli tuffs are probably poor hosts for veining. But the lava flows, microdiorite and felsic (rhyolite) flow have good potential for hosting a decent vein. I very much like the fact that the rhyolite seems to drop to lower elevation towards the W. Also that a major welded, glassy tuff occurs beneath the rhyolite in the creek towards the W. Collectively, these have the potential to be great hosts for a vein.

Furthermore, the dramatically improved gold grades towards the W, with visible adularia and trace grey sulphides in drill core, is very positive. And the assays need to be investigated because the grades may be higher (see comments below).

The suggested drill program is shown as red piercement points on the long section (Figure 6). The total meterage, depending on platform sites, is about 850-900 m.

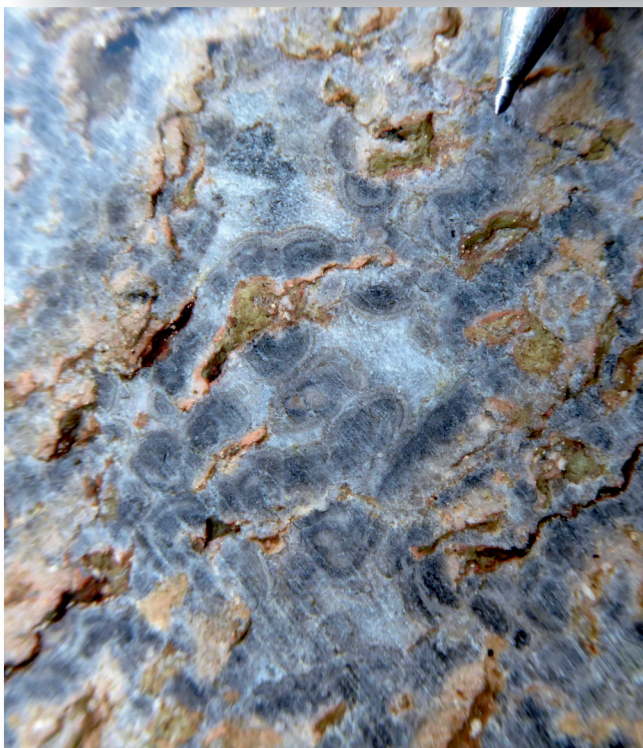
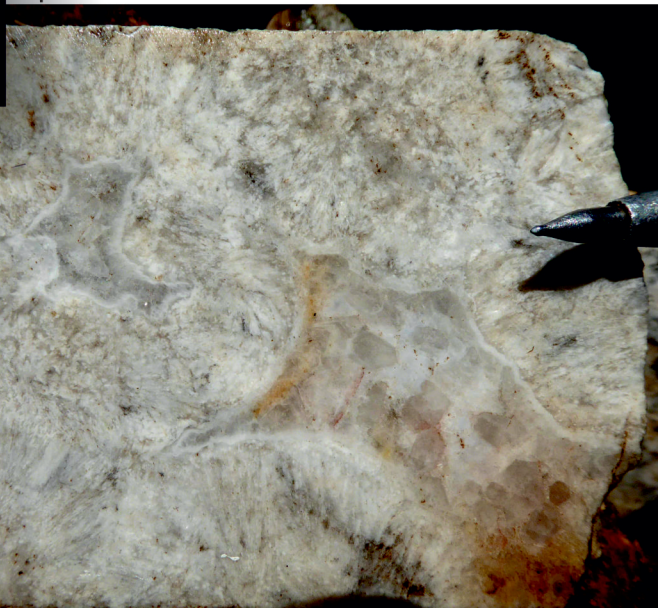
Quality control. Poor recovery in some of the mineralized zones. More assaying of drill core is required. The downhole surveys need to be checked; DDHTO 04 looks unusual.

The assays from DDHTO 09 (and others) are suspicious. There are two samples that have precisely 10 ppm Au and no drill sample has a higher value. To me it looks like the data have been rounded down or that this was an upper detection limit and the overlimit assays are missing. Are the original data lost? Do we need to submit for re-assay? The database needs to be corrected.

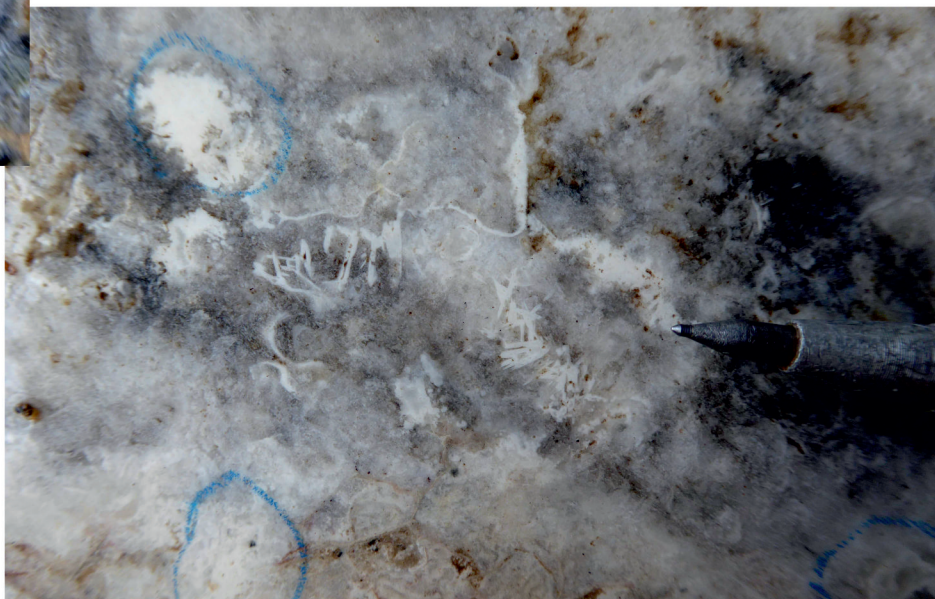


LEFT. DDHTO 04 @ 124.4 m. Bladed calcite (not replaced by quartz) and brownish carbonate.

BELOW. DDHTO 04 @ 122.8 m Botryoidal habit, bladed calcite (intergrown with quartz), with late fill of coarse calcite and euhedral quartz.



LEFT. DDHTO 09 @ 65 m. Concretionary 'limestone' with remnant pumices.



ABOVE. DDHTO 09 @ 95 m Detail of coarse white adularia.



LEFT. DDHTO 09 @ 95 m. Crustiform coarse calcite + chalcedony + adularia. Minor hematite.



Figure 7 Example textures from Tatascame.

3.5 CENTRAL BRECCIA

I walked over the ground again with Carlos for two half days. And logged a considerable amount of drill core, assays in hand. Then did some 3D modelling to try to understand controls on gold mineralization.

Lithologies and stratigraphy Central Breccia is an unusual, non-vein, style of mineralization for the La India District. It occurs more at less at the intersection of the major NE-striking Highway Fault with the andesite-filled graben that runs up towards the America and Guapinol veins. This tectonic setting is analogous to Tatascame (Cristalito), and suggests that the Highway Fault was a significant structure for localising fluid flow and mineralization.

However, drilling and trenching have not produced a coherent geological model to explain erratic gold grades at Central Breccia. This is not a simply modelled vein, as at La India. This is reflected in the variety of drill directions, carried out during different phases.

The technical report by Luc English *et al* (dated 2012) is detailed and the interpretation in my opinion is correct. The hill comprises a hydrothermal breccia, with an irregular, amoeba-like shape. (Figure 8, a geological map, does not show the breccia, because it has not been properly mapped on surface. But it broadly corresponds to the gold grade.) The breccia intrudes a porphyritic andesite (lava flow). ‘Intrudes’ is probably the wrong word, since the breccia is mostly an *in situ*, crackle-type breccia, comprising only andesite clasts that have not been significantly altered or transported.

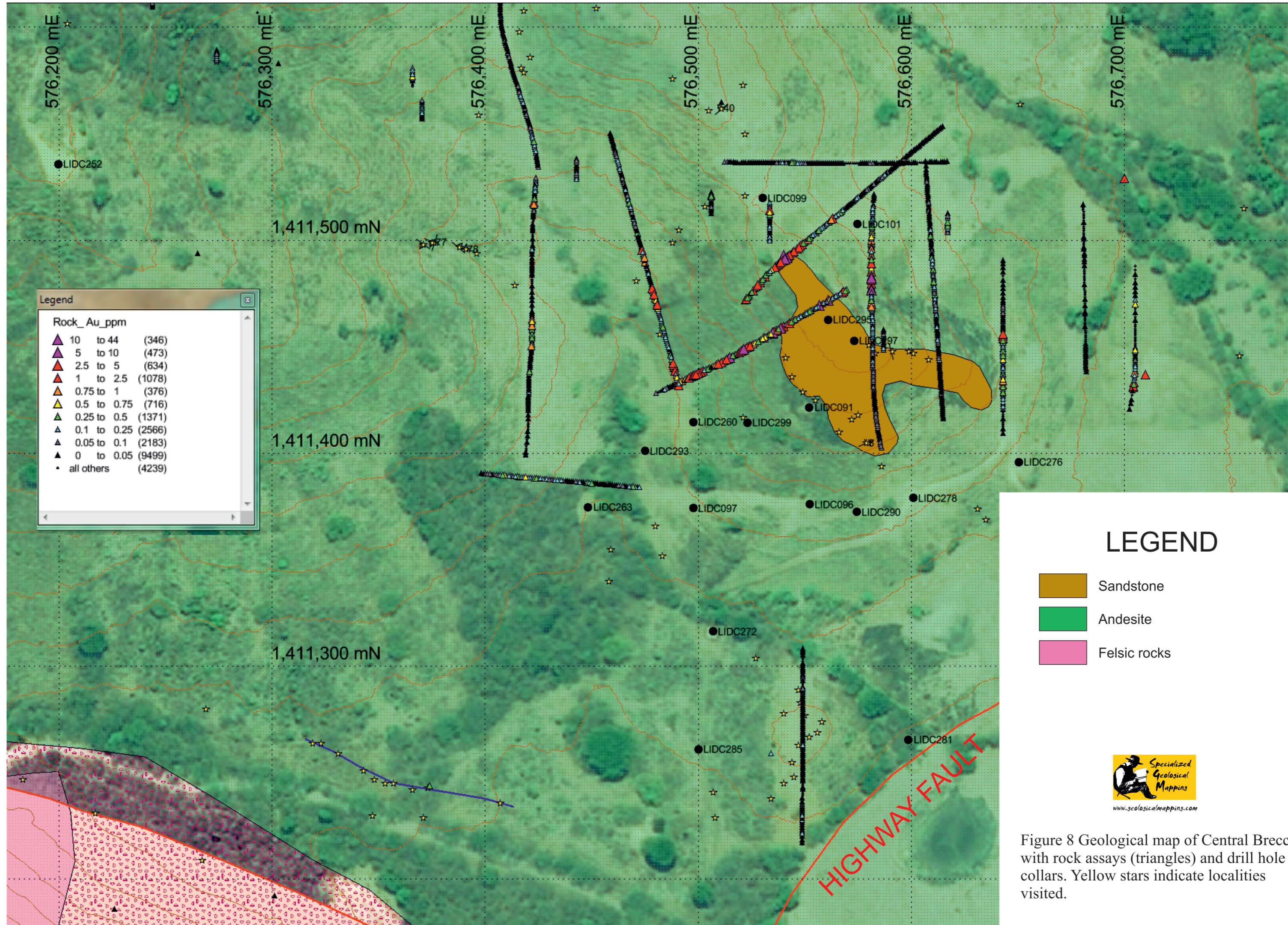
The origin of the hydrothermal breccia is probably phreatic. Brecciation was clearly linked to mineralization; there are examples of veins that pass laterally into breccias, veins cut by breccias, and breccias cut by veins. An intricate network of open spaces was filled by fine phreatic breccias that commonly resemble coarse sandstones or even fine siliceous mudstones.

One gets the impression that hydrothermal fluids, perhaps linked by conduits to a lake above, ran through these open spaces at high speeds. This was locally enough for traction of sediments; this is proven by cross- and graded bedding. Examples of these textures are shown in Figure 9. They are very similar to textures at Navidad (Argentina) and many other very high level epithermal systems, where fluids, often mostly groundwater or lake-derived water, rushed through open, connected spaces (fractures and autobreccias).

The top of the hill and the East flank are capped by a coarse, very well sorted sandstone, with local dune cross bedding. The textures are identical to the fine phreatic breccias. It is polymict, but dominated by very fine grained pale brown to light green glassy clasts. I interpret it as a re-sedimented eruption breccia. In other words, violent phreatic explosions vented clasts onto the original ground surface and they were reworked. The sandstone is about 3 m thick on the SE flank of the hill [576579 1411400] and shows excellent dune cross bedding. On top of the hill there are numerous occurrences of fluidised sandstone dykes cutting andesite; these look like the preserved eruption conduits and I would envisage mud and sand volcanos.

The host andesites around the breccia display sinuous to planar calcite + quartz veins, locally with jogs and spaces filled by fine phreatic breccia. Clearly, hydrothermal fluids and fine breccias were injected into the wall rocks. I have only collected a small amount structural data, from veins up a creek to the W of the Central Breccia. It shows mostly steep, ESE-striking veins. This is a similar orientation to the veins and faults within the andesite-filled graben.





Legend

Rock_Au_ppm		
▲	10 to 44	(346)
▲	5 to 10	(473)
▲	2.5 to 5	(634)
▲	1 to 2.5	(1078)
▲	0.75 to 1	(376)
▲	0.5 to 0.75	(716)
▲	0.25 to 0.5	(1371)
▲	0.1 to 0.25	(2566)
▲	0.05 to 0.1	(2183)
▲	0 to 0.05	(9499)
•	all others	(4239)

LEGEND

	Sandstone
	Andesite
	Felsic rocks



Figure 8 Geological map of Central Breccia with rock assays (triangles) and drill hole collars. Yellow stars indicate localities visited.

The breccia everywhere carries low gold grade (approximately 0.1 to 1 g/t Au). But trenches (Figure 8) show remarkable variation in grade; a NE-trending trench displays numerous > 2 g/t Au assays and some samples up to 10 g/t Au. Low grades in adjacent trenches implies that the trench followed a mineralized structure. A nearby N-S trench displays common 0.5-1 g/t Au samples, with isolated spikes to 33 g/t Au. But there is no one obvious high structure that links the trenches or controls grade. A number of trenches, in close proximity to the high grade trenches, contain negligible grade. The trenches are now covered, but I suspect that there is an almost perfect correspondence between low grade gold (0.1-1 g/t Au) and hydrothermal (phreatic) breccia.

In summary, surface mapping and sampling can explain the distribution of low grade gold relatively easy – it occurs in hydrothermal breccia. However, explaining the high grade is more difficult. The drill holes shed some light on the geological control:

LIDC 97 (Figure 10) shows long lengths of phreatic breccia, commonly with bedded siliceous sediments (sandstones, siltstones, mudstones) and late fillings dominated by coarse calcite. I chose this hole because it shows a short length of higher grade (up to 32 g/t Au). The high grade portion occurs close to the upper contact of the breccia, but not at the contact (which is a more transported breccia and has low grades). By comparison with the remainder of the drill hole, which is almost entirely within phreatic breccia, the high-grade portion shows greatly increased clay alteration (10-15% clay). The clay appears to be illite, but may be mixed layer smectite-illite. There is also increased pyrite (up to 3%) in the coarse calcite matrix of the breccia. Pyrite overall is low elsewhere in the breccia (0.5-1%). Clasts in the breccia are largely weakly altered, with rims of illite + pyrite + leucoxene/sphene + calcite. Wall rock andesites around the breccia show pyrite (0.5-1%) + calcite + chlorite + local illite.

LIDC 099 shows a long intersection of phreatic breccia with low-grade, sub economic gold. There is a kick (up to 13 g/t Au) at 50-60 m depth, close to the upper contact of the breccia. This coincides with a minor fault with slickensides. It also coincides with breccia fill comprising grey crustiform calcite with minor pink adularia + colloform chalcedony + thin films of grey (Ag?) sulphide and pyrite. I think it more likely that the spike in gold grade is not due to the fault, but to the improved vein (breccia fill) textures, particularly the presence of adularia and sulphides.

LIDC 101 shows some high-grade intervals, up to 29 g/t Au. These intervals occur within phreatic breccia; they show minor elevated pyrite and some veins with early hematite + chalcedony + pyrite-rich bands + late coarse calcite. Again, there seems to be a correlation between gold grade and pyrite. A 21 g/t Au value at 100 m coincides with chalcedony + adularia (?) veins (breccia fill). There is also an increase in overall illite (or mixed layer smectite-illite) alteration (5-15%), which tallies with what was seen in LIDC 097.

LIDC 267 is in the E (Figure 10) and has no phreatic breccia. It comprises rhyolite autobreccia, overlain by graded polymict lapilli tuff and then a welded tuff. There is a faulted contact overlain by andesite, amygdaloidal andesite and, finally, andesite autobreccia.

LIDC 281 is also in the E (Figure 10) and displays complex geology. There is a long intersection of rhyolite autobreccia and welded tuff overlain with faulted contact by andesite, but then another fault brings felsic volcanic rocks back in (felsic lapilli tuff and welded tuff). The top 25 m again comprises andesite. Clearly, there are significant fault offsets in this hole. There are no significant gold grades. Veins and stockworks in the hole are dominated by coarse calcite, with increased quartz in the more felsic rocks.





LEFT. LIDC 097 @ 146.2 m Dyke of siliceous grey sediment (mudstone to coarse sandstone) with late coarse calcite fill.

RIGHT. LIDC 099 @ 80.3 m Dyke of breccia, siliceous grey sediment (mudstone to coarse sandstone) with late coarse calcite fill.



3) Late coarse calcite fill

2) Bedded siliceous mudstone and sandstone which accumulated in open spaces and on ledges.



LIDC 099 @ 76.3 m
1) Early vein fragment with possible adularia + colloform chalcidony + sulphide band.



LIDC 099 @ 171.0 m
1) Early vein fragment with crustiform texture. Possible adularia + chalcidony + pyrite + hematite.

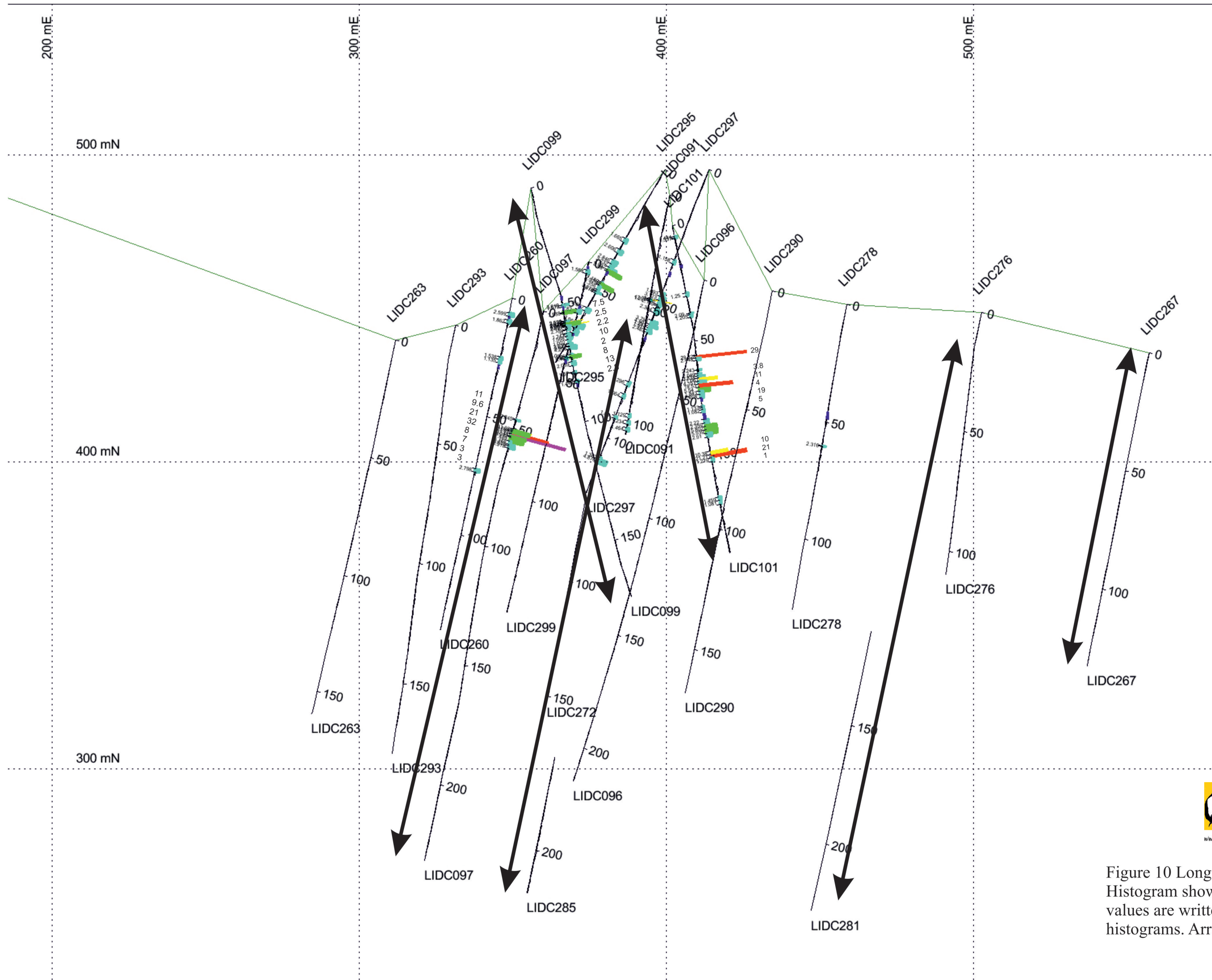


Figure 10 Long section of Central Breccia. Histogram shows gold grades. Significant values are written in text beside the histograms. Arrows show logged intervals.

LIDC 285 is the southernmost hole. Like LIDC 281, there are again fault complications. It shows a very deep intersection of hydrothermal breccia (about 180-210 m down hole). This breccia is unusual because it shows abundant felsic clasts, transported from the felsic 'basement'. This breccia is more transported than the andesitic phreatic breccia in the other holes and on the surface. Grades are strongly anomalous (0.1-0.4 g/t Au), but not ore grade. The interesting thing about this hole is the occurrence of breccia at great depth, demonstrating that the breccia has deep roots, and the fact that it is still strongly anomalous in gold.

The generalised paragenesis from drill core is (examples in Figure 9):

1 Early crustiform veins (often as fragments within later breccias). Veins comprise pink adularia (?) colloform chalcedony, sulphides, calcite, hematite.

2 Grey chalcedonic sediment, sandstone and fine grained breccia injections.

3 Coarse calcite.

4 Late white clay (smectite?).

5 Late illite (mixed layer smectite-illite?) + pyrite overprint with high grade gold?

3D modelling. Core logging and mapping does not really explain the erratic high grades at Central Breccia. There is no obvious single structure, or group of structures, that explains them. The breccia has an amoeba-like form and has low background gold grade. Higher grades seem to be associated with more phases of veining (breccia fill), increased sulphide content and increased clay (either illite or illite-smectite).

I viewed the drill data (gold as yellow disks on black background) in Discover 3D, in a direction that produces the smallest 'footprint'. Figure 11 shows various screenshots of this model. The top left shot (approximately 35° towards 135°) gives the smallest footprint and suggests this is the direction of oreshoots, perhaps formed by the intersection of subtle structures within the shell of phreatic breccia. SRK (?) produced some solids intended to form hard boundaries to a resource calculation (?). These solids are also shown in Figure 11. These solids seem to have been made by linking drill intersections in a broadly East-West direction (the solids dip steeply S). I think they are inherently unreliable and are probably best discarded.

Future exploration. The lack of a reliable geological model is a real problem with Central Breccia. No obvious continuous conduit or feeder zone has been identified. There are clearly oreshoots and these may be pencil-like (at the intersection of structures of uncertain orientation). There is potential to drill on the N side of the current drilling and enlarge the potential ore zone. However, I see Central Breccia as a lower priority target until some more mapping and 3D modelling. There is a possibility of some E-W continuous veins, demonstrated by vein float on the S side of the hill. The fault complications need to be resolved.

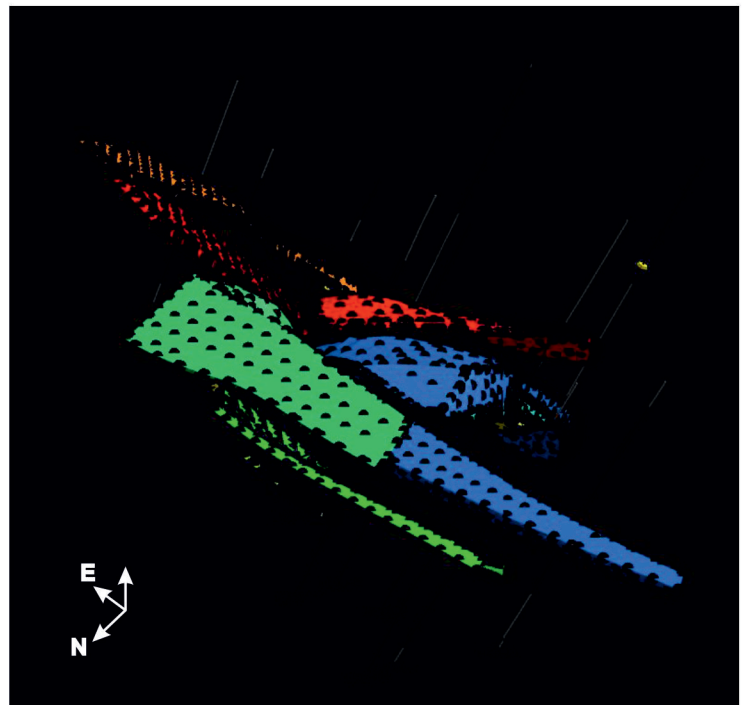
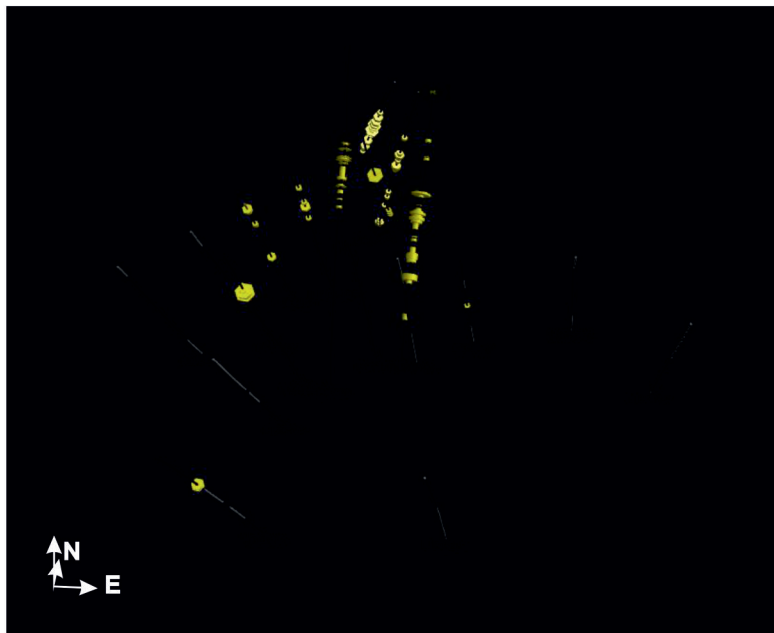
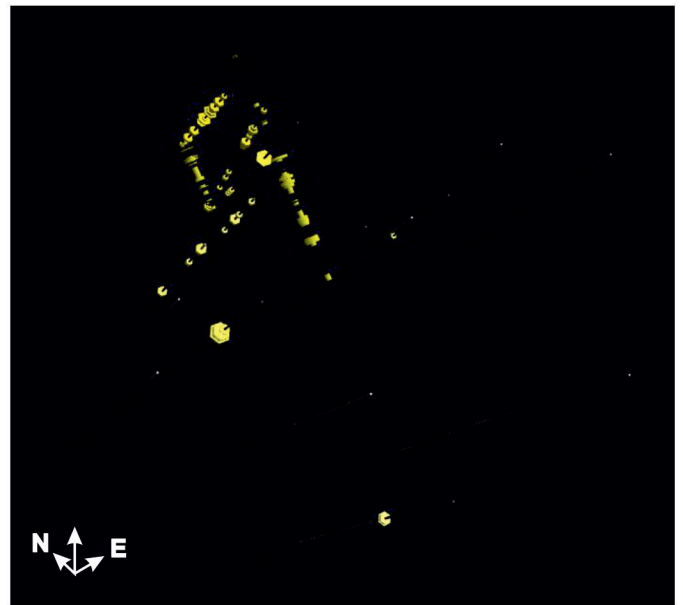
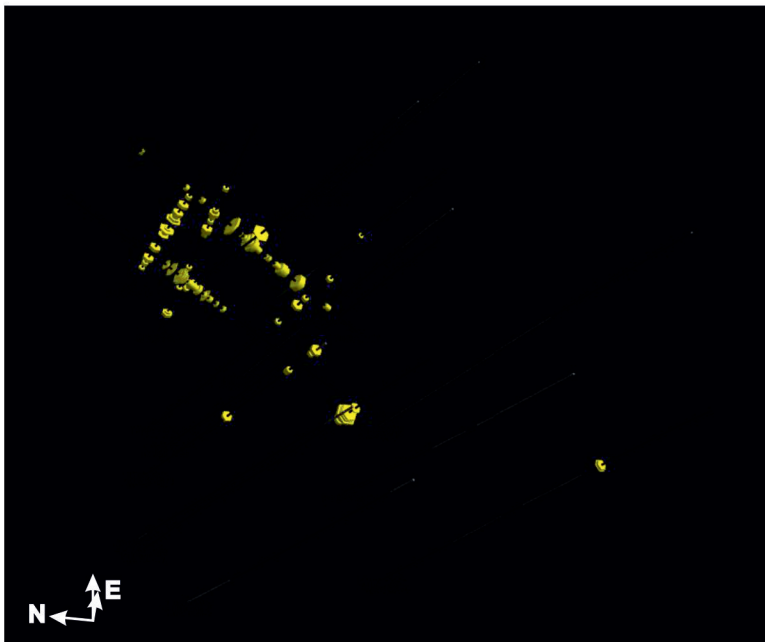
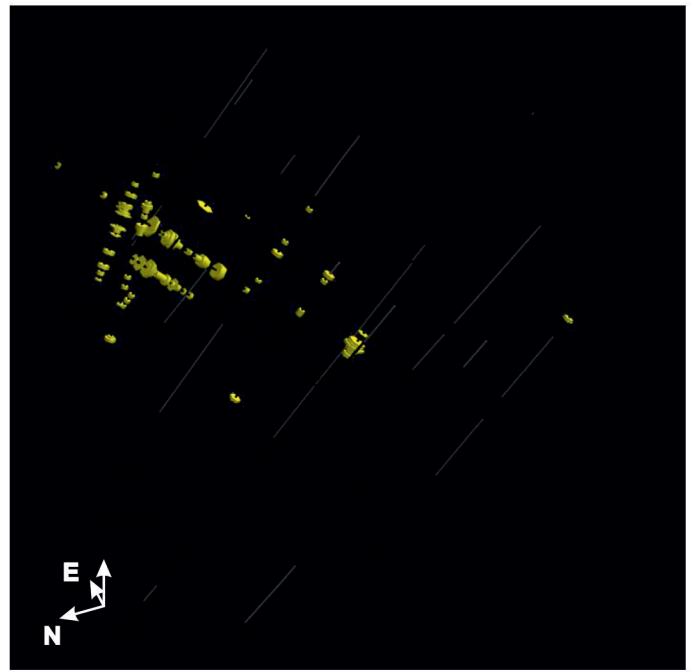
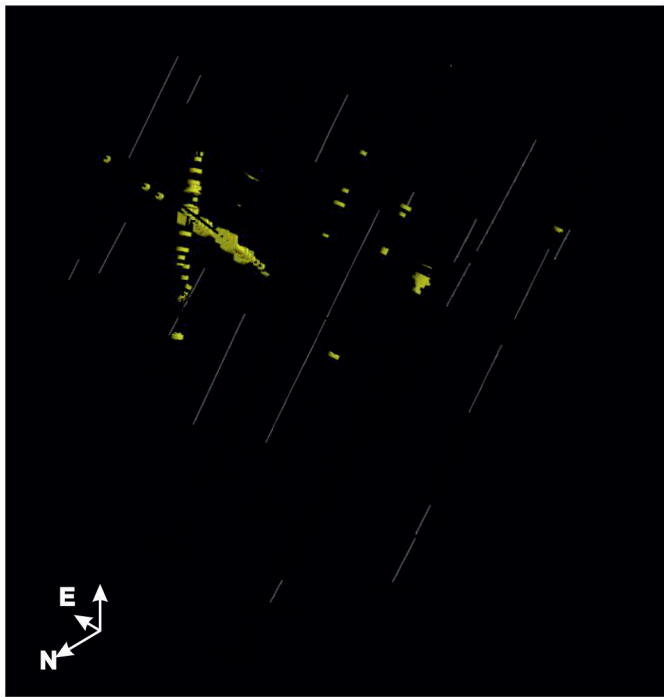


Figure 11 Screenshots of 3D model (Discover 3D). Yellow disks show gold grade, the larger the disk the higher the grade. Bottom right shows SRK wireframe models.

3.6 REAL DE LA CRUZ

We spent a couple of days walking Real de la Cruz, the rhyolite hills on the S side of the highway to the hydroelectric scheme, and down the river that drains the hydroelectric reservoir. I also logged SC 01 (208 m). A geological map is shown in Figure 12.

Lithostratigraphy. The rhyolite that hosts gold mineralization seems to be a flow rather than a dome. The topography shows a line of flat-topped rhyolite hills that extends at least 4 km from the main highway, near Tatascame, to at least Santa Barbara. This large lateral extent strongly suggests that this is a single flow, not a dome. The rhyolite shows extensive hydrothermal alteration; long stretches of the river, extensively exposed, show rusty weathered and bleached, kaolinite + limonite alteration. Clay generally does not exceed 5%. The limonite is after disseminated pyrite (1-3%). The kaolinite may be a supergene alteration of hypogene illite.

There is a stratigraphic problem that can only be resolved by more mapping. The flat topographic top of the rhyolite at Real de la Cruz has an elevation of about 550 m. Drill hole SC 01 demonstrates rhyolite down to 360 m elevation. But only a short distance to the S the rhyolite is overlain by andesite in the river [582530 1411976] at an elevation of 410 m. This andesite shows remarkably little alteration compared with the kaolinite + pyrite altered adjacent rhyolite. This is hard to explain, given the apparent flat lying (?) geology. Is the andesite a discontinuous sill that intrudes the rhyolite? More mapping is required.

Real de la Cruz has been extensively trenched (now back filled) (Figure 12). These trenches were mapped in detail by Condor geologists. I have plotted their structural data (mostly quartz vein measurements) in Figure 13, broken down by trench. This shows swarms of mostly E- to NE-striking, steep to vertical quartz veins.

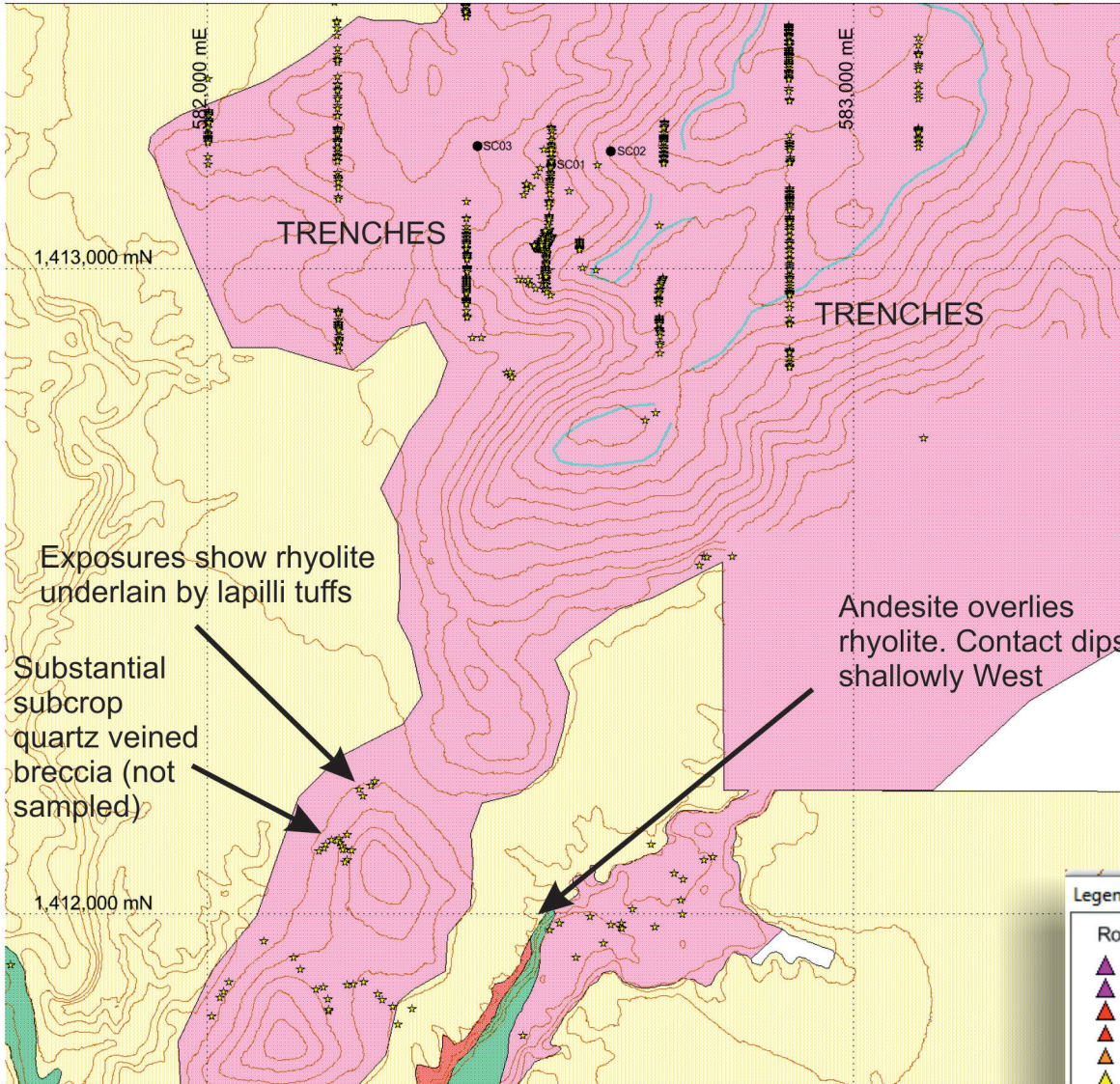
Rock chips from the trenches show some excellent values, with grades more than 30 g/t Au. Clearly previous drilling (3 holes) was predicated on a geological model in which the main veins are E-W striking. Maybe they also hoped to demonstrate a disseminated, or stockworked ore deposit that would be bulk-mineable. In the event, the drilling was very disappointing.

My logging of SC 01 showed 208 m of purplish grey very fine grained porphyritic dacite with moderately isolated feldspar phenocrysts, weakly glomeroporphyritic. The texture varies from massive and chilled to moderately flow foliated. The rock is remarkably unaltered, with just some very narrow haloes of disseminated pyrite around some veinlets. Sheeted quartz veins occur throughout the hole, but are mostly less than 10 mm thick. The thickest vein is 50 mm and show a breccia texture, with floating wall rock clasts. The quartz in most veins is symmetrical, comb quartz, with a central suture. It is commonly zoned, from milky to translucent. Some veins contain possible white adularia. Rare veins contain marcasite (c. 90 m) and bladed calcite replaced by quartz (c. 96 m).

Gold values in SC 01 (and the other 2 holes) effectively rule out the possibility of a disseminated, open-pit resource. A 3.4 g/t Au result from 47 m depth in SC 01 coincides with broken, sandy drill core with poor recovery. Presumably it was a larger quartz vein, but no fragments remain in the core boxes.

Small scale miners are busy now in a small open pit [582518 1413038] (shown in Figure 14). Channel sampling has given > 30 g/t Au in this pit. However, the lower bench displays excellent results, but channel samples from the next bench up are barren (Figure 14). The miners appear to be targeting oreshoots, at the intersections of veins, which pitch steeply NE.





Legend

Rock_Au_ppm

- ▲ 10 to 44 (346)
- ▲ 5 to 10 (473)
- ▲ 2.5 to 5 (634)
- ▲ 1 to 2.5 (1078)
- ▲ 0.75 to 1 (376)
- ▲ 0.5 to 0.75 (716)
- ▲ 0.25 to 0.5 (1371)
- ▲ 0.1 to 0.25 (2566)
- ▲ 0.05 to 0.1 (2183)
- ▲ 0 to 0.05 (9499)
- all others (4239)

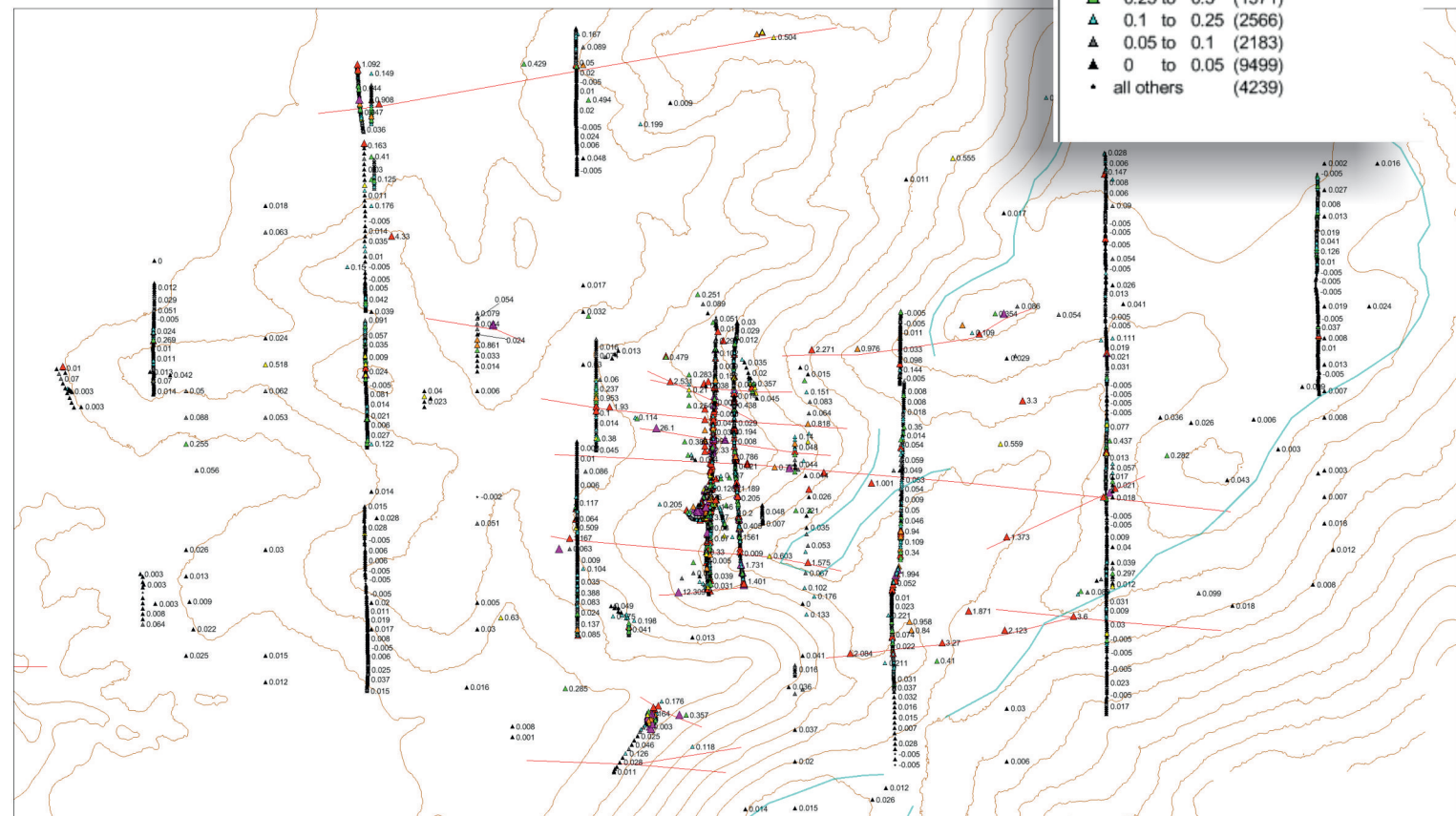


Figure 12 TOP Geological map. Pink = rhyolite, pinkish = alluvium, green = andesite. Yellow stars show field localities. BOTTOM. Rock chip results (gold).

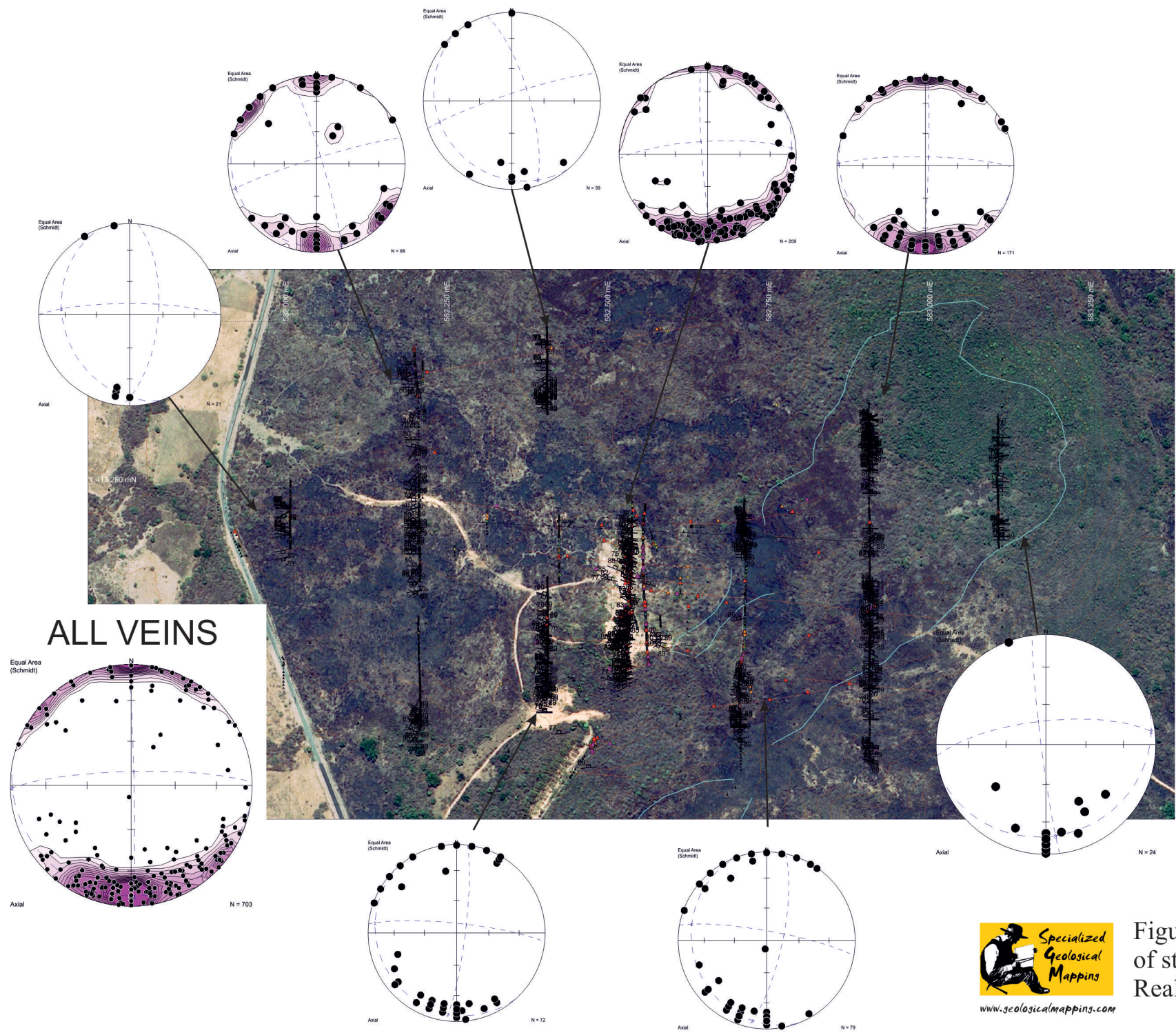


Figure 13 Stereograms of structural data from Real de la Cruz.

The main veins strike between 024° and 067° and are sub vertical. The minor veins, mostly a few cm wide, show a variety of directions within the pit. This fits with the discontinuous results from the channel sampling; it suggests that there is not a continuous vein with good grade.

About 200 m S of the open pit, there is an excellent trackside exposure [582469 1412840] of a 2 m wide zone of quartz veining (largest individual vein about 0.6 m wide) that strikes almost E-W and is sub vertical. Textures include rare bladed calcite replaced by quartz, abundant comb quartz (zoned milky to transparent) and some massive white chalcedony. Channel samples give up to 15 g/t Au.

During scout mapping S of the reservoir road, we encountered a large area of quartz veined breccia float. Remarkably, this has not been sampled previously, though a sample to the E gave 0.6 g/t Au (see screenshot below).



Future exploration. I would be reluctant to drill Real de la Cruz because of the lack of demonstrably continuous low sulphidation epithermal veins. The small-scale miners are smart and it is discouraging they have not encountered a continuous vein which they can stope.

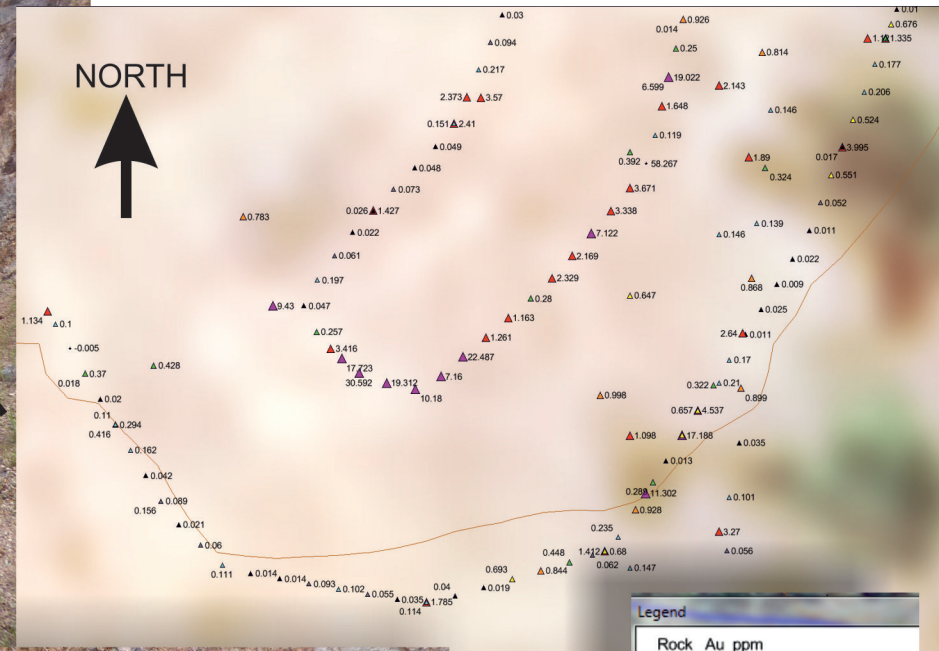
However, the target could be made more attractive with a couple of days' fieldwork. Firstly, although the hill has been extensively trenched, there does not seem to have been an effort to follow (by cutting with machete – the bush is thick and unfriendly) possible principal veins. The 2 m wide vein exposed in a track at [582469 1412840] is an excellent candidate to follow. I recommend opening the bush with machete and plotting with GPS the occurrence of any float block of vein quartz > 50 mm in diameter. Hopefully, this will give a good idea of if, and



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Figure 14 Open pit working at Real de la Cruz. Inset shows results of channel sampling.

LEFT Artisanal workings. Viewed towards the Northeast.



LEFT. Detail of quartz vein breccia with floating wall rock clasts. Approx 0.5 m wide.



LEFT. View of Southwest end wall of open pit. Channel samples give up to 30 g/t Au.

where, the vein continues. Of course, it may be another oreshoot, at the intersection of a couple of structures. But if continuity can be demonstrated, then it certainly merits drilling.

Drilling beneath the small open pit [582518 1413038] is worth a try, but collaring very close to try and intersect the oreshoot at shallow depth.

3.7 SANTA BARBARA

Santa Barbara comprises rhyolite-hosted mineralization E of the reservoir. It has never been drilled. I was pleasantly surprised by the extensive float field of quartz vein blocks, up to 0.5 m in diameter (Figure 15). This float field defines an ESE-striking vein zone (inferred in blue in Figure 15) at least 400 m long. Vein textures are excellent. They comprise crustiform comb quartz, chalcedony, large calcite rhombs replaced by quartz, and some geopetal structures (fossil spirit levels) (Figure 15) like those at Central Breccia (Figure 9), Cacao and La India. Bladed calcite replaced by quartz was also seen. Some blocks comprise hydrothermal breccia with quartz vein fragments.

There are a few rock chip results (of vein float) with grades up to 1.8 g/t Au (Figure 15).

Future exploration. I am very encouraged by the strike-length, the high-level textures in the vein blocks, and the fact that rock sampling demonstrates the presence of gold in the system. The vein trace is well marked (vein float disappears above) and some exposures at the W end display *in situ* chalcedony veins and silicified rhyolitic breccia (autobreccia?).

Proximity to the reservoir for a hydroelectric power plant has been raised as an issue. Personally, I would much rather know if there was a high grade epithermal vein than not. After all, why have the concession if it is never going to be drilled? It more than merits immediate drilling of two holes from the same platform aimed at testing it at 75 m and 150 m depth below surface.

My belief is that the current surface level marks the highest part of the epithermal vein and that a boiling level with higher grades may be present at depth.



Figure 15 Map of Santa Barbara area. Blue line shows interpreted vein trace. Yellow stars show field localities (mostly vein float).

3.8 SAN LUCAS

Carlos and I visited the target for about half a day and walked most of its length. The NNW-striking vein crops out over about 1.8 km and dips moderately to the E (I measured dips of 45-58°) (Figure 16 & 17). Walking the vein suggests that it may not be continuous since there are gaps where there are no artisanal workings. I logged 4 complete holes, 2 at the N end and the other 2 at the S end (Figure 17).

The vein is hosted by a major pumice-rich welded andesitic lapilli tuff. This tuff shows distinctive flattened, orange-weathered pumice fiamme or scoria that can reach 0.5 m in length and be up to 100 mm thick. (The same tuff crops out at the W end of the La India vein.)

There are extensive artisanal workings which are mostly open stopes. The miners are targeting post-mineral fault zones, like those at Mestiza (and for the same reason – oxidised, broken material with free gold, which is easy to recover). Typical stopes [572490 1410821] are about 1 m wide (Figure 17). Typically, they comprise 0.5 m of post-mineral, very limonitic and smectite-rich fault gouge, overlain by an intact vein, c. 0.5 m thick, of intergrown fine grained crystalline quartz and limonite-stained smectite. The texture is wormy, like Mestiza (Figure 17). In some places, bladed calcite replaced by quartz was seen. The vein does not have good crustiform banding.

Rock chip samples across the vein (Figure 16) are very encouraging. There are numerous in the range 5-10 g/t and sporadic samples up to 40 g/t Au.

LIDC 038 shows a greenish grey rock with scattered feldspar crystals and small lapilli. The texture is quite difficult, resembling igneous rock. However, local large pumices/scoria indicate this is a lapilli tuff, probably of intermediate composition (andesitic). The rock is magnetic and shows virtually no hydrothermal alteration, apart from minor chlorite and epidote at depth. The core boxes that cover the main vein are missing (lost in shelf collapse accident?). However, veins in the hanging wall (about 150 m, poor recovery, broken core) display quartz veins up to 50 mm with minor amethystine quartz, cockade quartz that cements crackle breccias in dense tuff with perlitic texture. Some veins show crackle breccia with late calcite fill.

LIDC 039. Core boxes from large parts of this hole, including the vein, are missing. It is in the same andesitic tuff, probably welded, with large orange pumices/scoria.

LIDC 46 is a deep hole (195 m). A few core boxes are missing, but the vein is intact. The host rock is the same welded andesitic lapilli tuff with large pumice/scoria lapilli. The hydrothermal alteration is weak and pervasive, comprising: 1% magnetite (probably remnant igneous, primary) + 0.5% calcite (disseminated) + 1% chlorite + 1% illite. Veins in the hanging wall are mostly calcite-dominated. The main San Lucas vein comprises simple fine grained quartz with minor calcite. The hanging wall to the vein is marked by a fault zone with sheared, cataclasite breccia. Crackle breccias in the footwall to the vein comprise early fine grained crustiform quartz and late coarse calcite. The best grade is 1.2 g/t Au. Disseminated pyrite (1%) occurs in the immediate wall rocks of the vein. This appears at the expense of magnetite. The illite content also increases slightly close to the vein (c. 2%).

LIDC 048 comprises the same andesitic tuff in both hanging- and footwall. The vein zone is poorly recovered and very broken. It comprises quartz matrix breccia with a fine-grained comb quartz cement. The vein contains no sulphides. The best grade is 19 g/t Au.



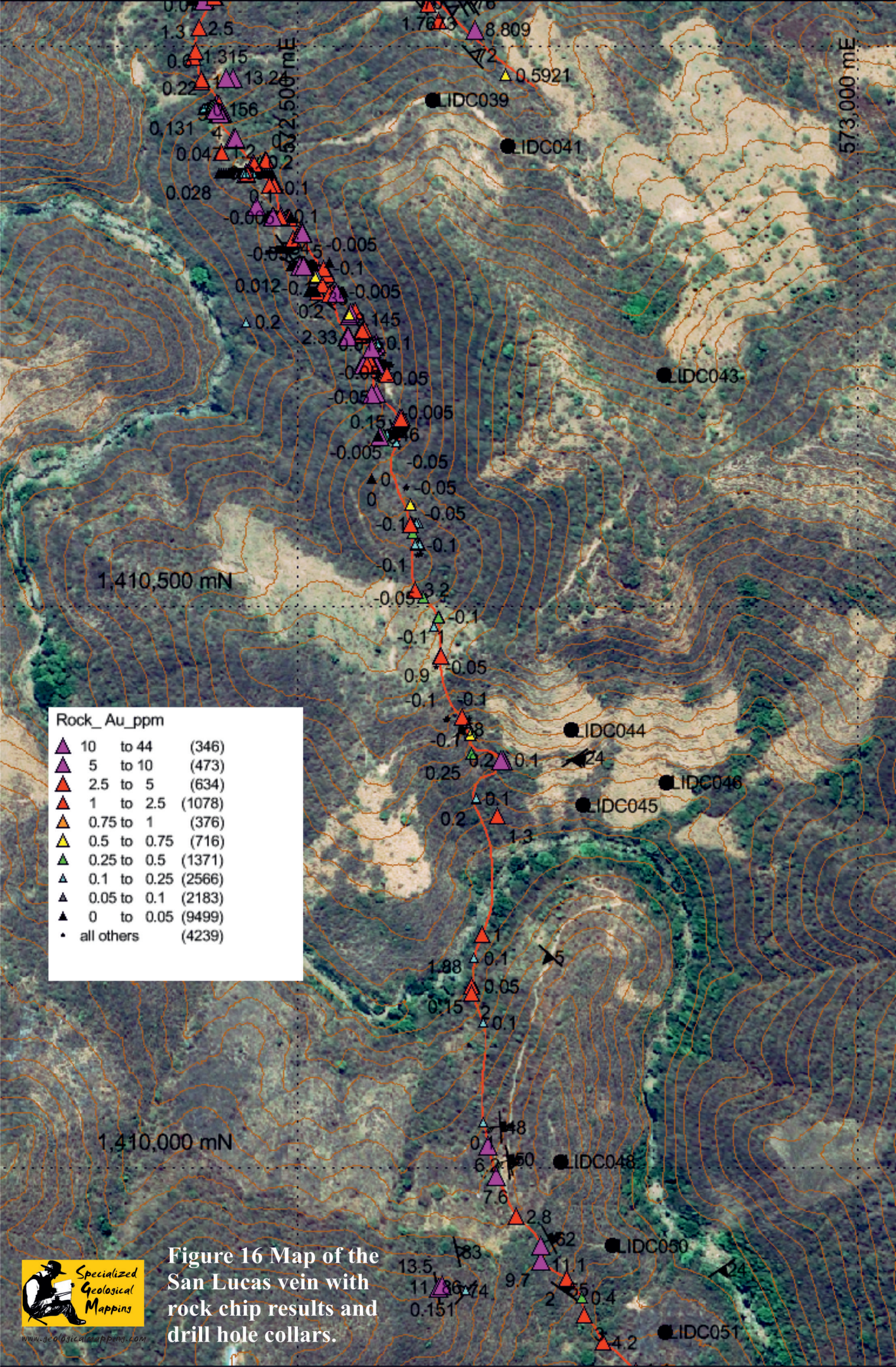


Figure 16 Map of the San Lucas vein with rock chip results and drill hole collars.

Future exploration. San Lucas has an Inferred Resource of about 59,000 oz, but I haven't examined the block model to see which portion hosts this. In my opinion, I find it highly dubious that even an Inferred Resource could be made given the paucity and spread-out nature of drilling.

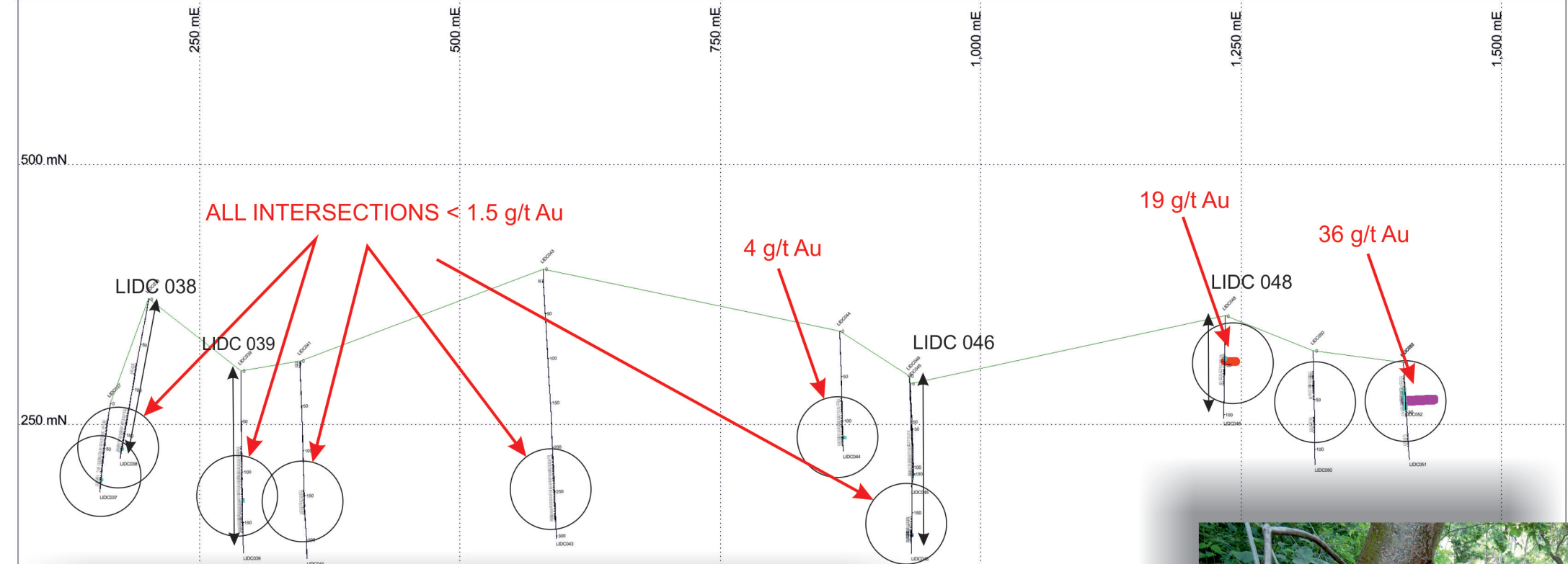
The San Lucas vein has much in common with Mestiza. The vein textures are simple (on surface and at depth), with a limited number of hydrothermal events. There is deep oxidation and almost certainly supergene enrichment of gold. The miners are going after the clayey, limonitic material, particularly along post mineral fault breccias.

The array of deeper drill holes on the northern half of the vein gave low grades (mostly < 1.5 g/t Au) and the vein is thin (comparable to the surface stopes - Figure 17). There is virtually no low-grade halo of veinlets around it. Drill holes in the S, which intersected the vein much closer to the surface, have much higher grade. I suspect this is because of near surface supergene enrichment, though I cannot rule out the possibility that this segment has higher hypogene grade. Again, it has a very limited low grade halo.

The topography along much of the vein is unfavourable for drilling – many of the previous holes were collared far from the vein, on the E side of a major ridge (Figure 16). The dip of the vein is mostly unfavourable for underground mining. I see little potential for textures (and grade) improving at depth. Access to site is difficult, along a rough road that needs repair.

There is therefore potential for an oxidised resource at San Lucas, as at Mestiza. But the topography will make it difficult to test. There is much better potential in the N, where the vein seems to dip almost parallel to topography (see screenshot below). There is very little information in this area, except a 14 g/t Au rock chip sample. But potentially it has low stripping and will be an oxidised resource.





BELOW. Intergrown, wormy quartz and limonitic stained smectite (after carbonate?).



RIGHT. Stopped vein and post mineral fault.



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Figure 17 Long section of the San Lucas vein. Arrows show logged holes.

Overall, I cannot recommend drilling at San Lucas for the time being. At some stage in the future some holes could be considered at the S end, to follow up on the high-grade, near-surface samples. And more mapping and channel sampling may pay dividends at the N end, helping to define an open-pittable oxidised resource (see screenshot above).

3.9 ANDREA

Carlos and I visited Andrea for a full day (Figure 18). There is no drilling available (apart from some very short holes drilled with a Winkie?).

The host rocks have gentle dips, but there is great variety in the main creek, including; a felsic flow (porphyritic dacitic andesite), porphyritic andesite, bedded tuffs, rhyolitic felsic flow and flow foliated aphyric basalt (?). More semi-regional mapping is required to figure out the likely host rocks at depth.

The vein zone is about 2.3 km long and is arcuate, with a main NNW-striking portion, which dips SW at about 50-60°, and more ESE-striking ‘tails’ on the N and S end (Figure 18). There is plenty of evidence that the vein zone anastomoses and splits. The geometry of these splits suggests there is a dextral strike slip component on an overall extensional vein (i.e like La India).

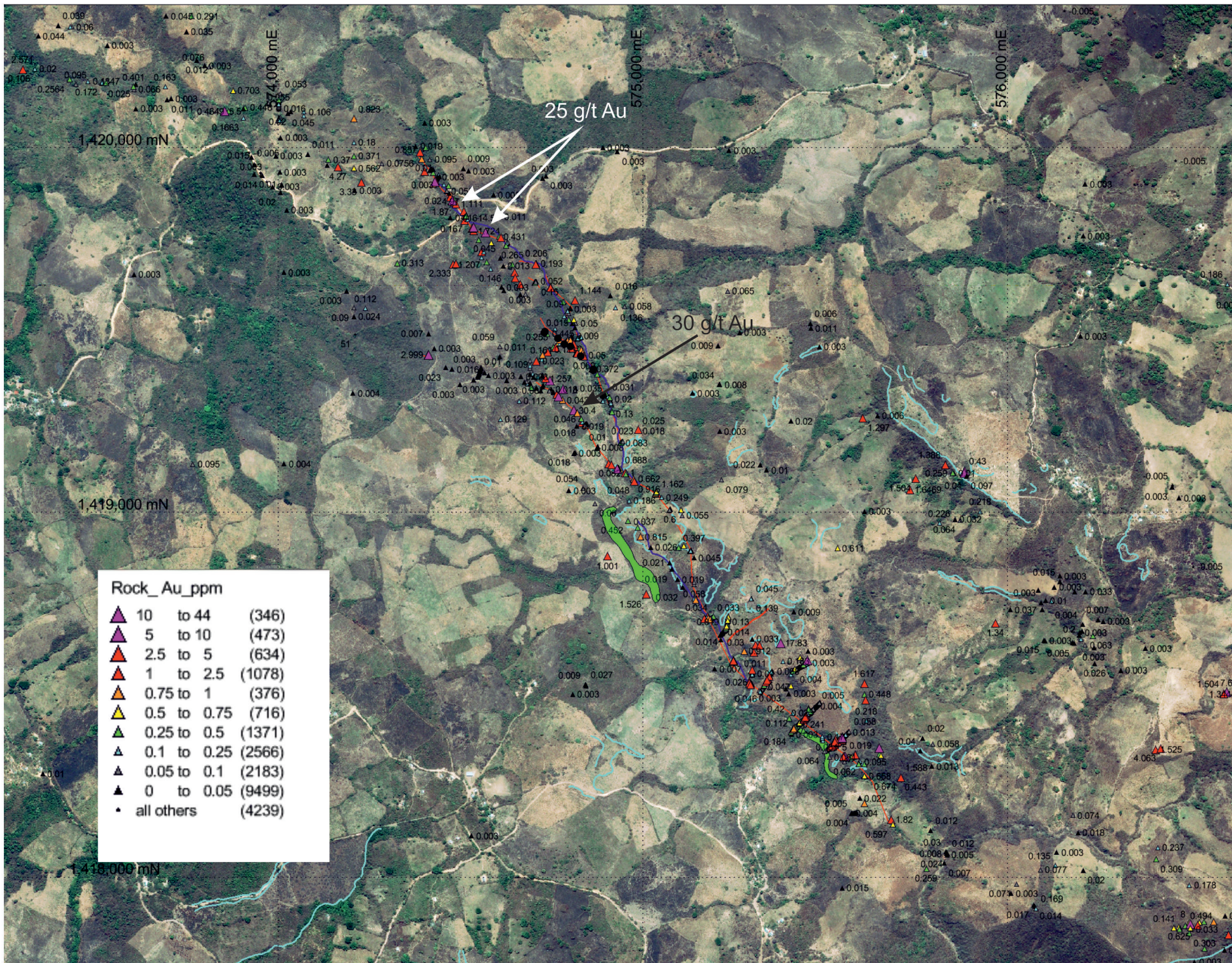
The creek follows the vein for large distances, so it is commonly difficult to estimate the width of the zone. However, there are some bends in the river which indicate that zones of sheeted veins and vein breccias exceed 20 m width e.g. [575292 1418546]. Good sheeted vein swarms occur in both footwall and hanging wall.

The veins show widespread low temperature textures: massive fine grained milky quartz, chalcedony and colloform chalcedony. However, there is a lack of hydrothermal events in the vein. There is evidence in places of early hydrothermal brecciation, which is commonly overprinted by quartz veins. There is minor coarse calcite (mostly not bladed, but rhombohedral), partly replaced by quartz.

Rock chip samples from the Andrea Vein zone are very encouraging. The highest grades, up to 30 g/t Au, seem to be clustered at the N end, in the main vein zone and in a southerly split (Figure 18).

Future exploration. I am not discouraged by relatively low grades on surface in the S, or the lack of small scale miners. Textures from the Andrea Vein zone imply high levels, above the main boiling zone.

This target is a real opportunity, with plenty of upside potential. It should be a priority for early drilling. I suspect the main obstacles will be logistical, with relatively poor access. I am reluctant to specify specific drill sites, without discussing the logistics with the Condor Gold team. However, given the strike length, the vein certainly merits a scout 500 m program.



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Figure 18 Map of the Andrea Vein with rock chip results (gold).

3.10 CASCABEL

A major NW-striking fault, which we refer to as the Cascabel Fault, occurs SW of La India, on the flank of the major ridge. It juxtaposes felsic lava and ignimbrite with younger andesite. It is essentially the mirror image of the La India fault, defining a horst.

There are sniffs of vein mineralization, with small pieces of vein float, along this structure and it has a very favourable orientation (parallel to La India). It has a major post-mineral displacement, bringing down a thick package of andesite on the W side. I would consider this to be an exploration target. Soil anomalies should be examined carefully. It is drill-ready, but some walking is required to carefully map andesite and vein float so that the structure can be narrowed down. It would be a shame to collar a hole too far from the structure and end up missing it.

4 REGIONAL SOIL GEOCHEMISTRY

I was also asked to comment on the soil geochemistry. A regional survey is underway, to try and generate new gold targets.

Overview. I have pointed out in previous reports the remarkable lack of wall rock alteration around the La India vein. Likewise, this visit to most of the satellite targets showed very little alteration; the core I saw from San Lucas, for example, shows virtually no disseminated sulphides in the wall rock; even vein fragments within the vein preserve igneous magnetite, which is remarkable. The fluids were relatively neutral, or alkaline. The 'normal' weakly acidic epithermal alteration, that results in illite + pyrite and magnetite destruction, is not present in the La India district. Many of the assemblages, for example the propylitic assemblage of chlorite + epidote + calcite + trace illite + remnant magnetite, are probably related to larger heat sources, such as intrusions (porphyries?), not to focused flow within narrow conduits (veins).

All in all, it is logical that the normal pathfinders for Au will have lower levels and extend less distance into the wall rocks.

As well as the inevitable problem of combining datasets from different periods and laboratories (which seem to skew mercury (Hg) for example), several factors need to be considered when interpreting the soil and rock geochemistry. These include: 1) wall rock alteration 2) influence of rock type 3) relative solubility of elements 4) post-mineral fault offsets which juxtapose different stratigraphic and epithermal levels.

The following general statements can be made about the La India District:

- 1) Anomalies in the traditional epithermal pathfinder elements (As, Sb, Hg, Te) are much lower than most traditional epithermal deposits I have worked on.
- 2) In the case of some elements it is clear that 'anomalies' simply reflect the tendency of some rock types to have higher natural background values. For example, there is a very clear association between copper (Cu) and more basic rocks (basalts and andesites). But overall values are very low (only 7 samples > 200 ppm Cu).
- 3) Cu and manganese (Mn) are relatively soluble elements. Mn tends to form halos in weathered rocks around Cu porphyries, for example, because it has higher solubility and moves farther in soils. Like Cu, it also tends to be dumped out in local reducing environments, for example around rocks with common mafic minerals. This is clear in the soil plot for Mn for example.
- 4) Younger alluvium and colluvium conceal geochemical anomalies. It is therefore always a good idea to superimpose a map of superficial deposits on geochemical plots.
- 5) The use of different laboratories over time can skew results.

The relative influence of the factors outlined above makes interpretation of soil and rock results tricky and subtle. It means very judicious use of ranges when making symbol plots. Experimentation with ranges works better than a purely statistical approach (based on standard deviations or a histogram distribution of the data). I tend to play with symbol size and colour and ranges until I begin to see some association with known veins. This experimentation frequently gives the best results and emphasizes new targets.

I prefer to use symbol plots with 10 ranges rather than gridded or contoured plots. They make the geographical distribution of data crystal clear. All the plots are shown, in alphabetical



order, in Appendix 2. The first plot shows date of sample collection.

I did some minor data processing before making the plots:

Soils. SILVER GOLD RATIO Removed all gold results below detection and 10 ppb Au. Removed all Ag assays below 5 ppb Ag.

Rocks. Removed all gold results below detection and 10 ppb Au. Removed all Ag assays below 0.1 ppm Ag.

Drill data. Ag/Au ratio. All Ag results below detection and 1 ppm removed. All Au results below detection and 0.1 ppm removed.

Silver (Ag). Many low sulphidation epithermal deposits, particularly those in back-arc settings, are silver-rich, with silver occurring in silver sulphides (argentite, acanthite) or in sulphosalts, in which sulphur combines with semi-metals such as As, Bi and Sb (pyrargyrite, proustite). In soils, silver is less soluble and tends therefore to suffer less dispersion.

The La India district has a curiously low silver content. Silver anomalies in soil are very low, with only 14 samples above 3.4 ppm Ag. The anomalies are narrow and mostly show a close relationship with known veins (Appendix 2).

There is a broader anomaly at Central Breccia, but I suspect this is an artefact of the data since these samples came from an older campaign, on a small, denser grid, in 2012. There are encouraging anomalies at Andrea also. There is also a cluster NW of Tatascame, which seems unrelated to known veins. There are some sporadic hits along the Mestiza veins, which is interesting since these veins, except for gold, are dead in terms of other elements. (*In part this is due to the lack of dispersion on the plateau-like topography. See my comments below under Mn.*)

Silver/gold (Ag/Au) ratio. I analysed all the drill data for the district after removing all Au and Ag samples below detection. The average Ag:Au ratio is 13:1.

Plots of Ag:Au ratio are commonly used as a tool to determine upflow zones. Increased silver is regarded as distal, lower silver as proximal. Again, it is worth emphasizing the low absolute values of silver in the district, which make this method less reliable.

The plot (Appendix 2) shows a distinct pattern. Higher Ag:Au values occur NW of Mestiza, along Andrea and W and N of Tatascame. There is also a cluster at Central Breccia. Lower Ag:Au values occur SE of La India, SW of Tatascame, Mestiza, San Lucas and at Real de la Cruz.

The implication of Ag:Au ratios is that there were probably multiple upflow centres; the SE part of La India was one, linking with San Lucas. The second was SW of Tatascame. Overall, it could be that the Highway Fault (or a precursor) was an important control and controlled several upflow centres.

Arsenic (As). This is a traditional pathfinder for epithermal deposits; it tends to occur as arsenian pyrite, arsenopyrite or in sulphosalts (e.g. proustite, tennantite). Arsenopyrite is important in many epithermals (both high and low-sulphidation), but I have seen only rare examples in drill core in the La India District. Neither are sulphosalts widely reported. They tend to be more common in Intermediate Sulphidation epithermals.

The As plot (Appendix 2) shows weak anomalies at most of the targets. The apparent cluster along the Highway Fault may reflect upflow of hydrothermal fluids up the fault (particularly where it intersects with the NW-striking veins/faults (e.g. La India). But equally, the string of anomalies may simply reflect the abrupt change in lithology, with mostly andesite in the hanging wall (E wall) of the fault).

The strongest anomaly occurs S of town of La India and I believe it is real, not due to contamination by all the processing plants. It is strongest in the felsic rocks. One interpretation is that it marks a jog, with the La India vein doing a jump into the Cascabel Fault.

There is a surprising lack of an anomaly at Mestiza/Tatiana, but a broad N-S anomaly occurs about 2 km to the W. This coincides with some sinuous bends in otherwise NW-striking veins and it could have been an important upflow zone and one which merits some closer investigation.

There is cluster of anomalies in a broad ESE-trending strip to the N of Tatascame. This swings towards the Andrea Vein. The data suggest that there may be some more continuous veins that have not been mapped.

Gold (Au). Gold is the best pathfinder for gold. It shows a close correspondence to known veins (Appendix 2). The area is hilly and gold, a resistate mineral, is transported in soils by hill creep. It is also surprisingly soluble and will be redistributed in soils by water (nuggets can grow in soils). This tendency tends to smear out anomalies from relatively narrow veins (I suspect this is true at San Luis, where the trenches show much wider anomalies when compared with the drilling).

There are no surprises, such as previously unknown veins, in the plot (Appendix 2). The anomaly at Andrea is encouraging. The SE extension of La India, which seems to jump into the Cascabel Fault, is also obvious (as in the Hg plot).

Copper (Cu). This plot more or less maps the distribution of intermediate and basic volcanic rocks (andesite, basalt). Copper can be useful in many epithermal deposits: it tends to be in the higher temperature, deeper portions, often as chalcopyrite. However, the values are so low in the La India District that I don't believe it is useful.

Mercury (Hg). This is another stalwart element for epithermal exploration. It is one of the most volatile elements and can pass through cover rocks (alluvium) to locate buried epithermal deposits. It should always be analysed with more precision (using the cold vapour method, typically as an add-on to the regular ICP-MS package). Care needs to be taken when handling soil samples. They should be air dried and not heated in an oven, as this drives off Hg.

There are clearly different generations of data in the database. Codes in the Hg_ppb column include 0, -1, -3 and -5, -1000, -3000, 1000, 2000, 3000, 4000. The minus numbers presumably mean 'below detection'. Clearly some cleaning is required. The 1000, 2000, 3000, 4000 values are strange and imply the lab, at that stage, only reported Hg in 1000 ppb (1 ppm) increments. I would investigate and consider removing them from the database.

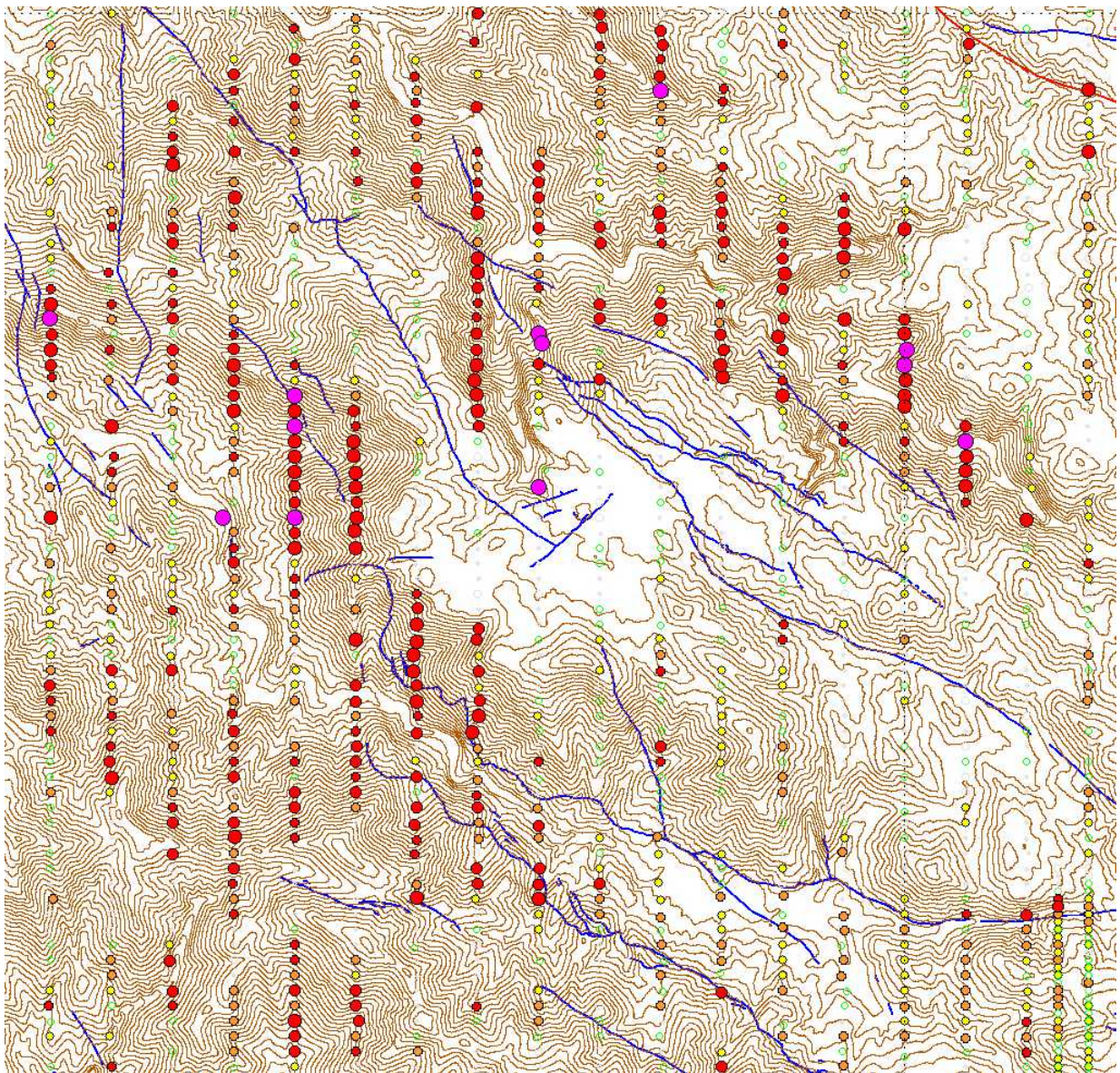
The plot (Appendix 2) shows a strong cluster of Hg anomalies around Andrea. However, I am suspicious of the data; most of these are reported as round numbers (1000, 2000, 3000 ppb etc). Was cold vapour used for this data?

Mestiza/Tatiana has no real anomaly, which is surprising. Neither does Cacao, again surprising considering the shallow level features of the vein.

La India shows the strongest cluster of anomalies and I particularly like the way the anomalies continue SE by several km. This area is dominated by andesite, which raises the potential for a concealed extension to the La India Vein. The data suggest the main La India vein may give a jog and jump southwards, until it lies parallel with the Cascabel Fault.

Manganese (Mn). This is a relatively mobile element. It can be locked up in manganiferous carbonate or rhodochrosite in epithermal vein deposits.

The plot (Appendix 1) shows a clear association with more mafic rocks. The andesite or basalt to the SE of La India shows a relatively strong anomaly. Likewise, the andesite-filled graben between America and Guapinól. There are relatively strong anomalies W of Mestiza, but comparing the anomalies with the topographic map shows that these anomalies tend to be on steep slopes. The flat areas have very low Mn (see screenshot below of Mestiza area). This implies strong downslope dispersal to me, probably from narrow point sources (veins).



Molybdenum (Mo). This element is generally associated with porphyries, but can be useful in epithermal systems, suggesting higher temperatures and proximity to the source porphyry and upflow centres. It occurs in some high sulphidation epithermals at very high concentrations (> 500 ppm), implying that very hot vapour-rich fluid arrived close to the surface very quickly from the source porphyry (e.g. Cañicapa belt, Ecuador).

Mo, a 'granitic' element, is a more reliable element than Cu because it is much less soluble. (I have already pointed out that more basic rocks with higher background Cu effectively 'swamp' the data and make them of little use). There is a weak lithological effect; there are clearly lower values in the andesites of the America-Guapinól graben when compared with the more felsic rocks (which tend to have higher background Mo) either side.

Again, the plot of soils (Appendix 2) shows low values, with only 7 samples > 25 ppm. However, it does show some interesting 'anomalies'. The first occurs SW of Tatascame; this may indicate an upflow zone in this area, close to the Highway Fault. There is also a cluster to about 2.5 km NW of Mestiza. The anomaly is probably broadened by dispersal on steep slopes.

There is also a small anomaly close to the Highway Fault about 1 km NE of Tatascame. What is the source of this? Is there a concealed vein here?

Andrea shows some sporadic 'high' Mo values. There are also some anomalies in the far NW of the district [570000 1418400].

Lead (Pb). Lead can be important in epithermal systems. The distal portions of epithermal veins can show Pb + Zn + Ag assemblages.

Again, the Pb values at La India are extremely low. Clearly this is a base metal-poor epithermal system. The plot (Appendix 2) shows a weak cluster W of Mestiza (which more or less mirrors As and Te). There are sporadic high values at La India. There is a weak anomaly at Central Breccia.

The biggest, most consistent, anomaly occurs at Andrea. Again, I would recommend some investigation into the raw data and laboratory. There is a lot of data between 20-40 ppm Pb when compared with other areas. But outwardly it appears to be a real (but weak) anomaly.

Antimony (Sb). Is part of the triumvirate of volatile epithermal elements (with As and Hg). It can occur as sulphide (stibnite) or as sulfosalts. It tends to occur at the top levels of epithermal deposits.

The Sb plot (Appendix 2) is very interesting and perhaps the most useful of all the elements (excluding gold). Firstly, it seems to show anomalies (though weak, no sample above 34 ppm) that are peripheral to La India and the Highway Fault. Relatively high Sb occurs at Andrea, W of Mestiza, the SE (concealed?) extension of La India, Real de la Cruz and N of Tatascame. There also seems to be a through-going anomaly that runs from America, through Central Breccia, to Cacao and possibly Real de la Cruz.

The Sb plot also shows an encouraging anomaly SE of La India, again supporting the concept of a buried extension to the La India Vein.

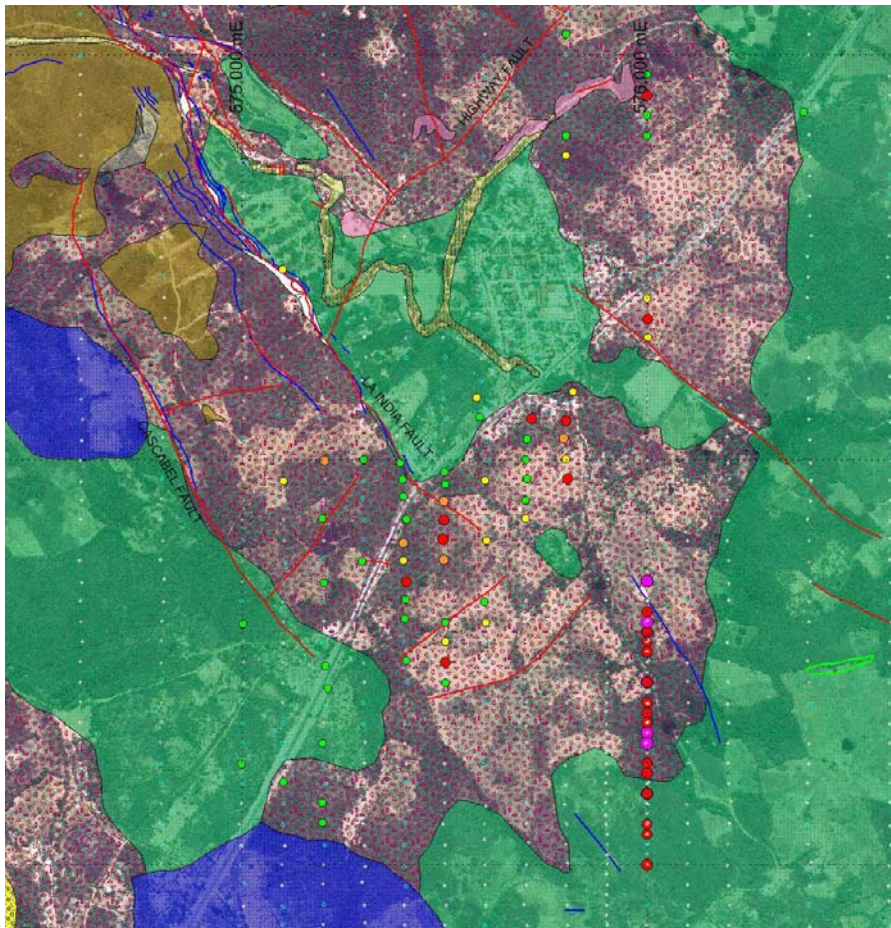
There are relatively high values along America and a broad anomaly in the hilly country to the W. Again, this partly reflects dispersion from point sources (veins) on slopes.

There are relatively high Sb values (> 15 ppm) on the edge of a major scarp slope about 2.5 km NNE of Tatascame. There is no obvious vein source. I am aware of a few epithermal deposits (e.g. Rio Blanco, Ecuador, 1 Moz Au) where flat-lying felsic flows and pumice-rich tuffs soaked up hydrothermal fluids above blind veins and have elevated Hg, Sb and As. This may be an example of this. But equally, there may be a vein that is responsible. It should be followed up.

Tellurium (Te). Gold occurs alloyed with tellurium in many epithermal deposits (and Intrusion-related and Orogenic Gold deposits).

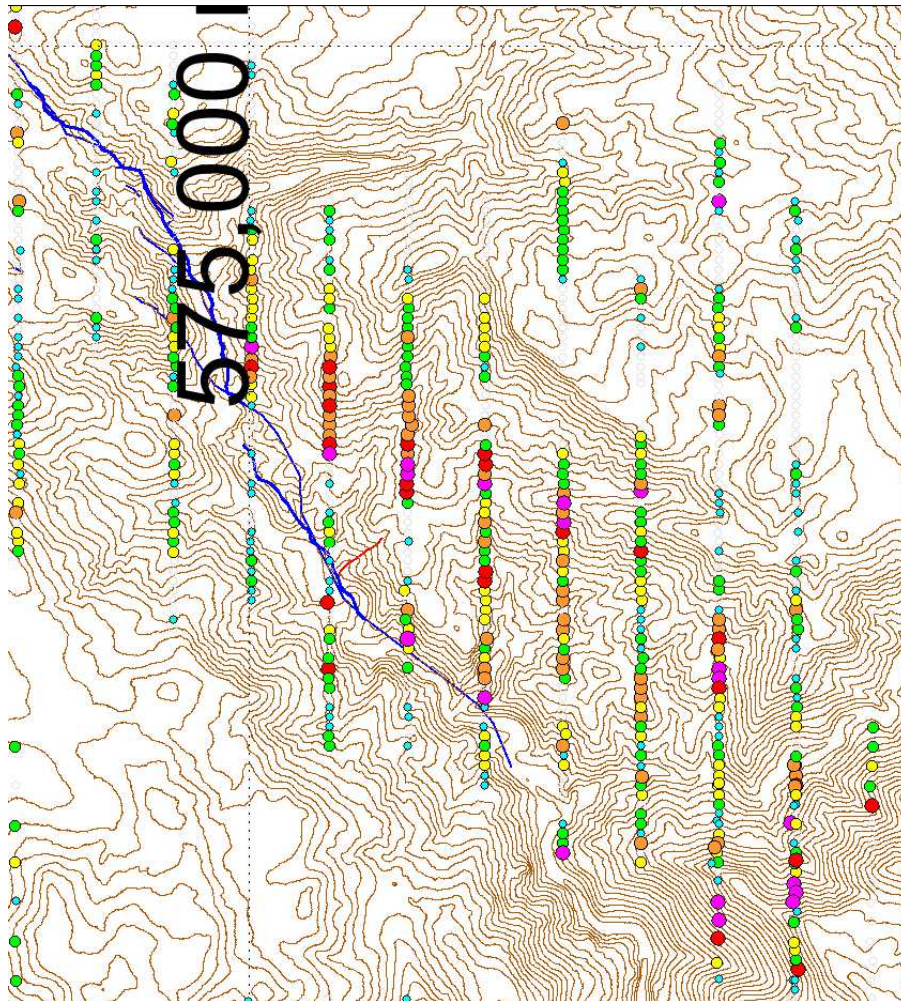
The plot shows the effects of different generations of laboratories (Andrea for example, which either has no analyses or used a different technique).

There is a cluster at La India, but this seems to be real, rather than an artefact due to contamination by processing plants. There is an unusual line of relatively high values to the SE of the road, within andesite, that looks out of place and again may be an artefact of different labs? But, overall the data suggest a possible SE continuation to the La India structure. The screenshot below shows the geological map. Tellurium corresponds well with the felsic rocks.



Zinc (Zn). Zinc mirrors lead (and silver) in many epithermal (and porphyry) systems. It tends to be more distal to the upflow centres than copper, for example. It is also relatively soluble/mobile and I notice that anomalies tend to be much broader on steep slopes than on flat ground. In this respect, it resembles manganese (see above). Point sources (veins) provide wide downslope anomalies.

The distribution of Zn is quite similar to Mn (Appendix 2). Some of the highest Zn values occur around Andrea, but note that many occur on the relative steep slopes N of the vein. Again, I suspect some point sources (veins) have created a wide downslope footprint. This is shown in the screenshot of the Andrea Vein (in blue) below.



The total Zn values at Andrea suggest it is more Zn-rich and therefore more distal to the main upflow zone(s), such as La India.

5 GEOPHYSICS

Ground and air magnetics are great for defining rock types and helping make geological maps. Likewise, airborne radiometrics. But, having seen the host rocks, I very much doubt that the increased radioactive signature from Andrea reflects adularia alteration of the wall rocks because, as in most of the district, the wall rocks are remarkably unaltered. The fluids in the vein conduits simply did not penetrate far into the wall rocks. The elevated radioactivity almost certainly simply reflects the outcrop of certain more felsic rocks, with more potassic minerals (K feldspar).

Because of my comments in Section 4 (the lack of pyritization of the wall rocks) I don't believe that electrical methods will be a great help in the La India district. Very little silica has been added to the wall rocks so IP will be unlikely to produce resistivity highs. I very much doubt that any 'magic bullet' electrical geophysical technique will help; yes, they will generate 'anomalies', because they always do; variability in the dataset generates end members that are considered 'anomalous'.

But I am sure that Sillitoe would agree that detailed mapping and soil/rock geochemistry are much better tools in this environment. Particularly since we already have plenty of vectors towards drill targets. I recommend that Condor Gold saves the money for drilling and old fashioned 'boots on the ground' geological work.

6 CONCLUSIONS AND RECOMMENDATIONS

Conclusions about individual targets are made in the relevant sections, 3.1 to 3.10.

In summary:

Santa Barbara – attractive target, should be drilled soon. No further work required before drilling. Vein should be targeted at 75 m and 150 m depth. 300 m total.

Andrea – a very attractive target, should be drilled soon. Logistical constraints may make that difficult. No further geological work required before drilling. Geological cross sections required. Some semi-regional mapping is required to establish what the likely host rocks will be at depth (but this is not essential before drilling). 500 m total.

Cascabel – discussed in previous reports, this is a long shot, but well worth taking. It has the potential to be a major ‘concealed’ discovery, close to the main upflow zone of La India. The vein should be targeted at 75 m and 150 m depth. 300 m total.

Mestiza – drill ready. Attractive target, probably a shallow oxidised high grade gold resource, with lower grades expected at depth. A few deep holes are justified, to rule out the possibility of a higher-grade boiling zone. But most efforts should be made to drill the shallow portions on a spacing to be established by the resource modeler. Once we have this guidance, we can design new drill holes. But my preliminary plan would be to target the vein using fences at shallow depth (c. 40 m depth), with careful triple tube drilling to ensure recovery (the material will be friable and oxidised). Then again at about 110-120 m depth. The intention would be to define an oxidised gold resource. I would begin the program straddling the best drill holes from previous drilling.

Real de la Cruz – not drill ready and a less attractive target because of the difficulty in identifying continuous veins. Can be made drill ready with a few days’ simple fieldwork. 300 m total.

Cacao – drill-ready, an attractive target. The lower temperature vein textures suggest a high level in an epithermal system, above a boiling zone (but there is a chance the vein is distal to the main upflow zone (at La India?) and may have only a weak boiling level and more alkaline fluids due to mixing with groundwater/meteoric water). Drilling is the only way to test the hypothesis. Geological cross sections need to be made. 2100 m total, to be reduced if initial holes are disappointing. Express assay service from initial holes. Holes A and E first (see Figure 2).

Los Limones – virtually drill ready. The vein is thin and I suspect it is discontinuous. Grades are high. Some more mapping and geological cross sections are required. The vein merits scout drilling and should be targeted at 75 m and 150 depth below the surface. 300 m total.

Tatascame (Cristalito) – this very attractive target is drill ready. About 850-900 m of drilling are recommended.

San Lucas – this is a less attractive target, because of its narrowness, shallow dip, and the lack of wall rock mineralization (stockworks or sheeted veins). Logistics are difficult. The N and S ends of the vein merit more work, including drilling in the S, but it should rank low in



the list of priorities.

Central Breccia - understanding is hampered by the lack of a clear geological model. High grade mineralization may be in narrow, pencil-like oreshoots, at the intersection of structures. No drilling recommended for the time being. There is some potential for enlarging the resource by drilling on the N side and this should be considered in the future, after some 3D modelling of the geology.

At some stage, the district needs to be examined as a whole (*cf.* Cerro Vanguardia, see screenshot below): the alteration assemblages and vein textures need to be put together into an overall interpretation of the fossil geothermal field. This should give us a better idea of where the upflow zones were.

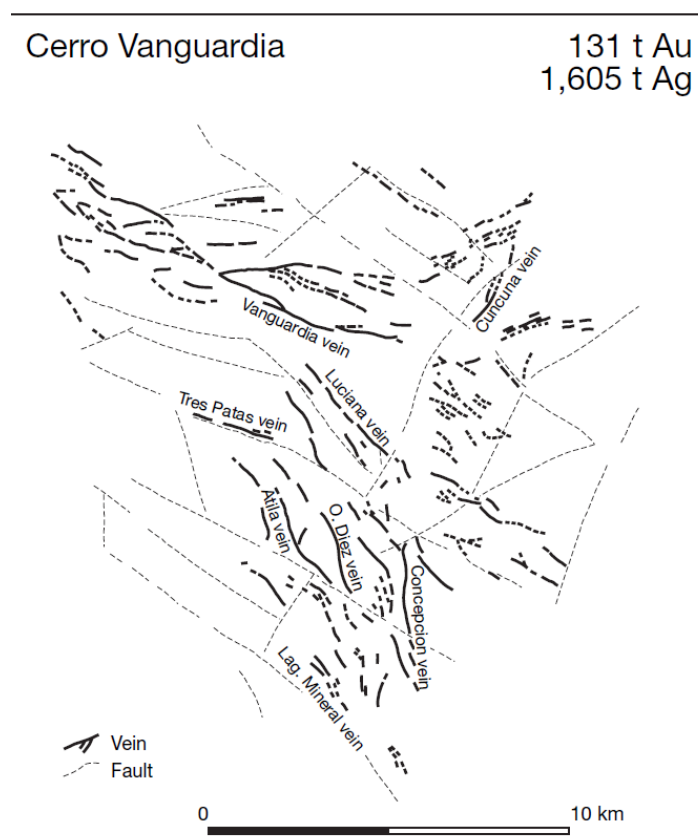


Figure 19 shows an example of a modern geothermal field in Kyushu, Japan. It is instructive because the scale is similar to the La India district. Probably the main difference is that it has strong topography, whereas I imagine the La India district was relatively flat-lying, swampy, with lakes (suggested by accretionary lapilli, rare coaly tuffs).

The simplest interpretation of the peripheral pattern shown by Sb and Ag:Au ratios in soils is that the main upflow centre was at La India and along the Highway Fault (or its precursor) and that most other targets are distal to this upflow centre (particularly Andrea and NW of Mestiza).

The level of erosion of the epithermal system may be similar across the district, but because the temperature gradients fell laterally, away from the upflow centres, that means higher levels are preserved outwards. The cartoon below explains this concept and should be considered a 'long section', in the plane of a through-going fault, like La India. Note that the boiling occurs at



Geothermal Manifestations and temperature

cold water down down fault - 350 at 1km depth!

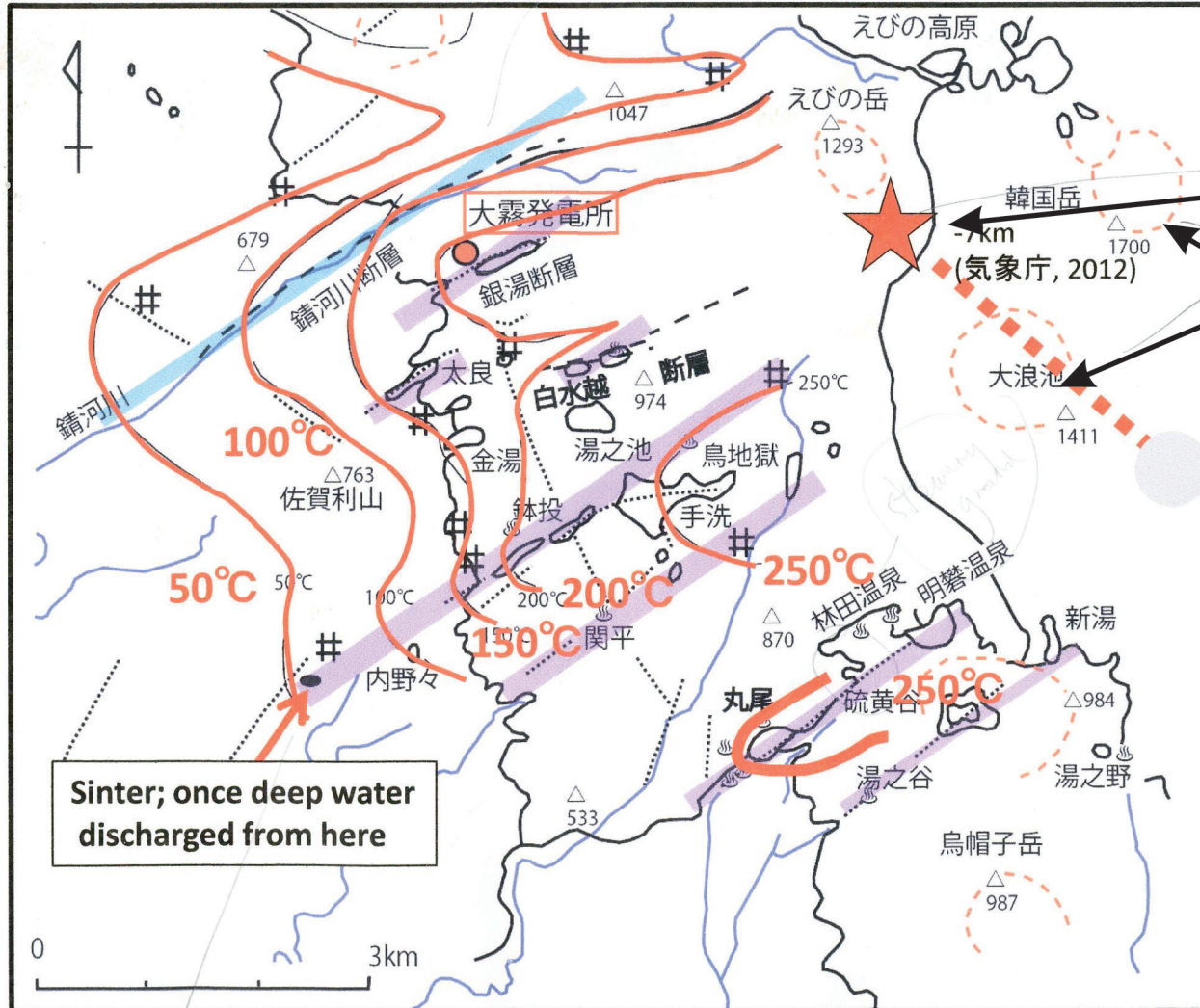
NE trending fractures are dominant.

MAGMA CHAMBER
VOLCANO

Weak but continuous tremors.
(Nakamichi et al., 2013)

Mt. Shinmoe erupted on Jan. 26, 2011.

- 断層
- リニアメント
- 噴火口
- シンター
- ♨ 温泉
- 井 地質調査井
- 変質帯



Sinter; once deep water discharged from here

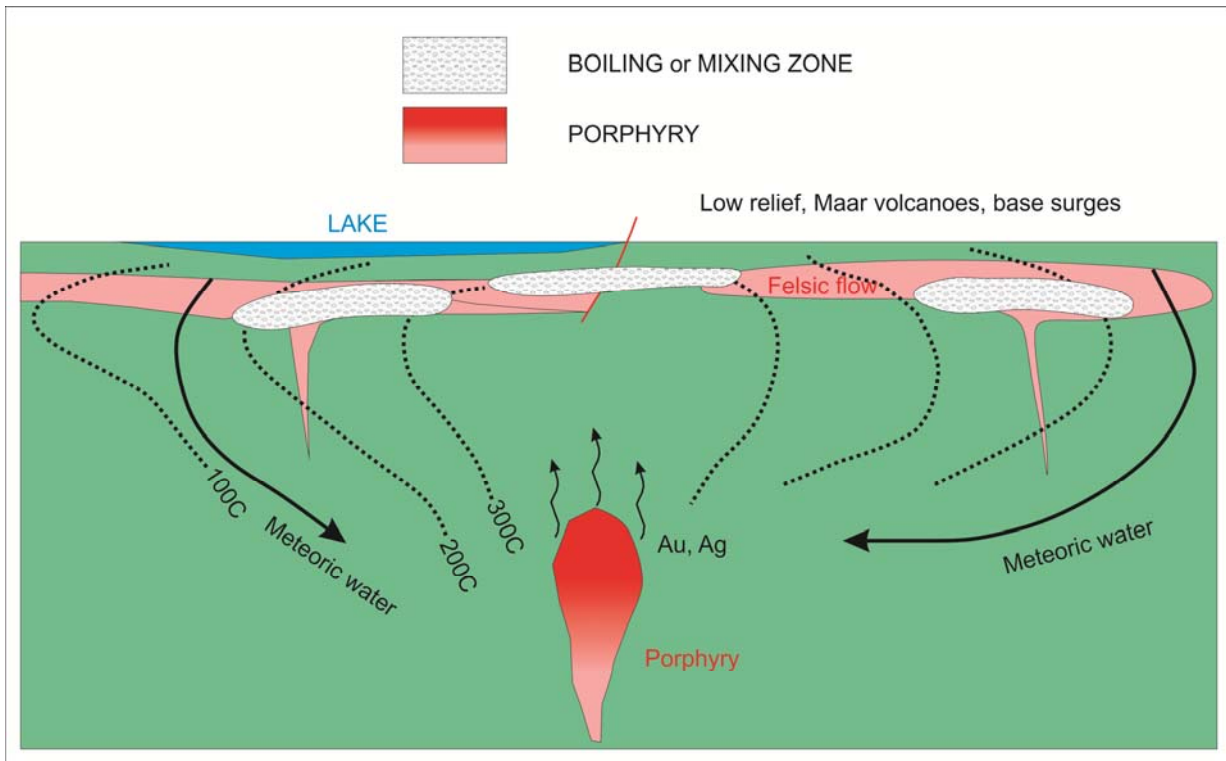
20,000 years

Temperature contours are on the sea level.



Figure 19 Example of an active geothermal field in Kyushu, Japan. Temperature contours (in red) are plotted at sea level (approx 500 m below ground surface). Note scale, which is comparable to La India. The purple lines show faults.

higher elevation above the porphyry intrusion (or *mixing* – *epithermal researchers form two clans, those that emphasize mixing of different waters (Corbett), the other boiling (Hedenquist)*). I am postulating a porphyry intrusion at depth, the ultimate source of heat and metals that drove, and mineralized, the district (back-arc epithermals tend not to have associated intrusions).



7 OTHER RECOMMENDATIONS

7.1 Before drilling is carried out on any target, geological cross sections need to be made. These should show stratigraphy, structure, alteration and planned drill holes. They will be based on mapping and logging of existing core. We should not rely entirely on resource modelers' wireframes for drill targeting. Sections should be updated as more information is available.

7.2 The soil geochemistry program should continue to plug the gaps in coverage. But we should not lose sight of its objectives, to generate new vein targets. A line spacing of 400 m is detailed enough to detect any through-going veins. Follow-up mapping or more detailed sampling would follow. The effects of downslope dispersion from point surfaces (veins) in steep topography need to be borne in mind. Hg should be analysed by cold vapour and samples should be air- and not oven-dried.

7.3 Additional core sampling is required for some drill holes, where the approach was overly conservative – see Sections 3.1-3.10 for examples. I have also made comments on my logs regarding sampling.

7.4 In future drilling, recovery will be key. Triple tube drilling and larger diameter. We cannot afford to have poor recovery, especially from deep holes. It negatively impacts on so many aspects, from resource calculation to engineering studies. I recommend that a geologist sits on the rig, supervising the drilling as it approaches the critical zone and making sure that the drillers take care (slower drilling, constant torque, reduced water pressure, whatever is required). We cannot run the risk of drilling to depth, only to have poor recovery. It is wonderful having many metres of perfect non-mineralized wall rock to examine, but if recovery is poor in the critical mineralized zone, then the information is severely compromised. Future resource calculations will be compromised or full of disclaimers.

7.5 Downhole surveying. I recommend 10 m intervals. Dubious survey results need to be checked immediately and surveys carried out again.

7.6 Oriented core is certainly preferable, but we need confidence in the method. Also, oriented core is less crucial for a simple single vein target. It becomes more important for examples like La India, where there is a wide hanging wall zone above the main vein which has potentially mineable veins with different orientations.

7.7 I recommend printing the A3 drill logs (Appendix 1) and inserting paper copies into the relevant drill hole folders.

7.8 Drill programs need to be modified on the hoof, and as (express) assays are received. This highlights the importance of an experienced on-site geologist, with the confidence to continue drill holes beyond their programmed depth and modify a program as results come in. There is real danger in having an inexperienced geologist managing a drill program. I saw several drill holes on this visit that were apparently stopped in mineralization because they had reached their programmed depth.

8 DATA AND SIGNATURE PAGE

The author, Warren Pratt (PhD CGeol) is a Director of Specialised Geological Mapping Ltd, a consulting company based in the UK. He is a graduate of Hull University, UK (BSc Hons Geology, First Class, 1986) and the University College of Wales, Aberystwyth, UK (PhD Structural Geology, 1990). He has practiced his profession continuously for the last 26 years and is experienced in epithermal, porphyry Cu/Au, orogenic/shear zone Au and VHMS deposits. Warren Pratt is a Competent Person as defined in Chapter 19 of the UKLA Sourcebook, Chartered Geologist (22 years), Fellow of the Geological Society, and Fellow of the Society of Economic Geologists. He won the President's Award of the Geological Society in 1994 for the preparation of detailed geological maps.

The author has detailed knowledge of the assets held by Condor Gold plc in Nicaragua. The author holds options in Condor Gold plc. The only other commercial interest in relation to Condor Gold plc is the right to charge professional fees for this report.

Dated at Urquhart, 25 October 2016

signed

Warren Pratt, PhD, CGeol



Appendix 1

A3 drill logs

Appendix 2

Soil geochemistry plots