

## NAMIQUIPA PROJECT UPDATE

17 July 2014. Santana Minerals Limited (“Santana”) has completed its review of geological, geochemical and geophysical data at its 100% owned Namiquipa Project in Chihuahua State of Mexico.

### Highlights include:

- **Northern vein potential extension** zone confirmed
- **Follow-up drill targets identified** to
  - test the Northern extension and
  - to infill untested areas along strike from Princessa vein and at depth under America and Princessa veins.

### Discussion:

Santana engaged the services of epithermal Au-Ag specialists Corbett and Menzies Consulting (CMC), to undertake a desktop review of available geological, geochemical and geophysical data. Geologists from CMC have visited the Namiquipa Project on 4 previous occasions and have assisted the site geologists in their understanding aspects of the geology, mineralisation and alteration during the last 3 years.

The objective of the review was to design an appropriate follow-up work program.

The review looked at the extensive quantum of data from work undertaken by Santana’s predecessor (including 86 diamond core holes for 32,151 metres) and from historic production (from workings of the America and Princessa veins) (**Figure 1**).

Assessment involved identification of a model for the controls to the Namiquipa Ag-Pb-Zn ( $\pm$ Au) mineralization. The assessment has provided a geologic model. The exploration targets are based on the controls to mineralisation: lithology, structure, styles and mechanism of Ag-Au deposition. It aligns with interpretation of magnetics and Induced polarisation (IP) data.

The interpretation and outcomes are encouraging for the support of further exploration.

The detailed project interpretation is within the regional setting that Namiquipa is part of, the lower volcanic sequence (LVS) of the larger Sierra Madre Occidental Volcanic (SMOV) geologic zone which hosts several economically important epithermal Ag deposits in the top 10 Ag producers globally.

More specific to Namiquipa, the stratigraphy comprises multiple andesitic volcanic units and a basal rhyolite dome. It is transected by north-south oriented Ag-Pb-Zn bearing quartz veins, and north-west oriented faults. The historically mined America and Princessa veins exhibit highest grades within the competent andesite.

Mineralisation occurs as argentite and tennantite-tetrahedrite-yellow to red sphalerite-galena-chalcopyrite bearing quartz veins with peripheral illite-pyrite grading out into chlorite alteration.

The volcanic sequence displays moderate silica-adularia alteration over broad zones in permeable host rocks. Gangue minerals include magnesium carbonate, chalcedonic silica and locally kaolin, the latter of which occurs with bonanza Ag grades and is indicative of acid sulphate waters collapsing down north-west cross structures. South plunging flexures host ore shoots.

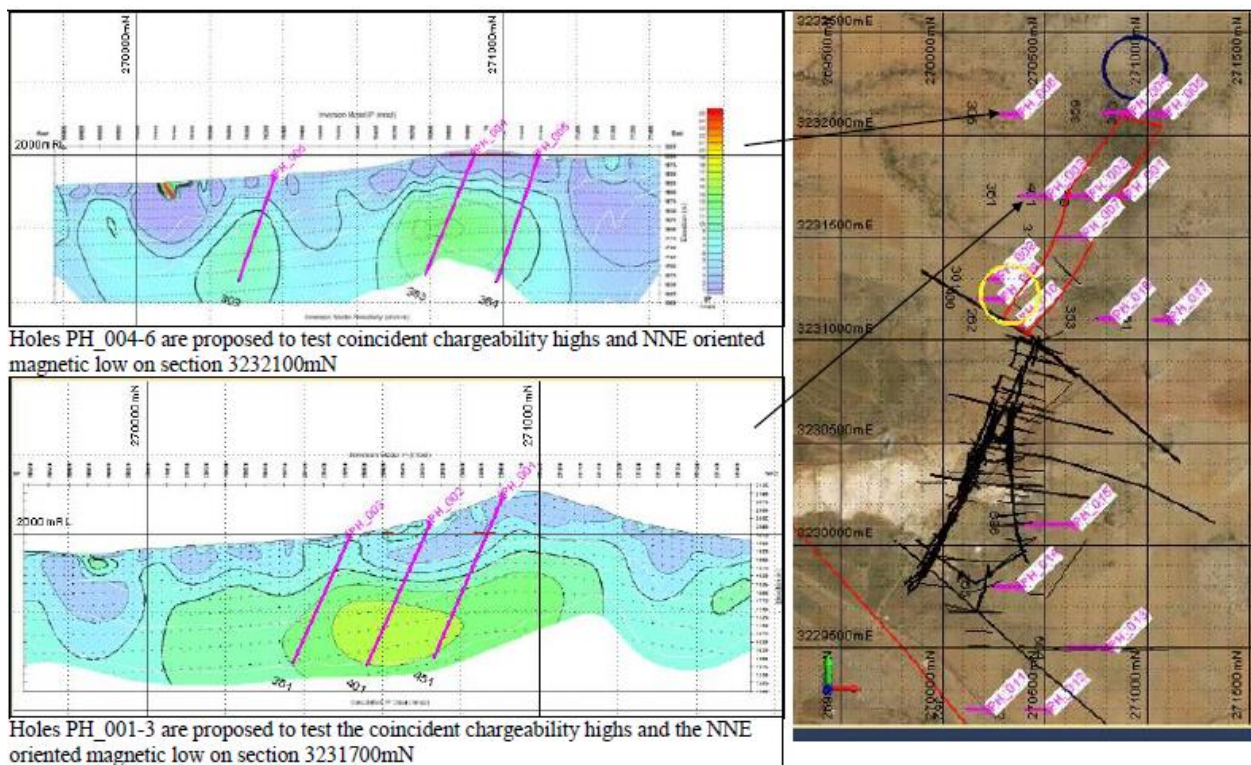
Statistical analysis of geochemical data suggests that an early quartz-sulphide event (ie Au-Cu-As-Sb) has been overprinted by a carbonate-based metal Ag-Pb-Zn event. Ground magnetic data highlights several north-west and west-north-west oriented faults which transect the north-south trending veins. A prominent north-west oriented fault appears to have off-set mineralisation (**Figure 2**), immediately north of the old workings, where to date no northern continuation of the veins has been discovered.

It has been interpreted from the stratigraphy that the offset on this fault is modest with potential for the discovery of high grade veins in the northern block. This interpretation is supported by analyses of the alteration and IP chargeability. IP chargeability inversion models show a positive correlation with mineralisation south of this offset fault.

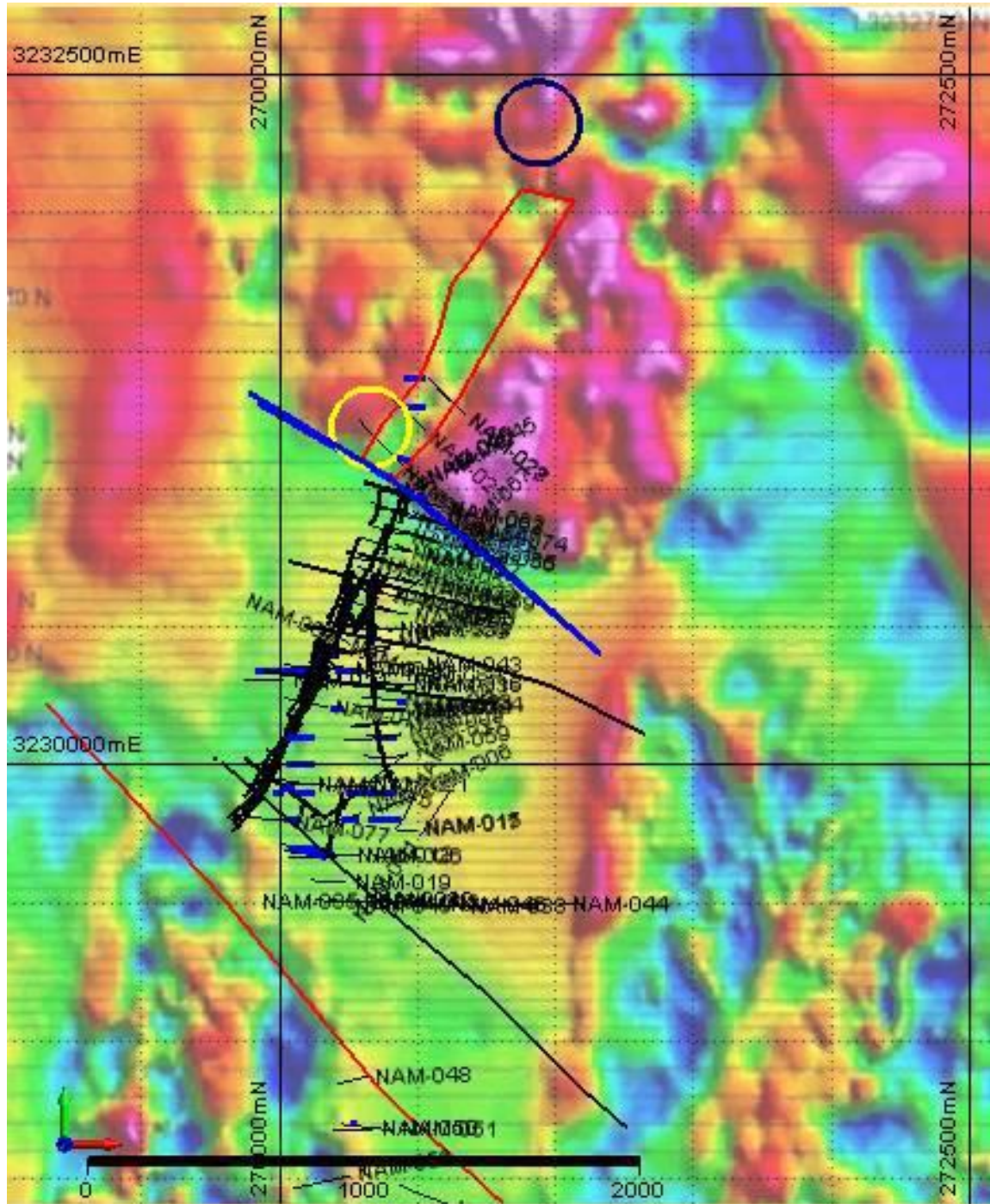
**Outcomes:**

The outcomes recommend a drill program of up to 17 drill holes in order to test the following targets which have been noted with priority:

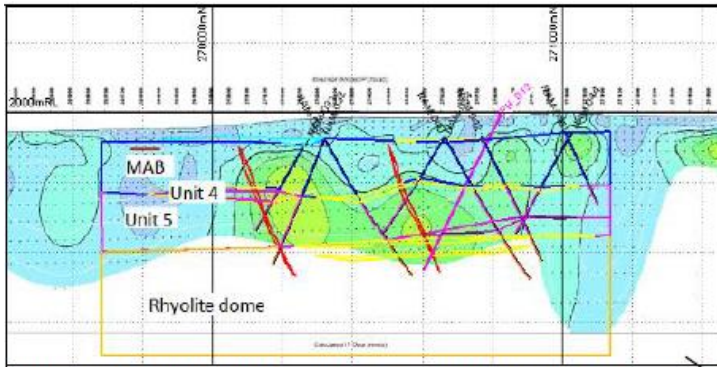
- Zones of high IP chargeability associated with competent host rocks to the Northern extension area (**Figure 1**);
- A transect across the North-west off-set to associated ground magnetic low and coincident outcrop of quartz veins (**Figure 2**);
- Infill untested areas associated with IP chargeable zones (**Figures 3 & 4**); and
- Test zones associated with North-West faults which represent potential sites of Ag deposition by the mixing of acid sulphate waters with magmatic fluids.



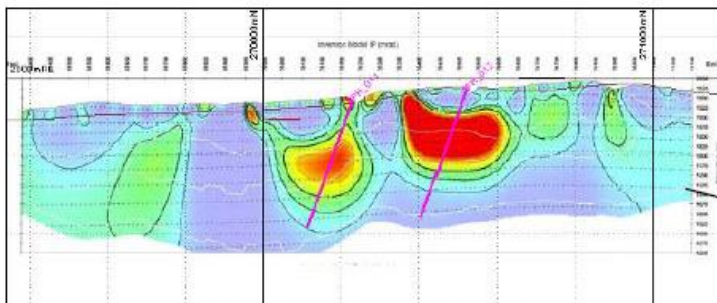
**Figure 1.** Proposed Holes PH\_001-006 testing chargeability highs, magnetic low and northern zone silicification



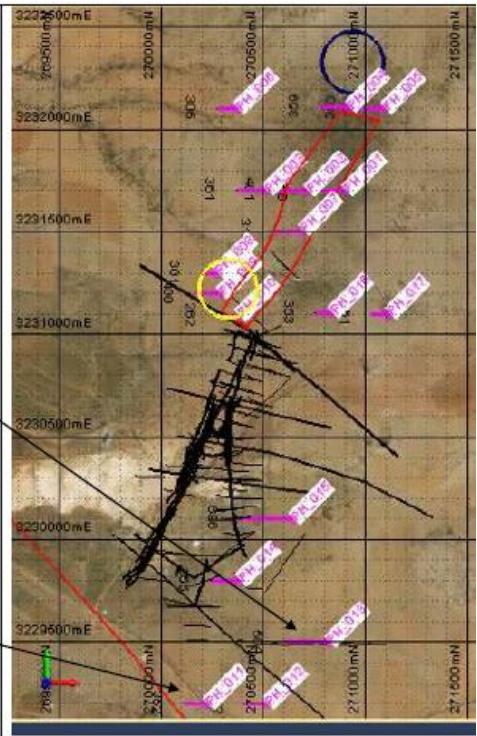
**Figure 2.** Reduced to pole ground magnetic data showing NW-WNW trending faults (black and blue lines), NNE oriented zone of magnetite depletion (red polygon), acid sulphate cap (yellow circle) and northern zone of silicification (blue circle).



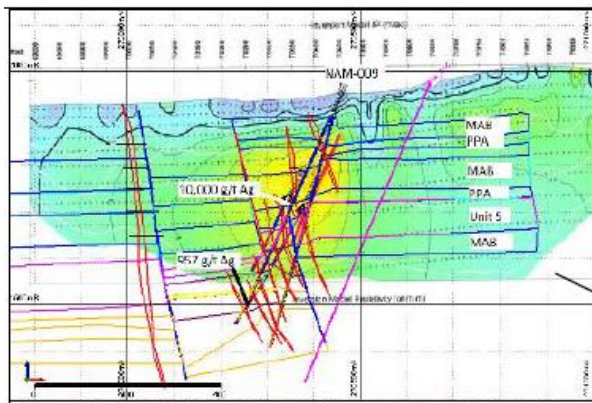
Holes PH\_013 is an infill hole testing the down dip extend of the Princesa vein and associated chargeability high.



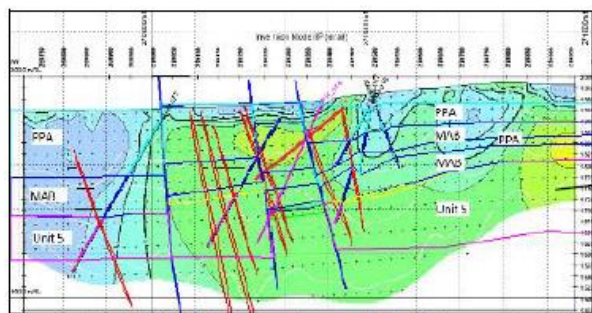
Holes PH\_011 and PH\_012 test two chargeability high along strike from the Princesa and Mexicana veins



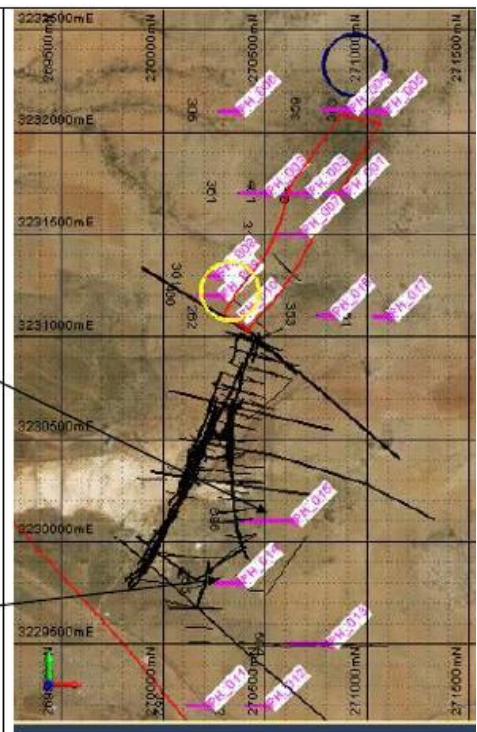
**Figure 3.** Proposed holes PH\_011 -013 testing chargeability highs and down dip extents of Princesa vein.



Proposed hole PH\_015 and NAM\_009 on section 3230100mN



Proposed hole PH\_014 testing a chargeability high on section 3229800mN.



**Figure 4.** Proposed holes PH\_014 – 015 testing chargeability highs and down dip on the Princesa vein below hole NAM-009.

For further information, please contact:

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**Competent Person's Statement**

The information in this report that relates to exploration results and geology is based on information compiled by Mr Richard Keevers, who is a Fellow of the Australasian Institute of Mining and Metallurgy. Mr Keevers is a non-executive director of the Company. Mr Keevers has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Keevers consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

**About Santana**

Santana is a precious metals explorer focused on Mexico where it holds 100% of the Namiquipa silver project in Chihuahua.

Additional information about Santana and its projects is available on the website: [www.santanaminerals.com](http://www.santanaminerals.com)