30 January 2009



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# **Silver Swan Group Ltd**

# **December Quarterly Activities Report**

#### **HIGHLIGHTS**

- New VMS (Cu-Zn-Ag-Au) targets identified in the Quinns area
- New downhole EM target identified at Austin
- Austin VMS system (Cu-Zn-Ag-Au) known to be a style that typically occurs in clusters and hosts the largest tonnages
- Uranium anomaly well defined at Yagahong
- ♣ Aeromagnetic survey at 25m and 40m line-spacing over 418.6 km² kilometres completed

Silver Swan's exploration work in the quarter focused on two project areas, namely Quinns (including Austin) and Yagahong (including Copper Hills) all within the Meekatharra area of the Murchison region.

## **Exploration Activities**

#### **Quinns Project**

### Aeromagnetic Survey

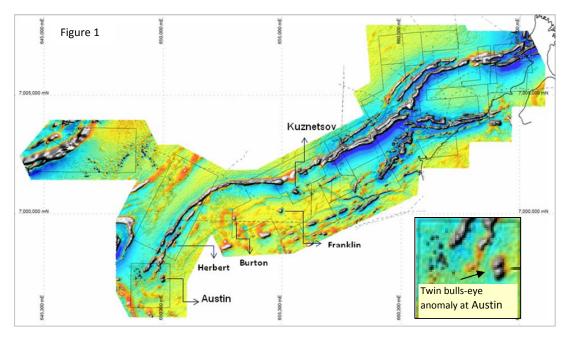
Quinns is located ~55km SE of Meekatharra and 20km SSW of the Copper Hills Cu-Au project. Wide intersections of high-grade **Cu-Zn-Ag-Au** mineralisation at **Austin** have been reported in previous ASX releases and are available on SWN's website. Austin is a promising new discovery made by Silver Swan last year.

Preliminary images from a new detailed aeromagnetic survey over the complete Quinns project area resolve the strong magnetic anomaly at Austin into two adjacent bulls-eye anomalies. The highly successful drilling to date by SWN is associated with the southern anomaly only. The northern anomaly is coincident with a downhole EM response from a recent survey and near to a 1990 CRA drillhole 90PWGD002. That hole with highly anomalous copper and zinc was drilled approximately 20-30m north of the conductor.

Several other magnetic bulls-eye anomalies similar to Austin have been identified. These anomalies, like Austin, are under transported cover. The recently named Franklin anomaly is coincident with chlorite-magnetite alteration at surface. Other anomalies present have been provisionally named Herbert, Burton, Franklin and

Kuznetsov, and are in addition to the already known anomalies in the northern part of Quinns. These anomalies are shown in Figure 1.

Data were collected from 25m spaced flight-lines, with a sensor elevation of 25m for most of the area. A smaller survey was carried out over E51/903 at 40m line spacing. Data processing and interpretation are continuing.



### Austin Cu-Zn-Ag-Au: Down-hole geophysical survey

Down-hole electromagnetic surveys have been completed in all 12 holes drilled by SWN into the Austin VMS discovery and two nearby holes drilled by CRA in 1990-1991. Conductors identified from this survey confirm:

- the interpretation of a north-dipping body, plunging steeply to the northeast
- a significant conductor yet to be tested east and down plunge from hole ATD003
- an off-hole conductor identified to the north of the current SWN drilling. This conductor is coincident
  with a newly recognised double-peak bulls-eye magnetic anomaly at Austin. The conductor is close to a
  1990 CRA hole 90PWGD002, recording intersections of 8.1m at 0.5% Cu and 2.1m at 1.2% Zn. This may
  represent another NE plunging zone of mineralisation that would fit well with the current interpreted
  geological model.

## Austin Cu-Zn-Ag-Au: High precision geochemistry

High precision geochemistry for major, trace and rare earth elements was conducted on 40 samples from three diamond holes at Austin. This work was conducted with Professor R Kerrich, a leading world expert on VMS systems and geochemistry, to characterize VMS type and environment and to obtain a good indication of potential metal budget. The six major divisions of VMS type have different and distinctive metal budgets. The results of this work are as follows:\*

- Geodynamic setting: "intraoceanic rifted arc, transitional to back-arc in keeping with prospective VMS environments"
- "Austin has all of the lithological, textural, geodynamic, alteration and metal budgets of productive Archaean VMS deposits worldwide"
- "Drill intersections to date of 50-90 metres exceed the average for VMS deposits"
- "FIIIa,b compositional characteristics of Austin VMS volcanic host; FIIIa,b host the largest tonnage VMS deposits of all ages". FIIIa,b is an established scientific classification for VMS deposits; details of the classification and background science may be found at Galley et al., 2007.

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- A bimodal-mafic classification is a closest fit of VMS type at this early stage. In Canada for a best comparison, bimodal mafic deposits account for the greatest number and, therefore, the largest aggregate tonnage of this deposit types (Galley et al., 2007).
- Most samples from Austin lie in the FIIIb field. Economic VMS deposits deposit types within this category
  include Kidd Creek, Kamiskotia, Eskay Creek and Mattagami Lake (Canada) and Neves Corvo (Portugal).

These results provide great encouragement for the on-going exploration of the Austin discovery.

\*The samples for this work were collected, analysed and interpreted by Prof. R. Kerrich (OreGeodynamics Inc. Canada, January 2009). The quotes above are taken directly from R. Kerrich's report to Silver Swan.

Galley, A.G., et al., 2007. Volcanic Massive Sulphide Deposits. Geol. Assoc. Canada, Mineral Deposits Division, Spec. Publ. No 5, 141-161.

## **Yagahong Project**

## Yagahong Cu-Au: Aeromagnetic Survey

Yagahong lies ~40km SE of Meekatharra. Aeromagnetic data was collected over the entire area at 40m spaced flight-lines and detailed 25m line spacing at Copper Hills, with a sensor elevation of 25m (Figure 2).

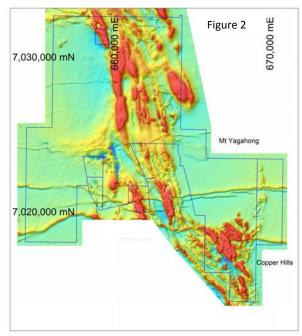
#### Copper Hills Cu-Au

Copper Hills is located and occupies the southern part of the Yagahong Project. Copper Hills is a syn-tectonic Cu-Au mineralised system, a separate and different mineralisation style to Austin. Intersections of Cu-Au mineralisation at Copper Hills South have been reported in previous releases to the ASX and readers are referred to SWN's website for this information.

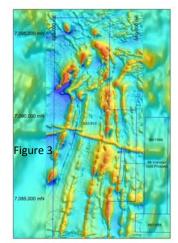
Aeromagnetic data at Copper Hills matches well with detailed geological mapping carried out by SWN and defines well the copper-gold-bearing sheared gabbroic unit, its extension to the north, its continuity under cover and the gabbroic embayments that also host copper mineralisation. The structural complexities of the area are clearly evident and can be accurately mapped. A number of new target zones have been identified as a result of the aeromagnetic data.

## **Uranium anomaly at Yagahong**

Radiometrics has identified a well defined uranium anomaly of >5km of strike and 700m wide associated with calcrete in the central to northern part of the Yagahong project area. The new data show an intensity and definition to the anomaly that is closely associated with calcretes in a palaeochannel. The anomaly is intense and will be sampled.



# **Other Projects**



#### **Abbotts**

Data from a detailed aeromagnetic survey were received for the Abbotts project, along with preliminary imagery (Figure 3). Data were collected from 40m spaced flight-lines, with a sensor elevation of 25m. Data processing and interpretation are on-going.

#### **Bourkes Find**

Compilation and validation of previously unavailable legacy data over the southern part of the Bourkes Find project is almost complete in preparation for a drilling programme.

#### **Planned Activities**

#### **Quinns**

- At Austin, increase the size of the known mineralisation and test the second associated bulls-eye anomaly; target drill the new EM conductors at Austin.
- Conduct EM surveys over the newly recognised magnetic anomalies to determine precise and detailed Cu-Zn-Ag-Au mineralisation targets prior to drilling

## Yagahong

- Preliminary, low cost sampling of the Yagahong uranium anomaly
- Continue to test the 3km long strike zone of Cu-Au mineralisation at Copper Hills

#### **Bourkes Find**

Design and prepare for a future diamond and reverse circulation drilling programme

For further information please contact:

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Information in this report that relates to Exploration Results is based on information compiled by S. Vearncombe, RPGeo, who is a Member of the Australian Institute of Geoscientists. S. Vearncombe is a full-time employee of Silver Swan Group and has sufficient experience which is relevant to the styles of mineralisation and types of deposit under consideration and to the activity which she is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. S. Vearncombe consents to the inclusion in the report of the matters based on her information in the form and context in which it appears.

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