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Hillside Copper Project, South Australia

- **Outstanding detail defines new high priority targets at Hillside.**
- **High resolution aeromagnetic survey identifies three separate structures, each up to 2km long.**
 - **Drilling to date has tested less than 5% of the prospective copper-rich structures.**

Rex Minerals Limited (“Rex”) has completed a new, high-resolution aeromagnetic survey over its 100% owned Hillside copper-gold prospect on South Australia’s Yorke Peninsula. The results from this survey show that there are three major features (interpreted to be magnetite rich structures) which extend in a northerly direction that were not clearly defined in the previous magnetic survey. An important observation of the new survey is that the highest intensity magnetic feature has not been drill tested.

The aeromagnetic survey is significant for three reasons.

- **Relationship to Copper** - All of the drilling completed to date at Hillside shows a strong correlation between copper and magnetite. Magnetite is the mineral which has been identified as the cause of the magnetic anomalies at Hillside. (This relationship is similar to many other copper-gold deposits such as the Ernest Henry deposit in Queensland).
- **Detail** - The survey is one of the most detailed magnetic surveys ever undertaken in South Australia. The helicopter supported survey comprised 400 line kilometres at 25 metre spaced flight lines, and with a magnetometer height of 30 metres above the ground. It is expected that the results from this survey will dramatically increase the precision of Rex’s targeting for copper mineralisation at Hillside.
- **Large Scale Regional targets** – Successful targeting using a detailed magnetic survey at Hillside (over an area of 10km²) could open up a new frontier of multiple large scale copper-gold targets along the Pine Point Copper Belt (area of 1000km²). Rex has 100% ownership of the Pine Point Copper Belt for a total length of over 60km and plans to fly the entire belt with a high resolution magnetic survey in September - October.

Rex’s Managing Director Mr Steven Olsen said “The new survey has far exceeded our expectations. The initial Government airborne magnetic surveys on the Yorke Peninsula were completed on lines that were 400 metres apart compared with the new survey which was completed on lines that were 25 metres apart. The improvement in this level of detail is like jumping from a grainy old black and white television to a new high-definition colour screen.”

“Our exploration approach has been to focus on shallow copper-gold targets on the Yorke Peninsula of a scale similar to Prominent Hill or larger and the Hillside prospect is just one potential site along this historic copper belt.”

“The results at Hillside have generated a new level of anticipation for the new targets we may generate when we complete our detailed regional magnetic survey over the entire Pine Point Copper Belt. This survey should be completed in October,” Mr Olsen said.

Results

The magnetic survey has provided data which allows for much greater clarity in terms of where the magnetic rocks exist at Hillside. Figure 1 below shows the comparison between the previous broad survey and the new high resolution survey. The image on the left (Image 1) identified a large magnetic feature (purple colour) which was broadly 2km long and 500m wide. The image on the right (Image 2) shows that this magnetic anomaly is made up of three major features which represent important targets given that the drilling to date has shown a strong relationship between the magnetite and copper.

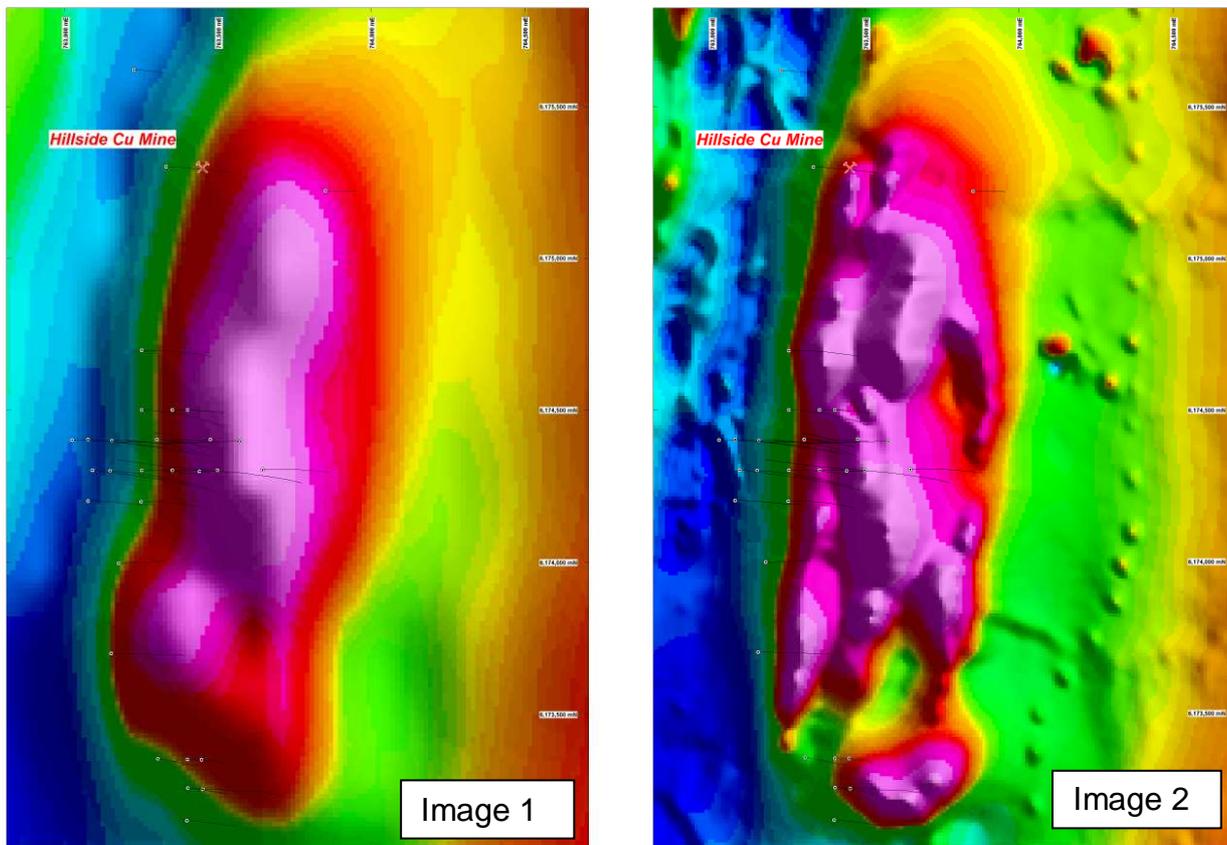


Figure 1: Comparison between the Government magnetic survey flown at 400m line spacing (left) and the Rex magnetic survey flown at 25m line spacing (right).

The magnetic survey has identified three distinct north-south oriented structures which are interpreted to extend for up to 1.6km each. Drilling to date has focussed on the central section of the westernmost structure which corresponds with the Zanoni Fault. Within the Zanoni structure, as well as the other two structures to the east, there are a number of locations that have yet to be tested which Rex considers are important targets (Figure 2). Testing of these targets is considered to give Rex the best opportunity of determining the extent of the copper mineralisation between 20m and 500m of the surface at Hillside.

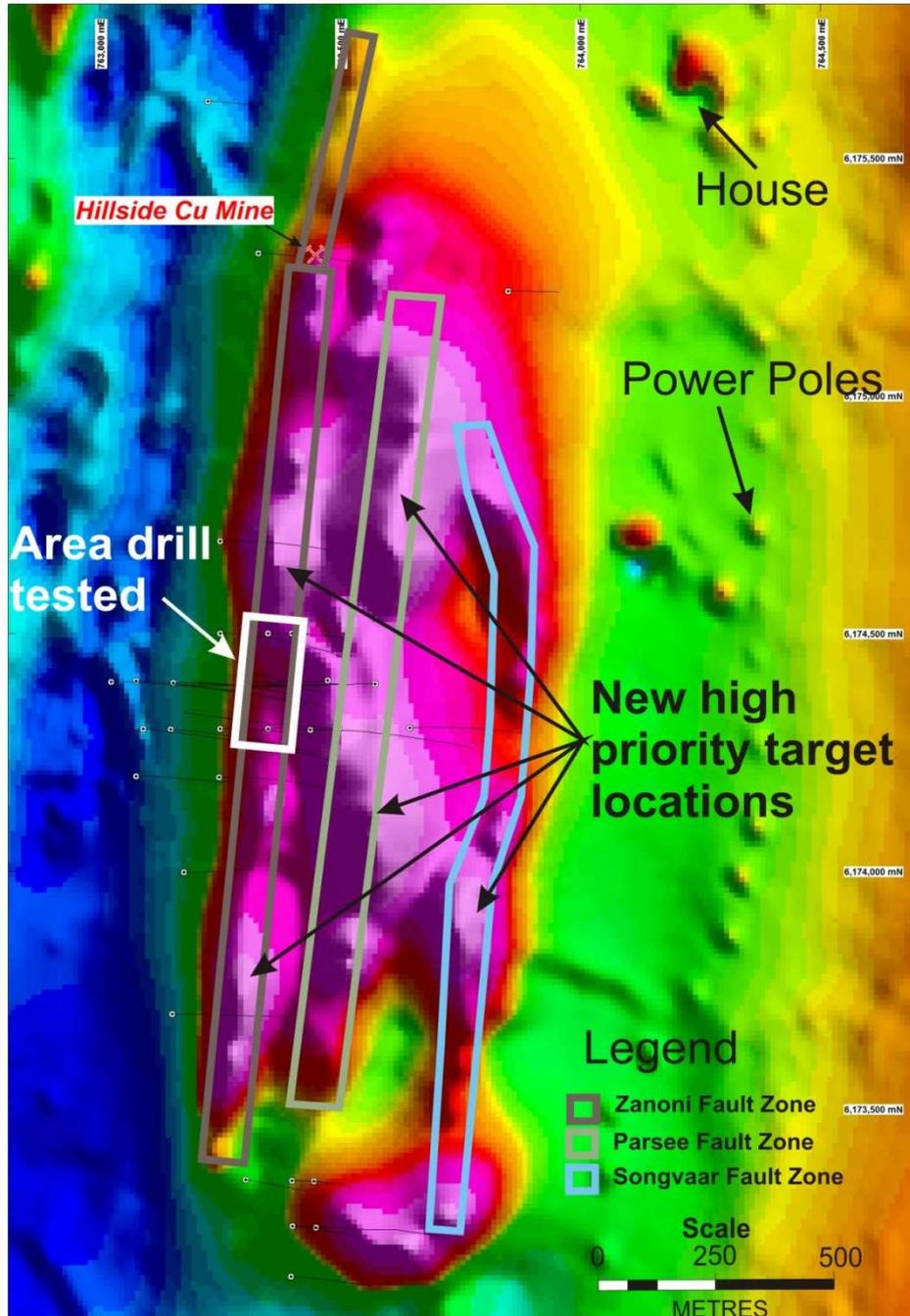


Figure 2: Detailed view of the drilling and the new magnetic image at Hillside, with the interpreted structures and key target locations highlighted. Drilling to date has tested 300m of the Zanoni Fault Zone. The remaining 1.7km of the Zanoni Fault Zone and the entire length of the Parsee and Songvaar Fault Zones are yet to be tested.

Future Hillside and Pine Point Programmes

Rex Minerals will have two diamond drill rigs at Hillside from mid September (additional drill rig coming from Rex's Mt Carrington Project). The second drill rig will be targeting the high priority areas that have been defined from the new aeromagnetic survey data. The first drill rig will continue to define the extensions to the high grade copper mineralisation that has been identified within the Zanoni Fault Zone, particularly to the north where the mineralisation appears to be getting shallower.

Throughout September, a regional high resolution aeromagnetic survey will be completed over the entire Pine Point Copper Belt within Rex's Exploration Licence on the Yorke Peninsula. This information is expected to be processed and subsequently announced in October.

Rex is focussing its activities for the remainder of 2009 on the generation of targets considered prospective for multiple large scale copper projects at both at Hillside and throughout the Pine Point Copper Belt. This work will continue into the first half of 2010, when Rex will also aim to deliver the first Resource estimate from the Hillside project.

About Pine Point Copper Belt (South Australia)

Rex has 100% ownership over a 60km section of the highly prospective Pine Point Copper Belt ('PPCB') on the Yorke Peninsula of South Australia between Pine Point, Ardrossan and White Cliffs. The features which attracted Rex to the area and underpin its current focus include:

Historic finds - Multiple historical high-grade copper deposits exist along the PPCB.

Thin cover - Most of the Pine Point Copper Belt is "hidden" by a thin layer of cover rocks (approx. 10m to 50m thick).

Multiple targets - A range of prospects and targets exist along the 60 km section of the copper belt.

Scale - Large scale and high-grade copper mineralisation has now been discovered (Hillside) at one of many "hidden" targets along the PPCB.

Setting - The copper discovered to date is associated with magnetite, which in high concentrations will produce magnetic anomalies on detailed surveys allowing Rex to "see through" the cover rocks to focus on new targets.

Modern Techniques - Detailed high resolution magnetic surveys have the potential to redefine in much greater detail a large number of copper targets.

Infrastructure -The proximity to Adelaide (1.5hrs by car) and the location of a major highway along the entire length of the Peninsula and the nearby ports will assist the economics of new developments.

Power - The area is connected to the State's main power grid.

For Comment and Further Details

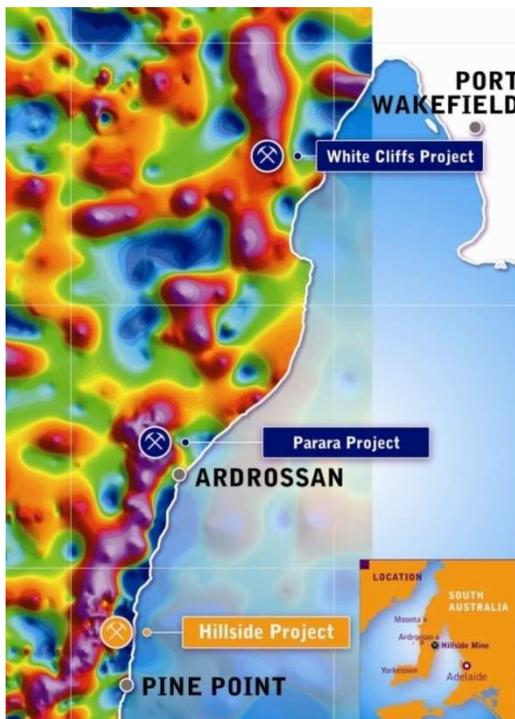
For more information about Rex Minerals and its projects please visit our website www.rexminerals.com.au or contact

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About Rex Minerals

Rex is an Australian minerals exploration company with recent copper discoveries in South Australia and New South Wales. Rex seeks to discover multiple copper deposits leading to the development of a large scale, low cost and long life mining operation on the Yorke Peninsula in South Australia. Existing gold and silver resources and a shallow copper discovery at Mt Carrington in NSW also provide Rex with a shorter term development option. The project portfolio is therefore expected to provide Rex with a sustainable pipeline of development opportunities.



Rex is exploring for multiple large scale copper-gold-uranium deposits on the Yorke Peninsula, South Australia. The presence of copper on the Yorke Peninsula was first highlighted by a number of small and high grade historical copper mines that exist within a large regional fault known as the Pine Point Fault Zone.

Rex considers that most of the copper was not discovered by early prospectors as it lies underneath 10 to 50 metres of cover sediments and were effectively “hidden” from earlier explorers.

Rex is undertaking a number of geophysical surveys that enable geologists to “see through” the shallow cover sediments to identify potential sites for large scale copper-gold-uranium mineralisation.

As part of this work, recent gravity survey’s have highlighted a large number of targets that exist along the Pine Point Fault Zone (shown in purple on adjacent image).

In NSW, Rex has recently acquired 100% ownership of the Mt Carrington gold-silver project. Mt Carrington has 190,000ozs of gold and 10.5Mozs of silver with additional shallow gold and silver potential. Recent exploration at Mt Carrington has also identified some significant high grade copper mineralisation within 100m of the surface, including 18.7m @ 5.9% copper and 10.1m @ 6.3% copper.

Competent Persons Report

The information in this report that relates to Exploration Results or Mineral Resources is based on information compiled by Mr Geoffrey Lowe who is a Member of the Australasian Institute of Mining and Metallurgy and is a full time employee of Rex Minerals Ltd. Mr Lowe 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 2004 Edition of the ‘Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves’. Mr Lowe consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.