



QUARTERLY REPORT 3 Months Ending 30 September 2004

HIGHLIGHTS

Elsmore Tin Project, NSW

- MAPPING AND SAMPLING ON EL 6196 INDICATE EXCELLENT SCOPE FOR HARD ROCK TIN DEPOSITS AT SHEEP STATION HILL AND NEWSTEAD
 - At Sheep Station Hill geological mapping has shown that there are numerous well mineralised greisen veins from 1 to 10m wide and with a cumulative strike length of over 3km.
 - Assays from surface sampling of these veins reveal tin grades of up to 2.35% Sn, with important accessory molybdenum, silver, copper and tungsten.
 - Attractive hard rock tin targets are also emerging at Newstead, accompanied by a deep lead that offers excellent alluvial tin potential.

Tooloom Gold Project, NSW

- FURTHER INTERPRETATION OF RESULTS AT PHOENIX CONFIRMS CONTINUING HIGH PROSPECTIVITY
 - Check assays of earlier drill samples from Phoenix indicate that antimony could be an important co-product.
 - Antimony assays of up to 8.38% Sb were reported, equivalent in value to about 19 g/t gold at current metal prices.
 - Compilation of two generations of soil geochemistry showed separate antimony and copper anomalies within a broader gold anomaly.
 - The breccia pipe may be a late event, picking up pre-existing mineralisation.
 - Attractive targets to be tested in the next round of drilling.

Corporate

- Exploration expenditure for the Quarter was approximately \$180,000
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Elsmore Tin Project, NSW (Malachite 100%)

A program of geological mapping and rock sampling was carried out on the Elsmore exploration licence (EL 6196), held 100% by the Company and situated about 20km east of Inverell in northern NSW. Work was focussed on the Sheep Station Hill and Newstead prospects, located respectively 1 km and 4 km to the southeast of the Elsmore tin mine (Figure 1), which is excluded from the EL but where the Company holds an option to purchase.

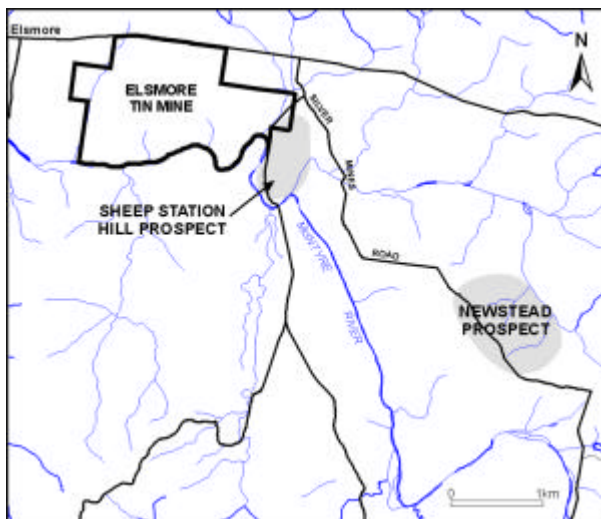


Figure 1: Reference map of part of EL 6196, showing locations of the Elsmore tin mine (under option to Malachite) and the Sheep Station Hill and Newstead greisen prospects (on Malachite's EL).

Geologically the altered and mineralised rocks exposed on Sheep Station Hill are probably part of the Elsmore greisen¹ system, although the greisen veins are notably wider and more extensive along strike than at Elsmore itself. Previous company exploration at Sheep Station Hill is thought to be minimal, and there is no record of drilling, but there has been extensive prospecting and some production by private individuals. A retired prospector living in nearby Inverell has visited the hill with Malachite personnel and identified where he obtained the best results over 30 years ago. Importantly, he indicated that he had removed most of the high grade tin from the outcropping or near-outcropping veins, although only to a maximum depth of a metre or so. It appears that there were numerous rich "pockets" containing coarse grained cassiterite (which is the ore mineral of tin, Figure 2) scattered along many of the greisen veins and that these have been selectively removed (Figure 3). Geologically there is no reason why such rich "pockets" should not be repeated at depth below the old surface workings.

Assay results from the Company's recent outcrop sampling at Sheep Station Hill have confirmed that the greisen veins are well mineralised, with 66 samples of greisen averaging 0.2% Sn, although obviously richly mineralised material, somewhat like that pictured in Figure 2, was deliberately excluded from these samples. Even so, the maximum tin assay value² was 2.35% Sn, from a vein 4-5m wide. The highest molybdenum assay was 863 ppm Mo, equivalent to about 0.3% Sn at current prices, although much richer material crops out in places but again, was not sampled in the initial program for fear of biasing the results. The surface assay results are thus quite conservative. Copper, silver and tungsten are also significantly anomalous (maximums of 0.33% Cu, 23 g/t Ag and 0.23% WO₃ respectively).

Figure 2: A spectacular specimen of tin-bearing greisen collected from Sheep Station Hill 30 years ago. Large cassiterite crystals are shown clustered within very micaceous greisen. (Photograph courtesy of Mr Bob Smith.)



¹ The term "greisen" refers to granite that has been strongly altered by hydrothermal activity, producing a rock rich in quartz and mica and commonly carrying significant tin values.

² As a guide to value it might be noted that 1% Sn is equivalent in metal value to approximately 8 g/t Au at current spot prices.

The Sheep Station Hill greisen system extends over an area of at least 1,000 x 500m and consists of numerous veins of intensely greisenised rock, with less altered material in between. The greisen veins are typically 1 to 3m wide but swell to more than 10m locally and there are many splits and joins, as well as areas of more massive greisen development, especially in the northern part of the prospect. Collectively, the clearly defined mineralised greisen veins add up to a strike length of more than 3km. If the grades recorded by the



Company to date at surface improve somewhat with depth, as seems likely if high grade “pockets” like those extracted at the surface 30 years ago are encountered, Sheep Station Hill could be amenable to selective mining of the higher grade tin greisen veins that may also yield economic quantities of silver, molybdenum, copper and tungsten. It is possible too that Sheep Station Hill could represent a viable bulk tonnage, open pit target.

Figure 3: Shallow surface workings at Sheep Station Hill where rich material like that in Figure 2 has been removed from a mineralised greisen vein.

At Newstead there is a greisen system that appears similar in size and intensity to that at the Elsmore mine and Newstead also has a long history of tin mining, both in alluvial and hard rock materials. Some company exploration took place at Newstead about 20 years ago, following earlier work nearly 40 years ago that included a limited amount of drilling. Most of the previous work seems to have been concentrated on a zone of massive greisen roughly 350 x 100m in size, and on alluvial material that may have shed from it near Kings Creek. Malachite’s work is still at an early stage and to date has been focussed more to the east and southeast of the previously explored area, in a zone of extensive old workings in or around bodies of laterite, silcrete and other surface materials.

Approximately 40 samples were collected from outcrop at Newstead in the recent program and the results provide strong encouragement that Newstead, like Sheep Station Hill, offers excellent potential for an economic tin resource. Most tin assays are in the range of 0.1 to 0.3% Sn, although the highest is 1.55% Sn. Results for the accessory metals – copper, silver, molybdenum and tungsten – however, are significantly lower than at Sheep Station Hill. The Newstead greisen generally appears to be more massive in nature than at Sheep Station Hill and does not seem to form the well defined mineralised greisen veins of long strike length that characterise the other prospect. An intriguing body of silcrete (silicified surface material) occupies a substantial area in part of the Newstead prospect (and was known historically as “the Glassy Bar”). Numerous small scale old workings are scattered around the margins of the Glassy bar, with coarse grained cassiterite visible in quartz-rich dump material in places. It is possible that the Glassy Bar hides significant tin hosted by quartz veins within a more massive greisen.

Mapping at Newstead has also identified a deep lead (buried stream bed) that is situated close to the tin-bearing greisen and has been extensively worked in its lower, more accessible reaches. The upper part of the deep lead lies beneath a thin basalt cap that could be hiding a rich paleo-alluvial tin deposit that would be an attractive target for drilling.

Tooloom Gold Project, NSW (Malachite 100%)

Only minimal field work was conducted at Tooloom during the Quarter but important advances were made in understanding the nature of mineralisation at the Phoenix prospect through more detailed analysis of previous results and petrological studies of core from recent drilling. Twenty duplicate splits from existing drill samples were sent to a second laboratory for check assay of gold and more quantitative assay of antimony and arsenic. This confirmed that the previously reported gold assays are reproducible and, importantly, showed that antimony is much more important as a potential co-product than initially realised. A peak antimony assay of 8.38% Sb was reported, which at current antimony prices of around \$US3,000 per tonne, is equivalent in value to a gold assay of 19 g/t Au. Antimony could well be a significant economic component of mineralisation at Phoenix. The 10m interval from 113m to 123m in PHRC02, for example, assayed 1.35% Sb and 0.65 g/t Au, equal to 3.9 g/t Au on a gold-equivalent basis.

A number of interesting features also emerged when the results from two generations of soil geochemistry were merged into one data set. As shown in Figures 4, 5 and 6 below, this clearly demonstrated that

- i) the breccia pipe is located within a low order gold-in-soil anomaly (20-50 ppb Au), even though in drill holes at depth it contains many gold values over 1 g/t Au (= 1,000 ppb Au), with the highest being 5.45 g/t Au;
- ii) the main gold-in-soil anomaly (>50 ppb Au), located to the south of the breccia pipe, has not yet been significantly tested by drilling;
- iii) antimony forms a discrete anomaly separate from the gold anomaly and just to the north of the breccia pipe; and
- iv) there is a well defined copper-in-soil anomaly within the main gold anomaly that has been tested only at one margin.

Future drilling clearly needs to target both the breccia pipe/antimony anomaly and the copper/gold soil anomaly to the south of the breccia pipe.

A suite of ten samples of drill core from recent diamond core drilling at Phoenix was subjected to petrological study. The microscopic examination showed good evidence that there are several generations of sulphide mineralisation at Phoenix, implying also that more than one generation of gold deposition has occurred. This is quite important for understanding the differing assay results achieved to date, especially for those holes within the breccia pipe. Under the microscope it can be seen that several different rock types occur as fragments in the breccia, including a mineralised porphyry rock not yet seen as a distinct intrusive phase in outcrop or in drill core. Some fragments are very rich in sulphide, whereas others are virtually devoid of sulphide. Many fragments show evidence of pre-existing quartz veins that terminate at fragment boundaries. Arsenopyrite seems to occur both as an early phase in larger crystals and as a late phase, where it is characterised by abundant, very fine, needle-shaped crystals concentrated within the carbonate component of the breccia matrix. Such abundant fine arsenopyrite grains may be the principal source of the chargeability anomaly defined in the IP survey conducted earlier in the year. Importantly, arsenic is the accessory element that correlates best with gold.

From an exploration point of view, the complex intrusive, alteration and mineralisation history at Phoenix is a very positive feature, as such complexity is characteristic of most major gold deposits in other parts of the world. Immediate targets include the soil anomalies referred to above and structures extending out from the centre of the system. The presence of pre-brecciation mineralised, altered and quartz-veined fragments of porphyry in the breccia pipe suggest that a further target at Phoenix may be a stockwork-veined, intrusive porphyry body which presumably remains buried somewhere within the system. Such a body may be to Phoenix what Ridgeway is to Cadia³.

³ See: www.newcrest.com.au

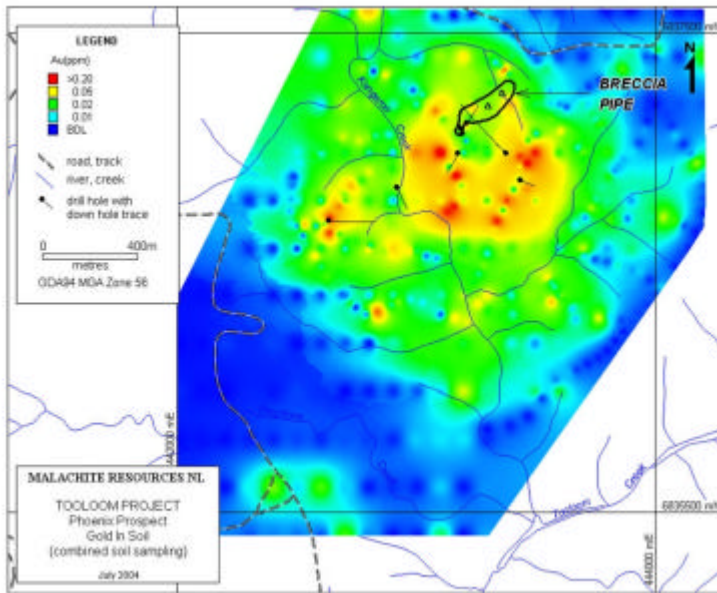


Figure 4: Gold-in-soil geochemistry at the Phoenix prospect. Note that the breccia pipe lies within the 20-50 ppb gold anomaly (green area) but outside the main zone of >50 ppb gold, indicated by yellow and red in the diagram. Even so, many gold values above 1 g/t Au were obtained in drill holes at depth within the breccia pipe.

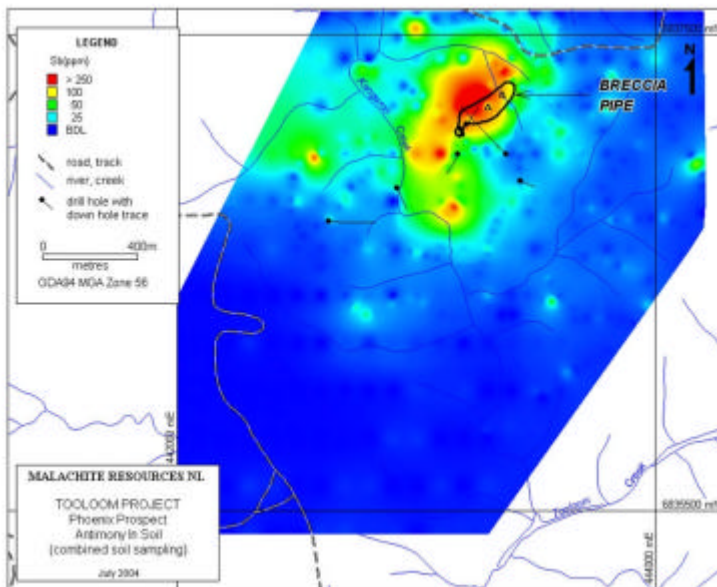


Figure 5: Antimony-in-soil geochemistry at the Phoenix prospect. Note that the main antimony anomaly (>250 ppm Sb, red area) is separate from the main gold anomaly and is centred just to the north of the breccia pipe. Some overlap occurs in an undrilled area closer to Kangaroo Creek.

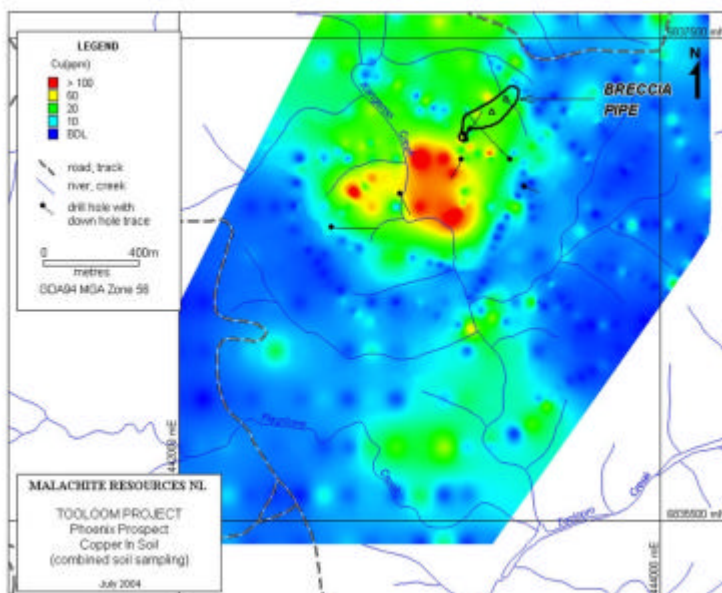


Figure 6: Copper-in-soil geochemistry at the Phoenix prospect. Note that the main copper anomaly (>50 ppm Cu, red and yellow area), lies within the >50 ppb gold anomaly. Even so, copper values up to 2,000 ppm Cu were obtained in holes drilled into the breccia pipe to the north, beneath soil values of only 20-50 ppm Cu.

Conrad Silver Project, NSW (Malachite 100%)

No new field work was carried out at Conrad but negotiations with the registered native title parties have moved ahead positively. A draft access agreement, providing for Malachite's access to Crown land where native title may exist, has been prepared and a final version is expected to be signed in the near future. Once that has been achieved, the Minister will be able to issue an agreement under Section 31 of the Native Title Act allowing the Company to begin work on all Crown land within EL 5977. Of particular interest is the immediate strike extension of the Conrad lode across about 1.5km of Crown land just to the southeast of Davis shaft.

Mt Ramsay Project, Tasmania (Malachite farming-in)

Planning continued for an initial field program scheduled for October. Research into previous exploration recorded in the Mineral Resources Tasmania open file system also took place.

Copperfield & Lynd River, Queensland (Malachite 100%)

The Queensland Government granted Exploration Permit for Minerals 14134 ("EPM 14134") to Malachite on 6 September 2004. EPM 14134 covers the Copperfield area, 150km west of Townsville in north Queensland. While awaiting grant of this title, the Company spent considerable time compiling available information from previous exploration, as recorded in open file data at the Queensland Department of Natural Resources and Mines. This has led to the identification of several specific targets for immediate follow up in the field. In the first instance, attention will be given to an outcropping structure where extensive sampling by ACM Gold in 1988 produced an average (from 111 rock samples) of 4% Cu, 0.5 g/t Au and 19.5 g/t Ag, with individual assays commonly much higher. Geophysical data suggest there may be unexposed repetitions of this structure nearby.

Malachite's application for the Copperfield tenement involved participation in the Expedited Procedure under the Native Title Act. Following that process, no native title claim has emerged over the tenement and as a result, the Company is able to conduct exploration without having to conform to a complex native title process. The Company will still have to, and always does, adhere to its obligations in regard to protection of Aboriginal cultural heritage and the environment.

The Company's application for a tenement over the Lynd River area, 200km west of Cairns, (EPMA 14274) continued to move through the application process, including the Expedited Procedure under the Native Title Act. Grant of title is not expected until late in 2004 or early in 2005.

Boonoo Boonoo Gold-Silver Project, NSW (Malachite 100%):

No activity took place in the past Quarter.

Rivertree Silver Project, NSW (Malachite 100%)

No activity took place in the past Quarter.

AGI Database Project

No activity in the past Quarter.

Forward Plans

An initial field program will be conducted at Mt Ramsay in October. At that time it is proposed to verify the anomalies identified in the Government airborne data on the ground by conducting a limited EM survey with portable equipment. Soil and rock samples will also be collected for geochemical analysis to help ascertain whether the anomalies are exposed at surface and relate to tin or other metal mineralisation.

Follow up will also take place at Elsmore, particularly at Sheep Station Hill, where it is hoped to be able to carry out an initial reverse circulation percussion drilling program before the end of the year. If that happens, a few reconnaissance holes may also be drilled at Newstead.

At Tooloom, a program of detailed soil geochemistry will be conducted over the central part of the Phoenix prospect, with a view to better defining the gold, antimony and copper anomalies and detecting mineralised structures, before renewed drilling, scheduled for early 2005.

A reconnaissance field program will also take place at Copperfield in October, aimed at verifying results of previous work and confirming the copper-gold-silver prospectivity of the area.

Provided native title negotiations can be completed in a timely manner, it is also planned to carry out drill target definition work at Conrad during the December Quarter. This is likely to include a gradient array induced polarisation geophysical survey along the strike extension of the Conrad lode, starting near the Davis shaft and continuing for 4-5km to the southeast.

Expenditure

Exploration expenditure during the period under review amounted to approximately \$180,000.

Further Information

For further information please contact Garry Lowder on (02) 9415 6833 or 0417 212 099, or by email at glowder@malachite.com.au.



G.G. LOWDER
Managing Director
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