NT EXPLORATION LICENCE 6662
WHITE HILL DAM

EXPLORATION RELINQUISHMENT REPORT
December 1992 through to November 1993

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MAP SHEETS: 1:250,000 Alice Springs
1:100,000 Arltunga-Harts Range
1:100,000 Riddock
1:50,000 Riddock

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Including the cover, 7 pages total this report.
1. SUMMARY

The exploration program to November 1993 at White Hill Dam has produced mixed results. A very reasonable coverage of the region (specifically the relinquished area) has indicated a base metal anomaly over a substantial zone, just south then west of White Hill Dam. Signal strengths were quite weak with no targets determined. Perhaps somewhat in contrast, and to the southern side over the intermediate slope and range, surface gold has been detected from geochemical analysis. Laboratory assay results of surface samples revealed only low grade values with signal response around 0.01 ppm (cut-off grade) and mostly below, a headgrade of 0.22 ppm Au from FA25 charges.

Difficult strata conditions prevented anticipated drilling but RAB investigation mineral drilling at target site WH023-D intersected very thick mud at 33mts, gold mineralization closed just below surface.

......for location see Map 1, ...sample locations see Map 4

2. INTRODUCTION

Exploration Licence 6662, White Hill Dam, was granted to Mr Geoff Bogie on 20th November 1989. This report relates to exploration activities occurring from December '89 to November '93. The licence consisted of 9 graticular blocks during the '92 to '93 term. From Alice Springs the prospect is situated some 200kms east north-east, located within the Harts Ranges, Northern Territory. Access to the property is via the Plenty Highway, then turning south just east of Ongeva Creek crossing onto the Blackfellows Bones Bore road. Thence pastoral tracks access through to White Hill Dam, an exploration track turns back west after crossing the Oneva Creek. Camp is situated some 40kms from the Plenty, located on the timbered stream banks of the Oneva Creek.

......for tenement detail see Map 2 ......relinquished area see Map 3

3. GEOLOGY

Coverage of the geology in this area has been given in previous reports. Generally the faulting of this province (sometimes retrogressive) takes on an east-west trend, with several generations of shears, shear zones and pegamites cutting through high grade metamorphics. Dip varies but generally steeply to the north.

The licence area contains moderately high hills, to 1050mts elevation, covering the north and south, and trend east-west. A low lying central valley plain area contains poorly outcropping rock surrounded by colluvial soils. Watershed is discharged through channel exits of colluvium and alluvium wash to the south, exiting through the Cadney Creek system. However the bulk of drainage discharges in a westerly direction, throughput via the Oneva Creek watercourse, finally exiting into the Ongeva Creek.

A retrogressive band of alteration has been noted cutting across the low lying area. The zone is characterised generally by heavily epidotised lensing on low rounded outcrop and is commonly entruded by large and small quartz stringer veins. To the south-east of the relinquished area, the Copper Queen (not appropriately named) strikes east-west over 950mts, a conformable garnet - pyroxene unit in Cadney gneiss, distance or thickness across the lense approx 1mt. Apart from the colluvial plain, the balance of country consists of rough low to medium elevated outcrop and rounded hills. Scattered occurrences of copper mineralization (eastern sector) exist within calc-schist localized poddings and appear to close rapidly. Sulphide mineralization has not been seen.
4. WORK UNDERTAKEN

An adequate coverage to major and minor streams has produced very little multi-element signal response from stream sediment sampling. The northern sector did however register base metal values slightly above background, the zone catchments of which were then replotted and boundaries reduced by approx half. But after collecting a double quantity of sediments, the second phase did not raise any values significantly and the zone received no further work. Samples collected as stream sediments were reduced to a clay fraction prior to geochem analysis, forwarded as 50g splits for Aqua Regia digest.

To the south, the Copper Queen lense was investigated over the entire length of 950mts and then further east by another 1000mts. As a field check, in-line country to the west was also investigated but the narrow 1mt lense discontinued. The overall field checking was made on foot by the author and Dr Burton Murrell, geologist. Grab rockchip samples from the eastern most end of the Copper Queen lense registered 3.0ppm and 4.0ppm Au. Copper values assayed at 1200ppm to around 3% and 4% but visual indications were reasonably clear that economic values and grades would not carry through. In typical interpretation as with many other explorers who have checked this unit, Murrell concluded the Copper Queen and immediate surface surrounds as appearing most uneconomic. This area was downgraded by the operator and given only the consideration as a plotted exposure.

That country contained in the central to central east and north-east was investigated further, knowingly that stream sediments registered below acceptable cut-off grades. Gold values sought were 0.01ppm and naturally Cu above background would raise suspicion. Several areas of small local collection or better described as accumulation of fan spreads and basins between outcrop were traversed by the author and Murrell on motorbikes. The terrain of these areas rendered an impossibility to negotiate by 4x4 vehicle. The areas were selected by air photo interpretation, with a good 6 or 8 of these areas appearing as a prominent pale coloured feature; as a catchment pond, above ground eluvium fan or basin. The drainage exits were individually sampled but as the multi-element assay results came to hand, no targets resulted.

The central-west area, after picking up low level detections of Au signals from a very broad grid of surface samples, was resampled on tighter grids and then as a further annexe, the grids extended moreover to the east & west. A good 200 or so surface samples collected by 50mm hollow power auger to a depth of 300mm revealed a gold anomaly to the immediate south of the northerly boundary range. Samples were reduced to clay fractions, split to 50g and FA25 charged. The anomaly values struggled to survive 0.01ppm. Mineralization extended over 60mts and to a width of near 30mts. Anomalous gold detected revealed a headgrade of 0.22ppm. The zone closed north, south & west and remained open to the east, however several other surface grids aligned with strike indicated no promise of optimistic enrichment or continuation of mineralised open extension. Three 95mm RAB drill wells were placed at this location. Two were unsuccessfull owing to massive cave-ins, the other intersecting 33mts depth where very thick mud was encountered. Drill well WH023-D was not developed further after assays indicated that sub-surface mineralization discontinued.

But then the valley plain, throughlyfairing through the lower southern section of the property, offers little relief with an east-west trending shear zone mapped over high grade metamorphics units of amphibolites, gneisses & massive epidote inset in seperate unit structures as discontinuous low rounded rough outcrop. At the western section, geologist Wakelin-King mapped the contacts of the shear together with a fault at the base of the north range. This was followed up by on-site identification and flagging over some of the margins. Surface samples taken into the zone of alteration led to no gold anomalies discovered. The host formation has taken on the additional role of supporting a secondary zone of highly metamorphised alteration between contacts of shear and fault. It is this surface horizon only in which low value uneconomic copper gold mineralization has been detected.
5. CONCLUSIONS

Geochemistry data covering the eastern sector of this relinquished area has indicated no signal response from multi-element coverage. And too, the Copper Queen surrounds have shown no elevated signals from stream sediment sampling. The alteration zone through the low plain and into hills bearing west south-west has not indicated enriched zones but has produced single gold registrations to below cut-off grade not conforming to any anomalies. Weak anomalous gold detected within A horizons colluvium, off the alteration zone and further to the central north, has indicated that localized surface mineralization appears to close at sub-surface intersections between B and C horizons. From the geochemistry analyses data, base metal mineralization discovered to the north as very weak anomalous fractions has provided constrained support for further investigation.

The operator as a junior gold explorer does not offer any prudent conclusions of geological persuasion, except to suggest that surface concentrations of mineralization exist at the White Hill Dam location. New discoveries of copper gold and base metals were deemed possible by the operator applying advanced and different technique's, principally the fractioning of sample clays prior to laboratory preparation. The discoveries have all rendered values and limited structural margins below acceptable levels of viability.

Map 1. Location
Map 2. Tenement Detail

...White Hill Dam Prospect

EL6662
9 BLOCKS
29 sq kms

Map 3. Relinquished Area (shaded)

...4 Blocks Surrendered