

MCs 38
1994 ANNUAL REPORT
GHEKO PROSPECT
NORTHERN TERRITORY

CENTRAL PACIFIC MINERALS N.L.

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1. INTRODUCTION

The copper, lead and zinc gossan of the Gheko Prospect is located approximately 50km north-east of Alice Springs, in the Northern Territory (Figure 1). The summit of Bald Hill is the nearest topographic feature, about 1.6km to the north. The mineralisation was discovered in 1969 as a result of stream sediment geochemical sampling in the area of former Authority to Prospect 1721.

Subsequently, forty "Cobra" drill samples were collected, induced polarisation surveys, geological mapping and a four-hole percussion drill programme were completed. Grades of 7.8% zinc and 8.5 g/t silver over a 1.5m interval (PH2) were the best obtained.

2. TENURE

The area was initially held as part of AP 1721. MCs 38 (formerly MC 463H) of 33 hectares was granted to Central Pacific Minerals N.L. on 22nd March 1984. An application for renewal of MCs 38 for a further 10 years was lodged with the N.T. Department of Minerals & Energy in September 1993. Formal notification of the outcome of the application is yet to be received.

3. GEOLOGICAL SETTING

The rocks of the prospect area consist of crystalline basement assigned to Early Proterozoic? Division Two rocks of the Arunta Block near the north-eastern margin of the Late Proterozoic to Late Palaeozoic, Amadeus Basin (Alice Springs 1:250 000 Geological Sheet SF 53-14). Gneiss, schist, amphibolite, marble and calc-silicates of the Sliding Rock metamorphics are the principal rock types. The metamorphic grade is as high as the almandine amphibolite facies. Small pegmatite and microdiorite intrusions are common but no large igneous intrusions are present. A retrograde schist zone, possibly related to similar more widespread zones to the north, transects the Prospect.

Further to the north, the Late Proterozoic Heavitree Quartzite and the Bitter Springs Formation, which are the two lowermost formations of the Amadeus Basin are infolded into the Arunta Block to form the Arltunga Nappe Complex.

4. GENERAL GEOLOGY OF THE GHEKO PROSPECT

Gossans crop out on the flanks of lenticular developments of garnetiferous metaquartzite. The metaquartzite occurs along the contact of a sequence of biotite gneisses with a sequence of fine-grained, even-textured amphibolite (Figure 2). The relatively simple lithological relationship is complicated by extremely complex and tight folding, particularly in the north-east corner of the area mapped. The similarity of the position of the gossan and the presence of similar gneisses and amphibolite strongly suggests that the Gheko Prospect is a stratigraphic equivalent of the Rankin's Prospect mineralisation (7km to the west-northwest).

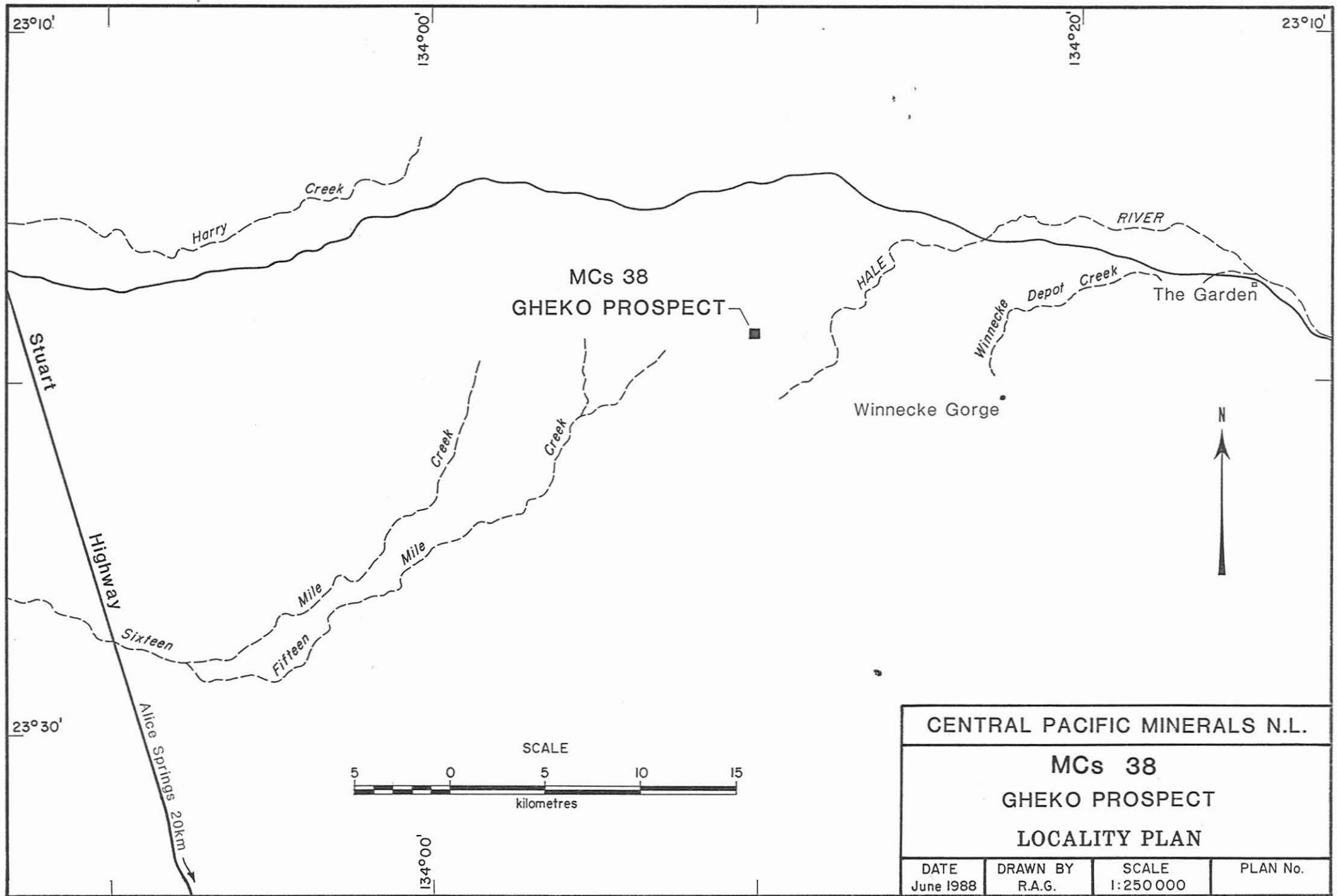


Figure 1

The lead-zinc mineralisation was found to be principally sphalerite, with some galena and chalcopyrite associated with magnetite and quartz. The mineralisation appears to be stratigraphically controlled as it occurs in gossanous haematite-actinolite rocks marginal to garnetiferous quartzite with the actinolite rocks presumably replacements of former calcareous lenses. The garnet quartzite is intensely recrystallised; no quartz grain boundaries can be discerned and the quartzite superficially resembles a garnetiferous quartz vein. In several places decomposed amphibole and pyrite occur in the quartzite.

5. CURRENT PROGRAMME

Claim Maintenance

As indicated earlier, an application for renewal of MCs 38 was lodged with the NTDME in 1993. Part of the renewal process involves inspection of the lease by officers of the department, however, apparently some difficulty was experienced in locating the site.

As a consequence, the lease area was visited in September, 1994. The lease pegs were found following location of access tracks and evidence of drilling. The general site of the lease was located by hand-held GPS using the plotted position on the Laughton 1:100,000 sheet. GPS readings were recorded at both the collar of drillhole PH1 (see Figure 2) and the MC datum post. PH1 is approximately 435m at 118° grid (AMG) from the datum post. The datum post has the following co-ordinates:

413 360m E 7 422 350m N AMG Zone 53K

Whilst at the site, maintenance on the lease corner posts and side markers was undertaken. The corner posts were upgraded by placing 150mm diameter pipe over the original star-picket markers to comply with current legislation (Figure 3a & 3b). The line of stones indicating the attitude of the sides of the lease were also repaired. Following maintenance at the datum post, a copy of the original notice of marking-out was placed inside an aluminium can inside the top of the post (Figure 4a & 4b).

Potential

As in previous years, the potential of the Prospect was again reviewed in 1994. However, the location and small size of the currently known mineralisation coupled with the prevailing metal prices of the commodities involved is such that the property is to continue for the time being on a care and maintenance basis.



FIGURE 3a:
Southwest corner post as found
before maintenance.

FIGURE 3b:
Southwest corner post following
maintenance of post and side markers.

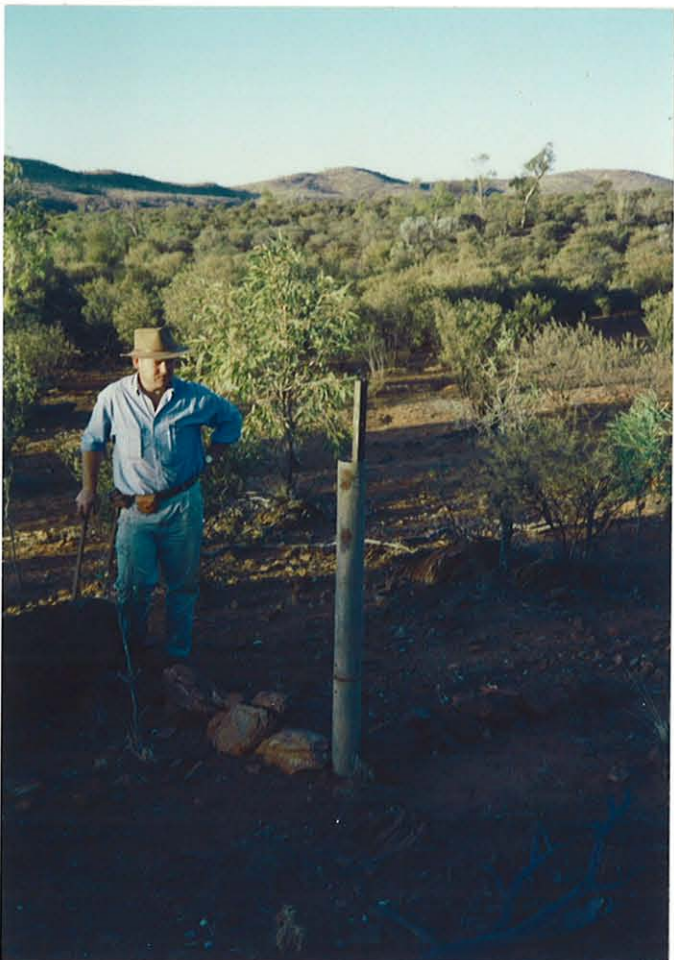




FIGURE 4a:
Datum corner post, Gheko Prospect
after maintenance. View looking SE.

FIGURE 4b:
Datum corner post, Gheko Prospect,
after maintenance. View looking SSW.

