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PINE CREEK GOLDFIELDS LIMITED
ANNUAL REPORT FOR MCN 544
NOVEMBER 1993 - NOVEMBER 1994

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1. INTRODUCTION

MCN544 is located 3km south of the town of Pine Creek, between the Stuart Highway and the disused North Australia Railway (fig 1). The claim is located on Bonrook Station.

No work has been carried out over this area in the period November 1993 to November 1994.

2. PREVIOUS EXPLORATION

Exploration work has included a 1:10,000 scale colour photography flown on east-west lines in June 1989 by Airesearch Pty Ltd of Darwin. Gridding, soil sampling, mapping, ground magnetics, rock chip sampling, RAB and percussion drilling were all undertaken over MCN544 as part of a larger program covering the surrounding ground of EL4907.

Gridding resulted in 1.87 line kilometres, over which a grounds magnetic survey was carried out by Surtec Geosurveys. Geological mapping of the area at 1:10,000 scale was carried out by P.F. Plibersek of Rimsearch, Sydney.

Soil sampling was carried out in June 1990 by Surtec Geosurveys. Samples were taken at 5 metre intervals along the grid lines and composited into 40 metre increments. Soil samples were submitted to AAL (Pine Creek) and analysed for Au, Ag, As, Cu, Pb, and Zn.

A program of shallow RAB drilling to sample bedrock was undertaken during October/November 1991. This resulted in 99 metres of drilling on MCN544. Holes were drilled to 3 metres depth and samples were taken from the bottom metre of each hole. Samples were analysed for Au, Cu, and As. Gold assays, like the soil assays, were generally poor, with the majority returning less than detection ($<0.01\text{g/t Au}$) and a maximum of 0.14 g/t Au . Copper and arsenic assays were also low ($<100\text{ppm}$), with a slight increase with maximum gold grade.

Percussion drilling was carried out in areas where Au, Cu and As were slightly anomalous, during April 1992. Five holes were drilled within MCN544, each to a depth of 30 metres, resulting in 150 metres of drilling. Holes were drilled vertically, 25 metres apart on 100 metre

lines. Samples were taken at 2 metre intervals and analysed for Au, Ag, As, Cu, Pb and Zn. A maximum gold grade of 0.23g/t Au was returned in one hole.

No work has been carried out in the period November 1993 to November 1994.

3. GEOLOGY AND MINERALISATION

The area of MCN544 consists of interbedded, well cleaved and laminated siltstones and medium to coarse greywackes. An area of leuco granite outcrops in the south-west corner of the claim. This forms part of the Lower Proterozoic rocks forming a south-east trending lobe of the Pine Creek Geosyncline within an embayment of the Cullen Batholith. This zone lies within the Pine Creek Shear Zone which contains numerous tight aligned folds and shears which have undergone increased deformation to the east.

Mapping by Plibersek indicated the presence of a tight anticlinal fold in the north-east corner of the claim. Rock chip samples of up to 1.17g/t Au are present in the north-east and are related to narrow quartz/iron oxide veins, possibly associated with faulting.

This area is considered to have little potential for hard rock gold mineralisation.

4. EXPENDITURE - November 1993 - November 1994

	\$
Fees and registrations	1,125
Reporting	1,000
Office and overheads	200
Staff costs	500
TOTAL	2,825

REFERENCES

Plibersek, P.F., Report on exploration of Bonrook EL4907 Pine Creek NT, July 1989.

Morgan, A.M., Pine Creek Goldfields, EL 4907, Bonrook First Annual Report 1988-89.

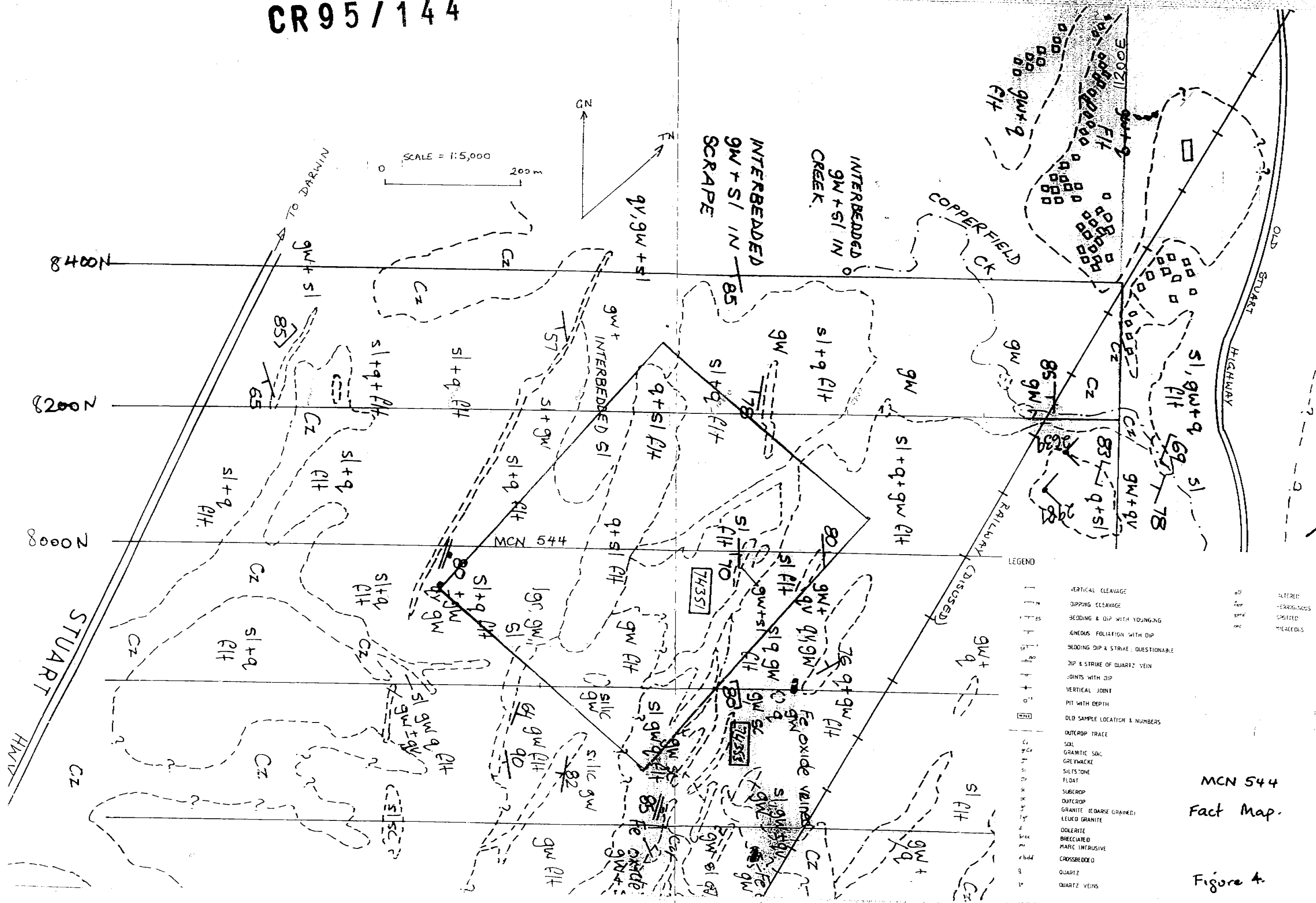
Fawcett, C.J., Exploration Licence No. 4907, Annual Report, November 1990, Period reported 24th October 1989 - 23rd October 1990.

Fawcett, C.J., Exploration Licence No. 4907, Third Annual Report, November 1991, Period reported 24th October 1990 - 23rd October 1991.

Fawcett, C.J., Exploration Licence No. 4907, Fourth Annual Report and final report on work undertaken between 24th October 1988 - 23rd October 1992.

Fawcett, C.J., Pine Creek Goldfields, Report for MCN 544, for the period October 1988 - November 1993.

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MCN 544
Fact Map.

Figure 4.