

OPEN FILE

KEN DAY PTY LTD

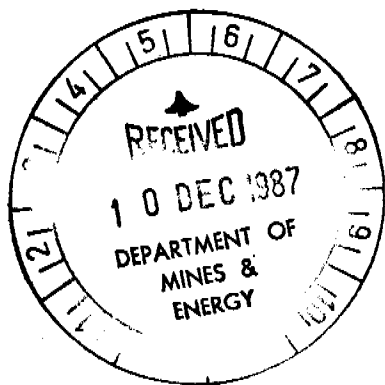
EXPLORATION LICENCE 2769

GOLDEN DYKE DOME - NORTHERN TERRITORY

FINAL REPORT: YEAR 6 (1986/87)

FOR AREA RETAINED UNDER TENEMENT APPLICATIONS

(MCNs 1624, 1625, 1626, 1627)



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FIGURE 1 - LOCATION MAP SHOWING TENEMENT BOUNDARIES

FIGURE 2 - GEOLOGICAL MAP SHOWING TENEMENT BOUNDARIES

ENCLOSURE 1 GEOLOGICAL AND TOPGRAPHICAL MAP,
EL 2769 AND EL 2770

1. INTRODUCTION

Exploration licence 2769 is located approximately 150km southeast of Darwin on the former southern portion of the Prices Springs Pastoral Station. The licence area is now part of the Douglas Pastoral Station which is owned by Messrs Henry, Walker, Bailey and Wright.

EL 2769 was granted on 31.5.81 for a period of 6 years.

This is the final report for the licence area retained under tenement applications MCN's 1624, 1625, 1626 and 1627.

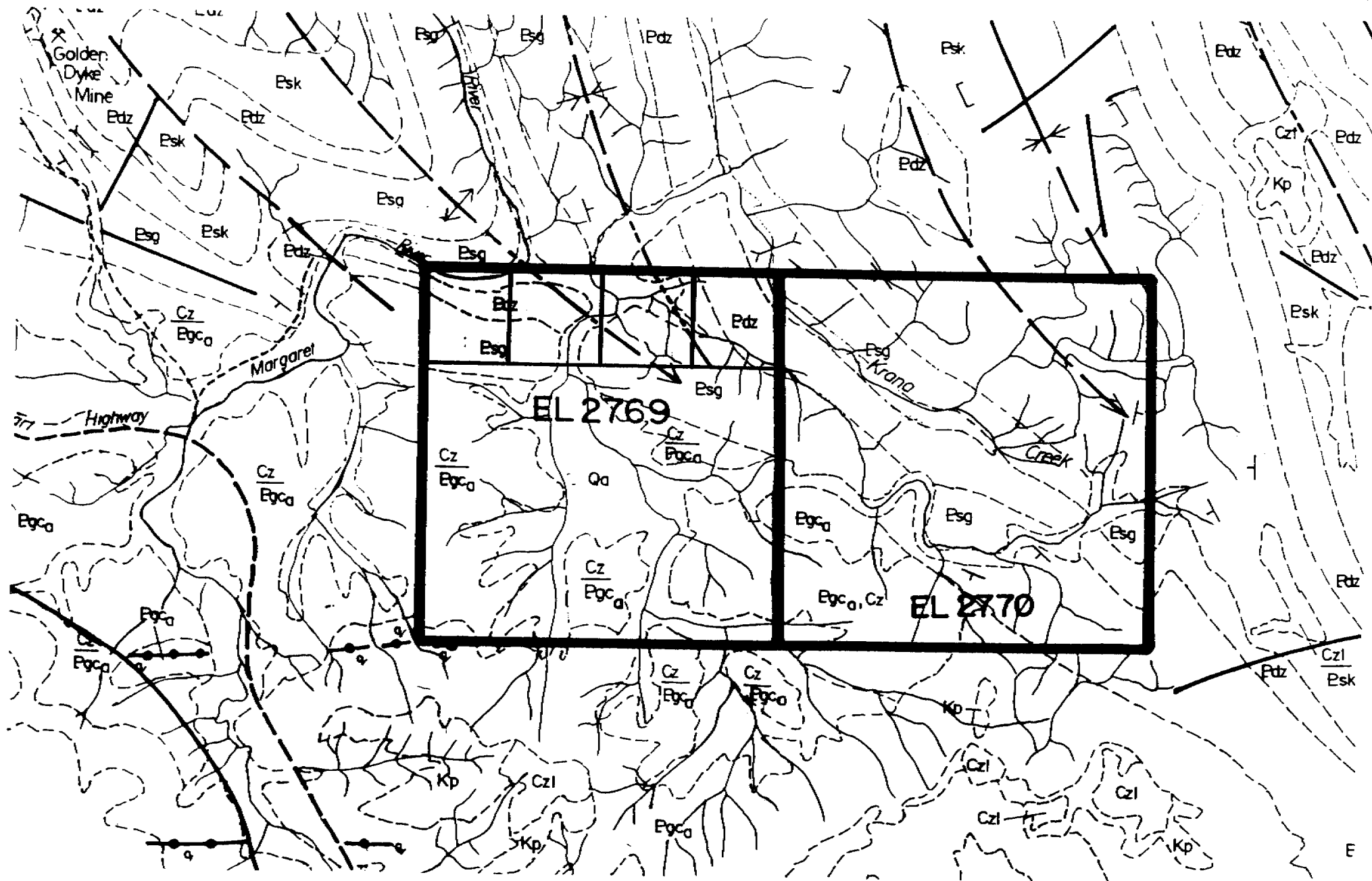
2. LOCATION AND ACCESS

EL 2769 is located in the old Cullen Mineral Field (now part of the Northern Mineral Field) outside the southern boundary of the Mt Wells Policy Reserve and to the southeast of the Golden Dyke Dome (Fig.1 and Enclosure 1).

EL 2769 has its northern boundary on 13 degrees 35'S, its eastern boundary on 131 degrees 33'E, its southern boundary on 13 degrees 36'S and its western boundary on 131 degrees 32'E. Its area is 1 graticular block, ie 3.3 sq km.

The western, northern and eastern boundaries of the area retained under tenement applications coincide with the exploration licence boundaries, whilst the southern boundary lies 440m south of 13 degrees 35'S (refer Fig 1).

Access to the area is via a track leaving the Mt Bonnie Road to the south of the Golden Dyke Mine. This road passes through the northern section of EL 2769 and ends at the northwest corner of EL 2770 adjacent to the eastern boundary of EL 4818.



GEOLOGICAL MAP

MCN 1624 - MCN 1627

EL 2769

figure 2

3. DESCRIPTION

The northern part of exploration licence 2769 consists of rugged topography which is dissected by streams draining from west, east and south. This system drains the Golden Dyke to the west, the Margaret Dome to the east and the Cullen Granite to the south.

Vegetation throughout the area shows variation with changes in geology. Predominantly sparse woodland containing Ironbark and Eucalypts with very little groundcover except for speargrass, characterises the Lower Proterozoic metasediments of the region. Open woodland comprising Woollybutt, White Gum and Iron Bark trees and a higher proportion of shrubs and groundcover occur in the richer soils derived from the weathered dolerite sills.

4. GEOLOGY

The stratigraphy of the portion of EL 2769 retained under tenement applications consists of the Lower Proterozoic Gerowie Tuff of the South Alligator Group, which is intruded by the Zamu Dolerite. The Cullen Granite lies to the south of the tenement applications within EL2769, where it is partly overlain by Cenozoic sediments.

The major structural feature of the area is a tight south easterly plunging anticline which constitutes the southern extension of the Golden Dyke Dome. This is bordered to the east by a tight syncline which occurs between the Golden Dyke Dome and the adjacent Margaret Dome. On the ground, a massive quartz outcrop follows the axial trace of the syncline, and this may represent a major fault.

Refer to Figure 2 and Enclosure 1 for Geological Map.

5. PREVIOUS EXPLORATION

So far as has been able to be ascertained, prior to 1985/86 no previous reporting has been done specifically on this area. Several reports have however been completed on the Golden Dyke Dome as a whole. These reports have generally tended to concentrate on the western flank of the dome as this is where mineralisation has been discovered to date.

Investigations began by Ken Day Pty Ltd in the year 1985/86 (Jettner, 1986). The greatest area of interest was the contact between the upper member of the Koolpin Formation and the upper dolerite sill around the southeasterly plunging anticline located in the northwest corner of the exploration licence.

Panning along the creek below the nose of the anticline resulted in some colours of gold. Samples were taken from a banded iron formation gossan and a nodular chert unit, with the banded iron formation giving an anomalous gold result.

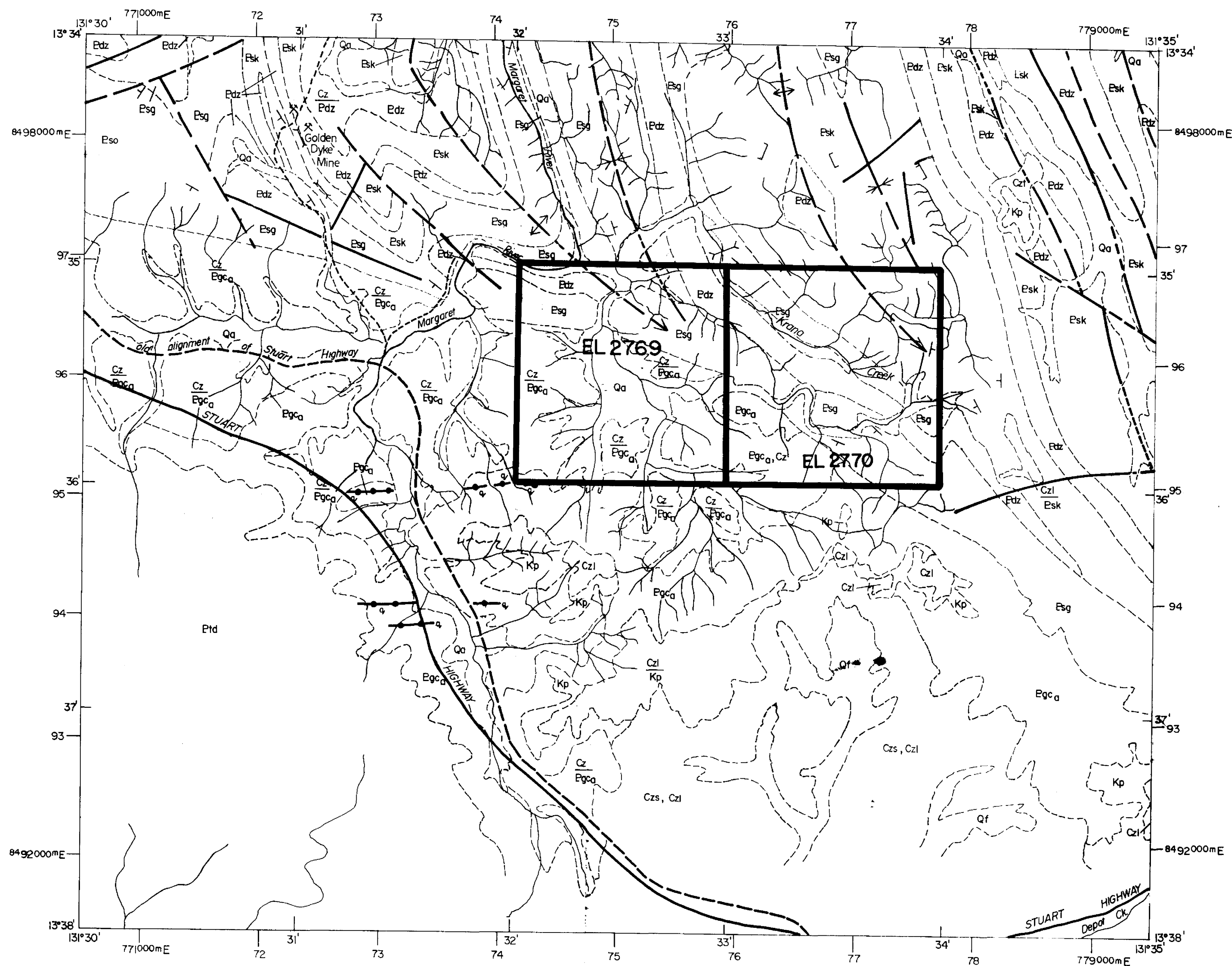
6. EXPLORATION FOR YEAR 6

All major drainages within EL 2769 were sampled for gold. The method involved extracting twelve litres of alluvium, screening to minus 2cm and panning, with a visual inspection for gold. The only positive indication of gold within the exploration licence was in the Margaret River, in the far northwestern corner of the licence. As no gold was found in the streams originating within the exploration licence, it was concluded that the source for the gold show was probably from outside the licence area. No further work was done within the exploration licence.

7. REFERENCES

Jettner (1986) "Exploration Licence 2769, Golden Dyke Dome - Northern Territory, Annual Report for Year 5 (1985/86)" for Ken Day Pty Ltd. (unpublished)

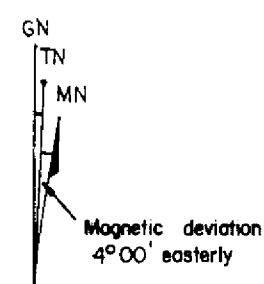
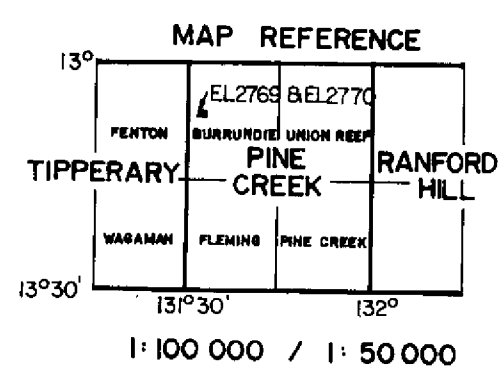
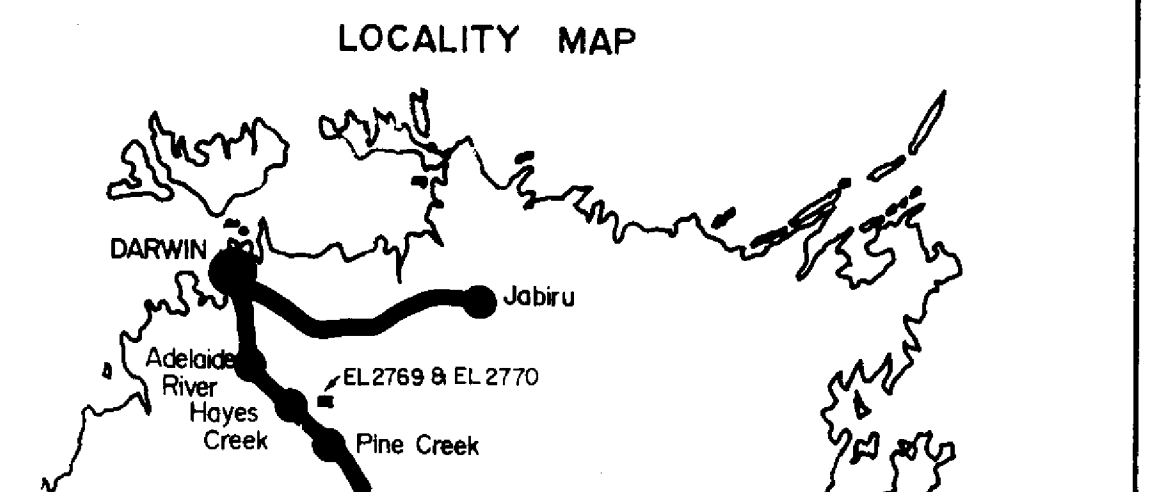
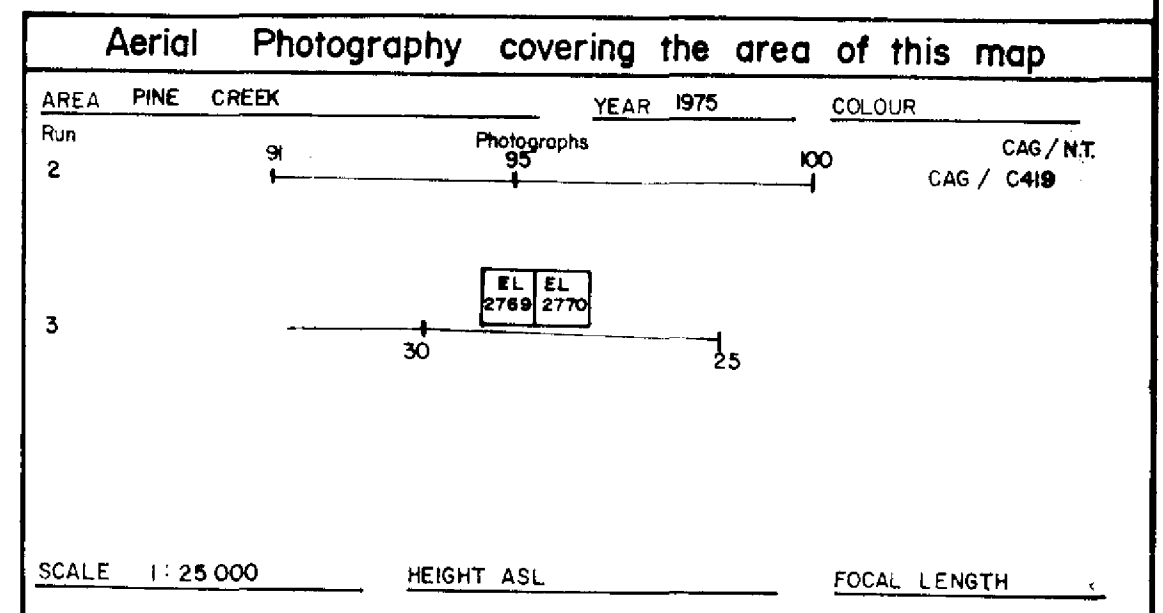
ENCLOSURE 1



GEOLOGICAL REFERENCE	
Qa	Silt, sand, clay, mud; coastal and river alluvium
Cz	Sand, gravel and laterite, colluvial, talus and transported terrestrial sediments.
Eld	Massive cross-bedded quartz sandstone pebble bands
Edz	Quartz dolerite and granophyre, metamorphosed to amphibolite in northwest
Eso	Slate (carbonaceous in places) shale, phyllite, siltstone, greywacke, argillite, crystal tuff, tuffaceous chert, minor ferruginous siltstone with cert bands, lenses and nodules
Gerowie Tuff	Esg Black green cherty tuff, crystal tuff, green argillite, pale green tuffaceous greywacke, rare chert-banded siltstone.
Koolpin Formation	Esk Ferruginous siltstone with cert-bands, lenses and nodules, pyritic carbonaceous shale, silicified dolomite, minor phyllite, jasper and banded iron formation.
Allamby Springs Granite	Esga Coarse pink green porphyritic hornblende-biotite granite, pink medium-coarse porphyritic biotite leucogranite.

LEGEND	
	Road with bridge
	Vehicular track with gate & grid
	Railway line
	Landing ground
	Fence line
	Power / telephone line
	Creek or river with waterhole
	Swamp
	Escarpment or cliff
	Building (used or disused)
	Stock yard
	Survey station, Spot height
	Contour line (in metres)
	Mine or substantial workings
	Costean or pit
	Sample location
	Geological boundary
	Unconformity
	Anticline
	Syncline
	Overtured anticline
	Fault
	Snear zone
	Minor anticline
	Minor syncline
	Crag fold
	Strike & dip of strata
	Vertical strata
	Trend line showing dip
	Plunge symbol on trend line
	Lineament
	Dyke or vein, q, peg, g
	Strike & dip of foliation
	Vertical foliation
	Strike & dip of cleavage
	Vertical cleavage
	Trend of plunge of lineation

NOTE: For additional symbols refer to the relevant Geological Map Series applicable to the area enlarged on this sheet.



Acknowledgement: This topographic and geological map has been compiled using NATMAP 1:50 000 and 1:100 000 topographic series plus BMR 1:25 000 geological compilation series.

TERRITORY RESOURCES N.L.

EL 2769 AND EL 2770
GEOLOGICAL AND TOPOGRAPHICAL MAP
MARGARET RIVER LOCALITY

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References 1: 50 000 Burrundie, 1:100 000 Pine Creek	Geologist	Scale 1:25 000	Report Number
Drawn by Terry O'Leary	Date 9-4-1987	Plan Number MR87/38/A2	