EL7561 - GROVE HILL ANNUAL REPORT YEAR THREE OF TENURE

04.08.94 - 03.08.95 Mc KINLAY RIVER 1:100,000 Map Sheet

CR 9 5

Distribution:

NTDME Territory Goldfields NL



C. Fawcett August 1995

TABLE OF CONTENTS

1.0	SUMMARY	1
2.0	LOCATION AND TENURE	1
3.0	GEOLOGY	
	3.1 Regional Geology 3.2 Local Geology	4 4
4.0	PREVIOUS EXPLORATION	
	1994-1995 EXPLORATION	
6.0	PROPOSED PROGRAMME	6
7.0	EXPENDITURE	6
8.0	REFERENCES	7

LIST OF FIGURES

Figure

1 Location Map2 Tenement Location

3 Local Geology

1.0 SUMMARY

EL7561 is located approximately 140km southeast of Darwin in Lower Proterozoic sediments of the Pine Creek Geosyncline. Units of the Mt. Bonnie Formation and Burrell Creek Formation outcrop within the licence area.

Exploration during previous years by Dominion has consisted of gridding, soil sampling and vacuum drilling.

No work was undertaken during the year ending 3 August 1995 due to commitments in other areas.

The tenement was granted to Dominion Gold Operations Pty Ltd on the 4 August 1992 for a period of four years. The licence was subsequently acquired by Territory Goldfields NL in May 1995.

The size of the exploration licence reported on stands at three graticular blocks.

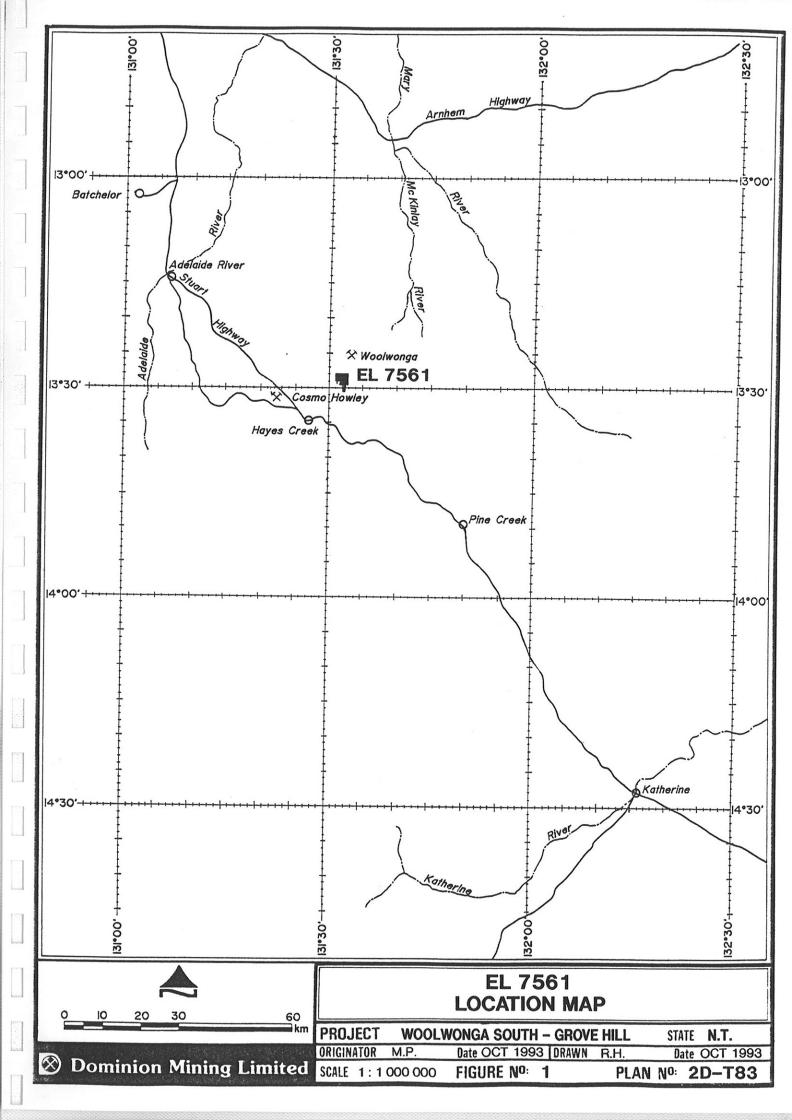
2.0 LOCATION AND TENURE

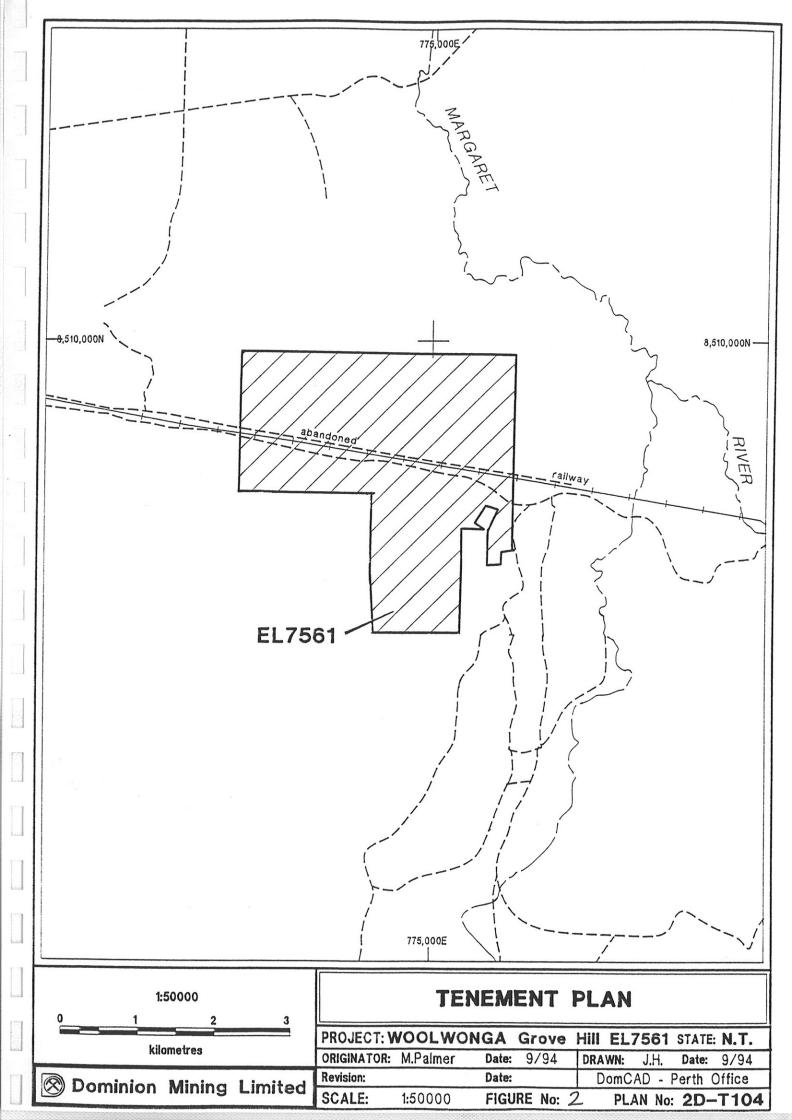
EL7561 is located approximately 140km southeast of Darwin on the Ban Ban 1:50,000 scale map sheet.

The licence lies between latitudes 13°28'S and 13°30'S and longitudes 131°31'E and 131°33'E.

Access is via the Stuart Highway to Cosmo Howley then north via the Fountainhead Road and the Grove Hill Road along the old abandoned railway. (See Figure 1).

The exploration licence was originally granted to Dominion Gold Operations on 4 August 1992 as five graticular blocks, for a period of four years. Two blocks were relinquished in July 1994 and a third block was relinquished in July 1995. The current tenement and 1995 relinquished portion is shown in Figure 2.





3.0 GEOLOGY

3.1 Regional Geology

The Pine Creek Inlier is a roughly triangular area of about 66,000km² south and east of Darwin, which contain Early Proterozoic metasedimentary rocks resting on a gneissic and granitic archaean basement. The metasediments represent fluviatile, shallow water and intertidal basinal sequence up to 14km thick (Needham et al. 1980).

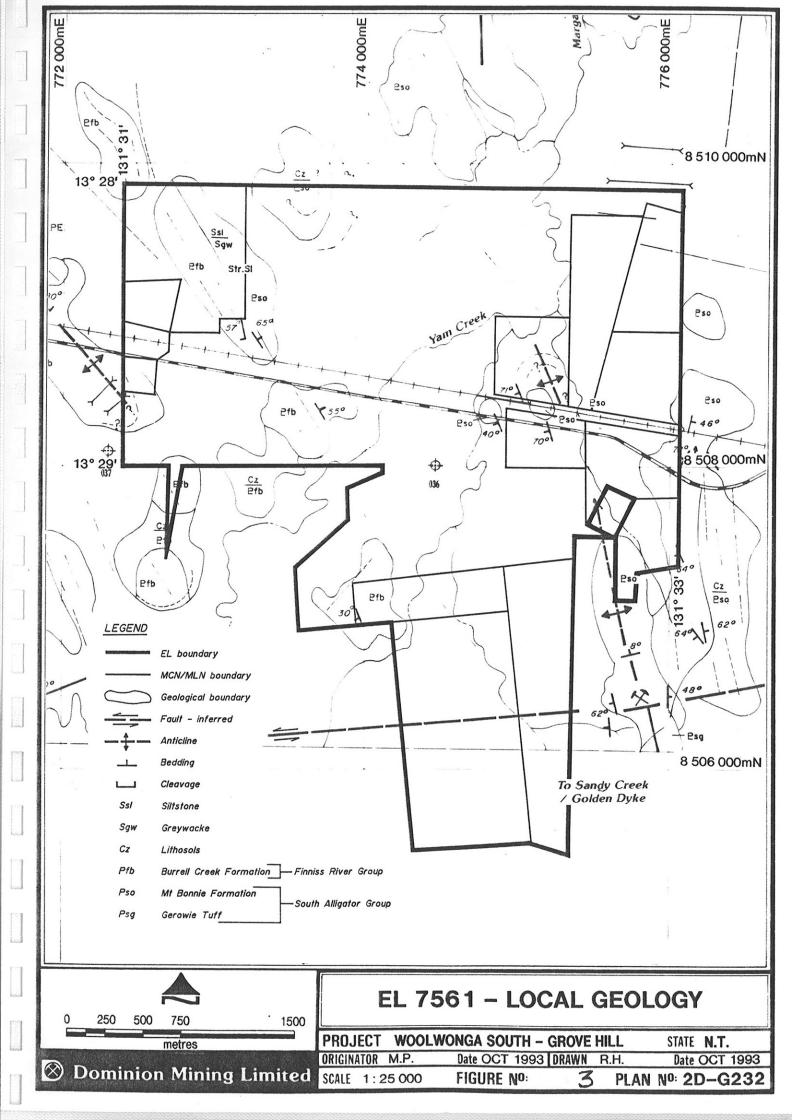
During the Top End Orogeny (1870-1780Ma) the rocks were metamorphosed to mainly greenschist facies, however, amphibolite facies dominates in the northeast in the Alligator Rivers region. Proven Archaean rocks are restricted to mainly granite-gneiss of the Rum Jungle, Waterhouse and Nanambu Complexes which formed mantled gneiss domes near the presently exposed western and eastern margins of the inlier.

The sedimentary rocks are mainly shale, siltstone, sandstone, conglomerate, carbonate rocks and iron formations. Felsic to mafic volcanism and associated tuffaceous sediments are also present. The sedimentary sequence is intruded by transitional igneous rocks including pre-tectonic dolerite sills and syn to post tectonic granitoid plutons and dolerite lopoliths and dykes. Largely undeformed platform covers of Middle Proterozoic to Mesozoic strata overlie these Lower Proterozoic sediments.

3.2 Local Geology

The exploration licence covers the interpreted northerly strike extension to the structure hosting the Priscilla/Yam Creek line of workings. This structure lies within the west limit of the Yam Creek Anticline, a major north striking and northwards plunging fold.

Exposed in the core of the anticline outside the EL, are units of the Gerowie Tuff and Mt. Bonnie Formation. Within the licence area outcrop is sparse, being restricted to low hills near the railway line. Sediments of the Mt. Bonnie Formation and possibly Burrell Creek Formation outcrop in this area. The majority of the licence is covered by alluvial material derived from the Yam Creek drainage system. See Figure 3 for local geology.



4.0 PREVIOUS EXPLORATION

There is no record of exploration within the exploration licence prior to Dominion's tenure.

Work carried out by Dominion in the first and second years of tenure has included aeromagnetic interpretation, gridding, soil sampling and vacuum drilling.

5.0 1994-1995 EXPLORATION

A review and assessment of geochemical data collected was undertaken to determine how effectively the area had been tested. The proposed RAB drilling was not undertaken due to exploration commitments in other areas.

6.0 PROPOSED PROGRAMME

The proposed programme for the fourth year of tenure will involve RAB drilling to test areas where deep alluvial cover vacuum drilling difficult and test those areas of anomalous gold values deemed significant.

The expected expenditure for this programme is \$6,000.

7.0 EXPENDITURE

Employee Wages and Costs Vehicle Costs Drafting/Computing Consumables Database Management Land Management	1,291 122 704 111 500 140
Office	1,152

Total \$4,020

8.0 REFERENCES

- Needham, R.S., Crick, J.H., and Stuart-Smith, P.G. (1980)
 'Regional Geology of the Pine Creek Geosyncline' in Proceedings of the International Uranium Symposium International Atomic Energy Agency, Vienna P1-22.
- Palmer, M., 1993. EL7561 Annual Report, First Year of Tenure 4/08/92 3/08/93. Unpublished report to the NTDME.
- Palmer, M. 1994. EL7561 Annual Report, Second Year of Tenure 4/08/93 3/08/94. Unpublished report to the NTDME.