

# Northern Gold NL

ACN: 009 620 937 Lot 128 Finlay Rd, ADELAIDE RIVER, N.T. 0846 Phone: 08 89767023 Fax: 08 89767025

# EL 8198 1996 ANNUAL REPORT

23.08.95 - 22.08.96 Ranford Hill 1:100,000 Map Sheet

Title Holder:- Territory Goldfields N.L. Managed by:- Northern Gold N.L.



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September 1996

Author:- N.Socic

**NTDME** 

Northern Gold N.L., Adelaide River

Northern Gold N.L., Perth Office

### **SUMMARY**

EL 8198 is located approximately 35 kilometres east - northeast of Pine Creek. The licence was granted to Dominion Gold Operations Pty. Ltd. on the 23<sup>rd</sup> of August 1993 for a period of four years and originally consisted of 3 blocks. However, due to compulsory relinquishment, the licence now stands at 2 graticular blocks, 6 square kilometres in area.

Territory Goldfields N.L., which is now managed by Northern Gold N.L., acquired the tenement in May 1995.

Northern Gold N.L. completed a work program based on digital data acquisition and manipulation. Landsat Imagery, SPOT Imagery and AGSO mapping were obtained and used in conjunction with aerial mapping to determine the best method of gold exploration to be used on the licence.

The covenant for the 1995/96 year of tenure was \$4,000 and the expenditure totaled \$4,185.

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#### 1.0 LOCATION AND TENURE

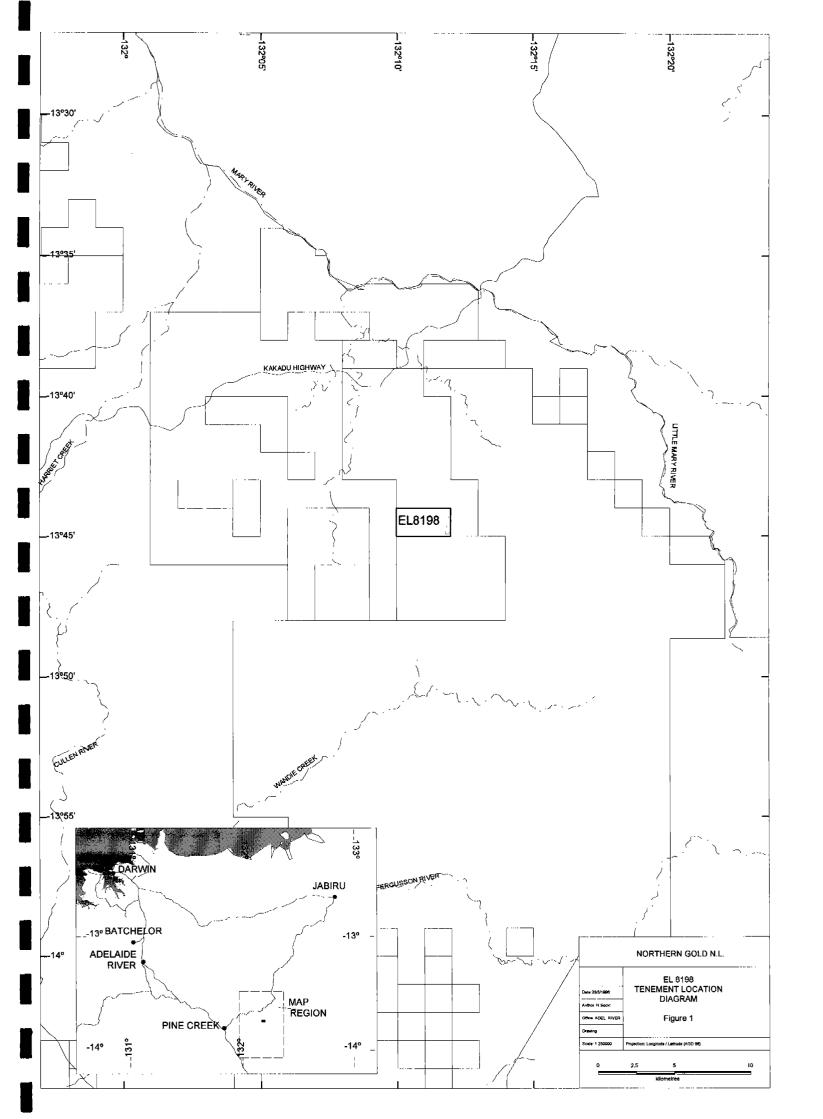
EL 8198 is located approximately 35 kilometres east - northeast of Pine Creek on the Moline (15/4-IV) 1:50,000 and Ranford Hill 1:100,000 scale map sheets. The licence originally consisted of 3 blocks. However, due to compulsory relinquishment, the licence now stands at 2 graticular blocks, 6 square kilometres in area, lying between latitudes 13°44' south and 13°45' south and longitudes 132°10' east and 132°12' east (Figure 1). The tenement is located within Perpetual Pastoral Lease 1134, Mary River East, held by Mary River Cattle Station Pty. Ltd.

Access is via the Stuart Highway to Pine Creek, then via the Kakadu Highway and along maintained pastoral tracks.

The licence, originally consisting of 3 graticular blocks was granted to Dominion Gold Operations Pty. Ltd. on the 23<sup>rd</sup> of August 1993 for a period of four years. Due to compulsory relinquishment, EL 8198 was reduced to 2 blocks in July 1995. Territory Goldfields N.L., which is now managed by Northern Gold N.L., acquired the tenement in May 1995.

During the 1995/96 exploration season, Northern Gold N.L. completed a work program based on digital data acquisition and manipulation. Landsat Imagery, SPOT Imagery and AGSO mapping were obtained and used in conjunction with aerial mapping to determine the best method of gold exploration to be used on the licence.

The covenant for the 1995/96 year of tenure was \$4,000 and the expenditure totaled \$4,185.



#### 2.0 GEOLOGY

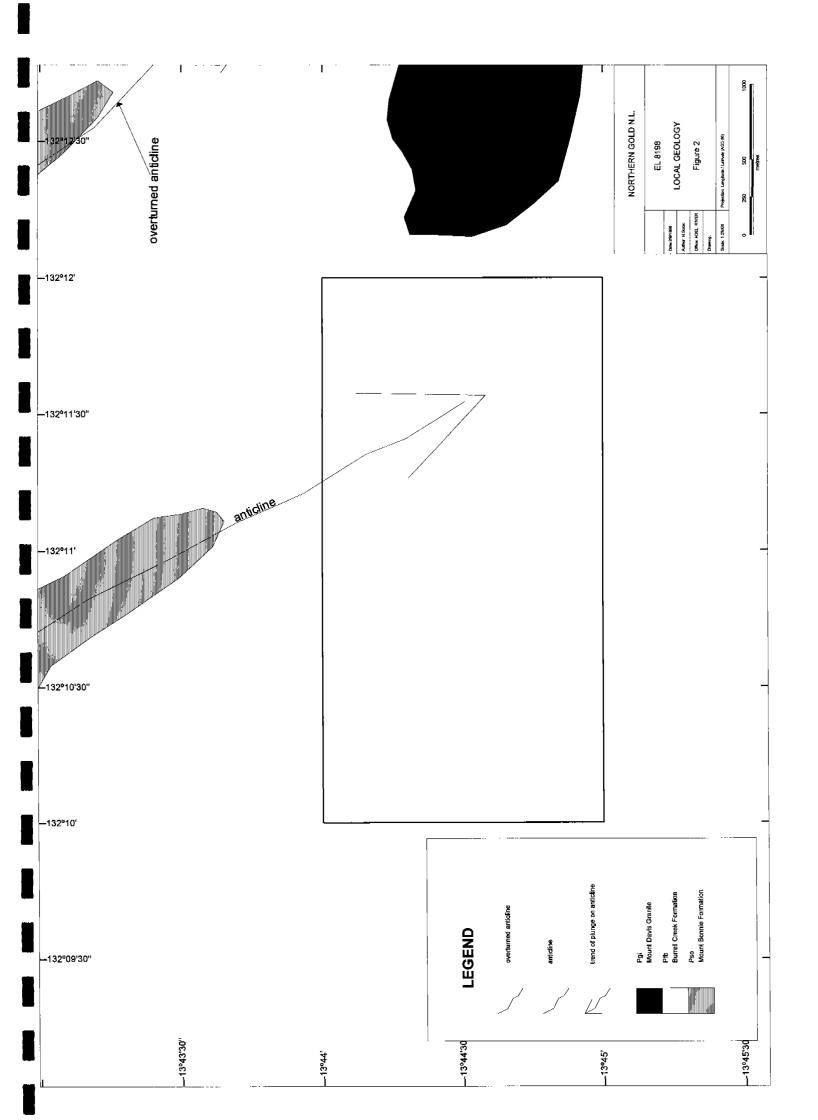
#### 2.1 Regional Geology

EL 8198 is situated within the Pine Creek Geosyncline, a tightly to isoclinally folded sequence of mainly pelitic and psammitic Lower Proterozoic sediments with interlayered tuff units. All the lithologies in the area have been metamorphosed to low, and in places, medium grade, metamorphic assemblages. For the purpose of this report, the prefix meta- is implied, but omitted from the rock names and descriptions.

The sequence has been intruded by pre-orogenic dolerite sills of the Zamu Dolerite and a large number of late syn-orogenic to post-orogenic Proterozoic granitoids. Largely undeformed Middle and Late Proterozoic, Palaeozoic and Mesozoic strata, as well as Cainozoic sediments and laterites, overly the Pine Creek Geosyncline.

#### 2.2 Local Geology

A folded sequence of Lower Proterozoic Burrell Creek Formation sediments dominates the licence area. Folds trend northwest - southeast through the area. The licence is situated 300 metres west of the Mount Davis Granite (Figure 2).



### 3.0 PREVIOUS WORK

Dominion Gold Operations Pty. Ltd. carried out gridding, LAG sampling, geological mapping and a data review over EL 8198.

LAG Sampling was carried out on an 800 metre x 200 metre grid. A total of 40 samples were collected. Results were generally disappointing with two spot anomalous values up to 68ppb Au collected from the centre of the tenement (Backo, 1994).

A program of geological mapping and data review was carried out over a large part of the Wandie project area, including EL 8198 (Fawcett, 1995).

#### 4.0 1995/96 EXPLORATION COMPLETED

During the 1995/96 field season Northern Gold N.L. carried out a work program based on digital data studies.

### 4.1 GIS and Remote Sensing Studies

Northern Gold N.L. completed a work program based on digital data acquisition and manipulation. Landsat Imagery, SPOT Imagery and AGSO mapping were obtained and used in conjunction with aerial mapping to determine the best method of exploration to be used on the licence.

GIS and satellite imagery were used to log soil types, indicating that the region comprises mainly lateritised lower saprolite.

Satellite imagery was also used to interpret the structural geology of the region (Figure 3).

Interpretation of the GIS and remote sensing imagery shows the Mount Davis Granite outcropping to the west of the tenement. The Lower Proterozoic Burrell Creek Formation sediments dominate the licence area.

## **5.0 1995/96 EXPENDITURE**

Expenditure on EL 8198 during the 1995/96 year of tenure totaled \$4,185. Details of this expenditure are listed below as Table 1.

Table 1 EL 8198 1995/96 Expenditure

COSTS	AMOUNT
Report Compilation	300
Data Review	295
Tenement Management	490
AGSO Mapping	425
Satellite Imagery & Manipulation	875
GIS Manipulation	480
Salaries and Wages	775
Subtotal	3,640
Administration @ 15%	545
TOTAL	<u>\$4,185</u>

### 6.0 1996/97 PROPOSED WORK PROGRAM

The proposed work program for the 1996/97 year of tenure will consist of regional soil sampling, geological mapping and assaying.

An estimation of the cost of these programs is listed in Table 2.

Table 2 EL 8198 1996/97 Proposed Work Program

COSTS	AMOUNT
Regional Soil Sampling	1,100
Geological Mapping	900
Assaying	500
TOTAL	\$2,500

## 7.0 REFERENCES

BACKO, J., (1994). EL 8198 - Eureka Creek, Year One of Tenure, 23 August 1993 to 22 August 1994. Unpublished report by Dominion Gold Operations Pty. Ltd. to the NTDME.

FAWCETT, C., (1995). EL 8198 - Eureka Creek, Annual Report, Year Two of Tenure, 23/08/94 - 22/08/95. Unpublished report by Territory Goldfields N.L. to the NTDME.