

PLACER AUSTEX PTY. LIMITED

EXPLORATION LICENCE No. 1236, DALY RIVER
NORTHERN TERRITORY

ANNUAL REPORT
FOR THE PERIOD 17th SEPTEMBER 1976 TO 16th SEPTEMBER 1977

MICROFILMED

DATE: _____

12/12/81

CR77/152

PLACER AUSTEX PTY. LIMITED

E.L.1236 (DALY RIVER)

GEOLOGY

Investigations of the area commenced with an examination of air photographs and data from previous exploration activity. Results of Esso's 1971 air-borne radiometric/magnetic survey were also studied at this time.

Subsequently a reconnaissance field survey was planned and undertaken with a view to determining whether lithologies similar to the Golden Dyke/Koolpin formations were present below the Noltenius Formation and between its outcrop and the Litchfield Granite. The Golden Dyke and Koolpin formations are host rocks to Uranium mineralisation at the Rum Jungle, South Alligator and East Alligator River Fields.

The area of interest is relatively flat with a thin cover of sheet-wash although a few outcrops of quartz-mica schist and chert were located. As a result of the reconnaissance a broad zone (40 km North-South by 2 - 4 km East-West) was defined immediately west of the outcropping Noltenius Formation and Giants Reef Fault, which requires testing by auger/percussion drilling on an East-West grid, perpendicular to the regional strike.

PERSONNEL

During the field reconnaissance programme 2 geologists and one field assistant were employed for part of their time on E.L. 1236. Thereafter, one geologist was employed for part of his time planning a more detailed programme for the next exploration phase.

GENERAL

Protracted negotiations for a proposed joint venture between Placer, Pancontinental Mining Limited and Alluvial Gold Limited were still proceeding at the end of the period of this Report. Subsequently, in November 1977, negotiations were terminated by the withdrawal of Pancontinental and Alluvial Gold. Placer intends to proceed on its own account with further exploration in 1978.

An application for exemption from Condition 2 of the First Schedule of E.L. 1236 was granted for the wet season period from 1st December 1976 to 31st May 1977.

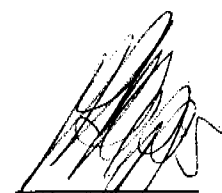
PLACER AUSTEX PTY., LIMITED

E.L. 1236 (DALY RIVER)

EXPENDITURE

For the period 17th September 1976 to 16th September 1977

	A\$
Geology	9,564
Management/Administration	6,948
Transport/Communications	1,888
Property/Legal Expenses	1,904
Geophysics	592
Camp Costs/Accommodation	412
	<hr/>
	\$21,308



P. H. APPS
Administration Manager, Exploration

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PLACER AUSTEX PTY. LIMITED

17th February 1978

Assistant Secretary of Mines,
Northern Territory Department of Mines
P.O. Box 2901
DARWIN N.T. 5794

Your ref : EL1236 - GCL:MD

Dear Sir,

re : E.L.1236 Annual Report 17/9/76 to 16/9/77

Further to your letter of 22nd December 1977 and our Mr. App's reply dated 3rd January 1978, I have pleasure in supplying the additional information about our work on the above E.L. that you requested.

1. AIR PHOTOS - FIELD TRAVERSING

Black and white air photos, at a scale of approximately 1:86,600 were obtained and employed in field traversing to investigate the lithologies outcropping

- (a) to the east of the Litchfield granite complex (Fig.1), and
- (b) to the west of the outcropping Noltenius Formation (Plan)/ Burrell Creek Formation (Pl6), and west of the Giants Reef Fault,

as delineated on the 1:63,360 scale geological maps for Muldiva Creek (Sheet 85, Zone 4) and Daly River (Sheet 76, Zone 4), compiled by the Bureau of Mineral Resources in 1959. (Attached Figure 1.)

The prime objective of this reconnaissance was to determine whether lithologies similar to the Golden Dyke/Koolpin formations (host rocks to the stratabound uranium mineralisation in the Rum Jungle, South Alligator River and East Alligator River fields) were present below the coarse grained sediments (greywackes, siltstones and conglomerates) of the Noltenius/Burrell Creek formations along

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the eastern boundary of the Litchfield granite complex. The earlier BMR mapping (ref: 1:63,360 scale Muldiva Creek and Daly River sheets, Nos 85/4 and 76/4 respectively), which was of a reconnaissance nature employing air photos, showed this boundary to be essentially covered by Quaternary alluvium.

The results of Placer's reconnaissance traversing confirmed the extensive alluvium cover along this prospective boundary, and few outcrops of bedrock were located in spite of detailed coverage. Furthermore, the large areas mapped as Litchfield granite complex (Pgl) and Hermit Creek Metamorphics (Ah) on the western boundary of the Muldiva Creek and Daly River 1:63,360 scale BMR geological maps (Fig.1) were found to be essentially soil and sheet wash/alluvium covered, with few actual granite outcrops.

Thus, the new geological facts and outcrop locations obtained from this initial field traversing programme are much less than was hoped for, as shown on the attached field plan (Fig.2). Small isolated outcrops of chert were located within this boundary zone (possibly representing silicified dolomite?) indicating that finer grained sediments occur below the westernmost outcrops of coarse grained sediments of the Noltenius/Burrell Creek formation.

2. GEOPHYSICS

During the field traversing discussed above, Placer's geologists employed the following geophysical instruments as aids to prospecting :-

- (a) one GRS-101 portable scintillometer on hire from Geometrics International Corporation, Milsons Point, Sydney 2061.
- (b) one GIS-3 portable spectrometer on hire from Scintrex Pty. Ltd., Killarney Heights, Sydney 2087

Systematic geophysical ground surveys were not carried out and no geophysical plans were produced.

During the geological reconnaissance programme use was made of the results of Esso Australia Ltd's Victoria River Block A exploration programme, specifically the :-

- (a) airborne total magnetic intensity plan,
- (b) airborne total count plan, and
- (c) airborne U/Th plan

In particular a number of magnetic, total count and U/Th anomalies were inspected on the ground but in no case was follow-up work considered justified.

3. FOLLOW-UP WORK

The discovery of chert outcrops within the meridional zone along the eastern boundary of the Litchfield granite complex, below the outcrops of Noltenius/Burrell Creek formation (see (1) above and the attached Fig.2), give encouragement to continue exploration of the original conceptual model with test drilling (auger and/or percussion) along a series of East-West traverse lines to investigate the lithologies present below the alluvium cover, and to determine whether prospective host-rocks for stratabound uranium mineralisation are included.

This follow-up programme was planned for the 1977 dry season. However, early in 1977 our Company took the view that in order to comply with the Federal Government's investment guidelines for uranium, we should seek Australian partners for subsequent stages of exploration. Negotiations commenced with Pancontinental Mining Limited and Alluvial Gold Limited, a subsidiary of Oakbridge. Negotiations reached an advanced stage but became protracted and as a result of failure to agree to terms for expenditure between Pancontinental and Alluvial Gold, Pancontinental formally withdrew from negotiations on 23rd November 1977. This date rendered it impractical for Placer to mount a field programme before the onset of the wet season. The follow-up programme will now be commenced at the beginning of the 1978 dry season.

R. COX

RC/ef/98

Attached : Fig.1 - Geology Plan, Daly River Project,
(after 1:63,360 scale BMR 1959 Daly River & Muldiva
Creek sheet Nos. 76/4 and 85/4)

Fig.2 - Field geology plan, northern part of E.L.1236

— after 163,360 BMR 1959 Daly
Rind and Middlewa Creek sheets
76/4 and 85/4

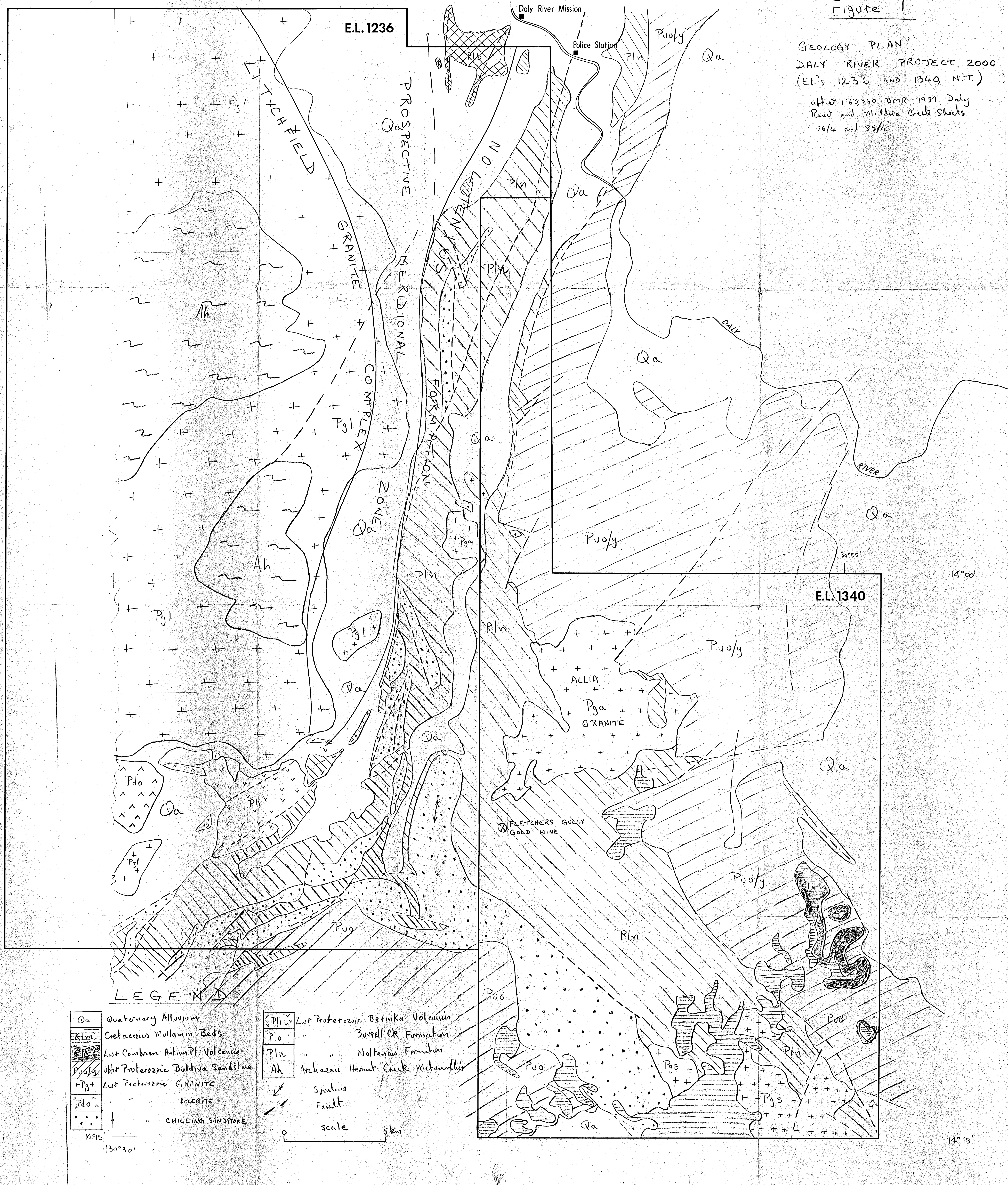


FIGURE 2

EL. 1236 DALY RIVER PROJECT 2000.
PLAN SHOWING OUTCROPS LOCATED
DURING 1976 RECONNAISSANCE
TRAVERSING OF MERIDIONAL ZONE
BETWEEN LITCHFIELD COMPLEX
AND NOLTENIUS FORMATION

SCALE 0 10 km
(APPROX. - UNCONTROLLED PHOTO-MOSAIC)

