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ANNUAL REPORT

ANSON - NORTHERN TERRITORY

EXPLORATION LICENCE 8258

FOR THE PERIOD 23 NOVEMBER 1994 TO 22 NOVEMBER 1995

**Map Sheet 1:250 000 - Cape Scott SD52-07
Map Sheet 1:250 000 - Anson 4971**

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Report No. 9787

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TEXT FIGURES

<u>Fig No</u>	<u>Plan No</u>	<u>Title</u>	<u>Scale</u>
1	NTD294	EL8258 'ANSON' Base Plan & Locality	1:50,000
2	N/A	Anson Helimag Survey	1:50,000

ANNEXURE

1. Bibliographic Data Sheet
2. Expenditure Summary 1994 - 1995
3. Proposed Work Programme & Expenditure 1995 - 1996

1. INTRODUCTION

Exploration Licence 8158 (Anson) is located approximately 110 kms south-west of Darwin and straddles the lower reaches of the Reynolds River.

Two pastoral leases are affected by this title: NT Por 3219 (Labelle Downs PL986) and NT Por 2681 (Litchfield PPL1006).

Access to the area is through Labelle Downs Station but is severely limited by the extent of black soil cover which cannot be traversed by vehicle for much of the year. The field season is thus effectively restricted to two or three months (July, August, September) at the very end of the dry season.

The Anson Exploration Licence was granted to Normandy Exploration on 23 November 1993 for a six year term with an expenditure commitment for the first year of tenure of \$31,000 over an area of 61 blocks.

On 23 November 1995 the Exploration Licence was reduced to 30 blocks.

2. GEOLOGY

Beneath the extensive black soil flood-plains that blanket most of the licence area lies the Wagaite Granite, which has been dated at 1852 ± 33 Ma.

A major structure known as Tom Turner's Fault cuts through the eastern part of the licence area on a trend that runs slightly east of north. This structure has been described by the NTGS as "a dextral-oblique slip fault".

A few small blocks of (downthrown) Moyle River Formation sediments (Middle Proterozoic) occur along Tom Turner's Fault, the largest of which forms a prominent feature known as Bob's Nob.

3. PREVIOUS EXPLORATION

An airborne magnetic survey flown for Ashton Mining Limited in 1982/83 identified a number of discrete dipolar magnetic anomalies within their EL 2407.

These were followed up by helicopter magnetic survey and surface loam sampling of some of the anomalies, but sample results were negative and no further work was carried out.

4. EXPLORATION OBJECTIVES

The "Anson" area was considered to have potential for deep-seated intrusions of kimberlitic affinities because of its position on a major structural trend and the presence of airborne magnetic anomalies that were considered by previous explorers to relate to a bedrock source.

Loam sampling over areas of transported black soils was thought to be an inadequate means of testing these magnetic anomalies and further detailed magnetic surveys were planned, to be followed by drilling of selected anomalies.

5. EXPLORATION 1993 - 1994

5.1 Air-Photo Study

Coloured air-photo coverage at 1:60,000 scale, flown in April 1986 was purchased and a photo-study completed over the project area.

5.2 Geophysical Data Acquisition and Processing

Open-file company reports on ELs 1408, 2407 and 3188 were copied from the Department of Mines and Energy, including magnetic profiles and flight line plans from Ashton's airborne surveys.

Data was also acquired from the NTGS for a magnetic survey flown for the Department in 1981 over the Anson 1:100,000 sheet and re-processed in-house in order to identify those dipolar magnetic anomalies most likely to be related to pipe-like intrusive bodies.

Several anomalies have been selected for further investigation.

6. EXPLORATION 1994 - 1995

6.1 Helimag Survey

In late 1994 a helimag survey was flown over an area of 880 kms² covering all 9 dipolar anomalies revealed by the Ashton aeromagnetic survey in 1981. The Normandy Exploration Ltd in-house magnetic system was used for this survey. The flight lines were north-south at intervals of 50 metres at an average bird height above ground of 60 metres.

The data was excellent and preliminary interpretation and modelling of the anomalous responses revealed an average depth to the magnetic source of >40 metres (Fig 2).

It was planned to drill selected anomalies but the late availability of a drilling rig and the early start of the wet season postponed this survey until the 1996 dry season window. As a compromise option it was decided to at least undertake an auger sampling programme to recover subsurface material for geochemical assays.

6.2 Auger Sampling

A Jet Ranges helicopter was chartered in October 1995 to access seven of the aeromagnetic dipoles in the vicinity of Bobs Nob on Labelle Downs Station.

The area lies below 10 metres above sea level and the entire plain comprises a thin layer of black/grey soil, underlain by grey clays that represent infilled valleys of the Daly, Reynolds and Finness Rivers.

Six anomalies were sampled by hand augering to a maximum depth of 4 metres. Two anomalies not sampled were 8/8 and an isolated magnetic anomaly which have modelled depths of 200 metres (Fig 2, Table 1).

The material from the base of each auger hole was despatched to Amdel Laboratories in Perth for assays which included the normal suite of elements associated with kimberlites and lamproites especially Cr, Ni and the rare earths.

These samples will also be examined for kimberlitic indicator minerals.

Table 1

Anomaly	Co-Ordinates	Depth	Comments
6/5	643050E 8539400N	to 4m	Clay
6/7a	643100E 8536100N	to 4m	Clay
8/1	645000E 8534500N	to 4m	Clay/Shell grit
6/3	848600E 8536900N	to 1.5m	Clay
6/2a	647400E 8537800N	to 4m	Clay
8/1b	646950E 8536550N	to 4m	Clay

The results are expected in December and will be reported in the next annual report.

7. CONCLUSION

Irrespective of the heavy mineral and geochemical results, an attempt will be made in 1996 dry season to drill the anomalies listed in Table 1 and Annexure 3.

8. EXPENDITURE

The total expenditure for the report period is listed as \$31,506 (annexure 1). This below estimated budget figure is entirely due to the unavailability of a suitable drill rig during the short dry season access period compounded by an early start to the wet season.

BIBLIOGRAPHIC DATA SHEET

REPORT NUMBER:	9787	
PROSPECT NAME:	Anson	
OWNERS:	Normandy Exploration Limited	
KEYWORDS:	Magnetic Anomalies Kimberlite	
COMMODITY:	Diamonds	
TECTONIC UNIT:	Pine Creek Geosyncline	
1:250,000 MAP SHEETS:	Cape Scott	SD52-07
1:200,000 MAP SHEETS:	Anson	4971

EXPENDITURE SUMMARY**EL8258 - ANSON****Period 23 November 1994 - 22 November 1995**

Salaries and Wages	11,731
Travel, Accommodation, Meals	4,162
Regional Office Costs	3,798
Tenement Costs	50
Geophysical Survey	7,297
Maps and Publications	50
Courier, Freight	943
Vehicle Hire Costs	1,124
Vehicle Operating Costs	1,671
Consultants	680
Field Supplies	20
Total:	<u>\$31,506</u>

ANSON EL8258**Proposed Programme & Expenditure****For Period 23/11/95 to 22/11/96**

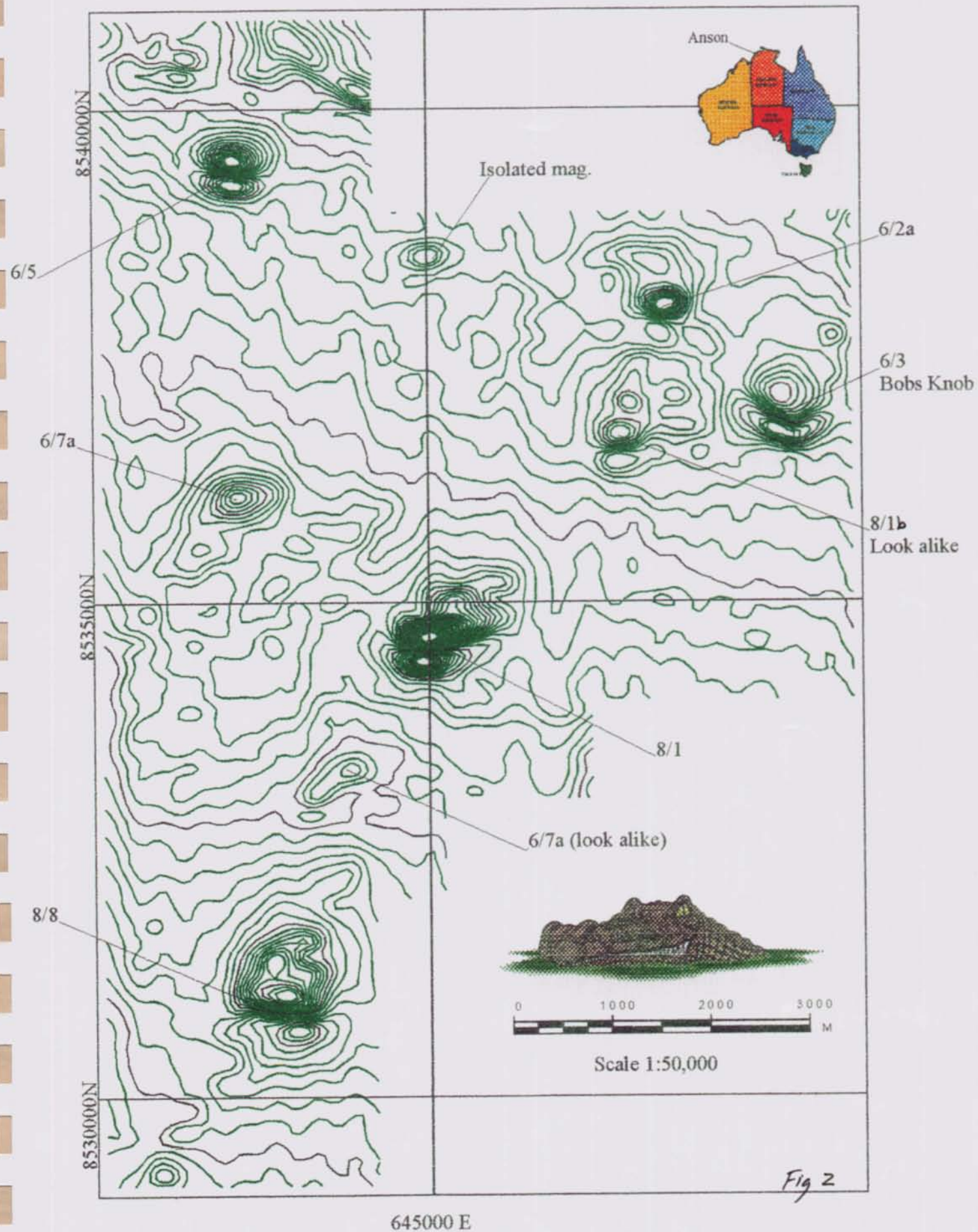
Once the ground conditions allow for the access of a drill the investigation of the 6 aeromagnetic targets can commence. An aircore system is favoured for this stage of the evaluation programme.

If kimberlite or lamproite is intersected, an intensive aircore drilling programme will be initiated to outline the subsurface area of the bodies and to determine their geology and structure.

If the sources are of economic size then a normal evaluation programme will proceed, including bulk sampling to determine the diamond grade of the pipes. A mobile HMS plant would be used to wash the material.

A total cost for the initial drilling and evaluation (excluding HMS plant treatment) of the pipes is estimated at \$100,000.

Salaries and Wages	10,000
Drilling	50,000
Track Construction	10,000
Vehicle Cost	5,000
Travel and Accommodation	5,000
Field Expenses	12,000
Overheads-Office Costs	8,000
Total:	<u>\$100,000</u>



Anson Helimag Survey
Contoured Total Magnetic Intensity (nT)

