

PALADIN  
RESOURCES N.L.  
A.C.N. 061 681 098



for  
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J A COOKE, M I COOKE

ANNUAL REPORT  
on  
Exploration Licence 8862

PINE CREEK  
NORTHERN TERRITORY

COVERING THE PERIOD  
15 November 1994 to 14 November 1995

COMPILED BY: K S TAYLOR

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## (ii) TABLE OF CONTENTS

	PAGE
SUMMARY	(i)
TABLE OF CONTENTS	(ii)
1. INTRODUCTION	1
2. LOCATION	1
3. GEOLOGY	1
4. INVESTIGATIONS	2
4.1 Airborne Magnetics	2
4.2 Geological Mapping	2
5. STATEMENT OF EXPENDITURE	3

## LIST OF FIGURES

Figure 1	14D01	Pine Cr��ek Project, Location Map
Figure 2		Total Field Magnetic Contours
Figure 3	19A05	EL 8862 Geological Map

(i) SUMMARY

EL 8862 was granted to J A Earthrowl, J J Farrell, G Mainelis, J A Cooke, M I Cooke on 15 November 1994. The tenement forms part of the North Goodall Project in which Paladin is earning an interest by carrying out exploration on the project area.

Work carried out during the first year of tenure included airborne magnetics and geological mapping.

Exploration is focussed on gold.

## 1. INTRODUCTION

Exploration Licence 8862, covering an area of five blocks (16km<sup>2</sup>) was granted on 15 November 1994 to J A Earthrowl, J J Farrell, G M Mainelis, M I Cooke and J A Cooke, in equal shares. Giants Reef Exploration Pty Ltd (Giants Reef) has an agreement over the tenement and it forms part of the North Goodall Project in which Paladin Resources NL (Paladin) is earning an interest under an agreement signed on 28 August 1995.

The tenement is one of several worked by Paladin as the North Goodall Project.

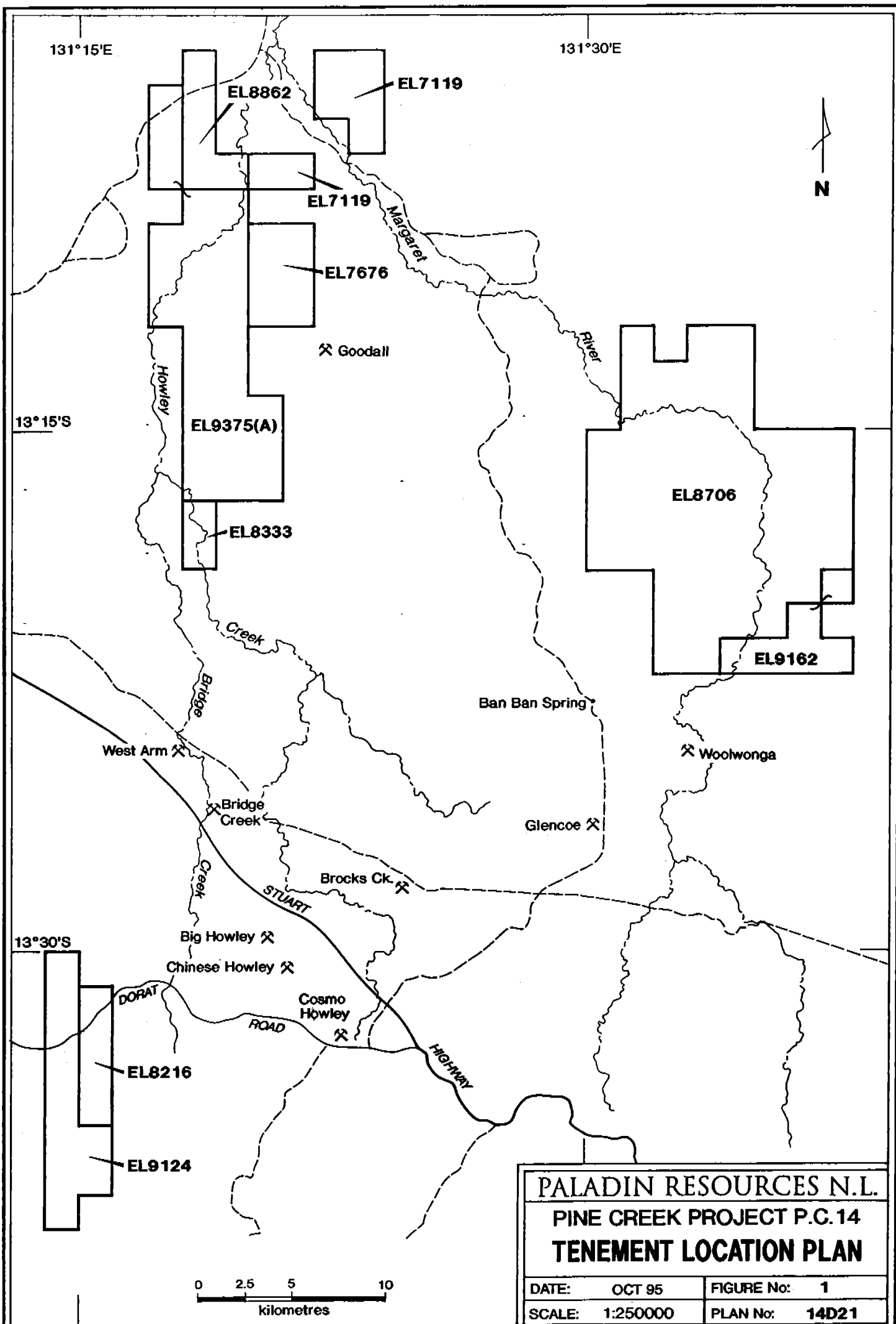
This report covers exploration work carried out by Paladin during the first year of tenure.

## 2. LOCATION

EL 8862 lies approximately midway between Batchelor and Pine Creek on the PINE CREEK 1:250,000 map sheet SD 52-8 and the MARGARET RIVER 1:50,000 map sheet 14/ 2-I (*Figure 1*).

## 3. GEOLOGY

The North Goodall Project lies within the Central Marrakai Structural Domain with the majority of tenement areas situated adjacent to the Howley Anticline. In this region the prospective South Alligator Group and Burrell Creek Formation rocks have been uplifted by intruding granitoid plutons such as the Burnside Granite and subsequently exposed on the flanks and marginal to the cores of regional domes. Gold mineralisation occurs preferentially within carbonaceous and sulphidic units of the South Alligator Group and Greywackes of the Burrell Creek Formation in quartz reefs or stockworks in a variety of structural settings though usually in association with anticlinal axes.



Stratigraphically the South Alligator Group consists of the basal Koolpin Formation made up of BIF, carbonaceous phyllite and siltstone overlain by tuff, siltstone and phyllite of the Gerowie Tuff, and is topped by phyllite, chert and BIF of the Mt Bonnie Formation. Burrell Creek Formation flysch sediments of the Finnis River Group conformably overlay the South Alligator Group. The sediments were intruded by the Zamu Dolerite before the onset of metamorphism and deformation. The rocks are metamorphosed to lower greenschist facies by the Pine Creek orogeny. The tight isoclinal folds trend north and north-west and are refolded by east-west trending open folds.

#### 4. INVESTIGATIONS

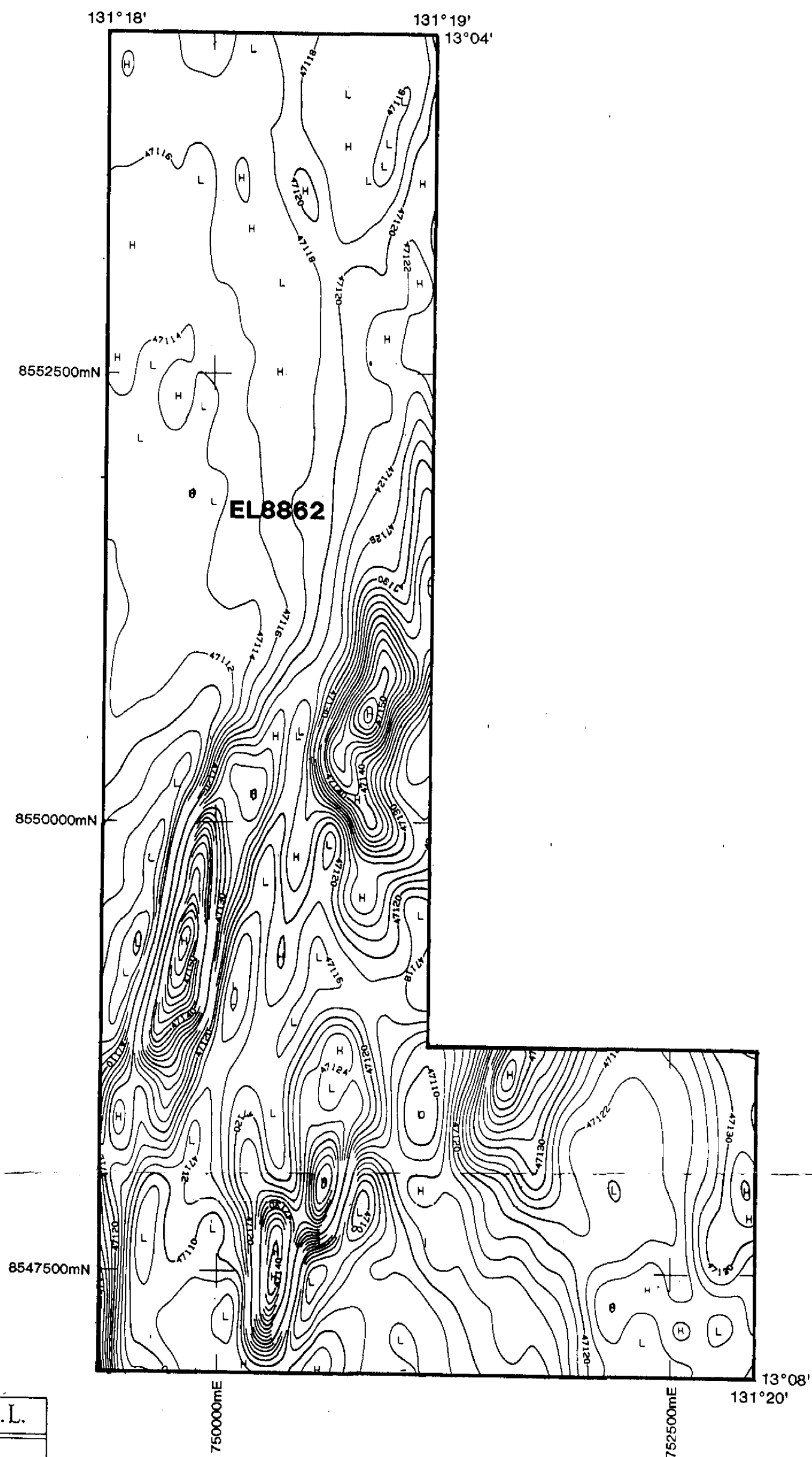
##### 4.1 Airborne Magnetics

High resolution multi-client aeromagnetic data, covering the tenement and surrounding areas, was purchased from World Geoscience. The survey was flown by Aerodata Holdings Ltd during the period December 1987 - May 1988. The data was used to provide an in-house interpretation of the physical structure in geology of the area. (Figure 2)

##### 4.2 Geological Mapping

The tenement was mapped on aerial photo overlays at a scale of 1:25,000.

The tenement is entirely covered by quaternary alluvial and black soil plain sediments. Minor tertiary laterites were observed in gravel pits. (Figure 3)



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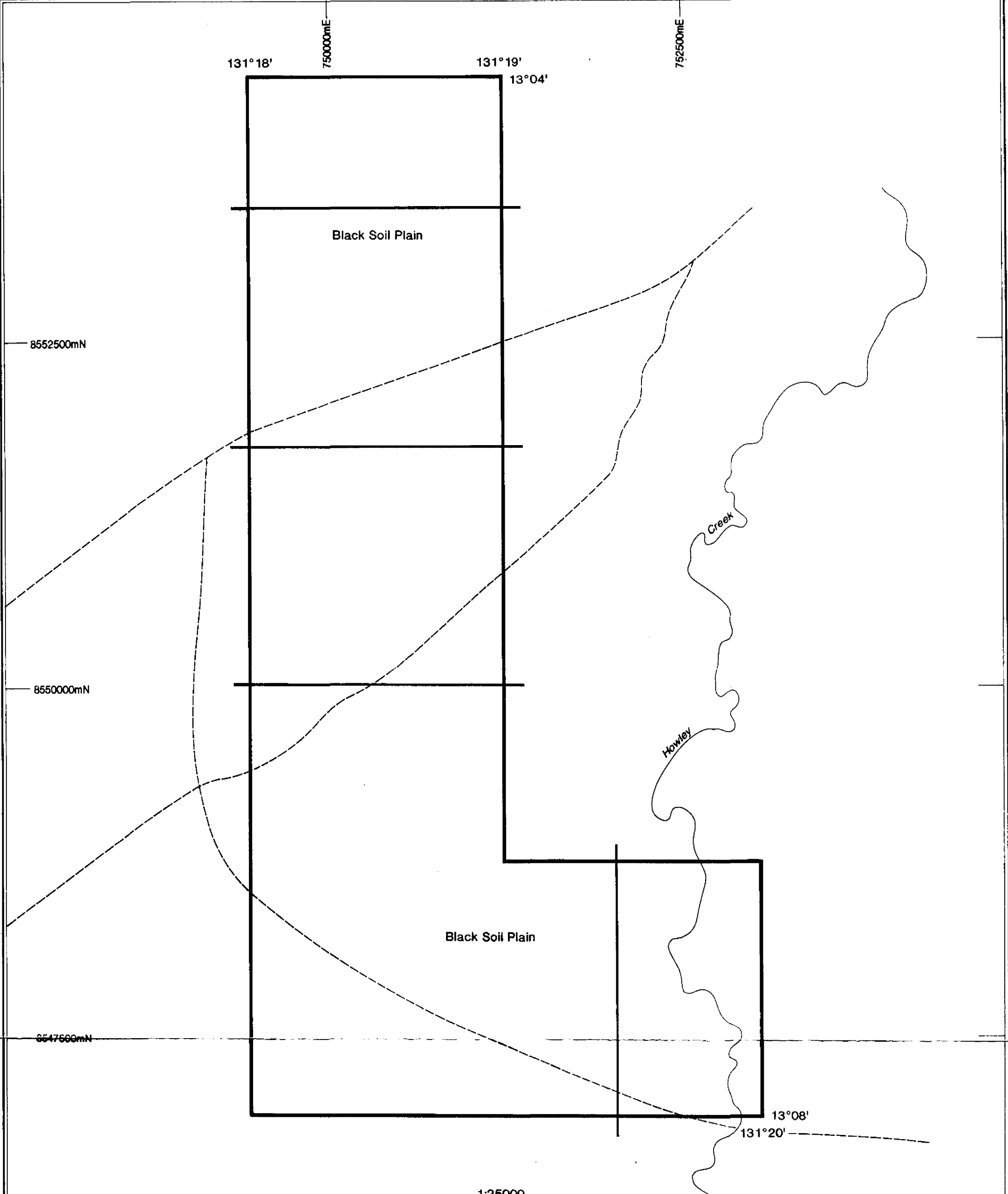
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EL8862

TOTAL FIELD MAGNETIC CONTOURS

DATE DRAWN	Nov.95	FIGURE No.	2
PLAN No.		REPORT No.	

Part of Airborne Geophysical Survey PINE CREEK NT 1987-88  
TOTAL FIELD MAGNETIC CONTOURS AERODATA HOLDINGS Ltd.



1:25000  
0 250 500 1000 1500  
metres

— Traverse line  
- - - Road

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EL8862

**GEOLOGICAL MAP**

DATE:	Nov. 95	FIGURE No:	<b>3</b>
PLAN No:	<b>19A05</b>	REPORT No:	



5.

**STATEMENT OF EXPENDITURE****EXPLORATION LICENCE 8862****COVERING THE PERIOD****15/11/94 TO 14/11/95**

<b>CATEGORY</b>	<b>AMOUNT</b>
	<b>\$</b>
Salaries & Wages	2317
Consultants / Contractors	49
Bulldozing / Grading	-
Drilling RAB	-
Drilling PDH/RC	-
Geochemistry - Stream	-
Geochemistry - Soil	-
Geochemistry - Rock Chip / Drill	-
Geophysics - Airborne	500
Fuel	50
Vehicles & Equipment	200
Camp Operating & Consumables	20
Travel, Accommodation & Meals	400
Drafting, Printing & Maps	100
<b>Subtotal</b>	<b>3636</b>
<b>Overheads (Standard 12%)</b>	<b>436</b>
<b>TOTAL</b>	<b>4072</b>