

**ACACIA RESOURCES LTD**  
**EXPLORATION LICENCE 9137 - EAST BONROOK**  
**RELINQUISHED AREA REPORT**  
**FOR THE PERIOD**  
**5<sup>TH</sup> JUNE 1995 TO 4<sup>TH</sup> JUNE 1999**

**Author:** Jane Ham  
**Drafting:** Amanda Horner  
**Date:** September 1999

**Report No:** 08.10420  
**Copy No:** 1

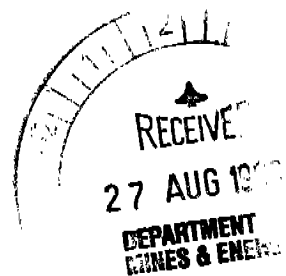
1:100 000 Pine Creek 5270  
1:250 000 Pine Creek SD52-8

**Distribution:**

- |   |                                     |
|---|-------------------------------------|
| 1 | NT Department of Mines & Energy     |
| 2 | Nullarbor Holdings Limited (Sydney) |
| 3 | Acacia Resources (Darwin)           |
| 4 | Acacia Resources (Melbourne)        |
| 5 | Acacia Resources (Field)            |

**OPEN FILE**

**CR 99 / 378**



## SUMMARY

Exploration Licence (EL) 9137, in the Pine Creek area, NT, is being explored by Acacia Resources Limited (Title Holders), under a joint venture agreement signed in December 1994 between Solomon Pacific Resources NL and Nullarbor Holdings Limited. Following the successful acquisition of Solomon Pacific Resources in June 1996, Acacia assumed the interests of Solomon Pacific Resources within EL 9137 and has now earned a 79.99% interest in the tenement.

EL 9137 is included in the Bonrook Project along with five other leases. Exploration within EL 9137 is carried out in conjunction with work in these tenements. A relinquishment of one (1) block was made on 4<sup>th</sup> May 1999. This report details the exploration completed in the relinquished area between 5<sup>th</sup> June 1995 and 4<sup>th</sup> June 1999. The work completed is summarised below:

- 2 line km of gridding and 86 soil samples
- 1:25 000 aerial photography and digital elevation modelling
- Regional gravity survey
- Regional geophysical data compilation and interpretation.
- Compilation and review of all data within the Bonrook J.V. area, which includes EL 9137.

## **CONTENTS**

- 1 INTRODUCTION**
- 2 TENEMENT STATUS**
- 3 LOCATION AND ACCESS**
- 4 REGIONAL GEOLOGY**
- 5 LOCAL GEOLOGY**
- 6 WORK COMPLETED FOR PERIOD 5<sup>th</sup> JUNE 1995 TO 4<sup>TH</sup> JUNE 1999**
  - 6.1 Work Completed For Period Ending 4<sup>th</sup> June 1996**
    - 6.1.1 Review and Compilation of Previous Explorers
    - 6.1.2 Gridding and Soil Sampling
  - 6.2 Work Completed For Period Ending 4<sup>th</sup> June 1997**
    - 6.2.1 Geological Reconnaissance
    - 6.2.2 Aerial Photography/Digital Elevation Modelling
    - 6.2.3 Regional Gravity Survey
  - 6.3 Work Completed For Period Ending 4<sup>th</sup> June 1998**
    - 6.3.1 Gridding
    - 6.3.2 Soil Sampling
  - 6.4 Work Completed For Period Ending 4<sup>th</sup> June 1999**
- 7 ENVIRONMENTAL**
- 8 EXPENDITURE FOR PERIOD 5<sup>th</sup> JUNE 1995 TO 4<sup>TH</sup> JUNE 1999**
- 9 REFERENCES**

**FIGURE LISTING**

<b>Figure</b>	<b>Title</b>	<b>Scale</b>
<b>Figure 1</b>	East Bonrook Relinquished Area, EL 9137 Tenement Location	1:200,000
<b>Figure 2</b>	East Bonrook Relinquished Area, EL 9137 Regional Geology	1:200,000
<b>Figure 3</b>	East Bonrook Relinquished Area, EL 9137 Soil Sample Locations with sample numbers	1:10,000
<b>Figure 4</b>	East Bonrook Relinquished Area, EL 9137 Soil Sample Locations with Au results	1:10,000
<b>Figure 5</b>	East Bonrook Relinquished Area, EL 9137 Gravity Station Locations	1:10,000

**APPENDICES**

<b>Appendix 1</b>	Soil Sample Ledgers and Assay Results (Data disk – comma delimited format)
<b>Appendix 2</b>	Gravity Survey Reference Locations and Station Data
<b>Appendix 3</b>	Environmental Register

## **1 INTRODUCTION**

Exploration Licence (EL) 9137 is being explored by Acacia Resources Limited under a joint venture agreement with Nullarbor Holdings Limited. The tenement is located approximately 20 km south-southeast of the Union Reefs Gold Mine, and approximately 8 km southeast of the Pine Creek township. Acacia Resources Limited (Acacia) is exploring the East Bonrook tenement with the aim of defining economic gold mineralisation that could become mill feed for the Union Reefs Gold Mine. An area reduction of one (1) block was made on 4<sup>th</sup> May 1999 and this report details all exploration work carried out within the relinquished area for the period ending 4<sup>th</sup> June 1999.

## **2 TENEMENT STATUS**

EL 9137, comprising 2 graticular blocks, was granted to Acacia on 5<sup>th</sup> June 1995 for a period of 6 years. The licence was added to the Bonrook Joint Venture under an agreement between Acacia, Nullarbor Holdings Limited and Solomon Pacific Resources (Solpac) signed on the 23<sup>rd</sup> November 1994, with Acacia Resources as manager.

Through Acacia's take-over of Solpac on 24<sup>th</sup> June 1996, Acacia assumed Solpac's interest in EL 9137. Current interests in the tenement stand at Acacia 79.99% and Nullarbor Holdings 20.01%.

A reduction of one block was made on the 4<sup>th</sup> May, 1999. The western block of the licence was relinquished. The blocks relinquished and retained are detailed below:

Block Relinquished:	Map No. 14/6-11 Pine Creek No. 34/62
Block Retained:	Map No.14/6-11 Pine Creek No. 35/62

Recent exploration in the lease was covered by AAPA certificate C98/149, which expires on 18<sup>th</sup> December 2000.

## **3 LOCATION AND ACCESS**

The centre of EL 9137 is located approximately 8 km SE of the township of Pine Creek in the Northern Territory, (Figure 1). The licence area can be accessed from the Stuart Highway via the old "Wandie Track" from the airstrip turnoff on the outskirts of Pine Creek, then by following the Wandie Track eastwards from Pine Creek for some 4km and turning south along the gas pipeline. Alternate access to the tenement can be achieved via tracks leading north from the Bonrook Station Homestead, which is well signposted along the Stuart Highway south of Pine Creek.

The licence area falls entirely within Bonrook Station and keys for locked gates along the Wandie Track must be sought from the station manager's residence.

#### **4 REGIONAL GEOLOGY**

EL 9137 is located south of Pine Creek township in the central part of the Pine Creek Geosyncline (Figure 2). The geosyncline contains Early Proterozoic metasedimentary rocks overlying a gneissic and granitic Archaean basement. The metasediments represent a preserved basinal sequence up to 14km in thickness (Needham et al., 1980) which was tightly folded and metamorphosed to greenschist facies, and in some places amphibolite facies, between 1890 to 1870 Ma (Ferguson, 1980)

The geosynclinal sequence is intruded by transitional igneous rocks including, predeformational dolerite lopoliths and dykes and post deformational granites. Largely undeformed platform cover, comprising Middle and Late Proterozoic, Cambro-Ordovician and Mesozoic strata, unconformably overlie the older rocks.

EL 9137 lies in the southern part of a narrow corridor of metasediments, assigned to Burrell Creek Formation (Stuart-Smith, 1987), between two lobes of the Cullen Batholith. This corridor contains both the Union Reefs and Pine Creek gold mines, as well as numerous small historic prospects and deposits.

#### **5 LOCAL GEOLOGY**

EL 9137 contains rocks of Burrell Creek (Pfb) and Mt Bonnie (Pso) Formation which have been intruded by the Bonrook (Pgcb), Allamber Springs (Pgca) and undifferentiated (Pgc) granites (Figure 2). Swarms of quartz and quartz-breccia veins are present along the northern and western margins of these plutons, with minor hornfelsing apparent around the veins. A distinct conglomerate horizon exists within the Burrell Creek Formation in the central portion of the tenement, near the margin of the Allamber Springs Granite.

Most of the tenement has moderate to thin soil cover, and in the southeastern portion Quaternary alluvium (Qa) and deep humic soils (Qf) occur in low lying areas and along drainage channels.

There are no known gold workings within the tenement, although there is a nearby tin prospect to the northwest of Bonrook Station, to the west of the tenement.

## **6 WORK COMPLETED FOR PERIOD 5<sup>th</sup> JUNE 1995 TO 4<sup>TH</sup> JUNE 1999**

### **6.1 Work Completed For Period Ending 4<sup>th</sup> June 1996**

#### **6.1.1 Review and Compilation of Previous Explorers**

Several companies have held tenure over the exploration licence, including Greater Consultancies and Nullarbor Holdings/Solomon Pacific Resources.

In 1988 exploration licence 6255 covered the entirety of the current EL 9137, was granted to the Greater Consultancies Pty Ltd for six years. The licence was cancelled by the NTDMR in June 1992. Work completed included detailed interpretation of Aerodata airborne magnetics, ground magnetics, airphoto lineament studies, mapping and rockchip sampling. These studies defined a series of magnetic lineaments and regional lineaments and airphoto lineaments trending north - west - south to east through the current EL 9137. In particular two magnetic lineaments (mafic dykes) interpreted by Greater Consultancies exist within the north-western portion of the licence area.

The current licence EL 9137 previously formed part of EL 7893 held by Nullarbor Holdings Ltd in joint venture with Solomon Pacific Resources NL. Under this tenure Eupene Exploration enterprises were contracted to carry out an extensive literature review of the licence. Compilation of mapping, rock chip sampling and remote sensing interpretations from the previous explorers has defined an area with coincident geochemical anomalism and magnetic and regional lineations. This area was defined as a high priority target for exploration within the tenement.

#### **6.1.2 Gridding and Soil Sampling**

A total of one (1) line kilometre of crossline gridding was completed from a surveyed baseline constructed through the adjacent licence during the year. The surveyed grid baseline is orientated at 324° magnetic. The 200m spaced crosslines were marked with 50 spaced galvanised iron fence droppers.

A total of 40 soil samples were collected by either hoe pick or power auger from the gridded area. Samples weighing 1.5 to 2kg's were collected every 25m along the crosslines from the B<sub>2</sub>/C horizon and sieved to -5mm.

The samples were analysed by Assaycorp in Pine Creek for low level Au by 50g fire assay and Cu, Pb, Zn and As by AAS. Results from the sampling were mostly below detection. Sample locations and Au results are shown in Figures 3 and 4 respectively. Soil sample ledgers and analyses are included in Appendix 1.

## **6.2 Work Completed For Period Ending 4<sup>th</sup> June 1997**

### **6.2.1 Geological Reconnaissance**

Several days of geological reconnaissance of the Bonrook East lease was completed during the reporting period.

### **6.2.2 Aerial Photography/Digital Elevation Modelling**

Airesearch Mapping was contracted to fly a 1:25,000 scale colour aerial photography survey over Acacia's Pine Creek tenements late in 1996, including EL 9137. In-house processing of the aerial photography included scanning the photographs, producing a digital copy and incorporating the digital data into Acacia's GIS database.

Digital Elevation Models (DEM) were created from digital data acquired from ABAKOS in Brisbane. ABAKOS scanned 1:50,000 topographic maps and vectorised the contours to produce a digital database.

### **6.2.3 Regional Gravity Survey**

A regional gravity survey was conducted during 1997 incorporating Acacia's Pine Creek tenements, including EL9137. The survey provided more detailed data than the regional AGSO gravity surveys and was conducted as part of two Honours theses (University of Tasmania) aimed at modelling the depth to granite intrusions and their spatial relationship with mineralisation, in the Pine Creek area (Figure 5).

Station spacing for the survey was about ~500m spaced stations and a Worden gravity meter was used with a differential GPS providing accurate locations and heights for the subsequent data reductions. Two stations were within the relinquished portion of EL 9137. Reference locations and station data are included in Appendix 2.

Hungerford Geophysical Consultants reviewed the results of the theses and the survey with the following conclusions:

- The sediments to the west of the centre of the Pine Creek Geosyncline have a higher density than those on the eastern side. This can be attributed to either a thicker metasedimentary sequence on the western side or higher density rocks, possibly Mt Bonnie Formation (and not Burrell Creek Formation).
- A correlation between a shallower depth to granite basement and mineralisation was suggested.



### **6.3 Work Completed For Period Ending 4<sup>th</sup> June 1998**

#### **6.3.1 Gridding**

A total of one (1) line kilometre of gridding was emplaced as preparation for soil sampling, with galvanised steel droppers placed at 50m centres along lines 200m apart. Figure 3 shows the extent of the soil sampling coverage, which is identical to the gridding.

#### **6.3.2 Soil Sampling**

A total of forty six (46) soil samples were collected during the reporting period as part of a programme designed to infill and extend earlier soil sampling coverage. Samples weighing 3 to 4 kg's were collected at 25m intervals along lines 200m apart utilising a Toyota mounted auger rig. The samples were taken from the interface between the B and C horizons to maximise the likely physical and chemical dispersion halo around potential gold mineralisation.

The samples were despatched to Assaycorp in Pine Creek where they were crushed and pulverised to 90% passing 100µm, and a 50g charge analysed for gold to 1ppb by fire assay. Some samples were also analysed for As, Cu, Pb and Zn in ppm by aqua regia determination. Several standards were included with the original soil samples.

Results from the sampling were mostly below detection, with a peak value of 23ppb Au. Sample locations and Au results are shown in Figures 3 and 4 respectively. Soil sample ledgers and analyses are included in Appendix 1.

### **6.4 Work Completed For Period Ending 4<sup>th</sup> June 1999**

The area incorporated by EL 9137 has been included in regional geophysical data compilation of Acacia's Pine Creek tenement holdings. This work included the following:

Hungerford Geophysical Consultants merged and leveled the multiple aeromagnetic and radiometric data sets that Acacia has acquired to allow easier comparison of the images across the boundaries of the different surveys. Revised reduced to the pole and first vertical derivative plots were produced after following processing was applied to merge the detailed aeromagnetic and multiclient datasets:

- Regrid all surveys to 15m grid cell size.
- Add 47210nT to the UTS grid (if required)
- Boolean join of the multiclient and UTS grids
- Smooth the merged grid with a 3 x Hanning filter

A compilation and review of all data within the Bonrook J.V. area, which includes EL 9137, was completed. The data compiled, included all mapping, auger and spot soils, rockchips, costeans, and geophysical surveys (Martin et al., 1999).

## **7 ENVIRONMENTAL**

All exploration within the lease has been conducted so as to minimise any environmental disturbance. Auger holes were backfilled at the time of completion and grid pegs will be removed from the relinquished area. An environmental ledger is included in Appendix 3.

## **8 EXPENDITURE FOR PERIOD 5<sup>th</sup> JUNE 1995 TO 4<sup>TH</sup> JUNE 1999**

Total estimated expenditure for the relinquished portion of the lease for period ending 4<sup>th</sup> June 1999 is \$18 340. A breakdown of the estimated expenditure for each reporting year is given below:

<b>Reporting Year</b>	<b>Expenditure</b>
Year Ending 4 <sup>th</sup> June1996	\$4 174
Year Ending 4 <sup>th</sup> June1997	\$5 715
Year Ending 4 <sup>th</sup> June1998	\$7 490
Year Ending 4 <sup>th</sup> June1998	\$ 961
<b>Total</b>	<b>\$18 340</b>

## **9 REFERENCES**

FERGUSON J, 1980. Metamorphism in the Pine Creek Geosyncline and its bearing on stratigraphic correlation's. In FERGUSON J, & GOLBY AB, (Editors) - URANIUM IN THE PINE CREEK GEOSYNCLINE. International Atomic Energy Agency, Vienna, 91-100.

NEEDHAM RS, CRICK IH, & STUART-SMITH PG, 1980. Regional geology of the Pine Creek Geosyncline. In FERGUSON J, & GOLBY AB, (Editors) - URANIUM IN THE PINE CREEK GEOSYNCLINE. International Atomic Energy Agency, Vienna, 1-22.

STUART-SMITH PG, NEEDHAM RS, BAGAS L & WALLACE DH, 1987. Pine Creek, Northern Territory, 1:100,000 map and commentary. Bureau of Mineral Resources, Canberra.

SPURWAY C, 1995. Exploration Licence 7893 - Bonrook, Partial Relinquishment Report Unpublished Report for the NTDME. Report Number 08.7520

SPURWAY C., 1996. Exploration Licence 9137 - East Bonrook, First Annual Report for the Year Ended 4<sup>th</sup>, June 1996. Unpublished Report for the NTDME. Report Number 08.7976.

SPURWAY C., 1997. Exploration Licence 9137 - East Bonrook, Second Annual Report for the Year Ended 4<sup>th</sup>, June 1997. Unpublished Report for the NTDME. Report Number 08.8784.

MARTIN, N. 1998. Exploration Licence 9137 - East Bonrook, Third Annual Report for the Year Ended 4<sup>th</sup>, June 1998. Unpublished Report for the NTDME. Report Number 08.9631.

WITHAM W.J.A., Exploration Licence Number 6255, Bonrook, Annual report for the ending 16<sup>th</sup> November, 1990

HAM J. Exploration Licence 9137 - East Bonrook, Fourth Annual Report for the Year Ended 4<sup>th</sup>, June 1998. Unpublished Report for the NTDME. Report Number 08.10407.

# Acacia Exploration Geological Logging Codes

RETURN (RTN)
Of Return

WATER (H2O)
D Dry
M Moist
W Wet
B Blowndry
I Injected

HARDNESS
H Very Hard
I Hard
M Medium
S Soft
VS Very Soft

COLOUR (COLOUR)
<u>Qualifier</u>
DK Dark
LT Light
BE Beige
BG Blue/green
BK Black
BL Blue
BN Brown
CM Cream
GN Green
GY Grey
KH Khaki
MS Mustard
OG Orange
PI Pink
PU Purple
RD Red
TN Tan
WH White
YE Yellow
e.g. BNGN, LTBN

TEXTURE (Text)
<u>Qualifier</u>
Strong
Moderate
Weak
<u>Sedimentary</u>
IB Interbedded
LM Laminated
LY Layered

TEXTURE Ctd. (TEXT)
<u>Metamorphic</u>
CR Crenulated
MY Mylonitic
PB Porphyroblastic
SC Schistose
SP Spotted

<u>Igneous</u>
AC Acicular
AM Amygdaloidal
AN Aphanitic
EQ Equigranular
PO Porphyritic
PW Pillows

<u>Structural</u>
BO Boxwork
BX Brecciated
FD Folded
FO Foliated
FR Fractured
LI Lineated
RO Rodded
SH Sheared
SL Slickenslides

<u>Others</u>
CX Crystalline
CO Competant
FB Fibrous
GO Gossanous
MS Massive
PT Platy
PS Porous
SA Saccaroidal
SB Solution Bands

GRAINSIZE (GN_SZ)
FN Fine - not visible to naked eye
MD Medium - visible to naked eye
CS Coarse - >2mm
NB. Hyphenate for two rock types in one interval ie. Shale/ greywacke - FN/MD Otherwise only one code per rocktype

WEATH (Weathering) (WTH)
EW Extremely weathered with poor textural preservation
HW Highly weathered with moderate textural preservation
MW Moderately weathered with good textural preservation
SW Slightly weathered with < 20% oxides
FR Fresh Bedrock

REGOLITH (REGO)
TR Transported
TL Laterite
US Upper Saprolite
RX Redox Front
LS Lower Saprolite
WB Weathered Bedrock
BR Bedrock (fresh)
SA Saprolite (undifferentiated)

<u>Overprints</u>
MT Mottling
CT Calcrete
ST Silcrete
FT Ferricrete
GT Goethite
HM Haematite
e.g. USMT, USGT

ROCKTYPE (MAJ, MIN1, MIN2)
<u>Sedimentary</u>
AG Agglomerate
BX Breccia
BIF Banded Iron Form
CG Conglomerate
CH Chert
DO Dolomite
EE Epiclastic
CB Carbonate
CSH Carbonaceous Shale
CSI Carbonaceous Siltstone
GS Graphitic Shale
GW Greywacke (>15%matrix)
HS Haematitic Shale
LM Limestone
SH Shale
SI Siltstone
SS Sandstone
TF Tuff

<u>Igneous</u>
VA Acid Volcanic
VB Basic Volcanic
VI Intermediate Volcanic
EB Basalt
DL Dolerite
GB Gabbro
FI Felsic Intrusive (undiff)
MI Mafic Intrusive (undiff)
GR Granite (undiff)
PG Pegmatite
PO Porphyry
AP Aplite
GRA Alkali Granite
GRD Granodiorite

<u>Metamorphic</u>
AM Amphibolite
BMS Biotite Mica Schist
GN Gneiss
HF Hornfels
PH Phyllite
QC Quartz Carbonate

ROCKTYPE Ctd. (MAJ, MIN1, MIN2)
<u>Metamorphic Ctd</u>
QMS Quartz Mica Schist
QT Quartzite
SC Schist
SL Slate
SSM Metasediment

<u>Other</u>
CL Clay
GV Gravel
GO Gossan
IS Ironstone
QV Massive Quartz Vein
MK Mullock
PI Pisolitic Gravel
SD Sand

ALT TYPE (ALTER)
AB Albite
AD Andalusite
AM Amphibole
AT Altered (undiff)
BI Biotite
BL Bleaching (cb-si)
CB Carbonate
CH Chlorite
CL Clay
CW Clay Weathering
EP Epidote
FE Iron
FL Fluorine
GP Graphite
GA Garnet
GT Goethite
GN Green Alteration
HM Haematite
KA Kaolinite
KY Kyanite
LI Limonite
KS K-Feldspar
MI Mica
MN Manganese
MT Magnetite
MU Muscovite
PH Phlogopite
PL Plagioclase
PY Pyrite
SE Sericite
SI Silica
SR Siderite
TC Talc
TE Tremolite
TM Tourmaline
ZE Zeolite

**Acacia Exploration**  
**Geological Logging Codes Ctd.**

ALT QUAL (QUAL)	
Qualifier	
WK	Weak
MD	Moderate
ST	Strong
IN	Intense
M	Disseminated
V	Pervasive
PT	Patchy
SV	Selvage
VN	Vein
e.g. STDM, MRSV	

VEIN TYPE (VN_TYPE)	
CB	Carbonate
CH	Chert
Z	Quartz
Y	Pyrite

VEIN STYLE (VN_STYLE)	
BK	Buck
BX	Breccia
CB	Comb
CH	Chalcedonic
F	Fibrous
MI	Milky
RB	Ribbon
S	Saccharoidal
ST	Stringer
SM	Smoky
TR	Translucent
L	Laminated
SW	Stock Work
NB: (i) For other veins use appropriate code e.g. PY, AS	
(ii) % veining must be expressed as a numeric e.g. 0.5, 1, 5 etc.	

MINERALISATION (OTHERSULPH, OTHER MIN)	
AS	Arsenopyrite
AZ	Azurite
AU	Gold
BI	Biotope
BO	Bornite
CB	Carbonate (undiff)
CC	Chalcocite
CN	Native Copper
CP	Chalcopryite
CU	Cuprite
CV	Covellite
GA	Galena
GR	Garnet
GT	Goethite
HM	Haematite
MA	Malachite
MF	Fine Black Mineral
MN	Manganese
PO	Pyrrholite
PY	Pyrite
SP	Sphalerite
NB: Mineral content must be expressed as a numeric e.g. 0.5, 1, 5 etc	

STRUCTURAL DEFECTS (Geotech)	
BE	Bedding
CG	Cleavage
DK	Dyke
FA	Fold Axis
FH	Fold Hinge
FT	Fault
JO	Joint
FR	Fractured Zone
FG	Fragmented Zone
LI	Lination
SC	Schistosity
SH	Shear Zone
VS	Vein Stockwork
VN	Vein
FV	Fractured Vein
VB	Brecciated Vein
BK	Broken Zone

ROCK STRENGTH (Geotech)	
VW	Very Weak
W	Weak
M	Medium Strong
S	Strong
VS	Very Strong

ROUGHNESS (Geotech)	
K	Slickenslided
P	Polished
S	Smooth
R	Rough

BROKEN ZONE (Geotech)	
N	Natural
H	Heated
D	Drill Induced

FRACTURING (Geotech)	
WF	Weak, core pieces 1m-200m
MF	Mod. core pieces 10-20cm
SF	Strong, core pieces 5-10cm
BK	Broken core, 25 cm pieces

SHAPE (Geotech)	
P	Planar
U	Undulating
S	Stepped

**Logging Notes:**

- (1) Only **one** logging code to be entered per field (excluding qualifiers and **two** colours where necessary).
- (2) No **new** codes to be entered without notification and approval.
- (3) No **backslashes, commas, hyphens** etc. to be used in any field except Comments.
- (4) Quartz Veining and Mineral content must be expressed as a **numeral** (**not** Trace, Tr etc )
- (5) Hole Numbers must be entered correctly using the appropriate prefix and **four** digit number.
- (6) All geological logs **must** be validated prior to entry onto Access Dbase.

Year	Tas Uni station no	AMG E	AMG N + 8,000,000	Elevation (m)	Obs Grav	Theor.grav	Terrain correction	2.67 B.A	Location
1997	49.2402	812281.3	8,466,467.4	177.38	978.308999	978.327914	0	16	Pine Creek
1997	49.2403	812415.7	8,466,034.3	178.26	978.308719	978.328077	0	15.73	Pine Creek

## **TENEMENT ENVIRONMENTAL MANAGEMENT REGISTER** **LAND STATUS RECORD**

**Project:** Bonrook Project

**Tenement Name:** East Bonrook **Loc. Code:** HK93

**Tenement No's:** EL 9137

**Registered Holder(s):** Acacia Resources P/L

**Date Granted:** 5 June 1995 **Term:** 6 years **Area:** Pine Creek 14/6-II

**Bond/Security:** N/A

**JV Partners (if any):** Nullarbor Holdings Limited

**Land Classification:** (Crown, Private, Lease)

**Land Holder/Occupier:** Foundation Franz Webber **Station:** Bonrook Station

**Address:** Bonrook Station, Pine Creek **Phone:**

**Contacted By:** E. Wakefield **Date:** 28 March 1995

**Pastoral Notes:** (Stock, Cultivation, Access, Rainfall)

Horse Stud  
Some tourism activities.

**Environmental Notes:** (Flora/Fauna, Erosion, Bushfires, Flooding)

Sclerophyll forest subject to limited burnoffs during dry season and localised flooding during wet season.

**Groundwater:** (Bores/Wells/Dams, streams, drainage, test data)

Localised water courses only.

**Aboriginal Notes:** (Sacred Sites, Cultural)

AAPA certificate number 97/137. No sites recorded. AAPA certificate number C98/149 expires 18/12/2000.

**Historic Relics:** (Mine Workings, Equipment, Homesteads etc.)

NA

**Previous Activity:** (Mining, Exploration, Forestry, etc.)

No significant exploration activities prior to 1995.

**TENEMENT ENVIRONMENTAL MANAGEMENT REGISTER**  
**PRE-EXISTING ENVIRONMENTAL DISTURBANCE RECORD**

**Tenement Name:** East Bonrook **No(s):** EL 9137

**Exploration Activity Area:** NA

**Shafts/Pits/Dumps:** NA

**Track/Access:** Via station tracks.

**Line Clearing:** NA

**Costeaning:** NA

**Drill Sites:** NA

**Other:** NA

**Location Data:** 1:250,000 map sheet SD52-08 Pine Creek  
1:100,000 map sheet 5270 Pine Creek

Other Ref:

**Compiled by:** Neil Martin **Date:** July 1998



**TENEMENT ENVIRONMENTAL MANAGEMENT REGISTER**  
**ACACIA ENVIRONMENTAL IMPACT RECORD**

**Tenement Name:** East Bonrook **No (s):** EL 9137

**Report Ref No's:** Company Annual Report Nos - 08.7976, 08.8784, 08.9631, 08.10407

**Exploration Activities:** Aerial photographic survey 1996

**Grids & Traverses:** 1 line km of regional grid lines 1996/97 (steel droppers @ 50m centres)  
1 line km infill gridding 1997/98 (steel droppers @ 50m centres)

**Soil Sampling:** 40 soil auger samples 1995/96  
66 soil auger samples 1997/98

**Costeans / Pits:** NA

**Drilling:** NA

**Drill Traverses:** NA

**Drill Pads:** NA

**Ground Geophysics:** NA

**Access Tracks:** NA

**Camps:** NA

**Other:** NA

**Compiled by:** Jane Ham **Date:** July 1999

**TENEMENT ENVIRONMENTAL MANAGEMENT REGISTER**  
**ACACIA REHABILITATION RECORD**

**Tenement Name:** East Bonrook **No(s):** EL 9137

**Disturbance:** **Rehabilitation:** **Date:**

**Grids & Traverses:** Grid pegs to be removed.

**Soil Sampling:** Auger holes backfilled immediately after sampling

**Costeans/Pits:** NA

**Drilling:** NA

**Drill Traverses:** NA

**Drill Pads:** NA

**Ground Geophysics:** NA

**Access Tracks:** NA

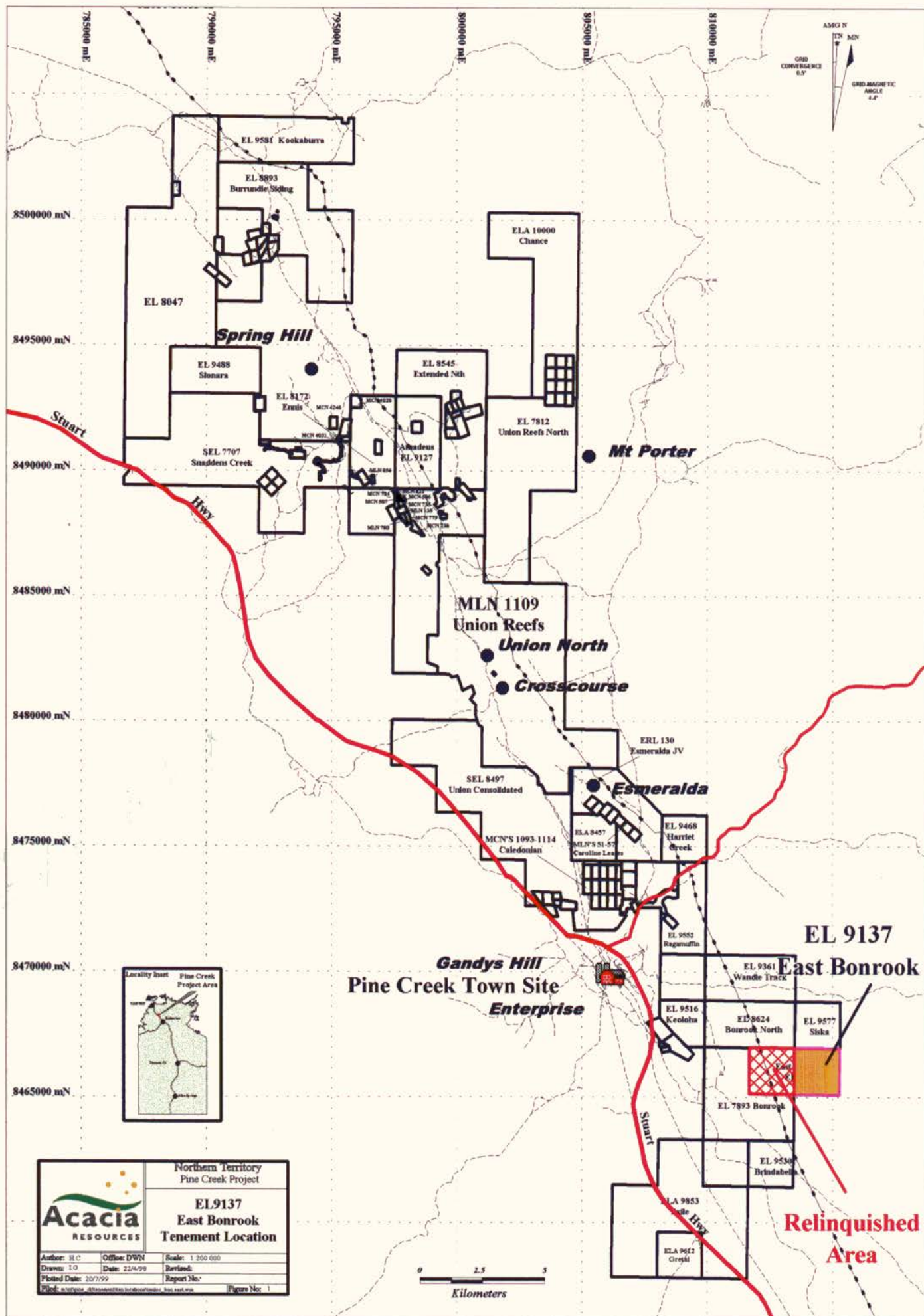
**Camps:** NA

**Other:** NA

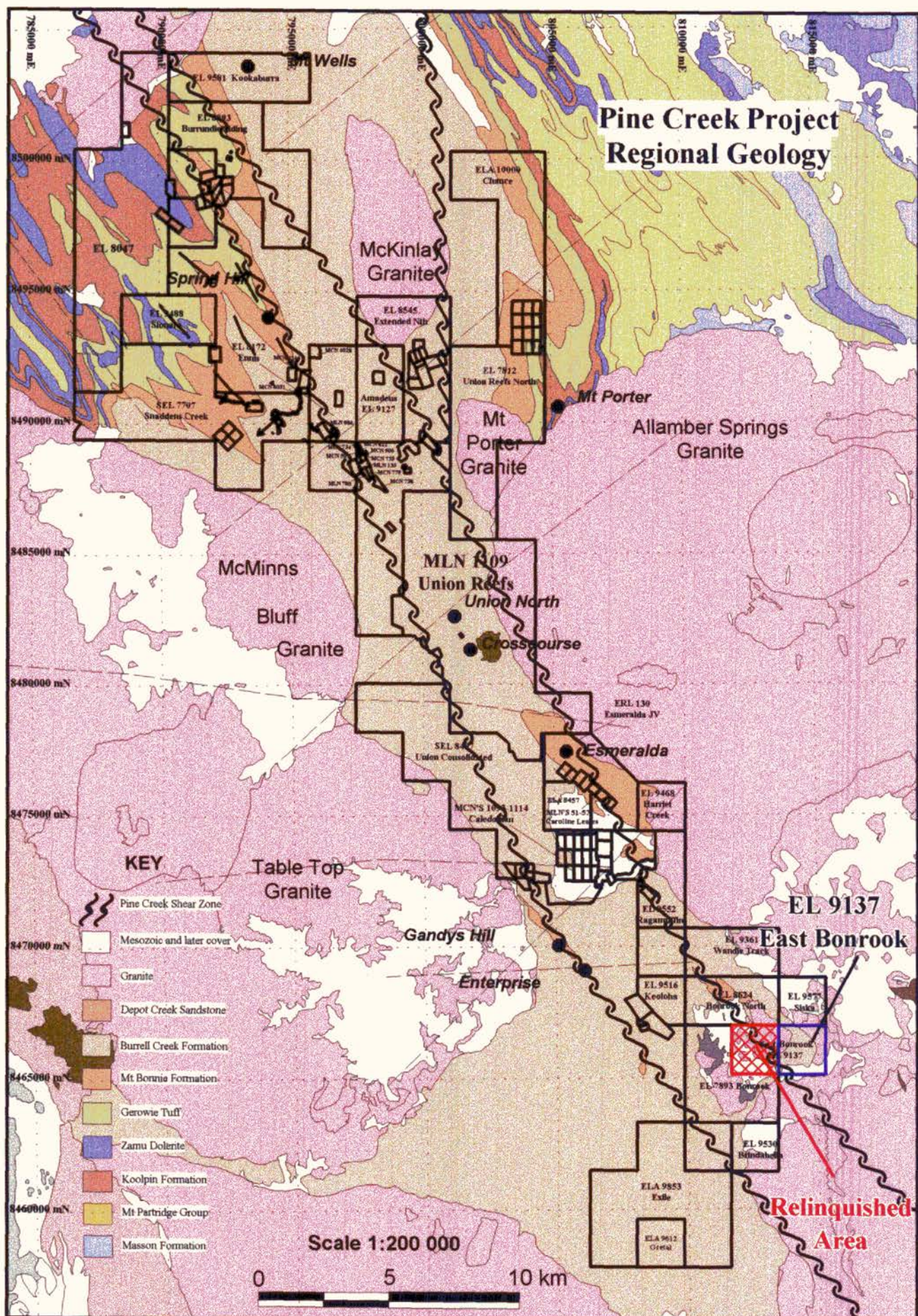
**Inspected / Clearance:** NA **Bond/Security released:** NA

**Compiled by:** Jane Ham **Date:** July 1999

**Follow-up Inspection Report:**



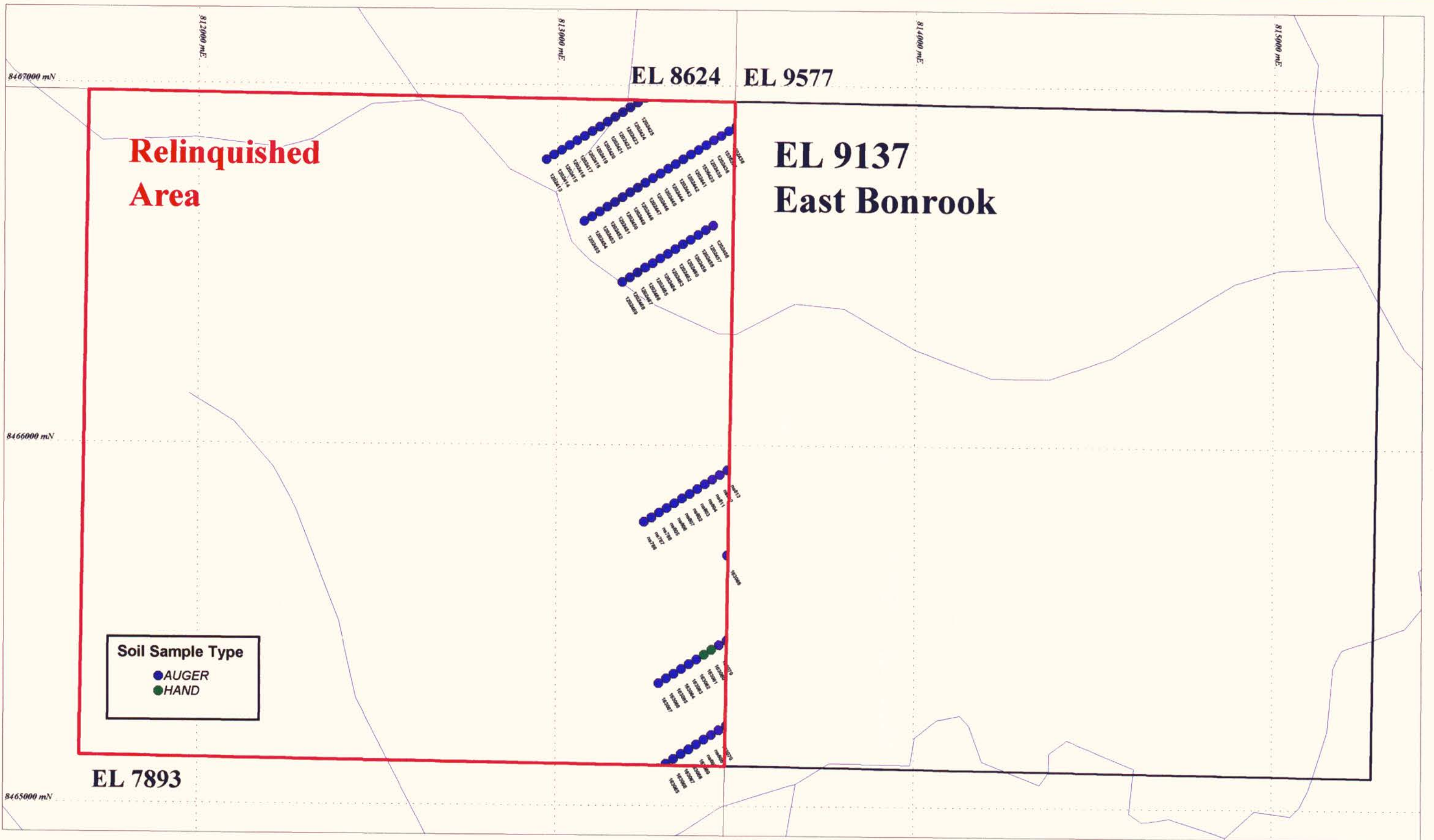




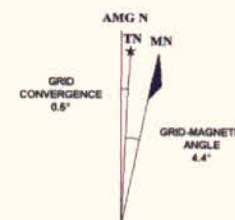
Filed: m:\nt\pine\_ck\geology\regional\pk 200kA4 ge.wor

**Figure 2**





0 0.25 0.5  
Kilometers

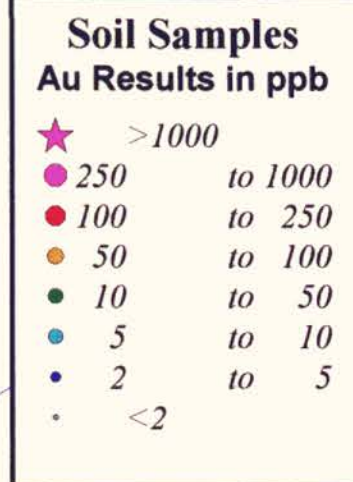


		Northern Territory Pine Creek Project	
		<b>EL 9137 - Bonrook East - Soil Geochemistry with Sample Numbers</b>	
Author: J.H.	Office: DWN	Scale: 1:10 000	
Drawn: A.L.H.	Date: 20/7/99	Revised:	
Plotted Date: 20/7/99	Report No.:		
Filed: m:\n\pine_creek\soils\bonrook\Bon East 10KAS Soil99.WOR		Figure No: 3	

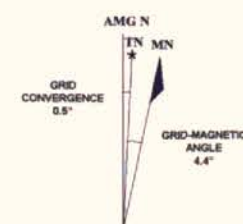
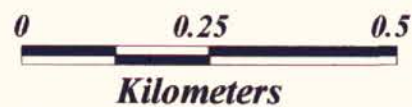
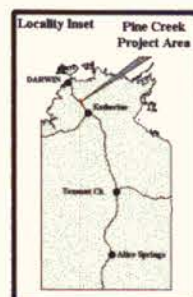
**Relinquished  
Area**

EL 8624 EL 9577

**EL 9137  
East Bonrook**

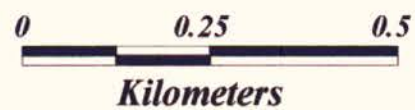
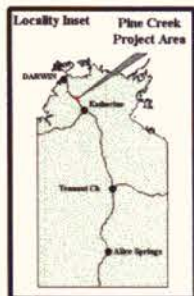
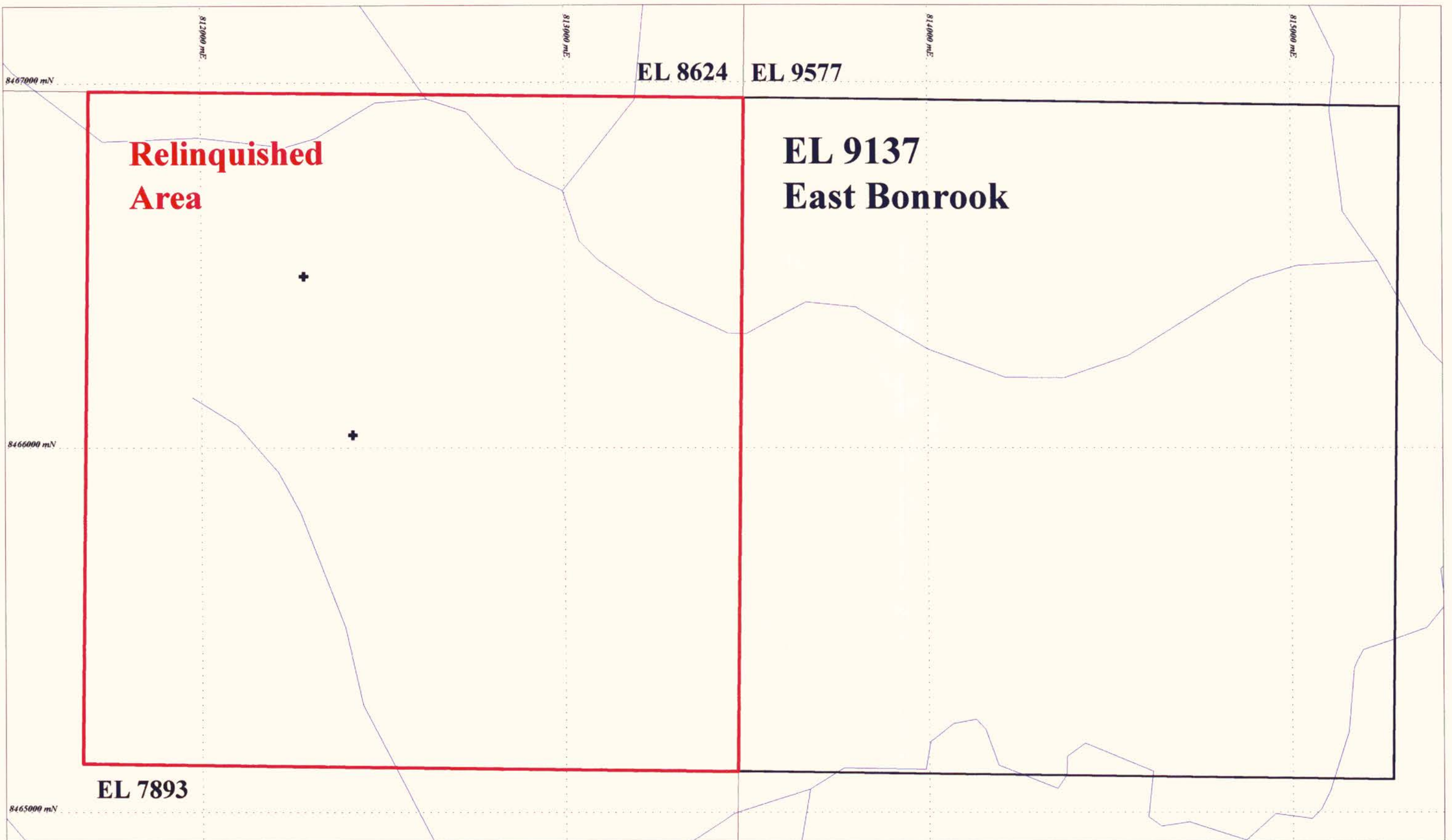


**EL 7893**

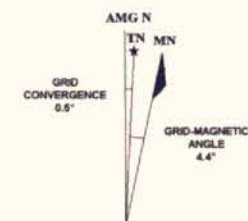



<b>Northern Territory Pine Creek Project</b>		
<b>EL 9137 - Bonrook East - Soil Geochemistry with Au Results ppb</b>		
Author: J.H.	Office: DWN	Scale: 1:10 000
Drawn: A.L.H.	Date: 20/7/99	Revised:
Plotted Date: 20/7/99	Report No.:	
Filed: m:\of\pine_ck\soil\bonrook\Bon East 10&A3 SoilAu99 WOR		Figure No: 4





Key:  
+ Gravity Station



 <b>Acacia</b> RESOURCES		<b>Northern Territory</b> <b>Pine Creek Project</b>	
		<b>EL 9137</b> <b>- Bonrook East -</b> <b>Gravity Station</b> <b>Locations</b>	
<b>Author:</b> J.H.	<b>Office:</b> DWN	<b>Scale:</b> 1:10 000	
<b>Drawn:</b> A.L.H.	<b>Date:</b> 20/7/99	<b>Revised:</b>	
<b>Plotted Date:</b> 20/7/99		<b>Report No.:</b>	
<b>Filed:</b> m:\nt\pine_creek\gravity\Bon East 10kA3 Gravity99.WOR		<b>Figure No:</b> 5	