ACACIA RESOURCES LTD

EXPLORATION LICENCE 9424 - BRUMBY

Partial Relinquishment Report
For the period 15th May 1996 – 26th March 1999

Author:	**Penny Large**	**Report No:**	**08.10443**
		Date:	**August 1999**
Drafting:	**Amanda Horner**	**Copy No:**	**1**

1:100 000	**Batchelor**	**5171**
1:250 000	**Pine Creek**	**SD52-8**

Distribution:

1	NT Department of Mines & Energy
2	Acacia Resources (Darwin)
3	Acacia Resources (Melbourne)
4	Acacia Resources (Field)
5	Acacia Resources (BCGM)

SUMMARY

Exploration Licence (EL) 9424, in the Pine Creek area, NT, is currently being explored by Acacia Resources Limited. The centre of the tenement is located approximately 20 km east of the Adelaide River township and 35km NNW of the Brocks Creek Gold Mine and treatment facilities.

In order to comply with statutory requirements a partial reduction of one block was completed at the conclusion of the third year of tenure. This report summarises the work completed within the relinquished portion of the tenement between the 15th of May 1996 and the 26th of March 1999. Exploration activities completed within the relinquished block over the three years of tenure has included data review, compilation, and interpretation, acquisition of detailed aeromagnetics and vacuum based geochemical soil sampling.

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF APPENDICES

1.0 INTRODUCTION

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2.0 LOCATION AND ACCESS

EL 9242 (Brumby) is located approximately 15 km east of Adelaide River, on Mount Keppler Station and is covered by the Margaret River 1:50,000 topographic sheet. Access to EL 9424 from the Stuart Highway is via either Tortilla Flats Road or Fisher Road and then Mount Keppler Station roads (Figure 1). Access is severely restricted after the wet season as the lease is superimposed over a major drainage system.

3.0 TENEMENT STATUS

Brumby (EL 9424) was granted to Solomon Pacific Resources (Solpac) on the 15th May 1996 for a period of six years, and consisted of 3 graticular blocks. Upon the purchase of Solpac by Acacia Resources in 1996, responsibility for exploration activities on EL 9424 was assumed by Acacia Resources. Prior to Solpac, the area covered by EL 9424, had been held by Paladin Resources under EL 8355.

An application for a full waiver on tenement reduction requirements was approved by NTDME on 7th July 1998. A half area reduction was required at the conclusion of the third year of tenure so a reduction nomination was submitted to the NTDME on the 26th of March 1999. This application was

approved on the 28th June 1999. The details of the blocks relinquished and retained are given below (Figure 1):

Block Relinquished:	No. 55/28	Map No. 14/2-1 Margaret River
Blocks Retained:	Nos.53/28, 54/28	Map No. 14/2-1 Margaret River

Exploration within the lease is covered by AAPA certificate C99/015, which expires on 12th March, 2001.

4.0 REGIONAL GEOLOGY

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

The geosynclinal sequence is intruded by transitional igneous rocks including pre-deformational dolerite lopoliths and dykes and post-deformational granites. Weak to moderately deformed Middle to Late Proterozoic, Cambro-Ordovician and Mesozoic platform cover unconformably overly the geosynclinal sequence.

5.0 LOCAL GEOLOGY

The geology of EL 9424 is mainly concealed by a thick (up to 13m) cover of alluvium, with only minor occurrences of outcrop. Where exposed, the predominant rock types are greywacke and siltstone, which are typical of the Burrell Creek Formation (Figure 2). Foliations indicate tight folds with north trending axial planes. This is similar to the structural setting of the Goodall Mine and mineralisation of the same style may be expected along the hinges of the anticlines present at Brumby.

6.0 PREVIOUS WORK

Previous work on the relinquised portion of the lease has been carried out by Paladin Resources in 1994, as part of the Pine Creek Project, under EL 8355. The work carried out by Paladin Resources consisted of ~ three line km of gridding over shallow RAB drilling was completed. A total of 42 shallow RAB or vertical RAB holes were drilled within the relinquished portions of EL9424. This drilling programme targeted a prominent, north trending magnetic linear high near the eastern boundary of the tenement. Nine (9) rockchip samples were also submitted for analysis.

The results of the shallow vertical RAB program returned only three anomalous values the peak being 39ppb Au. The low values and spotty distribution of the anomalous results were considered unprospective by Paladin Resources and EL 8355 (now part of EL 9424) was relinquished.

7.0 WORK COMPLETED

The work completed within the relinquished portion of EL 9424 between the 15th May 1996 and the 26th of March 1999 is summarised below:

7.2 Solomon Pacific – 15th May 1996 to July 1996

No reports could be located for any work performed by Solomon Pacific Resources on this tenement during the two months they held tenure.

7.2 Acacia Resources – July 1996 – 14th May 1997 (Acacia Rep. No. 08.8778)

Due to pressing financial commitments in other newly acquired tenements stemming from the purchase of Solpac in 1996, limited field work was undertaken during the first year of tenure. The prolonged wet season in the

Northern Territory at the beginning of 1997 also saw a two month delay to the start of the field season.

Data Compilation and Aquisition

Work completed in EL 9424 during the 1996/1997 reporting period included the compilation and entry of previous explorer's data into Acacia's MAPInfo (GIS) database. The multi-client aeromagnetic data for the area covered by relinquished portion of EL9424 was also purchased (Clark, 1997).

7.3 Acacia – 15th May 1997 to 14th May 1998 (Acacia Rep. No. 08.9621)

Field Reconnaissance

Mapping of the lease was conducted during 1997 to delineate areas of outcrop, drainage and access. It was concluded that the western side of the lease would need to be tested by vacuum soil sampling to penetrate the surficial cover.

Aeromagnetic Interpretation

Interpretation of the multi-client aeromagnetic data purchased during 1997 was undertaken during the 1997/1998 reporting period. This exercise was part of a more regional programme, but unfortunately the data was not of high enough resolution to allow a sufficiently detailed geological interpretation.

7.4 Acacia Resources – 1998/1999 (08.10228) Year 3 (Current Tenure)

Vacuum Soil Sampling

Vacuum soil sampling was completed along four (4) fences in the southern half of the licence, on 400m spaced traverses. The fences were drilled between existing spot soil samples collected by Paladin in 1994, to infill the geochemical coverage to 200m. Drilling was conducted by Down to Earth Drilling contractors using a vacuum rig mounted on a 6WD Nissan.

One to three metre composite samples were collected from the B2/C horizon in each vacuum hole, at depths typically between 1 and 4m. A total of one hundred and forty eight (148) two kilogram samples were submitted to Assaycorp, Pine Creek for gold analysis. The samples were dried, crushed and pulverised to a nominal 90% passing 100μ and assayed for Au using FALL (detection limit of 1 ppb Au).

Results were disappointingly low, with none above 10ppb Au. Sample locations and results are shown in Figures 3 and 4, respectively.

Detailed Aeromagnetic and Radiometric Survey

Universal Tracking Systems (UTS) were contracted to fly a detailed aerial magnetic and radiometric survey over an area that incorporated the Brumby licence. The area of the survey was ~64km^2 on a flight line orientation of 090° magnetic. The flight lines were flown 50m apart with a mean terrain clearance of 25m. Tie lines were flown at 500m spacing. In-line sampling was specified at 4 - 5 metres or less with a required magnetometer sensitivity of less than 0.001nT and an instrumental noise envelope not exceeding 0.2nT. Navigation was by real time differential GPS to achieve accurate lateral and height positioning. A spectrometer

with a detector size of 33 litres was included in the survey equipment but radiometric data was not collected from every site.

Test lines were flown at the start and finish of daily data collection to demonstrate validity and repeatability of Gamma Ray data. Specific regulations were made about calibrating, checking, and correcting the magnetometer, spectrometer, background radiation, and ground elevation throughout the period of data collection. A magnetic ground base station with a resolution of 0.5nT was central to the survey, and synchronised with flying time so as to correct for diurnal variations.

Hungerford Geophysic Consultants was contracted to process the raw magnetic data (Figure 5). Flight Lines and TMI contours are included as Figures 6 and 7.

Regional Geophysical Compilation

Hungerford Geophysical Consultants merged and levelled the multiple aeromagnetic data sets that Acacia has acquired to allow easier comparison of the images across the boundaries of the different surveys. The 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

Reduced to the pole and first vertical derivative plots were produced and a revised regional geological interpretation was produced utilising recently acquired regional gravity data, multiple detailed and multiclient aeromagnetic data sets and IP surveys acquired between 1992 and 1997 (Figure 8).

8 ENVIRONMENTAL

Environmental disturbance was kept to a minimum wherever possible. Pre-existing tracks were used and additional tracks were driven only where necessary. Vacuum sample sites were backfilled immediately after sampling. An Environmental Register has been established by Acacia Resources since taking over management of the tenements (Appendix 3).

9 REFERENCES

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

BOUT J.. 1994. Pine Creek Project, Report on Gold Exploration Activities July-September, 1994. Unpublished report prepared on behalf of Paladin Resources for the NTDME. (pp10). (08.8731)

CLARK, H.; 1997; EL 9424 Brumby Annual Report for the Period 15th may 1996 to 14th May 1997; Acacia Resources Report to NTDME. (08.8778)

CLARK, H., MARTIN N.,; 1998; EL 9424 Brumby Annual Report for the Period 15th May 1997 to 14th May 1998; Acacia Resources Report to NTDME. (08.9621)

TAYLOR K. S., 1994. Annual report for Eden Creek Pty Ltd, N.T. EL 8333. Unpublished report on behalf of Paladin resources for the NTDME. (08.8732).

TAYLOR K. S., 1996. Annual Report on Exploration Licence 8333, Pine Creek, Northern Territory, covering the period 8th December 1995 to 7th December 1996. Unpublished report on prepared behalf of Paladin Resources for NTDME. (08.8936)

TAYLOR K.S., Sept 1996. Brumby Project Summary report; EL 9375 & EL 8333. Unpublished report on prepared behalf of Paladin Resources. (08.8735)

TAYLOR K.S., 1995. Annual report for Eden Creek Pty Ltd, N.T - Dec 1994- Dec 1995. Unpublished report prepared on behalf of Paladin Resource for the NTDME. (08.8734).

DIX W.R., 1995. Report on Exploration for Central Pine Creek Area- may 1995 to Nov 1995. Unpublished report prepared on behalf of Paladin Resources. (08.8733).

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.

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
H Hard
M Medium
S Soft
S Very Soft

COLOUR
(COLOUR)

Qualifier

DK Dark
LT Light

E Beige
BG Blue/green
BK Black
L Blue
N Brown
CM Cream
GN Green
Y Grey
K Khaki
S Mustard
OG Orange
PI Pink
P Purple
D Red
TN Tan
WH White
E Yellow

e.g BNGN, LTBN

TEXTURE
(Text)

Qualifier

T Strong
D Moderate
WK Weak

Sedimentary

IB Interbedded
LM Laminated
Y Layered

TEXTURE Ctd.
(TEXT)

Metamorphic

CR Crenulated
MY Mylonitic
PB Porphroblastic
SC Schistose
SP Spotted

Igneous

AC Acicular
AM Amygdaloidal
AN Aphanitic
EQ Equigranular
PO Porphyritic
PW Pillows

Structural

BO Boxwork
BX Brecciated
FD Folded
FO Foliated
FR Fractured
LI Lineated
RO Rodded
SH Sheared
SL Slickenslides

Others

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)

Overprints

MT Mottling
CT Calcrete
ST Silcrete
FT Ferricrete
GT Goethite
HM Haematite

e.g. USMT, USGT

ROCKTYPE
(MAJ, MIN1, MIN2)

Sedimentary

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

Igneous

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

Metamorphic

AM Amphibolite
BMS Biotite Mica Schist
GN Gneiss
HF Hornfels
PH Phyllite
QC Quartz Carbonate

ROCKTYPE Ctd.
(MAJ, MIN1, MIN2)

Metamorphic Ctd

QMS Quartz Mica Schist
QT Quartzite
SC Schist
SL Slate
SSM Metasediment

Other

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 Selvedge
- N 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
- B Comb
- H Chalcedonic
- B Fibrous
- MI Milky
- BB Ribbon
- A Saccharoidal
- T Stringer
- SM Smoky
- TR Translucent
- M Laminated
- V 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 Biotite
- BO Bornite
- CB Carbonate (undiff)
- CC Chalcocite
- CN Native Copper
- CP Chalcopyrite
- CU Cuprite
- CV Covellite
- GA Galena
- GR Garnet
- GT Goethite
- HM Haematite
- MA Malachite
- MF Fine Black Mineral
- MN Manganese
- PO Pyrrhotite
- 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 Lineation
- 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 <u>two</u> 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** (<u>not</u> 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.

TENEMENT ENVIRONMENTAL MANAGEMENT REGISTER
LAND STATUS RECORD

Project: Brocks Creek Project

Tenement Name: Brumby **Loc. Code:**

Tenement No's: EL9424

Registered Holder(s): Acacia Resources

Date Granted: 15 May 1996 **Term:** six (6) years **Area:** 1 grat. Block

Bond/Security: None

JV Partners (if any): NA

Land Classification: Pastoral Lease

Land Holder/Occupier: W.E. Moon & M.A. Rathsman **Station:** Mount Ringwood

Address: W.E. Moon & M.A. Rathsman **Phone:** (08) 8976 0919

Contacted By: Damien Stephens **Date:** 1998

Pastoral Notes: **(Stock, Cultivation, Access, Rainfall)**
- Mount Ringwood Station runs cattle and buffalo
- Home paddocks used to cultivate feed
- Access is via Tortilla Flats road or Fisher road, both off Stuart Highway
- Seasonal monsoonal rainfall December to March

Environmental Notes: **(Flora/Fauna, Erosion, Bushfires, Flooding)**
- Seasonal burn-off at start of each dry season
- Seasonal flooding of Howley and Bridge Creeks during wet season
- Road undercut and eroded during wet season where it crosses Howley Creek
- Livestock - cattel & buffalo; Other:- feral pigs, freshwater crocodiles, kangaroos, variety of birdlife and small reptiles and mammals.
- Mainly uncultivated paddocks with sclerophyll forest.

Groundwater: **(Bores/Wells/Dams, streams, drainage, test data)**
- Numerous small semi-permanent to permanent wwater holes & dams for stock watering
- Howley Creek flows through western margin of tenement

Aboriginal Notes: **(Sacred Sites, Cultural)**
AAPA authority clearance granted on 12th March (Certificate C97/137). Current AAPA certificate C99/015 expires 12 March 2001. No sites of significance identified.

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

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

TENEMENT ENVIRONMENTAL MANAGEMENT REGISTER
PRE-EXISTING ENVIRONMENTAL DISTURBANCE RECORD

Tenement Name:	Brumby	**No(s):** EL 9424	
Exploration Activity Area:	Brocks Creek Regional		
Shafts/Pits/Dumps:	None observed		
Track/Access:	Tenement access via Tortilla Flats road or Fisher road off the Stuart Highway		
Line Clearing:	None observed		
Costeaning:	NA		
Drill Sites:	Paladin 1994: 1689m shallow RAB		
Other:	Paladin 1994: 11 rockchip samples		
Location Data:	1:250,000 Geological Sheet 1:50,000 Topographic Sheet	PINE CREEK (SD52-8) MARGARET RIVER (5711-1)	
Other Ref:	08.8778,08.9621,08.10228		
Compiled by:	Jane Ham	**Revised by:**	P. Large
Date:	June 1999	**Date:**	August 1999

TENEMENT ENVIRONMENTAL MANAGEMENT REGISTER
ACACIA ENVIRONMENTAL IMPACT RECORD

Tenement Name:	Brumby	**No (s):**	EL9424
Report Ref No's:	08.8778, 08.9621, 08.10228		
Exploration Activities:	1998: Vacuum drilling		
Grids & Traverses:	1998: ~6line km of gridding and associated clearing of access lines. Steel droppers with aluminium permatags and biodegradable flagging tape at 50m intervals along lines.		
Soil Sampling:	NA		
Costeans / Pits:	NA		
Drill Traverses:	1998: 6 Vacuum fences for soil sampling (226 samples)		
Drill Pads:	NA		
Ground Geophysics:	None		
Access Tracks:	NA		
Camps:	None		
Other:	None		

Compiled by:	Jane Ham	**Revised by:**	P. Large
Date:	June 1999	**Date:**	August 1999

TENEMENT ENVIRONMENTAL MANAGEMENT REGISTER
ACACIA REHABILITATION RECORD

Tenement Name: Brumby **No(s):** EL9624

Disturbance:	**Rehabilitation:**	**Date:**
6 line km gridding	Steel droppers removed	July 1999
Vacuum soil samples (226)	Holes plugged after drilling	

Grids & Traverses: 1998: 6 line km of gridding. Pegs removed.

Soil Sampling: NA

Costeans/Pits: NA

Drilling: 1998: Vacuum holes were backfilled on completion.

Drill Traverses: NA

Drill Pads: NA

Ground Geophysics: None

Access Tracks: NA

Camps: Homestead at Mt Ringwood Station

Other: None

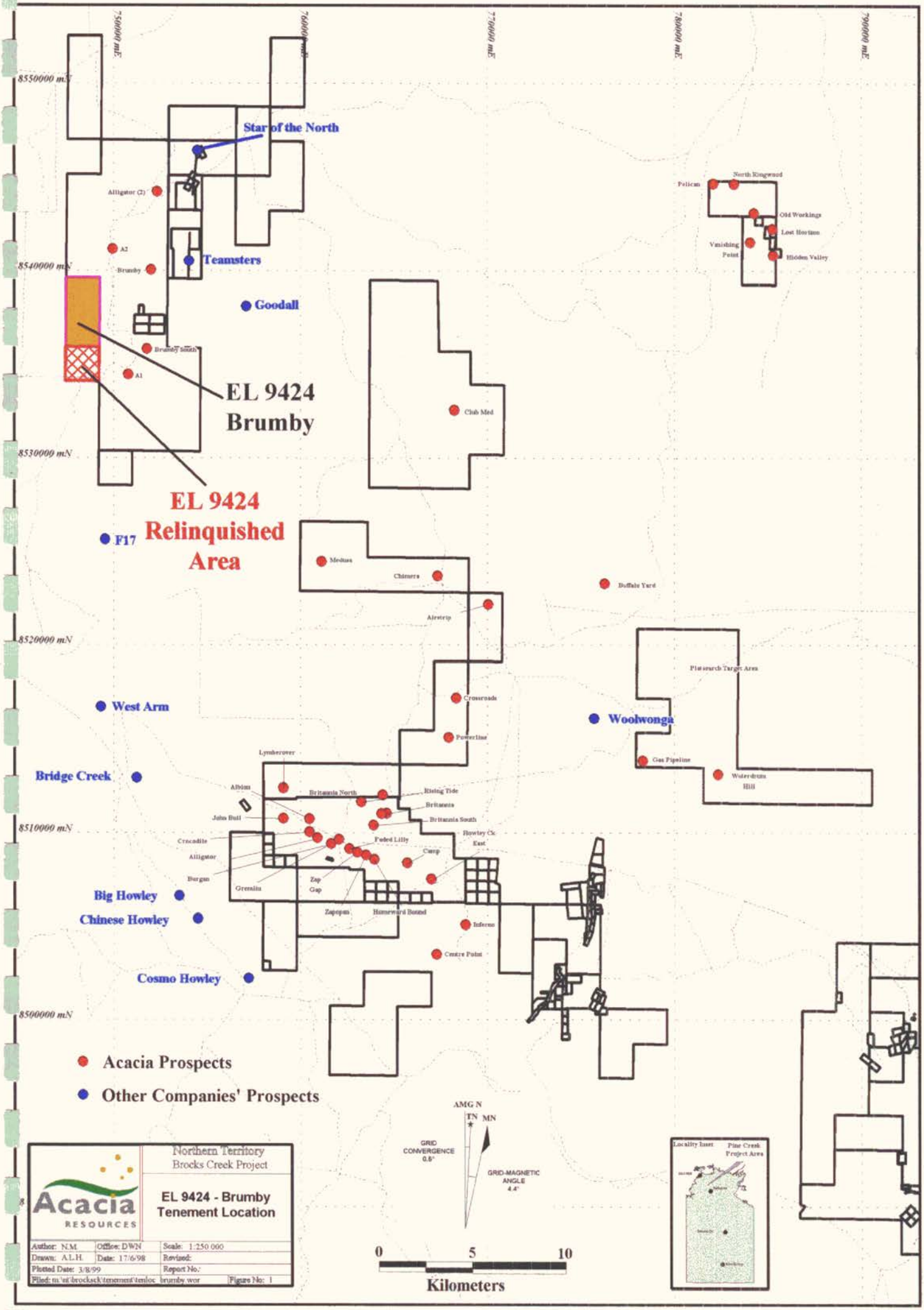
Inspected / Clearance:

Bond/Security released: N/A

Compiled by: Penny Large

Date: 8th August 1999

Follow-up Inspection Report: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8520000 mN
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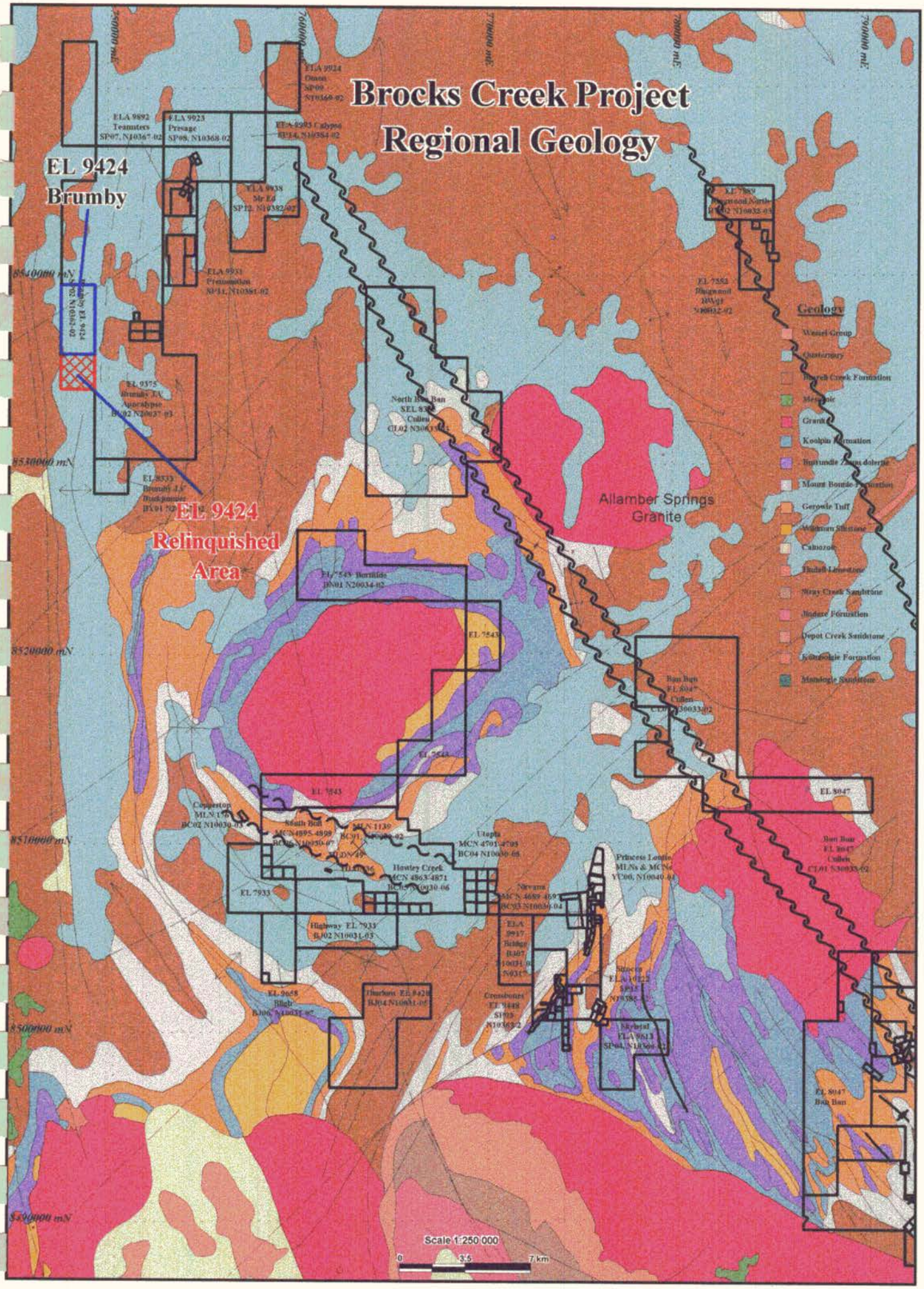
Star of the North
Alligator (2)
A2
Brumby
Teamsters
Goodall
Brumby south
A1
EL 9424
Brumby
EL 9424
Relinquished
Area
F17
Club Med
Pelican
North Ringwood
Old Workings
Lost Horizon
Vanishing
Point
Hidden Valley
Medusa
Chimera
Airstrip
Buffalo Yard
Pinesearch Target Area
West Arm
Crossroads
Powerline
Woolwonga
Gas Pipeline
Waterbutts
Hill
Bridge Creek
Lyntherover
Albion
Britannia North
Rising Tide
Britannia
Britannia South
John Bull
Crocodile
Alligator
Burgan
Faded Lilly
Rowley Ck
East
Carp
Gremlin
Zap
Gap
Zapopan
Homeward Bound
Big Howley
Chinese Howley
Inferno
Centre Point
Cosmo Howley
Acacia Prospects
Other Companies' Prospects
AMG N
TN
MN
GRID
CONVERGENCE
0.8°
GRID-MAGNETIC
ANGLE
4.4°
0
5
10
Kilometers
Locality Inset
Pine Creek
Project Area
Northern Territory
Brocks Creek Project
EL 9424 - Brumby
Tenement Location
Acacia
RESOURCES
Author: N.M.
Office: DWN
Scale: 1:250 000
Drawn: A.L.H.
Date: 17/6/98
Revised:
Plotted Date: 3/8/99
Report No.:
Filed: n:\nt\brocksck\tenement\tenloc brumby.wor
Figure No: 1



Filed: m:\nt\brocksck\geology\regional\bk 250kA4 tengeol.wor

Figure 2

746000 mE
747000 mE
748000 mE
749000 mE
750000 mE
751000 mE

8539000 mN
8538000 mN
8537000 mN
8536000 mN
8535000 mN
8534000 mN

EL 9424
Brumby

EL 9375

AMG N
TN
MN
GRID CONVERGENCE 0.5°
GRID-MAGNETIC ANGLE 4.4°

Relinquished Area

0 250 500 metres
1 : 20 000

Locality Inset
Brocks Creek Project Area
DARWIN
Katherine
Tennant Cr
Alice Springs

Sample Type

- PHRAB
- SOIL SPOT
- VACUUM
- \+ ROCKCHIP (Historical)
- ▲ Vert. RAB

***Sample Number denotes this reporting period**

Acacia RESOURCES

Northern Territory
Brocks Creek Project

EL 9424 - Brumby Geochemical Sample Locations with Sample Numbers

Author: D.M.S	Office: DWN	Scale: 1 : 20 000
Drawn: A.L.H.	Date: 05/08/99	Revised:
Plotted Date: 05/08/99		Report No.:
Projection/Grid: UTM AMG52 (AGD84)		
Filed: m:\nt\brocksck\geochem\soils\brumby\Brumby 20kA3 Reling99.WOR		Figure No: 3

746000 mE
747000 mE
748000 mE
749000 mE
750000 mE

8539000 mN
8538000 mN
8537000 mN
8536000 mN
8535000 mN
8534000 mN

Geochemical Samples
Au Results in ppb

>1000	
250	to 1000
100	to 250
50	to 100
10	to 50
5	to 10
2	to 5
<2	

Drillhole Samples
Au Results in ppb

>1000	
250	to 1000
100	to 250
50	to 100
10	to 50
5	to 10
2	to 5
<2	

EL 9424
Brumby

EL 9375

Relinquished Area

AMG N
TN MN
GRID CONVERGENCE 0.5°
GRID-MAGNETIC ANGLE 4.4°

0 250 500 metres
1 : 20 000

Locality Inset — Brocks Creek Project Area

Au Result denotes this reporting period

Acacia RESOURCES

Northern Territory
Brocks Creek Project

EL 9424 - Brumby
Geochemical Sample Results Au ppb

Author: D.M.S	Office: DWN	Scale: 1 : 20 000
Drawn: A.L.H	Date: 0/08/99	Revised:
Plotted Date: 0/08/99		Report No.:
Projection/Grid: UTM AMG52 (AGD84)		
Filed: m:\nt\brocksck\geochem\soils\brumby\Brumby 20kA3 Au Relinq99.WOR		Figure No: 4

746000 mE
747000 mE
748000 mE
749000 mE
750000 mE
751000 mE

EL 9424
Brumby

EL 9375

8539000 mN
8538000 mN
8537000 mN
8536000 mN
8535000 mN
8534000 mN

Relinquished Area

0 250 500 metres
1 : 20 000

Locality Inset — Brocks Creek Project Area

AMG N
TN MN
GRID CONVERGENCE 0.5°
GRID-MAGNETIC ANGLE 4.4°

Acacia RESOURCES

Northern Territory
Brocks Creek Project

EL 9424 - Brumby
Detailed Aeromagnetics
RTP

Author: D.M.S	Office: DWN	Scale: 1 : 20 000
Drawn: A.L.H.	Date: 03/06/99	Revised:
Plotted Date: 03/08/99		Report No.:
Projection/Grid: UTM AMG52 (AGD84)		
Filed: m:\et\brockck\geophys\brumby\Brumby 20kA3 Relinqtmi99.WOR		Figure No: 5

746000 mE
747000 mE
748000 mE
749000 mE
750000 mE

EL 9375

EL 9424
Brumby

8539000 mN
8538000 mN
8537000 mN
8536000 mN
8535000 mN
8534000 mN

L401500
L401490
L401480
L401470
L401460
L401450
L401440
L401430
L401420
L401410
L401400
L401390
L401380
L401370
L401360
L401350
L401340
L401330
L401320
L401310
L401300
L401290
L401280
L401270
L401260
L401250
L401240
L401230
L401220
L401210
L401200
L401190
L401180
L401170
L401160
L401150
L401140
L401130

Relinquished Area

L490140

0 250 500 metres
1 : 20 000

Locality Inset
Brocks Creek Project Area
DARWIN
Katherine
Tennant Ck
Alice Springs

AMG N
TN MN
GRID CONVERGENCE 0.5°
GRID-MAGNETIC ANGLE 4.4°

Acacia RESOURCES

Northern Territory
Brocks Creek Project

EL 9424 - Brumby
Detailed Aeromagnetic Flight Lines

Author: J.H.	Office: DWN	Scale: 1 : 20 000
Drawn: A.L.H.	Date: 03/06/99	Revised:
Plotted Date: 03/08/99		Report No.:
Projection/Grid: UTM AMG52 (AGD84)		
Filed: m:\nt\brockck\geophys\brumby\Brumby 20kA3 Relinqamag Flight99		Figure No: 6

746000 mE
747000 mE
748000 mE
749000 mE
750000 mE
751000 mE

EL 9375

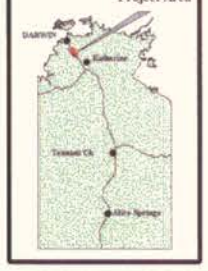
EL 9424
Brumby

8539000 mN
8538000 mN
8537000 mN
8536000 mN
8535000 mN
8534000 mN

Relinquished Area

0 250 500 metres
1 : 20 000

Locality Inset — Brocks Creek Project Area



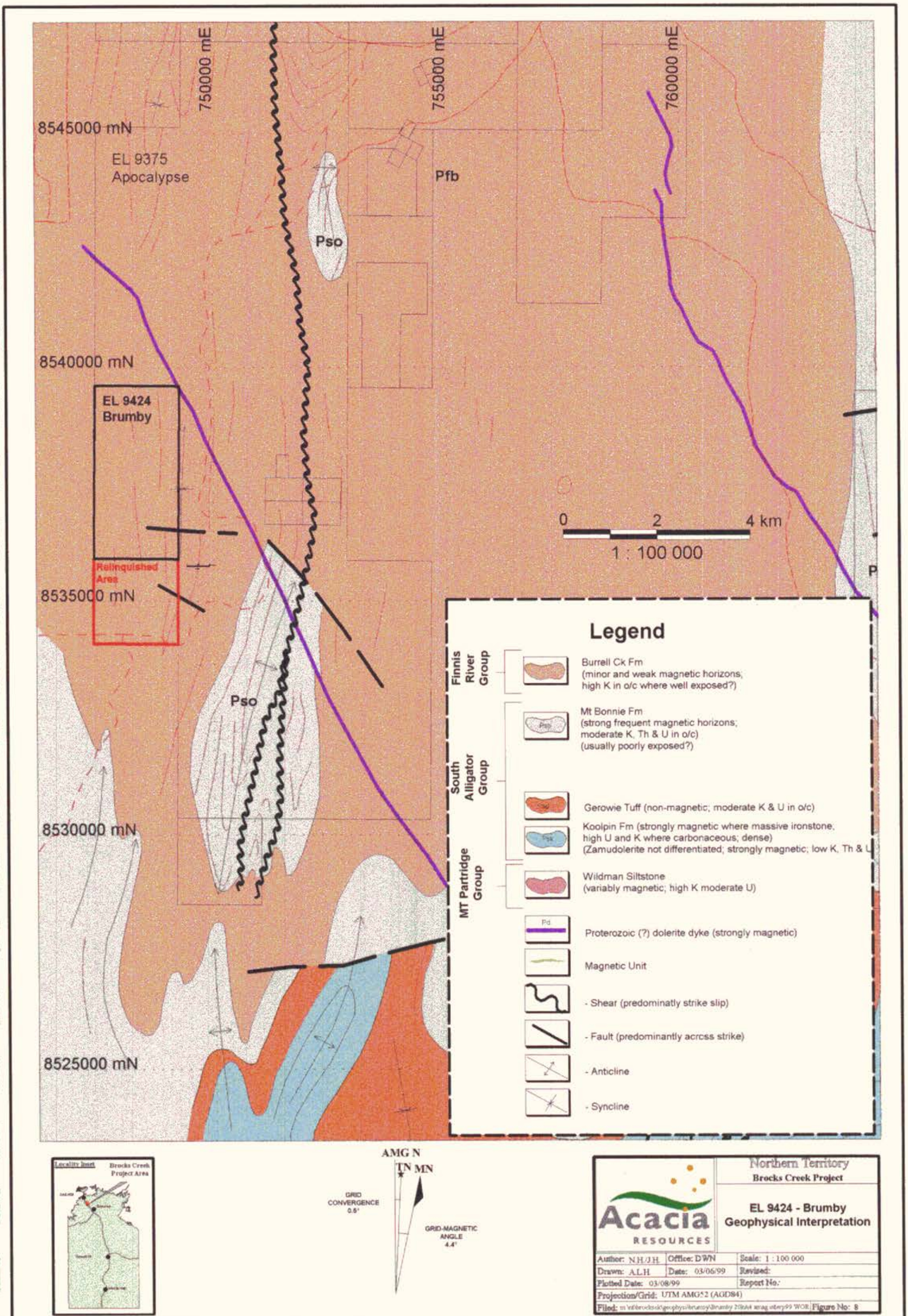
AMG N
TN
MN
GRID CONVERGENCE 0.5°
GRID-MAGNETIC ANGLE 4.4°

Acacia RESOURCES

Northern Territory
Brocks Creek Project

EL 9424 - Brumby Detailed Aeromagnetic Contours

Author: J.H.	Office: DWN	Scale: 1 : 20 000
Drawn: A.L.H.	Date: 03/06/99	Revised:
Plotted Date: 03/08/99		Report No.:
Projection/Grid: UTM AMG52 (AGD84)		
Filed: n:\nt\brocksck\geophys\brumby\Brumby 20kA3 amag cont99.WOR		Figure No: 7


750000 mE
755000 mE
760000 mE
8545000 mN
8540000 mN
8535000 mN
8530000 mN
8525000 mN
EL 9375
Apocalypse
EL 9424
Brumby
Relinquished Area
Pfb
Pso
Pso
0
2
4 km
1 : 100 000
Legend
Finnis River Group
Burrell Ck Fm
(minor and weak magnetic horizons;
high K in o/c where well exposed?)
South Alligator Group
Mt Bonnie Fm
(strong frequent magnetic horizons;
moderate K, Th & U in o/c)
(usually poorly exposed?)
Gerowie Tuff (non-magnetic; moderate K & U in o/c)
Koolpin Fm (strongly magnetic where massive ironstone,
high U and K where carbonaceous; dense)
(Zamudolerite not differentiated; strongly magnetic; low K, Th & U
MT Partridge Group
Wildman Siltstone
(variably magnetic; high K moderate U)
Proterozoic (?) dolerite dyke (strongly magnetic)
Magnetic Unit
- Shear (predominatly strike slip)
- Fault (predominantly acrcss strike)
- Anticline
- Syncline
AMG N
TN
MN
GRID CONVERGENCE 0.5°
GRID-MAGNETIC ANGLE 4.4°
Northern Territory
Brocks Creek Project
EL 9424 - Brumby
Geophysical Interpretation
Acacia
RESOURCES
Author: NH/JH
Office: DWN
Scale: 1 : 100 000
Drawn: ALH
Date: 03/06/99
Revised:
Plotted Date: 03/08/99
Report No.:
Projection/Grid: UTM AMG52 (AGD84)
Figure No: 8