

EL 7684

PINE CREEK, NORTHERN TERRITORY

FINAL REPORT

BY

JOHN A EARTHROWL MSc MAusIMM

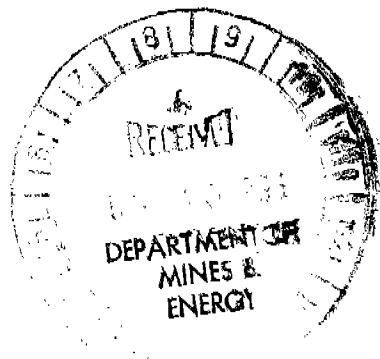
CONSULTING GEOLOGIST

P O BOX 219 BATCHELOR NT 0845

FOR

J A Earthrowl, C R Day, M D Teelow

Batchelor  
May 1996



CR6/410

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## SUMMARY

EL 7684 has been subjected to systematic and intensive base metal and gold exploration over a four year term.

This has included stream sediment, soil and rock sampling, ground magnetics, costeaning as well as reverse circulation and diamond drilling.

Copper mineralisation, associated with lead and zinc anomalies, was traced over several stratabound horizons within a shale/dolomite sequence. No economic tonnage/grade mineralisation was located.

The local stratigraphy has been reinterpreted to correlate with the Rum Jungle Mineral Field.

## 1. INTRODUCTION

This is the Final Report for EL 7684 a tenement granted on 13 April 1992 and surrendered on 12 February 1996 covering a part of the western flank of the Cullen Granite Batholith.

The tenement covers Early Proterozoic sediments in contact with Middle Proterozoic granites in the Pine Creek Geosyncline. The stratigraphy and mineralisation correlates with the Rum Jungle Mineral Field where U, Cu-Pb-Zn-Co-Ni mineralisation is known.

## 2. TENEMENT

Exploration Licence 7684 was originally granted to J A Earthrowl, C R Day and M D Teelow on 13 April 1992 and that terminated in 1995.

The EL was surrendered on 12 February 1996 prior to the end of the fourth year.

## 3. LOCATION

### 3.1 Cadastral

EL 7684 falls entirely within the Mary River pastoral lease (PPL 1134), a farming/grazing property more recently diversifying into ironwood timber production.

### 3.2 Geographical

EL 7684 is centred at 13° 27'S, 131° 58'E which is 45 kms north north east of the community of Pine Creek, North Territory. the region is sparsely populated with mining, cattle, timber and tourism the main activities.

Topographically EL 7684 is influenced by the granite batholith which has caused the sediments to be ridge forming due to their contact metamorphism.

### 3.3 Geological

EL 7684 follows the western contact of the Proterozoic Cullen Granite where it is in concordant contact with black shales and dolomites. It is this environment that has been equated with the Rum Jungle Mineral Field.

Detailed descriptions of the local geology are given in Butler 1994A.

### 4. PREVIOUS EXPLORATION

The first systematic exploration was not carried out until the late 60's early 70's. During that period Australian Geophysical Pty Ltd conducted airborne radiometric surveys but no anomalies or ground follow up was reported.

Ferruginous units overlying the Masson Formation found south of EL 7684 have been investigated by Wandaroo Mining and CRA for their iron ore potential. Tonnages and grade were found to be insufficient for mining.

CRA Exploration Pty Ltd conducted regional soil traverses. Sampling identified nineteen anomalies, five of which were followed up with detailed soil sampling, mapping and gossan sampling. Anomaly 1.5, approximately 18 km south west of EL 7684 was considered to have the most potential. A diamond drill hole targeted at the best geochemistry within anomaly 1.5 yielded disappointing results (max, 2 m @ 0.16% Pb and 0.19% Zn) and the ground was relinquished.

Uranium, tin, tungsten, molybdenum and basemetal exploration conducted by Australian and New Zealand Exploration Company consisted of -80 # stream sediment sampling at 1 km intervals, heavy mineral concentrate sampling, radiometric surveys and soil sampling. Elevated base metal values were found in a number of localities along the granite contact (max, 140 ppm Cu, 200 ppm Pb and 460 ppm Zn). Follow up rock chipping located anomalous stratabound ironstone outcrops (max 130 ppm Cu, 600 ppm Pb and 1800 ppm Zn). The base metal potential was interpreted to be limited and little evidence of uranium, tin, tungsten or molybdenum mineralisation existed.

Greenex conducted a photo interpretation and ironstone sampling programme to test the gold, tin and tungsten potential of the area. No anomalous results were recorded.

Total Mining Australia Pty Ltd held two EL's (4414 and 4460) within the area from 1983 to 1989. Total Mining's primary target was hydrothermal uranium mineralisation. Their initial exploration identified anomalous scintillometer (SRAT SSPP2 x 15,000 cps) readings in silicified dolomite within the BMR mapped Mundogle Sandstone, 8 km south of the Mary River Station.

Detailed follow up work identified an interbedded sequence of carbonaceous shales and dolomites which were reasonably concordant with the Cullen Granite contact. The dolomites on surface invariably manifest themselves as intermittent siliceous bodies, easily mistaken for quartz veins. Total reported two locations containing stromatalitic structures and mapped a small area containing gneisses, migmatites and other metamorphic igneous rocks suggested to be possible Archaean remnants. Total recognised a resemblance to the stratigraphy of the Rum Jungle Mineral Field where uranium and base metals are associated with nearshore biohermal sedimentation. Furthermore, Total Mining suggested that the Mid Proterozoic Cullen Granite Batholith intrusive history was similar to that of the Rum Jungle and Waterhouse Archaean granite domes.

Total Mining's uranium search culminated in the discovery of many small radiometric anomalies over a twenty kilometre strike length and two concentrations of mineralisation at Cleo's and Twin, south south east of EL 7684.

Totals exploration activity within both EL's are reported as follows:-

- EL 4414 CR86/166, 89/151.
- EL 4460 CR85/200, 86/204, 87/047, 89/909.

## 5. EXPLORATION COMPLETED

### 5.1 Year 1 Activities

Initially work consisted of library research, data compilation and air photo interpretation. All old Government maps were perused for 'quartz vein' evidence, which were often found to be silicified dolomites in the field.

The known old shaft sunk on secondary copper mineralisation was the focus for field activity - located in Mt Masson Block 67/39.

Aztec carried out stream sediment, rock chip and limited BLEG sampling in year one.

The stream sediment samples of -40 mesh material returned anomalous values in Cu, Pb, Zn, Ni and Mn but not arsenic. A zone of anomalism was delineated parallel to the granite contact, within the sediments.

Grove 1993 describes the first year activities in detail. Total expenditure amounted to \$10,988 on a \$6,000 covenant.

### 5.2 Year 2 Activities

The 1993 field season saw the major activity by Aztec Mining on this tenement. Work consisted of:-

- Regional Mapping.
- Detailed Geological Mapping at the Big Barra and Black Bream anomalies.
- Ground magnetics over the Black Bream anomaly.- the elongate magnetic high is interpreted to be due to pyrrhotite at depth.

- Follow up Soil sampling - used to closer define copper and lead-zinc anomalies.
- Rock Chip surface samples similarly were collected to define Cu, Pb-Zn anomalies.
- Costeaning - 12 for 129m at Big Barra.  
                     - 4 for 72m at Black Bream.
- Reverse Circulation Drilling - 10 holes for 504m.
- Diamond Drilling - 2 holes for 257m.

After this program Aztec concluded that no primary or supergene copper or lead-zinc bodies of economic grade were present.

Aztec's exploration was found to support Total Minings' conclusion that the stratigraphy correlated with the Rum Jungle Mineral Field.

Details of this Year 2 program can be found in Butler 1994a. Total expenditure for the year was \$90,684 on a covenant of \$15,000.

### 5.3 Year 3 Activities

No further original field work was done by Aztec although the costeans and drill sites were all rehabilitated.

Ten thin sections were prepared from selected diamond drill core intervals and petrologically examined.

A total expenditure of \$5,508 was made on a covenant of \$5,000.

Aztec withdrew from the Joint Venture on 3 March 1995.

### 5.4 Year 4 Activities

Field work in Year 4 consisted of a final examination of the geology around the Aztec defined anomalies - Big Barra and Black Bream by the tenement holders.

The proposed costeaning and further drilling of the secondary copper mineralisation did not eventuate as the farm-in partner chose not to proceed.

The tenement was surrendered 12 February 1996.

## 6. GENERAL CONCLUSIONS

EL 7684 has been well tested for copper-lead-zinc within the Rum Jungle Mineral Field model as recognised in the field on the tenement. No economic grade/tonnage of these base metals was located.

The possibility of gold mineralisation being present was negated by very low arsenic response.

All orthodox exploration methods were used to test the tenement: airborne and ground geophysics, stream sediment, soil and rock chip sampling, costeaning, reverse circulation and diamond drilling.

## **7. RECOMMENDATION**

No further exploration for copper-lead-zinc mineralisation is warranted on the basis of results of Aztec field work.

## **8. ACKNOWLEDGEMENTS**

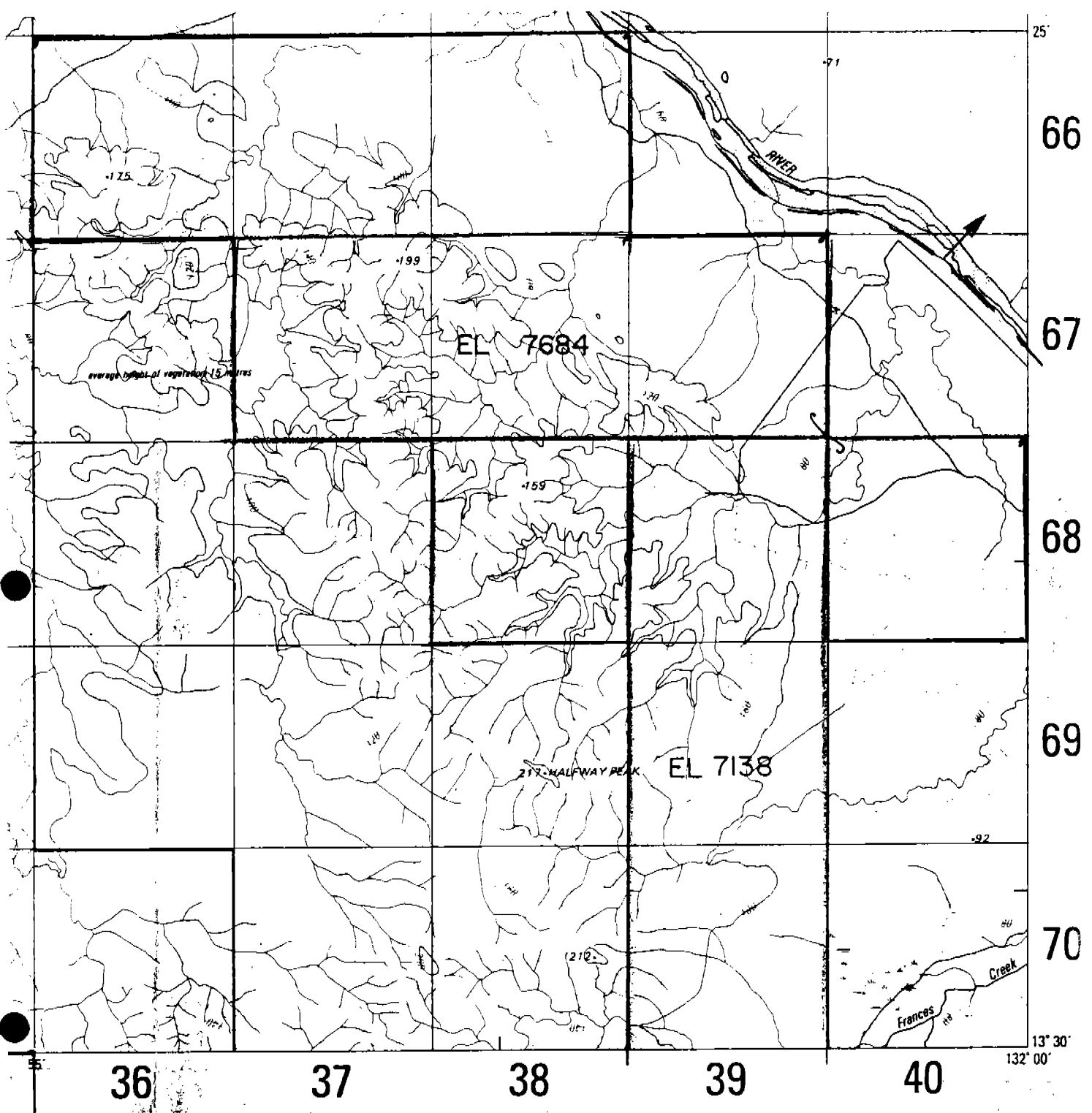
Of necessity, sections of this report are direct extracts from Annual Reports by Aztec Mining Company as listed in the references to this Final Report. The reader is referred to these reports for further details.

## EL 7684 FINAL REPORT

### REFERENCES

- Butler I K (1994a)      Annual Report  
Exploration Licences 7138, 7684, 7935  
Allamber Springs Project  
January 1993 to December 1993  
Aztec Mining Company Ltd (2 vols)  
Unpublished Mines Department Report
- Butler I K (1994b)      Relinquishing Report  
Exploration Licence 7684  
Mary River Area, Northern Territory  
13/04/92 to 12/04/94  
Aztec Mining Company Ltd  
Unpublished Mines Department Report
- Butler I K (1995)      Annual Report for Year Three  
Exploration Licence 7684  
Mary River Area, Northern Territory  
13/04/94 to 12/04/95  
Nicon Resources Limited  
Unpublished Mines Department Report
- Earthrowl J A (1995)      EL 7684  
Relinquishment Report for Ground dropped 12 April  
1995  
Report for C R Day, J A Earthrowl and M D Teelow  
Unpublished Mines Department Report
- Grove A D (1993)      Annual Report for Year One  
Exploration Licence 7684  
Allamber Springs, Northern Territory  
12 April 1992 to 12 April 1993  
Eupene Exploration Enterprises P/L for Aztec Mining  
Company Ltd  
Unpublished Mines Department Report





NATIONAL 1 : 50 000 SERIES SHEET No. 5271-II  
PART OF 1 : 100 000 SHEET  
McKINLAY RIVER 5271

# INDEX TO ADJOINING MAPS

Mount Ringwood 14/3-IV	Douglas Creek 14/3-I	Black Jungle 15/1-IV
Ban Ban 14/3-III	Mount Masson 14/3-II	Minglo Creek 15/1-III
Burrundie 14/6-IV	Union Reef 14/6-I	Moline 15/4-IV



MOUNT MASSON

Refer to this map as:—

**14/3-II**

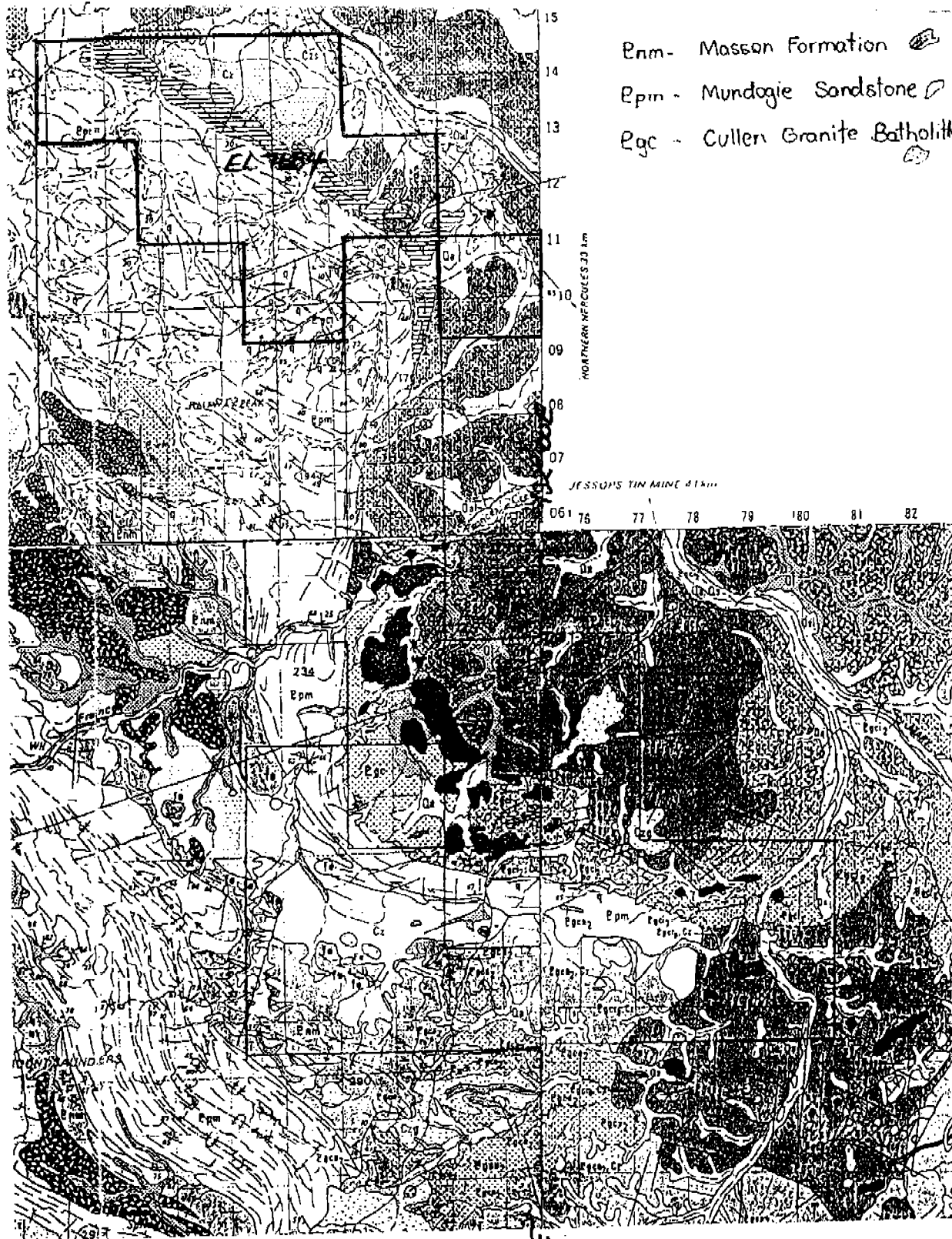
NORTHERN MINERAL FIELD

Fig. 1

# JOHN A EARTHROWL

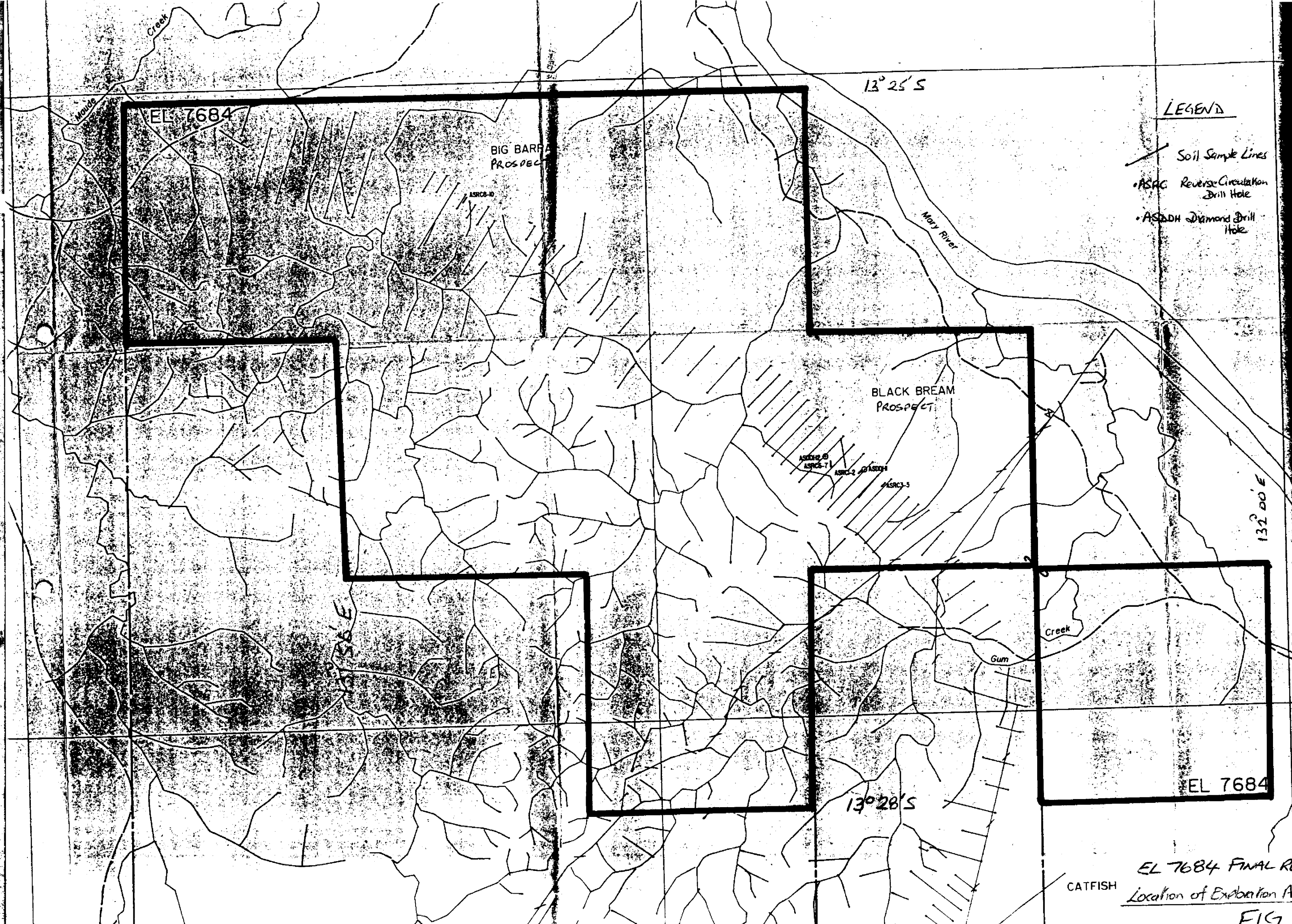
Consulting Geologist

MSc MAUSIMM



1:100 000 BMR/NTFS Geology

Fig 2



LEGEND

- Soil Sample Lines
- ASAC Reverse Circulation Drill Hole
- ASADH Diamond Drill Hole

# Department of Mines and Energy

CENTREPOINT TOWERS BUILDING, THE MALL, DARWIN N.T. 0800

G.P.O. BOX 2901, DARWIN, N.T. 0801, AUSTRALIA

TELEPHONE: (089) 89 5511 TELEX: AA85766 MINDAR FACSIMILE: (089) 81 4806



PROMOTING GROWTH THROUGH RESOURCE

## TITLES ADMINISTRATION BRANCH

EL 7684

Messrs J Earthrowl, M Teelow & Ms C Day  
PO Box 3307  
DARWIN NT 0801

Dear Messrs J Earthrowl, M Teelow & Ms C Day

I am pleased to advise that I, as Delegate of the Minister for Mines and Energy have granted Exploration Licence 7684 for a period of four (4) years. The relevant licence document is enclosed.

This licence is granted subject to the Mining Act 1980 and its Regulations and all other laws of the Northern Territory as are applicable. Before any field work is commenced, it is essential that all persons to be employed on the licence area be fully conversant with the conditions on which the licence is granted.

Guidelines are attached for submitting annual and final reports under sections 32 and 34 of the Mining Act and applications for exploration expenditure certificates under sections 7 and 8 of the Mineral Royalty Act 1980.

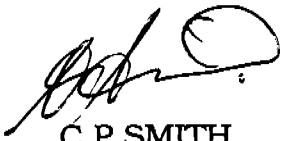
**You are reminded that exploration licences are granted with the expectation that you will *inter alia* comply with the expenditure covenant and all statutory requirements. Failure to honour this obligation could result in the licence being liable for cancellation.**

Strict compliance with the enclosed "Code of Conduct" of the Northern Territory Chamber of Mines is expected. Any deviation from this code which has an adverse impact on the landowner(s)/occupier(s) may jeopardise your title holding and tarnish the mining industry's image and relationship with other land users and interested groups. In the interest of a smooth working relationship, you should contact the landowner(s)/occupier(s) whose land is likely to be affected by any exploration or mining activity, including access, to provide details of your programs and to exchange contact names and addresses, particularly where you engage contractors.

Please note item 3 in the Explanatory Notes on Reporting, whereby transparencies must be provided for any plans larger than A3 size. Transparencies are less susceptible to damage or fading and are easier to reproduce for future records.

The area over which this licence has been granted is subject to an Aboriginal land claim. In the event that the claim is upheld and the land subsequently becomes Aboriginal land, the grant of any consequential mining rights will be subject to the provisions of the Aboriginal Land Rights (Northern Territory) Act.

Yours sincerely



C P SMITH  
Principal Registrar

13/4/92

✓  
14  
Mary River  
Becl.

**NORTHERN TERRITORY OF AUSTRALIA**

**MINING ACT**

**EXPLORATION LICENCE**

EL No. 7684

John Earthrowl as to 50 shares of 100, Carol Day as to 45 shares of 100 and Michael Teelow as to 5 shares of 100 are hereby licensed, for a period of four (4) years from the date hereof, to explore in accordance with the provisions of the Mining Act, the regulations thereunder and the terms and conditions specified in the First Schedule, all the area of land delineated in the Second Schedule excluding therefrom all land vested in the Commonwealth and all radio repeater sites held by the Australian Telecommunications Commission.



C P SMITH

Principal Registrar

as Delegate of the Minister for Mines and Energy

DATE 13/4/92

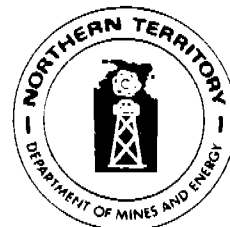
**FIRST SCHEDULE**

1. The licensees shall ensure that a minimum amount of \$6 000 is expended in carrying out exploration on the licence area during year one (1) of the licence.
2. The licensees shall comply with the provisions of and directions lawfully given under this Act and all other laws in force in the Territory as are applicable to his activities on the licence area.
3. Not later than one (1) month after the expiration of each 12 month period of this licence, the holder shall submit in writing a statement specifying the details of the exploration programme reflecting expenditure for the next year of the licence.

(Plan of Area)



# Department of Mines and Energy



CENTREPOINT TOWERS BUILDING, THE MALL, DARWIN N.T. 0800  
G.P.O. BOX 2901, DARWIN, N.T. 0801, AUSTRALIA  
TELEPHONE: (089) 89 5511 FACSIMILE: (089) 81 4806

PROMOTING GROWTH THROUGH RESOURCES

## TITLES ADMINISTRATION BRANCH

**EL 7684**

Messrs J Earthrowl & M Teelow  
& Ms C Day  
GPO Box 3307  
DARWIN NT 0801

Dear Messrs Earthrowl & Teelow & Ms Day

### EXPLORATION LICENCE 7684

**- J EARTHROWL, M TEELOW & C DAY**

The first anniversary of the above exploration licence occurs on 13 April 1993.

In order to meet the statutory requirements of the Mining Act, and to expedite the annual review please provide the following information, addressed for the attention of the Principal Registrar, by the dates indicated:

- A2 Ver*
- A2 Ver*
- 12-4-93 Rent (at \$10 per block) for the forthcoming licence year (section 29 and Regulation 7).
  - 12-5-93 Annual report for the previous licence year (section 34) and proposed commitment for the forthcoming year (section 34(3)) together with details of work program reflecting this covenant.

No additional reminders will be issued and failure to meet the statutory requirements may result in the initiation of cancellation action pursuant to section 171 of the Mining Act.

Please note that pursuant to section 166(1)(ba) of the Mining Act it is now a condition of all tenure that any change of address should be lodged in writing to the Secretary within 14 days of any such change.

Yours sincerely

*Mackney*

CRISTEL MACKNEY  
Mining Registrar

25.1.93



# Department of Mines and Energy



CENTREPOINT TOWERS BUILDING, THE MALL, DARWIN N.T. 0800  
G.P.O. BOX 2901, DARWIN, N.T. 0801, AUSTRALIA  
TELEPHONE: (089) 89 5511 FACSIMILE: (089) 81 4806

PROMOTING GROWTH THROUGH RESOURCE.

## TITLES ADMINISTRATION BRANCH

Our Ref: EL 7684

Messrs J Earthrowl & M Teelow  
& Ms C Day  
GPO Box 3307  
DARWIN NT 0801

Dear Messrs Earthrowl & Teelow & Ms Day

### **EXPLORATION LICENCE 7684 - J EARTHROWL, M TEELOW & C DAY**

The first annual review of this licence has been completed.

In accordance with your proposed expenditure, the covenant for the current year of the licence has been set at \$15 000, and the licence area remains at 8 blocks.

This letter of notification should be appended to the original licence document.

Yours sincerely

  
C P SMITH 21/6/93.  
Principal Registrar

# Department of Mines and Energy



CENTREPOINT TOWERS BUILDING, THE MALL, DARWIN N.T. 0800  
G.P.O. BOX 2901, DARWIN, N.T. 0801, AUSTRALIA  
TELEPHONE: (089) 89 5460 FACSIMILE: (089) 89 5530

**PROMOTING GROWTH THROUGH RESOURCE:**

## **TITLES ADMINISTRATION BRANCH**

Our Ref: EL 7684

Messrs J Earthrowl & M Teelow  
& Ms C Day  
GPO Box 3307  
DARWIN NT 0801

Dear Messrs Earthrowl & Teelow  
& Ms Day

### **EXPLORATION LICENCE 7684 - JOHN ANTHONY EARTHROWL, MICHAEL TEELow & CAROL RUTH DAY**

The second anniversary of the above exploration licence occurs on 13 April 1994.

In order to meet the statutory requirements of the Mining Act, and to expedite the annual review, please provide the following information, addressed for the attention of the Principal Registrar, by the dates specified:

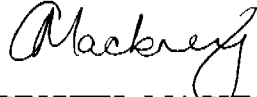
- 12.03.94 Nomination of the graticular blocks (not exceeding 4) wished to be retained in the licence areas for the forthcoming year (sections 26 and 27).
- 12.04.94 Rent (at \$20 per block) for the forthcoming licence year (section 29 and Regulation 7).
- 16.01.94 Annual report for the previous licence year (section 34) and proposed commitment for the forthcoming year (section 34[3]) together with details of work program reflecting this proposal.
- 12.07.94 Report on relinquished part of the licence area (section 32).

No additional reminders will be issued and failure to meet the statutory requirements may result in the initiation of cancellation action pursuant to section 171 of the Mining Act.



Please note that pursuant to section 166(1)(ba) of the Mining Act, it is a condition of all tenure that any change of address must be lodged in writing to the Secretary within 14 days of any such change.

Yours sincerely



CRISTEL MACKNEY  
Mining Registrar

10/1/94

cc: Mr I Butler  
Geologist  
Aztec Mining Company Limited  
PMB 60  
WINNELLIE NT 0821

cc: Mr R L Humberston  
Tenement Manager  
Aztec Mining Company Limited  
PO Box 585  
VICTORIA PARK WA 6100

# Department of Mines and Energy



PROMOTING GROWTH THROUGH RESOURCE

CENTREPOINT TOWERS BUILDING, THE MALL, DARWIN N.T. 0800  
G.P.O. BOX 2901, DARWIN, N.T. 0801, AUSTRALIA  
TELEPHONE: (089) 89 5460 FACSIMILE: (089) 89 5530

## TITLES ADMINISTRATION BRANCH

Our Ref: EL 7684

Mr J A Earthrowl  
GPO Box 3307  
DARWIN NT 0801

7684

Dear Mr Earthrowl

### **PARTIAL DEFERRAL OF REDUCTION OF EXPLORATION LICENCE 7684 - J EARTHROWL, C DAY & M TELOW**

I am pleased to advise that, the Minister, under the provisions of section 28 of the Mining Act, has deferred the reduction in area of Exploration Licence 7684 by one [1] block for twelve [12] months enabling you to retain five [5] blocks until 12 April 1995.

Nomination of blocks to be retained should be lodged four [4] weeks prior to this date.

I wish you every success with your exploration venture in the forthcoming year.

Yours faithfully

A handwritten signature in dark ink, appearing to be 'C P Smith', written over the printed name.

C P SMITH  
Principal Registrar

28/3/94

cc: Mr S Booth  
Aztec Mining Co. Ltd  
C/- Poseidon Exploration Ltd  
PO Box 38970  
WINNELLIE NT 0821



# Department of Mines and Energy



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CENTREPOINT TOWERS BUILDING, THE MALL. DARWIN N.T. 0800  
G.P.O. BOX 2901, DARWIN, N.T. 0801, AUSTRALIA  
TELEPHONE: (089) 89 5460 FACSIMILE: (089) 89 5530

## TITLES ADMINISTRATION BRANCH

Our Ref: EL 7684

Messrs J Earthrowl, M Teelow  
& Ms C Day  
GPO Box 3307  
DARWIN NT 0801

Dear Messrs Earthrowl & Teelow and Ms Day

### EXPLORATION LICENCE 7684 - J EARTHROWL, M TEELOW & C DAY

The second annual review of this licence has been completed.

In accordance with your proposed expenditure, the covenant for the current year of the licence has been set at \$5,000, and the licence area has been reduced to five [5] blocks.

This letter of notification together with the attached plan of the licence area, should be appended to the original licence document.

Pursuant to section 32 of the Mining Act, a report in respect of the relinquished area must be lodged by 12 July 1994. Should any part of the relinquished area be retained under other tenure, a separate report must be lodged for that area so that it may remain on closed file until eventual relinquishment.

Yours sincerely

  
C P SMITH  
Principal Registrar

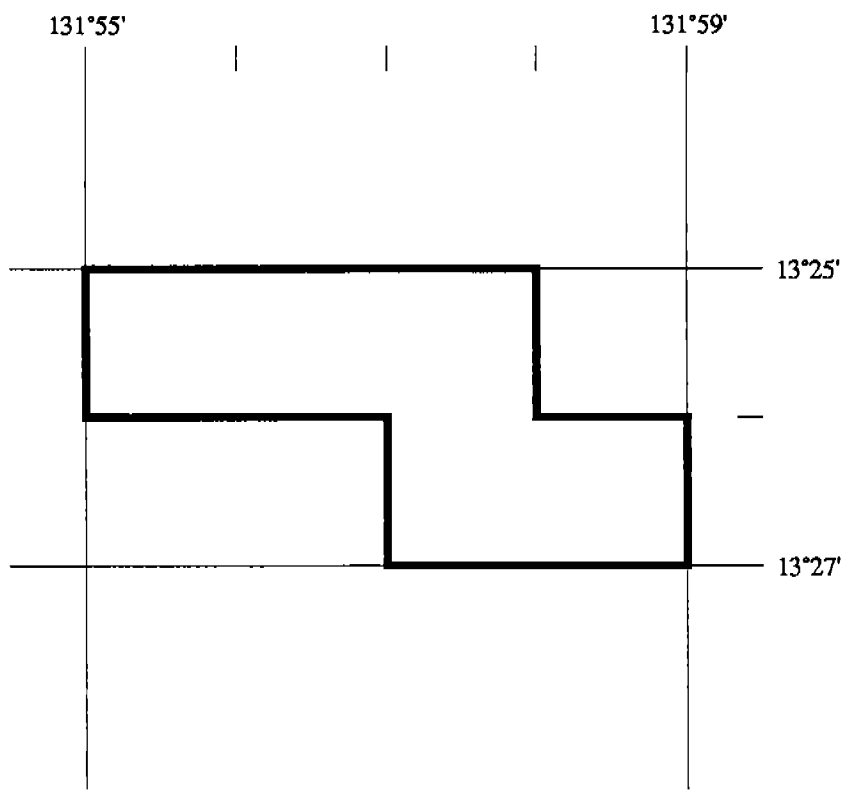
14/10/94.

cc: Mr S Booth  
Normandy Poseidon Ltd  
PO Box 38970  
WINNELLIE NT 0821

cc: Mr Ian Butler  
Aztec Mining Co. Ltd  
PMB 60  
WINNELLIE NT 0821



# RETAINED AREA



**EL7684**  
**5 BLOCKS**  
**16 sq kms**

# Department of Mines and Energy

CENTREPOINT TOWERS BUILDING, THE MALL, DARWIN N.T. 0800  
G.P.O. BOX 2901, DARWIN, N.T. 0801, AUSTRALIA



**PROMOTING GROWTH THROUGH RESOURCE**

## TITLES ADMINISTRATION BRANCH

Telephone: (089) 89 5233  
Facsimile: (089) 81 7106

Our Ref: EL 7684

Messrs J Earthrowl, M Teelow & Ms C Day  
GPO Box 3307  
DARWIN NT 0801

*Second Notice*

Dear Messrs Earthrowl & Teelow and Ms Day

### **EXPLORATION LICENCE 7684 - J EARTHROWL, M TEELow & C DAY**

The third anniversary of the above exploration licence occurs on 13 April 1995.

In order to meet the statutory requirements of the Mining Act, and to expedite the annual review, please provide the following information, addressed for the attention of the Principal Registrar, by the dates specified:

- 12.3.95 Nomination of the graticular blocks (**not exceeding 3**) wished to be retained in the licence areas for the forthcoming year (sections 26 and 27).
- 12.4.95 Rent (at **\$40** per block) for the forthcoming licence year (section 29 and Regulation 7).
- 12.5.95 Annual report for the previous licence year (section 34) and proposed commitment for the forthcoming year (section 34[3]) together with details of work program reflecting this proposal.
- 12.7.95 Report on relinquished part of the licence area (section 32).

No additional reminders will be issued and failure to meet the statutory requirements may result in the initiation of cancellation action pursuant to section 171 of the Mining Act.

Please note that pursuant to section 166(1)(ba) of the Mining Act, it is a condition of all tenure that any change of address must be lodged in writing to the Secretary within 14 days of any such change.

Yours sincerely

CRISTEL MACKNEY  
Regional Mining Registrar  
Darwin/Pine Creek Region

NH:mar19.7684

*15/3/95*



Northern Territory Government



# NICRON RESOURCES LIMITED

A.C.N. 000 828 535

A Member of the Normandy Poseldon Group

## WOODCUTTERS MINE:

80km Stuart Highway, via Darwin  
Northern Territory 0800

PMB 60, Winnellie, NT 0821

Telephone : (089) 76 0088  
Facsimile : (089) 76 0108

17 May, 1995

The Secretary  
Department of Mines & Energy  
GPO Box 2901  
Darwin NT 0801

Dear Sir,

**Re: Exploration Licence 7684 - Annual Report**

Please find enclosed the Annual Report for Exploration Licence 7684 (Report No. 19450).

Aztec Mining Limited has withdrawn from a Farm-In Venture on this Exploration Licence and, consequently, there is no section for the proposed work programme and estimated expenditure for the forthcoming year. This information will be provided by the tenement holders.

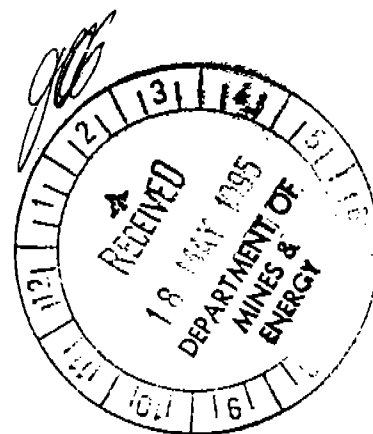
If there are any queries, please do not hesitate to contact me at Woodcutters Mine on the above telephone number.

Yours faithfully,

*Ian Butler*

**Ian Butler**  
Senior Exploration Geologist

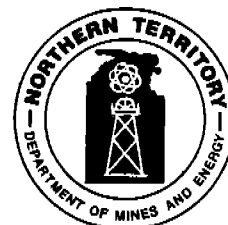
Encl.





# Department of Mines and Energy

CENTREPOINT TOWERS BUILDING, THE MALL, DARWIN N.T. 0800  
G.P.O. BOX 2901, DARWIN, N.T. 0801, AUSTRALIA



**PROMOTING GROWTH THROUGH RESOURCE:**

## TITLES ADMINISTRATION BRANCH

Telephone : (089) 99 5233  
Facsimile : (089) 81 7106

Our Ref: EL 7684

Messrs J A Earthrowl & M Teelow  
and Ms C Day  
GPO Box 3307  
DARWIN NT 0801

Dear Messrs Earthrowl & Teelow and Ms Day

**EXPLORATION LICENCE 7684 - JOHN ANTHONY EARTHROWL 50%.  
CAROL RUTH DAY 45% AND MICHAEL TEELOW 5%**

I refer to the Annual Report, lodged by Nicron Resources Limited on your behalf, for year three of the above licence. It was noted that the proposed work programme and expenditure for year four was not included.

A letter dated 17 May 1995, from Nicron Resources (attached) states that Aztec Mining has withdrawn from a farm-in venture on this EL. Consequently, as the current licence holder, **you** are now required to submit details of the proposed work programme and estimated expenditure for the fourth year of the licence, by 12 June 1995. This information is required before continuation of the licence may occur.

Should you have any queries regarding this matter, please contact Narelle Hore on 99 5233.

Yours sincerely

A handwritten signature in cursive script, appearing to read 'Jenny Castleman', with the date '22.5.95' written below it.

JENNY CASTLEMAN  
Mining Registrar



JOHN A EARTHROWL  
Consulting Geologist  
MSc MAusIMM

G.P.O. BOX 3307  
DARWIN, N.T. 0801

17 May 1995

Department of Mines and Energy  
Titles Administration Branch  
GPO Box 2901  
Darwin, NT, 0801

ATTN: Ms Jenny Castleman

Dear Ms Castleman,

RE: Exploration Licence 7684


I have received your letter of 22.5.95 advising of the need for us to submit a proposed work programme and expenditure for Year 4.


Our proposal for year ending 12.4.1996 is

"This years programme will concentrate on delineating the secondary copper resource at the old shaft. The malachite and cuprite present is used in fertilizer manufacture.

Airtrack Drilling 10 holes, 30m	\$2100
Costeaming, 2 x 50m	\$2000
Field Support	\$1000
	-----
	\$5100

Yours Faithfully,

  
C.R. Day

  
J.A. Earthrowl

TELEPHONE: (089) 41-1102

FACSIMILE: (089)

81881  
76246

81859

# Department of Mines and Energy

CENTREPOINT TOWERS BUILDING, THE MALL, DARWIN N.T. 0800  
G.P.O. BOX 2901, DARWIN, N.T. 0801, AUSTRALIA



**PROMOTING GROWTH THROUGH RESOURCES**

## **TITLES ADMINISTRATION BRANCH**

Telephone: [089] 995245 Facsimile: [089] 817106

Our Ref: EL 7684

Mr J A Earthrowl  
GPO Box 3307  
DARWIN NT 0801

Dear Mr Earthrowl

### **EXPLORATION LICENCE 7684**

The third annual review of this licence has been completed.

It is noted that not all administrative deadlines were met on time, viz:

Relinquishment notice 12.3.95, lodged 13.3.95

Report due 12.5.95, lodged 18.5.95

In future, the deadlines are to be observed so that the next annual review can proceed without unnecessary delay. This will ensure that the licence is not placed in jeopardy.

In accordance with your proposed expenditure, the covenant for the current year of the licence has been set at \$5,000, and the licence area has been reduced to three [3] blocks.

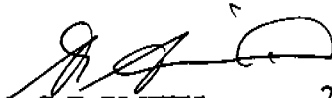
Pursuant to sections 26 and 27 of the Mining Act, I, as Delegate of the Secretary, approve the late lodgement of nomination of blocks for the forthcoming year.

This letter of notification together with the attached plan of the licence area, should be appended to the original licence document.



Pursuant to section 32 of the Mining Act, a report in respect of the relinquished area must be lodged by 12 July 1995. Should any part of the relinquished area be retained under other tenure, a separate report must be lodged for that area so that it may remain on closed file until eventual relinquishment.

Yours sincerely

  
C P SMITH 2/6/95.  
Principal Registrar

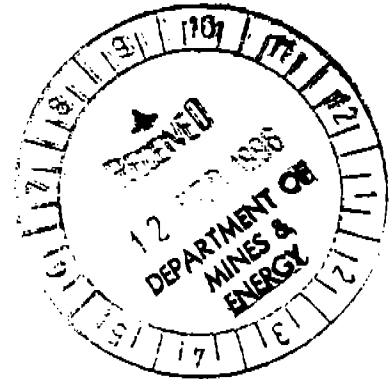
Batchelor, N.T.

9 Feb 1996

Titles Administration

Department of Mines and Energy

Darwin, N.T. 0800



Dear Sir/Madam

re EL 7684

Please be advised that we wish to  
surrender EL 7684 forthwith:

John A. Earthrowl x ~~John A. Earthrowl~~  
Carol R. Day x ~~Carol R. Day~~  
Michael D. Teckow (See attached)

# Department of Mines and Energy

CENTREPOINT TOWERS BUILDING, THE MALL, DARWIN N.T. 0800  
G.P.O. BOX 2901, DARWIN, N.T. 0801, AUSTRALIA



**PROMOTING GROWTH THROUGH RESOURCES**

**TITLES ADMINISTRATION BRANCH**

TELEPHONE: (089) 99 5233  
FACSIMILE: (089) 817106

EL 7684

Messrs J A Earthrowl, M Teelow  
& Ms C Day  
GPO Box 3307  
DARWIN NT 0801

*EL 7684*

Dear Messrs Earthrowl, Teelow & Ms Day

**EXPLORATION LICENCE 7684 - JOHN ANTHONY EARTHROWL (50%),  
CAROL RUTH DAY (45%) AND MICHAEL TEELow (5%)**

The above exploration licence was surrendered on 12 February 1996.

Pursuant to section 32 of the Mining Act, the final report, including details of all exploration on the licence area during the term of the licence, must be lodged with Titles Administration Branch by 11 May 1996.

Please note that final reports must include details of ALL exploration activities on the areas for the entire life of the licences. Should any of the area be retained under separate tenure, a separate report must be lodged for this area so that it may remain on closed file.

Please confirm in writing when all rehabilitation carried out as a consequence of any surface disturbance on the licence area has been completed. An inspection will then be made to "clear" the title environmentally.

I look forward to the receipt of your report.

Yours sincerely

*Mackney*

CRISTEL MACKNEY  
Regional Mining Registrar  
Northern Region

14.2.96.



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