CR 8977

E10WR/21/4-T4

PARTIAL RELINQUISHMENT REPORT OF

EXPLORATION LICENCE 9502
WILKINSON CREEK

NORTHERN TERRITORY

1:250,000 Map: Bauhinia Downs SE 53-03

1:100,000 Map: Glyde

T. NUNN

MAY 1997

Exploration Licence 9502 is held by:

BHP MINERALS PTY LTD
Level 3
3 Plain Street
EAST PERTH WA 6004

REF. U:\NUNN\SEC\FGKRAS\CREPORT\9502WILK.DOC
29/5/97

SUMMARY

EL 9502 (Wilkinson Creek) was granted to BHP Minerals on 25 October 1995 for a period of 6 years. A voluntary reduction was carried out on 24 October 1996.

An airborne GEOTEM survey was flown in May 1996 which was interpreted the following August. Due to the lack of notable conductors a voluntary reduction of 68% was made by BHP Minerals.

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1. Tenement Status

1. INTRODUCTION

This report covers work carried out by BHP Minerals (BHP) on that part of Exploration Licence 9502 relinquished on 28th October 1996.

The area is located in the mid-Proterozoic McArthur Basin and is considered prospective for sediment-hosted Pb-Zn mineralisation.

The tenement is located approximately 400 km north east of Tennant Creek in the Northern Territory and is accessed by the Stuart Highway, Carpentaria Highway and station tracks. A location plan of the relinquished area of the tenement is shown in Figure 1.

1.1 Tenement Status

E9502 was granted to BHP Minerals on 17th July 1996 for a period of 6 years. A voluntary reduction was made on 28th October 1996. Tenement details are given in Table 1.

1.2 Rehabilitation

No sampling or other ground disturbing work was carried out by BHP on the tenement.

1.3 Regional Geology

The relinquished ground is entirely covered by Cambrian Bukalara Sandstone. The Tawallah Group outcrops to the east in the Foelsche Inlier, suggesting similar rocks exist beneath the Cambrian sandstone within the licence. The area is dissected by major NW trending structures, subsidiary to the Emu Fault to the west.

2. GEOPHYSICS

2.1 GEOTEM Survey

An airborne EM (GEOTEM) survey was flown by Geoterrex Pty Ltd in May 1996 over EL 9502. Approximately 61 line km were flown over the relinquished portion with lines oriented E-W, and spaced 1000 m apart (flight line diagram is given in Figure 2). Survey specifications are listed in Appendix 2. EM profiles are shown in a separate BHP company report (CR 8856) submitted to the Northern Territory Mines Department in April 1997 (digital data also available). CR 8856 represents the Phase 2 data release of this EM survey and supersedes Phase 1 (BHP CR 8783) referred to in previous reports. Release of the profiles from the entire EM survey will occur concurrently with the final reports of the Exploration Licences still held within its limits.

From this survey a weak conductor is evident within the relinquished potion of EL 9502. This apparent stratigraphic conductor is typically 50 - 70 Ωm / 5 - 10 S. It is interpreted to be conductive Wollogorang Formation of the Tawallah Group.

3. CONCLUSIONS

Exploration by BHP was dependant upon the outcomes of a GEOTEM survey flown in May this year. The results of this survey suggested only stratigraphic conductors exist so BHP opted to relinquish part of the licence.

TABLE 1: TENEMENT STATUS TO DATE

Tenement name	Granting Date	Blocks at date of granting	Blocks after first relinquishment
EL 9502	17 July 1996	28	9

APPENDIX 1

EXPENDITURE STATEMENT

E9502 - WILKINSON CREEK

17 July 1996 to 24 October 1996

Geophysics	5,505
Office Expenses	137
Sub-Total	**5,642**
20% of Total for Corporate Overheads	1,128
TOTAL	**$6,770**

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APPENDIX 2

GEOTEM SPECIFICATIONS

GEOTEM SPECIFICATIONS

Aircraft	-	CASA C212-200 Turbo Prop							
Magnetometer	-	Scintrex Cesium Vapour Optical Absorption							
Resolution	-	0.01 nT							
Cycle Rate	-	1.0 second							
Sample Interval	-	60 metres							
Electromagnetic System	-	GEOTEM III Time Domain EM							
Transmitter Base Frequency	-	25 Hz							
Receiver	-	x and z, dual axis receiver coil in towed bird							
Cycle Rate	-	4 msec							
Sample Interval	-	9 metres							
Window mean times (msec)	-								
em1	0.4609	em2	0.4766	em3	0.4922	em4	0.5156	em5	0.5469
em6	0.5859	em7	0.6328	em8	0.6875	em9	0.7578	em10	0.8438
em11	0.9453	em12	1.0625	em13	1.2031	em14	1.3750	em15	1.5938
em16	1.8594	em17	0.0469	em18	0.0781	em19	0.1094	em20	0.1406
Data Acquisition	-	RMS GR33 Thermal Dot Matrix Recorder							
	-	GEODAS Digital Acquisition System							
Flight Line Direction	-	090 - 270 degrees							
Flight Line Spacing	-	1,000 metres							
Mean Terrain Clearance	-	105 metres							
Navigation	-	GPS satellite positioning / Doppler							