



PERILYA
MINES NL

ACN 009 193 695

**FINAL REPORT
McARTHUR RIVER PROJECT**

**FOR PERIOD
17 NOVEMBER 1988 TO 16 NOVEMBER 1998**

**EXPLORATION LICENCES:
6236 : MIM EXPLORATION PTY LTD
PERILYA MINES NL**

**1:250,000 Scale Map Sheets
Bauhinia Downs (SE 53-03)
Mt Young (SD 53-15)**

Distribution:

- 1. Perylja Mines NL (2)**
- 2. Department of Mines & Energy (1)**

**Author: B S Kwiecien
July 1999**

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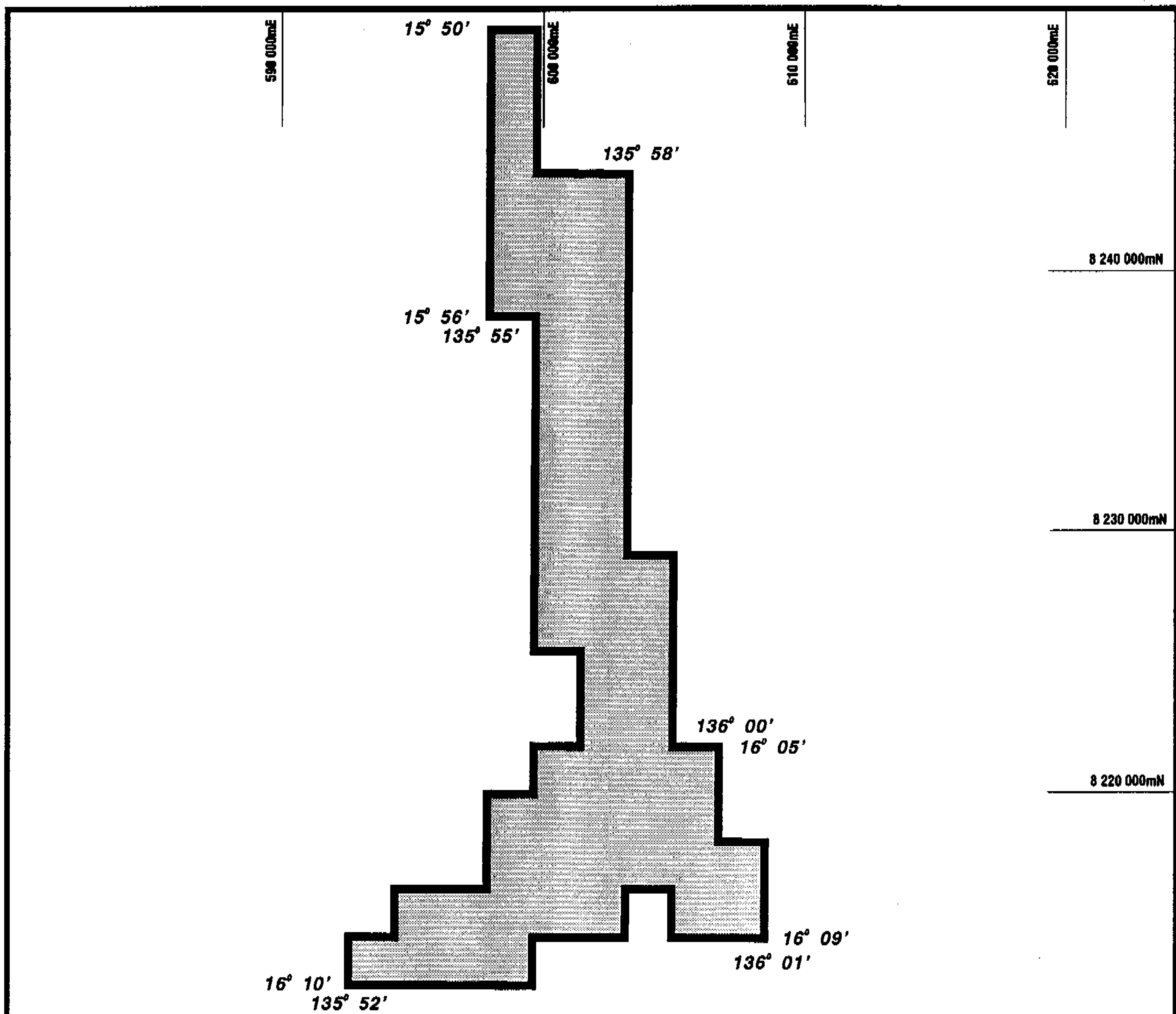
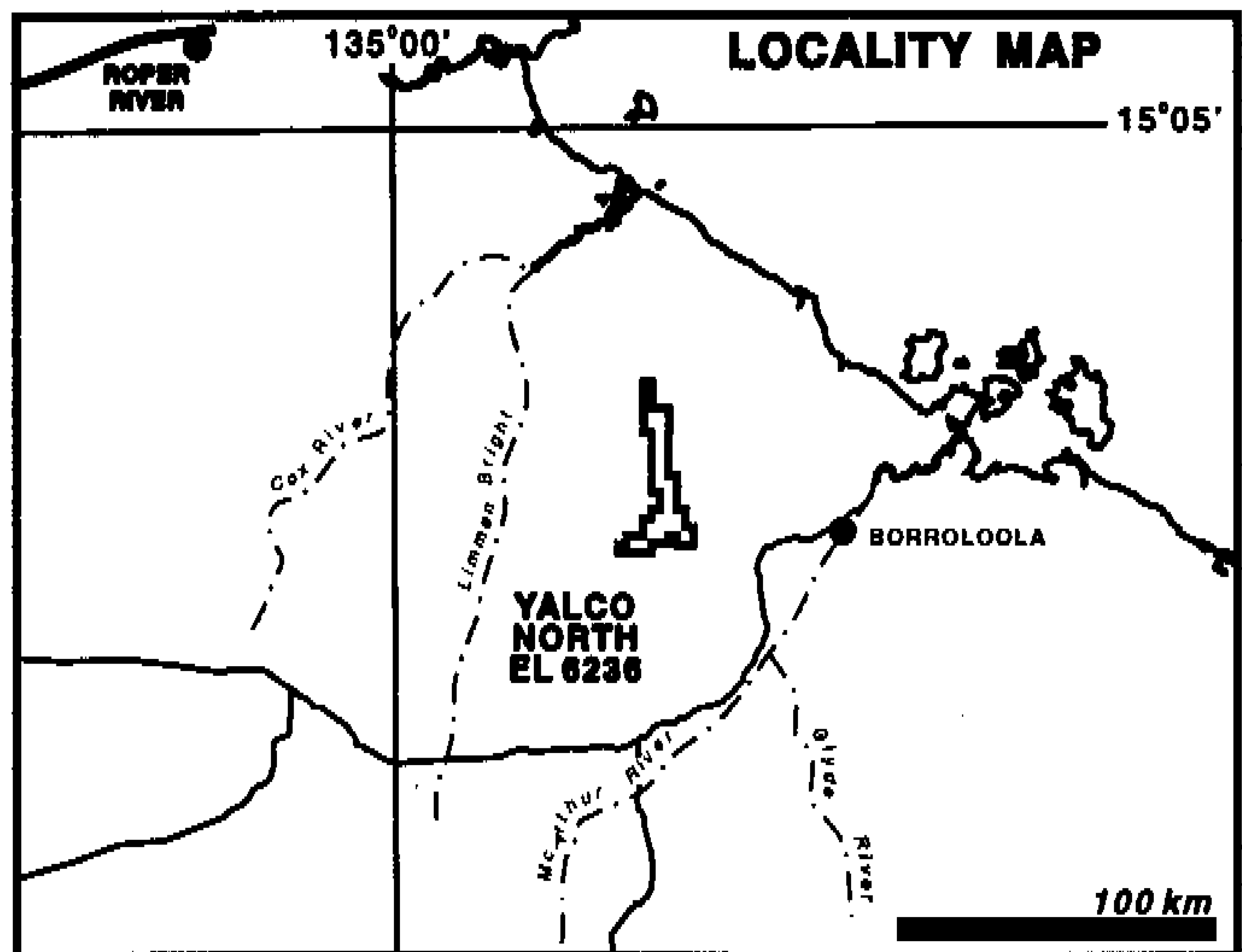
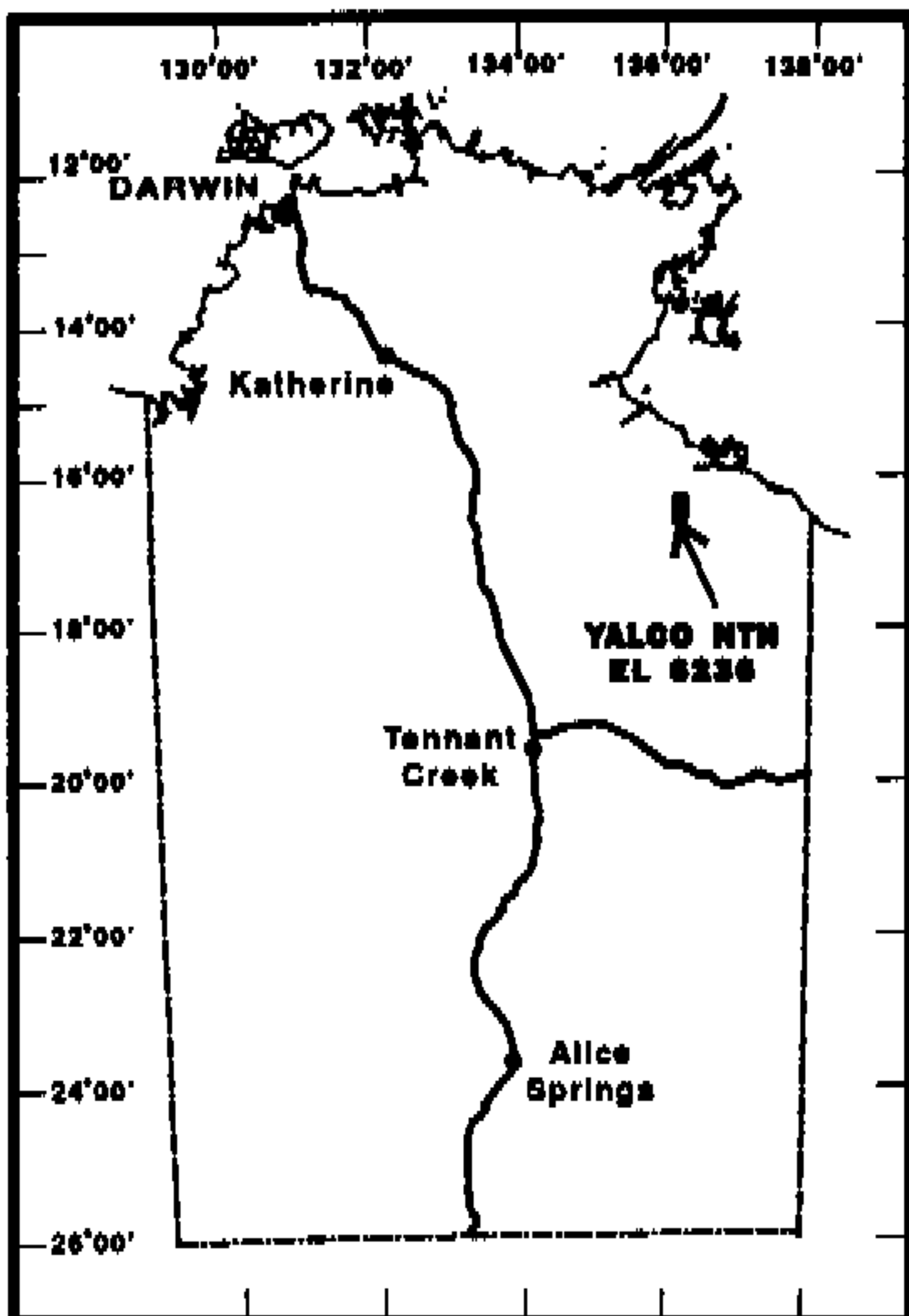
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0 2 4 6 8 10km
Scale 1:250 000

M.I.M. EXPLORATION PTY. LTD. NORTHERN TERRITORY		
PROJECT YALCO NORTH EL 6236		
TITLE LOCATION MAP		
Mining District:	Author: E.R.	Scale: 1:250 000
1:250 000: SD 53-15, SD 53-2	Drawn: E.I.K.	Date: 15th Oct. 1996
1:100 000: 6065, 6066	Drawing No.: 50459	Figure No.: 1

1.0 INTRODUCTION

The McArthur River project consisted of several tenements, which have been relinquished over the years. This report presents, in summary, all work completed on EL 6236 Yalco North. It summarises investigation by Perilya Mines NL, as initial managers, and then MIM Exploration Pty Ltd, as subsequent managers.

Comprehensive detail of the exploration work completed can be found in the Annual Technical Reports submitted throughout the licence tenure.

2.0 LOCATION AND ACCESS

EL 6236 is located on Bauhinia Downs (SE 53-03) and Mount Young (SD 53-15) 1:250,000 sheets in the McArthur Basin. The exploration licence lies between latitudes 15° 50' and 16° 10' South and longitudes 135° 52' and 136° 01' East.

3.0 TENURE

Exploration licence (EL) 6236, known as Yalco North, was granted to Quilpie Ltd on 17 November 1988 with a total of 259 graticular blocks and later became part of the McArthur River Joint Venture between the Licensee, Noranda Pty Ltd and Perilya Mines NL, Topend Resources NL and TP Lindner.

In April 1992 Mount Isa Mines Limited (MIM) farmed into the joint venture which then became the McArthur River Regional Joint Venture. On 11 March 1998 MIM withdrew from the joint venture and the exploration license subsequently expired in November 1998.

The licence was reduced from its initial 259 blocks to 130 blocks in 1992. It was subsequently reduced to 65 blocks in 1994 and extended for a further two years to 1996. It was then reduced further by seven blocks and remained 58 graticular blocks until it expired in 1998. All partial surrender reports were submitted.

4.0 REGIONAL GEOLOGY

The Licence occurs within the Batten Trough of the Palaeo/Meso-Proterozoic McArthur Basin on the Bauhinia Downs (SE 53-03) and Mount Young (SD 53-15) 1:250,000 sheets and the Batten (6065), Borrooloola (6165) and Tawallah Range (6066) 1:100,000 sheets.

The regional geology of the Bauhinia Downs sheet is described in detail by Pietsch et al (1991).

The Licence area is largely underlain by the dolomitic sedimentary sequence of the McArthur Group. Locally, inliers of the older volcanic and siliciclastic Tawallah Group and outliers of the younger, dolomitic, Nathan Group and siliciclastic Roper Group are present.

Platform cover of the Cambrian Bukalara Sandstone masks the Proterozoic rocks to the east and south-east and thin (<20 m) Cretaceous, terrestrial to shallow marine, sediments are locally present. Soil cover is generally thin and skeletal although laterally extensive alluvial cover is present around major drainages. Coastal sands are present on the Mount Young sheet.

Folding of the Tawallah and McArthur Group sequences is gently to moderate, with steep dips locally developed in proximity to major faults. The Nathan and Roper Group strata are gently folded with shallow dips.

Structure is dominated by the interaction of the north-north-west trending Calvert and Mallapunya Faults with the north-south striking Emu Fault Zone.

5.0 PREVIOUS EXPLORATION

Most of the licence has been, at least partly covered by reconnaissance level stream or by soil geochemical sampling since the mid 1970's.

Exploration targets have included copper, lead-zinc-silver, gold and diamonds using various models and exploration techniques.

6.0 WORK COMPLETED DURING LIFE OF EL 6236

6.1 Exploration During 1989

In 1988-89 investigations were of preparatory stage of exploration which included compilation of 1:200,000 geological interpretation. The field exploration consisted of a reconnaissance programme of helicopter assisted sampling to investigate targets identified from aerial photos and geological exploration.

6.2 Exploration During 1990

Exploration activities were confined to mapping, soil and rock chip geochemical sampling, and a ground EM survey was carried out over a gridded area of 8 km strike length. Whilst geochemical results were uninspiring, several EM targets were delineated, two which appeared worthy of drilling.

6.3 Exploration During 1991

A summary map of the Batten Trough was prepared. An airborne EM survey of 102 line km with 2 km line spacing was undertaken. A four week field evaluation programme was carried out and 71 composite rock chip samples were collected.

6.4 Exploration During 1992

MIM Exploration Pty Ltd commenced as Managers of project during 1992. QUESTEM and GEOTEM were flown over EL 6236, which confirmed a strongly conductive surface signature.

6.5 Exploration During 1993

Interpretation of the QUESTEM surveys was completed and upgrading of access tracks and the existing grid was undertaken in preparation for a drilling programme.

6.6 Exploration During 1994

Six holes, for a total of 884.4 m of RC and diamond drilling which included a total of 425.8 m diamond core drilling. There were two water bores drilled.

6.7 Exploration During 1995

In 1995, 894 lag samples were collected and two discrete anomalies delineated. A SIROTEM survey was conducted to verify deep conductors. The anomalies could not be repeated.

6.8 Exploration During 1996

In 1996 TEM sounding data was acquired. The survey was carried out to follow up previously acquired anomalous geochemical data from the northern part of the licence. Two EM anomalies appear to represent possible sulphide accumulation.

6.9 Exploration During 1997

In 1997 two diamond drill holes were drilled to test the EM anomalies as there was the suggestion that the response may represent economic sulphide mineralisation. No significant economic sulphide mineralisation was intersected and the project was downgraded by MIM.

6.10 Exploration During 1998

MIM withdrew from the joint venture in March 1998.

There was no work carried out by Perilya during 1998. As the exploration licence was not able to be renewed and continuing the licence as a retention lease was not warranted, the licence was let to expire.

All of the work summarised in this report is fully detailed in previous annual reports already submitted. The reader is referred to these previous reports.

7.0 CONCLUSION

The drilling commenced by MIM Exploration Pty Ltd was successfully completed in October 1997. The eastern hole did not intersect the target stratigraphy and was subsequently interpreted to be deeper than initially suggested.

The western hole was a technical success intersecting 111 m of very pyritic Caranbirini Formation with sub-economic galena and sphalerite. It was interpreted as an identification of a large pyritic basin (potentially 6 km x 1 km using EM).

However, as MIM felt that these results were of sub-economic potential and did not warrant transiting EL 6236, they withdrew from the joint venture. Perilya and Quilpie concurred with this assessment and the exploration licence was let to expire.

8.0 REFERENCES

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9.0 EXPENDITURE

Table 1 MIM-Perilya-Noranda Joint Venture – Summary of Expenditure Commencement to 16 November 1998, EL 6236

	Expenditure to 31/12/1997	Current Period to 31/01/1998	Total Expenditure to 31/01/1998
Labour – Mex	489,013	976	489,989
Supplies and Services – Office Fixed	39,474	10	39,484
Infrastructure	1,800	326	2,126
Personnel Costs – Fixed	114	0	114
Personnel Costs – Variable	6,231	0	6,231
Miscellaneous Government Charges	0	0	0
Supplies and Services – Office Variable	101,148	0	101,148
Supplies and Services – Field	128,324	41	128,365
Travel and Accommodation	89,605	0	89,605
	855,709	1,353	857,062

Drilling	633,845	0	633,845
Contract and Consultant Services	297,080	743	297,823
Geophysics	62,832	0	62,832
Geochemical	63,134	0	63,134
Research	0	0	0
Labour – External	0	0	0
	1,056,891	743	1,057,634

Joint Venture Contributions	0	0	0
Land Tenure and Environment	120,974	0	120,974
	120,974	0	120,974

Administration	169,979	254	170,233
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TOTAL	2,203,553	2,350	2,205,903
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Contributable as follows:		
ISA - Initial expenditure required to earn 42.5% interest		1,400,000
- Subsequent contributions @ 50% of expenditure exceeding \$1.4M		402,951
ISA total contributions		1,802,951
Perilya – 50% of expenditure in excess of \$1.4M		402,951
TOTAL CONTRIBUTIONS		2,205,903