

OPEN FILE

NORTH FLINDERS MINES LIMITED
RELINQUISHMENT REPORT FOR PORTION OF EXPLORATION
LICENCE No. 6835

PERIOD TO 21/11/90

THE GRANITES 1:250,000 SHEET SF52-3

CR 91/327A

DME LIBRARY
09 FEB 1995
SCANNED

D. A. C. Archibald
DA/SH/001
May 1991

Am 14/6/91.

NORTH FLINDERS MINES LIMITED

SUMMARY

Exploration licence 6835 ("Wild Potato Bore") is a part of the North Flinders Tanami Project Area, confirmed by the Director of Mines in a letter dated 9th October, 1990. This report covers that part of the licence area set aside for compulsory relinquishment in accordance with the conditions of the Mining Act.

The Company's primary interest has been the identification of mineable gold resources, though exploration methods include techniques designed to locate base metal and diamond deposits.

The entire exploration licence was initially evaluated by reconnaissance mapping, photointerpretation, airborne magnetics and partial coverage by a radiometric survey for potassium. Subsequent work on the relinquished portion of the licence area has included an assessment and integration of data to delineate exploration targets. No targets of sufficient merit to justify further evaluation were located in the relinquished area.

CONTENTS

SUMMARY

1. INTRODUCTION
2. LOCATION & ACCESS
3. EXPLORATION - WORK UNDERTAKEN
4. EXPLORATION - RESULTS
5. CONCLUSION
6. LIST OF FIGURES AND PLANS

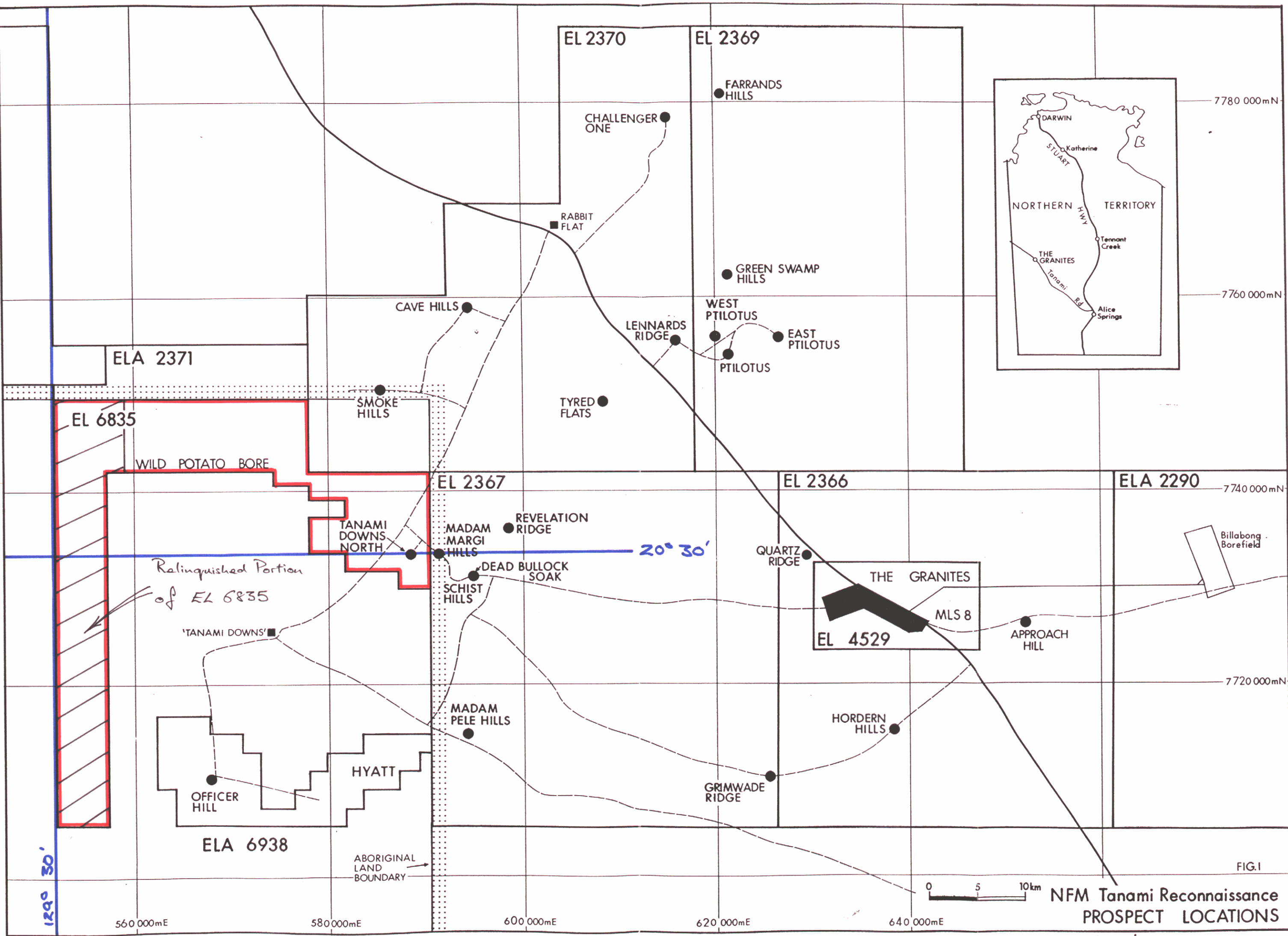


Figure 1

1. INTRODUCTION

EL 6835 ("Wild Potato Bore") was granted on November 22, 1989. The entire tenement lies within the Tanami Downs Pastoral Lease which is currently subject to an aboriginal land claim. The majority of exploration activity has been conducted over the retained portion of the exploration licence; a description of work undertaken over the relinquished portion of the tenement is given in this report (see Figure 1 for location details).

2. LOCATION AND ACCESS

EL 6835 is located approximately 600 kilometres north-west of Alice Springs in The Granites-Tanami region of the Northern Territory. The licence is situated on ground covered by 1:250,000 map sheet SF 52-3, The Granites.

Access to the area is by air or via the Tanami Highway to the Ivy exploration camp adjacent to The Granites mining operation. Tracks west via the Dead Bullock Soak exploration camp and Tanami Downs homestead lead to the relinquished portion of EL 6835 which lies 90 kilometres from the Ivy base facilities (see Figure 1).

3. **EXPLORATION - WORK UNDERTAKEN**

Prior to 1990, a reconnaissance mapping program and an airborne magnetic survey were undertaken over the whole licence area. These provided data which affected the scale of later exploration work, the techniques utilised and the perceived prospectivity of the tenement.

Field Mapping

The field reconnaissance mapping was associated with a photointerpretation exercise as there are few bedrock exposures evident within the relinquished portion of the exploration licence. Best outcrops are limited to the south of the area. They are shown at a scale of 1:25,000 on Drawing Nos. 60-296 and 60-303.

Airborne Geophysics

The initial assessment of EL 2368 also placed a heavy reliance on interpreted data derived from two merged aeromagnetic surveys. Contoured results of these low-level, high quality surveys flown by Geoterrex are presented on Drawing Nos. 50-1166, 50-29A and 50-29B at a scale of 1:25,000. Operational details of the program are also recorded on these sheets.

Radiometric data for potassium was collected for the southern part of the relinquished area. Contoured results and operational details are available on Drawing No. 50-54 at a scale of 1:25,000.

Recent Activity

More recent activity within EL 6835 has been confined to the portion of the licence area to be retained, where specific exploration targets have been localised and drilled. Data available for the relinquished ground has been assessed, but no suitably prospective targets have been delineated.

4. **EXPLORATION - RESULTS**

Mapping and aeromagnetic interpretation has shown that the southern 8 kilometres of the elongate relinquished portion of EL 2368 is underlain by "The Granites" Granite with varying magnetic susceptibility. It is bounded to the north, south and west by Late Proterozoic Muriel Range Sandstone (refer to Drawing No. 50-105 and 60-303).

Immediately to the north, an east-west shear with an intruded dyke is interpreted. The remainder of the relinquished area is believed to be overlain by a thick sheet of Lower Cambrian Antrim Plateau basic volcanics which precludes testing of the covered lithologies..

Just south of the east-west shear, and on the eastern boundary of the exploration licence, there is a small exposure of interpreted Mount Charles Beds. However, the quartzitic outcrop (intruded by mafics) lacks the fine grained chemical sediment usually associated with gold mineralisation in these rocks.

In general, the result of NFM mapping for this area was similar to that shown on "The Granites" published map (SF 52-3) at 1:250,000.

5. CONCLUSION

Exploration results have been insufficient to justify further expenditure on this portion of EL 6835. Consequently it has been set aside for relinquishment in 1991.

6. LIST OF FIGURES AND PLANS

Figures

1. NFM Tanami Reconnaissance Prospect Locations
(showing EL 6835 and Portion to be relinquished).

Plans

Drawing No.		Title	Scale
60-296	J12	Fact Geology Regional Map (no bedrock outcrop)	1:25,000
60-303	K12	Fact Geology Regional Map	1:25,000
50-1166	I12	Residual Magnetic Contours	1:25,000
50-29A	J12	Residual Magnetic Contours	1:25,000
50-29B	K12	Residual Magnetic Contours	1:25,000
50-54	K12	Potassium Count Contours	1:25,000
50-105	K12	Geophysical Interpretation	1:25,000