



MANCALA P/L
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OPEN FILE

Partial Surrender

Exploration Licence 23/92

MICROFILMED
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EL23/92
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See folio 34A

AMG REFERENCE POINTS ADDED

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PARTIAL SURRENDER - EL 23/92
MANCALA P/L - T AKERMAN

1.0 SUMMARY AND RECOMMENDATIONS

Flowing an extensive literature review of historical and recent exploration within EL 23/92, the potential for economic high grade gold deposits in the southern and western portion of the EL is considered limited. This, combined with exploration success in the head waters of the Dans Rivulet has prompted a partial surrender of the EL. The partial surrender will allow exploration activities to be concentrated in the area considered to be of highest prospectivity.

It is recommended that the original EL (taken out by Newcrest Limited) be partially surrendered from 149 skm to 28 skm.

2.0 INTRODUCTION

The exploration licence 23/92 extends from the Mangana region in the south to the Alberton region in the north, encompassing an area of 149 square kilometres (Figure 1).

The mining lease 6M/95 (Tas Tiger P/L, formally Mancala P/L), and the EL 4/88 (Threader and Associates) are totally enclosed within the EL. Areas exempt from the Mining Act within the EL, are the Griffin Forest Reserve (0.1 skm) and 0.3 skm of Crown Reserves.

The northern portion of the EL encompasses the Alberton Goldfield, the central portion a segment of the Dan's Rivulet Goldfield and the southern and western area to be surrendered is largely devoid of known gold prospects.

Gold is the main commodity being explored for, although historically sporadic occurrences of tin and tungsten are known, and are not excluded from the target parameters.

A partial surrender of the exploration licence has been applied for. This will reduce the area of the EL from 149 to 28 skm.

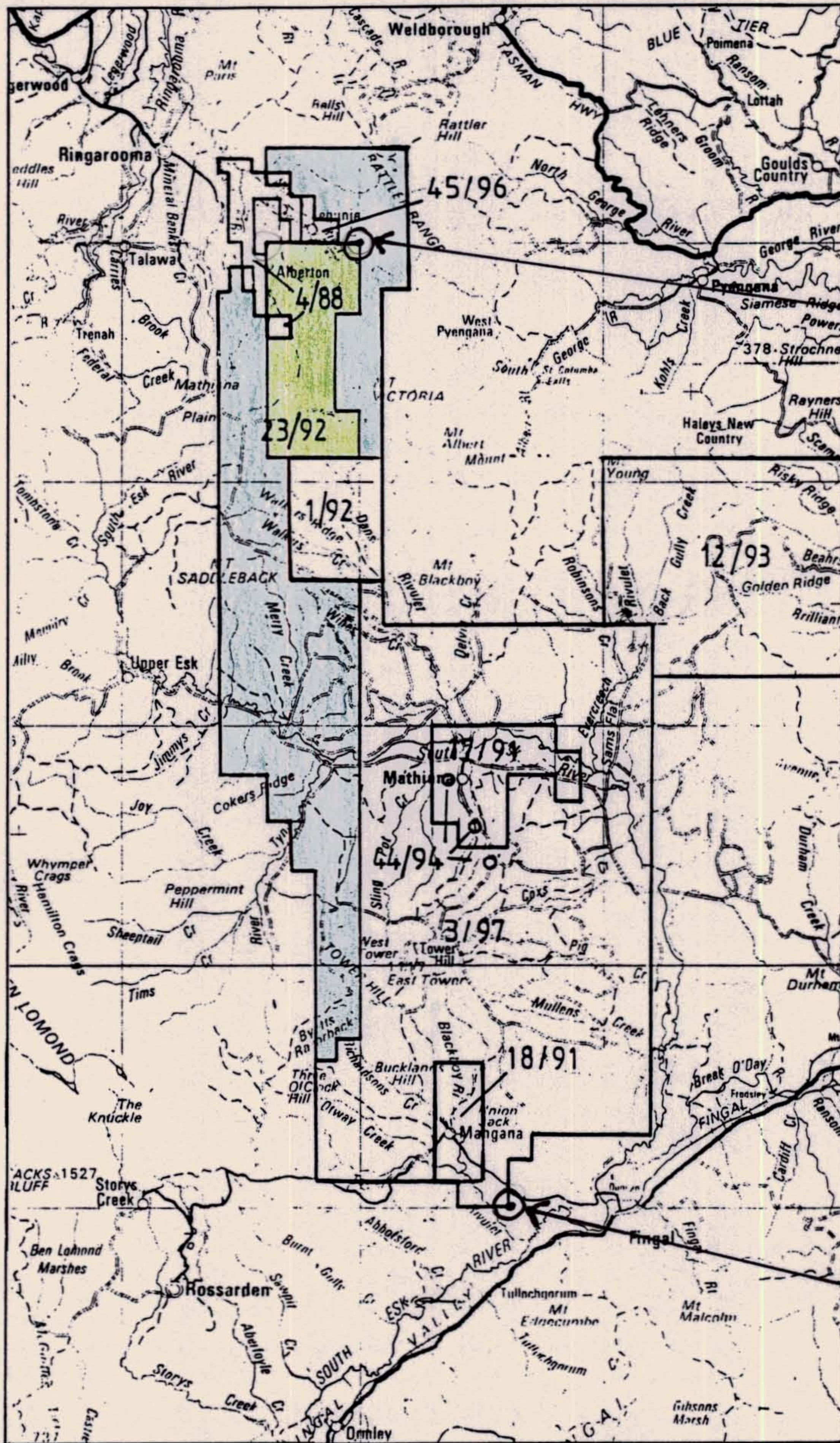
3.0 EXPLORATION OBJECTIVES AND RATIONALE

The objective of Mancala's exploration in EL 23/92 is to locate a substantial gold resource that would be amenable to a narrow vein, underground style mining. Hard rock, vein targets in the order of +5000 oz Au are sort. The prime target style is that of The New Golden Gate Mine, which produced in excess of 250,000 oz of gold.

Previous, modern exploration in the region has targeted large tonnage, relatively low grade opencut type resources. Previous production from the region has been derived from narrow vein resources and to a lesser extent alluvial workings. Extensive soil and stream sediment sampling programs of previous modern exploration companies have met with little success and have been hampered by technical difficulties.

Mancala's approach to exploration in the EL has had a basis in the extensive work undertaken in ML 6M/95, which is totally encompassed by the EL. The approach is two fold:

- 1) Specific targets generated from a combination of historical data, the application of recent generic models and detailed sampling and mapping.



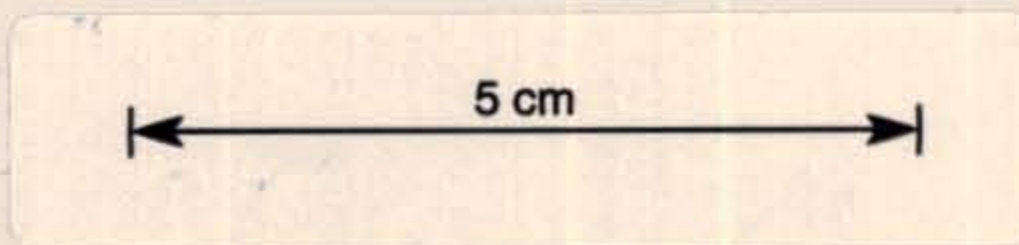
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Figure 1. EL/23/92

- Area to be surrendered: Blue
- Area to be retained: Green
- From 1:125,000 Tasmap



2) Regional targets to be generated from geophysical data and a broad structural interpretation of the area.

To assist financially and to give technical advice (in relation to regional target selection) Mancala is seeking joint venture partners for EL 23/92 and for the other tenements held by the company.

4.0 TENEMENT INFORMATION

Exploration Licence: 23/92
 Area: 149 square kilometres
 Land District: Cornwell and Dorset
 Vicinity: Alberton
 Municipality: Ringarooma and Fingal

Schedule:

Commencing at a north west corner at grid co-ordinates 566 000 metres E. 5 434 000 metres N. thence grid east to 572 000 metres E. grid south to 5 428 000 metres N. grid west to 571 000 metres E. again grid south to 5 421 000 metres N. again grid west to 567 000 metres E. again grid south to 5 416 000 metres N. again grid east to 570 000 metres E. again grid south to 5 397 000 metres N. again grid west to 569 000 metres E. again grid south to 5 396 000 metres N. again grid west to 568 000 metres E. again grid north to 5 404 000 metres N. again grid west to 567 000 metres E. aforesaid again grid north to 5 406 000 metres N. again grid west to 566 000 metres E. aforesaid again grid north to 5 408 000 metres N. again grid west to 564 000 metres E. again grid north to 5 428 000 metres N. aforesaid again grid east to 564 500 metres E. again grid north to 5 429 000 metres N. again grid east to 565 000 metres E. again grid south to 5428000 metres E. aforesaid again grid east to 565 500 metres E. again grid south to 5427000 metres N. again grid east to 566 000 metres E. aforesaid again grid south to 5426000 metres N. again grid east to 567 000 metres E. aforesaid again grid north to 5427000 metres N. aforesaid again grid west to 566 000 metres E. aforesaid again grid north to 5 430 000 metres N. again grid east to 569 000 metres E. aforesaid again grid north to 5 431 000 metres N. again grid west to 568 000 metres E. aforesaid again grid north to 5 432 000 metres N. again grid west to 567 000 metres E. aforesaid again grid north to 5 433 000 metres N. again grid west to 566 000 metres E. aforesaid thence again grid north to the point of commencement.

The area excludes: 345 ha Mining Leases
 0.1 skm Griffin Forest Reserve
 0.3 skm Crown Reserves

It is proposed to reduce the existing extent of the exploration licence to an area of 28 km. The area which is proposed to remain as EL 23/92 is scheduled below:

Commencing at a north west corner at grid co-ordinates 566 000 metres E, 5 430 000 metres N, thence grid east to 570 000 metres E, 5 430 000 metres N, grid south to 570 000 metres E, 5 427 000 metres N, grid west to 569 000 metres E, 5 427 000 metres N, grid south to 569 000 metres E, 5 423 000 metres N, grid east to 570 000 metres E, 5 423 000 metres, grid south to 570 000 metres E, 5 421 000 metres N, grid west to 566 000 metres E, 5 421 000 metres N, grid north to the point of commencement (Figure 1).

5.0 PREVIOUS EXPLORATION

Mancala purchased EL 23/92 from Newcrest Mining Limited in June 1994. Newcrest engaged the services of consultant geologist Lindsay Newnham who compiled an extensive review of previous exploration (Newnham, 1992). This work combined with Pearson (1993) details the previous exploration to date within the EL.

6.0 REGIONAL GEOLOGY

The regional geology of the are to be surrendered has been detailed by geologists of the Tasmanian Mines Department on the 1:50,000 geological maps of Ben Lomond and Alberton. Recent reviews, specific to economic geology are provided by Taheri (1992 and 1993) and Keel et. al. (1994) as part of the Netgold Project.

The Mathinna Beds consist of a monotonous sequence of interbedded, fine to medium grained, commonly graded, quartz rich sandstone beds and pelrites (Taheri, 1993). The Mathinna Beds are unconformably overlain by probable Carboniferous and Permo-Triassic sedimentary sequences of the Parmeener Supergroup.

The Mathinna Beds have been intruded by granites and graniodiorites, of Devonian age, the thermal alteration halo of which is sporadically mineralised with tin and tungsten. The age of gold mineralisation is uncertain, although it is probable that deposition occurred concurrently with folding and cleavage development, prior to the Devonian granitic intrusives.

Regionally, the Mathinna beds are folded about northwest-trending axes to form small scale and kilometre scale wavelength tight to moderate folds. Axial plane cleavage development takes the form of a slaty cleavage in the pelitic units (Taheri, 1993). Folding is asymmetric with local steep overturning to the west in some cases (Pearson, 1993). A subsequent deformation has produced regional mega kinking about steep, northeast trending kink planes, and numerous steeply dipping kink-bands with both sinistral and dextral geometry's (Goscombe and Findlay, 1989, in Taheri, 1993).

7.0 WORK CARRIED OUT BY MANCALA PTY LTD

Regional Geology and Literature Review

Following the extensive work carried out within ML 6M/95 (Akerman, 1995) Mancala's gold exploration activities were directed towards major structural features, with an emphasis upon the New Golden Gate structural setting.

A detailed review of all historical data and recent exploration activities within the area to be surrendered was conducted. This revealed that historically only very limited alluvial workings were present in the surrender area. This fact focused the majority of work on the known auriferous zone near the Alberton and Dans Rivulet Valleys.

Historical Workings, Mapping and Sampling Programs.

On ground work in the surrender area has been limited to the cursory examination of road outcrops in an attempt to become familiar with the regional extent of the Mathinna Sequence. The monotonous nature of the sequence was conformed.

8.0 CONCLUSIONS

Within the area to be surrendered there are no known major structural features which may host high grade gold deposits. Considering the very intensive prospecting at the turn of the century and recent exploration activities, economic gold deposits would not appear to outcrop. Potential may exist within 'blind or hidden' structures, although their potential is considered far less than in the area of the EL to be retained.

REFERENCES

- Akerman, T.E. (1995). Trenching Program, Alberton. 6M/95. Unpublished internal report, Mancala Pty. Ltd.
- Keele, R.A, Taheri, J. and Bottrill, R.S. (1994). Structure and veining in the Devonian-aged Mathinna-Alberton Gold Lineament, northeast Tasmania *Report 1994/06, Mineral Resources Tasmania.*
- Newnham, L.A. (1992) Exploration licences 22/92 and 23/92, North-East Tasmania Review of previous exploration information. Unpublished report, Newcrest Mining Limited.
- Pearson, D.F. (1993). *Annual report for exploration licences 22/92 Tower Hill, 23/92 Alberton and 34/92 Mt. Saddleback, Tasmania 9 October 1992 to September 1993.* Newcrest Mining Limited.
- Powell, C. McA. (1991). Structure of the Beaconsfield and Lefroy goldfields. *Report 1991/16 Division of Mines and Mineral Resources Tasmania.*
- Taheri, J. (1992). Northeast Goldfields: A summary of the Tower Hill, Mathinna and Dans Rivulet Goldfields. *Report 1992/10, Mineral Resources Tasmania.* 1993/34.
- Taheri, J. (1993). Northeast Goldfields: A summary of the Alberton Goldfield. *Report 1993/34 Mineral Resources Tasmania.*