

MANCALA PTY LTD

ACN 056 204 267

Mine Management & Contracting

95-3741

790001

Please send all accounts to:
P.O. Box 240
LAUNCESTON TAS 7250

Local Address:
Phone (003 347576)
Fax (003 340215)

MICROFILMED
FICHE No.013719 -

EXPLORATION LICENCE

EL 21/93

ALBERTON

ANNUAL REPORT 1994-95

OPEN FILE

Prepared by T.E.Akerman
and G.D.Iliff

95-3741

ALBERTON EL21/93 ANNUAL REPORT
1994-95 - MANCALA PTY LTD
AKERMAN, T E ILIFF, G D

EL 21/93
20 JUL 1995
Covering letter 29/6/95 folio 29.

Offices in N.S.W., Tasmania & Queensland

CONTENTS

	Page
Summary	2
1. Introduction	
1.1 Background	3
1.2 Targets	4
1.3 Potential in EL 21/93	4
2. Exploration activities	
2.1 Literature	5
2.2 Field work and investigation of old mines	5
3. Environmental	6
4. Discussion	6
5. Expenditure	6
References	7

SUMMARY

EL 21/93 was granted on the 8th July 1994 as a result of application by Mancala Pty Ltd for ETA 339, the relinquished part of EL 4/88. The Licence comprises six distinct areas conforming to AMG grid lines, some sharing corners, totalling nine square kilometres, situated in the vicinity of Alberton/New River, east and south east of Ringarooma, North Eastern Tasmania.

Mancala sought to acquire the tenement as an adjunct to its interests in the region in the form of EL 23/92 and consolidated ML 6M/95 (formerly MLs 44M to 46M/88), as part of its gold exploration programme.

The perceived potential for gold mineralisation in this region is in two sizes of vein-type deposit. The smaller size is typical of the Alberton Field, as shoots in small quartz-filled breccia reefs. The larger deposit is based on the model of the Golden Gate orebody at Mathinna, with a strike length and depth extent of several hundred metres. Both sizes are suitable for exploitation by a small mining company such as Mancala.

1. INTRODUCTION

1.1 Background

Mancala started exploring for gold in northeastern Tasmania in early 1993, when it became involved in one of three mining leases, ML 45M/88, held by Tas Tiger Mining Pty Ltd, at Alberton. Having appropriate machinery for narrow vein mining, Mancala adopted the approach of re-accessing the most recently worked mine in the lease, the Ringarooma United Mine, as a means of investigating the style of mineralisation of the Alberton Field. The workings and reefs were explored further with chip sampling and diamond drilling.

The five holes, totalling 255 metres, were the first of a programme of thirteen holes drilled in three mines. The other two mines were the Long Struggle, in ML 44M/88, and the Mt. Victoria, in ML 46M/88, in which were drilled five and three holes respectively, totalling 759.6m. This drilling much increased Mancala's understanding of the nature of the gold-bearing reefs clearly identifying known reefs in *along-strike intersections*, and indicating other reefs that had not yet been exploited, perhaps not previously known.

Expenditure by Mancala on the three Leases was close to \$0.5 million in the year 1993/1995.

In the meantime, wishing to hold ground in its own right, Mancala successfully tendered for this Licence, EL 21/93, was granted an Authority to Prospect at Warrentinna, AP 1/93, and purchased EL 23/92 from Newcrest Mining Ltd.

1.2 Targets

As a result of the drilling and literature study, Mancala has crystallised its ideas on two models of gold mineralisation occurring in the Mathinna/Alberton gold corridor. Basically, the styles of mineralisation are:-

A. **Alberton type.** These occur as ore shoots in small reefs of quartz-filled breccia as fracture fill, associated with at least two and up to four phases of folding, essentially trending northwest and northeast, probably as axial plain dilatatory structures, for they appear to be wedge shaped in section. Also, their grade appears to decrease with depth. The average mined grade of these reefs was about 30g/t Au. What makes a specific part of a reef into an ore shoot is not understood at this stage.

B. **Golden Gate type.** This type of mineralisation seems to occupy a much larger structure than the Alberton type. Its archetype, the Golden Gate mine orebody, extends to a known depth of 600m and lateral extent of over 200m (Taheri & Findlay 1992). The mined depth is apparently a function of mining technology available to the operators at the time, rather than a lessening of size and grade of the ore shoots. A significant feature of the Golden Gate in exploration terms is that it is central to several smaller gold deposits of the Mathinna Field, which suggests it might have been a conduit of mineralising fluids for these deposits. Therefore, other Golden Gate type deposits should exist within the corridor, most likely central to, or close to, smaller deposits. And they would occur within the major structure that appears to link the bunches of deposits along the corridor.

1.3 Potential in EL 21/93

There is perceived potential for both types of gold mineralisation in the various parts of EL 21/93. Specifically, the central part has potential for discovery of Alberton type reefs.

The eastern part, over the New River Valley, and the western end of the northern part have some potential for the Golden Gate type reef, though the former, being off the Dorset River/Dans Rivulet line, is a long shot. It is possible that New River Valley overlies another deep-seated structure

that could also contain conduits. The presence of the Heathorns deposit and a few others on the slopes of the valley supports this notion.

2.0 Exploration Activities

EL 21/93 adjoins Mancala's other tenements in the region (EL 23/92 and ML 6M/95), and forms six percent of total tenements held. Exploration within the EL forms an intrinsic part of the overall exploration strategy for the entire region. Consequently, work in the EL has concentrated on a literature search, an assessment of potential access to old mines and a reconnaissance mapping program in the central portion of the EL.

2.1 Literature Search

All previous documented work in the EL has been collated into a database for the entire Alberton region. Of particular interest, are the diamond drill holes, drilled beneath old workings reported upon by Scott (1933). The drilling involved four holes with disappointing assay results. However, the geological descriptions are potential useful when combined with surface mapping.

2.2 Field Work and Investigation of Old Mines

Within the central portion of the EL, a Pine and Eucalyptus plantations have been established. The access tracks to the plantations were renaissance mapped. Although exposure was not as great as anticipated, it was found that the area consists of a series of interbedded quartzwackes and siltstones dipping both moderately to steeply to the east and west. Bucky quartz float is common, with a typical sample returning a result of 0.08 g/t Au.

Small faults trending NW are present, commonly forming a lithological boundary between sheared and cleaved siltstone and massive quartzwacke. Sampling of fault gouge returned the best result of 0.13 g/t.

All of the known prospects or mines were searched for, primarily to determine the ease of location. The AMG locations from Taheri (1993) were utilised with a GPS device. The search was conducted from the Mt.

Victoria Road down hill. During this search none of the deposits were located owing to them having been ploughed up during plantation cultivation or being very well concealed within blackberries.

3.0 Environmental

No mechanical or invasive exploration techniques have been utilised during the year. Consequently, no rehabilitation is required.

4.0 Discussion

There exists potential within the EL, particularly the central portion, for a small, auriferous quartz vein system to be present. The remaining portions of the EL lie on either Recent river gravel's or Tertiary sediments. The central portion, although lying to the West of the main Alberton liniment has good exposure of bedrock as compared to the majority of Mancala's tenements. Detailed mapping and sampling of fault gouge and quartz veining is warranted to aid in the overall geological interpretation of the Alberton region.

If possible the collars of the 1933 drilling program and the deposits should be located, the workings mapped and the subsurface drillhole geology projected to surface.

Although not considered an area of extremely high prospectivity, the EL's location adjacent to Mancala's other tenements and good exposure will aid in the regional geological interpretation.

5.0 Expenditure

For six months ending 30 June 1995: \$3,398
For six months ending 31 Dec. 1994: \$5,894

Total prior to current term: \$2,779
Total during current term: \$9,292
Total during life of EL \$12,071

References

Scott, J.B. 1933. Notes on the boring campaign at the northern end of the Alberton Field (New River). Unpublished Report Tasmania Department of Mines. 1933:69-70.

Taheri, J. and Findlay, R.H. Northeast Goldfields: A summary of the Tower Hill, Mathinna and Dans Rivulet Goldfields. Tasmania Department of Mines. Report 1992/10.

Taheri, J. 1994. Northeast Goldfields: A summary of the Alberton goldfield. Mineral Resources Tasmania. Report 1933/34.