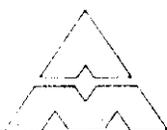


DKSC



AMDEX MINING LIMITED

TRIAKO MINES N.L., BUKA MINERALS N.L.,

GIPPSLAND MINERALS N.L., KIBUKA MINES PTY. LTD.

169 MILLER STREET, NORTH SYDNEY, AUSTRALIA 2060

D of M <i>[Signature]</i>	A.O. <i>[Signature]</i>	C.O. <i>[Signature]</i>	E.O.	D.S.M. <i>[Signature]</i>
Received Answered			26 MAY 1981	Registrar E & IL
DEPT. OF MINES REF. No. 4330/81				<i>[Signature]</i>

TECHNICAL REPORT

REPORT ON PRELIMINARY INVESTIGATIONS
BY AMDEX MINING LTD., E.L. 7/80

JN

(ALBERTON GOLDFIELD)

MICROFILMED

OPEN FILE

AUTHOR: K. MORRISON

INVESTIGATIONS CONDUCTED BY: K. MORRISON

TYPED BY: C STEEL

DATE: 11TH MARCH 1981

DISTRIBUTION: Mr. N.B. Brown, Ringarooma, Tasmania
 Mr. J.S. Cox, Scottsdale, Tasmania
 Kibuka Mines PTY. Limited, Pioneer, Tasmania
 Kibuka Mines Pty. Limited, Sydney, N.S.W.

PROJECT:

1 : 250,000 SHEET INDEX NO.:

AMG REFERENCE POINTS ADDED

CONTENTS

	PAGE NUMBER
1. INTRODUCTION	1
2. THE ALBERTON GOLDFIELD	2
3. PREVIOUS GEOLOGICAL WORK	3
4. CURRENT WORK	5
5. CONCLUSIONS	8
APPENDIX 1	9

002

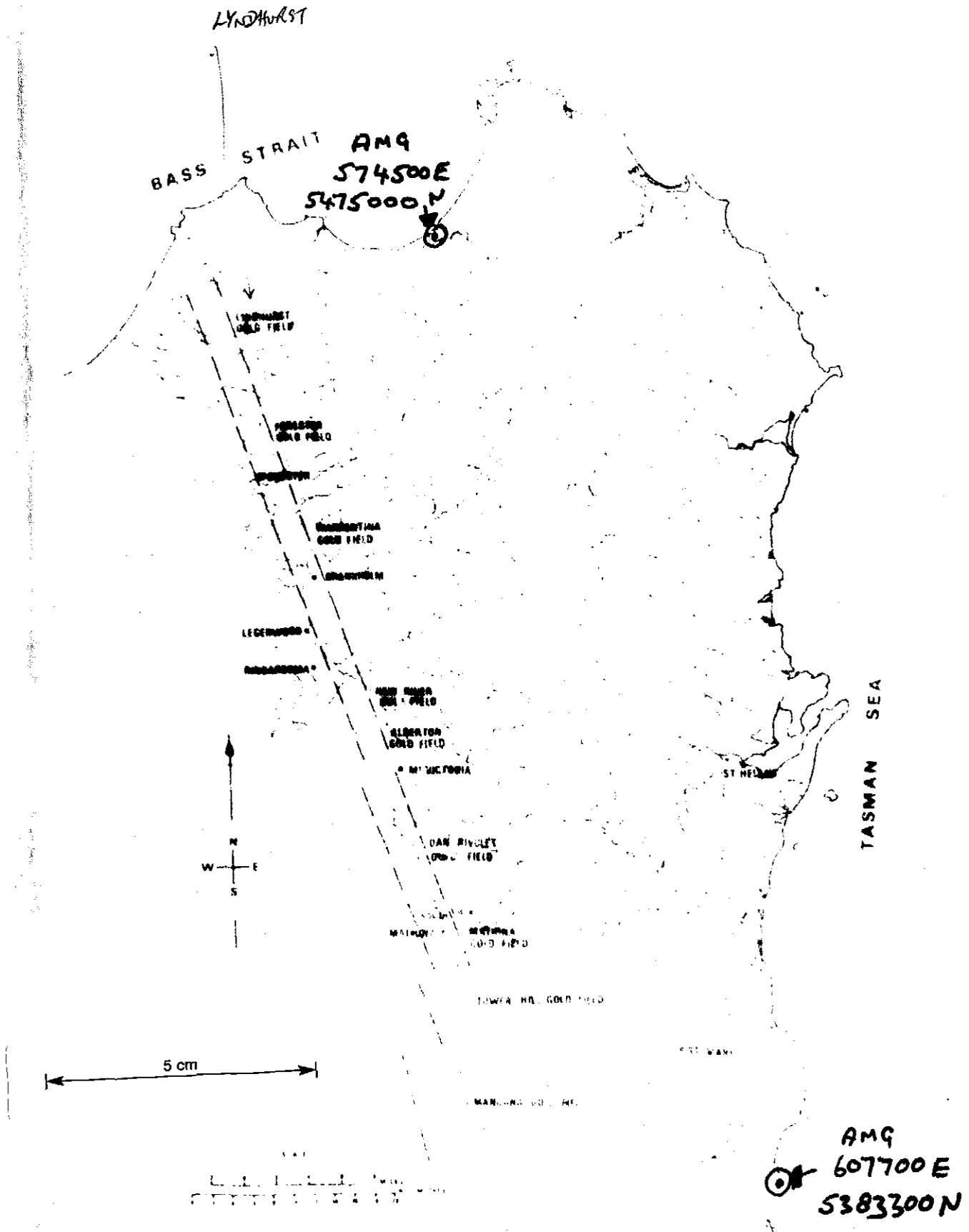


Figure 1. Mathinna Group gold lineament including Alberton Goldfield.

1. INTRODUCTION

Exploration License 7/80 covers a 7 square kilometre area comprising most of the Alberton goldfields, located on Garden Ridge, south-east of Ringarooma (see Fig. 1).

The E.L. is held by N. Brown and J.Cox who approached Amdex in September 1980 regarding the possible sale of an option to explore. After a reconnaissance of the area and some underground sampling (see Inter-Office Memo, 17/10/80) an agreement between Kibuka Mines Pty, Ltd., (Amdex), Cox and Brown was signed on 1/12/80. This agreement involved an initial grant to Kibuka of license to explore E.L. 7/80 for three months prior to either exercising an option or terminating the agreement.

This report describes the results of investigations conducted during the initial three month period, which finished 28/2/81.

2. THE ALBERTON GOLDFIELD

The Alberton field is situated approximately in the middle of an 80 kilometre long north west - south east trending linear belt of gold-bearing lodes in sheared, quartz veined and in places, brecciated pelites and psammities belonging to the Early Palaeozoic Mathinna Group. Over one hundred lodes were found between the 1880's and the early 1900's. Most were small, shallow and low grade, however, the largest, the New Golden Gate near Mathinna, was worked to a depth of over 2000 feet and produced 263,000 ozs of gold. There are no operating mines today.

The Alberton field itself consisted of three main mining operations, Ringarooma United, Mercury and Long Struggle, plus numerous smaller excavations. Most of the work was carried out prior to 1900, however, intermittent mining continued in the Ringarooma United until 1939. From the records available it appears that in the order of 10,000 ozs of gold were produced from the Ringarooma United and Mercury mines combined. Production from the Long Struggle is unknown. The Long Struggle is held under Mineral Lease by local miners and is thus excluded from E.L. 7/80.

At the Mercury, two parallel lodes were worked from two main adits and a small open cut and at the larger Ringarooma United, seven lodes were worked from at least six main adits and several shafts.

3. PREVIOUS GEOLOGICAL WORK

Up until the late 1960's a series of general reports were produced by well known government geologists, eg: Thureau (1883), Twelvetrees (1900), Loftus-Hills (1923), McIntosh Reid (1925), Nye and Blake (1933), Hughes (1952). These reports described the mining and milling history of the various operations on the field. The general picture portrayed is one of a fragmented and under-capitalized approach to mining which resulted in unnecessary duplication of mines and plant. All writers predicted a bright future for the field, based on the assumption that more gold would be found below the existing shallow workings. The main characteristics of the mineralization can be summarized as follows:-

1. The mineralized zone is structurally controlled, with mineralization being independent of host rock lithology.
2. A large number of small discrete ore bodies exist and they lie parallel to fractures in at least three orientations.
3. Both free gold and gold-bearing sulphides occur in quartz "reefs" which are interpreted as fissure-fill deposits.
4. The role of secondary surface enrichment is unclear.
5. Large areas of alluvial sediments downslope from the lodes are potential hosts of placer gold.

In 1967 V. Threader, Department of Mines, completed an M.Sc. thesis on the Mangana - Waterhouse Goldfields. Threader concluded that the lodes were emplaced by selective replacement of sheared country rock in a linear zone of either strike - slip or wrench faulting. He found no evidence of ore channels which might indicate a feeder vein system at depth, however, he also suggested that mineralization was probably not restricted to an enriched upper zone.

As a follow up to Threader's work, the Mines Department drilled four diamond drill holes in the Alberton area between 1966 and 1970. These holes were drilled at an inclination of 50° on a bearing of 049° Mag., to depths ranging from 862 feet to 1031 feet. The holes were sited to drill into Garden Ridge from the south west, the aim being to intersect any shear zone below the known Alberton lodes. At Mathinna the Main Slide shear zone had been proven over a strike length of 1000 feet and to depths of 1600 feet. Although the results of this drilling have not yet been published, the drilling logs record intermittent short intervals of sheared and veined rock with some visible sulphide mineralization.

In 1976 a group known as Stannon Engineering acquired three Exploration Licenses (6/76, 7/76 and 8/76) covering the gold-bearing lineament from Warrentinna to Tower Hill. They produced an elaborate though anonymous report based mainly on library research data, in which they suggested that the two areas with greatest potential were the Ringarooma United and the Mercury mines. These conclusions were reached because the records show that in both mines development ceased only short distances (32 feet at Ringarooma United and 90 feet at Mercury) from predicted extensions of known lodes. Using the Golden Gate Mine at Mathinna as a model, Stannon predicted that gold should exist at depth, below the Alberton Mines.

4. CURRENT WORK

The aim of this investigation was to seek evidence of gold mineralization or at least to demonstrate that sufficient potential existed to warrant some exploration expenditure by Amdex.

The first approach was to identify, by reference to old reports, those adits which were located in the field, and then to sample selectively at sites described in the reports as stopes from which payable ore was recovered. In some cases these stopes were easily located and sampled, however, in other cases fall-in prevented access. Generally the adits are still in good condition, despite being up to one hundred years old. At the selected sites samples were taken where the rocks appeared to be sheared, veined and/or show signs of alteration such as chloritization and honeycombing of the quartz. The only mineralization observed were rare occurrences of minor arsenopyrite and pyrite. Eleven samples taken from seven mines were crushed and milled at Pioneer then fire assayed at the Mines Department laboratories, Launceston. Rock descriptions and assay results are tabulated in Appendix 1. Except for samples from Hanah Adit the results were all less than 0.3 p.p.m. The highest value (Hanah 2) is only 1.8 p.p.m. Additional samples from the same eleven sites were crushed and panned down to heavy mineral concentrates which were examined under the microscope. Small amounts of arsenopyrite and pyrite were recovered from some samples but no gold was seen.

Several rocks selected from mine dumps were also crushed, panned and examined. The residues contained small amounts of

6/....

008

arsenopyrite, pyrite and a black opaque mineral with sub-metallic lustre (presumably an iron oxide). Again no gold was seen.

A second approach was to examine both the Mines Department drilling and the Stannon Engineering report to evaluate the evidence for mineralization outside the area of past mining.

Although the Mines Department had not intended to drill for mineralization, but rather to test for the extension of a shear zone at depth, the siting of holes was such at least two of them (Holes 3 and 4) could have intersected downward extensions of the main lodes at the Ringarooma United. The drill core was made available to Amdex by the Mines Department and was examined in Hobart. The core stratigraphy was found to correspond well with the logs produced by V. Threader and the rock types present matched these exposed in the Alberton mines and mullock heaps. Uncommon disseminated sulphide was observed in quartzites, slates, phyllites and vein quartz, showing no apparent lithological preference. The only reference to gold in the log sheets ("small grain of free gold" in quartz - impregnated phyllite at 557 feet - 557 feet 10 inches, Hole No. 1) could not be confirmed as the relevant core was missing.

Regarding the concept of a shear zone, the core contains several short, discontinuous intervals of sheared rock. Although none of the core has been assayed, visible sulphide mineralization is not restricted to and not always present in the sheared rock. In summary, although it is recognized that the drilling program was never intended to adequately explore a potential deposit, it has provided no real support for the concept of a mineralized shear zone beneath the Alberton Mines.

As mentioned previously, the Stannon report predicted gold at depth below the Alberton field. Although this report was produced six years after the Mines Department drilling, no mention is made of the drilling. This omission must be viewed with suspicion, especially in view of the fact that Stannon conducted detailed research in the Mines Department library and had discussions with Mines Department geologists.

The Stannon report itself is an interesting document. It is divided into three sections. The first is a summary of the geology and mining history of the Alberton field. The second section is a summary of textbook mineral economics. Neither of the latter sections relate to Alberton or to any other real deposit. Enquiries at the Mines Department revealed that Stannon Engineering had not been heard of either before or since this report. No names of participants or authors are mentioned in the report.

5. CONCLUSIONS

1. It is obvious that these preliminary investigations, despite their incomprehensive nature, have discovered nothing to encourage further expenditure by Amdex.
2. Considering the current aims and resources of Amdex, the only logical recommendation is that the agreement be terminated.
3. The basic contention that mineralization should not be confined to shallow ground still appears valid and thus the area could represent a challenging exploration target for a company with the resources to tackle an expensive, long term project.

APPENDIX 1

ROCKS SELECTIVELY SAMPLED IN RINGAROOMA UNITED MINE

1. Premier 16 metres along tunnel.

A cleaved, sandy argillite with vein quartz deposited on joint planes, as occasional pods and sometimes as deposits parallel to cleavage.

2. Mercury 1 39 metres along bottom tunnel.

Phyllitic rocks with signs of secondary alteration. Honeycombing gossan-like iron oxide development, amorphous clay minerals.

3. Mercury 2 60 metres along bottom of tunnel.

Similar to above, but with more vein quartz/country rock parallel alternations.

4. Mercury 3 30 metres along top of tunnel.

Similar to Mercury 1, with some quartz/country rock breccia plus some green alteration mineral in the quartz.

5. Bendy 1 50 metres along tunnel.

Fissure-fill breccia, vein quartz. Pods of quartz incorporated in folded cleavage.

6. Bendy 2 35 metres along tunnel.

Fissure-fill vein quartz with minor secondary alteration. No breccia.

7. Canon? 30 metres along tunnel.

Breccia of quartz/country rock. Deformed and having a poorly developed fissility.

8. Hanah 1. 85 metres along tunnel.
Cleaved and folded shale with pods and veins of quartz. Some weathering of country rock to clay. Black MnO_2 ? staining along fracture planes.

9. Hanah 2. 20 metres along tunnel.
Iron-stained, clay-rich probable fine grained wacke with bodies of vein quartz.

10. Rosalind 1. 61 metres along tunnel.
Grey slate with veins of quartz parallel to cleavage.

11. Rosalind 2. 61 metres along tunnel.
Sandy slate with veinlets of honeycombed quartz parallel to cleavage.

ASSAY RESULTS, RINGAROOMA UNITED

<i>Sample Description</i>	<i>grams. Au/tonne (p.p.m.)</i>
<i>Premier</i>	<i>less than 0.3</i>
<i>Mercury 1</i>	<i>less than 0.3</i>
<i>Mercury 2</i>	<i>less than 0.3</i>
<i>Mercury 3</i>	<i>less than 0.3</i>
<i>Bendy 1</i>	<i>less than 0.3</i>
<i>Bendy 2</i>	<i>less than 0.3</i>
<i>Canon</i>	<i>less than 0.3</i>
<i>Hanah 1</i>	<i>0.4</i>
<i>Hanah 2</i>	<i>1.8</i>
<i>Rosalind 1</i>	<i>less than 0.3</i>
<i>Rosalind 2</i>	<i>less than 0.3</i>

ROCKS SELECTIVELY COLLECTED FROM RINGAROOMA UNITED MINE DUMPS 17/11/80.

1. A poorly cleaved quartzite with abundant deformed and linear quartz veins. Some green coloured alteration mineral in the quartz.
2. Tightly folded phyllite with pods and other bodies of recrystallized quartz.
3. Layered vein quartz with vughs and crystals, dominant over parallel sub-phyllite.
4. Cleaved quartzite with 0.5 cm. quartz vein younger than the cleavage. Also pods of quartz.
5. Schistose phyllite with abundant very small quartz veins parallel to schistosity.
6. Blue cleaved quartzite with quartz veins, partly honeycombed.

All rocks produced small quantities of heavy minerals mostly steel fragments from the dolly, some black opaques and rare sulphides. No visible gold.

ROCKS SELECTIVELY COLLECTED FROM LONG STRUGGLE MINE

1. Honeycombed quartz with brittle crystals and cavities, possibly due to secondary dissolution. Abundant amorphous iron oxides. No heavy minerals were obtained from this rock.

2. Quartz-veined sandstone or orthoquartzite with visible blebs of sulphide. Acrid smell when struck (arsenopyrite). Heavy minerals produced. Abundant arsenopyrite, small amount of pyrite, no gold.

EXTRACT FROM INTER-OFFICE MEMO (17/10/80)

Wet chemical assays by S.G.S. Sydney

Drive Name	p.p.m. Au (grams per tonne)
Crown Prince	0.15
Tunnel Above Ringarooma United	0.17
Top Tunnel on hillside	0.79
Middle Tunnel on hillside	0.13