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NARACOOPA RUTILE LIMITED

REPORT OF INVESTIGATIONS ON

EXPLORATION LICENCE NO.

16/69

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INTRODUCTION

Between 14th and 21st December, 1969, Kenneth McMahon & Partners Pty Ltd conducted a reconnaissance survey over Robbins, Hunter and Three Hummock Islands in the Bass Strait off the north coast of Tasmania.

The islands lie within Exploration Licence No.16/69 held by Naracoopa Rutile Ltd. The reconnaissance survey was primarily oriented towards the location of heavy mineral concentrations that might be present in the sand deposits on the islands.

One line of boreholes was pegged on both Three Hummock and Hunter Islands, and five short lines were pegged on Robbins Island. Time only permitted a few auger holes to be drilled and altogether four holes were drilled on Three Hummock Island and six holes on Robbins Island. No holes have yet been drilled on Hunter Island.

CONCLUSIONS AND RECOMMENDATIONS

The results from the drilling to date have failed to reveal any concentrations of heavy minerals in the beach sands.

No heavy minerals were noted in the dune profiles or at the high tide mark on any of the islands. If heavy mineral concentrations were present in the sands one would expect to see traces of them at these places.

Although the beach sand deposits of the three islands cannot be considered as thoroughly investigated the potential for finding economic concentrations of heavy minerals must be considered as very small and it is, therefore, recommended that the exploration licence be dropped.

LOCATION AND ACCESS

The islands are located in the Bass Strait off the western end of the North Coast of Tasmania.

Access can be gained either by boat or aircraft and during the present survey a Cessna 180 was used to position the exploration crew. The plane landed either on the beach at low tide or on a suitable field as close as possible to the area of interest.

RECONNAISSANCE PROGRAMME

Aerial photographs of the island were examined prior to visiting the area and the most promising regions were selected for initial investigation.

Owing to the lack of time available and time lost due to bad weather only a limited amount of work could be completed.

Three Hummock Island:

A large parabolic dune on the north-west coast was examined. A surveyed line 5,800 feet long was pegged across this dune and adjacent sand bearing areas (Plate 1).

Four holes were drilled along this line at 3H1/12S (to 30 ft); 3H1/12N (to 13 ft); 3H1/20N (14 ft), and 3H1/6N (8 ft). The last three holes were discontinued at the watertable as no wet sampling equipment had been brought in for this initial work.

No significant concentration of heavy minerals was noted in the drill samples and no evidence of any concentration of heavy minerals could be seen on the flanks of the dunes or around the high water mark on the beaches.

Robbins Island:

From the aerial photographs, the most promising area appears to be a large area of parallel dunes extending from the north-east coast approximately 4 miles in a south-westerly direction across the island. On visiting the area this area was found to be swamp land and unlikely to be amenable to mining even if significant proportions of heavy minerals were present.

Consequently, the reconnaissance survey was confined to a series of overlapping parabolic dunes on the north-east coast of the island adjacent to the shore line.

Five lines were pegged approximately 2,000 ft apart and parallel to the long axes of the dunes. Pegs were put in at 200 ft intervals (Plate 2). Six holes were drilled at the following co-ordinates: R3/6W (8 ft); F3/4W (18 ft); R2/6W (5 ft); R2/12W (20 ft); R1/8W (25 ft), and R46W (25 ft).

Drilling was terminated either when the watertable was reached or when the drill intersected hard ground. No concentrations of heavy minerals were noted in the drill samples, in the dune profile or at high water mark.

A local farmer disclosed that he thought there were some heavy mineral concentrations at the apex of the inlet on the extension of lines R1. This area was examined but no heavy minerals were noted.

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Hunter Island:

There is a large prospective sand bearing area on the west coast of Hunter Island. However, time did not permit a thorough investigation of this area and only one line (H1) was pegged. This line stretches from the west coast 7,000 feet in an easterly direction (Plate 3). No holes have yet been drilled on Hunter Island. No indications of heavy mineral concentrations were seen anywhere on the surface.

RESULTS

The results of the limited drilling programme carried out on Robbins and Three Hummock Islands are tabulated below. As can be readily seen no economic concentrations of heavy minerals were encountered.

<u>Line No.</u>	<u>Footage</u>	<u>Heavy Min. %</u>
R1/W8	0 - 5	Less than 0.1
	5 - 10	"
	10 - 15	"
	15 - 20	"
	20 - 25	"
R2/6W	0 - 5	"
R2/12W	0 - 5	"
	5 - 10	"
	10 - 15	"
	15 - 20	"
R3/6W	0 - 5	"
	5 - 8	"
R3/12W	0 - 5	"
	5 - 10	"
	10 - 15	"
	15 - 18	"
R4/6W	0 - 5	"
	5 - 10	"
	10 - 15	"
	15 - 20	"
	20 - 25	"
3H1/12S	0 - 5	"
	5 - 10	"
	10 - 15	"
	15 - 20	"
	20 - 25	"
	25 - 30	"
3H1/6W	0 - 5	"
	5 - 8	"
3H1/12N	0 - 5	"
	5 - 10	"
	10 - 13	"
3H1/20N	0 - 5	"
	5 - 10	"
	10 - 14	"

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THREE HUMMOCK ISLAND

PLATE 1

LOCATION OF PEGGED BORE HOLE LINE AND AUGER HOLES

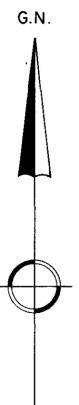
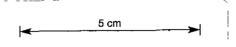
Scale: 1:25,000

Date: 31 Dec, '69

Kenneth McMahon & Partners Pty Ltd.

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CAPE ROCHON

COULOMB

BAY

HOPE

CHANNEL

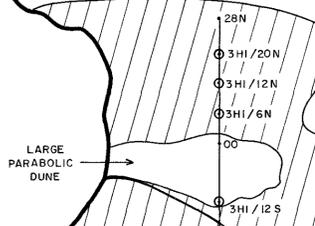
CAPE ADANSAN

1,020,000 y N

1,020,000 y N

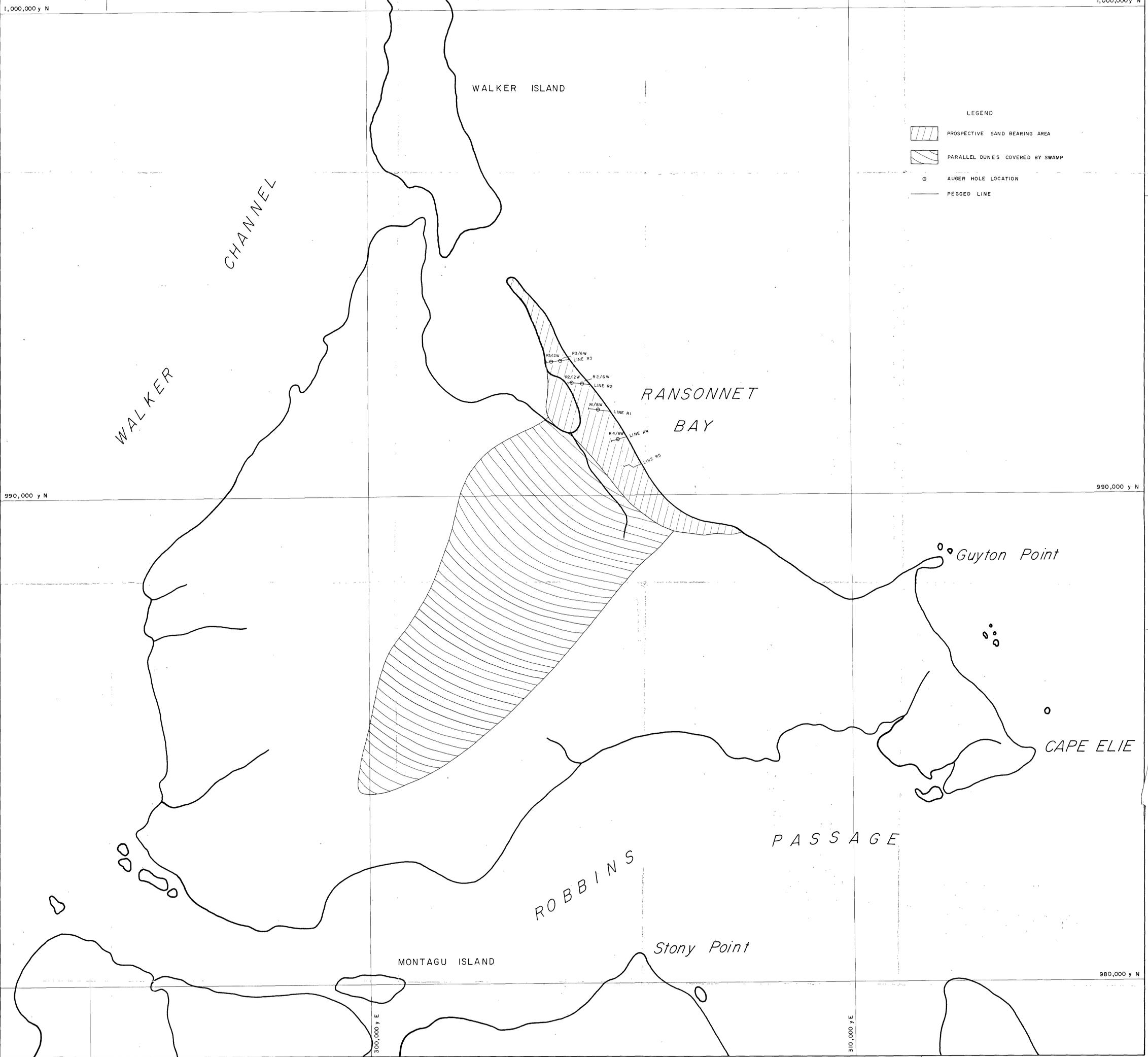
300,000 y E

300,000 y E



LEGEND

-  PROSPECTIVE SAND BEARING AREA
-  AUGER HOLE LOCATION
-  PEGGED LINE



- LEGEND
-  PROSPECTIVE SAND BEARING AREA
 -  PARALLEL DUNES COVERED BY SWAMP
 -  AUGER HOLE LOCATION
 -  PEGGED LINE

HUNTER ISLAND	PLATE 3
LOCATION OF PEGGED BORE HOLE LINE	Scale 1:25,000
	Date: 31 Dec '69

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CAPE KERAUDREN

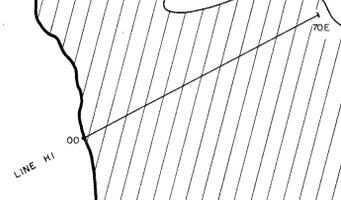
HOPE

CHANNEL

LEGEND

-  PROSPECTIVE SAND BEARING AREA
-  PEGGED LINE

CUVIER BAY



STEEP ISLAND

PASSAGE

0

BIRD ISLAND

HUNTER

STACK ISLAND

1,020,000 y N

1,020,000 y N

1,010,000 y N

1,010,000 y N

1,000,000 y N

1,000,000 y N

280,000 y E

290,000 y E

280,000 y E

290,000 y E