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96-3845



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ANDIP Pty Ltd

EL 17/94 - Ocean Beach

Relinquishment Report

EL 17/94	EL 17/94
21 MAR 1996	21 MAR 1996
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RELINQUISHMENT REPORT OCEAN BEACH
1996 EL 17/94 - ANDIP PTY LTD
MORRISON K C

K.C. Morrison
20 March 1996

1. INTRODUCTION AND TENEMENT DETAILS

Exploration Licence 17/94 is a 31 km² tenement at Ocean Beach (Figure 1). Andip Pty Ltd held 100% equity in the EL which was relinquished at the end of Licence Year 1 (13/1/1996).

This report summarises the Company's exploration aims, work done and the reasoning behind the decision to withdraw from the project after one year.

2. PREVIOUS EXPLORATION

Ephemeral heavy mineral accumulations have been noted on the active beach face at Ocean Beach for over 100 years, particularly after periods of dune erosion by heavy seas. Minor gold was sluiced from natural heavy sand enrichments on the beach in the 1920s and 1930s.

Exploration programs by CRAE Ltd in 1981, Newmont Holdings Pty Ltd in 1985 and Aztec Mining Company Pty Ltd in 1989, all reported drill-defined resources of the order of 2 million tonnes grading 9% total heavy mineral above a cemented gravel basement but the amount of mineral exposed on the beach surface varies substantially and frequently.

Australian Zircon Pty Ltd held the area under EL 6/92 for one year up until October 1993 and their work was aimed at metallurgical separation tests on surface samples. They confirmed the high proportion of non-ore heavy minerals with 16% of the +2.96 SG fraction comprising rutile and zircon. The possibility of an additional viable ilmenite/leucoxene product was diminished by the difficulty of separating chromite from the ilmenite. At that time the zircon and rutile prices were depressed and the Company relinquished the ground in October 1993.

3. EL 17/94 EXPLORATION

Andip Pty Ltd acquired the area in January 1995, at a time of increasing zircon and rutile prices and with the aim of testing the possibility of producing dried gravity/wet magnetic product enriched in rutile, zircon and ilmenite, and which could be sold to one of the existing dry magnetic/electrostatic mills in eastern Australia.

Preliminary discussions with Consolidated Rutile Ltd indicated their interest in securing supplementary sources of ilmenite/zircon/rutile for their Brisbane dry plant but also flagged their concerns regarding separation characteristics of the concentrate, transport costs from Strahan to Brisbane and environmental management of an operation on Ocean Beach.

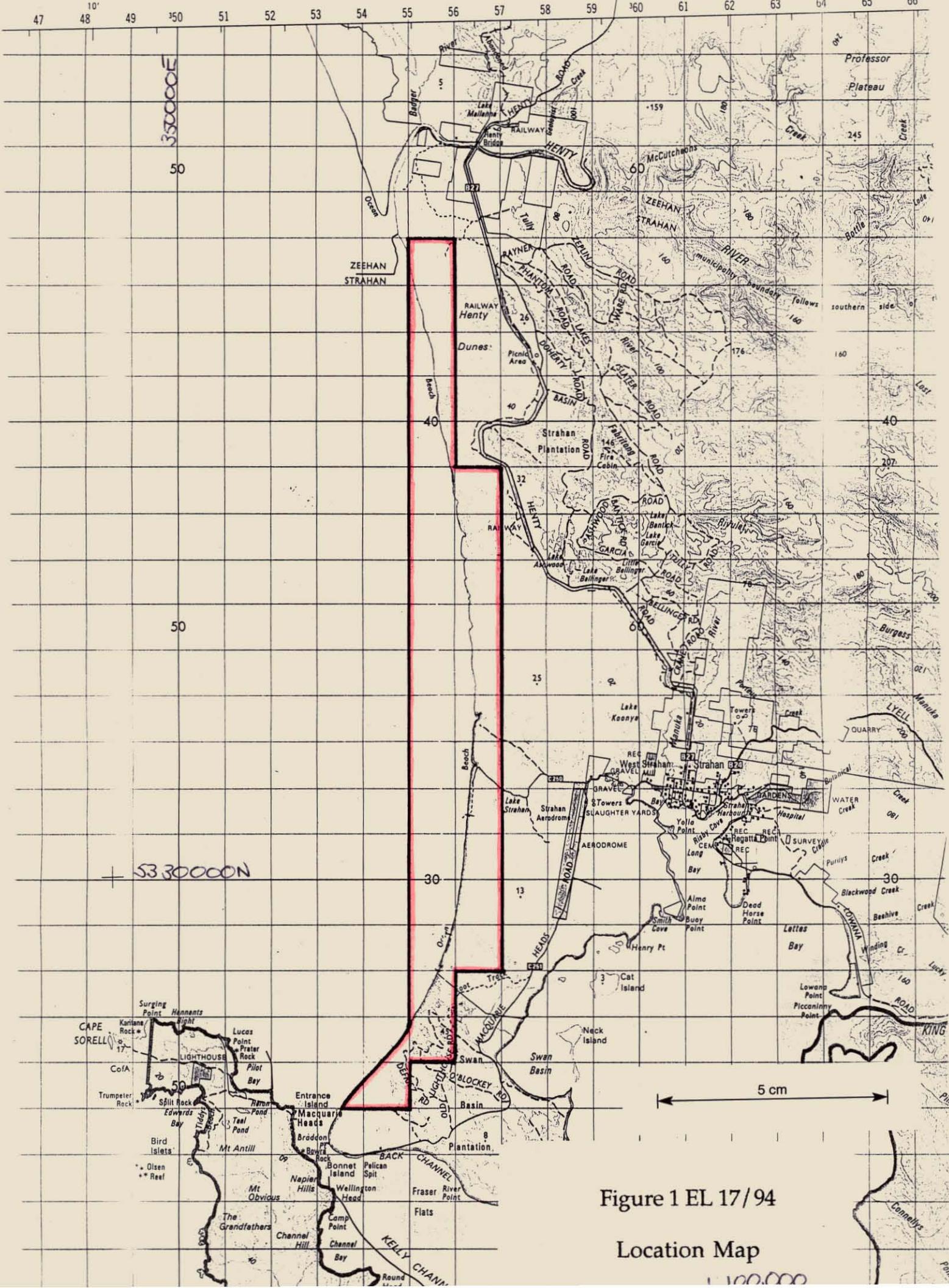


Figure 1 EL 17/94

Location Map

In August 1995, 9 x 10 kg samples of surface to 1 metre natural enrichments were collected over a 6 km stretch of beach with the aim of testing variation in ore mineral concentration along the beach and to progress the magnetic separation work done by Readings for Australian Ziron Pty Ltd in 1992-93.

A composite sub-sample of this material was submitted to Consolidated Rutile and their assay results (Table 1) were consistent with earlier work, with zircon 11% and rutile 6% of the +2.96 SG heavy minerals and an additional 25% of ilmenite product derived from laboratory scale run of mill magnetic separation. An assay of the ilmenite product shows the Cr₂O₃ content of 31.3% far exceeding the TiO₂ content of 13.9%, confirming the extreme difficulty of cost effectively recovering a saleable ilmenite product.

Further discussions with Australian Titanium Minerals Ltd regarding the possibility of barging a bulk zircon/rutile product from Strahan to Grassy were also fruitless and Andip concluded that further test work on the samples and the employment of consultants to conduct the necessary environmental impact studies and manage the pilot plant work at Strahan were not warranted.

Consequently the EL was relinquished at the end of Year 1.

Year 1 Expenditure details are shown on Table 2.

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TASMANIAN
BEACH SAMPLES
REF NO. 0132

- Ocean Beach.

Table 1

RAPID MAGNET RESULTS % IN HEAVY MINERAL					
PERM MAG	POLE 1A	POLE 1B	POLE 2A	POLE 2B	NON MAGS
0.20	16.48	33.89	18.80	3.10	27.72

CLERICI RESULTS % H.M											
1A+B				2A+B							
-3.60	+3.60-4.05	+4.05-4.38	+4.38	-3.60	+3.60-4.05	+4.05-4.38	+4.38	-3.60	+3.60-4.05	+4.05-4.38	+4.38
8.79	8.85	7.75	24.99	10.66	3.17	0.79	7.08	7.55	3.18	5.68	11.02

HEAVY MINERAL %	RAPID MAGNET RESULTS % IN TOTAL					
	PERM MAG	POLE 1A	POLE 1B	POLE 2A	POLE 2B	NON MAGS
69.06	0.14	11.39	23.41	12.85	2.14	19.15

CLERICI RESULTS % TOTAL											
1A+B				2A+B							
-3.60	+3.60-4.05	+4.05-4.38	+4.38	-3.60	+3.60-4.05	+4.05-4.38	+4.38	-3.60	+3.60-4.05	+4.05-4.38	+4.38
6.33	5.09	4.84	18.84	7.37	2.19	0.55	4.89	5.21	2.20	4.12	7.62

1. H.M. Assays - CRL Laboratory (above)

"Ilmenite" - % of H.M. 25 %
 Rutile - " 6 %
 Zircon - " 11 %

2. ALS. Chemical Assays

"Ilmenite" Quality Assay

TiO₂ 18.9 % SiO₂ 2.42 %
 FeO 12.1 % ZrO₂ < 0.01 %
 Fe₂O₃ 21.5 % V₂O₅ 0.21 %
 Cr₂O₃ 31.3 % Nb₂O₅ 0.06 %
 Al₂O₃ 7.70 %
 MnO 0.88 %
 MgO 5.42 %
 CaO 0.08 %

Laboratory notes that ilmenite is "dirty", and that "ilmenite" is mixture of ilmenite and chromite which is reasonably difficult to process metallurgically.

REFERENCE: E/L 17/94

EXPENDITURE DETAILSGEOLOGY

Field excursion mid August 95	
Ken Morrison	820.00
J Purton costed against my time in travel and field	800.00
Freight and Accommodation TT Line - 4WD -Melb - Tas Return	<u>792.00</u>
	<u>\$2412.00</u>

FEASIBILITY STUDIES

Consolidated Rutile	
Minerology and metallurgical examination of high grade samples to study the complexities of beneficiation.	1150.00
J Purton research Mines Dept., discussions Hobart with CJ Foyster re beneficiation and marketability including accommodation	740.20

<u>ADMINISTRATION</u>	450.00
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OTHER

Insurance policies	<u>371.00</u>
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TOTAL	<u>\$5123.20</u>
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