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DESG

TANNERS BAY TIN FIELD REPORT,

FLINDERS ISLAND,

SPECIAL PROSPECTORS LICENCE 771

EXPLORATION

RESULTS AND COMMENTS FROM
THE TESTING CARRIED OUT AT
THE TANNERS BAY MINE.

JANUARY 1978

B. SABIN & M. WARD

AMG REFERENCE POINTS ADDED

INTRODUCTION

B.SABIN, WITH ASSOCIATES M.WARD, AND P.NETTLETON, APPLIED FOR SPECIAL PROSPECTORS LICENCE 771, COMPRISING OF 700 HECTARES, INCLUDING THE TANNERS BAY MINE OLD WORKINGS, TO INVESTIGATE THE POSSIBLE ECONOMIC TIN AND TOPAZ DEPOSITS THERE.

EQUIPMENT CONSISTED OF A COMMER ONE TON EQUIPMENT VAN, A FIAT 411 DIESEL TRACTOR, FITTED WITH A BEAVER FRONT END LOADER AND BACK HOE, AND A POWERED AUGER. A CESSNA 172 WAS USED FOR TRANSPORT OF PERSONEL AND FOR AERIAL SEARCH WORK.

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SUMMARY OF TESTS

DURING THE PROGRAM, A NUMBER OF HOLES WERE BOTTOMED IN THE OLD WORKINGS, AND IT WAS ESTABLISHED THAT THE LEAD CONSISTED OF SEVERAL GUTTERS ENTRENCHED IN A DECOMPOSED GRANITE BED ROCK HEADING IN MUCH THE SAME DIRECTION AS THE PRESENT DRAINAGE.

FURTHER TESTING WAS THEN CARRIED OUT SOUTH EAST OF THE WORKINGS AND AGAIN, NORTH OF THE WORKINGS. THE RESULTS CONCLUDED THE OBSERVATIONS WHICH WERE ESTABLISHED EARLIER, AND THAT TIN AND TOPAZ OCCUR IN VARYING VALUES OVER A BROAD AREA.

THE LAY OUT OF THE LEAD CONSISTING OF GUTTERS OR DEPRESSIONS IN THE BED ROCK CONTAINING PEAT AND WASH, VERY DARK IN COLOUR, AND HAVE RELATIVE HIGH VALUES OF TIN AND TOPAZ. IMMEDIATELY ABOVE THIS, FOR A HEIGHT OF ONE METRE IS ANOTHER LAYER OF WASH, MUCH LIGHTER IN COLOUR, CONTAINS NO PEAT, AND ONLY TRACES OF TOPAZ. TIN VALUES IN THIS LAYER AVERAGE 400 gm TO 700 GM PER M³ OVER BURDEN RATIOS ARE GOOD IN THE SOUTH BELOW THE WORKINGS.

SPECIAL TECHNIQUES MAY HAVE TO BE DEVELOPED TO COPE WITH HIGHER RATIOS TO THE NORTH.

$$600 \text{ gm} / \text{M}^3 \equiv 116 / \text{yd}^3$$

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SAMPLES

SAMPLES OF 10 LITRES WERE TAKEN FROM THE LAST METRE OF WASH LYING ON BED ROCK. SAMPLES TAKEN ABOVE THIS LAYER PRODUCED NIL OR TRACE ONLY AND ARE TO BE CONSIDERED BARREN FROM AN ECONOMIC POINT OF VIEW.

SAMPLES WERE CAREFULLY PANNED OUT AND THE MINERAL WEIGHED ON A BEAM BALANCE, THEN CALCULATED AT GRAMS/M³

ALL MINERAL CONCENTRATES WERE KEPT, THOROUGHLY MIXED, AND DIVIDED TO OBTAIN A SAMPLE FOR ASSAY BY THE DEPARTMENT OF MINES LABORATORY, LAUNCESTON. SAMPLE NO.4 CONSISTED OF CONCENTRATE ONE METRE ABOVE BEDROCK, SAMPLE NO.2, CONCENTRATE AT BEDROCK.

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CONCLUSIONS

FOLLOWING THE WORK THAT WAS CARRIED OUT DURING AUGUST THROUGH NOVEMBER 1977, A DECISION TO APPLY FOR A MINING LEASE WAS MADE, INFLUENCED BY THE FOLLOWING FACTORS:-

1. SUFFICIENT GROUND CARRYING AN ECONOMIC TIN VALUE EXISTS TO ENABLE OPERATIONS FOR A NUMBER OF YEARS.
2. SPECIFIC MARKETS FOR TOPAZ ARE NOT YET ESTABLISHED, AND A NUMBER OF FACTORS AFFECT THE VALUE OF THESE STONES, BUT SUFFICIENT INFORMATION HAS BEEN GAINED TO PROCEED WITH THE MINING OF THIS BY-PRODUCT.
3. WATER REQUIREMENTS. LARGE QUANTITIES OF WATER ARE PRESENT DURING THE WINTER MONTHS, THROUGH TO THE END OF SPRING, BOTH AS FREE WATER IN STREAMS AND AS GROUND WATER. CONSERVATION WITH PLASTIC LINED DAMS WOULD EXTEND THE PERIOD OF OPERATION. THE DRY SPELL WOULD ENABLE CLEANING UP OF THE BEDROCK GUTTERS AND STACKING THE RESULTING WASH.
4. LOW OVERBURDEN RATIO'S IN THE SOUTH, AND IN THE OLD WORKINGS, ARE PARTICULARLY ATTRACTIVE WITH REGARD TO THE ECONOMIC RECOVERY OF THE MINERALIZED WASH.

WITH THESE CONSIDERATIONS, IT WAS DECIDED TO APPLY FOR TWO LEASES, ONE TO THE SOUTH, INCLUDING THE OLD WORKINGS, WHERE OPERATIONS WOULD BE COMMENCED, AND ONE NORTH WEST AND ADJACENT, AS A RESERVE OR AS A SECOND OPERATION ONCE THE SOUTHERN WORKINGS WERE ESTABLISHED.

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TEST PROGRESS

DRILL No.	DEPTH	REMARKS	GM/M
RANDOM GROUP 'A'	ONE TO TWO METRES	OVERBURDEN REMOVED DURING PREVIOUS OPERATIONS.	820
RANDOM GROUP 'B'	ONE METRE	AS ABOVE POCKETS OF HIGH CONCENTRATION	2670
SE 1 A	3.75M	BOTTOMED ON GRANITE.	1200
SE 1 B	APPROX. 4 M	HOLE COLLAPSED	NIL
SE 2 A	2M	INTERSECTED GUTTER PEAT & PYRITE	950
SE 2 B	3.25M	DECOMPOSED GRANITE	750
SE 3 A	3.5M	AS ABOVE	700
SE 3 B	5 M	UNBOTTOMED	NIL
SE 4 A	3 M OBSTACLE	UNBOTTOMED	NIL
SE 4 B	5 M	UNBOTTOMED	NIL



Laboratory, 287 Wellington Street
Launceston, Tas. 7250

21st November, 77

CERTIFICATE OF ANALYSIS

To Mr. B. Sabin,
5 Mannana Street, Rye. Vict. 3941

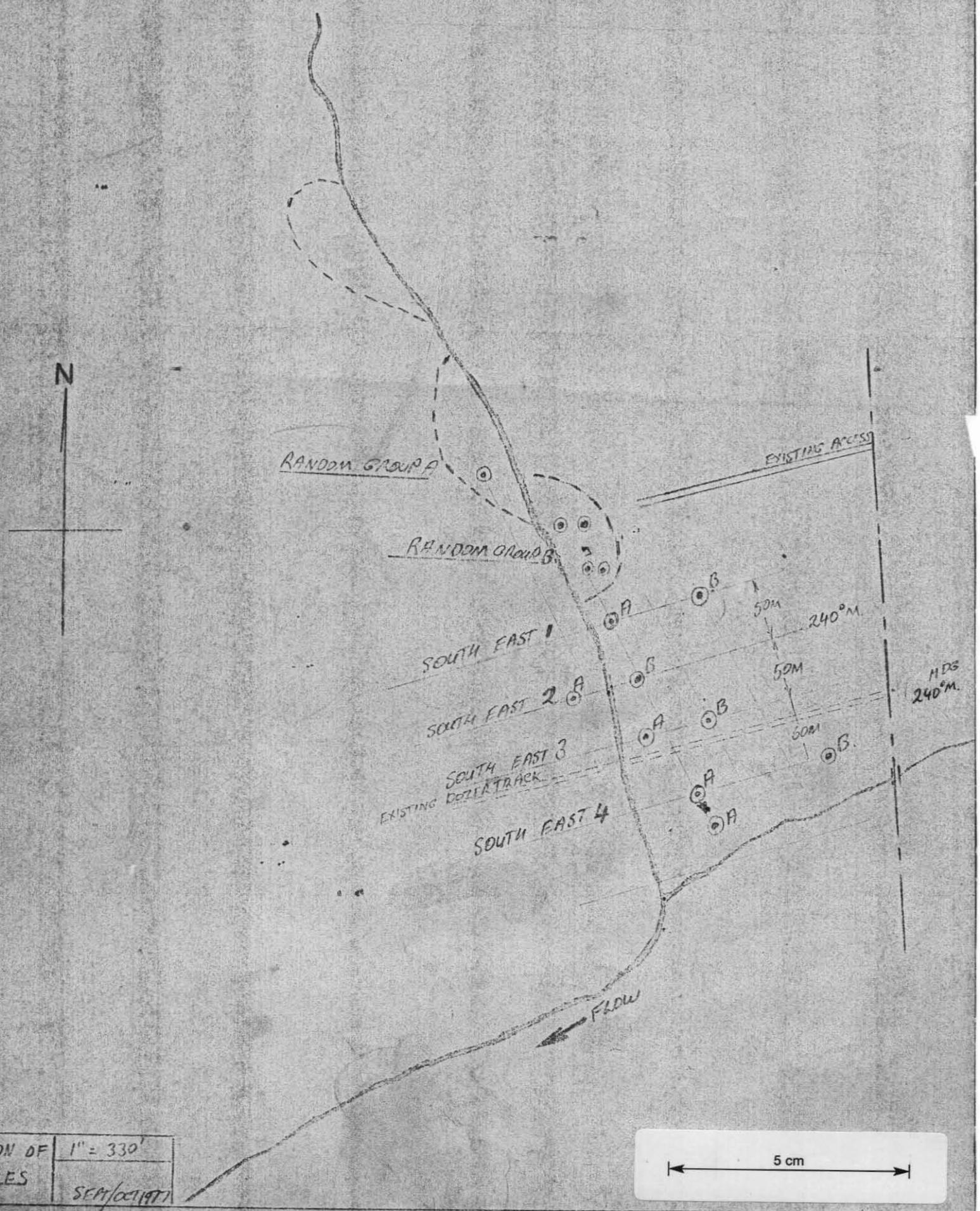
The sample of Stanniferous Material received
from you on the 10th November, 77
and stated to be from Tanners Bay Mine N.W. Flinders Island. ^{has} _{have} been
examined, with the following results:—

1977	Registered Number	Description	% Sn.
21/11/77	773001	Sample No 1	25.4
	773002	Sample No 2	62.3
		<u>Fee. Paid.</u>	
		Analyses by <i>J. B. Letting</i>	
		<i>AK</i>	

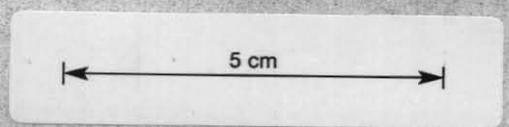
Chief Chemist and Metallurgist

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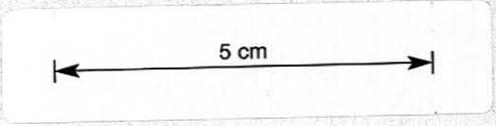
LOCATION OF	1" = 330'
SAMPLES	SEA/OCT/1977



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AMG REFERENCE POINTS ADDED



TANNER BAY TIN FIELD	
TV	Scale 1CM = 160 M
	B. SABIN

