

ABERFOYLE TIN DEVELOPMENT PARTNERSHIP

65-391

REPORT NO. 3REVIEW OF BLUE TIER TIN PROSPECT ON COMPLETION OF
SECOND DIAMOND DRILLING PROGRAMME

at

LOTTAH

Tasmania

by

A. A. C. Mason and J. L. Morton21st June, 1965**MICROFILMED**Accompanying Report:

Appendix 1 - Tonnage and Grade Calculations
 Appendix 2 - Diamond Drill Core Records, Holes 1-11
 Geological Plan ✓ (x2)
 Plan of No. 1 Zone
 Plan of No. 2 Zone
 Plan of No. 3 Zone
 Plan of No. 4 Zone
 Cross Section 5100N
 Cross Section 5200N
 Cross Section 5300N
 Cross Section 5400N

Scale: 1" = 100'
 Scale: 1" = 40'
 Scale: 1" = 40'

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INTRODUCTION

The second programme of diamond drilling has been completed at Blue Tier. This work involved six holes totalling 1206 feet which were drilled east of Anchor Open Cut. Sampling and drilling previously carried out along the east face of the cut disclosed the occurrence of flat bodies of tin ore and the programme under review was designed to test for easterly extensions of these.

Field supervision and logging was attended to by P. H. Frank.

STRUCTURAL GEOLOGY

Four flat lying ore zones occur within the area tested. These are associated with zones of greisen and greisenised granite of similar flat attitude between about 100 and 200 feet below surface. The greisen zone is overlain by granite, which is weathered to an average depth of 66 feet.

ECONOMIC GEOLOGY

An appraisal of ore has been made, using sample data from channels and drill holes. This is not for the purpose of assessing the value of the deposit, but merely to demonstrate potential. Calculations are based on volumes of influence by calculating areas and widths from plan. Details of individual zones are shown on four copies of 1" = 40 ft. plan and 1" = 40 ft. cross sections at 5100N, 5200N, 5300N and 5400N.

Details of indicated ore are shown in Appendix No. 1 and can be summarised as follows:

	<u>Tons</u>	<u>Grade % Sn</u>
<u>ORE</u>		
Containing more than 0.4% Sn	108,176	1.055
Containing between 0.1 and 0.4% Sn	129,926	0.232
Total	<u>238,102</u>	<u>0.606</u>
<u>OVERBURDEN</u>		
Decomposed granite	462,900	Nil
<u>WASTE</u>		
Barren material between ore zones	463,298	Nil
<u>TOTAL OVERBURDEN PLUS WASTE</u>	926,198	Nil

The theoretical ratio of overburden plus waste to high grade (1.055%) ore is thus 8.6 : 1 and of overburden plus waste to total (0.606%) ore, 3.9 : 1. The metallic tin content of 0.606% for total ore, is however, too low to consider for economic extraction.

Assuming a dilution factor of 15% for any mining operation, and the extraction of only high grade ore, expected tonnage and grade must be adjusted thus:

<u>ORE</u>	<u>Tons</u>	<u>Grade % Sn</u>
Containing more than 0.4% Sn	108,176	1.055
Plus 15% diluting material	16,224	Nil
Diluted ore	124,400	0.918*

* assumes all diluting material has no Sn value.

The ratio of overburden plus waste to diluted high grade ore containing 0.918 % Sn is thus 7.4:1

In the case of an open cut operation, additional adjustments must be made in consideration of batters. Basing calculations on the assumption of 2,000,000 tons of ore reserves, the ratio of batters to ore would be 3.9:1. Therefore, for an open cut operation the ratio of overburden plus waste to diluted high grade ore containing 0.918% Sn would be 11.3:1

Since the area overlying the ore indicated by diamond drilling, and summarised above, is 84,168 square feet, the potential of the area is 1.29 tons/square ft. of ore grading 1.055% Sn, or, in terms of this same ore, diluted to a grade of 0.918% Sn, 1.48 tons/sq. ft.

The following table gives a comparison of potential, dilution, and waste figures for various ore combinations.

	*1 Indicated tonnage	Grade % Sn	Potential tons/sq. ft.	Ratio O/burden + waste : ore	*2 Ratio O/burden + waste + batters : ore
Higher grade ore	108,176	1.055	1.29	8.6:1	12.5:1
Higher grade ore with 15% dilution.	124,400	0.918	1.48	7.4:1	11.3:1
Total Tin bearing granite	238,102	0.606	2.80	3.9:1	7.8:1

*1. Beneath an area of 84,168 square feet.

*2. Assuming a batter angle of 50° , the ratio of batter waste to ore being thus 3.9:1

For the purpose of this study let us assume 60% Sn recovery. Applied to the diluted grade of 0.918% Sn, this gives a recovered grade of 0.552% Sn. At a tin price of £E1,200 for tin metal contained in concentrates, this represents a recovered value of £7.10.0 per ton of ore.

OPEN CUT FEASIBILITY STUDY

1 ton ore plus 11.3 tons overburden and waste mined @ 10/- per ton	£6. 3. 0
1 ton ore treated @ £1. 5. 0	1. 5. 0
Administration and miscellaneous	12. 0
	<hr/>
Total mining and treatment per ton	£8. 0. 0
Value of ore per ton	£7. 10. 0
∴ Not feasible.	

UNDERGROUND MINING FEASIBILITY STUDY

1 ton ore mined @ £3. 10. 0 per ton	£3. 10. 0
1 ton ore milled and treated @ £1. 10. 0	1. 10. 0
Administration and miscellaneous	12. 0
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Total mining and treatment per ton	£5. 12. 0
Value of ore per ton	£7. 10. 0
Working profit per ton excluding Capital amortisation and taxation	£1. 18. 0

DISCUSSION

The economy of working the Anchor orebodies by open cut within the relatively narrow scope of the small area tested is not feasible, but until a broad test is complete this possibility cannot be eliminated.

At this juncture it would appear that underground mining might be attractive on the score of cost. In any event the work to date demonstrates the type and grade of ore likely to be encountered and provides sufficient encouragement to warrant further testing.

This work should take the form of a broad drilling programme to outline tonnage potential over an area large enough to yield at least 2,000,000 tons of ore. At the factor of 1.48 tons per square foot, this area amounts to 1,351,000 square feet or roughly 1,200 feet by 1,200 feet. Two programmes are envisaged, the first based on a primary grid of holes every 200 feet for a total of 36 holes. The second programme would depend on satisfactory results from the first, and would be based on a secondary grid with holes every 100 feet for a total of 85 holes. Depths are expected to average about 200 feet per hole. These programmes would be preceded by field establishment, line cutting and grid surveys.

RECOMMENDATIONS

It is therefore recommended that two broad programmes be undertaken to test for the occurrence of ore in the vicinity of the Anchor open cut, over an area of about 1,351,000 square feet as set out under discussions above. Prior to the commencement of this undertaking, a very critical geologic study should be conducted on the evidence available from the sampling and drilling results with emphasis on possible structural and mineralogical criteria. The following schedule and budget would apply.

STAGE I - PRIMARY GRID

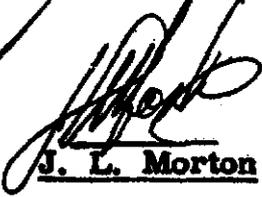
Item	Days	Cost (£)
Purchase of landrover and trailer		2,000
Field mobilisation, demobilisation	10	220
Line cutting - 4200 feet, 2 men, 1 foreman	10	170
Surveying 4200 feet (20 days)	included	300
36 D. D. holes x 200' = 7200'		
Exigencies 1000'		
Total D. D. 8200' @ £4. 5. 0	*205	36,900
Drilling water supply		300
Geologist (205 days)	included	3,075
Assistant (205 days)	included	1,435
Other work (bulldozing etc.) (5 days)	included	250
Transport		500
Travelling and accommodation		200
Accommodation and keep (field)		600
Stores		500
Freight		100
Assaying and laboratory testing		500
Outside technical services		500
Drafting, typing and printing	5	300
Report	5	300
Sub total	235	48,150
Overheads 10%		4,820
Contingencies 15%	36	7,230
<u>TOTAL - STAGE I</u>	271	60,200

* 2 shift basis.

STAGE II - SECONDARY GRID

<u>Item</u>	<u>Days</u>	<u>Cost (£)</u>
Line cutting, 4000 ft. 2 men and foreman	10	170
Surveying 4,000 ft. (18 days)	included	200
Percussion holes 85 x 100' = 8,500'	56	8,500
D. D. Holes 85 x 100' = 8,500' (50 days concurrent)	*162	38,250
Drilling water supply		200
Geologist (216 days)	included	3,240
Assistant (216 days)	included	1,512
Other work		100
Transport		500
Travelling and accommodation		200
Accommodation and keep (field)		678
Stores		500
Freight		75
Assaying		350
Laboratory testing		500
Outside technical services		250
Drafting, typing, printing	5	300
Report	5	300
Sub total	238	55,825
Overheads 10%		5,582
Contingencies 15%	36	8,373
<u>TOTAL - STAGE II</u>	<u>274</u>	<u>69,780</u>
<u>TOTAL - STAGE I</u>	<u>271</u>	<u>60,200</u>
<u>TOTAL - STAGE II</u>	<u>274</u>	<u>69,780</u>
<u>GRAND TOTAL</u>	<u>545</u>	<u>129,980</u>


A. A. C. Mason


J. L. Morton

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248007

Appendix No. 1

ABERFOYLE TIN DEVELOPMENT PARTNERSHIPBLUE TIER TONNAGE CALCULATIONS

	Block	Area	Depth (width)	Cu. ft.	Tons	Grade % Sn	T. G.
A	1 - 1	9,120	15.0	136,800	11,400	0.50	5,700
	1 - 2	7,288	5.0	36,440	3,037	1.17	3,553
	Totals	16,408	10.6	173,240	14,437	0.64	9,253
A	2 - 1	5,392	20.0	107,840	8,987	0.59	5,302
	2 - 2	8,592	15.0	128,880	10,740	0.51	5,477
	2 - 3	20,016	25.0	500,400	41,700	1.19	49,623
	2 - 4	12,288	10.0	122,880	10,240	2.13	21,811
	Totals	46,288	18.6	860,000	71,667	1.15	82,213
B	2 - 5	5,432	11.0	59,752	4,979	0.22	1,095
	2 - 6	11,760	35.0	411,600	34,300	0.17	5,831
	2 - 7	10,480	15.0	157,200	13,100	0.12	1,572
	2 - 8	5,848	10.0	58,480	4,873	0.22	1,072
	Totals	33,520	20.5	687,032	57,252	0.17	9,570
	Totals 2-1 to 2-8	79,808	19.4	1,547,032	128,919	0.71	91,783
A	3 - 1	4,032	12.0	48,384	4,032	0.47	1,895
	3 - 2	7,600	15.0	114,000	9,500	0.67	6,365
	Totals	11,632	14.0	162,384	13,532	0.61	8,260
B	3 - 3	11,840	30.0	355,200	29,600	0.24	7,104
	Totals 3-1 to 3-3	23,472	22.1	517,584	43,132	0.36	15,364
A	4 - 1	10,248	10.0	102,480	8,540	1.69	14,432
	4 - 2	16,248	10.0	162,480	13,540	0.14	1,896
B	4 - 3	10,608	12.0	127,296	10,608	0.13	1,379
	4 - 4	13,360	17.0	227,120	18,926	0.54	10,220
	Totals 4-2 to 4-4	40,216	12.9	516,896	43,074	0.31	13,495
	Totals 4-1 to 4-4	50,464	12.3	619,376	51,614	0.54	27,927
	Totals Group A	84,576	15.3	1,298,104	108,176	1.055	114,158
	Totals Group B	85,576	18.2	1,559,128	129,926	0.232	30,169
	GRAND TOTALS	170,152	16.8	2,857,232	238,102	0.606	144,327
	O'burden	84,168	66.0	5,555,088	462,920		
	Total Ore Zone	84,168	100.0	8,416,800	701,400		

APPENDIX No. 2

Note Sample data footages exclude 1' of Mullock at collar.

DIAMOND DRILL CORE RECORD

248008

003

Hole Number.....1.....

Date Commenced 9/3/64 Completed 13/3/64

Collar R.L.....921.8.....

Area of Operation Blue Tier

Geological Logging by A. McGain

Bearing of Hole Vertical

Location Surface Anchor Open Cut

Core Recovery 94%

Angle of Hole "

Co-ordinates of Collar 5067-5 N; 24775.5 E

Drilled by A.D.D.

Final Depth 51.0 Core Size BX

Ex. 62417 (D)

DRILL FOOTAGE		VEIN OR OTHER INTERSECTIONS				BEDDING	Core Recovered.	DESCRIPTION	SAMPLE DATA	Sample No.	ASSAY
From	To	Depth	Length	True Width	Angle To Core Axis	Angle To Core Axis					
1.0	51.0		51.0								
							Granite, partially silicified in parts.	0.0 - 1.0	1 - 1	Tr	
							Coarse grained. Composed of Quartz, felspar - often altered to chlorite, and minor biotite. Occasional fractures filled with yellow pug and chlorite. Highly decomposed and fractured between 18.0 and 24.0. Bright yellow clay mineral on weathered core between 18.0 and 35.0. Felspars in this section are more decomposed than in rest of core. Occasional coarse cassiterite crystals between 39.0 and 51.0.	1.0 - 3.0	1 - 2	0.22	
								3.0 - 6.0	1 - 3	Tr.	
								6.0 - 9.0	1 - 4	0.12	
								9.0 - 12.0	1 - 5	0.11	
								12.0 - 15.0	1 - 6	Tr.	
								15.0 - 18.0	1 - 7	Tr.	
								18.0 - 18.8	1 - 8	Tr.	
								21.0 - 23.2	1 - 9	0.11	
								18.8 - 21.0	LC		
								23.2 - 24.0	LC		
								24.0 - 27.0	1 - 10	0.10	
								27.0 - 30.0	1 - 11	0.14	
								30.0 - 33.0	1 - 12	Tr.	
								33.0 - 36.0	1 - 13	0.37	
								36.0 - 39.0	1 - 14	0.67	
								39.0 - 42.0	1 - 15	1.03	
								42.0 - 45.0	1 - 16	0.83	
								45.0 - 48.0	1 - 17	0.12	
							48.0 - 51.0	1 - 18	0.22		

248009

008

DIAMOND DRILL CORE RECORD

Hole Number..... 2
 Area of Operation..... Blue Tier
 Location..... Surface Anchor Open Cut
 Co-ordinates of Collar..... 5205.6 N 24825.2 E

Date Commenced..... 16/3/64 Completed..... 20/3/64
 Geological Logging by..... A. McGain
 Core Recovery..... 100%
 Drilled by..... A.D.D.

Collar R.L..... 945.8
 Bearing of Hole.....
 Angle of Hole..... Vertical
 Final Depth..... 50.0 Core Size..... BX

Ex. 42417 (D)

DRILL FOOTAGE		VEIN OR OTHER INTERSECTIONS				BEDDING		Core Recovered.	DESCRIPTION	SAMPLE DATA		ASSAY
From	To	Depth	Length	True Width	Angle To Core Axis	Angle To Core Axis	Sample No.					
0	26.7		26.7				26.7	Granite. Moderately altered. Felspars yellowish colour and changed to chlorite.	00 - 3.0	2 - 1	Nil	
								Biotite relatively fresh. Occasional fractures with yellow clay mineral.	3.0 - 6.0	2 - 2	Tr.	
									6.0 - 9.0	2 - 3	Tr.	
									9.0 - 12.0	2 - 4	Tr.	
									12.0 - 15.0	2 - 5	Nil	
									15.0 - 18.0	2 - 6	Tr.	
									18.0 - 21.0	2 - 7	Nil	
26.7	28.0		1.3				1.3	Fine grained greisen. Occasional biotite.	21.0 - 24.0	2 - 8	Nil	
28.0	38.5		10.5				10.5	Coarse greisen. Highly silicified. Fresh biotite very common. Occasional coarse pink feldspars.	24.0 - 27.0	2 - 9	Tr.	
									27.0 - 30.0	2 - 10	0.21	
									30.0 - 33.0	2 - 11	0.19	
38.5	40.5		2.0				2.0	Granite, moderately altered.	33.0 - 36.0	2 - 12	0.29	
40.5	42.5		2.0				2.0	Greison highly silicified. Minor biotite.	36.0 - 39.0	2 - 13	0.26	
									39.0 - 42.0	2 - 14	Nil.	
42.5	50.0		7.5				7.5	Granite. Moderately altered. As above.	42.0 - 45.0	2 - 15	Nil.	
									45.0 - 48.0	2 - 16	Nil.	
									48.0 - 50.0	2 - 17	Tr.	

Note Sample data footages exclude 3' of mullock at collar.

248010

009

DIAMOND DRILL CORE RECORD

Hole Number.....3.....
 Area of Operation.....Blue Tier.....
 Location.....Anchor Open Cut.....
 Co-ordinates of Collar 5295.5N; 24886.2E

Date Commenced 23/3/64.....Completed.....25/3/64
 Geological Logging by.....A. McGain.....
 Core Recovery.....100%.....
 Drilled by.....A.D.D.....

Collar R.L.....965.5.....
 Bearing of Hole.....
 Angle of Hole.....Vertical.....
 Final Depth.....53.0.....Core Size.....BX

DRILL FOOTAGE		VEIN OR OTHER INTERSECTIONS				BEDDING	DESCRIPTION	SAMPLE DATA		ASSAY
From	To	Depth	Length	True Width	Angle To Core Axis	Angle To Core Axis		Sample No.		
3'	9.0					9.0	Core Recovered	0.0 - 3.0	3 - 1	0.58
							Greisen, fresh biotite and chlorite common. Minor felspar. Occasional trace chalcopyvite as patches. Occasional coarse cassiterite 4.2 to 9.0	3.0 - 6.0	3 - 2	0.62
								6.0 - 9.0	3 - 3	0.41
								9.0 - 12.0	3 - 4	0.26
9.0	36.7					27.7	Yellowish granite. Moderately altered. Chlorite very common. Greisen 14.3 to 15.4 Occasional cassiterite at 13.5 feet. Biotite very minor. Occasional large fractures with slickensides and yellow clay infilling.	12.0 - 15.0	3 - 5	
								15.0 - 18.0	3 - 6	
								18.0 - 21.0	3 - 7	
								21.0 - 24.0	3 - 8	
								24.0 - 27.0	3 - 9	
								27.0 - 30.0	3 - 10	0.27
								30.0 - 33.0	3 - 11	
36.7	53.0					13.3	Greisen Yellowish. Minor chlorite and altered felspar. Coarse cassiterite very occasional.	33.0 - 36.0	3 - 12	0.18
								36.0 - 39.0	3 - 13	0.18
								39.0 - 42.0	3 - 14	0.17
								42.0 - 45.0	3 - 15	0.16
								45.0 - 50.0	3 - 16	
		N.B. Hole No. 3 Deepened to 105 ft. Core had not been logged.					Assayed in 3' sections - No tin values.			

248011

010

DIAMOND DRILL CORE RECORD

Hole Number..... 4
 Area of Operation..... Blue Tier.
 Location..... Surface, Anchor Open Cut
 Co-ordinates of Collar..... 5384.2N: 24864.8E

Date Commenced 26/3/64..... Completed 2/4/64
 Geological Logging by.....
 Core Recovery.....
 Drilled by.....

Collar R.L..... 981.7
 Bearing of Hole.....
 Angle of Hole.....
 Final Depth..... Core Size.....

DRILL FOOTAGE		VEIN OR OTHER INTERSECTIONS				BEDDING		Core Recov- ered.	DESCRIPTION	SAMPLE DATA	Sample No.	ASSAY
From	To	Depth	Length	True Width	Angle To Core Axis	Angle To Core Axis						
0	14.5		14.5				14.5	Greisen. Highly silicified.	0.0 - 3.0	4 - 1	Tr.	
								Biotite very common. Very minor	3.0 - 6.0	4 - 2	Tr.	
								felspar. Possible very occasional	6.0 - 9.0	4 - 3	0.11	
								cassiterite. Very occasional patchy	9.0 - 12.0	4 - 4	Tr.	
								chalcopyrite	12.0 - 15.0	4 - 5	0.14	
14.5	38.0		13.5				13.5	Greisenised granite. Very light yellowish	15.0 - 18.0	4 - 6	0.35	
								colour. Felspar partially changed to chlorite.	18.0 - 21.0	4 - 7	0.50	
								biotite common.	21.0 - 24.0	4 - 8	0.44	
									24.0 - 27.0	4 - 9	0.21	
									27.0 - 30.0	4 - 10	0.18	
									30.0 - 33.0	4 - 11	0.18	
									33.0 - 36.0	4 - 12	0.13	
									36.0 - 39.0	4 - 13	0.11	
									39.0 - 42.0	4 - 14	0.23	
									42.0 - 45.0	4 - 15	Tr.	
38.0	50.0		12.0				12.0	Greisenised granite. Felspar	45.0 - 48.0	4 - 16	Tr.	
								partially changed to chlorite. Biotite	48.0 - 50.0	4 - 17	0.28	
								common. Possible occasional cassiterite.				

Note Sample data footages exclude 1' of mullock at collar.

DIAMOND DRILL CORE RECORD

248012

1110

Hole Number..... 5
 Area of Operation..... Blue Tier.
 Location.....
 Co-ordinates of Collar..... 5480.6 N; 24868.2 E

Date Commenced..... 5/4/64..... Completed..... 8/4/64.
 Geological Logging by.....
 Core Recovery.....
 Drilled by.....

Collar R.L..... 1007.0
 Bearing of Hole.....
 Angle of Hole.....
 Final Depth..... Core Size.....

Ex. 62417 (D)

DRILL FOOTAGE		VEIN OR OTHER INTERSECTIONS				BEDDING	DESCRIPTION	SAMPLE DATA	Sample No.	ASSAY
From	To	Depth	Length	True Width	Angle To Core Axis	Angle To Core Axis Core Recovered.				
1.4	23.0		21.6			21.6	Greisen. Biotite common. Felspar also fairly common. Occasional coarse cassiterite crystals.	0 - 3 3 - 6 6 - 9 9 - 12 12 - 15 15 - 18 18 - 21	5 - 1 5 - 2 5 - 3 5 - 4 5 - 5 5 - 6 5 - 7	0.10 Nil Nil Nil Nil Nil Tr.
23.0	28.3		5.3			5.3	Greisenised granite. Felspar very common and often altered to chlorite. Light yellowish colour.	21 - 24 24 - 27 27 - 30 30 - 33	5 - 8 5 - 9 5 - 10 5 - 11	Tr. Tr. Nil Tr.
28.3	33.0		4.7			4.7	Greisen. Occasional trace chalcopyrite and pink felspars. Minor felspar.	33 - 36 36 - 39 39 - 42	5 - 12 5 - 13 5 - 14	Tr. Tr. Tr.
33.0	45		12.0			12.0	Greisenised granite. Minor biotite Felspar common, often changed to chlorite.	42 - 45 45 - 48 48 - 50	5 - 15 5 - 16 5 - 17	0.10 Tr. Tr.
45.0	51.7		6.7			6.7	Greisen, highly silicified. Biotite common.			

248013

012

DIAMOND DRILL CORE RECORD

Hole Number 6
 Area BLUE TIER, ANCHOR OPEN-CUT
 Location 5299N, 25000E
 Geological Logging by P.H. FRANK

Date Commenced 21.1.65
 Date Completed 29.1.65
 Core Recovery 65% Ore Zone 98.5%
 Drilled by Associated Diamond Drillers

Collar R.L. 1083.7
 Bearing of Hole -
 Dip -90°
 Depth 200' Core Size AXT

EX. 17039 (D)

DRILL FOOTAGE		VEIN OR OTHER INTERSECTIONS				DESCRIPTION	REMARKS	SLIPPER		ASSAY % Tm
From	To	Depth	Length	True Width	Angle To Core Axis			FROM	TO	
0	68 1/4					Recovered no core. Probably Kaolinised Granite.				
68 1/4	87					Coarse grained granite. Lost 5-inches of core between 80' - 85'.	68 1/4	70	NIL	
							70	75	NIL	
							75	80	NIL	
							80	85	NIL	
87	91 1/4					Fine grained granite with Siderite, Chlorite & Molybdenite.	85	90	NIL	
91 1/4	94 1/4					Greisen	90	95	Tr.	
94 1/4	95 1/2					Fine grained granite.				
95 1/2	102 1/2					Greisen	95	100	Tr.	
102 1/2	103 1/2					Fine grained granite	100	105	0.14	
103 1/2	122					Greisen. Lost 14-inches of core between 120'-125'	105	110	0.18	
							110	115	0.14	
							115	120	0.17	
122	124 1/2					Greisen, badly broken core, return water lost	120	125	0.21	
124 1/2	130					Fine grained granite	125	130	0.22	
130	150					Greisen. Lost 2-inches of core between 135'-140'	130	135	0.11	
							135	140	1.15	
							140	145	0.53	
							145	150	0.33	

HOLE No. 6

FOOTAGE: From 150 To 200'

EX. 3092 (K)

DRILL FOOTAGE		VEIN OR OTHER INTERSECTIONS				BEDDING		DESCRIPTION	REMARKS	SLUDGE		ASSAY % TIN
From	To	Depth	Length	True Width	Angle To Core Axis	Angle To Core Axis	FROM			TO		
150	200						Greisenised granite. Lost 3-inches of core between 150'-155'.			150 155	0.18	
										155 160	Tr.	
										160 165	Tr.	
										165 170	Tr.	
										170 175	0.11	
										175 180	0.17	
										180 185	Tr.	
										185 190	Tr.	
										190 195	Tr.	
										195 200	0.22	
<u>HOLE COMPLETED AT 200 FEET.</u>												

248014

013

A. I. D. P.
~~XXXXXXXXXXXX~~

248015

DIAMOND DRILL CORE RECORD

Hole Number 7
 Area BLUE TIER, ANCHOR OPEN-CUT
 Location 5199N, 25000E.
 Geological Logging by P.H. FRANK

Date Commenced 1.2.65.
 Date Completed 5.2.65.
 Core Recovery FULL HOLE 70% ORE ZONE 99%
 Drilled by ASSOCIATED DIAMOND DRILLERS

Collar R.L. 1063.0
 Bearing of Hole -
 Dip -90°
 Depth 201½' Core Size AXT

01A

EX. 17039 (D)

DRILL FOOTAGE		VEIN OR OTHER INTERSECTIONS				DESCRIPTION	REMARKS	SLUDGE		ASSAY
From	To	Depth	Length	True Width	Angle To Core Axis			FROM	TO	
0	59					Recovered no core. Probably Kaolinised Granite. Coarse grained granite.				
59	77½									
								60	65	NIL.
								65	70	NIL.
								70	75	TRACE
77½	106					Greisen, with a few cassiterite crystals. Lost 3-inches of core between 80'-85'				
								75	80	NIL.
								80	85	0.34
								85	90	0.61
								90	95	0.55
106	107					Greisenised granite with a few visible cassiterite crystals. Greisen, with a few visible cassiterite crystals, rich in some sections between 113'-118'. Lost 5-inches of core between 115'-120'. Fine grained granite.				
107	126½							95	100	TRACE
								100	105	TRACE
								105	110	0.11
								110	115	1.27
126½	152½						115	120	3.98	
							120	125	0.44	
							125	130	0.15	
							130	135	NIL.	
							135	140	NIL.	
							140	145	TRACE	
							145	150	TRACE	

HOLE No. [REDACTED]

FOOTAGE: From 150' To 201 1/2'

EX. 3032 (K)

DRILL FOOTAGE		VEIN OR OTHER INTERSECTIONS				BEDDING		DESCRIPTION	REMARKS	SLUDGE		ASSAY
From	To	Depth	Length	True Width	Angle To Core Axis	Angle To Core Axis	FROM			TO		
152 1/2	152 3/4		3"	1 1/4"	25°		Greisen vein, no visible cassiterite		150	155	NIL.	
152 3/4	164 1/2						Coarse grained granite.		155	160	NIL.	
164 1/2	165 3/4						Fine grained granite.		160	165	NIL.	
165 3/4	177 1/4						Coarse grained granite.		165	170	TRACE	
	177 1/4						Pegmatite Dyke		170	175	NIL.	
179	190 1/2						Coarse grained granite.		175	180	NIL.	
									180	185	TRACE	
									185	190	NIL.	
190 1/2	190'8"		2"	1 1/2"	50°		Greisen vein, no visible cassiterite					
190'8"	193 3/4						Coarse grained granite.		190	195	NIL.	
193 3/4	201 1/2						Pegmatite dyke, much Tourmaline and a few inclusions of granite.		195	200	NIL.	
									200	201 1/2	Not Assay	

HOLE COMPLETED AT 201 1/2 FEET.

015

A. I. D. P.
~~XXXXXXXXXX~~

DIAMOND DRILL CORE RECORD

248017

016

Hole Number 8
 Area BLUE TIER, ANCHOR OPEN CUT
 Location 5085N, 24999.5E
 Geological Logging by P.H. FRANK

Date Commenced 10.2.65.
 Date Completed 19.2.65.
 Core Recovery 78.0%
 Drilled by ASSOCIATED DIAMOND DRILLERS

Collar R.L. 1030.85
 Bearing of Hole -
 Dip -90°
 Depth 200' Core Size AXT

EX. 17039 (D)

DRILL FOOTAGE		VEIN OR OTHER INTERSECTIONS				DESCRIPTION	REMARKS	SLUDGE		ASSAY
From	To	Depth	Length	True Width	Angle To Core Axis			FROM	TO	
0	36½					Recovered no core. Probably Kaolinised granite				
36½	57					Coarse grained granite, partly decomposed and badly broken. Lost 9" of core between 36½'-40', 18" between 40'-45' and 24" between 50'-55'.	36½	40	NIL.	
							40	45	NIL.	
							45	50	TRACE	
							50	55	NIL.	
57	69¾					Coarse grained granite. Lost 18" of core between 55'-60', 4" between 60'-65' and 4" between 65'-70'.	55	60	NIL.	
							60	65	NIL.	
							65	70	NIL.	
69¾	91½					Coarse grained granite with four partly greisenised veins totalling 12" at random direction to core.	70	75	TRACE	
							75	80	TRACE	
							80	85	NIL.	
							85	90	NIL.	
91½	101½					Coarse grained granite	90	95	NIL.	
							95	100	NIL.	
101½	101¾		3		60°	Carbonated vein.	100	105	NIL.	

DRILL FOOTAGE		VEIN OR OTHER INTERSECTIONS				BEDDING		DESCRIPTION	REMARKS	SLUDGE		ASSAY
From	To	Depth	Length	True Width	Angle To Core Axis	Angle To Core Axis	FROM			TO		
101 3/4	125						Coarse grained granite			105	110	NIL.
										110	115	NIL.
										115	120	NIL.
										120	125	NIL.
125	157 3/4						Fine grained granite.			125	130	TRACE
										130	135	NIL.
										135	140	NIL.
										140	145	NIL.
										145	150	TRACE
										150	155	NIL.
157 3/4	160 1/2						Greisenised granite. No visable cassiterite.			155	160	TRACE
160 1/2	172 3/4						Coarse grained granite.			160	165	TRACE
										165	170	TRACE
172 3/4	178 1/2						Slightly altered coarse grained granite with a little Pinite.			160	175	TRACE
										175	180	NIL.
178 1/2	182						Pegmatite Dyke with some Tourmaline.					
182	187 1/2						Slightly altered coarse grained granite with a little pinite. Lost 12-inches of core between 180'-185'.			180	185	TRACE
										185	190	TRACE
187 1/2	188 3/4				55°		Pegmatite dyke with a little Tourmaline.					
188 3/4	193 1/2						Slightly altered fine grained granite with a little Pinite.			190	195	NIL.
193 1/2	200						Medium grained granite showing very slight alteration.			195	200	TRACE
<u>HOLE COMPLETED AT 200 FEET.</u>												

017

A. I. D. P.
XXXXXXXXXX

DIAMOND DRILL CORE RECORD

248019

018

Hole Number 9
 Area
 Location
 Geological Logging by

Date Commenced
 Date Completed
 Core Recovery
 Drilled by

Collar R.L.
 Bearing of Hole
 Dip
 Depth Core Size

EX. 17039 (U)

DRILL FOOTAGE		VEIN OR OTHER INTERSECTIONS				DESCRIPTION	REMARKS	SLUDGE		ASSAY
From	To	Depth	Length	True Width	Angle To Core Axis			FROM	TO	
140½	149					Greisen, with a little visible cassiterite				
							140	145	0.23	
							145	150	0.33	
149	159					Greisenised granite with a little visible cassiterite. Lost 24-inches of core between 150'-155'.				
							150	155	0.23	
							155	160	0.24	
159	170					Greisen with very little visible cassiterite, a rich patch at 169 feet.				
							160	165	0.17	
							165	170	0.23	
170	176					Greisenised granite, no visible cassiterite				
							170	175	Tr.	
176	187					Greisen with visible cassiterite with rich patches between 184½' - 186'.				
							175	180	0.23	
							180	185	1.34	
187	188					Granite slightly greisenised, no visible cassiterite.				
							185	190	2.03	
188	191½					Greisen with no visible cassiterite.				
							190	195	Tr.	
191½	198½					Slightly altered granite, no visible cassiterite. Lost 6-inches of core between 195-198½ feet.				
							195	198½	Nil.	
<p><u>HOLE COMPLETED AT 198½ FEET.</u></p>										

A. I. D. P.
XXXXXXXXXX

248020

019

DIAMOND DRILL CORE RECORD

Hole Number 9
 Area BLUE TIER, ANCHOR OPEN-CUT
 Location 5301N, 25100E.
 Geological Logging by P.H. FRANK

Date Commenced 22. 2. 65.
 Date Completed 11. 3. 65.
 Core Recovery 63%
 Drilled by Associated Diamond Drillers

Collar R.L. 1084.0
 Bearing of Hole -
 Dip -90°
 Depth 198½' Core Size AXT

EX. 17039 (B)

DRILL FOOTAGE		VEIN OR OTHER INTERSECTIONS				DESCRIPTION	REMARKS	EDGE		ASSAY
From	To	Depth	Length	True Width	Angle To Core Axis			FROM	TO	
0	70					No core, probably Kaolinised granite.				
()	81					Decomposed granite, coarse grained. Lost 9-inches core between 70'-75'.				
81	85½					Coarse grained granite with a 3" pegmatike dyke. No visible cassiterite. Lost 10-inches of core between 80'-85'.				
85½	102					Greisen with visible cassiterite between 89' and 95' plus a trace of sulphides. Lost 7" core between 90'-95'.				
102	104½					Granite				
104½	106½					Greisenised granite.				
106½	109					Granite.				
109	119					Greisen, no visible cassiterite				
119	140½					Greisenised granite with visible cassiterite between 122½'-123½'. Lost 5-inches core between 125'-130'.				

A.T.D.P.
XXXXXXXXXX

Mr. A. Mason

DIAMOND DRILL CORE RECORD

248021

020

Hole Number 10
 Area Blue Tier, Anchor Open Cut
 Location 5195.08N, 25101.49E
 Geological Logging by P.H. FRANK

Date Commenced 12.3.65.
 Date Completed 19.3.65.
 Core Recovery 70%
 Drilled by Associated Diamond Drillers

Collar R.L. 1052.27
 Bearing of Hole -
 Dip -90°
 Depth 201' Core Size AXI

EX. 17039 (b)

DRILL FOOTAGE		VEIN OR OTHER INTERSECTIONS				DESCRIPTION	REMARKS	XXXXX FROM TO		ASSAY
From	To	Depth	Length	True Width	Angle To Core Axis					
0	60					No core, probably kaolinised granite.				
60	62½					Coarse grained granite		60	65	Trace
62½	63¼					Greisen vein, no visible cassiterite				
63¼	71					Coarse grained granite		65	70	Nil.
71	75					Slightly altered coarse grained granite with a little pinite		70	75	Nil.
75	85					Slightly altered coarse grained granite with a little pinite, core badly broken.		75	80	Nil.
85	103					Slightly altered coarse grained granite with a little pinite.		80	85	Nil.
								85	90	Nil.
								90	95	Nil.
								95	100	Nil.
103	103½					Greisen vein, no visible cassiterite.				
103½	106¼					Fine grained granite.		100	105	Nil.
106¼	107					Greisen vein, no visible cassiterite.				
107	108					Fine grained granite.				
108	108¾					Greisen vein, rich cassiterite		105	110	2.05
108¾	109¾					Greisenised granite, no visible cassiterite.				
109¾	110					Greisen, good cassiterite.				
110	112					Greisenised granite, no visible cassiterite.				
112	113½					Greisen vein with rich assiterite		110	115	2.21

DIAMOND DRILL CORE RECORD

248022

021

Hole Number 10
 Area
 Location
 Geological Logging by

Date Commenced
 Date Completed
 Core Recovery
 Drilled by

Collar R.L.
 Bearing of Hole
 Dip
 Depth Core Size

EX. 17039 (U)

DRILL FOOTAGE		VEIN OR OTHER INTERSECTIONS				DESCRIPTION	REMARKS	SLUDGE		ASSAY
From	To	Depth	Length	True Width	Angle To Core Axis			FROM	TO	
113½	125					Greisenised granite, no visible cassiterite.	115	120	Trace	
125	154					Coarse grained granite.	120	125	Trace	
							125	130	Nil.	
							130	135	Nil.	
							135	140	Nil.	
							140	145	Nil.	
							145	150	Nil.	
154	154½					Pegmatite Dyke.	150	155	Trace	
154½	155½					Greisen vein, no visible cassiterite	155	160	0.19	
155½	167					Slightly greisenised granite, no visible cassiterite.	160	165	Trace	
167	172					Fine grained granite.	165	170	Trace	
172	175					Slightly altered granite.	170	175	Nil.	
175	177					Greisen with a little sulphide mineral, no visible cassiterite.	175	180	0.22	
177	180½					Slightly altered granite.	180	185	Trace.	
180½	191					Altered granite, with some pinite.	185	190	Nil.	
191	192					Pegmatite dyke.	190	195	Nil.	
192	201					Altered granite with some pinite.	195	200	Nil.	
							200	201	Not Assayed	
						<u>HOLE COMPLETED AT 201 FEET.</u>				

A.I.D.P.

XXXXXXXXXX.

DIAMOND DRILL CORE RECORD

248023

022

Hole Number No. 11

Date Commenced 23.3.65.

Collar R.L. 1067.93

Area Blue Tier, Anchor Open Cut

Date Completed 30.3.65.

Bearing of Hole -

Location 5194.96N, 25313.66E

Core Recovery 80%

Dip -90°

Geological Logging by P.H. FRANK

Drilled by Associated Diamond Drillers Depth 205' Core Size AXI

EX. 17039 (D)

DRILL FOOTAGE		VEIN OR OTHER INTERSECTIONS				DESCRIPTION	REMARKS	XXXXXX		ASSAY
From	To	Depth	Length	True Width	Angle To Core Axis			FROM	TO	
0	38					No core probably kaolinised granite.				
38	61					Decomposed granite, badly broken.	Lost 23 ft.	38	70	Not Assayed.
61	72 $\frac{3}{4}$					Coarse grained granite.	of core from	70	75	Trace.
72 $\frac{3}{4}$	74 $\frac{1}{2}$				60°	Greisen vein, no visible cassiterite.	38'-75'.	75	80	Nil.
74 $\frac{1}{2}$	94 $\frac{1}{2}$					Coarse grained granite. Lost 6" core between 75' and 80' and 4" core between 80'-85'.		80	85	Nil.
94 $\frac{1}{2}$	95 $\frac{1}{4}$				60°	Greisen vein, no visible cassiterite.		85	90	Nil.
95 $\frac{1}{4}$	100					Coarse grained granite. Lost 17" core between 95'-100'.		90	95	Nil.
100	105					Coarse grained granite with four partley greisenised veins, total length 5". No visible cassiterite. Core badly Broken.		95	100	Trace.
105	128					Coarse grained granite. Lost 6" core between 105'-110'.		100	105	Nil.
								105	110	Nil.
								110	115	Nil.
								115	120	Nil.
								120	125	Nil.
128	129 $\frac{1}{4}$				50°	Dyke rock with a little sulphide mineral, no visible cassiterite.		125	130	Nil.
129 $\frac{1}{4}$	135					Coarse grained granite		130	135	Trace.
135	145 $\frac{1}{2}$					Slightly altered coarse grained granite with a little pinite.		135	140	Nil.
								140	145	Nil.

DIAMOND DRILL CORE RECORD

248024

023

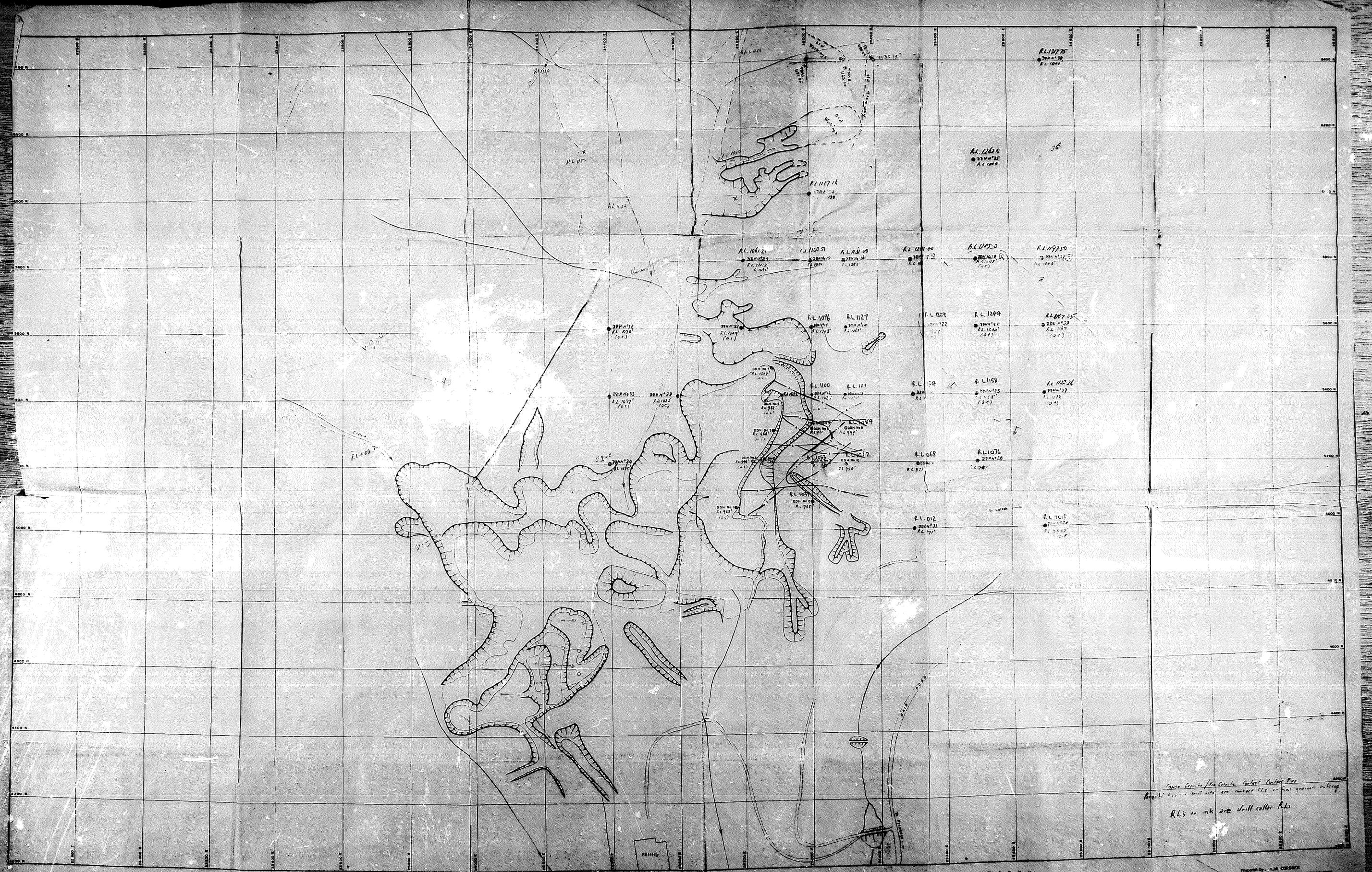
Hole Number No. 11
 Area
 Location
 Geological Logging by

Date Commenced
 Date Completed
 Core Recovery
 Drilled by

Collar R.L.
 Bearing of Hole
 Dip
 Depth Core Size

EX. 17099 (D)

DRILL FOOTAGE		VEIN OR OTHER INTERSECTIONS				DESCRIPTION	REMARKS	INDEX		ASSAY
From	To	Depth	Length	True Width	Angle To Core Axis			FROM	TO	
145½	152					Greisenised granite with a little sulphide mineral		145	150	Nil.
152	155					Greisen with visible cassiterite between 152'-154'		150	155	0.38
155	162½					Slightly altered fine grained granite.		155	160	Nil.
162½	170½				63°	Greisen with visible cassiterite at 163'. Rest of core shows a trace of cassiterite & a little sulphide mineral.		160	165	0.21
								165	170	0.57
170½	173½					Greisenised granite, no visible cassiterite.				
173½	180					Slightly altered fine grained granite, no visible cassiterite.		170	175	Trace
								175	180	Trace
180	181					Greisenised granite, no visible cassiterite.				
181	185					Fine grained granite.		180	185	Trace
185	188					Greisenised granite with a trace of cassiterite.		185	190	Trace
188	190					Fine grained granite.				
190	194					Greisen with a trace of cassiterite plus a little chalcopryite and bornite.		190	195	0.15
194	195					Slightly altered granite with a little sulphide mineral.				
195	196					Greisen with a trace of cassiterite plus a little sulphide mineral.				
196	199					Slightly altered granite with a little sulphide mineral.		195	200	0.16
199	200½					Greisenised granite with a little bornite.				
200½	205					Slightly altered granite with a little bornite.		200	205	Nil.
<u>HOLE COMPLETED AT 205 FEET.</u>										



Some contours/plan contours correct contour lines
 RLs in ink are drill collar RLs

Amended 12/1967

ABERFOYLE TIN DEVELOPMENT PARTNERSHIP
BLUE TIER TIN PROSPECT
 GEOLOGICAL PLAN ANCHOR OPEN CUT

LEGEND

	Contour		Closed contour
	Plan contour		Drill Hole
	Road		Barrier
	Fence		Other

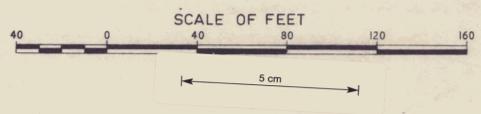
Grid as defined by 6722

Prepared by: J.M. CORDER
 of R.L.M.S. AND ASSOCIATES
 Drawing for: ABERFOYLE TIN PROSPECT
 Date: 1967
 D.M.S. No. A-197





1 Scale

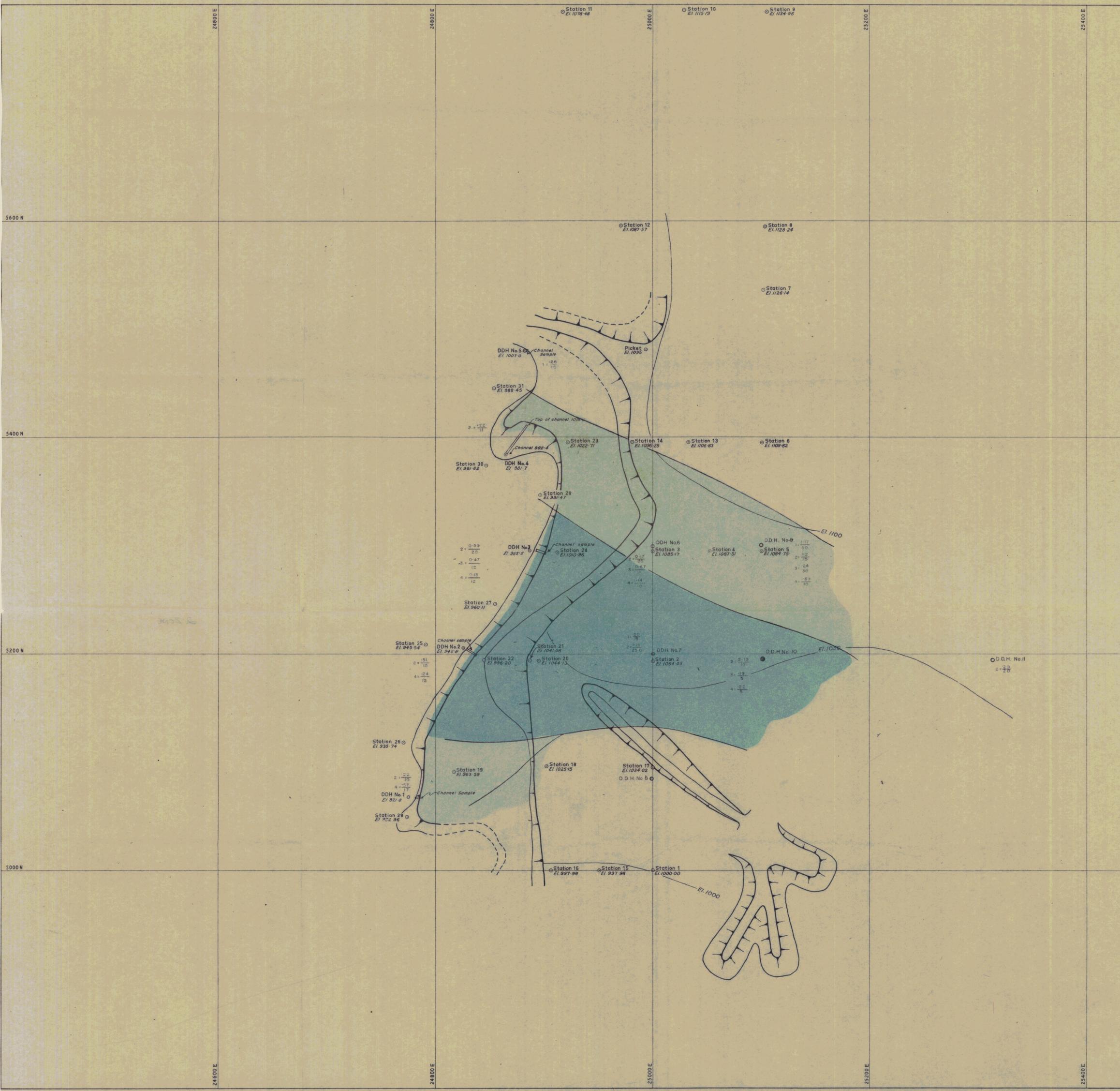


OUTLINE OF ZONE No. I.

ABERFOYLE TIN DEVELOPMENT PARTNERSHIP
 BLUE TIER TIN PROSPECT
 PLAN OF PORTION OF ANCHOR OPEN CUT

248027
 4869

1PE-20 1/250



ABERFOYLE TIN DEVELOPMENT PARTNERSHIP
 BLUE TIER TIN PROSPECT
 PLAN OF PORTION OF ANCHOR OPEN CUT

4099

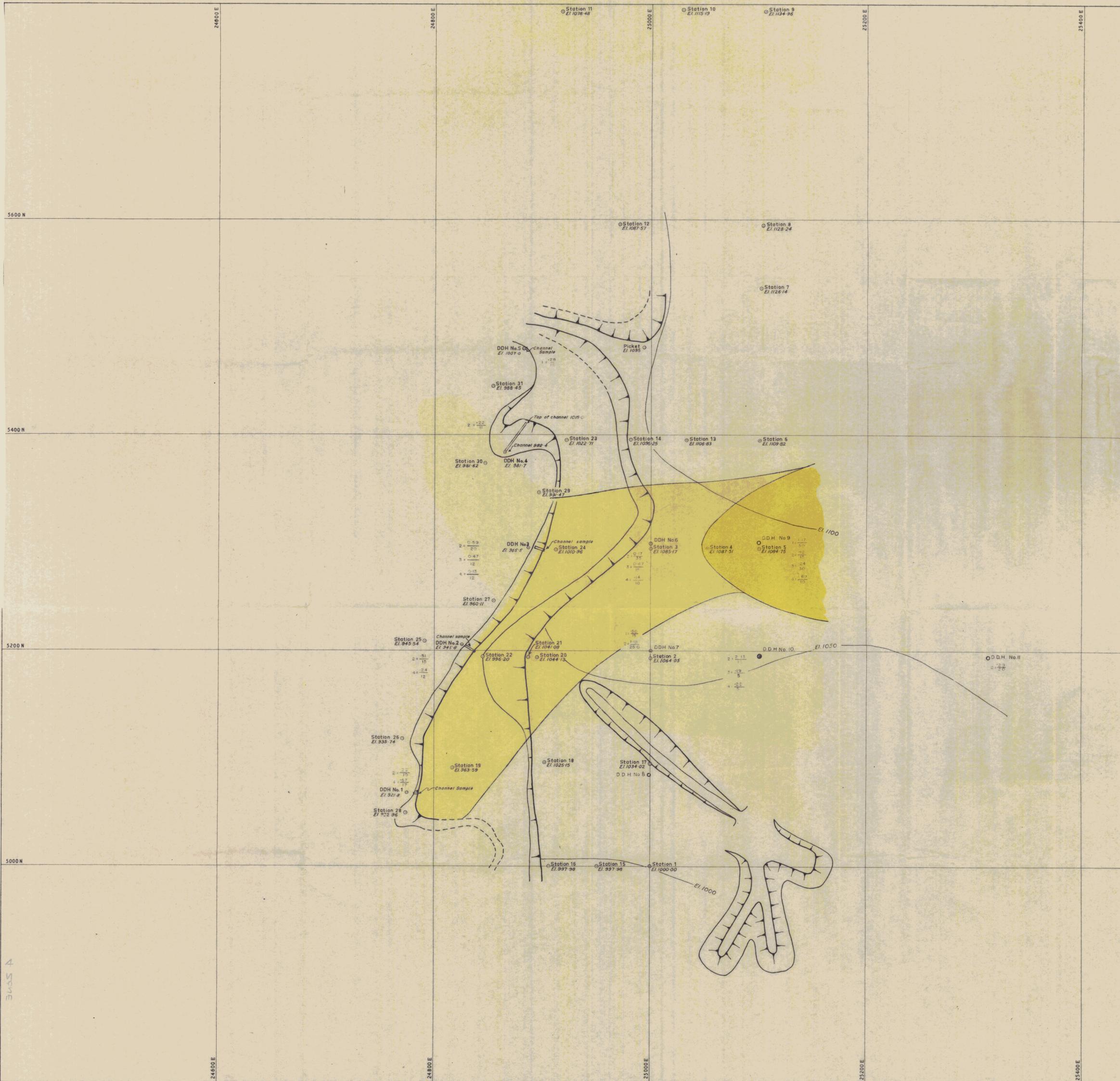
248028
IPE-20 8/22/20



 OUTLINE OF ZONE No. 3.

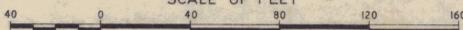
ABERFOYLE TIN DEVELOPMENT PARTNERSHIP
 BLUE TIER TIN PROSPECT
 PLAN OF PORTION OF ANCHOR OPEN CUT

4100
 248029
 RE-2J 8/20



A
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E

SCALE OF FEET



5 cm

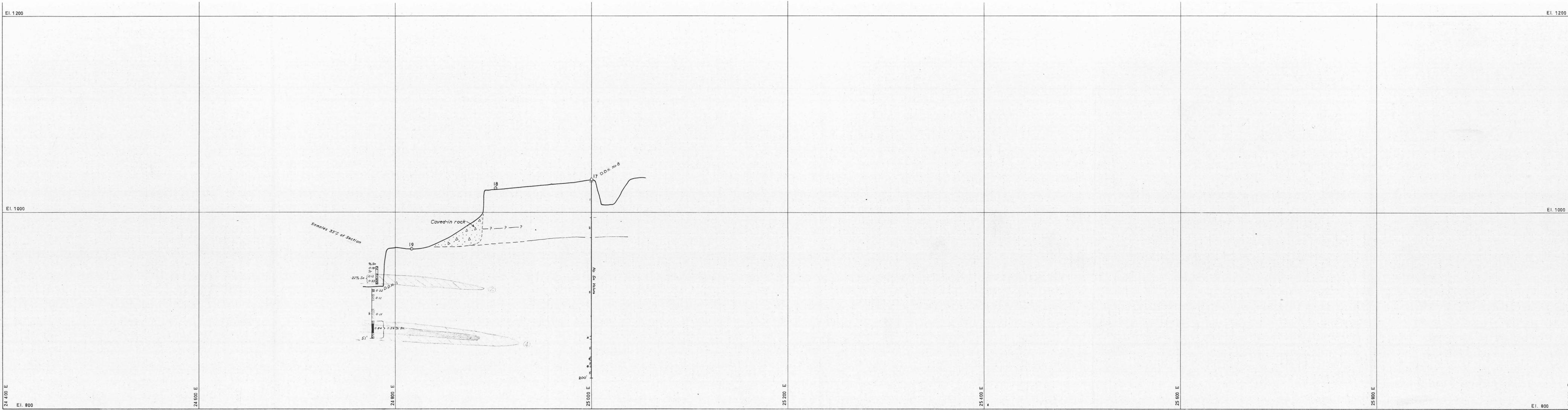
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ABERFOYLE TIN DEVELOPMENT PARTNERSHIP
 BLUE TIER TIN PROSPECT
 PLAN OF PORTION OF ANCHOR OPEN CUT

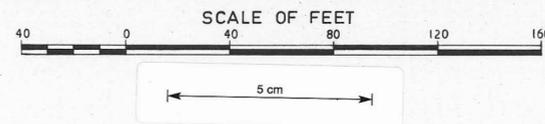
248030

4101

1PE-20 8/26/00

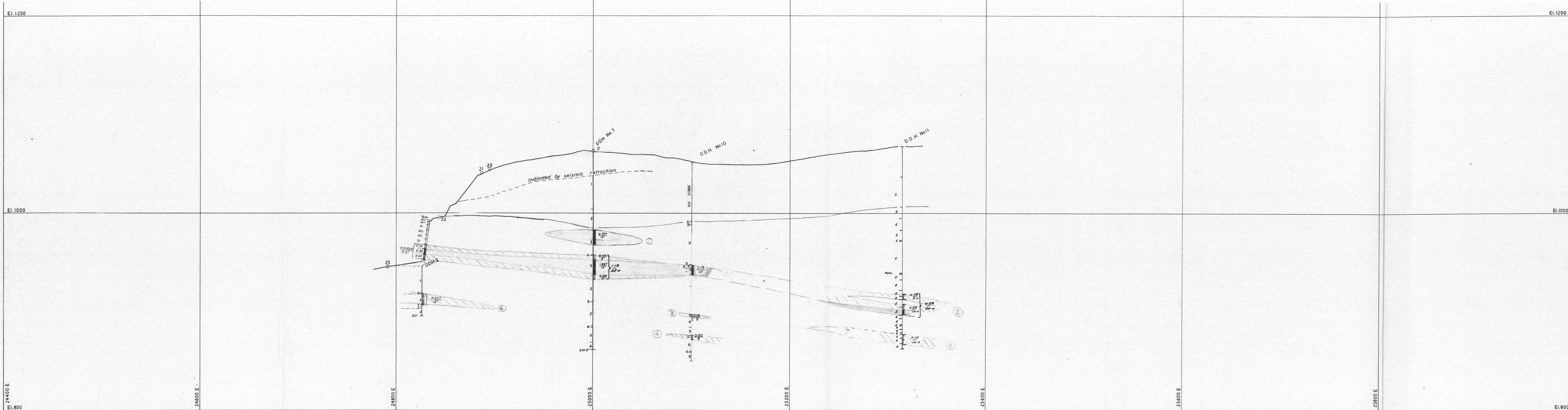


ABERFOYLE TIN DEVELOPMENT PARTNERSHIP
 BLUE TIER TIN PROSPECT
 CROSS SECTION AT 5100 N-ANCHOR OPEN CUT
 LOOKING NORTH



LEGEND		ASSAY LEGEND
5	Granite	NIL
6	Pegmatite	01 to .09%Sn
1	Kaolinised granite	.10 to .19%Sn
2	Decomposed granite	.20 to .49%Sn
3	Greisen	More than .50%Sn
4	Greisenised granite	

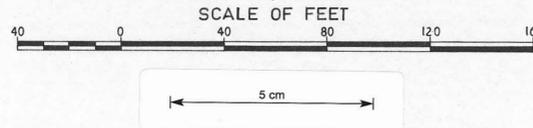
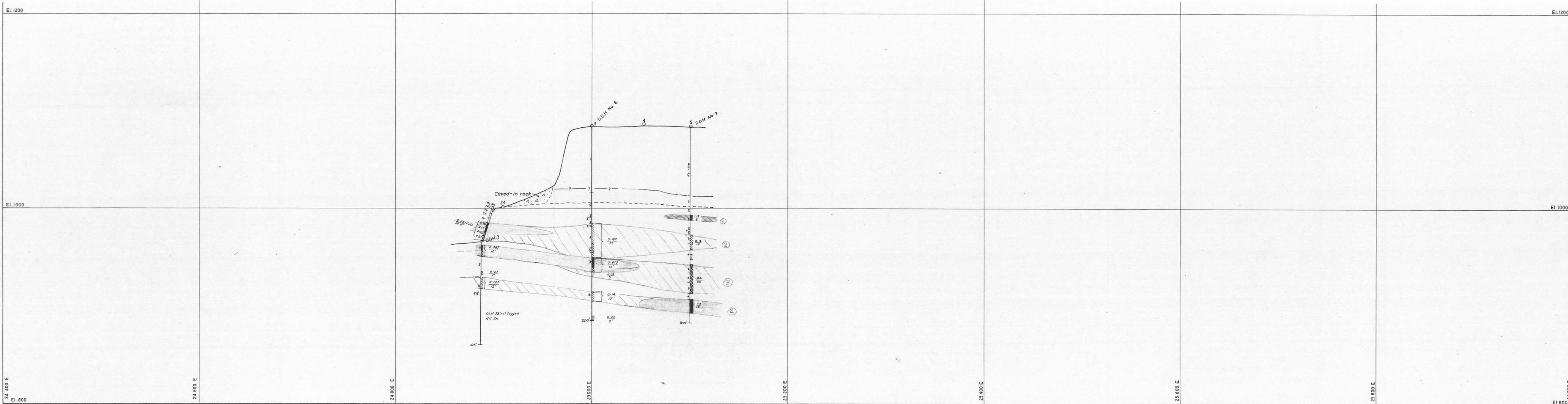
248031
 4102
 Prepared by: J.L. MORTON
 of R. HARE AND ASSOCIATES
 Drafting by: GEODRAFTING SERVICES
 Drawn by: C.J.H. Date: 24-7-1963
 DRAWING NO A.54
 1P6-2d PLSO



ABERFOYLE TIN DEVELOPMENT PARTNERSHIP
 BLUE TIER TIN PROSPECT
 CROSS SECTION AT 5200 N-ANCHOR OPEN CUT
 LOOKING NORTH

LEGEND		ASSAY LEGEND	
5	Granite	□	NIL
6	Pegmatite	▨	.01 to .09%Sn
1	Kaolinised granite	▩	.10 to .19%Sn
2	Decomposed granite	▧	.20 to .49%Sn
3	Greisen	▦	More than .50%Sn
4	Greisenised granite		

248032 4103
 Prepared by: J.L. MORTON
 of R. HARE AND ASSOCIATES
 Drafting by: GEODRAFTING SERVICES
 Drawn by: C.J.H. Date: 24-7-1963
 DRAWING No A.55



ABERFOYLE TIN DEVELOPMENT PARTNERSHIP
 BLUE TIER TIN PROSPECT
 CROSS SECTION AT 5300 N-ANCHOR OPEN CUT
 LOOKING NORTH

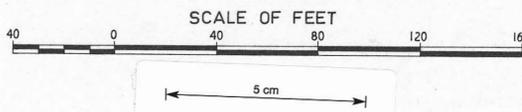
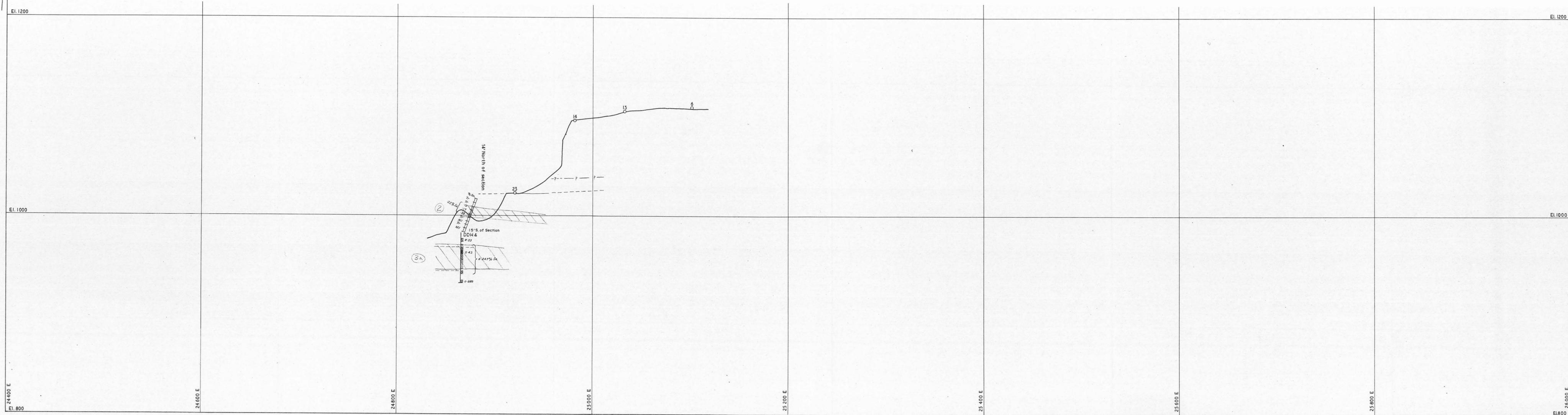
LEGEND

5 Granite	1 Kaolinised granite
6 Pegmatite	2 Decomposed granite
	3 Greisen
	4 Greisenised granite

ASSAY LEGEND

Nil
.01 to .09%Sn
.10 to .19%Sn
.20 to .49%Sn
More than .50%Sn

248033 4104
 Prepared by: J.L. MORTON
 of R. HARE AND ASSOCIATES
 Drafting by: GEODRAFTING SERVICES
 Drawn by: C.J.H. Date: 25-7-1963
 DRAWING NO A.56
 1FE-2J PEE



ABERFOYLE TIN DEVELOPMENT PARTNERSHIP
 BLUE TIER TIN PROSPECT
 CROSS SECTION AT 5400 N-ANCHOR OPEN CUT
 LOOKING NORTH

LEGEND		ASSAY LEGEND	
	Granite		NIL
	Kaolinised granite		.01 to .09% Sn
	Decomposed granite		.10 to .19% Sn
	Greisen		.20 to .49% Sn
	Greisenised granite		More than .50% Sn

248034 4105

Prepared by: J. L. MORTON
 of R. HARE AND ASSOCIATES
 Drafting by: GEODRAFTING SERVICES
 Drawn by: C.J.H. Date: 24-7-1963

DRAWING No A.57

E1.1200

E1.1200

E1.1000

E1.1000

24400 E
E1.800

24600 E

24800 E

25000 E

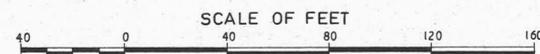
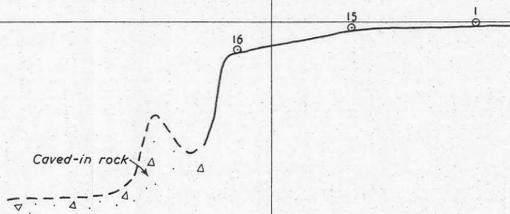
25200 E

25400 E

25600 E

25800 E

26000 E
E1.800



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ABERFOYLE TIN DEVELOPMENT PARTNERSHIP
 BLUE TIER TIN PROSPECT
 CROSS SECTION AT 5000 N-ANCHOR OPEN CUT
 LOOKING NORTH

LEGEND

1	Granite	1	Kaolinised granite
2	Pegmatite	2	Decomposed granite
3	Greisen	3	Greisen
4	Greisenised granite	4	Greisenised granite

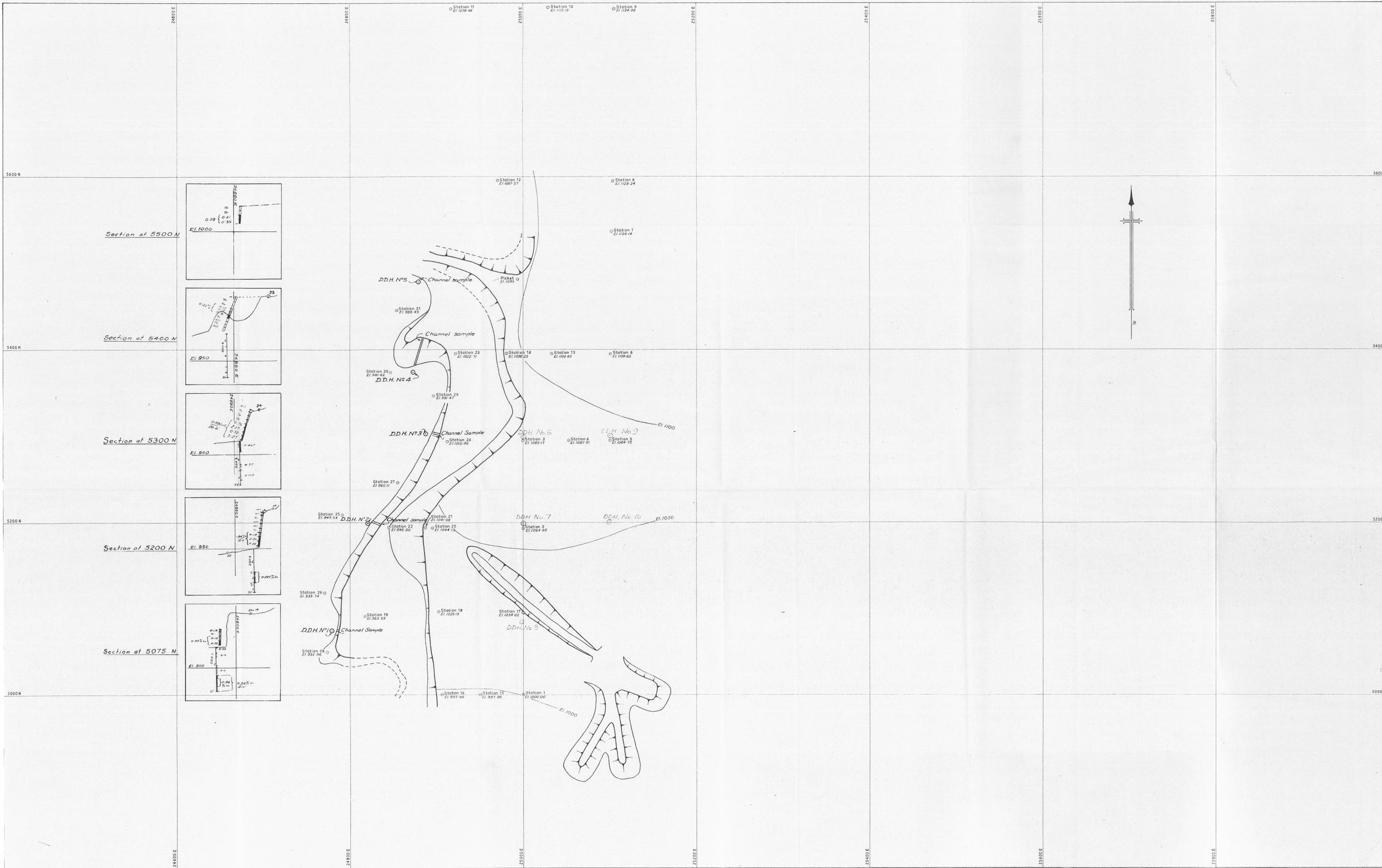
ASSAY LEGEND

White	NIL
Diagonal lines (top-left to bottom-right)	.01 to .09% Sn
Diagonal lines (bottom-left to top-right)	.10 to .19% Sn
Horizontal lines	.20 to .49% Sn
Vertical lines	More than .50% Sn

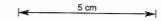
Prepared by: J.L. MORTON
 of R. HARE AND ASSOCIATES
 Drafting by: GEODRAFTING SERVICES
 Drawn by: C.J.H. Date: 24.7.1963

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ABERFOYLE TIN DEVELOPMENT PARTNERSHIP
 BLUE TIER TIN PROSPECT
 PLAN OF PORTION OF ANCHOR OPEN CUT



LEGEND		ASSAY LEGEND	
5	Granite	1	Kaolinised granite
6	pegmatite	2	Decomposed granite
		3	Greisen
		4	arseniated granite
			0 to 0.9% Sn
			1.0 to 1.9% Sn
			2.0 to 4.9% Sn
			More than 5.0% Sn

Prepared by J.L. MORTON
 of R HARE AND ASSOCIATES
 Drafting by GEODRAFTING SERVICES
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