

Geology

Department

**MICROFILMED**

67-483

REPORT NO. 2

BEACONSFIELD NICKEL PROSPECT, TASMANIA

by

EL 7/67

Senior Geologist

P. J. ANTHONY

21 December, 1967

Accompanying Report

Scale

Figure I Geological Plan and Sections of Drill Holes

1" = 1000'

Figure II Ore Reserve Plan

1" = 1000'

S U M M A R Y  
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Seventeen diamond drill holes totalling 1002 feet were drilled to test four areas of the most favourable laterites at Beaconsfield. The drilling indicated that 7 million to 11 million tons of ore with an average grade of 1.05% (Ni + Co) could be present.

From the point of view of a smelting operation this ore potential and grade is inadequate and uneconomic.

There is a market for high grade (2.6% (Ni + Co) + ) nickel silicate ore and although ore of this grade is not known or likely at Beaconsfield, profitable operations could result if the ore can be simply and cheaply upgraded and a satisfactory price can be negotiated. Since nickel silicate ores in New Caledonia and Oregon (USA) are upgraded by trommeling and screening, the ore at Beaconsfield may also respond in a like manner.

The following recommendations are made

- (1). metallurgical test work be carried out on bulk samples of the ore to establish
  - a. the percentage of favourable and unfavourable metal content of the ore to determine suitability of the material for sale as ore.
  - b. the feasibility of upgrading the ore to a minimum of 2.6% (Ni + Co), by trommeling and screening.
- (2) if the ore can be upgraded and conforms to specifications further expenditure on drilling at Beaconsfield would be justified.
- (3) the prospect be held under exploration licence, or other tenement, until such time as the metallurgical test work is complete.

## C O N T E N T S

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Introduction

Lease Holdings

Geology

Exploration Results

Economic Considerations

Conclusions and Recommendations

Appendices

- I Drill Core Logs
- II Diamond Drilling Progress  
and Results
- III Summary of Evaluations

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INTRODUCTION

Exploration Licence No 7/67 totalling approximately 31 square miles was granted to the Company for a period of 6 months from 17th May, 1967.

Field investigations comprising geological mapping, surveying, diamond drilling and allied duties were carried out continuously from the period 1st August to 31st October 1967.

This report summarises the results of the investigations which were aimed at determining the grade and extent of nickel ore that was assumed to be present beneath the known laterites within the prospect.

LEASE HOLDINGS

Exploration Licence No 7/67 was renewed for a further period of 6 months from 17th November, 1967. Unless extended again the Licence will expire on 17th May, 1968.

GEOLOGY

The aerial extent of the favourable laterite, proved to be less than that described and indicated by previous work. Mapping and drilling showed that the laterite could be divided into two broad categories. A more favourable variety, occupying topographic high areas and frequently covered by hard pisolitic laterite. Generally, this laterite showed a well developed and deep lateritic profile. The less favourable laterite, developed in topographic low or flat areas, showed a poorly developed lateritic profile, an absence of hard pisolitic laterite and frequent outcrops of fresh serpentinite were visible.

The more favourable variety of laterite occupied substantially less area than was hoped for.

A definite and recognisable lateritic profile is developed in and beneath the favourable laterite and consists of -

1. LATERITE

1.1 Pisolitic zone - Hard pisolitic grains of ironstone cemented with a matrix of ferruginous red clay.

1.2 Ferruginous red zone - Soft, chocolate to dark red clay, with occasional hard pisolitic grains and blebs of black ironstone.

*9 palled zone*  
1.3 Limonitic yellow zone - Soft yellow to orange coloured clay with occasional blebs of red clay.

1.4 Mottled zone - Soft bright red, chocolate red, brown, yellow, purple clay with occasional specks of white and black. The colour variations are either in bands or blebs.

\*

*crash*

2. SERPENTINITE

- 2.1 Transition zone - Soft highly decomposed serpentinite, dark to light green in colour, with occasional inclusions of red clay.
- 2.2 Bleached zone - Soft to hard pale yellow green serpentinite, with occasional specks and stringers of unaltered magnetite.
- 2.3 Fresh zone - Moderately hard to hard variegated dark green serpentinite, with occasional specks and stringers of magnetite.

Refer to summary of core logs Appendix I.

As indicated in Report No 1 the Company was interested in the "Transition zone" (decomposed serpentinite) which occurs below the lateritic development.

Three areas of 'favourable' laterite were delineated and tested by diamond drilling. A fourth area consisting of 'unfavourable' laterite was also tested by one hole.

EXPLORATION RESULTS

The four areas tested by drilling namely, Barnes Hill, Scots Hill, Mt. Vulcan, and "The Flat" area; are shown in fig.1.

Together 17 diamond drill holes were completed for a total of 1,002 feet. Hole Nos 1 to 13 were drilled in the Barnes Hill area. Hole Nos 14 and 15 were drilled in the Scots Hill area. Hole No.16 was drilled in Mt Vulcan, and Hole No 17 was drilled in "The Flat" area.

The best grade intersection, was encountered in the Barnes Hill area, Hole No. 1 which averaged 1.45% (Ni + Co) over 39 feet. The highest grade encountered was also in the Barnes Hill area, where in Hole No. 8 between 40 and 45 feet the nickel plus cobalt grade was 2.17%.

Refer to Appendix II for Diamond Drill Progress and Results. The tons and grade calculations below are based on the following assumptions -

- a. that 20 cub ft/ton of material in place is accepted.
- b. that the grade taken is a combined nickel plus cobalt grade and for reserves only grades greater than 0.70% are accepted.
- c. that for case A reserves, the area affected by each hole is as shown in fig.2
- d. that for case B reserves, block numbers, A, E, D, G, H and J are included and have a grade and thickness equivalent to the average of other blocks in the same area.

Reservesi. Barnes Hill area

Case A 5,542,000 Tons at 1.03% grade and 6,126,000 Tons of overburden.

Case B 7,390,000 Tons at 1.03% grade and 8,106,000 Tons of overburden.

ii. Scots Hill area

Case A 632,000 Tons at 1.06% grade and 3,163,000 Tons of overburden.

Case B 1,655,000 Tons at 1.06% grade and 8,177,000 Tons of overburden.

iii. Mt Vulcan

Case A 928,000 Tons at 1.14% grade and 896,000 Tons of overburden.

Case B 2,668,000 Tons at 1.14% grade and 2,576,000 Tons of overburden.

iv. "The Flat" area

Case A Less than 0.70% grade

Case B Less than 0.70% grade

v. Total

Case A 7,102,000 Tons at 1.05% grade and 10,185,000 Tons of overburden, an overburden to one ratio of 1.43 to 1.0.

Case B 11,713,000 Tons at 1.06% grade and 18,859,000 Tons of overburden, an overburden to one ratio of 1.61 to 1.0

ECONOMIC CONSIDERATIONS

Diamond drilling showed that nickel values were low in the laterite itself, particularly in the upper ferruginous zone, as was expected. A concentration of nickel values was shown to occur typically in the 'transition' zone which is a highly decomposed serpentine, barely recognisable as serpentine, occurring beneath the laterite and above the bleached and fresh serpentine. The thickness of this zone varied from 3 feet to 39 feet with an average of 14 feet.

Whenever the transition zone was present the best nickel values were to be found, with one exception in Hole No.15. Relatively high nickel values were not exclusively confined to the transition zone but extended above through the 'mottled' zone and less frequently to the 'limonitic' zone. Below, higher values were sometimes seen in the 'bleached' serpentine usually when the bleached rock was soft. Hard bleached serpentine rock rarely contained high nickel values.

Although enrichment occurred, the concentration of nickel (slightly greater than 1%) was not high. The thickness of the enriched zone was less than was hoped for and this in combination with a limited aerial extent of the 'favourable' laterites resulted in far less tonnage than was originally hoped for.

*max*

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A tonnage of 7 - 11 million tons of 1.05% (Ni + Co) is too small to justify an expensive smelter operation. At least 50 million tons of this or better grade ore would be necessary to establish a smelter, and this order of tonnage is not available at Beaconsfield.

From the point of view of marketing the ore itself a minimum grade of 2.6% (Ni + Co) is necessary however the drilling has eliminated any possibility of grades of this order occurring in any quantity. On the other hand, some nickel silicate ores are amenable to upgrading by trommelling and screening e.g. New Caledonia and Oregon (USA). If the Beaconsfield ore could be upgraded by such simple means, and specifications of the ore with regard to Mg, SiO<sub>2</sub>, Fe etc were acceptable then the prospect could well turn into a mine. The prospect is very favourably situated to population centres, roads, power and water and most importantly is close to established port facilities. Cheap and simple mining and beneficiation methods would ensure a low cost operation. Preliminary feasibility studies indicate that very profitable operations could be possible if the ore could be cheaply upgraded from 1% to 2.8% (Ni + Co) and allowing for a 50% ore recovery. The Japanese purchase 2.8% (Ni + Co) + ore from New Caledonia for about (\$13 Aust) ton f.o.b. Noumea.

In view of the possibilities associated with upgrading the ore it would be wise not to relinquish the exploration licence until such time as some metallurgical test work is carried out. In the meantime no other expenditure on the prospect can be justified.

A summary of evaluation studies of upgraded ore is shown in Appendix III.

CONCLUSIONS AND RECOMMENDATIONS

In terms of a future smelting operation the prospect has no potential because of limited tonnage of available ore. If the ore could be simply and cheaply upgraded to 2.8% (Ni + Co) or better there would appear to be a good chance that profitable operations could result.

In view of this it is recommended that

- (1) the exploration licence be renewed until such time as metallurgical test work on the ore has been completed.
- (2) metallurgical test work be carried out on a bulk sample of the ore to establish:
  - a. the feasibility of upgrading the ore to a minimum of 2.6% (Ni + Co)
  - b. the contents of the ore, with regard to Mg, Si, Fe and other metals that are important in smelting.
- (3) expenditure on work other than metallurgical tests be suspended until the results of the tests are known.

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156008

A P P E N D I X      I

DRILL            CORE            LOGS

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156009

KING ISLAND SCHEELITE (1947) LTD .

Summary D. Drill Core Log

Beaconsfield Nickel Prospect

Hole No. 1Depth 58 ft

Footage			Logs	Assay Results				
From	To	Length		Ni	Co	Ng	Cr	Fe
0	2	2	LATERITE: Ferruginous red zone	.11	.01		.25	27.2
2	7	5	LATERITE Limonitic yellow zone	.11	.02		.14	14.1
7	11	4	LATERITE Mottled zone	.60	.30		.13	44.5
11	16	5	" " "	1.73	.11		.17	30.7
16	21	5	SERPENTINITE Bleached zone	1.86	.05		.07	14.3
21	26	5	" " "	1.50	.03		.05	10.4
26	31	5	" " "	1.52	.02		.06	6.1
31	36	5	" " "	1.31	.02		.05	6.6
36	41	5	" " "	1.10	.02		.03	6.0
41	46	5	" " "	1.35	.02		.04	8.4
46	51	5	" " "	.52	.01		.03	3.6
51	56	5	SERPENTINITE Fresh zone	.48	.01		.02	3.0
56	59	3	" " "	.67	.01		.02	2.7

Recovery 95%

009

156010

KING ISLAND SCHEELITE (1947) LTD .

Summary D. Drill Core Log

Beaconsfield Nickel Prospect

Hole No. 2Depth 42 ft

Footage			Logs	Assay Results				
From	To	Length		Ni	Co	Mg	Cr	Fe
0	5	5	LATERITE Limonitic yellow zone	.19	.01		.06	13.2
5	10	5	LATERITE Mottled and SERPENTINITE Transition	.41	.01		.05	8.2
10	15	5	SERPENTINITE Bleached zone	.26	.01		.02	3.3
15	20	5	" " "	.38	.01		.01	3.7
20	25	5	" " "	.33	.01		.02	3.3
25	<del>30</del>	5	" " "	.31	.01		.02	3.3
30	35	5	" " "	.25	.01		.01	3.9
35	40	5	" " "	.29	.01		.02	4.3
40	42	2	" " "	.25	.01		.02	4.2

Recovery 86%

010

156011

KING ISLAND SCHEELITE (1947) LTD

Summary D. Drill Core Log

Beaconsfield Nickel Prospect

Hole No. 3Depth 66 ft

Footage			Logs	Assay Results				
From	To	Length		Ni	Co	Mg	Cr	Fe
0	5	5	LATERITE Pisolitic zone	.09	.01			
5	10	5	LATERITE Ferruginous red zone	.10	.01	.03	2.20	31.0
10	15	5	" " "	.13	.01	.01	.51	33.0
15	18	3	LATERITE Limonitic yellow zone	.48	.03	.03	.57	42.0
18	23	5	LATERITE Mottled zone	.50	.03	.03	.20	39.5
23	<del>28</del>	5	" " "	.47	.08	.66	.14	49.0
28	33	5	" " "	.41	.25	.30	.18	46.0
33	38	5	" " "	.43	.17	.42	.36	39.5
38	43	5	" " "	1.18	.12	1.8	.18	30.0
43	48	5	SERPENTINITE Transition zone	1.13	.03	7.5	.13	16.0
48	53	5	SERPENTINITE Bleached zone	.70	.02	12.3	.04	5.5
53	58	5	SERPENTINITE Fresh zone	.29	<.01		<.01	3.8
58	63	5	" " "	.21	<.01		<.01	4.6
63	66	3	" " "	.24	<.01		.02	4.3

Recovery 98%

156012

011

KING ISLAND SCHEELITE (1947) LTD

Summary D. Drill Core Log

Beaconsfield Nickel Prospect

Hole No. 4Depth 28 ft Abandoned

Footage			Logs	Assay Results				
From	To	Length		Ni	Co	Mg	Cr	Fe
0	5	5	LATERITE Pisolitic zone	.11	<.01		1.62	40.2
5	10	5	LATERITE Ferruginous red zone	.17	.01		1.62	42.9
10	15	5	LATERITE Limonitic yellow zone	.19	<.01		1.14	46.4
15	20	5	LATERITE Mottled zone	.26	.10		.80	38.4
20	25	5	SERPENTINITE Transition zone	.73	.25		.48	27.5
25	<del>28</del>	3	" " "	.73	.05		.17	17.2
			Recovery 73%					
			Host zone 50%					

012

156013

KING ISLAND SCHEELITE (1947) LTD

Summary D. Drill Core Log

Beaconsfield Nickel Prospect

Hole No. 4ADepth 41ft

Footage			Logs	Assay Results				
From	To	Length		Ni	Co	Mg	Cr	Fe
0	5	5	LATERITE Pisolitic and Ferruginous zones	.06	<.01		1.39	24.2
5	10	5	LATERITE Limonitic yellow zone	.12	<.01		2.04	36.6
10	15	5	" " " "	.17	.01		1.29	42.9
15	20	5	LATERITE Mottled zone	.35	.10		.75	38.4
20	25	5	SERPENTINITE Transition zone	.12	.07		.11	12.4
25	<del>30</del>	5	SERPENTINITE Bleached zone	.63	.01		.09	6.6
30	35	5	SERPENTINITE Fresh zone	.44	<.01		.04	4.3
35	41	6	" " "	.23	.01		.03	4.5

Recovery 91%

013

156014

KING ISLAND SCHEELITE (1947) LTD

Summary D. Drill Core Log

Beaconsfield Nickel Prospect

Hole No. 5Depth 36 ft

Footage			Logs	Assay Results				
From	To	Length		Ni	Co	Mg	Cr	Fe
0	5	5	LATERITE Pisolitic zone	.20	.02	.30		33.6
5	12	7	LATERITE Mottled zone	.73	.03	1.2		25.1
12	17	5	SERPENTINITE Transition zone	.93	.05	4.2		22.6
17	22	5	SERPENTINITE Bleached zone	.38	.01	16.4		6.8
22	27	5	SERPENTINITE Fresh zone	.27	.01	19.8		3.5
27	32	5	" " "	.27	.01	18.8		4.0
32	<del>36</del>	4	" " "	.23	.01	16.4		4.6
Recovery 97%								

014

156015

KING ISLAND SCHEELITE (1947) LTD

Summary D. Drill Core Log

Beaconsfield Nickel Prospect

Hole No. 6Depth 51ft

Footage			Logs	Assay Results				
From	To	Length		Ni	Co	Ng	Cr	Fe
0	3	3	OVERBURDEN	.13	.02	.3		14.5
3	6	3	LATERITE Ferruginous and Limonitic zones	.36	.09	.4		18.3
6	11	5	LATERITE Mottled zone	.70	.07	.9		23.3
11	15	4	" " "	.75	.09	1.0		26.1
15	20	5	SERPENTINITE Transition zone	.80	.05	2.4		21.6
20	25	5	SERPENTINITE Bleached zone	.39	.01	16.8		5.3
25	30	5	" " "	.31	.01	17.1		4.4
30	35	5	" " "	.29	.01	18.6		5.3
35	40	5	" " "	.28	.01	18.3		6.6
40	45	5	" " "	.26	.01	18.3		4.4
45	51	6	" " "	.25	.01	18.3		5.3

Recovery 96%

015

KING ISLAND SCHEELITE (1947) LTD

156016

Summary D. Drill Core Log

Beaconsfield Nickel Prospect

Hole No. 7Depth 20 ft Abandoned

Footage			Logs	Assay Results				
From	To	Length		Ni	Co	Mg	Cr	Fe
0	6	6	LATERITE Ferruginous red zone	.11	.01	.04		24.8
6	8	2	LATERITE Limonitic yellow zone	.48	.02	.50		27.0
8	13	5	LATERITE Mottled zone	.71	.08	1.92		23.2
13	18	5	SERPENTINITE Bleached zone	.90	.09	3.62		23.5
18	20		CORE LOST					
			Recovery 58%					

156017

016

KING ISLAND SCHEELITE (1947) LTD

Summary D. Drill Core Log

Beaconsfield Nickel Prospect

Hole No. 7ADepth 13 ft Abandoned

Footage			Logs	Assay Results				
From	To	Length		Ni	Co	Mg	Cr	Fe
0	6	6	LATERITE Ferruginous and Limonitic zone	.11	<.01	.07		24.8
6	9	3	LATERITE Mottled zone	.71	.11	.91		31.2
9	13		CORE LOST					
			Recovery 61%					

017

156018

KING ISLAND SCHEELITE (1947) LTD

Summary D. Drill Core Log

Beaconsfield Nickel Prospect

Hole No. 7BDepth 42 ft

Footage			Logs	Assay Results				
From	To	Length		Ni	Co	Ng	Cr	Fe
0	7	7	LATERITE Ferruginous red zone	.10	<.01	.04		24.0
7	12	5	LATERITE Mottled zone	.39	.01	.23		37.0
12	16	4	SERPENTINITE Fresh zone	.46	<.01	4.1		22.4
16	20	4	SERPENTINITE Transition zone	.87	.05	5.8		21.9
20	24	4	" " "	.88	.04	6.3		21.2
24	28	4	SERPENTINITE Bleached zone	.57	.02	7.7		13.7
28	33	5	SERPENTINITE Fresh zone	.34	.01	16.8		7.2
33	38	5	" " "	.22	.01	20.1		5.0
38	42	4	" " "	.27	.01	21.0		5.2

Recovery 88%

018

KING ISLAND SCHEELITE (1947) LTD

156019

Summary D. Drill Core Log

Beaconsfield Nickel Prospect

Hole No. 8Depth 91 ft

Footage			Logs	Assay Results				
From	To	Length		Ni	Co	Ng	Cr	Fe
0	4	4	LATERITE Ferruginous red zone	.08	<.01	.43		26.9
4	9	5	" " " "	.11	.01	.24		42.6
9	13	4	LATERITE Limonitic yellow zone	.12	<.01	.22		19.4
13	16	3	" " " "	.12	.01	.03		21.8
16	21	5	LATERITE Mottled zone	.17	<.01	.02		31.1
21	<del>26</del>	5	" " " "	.18	<.01	.09		32.5
26	31	5	" " " "	.13	<.01	.04		26.0
31	35	.4	" " " "	.54	.03	.06		31.1
35	40	5	SERPENTINITE Transition zone	1.26	.14	1.91		18.1
40	45	5	" " " "	2.17	.10	5.12		19.9
45	50	5	SERPENTINITE Bleached zone	1.80	.08	10.0		10.3
50	57	7	" " " "	1.18	.07	8.4		10.9
57	63	6	" " " "	1.04	.03	17.7		4.6
63	69	6	" " " "	.26	<.01	12.7		6.6
69	74	5	SERPENTINITE Fresh zone	.37	.01	15.2		5.0
74	79	5	" " " "	.24	.01	15.5		5.6
79	84	5	" " " "	.25	.01	16.0		4.6
84	91	7	" " " "	.24	.01	16.0		4.0
			Recovery 97%					

019

KING ISLAND SCHEELITE (1947) LTD

156020

Summary D. Drill Core Log

... Beaconsfield Nickel Prospect

Hole No. 9Depth 21ft

Footage			Logs	Assay Results				
From	To	Length		Ni	Co	Mg	Cr	Fe
0	4	4	LATERITE Pisolitic zone	.30	.07	1.34		42.6
4	7	3	LATERITE Mottled zone and Transition	.66	.11	6.0		26.6
7	9	2	SERPENTINITE Bleached zone	.40	.02	24.0		4.8
9	14	5	SERPENTINITE Fresh zone	.20	.02	23.4		7.8
14	21	7	" " "	.20	.02	24.7		4.8
			Recovery 87%					

020

156021

KING ISLAND SCHEELITE (1947) LTD

Summary D. Drill Core Log

Beaconsfield Nickel Prospect

Hole No. 10Depth 66 ft

Footage			Logs	Assay Results				
From	To	Length		Ni	Co	Ng	Cr	Fe
0	5	5	LATERITE Pisolitic and limonitic zones	.56	.03	2.3		16.6
5	7	2	LATERITE Mottled zone	.78	.10	2.1		25.0
7	10	3	SERPENTINITE Transition zone	1.02	.04	3.6		15.8
10	15	5	SERPENTINITE Bleached zone	.58	.02	18.8		7.0
15	19	4	" " "	.38	.02	20.5		6.2
19	<del>22</del>	3	" " "	.36	.02	20.4		6.8
22	27	5	SERPENTINITE Fresh zone	.20	.02	20.7		4.8
27	32	5	" " "	.24	.02	22.2		5.2
32	37	5	" " "	.20	.02	24.0		5.6
37	42	5	" " "	.20	.02	21.7		5.0
42	45	3	" " "	.24	.01	22.2		4.6
45	50	5	" " "	.12	.01	23.6		4.0
50	58	8	RODONGITE	.04	.01	6.1		4.0
58	62	4	SERPENTINITE Fresh zone	.10	.01	22.9		4.6
62	66	4	" " " and Rodongite	.01	.01	8.8		4.4
			Recovery 91%					

021

KING ISLAND SCHEELITE (1947) LTD

156022

Summary D. Drill Core Log

Beaconsfield Nickel Prospect

Hole No. 11Depth 18 ft

Footage			Logs	Assay Results				
From	To	Length		Ni	Co	Mg	Cr	Fe
0	6	6	RODONGITE ?	<.01	.01	9.4		5.8
6	12	6	SERPENTINITE Fresh zone	.04	.01	15.2		5.0
12	18	6	" " "	.20	.01	23.2		3.4
			Recovery 100%					

022

KING ISLAND SCHEELITE (1947) LTD

156023

Summary D. Drill Core Log

Beaconsfield Nickel Prospect

Hole No. 12Depth 87 ft

Footage			Logs	Assay Results				
From	To	Length		Ni	Co	Ng	Cr	Fe
0	4	4	LATERITE Ferruginous red zone	.01	.01	.20		25.2
4	12	8	LATERITE Pisolitic zone	.01	.01	.20		32.6
12	17	5	LATERITE Ferruginous red zone	.01	.01	.1		41.4
17	22	5	" " " "	.01	.01	.10		38.0
22	26	4	" " " "	.01	.01	.10		36.6
26	<del>30</del>	4	LATERITE Limonitic yellow zone	.12	.14	.10		27.4
30	40	10	LATERITE Mottled zone	.20	.17	.20		22.4
40	45	5	" " "	.59	.22	.20		35.2
45	51	6	" " "	.48	.09	.50		32.6
51	57	6	CORE LOST					
57	60	3	SERPENTINITE Transition zone	1.46	.10	3.0		28.6
60	64	4	" " "	1.52	.04	7.9		14.4
64	69	5	SERPENTINITE Bleached zone	1.22	.04	7.3		15.4
69	74	5	SERPENTINITE Fresh zone	.48	.02	23.1		8.0
74	79	5	" " "	.53	.01	23.5		7.4
79	87	8	" " "	.64	.01	22.5		5.3
Recovery 75%								

023

156024

KING ISLAND SCHEELITE (1947) LTD

Summary D. Drill Core Log

Beaconsfield Nickel Prospect

Hole No. 13Depth 58 ft

Footage			Logs	Assay Results				
From	To	Length		Ni	Co	Mg	Cr	Fe
0	6	6	LATERITE Ferruginous red zone	.02	<.01	.45		30.2
6	11	5	LATERITE Limonitic yellow zone	.06	<.01	.12		18.4
11	16	5	LATERITE Mottled zone	.10	<.01	.14		30.4
16	22	6	" " "	.32	.07	.52		33.8
22	27	5	SERPENTINITE Transition zone	.62	.07	5.06		18.0
27	32	5	" " "	.96	.05	6.07		24.4
32	37	5	CORE LOST					
37	41	4	SERPENTINITE Bleached zone	1.20	.04	13.3		17.3
41	45	4	" " "	.71	.02	18.6		16.3
45	50	5	SERPENTINITE Fresh zone	.62	.01	22.6		6.5
50	58	8	" " "	.46	.01	22.7		6.3

Recovery 80%

024

KING ISLAND SCHEELITE (1947) LTD .

156025

Summary D. Drill Core Log

Beaconsfield Nickel Prospect

Hole No. 14Depth 69 ft

Footage			Logs	Assay Results				
From	To	Length		Ni	Co	Mg	Cr	Fe
0	6	6	LATERITE Ferruginous red zone	.34	.02	1.22		31.2
6	11	5	LATERITE Limonitic yellow zone	.10	.02	.39		32.0
11	16	5	" " " "	.12	.02	.26		32.6
16	21	5	LATERITE Mottled zone	.11	.02	.15		42.3
21	26	5	" " "	.15	.10	.17		19.4
26	<del>31</del>	5	" " "	.26	.30	.40		29.9
31	36	5	" " "	.42	.16	.35		54.8
36	40	4	" " "	.33	.20	.25		49.9
40	44	4	" " "	.27	.20	.20		37.6
44	47	3	SERPENTINITE Transition zone	.74	.14	2.2		22.9
47	52	5	SERPENTINITE Bleached zone	1.06	.08	2.1		15.1
52	57	5	" " "	0.85	.04	1.92		29.1
57	62	5	SERPENTINITE Fresh zone	.34	.02	21.4		6.7
62	66	4	" " "	.20	.02	22.0		11.0
66	69	3	" " "	.24	.02	23.7		4.4
			Recovery 90%					

095

156026

095 KING ISLAND SCHEELITE (1947) LTD .

Summary D. Drill Core Log

Beaconsfield Nickel Prospect

Hole No. 15

Depth 86 ft

Footage			Logs	Assay Results				
From	To	Length		Ni	Co	Mg	Cr	Fe
0	8	8	LATERITE Ferroginous Red zone	.10	.02	1.06		28.9
8	16	8	LATERITE Limonitic yellow zone	1.08	.02	.77		21.0
16	25	9	LATERITE Mottled zone	.17	.04	.37		39.0
25	35	10	CORE LOST					
35	50	15	LATERITE Mottled zone	.27	.06	1.38		23.8
50	55	5	SERPENTINITE Transition zone	.11	.02	1.08		9.8
55	60	5	SERPENTINITE Bleached zone	.11	.01	2.86		6.1
60	65	5	" " "	.17	.01	3.82		4.4
65	73	8	" " "	1.21	.02	2.28		20.4
73	76	3	SERPENTINITE Fresh zone	.26	.01	6.8		6.1
76	81	5	" " "	.24	.01	3.8		3.4
81	86	5	" " "	.19	.02	21.8		5.7
			Recovery 63%					

026

156027

KING ISLAND SCHEELITE (1947) LTD

Summary D. Drill Core Log

Beaconsfield Nickel Prospect

Hole No. 16Depth 76ft

Footage			Logs	Assay Results				
From	To	Length		Ni	Co	Mg	Cr	Fe
0	5	5	LATERITE Ferruginous Red & Pisolitic zones	.09	.01	<.1		46.4
5	10	5	" " " " "	.09	.01	<.1		46.8
10	14	4	" " " " "	.07	.01	<.1		32.6
14	18	4	LATERITE Limonitic yellow zone	.06	.01	<.1		14.0
18	23	5	LATERITE Mottled zone	.13	.02	.1		46.6
23	<del>28</del>	5	" " "	.12	.04	.2		44.8
28	32	4	SERPENTINITE Transition zone	1.56	.06	4.7		26.8
32	37	5	SERPENTINITE Bleached zone	1.36	.04	10.2		22.8
37	42	5	" " "	1.21	.04	11.5		19.8
42	47	5	" " "	1.16	.05	6.4		18.4
47	51	4	" " "	0.70	.02	7.5		17.2
51	57	6	" " "	0.71	.02	15.2		11.6
57	62	5	SERPENTINITE Fresh zone	.40	.01	17.4		6.2
62	67	5	" " "	.70	.02	15.2		8.0
67	72	5	" " "	.44	.01	20.0		4.6
72	76	4	" " "	.42	.02	17.6		6.9

Recovery 82%

SKING ISLAND SCHEELITE (1947) LTD

Summary D. Drill Core Log

Beaconsfield Nickel Prospect

Hole No. 17

Depth 32 ft

Footage			Logs	Assay Results				
From	To	Length		Ni	Co	Mg	Cr	Fe
0	5	5	LATERITE Pisolitic zone	.31	.18			
5	9	4	LATERITE Ferruginous red zone	.44	.06			
9	14	5	SERPENTINITE Transition zone	.34	.03			
14	19	5	" " "	.33	.02			
19	24	5	SERPENTINITE Bleached zone	.42	.03			
24	<del>29</del>	5	SERPENTINITE Fresh zone	.12	.02			
29	32	3	" " "	.13	.02			
Recovery 92%								

029

KING ISLAND SCHEELITE (1947) LTD

BEACONSFIELD NICKEL PROJECT

DIAMOND DRILL PROGRESS AND RESULTS

156029

APPENDIX II

Hole No.	Location	Date Commenced	Date Completed	Co-ordinates			Depth (ft)	Monthly Progress (ft)	Total Progress (ft)	% Ni	Assay Results	
				North (ft)	East (ft)	Elevation (ft)					% Ni	% CM (Ni + Co)
1	Barnes Hill	2.8.67	5.8.67	2057	9968	998	59	59	59	11' to 46' av. 35 ft. 1.48% Ni	7' to 46' av 39 ft 1.45% CM	
2	Barnes Hill	8.8.67	10.8.67	2971	10017	948	42	101	101	Less than 0.70%	Less than 0.70%	
3	Barnes Hill	15.8.67	18.8.67	6028	8455	1074	66	167	167	38' to 53' av 15 ft 1.00% Ni	28' to 53' av 25 ft 0.89% CM or 38' to 48' av. 10 ft 1.23% CM.	
4	Barnes Hill	18.8.67	21.8.67	5997	8988	1059	28	195	195	Abandoned	Abandoned	
4A	Barnes Hill	21.8.67	22.8.67	5999	8988	1062	41	236	236	20' to 25' av 5 ft 1.12% Ni or 20' to 30' av 10 ft 0.88% Ni	20' to 25' av 5 ft 1.19% CM or 20' to 30' av 10 ft 0.91% CM	
5	Barnes Hill	23.8.67	24.8.67	5978	7967	1005	36	272	272	5' to 17' av 12 ft 0.81% Ni	5' to 17' av 12 ft 0.85% CM	
6	Barnes Hill	26.8.67	31.8.67	5985	7007	950	51	323	323	6' to 20' av 14 ft 0.75% Ni	6' to 20' av 14 ft 0.82% CM	
7	Barnes Hill	1.9.67	2.9.67	4993	8586	1018	20	20	343	Abandoned	Abandoned	
7A	Barnes Hill	2.9.67	2.9.67	4992	8583	1018	13	33	356	Abandoned	Abandoned	
7B	Barnes Hill	4.9.67	7.9.67	4997	8522	1022	42	75	398	16' to 24' av 8 ft 0.88% Ni	16' to 24' av 8 ft 0.92% CM	
8	Barnes Hill	8.9.67	13.9.67	6497	8989	1070	91	166	489	35' to 63' av 28 ft 1.45% Ni or 40' to 45' av 5 ft 2.17% Ni	35' to 63' av 28 ft 1.53% CM or 40' to 50' av 10 ft 2.07% CM	
9	Barnes Hill	14.9.67	14.9.67	5984	9994	922	21	187	510	Less than 0.70%	4' to 7' av 3 ft 0.77% CM	
10	Barnes Hill	16.9.67	20.9.67	7014	9999	927	66	253	576	5' to 15' av 10 ft 0.75% Ni or 5' to 10' av 5 ft 0.99% CM	0' to 15' av 15 ft 0.71% CM or 5' to 10' av 5 ft 0.99% CM	
11	Barnes Hill	21.9.67	21.9.67	3998	9984	943	18	271	594	Less than 0.70%	Less than 0.70%	
12	Barnes Hill	25.9.67	29.9.67	6510	8498	1062	87	358	681	57' to 69' av 12 ft 1.38% Ni or 57' to 69' av 12 ft 1.43% CM	40' to 69' av 29 ft 1.07% CM or 57' to 69' av 12 ft 1.43% CM	
13	Barnes Hill	2.10.67	6.10.67	7049	9464	968	58	58	739	27' to 45' av 18 ft 0.99% Ni	27' to 45' av 18 ft 1.03% CM	
14	Scots Hill	9.10.67	14.10.67	13753	2272	885	69	127	808	44' to 57' av 13 ft 0.90% Ni	44' to 57' av 13 ft 0.98% CM	
15	Scots Hill	14.10.67	18.10.67	14502	2267	819	86	213	894	65' to 73' av 8 ft 1.21% Ni	65' to 73' av 8 ft 1.23% CM	
16	Mt Vulcan	20.10.67	25.10.67	12000	3000	-	76	289	970	28' to 57' av 29 ft 1.10% Ni	28' to 57' av 29' 1.14% CM	
17	Flat Area	26.10.67	27.10.67	8860	5000	-	32	321	1002	Less than 0.70%	Less than 0.70%	

028

## SUMMARY OF EVALUATIONS

Case No.	Ore Tons	Grade (% Ni+Co)	Overburden Tons	Upgraded Ore (50% Rec.) Tons	Grade (% Ni+Co)	Capital Estimate (\$)	Assumed Value at 2.8% CM (\$)	Gross Value (\$)	Operating Cost (\$)	Tax (\$)	Profit after Tax (\$)	Av. Annual Return on Capital	Cut off Grade	Years Life	Remarks
A	7102000	1.05	14204000	1332000	2.80	2000000	\$10.00	13332000	10342000	331000	643000	4.6%	0.70%	7	Tested blocks only Ni + Co.
B	11713000	1.06	23426000	2214000	2.80	2000000	\$10.00	22140000	17062000	1046000	2032000	10.1%	0.70%	10	Includes favourable blocks Ni + Co.
C	7787000	1.08	15574000	1502000	2.80	2000000	\$10.00	15020000	11352000	566000	1100000	6.8%	0.70%	8	Tested blocks Ni + 2 Co.
D	13235000	1.08	26470000	2552500	2.80	2000000	\$10.00	25525000	19295000	1438000	2792000	10.7%	0.70%	13	Includes favourable blocks + Ni + 2 Co
E	10357000	0.96	20714000	1775500	2.80	2000000	\$10.00	17755000	15033000	246000	477000	2.4%	0.50%	10	Tested blocks Ni + 2 Co.
F	16981000	0.97	33962000	2938000	2.80	2500000	\$10.00	29380000	24655000	756000	1469000	3.7%	0.50%	16	Includes favourable blocks Ni + 2 Co.
G	4104000	1.32	8208000	967400	2.80	2000000	\$10.00	9674000	6036000	557000	1081000	10.8%	1.00%	5	Tested blocks Ni + 2 Co.
H	1143000	1.74	2286000	306324	2.80	2000000	\$10.00	3063000	1692000	--	--	--	1.50%	1	Tested blocks Ni + 2 Co.
A	7102000	1.05	14204000	1332000	2.80	2000000	\$13.00	17316000	10342000	1691000	3283000	23.4%	0.70%	7	Tested blocks only Ni + Co.
B	11713000	1.06	23426000	2214000	2.80	2000000	\$13.00	28782000	17062000	3305000	6415000	32.0%	0.70%	10	Includes favourable blocks Grade = Ni + Co
C	7787000	1.08	15574000	1502000	2.80	2000000	\$13.00	19526000	11352000	2099000	4075000	25.5%	0.70%	8	Tested blocks Ni + 2 Co.
D	13235000	1.08	26470000	2552500	2.80	2000000	\$13.00	33183000	19295000	4042000	7846000	30.2%	0.70%	13	Includes favourable blocks Ni + 2 Co.
E	10357000	0.96	20714000	1775500	2.80	2000000	\$13.00	23082000	15033000	2057000	2783000	13.9%	0.50%	10	Tested blocks only Ni + 2 Co.
F	16981000	0.97	33962000	2938000	2.80	2500000	\$13.00	38194000	24655000	3927000	7622000	23.9%	0.50%	16	Includes favourable blocks Ni + 2 Co.
G	4104000	1.32	8208000	967400	2.80	2000000	\$13.00	12576000	6036000	1501000	3039000	30.4%	1.00%	5	Tested blocks only. Grade = Ni + 2 Co.
H	1143000	1.74	2286000	306324	2.80	2000000	\$13.00	3982000	1692000	227000	63000	3.2%	1.50%	1	



C-33  
030

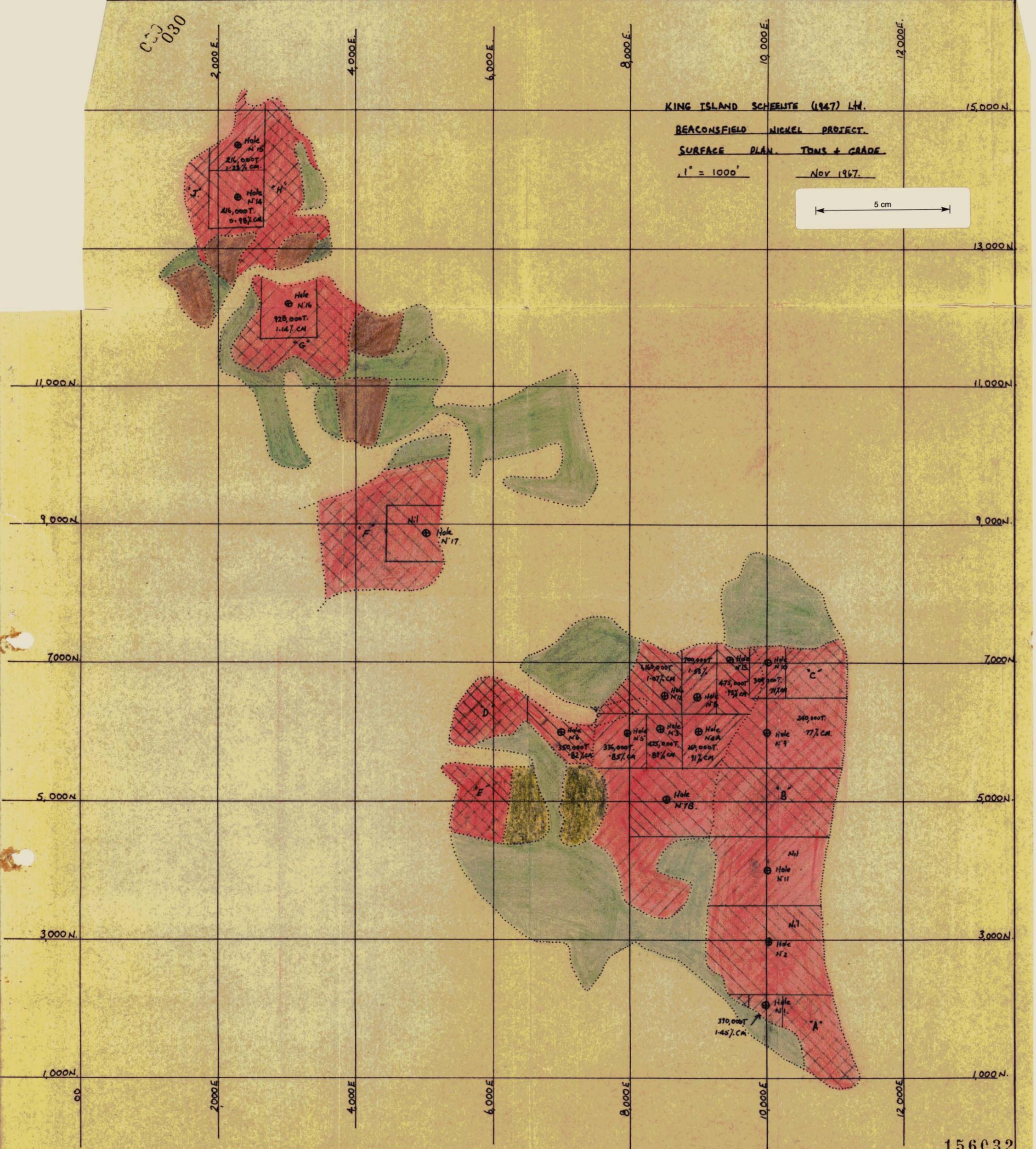
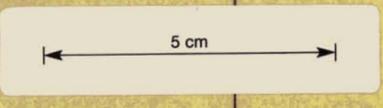
KING ISLAND SCHEELITE (1947) LTD.

BEACONSFIELD NICKEL PROJECT.

SURFACE PLAN. TONS + GRADE.

1" = 1000'

Nov 1967.



156032

Fig 11