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MICROFILMED

REPORT TO

TASMANIAN MINES DEPARTMENT

ON

EXPLORATION LICENCES 3/65 AND 14/65

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- C. Logs and assays of bores and costeans in the laterites of the Anderson's Creek area.
- D. Logs and assays of pits testing Chromite bearing gravels in the Anderson's Creek area.

INTRODUCTION AND SUMMARY

This report summarises the results of the exploration carried out by the Broken Hill Pty. Co. Ltd. in the Beaconsfield area principally under Exploration Licence 3/65 and partially under EL's 14/65, 15/65. EL 15/65 is still in force but the other two Licences have expired.

The Company's field investigations were initiated by literature research which indicated a favourable environment for limestone, chromite, nickel, iron ore and base metal deposits.

The following work was completed:-

1. Regional and detailed mapping using 1" to 65 chain and 1" to 20 chain aerial photographs and field traverse information.
2. Airborne and ground magnetometer surveying.
3. Geochemical sampling.
4. Testing, by drilling, pitting or trenching of selected areas for limestone, iron ore, chromium and nickel.
5. Testing of an aeromagnetic anomaly at Scott's Hill by one diamond drill hole.

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PREVIOUS LITERATURE

The many publications referred to during the company's investigation of the Beaconsfield area are listed in the bibliography.

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EXPLORATION TITLES

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Exploration Licence 3/65 was granted to the company on 7th April 1965 over 57 square miles and was allowed to lapse on 7th October, 1966.

Exploration Licence 14/65 was taken up in June 1965 to cover investigation of quartzite deposits which have now been covered by mineral leases.

Some of the work in connection with EL's 14/65 and 3/65 overlapped into EL 15/65 which was granted to the company in June 1965 and which is still in force.

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GEOLOGY (FIG. 2.)

A. GENERAL:

The area investigated consists of three distinct geologic units:

- (1) A folded basement of slightly metamorphosed Precambrian sediments.
- (2) A sedimentary sequence ranging from the Upper Cambrian to the Middle Devonian and folded during the Middle Devonian Tabberabberan Orogeny. The older members of this sequence are intruded by pre-ordovician ultrabasics.
- (3) A blanket of Permian and Tertiary sediments intruded by Jurassic dolerites and capped by Tertiary basalts.

B. STRATIGRAPHY:

1. Precambrian -

Precambrian metamorphosed greywackes and sub-greywackes typical of a geosynclinal environment outcrop in the western portion of EL 3/65 and form the antiformal structure of asbestos Range. Exposures of these rocks occur along the coastline at Badger Head.

2. Cambrian -

(a) Sediments

Cambrian sediments outcrop southwest of Port Sorrell, south of the West Tamar Highway - Flowery Gully Road Junction, on the western slopes of Cabbage Tree Hill and Blue Tier Hill and at the road crossing of the eastern arm of the Franklin River.

The Cambrian rocks are faulted against the Precambrian

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and the sequence is characterised by interbedded sandstone, greywacke, siltstone and slate indicating a geosynclinal environment. The thickness of the sequence is not known but exceeds 2000 feet.

Between the western edge of the Anderson's Creek Ultrabasics and the Precambrian there is a narrow strip of schists and micaceous sandstones of uncertain stratigraphic position. Petrological examination shows evidence of serpentinization indicating a Cambrian or possibly Precambrian age.

(b) Ultrabasic Rocks -

Ultrabasic rocks outcrop two miles west of Beaconsfield over a length of four miles with a maximum width of approximately one mile. The aeromagnetic contours (fig. 9) indicate that the ultrabasic belt continues under cover of Permian sediments over a length of twelve miles and a width of between two and three miles.

The ultrabasic complex contains a variety of rock types, those identified by petrological examination including—

(1) Serpentinite with dominant antigorite and seamed by irregular veins of chrysotile and magnetite with magnetite replacing chrysotile. Magnetite and chromite occur in the serpentinite as small crystals.

Two stages of mineralisation are recognised, intramagmatic disseminations of chromite and magnetite and hydrothermal replacement of chrysotile in veins by magnetite.

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(2) Pyroxine Gabbro occurs mainly in the northwestern corner of the ultrabasic complex but small bodies are scattered throughout the serpentinite. The rock shows evidence of saussuritization and contains ilmenite, pyrrhotite with occasional pentlandite, and chalcopyrite with rare vallerite.

(3) Pyroxenite. Patches of pyroxenite up to 30 yards in width occur scattered throughout the serpentinite. The rock consists almost entirely of enstatite, bronzite or diallage with rare olivene, magnetite, chromite, chalcopyrite and chalcocite.

The diallage pyroxenite shows weak serpentinitization.

(4) Rodingite. This rock type occurs associated with coarse grained to pegmatitic metasomatized hornblende gabbro south of Barnes Hill. The rodingite has developed from hornblende gabbro by lime metasomatixm prior to serpentinitization.

(5) Leucocratic Rocks. Small bodies, up to 10 yards in diameter, of leucocratic rocks occur within the ultrabasic complex particularly south of Frenchmans Quarry where they are associated with hornblende gabbro. The rock is a saussaritized diorite consisting of pyroxene, amphibole, saussaritized plagioclase, sericite, secondary felspar with coarsely crystalline amphibole and pyroxene remnants.

(6) Metamorphic Rock. Metamorphic rocks consisting mainly of quartz, plagioclase and biotite and which show a gneissic lineation occur in the ultrabasic complex. The rock is described as a biotite gneiss.

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3. ORDOVICIAN

The Ordovician Junee Group is represented at Beaconsfield by the following facies sequence:

Sandstone, siltstone and slate.

Limestone

Sandstones and siltstones

Quartzites and quartz conglomerates.

the total thickness of the group exceeding 3000 feet.

The Ordovician sediments occur west and south of Beaconsfield and southwest of Frankford, the best exposure being along the Flowery Gully Road and the Frankford Highway.

There is no evidence of conformity between the Ordovician and Cambrian sediments.

(a) Blyth's Creek Formation

The base of the Junee Group is formed by a friable coarse grained sandstone approximately 100 feet thick. There is no apparent fossil evidence as to the age of these sediments. They are younger than Dreskachian and older than the Lower Ordovician fauna of the Caroline Creek sandstone and belong lithologically to the Junee Group. They are therefore regarded as Lower Ordovician.

(b) Cabbage Tree Conglomerate

The Cabbage Tree Conglomerate forms steep ridges east of Beaconsfield and south of Frankford with good exposures along the Flowery Gully road.

The formation consists of thick bedded grey quartzites with conglomeratic beds of pebbles up to three inches common in the basal beds. Chromite grains occur in

several horizons and the quartzite includes some thin shale beds.

At Cabbage Tree and Blue Tier Hills the Cabbage Tree conglomerate is conformable with the Blyth's Creek formation but at Anderson's Creek it rests on Cambrian serpentinite.

Potentially Economic deposits of silica and silica gravel occur in the Cabbage Tree conglomerate.

(c) Caroline Creek Sandstone

This formation consists of interbedded micaceous sandstones, chloritic siltstone and shale to a thickness of 750 feet. The presence of the trilobites *Tasmanaspis leveisi* and *Prosopiscus subquadiatus* establishes the age of these sediments as Lower Ordovician.

(d) Gordon Limestone

The Caroline Creek sandstone is conformably overlain by the Gordon limestone southeast of Cabbage Tree Hill where it has a thickness of 500 to 600 feet.

Company drilling and intersections in the Tasmania mine show that the Gordon Limestone occurs over a strike length of four miles east of Cabbage Tree and Blue Tier Hills.

The sequence exposed in the Tasmania mine is:

Limestone	60 feet
Slate	70 "
Sandstone	60 "
Slate	15 "

Limestone	15 feet
Slate	100 "
Limestone	200 "
Total	<u>520 feet</u>

Gordon limestone outcrops over 1.5 miles with a width of $\frac{1}{4}$ mile at Flowery Gully being cut off in the north by a fault and covered by Permian sediments in the south and west. Areas of low silica limestone occur at Flowery Gully and some stone has been produced for the Bell Bay aluminium works.

4.

PERMIAN AND TERTIARY

These two units comprise the geological history after the Tabberabberan Orogeny.

The Permian sediments are the more abundant in the area investigated and rest unconformably on Precambrian and Palaeozoic structures. The sequence consists of up to 1700 feet of sandstones, siltstones and shales and includes the Quamby Group, Golden Valley Group, Mersey Group, Woodbridge Group, Ferntree Group and the Cygnet coal measures representing the Sakmarian, Artinskian, Kungurian and Tartarian epochs.

The basal tillite which occurs in mid, southern and northwestern Tasman does not occur at Beaconsfield. ?

The Tertiary sediments which occur mainly to the north of Beaconsfield consist of sandy clays and sandstones. The extensive accumulations of white quartz gravels north of Beaconsfield are regarded as Tertiary. h

The Cambrian ultrabasics are capped by laterite formed during the Tertiary.

5. IGNEOUS ROCKS

Dolerite occurs in the south of the area and is regarded as Jurassic. The dolerite bodies trend northwest-the major direction of the Tabberabberan lineations. The rock is composed of 40% pyroxine and 60% plagioclase partially altered to sericite and chlorite.

Tertiary basalt containing 45% plagioclase, 15% olivine, 30% pyroxene and 10% opaque oxides with the olivine showing alteration to magnetite and serpentine occurs in the northeastern sector of the area and overlies Tertiary sediments.

C. STRUCTURAL GEOLOGY

The area comprises four main structural units:-

1. A Precambrian antiform
2. Tabberabberan Structures.
3. A Permian blanket covering the Precambrian and Tabberabberan structures and intruded by Jurassic dolerites paralleling the Tabberabberan trends.
4. Horst and graben structures developed during the Tertiary and accompanied by basalt flows.

D. RESULTS OF B.H.P. CO. LTD. OPERATIONS

1. Geophysical

The aeromagnetic survey over the area was flown under contract by A.M.E.G. Pty. Ltd. and their interpretation of results is presented in a report dated August 1965 "Aeromagnetic Survey,

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Beaconsfield Tasmania, For Broken Hill Pty. Co. Ltd.

The ground survey over the area responsible for the anomaly detected during the aeromagnetic survey was conducted by the B.H.P. Co. Ltd. and the results are recorded in Company Report No. 557.

The anomaly was tested by Scotts' Hill DDH No.1, which intersected serpentine with minor asbestos veins and veins of magnetite from 310' the bottom of the hole at 673'.

The core did not contain any sulphide mineralization and the magnetite content, although not of economic significance was sufficient to explain the magnetic anomaly recorded over the drill site.

The log of the hole is presented as appendix A.

2. Geochemical Sampling Figs. (4,5,6,)7.

An area of approximately 130 square miles, including portions of E.L. 3/65, 14/65 and 15/65 was covered during the stream sediment sampling programme. Each sample was assayed for leachable copper, zinc and nickel and for total molybdenum, and results are shown on Figs. 4,5,6 & 7. Only one sample gave a higher than background result for molybdenum and the results for this element were not plotted.

3. Limestone

Seventeen percussion drill holes were put down at the locations shown on Fig.8 in an endeavour to locate near surface continuations of the limestone outcropping at Flowery Gully and intersected in the Mines Department bore at the Tasmania Mine.

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The sections on Fig.8 and the logs in appendix B, show that no near surface intersections of limestone were made during the drilling and the project has been abandoned.

Samples of the gravels intersected by bores PB3 and PB9 were tested for gold with a negative result.

4. Iron Ore

A small outcrop of ferruginous material occurs at Mt. Sugarloaf and five short Halco-Stenwick holes were drilled to determine whether the occurrence is of sufficient extent and purity to be considered for use in the Company's Bell Bay furnace.

Three holes intersected clay from the surface to approximately 20 feet and the other two intersected ferruginous material from the surface to eight and two feet.

The evidence from the drilling, supported by geophysical evidence, showed that the outcrop does not represent a significant orebody.

5. Nickel and Chrome (Fig.9)

The laterites near Anderson's Creek, proven to be nickel and chrome bearing by previous investigations by other companies, were sampled by drilling and costeaning and the results of this work are presented as appendix C to this report.

The results show that the nickel and chrome content of the laterites are too low for development. The chromite bearing gravels in the Anderson's Creek area were tested by pitting and the logs of the pits and sample assays are

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given in appendix D.

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APPENDIX A.

Log of Scott's Hill DDH-No.1.

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DRILLING PROGRESS REPORT

174020

HOBART

Branch

Bore SCOTT'S HILL DDH NO. 1

Report No. 1

Location 3 miles west Beaconsfield, Tasmania

Bearing 230 T

Period April 5th - May 5th

Depression 45°

Operator A. Bartlett

R. L. Collar

Unit Mindrill

Est. Total Depth 1,000' inclined at 45°

Bit

Footage for Period

Barrel

From	To	Int.	Core Rec'd.	%	Core in Dip	Description
0	16					Sandy gravel. Fragments about $\frac{1}{2}$ " with some larger quartz pebbles $\frac{1}{2}$ " long.
16	25					Clay
25						25 - 26 small quartz pebbles $\frac{1}{4}$ " scattered in clayey matrix
						26 - 28.8 soft white clay
						28.8 - 34 soft buff clay
						34 - 39 sand with small quartz pebbles $\frac{1}{16}$ "
						39 - 40.3 quartz pebbles $\frac{1}{2}$ "
						40.3 - 58 white friable crumbly clay
	89.3					58 - 89.3 Claystone harder more compact grey claystone
89.3	90					Quartz
90	106.5					No core
106.5						Sandstone fine grained light red colour
	134.3					Dip in core 10° ∴ Dip of beds either 35° or 55°
						114 - 118 Sand loose
						124 - 130 No core
134.3						Sandstone Siltstone fine grained dense light and dark grey. Finely banded $\frac{1}{10}$ " bands of softer dark grey siltstone in lighter grey sandstone.
						136 Dip in core 25° ∴ Dip of beds 20° or 70°
						163.9 Quartz vein $\frac{1}{8}$ " wide running down ore for about 4" at steep 80° angle.

Remarks:

Date 5th May, 1966

Logged by K.M. Hall

020

DRILLING PROGRESS REPORT

174021

Branch

Bore.....

Report No.....

From	To	Int.	Core Rec'd.	%	Dip in Core	Description
134.3	cont:					164.5 Small pieces of sandstone 1/10 x 1/5" distorted and scattered within silty matrix 170 pyrite specks 203.2 angle = core 20° Dep of Beds 25 or 65 Between 183.7 - 203.2 small specks of pyrite or partings 205.5 Angle in core 15° ∴ Dep of beds 30 or 60 226.6 angle in core 15° 230.5 " " " 25° 234 specks of pyrite on weathered plane 236 angle in core 30-35 244 " " " 20-25 245 " " " 20 248-250 silty partings are extremely fine 1/16" 250.5 - 251 pebbly 1/4" in sandstone
251		251				Black very fine-grained dense silicified sandstone. In places chert-like. No bedding, massive with scattering of lighter coloured small fragments of sandstone
255.4	255.4					255.4 Light green quartz sandstone open texture-pitted surface. Within green sandstone there are bands of dark black chert-like material 1/10" - 1/2" wide. Where black material occurs as bands in green it is not quite so fine- grained. Green sst. appears to have a core dip of 15-20 262 - 262.2 Black cherty material 262.2-263.3 green sandstone 263.3-266 black chert 266 green sandstone with black bands becoming larger and more frequent 2-3" wide

Remarks:

Date 5th May

Logged by K.M. Hall

021

DRILLING PROGRESS REPORT

174022

Branch

Bore

Report No.

From	To	Int.	Core Rec'd.	%	Dip in Core	Description
						<p>276-278 colour greenish grey slightly denser and with small bands of quartz pebbles across core at right angles</p> <p>278 chert - black dense</p> <p>288.3 - 290 core recovery very poor small pieces only lighter grey fine grained sandstone with small darker grey silty partings of 134.3 - 251</p> <p>290-296 chert</p>

Remarks:

Date

Logged by

022

DRILLING PROGRESS REPORT

174023

HOBART

Branch

Bore..... Scott Hill DDH No.1. Report No.....
 Location..... 3 Miles West Beaconsfield Tas.
 Bearing..... 230T Period..... May 6th - May 25th
 Depression..... 45' Operator..... A. Bartlett
 R. L. Collar..... 173.5 Unit.....
 Est. Total Depth..... 296 - 457.9 Bit.....
 Footage for Period..... Log Unsplit Core Barrel.....

From	To	Int.	Core Rec'd.	%	Core in Dip	Description
296	297					296 - 297 Black mudstone with small 0.005' quartz grains.
297						<u>Quartz Sandstone</u> silicified, in places to quartzite. Grey specks of pyrite at 299.4 299.8 302 No occurrences of pyrite react magnetically ∴ pyrrhotite not associated.
						302 - 307 Quartzite with very fine .005 veins of black material - mudstone Pyrite also occurs - has been weathered out in places.
						307 - 307.4 Sandstone softer friabl
	310.3					309.4 - 310.3 Black shale hard dense with 0.005' fine white lines of quartz particles.
310.3						<u>Serpentine</u> 310.3 - 312.5 white - pale green weathered? 312.5 solid and unweathered. ↓ Light to dark green massive and granular in places fibrous. Light green usually granular. Dark green

Remarks:

Date May 26th

Logged by K.M. Hall

DRILLING PROGRESS REPORT

174024

HOBART

Branch

023

Bore Scotts Hill DDH No. 1.

Report No.

From	To	Int.	Core Rec'd.	%	Dip in Core	Description
						<p>fibrous with a soapy feel.</p> <p>318.4 Reacts magnetically</p> <p>319.4 1/2" wide vein of quartz with blebs of magnetite associated. Much of the serpentine core reacts slightly to a magnet and there are numerous occurrences of <u>magnetite</u> approximately one occurrence per foot of core.</p> <p>325 onwards, serpentine is criss-crossed by fine white veins of asbestos.</p> <p>325.4 - 0.02 band magnetite.</p> <p>331 - 332 1/2" wide vein of quartz with large blebs of magnetite in quartz and serpentine.</p> <p><u>Sampled</u> core split small veins of magnetite 0.02' wide occur about every foot. Sometimes veins run lengthwise down core for up to 6".</p> <p>358 - 361 Serpentine. 365 - 369 crumbly and soft. 381 - 381.5 1/2" band asbestos running down core.</p> <p>381.5 Magnetite 0.02'</p> <p>387 - 388.4 Practically all asbestos soft white and greasy.</p>

Remarks:

Date May 26th

Logged by K.M. Hall

024

DRILLING PROGRESS REPORT

174025

HOBART

Bore

Bore Scott Hill DDH No. 1.

Report No.

From	To	Int.	Core Rec'd.	%	Dip in Core	Description
						398 - 399 $\frac{1}{10}$ " band asbestos down core.
						404.7 - 405 magnetite band $\frac{1}{2}$ " wide down core at 60'
						405.7 Magnetite $\frac{1}{4}$ " sq.
						414 - 415 soft and white.
						414.3 Magnetite $\frac{1}{2}$ " across core.
						424 onwards asbestos veins across core are more common and wider. Soft and soapy.
						432.3 Darker green asbestos comprises perhaps 15% in this part of core.
	457.9					435.7 - 437 <u>Sampled</u> dark green serpentine with asbestos.
						438.6 Darker asbestos less common.
						439 asbestos dipping 45°. veins.
						446.4 - .6 very strongly magnetic $\frac{1}{4}$ " wide.
						446.6 - 457.9 Dark green serpentine.
457.9	673.0					Serpentine with minor veins of asbestos and magnetite.

Remarks:

Date May 26th

Logged by K.M. Hall

APPENDIX B.

Logs of limestone bores, east of Blue Tier Hill
and Mt. Sugarloaf.

DRILLING PROGRESS REPORT

BEACONSFIELD

Branch

026

Bore No. 1

Report No. 1

Location 4 Chains E. of Flowery Gully - Blue
Tier Rd. Junction

174027

Bearing

Period

Depression

Operator T. Green & B. Emmarto

R. L. Collar

Unit Goldfields G 33

Est. Total Depth

Bit

Footage for Period

Barrel

From	To	Int.	Core Rec'd.	%	Core in Dip	Description
0	25'	25'				Clay and decomposed schist.
25'	35'	30'				Grey to black schist.

Remarks:

Date 12.6.65.

Logged by M. Edyvean

02

DRILLING PROGRESS REPORT BEACONSFIELD Branch

Bore No. 2

Report No. 2

Location 2 chs. E. of Flowery Gully - Blue Tier Rd. Junction.

174028

Bearing

Period

Depression

Operator T. Green & B. Emmerton.

R. L. Collar

Unit Goldfields G.33

Est. Total Depth

Bit

Footage for Period

Barrel

From	To	Int.	Core Rec'd.	%	Core in Dip	Description
0	10	10				Clay.
10	23	13'				Decomposed schist.

Remarks:

Although solid limestone was not encountered it is obvious from the samples collected that bedrock is very close.

Date 24.6.65.

Logged by M. Edyvean.

028
DRILLING PROGRESS REPORT..... **BEACONSFIELD**..... Branch

Bore No. **3**

Report No. **3**

Location **At Junction of Flowery Gully & Blue Tier Rd.**

174029

Bearing **-**

Period.....

Depression **-**

Operator **J. Green & B. Emmerton**

R. L. Collar **-**

Unit **Goldfields G.33**

Est. Total Depth **-**

Bit.....

Footage for Period **-**

Barrel.....

From	To	Int.	Core Rec'd.	%	Core in Dip	Description
0	80'	80'				Oxidized alluvium + <i>talus</i>
80'	112'	32'				Non-oxidized alluvium + <i>talus</i>
112'	115'	3'				Fine grained gravel.
115'	132'	17'				Coarse grained gravel.
132'						Solid limestone.

Remarks:

Date **12.6.65.**

Logged by **M. Edyvean**

029

DRILLING PROGRESS REPORT

BEACONSFIELD

Branch

Bore No. 4

Report No. 4

Location 2 chs. W. of Flowery Gully - Blue Tier Rd. Junction.

Bearing

Period

174030

Depression

Operator J. Green & B.

R. L. Collar

Unit Goldfields G.33

Emmerton

Est. Total Depth

Bit

Footage for Period

Barrel

From	To	Int.	Core Rec'd.	%	Core In Dip	Description
0	30'	30'				Alluvium.

Remarks:

Date 14.6.65.

Logged by M. Edyvean.

030

DRILLING PROGRESS REPORT

BEACONSFIELD

Branch

Bore No. 5

Report No.

Location 4 chs. W. of Flowery Gully & Blue Tier Rd. Junction.

174031

Bearing

Period

Depression

Operator J. Green & B. Emmerton

R. L. Collar

Unit Goldfields G.33

Est. Total Depth

Bit

Footage for Period

Barrel

From	To	Int.	Core Rec'd.	%	Core in Dip	Description
0	30'	30'				Alluvium.

Remarks:

Date 14.6.65.

Logged by M. Edyvean.

DRILLING PROGRESS REPORT

BEACONSFIELD

Branch

Report No. 6

174032

Period 31st May - 2nd June.

Operator T. Green and
B. Emmerton.

Unit Goldfields G-33

Bit

Barrel

031

Bore No. 6

Location 110 chs. along Blue Tiers Rd.

Bearing -

Depression -

R. L. Collar -

Est. Total Depth -

Footage for Period -

From	To	Int.	Core Rec'd.	%	Core in Dip	Description
0'	23.0'	23.0				Weathered schist.
23.0'	38.0	15.0				Black schist.

Remarks:

Date 14.6.65.

Logged by M. Edyvean.

DRILLING PROGRESS REPORT

BEACONSFIELD

Branch

032

Bore No. 87
 Location 4 chs. W. of bore No. 6
 Bearing -
 Depression -
 R. L. Collar -
 Est. Total Depth -
 Footage for Period -

Report No. 7
174033
 Period 2nd June - 4th June.
 Operator T. Green & B. Emmerton.
 Unit Goldfields G.33
 Bit -
 Barrel -

From	To	Int.	Core Rec'd.	%	Core In Dip	Description
0	5.0'	5'				Clayey sand.
5	39.0'	34'				Sand.
39	40.0'	1.0				Quartz gravel.

Remarks:

Date 24.6.65.

Logged by M. Edyvean.

DRILLING PROGRESS REPORT

BEACONSFIELD Branch

033

Bore No. 8

Report No. 8

Location 2 chs. W. of bore No. 8

174034

Bearing -

Period 5th June - 22nd June.

Depression -

Operator T. Green and

R. L. Collar -

B. Emmerton

Est. Total Depth -

Unit Goldfields G.33

Footage for Period -

Bit -

Barrel -

From	To	Int.	Core Rec'd.	%	Core In Dip	Description
0	60'	60'				Clay.
60'	95'	35'				Sandy material with quartz pebbles.
95'	115'	20'				Sandy clay.
115'	140'	25'				Calcareous clay and limestone fragments.
140'	150'	10'				Sand and limestone fragments, smaller and not as numerous as in the section above.
150'	170'	20'				Quartz gravel with clay and small limestone fragments.

Remarks: Hole terminated when a quartzite boulder was struck $\frac{1}{2}$ " being drilled in 8 hours.

Date 24.6.65.

Logged by M. Edyvean.

DRILLING PROGRESS REPORT BEACONSFIELD Branch

034

Bore No. ~~109~~ 1

Report No. 9

Location Line 165 chs. along Blue Tier Rd.
16 chains to the east of the road.

174035

Bearing -

Period 24th June.

Depression -

Operator T. Green &

R. L. Collar -

B. Emmerton

Est. Total Depth -

Unit Goldfields G.33

Bit

Footage for Period -

Barrel

From	To	Int.	Core Rec'd.	%	Core in Dip	Description
0	5	5				Weathered claystone.
5	15	10				Pure claystone.

Remarks:

This hole was terminated at 15' as the claystone is not part of the Ordovician sequence i.e. the bore hole is located too far to the east. The next site is 3 chs. to the west.

Date 24.6.65.

Logged by M. Edyvean.

DRILLING PROGRESS REPORT

BEACONSFIELD

Branch

5
35

Bore No. ~~10~~ 10

Report No. 10

Location 4 chains west of bore No. 10

174036

Bearing

Period June 25th.

Depression

Operator J. Green & B. Emmerton

R. L. Collar

Unit Goldfields G.33

Est. Total Depth

Bit

Footage for Period

Barrel

From	To	Int.	Core Rec'd.	%	Core in Dip	Description
0	5	5				Clay brown and grey.
5	10	5				As above except that more grey claystone is present.
10	15	5				As above.
15	20	5				Claystone.

Remarks:

Date 25.6.65.

Logged by M. Edyvean.

DRILLING PROGRESS REPORT

BEACONSFIELD

Branch

036

Bore No. ~~D~~ 11

Report No. 11

Location 4 chains West of bore No. 11

174037

Bearing -

Period 25th June - 28th June.

Depression -

Operator T. Green & B. Emmer ton.

R. L. Collar -

Unit Goldfields G.33

Est. Total Depth -

Bit

Footage for Period -

Barrel

From	To	Int.	Core Rec'd.	%	Core in Dip	Description
0	5	5				Sandy clay.
5	10	5				Clay.
10	55	45				Weathered shale.

Remarks:

Date 28.6.65.

Logged by M. Edyvean.

DRILLING PROGRESS REPORT

BEAGONSFIELD

Branch

037

Bore No. ~~10~~ 12

Report No. 12

Location On line 165 chs. along Blue Tier Rd.
5 yds. east of road.

174038

Bearing

Period 28th June - 29th June

Depression

Operator T. Green &
B. Emmerton.

R. L. Collar

Unit Goldfields G.33

Est. Total Depth

Bit

Footage for Period

Barrel

From	To	Int.	Core Rec'd.	%	Core In Dip	Description
0	12	12				Clay.
12	40	28				Clay with sandy schist fragments.

Remarks:

Date 29.6.65.

Logged by M. Edyvean.

DRILLING PROGRESS REPORT

BEACONSFIELD

B.

038

Bore ~~12~~ 13

Report No. _____

Location 158 chains along Flowery Gully Rd.

174039

Bearing -

Period 30th June - 1st Ju

Depression -

Operator T. Green &
B. Emmerton.

R. L. Collar -

Unit Goldfields G.33

Est. Total Depth -

Bit _____

Footage for Period -

Barrel _____

From	To	Int.	Core Rec'd.	%	Core In Dip	Description
0	30	30				Sandy clay.
30	35	5				As above plus transported dolerite boulders.
35	45	10				As above plus green clay.

Remarks:

Date 3.7.65.

Logged by M. Edyvean.

DRILLING PROGRESS REPORT

BEACONSFIELD

Branch

039

Bore ~~18~~ 19

Report No. 14

Location 5 chains West of bore No. 14

174040

Bearing -

Period 1st July - 2nd July.

Depression -

Operator T. Green & B. Emmerton.

R. L. Collar -

Unit Goldfields G.33

Est. Total Depth -

Bit

Footage for Period -

Barrel

From	To	Int.	Core Rec'd.	%	Core In Dip	Description
0	5	5				Clay.
5	15	10				Clay and sandstone fragments.
15	35	20				Sandy clay (micaceous).
35	40	5				Sandy clay (micaceous) with sandstone pebbles.

Remarks

Date 3.7.65.

Logged by M. Edyvean.

DRILLING PROGRESS REPORT

BEACONSFIELD

Brane

Bore No. D 10

Report No. 15

Location 190 chs. along Flowery Gully Rd.
5 chs. east of road.

174041

Bearing -

Period 2nd July - 3rd July.

Depression -

Operator T. Green & B. Emmerton.

R. L. Collar -

Unit Goldfields G.33

Est. Total Depth -

Bit -

Footage for Period -

Barrel -

From	To	Int.	Core Rec'd.	%	Core In Dip	Description
0	5	5				Clay.
5	30	25				Clay with sandstone fragments from $\frac{1}{4}$ " to $\frac{1}{2}$ " in length.
30	35	5				Sandy clay.
35	40	5				Clay and sandstone fragments.

Remarks:

Date 7.7.65.

Logged by M. Edyvean.

DRILLING PROGRESS REPORT BEACONSFIELD Branch

04

Bore No. ~~16~~ 16

Report No. 16

Location 5 chs. east of bore No. 16

174042

Bearing

Period 5th July - 7th July.

Depression

Operator T. Green &
B. Emmerton.

R. L. Collar

Unit Goldfields G.33

Est. Total Depth

Bit

Footage for Period

Barrel

From	To	Int.	Core Rec'd.	%	Core in Dip	Description
0	5	5				Dark grey clay.
5	15	10				Sandy clay.
15	20	5				Clay and sandstone fragments.
20	25	5				Pale grey clay.
25	40	15				Clay with sandstone fragments.

Remarks:

Date 7.7.65.

Logged by M. Edyvean.

042

DRILLING PROGRESS REPORT

BEACONSFIELD

Branch

Bore No. ~~1~~ 17

Report No. 17

Location On Holwell Rd. south of Dennious Rd. by
18 chs. east of Holwell Rd. by 2 chains.

174043

Bearing.....

Period 8th July - 9th July.

Depression.....

Operator T. Green &
B. Emmerton.

R. L. Collar.....

Unit Goldfields G.33

Est. Total Depth.....

Bit.....

Footage for Period.....

Barrel.....

From	To	Int.	Core Rec'd.	%	Core In Dip	Description
0	15	15				Sand.
15	35	20				Sandy clay.
35	50	15				Black peaty sediment.
50	60	10				Sandy clay with organic matter and shale.

Remarks:

Date 12.7.65.

Logged by M. Eadyvean.

04

ADWA T. BARNES HILL
BORE 1, 25 FEET

174044

<u>Depth</u>		<u>Description</u>	<u>Sample No.</u>	<u>Assay Results Newcastle</u>			
<u>From</u>	<u>To</u>			<u>Fe</u>	<u>Ni</u>	<u>Cr₂O₃</u>	<u>Co</u>
0'	5'	Laterite	C.R. 5858	24.4	.02	6.42	.01
5'	10'	"	5859	28.8	.03	10.74	.01
10'	15'	"	5860	34.3	.05	11.30	.01
15'	20'	"	5861	34.3	.07	8.26	.01
20'	25'	"	5862	39.5	.12	7.89	.01

BORE 1A, 57 FEET

0'	5'	Laterite	C.R. 5863	30.1	.02	9.12	.01
5'	10'	"	5864	31.5	.04	112.32	.01
10'	15'	"	5865	38.3	.08	11.31	.01
15'	20'	"	5866	47.4	.32	10.20	.02
20'	25'	"	5867	43.5	.37	4.65	.03
25'	30'	"	5868	44.6	.42	4.60	.10
30'	35'	"	5869	40.3	.39	5.38	.11
35'	40'	"	5870	28.6	.60	3.40	.15
40'	46.7'	Serpenti-ferous material	5871	27.5	1.08	4.19	.08
At 46.7' Auger Sample		" "	5872	27.3	.96	3.89	.12
46.7'	51.7'	" "	5873	10.4	.33	1.61	.02
51.7'	56.7'	" "	5874	6.4	.19	0.88	.01

BORE 2, 63 FEET

0'	5'	Laterite	C.R. 5875	19.0	.02	1.53	.01
5'	10'	"	5876	35.6	.02	3.10	.04
10'	15'	"	5877	38.1	.01	4.33	.01
15'	20'	"	5878	36.8	.02	7.66	.01
20'	25'	"	5879	37.4	.02	8.77	.01
25'	30'	"	5880	38.2	.20	8.89	.01
30'	35'	"	5881	43.6	.09	8.58	.01
35'	40'	Enterance of Serpenti-ferous material	5882	49.1	.12	5.16	.01
40'	45'	" "	5883	53.4	.16	6.36	.05
45'	50.5'	" "	5884	49.1	.34	6.66	.07
50.5'	55.5'	" "	5885	31.6	1.35	5.80	.08
55.5'	60.0'	" "	5886	25.2	1.65	4.53	.10
60.0'	63.0'	" "	5887	13.3	1.08	2.48	.06

APPENDIX C.

Logs and assays of bores and costeans in the
laterites of the Anderson's Creek area.

045

AREA J. BARNES HILL

174046

BORE 3. 74 FEET

Depth		Description	Sample No.	Assay Results Newcastle			
From	To			Fe	Ni	Cr ₂ O ₃	Co
0'	5'	Laterite	C.R. 5888	24.6	.02	2.31	.01
5'	10'	"	5889	36.7	.01	3.32	.01
10'	15'	"	5890	46.7	.01	4.65	.01
15'	20'	"	5891	45.0	.02	5.38	.01
20'	25'	"	5892	36.7	.02	6.74	.01
25'	30'	"	5893	40.2	.05	7.54	.08
30'	35'	"	5894	43.3 ³⁹⁻⁰¹	.06 ⁰⁻⁰¹	7.34 ⁵⁻³³	.04 ⁰⁻⁰²
35'	40'	"	5895	46.6	.20	6.77	.01
40'	45'	"	5896	50.2	.19	6.59	.01
45'	50'	"	5897	39.5	.21	4.38	.03
50'	55'	"	5898	48.6	.38	4.22	.14
55'	60'	"	5899	49.3 ⁴⁴⁻²⁰	.29 ⁰⁻¹⁵	6.25 ⁵⁻²⁴	.09 ⁰⁻⁰⁶
60'	65'	Weathered Serpentine	5900	38.6	.92	4.60	.08
65'	70'	"	5901	22.3	1.12	3.77	.06
70'	74'	Serpentine	5902	15.9 ²⁵⁻⁶	1.04 ⁰⁻³	2.82 ³⁻²⁵	.04 ⁰⁻⁶

BORE 4. 67 FEET

0'	5'	Laterite	C.R. 5903	18.6	.02	1.77	.01
5'	10'	"	5904	40.2	.01	1.91	.01
10'	15'	"	5905	44.2	.04	5.77	.02
15'	20'	"	5906	47.6	.05	7.28	.01
20'	25'	"	5907	44.3	.02	8.32	.01
25'	30'	"	5908	42.7 ³⁹⁻⁶⁰	.07 ⁰⁻⁰³	6.24 ⁵⁻²¹	.01 ⁰⁻⁰¹
30'	35'	"	5909	35.8	.23	4.35	.02
35'	40'	"	5910	42.4	.16	9.30	.05
40'	45'	"	5911	43.7	.22	7.34	.01
45'	50'	"	5912	35.0	.22	3.71	.04
50'	55'	"	5913	40.1 ³⁹⁻⁴	.28 ⁰⁻²²	4.66 ⁴⁻²⁹	.05 ⁰⁻⁰³
55'	60'	Weathered Serpentine	5914	23.8	1.20	3.83	.07
60'	65'	"	5915	36.8	1.33	3.39	.08
65'	67'	Bedrock	5916	13.7 ²⁴⁻⁷⁷	1.45 ¹⁻³⁵	1.18 ²⁻⁸⁰	.09 ⁰⁻⁰⁸

046

AREA J, BARNES HILL
EXCAVATION 1, 18 FEET

BEN LOMOND CO.
NIKKEL PITS
174047

<u>Depth</u>		<u>Description</u>	<u>Sample No.</u>	<u>Assay Results</u>			
<u>From</u>	<u>To</u>			<u>Fe</u>	<u>Ni</u>	<u>Cr₂O₃</u>	<u>Co</u>
		<u>Laterite</u>		1. <u>Temco</u>			
				2. <u>Mines Department</u>			
0'	3' 7"	Red	B.7376	0.05	ND	Nil	
				Trace		Trace	
3' 7"	6' 4"	Red and yellow	7377	0.22	"	Nil	
				0.18	"		
6' 4"	8' 6"	Red and yellow	7378	0.37	"	0.10	
				0.29			
8' 6"	11' 0"	Red and yellow	7379	0.49	"	Nil	
				0.23			
11' 0"	12' 11"	Yellow and red	7380	0.28	"	0.24	
				0.19			
12' 11"	14' 10"	Red, black, green, white. Remarkable change in profile.	7381	0.75	"	0.24	
				0.55			
14' 10"	16' 5"	" "	7382	1.02	"	0.24	
				0.82			
16' 5"	16' 9"	Bright red. Change in profile. Not on bed-rock.	7383	Trace	"	Nil	
				0.91			
16' 9"	18' 3"	Red, black, green clay. Not on bed-rock.	7224		"		

EXCAVATION 2, 16 FEET

		<u>Laterite</u>					
0'	2' 8"	Red	B.7384	0.86	"	Nil	
				Trace			
2' 8"	5' 2"	Red	7385	0.25	"	Trace	
				0.12			
5' 2"	8' 2"	Light red and yellow	7386	0.32	"	Trace	
				0.19			

047

AREA J. BARNES HILL

174048

EXCAVATION 2, 16 FEET (Cont'd.)

<u>Depth</u>		<u>Description</u>	<u>Sample No.</u>	<u>Assay Results</u>			
<u>From</u>	<u>To</u>			<u>Fe</u>	<u>Ni</u>	<u>Cr₂O₃</u>	<u>Co</u>
		<u>Laterite</u>					
8' 2"	10' 8"	Red and yellow.	B.7387	1. Temco 2. Mines Department	0.30 0.19	ND	N11
10' 8"	12' 11"	Red and yellow.	7388		0.58 0.42	"	0.42 Trace
12' 11"	14' 11"	Greenish grey yellow. Change in profile.	7389		1.42 0.99	"	0.34
14' 11"	15' 7"	Greenish grey yellow. Change in profile. Not on bedrock.	7390		0.90 0.74	"	0.26

EXCAVATION 3, 10 FEET

		<u>Laterite</u>					
0'	2' 9"	Red.	B.7391		0.25 0.28	"	Trace
2' 9"	4' 11"	Light red.	7392	1. Newcastle 2. Mines Department	.18 0.13	"	.01
4' 11"	7' 11"	Light red.	7393		.33 0.31	"	.02
7' 11"	10' 3"	Green, black, red. Remarkable change in profile.	7394		.74 0.69	"	.13
	7' 6"	Red, black, yellow. Remarkable change in profile. Not in bedrock.	7395(3A)		.73 0.53	"	.10

048

AREA J. BARNES HILL

174049

EXCAVATION 4, 14 FEET

<u>Depth</u>		<u>Description</u>	<u>Sample No.</u>	<u>Assay Results</u>			
<u>From</u>	<u>To</u>			<u>Fe</u>	<u>Ni</u>	<u>Cr₂O₃</u>	<u>Co</u>
		<u>Laterite</u>		1. <u>Newcastle</u>			
				2. <u>Mines Department</u>			
0'	2' 6"	Red	B.7396		.01	ND	.01
					Trace		
2' 6"	4' 6"	Red	7397		.03	"	.01
					Trace		
4' 6"	7' 0"	Red	7398		.08	"	.02
					0.11		
7' 0"	9' 9"	Light red	7399		.11	"	.02
					0.10		
9' 9"	12' 1"	Light red	7400		.11	"	.01
					0.09		Trace
12' 1"	13' 10"	Light red, not on bedrock	7401		.14	"	.02
					0.10		
13' 10"	14' 0"	Light red, taken near bedrock.	7402 (4A)		.70	"	.17
					0.76		

EXCAVATION 5, 15 FEET

		<u>Laterite</u>					
0'	2' 6"	Red	B.7403		.02	"	.01
					Trace		
2' 6"	4' 11"	Red	7404		.03	"	.01
					Trace		
4' 11"	7' 4"	Red and green	7405		.03	"	.01
					Trace		
7' 4"	9' 11"	Light red. Slight change in profile.	7406		.06	"	.01
					Trace		
9' 11"	12' 8"	Light red.	7407		.12	"	.08
					0.15		
12' 8"	13' 11"	Green, red, black. Remark- able change in profile.	7408		.45	"	.22
					0.42		
13' 11"	14' 11"	Green, red. Not on bedrock	7409		.46	"	.04
					0.37		

049

AREA J, BARNES HILL

174050

EXCAVATION 6, 20 FEET

<u>Depth</u>		<u>Description</u>	<u>Sample No.</u>	<u>Assay Results</u>			
<u>From</u>	<u>To</u>			<u>Fe</u>	<u>Ni</u>	<u>Cr₂O₃</u>	<u>Co</u>
				1. <u>Newcastle</u>			
		<u>Laterite</u>		2. <u>Mines Department</u>			
0'	2' 5"	Grey and red	B.7410		.03	ND	.01
					Trace		
2' 5"	4' 8"	Light red	7411		.02	"	.01
					Trace		
4' 8"	7' 3"	Red	7412		.04	"	.01
					Trace		Trace
7' 3"	9' 9"	Red	7413		.12	"	.01
					0.13		
9' 9"	12' 5"	Light red	7414		.22	"	.02
					0.18		
12' 5"	15' 8"	Light red	7415		.23	"	.03
					0.20		
15' 8"	17' 8"	Light red	7416		.27	"	.07
					0.25		
17' 8"	19' 3"	Yellow, black, red. Remarkable change in profile.	7417		.38	"	.39
					0.33		
19' 3"	20' 3"	Yellow, black, green. Slight change. Not on bedrock.	7418		.63	"	.34
					0.63		

EXCAVATION 7, 15 FEET

<u>Depth</u>		<u>Description</u>	<u>Sample No.</u>	<u>Assay Results</u>			
<u>From</u>	<u>To</u>			<u>Fe</u>	<u>Ni</u>	<u>Cr₂O₃</u>	<u>Co</u>
		<u>Laterite</u>					
0'	3' 0"	Red	B.7419		.04	"	.01
					Trace		
3' 0"	5' 8"	Red	7420		.14	"	.06
					0.13		
5' 8"	8' 2"	Light red	7421		.28	"	.08
					0.27		
8' 2"	10' 11"	Red, yellow black. Remarkable change in profile.	7422		.46	"	.18
					0.42		

050

174051

AREA J, BARNES HILL
EXCAVATION 7, 17 FEET (Cont'd.)

<u>Depth</u>		<u>Description</u>	<u>Sample No.</u>	<u>Assay Results</u>			
<u>From</u>	<u>To</u>			<u>Fe</u>	<u>Ni</u>	<u>Cr₂O₃</u>	<u>Co</u>
		<u>Laterite</u>		1. <u>Newcastle</u>			
				2. <u>Mines Department</u>			
10'11"	13' 5"	Red, yellow black. Remarkable change in profile.	B.7423		.37 0.37	ND.	.15
13' 5"	15' 5"	Red, yellow black. Remarkable change in profile. Not on bedrock.	7424		.31 0.25	"	.05 Trace

EXCAVATION 8, 11 FEET

		<u>Laterite</u>					
0'	2' 9"	Red.	B.7425		.04 Trace	"	.01
2' 9"	5' 5"	Red.	7426		.08 0.09	"	.01
5' 5"	8' 5"	Red, (light).	7427		.18 0.18	"	.04
8' 5"	11' 3"	Red and black. Slight change in profile. Not on bedrock.	7428		.35 0.38	"	.18

EXCAVATION 9, 10 FEET

		<u>Laterite</u>					
0'	2'9"	Red	B.7429		.13 0.14	"	.02
2' 9"	5' 7"	Light red and black.	7430		.41 0.43	"	.16
5' 7"	7'10"	Light red.	7431		.51 0.55	"	.10
7'10"	9' 6"	Light red, yellow. Not on bedrock.	7432		.69 0.96	"	.18

051

174052

AREA J, BARNES HILL
EXCAVATION 10, 8 FEET

<u>Depth</u> <u>From</u>	<u>To</u>	<u>Description</u>	<u>Sample</u> <u>No.</u>	<u>Assay Results</u>			
				<u>Fe</u>	<u>Ni</u>	<u>Cr₂O₃</u>	<u>Co</u>
		<u>Laterite</u>		1. <u>Newcastle</u>			
				2. <u>Mines Department</u>			
0'	2' 1"	Red	B.7433		.04 Trace	ND	.01
2' 1"	4' 9"	Red	7434		.02 Trace	"	.01
4' 9"	6' 0"	Red	7435		.04 0.10	"	.01
6' 0"	8' 4"	Red, green and yellow. Remarkable in profile.	7436		.16 0.30	"	.05
	4' 0"	Red yellow	7437(10A)		.26 0.36	"	.01
4' 0"	5' 8"	Red, yellow green. Not on bedrock.	7438(10B)		.33 0.40	"	.02

AREA P, BARNES HILL
EXCAVATION 11, 10 FEET

		<u>Laterite</u>					
0'	2' 6"	Red	B.7439		.06 Trace	"	.01
2' 6"	4' 10"	Red and yellow.	7440		.14 0.20	"	.01
4' 10"	6' 7"	Red, green and yellow. Slight change in profile.	7441		.18 0.20	"	.01
6' 7"	10' 0"	Red and yellow. Not on bedrock.	7442		.16 0.19	"	.01

052

LATERITES, AREAS C, F AND J.

MELBOURNE OFFICE

174053

AREA C, SCOTS HILLBORE 1, 70 FEET

<u>Depth</u>		<u>Description</u>	<u>Sample No.</u>	<u>Assay Results Newcastle</u>			
<u>From</u>	<u>To</u>			<u>Fe</u>	<u>Ni</u>	<u>Cr₂O₃</u>	<u>Co</u>
0'	5'	Laterite	B.7016				
5'	10'	"	7017	55.6	0.15	5.92	0.03
10'	15'	" ferrug lat.	7018	55.6	0.17	4.62	0.03
15'	20'	"	7019	24.3	0.55	2.59	0.09
20'	25'	" 7.62m	7020	19.5	0.57	2.15	0.04
24'	30'	"	7021	48.5	0.55	4.49	0.08
30'	35'	" ? sand & clay	7022	36.8	1.10	4.72	0.09
35'	40'	" 4.57	7023	41.1	0.89	5.31	0.09
40'	45'	"	7024	26.0	0.78	3.43	0.08
45'	50'	"	7025	11.8	0.55	2.46	0.03
50'	55'	" wall	7026	14.8	0.32	1.59	0.04
55'	60'	" - sep.	7027	12.3	0.22	1.29	0.02
60'	65'	"	7028	9.7	0.16	1.18	0.02
65'	70'	"	7030	11.6	0.31	1.39	0.02
69'		"	7029	16.9	0.48	3.36	0.04

BORE 2, 73 FEET

0'	5'	Laterite	B.7001	22.5	0.01	1.84	0.01
5'	10'	"	7002	22.5	0.01	1.32	0.01
10'	15'	"	7003	28.3	0.02	1.53	0.02
15'	20'	"	7004	34.1	0.01	2.46	0.01
20'	25'	"	7005	38.4	0.03	4.87	0.01
25'	30'	"	7006	35.1	0.03	5.61	0.03
30'	35'	"	7007	29.4	0.05	10.19	0.04
35'	40'	" 12.19m	7008	23.5	0.06	7.00	0.01
40'	45'	"	7009	11.0	0.07	1.10	0.01
45'	50'	"	7010	14.0	0.09	0.99	0.01
50'	55'	"	7011	27.7	0.09	1.83	0.04
55'	60'	" wall	7012	17.5	0.12	0.82	0.03
60'	65'	"	7013	26.3	0.16	1.70	0.02
65'	70'	"	7014	34.9	0.18	2.54	0.06
70'	73'	"	7015	39.3	0.035	2.69	0.19

053

AREA C. SCOTS HILL
EXCAVATION 12, 15 FEET

ZANOW QUARRIES

174054

<u>Depth</u>		<u>Description</u>	<u>Sample No.</u>	<u>Assay Results</u>			
<u>From</u>	<u>To</u>			<u>Fe</u>	<u>Ni</u>	<u>Cr₂O₃</u>	<u>Co</u>
				1. <u>Newcastle</u> 2. <u>Mines Department Tasmania</u>			
		<u>Laterite</u>					
0'	3' 0"	Red	B.7443	.11 0.19		ND	.04
3' 0"	5' 10"	Red	7444	.11 0.20		"	.05
5' 10"	8' 5"	Red, Yellow and black. Remarkable change in profile.	7445	.32 0.41		"	.21
8' 5"	10' 1"	Yellow and black. Slight change in profile.	7446	.21 0.32		"	.10
10' 1"	12' 9"	Yellow and red. Slight change in profile.	7447	.14 0.15		"	.08
12' 9"	15' 4"	Yellow. Slight change in profile. Not on Bed-rock.	7448	.04 Trace		"	.01

EXCAVATION 13, 6 FEET

0'	2' 10"	Red	B.7449	.02 Trace		"	.01
2' 10"	5' 10"	Light red. Not on bed-rock.	7450	.01 Trace		"	.01

054

AREA F, MT. VULCAN

174055

BORE 1, 25 FEET

Depth		Description	Sample No.	Assay Results Newcastle			
From	To			Fe	Ni	Cr2O3	Co
0'	5'	Laterite	C.R.5917	39.0	.13	1.83	.12
5'	10'	"	5918	42.5	.14	2.44	.12
10'	15'	"	5919	43.3	.46	3.60	.80
15'	20'	Weathered Bedrock	5920	27.1	.94	2.72	.08
20'	25'	Solid bed- rock.	5921	11.7	1.02	1.48	.15

BORE 2, 37 FEET

0'	5'	Laterite	C.7.5922	41.7	.21	5.77	.10
5'	10'	"	5923	46.3	.26	3.30	.14
10'	15'	"	5924	37.2	.20	2.50	.04
15'	20'	Weathered bedrock.	5925	39.5	.61	4.30	.10
20'	25'	" "	5926	29.8	.91	3.07	.07
25'	30'	" "	5927	19.1	.25	2.03	.01
30'	35'	" "	5928	13.4	1.00	1.62	.05
35'	36.8'	Solid bed- rock.	5929	14.1	.72	1.51	.03

BORE 3, 20 FEET

0'	5'	Laterite	B.6876	45.2	.35	3.60	.09
5'	10'	Weathered bedrock.	6877	23.8	1.10	2.29	.15
10'	15'	" "	6878	20.8	.82	1.91	.03
15'	20'	Solid bed- rock.	6879	7.7	.98	0.70	.11

BORE 4, 58 FEET

0'	5'	Laterite	B.6880	46.0	.03	5.51	.02
5'	10'	"	6881	48.9	.05	5.54	.01
10'	15'	"	6882	40.3	.03	4.34	.01
15'	20'	"	6883	31.7	.05	3.80	.04
20'	25'	"	6884	20.7	.09	1.72	.01
25'	30'	"	6885	14.3	.07	0.69	.02
30'	35'	"	6886	51.5	.12	4.18	.02
35'	40'	"	6887	49.2	.23	3.74	.12
40'	45'	"	6888	27.3	.46		.05

055

AREA F, MT. VULCAN

174056

BORE 4, 58 FEET (Cont'd)

From	To	Description	Sample No.	Fe	Assay Results Newcastle		
					Ni	Cr2O3	Co
45'	50'	Enter weather	B.6889	14.2	.19	1.26	.04
		serp.					
50'	55'	" "	6890	24.1	.56	2.28	.04
55'	58'	Enter of bed-rock.	6891	31.2	.44	1.97	.06

EXCAVATION 14, 8 FEET

		Laterite	1. Newcastle. 2. Mines Department, Tasmania				
0'	3' 0"	Red.	B.7451	.02	.02	ND	.01
					Trace		
3' 0"	5' 6"	Red.	7452		.03	"	.01
					Trace		
5' 6"	8' 5"	Red.	7453		.04	"	.01
					Trace		

EXCAVATION 15, 8 FEET

0'	2' 0"	Red.	B.7454		.24	"	.67
2' 0"	3' 11"	Red, black and yellow. Remarkable change in profile.	7455		.38 0.45	"	1.10
3' 11"	6' 3"	Red, black and yellow. Remarkable change in profile.	7456		.24 0.20	"	.55
6' 3"	8' 1"	Red, black and yellow. Remarkable change in profile.	7457		.28 0.29	"	.24

EXCAVATION 16, 6 FEET

0'	2' 6"	Red.	B.7458		.05	"	.02
2' 6"	6' 2"	Red.	7459		Trace .12 0.11	"	.07

APPENDIX D.

Logs and assays of pits, Testing
Chromite bearing gravels in the Anderson's
Creek Area.

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LINE 1.

PITS 1 - 4

CHROMITE GRAVELS

AREA R.

058

AREA R.

174059

SOUTH OF SIMMONDS HILLLINE 1.Assay ResultsFrom Newcastle
Tenco

<u>Depth</u>		<u>Description</u>	<u>Sample No.</u>	<u>Ni</u>	<u>Co. Pt.</u>	<u>Cr₂O₃</u>
<u>PIT 1.</u>						
0'	1.25'	Chromite bearing gravels	B 7532	.08	.04	2.92
1.25'	2.25'	Yellow green clay	33	.32	.04	2.08
2.25'	3.0'	Weathered Bedrock (Close to Bedrock)	34	.48	.02	1.72
<u>PIT 2.</u>						
0'	1.5'	Chromite bearing gravels	B 7535	.06	.01	2.60
1.5'	5.5'	Green Brown clay	36	.39	.05	1.87
5.5'	6.5'	Weathered Bedrock (Close to Bedrock)	37	.64	.04	1.87
<u>PIT 3.</u>						
0'	1.5'	Chromite bearing gravels	B 7538	.05	.01	1.62
1.5'	4.0'	Yellow brown clay	39	.11	.01	1.02
4.0'	4.75'	Weathered Bedrock (Close to Bedrock)	40	.66	.10	1.90
<u>PIT 4.</u>						
0'	1.0'	Chromite Bearing gravels	B 7541	.04	.01	1.48
1.0'	4.0'	Yellow clay	42	.05	.01	.39
4.0'	7.5'	Dark Brown Clay	43	.29	.02	1.90
7.5'	9.5'	Weathered Bedrock (Not near Bedrock)	44	.36	.02	1.96

LINE 2.

PITS 1 - 3

CHROMITE GRAVELS

AREA R

060

AREA R.

174061

SOUTH OF SIMMONDS HILLLINE 2.CHROMITE GRAVELSPIT 1.Assay Results
From Newcastle
Tenco

<u>Depth</u>		<u>Description</u>		<u>Assay Results</u>		
<u>From</u>	<u>To</u>			<u>Ni</u>	<u>Co.</u>	<u>Pt. Cr₂O₃</u>
0'	1.0'	Chromite bearing gravels contains quartz gravels	B 7545	.01	.01	.22
1.0'	5.0'	Yellow clay	46	.02	.01	.22
5.0'	8.0'	Weathered Bedrock (Not near Bedrock)	47	.78	.07	1.13
<u>PIT 2.</u>						
0'	1.25'	Chromite bearing gravels	B 7548	.05	.04	2.15
1.25'	2.5'	Yellow green clay	49	.23	.01	1.10
2.5'		Bedrock	50	.50	.02	.67
<u>PIT 3.</u>						
0'	0.75'	Chromite bearing gravels	B 7605	.07	.01	2.12
0.75'	1.75'	White putty sand contains chromite bearing gravels	B 7606	.07	.01	1.74
1.75'	9.5'	Yellow clay (Not near Bedrock)	B 7607	.34	.04	2.92

174062

190

LINE 3.

PITS 1 - 4.

CHROMITE GRAVELS

AREA M.

062

AREA M.

174063

SIMMONDS HILLLINE 3.CHROMITE GRAVELSPIT 1.

<u>Depth</u>		<u>Description</u>	<u>Sample No.</u>	<u>Assay Results</u>		
<u>From</u>	<u>To</u>			<u>From</u>	<u>Newcastle</u>	<u>Tenoco</u>
			<u>Ni</u>	<u>Co</u>	<u>Pt.</u>	<u>Cr₂O₃</u>
0'	1.5'	Chromite bearing gravels	B 7551	.06	.02	4.08
1.5'	3.5'	Brown green clay	52	.31	.06	1.86
3.5'	5.0'	Weathered Bedrock (Close Bedrock)	53	.54	.05	1.27

PIT 2.

0'	1.0'	Chromite bearing gravels	B 7554	.04	.01	2.31
1.0'	3.25'	Yellow-brown clay	55	.19	.01	1.86
3.25'	8.25'	Dark green-brown clay Not near Bedrock	56	.28	.05	1.96

PIT 3.

0'	1.25'	Chromite bearing gravels	B 7557	.04	.07	1.97
1.25'	2.25'	Yellow-green clay	58	.18	.03	1.70
2.25'	3.25'	Weathered Bedrock (On Bedrock)	59	.40	.05	2.28

PIT 4.

0'	0.5'	Chromite bearing gravel	B 7560	.06	.01	2.60
0.5'	2.5'	Dark-brown clay	61	.25	.01	2.40
2.5'		Weathered Bedrock (Near Bedrock)	62	.27	.01	.73

063

174064

LINE 4.

PITS 1 - 9

CHROMITE GRAVELS

AREA M

064

AREA W.SIMMONDS HILLLINE 4.

174065

CHROMITE GRAVELSPIT 1.Assay Results
From Newcastle
Temco

<u>Depth</u>		<u>Description</u>	<u>Sample No.</u>	<u>Assay Results</u>			
<u>From</u>	<u>To</u>			<u>Ni</u>	<u>Co</u>	<u>Pt</u>	<u>Cr₂O₃</u>
0'	1.25'	Chromite bearing gravels	B 7563	.04	.01		2.70
1.25'	3.25'	Light-brown green clay	64	.19	.02		2.73
3.25'	4.75	Weathered bedrock (Close to Bedrock)	65	.34	.02		2.00

PIT 2.

0'	1.0'	Chromite bearing gravels	B 7566	.04	.01		3.48
1.0'	3.0'	Dark brown-green clay	67	.15	.01		2.73
3.0'		Bedrock	68	.47	.06		1.10

PIT 3.

0'	2.0'	Chromite bearing gravels	B 7569	.03	.01		3.48
2.0'	4.0'	Brown clay Chromite bearing gravels appears in clay	70	.27	.03		2.98
4.0'	6.5'	Weathered Bedrock (Near Bedrock)	71	.92	.07		2.15

PIT 4.

0'	2.25'	Chromite bearing gravels	B 7572	.05	.01		4.08
2.25'	4.5'	Brown green clay	73	.54	.04		2.84
4.5'	9.5'	Weathered Bedrock (Not near Bedrock)	74	.94	.05		1.27

PIT 5.

0'	1.0'	Chromite bearing gravels	B 7575	.05	.01		4.91
1.0'	6.0'	Yellow clay	76	.72	.07		3.41
6.0'	8.5	Weathered Bedrock (Not near Bedrock)	77	.72	.05		2.15

065

Cont'd

AREA M.

SIMMONDS HILL.

LINE 4.

174066

CHROMITE GRAVELSPIT 6.Assay Results
From Newcastle
Temco

<u>Depth</u>		<u>Description</u>	<u>Sample No.</u>	Ni	Co	Pt	Cr ₂ O ₃
<u>From</u>	<u>To</u>						
0'	2.0'	Chromite bearing gravel	B 7578	.05	.05		4.46
2.0'	4.0'	Yellow clay	79	.18	.01		3.26
4.0'	7.0'	Very dark green-brown clay	80	.54	.05		3.16
7.0'	-	Weathered Bedrock depth unknown (Not near Bedrock)	81	.46	.02		1.8

PIT 7.

0'	2.0'	Red chromite bearing gravels.	B 7582	.07	.01		4.25
2.0'	4.0'	Brown-green clay plus chromite bearing gravels	83	.10	.01		4.3
4.0'	5.0'	Brown clay contains chromite bearing gravels	84	.14	.03		4.15
5.0'	10.0'	Very dark green-brown clay (Not near Bedrock)	85	.54	.03		2.85

PIT 8.

0'	1.0'	Chromite bearing gravels	B 7586	.06	.01		2.70
1.0'	3.0'	Brown clay contains chromite bearing gravels	87	.10	.04		3.68
3.0'	9.0'	Weathered Bedrock (Not near Bedrock)	88	.88	.09		1.83

PIT 9.

0'	1.0'	Grey putty sand	B 7589	.03	.01		1.55
1.0'	5.0'	Brown clay	90	.12	.01		1.97
5.0'	9.0'	Brown-green clay (Not near Bedrock)	91	.38	.09		2.63

Line 5
Pits 1 - 4
Chromite gravels
Area M

067

SIMMOND'S HILL AREA M
LINE 5 PIT 1

174068

<u>Depth</u>		<u>Description</u>	<u>Sample No.</u>	<u>Assay Results</u>			
<u>From</u>	<u>To</u>			<u>Ni</u>	<u>Co</u>	<u>Pt</u>	<u>Cr₂O₃</u>
<u>Pit 1</u>							
0'	0.5'	Chromite bearing gravels	B7592	.06	.03	4.75	
0.5'	3.5'	Grey to brown clay contains Chromite bearing gravels	93	.09	.05	5.38	
3.5'	7.5'	Green-brown clay (Not near Bedrock)	94	.64	.11	2.32	
<u>Pit 2</u>							
0'	1.5'	Chromite bearing gravels	B7595	.05	.01	4.00	
1.5'	4.0'	Brown-green clay	96	.72	.06	2.7	
4.0'	-	Weathered bedrock (Not near Bedrock)	97	.50	.03	1.24	
<u>Pit 3</u>							
0'	0.5'	Chromite bearing gravels	B7598	.04	.01	4.06	
0.5'	1.75'	Brown clay contains "	99	.07	.01	3.04	
1.75'	3.75'	Brown-green clay	B7600	.72	.06	2.72	
3.75'	-	Bedrock	01	.32	.01	.88	
<u>Pit 4</u>							
0'	1.0'	Chromite bearing gravels	B7602	.03	.01	2.20	
1.0'	3.0'	Brown-green clay	03	.45	.08	1.18	
3.0'	7.0'	Weathered bedrock (Not near Bedrock)	04	.19	.03	.56	

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068

174069

LINE 6.

PITS 1 - 5

CHROMITE GRAVELS

AREA I.

069

174070

AREA IBARNE'S HILLLINE 6CHROMITE GRAVELSPIT 1.

Depth		Description	Sample No.	Assay Results		
From	To			Ni	Co	Pt Cr ₂ O ₃
0'	2.0'	Brown chromite bearing gravels	B 7608	.03	.01	6.78
2.0'	5.25'	Light brown clay	09	.16	.02	2.98
5.25'	9.0'	Brown clay containing blue-green and black oxides (Not near Bedrock)	10	.30	.03	3.33

PIT 2.

0'	3.0'	Red chromite bearing gravel?	B 7611	.06	.01	4.27
3.0'	9.0'	Yellow-brown clay (Not near Bedrock)	12	.36	.17	2.92

PIT 3.

0'	3.0'	Red laterite	B 7613	.09	.06	5.66
3.0'	10.0'	Blue-green clay (Not near Bedrock)	14	.75	.03	1.24

PIT 4.

0'	3.0'	Red laterite	B 7615	.10	.01	4.09
3.0'	9.0'	Blue-green clay (Not near Bedrock)	16	.51	.01	.96

PIT 5.

0'	4.0'	Red laterite	B 7617	.09	.01	5.04
4.0'	8.0'	Yellow green clay	18	.48	.01	4.00
8.0	-	(Weathered Bedrock) (Not near Bedrock)	19	.51	.04	5.80

070

174071

LINE 7.

PITS 1 - 11

CHROMITE GRAVELS

AREA I

071

174072

AREA I
BARNE'S HILL
LINE 7

PIT 1

<u>Depth</u>		<u>Description</u>	<u>Sample No.</u>	<u>Assay Results</u>			<u>Cr₂O₃</u>
<u>From</u>	<u>To</u>			<u>Si</u>	<u>Co</u>	<u>Pt</u>	
0'	0.5'	Chromite bearing gravels.	B7620	.05	.01	4.41	
0.5'	2.5'	Chromite bearing gravels.	21	.05	.01	4.15	
2.5'	6.5'	White-brown-green clay. (Not near Bedrock)	22	.55	.02	.51	

PIT 2

0'	3.0'	Chromite bearing gravels.	B7623	.04	.01	4.15
3.0'	9.25'	Yellow-white-green clays. (Concretions) Not near B. Rock.	24	.72	.03	2.78

PIT 3

0'	0.75'	Laterite & chromite bearing gravels.	B7625	.04	.01	4.14
0.75'	3.5'	Yellow clay	26	.37	.01	1.13
3.5'	9.5'	Brown-green-black clay. (Not near Bedrock)	27	.55	.07	.92

PIT 4

0'	0.25'	Thin blanket of chromite bearing gravel.	B7628	.05	.01	4.15
0.25'	2.75'	Laterite	29	.14	.01	2.78

072

174073

Depth		Description	Sample No.	Assay Results			
From	To			Ni	Co	Pt	Cr ₂ O ₃
2.75'	7.0'	Yellow-Brown clay.	30	.41	.01		.92
7.0'	8.0'	Brown clay with black oxides.	31	1.03	.15		.72
8.0'	-	Weathered bedrock (Not near bedrock)	32	.60	.04		.10
<u>PIT 5</u>							
0'	0.25'	Very thin blanket of chromite.	B7633	.06	.01		3.60
0.25'	1.75'	Laterite bearing gravels.	34	.13	.01		2.92
1.75'	3.25'	Yellow clay containing black oxides.	35	.90	.09		1.05
3.25'	6.75'		36	1.48	.10		1.93
6.75'	-	Weathered Bedrock (Not near Bedrock)	37	.45	.01		.20
<u>PIT 6</u>							
0'	0.25'	Thin blanket of chromite bearing gravels.	B7638	.04	.01		4.49
0.25'	1.75'	Laterite	39	.07	.01		3.77
1.75'	7.75'	Yellow clay containing white clay.	40	.08	.01		.98
7.75'	-	Bright red weathered Bedrock. (Not on Bedrock)	41	.13	.02		.07
<u>PIT 7 (gravel surface missing)</u>							
0'	0.75'	Laterite	B7642	.04	.01		4.00

Cont'd.

PIT 7.

Depth		Description	Sample No	Assay Results			
From	To			Ni	Co	Pt	Cr ₂ O ₃
0.75'	3.25'	Yellow-brown clay	B 7643	.08	.01		.67
3.25'	7.25'	Red-brown-white clay	44	.07	.01		.47
7.25'	-	Weathered Bedrock (Not near Bedrock)	45	.06	.01		.07

PIT 8. (Gravel surface missing)

0'	2.0'	Laterite	B 7646	.05	.01		4.15
2'	9.5'	Yellow-green clay	47	.57	.04		1.53
9.5'	-	Weathered Bedrock (Not near Bedrock)	48	.83	.04		1.29

PIT 9.

0'	1"	Chromite bearing gravels	B 7649	.05	.01		4.28
1"	5.75"	Laterite	50	.10	.01		3.90
5.75'	8.75'	Blue-green clay	51	.42	.03		3.57
8.75'	-	Weathered Bedrock (Not near Bedrock)	52	.94	.05		.85

PIT 10.

0'	½"	Chromite bearing gravels	B 7653	.10	.02		3.41
½"	0.5'	Laterite	54	.10	.02		5.39
0.5'	1.5'	Brown-Yellow clay	55	.19	.01		.82
1.5'	7.75'	Yellow-brown-black-white clay	56	.12	.01		.10
7.75'	-	Weathered Bedrock (Not near Bedrock)	57	.14	.01		.10

074

174075

cont'd. Depth		<u>Description</u>	<u>SampleNo.</u>	<u>Assay Results</u>			
<u>From</u>	<u>To</u>			<u>Ni</u>	<u>Co</u>	<u>Pt</u>	<u>CeO3</u>
0'	0.5'	Chromite bearing gravels	B 7658	.08	.04		4.97
0.5'	2.25'	Laterite	59	.20	.01		2.95
2.25'	4.0'	Weathered Bedrock (Not near Bedrock)	60	.21	.01		.34

LINE 8.

PITS 1 - 2

CHROMITE GRAVELS

AREA I

076

174077

AREA I
BARNE'S HILL
LINE 8
CHROMITE GRAVELS

PIT 1.

Depth		Description	Sample No.	Assay Results			
From	To			Ni	Co	Pt	Cr ₂ O ₃
0'	2.0'	Red chromite bearing gravels	B 7661	.08	.01		.61
2.0'	4.0'	Green and black clay	62	.07	.01		.13
4.0'	6.0'	Brown clay	63	.08	.01		.18
6.0'	8.0'	Brown-green clay	64	.09	.01		.13
8.0'	-	Weathered Bedrock	65	.08	.01		.20

PIT 2.

0'	0.5'	Chromite bearing gravels	B 7666	.06	.01		5.47
0.5'	2.0'	Red and green clay	67	.18	.01		5.77
2.0'	4.0'	Brown and green clay	68	.12	.01		4.00
4.0	-	Weathered Bedrock	69	.59	.02		2.13

174078

077

LINE 9.

PITS 1 - 6.

CHROMITE GRAVELS

AREA I.

078

174079

AREA I.
BARNE'S HILL
LINE 9

PIT 1.

<u>Depth</u>		<u>Description</u>	<u>SampleNo.</u>	<u>Assay Results</u>			
<u>From</u>	<u>To</u>			<u>Ni</u>	<u>Co</u>	<u>Pt</u>	<u>Cr₂O₃</u>
0'	2.25'	Laterite	B 7672	.12	.01	1.02	
2.25'	6.0'	Red-white clay	73	.12	.02	.02	
6.0	10.75'	Red-white clay magnetite veins. Not near Bedrock	74	.18	.02	..16	

PIT 2.

0'	1.5'	Laterite	B 7675	.13	.01	3.26
1.5'	5.5'	Yellow clay	76	.31	.01	1.29
5.5'	7.0'	Yellow-green clay	77	.34	.02	..79
7.0'	-	Yellow clay containing black oxides (Not near Bedrock)	78	.23	.02	.28

PIT 3.

0'	2.5'	Laterite	B 7679	.06	.01	4.49
2.5'	5.0'	White-green clay	80	.41	.01	.48
5.0	-	(Weathered Bedrock) (not near Bedrock)	81	.29	.02	.20

PIT 4.

0'	3.5'	Laterite	B 7682	.12	.02	3.39
3.5'	6.5'	Yellow clay	83	.31	.02	2.15
6.5	-	Weathered Bedrock (Not near Bedrock)	84	.41	.01	.34

PIT 5.

0'	3.5'	Laterite	B 7685	.12	.03	3.29
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174080

079
Cont'd.

AREA I.
BARNE'S HILL
LINE 9

PIT 6.

<u>Depth</u>		<u>Description</u>	<u>SampleNo.</u>	<u>Assay Results</u>			
<u>From</u>	<u>To</u>			<u>Ni</u>	<u>Co</u>	<u>Pt</u>	<u>Cr₂O₃</u>
0'	0.5'	White putty sand	B 7686	.02	.01		3.08
0.5'	5.0'	Yellow-green clay	87	.11	.03		2.24
5.0	-	Weathered Bedrock (Not near Bedrock)	88	.19	.02		.98

174081

080

Line 10
Pits 1 - 10
Chromite Gravels.
Area A

081

174082

AREA A. FRENCHMAN'S QUARRYLINE 10 PIT 1

<u>Depth</u>		<u>Description</u>	<u>Pit 1</u> <u>Sample No.</u>	<u>Assay Results</u>			
<u>From</u>	<u>To</u>			<u>Ni</u>	<u>Co</u>	<u>Pt</u>	<u>Cr₂O₃</u>
0'	1.0'	Chromite bearing gravel	B7689	.05	.01		2.31
1.0'	6.0'	Red-green clay	90	.12	.02		2.22
6.0'	-	Weathered bedrock (Not near Bedrock)	91	.53	.11		1.80
<u>Pit 2</u>							
0'	2.25'	Chromite bearing gravels	B7692	.03	<.01		2.41
2.25'	4.0'	Yellow-green clay	93	.08	.01		2.15
4.0'	-	Weathered bedrock (Not near Bedrock)	94	.27	.04		2.21
<u>Pit 3</u>							
0'	2.5'	Chromite bearing gravels	B7695	.04	.01		2.28
2.5'	4.0'	Yellow-green clay	96	.71	.04		1.84
4.0'	-	(Weathered Bedrock) (Not near Bedrock)	97	.78	.05		2.41
<u>Pit 4</u>							
0'	1.25'	Chromite Bearing gravels	B7698	.06	.01		2.97
1.25'	4.25'	Red clay	99	.09	.01		2.89
4.25'	-	Green clay	B7700		.03		2.69
<u>Pit 5</u>							
0'	1.5'	Chromite bearing gravels	B7701	.05	.01		2.41
1.5'	6.5'	Yellow-Brown Clay (Not near Bedrock)	02	.06	.01		2.32
<u>Pit 6</u>							
0'	2.0'	Brown gravel	B7703	.03	.01		2.05
2.0'	8.0'	Yellow brown clay	04	.04	<.01		.67
8.0'	-	(Weathered Bedrock) (Not near Bedrock)	05	.05	.01		.41

Pit 7Assay Results

<u>Depth</u> <u>From</u>	<u>To</u>	<u>Description</u>	<u>Sample</u>	<u>Ni</u>	<u>Co</u>	<u>Pt</u>	<u>Cr₂O₃</u>
0'	1.5'	Chromite bearing gravels	B7706	.04	.01		1.94
1.5'	6.75'	Yellow-green clay	07	.06	.01		2.62
6.75'	-	Red-white-brown clay (Not near Bedrock)	08	.09	.01		1.05

Pit 8

0'	2.0'	Chromite bearing gravels	B7709	.03	<.01		1.56
2.0'	8.0'	Red-brown clay	10	.04	<.01		1.30
8.0'	-	White and green clay (Not near Bedrock)	11	.10	.01		.95

Pit 9

0'	1.5'	Chromite bearing gravels	B7712	.02	<.01		1.26
1.5'	5.0'	Red clay	13	.03	<.01		1.13
5.0'	8.5'	Green and brown clay	14	.14	.01		1.43
8.5'	-	Weathered bedrock (Not near Bedrock)	15	.14	.01		1.10

Pit 10

0'	2.0'	Chromite bearing gravels	B7716	.03	<.01		2.02
2.0'	9.0'	Red-brown-green clay	17	.05	<.01		1.71
9.0'	-	Weathered bedrock (Not near bedrock)	18	.53	.01		1.29

LINE 11.

PITS 1 - 10

CHROMITE GRAVELS

AREA B.

084

AREA B NORTH OF SCOTS HILL

174085

LINE 11

<u>Depth</u>	<u>Description</u>	<u>Sample No.</u>	<u>Ni</u>	<u>Co</u>	<u>Pt</u>	<u>Cr₂O₃</u>	<u>Remarks</u>
	<u>Pit 1</u>						
0'	0.75'	Laterite	B.7719	.03	.01	3.64	
0.75'	3.25'	Yellow brown clay	20	.04	.01	2.12	
3.25'	8.25'	Brown yellow red clay (not near Bedrock)	21	.07	.01	5.60	
	<u>Pit 2</u>						
0'	0.75'	Red Laterite	B.7722	.04	.01	3.54	
0.75'	7.75'	Red yellow clay	23	.05	.01	1.97	
7.75'	8.75'	Red yellow white clay	24	.06	.01	1.94	
8.75'	-	Brown clay containing black oxides. (not near Bedrock)	25	.24	.14	1.80	
	<u>Pit 3</u>						
0'	2.0'	Laterite	B.7726	.03	.01	2.86	
2.0'	7.0'	Brown and dark green clay. (not near Bedrock)	27	.05	.01	3.61	
	<u>Pit 4</u>						
0'	1.0'	Laterite	B.7728	.04	<.01	3.14	
1.0'	4.0'	Brown and yellow clay	29	.07	.01	2.92	
4.0'	-	Yellow brown clay) containing black oxides) (not near Bedrock)	30	.11	.02	4.78	
	<u>Pit 5</u>						
0'	2.5'	Laterite	B.7731	.09	.01	3.20	
2.5'	6.0'	Red yellow and green clay	32	.08	.01	1.97	
6.0'	10.0'	Red clay containing black oxides	33	.28	.16	4.24	

085

AREA B NORTH OF SCOTS HILL

174086

LINE 11

<u>Depth</u>	<u>Description</u> (Bedrock)	<u>Sample No.</u>	<u>Results</u>			<u>Remarks</u>
			<u>Ni</u>	<u>Co</u>	<u>Pt</u>	
		34	.06	.01		.16
	<u>Pit 6</u>					
0'	2.0' Laterite	B.7735	1.07	.01		4.24
2.0	7.75' Red clay containing black oxides.	36	1.21	.07		6.11
7.75'	- (Weathered Bedrock)	37	1.71	.02		2.41
	<u>Pit 7 (Gravel surface missing)</u>					
0'	1.5' Brown Clay	B.7738	.88	.07		2.44
1.5'	4.25' Brown green clays	39	.95	.03		1.43
4.25'	9.25' (Weathered Bedrock) (Near Bedrock)	40	.32	.01		1.53
	<u>Pit 8</u>					
0'	1.0' Brown clay.	B.7741	.54	.03		3.20
1.0'	3.75' Brown green yellow clays	42	.72	.03		1.62
3.75'	- Weathered bedrock (Not near Bedrock)	43	.52	.02		1.64
	<u>Pit 9</u>					
0'	1.5' Black clay	B.7744	.20	.02		4.62
1.5'	3.25' Brown green clay	45	.47	.03		3.19
3.25'	- Weathered bedrock (Near bedrock)	46	.37	.02		1.23
	<u>Pit 10</u>					
0'	1.0' Black clay	B.7747	.16	.01		3.40
1.0'	4.25' Brown green clay	48	.17	.01		1.18
4.25'	4.75' Grey green clay	49	.08	.01		.44
4.75'	6.0' Dark green black clay	50	.14	.01		1.53

086

AREA B NORTH OF SCOTS HILL

174087

LINE 11

<u>Depth</u>	<u>Description</u>	<u>Sample No.</u>	<u>Results</u>			<u>Remarks</u>
			<u>Ni</u>	<u>Co</u>	<u>Pt Cr₂O₃</u>	
6.0' -	Weathered Bedrock (Near Bedrock)	B.7126	.13	.01	0.38	

174088

087

Line 12

Pits 1 - 4

Chromite gravels

Area B

089

AREA B NORTH OF SCOTS HILL

174090

LINE 12

<u>Depth</u>	<u>Description</u>	<u>Sample No.</u>	<u>Ni</u>	<u>Co</u>	<u>Pt</u>	<u>Cr₂O₃</u>
6.0' -	Weathered bedrock (Near Bedrock)	B7139	.21	.03		.61

174091

030

Line 13
Pits 1 - 5
Chromite gravels
Area B

092

174093

AREA B NORTH OF SCOTS HILL

LINE 13

Assay Results

From

1
2

<u>Depth</u>	<u>Description</u>	<u>Sample No.</u>	<u>Ni</u>	<u>Co</u>	<u>Pt</u>	<u>Cr₂O₃</u>
1.0' 1.5'	Brown clay	B7154	.51	.04		3.07
1.5' -	Weathered bedrock (near bedrock)	55	.32	.02		1.26



Line 14
Pits 1 - 8
Chromite Gravels
Area B

AREA B NORTH OF SCOTS HILLAssay Results
FromLINE 14(1)
(2)

<u>Depth</u>	<u>Description</u>	<u>Pit 5 Gravel surface missing</u>	<u>Sample No.</u>	<u>Ni</u>	<u>Co</u>	<u>Pt</u>	<u>Cr₂O₃</u>
0'	2.5	Red laterite	B7170	.02	<.01		2.86
2.5'	4.5'	Weathered bedrock	71	.04	<.01		2.94
4.5'		Bedrock	72	.07	<.01		3.07

Pit 6

0'	0.5'	Chromite bearing gravels	B7173	.09	<.01		6.75
0.5'	1.75'	Brown clay	74	.22	<.01		7.73
1.75'	3.0'	Brown green clay	75	.47	<.01		8.52
3.0'	-	Weathered bedrock (Not near bedrock)	76	.19	.02		5.09

Pit 7

0'	3.25'	Brown yellow clay containing gravels	B7177	.72	.04		1.90
3.25'	7.0'	Green brown clay containing black oxides	78	.51	.06		3.79
7.0'	-	Weathered bedrock (Near bedrock)	79	.37	.03		2.05

Pit 8

0'	1.0'	Yellow white brown clay	B7180	.20	.01		0.79
1.0'	5.0'	Weathered bedrock	81	.15	<.01		0.16
5.0'	-	Bedrock	82	.27	.01		1.02

Line 15
Pits 1 - 5
Chronite gravels
Area E

097

174098

AREA E TERRAZZO QUARRYLINE 15Assay Results

From

(1)

(2)

<u>Depth</u>	<u>Description</u>	<u>Sample No.</u>	<u>Ni</u>	<u>Co</u>	<u>Pt</u>	<u>Cr₂O₃</u>
<u>Pit 1</u>						
0'	2.0'	Chromite bearing gravels B7183	1. .06	<.01		2.31
2'	8.0'	Yellow green clay contain -ing black oxides.	84 1	.70	.06	2.43
		(Not near bedrock)	2			
<u>Pit 2</u>						
0'	1.5'	Chromite bearing gravels B7185	.06	<.01		.54
1.5'	4.5'	Yellow clay	86	.05	<.01	.67
4.5'	8.0'	Weathered bedrock	87	.39	.01	2.53
		(Not near bedrock)				
<u>Pit 3</u>						
0'	1.0'	White sand	B7188	.01	.01	1.49
1.0'	5.0'	Yellow clay	89	.13	.01	1.91
5.0'	8.25'	Yellow green clay	90	.31	.03	2.35
8.25'	-	Weathered bedrock	91	1.02	.28	2.43
		(Not near bedrock)				
<u>Pit 4</u>						
0'	1.0'	Chromite bearing gravels B7192	.14	.09		2.18
1.0'	8.25'	Yellow green clay	93	.47	.05	2.86
		(Not near bedrock)				
<u>Pit 5</u>						
0'	1.0'	Chromite bearing gravels B7194	.01	<.01		0.75
1.0'	3.0'	Brown clay containing black oxides	95	.42	.16	2.92
3.0'	8.5'	Weathered bedrock	96	.13	.06	.38
		(Near bedrock)				

098

174099

Line 16
Pits 1 - 6
Chromite gravels
Area G

AREA G TERRAZZO QUARRYLINE 16Assay Results

From

(1)
(2)

<u>Depth</u>	<u>Description</u>	<u>Pit 1</u>	<u>Sample No.</u>	<u>Ni</u>	<u>Co</u>	<u>Pt</u>	<u>Cr₂O₃</u>
0'	0.5'	Chromite bearing gravels	B7197	.13	.02		3.68
0.5'	1.0'	Brown green clay	98	.37	.02		1.18
1.0'	5.0'	Weathered bedrock (Near bedrock)	99	.20	.01		1.18
<u>Pit 2</u>							
0'	0.75'	Chromite bearing gravels	B7200	.10	.03		4.25
0.75'	1.75'	Yellow clay	01	.45	.04		1.90
1.75'	7.75'	Weathered bedrock (near bedrock)	02	.33	.05		1.10
<u>Pit 3</u>							
0'	4.5'	Chromite bearing gravels	B7203	.04	.01		3.79
4.5'	9.0'	Yellow green clay	04	.31	.05		3.35
9.0'	9.5'	Weathered bedrock (near bedrock)	05	.67	.05		2.62
<u>Pit 4</u>							
0'	0.5'	Chromite bearing gravels	B7206	.10	.01		3.61
0.5'	1.75'	Yellow clay	07	.13	.01		3.51
1.75'	5.0'	Weathered bedrock (near bedrock)	08	.21	.01		0.98
<u>Pit 5</u>							
0'	0.5'	Chromite bearing gravels	B7209	.09	<.01		2.48
0.5'	3.5'	Yellow clay	10	.21	.01		.96
3.5'	8.5'	Weathered bedrock (Not near bedrock)	11	.73	.01		.26
<u>Pit 6</u>							
0'	0.75'	Chromite bearing gravels	B7212	.03	.01		2.62

174101

Assay ResultsAREA G TERRAZZO QUARRYLINE 16

From

(1)
(2)

<u>Depth</u>		<u>Description</u>	<u>Pit 6</u>	<u>Sample No</u>	<u>Ni</u>	<u>Co</u>	<u>Pt</u>	<u>Cr₂O₃</u>
0.75'	3.25'	Yellow clay		B7213	.14	<.01		4.16
3.25'	8.25'	Weathered Bedrock (Not near bedrock)		14	.23	.09		3.79

101

Line 17
Pits 1 - 3
Chromite gravels
Area K.

102

174103

AREA K N.W. BARNE'S HILLAssay ResultsLINE 17

From

(1)
(2)

<u>Depth</u>	<u>Description</u>	<u>Sample No.</u>	<u>Ni</u>	<u>Co</u>	<u>Pt</u>	<u>Cr₂O₃</u>	
	<u>Pit 1</u>						
0'	2.0'	Chromite bearing gravels	B7215	1	.02	<.01	2.53
				2			
0'	6.25'	Red clay	16	1	.09	.02	3.27
				2			
6.25'	7.25'	Weathered bedrock	17	1	.21	.03	4.15
				2			
	(Not near bedrock)						
	<u>Pit 2</u>						
0'	1.5'	Chromite bearing gravels	B7218		.02	<.01	2.15
1.5'	4.5'	Yellow clay	19		.42	.02	3.10
1.5'	9.5'	(Weathered bedrock)	20		1.25	.14	2.63
	(Not near bedrock)						
	<u>Pit 3</u>						
0'	2.0'	Chromite bearing gravels	B7221		.07	.02	5.35
0'	4.75'	Yellow and green clay	22		.24	.02	3.38
4.75'	8.25'	(Weathered bedrock)	23		.95	.09	3.74
	(Near bedrock)						

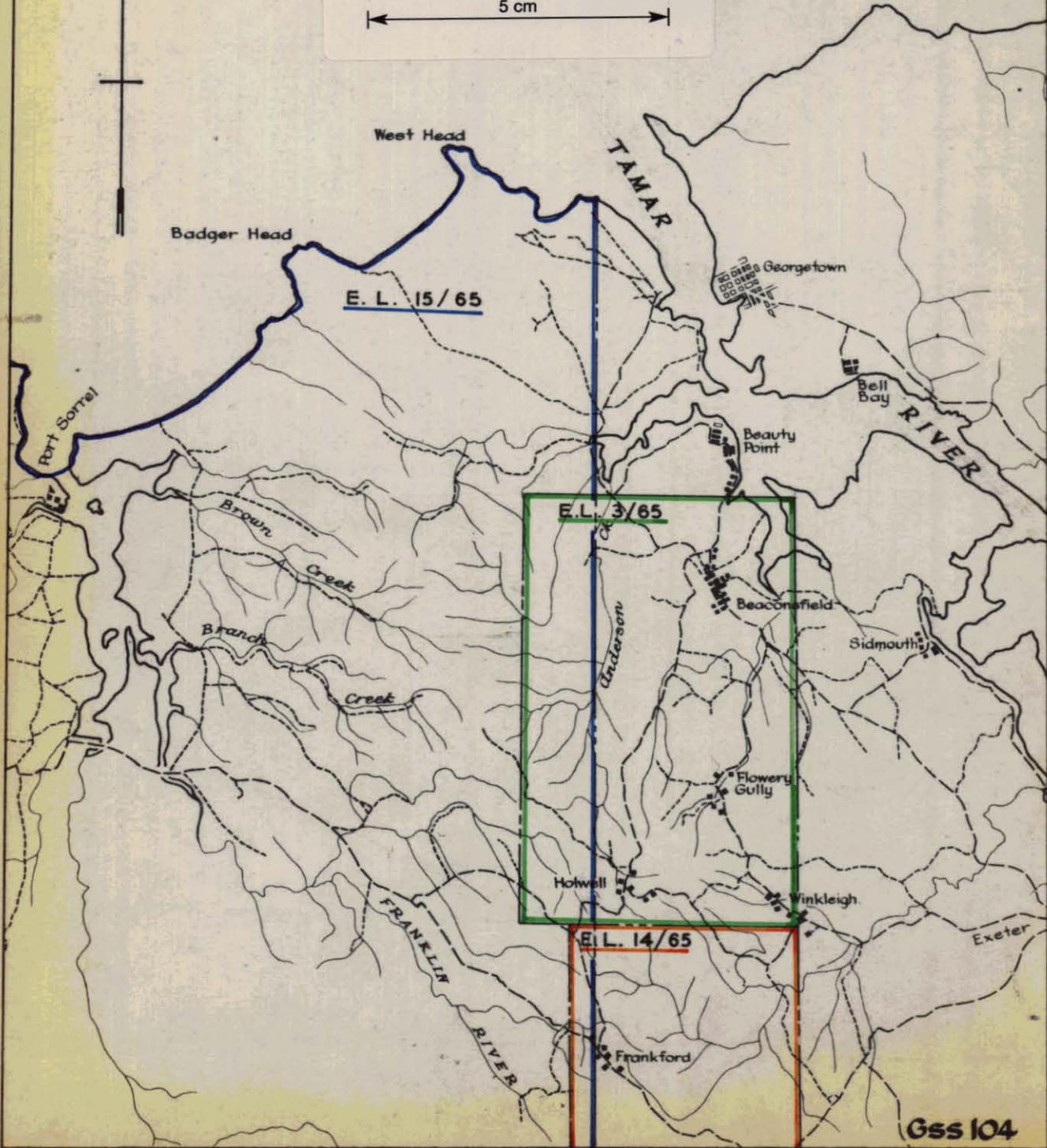
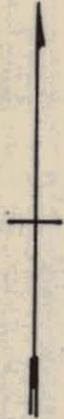
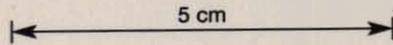
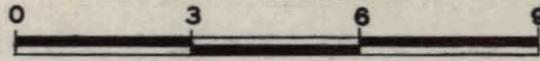
FIG. 1

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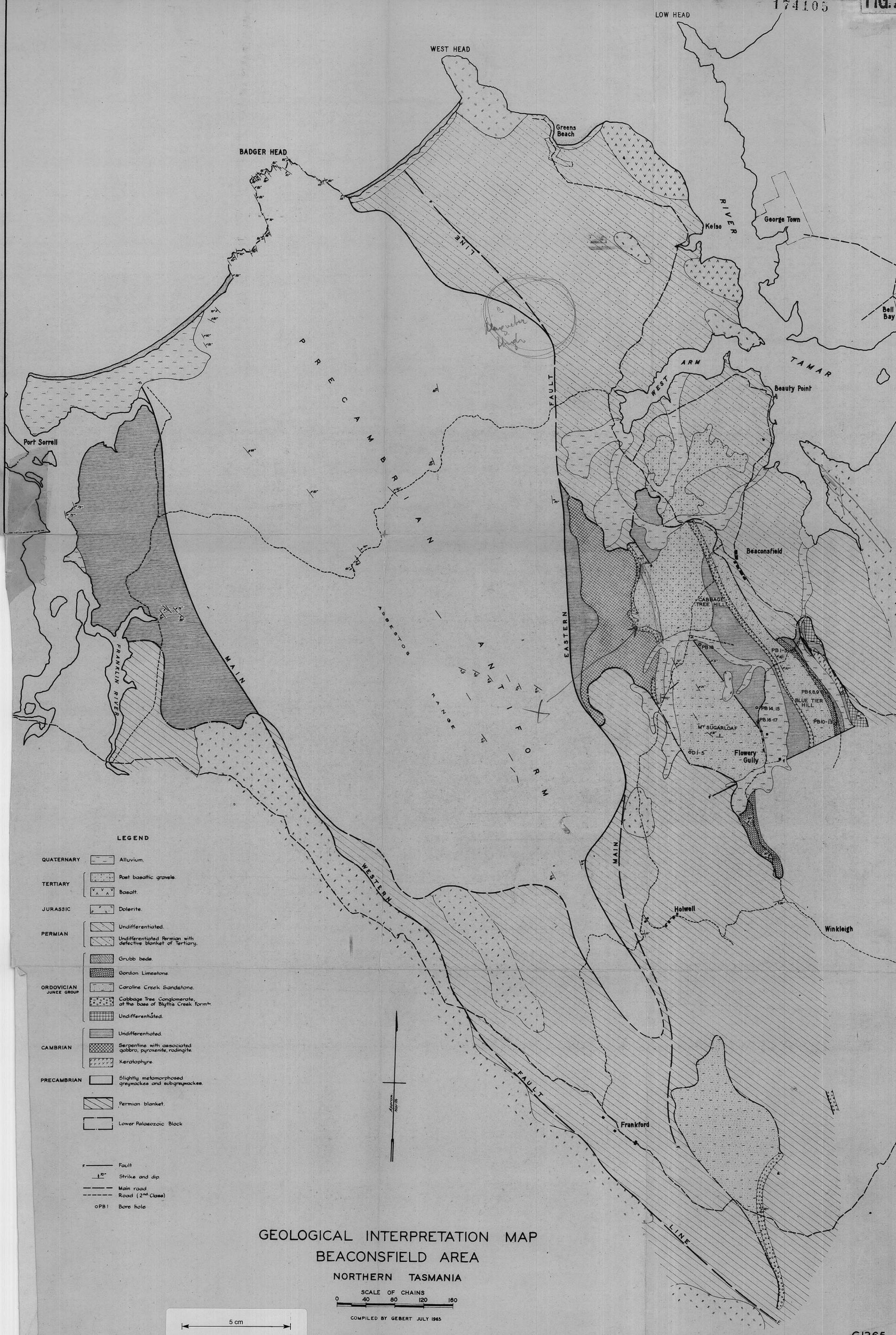
LOCALITY MAP

BEACONSFIELD AREA TASMANIA

SCALE OF MILES

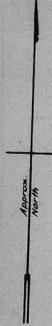


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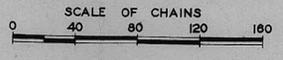


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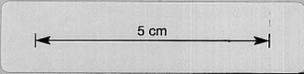
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 - Alluvium.
- TERTIARY
 - Post basaltic gravels.
 - Basalt.
- JURASSIC
 - Dolerite.
- PERMIAN
 - Undifferentiated.
 - Undifferentiated Permian with defective blanket of Tertiary.
 - Grubb beds.
 - Gordon Limestone.
- ORDOVICIAN
 - Caroline Creek Sandstone.
 - Cabbage Tree Conglomerate, at the base of Blythe Creek Form.
 - Undifferentiated.
- CAMBRIAN
 - Undifferentiated.
 - Serpentine with associated gabbro, pyroxenite, rodingite.
 - Keratophyre.
- PRECAMBRIAN
 - Slightly metamorphosed greywackes and subgreywackes.
 - Permian blanket.
 - Lower Palaeozoic Block.
- Fault
- Strike and dip.
- Main road
- Road (2nd Class)
- OPB1 Bore hole

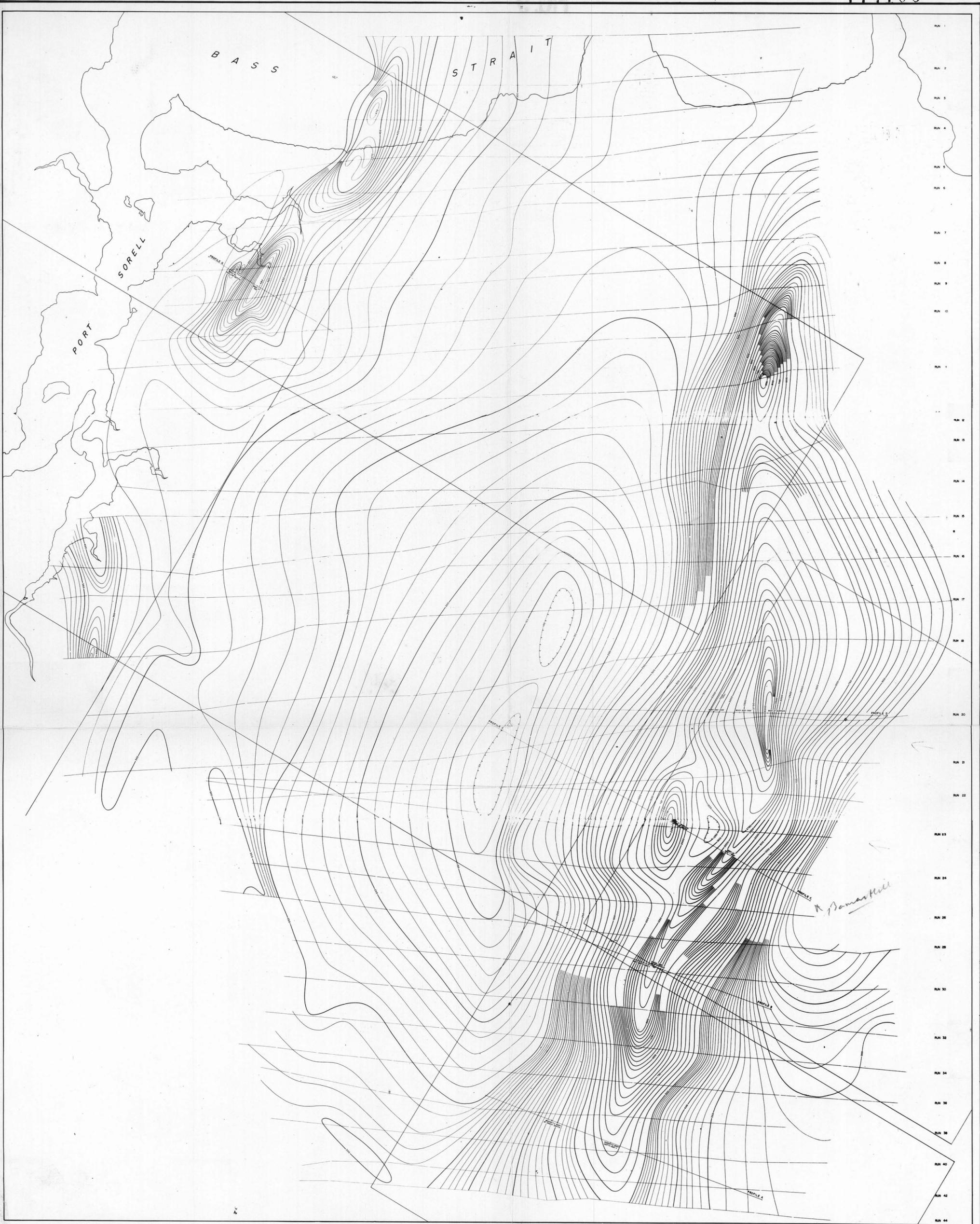


GEOLOGICAL INTERPRETATION MAP
 BEACONSFIELD AREA
 NORTHERN TASMANIA

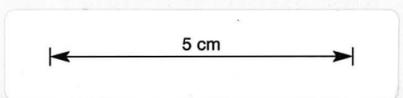


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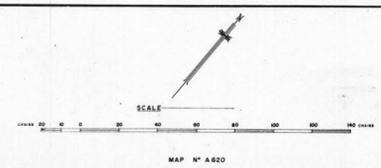




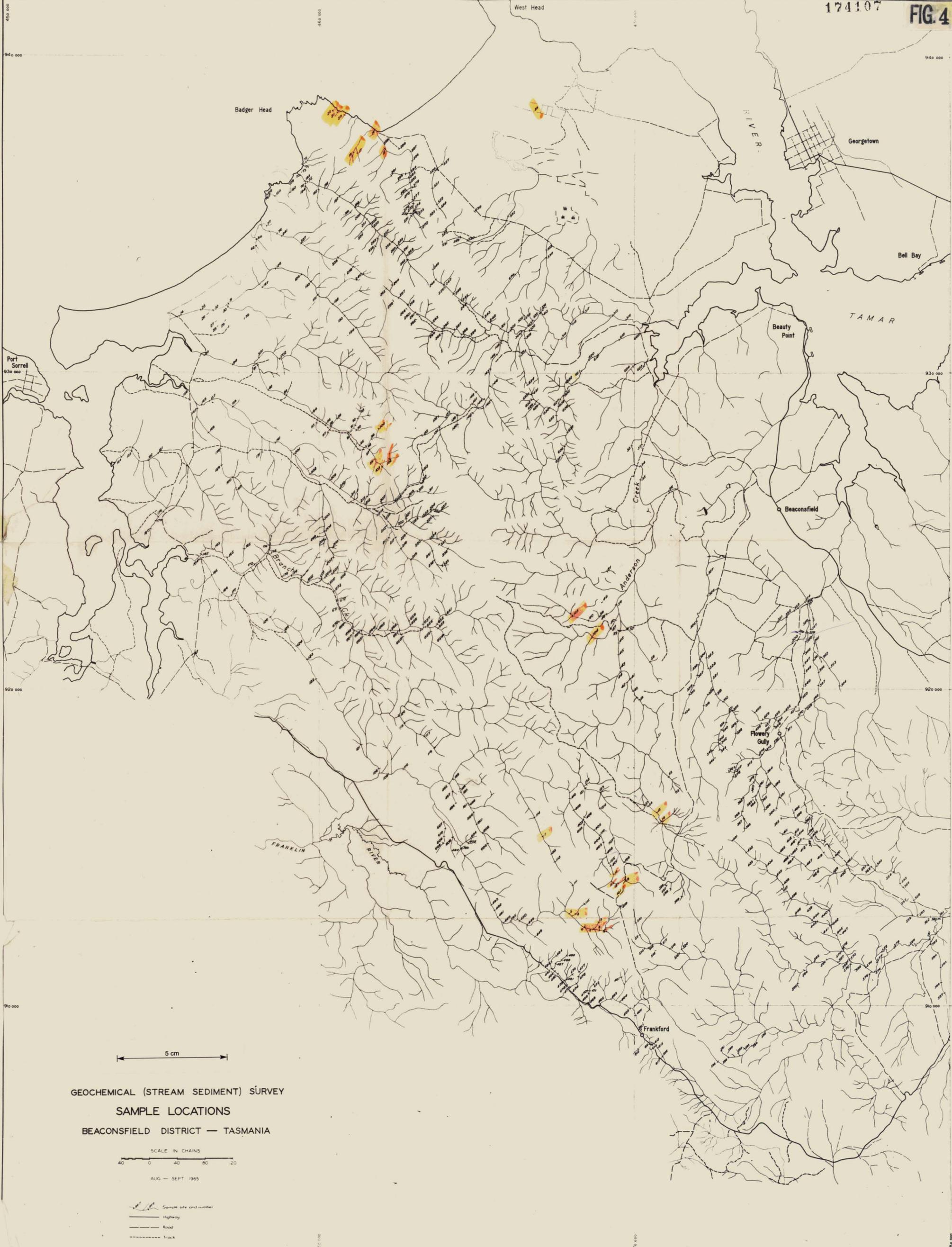
RUN 1
 RUN 2
 RUN 3
 RUN 4
 RUN 5
 RUN 6
 RUN 7
 RUN 8
 RUN 9
 RUN 10
 RUN 11
 RUN 12
 RUN 13
 RUN 14
 RUN 15
 RUN 16
 RUN 17
 RUN 18
 RUN 19
 RUN 20
 RUN 21
 RUN 22
 RUN 23
 RUN 24
 RUN 25
 RUN 26
 RUN 27
 RUN 28
 RUN 29
 RUN 30
 RUN 31
 RUN 32
 RUN 33
 RUN 34
 RUN 35
 RUN 36
 RUN 37
 RUN 38
 RUN 39
 RUN 40
 RUN 41
 RUN 42
 RUN 43
 RUN 44



LEGEND
 CONTOUR VALUE 8500
 LOW 8500
 HIGH 8500
 CONTOUR INTERVAL 10 GAMMAS
 FLIGHT LINE
 FLYING HEIGHT 500 FT. M.T.C.



TOTAL MAGNETIC INTENSITY
 AEROMAGNETIC SURVEY - BEACONSFIELD AREA
 TASMANIA
 FOR
 BROKEN HILL PROPRIETARY CO. LTD.
 BY
 AMER PPT. LTD.
 TO ACCOMPANY REPORT BY LEADY



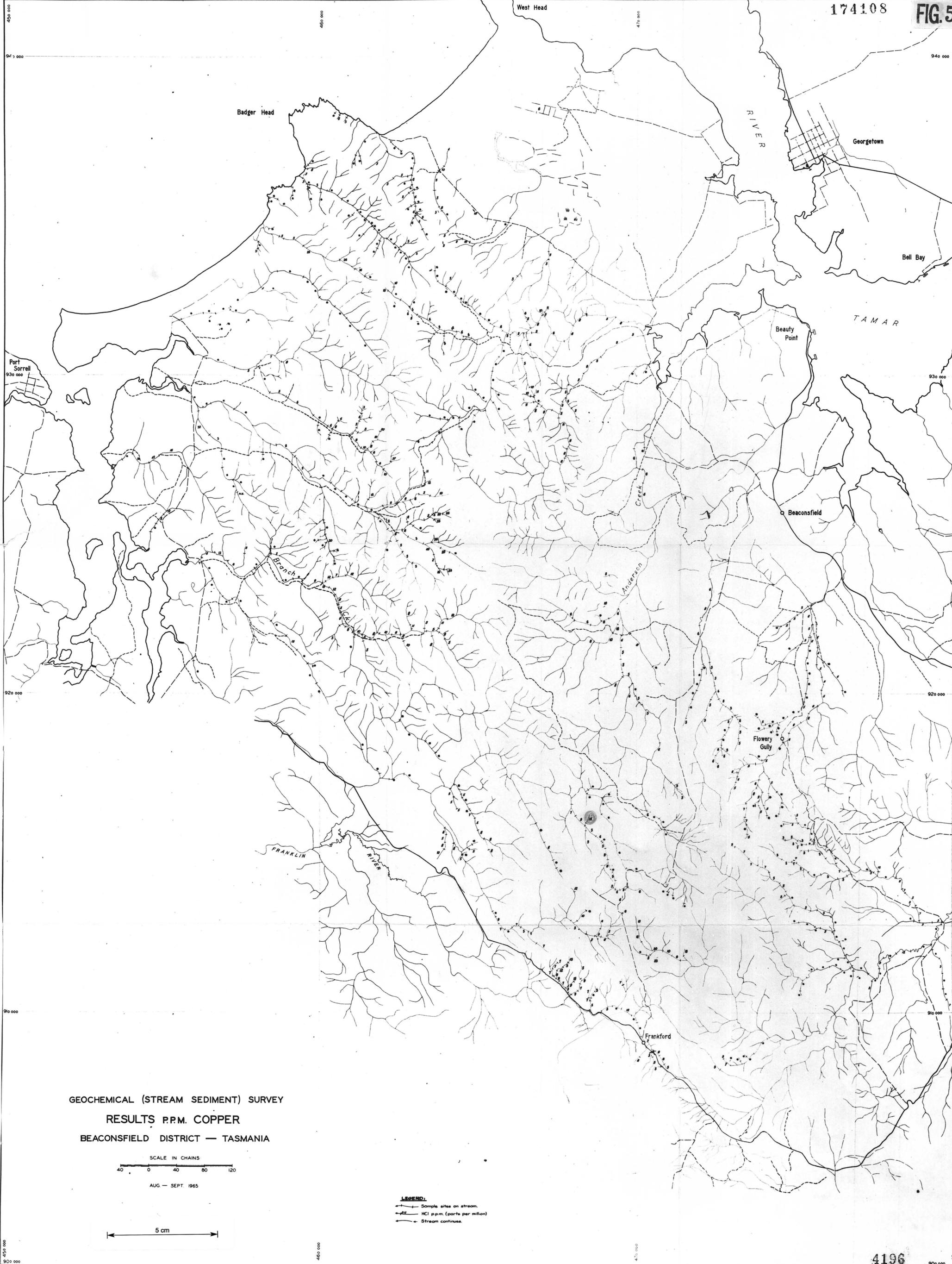
5 cm

GEOCHEMICAL (STREAM SEDIMENT) SURVEY
 SAMPLE LOCATIONS
 BEACONSFIELD DISTRICT — TASMANIA

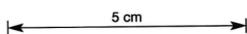
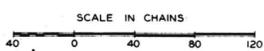
SCALE IN CHAINS
 40 0 40 80 20

AUG — SEPT 1965

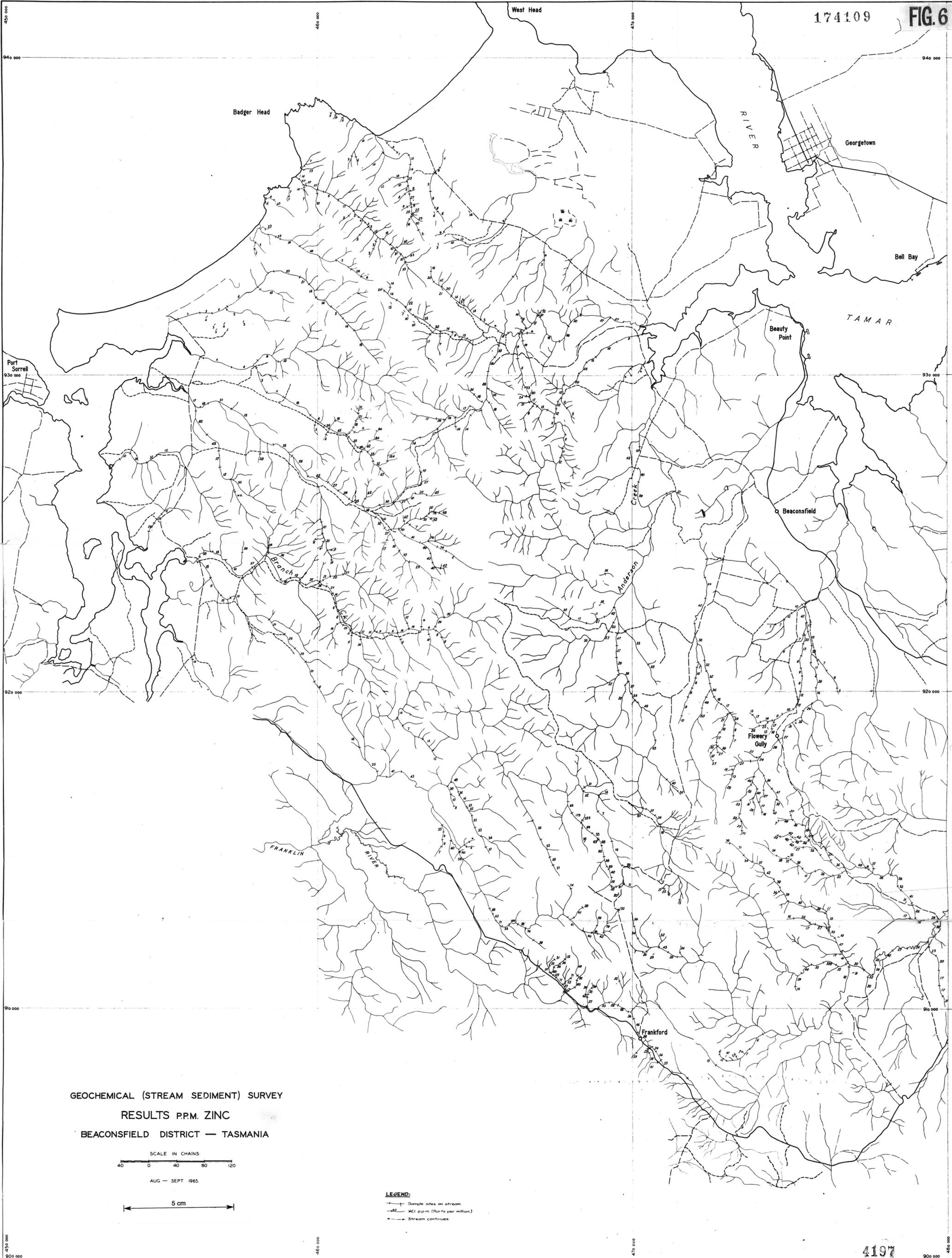
- Sample site and number
- Highway
- Road
- Track



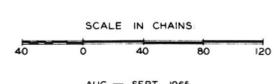
GEOCHEMICAL (STREAM SEDIMENT) SURVEY
 RESULTS P.P.M. COPPER
 BEACONSFIELD DISTRICT — TASMANIA



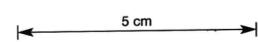
LEGEND:
 ● Sample sites on stream.
 — HCl p.p.m. (parts per million)
 — Stream continues.



GEOCHEMICAL (STREAM SEDIMENT) SURVEY
 RESULTS P.P.M. ZINC
 BEACONSFIELD DISTRICT — TASMANIA



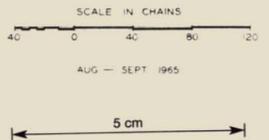
AUG — SEPT. 1965



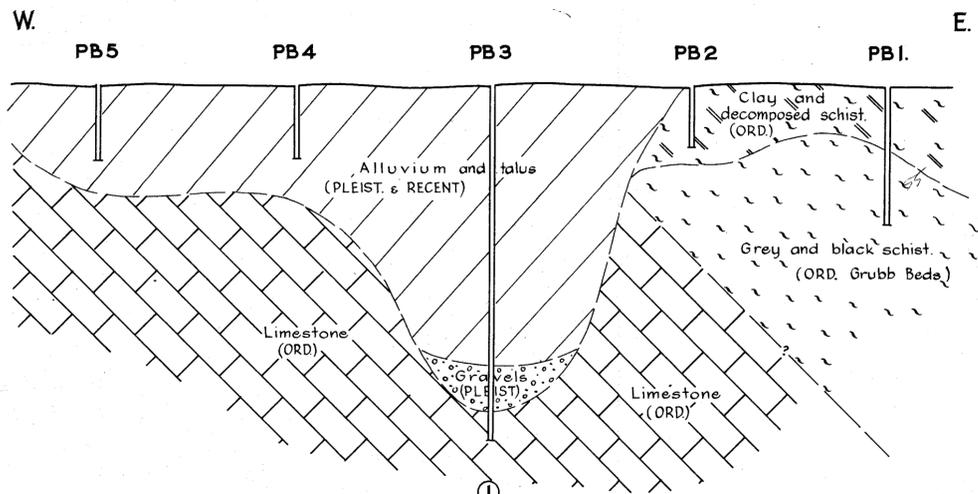
- LEGEND:**
- + Sample sites on stream
 - 22— MEI p.p.m. (Parts per million)
 - Stream continues



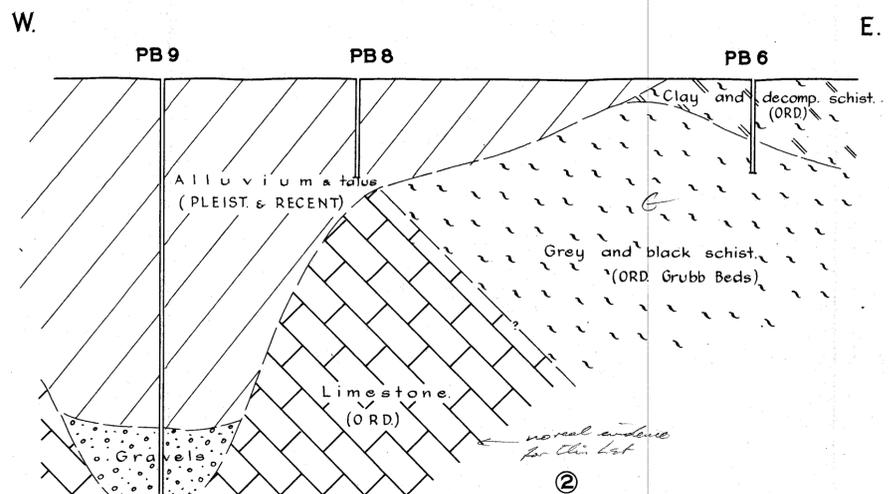
GEOCHEMICAL (STREAM SEDIMENT) SURVEY
 RESULTS P.P.M. NICKEL
 BEACONSFIELD DISTRICT — TASMANIA



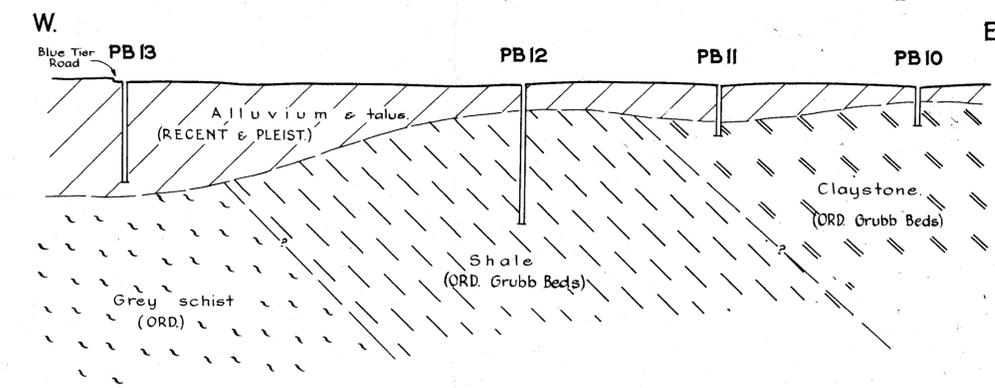
LEGEND:
 ○ Sample sites on stream
 — HCl ppm (parts per million)
 — Stream continua



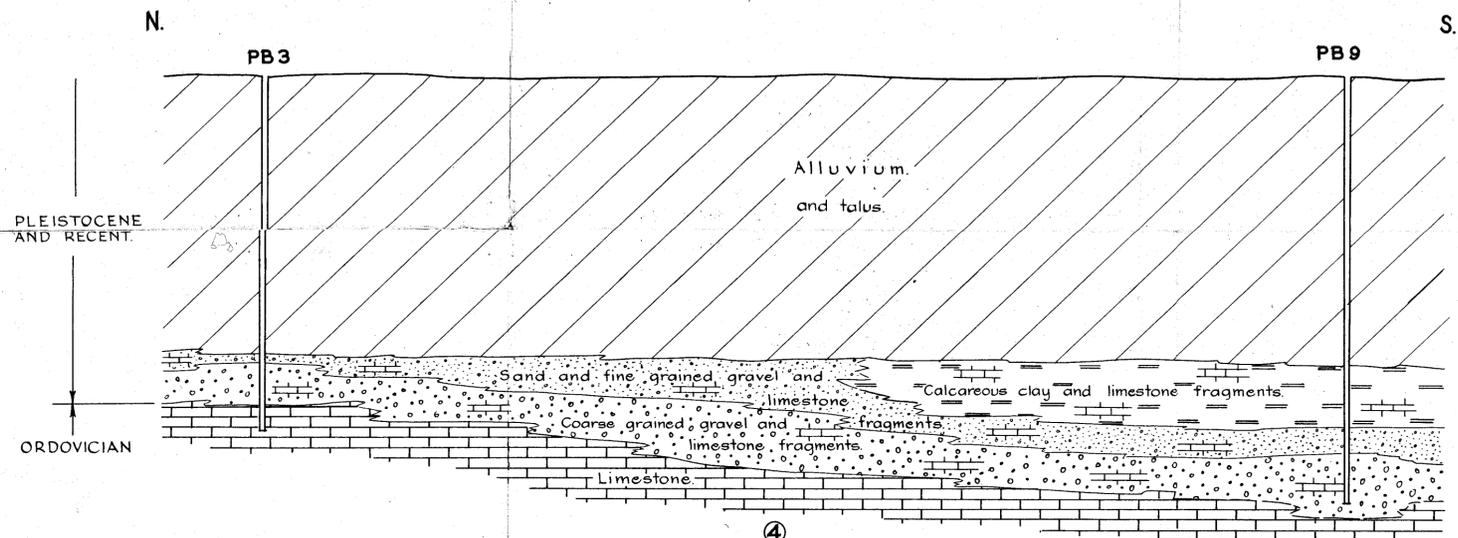
SECTION - BORES PB 1 - PB 5.
ALONG FLOWERY GULLY ROAD
H.S. + 1" = 66'
V.S. + 1" = 40'



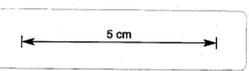
SECTION - BORES PB 6, PB 8 & PB 9.
WEST OF BLUE TIER ROAD
H.S. + 1" = 66'
V.S. + 1" = 40'



SECTION - BORES PB 10 - PB 13.
EAST OF BLUE TIER ROAD
H.S. + 1" = 132'
V.S. + 1" = 40'

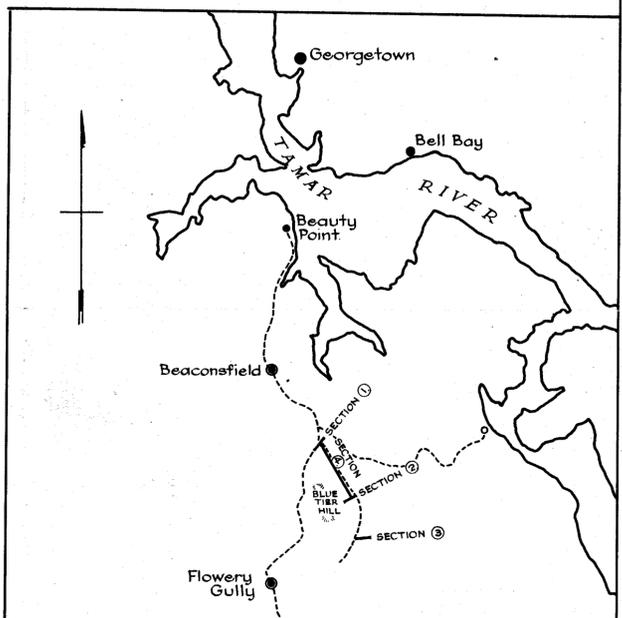


SECTION - BORES PB 3 & PB 9.
WESTERN BORDER OF BLUE TIER ROAD
HORIZONTAL SCALE + 1" = 660'
VERTICAL SCALE + 1" = 40'

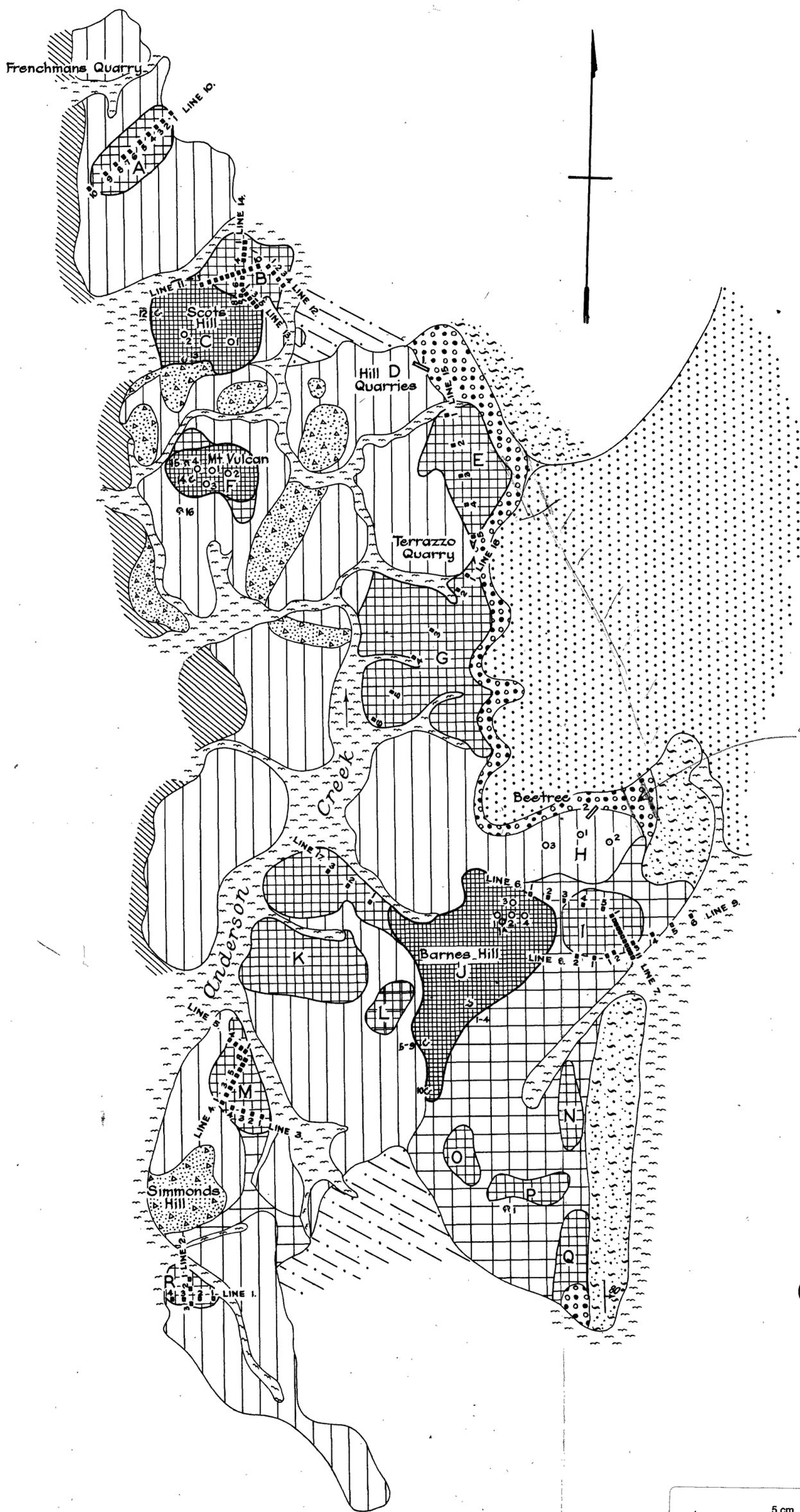


LIMESTONE - SECTIONS
BEACONSFIELD - FLOWERY GULLY AREA
TASMANIA

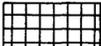
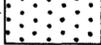
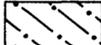
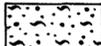
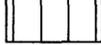
COMPILED BY M. EDYVEAN 1965



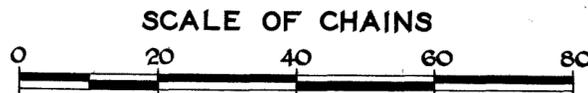
LOCALITY MAP
SCALE: 1 INCH = 2 MILES



LEGEND

- RECENT  Alluvium.
- PLEISTOCENE  Thin and defective blanket of chromite bearing gravels on Cambrian serpentine.
-  Chromite enrichments on Cambrian serpentine under a thin blanket of quartz gravels.
- TERTIARY  Thick laterites with Ni enrichment in basal zones.
-  Thin and defective blanket of lateritic soil on Cambrian serpentine.
-  Quartz gravels.
- PERMIAN  Basal conglomerate and siltstone.
- ORDOVICIAN  Caroline Creek Sandstone and sandy schists.
-  Cabbage Tree Conglomerate.
- CAMBRIAN  Ultrabasic complex mostly serpentine, gabbro, pyroxenite and rodingite in small amounts.
-  Slate.
- PRECAMBRIAN OR CAMBRIAN  Anderson Creek Metamorphics.
- A - Q Area locations.
-  Pits.
- 20 Bores.
-  Excavations.
-  Cuts.

GEOLOGICAL MAP
 CHROMIUM AND NICKEL PROSPECTS
 ANDERSON CREEK AREA
 WEST OF BEACONSFIELD, TAS.



COMPILED BY GEBERT JUNE 1965

