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This report is submitted to the Mines Department as required by Condition 6 of Exploration Licence 13/65.

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E.L.13/65 CAPE SORELL PENINSULA, S.W.TASMANIA

EXPLORATION FOR CHRYSOTILE ASBESTOS IN THE HIBBS BELT

NODDY CREEK

AND PAD 2 TO ASBESTOS POINT

1970/71

by

J. G. LANGLANDS

HOBART SEPTEMBER, 1971

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1. INTRODUCTION

1.1 GEOGRAPHY AND ACCESS figs. 1 and 2.

The Hibbs Ultrabasic Belt occupies an eighteen mile long strip of the Sorell Peninsula between Asbestos Point on the south shore of Macquarie Harbour and the mouth of the Spero River on the west coast.

The area dealt with in this report is part of an 800 feet plateau deeply dissected by many creeks, rejuvenated by post glacial uplift.

The natural vegetation is temperate rain forest with myrtle, gum and celery top pine. Second storey trees include ti-tree, sassafras, horizontal, leatherwood etc. Dense undergrowth including bauera, ti-tree and cutting grass is developed locally.

The climate is mild and wet. Maximum summer temperatures can reach 95°F, 35°C. Frosts occur in winter. The annual rainfall is between 60 and 70 inches a year, most of which falls in winter. However, due to the influence of the predominant westerly airflow from the ocean, heavy and prolonged rain may fall during the summer. The severe winter weather conditions limit the effective field season to between November and June. Exceptionally good weather conditions were experienced during the 1970/71 season.

Asbestos Point is 16 miles by launch from Strahan. A heavy duty landing, suitable for bulldozers, was built there in January 1970 using local swamp gum logs. The minimum water depth is four feet. A vehicle track, suitable for wheeled vehicles in relatively dry conditions, connects with the Noddy Creek track system. The distance from the landing to the Noddy Creek, Pad 3, campsite is 5 miles.

The area is also accessible via Birch Inlet landing which is 24 miles by launch from Strahan. Tracked vehicles can travel the 9 miles from Birch Inlet to the Noddy Creek, Pad 3, campsite. There are several helicopter pads in the area.

A 10 man camp is established at Noddy Creek, Pad 3. Figure 3 is a plan of the camp showing existing facilities.

The area investigated is part of Exploration Licence 13/65 the relevant boundaries of which are shown in figure 1.

1.2 GEOLOGY

The area described in this report extends from the Pad 2 area to Asbestos Point, a strike distance of approximately 7½ miles. It is bounded on the west by a belt of Precambrian, Modder Group rocks and on the east by the Cambrian Noddy Creek Volcanics.

Two sub-parallel approximately conformable ultramafic bodies are separated by an irregular wedge, up to 3500 feet wide, of Cambrian

823008 FIG. No 1

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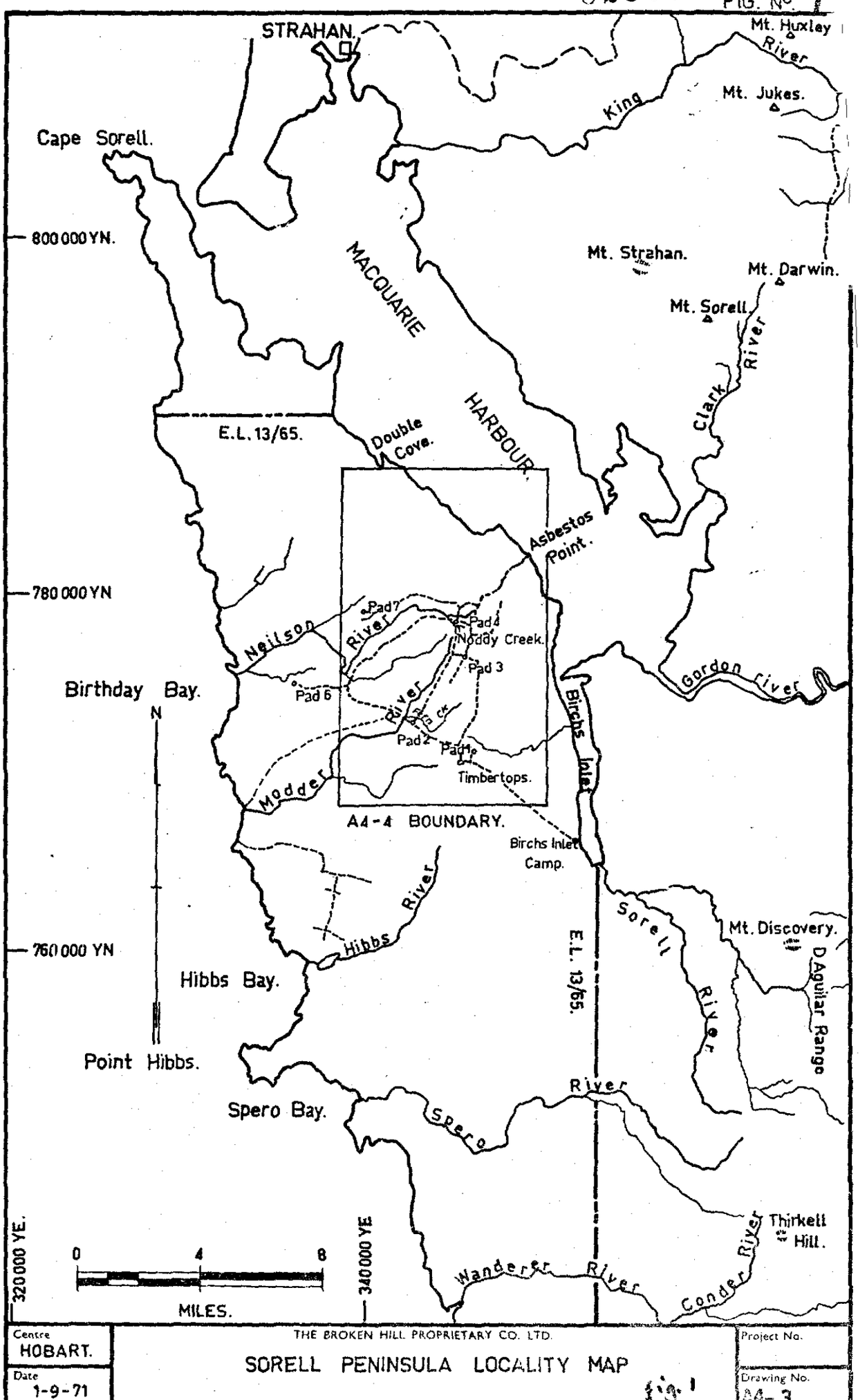

Centre HOBART.	THE BROKEN HILL PROPRIETARY CO. LTD.	Project No.
Date 1-9-71	SORELL PENINSULA LOCALITY MAP Fig. 1	Drawing No. A4-3

5 cm

ANG COORDINATES

823009 FIG. No. 2.

009

MACQUARIE HARBOUR

Serpentinite and pyroxenite of Hibbs Belt.

Bulldozed lines, all lines not shown.

Oc Ordovician

€vb Cambrian volcanics

Po Precambrian

ASBESTOS POINT

Main Creek

Muddy Cove Creek

HIBBS BELT.

780 000 YN

Anomaly 128

Neilson River

Pad 4

Pad 10

Muddy Creek

West belt

Pad 3 & camp.

East belt

Pad 2

Fern Creek

Modder River

Pad 1.

Timbertops.

100N
80N
70N
60N
55N
40N
30N
20N
10N
0
10S
20S
40S
50S
70S

0 1 2 MILES

345 000 YE

to Birchs Inlet camp.

N

Centre HOBART	THE BROKEN HILL PROPRIETARY CO. LTD.	Project No.
Date 2-9-71.	SORELL PENINSULA LOCALITY MAP. PAD 2 to ASBESTOS POINT. fig. 2.	Drawing No. A4- 4

5 cm

ANG COORDINATES

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siltstones. The wedge narrows southwards to within half a mile of Pad 2. From there, southward, a belt of sediments, talc schists and sheared volcanics separates the eastern and western ultramafics to at least one mile south of Pad 2.

The western margin of the western ultramafic is faulted against Ordovician and Cambrian sediments. Its width varies between 550 feet and 1200 feet. Bedding in the enclosing sediments dips steeply east and west. The eastern margin of the eastern body is in contact with Cambrian siltstones and greywacke and localised gabbro. Its width varies between 150 feet and 2000 feet. Drilling and country rock bedding indicates a variable steep dip greater than 75 degrees.

Ultramafic rock types include variously sheared serpentinites, massive serpentinites, serpentinised pyroxenites and pyroxenite.

Significant development of cross fibre occurs in the more massive serpentinites and in the serpentinised margins of large pyroxenite bodies of the eastern ultramafic. Slip fibre occurs in some of the sheared serpentinites of both bodies.

The boundaries of the ultramafic are shown in figure 2. Other geological detail is drawn from Hall et. al. 1969, fig. 3a. C.R.793.

1.3 PREVIOUS ASBESTOS EXPLORATION.

The small deposit of chrysotile asbestos in serpentinite at Asbestos Point has been known since before 1900. Production was by hand picking good quality ore from the small quarry and trenches near the point. Several exploration trenches were cut many years ago but no further exploitable deposit was found. Hall et. al. 1969, C.R.778, p.52, gives a good synopsis of previous investigations as reported by Hills, 1914; Nye, 1929; Rae, 1941; and Taylor, 1955. Taylor, 1955 also described the occurrences near the mouth of the Spero River.

Hall, et. al., 1969 C.R.778, noted the occurrence of abundant chrysotile asbestos in the eastern ultrabasic during the 1966-67 season. In 1968, 7 costeans on lines 20S, 10S, 10N, 20N, 30N, 40N and 50N were logged. Assuming depth continuation to 300 feet below surface it was calculated that 8½ million tons of 2.3% cross fibre ore was present between lines 20S and 50N; Hall et. al., April 1969, C.R.793. See also McGregor, October 1969, C.R.811.

1.4 CONSULTANT'S REPORTS AND AIMS OF PROJECT.

These results were sufficiently encouraging to warrant further investigation of the Noddy Creek fibre occurrence and Mr. B. Butt, then of Watts, Griffis and McOuat, Sydney, was engaged as asbestos consultant to the company.

In July 1970 Mr. Butt reviewed the data collected by B.H.P. and concluded that the Noddy Creek area was highly prospective. In order to be profitable, an asbestos deposit on the Sorell Peninsula would need 25 million tons of 4.5% fibre in groups 4 to 7, accessible by open cut mining. (Butt, July 1970)

During his visit to Noddy Creek in December 1970 Mr. Butt stressed the importance of the slip fibre potential of sheared serpentinite within and adjacent to the known cross fibre occurrences. It was apparent that an exploitable tonnage of only cross fibre bearing serpentinite was probably not available in the prospective area between 20S and 50N, a distance of 6500 feet. However, if sheared serpentinite associated with the cross fibre bearing serpentinite contains 4% - 5% of slip fibre, then perhaps a workable tonnage could be indicated to justify the initiation of a more intensive phase of exploration in the 1971/72 season.

Accordingly the 1970/71 season had four objectives:

1. Determine the surface extent and quality of the cross fibre zones by further, closer spaced costeaning, detailed mapping and visual fibre logging.
2. Determine the depth extension of good surface indications by diamond drilling.
3. Determine the fibre content of cross fibre zones and potential slip fibre bearing serpentinite adjacent to them by milling and processing selected surface and subsurface samples.
4. Determine the fibre potential of other areas of the Hibbs Belt, especially directly along strike from Noddy Creek.

1.5 TECHNICAL PERSONNEL

The following company personnel were directly concerned with technical matters at Noddy Creek during the 1970/71 season:

John Langlands	Officer in Charge
Boye Flood	Senior Geologist, Hobart
Bob Close	Geologist
Brian Cuffley	Geologist
Pat Hillsdon	Geophysicist
Martin Lamb	Technical Assistant and Draughtsman

2. REGIONAL WORK

Black and white and colour air photo coverage of the Hibbs Belt was flown by the Lands Department in April. The reference is Project F289, Noddy Creek Area, runs 1 to 7, 15/4/71. Prints were produced at a scale close to 1 : 12000.

Sheet HB4, Asbestos Point, of the 1" = 400' geology series was mapped. Sheets HB6, HB10, HB14, HB17 and HB21 were revised. These are presented as figs. 4 to 9. The geology of these sheets is dealt with in the relevant sections below.

3. NODDY CREEK EAST BELT

3.1 SURVEY

A survey with level control of all tracks and cleared lines in the vicinity of the serpentinite between Asbestos Point and the 70S (7000S) was carried out by M. Darcey of Peacock, Darcey, Anderson, Hobart. The results were drawn up at scales of 1" = 400' and 1" = 50'. The surveyor's reference for the plans is E9/4K - K151 Plans 1-6. Transparencies of these and copies of the surveyor's field notes and a list of selected Lands Department grid coordinates are held by B.H.P., Hobart and Melbourne. It should be noted that there are discrepancies between the current survey and older surveys with regard to the position of tracks on the Lands Department grid. See section 6 below.

3.2 ACCESS TO THE SERPENTINITE

A rough track about 3 miles long connects Asbestos Point with the 100N (10000N) line at Noddy Creek, fig. 2. The Noddy Creek East Belt "grid" extends about 7000 feet south of Pad 3. The following is a list of all bulldozed lines approximately at right angles to strike which cut the East Belt serpentinite between 70S and Asbestos Point. All these lines are shown on the relevant HB series, 1" = 400', sheet, figures 7, 6, 5 and 4.

70S (= 7000S)		30N	Costeaned '70/71
60S		35N	" "
50S		40N	" "
40S		45N	" "
30S		50N	" "
20S	Costeaned 70/71	55N	" "
15S	" "	60N	" "
10S	" "	70N	" "
07S	" "	80N	" "
04S	" "	80N Access Track	" "
00	Line Not Costeaned 70/71	100N	" "
05N	Costeaned 70/71	105N	" "
10N	" "	Peg 34 on Asbestos Point Track	" "
15N	" "		
20N	" "	Asbestos Point Costean	" "
25N	" "		

There are numerous other connecting lines and roads more or less parallel to strike which are not mentioned here. All those between 20S and 105N are shown on the 1" = 50' map sheets figures 10 to 21.

3.3 MAPPING AND RECONNAISSANCE

Detailed outcrop mapping at a scale of 1" = 50' was carried out over the serpentinite between 20S and 105N, figs. 10 to 21. These maps are, as far as possible, fact maps and are copiously annotated. They record the surveyed grid, all outcrop, channel samples, surface fibre logs and drill holes. Figure 22 is an index to these sheets.

An interpretive solid geology map from 20S to 55N at a scale of 1" = 200' is presented in figure 23. A discussion of the results of field-work will be found below after presentation of drilling results, section 3.8.

Outside the area of 1" = 50' mapping a detailed reconnaissance was made. But no significant fibre development was seen. Lines 70S, 60S, 50S, 40S and 30S and the connecting strike line were inspected but no fibre was recorded. The costean cut eastwards from peg 34 on the Asbestos Point road exposed some very narrow bands of extremely sheared serpentinite. (fig. 4)

The old trenches and workings at Asbestos Point (Taylor 1955) were closely examined but no significant widths of fibre bearing material were seen.

A costean cut about 500 feet south of the point exposed only 60 feet width of massive serpentinite. No cross fibre was found there. (fig. 4)

Taylor (1955) reports that no serpentinite crops out in the bed of the Muddy Bay (Cove) Creek which he followed from its headwaters, close to the 80N line, to Macquarie Harbour. From his traverse of Main Creek he concludes that serpentinite does not extend further than $\frac{3}{4}$ mile from Asbestos Point (fig.2)

Bulldozing and mapping on the 105N line conclusively demonstrates that the ultramafic is truncated by faults. (fig. 21) Ultramafic rocks are not associated with the magnetic anomaly in the Pad 10 area south of Asbestos Point (see section 6 below).

The Asbestos Point serpentinite and the Noddy Creek East Belt serpentinite in the 100N area are therefore not continuous. A tenuous connection represented by the extremely sheared narrow serpentinites exposed in the Peg 34 costeans (fig.4) may exist but cannot be considered of any potential economic importance.

3.4 FIBRE LOGGING

During detailed mapping suitable sections for fibre counting were noted. All fibre occurrences in the costeans from 20S to 105N, greater than 5 to 10 feet in width, with more than a trace of cross fibre were logged. A summary of the results and visual dollar values are presented in Table 1. All fibre log sheets and visual dollar value sheets are presented in Appendix Two

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TABLE 1

COSTEAN FIBRE LOG RESULTS SUMMARY

Line	Log	Feet East	Offset	Interval	Width Feet	% Visual Uncorr-ected	% Visual Assume Vein Angle = 45°	Evalu-ation Points Fibre	Rock Value/ Short Ton $ Can. 1971
20S	FL012	453E	119N	0'-80'	80'	1.70%	2.59%	111	3.62
				130'-140'	10'	1.87%	2.72%	88	3.10
15S	FL013	507E	36N	0'-20'	20'	7.70%	11.30%	459	37.80
				35'-45'	10'	2.0%	2.95%	38	1.77
10S	FL011	455E	13S	0'-20'	20'	3.4%	5.0%	110	7.00
10N	FL010	700E	20N	5'-30'	25'	2.9%	4.1%	166	8.36
10N	FL009	283E	2S	0'-15'	15'	4.0%	5.9%	159	11.80
				75'-90'	15'	4.1%	6.1%	53	4.33
15N	FL014	480E	---	0'-80'	80'	2.1%	3.07%	262	7.51
20N	FL003	392E	3S	0'-35'	35'	1.0%	1.47%	149	2.82
20N	FL002	381E	29S	0'-30'	30'	3.9%	5.72%	39	3.43
20N	FL001	614E	2N	0'-25'	25'	3.4%	5.04%	102	6.51
25N	FL017	250E	50N	0'-50'	50'	3.5%	5.25%	310	13.45
25N	FL016	245E	87N	0'-105'	105'	1.1%	1.69%	36	1.00
30N	FL008	624E	20S	0'-25'	25'	0.7%	1.03%	123	1.60
30N	FL004	218E	---	0'-80'	80'	2.6%	3.84%	231	8.94
				145'-160'	15'	2.8%	4.17%	81	4.42
35N	FL018	140E	---	0'-75'	75'	5.0%	7.52%	373	19.40
				75'-110'	35'	0.7%	1.05%	21	0.58
40N	FL007	495E	14N	20'-40'	20'	1.4%	2.13%	174	4.45
				60'-105'	45'	1.3%	1.91%	184	4.09
	FL006	234E	10S	5'-45'	40'	1.9%	2.47%	126	3.96
	FL005	229E	6N	0'-60'	60'	3.1%	4.53%	316	11.61
45N	FL019	1104E	10N	0'-45'	45'	2.5%	3.7%	64	3.18
50N	FL015	594E	---	0'-65'	65'	2.7%	4.02%	131	6.71
				95'-135'	40'	3.8%	5.55%	54	4.00
51N	FL020	275E	---	0'-10'	10'	10.8%	15.9%	61	12.09
51N	FL021	367E	5S	0'-40'	40'	4.7%	6.97%	330	17.95
55N	FL022	192E	31N	0'-15'	15'	10.4%	15.3%	187	32.90
70N	FL023	701E	4N	0'-20'	20'	3.3%	4.8%	475	17.2

The techniques of fibre logging and calculation of visual dollar value are outlined in section 3.9 below.

3.5 CHANNEL SAMPLING

Small channel samples of approximately 75 pounds each were collected in 5 gallon drums from intervals of approximately 25 feet across the complete outcropping width of the ultramafic body on lines 10N, 20N, 30N and 40N. On line 15S the serpentinite was sampled from the western margin of the pyroxenite body, fig. 23, to the western serpentinite contact. In addition further samples were collected from fibre log sections to ensure that all fibre logs on lines 20S, 15S, 10S, 10N, 20N, 30N and 40N were sampled so that a comparison of visual and milled results would be possible. Sample localities are shown in figure 23. Appendix 1 includes descriptions of channel samples AF1 to AF119.

All channel samples, except those sent for testing, are stored in Strahan, c/o Mr. H. G. MacDermott.

3.6 DRILLING

The 1970/71 drilling programme was designed to test subsurface extensions of good surface shows of cross fibre and to provide samples for fibre testing. NQ wire line equipment was used throughout. Drill sites were selected to intersect targets at least 200 feet subsurface.

Drill sites and a summary of results are shown in figure 23 and Table 2 (DDH1, drilled in 1968 to test an E.M. anomaly on the western edge of the ultramafic has been included in this record.) Drilling sections at a scale of 1" = 50' at 40N, 30N, 20N, DDH1 and 15S are presented in figures 24 to 28. Graphic geological logs, fibre logs and core recovery in drill runs at a scale of 1" = 25' are given in figure 29.

Core recovery was poor, due partly to the inexperience of some drillers and partly to the broken, loose, sheared and often talcose nature of the ground. A discussion of the consequences of core loss is given in section 3.9d.

The core from each hole was divided into samples for fibre testing by consideration of (a) cross fibre content and quality;

(b) rock type changes;

(c) the weight of sample required to yield at least one pound of fibre from rock with 2% fibre;

(d) estimates of slip fibre content.

Each sample is contained in two or more core boxes, separate from adjacent samples. All core boxes are clearly marked with paint and/or punched aluminium tags. All core, except that sent for testing, is stored in Strahan, c/o Mr. H. G. MacDermott.

TABLE 2

DRILLING SUMMARY

Hole	Specifications: Line	Easterly Offset	R.L.	Bearing	Dip	Depth	Surface Target: Log	Int	%corr.	C$ per ton
DDH1	Base line 850'N	50'W	787.8'	311¼°	45°	299'				
DHNC2	30N	427E	5'N	707.2'	257¾°	45°	512'	FL004	80'	3.84% $8.94
									15'	4.17% $4.42
DHNC3	30N	400E	7.5'N	711.3'	081½°	45°	503.5'	FL008	25'	1.03% $1.60
DHNC4	40N	48.5E		783.1'	086½°	45°	427.4'	FL005	60'	4.53% $11.61
								FL006	40'	2.47% $3.96
DHNC5	30N	32.5%		776'	079°	45°	544.5'	FL004	80'	3.84% $8.94
									15'	4.17% $4.42
							FOLLOW UP TO DHNC2			
DHNC6	40N	349E	1.5'S	723'	086°	45°	600'	FL007	20'	2.13% $4.45
									45'	1.91% $4.09
DHNC7	20N	149E	19'N	802.7'	108½°	45°	595'	FL002	30'	5.72% $3.43
								FL003	35'	1.47% $2.82
DHNC8	20N	452E		764.9'	108½°	43°	510'	FL001	25'	5.04% $6.51
DHNC9	15S	733E	11.7S	788.9'	319°	45°	390'	FL013	20'	11.30% $37.80
									10'	2.95% $1.77

RESULTS OF VISUAL EVALUATION OF CROSS FIBRE

Hole	Interval From	To	Width	Sample	% Corr.	Evaluation Points	C$ Per Ton
DDH1	146'	151'	5'	NONE	3.2	NOT CALCULATED	NOT CALCULATED
DHNC2	20'	85'	65'	AF401	1.10	25	0.77
	205'	225'	20'	AF404	1.40	98	1.75
	305'	355'	50'	AF406	1.54	187	3.31
DHNC3	0'	55'	55'	AF409	4.40	112	6.25
DHNC4	115'	120'	5'	NONE	1.10	NOT CALCULATED	
	325'	330'	5' (fibre from 1')	NONE	2.10	NOT CALCULATED	
DHNC5	230'	255'	25'	AF419	2.50	22	1.35
	290'	325'	35'	AF421	2.88	84	3.17
	325'	360'	35'	AF422	4.76	86	5.34
	360'	395'	35'	AF423	1.43	41	0.89
DHNC6				BARREN			
DHNC7	125'	180'	55'	AF440	2.29	75	2.29
	515'	595'	80'	AF446	0.12	16	0.06
DHNC8	145'	215'	70'	AF449	0.37	130	0.66
DHNC9	110'	190'	80'	AF452	1.97	187	4.25

Sludge samples, are also stored in Strahan. For a number of reasons, including poor sludge recovery, contamination, missing samples due to poor water return or inefficient collecting equipment, these samples are probably of no practical use. Without an elaborate system of settling tanks and a great deal of time, it is not possible to collect all the sludge because a substantial quantity of fibre remains in suspension.

Core samples AF401 to AF454 are shown on the relevant drill section drawing, figures 24, 25, 26 and 28, and full descriptions are given in appendix 3.

3.7 MAGNETOMETER SURVEY

The survey was conducted to test for a consistent positive relationship between cross fibre occurrence and the shape of the magnetic profiles over the ultramafic body. Close correlation between ground magnetic anomalies and economic chrysotile deposits has been demonstrated in many instances, e.g. at the Roberge Lake deposits of Northern Quebec.

All traverses from 20S to 105N were surveyed at 25 feet stations using a hand held McPhar flux gate magnetometer. All readings were made at or between pegs placed during the 1971 survey on the traverses shown on the 1" = 50' maps. Thus direct and accurate correlations between geology and magnetic results are possible. The magnetic profiles were plotted at 1" = 50' and 1" = 4000 γ on diagramatic surface geology sections, figures 30 to 42.

The magnetic profiles over Deposits 1 and 2, where subsurface fibre has been proved by drilling, were compared with geological sections 20N to 40N and 20S to 10S.

The profiles on lines 40N, 35N, 30N, 25N and 20N show that the western fibre zone and the eastern fibre zone and their associated sheared serpentinites are associated with higher and generally more variable magnetic intensity than the central stichtite bearing zone which is represented by magnetic lows, "terraces" or low "plateaux" on the magnetic profiles. The profiles on lines 20S, 15S and 10S show that the barren pyroxenite is weakly magnetic with a western marginal high corresponding to the cross fibre zone. The sheared serpentinite west of the fibre zone shows variable magnetic characteristics.

A loose positive relationship between substantial amounts of cross fibre and magnetic highs could be seen but it is doubtful whether the profile characteristics could be used to predict the presence of cross fibre in the absence of outcrop because similar anomalies occur in barren areas.

It should be noted that large anomalies can be caused by:

(a) edge effects;

(b) mass effects, where serpentinite crops out in a relatively steep sided valley;

(c) surface effects, caused by the magnetic iron oxide capping; (Hillsdon pers. comm. E9/2B, 28/6/71)

3.8 RESULTS OF FIELDWORK

20S to 55N

Good surface indications of cross fibre occur between, and including, lines 20S and 70N, figs. 6 and 7, at Noddy Creek. South of 20S the ultramafic body thins to less than 150 feet at line 40S. From 40S to 70S, the limit of the grid, no fibre was recorded. No significant amounts of fibre were found north of 70N. The ultramafic on line 60N is only 200 feet wide and only minor short cross fibre was noted. While the fibre occurrence on 70N is good, 20' with 4.8% visual cross fibre in rock worth C$17.2 per ton, it is isolated from the area of more continuous fibre occurrence south of 55N. It will, therefore, not be considered further at this stage.

There are three main zones of cross fibre development. A western zone from about 05N to 55N an eastern zone from 05N to 55N and a southern zone from 10S to 20S. See figure 23. Fibre zones are considered to be those areas in which more than a trace of cross fibre occurs on more than one cross-cutting line. No attempt was made to map a cut-off percentage fibre. The volumes defined in section 3.9d for the purposes of tonnage calculation have dimensions less than the fibre zones as mapped.

The fibre of the eastern and western zones is developed in massive serpentinites and completely serpentinised pyroxenites often enclosed in an envelope of sheared serpentinite containing magnetite and slip fibre. The two zones are separated by a zone of sheared and slightly sheared pale green serpentinite with disseminated stichtite and some slip fibre. Good cross fibre development and disseminated stichtite are mutually exclusive.

The fibre of the southern zone occurs in massive serpentinite on the western margin of a pyroxenite body east of a zone of sheared serpentinite.

Drilling the eastern and western zone targets, sections 20N, 30N and 40N, figures 24, 25 and 26, showed that the eastern zone did not continue far below surface. Holes 6 (40N) and 3 (30N) were barren at the target depth; hole 8 (20N) intersected only poor cross fibre.

On 30N the fibre of the western zone was proved at 300 feet below surface. On 20N the drilling information indicates probable similar depth extension. However, hole 4 on 40N was barren below 60' of surface rock worth C$11.61 a ton (FL005)

The zone of disseminated stichtite was shown to widen considerably at depth on sections 30N and 40N. The 400 feet level plan, fig. 23, shows that the entire ultramafic width between 40N and 50N contains disseminated stichtite at depth and therefore, apparently does not

contain cross dibre. Further drilling would be required to test this theory.

Hole 9 was drilled on 15S to test the southern fibre zone. A simple straight line interpretation of costean and drill hole information indicates that the fibre zone on 15S dips eastwards at about 60°. The dip of the eastern ultramafic contact is not at all well fixed but the results suggest that it dips steeply westwards. Therefore the fibre zone on 15S could be truncated by the eastern gabbro contact between 120 and 250 feet below surface.

DDH1, fig. 27, drilled in 1968 to test an E.M. anomaly intersected only 5 feet of short cross fibre on the western margin of the pyroxenite body between 05N and 10N.

It was not possible to obtain any quantitative estimate of slip fibre content of sheared serpentinite. Both the non cross fibre bearing sheared serpentinite enclosing the cross fibre zones and the disseminated stichtite zone must be considered as potential slip fibre sources until some results of milling and testing are available.

3.9 TONNAGE AND GRADE; VISUAL EVALUATION METHODS

3.9a Note on Visual Evaluation of Slip Fibre

It is possible to obtain a quantitative estimate of the abundance and quality of cross fibre asbestos by the purely visual methods described below, but no equivalent technique can be used to evaluate slip fibre asbestos because all the slip fibre in a rock may not be readily visible, and the apparent fibre length in outcrop or core may be drastically reduced by milling. The only reliable way to assess the potential slip fibre content of a deposit is by sampling and separation, grading and testing of contained fibre.

When the first batch of samples has been milled and tested a review of the total fibre potential of the area can be made.

3.9b Fibre Logging Technique

Ideally areas of fresh, clean, 100% outcrop are required for surface logging. Log lines should be as near to 90° to the strike direction of the ore zones as possible. It was found that the walls of costeans could be most easily chipped, brushed and washed to provide 100% exposure of the fibre veins but floors of costeans could also be suitably prepared. It was noted that the cross fibre bearing serpentinite tended to break along shear planes and unless the surface of these planes was broken with a heavy hammer the cross fibre veins remained obscured behind a thin layer of sheared slip fibre bearing serpentinite.

The fibre log line is marked off in horizontal five feet intervals and a fibre count made for each interval over '' width of the fibre zone.

The results are most conveniently recorded in a waterproof field notebook and later transferred to pre-printed fibre log sheets. The number of veins yielding fibre of 1/32", 1/16", 2/16", 3/16", etc. in each five feet interval is recorded and a note of the average angle between the fibre veins and the log line is taken. It is not sufficient to record only the vein width since wide veins made up of layers with shorter fibre often occur. An approximate underestimate of the cross fibre volume percentage of each interval is obtained by summing the total number of 1/16s of an inch of fibre and dividing by ten. It should be noted that this value, here called the uncorrected visual percentage, takes no account of vein angle. If the fibre veins are not at right angles to the log line then the sample will contain a greater volume of the same type of fibre.

Cross fibre core logging is done after the usual geological logging. Cross fibre bearing zones are marked off in five feet intervals, care being taken to ensure agreement with the drillers' run markers.

It is necessary to make semi-arbitrary decisions on the limits of some of the five feet intervals when core recovery is not 100%. Core recovery in each five feet interval is recorded and fibre logging proceeds as above. Examples of fibre log sheets may be found in appendices 2 and 3.

3.9c Visual Dollar Value Calculations

Each fibre log section is separated into intervals of similar fibre length distribution. These intervals are used to decide sample limits in drill core. The divisions are, if possible, not less than a "mineable width", say 20-30 feet. The total number of fibre veins at 1/32", 1/16", 2/16", etc. in the interval are entered on the visual dollar value sheet (see appendices 2 and 3) and each total is converted to the equivalent number of 1/16s". The grand total of 1/16s" for the sample interval is calculated. The visual percentage, corrected for an assumed average vein angle of 45° is calculated from the formula:

$$\text{v.\%} = \frac{\text{Total 1/16s" x 0.737}}{\text{Sample Footage}}$$

A synthetic Quebec Standard Test, Q.S.T., is then made by consideration of the proportions in ounces of an imaginary 1 lb. fibre sample which would be retained on the 2 mesh, 4 mesh and 10 mesh screens and the pan of a Quebec Standard Testing Machine. The actual examples in appendices 2 and 3 show how these weights are derived from the fibre log data. The weight in ounces of each fibre length fraction is then multiplied by a value factor either 1, 10, 40 or 100 for the Pan, 10 mesh, 4 mesh and 2 mesh products respectively, to allow for the higher value of long fibre and the result is entered in the Evaluation Points column. The evaluation points total for the sample is then used to derive a value per short ton of fibre from a graph relating evaluation points and fibre value (fig. 43). The rock value or ore

value is obtained by multiplying the fibre value by the corrected visual percentage. The 1971 Canadian Producers' price list is given in Table 11.

3.9d Note on Core Loss

Core recovery during the 1971 drilling programme was poor. A graphic representation of the geological log, fibre log, and core recovery in driller's runs for each hole is given in figure 29. These graphic logs were drawn up to determine the relationship between core loss, cross fibre content and rock type.

Core loss occurred in - sediments near the collar;
- sheared serpentinite;
- cross fibre zones.

In general the core loss was greater in fibre zones than in the barren enclosing serpentinites but on a local scale, within the fibre zones, no direct relationship between visual fibre content and core recovery is obvious. Stated differently, the fibre content of the core is not always lower in low recovery sections. Therefore, the variability of fibre content in the core may be due to a combination of the variability of fibre content of the rock drilled, and preferential loss of fibre.

Loss of core will not alter the milled result if the lost core contains fibre in the same proportion as the core recovered. This situation could also apply for slip fibre in sheared serpentinite. However, if cross fibre or rich cross fibre zones were preferentially lost then the results of milling the core could grossly understate the fibre content of the ore.

Several holes at Woodsreef were drilled using a BX pilot hole followed down by a 12" diameter hole in 10 foot sections. Core recovery in the BX hole was good. Comparison of the milled fibre percentages of the BX core and the 12" core showed that the BX results should be multiplied by 1.28 to correct for loss of fibre in the small core. BX core is almost exactly the same size as BQ wire line core.

It may therefore be valid to add 30% to all fibre percentages derived from core samples before even considering sections of high core loss.

Noddy Creek fibre is loosely bound by comparison with the Woodsreef fibre. Core from fibre zones is often very broken. Conditions for full core recovery of cross fibre bearing serpentinite are not good.

Therefore significant preferential loss of cross fibre may have occurred. This could account for the difference in dollar values between exposed rock and core. (Tables 3 to 10). For example, the overall evaluation points for exposed ore of Deposit 1 (30N) is 244, Table 3. The evaluation points for core from Deposit 1 is only 91, Table 4. The surface rock contains significant amounts of 4 mesh and 2 mesh fibre. The core does not.

Complete recovery of sludge was not made for a variety of reasons, including - the lack of suitable recovery equipment,

- partial water return in some holes,
- inexperience of drillers and the geologist in charge in drilling for asbestos,
- lack of time,
- advice from the consultant that the results never warrant the expense and inconvenience incurred.

3.9e Milling and Fibre Testing

The following samples from the 30N and 15S areas have been sent to the testing laboratory at Woodsreef in N.S.W. Arrangements were negotiated through Mr. B. Butt who is now the Exploration Manager of Woodsreef Mines.

CORE SAMPLES

Sample	Hole	Sample	Hole
AF409	DHNC3, 30N	AF452	DHNC9, 15S
AF410	DHNC5, 30N	AF453	DHNC9, 15S
AF417	DHNC5, 30N	AF454	DHNC9, 15S
AF418	DHNC5, 30N		
AF419	DHNC5, 30N		
AF420	DHNC5, 30N		
AF421	DHNC5, 30N		
AF422	DHNC5, 30N		
AF423	DHNC5, 30N		
AF424	DHNC5, 30N		

CHANNEL SAMPLES

Sample	Line	Sample	Line
AF 9	30N	AF 99	15S
AF 10	30N	AF100	15S
AF 11	30N	AF104	15S
AF 12	30N	AF105	15S
AF 13	30N	AF106	15S
AF 14	30N	AF107	15S
AF 29	30N		
AF 30	30N		
AF 31	30N		
AF 32	30N		
AF 33	30N		

The following samples from the 20N, 40N, 10S and 20S areas have been sent to the Quebec Government testing laboratories in Canada. Arrangements for testing were made by the company's asbestos consultants, Watts, Griffis and McOuat of Sydney.

CORE SAMPLES

Sample	Hole	Sample	Hole
AF440	DHNC7	AF426	DHNC4
AF441	DHNC7	AF427	DHNC4
AF442	DHNC7	AF428	DHNC4
AF443	DHNC7	AF429	DHNC4
AF444	DHNC7	AF430	DHNC4
AF445	DHNC7		
AF446	DHNC7		

CHANNEL SAMPLES

Sample	Line	Sample	Line
AF 56	20N	AF 59	40N
AF 55	20N	AF 60	40N
AF 54	20N	AF110/111	40N
AF 53	20N	AF 64	40N
AF 52	20N	AF 65	40N
AF119	20N	AF101	20S

CHANNEL SAMPLES (Cont.)

Sample	Line	Sample	Line
AF 8	20N	AF102	20S
AF 7	20N	AF103	20S
AF 6	20N	AF 98	10S

Each sample will be subjected to four tests.

1. Fibre Separation and Determination of Yield

The sample is crushed using an ordinary jaw crusher to reduce it to a suitable size. It is then impacted in a special mill to open the fibre before passing over a vibrating screen belt which allows the smaller rock fragments, but not fibre to pass through. The larger remaining rock fragments and crudy (unopened) fibre fall off the end of the screen belt while open fluffy fibre is sucked off by a sort of vacuum cleaner arrangement. The large fragments of crudy fibre and larger rock fragments are impacted and screened repeatedly until all fibre is separated from rock. The percentage fibre is calculated from the weight of fibre and the weight of the sample.

2. Quebec Standard Test

If sufficient fibre is released a one pound sample is graded into fibre length fractions in a QUEBEC STANDARD TEST machine. The results are expressed as the weight in ounces of fibre retained by the 2 mesh, 4 mesh, 10 mesh and PAN of the machine. If necessary, further screening tests can be carried out to grade fibre which is shorter than 10 mesh. The results of this test are used to derive a dollar value for each sample.

3. Wet Volume

A standard weight of fibre is placed in water in a measuring cylinder, shaken and allowed to settle. The volume of the column of suspended fibre is directly proportional to the degree of fiberization.

4. Magnetic Rating

The magnetic rating of 10 grams of fibre is determined by comparison with known standards.

A high magnetic rating is undesirable in fibre used for the manufacture of electrical insulators. A high magnetite content in decorative asbestos based laminates may cause a rusty discolouration.

See Butt, July 1970, for descriptions of these and further tests.

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823026

TABLE 3

NODDY CREEK

DEPOSIT 1, 30N

CROSS FIBRE LENGTH DISTRIBUTION

AND VISUAL DOLLAR VALUE

Costeans Only

Line	Log	Int.ft.	Feet	1/32	1/16	2/16	3/16	4/16	5/16	6/16	7/16	8/16	+ ½	Sum 1/16
20N	FL003	0-35	35	2	34	10	2	1	1					70
	FL002	0-35	35	141	127	18								233½
25N	FL017	0-50	50	70	72	43	24	7	2	1	3	1	1 @ 18/16	356
	FL016	0-105	105	235	76	11	5							230½
30N	FL004	0-80	80	20	118	61	22	11	9	2				417
		110-120	10	4	2	2								8
		145-160	15	22	36	16	2							85
35N	FL018	0-75	75	98	143	94	32	27	15	6	3	2	1 @ 11/16 1 @ 19/16	762
		75-110	35	54	21	1								50
40N	FL006	5-45	40	39	47	27	7						1 @ 10/16	151½
	FL005	0-65	65	69	108	51	11	6	3	3	0	3	1 @ 11/16	369½
		TOTALS	545'	754	784	334	105	52	30	12	6	6		2733
		1/16s		377	784	668	315	208	150	72	42	48	69 =	2733

SUM 1/16s = 2733

TOTAL FOOTAGE = 545'

ASSUME VEIN ANGLE = 45°

VISUAL % FIBRE = $\frac{2733 \times 0.737}{545}$

= 3.7%

Q.S.T.	1/16	oz.	Evaluation Points
Pan	1161	6.80 x 1	7
10M	983	5.75 x 10	58
4M	472	2.76 x 40	110
2M	117	0.69 x 100	69
	2733	16.00	244

Fibre value = C$237 per short ton 1971.

Rock value = C$8.79 per short ton 1971.

027

823027

TABLE 4

NODDY CREEK

DEPOSIT 1, 30N

CROSS FIBRE LENGTH DISTRIBUTION

AND VISUAL DOLLAR VALUE

Core Only

	1/32	1/16	2/16	3/16	4/16	5/16	6/16	Sum 1/16
DHNC2								
20-85, 65'	128	27	3					97
205-225, 20'	45	8	2	0	1			38½
305-355, 50'	44	35	8	3	2	3		105
DHNC3								
0-55, 55'	164	131	46	11	7			366
DHNC5								
230-255, 25'	98	32	2					85
290-325, 35'	104	51	9	2	1	0	1	137
325-360, 35'	77	91	28	12	0	1		226½
360-395, 35'	42	35	6					68
DHNC7								
125-180, 55'	105	68	18	3	0	0	1	171½
								1294½
TOTALS	807	478	122	31	11	4	2	
1/16s	403½	478	244	93	44	20	12	= 1294½

Sum 1/16s = 1294

Total Footage = 375'

Assume Vein Angle = 45°

Visual % Fibre = $\frac{1294 \times 0.737}{375}$

= 2.54%

Q.S.T.	1/16	oz.	Evaluation Points
Pan	881	10.90 x 1	11
10M	337	4.17 x 10	42
4M	76	0.94 x 40	38
2M			
	1294	16.01	91

Fibre Value = C$117 per short ton (1971)

Rock Value = C$2.97 per short ton (1971)

TABLE 5

NODDY CREEK

DEPOSIT 1, 30N

CROSS FIBRE LENGTH DISTRIBUTION

AND VISUAL DOLLAR VALUE

(Combining Costean and Core Logs)

	1/32	1/16	2/16	3/16	4/16	5/16	6/16	7/16	8/16	10/16	11/16	18/16	19/16
TOTAL	1561	1262	456	136	63	34	14	6	6	1	2	1	1
1/16	780	1262	912	408	252	170	84	42	48	10	22	18	19

Sum 1/16 = 4027

Total Footage = 920'

Assume vein angle = 45°

Visual % Fibre = $\frac{4027 \times 0.737}{920}$

= 3.2%

Q.S.T.

	1/16s	Oz.	Points
Pan	2042	8.14 x 1	8
10M	1320	5.24 x 10	52
4M	548	2.18 x 40	87
2M	117	0.41 x 100	41
	4027	15.97	188

Fibre value per short ton (1971) = C$220

Rock value per short ton (1971) = C$7.10

Potential tonnage, short tons = 4.633×10^6

Deposit value (1971) = C$32.9 million

TABLE 6

NODDY CREEK

DEPOSIT 1, 30N

VISUAL COSTEAN AND CORE INFORMATION

Line	Log	Int.	No.5' Int.	Volume % Fibre Vein Angle = 45°	Evaluation Points	Fibre Group	Visual Fibre Value/ Ton C$ 1971	Rock Value/ Ton C$ 1971	Sample
20N	FL003	35'	7	1.47	149	5K-5D	192	2.82	AF119
	FL002	30'	6	5.72	39	7M-7K	60	3.43	AF118
	DHNC7	55'	11	2.29	75	7D	100	2.29	AF440
25N	FL017	50'	10	5.25	310	4K-4J	256	13.45	NONE
	FL016	105'	21	1.69	36	7M-7K	59	1.00	NONE
30N	FL004	80'	16	3.84	231	4T-4M	232	8.94	AF31, 30 29, 9.
		15'	3	4.17	81	7D-6D	106	4.42	AF12
30N	DHNC2	65'	13	1.10	52	7K-7H	70	0.77	AF401
		20'	4	1.40	98	6D-5R	125	1.75	AF404
		50'	10	1.54	187	5D-4T	215	3.31	AF406
	DHNC3	55'	11	4.40	112	6D-5R	142	6.25	AF409
	DHNC5	25'	5	2.50	22	7T-7R	54	1.35	AF419
		35'	7	2.88	84	7D-6D	110	3.17	AF421
		35'	7	4.76	86	7D-6D	112	5.34	AF422
		35'	7	1.43	41	7M-7K	62	0.89	AF423
35N	FL018	75'	15	7.52	373	4J-4D	258	19.40	NONE
		35'	7	1.05	21	7T-7R	54	0.58	NONE
40N	FL005	60'	12	4.53	316	4K-4J	256	11.61	AF110, 111
	FL006	40'	8	2.47	126	6D-5R	160	3.96	AF112, 113

Average value of a 5' interval = C$5.74 (1971 prices)

Tonnage, short tons = 4.633×10^6

Deposit value = C$26.6 million

TABLE 7

NODDY CREEK

DEPOSIT 1, 30N

DEPOSIT VALUE FROM VISUAL DOLLAR VALUES

Tonnage = 4.633×10^6 short tons

Rock value/ton C$ 1971	No. of 5'ints.	% of total	Assumed rock value/ton C$ 1971	Value C$ x 10^6
0 - 2	57	31.60	1	1.47
2 - 4	49	27.20	3	3.78
4 - 6	10	5.55	5	1.29
6 - 8	11	6.10	7	1.98
8 - 10	16	8.90	9	3.70
10 - 12	12	6.65	11	3.38
12 - 14	10	5.55	13	3.34
14 - 16	0	0		0
16 - 18	0	0		0
18 - 20	15	8.34	19	5.02
TOTALS	180	99.9%		C$23.96 million

031

823031

TABLE 8

NODDY CREEK

DEPOSIT 2, 15S

CROSS FIBRE LENGTH DISTRIBUTION

Costeans, Core, Costeans & Core

COSTEANS

Line	Log	Int.	Feet	1/32	1/16	2/16	3/16	4/16	5/16	6/16	7/16	+½"	Sum 1/16
20S	FL012	0-80	80	157	84	30	13	5					281½
		130-140	10	11	14	3	4						37½
15S	FL013	0-20	20	16	66	39	14	5	5	2	1	50 x 1/16 @ 2M	308
		35-45	10	34	17	3							40
10S	FL011	0-20	20	36	56	15	8	2					136
		TOTALS	140'	254	237	90	39	12	5	2	1		803
		1/16s		127	237	180	117	48	25	12	7	50	803

Sum 1/16s = 803

Total footage = 140

Assume vein angle = 45°

Visual % fibre = $\frac{803 \times 0.737}{140}$

= 4.2%.

CORE

15S	DHNC9	110-190	80	100	70	17	4	6	1	2	1		
		1/16s		50	70	34	12	24	5	12	7		214

Sum 1/16s = 214

Total footage = 80

Assume vein angle = 45°

Visual % fibre = $\frac{214 \times 0.737}{80}$

= 1.97%

COSTEANS AND CORE

		220	354	307	107	3	18	6	4	2		1017
		1/16s	177	307	214	9	72	30	24	14	50	1017

Sum 1/16s = 1017

Total footage = 220

Assume vein angle = 45°

Visual % fibre = $\frac{1017 \times 01737}{220}$

= 3.4%

032

TABLE 9

NODDY CREEK

DEPOSIT 2, 15S

SYNTHETIC QUEBEC STANDARD TEST

TOTAL FIBRE

AND VISUAL DOLLAR VALUE

	1/16	oz.		Evaluation Points
Pan	484	7.75 x	1	8
10M	343	5.40 x	10	54
4M	140	2.20 x	40	88
2M	50	0.79 x	100	79
	1017	16.14		229

Fibre value = C$231 (1971)

% Fibre = 3.4%

Therefore rock value = C$7.87 (1971)

Tonnage = 1.707×10^6 short tons

Therefore deposit value = C$13.43 million (1971)

033

823033

TABLE 10

NODDY CREEK

DEPOSIT 2, 15S

VISUAL COSTEAN AND CORE INFORMATION

Line	Log	Int.	No. 5' Int.	Volume % fibre vein angle = 45°	Evaluation Points	Fibre Group	Visual fibre value per ton C$ 1971	Rock value per ton C$ 1971	Sample
20S	FL012	80'	16	2.59	111	6D-5R	140	3.62	AF101 102 103
		10'	2	2.72	88	7D-6D	114	3.10	NONE
15S	FL013	20'	4	11.30	459	4D-4A	335	37.80	AF 99 100
		10'	2	2.95	38	7M-7K	60	1.77	
	DHNC9	80'	16	1.97	187	5D-4T	215	4.25	AF452
10S	FL011	20'	4	5.00	110	6D-5R	140	7.00	AF 98

Average value of a 5' interval = C$7.4 per ton

Tonnage, short tons = 1.707×10^6

Deposit value = C$12.630 million

DEPOSIT VALUES FROM VISUAL DOLLAR VALUES

Rock value/ton C$ 1971	Number 5' Ints.	% of Total	Assumed rock value/ton	Value C$ x 10^6
0 - 2	2	4.54	1	0.078
2 - 4	18	40.90	3	1.395
4 - 6	16	36.30	5	3.095
6 - 8	4	9.1	7	1.089
36 - 38	4	9.1	37	5.750
TOTALS	44	99.94		C$11.407 million

Deposit Value = C$11.407 million

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4. NODDY CREEK WEST BELT

4.1 RECONNAISSANCE

The following list indicates the locality and type of all fibre occurrences found on unimproved, old bulldozed lines cut on the West Belt Serpentinite from its northern limit to the Pad 2 area. Localities are plotted on the adjacent map, fig. 49.

Locality	Comments
(1) Stream at peg "29N" bears 50°N. East end of stream section about 3000'N of Pad 4.	Minor ribbon fibre.
(2) Track (50N line) 700'E of Pad 4.	Minor cross fibre less than or equal to $\frac{3}{4}$"
(3) 900 feet south of Pad 4 (peg "9S")	Minor cross fibre.
(4) 800 feet north of 00 line.	Minor cross fibre and slip fibre.
(5) 300 feet south of 00 line.	Slip fibre
(6) Second creek south of 00 line, approx. 1500' S of 00 line.	Very minor cross fibre in small blobs of massive serpentinite in sheared serpentinite.
(7) Third creek south of 00 line, approx. 2400'S of 00 line.	Two feet width of pale massive serpentinite with several fibre veins 1/16 - 4/16 with good slip fibre.
(8) Deep gully, fourth creek south of 00 line, approx. 3000'S of 00 line.	Slip fibre, brittle, talcose N of creek. One cross fibre vein with 2 x 1/16, 50 feet east of track.
(9) 4000S line	Good cross fibre associated with serpentinised pyroxenite boulders.

No fibre has been found in the West Belt Serpentinite south of locality (9).

4.2 COSTEANING

One costean was cut across the West Belt 1400 feet north of Pad 4. No cross fibre was located. A map of the costean is shown in figure 50.

5. PAD 2 AREA

5.1 RECONNAISSANCE AND COSTEANING

The following list gives the locality and type of all known fibre occurrences in the Pad 2 area. The localities are plotted on the accompanying map, fig. 51.

Locality	Comments
(1) From Pad 2, 2800 feet N, bulldozed line bears SE, 500' along line.	Two occurrences: a. Minor cross fibre. b. Three inches of ribbon fibre with veins: 7 @ 1/32 10 @ 1/16
(2) From Pad 2, 2800 feet N, bulldozed line bears SE, 950' along line.	Shallow costean exposes a zone of brown weathering serpentinised pyroxenite boulders about 10 feet wide enclosed in sheared serpentinite. Narrow rich ribbon fibre development occurs on margins of boulders; e.g. 2 feet of 22% fibre up to 7/16.
(3) From Pad 2, 1800 feet N, bulldozed line bears SE, 2700 feet along line - Costean 1.	Cross fibre in massive serpentinite over 20 feet width. No fibre log. Estimated 1% cross fibre to $\frac{1}{4}$".
(4) From Pad 2, approx. 1300 feet east along track, Costean 2.	Two separate narrow (10') zones of ribbon fibre and cross fibre associated with serpentinised pyroxenite boulders.
(5) From Pad 2, approx. 1600 feet east along track, near eastern contact of serpentinite.	Two feet width of ribbon fibre in dark green massive and sheared serpentinite.
(6) 2100 feet SSW of Pad 2.	Cross fibre (assume minor) in dark green serpentinite.
(7) 2400 feet S of Pad 2.	Cross fibre in massive serpentinite veins 3 @ $\frac{1}{4}$.
(9) 2450 feet S of Pad 2.	Ribbon fibre in brown weathering massive dark serpentinite.
(9) 5800 feet south of Pad 2, Costean 3.	Minor cross fibre in dark green sheared and massive serpentinite.

Reconnaissance of all existing tracks in the area was carried out early in the season and all fibre occurrences were noted. Late in the season costeans 1, 2 and 3 (fig. 51) were cut.

Costean 1.

Costean 1 was cut to test the wide portion of the eastern serpentinite north of Pad 2 for cross fibre deposits and to follow up the fibre at localities (1) and (2) above.

The costean extends eastwards from the 1800 feet peg on the Pad 2 - Pad 4 road from the eastern edge of the western serpentinite to, and beyond, the eastern boundary of the eastern serpentinite; a distance of about 4000 feet.

The eastern serpentinite was previously thought to be about 2300 feet thick just north of the Pad 2 - Timbertops road. Outcrops in Costean 1 show that the thickening of the belt is due to the occurrence of 1900 feet width of talcose schists and altered mafic - ultramafic rock west of 600 feet width of massive serpentinite and admixed igneous rocks ranging from ? diorite to pyroxenite in composition.

Twenty feet of massive dark serpentinite containing an estimated 1% fibre in narrow localised bands occurs near the eastern serpentinite margin. No other fibre was found.

Costean 2.

Costean 2 was cut on the north side of the Pad 2 - Timbertops road to test extensions of two narrow high grade ribbon fibre zones located during reconnaissance.

The complete width of the eastern serpentinite was costeaned but no extensions of the fibre were found. It is concluded that the fibre occurs as localised shells around serpentinised pyroxenite boulders.

Costean 3.

About half a mile south of Pad 2 the eastern serpentinite belt widens to about 2000 feet. A dozer track was cut south from Costean 2 for about a mile and a 2000 feet long, cross-strike costean was cut across the body.

The body is made up of a core of coarse grained massive pyroxenite which becomes progressively more serpentinised towards the margins. Minor cross fibre to 4/16 was found near the western margin of the ultramafic body.

6. NODDY CREEK TO ASBESTOS POINT AND THE PAD 10 AREA

See figures 4, 5 and 52.

Note. During the 1970/71 survey a sheet HB4 basemap, as supplied by Melbourne office, was used to determine the relationship of the Lands Department Grid to the surveyed lines in the Noddy Creek area. The position of certain lines on the 1968 sheet HB6 is different to that shown on the current version, fig. 5. The relative positions of lines surveyed this year and in previous years are not correct. Sheet HB6, fig. 5, was compiled by plotting the recent survey data in relation to the grid shown on HB4, fig. 4, and transferring geology from areas not surveyed this year by inspection. A more accurate compilation could be made using the 1971 air photos to control the relative positions of bulldozed lines.

6.1 FIELDWORK AND RESULTS

Work in these areas was carried out to determine if any serpentinite was present between the 100N line and the Asbestos Point occurrence and to determine the cause of the aeromagnetic anomaly near Pad 10 in the Noddy Creek Volcanics, south along strike from Asbestos Point.

The serpentinite at 100N was traced northwards by bulldozing and was found to be truncated by south east trending faults at line 105N, fig. 5.

A bulldozed line with short pilot costeans cut eastwards from peg 34 halfway between 100N and Asbestos Point located three narrow (4' - 10') occurrences of extremely sheared and weathered white serpentinite (or its altered equivalent). In each case black slate or carbonaceous slate occurs a few feet west of the serpentinite but not east of it. See inset maps in fig. 4. This rock type distribution could be caused by an imbricate fault structure. Three co-linear outcrops of quartz and silicified and quartz-veined sediments at pegs 35, 40 and 53 may indicate the presence of a major NE trending fault just west of the sheared serpentinite in the peg 34 costeans. The schistose quartz felspar rock which occurs east of the sheared serpentinite at the end of the line probably correlates with the felspar quartz porphyries of the Pad 10 area. That being the case it appears that the peg 34 line crosses the serpentinite horizon and demonstrates that the serpentinite is as good as absent due to faulting and shearing. Alternatively, no larger body of serpentinite was ever present.

Taylor (1955) traced the Asbestos Point serpentinite for approximately half a mile south of Asbestos Point. His "Main Creek" section was compiled onto sheet HB4, fig. 4. His traverse of the Muddy Bay (Cove) Creek from its headwaters just east of the 80N line at Noddy Creek to Muddy Bay (Cove) on Macquarie Harbour did not locate any serpentinite. The Muddy Bay (Cove) Creek cuts the "serpentinite horizon" in the area

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south of the peg 34 line, fig. 2. There is no aeromagnetic anomaly in the search area.

Mapping and magnetometer traverses in the Pad 10 area located a ground magnetic anomaly with a magnitude of 1400 above local background, associated with a dark green fine grained basic volcanic rock unit enclosed in felspar quartz porphyry. The magnetic profiles and a map showing geology and sample localities are given in figure 52.

Although the aeromagnetic anomaly maximum is 5400 it is probable that at least an extension of its source was located and identified. Traverses of all existing tracks in the area did not discover any other potential source.

7. SPERO RIVER AND HIBBS LAGOON AREAS

A separate report dealing with these areas has been written by B. Flood.

8. GEOLOGY OF THE NODDY CREEK ASBESTOS OCCURRENCE. fig. 23.

At present only one area of the Hibb's Belt is known to contain a potentially economic fibre deposit. That is the Noddy Creek East Belt from 20S to 55N where preliminary drilling and interpretation of mapping has indicated that 11.7 million tons of possibly ore grade serpentinite occur in several small deposits.

An approximately conformable ultramafic - mafic complex of serpentinites, pyroxenites and various basic rocks, is enclosed in steeply dipping Cambrian sediments equivalent to the Dundas Group. (Hall et. al. 1969, C.R.793, fig. 3A) Within the 6000 feet strike length of the area considered, the ultramafic body varies in width between 150 feet and 750 feet but generally is 400 to 600 feet wide.

8.1 ROCK TYPES

The following list gives the various rock types of the area.

Petrographic reports by A.M.D.E.L. (August 1971) and Close (1971) have been used in the descriptions of the igneous rocks and serpentinites.

CAMBRIAN DUNDAS GROUP SEDIMENTS	1. Brown siltstone
	2. Black siltstone
	3. Greywacke siltstone and conglomerate
ULTRAMAFICS	1. Pyroxenites
	2. Massive serpentinite
	3. Sheared serpentinite
	4. Stichtite serpentinite
"GABBROS" (field name)	1. Metasomatic gabbro-pyroxenite
	2. Altered norite
	3. Metasomatised ultramafic
	4. Altered norite
	5. Microsyenite
LAMPROPHYRE DYKES	
IRON CAP	

CAMBRIAN DUNDAS GROUP SEDIMENTS

1. Brown Siltstone

The sediments west of the ultramafic are very uniform, pale brown siltstones with minor bands of pyritic carbonaceous siltstone and shale. Sedimentary laminations are often recognisable. No coarse detritus has contributed to the sediments.

2. Black Siltstone

A black and dark grey, laminated, pyritic, carbonaceous siltstone occurs in contact with the ultramafic from 10N to 10S.

In many places the western contact is exposed by costeaning and has been drilled by holes 4, 5 and 7. The contact is very smooth (fig. 23, compare eastern contact) and sedimentary lamination is parallel to it.

A narrow alteration and deformation zone up to 35 feet wide extends from the sheared serpentinite westwards into the sediments. The characteristics of the sediments adjacent to the contact are as follows.

1. Darkening and hardening due to silicification or recrystalisation.
2. Microfaulting and brecciation.
3. Carbonate veining.
4. Microfolding of carbonate veins, deformation banding and augen structure.
5. Slight schistosity in some places.
6. 2'-3' of altered sediment with ribbon fibre and serpentine veins at contact with sheared serpentinite.

3. Greywacke siltstone, sandstone and conglomerate

East of the ultramafic - mafic belt the sediments are notably coarser than to the west. They consist of greywacke siltstones, sandstones and conglomerates. Conglomerates occur immediately east of the norite in the Pad 3 area. Pebbles correlated with the Pad 3 noritic gabbro have been described by Rubenach (1968 ?). The eastern contact of the belt may have been an erosion surface during the Cambrian.

Conglomeratic sediments also occur east of the serpentinite at Asbestos Point where the pebbles are siliceous. At both these localities the ultramafic is enclosed by silty sediments to the west and sandy and pebbly sediments to the east. At both localities the pebbles are compressed at right angles to strike.

ULTRAMAFICS

1. Pyroxenites. Thin sections 71/L1-49, 50, 53, 55, 56, 69A, 157, 159. With one exception, all rocks so far examined to determine the primary igneous mineralogy are pyroxenites. The single exception is a layered lherzolite from the 10S area. Thin sections of the following rock types have been identified by either A.M.D.E.L. (August 1971) or Close (1971):

lherzolite (opx-cpx-ol)
olinopyroxenite
websterite
augite hypersthenite
orthopyroxenite
hypersthenite

These rocks show evidence of crystal accumulation such as large cumulus orthopyroxenes with interstitial anhedral clinopyroxene, and compositioned layering caused by differences in pyroxene and olivine content of different bands.

At least two phases of serpentinisation are in evidence. The first is the partial or complete pseudomorphous replacement of pyroxenes by "bastite" in which the fine structures of the pyroxenes such as fine exsolution lamellae are preserved in large optically homogeneous serpentine plates of "bastite". The "bastite" plates may be enclosed and cut by less regular aggregates of second phase serpentine which cannot be directly related to the primary minerals.

2. Massive Serpentinite. Thin sections 71/L1-156, 164.
Massive serpentinite occurs in places throughout the western and eastern asbestos zones and southern asbestos zones. In natural outcrop the rocks weather pale grey or very pale brown. On freshly broken surfaces it varies between dark and light green. In general it is subtranslucent. It often occurs as envelopes around partially serpentinised pyroxenite cores. All three serpentine polymorphs have been recognised in diffractograms of massive cross fibre bearing serpentinite. (Close, pers. comm.) The massive cross fibre bearing serpentinite from the western asbestos zone at 30N exhibits relict phase layering and is interpreted as a completely serpentinised lherzolite (2px-ol).

3. Sheared Serpentinite
Sheared serpentinite occurs ubiquitously in the area, but its most marked development is on the east and west margins of the ultramafic body between the contacts and the cross fibre zones, between the fibre zones and the stichtite zone and in the central part of the body from 10N to 07S.

It is only the texture which distinguishes the sheared serpentinite since all gradations from nearly black to pale green varieties occur. The rock readily breaks up to form flakes and small chips. Fibrous magnetite and slip fibre are associated with the sheared serpentinite in certain localities.

Preliminary X.R.D. determinations show that the serpentine polymorph in the sheared serpentinite is clinochrysotile (Close 1971).

4. Stichtite Serpentinite. Thin section 71/L1-172.
This rock type occurs in two major surface map units and in two other localities where it is of minor importance.

From line 60N a belt of serpentinite with disseminated stichtite occupies a strip near the western ultramafic margin southwards to 45N. Another discrete belt occupies a central position from 50N south to 05N. This latter belt has been shown by drilling to widen northwards at depth and appears to join the first mentioned belt below the 50N cross fibre occurrence which has the appearance, in the

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interpretive sections, of a roof pendant into a large body of stichtite serpentinite. A small patch of the rock type was mapped towards the western end of 20N and a worked out vein of massive stichtite is known from 15S west of the pyroxenite.

The freshly broken rock is characteristically light green and mottled. The stichtite disseminations occur in the more massive portions of the rock associated with cores of chrome spinel.

Localised shears are common. They contain brittle talcose slip fibre and fibrous magnetite often intimately associated.

A thin section shows an interesting fibre lamellar network of serpentine with occasional larger flakes embayed and veined by finer grained serpentine.

Only minor occurrences of cross fibre have been recorded in the stichtite zones. The absence of <u>good</u> chrysotile cross fibre in economically significant widths in the disseminated stichtite serpentinite may be due to two causes.

1. It was never present which possibility, if we are to remain optimistic, we shall discount for the present.
2. Cross fibre was present but has been modified by shearing and reaction with carbon dioxide.

The partial pressure of CO_2 must have been great enough to permit the formation of stichtite. It may therefore also have enhanced the reaction:

Serpentine (cross fibre) + CO_2 = Talc + Magnesite + H_2O

The talc has rendered the fibre brittle and movement along the fibre bearing fractures has degraded the fibre to its present state. The magnesite and H_2O produced by the reaction may have been removed in solution along the fractures containing the fibre or could contribute to the formation of stichtite.

It is interesting to note that disseminated stichtite has not been found elsewhere in the Hibbs Belt. It is found exactly where the largest known deposit of chrysotile is located, yet from field relations, chrysotile cross fibre and disseminated stichtite are locally, mutually exclusive.

<u>Note on Serpentinisation</u>

The simplest model of the serpentinisation, which fits with the field evidence and the results of limited thin section examination, is one in which the ultramafic body was originally composed of cumulus pyroxenites and lherzolites which were serpentinised in two stages, i.e. bastite formation followed by formation of an irregular serpentine aggregate. Tectonic movements and faulting produced the present distribution of rock types, i.e. essentially 2 layers of large pyroxenite and serpentinised pyroxenite boudins enclosed in envelopes of sheared serpentinite separated by the stichtite serpentinite.

The stichtite bearing serpentinite and certain of the massive serpentinites show no indication of primary structures or mineralogy. The primary mineralogy of these serpentinites is not known. They could have contained appreciable quantities of olivine.

"GABBROS" (field name)

The "gabbros" are confined to the margins of the ultramafic south of 05N.

1. Metasomatic gabbro - pyroxenite. Thin sections 71/L1-48, 49, 55, 59, 60, 151.

Near the western edge of the ultramafic between lines 05N and 00 the western portion of a massive pyroxenite body has been selectively metasomatically altered to produce a mixture of rock types from basic to intermediate in composition.

Summarising the results of examination of 6 thin sections from the area, the rocks have been formed by introduction of water, silica, calcium and sodium to pyroxenites. Tremolite, hornblende, talc, chlorite and serpentine have formed at the expense of the pyroxenes. The rock is cut by veins containing prehnite, quartz and calcite. Saussuritised sodic plagioclase occurs in veins and patches throughout. In two specimens prehnite occurs. The mineralogy and textures in some of these rocks indicates that incipient rodingitic metasomatism has occurred.

2. Altered norite. Thin sections 71/L1-64 and 169.

The western gabbroic body mapped as extending from 04S to about 18S was sampled on 07S. Two thin sections have been examined. The rock types identified are a partially serpentinised and saussuritised noritic gabbro and a uralitised, quartz-chlorite veined doleritic rock. These two adjacent specimens illustrate again the inhomogeneity and alteration of these rocks.

3. Metasomatised Ultramafic. Thin section 71/L1-160.

The 10S line cuts a body originally mapped as a light grey basic to intermediate intrusive adjacent to the western contact. One thin section was identified as an altered ultramafic or mafic rock with tremolite and talc making up the 95%. It is suggested that this rock is a metasomatically altered orthopyroxenite although further sampling and petrography is required to accurately determine its nature.

4. Altered norite. Thin sections 71/L1-57 and 163.

A body of gabbro was mapped on the eastern edge of the ultramafic at Pad 3 out by the 00 line. Examination of two thin sections shows that the body was probably originally a norite and has been subsequently altered by shearing and hydrous calcium metasomatism.

5. Microsyenite. Thin section 71/L1-162.

The "gabbro" on the eastern contact from 04S to 15S identified as an altered microsyenite with chlorite, epidote and quartz.

Of the five rock bodies mentioned in this section only two are in fact gabbroic. Both are altered norites and occur at the contacts of the ultramafic body. They are present only locally and cannot be considered as typical of the ultramafic body as a whole. It is not possible to state generally that the Noddy Creek ultramafic has marginal norites.

LAMPROPHYRE DYKES. Thin sections 71/L1-52, 67B, 104, 138, 139 and 168. Many discontinuous, narrow, boudinaged, dark lamprophyre dykes occur in sheared serpentinite throughout the area. One dyke has been seen to cut serpentinite, microsyenite and the sediments of the eastern contact in the 07S to 10S area.

The lamprophyres have a fine grained or glassy matrix composed of orthoclase and plagioclase with phenocrysts of biotite or biotite and augite.

In hole 7 on 20N a xenolithic lamprophyre dyke was drilled. It contains xenoliths of pink garnet-bearing siliceous gneiss and quartzite which may be derived from Precambrian basement.

IRON CAP

A porous, granular, dark chocolate brown, magnetic iron oxide capping up to two feet thick occurs over serpentinite in several areas of the Hibbs Belt. It does not extend over gabbros or sediments but is restricted to relatively flat, wet areas such as valleys, swamps or terrace features such as near Pad 3. Occasionally cappings are found on small flat topographic highs formed by recent erosion. These cappings are therefore formed in wet, oxidising environments over serpentinite.

In many of the stagnant pools which occur in the swamps a brown gel-like substance forms. It is suggested that these iron cappings may be derived by dehydration and lithification of such gels in recent geological times.

8.2 THE FIBRE

CROSS FIBRE

The cross fibre at Noddy Creek occurs in massive serpentinite and serpentinised pyroxenite in two parallel zones separated by a zone of partly sheared disseminated stichtite serpentinite and in a zone bordering a pyroxenite body in the south part of the area. The fibre zones are enclosed and often cut by sheared serpentinite.

There are five main fibre vein types.

1. Stockwork veins.
2. Ribbon fibre veins.
3. Widely spaced sub-parallel veins.
4. Gash veins.
5. Threadveins.

These distinctions are made for convenience of description. All five types can be found in association.

1. Stockwork cross fibre is developed in a three dimensional vein network in massive serpentinite. Veins occur in several different orientations. In a few cases a rectangular development was noted. All fibre lengths can be found in stockwork occurrences.

2. Ribbon fibre serpentinite has several closely spaced, parallel veins generally less than ¼", and occurs as concentric spheroids and ellipsoids around barren cores of serpentinite or serpentinised pyroxenite and as tabular bodies parallel to contacts with sheared serpentinite. Several small occurrences, up to 3 feet in width with up to 40% fibre are known from Noddy Creek.

3. Widely spaced, sub-parallel veins occur parallel to the layering of serpentinised pyroxenite. The most notable development of this type is in the southern area, 10S - 15S. All fibre lengths can occur.

4. Gash veins are not more than a few inches long in section with the maximum vein width and therefore longest fibre towards the middle. The vein width tapers off to zero at each end. Gash veins occur throughout the area.

5. Threadveins are very narrow, often discontinuous veins less than 1/32 of an inch.

The fibre veins are generally very loosely bound in the rock and it is fairly easy to hand pick the longer crude fibre from broken ore. The fibre itself is easily opened and can be very easily teased to a fluffy ball by hand.

The veins often have partings parallel and sub-parallel to the walls. These are usually due to dislocations or kink bands within the fibre veins. In some cases composite veins of cross fibre and apple green picrolite occur. The picrolite tends to be marginal although, in some cases, picrolite veins do cause a central parting.

Near minor shears, within fibre zones, movement along cross fibre veins has tilted the fibre at an angle to the vein walls. Further shearing causes the fibre to become oriented parallel to the vein walls so that it resembles slip fibre. If the sheared serpentinite adjacent to existing cross fibre zones originally contained cross fibre and the fibre has not been completely destroyed by shearing, significant quantities of slip fibre may be available from this source.

SLIP FIBRE

Two types of fibre occur in sheared serpentinite.

1. Sheared cross fibre.
2. Brittle, often talcose slip fibre.

The first of these two types is of minor importance. It does not occur in sufficient quantity to significantly augment tonnage of potential

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ore. It occurs in shears cutting cross fibre zones. From the similarity between it and adjacent cross fibre it is assumed to be chrysotile. Its occurrence may cause milled fibre yields to be higher than visual fibre yields.

The second slip fibre type occurs in sheared serpentinite and the less sheared stichtite serpentinite throughout the area. It occurs in veins up to ½ inch wide or as silky fibrous smears on shear planes. In some of the wider veins, fibre lengths greater than the width of the core (+ 2") have been noted. These longer fibres are brittle and would almost certainly break down during milling. Fibrous talc and magnetite is often mixed with this type of slip fibre. Positive X.R.D. identification of samples 71/L1-173, 174 and 175 by M.R.L. will help to assess the potential of this fibre type.

8.3 FIBRE GENESIS

No serious attempt has been made to investigate the origin of the fibre. All that is offered here are a few observations considered to be relevant in a study of fibre formation.

Cross fibre was formed after the initiation of serpentinisation since veins cut bastite pseudomorphs. Cross fibre may be pre stichtite since stichtite bearing serpentinite appears to truncate fibre zones at depth and stichtite serpentinite contains talcose fibre which may be derived from chrysotile by carbon dioxide degradation. It is likely that carbon dioxide concentration would increase during serpentinisation while aqueous, but non-carbonate phases were forming. At some critical pCO_2, carbonate, i.e. stichtite, formed and some chrysotile fibre may have been simultaneously degraded to talc to product the fibre type now seen in the stichtite zone.

Two theories of origin of chrysotile cross fibre continually occur in the literature. One theory proposes growth of fibre veins at the expense of the vein walls; essentially an in situ process, whereas the other requires the presence of a mobile, serpentinous fluid which permeated tension fractures and provides the serpentine of the fibre from an outside source. At Noddy Creek from 50N to 10N the silicified sediments of the western contact contain a narrow band of chrysotile ribbon fibre against the contact. The host rock is not serpentine, which suggests introduction of serpentine by a mobile serpentinous fluid phase. However, the host sediment does contain veins of picrolite which may have partially recrystalised to produce chrysotile cross fibre.

The causes of ribbon fibre development are not known but may be analogous to exfoliation due to weathering. Each fibre vein may occupy an ellipsoidal tension fracture caused by expansion of the layer outside it. The expansions may be due to successively more complete serpentinisation of a diminishing core of barren pyroxenite.

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At Noddy Creek a positive association between the occurrence of substantial quantities of cross fibre and the following items 1 to 6 exists.

1. Aeromagnetic anomaly.
2. Increase in width and broad flexure of serpentinite belt.
3. Natural outcrops of chocolate weathering, serpentinised pyroxenite.
4. Massive serpentinite and serpentinised pyroxenite.
5. Proximity of a large barren pyroxenite body.
6. Proximity of disseminated stichtite in bright green serpentinite.

The relationship between cross fibre and items 1 and 6 may be coincidental. The others are considered to be genetically related to cross fibre occurrence on a large scale.

8.4 STRUCTURE

There are three major structural elements affecting the area.

1. Regional Strike and Structural Trend

The regional strike is NNE; dips are steep. The serpentinite is approximately conformable. Internal structures such as shear planes, rock type contacts, primary phase layering and most lamprophyre dyke boudins are parallel or sub-parallel to strike. A notable exception is the orientation of cross fibre veins and the orientation of shear planes near massive serpentinite. These shear planes in sheared serpentinite tend to be parallel to local discordant trends of contacts of massive rock and resemble structures in incompetent rocks surrounding boudins.

The pebbly bands east of the serpentinite at Noddy Creek and Asbestos Point contain numerous deformed pebbles with long axes approximately parallel to strike. Incompetent structures occur in the enclosing schistose sediment at Asbestos Point.

These structures indicate that a regional compression at right angles to strike played a major part in modifying the complex to its present form. The structural discordance of the cross fibre veins and their relationship to sheared serpentinite, mentioned above, indicates that they were formed before the compression event.

2. Faults

Three major strike trend faults were mapped by McGregor 1968 (figs. 6 and 7, this report) in the immediate vicinity of the area. The western serpentinite contact was interpreted as a fault. Recent mapping and drilling has shown that the sediments are deformed near the contact but it is suggested that any major movement along a fault in this area has occurred within the marginal sheared serpentinite rather than in the siltstone.

Two strike trend faults a few hundred feet west of the serpentinite have interposed a narrow block of sediments between the eastern serpentinite contact and its marginal gabbroic rocks, which indicates that the serpentinite gabbro-complex is pre-faulting. A strike trend fault has brought Ordovician sediments west of the Hibbs Belt into contact with the serpentinite along part of the western edge of the Hibbs Belt. The Hibbs Belt serpentinites are therefore Cambrian. Some deformation in the sheared serpentinite is probably due to post Ordovician strike trend fault movements.

There is some evidence for a system of NW trending cross faults of limited, local effect. The serpentinite at 105N is truncated by such faults and NW trending shears have been seen cutting the pebbly beds east of the serpentinite at Noddy Creek. The irregular eastern contact of the serpentinite could be caused by such faulting. The western contact is much smoother by comparison.

3. Broad Convex Eastwards Flexure

Between 20S and 60N there is a marked convex eastwards flexure in a part of the East Belt which is two to three times wider than equivalent strike lengths to the north and south. Abundant asbestos occurs in the thickened, bent part .

8.5 SUMMARY OF GEOLOGICAL HISTORY

The following is one possible interpretation of the history of the serpentinite: one which allows for a maximum development of cross fibre with subsequent modification of part of it by metasomatic alteration and tectonic movement.

A body of ultramafic rocks was introduced into Cambrian geosynclinal sediments. It may have been a cool intrusion or an ultramafic submarine lava. It was not a magmatic sill or dyke since no wide thermal aureole occurs. If the body was originally a lava flow the cumulitic phase layering probably formed in place.

The marked lithological differences between the sediments east and west of the serpentinite and the occurrence of gabbroic pebbles in the eastern conglomerates near Pad 3 (Rubenach 1968 ?) may be due to post extrusive erosion of a submarine ultramafic/mafic lava complex. Alternatively, a partially serpentinised, cool intrusion may have selectively intruded a plane of weakness caused by a lithological change in the Cambrian sequence and the pebbles may be derived from another source.

Initial serpentinisation converted pyroxenes to bastite. Subsequent serpentinisation all but removed original igneous textures and segregated the ultramafic into a similar but less deformed assemblage of relict pyroxenite bodies in serpentinite. During or after complete serpentinisation cross fibre was formed. It is not known with certainty if cross fibre development was more extensive before deformation but there is some indirect evidence, outlined above, to suggest

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that it was.

The partial pressure of CO_2 rose sufficiently towards the end of serpentinisation to produce a stichtite phase and degrade some fibre to talc.

Post Cambrian compression and post Ordovician faulting modified the body, produced sheared serpentinite and destroyed some cross fibre. The Hibbs Belt and its major structures trend NNE parallel to the margin of a horst of Precambrian between $\frac{1}{4}$ and $\frac{1}{2}$ mile to the west. Ordovician sediments unconformably overlying the Cambrian are folded in the NW trending Timbertops syncline. The deformation of the serpentinite probably has Tabberabberan and Cambrian components.

Note: The structural discordance between the Timbertops syncline and the Hibbs serpentinite belt, and the unconformity at the base of the Ordovician at Timbertops suggests that these two areas are tectonically and lithologically distinct, yet Ordovician rocks have been mapped in the Hibbs Belt between the Precambrian block and the serpentinite in the valley of the Modder River. Two alternative conclusions can be drawn from this.

1. Tectonism was intense enough to create a difference in the structural environment of essentially the same Ordovician rocks at Timbertops and the Hibbs Belt,

OR

2. The limestones and sandstones in the Hibbs Belt are not Ordovician; but Cambrian.

No fossils have been found in the Hibbs Belt Ordovician. (Clarke 1967) It appears to have been named by lithological comparison with Ordovician rocks elsewhere.

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TABLE 11 (See figure 43)

ASBESTOS FIBRE PRICE LIST
Effective July 1, 1971.

Canadian Standard	Minimum Guaranteed Test Ounces				Price Canadian Funds
	2M	4M	10M	Pan	
No. 1 Crude					$1,615.00
No. 2 Crude					875.00
3K	10.5	3.9	1.3	0.3	675.00
3K	7.0	7.0	1.5	0.5	573.00
3R	4.0	7.0	4.0	1.0	487.00
3T	2.0	8.0	4.0	2.0	442.00
3Z	1.0	9.0	4.0	2.0	412.00
4A	0.0	8.0	6.0	2.0	383.00
4D	0.0	7.0	6.0	3.0	258.00
4J	0.0	5.0	7.0	4.0	258.00
4K	0.0	4.0	9.0	3.0	252.00
4M	0.0	4.0	8.0	4.0	252.00
4T	0.0	2.0	10.0	4.0	227.00
5D	0.0	0.5	10.5	5.0	193.50
5K	0.0	0.0	12.0	4.0	193.50
5M	0.0	0.0	11.0	5.0	182.00
5R	0.0	0.0	10.0	6.0	164.50
6D	0.0	0.0	7.0	9.0	120.00
7D	0.0	0.0	5.0	11.0	100.00
7F	0.0	0.0	4.0	12.0	90.00
7H	0.0	0.0	3.0	13.0	77.00
7K	0.0	0.0	2.0	14.0	63.00
7M	0.0	0.0	1.0	15.0	57.00
7R	0.0	0.0	0.0	16.0	53.50
7T	0.0	0.0	0.0	16.0	51.00
7MS	No Test				55.00
7RS	No Test				55.00
7TS	No Test				55.00
8S	No Test				47.00
8S	No Test				33.30
8T	No Test				25.50

PRICES: Per ton of 2000 lbs. F.O.B. cars, mine, in carload quantities and are subject to change without notice. On less than carload quantities on 7D or below additional charge of $4.00 per ton.

TERMS: 1% 10 days, net 30 days, Canadian Funds or U.S. dollar equivalent.

PACKAGE: Standard package - 100 lb. bag.

All quotations subject to prior sale.

Any new government taxes will be added to our invoice.

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E.L. 13/65 CAPE SORELL PENINSULA, S.W. TASMANIA

EXPLORATION FOR CHRYSOTILE ASBESTOS IN THE HIBBS BELT

NODDY CREEK

AND PAD 2 TO ASBESTOS POINT

1970/71

APPENDIX ONE

SAMPLES

i. Channel Samples

ii. Core Samples

iii. Rock Samples

iv. Analyses

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CHANNEL SAMPLES IN STRAHAN STORE 1/6/71

CHANNEL SAMPLES

AF 1 - AF 119 — Noddy Creek

119 Samples

GR 1 - GR 4 — Adamsfield

4 Samples (in 5 drums)

i. Channel Samples

Approximate locations of all channel samples are shown in fig. 23. Accurate locations are shown on the relevant 1" = 50' geological map sheet which is indexed in figure 23.

Sample No.	Line	Weight	Rock Description	Chip Size Max.	Comments
AF 1	20N	77 lbs.	Sheared Serpentinite	4"	Minor cross fibre 3/16". Slip fibre. Fibrous Magnetite.
AF 2	20N	70 lbs.	Massive and Sheared Serpentinite	3"	Magnetite, slip fibre, stichtite.
AF 3	20N	68 lbs.	Massive and Sheared Serpentinite	4"	Fibrous magnetite, slip fibre, stichtite.
AF 4	20N	74 lbs.	Massive and Sheared Serpentinite	5"	Magnetite, slip fibre, minor cross fibre 2/16", stichtite.
AF 5	20N	74 lbs.	Massive and slightly sheared Serpentinite	7"	Cross fibre 1/16", magnetite, slip fibre, stichtite.
AF 6	20N	78 lbs.	Massive and Sheared Serpentinite	5"	Magnetite, slip fibre, stichtite, wet sample.
AF 7	20N	77 lbs.	Massive and Sheared Serpentinite	3"	Magnetite, slip fibre, stichtite, wet sample.
AF 8	20N	63 lbs.	Massive and Sheared Serpentinite	3"	Cross fibre 2/16" stichtite.
AF 9	30N	76 lbs.	Massive and Sheared Serpentinite	4"	Cross fibre 6/16" magnetite.
AF10	30N	75 lbs.	Massive and Slightly Sheared Serpentinite	6"	Minor cross fibre, slip fibre.
AF11	30N	69 lbs.	Massive and Sheared Serpentinite	5"	Slip fibre, fibrous magnetite.
AF12	30N	71 lbs.	Massive and Sheared Serpentinite	4"	Cross fibre less than or equal to 2/16", magnetite, slip fibre.
AF13	30N	74 lbs.	Massive and Sheared Serpentinite	2"	Magnetite, slip fibre.
AF14	30N	70 lbs.	Massive and Sheared Serpentinite	2"	Stichtite trace, magnetite.
AF15	30N	77 lbs.	Sheared Serpentinite	2"	Slip fibre, stichtite trace, fibrous magnetite.

Sample No.	Line	Weight	Rock Description	Chip Size Max.	Comments
AF16	30N	75 lbs.	Sheared and Massive Serpentinite	2"	Minor cross fibre, slip fibre, stichtite.
AF17	30N	70 lbs.	Massive Serpentinite	2½"	Minor cross fibre, stichtite, slip fibre, magnetite.
AF18	30N	65 lbs.	Massive Serpentinite	3"	Minor cross fibre, stichtite, slip fibre.
AF19	30N	65 lbs.	Massive Serpentinite	2"	Minor cross fibre, stichtite, magnetite.
AF20	30N	70 lbs.	Massive and Sheared Serpentinite	2"	Slip fibre, stichtite, magnetite.
AF21	30N	73 lbs.	Sheared Serpentinite	2"	Stichtite.
AF22	30N	75 lbs.	Sheared Serpentinite	2"	Magnetite, stichtite.
AF23	30N	70 lbs.	Massive and Sheared Serpentinite	3"	Cross fibre.
AF24	20N	58 lbs.	Sheared and Massive Serpentinite	3"	Cross fibre.
AF25	20N	73 lbs.	Sheared and Massive Serpentinite	3"	Magnetite.
AF26	20N	72 lbs.	Sheared and Massive Serpentinite	3"	Magnetite.
AF27	20N	73 lbs.	Sheared Serpentinite	3"	
AF28	20N	74 lbs.	Sheared Serpentinite	3"	
AF29	30N	78 lbs.	Massive and Sheared Serpentinite	3"	Cross fibre 6/16", slip fibre.
AF30	30N	75 lbs.	Massive and Sheared Serpentinite	3"	Cross fibre 3/16", slip fibre.
AF31	30N	66 lbs.	Massive and Sheared Serpentinite	3"	Cross fibre 4/16", slip fibre.
AF32	30N	78 lbs.	Sheared Serpentinite	3"	Slip fibre, magnetite.
AF33	30N	84 lbs.	Sheared Serpentinite	2"	Slip fibre.
AF34	30N	81 lbs.	Sheared Serpentinite	3½"	Slip fibre, magnetite.

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Sample No.	Line	Weight	Rock Description	Chip Size Max.	Comments
AF35	30N	75 lbs.	Sheared Serpentinite	3½"	Slip fibre.
AF36	30N	78 lbs.	Massive and Sheared Serpentinite	4"	First five feet only sampled. Cross fibre, slip fibre.
AF37	30N	73 lbs.	Sheared Serpentinite	3"	
AF38	30N		Sheared Serpentinite	3½"	Slip fibre.
AF39	30N	72 lbs.	Sheared Serpentinite	3"	Cross fibre 1/16" magnetite.
AF40	30N	76 lbs.	Sheared Serpentinite	3"	Magnetite.
AF41	30N	71 lbs.	Massive and Sheared Serpentinite	3½"	Only half interval sampled.
AF42	20N	79 lbs.	Massive and Sheared Serpentinite	3½"	Magnetite.
AF43	20N	81 lbs.	Sheared Serpentinite	3"	Magnetite.
AF44	20N	84 lbs.	Sheared Serpentinite	3"	Magnetite.
AF45	20N	83 lbs.	Sheared Serpentinite	2"	Magnetite, stichtite trace.
AF46	20N	80 lbs.	Sheared Serpentinite	2½"	Magnetite
AF47	20N	87 lbs.	Sheared Serpentinite	3½"	Partially weathered.
AF48	20N	82 lbs.	Massive and Sheared Serpentinite	3"	Cross fibre 5/16"
AF49	20N	77 lbs.	Massive and Sheared Serpentinite	3"	Minor cross fibre.
AF50	20N	79 lbs.	Massive and Sheared Serpentinite	3½"	Cross fibre 3/16", slip fibre.
AF51	20N	79 lbs.	Massive and Sheared Serpentinite	3"	Cross fibre 1/16"
AF52	20N	79 lbs.	Sheared Serpentinite	2"	S.F. magnetite.
AF53	20N	81 lbs.	Massive and Sheared Serpentinite	3½"	Slip fibre.

Sample No.	Line	Weight	Rock Description	Chip Size Max.	Comments
AF54	20N	81 lbs.	Massive and Sheared Serpentinite	3"	Slip fibre, magnetite.
AF55	20N	77 lbs.	Massive and Sheared Serpentinite	3½"	Magnetite.
AF56	20N	70 lbs.	Massive and Sheared Serpentinite	4"	
AF57	20N	64 lbs.	Massive and Sheared Serpentinite	4"	Partial sample.
AF58	40N	70 lbs.	Sheared Serpentinite	3"	
AF59	40N	78 lbs.	Massive and Sheared Serpentinite	3½"	Slip fibre.
AF60	40N	84 lbs.	Sheared Serpentinite	2½"	Slip fibre.
AF61	40N	82 lbs.	Sheared Serpentinite	2½"	
AF62	40N	79 lbs.	Sheared Serpentinite	2½"	Slip fibre.
AF63	40N	76 lbs.	Sheared Serpentinite	3"	Slip fibre, magnetite.
AF64	40N	78 lbs.	Sheared Serpentinite	2½"	Slip fibre, magnetite.
AF65	40N	82 lbs.	Sheared Serpentinite	3"	Slip fibre, magnetite.
AF66	40N	69 lbs.	Massive and Sheared Serpentinite	3"	Slip fibre, magnetite.
AF67	40N	77 lbs.	Massive and Sheared Serpentinite	3½"	Magnetite.
AF68	40N	79 lbs.	Massive and Sheared Serpentinite	3"	
AF69	40N	77 lbs.	Massive and Sheared Serpentinite	3"	
AF70	40N	76 lbs.	Massive and Sheared Serpentinite	3"	Magnetite, stichtite.
AF71	40N	76 lbs.	Massive and Sheared Serpentinite	3½"	Magnetite, stichtite trace.

Sample No.	Line	Weight	Rock Description	Chip Size Max.	Comments
AF72	40N	70 lbs.	Massive and Sheared Serpentinite	3½"	Slip fibre.
AF73	40N	80 lbs.	Massive and Sheared Serpentinite	3½"	Cross fibre 1/8", slip fibre.
AF74	40N	67 lbs.	Massive and Sheared Serpentinite	3"	Cross fibre 1/8".
AF75	40N	73 lbs.	Massive Serpentinite	3½"	Cross fibre ½", slip fibre.
AF76	10N	81 lbs.	Massive and Sheared Serpentinite	3"	
AF77	10N	83 lbs.	Sheared Serpentinite	2½"	
AF78	10N	77 lbs.	Sheared Serpentinite	3½"	
AF79	10N	80 lbs.	Massive and Sheared Serpentinite	3"	
AF80	10N	80 lbs.	Massive and Sheared Serpentinite	3"	
AF81	10N	83 lbs.	Massive and Sheared Serpentinite	3"	Slip fibre.
AF82	10N	83 lbs.	Massive and Sheared Serpentinite	3"	
AF83	10N	82 lbs.	Massive and Sheared Serpentinite	3½"	Slip fibre.
AF84	10N	77 lbs.	Massive and Sheared Serpentinite	3½"	Magnetite.
AF85	10N	82 lbs.	Massive and Sheared Serpentinite	3"	
AF86	10N	77 lbs.	Massive and Sheared Serpentinite	3½"	Magnetite.
AF87	10N	77 lbs.	Massive and Sheared Serpentinite	3½"	Slip fibre, magnetite.
AF88	10N	82 lbs.	Massive and Sheared Serpentinite	3"	Slip fibre.

Sample No.	Line	Weight	Rock Description	Chip Size Max.	Comments
AF 89	10N	82 lbs.	Massive and Sheared Serpentinite	3½"	Slip fibre.
AF 90	10N	82 lbs.	Massive and Sheared Serpentinite	3½"	
AF 91	10N	84 lbs.	Massive and Sheared Serpentinite	3½"	Magnetite, stichtite.
AF 92	10N	82 lbs.	Massive and Sheared Serpentinite	3½"	Magnetite.
AF 93	10N	85 lbs.	Massive and Sheared Serpentinite	3"	Magnetite.
AF 94	10N	89 lbs.	Massive and Sheared Serpentinite	3½"	Magnetite.
AF 95	10N	86 lbs.	Massive and Sheared Serpentinite	3½"	Slip fibre, magnetite and cross fibre.
AF 96	10N	84 lbs.	Massive and Sheared Serp.	3"	Cross fibre.
AF 97	10N	76 lbs.	Massive and Sheared Serpentinite	3"	Cross fibre, slip fibre, and magnetite.
AF 98	10S	71 lbs.	Massive Serpentinite and small amount of Sheared	3½"	Cross fibre, sample interval 39 feet.
AF 99	15S	84 lbs.	Massive and Sheared Serpentinite	3½"	Cross fibre, slip fibre, sample interval to end of fibre log.
AF100	15S	75 lbs.	Massive and Sheared Serpentinite	2½"	Cross fibre, slip fibre.
AF101	20S	84 lbs.	Massive and Sheared Serpentinite	3"	Cross fibre, sample interval 26½ feet.
AF102	20S	78 lbs.	Massive and Sheared Serpentinite	3½"	Cross fibre, sample interval 26½ feet.
AF103	20S	72 lbs.	Massive and Sheared Serpentinite	3½"	Cross fibre, sample interval 27 feet.
AF104	15S		Massive and Sheared Serpentinite	3"	Slip fibre.
AF105	15S		Massive and Sheared Serpentinite	3"	Slip fibre.

Sample No.	Line	Weight	Rock Description	Chip Size Max.	Comments
AF106	15S		Massive and Sheared Serpentinite	3"	Slip fibre.
AF107	15S		Sheared Serpentinite	2½"	
AF108	15S		Sheared Serpentinite	2"	
AF109	15S		Sheared Serpentinite	2½"	
AF110	40N	75 lbs.	Massive and Sheared Serpentinite	3"	Cross fibre and slip fibre.
AF111	40N	72 lbs.	Massive Serpentinite	3½"	Cross fibre.
AF112	40N	80 lbs.	Massive and Sheared Serpentinite	3½"	Cross fibre and slip fibre.
AF113	40N	78 lbs.	Massive and Sheared Serpentinite	3"	Cross fibre and slip fibre.
AF114	10N	82 lbs.	Massive and Sheared Serpentinite	3"	Cross fibre and slip fibre.
AF115	10N	86 lbs.	Massive and Sheared Serpentinite	3½"	Cross fibre and slip fibre.
AF116	10N	68 lbs.	Massive Serpentinite	3½"	Cross fibre, slip fibre and magnetite.
AF117	10N	70 lbs.	Massive and Sheared Serpentinite	3"	Cross fibre, slip fibre and magnetite.
AF118	20N	83 lbs.	Massive and Sheared Serpentinite	3"	Cross fibre.
AF119	20N	77 lbs.	Massive and Sheared Serpentinite	3"	Cross fibre.

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ii. Core Samples

All core is NQ wire-line.

Refer to Drill Logs, Fibre Logs and Visual Dollar Value Sheets for detail. Appendix 3.

Sample	Hole	From ft.	To ft.	Int. ft.	Rec. ft.	% Rec.	Comments
AF401	DHNC2	20	85	65	34.5	53.0	Cross fibre.
AF402	"	85	130	45	20.4	45.1	Slip fibre.
AF403	"	130	205	75	35.2	47.0	Slip fibre.
AF404	"	205	225	20	15.3	76.5	Cross fibre.
AF405	"	225	305	80	42.9	53.6	Slip fibre, very minor cross fibre.
AF406	"	305	355	50	37.9	75.8	Cross fibre.
AF407	"	355	450.5	95.5	78.3	82.0	Slip fibre.
AF408	"	450.5	512	61.5	46.7	75.9	Slip fibre.
AF409	DHNC3	0	55	55	39.8	72.4	Woodsreef lab; cross fibre.
AF410	"	55	100.3	45.3	42.6	94.1	Woodsreef lab; sheared with slip fibre.
AF411	"	100.3	150	49.7	45.2	91.0	Slip fibre.
AF412	"	150	214	64	61.6	96.1	Slip fibre.
AF413	"	214	258	44	39.9	90.7	Slip fibre.
AF414	"	258	342	84	80.3	95.6	Slip fibre.
AF415	"	342	445	103	101.4	97.7	Slip fibre.
AF416	"	445	493	48	38.0	79.1	Slip fibre.
AF417	DHNC5	120	184	64	54.7	85.4	Woodsreef lab; cross fibre in hornfels, slip fibre.
AF418	"	184	230	46	45	97.8	Woodsreef lab; slip fibre.
AF419	"	230	255	25	24.2	96.9	Woodsreef lab; cross fibre.
AF420	"	255	290	35	29.8	85.1	Woodsreef lab; sheared serpentinite.
AF421	"	290	325	35	29.3	83.7	Woodsreef lab; cross fibre.
AF422	"	325	360	35	25.9	74.0	Woodsreef lab; cross fibre.
AF423	"	360	395	35	24.1	69.0	Woodsreef lab; cross fibre.
AF424	"	395	470	75	54.2	72.2	Woodsreef lab; slip fibre.
AF425	"	470	544.5	74.5	68.1	91.4	
AF426	DHNC4	118	188	70	41.4	59	Quebec lab; minor cross fibre in hornfels, minor slip fibre.
AF427	"	188	237	49	44.3	90	Quebec lab; barren.
AF428	"	237	319	82	76.7	93	Quebec lab; slip fibre.
AF429	"	319	364	45	39.2	87	Quebec lab; minor cross fibre, minor slip fibre.
AF430	"	364	427.4	63.4	53.9	85	Quebec lab; slip fibre.
AF431	DHNC6	0	80	80	62.4	77.9	Minor talcose slip fibre, very minor cross fibre.
AF432	"	80	169	89	87.7	98.5	1% (est.) talcose slip fibre.

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Sample	Hole	From ft.	To ft.	Int. ft.	Rec. ft.	% Rec.	Comments
AF433	DHNC6	169	249	80	78.7	98.3	1% (est.) talcose slip fibre.
AF434	"	249	333.5	84.5	82.1	97.2	1% (est.) talcose slip fibre.
AF435	"	333.5	378.5	45	42.5	94.5	Minor slip fibre.
AF436	"	378.5	449.5	71	62.6	88.2	Minor slip fibre.
AF437	"	449.5	512.5	63	63	100	< 1% (est.) talcose slip fibre.
AF438	"	512.5	600	87.5	86.4	98.6	< 1% (est.) talcose slip fibre.
AF439	DHNC7	73	125	52	49.5	95	
AF440	"	125	180	55	51.7	94	Quebec lab; cross fibre.
AF441	"	180	283	103	91.7	89	Quebec lab; approx. 1% talcose slip fibre.
AF442	"	283	342.3	59.3	59	100	Quebec lab; minor talcose slip fibre.
AF443	"	342.3	391	48.7	48.3	98	Quebec lab; minor slip fibre.
AF444	"	391	465	74	67.9	92	Quebec lab; approx. ½% slip fibre.
AF445	"	465	514.5	49.5	42.2	84	Quebec lab; minor cross fibre, 1% slip fibre.
AF446	"	514.5	595	80.5	61.4	77	Quebec lab; minor cross fibre.
AF447	DHNC8	10	68	58	42.4	73.0	½% slip fibre.
AF448	"	68	145	77	70.6	91.7	½% slip fibre.
AF449	"	145	215	70	46.6	66.6	Cross fibre.
AF450	"	215	315	100	54.7	54.7	Minor cross fibre.
AF451	"	315	431.3	116.3	108.4	93.1	Barren.
AF452	DHNC9	110	190	80	75.5	94.3	Woodsreef lab; cross fibre.
AF453	"	190	271	81	79.5	98.0	Woodsreef lab; approx. ½% slip fibre.
AF454	"	271	366.8	95.8	85	88.6	Woodsreef lab; approx. ½% slip fibre.

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CORE SAMPLES IN STRAHAN STORE 10/5/71

DHNC 2

Box	Sample	Box	Sample	Box	Sample
1	No sample	8A	403	15	AF 407
1A	AF 401	8	AF 404	16	407
2	401	9A	404	17	407
3	401	9	AF 405	18	407
4A	401	10	405	19	407
4	AF 402	11	405	20A	407
5	402	12	405	20	AF 408
5A	AF 403	12A	AF 406	21	408
6	403	13	406	22	408
7	403	14	406	23	408
		15A	406		

31 boxes

DHNC 3

Box	Sample	Box	Sample	Box	Sample	Box	Sample
1	AF 409	9A	411	16A	AF 414	25	415
2	409	9	AF 412	17	414	26	415
3	409	10	412	18	414	27	415
3A	AF 410	11	412	19	414	28	415
4	410	12	412	20	414	28A	416
5	410	13A	412	21	414	29	416
6A	410	13	AF 413	22A	414	30	416
6	AF 411	14	413	22	AF 415	31A	416
7	411	15	413	23	415	31	No sample
8	411	16	413	24	415		

39 Boxes

062

CORE SAMPLES IN STRAHAN STORE 10/5/71

DHNC 4

Box	Sample	Box	Sample	Box	Sample
1	No Sample	9	AF 427	17	AF 429
2	" "	10	427	18	429
3	" "	11	427	19	429
4	" "	12A	427	20A	429
5	" "	12	AF 428	20	AF 430
5A	AF 426	13	428	21	430
6	426	14	428	22	430
7	426	15	428	23	430
8	426	16	428		
8A	426	17A	428		

28 Boxes in Strahan

DHNC 5

Box	Sample	Box	Sample	Box	Sample	Box	Sample
1	No sample	10A	AF 418	17	AF 421	25	424
2	" "	11	418	18	421	26	424
3	" "	12	418	19	421	27	424
4	" "	13	418	20	AF 422	28A	424
5	" "	13A	419	21	422	28	AF 425
6	" "	14	419	22A	422	29	425
6A	AF 417	15A	419	22	AF 423	30	425
7	417	15	420	23	423	31	425
8	417	16	420	24A	423	32	425
9	417	17A	420	24	AF 424		
10	417						

40 Boxes

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CORE SAMPLES IN STRAHAN STORE 10/5/71

DHNC 6

Box	Sample	Box	Sample	Box	Sample
1	AF 431	10	433	18	436
2	431	10A	AF 434	18A	AF 437
3	431	11	434	19	437
3A	432	12	434	20	437
4	432	13	434	21A	437
5	AF 432	14A	434	21	AF 438
6	432	14	AF 435	22	438
7A	432	15	435	23	438
7	AF 433	16	AF 436	24	438
8	433	17	436	25	438
9	433				

31 Boxes

CORE SAMPLES IN STRAHAN STORE 1/6/71

DHNC 7

Box	Sample	Box	Sample	Box	Sample
1	No sample	8	AF 441	16	AF 443
2	" "	9	441	17	AF 444
3A	" "	10	441	18	444
3	AF 439	11	441	19	444
4	439	12A	441	19A	AF 445
5	439	12	AF 442	20	445
5A	AF 440	13	442	21A	445
6	440	14	442	21	AF 446
7	440	14A	AF 443	22	446
8A	440	15	443	23	446
				24	446

31 Boxes

CORE SAMPLES IN STRAHAN STORE 1/6/71

DHNC 8

Box	Sample	Box	Sample	Box	Sample
1A	No sample	9	AF 450	17	No sample
1	AF 447	10	450	18	No Sample
2	447	11A	450	19	No Sample
3	AF 448	11	AF 451		
4	448	12	451		
5	448	13	451		
6	AF 449	14	451		
7	449	15	451		
8A	449	16A	451		
8	AF 450	16	No Sample		

23 Boxes

DHNC 9

Box	Sample	Box	Sample
1	No Sample	10	AF 453
2	" "	11	453
3	" "	12	AF 454
4	" "	13	454
5	AF 452	14	454
6	452	15	454
7	452		
8	452		
8A	AF 453		
9	453		

17 Boxes

066

iii. Rock Samples

The following is a copy of the 71/L1 rock sample series index for specimens collected in the Hibbs Belt area from Spero River to Asbestos Point during the 1970/71 season.

Sample No.	Rock Type	Assay	TS/PS	1" Sheet	Locality	Remarks
71/L1-1	Siltstone			71	Spero River N side river E of ultrab.	
71/L1-2	Saussurite Gabbro		TS	71	Spero River N side river	
71/L1-3	Serpentinite			71	" "	
71/L1-4	Pyroxenite		TS	71	" "	
71/L1-5	Sheared Serpentinite		TS	71	" "	
71/L1-6	Serpentinite c.f.		TS	71	" "	
71/L1-7	Pyroxenite			71	" "	
71/L1-8	Gabbro		TS	71	Spero River Spero Bay	
71/L1-9	Serp/Pyrox.			71	Spero River W of No. 2 Stream	
71/L1-10	Serpentinite			71	" "	
71/L1-11	Serp/Pyrox. c.f.			71	" "	
71/L1-12	Sheared Serpentinite			71	" "	
71/L1-13	Serpentinite c.f.			71	" "	
71/L1-14	Banded Pyroxenite		TS	71	Spero River River Section	
71/L1-15	Serpentinite			71	" " "	
71/L1-16	Gabbro/Serp?			71	" " "	
71/L1-17	Serpentinite		TS	71	" " "	
71/L1-18	Banded Pyroxenite		TS	71	Spero River Camp-Landing Track	
71/L1-19	Serpentinite c.f.			71	" "	
71/L1-20	Serp/Pyrox.			71	Spero River Upper part No.2 Stream	

Sample No.	Rock Type	Assay	TS/PS	1" Sheet	Locality	Remarks
71/L1-21	Serpentinite			71	Spero River W of No. 2 Stream	
71/L1-22	Sheared Serpentinite		TS	71	" "	
71/L1-23	Serpentinite			71	" "	
71/L1-24	Banded Pyroxenite c.f.		TS(2)	71	Spero River at the camp	
71/L1-25	Iron Capping, Pyroxenite		TS	71	Spero River upper part No.2 stream	
71/L1-26	Serpentinite c.f.			71	Spero River N side of river	
71/L1-27	Siltstone			71	Spero River N side of river E of ultrab.	
71/L1-28	Gabbro			71	Spero River N side of river N of ultrab.	
71/L1-29	Sheared Serpentinite			71	Hibbs Lagoon 7300N 200W	
71/L1-30	Banded Pyroxenite			71	Hibbs Lagoon 7300N c.100"	
71/L1-31	Dark Dyke			71	Hibbs Lagoon 6100N	
71/L1-32	Light Dyke			71	Hibbs Lagoon 4730N	
71/L1-33	Dark Dyke			71	Hibbs Lagoon 1650N	
71/L1-34	Light Dyke		TS	71	Hibbs Lagoon 1000N	
71/L1-35	Light Dyke			71	Hibbs Lagoon 700N	
71/L1-36	Gabbro?			71	Hibbs Lagoon 0 N 975W	
71/L1-37	Serpentinite c.f.			71	Hibbs Lagoon 0 N 825-750W	
71/L1-38	FeS_2		P	64	Noddy Creek DDBH 8 291'	
71/L1-39	?Silicified Volcanics		TS Reqd.	64	Noddy Creek 3500'N Eastern end 645' peg	Sheared and silicified? dyke rock or Int. Volcanics

Sample No.	Rock Type	Assay	TS/PS	1" Sheet	Locality	Remarks
71/L1-40	Serpentinite			64	3000'N Western end opp. Trig Pt.	Layered massive P.S. serpentinite c cross fibre. Same as NC16 sent to AMDEL
71/L1-41 (A & B)	Serpentinite			64	3000'N Central	2 specimens of ST. bearing c.PS serpentinite. Similar to NC24 sent to AMDEL
71/L1-42	Siliceous Sediment		TS Reqd.	64	2500'N opp. 454' peg on Eastern road	Fine grained green massive siliceous SED.
71/L1-44 (A & B)	Volcanic contact rock		TS(A) Reqd.	64	2200'N costean between 200' & 245' on Eastern road	2 specimens of Volcanic or Dyke rock on contact c U.B. 1 specimen from same area sent to AMDEL NC17.
71/L1-45	Lamprophyre		TS Reqd.	64	2500'N Western end approx. 200' peg.	Dark grey Lamprophyric Dyke rock
71/L1-46	Serpentinite		TS Reqd.	64	2500'N Central approx. 450' mark	Stichtite in Serp.
71/L1-47	Lamprophyre			64	1000'N Western end approx. 370' mark	Black lamprophyre dyke. Same as NC20 sent to AMDEL
71/L1-48	Gabbro		TS Reqd.	64	600'N Area approx. 200'W of road	Cor. gr.? pegmatitic gabbro
71/L1-49	Gabbro		TS Reqd.	64	500'N opp. 500' peg	Blue-grey med. gr. gabbro. Chlorite rich.
71/L1-50	Serpent-inised		TS Reqd.	64	600'N Area approx. 100' west of main road	Black Fn-Med. gr. serpentinised pyroxenite.
71/L1-51	Serpent-inised Pyroxenite		TS Reqd.	64	600'N Area approx. 90' west of main road.	Black med. cor.gr. serpentinised pyroxenite.

Sample No.	Rock Type	Assay	TS/PS	1" Sheet	Locality	Remarks
71/L1-52	Lamprophyre			64	500'N approx. 20'N of 590' mark	Dark grey Fn-Med. gr. lamprophyric dyke.
71/L1-53	Serpentinised Pyroxenite		TS Reqd.	64	500'N approx. 20'N of 580' mark	Med. gr. serpentinised pyroxenite.
71/L1-54	Gabbro		TS Reqd.	64	600'N Area approx. 180'W of road	Green-grey med. gr. gabbro c qtz. veins
71/L1-55	Pyroxenite-Gabbro Transition Rock		TS Reqd.	64	140'N of 550' mark on 00'N	Green-grey med.cor. gr. pyroxenite-gabbro transition rock c qtz. veins
71/L1-56	Serpentinised Pyroxenite		TS Reqd.	64	Approx. 250' area 40'W of main road	Cor. gr. partly serpentinised pyroxenite
71/L1-57	Gabbro		TS Reqd.	64	00' line approx. 1030'E, south side of road	Pyroxenite-gabbro. med. gr. c qtz. veins partly serpentinised c minor sulphides. Similar to NC13 sent to AMDEL
71/L1-58	Conglomerate		TS Reqd.	64	Approx. 200'N area. Helipad 3.	Sheared grey conglomerate.
71/L1-59	Gabbro			64	00' Western end approx. 535' mark	Med. gr. qtz. intruded gabbro. Similar to NC13 sent to AMDEL
71/L1-60 (A & B)	Gabbro		TS Reqd.	64	600'N Area approx. 150' W from main road.	Cor. gr. basic intrusive rock
71/L1-61 (A & B)	Diorite Gabbro		TS(A) Reqd.	64	00' Line approx. 380' in costean	Dark grey, med. gr. deutrically altered dyke rock c minor sulphides.
71/L1-62	Qtz.-Carbonate Vein			64	400'S 50'W of 300' peg	Siliceous white vein rock in sheared serp.
71/L1-63 (A & B)	Altered Silicified Gabbro			64	700'S approx. 210' mark	Siliceous chlorite rock, basic intrusive. Similar to NC21 sent to AMDEL
71/L1-64	Sheared Serpentinised Gabbro		TS Reqd.	64	700'S approx. 150' mark	Sheared, serpentinised basic igneous rock, lt. green. (Sheared version of 71/L1-49)

Sample No.	Rock Type	Assay	TS/PS	1" Sheet	Locality	Remarks
71/L1-65	Lamprophyre? Andesitic comp.			64	700'S approx. 200' south of 700' costean peg along road	Lt. grey (weathered) Lamprophyric dyke rock. Same as NC14 sent to AMDEL
71/L1-66	Lamprophyre? Andesitic comp.		TS	64	700'S approx. 50'S of 600' peg in costean	As above.
71/L1-67 (A & B)	Lamprophyre? Andesitic Comp.		TS	64	700'S. 100'S of 400' peg in costean along N-S line	One weathered and one as above unweathered specimen
71/L1-68	Qtz. Intruded Hornfels?		TS Reqd.	64	1000'S eastern end approx.950' mark	Fn. gr. Hornfels c qtz. veins and spherulites (marginal to sheared gabbro to west)
71/L1-69 (A & B)	Bronzite? Peridotite partly serpentinised		TS(A) Reqd.	64	1000'S western end approx.500' peg	Lt-dk green grey cor. gr. partly serpentinised pyroxene-peridotite. Same as NC11 sent to AMDEL
71/L1-70	Pyroxenite?			64	1000's western end approx.275' mark	Lt. grey cor. gr. altered gabbro or pyroxenite? Similar specimen NC12 sent to AMDEL
71/L1-71	Lamprophyre			64	1500'N western end approx.280' mark	Med. gr. grey lamprophyric dyke.
71/L1-72	Gabbro	CoNiCr CuPbZn	TS	64	Fern Ck. costean approx. 2000'N pad2 approx.250' from east end of costean	Weathered cor. gr. gabbro, similar rock NC3 sent to AMDEL
71/L1-73	Enstatite?	CoNiCr CuPbZn	TS	64	Costean 6000'S of pad 2. Central zone	V. cor. gr. dk. grn. pyroxenite (enstatite). Similar rock NC2 sent to AMDEL
71/L1-74 (A & B)	Serpentinite		TS(A) Reqd.	64	Central 1000'N approx. 500' peg	Light green (P.S.) serp. c S.F. & Mag.

Sample No.	Rock Type	Assay	TS/PS	1" Sheet	Locality	Remarks
71/L1-75 (A & B)	Serpentinite		TS(A) Reqd.	64	1000'N eastern end approx.780' peg	Dk. grn. (D.S.) serp. c̄ magnetite.
71/L1-76	Carbonaceous		TS Reqd.	64	1000'N approx.250' mark near contact	Partly metasomitized carbonaceous siltstone
71/L1-77	Basic-Int. Volcanic Agglomerate		TS Reqd.	64	Near helipad 9 on great N-S road NC - Timbertops	Lt-dk. grn. volcanic agglomerate
71/L1-78	Serpentinite		TS cut	64	DHNC4 343.5'	Micro ribbon fibre texture and brown mineral.
71/L1-79	Serpentinite		TS Reqd.	64	DHNC5 525.9'	Massive, dark, mottled c̄ stichtite.
71/L1-80	Serpentinite		TS cut	64	DHNC5 360.6'	Cross fibre bearing.
71/L1-81	Sheared Serpentinite	CoNiCu Cr AA	TS Reqd.	64	DHNC5 160.6'	Minor +ve D.M.G. sulphide
71/L1-82	Contact altered Siltstone		TS Reqd.	64	DHNC5 123.8'	c̄ ribbon fibre
71/L1-83	Serpentinite		TS Reqd.	64	DHNC7 461.3'	c̄ stichtite and magnetite.
71/L1-84	Serpentinite	CoNiCu Cr AA		64	DHNC7 341.8'	Pale, massive c̄ minor finely disseminated +ve D.M.G. sulphide.
71/L1-85	Serpentinite		TS Reqd.	64	DHNC7 295.3'	Massive, granular c̄ minor slip fibre
71/L1-86	Sheared Serpentinite	CoNiCu Cr AA	TS Reqd.	64	DHNC7 200.5'	c̄ +ve D.M.G. sulphide, slip fibre and magnetite.
71/L1-87	Partially Serpentinised Pyroxenite		TS Reqd.	64	DHNC7 145'	
71/L1-88	Serpentinite		TS Reqd.	64	DHNC7 131.3'	c̄ cross fibre and minor +ve D.M.G. sulphide
71/L1-89	Lamprophyre		TS cut	64	DHNC7 113.5'	c̄ dark banding
71/L1-90	Lamprophyre		TS cut	64	DHNC7 110.5'	c̄ garnetiferous xenolith
71/L1-91	Lamprophyre		TS cut	64	DHNC7 105'	From margin of dyke

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Sample No.	Rock Type	Assay	TS/PS	1" Sheet	Locality	Remarks
71/L1-92	Sheared Serpentinite	CoNiCu Cr AA	TS,PS Reqd.	64	DHNC7 93'	c̄ +ve D.M.G. sulphide
71/L1-93	Sheared Gabbro		TS Reqd.	64	DHNC7 69.7'	
71/L1-94	Serpentinite		TS Reqd.	64	DHNC8 104.5'	Massive, pale c̄ stichtite
71/L1-95	Sheared Serpentinite		TS Reqd.	64	DHNC8 133.2'	c̄ slip fibre, magnetite, stichtite.
71/L1-96	Chlorite, Co_3 Serpentine Rock		TS cut	64	DHNC8 445.3'	
71/L1-97	Serpentinite/ Pyroxenite		TS Reqd.	64	DHNC8 290.5'	c̄ minor cross fibre
71/L1-98	Serpentinite		TS cut	64	DHNC9 332.6'	Pale, granular, c̄ stichtite and magnetite.
71/L1-99	Serpentinite		TS Reqd.	64	DHNC9 199'	Pale, granular c̄ stichtite and magnetite.
71/L1-100	Serpentinite		TS Reqd.	64	DHNC9 170'	c̄ cross fibre.
71/L1-101	Pyroxenite		TS cut	64	DHNC9 142.5'	
71/L1-102	Partially Serpentinised Pyroxenite		TS Reqd.	64	DHNC9 103'	
71/L1-103	Sheared Gabbro		TS Reqd.	64	DHNC9 22.7'	Carbonated.
71/L1-104	Lamprophyre		TS Reqd.	64	5500'N Line eastern end approx.570'	Dark grey lamprophyric dyke rock
71/L1-105 (A & B)	Talc contact rock		TS Reqd.	64	5500'N as above	Massive talc rich contact rock between lamprophyric dyke and sheared serpentinite.
71/L1-106	Serpentinite			64	3500'N eastern end approx.579' mark	Massive serpentinite (P.S.) with stichtite.
71/L1-107 (P10/1)	Acid Porphyry			64	Noddy Creek Pad 10 approx. 2100'N and 300'E	Pale green cream weathering (kaolinised) c̄ felspar, quartz phenocrysts.
71/L1-108 (P10/2)	Acid Porphyry			64	Noddy Creek Pad 10 approx. 300'E	

Sample No.	Rock Type	Assay	TS/PS	1" Sheet	Locality	Remarks
71/L1-109 (P10/3)	Basaltic ? Volcanic			64	Noddy Creek Pad 10 approx. 2100'S	Fine grained.
71/L1-110 (P10/4)	Int-basic Volcanic			64	Noddy Creek Pad 10 approx. 2300'S	Pale green weathering c̄ lath felspar phenocrysts.
71/L1-111 (P10/5)	Acid Porphyry			64	Noddy Creek Pad 10 25S approx. 160'E	
71/L1-112 (P10/6)	Basic-Int Volcanic			64	Noddy Creek Pad 10 25S approx. 1300E	c̄ lath felspar phenocrysts
71/L1-113 (P10/7)	Acid Porphyry			64	Noddy Creek Pad 10 approx. 3420S	
71/L1-114 (P10/8)	Basaltic ? Volcanic			64	Noddy Creek Pad 10 approx. 3500S	Dark green, chloritic micro-vesicular.
71/L1-115 (P10/9)	Greywacke			64	Noddy Creek Pad 10 area near contact c̄ acid porphyry approx. 4500'S along track from 25S	Pale grey-green slightly sheared.
71/L1-116 (P10/10)	Greywacke c̄ pebbles			64		Siltstone and ? acid volcanic clasts.

Samples 71/L1-107-116 inc. refer Noddy Creek Area Run 1971 Run 3/94.

71/L1-117A c.f. 71/L1 170	Massive sulphide/ gossan	similar to 71/ L1-170 NC22		64	Outcrop near mouth of adit Brickmakers Bay 600'SE of Asbestos Point Landing	Sample from blue green sheared basic/intermediate rock type near contact with agglomerate.
71/L1-117B	"	"		64	" " "	" " " "
71/L1-118	Serpentinite		TS	64	2500' Line approx. 300' peg	Black massive serpentinite magnetic.
71/L1-119	Serpentinite		TS	64	2500'N approx. 330' mark	Dark green serpentinite with magnetite, pentlandite associated with asbestos fibre.

Sample No.	Rock Type	Assay	TS/PS	1" Sheet	Locality	Remarks
71/L1-120	Serpentinite			64	2500'N approx. 370' mark	Light green serpentinite with strong cross fibre and minor magnetite.
71/L1-121	Serpentinite			64	2500'N approx. 385' mark	Pale green serpentinite, magnetite in shear planes, minor cross fibre.
71/L1-122	Serpentinite		TS	64	2500'N approx. 905' mark	Dark green serpentinite v. minor magnetite serp-pseudomorphs after pyroxenes?
71/L1-123	Serpentinite		TS	64	2500'N approx. 610' mark	Sheared serp. with magnetite.
71/L1-124	Serpentinite		TS	64	2500'N approx. 630' mark	Dark green serp. fibrous magnetite on shear planes.
71/L1-125	Serpentinite			64	2650'N approx. 150' due north of 300' peg on 2500'N line.	Ribbon fibre bearing serp. with pentlandite.
71/L1-126	Serpentinite		TS Reqd.	64	5500'N approx. 750' mark	Dark green compact sheared serpentinite $\bar{c}$ carbonate veins in shear planes.
71/L1-127	Carbonate Vein			64	550'N approx. 750' mark	Fibrous carbonate dolomite ? with sheared serp.?
71/L1-128	Intermediate Dyke or Silicified Gabbro		TS Reqd.	64	3500'N approx. 695' peg	Quartz rich Leucocratic dyke rock possibly silicified gabbro.
71/L1-129	Serpentinite		TS Reqd.	64	5000'N approx. 400' peg. stream section	Light green serpentinite with fine cross fibre veins.
71/L1-130	Carbonaceous Siltstone		TS Reqd.	64	3000'N approx. 115' peg	Dark grey carbonaceous siltstone partly metasomatized $\bar{c}$ Co_3 veins.
71/L1-131	Sheared talc rock		TS Reqd.	64	2000'N approx. 875' mark	Brown-grey sheared talc rock with qtz. xenoliths and green mineral-fuchsite ? magnetite.

Sample No.	Rock Type	Assay	TS/PS	1" Sheet	Locality	Remarks
71/L1-132	Talc Schist			64	2000'N approx. 1000' peg	Blue-grey schistose talc rock.
71/L1-133	Hornfels ?		TS	64	2000'N approx. 200' beyond 1000' peg	Dark grey horfelsized sediment with quartz veins and pyrite.
71/L1-134	Silicified Gabbro		TS	64	2000'N approx. 300' beyond 1000' peg	Grey med. gr. basic rock. Silicified with narrow qtz. veins.
71/L1-135	Rodingite & Serpentinite		TS Reqd.	64	1000'N approx. 500' mark	Lens in serpentinite. Grey with hydra-garnet and prehnite identified.
71/L1-136	Fuchsite		TS	64	Approx. 750'N in stream bed on road behind helipad 3.	Light green, soft, sheared rock with pyrite.
71/L1-137 (A & B)	Conglomerate		TS	64	approx. 1500' from Timbertops road west along road to 1500'S Line	Sheared conglomerate with fuchsite ? clasts.
71/L1-138	Lamprophyre		TS	64	Approx. 1000' from Timbertops road west along road to 1500'S Line	Dark grey biotite rich lamprophyre.
71/L1-139	Lamprophyre			64	1000'S Line approx. 1130' mark	Biotite rich lamprophyre.
71/L1-140	Plagioclase rich rock		TS	64	400'S approx. 285' mark	Light grey felspar rock with thin magnetite veins.
71/L1-141	Coarse Gabbro			64	200'SE of Asbestos Point Jetty	Dark grey coarse grained gabbro
71/L1-142	Serpentinite	AA1056		64	DHNC2 160'-170'	Chip sample.
71/L1-143	Serpentinite with dissem. stichtite	AA1057		64	DHNC3 175'-180'	" "
71/L1-144	Sheared Serpentinite	AA1058		64	DHNC4 155'-160'	" "

Sample No.	Rock Type	Assay	TS/PS	1" Sheet	Locality	Remarks
71/L1-145	Sheared Serpentinite ō stichtite	AA1059		64	DHNC6 295'-300'	Chip sample
71/L1-146	Massive mottled serp.	AA1060		64	DHNC7 285'-290'	" "
71/L1-147	Hard dark massive serp.	AA1061		64	DHNC8 245'-250'	" "
71/L1-148	Pale massive Serpentinite	AA1062		64	DHNC9 195'-200'	" "

Samples 142 to 148 were sampled at the request of Dr. Bumstead and sent to Geomin., Sydney, to be analysed for SiO_2, Al_2O_3, MgO, CaO, total Fe, TiO_2, Ni, Cr, Cu, Zn, and Co.

71/L1-149 (NC1)	Dk. green serpentinised pyroxenite	Anal. for Cu,Pb, Zn,Co, Ni,Cr, by AMDEL	TS by AMDEL	64	½m SSE of Pad 2.	
71/L1-150 (NC2)	Dk. green very coarse pyroxenite	"	"	64	1M SSE of Pad 2. (Echo Ridge)	Similar to 71/L1-73
71/L1-151 (NC3)	Coarse "gabbro" (diorite composition)	"	"	64	½ NE of Pad 2. Fern Ck. costean (new) approx. 2300'E of main N-S track	Same as 71/L1-72
71/L1-152 (NC4)	Med. gr. leucocratic plagioclase rock (Albitite ?)	"	"	64	As above approx. 2300'E of main N-S track	
71/L1-153 (NC5)	Fine grained dk. green basic-ultra-basic rock (? dyke)	"	"	64	½ N of Pad 2 Fern Ck. costean (old)	Pyroxenite gabbro transition rock
71/L1-154 (NC6)	Med. grained gabbro	"	"	64	As above	
71/L1-155 (NC7)	Light blue-grey talc schist	"	"	64	½ NE of Pad 2 Fern Ck. costean (new) approx. 1300'E of N-S track	
71/L1-156 (NC8)	Dk. green massive Serpentinite	"	"	64	1000 S line 600' peg	
71/L1-157 (NC9)	Dk. green med. grained serpentinised pyroxenite	"	"	64	As above approx. 500' peg	

Sample No.	Rock Type	Assay	TS/PS	1" Sheet	Location	Remarks
71/L1-158 (NC10)	Coarse gr. pyroxenite (bronzite ?)	Anal. for Cu,Pb Zn,Co Ni,Cr by AMDEL	TS by AMDEL	64	1000 S line approx. 500' peg	
71/L1-159 (NC11)	Dk. green partly serpentinised (med. gr.) pyroxenite	"	"	64	As above	Similar to 71/L1-69
71/L1-160 (NC12)	Coarse gr. light grey-green altered pyroxenite	"	"	64	1000 S line 300' peg	Similar to 71/L1-70
71/L1-161 (NC13)	Med. gr. green-grey gabbro intruded by aplite ? vein	"	"	64	0 Line 550' peg	Similar to 71/L1-59
71/L1-162 (NC14)	Fine gr. grey-green basic rock (volcanic ?)	"	"	64	Main N-S road 250S of 700S line	Same as 71/L1-65
71/L1-163 (NC15)	Med. gr. dk. grey gabbro	"	"	64	0 line approx. 1000' peg	Similar to 71/L1-57
71/L1-164 (NC16)	Massive dk. green layered serpentinite c crysotile cross fibre	"	"	64	3000 N line approx. 150' peg	Same as 71/L1-40
71/L1-165 (NC17)	Orange-green basic volcanic rock near contact with ultramafics	"	"	64	250'N of 2000 N line Eastern access road	From same place as 71/L1-44A
71/L1-166 (NC18)	Cream chert c black spinel crystals	"	"	64	½m NE Pad 2 Fern Ck. costean (new) approx. 2400'E of N-S	Similar to rock on western end of dyke on 5500'N line. 71/L1-105B
71/L1-167 (NC19)	Grey med. gr. basic lamprophyre dyke	"	"	64	5000 N line approx. 900' peg	
71/L1-168 (NC20)	Black med. gr. biotite lamprophyre dyke	"	"	64	1000 N line approx. 370' peg	Same as 71/L1-47

Sample No.	Rock Type	Assay	TS/PS	1" Sheet	Location	Remarks
71/L1-169 (NC21)	Light grey-green altered gabbro ? c qtz. veins	Anal. for Cu,Pb, Zn,Co, Ni,Cr, by AMDEL	TS by AMDEL	64	700 S line 200' peg	Similar to 71/L1-63
71/L1-170 (NC22) c.f. 71/L1 117	Massive pyrite (c chalcopyrite) in limonite goethite matrix	"	"	64	600'SE of Asbestos Pt. landing	Near mouth of old adit. c.f. 71/L1-117
71/L1-171 (NC23)	Qtz. veined green altered ultramafic rock with disseminated pyrite chalcopyrite and bornite	"	"	64	½ NE of Pad 2 Fern Ck. costean (new) 1500'E of N-S track	
71/L1-172 (NC24)	Apple green serpentinite c stichtite and thin less than or equal to 1/16" chrysotile fibre veins	"	"	64	3000'N line approx. 500' peg	Similar to 71/L1-41B
71/L1-173	Brittle asbestos fibre	XRD at M.R.L.		64	DHNC7 276'-283'	Mineral ? From mill sample AF441
71/L1-174	Slip fibre in slightly sheared serpentinite	XRD at M.R.L. (fibre)		64	DHNC7 288.5'	Fibrous mineral ? From mill sample AF442
71/L1-175	Fibrous talc? in slightly sheared serpentinite	XRD at M.R.L. (fibre)		64	DHNC7 295.3'	Fibrous mineral ? From mill sample AF442
71/L1-176	Serpentinite and sheared serpentinite			64	DHNC7 180'-283'	4 pieces of core from mill sample AF441
71/L1-177	Sheared serpentinite			64	Channel Sample AF52 (20N)	4 pieces from sample drum
71/L1-178	Sheared Serpentinite			64	Channel Sample AF7 (20N)	4 pieces from sample drum
71/L1-179	Sheared Serpentinite			64	Channel Sample AF60 (40N)	4 pieces from drum
71/L1-180	Sheared Serpentinite			64	Channel Sample AF64 (40N)	4 pieces from drum

Rock samples 71/L1-149 to 172 inc. equivalent to NC1 to NC24 inc. were analysed for Cu, Pb, Zn, Co, Ni, Cr.

NC Number	71/L1 Number	Cu (ppm)	Pb (ppm)	Zn (ppm)	Co (ppm)	Ni (ppm)	Cr (ppm)
1	149	< 5	5	35	30	130	110
2	150	< 5	< 5	50	45	190	410
3	151	5	5	25	25	75	15
4	152	< 5	< 5	45	10	50	15
5	153	35	< 5	50	45	440	360
6	154	200	< 5	35	20	40	25
7	155	35	5	40	45	230	930
8	156	< 5	< 5	45	120	1300	780
9	157	5	< 5	25	50	580	370
10	158	< 5	5	65	50	380	1600
11	159	5	5	35	70	750	470
12	160	15	5	45	25	200	1100
13	161	5	5	25	20	70	50
14	162	25	30	70	20	70	55
15	163	35	5	35	55	140	75
16	164	< 5	5	80	90	1600	1200
17	165	110	5	100	60	100	35
18	166	25	25	810	5	95	200
19	167	35	45	100	30	50	25
20	168	15	5	90	35	90	80
21	169	5	< 5	30	25	80	50
22	170	430	120	100	95	100	100
23	171	2000	< 5	55	50	160	300
24	172	5	5	15	70	1900	620

iv. Analyses

Rock Samples 71/L1-142 to 148 inc. equivalent to AA1056 to AA1062 were analysed for major elements and some minor elements.

ANALYSIS OF SERPENTINITES AA1056 - AA1062

	56	57	58	59	60	61	62
SiO_2	39.1%	36.7%	34.5%	35.3%	34.1%	41.9%	36.7%
Al_2O_3	0.7	0.5	0.2	0.3	0.3	0.5	0.3
CaO	0.1	0.1	0.1	0.1	0.1	0.1	0.1
MgO	39.6	40.1	41.9	40.0	40.4	34.5	39.9
Total Fe	4.3	4.8	4.8	5.5	5.8	7.7	6.0
TiO_2	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Cu	12 ppm	6 ppm	14 ppm	18 ppm	8 ppm	6 ppm	18 ppm
Zn	60	36	26	30	34	90	40
Ni	1300	2500	2400	2200	1800	1000	2800
Co	90	100	52	92	120	96	100
Cr	5500	2500	3750	2500	6000	2250	550

56 Serpentinite DHNC2, 30N, 160'-170'

57 Serpentinite with disseminated stichtite DHNC3, 30N, 175'-180'

58 Sheared serpentinite DHNC4, 40N, 155'-160'

59 Sheared serpentinite with stichtite DHNC6, 40N, 295'-300'

60 Massive mottled serpentinite DHNC7, 20N, 245'-250'

61 Hard dark massive serpentinite DHNC8, 20N, 245'-250'

62 Pale massive serpentinite DHNC9, 15S, 195'-200'

081

823081

E.L. 13/65 CAPE SORELL PENINSULA, S.W. TASMANIA

EXPLORATION FOR CHRYSOTILE ASBESTOS IN THE HIBBS BELT

NODDY CREEK

AND PAD 2 TO ASBESTOS POINT

1970/71

APPENDIX TWO

COSTEAN FIBRE LOGS AND VISUAL DOLLAR

VALUE SHEETS WITH RESULTS SUMMARY

FIBRE LOGS FL001 TO FL023

082

TABLE 1

COSTEAN FIBRE LOG RESULTS SUMMARY

Line	Log	Feet East	Offset	Interval	Width Feet	% Visual Uncorrected	% Visual Assume Vein Angle = 45°	Evaluation Points Fibre	Rock Value/ Short Ton $ Can. 1971
20S	FL012	453E	119N	0'-80'	80'	1.70%	2.59%	111	3.62
				130'-140'	10'	1.87%	2.72%	88	3.10
15S	FL013	507E	36N	0'-20'	20'	7.70%	11.30%	459	37.80
				35'-45'	10'	2.0%	2.95%	38	1.77
10S	FL011	455E	13S	0'-20'	20'	3.4%	5.0%	110	7.00
10N	FL010	700E	20N	5'-30'	25'	2.9%	4.1%	166	8.36
10N	FL009	283E	2S	0'-15'	15'	4.0%	5.9%	159	11.80
				75'-90'	15'	4.1%	6.1%	53	4.33
15N	FL014	480E	---	0'-80'	80'	2.1%	3.07%	262	7.51
20N	FL003	392E	3S	0'-35'	35'	1.0%	1.47%	149	2.82
20N	FL002	381E	29S	0'-30'	30'	3.9%	5.72%	39	3.43
20N	FL001	614E	2N	0'-25'	25'	3.4%	5.04%	102	6.51
25N	FL017	250E	50N	0'-50'	50'	3.5%	5.25%	310	13.45
25N	FL016	245E	87N	0'-105'	105'	1.1%	1.69%	36	1.00
30N	FL008	624E	20S	0'-25'	25'	0.7%	1.03%	123	1.60
30N	FL004	218E	---	0'-80'	80'	2.6%	3.84%	231	8.94
				145'-160'	15'	2.8%	4.17%	81	4.42
35N	FL018	140E	---	0'-75'	75'	5.0%	7.52%	373	19.40
				75'-110'	35'	0.7%	1.05%	21	0.58
40N	FL007	495E	14N	20'-40'	20'	1.4%	2.13%	174	4.45
				60'-105'	45'	1.3%	1.91%	184	4.09
	FL006	234E	10S	5'-45'	40'	1.9%	2.47%	126	3.96
	FL005	229E	6N	0'-60'	60'	3.1%	4.53%	316	11.61
45N	FL019	1104E	10N	0'-45'	45'	2.5%	3.7%	64	3.18
50N	FL015	594E	---	0'-65'	65'	2.7%	4.02%	131	6.71
				95'-135'	40'	3.8%	5.55%	54	4.00
51N	FL020	275E	---	0'-10'	10'	10.8%	15.9%	61	12.09
51N	FL021	367E	5S	0'-40'	40'	4.7%	6.97%	330	17.95
55N	FL022	192E	31N	0'-15'	15'	10.4%	15.3%	187	32.90
70N	FL023	701E	4N	0'-20'	20'	3.3%	4.8%	475	17.2

823083

NODDY CREEK 1971

083

FIBRE LOG SHEET

Hole: Interval: 0' - 80' Footage: 80'

Costean: 20S 453E
Offset 119N Fibre Log: FL012 Logged west to east

←PAN→ ←10M→ ←4M→ ←2M→

FROM	To	REC	Code	1/32	1/16	2/16	3/16	4/16	5/16	6/16	7/16			Sum 1/16	Vein Angle	Val o/o
0	5		2	20	9	2								23		2.3
5	10		1	2	3									4		0.4
10	15		1	10	8									13		1.3
15	20		2	1	2	2								6½		0.6
20	25		1	0	1									1		0.1
25	30		1/22	4	1	2								7		0.7
30	35		3	1	4	2	1							19½		1.9
35	40		1	0	1									1		0.1
40	45		3	1	6	3	1	1						19½		1.9
45	50		3	0	6	3	3	1						25		2.5
50	55		3	7	5	4	1	1						23½		2.3
55	60		3	10	11	5	4							38		3.8
60	65		2	31	14	2	One foot of 10 @ 1/64 to the inch							33½		3.3
65	70		1	12										6		0.6
70	75		3	36	10	2	2		Six inches of 1/64 veins					38		3.8
75	80		2	22	6	1	0	1						23		2.3
0	80		207	157	84	30	13	5								
			1/16	78½	84	60	39	20						281½		1.7% 80'

R. J. Close

823084

084

Location NODDY CREEK 1971

VISUAL DOLLAR VALUE

Hole: Sample: Footage: 80', 0'-80'

Costean: 20S Fibre Log: FL012

	1/32	1/16	2/16	3/16	4/16	5/16	6/16	7/16	+½	Total
Visual Fibre		162	30	13	5					
1/16s		162	60	39	20					281
		Pan		10M			4M		2M	

Uncorrected Visual Percentage (fibre log sheet) = 1.7 %

Assuming vein angle = 45° then:

Corrected Visual Percentage = $\frac{\text{Total 1/16s x 0.737}}{\text{Footage}}$ = 2.59 %

Q.S.T.

	1/16s	Ounces		Evaluation Points
Pan =	162	9.23	X 1	= 9
10 Mesh =	99	5.64	X 10	= 56
4 Mesh =	20	1.14	X 40	= 46
2 Mesh =			X 100	=
	281	16.01		111

From graph relating evaluation points and price:- 1971 Prices

Value/short ton fibre = C$ 140.00

Therefore value/short ton rock = C$ 3.62

Value milled = C$

Date June 1971

085

823085

NODDY CREEK 1971

FIBRE LOG SHEET

Hole: Interval: 80' - 145' Footage: 65'

Costean: 20S Fibre Log: FL012 continued

←PAN→ ←10M→ ←4M→ ←2M→

FROM	To	REC	Code	1/32	1/16	2/16	3/16	4/16	5/16	6/16	7/16			Sum 1/16	Vein Angle	Vol %	
80	85		1			BARREN								0		0	
	90		1											0		0	
	95		1					SLIP FIBRE			12'	13.1'		0		0	
	100		1					"	"		15.5'	19.7'		0		0	
	105		1					"	"		21'	23'		0		0	
	110		1					"	28.5'	to	30'			0		0	
	115		1					"	"		33'			0		0	
	120		1					"	"		36.8'			0		0	
	125		1					"	42'	to	44'			0		0	
	130		1			BARREN								0		0	
	135		3	8	9	2	3							26		2.6	
	140		2	3	5	1	1							11.5		1.1	
	145		1			BARREN								0		0	
135	140		TOT	11	14	3	4							37½		1.87	10'
			1/16	5½	14	6	12										

1.87% applies to 130' to 140'

B. Flood

823086

056

Location NODDY CREEK 1971

VISUAL DOLLAR VALUE

Hole: Sample: Footage: 10', 130'-140'

Costean: 20S Fibre Log: FL012

	1/32	1/16	2/16	3/16	4/16	5/16	6/16	7/16	+½	Total
Visual Fibre		19	3	4						
1/16s		19	6	12						37
		Pan	10M		4M				2M	

Uncorrected Visual Percentage (fibre log sheet) = 1.87 %

Assuming vein angle = 45° then:

Corrected Visual Percentage = $\frac{\text{Total 1/16s x 0.737}}{\text{Footage}}$ = 2.72 %

Q.S.T.

	1/16s	Ounces		Evaluation Points
Pan =	19	8	X 1	= 8
10 Mesh =	18	8	X 10	= 80
4 Mesh =			X 40	=
2 Mesh =			X 100	=
	37	16		88

From graph relating evaluation points and price:- 1971 Prices

Value/short ton fibre = C$ 114.00

Therefore value/short ton rock = C$ 3.10

Value milled = C$

Date June 1971

823087

NODDY CREEK 1971

087

FIBRE LOG SHEET

Hole: Interval: 0' - 50' Footage: 50'

Costean: 15S 507E offset 36N Fibre Log: FL013 Logged W to E

←PAN→ ←10M→ ←4M→ ←2M→

FROM	To	Rec	Code	1/32	1/16	2/16	3/16	4/16	5/16	6/16	7/16	1/2	5/8	Sum 1/16	Vein Angle	Vol o/o	
0	5		4	1	13	10	5	4	3	2	1	2	1	124½		12.4	
	10		4	3	19	15	5	1	1	0	0	2		90½		9.0	
	15		4	11	32	13	4	0	1	0	0	1		88½		8.8	
0	15		TOT	15	64	38	14	5	5	2	1	5	1				
			1/16	7½	64	76	42	20	25	12	7	40	10	303½		10.1	15'
15	20		1	1	2	1		Numerous thin slip fibre veins						4½		0.4	
0	20		TOT	16	66	39	14	5	5	2	1	5	1				
			1/16	8	66	78	42	20	25	12	7	40	10	307½		7.7	20'
20	25		1			BARREN		Numerous thin slip fibre veins						0			
	30		1			"		"		"	"	"		0			
	35		1			"		"		"	"	"		0			
	40		1		1	"		"		"	"	"		1		0.1	
	45		2	34	16	3		"		"	"	"		39		3.9	
35	45		TOT	34	17	3											
			1/16	17	17	6								40		2.0	10'
45	50			BARREN - Massive serp. and pyroxenite										0		0	

R. J. Close

823088

088

Location NODDY CREEK 1971

VISUAL DOLLAR VALUE

Hole: Sample: Footage: 20', 0'-20'

Costean: 15S Fibre Log: FL013

	1/32	1/16	2/16	3/16	4/16	5/16	6/16	7/16	+½	Total
Visual Fibre 1/16s	74	78	42	20	25	12	7	50		307
	Pan	10M		4M				2M		

Uncorrected Visual Percentage (fibre log sheet) = 7.7 %

Assuming vein angle = 45° then:

Corrected Visual Percentage = $\frac{\text{Total 1/16s x 0.737}}{\text{Footage}}$ = 11.3 %

Q.S.T.

	1/16s	Ounces		Evaluation Points
Pan =	74	3.85	X 1	= 4
10 Mesh =	120	6.25	X 10	= 62
4 Mesh =	64	3.33	X 40	= 133
2 Mesh =	50	2.60	X 100	= 260
				459

From graph relating evaluation points and price:- 1971 Prices

Value/short ton fibre = C$ 335.00

Therefore value/short ton rock = C$ 37.80

Value milled = C$

Date June 1971

823039

089

Location NODDY CREEK 1971

VISUAL DOLLAR VALUE

Hole: Sample: Footage: 10', 35'-45'

Costean: 15S Fibre Log: FL013

	1/32	1/16	2/16	3/16	4/16	5/16	6/16	7/16	+½	Total
Visual Fibre		34	3							
1/16s		34	6							40
		Pan	10M			4M			2M	

Uncorrected Visual Percentage (fibre log sheet) = 2.0 %

Assuming vein angle = 45° then:

Corrected Visual Percentage = $\frac{\text{Total 1/16s x 0.737}}{\text{Footage}}$ = 2.95%

Q.S.T.

	1/16s	Ounces		Evaluation Points
Pan =	34	13.6 X	1	= 14
10 Mesh =	6	2.4 X	10	= 24
4 Mesh =		X	40	=
2 Mesh =		X	100	=
	40	16.0		38

From graph relating evaluation points and price:- 1971 Prices

Value/short ton fibre = C$ 60.00

Therefore value/short ton rock = C$ 1.77

Value milled = C$

Date June 1971

823090

NODDY CREEK 1971

030

FIBRE LOG SHEET

Hole: Interval: 0' - 20' Footage: 20'

Costean: 10S 455E Fibre Log: FL011 Logged E to W
Offset 13S

←PAN→ ←10M→ ←4M→ ←2M→

FROM	To	Rec	Code	1/32	1/16	2/16	3/16	4/16	5/16	6/16	7/16			Sum 1/16	Vein Angle	Val o/o	
0W	5W		3	14	14	5	4							43		4.3	
	10		2	6	17	2	1							27		2.7	
	15		3	14	22	6	2	1						51		5.1	
	20		3	2	3	2	1	1						15		1.5	
0	20		TOT	36	56	15	8	2									
			1/16	18	56	30	24	8						136		3.4	20'

R. J. Close

823091

091

Location NODDY CREEK 1971

VISUAL DOLLAR VALUE

Hole: Sample: Footage: 20', 0'-20'

Costean: 10S Fibre Log: FL011

	1/32	1/16	2/16	3/16	4/16	5/16	6/16	7/16	+½	Total
Visual Fibre		74	15	8	2					
1/16s		74	30	24	8					136
		Pan		10M			4M		2M	

Uncorrected Visual Percentage (fibre log sheet) = 3.4 %

Assuming vein angle = 45° then:

Corrected Visual Percentage = $\frac{\text{Total 1/16s x 0.737}}{\text{Footage}}$ = 5.0 %

Q.S.T.

	1/16s	Ounces		Evaluation Points
Pan =	74	8.7 X 1	=	9
10 Mesh =	54	6.35 X 10	=	64
4 Mesh =	8	0.94 X 40	=	37
2 Mesh =		X 100	=	
	136	15.99		110

From graph relating evaluation points and price:- 1971 Prices

Value/short ton fibre = C$ 140.00

Therefore value/short ton rock = C$ 7.00

Value milled = C$

Date June 1971

823092

092

NODDY CREEK 1971

FIBRE LOG SHEET

Hole: Interval: 0' - 30' Footage: 30'

Costean: 10N 700E
Offset 20N

Fibre Log: FL010 Logged W to E

←PAN→ ←10M→ ←4M→ ←2M→

FROM	To	Rec	Code	1/32	1/16	2/16	3/16	4/16	5/16	6/16	7/16			Sum 1/16	Vein Angle	Val o/o	
0	5		1			BARREN								0		0	
	10		4	8	13	0	1	0	0	1	1			33		3.3	
	15		4	14	8	3	3	2						38		3.8	
	20		2	24	16	2	1							35		3.5	
	25		3	7	6	2	2	1						23½		2.3	
	30		1	2	7	1								10		1.0	
5	30		TOT	55	50	8	7	3	0	1	1						
			1/16	27½	50	16	21	12	0	6	7			139½		2.8	25'

North Wall of costean opposite AF 92/93

N. J. Close

093

823093

Location NODDY CREEK 1971

VISUAL DOLLAR VALUE

Hole: Sample: Footage: 25', 5'-30'

Costean: 10N East Fibre Log: FL010

Zone

	1/32	1/16	2/16	3/16	4/16	5/16	6/16	7/16	+½	Total
Visual Fibre		77	8	7	3	0	1	1		
1/16s		77	16	21	12	0	6	7		139
		Pan	10M		4M				2M	

Uncorrected Visual Percentage (fibre log sheet) = 2.8 %

Assuming vein angle = 45° then:

Corrected Visual Percentage = $\frac{\text{Total 1/16s x 0.737}}{\text{Footage}}$ = 4.1 %

Q.S.T.

	1/16s	Ounces		Evaluation Points
Pan =	77	8.86	X 1	= 9
10 Mesh =	37	4.26	X 10	= 42
4 Mesh =	25	2.88	X 40	= 115
2 Mesh =			X 100	=
	139	16.00		166

From graph relating evaluation points and price:- 1971 Prices

Value/short ton fibre = C$ 204.00

Therefore value/short ton rock = C$ 8.36

Value milled = C$

Date June 1971

094

823094

NODDY CREEK 1971

FIBRE LOG SHEET

Hole: Interval: 0' - 90' Footage: 90'

Costean: 10N 283E
Offset 2S

Fibre Log: FL009 Logged W to E

←PAN→ ←10M→ ←4M→ ←2M→

FROM	To	Rec	Code	1/32	1/16	2/16	3/16	4/16	5/16	6/16	7/16			Sum 1/16	Vein Angle	Val o/o	
0	5		4	9	16	11	2	3						60½		6.0	
	10		1			BARREN											
	15		3	11	31	6	2	0	1					59½		5.9	
0	15		TOT	20	47	17	4	3	1								
			1/16	10	47	34	12	12	5					120		4.0	15'
15	75		1			BARREN								0		0	
75	80		½2	44	28	1								52		5.2	
	85		2	7	26	6	0	1						45½		4.5	
	90		1	28	13									27		2.7	
75	90		TOT	79	67	7	0	1									
			1/16	39½	67	14	0	4						124½		4.1	15'

93' mark is opposite peg AF 79/80

095

823095

Location NODDY CREEK 1971

VISUAL DOLLAR VALUE

Hole: Sample: Footage: 15', 0'-15'

Costean: 10N West Zone Fibre Log: FL009

	1/32	1/16	2/16	3/16	4/16	5/16	6/16	7/16	+½	Total
Visual Fibre		57	17	4	3	1				
1/16s		57	34	12	12	5				120
		Pan	10M			4M			2M	

Uncorrected Visual Percentage (fibre log sheet) = 4.0 %

Assuming vein angle = 45° then:

Corrected Visual Percentage = $\frac{\text{Total 1/16s x 0.737}}{\text{Footage}}$ = 5.9 %

Q.S.T.

	1/16s	Ounces		Evaluation Points
Pan =	57	7.6	X 1	= 8
10 Mesh =	46	6.14	X 10	= 61
4 Mesh =	17	2.26	X 40	= 90
2 Mesh =			X 100	=
	120	16.00		159

From graph relating evaluation points and price:- 1971 Prices

Value/short ton fibre = C$ 200.00

Therefore value/short ton rock = C$ 11.80

Value milled = C$

Date June 1971

096

823096

Location NODDY CREEK 1971

VISUAL DOLLAR VALUE

Hole: Sample: Footage: 15', 75'-90'

Costean: 10N West Zone Fibre Log: FL009

	1/32	1/16	2/16	3/16	4/16	5/16	6/16	7/16	+½	Total
Visual Fibre		106	7	0	1					
1/16s		106	14	0	4					124
		Pan	10M		4M				2M	

Uncorrected Visual Percentage (fibre log sheet) = 4.1 %

Assuming vein angle = 45° then:

Corrected Visual Percentage = $\frac{\text{Total 1/16s x 0.737}}{\text{Footage}}$ = 6.1 %

Q.S.T.

	1/16s	Ounces		Evaluation Points
Pan =	106	13.69	X 1	= 14
10 Mesh =	14	1.81	X 10	= 18
4 Mesh =	4	0.52	X 40	= 21
2 Mesh =			X 100	=
	124	16.02		53

From graph relating evaluation points and price:- 1971 Prices

Value/short ton fibre = C$ 71.00

Therefore value/short ton rock = C$ 4.33

Value milled = C$

Date June 1971

097

823097

NODDY CREEK 1971

FIBRE LOG SHEET

Hole: Interval: 0' - 80' Footage: 80'

Costean: 15N 480E Fibre Log: FL014 Logged W to E

←PAN→ ←10M→ ←4M→ ←2M→

FROM	To	REC	Code	1/32	1/16	2/16	3/16	4/16	5/16	6/16	7/16			Sum 1/16	Vein Angle	Val o/o	
0	5		4	7	2	1	1	0	1	1		1@7/8		35½		3.5	
	10		4	2	12	3	6	1	1		sf @	1'		46		4.6	
	15		2	1	1	0	1	1						8½		0.8	
	20		1			BARREN								0		0	
	25		1			BARREN								0		0	
	30		4	2	4	2	1	1	0	0	0	1@¾		28		2.8	
	35		3	6	11	2	2				sf @	4'		24		2.4	
	40		2	8	7	3					sf @	3.5'		17		1.7	
	45		2	1	9	3	0	1			sf @	0'		19½		1.9	
	50		2	0	0	3	0	1			sf @	4'		10		1.0	
	55		1			BARREN								0		0	
	60		1			BARREN								0		0	
	65		1	0	2			Sf @ 1.5', 2.5', 3.5'						2		0.2	
	70		2	8	5	1	1	1	two inch sf @ 4'					18		1.8	
	75		3	10	8	5	3		sf @ 2.5'					32		3.2	
	80		2	56	48	7	1		sf @ 0' - 3'					93		9.3	
0	80		TOT	101	109	30	16	6	2	1							
			1/16	50½	109	60	48	24	10	6		28		333½		2.1	80'

R. J. Close

823098

098

Location NODDY CREEK 1971

VISUAL DOLLAR VALUE

Hole: Sample: Footage: 80', 0'-80'

Costean: 15N Fibre Log: FL014

	1/32	1/16	2/16	3/16	4/16	5/16	6/16	7/16	+½	Total
Visual Fibre		159	30	16	6	2	1	0		
1/16s		159	60	48	24	10	6	0	26	333
		Pan	10M			4M			2M	

Uncorrected Visual Percentage (fibre log sheet) = 2.1 %

Assuming vein angle = 45° then:

Corrected Visual Percentage = $\frac{\text{Total 1/16s x 0.737}}{\text{Footage}}$ = 3.07%

Q.S.T.

	1/16s	Ounces	Evaluation Points
Pan =	159	7.65 X 1	= 8
10 Mesh =	108	5.18 X 10	= 52
4 Mesh =	40	1.92 X 40	= 77
2 Mesh =	26	1.25 X 100	= 125
	333	16.00	262

From graph relating evaluation points and price:- 1971 Prices

Value/short ton fibre = C$ 245.00

Therefore value/short ton rock = C$ 7.51

Value milled = C$

Date June 1971

099

FIBRE LOG SHEET

823099

Hole: Interval: 0' - 35' Footage: 35'

Costean: 20N 392E
Offset 3S Fibre Log: FL003 Logged W to E

←PAN→ ←10M→ ←4M→ ←2M→

FROM	To	REC	Code	1/32	1/16	2/16	3/16	4/16	5/16	6/16	7/16			Sum 1/16	Vein Angle	Val o/o	
0	5		2	2	11	3	0	1						22		2.2	
	10		1	0	2				Slip fibre present					2		0.2	
	15		1	0	4	1								6		0.6	
	20		2	0	10	2	1							17		1.7	
	25		1	0	3									3		0.3	
	30		1	0	Sheared Serpentinite									0		0	
	35		3	0	4	4	1	0	1	dyke @ 32'				20		2.0	
			TOT	2	34	10	2	1	1								
			1/16	1	34	20	6	4	5					70		1.0	35'

B. Butt

100

823100

Location NODDY CREEK 1971

VISUAL DOLLAR VALUE

Hole: Sample: Footage: 35', 0'-35'

Costean: 20N West Fibre Log: FL003

	1/32	1/16	2/16	3/16	4/16	5/16	6/16	7/16	+½	Total
Visual Fibre		35	10	2	1	1				
1/16s		35	20	6	4	5				70
		Pan	10M			4M			2M	

Uncorrected Visual Percentage (fibre log sheet) = 1.0 %

Assuming vein angle = 45° then:

Corrected Visual Percentage = $\frac{\text{Total 1/16s x 0.737}}{\text{Footage}}$ = 1.47 %

Q.S.T.

	1/16s	Ounces			Evaluation Points
Pan =	35	8.0	X	1	= 8
10 Mesh =	26	5.95	X	10	= 59
4 Mesh =	9	2.06	X	40	= 82
2 Mesh =			X	100	=
	70	16.01			149

From graph relating evaluation points and price:- 1971 Prices

Value/short ton fibre = C$ 192.00

Therefore value/short ton rock = C$ 2.82

Value milled = C$

Date June 1971

101

823101

NODDY CREEK 1971

FIBRE LOG SHEET

Hole: Interval: 0' - 35' Footage: 35'

Costean: 20N 381E
Offset 29S

Fibre Log: FL002 Logged W to E

←PAN→ ←10M→ ←4M→ ←2M→

FROM	To	REC	Code	1/32	1/16	2/16	3/16	4/16	5/16	6/16	7/16	Sum 1/16	Vein Angle	Val o/o	
0	5		2	31	14	3		sf	1.3	2.5	4.7	35½		3.5	
	10		1	Sheared								0		0	
	15		5	17	12			sf	0.4	2.3	4.7	20½		2.0	
	20		2	49	43	3		sf	0.5	2.5	3.6	73½		7.3	
	25		2	40	20	6		sf	0.9	1.9	4.0	52		5.2	
	30		2	4	38	6		sf	1.0	1.7	3.4 4.4 5.0	52		5.2	
	35		1	Sheared				sf	0.0	1.4	2.2 3.3	0		0	
0	30		TOT	141	127	18									
			1/16	70½	127	36						233½		3.9	30'

J. Langlands

R. Close

102

823102

Location NODDY CREEK 1971

VISUAL DOLLAR VALUE

Hole: Sample: Footage: 30', 0'-30'

Costean: 20N Fibre Log: FL002

	1/32	1/16	2/16	3/16	4/16	5/16	6/16	7/16	+½	Total
Visual Fibre		197	18							
1/16s		197	36							233
		Pan	10M			4M			2M	

Uncorrected Visual Percentage (fibre log sheet) = 3.9 %

Assuming vein angle = 45° then:

Corrected Visual Percentage = $\frac{\text{Total 1/16s x 0.737}}{\text{Footage}}$ = 5.72 %

Q.S.T.

	1/16s	Ounces		Evaluation Points
Pan =	197	13.52	X 1	= 14
10 Mesh =	36	2.48	X 10	= 25
4 Mesh =			X 40	=
2 Mesh =			X 100	=
	233	16.00		39

From graph relating evaluation points and price:- 1971 Prices

Value/short ton fibre = C$ 60.00

Therefore value/short ton rock = C$ 3.43

Value milled = C$

Date June 1971

823103

103

NODDY CREEK 1971

FIBRE LOG SHEET

Hole: Interval: 0' - 25' Footage: 25'

Costean: 20N 614E
Offset 2N

Fibre Log: FL001 Logged W to E

←PAN→ ←10M→ ←4M→ ←2M→

FROM	To	REC	Code	1/32	1/16	2/16	3/16	4/16	5/16	6/16	7/16			Sum 1/16	Vein Angle	Vol %	
0	5		2	16	22	6			sf 6	veins				42		4.2	
	10		3	15	6	7	3	1	sf 2	veins				40½		4.0	
	15		3	8	8	11	3		sf 5	veins				43		4.3	
	20		3	18	9	4	2		sf 4	veins				32		3.2	
	25		2	10	5	2			sf in 3"	shear				14		1.4	
0	25		TOT	67	50	30	8	1									
			1/16	33½	50	60	24	4						171½		3.4	25'

J. Langlands
B. Flood
B. Curtley

104

823104

Location NODDY CREEK 1971

VISUAL DOLLAR VALUE

Hole: Sample: Footage: 25', 0'-25'

Costean: 20N Fibre Log: FL001

	1/32	1/16	2/16	3/16	4/16	5/16	6/16	7/16	+½	Total
Visual Fibre		83	30	8	1					
1/16s		83	60	24	4					171
		Pan	10M			4M			2M	

Uncorrected Visual Percentage (fibre log sheet) = 3.4 %

Assuming vein angle = 45° then:

Corrected Visual Percentage = $\frac{\text{Total 1/16s x 0.737}}{\text{Footage}}$ = 5.04 %

Q.S.T.

	1/16s	Ounces		Evaluation Points
Pan =	83	7.76 X	1	= 8
10 Mesh =	84	7.86 X	10	= 79
4 Mesh =	4	0.37 X	40	= 15
2 Mesh =		X	100	=
	171	15.99		102

From graph relating evaluation points and price:- 1971 Prices

Value/short ton fibre = C$ 130.00

Therefore value/short ton rock = C$ 6.51

Value milled = C$

Date June 1971

FIBRE LOG SHEET

Hole: Interval: 0' - 50' Footage: 50'

Costean: 25N 250E Fibre Log: FL017 Logged W to E

←PAN→ ←10M→ ←4M→ ←2M→

FROM	To	Rec	Code	1/32	1/16	2/16	3/16	4/16	5/16	6/16	7/16			Sum 1/16	Vein Angle	Val o/o	
0	5		4	6	22	17	11	3	1	1	2			129		12.9	
	10		3	5	2	3	1	2						21½		2.1	
	15		3	28	10	4	1	1						39		3.9	
	20		3	0	11	4	2	0	1	One foot covered				30		3.0	
	25		1		Barren - pyroxenite									0		0	
	30		2	3	0	0	1	1		One foot covered				8½		0.8	
	35		3	9	15	8	4							47½		4.7	
	40		4	9	1	2	1	0	0	0	1	1@½	1@ 10/16	45½		4.5	
	45		2	7	9	4								20⅛		2.0	
	50		3	3	2	1	3							14½		1.4	
0	50		TOT	70	72	43	24	7	2	1	3						
			1/16	35	72	86	72	28	10	6	21	8	18	356		3.56	50'

B. Cuffley

106

823106

Location NODDY CREEK 1971

VISUAL DOLLAR VALUE

Hole: Sample: Footage: 50', 0'-50'

Costean: 25N Fibre Log: FL017

	1/32	1/16	2/16	3/16	4/16	5/16	6/16	7/16	+½	Total
Visual Fibre		107	43	24	7	2	1	3		
1/16s		107	86	72	28	10	6	21	26	
		Pan		10M			4M		2M	

Uncorrected Visual Percentage (fibre log sheet) = 3.56 %

Assuming vein angle = 45° then:

Corrected Visual Percentage = $\frac{\text{Total 1/16s x 0.737}}{\text{Footage}}$ = 5.25 %

Q.S.T.

	1/16s	Ounces		Evaluation Points
Pan =	107	4.8 X 1	=	5
10 Mesh =	158	7.1 X 10	=	71
4 Mesh =	65	2.92 X 40	=	117
2 Mesh =	26	1.17 X 100	=	117
	356	15.99		310

From graph relating evaluation points and price:- 1971 Prices

Value/short ton fibre = C$ 256.00

Therefore value/short ton rock = C$ 13.45

Value milled = C$

Date June 1971

107

FIBRE LOG SHEET

823107

Hole: Interval: 0' - 105' Footage: 105'

Costean: 25N 245E
Offset 87N Fibre Log: FL016 Logged W to E

←PAN→ ←10M→ ←4M→ ←2M→

FROM	To	Rec	Code	1/32	1/16	2/16	3/16	4/16	5/16	6/16	7/16			Sum 1/16	Vein Angle	Val %	
0	5		1	5	5									7½		0.7	
	10		1	8	7									11		1.1	
	15		1	Barren										0		0	
	20		1	Barren				Sulphides						0		0	
	25		1	Barren										0		0	
	30		3	53	16	6	3							63½		6.3	
	35		2	43	10	2		Sulphides						35½		3.5	
	40		1	Barren				Sulphides						0		0	
	45		3	54	16	1	2							51		5.1	
	50		5	37	16									34½		3.4	
25	50		TOT	187	58	9	5										
			1/16	93½	58	18	15							184½		3.7	25'
50	55		1	Barren										0			
	60		1	Barren										0			
	65		1	Barren										0			
	70		1	9	2									6½		0.6	
	75		1	4										2		0.2	
	80		1	Barren										0		0	
	85		1	9	2									6½		0.6	
	90		1	3										1½		0.1	
	95		2	10	2	2								11		1.1	
	100		1	0				s.f.						0		0	
	105		1	0				s.f.						0		0	
			TOT	235	76	11	5										
			1/16	117½	76	22	15							230½		1.1	105'

108

823108

Location NODDY CREEK 1971

VISUAL DOLLAR VALUE

Hole: Sample: Footage: 105', 0'-105'

Costean: 25N Fibre Log: FL016

	1/32	1/16	2/16	3/16	4/16	5/16	6/16	7/16	+½	Total
Visual Fibre		193	11	5						
1/16s		193	22	15						230
		Pan	10M		4M				2M	

Uncorrected Visual Percentage (fibre log sheet) = 1.1 %

Assuming vein angle = 45° then:

Corrected Visual Percentage = $\frac{\text{Total 1/16s x 0.737}}{\text{Footage}}$ = 1.69 %

Q.S.T.

	1/16s	Ounces		Evaluation Points
Pan =	193	13.8	X 1	= 14
10 Mesh =	37	2.2	X 10	= 22
4 Mesh =			X 40	=
2 Mesh =			X 100	=
	230	16.0		36

From graph relating evaluation points and price:- 1971 Prices

Value/short ton fibre = C$ 59.00

Therefore value/short ton rock = C$ 1.00

Value milled = C$

Date June 1971

109

823109

NODDY CREEK 1971

FIBRE LOG SHEET

Hole: Interval: 0' - 80' Footage: 80'

Costean: 30N 624E
Offset 20S

Fibre Log: FL008 Logged W to E

←PAN→ ←10M→ ←4M→ ←2M→

FROM	To	Rec	Code	1/32	1/16	2/16	3/16	4/16	5/16	6/16	7/16			Sum 1/16	Vein Angle	Val %	
0	5		1	14	4									11		1.1	
	10		½2	5	4	1		One foot of clay						8½		0.8	
	15		1			Badly Weathered								-		-	
	20		2	0	2	2	1							9		0.9	
	25		2	1	2	0	0	1						6½		0.6	
0	25		TOT	20	12	3	1	1									
	35		1/16	10	12	6	3	4						35		0.7	25'
25	30		1		Barren - Sheared									0		0	
	35		1		"		"							0		0	
	40		1		"		"							0		0	
	45		1		"		"							0		0	
	50		1		"		"							0		0	
	55		1		"		"							0		0	
	60		1		"		"							0		0	
	65		1		"		"							0		0	
	70		1		About 1% good slip fibre									0		0	
	75		1	14	3									10		1.0	
	80		1	8		Some good slip fibre								4		0.4	
70	80		TOT	22	3												
			1/16	11	3									14		0.7	10'
										J. Langlands							

110

823110

Location NODDY CREEK 1971

VISUAL DOLLAR VALUE

Hole: Sample: Footage: 25', 0'-25'

Costean: 30N East Fibre Log: FL008

	1/32	1/16	2/16	3/16	4/16	5/16	6/16	7/16	+½	Total
Visual Fibre		22	3	1	1					
1/16s		22	6	3	4					35
		Pan	10M		4M				2M	

Uncorrected Visual Percentage (fibre log sheet) = 0.7 %

Assuming vein angle = 45° then:

Corrected Visual Percentage = $\frac{\text{Total 1/16s x 0.737}}{\text{Footage}}$ = 1.03 %

Q.S.T.

	1/16s	Ounces		Evaluation Points
Pan =	22	10.1	X 1	= 10
10 Mesh =	9	4.1	X 10	= 41
4 Mesh =	4	1.8	X 40	= 72
2 Mesh =			X 100	=
	35	16.0		123

From graph relating evaluation points and price:- 1971 Prices

Value/short ton fibre = C$ 155.00

Therefore value/short ton rock = C$ 1.60

Value milled = C$

Date June 1971

111

823111
NODDY CREEK 1971

FIBRE LOG SHEET

Hole: Interval: 0' - 80' Footage: 80'

Costean: 30N 218E Fibre Log: FL004 Logged W to E

←PAN→ ←10M→ ←4M→ ←2M→

FROM	To	Rec	Code	1/32	1/16	2/16	3/16	4/16	5/16	6/16	7/16			Sum 1/16	Vein Angle	Vol %
0	5		2	0	5	4								13		1.3
	10		3	0	9	5	2							26		2.6
	15		3	0	9	10	0	2						37		3.7
	20		4	0	15	6	5	1	2	1				62		6.2
	25		4	0	7	4	2	1	1	s.f. @ 4.5'				30		3.0
	30		3	0	4	2	1	2						19		1.9
	35		1	0	2									2		0.2
	40		1		Barren									0		0
	45		2	0	5	2								9		0.9
	50		4	0	13	7	2	2						41		4.1
	55		4	0	10	6	0	1	2					36		3.6
	60		2	0	9	3				s.f. @ 4.7'				15		1.5
	65		4	0	4	1	1	1	2		veins @ 1/32			23		2.3
	70		4	8	11	8	5	0	2	1				62		6.2
	75		3	8	6	3	3	1						29		2.9
	80		½2	4	9	0	1			s.f. @ 2.5'				12		1.2
			TOT	20	118	61	22	11	9	2						
			1/16	10	118	122	66	44	45	12				417		2.6
80	160		NEXT PAGE													

112

NODDY CREEK 1971 823112

FIBRE LOG SHEET

Hole: Interval: 80' - 160' Footage: 80'

Costean: 30N Fibre Log: FL004 continued

←PAN→ ←10M→ ←4M→ ←2M→

FROM	To	REC	Code	1/32	1/16	2/16	3/16	4/16	5/16	6/16	7/16			Sum 1/16	Vein Angle	Vol o/o	
80	85		1		Sheared serpentinite ō s.f.												
	90		1														
	95		1														
	100		1														
	105		1														
	110		1		Less sheared ō s.f.												
	115		1	2	1 Sheared serpentinite ō s.f.									2		0.2	
	120		½2	2	1	2								6		0.6	
110	120		TOT	4	2	2											
			1/16	2	2	4								8		0.4	10'
120	145				Sheared serp. ō s.f.									-		-	
145	150		2	16	8	2		Vns // log line				s.f.		30		3.0	
	155		3	4	12	9	2	Vns // log line				s.f.		38		3.8	
	160		2	2	6	5								17		1.7	
145	160		TOT	22	36	16	2										
			1/16	11	36	32	6							85		2.8	15'

B. Butt

113

823113

Location NODDY CREEK 1971

VISUAL DOLLAR VALUE

Hole: Sample: Footage: 80', 0'-80'

Costean: 30N West Fibre Log: FL004

	1/32	1/16	2/16	3/16	4/16	5/16	6/16	7/16	+½	Total
Visual Fibre		128	61	22	11	9	2			
1/16s		128	122	66	44	45	12			417
		Pan	10M			4M			2M	

Uncorrected Visual Percentage (fibre log sheet) = 2.6 %

Assuming vein angle = 45° then:

Corrected Visual Percentage = $\frac{\text{Total 1/16s x 0.737}}{\text{Footage}}$ = 3.84 %

Q.S.T.

	1/16s	Ounces		Evaluation Points
Pan =	128	4.9	X 1	= 5
10 Mesh =	188	7.22	X 10	= 72
4 Mesh =	101	3.86	X 40	= 154
2 Mesh =			X 100	=
	417	15.98		231

From graph relating evaluation points and price:- 1971 Prices

Value/short ton fibre = C$ 232.00

Therefore value/short ton rock = C$ 8.94

Value milled = C$

Date June 1971

114

823114

Location NODDY CREEK 1971

VISUAL DOLLAR VALUE

Hole: Sample: Footage: 15', 145'-160'

Costean: 30N West Fibre Log: FL004

	1/32	1/16	2/16	3/16	4/16	5/16	6/16	7/16	+½	Total
Visual Fibre		47	16	2						
1/16s		47	32	6						85
		Pan	10M		4M				2M	

Uncorrected Visual Percentage (fibre log sheet) = 2.8 %

Assuming vein angle = 45° then:

Corrected Visual Percentage = $\frac{\text{Total 1/16s x 0.737}}{\text{Footage}}$ = 4.17 %

Q.S.T.

	1/16s	Ounces		Evaluation Points
Pan =	47	8.86	X 1	= 9
10 Mesh =	38	7.16	X 10	= 72
4 Mesh =			X 40	=
2 Mesh =			X 100	=
	85	16.02		81

From graph relating evaluation points and price:- 1971 Prices

Value/short ton fibre = C$ 106.00

Therefore value/short ton rock = C$ 4.42

Value milled = C$

Date June 1971

115

823115

FIBRE LOG SHEET

NODDY CREEK 1971

Hole:

Interval: 0' - 75'

Footage: 75'

Costean: 35N 140E

Fibre Log: FL018 Logged W to E.

				←PAN→	←10M→	←4M→					←2M→					
FROM	To	Rec	Code	1/32	1/16	2/16	3/16	4/16	5/16	6/16	7/16			Sum 1/16	Vein Angle	Vol %	
0	5		1	1	0	1								2½		0.2	
	10		4	8	17	14	7	6	2					104		10.4	
	15		3	0	1	4	1	2						20		2.0	
	20		4	16	16	19	6	2	2	1	0	1@½		112		10.9	
	25		4	4	14	8	4	1	1	0	2			67		6.6	
	30		4	0	6	5	1	2	1					32		3.2	
	35		2	4	5	4	0	1						19		1.9	
	40		4	5	5	2	3	1	5					49½		5.0	
	45		3	4	10	2	2	0	0	1				28		2.2	
	50		4	2	6	0	2	1	1	0	0	1@	11/16	33		3.3	
	55		4	0	4	3	0	2	0	1	1	1@½	1@ 19/16	58		5.8	
	60		4	2	11	7	3	4	2	1				67		6.7	
	65		3	5	3	4	1	1	0	1				26½		2.3	
	70		4	25	19	7	0	1	1	1				60½		6.1	
	75		4	22	26	14	2	3						83		9.1	
0	75		TOT	98	143	94	32	27	15	6	3	2					
			1/16	49	143	188	96	108	75	36	21	16	30	762		5.1	75'
75	110		NEXT PAGE														

117

823116

Location NODDY CREEK 1971

VISUAL DOLLAR VALUE

Hole: Sample: Footage: 75', 0'-75'

Costean: 35N West Fibre Log: FL018

	1/32	1/16	2/16	3/16	4/16	5/16	6/16	7/16	+½	Total
Visual Fibre		192	94	32	27	15	6	3		
1/16s		192	188	96	108	75	36	21	36	762
		Pan	10M			4M			2M	

Uncorrected Visual Percentage (fibre log sheet) = 5.1 %

Assuming vein angle = 45° then:

Corrected Visual Percentage = $\frac{\text{Total 1/16s x 0.737}}{\text{Footage}}$ = 7.52%

Q.S.T.

	1/16s	Ounces	Evaluation Points
Pan =	192	4.0 X 1	= 4
10 Mesh =	284	5.94 X 10	= 59
4 Mesh =	236	4.93 X 40	= 197
2 Mesh =	54	1.13 X 100	= 113
	766	16.00	373

From graph relating evaluation points and price:- 1971 Prices

Value/short ton fibre = C$ 258.00

Therefore value/short ton rock = C$ 19.40

Value milled = C$

Date June 1971

116

823117

NODDY CREEK 1971

FIBRE LOG SHEET

Hole: Interval: 75' - 110' Footage: 35'

Costean: 35N Fibre Log: FL018 continued

←PAN→ ←10M→ ←4M→ ←2M→

FROM	To	REC	Code	1/32	1/16	2/16	3/16	4/16	5/16	6/16	7/16			Sum 1/16	Vein Angle	Vol o/o	
75	80		5	25	9	1								24		2.4	
	85		1	12	3									9		0.9	
	90		1	7	4									8		0.8	
	95		1	BARREN										0		0	
	100		1	3	1									3		0.3	
	105		1	2	1									2		0.2	
	110		1	5	3									6		0.6	
75	110		TOT	54	21	1											
			1/16	27	21	2								50		0.7	35'

B. Cuffley

R. Close

118

823118

Location NODDY CREEK 1971

VISUAL DOLLAR VALUE

Hole: Sample: Footage: 35', 75'-110'

Costean: 35N West Fibre Log: FL018

	1/32	1/16	2/16	3/16	4/16	5/16	6/16	7/16	+½	Total
Visual Fibre		48	1							
1/16s		48	2							50
		Pan	10M			4M			2M	

Uncorrected Visual Percentage (fibre log sheet) = 0.7 %

Assuming vein angle = 45° then:

Corrected Visual Percentage = $\frac{\text{Total 1/16s x 0.737}}{\text{Footage}}$ = 1.05 %

Q.S.T.

	1/16s	Ounces		Evaluation Points
Pan =	48	15.36	X 1	= 15
10 Mesh =	2	0.64	X 10	= 6
4 Mesh =			X 40	=
2 Mesh =			X 100	=
	50	16.00		21

From graph relating evaluation points and price:- 1971 Prices

Value/short ton fibre = C$ 54.00

Therefore value/short ton rock = C$ 0.58

Value milled = C$

Date June 1971

823119

J. Langlands
B. Cuffley

NODDY CREEK 1971

FIBRE LOG SHEET

119

Hole: Interval: 0' - 70' Footage: 70'

Costean: 40N 495E Fibre Log: FL007 Logged W to E

Offset 14N

←PAN→ ←10M→ ←4M→ ←2M→

FROM	To	Rec	Code	1/32	1/16	2/16	3/16	4/16	5/16	6/16	7/16			Sum 1/16	Vein Angle	Vol %	
0	5		1		Sheared 5 minor s.f.									0		0	
	10		1			"	"	"	"					0		0	
	15		1			"	"	"	"					0		0	
	20		1			"	"	"	"					0		0	
	25		1	2	1	Good slip fibre								2		0.2	
	30		1	9										4½		0.4	
	35		1		Barren									0		0	
	40		4	3	13	10	3	2	Two clay seams c asbestos					51½		5.1	
20	40		TOT	14	14	10	3	2									
			1/16	7	14	20	9	8						58		1.4	20'
40	45		1		Barren									0		0	
	50		1		1			Minor s.f.						1		0.1	
	55		1		Barren - Sheared									0		0	
	60		1			"		"						0		0	
	65		3	3	6	4	1							18½		1.8	
	70		1		Barren									0		0	
	75		1	0	2									2		0.2	
	80		1	2	0	1								3		0.3	
	85		1	2	3									4		0.4	
	90		3	3	10	4	0	1	1					28		2.8	
	95		3	4	8	3	1	0	0	0	1			26		2.6	
	100		3	3	9	2	3	1						27		2.7	
	105		2		2	3								8		0.8	
60	105		TOT	17	40	17	5	2	1	0	1						
			1/16	8½	40	34	15	8	5	0	7			117½		1.3	45'
	No outcrop beyond 105' because of steep slope																

120

823120

Location NODDY CREEK 1971

VISUAL DOLLAR VALUE

Hole: Sample: Footage: 20', 20'-40'

Costean: 40N East Fibre Log: FL007

	1/32	1/16	2/16	3/16	4/16	5/16	6/16	7/16	+½	Total
Visual Fibre		21	10	3	2					
1/16s		21	20	9	8					58
		Pan	10M		4M				2M	

Uncorrected Visual Percentage (fibre log sheet) = 1.4 %

Assuming vein angle = 45° then:

Corrected Visual Percentage = $\frac{\text{Total 1/16s x 0.737}}{\text{Footage}}$ = 2.13 %

Q.S.T.

	1/16s	Ounces		Evaluation Points
Pan =	21	5.8	X 1	= 6
10 Mesh =	29	8.0	X 10	= 80
4 Mesh =	8	2.2	X 40	= 88
2 Mesh =			X 100	=
	58	16.0		174

From graph relating evaluation points and price:- 1971 Prices

Value/short ton fibre = C$ 209.00

Therefore value/short ton rock = C$ 4.45

Value milled = C$

Date June 1971

121

823121

Location NODDY CREEK 1971

VISUAL DOLLAR VALUE

Hole: Sample: Footage: 45', 60'-105'

Costean: 40N East Fibre Log: FL007

	1/32	1/16	2/16	3/16	4/16	5/16	6/16	7/16	+½	Total
Visual Fibre		48	17	5	2	1		1		
1/16s		48	34	15	8	5		7		117
		Pan	10M			4M			2M	

Uncorrected Visual Percentage (fibre log sheet) = 1.3 %

Assuming vein angle = 45° then:

Corrected Visual Percentage = $\frac{\text{Total 1/16s x 0.737}}{\text{Footage}}$ = 1.91 %

Q.S.T.

	1/16s	Ounces		Evaluation Points
Pan =	48	6.57 X	1	= 7
10 Mesh =	49	6.70 X	10	= 67
4 Mesh =	20	2.74 X	40	= 110
2 Mesh =		X	100	=
	117	16.01		184

From graph relating evaluation points and price:- 1971 Prices

Value/short ton fibre = C$ 214.00

Therefore value/short ton rock = C$ 4.09

Value milled = C$

Date June 1971

823122

122

FIBRE LOG SHEET

Hole: Interval: 0' - 50' Footage: 50'

Costean: 40N 234E
Offset 10S

Fibre Log: FL006 Logged W to E

←PAN→ ←10M→ ←4M→ ←2M→

FROM	To	Rec	Code	1/32	1/16	2/16	3/16	4/16	5/16	6/16	7/16			Sum 1/16	Vein Angle	Val o/o	
0	5		1			Sheared - Barren								0		0	
	10		4	5	38	21	7	0	0	0	0	1 @ 5/8		113½		11.3	
	15		1			1			Sheared					2		0.2	
	20		1			Sheared - Barren								0		0	
	25		1			Sheared - Barren								0		0	
	30		1			Sheared - Barren								0		0	
	35		5	22	3									14		1.4	
	40		2	4	2	3			Slip Fibre					10		1.0	
	45		2	8	4	2								12		1.2	
	50					Sheared - Barren											
5	45		TOT	39	47	27	7	0	0	0	0						
			1/16	19½	47	54	21	0	0	0	0	10		151½		1.9	40'

J. Langlands

B. Cuffley

123

823123

Location NODDY CREEK 1971

VISUAL DOLLAR VALUE

Hole: Sample: Footage: 40', 5'-45'

Costean: 40N West Fibre Log: FL006

	1/32	1/16	2/16	3/16	4/16	5/16	6/16	7/16	+½	Total
Visual Fibre		66	27	7	0	0	0	0		
1/16s		66	54	21	0	0	0	0	10	151
		Pan		10M			4M			2M

Uncorrected Visual Percentage (fibre log sheet) = 1.9 %

Assuming vein angle = 45° then:

Corrected Visual Percentage = $\frac{\text{Total 1/16s x 0.737}}{\text{Footage}}$ = 2.47%

Q.S.T.

	1/16s	Ounces			Evaluation Points
Pan =	66	7.0	X	1	= 7
10 Mesh =	75	7.95	X	10	= 79
4 Mesh =	10	1.06	X	40	= 40
2 Mesh =			X	100	=
	151	16.01			126

From graph relating evaluation points and price:- 1971 Prices

Value/short ton fibre = C$ 160.00

Therefore value/short ton rock = C$ 3.96

Value milled = C$

Date June 1971

823124
NODDY CREEK 1971

124

FIBRE LOG SHEET

Hole: Interval: 0' - 65' Footage: 65'

Costean: 40N 229E
Offset 6N

Fibre Log: FL005 Logged W to E

←PAN→ ←10M→ ←4M→ ←2M→

FROM	To	Rec	Code	1/32	1/16	2/16	3/16	4/16	5/16	6/16	7/16			Sum 1/16	Vein Angle	Val o/o	
0	5		1	0	1	Sheared c̄			s.f.					1		0.1	
	10		3	4	14	4						1@½		32		3.2	
	15		4	4	2	7	2	2	1	0	0	2@½		53		5.3	
	20		2	3	3	4			c̄ s.f.					12½		1.2	
	25		3	11	13	5	3	1	0	1	0	1 @ 11/16		58½		5.8	
	30		2	11	17	6	1							37½		3.7	
	35		2	11	11	2								20½		2.0	
	40		3	4	17	5	3	1						42		4.2	
	45		4	5	11	3	1	0	1	1	c̄ s.f.			33½		3.3	
	50		1		Sheared - Barren									0		0	
	55		3	11	4	9	1	1		Sheared 50'-52'				34½		3.4	
	60		4	5	15	6	0	1	1	1				44½		4.4	
	65		1		Sheared - Barren									0		0	
			TOT	69	108	51	11	6	3	3	0	3	1				
			d/16	34½	108	102	33	24	15	18	0	24	11	369½		3.1	60'

J. Langlands
B. Cuffley

125

823125

Location NODDY CREEK 1971

VISUAL DOLLAR VALUE

Hole: Sample: Footage: 60', 0'-60'

Costean: 40N West Fibre Log: FL005

	1/32	1/16	2/16	3/16	4/16	5/16	6/16	7/16	+½	Total
Visual Fibre		142	51	11	6	3	3			
1/16s		142	102	33	24	15	18			369
		Pan	10M			4M			2M	

Uncorrected Visual Percentage (fibre log sheet) = 3.1 %

Assuming vein angle = 45° then:

Corrected Visual Percentage = $\frac{\text{Total 1/16s x 0.737}}{\text{Footage}}$ = 4.53 %

Q.S.T.

	1/16s	Ounces		Evaluation Points
Pan =	142	6.15	X 1	= 6
10 Mesh =	135	5.85	X 10	= 59
4 Mesh =	57	2.47	X 40	= 99
2 Mesh =	35	1.52	X 100	= 152
	369	15.99		316

From graph relating evaluation points and price:- 1971 Prices

Value/short ton fibre = C$ 256.00

Therefore value/short ton rock = C$ 11.61

Value milled = C$

Date June 1971

823126

NODDY CREEK 1971

126

FIBRE LOG SHEET

Hole: Interval: 0' - 45' Footage: 45'

Costean: 45N 1104E Fibre Log: FL019 Logged W to E
Offset 10N

←PAN→ ←10M→ ←4M→ ←2M→

FROM	To	REC	Code	1/32	1/16	2/16	3/16	4/16	5/16	6/16	7/16			Sum 1/16	Vein Angle	Val g/t	
0	5		2	6	7	2								14		1.4	
	10		1		Barren			Minor s.f.						0			
	15		2	87	61	3								110½		11.0	
	20		4	11	14	6	1	1	0	0	1			45½		4.5	
	25		1		Barren									0		0	
	30		1			"								0		0	
	35		1			"		Minor s.f.						0		0	
	40		5	24	3									15		1.5	
	45		2	54	10	2								41		4.1	
			TOT	182	95	13	1	1	0	0	1						
			1/16	91½	95	26	3	4	0	0	7			226		2.5	45'

R. Close

B. Cuffley

823127

127

Location NODDY CREEK 1971

VISUAL DOLLAR VALUE

Hole: Sample: Footage: 45', 0'-45'

Costean: 45N East Fibre Log: FL019

	1/32	1/16	2/16	3/16	4/16	5/16	6/16	7/16	+½	Total
Visual Fibre		186	13	1	1	0	0	1		
1/16s		186	26	3	4	0	0	7		226
		Pan	10M			4M			2M	

Uncorrected Visual Percentage (fibre log sheet) = 2.5 %

Assuming vein angle = 45° then:

Corrected Visual Percentage = $\frac{\text{Total 1/16s x 0.737}}{\text{Footage}}$ = 3.7 %

Q.S.T.

	1/16s	Ounces		Evaluation Points
Pan =	186	13.20	X 1	= 13
10 Mesh =	29	2.05	X 10	= 20
4 Mesh =	11	0.78	X 40	= 31
2 Mesh =			X 100	=
	226	16.03		64

From graph relating evaluation points and price:- 1971 Prices

Value/short ton fibre = C$ 86.00

Therefore value/short ton rock = C$ 3.18

Value milled = C$

Date June 1971

128

NODDY CREEK 1971 823128

FIBRE LOG SHEET

Hole: Interval: 0' - 65' Footage: 65'

Costean: 50N 594E Fibre Log: FL015 Logged W to E

←PAN→ ←10M→ ←4M→ ←2M→

FROM	To	REC	Code	1/32	1/16	2/16	3/16	4/16	5/16	6/16	7/16			Sum 1/16	Vein Angle	Val o/o	
0	5		5	32	19									35		3.5	
	10		½2	18	14	1								25		2.5	
	15		½2	29	13	1								29½		2.9	
	20		1	6	4									7		0.7	
	25		1	2										1		0.1	
	30		1	3	6									7½		0.7	
	35		2	24	12	1	2							32		3.2	
	40		2	4	7	1	1							14		1.4	
	45		2	11	11	2	0	1						24½		2.4	
	50		4	54	25	4	3	0	2	1				85		8.5	
	55		4	6	17	8	4	2	0	0	0	1@ ½		64		6.4	
	60		2	3	3	2	1							11½		1.1	
	65		5	33	2									18½		1.8	
			TOT	225	133	20	11	3	2	1	0	1					
			1/16	112½	133	40	33	12	10	6	0	8		354½		2.7	65'

0' - 65' on N wall of costean

65 135 NEXT PAGE

823129

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Location NODDY CREEK 1971

VISUAL DOLLAR VALUE

Hole: Sample: Footage: 65', 0'-65'

Costean: 50N West Fibre Log: FL015

	1/32	1/16	2/16	3/16	4/16	5/16	6/16	7/16	+½	Total
Visual Fibre		245	20	11	3	2	1	0		
1/16s		245	40	33	12	10	6	0	8	354
		Pan	10M			4M			2M	

Uncorrected Visual Percentage (fibre log sheet) = 2.7 %

Assuming vein angle = 45° then:

Corrected Visual Percentage = $\frac{\text{Total 1/16s x 0.737}}{\text{Footage}}$ = 4.02 %

Q.S.T.

	1/16s	Ounces		Evaluation Points
Pan =	245	11.1	X 1	= 11
10 Mesh =	73	3.3	X 10	= 33
4 Mesh =	28	1.27	X 40	= 51
2 Mesh =	8	0.36	X 100	= 56
	354	16.03		131

From graph relating evaluation points and price:- 1971 Prices

Value/short ton fibre = C$ 167.00

Therefore value/short ton rock = C$ 6.71

Value milled = C$

Date June 1971

129

FIBRE LOG SHEET

Hole: Interval: 65' - 135' Footage: 70'

Costean: 50N Fibre Log: FL015 continued

←PAN→ ←10M→ ←4M→ ←2M→

FROM	To	REC	Code	1/32	1/16	2/16	3/16	4/16	5/16	6/16	7/16			Sum 1/16	Vein Angle	Val %	
65	70		1		Barren - Sheared									0		0	
	75		1			"		"						0		0	
	80		1			"		"						0		0	
	85		1			"		"						0		0	
	90		1			"		"		Minor s.f. & magnetite				0		0	
	95		1											0		0	
	100		5	55	9									36½		3.6	
	105		5	26	19	1								34		3.4	
	110		1			Barren - Sheared								0		0	
	115		3	34	38	8	8	0	1					100		10.0	
	120		2	35	31	4	1							59½		5.9	
	125		1			Barren - Sheared								0		0	
	130		5	47	13									36½		3.6	
	135		2	23	18	3								35½		3.5	
95	135		TOT	220	128	16	9	0	1								
			1/16	110	128	32	27	0	5					302		3.8	40'
										R. Close							
			65' - 135' on S side of costean														

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823131

Location NODDY CREEK 1971

VISUAL DOLLAR VALUE

Hole: Sample: Footage: 40', 95'-135'

Costean: 50N West Fibre Log: FL015

	1/32	1/16	2/16	3/16	4/16	5/16	6/16	7/16	+½	Total
Visual Fibre		238	16	9	0	1				
1/16s		238	32	27	0	5				302
		Pan	10M			4M			2M	

Uncorrected Visual Percentage (fibre log sheet) = 3.8 %

Assuming vein angle = 45° then:

Corrected Visual Percentage = $\frac{\text{Total 1/16s x 0.737}}{\text{Footage}}$ = 5.55 %

Q.S.T.

	1/16s	Ounces		Evaluation Points
Pan =	238	12.60	X 1	= 13
10 Mesh =	59	3.12	X 10	= 31
4 Mesh =	5	0.26	X 40	= 10
2 Mesh =			X 100	=
	302	15.98		54

From graph relating evaluation points and price:- 1971 Prices

Value/short ton fibre = C$ 72.00

Therefore value/short ton rock = C$ 4.00

Value milled = C$

Date June 1971

51N STREAM SECTIONS NODDY CREEK 1971 823132

132

FIBRE LOG SHEET

Hole: Interval: 0' - 10' Footage: 10'

Costean: 51N 275E Fibre Log: FL020 Logged W to E

←PAN→ ←10M→ ←4M→ ←2M→

FROM	To	Rec	Code	1/32	1/16	2/16	3/16	4/16	5/16	6/16	7/16	Sum 1/16	Vein Angle	Val %	
0	5		3	94	58	6	3	1				130		13.0	
	10		3	27	44	10	3					86½		8.6	
			TOT	121	102	16	6	1							
			1/16	60½	102	32	18	4				216½		10.8	10'

R. Close
B. Cuffley

823133

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Location NODDY CREEK 1971

VISUAL DOLLAR VALUE

Hole: Sample: Footage: 10', 0'-10'

Costean: 51N East Fibre Log: FL020

	1/32	1/16	2/16	3/16	4/16	5/16	6/16	7/16	+½	Total
Visual Fibre		162	16	6	1					
1/16s		162	32	18	4					216
		Pan	10M		4M				2M	

Uncorrected Visual Percentage (fibre log sheet) = 10.8 %

Assuming vein angle = 45° then:

Corrected Visual Percentage = $\frac{\text{Total 1/16s x 0.737}}{\text{Footage}}$ = 15.9 %

Q.S.T.

	1/16s	Ounces		Evaluation Points
Pan =	162	12.0	X 1	= 12
10 Mesh =	50	3.7	X 10	= 37
4 Mesh =	4	0.3	X 40	= 12
2 Mesh =			X 100	=
	216	16.0		61

From graph relating evaluation points and price:- 1971 Prices

Value/short ton fibre = C$ 81.00

Therefore value/short ton rock = C$ 12.90

Value milled = C$

Date June 1971

51N STREAM SECTION

NODDY CREEK 1991 823134

134

FIBRE LOG SHEET

Hole:

Interval: 0' - 40'

Footage: 40'

Costean: 51N 867E
Offset 5S

Fibre Log: FL021 Logged W to E

←PAN→ ←10M→ ←4M→ ←2M→

FROM	To	REC	Code	1/32	1/16	2/16	3/16	4/16	5/16	6/16	7/16			Sum 1/16	Vein Angle	Val o/o	
0	5		1	35	6									23½		2.3	
	10		4	25	9	1	1	1	1	0	1			42½		4.2	
	15		4	46	11	0	0	0	1	1	1			52		5.2	
	20		4	32	11	3	0	0	1	0	0	1 @ ½		50		5.0	
	25		4	12	16	7	8	5	0	0	1	1 @ ½	1 @ ½	107		10.7	
	30		4	8	12	7	0	0	2	1				46		4.6	
	35		3	8	7	4	1	2						30		3.0	
	40		3	15	10	2	2							27½		2.7	
0	40		TOT	181	82	24	12	8	5	2	3	1	2				
			1/16	90½	82	48	36	32	25	12	21	8	24	378½		4.7	40'

Close and Cuffley

Location NODDY CREEK 1971

VISUAL DOLLAR VALUE

Hole: Sample: Footage: 40', 0'-40'

Costean: 51N East Fibre Log: FL021

	1/32	1/16	2/16	3/16	4/16	5/16	6/16	7/16	+½	Total
Visual Fibre		172	24	12	8	5	2	3		
1/16s		172	48	36	32	25	12	21	32	378
		Pan	10M			4M			2M	

Uncorrected Visual Percentage (fibre log sheet) = 4.7 %

Assuming vein angle = 45° then:

Corrected Visual Percentage = $\frac{\text{Total 1/16s x 0.737}}{\text{Footage}}$ = 6.97 %

Q.S.T.

	1/16s	Ounces		Evaluation Points
Pan =	172	7.30 X	1	= 7
10 Mesh =	84	3.55 X	10	= 36
4 Mesh =	90	3.80 X	40	= 152
2 Mesh =	32	1.35 X	100	= 135
	378	16.00		330

From graph relating evaluation points and price:- 1971 Prices

Value/short ton fibre = C$ 258.00

Therefore value/short ton rock = C$ 17.95

Value milled = C$

Date June 1971

823136

NODDY CREEK 1971

136

FIBRE LOG SHEET

Hole: Interval: 0' - 15' Footage: 15'

Costean: 55N 192E Fibre Log: FL022 Logged W to E
Offset 31N

←PAN→ ←10M→ ←4M→ ←2M→

FROM	To	REC	Code	1/32	1/16	2/16	3/16	4/16	5/16	6/16	7/16			Sum 1/16	Vein Angle	Vol %	
0	5		5	120										60		6.0	
	10		2	75	50	4								95½		9.5	
	15		4	62	54	16	2	0	0	1	0		=	156		15.6	
			TOT	257	104	20	2	0	0	1	0						
			1/16	128½	104	40	6	0	0	6	0		27	311½		10.4	15'
10	15		One vein each at ½ 9/16 and 5/8 = 27 x 1/16														

Close and Cuffley

823137

137

Location NODDY CREEK 1971

VISUAL DOLLAR VALUE

Hole: Sample: Footage: 15', 0'-15'

Costean: 55N West Fibre Log: FL022

	1/32	1/16	2/16	3/16	4/16	5/16	6/16	7/16	+½	Total
Visual Fibre		232	20	2	0	0	1	0		
1/16s		232	40	6	0	0	6	0	27	311
		Pan	10M			4M			2M	

Uncorrected Visual Percentage (fibre log sheet) = 10.4 %

Assuming vein angle = 45° then:

Corrected Visual Percentage = $\frac{\text{Total 1/16s x 0.737}}{\text{Footage}}$ = 15.3 %

Q.S.T.

	1/16s	Ounces		Evaluation Points
Pan =	232	11.95	X 1	= 12
10 Mesh =	46	2.36	X 10	= 24
4 Mesh =	6	0.31	X 40	= 12
2 Mesh =	27	1.39	X 100	= 139
	311	16.01		187

From graph relating evaluation points and price:- 1971 Prices

Value/short ton fibre = C$ 215.00

Therefore value/short ton rock = C$ 32.90

Value milled = C$

Date June 1971

823138

NODDY CREEK 1971

138

FIBRE LOG SHEET

Hole: Interval: 0' - 20' Footage: 20'

Costean: 70N 701E
Offset 4N

Fibre Log: F1023 Logged W to E

←PAN→ ←10M→ ←4M→ ←2M→

FROM	To	Rec	Code	1/32	1/16	2/16	3/16	4/16	5/16	6/16	7/16			Sum 1/16	Vein Angle	Val o/o	
0	5		1	2										1		0.1	
	10		4	27	11	3	2	2	0	1				50		5.0	
	15		4	3	8	0	1	2	1	1	0	1	@ 3/4	43		4.3	
	20		4	19	6	2	1	0	1	0	0	1	@ 9/16	37		3.7	
			TOT	51	25	5	4	4	2	0	0						
			1/16	25½	25	10	12	16	10	0	0		21	131		3.3	20'

B. Cuffley

139

823139

Location NODDY CREEK 1971

VISUAL DOLLAR VALUE

Hole: Sample: Footage: 20', 0'-20'

Costean: 70N Fibre Log: FL023

	1/32	1/16	2/16	3/16	4/16	5/16	6/16	7/16	+½	Total
Visual Fibre		50	5	4	4	2	2	0		
1/16s		50	10	12	16	10	12	0	21	131
		Pan	10M		4M				2M	

Uncorrected Visual Percentage (fibre log sheet) = 3.3 %

Assuming vein angle = 45° then:

Corrected Visual Percentage = $\frac{\text{Total 1/16s x 0.737}}{\text{Footage}}$ = 4.8 %

Q.S.T.

	1/16s	Ounces		Evaluation Points
Pan =	50	6.11	X 1	= 6
10 Mesh =	22	2.68	X 10	= 27
4 Mesh =	38	4.65	X 40	= 186
2 Mesh =	21	2.56	X 100	= 256
	131	16.00		475

From graph relating evaluation points and price:- 1971 Prices

Value/short ton fibre = C$ 358.00

Therefore value/short ton rock = C$ 17.20

Value milled = C$

Date June 1971

823140

OLD N - S COSTEAN 2500' NE of Pad 2. NODDY CREEK 1971

140

FIBRE LOG SHEET

Hole: Interval: Footage: 1.8'

Costean: 2500' NE of Pad 2 Fibre Log: **Non outcrop boulder**

←PAN→ ←10M→ ←4M→ ←2M→

FROM	To	REC	Code	1/32	1/16	2/16	3/16	4/16	5/16	6/16	7/16			Sum 1/16	Vein Angle	Vol %	
Fibre log of		Tot.		24	26	10	2	2	0	1							
boulder	1.8'	1/16		12	26	20	6	8	0	6	=	78				22.5	1.8'

The fibre zone was not found in outcrop

J. Langlands

141

823141

E.L. 13/65 CAPE SORELL PENINSULA, S.W. TASMANIA

EXPLORATION FOR CHRYSOTILE ASBESTOS IN THE HIBBS BELT

NODDY CREEK

AND PAD 2 TO ASBESTOS POINT

1970/71

APPENDIX THREE

DRILL LOGS, CORE FIBRE LOGS AND VISUAL DOLLAR

VALUE SHEETS WITH RESULTS SUMMARY

DDH1 AND DHNC2 - DHNC9

TABLE 2

DRILLING SUMMARY

Hole	Specifications: Line	Easterly	Offset	R.L.	Bearing	Dip	Depth	Surface Target: Log	Int	%corr.	C$ per ton
DDH1	Base line 850'N		50'W	787.8'	311¼°	45°	299'				
DHNC2	30N	427E	5'N	707.2'	257¾°	45°	512'	FL004	80'	3.84%	$8.94
									15'	4.17%	$4.42
DHNC3	30N	400E	7.5'N	711.3'	081½°	45°	503.5'	FL008	25'	1.03%	$1.60
DHNC4	40N	48.5E		783.1'	086½°	45°	427.4'	FL005	60'	4.53%	$11.61
								FL006	40'	2.47%	$3.96
DHNC5	30N	32.5%		776'	079°	45°	544.5'	FL004	80'	3.84%	$8.94
									15'	4.17%	$4.42
								FOLLOW UP TO DHNC2			
DHNC6	40N	349E	1.5'S	723'	086°	45°	600'	FL007	20'	2.13%	$4.45
									45'	1.91%	$4.09
DHNC7	20N	149E	19'N	802.7'	108½°	45°	595'	FL002	30'	5.72%	$3.43
								FL003	35'	1.47%	$2.82
DHNC8	20N	452E		764.9'	108½°	43°	510'	FL001	25'	5.04%	$6.51
DHNC9	15S	733E	11.7S	788.9'	319°	45°	390'	FL013	20'	11.30%	$37.80
									10'	2.95%	$1.77

RESULTS OF VISUAL EVALUATION OF CROSS FIBRE

Hole	Interval From	To	Width	Sample	% Corr.	Evaluation Points	C$ Per Ton
DDH1	146'	151'	5'	NONE	3.2	NOT CALCULATED	NOT CALCULATED
DHNC2	20'	85'	65'	AF401	1.10	25	0.77
	205'	225'	20'	AF404	1.40	98	1.75
	305'	355'	50'	AF406	1.54	187	3.31
DHNC3	0'	55'	55'	AF409	4.40	112	6.25
DHNC4	115'	120'	5'	NONE	1.10	NOT CALCULATED	
	325'	330'	5' (fibre from 1')	NONE	2.10	NOT CALCULATED	
DHNC5	230'	255'	25'	AF419	2.50	22	1.35
	290'	325'	35'	AF421	2.88	84	3.17
	325'	360'	35'	AF422	4.76	86	5.34
	360'	395'	35'	AF423	1.43	41	0.89
DHNC6				BARREN			
DHNC7	125'	180'	55'	AF440	2.29	75	2.29
	515'	595'	80'	AF446	0.12	16	0.06
DHNC8	145'	215'	70'	AF449	0.37	130	0.66
DHNC9	110'	190'	80'	AF452	1.97	187	4.25

143

DRILLING PROGRESS REPORT MOODY CREEK S.W. TASMANIA Branch

Bore DDH 1 Report No. 823143

Location BASELINE 850'N OFFSET 50'W (1971 Survey)

Bearing 311½° TRUE Period APRIL/MAY 1968

Depression 45° Operator COLLINS AND TALBOT

R. L. Collar 787.8 Unit

Est. Total Depth Bit

Footage for Period 299' Barrel

From	To	Int.	Core Rec'd.	%	Core in Dip	Feet	Description
0	39'6"					0	Serpentinite: Massive dark green.
	41'0"	1'6"	1'6"	100			Abundant bastite (after pyroxene).
	43'0"	2'0"	1'10"	92		39'6"	Shearing common.
	46'0"	3'0"	2'10"	94		39'6"	Serpentinized Pyroxenite. Dark
	50'0"	4'0"	3'10"	96			green-black massive rock with
	53'0"	3'0"	3'0"	100			relics of pyroxene in serpnetinite.
	58'6"	5'6"	5'6"	100			Shear planes common occurring on
	65'6"	7'0"	7'0"	100			average every 3". Shear planes
	69'0"	3'0"	3'0"	100			are striated and contain brittle
	70'6"	1'6"	1'6"	100		50'0"	chrysotile or splintery picrolite.
	76'0"	5'6"	5'6"	100		50'0"	Serpentinized Pyroxenite. As above
	78'0"	2'0"	2'0"	100			except shearing is closer (every
	81'0"	3'0"	3'0"	100			1") and shear planes are polished
	82'6"	1'6"	1'8"	110			with no picrolite or chrysotile.
	90'0"	7'6"	7'6"	100			At 51'4" - 51'7" a manganese
	97'6"	7'6"	7'6"	100			coating with calcite occurs in the
	102'3"	4'9"	4'9"	100		53'0"	shear plane.
	110'3"	8'0"	8'0"	100		53'0"	Serpentinized Pyroxenite. As above
	118'0"	7'9"	7'9"	100			except shearing is evident now
	124'0"	6'0"	6'0"	100			only at every 6". Minor
	126'0"	2'0"	2'0"	100			chrysotile and picrolite fill
	131'0"	5'0"	4'11"	98			shear planes. Pyroxene crystals
	133'0"	2'0"	3'2"	160			are more distinctive than in the
	136'0"	3'0"	2'11"	97		97'6"	above core.
	136'6"	0'6"	0'9"	150		97'6"	Serpentinized Pyroxenite. Core
	138'6"	2'0"	2'0"	100			varies from dark green resinous
	139'6"	1'0"	1'0"	100			non xtalline serpentinite to
							medium light green pyroxenite.
							Shear planes contain brittle slip
							fibre chrysotile, picrolite,
						139'6"	calcite and some manganese.

Remarks:

Date 2 May 1968 Logged by R.W. McGregor

144

DRILLING PROGRESS REPORT NODDY CREEK S.W. TASMANIA Branch

Bore DDH 1 Report No. 1 823144

From	To	Int.	Core Rec'd.	%	Dip in Core	Feet	Description
139'6"	140'9"	1'3"	1'2"	93		139'6"	Serpentinite. Dark green resinous non xtalline serpentinite with chrysotile and picrolite in shear planes. Pale yellow-pink SULPHIDE is present. It occurs as a smear on shear planes and also is rarely seen in the actual serpentinite where it occurs as
	143'3"	2'6"	2'3"	90		143'3"	finely disseminated specks.
	143'8"	0'5"	0'5"	100		143'3"	Serpentinite. No Sulphides
	144'9"	1'1"	0'11"	92		143'8"	
	146'3"	1'6"	1'6"	100		143'8"	Serpentinite with sulphides as
	146'6"	0'3"	0'3"	100		144'9"	above.
	147'6"	1'0"	1'0"	100		144'9"	Serpentinized Pyroxenite. Medium
	148'0"	0'6"	0'6"	100		146'3"	light green xtalline pyroxenite.
	148'6"	0'6"	0'6"	100		146'3"	Serpentinite with one vein of brittle cross fibre asbestos ¾"
	149'0"	0'6"	0'6"	100		146'6"	thick.
	149'6"	0'6"	0'6"	100		146'6"	Serpentinite. Dark green with vitreous shear planes containing
	150'0"	0'6"	0'6"	100			chrysotile and picrolite (light
	150'6"	0'6"	0'5"	83		147'6"	green)
	151'0"	0'6"	0'6"	100		147'6"	Serpentinite. As above.
	151'3"	0'3"	0'3"	100		148'0"	6 asbestos veins 1/16"-1/8". wide.
	151'6"	0'3"	0'3"	100		148'0"	Serpentinite. As above.
	152'3"	0'9"	0'8"	89		148'6"	6 asbestos veins 1/16" wide.
	153'0"	0'9"	0'7"	78		148'6"	Serpentinite. As above. 1 asbestos
	156'6"	3'6"	No Core	0			vein 1/16" wide. Smear of pale yellow-pink sulphide 1/32" thick
	156'8"	0'2"	0'2"	100		149'0"	at 149'0".
						149'0"	Serpentinite. Very minor sulphides
						149'6"	as specks on shear planes.
						149'6"	Serpentinite with sulphides as above and 8 veins of asbestos
						150'0"	1/32"-1/16" wide.
						150'0"	Serpentinite with 10 veins of
						150'6"	asbestos 1/32"-1/16" wide.

Remarks: The pale yellow-pink sulphide mentioned above is possibley Pentlandite since it is similar to identified pentlandite north along strike.
X-fibre 146' to 151'

Date 2nd May 1968. Logged by P.W. McGREGOR

DRILLING PROGRESS REPORT NODDY CREEK S.W. TASMANIA Branch

Bore DDH 1 Report No. 1

145

From	To	Int.	Core Rec'd.	%	Dip in Core	Feet	Description
156'8"	158'6"	1'10"	1'10"	100		150'6"	Serpentinite with 5 veins of asbestos and 1 speck of yellow-pink sulphide.
	160'9"	2'3"	2'3"	100		151'0"	
	161'6"	0'9"	0'9"	100		151'0"	Serpentinite with graphite along shear planes.
	162'6"	1'0"	1'0"	100		151'3"	
	164'6"	2'0"	2'0"	100		151'3"	Serpentinite with graphite and pale yellow-pink sulphide in shear planes.
	166'8"	2'2"	2'2"	100		153'0"	
	167'8"	1'0"	1'0"	100		153'0"	Appearance of sludge suggests highly sheared flakey serpentinite
	168'8"	1'0"	1'0"	100		156'6"	
	175'6"	6'10"	6'10"	100		156'6"	Serpentinite. Hard dark grey black massive serpentinite with streaks of pale yellow-pink sulphide in shear planes.
	180'0"	4'6"	4'5"	98		156'8"	
	184'4"	4'4"	4'4"	100		156'8"	Chert. Dense massive banded chert. Bands are about 1/32" wide and are dirty green alternating with medium grey. Very minor pale yellow-pink sulphides with graphite in shear planes.
	187'6"	3'2"	3'2"	100		161'6"	
						161'6"	Silicified Serpentinite. Green grey dense rock with numerous quartz veins, some containing pyrite. Also some graphite present.
						167'8"	
						167'8"	Graphitic Siltstone. Dark grey cleaved siltstone containing much graphite both throughout the rock and in cleavage planes. Pyrite is very common and occurs as veins, or blebs in cleavage planes. Pyrite streaks and radiating masses also occur. Width of pyrite veins is up to 1/32" wide.
						187'6"	Fe staining is present.

Remarks:

Date 2nd May 1968 Logged by P.W. McGREGOR

823145

DRILLING PROGRESS REPORT [illegible] Branch

146

Bore DDH 1 Report No. 1

From	To	Int.	Core Rec'd.	%	Dip in Core	Feet	Description
187'6"	193'6"	6'0"	6'0"	100	30	187'6"	Laminated Siltstone. Dark grey and light grey alternating bands of siltstone. Bands of greywacke also occur in the siltstone. Pyrite veins are very common and occur throughout core. Pyrite also occurs as blebs and streaks in cleavage planes. Graphite is also relatively common although not as common as in the graphitic siltstone. Quartz veins and calcite veins are also common. A dirty green coating occurs in many shear planes - probably
	199'4"	5'10"	5'5"	93		275'1"	$FeSO_4$.
	206'3"	6'11"	6'11"	100		275'1"	Serpentinite. Translucent olive green serpentinite - much sheared and vitreous. Pyrite and calcite in shear planes. Also some
	216'0"	9'9"	9'9"	100		292'6"	graphite.
	226'0"	10'0"	10'0"	100		292'6"	Laminated Siltstone.
	233'6"	7'6"	7'6"	100		299'0"	As above.
	241'6"	8'0"	8'0"	100			
	245'0"	3'6"	3'6"	100			
	251'6"	6'6"	6'6"	100			
	256'6"	5'0"	5'0"	100			
	260'6"	4'0"	4'0"	100			
	265'0"	4'0"	4'0"	100			
	268'0"	3'0"	3'0"	100			
	274'0"	6'0"	5'11"	99			
	275'1"	1'1"	1'1"	100			
	275'6"	0'5"	0'5"	100			
	278'6"	3'0"	2'6"	84			
	282'0"	3'6"	3'1"	88			
	285'4"	3'4"	2'10"	85			
	288'6"	3'2"	2'10"	90			
	292'0"	3'6"	1'10"	53			
	292'6"	0'6"	0'6"	100			
	296'0"	3'6"	3'5"	98	25		
	299'0"	3'0"	3'0"	100			
			END OF HOLE				

823146

Remarks: Total depth = 299'0"
Total core rec'd.= 290'6"
Total core recovery = 97%

Date 2nd May 1968 Logged by P.W. McGREGOR

FIBRE LOG SHEET

147

Hole: DDH 1 (1968) Interval: 146' - 151' Footage: 5'

Costean: Fibre Log: 823147

←PAN→ ←10M→ ←4M→ ←2M→

FROM	To	REC	Code	1/32	1/16	2/16	3/16	4/16	5/16	6/16	7/16			Sum 1/16	Vein Angle	Vol %	
146	151	98%	5	35	5												
			1'16s	17½	5									22½		2.2	
																3.2% corr.	

J. G. Langlands

DRILLING PROGRESS REPORT SORELL PENINSULA NODDY CK. Branch

148

Bore DHNC2 (3000N)

Location 30N 427E OFFSET 5'N

Bearing 257¾°

Depression 45°

R. L. Collar 707.2'

Est. Total Depth 700 feet, actual depth 512'

Footage for Period 512'

Report No. 823148

Period Jan.15'71 - Feb.18'71

Operator M. DOUCH, A.S. JAMES PTY.

Unit E.D.E.C.O. 36

Bit NQW/L STEP FACED CARATS 16.75 Diamond Size per carat

Barrel 55/70, 33/47 NQ LONG TEAR

From	To	Int.	Core Rec'd.	%	Core in Dip	Feet	Description
0	5.0	5.0	0.9	18.0		0-5	Overburden - platform fill.
	10.0	5.0	1.6	32.0		5.0	Green sheared serpentinite c̄
	11.0	1.0	0.4	40.0		9.5	magnetite, no fibre.
	14.0	3.0	3.0	100		9.5	Serpentinite breccia c̄ magnetite
	14.9	0.9	0.7	78.0			veins less than 2mm and minor
	20.9	6.0	2.7	46.7		19.9	slip fibre veins (11)
	26.0	5.1	3.3	64.7		19.9	Sheared serpentinite c̄ magnetite,
	31.0	5.0	4.8	96.0		24.5	no fibre.
	41.0	10.0	2.2	22.0		24.5	Pale green serpentinite breccia c̄
	48.0	7.0	4.2	60.0			stockwork X-fibre and associated
	58.0	10.0	4.2	46.0			pale green serpentine veins less
	63.0	5.0	4.8	96.0		25.7	than 1cm.
	65.0	2.0	1.4	70.0		25.7	Green sheared serpentinite and
	69.5	4.5	3.2	71.2			breccia c̄ magnetite and very
	69.5	69.5	37.4	53.8		30.5	minor slip fibre (2)
						30.5	Ribbon fibre in pale green
							serpentinite @ 45° to L.C.A. to
							30.7', massive X-fibre stockwork
							to 31.3'. Ribbon fibre and short
							stockwork X-fibre in pale green
						31.7	serpentinite to 31.7'.
						31.7	Dark sheared serpentinite breccia
						47.2	c̄ slip fibre (5)
						47.2	Pale green massive serpentinite
							breccia c̄ stockwork X-fibre 57.0'
						58.0	- 58.0', minor threadveins only.
						58.0	Dark sheared serpentinite becoming
						61.0	massive and granular towards end.
						61.0	Pale green serpentinite c̄ ribbon
							and stockwork X-fibre and pale
							green subtranslucent serpentine
						65.8	veins less than 5mm.

Remarks:

Numbers in brackets e.g. (3) after slip fibre is mentioned indicates the number of veins of slip fibre cutting the core in that interval.

X-fibre = cross fibre

L.C.A. = long core axis

Date 13/2/71

Logged by JOHN G. LANGLANDS

DRILLING PROGRESS REPORT SORELL PENINSULA MODEL CO. Branch

Bore DHMC2 Report No.

Tray 149

From	To	Int.	Core Rec'd.	%	Dip in Core
(3) 69.5	79.5	10.0	3.3	33.0	
80.0	89.5	10.0	4.4	44.0	
	99.5	10.0	3.1	31.0	
	104.5	5.0	2.7	54.0	
(4)	105.0	0.5	0.5	100	
	109.0	4.0	1.7	42.5	
110.5	111.0	2.0	2.0	100	
	113.0	2.0	2.0	100	
	115.0	2.3	1.1	47.7	
	120.0	4.7	1.9	40.4	
(5)	130.0	10.0	3.4	34.0	
	140.0	10.0	1.0	10.0	
	150.0	10.0	1.8	18.0	
158.5	160.0	10.0	3.2	32.0	
	162.0	2.0	1.2	60.0	
	164.0	2.0	1.1	55.0	
(6)	166.0	2.0	1.6	80.0	
	169.0	3.0	2.4	80.0	
	174.6	5.6	2.3	41.0	
178.5	179.0	4.4	3.2	72.8	
	184.0	5.0	3.3	66.0	
(7)	189.0	5.0	3.6	72.0	
	194.0	5.0	3.0	60.0	
198.0	198.0	4.0	2.5	62.5	
	202.0	4.0	4.0	100	
	204.6	2.6	0.9	34.5	
	209.0	4.4	1.2	27.2	
(8)	213.5	4.5	3.3	73.5	
219.0	219.0	5.5	5.1	92.8	

Feet	Description 823149
65.8	Dark medium grained granular
66.5	serpentinite.
66.5	Pale green subtranslucent serp.
	breccia c̄ short stockwork X-fibre
	and some slip fibre.
	80.0 - 83.0 good ribbon fibre zone
	high %, less than or equal to 2/16"
89.5	sub parallel to L.C.A.
89.5	Slightly sheared dark serpentinite
	breccia c̄ minor veins of magnetite
130.0	and slip fibre (11)
130.0	Pale green serpentinite c̄ cross
140.0	fibre. N.B. high core loss.
140.0	Dark medium grained serpentinite
	breccia c̄ slip fibre (6) and minor
151.5	X-fibre.
151.5	Alternations of pale green
	translucent serpentinite c̄ minor
	X-fibre (3) at 151.5, 166.8,
	167.4 and slip fibre (7) and dark
	granular slightly sheared serp. c̄
184.5	slip fibre (5) and minor magnetite.
184.5	Mostly dark, sheared to very
	sheared serpentinite c̄ magnetite
	with thin alternations of green
	subtranslucent sheared serp.
209.0	2 good slip fibre veins @ 194.5 (2)
209.0	Pale green slightly sheared
	subtranslucent serpentinite c̄
	secondary serp. veins and short
	X-fibre veins, X-fibre threadveins
214.3	and slip fibre.
214.3	Massive, hard partially
	serpentinised pyroxenite c̄ few
	irregular serp. veins less than
221.1	5mm - no fibre.

Remarks: As before

Date 13/2/71 Logged by JOHN G. LANGLANDS

DRILLING PROGRESS REPORT SORELL PENINSULA NODDY CK. Branch

Bore DHNC2 Report No.

Tray 150

From	To	Int.	Core Rec'd.	%	Dip in Core
(9) 219.0	223.6	4.6	4.4	95.8	
	229.0	5.4	3.4	63.0	
	233.0	4.0	2.1	52.5	
240.0	239.0	6.0	1.9	31.6	
	243.0	4.0	2.2	55.0	
(10)	249.0	6.0	2.1	35.0	
	252.0	3.0	2.5	83.3	
	252.5	0.5	0.4	80.0	
	255.5	3.0	1.9	63.3	
	258.9	3.4	0.6	17.6	
	261.0	2.1	0.9	42.8	
	262.0	1.0	0.7	70.0	
	263.2	1.2	0.9	75.0	
264.0	264.0	0.8	0.8	100	
	265.0	1.0	0.6	60.0	
	267.0	2.5	1.4	56.0	
(11)	270.0	2.5	2.0	80.0	
	274.5	4.5	2.2	46.0	
	279.5	5.0	4.5	90.0	
284.8	284.5	5.0	2.0	40.0	
	289.0	4.5	0.7	15.5	
	292.0	3.0	0.8	26.3	
	294.0	2.0	0.7	35.0	
	296.5	2.5	2.0	80.0	
	298.5	2.0	1.8	90.0	
(12)	300.0	1.5	0.7	46.5	
	302.5	2.5	2.2	88.0	
	304.0	1.5	1.0	66.6	
	306.0	2.0	1.6	80.0	
308.5	308.5	2.5	2.4	96.0	
	311.0	2.5	2.3	92.0	
	314.0	3.0	2.2	73.4	
	318.5	4.5	2.5	55.6	
	320.0	1.5	0.9	60.0	
(13)	321.0	1.5	1.0	66.6	
	323.0	1.5	0.7	46.5	
328.0	324.5	1.5	1.2	80.0	

Feet	Description 823150
221.1	Green and pale green serpentinite
224.0	c short stockwork and ribbon fibre.
224.0	Sheared and very sheared serp.
	c magnetite and some slip fibre
	(6) adjacent to X-fibre zone to
	229.3, minor short X-fibre @
252.0	235.7, slip fibre (2) @ 251.
252.0	Dark slightly sheared serpentinite
	breccia c magnetite and pale green
294.0	picrolite veins.
294.0	Massive pale green serpentinite
	c irregular blebs of brown silicate
	less than 1cm, minor gash veins
296.0	short X-fibre and minor slip fibre.
296.0	Dark sheared serpentinite c
304.0	magnetite veins and slip fibre (10)
304.0	Massive green vari-coloured serp.
	c secondary serp. veins, minor
	short X-fibre gash veins and slip
310.5	fibre (8).
310.5	Dark sheared serpentinite.
313.0	
313.0	Mostly green and light green
	subtranslucent serpentinite c
	X-fibre of good length but low
	yield. X-fibre veins at low angles
	to L.C.A. (less than or equal to
	15°). Few short intersections of
	dark granular serpentinite. Slip
	fibre occurs throughout. Prominent
	textural layering @ 90° to L.C.A.
	from 338.6 to 344. Finely
344.7	disseminated spinel 2%.
344.7	Massive dark granular serp. c
	minor short X-fibre. Irregular
345.8	oriented slip planes.

Remarks: As before

Date 13/2/71

Logged by JOHN G. LANGLANDS

DRILLING PROGRESS REPORT SORELL PENINSULA MOODY CK. Branch

Bore DHNC2 Report No.

Tray 151

From	To	Int.	Core Rec'd.	%	Dip in Core	Feet	Description 823151
	324.5	327.0	2.5	1.7	68.0	345.8	Green and light green serp. as above 313-344.7 c̄ good quality, low yield fibre.
(14)		329.6	2.6	2.0	77.0		
		330.0	0.4	0.4	100	353.0	
		334.0	4.0	3.6	90.0	353.0	Dark sheared serpentinite c̄ higher than normal slip fibre content.
		337.0	3.0	2.4	80.0		
		341.0	4.0	4.0	100	365.5	
344.5		344.5	3.5	3.5	100	365.5	Deep green serpentinite c̄ stockwork of slip fibre and magnetite veins
		353.5	9.0	5.8	64.5		
(15)		357.5	4.0	1.4	35.0	369.5	
		363.5	6.0	1.5	25.0	369.5	Very sheared pale to deep green serpentinite c̄ slip fibre and magnetite.
370.0		370.5	7.0	5.4	77.0		
		374.5	4.0	4.0	100	371.5	
(16)		381.5	7.0	5.8	82.8	371.5	Sheared serpentinite, deep green and pale green, sheared and slightly sheared alternating c̄ magnetite segregations and minor slip fibre veins @ 379' and 414'-416'. Minor +ve D M.G. sulphide bleb in magnetite vein @ 411'.
386.0		384.0	2.5	2.5	100		
(17)		393.5	9.5	8.0	84.2		
405.5		403.5	10.0	7.2	72.0		
(18)		411.5	8.0	7.4	92.5		
		414.5	3.0	3.0	100		
422.0		422.0	7.5	5.5	73.3	416.0	
(19)		429.5	7.5	7.5	100	416.0	Serpentinite, pale green, slightly sheared c̄ stockwork slip fibre and magnetite.
		434.5	5.0	5.0	100	433.5	
438.2		439.0	4.5	3.5	77.8	433.5	Sheared serpentinite, pale green c̄ fibrous talc and magnetite in veins @ 20°-45° to L.C.A. Slickensides in veins at 90° to L.C.A. Minor +ve D.M.G. sulphide blebs in vein c̄ slip fibre and magnetite @ 434', 437.5'
(20)		444.0	5.0	5.0	100	439.0	
455.0		452.0	8.0	7.5	93.8	439.0	Slightly sheared serpentinite, pale green c̄ magnetite and minor slip fibre. Minor +ve D.M.G. sulphide @ 443.5, 444.5, 445.8, 448.4 associated with slip fibre and magnetite veins.
						450.5	

Remarks:

Date 25/2/71 Logged by JOHN G. LANGLANDS

DRILLING PROGRESS REPORT SORELL PENINSULA NODDY CK. Branch

152

Bore DHNC2 Report No.

823152

Tray	From	To	Int.	Core Rec'd.	%	Dip in Core	Feet	Description
455.0	452.0	461.0	9.0	7.5	83.5		450.5	Sheared and very sheared serpentinite, pale green, c magnetite and flakey and fibrous talc and minor long brittle slip fibre. Minor +ve D.M.G. sulphide blebs, associated c veins @ 461.2, 463.9, 472.4, 473.0, 474.2, 477.0, 478.0, 484.5, 491.5, 493.0, 494.0, 494.7, 497.0, 503.3, 510.5, 511.8.
(21)		464.0	3.0	2.2	73.3			
		469.0	5.0	2.1	42.0			
		474.0	5.0	4.7	94.0			
476.5		480.0	6.0	5.7	95.0			
(22)		484.0	4.0	3.5	87.5			
492.5		490.0	6.0	5.0	83.3			
		494.0	4.0	3.6	90.0			
(23)		496.5	2.5	2.5	100			
		504.0	7.5	4.5	60.0			
		507.0	3.0	0.9	30.0			
		508.0	1.0	0.7	70.0			
		510.0	2.0	0.8	40.0			
512.0		512.0	2.0	1.6	80.0		512.0	

Overall Core Recovery	319.3 feet
Hole Depth	512.0 feet
Overburden	5.0 feet
% Recovery	63.0 %

DIP TESTS

0'	46°
200'	47°
400'	46°

Remarks: L.C.A. = Long Core Axis.

Hole stopped at 512' by the geologist due to combination of slow progress in very poor drilling country and footage required to intersect hanging wall contact of serpentinite (@200')

Date 25/2/71

Logged by JOHN G. LANGLANDS

153

DRILLING PROGRESS REPORT SORELL PENINSULA NODDY CK. Branch

Bore DHNC2 Report No.

From	To	Int.	Core Rec'd.	%	Dip in Core	Description 823153

ORIENTATION OF CROSS FIBRE VEINS TO LONG CORE AXIS (L.C.A.)

Feet	Orientation
314.5	40°
320.5	0°
321.0	45°
324.5	0°
327.5	3°
331.5	10° - 40°
334.5	70°
336.5	0°
338.0	10°
338.0 - 344.0	≤ 10°
344.5	30°
346.0	< 5°
346.0	85°
348.0	30°
352.0	80°

Remarks:

Date 13/2/71 Logged by JOHN G. LANGLANDS

154

NODDY CREEK 1971

FIBRE LOG SHEET

823154

Hole: DHNC 2 Interval: 0'-160' 205'-235' Footage: 305'-355'

Costean: Fibre Log:

←PAN→ ←10M→ ←4M→ ←2M→

FROM	To	Rec	Code	1/32	1/16	2/16	3/16	4/16	5/16	6/16	7/16			Sum 1/16	Vein Angle	Vol o/o
0	5			Overburden										0		0
	10	2.5	1		Barren									0		0
	15	4.8	1	2										1		0.1
	20	2.3	1	2										1		0.1
	25	3.5	1	3	3									4½		0.4
	30	4.8	½2	1	1	2								5½		0.5
	35	2.4	½2	12										6		0.6
	40	0.6	1		Barren									0		0
	45	2.3	1		Barren									0		0
	50	4.9	½2	12	6	1	Vns // to core							14		1.4
	55	1.5	½2	16	1									9		0.9
	60	3.8	1	9										4½		0.4
	65	4.5	5	23	4									15½		1.5
	70	3.8	½2	6	5									8		0.8
	75	1.5	1	3										1½		0.1
	80	3.7	½2	7	2									5½		0.5
	85	3.4	5	35	5									23		2.3
20	85		TOT	128	27	3										
			1/16	64	27	6								97		0.75 65'
48	63		Fibre in sludge less than or equal to 1/8" ō magnetite													

B. Butt and J. Langlands

155

NODDY CREEK 1971

823155

FIBRE LOG SHEET

Hole: DHNC 2 continued Interval: 85' - 160' 205' - 225' Footage:

Costean: Fibre Log:

←PAN→ ←10M→ ←4M→ ←2M→

FROM	To	Rec	Code	1/32	1/16	2/16	3/16	4/16	5/16	6/16	7/16			Sum 1/16	Vein Angle	Val o/o	
85	90	0.9	1		Barren												
	95	1.4	1		"												
	100		1		"												
	105		1		"												
	110		1		"												
	115		1		"												
	120		1		"												
	125		1		"												
	130		1		"												
130	160	9.6	1	11	4		s.f.	N.B. poor recovery						9½		0.15	30'
205	210	1.5	1	4										2		0.2	
	215	3.7	2	17	4	1	0	1						18½		1.8	
	220	5.0	1		Barren									0		0	
	225	5.0	5	24	4	1								18		1.8	
205	225		TOT	45	8	2	0	1									
			1/16	22½	8	4	0	4						38½		0.95	20

156

NODDY CREEK 1971

823156

FIBRE LOG SHEET

Hole: DHNC 2 continued Interval: 305' - 355' Footage: 50'

Costean: Fibre Log:

			←PAN→	←10M→	←4M→										
FROM	To	Rec	Code	1/32	1/16	2/16	3/16	4/16	5/16	6/16	7/16			Sum 1/16	Vein Angle	Vol %	
305	310	4.8	½2	2	6	1								9		0.9	
	315	4.0	½2	0	4	1								6		0.6	
	320	2.2	1	3	1									2½		0.2	
	325	4.1	3	5	2	1	0	0	2					16½		1.6	
	330	3.8	2	1	2	2	1							9½		0.9	
	335	4.4	3	9	6	1	1	1						19½		1.9	
	340	4.4	½2	7	8	1								13½		1.3	
	345	5.0	½2	13	4									10½		1.0	
	350	3.8	3	2	2	0	1	1	1					15		1.5	
	355	2.7	½2	2	0	1								3		0.3	
			TOT	44	35	8	3	2	3								
			1/16	22	35	16	9	8	15					105		1.0	50'

157

823157

Location NODDY CREEK 1971

VISUAL DOLLAR VALUE

Hole: DHNC 2 Sample: AF 401 Footage: 65', 20'-85'

Costean: Fibre Log:

	1/32	1/16	2/16	3/16	4/16	5/16	6/16	7/16	+½	Total
Visual Fibre		91	3							
1/16s		91	6							97
		Pan	10M			4M			2M	

Uncorrected Visual Percentage (fibre log sheet) = 0.75 %

Assuming vein angle = 45° then:

Corrected Visual Percentage = $\frac{\text{Total 1/16s x 0.737}}{\text{Footage}}$ = 1.1 %

Q.S.T.

	1/16s	Ounces		Evaluation Points
Pan =	91	15.00	X 1	= 15
10 Mesh =	6	1.00	X 10	= 10
4 Mesh =			X 40	=
2 Mesh =			X 100	=
	97	16.00		25

From graph relating evaluation points and price:- 1971 Prices

Value/short ton fibre = C$ 70.00

Therefore value/short ton rock = C$ 0.77

Value milled = C$

Date June 1971

158

823158

Location NODDY CREEK 1971

VISUAL DOLLAR VALUE

Hole: DHNC 2 Sample: AF 404 Footage: 20', 205'-225'

Costean: Fibre Log:

	1/32	1/16	2/16	3/16	4/16	5/16	6/16	7/16	+½	Total
Visual Fibre		30	2	0	1	0				
1/16s		30	4	0	4	0				38
		Pan	10M		4M				2M	

Uncorrected Visual Percentage (fibre log sheet) = 0.95%

Assuming vein angle = 45° then:

Corrected Visual Percentage = $\frac{\text{Total 1/16s x 0.737}}{\text{Footage}}$ = 1.4 %

Q.S.T.

	1/16s	Ounces		Evaluation Points
Pan =	30	12.6 X	1	= 13
10 Mesh =	4	1.7 X	10	= 17
4 Mesh =	4	1.7 X	40	= 68
2 Mesh =		X	100	=
	38	16.0		98

From graph relating evaluation points and price:- 1971 Prices

Value/short ton fibre = C$ 125.0

Therefore value/short ton rock = C$ 1.75

Value milled = C$

Date June 1971

159

823159

Location NODDY CREEK 1971

VISUAL DOLLAR VALUE

Hole: DHNC 2 Sample: AF 406 Footage: 50', 305'-355'

Costean: Fibre Log:

	1/32	1/16	2/16	3/16	4/16	5/16	6/16	7/16	+½	Total
Visual Fibre		57	8	3	2	3				
1/16s		57	16	9	8	15				105
		Pan	10M			4M			2M	

Uncorrected Visual Percentage (fibre log sheet) = 1.0 %

Assuming vein angle = 45° then:

Corrected Visual Percentage = $\frac{\text{Total 1/16s x 0.737}}{\text{Footage}}$ = 1.54 %

Q.S.T.

	1/16s	Ounces		Evaluation Points
Pan =	57	8.7 X	1	= 9
10 Mesh =	25	3.8 X	10	= 38
4 Mesh =	23	3.5 X	40	= 140
2 Mesh =		X	100	=
	105	16.0		187

From graph relating evaluation points and price:- 1971 Prices

Value/short ton fibre = C$ 215.00

Therefore value/short ton rock = C$ 3.31

Value milled = C$

Date June 1971

160

DRILLING PROGRESS REPORT SORELL PENINSULA NODDY CK. Branch

Bore DHNC3 (3000'N)

Location 30N 400E OFFSET 7.5'N

Bearing 081½°

Depression 45°

R. L. Collar 711.3

Est. Total Depth 500'

Footage for Period 503.5'

Report No. 823160

Period FEB.- APRIL 1971

Operator M. DACIO

Unit E.D.E.C.O. 36 (A.S.JAMES)

Bit NQW/L STEP FACED as for DHNC2.

Barrel NQ LONG YEAR

From	To	Int.	Core Rec'd.	%	Core In Dip	Feet	Description
0	1.0	1.0	0.5	50.0		0 -	Pale dark green sheared and slightly sheared serpentinite. Slip fibre c̄ magnetite, cross fibre less than or equal to 1/16" from 0'-15'. Pale green subtranslucent serpentine veins from 0'-3.5'.
	1.5	0.5	0.35	70.0			
	2.5	1.0	0.7	70.0			
	3.5	1.0	0.9	90.0			
1)	5.5	2.0	1.2	60.0			
	10.0	4.5	0.5	11.0			
	13.0	3.0	1.75	58.5		21.5	
	16.0	3.0	2.8	93.5		21.5	Dark green granular massive
	21.5	4.5	3.9	86.5		27.6	serpentinite, minor slip fibre.
3.5	23.5	2.0	0.4	20.0		27.6	Pale green cross fibre bearing serpentinite massive. Fine ribbon fibre 28.5'. Strong ribbon fibre zones at 30'-32', 32.5', 33.5-35.5'. Average vein angle 45° to L.C.A. veins less than or equal to 4/16". Massive subtranslucent serpentine, pale green 28.5' and 29.5', veins at 43.5'. Becomes granular at 49.0' with widely separated thin
	27.5	4.0	4.0	100			
	29.5	2.0	2.0	100			
	30.0	0.5	0.4	80.0			
2)	31.5	1.5	1.5	100			
	33.5	2.0	2.0	100			
9.0	38.5	5.0	5.0	100			
	43.5	5.0	5.0	100			
3)	48.5	5.0	2.7	54.0			
	53.5	5.0	2.7	54.0			
58.5	58.5	5.0	4.8	96.0		50.0	X-fibre veins.
4)	63.5	5.0	4.6	92.0		50.0	Pale dark green sheared serpentinite
	68.5	5.0	5.0	100		55.5	Slip fibre veins c̄ magnetite.
4.5	73.5	5.0	5.0	100		55.5	Dark green serpentinite breccia. Many thin slip fibre veins and stock-works. Magnetite is
	73.5	73.5	57.7	78.6		72.3	associated with larger veins.

Remarks:

Date 8/3/71

Logged by R. J. CLOSE

DRILLING PROGRESS REPORT: SORELL PENINSULA MOODY CK. Branch

Box 161

Bore DHNC3 Report No.

From	To	Int.	Core Rec'd.	%	Dip in Core	Feet	Description 823161
73.5	78.5	5.0	4.4	88.0		72.3	Pale green sheared serpentinite c minor cross fibre veins less than or equal to 1/16". Veins
	80.5	2.0	1.8	90.0		74.3	short and weakly developed.
	83.5	3.0	2.8	93.5		74.3	Dark green serpentinite breccia. Slip fibre veins with a lot of
	91.5	8.0	7.8	97.5		76.5	magnetite. 50% R.C.
	93.5	2.0	1.9	95.0		76.5	Pale green sheared serpentinite with cross fibre veins less than
	99.0	5.5	5.5	100			or equal to 2/16". Fine ribbon fibre at 77' & 80'. Slip fibre
	103.5	4.5	4.5	100		81.8	common.
	104.0	0.5	0.5	100		81.8	Dark green massive and slightly sheared serpentinite breccia. Sheared zones rich in magnetite, slip fibre in thin stockworks.
	108.5	4.5	3.7	74.0		89.1	Becomes granular at 81.5' and 88.0'
	113.5	5.0	4.3	86.0		89.1	Sheared and slightly sheared pale green serpentinite breccia, with minor X-fibre less than or equal to 1/16" at 92'. Slip fibre veins
	115.5	2.0	2.0	100		95.5	at 45° to L.C.A. with magnetite.
	123.5	8.0	6.3	78.8		95.5	Highly sheared serpentinite slip fibre veins full of magnetite and some flakey talc. Pale - dark
	50.0	50.0	45.5	91.0		100.3	green.
						100.3	Pale green massive serpentinite with minor sheared zones at 109'-110' and 115'-117'. Slip fibre not strongly developed, but one vein at 108.5' has long brittle fibre associated with magnetite and talc, blebs of stichtite are
						119.0	common.

Remarks:

Date 8/3/71 Logged by R. J. CLOSE

DRILLING PROGRESS REPORT SORELL PENINSULA ... ranc

Bore DHNC3 Report No.

Box 162

From	To	Int.	Core Rec'd.	%	Dip In Core	Feet	Description 823162
27.0	123.5	128.5	5.0	4.4	88.0		119.0 Dark green highly sheared serpentinite breccia. Magnetite rich, slip fibre veins thin.
		133.5	5.0	5.0	100		
(8)		138.5	5.0	4.5	90.0		
142.0		142.0	3.5	3.5	100		126.8 Stichtite.
		144.0	2.0	2.0	100		126.8 Pale green, massive to sheared serpentinite breccia. Thin slip fibre veins with associated magnetite. Highly sheared zone at 129'. Becomes more massive at base, from 143' with no fibre.
(9)		149.0	5.0	5.0	100		
		151.0	2.0	1.5	75.0		
156.5		156.0	5.0	5.0	100		
		158.5	2.5	2.5	100		
(10)		163.5	5.0	4.9	98.0		
		168.5	5.0	5.0	100		144.5 Stichtite BLEBS ARE common.
		169.5	1.0	1.0	100		144.5 Sheared to highly sheared serpentine. Pale green becoming darker at base with the presence of thin magnetite stockworks. Slip fibre is most prominent in highly sheared zone at 147'. Core
		170.0	0.5	0.5	100		
		173.5	3.5	3.4	95.0		
172.0		181.0	7.5	7.5	100		151.0 is brittle at base.
		57.5	57.5	55.7	97.0		151.0 Dark - light green massive to slightly sheared serpentinite. Rich in magnetite and stichtite particularly from 151' - 157' where the magnetite is in fine stockwork form - slip fibre is rare in this zone. Shear zones occur at 158.5' and 166'-167'. Slip fibre and magnetite are strongly developed in shears. Minor X-fibre at 169.5' and 162'
							171.0 less than or equal to 1/16".
							171.0 Sheared - highly sheares serpentine Pale Green. Slip fibre vein with talc at 171.3' and 171.5'. Magnetite is present in thin stockworks as well as in fibre
							177.5 veins. Stichtite.

Remarks:

Date 8/3/71 Logged by R. J. CLOSE

DRILLING PROGRESS REPORT SORELL PENINSULA NODDI C.. Branch

Bore DHNC3 Report No.

163

Box	From	To	Int.	Core Rec'd.	%	Dip in Core	Feet	Description 823163
11)	181.0	186.0	5.0	5.0	100		177.5	Massive - slightly sheared Serpentinite. Shear zones at 181', 187'-188', 194'. Thick slip fibre veins at 204', 206' sub parallel to L.C.A. Good quality slip fibre at 196'. Pale green.
187.0		186.5	0.5	0.5	100			
12)		194.0	7.5	7.3	95.0			
		199.0	5.0	4.5	90.0			
04.0		204.0	5.0	5.0	100			
		214.0	10.0	8.8	88.0			
(11)		219.0	5.0	4.8	96.0		214.0	Stichtite.
		221.5	2.5	2.4	96.0		214.0	Pale green - dark green sheared and highly sheared serpentinite breccia. Massive band b/n 225.5'-227.5' and 221.5'- 222.5' becomes dark green from 239.5' due to the presence of magnetite stockworks and larger blebs of stichtite. Slip fibre strongly developed from 238' onwards. Magnetite stockworks from 214'-217' making the core brittle. Highly sheared at top and bottom of zone and at 233'-234'.
222.0		222.9	1.4	1.4	100			
		223.2	0.3	0.3	100			
(12)		225.5	2.3	2.3	100			
		228.0	2.5	2.5	100			
		228.5	0.5	0.5	100			
		233.5	5.0	5.0	100			
238.5		238.5	5.0	3.5	70.0			
		243.5	5.0	3.7	74.0			
13)		248.0	4.5	3.8	84.5			
		250.5	2.5	2.5	100			
56.5		258.0	7.5	7.2	90.0			
		77.0	77.0	71.0	92.2		250.0	
							250.0	Sheared and highly sheared pale green serpentinite. Slip fibre and magnetite strongly developed in the highly sheared bands, the larger veins of magnetite are sub parallel to the L.C.A. Stichtite
							258.0	present.

Remarks:

b/n = between

Date 8/3/71 Logged by R.W.J. CLOSE

DRILLING PROGRESS REPORT SORELL PENINSULA NODDY CK. Branch

164

Bore DHNC3 Report No.

Box	From	To	Int.	Core Rec'd.	%	Dip in Core	Feet	Description 823164
2 0.5	258.0	260.5	2.5	2.5	100		258.0	Massive and sheared pale green serpentinite. Shears and slip planes c slip fibre and magnetite at 10° to 80° to long core axis.
(17)		270.0	9.5	9.2	96.8			
2 7.0		280.0	10.0	9.6	96.0			
(18)		289.0	9.0	8.4	93.3			
2 2.0		295.0	6.0	5.4	90.0		308.5	Disseminated stichtite throughout.
(19)		304.0	9.0	9.0	100		308.5	Massive and sheared dark and pale green serpentinite. Shears at 10° to 50° to L.C.A. Magnetite veins and trace of disseminated stichtite. Texture and colour variable on a small scale.
3 8.0		314.0	10.0	9.7	97.0			
(20)		324.0	10.0	10.0	100			
323.0		332.0	8.0	7.5	93.7			
(1)		339.0	7.0	6.2	88.5			
339.0		343.0	4.0	3.7	92.5		342.0	
(2)		353.0	10.0	10.0	100		342.0	Sheared serpentinite grey-green c shears and slip fibre veins @ 70° - 90° to L.C.A.
355.0		355.0	2.0	2.0	100			
(3)		365.0	10.0	9.0	90.0		355.5	
372.0		375.0	10.0	10.0	100		355.5	Massive and sheared serpentinite, pale to dark green, c magnetite and slip fibre veins and a trace of disseminated stichtite. 370.3 - 370.9 Micro ribbon slip fibre zone.
(24)		385.0	10.0	10.0	100			
3 5.0		395.0	10.0	10.0	100			
(25)		405.0	10.0	9.8	98.0			
4 1.5		415.0	10.0	9.7	97.0			
(26)		425.0	10.0	10.0	100		439.4	
4 7.5		435.0	10.0	10.0	100		439.4	Biotite lamprophyre brecciated and veined by talc/serpentine. Not sheared. Contacts at approx. 45° to L.C.A.
(27)		445.0	10.0	10.0	100			
4 3.0		448.0	3.0	3.0	100			
(28)		455.0	7.0	5.9	84.3		440.0	
4 3.0		464.0	9.0	8.8	97.8		440.0	Highly sheared serpentinite.
(29)		471.0	7.0	6.5	92.8		445.0	
464.0		481.0	10.0	6.0	60.0		445.0	Massive, slightly sheared, very pale green serpentinite c disseminated and vein magnetite and minor talcose slip fibre. No stichtite.
(0)		484.0	3.0	2.8	93.4			
486.5		493.0	9.0	5.0	55.6			
(1)		235.0	235.0	219.7	93.5			
503.5							483.5	
							483.5	Very sheared serpentinite.
							493.0	

Remarks: There appears to be two types of slip fibre: one very soft brittle and talcose with a pearly lustre, the other fairly tough and flexible with magnetite associated.

Date 24/3/71 to 355.5' 3/4/71 to 493' Logged by JOHN G. LANGLANDS

165

Box

DRILLING PROGRESS REPORT SORELL PENINSULA NODDY CK. Branch

Bore DHNC3 Report No.

From	To	Int.	Core Rec'd.	%	Dip in Core
493.0	499.0	6.0	6.0	100	
	503.5	4.5	4.5	100	
	10.5	10.5	10.5	100	

823165

Feet Description

493.0 Irregularly banded quartz rich rock c trace of deep green to turquoise amorphous mineral in
494.5 fractures. Bands @ 60° to L.C.A.

494.5 Sheared and brecciated siliceous, contact altered sediments c minor vein and disseminated sulphide
503.5 -ve D.M.G. and CO_3 veins.

Depth of Hole	503.5
Core Recovery	460.1
% Recovery	91.4%

DIP TESTS

COLLAR	45°
200'	46½°
400'	46°
500'	45°

Remarks:

Date 3/4/71

Logged by R. J. CLOSE AND JOHN G. LANGLANDS

166

NODDY CREEK 1971

FIBRE LOG SHEET

823166

Hole: DHNC 3 Interval: 0' - 55' Footage: 55'

Costean: Fibre Log:

←PAN→ ←10M→ ←4M→ ←2M→

FROM	To	REC	Code	1/32	1/16	2/16	3/16	4/16	5/16	6/16	7/16			Sum 1/16	Vein Angle	Vol %	
0	5	3.5	½2	8	5		Overburden less than 1'							9		0.9	
	10	0.7	1	2	1									2		0.2	
	15	3.6	1	2	2									3		0.3	
	20	3.5	1			Barren								0		0	
	25	3.2	1			"								0		0	
	30	4.9	½2	40	6	1								28		2.8	
	35	5.0	4	64	46	15	3	3						129		12.9	
	40	5.0	4	12	27	16	7	3						98		9.8	
	45	4.3	3	26	32	14	1	1						80		8.0	
	50	2.7	½2	10	12									17		1.7	
	55	3.3	1			Barren								0		0	
0	50		TOT	164	131	46	11	7									
			1/16	82	131	92	33	28						366		3.66	50

R. Close

167

823167

Location NODDY CREEK 1971

VISUAL DOLLAR VALUE

Hole: DHNC 3 Sample: AF 409 Footage: 55', 0'-55'

Costean: Fibre Log:

	1/32	1/16	2/16	3/16	4/16	5/16	6/16	7/16	+½	Total
Visual Fibre		213	46	11	7					
1/16s		213	92	33	28					366
		Pan	10M		4M				2M	

Uncorrected Visual Percentage (fibre log sheet) = 3.66 %

Assuming vein angle = 45° then:

Corrected Visual Percentage = $\frac{\text{Total 1/16s x 0.737}}{\text{Footage}}$ = 4.4 %

Q.S.T.

	1/16s	Ounces			Evaluation Points
Pan =	213	9.3	X	1	= 9
10 Mesh =	125	5.5	X	10	= 55
4 Mesh =	28	1.2	X	40	= 48
2 Mesh =			X	100	=
	366	16.0			112

From graph relating evaluation points and price:- 1971 Prices

Value/short ton fibre = C$ 142.00

Therefore value/short ton rock = C$ 6.25

Value milled = C$

Date June 1971

DRILLING PROGRESS REPORT SORELL PENINSULA NODDY CK. Branch

168

Bore DHNC4

Location 40N 48.5E

Bearing 086½° Provisional (TRUE BEARING)

Depression 45°

R. L. Collar 783.1 feet

Est. Total Depth 500 feet

Footage for Period

Report No. 823168

Period MARCH - APRIL 1971

Operator A.D.D.

Unit F.30

Bit NQTT STEP FACED

Barrel NQ W/L (TT)

Box	From	To	Int.	Core Rec'd.	%	Core in Dip	Feet	Description
0	0	32.0	32.0	2.4	7.5		0 -	Greywacke; yellow-grey, weathered,
		39.0	7.0	3.4	48.5	38.5'	39.1	carbonaceous fine greywacke and
(1)		42.0	3.0	2.9	96.7	40°		shale.
		49.6	7.6	4.6	60.6		39.1	Greywacke and shale; black,
0.6		56.5	6.9	5.6	81.3	53.0'		carbonaceous, laminated, fine
(2)		64.5	9.0	6.5	72.3	53°		greywacke and shale. Pyrite
9.0		73.7	9.2	6.6	71.7		45.3	fibres along fracture planes.
(3)		83.4	9.7	9.7	100.0		45.3	Greywacke; grey, fine greywacke
5.0		98.3	14.9	14.3	96.0	37.0'		with some bands of siltstone and
(4)		101.0	2.7	1.6		52°		shale. Pyrite throughout on
1 1.5		109.8	8.8	6.6	75.0			fracture planes and in vughs.
(5)		111.9	2.1	1.8	89.1		113.0	Microfaults common.
		118.7	6.8	4.8	70.6		113.0	Brecciated hornfels; Black,
1 0.0		119.6	0.9	0.3	33.3			carbonaceous, hornfelsed siltstone
		123.4	3.8	3.5	92.1			with serpentine and quartz veins
		126.2	2.8	1.2	42.8			and picrolite along fractures
(6)		131.0	4.8	1.1	22.9		118.0	planes. Some carbonate.
		135.5	4.5	1.4	31.1		118.0	Brecciated Hornfels; as above with
		137.5	2.0	1.5	75.0			cross fibre (1/16") veins and
		145.0	7.5	2.0	26.7		118.7	magnetite blebs.
149.0		149.8	4.8	2.3	47.9		118.7	Serpentinite; very sheared, pale
		152.0	2.2	1.6	72.8		130.6	green c̄ magnetite.
(7)		154.5	2.5	1.7	68.1		130.6	Sheared serpentinite; variegated,
		158.9	4.4	3.2	72.8			c̄ slip fibre and magnetite.
1 6.0		165.6	6.7	5.8	86.5			Blebs minor +ve D.M.G. sulphide
(8)		172.4	6.8	2.9	42.6		188.0	at 137.2' and 160.0'.
		179.4	7.0	5.0	71.4			
185.5		187.2	7.8	6.8	87.1			

Remarks: 1. B. Cuffley logged 0 - 118.7

2. N.B. a 14.9 foot run 83.4' to 98.3 feet.

Date 7/4/71

Logged by JOHN G. LANGLANDS

DRILLING PROGRESS REPORT — SOREL PENINSULA ADDY CK. Branch

169

Bore DHNC4 — Report No.

Box	From	To	Int.	Core Rec'd.	%	Dip In Core
[illegible]9)	187.2	195.9	8.7	7.3	83.9	
202.0		205.6	9.7	9.2	94.9	
[illegible]10)		215.6	10.0	9.4	94.0	
218.0		225.6	10.0	9.2	92.0	
(11)		232.6	7.0	6.6	94.2	
23[illegible].0		236.8	4.2	3.2	76.2	
(12)		242.7	5.9	3.9	66.1	
2[illegible]0.5		249.7	7.0	5.3	75.6	
(13)		258.8	9.1	8.7	95.5	
2[illegible]7.0		267.8	9.0	9.0	100	
(14)		277.8	10.0	10.0	100	
2[illegible]2.5		288.3	9.5	9.5	100	
(15)		298.0	9.7	9.7	100	
30[illegible].5		307.5	9.5	9.3	97.9	
(16)		316.8	9.3	9.3	100	
314.0		325.6	8.8	7.6	86.5	
[illegible]17)		333.0	7.4	7.4	100	
330.0		340.0	7.0	6.4	91.4	
[illegible]18)		347.3	7.3	6.3	86.2	
345.0		354.2	6.9	5.5	79.6	
[illegible]19)		359.7	5.5	3.9	71.0	
360.5		366.0	6.3	5.9	93.6	
(20)		371.8	5.8	5.2	89.6	
3[illegible]8.5		377.8	6.0	5.6	93.3	
(21)		383.0	5.2	4.9	94.4	
[illegible]		388.5	5.5	5.2	94.6	
394.0		395.0	6.5	6.3	97.0	
[illegible]		400.9	5.9	4.3	73.0	
(22)		404.5	3.6	2.9	80.6	
[illegible]		409.5	5.0	4.2	84.0	
412.0		414.7	5.2	4.7	90.5	

Feet	Description 823169
188.0	Sheared serpentinite; variegated,
228.0	
228.0	Very sheared serpentinite
237.0	
237.0	Pale sheared serpentinite; $\bar{c}$ minor stichtite and slip fibre and magnetite (less than or equal to 5%) veins and disseminations.
319.0	
319.0	Dark massive serpentinite; slightly sheared $\bar{c}$ magnetite veins, minor slip fibre and very minor stichtite disseminations.
325.5	
325.5	Pale green serpentinite $\bar{c}$ short ribbon and stockwork cross fibre. 1/32: 16; 1/16: 5; 2/16: 1
326.5	
326.5	Dark massive serpentinite; slightly sheared $\bar{c}$ magnetite veins, minor slip fibre and very minor stichtite dissemination
329.5	
329.5	Pale sheared serpentinite; $\bar{c}$ magnetite, minor slip fibre and minor stichtite.
343.5	
343.5	Dark serpentine/talc rock; $\bar{c}$ a folded micro-scale ribbon fibre fabric and irregularly shaped (less than or equal to $\frac{1}{2}$") disseminations of a soft, amorphous, chocolate brown mineral, may be a serpentine vein.
344.1	
344.1	Pale sheared serpentinite; $\bar{c}$ magnetite veins and minor stichtite and slip fibre.
364.0	
364.0	Serpentinite; dark and deep green, slightly sheared and sheared $\bar{c}$ magnetite. Stichtite and minor slip fibre are visible in the more massive portions.
414.5	

Remarks:

Date 12/4/71

Logged by JOHN G. LANGLANDS

DRILLING PROGRESS REPORT SORELL PENINSULA NODDY CK. Branch

170

Bore DHNC4 Report No.

Box	From	To	Int.	Core Rec'd.	%	Dip in Core
[redacted]2.0	414.7	419.4	4.7	4.6	98.0	
(23)		427.4	8.0	4.1	51.3	
[redacted]7.4						

Feet Description 823170

414.5 Very Sheared Serpentinite.
427.4

Depth of Hole 427.4'
Core recovered 328.7'
Overall % Recovery 76.9%

DIP TESTS

0'	44°
200'	43¼°
400'	44½°

Remarks: The hole was collared in weathered sediments and no core recovery was made for the first 30 feet.
In places the rock is very sheared and washes away very easily indeed. The core recovery is reasonable for the type of rock drilled.

Date 13/4/71 Logged by JOHN G. LANGLANDS

NODDY CREEK 1971

171

823171

FIBRE LOG SHEET

Hole: DHNC 4 Interval: 115' - 120' 325' - 330' Footage:

Costean: Fibre Log:

←PAN→ ←10M→ ←4M→ ←2M→

FROM	To	Rec	Code	1/32	1/16	2/16	3/16	4/16	5/16	6/16	7/16			Sum 1/16	Vein Angle	Val o/o	
115	120	2.5	1	12	2									8		0.8	5'
				Stockwork in altered hornfels													
325	330	5	½2	16	5	1								15		1.5	5'
				Fibre in 1' interval, see log.													

DRILLING PROGRESS REPORT SORELL PENINSULA NODDY CK. Branch

172

Bore DHNC5 Report No. 823172

Location 30N 32.5E 3000N LINE

Bearing 079° (TRUE) Period APRIL 1971

Depression 45° Operator A.S. JAMES

R. L. Collar 776 feet (ESTIMATE) Unit E.D.E.C.O. 36

Est. Total Depth 600 feet Bit NQW/L STEP FACED

Footage for Period 544.5 feet. Barrel NQW/L

Box	From	To	Int.	Core Rec'd.	%	Core In Dip	Feet	Description
0	0	10.0	10.0	10.5	5.0		0–13.0	Siltstone and greywacke; weathered
		12.0	2.0	0.3	15.0		13.0	Siltstone and greywacke; fresh, carbonaceous, pyritic. Sulphide in slip planes and in vughs.
		14.0	2.0	0.3	15.0			
		16.0	2.0	0.5	25.0	35°		
		18.0	2.0	0.2	10.0	60°	88.5	Layering at 60° to L.C.A. at 35'
(1)		20.0	2.0	0.2	10.0		88.5	Hornfelsed sediments; ō deformation banding, augen structure and micro-folded CO_3 veins.
		22.0	2.0	0.2	10.0			
		24.0	2.0	0.5	25.0			
		29.0	5.0	1.2	24.0		123.2	
		34.0	5.0	1.6	32.0	112°	123.2	Hornfelsed sediments; deformed contact altered ō serpentine and chrysotile veins (1/16") Fibre log 120' - 130'.
		37.5	3.5	1.3	37.2	50°		
39.0		42.0	4.5	1.2	26.6		125.9	
		44.0	2.0	1.0	50.0		125.9	Very sheared serpentinite.
		46.5	2.5	0.7	35.8	71/L1 82	127.0	
(2)		51.0	4.5	1.3	28.4		127.0	Slightly sheared serpentinite; pale green ō minor slip fibre and magnetite.
		54.0	3.0	1.5	50.0		137.0	
57.0		57.0	2.0	1.4	70.0		137.0	Massive serpentinite; pale green ō disseminated and vein magnetite and minor slip fibre.
		63.0	6.0	2.9	48.4			
		69.0	6.0	2.6	43.4		140.0	
(3)		73.0	4.0	2.2	55.0		140.0	Sheared and very sheared serpentinite; ō magnetite. Minor slip fibre in the more massive portions of the core.
		77.0	4.0	0.8	20.0			
80.0		81.0	4.0	1.7	42.5			
		84.0	3.0	2.2	73.5			
(4)		86.0	2.0	1.4	70.0		154.0	
		93.0	7.0	5.5	78.5		154.0	Sheared serpentinite; ō slip fibre and magnetite. Minor +ve D.M.G. sulphide blebs at 159.0 and 160.7
94.5		99.5	6.5	5.7	87.6			
(5)		104.5	5.0	3.5	70.0		184.0	
110.5		111.0	6.5	5.9	90.7			
(6)		119.0	8.0	7.9	98.7			
		119.25	0.25	0.1	40.0			

Remarks:

Date 7/4/71 Logged by JOHN G. LANGLANDS

DRILLING PROGRESS REPORT SORELL PENINSULA NODDY CK. Branch

Bore DHNC5 Report No.

Box	From	To	Int.	Core Rec'd.	%	Dip in Core	Feet	Description 823173
10.5	119.25	123.5	4.25	4.25	100		184.0	Massive serpentinite; slightly
(6)		127.0	3.5	3.0	85.7			sheared pale green c slip fibre.
25.0		127.5	0.5	0.3	60.0			Very minor +ve D.M.G. sulphide
		130.0	2.5	2.0	80.0		204.0	at 188'.
7)		134.5	4.5	3.1	69.0	71/11 87	204.0	Massive serpentinite; as above
		136.75	2.25	1.4	62.4			c short ribbon and stockwork
		139.5	2.75	2.3	83.7		234.6	cross fibre 231.4 - 232.4.
40.0		143.5	4.0	2.1	52.5		234.6	Massive dark serpentinite; slightly
		147.5	4.0	3.2	80.0			sheared c magnetite and minor slip
8)		154.0	6.5	5.1	78.5		241.2	fibre.
156.5		160.5	6.5	5.9	90.7		241.2	Massive pale serpentinite c short
9)		170.5	10.0	9.7	97.0		249.8	stockwork and ribbon fibre.
172.0		174.0	3.5	3.5	100		249.8	Dark moderately sheared
10)		181.0	7.0	6.6	94.2			serpentinite; c magnetite veins
189.0		191.0	10.0	9.1	91.0		293.0	and disseminations.
(11)		201.0	10.0	9.7	97.0		293.0	Massive pale serpentinite; c
04.0		204.0	3.0	3.0	100			stockwork cross fibre. Dark
(12)		213.0	9.0	9.0	100			partially serpentinised pyroxenite
18.5		223.0	10.0	10.0	100			from 305.5 to 306.2 and from
(13)		233.5	10.5	10.5	100		313.6	309 - 310.
34.5		243.5	10.0	10.0	100		313.6	Sheared serpentinite; with sheared
(14)		253.5	10.0	9.2	92.0		327.0	and bent cross fibre.
250.0		263.5	10.0	10.0	100		327.0	Pale serpentinite; slightly
5)		272.0	8.5	8.0	94.0			sheared c short cross fibre.
64.5		279.0	7.0	5.5	78.5			Partially serpentinised pyroxenite
(16)		284.0	5.0	3.8	76.0		335.0	from 327.5 - 328.5.
280.0		289.2	5.2	3.2	61.5		335.0	Pale sheared serpentinite.
7)		294.0	4.8	4.8	100		342.0	
95.0		301.0	7.0	4.9	70.0			
(18)		306.0	5.0	5.0	100			
310.0		311.0	5.0	4.6	92.0			
9)		314.0	3.0	3.0	100			
24.0		320.0	6.0	3.3	55.0			
(20)		323.0	3.0	3.0	100			
		327.0	4.0	3.1	77.6			
		333.0	6.0	4.6	77.6			
42.0		340.0	7.0	3.5	50.0			

Remarks:

Date 12/4/71 Logged by JOHN G. LANGLANDS

DRILLING PROGRESS REPORT SORELL PENINSULA NODDY CK. Branch

Bore DHNC5 Report No.

Box	From	To	Int.	Core Rec'd.	%	Dip in Core	Feet	Description 823174
2.0	340.0	349.5	9.5	7.6	80.0		342.0	Massive pale serpentinite; c̄ cross
(21)		354.5	5.0	4.2	84.0			fibre. Dark partially serpentinised
8.5		357.5	3.0	2.3	76.6			pyroxenite from 352.3' - 354.4' and
		362.0	5.5	5.0	91.0		373.5	366.2'- 370.2'.
(22)		368.8	6.8	6.3	92.7		373.5	Sheared serpentinite; c̄ cross fibre
3.5		374.0	5.2	4.1	78.9		410.1	slip fibre and magnetite.
		378.5	4.5	2.6	57.8		410.1	Deep green, massive and slightly
		380.2	1.7	1.2	70.6	71/11 80		sheared serpentinite; c̄ magnetite
(23)		384.0	3.8	2.2	57.9			and slip fibre veins. Minor
		389.0	5.0	2.7	54.0		517.0	stichtite from 506' - 517'.
390.5		394.5	5.5	3.0	54.6		517.0	Massive serpentinite; deep and pale
24)		403.5	9.0	4.5	50.0			green, mottled, c̄ disseminated
		409.0	5.5	1.8	32.7			stichtite, occasional minor shears
15.5		415.0	6.0	5.0	83.5		543.0	with magnetite and minor slip fibre.
		420.0	5.0	4.4	88.1		543.0	Very sheared serpentinite.
		424.0	4.0	2.9	72.5		544.5	
		429.5	5.5	4.3	78.3			
431.5		435.0	5.5	4.7	85.5			Depth of hole 544.5 feet
26)		443.0	8.0	6.8	85.0			Core recovered 414.8 feet
447.0		449.0	6.0	4.6	76.6			% Recovery 76.1%
		453.5	4.5	3.8	84.5	71/11 79		
(27)		462.5	9.0	4.6	51.2			DIP TESTS 45° nominal
6.5		468.5	6.0	5.2	86.6			0'
(28)		474.5	6.0	5.7	95.0			200' 44½°
		480.2	5.7	5.3	93.1			400' 44°
3.0		488.2	8.0	7.3	91.2			540' 43°
(29)		495.0	6.8	6.8	100			
		502.0	7.0	7.0	100			
498.5		504.5	2.5	2.2	89.1			
30)		511.0	6.5	5.9	90.8			
513.0		518.0	7.0	5.6	80.1			
		524.0	6.5	6.0	92.3			
(31)		534.5	10.0	8.0	80.0			
528.5		544.5	10.0	9.7	97.0			
32)								
544.5								

Remarks: Core recovery is poorest in sheared serpentinite. The cross fibre zones were almost completely recovered. A.D.D. drilling a similar hole obtained 76.9% recovery.

Date 13/4/71 Logged by JOHN G. LANGLANDS

NODDY CREEK 1971

823175

175

FIBRE LOG SHEET

Hole: DHNC 5 Interval: 120' - 125' 220' - 410' Footage:

Costean: Fibre Log:

				←PAN→	←10M→		←4M→				←2M→						
FROM	To	REC	Code	1/32	1/16	2/16	3/16	4/16	5/16	6/16	7/16			Sum 1/16	Vein Angle	Val o/o	
120	125	5	5	43	15	Stockwork in altered horafels								36		3.6	
220	225	5	1		Barren					s.f.				0		0	
	230	4.9	1		"					"				0		0	
	235	4.7	1	16	3					"				11		1.1	
	240	4.9	1		Barren					"				0		0	
	245	4.4	½2	14	7	1				"				16		1.6	
	250	5.0	5	60	22	1								54		5.4	
	255	5.0	1	8						s.f.				4		0.4	
230	255		TOT	98	32	2											
			1/16	49	32	4								85		1.65	25'
255	260	5.0	1		Barren									0		0	
	265	5.0	1	2										1		0.1	
	270	5.0	1		Dark barren sheared serpentinite									0		0	
	275	4.6	1		"		"	"		"				0		0	
	280	4.5	1		"		"	"		"				0		0	
	285	4.8	1		"		"	"		"				0		0	
	290	5.0	1		"		"	"		"				0		0	
	295	5.0	3	25	17	4	0	0	0	1				43		4.3	
	300	4.2	2	30	17	2	1							39		3.9	
	305	5.0	2	20	11	1	0	1						27		2.7	
	310	4.7	½2	6	2	1								7		0.7	
	315	5.0	2	20	3	1	1							18		1.8	
	320	4.4	1		Barren sheared									0		0	
	325	4.9	1	4	1									3		0.3	
290	325		TOT	104	51	9	2	1	0	1							
			1/16	52	51	18	6	4	0	6				137		1.9	35'

176

NODDY CREEK 1971

823176

FIBRE LOG SHEET

Hole: DHNC 5 Interval: continued 325' - 410' Footage:

Costean: Fibre Log:

				←PAN→	←10M→	←4M→					←2M→					
FROM	To	Rec	Code	1/32	1/16	2/16	3/16	4/16	5/16	6/16	7/16			Sum 1/16	Vein Angle	Vol o/o	
325	330	4.8	½2	16	8	1								18		1.8	
	335	4.5	2	27	18	3	1							40		4.0	
	340	2.8	1		Barren sheared									0		0	
	345	4.5	2	9	10	4								22		2.2	
	350	4.9	3	8	18	10	7	0	1					68		6.8	
	355	4.5	3	3	14	7	3							38		3.8	
	360	5.0	2	14	23	3	1							39		3.9	
			TOT	77	91	28	12	0	1								
			1/16	38	91	56	36	0	5					226		3.23	35'
360	365	5.0	2	5	10	2								16		1.6	
	370	5.0	2	13	14	3								26		2.6	
	375	4.0	1	10	6									11		1.1	
	380	3.6	1		v. sheared, minor s.f.									0		0	
	385	3.8	1	8	0	1								6		0.6	
	390	2.7	1	4	2									4		0.4	
	395	3.6	1	2	3									4		0.4	
			TOT	42	35	6											
			1/16	21	35	12								68		0.97	35'
395	400	3.0		Sheared s.f.										0		0	
	405	3.7		v.sheared										0		0	
	410	3.5		v.sheared										0		0	

823177

177

Location NODDY CREEK 1971

VISUAL DOLLAR VALUE

Hole: DHNC 5 Sample: AF 419 Footage: 25', 230'-255'

Costean: Fibre Log:

	1/32	1/16	2/16	3/16	4/16	5/16	6/16	7/16	+½	Total
Visual Fibre		81	2							
1/16s		81	4							85
		Pan	10M			4M			2M	

Uncorrected Visual Percentage (fibre log sheet) = 1.65 %

Assuming vein angle = 45° then:

Corrected Visual Percentage = $\frac{\text{Total 1/16s x 0.737}}{\text{Footage}}$ = 2.5 %

Q.S.T.

	1/16s	Ounces		Evaluation Points
Pan =	81	15.3 X	1	= 15
10 Mesh =	4	0.7 X	10	= 7
4 Mesh =		X	40	=
2 Mesh =		X	100	=
	85	16.0		22

From graph relating evaluation points and price:- 1971 Prices

Value/short ton fibre = C$ 54.00

Therefore value/short ton rock = C$ 1.35

Value milled = C$

Date June 1971

823178

Location NODDY CREEK 1971

VISUAL DOLLAR VALUE

Hole: DHNC 5 Sample: AF 421 Footage: 35', 290'-325'

Costean: Fibre Log:

	1/32	1/16	2/16	3/16	4/16	5/16	6/16	7/16	+½	Total
Visual Fibre		103	9	2	1	0	1			
1/16s		103	18	6	4	0	6			137
		Pan	10M			4M			2M	

Uncorrected Visual Percentage (fibre log sheet) = 1.9 %

Assuming vein angle = 45° then:

Corrected Visual Percentage = $\frac{\text{Total 1/16s x 0.737}}{\text{Footage}}$ = 2.88 %

Q.S.T.

	1/16s	Ounces			Evaluation Points
Pan =	103	12.1	X	1	= 12
10 Mesh =	24	2.8	X	10	= 28
4 Mesh =	10	1.1	X	40	= 44
2 Mesh =			X	100	=
	137	16.0			84

From graph relating evaluation points and price:- 1971 Prices

Value/short ton fibre = C$ 110.00

Therefore value/short ton rock = C$ 3.17

Value milled = C$

Date June 1971

179

823179

Location NODDY CREEK 1971

VISUAL DOLLAR VALUE

Hole: DHNC 5 Sample: AF 422 Footage: 35', 325'-360'

Costean: Fibre Log:

	1/32	1/16	2/16	3/16	4/16	5/16	6/16	7/16	+½	Total
Visual Fibre		129	28	12	0	1				
1/16s		129	56	36	0	5				226
		Pan	10M			4M			2M	

Uncorrected Visual Percentage (fibre log sheet) = 3.23%

Assuming vein angle = 45° then:

Corrected Visual Percentage = $\frac{\text{Total 1/16s x 0.737}}{\text{Footage}}$ = 4.76%

Q.S.T.

	1/16s	Ounces		Evaluation Points
Pan =	129	9.1 X	1	= 9
10 Mesh =	92	6.5 X	10	= 65
4 Mesh =	5	0.3 X	40	= 12
2 Mesh =			X 100	=
	226	15.9		86

From graph relating evaluation points and price:- 1971 Prices

Value/short ton fibre = C$ 112.0

Therefore value/short ton rock = C$ 5.34

Value milled = C$

Date June 1971

180

823180

Location NODDY CREEK 1971

VISUAL DOLLAR VALUE

Hole: DHNC 5 Sample: AF 423 Footage: 35', 360'-395'

Costean: Fibre Log:

	1/32	1/16	2/16	3/16	4/16	5/16	6/16	7/16	+½	Total
Visual Fibre		56	6							
1/16s		56	12							68
		Pan	10M			4M			2M	

Uncorrected Visual Percentage (fibre log sheet) = 0.4 %

Assuming vein angle = 45° then:

Corrected Visual Percentage = $\frac{\text{Total 1/16s x 0.737}}{\text{Footage}}$ = 1.43 %

Q.S.T.

	1/16s	Ounces		Evaluation Points
Pan =	56	13.2	X 1	= 13
10 Mesh =	12	2.8	X 10	= 28
4 Mesh =			X 40	=
2 Mesh =			X 100	=
	68	16.0		41

From graph relating evaluation points and price:- 1971 Prices

Value/short ton fibre = C$ 62.00

Therefore value/short ton rock = C$ 0.89

Value milled = C$

Date June 1971

181

823181

Location NODDY CREEK 1971

VISUAL DOLLAR VALUE

Hole: DHNC 5 Sample: AF 421, 422, 423 Footage: 105', 290'-395'

Costean: Fibre Log:

	1/32	1/16	2/16	3/16	4/16	5/16	6/16	7/16	+½	Total
Visual Fibre		288	43	14	1	1	1			
1/16s		288	86	42	4	5	6			431
		Pan	10M			4M			2M	

Uncorrected Visual Percentage (fibre log sheet) = 2.4 %

Assuming vein angle = 45° then:

Corrected Visual Percentage = $\frac{\text{Total 1/16s x 0.737}}{\text{Footage}}$ = 3.02 %

Q.S.T.

	1/16s	Ounces		Evaluation Points
Pan =	288	10.8	X 1	= 11
10 Mesh =	128	4.7	X 10	= 47
4 Mesh =	15	0.5	X 40	= 20
2 Mesh =			X 100	=
	431	16.0		78

From graph relating evaluation points and price:- 1971 Prices

Value/short ton fibre = C$ 103.00

Therefore value/short ton rock = C$ 3.11

Value milled = C$

Date June 1971

DRILLING PROGRESS REPORT SORELL PENINSULA NODDY CK. Branch

182

Bore DHNC6

Location 40N 349E OFFSET 1.5S

Bearing 086° is the true bearing of the drill line.

Depression 45°

R. L. Collar 723' (interpolation)

Est. Total Depth 400'

Footage for Period

Report No. 823132

Period APRIL 1971

Operator A.D.D.

Unit F.30

Bit NQW/L STEP FACED

Barrel NQW/L

Box	From	To	Int.	Core Rec'd.	%	Core in Dip	Feet	Description
0	0	10.9	10.9	1.0	9.2		0	Massive and sheared pale green serpentinite c disseminated stichtite and magnetite in veins. Minor talcose slip fibre 27.9 - 28.4. Dark serpentine/talc "vein" c folded micro-scale ribbon fibre fabric and irregular less than ¼" disseminations of a chocolate brown mineral. The "vein" margins are richer in this mineral. c.f. DHNC4
		15.8	4.9	2.6	53.1			
(1)		25.3	9.5	6.6	69.5			
38.0		34.2	8.9	8.9	100			
		41.0	6.8	4.9	72.1			
(2)		47.7	6.7	6.7	100			
		58.0	10.3	9.9	97.1			
63.0		63.8	5.8	5.6	96.6			
(3)		73.2	9.4	9.4	100			
		83.8	10.6	10.6	100			
97.0		90.2	6.4	5.6	87.5		48.0	343.5 to 344.1.
(4)		100.6	10.4	10.4	100		48.0	Massive pale green serpentinite c disseminated stichtite and less magnetite than the previous interval. Minor slip fibre, perhaps 1%. 3"
111.5		110.0	9.4	9.4	100			
		119.6	9.6	9.1	94.8			
(5)		127.0	7.4	7.4	100			
138.0		136.0	9.0	9.0	100		80.0	of thread/vein ribbon fibre at 71.2'
(6)		146.0	10.0	10.0	100		80.0	Massive and sheared pale green serpentinite c stichtite and magnetite and about 1% of soft talcose, sometimes flakey slip
159.5		156.0	10.0	10.0	100			
		166.0	10.0	10.0	100			
(7)		175.4	9.4	9.4	100			
183.5		186.0	10.6	10.6	100		169.0	fibre.
		195.4	9.4	8.1	86.2		169.0	Deformed serpentinite, brecciated and folded serpentinite c magnetite, stichtite and soft brittle talcose
							184.5	slip fibre, about 1.5%.
							184.5	Slightly sheared pale green serpentinite c magnetite, stichtite and 1% slip fibre, soft brittle
							194.5	and talcose.

Remarks:

Date 21/4/71

Logged by JOHN G. LANGLANDS

DRILLING PROGRESS REPORT SORELL PENINSULA NODDY CK. Branch

Bore DHNC6 Report No. 823183

Box	From	To	Int.	Core Rec'd.	%	Dip in Core	Feet	Description
183.5	195.4	205.3	9.9	9.9	100		194.5	Sheared serpentinite pale,
(8)		212.0	6.7	6.7	100		197.4	becoming darker towards end.
208.0		222.0	10.0	10.0	100		197.4	Deep green slightly sheared serpentinite c magnetite and slip fibre, approx. 1%, soft, brittle
(9)		230.0	8.0	8.0	100			
232.5		240.3	10.3	10.3	100			
(10)		249.0	8.7	8.7	100		203.8	and talcose, miner stichtite.
257.0		256.0	7.0	7.0	100		203.8	Slightly sheared pale green serpentinite c magnetite, stichtite
(11)		266.0	10.0	10.0	100			
279.0		276.0	10.0	9.2	92.0			and less than 1% soft, brittle
		286.0	10.0	9.6	96.0			talcose slip fibre. Fibrils are
(12)		296.0	10.0	10.0	100		249.0	~~less~~ greater than 2" in some cases.
305.0		305.3	9.3	9.3	100		249.0	Sheared and slightly sheared serpentinite, deep green and dark
(13)		315.6	10.3	10.3	100			
329.0		325.2	9.6	8.4	87.5			green c magnetite in the more
		335.0	9.8	9.8	100			sheared portions, stichtite
(14)		341.3	6.3	6.3	100			throughout.
351.5		349.0	7.7	7.7	100			Brittle talcy slip fibre less than
		356.6	7.6	6.7	88.1			or equal to 1%, some good veins
(15)		362.0	5.4	4.9	90.7			½" wide of long slip fibre less
		367.3	5.3	4.5	84.9			than 2". Contact between dark
376.0		372.0	4.7	4.7	100			and paler serpentinite @ 20° to
		378.7	6.7	6.4	95.4		313.5	L.C.A. at 298'.
		386.0	7.3	5.9	80.7		313.5	Massive pale serpentinite c approx. 1% good slip fibre, stichtite, and
							333.5	magnetite in veins.
							333.5	Pale and dark sheared serpentinite c magnetite up to 5% locally in veins, stichtite throughout, good localised slip fibre but less
							369.1	than ½% overall.
							369.1	Lamprophyric dyke c biotite - phyric margins and a more siliceous
							378.5	central portion. Unsheared.
							378.5	Sheared serpentinite, dark, hard
							386.0	compact d secondary contortions.

Remarks:

Date 21/4/71

Logged by JOHN G. LANGLANDS

DRILLING PROGRESS REPORT SORELL PEN...

Bore DHNC6 Report No. 823184

Box	From	To	Int.	Core Rec'd.	%	Dip in Core	Feet	Description
184								
3[illegible].0	386.0	391.8	5.8	3.2	55.2		386.0	Pale sheared serpentinite ō magnetite and minor stichtite
		395.8	4.0	2.9	72.6			
[illegible]16)		399.8	4.0	3.5	87.5		422.6	and minor slip fibre.
405.0		403.7	3.9	2.7	69.4		422.6	Massive pale green serpentinite,
		408.5	3.8	3.8	100			slightly sheared ō minor slip
(17)		412.8	4.3	4.3	100			fibre and magnetite. Rare very
		419.0	6.2	5.3	85.5		449.3	minor stichtite.
4[illegible]9.5		426.0	7.0	6.9	98.5		449.3	Dark and pale sheared serpentinite
		436.0	10.0	10.0	100			ō magnetite and less than 1% long
[illegible]18)		445.3	9.3	9.3	100		455.0	talcose slip fibre.
453.0		455.6	10.3	10.3	100		455.0	Massive and sheared pale green
[illegible]9)		465.4	9.8	9.8	100			serpentinite ō less than 1%
479.0		475.5	10.1	10.1	100			talcose slip fibre, magnetite in
		485.7	10.2	10.2	100			veins and minor vein and
(20)		488.0	2.3	2.3	100		498.0	disseminated stichtite.
		496.0	8.0	8.0	100		498.0	Massive pale green serpentinite
5[illegible].0		498.3	2.3	2.3	100			ō vein and disseminated magnetite,
		506.0	7.7	7.7	100			minor disseminated stichtite and
[illegible]21)		516.0	10.0	10.0	100			approx. ½% talcose slip fibre or
523.5		526.0	10.0	10.0	100		512.5	fibrous talc.
[illegible]22)		536.0	10.0	10.0	100		512.5	Slightly sheared and sheared
547.0		546.0	10.0	10.9	89.0			serpentinite. Pale green and
[illegible]23)		555.0	9.0	9.0	100			deep green ō disseminated and
		565.3	10.3	10.3	100			vein magnetite, minor disseminated
5[illegible]9.5		575.5	10.2	10.2	100			and vein stichtite and less than
[illegible]24)		585.5	10.0	10.0	100		568.0	1% talcose slip fibre.
593.0		593.0	7.5	7.5	100		568.0	Slightly sheared pale green
[illegible]25)		600.0	7.0	7.0	100			serpentinite ō minor disseminated
600.0								and vein stichtite, vein and
								disseminated magnetite and less
							586.0	than ½% talcose slip fibre.
							586.0	Pale green and dark green sheared
								serpentinite and breccia with a
								magnetite rich sheared matrix.
								Less sheared portions and the
								breccia clasts have disseminated
								stichtite, less than ½% of talcose
							600.0	slip fibre.

Remarks: Hole stopped at 600' - rig's recommended maximum N size capability after passing barren target zone.

NB. No fibre log sheet for this hole.

Date 24/4/71 Logged by JOHN G. LANGLANDS

DRILLING PROGRESS REPORT SORELL PENINSULA

185

Bore DHNC6 Report No.

823185

From	To	Int.	Core Rec'd.	%	Dip in Core	Description
						DIP TESTS
						0' Unsuccessful, assume 45°
						200' No etched line
						400' 47½°
						600' 47°
						Depth of hole = 600.0 feet.
						Core recovered = 564.2 feet.
						Overall recovery = 94%

Remarks:

Date 3/5/71 Logged by JOHN G. LANGLANDS

DRILLING PROGRESS REPORT SORELL PENINSULA NODDY C.

186

Bore DHNC7 2000N

Location 20N 149E OFFSET 19 feet N

Bearing 108½° TRUE

Depression 45°

R. L. Collar 802.7'

Est. Total Depth 595'

Footage for Period

Report No. 823186

Period APRIL - MAY 1971

Operator A.S. JAMES

Unit E.D.F.C.O. 36

Bit NQW/L STEP FACED

Barrel NQW/L

From	To	Int.	Core Rec'd.	%	Core in Dip	Feet	Description
0	6.0	6.0	2.0	33.3		0	Fine greywacke and siltstone,
	8.0	2.0	0.5	23.0			weathered deformed and slightly
	14.5	6.5	1.0	15.4		50.5	schistose.
	19.0	4.5	0.5	11.1		50.5	As above but fresh
	24.5	5.5	2.5	45.5		52.0	
	30.0	5.5	2.0	36.3		52.0	Sheared gabbro. Possibly chlorite,
	34.5	4.5	0.5	11.1			albite, amphibole rock c CO_3 vughs
	38.5	4.0	1.0	25.0		54.0	and veins.
	42.0	3.5	3.5	100		54.0	Indurated siltstone and fine
	45.0	3.0	3.0	100			greywacke c occasional CO_3 veins.
	49.5	4.5	3.7	82.3			Many irregular microfolds and
	52.0	2.5	2.5	100		68.4	microfaults deform the CO_3 veins.
	54.0	2.0	2.0	100	71/L1 93	68.4	Sheared gabbro c diffuse
	55.5	1.5	1.5	100			gradational contacts c 4 veins of
	56.7	1.2	1.2	100			pale grey-green slip/cross fibre
	58.7	2.0	2.0	100		73.0	to ¼" - may be amphibole.
	59.7	1.0	1.0	100		73.0	Sheared serpentinite, dark brown-
	60.7	1.0	1.0	100			green to black, compact, hard c
	62.0	1.3	1.3	100			many less than ¼" CO_3 veins,
	63.0	1.0	1.0	100	71/L1 92		disseminated magnetite and minor
	64.5	1.5	1.5	100			+ve D.M.G. sulphide disseminations
	67.0	2.5	2.0	80.0			at 83.8', 78.6', 93.0', 95.6',
	69.0	2.0	2.0	100			104.4'. Pyrite films are common
	71.5	2.5	2.0	80.0		105.0	in the shears, -ve D.M.G. reaction.
	72.5	1.0	0.6	60.0		105.0	Lamprophyre c biotite and horn-
	73.5	1.0	0.7	70.0			blende phenocrysts and xenoliths
	74.0	0.5	0.5	100	71/L1		of quartzite, garnet bearing gneiss,
	75.5	1.5	1.5	100	89 90		granite and "ghosts". Margins are
	79.5	4.0	3.7	92.6	91	115.5	richer in biotite and hornblende
	84.0	4.5	3.8	84.5			
	89.5	5.5	4.8	87.4			

Remarks:

Date 22/4/71

Logged by JOHN C. LANGLANDS

187

DRILLING PROGRESS REPORT SORELL PENINSULA NODDY CK. Branch

Bore DHNC7 Report No. 823187

Box	From	To	Int.	Core Rec'd.	%	Dip in Core	Feet	Description
3.0	89.5	95.0	5.5	5.0	91.0		115.5	Massive talc serpentine rock
		101.0	6.0	6.0	100		117.0	
4)		105.0	4.0	4.0	100		117.0	Sheared serpentinite, dark brown
105.5		111.5	6.5	6.5	100			green, compact.
		121.7	10.2	10.2	100			123.2' bleb +ve sulphide
		124.0	2.3	2.3	100		128.8	125.0' 8 blebs +ve Su.
29.5		131.5	7.5	6.5	86.6		128.8	Dark and deep green serpentinite
		134.5	3.0	3.0	100			c short ribbon and stockwork cross
6)		139.5	5.0	4.0	80.0		137.5	fibre.
		149.5	10.0	10.0	100		137.5	Dark, hard sheared serpentinite
151.5		153.5	4.0	3.2	80.0		139.5	c magnetite.
		158.0	4.5	3.4	75.6	71/L1 88	139.5	Serpentinite and partially
(7)		164.5	6.5	5.6	86.2			serpentinised pyroxenite c ribbon
		171.5	7.0	7.0	100			and stockwork cross fibre of good
		180.5	3.0	1.9	64.4			length.
		182.0	1.5	0.8	53.2		177.7	Barren pyroxenite 143.6' to 147.6'
		185.0	3.0	1.0	33.3		177.7	Dark and pale sheared serpentinite
8)		186.0	1.0	0.5	50.0			c magnetite and minor slip fibre,
		188.0	2.0	0.4	20.0	71/L1		minor disseminated sulphide at
		190.0	2.0	0.5	25.0	87	217.0	200.5 faintly +ve D.M.G. reaction.
		192.5	2.5	2.2	88.1		217.0	Pale green and deep green, slightly
		197.5	5.0	4.1	82.0			sheared serpentinite c magnetite
		202.0	4.5	4.2	93.4	71/L1		and minor localised slip fibre
204.0		206.5	4.5	3.9	86.7	86		less than 1% long and brittle and
		212.5	6.0	5.6	93.4			talcose.
9)		218.0	5.5	5.5	100			Shear banding at 250', 50° to LCA
		223.5	5.5	4.7	85.5			255', 40° to LCA
27.0		233.0	9.5	9.0	94.6		283.0	265', 45° to LCA
(10)		241.5	8.5	8.5	100		283.0	Massive serpentinite, compact,
		244.0	2.5	2.5	100			granular c large scale (3") mottling
250.5		254.3	10.3	9.3	90.3			in places. Minor soft, brittle
		264.3	10.0	10.0	100			talcose slip fibre throughout e.g.
(11)		274.3	10.0	10.0	100		306.5	3 x ¼" veins c 1" fibre.
76.0		284.3	10.0	10.0	100			
12)		293.3	9.0	9.0	100	71/L1		
300.0		301.7	9.4	8.5	90.4	85		
13)		312.0	10.3	10.3	100			
(322.3								

Remarks:

(1) +ve sulphide/Su = positive D.M.G. reaction sulphide.

(2) At 190' uphole from a ground away piece of core, two one inch pieces of siltstone core were found in the core box. These were removed because it was obvious they did not come from that part of the hole.

Date 22/4/71 Logged by JOHN G. LANGLANDS

188

DRILLING PROGRESS REPORT SORELL PENINSULA MODDY CK. Branch

Bore DHNC7 Report No. 823188

Box	From	To	Int.	Core Rec'd.	%	Dip in Core	Feet	Description
[illegible]2.3	312.0	322.3	10.3	10.3	100		306.5	Dark sheared serpentinite.
(14)		332.0	9.7	9.7	100			Upper contact @ 30° to L.C.A.
[illegible]4.5		342.0	10.0	10.0	100			truncates the shearing. Minor
(15)		352.0	10.0	10.0	100		308.5	talcose slip fibre.
[illegible]8.0		362.0	10.0	10.0	100		308.5	Massive serpentinite, pale grey
		372.0	10.0	10.0	100			green c disseminated and narrow
([illegible]6)		382.0	10.0	9.3	93.0			vein stockwork magnetite and
		388.0	6.0	6.0	100	71/L1 84		minor talcose slip fibre in shears.
394.0		394.5	6.5	6.5	100			Very minor +ve D.M.C. finely
		401.5	7.0	7.0	100			disseminated sulphide at 321.2,
(17)		411.5	10.0	10.0	100		342.3	322, 328.0, 324.8, 341.8.
[illegible]6.0		415.0	4.5	2.5	55.5		342.3	Pale and dark green sheared
		420.0	5.0	1.8	36.0			serpentinite c magnetite in veins.
[illegible]8)		424.0	4.0	3.2	80.0			Minor disseminated stichtite from
		434.0	10.0	9.6	96.0			362' onwards. Fibrous talc in the
[illegible]4.0		444.0	10.0	9.7	97.0		391.0	more contorted portions.
		454.0	10.0	9.7	97.0		391.0	Massive and sheared pale and deep
(19)		459.0	5.0	4.1	82.0			green serpentinite c disseminated
		464.5	5.5	5.5	100	71/L1 83		stichtite blebs, vein magnetite in
469.0		471.5	7.0	7.0	100			the sheared portions and minor
		481.5	10.0	5.5	55.0			slip fibre (½%). Fine veins of
(20)		483.5	2.0	2.0	100		465.0	talc.
		488.5	5.0	2.3	46.0		465.0	Deep green massive serpentinite,
		494.5	6.0	5.8	96.5			granular c minor disseminated
[illegible]8.5		504.5	10.0	10.0	100			stichtite. Pale green composite
([illegible])		514.5	10.0	10.0	100			veins of light green serpentine
528.0		521.5	7.0	1.5	21.4			and short cross fibre.
		524.0	2.5	1.7	68.0			1/32 1/16 1/8
		528.0	4.0	3.1	77.6		465.9	6 2 0
							465.9	Massive and sheared pale and dark
								green serpentinite c magnetite
								veins and 1% (est) slip fibre,
								half of which is talcose and
							514.5	brittle. Disseminated stichtite.

Remarks: N.B. The "main" asbestos zone appears to be absent subsurface. The stichtite bearing serpentinite has been encountered without passing through a massive cross fibre bearing serpentinite at the expected depth.

Date 24/4/71 Logged by JOHN G. LANGLANDS

DRILLING PROGRESS REPORT SORELL PENINSULA NODDY CK. Branch

Bore DHNC7 Report No. 823139

Box 189

From	To	Int.	Core Rec'd.	%	Dip In Core	Feet	Description
528.0	530.5	2.5	1.3	52.0		514.5	Pale and dark sheared flakey serpentinite c magnetite. The stichtite is absent.
	534.5	4.0	2.0	50.0			
(22)	538.5	4.0	4.0	100			
	542.5	3.5	2.8	80.0		568.5	Minor cross fibre - see log.
	544.5	2.5	1.6	64.0		568.5	Dark massive serpentinite and pyroxenite c minor cross fibre.-
	550.5	6.0	3.4	56.6			
554.0	554.0	3.5	3.1	88.6		595.0	see log.
	557.0	3.0	3.0	100			
	560.0	3.0	1.2	40.0			Depth 595'
	563.0	3.5	3.5	100			Core recovered 510.2
(23)	567.0	3.5	3.5	100			% recovery 85.7%
	571.0	4.5	4.5	100			
	575.5	4.0	4.0	100			DIP TESTS
77.0	580.0	4.5	4.5	100			0 46¾°
	583.0	3.0	1.7	56.7			200 44½°
(24)	589.5	6.5	6.2	95.3			400 45½°
95.0	595.0	5.5	4.9	89.0			590 44½°

Remarks: Hole stopped in dark serpentinite/pyroxenite equivalent to that penetrated by DHNC8.

Date 20/5/71 Logged by JOHN G. LANGLANDS

190

823190

NODDY CREEK 1971

FIBRE LOG SHEET

Hole: DHNC 7 Interval: 125' - 180' Footage: 55'

Costean: Fibre Log:

←PAN→ ←10M→ ←4M→ ←2M→

FROM	To	Rec	Code	1/32	1/16	2/16	3/16	4/16	5/16	6/16	7/16			Sum 1/16	Vein Angle	Vol %	
125	130	4.6	5	23	3						Minor	s.f.		14½		1.4	
	135	5.0	5	26	9						"	"		22		2.2	
	140	4.2	1	0	0						"	"		0		0	
	145	4.8	3	11	2	1	2	0	0	1				21½		2.1	
	150	5.0	2	7	6	3								15½		1.5	
	155	4.5	1	2	3							s.f.		4		0.4	
	160	4.0	1	5	5							s.f.		7½		0.7	
	165	4.3	2	6	10	9					gash	veins		31		3.1	
	170	5.0	2	2	11	1	1							17		1.7	
	175	4.7	½2	15	14						gash	veins		21½		2.1	
	180	3.8	2	8	5	4								17		1.7	
			TOT	105	68	18	3	0	0	1							
			1/16	52½	68	36	9	0	0	6				171½		1.5	55'

191

NODDY CREEK 1971

FIBRE LOG SHEET

823191

Hole: DHNC 7 Interval: 515' - 595' Footage: 80'

Costean: Fibre Log:

				←PAN→	←10M→	←4M→					←2M→					
FROM	To	REC	Code	1/32	1/16	2/16	3/16	4/16	5/16	6/16	7/16			Sum 1/16	Vein Angle	Val o/o	
465	465.9		1	6	2									5		—	
515	520	1.5	1	0	0			two s.f. veins						0		0	
	525	3	1	0	0									0		0	
	530	4.2	1	0	0									0		0	
	535	3.9	1	0	1									1		0.1	
	540	5.0	1	1										½		0	
	545	4.6	1	0	0									0		0	
	550	3.3	1	0	0									0		0	
	555	4.8	1	2	3									4		0.4	
	560	3.6	1	0	0			two s.f. veins						0		0	
	565	4.6	1	3										1½		0.1	
	570	5.0	1	2										1		0.1	
	575	5.0	1	3										1½		0.1	
	580	5.0	1	0	0									0		0	
	585	4.0	1	0	0									0		0	
	590	4.5	1	0	0									0		0	
	595	4.6	1	8										4		0.4	
515	595		TOT	19	4												
			1/16	9½	4									13½		0.1	80'

192

823192

Location NODDY CREEK 1971

VISUAL DOLLAR VALUE

Hole: DHNC 7 Sample: AF 440 Footage: 55', 125'-180'

Costean: Fibre Log:

	1/32	1/16	2/16	3/16	4/16	5/16	6/16	7/16	+½	Total
Visual Fibre		120	18	3	0	0	1			
1/16s		120	36	9	0	0	6			171
		Pan	10M			4M			2M	

Uncorrected Visual Percentage (fibre log sheet) = 1.5 %

Assuming vein angle = 45° then:

Corrected Visual Percentage = $\frac{\text{Total 1/16s x 0.737}}{\text{Footage}}$ = 2.29 %

Q.S.T.

	1/16s	Ounces		Evaluation Points
Pan =	120	11.22 X	1	= 11
10 Mesh =	45	4.21 X	10	= 42
4 Mesh =	6	0.56 X	40	= 22
2 Mesh =		X	100	=
	171	15.99		75

From graph relating evaluation points and price:- 1971 Prices

Value/short ton fibre = C$ 100.00

Therefore value/short ton rock = C$ 2.29

Value milled = C$

Date June 1971

193

823193

Location NODDY CREEK 1971

VISUAL DOLLAR VALUE

Hole: DHNC 7 Sample: AF 446 Footage: 80', 515'-595'

Costean: Fibre Log:

	1/32	1/16	2/16	3/16	4/16	5/16	6/16	7/16	+½	Total
Visual Fibre		13½								
1/16s		13½								13½
		Pan		10M			4M		2M	

Uncorrected Visual Percentage (fibre log sheet) = 0.1 %

Assuming vein angle = 45° then:

$$\text{Corrected Visual Percentage} = \frac{\text{Total 1/16s x 0.737}}{\text{Footage}} = 0.12\ \%$$

Q.S.T.

	1/16s	Ounces		Evaluation Points
Pan =	13½	16.00	X 1	= 16
10 Mesh =			X 10	=
4 Mesh =			X 40	=
2 Mesh =			X 100	=
	13½	16.00		16

From graph relating evaluation points and price:- 1971 Prices

Value/short ton fibre = C$ 54.00

Therefore value/short ton rock = C$ 0.06

Value milled = C$

Date June 1971

DRILLING PROGRESS REPORT SORELL PENINSULA NODDY CK. Branch

Bore DHNC8 2000N

Location 20N 452E OFFSET 0

Bearing 108½° TRUE

Depression 43°

R. L. Collar 764.9'

Est. Total Depth 510'

Footage for Period

Report No. 823194

Period MAY 1971

Operator A.D.D. F.30

Unit MINDRILL F.30

Bit NQW/L STEP FACED

Barrel NQW/L

From	To	Int.	Core Rec'd.	%	Core in Dip
0	10.0	10	2.1	21	
	16.0	6	1.9	32	
	21.5	5.5	2.5	46	
	25.5	4	3.5	88	
	32.5	7	2.1	30	
	38.5	6	3.9	65	
	43.0	4.5	4.2	93	
	46.0	3	3.0	100	
	48.5	2.5	2.5	100	
	56.0	7.5	6.8	91	
	65.5	9.5	9.5	100	71/L1 94
	75.8	10.3	10.3	100	
	85.8	10.0	10.0	100	
	96.0	10.2	10.2	100	
	106.0	10.0	9.5	95	
	116.0	10.0	9.7	97	
	125.0	9.0	9.0	100	
	134.3	9.3	9.3	100	
	143.5	9.2	3.9	43.3	71/
	147.5	4.0	3.2	80.0	L1
	154.5	7.0	3.6	51.5	95
	158.0	3.5	2.3	65.8	
	161.5	3.5	2.3	65.8	
	165.0	3.5	1.9	54.3	
	168.0	3	2.9	96.7	
	172.5	4.5	3.4	75.6	
	176.0	3.5	1.5	42.9	
	184.0	8.0	3.5	43.7	
	187.0	3.0	3.0	100	
	191.0	4.0	2.4	55	
	191.0	191.0	143.9	75%	

Feet	Description
0	Overburden c̄ cross fibre bearing fragments from costean less than
10	or equal to 2/16".
10	Massive slightly sheared pale green serpentinite, granular, mottled c̄ disseminated stichtite and slip fibre/magnetite veins. Localised minor thread vein ribbon fibre. Total fibre content ½% estimated although locally richer. Much of the slip fibre is tough and flexible. Massive portions of the core show possible pseudomorphs often olivine, less than or equal to 1 cm. diameter. Sheared
129	portions are richer in magnetite.
129	Sheared serpentinite c̄ minor slip
147.5	fibre, magnetite and stichtite.
147.5	Serpentinite slightly sheared c̄ cross fibre, slip fibre and
209.5	magnetite.

Remarks:

Date 15/5/71

Logged by JOHN G. LANGLANDS

DRILLING PROGRESS REPORT SORELL PENINSULA NODDY CK. Branch

Bore DHNC8 Report No.

823195

From	To	Int.	Core Rec'd.	%	Dip in Core
191.0	196.0	5.0	2.8	56	
	202.0	6.0	2.7	46.6	
	205.5	3.5	3.5	100	
	215.0	9.5	8.8	92.6	
	225.5	9.5	4.5	100	
	233.0	8.5	3.7	43.5	
	235.0	2.0	2.5	100	
	238.0	3.0	1.9	63.4	
	240.5	2.5	1.8	90	
	244.0	3.5	2.1	60	
	245.0	1.0	0.8	80	
	250.0	5.0	4.9	98	
	253.0	3.0	3.0	100	
	257.5	4.5	2.2	48.9	
	265.5	8.0	2.3	28.8	
	269.5	4.0	2.2	55	
	273.0	3.5	1.3	37.1	
	276.0	3.0	1.3	43.3	
	279.5	3.5	0.7	20	
	286.0	6.5	1.9	29.2	
	291.5	5.5	1.7	31.9	
	293.0	1.5	0.8	53.3	
	296.0	3.0	0.9	29.9	
	297.5	1.5	0.8	53.3	
	301.5	4.0	1.2	29.9	
	303.0	1.5	0.9	60	
	305.8	2.8	2.8	100	
	310.0	4.2	4.2	100	
	313.5	3.5	2.8	80	
	317.5	4.0	4.0	100	
	320.0	2.5	2.5	100	
	323.5	3.5	3.1	88.6	
	326.0	2.3	2.3	88.1	
	329.0	3.0	3.0	100	
	332.3	3.3	2.8	85	
	335.5	3.2	3.0	93.9	
	144.5	144.5	91.7	63.5%	

Feet	Description
209.5	Pyroxenite and serpentinite dark hard massive c occasional minor shears. 280 - 291 minor short cross fibre. 291 - 292.8 veins of dark green serpentinite, U.B. is paler, one ½ inch pyrite (-ve
423	D.M.G.) vein.

Remarks:

Date 15/5/71 Logged by JOHN G. LANGLANDS

DRILLING PROGRESS REPORT — Southern Peninsular Mines N.L. Branch

Bore DHNC8 — Report No. 823196

From	To	Int.	Core Rec'd.	%	Dip in Core	Description
335.5	342.0	7.5	4.6	65.7		
(12)	343.5	1.5	1.5	100		
	347.0	3.5	3.0	85.8		
350	350.0	3.0	3.0	100		
	354.0	4.0	4.0	100		
	355.5	1.5	1.3	86.6		
(13)	357.5	2.0	2.0	100		
	360.0	2.5	2.1	84		
	364.5	4.5	4.5	100		
3	373.5	9.0	9.0	100		
	380.0	6.5	6.5	100		
4)	382.0	2.0	2.0	100		
	386.0	4.0	4.0	100		
6	396.0	10.0	10.0	100		
	398.0	2.0	2.0	100		
	400.5	2.5	2.5	100		
	405.0	4.5	4.5	100		
	408.0	3.0	2.3	76.7		
	410.0	2.0	1.7	85		
(15)	417.0	7.0	6.5	93		
9	423.0	6.0	3.9	63.4		423 Sheared serpentine, chlorite rock
	428.0	5.0	5.0	100		424.3 c̄ very thin CO_3 veins
	431.0	3.0	3.0	100		424.3 Serpentinite, fine grained, black,
(16)	436.5	5.5	5.1	92.9		breaks along irregular shear
	438.0	1.5	1.5	100		431.3 network, CO_3 veins towards end.
3	445.0	7.0	7.0	100		431.3 Chlorite, CO_3, serpentine ? rock
	451.0	6.0	6.0	100		c̄ alteration product of a dissem-
(17)	453.8	2.8	2.8	100		inated spinel phase, probably
465	462.5	8.7	8.7	100		leucoxene. Numerous irregular
	470.0	7.5	5.6	74.7		veins and pods of white crystalline
	478.0	8.0	5.1	63.7	71/L1	CO_3. May be a hydrothermally
(18)	478.8	0.8	0.8	100	96	510.0 altered ultrabasic or gabbro.
	488.0	9.2	9.2	100		Depth of hole 510 feet
492	494.3	6.3	6.3	100		Core recovered 409.2
	504.5	10.2	10.2	100		Overall % recovery 80.2%
(19)	508.0	3.5	3.5	100		DIP TESTS
5	510.0	2.0	2.0	100		0' 43°
						~~200'~~ ~~42½°~~
						400' 43°
						500' 43°

Remarks: 174.5 174.5 162.7 93%

Hole stopped at 510' due to suspected proximity of eastern boundary fault and lack of fibre prospects in end rock-type.

Date 15/5/71

Logged by JOHN G. LANGLANDS

NODDY CREEK 1971

197

823197

FIBRE LOG SHEET

Hole: DHNC 8 Interval: 145' - 215' Footage: 70'
280' - 291' 11'

Costean: Fibre Log:

←PAN→ ←10M→ ←4M→ ←2M→

FROM	To	Rec	Code	1/32	1/16	2/16	3/16	4/16	5/16	6/16	7/16			Sum 1/16	Vein Angle	Val %	
145	150	4	1	12	2									8		0.8	
	155	2.1	1	3	2									3½		0.3	
	160	3.6	1	0	0									0		0	
	165	2.5	1	1	1									1½		0.1	
	170	4.8	1	0	0									0		0	
	180	3.3	1	0	0									0		0	
	185	3.0	1	0	0									0		0	
	190	3.5	1	0	0									0		0	
	195	3.2	1	0	1									1		0.1	
	200	2.5	1	0	0									0		0	
	205	5.0	2	1	2	2								6½		0.6	
	210	4.0	2	2	5	1	0	0	1					13		1.3	
	215	5.0	1	1	1		Massive serpentinised Px							1½		0.1	
			TOT	20	14	3	0	0	1								
			1/16	10	4	6	0	0	5					35		0.25	70'
280	291	3.1		8	3		NB recovery < 30%							7		0.3	11'

198

823198

Location NODDY CREEK 1971

VISUAL DOLLAR VALUE

Hole: DHNC 8 Sample: AF 449 Footage: 70', 145'-215'

Costean: Fibre Log:

	1/32	1/16	2/16	3/16	4/16	5/16	6/16	7/16	+½	Total
Visual Fibre		24	3	0	0	1				
1/16s		24	6	0	0	5				35
		Pan	10M			4M			2M	

Uncorrected Visual Percentage (fibre log sheet) = 0.25 %

Assuming vein angle = 45° then:

Corrected Visual Percentage = $\frac{\text{Total 1/16s x 0.737}}{\text{Footage}}$ = 0.37 %

Q.S.T.

	1/16s	Ounces		Evaluation Points
Pan =	24	11.0	X 1	= 11
10 Mesh =	6	2.7	X 10	= 27
4 Mesh =	5	2.3	X 40	= 92
2 Mesh =			X 100	=
	35	16.0		130

From graph relating evaluation points and price:- 1971 Prices

Value/short ton fibre = C$ 165.00

Therefore value/short ton rock = C$ 0.66

Value milled = C$

Date June 1971

DRILLING PROGRESS REPORT SORELL PENINSULA NODDY CK. Branch

189

Bore DHNC9 Report No. 823199

Location 15S 733E OFFSET 11.7S

Bearing 319° TRUE Period MAY 1971

Depression 45° Operator A.D.D.

R. L. Collar 788.7' Unit MINDRILL F30

Est. Total Depth 390' Bit NQW/L STEP FACED

Footage for Period Barrel NQW/L

Box	From	To	Int.	Core Rec'd.	%	Core in Dip	Feet	Description
	0	10.0	10	5.6	56		0	Sheared, quartz veined chloritic schist c yughs after CO_3
	10.0	15.0	5	4.5	90			
(1)	15.0	18.2	3.2	2.8	87.6			leucoxene. Rock is = to bottom
	18.2	22.5	4.3	3.5	81.5	71/L1		of DHNC8 on 2000N. Probably
	22.5	30.0	7.5	4.5	60.0	103		sheared gabbro.
32.5	30.0	39.5	9.5	9.5	100		30	0 - 15' weathered brown.
	39.5	43.5	4.0	4.0	100		30	Dark slightly sheared and sheared
(2)	43.5	53.7	10.2	8.0	78.6			partially serpentinised pyroxenite
5 .7	53.7	60.0	6.3	5.7	90.5			and serpentinite c CO_3, serpentine
	60.0	67.5	7.5	5.2	69.4	71/L1		and talc veins. Shows primary
	67.5	68.0	0.5	0.5	100	102	110.5	adcumulus orthopyroxenes.
(3)	68.0	71.2	3.2	0.6	18.7		110.5	Dark massive serpentinite and
	71.2	73.5	2.3	2.1	91.4			partially serpentinised pyroxenite
	73.5	74.2	0.7	0.3	41.9			c minor shears. Picrolite,
	74.2	75.0	0.8	0.6	75			serpentine and cross fibre veins
8 .0	75.0	83.0	8.0	8.0	100		133.2	(See Log)
	83.0	89.0	6.0	2.5	41.6		133.2	Massive phase layered serpentinised
( )	89.0	96.5	7.5	6.2	82.6			peridotite. Layering @ 50° to
	96.5	98.0	1.5	1.3	86.6			LCA. Margins are massive, dark c
	98.0	105.7	7.7	7.7	100			few dark green to black pyroxene
	105.7	109.2	3.5	3.4	97.2			in a serpentine "matrix". Central
10.5	109.2	113.2	4.0	3.5	87.6			portion of 2.5' has 5 bands
	113.2	114.5	1.3	1.3	100	71/L1		2" - 5" thick of serpentine
(5)	114.5	119.0	4.5	3.2	71.1	101		veined pale green pyroxenite c
	119.0	125.0	6.0	4.0	66.6			large $\leq \frac{3}{4}$" pale green orthopyrox-
	125.0	130.0	5.0	4.0	80.0			enes and small granular $\leq \frac{1}{4}$"
1 5.0	130.0	137.0	7.0	6.9	98.6			cumulus texture pyroxene of the
	137.0	147.2	10.2	10.2	100			same type. Bands of pyroxenite
(4)	147.2	148.0	0.8	0.8	100			alternate with 1" to 3" bands of
	148	148	120.4				144.0	a dark red grained serpentinite
								c small dark pyroxenes.

Remarks: 0 - 10' NX CASING CORE

Date 22/5/71 Logged by JOHN G. LANGLANDS

DRILLING PROGRESS REPORT SORELL PENINSULA NODDY CK. Branch

Bore DHNC9 Report No. 823200

From	To	Int.	Core Rec'd.	%	Dip in Core	Feet	Description
1[illegible].0	148.0	154.5	6.5	6.5	100		144 Alternations of serpentinite with ribbon and stockwork cross fibre and barren pyroxenite.
(6)		159.7	5.2	5.0	96.2		
1[illegible].3		163.7	4.0	3.8	95.1		
		168.0	4.3	4.3	100		144 - 173 Cross fibre and sheared serp.
(7)		178.2	10.2	10.2	100		
1[illegible].2		188.5	10.3	10.3	100		173 - 175 Barren px
(8)		190.5	2.0	2.0	100		175 - 178.7 Serp/px with cross fibre
		194.5	4.0	4.0	100		178.7-180.7 Barren px
200.6		202.0	7.5	7.5	100		180.7-181.3 Ribbon fibre zone
		208.0	6.0	6.0	100	71/L1 100	181.3-183.5 Stockwork cross fibre
(9)		218.2	10.2	10.2	100		183.5-188.0 Barren px
2[illegible].2		226.0	7.8	7.8	100		189.0 188.0-188.8 Ribbon fibre zone.
		233.0	7.0	7.0	100		189.0 Dark and deep green sheared serpentinite c magnetite and slip fibre approx. ½% in
(10)		243.0	10.0	8.5	85		195 composite veins.
247		249.5	6.5	6.5	100		195 Pale green massive, granular serpentinite c composite veins of brittle slip fibre and magnetite ½%. Does not resemble chrysotile host rock type.
(11)		255.0	5.5	5.5	100		
		265.2	10.2	10.2	100		
269.2		275.5	10.3	10.3	100		
(1[illegible])		285.7	10.2	10.0	99		
292		295.2	9.5	9.2	97		
		147.2	147.2	145.8	99		201.5 Dark and pale green sheared and slightly sheared, often flakey, serpentinite c magnetite and talcose slip fibre veins approx.
							271 ½%.
							271 Pale green massive granular serpentinite c composite fibrous
							288.7 talc/magnetite veins approx. ½%
							288.7 Pale green sheared serpentinite c ½% talcose slip fibre and
							297.2 magnetite.

Remarks:

Date 22/5/71 Logged by JOHN G. LANGLANDS

201

DRILLING PROGRESS REPORT SORELL PENINSULA MODDY CK. Branch

Bore DHNC9 Report No. 823201

From	To	Int.	Core Rec'd.	%	Dip in Core
292.8	295.2				
	300.0	4.8	4.2	87	
(13)	305.2	5.2	4.5	86	
	312.7	7.5	6.6	88	
318	319.7	5.0	5.0	100	
	327.0	7.3	7.0	96	
	330.0	3.0	1.6	53	
(14)	335.2	5.2	5.2	100	
	340.0	4.8	4.5	94	71/11
342	344.0	4.0	3.0	75	98
	348.0	4.0	3.0	75	
(15)	354.5	6.5	5.6	86	
	360.7	6.2	5.8	94	
366	366.0	5.3	4.6	87	
	370.0	4.0	3.7	92	
	375.0	5.0	3.5	70	
(16)	380.0	5.0	4.0	80	
	386.0	6.0	4.0	67	
390	390.0	4.0	1.8	45	
		94.8	77.6	82	

Feet	Description
297.2	Pale green and deep green serpentinite, 50% sheared, 50% massive, alternating. Magnetite in veins. ½% slip fibre overall ō 2 veins of leng + 1" brittle
366.8	talcose slip fibre at 326'
366.8	Extremely sheared alternating pale and dark serpentinite. The core is plastic due to severe
390	shearing.

Depth 390 feet
Core 343.8 feet
% Recovery 88%

DIP TESTS

0'	44°
200'	44½°
390'	44°

Remarks:

Date 25/5/71 Logged by JOHN G. LANGLANDS

NODDY CREEK 1971

202

823202

FIBRE LOG SHEET

Hole: DHNC 9 Interval: 110' - 190' Footage: 80'

Costean: Fibre Log:

←PAN→ ←10M→ ←4M→ ←2M→

FROM	To	Rec	Code	1/32	1/16	2/16	3/16	4/16	5/16	6/16	7/16			Sum 1/16	Vein Angle	Vol %	
110	115	4.7	2	0	4	5	0	1			picrolite			18		1.8	
	120	4.0	1	5	5						"			7½		0.7	
	125	4.0	1	2										1		0.1	
	130	4.0	1	5										2½		0.2	
	135	4.6	1		Barren									0		0	
	140	5.0	1	0	1									1		0.1	
	145	5.0	4	0	4	2	4	2	1	0	1			40		4.0	
	150	4.8	1	4	3									5		0.5	
	155	5.0	1	5	4									6½		0.6	
	160	4.5	1	0	1				Sheared - s.f.					1		0.1	
	165	4.1	1		Barren									0		0	
	170	4.8	2	4	5	0	0	2						15		1.5	
	175	5.0	4	24	14	2	0	1	0	2	gash veins			46		4.6	
	180	5.0	2	4	7	2					"	"		13		1.3	
	185	5.0	2	15	19	6					"	"		38½		3.8	
	190	4.8	5	32	3									19		1.9	
			TOT	100	70	17	4	6	1	2	1						
			1/16	50	70	34	12	24	5	12	7			214		1.3	80'

203

823203

Location NODDY CREEK 1971

VISUAL DOLLAR VALUE

Hole: DHNC 9 Sample: AF 452 Footage: 110'-190' 80'

Costean: Fibre Log:

	1/32	1/16	2/16	3/16	4/16	5/16	6/16	7/16	+½	Total
Visual Fibre		120	17	4	6	1	2	1		
1/16s		120	34	12	24	5	12	7		214
		Pan	10M		4M				2M	

Uncorrected Visual Percentage (fibre log sheet) = 1.3 %

Assuming vein angle = 45° then:

Corrected Visual Percentage = $\frac{\text{Total 1/16s x 0.737}}{\text{Footage}}$ = 1.97 %

Q.S.T.

	1/16s	Ounces		Evaluation Points
Pan =	120	9.0	X 1	= 9
10 Mesh =	46	3.4	X 10	= 34
4 Mesh =	48	3.6	X 40	= 144
2 Mesh =			X 100	=
	214	16.0		187

From graph relating evaluation points and price:- 1971 Prices

Value/short ton fibre = C$ 215.00

Therefore value/short ton rock = C$ 4.25

Value milled = C$

Date June 1971

71-805 Fig. 3

823204

1. Mess and kitchen.
2. Store shed.
3. Worldwide unit, geological office.
4. Worldwide unit, administration office and accomodation for one.
5. Garage and workshop.
6. Worldwide unit, accom. for two.
7. Worldwide unit, accom. for two
8. Caravan, accom. for five.
9. Washroom and showers.
10. Generator shed.
11. Toilet.
12. Site of caravan, accom. for four.
13. Site of store tent.
14. Site of store tent.
15. Site of caravan annex.
16. Site of caravan annex.
17. Site of A.D.D. caravan.
18. Site of A.S.J billy hut.
19. Site of A.S.J tent.

[ ] Removed.

To ASBESTOS POINT.

345500 YN

776500 YN

N

18 19 A.S.J Camp site.

17 A.D.D Campsite.

Heli-Pad.

0 50 100

SCALE IN FEET

Watertank. (700 gals. approx.)

Hot water service

Radio mast.

dam.

PAD.2. via WESTBELT.

To TIMBERTOPS and BIRCH INLET.

1171

5 cm

Fig. No. 3
To accompany
Dated

THE BROKEN HILL PROPRIETARY CO. LTD.
EXPLORATION DEPARTMENT

E.L. 13/65 SOUTH WEST TASMANIA.
NODDY CREEK CAMP.

Revisions:	Prepared by: M.L	Centre: HOBART.	
	Date: 21-7-71	Project No:	Drawing No: A3-3
	Drawn: M.L		

823205 71-805 Fig. 4

Asbestos Point.

Black carbonaceous siltstone

sheared coarse grained quartz sandstone. & well rounded grains, greywacke & siltstone & pebble beds, veined by CO_3, fe oxides & quartz.

apparent error due to photo distortion of coastline.

sheared fine sandstone, siltstone & pebble beds & quartz & bright green talc veins.

green angular pebble beds & acid volcanic fragments.

basic dyke

landing

quartz gravel & yellow-brown clay.

outcrop pale grey to white soft mud-siltstone.

P5

quartz gravel on yellow-brown clay

residual quartz in light brown clay, natural soil is grey & rich in quartz

green siltstone & fine greywacke in cutting

P10

Half Mile Cutting.

acid volcanic

talc chlorite schist & quartz veins.

massive green siltstone.

agglomerate & acid volcanic fragments in green tuffaceous matrix.

20' dark grey greywacke siltstone & shale.

asbestose siltstone & fine grained siliceous schist.

siliceous schist & crumpled quartz veins

cream to brown siliceous fine grained schist & pebbles of grey siltstone & chert.

coarse pale sheared tuff & angular siliceous pebbles.

green & brown sheared greywacke & shale bands & quartz veins.

massive green greywacke & siltstone & graded bedding youngs eastwards

siliceous pale tuff - siltstone

grey siltstone

green siltstone & very coarse tuffaceous greywacke & angular pebbles.

cream & grey siltstones.

Muddy Cove.

boulder beds, siltstone, greywacke & conglomerate in argillaceous pebbly matrix? recent glacial?

green siltstone fragments.

P15

residual quartz gravel.

iron cap.

red brown & green siltstone outcrop.

P20

green siltstone in cutting, lamination.

fragments of brown green siltstone in clay.

brown clay & siltstone fragments.

pink, brown & green siltstone in cutting - dip of lamination shown.

P25

One Mile Cutting.

yellow-brown clay.

outcrop of quartz veined silicified green mineralised siltstone.

P30

outcrop of irregularly jointed grey-green siltstone.

deeply weathered greywacke & siltstone

sheared grey-green siltstone & greywacke lamination ? sedimentary

3' of weathered sheared setp

quartz veined greywacke

4'-5' of weathered sheared setp

costean 3.

green slate.

costean 2.

green slate.

costean 1.

green slate siltstone.

schistose quartz felspar rock.

quartz gravel

blocky friable siliceous quartz veined rock.

P35

quartz gravel

clay & residual quartz.

blocky friable siliceous quartz veined rock

P40

residual quartz in soil.

costean 1

white sheared setp

red manganiferous weathered mudstone.

black carbonaceous slate.

mudstone

costean 2.

black carbonaceous slate.

white sheared setp

red weathered mudstone.

costean 3.

black slate

green slate

white sheared setp.

Survey control by Peacock, Darcey and Anderson.
Drawings E9/4K-K151. Plans 1-6 22-4-71.

SHEET INDEX & LOCALITY MAP.

MACQUARIE HARBOUR

Nelson River

Hibbs Bay

340000YE

760000YN

HB1 HB2 HB5
HB3 HB4
HB6 HB7 HB8
HB9 HB10 HB11 HB12
HB13 HB14 HB15 HB16
HB17 HB18 HB19 HB20
HB21 HB22 HB23 HB24
HB25 HB26 HB27 HB28 HB29
HB30 HB31 HB32 HB33 HB34
HB35 HB36 HB37 HB38 HB39
HB40 HB41 HB42 HB43 HB44
HB45 HB46 HB47 HB48 HB49
HB50 HB51 HB52 HB53 HB54

LEGEND.

- Siltstone.
- Greywacke & siltstone.
- Sediments & pebble beds.
- ss Schistose siltstone & fine grained siliceous schist
- Agglomerate.
- Basic to intermediate intrusive.
- Sheared intermediate to basic intrusive.
- Talc chlorite schist.
- Massive and sheared serpentinite.

- Boulder bed on beach.
- Dip of bedding.
- Dip of schistosity, shear planes.
- Plunge of minor fold.
- Minor fold, axis horizontal.

Geological boundaries.
- Defined
- Approximate
- Inferred

- Creek.
- Costean.
- Small quarry

N

5 cm

1172

0 400 800 1200
SCALE IN FEET.

Fig. No. 4
To accompany
Dated

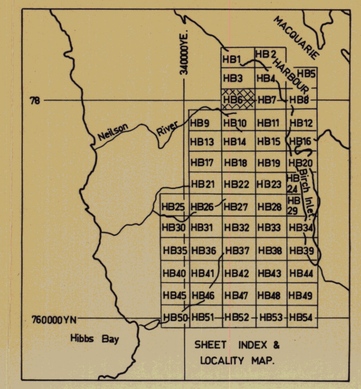
THE BROKEN HILL PROPRIETARY CO. LTD.
EXPLORATION DEPARTMENT

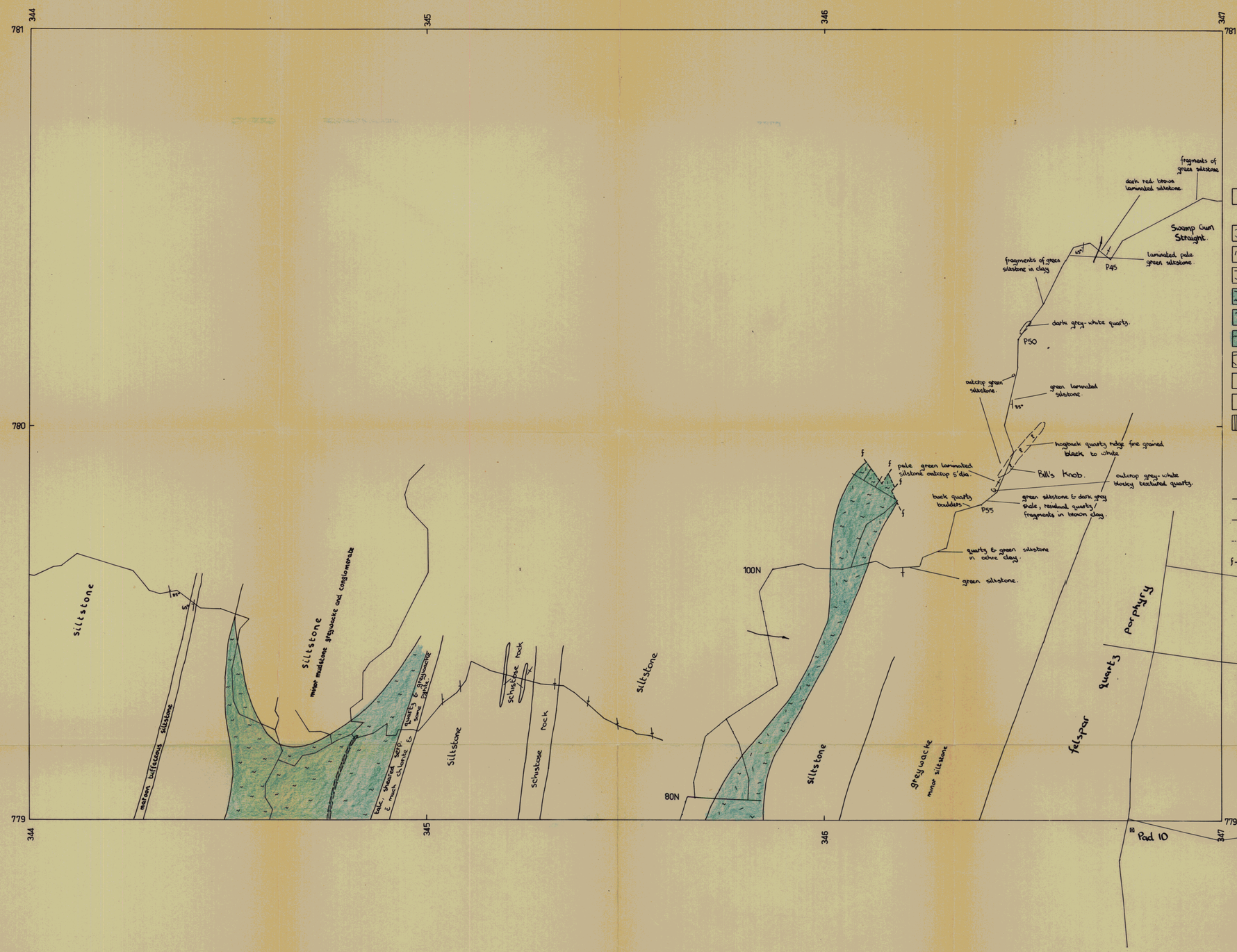
E.L. 13/65 SOUTH WEST TASMANIA.
NODDY CREEK AREA – SHEET HB4.
GEOLOGY.

Drawn: J.G.L & BC	Date: 24-6-71	Centre: HOBART.
Traced M.L.	Project No:	Drawing No: A1-1
Checked		
O.I.C. J.G.L		

Revisions:

823206 Fig. 5





LEGEND

Overburden and scree.

ULTRABASICS

- Massive serpentinite
- Pale green massive serpentinite.
- Dark green massive serpentinite.
- Massive and sheared serpentinite.
- Dark green sheared serpentinite.
- Pale green sheared serpentinite.
- Pyroxenite.
- Cross fibre zone.

SEDIMENTS.

- Greywacke and siltstone.
- Siltstone.
- Black carbonaceous siltstone and argillite.
- Talc chlorite schist with sheared greywacke and siltstone.

OTHER IGNEOUS ROCKS.

- Lamprophyre dyke.
- Intermediate intrusive.
- Basic intrusive.
- Gabbro.

Geological Boundaries.

- Defined.
- Approximate.
- Inferred.
- Fault

- Dip of bedding.
- Dip of shear plane and schistosity.
- Dip of phase layering.
- Costean.
- Survey line.

5 cm

SCALE IN FEET.
0 400 800 1200

1173

Fig. No. 5
To accompany
Dated 71-805

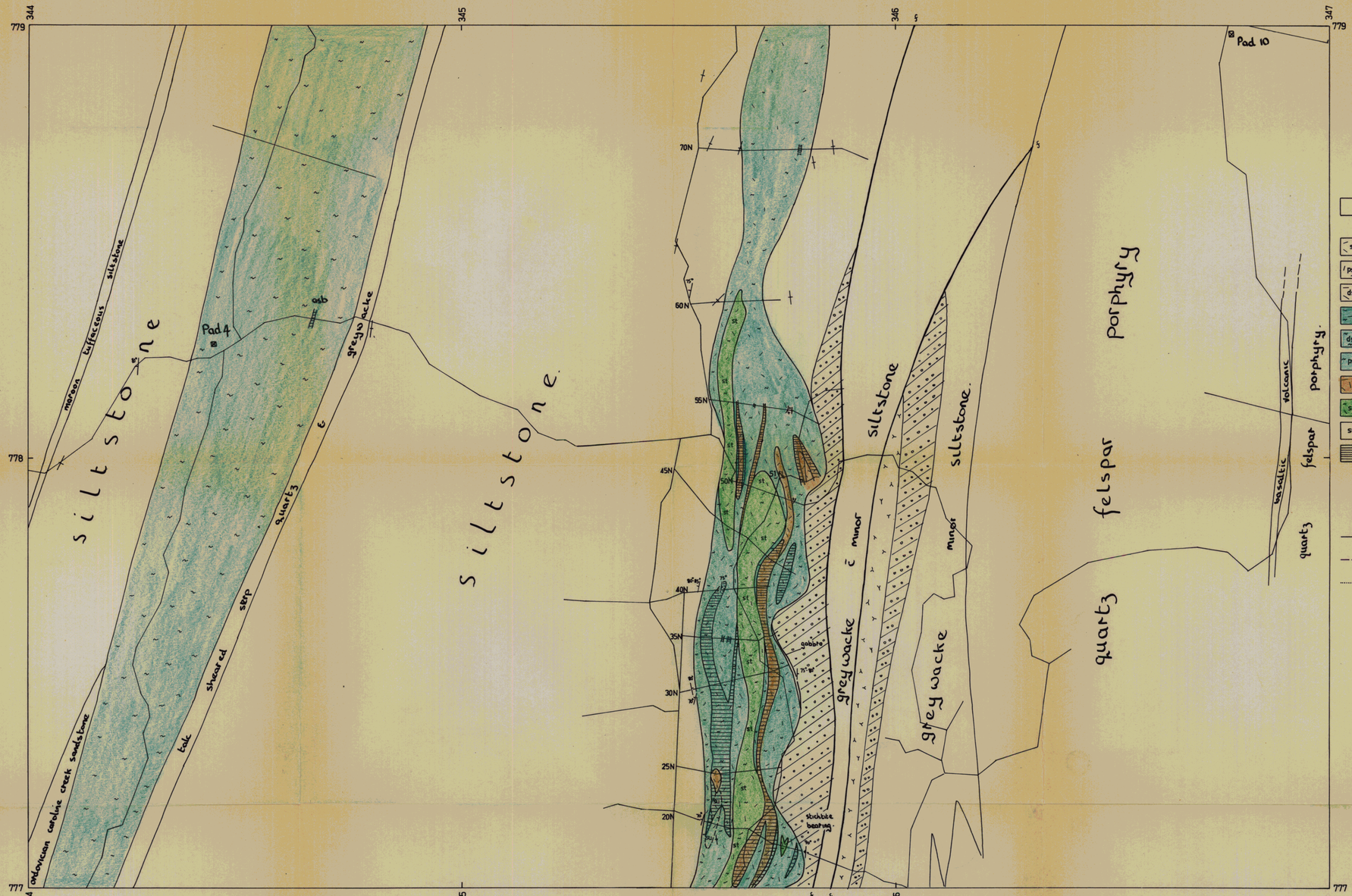
THE BROKEN HILL PROPRIETARY CO. LTD.
EXPLORATION DEPARTMENT

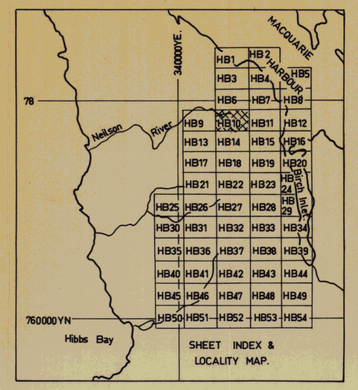
E.L. 13/65. SOUTH WEST TASMANIA.
NODDY CREEK AREA SHEET HB 6
GEOLOGY

Drawn: P. McG | Date: 1968 | Centre: HOBART
Traced | Checked | O.I.C.
Project No:
Drawing No: A1-27

Revisions: J.L & B.C. MAY - JUNE 1971

823207 Fig. 6





LEGEND

Overburden and scree.

ULTRABASICS

- Massive serpentinite
- Pale green massive serpentinite.
- Dark green massive serpentinite.
- Massive and sheared serpentinite.
- Dark green sheared serpentinite.
- Pale green sheared serpentinite.
- Pyroxenite. and serpentinised pyroxenite.
- Stichtite bearing massive and sheared serpentinite.
- Minor disseminated pentlandite.
- Cross fibre zone.

SEDIMENTS.

- Greywacke and siltstone.
- Siltstone.
- Black carbonaceous siltstone and argillite.
- Talc chlorite schist with sheared greywacke and siltstone.

OTHER IGNEOUS ROCKS.

- Lamprophyre dyke.
- Intermediate intrusive.
- Basic intrusive.
- Gabbro.
- Sheared greywacke, conglomerate & minor siltstone & highly deformed "contact" rock.

Geological Boundaries.

- Defined.
- Approximate.
- Inferred.

- Dip of bedding.
- Dip of shear plane and schistosity.
- Dip of phase layering.
- Costean.
- Survey line.
- Fault.

Approximate compilation of A1-1144 TSW 60 & 1970-71. mapping and survey.

5 cm

SCALE IN FEET.
0 400 800 1200

1174

Fig. No. 6
To accompany
Dated 71-805

THE BROKEN HILL PROPRIETARY CO. LTD.
EXPLORATION DEPARTMENT

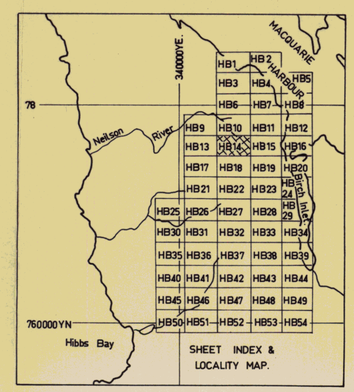
E.L. 13/65. SOUTH WEST TASMANIA.
NODDY CREEK AREA
GEOLOGICAL MAP SHEET HB10.

Drawn: P. McG	Date: 13-2-68	Centre: MELBOURNE.
Traced	Project No: TSW 60	Drawing No. A1-1144 Rev 32.
Checked		
O.I.C.		

Revisions: By R.C., B.C. & J.L. 1971

823208 Fig. 7





LEGEND.

Overburden and scree.

ULTRABASICS

- Massive serpentinite
- Pale green massive serpentinite.
- Dark green massive serpentinite.
- Massive and sheared serpentinite.
- Dark green sheared serpentinite.
- Pale green sheared serpentinite.
- Pyroxenite. and serpentinised pyroxenite
- Stichtite bearing massive and sheared serpentinite
- Cross fibre zone.

SEDIMENTS.

- Greywacke and siltstone.
- Siltstone.
- Black carbonaceous siltstone and argillite.
- Talc chlorite schist with sheared greywacke and siltstone.

OTHER IGNEOUS ROCKS.

- Lamprophyre dyke.
- Intermediate intrusive.
- Basic intrusive.
- Gabbro.
- Sheared greywacke, conglomerate & minor siltstone & highly deformed "contact" rocks.

Geological Boundaries.

- Defined.
- Approximate.
- Inferred.

- Dip of bedding.
- Dip of shear plane and schistosity.
- Dip of phase layering.
- Costean.
- Survey line.
- Fault.

Approximate compilation of A1-1145 TSW61. 12-2-68. & 1970-71 mapping & survey.

5 cm

SCALE IN FEET.
0 400 800 1200

1175

Fig. No. 7
To accompany
Dated

71-805

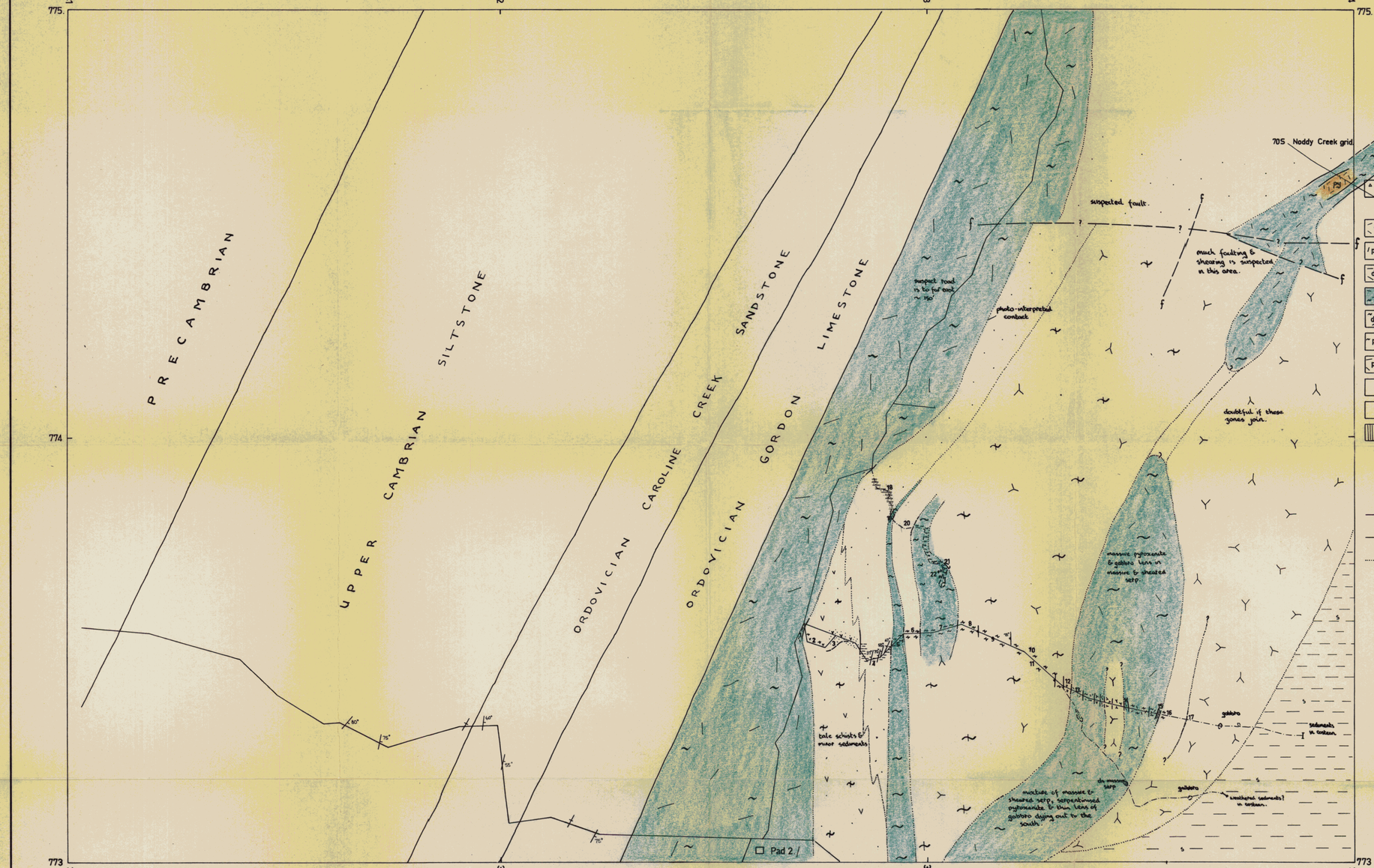
Revisions: By. R.C. BC & J.L. 1971

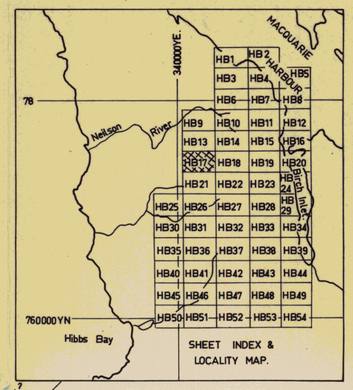
THE BROKEN HILL PROPRIETARY CO. LTD.
EXPLORATION DEPARTMENT

E.L. 13/65. SOUTH WEST TASMANIA.
NODDY CREEK AREA
GEOLOGY MAP SHEET HB14.

Drawn: P. McG	Date: 12-2-68	Centre: MELBOURNE
Traced	Project No: TSW 61	Drawing No: A1- 1145 Rev 31
Checked		
O.I.C.		

823209 Fig. 8





LEGEND.

- Overburden and scree.

ULTRABASICS

- Massive serpentinite
- Pale green massive serpentinite.
- Dark green massive serpentinite.
- Massive and sheared serpentinite.
- Dark green sheared serpentinite.
- Pale green sheared serpentinite.
- Pyroxenite.
- Cross fibre zone.

SEDIMENTS.

- Greywacke and siltstone.
- Siltstone.
- Black carbonaceous siltstone and argillite.
- Talc chlorite schist
- Sediments.

OTHER IGNEOUS ROCKS.

- Lamprophyre dyke.
- Intermediate intrusive.
- Basic intrusive.
- Gabbro.
- Talc schists and sheared gabbros and sheared serpentinite.

Geologial Boundaries.

- Defined.
- Approximate.
- Inferred.

- Dip of bedding.
- Dip of shear plane and schistosity.
- Dip of phase Layering.
- Costean.
- Survey line.
- Track.

SCALE IN FEET.
0 400 800 1200
5 cm

Key to numbered rock types.

1 pale green massive serpentinite.
2 talc schist & sheared volcanics.
3 sheared volcanics & sediments & quartz veins
4 light grey - brown carbonaceous shale & greywacke.
5 pale green highly sheared serpentinite.
6 light grey schists.
7 light brown weathered rock possibly talc chlorite schist derived from sheared serpentinite.
8 talc schist
9 talc schist & blue-grey massive & blocky basic rock.
10 massive disseminated pyrite to chalcopyrite ± minor bornite in qtz & surrounding blue-grey schistose rock
11 sheared basic rock, fined grained gabbro or hornfels.
12 massive light - dark grey basic rock, or hornfels & talc schist.
13 altered medium grained pyroxenite ± x fibre.
14 altered pyroxenite.

Key to numbered rock types.

15 cross fibre in massive serp. zone ~ 20' wide
16 talc schist & light grey hornfels.
17 blue clay (contact rock).
18 siltstone & minor greywacke.
19 pale green massive serpentinite. ± minor ribbon fibre.
20 suspected fault zone. ± clay breccia fragments, siltstone & quartz veins.
21 altered hornblende gabbro.
22 boulder of dark serpentinite ± cross fibre ~ 21-5% over 2' interval.

Fig. No. 8 1176
To accompany 71-805
Dated

THE BROKEN HILL PROPRIETARY CO. LTD.
EXPLORATION DEPARTMENT

E.L. 13/65. SOUTH WEST TASMANIA.
DETAIL GEOLOGICAL MAP.
FERN CREEK AREA.
SHEET HB17 -

Revisions: JULY 1970 R. CLOSE OIC JGL

Drawn:	Date: 3-5-68	Centre: MELBOURNE.
Traced	Project No: TSW-57	Drawing No: A1- 7141 Rev. A1-6
Checked		
O.I.C.		

341
773

344
773

UPPER CAMBRIAN SILTSTONE

ORDOVICIAN CAROLINE CREEK SANDSTONE

ORDOVICIAN GORDON LIMESTONE.

VOLCANICS

SHEARED

SWAMP

SILTSTONE

pale green serp

boulders of dark green serpentinised pyroxenite & ribbon fibre

sheared volcanics

talc schist & weathered sheared serp

serpentinised pyroxenite & fibre

light grey sediments

mostly massive alternating with massive & sheared light to dark green serp

2" ribbon fibre

dark green massive & sheared serp.

carbonaceous siltstone shale talc schist

talc schist

cross fibre in dark green serp

cross fibre zones

massive dark green-black serp

serpentinised pyroxenite

boulder outcrops of massive serpentinised medium grained pyroxenite (chromite grains 1-2mm)

talc schists & altered sediments

pyroxenite

large outcropping boulders of coarse grained pyroxenite slightly serpentinised

serpentinised

pyroxenite

talc schist & chert magnetite

minor cross fibre

dark green sheared & massive serp

costean position approximate (air photo interp)

dark green serp

green-grey greywacke.

serpentinised

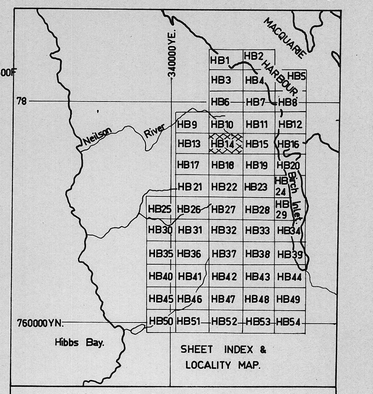
?

?

?

823211 Fig. 10





SHEET INDEX & LOCALITY MAP.

SHEET HB 14

46	47	48	49	50	51	52	53	54
37	38	39	40	41	42	43	44	45
28	29	30	31	32	33	34	35	36
19	20	21	22	23	24	25	26	27
10	11	12	13	14	15	16	17	18
1	2	3	4	5	6	7	8	9

SUBDIVISION SHEET INDEX.

N

LEGEND.

- Overburden and scree.

ULTRABASICS

- s — Massive serpentinite, pyroxenite.
- ps — Pale green massive serpentinite.
- ds — Dark green massive serpentinite.
- Massive and sheared serpentinite.
- ds — Dark green sheared serpentinite.
- ps — Pale green sheared serpentinite.
- py — Pyroxenite.
- Cross fibre zone.

SEDIMENTS.

- Greywacke and siltstone.
- s — Siltstone.
- c — Black carbonaceous siltstone and argillite.
- Talc chLorite schist with sheared greywacke and siltstone.

OTHER IGNEOUS ROCKS.

- l — Lamprophyre dyke.
- i — Intermediate intrusive.
- b — Basic intrusive.
- Gabbro.
- st — Stichtite.
- sf — Slip fibre.
- su — Sulphide.
- m — Magnetite.
- Survey pegs.
- FL001 — Fibre log section.
- AF1 — Channel sample locality.
- Creek.
- Dip of bedding.
- Dip of shear plane and schistosity.
- Dip of phase layering
- Geological boundaries.
- Defined.
- Approximate.
- Inferred.

SCALE IN FEET.

0 50' 100' 150'

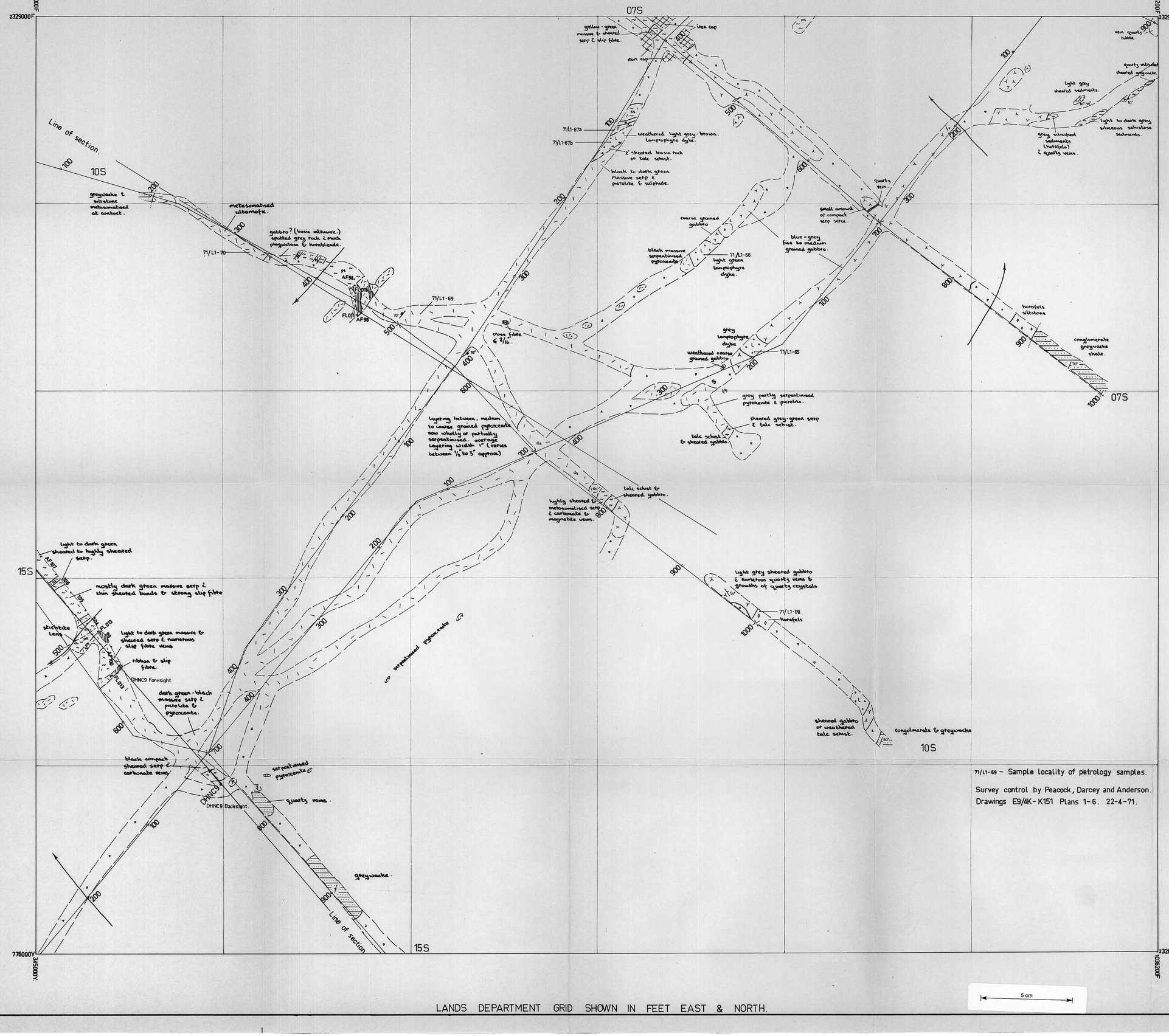
Fig. No. 10 1178
To accompany 71-805
Dated

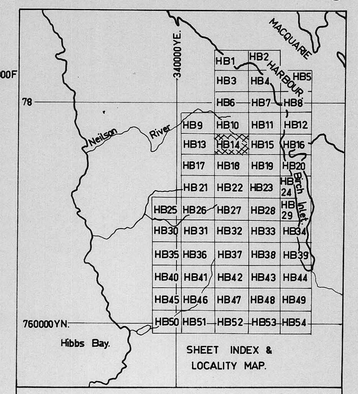
THE BROKEN HILL PROPRIETARY CO. LTD.
EXPLORATION DEPARTMENT

E.L. 13/65. SOUTH WEST TASMANIA. SORELL PENINSULA ASBESTOS DETAIL GEOLOGICAL MAP SHEET-HB 14 SUBDIVISIONS-20, 21, 29 & 30

Drawn: R.C.	Date: 26-7-71	Centre: HOBART.	
Traced M.L.		Project No:	Drawing No: A1-9
Checked			
O.I.C. J.L.			

Revisions:





LEGEND.

- Overburden and scree.

ULTRABASICS

- Massive serpentinite, pyroxenite.
- Pale green massive serpentinite.
- Dark green massive serpentinite.
- Massive and sheared serpentinite.
- Dark green sheared serpentinite.
- Pale green sheared serpentinite.
- Pyroxenite.
- Cross fibre zone.

SEDIMENTS.

- Greywacke and siltstone.
- Siltstone.
- Black carbonaceous siltstone and argillite.
- Talc chlorite schist with sheared greywacke and siltstone.

OTHER IGNEOUS ROCKS.

- Lamprophyre dyke.
- Intermediate intrusive.
- Basic intrusive.
- Gabbro.
- st Stichtite.
- sf Slip fibre.
- su Sulphide.
- m Magnetite.
- ° Survey pegs.
- · FL001 · Fibre log section.
- · AF1 · Channel sample locality.
- Creek.
- Dip of bedding.
- Dip of shear plane and schistosity.
- Dip of phase layering
- Geological boundaries.
- Defined.
- Approximate.
- Inferred.

71/L1-69 – Sample locality of petrology samples.

Survey control by Peacock, Darcey and Anderson.
Drawings E9/4K-K151 Plans 1-6. 22-4-71.

SCALE IN FEET.
0 50' 100' 150'

1179
Fig. No. 11
To accompany
Dated
71-805

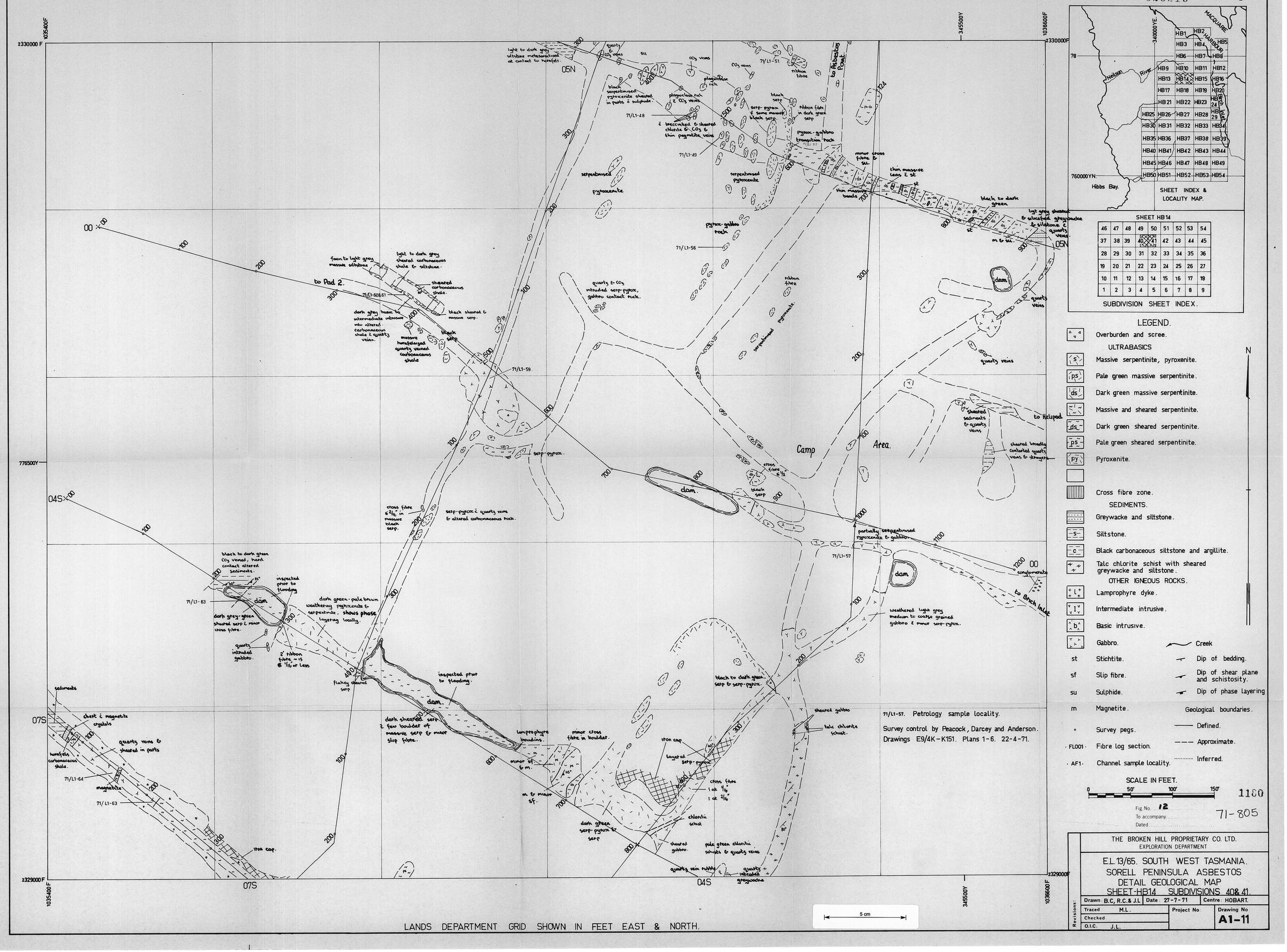
THE BROKEN HILL PROPRIETARY CO. LTD.
EXPLORATION DEPARTMENT

E.L. 13/65. SOUTH WEST TASMANIA.
SORELL PENINSULA ASBESTOS
DETAIL GEOLOGICAL MAP
SHEET-HB14 SUBDIVISIONS 31 & 32

Drawn: R.C. & B.C.	Date: 27-7-71	Centre: HOBART.	
Traced M.L.		Project No:	Drawing No: A1-10
Checked			
O.I.C. J.L.			

Revisions:

823213 Fig. 12



LEGEND.

- Overburden and scree.

ULTRABASICS

- Massive serpentinite, pyroxenite.
- Pale green massive serpentinite.
- Dark green massive serpentinite.
- Massive and sheared serpentinite.
- Dark green sheared serpentinite.
- Pale green sheared serpentinite.
- Pyroxenite.
- Cross fibre zone.

SEDIMENTS.

- Greywacke and siltstone.
- Siltstone.
- Black carbonaceous siltstone and argillite.
- Talc chlorite schist with sheared greywacke and siltstone.

OTHER IGNEOUS ROCKS.

- Lamprophyre dyke.
- Intermediate intrusive.
- Basic intrusive.
- Gabbro.
- st Stichtite.
- sf Slip fibre.
- su Sulphide.
- m Magnetite.
- ° Survey pegs.
- FL001 Fibre log section.
- AF1 Channel sample locality.
- Creek
- Dip of bedding.
- Dip of shear plane and schistosity.
- Dip of phase layering.

Geological boundaries.

- Defined.
- Approximate.
- Inferred.

71/L1-57. Petrology sample locality.

Survey control by Peacock, Darcey and Anderson.
Drawings E9/4K-K151. Plans 1-6. 22-4-71.

SCALE IN FEET. 0 50' 100' 150' 1100

Fig No. 12
To accompany
Dated 71-805

THE BROKEN HILL PROPRIETARY CO. LTD.
EXPLORATION DEPARTMENT

E.L. 13/65. SOUTH WEST TASMANIA.
SORELL PENINSULA ASBESTOS
DETAIL GEOLOGICAL MAP
SHEET HB14 SUBDIVISIONS 40 & 41.

Drawn: B.C, R.C. & J.L | Date: 27-7-71 | Centre: HOBART.
Traced M.L. | Checked | O.I.C. J.L. | Project No. | Drawing No. A1-11
Revisions:

82321-4 Fig. 13

1036000F 345000Y 1037200F

777000Y 2331000F

15N 10N

Line of section.

carbonate vein. Lens of pale green massive serp & cross fibre. massive & sf. lens. thin lens of massive serp. thin lens of pale green massive serp. st & sf. st & strong sf. lamprophyre dyke 1'-16' & margins of massive cryptocrystalline serp. iron cap. blank to dark green. FL014. Light grey green mottled massive serp & cross fibre. blue-grey compact sheared serp. clearing. serp-pyrox. greywacke & siltstone & possibly some volcanic lens.

ribbon fibre. carbonaceous siltstone. soft grey-brown siltstone some carbonaceous bands highly jointed, thin layered earthy bottom. pale green massive serp & cross fibre. hard black metamorphosed schistose country rock carbonaceous & cross fibre at contact. hornfels silicified carbonaceous shale. 71/L1-76. cross fibre in highly weathered serp. FL009 & AF117. AF117. AF116. FL009 & AF116. ribbon fibre. highly sheared. 71/L1-47. lamprophyre dyke. silicified greywacke & shale. light grey quartz sediment stream. siliceous pyroxenite & serp-pyrox & slight shearing & CO_3 veins. hornfelsed carbonaceous shale. minor sf. 71/L1-74. st, su, thin gash veins & cross fibre. FL010 & AF114. AF114 & 115. FL010 & AF115. sf in joints. minor massive bands & st. dark to light green massive serp & cross fibre in lens. basic intrusive light grey-green probably gabbro (saussuritized) metamorphosed. magnetite veins & ok contacts. 71/L1-75. talc schist sheared greywacke on contact then unsheared greywacke. ribbon & cross fibre in lens of massive serp. massive to highly sheared schistose dark green to black-bluish serp.

mixture of serp-pyrox & pyrox-gabbro transition rock. cross fibre. serp-pyrox & CO_3 veins. cross fibre in dk serp. pyrox-gabbro transition rock. cross fibre & % black serp. long slip fibre. DDH1 Foresight. DDH. serp-pyrox. cross fibre. rich cross fibre. pyrox-gabbro transition rock. serp & partially serpentinised pyrox.

quartz breccia in carbonaceous shale/hornfels. carbonaceous shale. dark green weathered. hydrothermally altered CO_3 rich gabbro & amphibolite fibre. hornfelsed carbonaceous shale. pyrox-gabbro rock. breccia. partly sheared & quartz veins. serp-pyrox gabbro rock. black massive serp-pyrox. black serp. 71/L1-54. 71/L1-55. serp-pyrox & ribbon fibre.

dark green massive serp. dark green massive & sheared serp. dark to light green sheared serp. iron cap. sediment outcrops of dark green sheared serp & pale green massive bands. boulders. serpentinised pyroxenite. outcrops.

Line of section.

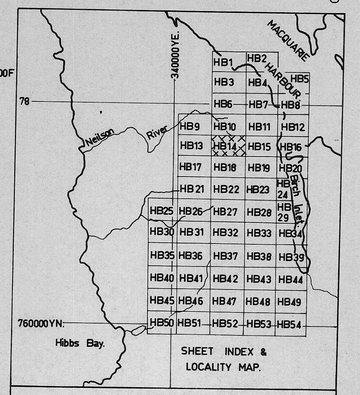
LANDS DEPARTMENT GRID SHOWN IN FEET EAST & NORTH.

5 cm

71/L1-55 Petrology sample locality.

Survey control by Peacock, Darcey and Anderson.

Drawings E9/4K-K151. Plans 1-6. 22-4-71.



SHEET INDEX & LOCALITY MAP.

SHEET HB14

46	47	48	49	50	51	52	53	54
37	38	39	40	41	42	43	44	45
28	29	30	31	32	33	34	35	36
19	20	21	22	23	24	25	26	27
10	11	12	13	14	15	16	17	18
1	2	3	4	5	6	7	8	9

SUBDIVISION SHEET INDEX.

LEGEND.

- Overburden and scree.

ULTRABASICS

- Massive serpentinite, pyroxenite.
- Pale green massive serpentinite.
- Dark green massive serpentinite.
- Massive and sheared serpentinite.
- Dark green sheared serpentinite.
- Pale green sheared serpentinite.
- Pyroxenite.
- Cross fibre zone.

SEDIMENTS.

- Greywacke and siltstone.
- Siltstone.
- Black carbonaceous siltstone and argillite.
- Talc chlorite schist with sheared greywacke and siltstone.

OTHER IGNEOUS ROCKS.

- Lamprophyre dyke.
- Intermediate intrusive.
- Basic intrusive.
- Gabbro.
- Creek.
- st Stichtite. — Dip of bedding.
- sf Slip fibre. — Dip of shear plane and schistosity.
- su Sulphide. — Dip of phase layering.
- m Magnetite.

Geological boundaries.

- Survey pegs. — Defined.
- FL001 Fibre log section. — Approximate.
- AF1 Channel sample locality. ..... Inferred.

N

SCALE IN FEET. 0 50' 100' 150'

1181

Fig. No. 13

To accompany 71-805

Dated

THE BROKEN HILL PROPRIETARY CO. LTD.
EXPLORATION DEPARTMENT

E.L. 13/65. SOUTH WEST TASMANIA.
SORELL PENINSULA ASBESTOS
DETAIL GEOLOGICAL MAP
SHEET HB14 SUBDIVISIONS 50 & 51.

Drawn: R.C.	Date: 28-7-71	Centre: HOBART.	
Traced M.L		Project No.	Drawing No. A1-12
Checked			
O.I.C. J.L.			

Revisions:

823215 Fig. 14

1036400F 345500Y 2332000F 1037600F

25N 20N

Line of section

FL016 Mitton fibre. Light green sheared serp & thin massive bands.

Light to dark green massive & sheared serp & cross fibre in massive lens.

grey siltstones metamorphosed near contact & cross fibre

dyke rock 2' thick

FL017

71/L1-45

suspected contact

dark green compact sheared serp & carbonaceous veins near contact

ds

dark green massive serpentinite & serpentinised pyroxenite & minor cross fibre & abundant magnetite.

cross fibre <1/16" st

cross fibre 6/16 scattered

ribbon fibre

71/L1-46

lamprophyre dyke

dyke cuts out in serpentinised basic core asbestos fibre has been cooked massive chrysotile/talcose serp in walls of dyke.

pink/ish - light grey talc schists & silicified sheared volcanics

brown sheared sediments & quartz veins probably greywacke & siltstone.

71/L1-43a

red-brown altered sheared serp

p-ds

volcanics?

71/L1-43b

broun-black soil horizon on contact

highly sheared

weathered carbonaceous siltstone shear zone & talc schist margins.

Light brown sheared volcanic sediments

grey-brown intermediate volcanics & few quartz veins.

brown highly contorted serp (possible fault zone.)

sheared greywacke

71/L1-42

intruded quartz volcanic.

boulders of dark green black serp-pyrox & cross fibre

sheared light brown volcanics

71/L1-44b

leucocratic medium to fine grained volcanics

71/L1 165

light grey medium grained intermediate volcanics

fine cross fibre

71/L1-44a

grey-brown sheared volcanics

grey silicified greywacke quartz veins

gradational boundary

thin 3" breccia zone

weathered greywacke & siltstone.

slightly sheared greywacke shale

zone of chocolate coloured serp-pyrox boulders

serp-pyrox boulder zone

cross fibre ≤ 2/16.

diffused magnetite blebs

shear

black serp-talc contact

finely laminated talc schist.

ribbon fibre shells.

lamprophyre dyke

dark green & green massive serp & cross fibre & pectolandite blebs, magnetite throughout.

localised cross fibre in hard dark serp

minor +ve DP16 disseminated sulphide.

DHNC7 Foresight.

FL003

DHNC8

AF52 AF118 AF119 AF120 AF121 AF122 AF123 AF124 AF125 AF126 AF127 AF128 AF129 AF130 AF131 AF132 AF133 AF134 AF135 AF136 AF137 AF138 AF139 AF140 AF141 AF142 AF143 AF144 AF145 AF146 AF147 AF148 AF149 AF150 AF151

FL002 FL001

dyke contact vertical.

highly sheared serp & fibrous magnetite

cross fibre 2/16

pale green massive serp & serp-pyrox boulders & cross & ribbon fibre.

light to dark green massive serp & cross & slip fibre

massive boulders of dark green serp & light green massive cross fibre bearing serp

ps-ds & st

ribbon fibre.

massive boulders set in sheared serp envelopes

large blobs of stichtite.

iron cap.

71/L1-42. Petrology sample locality.

Survey control by Peacock, Darcey and Anderson.
Drawings E9/4K-K151. Plans 1-6. 22-4-71.

777000Y 1039400F 345500Y 2331000 1037600F

LANDS DEPARTMENT GRID SHOWN IN FEET EAST & NORTH.

5 cm

340000YE. 760000YN. 78

MACQUARIE HARBOUR Nelson River Hibbs Bay.

HB1 HB2 HB3 HB4 HB5 HB6 HB7 HB8 HB9 HB10 HB11 HB12 HB13 HB14 HB15 HB16 HB17 HB18 HB19 HB20 HB21 HB22 HB23 HB24 HB25 HB26 HB27 HB28 HB29 HB30 HB31 HB32 HB33 HB34 HB35 HB36 HB37 HB38 HB39 HB40 HB41 HB42 HB43 HB44 HB45 HB46 HB47 HB48 HB49 HB50 HB51 HB52 HB53 HB54

SHEET INDEX & LOCALITY MAP.

SHEET HB 10

46	47	48	49	50	51	52	53	54
37	38	39	40	41	42	43	44	45
28	29	30	31	32	33	34	35	36
19	20	21	22	23	24	25	26	27
10	11	12	13	14	15	16	17	18
1	2	3	4	5	6	7	8	9

SUBDIVISION SHEET INDEX.

LEGEND.

- Overburden and scree.

ULTRABASICS

- Massive serpentinite, pyroxenite.
- Pale green massive serpentinite.
- Dark green massive serpentinite.
- Massive and sheared serpentinite.
- Dark green sheared serpentinite.
- Pale green sheared serpentinite.
- Pyroxenite.
- Cross fibre zone.

SEDIMENTS.

- Greywacke and siltstone.
- Siltstone.
- Black carbonaceous siltstone and argillite.
- Talc chlorite schist with sheared greywacke and siltstone.

OTHER IGNEOUS ROCKS.

- Lamprophyre dyke.
- Intermediate intrusive.
- Basic intrusive.
- Gabbro.
- Creek.
- st Stichtite.
- Dip of bedding.
- sf Slip fibre.
- Dip of shear plane and schistosity.
- su Sulphide.
- Dip of phase layering
- m Magnetite.
- Geological boundaries.
- Survey pegs.
- Defined.
- FL001 Fibre log section.
- Approximate.
- AF1 Channel sample locality.
- Inferred.

SCALE IN FEET. 0 50' 100' 150'

1182

Fig. No. 14
To accompany
Dated 71-805

THE BROKEN HILL PROPRIETARY CO. LTD.
EXPLORATION DEPARTMENT

E.L. 13/65. SOUTH WEST TASMANIA.
SORELL PENINSULA ASBESTOS
DETAIL GEOLOGICAL MAP
SHEET HB10 SUBDIVISIONS 5 & 6.

Drawn: R.C.	Date: 30-7-71	Centre: HOBART.	
Traced M.L.		Project No:	Drawing No: A1-14
Checked			
O.I.C. J.L.			

Revisions:

823216 Fig. 15

1036400F 345500Y 1037600F

2333000F 777500Y 2332000F

35N 30N

dam

Line of section.

3' asbestos zone in sediment & serp on contact

jasper reef

pale to dark green massive serp

mostly dark green massive serp & lens of pale green massive serp & fibre bearing serp

sheared & highly sheared

massive serp-pyrox & cross fibre

cross fibre shell around boulder in massive & sheared serp.

strong sf

cross fibre ⊄ ½".

ps & cross fibre

cross fibre in massive lens.

pale to dark green massive serp & pale green sheared serp

partly metasomatised sheared sediments including conglomerate & greywacke

sheared & highly sheared

71/L1-105

71/L1-39

highly sheared metasomatised serp

light grey highly calcareous massive & sheared metasomatised sediments & light green mineral & quartz veins & possible altered basic intrusive.

zone of massive serp-pyrox & shells of cross fibre

no outcrop bog iron scree.

dark green sheared serp & slip fibre

FL004-160° DHNC3 DHNC2

light green highly sheared serp

grey-black pyritic siltstone

grey-dark green highly sheared serp

FL004-90

FL004-0

DHNC5

1' pale green serp & cross fibre.

asbestos in contact sediments & quarty veins

light to dark green sheared to massive serp & minor sf

1' asbestos zone

71/L1-40

71/L1-164

TRIG.

dark green massive serp & cross fibre

grey-pyritic siltstone

cross fibre

weathered pale green sheared serp.

hornfels

iron capping

su

Light & dark green massive serp & cross fibre & pentlandite blebs.

ribbon fibre boulder.

black massive serp

3' ribbon fibre zone

black compact sheared serp

sheared volcanics & greywacke & quartz veins.

FL008-80'

light grey brown medium grained intermediate volcanics

dark grey to light brown greywacke & siltstone, slightly sheared.

asbestos in light green massive serp veins

massive serp-pyrox boulders.

FL008-0

71/L1-172

71/L1-41a&b

compact sheared serp & CO_3 veins

boulders & outcrops of black metasomatised compact sheared serp (same as occurrence near contact 3000N).

dark green compact sheared serp & thin CO_3 veins

71/L1-40 Petrology sample locality.

Survey control by Peacock, Darcey and Anderson.

Drawings E9/4K-K151. Plans 1-6. 22-4-71.

compact sheared serp

talc schist

quartz

silicified siltstone

numerous quartz veins & traces in silicified greywacke & siltstone & sheared volcanics

greywacke

sheared volcanics & quartz veins

silicified siltstone & sheared volcanics.

boulders of sheared quartz

black carbonaceous shale highly sheared contacts & quartz veins & talc schists (probably fault zone).

light grey & brownish fine to medium grained sheared volcanics

silicified greywacke & siltstone.

LANDS DEPARTMENT GRID SHOWN IN FEET EAST & NORTH.

5 cm

MACQUARIE

HARBOUR

Nelson River

Hibbs Bay.

340000YE.

78

760000YN.

SHEET INDEX & LOCALITY MAP.

		HB1	HB2					
		HB3	HB4	HB5				
		HB6	HB7	HB8				
HB9	HB10	HB11	HB12					
HB13	HB14	HB15	HB16					
HB17	HB18	HB19	HB20					
HB21	HB22	HB23	HB24					
HB25	HB26	HB27	HB28	HB29				
HB30	HB31	HB32	HB33	HB34				
HB35	HB36	HB37	HB38	HB39				
HB40	HB41	HB42	HB43	HB44				
HB45	HB46	HB47	HB48	HB49				
HB50	HB51	HB52	HB53	HB54				

SHEET HB10

46	47	48	49	50	51	52	53	54
37	38	39	40	41	42	43	44	45
28	29	30	31	32	33	34	35	36
19	20	21	22	23	24	25	26	27
10	11	12	13	14	15	16	17	18
1	2	3	4	5	6	7	8	9

SUBDIVISION SHEET INDEX.

N

LEGEND.

Overburden and scree.

ULTRABASICS

- Massive serpentinite, pyroxenite.
- Pale green massive serpentinite.
- Dark green massive serpentinite.
- Massive and sheared serpentinite.
- Dark green sheared serpentinite.
- Pale green sheared serpentinite.
- Pyroxenite.
- Cross fibre zone.

SEDIMENTS.

- Greywacke and siltstone.
- Siltstone.
- Black carbonaceous siltstone and argillite.
- Talc chlorite schist with sheared greywacke and siltstone.

OTHER IGNEOUS ROCKS.

- Lamprophyre dyke.
- Intermediate intrusive.
- Basic intrusive.
- Gabbro.

st Stichtite.

sf Slip fibre.

su Sulphide.

m Magnetite.

° Survey pegs.

· FL001 · Fibre log section.

· AF1 · Channel sample locality.

Creek.

Dip of bedding.

Dip of shear plane and schistosity.

Dip of phase layering

Geological boundaries.

Defined.

Approximate.

Inferred.

SCALE IN FEET.

0 50' 100' 150'

1183

Fig No. 15

To accompany

Dated

71-805

THE BROKEN HILL PROPRIETARY CO. LTD.
EXPLORATION DEPARTMENT

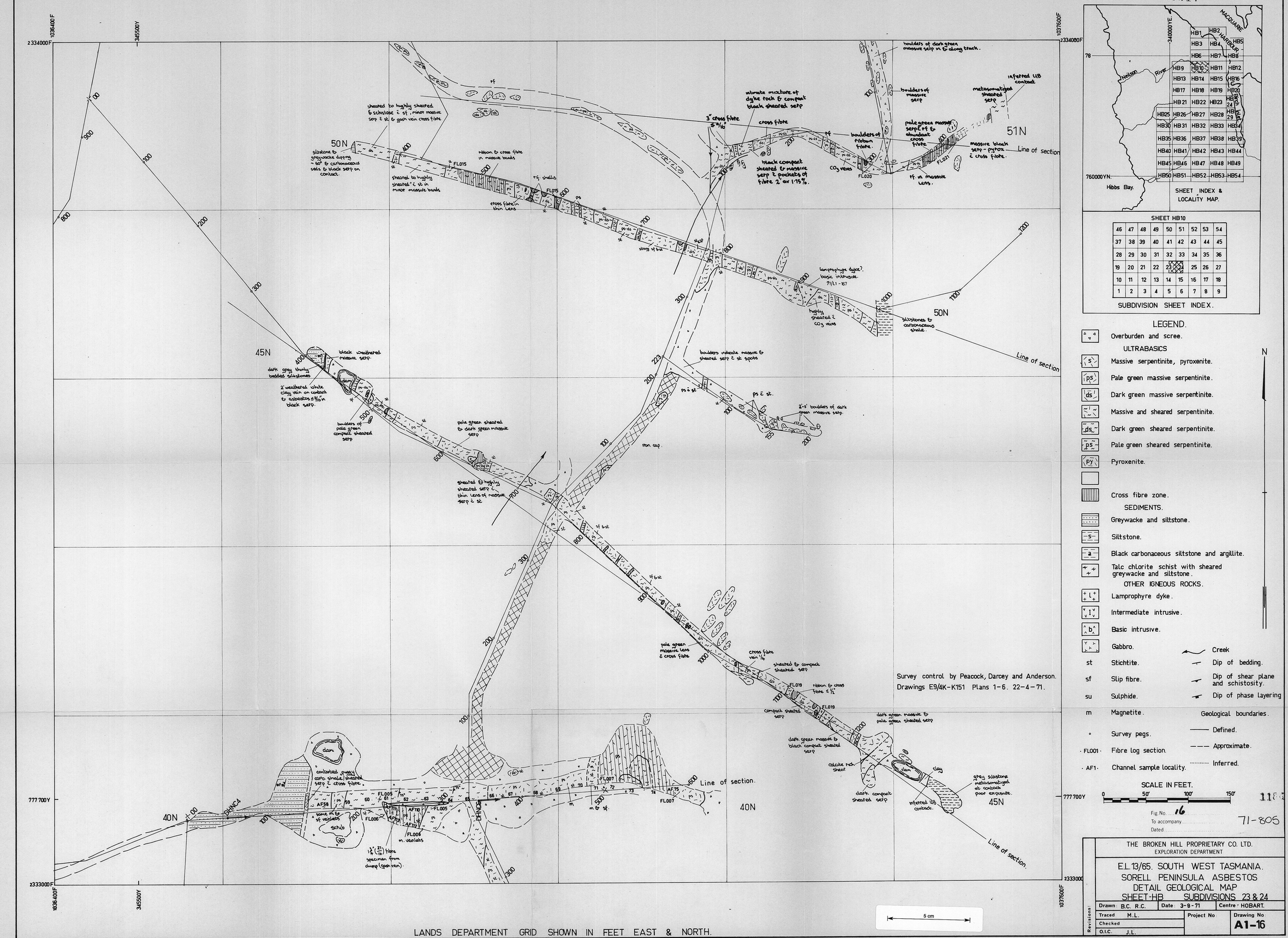
E.L. 13/65. SOUTH WEST TASMANIA.
SORELL PENINSULA ASBESTOS
DETAIL GEOLOGICAL MAP
SHEET-HB10 SUBDIVISIONS 14 & 15

Drawn: R.C. B.C	Date: 2-8-71	Centre: HOBART.	
Traced M.L	Project No:	Drawing No. A1-15	
Checked			
O.I.C. J.L.			

Revisions:

823217

Fig. 16



SHEET INDEX & LOCALITY MAP.

SHEET HB10

46	47	48	49	50	51	52	53	54
37	38	39	40	41	42	43	44	45
28	29	30	31	32	33	34	35	36
19	20	21	22	23	24	25	26	27
10	11	12	13	14	15	16	17	18
1	2	3	4	5	6	7	8	9

SUBDIVISION SHEET INDEX.

LEGEND.

Overburden and scree.

ULTRABASICS

- s — Massive serpentinite, pyroxenite.
- ps — Pale green massive serpentinite.
- ds — Dark green massive serpentinite.
- Massive and sheared serpentinite.
- ds — Dark green sheared serpentinite.
- ps — Pale green sheared serpentinite.
- py — Pyroxenite.
- Cross fibre zone.

SEDIMENTS.

- Greywacke and siltstone.
- s — Siltstone.
- a — Black carbonaceous siltstone and argillite.
- Talc chlorite schist with sheared greywacke and siltstone.

OTHER IGNEOUS ROCKS.

- l — Lamprophyre dyke.
- I — Intermediate intrusive.
- b — Basic intrusive.
- Gabbro.
- st — Stichtite.
- sf — Slip fibre.
- su — Sulphide.
- m — Magnetite.
- Survey pegs.
- FL001 — Fibre log section.
- AF1 — Channel sample locality.

Creek

Dip of bedding.

Dip of shear plane and schistosity.

Dip of phase layering

Geological boundaries.

Defined.

Approximate.

Inferred.

SCALE IN FEET.

0 50' 100' 150'

Fig. No. 16

To accompany

Dated

71-805

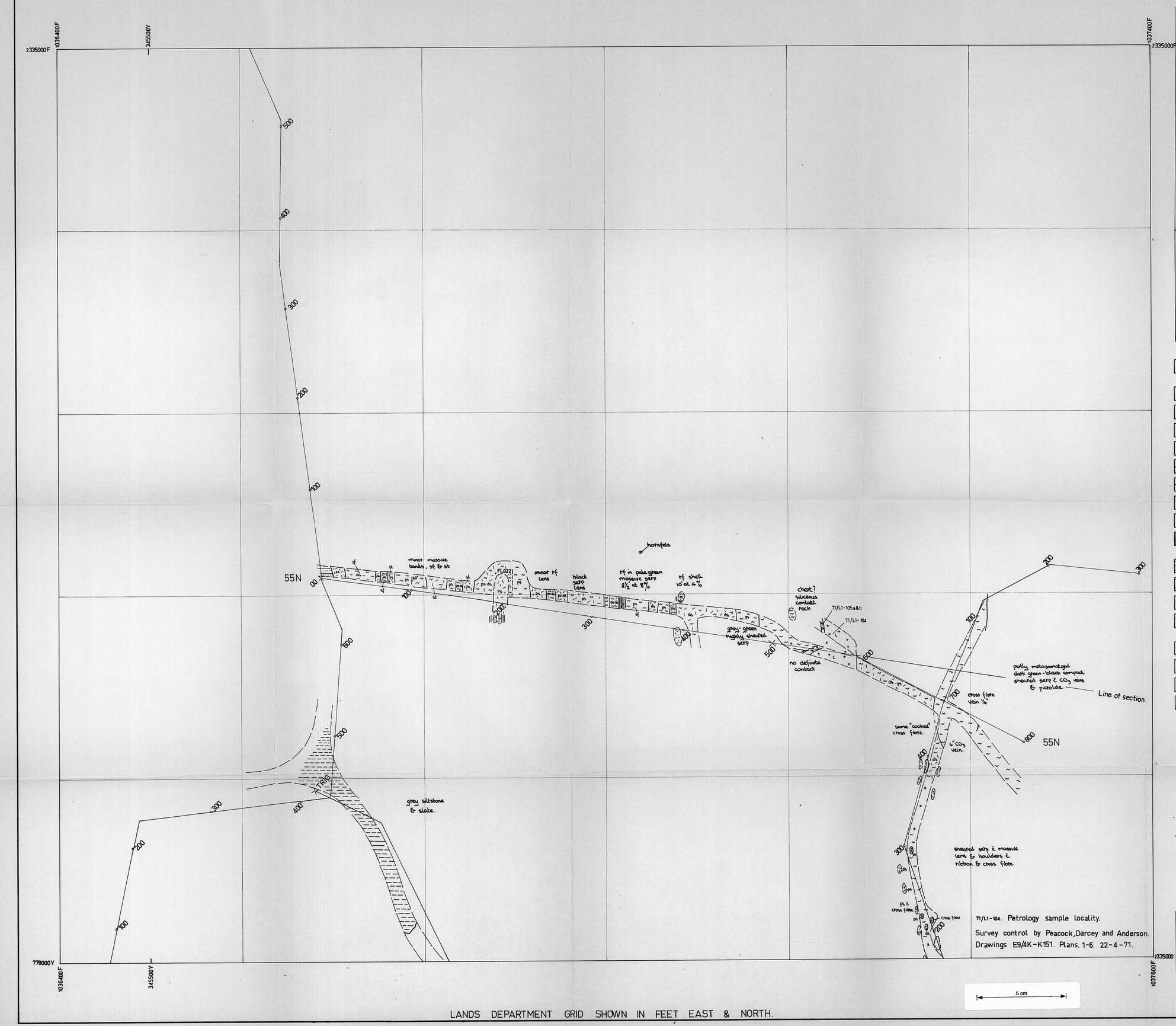
THE BROKEN HILL PROPRIETARY CO. LTD.
EXPLORATION DEPARTMENT

E.L. 13/65. SOUTH WEST TASMANIA.
SORELL PENINSULA ASBESTOS
DETAIL GEOLOGICAL MAP
SHEET-HB SUBDIVISIONS 23 & 24

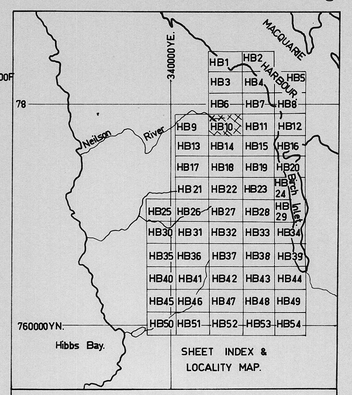
Drawn: B.C. R.C.	Date: 3-8-71	Centre: HOBART.
Traced M.L.	Project No:	Drawing No: A1-16
Checked		
O.I.C. J.L.		

Revisions:

823218 Fig. 17



LANDS DEPARTMENT GRID SHOWN IN FEET EAST & NORTH.



SHEET INDEX & LOCALITY MAP.

SHEET HB10

46	47	48	49	50	51	52	53	54
37	38	39	40	41	42	43	44	45
28	29	30	31	32	33	34	35	36
19	20	21	22	23	24	25	26	27
10	11	12	13	14	15	16	17	18
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SUBDIVISION SHEET INDEX.

LEGEND.

Overburden and scree.

ULTRABASICS

- s — Massive serpentinite, pyroxenite.
- ps — Pale green massive serpentinite.
- ds — Dark green massive serpentinite.
- Massive and sheared serpentinite.
- ds — Dark green sheared serpentinite.
- ps — Pale green sheared serpentinite.
- py — Pyroxenite.
- Cross fibre zone.

SEDIMENTS.

- Greywacke and siltstone.
- s — Siltstone.
- c — Black carbonaceous siltstone and argillite.
- Talc chlorite schist with sheared greywacke and siltstone.

OTHER IGNEOUS ROCKS.

- l — Lamprophyre dyke.
- I — Intermediate intrusive.
- b — Basic intrusive.
- Gabbro.

- st — Stichtite.
- sf — Slip fibre.
- su — Sulphide.
- m — Magnetite.
- Survey pegs.
- FL001 — Fibre log section.
- AF1 — Channel sample locality.

- Dip of bedding.
- Dip of shear plane and schistosity.
- Dip of phase layering

Geological boundaries.

- Defined.
- Approximate.
- Inferred.

SCALE IN FEET.

0 50' 100' 150'

1185

Fig. No. 17

To accompany

Dated

71-805

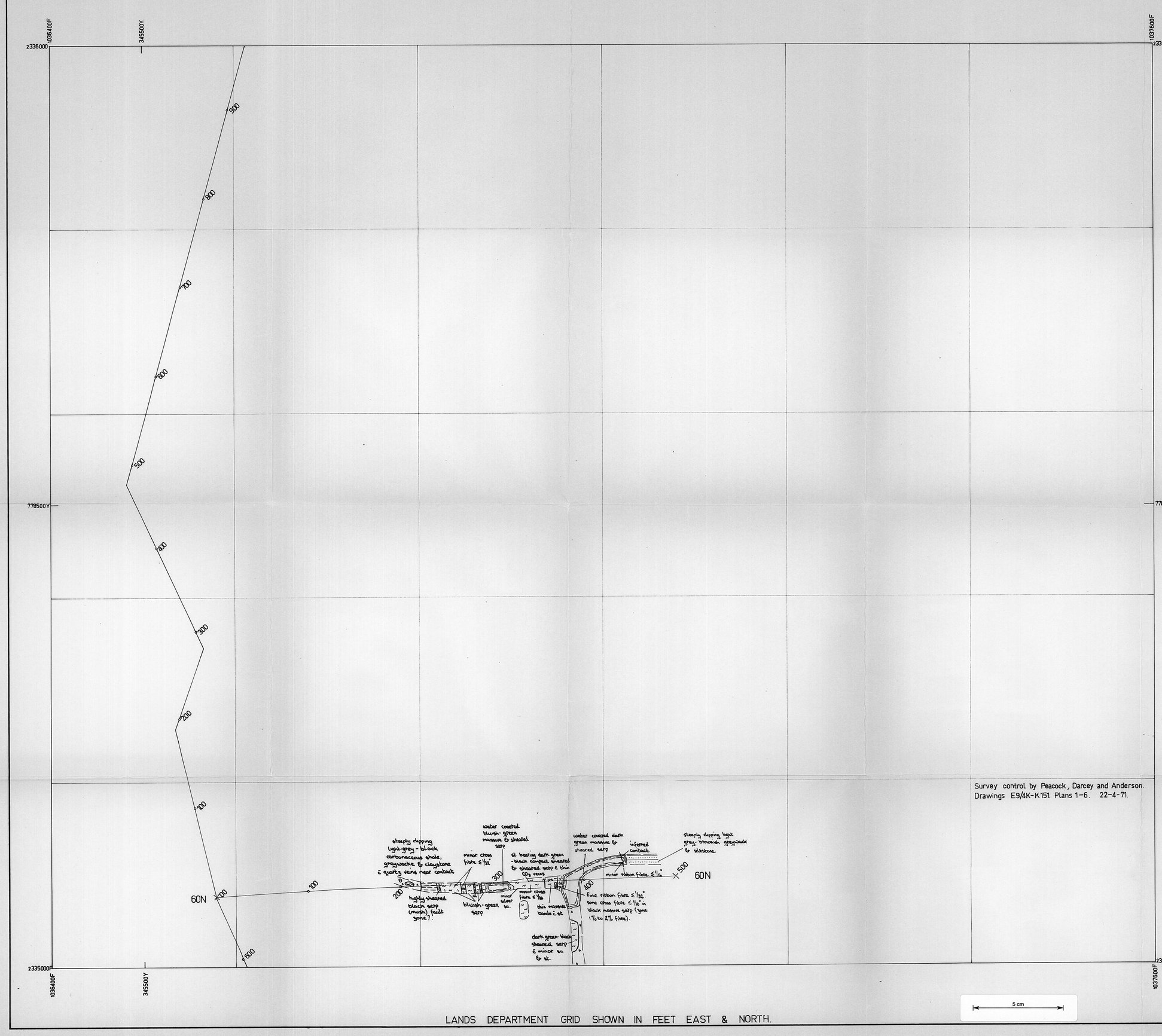
THE BROKEN HILL PROPRIETARY CO. LTD.
EXPLORATION DEPARTMENT

E.L. 13/65. SOUTH WEST TASMANIA.
SORELL PENINSULA ASBESTOS
DETAIL GEOLOGICAL MAP
SHEET-HB10 SUBDIVISIONS 31 & 32

Drawn: R.C.	Date: 4-8-71	Centre: HOBART.	
Traced M.L.	Project No:	Drawing No: A1-17	
Checked			
O.I.C. J.L.			

Revisions:

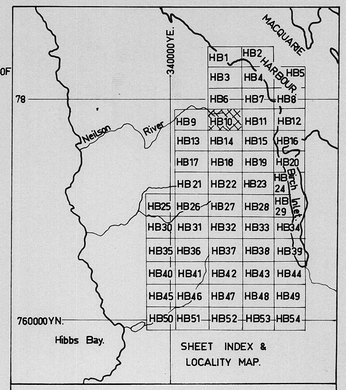
823219 Fig. 18



Survey control by Peacock, Darcey and Anderson. Drawings E9/4K-K151 Plans 1-6. 22-4-71.

LANDS DEPARTMENT GRID SHOWN IN FEET EAST & NORTH.

5 cm



SHEET INDEX & LOCALITY MAP.

SHEET HB10

46	47	48	49	50	51	52	53	54
37	38	39	40	41	42	43	44	45
28	29	30	31	32	33	34	35	36
19	20	21	22	23	24	25	26	27
10	11	12	13	14	15	16	17	18
1	2	3	4	5	6	7	8	9

SUBDIVISION SHEET INDEX.

LEGEND.

Overburden and scree.

ULTRABASICS

- s — Massive serpentinite, pyroxenite.
- ps — Pale green massive serpentinite.
- ds — Dark green massive serpentinite.
- Massive and sheared serpentinite.
- ds — Dark green sheared serpentinite.
- ps — Pale green sheared serpentinite.
- py — Pyroxenite.
- Cross fibre zone.

SEDIMENTS.

- Greywacke and siltstone.
- s — Siltstone.
- c — Black carbonaceous siltstone and argillite.
- Talc chlorite schist with sheared greywacke and siltstone.

OTHER IGNEOUS ROCKS.

- l — Lamprophyre dyke.
- I — Intermediate intrusive.
- b — Basic intrusive.
- Gabbro.

- st — Stichtite.
- sf — Slip fibre.
- su — Sulphide.
- m — Magnetite.
- Survey pegs.
- FL001 — Fibre log section.
- AF1 — Channel sample locality.

- Dip of bedding.
- Dip of shear plane and schistosity.
- Dip of phase layering

Geological boundaries.

- Defined.
- Approximate.
- Inferred.

SCALE IN FEET.

0 50' 100' 150'

N

Fig. No. 18

To accompany

Dated

1186

71-805

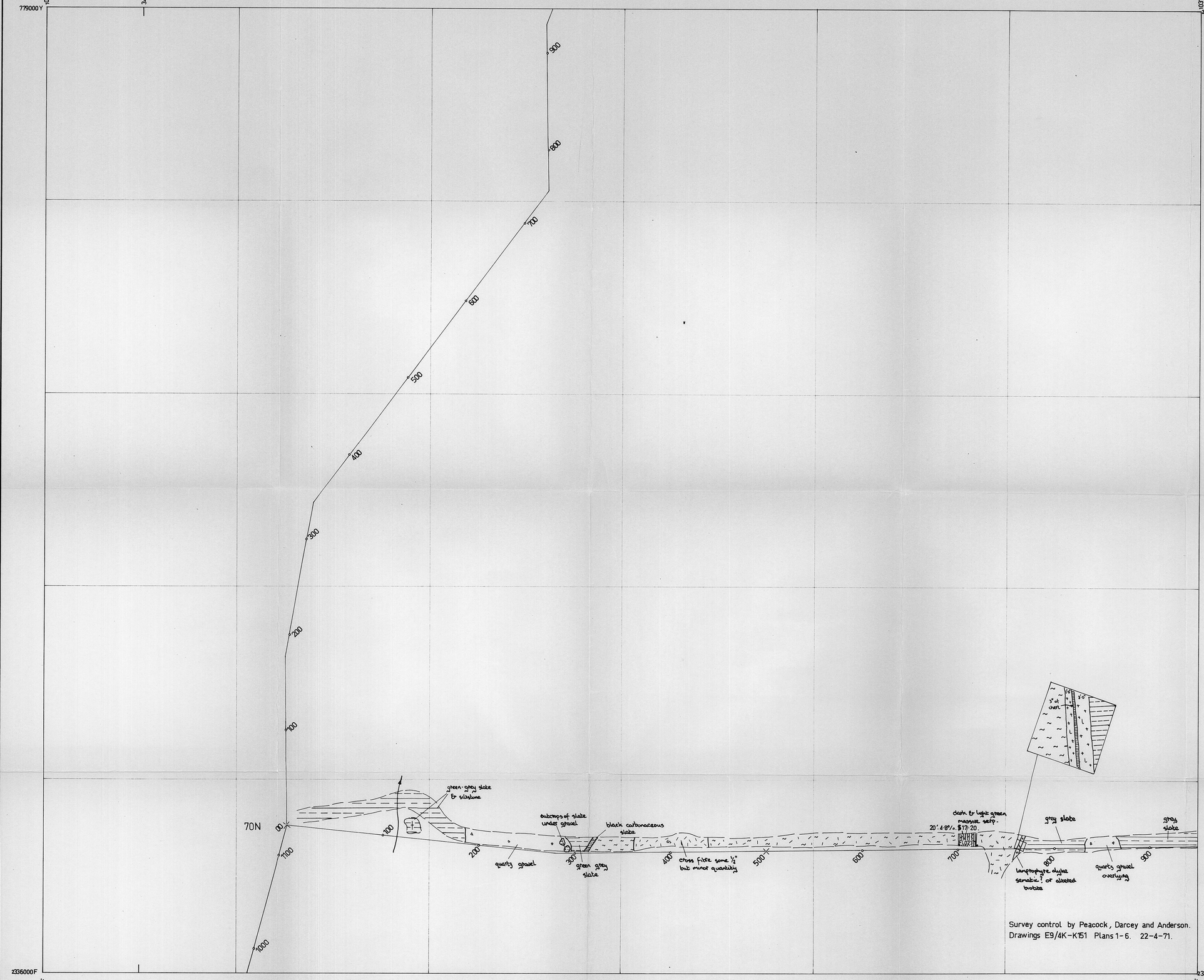
THE BROKEN HILL PROPRIETARY CO. LTD.
EXPLORATION DEPARTMENT

E.L. 13/65. SOUTH WEST TASMANIA.
SORELL PENINSULA ASBESTOS
DETAIL GEOLOGICAL MAP
SHEET-HB10 SUBDIVISIONS 41-42

Drawn: R.C.	Date: 9-8-71	Centre: HOBART.	
Traced M.L.	Project No:	Drawing No: A1-18	
Checked			
O.I.C. J.L.			

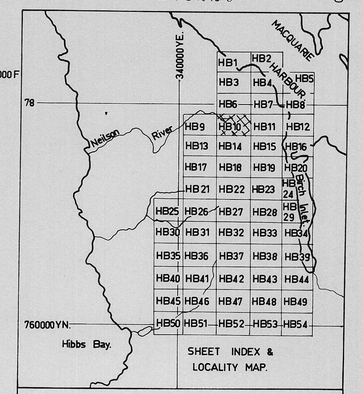
Revisions:

823220 Fig. 19



Survey control by Peacock, Darcey and Anderson.
Drawings E9/4K-K151 Plans 1-6. 22-4-71.

LANDS DEPARTMENT GRID SHOWN IN FEET EAST & NORTH.



SHEET INDEX & LOCALITY MAP.

SHEET HB10

46	47	48	49	50	51	52	53	54
37	38	39	40	41	42	43	44	45
28	29	30	31	32	33	34	35	36
19	20	21	22	23	24	25	26	27
10	11	12	13	14	15	16	17	18
1	2	3	4	5	6	7	8	9

SUBDIVISION SHEET INDEX.

LEGEND.

- Overburden and scree.

ULTRABASICS

- s — Massive serpentinite, pyroxenite.
- ps — Pale green massive serpentinite.
- ds — Dark green massive serpentinite.
- Massive and sheared serpentinite.
- ds — Dark green sheared serpentinite.
- ps — Pale green sheared serpentinite.
- py — Pyroxenite.
- Cross fibre zone.

SEDIMENTS.

- Greywacke and siltstone.
- s — Siltstone.
- c — Black carbonaceous siltstone and argillite.
- Talc chlorite schist with sheared greywacke and siltstone.

OTHER IGNEOUS ROCKS.

- l — Lamprophyre dyke.
- I — Intermediate intrusive.
- b — Basic intrusive.
- Gabbro.
- st — Stichtite.
- sf — Slip fibre.
- su — Sulphide.
- m — Magnetite.
- Survey pegs.
- FL001 — Fibre log section.
- AF1 — Channel sample locality.

- Creek.
- Dip of bedding.
- Dip of shear plane and schistosity.
- Dip of phase layering

Geological boundaries.

- Defined.
- Approximate.
- Inferred.

SCALE IN FEET.

0 50' 100' 150'

Fig. No. 19
To accompany
Dated

1187
71-805

THE BROKEN HILL PROPRIETARY CO. LTD.
EXPLORATION DEPARTMENT

E.L. 13/65. SOUTH WEST TASMANIA.
SORELL PENINSULA ASBESTOS
DETAIL GEOLOGICAL MAP
SHEET-HB10 SUBDIVISIONS 50-51.

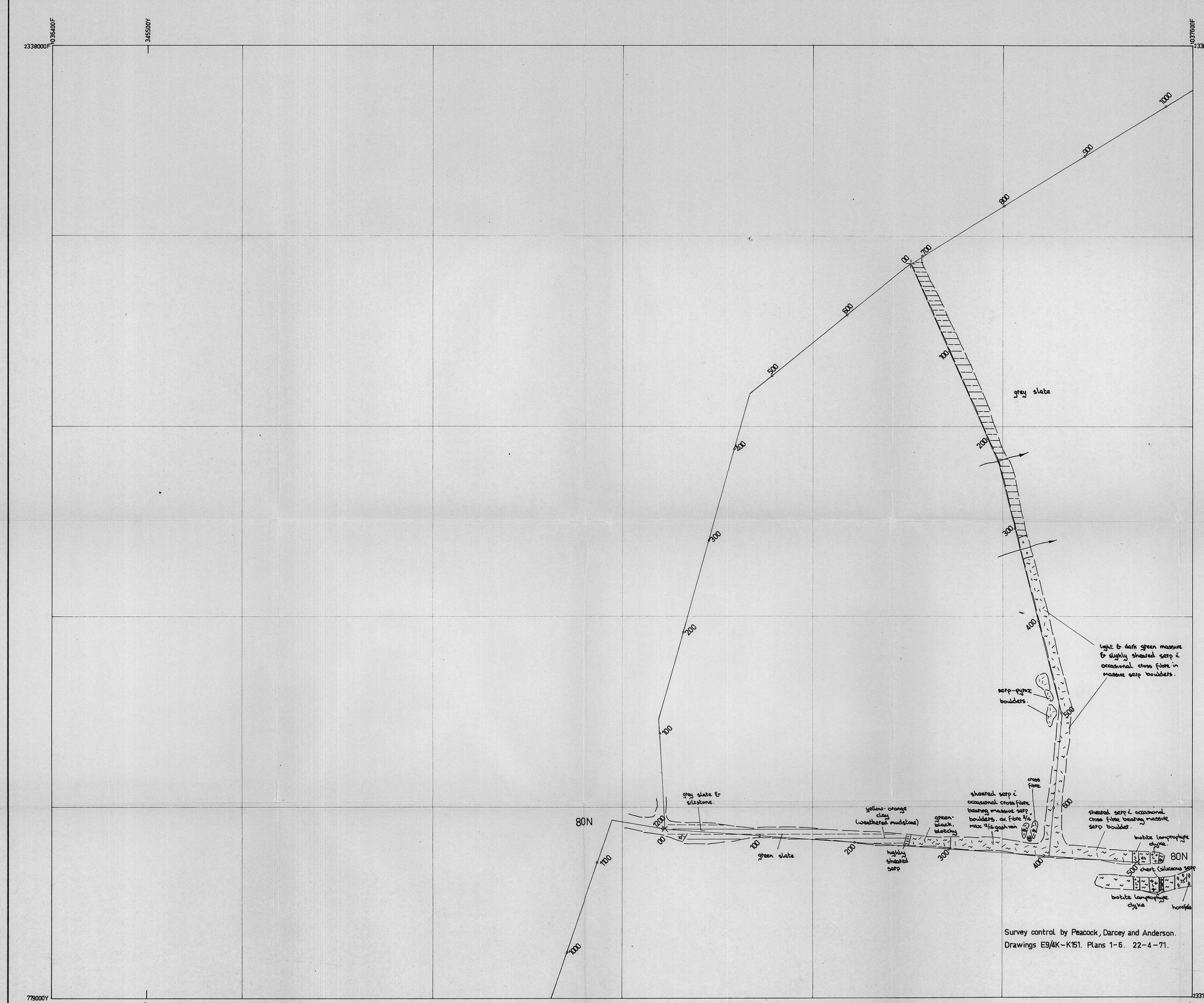
Drawn: B.C.	Date: 9-8-71	Centre: HOBART.	
Traced M.L.	Project No	Drawing No A1-19	
Checked			
O.I.C. J.L			

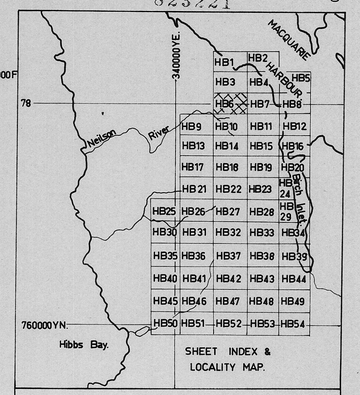
Revisions:

5 cm

823221

Fig. 20





SHEET INDEX & LOCALITY MAP.

SHEET HB6

46	47	48	49	50	51	52	53	54
37	38	39	40	41	42	43	44	45
28	29	30	31	32	33	34	35	36
19	20	21	22	23	24	25	26	27
10	11	12	13	14	15	16	17	18
1	2	3	4	5	6	7	8	9

SUBDIVISION SHEET INDEX.

N

LEGEND.

- Overburden and scree.

ULTRABASICS

- Massive serpentinite, pyroxenite.
- Pale green massive serpentinite.
- Dark green massive serpentinite.
- Massive and sheared serpentinite.
- Dark green sheared serpentinite.
- Pale green sheared serpentinite.
- Pyroxenite.
- Cross fibre zone.

SEDIMENTS.

- Greywacke and siltstone.
- Siltstone.
- Black carbonaceous siltstone and argillite.
- Talc chlorite schist with sheared greywacke and siltstone.

OTHER IGNEOUS ROCKS.

- Lamprophyre dyke.
- Intermediate intrusive.
- Basic intrusive.
- Gabbro.
- Creek.
- st Stichtite.
- Dip of bedding.
- sf Slip fibre.
- Dip of shear plane and schistosity.
- su Sulphide.
- Dip of phase layering.
- m Magnetite.
- Geological boundaries.
- Survey pegs.
- Defined.
- FL001 Fibre log section.
- Approximate.
- Inferred.
- AF1 Channel sample locality.

SCALE IN FEET.

0 50' 100' 150'

Fig. No. 20

To accompany

Dated

1188

71-805

THE BROKEN HILL PROPRIETARY CO. LTD.
EXPLORATION DEPARTMENT

E.L. 13/65. SOUTH WEST TASMANIA.
SORELL PENINSULA ASBESTOS
DETAIL GEOLOGICAL MAP
SHEET-HB 6 SUBDIVISIONS 5-6

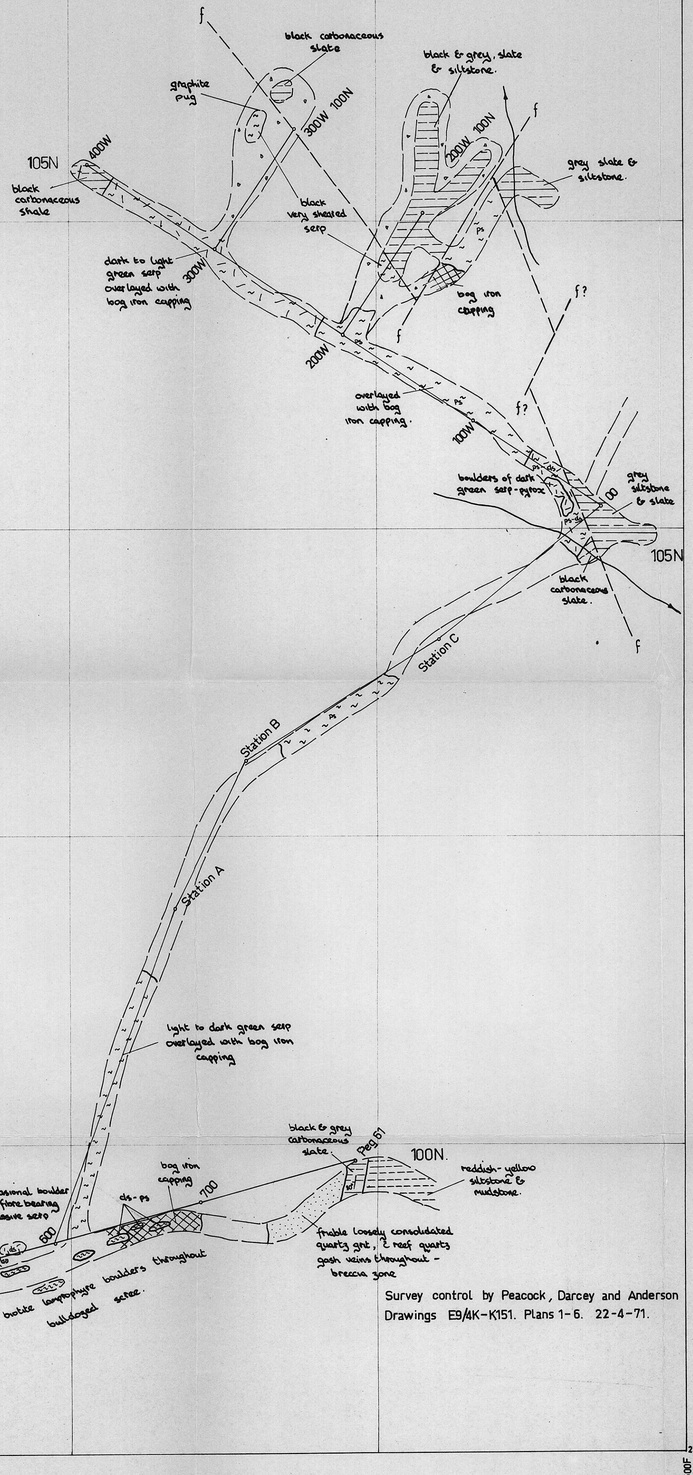
Drawn: R.C & B.C.	Date: 9-8-71	Centre: HOBART.	
Traced M.L		Project No.	Drawing No. A1-20
Checked			
O.I.C. J.L.			

Revisions:

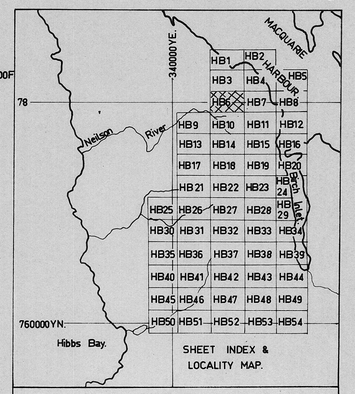
823222 Fig. 21

1037400F 346000Y 1038600F

2339800F



LANDS DEPARTMENT GRID SHOWN IN FEET EAST & NORTH.



SHEET INDEX & LOCALITY MAP.

SHEET HB6

46	47	48	49	50	51	52	53	54
37	38	39	40	41	42	43	44	45
28	29	30	31	32	33	34	35	36
19	20	21	22	23	24	25	26	27
10	11	12	13	14	15	16	17	18
1	2	3	4	5	6	7	8	9

SUBDIVISION SHEET INDEX.

LEGEND.

- Overburden and scree.

ULTRABASICS

- s — Massive serpentinite, pyroxenite.
- ps — Pale green massive serpentinite.
- ds — Dark green massive serpentinite.
- Massive and sheared serpentinite.
- ds — Dark green sheared serpentinite.
- ps — Pale green sheared serpentinite.
- py — Pyroxenite.
- Cross fibre zone.

SEDIMENTS.

- Greywacke and siltstone.
- s — Siltstone.
- Black carbonaceous siltstone and argillite.
- Talc chlorite schist with sheared greywacke and siltstone.

OTHER IGNEOUS ROCKS.

- l — Lamprophyre dyke.
- I — Intermediate intrusive.
- b — Basic intrusive.
- Gabbro.
- Creek
- st — Stichtite.
- Dip of bedding.
- sf — Slip fibre.
- Dip of shear plane and schistosity.
- su — Sulphide.
- Dip of phase layering
- m — Magnetite.
- Geological boundaries.
- ° — Survey pegs.
- Defined.
- FL001 — Fibre log section.
- Approximate.
- AF1 — Channel sample locality.
- Inferred.

SCALE IN FEET.

0 50' 100' 150'

Survey control by Peacock, Darcey and Anderson Drawings E9/4K-K151. Plans 1-6. 22-4-71.

1189

Fig. No. 21

To accompany

Dated 71-805

THE BROKEN HILL PROPRIETARY CO. LTD.
EXPLORATION DEPARTMENT

E.L. 13/65. SOUTH WEST TASMANIA.
SORELL PENINSULA ASBESTOS
DETAIL GEOLOGICAL MAP
SHEET-HB6 SUBDIVISIONS 15,16,24&25

Drawn: B.C.		Date: 10-8-71	Centre: HOBART.
Traced M.L.		Project No:	Drawing No A1-21
Checked			
O.I.C. J.L.			

Revisions:

Fig. 22

823223

THE BROKEN HILL PROPRIETARY CO. LTD.
EXPLORATION DEPARTMENT

E.L. 13/65. SOUTH WEST TASMANIA.
SORELL PENINSULA ASBESTOS.
NODDY CREEK 1"=50'. SHEET INDEX AND
RELATIONSHIP TO HB. SHEET SUBDIVISIONS.

Drawn: M.L. | Date: 30-7-71 | Centre: HOBART
Traced M.L. | Project No: | Drawing No A1-13
Checked
O.I.C. J.L.

Revisions:

Fig. No. 22
To accompany
Dated 71-805 1160

A1-21
A1-20
A1-19
A1-18
A1-17
A1-16
A1-15
A1-14
A1-12.
A1-11 Camp Area.
A1-10
A1-9

100N
80N
70N
60N
55N
50N
45N
40N
35N
30N
25N
20N
15N
10N
05N
00
04S
07S
10S
15S
20S

19 20 21 22 23 24 25 26
10 11 12 13 14 15 16 17
HB 6 1 2 3 4 5 6 7 8 9 779000Y
HB 10
46 47 48 49 50 51 52 53 54
37 38 39 40 41 42 43 44 45
28 29 30 31 32 33 34 35 36 778000Y
345000Y
19 20 21 22 23 24 25 26 27
10 11 12 13 14 15 16 17 18
HB 10 1 2 3 4 5 6 7 8 9 777000Y
HB 14
46 47 48 49 50 51 52 53 54
346000Y
37 38 39 40 41 42 43 44 45
28 29 30 31 32 33 34 35 36 776000Y
20 21 22

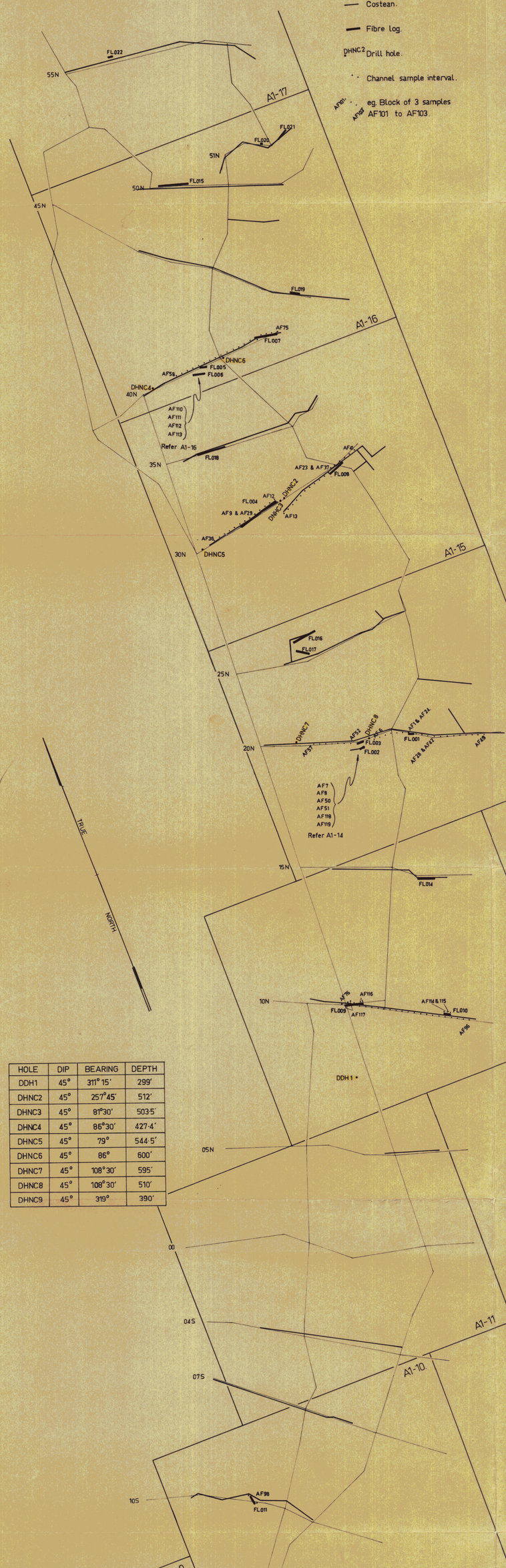
N

0 400 800 1200
SCALE in FEET

5 cm

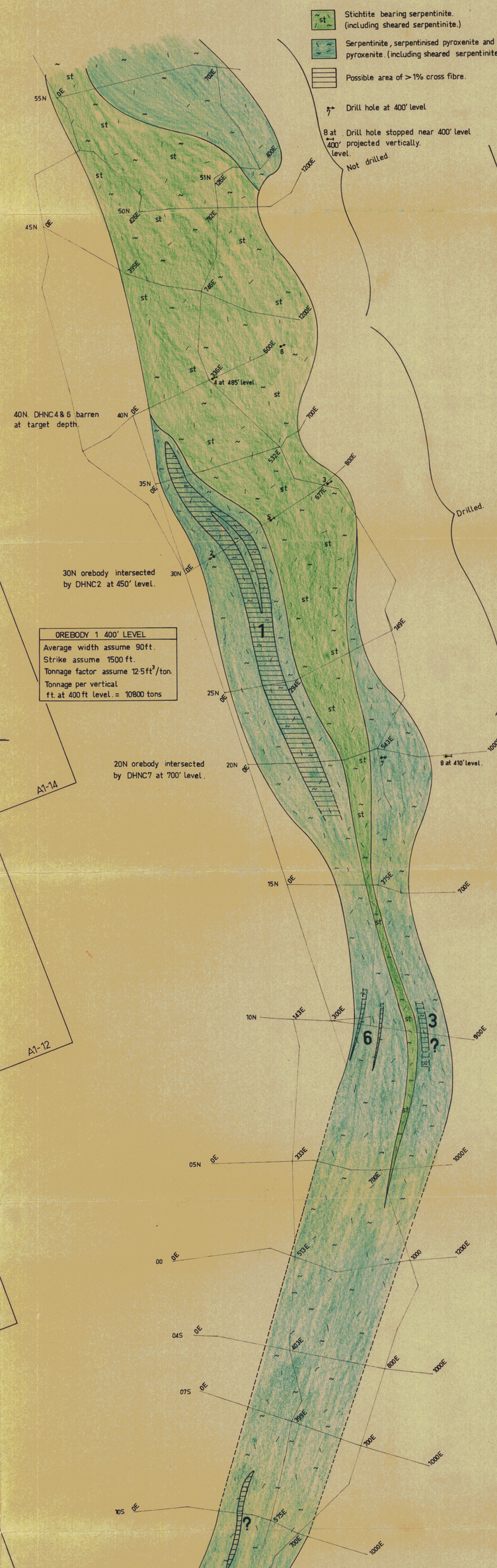
1191

COSTEANS, FIBRE LOGS, CHANNEL SAMPLES & DRILL HOLES



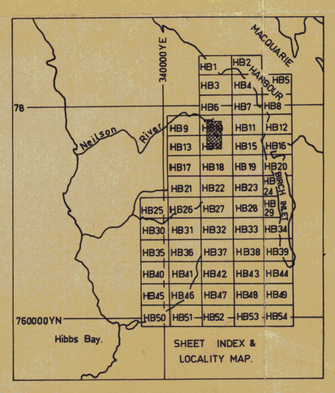
HOLE	DIP	BEARING	DEPTH
DDH1	45°	311° 15′	299′
DHNC2	45°	257°45′	512′
DHNC3	45°	81°30′	503·5′
DHNC4	45°	86°30′	427·4′
DHNC5	45°	79°	544·5′
DHNC6	45°	86°	600′
DHNC7	45°	108°30′	595′
DHNC8	45°	108°30′	510′
DHNC9	45°	319°	390′

400′ LEVEL PLAN



GEOLOGICAL MAP





5 cm

Survey control by Peacock, Darcey and Anderson. Drawings E9/4K-K151 Plans 1-6. 22-4-71

0 200 400 600 800 1000
SCALE IN FEET

Revisions:

Drawn: R.C. & J.L.	Date: 19-8-71
Traced	
Checked M.L.	
O.I.C. J.L.	Centre: HOBART
Project No	Drawing No AO-1

THE BROKEN HILL PROPRIETARY CO. LTD. EXPLORATION DEPARTMENT

E.L. 13/65. SOUTH WEST TASMANIA

SORELL PENINSULA NODDY CREEK.

GEOLOGY 55N to 20S 1"= 200′, 400′ LEVEL PLAN and COSTEANS, FIBRE LOGS, CHANNEL SAMPLES & DRILLHOLES.

823924

Fig 23

71-805

1191

FIG. 23

823225 Fig. 24

Generalised Legend.

- Serpentinite.
- St — Stichtite bearing serpentinite.
- Cross fibre zone ≥ 1%.
- Sediments.

Core samples for milling.			
Hole.	Interval'	Length'	Sample.
DHNC4.	0 – 118	118	None
	118-188	70	AF426
	188-237	49	AF427
	237-319	82	AF428
	319-364	45	AF429
	364-427·4	63·4	AF430
DHNC6.	0-80	80	AF431
	80-169	89	AF432
	169-249	80	AF433
	249-333·5	84·5	AF434
	333·5-378·5	45	AF435
	378·5-449·5	71	AF436
	449·5-512·5	63	AF437
	512·5-600.	87·5	AF438

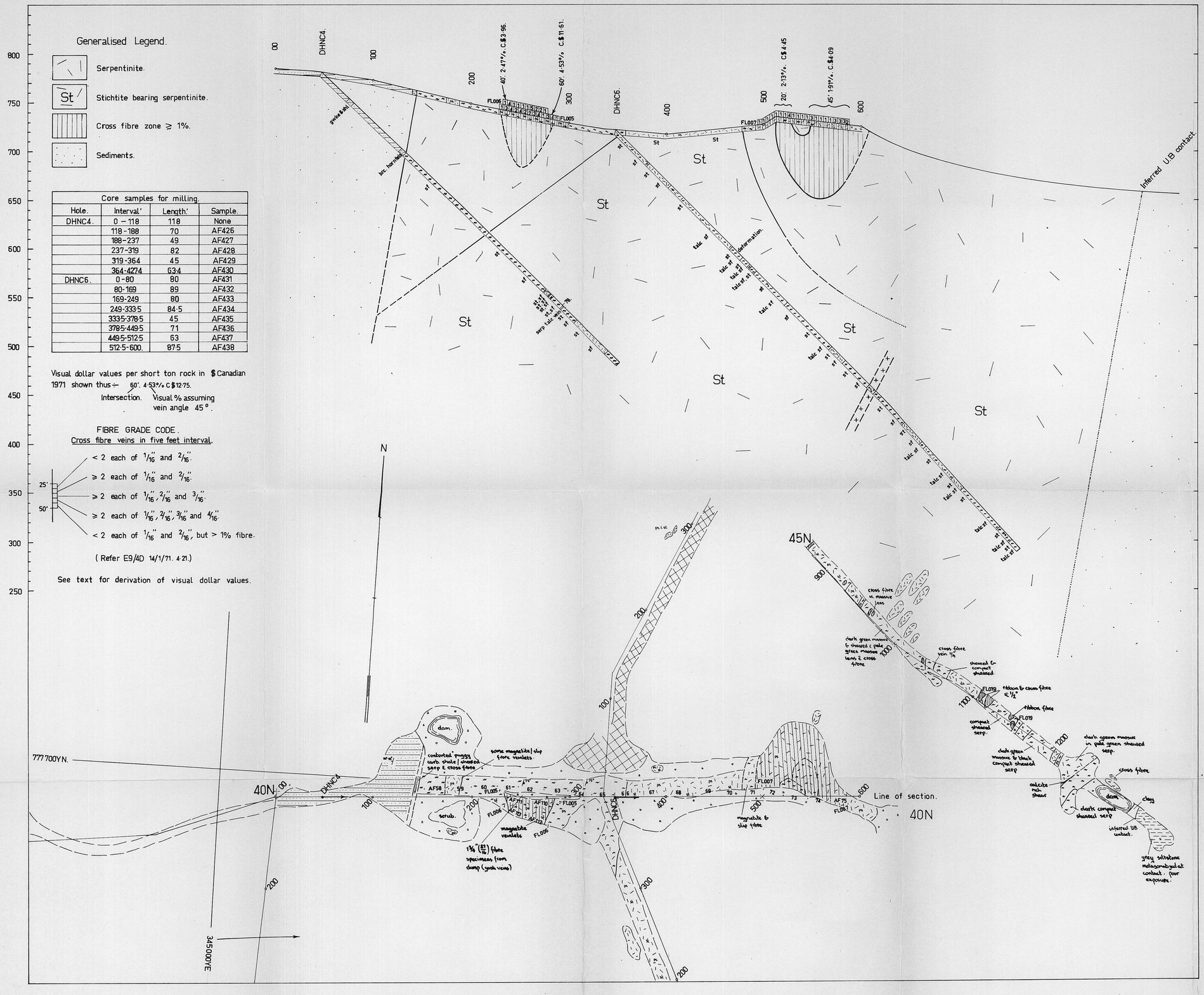
Visual dollar values per short ton rock in $ Canadian 1971 shown thus ÷ 60'. 4·53%. C$12·75.
Intersection. Visual % assuming vein angle 45°.

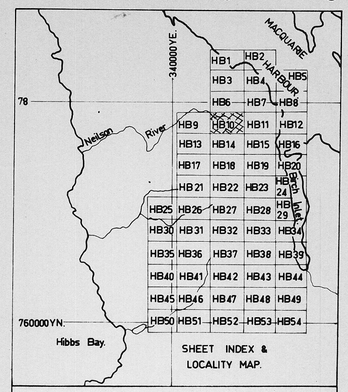
FIBRE GRADE CODE.
Cross fibre veins in five feet interval.

- < 2 each of 1/16" and 2/16".
- ≥ 2 each of 1/16" and 2/16".
- ≥ 2 each of 1/16", 2/16" and 3/16".
- ≥ 2 each of 1/16", 2/16", 3/16" and 4/16".
- < 2 each of 1/16" and 2/16", but > 1% fibre.

(Refer E9/4D 14/1/71. 4·21.)

See text for derivation of visual dollar values.





SHEET INDEX & LOCALITY MAP.

SHEET HB10

46	47	48	49	50	51	52	53	54
37	38	39	40	41	42	43	44	45
28	29	30	31	32	33	34	35	36
19	20	21	22	23	24	25	26	27
10	11	12	13	14	15	16	17	18
1	2	3	4	5	6	7	8	9

SUBDIVISION SHEET INDEX.

LEGEND.

- Overburden and scree.

ULTRABASICS

- s — Massive serpentinite, pyroxenite.
- ps — Pale green massive serpentinite.
- ds — Dark green massive serpentinite.
- Massive and sheared serpentinite.
- ds — Dark green sheared serpentinite.
- ps — Pale green sheared serpentinite.
- py — Pyroxenite.
- Bog iron capping.
- Cross fibre zone.

SEDIMENTS.

- Greywacke and siltstone.
- s — Siltstone.
- c — Black carbonaceous siltstone and argillite.
- Talc chlorite schist with sheared greywacke and siltstone.

OTHER IGNEOUS ROCKS.

- L — Lamprophyre dyke.
- I — Intermediate intrusive.
- b — Basic intrusive.
- Gabbro.
- st — Stichtite.
- sf — Slip fibre.
- su — Sulphide.
- m — Magnetite.
- ∘ — Survey pegs.
- FL001 — Fibre log section.
- AF1 — Channel sample locality.
- 78 — Locality of petrology sample. ie. 71/L1-78.
- Dip of bedding.
- Dip of shear plane and schistosity.
- Dip of phase layering.

Geological boundaries.
- Defined.
- Approximate.
- Inferred.

SCALE IN FEET.
0 50' 100' 150'

1182

Fig No. 24
To accompany.
Dated 71-805

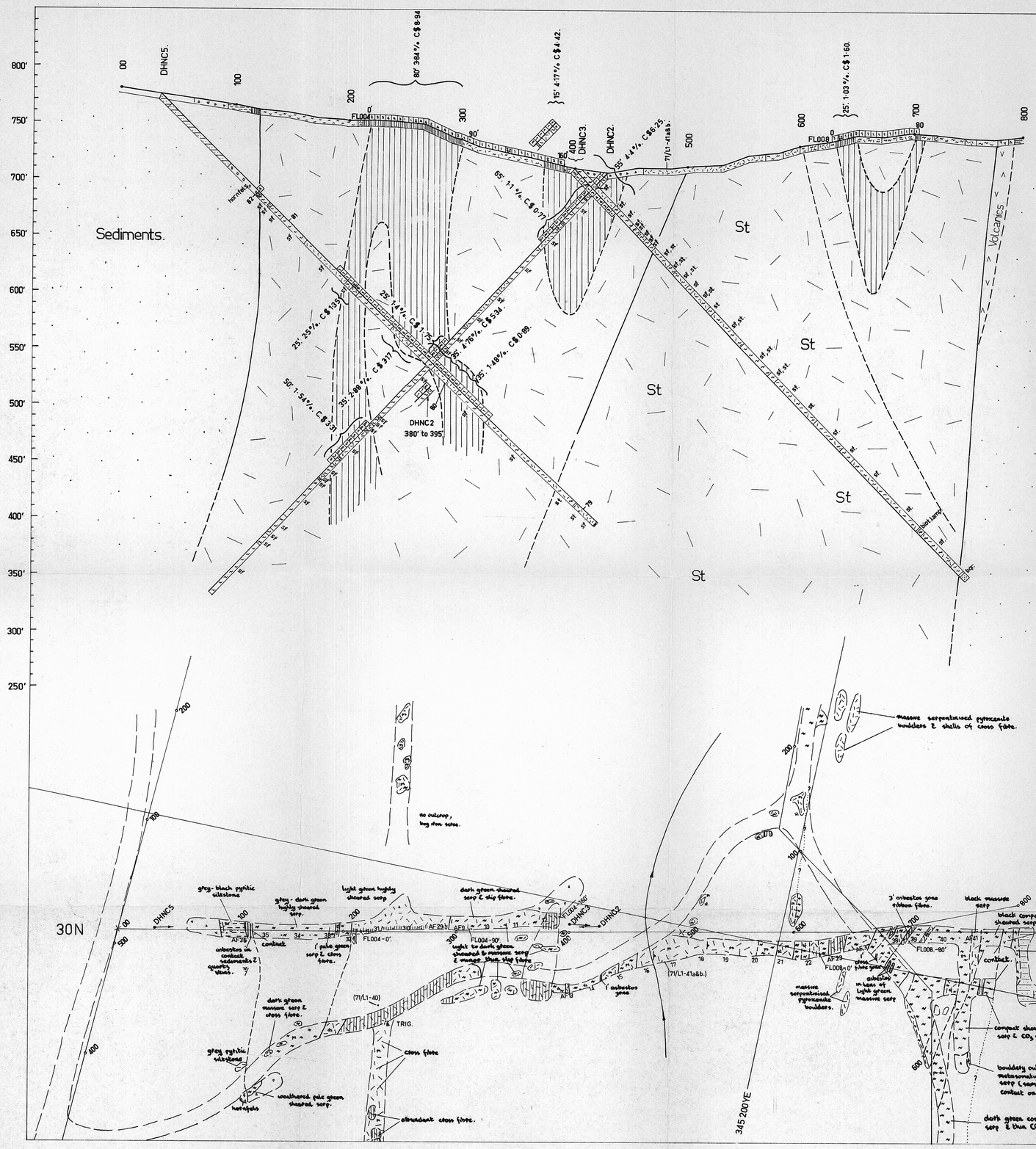
THE BROKEN HILL PROPRIETARY CO. LTD.
EXPLORATION DEPARTMENT

E.L. 13/65 SORELL PENINSULA ASBESTOS
NODDY CREEK DRILL SITES.
GEOLOGY AND GRAPHIC FIBRE LOGS.
MAP AND SECTIONS. DHNC-4 & 6. (40N)

Drawn: B.C., R.C. & J.L.	Date 12/7/71.	Centre: HOBART.	
Traced M.L.		Project No	Drawing No A1-4
Checked			
O.I.C. J.L.			

Revisions:

823226 Fig. 25



Generalised Legend.

- Cross fibre zone ≥ 1%.
- Serpentinite.
- St — Stichtite bearing serpentite.
- Sediments.

Core samples for milling			
Hole.	Interval'.	Length'.	Sample.
DHNC2.	0 - 20	20	None.
	20 - 85	65	AF401
	85 - 130	45	AF402
	130 - 205	75	AF403
	205 - 225	20	AF404
	225 - 305	80	AF405
	305 - 355	50	AF406
	355 - 450·5	95·5	AF407
	450·5 - 512	61·5	AF408
DHNC3.	0 - 55	55	AF409
	55 - 100·3	45·3	AF410
	100·3 - 150	49·7	AF411
	150 - 214	64	AF412
	214 - 258	44	AF413
	258 - 342	84	AF414
	342 - 445	103	AF415
	445 - 493	48	AF416
	493 - 503·5	10·5	None
DHNC5.	0 - 120	120	None
	120 - 184	64	AF417
	184 - 230	46	AF418
	230 - 255	25	AF419
	255 - 290	35	AF420
	290 - 325	35	AF421
	325 - 360	35	AF422
	360 - 395	35	AF423
	395 - 470	75	AF424
	470 - 544·5	74·5	AF425

Visual dollar values per short ton rock in $ Canadian 1971 shown thus:- 50'. 1·54%. C$ 3·27.
(50' = Intersection. 1·54% = Visual % assuming vein angle = 45°.)

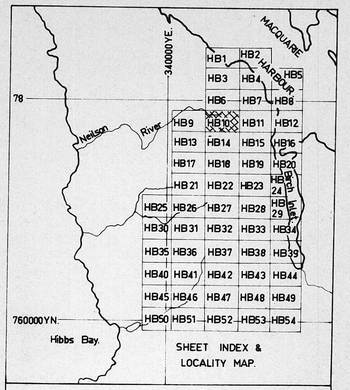
FIBRE GRADE CODE.
Cross fibre veins in five feet interval.

25' / 50'

- < 2 each of 1/16" and 2/16".
- ≥ 2 each of 1/16" and 2/16".
- ≥ 2 each of 1/16", 2/16" and 3/16".
- ≥ 2 each of 1/16", 2/16", 3/16" and 4/16".
- < 2 each of 1/16" and 2/16", but > 1% fibre.

(Refer E9/4D 14/1/71 4·21)

See text for derivation of visual dollar values.



SHEET INDEX & LOCALITY MAP.

SHEET HB10

46	47	48	49	50	51	52	53	54
37	38	39	40	41	42	43	44	45
28	29	30	31	32	33	34	35	36
19	20	21	22	23	24	25	26	27
10	11	12	13	14	15	16	17	18
1	2	3	4	5	6	7	8	9

SUBDIVISION SHEET INDEX.

LEGEND.

- Overburden and scree.

ULTRABASICS

- Massive serpentinite, pyroxenite.
- Pale green massive serpentinite.
- Dark green massive serpentinite.
- Massive and sheared serpentinite.
- Dark green sheared serpentinite.
- Pale green sheared serpentinite.
- Pyroxenite.
- Cross fibre zone.

SEDIMENTS.

- Greywacke and siltstone.
- Siltstone.
- Black carbonaceous siltstone and argillite.
- Talc chlorite schist with sheared greywacke and siltstone.

OTHER IGNEOUS ROCKS.

- Lamprophyre dyke.
- Intermediate intrusive.
- Basic intrusive.
- Gabbro.
- st — Stichtite.
- sf — Slip fibre.
- su — Sulphide.
- m — Magnetite.
- ° — Survey pegs.
- FL001 — Fibre log section.
- AF1 — Channel sample locality.
- 78 — Location of petrology sample ie. 71 L1-79.
- Dip of bedding.
- Dip of shear plane and schistosity.
- Dip of phase layering.

Geological boundaries.
- Defined.
- Approximate.
- Inferred.

SCALE IN FEET.
0 50' 100' 150'

Fig No. 25
To accompany 1193
Dated 71-805

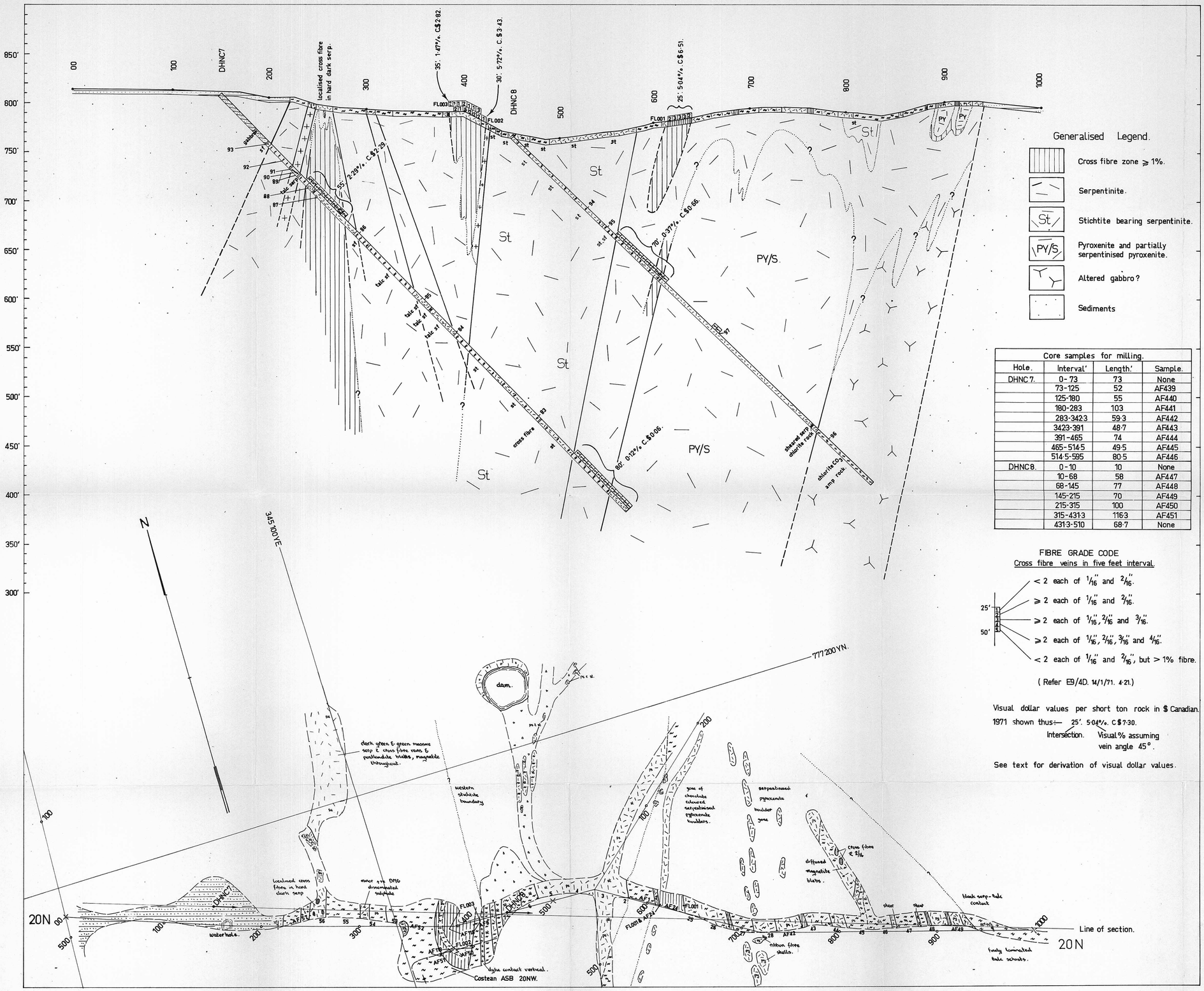
THE BROKEN HILL PROPRIETARY CO. LTD.
EXPLORATION DEPARTMENT

E.L. 13/65 SORELL PENINSULA ASBESTOS
NODDY CREEK DRILL SITES.
GEOLOGY AND GRAPHIC FIBRE LOGS.
MAP AND SECTIONS. DHNC - 2,3&5. (30N)

Drawn R.C., J.L.&M.L.	Date 6-7-71.	Centre HOBART.	
Traced M.L.		Project No	Drawing No A1-2
Checked			
O.I.C. J.L.			

Revisions:

823227 Fig. 26



Generalised Legend.

- Cross fibre zone ≥ 1%.
- Serpentinite.
- St — Stichtite bearing serpentinite.
- PY/S — Pyroxenite and partially serpentinised pyroxenite.
- Altered gabbro?
- Sediments

Core samples for milling.

Hole.	Interval'	Length:'	Sample.
DHNC 7.	0-73	73	None
	73-125	52	AF439
	125-180	55	AF440
	180-283	103	AF441
	283-342·3	59·3	AF442
	342·3-391	48·7	AF443
	391-465	74	AF444
	465-514·5	49·5	AF445
	514·5-595	80·5	AF446
DHNC 8.	0-10	10	None
	10-68	58	AF447
	68-145	77	AF448
	145-215	70	AF449
	215-315	100	AF450
	315-431·3	116·3	AF451
	431·3-510	68·7	None

FIBRE GRADE CODE
Cross fibre veins in five feet interval.

25'
50'

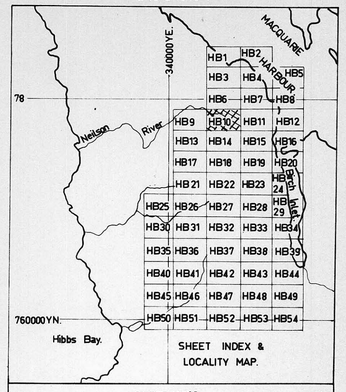
- < 2 each of 1/16" and 2/16".
- ≥ 2 each of 1/16" and 2/16".
- ≥ 2 each of 1/16", 2/16" and 3/16".
- ≥ 2 each of 1/16", 2/16", 3/16" and 4/16".
- < 2 each of 1/16" and 2/16", but > 1% fibre.

(Refer E9/4D. 14/1/71. 4-21.)

Visual dollar values per short ton rock in $ Canadian. 1971 shown thus:— 25'. 5·04%. C$7·30.
Intersection. Visual % assuming vein angle 45°.

See text for derivation of visual dollar values.

5 cm



SHEET INDEX & LOCALITY MAP.

SHEET HB10

46	47	48	49	50	51	52	53	54
37	38	39	40	41	42	43	44	45
28	29	30	31	32	33	34	35	36
19	20	21	22	23	24	25	26	27
10	11	12	13	14	15	16	17	18
1	2	3	4	5	6	7	8	9

SUBDIVISION SHEET INDEX.

LEGEND.

- Overburden and scree.

ULTRABASICS

- s — Massive serpentinite, pyroxenite.
- ps — Pale green massive serpentinite.
- ds — Dark green massive serpentinite.
- Massive and sheared serpentinite.
- ds — Dark green sheared serpentinite.
- ps — Pale green sheared serpentinite.
- py — Pyroxenite.
- Cross fibre zone.

SEDIMENTS.

- Greywacke and siltstone.
- s — Siltstone.
- c — Black carbonaceous siltstone and argillite.
- Talc chlorite schist with sheared greywacke and siltstone.

OTHER IGNEOUS ROCKS.

- l — Lamprophyre dyke.
- I — Intermediate intrusive.
- b — Basic intrusive.
- Gabbro.
- st — Stichtite.
- sf — Slip fibre.
- su — Sulphide.
- m — Magnetite.
- Survey pegs.
- FL001 — Fibre log section.
- AF1 — Channel sample locality.
- 83 — Location of petrology sample ie 71/L1-83.
- Dip of bedding.
- Dip of shear plane and schistosity.
- Dip of phase layering.

Geological boundaries.
- Defined.
- Approximate.
- Inferred.

SCALE IN FEET.
0 50' 100' 150'

Fig No. 26
To accompany
Dated

1154
71-805

THE BROKEN HILL PROPRIETARY CO. LTD.
EXPLORATION DEPARTMENT

E.L. 13/65 SORELL PENINSULA ASBESTOS
NODDY CREEK DRILL SITES.
GEOLOGY AND GRAPHIC FIBRE LOGS.
MAP AND SECTIONS. DHNC-7 & 8 (20N)

Drawn: R.C.& J.L.	Date: 9/7/71	Centre: HOBART.	
Traced M.L.		Project No	Drawing No A1-3
Checked			
O.I.C. J.L.			

Revisions:

823228 Fig. 27

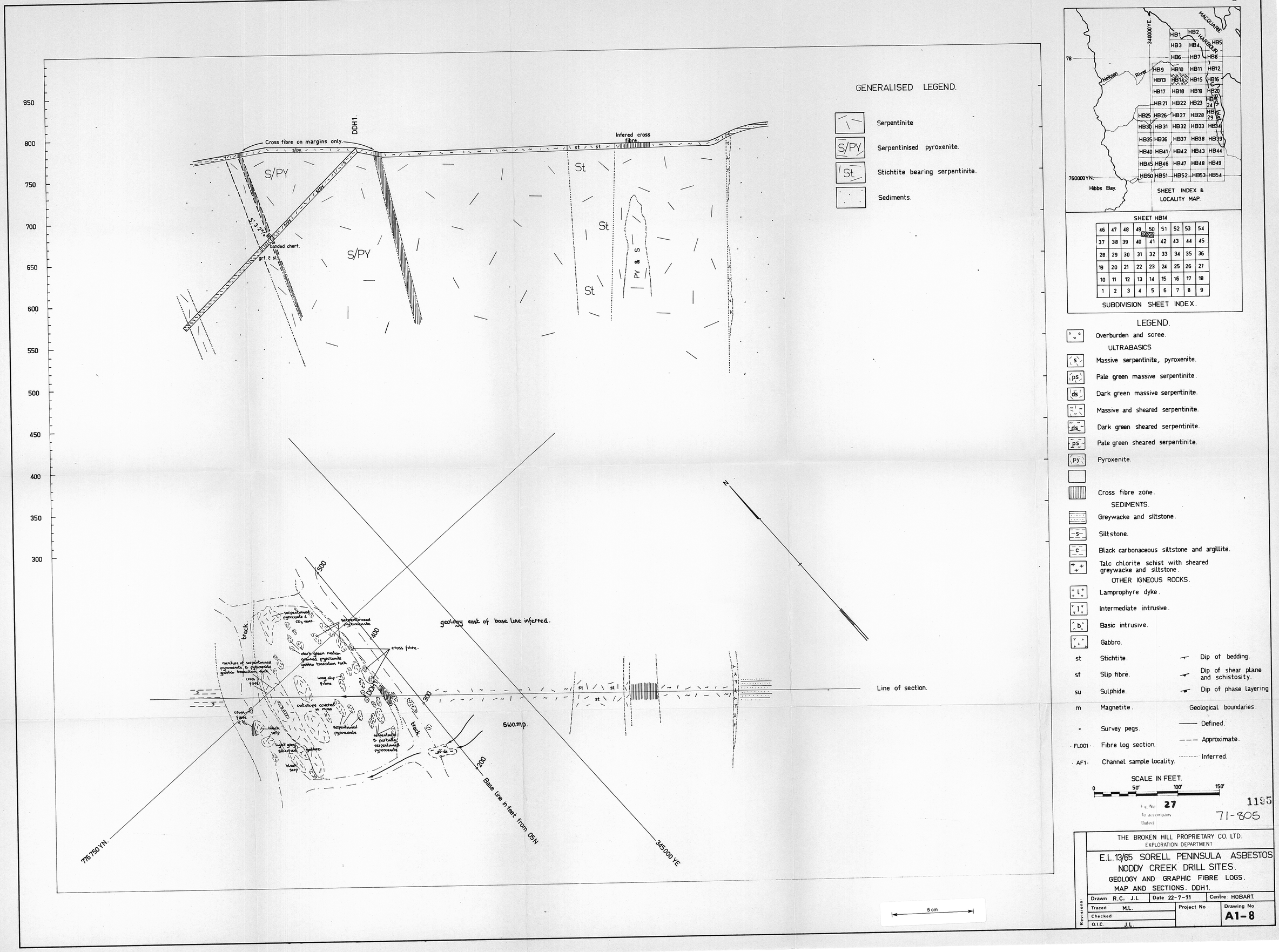


Fig No 27
To accompany
Dated

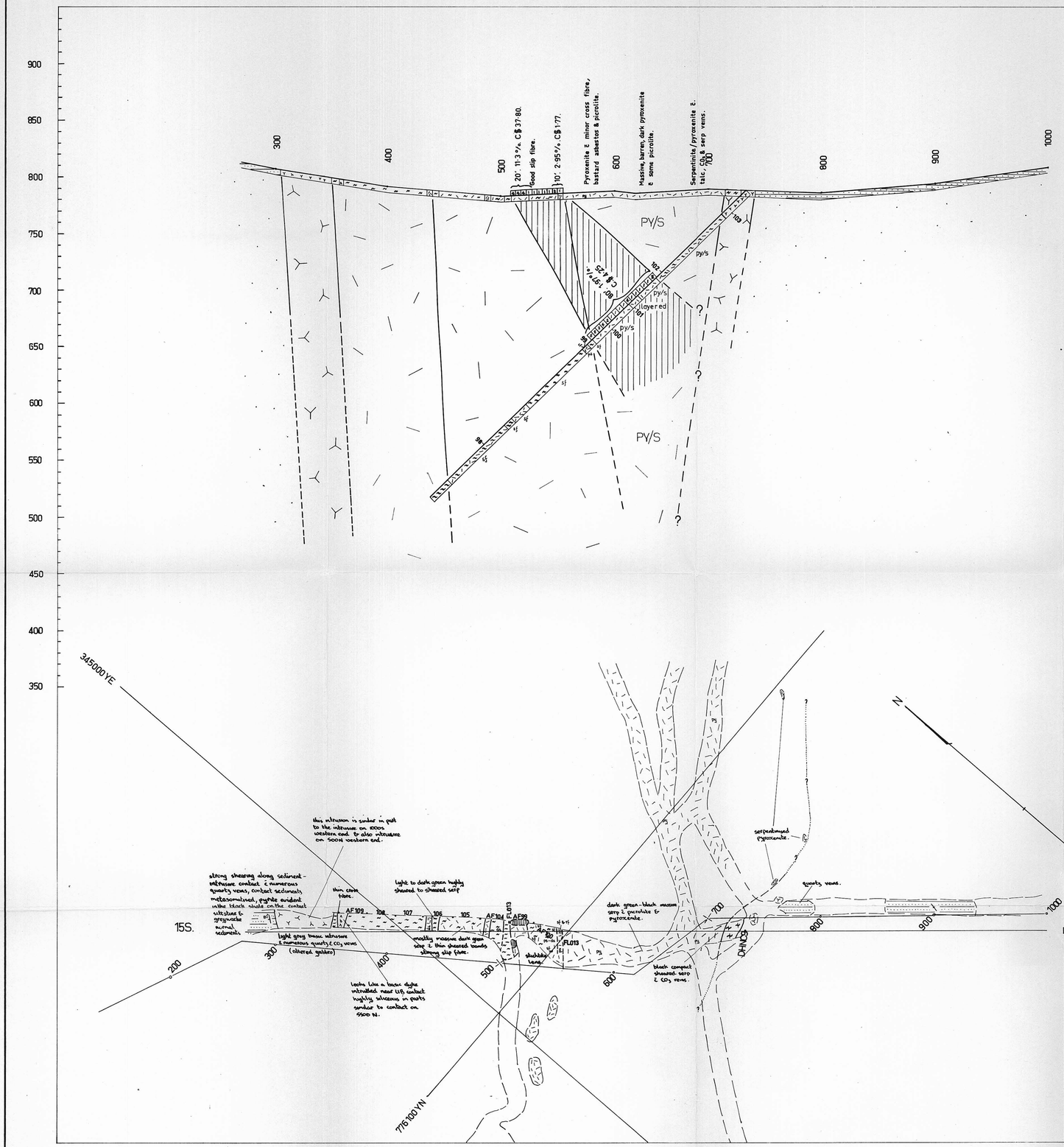
1195
71-805

THE BROKEN HILL PROPRIETARY CO. LTD.
EXPLORATION DEPARTMENT

E.L. 13/65 SORELL PENINSULA ASBESTOS
NODDY CREEK DRILL SITES.
GEOLOGY AND GRAPHIC FIBRE LOGS.
MAP AND SECTIONS. DDH1.

Drawn R.C. J.L	Date 22-7-71	Centre HOBART.
Traced M.L.	Project No	Drawing No A1-8
Checked		
O.I.C. J.L.		

Revisions



GENERALISED LEGEND.

- Serpentinite.
- Pyroxenite and serpentinite.
- Cross fibre zone ⩾ 1% fibre.
- Gabbro.
- Sediments.

Core samples for milling.

Hole	Interval'	Length'	Sample.
DHNC9	0-30	30	None.
	30-110.	80	None.
	110-190	80	AF452.
	190-271	81	AF453
	271-366·8	95·8	AF454
	366·8-390	23·2	None.

FIBRE GRADE CODE.

Cross fibre veins in five feet interval.

25' / 50'

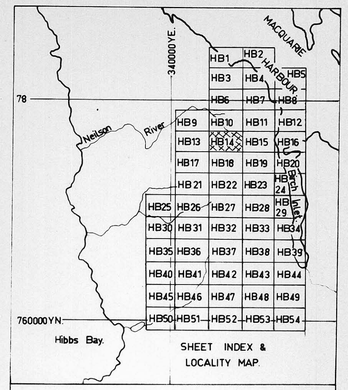
- < 2 each of 1/16" and 2/16".
- ⩾ 2 each of 1/16" and 2/16".
- ⩾ 2 each of 1/16", 2/16" and 3/16".
- ⩾ 2 each of 1/16", 2/16", 3/16" and 4/16".
- < 2 each of 1/16" and 2/16", but > 1% fibre.

(Refer E9/4D 14/1/71. 4·21)

Visual dollar value per short ton rock in $ Canadian 1971 shown thus:— 10'. 2·95%. C.$1·89.

Intersection. Visual % assuming vein angle 45°.

See text for derivation of visual dollar values.



SHEET INDEX & LOCALITY MAP.

SHEET HB14

46	47	48	49	50	51	52	53	54
37	38	39	40	41	42	43	44	45
28	29	30	31	32	33	34	35	36
19	20	21	22	23	24	25	26	27
10	11	12	13	14	15	16	17	18
1	2	3	4	5	6	7	8	9

SUBDIVISION SHEET INDEX.

LEGEND.

- Overburden and scree.

ULTRABASICS

- Massive serpentinite, pyroxenite.
- Pale green massive serpentinite.
- Dark green massive serpentinite.
- Massive and sheared serpentinite.
- Dark green sheared serpentinite.
- Pale green sheared serpentinite.
- Pyroxenite.
- Cross fibre zone.

SEDIMENTS.

- Greywacke and siltstone.
- Siltstone.
- Black carbonaceous siltstone and argillite.
- Talc chlorite schist with sheared greywacke and siltstone.

OTHER IGNEOUS ROCKS.

- Lamprophyre dyke.
- Intermediate intrusive.
- Basic intrusive.
- Gabbro.
- Locality of petrology samples. ie. 71/L1-100
- st Stichtite.
- Dip of bedding.
- sf Slip fibre.
- Dip of shear plane and schistosity.
- su Sulphide.
- Dip of phase layering.
- m Magnetite.
- Survey pegs.
- FL001 Fibre log section.
- AF1 Channel sample locality.

Geological boundaries.
- Defined.
- Approximate.
- Inferred.

SCALE IN FEET.

0 50' 100' 150'

5 cm

Fig No. 28
To accompany
Dated

1186
71-805

THE BROKEN HILL PROPRIETARY CO. LTD.
EXPLORATION DEPARTMENT

E.L. 13/65 SORELL PENINSULA ASBESTOS
NODDY CREEK DRILL SITES.
GEOLOGY AND GRAPHIC FIBRE LOGS.
MAP AND SECTIONS. DHNC-9 (15S).

Drawn R.C. J.L	Date 14-7-71	Centre HOBART.	
Traced M.L.		Project No	Drawing No A1-5
Checked			
O.I.C. J.L			

Revisions

Depth in feet. 0 10 20 30 40 50 60 70 80 90 100 150 200 300 400 500 600

A.D.D. DHNC9 Core recovery 100% % Fibre. 10%
Total core recovery 88.0%

A.D.D. DHNC8 Core recovery 100% % Fibre. 10%
Total core recovery 80.2%

A.S.J. DHNC7 Core recovery 100% % Fibre. 10%
Total core recovery 85.7%

A.D.D. DHNC6 Core recovery 100% % Fibre. 10%
Total core recovery 94.0%

A.S.J. DHNC5 Core recovery 100% % Fibre. 10%
Total core recovery 76.1%

A.D.D. DHNC4 Core recovery 100% % Fibre. 10%
Total core recovery 76.9%

A.S.J. DHNC3 Core recovery 100% % Fibre. 10%
Total core recovery 91.4%

A.S.J DHNC2 Core recovery 100% % Fibre. 10%
Total core recovery 63.0%

A.D.D. DDH1 Core recovery 100% % Fibre. 10%
Total core recovery 97.0%

5 cm

Depth in feet. 0 10 20 30 40 50 60 70 80 90 100 150 200 300 400 500

LEGEND.

- ps — Pale green massive serpentinite.
- ds — Dark green massive serpentinite.
- ps — Pale green sheared serpentinite.
- ds — Dark green sheared serpentinite.
- py — Pyroxenite.
- s&py — Serpentinite and pyroxenite.
- s/py — Serpentinised pyroxenite.
- Greywacke and siltstone.
- Siltstone.
- Hornfels
- Gabbro.
- l — Lamprophyre.
- st — Stichtite.
- xf — Minor cross fibre
- A.D.D. — Hole drilled by:- Associated Diamond Drillers.
- A.S.J. — Hole drilled by:- A.S. James.

Core recovery %, calculated in drill runs.

Fibre %, visual and uncorrected.

1197
71-805

Fig. No. 29
To accompany
Dated

THE BROKEN HILL PROPRIETARY CO. LTD.
EXPLORATION DEPARTMENT

E.L. 13/65. SOUTH WEST TASMANIA.
NODDY CREEK.
GRAPHIC LOGS, FIBRE LOGS, CORE RECOVERY. DDH1-DHNC2 - DHNC9.

Drawn: M.L.	Date: 26-8-71	Centre: HOBART.	
Traced M.L.		Project No.	Drawing No. A1-28
Checked			
O.I.C. J.L.			

Revisions:

823231


Overburden and scree.


Sheared serpentinite.


Massive and sheared serpentinite.


Massive serpentinite.

ps Pale green

ds Dark green



Serpentinite.



Pyroxenite and serpentinite.



Serpentinised pyroxenite


Cross fibre zone.

st Stichtite.


Siltstone


Greywacke and siltstone.

grf shl. Graphite shale


Basic intrusive.


Intermediate intrusive


Lamprophyre


Gabbro.

qtz. Quartz.

lamp. Lamprophyre.

Vertical scale. 1"= 4000 gammas.

Horizontal scale. 1" 50'

1198

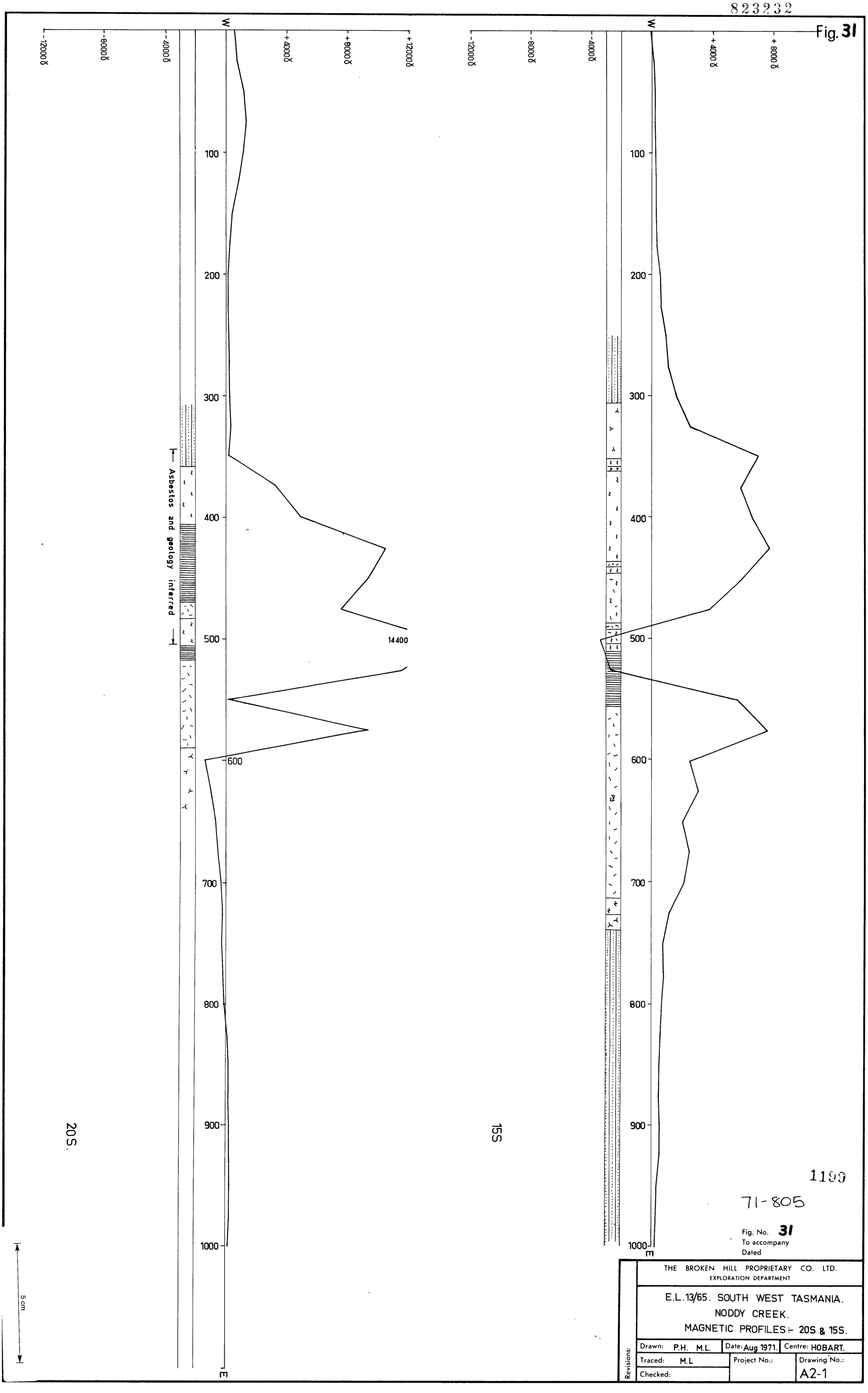
Numbers on horizontal scale increase eastward unless otherwise indicated.

71-805

Centre HOBART	THE BROKEN HILL PROPRIETARY CO LTD	Project No
Date 9-9-71.	E.L. 13/65. SOUTH WEST TASMANIA. fig. 30	Drawing No A4- 7
	NODDY CREEK. GEOLOGICAL KEY FOR MAGNETIC PROFILES	

823232

Fig. 31



1199

71-805

Fig. No. 31
To accompany
Dated

THE BROKEN HILL PROPRIETARY CO. LTD.
EXPLORATION DEPARTMENT

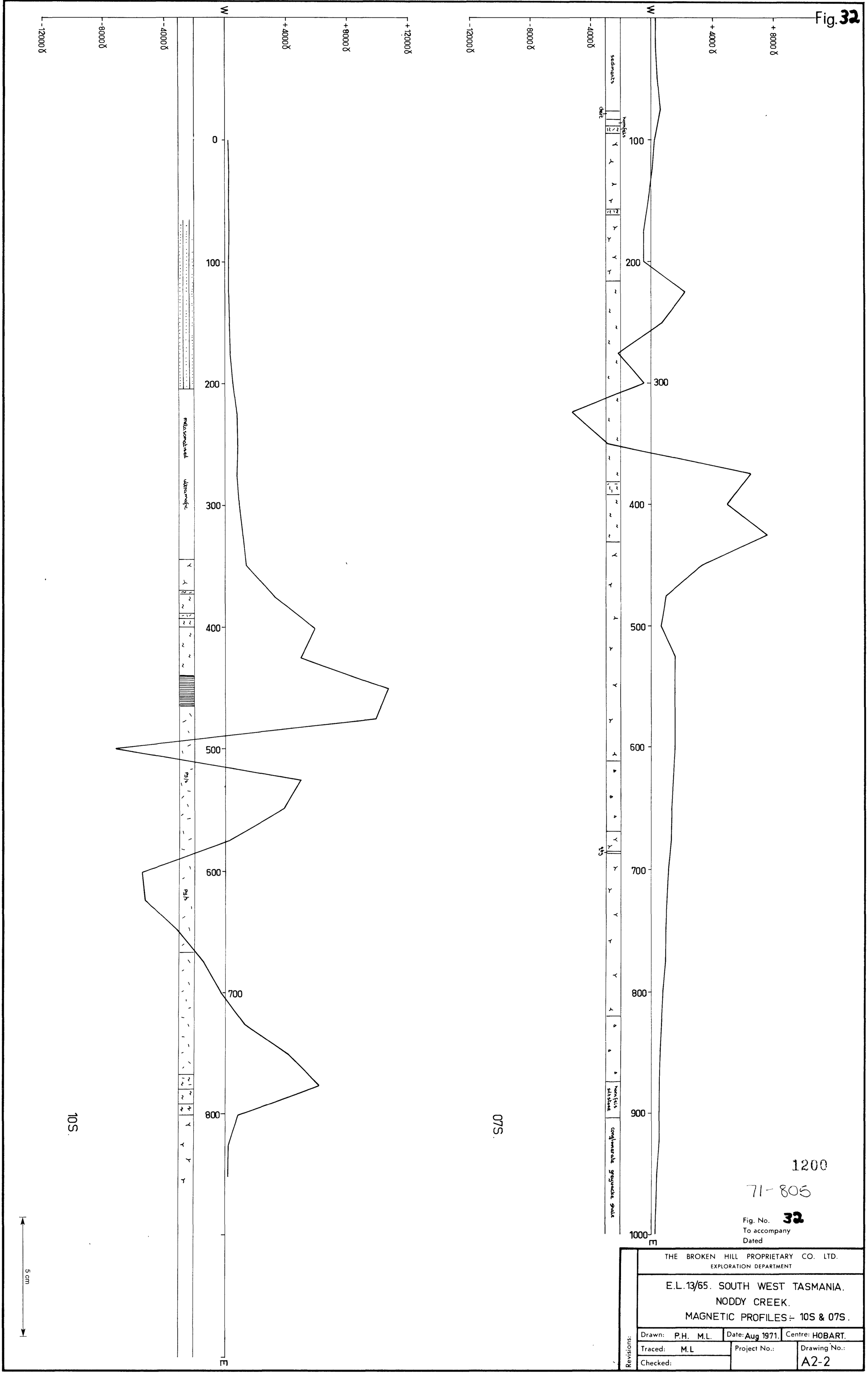
E.L.13/65. SOUTH WEST TASMANIA.
NODDY CREEK.
MAGNETIC PROFILES:- 20S & 15S.

Drawn: P.H. M.L.	Date: Aug 1971.	Centre: HOBART.
Traced: M.L	Project No.:	Drawing No.: A2-1
Checked:		

Revisions:

823233

Fig. 32



1200

71-805

Fig. No. 32
To accompany
Dated

THE BROKEN HILL PROPRIETARY CO. LTD.
EXPLORATION DEPARTMENT

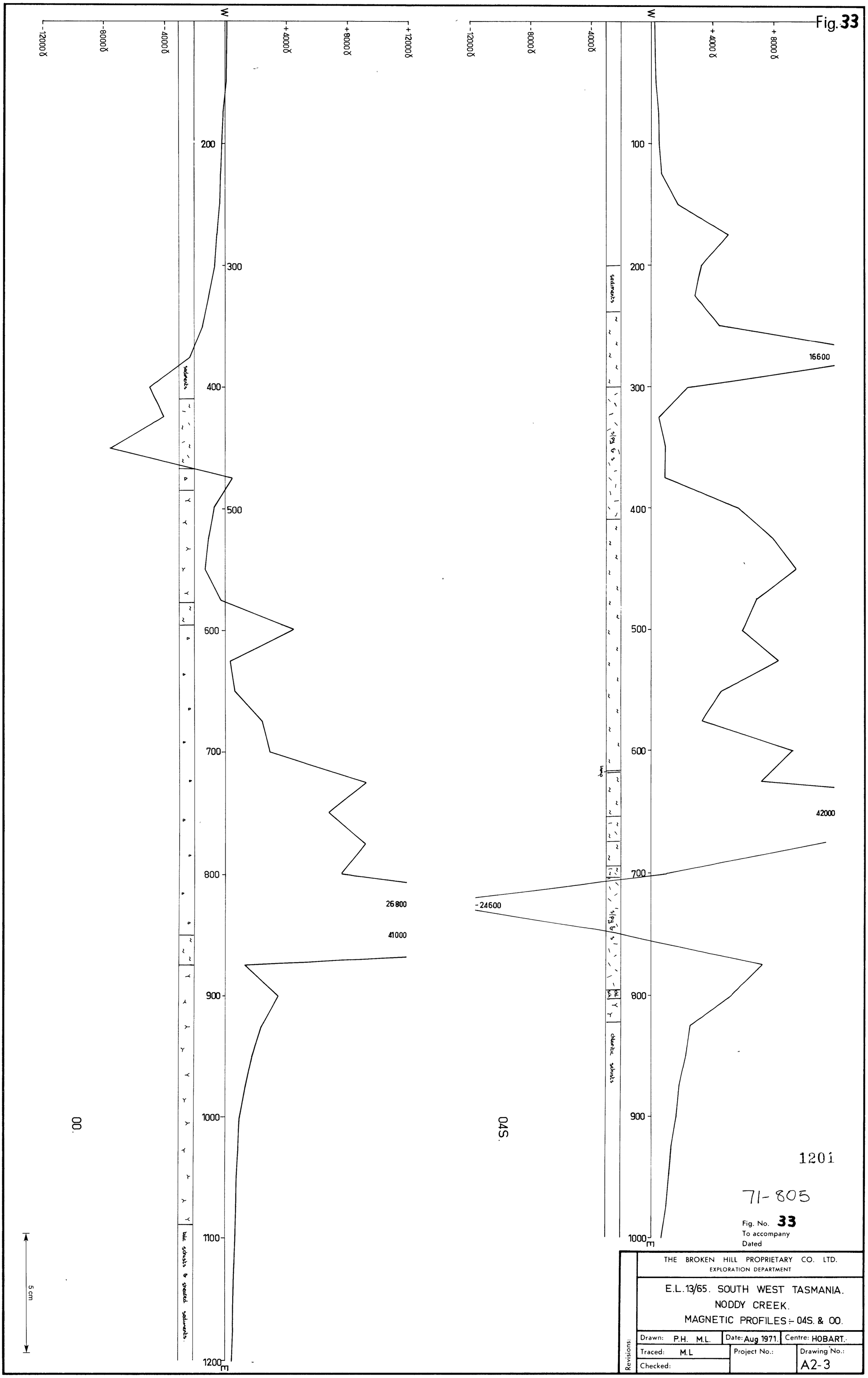
E.L.13/65. SOUTH WEST TASMANIA.
NODDY CREEK.
MAGNETIC PROFILES:- 10S & 07S.

Drawn: P.H. M.L.	Date: Aug 1971.	Centre: HOBART.
Traced: M.L	Project No.:	Drawing No.: A2-2
Checked:		

Revisions:

823234

Fig. 33



5 cm

1201

71-805

Fig. No. 33
To accompany
Dated

THE BROKEN HILL PROPRIETARY CO. LTD.
EXPLORATION DEPARTMENT

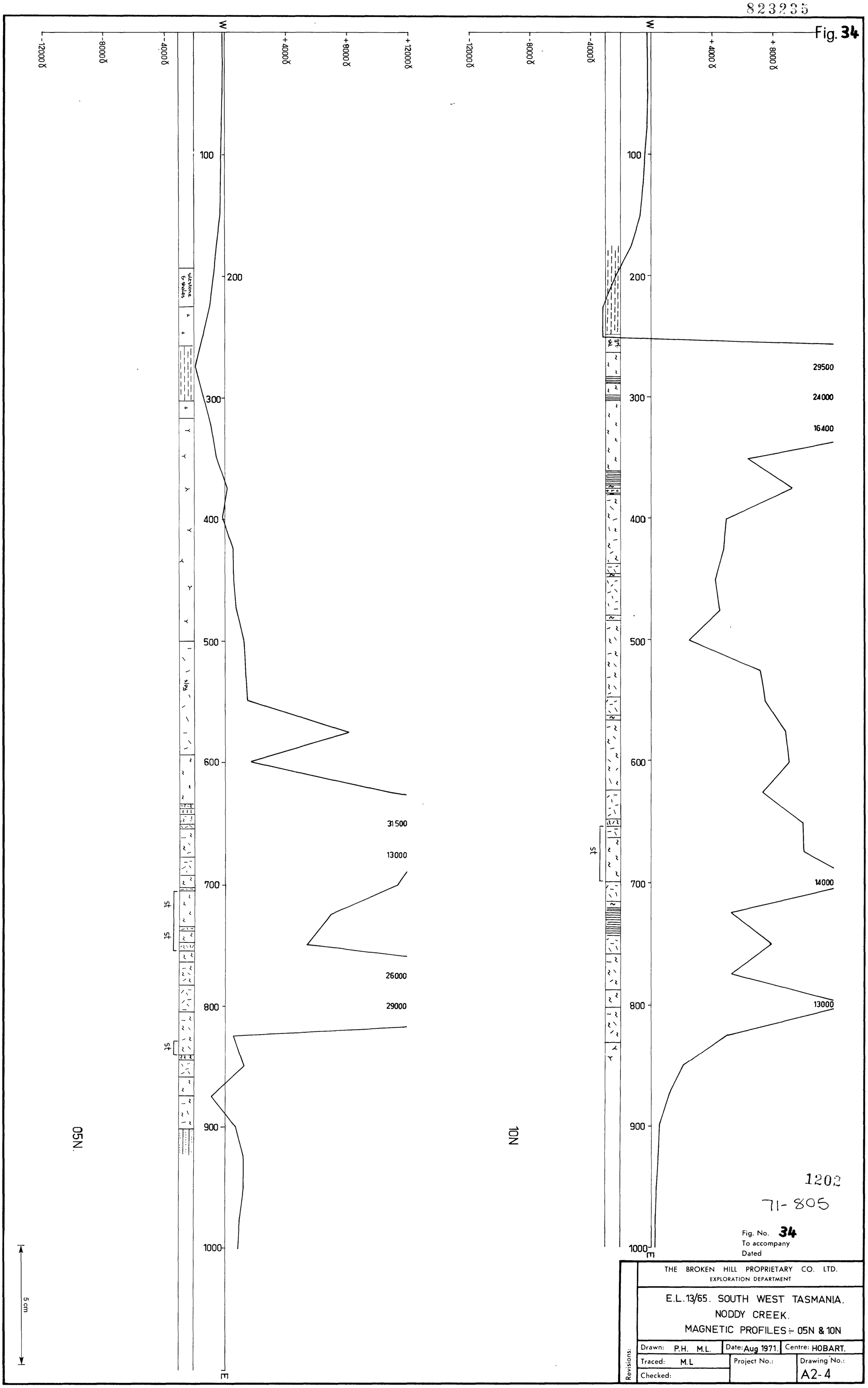
E.L.13/65. SOUTH WEST TASMANIA.
NODDY CREEK.
MAGNETIC PROFILES :- 04S. & 00.

Drawn: P.H. M.L.	Date: Aug 1971.	Centre: HOBART.
Traced: M.L	Project No.:	Drawing No.: A2-3
Checked:		

Revisions:

823235

Fig. 34



1202

71-805

Fig. No. 34
To accompany
Dated

THE BROKEN HILL PROPRIETARY CO. LTD.
EXPLORATION DEPARTMENT

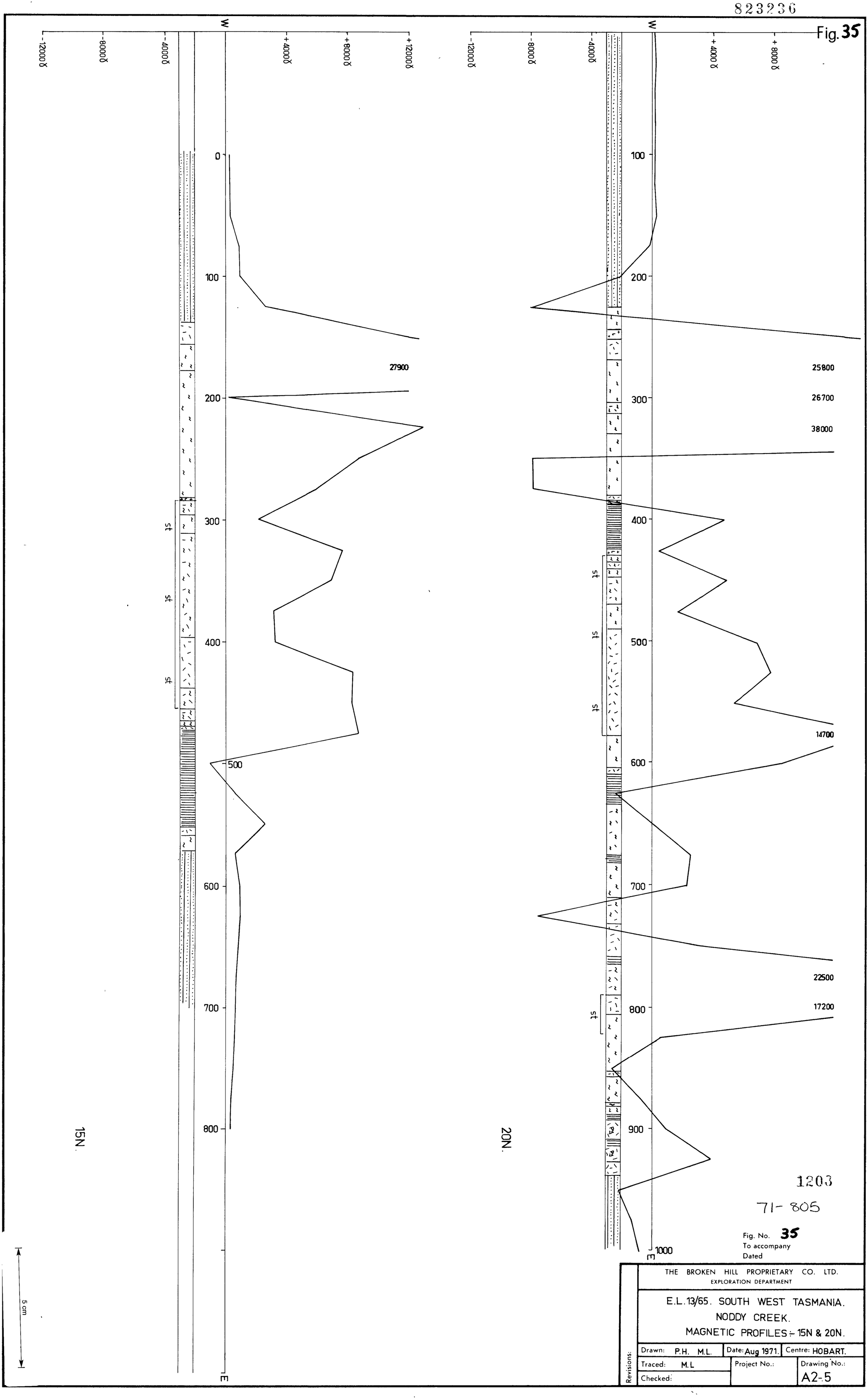
E.L.13/65. SOUTH WEST TASMANIA.
NODDY CREEK.
MAGNETIC PROFILES - 05N & 10N

Drawn: P.H. M.L.	Date: Aug 1971.	Centre: HOBART.
Traced: M.L	Project No.:	Drawing No.: A2-4
Checked:		

Revisions:

823236

Fig. 35



1203

71-805

Fig. No. 35
To accompany
Dated

THE BROKEN HILL PROPRIETARY CO. LTD.
EXPLORATION DEPARTMENT

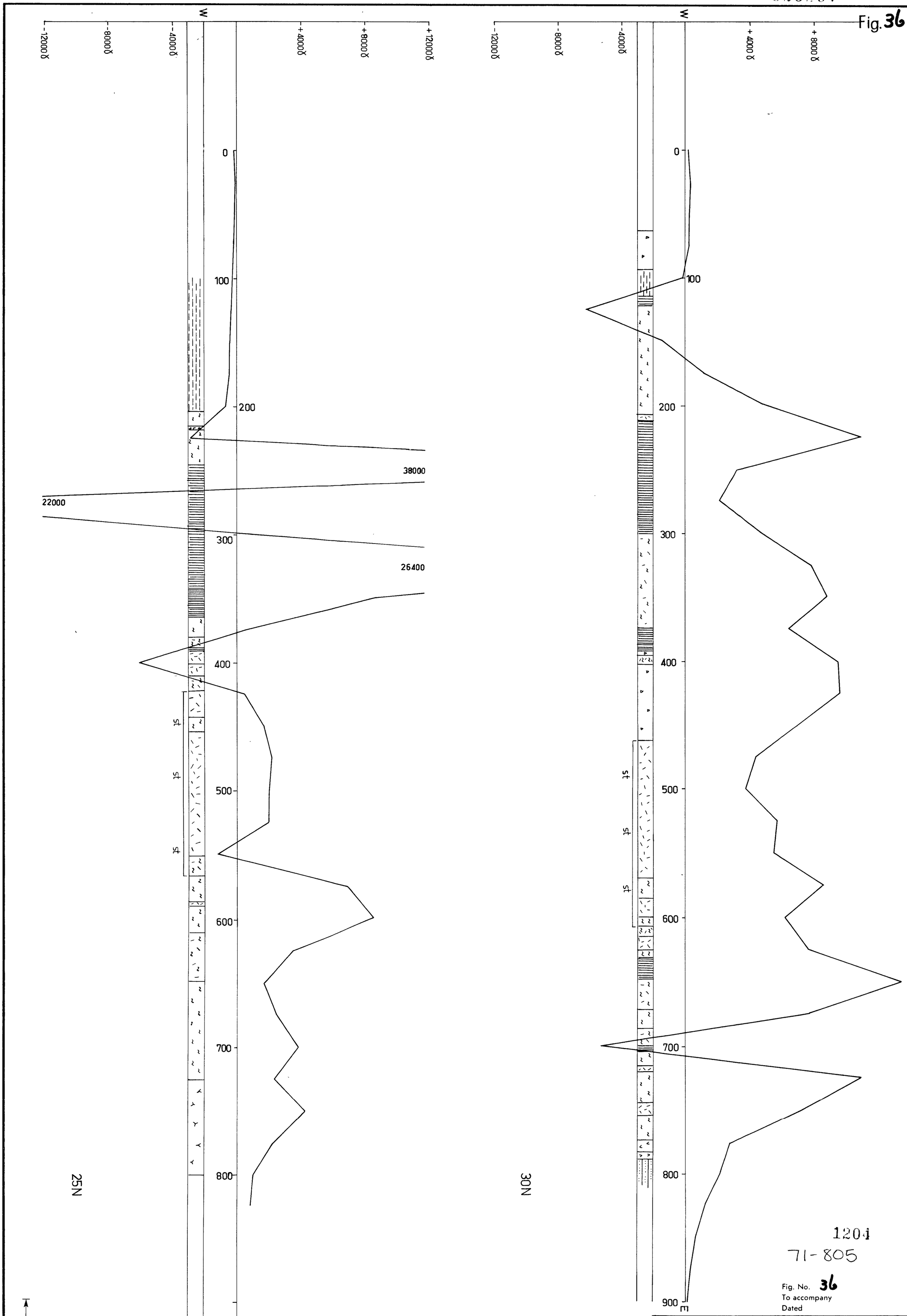
E.L.13/65. SOUTH WEST TASMANIA.
NODDY CREEK.
MAGNETIC PROFILES :- 15N & 20N.

Drawn: P.H. M.L.	Date: Aug 1971.	Centre: HOBART.
Traced: M.L	Project No.:	Drawing No.: A2-5
Checked:		

Revisions:

823237

Fig. 36



1204
71-805

Fig. No. 36
To accompany
Dated

Revisions:

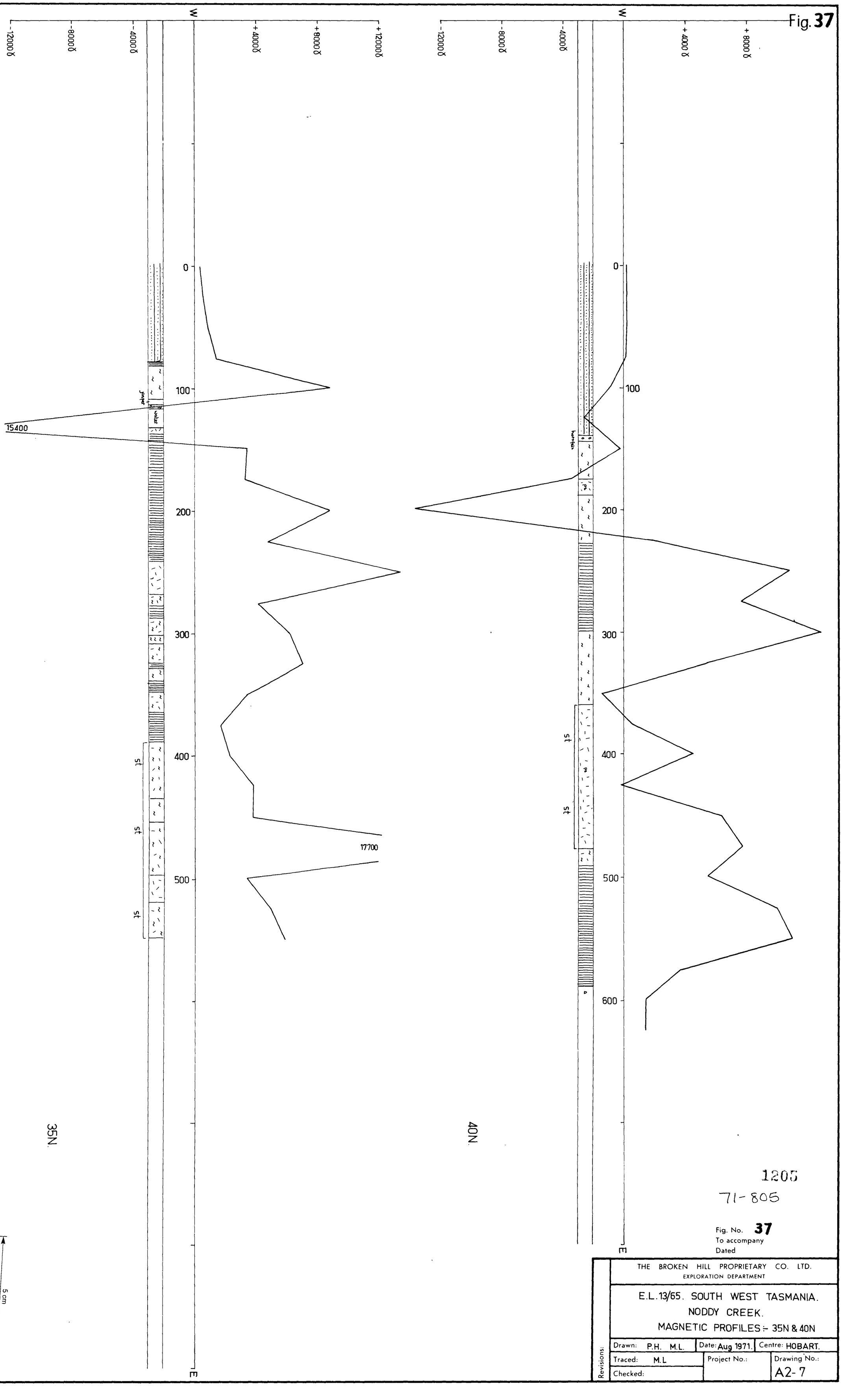
THE BROKEN HILL PROPRIETARY CO. LTD.
EXPLORATION DEPARTMENT

E.L.13/65. SOUTH WEST TASMANIA.
NODDY CREEK.
MAGNETIC PROFILES :- 25N & 30N.

Drawn: P.H. M.L.	Date: Aug 1971.	Centre: HOBART.
Traced: M.L	Project No.:	Drawing No.: A2-6
Checked:		

823238

Fig. 37



1205

71-805

Fig. No. **37**
To accompany
Dated

THE BROKEN HILL PROPRIETARY CO. LTD.
EXPLORATION DEPARTMENT

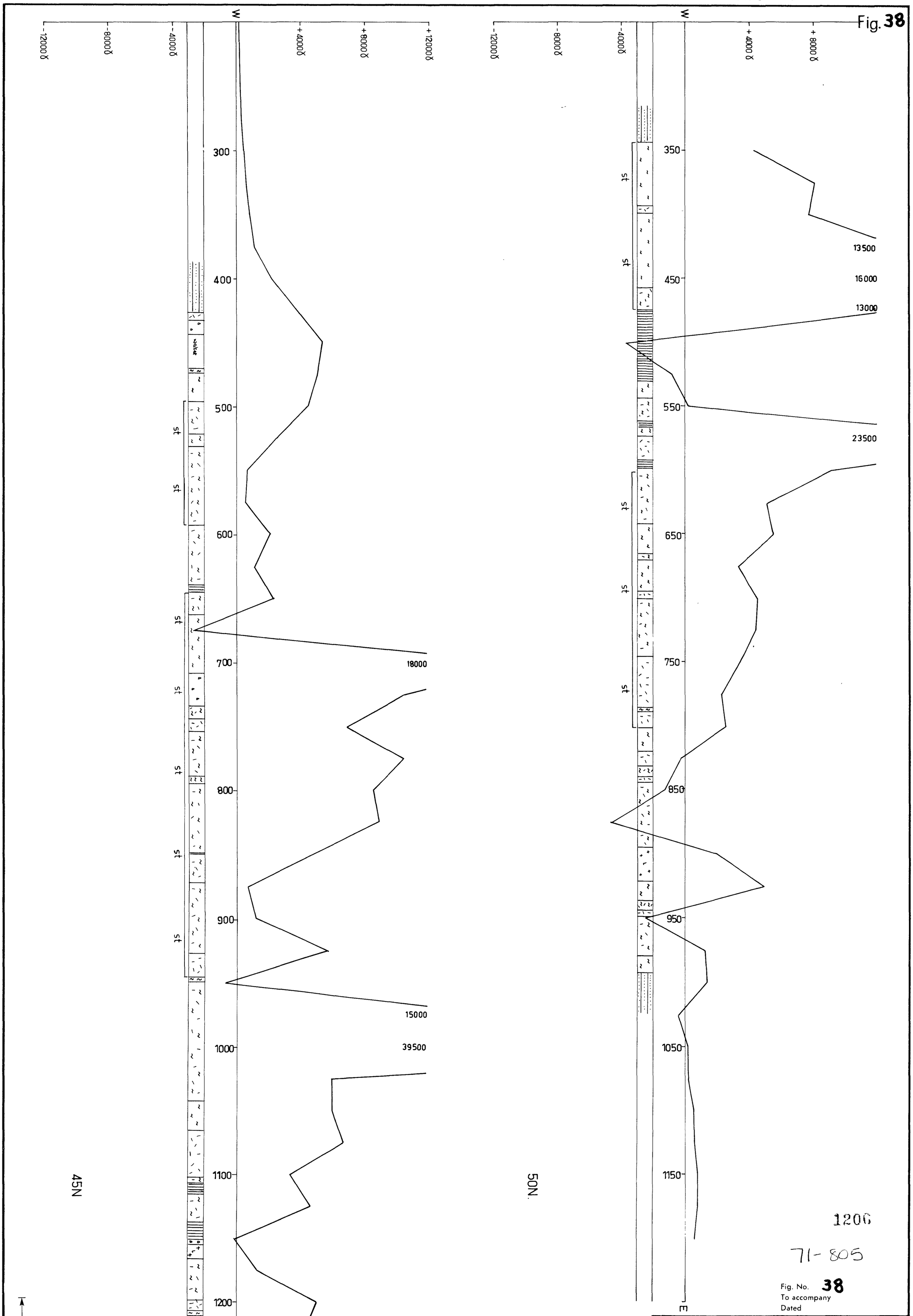
E.L.13/65. SOUTH WEST TASMANIA.
NODDY CREEK.
MAGNETIC PROFILES :- 35N & 40N

Drawn: P.H. M.L.	Date: Aug 1971.	Centre: HOBART.
Traced: M.L	Project No.:	Drawing No.: A2-7
Checked:		

Revisions:

823239

Fig. 38



1206

71-805

Fig. No. 38
To accompany
Dated

THE BROKEN HILL PROPRIETARY CO. LTD.
EXPLORATION DEPARTMENT

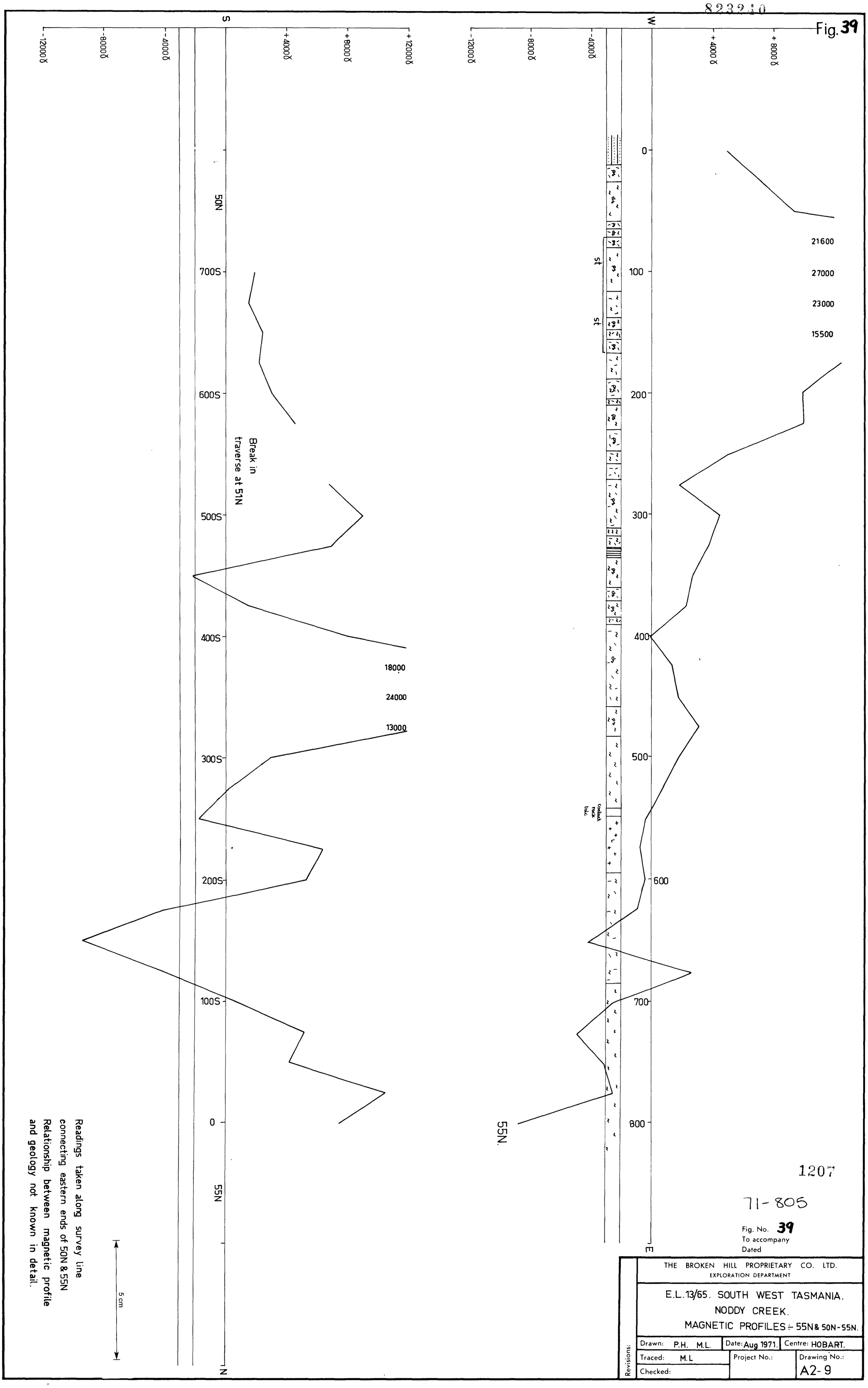
E.L.13/65. SOUTH WEST TASMANIA.
NODDY CREEK.
MAGNETIC PROFILES :- 45N & 50N

Drawn: P.H. M.L.	Date: Aug 1971.	Centre: HOBART.
Traced: M.L	Project No.:	Drawing No.: A2-8
Checked:		

Revisions:

823210

Fig. 39



Readings taken along survey line connecting eastern ends of 50N & 55N

Relationship between magnetic profile and geology not known in detail.

5 cm

1207

71-805

Fig. No. 39
To accompany
Dated

THE BROKEN HILL PROPRIETARY CO. LTD.
EXPLORATION DEPARTMENT

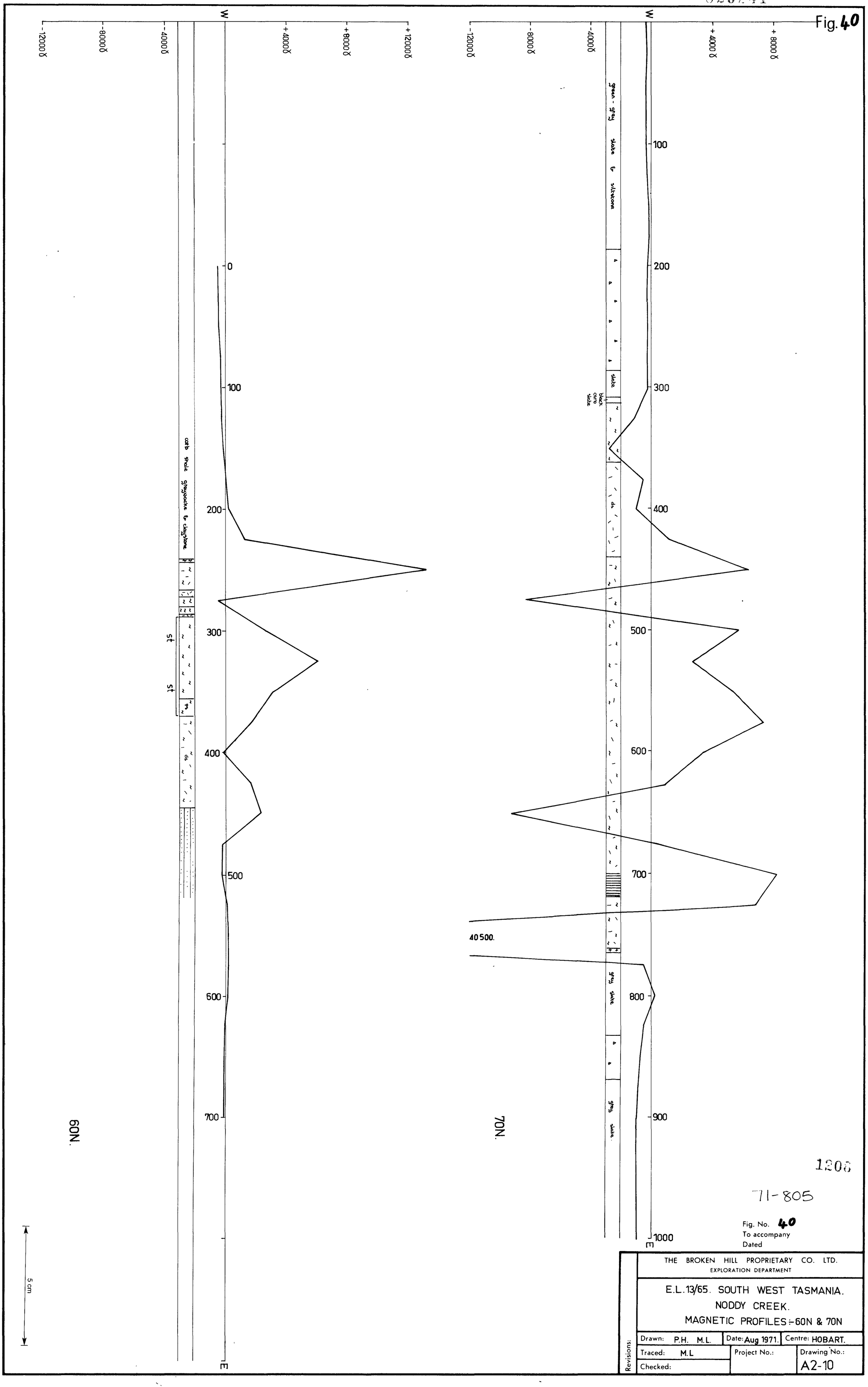
E.L.13/65. SOUTH WEST TASMANIA.
NODDY CREEK.
MAGNETIC PROFILES :- 55N & 50N-55N.

Drawn: P.H. M.L.	Date: Aug 1971.	Centre: HOBART.
Traced: M.L	Project No.:	Drawing No.: A2-9
Checked:		

Revisions:

823241

Fig. 40



1206

71-805

Fig. No. 40
To accompany
Dated

THE BROKEN HILL PROPRIETARY CO. LTD.
EXPLORATION DEPARTMENT

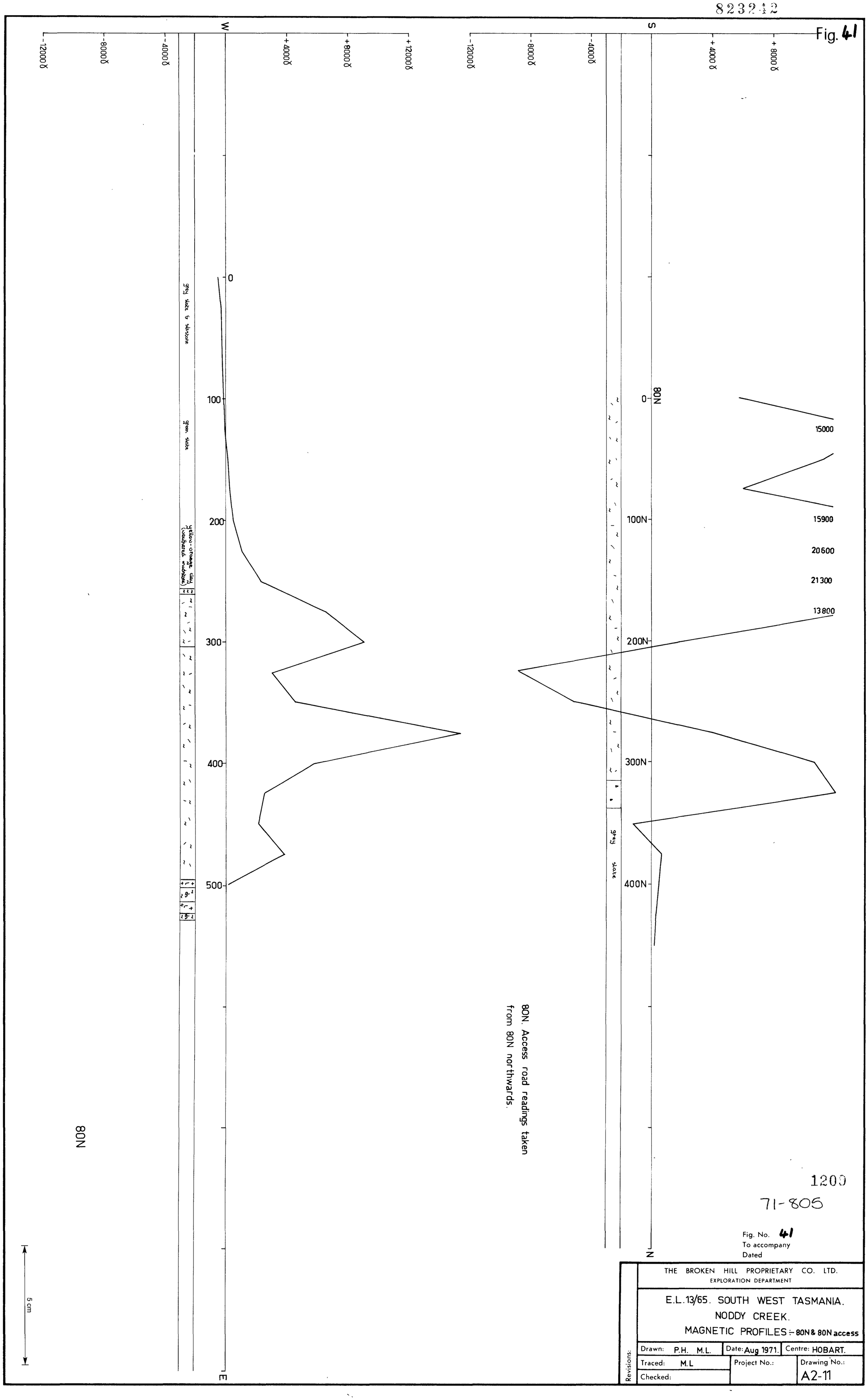
E.L. 13/65. SOUTH WEST TASMANIA.
NODDY CREEK.
MAGNETIC PROFILES :- 60N & 70N

Drawn: P.H. M.L.	Date: Aug 1971.	Centre: HOBART.
Traced: M.L	Project No.:	Drawing No.: A2-10
Checked:		

Revisions:

8232-12

Fig. 41



80N. Access road readings taken from 80N northwards.

5 cm

1209

71-805

Fig. No. 41
To accompany
Dated

THE BROKEN HILL PROPRIETARY CO. LTD.
EXPLORATION DEPARTMENT

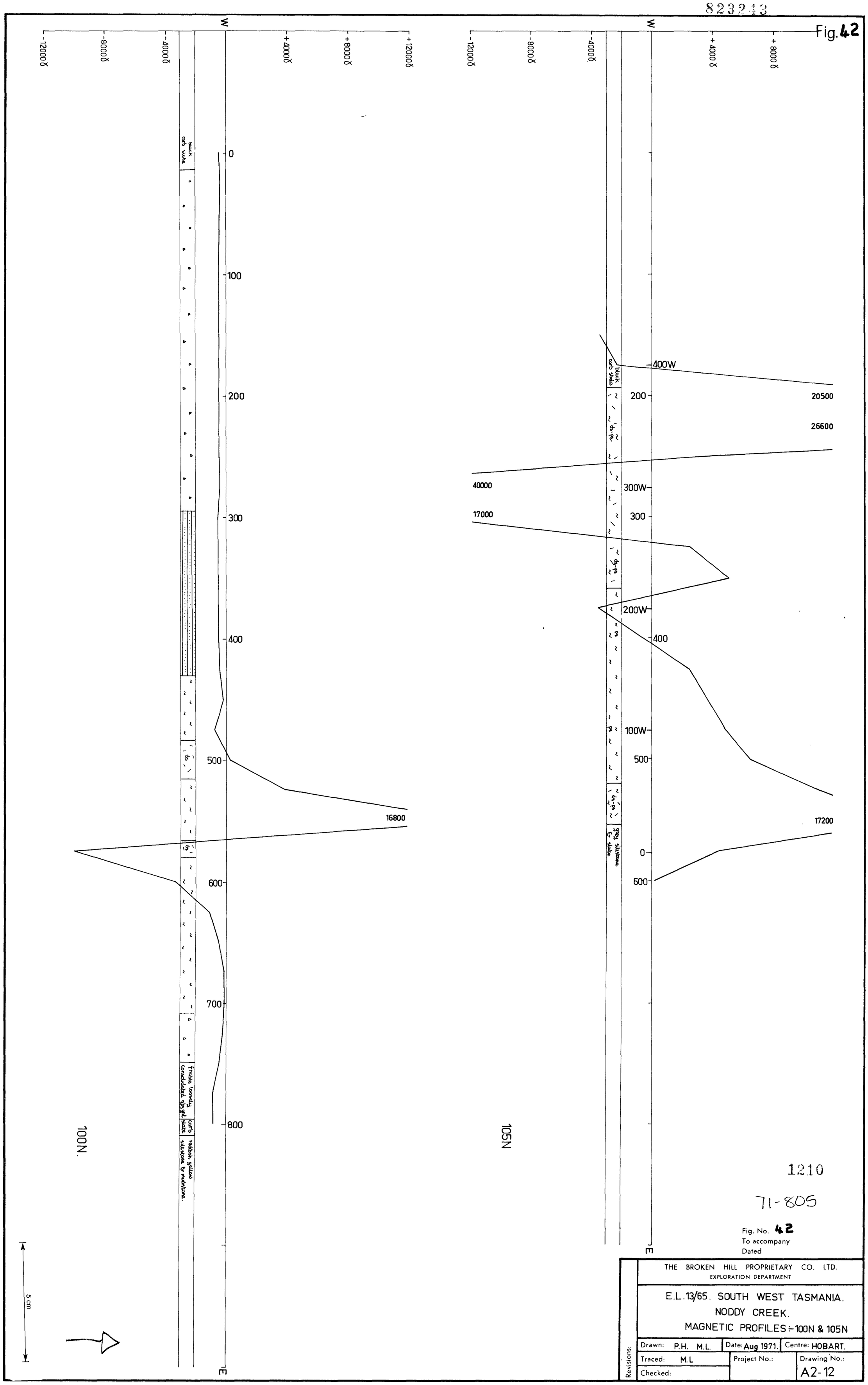
E.L.13/65. SOUTH WEST TASMANIA.
NODDY CREEK.
MAGNETIC PROFILES - 80N & 80N access

Drawn: P.H. M.L.	Date: Aug 1971.	Centre: HOBART.
Traced: M.L	Project No.:	Drawing No.: A2-11
Checked:		

Revisions:

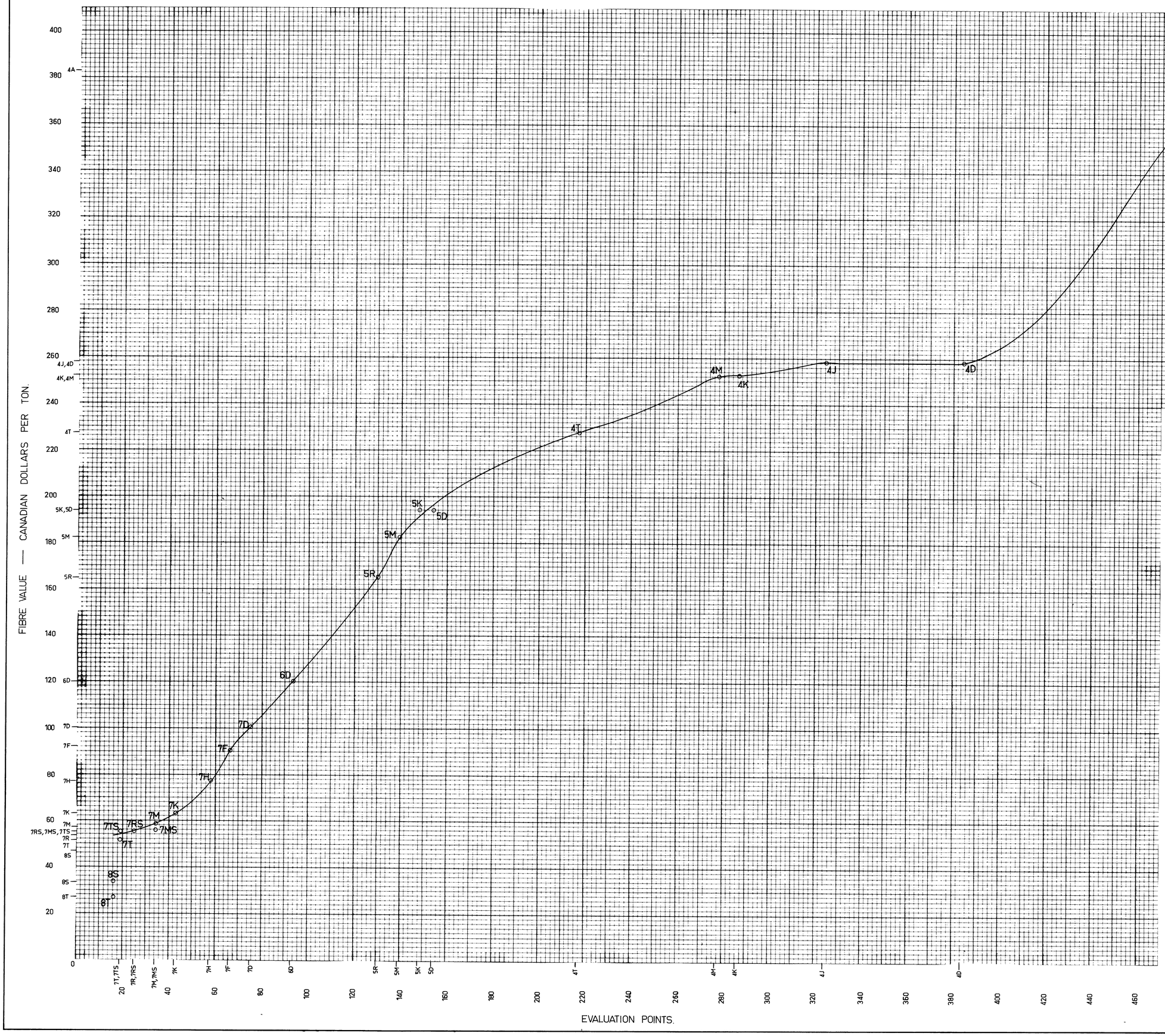
8232.13

Fig. 42



822214

Fig. 43



FIBRE VALUATION GRAPH.			
PRICES & POINT GRADES EFFECTIVE JANUARY - 1 - 1971			
POINTS			
GROUP 3 to GROUP 7.			
2 MESH ×100	4 MESH ×40	10 MESH ×10	35 MESH & PAN ×1
EQUIVALENT VEIN WIDTH.			
1/2" & wider.	1/4" to 7/16" inc.	1/8" to 3/16" inc.	1/16" & less.
USING PRESSURE Q.S. TEST & SHREDDER.			

BASED ON MAXIMUM PREMISSABLE SHIPPING Q.S. TEST.

See text for Canadian price list. TABLE 12

5 cm

1217

71-805

Fig No 43
To accompany
Dated

THE BROKEN HILL PROPRIETARY CO. LTD.
EXPLORATION DEPARTMENT

ASBESTOS FIBRE EVALUATION GRAPH.

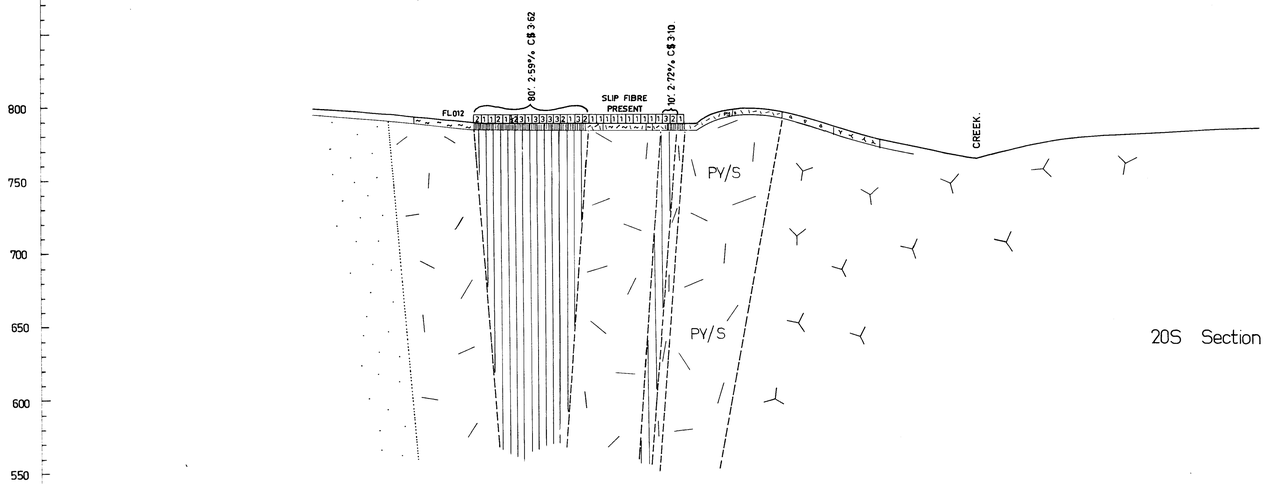
Adapted from drawing by Watts, Griffis & McOuat.

Drawn	Date 30-8-71	Centre HOBART.
Traced	Project No	Drawing No A1-29
Checked		
O.I.C.		

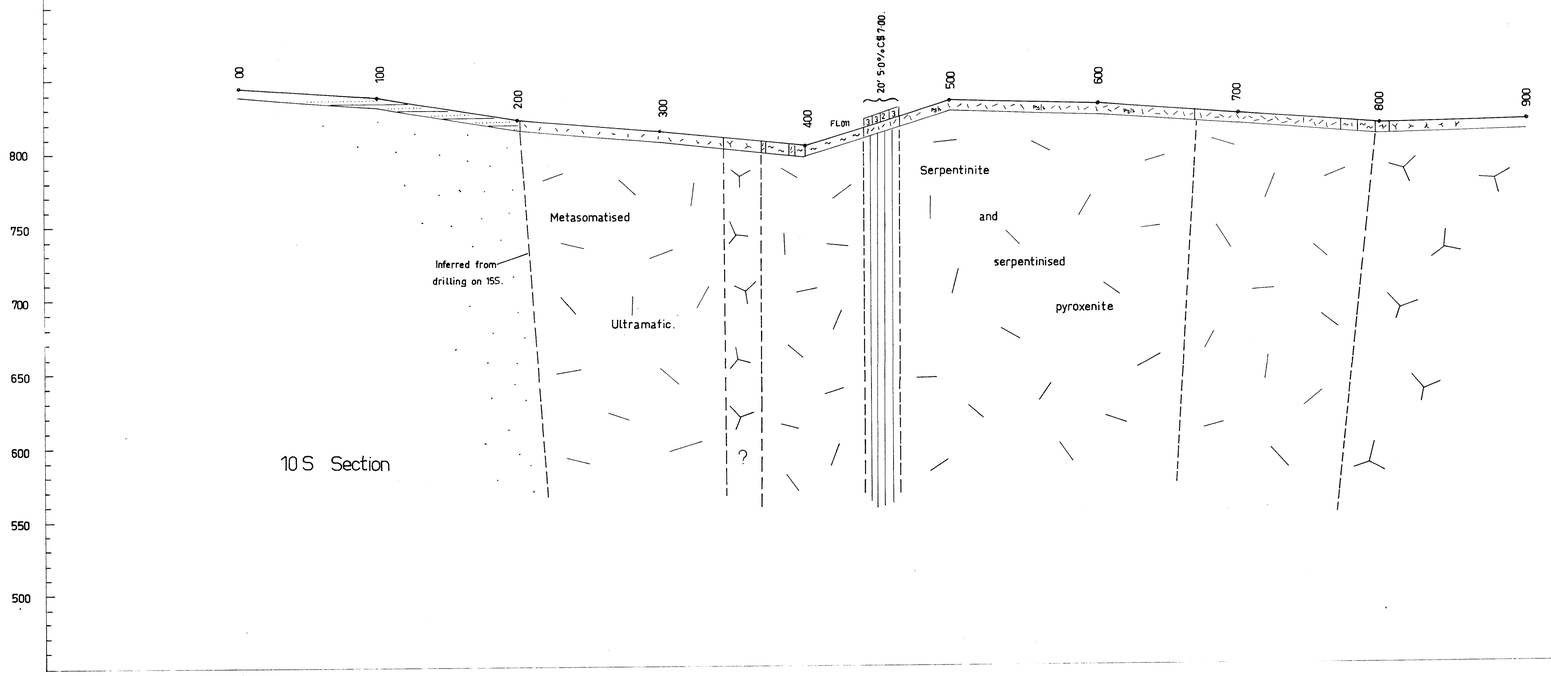
Revisions:

Fig. 44

All subsurface geology inferred.



20S Section



10 S Section

Generalised Legend.

- Cross fibre zone ≥ 1%
- Serpentinite.
- PY/S — Pyroxenite and serpentinite.
- Gabbro.
- Sediments.

FIBRE GRADE CODE
Cross fibre veins in five feet interval.

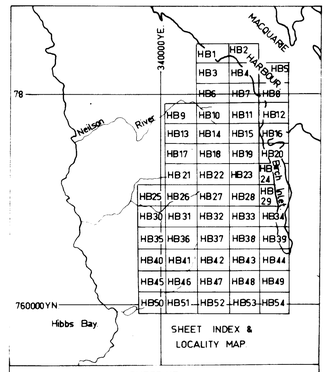
25'
50'

- < 2 each of 1/16" and 2/16".
- ≥ 2 each of 1/16" and 2/16".
- ≥ 2 each of 1/16", 2/16" and 3/16".
- ≥ 2 each of 1/16", 2/16", 3/16" and 4/16".
- < 2 each of 1/16" and 2/16", but > 1% fibre.

(Refer E9/4D. 14/1/71. 4-21.)

Visual dollar values per short ton rock in $ Canadian.
1971 shown thus:— 10'. 2·72 %. C$ 3·40.
Intersection. Visual % assuming vein angle 45°.

See text for derivation of visual dollar values.



SHEET INDEX & LOCALITY MAP

SHEET HB

46	47	48	49	50	51	52	53	54
37	38	39	40	41	42	43	44	45
28	29	30	31	32	33	34	35	36
19	20	21	22	23	24	25	26	27
10	11	12	13	14	15	16	17	18
1	2	3	4	5	6	7	8	9

SUBDIVISION SHEET INDEX.

LEGEND.

- Overburden and scree.

ULTRABASICS.

- s — Massive serpentinite, pyroxenite.
- ps — Pale green massive serpentinite.
- ds — Dark green massive serpentinite.
- ~s~ — Massive and sheared serpentinite.
- ~ds~ — Dark green sheared serpentinite.
- ~ps~ — Pale green sheared serpentinite.
- py — Pyroxenite.
- Cross fibre zone.

SEDIMENTS.

- Greywacke and siltstone.
- s — Siltstone.
- c — Black carbonaceous siltstone and argillite.
- Talc chlorite schist with sheared greywacke and siltstone.

OTHER IGNEOUS ROCKS.

- l — Lamprophyre dyke.
- i — Intermediate intrusive.
- b — Basic intrusive.
- Gabbro.

- st — Stichtite
- sf — Slip fibre
- su — Sulphide
- m — Magnetite.
- Survey pegs.
- FL001 — Fibre log section.
- AF1 — Channel sample locality.

Dip of bedding.
Dip of shear plane and schistosity.
Dip of phase layering.

Geological boundaries
Defined.
Approximate.
Inferred.

SCALE IN FEET.
0 50' 100' 150'

5 cm

1212
71-805

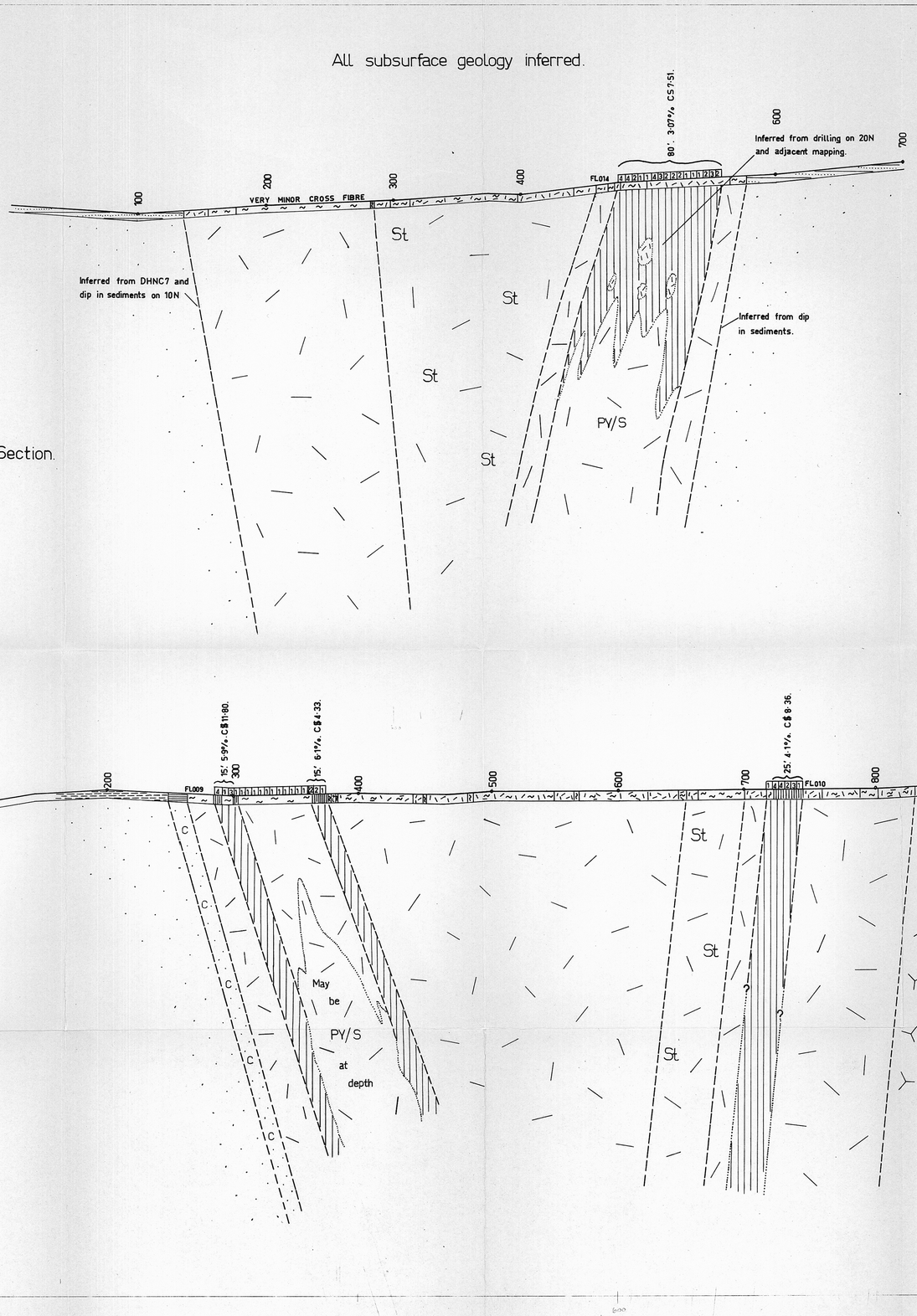
THE BROKEN HILL PROPRIETARY CO. LTD.
EXPLORATION DEPARTMENT

E.L. 13/65 SORELL PENINSULA ASBESTOS
NODDY CREEK AREA.
COSTEAN SECTIONS. 20S & 10S

Drawn J. L	Date 11 - 8 - 71	Centre HOBART	
Traced M. L		Project No	Drawing No A1-22
Checked			
O.I.C. J. L			

Revisions

All subsurface geology inferred.

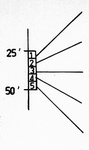


Generalised Legend.

- Cross fibre zone ≥ 1% fibre.
- Serpentinite.
- St — Stichtite bearing serpentinite.
- PY/S — Pyroxenite and serpentinite.
- Gabbro
- Sediments
- C — Carbonaceous siltstone.

FIBRE GRADE CODE

Cross fibre veins in five feet interval.

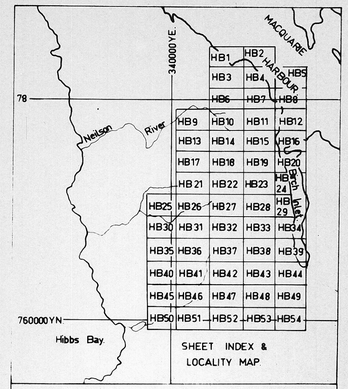


- < 2 each of 1/16" and 2/16".
- ≥ 2 each of 1/16" and 2/16".
- ≥ 2 each of 1/16", 2/16" and 3/16".
- ≥ 2 each of 1/16", 2/16", 3/16" and 4/16".
- < 2 each of 1/16" and 2/16", but > 1% fibre.

(Refer E9/4D. 14/1/71. 4-21.)

Visual dollar values per short ton rock in $ Canadian 1971 shown thus :– 15' 6·1% C$4·86.
Intersection. Visual % assuming vein angle 45°

See text for derivation of visual dollar values.



SHEET INDEX & LOCALITY MAP.

SHEET HB

46	47	48	49	50	51	52	53	54
37	38	39	40	41	42	43	44	45
28	29	30	31	32	33	34	35	36
19	20	21	22	23	24	25	26	27
10	11	12	13	14	15	16	17	18
1	2	3	4	5	6	7	8	9

SUBDIVISION SHEET INDEX.

LEGEND.

- Overburden and scree.

ULTRABASICS

- S — Massive serpentinite, pyroxenite.
- ps — Pale green massive serpentinite.
- ds — Dark green massive serpentinite.
- Massive and sheared serpentinite.
- ds — Dark green sheared serpentinite.
- ps — Pale green sheared serpentinite.
- py — Pyroxenite.
- Cross fibre zone.

SEDIMENTS.

- Greywacke and siltstone.
- S — Siltstone.
- C — Black carbonaceous siltstone and argillite.
- Talc chlorite schist with sheared greywacke and siltstone.

OTHER IGNEOUS ROCKS.

- L — Lamprophyre dyke.
- I — Intermediate intrusive.
- b — Basic intrusive.
- Gabbro.

st	Stichtite.		Dip of bedding.
sf	Slip fibre.		Dip of shear plane and schistosity.
su	Sulphide.		Dip of phase layering.
m	Magnetite.	Geological boundaries.	
°	Survey pegs.	——	Defined.
FL001	Fibre log section.	– – –	Approximate.
AF1	Channel sample locality.	·····	Inferred.

SCALE IN FEET.

0 50' 100' 150'

5 cm

File No. 45
Tenement
Dated

1213
71-805

THE BROKEN HILL PROPRIETARY CO. LTD.
EXPLORATION DEPARTMENT

E.L. 13/65 SORELL PENINSULA ASBESTOS
NODDY CREEK AREA.
COSTEAN SECTIONS. 10N & 15N.

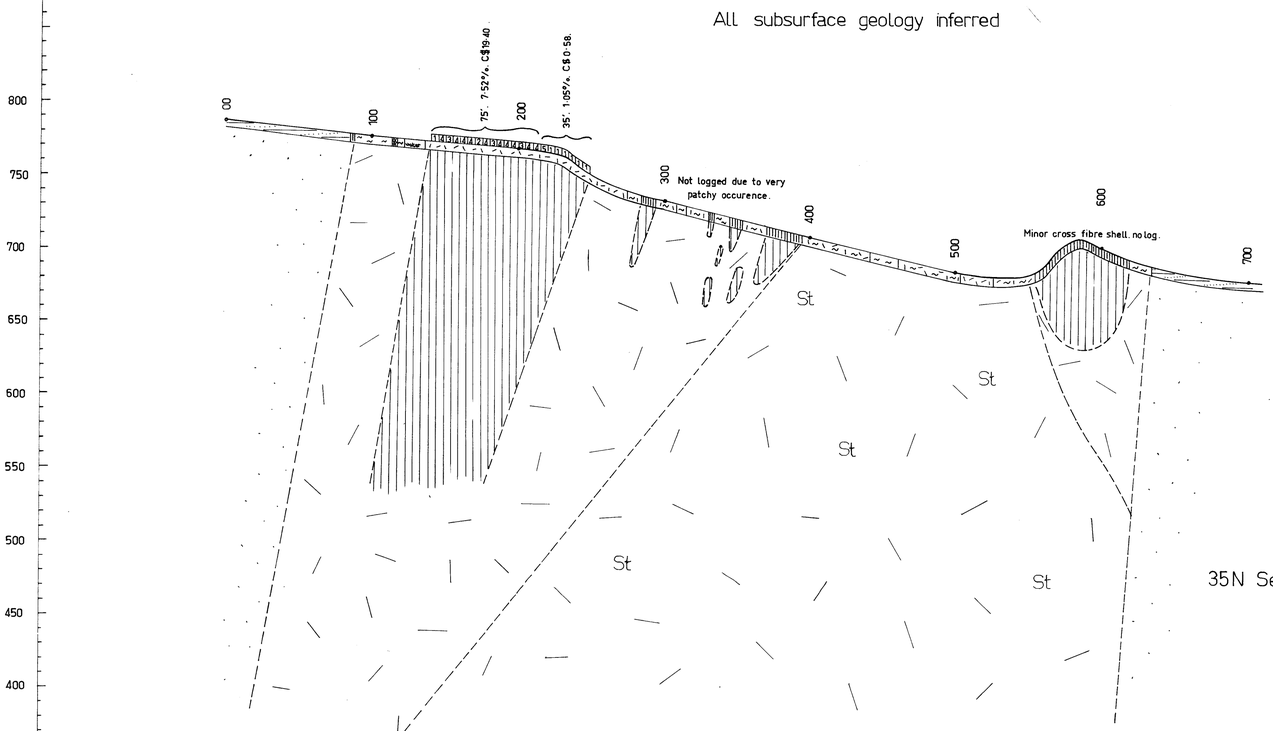
Drawn J. L	Date 11-8-71	Centre HOBART.	
Traced M. L		Project No	Drawing No A1-23
Checked			
O.I.C. J. L.			

Revisions:

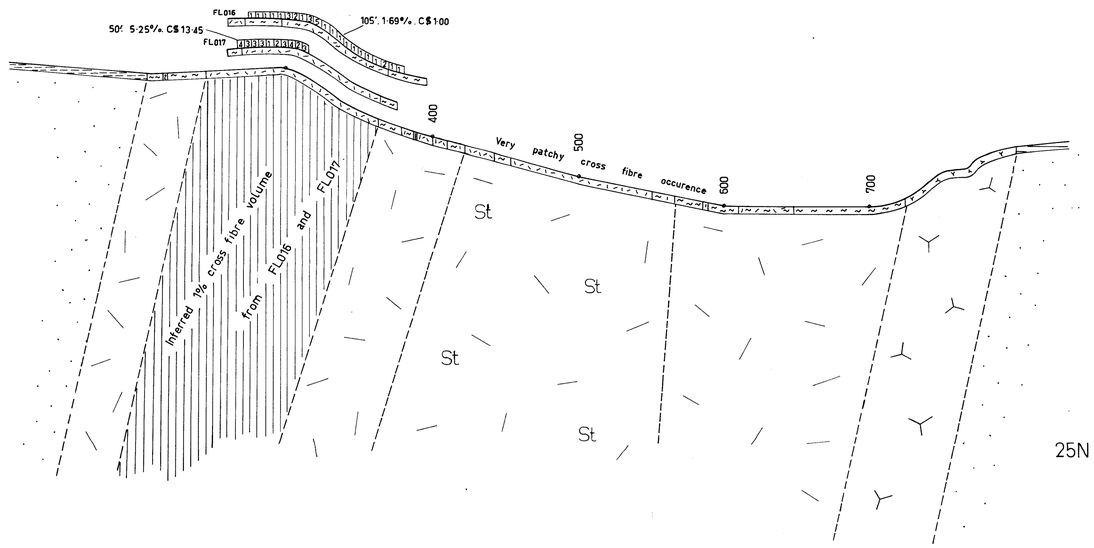
822245

Fig. 46

All subsurface geology inferred



35N Section.



25N Section.

Generalised Legend.

- Cross fibre zone 1% fibre
- Serpentinite.
- St — Stichtite bearing serpentinite.
- Gabbro
- Sediments.

FIBRE GRADE CODE
Cross fibre veins in five feet interval.

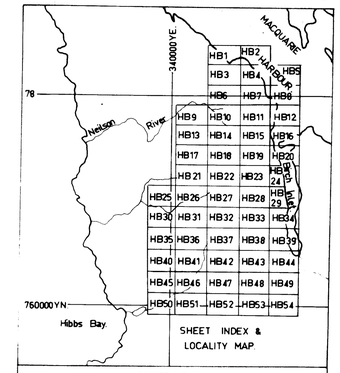
25'
50'

- < 2 each of 1/16" and 2/16".
- ≥ 2 each of 1/16" and 2/16"
- ≥ 2 each of 1/16", 2/16" and 3/16".
- ≥ 2 each of 1/16", 2/16", 3/16" and 4/16".
- < 2 each of 1/16" and 2/16", but > 1% fibre.

(Refer E9/4D. 14/1/71 4·21)

Visual dollar values per short ton rock in $ Canadian 1971 shown thus— 35'. 1·05%. C$ 0·50.
Intersection. Visual% assuming vein angle 45°.

See text for derivation of visual dollar values.



SHEET INDEX & LOCALITY MAP.

SHEET HB

46	47	48	49	50	51	52	53	54
37	38	39	40	41	42	43	44	45
28	29	30	31	32	33	34	35	36
19	20	21	22	23	24	25	26	27
10	11	12	13	14	15	16	17	18
1	2	3	4	5	6	7	8	9

SUBDIVISION SHEET INDEX.

LEGEND.

- Overburden and scree.

ULTRABASICS

- s — Massive serpentinite, pyroxenite.
- ps — Pale green massive serpentinite.
- ds — Dark green massive serpentinite.
- Massive and sheared serpentinite.
- ds — Dark green sheared serpentinite.
- ps — Pale green sheared serpentinite.
- py — Pyroxenite.
- Cross fibre zone.

SEDIMENTS.

- Greywacke and siltstone.
- s — Siltstone.
- c — Black carbonaceous siltstone and argillite.
- Talc chlorite schist with sheared greywacke and siltstone.

OTHER IGNEOUS ROCKS.

- l — Lamprophyre dyke.
- i — Intermediate intrusive.
- b — Basic intrusive.
- Gabbro.

st	Stichtite.		Dip of bedding.
sf	Slip fibre.		Dip of shear plane and schistosity.
su	Sulphide.		Dip of phase layering.
m	Magnetite.		Geological boundaries.
°	Survey pegs.		Defined.
FL001	Fibre log section.		Approximate.
AF1	Channel sample locality.		Inferred.

SCALE IN FEET.
0 50' 100' 150'

Fig No. 46 To accompany Dated

1214
71-805

THE BROKEN HILL PROPRIETARY CO. LTD.
EXPLORATION DEPARTMENT

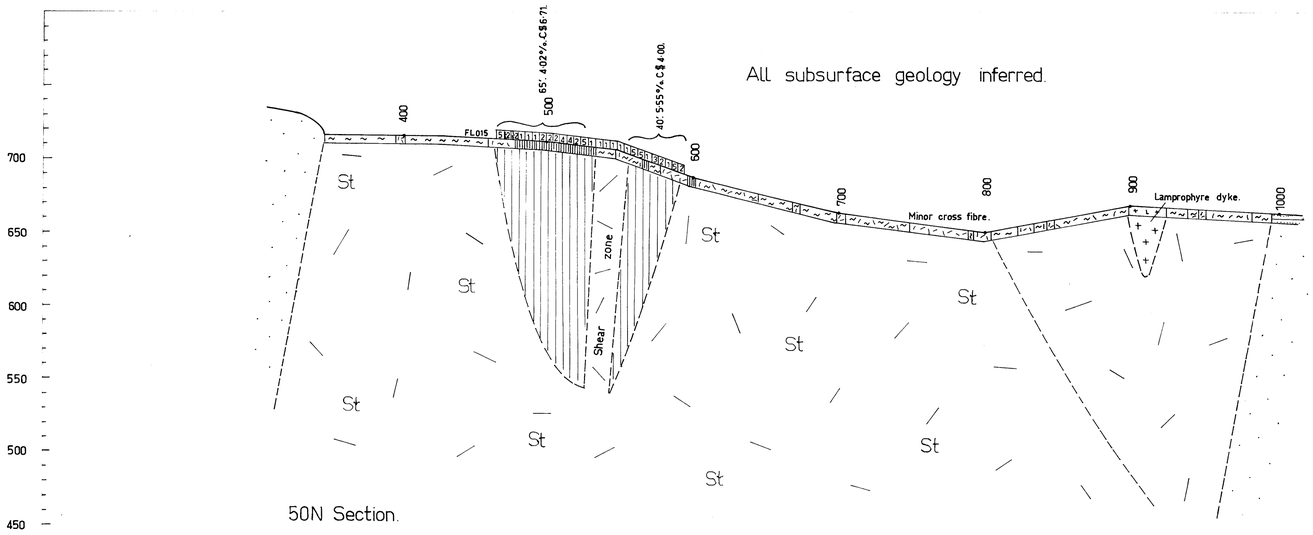
E.L. 13/65 SORELL PENINSULA ASBESTOS
NODDY CREEK AREA.
COSTEAN SECTIONS. 25N & 35N.

Drawn J. L	Date 12-8-71	Centre HOBART.	
Traced M.L.	Project No	Drawing No A1-24	
Checked			
O.I.C. J.L.			

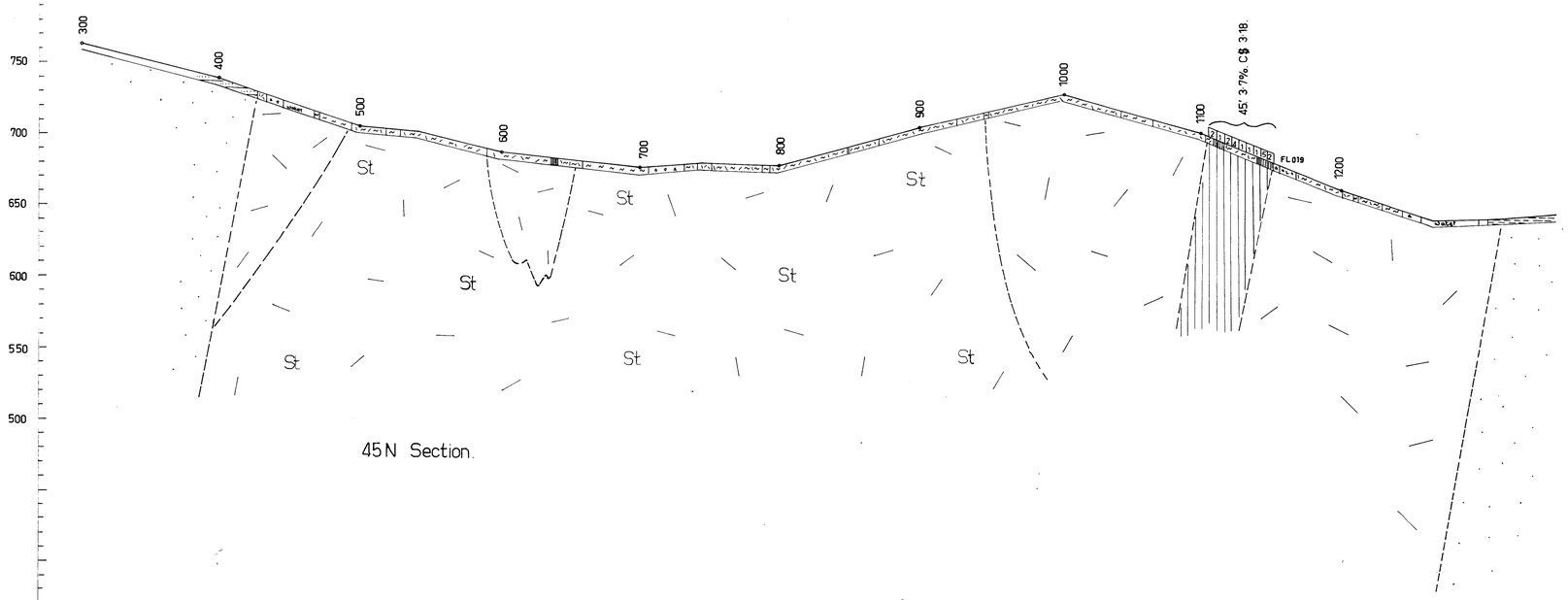
Revisions:

5 cm

All subsurface geology inferred.



50N Section.



45N Section.

Generalised Legend.

- Cross fibre zone ≥ 1%
- Serpentinite.
- St — Stichtite bearing serpentinite.
- Sediment.

FIBRE GRADE CODE
Cross fibre veins in five feet interval.

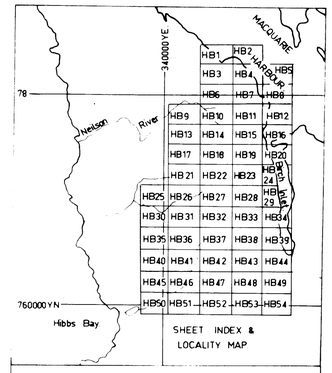
- < 2 each of 1/16" and 2/16".
- ≥ 2 each of 1/16" and 2/16".
- ≥ 2 each of 1/16", 2/16" and 3/16".
- ≥ 2 each of 1/16", 2/16", 3/16" and 4/16".
- < 2 each of 1/16" and 2/16", but > 1% fibre.

25' / 50' Interval

(Refer E9/4D. 14/1/71. 4-21.)

Visual dollar values per short ton rock in $ Canadian.
1971 shown thus:— 40'. 5.55%. C$ 4.45.
Intersection. Visual % assuming vein angle 45°.

See text for derivation of visual dollar values.



SHEET INDEX & LOCALITY MAP

SHEET HB

46	47	48	49	50	51	52	53	54
37	38	39	40	41	42	43	44	45
28	29	30	31	32	33	34	35	36
19	20	21	22	23	24	25	26	27
10	11	12	13	14	15	16	17	18
1	2	3	4	5	6	7	8	9

SUBDIVISION SHEET INDEX.

LEGEND

- Overburden and scree
- ULTRABASICS
- S — Massive serpentinite, pyroxenite.
- ps — Pale green massive serpentinite.
- ds — Dark green massive serpentinite.
- Massive and sheared serpentinite.
- ds — Dark green sheared serpentinite.
- ps — Pale green sheared serpentinite.
- py — Pyroxenite.
- Cross fibre zone.
- SEDIMENTS
- Greywacke and siltstone.
- s — Siltstone.
- c — Black carbonaceous siltstone and argillite.
- Talc chlorite schist with sheared greywacke and siltstone.
- OTHER IGNEOUS ROCKS
- l — Lamprophyre dyke.
- i — Intermediate intrusive.
- b — Basic intrusive.
- Gabbro.
- st — Stichtite
- sf — Slip fibre
- su — Sulphide
- m — Magnetite
- Survey pegs
- FL001 — Fibre log section.
- AF1 — Channel sample locality.
- Dip of bedding.
- Dip of shear plane and schistosity.
- Dip of phase layering.
- Geological boundaries
- Defined.
- Approximate.
- Inferred.

SCALE IN FEET.
0 50' 100' 150'

5 cm

47 1215
71-805

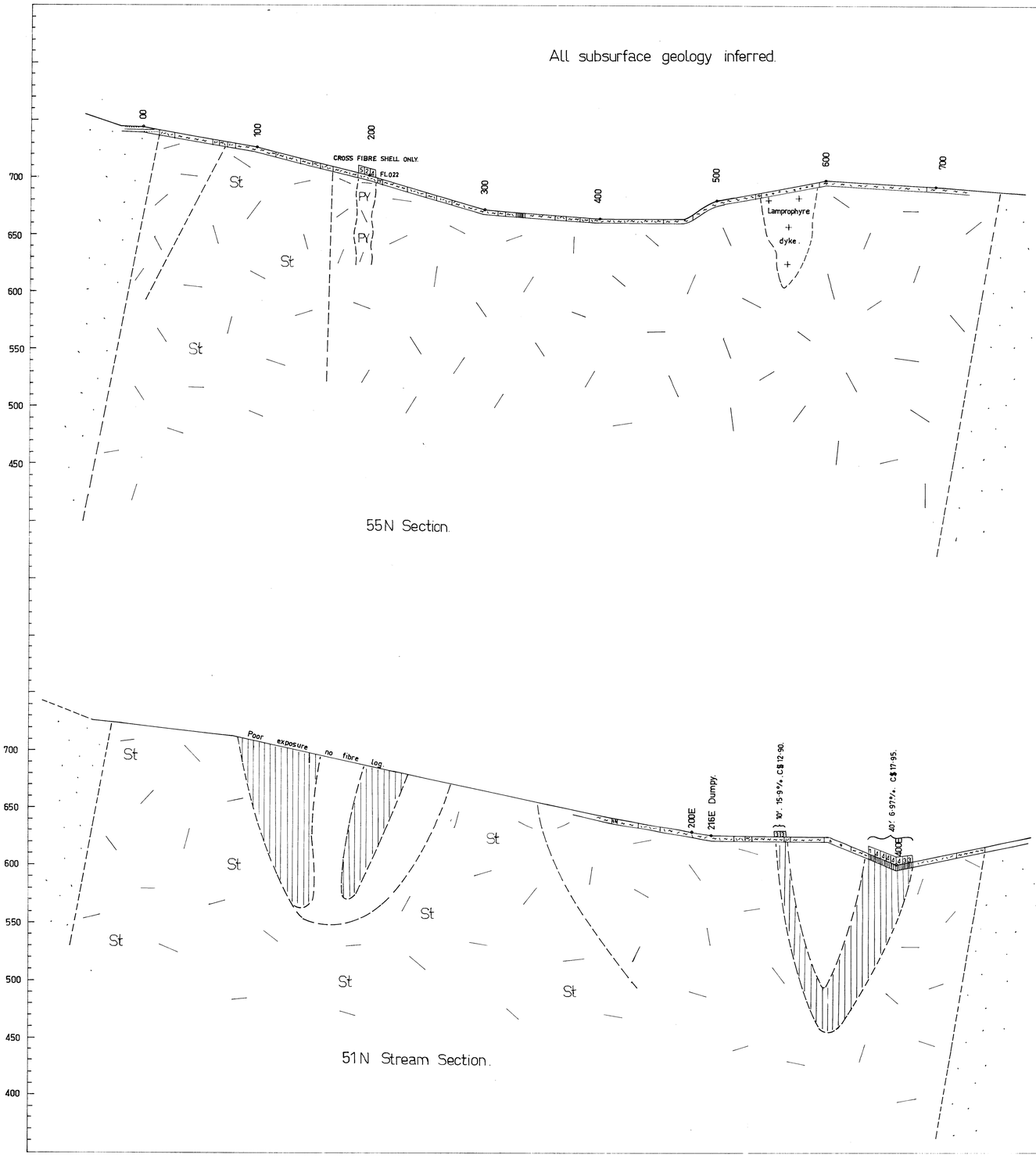
THE BROKEN HILL PROPRIETARY CO. LTD.
EXPLORATION DEPARTMENT

E.L. 13/65 SORELL PENINSULA ASBESTOS
NODDY CREEK AREA.
COSTEAN SECTIONS. 45N & 50N

Drawn J.L	Date 12-8-71	Centre HOBART	
Traced M.L		Project No	Drawing No A1-25
Checked			
O.I.C J.L.			

Revisions

All subsurface geology inferred.



55N Section.

51N Stream Section.

Generalised Legend.

- Cross fibre zone ≥ 1%
- Serpentinite.
- St — Stichtite bearing serpentinite.
- PY — Pyroxenite.
- Sediments.

FIBRE GRADE CODE
Cross fibre veins in five feet interval.

25' / 50'

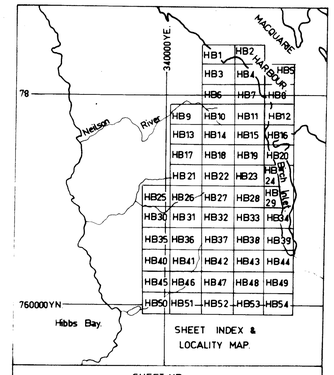
- < 2 each of 1/16" and 2/16".
- ≥ 2 each of 1/16" and 2/16".
- ≥ 2 each of 1/16", 2/16" and 3/16".
- ≥ 2 each of 1/16", 2/16", 3/16" and 4/16".
- < 2 each of 1/16" and 2/16", but > 1% fibre.

(Refer E9/4D. 14/1/71. 4·21.)

Visual dollar values per short ton rock in $ Canadian.
1971 shown thus ⊢ 10'. 15·9%. C $ 14·30.
Intersection. Visual% assuming vein angle 45°.

See text for derivation of visual dollar values.

5 cm



SHEET INDEX & LOCALITY MAP.

SHEET HB

46	47	48	49	50	51	52	53	54
37	38	39	40	41	42	43	44	45
28	29	30	31	32	33	34	35	36
19	20	21	22	23	24	25	26	27
10	11	12	13	14	15	16	17	18
1	2	3	4	5	6	7	8	9

SUBDIVISION SHEET INDEX.

LEGEND.

- Overburden and scree.

ULTRABASICS

- s — Massive serpentinite, pyroxenite.
- ps — Pale green massive serpentinite.
- ds — Dark green massive serpentinite.
- Massive and sheared serpentinite.
- ds — Dark green sheared serpentinite.
- ps — Pale green sheared serpentinite.
- py — Pyroxenite.
- Cross fibre zone.

SEDIMENTS.

- Greywacke and siltstone.
- S — Siltstone.
- C — Black carbonaceous siltstone and argillite.
- Talc chlorite schist with sheared greywacke and siltstone.

OTHER IGNEOUS ROCKS.

- L — Lamprophyre dyke.
- I — Intermediate intrusive.
- b — Basic intrusive.
- Gabbro.

- st — Stichtite.
- sf — Slip fibre.
- su — Sulphide.
- m — Magnetite.
- Survey pegs.
- FL001 — Fibre log section.
- AF1 — Channel sample locality.

- Dip of bedding.
- Dip of shear plane and schistosity.
- Dip of phase layering.

Geological boundaries.
- Defined.
- Approximate.
- Inferred.

SCALE IN FEET.
0 50' 100' 150'

1216

Fig No. 48
To accompany Dated

71-805

THE BROKEN HILL PROPRIETARY CO. LTD.
EXPLORATION DEPARTMENT

E.L. 13/65 SORELL PENINSULA ASBESTOS
NODDY CREEK AREA.
COSTEAN SECTIONS. 55N & 51N

Drawn J. L	Date 13-8-71	Centre HOBART.	
Traced M.L		Project No	Drawing No A1-26
Checked			
O.I.C. J.L.			

Revisions

Fig. 49

822250

1217

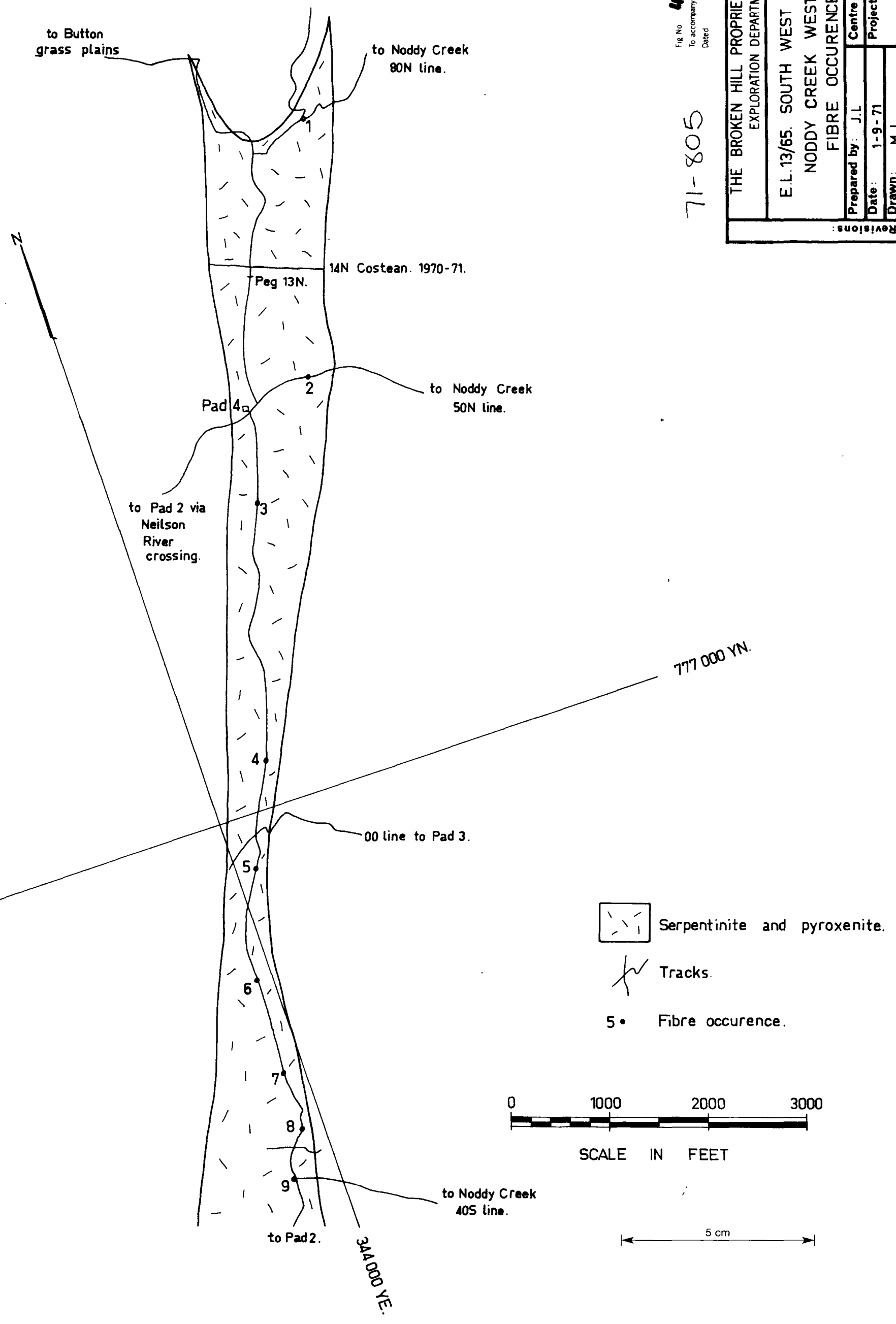
Fig No 49
To accompany
Dated

71-805

THE BROKEN HILL PROPRIETARY CO. LTD.
EXPLORATION DEPARTMENT

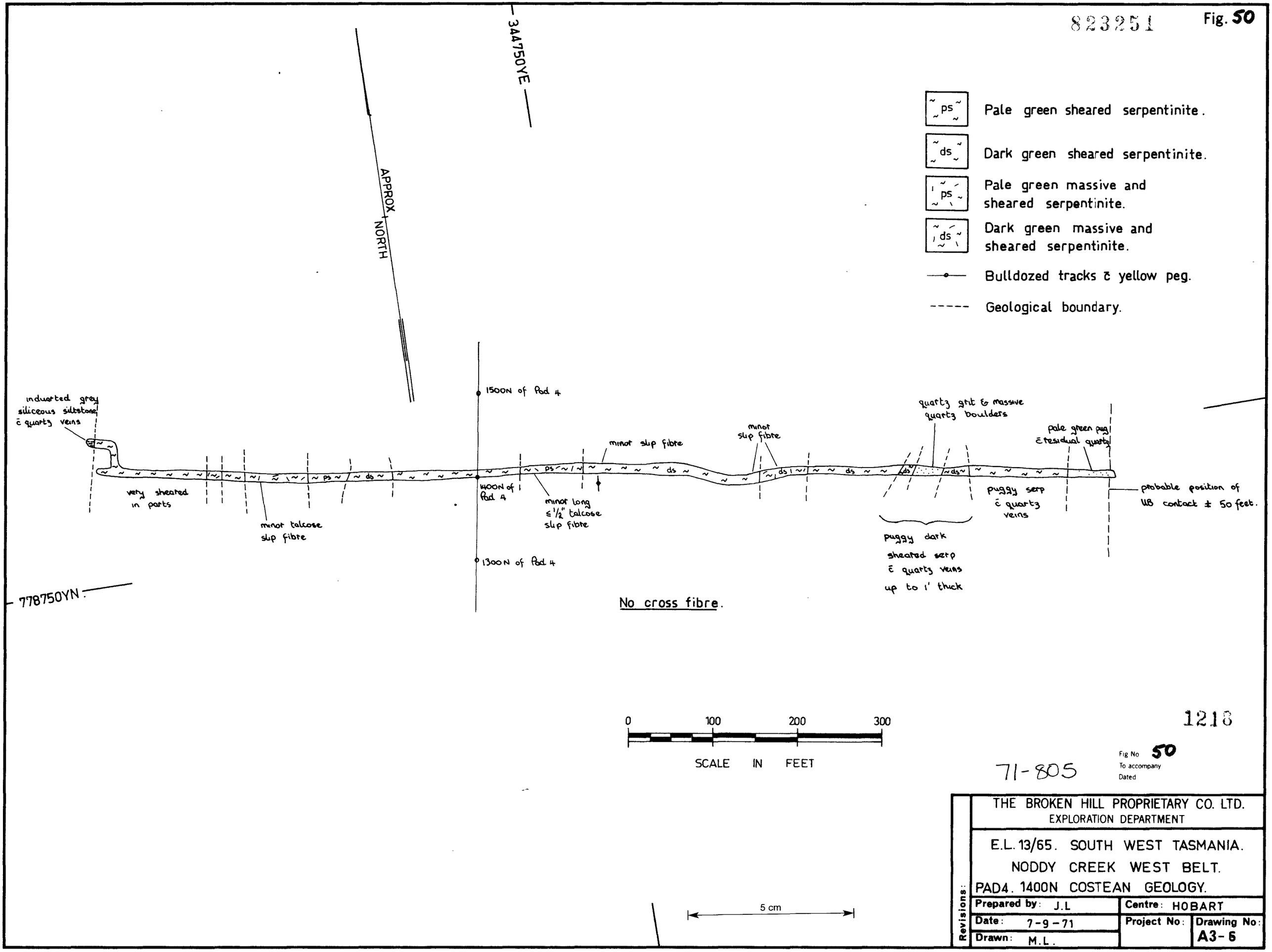
E.L. 13/65. SOUTH WEST TASMANIA.
NODDY CREEK WEST BELT.
FIBRE OCCURENCES.

Prepared by: J.L | Centre: HOBART.
Date: 1-9-71 | Project No: | Drawing No: A3-5
Drawn: M.L.
Revisions:



823251

Fig. 50



1218

71-805

Fig No 50
To accompany
Dated

THE BROKEN HILL PROPRIETARY CO. LTD.
EXPLORATION DEPARTMENT

E.L. 13/65. SOUTH WEST TASMANIA.
NODDY CREEK WEST BELT.
PAD4. 1400N COSTEAN GEOLOGY.

Prepared by: J.L		Centre: HOBART	
Date: 7-9-71		Project No:	Drawing No: A3-6
Drawn: M.L.			

Revisions:

Fig. 51

823252

1219
71-805

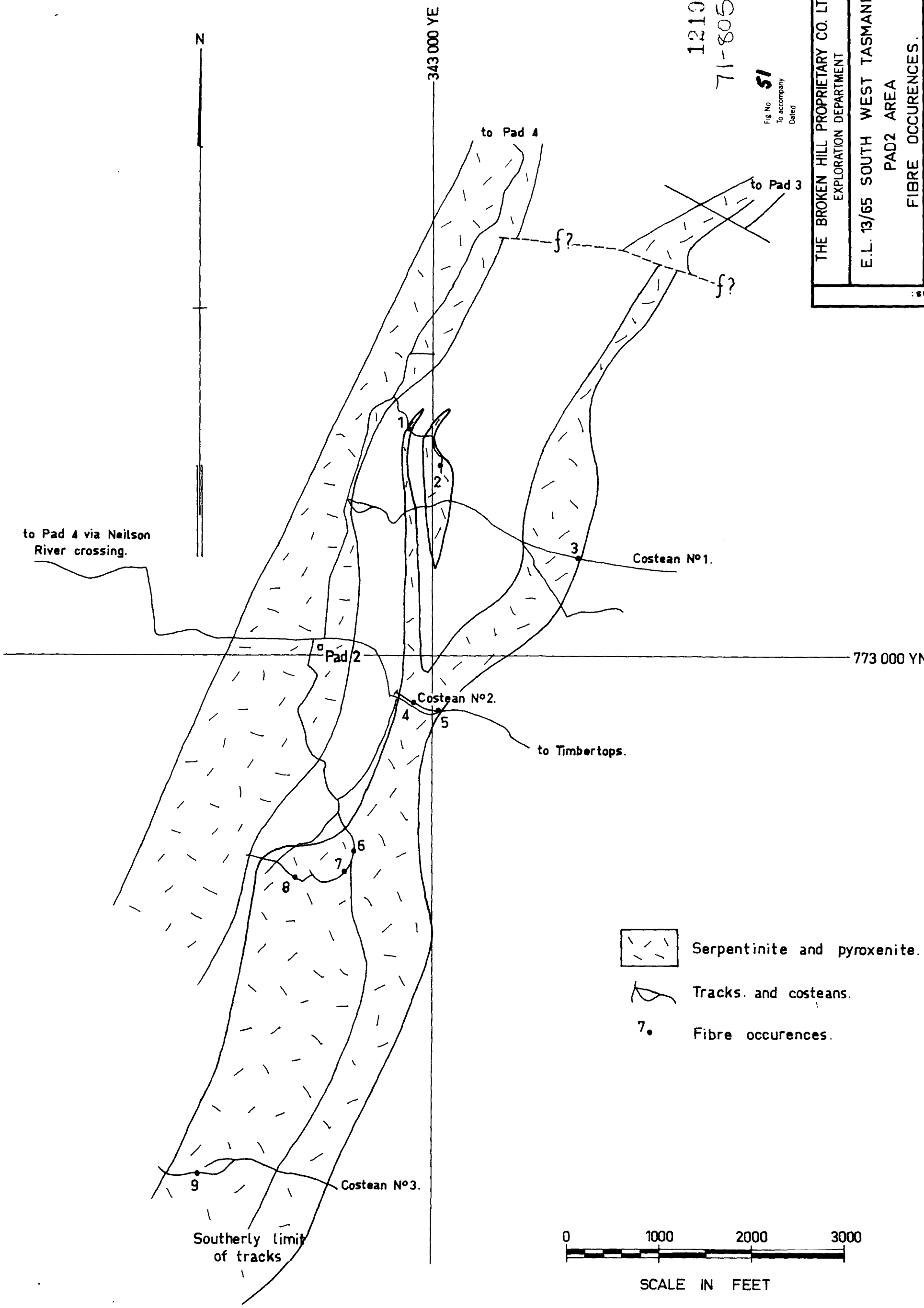


Fig No 51
To accompany
Dated

THE BROKEN HILL PROPRIETARY CO. LTD.
EXPLORATION DEPARTMENT

E.L. 13/65 SOUTH WEST TASMANIA
PAD2 AREA
FIBRE OCCURENCES.

Revisions:

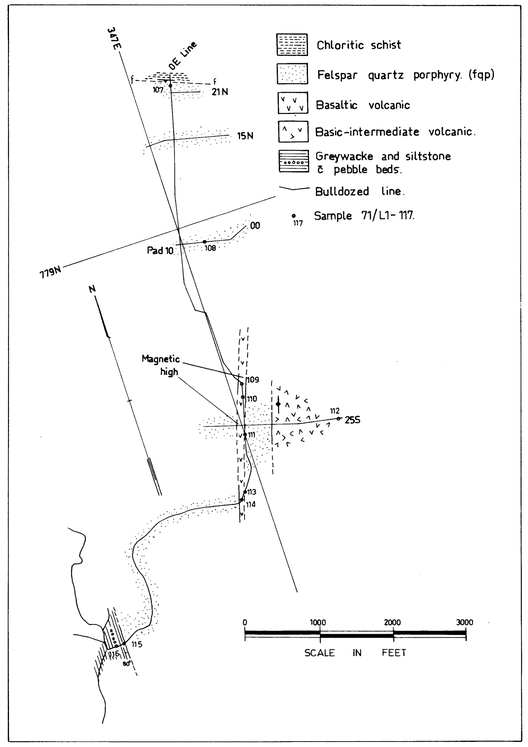
Prepared by: J.L.
Date: 1-9-71.
Drawn: M.L.
Centre: HOBART.
Project No:
Drawing No: A3-4

5 cm

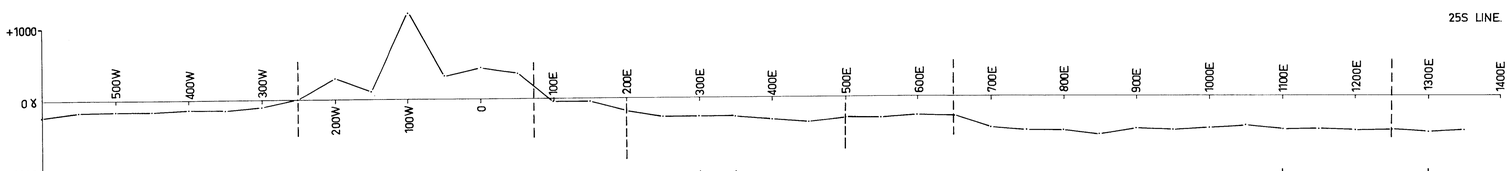
823253

Fig. 52

MAP.



25S LINE.



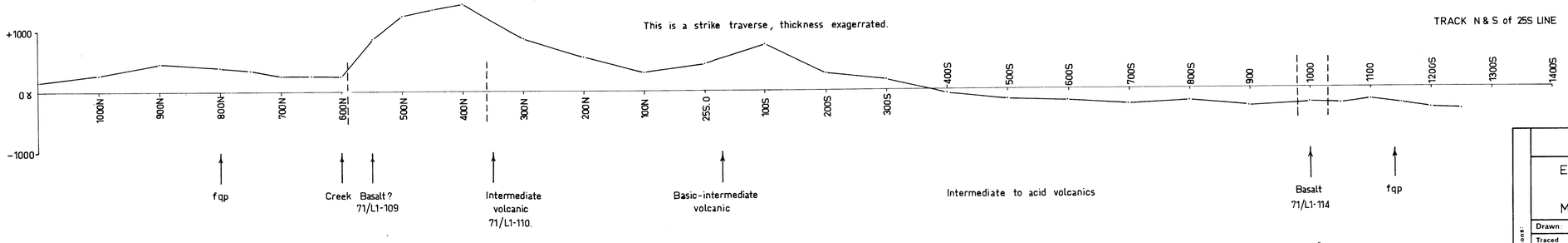
Scale in feet.

Observation points or sample point.

Rock type boundaries.

This is a strike traverse, thickness exagerrated.

TRACK N & S of 25S LINE



5 cm

Scale in feet.

Fig No. 52

To accompany

Dated

1220

71-805

THE BROKEN HILL PROPRIETARY CO. LTD.
EXPLORATION DEPARTMENT

E.L. 13/65. SOUTH WEST TASMANIA

NODDY CREEK PAD 10.

MAGNETIC PROFILES & GEOLOGY.

Drawn: J.L.	Date: 7-9-71	Centre: HOBART	
Traced M.L.		Project No.	Drawing No. A1-30
Checked			
O.I.C. J.L.			

Revisions