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GEOPHOTO MINERALS REPORT 1973/7

EVALUATION OF THE ALLUVIAL TIN POTENTIAL OF THE DORSET FLATS, PIONEER, E.L.6/68, N.E. TASMANIA

MICROFILMED

Prepared by

GEOPHOTO RESOURCES CONSULTANTS

for

TEXINS DEVELOPMENT PTY. LIMITED

I.R. Mortimore
1974

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546002

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INTRODUCTION

During 1972, a comprehensive evaluation of the tin bearing potential of a low lying, river terrace area, designated the Dorset Flats, was completed.

The prospect area, situated on the eastern bank of the Ringarooma River, approximately 2 miles northeast of Pioneer, covers an area of around 1,500,000 sq. yds. of Tertiary and Quaternary sediments, bounded on the west by the Ringarooma River and to the north, east and south by the foothills of the Blue Tier Ranges (Devonian porphyritic adamellites). The northern part of the flat is covered by a sheet of water, the Dorset Lagoon. (See location map A200).

The area represents the basically unworked section of the broad Dorset Flat (the bulk of the area lying on the western bank of the Ringarooma River) which was dredged by the Dorset Tin Dredging Company between 1944 and 1963 with the recovery of some 2000 tons plus of cassiterite concentrates.

On the prospect area itself, past years have seen limited mining activity, evidence of which exists in the form of five small open cuts (the largest of which covers an area of approximately 7000 sq. yds.) in the southern and central sectors of the area with further shallow workings in the north-eastern area close to Black Creek.

Two 5 acre mineral leases (76M/64 and 77M/64), in the name of R.C. Lawry, cover part of the southern sector close to the main workings. An option agreement was negotiated with Lawry to enable Texins to test the whole area and purchase the mineral leases if so desired.

The past mining activity (dredging and hydraulic mining), which was considered manifestation of the existence of economic grade alluvials, and the potentially large yardage, possibly in excess of 20 million cubic yards, were the major factors in considering the Dorset Flat prospect as holding sufficient potential to warrant exploratory work to evaluate this potential.

The grade of the alluvials, it was considered, would be low, but possibly marginally economic if a large yardage could be proven. The average grades worked by the Dorset Tin Dredge varied between 0.18 lbs/cu. yd. SnO_2 and 0.28 lbs/cu. yd. SnO_2 - subeconomic by standards today. However the grade of the material worked in the open cuts must have been higher in order to support hydraulic mining with its increased operational costs.

This may be expected from a regional viewpoint. The Ringarooma River, the probable source of any cassiterite in this area, breaks out from a narrow, restricted channel into the broad alluvial flood-plain at the southern limit of the Dorset Flat prospect area. In doing so the current would slacken and heavy particles carried would be dumped at this favourable locality.

The potential existed and an exploration programme was designed to test it.

EXPLORATION

(a) Preliminary Reconnaissance and Testing

As is the case when testing or proving an alluvial deposit, drilling played the dominant part with only limited surface work possible.

Initial ground work included a geological reconnaissance following gridding of the central prospect area (7 lines - total 23,800 feet). A geologic map (Drawing 1/158), found in the appendix of this report, carries the relevant data established in this mapping and basically defines the limits of the alluvial flat.

Earlier work also included the channel sampling of 13 backhoe pits which were located in the southern part of the flat about the old workings. A high water table which enabled water to flow-in freely curtailed the effectiveness of this work with basal sections remaining unsampled.

The 22 samples recovered were panned to a heavy mineral fraction before assay for tin. The results were poor, values ranging from 0.02 lbs/cu. yd. SnO_2 to 0.38 lbs/cu. yd. SnO_2 with a mean value of 0.09 lbs/cu. yd. SnO_2. However the restrictions on the sampling rendered this work incomplete in its findings.

(b) Rotary Drilling

To test the area, quickly yet effectively, in order to differentiate between stanniferous and non-stanniferous ground and to determine the basement profiles, a Longyear 38 diamond drill was employed to rotary drill the area with samples recovered using a dry plugging method with NQ drill rods and a tungsten shoe bit.

The programme of 46 holes was successful in its objectives, establishing the existence of a main gutter, trending roughly E-W across the southern section of the flat, with economic values indicated below a depth of 9-10 feet over a large area.

Access problems with a single axle trailer mounted rig, curtailed the area covered by this initial phase of drilling.

Although 251 assays were completed, no record of values is included in this report as the results were appraised only as indicators of tin-bearing ground rather than establishing true values.

The use of an open hole, even in this area of fairly rigid clays with limited cave-in and good recovery (50%-90%), could not be expected to give reliable results due to the small volumes recovered and definite, although small amount of, contamination.

Loose sands and wash in the lower parts of many of the holes created problems in retention of the sample on withdrawal of the rods.

Comparison with later results from the percussion drilling programme, reveal the values recorded by the rotary drill as showing a fair degree of consistency with those from the percussion drill holes within the overburden and through the underlying tin bearing horizons but below this where as the tin values peter out with depth in the deeper percussion holes, good values are recorded to total depth in the rotary holes indicating contamination from above i.e. open hole.

A plan of the rotary drill hole locations is found in the appendix (Drawing 1/157). A list of basement depths is also included with an indication of whether these holes carried tin values of significance.

(c) Percussion (Churn) Drilling

A follow-up percussion drilling programme was mounted

to further test the values of the stanniferous wash sections established in the earlier rotary drilling.

One or two rigs operated from mid-April through to the end of August, drilling a total of 212 cased (5") holes to a maximum basement depth of 43 feet 6 inches.

The earlier drilling (Holes 1-81 and 100-158) covered the main southern area in the vicinity of the old workings and also was aimed at determining the northern extensions of the lead established in that area to the south.

However, the general trend was for the tin values to fall away towards the north with the main lead narrow in the vicinity of holes P117-P119 and swinging away westwards from this point rather than continuing northwards through rotary drill locations Nos. 3 and 4, as anticipated.

The line of holes P134 to P158 failed to re-establish this lead either in profile or in comparable tin values. The ground along this line of holes was found to be considerably deeper with the lithological character of the sediments different from the previously tested area. Good basal wash sections of sand/grit ("drift") and well rounded, flat pebbles, appeared to be of Tertiary marine or lacustrine origin.

Similar sections occurred at depth in holes along lines P29-P25 (vicinity of hole P19), P47-P32 (vicinity of holes P30-P36) and P48-P63 (vicinity of hole P60). In all cases, these wash sections carried poor tin values.

The overall picture appears to be one of a Quaternary drainage system being superimposed upon sediments of Lower Tertiary age, the more recent sediments now forming a fluviatile terrace characterised by poorly sorted clay/sand or grit/wash,

often tin bearing. In the area tested by holes P134-P158, these conglomeratic clayey sands have been redistributed by the continued development of the Ringarooma River system while the alternative area to the south (tested by holes P1-P81) has been abandoned by the river and subsequently filled with more clayey and more importantly, basically non-tin bearing sediments. The granite bar which exists running from around 06W + 06N through 06E + 14N to 18E + 22N would have assisted in the "cutting off" of this area from the Ringarooma River. The course of the latter would have been dictated by this bar deflecting its flow to the east before it eventually broke through (west of 06W + 06N) straightening its course.

With the considerable reduction in the size of the target area now apparent, it was decided to concentrate the drilling on the southern section of the flats in order to prove a smaller but higher grade deposit which could still provide good returns from a low capitalised mining operation.

The later holes (P159 - P227) were located for this purpose.

All holes drilled were geologically logged, the samples, recovered over 5 feet intervals, volumed by weight/specific gravity determination methods before panning to a heavy mineral concentrate.

In all, 1220 samples were recovered, 1189 of which were assayed for tin and 99 assayed for gold.

In addition 17 tailings samples from the concentration site were assayed for tin to determine the cassiterite loss in the panning of the samples. Results of this work indicated an average recovery of 55% of the cassiterite contained within the samples.

RESULTS

Maps and sections included in the appendix of this report fully present all relevant data collected in this work.

These include:-

1. Dorset Flats Geological Map (Drawing 1/158)
2. " " Drill Hole Locations (Drawing 1/157)
3. " " Drill Hole Geological Sections (Drawing 1/176- 14 sheets)
4. " " Cross Sections - Assay Values (Drawing A217- 2 sheets)
5. " " R.L. Overlay (Drawing A216)
6. " " Basement Contours (Drawing 1/168)
7. " " Ore Reserve Blocks (Drawing 1/169)
8. " " Ore Reserve Blocks (Drawing 1/170)

All tin values were calculated as lbs/cu. yd. SnO_2 (72% Sn concentrate).

Tin values occurring apparently within the decomposed granites are accredited to poor cleaning of the bottom of the hole during drilling as the adamellites are certainly not tin bearing in this area. In the ensuing ore estimations adjustment has been made for this to the basal sections of the hole.

Computations of ore reserves were made in the field and in head office.

The latter are summarised in the appendix, "Summary of Dorset Flat Drilling Results" by W.E. Bush, with maps showing ore reserve blocks (Drawing 1/169 and 1/170).

Field calculations covering a larger area of 198,000 sq. yds. produced reserves of 710,000 cu. yds. of average grade

0.498 lbs/cu. yd. SnO_2 (72% Sn concentrate) beneath overburden averaging 3.2 yds in thickness and amounting to 630,000 cu. yds. Drill hole data used in this calculation were from holes P1-9, P12-P30, P33-P61, P64-P75, P82-P83, P122-P125, P129-P133, P163-P169, P176-P191, P193-P194, P203-P217, P220-P223 and P225-P227.

Obviously on present economics there is no scope for a mining venture based on the above figures. An operating cost of approximately 50 cents/cu. yd. for open cut hydraulic mining in N.E. Tasmania is generally accepted as a rough guideline upon which a feasibility can be based. On present day tin prices the above grade barely covers this operational cost. The added expense of removal of overburden which would be incurred here on the Dorset Flat renders the proposition uneconomic.

Some consideration was given to the viability of a small scale mining venture based on reserves of 154,100 cu. yds. of 0.95 lbs/cu. yd. SnO_2 grade, provided other prospects within EL6/68 were proven to carry similar pockets of tin bearing ground exploitable by the same mining methods used on the Dorset Flat.

During 1973 exploration along these lines failed to establish similar workable grades in sufficient yardages to put this scheme into practice.

It is therefore concluded, that at this time, it would be impractical to develop the limited reserves on the Dorset Flat as an operational alluvial tin mine on a company scale, although there is some scope for a small syndicate of operators to profitably work this deposit.

I.R. MORTIMORE.

APPENDIX 1

SUMMARY OF ROTARY DRILLING DATA

ROTARY DRILLING

Hole	Depth	Hole	Depth
1	27'0"	24	15'0"
2	28'0" T	25	17'0" T
3	40'6" T	26	10'0"
4	33'6"	27	9'3" S
5	12'3"	28	18'3" T
6	8'3"	29	19'0" T
7	18'0" T	30	32'0" S
8	11'11"	31	7'6"
9	10'0"	32	21'0"
10	3'6"	33	25'6" S
11	17'6"	34	35'7" S
12	10'5"	35	37'6" S
13	29'6" S	36	10'2"
14	11'4"	37	23'6" T
15	15'0"	38	27'3" T
16A	N.B. 4'6"	39	26'0"
16B	N.B. 3'6"	40	28'8" S
17	15'0" T	41	24'0"
18	12'6"	42	18'6" S
19	14'0" S	43	23'0" S
20	12'2" S	44	17'9"
21	12'6" S	45	16'6"
22	7'6"	46A	7'2"
23	N.B. 17'0" S	46B	6'6"

Depth - Depth to Granite Basement.

N.B. - Not Bottomed.

S - Values in excess of 0.62 lbs/cu. yd. SnO_2 over 5ft. or more.

T - Values in excess of 0.35 lbs/cu. yd. SnO_2 over 5ft. or more.

APPENDIX II

SUMMARY OF DORSET FLAT DRILLING RESULTS

The final yardages and grades revealed in the Dorset Flats drilling are summarised as follows:

Overburden	364,900 yds^3
Wash	375,600 yds^3
Average Washgrade	0.60 lbs/yd^3 (cassiterite)
Average overall grade	0.30 lbs/yd^3 (cassiterite)

While these grades may be workable on a small scale they are clearly sub-economic on a company scale.

The whole area could be high graded with the following results.

Overburden	206,300 yds^3
Wash	154,100 yds^3
Average Washgrade	0.95 lbs/yd^3
Average Overall grade	0.39 lbs/yd^3

Again these would be marginal at best even on a small scale company operation.

Gold values occur throughout but are erratic and average at around 2 $cents/yd^3$. They do not therefore substantially affect the overall outlook.

From the geomorphological point it would appear that the workable wash occurs on a high level terrace probably representing an original base level in the old Ringarooma River (see Basement Contour Plan). Following elevation and consequent rejuvenation the original river began to cut back into these old terraces and redistribute the wash carrying values. This process was modified at some point by repositioning of the main channel and subsequent filling of the old channel with barren overburden carrying a good percentage of carbonaceous material. The total effect has been to drastically limit the extent of the workable wash and diminish its value by an accumulation of barren overburden.

Our first drill holes penetrated the wash in one of the best areas, where the original wash was undisturbed and the overburden was at a minimum. Most of the later drilling gave good wash sections but the wash carried low values which were not revealed until laboratory tests were completed. While the drilling increased the wash yardage it was some time before the actual values for this yardage were computed, and a reduction in apparent workable material had to be made.

Unfortunately the Swains Creek drilling has added only marginally to the Dorset Flat yardages and a viable mining area does not presently appear possible.

W.E. Bush

W.E. BUSH

570,000yd E
147°55'
580,000yd E
148°00'
940,000yd N
41°05'
930,000yd N
41°10'
920,000yd N
41°15'

PIONEER
FROME
RIVER
Child Creek
Rocky Creek
Spitts Fb Creek
Grande Creek
Stoney Creek
Dead Horse Ck
Crystal Hill
Archer
BROOM
LITTLE PLAIN
Mac Michael Ck
Little Mt Michael
Mt Michael
Camp Ck
Southern Cross
Moon
POIMENA
Mt Little Child
Pioneer
Australia
Duke
Dow
Wyniford River
Ringarooma River
Swains Creek
Eastern Leads
Shallow Marine / River Terraces
Echo Lead
Bald Hill (Eluvial)
Weldborough (Alluvial/Eluvial/Residual)
Emu Flat

LEGEND

- Boundary of EL6/68 - April '73.
- Mineral Lease boundary excluded from EL6/68.
- Watercourse
- Road
- Vehicle track

PROSPECT AREAS	
1	Possible Deep Lead
2	Dorset Flat
3	Wyniford River
4	Pioneer Lead (Extensions)
5	Ringarooma River
6	Swains Creek
7	Eastern Leads
8	Shallow Marine / River Terraces
9	Echo Lead
10	Bald Hill (Eluvial)
11	Weldborough (Alluvial/Eluvial/Residual)
12	Emu Flat

Scale: 1:50,000

4000 0 4000 8000 12000 16000 Feet

2000 0 2000 4000 Metres

5 cm

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SYDNEY, AUSTRALIA

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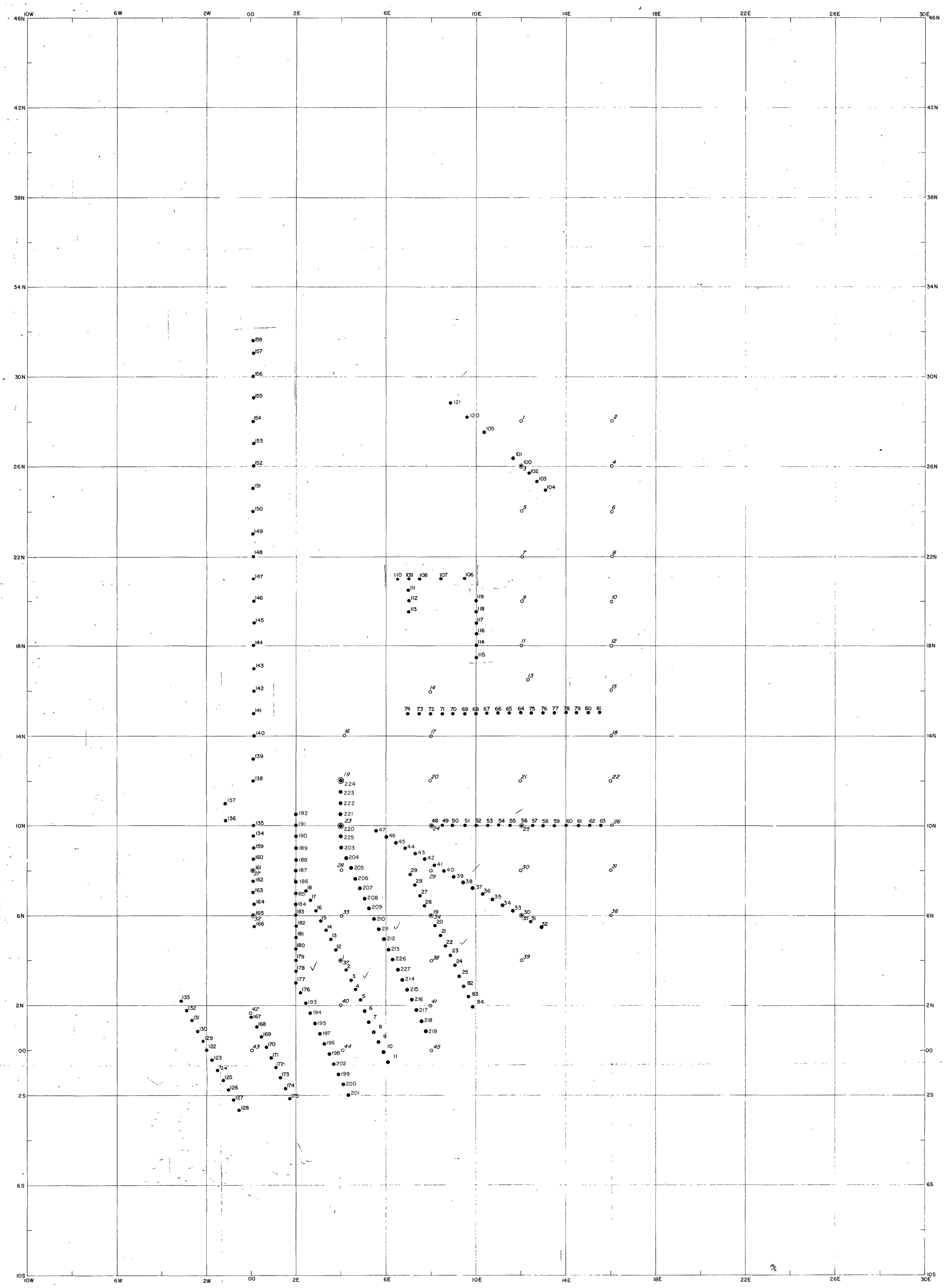
E.L.6/68 NORTH EAST TASMANIA

Alluvial Tin Prospect - Locations

(STATUS REPORT - 22ND MARCH 1973)

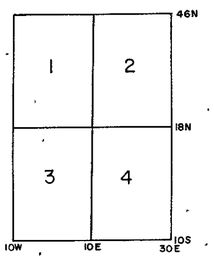
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PROJECT	6/68	AUTHOR	I. Mortimore	DATE	Nov. 1973	DWG Nº	A 200



546015

SHEET INDEX

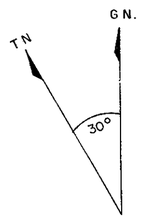


(100-Feet To 1Inch Series)

LEGEND

56 ● Percussion drill hole

30 ○ Rotary drill hole.



5 cm

Scale. 200 Feet to 1 Inch

200 0 200 400 600 800 Feet

100 0 100 200 Metres

74-1066

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E.L. 6/68 NORTH EAST TASMANIA

DORSET FLATS 2326
DRILL HOLE LOCATIONS

PROJECT	E L 6/68	AUTHOR	A C Johnson	DATE	June 1972	DWG NO	1/157

10W 6W 2W 00 2E 6E 10E 14E 18E 22E 26E 30E

46N 42N 38N 34N 30N 26N 22N 18N 14N 10N 6N 2N 00 2S 6S 10S

Dorset Lr Loon

Qts T/Qt Dg

RINGAROOMA RIVER

Flood Channel

Unconsolidated fine/course sands, gravel & wash beds — wash consists dominantly of altered basalt ironstone & quartz

Partially consolidated fine/course sands, silt & gravel — occasional wash bands.

Tailings

Open cut face shows weakly banded wash in matrix, off white/tan gritty clay & inter-banded with soft clayey sandstone. Wash composed of sub-rounded/rounded quartz, medium grey quartzite shingle, white/pale grey fine sandstones & medium grey meta-shales ~10% matrix

Abundant surface shingle & pebble wash, ranges up to 5" maximum diameter & consists of quartz, fine pale grey sandstone/siltstone (mothuna) & occasionally dark grey quartzite

Work face shows moderately abundant shingle wash coming in 2' below surface & is more or less continuous to floor & includes floor-wash 10" maximum diameter & includes quartz, quartzites, hornfelsed shales, fine white sandstones incorporated in matrix of hard off-white/brown course sandy clay

Generally sporadic surface wash distribution with occasional patches of more abundant wash, wash ranges up to 6" maximum diameter & consists of broken quartz, quartzite & fine pale grey sandstone

Granite outcrop

Gentle but marked rise of medium grey sandy residual soil — shallow nature of ground confirmed by presence of some granite outcrop & frequent granite floats, possible maximum depth to bed rock of 10 feet

Light brown/grey sandy clay minor small wash irregularly distributed throughout

Race follows contour of gentle rise

Medium grey sandy residual soil — sporadic wash

Working face poorly exposed

Grey/brown sandy soil merging into grey/brown gritty clay carrying minor small wash (½" max diameter) over bottom 3'

Intake dam.

77M/64 R. LAWRY.

76M/64 R. LAWRY

Lease peg — R. LAWRY

Granite exposed in water race

Abundant mothuna cobble more or less evenly distributed over face & set in matrix of ridge brown course sandy clay

Wash sporadically distributed throughout soft watery tan course sandy clay

Topsoil sluiced

Old bore

DF1(5') DF2(13') DF3(6') DF4(8') DF5(4.6') DF6(4.3') DF7(4.6') DF8(7'6") DF9(13') DF10(11') DF11(4'6") DF12(6')

Tailings

Tailings

Tailings

Tailings

Tailings

Tailings

Granite outcrop

Granite outcrop

Granite outcrop

Black Creek

Lagoon

LEGEND

- Dg — Devonian granite.
- T/Qt — Tertiary – Quaternary alluvials.
- Qts — Quaternary swamp.
- ——— – – – Contact, dashed where indefinite.
- ..... Tailings boundary.
- X X / X — Surface wash occurence.
- 10' — Working face — depth below surface indicated.
- / DF10 (5) — Backhoe hole — sampled depth indicated.
- (14') — Alluvial prospect shaft — depth shown.
- Position of former tailings race.
- Water race.
- Stream.
- Track.
- Swamp
- S — Swamp & grassland.
- 77M/64 — Lease boundary — R. Lawry. — subject to survey.

SHEET INDEX

1	2
3	4

46N 18N 10S

10W 10E 30E

(100 Feet To 1Inch Series)

T.N G.N 30°

5 cm

Scale: 200 Feet to 1 Inch

200 0 200 400 600 800 Feet

100 0 100 200 Metres

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E.L. 6/68 NORTH EAST TASMANIA

DORSET FLATS GEOLOGICAL MAP 2327

PROJECT	E.L. 6/68	AUTHOR	A.C. Johnson	DATE	June 1972	DWG. No	1/158



74-1066 546017

LEGEND

60 ● Percussion drill hole.

—+5— Basement contour relative to R.L. 470'.

→ Ancestral stream channels.

T.N. G.N. 30°

Scale: 100 Feet to 1 Inch

100 0 100 200 300 400 Feet

50 0 50 100 Metres

5 cm

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DORSET FLATS 2328

BASEMENT CONTOURS

PROJECT	E.L. 6/68	AUTHOR	W. Bush	DATE	Oct 1972	DWG No.	1/168

AREA	OVERBURDEN yds³	WASH yds³	AV. VALUE W. lbs/yd³
A	19,300	15,400	1·12
B	95,200	60,300	1·13
C	36,500	37,600	0·70
D	35,200	18,500	0·90
E	20,300	22,300	0·96
	206,300	154,100	0·95

Average value including overburden 0·39 lbs/yd³

T.N. G.N. 30°

LEGEND

60 Percussion drill hole

Scale: 100 Feet to 1 Inch

100 0 100 200 300 400 Feet

50 0 50 100 Metres

5 cm

74-1066 546018

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DORSET FLATS 2329

ORE RESERVE BLOCKS

PROJECT	E.L. 6/68	AUTHOR	W. Bush	DATE	Oct' 1972	DWG. Nº	1/109

AREA	OVERBURDEN yds³	WASH yds³	AVERAGE lbs/yd³
1	51,100	51,100	0·36
2	10,100	11,100	1·13
3	36,300	32,700	0·44
4	30,600	43,900	0·59
5	34,600	35,000	0·60
6	56,200	68,400	0·63
7	34,700	38,100	0·62
8	48,300	29,100	0·38
9	30,800	27,900	0·64
10	17,300	14,700	0·54
11	14,900	23,600	0·66
	364,900	375,600	0·60

Average value including overburden 0·30 lbs/yd³

T.N. G.N. 30°

LEGEND

60 ● Percussion drill hole

Scale: 100 Feet to 1 Inch

100 0 100 200 300 400 Feet

50 0 50 100 Metres

5 cm

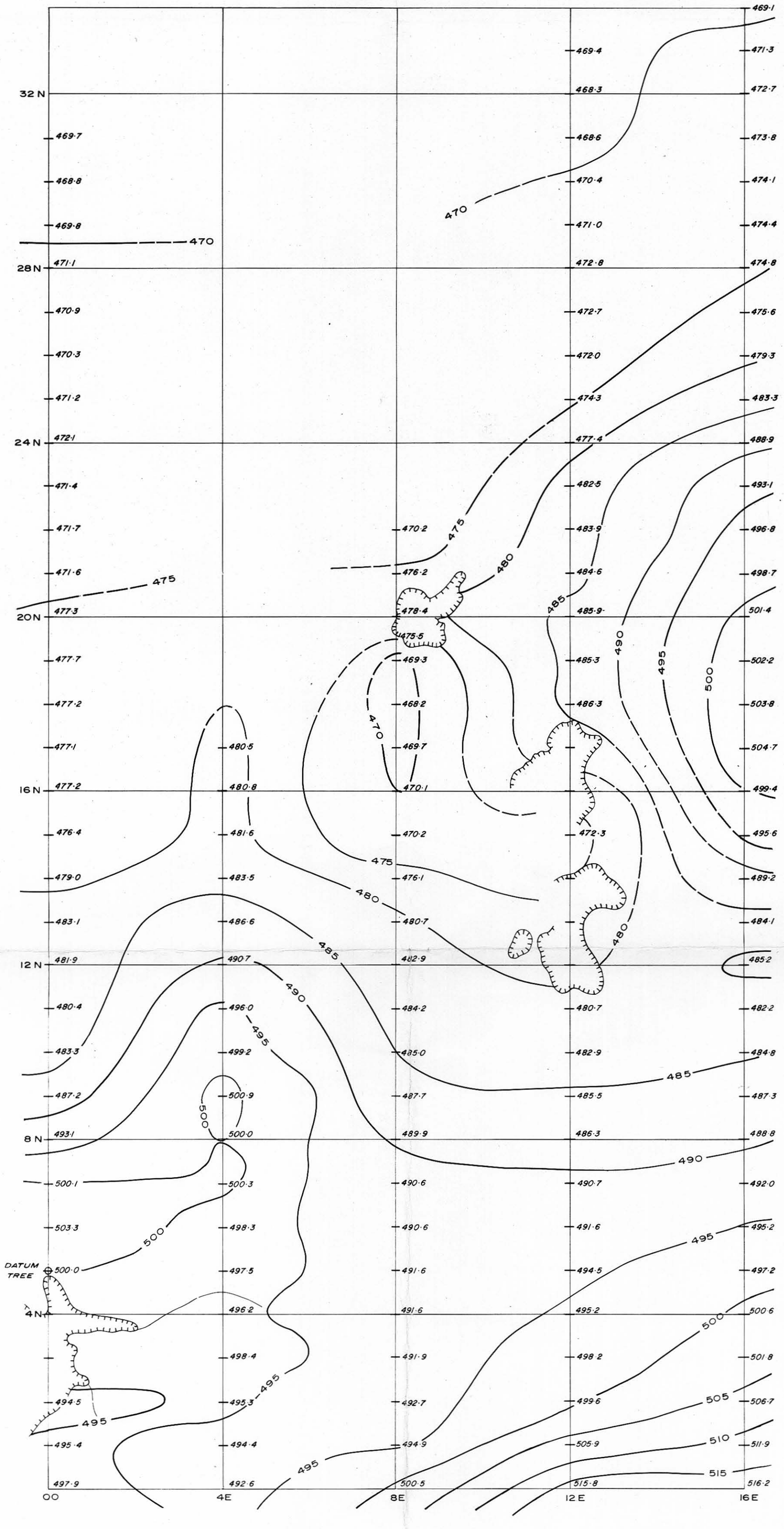
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TEXINS DEVELOPMENT PTY. LTD.
E.L. 6/68 NORTH EAST TASMANIA
DORSET FLATS 2330
ORE RESERVE BLOCKS

PROJECT	E.L. 6/68	AUTHOR	W. Bush	DATE	Oct' 1972	DWG. Nº	1/170



Scale: 200 Feet to 1 Inch

200 0 200 400 600 800 Feet

100 0 100 200 Metres

5 cm

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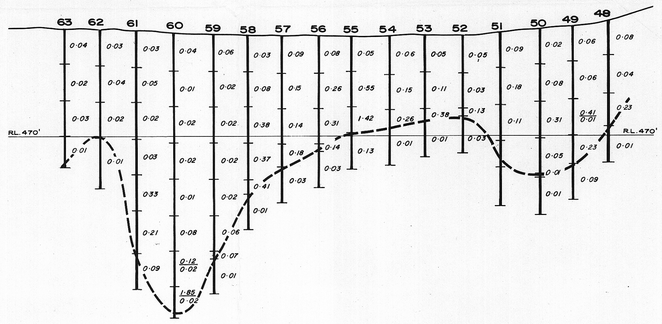
E.L. 6/68 NORTH EAST TASMANIA

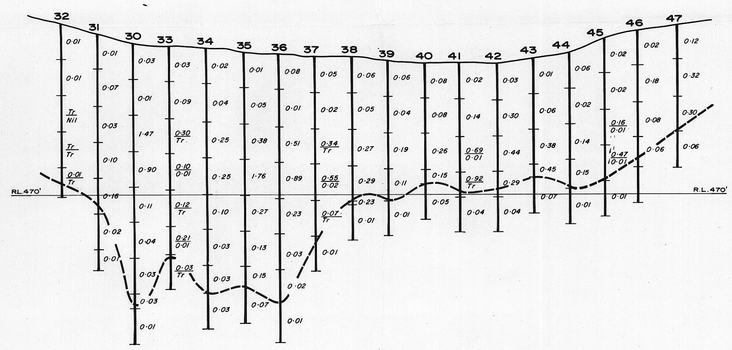
DORSET FLATS

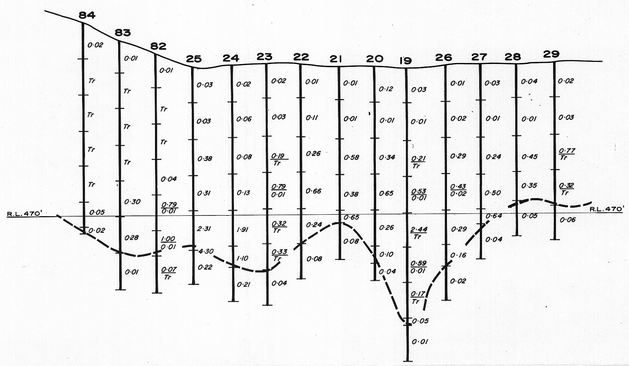
RELATIVE LEVEL OVERLAY

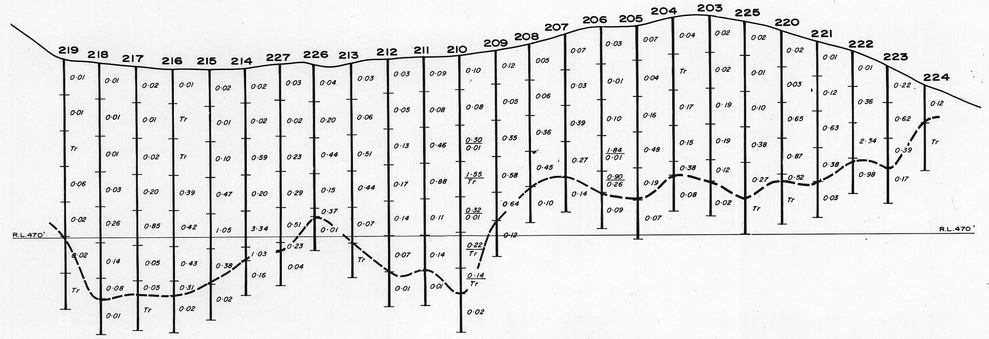
2331

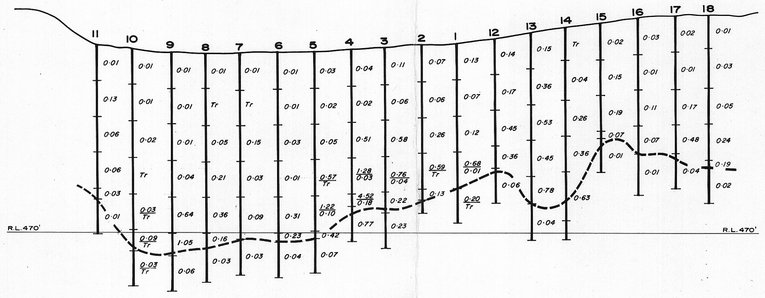
PROJECT	6/68	AUTHOR	I. Mortimore	DATE	Feb., 1974	DWG Nº	A-216

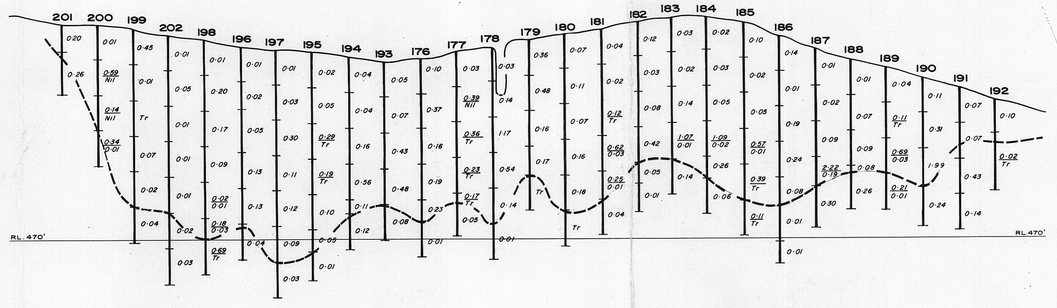












LEGEND

89	Percussion drill hole number	
0·68	Alluvial value lbs/cu.yd. SnO_2 (72% Sn Conc)	SnO_2 values – Tr. < 0·005 lbs/cu.yd. SnO_2 (72% Sn. Conc.)
0·16 / 0·03	Alluvial value lbs/cu.yd. SnO_2 (72% Sn Conc.) / Alluvial value dwts/cu.yd. Au.	Au. values – Tr. < 0·005 dwts/cu.yd. Au.
I	Sample interval	
	Top of Bedrock	

HORIZONTAL SCALE 1:1200
VERTICAL SCALE 1:120

5 cm

546021 74-1066

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GEOPHOTO RESOURCES
SYDNEY, AUSTRALIA

TEXINS DEVELOPMENT PTY. LTD.

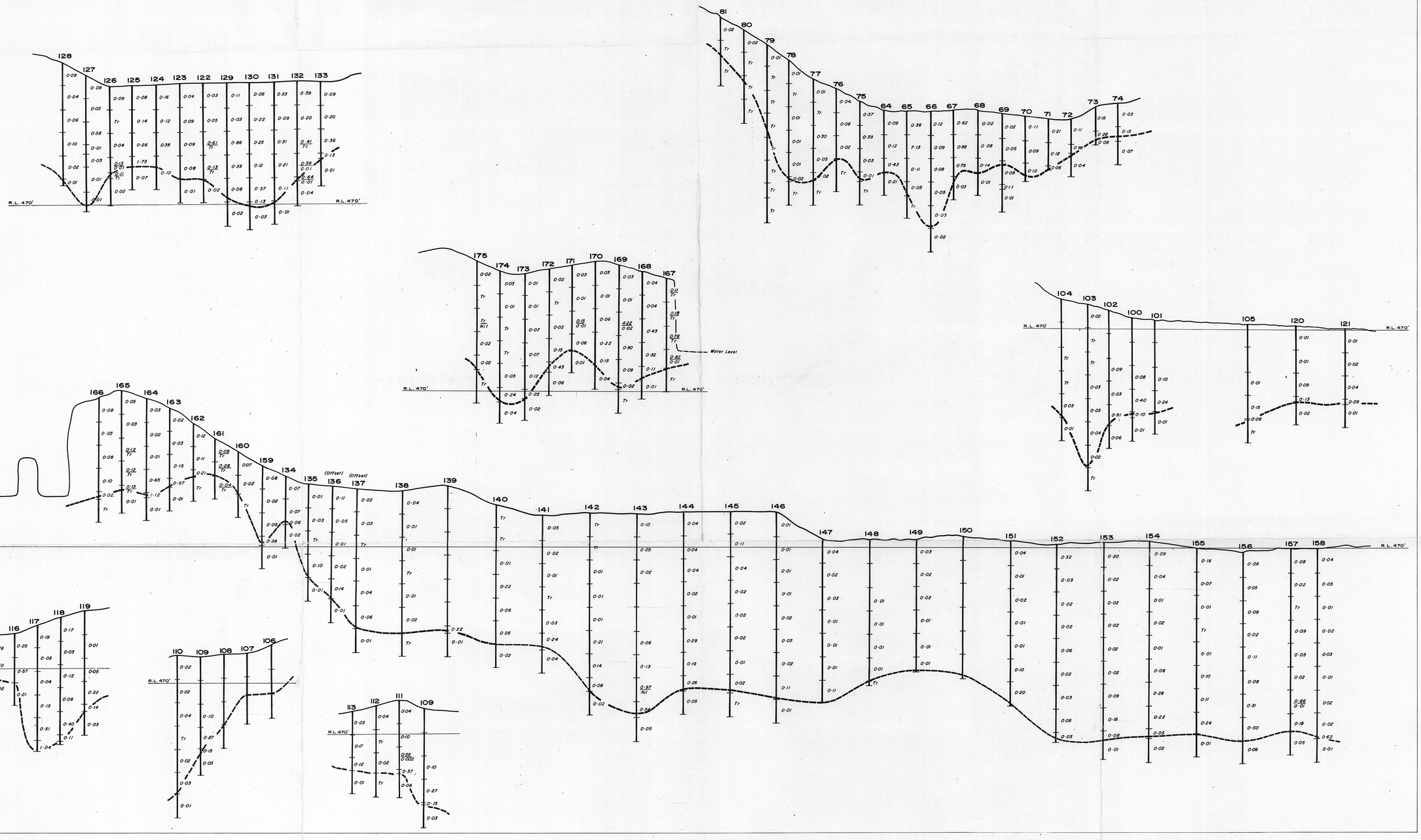
E.L.6/68 NORTH EAST TASMANIA

DORSET FLATS

DRILL HOLE SECTION.
ASSAY VALUES

2332

PROJECT	6/68	AUTHOR	I. Mortimore	DATE	Feb, 1973	DWG No.	A - 217



LEGEND

89 — Percussion drill hole number

0·68 — Alluvial value lbs/cu.yd. SnO_2 (72% Sn Conc.)

0·16 / 0·03 — Alluvial value lbs/cu.yd. SnO_2 (72% Sn Conc.) / Alluvial value dwts/cu.yd. Au.

SnO_2 values – Tr. < 0·005 lbs/cu.yd. SnO_2 (72% Sn Conc.)

Au. values – Tr. < 0·005 dwts/cu.yd. Au.

I — Sample interval

Top of Bedrock

HORIZONTAL SCALE 1:1200
VERTICAL SCALE 1:120

5 cm

546022 74-1066

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GEOPHOTO RESOURCES

SYDNEY, AUSTRALIA

TEXINS DEVELOPMENT PTY. LTD.

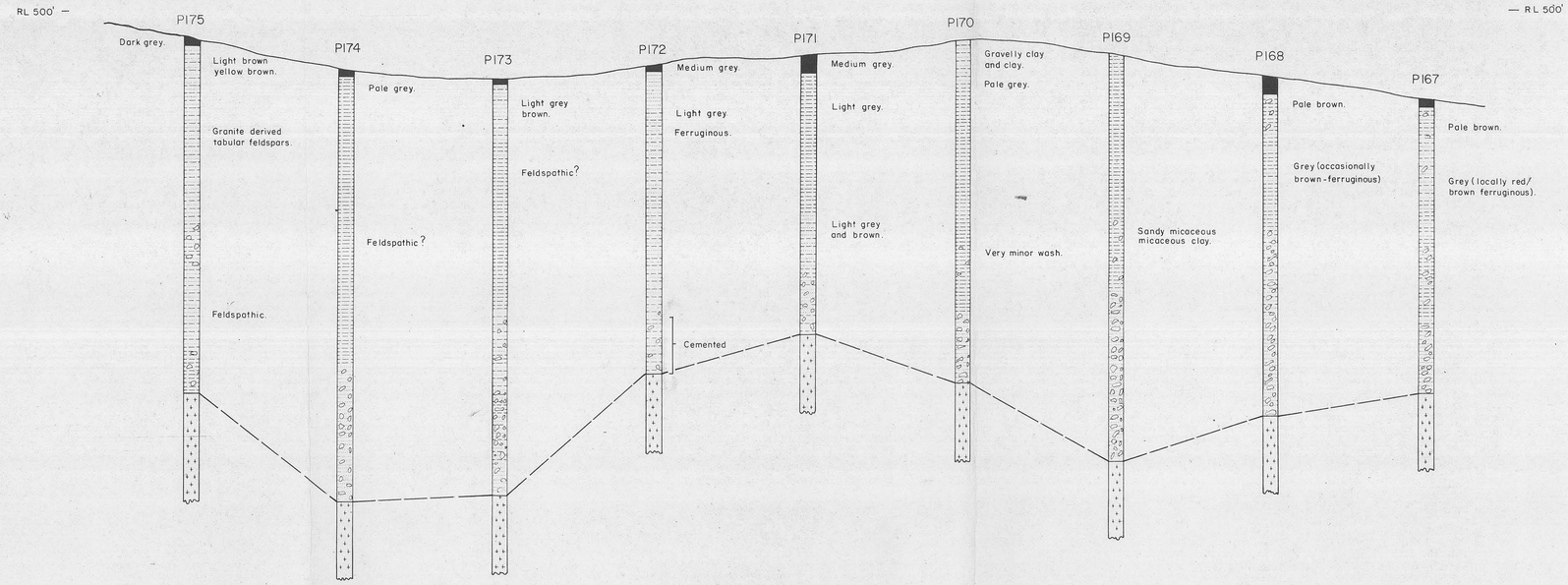
E.L.6/68 NORTH EAST TASMANIA

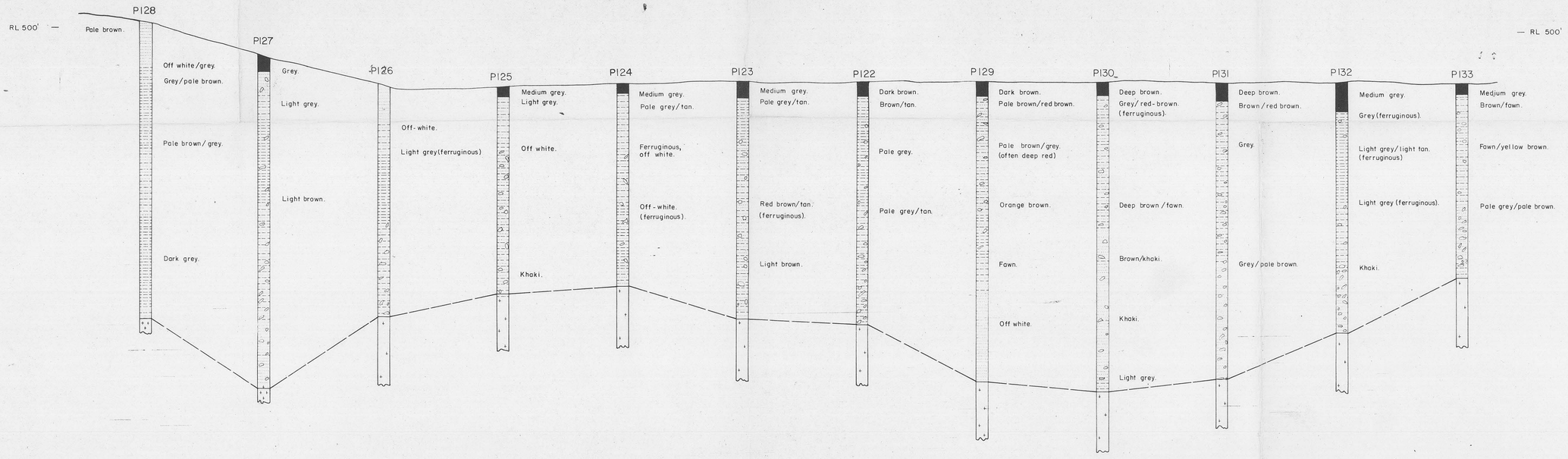
DORSET FLATS

DRILL HOLE SECTION.
ASSAY VALUES

2333

PROJECT	6/68	AUTHOR	I. Mortimore	DATE	Feb.,1973	Dwg No	A - 217





5 cm

546023

74-1066

LEGEND

- Sand, grit, drift, gravel (sand content > 75%)
- Sand and tailings.
- Clay, silty clay, gravelly clay (clay > 75%)
- Clayey sand, sandy clay, gritty or gravelly clay (clay > 25%, sand < 75%) or (clay < 75% sand > 25%)
- Sand with abundant wash
- Clayey sand with some wash
- Porphyritic feldspar-biotite granite, generally decomposed to chlorite and clay minerals
- Humus rich clay/soil
- Top of bedrock.

Note: Assumed R.L. datum is 500' at the point 00/5N (Tree).

Horizontal Scale

Feet 25 0 25 50 75 100 Feet

Feet 5 0 5 10 15 20 Feet

Vertical Scale

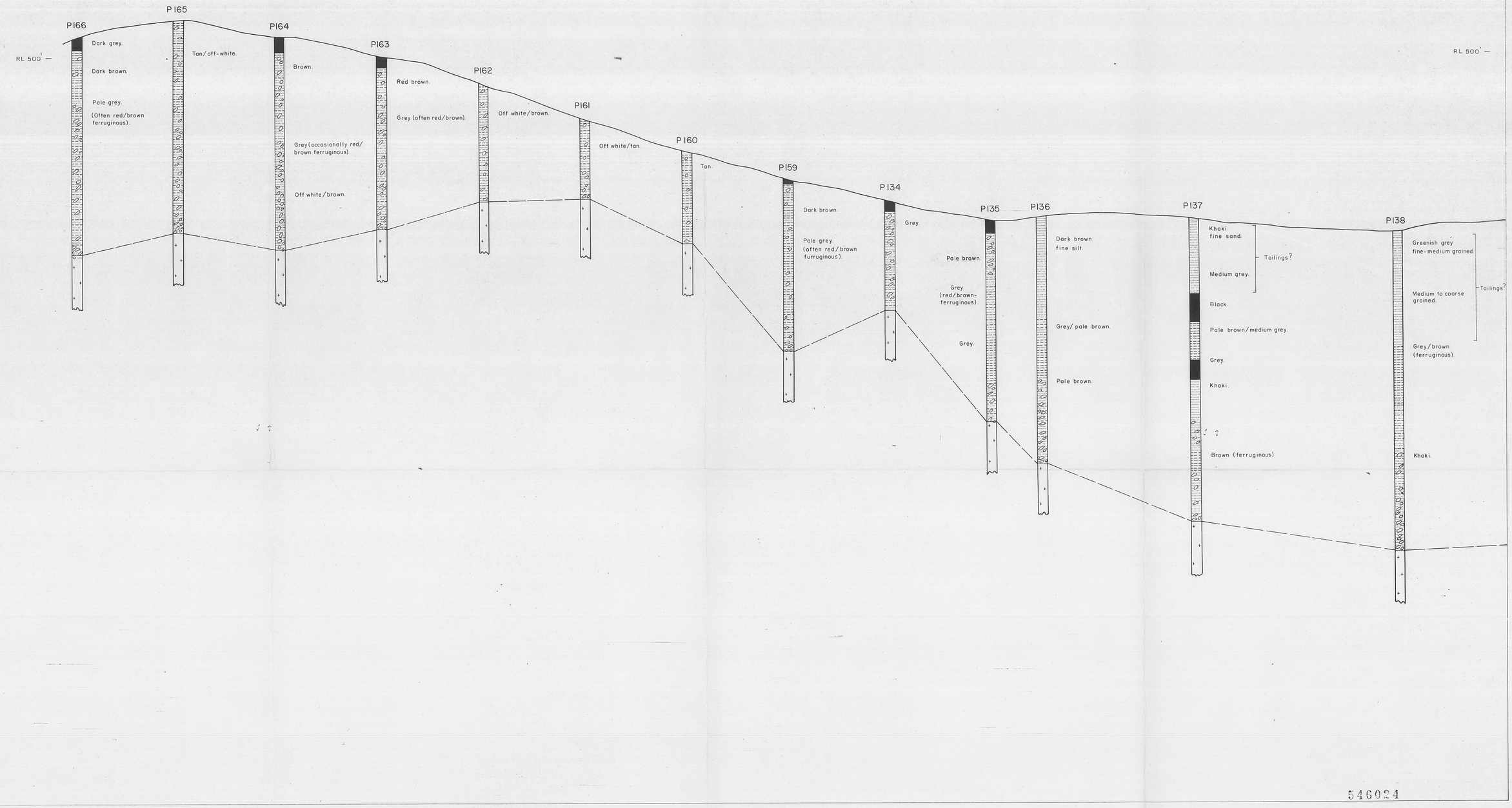
TEXAS INSTRUMENTS INCORPORATED
SERVICES GROUP
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BRISBANE AUSTRALIA

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E.L. 6/68 NORTH EAST TASMANIA

DORSET FLATS DRILL HOLE GEOLOGICAL SECTIONS

2334

PROJECT	E.L. 6/68	AUTHOR	I.M., L.J.	DATE	Dec. 1972	DWG. No.	1-176



546024

5 cm

74-1066

LEGEND

- Sand, grit, drift, gravel (sand content > 75%)
- Sand and tailings.
- Clay, silty clay, gravelly clay (clay > 75%)
- Clayey sand, sandy clay, gritty or gravelly clay (clay > 25%, sand < 75%) or (clay < 75% sand > 25%)
- Sand with abundant wash.
- Clayey sand with some wash.
- Porphyritic feldspar-biotite granite, generally decomposed to chlorite and clay minerals.
- Humus rich clay/soil.
- Top of bedrock.

Note: Assumed R.L. datum is 500' at the point 00/5N (Tree).

Horizontal Scale

Feet 25 0 25 50 75 100 Feet

Feet 5 0 5 10 15 20 Feet

Vertical Scale

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TEXINS DEVELOPMENT PTY. LTD.
E.L. 6/68 NORTH EAST TASMANIA
DORSET FLATS
DRILL HOLE 2335
GEOLOGICAL SECTIONS

PROJECT	E.L. 6/68	AUTHOR	I.M., L.J.	DATE	Dec. 1972	DWG. No	1-176

RL 485' —

P138

P139

Green-brown.

Medium-grey to red brown.

Brown.

P140

Green-grey.

Dark grey/medium grey.

Dark grey.

Light brown.

P141

Dark brown.

Brown.

Off-white/brown.

P142

Off-white/pale brown.

Green-grey.

P148

Deep green-brown.

??

Green-grey.

P144

Deep brown.

??

Off white/black.

P145

RL 485' —

Ash grey.

Green grey.

Deep grey.

Medium grey.

546025

5 cm

74-1066

LEGEND

- Sand, grit, drift, gravel (sand content > 75%)
- Sand and tailings.
- Clay, silty clay, gravelly clay (clay > 75%)
- Clayey sand, sandy clay, gritty or gravelly clay (clay > 25%, sand < 75%) or (clay < 75% sand > 25%)
- Sand with abundant wash
- Clayey sand with some wash
- Porphyritic feldspar-biotite granite, generally decomposed to chlorite and clay minerals
- Humus rich clay/soil.
- Top of bedrock.

Note: Assumed R.L. datum is 500' at the point 00/5N (Tree).

Horizontal Scale

Feet 25 0 25 50 75 100 Feet

Feet 5 0 5 10 15 20 Feet

Vertical Scale

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E.L. 6/68 NORTH EAST TASMANIA

DORSET FLATS DRILL HOLE GEOLOGICAL SECTIONS

2336

PROJECT	E.L. 6/68	AUTHOR	I.M., L.J.	DATE	Dec. 1972	DWG No	1-176

SHEET 3 OF 14 SHEETS

RL 480' —

P145

P146

Brown.

Dark brown.

Deep brown.

Off white/brown.

P147

Pale brown.

Deep brown.

Off white.

P148

Grey brown.

Green-grey.

Dark grey,

Green-brown.

P149

Green-brown.

Dark grey.

Green-grey.

P150

Green-brown.

Brown/grey.

Brown/grey.

P151

Green-grey.

Green-grey.

Khaki.

Grey/brown.

P152

Brown.

Green grey/ brown.

Green-grey.

Green-grey.

Hard granite.

Solid - granite.

RL 480' —

546026

5 cm

74-1066

LEGEND

- Sand, grit, drift, gravel (sand content > 75%)
- Sand and tailings
- Clay, silty clay, gravelly clay (clay > 75%)
- Clayey sand, sandy clay, gritty or gravelly clay (clay > 25%, sand < 75%) or (clay < 75% sand > 25%)
- Sand with abundant wash
- Clayey sand with some wash
- Porphyritic feldspar-biotite granite, generally decomposed to chlorite and clay minerals
- Humus rich clay/soil
- Top of bedrock

Note: Assumed R.L. datum is 500' at the point 00/5N (Tree).

Horizontal Scale

Feet 25 0 25 50 75 100 Feet

Feet 5 0 5 10 15 20 Feet

Vertical Scale

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E.L. 6/68 NORTH EAST TASMANIA

DORSET FLATS DRILL HOLE 2337 GEOLOGICAL SECTIONS

PROJECT	E.L. 6/68	AUTHOR	I.M., L.J.	DATE	Dec. 1972	DWG. No.	1-176

R.L. 480' —

— R.L. 480'

P152

P153

Off white/pale brown.

Black/brown.

Deep brown.

Off white/brown.

P154

Dark grey/black

Green/grey

Micaceous

P155

P156

Dark brown

Grey

P157

?

Sand/silt
(green grey)

Micaceous

P158

5 cm

546027

74-1066

LEGEND

- Sand, grit, drift, gravel (sand content > 75%)
- Sand and tailings.
- Clay, silty clay, gravelly clay (clay > 75%)
- Clayey sand, sandy clay, gritty or gravelly clay (clay > 25%, sand < 75%) or (clay < 75% sand > 25%)
- Sand with abundant wash.
- Clayey sand with some wash.
- Porphyritic feldspar-biotite granite, generally decomposed to chlorite and clay minerals.
- Humus rich clay/soil.
- ––– Top of bedrock.

Note: Assumed R.L. datum is 500' at the point 00/5N (Tree).

Horizontal Scale

Feet 25 0 25 50 75 100 Feet

Feet 5 0 5 10 15 20 Feet

Vertical Scale

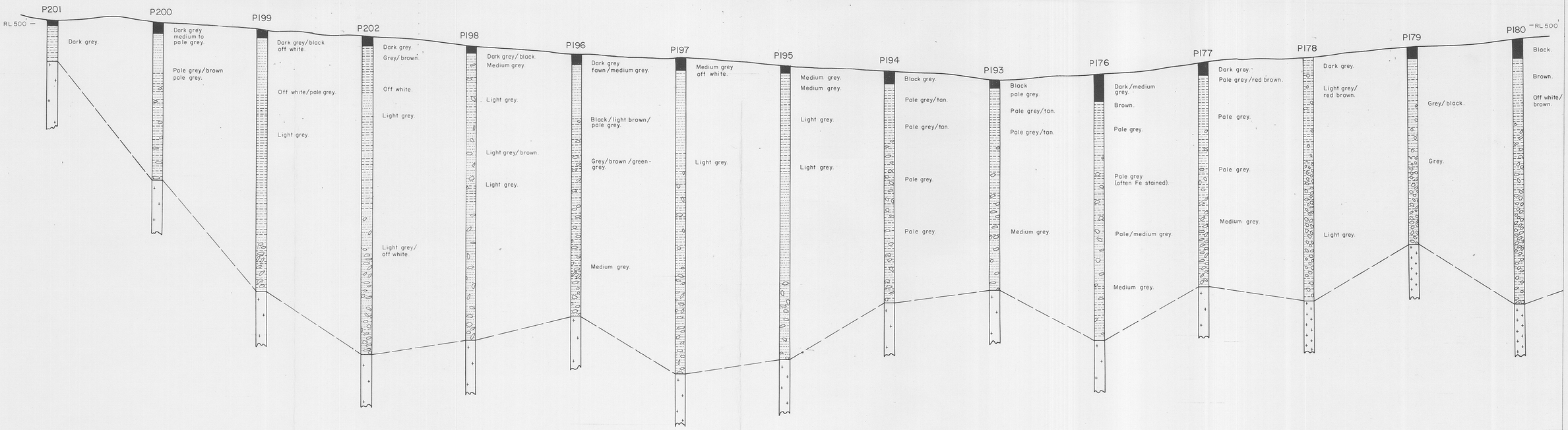
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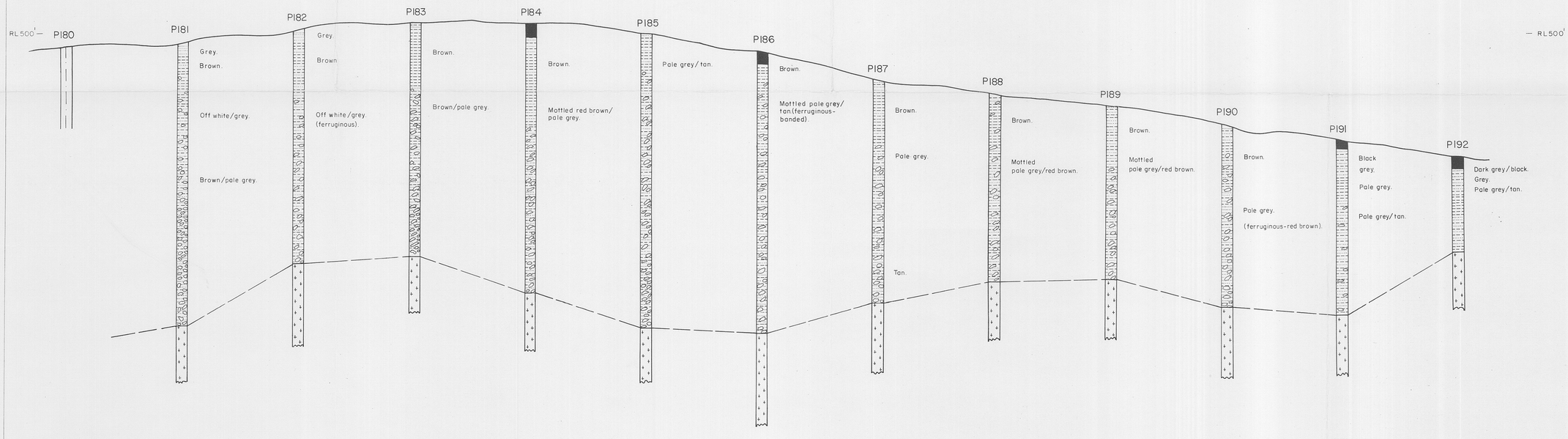
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E.L. 6/68 NORTH EAST TASMANIA

DORSET FLATS DRILL HOLE GEOLOGICAL SECTIONS

2338

PROJECT	E.L. 6/68	AUTHOR	I.M., L.J.	DATE	Dec. 1972	DWG. NO.	1-176





546028

5 cm

74-1066

LEGEND

- Sand, grit, drift, gravel (sand content > 75%)
- Sand and tailings
- Clay, silty clay, gravelly clay (clay > 75%)
- Clayey sand, sandy clay, gritty or gravelly clay (clay > 25%, sand < 75%) or (clay < 75% sand > 25%)
- Sand with abundant wash
- Clayey sand with some wash
- Porphyritic feldspar-biotite granite, generally decomposed to chlorite and clay minerals
- Humus rich clay/soil
- Top of bedrock

Note: Assumed R.L. datum is 500' at the point 00/5N (Tree)

Horizontal Scale:

Feet 25 0 25 50 75 100 Feet

Feet 5 0 5 10 15 20 Feet

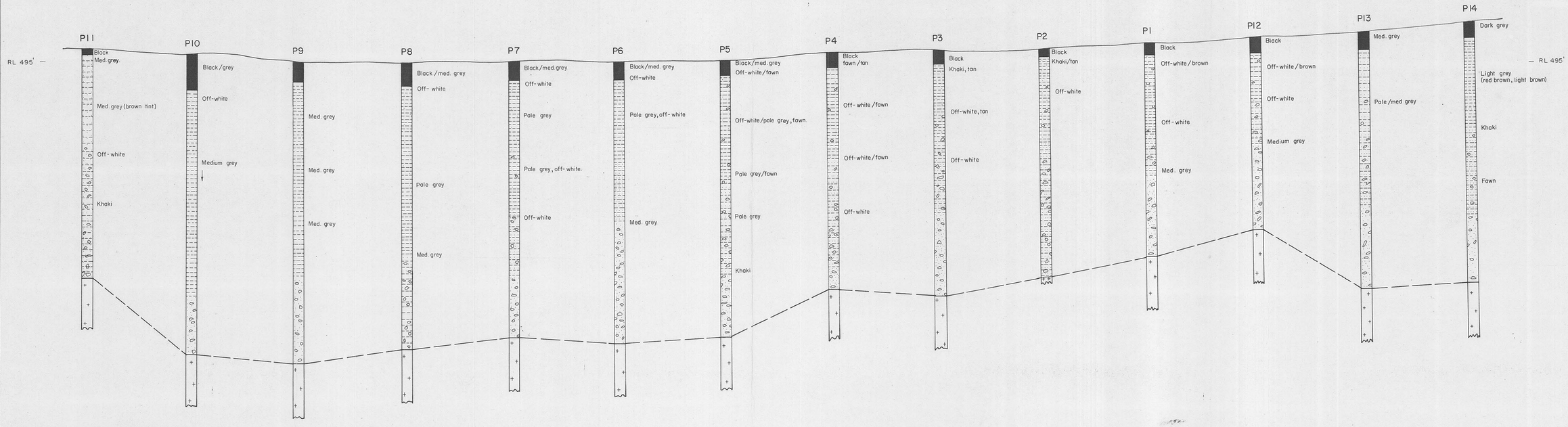
Vertical Scale

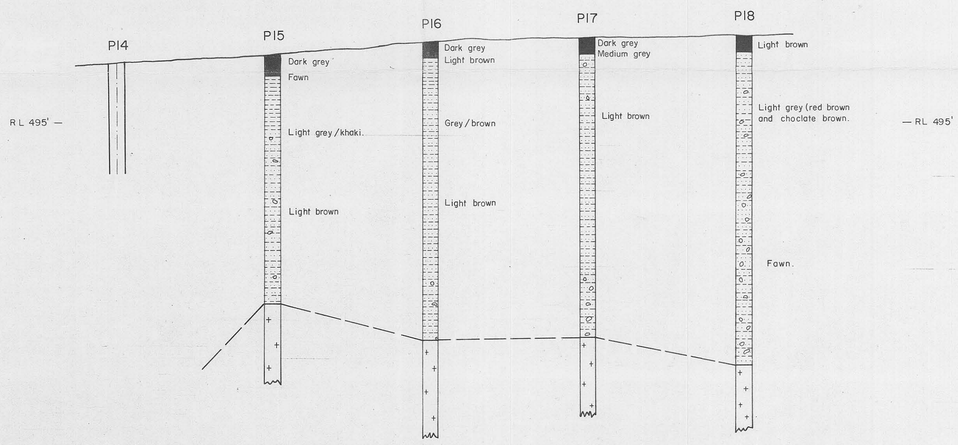
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E.L. 6/68 NORTH EAST TASMANIA

DORSET FLATS 2339
DRILL HOLE GEOLOGICAL SECTIONS

PROJECT	E.L. 6/68	AUTHOR	I.M., L.J.	DATE	Dec. 1972	DWG. No.	1-176





546029

5 cm

74-1066

LEGEND

- Sand, grit, drift, gravel (sand content > 75%)
- Sand and tailings.
- Clay, silty clay, gravelly clay (clay > 75%)
- Clayey sand, sandy clay, gritty or gravelly clay (clay > 25%, sand < 75%) or (clay < 75% sand > 25%).
- Sand with abundant wash.
- Clayey sand with some wash.
- Porphyritic feldspar-biotite granite, generally decomposed to chlorite and clay minerals.
- Humus rich clay/soil.
- Top of bedrock.

Note: Assumed R.L. datum is 500' at the point 00/5N (Tree).

Horizontal Scale

Feet 25 0 25 50 75 100 Feet

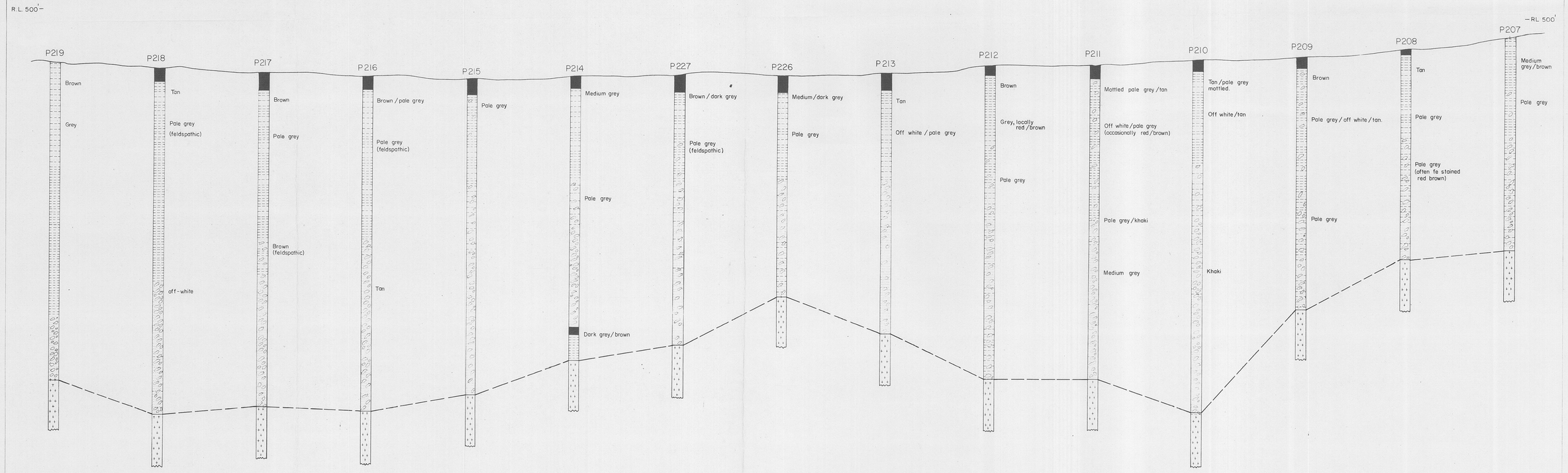
Feet 5 0 5 10 15 20 Feet

Vertical Scale

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E.L. 6/68 NORTH EAST TASMANIA
DORSET FLATS
DRILL HOLE 2340
GEOLOGICAL SECTIONS

PROJECT	E.L. 6/68	AUTHOR	I.M., L.J.	DATE	Dec. 1972	DWG. No.	1-176



5 cm

546030

74-1066

LEGEND

- Sand, grit, drift, gravel (sand content > 75%)
- Sand and tailings.
- Clay, silty clay, gravelly clay (clay > 75%)
- Clayey sand, sandy clay, gritty or gravelly clay (clay > 25%, sand < 75%) or (clay < 75% sand > 25%)
- Sand with abundant wash.
- Clayey sand with some wash.
- Porphyritic feldspar-biotite granite, generally decomposed to chlorite and clay minerals.
- Humus rich clay/soil.
- ---- Top of bedrock.

Note: Assumed R.L. datum is 500' at the point 00/5N (Tree).

Horizontal Scale

Feet 25 0 25 50 75 100 Feet

Feet 5 0 5 10 15 20 Feet

Vertical Scale

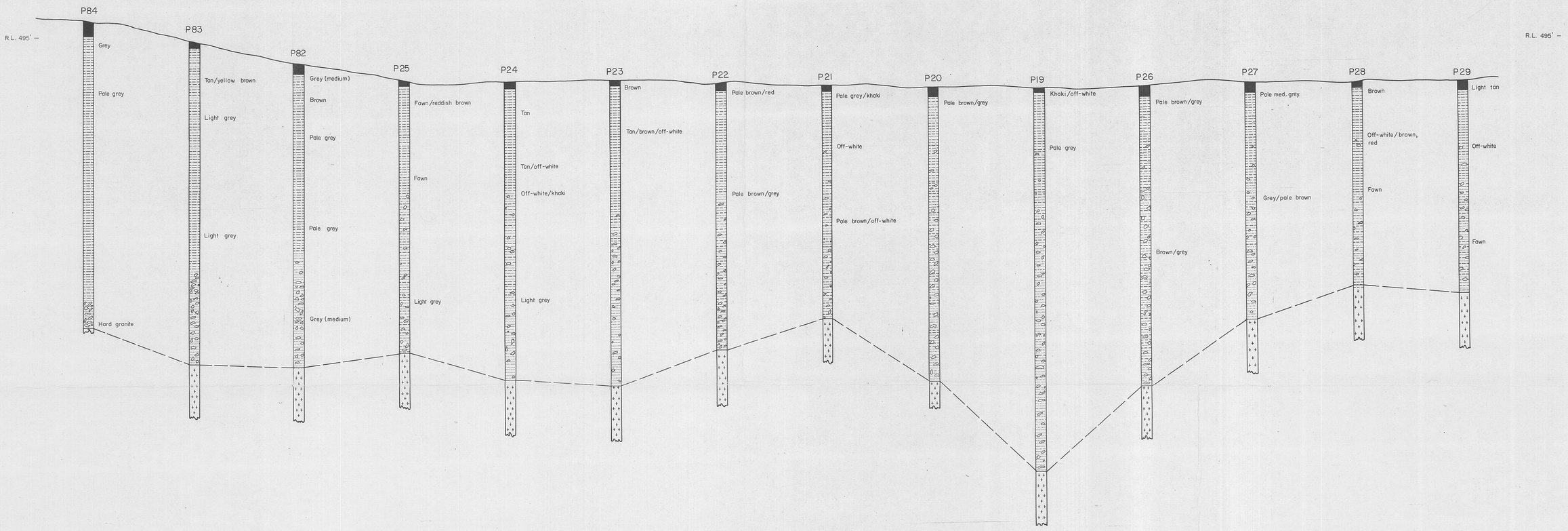
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E.L. 6/68 NORTH EAST TASMANIA

DORSET FLATS DRILL HOLE 2341 GEOLOGICAL SECTIONS

PROJECT	E.L. 6/68	AUTHOR	I.M., L.J.	DATE	Dec. 1972	DWG. NO.	1-176

SHEET 8 OF 14 SHEETS



546031

5 cm

74-1066

LEGEND

- Sand, grit, drift, gravel (sand content > 75%)
- Sand and tailings
- Clay, silty clay, gravelly clay (clay > 75%)
- Clayey sand, sandy clay, gritty or gravelly clay (clay > 25%, sand < 75%) or (clay < 75% sand > 25%)
- Sand with abundant wash
- Clayey sand with some wash
- Porphyritic feldspar-biotite granite, generally decomposed to chlorite and clay minerals
- Humus rich clay/soil
- – – – Top of bedrock

NOTE : Assumed R.L. datum is 500' at the point 00/5N (Tree)

Horizontal Scale

Feet 25 0 25 50 75 100 Feet

Feet 5 0 5 10 15 20 Feet

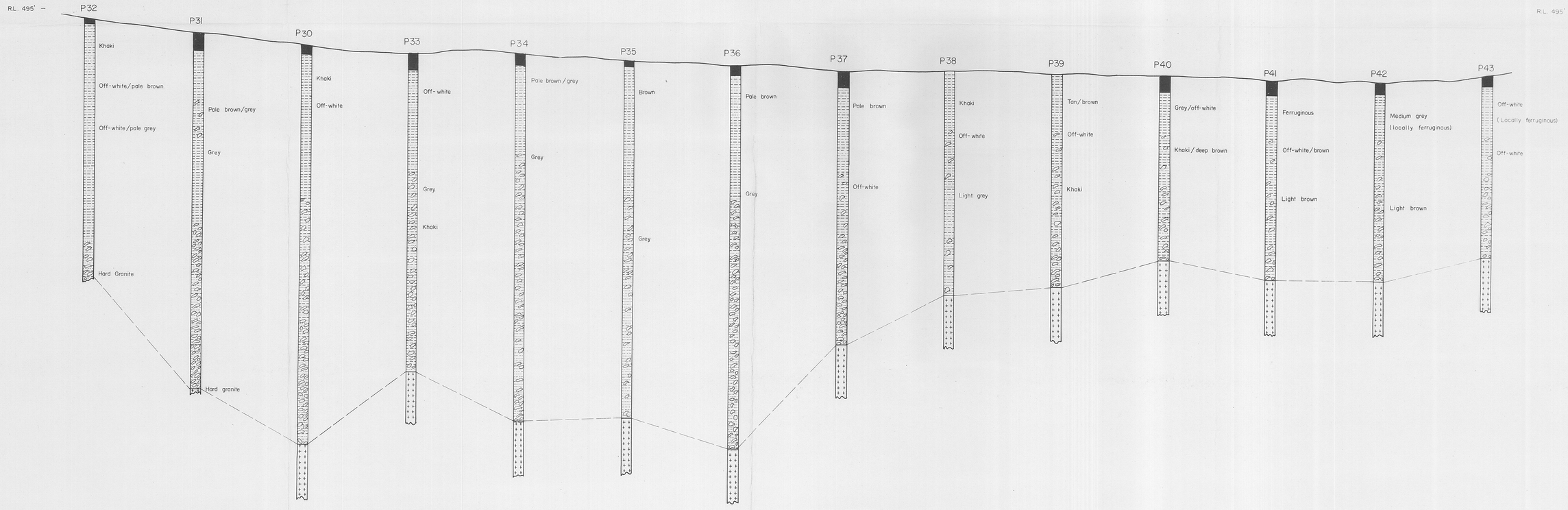
Vertical Scale

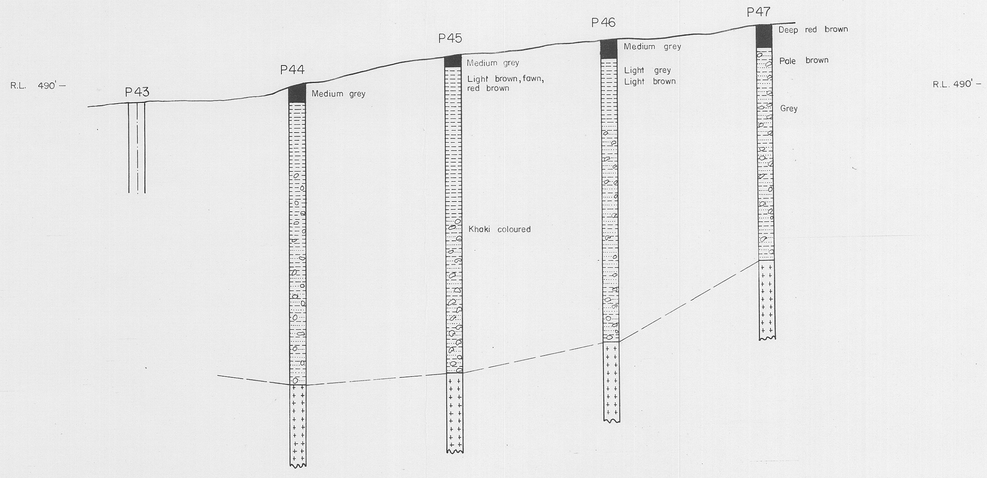
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DORSET FLATS
DRILL HOLE 2342
GEOLOGICAL SECTIONS

PROJECT	E.L. 6/68	AUTHOR	I.M., L.J.	DATE	Dec. 1972	DWG NO	I - 176





5 cm

74-1066 546032

LEGEND

- Sand, grit, drift, gravel (sand content > 75%)
- Sand and tailings
- Clay, silty clay, gravelly clay (clay > 75%)
- Clayey sand, sandy clay, gritty or gravelly clay (clay > 25%, sand < 75%) or (clay < 75% sand > 25%)
- Sand with abundant wash
- Clayey sand with some wash
- Porphyritic feldspar-biotite granite, generally decomposed to chlorite and clay minerals
- Humus rich clay/soil
- Top of bedrock

NOTE : Assumed R.L. datum is 500' at the point 00/5N (Tree)

Horizontal Scale

Feet 25 0 25 50 75 100 Feet

Feet 5 0 5 10 15 20 Feet

Vertical Scale

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BRISBANE AUSTRALIA

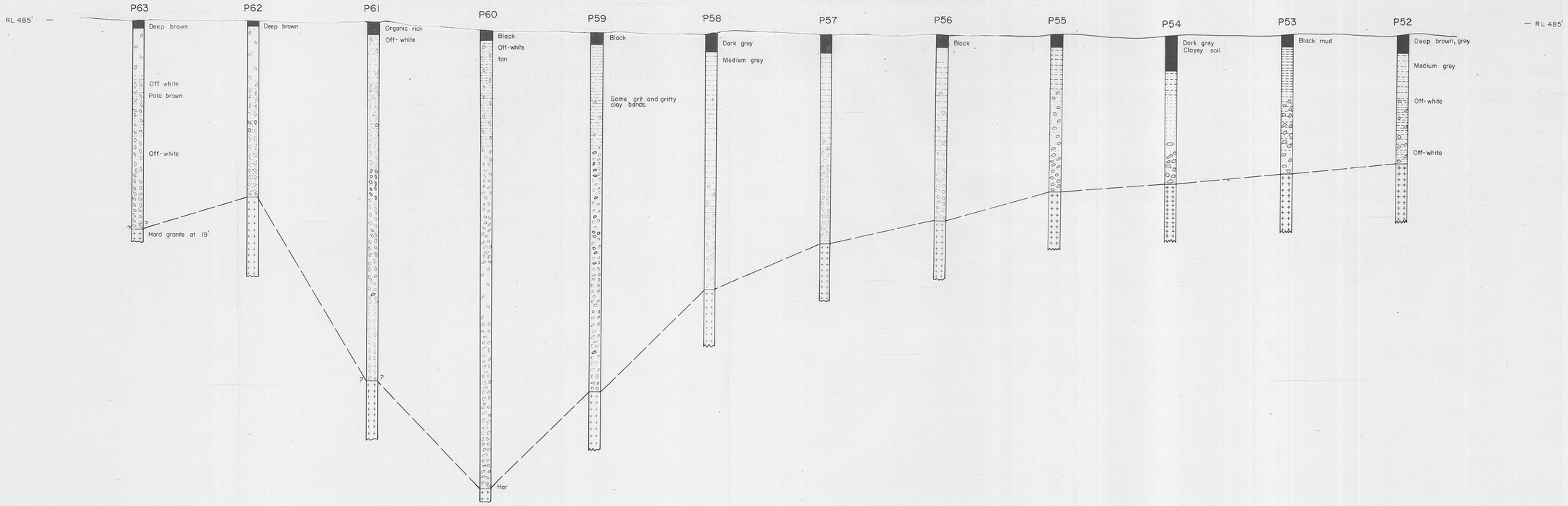
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E.L. 6/68 NORTH EAST TASMANIA

DORSET FLATS DRILL HOLE GEOLOGICAL SECTIONS

2343

PROJECT	E.L. 6/68	AUTHOR	I.M., L.J.	DATE	Dec. 1972	DWG. NO.	1-176

SHEET 10 OF 14 SHEETS



LEGEND

- Sand, grit, drift, gravel (sand content > 75%)
- Sand and tailings
- Clay, silty clay, gravelly clay (clay > 75%)
- Clayey sand, sandy clay, gritty or gravelly clay (clay > 25%, sand < 75% or (clay < 75% sand > 25%))
- Sand with abundant wash
- Clayey sand with some wash
- Porphyritic feldspar-biotite granite, generally decomposed to chlorite and clay minerals
- Humus rich clay/soil
- Top of bedrock

Note: Assumed R.L. datum is 500' at the point 00/5N (Tree).

Horizontal Scale

Feet 25 0 25 50 75 100 Feet

Feet 5 0 5 10 15 20 Feet

Vertical Scale

5 cm

546033

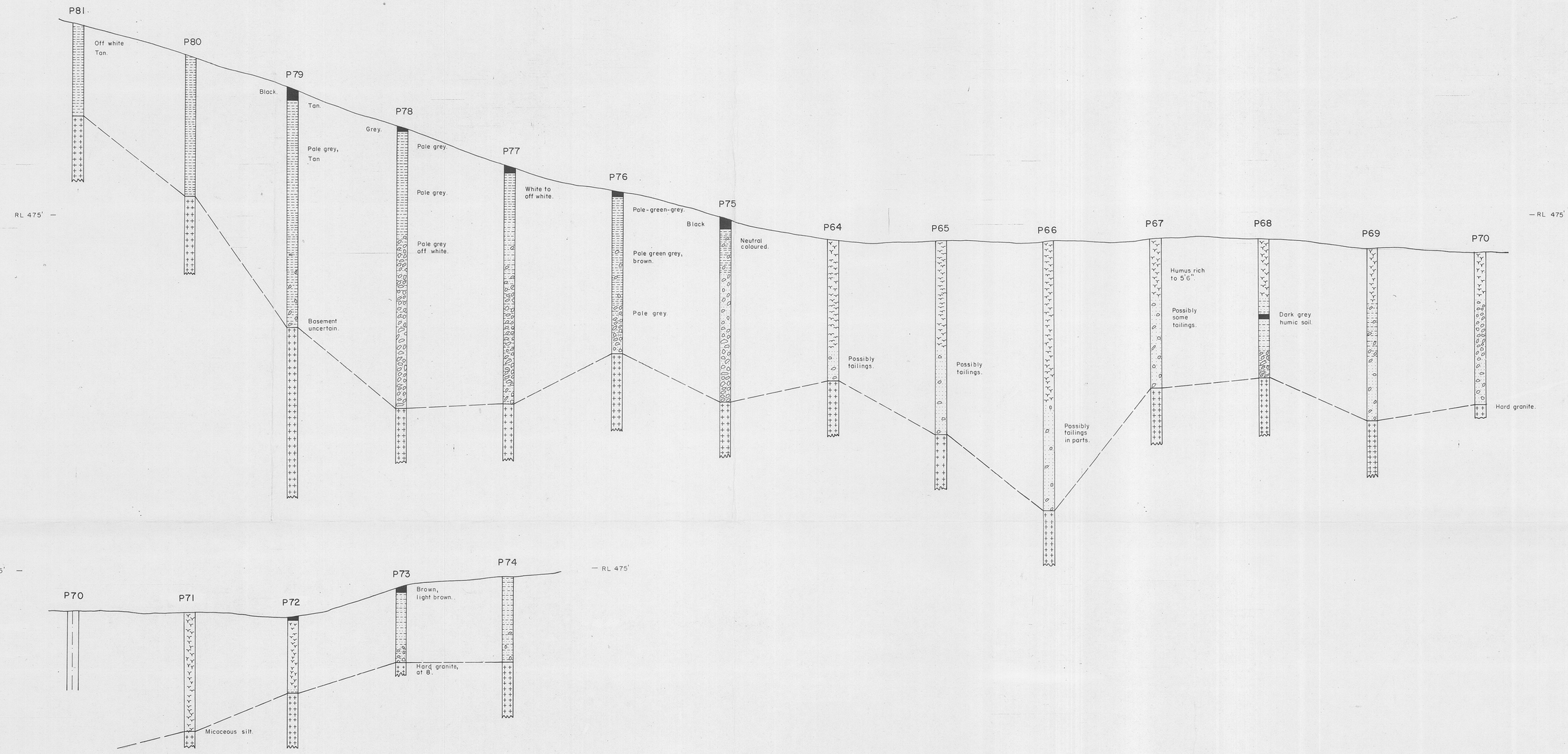
74-1066

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TEXINS DEVELOPMENT PTY. LTD.
E.L. 6/68 NORTH EAST TASMANIA
DORSET FLATS
DRILL HOLE 2344
GEOLOGICAL SECTIONS

PROJECT	E.L. 6/68	AUTHOR	I.M., L.J.	DATE	Dec. 1972	DWG No	I-176

SHEET 11 OF 14 SHEETS



LEGEND

- Sand, grit, drift, gravel (sand content > 75%)
- Sand and tailings
- Clay, silty clay, gravelly clay (clay > 75%)
- Clayey sand, sandy clay, gritty or gravelly clay (clay > 25%, sand < 75%) or (clay < 75% sand > 25%)
- Sand with abundant wash
- Clayey sand with some wash
- Porphyritic feldspar-biotite granite, generally decomposed to chlorite and clay minerals
- Humus rich clay/soil.
- Top of bedrock.

Note: Assumed R.L. datum is 500' at the point 00/5N (Tree).

Horizontal Scale

Feet 25 0 25 50 75 100 Feet

Vertical Scale

Feet 5 0 5 10 15 20 Feet

5 cm

74-1066 546034

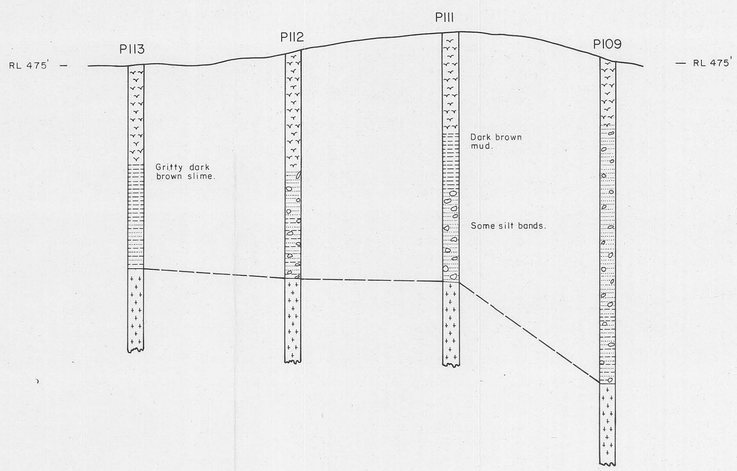
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BRISBANE AUSTRALIA

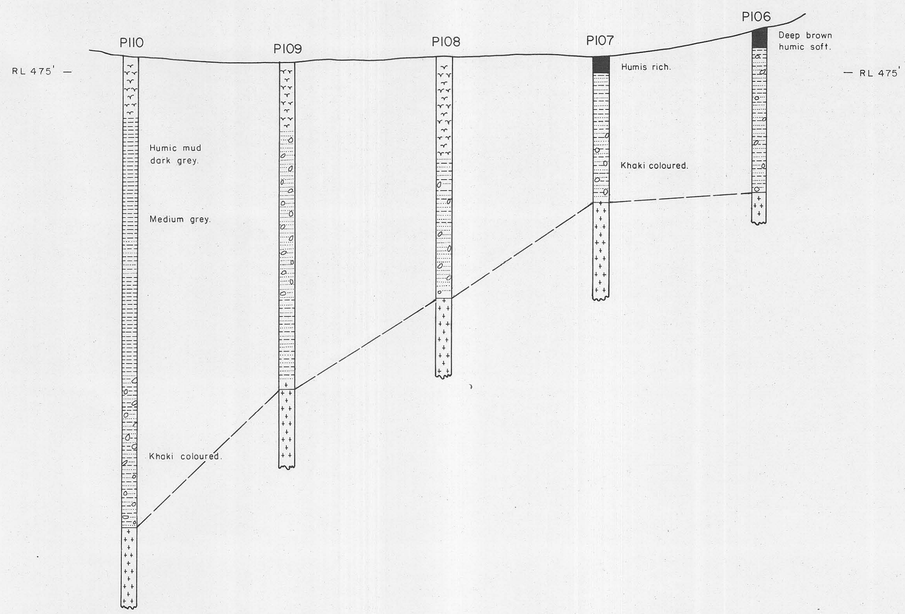
TEXINS DEVELOPMENT PTY LTD.
E.L. 6/68 NORTH EAST TASMANIA

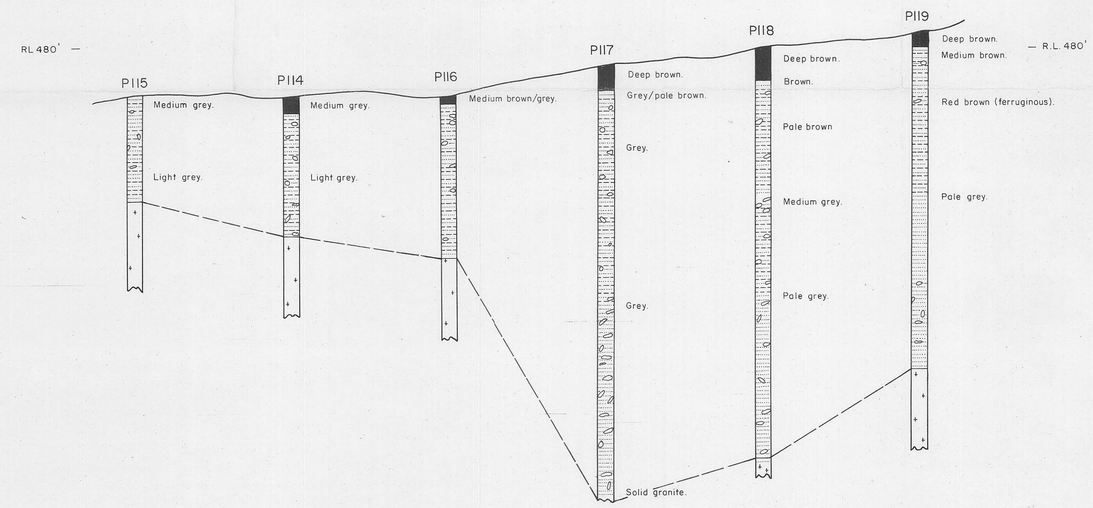
DORSET FLATS DRILL HOLE 2345 GEOLOGICAL SECTIONS

PROJECT	E.L. 6/68	AUTHOR	I.M., L.J.	DATE	Dec. 1972	DWG. NO.	1-176

SHEET 12 OF 14 SHEETS







5 cm

546035

74-1066

LEGEND

- Sand, grit, drift, gravel (sand content > 75%)
- Sand and tailings
- Clay, silty clay, gravelly clay (clay > 75%)
- Clayey sand, sandy clay, gritty or gravelly clay (clay > 25%, sand < 75%) or (clay < 75% sand > 25%)
- Sand with abundant wash
- Clayey sand with some wash
- Porphyritic feldspar-biotite granite, generally decomposed to chlorite and clay minerals
- Humus rich clay/soil
- Top of bedrock.

Note: Assumed R.L. datum is 500' at the point 00/5N (Tree).

Horizontal Scale

Feet 25 0 25 50 75 100 Feet

Feet 5 0 5 10 15 20 Feet

Vertical Scale

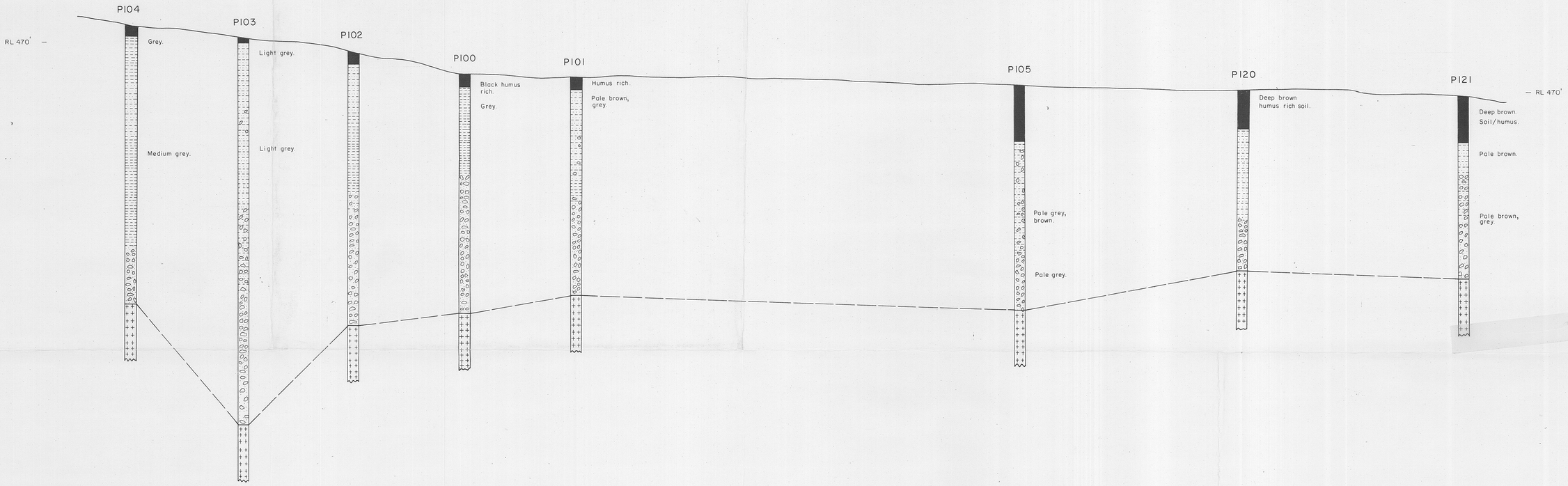
TEXAS INSTRUMENTS INCORPORATED
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GEOPHOTO RESOURCES CONSULTANTS
BRISBANE AUSTRALIA

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E.L. 6/68 NORTH EAST TASMANIA

DORSET FLATS DRILL HOLE GEOLOGICAL SECTIONS

2346

PROJECT	E.L. 6/68	AUTHOR	I.M., L.J.	DATE	Dec. 1972	DWG. NO.	1-176



546036

74-1066

5 cm

LEGEND

- Sand, grit, drift, gravel (sand content > 75%)
- Sand and tailings.
- Clay, silty clay, gravelly clay (clay > 75%)
- Clayey sand, sandy clay, gritty or gravelly clay (clay > 25%, sand < 75%) or (clay < 75% sand > 25%)
- Sand with abundant wash
- Clayey sand with some wash
- Porphyritic feldspar-biotite granite, generally decomposed to chlorite and clay minerals
- Humus rich clay/soil
- Top of bedrock.

Note: Assumed R.L. datum is 500' at the point 00/5N (Tree).

Horizontal Scale

Feet 25 0 25 50 75 100 Feet

Feet 5 0 5 10 15 20 Feet

Vertical Scale

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BRISBANE AUSTRALIA

TEXINS DEVELOPMENT PTY. LTD.
E.L. 6/68 NORTH EAST TASMANIA

DORSET FLATS DRILL HOLE 2347 GEOLOGICAL SECTIONS

PROJECT	E.L. 6/68	AUTHOR	I.M., L.J.	DATE	Dec. 1972	DWG. No.	1-176