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GEOPHOTO MINERALS REPORT 1973/13

PERCUSSION DRILLING -

RINGAROOMA RIVER

E.L.6/68, N.E. TASMANIA.

Prepared by

GEOPHOTO RESOURCES CONSULTANTS

for

TEXINS DEVELOPMENT PTY. LIMITED

I.R. Mortimore

1974

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INTRODUCTION

Late in 1970, B.M.I. approached Texins regarding a possible joint venture agreement in which the two companies would jointly explore and exploit tin bearing river gravels within the Ringarooma River. At that stage, the Ringarooma River was not viewed by Texins as holding sufficient potential to warrant investigation as an alluvial tin prospect. The matter went no farther.

This status was maintained until late in 1971 when B.M.I. once again made informal representations to Texins regarding our intentions in this area. Talks were held in Launceston with Z. Kociumbas, B.M.I.'s Tasmania Manager, who outlined their plans for the area and the means by which B.M.I. would participate in any joint venture. These terms effectively amounted to our carrying out virtually all exploration work at our expense with B.M.I. merely lending their mining expertise to the operation once it was at a proven stage where mining would be the next feasible step.

At this point negotiations were again halted as the terms appeared, even at this early stage, to be unfavourable from the Texins stand-point.

Late in 1972, B.M.I. began a comprehensive evaluation of the stretches of the Ringarooma River which lay within their EL24/70, obtaining options on those sectors of the river held under lease to local miners and prospectors.

The results of this work, which involved sampling of the upper 2 feet of the river gravels at 200 foot intervals over a 4.59 mile section of the river and 3 drill holes to basement, were summarised in a report by Dr. J.C. Standard who computed reserves existing of 1,313,000 cu. yds. grading 2.79 lbs/cu. yd.

SnO₂ (70% Sn) to an average depth of 12 feet.

Texins meanwhile, during 1972, were engaged in an evaluation of the potential of unworked sections of the Dorset Flat. An old abandoned river channel of the Ringarooma River was identified carrying workable grades, although restricted in yardage.

This lead when followed upstream, ran into the present course of the Ringarooma River and was not tested from this point on, that is southwards.

The two factors, our findings on the Dorset Flat and B.M.I.'s programme some 9 to 10 miles upstream, which, although not completed at that stage, was, through the grapevine, presenting interesting results, prompted Texins into theorising that the section between B.M.I.'s EL24/70 and the Dorset Flat may offer prospects of yielding tin bearing ground of economic grade. The yardage was potentially large, possibly of the order of 15,000,000 cu. yds.

Plans were formulated early in 1973 to commence a testing programme on the alluvials over this stretch of river. These plans were documented in the "Status Report on the Alluvial Tin Prospects" - Geophoto Minerals Report 1973/9 dated 23rd March, 1973.

THE PROSPECT AREA

As outlined in the above mentioned report, the recent course (Post Tertiary) of the Ringarooma River has cut a deeply incised channel into rocks comprising shales, siltstones and quartzites of the Mathinna Beds (Silurian) and granites,

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adamellites and granodiorites of the Blue Tier batholith (Devonian).

From the boundary of B.M.I.'s EL24/70, following the river downstream, one passes through a $\frac{5}{8}$ mile section carrying river gravels over a width up to 150 yds. and to a depth between 10 and 18 feet (B.M.I. drilling results).

From the small 5 acre lease (116M/68) of Hyde and Trevenna, the Ringarooma River is narrow and rocky over a 2 mile stretch with little or no alluvial material present.

Near Herrick, the river opens out to be up to 200 feet across with wide alluvial flats on either or both banks. Here the river is held under lease to Trevenna and/or Hyde (40M/70 - 15 acres, 85M/64 - 22 acres and 41M/70 - 15 acres) for a distance of just over one mile.

From this point on, north-eastwards, the river is held wholly within EL6/68 until South Mt. Cameron is approached where the boundary with B.M.I.'s EL24/70 truncates the Texins section of the river.

The Dorset Flats, just south of South Mt. Cameron, across which the Ringarooma River has meandered creating a broad river flat, has largely been worked out by the Dorset Tin Dredge between 1944 and 1963.

The prospect area within EL6/68 was split into two sections for the preliminary testing.

The two sections were:-

Area A

Upstream from the Trevenna/Hyde mineral lease 116M/68

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to the western boundary of EL6/68.

Area B

Downstream from Trevenna's mineral lease 41M/70 to the southern limit of the Dorset Flat.

Since the decision to go ahead with, and a start made on, a preliminary evaluation of these two areas, area A has been excluded from EL6/68 by the Minister of Mines, together with the narrow, rocky section near Moorina. They have been granted to B.M.I. under mineral leases 49M/73 and 50M/73. B.M.I. therefore now controls the river through to Herrick.

The position regarding the Trevenna/Hyde leases close to Herrick, as to whether B.M.I. have secured options on these leases, is uncertain. Trevenna, at this moment, is engaged in a tin mining operation at the Mutual Bridge (within B.M.I.'s area of interest) apparently independent of B.M.I.

Area B was selected for the initial work, largely from the point of view of its potentially large yardage.

Between Trevenna's lease 41M/70 and the southern end of the Dorset Flat, a distance of 5.8 miles, the present river bed was estimated to carry a yardage in excess of 8,000,000 cu. yds. (taking an average width of 80 yds. and a depth of 10 yds.). This could reasonably be expected to be increased by between 25 and 35% by taking in additional yardage contained within and below older river terraces, which are, developed on either bank, along much of the rivers length. No detailed mapping of these terraces was completed, but a reconnaissance of the area served to indicate the extent of their development.

Should the results warrant, additional yardage could be

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had by securing options on mineral leases 40M/70, 85M/64 and 41M/70, yielding a further estimated 2.5 million cubic yards of alluvial material.

Unworked sections of the Dorset Flat could further increase the yardage, dependent on the scale and type of operation envisaged.

SURFACE SAMPLING OF THE RIVER GRAVELS

From the inception of the programme to test, by drilling, the alluvials within the river, problems were encountered with regard to the unsettled nature of the weather which resulted in the river carrying a considerably increased volume of water compared to the previous 6 months (October - March).

In early June, vehicle tracks to the river were completed to provide access for the ensuing drilling programme.

However, continued unfavourable conditions precluded this drilling further delaying an evaluation of grade potential.

It was then decided to initially test the alluvials by surface testing to a depth of approx. 2 feet (similar to B.M.I.'s programme).

The volume of water within the river also severely curtailed the value of this exercise with only 22 samples being recoverable from 7 locations over a 2.3 mile length of river from Trevenna's 41M/70 lease to the Pioneer Mine water supply pipe column. (See drawing No. A-196).

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The assay values were erratic, ranging from 0.02 through to 2.32 lbs/cu. yd. SnO_2 (71% Sn) with an average value of 0.44 lbs/cu. yd. SnO_2 .

No real significance could be derived from the results with no distinct falling off of values downstream as might have been expected. Naturally they could not be taken as indicative of values to be encountered at depth.

PERCUSSION DRILLING

(a) Aim

The aim of this preliminary drilling programme was to give some indication of the depths and grades likely to be encountered along the length of the Ringarooma River prospect area and to ascertain whether these figures were sufficient to satisfy the minimum requirements (combined yardage-grade) upon which a continued evaluation and/or feasibility could be based.

These minimum requirements were in fact a double set of figures based on two different grades. Each grade, with a specific yardage, would form the basis upon which further studies could be made on the viability of an operational method particularly suited to that grade and yardage.

(i) If a yardage of the order of 15,000,000 cu. yds. was indicated and an average grade of 0.5 lbs/cu. yd. SnO_2 or above evident in the early drilling, then there was scope for consideration of the prospect as amenable to dredging.

A dredge treating a yardage of around 1,500,000 cu. yds. per annum would have an operating life of 10 years.

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Naturally the Dorset Tin Dredge which has lain idle, just north of Gladstone, for the past two years, came into these considerations.

Over the final years of its operating life it was reportedly just breaking even in its operations, producing approximately 100 tons of Sn. concentrate per annum.

Over the past two years a mainland based company has been negotiating to lease or buy the dredge to work the alluvial flats of Fosters Marshes, further to the north from the dredge's present location. Informal representations were made to Texins regarding a joint venture. In the talks, operating costs of \$220,000 per annum were mentioned which is consistent with actual operating figures as illustrated in the above paragraph.

No production figures or costs of Australian tin dredge operations are on hand to give an indication of grade of material required to make such an operation a viable one.

A dredging operation, proposed but never made operational, at Greenbushes in Western Australia was based on reserves of 21,000,000 cu. yds. grading 0.45 lbs/cu. yd. SnO_2 (70% Sn) and 0.038 lbs/cu. yd. Ta_2O_5 to an average depth of 15 feet.

Dredges on dredging properties in the Mt. Garnet area of N.E. Queensland are reportedly operating on grades ranging between 0.42 and 0.52 lbs/cu. yd. SnO_2 .

Malaysian/Thailand tin dredging operational costs during 1970/71/72 ranged between 10.6 and 50.0 U.S. cents per cu. yd. with an average cost around 19.5 U.S. cents per cu. yd.

Many of these dredges are large, treating in excess of

3 million cu. yds. per annum which therefore reduces the cost per cu. yd. Dredges treating 1 to 2 million cu. yds per annum operated on costs ranging between 19.6 U.S. cents and 50.0 U.S. cents per cu. yd., averaging around 29.0 U.S. cents per cu. yd. The average grade was 0.50 lbs/cu. yd. SnO₂ for these smaller dredge operations.

The Dramin dredge operating in Portugal in 1971 treated 1.44 million cu. yds. at a cost of approximately 18 cents per cu. yd. The grade of material was 0.258 lbs/cu. yd. Sn.

Labour costs, taxation structures, equipment costs etc. etc. vary considerably from country to country with labour costs in particular being undoubtedly greater in Australia than in the two examples listed above.

Further with the inflationary pressures experienced in the past 12 months, these costs could be considerably out of date.

However the figures are some guide in estimating a grade, assuming the accompanying yardage exists, upon which further evaluation and feasibility work could be based.

The grade for this particular project was set at 0.50 lbs/cu. yd. SnO₂ (70% Sn) or 50 cents/cu. yd. at present market prices (\$32.18 per unit).

(ii) Should the yardage be found to be less than the indicated 15,000,000 cu. yds. then the concept of utilising the Dorset, or any other, dredge would be dropped.

A target of at least 2,000,000 cu. yds. would be then set with an average grade of 1 lb/cu. yd. SnO₂ or more.

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An operation of the scale and type B.M.I. is at present mounting on the Ringarooma River could then be envisaged and feasibility based on this.

(b) Programme

With these objectives, two lines of drill holes were proposed, one close to Trevenna's mineral lease 41M/70 and a second approximately 1 1/4 miles downstream.

Dependent on the results from this drilling, further lines would be planned.

All drill hole locations were determined by ease of access to the river and ease of movement once in the river bed itself.

With the advent of more settled weather, drilling was able to commence at drill holes location No. 1 in mid-August.

Between this time and mid-October 33 holes were drilled at 5 separate locations, the final 16 holes being at 3 additional locations, following the receipt of interesting results from location No. 1, in particular.

Drilling contractors using a cable tool percussion rig (churn-drill) were employed throughout the programme.

The rig was moved by either tractor or bulldozer.

All holes were cased (5 inch casing) with samples being recovered by drive pump within the casing.

All samples were volumed by specific gravity/weight determination and panned to a heavy mineral fraction before

assay for tin and/or gold.

Plans of the individual drill holes locations (5) are attached together with their relative positions along the river (drawing No. A-196).

Sections along the individual drill lines at each location are also attached giving lithological data, sample intervals, assay results and average hole values - drawings A-212, A-213, A-214, A-215 and A-216.

These plans and sections are basically self explanatory regarding particular features of the individual holes and locations.

REVIEW OF RESULTS

Treated line by line, the following relevant data is obtained.

Line 1, Drill Hole Location No. 1 (8 holes - see plan)

This line, located furtherest upstream within the prospect area, was anticipated to carry the most interesting results. This it did,

Excluding Hole RP8, which was drilled closest to the granite on the west bank and failed to encounter any significant values, and Hole RP7, which was drilled midway between Holes RP2 and RP3 in an attempt to attain a true granite basement but which merely duplicated the results of these holes and again failed to penetrate past 26 feet, an average value of 1.18 lbs/cu. yd. SnO₂ (70% Sn) can be computed for the combined zones

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of influence of Holes RP1 to RP6 - a width of 110 yds. - to an average depth of 33 feet.

This value is strongly influenced by Hole RP1 and RP4 which both carried very high tin values below 30 feet and 25 feet respectively.

Holes RP2 and RP3, and later RP7, failed to penetrate to these depths due either to the existence of a rise in the granite basement between RP1 and RP4 or to the inability of the casing to penetrate a hard layer of compact sediments, wash pebbles or wood. Which of these alternatives was the case is uncertain.

This problem of interpretation was encountered on a number of occasions throughout the drilling programme making assessment of true bottom difficult. Very heavy Mathinna cobble wash (grey quartzite predominantly) presented a hard barrier which was often impenetratable. Attempts to persevere with driving the casing were painfully slow, resulted in "heaving" of the sample within the casing and often took a toll of the equipment with broken drive shoes and drive pumps - costly in downtime while replacements were sought.

On Line 1, 6 of the 8 holes encountered similar problems. Three of these (RP4, RP5 and RP6) were probably on or very close to granite basement. Within Holes RP2, RP3 and RP7, it is feasible that they have in fact encountered a rise in the granite basement and that Hole RP1 marks an old narrow channel of the river.

Of interest to note is the fact that the tin bearing horizons in Hole RP1, lithologically, were peculiar to this hole only within the whole programme of 33 holes, apart from

similarities within the lower sections of Holes RP32 and RP33 on Line 5.

Gold values to 0.56 dwts/cu. yd. were recorded in the lower sections of Holes RP1 and RP4.

The more easterly holes drilled, RP5 and RP6, were within the present river bed. Values fell off with depth, in contrast to the earlier holes, with the higher values being encountered in the upper 10 feet. Average values for these two holes were low, 0.20 lbs/cu. yd. SnO₂ and 0.29 lbs/cu. yd. SnO₂ respectively.

Line 2, Drill Hole Location No. 2 (9 holes - see plan)

Located approximately 1 $\frac{1}{4}$ miles downstream from location No. 1, the line was drilled across the inside curve of a wide abandoned sweep of the river, with the final 3 holes drilled within the present river bed.

An average value of 0.20 lbs/cu. yd. SnO₂ over the combined zones of influence of Holes RP9 to RP17 can be calculated. This is over a width of 148 yds. to an average depth of 42 feet.

Again this value is influenced by the higher values within two holes, RP16 and RP17.

The four deep holes, RP9 to RP12 (49 or 50 feet deep), carried very heavy wash (Mathinna cobble) over the lower 10 to 20 feet but the tin values were generally poor, < 0.41 lbs/cu. yd. SnO₂, one exception being 1.48 lbs/cu. yd. SnO₂ in the lower 5 feet of Hole RP10.

Holes RP15 to RP17, drilled within the river bed gave an

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average value of 0.35 lbs/cu. yd. SnO₂ to an average depth of 39 feet. In general, values were average to good over the upper 10 to 15 feet and good below 35 feet.

Hole RP16 carried interesting gold values to 0.63 dwts/cu. yd. over the lower 6½ feet.

Holes RP9, RP13, RP14 and RP15 failed to give undisputed evidence that a granite basement had been attained.

Line 3, Drill Hole Location No. 3 (4 holes - see plan)

With the completion of Lines 1 and 2, it was decided that the results obtained, particularly from Line 1, were encouraging enough to continue drilling at 3 further locations.

Line 3 was located approximately ¼ mile downstream from the Pioneer bridge and also downstream from the confluence with the Wyniford River (½ mile) and the old abandoned course of the Wyniford River (120 yards).

All holes were drilled within the present river bed and values were found to be more consistent through the length of each hole than previously experienced upstream.

An average value of 0.29 lbs/cu. yd. SnO₂ can be computed for the zones of influence of the 4 holes - a width of 90 yds. - to an average depth of 29 feet.

Again no direct evidence of a true granite basement being encountered was obtained in any of the 4 holes. In Hole R019 some perseverance revealed a number of large granite boulders over the lower 5 feet which when eventually broken were superseded by further boulders. While this was taking

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place, the suction created within the casing caused "heaving" with greatly increased volumes of samples being recovered and some reliability of the results lost.

Line 4, Drill Hole Location No. 4 (5 holes - see plan)

Line 4 was located approximately 250 yds. upstream from the Pioneer Mine pipe column.

All holes were drilled within the present bed of the river.

Over a width of 80 yds., within the zones of influence of Holes RP22 to RP26 an average value of 0.33 lbs/cu. yd. SnO₂ can be computed to an average 38 feet depth.

As in the case of the holes within the river bed on Line 2 values over the upper 10-15 feet were generally average to good with a falling off in values with depth. More interesting values to 2.25 lbs/cu. yd. SnO₂ were found in the lower sections of Hole RP24, below 40 feet.

In all holes, the granite basement was not positively identified although in Holes RP23, RP25 and RP26, there were strong indications that the basement had been reached.

Line 5, Drill Hole Location No. 5 (7 holes - see plan)

The fifth and final line of holes was located approximately $\frac{2}{3}$ mile upstream from Line 4, approximately $\frac{1}{3}$ mile downstream from Line 2.

Four holes were drilled within the present bed of the

river with an additional 3 completed in a similar situation to that on Line 2, an old abandoned sweep of the river, now terraced above the present course.

The four holes drilled within the river bed, RP27 to RP30 yielded an average value of 0.24 lbs/cu. yd. SnO₂ to an average depth of 25 feet over their combined zones of influence amounting to 70 yds. in width. The higher values within these holes were recorded in the upper 10 feet.

The final three holes of the programme returned a low average value of 0.13 lbs/cu. yd. SnO₂ to an average depth of 39 feet. Significant values were recorded only in the lower 2 to 5 feet of Holes RP33 and RP31.

For the whole line an average value of 0.18 lbs/cu. yd. SnO₂ to an average 32 feet depth can be computed over a width of 150 yds. - the zone of influence of holes RP27 to RP33.

Of the 7 holes drilled only 3 failed to establish a definite granite basement.

In view of the maximum depths recorded on Line 2 (50 feet) and Line 4 (48 feet), it was anticipated comparable depths would be attained along this line. The deepest section, it would appear, passes between RP31 and RP30. This remained untested.

CONCLUSIONS

From the above review of the results, certain conclusions are self evident.

First and foremost, it is evident that grades encountered

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from drill location No. 2, north-eastwards, will not support a mining operation of any description based on present economics.

A summary of the grades encountered:-

Grade - lbs./cu. yd. SnO₂ (70% Sn)

	Line 1	Line 2	Line 5	Line 4	Line 3
Overall Grade (Top to bottom)	1.18(6 holes)	0.20(9)	0.18(7)	0.33(5)	0.29(4)
Grade within present river bed	0.25(2 holes)	0.35(3)	0.24(4)	0.33(5)	0.29(4)
Grade with present river bed (Top 10ft.)	0.62(2 holes)	0.50(3)	0.39(4)	0.43(5)	0.20(4)

It can be seen from these figures that certain trends are established.

In the overall grade figures, where the river (present bed plus terrace) is at its widest, the grades fall away i.e. Lines 2 and 5.

Grades within the present river bed remain basically consistent ranging between 0.24 and 0.35 lbs/cu. yd. SnO₂.

The upper 10 feet within the present river bed comprising coarse sands and grits with abundant wash material (angular to well rounded - basalt, granite, quartz, Mathinna cobble, "clinker"), was largely derived as tailings from the numerous, often large, alluvial mines upstream. Poor recoveries and the flood of 1929, as Standard has pointed out in his report to B.M.I., are generally thought to have resulted in the redeposition of cassiterite

downstream from Derby. B.M.I. has found the economic grades in the upper few feet to fall off in value as traced downstream, as would be expected.

This trend is evident in the Texins drilling with grades in the upper 10 feet decreasing as one moves downstream.

The Wyniford River was expected to have exerted some influence on values in Line 3 but this has not been reflected in these results.

Drill hole location No. 1 gave the only results which warrant some consideration. Here, as noted above, an average value of 1.18 lbs/cu. yd. SnO_2 could be computed for the line using 6 of the 8 holes drilled.

However in considering this value and its significance, the following points must be noted.

The value was strongly influenced by very good tin values in the lower sections of holes RP1 and RP4.

Further, approximately $1\frac{1}{4}$ miles downstream, where the second drilling location (No. 2) was situated, the values recorded had fallen off dramatically with an average value for this line of only 0.20 lbs/cu. yd. SnO_2 . Values comparable with those of Line 1 were encountered in only two holes (lower 5 feet and $6\frac{1}{2}$ feet of Holes RP10 and RP16).

The lithology of the tin bearing horizons in Hole RP1 was not duplicated in any hole along Line 2. The character of the sediments in Line 2 had distinctly changed over the distance between Line 1 and Line 2.

The yardage existing between Line 1 and Line 2 is estim-

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ated at approximately 1,750,000 cu. yds.

This yardage in itself is below that set as a basis upon which further evaluation could be mounted, assuming an average value of 1 lb/cu. yd. SnO_2 existed. With the grades recorded in Line 2, it is doubtful the average grade within this stretch of the river does approach 1 lb./cu. yd. SnO_2 .

The fact that the high values in Line 1 were encountered within two holes only, and in Hole RP1 in particular, suggests possibly that RP1 marks the location of an old abandoned gutter of the Ringarooma River which has been preserved by the recutting and straightening of the present river.

Within other sections of the river, both upstream from and below Line 1, where the river has been confined between steep granite banks and has maintained a straight course, it is probable such abandoned gutters do not exist with the original sediments being redistributed downstream as the Ringarooma River has continued in its development and cut deeper.

The final conclusion must be that the grades, as defined by the drilling, and the projected yardages are not favourable and do not support any prognosis that combined grades and yardages exist upon which a mining operation could be mounted, be it by dredging, mechanical/dragline or hydraulic methods.

RECOMMENDATIONS

The estimated 2.5 million cu. yds. of material within the Hyde/Trevenna leases, upstream from Line 1, remain untested but the results gained within the Texins prospect area do not warrant the expense in negotiating options on these leases

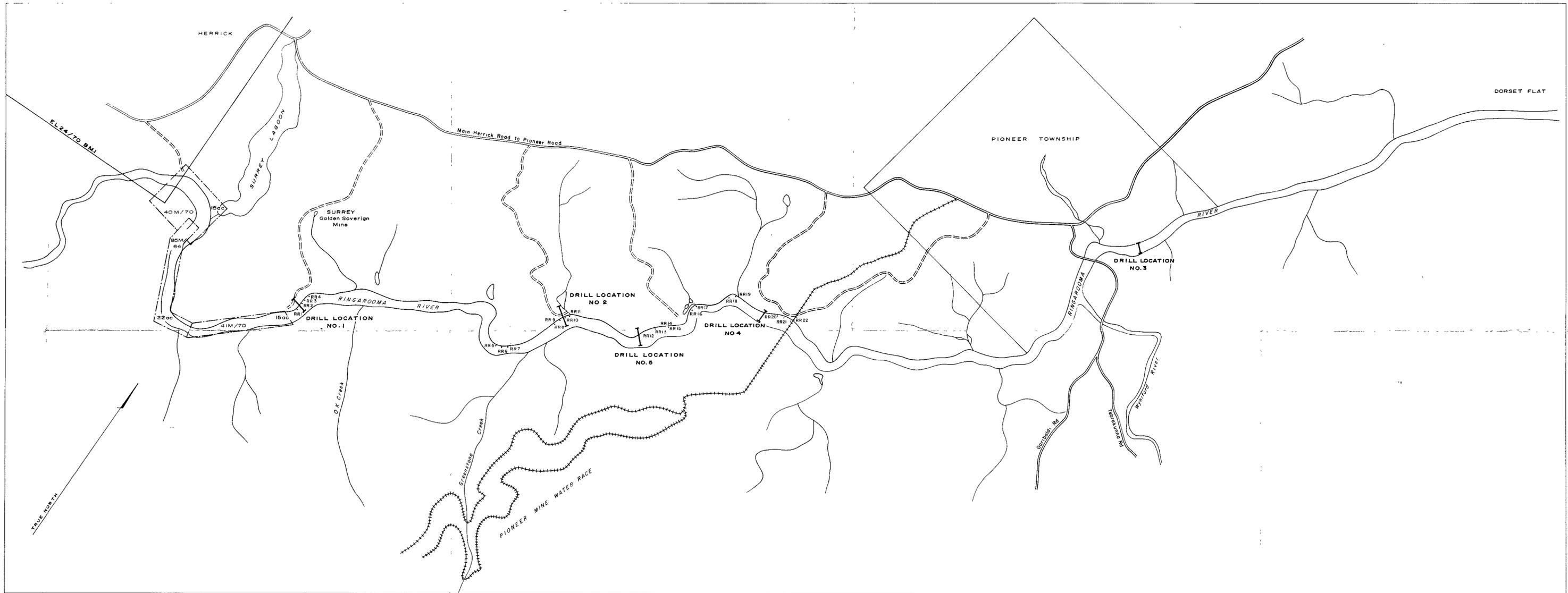
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with a view to the testing of them.

The data obtained from this programme of drilling is considered adequate to assess the potential of this prospect and the results are such as to conclude that no further exploratory work is warranted.

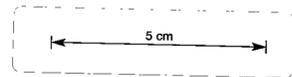
I.R. MORTIMORE.



LEGEND

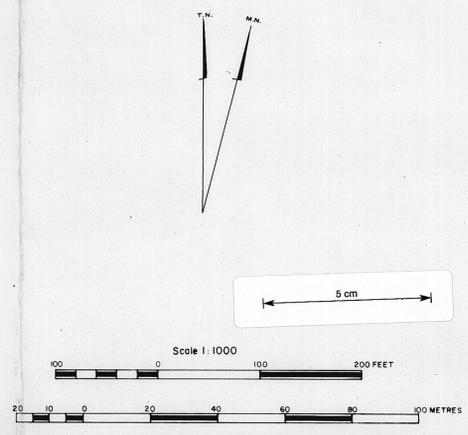
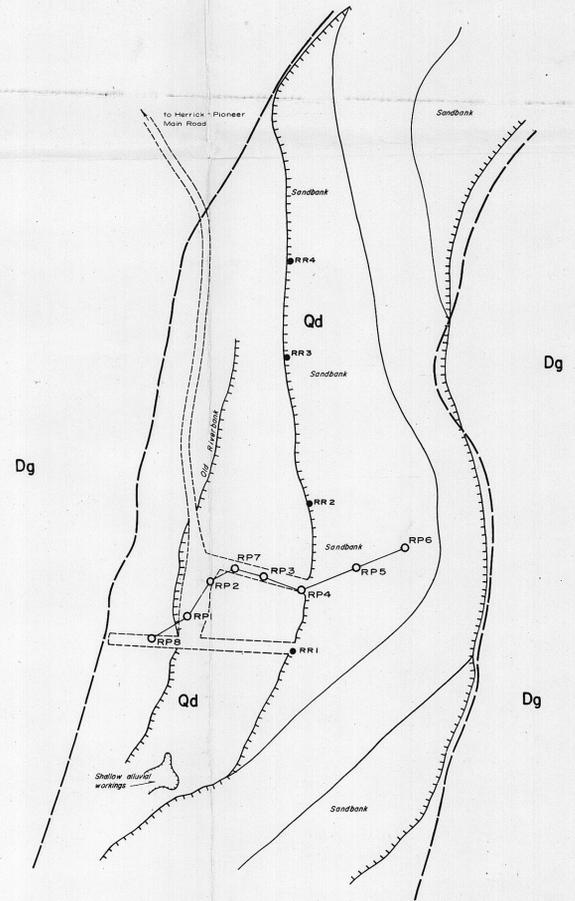
- ==== Road, track
- ~ Watercourse
- Water race, pipeline
- - - - Mineral lease excluded from EL6/68
- - - - Exploration lease excluded from EL6/68
- RR 15 Surface sample location
- ┆ Line of drill holes

SCALE: 1:15,840

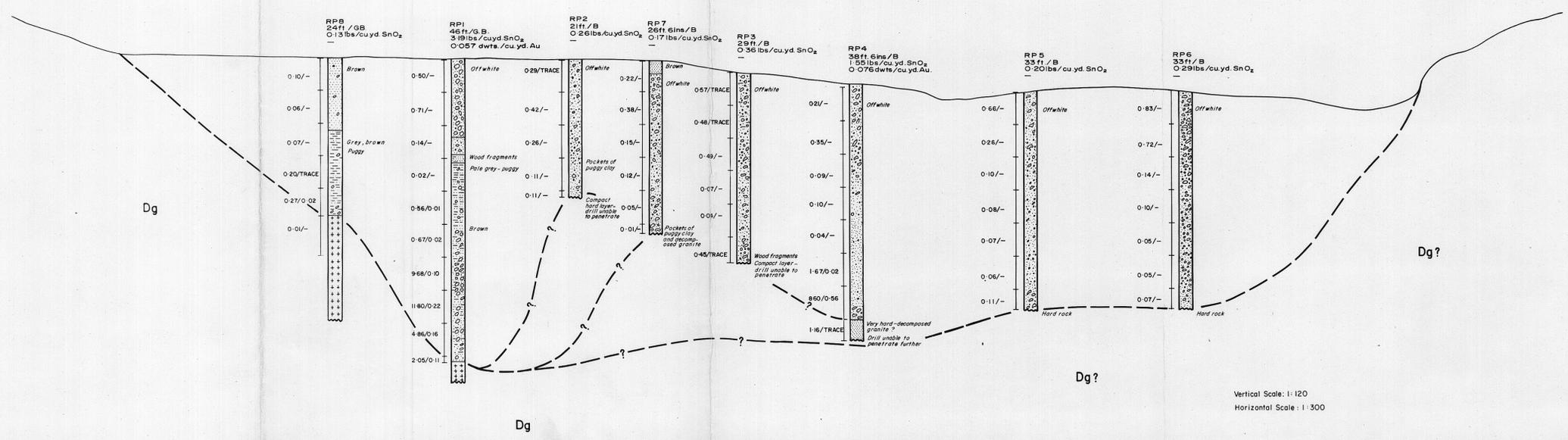


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TEXAS INSTRUMENTS INCORPORATED GEOPHOTO RESOURCES SYDNEY, AUSTRALIA					
TEXINS DEVELOPMENT PTY. LTD. EL 6/68 NORTH EAST TASMANIA RINGAROOMA RIVER ALLUVIAL TIN PROSPECT Drill Hole Locations					
					
PROJECT	6/68	AUTHOR	1 Mortimore	DATE	Oct, 1973
				DWG. NO.	2484



- LEGEND**
- CLAY
 - SILT
 - Quaternary SAND
 - GRIT
 - WASH
 - Devonian GRANITE, ADAMELLITE
- Qd** Silt, sand, grit, gravel - Quaternary
Dg Granite, porphyritic adamellite - Devonian
- Geological contact, indefinite
 Limit of river, low level of flow
 Riverbank
 Vehicle track
- Surface sample location
 Percussion drill hole location
 Section line
- 8-15/0-63 Sample interval showing assay values
 lbs./cu.yd. SnO₂ (70% Sn) / dwts./cu.yd. Au.
 0-04/- no assay recorded
- RP 4 Hole number
 38ft. 6 ins./B Depth of hole to / B Bottom G.B Granite Bottom
 1.55 lbs./cu.yd. SnO₂ Average value lbs./cu.yd. SnO₂ (70% Sn) to above depth
 0.076 dwts./cu.yd. Au Average value (dwts./cu.yd. Au) to above depth
 (- Insufficient assay data to determine average)

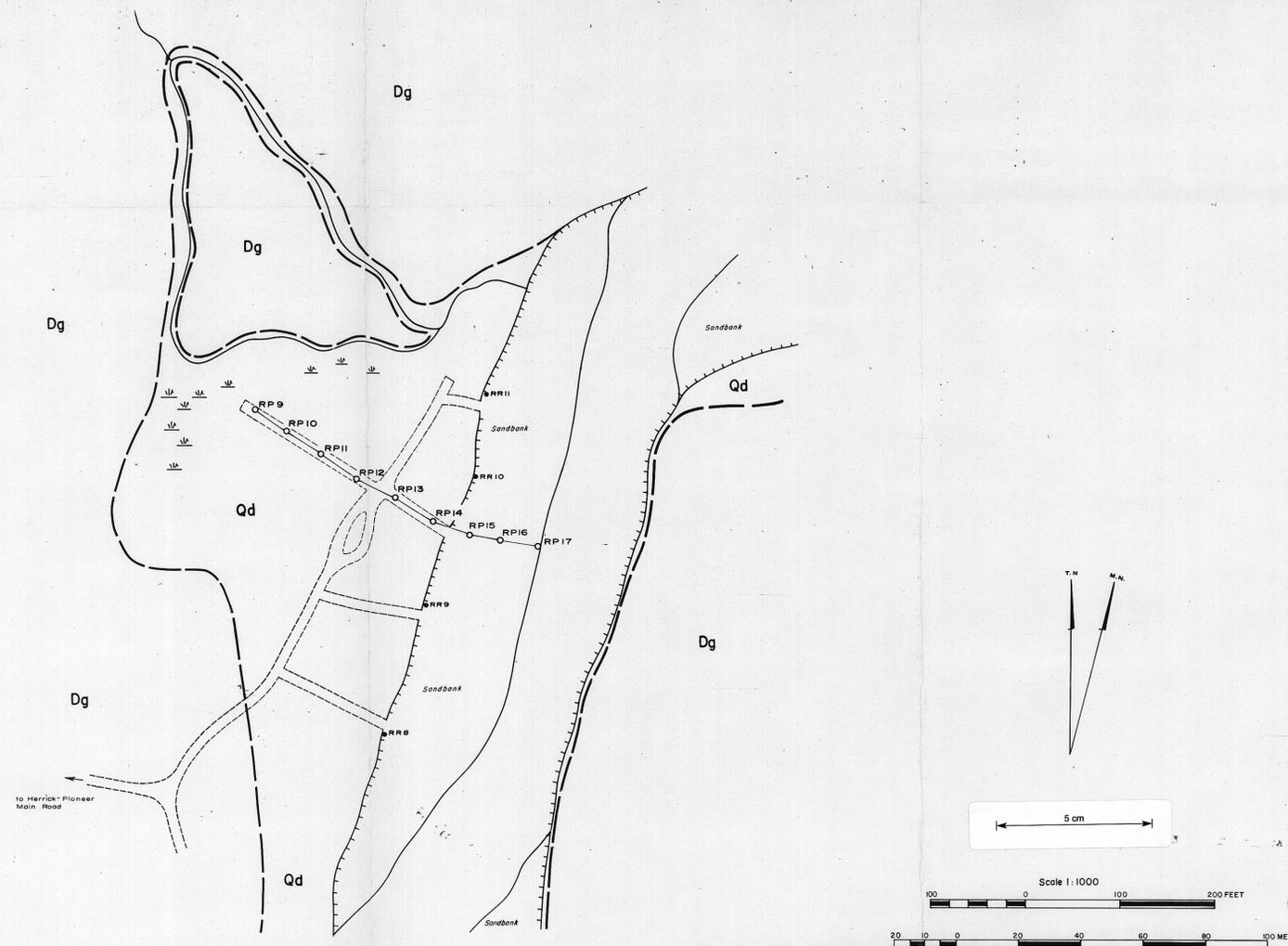


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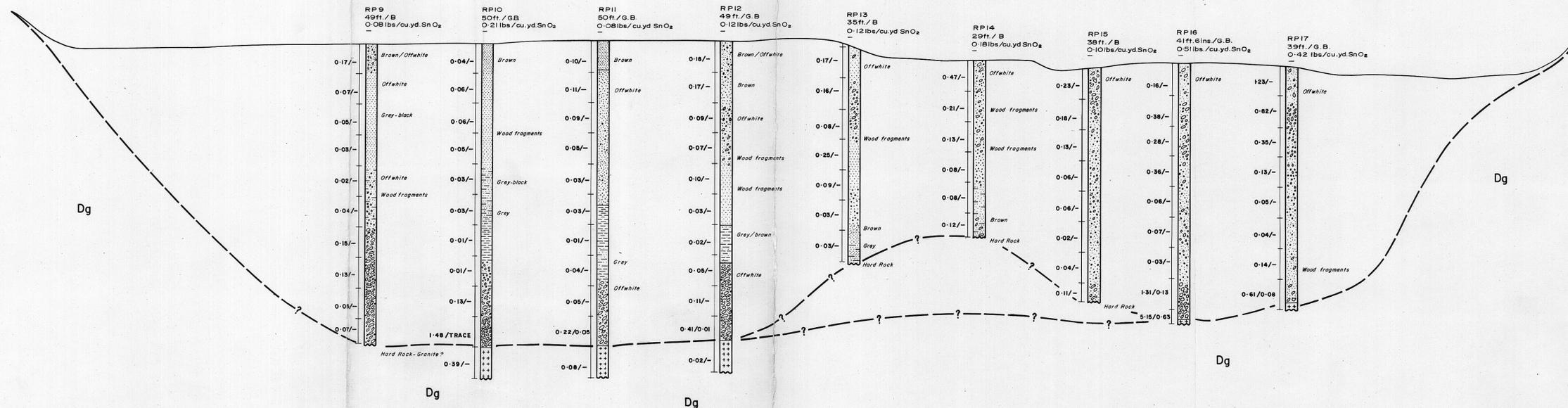
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 SYDNEY, AUSTRALIA

TEXINS DEVELOPMENT PTY. LTD.
 EL 6/68 NORTH EAST TASMANIA
RINGAROOMA RIVER ALLUVIAL TIN PROSPECT
 PERCUSSION DRILLING
 DRILL LOCATION NO. 1 2485

PROJECT 6/68 AUTHOR I. Mortimore DATE Jan, 1974 DWG NO. 1.212



- LEGEND**
- CLAY
 - SILT
 - Quaternary**
 - SAND
 - GRIT
 - WASH
 - Devonian**
 - GRANITE, ADAMELLITE
- Qd** Silt, sand, grit, gravel - Quaternary
Dg Granite, porphyritic adamellite - Devonian
- Geological contact, indefinite
 - Limit of river, low level of flow
 - Riverbank
 - Vehicle track
 - Surface sample location
 - Percussion drill hole location
 - Section line
- 5-15/0-63** Sample interval showing assay values
 lbs./cu.yd. SnO₂ (70% Sn) / dwts./cu.yd. Au.
0-04/- - no assay recorded
- RP 4** Hole number
 38ft. 6 ins. / B Depth of hole to / B Bottom G.B Granite Bottom
 1-55 lbs./cu.yd. SnO₂ Average value (lbs./cu.yd. SnO₂ (70% Sn) to above depth
 0-076 dwts./cu.yd. Au Average value (dwts./cu.yd. Au.) to above depth
 (- Insufficient assay data to determine average)



Vertical Scale: 1:120
 Horizontal Scale: 1:300

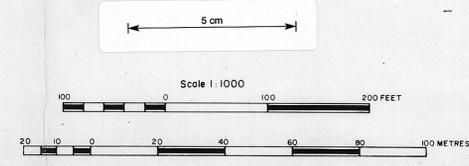
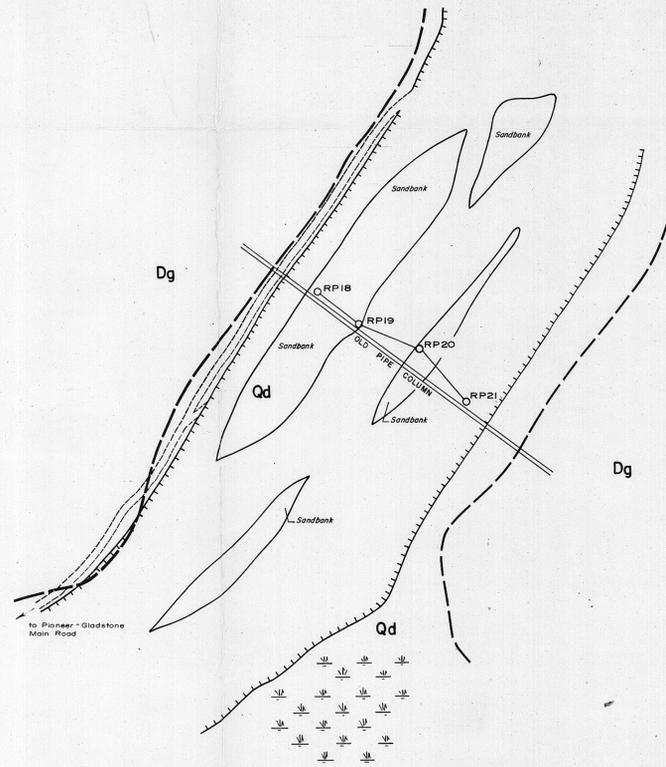
598024 74-101

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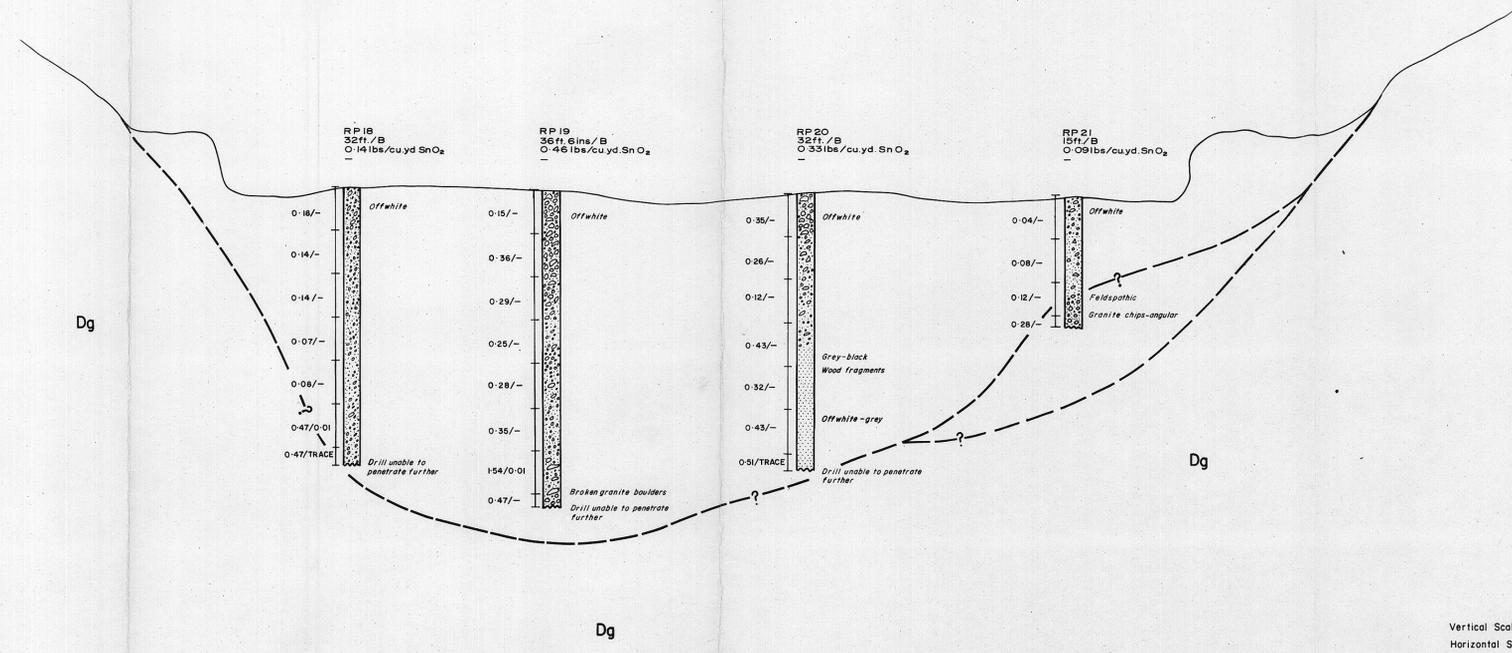
TEXINS DEVELOPMENT PTY. LTD.
 EL 6/68 NORTH EAST TASMANIA
**RINGAROOMA RIVER ALLUVIAL
 TIN PROSPECT**
 PERCUSSION DRILLING
 DRILL LOCATION NO.2

2486

PROJECT 6/68 AUTHOR I Mortimore DATE Jan, 1974 DWG NO. 2



- LEGEND**
- CLAY
 - SILT
 - Quaternary SAND
 - GRIT
 - WASH
 - Devonian GRANITE, ADAMELLITE
- Qd Silt, sand, grit, gravel - Quaternary
Dg Granite, porphyritic adamellite - Devonian
- Geological contact, indefinite
Limit of river, low level of flow
Riverbank
Vehicle track
- Surface sample location
Percussion drill hole location
Section line
- Sample interval showing assay values
lbs/cu yd SnO₂ (70% Sn) / dwts/cu yd Au
- no assay recorded
- RP 4 Hole number
38ft 6 ins / B Depth of hole to / B Bottom GB Granite Bottom
1.55 lbs/cu yd SnO₂ Average value (lbs/cu yd SnO₂ (70% Sn) to above depth
0.076 dwts/cu yd Au Average value (dwts/cu yd Au) to above depth
- Insufficient assay data to determine overage



Vertical Scale: 1:120
Horizontal Scale: 1:300

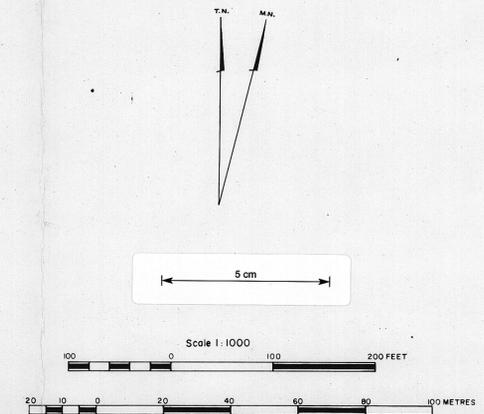
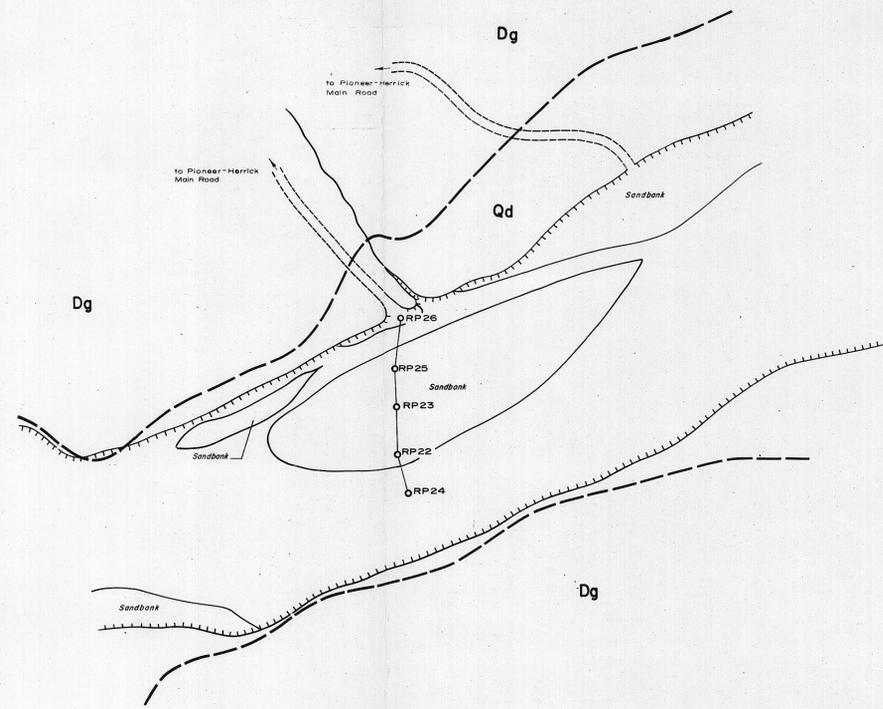
598025 74-1011

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GEOPHOTO RESOURCES
SYDNEY, AUSTRALIA

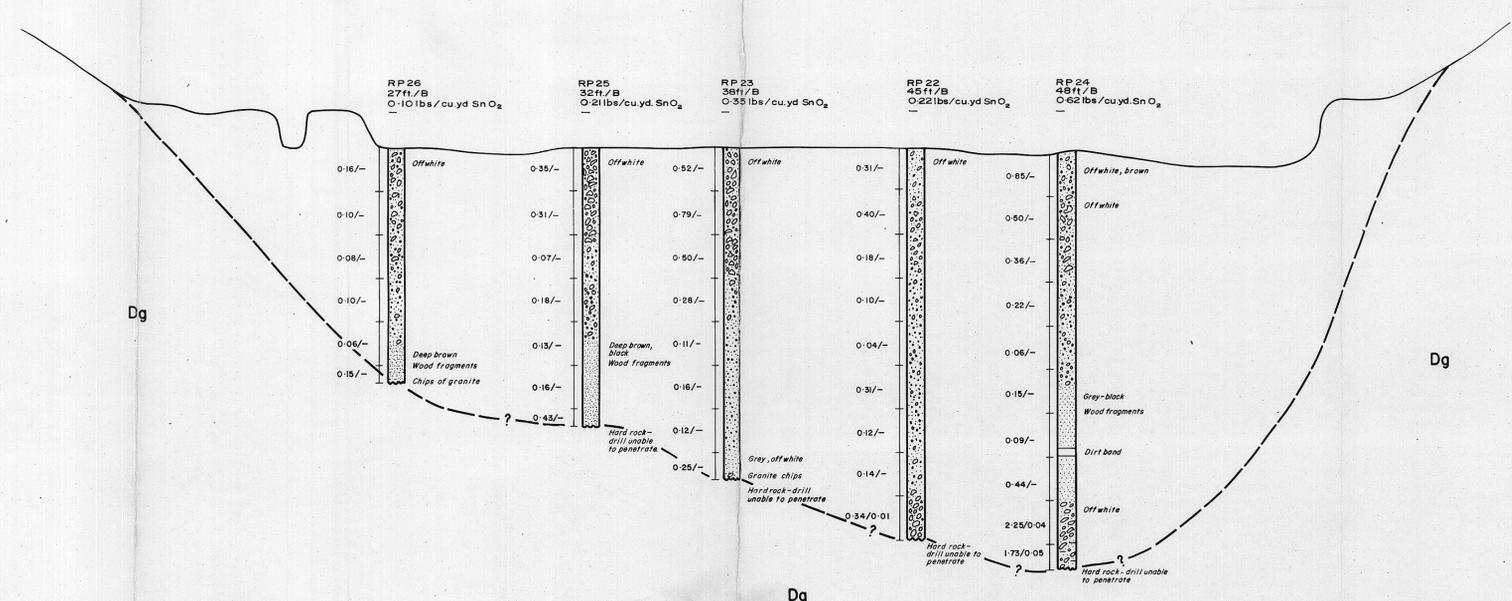
TEXINS DEVELOPMENT PTY. LTD.

EL 6/68 NORTH EAST TASMANIA
**RINGAROOMA RIVER ALLUVIAL
TIN PROSPECT**
PERCUSSION DRILLING
DRILL LOCATION NO. 3

2487



- LEGEND**
- CLAY
 - SILT
 - Quaternary
 - SAND
 - GRIT
 - WASH
 - Devonian
 - GRANITE, ADAMELLITE
-
- Qd** - fill, sand, grit, gravel - Quaternary
 - Dg** - Granite, porphyritic adamellite - Devonian
-
- Geological contact, indefinite
 - Limit of river, low level of flow
 - Riverbank
 - Vehicle track
 - Surface sample location
 - Percussion drill hole location
 - Section line
-
- 8-15/0-63** Sample interval showing assay values
lbs/cu yd SnO₂ (70% Sn) / dwts/cu yd Au
 - 0-04/-** - no assay recorded
-
- RP-4** Hole number
 - 38ft 6 ins / B** Depth of hole to / B Bottom G.B Granite Bottom
 - 1.55 lbs/cu yd SnO₂** Average value (lbs/cu yd SnO₂ (70% Sn) to above depth
 - 0.076 dwts/cu yd Au** Average value (dwts/cu yd Au) to above depth
 - (-)** Insufficient assay data to determine average



Vertical Scale: 1:120
Horizontal Scale: 1:300

598026 74-1011

TEXAS INSTRUMENTS INCORPORATED
GEOPHOTO RESOURCES
SYDNEY, AUSTRALIA

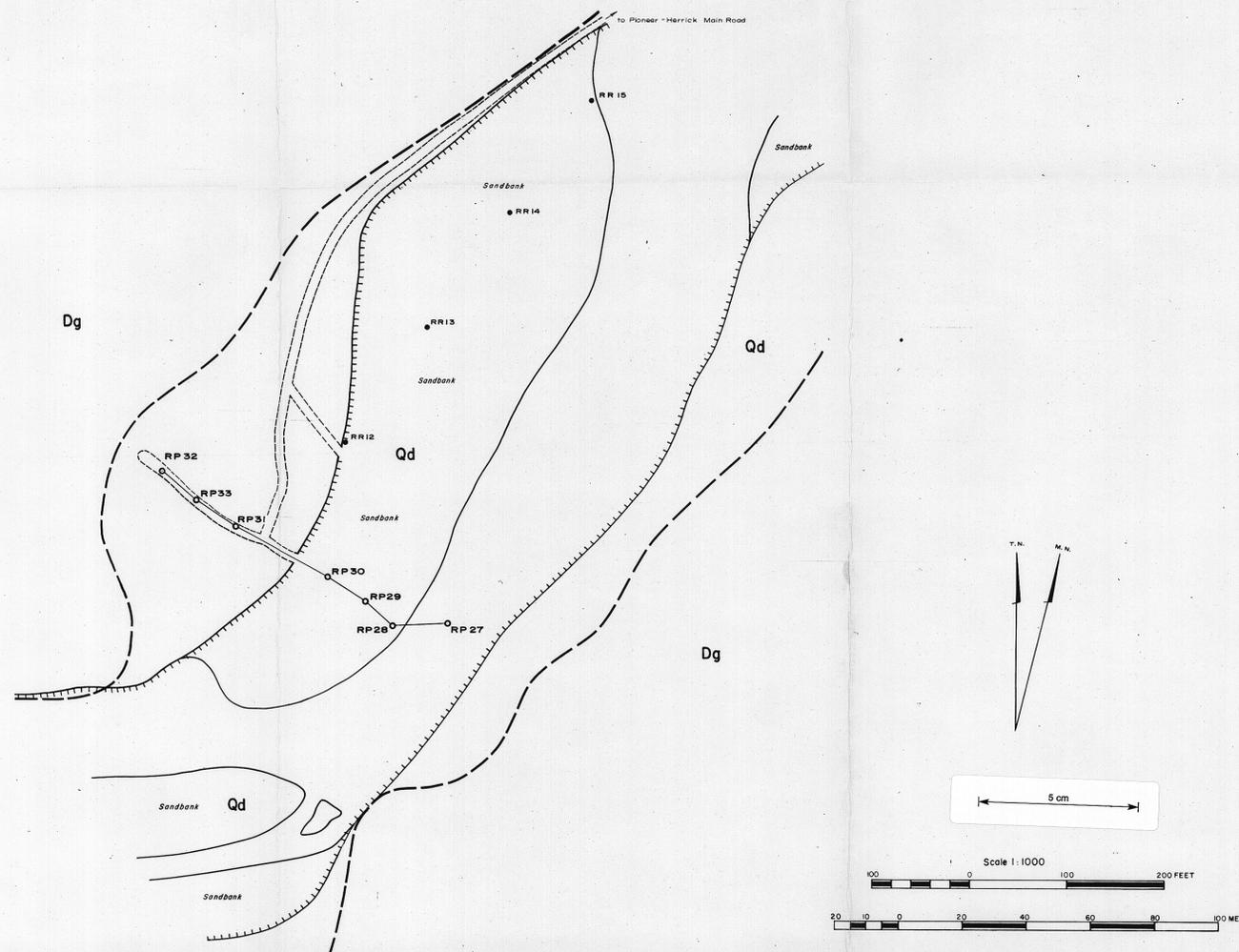
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EL 6/68 NORTH EAST TASMANIA
RINGAROOMA RIVER ALLUVIAL TIN PROSPECT
PERCUSSION DRILLING
DRILL LOCATION NO. 4

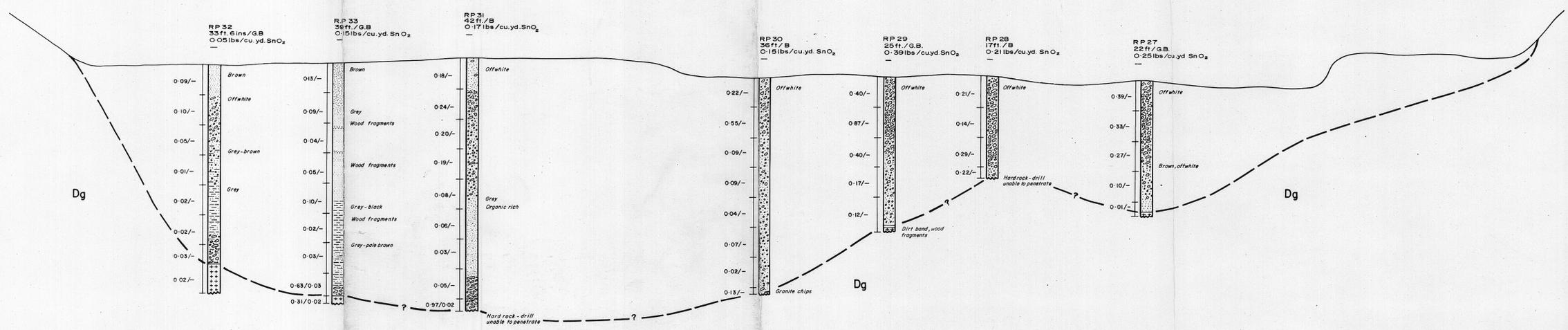


2488

PROJECT 6/68 AUTHOR I. Mortimore DATE Jan, 1974 DWG NO. 2488



- LEGEND**
- CLAY
 - SILT
 - Quaternary SAND
 - GRIT
 - WASH
 - Devonian GRANITE, ADAMELLITE
- Qd silt, sand, grit, gravel - Quaternary
 Dg Granite, porphyritic adamellite - Devonian
- Geological contact, indefinite
 Limit of river, low level of flow
 Riverbank
 Vehicle track
- Surface sample location
 Percussion drill hole location
 Section line
- Sample interval showing assay values
 lbs/cu yd SnO₂ (70% Sn) / dwts/cu yd Au
 - no assay recorded
- Hole number
 Depth of hole to /B Bottom G.B Granite Bottom
 Average value (lbs/cu yd SnO₂ (70% Sn) to above depth)
 Average value (dwts/cu yd Au) to above depth
 (- Insufficient assay data to determine average)



Vertical Scale: 1:120
 Horizontal Scale: 1:300

598027 74-1011

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TEXINS DEVELOPMENT PTY. LTD.
 EL 6/68 NORTH EAST TASMANIA
**RINGAROOMA RIVER ALLUVIAL
 TIN PROSPECT**
 PERCUSSION DRILLING
 DRILL LOCATION NO.5 2489

PROJECT 6/68 AUTHOR I. Mortimore DATE JGR, 1974 DWG. NO. 212