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GEOPHOTO MINERALS REPORT 1970/98

MEMORANDUM REPORT ON TIN PROSPECTS

IN THE

GREAT PYRAMID AREA, UPPER SCAMANDER

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

TEXINS DEVELOPMENT PTY. LTD.

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MEMORANDUM:

21st January, 1971.

TO: R.H. Barton, General Manager, Geophoto.
FROM: R.M. Tucker, Senior Geologist.

In view of the tin values obtained in this sampling, the known tin mineralisation in the area, and prospective activity in the district, it is recommended that costeans be cut by dozing to expose weathered bedrock across the line of lode in the area. This work should be carried out urgently, i.e. prior to mid-February, to enable decisions to be made on further work in the area.


R.M. Tucker.

INTRODUCTION

The Great Pyramid area, lying approximately two miles to the north of Upper Scamander, has long been explored and worked for tin.

The mine itself was worked during 1909 and 1910, the emphasis being mainly on exploratory work. Further exploratory work was carried out in 1914. Between 1925 and 1936 the mine was worked with a production of 331 tons of ore which yielded 2.931 tons of tin.

The mine area is now covered by three leases (total 48 acres) held in the name of L. Price and W. Williams. Paringa Mining Company have taken the options over these leases and are currently pursuing an active exploration program, including percussion and diamond drilling, with the view to proving up a low grade tin deposit exploitable by open-cut methods.

GEOLOGY

The rocks in the mine area belong to the Mathinna Beds of Silurian age. They are mainly sandstones, mudstones and siltstones with quartzites being widely developed by alteration of the sandstones.

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The strike of the beds generally varies between 325° and 345° , dipping towards the south-west at a steep angle, but local variations in both dip and strike are common due to faulting and folding.

The mudstones and siltstones are found to be thin bedded in contrast to the sandstones and quartzites which are generally massive with bedding difficult to define. The sandstones are fine to medium grained, occasionally feldspathic. Gradations from soft sandstones through to hard quartzites are present. The latter are generally well fractured, joint systems developed parallel and normal to the bedding planes.

The mineralisation consists of veins, mainly of cassiterite with pyrite and minor chalcopyrite. Limonitic iron staining is a common feature of the rocks in this area, derived from the pyrite. The cassiterite is generally finely crystalline and associated with limonite, quartz and occasionally secondary micas. It also occurs as coatings along joints and faults or in soft gence material associated with fracturing.

The cassiterite mineralisation is often difficult to positively identify in hand specimens owing to the fine nature of the crystals and the fact that the brownish-red cassiterite is easily confused with the brownish iron oxides.

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The highest tin values in the mine workings are found to coincide with the quartzite formations in which fracturing is more strongly developed.

Towards the south (within the boundaries of E.L.6/68) the rock types and mineralisation are similar to those in the immediate vicinity of the mine workings.

Sandstones are generally more common with a more limited development of quartzites.

However prominent quartzite formations are found directly to the south of the Price/Williams leases (samples 40 to 52 - see map) and towards the west high on the ridge (samples 64 to 68). In the latter area, gossanous outcrops are conspicuous.

To the east and south-east, thin beds of quartzites are seen to be interbedded with sandstones, siltstones and slates. Good exposures of this sequence can be obscured in the road-cuttings.

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ROCK GEOCHEMISTRY

Together with a geological appraisal of the area, seventy eight rock chip samples were taken for analysis.

Outcrops over large tracts of ground were sparse, good exposures being largely limited to those areas mentioned above. Floaters were taken where outcrop was poor and their deviation could be ascertained with a certain degree of accuracy.

Towards the south, the slopes were gentle and exposures very few.

All samples were analysed for tin.

CONCLUSIONS

The results generally indicated that the tin mineralisation is not confined to the mine area but extends to the south.

Low tin values were indicated in thin bedded quartzites to the east along the road-cuttings. The highest value (sample 29) within this section, was recovered from gouge material associated with a fault.

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The development of quartzites in this area is limited and consequently the extent of the mineralisation is also limited.

This is similarly the case towards the west where only isolated outcrops yielded low tin values.

In contrast, the central area lying directly south of the mine workings yielded values up to 1.18% tin with a concentration of values in excess of 0.05% tin over a moderately large area of good outcrop, where quartzite is the dominant rock type.

Quartzites are seen to outcrop about the area covered by samples 40 to 55 and 72 to 74.

To the south, across a small gully, lack of exposure prevented adequate testing of this ground. However, further south again, a single value of 0.43% tin suggests this intervening ground may warrant further exploratory work.

Follow up work must ultimately involve drilling. The extent to which geological mapping can be carried out is limited, owing to the lack of exposures, while soil geochemical methods of prospecting are rendered unreliable due to the loose nature of the scree and talus on the steep slopes.

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Percussion drilling, on either 50 feet or 100 feet centres, is suggested over an initial area of approximately 600 feet by 600 feet, covering the area from which the most encouraging values have been recovered to date. Upon the basis of the results from such drilling, the drilling program could be extended, if warranted.

DECEMBER 1970

IAN R. MORTIMORE

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APPENDIX

1. Lab. Sheets Nos. 506/1, 506/2
2. Map showing sample points. (Sketch map appended, drafted map to follow when available).

GEOCHEMICAL LABORATORY REPORT 948010

FIELD SHEET No. Q01432 PROJECT No. EL. 6/68 GREAT PYRAMID TIN MINE AREA

LAB. SHEET No. 506/1 SAMPLE TYPE ROCK DATE: 10th December, 1970. (8 of 8)

SAMPLE No.	LAB. No.	Sn %						
P 1	70-L-1138	0.05						
P 2	70-L-1139	BLD						
P 3	70-L-1140	BLD						
P 4	70-L-1141	BLD						
P 5	70-L-1142	BLD						
P 6	70-L-1143	BLD						
P 7	70-L-1144	BLD						
P 8 F	70-L-1145	BLD						
P 9	70-L-1146	BLD						
P 10	70-L-1147	BLD						
P 11	70-L-1148	0.43						
P 12	70-L-1149	BLD						
P 13	70-L-1150	BLD						
P 14	70-L-1151	BLD						
P 15	70-L-1152	BLD						
P 16	70-L-1153	BLD						
P 17	70-L-1154	BLD						
P 18	70-L-1155	BLD						
P 19	70-L-1156	BLD						
P 20 F	70-L-1157	BLD						
P 21 F	70-L-1158	BLD						
P 22	70-L-1159	BLD						
P 23	70-L-1160	BLD						
P 24	70-L-1161	BLD						
P 25	70-L-1162	BLD						
P 26	70-L-1163	BLD						
P 27	70-L-1164	BLD						
P 28	70-L-1165	BLD						
P 29	70-L-1166	0.19						
P 30	70-L-1167	BLD						
P 31	70-L-1168	BLD						
P 32	70-L-1169	BLD						
P 33	70-L-1170	BLD						
P 34	70-L-1171	BLD						
P 35	70-L-1172	0.05						
P 36	70-L-1173	0.08						
P 37 F	70-L-1174	BLD						
P 38 F	70-L-1175	BLD						
P 39 F	70-L-1176	BLD						
P 40	70-L-1177	BLD						
P 41	70-L-1178	0.08						
P 42	70-L-1179	0.38						
P 43	70-L-1180	BLD						
P 44	70-L-1181	BLD						
P 45	70-L-1182	BLD						
P 46	70-L-1183	BLD						

METHODS:

This laboratory is registered by the National Association of Testing Authorities, Australia. The tests reported herein have been performed in accordance with its terms of registration.

Sn by GRC No. 6A

B.L.D. = Below Limit of Detection



Chief Chemist

Ray W. [Signature]

GEOCHEMICAL LABORATORY REPORT 948011

FIELD SHEET No. 001433 PROJECT No. EL.6/68 - GREAT PYRAMID TIN MINE AREA

(8 of 8)

LAB. SHEET No. 506/2 SAMPLE TYPE ROCK DATE 10th December, 1970

SAMPLE No.	LAB. No.	Sn %					
P 47	70-L-1184	0.08					
P 48	70-L-1185	BLD					
P 49	70-L-1186	0.25					
P 50	70-L-1187	BLD					
P 51	70-L-1188	1.18					
P 52	70-L-1189	0.19					
P 53	70-L-1190	BLD					
P 54	70-L-1191	0.05					
P 55	70-L-1192	BLD					
P 56	70-L-1193	BLD					
P 57	70-L-1194	BLD					
P 58	70-L-1195	BLD					
P 59	70-L-1196	BLD					
P 60	70-L-1197	BLD					
P 61	70-L-1198	0.05					
P 62	70-L-1199	BLD					
P 63	70-L-1200	BLD					
P 64	70-L-1201	BLD					
P 65	70-L-1202	BLD					
P 66	70-L-1203	BLD					
P 67	70-L-1204	BLD					
P 68	70-L-1205	BLD					
P 69	70-L-1206	BLD					
P 70	70-L-1207	BLD					
P 71	70-L-1208	BLD					
P 72	70-L-1209	0.12					
P 73	70-L-1210	BLD					
P 74	70-L-1211	BLD					
P 75	70-L-1212	0.05					
P 76	70-L-1213	BLD					
P 77	70-L-1214	BLD					
P 78	70-L-1214A	BLD					

METHODS:



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Chief Chemist

Ray W. Zeeb

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