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92-3377

ANNUAL REPORT

1991 - 1992

E.L. 4/88 (PERA FLATS)

By Vic Threader

August 1992

Vic Threader and Associates Pty Ltd
Kingston Beach

AMG REFERENCE POINTS ADDED

CONTENTS

Introduction

This report details activities in the licence during the fourth year of tenure.

These activities are aimed at identifying palaeochannels in the alluvium of the Dorset and New Rivers with the aim of proving a sufficient resource of alluvial gold and minor subsidiary heavy minerals to justify their economic extraction.

Previous Annual Reports are: 1989-90 TCR 89-2991

1990-91 TCR 90-3151

1991-92 TCR 91-3279

For reference purposes three previously unnamed streams have been designated Pera Flats Creek, New Creek and Old Workings Creek. They are of significance with respect to the Tertiary basalts and their probable effect on gold distribution. The first two are inferred to be basalt laterals and the third is the headwaters of the New River Lead.

Exploration 1991-2

The proposed programme of exploration for the past year was completed. This consisted of:

1. an excavator trench (E31) at the northern end of the workings of the New River Prospecting Syndicate, defunct since 1939.
2. prospecting in and around the old workings E1-30.
3. A line of churn drill holes nos 65-71 across the Dorset River alluvial plain 1 km south of the previous boreline nos 47-55, and
4. An additional prospect pit (E32) which was not included in the 1991-2 proposals was excavated at AMG 566920mE/5431460mN, this was adjacent to the mid point of the line of holes nos 3 to 8. Its purpose was to intersect the New River Lead which was drilled and located on the adjoining property.

Results. (Logs and locations are given in appendix).

1. A 30 tonne excavator was used to dig E31, a 10m trench, across the workings to a depth of 4m. Mine tailings and rubble were encountered at the eastern end, rich alluvial gold in the middle portion, estimated at 2g/m^3, and poorer values at the western end estimated at 0.3 g/m^3.

2. Excavator pits 1-30 around the old workings indicate remaining pockets of virgin ground but values are sporadic and would not constitute a viable resource.

The northern end of the old workings is more promising and should be included in an alluvial mine operating on the New River Lead which extends to the north.

Of more interest is the tailings area which contains about 40 000m^3 of sluice material. This can be expected to contain fine gold but is difficult to sample by machine as it is water saturated. It is worth sampling by hand auger to ascertain grade.

Assays of the two rich patches were not undertaken as they represent only isolated values.

3. Seven churn drill holes were drilled along a farm road - the only access available due to cropping in surrounding farmland. Gold was recorded in four of the holes and one (BH.69) had an estimated grade of 0.14g/m^3. Of significance in this drilling is the abundance of sulphide grains in the heavy mineral concentrates. They are presumably derived from the gold lodes and therefore indicate proximity to an alluvial gold concentration.

4. E32 was excavated to a depth of 7½m using a 30t Hitachi machine. The maximum effective digging depth is 6m but an additional 1½m was achieved by benching. The operation was aborted 2½m short of target depth due to excessive water intake from below 5m which was beyond

the capacity of the pump. Conditions were exacerbated by exceptional rains (>100mm in 10 days). A "Flextool" submersible pump was hired from Wreckair for the job. Specifications:

Designation 525u

Minimum Power unit 1.5kw (2HP)

Actual Power unit used was a 4 stroke 3.7KW Briggs and Stratton petrol engine

Maximum Head 10m

Maximum delivery 25 000 l/hour (5500 gph)

At 7m depth this unit would lose 25% of its pumping capacity and as it could not drain the trench, it is assumed that intake exceeded 18000 l/hr. A flextool 212 pump/6kw motor would have doubled the delivery and probably would have been adequate under the conditions.

Exploration 1992-3

The programme for the ensuing year is based on the geomorphic model illustrated in figure 4.

1 and 2. Churn drilling is proposed at two localities along New River to trace the Lead downstream from the line of previous boreholes nos 9-15, on the premise that it would contain both detrital gold from the New River goldfield and cassiterite and minor gold from the Rattler Range tin province.

3. Completion of the 65-71 line of boreholes in the Dorset Valley. The proposal is to test drill in front of an inferred abandoned strandline i.e. 1-200m south of previous drilling.

The locations of these proposals are indicated on figure 4.

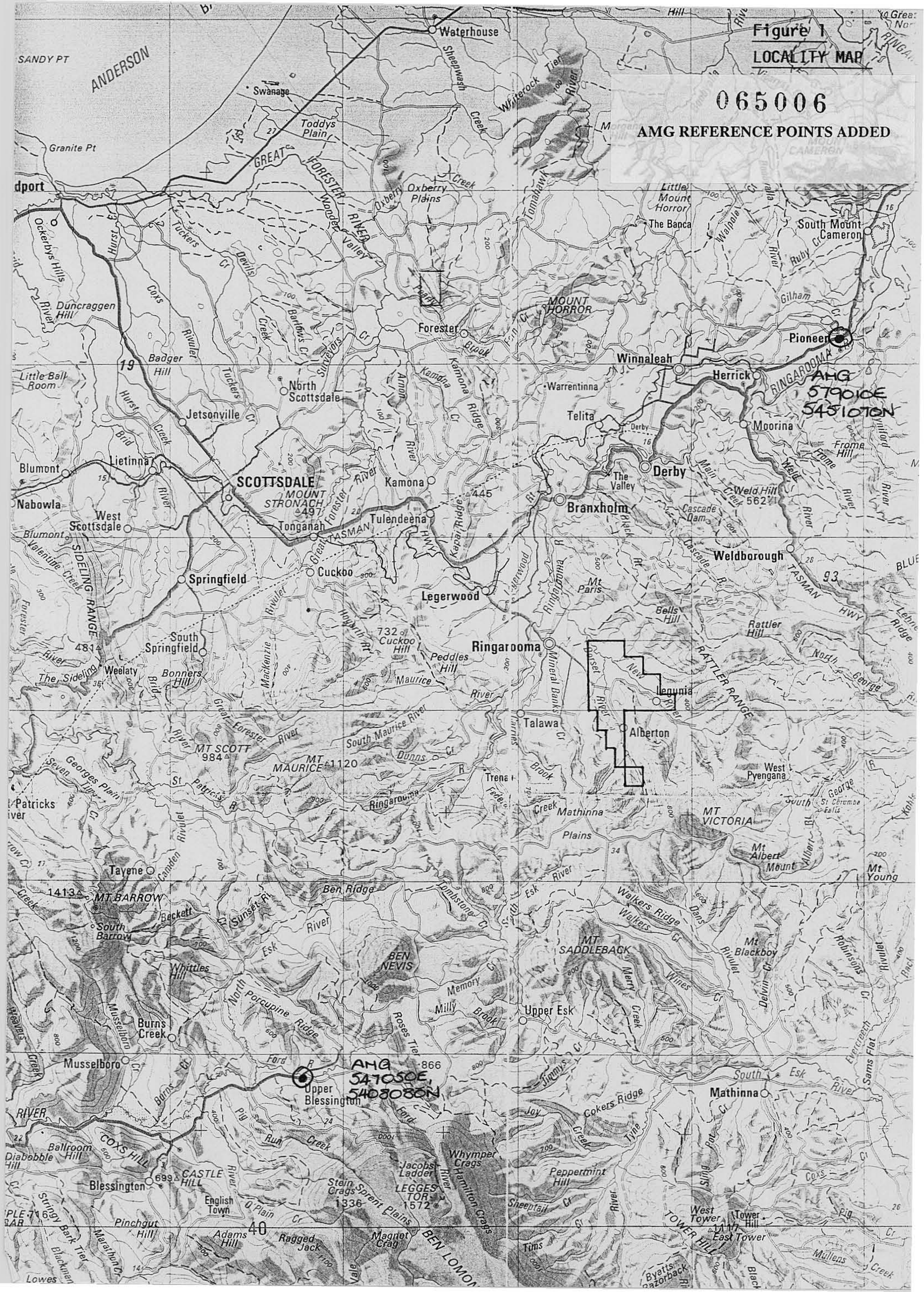

Figure 1
LOCALITY MAP

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Figure 2

E.L.4/88 PERA FLATS - NEW RIVER LEAD

Road

300 Contour

Watercourse

Borehole

x Geophone (Seismic Line 10 - 1990)

Abandoned alluvial gold workings

Gravel pit

State Forest Boundary

Course of New River Lead

E1 Excavator Pit

Line of percussion/churn drill holes

Boundary of alluvium

Scale 1 : 2500

5 cm

NEW RIVER

CROWN PRINCE RIVER

NEW RIVER ROAD

CREEK

PINE PLANTATION

WORKINGS

CREEK

270

280

300

310

Parklands

5431000mN

567000mE

July 1991 additions August 92

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Figure 3
E.L.4/88 (Pera Flats) Dorset River Exploration
Road
Vehicular track
Water course
Seismic line
Churn drill hole
Old alluvial gold workings
Gravel pit
Scale 1 : 5000
5 cm
DORSET RIVER
PERA
PERA FLATS ROAD
NEW RIVER ROAD
FLATS CREEK
ALBERTON ROAD
ROSIERS ROAD
VINEYS CREEK
5430000 m N
565000 m E

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Figure 4

E.L. 4/88 (PERA FLATS)

Geomorphology

Licence Boundary

Watercourse

Drainage Divide

New River Lead

Tertiary Basalt — Present outline / Inferred original

Strandline of inferred lake

Extent of marshland

3–8 Churn Drill Holes (see also fig.2)

(1) Proposed churn drill holes

0 2 km

Scale 1 : 25 000

5 cm

RATTLER RANGE

NEW CREEK

PERA FLATS

DORSET CREEK

CROWN PRINCE RIVER

OLD WORKINGS CREEK

NEW GARDEN RIVER

GOLDFIELD CREEK

ALBERTON RIVER

GOLDFIELD RIDGE

57-87

47-55

65-71

3-8

5430000 mN

570000 mE

August 1992

Vic Threader and Associates Pty Ltd.

APPENDIX

PERA FLATS EL 4/88 AMG REFERENCES

B.H. Nos 1 to 64 see AR 1991-2 (TCR 91-3279)

Boreholes	mE	mN
65	563420	5429200
66	480	250
67	130	280
68	360	240
69	480	160
70	460	170
71	500	150

Excavator Pits

	mE	mN		mE	mN
E 1	567000	5429900	E 17	567080	5430330
2	566950	5430000	18	567070	5430310
3	566980	5430100	19	567060	5430280
4	567030	5430180	20	567160	5430330
5	567000	5430180	21	567180	5430280
6	566950	5430170	22	567200	5430230
7	566940	5430180	23	567210	5430150
8	566930	5430220	24	567200	5430150
9	566930	5430240	25	567190	5430150
10	566940	5430270	26	567240	5430150
11	566980	5430300	27	567230	5430220
12	567030	5430290	28	567220	5430280
13	567060	5430260	29	567110	5430300
14	567130	5430320	30	567140	5430390
15	567110	5430320	31	567110	5430710
16	567120	5430330	32	566920	5431460

EXCAVATOR PIT LOGS

No.	Depth (m)	Thickness (m)	Log	Gold Content
E1-13	(Excavations in Mathinna Beds scree to depths of 3m in clay and rock fragments and no Heavy Minerals)			
14	0-2.3	2.3	Red and yellow clay	
	2.3-2.5	0.2	White sandy clay	nil
15	0-2	2.0	Red and yellow clay	
	2-3	1.0	White sandy clay	nil
16	0-1.4	1.4	Red and brown clay	
	1.4-1.6	0.2	White sandy clay with Quartz grits, lignitic at top	nil
	1.6-3.5	1.9	As above but below level of old working	
17	0-0.6	0.6	Brown clay	
	0.6-0.9	0.3	L.grey sandy clay with quartz grits Too hard to continue	
18	0-0.3	0.3	Clay	
	0.3-0.6	0.3	L.grey sandy clay with quartz grits	nil
	0.6-2.0	1.4	Yellow clay with bedrock fragments	
	2.0-3.0	1.0	Grey ditto	
19	0-2.9	2.9	Yellow clay	
	2.9-4.5	1.6	White sandy clay	
20	0-1.4	1.4	Brown clay	
	1.4-1.9	0.5	White sandy clay, lignitic at top	
21	0-2.6	2.6	Brown clay	
	2.6-3.0	0.4	L.grey sandy clay	nil
22	0-3.1	3.1	Yellow clay	
	3.1-4.6	1.5	White pebbly sandy clay	
23	0-2.0	2.0	Clay	
	2.0-3.0	1.0	White pebbly sandy clay	*
	3.0-3.5	0.5	As above but discoloured (probably near bedrock)	
24 & 25	0-2.5	2.5	Reddish brown clay Bedrock in bottom of hole	

No.	Depth (m)	Thickness (m)	Log	Gold Content
26	0-2.0	2.0	Red and yellow clay	
	2.0-3.0	1.0	White clayey gravel	nil
27	0-2.0	2.0	Yellow clay	
	2-2.7	0.7	White clayey quartz gravel	
28	0-2.4	2.4	Yellow clay (too hard for machine)	
29	0-2.4	2.4	Clay	
	2.4-3.3	0.9	L.grey clayey gravel	
30	0-3.3	3.3	Yellow clay	
	3.3-4.1	0.8	White clayey	
31	0-3.3	3.3	Yellow clay	
	3.3-4.1	0.8	L.grey sandy clay lignitic at top	*
32	0-5.0	5.0	Clay and gravel	
	5.0-7.5	2.5	Water saturated, very coarse gravel (max particle size 300mm)	

* Numerous gold particles up to 1mm but mostly very fine but the samples have not been assayed.

PERA FLATS BOREHOLE LOGS

No.	Depth From	Depth To	Thickness (m)	Log	Au Content	Minerals in h.m. conc.
65	0	3	3	Clay and shingle	–	–
	3	8.5	5.5	Shingle	6-6.5/1	Abundant Zircon Spinel and sulphides
	8.5	9.5	1		7.5-8.5/1	
66	0	3	3	Clay and shingle	–	–
	3	4.5	1.5	Shingle	–	As above
	4.5	6.5	2.0	White clay and sand with small pebbles	6-6.5/1	
	6.5	8.5	2.0	Shingle	–	
67	0	4	4	Clay and shingle	–	–
	4	8	4	Shingle	–	Abundant spinel and sulphides
	8	10	2	Sand, weathered ss	–	Magnetite
	10	12.5	2.5	Silty clay - Sm - bedrock	–	
68	0	4	4	Clay and shingle	nil	–
	4	5.5	1.5	Light grey sandy clay		Very small heavy Mineral concentrate Zircon and sulphides
	5.5	9	4.5	Shingle		
	9	10	1.0	Silty clay - bedrock		
69	0	4	4	Clay and shingle	–	
	4	7	3	Shingle	1	Abundant zircon and sulphides
	7	13	6	Shingle	14 most at 9-9.5 (est av grade 0.14 g/m^3)	arsenopyrite 2m magnetite? abundant secondary Mn and Fe oxideas
	13	14	1	Silty clay - bedrock	–	–
70	0	2	2	Clay and shingle	–	–
	2	4.5	2.5	Shingle	–	zircon spinel and sulphides abundant
	4.5	5	0.5	Shingle	1	
	5	8.5	3.5	Shingle	–	
	8.5	10	1.5	Shingle	3	
	10	11	1	Shingle	–	
	11	12	1	Clay and soft sandstone Bedrock at 12	–	
71	0	3	3	Clay and shingle	–	
	3	7	4	Shingle	–	As above and limonite
	7	8	1	Shingle	–	
	8	12.0	4	" not bottomed		ditto and magnetite

PERA FLATS BOREHOLE SUMMARY

Churn Drilling

	Depth of Hole (m)	Depth to Bedrock (m)	White Sand & Clay	Au Depth/no. of grains
1	8.5	–	–	3-8.5/6
2	13.6	–	–	4-5/3
3	6.0	4.0	–	nil
4	7.5	6.0	–	3-4.5/2
5	10.0	9.0	–	6-9/2
6	12.0	11.0	–	3-11/14
7	7.5	9	–	7.5-9/1
8	14	11	–	6-11/3
9	14	13	–	–
10	14	11	–	9-11/4
11	15	14	–	7-12/10
12	15	–	–	4-14/5
13	15	–	–	11-12/1
14	11	–	–	8-11/5
15	12	–	–	–
16	18	–	–	–
17	21	–	20-21	8-12/15
18	20	–	17-20	7-14/5
19	18	–	–	14-15/1
20	15	–	11-12	8-15/11
21	15	–	–	–
22	11	–	–	–
23	12	–	–	–
24	12	–	–	–
25	12	–	–	10-11/1
26	14	–	–	–
27	12	–	–	–
28	7.5	–	–	5-7/5
29	12	–	8-12+	5-8/2
30	8	–	6-8+	5-8/55
31	9	–	7-9+	4-9/8
32	9	–	–	5-8/26
33	9	–	8-9+	5-8/27
34	8.5	–	–	5-8.5/32

	Depth of Hole (m)	Depth to Bedrock (m)	White Sand & Clay	Au Depth/ no. of Grains
35	9.5	-	8-9.5+	5-8.5/23
36	10.5	-	8-10.5+	4.5-9/23
37	10	-	7.5-10+	5-7.5/8
38	8	-	-	5-8/10
39	13	-	9-13+	4.5-10/94
40	11	-	8.5-11+	4.5-7/25
41	5	4.5	-	2-3/1
42	6	4.5	-	2-4.5/15
43	4	3	-	1-4/13
44	5	5	-	3-5/6
45	5	5	-	nil
46	6	6	-	3-6/64
47	4.5	4.5	-	3-4/1
48	6	-	-	2-3/1
49	6	-	5.5-6	4.5-6/4
50	8	6	-	nil
51	5.5	5	-	nil
52	7	6	-	2-6/3
53	5.5	5.5	-	4.5-5.5/1
54	6	5.5	-	nil
55	4.5	4.5	-	nil
56	5.5	4.5	-	nil
57	5.5	4.5	-	nil
58	5	4.5	-	3-4/1
59	4.5	4	-	nil
60	5	4.5	-	1-4.5/4
61	5	3.5	-	3-4/1
62	4.5	4	-	nil
63	4.5	-	-	3-4/1
64	4.5	-	-	nil
65	9.5	9.5	-	6-8.5/2
66	8.5	-	-	6-6.5/1
67	12.5	12.5	-	nil
68	10	10	-	nil
69	14	14	-	4-13/14
70	12	12	-	4-10/4
71	12	-	-	7- 8/1

PERA FLATS BOREHOLE SUMMARY

Calyx Drilling 1939

B.H.No.	Depth of Hole (m)	Depth to Bedrock (m)	White Wash	Depth/g per m^3
A 1	8.5	7.6		
2	8.8	8.4	5.6-8.4	4.9-5.6/0.3
3	11.3	10.7	6.9-10.7	8.9-10.6/0.01
4	8.8	8.3	6.1-8.3	4.5-8.3/6.65
B 1	21.6	21.0	7.3-21.0	4.5-11.1/0.24
2	21.9	20.9	9.4-20.9	6.7-11.2/0.26
3	11.6	?	7.3-11.6+	4.5-9.0/0.19
4	11.6	?	8.2-11.6	4.5-11.0/0.63
C 1	7.6	6.7	-	-
2	6.7	6.1	-	4.5-6.1/0.28
3	7.3	6.5	-	4.5-6.5/0.31
4	7.6	7.2	-	6.7-7.2/1.68
5	7.0	5.9	-	Tr
6	8.8	7.9	-	4.5-7.9/2.7
7	7.6	7.2	-	6.7-7.2/6.23
8	7.3	6.7	-	4.5-6.7/0.35