

OPEN FILE

91-3279

MINES

File Ref: E.L. 4/88
26 JUL 1991

Doc. R.

Action Officer	Initials
Refer to Corres.	
25-7-91	

Resubmit to	Date

ANNUAL REPORT

E.L. 4/88 PERA FLATS

BY Vic Threader

MICROFILMED

91-3279

Vic Threader and Associates Pty. Ltd.

Kingston Beach.

C O N T E N T S

Introduction

History of Mining and Exploration (Alluvial)

Exploration in E.L.4/88

1988-9 and 1989-90

1990-91

New River Lead

Hammer Drilling

Cable Tool Drilling

Sample Processing

Distribution of Values

Sample Descriptions

Dorset Lead

Cable Tool Drilling

New Areas

Programme 1991-2

Figures:

1. Locality Map ✓
2. Topographic Map and E.L. Boundaries ✓
3. New River Lead ✓
4. Dorset River Lead ✓
5. Longitudinal Section - New River Lead
6. Cross Sections ✓

Appendices:

1. Borehole Logs and Locations
2. Assay Data and Reserve Estimation

0002

Introduction

The E.L. was issued on 18th August 1988 and this report details exploration during the third year of tenure.

The aim has been to delineate palaeochannels in the Dorset and New River valleys and determine their heavy mineral content.

These two rivers are separated by Garden Ridge, on which the Alberton Goldfield - the primary source of the alluvial gold - is situated.

Location and Access

Pera Flats is the alluvial plain where the two rivers join before flowing into Ringarooma River about 3km north of Ringarooma village. Ringarooma is situated 8km due south of Branxholm on the Tasman Highway and lies about 100 km by road northeast of Launceston.

History of Exploration and Mining (alluvial)

New River. Tributaries of Crown Prince Creek which drained primary gold deposits on the eastern flanks of Garden Ridge were worked for alluvial gold during the 1920s and 1930s. There were around 40 000m³ of surface workings but there are no records of production. The Department of Mines sank twenty Calyx drill holes to the north of these workings to assist in their further exploitation. An 6m unlined shaft and short drive were excavated near one of the better grade holes (C7) but poor pumping equipment and wet conditions led to shaft collapse and cessation of operations.

Dorset River. Abandoned shallow surface workings occur on the slopes of interfluvial spurs west of Dorset River (fig.4). These are presumed to be reworked alluvial gold deposits which have been shed from Tertiary sediments and would suggest that a former (elevated) channel lay further to the west of the present one.

Refs?

? elevated

0000

Exploration in E.L.4/881. 1988-9 and 1989-90

The target area was originally the broad alluvial plain incorporating the confluence of the Dorset and New Rivers, accordingly a seismic survey of $1\frac{1}{2}$ km was undertaken across the Pera Flats and several potential palaeochannels were identified (A.R.1988-89). Two of these were drilled (B.Hs 1 and 2) to the target depths of 8.5m and 13.5m with negative results and it was decided to suspend drilling operations until a further seismic survey had been carried out.

This was done using both short and long spaced geophone cable (A.R.1989-90) and depths to bedrock of nearly 60m were indicated in Pera Flats and 30m upstream in the Dorset and New River valleys.

A line of holes (3-8) was drilled across portion of the New River Flats besides the Crown Prince Creek on seismic line no.10 where 30m to bedrock had been indicated. These holes intersected bedrock at 6-12m depth, which suggests that the wide spaced geophone lines were not indicating bedrock but possibly the interface between weathered and unweathered bedrock (see next section).

Five of these holes contained gold but none were of economic grade.

2. 1990-91

New River Lead. A competent cable tool driller was unavailable and it was decided in the meantime to carry out a rapid hammer drill programme to identify areas for more accurate sampling by cable tool at a later date.

Nineteen holes were drilled in three lines. The first, nos 9-14, was a continuation of the previous line nos 3-8. The second,

15-20 and third 21-27 were drilled at roughly right angles to search for the New River Lead. It was identified between B.Hs 19 and 20 but the method was discontinued due to poor sample recovery.

Four lines of holes were drilled in tracing the New River Lead over a distance of \approx 400m.

Nos 39-40 2

34-38 4

28-33 4

41-46 4

Cable Tool
 19 Cable Tool.
~~19 Cable Tool.~~

The assay results of this drilling combined with the results of the 1933 drilling indicate an in situ reserve in round figures of 30 000g of gold in 50 000m³ (average grade 0.6 g/m³).

The current drilling programme did not match the grade of alluvial gold which was found as a result of the drilling by the Department of Mines in 1939. This may result from over estimation in the earlier drilling, under estimation of the later drilling, or variations in grade along the course of the palaeochannel. One or two trenches across the lead would provide useful data on alluvial grade and would be necessary to provide sufficient material for pilot plant treatment so that a treatment process can be devised to recover the gold.

Sample Processing. Cuttings from drill bailer were decanted in 50L drums - settling time 10 minutes - three times, cradled and pan-concentrated in the field.

Samples were microscopically examined for mineral identification and grain count as a check on assay results and to determine variation in grain size with increasing distance from source. The data concerning depth and grain size of gold and slope of palaeochannel with

0003

increasing distance from source is summarised in figure 5.

Distribution of Values. The sediments were barren in the upper 4m of drilling except in the southernmost line of holes which is nearer to the primary source. Further south than this there were surface workings to a depth of 2m over an area of 1000 x 20 x 2 or 40 000m³ but there is no record of production.

Sample Descriptions. Volumes of decanted samples (less fines) were estimated in bins before processing. This estimate was compared with volumes after cradling to obtain an approximate fines content which is recorded in the bore logs.

The gold occurs in immature gravels over bedrock in the southernmost boreholes i.e. line C (1939) and nos 28-33 (1990). In boreholes further north the gold-bearing gravel overlies 10m of white sandy clay. The area, so far as is known, covered by this deposit is about 2ha. It contains 25% lithic fragments (leached Mathinna Beds sandstone), limonite nodules, cassiterite and zircon. The remainder is fine white sand, silt and clay. Similar leached Mathinna Beds are exposed in the floor of the abandoned surface workings.

The sequence consists of 10m of mature sediments on bedrock which is capped by a layer of heavy minerals and limonite, indicating prolonged erosion. Overlying this layer is 5-10m of immature gravel with alluvial gold at the base i.e. in contact with the zircon and cassiterite layer.

Dorset Lead. Two lines of Cable Tool holes were drilled across the Dorset River alluvial plain (figure 4) using the line of seismic lines 4 (holes 47 - 54) and 8 (holes 56 - 64) - hole no.55 was drilled between these two lines.

The thickness of alluvium in these holes was around 4 - 6m

0006

and gold content was limited to a few grains or entirely absent. It is concluded that the Palaeochannel is narrow in this area which accords with an inferred fault along the course of the Dorset River as reported (in A.R. 1990). Dolerite boulders were recorded in three of the holes (28, 63 and 64). Further progress was prevented in these holes due to severe damage to the casing shoe and drill bit. A ridge of dolerite along Alberton Road some 100m to the east is the probable source of this detritus.

Two prospective areas for concentrations of alluvial gold are suggested by this new evidence:

1. upstream of the boulder bed where loss of stream energy would occur on meeting the obstruction and
2. downstream of the constricted tract of the channel where waters enter the alluvial plain again causing loss of energy.

The constricted tract between these two areas may also be prospective depending on the timing of events: transport of gold, movement of talus and faulting.

New Areas. Alluvial ground in the Dorset River valley south of E.L.4/88 has been applied for (fig.2) so that the investigations can be extended further upstream closer to the source area.

The New River experience has been that economic concentrations of gold do not extend more than 1 km from the source. If a parallel can be drawn with the Dorset River, the alluvial ground for at least 4km upstream from the present E.L. boundary is more prospective for gold than the tract of the river in the current licence area.

Exploration Programme 1991-2 Three lines of holes are proposed:

1. (Fig.3) North of the abandoned surface workings in the New River goldfield is suggested by the promising results in B.H.46, which

indicates payable ground linking the boreholes and workings.

2. (Fig.3) West of the workings and upslope towards the primary gold source. This gold would be at shallow depth (<2m) and could be prospected by backhoe.

3. (Fig.4) South of the two lines of holes drilled in the Dorset River Valley to determine whether economic concentrations have occurred as a result of faulting and/or obstructions in the channel.

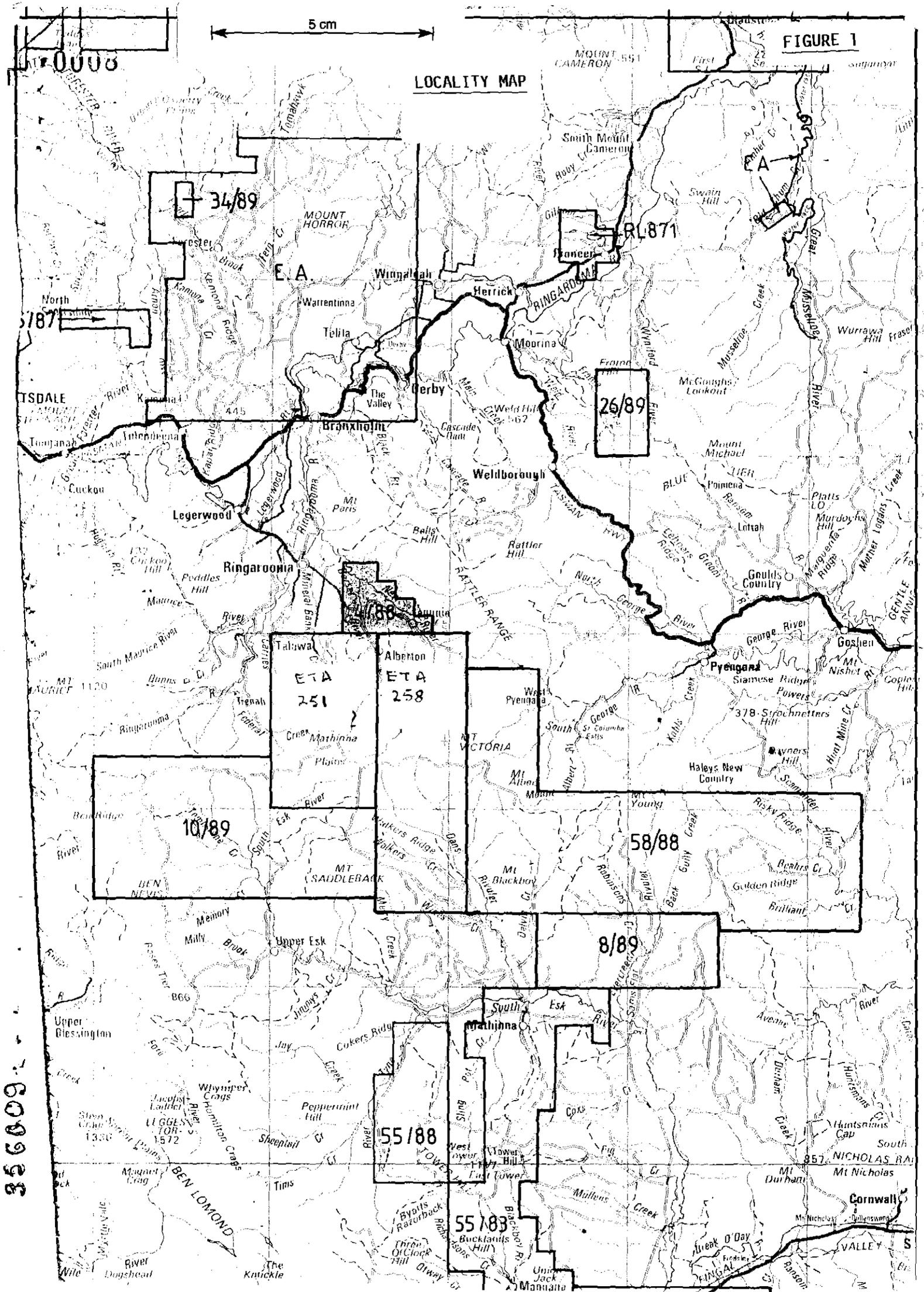


FIGURE 1

LOCALITY MAP

5 cm

356009

0000

187

34/89

RL871

26/89

10/89

58/88

8/89

55/88

55/83

ETA 251

ETA 258

FIGURE 1

LOCALITY MAP

5 cm

356009

0000

187

34/89

RL871

26/89

10/89

58/88

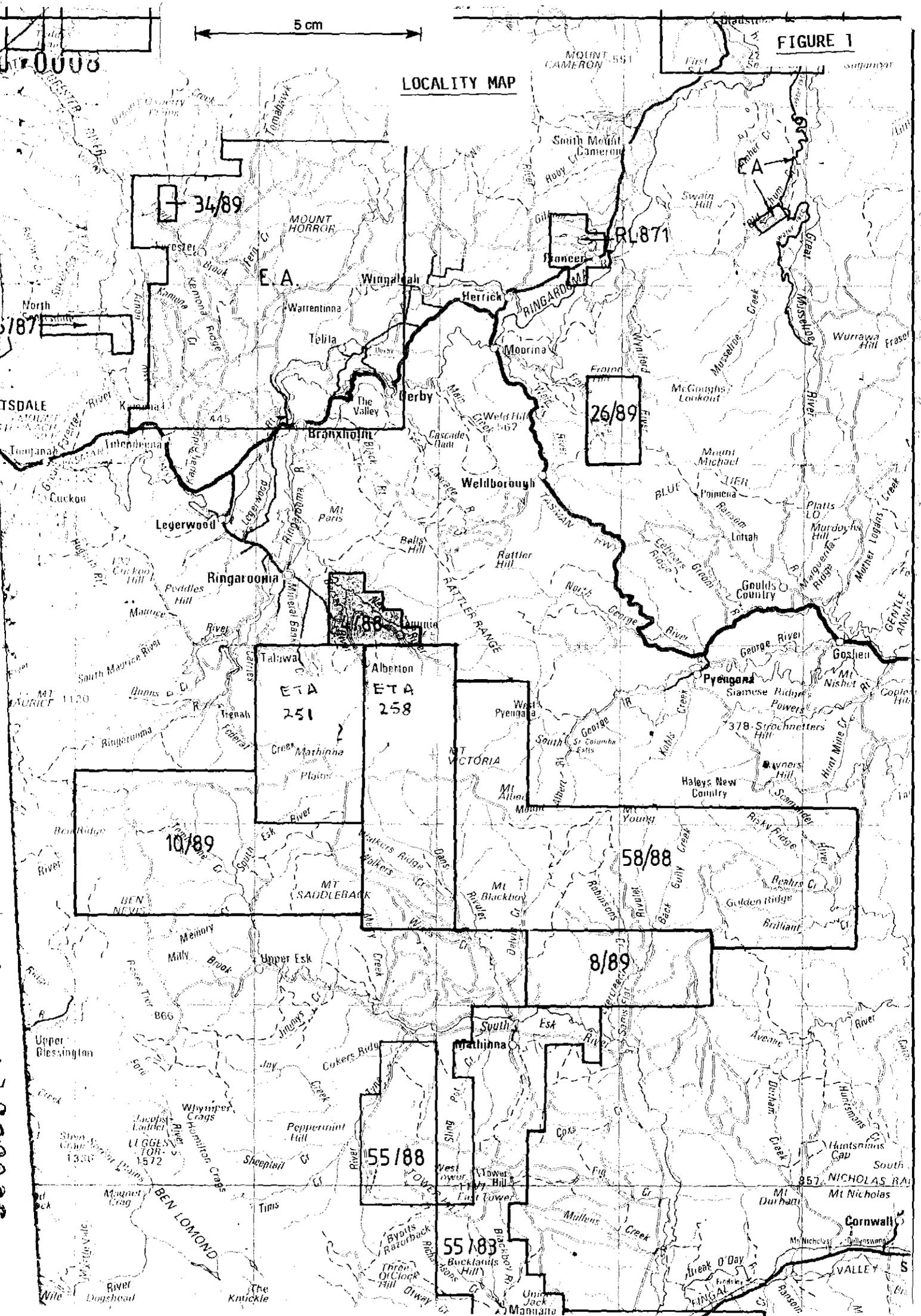
8/89

55/88

55/83

ETA 251

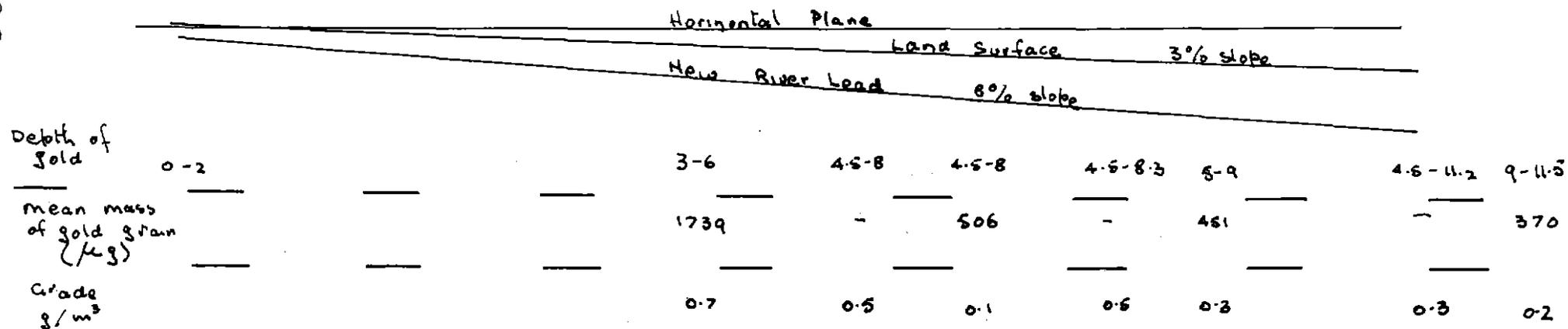
ETA 258



356010

Figure 5

LONGITUDINAL SECTION - NEW RIVER LEAD

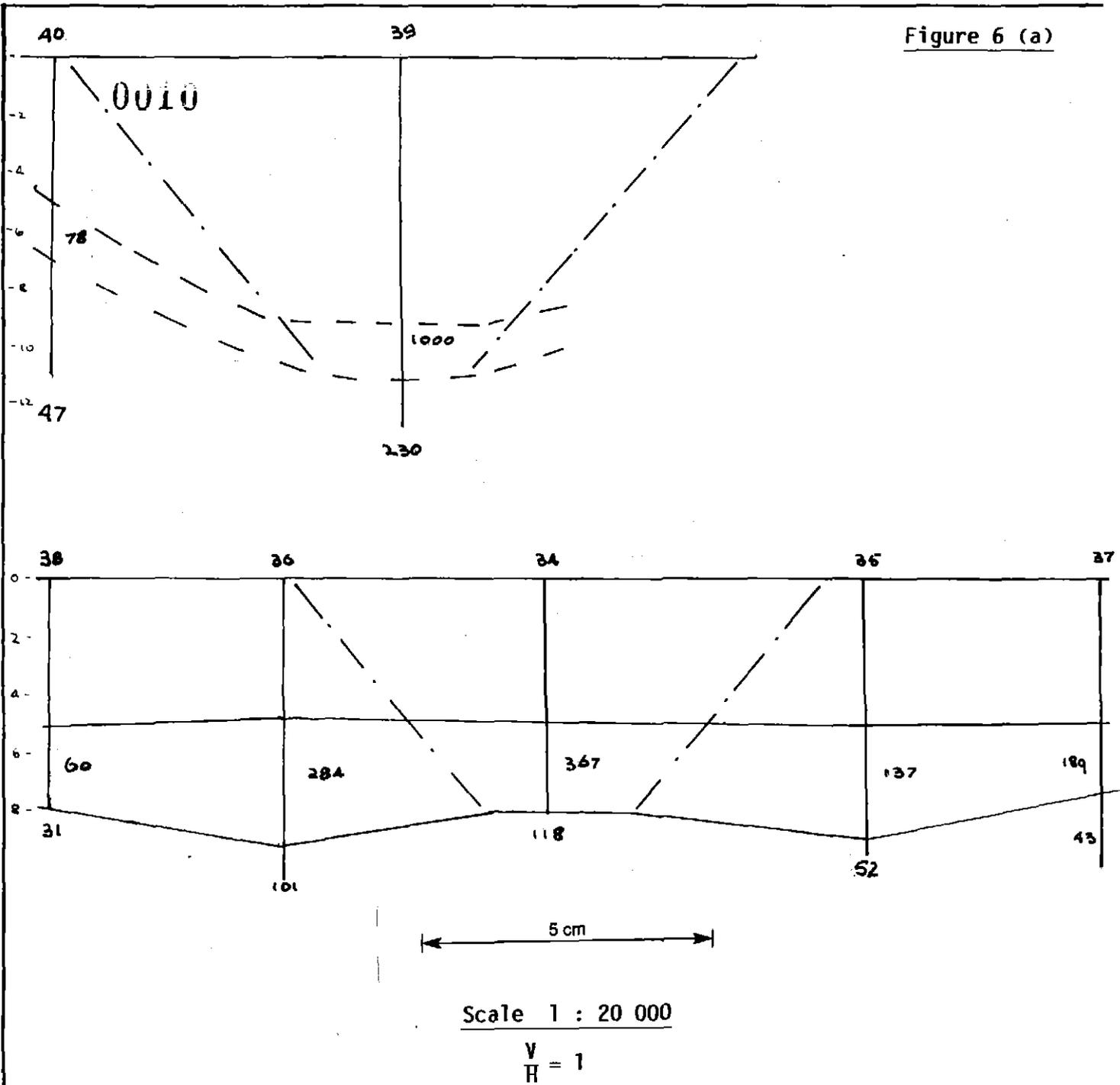
Scale 1:2500 $\frac{V}{H} = 2\%$ Trends in depth, mean mass & grade of gold in New River Lead.

July 1991

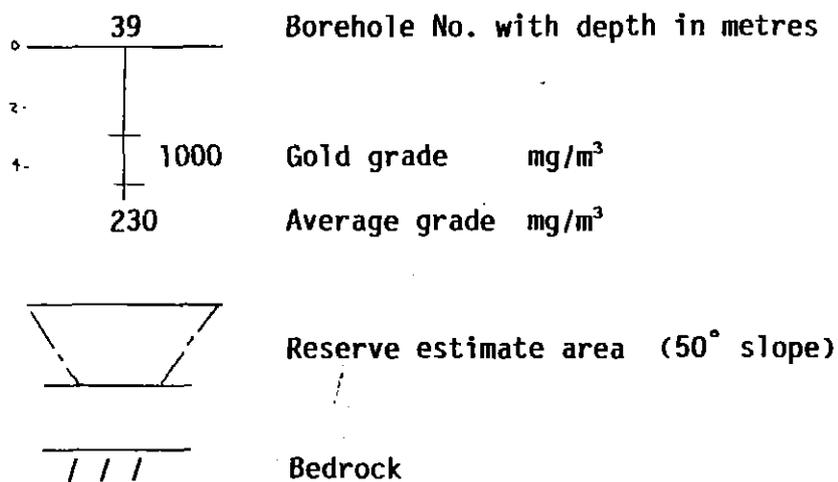
Vic Threader and Associates Pty. Ltd.

356010

Figure 6 (a)



New River Lead Borehole Sections



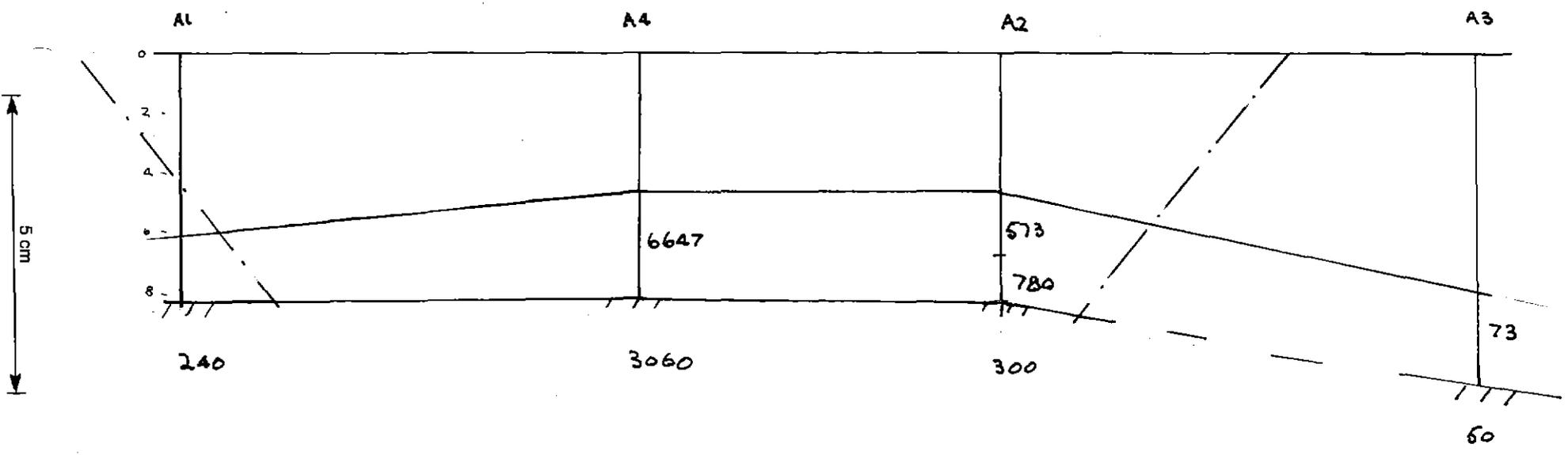
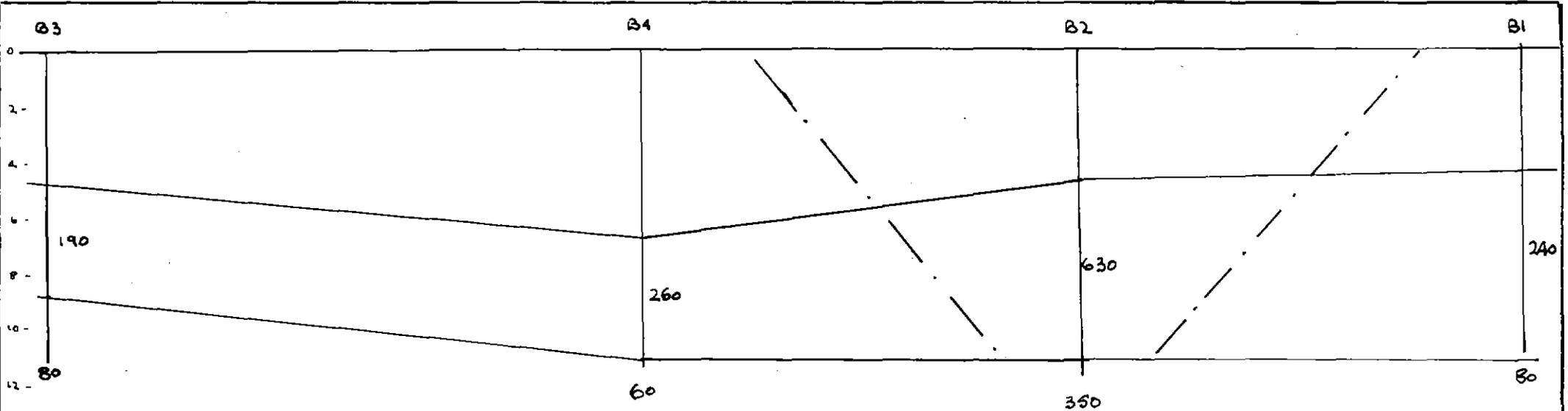
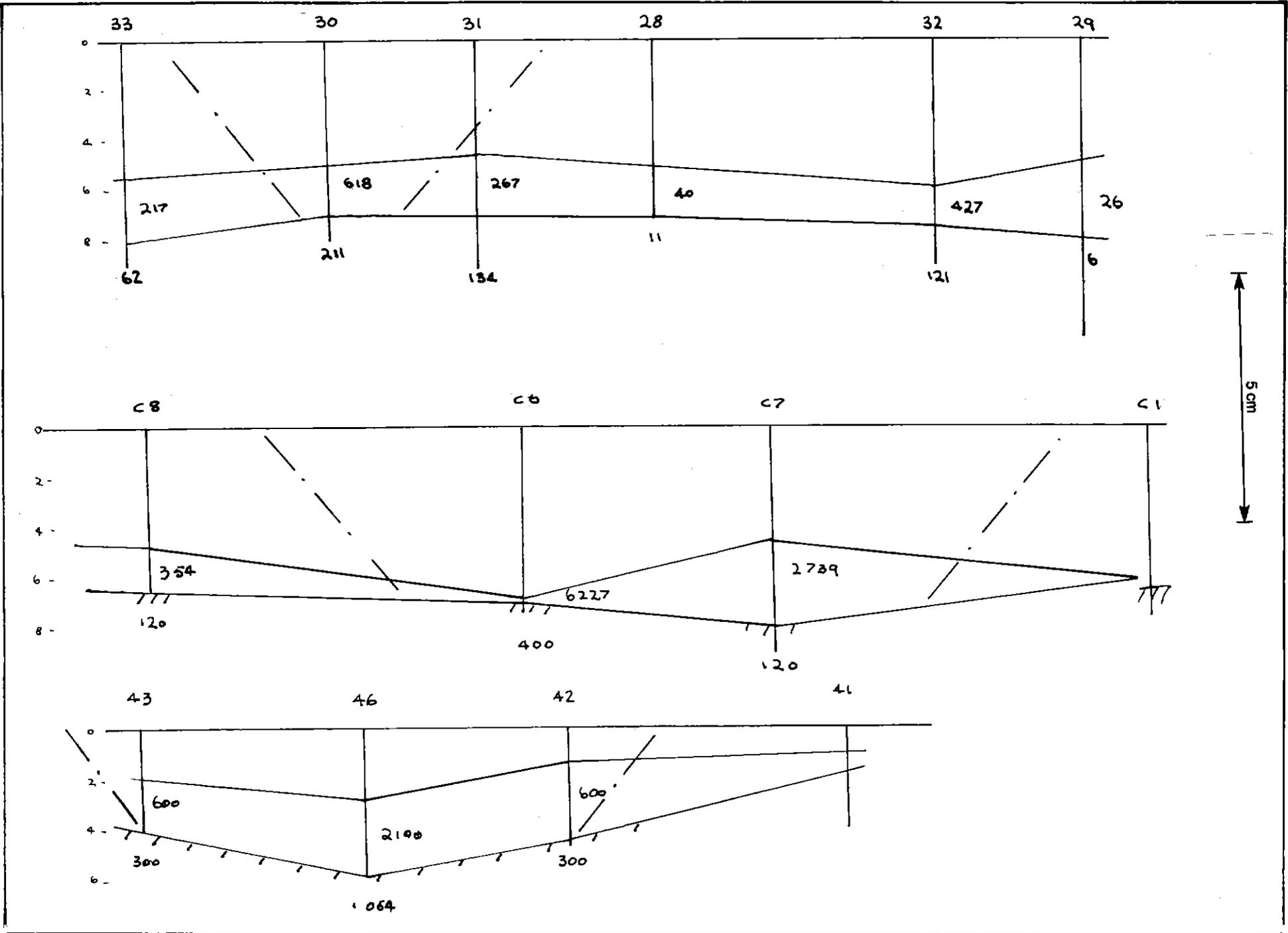


Figure 6 (b)



0013

APPENDIX 1

Borehole Logs and Locations

AMG References - Pera Flats Boreholes

<u>B. H. No.</u>	<u>mE</u>	<u>mN</u>	<u>B. H. No.</u>	<u>mE</u>	<u>mN</u>
1	565415	5432770	33	567100	5431055
2	170	485	34	160	130
3	566828	5431415	35	169	125
4	44	25	36	150	135
5	75	52	37	175	120
6	905	75	38	144	139
7	940	520	39	120	230
8	890	473	40	118	218
9	957	517	41	141	902
10	962	549	42	132	905
11	968	577	43	115	908
12	976	615	44	095	915
13	983	648	45	079	925
14	990	678	46	124	907
15	567140	297	47	565170	5430335
16	135	283	48	160	320
17	130	267	49	140	312
18	125	254	50	120	300
19	120	240	51	100	290
20	115	226	52	090	280
21	155	293	53	070	265
22	170	289	54	055	250
23	185	285	55	060	470
24	195	280	56	564795	745
25	210	279	57	810	750
26	225	265	58	835	745
27	255	237	59	850	755
28	130	043	60	875	770
29	140	034	61	895	785
30	118	052	62	920	785
31	122	049	63	940	800
32	135	037	64	965	880

.0010

PERA FLATS BORELOGS

<u>B.H.</u>	<u>Depth (m)</u>		<u>Thickness</u> <u>(m)</u>	<u>Log</u>	<u>Au Count</u>
	<u>From</u>	<u>To</u>			
9	0	11	11	Clayey gravel	nil
	11	12	1	Clay with ironstone nodules	
	12	14	2	Silty clay	
10	0	9	9	Brown clayey gravel	
	9	10	1	Sulphide particles in pan concentrate	1
	11	14	3	Silty clay	
11	0	14	14	Clayey gravel	nil
	14	15	1	Clay	
12	0	11	11	Clayey gravel	nil
	11	15	4	Silty clay	
13	0	15	15	Clayey gravel	
14	0	11	11	Clayey gravel	
15	0	10	10	Clayey gravel	
	10	12	2	Red silty clay	
16	0	8	8	Clayey gravel	
	8	11	3	Sandy clay	
	11	15	4	Clayey gravel	
	15	18	3	Silty clay	
17	0	7	7	Clayey gravel	
	7	8	1	Sandy clay	
	8	10	2	Clayey gravel	
	10	20	10	Sandy clay with occasional pebbles	1 (11-12m)
	20	21	1	Light brown silty clay, white at bottom	

<u>B.H.</u>	<u>Depth (m)</u>		<u>Thickness</u> <u>(m)</u>	<u>Log</u>	<u>Au Count</u>
	<u>From</u>	<u>To</u>			
18	0	8	8	Clayey gravel	
	8	10	2	Sandy clay	
	10	13	3	Clayey gravel	1 (11-12m)
	13	17	4	Sandy clay	
	17	20	3	Clean quartz gravel and white clay	
19	0	6	6	Clayey gravel	
	6	9	3	Sandy clay	nil
	9	11	2	Clayey gravel	
	11	18	7	Silty clay	
20	0	9	9	Clayey gravel	
	9	10	1	Sandy clay with occasional pebbles	6
	10	11	1	Clayey gravel	
	11	12	1	White clay with occasional pebbles	
	12	15	3	Silty clay	
21	0	14	14	Clayey gravel	
	14	15	1	Silty clay	
22	0	11	11	Clayey gravel Discontinued due to poor recovery	
23	0	11	11	Clayey gravel	
	11	12	1	Silty clay	
24	0	11	11	Clayey gravel	
	11	12	1	Silty clay	

B.H.	Depth (m)		Thickness (m)	Log	Au Count	
	From	To				
25	0	10	10	Clayey gravel		
	10	12	2	Silty clay		
26	0	5	5	Clayey gravel		
	5	14	9	Silty clay, gravel and particles of bedrock		
27	0	8	8	Clayey gravel		
	8	12	4	Silty clay, gravel and fragments of bedrock		
28	5	7	2	Clayey gravel	S & G% 40	5
	7	7.5	.5	Clay	<10	nil
29	4	5	1	Pebbly clay	25	nil
	5	8	3	" "	20	2
	8	12	4	White clay containing sulphides cassiterite and zircon		nil
30	4	5	1	Clayey gravel	40	nil
	5	6	1	" "	40	50
	6	8	2	White clay	<10	5
31	4	5	1	Clayey gravel	50	1
	5	6	1	" "	50	2
	6	7	1	" "	30	1
	7	9	2	White sandy clay	15	4
32	5	5.5	0.5	Clayey gravel	25	nil
	5.5	6	0.5	" "	30	1
	6	6.5	0.5	" "	30	16
	6.5	7	0.5	Sandy clay	5	3
	7	8	1	" "	5	6
	8	9	1	" "	5	nil

0018

-4-

B.H.	Depth (m)		Thickness (m)		Log S & G %	Au Count
	From	To				
33	4.5	5.5	1.0	Clayey gravel	50	nil
	5.5	6.5	1.0	" "	40	2
	6.5	7.0	0.5	" "	80	6
	7.0	7.5	0.5	" "	40	12
	7.5	8.0	0.5	" "	25	7
	8.0	9.0	1.0	White sandy clay	-	nil
34	4.5	5.0	0.5	Clayey gravel	50	nil
	5.0	5.5	0.5	" "	50	1
	5.5	6.0	0.5	" "	65	1
	6.0	6.5	0.5	" "	40	2
	6.5	7.0	0.5	" "	10	1
	7.0	7.5	0.5	} Clay & fine sand with quartz fragments	30	12
	7.5	8.5	1.0		40	15
35	0	4.5	4.5	Soil & clayey gravel	-	nil
	4.5	5.0	0.5	Clayey gravel	80	nil
	5.0	5.5	0.5	" "	66	2
	5.5	6.0	0.5	Sandy clay	20	1
	6.0	6.5	0.5	Sandy clay	40	10
	6.5	8.0	1.5	Sandy clay	20	8
	8.0	8.5	0.5	Fine sand & white clay with fragments of white siltstone (bedrock)	25	1
	8.5	9.0	0.5	- ditto -	40	1
	9.0	9.5	0.5	- ditto -	<10	nil
36	0	4.5	4.5	Soil, clay & shingle	-	-
	4.5	5.0	0.5	Shingle	70	4
	5.0	6.0	1.0	Gravel	-	nil
	6.0	8.0	2.0	Pebbly clay	20	17
	8.0	9.0	1.0	Pebbly clay with pellets of white clay	20	2
	9.0	10.5	1.5	Quartz gravel, sand & white clay containing cassiterite and zircon	25	nil
37	0	4.5	4.5	Soil, clay & shingle	-	nil
	4.5	5.0	0.5	Clay	20	nil
	5.0	7.5	2.5	Clayey gravel (sandstone fragments at 7.0-7.5)	50	8
	7.5	8.0	0.5	Brown clay with pellets of white clay	20	nil
	8.0	10.0	2.0	White clay, quartz	40	nil

B.H.	Depth (m)		Thickness (m)	Log	S & G %	Au Count
	From	To				
38	0	4.5	4.5	Soil, clay & shingle	-	nil
	4.5	5.0	0.5	Clay & shingle	55	nil
	5.0	7.0	2.0	Clayey gravel	50	9
	7.0	8.0	1.0	Clay	10	1
39	0	4.5	4.5	Soil, clay & shingle	-	nil
	4.5	9.0	4.5	Pebbly clay (abundant limonite 8.5-9.0)	40-50	2
	9.0	13.0	4.0	As above with pellets of white clay, most gold between 9.0-10.0m zircon abundant towards bottom of hole.		92
40	0	4.5	4.5	Soil, clay, shingle	-	nil
	4.5	6.0	1.5	Pebbly sand	70	10
	6.0	7.0	1.0	Clay	20	15
	7.0	8.5	1.5	Clay	30	nil
	8.5	11.0	2.5	White clay with quartz pebbles & fragments of sandstone, zircon & cassiterite		nil
41	0	1	1	Soil, clay & pebbles	20	nil
	1	2	1	Pebbly clay	15	nil
	2	3	1	" "	35	1
	3	4	1	Clayey gravel	75	nil
	4	4.5	0.5	Pebbly clay	25	nil
	4.5	5	0.5	Silt & clay (prob. bedrock)	<5	nil
42	0	2	2	Soil, clay & pebbles	45	nil
	2	3	1	Pebbly clay	45	5
	3	4	1	" "	45	5
	4	4.5	0.5	" "	45	5
	4.5	6.0	1.5	Silt & clay (bedrock)	30	nil
43	0	1	1	Soil, clay & pebbles	45	nil
	1	2	1	Pebbly clay	50	3
	2	3	1	" "	60	8
	3	4	1	Silt & clay (bedrock)	10	1
44	0	1	1	Soil, clay & pebbles	-	nil
	1	2	1	Pebbly clay	30	nil
	2	3	1	" "	45	nil
	3	4	1	" "	20	3
	4	4.5	0.5	" "	10	1
	4.5	5	0.5	" "	10	2

B.H.	Depth (m)		Thickness (m)	Log	S & G %	Au Count
	From	To				
45	0	1	1	Soil, clay & pebbles	-	nil
	1	2	1	" " "	7	nil
	2	3	1	" " "	7	nil
	3	4	1	" " "	7	1
	4	4.5	0.5	" " "	2	nil
	4.5	5	0.5	" " "	2	nil
46	1	2	1	pebbly clay	30	nil
	2	3	1	" "	95	nil
	3	4	1	" "	20	16
	4	4.5	0.5	" "	20	12
	4.5	5	0.5	" "	20	20
	5	5.5	0.5	" "	10	12
	5.5	6	0.5	" " with limonite nodules		4
47	1	2	1	Clayey gravel	70	nil
	2	3	1	Pebbly clay	25	nil
	3	4	1	" "	20	1
	4	4.5	0.5	Silty clay (bedrock)	<10	nil
48a	1	3	2	Pebbly clay	25	nil
	3	4	1	" "		
Hole aborted on hard bottom not bedrock (cf B.Hs 63 & 64)						
48b	1	2	1	Pebbly clay	30	nil
	2	3	1	" "	15	1
	3	4.5	1.5	" " with numerous clay pellets	15	nil
	4.5	6	1.5	- ditto - (close to bottom)	5	nil
49	1	4	3	Pebbly clay	35	nil
	4	4.5	0.5	Clayey gravel	35	nil
	4.5	5	0.5	Pebbly clay	35	1
	5	5.5	0.5	Sandy clay	10	1
	5.5	6	0.5	" " containing white sand & zircon		2

0023

B.H.	Depth (m)		Thickness (m)	Log	S & G %	Au Count
	From	To				
50	1	2	1	Pebbly clay	35	nil
	2	4	2	Sandy clay	30	nil
	4	4.5	0.5	Sandy pebbly clay	20	nil
	4.5	5	0.5	" " "	15	nil
	5	5.5	0.5	" " "	10	nil
	5.5	6	0.5	" " "	5	nil
	6	8	2	Silty clay (bedrock)	2	nil
51 15m from Dorset R	1	2	1	Silty sand	25	nil
	2	3	1	Pebbly silty sand with zircon	60	nil
	3	4	1	- ditto -	25	nil
	4	4.5	0.5	Pebbly sandy clay with weathered bedrock fragments	10	nil
	4.5	5.5	1	Silty clay	-	nil
52	1	2	1	Pebbly clay	35	nil
	2	3	1	Pebbly sandy clay	30	1
	3	4	1	Clayey gravel zircon present	50	nil
	4	4.5	0.5	Clayey gravel with fragments of weathered bedrock	35	nil
	4.5	5	0.5	clay, gravel	25	1
	5	5.5	0.5	" " zircon present	10	nil
	5.5	6	0.5	Silty clay	5	1
	6	7	1	" " with weath- ered fragments of bedrock	5	nil
53	1	2	1	clayey gravel	50	nil
	2	3	2	Pebbly clay	25	nil
	3	4	1	" "		nil
	4	4.5	0.5	Clayey gravel	60	nil
	4.5	5.5	1	" "	50	1
54	1	3	2	Pebbly clay	15	nil
	3	4.5	1.5	" "	40	nil
	4.5	5.5	1.0	" "	35	nil
	5.5	6	0.5	" " with weathered bedrock fragments	55	nil

B.H.	Depth (m)		Thickness (m)	Log	S&G%	Au Count
	From	To				
55	1	2	1	Pebbly clay	20	nil
	2	3	1	Sandy pebbly clay	10	nil
	3	4.5	1.5	" " " with zircon and weathered bedrock fragments	5	nil
56	1	2	1	Sandy pebbly clay	5	nil
	2	3	1	" " "	15	nil
	3	5.5	2.5	" " "		nil
57	1	4.5	3.5	" " "	20	nil
	4.5	5	0.5	" " " with weathered bedrock fragments	10	nil
58	1	2	1	Pebbly clay	5	nil
	2	3	1	Sandy pebbly clay	30	nil
	3	4	1	" " "	25	1
	4	4.5	0.5	Sandy clayey gravel	50	nil
	4.5	5	0.5	Silty clay (bedrock)	10	nil
59	1	2	1	Pebbly clay	5	nil
	2	4	2	" " "	35	nil
	4	4.5	0.5	Silty clay (bedrock)	<5	nil
60	1	2	1	Pebbly clay	35	1
	2	3	1	Clayey gravel	55	1
	3	4	1	" " "	25	1
	4	4.5	0.5	" " "	35	1
	4.5	5	0.5	Silty clay (bedrock)	5	nil
61	1	2	1	Clayey gravel	60	nil
	2	3	1	Gravel	90	nil
	3	4	1	Pebbly clay	40	1
	4	5	1	Silty clay	5	nil
62	1	2	1	Pebbly clay	30	nil
	2	3	1	" " "	40	nil
	3	4	1	" " "	20	nil
	4	4.5	0.5	" " " with bed- rock fragments	20	nil
63	1	2	1	Gravel	90	nil
	2	3	1	Pebbly clay	40	nil
	3	4	1	" " "	35	nil
	4	4.5	0.5	" " "	-	nil
64	1	4	3	" " "	35	nil
	4	4.5	0.5	" " "	5	nil

Both 63 & 64 aborted at 4.5 due to hard bottom - dolerite fragments in drill cuttings and severe damage to drill bit and casing shoe.

APPENDIX 2

Assay data and Reserve Estimation

ANALABS

A Division of Inchtcape Inspection and Testing Services Australia Pty. Ltd.

356025

0024

ANALYTICAL DATA

SAMPLE PREFIX		REPORT NUMBER	REPORT DATE	CLIENT ORDER No.	PAGE			
		103300.60.07696	20/02/91	Verbal	1 OF 1			
TUBE No.	SAMPLE No.	Al	Au	Au1	Sample	Wt:1	* Grain count	mass/gram
1	PF 28 5.0-7.0	9480	-	1.49	0.157	-	11	298
2	PF 29 5.0-12.0	10100	-	1.43	0.142	-	6	478
3	PF 30 5.0-8.0	-	86.99	33.74	-	38786	211	613
4	PF 31 4.0-9.0	42200	-	24.26	0.575	-	134	3033
5	PF 32 5.5-8.0	68400	-	19.42	0.284	-	121	177
6	PF 33 5.5-8.0	47500	-	9.88	0.208	-	62	366
7	PF 34 5.0-8.5	12900	-	20.05	1.554	-	118	801
8	PF 35 5.0-9.0	6140	-	9.44	1.538	-	52	411
9	PF 36 4.5-8.5	24600	-	17.15	0.697	-	101	779
10	PF 36 8.5-10.5	72	-	0.94	13.127	-	5) 96	472
11	PF 37 4.5-8.0	2060	-	6.87	3.333	-	43	624
12	PF 37 8.0-10.0	1470	-	1.42	0.970	-	7	203
13	PF 38 4.5-8.0	3110	-	4.89	1.572	-	31	444
14	PF 39 5.5-9.0	124	-	0.37	2.986	-	2	185
15	PF 39 9.0-13.0	15300	-	59.55	3.892	-	230	662
16	PF 40 4.5-8.0	2560	-	6.83	2.667	-	42	364
17	PF 40 8.0-11.0	1390	-	2.45	1.762	-	9	272
18							mean	634
19								
20								
21								
22								
23	DETECTION	10	5.00	0.01	0.001	1		
24	UNITS	ppm	%	mg	g	ug		
25	METHOD	GG309	GG399	GG309	9903	9903		

Results in ppm unless otherwise specified
 T = element present, but concentration too low to measure
 X = element concentration is below detection limit
 - = element not determined

AUTHORISED OFFICER

ANALABS

356026

A Division of Incharge Inspection and Testing Services Australia Pty. Ltd.

ANALYTICAL DATA

SAMPLE PREFIX

REPORT NUMBER

REPORT DATE

CLIENT ORDER No.

PAGE

103300 ^{made} 60.07897

10/04/91

1 OF 1

TUBE No	SAMPLE No	Vol	WT	mg/m ³	Grain Count	mass (µg) / gram			
1	46 / PF / 3-6	114.78	2.45	1052	66	1739			
2									
3									
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									
23	DETECTION	0.01	0.01						
24	UNITS	mg	g						
25	METHOD	GG300	GF001						

Results in ppm unless otherwise specified
 T = element present; but concentration too low to measure
 X = element concentration is below detection limit
 - = element not determined

AUTHORISED OFFICER



5 cm

Figure 2

TOPOGRAPHIC MAP

- E.L. 4/88
- Application Areas
2km² (ETA 258)
- 3 km² (ETA 251)

10040
356028

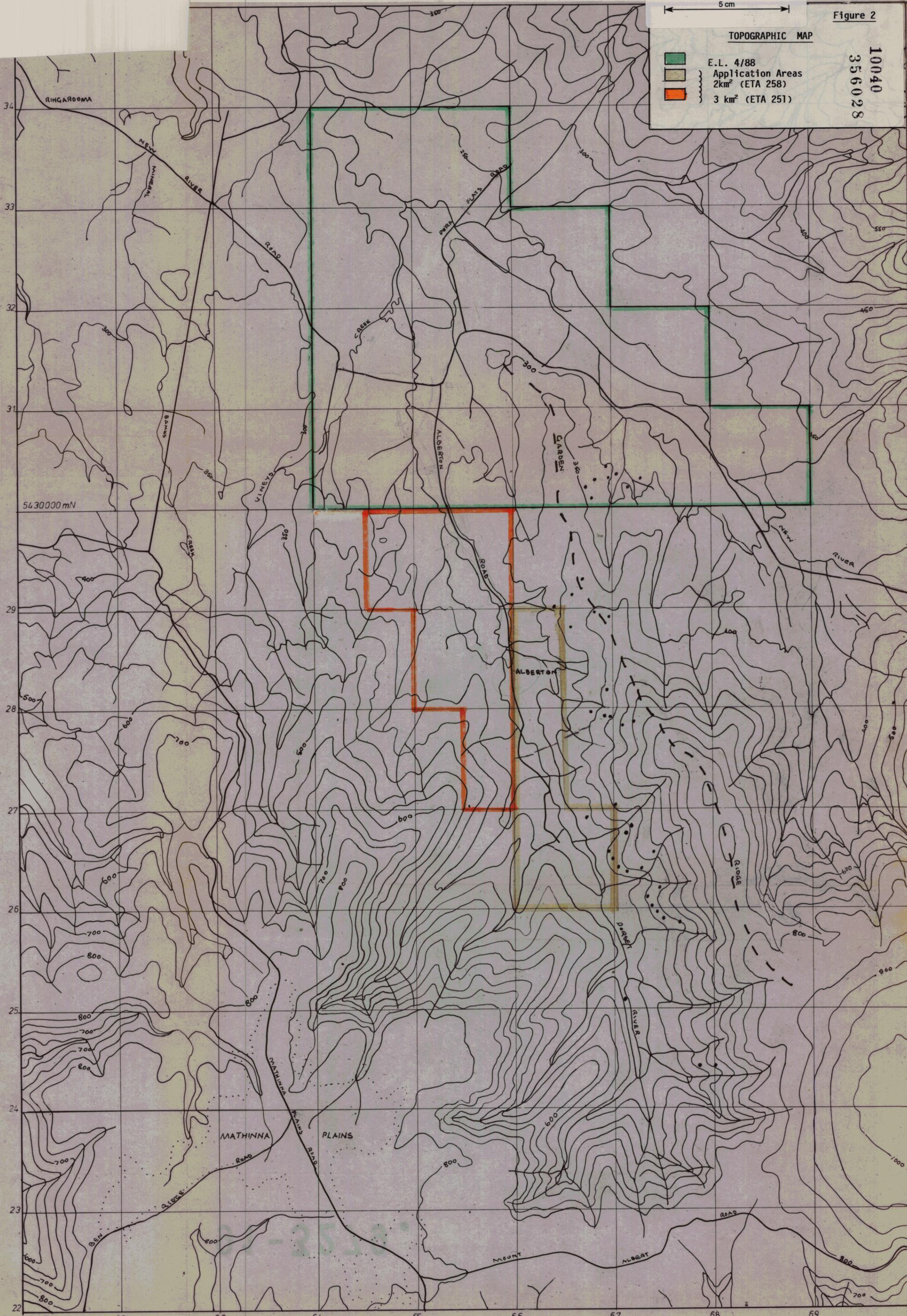
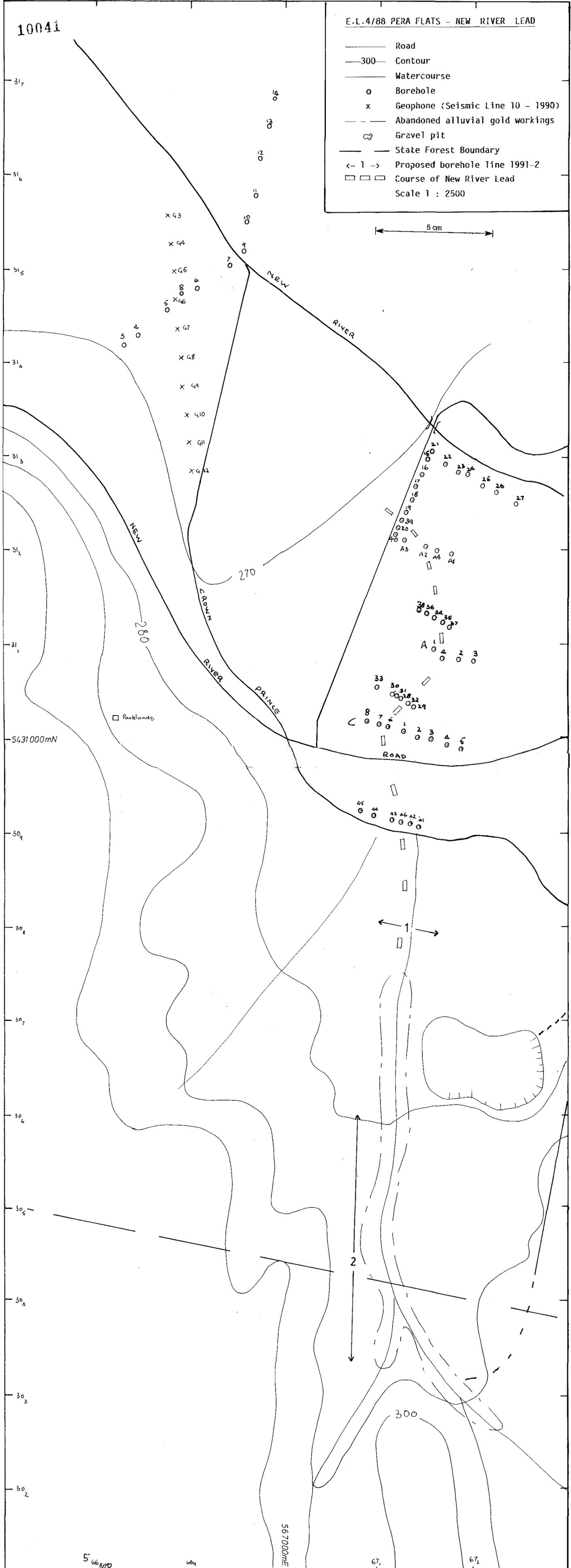


Figure 3

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

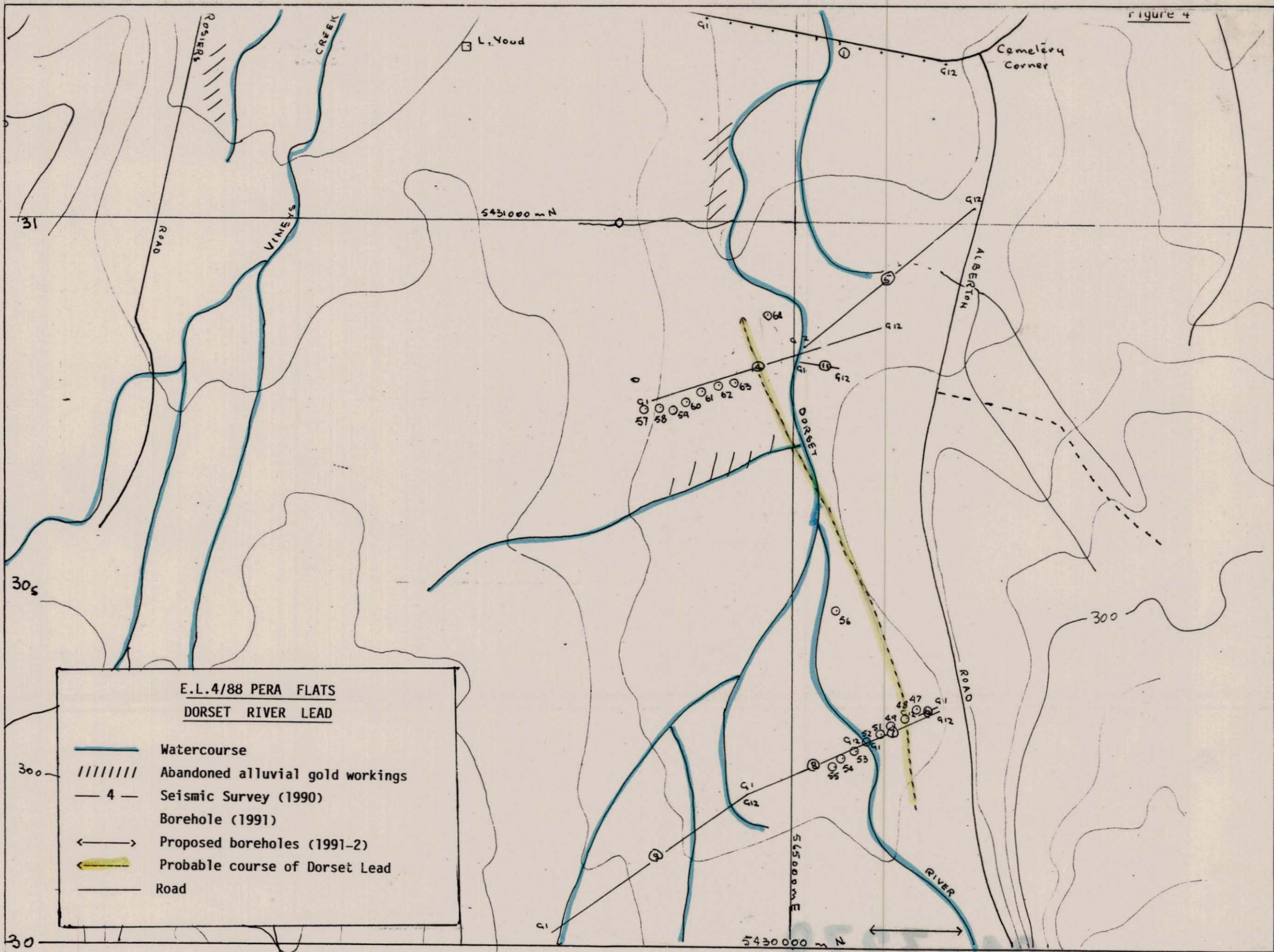
- Road
 - 300— Contour
 - Watercourse
 - o Borehole
 - x Geophone (Seismic Line 10 - 1990)
 - - - Abandoned alluvial gold workings
 - ⊕ Gravel pit
 - State Forest Boundary
 - < - 1 - > Proposed borehole line 1991-2
 - Course of New River Lead
- Scale 1 : 2500

356029



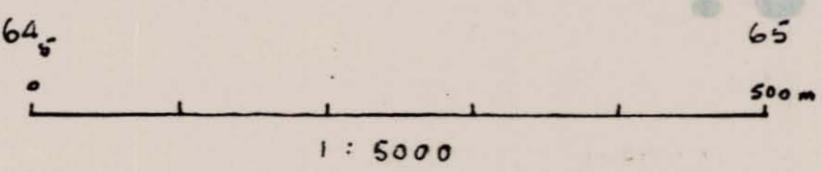
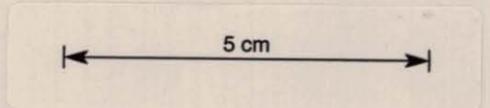
10042

Figure 4



**E.L.4/88 PERA FLATS
DORSET RIVER LEAD**

- Watercourse
- Abandoned alluvial gold workings
- Seismic Survey (1990)
- Borehole (1991)
- Proposed boreholes (1991-2)
- Probable course of Dorset Lead
- Road



July 1991

356030

Wm Thredwell and Associates Pty Ltd