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SK55-4
PROJECT 505

PLACER EXPLORATION LTD

RELINQUISHMENT REPORT
FOR 12 MONTHS TO JUNE 1990

EL 8/89, CLAYTONS CREEK (EVERCREECH RIVULET)
TASMANIA

RPT NO. TAS 4/90

MINES

90-3145

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KEYWORDS

TASMANIA	EXPLORATION
EL 8/89	GOLD
SK55-04	SILVER
CLAYTONS CREEK	LEAD
EVERCREECH RIVULET	ZINC
MATHINNA BEDS	COPPER
GRANITE	ARSENIC
MINE	
8415 (Forester)	

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1. SUMMARY

EL 8/89 over the Claytons Creek/Evercreech Rivulet area was obtained to explore for Carlin style Au mineralisation.

Regional drainage sampling using bulk cyanide leach (Au, Ag, Cu) and -80# stream sediment (Cu, Pb, Zn, Ag, Au) showed only odd spotty Au anomalies.

Follow-up of these weak spotty Au only anomalies showed the Au to be associated with very small zones of thin, widely spaced, quartz veining. One of these had been worked in the form of a shaft at the King Mine. These zones were of very limited extent (less than 50m in any direction and commonly less than 10m) and are not economically viable.

This evaluation of the EL8/89 shows that isolated spotty Au anomalies in bulk and conventional stream sediment samples are indicative of small vein occurrences of Au. In this environment, larger coincident anomalies with possible anomalous indicator elements (As, Cu) may be better indicators of larger Au mineralisation.

Regional exploration of EL8/89 suggests there is no significant Au mineralisation.

The ground should be relinquished.

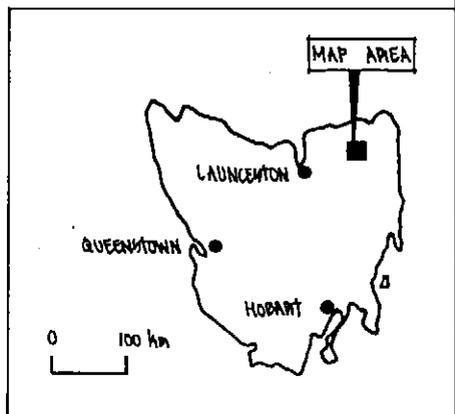
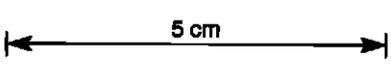
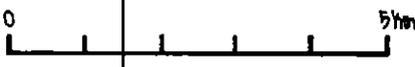
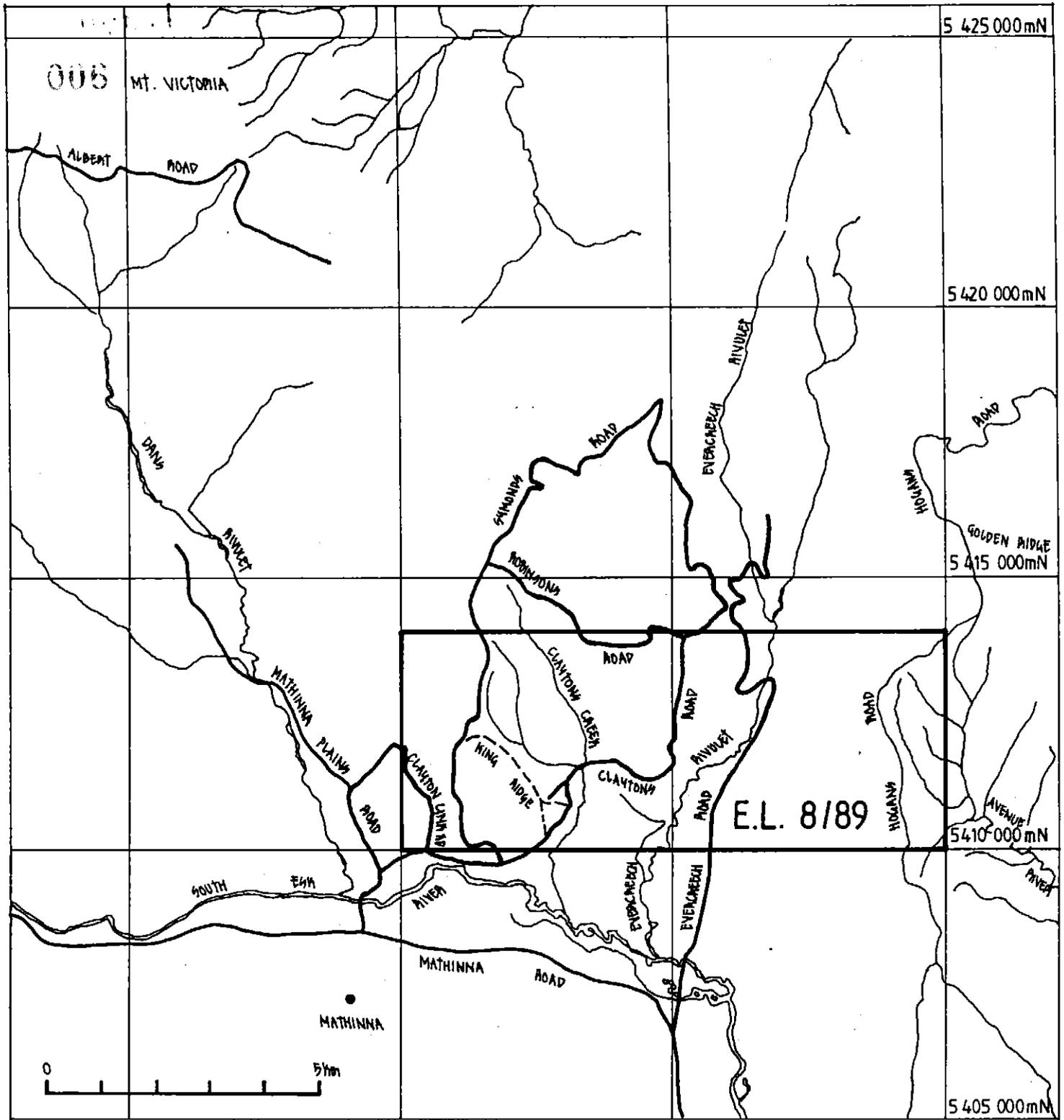


FIG. 1 LOCATION MAP, E.L. 8/89 CLAYTONS CREEK, TASMANIA.

2. INTRODUCTION

EL 8/89, Claytons Creek, is located 70km east of the major central northern Tasmanian city of Launceston (Figure 1). The Licence is centred to the northeast of the small township of Mathinna, extending eastward from the Clayton Links Road to Hogans Road and South from Robinsons Road to Christmas Hill.

The Licence was obtained by Placer Exploration Limited as a result of an application made in January 1989 over open ground. This was to explore an area underlain by Cambro-Silurian Mathinna Beds for Carlin style gold mineralisation. EL 8/89 was granted to Placer Exploration Limited on the 9th June 1989 over an area of 40 sq. km. The original application for 120 sq. km was reduced to 40 sq. km. because of prior applications for parts of the area by Federation Resources N.L. (and others). The original area of EL8/89 had an expenditure^f commitment of \$53000 over the first 2½ years of tenure.

Very little prior work has been recorded for the area of the Licence. Minor work by Union Corporation (Australia) Pty Ltd and Geophoto Minerals was directed at Sn/W/Pb/Zn/Cu/Mo mineralisation with no Au analyses being completed. The area has probably been prospected extensively for coarse quartz vein related Au mineralisation but records are hard to locate.

This report summarizes and records the investigations completed by Placer Exploration in the year (June 1989 - June 1990) between obtaining and relinquishing the EL 8/89 area.

3. LOCATION AND GENERAL

EL 8/89 is centred just to the northeast of the small village of Mathinna in northeast Tasmania, about 30kms west from the east coast holiday village of Scamander and about 18kms north of the Fingal. The 4km (N-S) by 10km (E-W) area is in the headwaters of the South Esk River.

Excellent access to the Licence area is provided by the sealed Fingal to Mathinna road to the southwest corner of the Licence. Other various grade gravel roads and forestry tracks and fire trails provide good driving access to within 2kms of most parts of the E.L.

Most of the Licence is underlain by a sequence of turbidic sandstone, siltstones and mudstones of the Cambro-Silurian Mathinna Beds. These support an open, relatively dry eucalypt forest with little underbrush. Patches of rainforest occur in the steeper gullies and on the shaded southern slopes of the higher areas. Much of the Licence area has been logged and now replanted with pine plantations.

The Licence area is drained by tributaries of the South Esk River. The main tributaries are Claytons Creek and Evercreech Rivulet. Both have lower reaches of relatively flat alluvial deposits which have been cleared and are now privately farmed. The upper reaches are very steep short creeks deeply incised into the underlying Mathinna Beds. Elevations range from about 270m on the river flats to ridge crests and plateaux at 640m, less than two kilometres away.

4. TITLE

Exploration Licence 8/89 (Claytons Creek) resulted from an application for an open area. The application, lodged on the 8th January 1989, covered an area of 120sq km of Mathinna Beds thought to be prospective for Carlin style gold mineralisation. After discussions with personnel of the Department of Mines the area of the application was reduced to 40sq km. The area excluded included ground covered by previous applications and small isolated sections around these prior applications.

On the 9th June 1989, EL 8/89 was granted to Placer Exploration Limited and covered an area of 40 square kilometres. This area was free of any State or Commonwealth reserves.

Most of the Licence area is state forest (mostly replanted pine plantation) with privately owned farms along Claytons Creek and Evercreech Rivulet.

EL 8/89 is subject to yearly renewals, however, because of poor results the Licence will not be renewed after its first 12 month period.

5. PREVIOUS EXPLORATION

Gold was the first metallic mineral discovered in Tasmania. It was discovered in 1852 at Mangana (The Nook) 20kms to the south of EL8/89. Prospecting in the area continued at significant levels until the 1880's with the discovery of several goldfields (Beaconsfield in 1877, Lefroy in 1872, Mangana-Mathinna-Mt Horror) and the tin fields of the St Helens, Weldborough, Blue Tier, Branxholm and Gladstone districts (1874). By the 1920's all the goldfields in the area had been virtually abandoned.

Little record of the early work exists except for minor Mines Department reports.

With the upturn in the gold price the Golden Gate Mine at Mathinna reopened and is still operational. Generally the gold occurred in quartz reefs varying from millimetres to 10 metres thick.

However, despite the upturn of exploration since the 1960's very little exploration has been completed in the EL8/89 area. Geophoto Minerals held part of the area as a small portion of EL6/68 in the 1968-74 period. Their main interest was lead-zinc-copper-silver around the Scamander area and tin around the Northeast Tasmanian granites. Conventional drainage sampling (-80# stream sediment and panned concentrate samples) was the only exploration technique used on or adjacent to the EL8/89 area. Analyses for Cu, Pb, Zn, Ag, Sn, W showed no significant results in the EL8/89 vicinity.

Union Corporation (Australia) Pty Ltd held a small part of the EL8/89 area as part of its EL21/80 in the 1980-82 period. Their main target was a quartz rich greissen/vein stockwork carrying tin (Winnall, 1982). Molybdenum, tungsten and basemetals were secondary targets. Again the only work

completed near the EL8/89 area was drainage sampling with assays for Sn, W, Mo, Cu, Pb, Zn. No anomalous samples were noted in the Mathinna area.

No further investigations were recorded for the Claytons Creek area until Placer Exploration (and others) showed an interest in the area in the late 1980's.

6. GEOLOGY

The only hard rocks known in the Licence area (Figure 2) are the quartzwacke turbidite sequence known as the Mathinna Beds. These are thought to be dominantly Early Devonian to Silurian in age although some parts may be as old as Ordovician (or even Cambrian).

The Mathinna Beds is a sequence of interbedded sandstones, siltstones and mudstones which have been contact metamorphosed by Devonian Granites to psammites and spotted pelites. Within the EL8/89 area they are composed mainly of sandstones and siltstones which have been folded and faulted probably during the Mid-Devonian Tabberabberan Orogeny and the Late Devonian intrusion of the granites. The resultant foliation trends north-northwest and dips steeply to the southwest.

An old working occurs within the Mathinna Beds in the Western part of the Licence. This working (the King Mine) is reportedly a shaft 100m deep. Tailings suggest a much shallower depth to this shaft which currently appears to be only about 10m deep. Gold occurs in thin quartz veins in a coarse siltstone to fine sandstone. Some pyrite is also present.

The only other rocks occurring within the Licence area are the Quaternary alluvium and gravels along the flatter lower reaches of Claytons Creek and Evercreech Rivulet and along the South Esk River (Sheet SK5504/505-6).

7. CURRENT EXPLORATION

7.1 Techniques

EL 8/89 was acquired to cover an area of Cambro-Silurian Mathinna Beds suitable for hosting Carlin style Au mineralisation.

A review of previous exploration data showed that although the area has a long history of prospecting and small scale gold prospecting and mining there is little recorded gold exploration. All exploration (recorded) has been on the edge of Sn/W exploration with secondary exploration for Cu/Pb/Zn.

Initially Placer undertook broadly spaced drainage sampling. This sampling involved the taking of two samples from the major easily accessible drainages within the area. These samples were:

- a 5kg sample of -6mm active stream sediment for bulk cyanide leaching of extractable gold with additional silver and copper analyses.
- a 1kg conventional stream sediment sample for analysis of the -20# fraction for Cu, Pb, Zn, Bi, As, Sb, Sn and Ag (for reference and comparison of the bulk sample).

Anomalous sample sites were resampled for both sample types.

Confirmed anomalous drainages were further sampled with additional 5kg bulk leach samples and closer spaced 1kg stream sediment samples.

Geological mapping, rock chip and further detailed -20# stream sediment sampling was undertaken in the resultant anomalous small creeks.

7.2 Results

The review of previous exploration data showed no detailed systematic exploration of the Claytons Creek area has been completed. Despite the area being in a significant belt of quartz vein hosted gold mineralisation (the Mangana-Mathinna-Alberton-Mt Horror-Waterhouse line) little, if any detailed systematic evaluation of the area has been recorded. Minor regional drainage geochemistry by Geophoto and Union Corporation showed no Au analyses and only low Sn, W, Mo, Cu, Pb, Zn values (background).

The initial Placer drainage sampling programme showed a 10.5ppb bulk leach Au anomaly in Claytons Creek (220ppm Cu and 12ppm Ag). This was confirmed by a 95ppm As value in the corresponding stream sediment sample. Samples from the adjacent Evercreech Rivulet showed low (0-4ppb) Au but 128ppm Cu in the bulk leach and 12ppm As in the stream sediment sample.

Follow-up sampling of these drainages was undertaken. This involved -20# sampling of most of the tributaries of the two streams, just above creek intersections. The -20# fraction was taken rather than the usual -80# fraction because of the lack of a significant amount of fine material in the high energy, steep tributaries. Comparison of -20# and -80# samples showed only a slight increase in the Au values in -80# samples from the Tower Hill area. In larger creeks further bulk leach samples were also taken.

Twenty three further bulk cyanide leach samples were taken (Sheet SK5504/505-1 for locations and Appendix I/Sheet SK5504/505-2 for analyses). Of these only four samples showed anomalous (>0.5ppb) Au values, with the highest value being only 0.80ppb. Three of the slightly anomalous samples drained the King Ridge (Claytons Creek to the east, King Creek to the west and a small unnamed creek to the northwest). The highest Au bulk leach value was from a small creek draining the eastern

side of the ridge to the east of Claytons Creek. Cu and Ag values for the bulk leach samples were not anomalous for any sample.

Of the 60 associated follow-up -20# stream sediment samples three showed anomalous Au values (Appendix II Sheets SK5504/505.2 - 505-5). One sample (29ppb) confirmed the earlier anomaly in the lower reaches of Evercreech Rivulet, another showed an anomaly of 22ppb in a small drainage in the headwaters of Claytons Creek, and the third showed a stronger anomaly of 34ppb in the headwaters of the King Creek. Other samples in these streams showed background Au values. Analyses for Cu (peak of 46ppm), Pb (peak of 72ppm), Zn (to 185ppm), Ag (to 1.4ppm), As (to 28ppm), Sb (to 13ppm) and Sn (to 10ppm) showed no anomalous values.

The isolated nature of the Au anomalies suggests the Au source is small with a significant nugget effect. The coincidence of Au anomalous streams using the two sampling techniques suggests the anomalies are real, but small. All drainages with slightly anomalous Au values in either the conventional or bulk samples were geologically mapped, with associated rock chip and further -20# drainage samples. This mapping showed the main rocks to be monotonous, massive, fine grained feldspathic sandstones with minor thin sandstone trends. In Claytons Creek (AMG 778137 Sheet SK5504/505-6) the sandstone in a 50 by 50m area was cut by abundant quartz veins (pers. comm P. Williamson). Elsewhere quartz veins were rare, as was any sign of alteration (of the sandstones). Rock chip and stream sediment samples collected during this mapping of anomalous drainages showed no anomalous Au values (Appendix III). However, the unseived stream sediment samples were analysed. Repeat samples (Appendix IV) showed anomalous Au from the King Creek only in the vicinity of the old King Mine (up to 2.82ppm Au in two samples from within 20m of the mine dump). This mine was located. Au occurs with fine sulphides (mainly pyrite) in a narrow zone of thin quartz veins (veins less than 1mm wide at a rate of 1/10cm in a 1m wide zone).

7.3 Proposed Exploration

The regional exploration has shown several weak gold anomalies in the vicinity of the King Ridge. Geological mapping and detailed sampling has shown the anomalous Au is associated with narrow zones of thin quartz veins, such as occurs at the old King Mine.

The location of the King Mine on following-up a combination of weak bulk and conventional stream sediment sample Au anomalies shows the validity and sensitivity of the technique.

However, the follow-up showed the Au anomaly resulted from only a very small Au rich veined zone.

No further work is required and the area should be relinquished.

8. REFERENCES

WINNALL. N.J., 1982. Final Report EL21/80
Unpublished Report of Union
Corporation (Aust) Pty. Ltd

APPENDIX I

REGIONAL DRAINAGE GEOCHEMISTRY

BULK CYANIDE LEACH SAMPLE ANALYSES



305 South Road, Mile End South, South Australia, 5031
Telephone: (08) 43 5722 Fax: (08) 234 0321 Telex: LABCOM AA89323

473021

Mr Peter Ellis
Placer Exploration Limited
P.O. BOX 384
ROSNY PARK
TAS 7018

Job Number: 9AD1500

Your Reference: 1180/1460
Number of Samples: 105
Extra Samples : 0

Date Received: 22-AUG-1989
Date Reported: 19-SEP-1989

This report comprises a cover sheet and pages 1 to 3

This report relates specifically to the samples tested in so far as that the samples as supplied are truly representative of the sample source. Please address any enquiries to Mr. Trevor Francis.

Approved Signature:

for

Dr. John Kikkert
General Manager - Adelaide.

Report Analyte Codes:
N.A. - Not Analysed.
L.N.R. - Listed But Not Received.
I.S. - Insufficient Sample for Analysis.

Distribution Codes:
CC - Carbon Copy
EM - Electronic Media
MM - Magnetic Media



Job: 9AD1500
O/N: 1180

021

ANALYTICAL REPORT

473022

Sample Cu Ag Au

700670	0.2	<0.02	0.10
700693	0.5	<0.02	0.15
700697	0.2	<0.02	0.60
700737	0.3	<0.02	0.20
700747	0.1	<0.02	0.60
700749	0.1	<0.02	0.45
700763	<0.1	<0.02	0.80
700770	0.2	<0.02	0.30
700777	0.2	<0.02	0.05
700783	0.4	<0.02	0.05

Clayton

Units	ppm	ppm	ppb
Detn Limit	0.1	0.02	0.05
Scheme	BLEG1	BLEG1	BLEG2



CLASSIC LABORATORIES LTD

Osman Place, Thebarton, South Australia 5031
Telephone: (08) 43 5722 Facsimile: (08) 234 0325



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022

473023

Mr Peter Ellis
Placer Exploration Limited
P.O. Box 384
ROSNY PARK
TAS 7018

Job Number: 0AD0055

Your Reference: 1473
Number of Samples: 10
Extra Samples : 0

Date Received: 09-JAN-1990
Date Reported: 22-JAN-1990

This report comprises a cover sheet and pages 1 to 1

This report relates specifically to the samples tested in so far as that the samples as supplied are truly representative of the sample source. Please address any enquiries to Mr. Trevor Francis.

Approved Signature:

for

Dr. John Kikkert
General Manager - Adelaide.

Report Analyte Codes:
N.A. - Not Analysed.
L.N.R. - Listed But Not Received.
I.S. - Insufficient Sample for Analysis.

Distribution Codes:
CC - Carbon Copy
EM - Electronic Media
MM - Magnetic Media



Job: OAD0055
O/N: 1473

473024

ANALYTICAL REPORT

023

Sample	Au	Ag	Cu
700794	0.35	<0.02	0.1
700796	0.10	<0.02	<0.1
700798	0.45	<0.02	<0.1
701352	<0.05	<0.02	0.2
701355	0.40	<0.02	0.2
701357	0.30	<0.02	<0.1
701359	0.10	<0.02	0.2
701361	0.25	<0.02	0.5
701363	0.20	<0.02	0.2
701365	0.15	<0.02	0.4

Units	ppb	ppm	ppm
Detn Limit	0.05	0.02	0.1
Scheme	BLEG2	BLEG1C	BLEG1C

024

473025

APPENDIX II

REGIONAL DRAINAGE GEOCHEMISTRY

STREAM SEDIMENT SAMPLE ANALYSES



CLASSIC COMLABS LTD

Analytical Laboratories (INC. IN WA.)



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305 South Road, Mile End South, South Australia, 5031
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025

473026

Mr Peter Ellis
Placer Exploration Limited
P.O. BOX 384
ROSNY PARK
TAS 7018

Job Number: 9AD1499

Your Reference: 1463
Number of Samples: 231
Extra Samples : 0

Date Received: 22-AUG-1989
Date Reported: 27-SEP-1989

This report comprises a cover sheet and pages 1 to 10

This report relates specifically to the samples tested in so far as that the samples as supplied are truly representative of the sample source. Please address any enquiries to Mr. Trevor Francis.

Additional material was not available to perform analysis on those samples marked as "Insufficient Sample for Analysis".

Approved Signature:

for

Dr. John Kikkert
General Manager - Adelaide.

Report Analyte Codes:
N.A. - Not Analysed.
L.N.R. - Listed But Not Received.
I.S. - Insufficient Sample for Analysis.

Distribution Codes:
CC - Carbon Copy
EM - Electronic Media
MM - Magnetic Media



ANALYTICAL REPORT

026

Sample	Cu	Pb	Zn	Ag	As	Sb	Sn
700667 - 80#	20	38	38	1.4	8	5	<4
700669 - 80#	19	34	28	1.2	4	<4	4
700671 - 80#	10	15	46	0.7	6	<4	6
700672 - 80#	12	30	20	0.8	12	<4	290 <i>Gx12A</i>
700674 - 80#	10	30	15	0.6	5	<4	5
700676 - 80#	10	20	22	0.9	5	6	6
700678 - 80#	13	28	17	1.1	5	<4	4
700680 - 80#	9	18	22	0.6	6	<4	6
700682 - 80#	9	24	13	1.0	5	<4	6
700684 - 80#	14	24	40	1.0	6	<4	<4
700686 - 80#	16	34	54	1.3	11	<4	6
700688 - 80#	26	38	250	1.0	14	<4	6
700690 - 80#	6	24	15	0.8	9	<4	6
700692 - 80#	15	42	88	1.3	11	<4	5
700694 - 80#	24	38	125	1.3	8	<4	10
700696 - 80#	22	52	54	1.2	5	<4	8
700698 - 80#	15	170	60	1.3	28	<4	<4
700699 - 80#	2	12	<2	0.3	2	<4	480 <i>Gx13</i>
700703 - 80#	14	36	34	1.1	12	<4	4
700705 - 80#	8	32	20	1.0	6	<4	5
700707 - 80#	10	32	24	1.1	10	<4	20
700709 - 80#	32	38	120	1.1	12	4	8
700711 - 80#	28	72	160	1.2	20	<4	6
700713 - 80#	30	46	80	1.2	9	<4	5
700715 - 80#	30	48	38	1.0	12	4	8
700717 - 80#	19	40	48	1.6	6	4	4
700719 - 80#	12	34	25	0.8	7	<4	4
700721 - 80#	18	36	50	0.8	5	<4	5
700723 - 80#	16	20	25	<0.1	5	<4	6
700725 - 80#	13	12	20	<0.1	30	<4	5
700727 - 80#	42	38	185	0.3	20	<4	<4
700729 - 80#	25	40	185	0.3	15	<4	6
700730 - 80#	4	40	13	<0.1	<2	<4	34 <i>Gx10</i>
700732 - 80#	32	35	230	0.5	25	<4	4
700734 - 80#	28	28	170	<0.1	13	<4	4
700736 - 80#	36	30	86	<0.1	11	<4	4

*Chryse
Cred*

Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Detn Limit	2	4	2	0.1	2	4	4
Scheme	AAS1	AAS1	AAS1	AAS2A	XRF1	XRF1	XRF1



Job: 9AD1499

O/N: 1463

027

ANALYTICAL REPORT

Sample	Cu	Pb	Zn	Ag	As	Sb	Sn
700738 - 80#	26	28	120	0.2	18	<4	8
700740 - 80#	14	16	28	<0.1	45	<4	6
700742 - 80#	22	22	52	<0.1	7	<4	5
700744 - 80#	11	20	28	<0.1	6	<4	10
700746 - 80#	15	18	32	<0.1	6	<4	5
700748 - 80#	25	20	78	<0.1	12	<4	5
700750 - 80#	25	20	94	<0.1	15	4	4
700751 - 80#	4	<4	7	<0.1	3	<4	58 <i>5017</i>
700753 - 80#	5	12	14	<0.1	7	<4	4
700755 - 80#	9	10	10	<0.1	13	<4	4
700757 - 80#	7	18	15	<0.1	17	<4	<4
700759 - 80#	6	15	15	0.2	10	5	4
700761 - 80#	15	24	54	0.7	22	<4	4
700763 - 80#	13	15	32	<0.1	18	4	5
700765 - 80#	5	6	13	<0.1	5	<4	<4
700767 - 80#	22	15	105	<0.1	28	<4	<4
700769 - 80#	22	14	70	<0.1	16	<4	4
700771 - 80#	28	24	155	0.2	6	<4	4
700773 - 80#	26	28	86	0.4	9	<4	8
700775 - 80#	38	28	115	<0.1	13	5	6
700777 - 80#	38	28	145	0.2	7	<4	8
700779 - 80#	46	32	66	0.1	8	5	6
700781 - 80#	12	30	32	<0.1	17	4	8
700782 - 80#	<2	<4	13	<0.1	<2	<4	480 <i>6x15</i>
700784 - 80#	28	26	125	1.4	9	<4	8
700786 - 80#	11	18	30	0.9	8	<4	20
700788 - 80#	13	22	24	1.0	10	<4	6
700790 - 80#	13	48	28	0.9	6	<4	<4
700792 - 80#	13	14	55	0.8	6	4	8

*Clayton
Critt*

Units	Cu	Pb	Zn	Ag	As	Sb	Sn
Detn Limit	2	4	2	0.1	2	4	4
Scheme	AAS1	AAS1	AAS1	AAS2A	XRF1	XRF1	XRF1



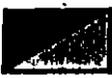
028

Job: 9AD1499
O/N: 1463

ANALYTICAL REPORT

Sample	Au Avg	Au Dp1	Au Dp2	Au Dp3
700667 - 80#	<2	---	---	---
700669 - 80#	<2	---	---	---
700671 - 80#	<2	---	---	---
700672 - 80#	<2	---	---	---
700674 - 80#	2	---	---	---
700676 - 80#	<2	---	---	---
700678 - 80#	<2	---	---	---
700680 - 80#	<2	---	---	---
700682 - 80#	<2	---	---	---
700684 - 80#	4	---	---	---
700686 - 80#	<2	---	---	---
700688 - 80#	<2	---	---	---
700690 - 80#	<2	---	---	---
700692 - 80#	4	---	---	---
700694 - 80#	6	---	---	---
700696 - 80#	<2	---	---	---
700698 - 80#	24	---	I.S.	---
700699 - 80#	2	---	---	---
700703 - 80#	2	---	---	---
700705 - 80#	<2	---	---	---
700707 - 80#	4	---	---	---
700709 - 80#	6	---	---	---
700711 - 80#	34	20	50	---
700713 - 80#	2	---	---	---
700715 - 80#	2	---	---	---
700717 - 80#	4	---	---	---
700719 - 80#	<2	---	---	---
700721 - 80#	<2	---	---	---
700723 - 80#	<2	---	---	---
700725 - 80#	<2	---	---	---
700727 - 80#	4	---	---	---
700729 - 80#	22	---	I.S.	---
700730 - 80#	4	---	---	---
700732 - 80#	4	---	---	---
700734 - 80#	2	---	---	---
700736 - 80#	6	---	---	---

Units	ppb	ppb	ppb	ppb
Detn Limit	2	2	2	2
Scheme	AAS9	AAS9	AAS9	AAS9



ANALYTICAL REPORT

029

Sample	Au Avg	Au Dp1	Au Dp2	Au Dp3
700738 - 80#	2	---	---	---
700740 - 80#	16	---	---	---
700742 - 80#	2	---	---	---
700744 - 80#	8	---	---	---
700746 - 80#	6	---	---	---
700748 - 80#	6	---	---	---
700750 - 80#	<2	---	---	---
700751 - 80#	8	---	---	---
700753 - 80#	4	---	---	---
700755 - 80#	<2	---	---	---
700757 - 80#	6	---	---	---
700759 - 80#	2	---	---	---
700761 - 80#	2	---	---	---
700763 - 80#	2	---	---	---
700765 - 80#	<2	---	---	---
700767 - 80#	<2	---	---	---
700769 - 80#	<2	---	---	---
700771 - 80#	<2	---	---	---
700773 - 80#	<2	---	---	---
700775 - 80#	<2	---	---	---
700777 - 80#	<2	---	---	---
700779 - 80#	<2	---	---	---
700781 - 80#	<2	---	---	---
700782 - 80#	<2	---	---	---
700784 - 80#	<2	---	---	---
700786 - 80#	<2	---	---	---
700788 - 80#	<2	---	---	---
700790 - 80#	<2	---	---	---
700792 - 80#	2	---	---	---

Units	ppb	ppb	ppb	ppb
Detn Limit	2	2	2	2
Scheme	AAS9	AAS9	AAS9	AAS9

473031

030

ANALABS

A division of MacDonald Hamilton & Co. Pty. Ltd.

Phone (09) 458 7999

52 Murray Road, Welshpool, W.A. 6106

Telex AA92560

FAX: 004 31 8890

ANALYTICAL REPORT No. 899, 52, 08, 05757

THIS REPORT MUST BE READ IN CONJUNCTION WITH THE ACCOMPANYING ANALYTICAL DATA

P.D. Ellis
Placer Exploration Limited
PO Box 384
Roseny Park
Tasmania 7018

ORDER No.	PROJECT
474	Claytons Crk
DATE RECEIVED	RESULTS REQUIRED
28/12/89	ASAP

No. OF PAGES OF RESULTS	DATE REPORTED	No. OF COPIES	TOTAL No. OF SAMPLES
1	12/01/90	1	14

STATE OF SAMPLES	REFER BELOW	PRE-TREATMENT							ANALYSIS					
		SAMPLE NUMBERS	DRY	CRUSH	SPLIT	PUL-VERISE	SIEVE	OTHER SEE REMARKS	NONE	REFER TO ANALYSIS SECTION	PREPARATION	METHC		
	Various		SS	Prep: 005	007, 018							Cu, Pb, Zn, Ag/107		
	Various		SS									Se/114		
	Various		SS									Au, AuChk/309		

RESULTS

TO

P.D. Ellis
Placer Exploration Limited
PO Box 384
Roseny Park
Tasmania 7018

RESULTS

TO

REMARKS

STATE OF SAMPLES	ANALYSIS — PREPARATION	ANALYSIS — METHOD
whole core	perchloric acid A1	atomic absorption AAS
split core	hydrochloric acid A2	x-ray fluorescence XRF
cutting	nitric acid A3	spectrophotometry SPEC
rock	aqua regia A4	colorimetry COL
oil	nitric-perchloric A5	chromatography CHR
slip	HF mixture A6	titration ITN
water	HF under pressure A7	other chemicals means CHEM
tissue	fusion A8	miscellaneous MISC
stream sediment		fluorescence FLUOR
heavy mineral		inductively coupled plasma ICP

AUTHORISED OFFICER

031

473032

ANALABS

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

ANALYTICAL DATA

SAMPLE PREFIX

REPORT NUMBER

REPORT DATE

CLIENT ORDER No.

PAGE

999.52.05.06757

12/01/90

1474

1 OF 1

TUBE No.	SAMPLE No.	Au	AuChk	Cu	Pb	Zn	Ag	As		
1	700793	<0.008	-	5	15	36	<0.1	12		
2	700795	<0.008	-	5	10	17	<0.1	2		
3	700797	<0.008	<0.008	5	5	26	<0.1	2		
4	700799	<0.008	-	5	10	15	<0.1	2		
5	700800	<0.008	-	5	10	53	<0.1	13		
6	701351	<0.008	-	7	10	32	<0.1	15		
7	701353	<0.008	-	9	10	32	<0.1	5		
8	701354	<0.008	-	25	20	93	<0.1	8		
9	701356	<0.008	-	12	10	53	<0.1	2		
10	701358	<0.008	-	12	10	25	<0.1	2		
11	701360	<0.008	-	14	15	55	<0.1	7		
12	701362	<0.008	-	10	5	39	<0.1	4		
13	701364	<0.008	-	15	15	72	<0.1	6		
14	701366	0.029	0.021	8	5	34	<0.1	2		
15										
16										
17										
18										
19										
20										
21										
22										
23	DETECTION	0.008	0.008	1	1	1	0.1	1		
24	UNITS	ppm	ppm	ppm	ppm	ppm	ppm	ppm		
25	METHOD	309	309	102	102	102	102	114		

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



APPENDIX III
ROCK CHIP AND STREAM SEDIMENT
GEOCHEMISTRY RESULTS

MEMO

10/4/90

TO: P. ELLIS, FILE

FROM: P. WILLIAMSON

RE: FOLLOW-UP SAMPLING: CLAYTONS CREEK EL.

Follow-up stream sediment and rock-chip sampling of anomalous drainages in the Claytons Ck area was conducted.

Sample locations are shown on attached map (Saddleback 5641) and stream sediment and rock chip locations and descriptions are given in the attached tables.

Outcrop within the drainage was generally poor and no areas of significant alteration/mineralisation, were recognised. The primary lithology within the area consisted of monotonous massive, fine-grained feldspathic sandstone with minor thin siltstone units.

Abundant quartz veining in feldspathic sandstone cropped out in a small area (approx. 50m x 50m) at the downstream end of the anomalous tributary of Claytons Ck (GR Sad 778137), but apart from this occurrence quartz veining within the area was reasonably rare.

CLAYTONS CREEK - Stream Sediment Samples.

<u>Sample No.</u>	<u>Grid Ref. Location</u>
701306	GR Sad 772100
701310	GR Sad 766111
701311	GR Sad 766113
701313	GR Sad 766117
701317	GR Sad 765116
701318	GR Sad 777114
701319	GR Sad 780115
701320	GR Sad 798129
701321	GR Sad 794131
701324	GR Sad 783117
701326	GR Sad 779116
701327	GR Sad 775117
701328	GR Sad 775118
701320	GR Sad 781118
701332	GR Sad 749135
701333	GR Sad 753136
701334	GR Sad 755136
701336	GR Sad 757139
701337	GR Sad 758140
701340	GR Sad 778138
701341	GR Sad 777138
701344	GR Sad 778137
701346	GR Sad 777136

CLAYTONS CREEK - Rock Chip Samples

<u>Sample No.</u>	<u>Location</u>	<u>Description</u>
701307	GR Sad 768107	Float. Single piece. Partially weathered fine-grained feldspathic sands with minor qtz stockworking.
701318	GR Sad 766111	Sub-outcrop. Fine-grained massive feldspathic sandstone.
701319	GR Sad 766111	Sub-outcrop. Partially weathered, fine-grained micaceous shale.
701312	GR Sad 762113	Float. 12 pieces. White qtz vein material.
701314	GR Sad 766117	Non-selective outcrop sample. Weakly weathered micaceous shale. Minor red Fe-oxide staining along cleavage planes.
6701315	GR Sad 765119	Float. Fine-grained massive feldspathic sandstone with rare thin qtz veins and red oxide staining disseminated throughout sample.
701316	GR Sad 762116	Float. Rare. Fine-grained feldspathic sandstone with minor thin qtz stockworking and Fe-oxide staining.
701322	GR Sad 744131	Float. Single piece. Weakly silicified fine-grained, massive feldspathic sandstone with minor thin qtz veins.
7-1323	GR Sad 794132	Outcrop. Fine-grained massive siltstone.

701325	GR Sad 782117	Float. Single-piece. Qtz vein material with Fe-oxide filling vughs.
701329	GR Sad 775118	Float. Qtz vein material.
701335	GR Sad 756137	Scree. Single piece. Partially weathered siltstone with thin qtz veins, approx 3 veins/10cm.
701338	GR Sad 758140	Scree. Single piece. Massive, grey siltstone with qtz stockmaking.
701339	GR Sad 779139	Float. Single piece. Massive grey siltstone with 10cm thick qtz veins with Fe-oxide filled cavities.
701342	GR Sad 777138	Outcrop. Massive grey siltstone.
701343	GR Sad 777138	Outcrop and float composite. 8 pieces. Grey massive siltstone with qtz veining.
701345	GR Sad 777137	Scree. Qtz vein with Fe-oxides.



CLASSIC LABORATORIES LTD

Incorporated in WA; a wholly owned subsidiary of Amdel Ltd
Osman Place, Thebarton, South Australia 5031
Telephone: (08) 43 5722 Facsimile: (08) 234 0321



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473038

037
Mr Peter Ellis
Placer Exploration Limited
P.O. BOX 384
ROSNY PARK
TAS 7018

FINAL ANALYSIS REPORT

Your Order No: 1480

Our Job Number : 0AD1078

Samples received : 10-APR-1990

Results reported : 19-APR-1990

No. of samples : 46

Report comprises a cover sheet and pages 1 to 1

This report relates specifically to the samples tested in so far as that the samples as supplied are truly representative of the sample source.

Note:

If you have any enquiries please contact Mr David Eardley-Harris quoting the above job number.

Approved Signatory:

Dr John Kikkert
General Manager - Adelaide

Report Codes:

N.A. - Not Analysed.
L.N.R. - Listed But Not Received.
I.S. - Insufficient Sample.

Distribution Codes:

CC - Carbon Copy
EM - Electronic Media
MM - Magnetic Media

"RELIABLE ANALYSES AT COMPETITIVE COST"

CLASSIC LABORATORIES LTD

Job: OAD1078
O/N: 1480

473039

ANALYTICAL REPORT

Sample	Cu	Pb	Zn	Au Dp1	Au Dp2	Ag	As
701305	9	8	6	0.01	--	<1	<2
701306	32	32	65	0.11	0.05	1	48
701307	7	14	15	<0.01	--	<1	8
701308	16	12	38	<0.01	--	<1	5
701309	50	38	86	<0.01	--	1	14
701310	26	32	90	0.04	--	1	25
701311	18	26	36	<0.01	--	1	18
701312	20	6	6	<0.01	--	<1	<2
701313	15	30	38	<0.01	--	1	6
701314	15	25	36	<0.01	--	1	<2
701315	17	30	26	<0.01	--	<1	8
701316	10	12	14	<0.01	--	<1	8
701317	26	26	70	<0.01	--	1	11
701318	7	18	22	<0.01	--	<1	3
701319	22	32	25	<0.01	--	<1	13
701320	7	12	6	<0.01	--	<1	3
701321	19	16	28	<0.01	--	<1	20
701322	7	15	9	0.02	<0.01	<1	3
701323	22	20	20	<0.01	--	1	9
701324	20	24	80	<0.01	--	1	8
701325	24	18	15	<0.01	<0.01	<1	2
701326	22	26	90	<0.01	--	1	10
701327	13	18	78	<0.01	--	1	3
701328	28	22	100	<0.01	--	1	10
701329	10	18	12	<0.01	--	<1	<2
701330	25	34	55	<0.01	--	1	5
701331	6	<4	6	<0.01	--	<1	<2
701332	18	22	72	<0.01	--	1	9
701333	18	12	80	<0.01	--	1	3
701334	22	24	100	0.01	--	1	6
701335	2	12	20	<0.01	--	<1	7
701336	19	8	54	<0.01	--	1	8
701337	25	26	35	<0.01	--	1	12
701338	22	14	6	<0.01	--	<1	15
701339	16	20	14	<0.01	--	<1	<2
701340	22	34	190	<0.01	--	1	24
701341	28	26	115	<0.01	--	1	13
701342	15	20	55	<0.01	--	1	9
701343	16	15	19	<0.01	--	<1	3
701344	28	30	66	<0.01	--	<1	16
701345	20	15	17	<0.01	<0.01	<1	2
701346	36	20	150	<0.01	--	1	24
701347	18	22	3	<0.01	--	<1	4
701348	35	38	105	<0.01	--	1	20
701349	19	12	6	<0.01	--	<1	<2
701350	17	<4	3	<0.01	--	<1	<2

Units	ppm						
Detn Limit	2	4	2	0.01	0.01	1	2
Scheme	AAS1	AAS1	AAS1	FA1	FA1	AAS2	XRF1

APPENDIX IV

REPEAT STREAM SEDIMENT GEOCHEMISTRY



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Job: OAD1675
O/N: 1483/505

ANALYTICAL REPORT

Sample	Au Avg	Au Au Rp1	Au SS1	Cu	Pb	Zn	
704101	<0.01	<0.01 x	--	26	30	145	701313
704102	0.02	0.02 20	--	175	22	48	317
704103	0.02	<0.01 x 0.04	--	20	22	24	310
704104	1.72	2.352350 1.36	1.44	32	35	110	King River Mine-3113
704105	0.01	0.01 10	--	14	22	46	(701306)
704106	<0.01	<0.01 x	--	11	12	15	308'
704107	0.01	0.01 10	--	19	25	26	319
704108	<0.01	<0.01 x	--	18	15	56	324
704109	<0.01	<0.01 x	--	26	30	96	330
704110	<0.01	<0.01 x	--	25	25	125	326
704111	1.15	2.822500 0.41	0.22	54	210	92	King River Mine
704112	<0.01	<0.01 x	--	16	24	58	701327
704113	<0.01	<0.01 x	--	46	42	115	328
704114	0.01	0.01 10	--	20	24	28	321
704115	<0.01	<0.01 x	--	5	8	6	320
704116	<0.01	<0.01 x	--	15	20	68	333
704117	0.01	0.01 10	--	17	22	64	332
704118	<0.01	<0.01 x	--	7	<4	3	Blank
704119	<0.01	<0.01 x	--	32	26	150	701334
704120	<0.01	<0.01 x	--	44	34	94	336
704121	<0.01	<0.01 x	--	16	18	80	337
704122	<0.01	<0.01 x	--	24	38	280	346
704123	<0.01	<0.01 x	--	13	26	78	344
704124	<0.01	<0.01 x	--	28	34	270	348
704125	<0.01	<0.01 x	--	50	34	145	341
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Detn L	0.01	0.01	0.01	0.01	2	4	2
Scheme	FA1	FA1	FA1	FA1	AAS1	AAS1	AAS1

042

473043



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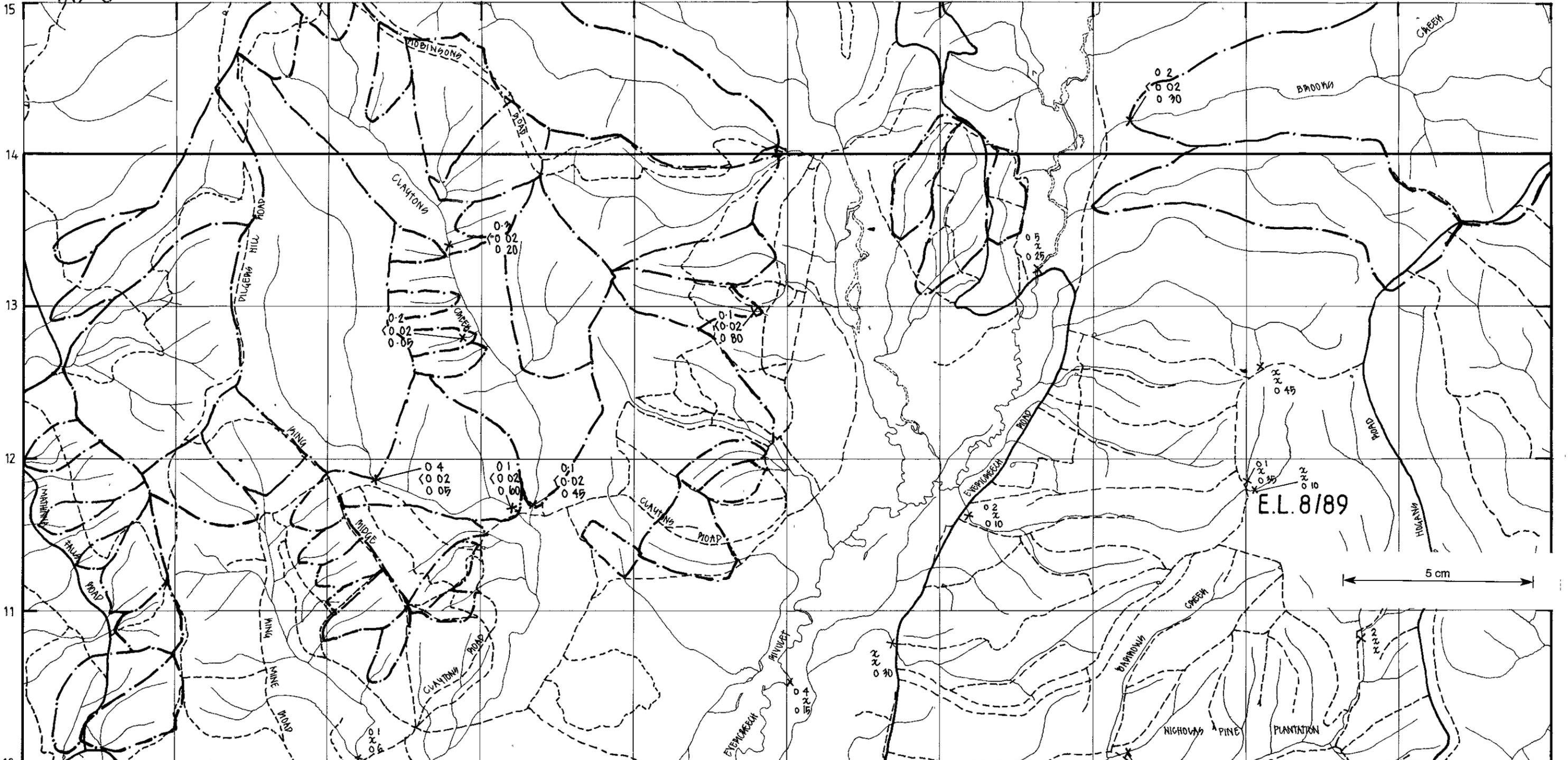
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Job: 0AD1675
O/N: 1483/505

ANALYTICAL REPORT

Sample	Ag
704101	1
704102	<1
704103	<1
704104	1
704105	1
704106	<1
704107	1
704108	<1
704109	1
704110	1
704111	1
704112	1
704113	1
704114	1
704115	<1
704116	<1
704117	<1
704118	<1
704119	1
704120	<1
704121	1
704122	1
704123	1
704124	1
704125	<1

Units	ppm
Detn L	1
Scheme	AAS2



5 cm

E.L. 8/89

PLACER EXPLORATION LTD
TASMANIA

LEGEND

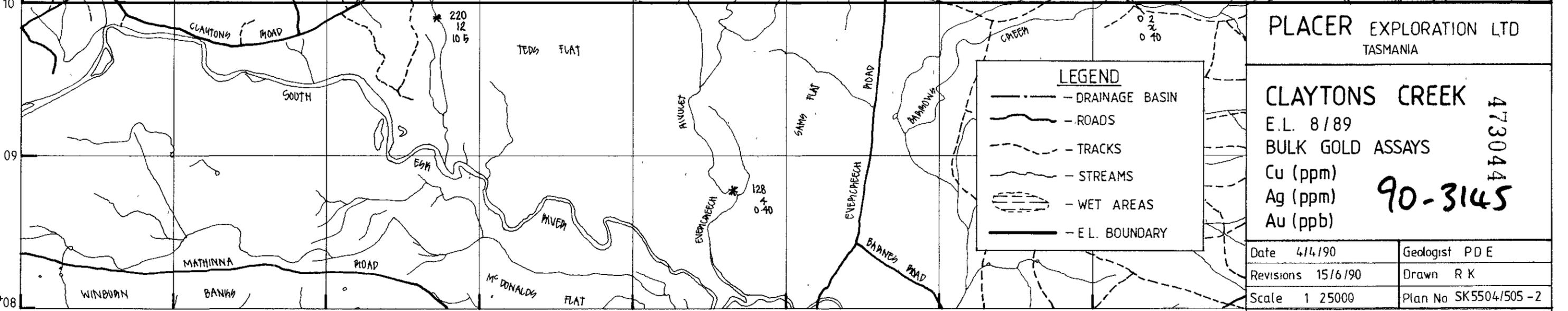
- - - - - DRAINAGE BASIN
- — — — — ROADS
- - - - - TRACKS
- ~~~~~ STREAMS
- ||||| WET AREAS
- E.L. BOUNDARY

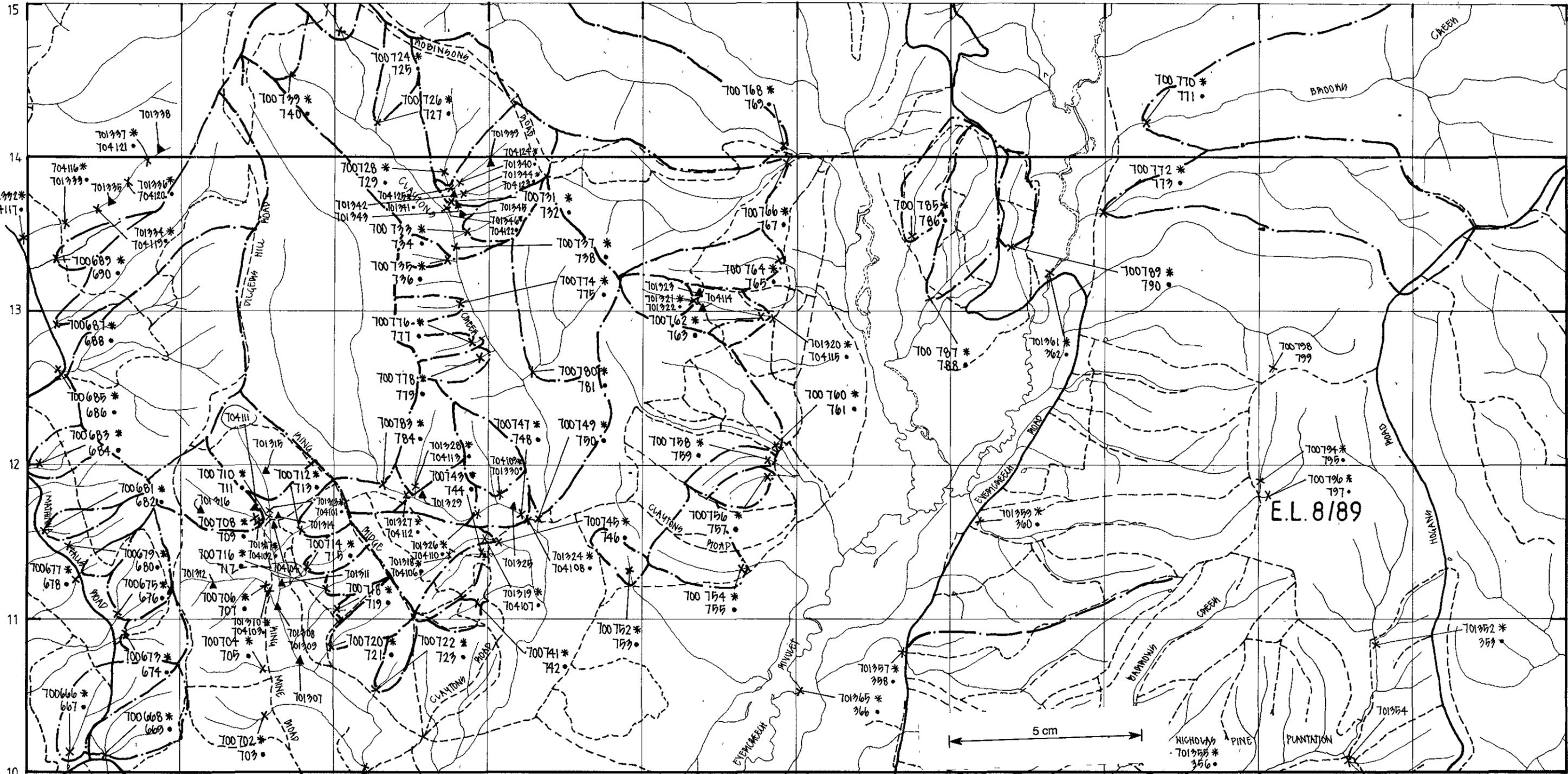
CLAYTONS CREEK
E.L. 8/89
BULK GOLD ASSAYS

Cu (ppm)	90-3145
Ag (ppm)	
Au (ppb)	

473044

Date 4/4/90	Geologist P D E
Revisions 15/6/90	Drawn R K
Scale 1 25000	Plan No SK5504/505 - 2





E.L. 8/89

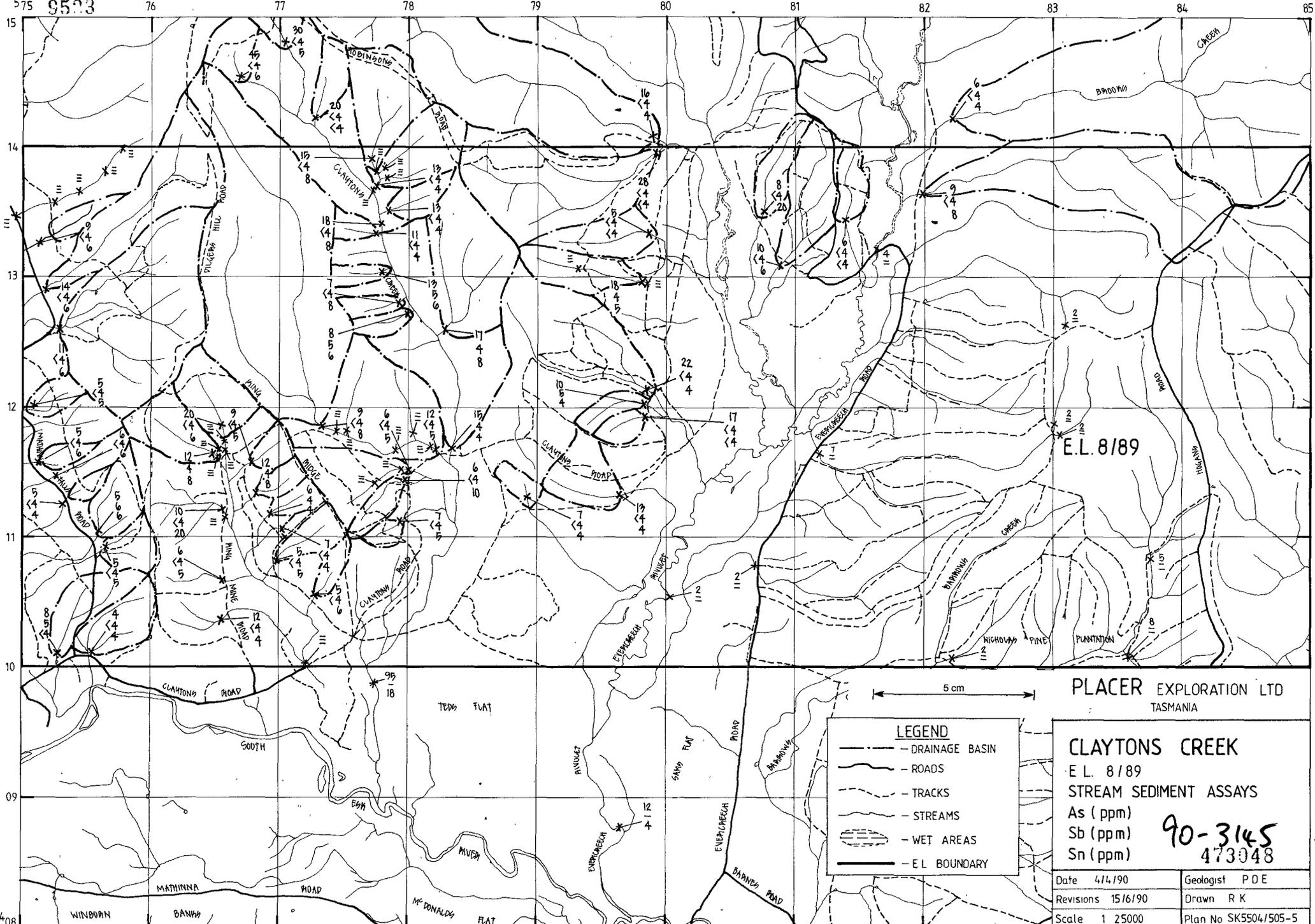
LEGEND

- DRAINAGE BASIN
- ROADS
- TRACKS
- STREAMS
- WET AREAS
- E.L. BOUNDARY
- 700570 * - BULK GOLD
- 641 • - STREAM SEDIMENT
- ▲ - ROCK SAMPLES

PLACER EXPLORATION LTD
TASMANIA

CLAYTONS CREEK
E L 8/89
90-3145
SAMPLE LOCATIONS 473945

Date 4/4/90	Geologist PDE
Revisions 15/6/90	Drawn R K
Scale 1:25000	Plan No SK5504/505-1



PLACER EXPLORATION LTD
TASMANIA

CLAYTONS CREEK
E.L. 8/89
STREAM SEDIMENT ASSAYS
As (ppm)
Sb (ppm) **90-3145**
Sn (ppm) **473048**

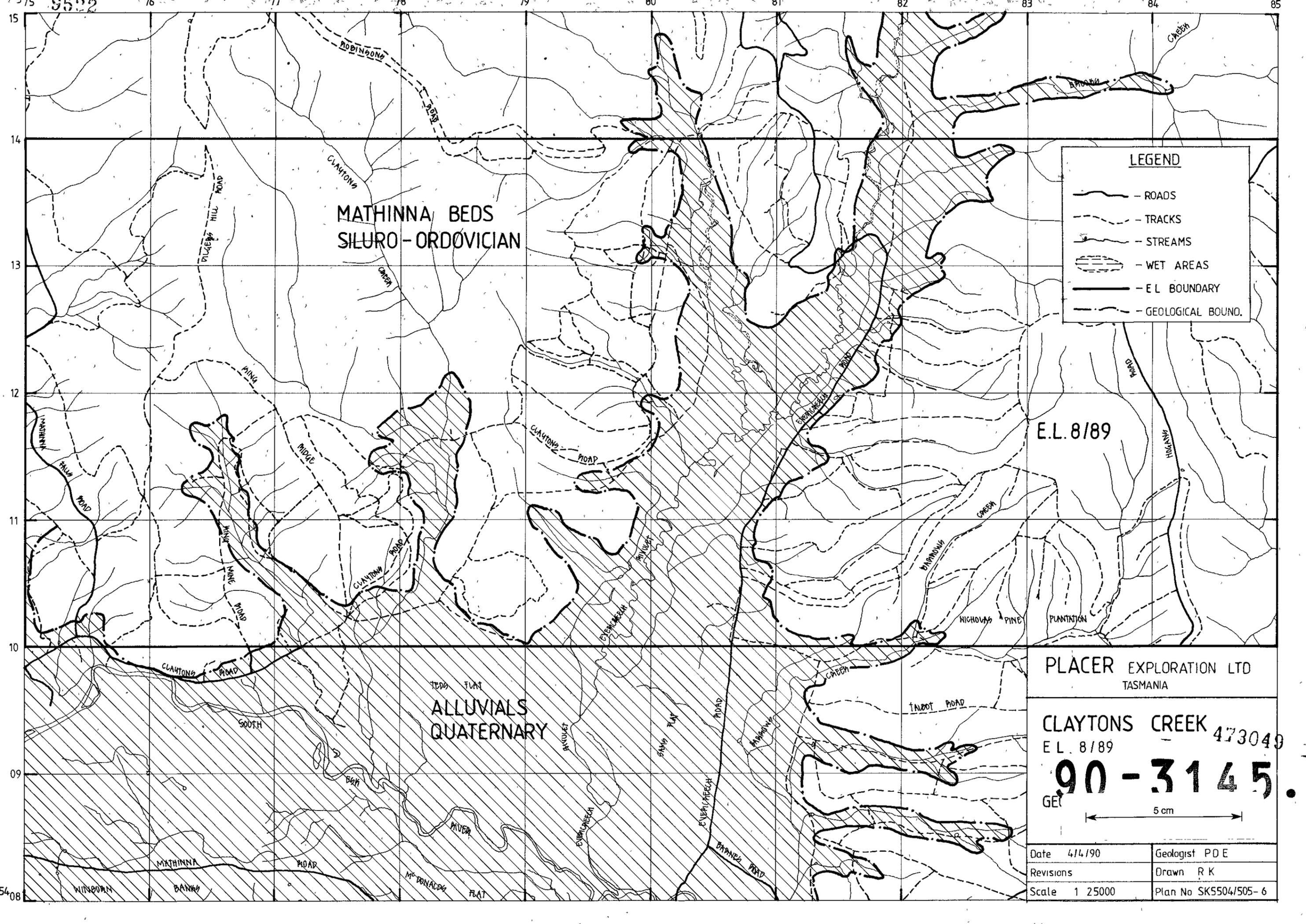
LEGEND

- DRAINAGE BASIN
- ROADS
- TRACKS
- STREAMS
- WET AREAS
- E.L. BOUNDARY

5 cm

Date	4/1/90	Geologist	P D E
Revisions	15/6/90	Drawn	R K
Scale	1 25000	Plan No	SK5504/505-5

5408



MATHINNA BEDS
SILURO-ORDOVICIAN

TEDD FLAT
ALLUVIALS
QUATERNARY

LEGEND

- ROADS
- - TRACKS
- ~ ~ STREAMS
- ▨ WET AREAS
- E.L. BOUNDARY
- - GEOLOGICAL BOUND.

E.L. 8/89

PLACER EXPLORATION LTD
TASMANIA

CLAYTONS CREEK 473049
E.L. 8/89

90-3145.

← 5 cm →

Date 4/1/90	Geologist PDE
Revisions	Drawn R.K.
Scale 1:25000	Plan No SK5504/505-6