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PLACECO AUSTRALIA PTY LTD

Incorporated in Tasmania

89-2949

MINES
File Ref. EL 25/86
24 APR 1989
Doc. Ref.
Action Officer | Initials
LETTER
21. 4. '89
REFERS

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Brighton TAS 7030 AUSTRALIA
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EXPLORATION LICENCE 25/86 - WARATAH

YEAR 2 & FINAL REPORT

RECEIVED

K.C. MORRISON

V. HOFTO

April 1989

89-2949

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Plan 2. EL 25/86 - Waratah, 1 : 25,000.
Sample localities.

TENEMENT INFORMATION

Exploration Licence 25/86 (Waratah) covers an area of 45 km^2 in northwest Tasmania (Figure 1 & Plan 1). The original application covered 39 km^2 and this block was granted on 29 January 1987. A 6km^2 extension to the southern end of EL 25/86 was applied for on 16 March 1987. This application was recorded as EL 19/87 but was incorporated into EL 25/86 on 20 May 1987. The licence is owned 100% by Placeco Australia Pty. Ltd.

The area comprises (guide only) : -

Crown Land	- 44.3 km^2
Timber Reserve	- 0.7 km^2

17 km^2 falls within the "Savage River" Australian Heritage Commission Interim List.

Two mineral leases are currently held inside the EL (Plan 1).

EXPLORATION PHILOSOPHY AND OBJECTIVES

EL 25/86 was originally applied for as an alluvial gold, tin and platinoid prospect with the possibilities of a hard rock play in the Cambrian ultramafics and associated basic volcanics. The application was one of a series of applications by the Company which encompassed hard rock gold plays in the northeast of the state with alluvial and offshore placer deposits in the northwest. The 6km^2 extension to EL 25/86 was applied for on the basis that the area adjacent to the southern boundary of EL 25/86 held possible extensions of the alluvial play.

The Company concludes that the main targets have been tested to a point where no further work is justified and therefore the EL is submitted for relinquishment.

Figure 1. Location Map - EL 25/86, Waratah

SUMMARY OF PREVIOUS WORK

A placer target adjacent to the Arthur River was tested with a series of excavated pits. The sediments recovered from the pits were sampled, processed and the heavy mineral concentrates were assayed for several metals. Significant but sub-economic grades of gold and tin were obtained. No evidence of platinum group metals was detected (Morrison & Davidson, 1987, Year 1 Report).

Placeco concluded that the alluvial prospect was effectively tested and proven to be sub-economic. No further exploration was conducted on that prospect.

SUMMARY OF WORK COMPLETED IN YEAR 2

A series of rock chip samples were taken from a sequence of ultramafic and basic intrusives, basalts, cherts and mudstones which outcrop in the Wandle Road road cuttings, and from a dissected laterite layer overlying a palaeo terrace level of the Arthur River (Plan 2).

The geology of the Wandle Road rocks is described by Williams and Brown (1983). This sequence, particularly the basalts and red mudstones, were considered as possible sources of the gold encountered in the Year 1 alluvial gravel sampling.

The samples were assayed for copper and gold in the case of the Wandle Road sequence, and for gold and nickel in the case of the laterites, by Analabs, Burnie. The results and samples descriptions are enclosed in Appendix 1.

No gold was detected. The three laterite samples were consistently elevated in nickel (4600 to 4800 ppm) suggesting that they were derived from the ultramafics. High values of copper were encountered in basalts WR10 (355 ppm) and WR12 (170ppnm), however no associated gold was detected.

CONCLUSIONS

1. The Arthur River tin and gold target has been proven uneconomic.

2. A preliminary look at the Wandle Road section gave no justification for more detailed work.

REFERENCES

WILLIAMS, P.R. and BROWN, A.V., 1983: An unusual occurrence of ultramafic and mafic rocks north of Mt bischoff, NW Tasmania. *Pap. Proc. R. Soc. Tasm.*, 117: 53-58.

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APPENDIX 1

SAMPLE DESCRIPTION AND ASSAYS
EL 25/86 - WARATAH

EL 25/86 - WARATAH, SAMPLE DESCRIPTIONS
WANDLE ROAD SECTION

WR1	Claystone	Red-brown, massive-blocky, uniform, weathering to blocky-conchoidal fractured fragments. MnO_2 deposits on joint faces.
WR2	Troctolite	Part serpentinised, ranging to plagioclase harzburgite. Rock jointed, partly sheared with serpentine deposits on faces with minor blue (nickel?) colour.
WR3	Chert	Cream, light grey-tan, blocky, finely laminated, banded, abundant fine fractures with multiple orientation. Apparently interbedded with brown micaceous wacke.
WR4	Dolerite	Blue grey, dark grey, medium grained relatively fresh, hard, dense. Minor local shears.
WR5	?Tuff	Red-brown, deeply weathered. Clayey material with apparent fragmental texture. Local contact with claystone containing core stones of olivine basalt, fresh - deeply weathered.
WR6	Basalt	Corestones in red-brown clayey matrix of ?slope deposit talus. Basalt fresh, blue-grey, fine grained, minor fresh olivine. Probably Tertiary.
WR7	-	Matrix material for WR6. Clay rich sediment, red-brown, in part micaceous, abundant basaltic debris.
WR8	Dolerite	Massive, grey-green, medium grained, some pyroxene preserved, feldspar apparently altered. Apparently bedded, locally jointed with serpentine deposits in joints.
WR9	Chert	Light grey with local secondary textures including vugs, very coarse pseudomorph-like siliceous platey form.

WR10	Basalt	Deeply weathered red-brown, medium grained. Possible pillows in outcrop. Apparently interbedded with clastic sediments.
WR11	Wacke/tuff	Red-purple, brown, deeply weathered interbedded with red claystones. Poorly preserved.
WR12	Basalt	Brown-green, deeply weathered, minor fine pyroxene preserved. 1% disseminated opaques. Pillow structures in outcrop.
WR13	Laterite	Dark brown at upper terrace level, occuring at contact of river gravels and ultramafic basement. Broken fragments, remnants in part botryoidal, pisolitic.
WR14	Laterite	As for WR13
WR15	Laterite	As for WR 13

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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. 999.29.08.06109

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

C/- K.C. Morrison
Placeco Australia Pty. Ltd.
190 Macquarie St.
Hobart
Tasmania 7000

ORDER No.	PROJECT

DATE RECEIVED	RESULTS REQUIRED
05/04/89	ASAP

No. OF PAGES OF RESULTS	DATE REPORTED	No. OF COPIES	TOTAL No. OF SAMPLES
1	11/04/89	1	15

STATE OF SAMPLES		PRE-TREATMENT							ANALYSIS		
REFER BELOW	SAMPLE NUMBERS	DRY	CRUSH	SPLIT	PUL. VERISE	SIEVE	OTHER SEE REMARKS	NONE	REFER TO ANALYSIS SECTION	PREPARATION	METHOD
	WR01/12	RC	Prep: 005,013,018						Cu/101		
	WR13/15	RC	Prep: 005,013,018						Ni/101		
	WR01/15	RC							Au,AuChk/309		

RESULTS TO

C/- K.C. Morrison
Placeco Australia Pty. Ltd.
190 Macquarie St.
Hobart
Tasmania 7000

RESULTS TO

REMARKS

STATE OF SAMPLES		ANALYSIS — PREPARATION				ANALYSIS — METHOD	
whole core	WC	perchloric acid	A1	cold acid	CA	atomic absorbtion	AAS
split core	SC	hydrochloric acid	A2	specific sulphide	SS	x-ray fluorescence	XRF
cutting	CU	nitric acid	A3	other mixed acids	Ma	spectrophotometry	SPEC
rock	Ro	aqua regia	A4	alkaline attack	AA	colorimetry	COL
soil	SO	nitric-perchloric	A5	volatilization	VO	chromatography	CHR
pulp	PU	HF mixture	A6	ignition	IG	titration	TTN
water	WA	HF under pressure	A7	pressed powder (XRF)	PP	other chemicals meaas	CHEM
tissue	TI	fusion	A8	glass fusion (XRF)	GF	miscellaneous	MISC
stream sediment	SS					fluorescence	FLUOR
heavy mineral	HM					inductively coupled plasma	ICP

AUTHORISED OFFICER

CC. 12

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ANALYTICAL DATA

SAMPLE PREFIX	REPORT NUMBER	REPORT DATE	CLIENT ORDER No.	PAGE
	999.29.08.06109	11/04/89		1 OF 1

TUBE No.	SAMPLE No.	Ni	Cu	Au	AuChk					
1	WR01	–	25	<0.01	–					
2	WR02	–	20	<0.01	–					
3	WR03	–	<5	<0.01	–					
4	WR04	–	25	<0.01	–					
5	WR05	–	75	<0.01	–					
6	WR06	–	80	<0.01	–					
7	WR07	–	85	<0.01	–					
8	WR08	–	40	<0.01	–					
9	WR09	–	<5	<0.01	–					
10	WR10	–	355	<0.01	–					
11	WR11	–	70	<0.01	–					
12	WR12	–	170	<0.01	–					
13	WR13	4600	–	<0.01	–					
14	WR14	4800	–	<0.01	–					
15	WR15	4700	–	<0.01	–					
16										
17										
18										
19										
20										
21										
22										
23	DETECTION	5	5	0.01	0.01					
24	UNITS	PPM	PPM	PPM	PPM					
25	METHOD	101	101	309	309					

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

AUTHORISED OFFICER

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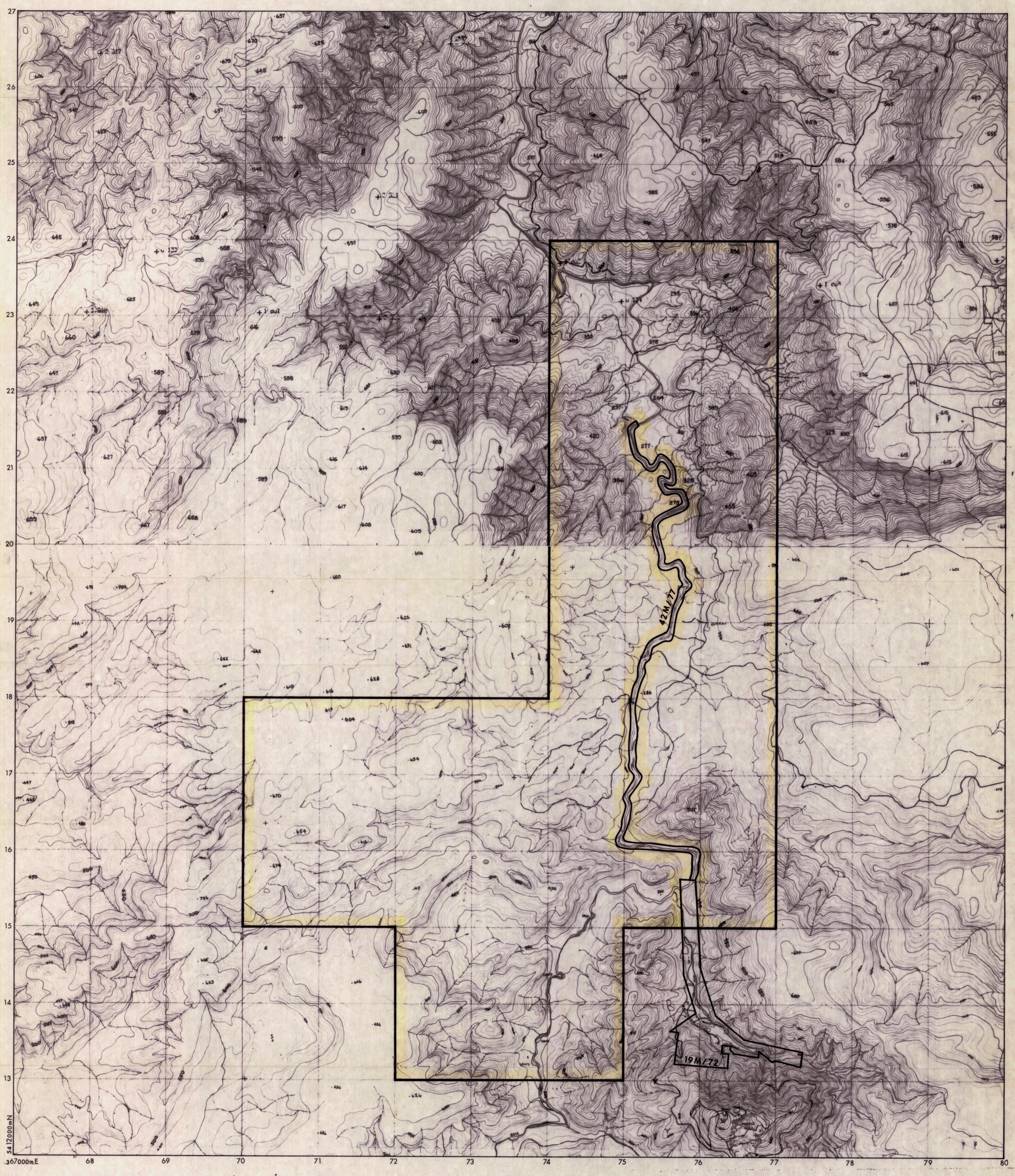

LEGEND

SCALE 1:25 000
1 millimetre represents 25 metres

Caravan park. Camping ground
Rubbish disposal area. Cemetery
Trigonometric station. Spot elevation
Contour with value. Depression contour
Quarry or open cut mine
Broken rocky surface
Dense forest. Medium forest
Low dense vegetation. Distinctive grass
Orchard. Pine plantation

Windbreak
Swamp. Land subject to flooding
Waterfall. Rapids
Indefinite shoreline or floodbank. Levee
Tidal rocks or ledge. Offshore rock
Lighthouse. Exposed wreck
Sand. Tidal reef
Saline coastal flat. Tidal flats
Jetty. Launching ramp

Built-up area with commercial centre
Roads maintained for continuous public use: Primary road; Secondary road. Bridge; Minor road
Roads of restricted use or access: Other roads; Vehicular track. Gate
Walking track. Bridge
Railway. Station
Light railway
Power transmission line and pylon positions
Building. Feature of special interest. Ruin. Mine
Post office. Police station. Fire station. School

BOUNDARIES shown on this map are NOT authoritative. For full particulars please consult the Registrar General's Department or the Lands Department
Property and land parcel boundaries are shown as at September 1981
Areas within proclaimed towns or less than two hectares are not depicted. To give a land parcel reference prefix parcel number with municipal number

Municipality name
Municipality number
Municipality boundary
Ward name
Ward boundary
Town boundary
Reserve boundary
Property boundary. Land parcel boundary and number

PROJECTION: Universal Transverse Mercator (UTM)
HORIZONTAL DATUM: Australian Geodetic Datum 1966
VERTICAL DATUM: Australian Height Datum (Tasmania) excepting offshore islands whose datum is mean sea level
GRID: 1000 metre intervals of the Universal Transverse Mercator Grid, Zone 55 (Australian Map Grid). Australian National Spheroid. Grid values are shown in full at the south west corner of the map
CONTOUR INTERVAL: 10 metres with 50 metre index contours

WORLD GEODETIC SYSTEM 1972: To convert co-ordinates from this system to Australian Geodetic Datum 1966, increase the value of latitudes by 5.3" and decrease the value of longitudes by 4.2". To obtain heights decrease satellite heights by 3 metres

MAGNETIC VARIATION: True Grid and Magnetic North are shown diagrammatically for the centre of this map. Magnetic North is correct for 1981 and moves easterly about 0.1° every three years

GN
TN MN
GRID CONVERGENCE 0.1°
GRID MAGNETIC ANGLE 1.4°

MEAN TEMPERATURE RAINFALL
J F M A M J J A S O N D

LOCATION MAP

MINING LEASES - EL25/86

No.	OWNER	ADDRESS	MINERAL	AREA (ha)
19M/72	RINGAROOMA MINING Pty Ltd NORTHERN DEVELOPMENTS (Tas) P/L CAMPERLANE NOMINEES Pty Ltd			107
42M/77	G.I. FISHER	198 Brisbane St, Launceston.		70

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PETRECON AUSTRALIA PTY. LTD.

PLACECO AUSTRALIA PTY LTD

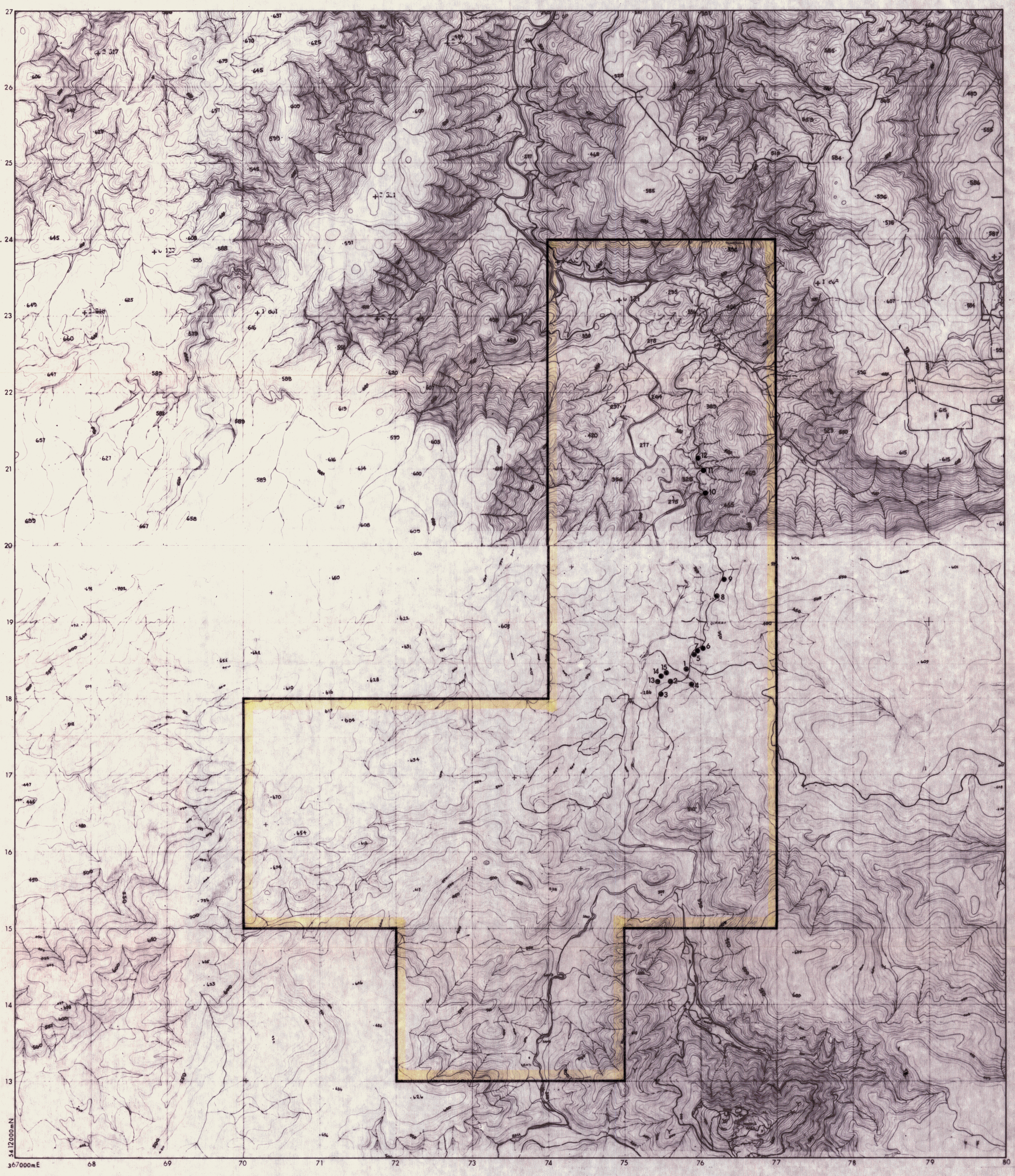
EL25/86 AND ADJOINING MINERAL LEASES (COMPETITOR).

No.	25/86-1
DATE	SEPT. 1987
COMPILED	J.D., K.M.
DRAWN	J.M.T.

TO ACCOMPANY: YEAR 2 ANNUAL REPORT - PLAN 1

5 cm

8218



LEGEND

1000 750 500 250 0 metres

SCALE 1:25 000
1 millimetre represents 25 metres

1 2 3 4 kilometres

- Caravan park. Camping ground
- Rubbish disposal area. Cemetery
- Trigonometric station. Spot elevation ... 396
- Contour with value. Depression contour
- Quarry or open cut mine
- Broken rocky surface
- Dense forest. Medium forest
- Low dense vegetation. Distinctive grass
- Orchard. Pine plantation
- Windbreak
- Swamp. Land subject to flooding
- Waterfall. Rapids
- Indefinite shoreline or floodbank. Levee
- Tidal rocks or ledge. Offshore rock
- Lighthouse. Exposed wreck
- Sand. Tidal reef
- Saline coastal flat. Tidal flats
- Jetty. Launching ramp

- Built up area with commercial centre
- Roads maintained for continuous public use: Primary road (sealed / unsealed); Secondary road. Bridge; Minor road
- Roads of restricted use or access: Other roads; Vehicular track. Gate
- Walking track. Bridge
- Railway. Station ... Karoola
- Light railway
- Power transmission line and pylon positions
- Building. Feature of special interest. Ruin. Mine ... Entally House
- Post office. Police station. Fire station. School

BOUNDARIES shown on this map are NOT authoritative. For full particulars please consult the Registrar General's Department or the Lands Department.
Property and land parcel boundaries are shown as at September 1981.
Areas within proclaimed towns or less than two hectares are not depicted. To give a land parcel reference prefix parcel number with municipal number

- Municipality name
- Municipality number
- Municipality boundary
- Ward name
- Ward boundary
- Town boundary
- Reserve boundary
- Property boundary. Land parcel boundary and number ... 0371

PROJECTION: Universal Transverse Mercator (UTM)
HORIZONTAL DATUM: Australian Geodetic Datum 1966
VERTICAL DATUM: Australian Height Datum (Tasmania) excepting offshore islands whose datum is mean sea level
GRID: 1000 metre intervals of the Universal Transverse Mercator Grid, Zone 55 (Australian Map Grid). Australian National Spheroid. Grid values are shown in full at the south west corner of the map
CONTOUR INTERVAL: 10 metres with 50 metre index contours

WORLD GEODETIC SYSTEM 1972: To convert co-ordinates from this system to Australian Geodetic Datum 1966, increase the value of latitudes by 5.3" and decrease the value of longitudes by 4.2". To obtain heights decrease satellite heights by 3 metres

MAGNETIC VARIATION: True, Grid and Magnetic North are shown diagrammatically for the centre of this map. Magnetic North is correct for 1981 and moves easterly about 0.1° every three years.

GN
TN MN
GRID CONVERGENCE 3°
GRID MAGNETIC ANGLE 14°

MEAN TEMPERATURE RAINFALL
J F M A M J J A S O N D
For temperatures at higher elevations subtract 1°C per 200 metres above sea level

LOCATION MAP

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648016

89-2949

PLACECO AUSTRALIA PTY LTD

EL. 25/86 – WARATAH
Wandle Road
SAMPLE LOCATIONS

No.	25/86-2
DATE	APRIL/'89
COMPILED	JMT
DRAWN	JMT

TO ACCOMPANY:

5 cm