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**LEFROY GOLD MINES PTY LTD**  
(A subsidiary of Central Kalgoorlie Gold Mines NL)

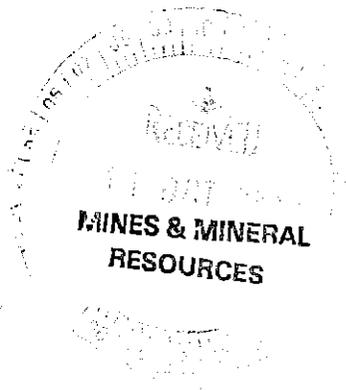
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11 OCT 1996		
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CONTRACT	FILE NO.	FILE INFO.
EL 21/94		
See folio 52		
EL 22/94		
See folio 55		
INDEXED		DATE

**BELL BAY EL 21/94 & PIPERS RIVER EL 22/94**  
**NE TASMANIA**

**REPORT ON AREA RELINQUISHED**

**OCTOBER 1996**



J.G. Purvis  
J.G. Purvis & Associates P/L  
October 1996

1. Mineral Resources Tasmania, Hobart
2. Perth Office
3. George Town Office

**96-3920**

REPORT ON AREA RELINQUISHED  
EL21/94 & 22/94 - NE TAS.  
LEFROY GOLD MINES-J.G. PURVIS

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## 1. INTRODUCTION

In 1994 the Tasmanian Government promoted the prospectivity of the lightly-held and poorly-tested NE Tasmanian Gold Province, via the NETGOLD Project.

The Lefroy Goldfield 12 km east of George Town on the north coast of Tasmania and with recorded production of 187,000 oz gold, was perceived by CKGM to be one of the most prospective parts of the province.

Initially, only the ground around the margins of the Lefroy Goldfield was available and this was taken up by CKGM in October 1994 as the 219 sq km Bell Bay EL21/94 and the 202 sq km Pipers River EL22/94. The main Lefroy Goldfield area was granted to CKGM in May 1995 as EL1/95.

In October 1996, the second anniversary of their granting, CKGM has elected to substantially reduce both the Bell Bay and Pipers River EL's. This report documents all the exploration done on the relinquished area in the period October 1994 - October 1996.

Work completed included:

- BLEG drainage sampling for gold
- -80 mesh stream sediment sampling for gold and arsenic
- Interpretation of aeromagnetic data
- Interpretation of Landsat data

The work was carried out by R Keele, D Duncan and R Duraj.

## 2. TENURE

Bell Bay EL21/94, covering 219 sq km, and Pipers River EL22/94, covering 202 sq km, were both granted on 28th October 1994.

On 28th October 1996 EL21/94 will be reduced to 77 sq km and EL22/94 to 67 sq km.

The retained and relinquished areas are shown in Figure 1.

The relinquished area totals 277 sq km and is made up of Private Property, Crown Land and State Forest (including parts of the Den Ranges RAP).

### **3. GEOLOGY**

#### **3.1 Geological Setting**

The dominant rock group on the relinquished area is the Ordovician to Early Devonian Mathinna Beds - a thick monotonous sequence of quartzose and micaceous sandstone, siltstone and shale. Their distribution is shown in Figure 1. The sequence trends NW and is generally mildly cleaved and folded.

Jurassic dolerite and Permian sediments (conglomerate, sandstone and mudstone), outcrop in the SW corner of the ground relinquished from the Bell Bay EL.

The northern half of the area is extensively covered by Tertiary basalt and Tertiary Quaternary sands/gravels.

#### **3.2 Gold Mineralization**

Gold occurs in quartz veins within the Mathinna Beds at Lefroy and Back Creek. It also occurs (to a much lesser extent) as alluvials, including Tertiary deep leads.

Most of the known gold mineralization lies within the Lefroy EL1/95, where recorded production is 187,000 oz (182,000 oz hard rock, 5,000 oz alluvial)(Keele, 1996). At Lefroy, the main auriferous reefs occupy strong persistent faults trending E-W across the NW-SE strike of the sediments. There are at least 25 sub-parallel reefs within an area measuring approximately 5 km NW-SE by 2 km E-W. Within the reefs the gold mineralization is patchy and generally concentrated into shoots grading +15g/t Au. All the known shoots have, of course, been mined out.

Pipers River EL22/94 surrounds the old Back Creek Goldfield where a small area of auriferous quartz reefs and alluvials produced 10,000 oz (Broadhurst, 1935). See Figure 1.

As far as is known, there are no recorded hard-rock gold occurrences on the relinquished area.

### **4. PREVIOUS MINING & EXPLORATION**

The Lefroy Goldfield was discovered in 1869 and mining had virtually ceased by 1904. As mentioned, total production was about 187,000 oz.

The Back Creek Goldfield was also discovered in 1869 and there has been negligible production since 1920. Most of the 10,000 oz of gold produced has been won from alluvials.

No mining activity is known on the area relinquished and exploration in the modern era has been extremely limited. CRA Exploration (Broadbent, 1982) carried out a regional stream sediment survey over the Pipers River area during the early 1980's. Results were generally insignificant, but an arsenic anomaly (23 ppm As, 0.1 ppm Au) was delineated within the relinquished area at Platypus Road (see Figure 5). This anomaly has been followed up by CKGM (see Section 7.2).

In the late 1980's Billiton Australia completed a reconnaissance BLEG drainage survey over the whole of NE Tasmania (Randell, 1991), including several samples from the Bell Bay - Pipers River licence areas. No significant gold anomalies were detected.

In 1993, as part of the NETGOLD Project, Mineral Resources Tasmania covered the relinquished area with aeromagnetics on a box grid pattern of 200m E-W lines and 400m spaced N-S lines. Regional gravity coverage was also obtained.

## **5. EXPLORATION PHILOSOPHY**

The Mathinna Beds in the Lefroy area are considered to have potential for two types of hard rock gold deposits:

1. Bulk low grade quartz-vein and fracture stockworks amenable to open-cut mining.
2. High-grade quartz reefs, either as extensions of the known past producers or in newly-discovered reefs.

The bulk low grade deposit type has been the principal target of CKGM's exploration programme.

The approach has been to concentrate detailed work (gridding, mapping, soil and rock sampling, drilling), around areas of known gold mineralization/production, and to cover the other areas with drainage sampling. Interpretation of regional data sets (e.g. aeromagnetics, Landsat, gravity), has been used to assist the programme in all areas.

## **6. SUMMARY OF WORK DONE**

Work done on the relinquished area during CKGM's period of tenure was as follows:

- a) Reconnaissance BLEG (bulk leach extractable gold) drainage survey (March-April 1995)
- b) Follow-up -80 mesh stream sediment sampling (September & November 1995)
- c) Further processing and interpretation of the NETGOLD aeromagnetics (1995 & 1996)
- d) Processing and interpretation of Landsat data (1995)

## 7. RESULTS

### 7.1 BLEG Drainage Survey

Reconnaissance BLEG drainage sampling was carried out over EL21/94 and EL22/94 in March-April 1995 (Duncan, 1995, in Keele, 1995).

Catchments covered by this sampling and the results, are shown in Figures 2 to 5 and in Table 1.

A total of 34 samples were taken on the relinquished area. Gold values ranged from <0.05 ppb to 4.80 ppb, none of which were classed as anomalous (Duncan, 1995).

Edited parts of Duncan's report appear in Appendix 1.

### 7.2 -80 Mesh Stream Sediment Sampling

In September and November 1995 a programme of -80 mesh stream sediment sampling was undertaken to follow up and in-fill the BLEG survey. Ten samples were taken from the area now relinquished from the Pipers River EL22/94. Results are listed in Table 2 and on Figures 4 and 5.

Samples were analysed for gold and arsenic by Analabs, Cooee. Gold was initially determined by fire assay (30 gm charge, AAS finish) with an 8 ppb detection limit, but the samples from Platypus Road (see below) were repeated by fire assay with a carbon rod finish to give a detection limit of 1 ppb Au.

Six samples were taken from the Platypus Road catchment (see Figure 5), where CRAE had obtained arsenic (20 ppm) and gold (96 ppb) anomalies in -80 mesh drainage sampling in 1982 (Broadbent, 1982). The CKGM BLEG sampling here had not registered anomalous gold (<1 ppb Au from two sample sites).

The -80 mesh follow-up at Platypus Road gave consistent low-level arsenic anomalies ranging from 9-47 ppm but gold values were extremely low, ranging from <1 ppb to a maximum of only 3 ppb. There is extensive outcrop of pyritic black shale and siltstone in the bed of the creek (R. Duraj, pers comm), and it is assumed this is the cause of the elevated arsenic values. There are no recorded gold workings in the catchment.

Four -80 mesh drainage samples were also taken from small catchments on the eastern slopes of a tract of State Forest south of Weymouth (see Figure 4). The catchments drain an area of outcropping Mathinna Beds that was not adequately tested during the original BLEG survey.

Results were extremely poor - all gold values were <8 ppb (the analyses were not repeated using carbon rod finish), and arsenic values ranged from 1-7 ppm.



TABLE 2 : RESULTS OF -80 MESH STREAM SEDIMENT SAMPLING

Uniq No	Sample No	Au(ppb)	As(ppm)	Easting	Northing	Topo Sheet	Sample Status	Comments
38	P407567	< 1	9	510900	5444820	Retreat	Very Good	Well formed flowing creek, 25-30% qtz. some large pebbles; sample collected 40m up stream from the bridge, good
39	P407568	< 1	15	510650	5444800	Retreat	Good	Same creek down stream as '67; 25m above junction with smaller creek to south, flowing stream with good
40	P407569	3	34	510200	5445100	Retreat	Good	20m upstream from road crossing and old sample 973207; good flowing stream, mainly fine seds; old sample
41	P407570	2	47	510400	5444850	Retreat	Poor	Very poor creek that is not flowing, at same location as CRA sample about 10m up stream from the main creek/no
42	P407571	1	21	510500	5444870	Retreat	Good	Good flowing stream about 25m up stream past s-bend on main creek, taken above junction, again pancon shows
43	P407572	1	35	509600	5445650	Retreat	Good	On the main creek about 100m from Pipers River; good flowing stream with active sediment; collected from pebble
44	P407573	0	7	511550	5456050	Weymouth	Very poor	Northernmost creek; sample dug up from valley floor, no defined creek, consider as soil sample; surrounding areas
45	P407574	0	6	511820	5455750	Weymouth	Very poor	Small creek east of 73, sample dug up from valley floor about 150m up from fence and road, same as 73
46	P407575	0	3	512400	5454940	Weymouth	Very poor	Sample dug up from valley floor above road, no creek formation at all
47	P407576	0	1	512570	5454400	Weymouth	Very poor	Same as 74, basalt outcrop along the road

### 7.3 Interpretation of Aeromagnetic Data

In June 1995, John Ashley of Southern Geoscience Consultants Pty Ltd (Perth, WA) made a preliminary interpretation of the NETGOLD Pipers River aeromagnetic data over the Lefroy area. Ashley's plan appears in Figure 6.

Results of the interpretation, as they apply to the relinquished area, were as follows (Keele, 1995):

#### 1. Distribution of Tertiary basalts

There were two major periods of basaltic volcanism in the region as shown by the normal and reversely polarised magnetic character of the flows. Normal polarised magnetic basalts (giving positive anomalies) occur in a belt along the eastern side of Pipers River, whilst the reverse polarised magnetic flows (giving negative anomalies) occur in the western half of Pipers River and Bell Bay. The basalts are linear and branching in character suggesting that the flows filled valleys and low points in the topography at the time of extrusion. Between 50000E and 50500E a N-S system of branching linear magnetic anomalies indicate that they flowed northward to Bass Strait. Others have distinctly linear edges suggesting that they were fault-controlled valleys (ie., grabens).

#### 2. Magnetic character of the Mathinna Group sediments.

The NW to NNW-trending linear anomalies in the Mathinna Group are due to subtle differences in magnetic character that exist between individual beds in the Mathinna Group. These are principally due to lithological variations within the sediments, but it may also be due to faults paralleling the regional strike. J. Ashley's interpretation shows that the strongest magnetic character occurs towards the top of the Stoney Head Sandstone, ie., at the boundary with the overlying Turquoise Bluff Slate (this can be seen in Figure 6 as a major 'magnetic contact').

A major break in the magnetic character of the Mathinna Beds occurs in the southeast corner of Pipers River EL. It may correspond to the Turquoise Bluff Slate-Bellingham Formation boundary or it may be a major structure associated with the axis of the Pipers River recumbent syncline.

#### 3. Interpreted Structure

The many offsets on the magnetic linears are interpreted to be faults. These faults trend E-W, WNW-ESE and NNE-SSW; the two former sets show sinistral offsets, whereas the latter shows dextral offsets (see Figure 6).

Further interpretation of the aeromagnetics was undertaken by R Keele (Keele, 1996). Features pertinent to the relinquished area are:

## 8.

1. Dominant direction of the Tertiary basalt flows is NNW, perpendicular to the presumed crustal extension during the Tertiary. Individual basins in the basalt have orientations ranging from E-W to N-S.
2. A system of E-W to ENE-WSW topographic features, probably either Tertiary transfer faults or reactivated Devonian structures, have influenced the ponding of the basalt flows.

Keele's plan showing aeromagnetic trends in the Lefroy-Pipers River area is reproduced in Figure 7.

#### 7.4 Interpretation of Landsat Data

An interpretation of a Landsat image over the Bell Bay and Pipers River EL's was produced in July 1995 by Peter Wilson and Associates of Perth, WA, at 1:100,000 scale (see Figure 8). The bands included in the interpretation were 7, 5 & 3. An accompanying scene at 1:250,000 scale, covered the EL's and surrounding area (see Figure 9).

Peter Wilson outlined in his interpretation a number of major faults, the most significant of which are: NW-trending structures that parallel the Tamar Graben (e.g. on the eastern side of the Tippogoree Hills) and a number of N-S structures that are prevalent in the eastern half of Pipers River EL (see Figure 8). These first order faults are accompanied by a number of second and third order structures, the most significant of which by far are: N-S, WNW-ESE & ENE-WSW faults and shear zones.

The Landsat data was further interpreted by R Keele in late 1995 (Keele, 1996), who noted the following features on the relinquished ground (see Figure 10):

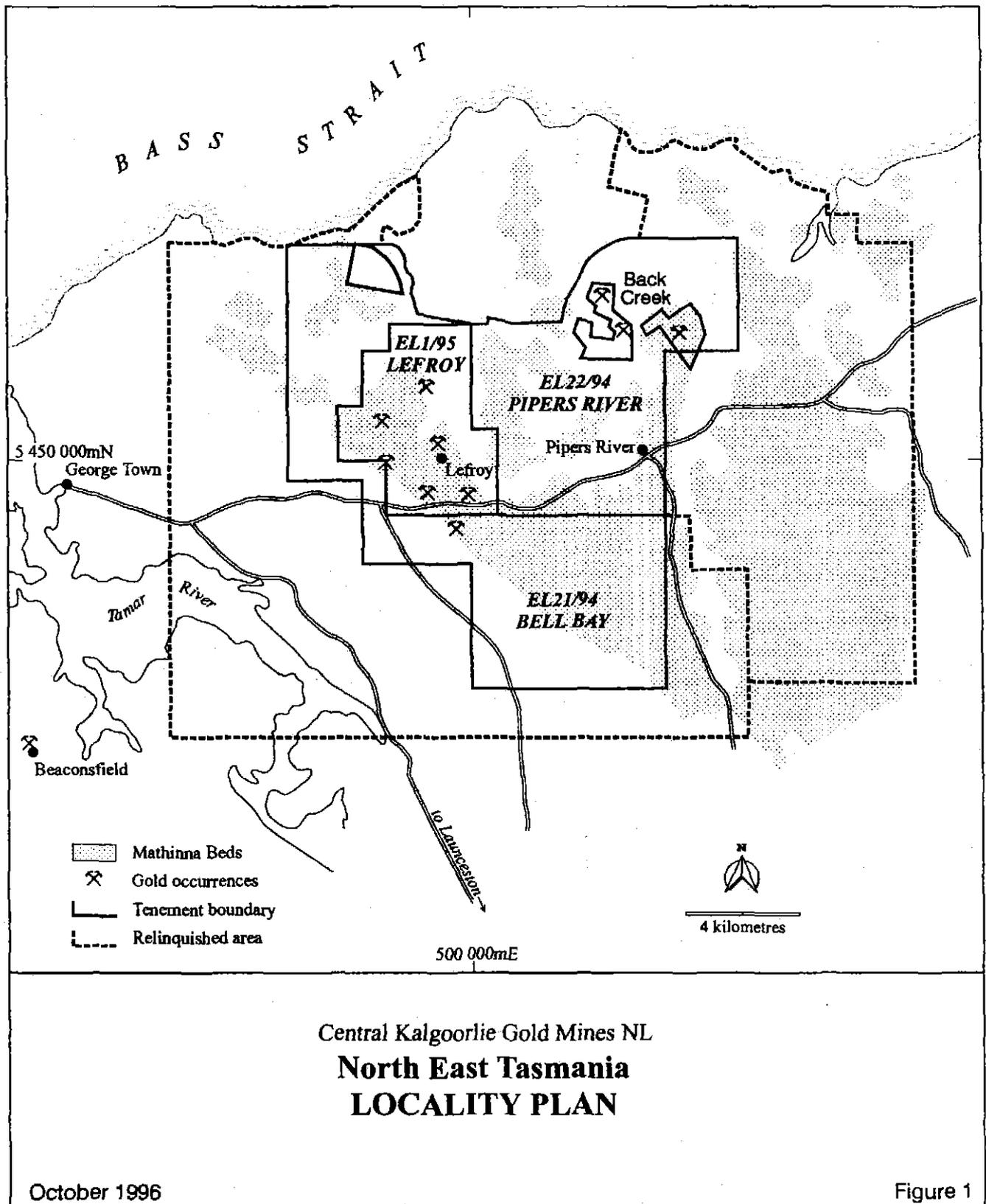
- NNE to ENE-trending faults and fractures
- NW-trending lithological & structural linears
- WNW-trending linears
- contrasting vegetation types on SW-facing hill slopes compared to NE-facing hill slopes

## 8. CONCLUSIONS

1. The work done by CKGM over the past two years has substantially downgraded the perceived prospectivity for gold of the area now relinquished from the Bell Bay and Pipers River EL's.
2. No targets warranting further exploration are currently identified within this area.

**9. REFERENCES & BIBLIOGRAPHY**

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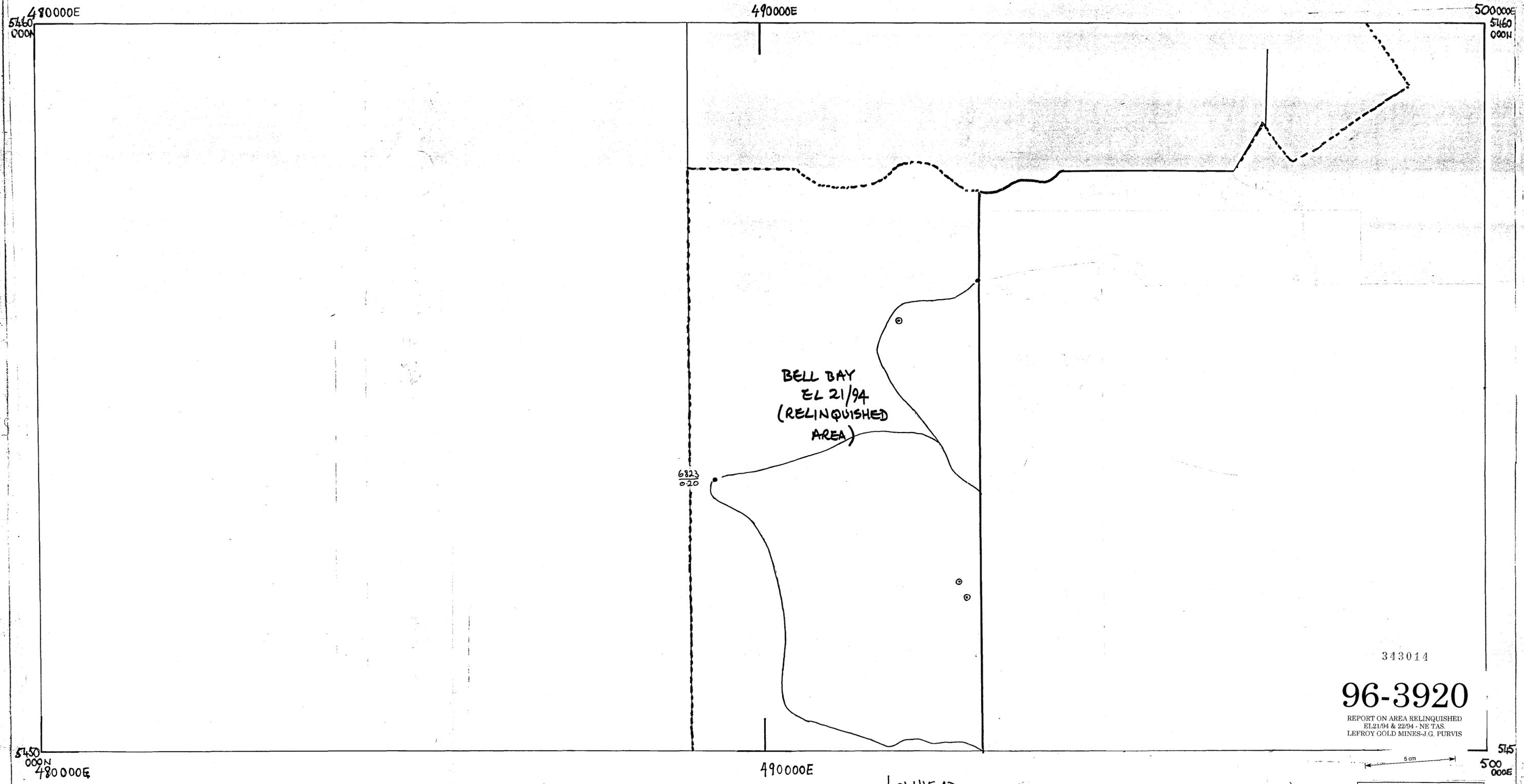
5 cm

1:25 000

STREAM BEDS

LOW HEAD

LOW HEAD



BELL BAY  
EL 21/94  
(RELINQUISHED  
AREA)

6823  
0.20

343014

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REPORT ON AREA RELINQUISHED  
EL21/94 & 22/94 - NE TAS  
LEFROY GOLD MINES-J.G. PURVIS

490000E

LOW HEAD

FOLLOW-UP PROGRAMME:

- Sample site (-80 mesh)
- 1ppb/10ppm  
Au As

KEY

- BLEG STREAM SEDIMENT
- Sample No. (Prefix P40—)  
Gold content ppb.
- Sites inspected but not suitable for sampling
- Rock sample
- Anomalous catchments in red
- Structural zones

CENTRAL KALGOORLIE GOLD MINES NL  
EL1/95, EL21/94, EL22/94  
LEFROY PROJECT  
NE TASMANIA  
DRAINAGE SAMPLING  
LOW HEAD SHEET  
SCALE 1:25,000 SEPT 1996

FIGURE 2

1:25000

STREAM SEDS  
D. M.P.D.

BELL BAY

5450  
000N 480000E

490000E BELL BAY

500  
000E

BELL BAY  
EL 21/94  
(RELINQUISHED  
AREA)

5440  
000N 480000E

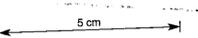
490000E

500  
000E

343015  
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EL21/94 & 22/94 - NE TAS.  
LEFROY GOLD MINES-J.G. PURVIS

FOLLOW-UP PROGRAMME:  
Sample site (-80 mesh)  
1ppb/10ppm  
Au As

- KEY
- BLEG STREAM SEDIMENT
  - 6829 Sample No. (Prefix P40—)  
19.48 Gold content ppb.
  - Sites inspected but not suitable for sampling.
  - ▲ Rock sample
  - ⊕ Anomalous catchments in red
  - ⊙ Structural zones



CENTRAL-KALGOORLIE GOLD MINES NL  
LEFROY PROJECT  
NE TASMANIA  
DRAINAGE SAMPLING  
BELL BAY SHEET  
SCALE 1:25,000 SEPT 1996

FIGURE 3

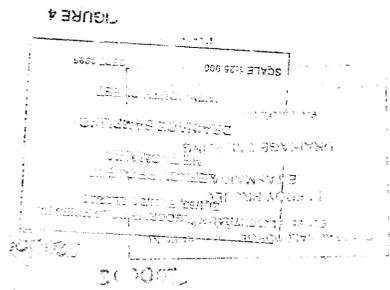
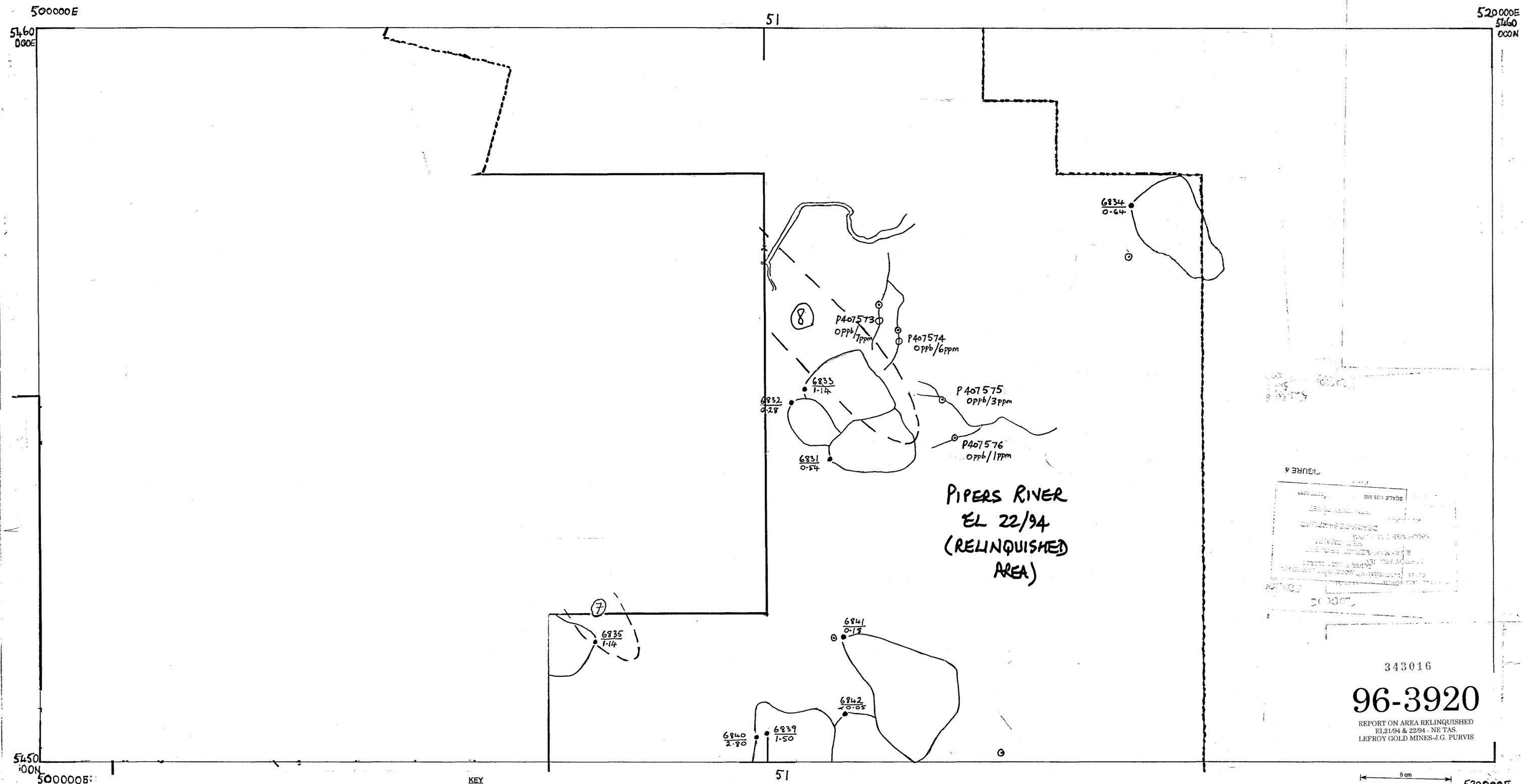
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STREAM SEDS

WEYMOUTH

WEYMOUTH

WEYMOUTH



343016  
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 REPORT ON AREA RELINQUISHED  
 EL21/94 & 22/94 - NE TAS.  
 LEFROY GOLD MINES-J.G. PURVIS

**FOLLOW-UP PROGRAMME:**  
 Sample site (-80 mesh)  
 1ppb/10ppm  
 Au As

**KEY**  
 • BLEG STREAM SEDIMENT  
 6829 Sample No. (Prefix P40—)  
 19.48 Gold content ppb.  
 ⊙ Sites inspected but not suitable for sampling  
 △ Rock sample  
 ⊕ Anomalous catchments in red  
 ⊙ Structural zones

5 cm  
 520000E  
 CENTRAL KALGOORLIE GOLD MINES NL  
 EL1/85, EL21/84, EL22/94  
**LEFROY PROJECT**  
 NE TASMANIA  
 DRAINAGE SAMPLING  
 WEYMOUTH SHEET  
 SCALE 1:25,000 SEPT 1996

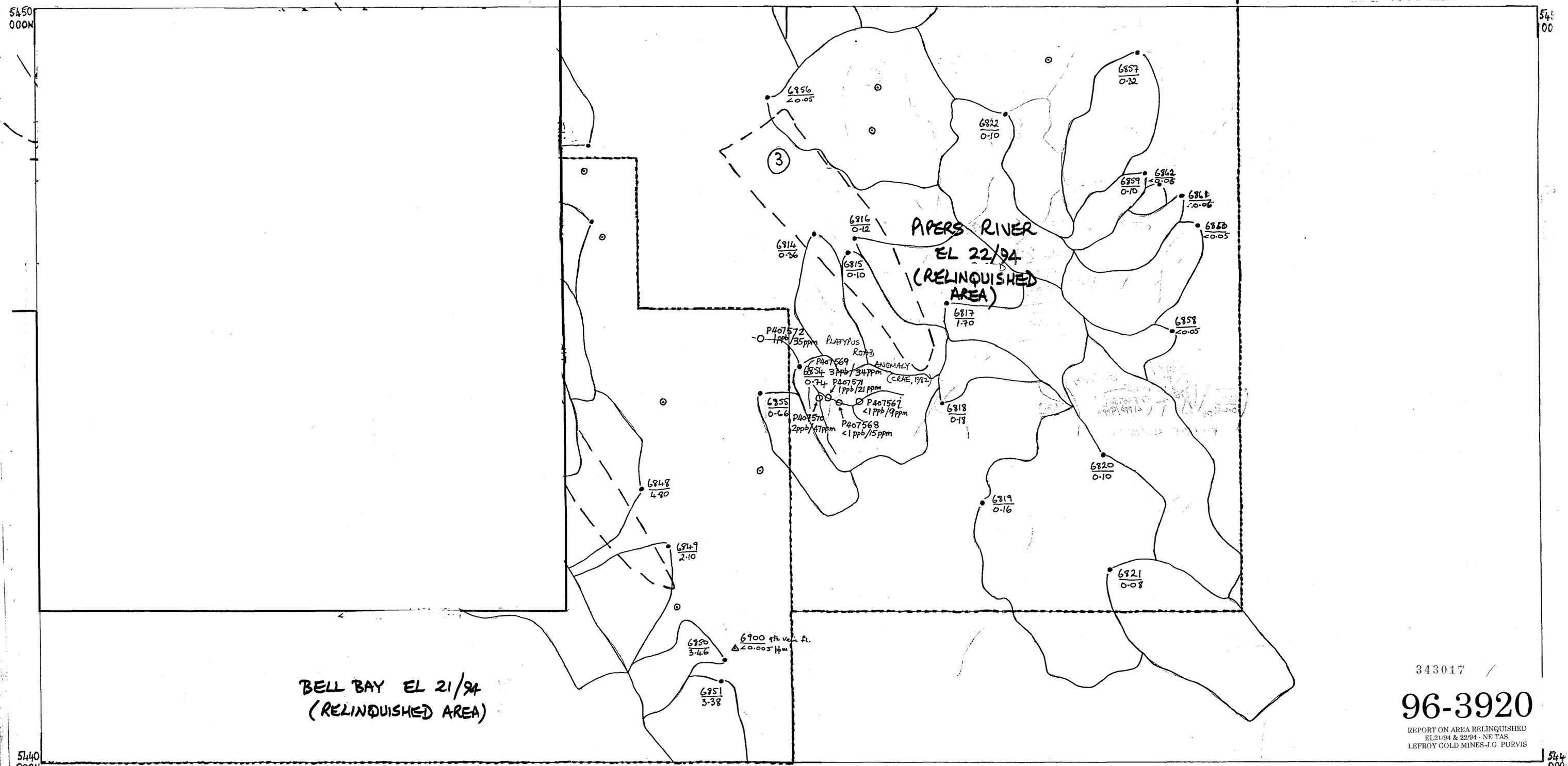
FIGURE 4

1:25000

STREAM SEDS

RETREAT

RETREAT



343017

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REPORT ON AREA RELINQUISHED EL21/94 & 22/94 - NE TAS. LEFROY GOLD MINES-J.G. PURVIS

BELL BAY EL 21/94 (RELINQUISHED AREA)

APIERS RIVER EL 22/94 (RELINQUISHED AREA)

KEY

- FOLLOW-UP PROGRAMME:
- Sample site (-80 mesh)
  - 1ppb/10ppm Au As
- KEY
- BLEG STREAM SEDIMENT
  - 6822 Sample No. (Prefix P40-)
  - 19.48 Gold content ppb.
  - Sites inspected but not suitable for sampling
  - △ Rock sample
  - ⊖ Anomalous catchments in red
  - ⊙ Structural zones

5 cm

RETREAT

CENTRAL KALGOORLIE GOLD MINES NL  
EL1/85, EL21/94, EL22/94

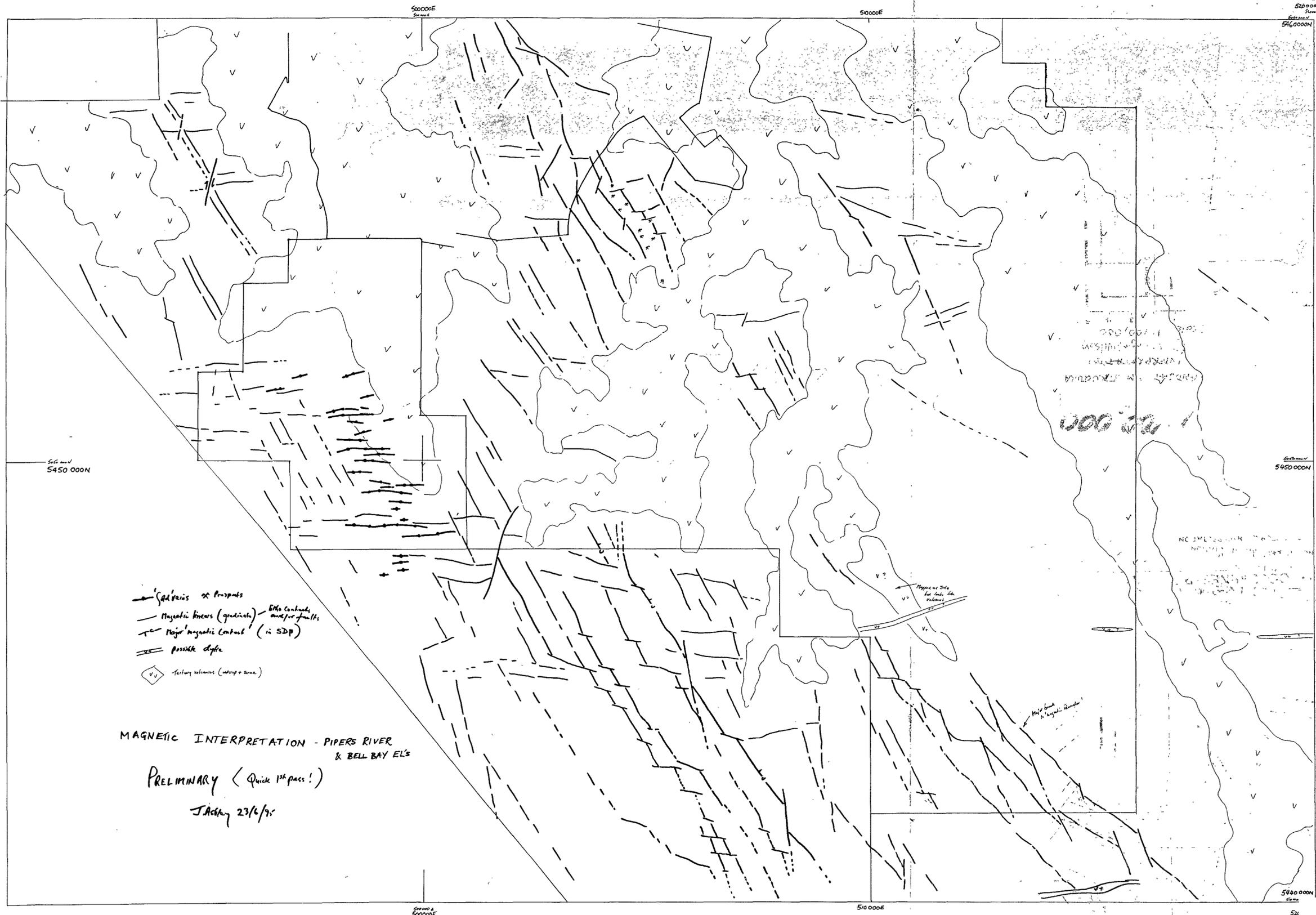
LEFROY PROJECT  
NE TASMANIA

DRAINAGE SAMPLING

RETREAT SHEET

SCALE 1:25,000 SEPT 1998

FIGURE 5



- (solid) or dashed — Faults or prospects
- Magnetic lines (gradient) — Little Contour, and just from 1/11
- Major magnetic Contour (in SDP)
- Possible dyke
- ◇ Volcanic features (outcrop + some)

MAGNETIC INTERPRETATION - PIPERS RIVER  
& BELL BAY EL'S

PRELIMINARY (Quick 1<sup>st</sup> pass!)

J. Ashby 23/6/75

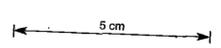
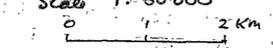
J. Ashby's  
MAG. MAG. INTERP.

LEFROY - BAKER

1:25,000

343018

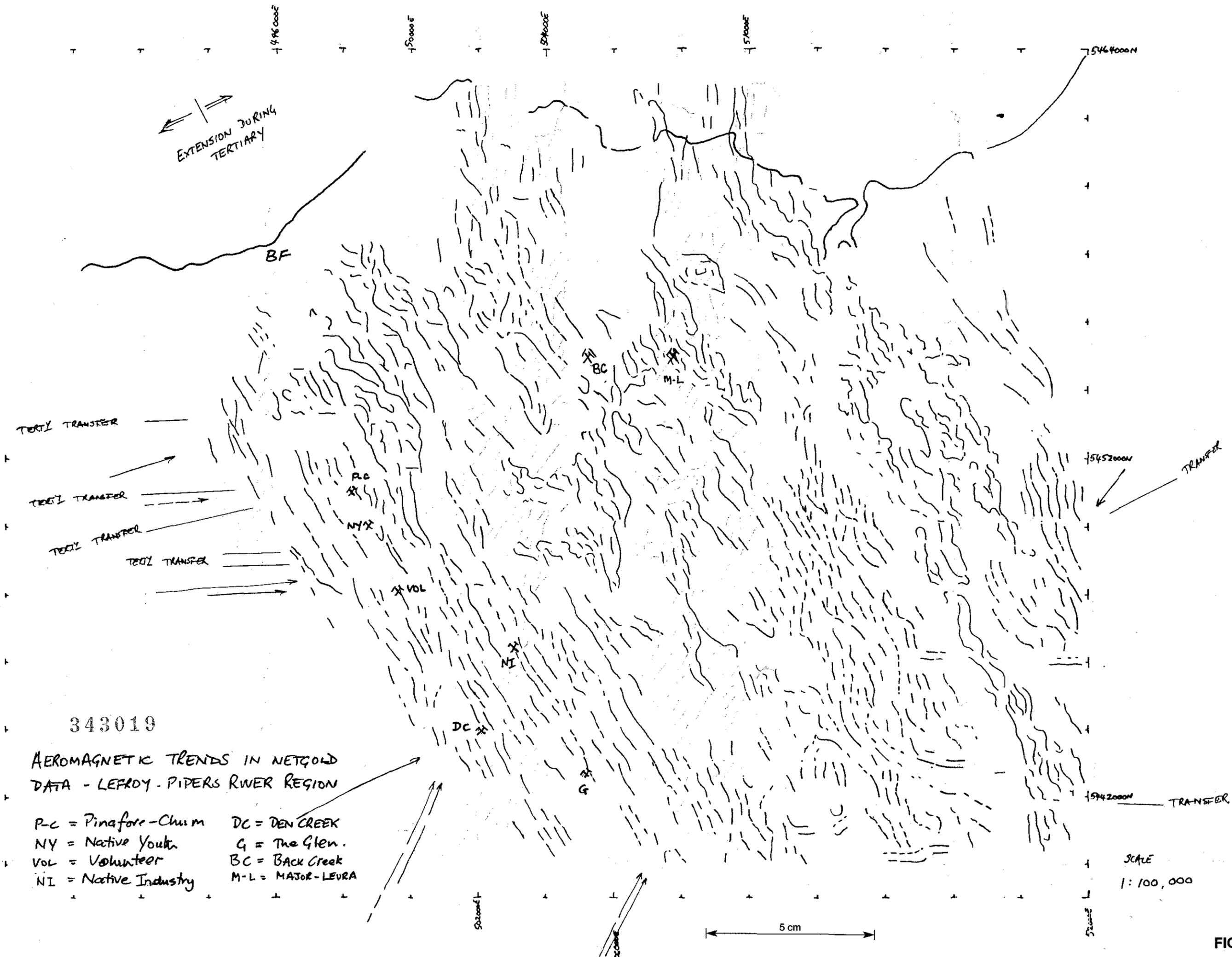
INTERPRETED  
AEROMAGNETICS  
(J. Ashby)  
Scale 1:50,000



FIGUR

96-3920

REPORT ON AREA BELONGING TO  
EL2194 & 2294 - NE TAS  
LEFROY GOLD MINES - J.C. PURVIS



343019

AEROMAGNETIC TRENDS IN NETGOLD DATA - LECKY - PIPERS RIVER REGION

- |                      |                   |
|----------------------|-------------------|
| PC = Pinafore-Chum   | DC = DEN CREEK    |
| NY = Native Youth    | G = The Glen.     |
| VOL = Volunteer      | BC = BACK CREEK   |
| NI = Native Industry | M-L = MAJOR-LEURA |

SCALE  
1:100,000

FIGURE 7

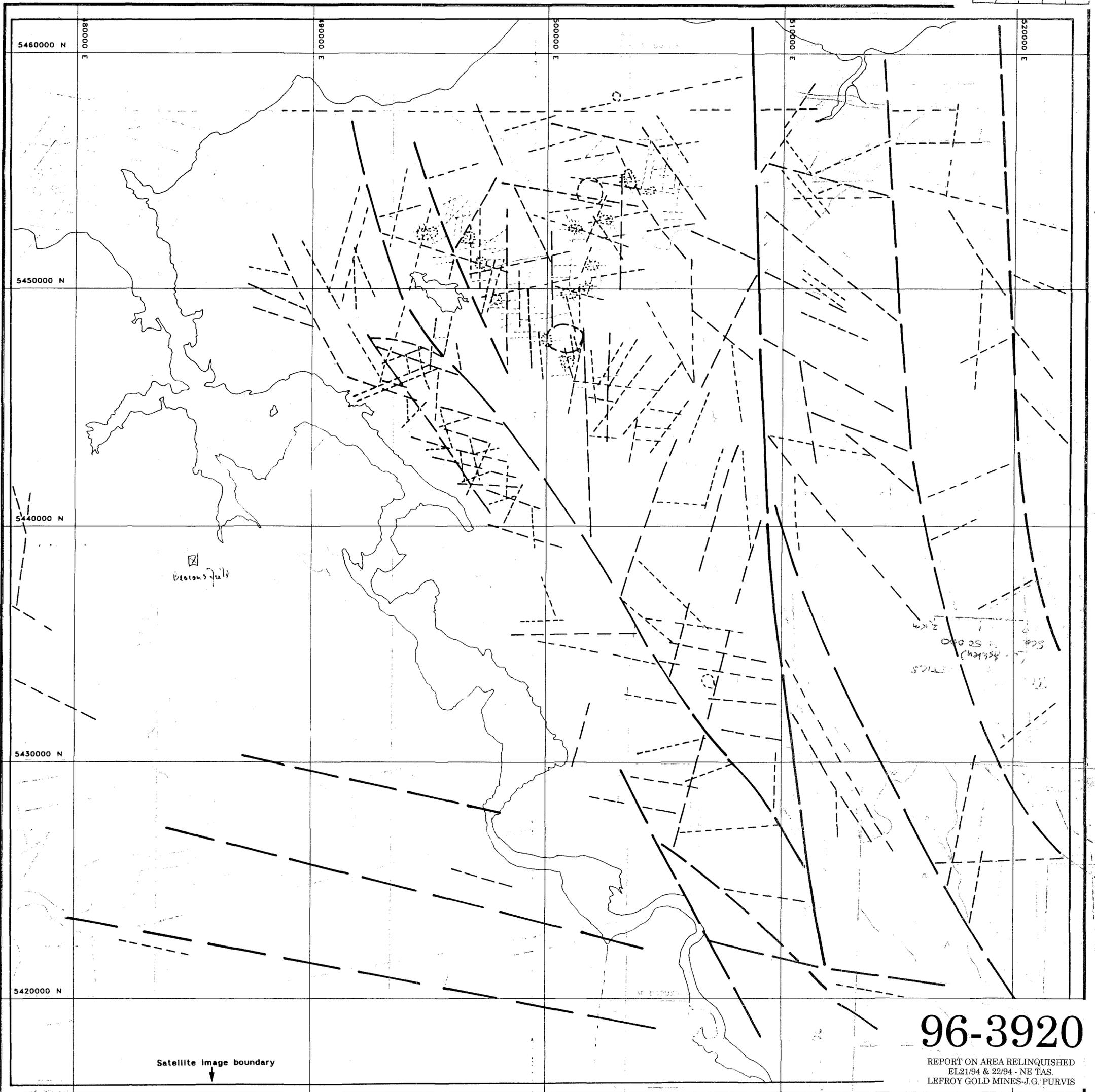
TAS  
P. WILSON

LANDSAT  
INTERP 1995

1:100,000

LANDSAT TM STRUCTURAL  
INTERPRETATION  
(P. LIVINGSTON) Wilson  
Scale: 1:100,000  
0 1 2 3 4 5 Km.

5 cm



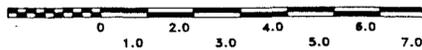
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EL21/94 & 22/94 - NE TAS.  
LEFROY GOLD MINES-J.G. PURVIS

LEGEND

- Major fault
- - - Minor fault
- · - · Shear zone
- · - · Fracture zone
- · · Anomalous zone

KILOMETRES



INTERNATIONAL EARTHSCAN PTY LTD

LEFROY GOLDMINES PTY LTD

NORTH EAST TASMANIA 343020

LANDSAT TM STRUCTURAL INTERPRETATION

DRAWN: Wilson

SCALE 1:100000

DATE: 3 AUG 1995

PLOT: TA

FIGURE 8

343021

Lefroy Goldmines Pty Ltd. - NE Tasmania

7

Landsat TM 4/3/94 Bands 753

Produced by Peter Wilson & Associates P/L.

21-July-1995

R

SCALE 1:250,000

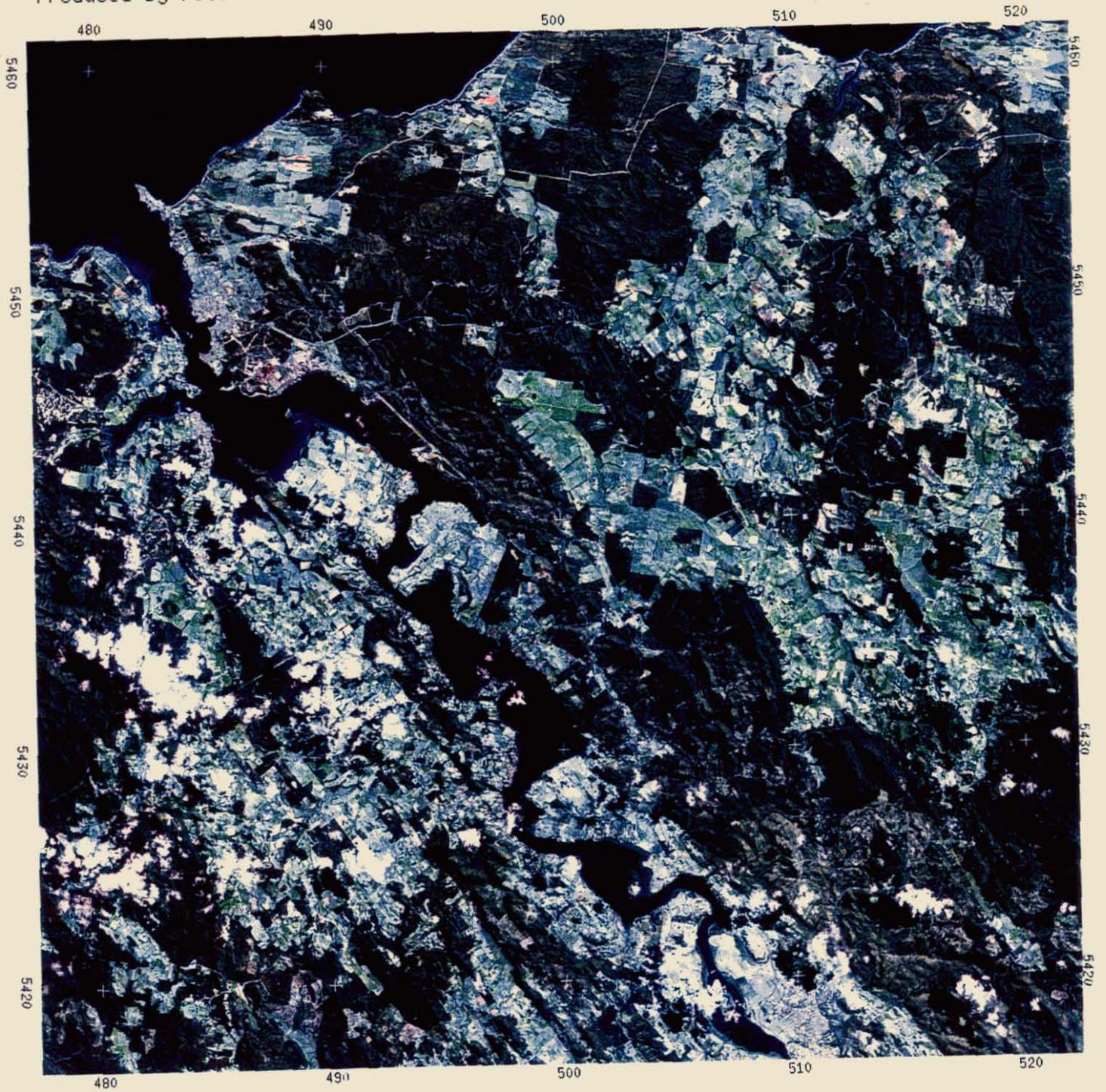


FIGURE 9



500,000 E

5450,000 N

490,000 E

5440,000 N

343022

LANDSAT INTERPRETATION  
OF  
BEECHFORD - LEFROY - GLEN

FIGURE 10

Scale 1:50,000

343023

**APPENDIX 1**

**REPORT ON BLEG DRAINAGE SAMPLING**

**BY D. DUNCAN**

**MAY 1995**  
**(Edited)**

## **RESULTS OF STREAM SEDIMENT SURVEY ELs 21/94 and 22/94, LEFROY, TASMANIA**

### **1. THE SURVEY**

The reconnaissance geochemical survey of the Central Kalgoorlie ELs was carried out between 27 March and 13 April. The survey was based on the collection of BLEG (bulk leach extractable gold) samples from the drainage of the region surrounding the Lefroy and Back Creek goldfields. The aim of the survey was to establish the overall gold response of the region and to locate repetitions of the quartz-gold lodes of the type already found at Beaconsfield, Lefroy and Back Creek. The sample site distribution was designed to cover the Mathinna sediments and their contained structural zone, to avoid as much as practicable the Cainozoic sediments and to minimise entry to private property. Samples were also collected in the Lefroy and Back Creek areas to indicate how known gold mineralisation is expressed in the streams and to aid in the interpretation of the regional geochemistry. The general conditions and details of the field sampling are described in the Appendix.

### **2. THE RESULTS**

The results were received from ANALABS on 9 May.

All results are plotted on an accompanying series of overlays to the 1:25,000 scale computer-generated geology maps recently produced by the Tasmanian Geological Survey. The overlays also contain the catchment boundaries of the samples and the structural zones and allow comparison of the results with the geology and mineralisation on the coloured maps.

### **3. THE INTERPRETATION**

Values below 5 ppb are not regarded as anomalous (generally similar values were established by Billiton in their 1989-90 NE Tasmania reconnaissance survey and also in their later more detailed work at Lisle).

### **4. CONCLUSIONS**

4.5 The last formation of the Mathinna Beds in this region is the overlying Bellingham Formation which occupies all of EL 22/94 east of 509,000mE. The catchments in this area are not anomalous and almost exclusively in the range 0-1 ppb (Population 1). This is taken to be the background levels for gold in this sandstone-dominated formation.

## 5. RECOMMENDATIONS

- 5.2 Following the results of this stream sediment survey, consideration should be given towards reducing the areas of the two regional ELs 21 and 22/94. EL 21/94 need only cover the areas NNW and SSE of Lefroy and EL22/94 could be reduced to concentrate on the Back Creek and Bakers Tier areas. Such a move would reduce substantially Central's required expenditure on the licences and allow funding to be concentrated on testing the potential of the Lefroy goldfield which has just been awarded as EL 1/95. The reduction should await the full appreciation of the structural study in case an important structural target which has not been tested geochemically should be released prematurely.

D. McP. DUNCAN  
26 May 1995

**LEFROY ELs 21 and 22/94 - Central Kalgoorlie Gold Mines NL**  
**STREAM SEDIMENT SURVEY - COMPLETION REPORT**

1. The reconnaissance stream sediment program was carried out from 27 March to 12 April, 1995.
2. In total 110 sites were visited with 77 BLEG samples and one quartz vein being collected; 32 sites were considered unsuitable for sampling (30%).
3. Unsuitable sample sites were mostly caused by
  - the absence of a recognisable channel,
  - the channel was covered by a soil profile, or
  - there was only clay material in the watercourse.
4. Most creeks were not running due to the prolonged drought.
5. However, most material was damp and difficult to pass through a 1/8 inch sieve in any reasonable time so the sample size was reduced to a minimum of 3 kg (from 5 kg) and then a 1/4 inch sieve was used throughout the survey to achieve a reasonable sampling rate.
6. A few samples were wet and the excess water had to be decanted after settling.
7. The BLEG samples as a population are a mixed bunch. It was not possible to standardise on a consistent fraction but as a rule sediment was collected in as fine a grain size as possible where it could still be classified as active sediment. Clay was avoided as were thin mud layers which could be wind blown in origin or from the immediate creek banks. It is only possible to take what each creek can provide. So the samples range from silt, sand to grit and sometimes a mixture of all three. Soil was sampled on the floor of some channels (in desperation) if it had a gritty or sandy component to it. If it was mainly humic and clay rich, the soil was not considered worth sampling.
8. In any one creek, two or three separate sites were collected from where possible along a 10 metre section to cover the nugget effect of gold.
9. About 10 samples have been taken close to gold mineralisation at Lefroy for orientation purposes including duplicate samples in two cases to measure the response of wet and dry samples.
10. The samples were delivered to ANALABS, Burnie on Wednesday 12 April and results were promised in 15 to 20 working days.

D.McP. Duncan  
20 April 1995