

NEWNHAM EXPLORATION & MINING SERVICES

MICROFILMED
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EL22/97
1998-1999
See folio 41

EL 22/97

TRIAL HARBOUR AREA

1998-1999 ANNUAL REPORT

MINERAL RESOURCES
2 - AUG 1999
TASMANIA

Prepared For:

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Annual Report 1998-1999 Trial Harbour Area - EL
22/97
Allegiance Mining NL; Newnham Exploration & Mining
Newnham, L.A. EL22/97

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1. SUMMARY

EL 22/97 west of Zeehan is subject to a joint venture agreement between Allegiance Mining NL (operators) and Rio Tinto Exploration Pty Limited.

The principal exploration target is nickel sulfide deposits concentrated along the margins of ultramafics which have been hydrothermally altered by the adjacent Heemskirk Granite.

Exploration for this deposit style on EL 22/97 is one component of an integrated district exploration program which encompasses ELs 22/88 and 9/66. Most work during the year focused on drill evaluation of the Avebury deposit on EL 28/88.

Minor field work undertaken on EL 22/97 was limited to an unsuccessful search for previous drill cores from the region.

In 1999-2000 year it is proposed to undertake mapping and rock sampling programs over aeromagnetically anomalous zones in both the Tenth Legion area and the south-east extension zone of the Trial Harbour ultramafic. This work will be undertaken between October 1999 and February 2000 at an estimated cost of \$30,000.

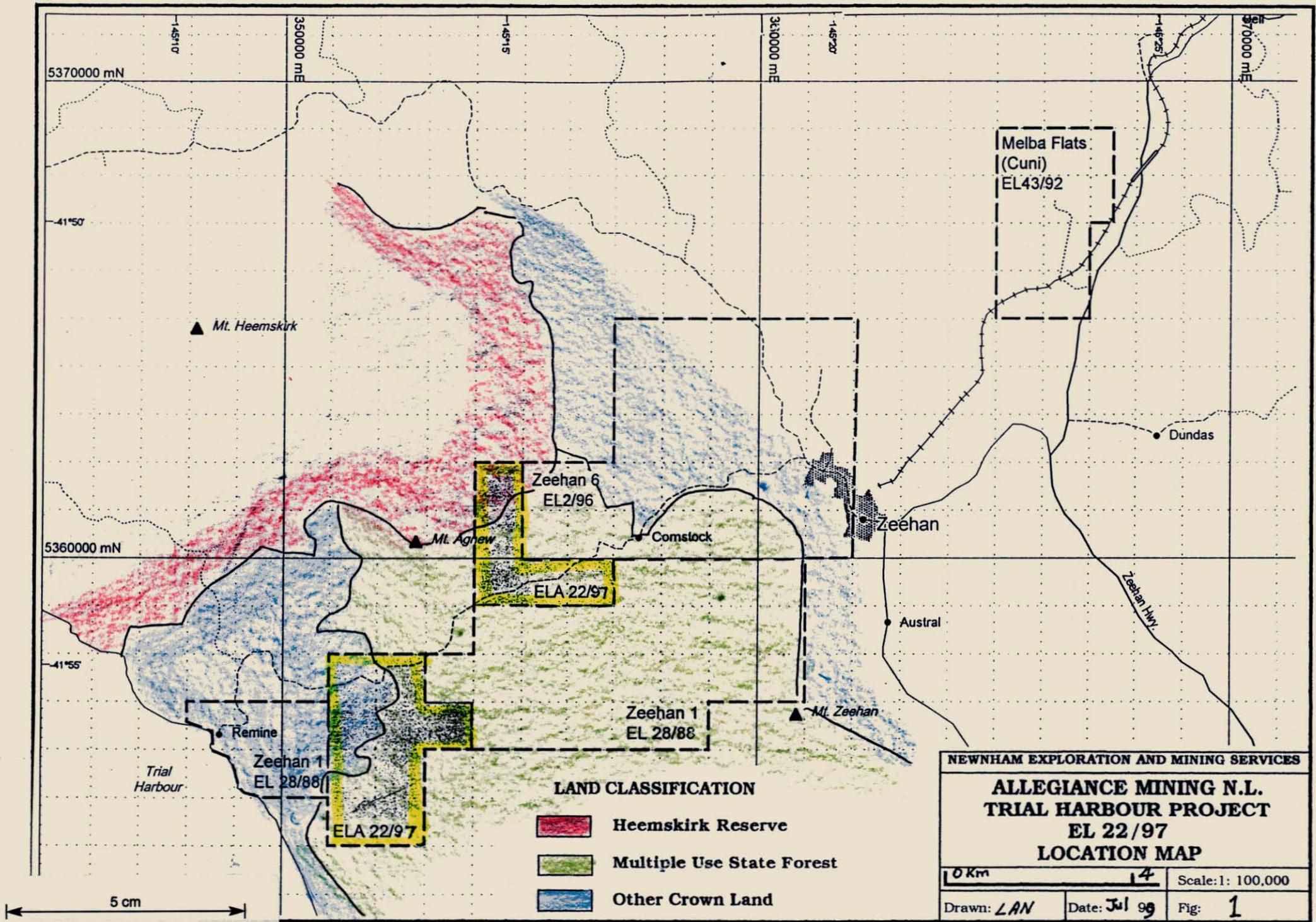
2. TENURE, CLASSIFICATION, GEOGRAPHY (Map 1)

EL 22/97 of 14 sq km in two parts was granted to Allegiance Mining NL on 29 August 1997, for a five-year period to 29 August 2002.

It subsequently became subject of the Trial Harbour J/V agreement between Allegiance and Rio Tinto Exploration Pty Limited which also covers the contiguous ELs 28/88 and 2/96, together with EL 43/92 (Melba flats).

Under the recently-signed *Tasmanian Regional Forest Agreement*, the area is classified as State Forest (Multiple Use), Heemskirk Reserve (subject to exploration and mining) and "other Crown Land" (subject to exploration and mining). The distribution of these classifications is shown on Map 1.

The northern block of EL 22/97 is cut by the Zeehan-Trial Harbour road and has been subjected to extensive exploration, mining and



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forestry activities. Patches of wet-sclerophyll are separated by open button-grass and low scrub, largely reflecting the underlying geology.

The southern block of EL 22/97 is bisected by the Little Henty River and contains a wide variety of morphological types ranging from rugged open eucalypt forests on the Heemskirk Range in the north, to dense forest in the Little Henty Gorge, to open dune and Quaternary cover in the south.

3. PREVIOUS WORK

The majority of previous work in the area covered by EL 22/97 was directed towards exploration for tin and iron in skarned or replacement formations adjacent to the Heemskirk Granite.

RGC and IMI were the principal contributors to this effort.

RGC completed a variety of electrical geophysical and geochemical surveys on grids established along the eastern and southern margins of the granite. They core-drilled holes TH 3, 4, 5 and 6, aimed at following up anomalies defined by these surveys. Core was extensively assayed but not for Ni.

IMI concentrated their efforts on massive ironstone formations as a potential iron ore resource. These ironstones were developed as a result of metasomatic alteration of ultramafic intrusives and calcareous sediments close to the granite contact.

They drilled a series of cored holes in the general Tenth Legion area. Two of these - TLC 004 and 005 - occur within EL 22/97.

4. WORK COMPLETED 1998-1999

Only minor work was undertaken during the year. Attempts to locate core from previous drilling programs proved unsuccessful.

Digital geological and geographical data at 1:25,000 was acquired and enlarged over the licence area for the purposes of the forthcoming

mapping and sampling program.

Enlargements of aerial photos were also acquired for the same purpose, although the coverage of the Trial Harbour ultramafic area is not good.

5. WORK PLANNED 1999-2000

Exploration on the adjacent EL 28/88 has resulted in the discovery of a major nickel sulfide deposit known as Avebury.

The sulfides at Avebury are concentrated in the margins of an ultramafic body which has been hydrothermally altered by the Heemskirk Granite (serpentinised). The alteration process involved both the mobilisation and concentration of nickel sulfides and the introduction of large amounts of iron as magnetite. The latter produces a major magnetic anomaly.

Allegiance recently completed a high resolution aeromagnetic survey over the district. Results of this survey, combined with district geological mapping, suggest that areas analogous to Avebury exist within EL 22/97 in the Tenth Legion area and as south-east extensions of the Trial Harbour ultramafic body.

In October-November 1999 it is planned to detail map and extensively chip sample for Ni assaying the magnetically anomalous marginal zones of the ultramafic bodies in the Tenth Legion area.

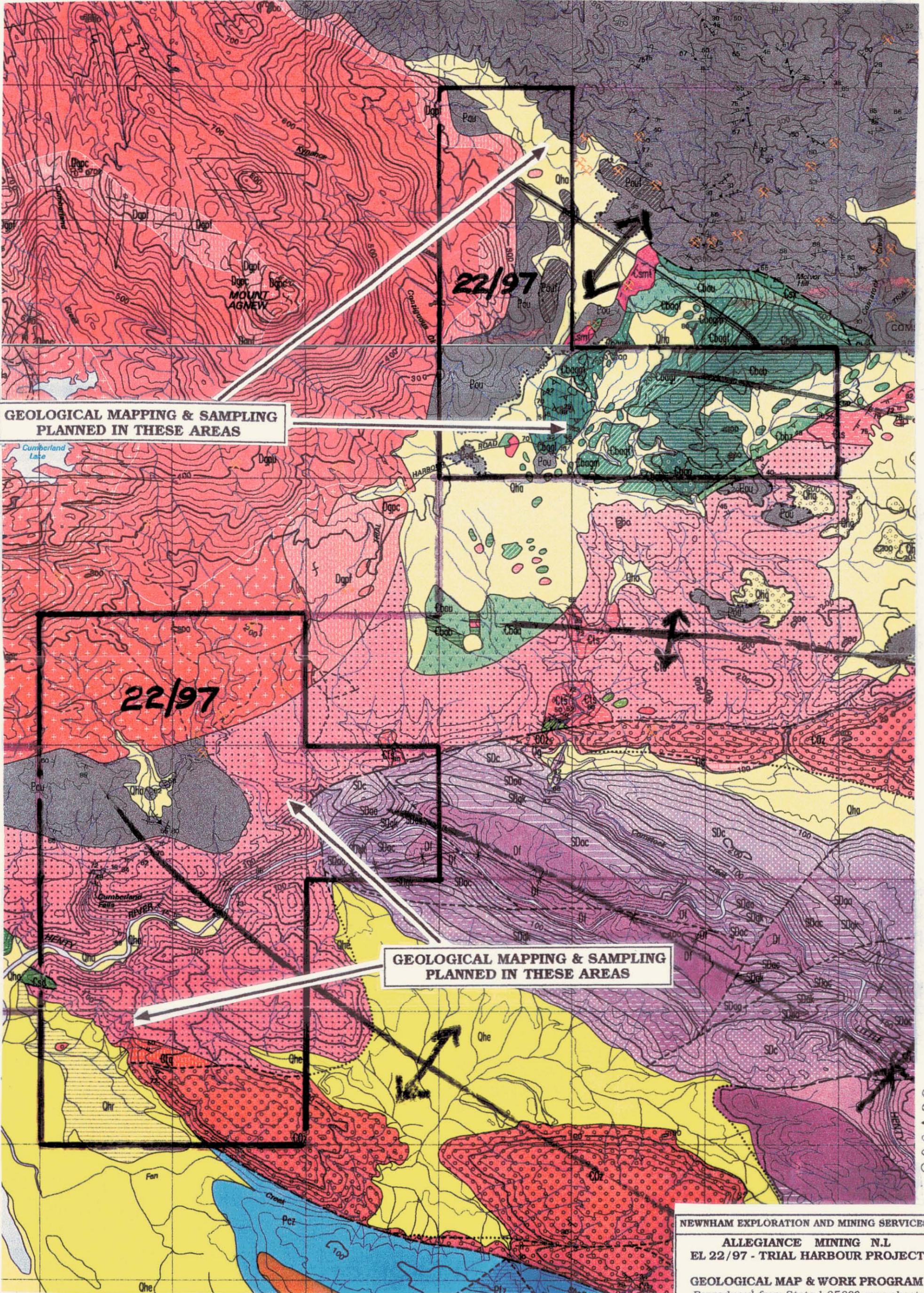
In January-February 2000 it is planned to complete similar surveys over the Trial Harbour ultramafic, in particular where it extends beneath cover rocks into EL 22/97.

6. BUDGET

The following budget has been allocated to undertake this work:

	\$
Wages:	20,000
Field support:	5,000
Assaying:	3,000
Drafting:	<u>2,000</u>
Budget Total:	<u>\$30,000</u>

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**GEOLOGICAL MAPPING & SAMPLING
PLANNED IN THESE AREAS**

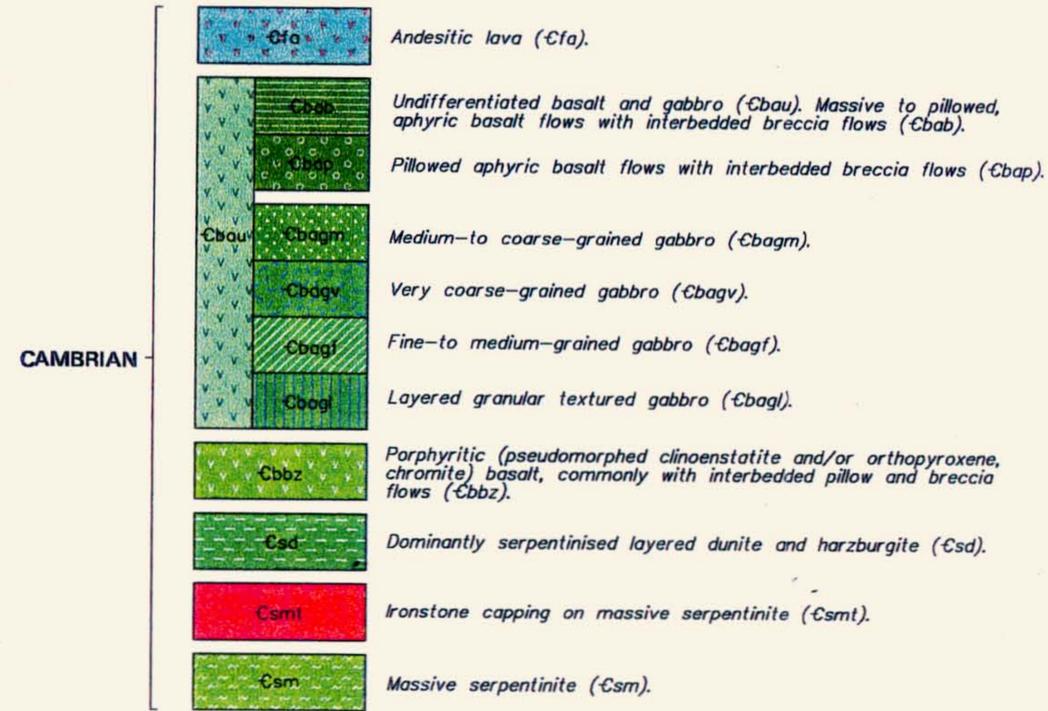
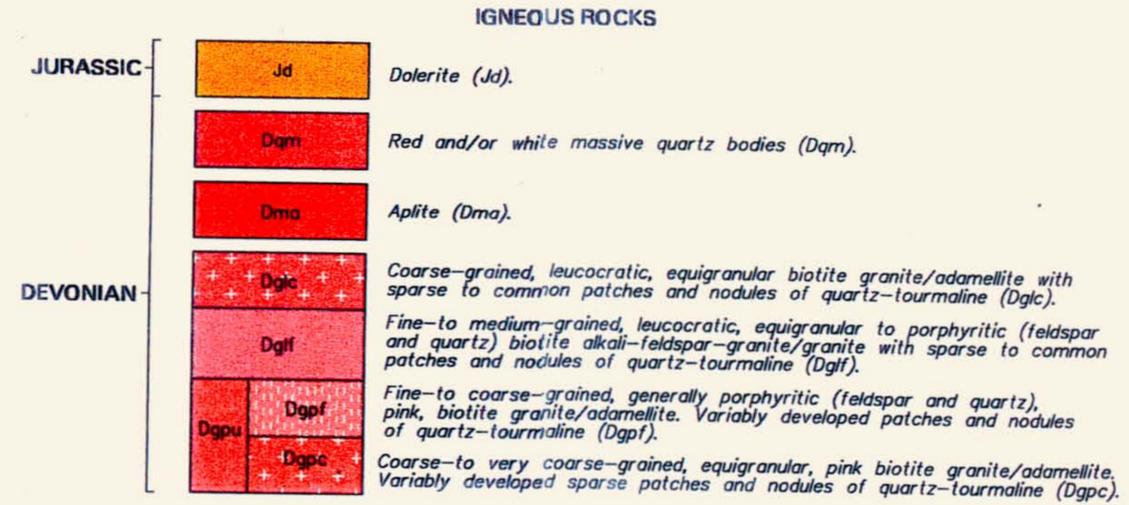
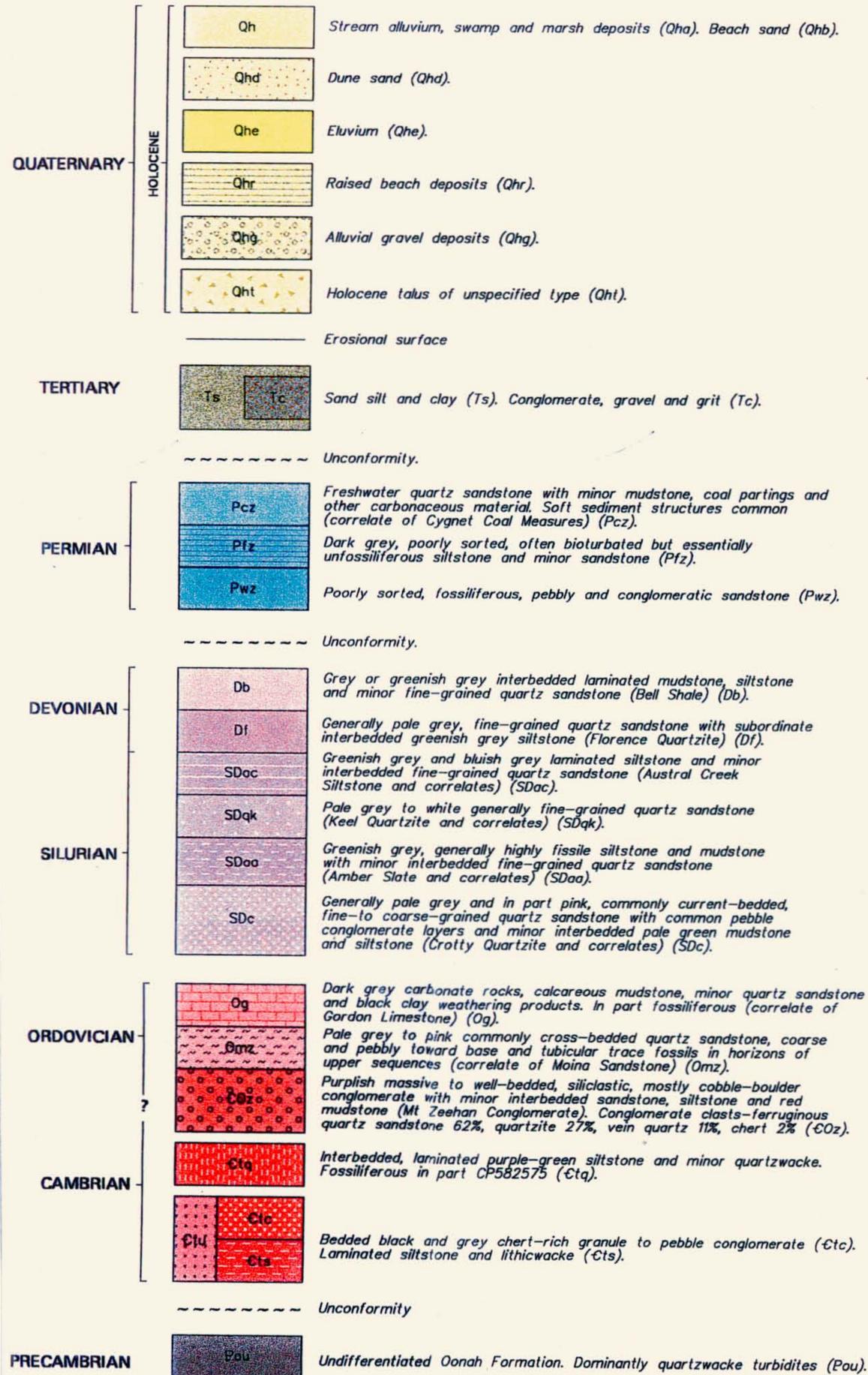
**GEOLOGICAL MAPPING & SAMPLING
PLANNED IN THESE AREAS**

NEWHAM EXPLORATION AND MINING SERVICES
ALLEGIANCE MINING N.L
EL 22/97 - TRIAL HARBOUR PROJECT
GEOLOGICAL MAP & WORK PROGRAM
 Reproduced from State 1:25000 map sheets

Scale:
Drawn: LAN
Date: Jul 98
Fig 2

5 cm

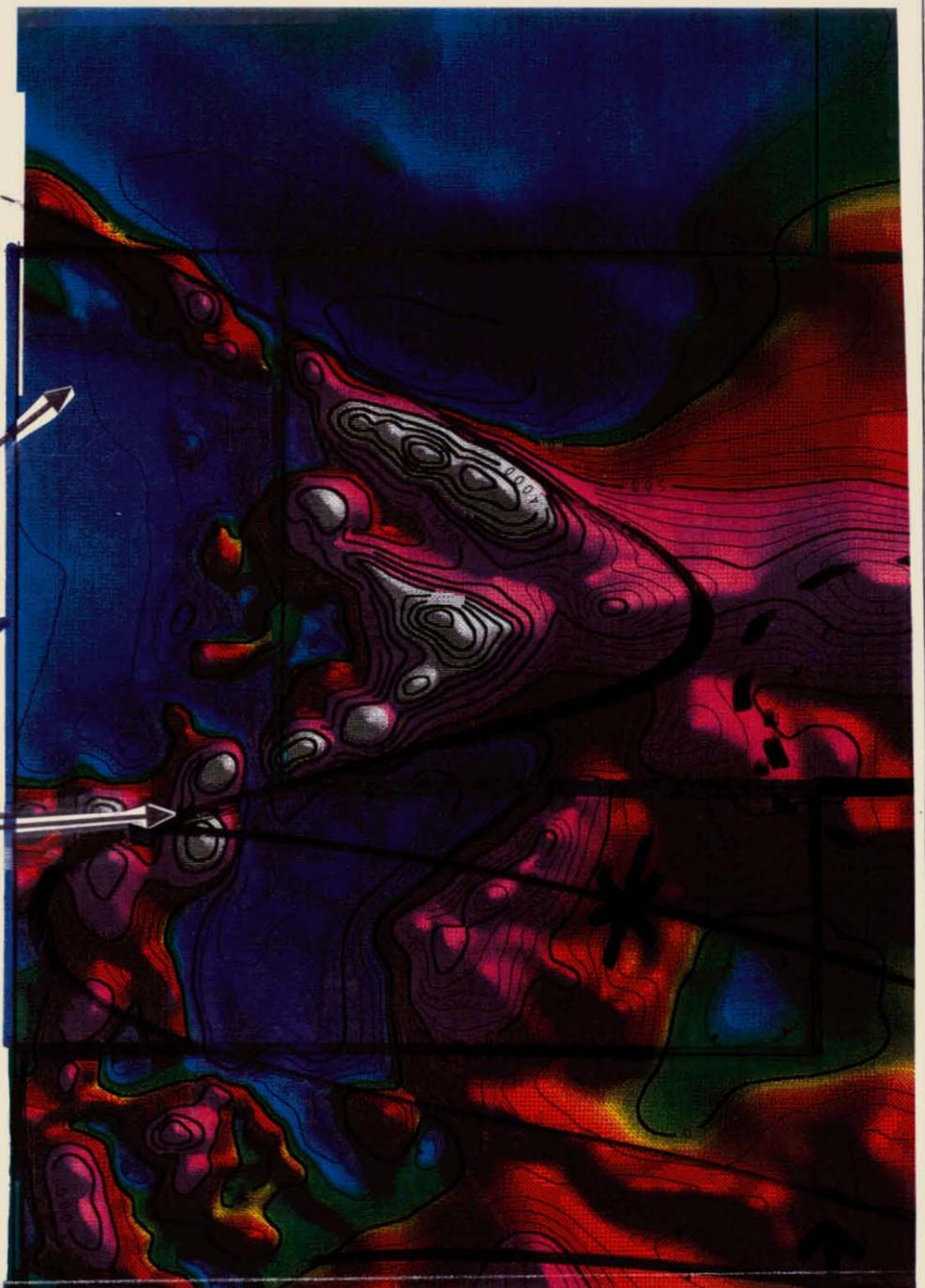
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NEWNHAM EXPLORATION AND MINING SERVICES

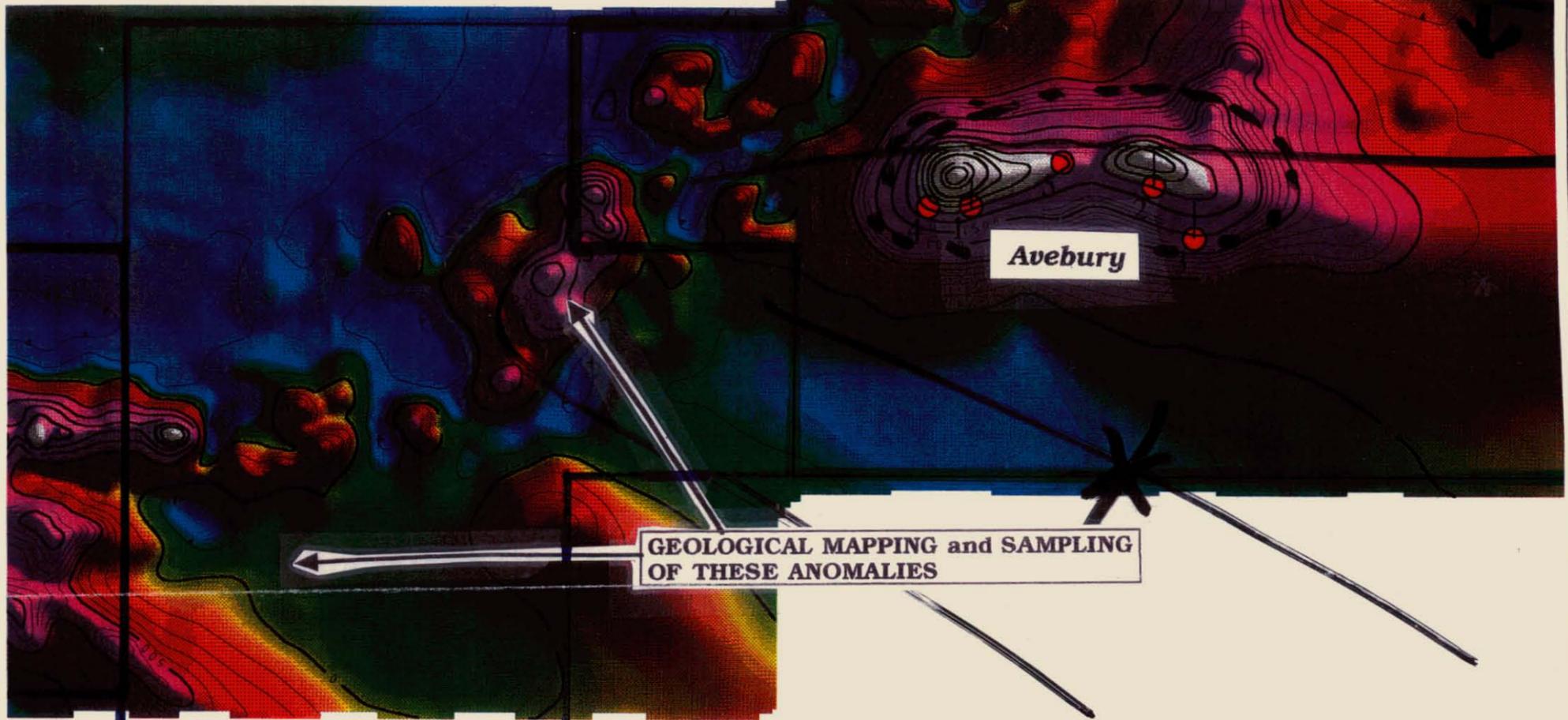
ALLEGIANCE MINING N.L.
EL 22/97 - TRIAL HARBOUR PROJECT
GEOLOGICAL MAP KEY
 Reproduced from State 1:25000 map sheet

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GEOLOGICAL MAPPING and SAMPLING OF THESE ANOMALIES

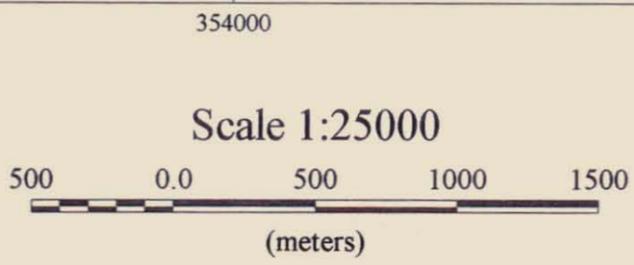
EL 22/97



Avebury

GEOLOGICAL MAPPING and SAMPLING OF THESE ANOMALIES

352000
EL 22/97



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NEWNHAM EXPLORATION AND MINING SERVICES		
ALLEGIANCE MINING NL		
EL 22/97 - TRIAL HARBOUR PROJECT		
TOTAL MAGNETIC FIELD-reduced to pole		
1998 AEROMAGNETIC SURVEY		
		Scale: 1 : 25,000
Drawn: LAN	Date: JULY 99	Fig 3