

NEWHAM EXPLORATION & MINING SERVICES

**OPEN FILE**

**EL 2/96 - ZEEHAN**

**PARTIAL RELINQUISHMENT REPORT**

**MICROFILMED**  
FICHE No. 014724-

EL2/96

For:

Allegiance Mining NL  
Level 1, 55 York Street  
Sydney, NSW, 2000

see folio 47

By:

L A Newnham, B.Sc., F.A.I.M.M.  
PO Box 132  
Riverside, Tas 7250

Ph: (03) 6394 3434  
Fax: (03) 6394 3435

11 August, 1998

98-4195

PARTIAL RELINQUISHMENT REPORT  
EL 2/96 - ZEEHAN - ALLEGIANCE MINING  
L A NEWNHAM

**CONTENTS**

- 1. SUMMARY**
- 2. TENURE**
- 3. GEOLOGY and TARGETS**
- 4. WORK COMPLETED**

**Figures:**

- 1. Location Plan**
- 2. Geology** **1:25,000**  
**(State Maps)**
- 3. Helimag Results, TMI** **1:25,000**
- 4. Helimag Results, First Derivative** **1:25,000**

## 1. SUMMARY

The northern half of EL 2/96 is underlain largely by Oonah Formation sediments.

Helimag survey results, combined with a review of previous exploration and mining work in the area suggests it has low potential to host the target deposit models of the joint venture partners.

No ground work was undertaken on the relinquished section of the licence; hence, there was no environmental disturbance.

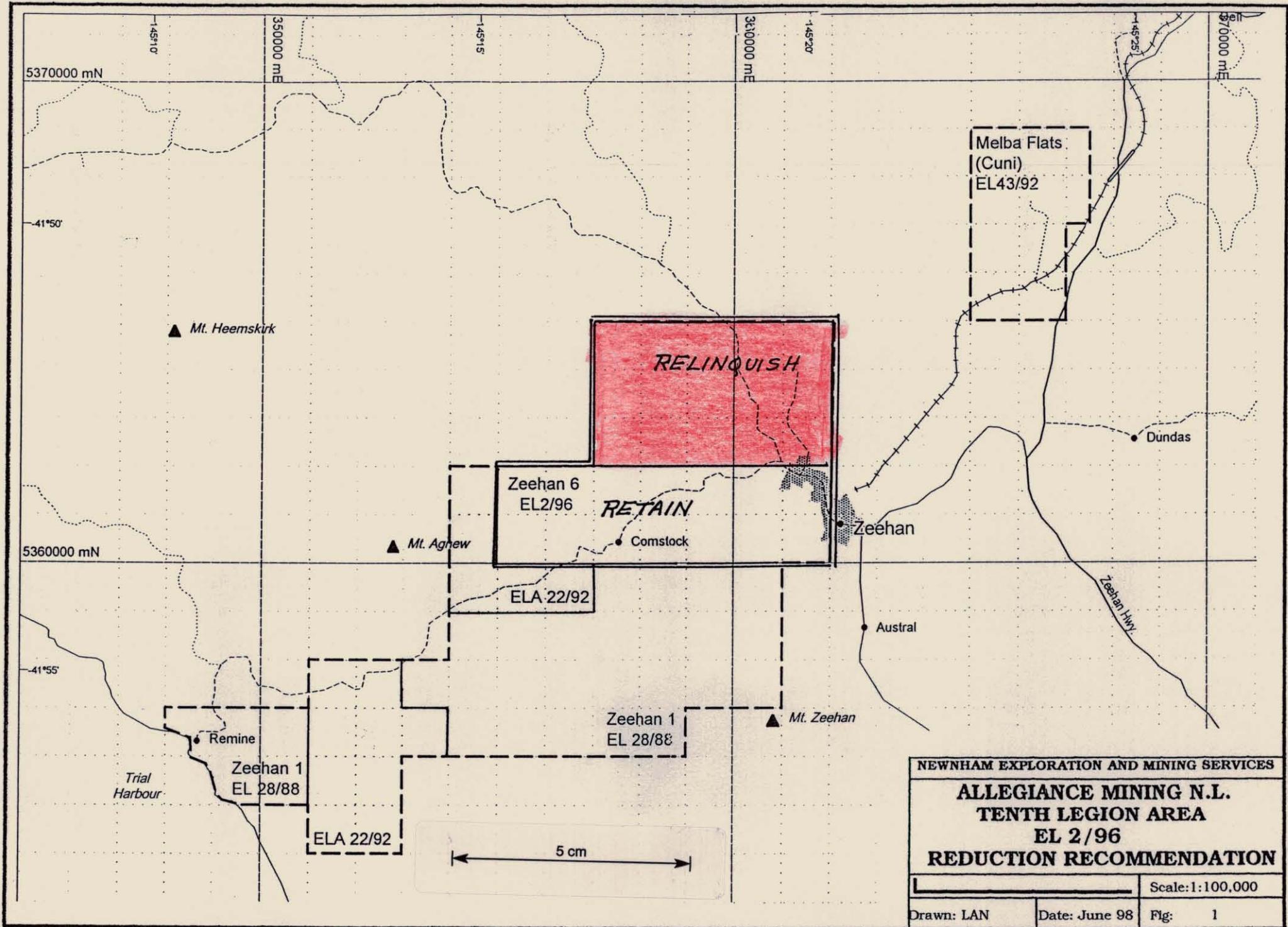
## 2. TENURE (Fig 1)

EL 2/96 of 29 sq km was granted to Rio Tinto Exploration Pty Limited on 12 April, 1996.

RTE entered into a J/V agreement with Allegiance Mining NL in November, 1997 to continue exploration of the area. Allegiance is manager of that J/V.

Application has been made to Mineral Resources Tasmania to relinquish the northern 15 sq km of the licence.

An area of approximately two (2) square kilometres in the south-east corner of the area to be relinquished is covered by Retention Licence 9705. This licence covers a number of substantial former mines.



NEWNHAM EXPLORATION AND MINING SERVICES

**ALLEGIANCE MINING N.L.  
TENTH LEGION AREA  
EL 2/96  
REDUCTION RECOMMENDATION**

Scale: 1:100,000	
Drawn: LAN	Date: June 98
Fig: 1	

227005

### 3. GEOLOGY and TARGETS

The relinquished area is underlain by quartzites and quartz turbidites of the Precambrian Oonah Formation.

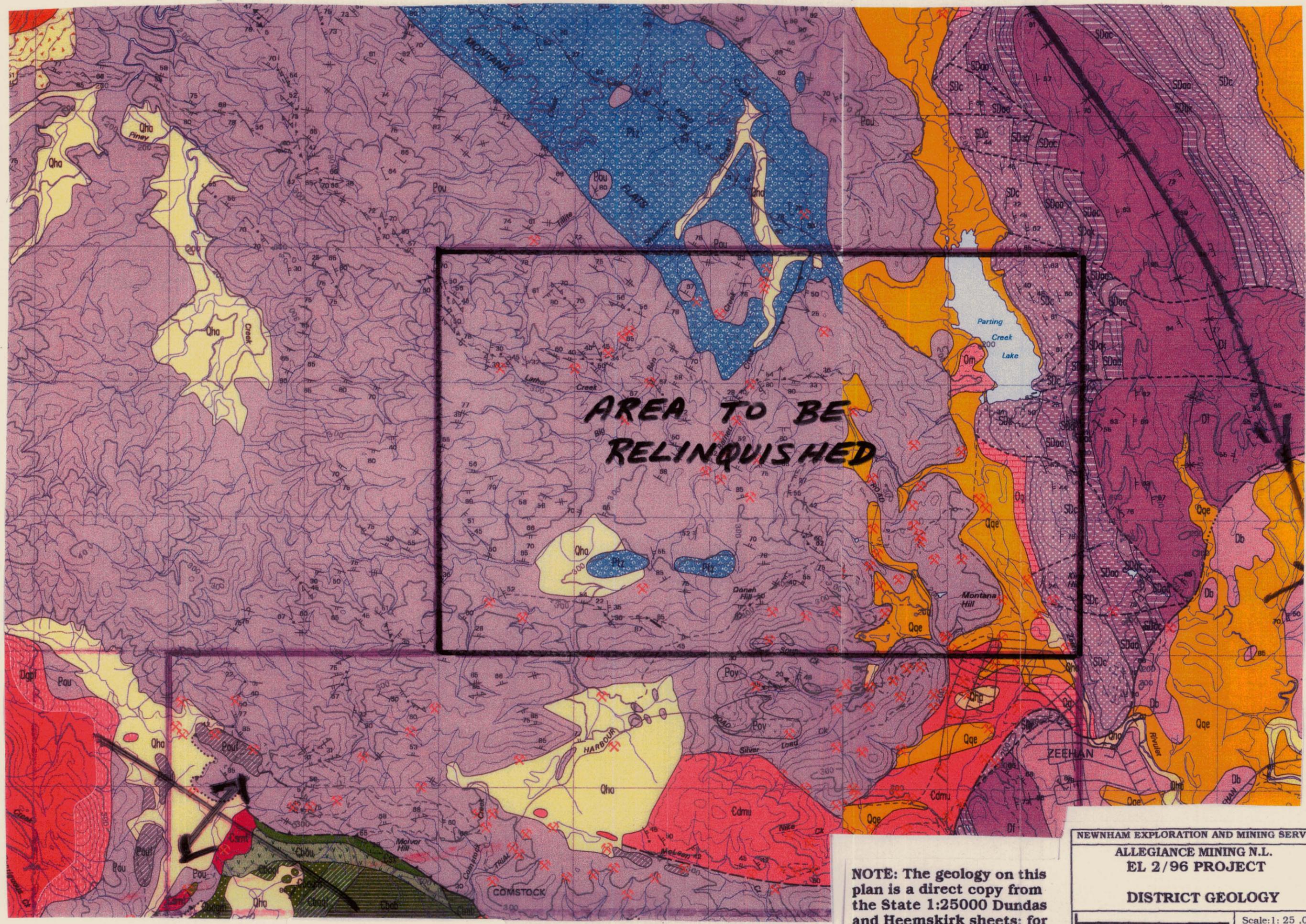
Onlapping Oonah in the east is a sequence of lower Palaeozoic sediments forming the east dipping, western limb of a south-east trending syncline formed during a period of Devonian folding.

Minor mineralisation is widespread in the Oonah, generally as small veins of Pb-Zn-pyrite. Several substantial former Pb-Zn mines occur in the eastern area; eg, Oonah and Zeehan Western, and Zeehan Montana (within RL 9705).

Replacement Pb-Zn mineralisation has also been mined within the Gordon Limestone; eg, Despatch Mine (within RL 9705).

RTE target models were:

- (a) shale hosted mineralisation in the Oonah Formation
- (b) Irish style Pb-Zn mineralisation in the Gordon Limestone



**AREA TO BE RELINQUISHED**

**NOTE:** The geology on this plan is a direct copy from the State 1:25000 Dundas and Heemskirk sheets; for legend, see this sheet.

5 cm

NEWNHAM EXPLORATION AND MINING SERVICES		
ALLEGIANCE MINING N.L.		
EL 2/96 PROJECT		
DISTRICT GEOLOGY		
Scale: 1: 25 ,000	Drawn:	Date: Aug 98 Fig: 2

#### 4. WORK COMPLETED

In April 1998 Allegiance completed a high resolution aeromagnetic survey of the area between Trial Harbour and Zeehan, including most of EL 2/96.

The purpose of this survey was to define areas considered anomalous in the context of their exploration for, firstly, nickel sulfide deposits and, secondly, shale hosted zinc deposits.

The results of this survey over the relinquished area of EL 2/96 are attached as Figs 3 and 4.

No other field work was undertaken.

As a result of this helimag survey and, following a review of all existing data, it was concluded that the area had diminished prospectivity with reference to the particular targets sought by both Allegiance and RTE.

354000

356000

358000

360000

5364000

5360000

5360000

**AREA TO BE  
RELINQUISHED**

**Comstock**

**Stonehenge**

5 cm

NEWNHAM EXPLORATION AND MINING SERVICES  
ALLEGIANCE MINING N.L.  
EL 2/96 PROJECT  
HELIMAG SURVEY  
TMI RESULTS

Scale: 1 : 25,000  
Drawn: Date: Aug 98 Fig: 3

354000

356000

358000

360000

**AREA TO BE  
RELINQUISHED**

5364000

5363000

5362000

5 cm

Comstock

Stonehenge

NEWNHAM EXPLORATION AND MINING SERVICES	
ALLEGIANCE MINING N.L.	
EL 2/96 PROJECT	
HELMAG SURVEY	
VERTICAL DERIVATIVE RESULTS	
Scale: 1: 25,000	
Drawn:	Date: Aug 98 Fig: 4

