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1. SUMMARY

1. Joint-venture exploration of EL 28/88 by Allegiance Mining NL and Rio Tinto Exploration Pty Limited has, in the past few years, been successful in making **new discoveries** of Pb-Zn-Ag mineralisation in the Stonehenge area, and Ni-sulfide mineralisation in the Avebury area.

2. These two new discoveries further highlight the very substantial base metal mineralisation potential of the area between Zeehan and Trial Harbour.

Recognition of this potential has led to the development by the J/V partners of **new and exciting mineral deposit models** for the region.

3. The discoveries at **Avebury** during 1997 and 1998 led to the development of a hydrothermal Ni-sulfide model based on the effects of intruding the Heemskirk Granite into a sequence of strongly deformed nickeliferous ultramafic rocks.

This model has recently been given further support from the results of a high-resolution airmag survey and the recognition of the widespread nature of nickel-sulfides in the Zeehan-Trial Harbour area. These results suggest the whole of EL 28/88 is underlain by prospective host rocks and favourable mineralisation repositories.

4. The recent discoveries at **Stonehenge** highlight the previously unrecognised potential of deformed Cambrian and Proterozoic sedimentary sequences in this area to host significant deposits of sediment-hosted base metal mineralisation. This potential is considered to be limited to the eastern half of EL 28/88.

5. To date, the J/V partners have **expended \$1,825,269** on exploration of EL 28/88 and **reduced** the licence area from 64 sq km to 29 sq km.

6. Allegiance Mining NL, as operators of the J/V, wishes to follow up the recent discoveries at Avebury and Stonehenge, based on the new deposit models developed.

An active **program of exploration is proposed**, costing \$530,000 over a two-year period through to December, 2000.

7. The **Year 1 program**, budgetted at \$250,000, would include:
 - core drilling at Avebury
 - core drilling at Stonehenge
 - geophysical surveys at Avebury
 - detailed mapping and sampling at Trial Harbour

8. The **Year 2 program**, budgetted at \$280,000, would be dependent on Year 1 results, but is envisaged as including:
 - drilling at Avebury
 - drilling at Stonehenge
 - drilling at Trial Harbour

9. EL 28/88 expires on 09 December, 1998. To allow the above work to proceed, application is made under Section 25 of the **Mineral Resources Development Act 1995** for an extension of the licence through to 09 December, 2000.

2. INTRODUCTION

The area around Zeehan is one of Tasmania's traditional mining districts and one of Australia's most renowned mineral fields.

Mining commenced in this region in the 1880s, and the district has supported a number of major mines and numerous smaller operations. A feature of the area is the immense number of mineral species present and the variety of deposit styles.

It is this diversity of mineralisation that has attracted so many explorers to the area over the past 120 years - whether it be silver, lead, zinc, tin, nickel, antimony, copper - Zeehan always had something to offer both the large and small explorer.

Such intense exploration over a long period has resulted in an immense amount of data. To absorb and appreciate the significance of this data is becoming increasingly difficult. The transient nature of much contemporary exploration often results in the explorer failing to recognise the geological "wood from the trees".

Allegiance Mining NL and Rio Tinto Exploration Pty Limited have now been exploring this area for almost 10 years. The result of this persistence has been the recent discovery of significant base metal mineralisation in two deposits; viz, Stonehenge and Avebury to the west of Zeehan.

Deposit models have been developed to both explain the development of these discoveries and to guide future exploration in the region.

3. LAND TENURE and CLASSIFICATION

EL 28/88 of 54 sq km was granted on 09 December, 1998 to "His Grace, the Most Noble, The Duke of Avram", and transferred to Major Mining Limited on 23 November, 1989.

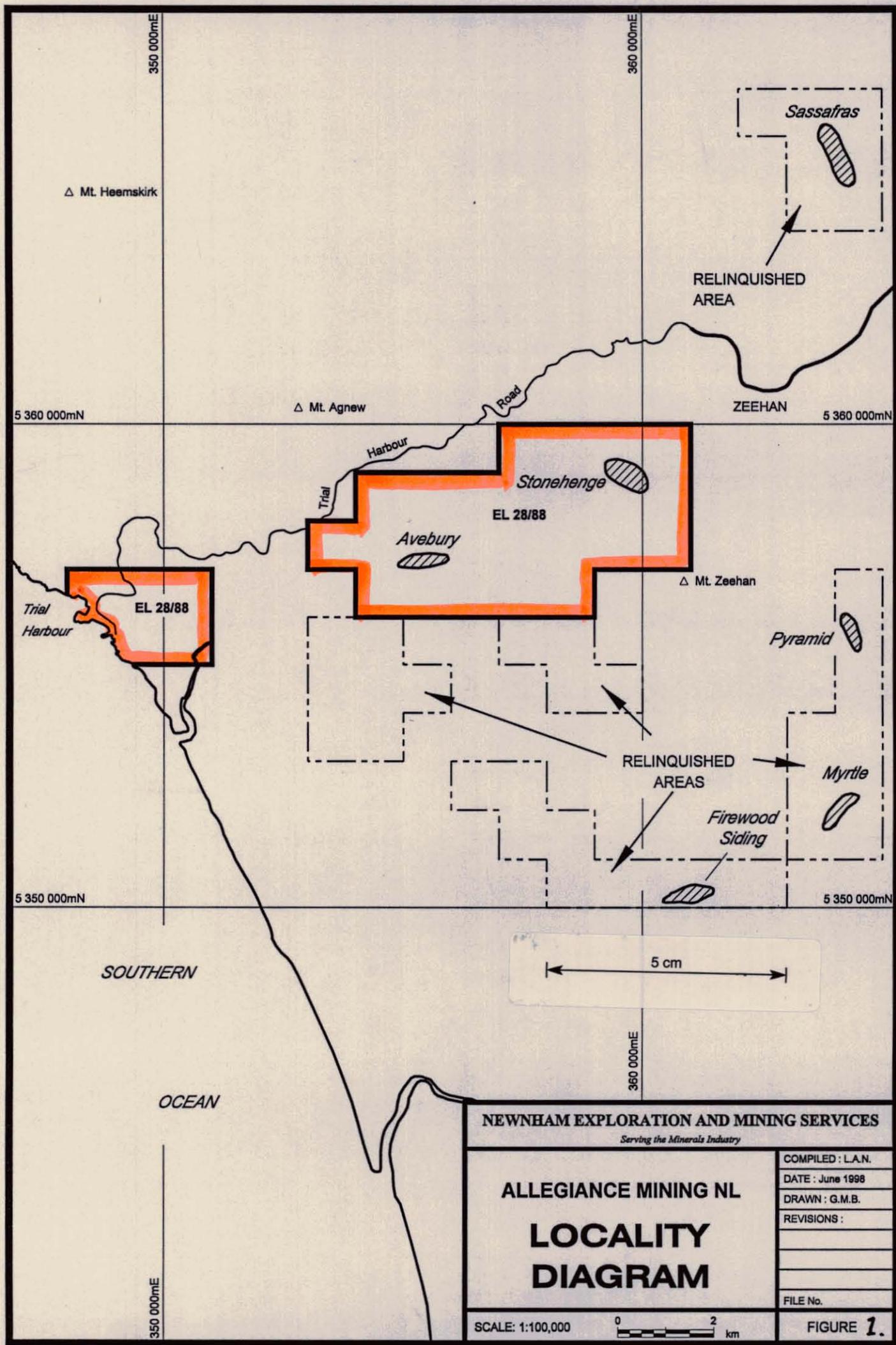
On 23 April, 1991, CRA Exploration Pty Limited (now Rio Tinto Exploration Pty Limited) entered into a J/V with Major Mining to continue exploration of the licence. Rio Tinto were managers of this work.

Allegiance Mining NL acquired Major Mining's interest in 1994 and the tenement was transferred to Allegiance (10%) and Rio Tinto (90%) as tenants in common on 22 January, 1994.

In December, 1997, the licence area was reduced by 55% to 29 sq km, in two parts.

In late 1997 Rio Tinto decided to withdraw from active exploration in Tasmania, and re-negotiated the Joint Venture Agreement with Allegiance, whereby Allegiance became managers of further exploration on EL 28/88 and could earn a majority interest by meeting specified expenditure commitments.

Most of EL 28/88 covers land classified either as State Forest/Multiple Use Forest land or "Other Public Land". Traditionally, the area has been subjected to widespread mining, exploration and forestry activities.



4. WORK COMPLETED (by the J/V)

Expenditure on the licence to date is \$1,825,269.

4.1 Irish Style Deposit Exploration:

Until recently, exploration was focused on the Ordovician Gordon Limestone for **Irish style carbonate hosted zinc deposits**.

In pursuit of this model, four prospect areas were evaluated:

(a) Myrtle Prospect:

Principal work included:

- geochemical surveys
- relogging and resampling old cores
- 184 aircore drill holes
- 7 cored drill holes totalling 1769 m

Best drill results were:

ZM 1008:	3.0 m 6.7% Zn 3.6 m 4.3% Zn, 2.9% Pb
ZWM 18:	7.05 m 2.4% Zn
DD 94ZM185:	0.6 m 14.9% Zn

(b) Pyramid Prospect:

Principal work included:

- bedrock geochemical surveys
- mapping
- 62 aircore drill holes
- 3 cored drill holes totalling 528 m

No significant intersections were acquired.

(c) **Firewood Siding Prospect:**

Principal work included:

- bedrock geochemical surveys
- mapping
- one cored drill hole of 212 m

No significant intersections obtained.

(d) **Sassafras Prospect:**

Principal work included:

- bedrock geochemical surveys
- mapping

No significant results obtained.

4.2 Sediment Hosted Pb-Zn Deposits:

In the early 1990s Rio Tinto (as operators) began to re-focus their attention on the potential of the Proterozoic and Cambrian formations west of Zeehan for **sediment hosted Pb-Zn deposits**.

In pursuit of this model, two prospect areas were evaluated:

- (a) Stonehenge
- (b) Avebury

(a) **Stonehenge Prospect:**

Historical mining, and drilling in the 1980s by RGC indicated that the Stonehenge area was underlain by lower Palaeozoic and Proterozoic sediments which contained significant base metal sulfide mineralisation.

Between 1993 and 1996 the joint venture completed the following work to further evaluate the area:

- detailed mapping
- bedrock geochemical surveys
- 27 aircore drill holes
- 4 cored drill holes

Results of this work are considered very encouraging and are detailed in section 5 below.

(b) Avebury Prospect:

Geochemical stream sediment surveys in the 1980s by RGC defined a Pb-Zn anomalous zone south of the Trial Harbour road near Comstock Creek.

Between 1993 and 1998, the joint venture completed the following work to further evaluate the area:

- geochemical surveys
- geophysical surveys
- 3 cored drill holes in 1996-1997
- 2 cored holes in 1997-1998

Results of this work are also considered very encouraging and are detailed in Section 6 below:

4.3 Other Work:

In order to acquire an overview of the geological factors influencing mineralisation on the licence area, the joint venture partners have also undertaken the following work:

(a) Helimag Surveys:

In 1996 Rio Tinto (as managers) completed a high-resolution helimag survey over much of the licence area as part of their Irish style deposit model exploration.

The survey was unusual in that the survey lines were flown on a variable grid, perpendicular to local strike. The primary purpose

of the survey was to define sideritic zones associated with base metal mineralisation.

In 1998, Allegiance (as managers) completed a high-resolution helimag survey over the reduced licence area between Zeehan and Trial Harbour.

This survey was flown grid N-S and was designed to define the extent and structure of mafic and ultramafic units within the Heemskirk Granite aureole.

(b) Structural and Stratigraphic Studies:

A basin analysis study of the Gordon Limestone was undertaken in 1996 by Clive Burrett. The purpose of this study was to improve the understanding of the Ordovician stratigraphy and its relationship to known mineralisation.

Also in 1996 Upton undertook an Honours Thesis study of the stratigraphy and structure of the Stonehenge area in order to improve understanding of the geological controls of the Stonehenge mineralisation.

In 1998 Michael McKeown was engaged to review existing data in the Zeehan-Trial Harbour area with special reference to the distribution of nickel-sulfide mineralisation. Results of this review are presented in the report:

"A New View of the Zeehan Mineral Field" by
Michael McKeown, May 1998, for Allegiance
Mining NL.

This report highlighted two key points (see Map 3):

- (a) widespread distribution of nickel sulfide mineralisation in the Zeehan Field
- (b) presence of a series of WNW fold axes affecting the hydrothermally affected contact aureole between Zeehan and Trial Harbour

5. RECENT DISCOVERIES

Exploration by the J/V partners over the past 10 years has successfully located a number of areas of significant base metal mineralisation.

However, the recent discoveries of nickel-sulfides at Avebury and zinc mineralisation at Stonehenge represent the most exciting outcomes of a decade of exploration. Deposit models developed to explain this mineralisation suggest potential exists within EL 28/88 for the discovery of significant mineral deposits.

Work completed by the J/V on these two prospects is described below.

5.1 Avebury:

The Avebury prospect area lies eight kilometres due west of Zeehan and eight kilometres due east of Trial Harbour.

In the 1980s RGC completed regional stream sediment sampling programs and more detailed grid based geological, geophysical, geochemical and drilling programs around the southern contact aureole of the Heemskirk Granite. Their target was tin deposits associated with the granite.

In 1993 CRA (Rio Tinto) reviewed this data and decided to follow up a stream sediment Pb-Zn anomaly south of the Trial Harbour road between Comstock and McLeans Creeks. They undertook reconnaissance soil sampling and magnetic surveys over this area.

An aeromagnetic survey flown by government in the 1980s on broad spaced E-W lines had defined an anomaly to the immediate west of the geochemical anomaly.

In 1996 CRA flew a small, high-resolution helimag survey over the area as part of their district Irish model program, and confirmed the presence of a strong anomaly at Avebury. Subsequent modelling suggested a dyke-like body dipping steeply south, with the top at approximately 140 m below surface.

In 1996-1997 CRA drilled three helicopter supported drill holes to test this magnetic-geochemically anomalous area. The target was gold or base metals (Pb-Zn) hosted by skarned Cambrian or Ordovician rocks.

An unexpected sequence of intensely altered Cambrian ultramafic and sedimentary rocks containing significant nickel-sulfide mineralisation as millerite and pentlandite was intersected in all three drill holes.

No significant Pb-Zn-Ag-Au mineralisation was encountered.

Principal intersections are presented in Table 1 below.

Encouraged by these results Allegiance, as the new J/V manager, drilled a further two helicopter supported drill holes in January-February, 1998. One of these holes intersected significant nickel-sulfide mineralisation as pentlandite.

The drilling suggested a new style of mineralisation had been encountered in a previously unrecognised geological setting. To better understand the potential for this setting to extend beyond the immediate Avebury area, a high-resolution helimag survey was completed in April, 1998 over the whole of EL 28/88.

Details of the recent Avebury drilling program are presented in the report:

"Results of Diamond Drilling on the Avebury Grid EL 28/88 by Allegiance Mining NL", by Michael McKeown, May, 1998 for Allegiance Mining NL.

Drill Hole	Intersection	Width (m)	%Ni	%S
DD 96/ZA1	151.6-159.6	8		
DD 96/ZA2	68.9-72.7	3.8	1.67	
	90.5-93.1	2.6	0.59	
	102.1-105.8	3.7	0.77	
	183.1-185.3	2.2	0.57	
	189.6-190.7	1.1	0.98	
DD 96ZA3	185.6-186.0	0.4	1.09	
	189.3-190.0	0.7	1.12	
A 001	243.9-316.3 Inc	72.4	0.36	0.52
	243.9-254.6	10.7	1.15	1.61
	243.9-244.3	0.4	15.0	20.4
A 002	118.3-120.3	2.0	0.14	0.08

Table 1: Avebury Drilling Results

Drilling of five holes since January, 1997 at Avebury has intersected significant Ni-sulfide mineralisation over a strike length of 1,000 m. This arguably represents the most important discovery of nickel-sulfide mineralisation anywhere in Tasmania.

Clearly, further drill testing is justified.

5.2 Stonehenge:

The Stonehenge prospect lies four kilometres due west of Zeehan.

In the early 1980s RGC explored this area for replacement tin deposits, on the basis of the existence of a broad, deep seated aeromagnetic anomaly within an area underlain by faulted Cambrian-Precambrian sediments.

They completed several drill holes in the immediate Stonehenge area. No tin was encountered, but one hole, TH 12, intersected substantial Pb-Zn mineralisation (see Table 2).

CRA (Rio Tinto) regarded this area as having potential for sediment hosted Zn mineralisation and undertook a substantial amount of work in the area.

In 1993 three cored holes, ZS 1, ZS 2 and ZS 3 were drilled to test a faulted sequence of carbonates and black shales.

Two of these, close to TH 12, intersected significant Pb-Zn-Ag mineralisation (see Table 2).

In 1995 27 aircore holes were completed around these drill holes. Four (4) of these holes (ZS 5, 6, 8, 10), intersected significant sulfides (see Table 2).

In 1996 a fourth cored hole, ZS 31, was completed to follow up these results. Again, significant mineralisation was intersected. Drilling of 163 deep (wacker) soil samples was undertaken to attempt to define the surface extent of the ZS 31 mineralisation. This work defined a 600 m long E-W Zn anomalous zone, open to the west.

An honours thesis completed in 1996 suggested the Stonehenge area was underlain by a structurally complex sequence of sediments known to host significant stratabound, stratiform and hydrothermal vein hosted Pb-Zn-Ag mineralisation.

These recent discoveries have not been followed up to date because of the focus of attention at Avebury.

Hole	Intersection	Width	%Zn	%Pb	g/t Ag
TH 12	32.0-42.0	10.0	2.49	1.0	32
	79.0-82.0	3.0	10.3	1.5	261
ZS 1	119.2-121.4	2.2	7.8	10.1	191
ZS 2	100.5-112.0	11.5	4.1	1.1	10
	190.3-190.5	0.3	20.0	12.3	415
ZS 5	9.0-26.0	17.0	2.82	2.06	
ZS 6	0.0-6.0	6.0	2.79	1.22	
ZS 8	12.0-15.0	3.0	1.43		
ZS 10	3.0-12.0	9.0	2.42		
ZS 31	34.0-40.5	6.5	6.3		
	66.2-67.5	1.3	3.5		
	153.0-156.2	3.2	2.5		

Table 2: Significant Stonehenge Drill Intersections

6. DISCOVERY MODELS

The EL 28/88 area between Zeehan and Trial Harbour is an historically significant mining district, well known for both the variety of mineral occurrences and the widespread distribution of those occurrences.

Exploration by various companies over the past 20-30 years has identified substantial resources in the region (see Map 2). These include:

Comstock:	6 Mt 5.5% Zn, 3.3% Pb, 40 g/t Ag
Queen Hill:	7.3 Mt 0.75% Sn
Oceana:	2-4 Mt 4.0% Zn, >10% Pb, 100 g/t Ag

Other historically important deposits supplement this list:

- nickel at Trial Harbour
- tin, copper, silver in the southern Heemskirk Granite
- Pb-Ag veins of the Zeehan field proper
- iron deposits at Tenth Legion

To this impressive list can now be added the recent discoveries by the Allegiance-Rio Tinto joint venture:

- Ni-sulfides at Avebury
- Zn at Stonehenge

A revised deposit model(s) is warranted, both to explain these deposits and to guide future exploration.

Such a model is presented below in terms of four perceived key elements:

- source rocks
- hydrothermal system

- plumbing systems
- repositories

6.1 Metal Source Rocks:

The mineral resource inventory listed above represents a substantial and varied amount of mineralisation. It is suggested that there are probably several sources of mineralisation:

- Heemskirk Granite (Sn, Cu, Ag, S)
- mafic and ultramafic formations (Ni)
- Cambrian sediments and volcanics (Pb, Zn, Ag, Au)

The southern margin of the **Heemskirk Granite** is highly fractionated and contains significant amounts of tin, copper silver and sulfur, as evidenced by earlier mining and drilling at prospects such as Federation, Sweeneys, Globe, Anomaly A.

The **mafic and ultramafic** formations, where they outcrop in the Trial Harbour, Melvors Hill and Tenth Legion areas, are known from surface sampling and drilling to be nickeliferous, typically in the 0.1-0.2% Ni range. This nickel is probably present as nickel silicates within the lattices of mafic mineral species.

Results from the recent helmag survey of EL 28/88 have been interpreted to suggest much of the licence area is underlain by mafic and ultramafic conformable units, within the Cambrian sedimentary package, tightly folded along west-north-west axes, plunging at shallow angles to the east. This interpretation is supported by the widespread distribution, on the new 1:25,000 maps of the area, of mafic/ultramafic outcrops; eg, the Stonehenge area appears to be underlain at depth by mafic/ultramafic formations.

Cambrian sediments and volcanics are known to underlie most of the eastern half of the licence area. The sedimentary sequence contains black shale units and Crimson Creek volcanics, both of which are known to be potential source rocks for Zn, Pb, Ag, Au mineralisation.

6.2 Hydrothermal System:

The model proposes that the metals in the above source rocks were mobilised and redistributed by hydrothermal fluids emanating from the Devonian-Carboniferous Heemskirk Granite.

Gravity and magnetic data suggests the granite is relatively shallow under the western section of the licence, with possible higher level cupolas under Zeehan and Melvors Hill.

Mineralogical evidence from drill cores and surface mapping indicates intense hydrothermal activity and alteration within a broad aureole above this granite. The aureole is characterised by the presence of sulfides and wide spread distribution of boron bearing minerals such as tourmaline and axinite.

Hydrothermal activity will be most intense above cupolas or fractured highly fractionated flanks of granitic intrusives.

Similarly, activity will be focused along areas which have been deformed and fractured; ie, structurally prepared, thereby facilitating permeation by the fluids. This point is important in directing exploration, particularly for Ni-sulfides. It is reasoned that if a mafic/ultramafic unit is massive, and unfractured, it is unlikely to be substantially penetrated by hydrothermal fluids. It may be altered by contact metasomatic influences but it will not be leached. This was probably the case with A 002 drill hole.

Thus, faulted or structurally prepared margins of the mafic/ultramafic units are the better places to focus exploration.

6.3 Plumbing Systems:

Plumbing systems in this model are necessary to provide both opportunities for hydrothermal fluids to access source rocks (discussed above) and movement of metal enriched fluids to repositories where they can be concentrated.

Plumbing systems in the geological environment at EL 28/88 are most likely to be faults and brecciated areas.

The tight folding indicated by the helimag survey, supported by district mapping, suggests there are a number of substantial faults through the area (Sylvester, Balstrup, Firewood Siding, Tenth Legion faults), and possibly fractured and faulted zones associated with the fold axes. Several key areas which fit this situation are:

- Trial Harbour
- west of Avebury
- Stonehenge

6.4 Repositories:

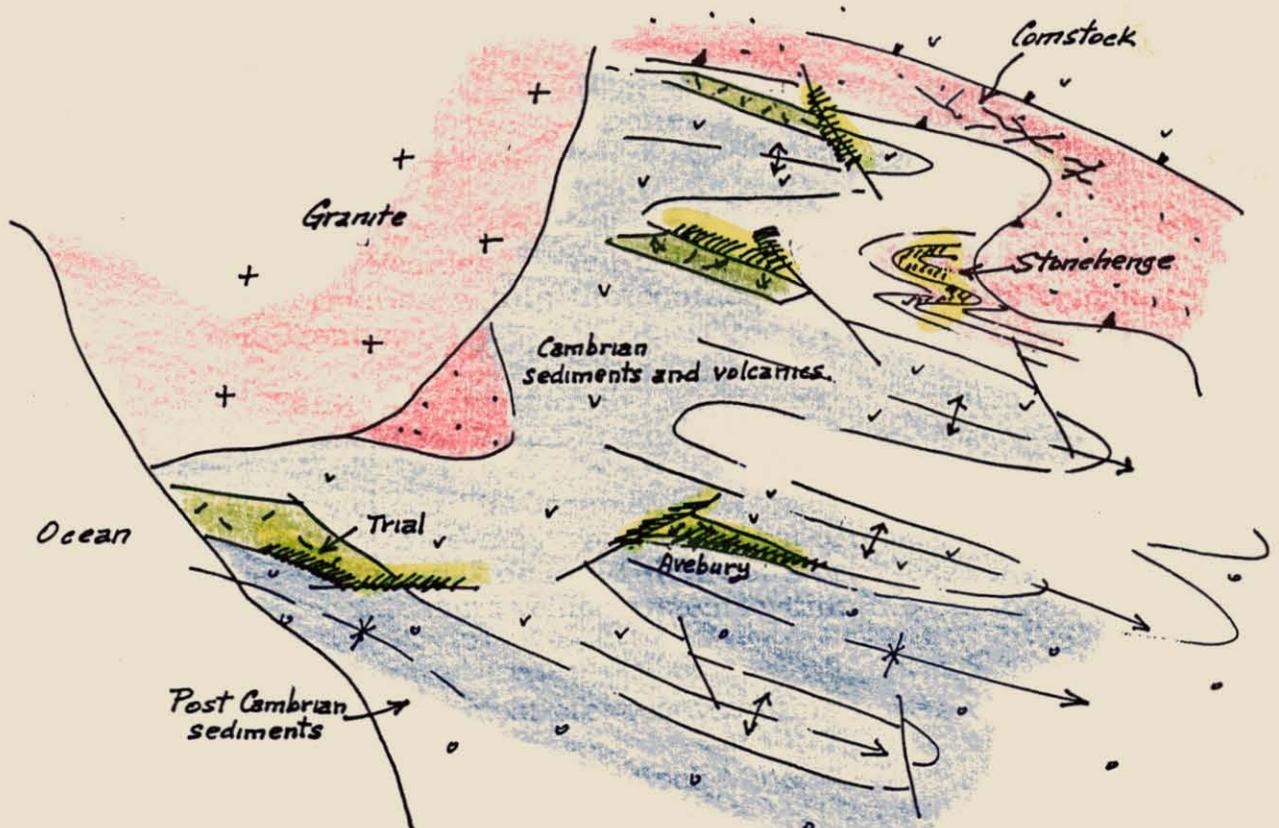
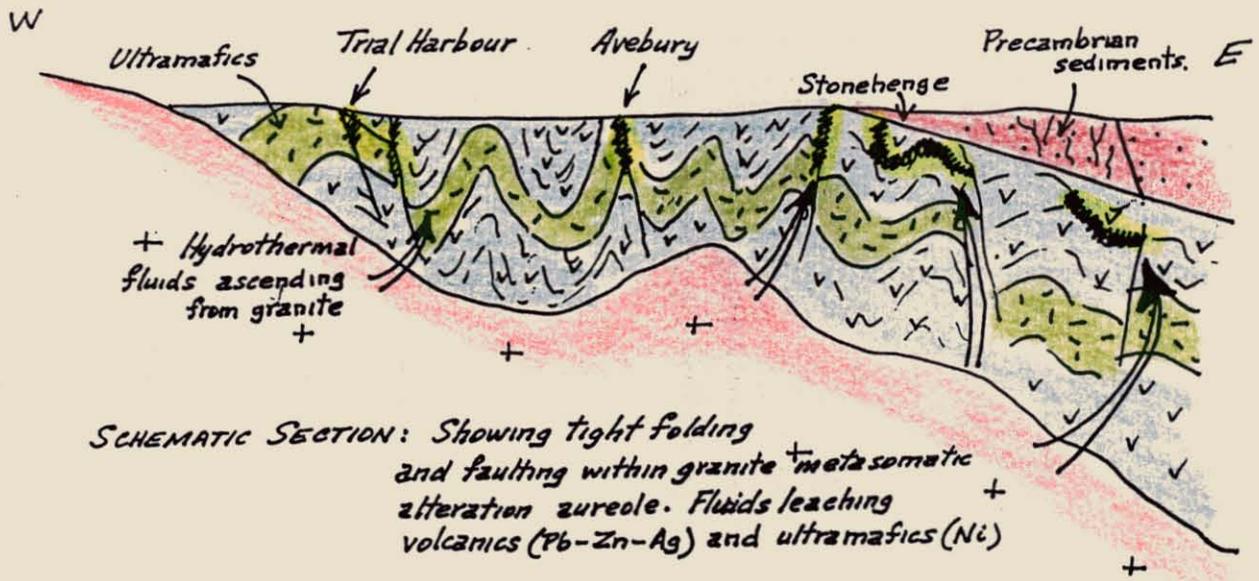
The formation of a substantial mineral deposit requires the hydrothermal fluids to move along a plumbing system and then to be concentrated in a trap site or deposit repository. A variety of such repositories is possible; eg:

- replacement of a favourable rock
(skarns and replacement deposits)
- trapped by an unreactive rock
- cooling along a structure

Repositories may be either within the source rock environment, within the plumbing system, or within a replacement situation some distance from the source rocks.

6.5 Model Summaries:

The key elements of the model are schematically illustrated below in sectional and plan views.



SCHEMATIC PLAN : Showing Cambrian sediments, volcanics and mafic-ultramafic units crumpled along WNW axes and faulted prior to intrusion by Heemskirk Granite

The key elements for the **Avebury Ni-sulfide model** are:

- adjacent presence of fractured and altered ultramafic source rocks within the contact aureole of the Heemskirk Granite
- faulted or structurally prepared zones which acted as plumbing systems for Ni-sulfides leached from the source rocks
- existence of structural or sedimentary repositories accessed by plumbing systems

The areas which appear most prospective at this stage are:

- * Avebury
- * south of McIvor Hill
- * Swansea Mine area
- * margins of Trial Harbour ultramafic body

The key elements of the **Stonehenge Pb-Zn sulfide variation of this model** are:

- Presence of deformed and fractured Cambrian sediments and volcanics of the Success Group and Crimson Creek Formation within the contact aureole of the Heemskirk Granite.
- Faults or structurally prepared zones which acted as conduits for Pb-Zn-Ag enriched fluids.
- Existence of favourable repositories for these fluids. The repositories may have been fractured overlying Oonah Formation rocks, calcareous shales, carbonates, brecciated and veined systems within the Cambrian.

The areas which appear most prospective at this stage are:

- * south-east of the Comstock Mine
- * south-east of the faulted and folded anticlinal structure postulated to extend into the Stonehenge area

7. PROPOSED EXPLORATION

It is proposed that the recent discoveries of mineralisation at Avebury and Stonehenge be followed up with a vigorous program of exploration over the next two years.

7.1 Year 1 Program:

The Year 1 program is estimated to cost \$250,000 and will consist of five main components:

(a) Avebury Access Development: (\$20,000)

It is proposed to develop a 2-3 km access road into the Avebury area to facilitate more detailed follow up work.

The actual route of the road has not yet been determined but will be approximately as shown on Fig 2.

Most of the development will be along an existing, but overgrown, logging track.

It is estimated that this road will take one excavator 2-3 weeks to complete at a cost of \$800/day plus supervision, for a total \$20,000.

Once the route has been planned in detail and marked out, approval will be sought from MRT.

(b) Avebury Grid Development: (\$10,000)

The existing Avebury grid will need to be refurbished and extended to facilitate ground geophysical surveys. Approximately 10 km of new grid will be required and refurbishment will take approximately one week.

Approval for the grid extension will be sought when specifics have been finalised - \$10,000 has been budgetted for this work.

(c) Ground Geophysics: (\$15,000)

It is planned to complete a small EM or IP survey on the grid around the immediate A 001 and DD 96ZA1 area to determine the response of known mineralisation as a guide to future exploration in the region.

A five day program has been budgetted for at \$2,000/day, total \$10,000.

(d) Avebury Drilling: (\$96,000)

Two (2) cored holes totalling 600 m are proposed. One (1) 350 m hole is planned to test the down-dip extension of the A 001 intersection. One (1) 250 m hole is planned to test the strike extension of the A 001 mineralisation, 200 m west of that hole.

The budget breakdown for these two holes is:

	\$
Drilling contractor 600 m @ \$100/m (including mobilisation/demobilisation)	60,000
Assaying 100 samples @ \$30/sample	3,000
Petrology 20 samples @ \$100/sample	2,000
Surveying	2,000
Vehicles 6,000 km @ \$0.50/km	3,000
Accommodation	2,000
Supplies (core trays, saw, bags, etc) @ \$7/m	4,000
Management 6 weeks: 50% geologist, 100% assistant	<u>20,000</u>
<u>Total</u>	<u>\$96,000</u>

(e) Stonehenge Drilling: (\$87,000)

Two (2) cored holes totalling 500 m are proposed.

These holes will be sited in the vicinity of TH 12 and ZS 31 to test the down-dip and strike extension of mineralisation in those two holes. Details of hole collars have not yet been determined but it is anticipated that little access development will be required.

The budget breakdown for these two holes is:

	\$
Drilling contractor 500 m @ \$100/m (including mobilisation/demobilisation)	\$50,000
Assaying 100 samples @ \$30/sample	3,000
Petrology 10 samples at \$100/sample	1,000
Surveying	2,000
Vehicles 6,000 km @ \$0.50/km	3,000
Access development	3,000
Accommodation	2,000
Supplies (trays, saw, bags, etc) @ \$6/m	3,000
Management 6 weeks: 50% geologist, 100% assistant	<u>20,000</u>
<u>Total</u>	<u>\$87,000</u>

(f) **District Mapping and Sampling: (\$22,000)**

Whilst the above drilling works are in progress, it is proposed that the project geologist and a field assistant undertake mapping and sampling of outcropping mafic and ultramafic formations. Samples need only be assayed in the first instance for Ni.

This work should focus on the following four areas:

- Trial Harbour ultramafic margins and south-east extensions
- McIvors Hill-Tenth Legion area
- creeks and grids in Avebury area
- Stonehenge/Swansea area

This work would be undertaken over the 12 weeks of drilling and involve the geologist (50%) and field assistant (50%). A budget of 30 days at \$750/day is provided for.

(g) Year 1 Budget Summary:

	\$
Avebury road access	20,000
Avebury grid development	10,000
Avebury ground geophysics	15,000
Avebury drilling	96,000
Stonehenge drilling	87,000
District mapping	<u>22,000</u>
<u>Year 1 Total</u>	<u>\$250,000</u>

7.2 Year 2 Program:

The Year 2 program assumes continuing encouragement from the Year 1 programs.

The following components are envisaged:

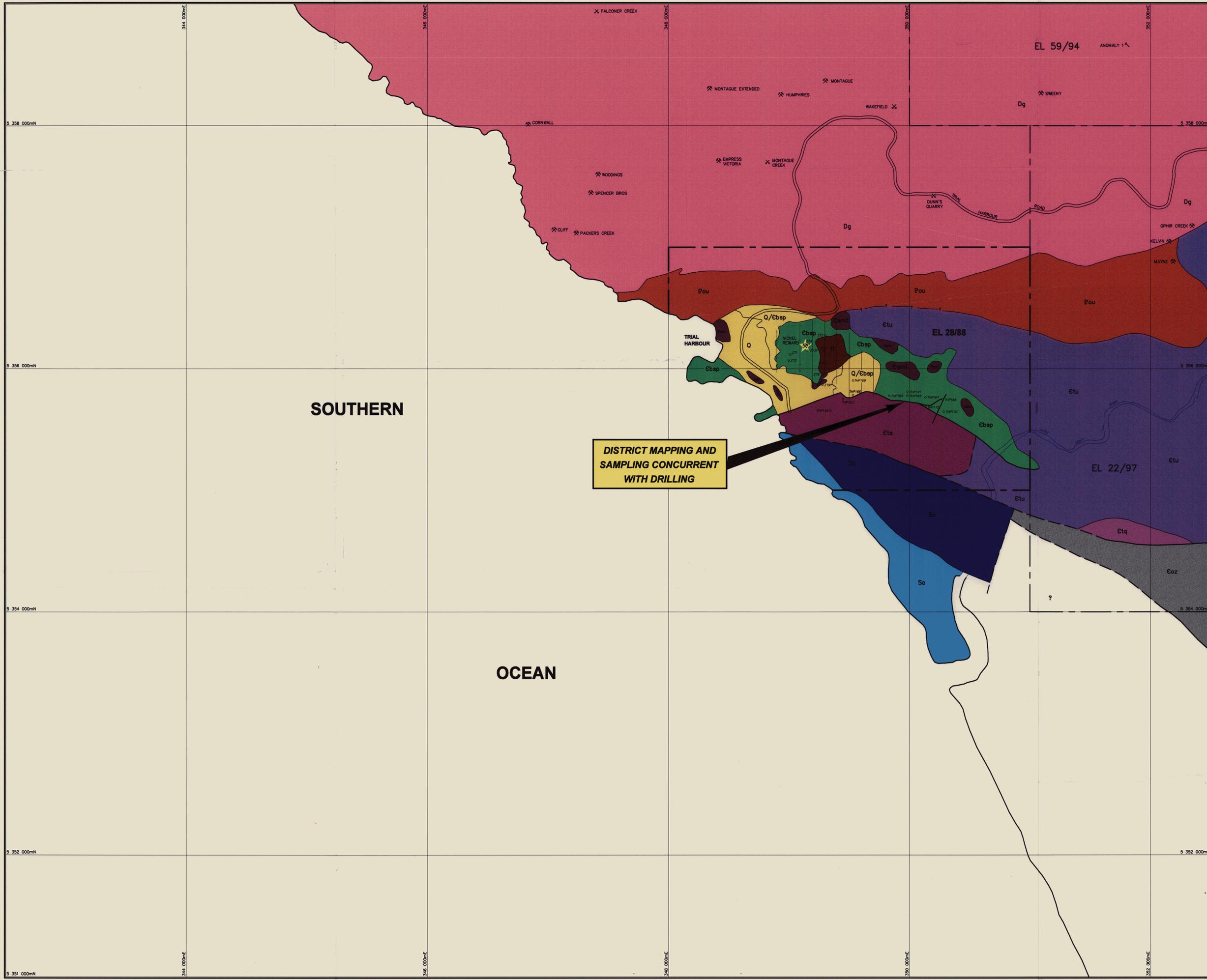
- Avebury drilling: (2 holes)	\$90,000
- Stonehenge drilling (2 holes)	\$90,000
- Trial Harbour drilling, including access development (2 holes)	<u>100,000</u>
<u>Year 2 Total</u>	<u>\$280,000</u>

7.3 Year 1 Schedule:

The Year 1 schedule outlined below is shown in terms of expenditure, as incurred. Months commence from the date of program approval.

MONTHS	1	2	3	4	5	6	7	8	9	10	11	12	TOTALS
Avebury Road			20,000										20,000
Avebury Grid				10,000									10,000
Avebury Geophysics				15,000									15,000
Avebury Drilling					10,000	66,000	20,000						96,000
Stonehenge Drilling								10,000	60,000	17,000			87,000
District Mapping					4,000	3,000	4,000	4,000	3,000	4,000			22,000
EXPENSE TOTALS			20,000	25,000	14,000	69,000	24,000	14,000	63,000	21,000			250,000

Table 3: Year 1 Schedule and Budget



- LEGEND**
- QUATERNARY**
 - Q Quaternary sand, beach deposits
 - TERTIARY**
 - Tertiary ironstone
 - SEDIMENTARY ROCKS**
 - DF Florence quartzite
 - AC Austral Creek siltstone
 - Keel quartzite
 - SA Amber siltstone
 - CR Cratly quartzite
 - GD Gordon limestone
 - MS Malpas sandstone
 - ZZ MZ Zeehan conglomerate
 - Chert, siltstone and lithicwacke
 - CAMBRIAN**
 - Chert
 - Siltstone and lithicwacke
 - Siltstones and magnetite
 - Siltstone and quartzwacke
 - Volcanics, chert, siltstone
 - PRE-CAMBRIAN**
 - Onah Formation
 - Micaceous units
 - Siltstone and shale
 - Coloursous units
 - Graphitic shale
 - Quartzite
 - IGNEOUS ROCKS**
 - Dg Heemskirk granite
 - Dqm Felsic dyke
 - Basalt flows
 - Gabbro
 - Mafic igneous rock
 - Mafic rock
 - Serpentine
 - MINERALIZATION**
 - Magnetite
 - massive sulphide
 - Geological boundary**
 - Concealed geological boundary**
 - Fault**
 - Thrust fault**
 - Flisure lode**
 - Syncline, plunge indicated**
 - Anticline, plunge indicated**
 - Bedding trace**
 - Pyrrhotitic zone**
 - Magnetic high**
 - Magnetic low**
 - Reported Nickel Occurrence**
 - Mine or prospect**
 - Alluvial workings - abandoned**
 - Diamond drill hole collar**
 - Diamond drill hole trace**
 - EL boundary**
 - ML or RL boundary**

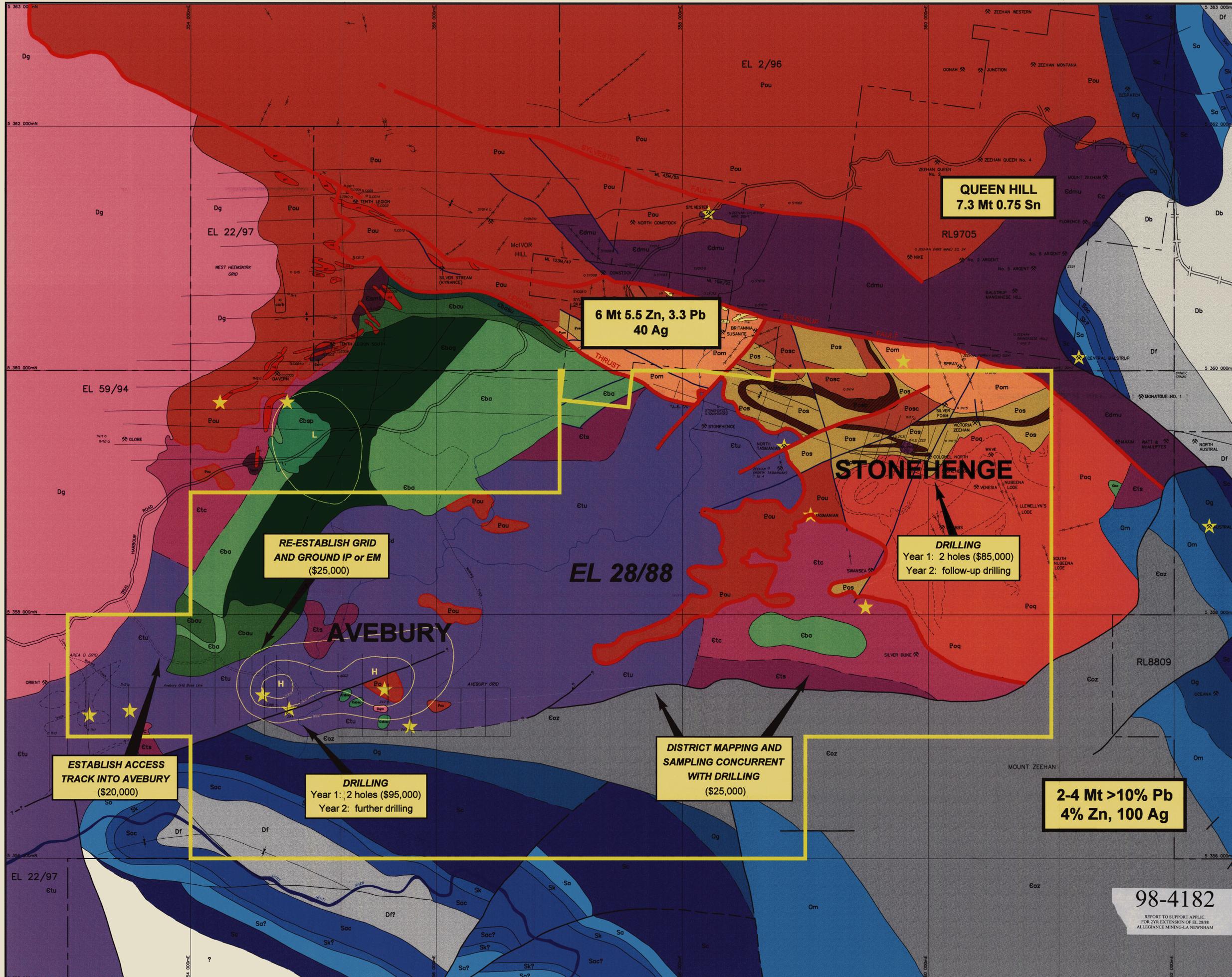
50m

98-4182

REPORT TO SUPPORT APPLIC.
FOR 2YRS EXTENSION OF EL 28/88
ALLEGIANE MINING-LA NEWNHAM

NEWNHAM EXPLORATION AND MINING SERVICES <i>Serving the Minerals Industry</i>	
ALLEGIANE MINING N.L. TRIAL HARBOUR PROJECT 1998-99 PROPOSED WORK PROGRAM	COMPILED: M.MARLAN DATE: June 1999 DRAWN: G.M.B. REVISIONS: FILE No. 2(a)
SCALE: 1:10,000	0 200 400 m

441030



QUEEN HILL
7.3 Mt 0.75 Sn

6 Mt 5.5 Zn, 3.3 Pb
40 Ag

STONEHENGE

2-4 Mt >10% Pb
4% Zn, 100 Ag

RE-ESTABLISH GRID
AND GROUND IP or EM
(\$25,000)

DRILLING
Year 1: 2 holes (\$85,000)
Year 2: follow-up drilling

DISTRICT MAPPING AND
SAMPLING CONCURRENT
WITH DRILLING
(\$25,000)

ESTABLISH ACCESS
TRACK INTO AVEBURY
(\$20,000)

DRILLING
Year 1: 2 holes (\$95,000)
Year 2: further drilling

LEGEND

- SEDIMENTARY**
 - Quaternary sand, beach deposits
 - Tertiary ironstone
- SEDIMENTARY ROCKS**
 - Florence quartzite
 - Austral Creek siltstone
 - Keel quartzite
 - Amber siltstone
 - Orally quartzite
 - Gordon limestone
 - Maina sandstone
 - Mt Zeehan conglomerate
 - Chert, siltstone and lithicwacke
- OROGENIC**
 - Chert
 - Siltstone and lithicwacke
 - Siltstone and magnetite
 - Siltstone and quartzwacke
 - Volcaniclastics, chert, siltstone
- CAMBRIAN**
 - Danah Formation
 - Micaceous units
 - Siltstone and shale
 - Calcareous units
 - Graphitic shale
 - Quartzite
- PRECAMBRIAN**
 - Heemskirk granite
 - Felsic dyke
 - Basalt flows
 - Gabbro
 - Mafic igneous rock
 - Mafic rock
 - Serpentinite
- AMERALISATION**
 - Magnetite
 - massive sulphide
- BOUNDARIES**
 - Geological boundary
 - Concealed geological boundary
 - Fault
 - Thrust fault
 - Fissure lode
- STRUCTURES**
 - Syncline, plunge indicated
 - Anticline, plunge indicated
 - Bedding trace
 - Pyrroclastic zone
 - Magnetic high
 - Magnetic low
 - Reported Nickel Occurrence
- OTHER**
 - Mine or prospect
 - Abandoned workings - abandoned
 - Diamond drill hole collar
 - Diamond drill hole trace
 - EL boundary
 - ML or RL boundary

PROPOSED YEAR 1 PROGRAM

Avebury Access:	
2-3 kms, 25 days at \$800/day	20,000
Grid Refurbishment and Ground Geophysics:	
10 kms track + 1 week remarking (\$12,000)	
5 days geophysical surveying (\$13,000)	25,000
Avebury Drilling	
2 cored holes 600m, at \$150-\$160/m all inclusive	95,000
Stonehenge Drilling	
2 cored holes 500m, at \$170/m all inclusive	85,000
Mapping and Sampling	
2 person crew, 6 weeks, mainly in Trial Harbour area	25,000
BUDGET ESTIMATE	\$250,000

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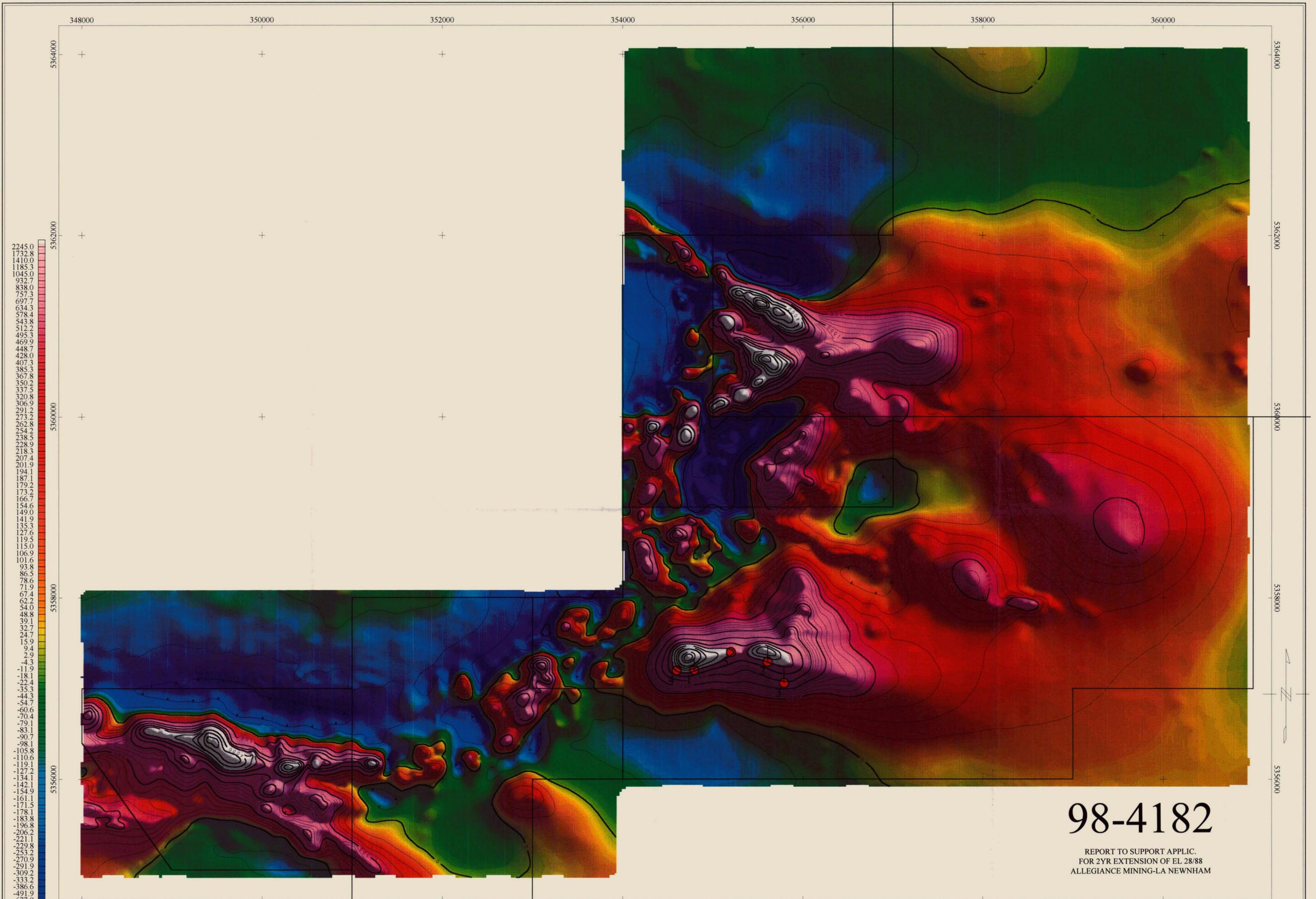
REPORT TO SUPPORT APPLIC.
FOR 2YR EXTENSION OF EL 28/88
ALLEGIANCE MINING-LA NEWNHAM

NEWNHAM EXPLORATION AND MINING SERVICES
Serving the Minerals Industry

ALLEGIANCE MINING N.L.
TRIAL HARBOUR PROJECT
1998-99
PROPOSED
WORK PROGRAM

SCALE: 1:10,000

DRAWN: M. MACGLAN
DATE: June 1998
DRAWN: G.M.B.
REVISIONS:
FILE: TH_Geology98WZ

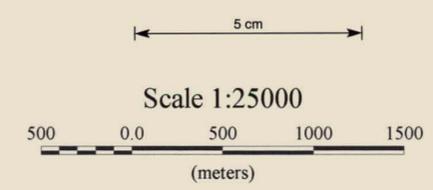


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1410.0
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1045.0
932.7
838.0
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697.7
634.4
578.4
543.8
512.2
495.3
469.9
448.7
428.0
407.3
385.3
367.8
350.2
337.5
320.8
306.9
291.2
273.2
262.8
254.2
238.5
228.9
218.3
207.4
201.9
194.1
187.1
179.2
173.2
166.7
154.6
149.0
141.9
135.3
127.6
119.5
115.0
106.9
101.6
93.8
86.5
78.6
71.9
67.4
62.2
54.0
48.8
39.1
32.7
24.7
15.9
9.4
2.9
-4.3
-11.9
-18.1
-22.4
-35.3
-44.3
-54.7
-60.6
-70.4
-79.1
-83.1
-90.7
-98.1
-105.8
-110.6
-119.1
-127.2
-134.1
-142.1
-154.9
-161.1
-171.5
-178.1
-183.8
-196.8
-206.2
-221.1
-229.8
-253.2
-270.9
-291.9
-309.2
-333.2
-386.6
-491.9
-677.9

TMI/RTP
nT

98-4182

REPORT TO SUPPORT APPLIC.
FOR 2YR EXTENSION OF EL 28/88
ALLEGIANE MINING-LA NEWNHAM

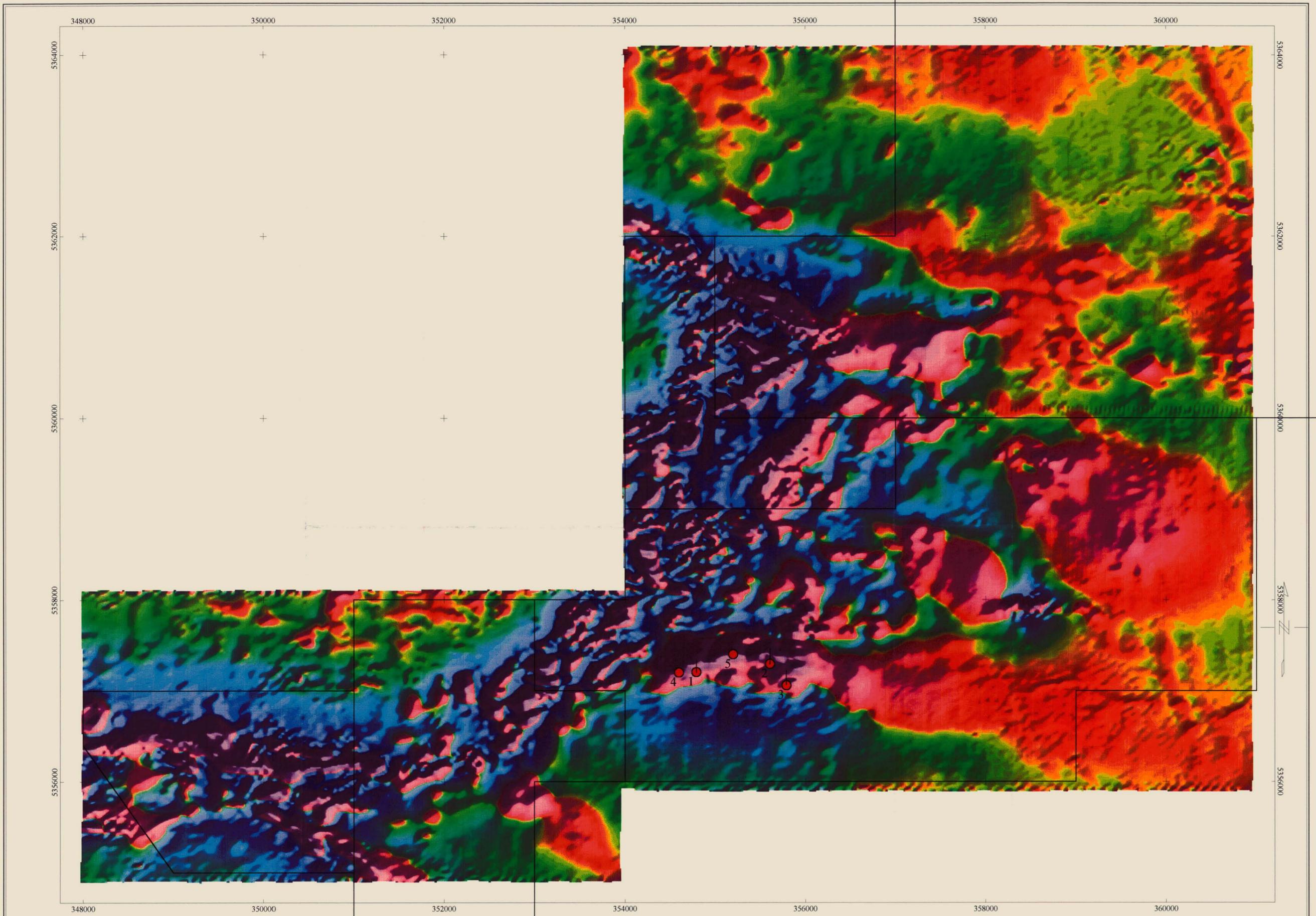


ALLEGIANE
TRIAL HARBOUR, WEST TASMANIA 1998 UTS AEROMAGNETICS *** PRELIMINARY ***
TOTAL MAGNETIC FIELD, REDUCED TO POLE SUN FROM SOUTH-EAST LINE SPACING=50m, DIR=0-180deg AMG84, ZONE 55
FLAGSTAFF, NH, 5/98



441032

MAP 4



5364000
5362000
5360000
5358000
5356000

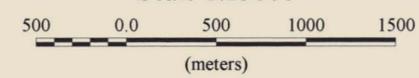
348000 350000 352000 354000 356000 358000 360000

5364000
5362000
5360000
5358000
5356000

4
1
5
2
3

5 cm

Scale 1:25000

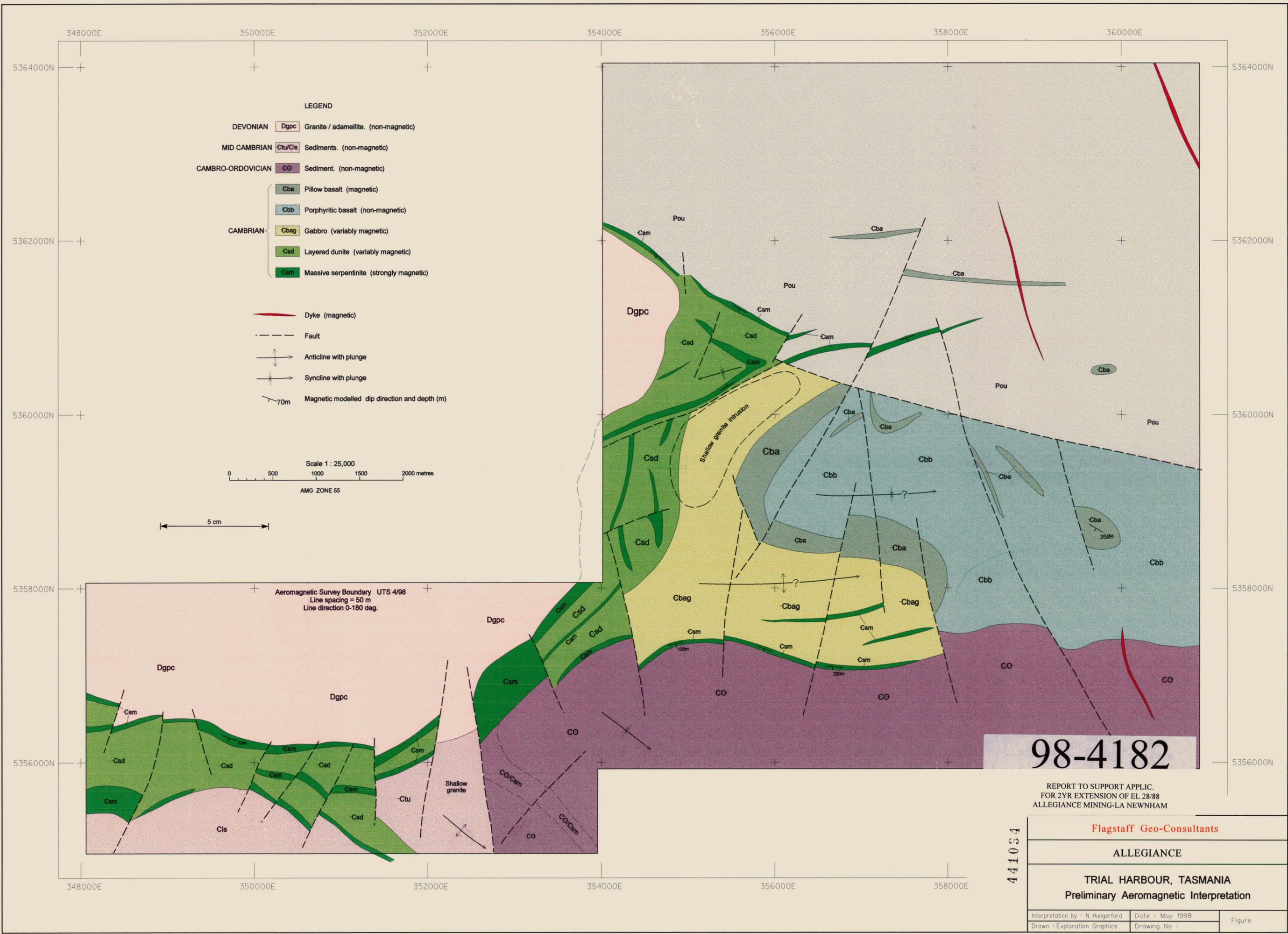


ALLEGIANCE
TRIAL HARBOUR, WEST TASMANIA 1998 UTS AEROMAGNETICS
1st VERTICAL DERIVATIVE, REDUCED TO POLE SUN FROM SOUTH-EAST LINE SPACING=50m; DIR=0-180deg; MESH=13m AMG84, ZONE 55
FLAGSTAFF, NH, 5/98



441033

MAP 5



- LEGEND**
- DEVONIAN Dgpc Granite / adamellite. (non-magnetic)
 - MID CAMBRIAN Ctu/Cls Sediments. (non-magnetic)
 - CAMBRO-ORDOVICIAN CO Sediment. (non-magnetic)
 - CAMBRIAN
 - Cba Pillow basalt (magnetic)
 - Cbb Porphyritic basalt (non-magnetic)
 - Cbag Gabbro (variably magnetic)
 - Csd Layered dunite (variably magnetic)
 - Cam Massive serpentinite (strongly magnetic)
 - Dyke (magnetic)
 - - - Fault
 - ↔ Anticline with plunge
 - ↔ Syncline with plunge
 - ↖ 70m Magnetic modelled dip direction and depth (m)

Scale 1 : 25,000
 0 500 1000 1500 2000 metres
 AMG ZONE 55

5 cm

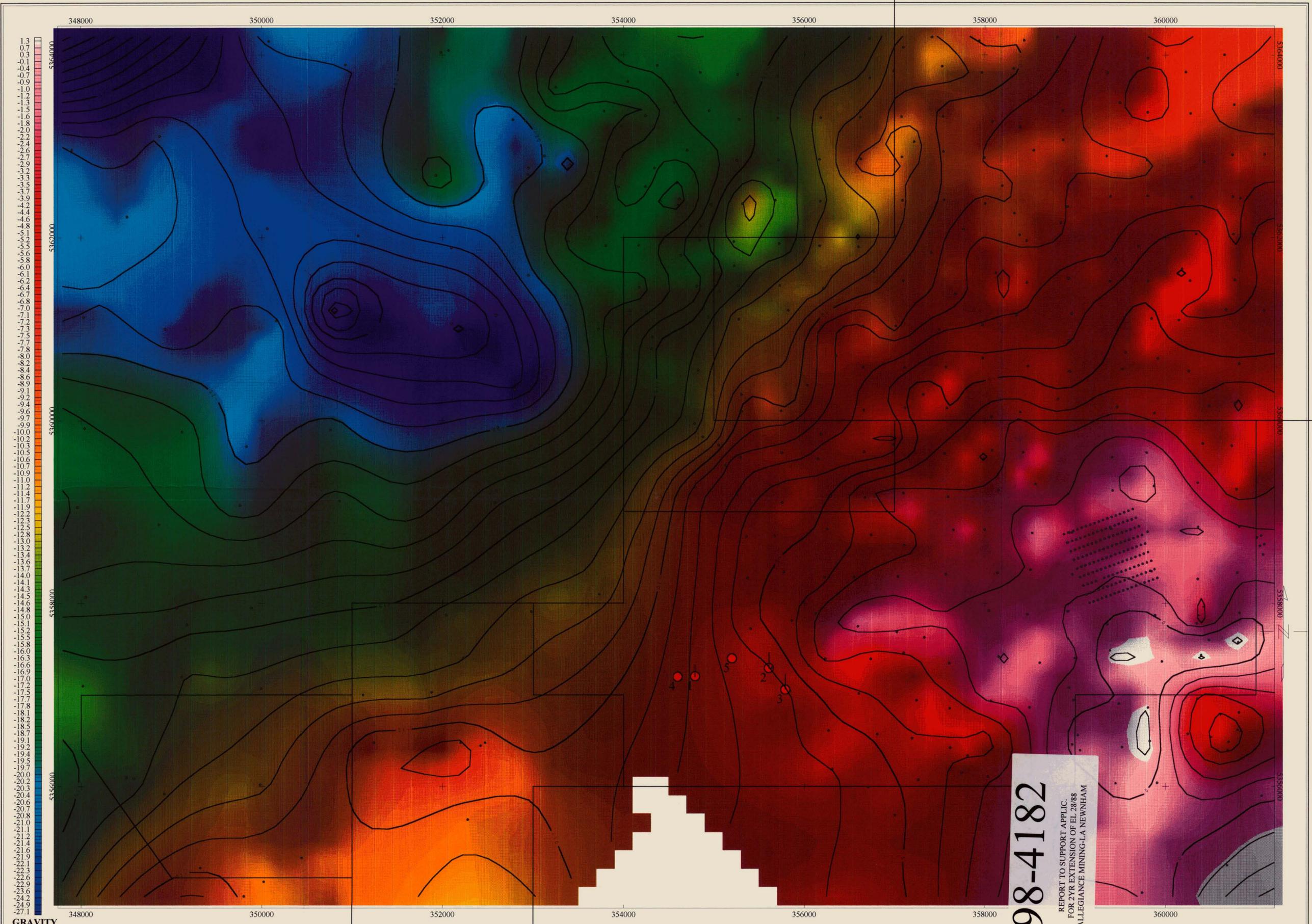
Aeromagnetic Survey Boundary UTS 4/98
 Line spacing = 50 m
 Line direction 0-180 deg.

98-4182

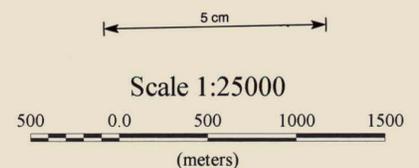
REPORT TO SUPPORT APPLIC.
 FOR 2YR EXTENSION OF EL 28/88
 ALLEGIANCE MINING-LA NEWNHAM

441054

Flagstaff Geo-Consultants		
ALLEGIANCE		
TRIAL HARBOUR, TASMANIA Preliminary Aeromagnetic Interpretation		
Interpretation by : N. Hungerford	Date : May 1998	Figure
Drawn : Exploration Graphics	Drawing No :	



GRAVITY
mGAL



98-4182
 REPORT TO SUPPORT APPLIC.
 FOR 2YR EXTENSION OF EL 28/88
 ALLEGIANCE MINING-LA NEWNHAM

ALLEGIANCE
RIAL HARBOUR, WEST TASMANIA MRT AND CRA GRAVITY
BOUGUER ANOMALY SUN FROM SOUTH-EAST DOTS=GRAVITY STATIONS AMG84, ZONE 55
FLAGSTAFF, NH, 5/98

441035