



STONEHENGE METALS  
LIMITED

**Stonehenge Metals Limited**  
ABN 81 119 267 391

**Gawler Iron Project**  
**EL39/2006**

Work done by Stonehenge Metals to  
24 January 2008

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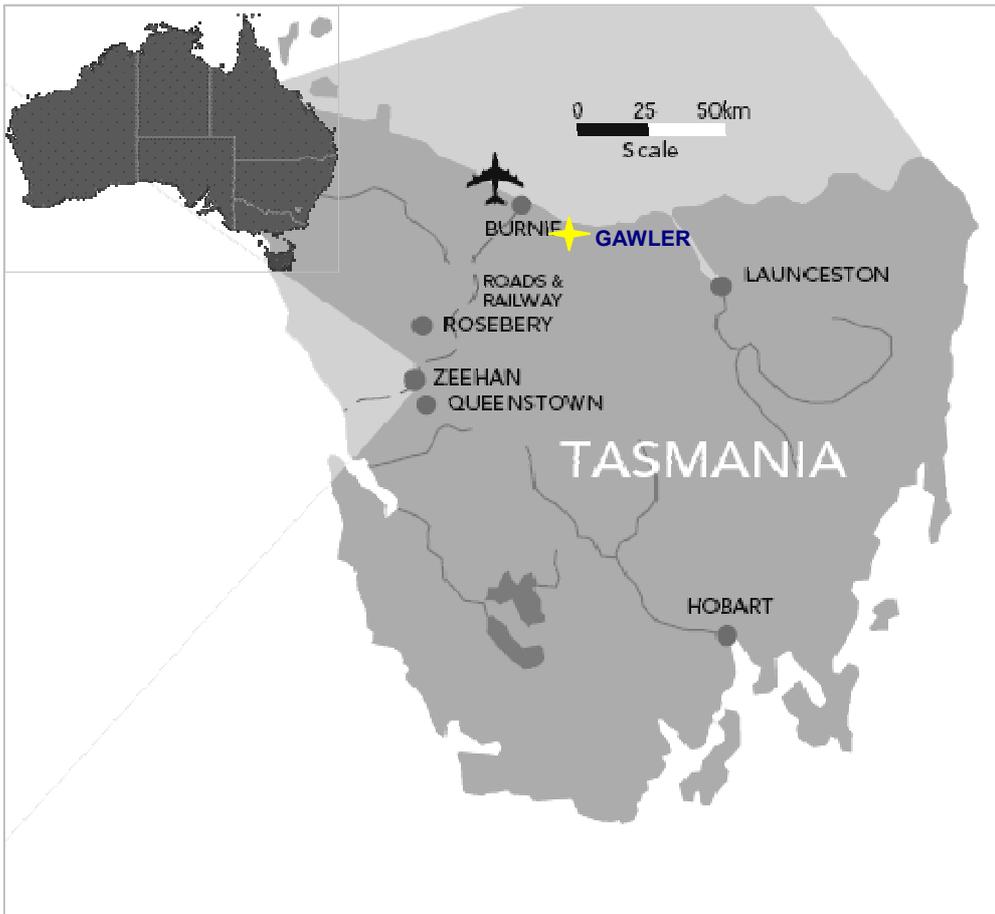
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## 1 Introduction

This report details all exploration activities by Stonehenge Metals Limited (Stonehenge) within EL 39/2006 until the 24<sup>th</sup> of January 2008.

EL 39/2006 covers an area of 27 square kilometres and is located approximately eight kilometres south of Ulverstone on the north coast of Tasmania. Stonehenge Metals Limited entered into an agreement with Southern Iron (Tas) Limited in July 2007 to acquire a 25% interest in EL39/2006.



**Figure 1.** Map showing location of the Gawler lease.

## **2 Location Access and Tenements**

The tenement lies about 8km south of Ulverstone (Tasmania, Australia). All co-ordinates used are referenced to the GDA94 datum. The tenement is located in UTM Zone 55. The tenement is located approximately at Latitude: -41.228°, Longitude: 146.156°. Access to the project is from the north via the Gawler Road and other sealed local roads.

The topography is of moderate relief ranging from about 50m above sea level in the Gawler River valley to about 200m. The tenement is cut by the Gawler River which is partly surrounded by wooded areas, the remainder of the tenement is fields and infrastructure used for dairy farming.

### **2.1 Tenure**

Stonehenge Metals Limited entered into an agreement with Southern Iron (Tas) Limited in July 2007 to acquire a 25% interest in EL39/2006.

The agreement was that Stonehenge could earn a 25% interest in EL39/2006 by committing to a minimum of \$0.4 million in exploration expenditure over the subsequent six months and issuing \$100,000 worth of Stonehenge shares once the expenditure commitment has been met. Stonehenge could withdraw from this obligation at any time prior to completing the required expenditure but will forego any interest in the tenement.

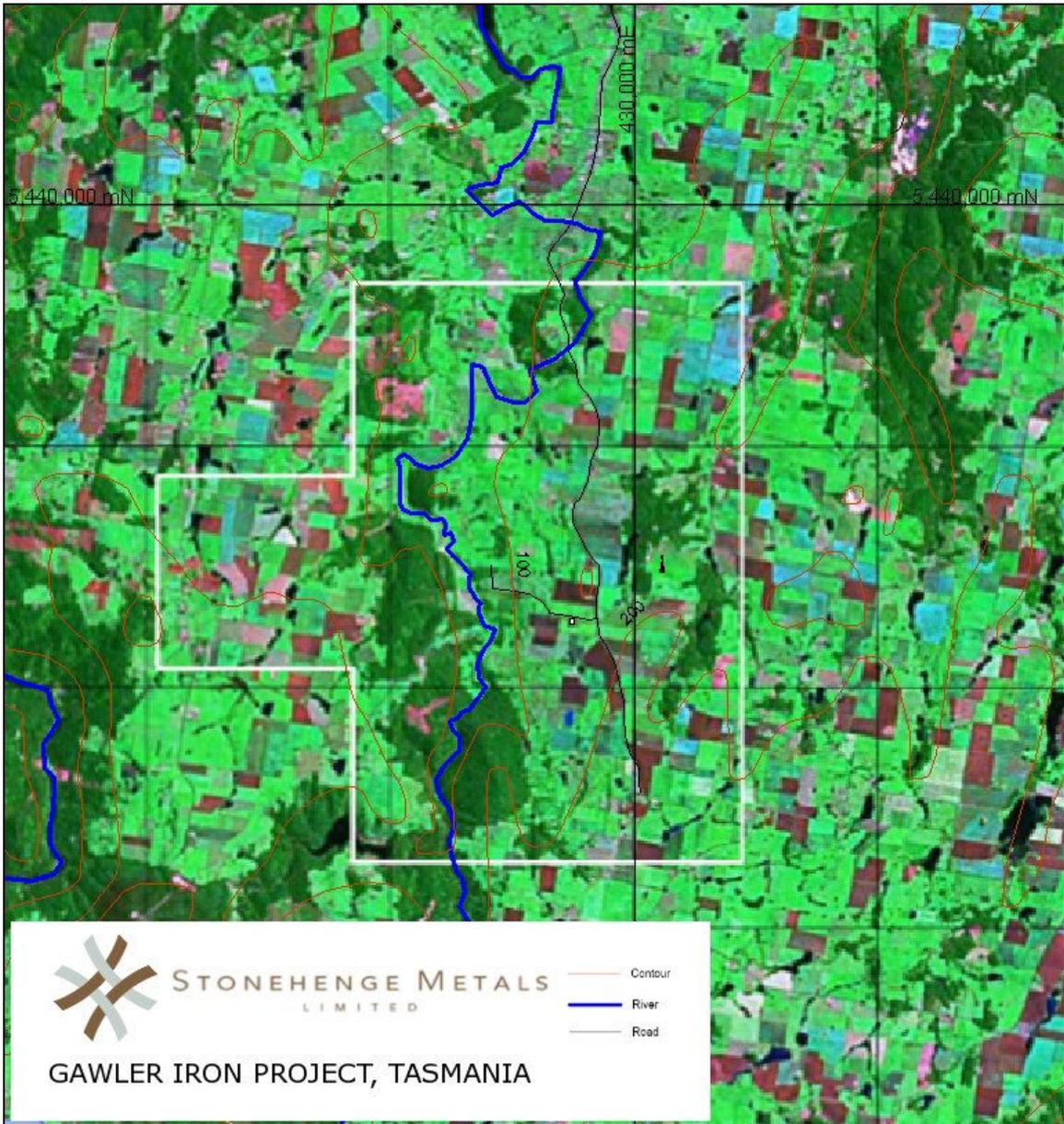


Figure 2. Map showing Gawler lease.

## **2.2 Local Geology**

See independent Geologist's report.

## **3 Previous Exploration**

The following report is the only know record of previous exploration for iron ore.

NOTES ON REPORTED IRON DEPOSIT AT GAWLER RIVER

The occurrence is situated in Gawler District on land consisting of 100 acres owned by L. J. McCulloch (A. McCulloch, Purchaser), which extends from Upper Gawler road westerly to Gawler River.

The property is accessible from Ulverstone in a southerly direction by way of Upper Gawler road in a distance of approximately six miles.

The area represents a basaltic plateau dissected to a depth of several hundred feet by Gawler River, which flows northerly to join Leven River near Ulverstone. The greater part of the area consists of Tertiary basalt. This rock extends westerly down the valley slope to a height of approximately 50 feet above, and to within 10 chains of the river. Quartzites of Lower Palaeozoic age underlie the basalt and are exposed in a low cliff on eastern bank of the river.

In a ploughed field, 5 chains north-east of the cliff, angular pieces of quartzite and hematite (iron oxide) are scattered through the soil on either side of the northern boundary of the property. These extend along an indefinite line bearing north-north-westerly over a length of about seven chains and from one to two chains in width. At three chains south of the boundary a heap of boulders, having a central depression, is said to be the side of an old shaft sunk many years ago on an outcrop of iron. The latter is not visible at present and no other outcrops are available for inspection.

Some of the detrital boulders and shaft spoil are made up of massive and micaceous hematite containing numerous siliceous blebs and bunches, and a few quartz veins. Others consist almost wholly of hematite, while pieces of ferruginous quartzite also occur.

It is indicated from the presence of hematite in close relation with quartzite that an irregular vein or lens of the former is contained in the latter below the surface. Owing to the inclusion of much silica in the hematite, the absence of iron outcrops, and the limited area over which the detrital iron occurs, this deposit cannot be considered as a source of iron ore.

From this view point no development is warranted.

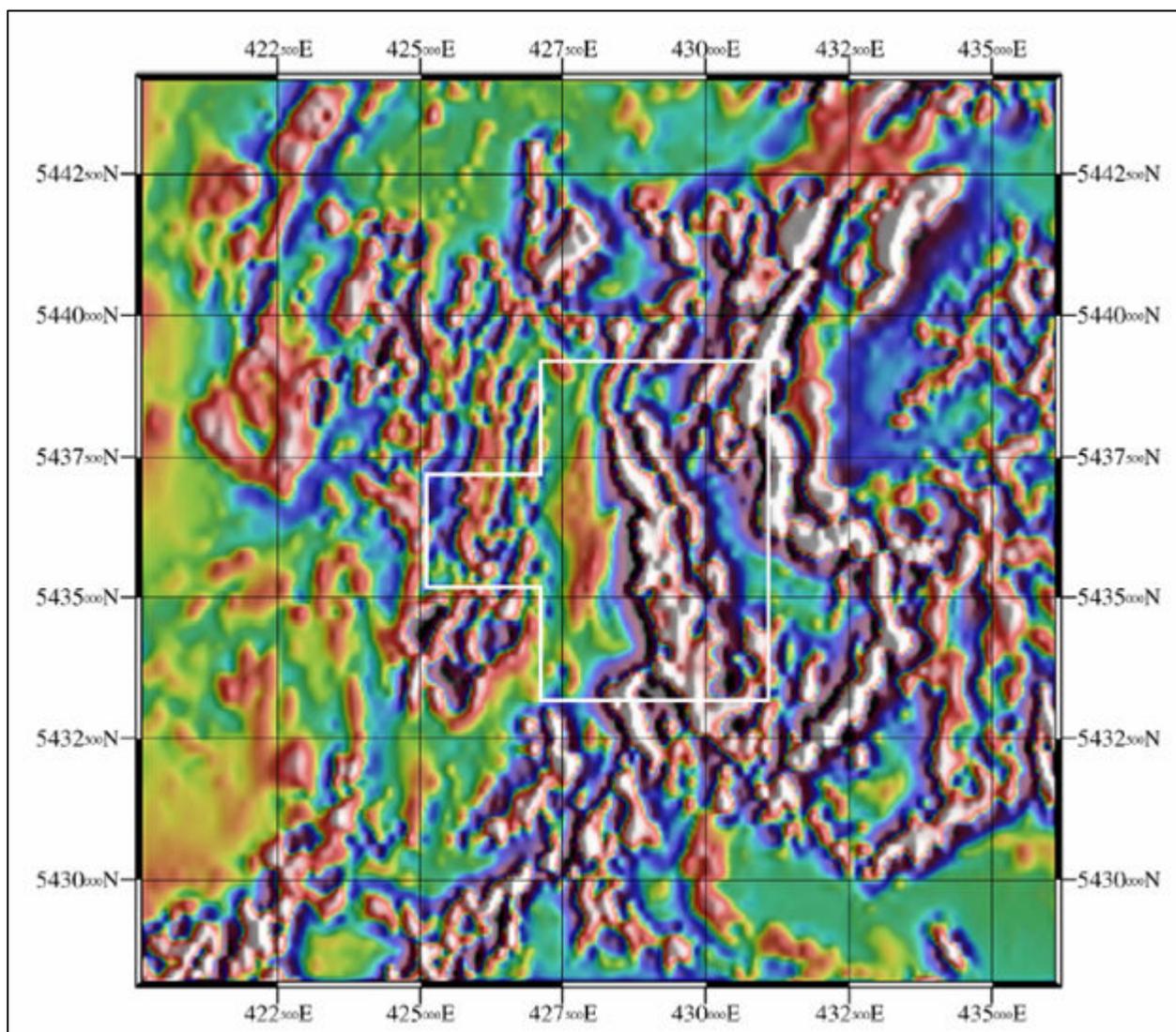
F. BLAKE  
A/GOVERNMENT GEOLOGIST.

Mines Department,  
HOBART.

2nd May, 1939.

### 3.1 Work during current tenement.

An aeromagnetic survey was completed by Southern Geoscience on behalf of Southern Iron (Tas) Pty Ltd. Results of the survey are available from Souther Iron (Tas).



**Figure 3.** Plan of reduced to pole (1<sup>st</sup> derivative) aeromagnetic image.

## 4 Exploration completed by Stonehenge Metals

In July 2007, Stonehenge Metals announced the results of four rock chip samples. Average assay results for the surface rock samples were 63% Iron, 0.01% phosphorous and 8% silica. Investigation of the bottom of several existing irrigation ditches revealed hematite bedrock. Trenching and sampling of the hematite bedrock in the irrigation ditches produced the following assays:

Sample	Fe%	S%
GWC1	64.8	0.24
GWC2	67.3	<0.01
GWC3	63.2	<0.01
GWC4	63.3	0.02

An independent geologist was commissioned to make an assessment of the project.

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## Stonehenge Metals Ltd Gawler Hematite prospect NW Tasmania Report on Field Visit September 2007

### *Introduction*

On Monday 24 September 2007 Ken Morrison was shown over the Gawler hematite prospect by Greg Lear and Luke Marshall. The aim of the visit was to contribute some regional context understanding to the geological setting of the prospect and, if possible, make suggestions as to the likely origin of the iron mineralisation and the level of descriptive detail needed to effectively log the core for the purpose of evaluating the prospect. Core from four holes was briefly examined and three outcrop sites and the OME drill rig were visited.

### *Observations and Suggestions*

The prospect comprises three suites of rocks underlying basalt-derived soil cover.

- An upper sequence of sub horizontal Tertiary basalt lavas and polymict pipe breccias.
- A lower sequence of Proterozoic folded but unclesaved, moderately to steeply dipping, interbedded quartzites and dolomites.
- An intermediate sub horizontal layer of post basalt Cainozoic age supergene alteration, comprising in detail a diversity of iron and manganese oxide and hydroxide mixed mineral associations and varying intensities of silicification of the dolomite beds.

The intermediate unit contains all the rocks of exploration interest but understanding its setting helps evaluate the prospect. It is entirely sub basalt and overprints the Proterozoic meta sedimentary sequence, with the most intense iron oxide development occurring in the sandy, porous and friable silicified dolomite beds and the massive cryptocrystalline quartzites remaining fairly inert to the alteration. This alteration style results from low temperature oxide zone regolith development processes and no evidence was seen of hydrothermal alteration beneath a surficial iron oxide capping. The implication here is that the iron was derived from the overlying basalt and leached by mildly acidic ground water.

One facies of the iron mineralisation is an impressive hard massive hematite, recovered in the core barrel mainly as pebble sized lumps with some core loss. Assays from hand picked samples of this material show an Fe content >60% and that SiO<sub>2</sub> is the only significant contaminant, supporting the likelihood of a silicified dolomite host rock (ie no Al<sub>2</sub>O<sub>3</sub>). If several million tonnes of this material could be identified it would be a high ranking prospect, but to date the massive hematite facies is perhaps <10% of the iron mineralisation seen in core

and the other facies are dominated by intermixed soft limonite, goethite, clay and sand, none which looks like ore.

Greg's suggestion of excavator trenching around the edge of the basalt magnetic footprint seems the only practical way of testing for more substantial occurrences of the massive hematite.

*Ken Morrison*  
Ken Morrison  
Consulting Geologist  
30 September 2007

In September and October 2007 Stonehenge Metals drilled 11 diamond core holes for 611.7m as shown in Figure 4 and detailed in the appendices. The core was assayed for iron and  $\text{SiO}_2$ ,  $\text{Al}_2\text{O}_3$ ,  $\text{TiO}_2$ ,  $\text{MnO}$ ,  $\text{CaO}$ , P (XRF), S (XRF),  $\text{MgO}$ ,  $\text{K}_2\text{O}$ , Zn, Pb, Cu, Ba, V, Cr, Cl, As, Ni, Sn, Sr, Zr, Na and Loss on Ignition calculated. Iron assay results are shown in Figures 6-11. The results for GAW003 were outstanding at the time of the report. Otherwise only GAW002 (Figure 12) intersected iron grades that may be of current interest as an iron ore source 9.8m at 54% iron from 1.2m was intersected.



**Figure 4.** Map showing location of diamond drill holes.

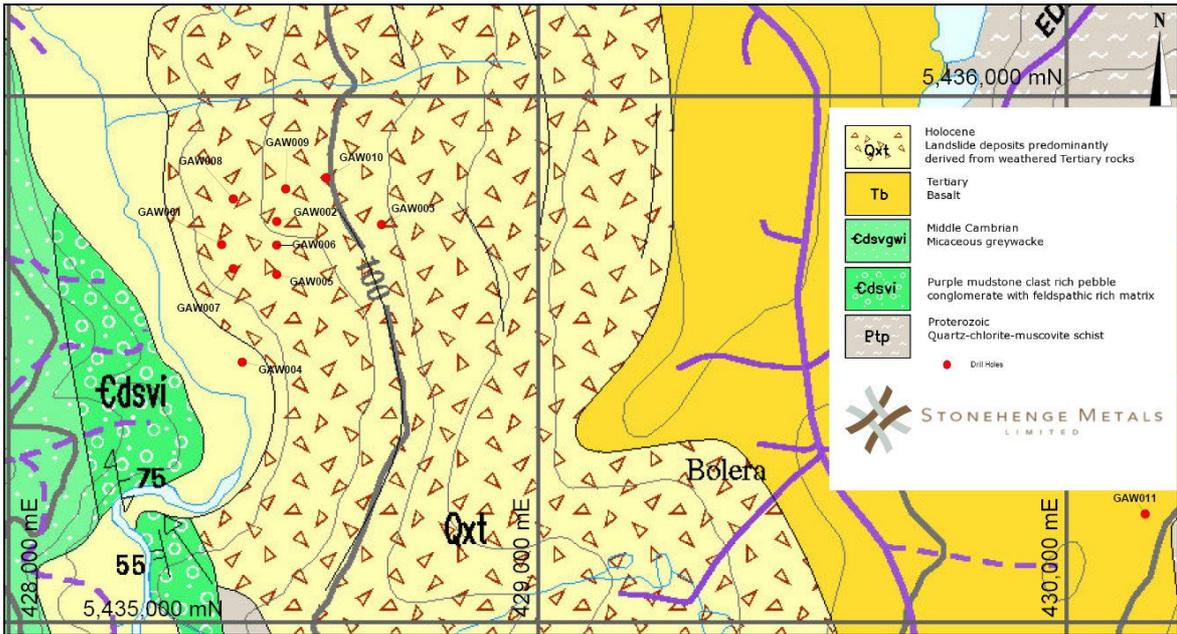


Figure 5. Map showing Diamond drill hole locations and MRT published geology.

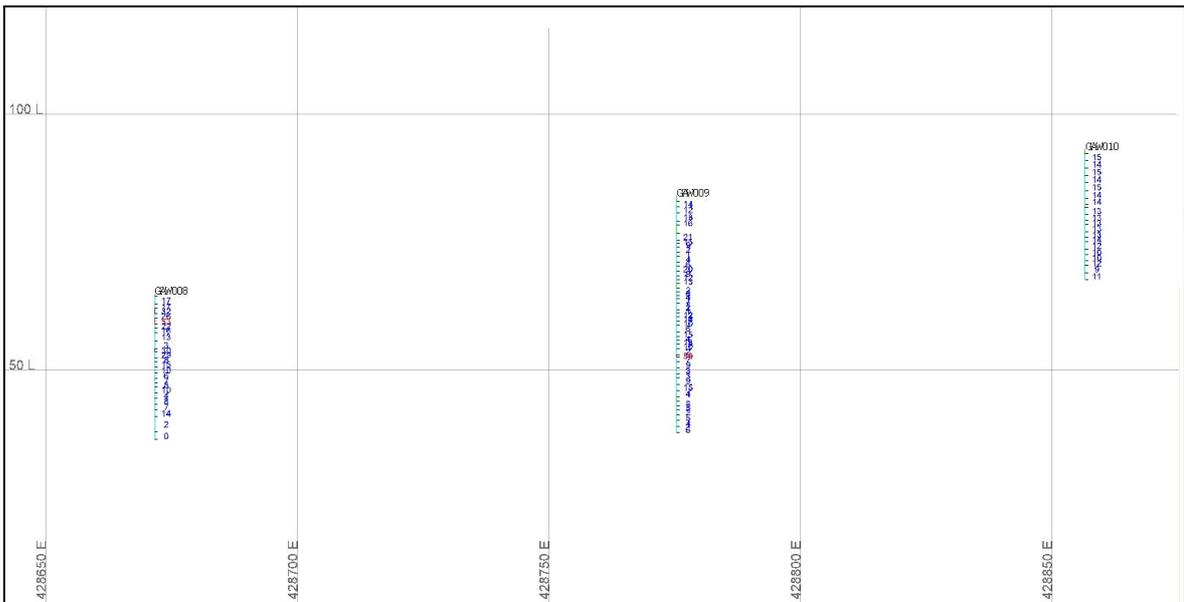
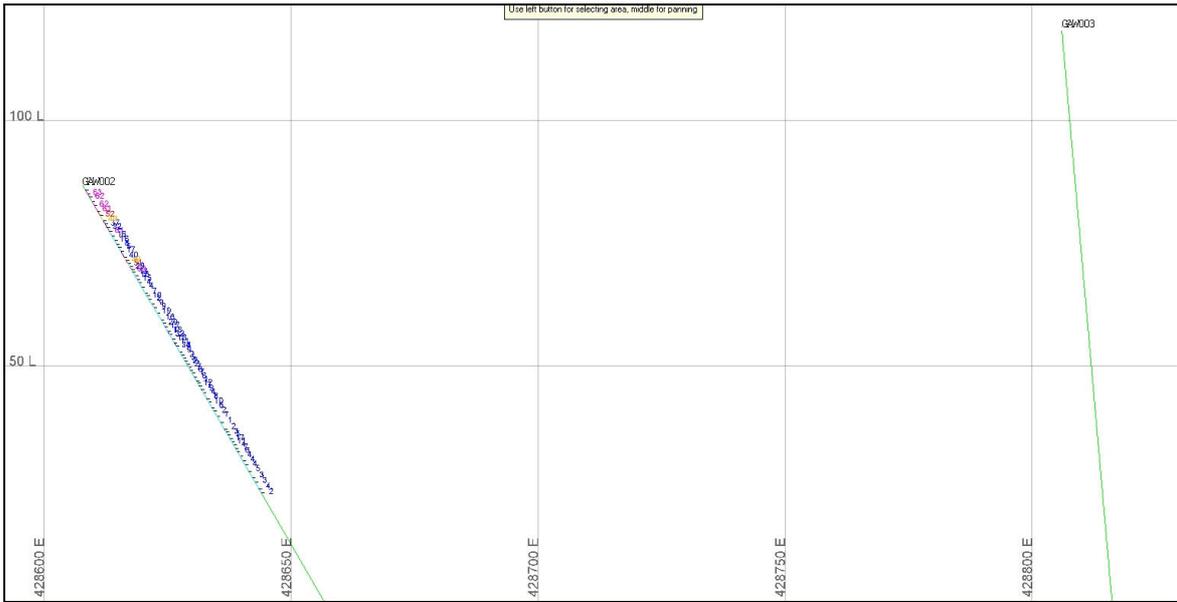
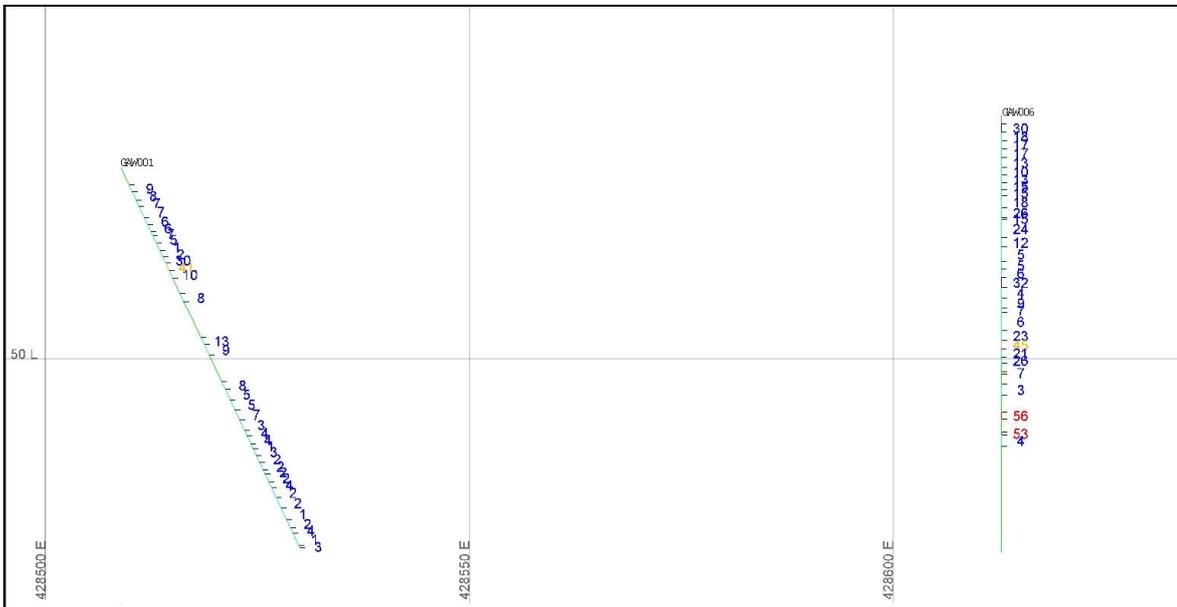


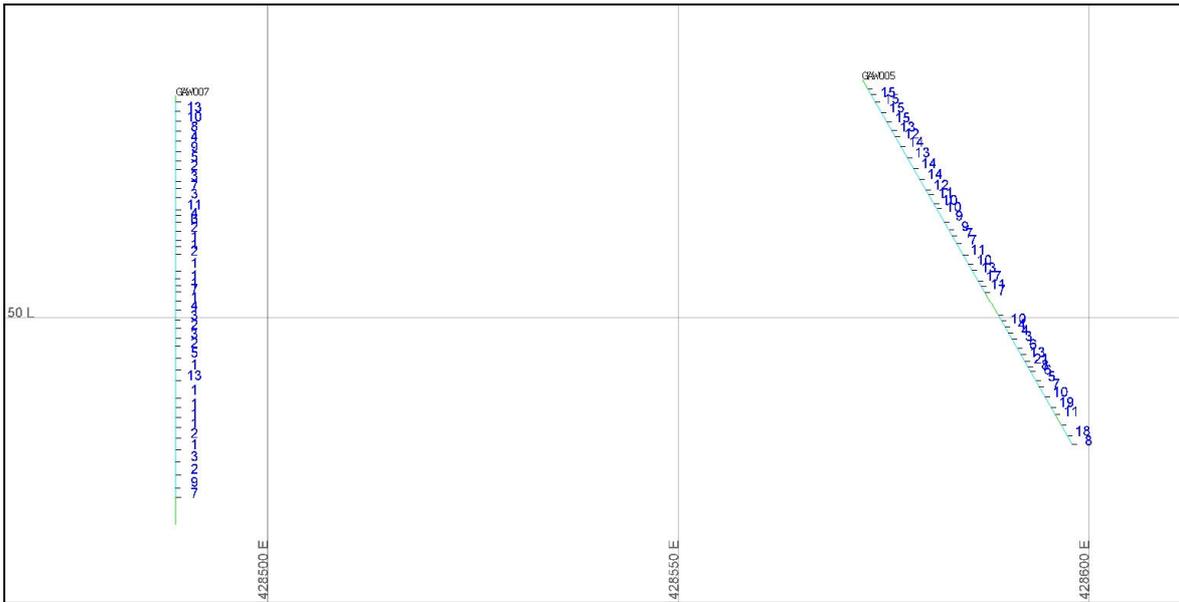
Figure 6. Section A Iron assay grades.



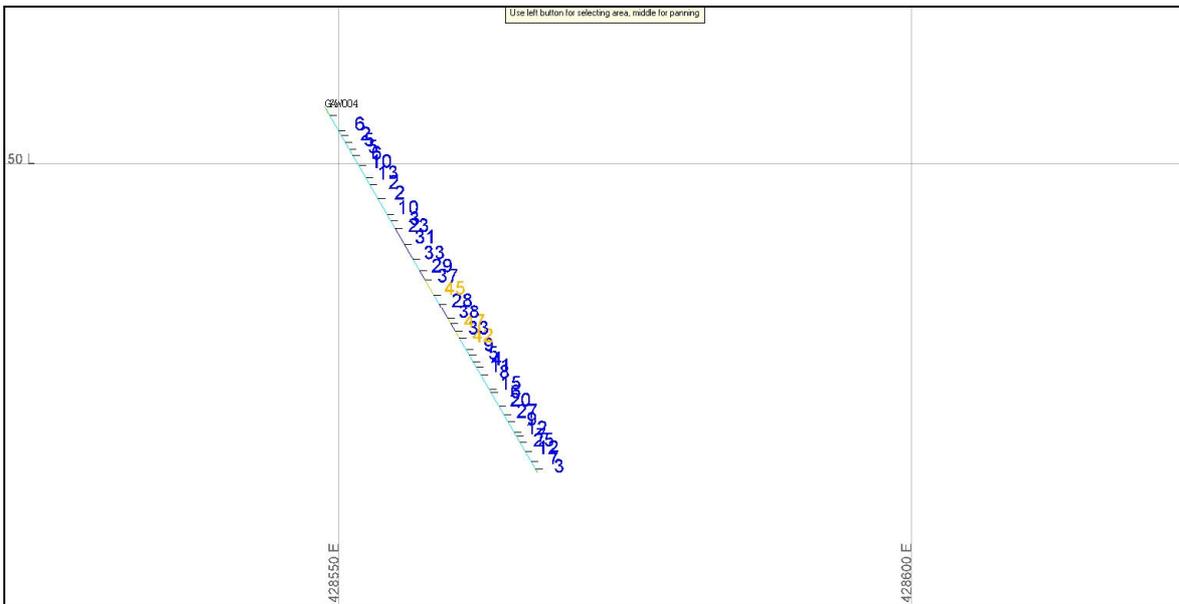
**Figure 7.** Section B Iron assay grades.



**Figure 8.** Section C Iron assay grades.



**Figure 9.** Section D Iron assay grades.



**Figure 10.** Section E Iron assay grades.

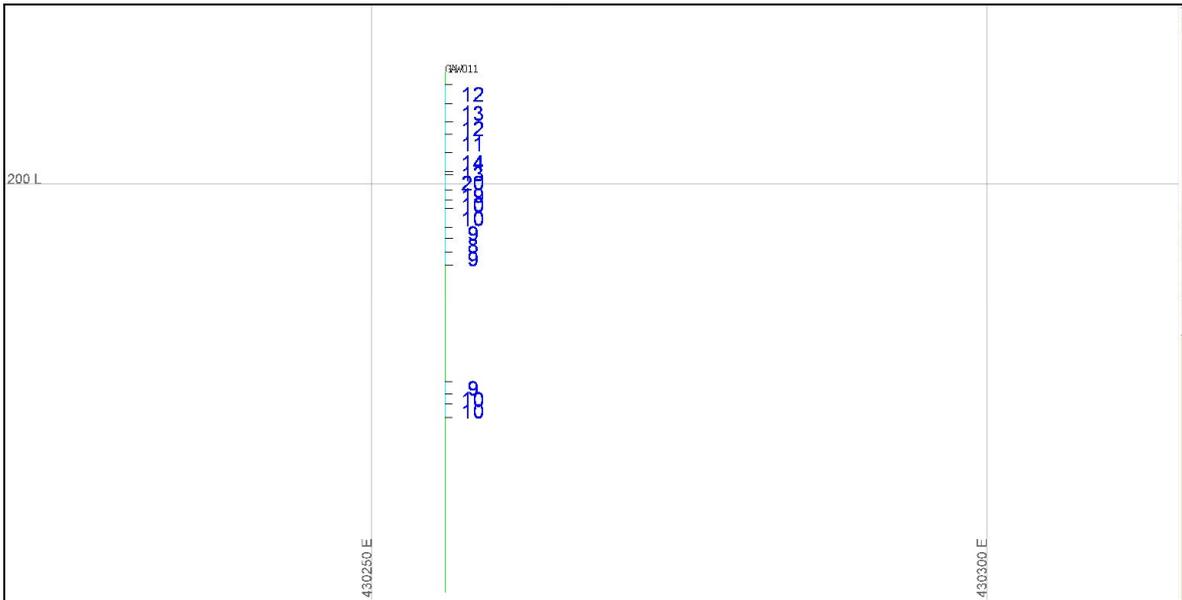


Figure 11. Section F Iron assay grades.

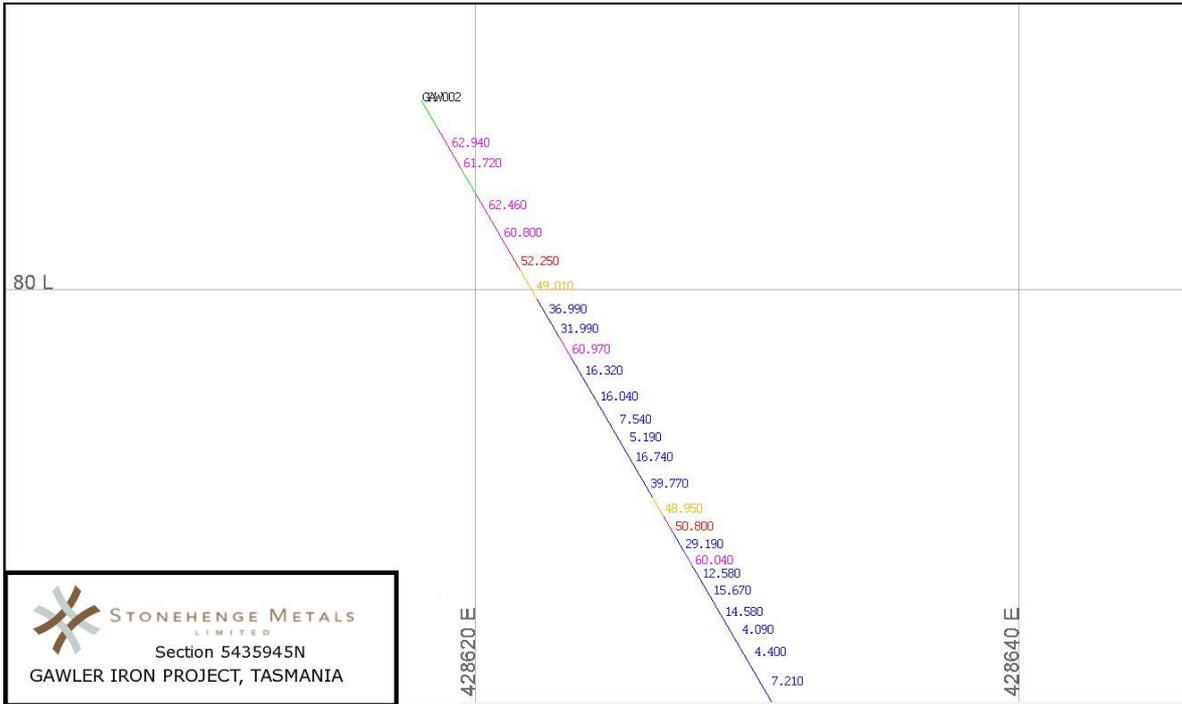


Figure 12. Section 5435945N -- Detail of GAW002 Iron assay grades.

5 Conclusions/ Further Work

The grades returned in diamond drill hole GAW002 are encouraging, however the most likely shape of the ore body (pipe like) limits the size of a deposit. Further work could be pursued on the current tenement for wider intersections as recommended by Jim Morrison and previously by Greg Lear (pers com). There may also be merit in pursuing regional targets

where the mineralisation is of greater extent. Given the company's limited resources other projects are more likely to result in economic mineralisation.

## 6 Expenditure

Expenditure to date (January 2008) by Stonehenge Metals Limited. Amounts are in Australian dollars excluding GST.

Item	Amount \$AUD
Geological Consultants	\$ 2,300.00
Computing	\$ 303.13
Consultants & Contractors	\$ 19,868.00
Diamond Drilling	\$ 72,162.56
Drill Assays (approximate)	\$ 20,000.00
Freight	\$ 1,800.00
Maps and Publications	\$ 1,509.00
Salary/Wages/Super	\$ 817.47
Sampling	\$ 2,200.00
Tenement Legal Fees	\$ 6,169.00
<b>Total</b>	<b>\$ 127,129.16</b>

## 7 Appendices

See associated excel spreadsheet Gawler\_data.xls containing Assay results, Collar locations, Core recoveries and sample intervals.