CONSOLIDATED TIN MINES LTD
ABN 57 126 634 606

**ASX/Media Release**
**24th October 2008**

## Metallurgical test work confirms tin and iron potential at Gillian Project

Australian tin exploration and development company Consolidated Tin Mines (ASX: CSD) is pleased to announce that results of metallurgical test work at the company's Gillian Project in north Queensland have confirmed the strong tin (Sn) and iron (Fe) potential of the project area.

The Gillian Project is 100% owned by Consolidated Tin and is part of Consolidated Tin's wider Mt Garnet project area, which is located 200km south west of Cairns in the Herberton tin field - one of Australia's premier tin fields.

The Gillian Project represents one of several large mineralised skarn occurrences in the Mt Garnet area. The skarn occurrences are known, from historic exploration, to host tin, iron copper, zinc and fluorine.

### Test Work

Consolidated Tin undertook rock chip sampling of surface ironstone outcrops at the Gillian Project in March, across three areas - Trench 1820, Trench 1940 and Trench 2360 (see Image 1).

Trench 1820 was a sample from an historic trench and is principally rich in cassiterite. Trench 1940 was also sampled from an historic trench and indications are that it is enriched in gillianite. The 2360 Trench sample was taken from exposed ironstone in a small open pit, and this ironstone contains both cassiterite and gillianite.

Each sample was collected over a width of 5-7 metres and was assayed for total tin and iron as well as soluble tin (after acid digest and AAS finish) by XRF. The XRF method gives total element content, irrespective of the mineral. Acid digest is for tin minerals that are dissolved in acid. (Cassiterite is not acid dissolvable. Gillianite is acid dissolvable). Results are shown in Table 1.

Total tin assays for each sample were around 0.5% Sn, which is a very economic grade for open pit development. The iron results were also very encouraging, varying between 30%-50 % Fe, and these results (as magnetite) are also very acceptable grades for open pit developments.

The soluble tin results were; 1940 Trench sample was 92% soluble tin, Trench 1820 10% soluble tin, and Trench 2360 17%.

The tin assays were confirmed to be cassiterite in all three samples, and much of it was of a very fine size within magnetite/haematite grains. The haematite content was weathered after magnetite, which is to be expected from surface samples.


ACN: 126 634 606 (ASX: CSD)
PO Box 140 Yorkeys Knob Qld 4878. Phone 0488 798 667
Registered Office: 25-27 Aplin Street Cairns Qld 4870
www.consolidatedtinmines.com.au

Goethite was the principal iron type in Trench 1940, and was also recognised in the other two samples. The surprising tin feature is the recognition of cassiterite in the 1940 Trench sample, as this tin behaved quite differently in the acid digest test work.

The fine size of the cassiterite samples represents a metallurgical challenge to be able to concentrate it.

Sizing analyses was undertaken on some coarser cassiterite to examine the possibility of a preferential tin partition into a specific size fraction in comparison to iron. As well there may be a preferential partition of the iron types based on grind times.

The test work was not intended to be an optimiser for grind time. The 1820 and 2360 Trench grind times were both such because of the harder haematite, as opposed to a shorter grind time for the softer goethite rock of 1940 Trench. Overall there was not a preference for tin or iron to partition in either the 1820 and 2360 Trench samples, as assay distribution was similar for both. The 1940 Trench has an overall finer size distribution, given the softer nature of the goethite, but again there is no partition of tin and iron to preferential sizes.

Further test work was undertaken to see if magnetic separation test work on sized fractions of the ironstone could allow a preferential partition of the tin and iron. As cassiterite is non magnetic, the proposed tested was to liberate the cassiterite from the iron mineral, and then have the iron mineral removed by magnetic separation, leaving the remaining non magnetic fraction enriched in tin. The test work was planned over a range of magnetic field strengths that would first remove the highly magnetic rock (haematite/magnetite) and then the lesser magnetic rock (goethite).

### Summary

In the 1820 Trench, there was a strong partition of iron to produce better than 60% Fe grades, which are very saleable concentrate grades. In 2360 Trench, there was also a good grade iron concentrate.

There does not appear to be a clear cut and significant partition of tin. In1820 Trench, even at very small fraction size, tin does not partition into the non magnetic. In 2360 Trench, there is a better partition particularly in the very fine fraction size, but the overall weight and grade distribution is low. The 1940 Trench sample does not suggest good tin partition or good graded iron concentrates.

Due to the weathered nature of these surface samples, no further work is proposed. Future test work will focus on drill samples, with the proposed work to be magnetic separation, preferably at the coarsest size and then fine grind and partition test work to separate tin from iron.

## The full report is available from CSD website:

http://www.consolidatedtinmines.com.au/announcements/8-announcements/38-report-on-ironstone-outcrops


ACN: 126 634 606
PO Box 140 Yorkeys Knob Q 4878. Phone (07) 4081 0241

## Background

The Mt Garnet area is a significant tin producing region, with the primary source of mineralisation being granite related. The skarn mineralisation is a result of high temperature metasomatic alteration of limestone lenses by granitoid intrusion. Historic tin production has come from the hardrock lodes within the granite or intruded sediments.

Alluvial tin within creek systems that drain the eroding lodes has also been mined in a significant way.

The interaction of limestone with intruding mineralised granite is known worldwide as a entrapment site for mineralisation. The mineralising fluids are generally acidic in nature and the interaction with limestone causes the neutralisation of the acids, and allows the deposition of mineralisation within the altered limestone.

This interaction has the potential to allow the development of large tonnages of mineralisation in a relatively small volume of rock. Generally, the skarn alteration is iron rich rock, the iron mineral principally being magnetite.

Significant sampling, trenching and diamond drilling has been undertaken by past explorers at the Gillian Project. Mapping has outlined a double-plunging folded ironstone lens, with the ironstone being a replacement of limestone. The overall strike was of northeast trend, and outcrop was found over a length of 1km. It was believed that the plunge directions extended the mineralisation away from outcrop.

The historic exploration work was principally for tin, and was undertaken in the 1970s. The trenching and drilling suggested shallow to steeply dipping ironstone lenses. Widths were up to 15m and grades were often better than 1% Sn, but the tin was found to be occurring as fine grained cassiterite and as a tin/iron hydroxyl. It was given a local term, gillianite, which was found to be acid soluble. The fine size of the cassiterite, and the occurrence of gillianite indicated detailed metallurgical investigation was required. The collapse of the world tin price in the early 1980s stopped this investigation.

ENDS

**For further information please contact;**

Ralph De Lacey
Managing Director
Consolidated Tin Mines
P: 07 4081 0241
M: 0428163176
E: ralph@nqmining.com.au

W: www.consolidatedtinmines.com.au

James Moses
Fortbridge Consulting
M: 0420 991 574
E: james.moses@fortbridge.com

The information contained in this report that relates to assay results of rock samples and drill chips, to mineral resource estimates and to ore reserve estimates of mineralisation has been approved for release by John Sainsbury (BSc, MausIMM). John Sainsbury is a geologist of 30 years experience and has sufficient experience in the type of mineralisation under consideration to be a Competent Person as defined by the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves - JORC Code, 2004 Edition. John Sainsbury is an executive director of Consolidated Tin Mines Limited. John Sainsbury has consented to the inclusion of this information in the form and context in which it appears.

## About Consolidated Tin Mines

Consolidated Tin Mines listed on the ASX in February this year with projects in one of the premier tin producing fields in Australia, and the Company is focused on discovering and developing major tin deposits in northern Queensland.

The company has acquired an impressive portfolio of advanced tin exploration projects in the southern Herberton tin field for development and transformation into a successful mining operation, to provide increased shareholder returns.

Consolidated Tin is driven by an experienced board of directors with a proven record of successful exploration and mining. The Company's vision is to become the premier hard rock tin producer in Queensland.

**Image 1:** Location of Rock Chip Samples at Gillian Project

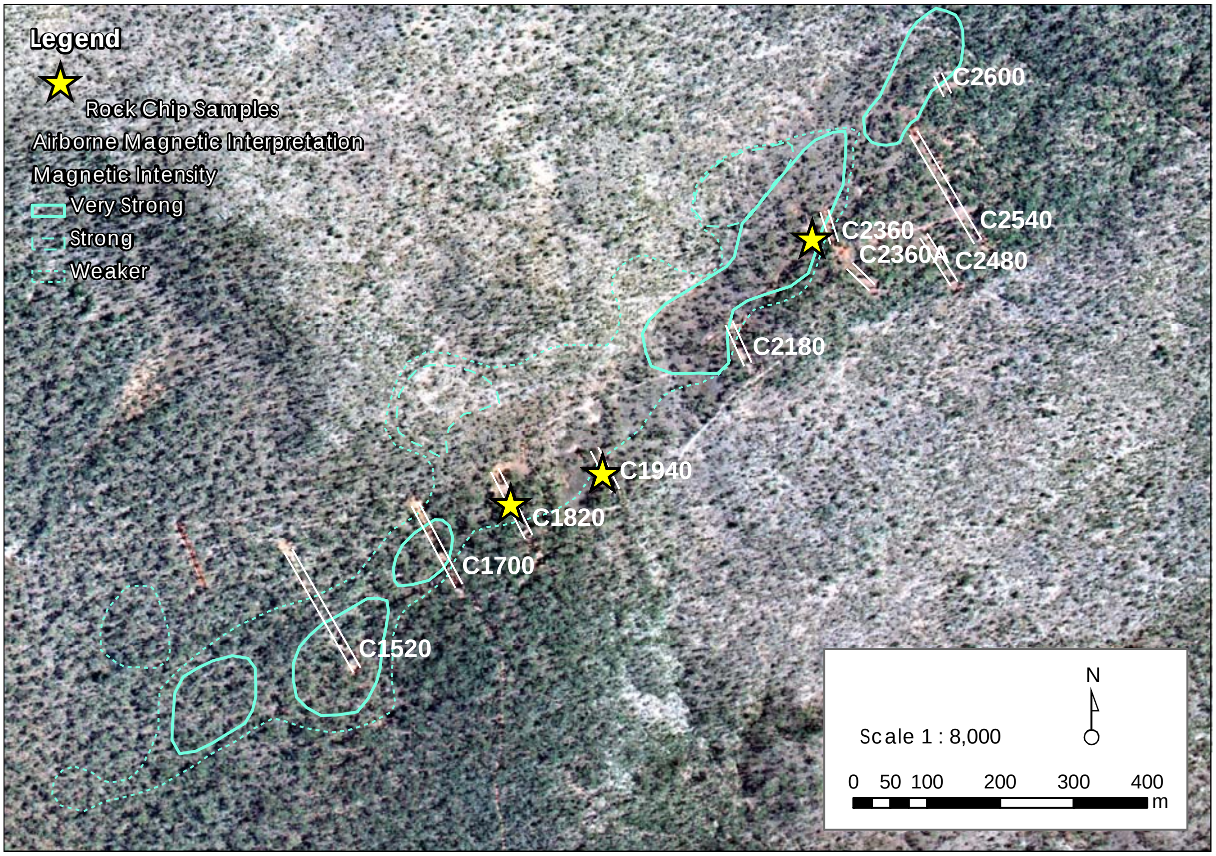


**Table 1**

| | |
|---|---|
| Date Submitted | 15/04/08 |
| Submitted By | ANB |
| No of Samples | 3 |
| Type | Solids |
| Priority | 16/04/08 |
| Assays Completed | 16/04/08 |
| Invioice Completed | 16/04/08 |

Burnie RESEARCH LABORATORY
INTERNAL SAMPLE DISPATCH SHEET

| Dispatch | | Analysis Results | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Sample Description | Number | Pulv y/n | Sn Fusion XRF | As Fusion XRF | Fe Fusion XRF | MgO Fusion XRF | Ca Fusion XRF | Mn Fusion XRF | Al Fusion XRF | Cu Fusion XRF |
| Trench 1820 | **376001** | LM5 | 0.41 | <0.01 | 46.8 | 0.03 | 0.01 | 0.18 | 0.66 | 0.03 |
| Trench 1940 | 376002 | LM5 | 0.65 | <0.01 | 31.7 | 0.04 | 0.05 | 2.07 | 1.83 | 0.18 |
| Trench 2360 | 376003 | LM5 | 0.46 | <0.01 | 52.5 | 0.04 | 0.02 | 3.44 | 0.38 | 0.13 |
| | | | | | | | | | | |
| Dispatch | | Analysis Results | | | | | | | | |
| Sample Description | Number | Pulv y/n | Si02 Fusion XRF | S % CS2000 | Fe % aas | **Sn Acid Sol aas** | **Sn Sol/Tot %** | **Size Sn p80 um** | **Size Sn p50 um** | **Size Sn p20 um** |
| Trench 1820 | **376001** | LM5 | 24.7 | 0.02 | 47.1 | **0.04** | 9.8 | 100 | 45 | 18 |
| Trench 1940 | 376002 | LM5 | 36.2 | 0.02 | 31.1 | **0.60** | 92.3 | 50 | 20 | 5 |
| Trench 2360 | 376003 | LM5 | 12.3 | 0.01 | 54.1 | **0.08** | 17.4 | 100 | 40 | 15 |
| | | | | | | | | | | |
| | | | | | | | | | | |