CONSOLIDATED
TIN MINES LIMITED

MT GARNET TIN SKARN MINERALISATION

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SUMMARY

The Mt Garnet outcropping basement geology is, as oldest rocks, deformed Silurian aged limestone and carbonate sediment, sandstones, conglomerates and shales, called the Chillagoe Formation. There has been extensive Carboniferous aged granite intrusion into the Chillagoe Formation, and remaining exposures of the Chillagoe Formation are disrupted and occur as remnant sediment rafts surrounded and eventually underplated by granite.
The deformation of the Chillagoe Formation has caused the originally flat lying sediment to be upturned into steeply dipping sediment bands, including the limestone bands.

The Carboniferous granite intrusions are the causative bodies of mineral deposits not only in the Mt Garnet area but throughout the Cairns hinterland area. In the Mt Garnet area, the granites were particularly associated with tin, as the tin oxide cassiterite, mineralisation. The tin mineralisation has been mined both from the granite as well as the intruded Chillagoe Formation. The Herberton Tinfield has produced approximately 150,000 tonne of cassiterite concentrate, containing 90,000 tonne of contained tin metal, since first mining in 1880.

The contact of limestone and mineralising granite is a well-known occurrence in ore forming processes. The limestone acts as a neutralising agent for hot, acid mineralising fluids derived from the granite. Iron is generally an abundant element in the fluids, and the reaction of limestone and mineralising fluid causes a very significant alteration and element exchange between granite and limestone. The resulting altered rock is generally called a skarn, with that alteration generally observed as a massive magnetite replacement of the limestone. Other elements, like tin, in the fluid will also be deposited in the altering limestone. Because of the very strong reaction of limestone and mineralised fluid, limestones have real potential to host significant mineralisation- the fluid will dump a lot of its minerals into a small volume of limestone

There are only limited occurrences limestones of the Chillagoe Formation in the Mt Garnet area. Because of the extensive granite emplacement, all the Chillagoe Formation occurrences have, to varying extents, been altered to skarns. The Consolidated tin Mines Ltd skarns, as well as the extensive iron element addition, are also host to tin mineralisation. These skarns are outcropping as massive to semi massive iron oxide exposures (magnetite/hematite/goethite) and have the strike and dip continuity of the replaced limestones. Because these precusor limestones were generally tabular, sheet type sediment bands, the skarn rock, is a tabular sheet type band.

Consolidated Tin Mines Ltd has explored three outcropping skarns deposits, Gillian, Pinnacles and Windermere. The combined exposed strike extent for the three is 6 kilometres. True width is from 4 to 20 metres. Depth has not been closed in any of the three deposits, as the Company has concentrated its efforts to estimate the open pittable, near surface (to 80 metres vertical depth) tin mineralisation. The Company exploration has highlighted that each skarn is quite uniform in its tin mineralisation, although tin grade does vary from an average 0.8% Sn for Gillian, 0.6% Sn for Windermere and 0.4%Sn for Pinnacles.

The reaction that has produced the skarn alteration and tin mineralisation has resulted in the largest contained tin deposits in the Herberton Tinfield. The Gillian prospect on which the company has completed most exploration has a JORC compliant, contained tin content of 24,000 tonne of tin metal (3Mt@0.8%Sn). This is well above the contained tin of the largest historic tin producing tin mine in the Tinfield, which is the Vulcan mine, which produced approximately 9,000 tonne of contained tin metal.

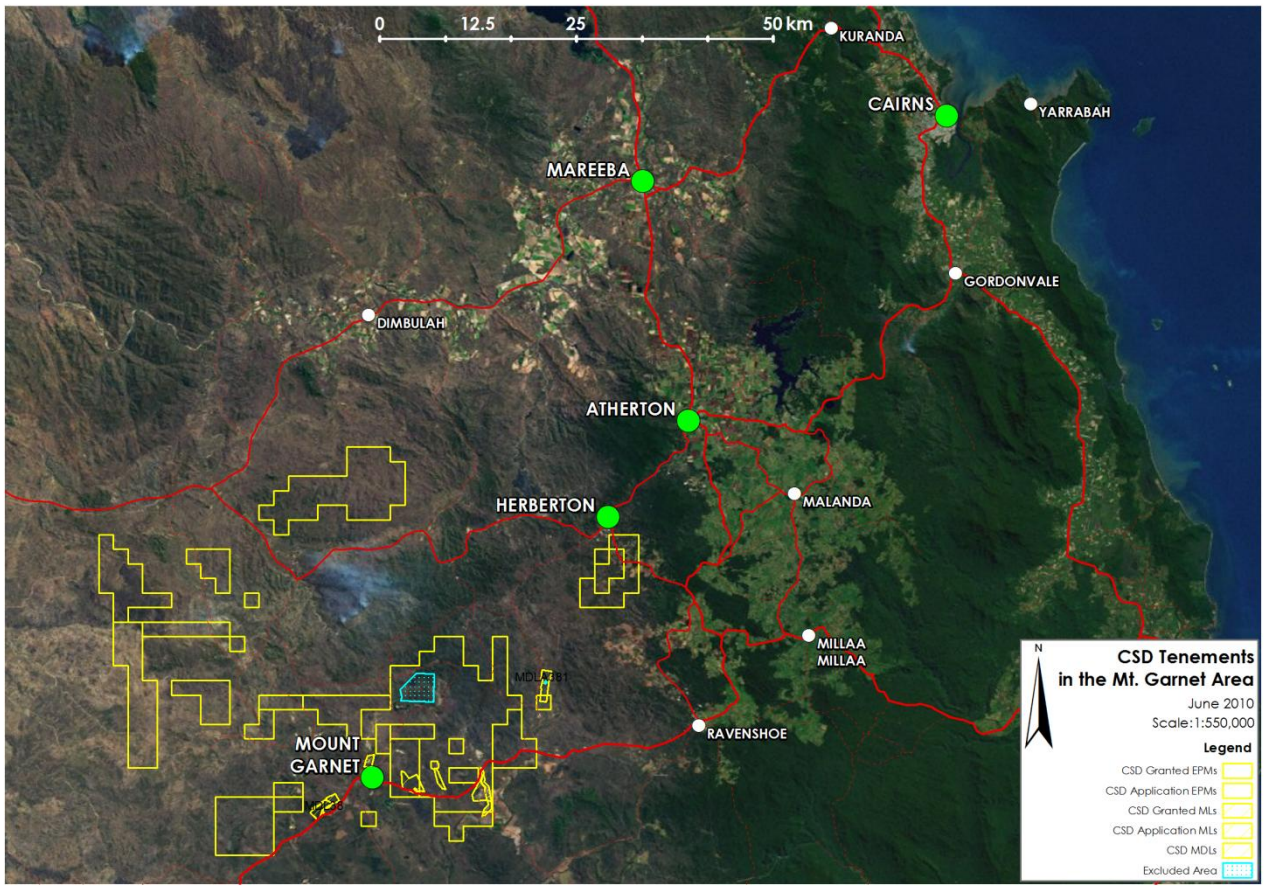
The Company believes that within the three mentioned skarn prospects that it will be able to establish 50,000 tonne of contained tin metal.

The Company, based on airborne magnetic surveys it has flown and drilling evidence from historic exploration, undertaken with the Company tenements, believes that there are skarns that are not outcropping , but at reasonably shallow depth(from 20 metres vertical depth). The Company believes there is significant potential for ongoing tin mineralised skarn exploration success within its tenements.

INTRODUCTION

The Mt Garnet Township is located 100 km south west of Cairns. Road access to the township is via, national highway, the Kennedy Highway, with the Cairns- Mt Garnet road distance being 200km.

Figure 1 -*Current CSD tenements in relation to Cairns, Far North Queensland.*



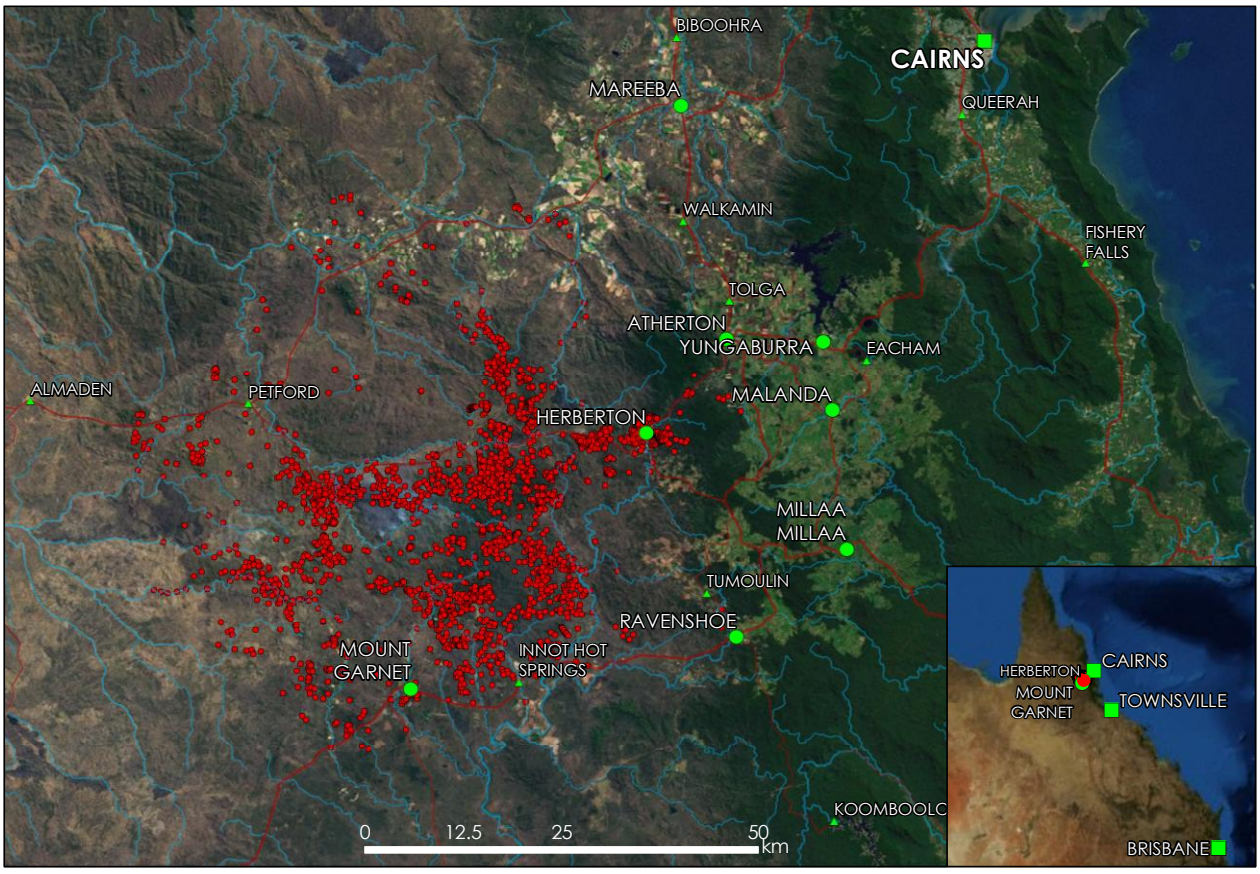
The Consolidated Tin Mines Ltd (CSD, the Company) project is centered within a 20 radius of Mt Garnet. The project is a tin exploration and mining project, seeking to establish significant hardrock and alluvial tin reserves and then the development of mining and milling operations to exploit the reserves. The Company listed on the Australian Securities Exchange in February 2008. The Company's IPO document highlighted a number of tin prospect areas, of both hardrock and alluvial nature, containing 2004 JORC compliant resources. The aim was to establish and increase the high confidence JORC compliant tin resources within the Company tenements, this establishment allowing for the funding of a near term, large tonnage tin mining and milling operation.

The Company believed that the tin mineralised skarn systems in the Mt Garnet area offered the best opportunity to establish the large tonnage, open pittable hardrock mining operation. In particular, three tin skarn systems were the targets of the exploration program- the Gillian, Pinnacles and Windermere projects.

MT GARNET AREA TIN PRODUCTION HISTORY

Tin mining within the Cairns hinterland was started in the 1880s. As a result of a reasonable gold mining industry that had been established in the Cairns hinterland the 1870s, when tin mining was commencing, there was a working mining population, commercial support and government administrators in place to reasonably quickly allow the regulated mining of the tin. Most importantly, the tin mineralisation proved to be a very large and this allowed the long term capital investment and employment at the tin mines.
The Herberton Tinfield was the recognised mineral field under Queensland government regulation. The Mt Garnet area was the southern half of the Herberton Tinfield. Up to 2010, approximately 150,000 of cassiterite (tin oxide) with an approximately 90,000 tonne of contained tin metal has been produced from within the Tinfield. Most production has been from hardrock production, with over 2000 individual mines developed. However, most of the production mines have been high grade mines, the largest historic mine being the Vulcan mine with production (through years 1891-1933) of approximately 9000 tonne of contained tin metal in concentrate, the mine head grade being 5% Sn.

Figure 2- Map of the Herberton Tinfield showing the individual mines.

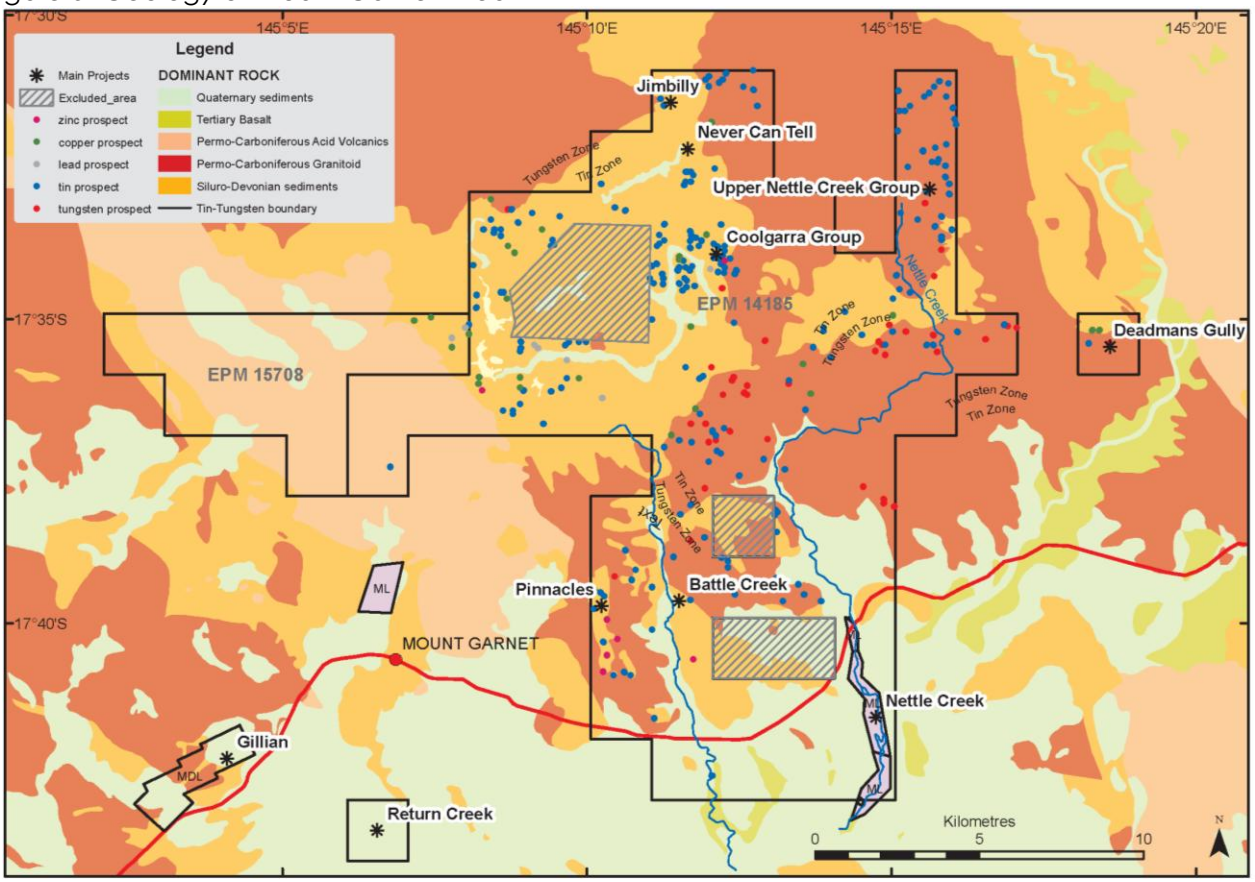


Tin recovery, via alluvial mining was significantly developed in the Mt Garnet area. The favourable development of 4 long north to south draining creek systems (the Nettle, Battle, Return and Smiths Creeks) each with headwaters in tin mineralised rock saw the development of dredge mining and from 1943-84 approximately 22,000 tonne of contained tin metal in concentrate was produced.

The increase in the tin price through the 1970s to early 1980s saw the renewal of generally small scale hardrock mines with single mines producing up to 600 tonne of contained tin metal in concentrate (production of 60,000 tonne at 1% Sn). Exploration established larger tonnage/low grade mineralisation, with in the Mt Garnet area, deposits of 12,000-16,000 tonne of contained tin metal highlighted through exploration programs.

GEOLOGY OF MT GARNET AREA

Figure 3- Geology of Mount Garnet Area



The Cairns hinterland basement geology are rocks of the Hodgkinson Province of the Tasman Orogenic Zone. The Tasman Orogenic Zone is the early-mid Paleozoic age of basement rock that underlies much of eastern Australia from Tasmania to north Queensland. The Hodgkinson Province is that part of the orogenic zone from Ingham to Cape Melville and from the coast to about 150 km inland.

Within the Cairns hinterland, the Hodgkinson Province comprises Ordovician to Devonian aged marine sediments of carbonates, clastic sandstones and siltones with minor basalt and chert. The thick sedimentary sequence has been multiply deformed and of is generally low metamorphic grade. The geological setting is a back arc basin setting. The Tasman Orogenic Zone along its full length is a complex zone of Paleozoic crustal growth and crustal compression. The Hodgkinson Province formed as a result of intracontinental rifting to form a large a marine basin, and within which the sediment from eroding adjacent continental highlands, was deposited. The western edge of the marine basin was marked by large coral reef development, similar to the current Barrier Reef. Further into the basin, sandstones, siltstones and cherts were deposited. Through the late

Devonian, crustal compression occurred and the marine basin closed and the marine sediments were strongly deformed and upturned. The basin edges were zones of extensive tectonic disruption and disruption of bedding

The Mt Garnet area is the location of a section of the western edge of the marine basin with this edge, being the North West trending Palmerville Fault. This fault is expressed by the juxtaposed Proterozoic high grade metamorphics, which formed the highlands to the marine basin, and Silurian carbonates belonging to the Chillagoe Formation, and clastic sediment of the Hodgkinson Formation. In the Mt Garnet area there is limited exposure of the Palmerville Fault, with the better exposures 90 km North West at Chillagoe.

Extensive granite emplacement and surface acid volcanic extrusion of late Carboniferous to early Permian age are exposed throughout the Hodgkinson Province. Within the Mt Garnet area, these igneous rocks are the major basement exposure. The overall igneous trend is North West, with emplacement control by faults like the Palmerville Fault, and parallel faults. Because of the significant granite emplacement, and erosion since emplacement, what is outcropping are limited sized remnants of Chillagoe Formation as rafts surrounded and underplated by granite.

Tertiary to Cainozoic aged basalts as a number of flows occur to the immediate south and east of Mt Garnet. Interbedded with the basalts are erosional channel sediment. These channel sediments have their headwaters in tin mineralised rock and thus the channel sediment is tin bearing. Cassiterite is a stable tin mineral in the weathering environment, and also has the property of high density. Alluvial mining for cassiterite has been of significance in the Mt Garnet area. What has been mined is the cassiterite occurring in the top 20 metres of the channels. What was recognised in exploration drill programs for the alluvials was many much deeper channels sediments, these channels in part covered by basalt.

SKARN FORMATION

Skarn formation is the high temperature magmatic-hydrothermal alteration of limestone or limey sediment layers forming what are termed calc silicate assemblages, with further general association with iron oxide minerals and economic mineralisation, particularly tin and tungsten mineralisation but also base metal mineralisation.

As a broad picture, the high temperature alteration is the result of emplacement of granite spatially close to the limestone. Generally the first change of limestone is marble formation and nearer the granite, change of the marble to the high temperature anhydrous calc silicate minerals of garnets and pyroxene. In many examples, an element like tin can be held within the garnet mineral lattice. Continued interaction of granite as heat source, and source of hot acid fluid and vapor and new elements , changes the initial calc silicate mineral assemblages and marble into a range of new calc silicates eg, amphiboles, wollastonite, vesuvianites. Massive to semi-massive iron oxide is formed, as magnetite and lesser haematite. Economic mineralisation of tin, as cassiterite, and tungsten and base metals can occur, as veins or disseminations within the skarn. Concentrations of boron or fluorine minerals can occur.

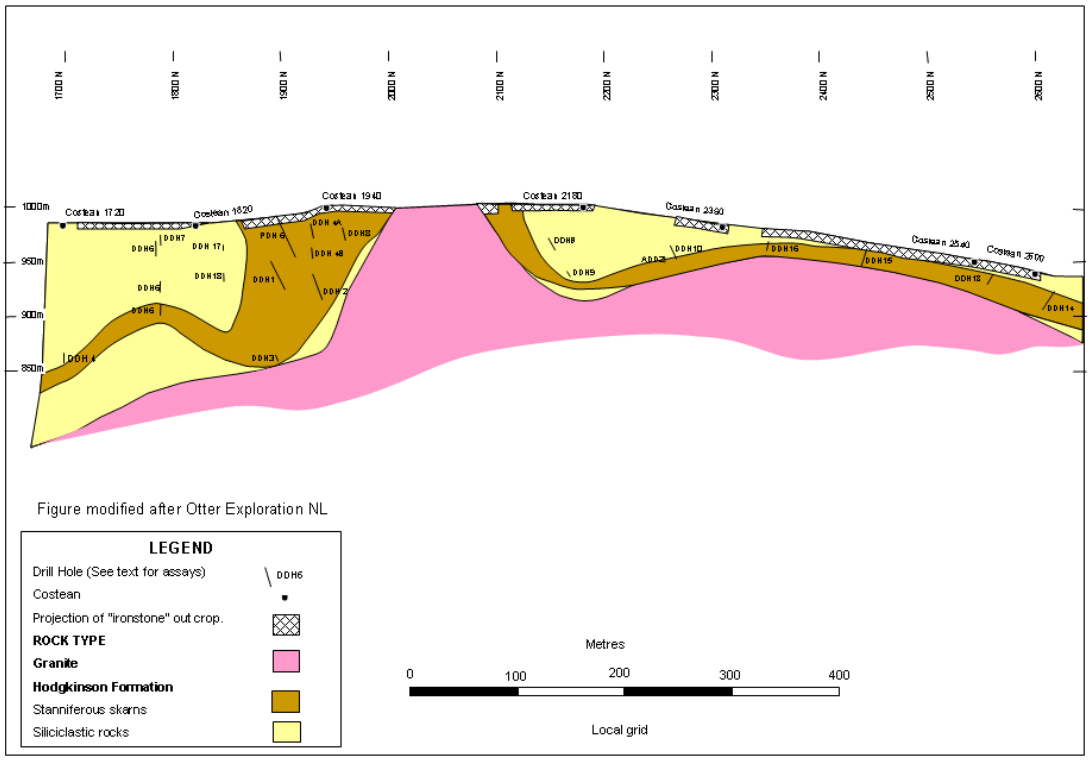
Most mineral deposits are formed at depth within the earth's crust. Intruding granites, rising slowly through the crust, focus many economic minerals in fluid systems near the top of the granite. The granites intrude by doming and fracturing the intruded rock, and fluids expelled from the granite fill these fractures. Economic minerals stable as chemical compounds in the fluids, deposit out of the solutions because of change of pressures on the fluids in the more open fractures, as well as changes due to reactions of the wall rocks and the fluid. Most vein type deposits of this type form slowly and require repeated fracturing to form sizeable tonnages and grades.

The reaction of limestone /marble and fluids is however, generally quite pronounced and of relatively short time duration. A number of changes occur in such a reaction. The acid nature of granite fluids is neutralised and economic mineral compounds are made unstable and allowing minerals to deposit. Boiling due to carbon dioxide formation, even at great depths occurs again, destabilising mineral complexes. Volume changes due to the reaction further allow space for mineral deposits. This combination of changes can allow a large deposition of economic minerals into a relatively small volume of altered rock.

THE MT GARNET TIN SKARNS

GILLIAN SKARN

Figure 4 – Simplified Geology of Gillian skarn.



The Gillian skarn is located 7 km south west of Mt Garnet. The mineralised outcrop is a 5-10 metres wide outcropping magnetite/haematite of a one kilometre strike length. Outcrop trend is 145-325 degrees magnetic. Several ironstone lenses have been found and while dip is moderate to steep, dip direction varies for the lenses. The ironstone occurs within a sandstone and siltstone package of approximately 50 metre width. The sediment and ironstone are surrounded and underplated by granite. The south western section of the ironstones has been intruded by granite dykes.

An airborne magnetic survey undertaken by the company in 2008, highlighted magnetic trends in both strike directions that have been interpreted as plunging extensions of the outcropping skarns. Granite has been found to be at 40-50 metre depth under the northern eastern outcrop of the ironstone, but drilling has not closed depth extent in the south western outcrop of the ironstones

Garnet and pyroxene have been recognised in the skarn system. However, a massive iron oxide overprint is the obvious and major alteration of the skarn. The only tin mineral identified by the Company is cassiterite. Previous, 1970s petrology studies suggested some of the assayed tin content, not as cassiterite, closely associated with goethite, the goethite suggested to be the breakdown of garnet. The testwork from the 1970s work suggested that the goethite tin may be soluble in acid. The Company has undertaken fused bead XRF analytical methods for first assay, and undertakes three acid digest with AAS finish to determine any soluble tin.

The cassiterite identified by the Company is of very fine size, and closely associated with magnetite, or its weathered product, haematite. There is identified cassiterite, of very fine size, associated with goethite. It is currently believed that the soluble tin may be very fine sized cassiterite that is either dissolved or taken into colloidal suspension in the acid digest, and read as soluble tin, even though it is cassiterite.

Based on drilling to date, the Gillian mineralisation is, in general, made up of high magnetite ironstone with mix of insoluble and soluble cassiterite content (found in the north east of the outcrop); a haematite/goethite ironstone mix with high insoluble tin content (found in the south west of the outcrop) and a haematite/goethite ironstone mix with a mix of insoluble and soluble cassiterite content (in the central portion of the outcrop). This is a general observation and it is unknown why there is this change of cassiterite behaviour. The magnetite to haematite change is a product of weathering.

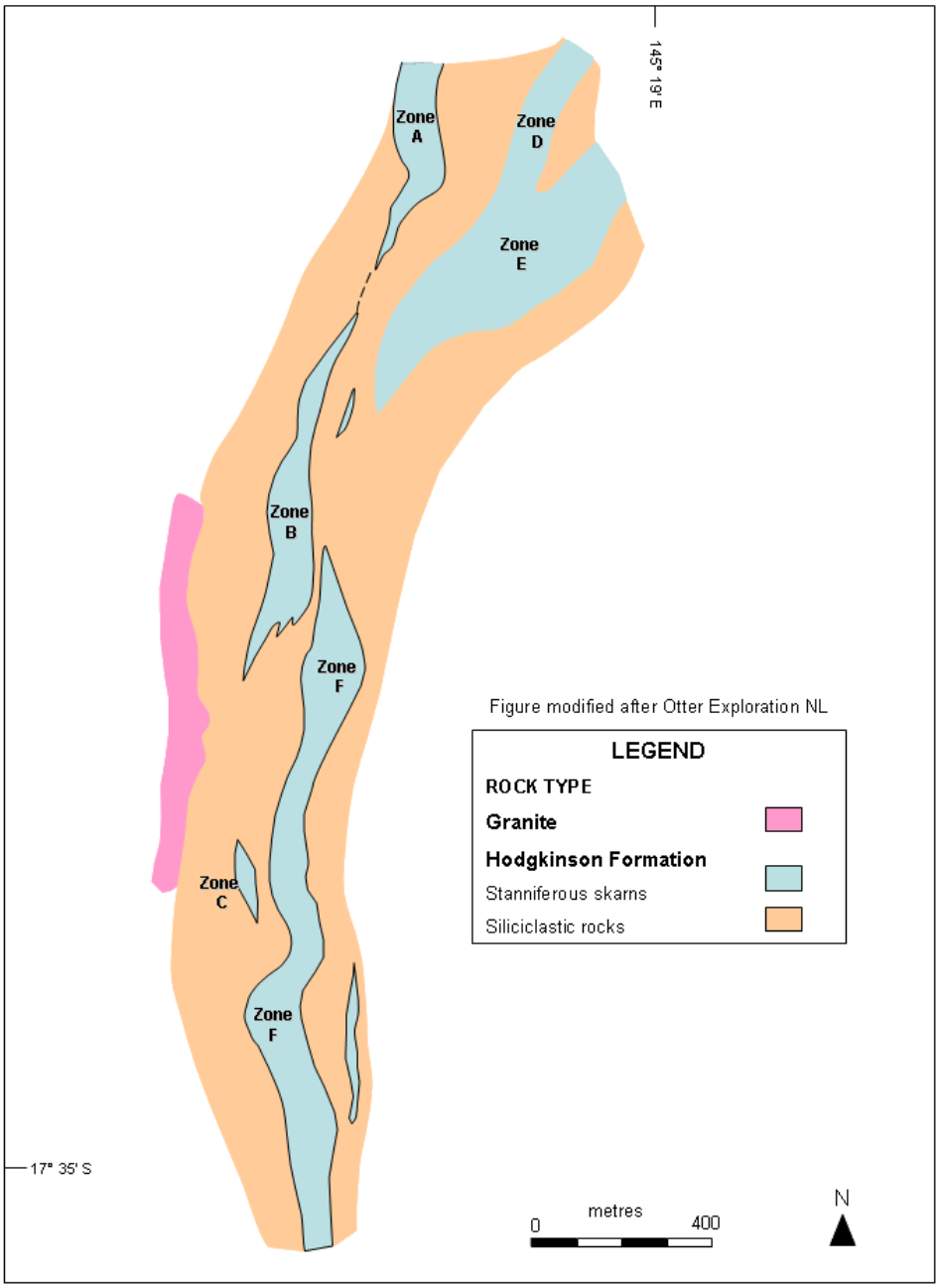
While the dykes are greisen altered, the granites underplating and surrounding the skarns has not been extensively altered as would be expected in the skarn process. It is possible the granites that now crop out around the Gillian mineralisation are not the mineralising granites, and observed granites and skarn have a fault contact. There has been no limestone/marble observed in outcrop or drilling. It is likely the current Gillian skarn was only a limited limestone bed, but which has been thoroughly altered and with a very significant tin mineralisation.

Approximately 1.5 kilometers is a further tin mineralised skarn prospect, called the Ironstone. This prospect is not held by the Company. It likely represents the now altered discontinuous strike extension of a small, tectonically disrupted limestone member of Chillagoe Formation in this area immediately south west of Mt Garnet.

The current JORC compliant Gillian resource is 3Mt@0.8%Sn.

WINDERMERE SKARN

Figure 5 – Simplified Geology of Windermere skarn.



The Windermere skarn is a series of north south (mag) trending ironstone lenses and located 20 kilometres north east of Mt Garnet. The Deadmans Gully is an offset extension of the southern extent of the skarn. Strike length is 2.5 kilometres. The Deadmans Gully portion has been drilled by the Company. Historic costean digging and rock chip sampling exploration is all that has been undertaken on the main length of the skarn. The tin assay averages 0.6% Sn

The ironstone development within the Windermere skarns is similar to that at Gillian, with massive magnetite/haematite outcrop exposed at surface. The skarn trench exposures are of 4-8 metres width and dipping steeply to the east. Limestone/marble lenses outcrop along strike from some ironstone lenses and indicate not all limestone has been converted

to skarn. The surrounding units are sandstones and siltones of the Chillagoe Formation. The nearest outcropping granite to the skarn is 200 metres to the west.

As with the Gillian skarn, the Windermere skarn represents alteration and change of precusor limestone units by a granite derived fluid. Based on outcrop, the granite is not in contact with the limestone and is at least 200 metres across strike from the limestone. As a result, the granite fluids need fracture access from granite to limestone. A distance between granite and skarn replaced limestone of 200 metres is known, with the example of the Moina tin skarn in Tasmania having a separation of at least 200 metres across strike between granite and skarn.

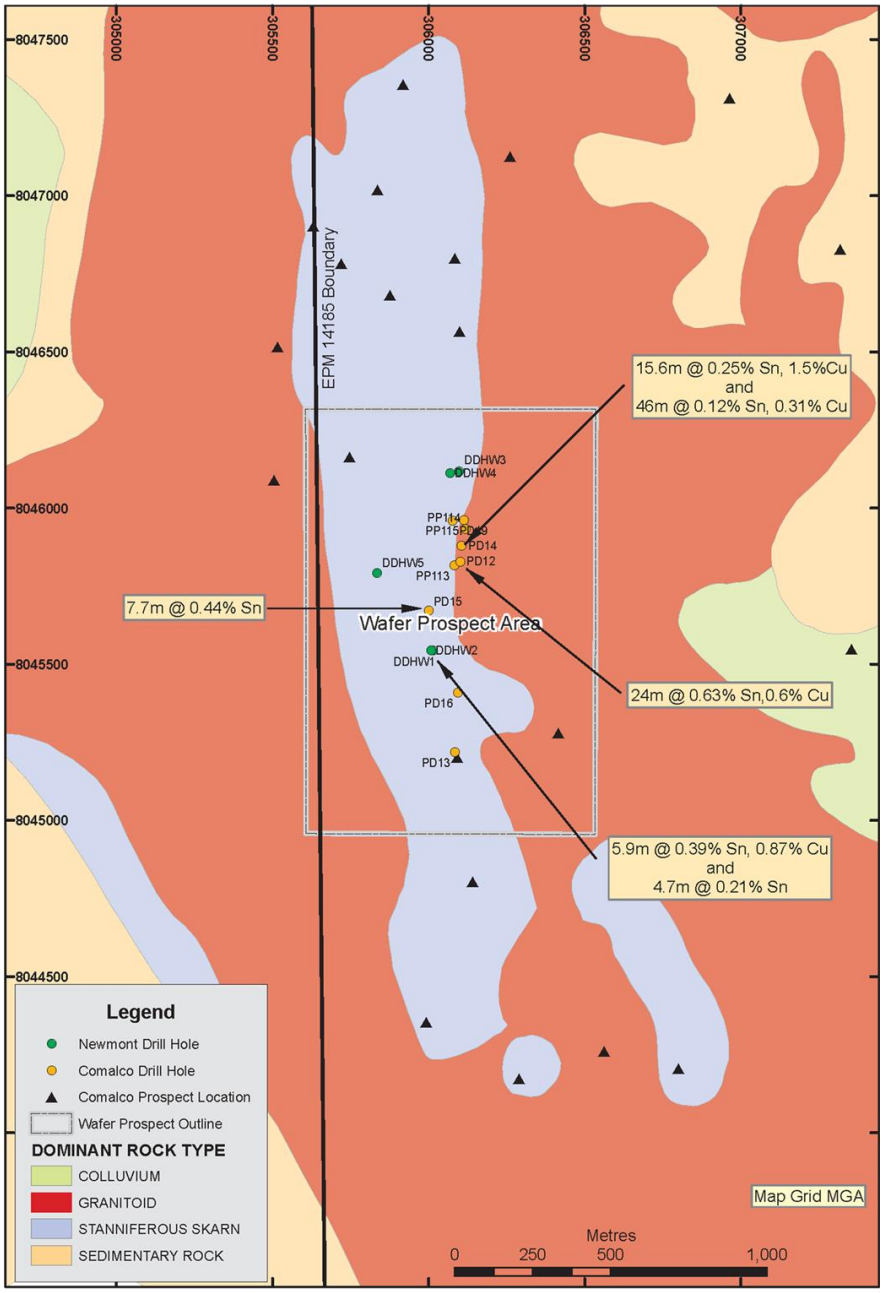
The Company 2008 airborne magnetic survey confirmed the outcropping disrupted nature to magnetite formation. A series of elongated magnetic bulleyes overlay outcropping ironstones.

The Windermere precusor limestone is a remnant disrupted portion of the Chillagoe Formation. The north south trend represented original strike length. The several lenses of ironstone likely represent original limestone lenses. Depth extent of skarn development is unknown but there is nothing to suggest that a 200 metre depth could not be found

The current JORC compliant resource is only for the Deadmans Gully portion of the Windermere prospect, that resource being 0.4Mt @ 0.49% Sn.

PINNACLES SKARN

Figure 6 – Simplified Geology of Pinnacles skarn.



The Pinnacles Skarn is located 10 kilometres east of Mt Garnet. Indeed the Pinnacles is a series of skarn lenses within a north south trending Chillagoe Formation roof pendent of 2.5 kilometre length and up to 500 metres width. Granite surrounds the sediment sequence.

This altered Chillagoe Formation sediment band was explored in the early to mid-1970s by Comalco, initially for fluorite. Comalco named 23 separate prospects within the roof pendent, based on outcrop of fluorite rich pods. It is likely that there is a more continuous nature to the pods. The pods were semi to massive ironstone outcrop, with the fluorite occurring in the skarn where the mineralisation consisted of monomineralic fine bands (to 5-10mm thickness) of magnetite, fluorite and vesuvianite (a calc silicate mineral) occurred

as a repeating mineral layering, replacing marble. Comalco termed this banded rock, wrigglite. Tin, as cassiterite, occurred in the magnetite layer.

Tin skarn formation occurs where tin enriched fluids interact with marble. The tin in these fluids is in a chemical bond, called complexing, with fluorine, boron or chlorine. In the case of the Mt Garnet area, the presence of fluorine, as fluorite, suggests fluorine was the complexing element. The reaction of this fluid with marble breaks the complex, with the fluorine joining with calcium to form fluorite. The Moina tin deposit mentioned above is a very similar wrigglite skarn. The wrigglite skarn is an end member type of skarn, and it forms from a high fluorine fluid rather than the lesser fluorine content fluids that formed Gillian and Windermere.

The Comalco exploration suggested that granite underplated the roof pendent at shallow depth (less than 20 metres depth) except for the eastern contact of the roof pendent with the granite. Deepest drilling along this contact, highlighted the granite/skarn contact was steeply west dipping and found to at least 200 metres vertical depth. The skarn was at the contact of marble and granite, and marble was also intersected at the 200 metre depth.

The skarn thickness has varied from 2 to 20 metres at this eastern contant and grade averages 0.4% Sn but up to 8 metres @ 2.3% Sn. The tonnage potential of this eastern contact is large. The Company has undertaken drilling on several of the 23 Comalco prospects, and does not believe depth has been closed off. The shallow depth also means that strip ratios in a potential mining operation would be low.

The 2008 Company airborne magnetic survey was undertaken to cover a large area around the roof pendent, and further magnetic targets, suggesting magnetite were highlighted for the 5 kilometres around Pinnacles.

The current JORC complaint resource within the Pinnacles prospect is 1.9Mrt @0.43%Sn.