

# **TNT MINES LIMITED**

ABN 67 107 244 039

**EL63/2004**

**MONTANA FLATS**

**ANNUAL REPORT TO 07 JULY 2011**

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## **1.0 INTRODUCTION**

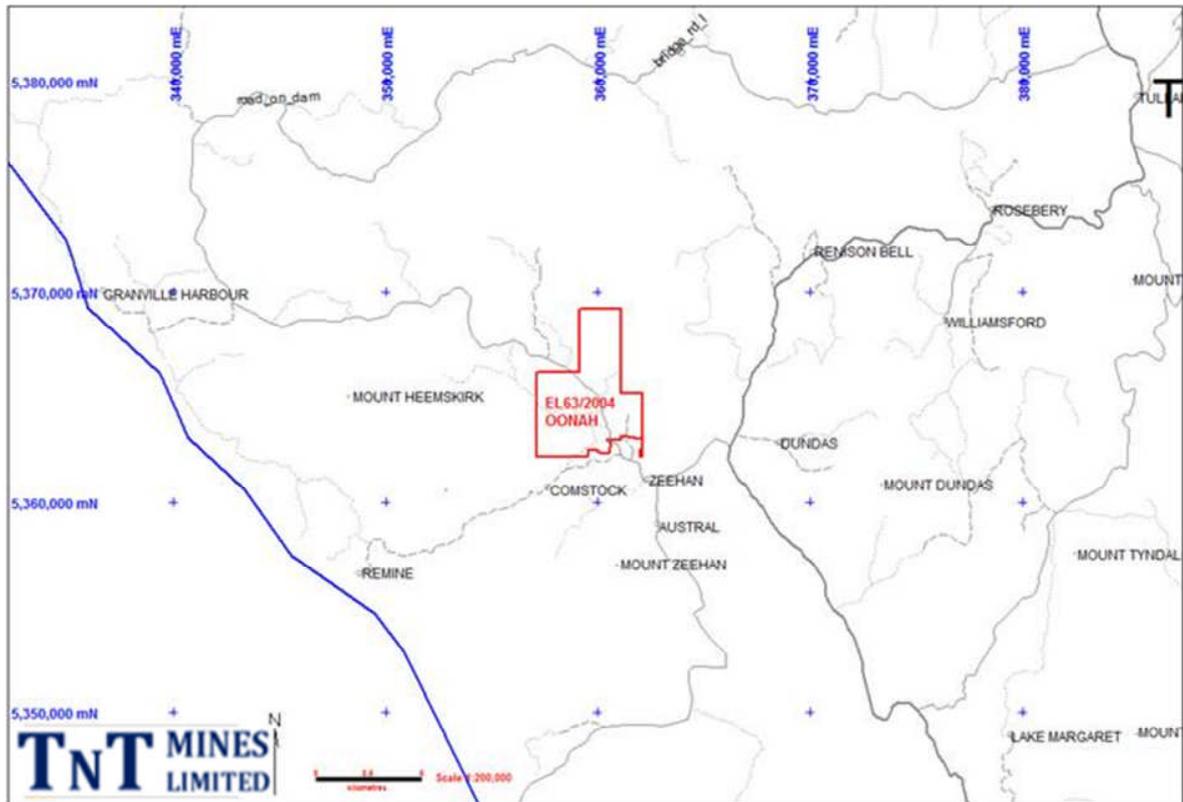
This report is a summary of the exploration activities conducted on the Oonah exploration licence, EL63/2004 (Figure 1), for the period 8 August 2010 to 7 August 2011. The licence covers a total area of 24 km<sup>2</sup>. The Oonah licence is subject to an exploration joint venture agreement between TNT Mines Limited and Geoinformatics Tasmania Pty Ltd, a wholly-owned subsidiary of Clancy Exploration Ltd. TNT Mines is currently managing exploration of the licence.

The licence is situated in western Tasmania and covers an interpreted portion of the Tenth Legion Fault. The licence was claimed primarily because the Tenth Legion Fault is interpreted to thrust the Burnie & Oonah Formations on top of younger units including the Gordon Limestone which is considered prospective by Bass for carbonate-replacement mineralisation. Whereas Bass Metals were interested in Devonian base metal mineralisation, TNT Mines is focussed on tin mineralisation.

### **1.1 Location and tenure**

The Oonah licence is located directly adjacent to the town of Zeehan and approximately 30km north of Strahan on the west coast of Tasmania (Figure 1). Zeehan is accessed from the north via the Zeehan Hwy off the Murchison Hwy. Access to the licence from Zeehan township is via the Heemskirk Rd and various unsealed public roads. The 24km<sup>2</sup> tenement can be found on the Heemskirk and Dundas (1:25,000) LTIS map sheets.

Topographically the area is of variable, undulating relief with the majority of the licence area classified as undifferentiated button grass moorland. In general, vehicular access is good with various unsealed vehicle 4WD tracks accessing the numerous old workings.



**Figure 1: Regional location plan**

## 1.2 Geology overview

A number of geological units are present within the Oonah licence area; however the units of interest in terms of prospectivity for granite-related and carbonate-replacement mineralisation are chiefly the Burnie and Oonah Formation and the Gordon limestone/Eldon Group association. Importantly it is the thrust relationship between these lithologies and the interpreted position of the Tenth Legion Fault that provides the focus for mineralising fluids (Figure 2).

In regards to the mineralisation of the Zeehan mining field of which the Oonah licence is considered to partially cover, there are two major styles of mineralisation. Classically the tin and Ag-Pb-Zn mineralisation has been attributed to magmatic hydrothermal zoning related to the intrusion of the Heemskirk granite. Both and Williams (1968) showed that the mineral zoning from west to east, is displayed principally in the gangue which changes from pyrite dominate to siderite dominate as the FeS content declines from west to east. The only distortion of this zoning is found at Queen Hill due to abundant tin mineralisation, attributed to a separate granite intrusion underlying the area.

A second mineralisation style considered akin to Irish- style syn-sedimentary lead-zinc mineralisation is reported at Oceana Mine and has been confirmed by Pb-isotope analysis conducted on lead mineralisation from that mine (Sise, 1986).

### *1.2.1 Burnie and Oonah Formation*

The Burnie and Oonah Formation is a thick, polydeformed Proterozoic quartzwacke turbidite succession, widespread in western Tasmania. The formation comprises of two lithological associations. The dominant quartzwacke turbidite association, which includes minor alkaline dolerite intrusions and lavas, consists of interbedded quartz sandstone, quartzwacke, siltstone and pelite. The secondary lithological association is predominately pelite and/or carbonate including mafic volcanics and conglomerate in some places. Near Zeehan this association is host to a number of Devonian vein, skarn and replacement-tin deposits, and at Mt Bischoff a dolomitic unit hosted major Devonian tin lodes (Seymour et al, 2006).

### *1.2.2 Owen Group*

The Owen Group is Cambrian to Ordovician in age and sits unconformably on the Mt Read Volcanics. The unit typically includes large volumes of coarse siliciclastic conglomerate composed dominantly of metaquartzite clasts derived from the Tyennan Metamorphics. It also includes turbidite and shallow marine sandstone units (Seymour et. al., 2006). It is not likely to host any exhalative styles of mineralisation such as Taylor and Mathison (1990) report for the younger Gordon Group. However, it could potentially host mineralisation associated with intrusion of Late Devonian–Early Carboniferous granitoids.

### *1.2.3 Gordon Group*

The Ordovician Gordon Group above the Pioneer Sandstone is a shallow-marine to peritidal, platform succession of predominately micritic, dolomitic limestone. The Gordon Group carbonate sequence is an important ore host for skarn mineralisation associated with intrusion of Late Devonian–Early Carboniferous granitoids (Seymour et. al., 2006).

### *1.2.4 Eldon Group*

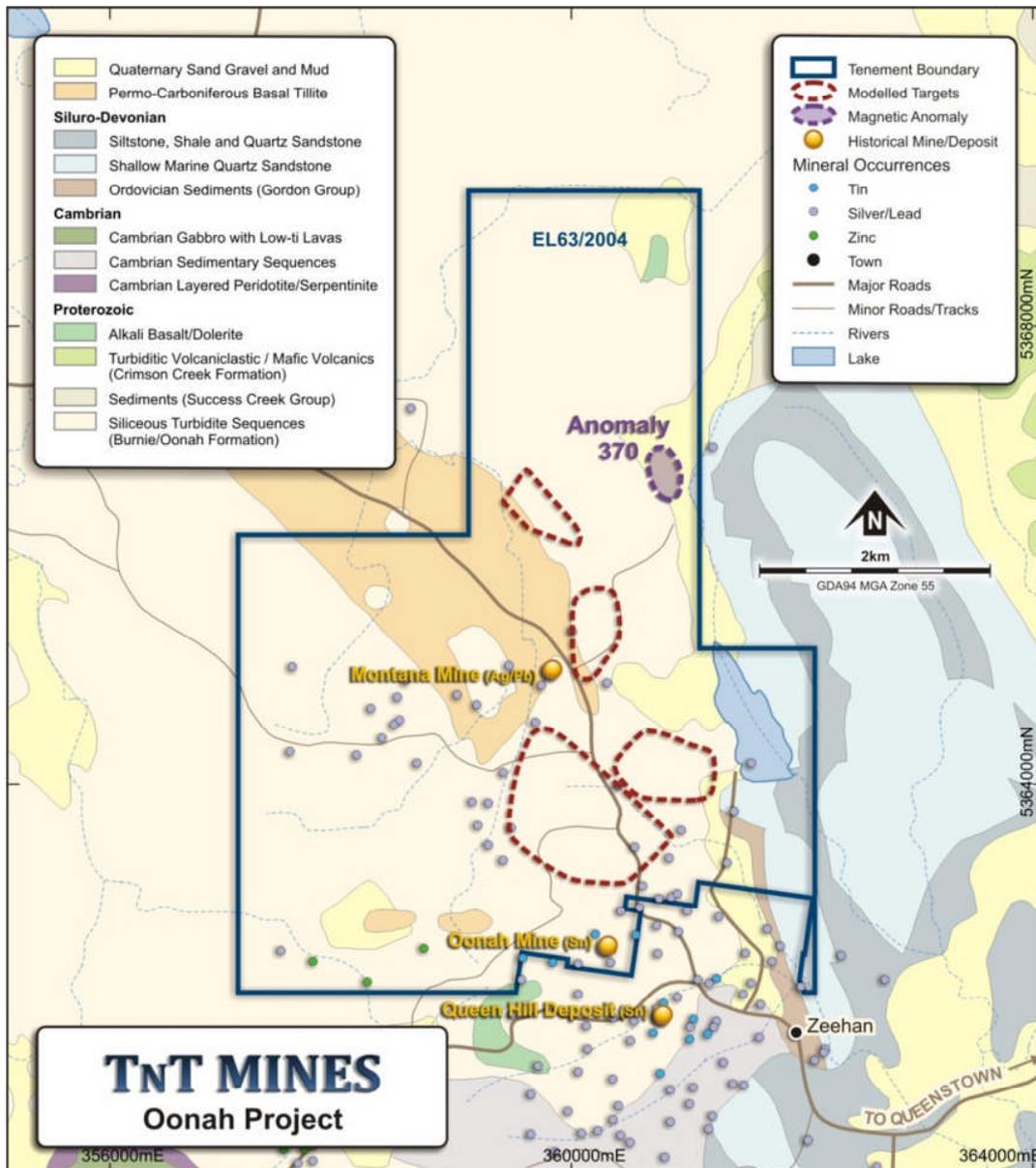
The Silurian-Devonian Eldon Group sits locally disconformably and erosionally on the Gordon Group. The lower part of the succession is dominated by shallow-marine quartz sandstone (Crotty and Florence Formations); the upper by a thick, shelf-facies shale unit with minor limestone identified locally as the Bell Shale and correlates (Seymour et. al., 2006).

### *1.2.5 Parmeener Supergroup*

Sediments of the Parmeener Supergroup represent Late Carboniferous to Late Triassic intrabasinal lithologies deposited unconformably on top of Late Devonian granites and older folded rocks. The Lower Parmeener Supergroup consists of mostly glacial and glaciomarine rocks, while the Upper Parmeener Supergroup consists of mostly fluvial and lacustrine sedimentary rocks (Seymour et al, 2006).

### *1.2.6 Tertiary Basalts*

Radiometric dates from basalts across Tasmania indicate an age range of between 16.4Ma and 64.5Ma.



**Figure 2: Regional geology**

### 1.3 Exploration Rationale

The Oonah tenement was acquired because it overlays the interpreted Tenth Legion Fault considered to be thrusting the Burnie and Oonah Formations on top of younger units. The larger deposits in the area such as Montana Silver Lead, Oonah and the Stannite Lodes are hosted in the Burnie and Oonah Formations which possibly acted as an aquatard trapping mineralisation below and immediately above the fault.

There is the potential for new deposits to be found or for extensions to existing deposits such as Oonah or Montana.

## **2.0 REVIEW OF PREVIOUS WORK**

### **2.1 Historic mining**

The Zeehan Ag-Pb mining field dates back to 1882 and was progressively developed until 1898. A sharp decline in production saw the closure of the smelter during the first decade of the 20<sup>th</sup> century and for the most part, from 1919 until the 1980s only small-scale operations existed in the upper levels of abandoned mines.

### **2.2 Exploration prior to current tenement**

Systematic exploration of the Zeehan mining field commenced during the late 1940s by a joint venture between North Broken Hill and Broken Hill South called Zeehan Explorations. Since that time exploration has generally concentrated on looking for extensions to the existing mines and workings. The area was originally targeted for tin mineralisation, but due to declining tin prices a shift in exploration strategy saw a move to exploration for Pb-Ag-Zn mineralisation.

**Date:** 1946-1951

**Company:** Zeehan Explorations

**Exploration Philosophy:** Exploring for large-scale carbonate-hosted mineralisation

**Work Completed:** Mostly concentrated their efforts on drilling carbonate-hosted mineralisation in the Gordon limestone. At their instigation, the BMR conducted gravity and electrical surveys in 1947/48 and 1954.

**Results and Conclusions:** Discouragingly, gravity anomalies were found to represent large accumulations of siderite and known mineralisation at Oceana Mine failed to give a significant electrical response.

No data available regarding results of drilling.

**Date:** 1970-1973

**Company:** Cominco Exploration Pty Ltd EL47/71 (Tenneco Australia Inc)

**Exploration Philosophy:** Carbonate-hosted base metal mineralisation

**Work Completed:** Several geophysical surveys including SP, EM, IP, Turair and gravity were conducted over the majority of the limestone sequence. Geological surface mapping, adit mapping, bedrock/rock chip sampling and ground truthing of Turair geophysical anomalies.

**Results and Conclusions:** Best grab sample from Bradshaw 1.4%Sn. Numerous Turair anomalies identified but details of follow-up work and results not found (73\_0956).

**Date:** 1971-1986

**Company:** Aberfoyle Resources Ltd EL47/71 (Formerly Cominco and Tenneco)

**Exploration Philosophy:** To assess regional tin potential to augment future mining operation based on Aberfoyle's Zeehan tin resource. However depressed tin price shifted focus of exploration to lead-zinc-silver mineralisation associated with the Gordon Limestone. Particularly interested in potential for syn-sedimentary (Irish-style) base metal mineralisation in Gordon Limestone similar to Oceana Mine south of Zeehan township. Despatch and

Tasmanian Crown both Ag-Pb mines in Gordon Limestone only 5km along strike from Oceana.

**Work Completed:** Geochemical bedrock sampling, lead isotope analysis and geophysics(?).

**Results and Conclusions:** Geochemical sampling results suggested that geochemical anomalies represent narrow, discontinuous Devonian vein-style mineralisation and do not warrant further exploration.

Pb-isotope analysis on galena samples collected from both the Despatch and Tasmania Crown mines revealed Devonian vein-style signatures rather than Oceana syn-sedimentary ratios. No further work recommended (86\_2606).

**Date:** late 1970's-1996

**Company:** CRA Exploration Pty Ltd (ML35M/72 and EL11/93)

**Exploration Philosophy:** Delineate resource below and along strike of the Sn-Cu-Ag Stannite Lode portion of the Oonah Mine.

**Work Completed:** Diamond drilling, mapping, soil geochemistry and rehabilitation

**Results and Conclusions:** (82\_1699 and 96\_3947)

- Stannite Lode 150m strike, 10m width and 300m depth representing resource of 1.3Mt @ 0.57% Sn with minor Ag present. Later revised to resource of 0.2Mt @ 0.4% Cu, 5.3% Pb, 284g/t Ag and 0.5% Sn.
- Best result in DD80OC4 5.9m @ 1.75% Sn, 200g/t Ag and 2.4% Cu from 91.5m.
- Pyritic black shales between Stannite Lode and Bradshaw's open cut essentially unmineralised.
- Mineralisation at Junction workings restricted to narrow quartz-siderite veins.
- SP and EM anomalies from 1964-65 BMR survey generally coincident with black shale outcrops.
- Black shales produced no soil anomalism.

**Date:** 1987-1994

**Company:** RGC Exploration (EL42/87)

**Exploration Philosophy:** Delineate areas for potential Queen Hill/Renison style tin mineralisation. Declining tin prices after 1991 shifted focus to Pb-Zn-Ag (Sn) on the Sylvester (outside current EL) and Parting Lake areas

**Work Completed:** Gravity and one diamond drill hole at Parting Lake grid. Work at Sylvester provided a resource estimate of 6Mt @ 3.3%Pb, 5.5%Zn and 40g/t Ag based on 13 diamond drill holes.

**Results and Conclusions:** PL001 drilled to test for base metal and/or stanniferous replacement mineralisation above a gravity interpreted granitic cupola thought to be associated with Zeehan Western and Zeehan Montana Ag-Pb-Zn mines. PL001 drilled to 673m EOH and only intercepted mineralisation from 42.6 to 50.7m where Gordon limestone sits adjacent to a fault. The limestone was replaced by siderite with disseminated base metals. Best assay result was 2m @ 0.76%Pb, 0.17%Zn and 17ppmAg (93\_3505).

**Date:** 2002-2003

**Company:** Mount Conqueror Minerals NL & Central West Gold NL (EL7/2002)

**Exploration Philosophy:** Revise Stannite Lode resource (feasibility)

**Work Completed:** Data review and field visit.

**Results and Conclusions:** Inferred resource of 440,000t @ 1.25%Sn, 1.48%Cu and 136g/t Ag at 0.5%Sn cut-off grade. Resource not sufficient as stand-alone mining operation. Recommend surrender of licence (03\_4935)

**Date:** 2005-2006

**Company:** Mount Conqueror Minerals NL & Central West Gold NL (EL7/2002)

**Exploration Philosophy:** Revise Stannite Lode resource (feasibility)

**Work Completed:** Data review and field visit.

**Results and Conclusions:** Inferred resource of 440,000t @ 1.25%Sn, 1.48%Cu and 136g/t Ag at 0.5%Sn cut-off grade. Resource not sufficient as stand-alone mining operation. Recommend surrender of licence (03\_4935)

## 2.3 Exploration during current tenement

### 2.3.1 2006 – 2007 (BSM)

During the previous reporting period the majority of work involved the capture of various datasets into FracSIS and MapInfo format by Geoinformatics. This data was then modelled to allow 3-dimensional analysis and target generation.

Following the work produced by Geoinformatics, a review of open file soil geochemistry and airborne magnetic data outside of the Oonah-Montana-Great Western group of historic mine workings has identified an area of broadly coincident soil anomalism within the RGC Exploration Parting Lake soil grid adjacent to several airborne magnetic features. Specifically the tin anomalism was brought to the attention of Bass Metals by Geoinformatics as an 'area of interest' and is in close proximity to the interpreted position of the Tenth Legion Fault.

The coincident soil anomalism is considered to represent hydrothermal fluids related to a proximal granite source (Heemskirk Granite). The magnetic features of interest include;

1. A NW striking magnetic low (~5km strike length) mapped along strike of the Montana – Great Western trend
2. A donut-shaped magnetic high adjacent to the interpreted position of the Tenth Legion Fault
3. Two sub-parallel, linear magnetic high features just outside of the licence which coincide with two sub-parallel faults striking NE off the Tenth Legion Fault

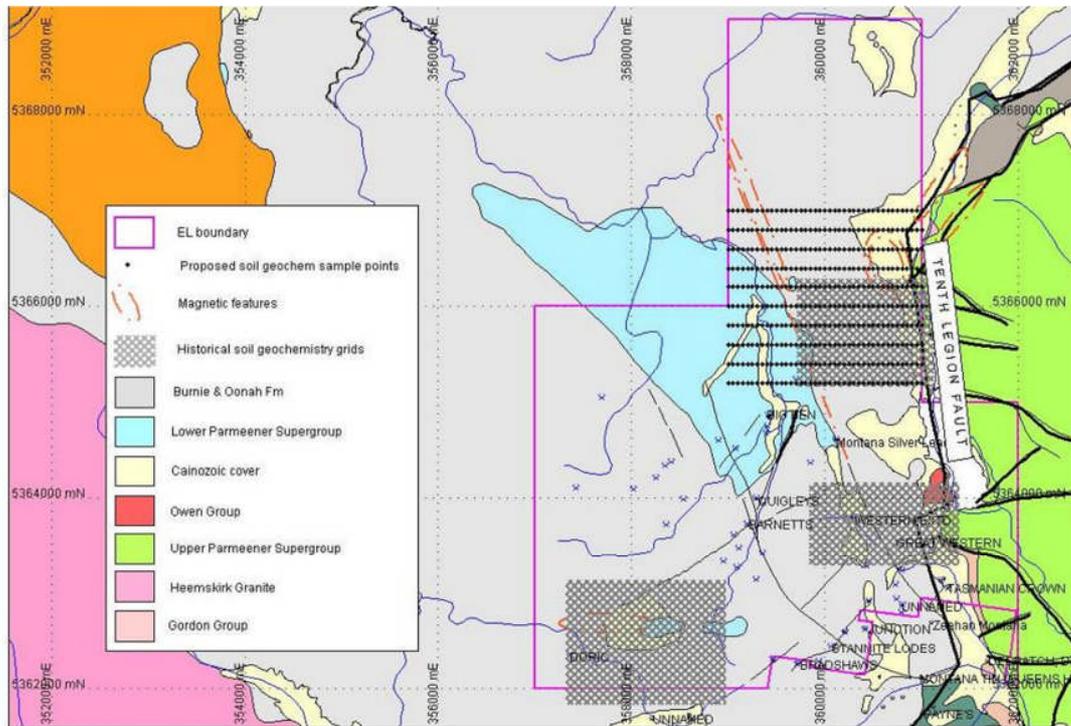
No known mineral occurrences appear to occur in this part of the Oonah licence and hence the bulk of previous exploration activity concentrated to the south in the vicinity of the known mines. For this reason the area is considered under-explored.

### 2.3.2 2007 – 2008 (BSM)

*Soil geochemistry program –*

A proposal for a soil geochemistry program was approved and undertaken. This program was designed to test the Geoinformatics 'area of interest' containing a historic tin in soil anomaly (Figure 3). A review of previous exploration data revealed coincident Sn, W, Mo,

Ba, Br, Cr, Fe and Cu anomalism adjacent to the Tenth Legion Fault position. Also of interest are several magnetic features in the vicinity of the soil anomalism. This program was completed with a total of 365 samples collected and 10km of gridding (Sample numbers 134261 – 134625)



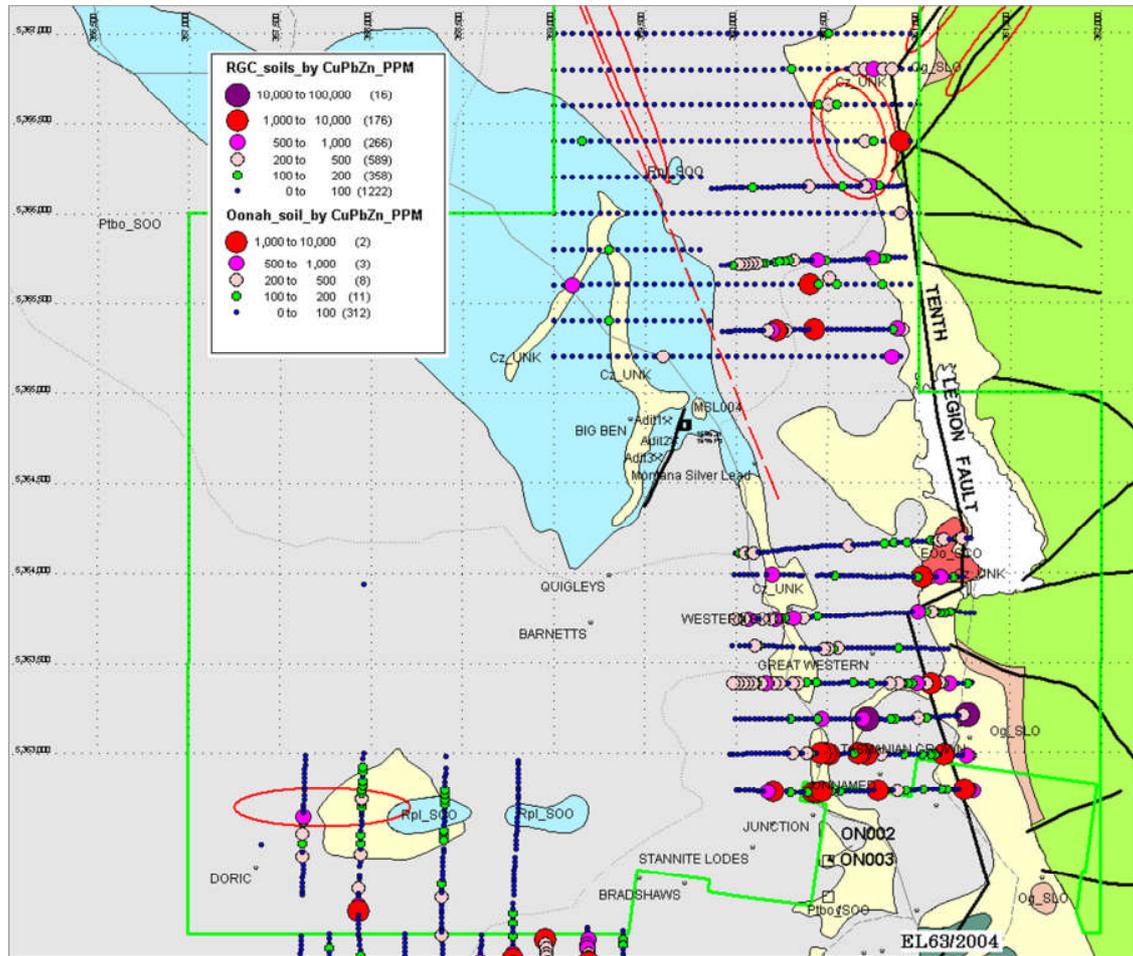
**Figure 3: Soil programme over Tin target**

*Mapping, grab sampling & orientation/access field trips –*

A site mapping and orientation trip was conducted over two days at the Oonah Mine and Stannite Lode. This was undertaken to better understand the surface orientation of the numerous mine workings in order to aid drill planning. A total of 26 rock chip and bulk samples were collected from adit openings, mullock pile and outcrop. The bulk mullock samples collected were found to illustrate the different ore types which include Galena, Stannite, Cassiterite, Carbonate and Bradshaw’s (Pyrite) Lodes. These results will aid in identifying the provenance of individual mullock heaps and orientation of mining infrastructure at surface.

A field reconnaissance trip to the Montana Silver Lead Mine identified the location of the historic box-cut pit and partially infilled inclined shaft accessed via the pit. The ore horizon was observed to contain stockwork and breccias-fill quartz-carbonate veins with associated galena and sphalerite mineralisation in Proterozoic sediments of the Burnie & Oonah Formation. Bulk and rock chip samples from the pit floor and pit walls have returned encouraging results with the best result from sample MSL014 containing 15.3%Pb, 15.4%Zn, 0.4%Cu and 846ppmAg. Another field trip was carried out specifically to determine the access track and locate the adits along the NS fault near Big Ben (Figure 4) area where MSL014 was taken. Three adits running EW across the fault at Montana Silver

Lead workings (East of Big Ben workings) were located and float/rock chip samples were collected from the mullocks and from the adit and were assayed by the Niton.



**Figure 4: Location of the adits east of Big Ben workings and soil anomaly map**

Further detailed field work was carried out to determine the accessibility and vegetation cover of the area around Big Ben workings. The main shaft and one adit of the Big Ben workings were located. Field data on lithological units and shear/fault zone from Montana Silver Lead mine are were collected. Sample no. MSL014 was found to be of vein-type Pb+Zn mineralisation confined to this shear zone with the special disposition of this shear zone being one of the guiding factors for the planning of the proposed RC drill holes.

*Literature review –*

A new team member has been assigned to this area and is currently undertaking a literature review of open file data for Montana Silver Lead, Oonah and Stannite Lodes historical workings and familiarisation of the geological setting.

*RC drill program preparation –*

Ten RC drill holes are in the planning stage to target the down dip and along the strike extensions of the mineralisation. The programme consists of 10 RC drill holes and will

utilise the existing track of Montana Silver Lead mine for approach to the drilling area. To access the drill site, tracks will be constructed and clearing will be made for the drilling pads. These holes will target NE-SW trending and SE dipping shear zone from the hanging wall. A program has been submitted to the MRT awaiting approval.

### *2.3.3 2008 – 2009 (BSM)*

#### **Costeaning**

Four costeans were planned to target outcropping mineralisation as well as testing for the five parallel lodes reported in historical documents around the historic Montana Silver Lead mine. These exploratory costeans were dug in the northern portion of our Oonah license (approximately 4 km NW of Zeehan).

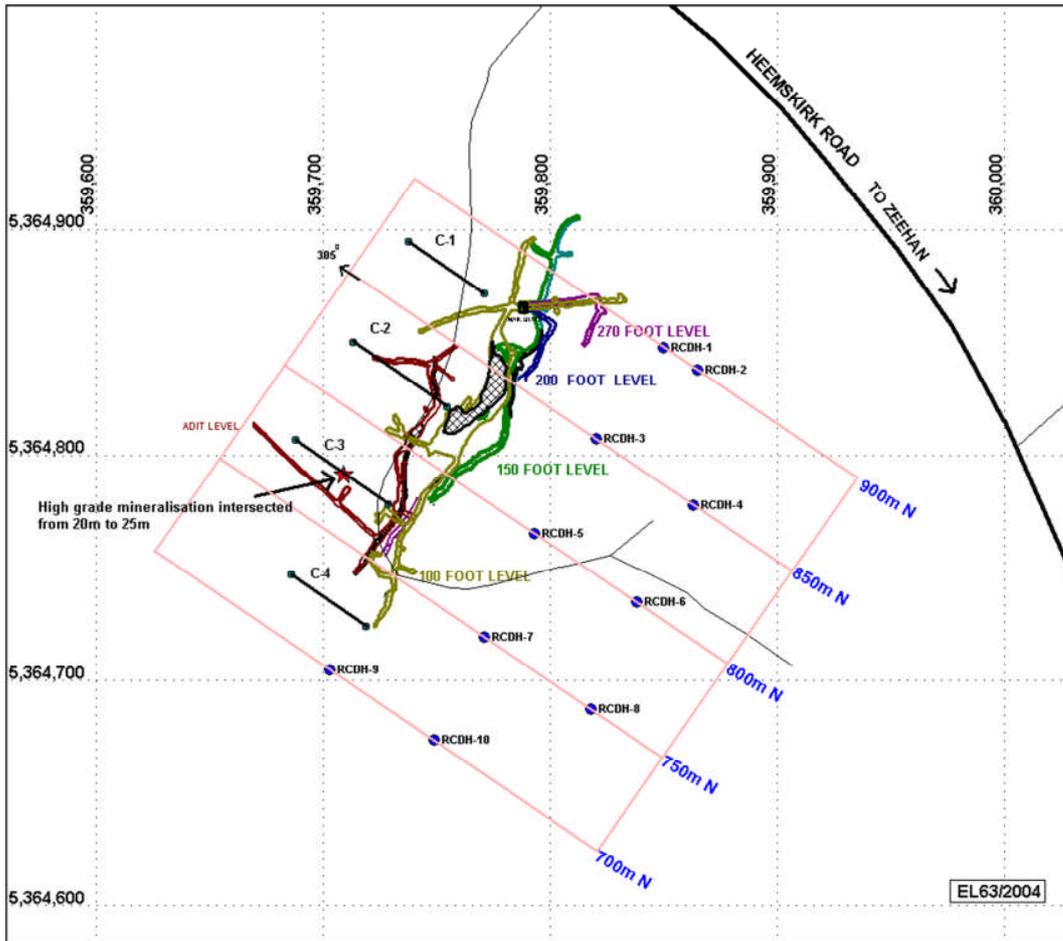
Each costean was 1m wide and 1.5m deep. Two of the costeans are 40 m in length and the remaining two are 50 m in length. These costeans were mapped in detail.

Costean number 3 (Figure 5) intersected approximately 4.5 m of high grade sulphide mineralisation (galena and sphalerite) in the highly-sheared black shale. Another approximately 1m wide zone of mineralisation was observed on the northern tip of the same costean in white quartzite within the shear zone.

Channel sampling will be carried out on 1m interval where the visible mineralisation was intersected and where alteration zone was observed. The rest of the costeans will be sampled at greater intervals and also grab samples will be collected from apparently barren areas.

Costeans 1 and 2 intersected infill material of the old Montana Silver Lead workings.

The topsoil/vegetation was stockpiled separately from the rock such that when we backfill the costeans during spring/summer we can rehabilitate with the topsoil.



**Figure 5: Costeans sampled**

Results were received for the costean sampling with the best intercepts being 7m at 4.7% Pb, 2.8% Zn and 650 g/t Ag. The only other significant intersection was 3m at 1.9% Pb 3.8% Zn and 35 g/t Ag

### **Planning and execution of an RC drilling program**

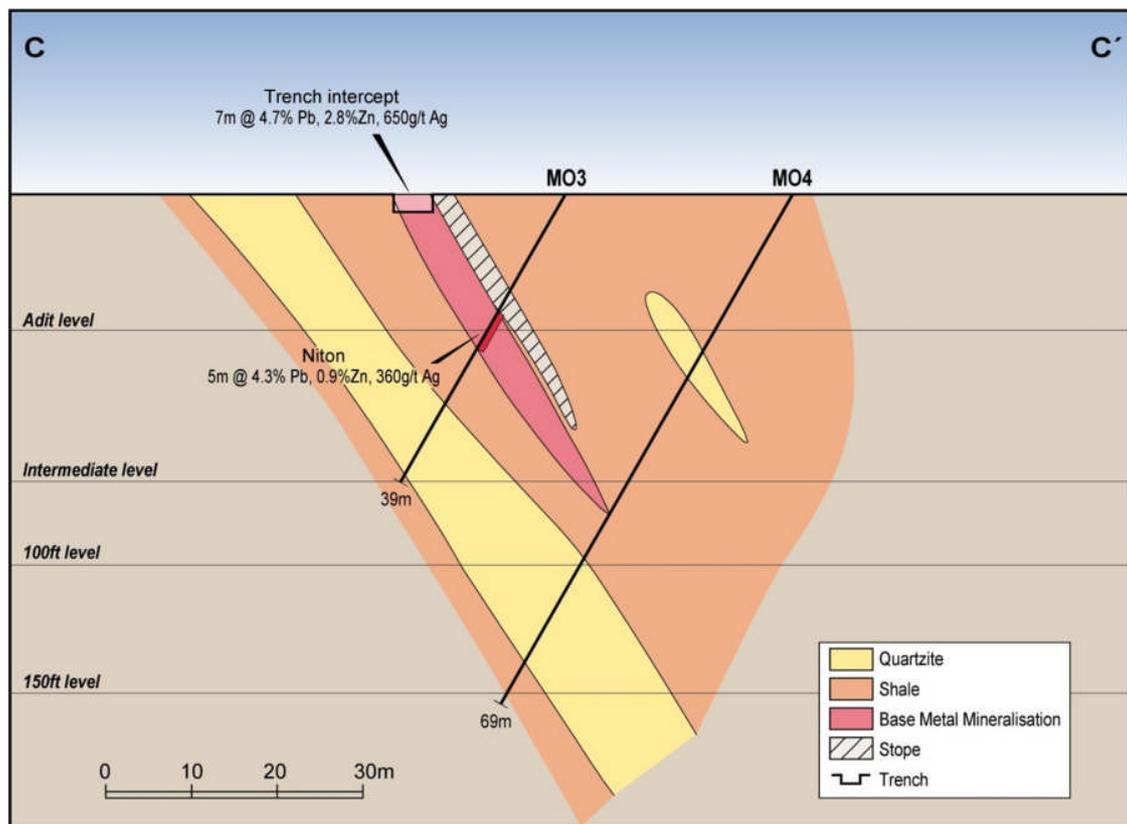
The mineralisation at Montana occurs within a dilational jog within a reverse fault system. The jog has dimensions of 100m (along strike) x 10m wide x 70m down dip.

10 diamond holes totalling 531m was drilled. The RC drilling was an effective method of drilling shallow holes relatively cheaply. The first hole MO5, had difficulty drilling through the stope. It was decided to end this hole early due to significant risk of the rods getting bogged. It was later found that a hole in the inner tube was the major factor contributing to this difficulty. Drilling went without a hitch after this first hole. Sample return was good, however on most of the holes once a stope was intersected water became a problem and the resulting meters were wet. All but two of the holes intersected a stope or drive. Generally the stope was 5-10m from the predicted point of intersection resulting in most holes being relatively short. MO3 and MO1 intersected the most significant intersections. A Niton XRF analysis was done on these intersections with MO3 having 5 meters at 4.3% Pb and 0.9%

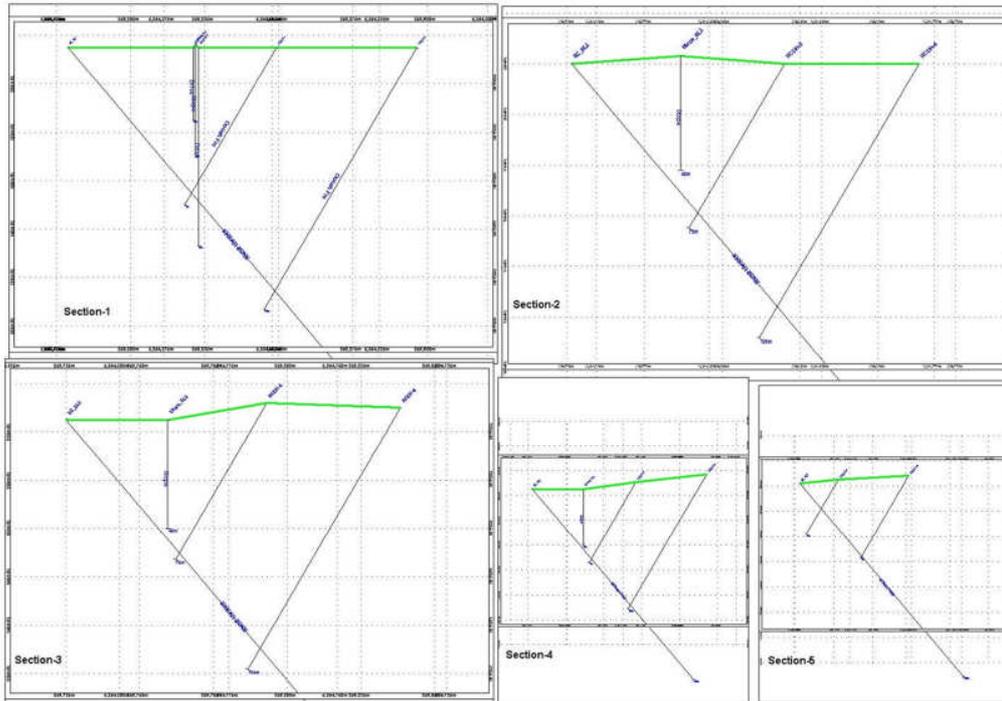
Zn, MO1 6m at 1.6% Pb and 0.44% Zn. In both holes the mineralisation was in close proximity to the hanging wall of the stope. The method of using the XRF on RC samples was to scan through the polyweave bag so there may be minor errors in these results.

These 10 holes demonstrated that close to the surface (0 – 70m) very little mineralisation remains within the Montana workings. What was noticed was that the majority of the mining was contained around a highly siliceous zone of both shale / quartzite. Several meters of sericitic (black) / siliceous alteration surrounds this main siliceous zone. The structure controlling this alteration and subsequent mineralisation was a moderately dipping shear zone that can be mapped at surface. After several holes were drilled it was clear that the majority of the base metal mineralisation had been removed during historic mining. Focus was then shifted to targeting the high grade intersection encountered in trench 3 and the intersections in holes MO3 and MO1. It was hoped that 30,000 tonnes of ore would remain however a further hole along strike from MO1 indicated that the mineralisation pinches out; making it very unlikely that such a deposit exists.

Archival information on the Montana mine suggests that there were several parallel lodes and only one of these was mined. The RC drilling found no evidence of these additional lodes which suggests that they are either at depth or located in a more regional sense.



**Figure 6: Long section showing intercepted mineralisation and planned drilling**



**Figure 7: Sections showing shear zone, stope and pierce points**

Geochemical results were as expected (Table 1) with a best result of 3.0m @ 2.1 %Zn, 9.0 % Pb and 252 ppm Ag. No further work is planned here except for rehabilitation of the RC drilling pads.

From (m)	To (m)	Drilled Interval (m)	Zn (%)	Pb (%)	Cu (%)	Ag (g/t)	Au (g/t)
<b>MO3 (at a 1% (Pb+Zn) cutoff)</b>							
15.0	34.0	19.0	0.5	1.8	0.0	41.7	0.0
<b>MO7 (at a 1% (Pb+Zn) cutoff )</b>							
33.0	38.0	5.0	0.2	2.0	0.0	57.0	0.0
56.0	64.0	8.0	0.3	1.6	0.0	38.8	0.0
<b>MO1 (at a 1% (Pb+Zn) cutoff )</b>							
21.0	31.0	10.0	0.8	3.7	0.0	98.1	0.0
<b><i>Incl. (at a 5% (Pb+Zn) cutoff)</i></b>							
21	24	3.0	2.1	9.3	0.0	252.3	0.0
<b>MO5 (at a 1% (Pb+Zn) cutoff )</b>							
34.0	42.0	8.0	1.7	1.3	0.0	38.0	0.0

**Table 1: Oonah – Montana Silver Lead – RC drilling results**

## **Mapping**

Extra mapping of the Montana workings was carried out to get a better understanding of the orientation of the mineralised jog. This included mapping all outcrop, current trenching and pre-existing trenches. An interpretive plan and five NW – SE cross-sections were drawn at 1:500 scale. Incorporated into these interpretations were the adits, drives and stopes from historic workings.

An updated interpretive map of the workings was compiled. (Figure 8) It indicated a lens of low to medium grade Pb, Zn, and Ag. This lens outcrops or is at subsurface and has a 60m in strike length, is 4m wide and 40m deep. What remains of this lens is sceptical as it is flanking the hanging wall of a historic stope.

During the period some research was done on the Oonah stannite- chalcopyrite-cassiterite lodes which will be the target for the next 12 months exploration.

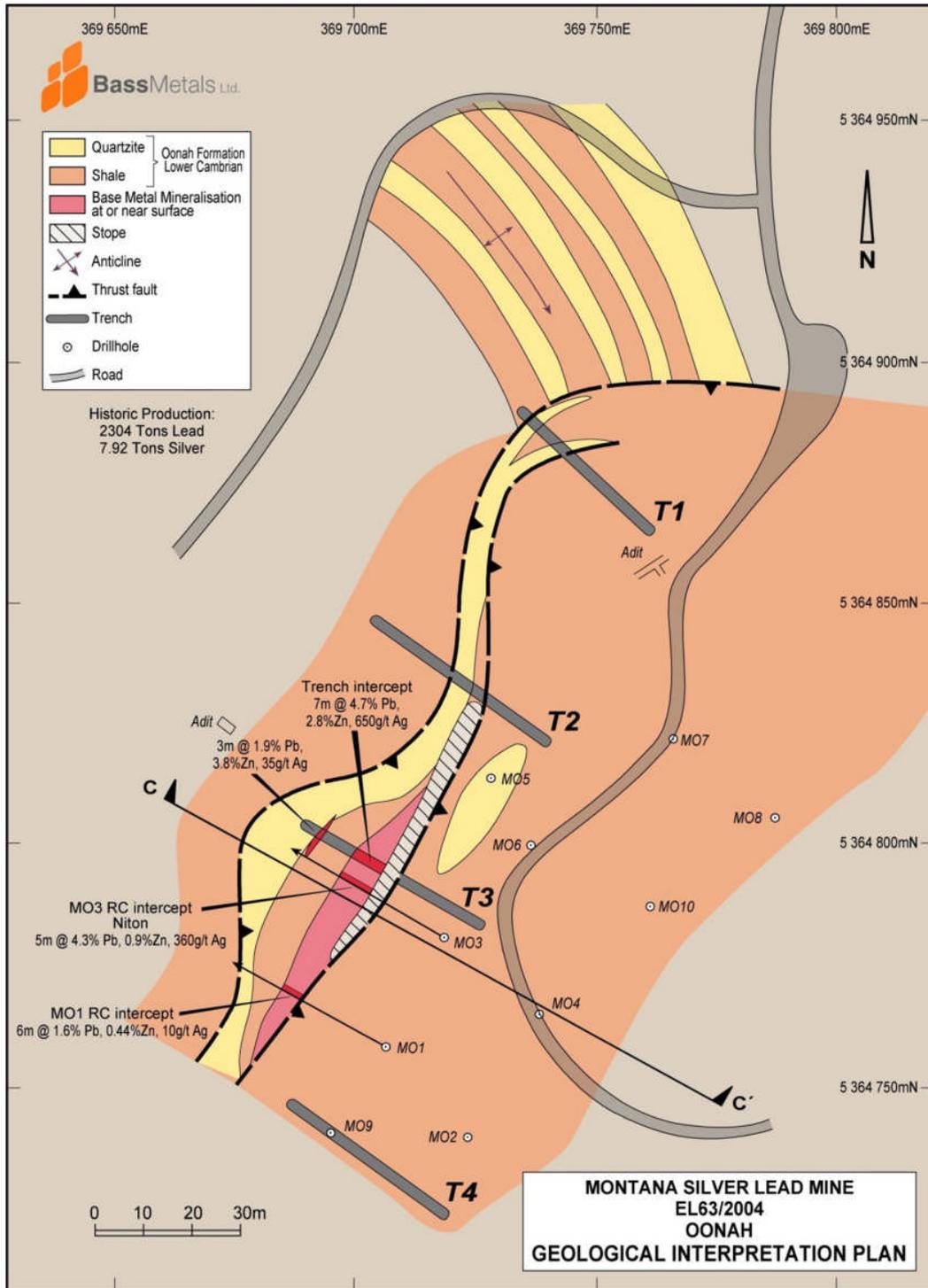
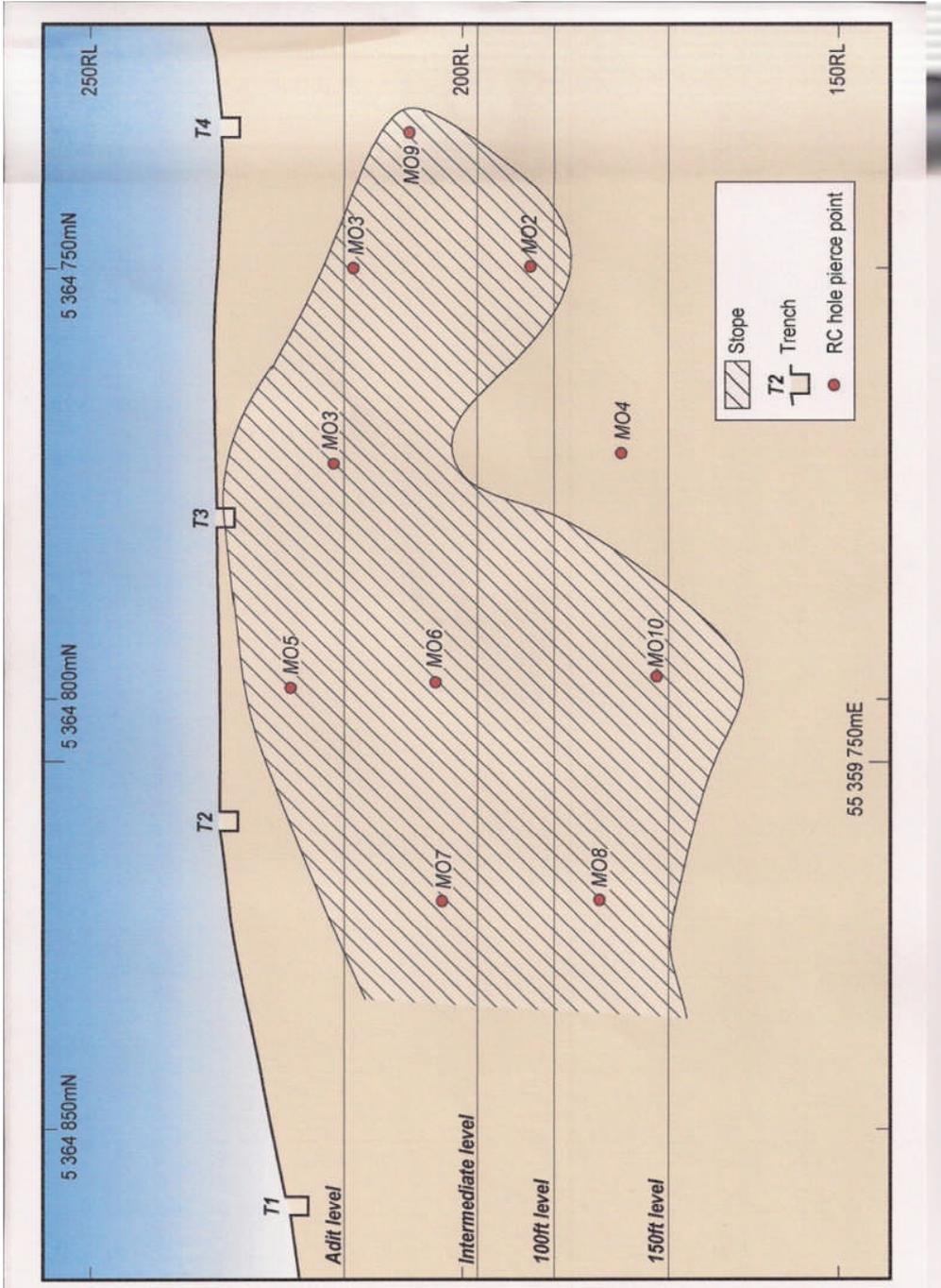


Figure 8: Interpretive plan of geology and drill hole locations



**Figure 9: Long section displaying trenches and drill hole intersections**

### 2.3.3 2009 – 2010 (BSM)

Activities were confined to rehabilitation of drill sites. A review of the exploration potential of the Oonah mine and EL63/2004 was commissioned and carried out by Wally Herrmann.

### **3.0 WORK COMPLETED DURING THE REPORTING PERIOD**

#### **3.1 Review of previous exploration**

A review of all exploration and geology reports relating to the area now covered by EL63/2004 was conducted by Wally Herrmann in mid-2009. The report is attached as Appendix 1. This work was not previously reported to MRT. TNT Mines has used this document to plan its work program on EL63/2004. Herrmann highlighted two exploration targets: Anomaly 370 and the Oonah Mine.

#### **3.2 Anomaly 370**

A ground inspection of the anomaly was carried out and it lies within a typical low-lying scrubby swamp. In preparation for a program of ground geophysics to be conducted in late 2011, a quote for a close-spaced gravity survey was obtained from Atlas Geophysics. This survey, in combination with a ground magnetic survey would be carried out prior to drill planning.

#### **3.3 Oonah Mine**

Work on the Oonah mine consisted of creating a digital database of the historical drill data associated with the Oonah mine and digitising surface and underground workings. The digital data was used to create a 3-D model of the Oonah mine to help in targeting further drilling. There is some potential for near-surface mineralisation that may be amenable to open cut mining, so some shallow drill holes were planned to test this idea. The drill sites were close to the surface workings on the northern end of the mine area. Approval for a small diamond drill program at the Oonah Mine was given by MRT after a field inspection by MRT personnel.

Considerable difficulty was encountered in obtaining a drill rig for this work. Originally, it was proposed to use an RC rig to drill some large diameter holes but the availability of RC rigs in Tasmania has become very limited. Eventually, a diamond rig was procured and drilling commenced in late July. The deposit has a strong structural component so core orientation data, using Reflex ACE gear, will be obtained during the program.

## **4.0 DISCUSSION OF RESULTS**

### **4.1 Anomaly 370**

Anomaly 370 is an airborne aeromagnetic anomaly which was classified as high priority by RGC Exploration but was never drilled. The magnetic signature was considered to have a potential Renison-style source. Anomaly 370 is discussed in detail in Herrmann's report attached as Appendix 1.

A ground inspection of the anomaly area revealed that it occupied a low-lying swampy area near Parting Lake Creek with typical thick scrub or sedge cover. Ground-based surveys will probably require some track-cutting for access. Any drilling will only be able to be conducted in the summer months.

### **4.2 Oonah Mine - drilling**

Herrmann estimated the remaining resource at the Oonah Mine to be about 180,000 tonnes at a grade of 1.2% Sn, 1.6% Cu and g/t Ag. Herrmann's estimate is conservative by his own admission and contrasts with an estimate reported in 2003 by McClatchie on behalf of Mount Conqueror Minerals NL and Central West Gold NL. McClatchie estimated 440,000 tonnes at 1.25% Sn, 1.48% Cu and 136 g/t Ag. At early July 2011 commodity prices, the in-ground metal value at Oonah was approximately:

- Herrmann - \$116M
- McClatchie - \$280M

Clearly, there is some work to be done to properly define the remaining resource and the potential to extend it. TNT's drill program commenced in August and is aimed at looking at the potential for mineralisation in the upper levels and to recover structural data and core for assaying, mineralogy and metallurgy. A screenshot of the 3-D model is shown in Figure 10 with the Stannite and galena lodes highlighted. Planned and historical drilling is shown in Figure 11 and a section showing historical drilling and 10m composite tin assays as well as one of the planned TNT holes on section 5362500mN is shown in Figure 12.

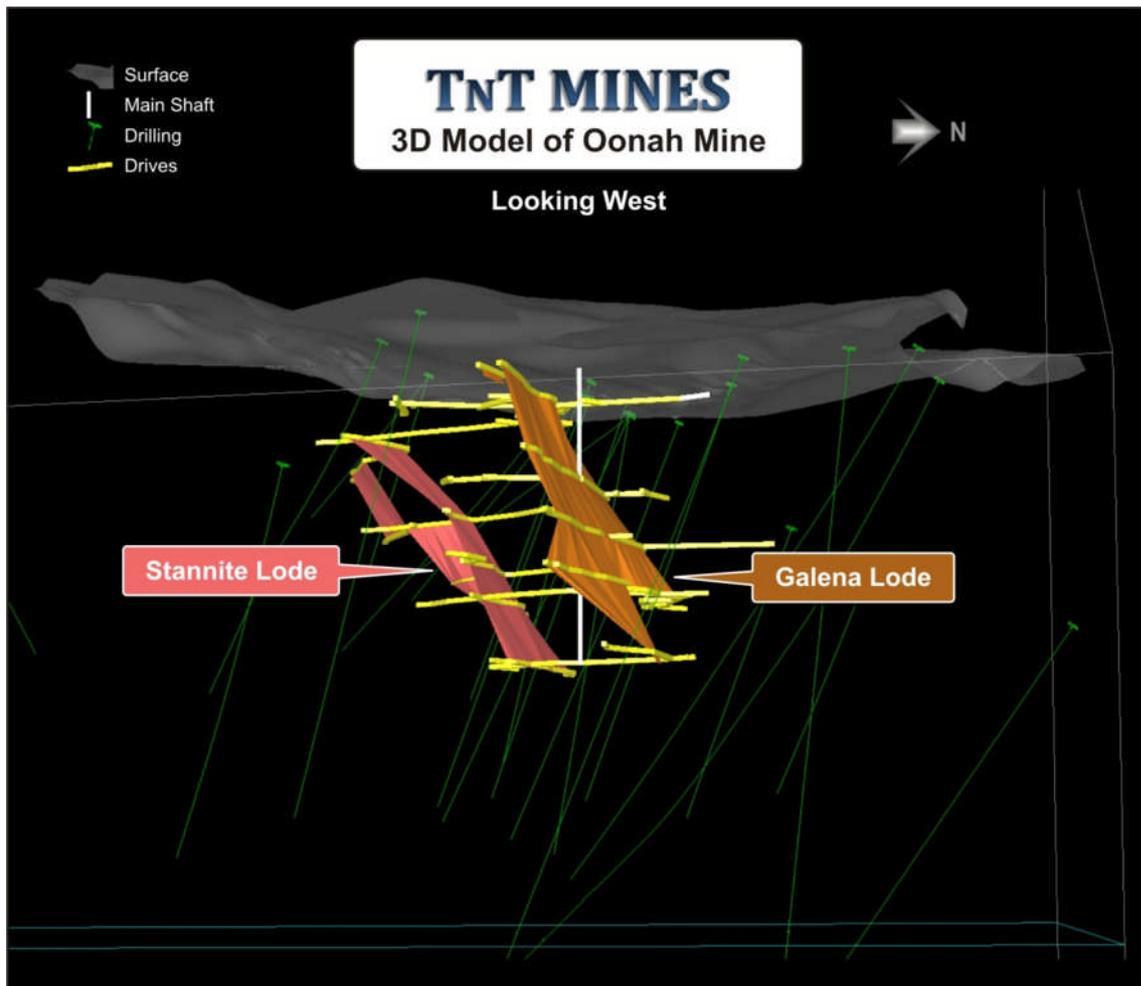


FIGURE 10: 3-D model of Oonah mine

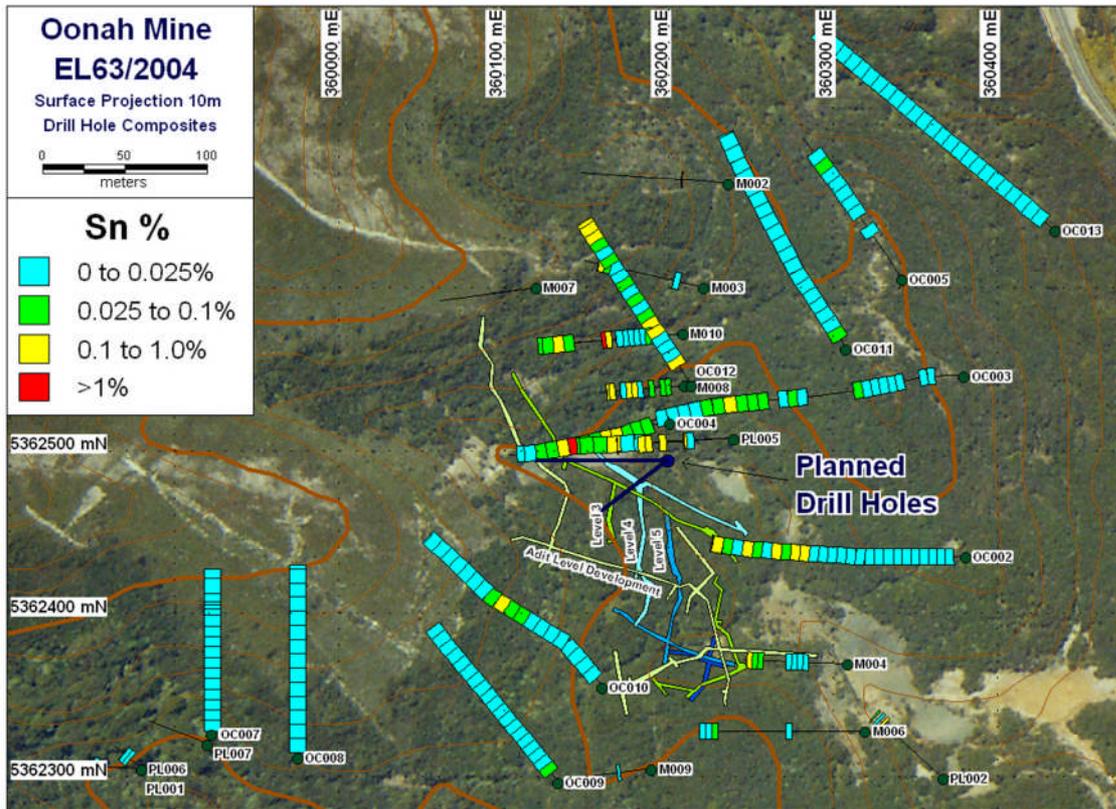


FIGURE 11: Planned and historical drilling – Oonah Mine

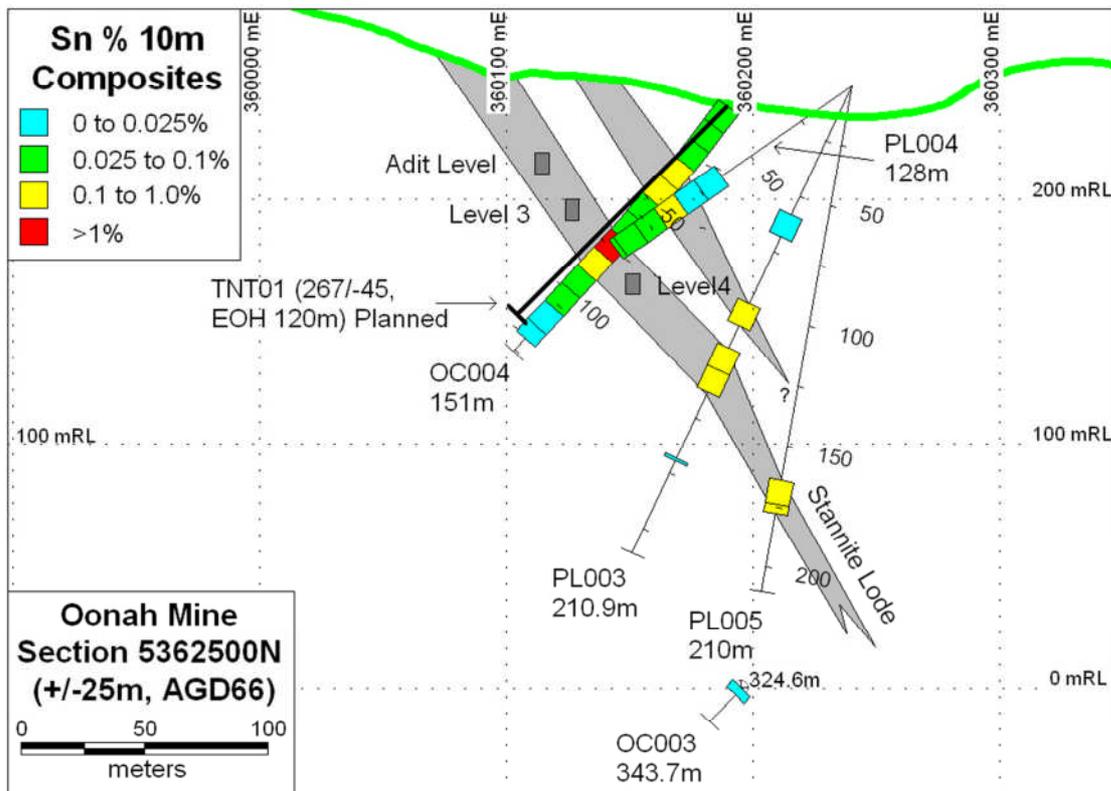


FIGURE 12: Section 5362500mN showing historical and planned drilling

## 5.0 CONCLUSIONS AND FUTURE WORK

The primary reason TNT Mines entered into a joint venture with Geoinformatics was to assess Anomaly 370. Anomaly 370 is a pure exploration play. However, work done on the Oonah Mine to date has shown that it has the potential to become a development project in the near term, however quite a bit more work is needed to understand the deposit. Historically, the Oonah was known as a silver mine however it is unclear as to whether the silver mined occurred only as argentiferous galena or whether there was silver associated with the stannite. The historical drilling indicates that silver and tin are spatially associated. At current silver prices the higher estimated resource at the Oonah Mine makes it a potentially attractive development proposition. There is probably insufficient drilling at Oonah at present to allow a JORC-compliant resource estimate but it may not require too much more to enable that to happen. The importance of having a JORC-compliant resource is that it significantly increases the ability of mineral explorers to raise money to fund development.

TNT Mines will follow through on its commitment to work on Anomaly 370 but will seek to fund further drilling at Oonah as well.

### *Anomaly 370*

Work proposed is for one or more geophysical surveys to better define Anomaly 370 for drill targeting. A ground magnetic survey and/or close-spaced gravity survey will be carried out. The results of the geophysics will be used to target a drill hole to a maximum of 300m. If the results of the geophysics are not positive then the drill budget will be directed at the Oonah Mine.

### *Oonah Mine*

There are three targets at Oonah that require further work. The first requires shallow drilling to see if there is a resource that could be targeted by open pit mining, comprised of unmined ore panels and lower grade mineralisation outside the main lodes. The second is to extend the mineralisation at depth and would require holes in the order of 250+ metres depth. This drilling could utilise RC pre-collars to reduce the costs. The third program would be to infill the current drilling to a coverage that would allow a JORC-compliant resource to be calculated. Following analysis of the current drill program and depending on the availability of funds, TNT Mines will conduct more drilling at Oonah.

## **6.0 ENVIRONMENT**

A diversion drain created to divert acid mine drainage was modified to allow access to the drill site. The drill site is in an area of disturbed waste rock from historical mining activities. The access track and drill site will be rehabilitated at the completion of drilling activities. The estimated cost of rehabilitation is approximately \$1500.

## **7.0 REFERENCES**

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**APPENDIX 1**  
**Exploration potential of Oonah mine and EL63/2004, by Wally Herrmann**