



STELLAR RESOURCES LIMITED
Columbus Metals Ltd

RL 5/1997 ZEEHAN
ANNUAL REPORT FOR THE PERIOD
20 MAY 2008 – 20 MAY 2009

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ABSTRACT

This Annual Report for RL 5/1997, Zeehan, covers the period from 20 May 2008 to 20 May 2009.

The Zeehan Retention Licence encompasses an area of 6 km² on the western outskirts of Zeehan Township, in NW Tasmania. It covers the historic Queen Hill, Severn and Montana deposits, which form the Zeehan Tin Project. The deposits are located under or adjacent to Queen Hill immediately northwest of Zeehan.

Exploration from the 1960's through until the mid 1980's identified significant tin mineralisation associated with, and under, old lead/silver deposits mined in the late 1800's and early 1900's. In 1983 the resource estimate for the three deposits, based on 23,000 metres of drilling, was 3 million tonnes of ore (>0.1%Sn cut off) grading 0.7%Sn and 10.9 g/t Ag. Due to depressed tin prices and corporate events no significant work has taken place on the project since 1990.

Stellar Resources Ltd, through its subsidiary Columbus Metals Ltd, purchased a 60% interest in the "Gippsland Joint Venture" from Western Metals Ltd early in 2008. The joint venture's key asset is RL 5/1995, the Zeehan Tin Project. Gippsland Limited continues to hold 40% of the project. Under the terms of the JV Stellar is Project Manager and Gippsland Ltd's interest is free carried until completion of a feasibility study.

Stellar have reviewed, and continue to review, the historic data from Western Metals, and other sources including unpublished research data from J. Anderson's uncompleted PhD study. In order to raise \$15 million for resource development and exploration drilling Stellar prepared an IPO document for the public listing of Columbus Metals Ltd. This included the preparation of a 3D computer model of the mineralisation, a detailed drilling program and budget and an independent geologist report.

Due to the changed economic conditions the listing of Columbus has been temporarily suspended. Stellar is currently reviewing production options for the Zeehan Tin Project and has commenced a prefeasibility study of mining shallow, high grade portions of the near surface portions of the deposits.

Total expenditure on RL 5/1997 during 2008 by Stellar totalled \$1,539,652, of which \$1,244,521 was acquisition cost.

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1. INTRODUCTION

1.1. EXPLORATION RATIONALE

RL 5/1997 covers the Zeehan Tin Project, which comprises the structurally controlled cassiterite-sulphide Queen Hill and Severn lodes and stockworks, and the Montana massive sulphide carbonate replacement (Renison style) deposit. All the known tin deposits remain open at depth and there are other exploration targets such as Golf Course which remain to be tested.

It is inferred that mineralisation continues below the base of the existing drilling, particularly at Severn and Montana. There is also room for a depth extension to the north at Queen Hill. It has been demonstrated that cassiterite grain size increases with depth, as does pyrrhotite content, so both grade and metallurgical amenability are expected to improve with depth.

All of the prospects are believed to be located above a deep-seated Devonian granite stock and it is likely that beneath the limit of existing drilling, which reached 400m depth, there is a considerable amount of suitable host rocks above, and/or adjacent to the granite.

1.2. GEOLOGICAL SETTING

The oldest rocks at RL 5/1997 are the Queen Hill Quartzites, a sequence of sediments and volcanics equivalent to the Neoproterozoic Oonah Formation, the oldest stratigraphy in the Zeehan area. These are predominantly quartzites with some interbedded arenaceous siltstones and shales. The upper part of the Oonah Formation is predominantly pelite and/or carbonate, including some evaporites, mafic volcanic rocks and conglomerate.

Overlying the Quartzites is a sequence of Precambrian dolomites, carbonaceous pyritic slates and minor volcanics equivalent to the Success Creek Group. This group comprises reddish brown siltstones with intercalated limestone's and dolomite and is locally referred to as the Poverty Point Beds. These beds correlate to that part of the Success Creek Group, which hosts the Renison replacement tin deposits. The Success Group rocks are overlain by the Cambrian Crimson Creek Formation, comprising basal pyroclastic volcanics overlain by a sequence of greywackes and argillites with minor tuffaceous slates and grits.

Ordovician Gordon Limestone crops out north east of Queen Hill while Siluro-Devonian Eldon Group sandstones and siltstones underlie most of the Zeehan townsite. The Devonian Heemskirk Granite outcrops 7 kilometres west of Zeehan, forming Mt Heemskirk, but it is believed that a ridge of the granite extends beneath Queen Hill at depth.

At Zeehan the Oonah Formation and the Success Creek Group both host vein and replacement tin deposits. Tin mineralisation within the dolomitic Poverty Point Beds at Montana is of cassiterite-sulphide replacement style. Mineralisation at Severn may be similar, being due to smeared-out Poverty Point carbonates along the Severn Fault.

1.2.1. Structure

The structure of the rocks at Queen Hill is complex with intense folding and faulting at all scales. The deformation is thought to be due to the Tabberabberan Orogeny. Broadly the Zeehan tin deposits are associated with the wide hinge zone of the northwest trending Heemskirk Anticlinorium, which is thought to have been the focus of the intrusion of the Heemskirk Granite at depth in this area.

Two major Devonian deformational events are recognised in the project area. The initial D₁ event is expressed as moderately doubly plunging NE-trending tight to isoclinal folds with weak fabric development. The D₂ event produced upright, generally SE-plunging folds with moderate to strong fabric development. A third structural event D_{2L} is recognised and overall these events produced six sets of faults in the sequence. The southern end of a major D₂ fracture zone between the D₂ Zeehan Syncline and the Heemskirk Anticlinorium appears to be the locus for a late stage intrusive phase of the Heemskirk Granite. Hydrothermal fluids emanating from or around this intrusive have focused along faults, shears and zones of fracturing. Where fluids reached reactive stratigraphy (i.e. sulphide, carbonate or tuffaceous horizons) cassiterite-bearing tin sulphide bodies have developed. Intersection of the more ductile S₂ and S₃ sets provides the best sites for mineralisation as evidenced by the Severn and Queen Hill deposits.

1.2.2. Mineralisation

Tin mineralisation at the Zeehan Project occurs as cassiterite and minor stannite in the three main deposits; Severn, Queen Hill and Montana, and at a minor outcropping occurrence at Golf Course. The deposits are Renison Bell/Cleveland-type tin deposits in which granite-derived hydrothermal fluids carrying tin, sulphur and other base metals intruded along structural conduits and reacted with suitable lithologies such as dolomite and carbonate rich tuff horizons to precipitate generally sulphide-rich lodes containing cassiterite. Typical associated gangue minerals include pyrite, pyrrhotite, quartz, tourmaline, carbonates and fluorides. The granite source of the hydrothermal fluids has not been intersected in drill holes in the immediate project area, however based on geophysical evidence and the presence of rare felsic porphyry intrusives a granite stock is interpreted to lie some 900m below the present surface.

The predominance of pyrite over pyrrhotite is a significant point of difference between the Zeehan and Renison Bell deposits, however, at depth pyrrhotite becomes more abundant at Zeehan. In addition to the main high temperature tin-mineralizing event, a later stage, cooler fluid event appears to have resulted in the formation of Pb-Zn-Ag sulphide lodes (Taylor's and Clarke's Lodes), which are not significantly tin-bearing. These lodes were the focus of early 20th century silver-lead mining efforts.

In all the Zeehan deposits cassiterite occurs as fine grained (20 - 70 microns) disseminations in stockworks and masses of fine-grained gangue comprising siderite, chlorite, silica, pyrite and pyrrhotite. At Queen Hill there is also variable accessory stannite and base metal sulphides. Pyrite now forms about 30% of the sulphides but microscopy indicates that an original major pyrrhotite content has been replaced by pyrite and marcasite. This has resulted in only the pyrrhotitic core of the Severn deposit remaining magnetic.

The **Queen Hill deposit** comprises two sub-parallel high-grade lenses within a single larger lower grade envelope. These lenses are an upper lens, "the hanging wall lens"; relatively narrow (3 to 8 metres), essentially massive sulphide (pyrite dominant), replacement-type mineralisation, dipping at 50° to 80°, and "the lower lens"; a wide composite zone containing narrow high-grade mineralisation. Significant tin mineralisation occurs in volcanics, clastic sediments and evaporites. The hanging wall lens is adjacent to a fault zone, which is coincident with Clarke's Ag-Pb lode. The mineralisation may not be closed off at depth (Figure 6). The Queen Hill deposit crops out weakly on the north-western side of Queen Hill and is hosted by the Poverty Point Beds.

The **Severn deposit** occurs as several parallel pseudoconformable lenses of bedding slip sulphide replacements and stockworks within a 130m wide drag zone in the hanging wall of the Severn Fault. The fault zone has an en echelon shape resulting from the intersection of northwest and northeast trending fracture sets. The Poverty Point Beds appear to be displaced 500m across the Severn Fault zone by substantial strike slip movement. The resultant geometry of the tin mineralisation at Severn is tabular and is located close to, or at, the apparent angular unconformity between the Oonah beds and the Success Creek and Crimson Creek sequence. At 0.5% Sn cut-off the upper part of Severn deposit is narrow and has a short strike length, but is high grade. Both thickness and strike length increase with depth and the deposit is open at depth (Figure 7).

Montana is a high grade, stratiform carbonate replacement tin deposit comprising cassiterite and massive sulphides hosted by the Poverty Point Bed equivalents, the Montana Beds, of the Success Creek Group. Montana is narrow near surface (2.5 to 5.0 metres) and has a strike length of approximately 80m. The upper levels were accessed historically to a depth of approximately 150m. The deepest intersection, in drill hole M76, 300m below surface, is 1.6% Sn over an estimated true width of 6m. The deposit is open at depth (Figure 7).

1.3. LICENCE

Tenement number: RL 5/1997

Tenement name: Zeehan

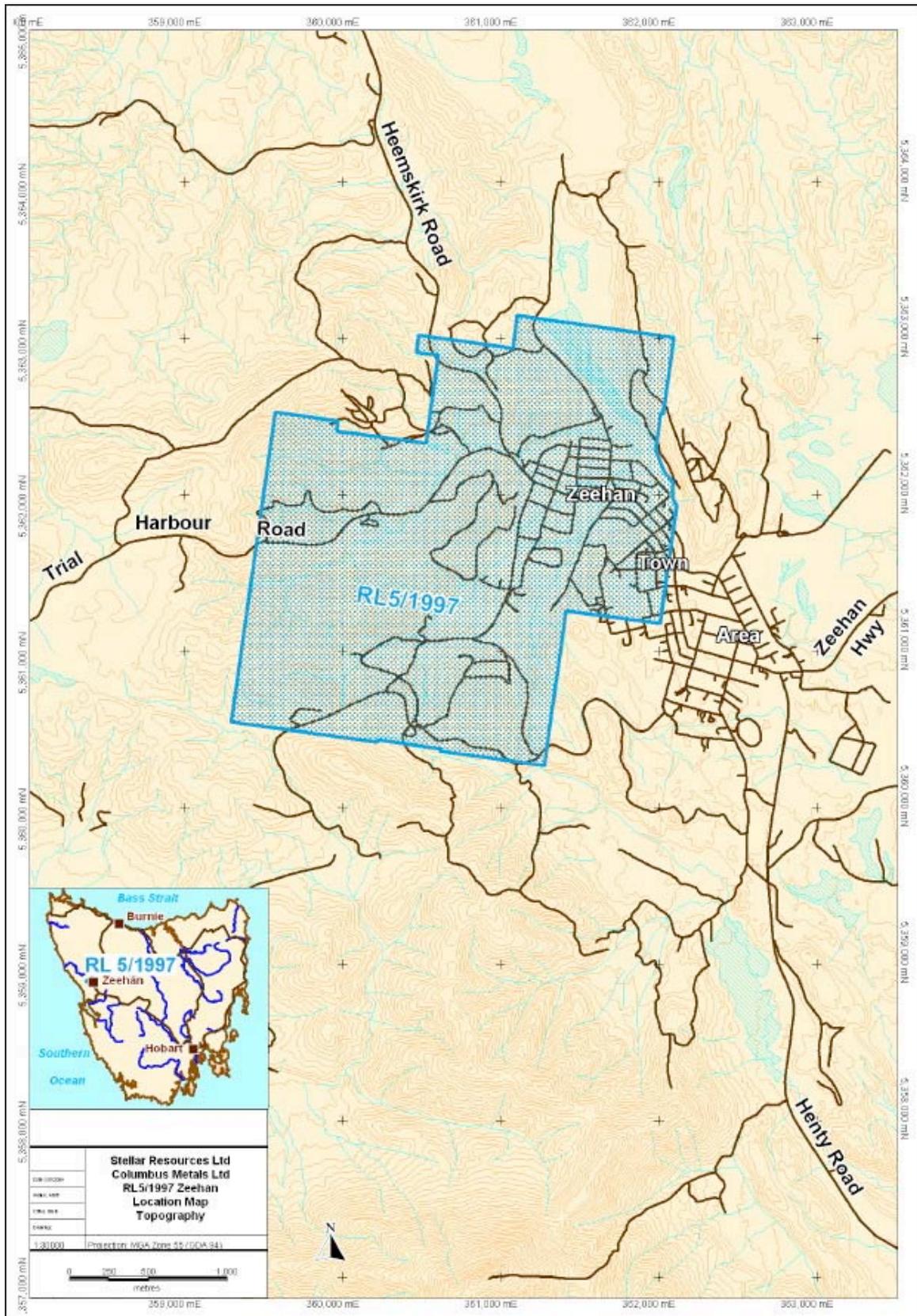
Tenement location: Located over the western side, and immediately west, of Zeehan Township, with main road access from the Heemskirk Road, the Zeehan Highway and the Trial Harbour Road, which passes generally through the centre of the licence (Figure 1). Numerous town roads and tracks traverse the licence area. The licence covers an area of 6km², which extends west from the council depot on the Zeehan Rivulet for 3.5 kilometres, past the golf course, and north for 3 kilometres from Manganese Hill to Montana Hill. The RL area is a mix of Crown Land and freehold land, including a large portion of the Zeehan Township.

The area comprises both cleared urban or farm land and regrowth forest after logging or burning. Refer to Figure 4.

Reporting period: 20 May 2008 to 20 May 2009.

Tenement holder: Columbus Metals Ltd., a wholly owned subsidiary of Stellar Resources Ltd., (60%) and Gippsland Limited (40%).

1.4. LOCATION OF LICENCE



• Figure 1. RL 5/1997, Zeelian Project: Location Map

1.5. LAND TENURE

SCHEDULE:

LAND DISTRICT OF MONTAGU
VICINITY OF ZEEHAN
MUNICIPALITY OF WEST COAST
RETENTION LICENCE 9705 6 SKM

COLUMBUS METALS LTD & GIPPSLAND RESOURCES AUST NL

Commencing at the southwest corner at grid coordinates 359,180 metres E 5,360,366 metres N, thence northerly to 359,458 metres E 5,362,347 metres N, easterly to 359,857 metres E 5,362,291 metres N, southerly to 359,848 metres E 5,362,227 metres N, again easterly to 360,412 metres E 5,362,148 metres N, again northerly to 360,491 metres E 5,362,712 metres N, westerly to 360,352 metres E 5,362,731 metres N, again northerly to 360,368 metres E 5,362,840 metres N, again easterly to 360,962 metres E 5,362,757 metres N, again northerly to 360,991 metres E 5,362,965 metres N, again easterly to 361,981 metres E 5,362,825 metres N, again southerly to 361,913 metres E 5,362,335 metres N, again westerly to 361,898 metres E 5,362,337 metres N, again southerly to the Zeehan Rivulet at approximate grid coordinates 361,866 metres E 5,362,113 metres N, thence by that Rivulet in a general southeasterly direction to approximate grid coordinates 362,000 metres E 5,361,738 metres N, again southerly to 361,894 metres E 5,360,995 metres N, again westerly to 361,300 metres E 5,361,079 metres N, again southerly to 361,160 metres E 5,360,088 metres N, again westerly to 360,502 metres E 5,360,181 metres N, again northerly to 360,504 metres E 5,360,196 metres N, again westerly to 360,108 metres E 5,360,251 metres N, again southerly to 360,106 metres E 5,360,237 metres N, thence again westerly to the point of commencement.

The area excludes 4 ha of Crown Reserves. Refer to Figure 2.

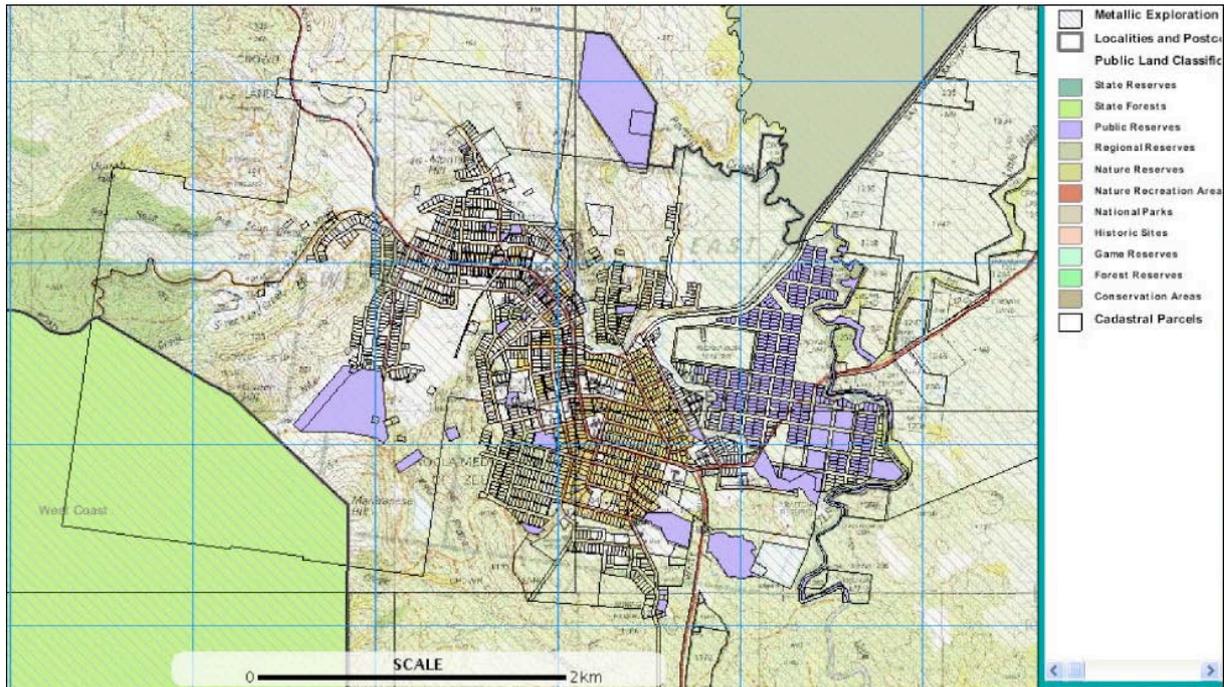
LAND TENURE:

The area comprises: Crown Land and Private property.
NB: This land tenure table is a guide only.

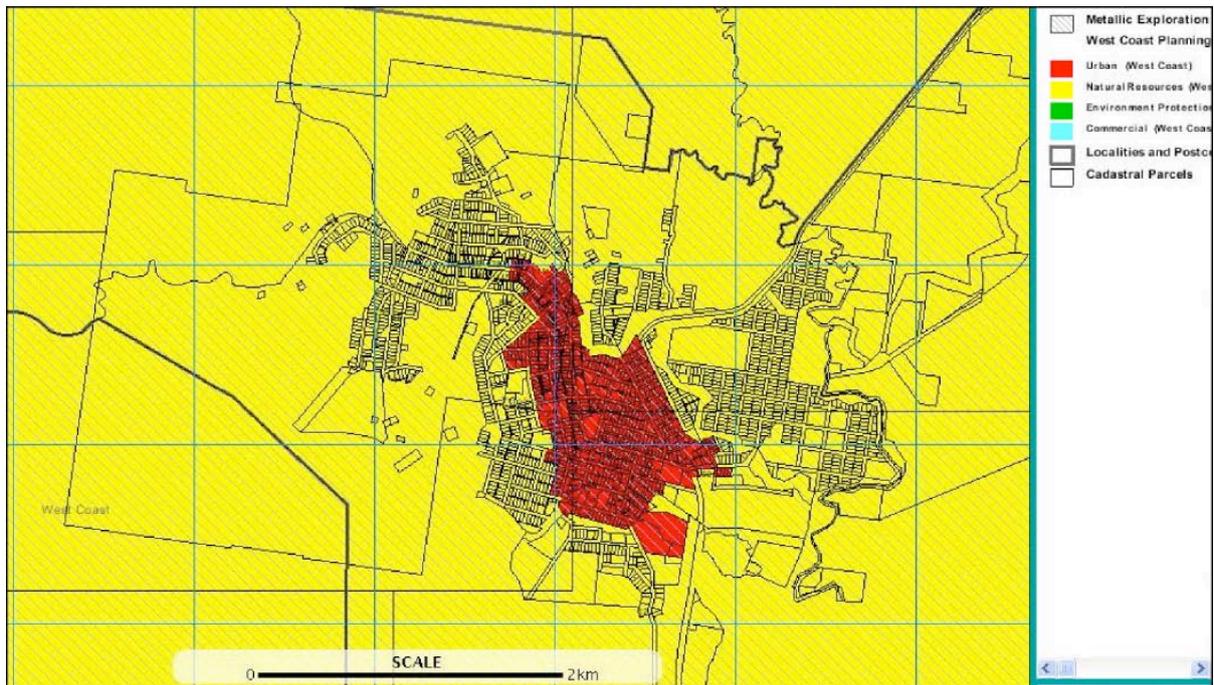
EXCLUSIONS:

The area embraced by this licence does not include:

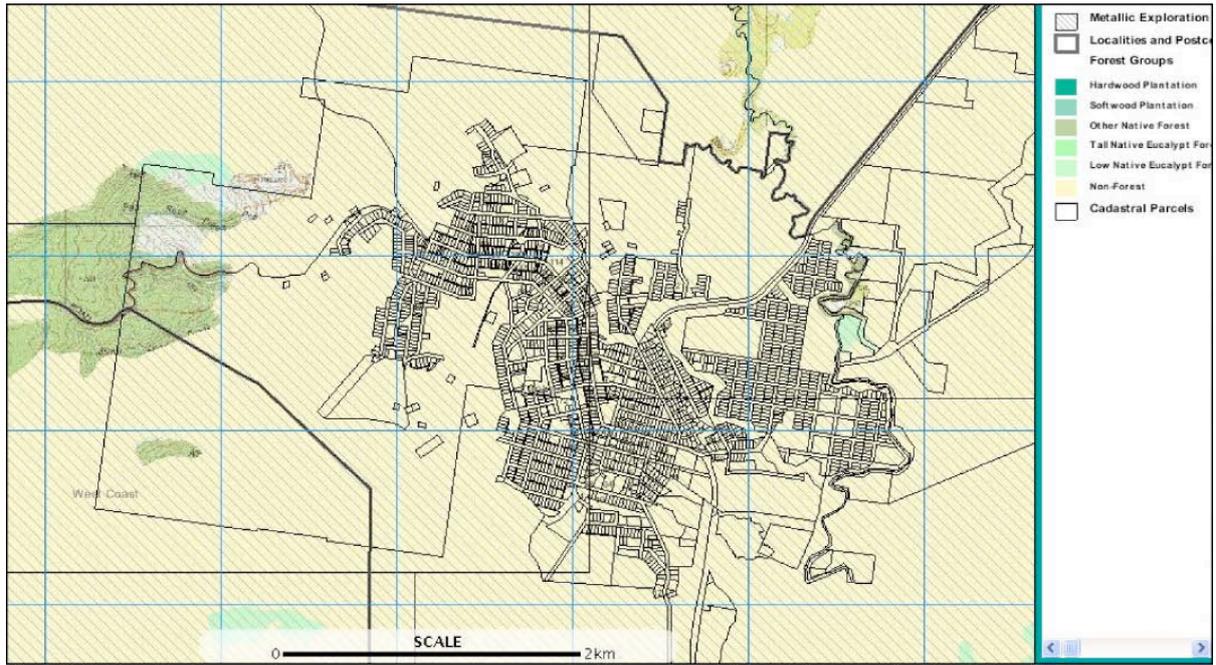
- (a) All forms of mineral tenements including mining leases, retention licences and exploration licences, which were applied for or in force prior to the date of application for this licence.
- (b) Land exempt from the provisions of the *Mineral Resources Development Act 1995*.
- (c) Land reserved under the *National Parks and Wildlife Act 1970* including National Parks, Historic Sites, Nature Reserves, Game Reserves and State Reserves shown on the Schedule.
- (d) Crown reservations or other land set apart or dedicated for any public purposes such as public reserves, municipal reserves or roadways unless such areas have been brought under the provisions of the *Mineral Resources Development Act 1995*.



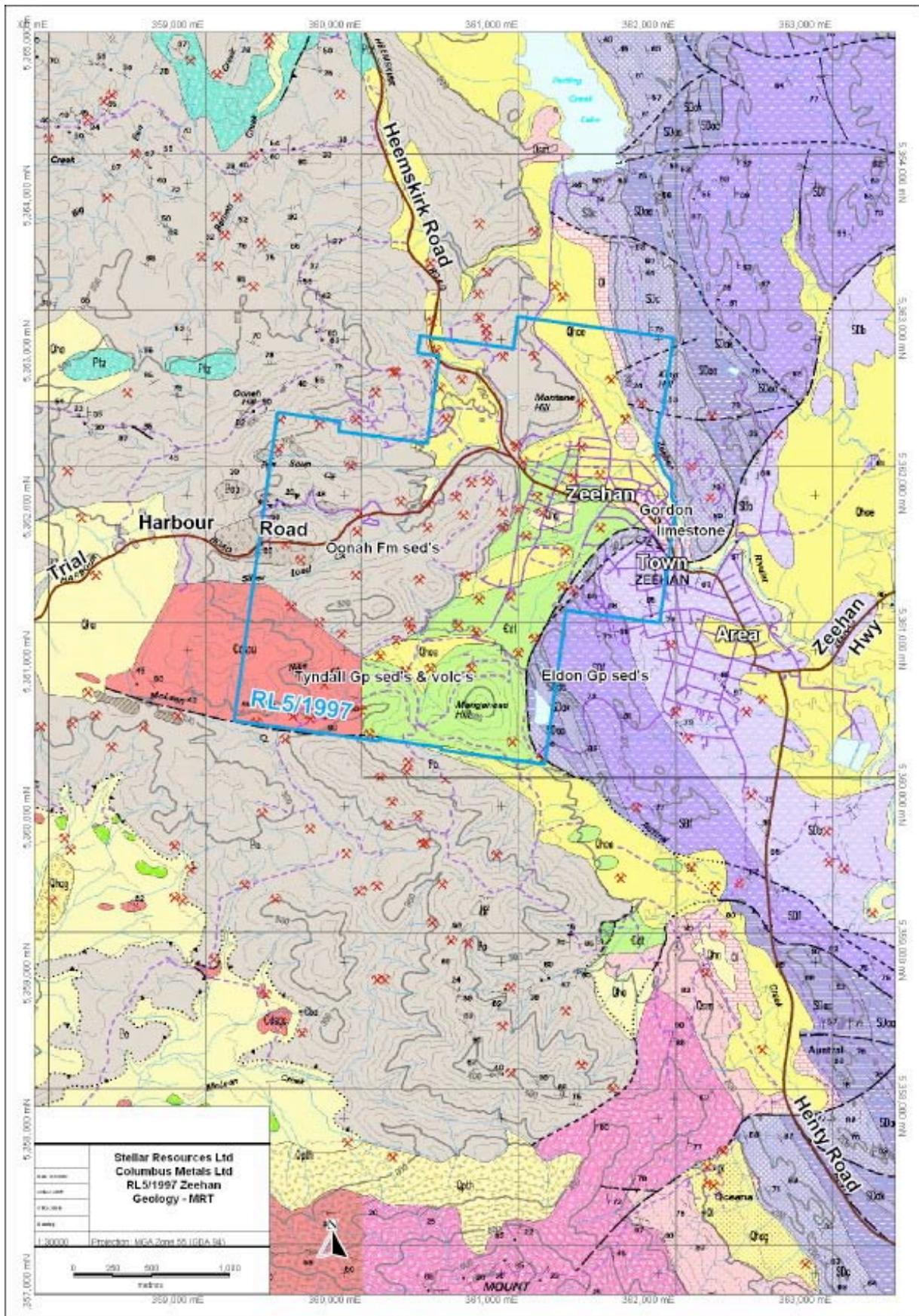
• Figure 2. RL5/1997, Zeehan Project: Land Tenure Map.



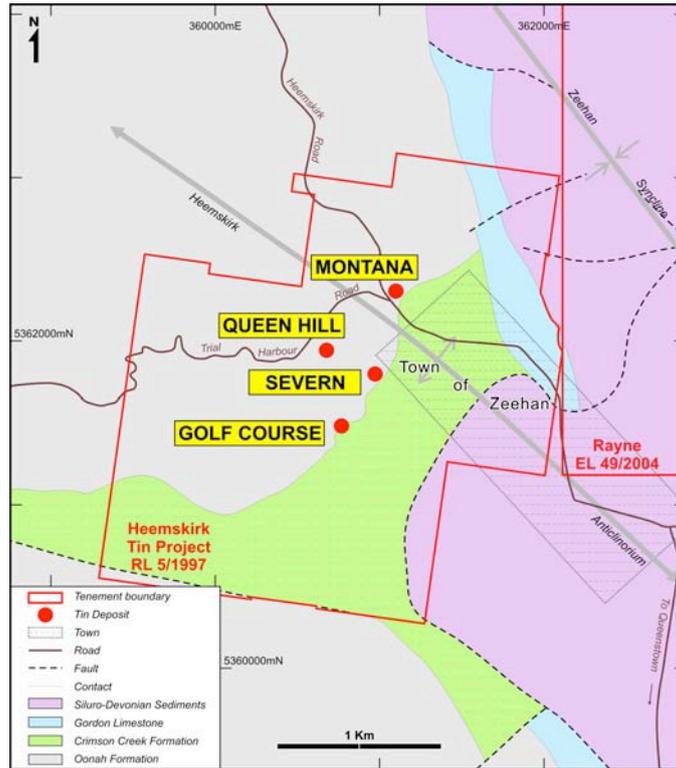
• Figure 3. RL5/1997, Zeehan Project: Planning Scheme Map.



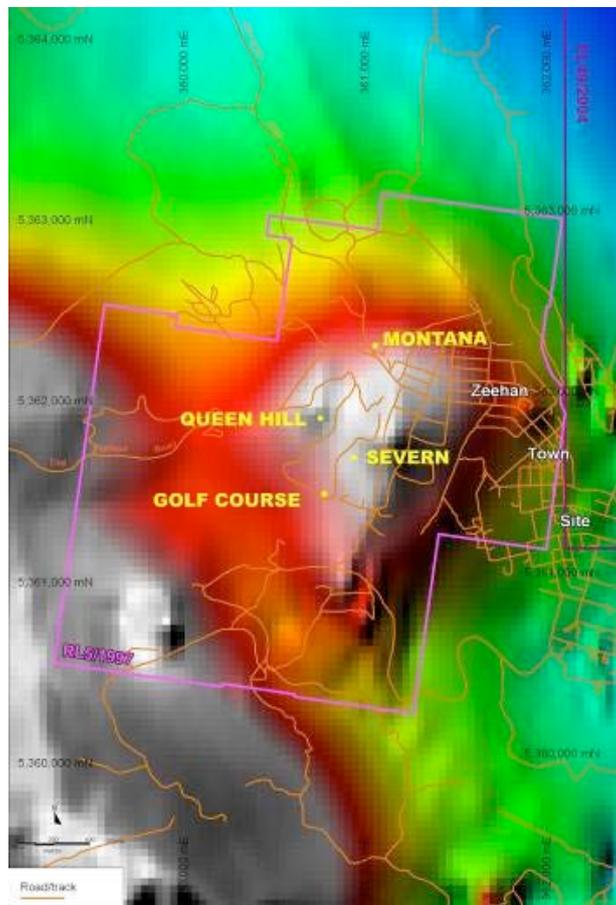
• Figure 4. RL5/1997, Zeehan Project: Vegetation Map.



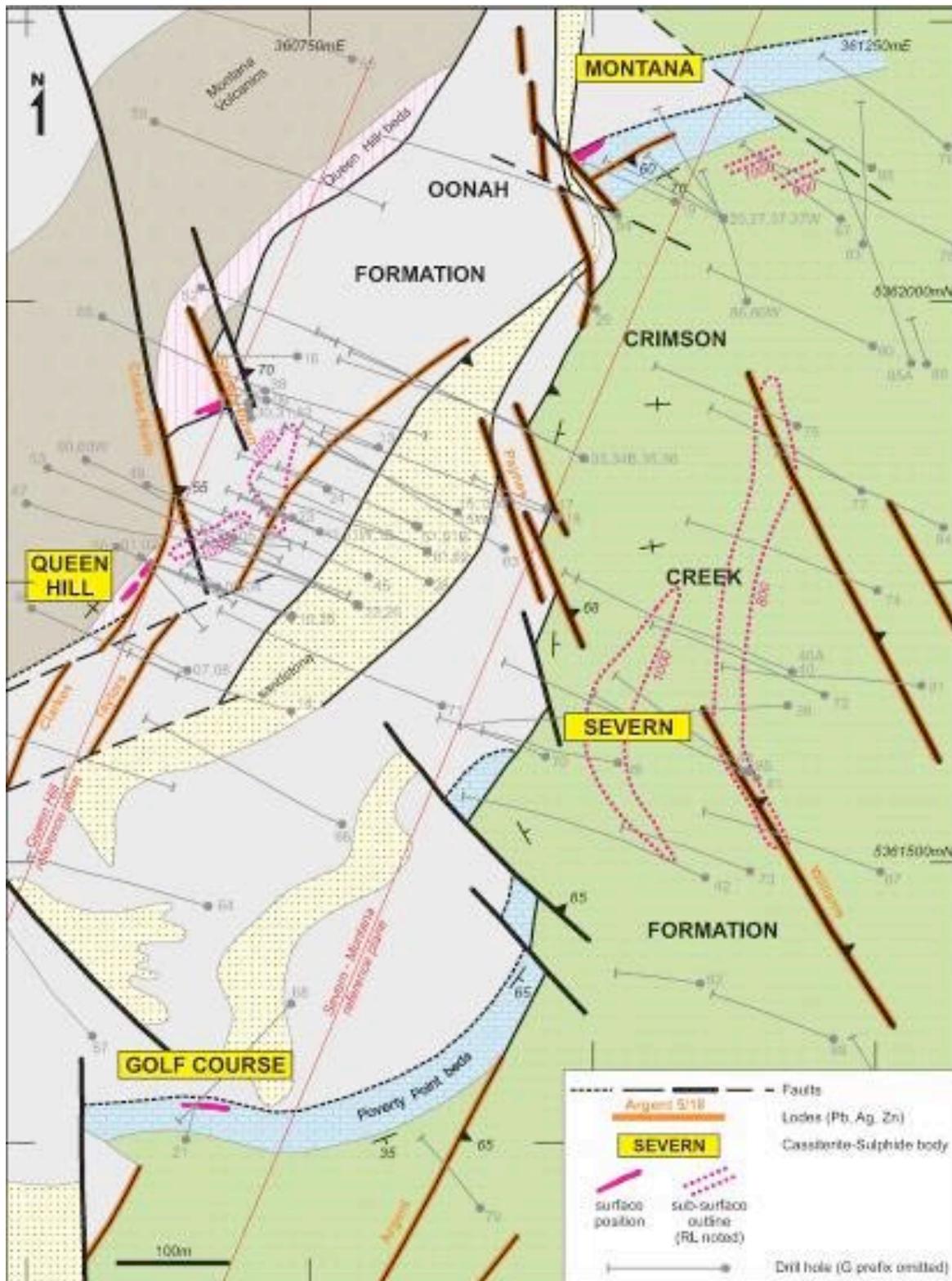
• Figure 5. RL5/1997, Zeehan Project: MRT Geology Map.



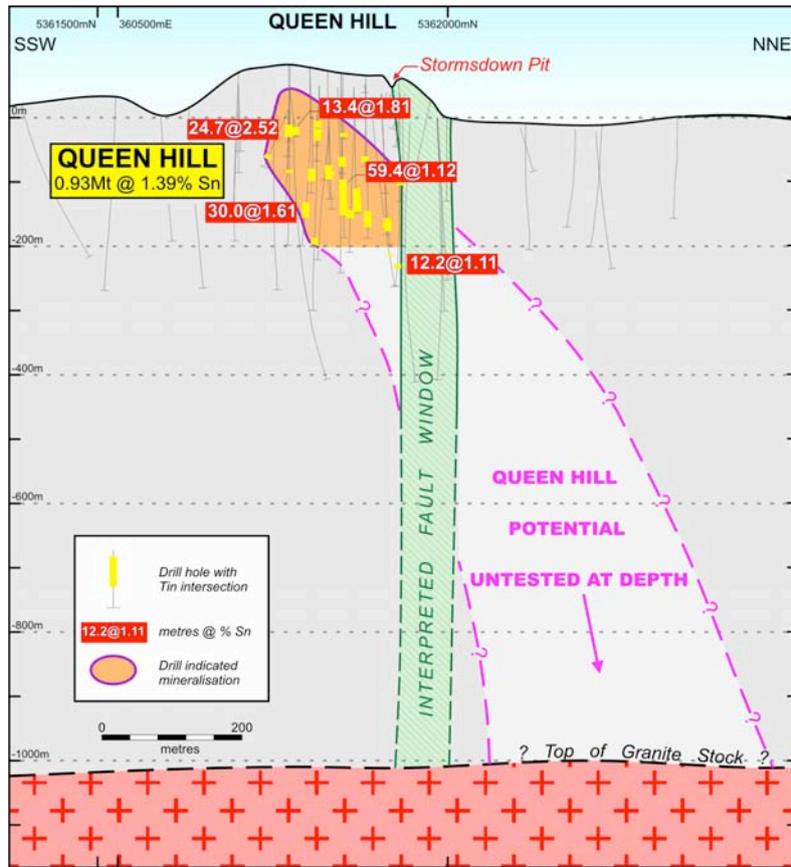
• Figure 6. RL5/1997, Zeehan Project: Geology showing deposits



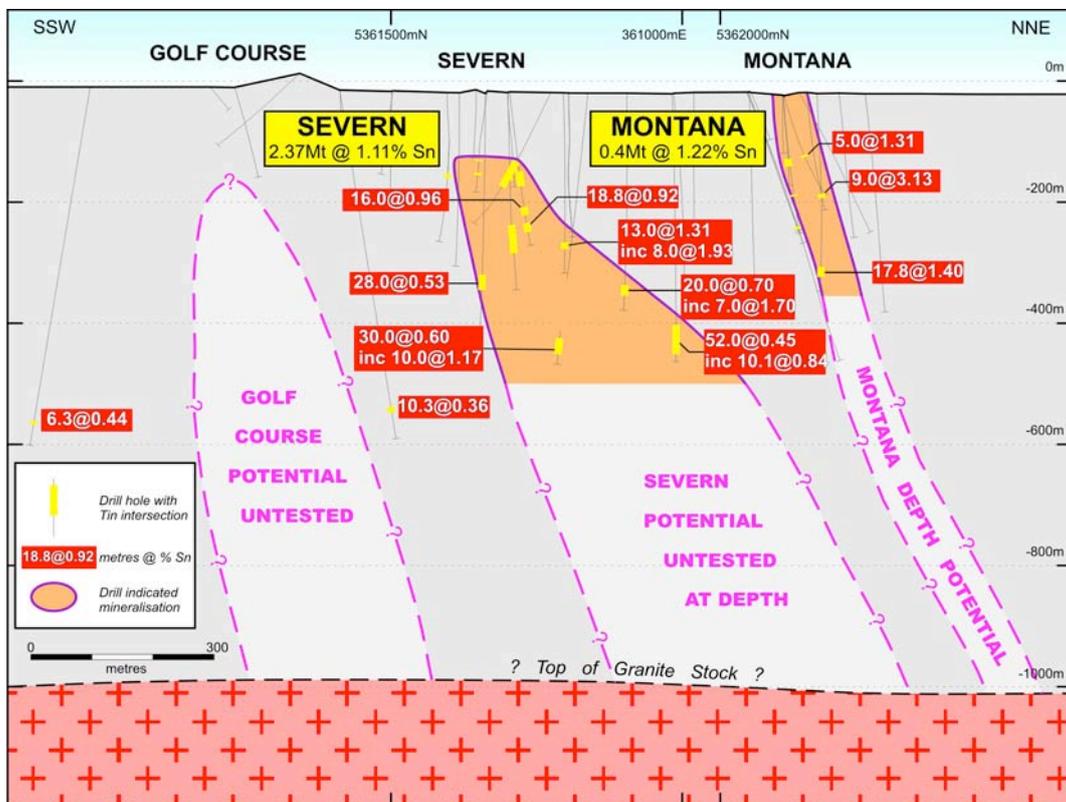
• Figure 7. RL5/1997, Zeehan Project: Aeromagnetic Image showing deposits.



• Figure 8. RL5/1997, Zeehan Project: Detailed Geology, Structure & Drilling.



• Figure 9. RL5/1997, Zeehan Project: Queen Hill Deposit Longitudinal Projection



• Figure 10. RL5/1997, Zeehan Project: Severn & Montana Deposits Longitudinal Projection.

2. REVIEW OF PREVIOUS WORK

The majority of previous exploration work for tin at Zeehan was carried out by Aberfoyle in the 1970's and 1980's and culminated in the delineation of 7.3 million tonnes of mineralisation at an average grade of 0.69% Sn together with 10.9 g/t Ag. Higher-grade zones within this mineralised envelope were reported as 3.61 million tonnes @ 1.21% Sn.

This work was undertaken in a Joint Venture first signed on 27 March 1972 between Cominco Exploration Pty Ltd (Aberfoyle) and Gippsland Oil and Minerals NL (now Gippsland Limited). This JV saw Aberfoyle's interest confirmed at 60% with the right to 70% equity in the project by completing an acceptable feasibility study.

Queen Hill was discovered in the late 1960's, when cassiterite was recognised in massive pyrite mineralisation exposed by old silver-lead mines. Drilling of a magnetic anomaly, located some 300m eastwards from Queen Hill (refer to Figure 7), led to the discovery of the larger Severn deposit in 1976. Early exploration focused on Queen Hill and continued sporadically throughout the late 1970's and early 1980's. Characterisation of ore from the upper Queen Hill lode showed it to comprise sulphides (mainly pyrite), carbonates, fluorite and silicates. The tin mineral was mainly cassiterite, but occurred in extremely fine particles (15 microns) disseminated throughout the ore, 60% in sulphide and the remainder in other gangue. The most promising route for beneficiation seemed to be standard mineral dressing methods to gain acceptable recoveries of the cassiterite into low grade concentrate and upgrade this by a pyro-metallurgical matte fuming. In June 1980 a bulk sample of ore from Queen Hill (2,892 tonnes) was excavated and sent to the Aberfoyle matte fuming pilot plant at the Kalgoorlie nickel smelter. Test work successfully produced a high-grade tin matte from this material. No further work was done due to the collapse in the tin price. The pilot plant and technology were subsequently sold to Mt Isa Mines Limited.

On 1 August 1981 an amalgamation of seven previous leases over the Queen Hill area was undertaken and CML 36/M /81 was granted for an area of 564ha for a period of 21 years. In 1997 this mining lease was converted into the 6km² retention licence RL 5/1997.

The exploration program at Queen Hill identified deeper mineralisation below Queen Hill and at Severn and Montana. Metallurgical characterisation test work on these deposits showed them to be more amenable to conventional mineral dressing than the Upper Queen Hill ore. Amenability was judged on cassiterite grain size, ease of liberation, and response to gravity and flotation separation. In particular the Severn ore responded better than some of the fine-grained ores at the Renison Bell Tin Mine when subjected to similar unit processes employed in the Renison Concentrator (Severn has an average grain size of 65 microns while some of the Renison Fault ores have an average grain size of 50 microns). This offers an option to process these ores by standard mineral dressing methods and produce a saleable gravity concentrate for a recovery estimated at 71.5%.

By 1982, Aberfoyle had completed 89 diamond drill holes totalling 23,000m and comprehensive data compilation and resource estimation was undertaken which resulted in a Pre Feasibility Study report issued in May 1983. The report concluded that the Zeehan Tin Project had potential for profitable underground mining. The project was never taken through to bankable feasibility study however, as work was halted in 1984 due to the imposition of export quotas on tin concentrates by the Association of Tin Producers.

Drilling ceased on the Zeehan Project in June 1982 but technical assessment by Aberfoyle geologists continued; in particular John Anderson undertook research studies towards a PhD degree. A number of new conceptual targets were generated and resulted in the completion of a series of EM geophysical surveys and two final drill holes for a total of 1,320m in 1989-90. The present conceptual model for the Zeehan Deposits, which illustrates the potential for significant additional resources, is based largely on John Anderson's research work.

Aberfoyle was taken over by Western Metals Limited (Western Metals) in 1998. Over the ensuing years, Western Metals remained heavily focused upon its base metals projects and no work was undertaken at Zeehan. Declining metal prices (at the time) and a heavy debt load together with unfavourable hedging positions saw Western Metals placed into receivership in 2003. In June 2006,

Western Metals was re-listed and a new board and management put in place. The Zeehan Project remained in the Western Metals portfolio but little work was done in the intervening period. The recent rise in tin price and forecast for future demand has refocused attention on the Zeehan tin deposits.

The historical pre-JORC Code resource estimates for the Zeehan Project JV* are set out below in Tables 1 and 2. For reference and comparison.

• **Table 1. Zeehan Project: 1982 Resource Estimate (pre JORC estimate)**

Mineralised Envelope 0.1 % Sn cut-off

LENS	CATEGORY**	Tonnes (million)	% Sn	g/t Ag	Tonnes Tin
Queen Hill	Indicated	1.8	0.82	33	14,800
Severn	Inferred	5.1	0.60	-	30,700
Montana	Inferred	0.4	1.22	51	4,870
Total		7.3	0.69	10.9	50,370

Higher grade zones within the mineralised envelope

LENS	CATEGORY**	Tonnes (million)	% Sn	g/t Ag	Tonnes Tin
Queen Hill	Indicated	0.93	1.39	28.9	12,900
Severn	Inferred	2.37	1.11	-	26,300
Montana	Inferred	0.31	1.45	58	4,500
Total		3.61	1.21	12.4	43,700

* Palmer, K. G., Aberfoyle Exploration Pty Ltd, Zeehan Project, Geological Resource Assessment, 31 August 1982

** The categories used by Aberfoyle are considered equivalent to those of the present day JORC Code.

• **Table 2. Zeehan Project: 2007 Resource Estimate (non JORC estimate)**

All Deposits >0.1% Sn**

DEPOSIT	Tonnes Range +/- 20% (million)	% Sn (+/- 20%)	Tonnes Tin (+/-20%)
Queen Hill	1.8 – 2.7	0.7 – 1.0	13,000 – 27,000
Severn	5.2 – 7.8	0.5 – 0.7	26,000 – 55,000
Montana	0.4 – 0.6	0.9 – 1.4	4,000 – 8,000

Summary all Deposits*

All deposits >0.1% Sn**

% Sn Grade Range	Tonnes Range +/- 20% (million)	% Sn (+/- 20%)	Tonnes Tin (+/-20%)
>0.1% Sn	7.0 – 11.0	0.6 – 0.8	42,000 – 88,000
>0.5% Sn	3.5 – 5.5	0.9 – 1.3	32,000 – 72,000
>0.7% Sn	2.5 – 3.5	1.0 – 1.6	25,000 – 56,000

*The quantity and grade ranges of the tin target at Heemskirk (Zeehan) are based on the BMGS memo for Western Metals dated 4/5/2007. The ranges are estimated by Chris Young MAusIMM, MAIG who has more than 10 years experience in the field of activity being reported.

**The potential quantity and grade is conceptual in nature as there has been insufficient exploration to define a Mineral Resource and it is uncertain if further exploration will result in the determination of a Mineral Resource.

3. EXPLORATION COMPLETED DURING THE REPORTING PERIOD

3.1. DATA ACQUISITION & ANALYSIS

During the reporting period Stellar has acquired and reviewed historical data from Western Metals Ltd and other sources including privately held Aberfoyle historical data. This has included unpublished research data from John Anderson's PhD studies.

Data has been used to create a digital database, which will be used to construct a geological 3D model of the Zeehan Project for review of production options and drill targeting.

3.2. IPO PREPARATION

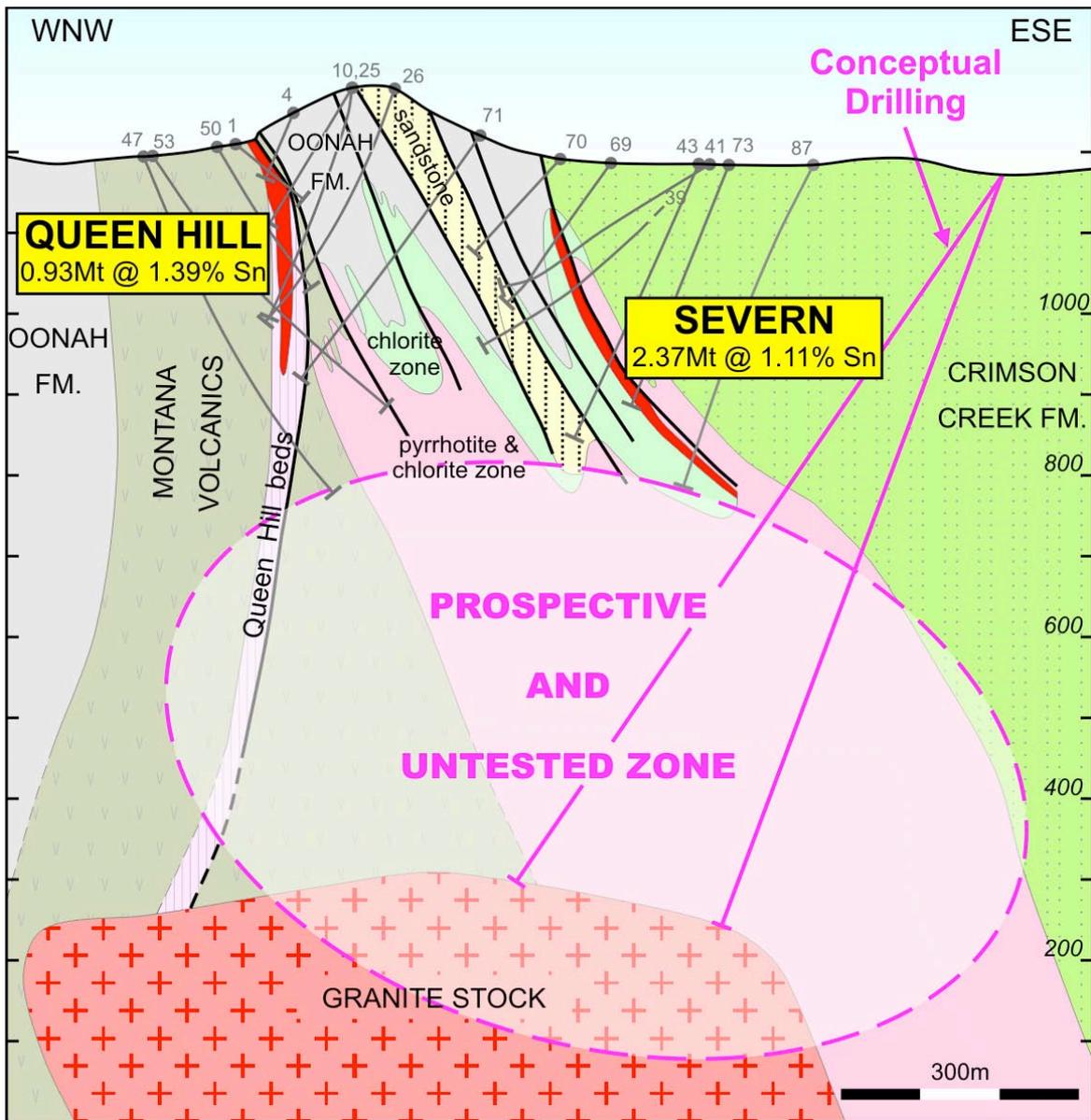
In order to fund resource definition and deep exploration drilling of the known deposits, as well as exploration drilling of other targets, a prospectus was prepared for the public float of Columbus Metals during 2008. Although the float was temporarily suspended significant work was carried out in its preparation. This included:

- construction of a 3D computer model of the known mineralisation (appended in digital form),
- preparation of resource/exploration drilling specification and budget
- preparation of an independent geologists report by AP Bravo & Associates (Appendix 1)

Following a successful fund raising Columbus will allocate \$2.7 million in the first year to be spent on resource and step out drilling. In year two \$337,000 will be spent on exploration drilling and \$4.2 million on resource drilling. The proposed budget summary is presented below in Table 3.

• **Table 3. Zeehan Project: Budget Summary**

ITEM	Quantity	Year 1	Year 2	Totals
Resource Drilling	10,900m	\$2,738,567	\$337,400	\$3,075,967
Exploration Drilling	14,600m		\$4,115,533	\$4,115,533
Scoping & Metallurgy		\$455,000	\$630,000	\$1,085,000
Corporate & Administration		\$275,000	\$380,000	\$655,000
Total	25,500m	\$3,468,567	\$5,462,933	\$8,931,500



• Figure 11. RL5/1997, Zeehan Project: Exploration Proposal.

4. DISCUSSION OF RESULTS

From the historical work carried out, principally by Aberfoyle, there is significant evidence to suggest that mineralisation at Zeehan continues below the historic drilling at each of the known deposits. Further the evidence also indicates that the nature of the mineralisation improves at depth with higher grades, coarser grain size and therefore better metallurgical amenability.

Research by Anderson recognised structural controls to mineralisation, which were used to identify exploration targets. These remain to be tested by drilling. The construction of the proposed rigorous 3D geological computer model incorporating Anderson's concepts, rather than the existing grade only 3D model, will assist in identifying drill targets associated with the known deposits and new blind targets in the extensive Zeehan Project mineralised system.

5. CONCLUSIONS

The Zeehan Project comprises three structurally controlled and replacement tin deposits with substantial scope to both increase the size and quality of the known deposits and to add to this resource via the discovery of additional mineralisation at depth.

The requisite deep drilling program requires significant expenditure, which Stellar will raise via the public listing of Columbus Metals Ltd. Stellar is also currently reviewing production options for the Zeehan Tin Project and has commenced a prefeasibility study of mining shallow, high grade portions of the near surface portions of the deposits.

5.1. PROPOSED WORK PROGRAM

- All pre-existing drilling and geological data will be entered into a 3D geological model, which will support drill targeting. New resource estimates will be made consistent with the JORC Code.
- Review production options.
- Pre-feasibility study of mining shallow, high grade portions of the Zeehan project
- Resource and geotechnical drilling of shallow targets
- Over two years undertake resource development drilling and step-out resource drilling at Heemskirk (24,600 metres drilling). The focus will be on expanding and converting the higher-grade zones of its deposits into mineable resources.
- Scoping studies, metallurgical testwork to confirm the ability to produce a saleable high-grade tin concentrate, together with base line environmental studies and required permitting will also be commenced in the first year. This is expected to support the completion of a pre-feasibility study by the end of year two.

6. ENVIRONMENT

As no fieldwork was carried during the reporting period no rehabilitation was required.

Prior to commencement of field work an environmental impact and rehabilitation plan will be submitted to MRT.

7. EXPENDITURE

Job No	Job Details	Department	
Tran. Date	30/4/2008 – 1/5/2009	Doc Ref - Description	Amount
Job Code: 6501	RL 5/1997 Zeehan Tin JV		
		Administration Management	AU\$1,562.50
		Professional	AU\$13,125.00
		Technical	AU\$76,286.34
Phase Total		STAFF COSTS	AU\$90,973.84
		Professional Technical	AU\$27,009.25
Phase Total		CONTRACT PERSONNEL	AU\$27,009.25
		Geoscientist	AU\$145,666.10
		Other	AU\$7,945.50
Phase Total		CONSULTANT PERSONNEL	AU\$153,611.60
		Vehicle Costs All	AU\$1,136.13
		Office Costs	AU\$6,275.79
Phase Total		SUPPORT COSTS	AU\$7,411.92
		Drafting and Presentation	AU\$6,803.13
Phase Total		DATA PROCESSING	AU\$6,803.13
		Purchase / Stamp Duties	AU\$1,147,477.75
		Pegging Application Forms	AU\$8,029.09
		Legal Costs	AU\$80,595.13
		Rents/ Other Utilities	AU\$8,419.50
Phase Total		TENEMENT COSTS	AU\$1,244,521.47
		Meals and Accommodation	AU\$2,131.36
		Airfares	AU\$6,311.33
		Vehicle Hire	AU\$112.63
		General Expense	AU\$765.08
Phase Total		TRAVEL	AU\$9,320.40
Job Total:		TOTAL	AU\$1,539,651.61

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Keywords

Location: Zeehan
Mineralisation environment: Sulphide Skarn
Minerals: Cassiterite, Stannite, Pyrite, Pyrrhotite, Magnetite
Exploration methods: Historic Research, Drilling
Mine/prospect name: Zeehan Project, Queen Hill deposit, Severn deposit, Montana deposit
Stratigraphic name: Oonah Formation, Success Creek Group, Crimson Creek Formation, Gordon Limestone, Eldon Group, Heemskirk Granite
Lithologic name: quartzite, siltstone, shale, limestone, dolomite, granite
Geological Province: Dundas Trough
Geological age: Lower Neoproterozoic, Palaeozoic

STELLAR RESOURCES LTD

May 2009

RL 5/1997 Zeehan – Report on 2008 program

APPENDICES

STELLAR RESOURCES LTD

January 2009

RL 5/1997 Zeehan – Report on 2008 program

Appendix 1: Columbus Metals Ltd., Independent Geologists Report (A.P. Bravo)

Columbus Metals Ltd

Independent Geologists Report – A P Bravo

Summary

Columbus Metals Limited (Columbus) controls a number of significant tin projects within its Zeehan (RL 5/1997), Heemskirk (EL 46/2003) and Rayne (EL 49/2004) tenements located close to the historic mining centre of Zeehan, in western Tasmania.

The properties hold potential for commercial discoveries of tin, copper and base metals in a major tin province, the Heemskirk-Zeehan area, which is shaping to become a significant tin mining district.

Columbus intends to focus initially on developing the previously discovered tin deposits at Queen Hill, Severn, Montana and St Dizier, with particular emphasis on resource expansion and delineation drilling. Columbus has planned a program of step out, resource and exploration drilling to achieve a proposed 7-10Mt target over the next two years. The objective is to significantly expand the resources and upgrade resources into the Measured and Indicated category.

Columbus also intends to evaluate the potential of established tin projects at Granville East, Gourlays Creek and Rayne that have not been adequately explored. The project locations are shown in Figure 1.



Figure 1. Project location map

The **Zeehan project** includes a cluster of three structurally controlled and replacement style cassiterite-sulphide tin deposits at Queen Hill, Severn and Montana located on Queen Hill west of Zeehan Township.

Drilling by previous explorers outlined a combined historical inferred resource for the three deposits estimated at 7.3Mt containing 0.69% Sn and 10.9 g/t Ag. Exploration potential is excellent with scope to increase the size of the existing resources by discovery of additional tin mineralisation, particularly at depth below the known deposits. The resources are open and are very likely to be upgraded with further exploration. There is also potential for new discoveries in a number of favourable structural settings recognised from previous exploration. The initial priority is to expand and upgrade the existing tin resources with resource delineation drilling in high-grade zones.

The **St Dizier** deposit is the most significant of several tin-bearing, magnetite skarns located along the northern contact of the Heemskirk Granite.

The magnetite-dominated St Dizier skarn deposit comprises tin - sulphide - magnetite mineralisation developed in strongly metasomatised sediments of Upper Proterozoic age. Over the next two years Columbus proposes to upgrade the status of the 1984 inferred historical resource estimate by Renison to be 0.8 million tonnes @ 0.7% Sn and 0.05% WO₃. The near surface pipe-like deposit has been incompletely drilled and requires additional resource definition drilling to expand and prove up additional resources. Drill targets are also ready for testing at the Central and Big H prospects located within the stanniferous magnetite skarn horizon along strike from St Dizier. The skarn trend extends eastwards from St Dizier for approximately 3km, wrapping around part of the northern contact of the Heemskirk Granite where a number of discrete aeromagnetic geophysical targets within the zone have been identified for immediate investigation.

The **Granville East** project is located approximately 5km NW of St Dizier. A feature of the area at Granville East is the prominent NNW trending aeromagnetic anomaly extending over a strike length of 2.5km.

Previous drilling along this trend intersected several carbonate horizons containing magnetite-pyrrhotite mineralisation with anomalous tin values typical of skarn style mineralisation. A number of discrete aeromagnetic anomalies have been identified at Donnelly's, Big Rocky Creek, Granville East and 11,000. The 11,000 prospect represents the northern extension of the Granville East stratigraphy containing previously exploited tin mineralisation at McDermott's. In a regional context the anomalies are analogous to the "thumb print" magnetic anomaly that defines the St Dizier tin resource. They have not been directly tested by drilling and are believed to represent additional tin-rich, pipe-like bodies of a size comparable to the Central Block mineralisation at St Dizier.

Gourlays Creek is located 4km west of the Granville East project.

A large aeromagnetic anomaly at Gourlays Creek is associated with a significant zone of stratabound magnetite and pyrrhotite mineralisation containing anomalous tin and copper values. Tertiary basalt cover has made interpretation of geophysical data and soil geochemical results difficult. Consequently, geophysical targets in the mineralised sediments have been partially explored. Results from previous exploration suggest that there is potential for skarn or replacement style tin mineralisation within banded calc-silicate rocks of the Oonah Formation at Gourlays Creek. The results of previous soil geochemistry have outlined areas of anomalous tin and copper values. Previous exploration has shown that a banded carbonate unit containing pyrite, magnetite, pyrrhotite and chalcopyrite is continuous along strike within the sediments and coincident with the airborne magnetic anomaly. Based on results from geophysical data, including ground magnetics, IP and UTEM surveys, there is potential for mineralisation to occur in an arcuate zone coincident with the aeromagnetic anomaly along a strike length in excess of 5km. The existing drilling has inadequately tested the UTEM zone and follow up drilling is proposed to test the geophysical anomalies. Two distinct aeromagnetic anomalies, Gourlays Creek and Tuckers Creek, of the St Dizier – Granville East style, located south of the previously explored area and closer to exposed Heemskirk Granite represent additional drill targets for skarn tin and possibly copper mineralisation.

The **Rayne project** covering an area of 28km² is situated immediately south of the western part of the Renison Bell Mining Lease and west of the Cuni copper nickel prospects at Melba Flats.

Previous exploration highlighted a broad, sub-circular aeromagnetic anomaly in the northern part of Rayne interpreted to be due to hydrothermal alteration related to a deep-seated granite stock. Based on the favourable geology, abundance of faulting and proximity to the Renison and Razorback tin mines there is potential for Renison style sulphide-carbonate replacement tin mineralisation and fault-infill style targets associated with the magnetic anomaly. The magnetic anomaly is relatively untested apart from a single hole drilled by Renison in 1985 to explore a magnetic peak the source of which remains unexplained. Assuming that the Renison Mine Sequence carbonates underlie Crimson Creek Formation sediments intersected in the drillhole there is potential for a substantial tin deposit based on

the Renison style sulphide-carbonate replacement model. Columbus proposes to re-assess and model all known geophysical data and will drill the modelled target if the results are encouraging.

Tasmanian Granite Related Tin, Tungsten and Skarn Mineralisation

The contact aureoles of Devonian granite in Western Tasmania are widely recognised for their world-class tin and tungsten deposits as well as significant fluorite, magnetite and base metal mineralisation (Seymour et al. 2007).

Deposit styles include the sulphide-carbonate replacement tin deposits at Renison Bell, Mt Bischoff and Cleveland, tungsten and magnetite skarn deposits at King Island and Kara, fluorite-magnetite skarns at Moina and tin, lead-zinc-silver structurally controlled and replacement tin sulphide deposits at Zeehan. The deposits generally occur less than one kilometre from a granite source or are related to stocks and porphyry dykes emanating from the main granite batholith (Turner et al. 2003).

Mineral Resources Tasmania compiled a summary of Devonian granite-related deposits in Western Tasmania based on Company estimates and previous production figures. The more significant include the following:

Deposit	Size (tonnes)	Grade
Renison Bell	24.5 million	1.4% Sn
Mt Bischoff	10.5 million	1.1% Sn
Moina	18.0 million	26% CaF ₂ , 0.1% Sn, 0.1% WO ₃
Zeehan Tin	7.3 million	0.7% Sn, 10.9 g/t Ag
Cleveland	12.4 million	0.6% Sn, 0.25% Cu

These major tin deposits are associated with the Meredith Granite (Cleveland and Mt Bischoff), the Pine Hill Granite (Renison Bell) and an inferred stock of concealed Heemskirk Granite (Zeehan Deposits).

Cassiterite-sulphide replacement deposits such as Renison Bell, Cleveland and Mt Bischoff are directly linked to intrusive granites in an environment typically marginal to the granite source. The outer boundary for these sulphide-carbonate replacement deposits is generally approximated by the 4km depth-to-granite contour (Leaman and Richardson, 2003).

Two major deposit types can be distinguished. They include stratabound deposits formed by replacement of dolomite and fault controlled or fissure replacement lodes containing fault-bounded vein systems. Tin occurs in sulphide-rich, concordant or stratabound replacement bodies and in associated late stage veins and irregular stockwork zones as cassiterite or as the tin-bearing sulphide mineral stannite (Cu₂FeSnS₄). Renison Bell replacement mineralisation typically contains 60-70% sulphides consisting predominantly of pyrrhotite, with minor pyrite, arsenopyrite and chalcopyrite. This assemblage is known to give an excellent electrical and magnetic geophysical response. The style of tin deposits and the variation in mineralogy is attributed to the nature of the magmatic hydrothermal fluids. The Zeehan deposits are considered to be of this style.

The typical skarn deposits being explored by Columbus were produced at relatively high temperature by magmatic-hydrothermal fluid activity and by associated metasomatism resulting from granite plutonism.

Metasomatism occurs when hot magmatic fluids from the granite intrusion infiltrate permeable country rock and react with carbonate-rich sediments to form a coarse-grained, generally iron-rich mixture of calc-silicates and magnetite skarn.

Mineralising fluids from the granitic intrusion move outwards to sites favourable for ore formation and are localised either along lithological contacts, or in extensively fractured zones where granite emplacement has reactivated major faults. The resulting geometry of

these skarn orebodies is generally believed to be related to the nature of the metasomatic pathways.

Tasmanian mineralised skarns are known to have formed where the contact aureole of the granite approached to within a few hundred metres of carbonate-rich sediments (Turner et al. 2003). The skarns are generally, though not always, associated with magnetite and tin mineralisation and were formed when metal sulphides were deposited in the later, cooling stages of the metasomatic event. Tin is generally present in skarn as cassiterite (SnO₂) or in tin-bearing silicate minerals. Accompanying mineral assemblages contain diopside, magnetite, phlogopite and serpentine together with pyrrhotite and/or pyrite, arsenopyrite and chalcopyrite.

The St Dizier deposit is the most significant of several tin-bearing, magnetite skarns located along the northern contact of the mineralised Heemskirk Granite. Typical of this style of deposit are the “thumb print” aeromagnetic anomalies considered to be indicative of pipe-like tin deposits formed during skarn development. Characteristically, all the mineralised skarns in this area appear to have low associated tungsten values.

Other prospects with a similar aeromagnetic signature include the magnetite-dominated skarns at Central, Big H and Granville East (Figure 2). Magnetite-sulphide mineralisation containing anomalous tin values has also been reported from Gourlays Creek situated 10km WNW from St Dizier.

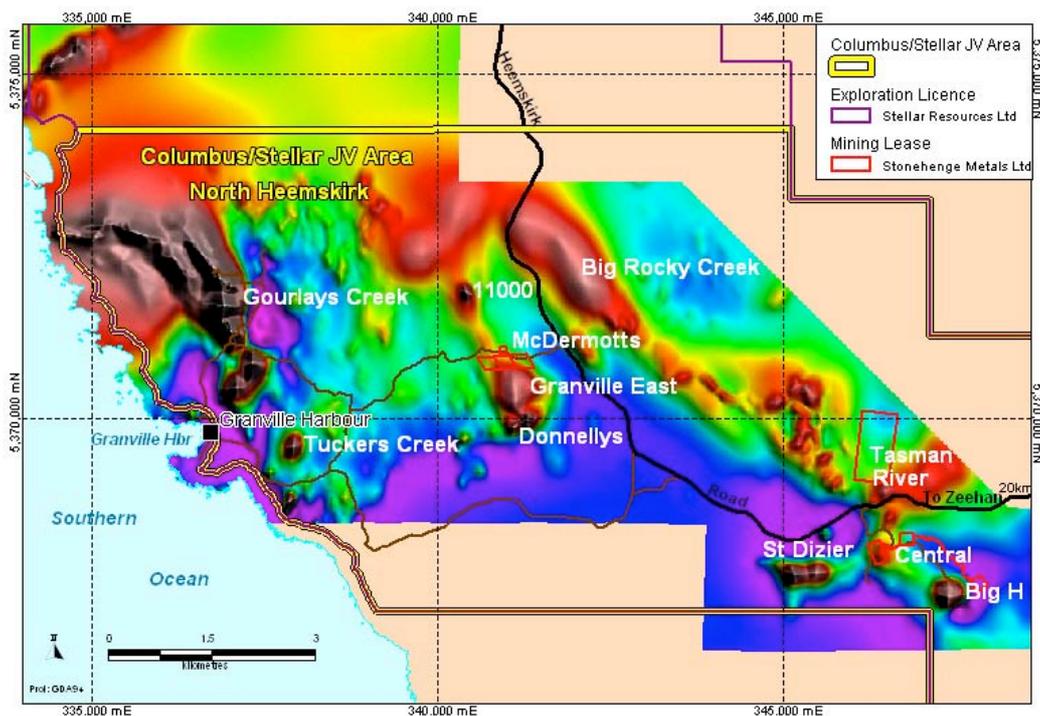


Figure 2. Heemskirk projects and prospects

Vein and greisen tin deposits generally occur within the granite body. In the southern part of the Heemskirk tenement, similar tin prospects including Healy & McIvor, Globe and Anomaly 4 formed in generally altered granite terrane on the southern flank of Mt Agnew. Previous work by companies in the area has demonstrated that these prospects contain generally sub-economic values of tin, zinc and silver in quartz-tourmaline rich greisen veins linked to a late phase of argillically-altered granite. This style of mineralisation is prospective because it may be related to a larger zone of tin-rich greisen veins developed at greater depth.

Zeehan Tin Project

Introduction

The Zeehan Tin Project is contained within Retention Licence RL5/1997, in the vicinity of Queen Hill, near Zeehan in western Tasmania. The licence covers an area of 6 km² and includes part of the Zeehan townsite and many of the old mines and prospects of the Zeehan silver-lead-zinc mining field.

The project includes three significant mineralised tin deposits at Queen Hill, Montana and Severn and a number of mineralised occurrences including the Golf Course prospect that justify further resource drilling and assessment (Figure 3).

Due to a long period of depressed metal prices and falling demand there has been no significant tin exploration near Zeehan for the past 20 years. However, the current rising tin price has rejuvenated interest in the area.

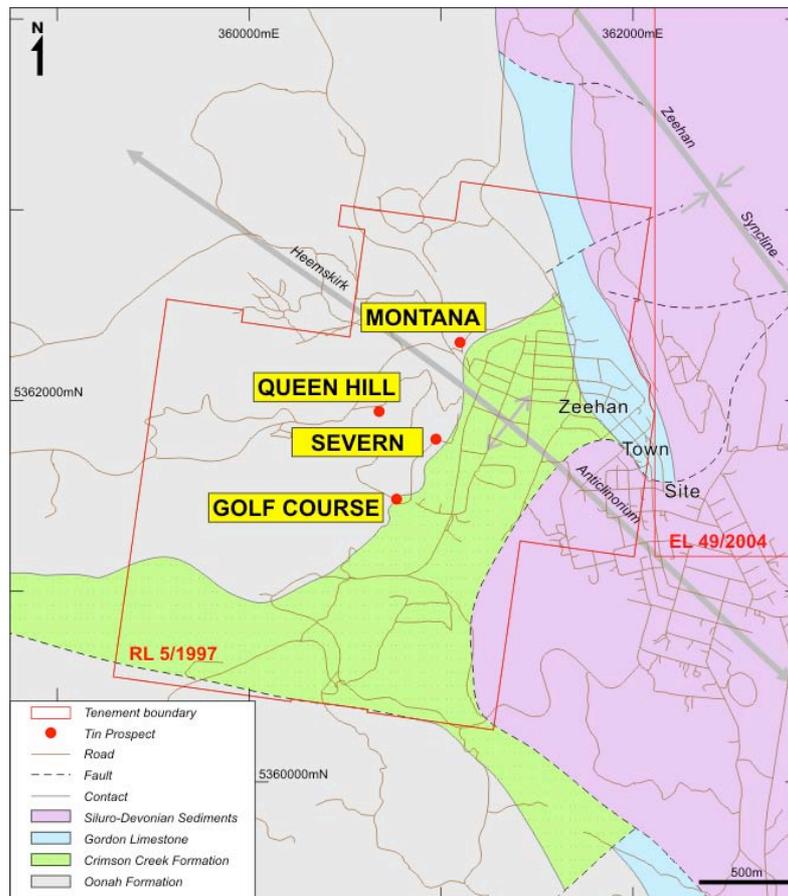


Figure 3. Zeehan Tin Project - Location of deposits

A previous resource estimate, based on 23,000 metres of drilling, outlined a substantial indicated and inferred tin resource for the three deposits estimated at 7.3 million tonnes grading 0.69% Sn and 10.9 g/t Ag, equivalent to 50,370 tonnes of contained tin metal, using a 0.1% tin cut off.

Geology of the Zeehan Tin Deposits

The Queen Hill quartzites are considered to be stratigraphic equivalents of the Oonah Formation, the oldest stratigraphic unit in the Zeehan area. The uppermost units of the Oonah Formation consist predominantly of quartzites containing interbedded arenaceous siltstone and shales. The overlying sequence of dolomite, carbonaceous pyritic slates and minor volcanics has been grouped as Success Creek Group of late Precambrian age. The Success Creek Group is comprised of reddish brown siltstones with intercalated limestones and

dolomite locally referred to as the Poverty Point Beds. Elsewhere, the Poverty Point Beds are correlated with that part of the Success Creek Group containing the stratabound pyrrhotite-cassiterite mineralisation at the Renison Bell tin mine located 15 km NW of Zeehan. These rocks are overlain by Cambrian age, Crimson Creek Formation consisting of basal pyroclastic volcanics and a sequence of greywackes and argillites containing minor tuffaceous slates and grits. Ordovician Gordon Limestone crops out in the area NE of Queen Hill and Siluro-Devonian Eldon group sandstones and siltstones underlie the majority of the Zeehan townsite. The nearest exposed granite, the Devonian age Heemskirk Granite, outcrops 7 km to the west of Zeehan with a ridge of Heemskirk Granite believed to extend beneath Queen Hill (Leaman, 1990).

The structure of the Queen Hill area is complex, with intense folding and faulting on all scales thought to be associated with the Tabberabberan Orogeny.

The Zeehan tin deposits are associated with the broad hinge zone of the NW trending Heemskirk Anticlinorium considered to be the locus for a late intrusive phase of the Heemskirk Granite.

Two distinct styles of folding indicate that the Queen Hill area has undergone several stages of deformation. The first deformation produced a series of north-easterly, gently plunging folds with steep south-easterly dipping axial planes that correspond to the attitude of a series of NE striking faults, which have the same orientation as most of the mineralised lodes in the Queen Hill area. A second deformation, attributed to the Tabberabberan Orogeny, produced open, moderately plunging NW and NNW trending folds related to the Heemskirk Anticlinorium. NNW-trending faults also occur cutting across the regional fabric in a direction similar to most of the silver-lead-zinc fissure lodes in the Zeehan field.

The Zeehan tin deposits comprise a cluster of three undeveloped bodies of sulphide-cassiterite mineralisation located near Queen Hill west of Zeehan. The Queen Hill, Severn and Montana deposits are considered to be Renison Bell-Cleveland type cassiterite sulphide tin deposits.

The **Queen Hill** mineralisation crops out weakly on the western side of the hill approx 300m west of Severn and is superimposed on a sequence of dolomitised siltstones, iron-rich evaporites, cherts and pyritic shales, informally known as the 'Queen Hill Beds'. This sequence is enclosed within the basaltic Montana Volcanics. Tin mineralisation is also associated with hydrothermal replacement of pyroclastic and dolomite units in the Precambrian-Cambrian transitional sequence referred to as the Poverty Point Beds. The source of the hydrothermal fluids is believed to be from the Devonian Heemskirk Granite, which has been inferred at depth, based on geophysical evidence and the occasional presence of felsic porphyry intrusives.

The Queen Hill deposit contains an upper lens consisting of relatively narrow (3 to 8 metres thick) but high grade, sulphide replacement-type mineralisation in volcanoclastics sediments and dolomite. The hanging wall is adjacent to a fault zone coincident with the Clarke Pb-Zn-Ag lode. The lower lens of the Queen Hill deposit is a wide (3 to 25 metres thick) composite zone containing relatively narrow high-grade mineralisation.

The **Severn** mineralisation is located in the hanging wall of the Severn Fault, within volcanoclastics sediments of the Crimson Creek Formation, above an unconformable contact with sediments of the Oonah Formation. The Severn deposit contains the greater part of the Zeehan resources.

The Severn Fault has been described as a tectonically fractured and brecciated zone dominated by highly deformed mudstone, lithicwacke breccia and clasts of Poverty Point dolomite. Tin mineralisation is fracture controlled and occurs as vein stockworks and replacement lenses within a 130m wide drag zone in the hanging wall of the Severn Fault. Narrow sulphide lodes and minor vein mineralisation consisting of pyrite, stannite and some cassiterite (Taylors lode) or siderite, ankerite, sphalerite and galena (Argent/McKays lode) are also present. The deposit is completely open at depth.

The Severn Fault zone has an en echelon shape resulting from the intersection of the NE and NW trending fracture sets. Displacement of the marker Poverty Point Beds indicates a throw of 500m across the fault by substantial strike slip movement.

Severn mineralisation has been located within the Oonah Formation in deeper parts of the deposit, away from the contact with Crimson Creek Formation, suggesting that it was structural preparation of the Severn Fault in the drag zone and not the unconformable contact that was important in deposition of the main Severn mineralisation (Noonan 1990). As a result, it is perceived that there is potential for Renison style replacement mineralisation where the Poverty Point Beds may have been dragged into contact with the footwall of the Severn Fault Zone.

Montana is a high grade, stratiform, carbonate replacement tin deposit confined to a dolomite sequence in the Montana Beds of the Success Creek Group. The Renison-style mineralisation, consisting of high-grade cassiterite and massive sulphides is a narrow (2.5 to 5.0 metres thick), stratiform lens with a strike length of approximately 80m. The adjacent historic silver mine workings were developed to a depth of approximately 150m. Below this level, drill hole G67, which was completed to a depth of 223.5m intersected a pyrite lode over 8.0m @ 3.34% Sn from 192.3m near the contact between Oonah Formation quartzites and Crimson Creek Formation. The deepest intersection occurs some 300m below surface in drillhole M76, which contained 1.6% Sn over an estimated true width of 6m. Like the Severn deposit the Montana mineralisation remains open at depth.

Cassiterite is present in the various deposits as fine-grained disseminations within a modal range of 20-70 microns. It is embedded in stockworks and masses of fine-grained gangue comprising siderite, chlorite, silica, pyrite and pyrrhotite and mainly at Queen Hill, variable accessory stannite and base metal sulphides. Although pyrite is the dominant sulphide (30%), micro-textural evidence indicates that a major pyrrhotite component was present and was substantially replaced by pyrite and marcasite. The resulting magnetic susceptibilities are greatly variable and only the pyrrhotitic core of the Severn body is broadly magnetic.

History and Previous Exploration

The Zeehan silver-lead mining field was discovered in 1882 and worked until about 1913. The most productive area was covered by the Western, Montana, Oonah and Queen leases, immediately to the north west of Zeehan. Production from the field totalled 2.7 million ounces of silver and 200,000 tonnes of lead. Small scale prospecting and mining continued for some time after the main mines closed.

Systematic exploration for carbonate-hosted mineralisation was conducted during the period 1946 to 1951 by Zeehan Explorations a joint venture between North Broken Hill and Broken Hill South Limited. Drilling results were encouraging and a decision was taken to proceed with production from the Oceana Mine. The resulting 128,177 tons at 11.6% Pb and 4.79 oz/t Ag were mined over the period 1954 to 1960 before the mine closed due to declining metal prices and excessive water inflows (Young, 1980).

Henderson reported the discovery of cassiterite on the northwest slope of Queen Hill in 1937 and Hill and Blisset (1961) mention that in about 1938 the area was worked by Zeehan Tin Development NL. Exploration activities in the Zeehan field were renewed in 1960 when several lodes in the Queen Hill area known for their silver-lead-zinc content were mined for tin from an open-cut and adits known as the Stormsdown Mine. Cassiterite-sulphide mineralisation was also exposed in adits driven into the adjacent Clarkes silver-lead Lode and in 1965, Placer Prospecting reported a zone containing 6 m @ 3.46% Sn from sampling in the No 2 adit.

In 1969, Gippsland Oil and Minerals NL (Gippsland) acquired tenements over Queen Hill and during 1971 completed 10 diamond drill holes. Some of the early holes intersected massive pyrite-pyrrhotite sulphides containing cassiterite, but later holes intersected only minor mineralisation. Aberfoyle concluded a joint venture with Gippsland and completed 25 diamond drill holes at Queen Hill confirming mineralisation to 300m below surface.

Aberfoyle also conducted an helicopter-borne EM and magnetometer survey over an area of 25 km² to explore for additional large conductive targets. A strong magnetic anomaly was delineated on the eastern flank of the hill at Severn in the vicinity of Zeehan. In 1976, Aberfoyle tested the Severn magnetic anomaly with a 350m diamond drill hole (G39). The hole intersected 5.65m averaging 1.95% Sn as cassiterite within an interval of pyrite-pyrrhotite-siderite veined sediments from 140m below the surface.

Three subsequent holes intersected the predicted Severn position 40m above and 100m on either side of the discovery but failed to detect similar ore grade mineralisation. The fifth hole (G43) intersected 40m of 0.89% Sn within a 130m wide envelope of disseminated pyrite-pyrrhotite mineralisation situated 100m below the intersection in G39. Later surface IP; EM and airborne DIGHEM surveys did not detect any anomalies attributable to tin sulphide mineralisation.

In 1978 Aberfoyle reprocessed all Zeehan drilling data and the Queen Hill tin resource. As a result additional drilling was undertaken to improve the quality of the inferred resource and estimate the gross ore potential in the Zeehan area (Young, 1980).

During the period 1978 to 1982 the metallurgy of the Queen Hill ore was examined in detail following realisation that there would be difficulties with treatment of the Queen Hill ore because of the presence of fine grained (<20 microns) cassiterite and some stannite. In 1980, a bulk sample of Queen Hill ore was sent to Aberfoyle's Matte Fuming pilot plant in Kalgoorlie for metallurgical research with the objective of maximising recoveries to produce a saleable concentrate.

Meanwhile, detailed exploration follow up and drilling of the DIGHEM anomalies at Queen Hill and the NW part of EL 47/71 showed that the anomalies were due to the presence of unmineralised black graphitic slates.

In 1980, drilling to test for structurally controlled mineralisation adjacent to discovery hole G39, confirmed the interpreted structural plunge of the Severn mineralisation when it intersected tin mineralisation over an interval of 136.31m, which assayed 0.51 % Sn and included 4.6m @ 2.76% Sn in semi-massive pyrrhotite.

In 1981, CML 36M/81, covering an area of 5.64 km² was created following amalgamation of the seven leases comprising the Queen Hill project. A new resource estimate was compiled in June 1982 after completion of 89 diamond drill holes totalling 23,000 metres (Richardson and Sise, 1982). It was recognised that a substantial tin resource could be inferred for the combined Queen Hill, Severn and Montana deposits containing 7.3 million tonnes grading 0.69% Sn and 10.9 g/t Ag assuming 0.1% Sn cut off. Continuous higher grade zones, which totalled 3.61 million tonnes @ 1.21% Sn and 12.4 g/t Ag using a 0.5% Sn cut off were identified within the mineralised envelope (Palmer, 1982)¹. The historic resource estimate prepared in 1982 is classified as Historic under terms of the JORC Code. The estimate was prepared by Aberfoyle Limited, a major Tasmanian tin producer at the time, using appropriate and reliable exploration and drilling methodology². The results are presented to give an indication of the present known tin resources at Zeehan. Under the current JORC Code classification the historic resource estimate could be considered an Indicated and Inferred Mineral Resource.

1 Palmer, K.G. *Zeehan Project Geological Resource Assessment*. Aberfoyle Exploration Pty Ltd, Melbourne dated August 1982.

2 *The reported details relating to the historical estimate are consistent with the guidance contained in Companies Update no 11/07, 5 December 2007 for reporting historical estimates. Conclusions reached in the resource estimate report were reviewed and considered reasonable by Gus Bravo, BSc(Hons), FAusIMM(CP), a principal of A P Bravo & Associates who is a Competent Person as defined by the JORC Code (2004).*

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In 1983, a pre feasibility report prepared by Palmer suggested that the Zeehan tin project could be turned into a profitable underground mine.

Three separate deposits were confirmed, each with different configuration, mineralogy and metallurgy. They included the Montana (carbonate replacement), Queen Hill (fault and carbonate replacement) and Severn (fault stockwork) the largest deposit where there are opportunities for extensions at depth beyond 400m.

Following the pre-feasibility study Aberfoyle continued re-logging drill core and re-assessment of data. As a result, Anderson (1990) recommended further drilling to establish continuity within the higher grade mineralised zones and further metallurgical work. Results of this research formed the basis for a renewed exploration effort during 1989-1990, which involved two deep diamond drill holes.

On renewal of EL 47/71 in late 1984 the licence was sub-divided following Aberfoyle's decision to relinquish rights to the western portion (EL2/85), which was marked out for retention by Gippsland Oil and Minerals NL. The eastern portion of 36 km² surrounding CML 36M/81 in the vicinity of Zeehan was retained as part of the Queen Hill JV between Aberfoyle Resources Limited/Cominco Exploration Pty Ltd and Gippsland Oil and Minerals NL.

During 1985-86 Aberfoyle continued exploring in EL 47/71 and focused on assessing the potential of the Gordon Limestone sequence to host significant lead-zinc mineralisation (Sise, 1986). Following an initial bedrock drilling program, several zones of anomalous geochemistry, related to the contact between Gordon Limestone and adjacent sediments, were defined within the Dispatch – Crown grids north of Zeehan. The results were interpreted as due to narrow, discontinuous Devonian vein style mineralisation, which did not warrant further exploration.

During 1987, Renison Limited was granted an area over Queen Hill surrounding the consolidated lease (CML 36M/81) of the Aberfoyle/Gippsland JV as EL 42/87. Renison were intent on acquiring CML 36M/81 but, when negotiations were unsuccessful Renison began exploration to target Montana-Severn-Queen Hill style tin mineralisation in EL 42/87. In 1988/89, Renison completed detailed geological mapping, rock chip geochemistry and an aeromagnetic survey. Dr David Leaman (1990) was contracted to complete a detailed interpretation of the form of the Heemskirk Granite at depth using gravity data from the Tasmanian Tasgrav database. Leaman suggested that a spine of Heemskirk Granite probably extends eastwards from Mt Agnew to Zeehan below the area of EL 42/87 and demonstrated there was a positive association between known mineralisation, faulting and the granite intrusion. During 1990/91, Renison curtailed tin exploration, but completed 16 drillholes to assess the licence for potential base metal skarn/replacement mineralisation without success.

In 1989, Aberfoyle resumed exploration to test the area to the south and down plunge of the Severn mineralisation as having potential for hosting additional tin resources based on data re-assessment and structural reinterpretation by Anderson (1990). Aberfoyle drilled two more holes for 1320m. The intersections in holes ZS91 and ZS92 of 6.3m @ 0.44 % Sn and 10.3m @ 0.38% Sn respectively, although sub-economic in grade delineated a 900m southern extension to the previously known Severn ore position.

The holes were tested with down hole EM and Aberfoyle completed surface UTEM loops at the Queen Hill, Severn and Golf Course prospects. Aberfoyle had difficulty interpreting the EM results due to the presence of non mineralised stratigraphic conductors in the area. Significantly, it was not possible to recognise an EM response attributable to the Severn mineralisation.

In 1997, the mining lease was converted to Retention Licence RL 5/1997 and Aberfoyle was taken over in 1998 by Western Metals Limited. Little subsequent work was conducted on the tenement until Columbus Metals Limited expressed interest in continuing with exploration and development of the Zeehan tin resources.

Potential

The Zeehan project includes three significant, structurally controlled and replacement style tin deposits. There is scope to substantially increase their size and add to existing resources by discovery of additional tin mineralisation particularly at depth below the deposits.

The Queen Hill mineralised lens is reasonably well delineated and opportunities for expanding the resource along strike appear limited although there is room for a depth extension to the north at Queen Hill where opportunities were identified previously by Aberfoyle.

There are strong grounds to infer from previous work that mineralisation may continue below the base of the existing drilling at Severn and Montana which are not closed off down plunge and remain open below the deepest drilling.

By analogy with the Renison Bell replacement style of mineralisation there is potential for additional and possibly higher grade tin mineralisation associated with coarse grained cassiterite to occur adjacent to replacement horizons at a depth for 500m to the inferred granite source (Noonan, 1990). The use of modern DHEM geophysics could assist discovery if the mineralisation becomes richer in pyrrhotite at depth.

There is also potential for further tin discoveries at previously recognised structural sites including the Severn Fault, Argent Lode intersection and associated with the Montana Fault where it intersects the Oonah, Queen Hill and Spray Queen structural trends.

Despite the initial disappointing results from exploration at the Golf Course prospect there remains potential for discovery of high-grade, cassiterite-bearing quartz sulphide stockworking and Pb-Zn-Ag mineralisation similar to that exposed in historic prospecting pits in the area.

Planned Exploration and Expenditure

Columbus intends to undertake resource development drilling and exploration of the Zeehan deposits over the next two years with a view to expanding and upgrading the defined mineralisation. All pre-existing geological data will be included in the current digital database and a 3D model generated to identify additional drilling targets.

Columbus has allocated \$2,900,000 in the first year to be spent on resource exploration drilling and \$500,000 for exploration and follow up of previously identified structural targets.

A budget of \$5,000,000 has been allocated for delineation drilling in the second year to bring the resources at Queen Hill, Severn and Montana into the Measured and Indicated category consistent with the JORC Code.

St Dizier Tin Project

Introduction

The St Dizier project is located within Heemskirk tenement, EL46/2003, 18km WNW from Zeehan (Figure 2).

The project comprises the St Dizier tin deposit and the prospective St Dizier-Big H skarn horizon extending across open, button grass country that occupies part of a low level coastal plateau in western Tasmania.

The St Dizier skarn horizon, which is marginal to the northern contact of the Heemskirk Granite is characterised by three prominent aeromagnetic anomalies that are coincident with the St Dizier tin deposit and the Central and Big H exploration prospects respectively (Figure 4). Part of the Central prospect is covered by Mining Lease 21M/2003 of 5.6ha held by Stonehenge Metals Limited.

The St Dizier tin deposit is the most important of three zones of magnetite-pyrrhotite-cassiterite mineralisation at the western end of the 3km long skarn horizon. No work has been conducted on these prospects for the past 20 years.

Geology Setting

The Heemskirk tenement covers most of the contact between Late Devonian age Heemskirk Granite and Proterozoic rocks of the Zeehan-Waratah belt. The stratigraphy consists mainly of Oonah and Crimson Creek Formations also includes Siluro-Devonian formations in the Duck Creek area.

The St Dizier deposit is hosted by a folded sequence of Proterozoic Oonah Formation in which the lower units consist predominantly of quartzites. The more prospective siltstone and shale units containing dolomite and carbonate-rich sediments occur more frequently in the upper part of the sequence. The sediments have undergone regional metamorphism and have been subject to contact metamorphism close to granite.

Renison divided the sediments at St Dizier into three units comprising Hangingwall Quartzites, Footwall Slates and an intervening skarn-carbonate horizon (Roberts, 1982).

The Hangingwall Quartzites consist of quartzitic sandstone intercalated with fine grained, impure limestone sediments. The sandstones are intensively deformed by small scale folding. Close to the granite contact the sediments have undergone tourmaline and biotite alteration. The Footwall Slates consist of shales and chialstolite-bearing siltstones as a result of contact metamorphism by the Heemskirk Granite. The chialstolite was replaced by sericite with later alteration.

The skarn-carbonate is mostly a mixed clastic sediment containing large variations in carbonate thickness. The skarn consists essentially of dolomite-derived serpentinous marble. Where it is mineralised, the complex mineralogy is predominantly a mass of serpentine, chlorite, phlogopite mica, calcite, tremolite-actinolite and diopside. Roberts (1989) described the mineralogy as a fine grained schoenfliesite-cassiterite-stanniferous magnetite assemblage consisting predominantly of magnetite and pyrite, some pyrrhotite, lesser chalcopyrite and cassiterite.

The St Dizier mineralisation is confined within a roof pendant of Oonah Formation in an embayment in the northern contact of the Heemskirk Granite. The coarse-grained, muscovite granite is particularly rich in tourmaline and contains narrow greisen veins. The flat-topped Heemskirk batholith, which has a northerly dipping, irregular, shallow contact has been divided into two phases. The main phase consists of red granite, but there are areas of a white granite phase, which appears to have been more enriched in volatiles and is regarded as the source of fluids for tin mineralisation in the Heemskirk district (Roberts, 1989).

Contact metamorphism has resulted in intensive tourmaline replacement of argillaceous layers in quartzites close to the granite, increased quartz vein activity in quartzites near the contact and formation of magnetite-calc-silicate skarn alteration in sediments along the contact (Effler in Heithersay and Sumpton, 1982).

Widely dispersed fluvial gravels, Quaternary alluvium, Tertiary basalt and Permian glacio-marine gravels, up to 20m thick, obscure large areas of Oonah Formation north of the granite outcrop.

St Dizier Skarn Mineralisation

The St Dizier tin skarn mineralisation formed by metamorphism and metasomatic replacement of upper Proterozoic dolomite units within the Oonah Formation following intrusion of the Heemskirk Granite. The skarn unit extends eastwards from St Dizier for approximately 3km, wrapping around part of the northern contact of the Heemskirk Granite. At its western end the skarn horizon is 50-60m thick but widens towards the Central Anomaly and again at Big H at its eastern end possibly due to flattening dip (Figure 4).

The mineralisation in the skarn appears to be best developed in fold hinge zones at St Dizier, Central Prospect and Big H where changes in permeability and local chemical controls determined the skarn mineral assemblage and tin distribution. Favourable tectonic conditions at these sites has provided fluid pathways and increased permeability for the mineralising hydrothermal fluids (Young, 1980).

The skarn rocks have preferentially weathered where the St Dizier deposit is sulphide rich forming iron-coated gossanous outcrop as seen in some of the surface prospecting pits.

There are three distinct zones of tin bearing, magnetite-pyrrhotite mineralisation that make up the St Dizier deposit (Roberts, 1984), the Eastern, Central and Western Blocks.

The Western Block contains a small narrow pod, 25m wide, located close to surface 150m west of the main mineralised zone. Previous drilling suggests that the low-grade, mineralised zone contains less than 150,000 tonnes of metallurgically favourable mineralisation.

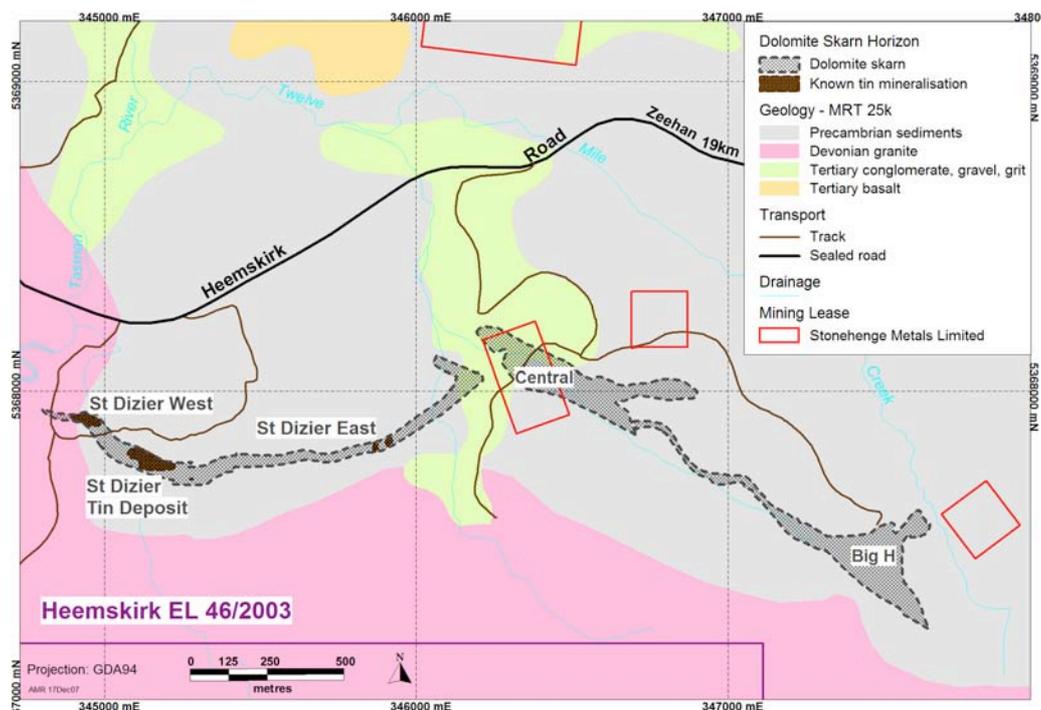


Figure 4. Dolomite skarn horizon

Exploration has shown that the Eastern mineralised Block extends for 700m horizontally and about 150m vertically approaching the granite contact from a depth of 100m. Drilling intersections indicate that the tin mineralisation varies from 2 to 25m true width in this area but does not come to surface. The zone has been sparsely drilled and there are indications a significant tonnage could be identified with more intensive drilling.

The economically important mineralised Central Block at St Dizier is a bulbous to pipe-like body within the main skarn horizon. Mineralisation is generally central to the skarn alteration but in places occupies the width of the skarn, which is about 50m (Figure 5).

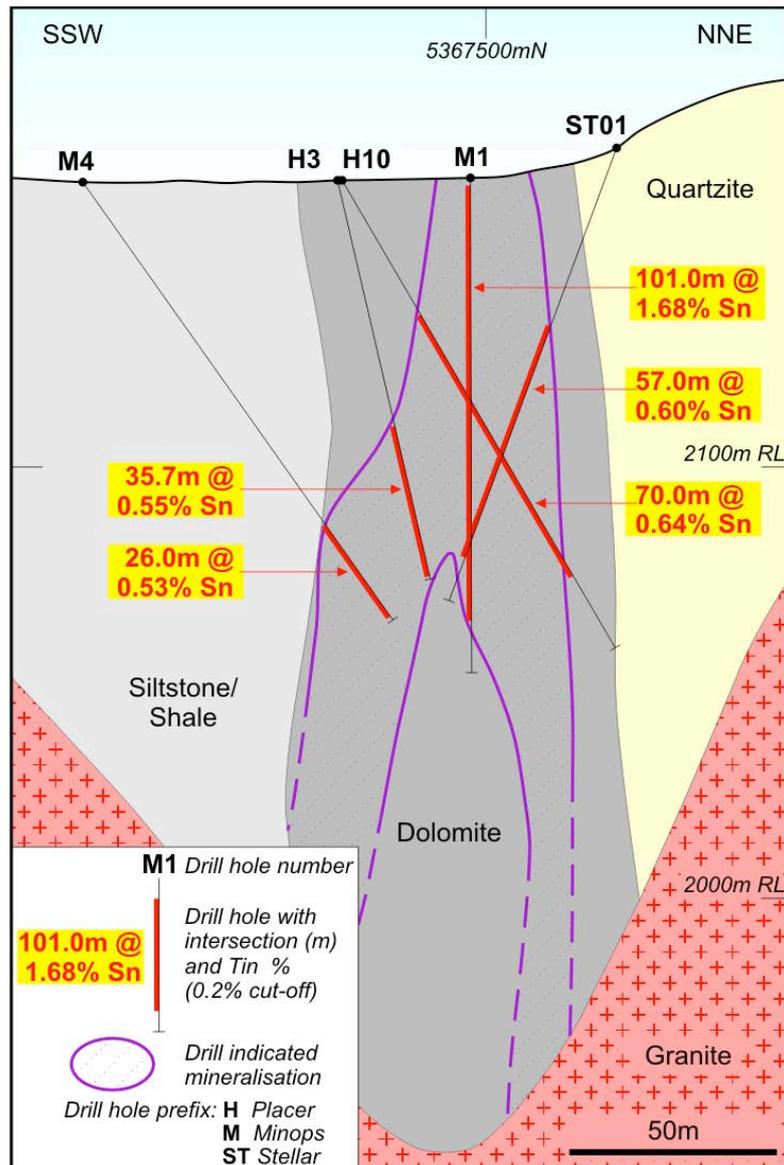


Figure 5. Cross section on line through M1- ST01

The general pattern of grades and thickness of mineralisation are shown on the longitudinal projection (Figure 6). The mineralisation forms a relatively thick, pod shaped lens 75m long and up to 50m wide which extends from ground level to a depth of approximately 120m below surface as tested in Hole M1 which was drilled in mineralisation by Minops Pty Ltd and intersected 101.5m @ 1.68% Sn (Renison re-assay)

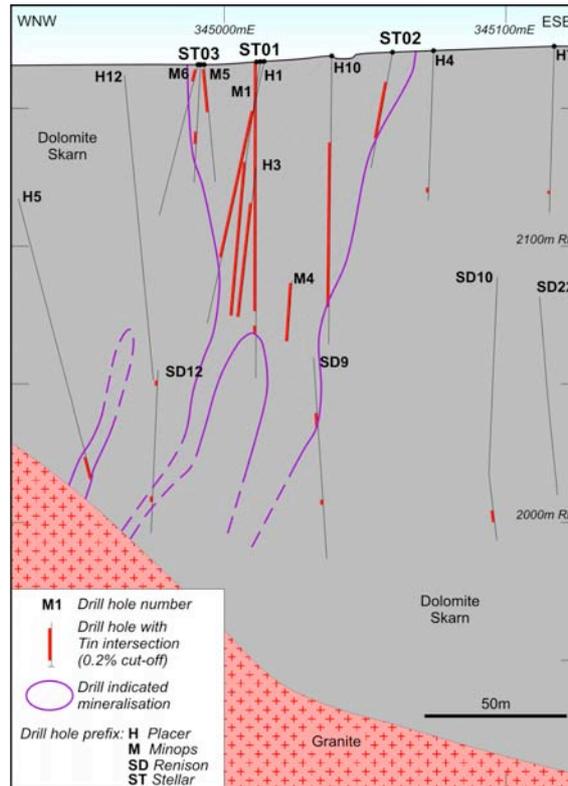


Figure 6. Long section showing tin intersections in the dolomite skarn

Renison considered the mineralisation thinned rapidly below about 120m based on an intersection of 3m @ 0.82% Sn in SD9 (Roberts, 1984). However, until further infill resource drilling is completed this hole cannot be considered definitive and the mineralisation is believed to be open at depth.

Previous estimates by Renison Limited suggest there is a mineralised zone of some 0.8 million tonnes in the Central Block (consisting mostly of cassiterite) and possibly as much as 2 million tonnes in the so-called West and East Blocks. A tonnage estimate to determine the possible open-cuttable potential of the central mineralisation was attempted using a longitudinal projection of the deposit. The shape of the mineralised body was contoured and a volume thicknesses calculated. Using a composite SG of 3.3 the estimate amounted to approximately 836,000 tonnes (Roberts,1984).

A resource estimate by Renison in 1984 identified 0.8 million tonnes @ 0.7% Sn and 0.05% WO_3 ¹ may be classified as a Historic² resource under the JORC code. The exploration was competently carried out by Renison, but they acknowledged that some drill hole data was questionable and they qualified the mineral resource as a “possible ore estimate”. Additional resource delineation drilling will be required to upgrade these mineralised areas to measured and indicated resource status in compliance with the JORC Code.

- 1 Roberts, P. A. *St Dizier Area, Progress Report. Renison Limited, dated June 1984.*
- 2 *The reported details relating to the historical estimate are consistent with the guidance contained in Companies Update no 11/07, 5 December 2007 for reporting historical estimates. The resources report and exploration methodology was considered as reasonable and reliable following a review by Gus Bravo, BSc(Hons), FAusIMM(CP), a principal of A P Bravo & Associates who is a Competent Person as defined by the JORC Code (2004).*

Previous Exploration History

The St Dizier-Heemskirk area was prospected intensively for tin following the discovery of alluvial tin in streams draining Mt Heemskirk in 1876. However, the tin boom was short lived

and by the late 1880's only a few small alluvial tin mines were left operating in the Heemskirk area.

Assistant Government Geologist Waller reported discovery of the St Dizier magnetite tin sulphide skarn in 1902. From 1913 to 1920 the Heemskirk Tin Syndicate carried out alluvial tin mining in the Tasman River area, 1.5km north of St Dizier.

In 1915, the Tasmanian Department of Mines issued reports on a tourmaline-quartz-haematite vein at Longs Iron Blow containing 0.3% Sn and the Mt Arthur Copper Mine, a small shaft in chalcopyrite-arsenopyrite mineralisation, which historically had returned 26.8% Cu. Both are located in Heemskirk Granite in the vicinity of St Dizier.

Later that year Waterhouse described the St Dizier mineralisation in detail and reported a grade of 0.97% Sn and 47.4% Fe but was not enthusiastic about the economic potential of the discovery. Consequently, there was no further exploration activity until Roy Laffer pegged leases 13M50, 16M62 and 17M72 covering the St Dizier prospect, in the period between 1959 and 1963, while prospecting and mining alluvial tin in the nearby Tasman River.

The majority of exploration work during the 1960's included reconnaissance mapping, geochemistry and detailed follow-up of old prospects along the margin of the Heemskirk Granite. Exploration at the time also included the first regional aeromagnetic coverage of the Heemskirk area by Aero Service Limited for the Aberfoyle Tin Development Partnership. The survey was undertaken in 1965 on east-west lines at a spacing of approximately 400m and an altitude that varied from 100m to in excess of 400m.

In the mid 1960's Placer Development Company (Placer) explored the St Dizier mining leases in joint venture with Laffer. Resulting from this work Placer identified the skarn horizon and the Central Block of high-grade tin mineralisation at St Dizier prior to withdrawing from exploration in 1966. Their exploration program included 12 diamond drill holes and 48 auger holes (Roberts, 1989).

The easterly extension of the skarn horizon between St Dizier and Big H was explored in 1966 and 1967 by Pickands Mather and Company International (Pickands Mather). Pickands Mather completed geological mapping and ground magnetics before drilling four diamond core holes to test for tin mineralisation in altered serpentinised skarn rocks in the area (Schmidt, 1967).

The first of these holes (H101) was drilled to test a prominent magnetic anomaly near the Twelve Mile prospect. The hole is close to the boundary of Stonehenge Mining Lease 21M/2003, which covers the prominent regional magnetic anomaly referred to as the Central Anomaly. Although collared in argillite, the majority of the hole consisted of serpentinised calc-silicate (now considered skarn but previously referred to as altered intrusive ultrabasic) and carbonate. The core contained several magnetite-sulphide zones from 143.3m, and included an intersection of 4.8m @ 0.25% Sn and a narrow magnetite-sulphide zone which returned 1.3m @ 0.45% Sn. The hole was stopped in serpentinised host rock at 160.6m (Schmidt, 1967).

The remaining three holes were drilled to test the area of the Big H regional magnetic anomaly at the eastern end of the skarn horizon. H102, which was drilled beneath a strong soil tin anomaly coincident with the main magnetic anomaly failed to intersect mineralisation. Rombouts (1983) later suggested that the hole was drilled down dip and may have passed above the skarn horizon. The other two holes drilled on the periphery of the Big H anomaly contained tin values ranging from 4 to 6,400ppm Sn.

Minops Pty Ltd commenced exploration in joint venture with Roy Laffer at the St Dizier leases in 1970. The work included gridding, ground magnetics and a self potential geophysical survey followed by nine diamond drill holes (Pearce, 1971).

Minops, who subsequently became the Paringa Mining and Exploration Company renegotiated an option agreement with Roy Laffer in 1978 and in 1979 farmed out the

exploration rights to Renison Limited to explore the St Dizier leases. During the period 1979 to 1984 Renison was granted an additional mining lease abutting the eastern edge of 13M50, 16M62 and 17M72. The Company subsequently completed geological mapping, soil geochemistry, trenching and geophysics before drilling fourteen diamond holes (SD9 to SD22) (Roberts, 1981; Kilpatrick, 1982; Roberts, 1984).

In October 1979 Renison drilled a series of holes (SD9 to SD13) to test the economic potential of the main St Dizier tin mineralisation and an additional two holes (SD14-SD15) to test the eastern extension of mineralisation. The work was followed by a proposal to drill a 4,000m program of 16 diamond holes to derive an ore tonnage for the main St Dizier deposit.

However, following a program of mapping, bedrock sampling and ground magnetics during 1981 and 1982, Renison opted instead to drill a further five holes (SD16-SD20) to test the eastern extremities of the mineralisation. Other work included petrological studies and metallurgical test work on the mineralisation. Renison also re-assayed sections of core from 4 of the original 12 Placer drill holes (H5-H8).

In 1983 a two drill hole program (SD21 and SD22) drilled in the eastern part of the mineralised zone to test for major extensions of mineralisation at depth failed to return encouraging results. Renison then completed re-assaying old core for tin and gold before completing a final assessment of the property's economic potential, which led to them withdrawing from the joint venture.

In the 1970s, following grant of EL 22/73 surrounding the St Dizier MLs and covering the St Dizier to Big H skarn horizon, Aberfoyle Exploration Pty Ltd (Aberfoyle) began to actively exploring the northern aureole of the Heemskirk Granite (Oxenford, 1981).

From 1974 to 1976 their exploration program included mapping, soil geochemistry and geophysics followed by diamond drilling (eight diamond holes for 540m) and trenching along the St Dizier skarn horizon.

In April 1975 an airborne EM and magnetic survey was flown to cover the continuation of the St Dizier skarn from Central Anomaly and Twelve Mile Creek to Big H and explore for previously unrecognised skarn mineralisation.

An agreement between Aberfoyle and Gippsland Oil and Minerals NL in 1977 resulted in the amalgamation of 22/73(St Dizier), 47/71(Queen Hill) and 13/76(Heemskirk). The larger area, designated EL47/71, took in the majority of the Heemskirk Granite contact thereby enabling Aberfoyle to complete a regional program of stream sampling and mapping around the northern Heemskirk Granite contact.

Aberfoyle's focus moved away from the St Dizier skarn to regional exploration within EL 47/71 and they completed a DIGHEM airborne electromagnetic and magnetic survey in March 1980. Several EM and magnetic targets including the North West Anomaly, Tasman River and Twelve Mile Creek prospects were identified. Further exploration included an additional SIROTEM geophysical survey, bedrock geochemistry and trenching at Twelve Mile Creek. The EM anomaly at Twelve Mile Creek was found to be due to carbonaceous sediments. Consequently, the associated magnetic anomaly was not drilled.

Gippsland Oil and Minerals NL retained part of EL47/71, covering the northern contact of the Heemskirk Granite following Aberfoyle's withdrawal from the joint venture in 1984. After a review of past exploration activities Gippsland relinquished the area.

Following assessment of the extensive tin workings in the Tasman River area north of Mt Heemskirk, Renison Limited signed an option agreement with S G Laffer and F J Griffiths in late 1996. Their objective was to test the potential for large-volume placer tin mineralisation in the alluvial sediments in the area. Subsequent exploration including excavator pit sampling and an RC drilling program comprising 16 holes to depths ranging from 4 to 70m confirmed the existence of cassiterite in basal placers within pre-basalt Tertiary sediments. On completion of the program Renison concluded that the thickness and distribution of sub-

Tertiary sediments was insufficient to provide an alluvial tin resource of preferred size and grade and they withdrew from the option.

Then followed a long period of depressed metal prices, particularly for tin, and no more exploration work was undertaken at Heemskirk until the area was taken up by Rubicon Mintec Ventures Pty Ltd (Stellar Resources Limited) in 2003.

Chris Young Consulting Pty Ltd completed a review of previous exploration for Stellar Resources Limited (Stellar) in early 2005 and recommended a program of metallurgical sampling and drilling to test the St Dizier tin deposit. In 2007, Stellar drilled three holes (ST01 – ST03) at the main central ore body at St Dizier to confirm the previous results and obtain sample material for metallurgical testing. All three holes were successful in returning tin intersections consistent with previous Placer and Renison drilling results.

In late 2006 Stellar drilled hole TRD1 in the southern part of Heemskirk EL 46/2003 at their Devises prospect located 2km NNW of the Avebury nickel mine. The hole was designed to test a strong aeromagnetic anomaly covering the contact between Heemskirk Granite and Cambrian ultramafic rocks. The hole intersected 146.0m of complex hornfels-skarn and granite migmatite geology containing disseminated and localised thin veins of pyrrhotite accompanied by chlorite, sericite and fluorite alteration. Despite the prevalence of hydrothermal alteration, results for tin and nickel values were low.

Planned Exploration and Expenditure

The geology of the St Dizier tin deposit is well understood. The mineralisation is constrained within the distinctive skarn carbonate horizon drilled in the central and western zones. In the eastern zone drilling has been insufficient to establish continuity of mineralisation with depth.

There remains considerable untested potential for additional discoveries of tin mineralisation in magnetite skarn within the northern contact aureole of the Heemskirk Granite where local and isolated magnetic highs are regarded as excellent exploration targets.

Drilling is warranted to explore the sizeable extension of mineralised skarn, which extends over 3.0km and includes the Central and Big H anomalies. Combined with the known resources at St Dizier the area has the potential for discovery of a significant tonnage of mineralisation suitable for open pit development.

The St Dizier resource is poorly defined by intersections from only 15 drill holes. The widely spaced and incomplete drilling means previous resource estimates are inferred category. A definitive drilling program is required to calculate an indicated resource followed by careful metallurgical testwork to take the project to feasibility.

Over the next two years Columbus intends to undertake resource development drilling and also expand the resource with further exploration drilling. All pre-existing drilling and geological data will be entered into a 3D model, which will be used to support the drilling program. Additional metallurgical testwork is also planned. The new mineral resource estimate will be consistent with the JORC Code.

Expenditure of \$122,800 is proposed in the first year to allow for testing the eastward extension of the mineralised zone and with additional expenditure of \$122,800 in the second year for follow up exploration. Columbus has allocated expenditure of \$591,200 for drilling and resource evaluation at St Dizier in the second year.

Granville East Project

Introduction

The Granville East project is located within the Heemskirk tenement, EL46/2003, 5km NW of St Dizier and 23km NW of Zeehan. Access is from the Heemskirk Road and the Granville Homestead road.

The project area is characterised by a prominent aeromagnetic anomaly elongated in a NNW direction over a strike length of 2.5km. The area has potential for magnetite-pyrrhotite tin-bearing skarn mineralisation given its location immediately north of the Heemskirk Granite contact (Figure 7).

Granville East includes a pipe-like tin-bearing skarn deposit previously mined from a small open pit in mining lease 21M/2003 held by R. K. & R. H. McDermott. An adjoining mining lease, 9M/2006, held by Stonhenge Metals Limited covers 10ha either side of 21M/2003. The open pit within 21M/2003 and the remainder of the excluded mining leases cover a 200m strike extent of the magnetic anomaly.

The area comprises open undulating plains with a cover of button grass and peat. Previously logged areas at the southern end of the anomaly, are covered by scrubby, ti-tree dominated vegetation.

Geology and Mineralisation

The project area is dominated by surface cover of remnant gravels, grey-white quartzite float and clay developed over Precambrian Oonah Formation.

The regionally extensive Oonah Formation comprises an easterly dipping succession, consisting of quartzite and micaceous quartzite with quartzites in the upper part of the sequence containing thin shale interbeds. Down dip there is an increase in dolomitic mudstone and carbonaceous black shales, which contain altered calc-silicate-carbonate skarn.

The north-trending skarn unit is up to 10m wide. In general, the calc-silicate varies between a tremolite rock and complex tremolite/actinolite, diopside, siderite skarn. The skarn is serpentinised and mineralised in part with varying amounts of magnetite, pyrrhotite, arsenopyrite, pyrite and cassiterite. Regionally, the dominant NNW trending aeromagnetic anomaly is coincident with the calc-silicate/carbonate skarn.

Previous Exploration

The Granville East area was identified initially by CRA Exploration (CRAE) from the 1957 Rio Tinto aeromagnetic survey. Following this, the area was explored in joint venture with Geopeko Limited (Geopeko) during the period 1980 to 1983.

Geopeko flew an additional aeromagnetic survey in 1981 to refine the original anomaly utilising an improved quality survey available at the time. Following the initial exploration, which consisted of geological mapping, C-horizon soil geochemistry, ground magnetics and an SP electrical survey, Geopeko excavated three costeans.

The first costean tested a previously identified, gossanous magnetite skarn. Results from rock chip sampling at 1 metre intervals along the costean included an anomalous tin interval of 10 metres averaging 2.9% Sn with a peak value of 11.2% Sn. Geopeko followed the gossanous zone southwards along strike with a second costean excavated in magnetite-siderite mineralisation. Further encouraging rock chip assays, which included 10m at 4.17 % Sn and containing one metre at 8.8% Sn were attributed to secondary enrichment. Another costean, excavated 200m south across the magnetic anomaly, cut through diopside skarn containing phlogopite, pyrite and arsenopyrite but the resulting tin values were low suggesting tin distribution in the skarn is erratic. The third costean failed to penetrate the Tertiary overburden.

Geopeko completed a diamond drill hole (GREDDH1) to a depth of 156.4m to test below the gossanous skarn. The hole intersected 85m of tremolite-actinolite skarn containing magnetite, and goethite replacing oxidised pyrrhotite mineralisation, which contained 4m at 0.11% Sn from 37.5m.

Geopeko subsequently completed a further 4 diamond drill holes (GREDDH2-5) to explore the north-trending aeromagnetic anomaly over a strike length of 500m. The drilling also tested targets associated with the costean anomalies and anomalous Sn, Cu, Zn and As soil geochemistry. One costean and two of the drill holes were completed within Mining Lease 21M/2003 held

by Stonehenge Metals Limited. A fifth hole designed to test the down dip extension of the pyrrhotite-magnetite mineralisation in GREDDH1 intersected 2m of banded, pyrrhotite serpentine rock with pyrite replacing pyrrhotite but no significant tin values were recorded (Heithersay, 1983).

Geopeko also identified the 11000 prospect, which represents the northern extension of the mineralised Granville East stratigraphy (Figure 7)

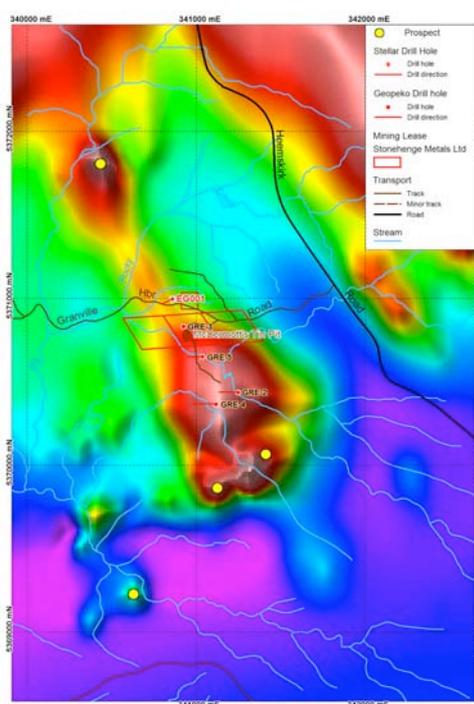


Figure 7 TMI and location map

At the **11000 prospect** a tin-bearing, ironstone-magnetite zone consisting of altered hornfels surrounding a central sequence of black shales and calc-silicate rock was mapped in 1983. The exposed, gossanous tin-bearing mineralisation has a coincident well-defined soil tin geochemical anomaly with values between 100 and 300ppm Sn. Four other discrete geochemically anomalous zones were identified within the prospect with coincident Sn, As, Cu, Zn and Sn, Bi, As, Zn, Fe geochemistry considered typical of a tin-bearing skarn.

The near surface magnetite-pyrite-ironstone mineralisation with accompanying anomalous tin values was considered very encouraging. The results were attributed to a zone of mineralisation within the calc-silicate, carbonate unit that extends throughout the Granville East prospect over a strike extent of at least 1.5km (Heithersay,1983). Geopeko proposed infill ground magnetics, soil sampling and costeaning followed by two drillholes to test the calc-silicate/carbonate unit but did not undertake this further work.

As part of the regional exploration Geopeko completed a study of mineralisation, photolineaments and faults and their relationship to the possible channelling of tin-bearing

fluids in the area (Heithersay,1983). Five areas of interest were highlighted for future work but not explored.

The **Big Rocky Creek** prospect located 1.7km east of **11000** is a broad magnetic anomaly extending sub parallel with the Granville East trend. A large portion of the area is covered by Tertiary basalt and basalt veneer but Lower Oonah Formation comprising micaceous quartzites and thin very carbonaceous shales typical of the Granville East sequence is exposed. Black shales were mapped central to the anomaly but modelling of the magnetic profiles suggests a deep seated magnetic target is present. Reconnaissance soil sampling covering the magnetic anomaly produced a patchy geochemical signature of weak coincident As, Cu, Zn but no significant Sn geochemistry. Geopeko reported that the broad areal extent of this anomaly suggests a large tonnage body of magnetic skarn material could be present and further work was recommended, including infill soil sampling, but no follow up took place.

In 1983, the **Donnelly's** prospect, located to the south of McDermott's pit was explored by Aberfoyle Exploration Pty Ltd (Aberfoyle) within its Queen Hill EL47/71 tenement. Aberfoyle reported discovery of a sulphide-bearing gossan assaying 2.6% Zn, 0.17% Pb and 0.33% Cu at Donnelly's during follow up of DIGHEM anomaly 203A, but no drilling was undertaken. C horizon soil geochemistry and follow up costeaning of anomalous geochemistry also revealed several areas of possible structurally related magnetite skarn mineralisation assaying up to 1.35% Sn.

Ground magnetics and mapping identified at least two different skarn horizons in the sedimentary sequence at or near the contact between quartzite and a carbonate horizon near the base of mudstones in Oonah Formation. The skarn horizons converge to become 50m wide in places. The skarn consists of a talcose, chloritic assemblage containing disseminated sulphides at the contact of green-grey-white serpentinised mudstone and quartzite. Serpentine has been partly replaced by magnetite-pyrrhotite-cassiterite mineralisation.

Based on petrological work the rocks are similar to the St Dizier skarns suggesting they were dolomitic limestones interbedded with magnesium-rich argillaceous sediments (Rombouts,1983). Results of geochemical assaying of costean rock samples showed most rock chip samples of serpentinous, sulphide mudstone were anomalous in zinc and copper with up to 5.2% Zn and 0.7% Cu. Tin was shown to be irregularly distributed and weakly anomalous up to 1.05% Sn.

Costean sampling across the area that subsequently became the McDermott's open pit returned tin grades averaging 2.86% Sn over 10m. Strong magnetite bands up to 27% Fe and tin rich bands up to 11.2% Sn. Further trenching returned values to 8.8% Sn over 10m with an average 4.2% Sn. Later work has shown this may be elluvial tin derived from weathered material above the ore zone (Featherstone, 2006).

After R. K. & R. H. McDermott were granted 21M/2003 in March 2004, McDermott Mining Pty Ltd (MDM) opened up the Granville East pit (McDermott's) firstly treating elluvial ore then bedrock ore. The pit is located over calc-silicate skarn mapped by Geopeko. Production to date comprises 3600kg of high quality concentrate.

C H Young visited the pit in 2005 and confirmed the presence of a typical (Zeehan style) mineralised tin lode exposed in outcrop within the pit (Internal Memo, Stellar Resources Limited, 2005).

In 2005, Bluestone Mines Tasmania Pty Ltd, now Metals X Limited carried out limited sampling and mapping of the weathered primary mineralisation of the Granville East pit. Channel sampling by Bluestone Mines Tasmania Pty Ltd is reported to have returned 9m width grading 4.10% Sn from across exposed mineralisation (Featherstone, 2006).

Further drilling in 2006 by McDermott included one RC and 3 diamond holes. The drilling suffered from poor recoveries but did return values to 3.6% Sn. The RC drilling intersected 18m of mineralised material with assays to 2.6% Sn.

Exploratory work to date by Stonehenge Metals Limited (Stonehenge) has been inconclusive and complicated by the poor state of the open pit and irregular exposure of the ore horizon. In early 2007, Stonehenge completed 573m of aircore drilling to shallow depths to determine the geological continuity and grade of the mineralised zone within the pit at Granville East. In the northern part of the pit drilling intersected a broad zone (av width 25m) of calc-silicate skarn alteration containing visible magnetite. The best results returned 0.2% tin.

In 2006 Stellar Resources Limited completed a diamond hole in an area 200m north of the open pit. The hole, drilled to 150m, intersected a quartzite and shale sequence containing 7.6m of banded quartz carbonate and black shale from 79m. Sparse mineralisation in the hole consisted of pyrrhotite veinlets and minor sphalerite. The hole appears to have been drilled too far to the west and tested above the main calc-silicate unit.

Planned Exploration and Expenditure

The tin mineralisation at McDermott's open pit is associated with a prominent aeromagnetic anomaly and has a pipe like distribution characteristic of the mineralisation at St Dizier. Application of this model shows that there are a number of similar aeromagnetic anomalies within the Granville East trend including Donnellys and 11,000 and nearby Big Rocky Creek, which have not been tested by drilling. In a regional context the anomalies occur in a similar geological setting, close to the contact with Heemskirk Granite and are analogous to the "thumb print" magnetic anomaly that defines the St Dizier tin resource. These anomalies are very likely to represent additional tin rich pipes of a size comparable to St Dizier. Two other, though less intense aeromagnetic anomalies located to the SW of Donnellys also warrant exploration follow-up.

Four diamond drill holes have been proposed by Columbus for follow up exploration to test the aeromagnetic anomalies at Granville East. Expenditure of \$61,400 has been allocated for exploration and drilling in the first year of operation to test the 11000 prospect at East Granville North. A further \$30,700 is proposed to complete exploration drilling in the second year. \$184,200 has been allocated in the second year for exploration drilling at the Donnellys magnetic anomalies.

Gourlays Creek Project

Introduction

Gourlays Creek is located within the Heemskirk tenement, EL46/2003, approximately 27km WNW of Zeehan. The project area, which is situated near the coast 2km north of Granville Harbour is readily accessible from the Zeehan-Corinna Road via the Granville Homestead road.

The Gourlays Creek project is defined by a strong NNW-trending, arcuate aeromagnetic anomaly with an interpreted strike length in excess of 5km. The area has potential for tin and copper-bearing magnetite skarn mineralisation in banded calcareous sediments of the Precambrian Oonah Formation.

The prospect includes the Vincent's Cu showings, reported by Waterhouse (1915) to contain a 4m band of mineralisation consisting of magnetite, haematite, pyrite and quartz. A grab sample of malachite bearing rock from the prospect assayed 10.8% Cu and 45.5ppm Ag (Heithersay and Sumpton, 1982). Previous exploration identified geophysical targets including several conductive zones and a strong chargeability anomaly in mineralised sediments related to the aeromagnetic anomaly (Figure 8). The targets have been inadequately explored.

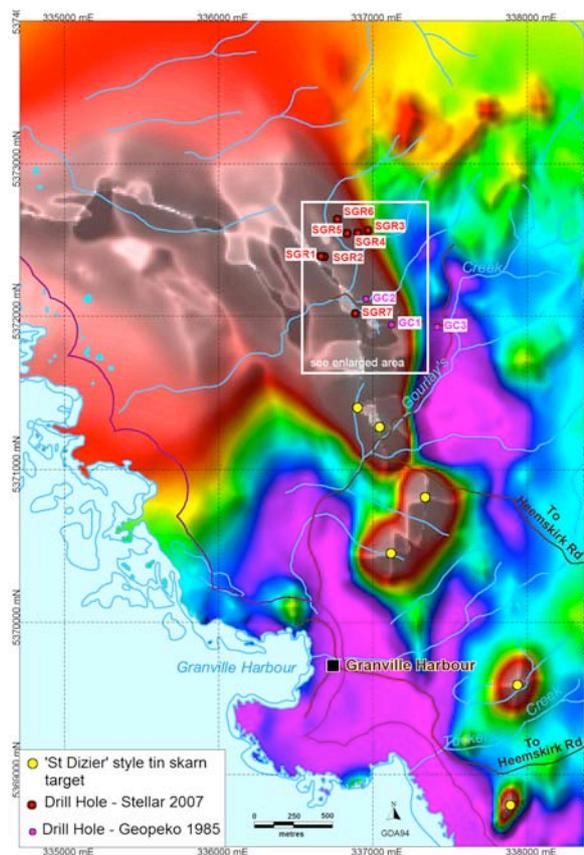


Figure 8 Gourlays Creek TMI and location map

Geology

Tertiary basalt covers the lower coastal plateau throughout a large part of the prospect. Outcrop is poor because surficial deposits of sub-basalt derived fluvial gravels, sand and basalt soils are widely distributed over the Tertiary plateau.

The basement geology consists of metamorphosed Precambrian Oonah Formation. The sequence is dominated by chloritic quartzites containing pyroxene garnet skarn, interlayered micaceous and chloritic siltstone, calcareous siltstone and hornfels (Norris, 1985).

The main body of Devonian Heemskirk Granite in the southern part of the prospect consists of tourmaline-rich muscovite granite.

Quartz-tourmaline veins and greisen commonly occur around the granite contact indicating abundant fluid movement was associated with the granite intrusion. The tourmaline veins reportedly contain tin values to 0.22% Sn. The carbonate horizons have been metasomatised to form pyroxene garnet skarn and pyrite magnetite skarn. Actinolite is the most prevalent accessory mineral. Mineralised black shales have been mapped in the eastern part of the prospect. The trend of the prominent aeromagnetic anomaly is coincident with this stratigraphy.

Two distinct styles of mineralisation occur at Gourlays Creek. Stratiform, massive and banded magnetite-quartz and massive pyrite mineralisation appears to be related to metamorphosed iron-rich sediments within the Oonah Formation. A second phase of mineralisation, which accompanied the late Devonian Heemskirk Granite intrusion, caused the formation of pyroxene-garnet skarn during metasomatic replacement of carbonate sediments above the banded iron units. In the carbonate-poor sediments tremolite-epidote hornfels developed in place of pyroxene skarn. Alteration of pyroxene garnet skarn resulted in the deposition of actinolite, epidote, magnetite, pyrrhotite, chalcopyrite and pyrite. Deposition of sulphides and tin occurred during retrograde skarn alteration (Norris, 1985).

Previous Exploration

In 1957, the regional airborne magnetic survey over western Tasmania by Rio Tinto Australia (Rio Tinto) identified the Gourlays Creek magnetic anomaly.

There was no subsequent exploration until most of the area was taken up by the Australian and New Zealand Exploration Company (Anzeco) in 1975 as EL 10/75. Anzeco was exploring regionally for tungsten mineralisation and targeted the Gourlays Creek magnetic anomaly. Pan-concentrate samples from heavy mineral stream sampling were assayed for tungsten, copper, lead, and zinc. The results did not support their exploration model and Anzeco relinquished the area (Cromer, 1990).

During 1979, Rio Tinto joint ventured the area to Geopeko Limited (Geopeko) who investigated the 5km long Gourlays Creek aeromagnetic anomaly. Preliminary work by Geopeko identified discrete magnetic horizons within the Gourlays Creek anomaly and located several magnetite and copper occurrences. Tin values in rock chips from pyritic quartzites in the area, which assayed 15 to 140ppm Sn were considered anomalous.

An additional aeromagnetic survey was flown for Geopeko in September 1981 by Geox Ltd. The improved quality and presentation of data enabled Geopeko to identify major magnetic anomalies at Gourlays Creek, Gourlays South, Granville East, St Dizier and Big H (Figure 2).

During 1982, the exploration effort was expanded to include ground magnetic surveys, mapping and soil sampling. The work outlined a well defined tin anomaly over a sequence of magnetic banded rocks in the vicinity of a north trending spine of the Heemskirk Granite near Gourlays Creek (Heithersay and Sumpton, 1982).

The conformable sequence of massive and banded magnetite units, commonly between 1 and 2m thick were considered by Geopeko to be part of a sequence of metamorphosed iron-rich, calcareous sediments related to banded iron formation of essentially chemical origin. The banding was believed to reflect primary compositional layering (Perring, 1983).

A second calc-silicate hornfels horizon with anomalous As, Sn and Ag geochemistry was identified in the eastern section of the sequence adjacent to the eastern magnetite lode. Both have been recognised as potential hosts for tin-copper skarn or replacement style mineralisation.

A UTEM geophysical survey by Geopeko in 1984 defined two main conductive zones extending for the strike length of the survey (1000m) and infill dipole-dipole IP identified a continuous chargeability anomaly at the southern extremity of the UTEM conductors.

Geopeko completed three diamond drill holes at Gourlays Creek to test the UTEM conductors. The holes intersected two main mineralised horizons consisting of stratabound sulphide-magnetite mineralisation, over widths of 9 to 15m (Kendall, 1984).

Drillhole GC1, which was drilled to test the coincident magnetic, IP and geochemical anomalies intersected pyroxene garnet skarn interbedded with magnetite pyroxene skarn. The best tin values in the skarn came from 1m at 0.3% Sn from 41m in the magnetite pyrite rock.

GC2, drilled to test the relationship between pyrite and magnetite intersected narrow magnetite-pyrite and magnetite-pyrite-barite-quartz horizons containing low copper and tin values. Another interval of massive pyrite and altered siltstone contained 1m @ 2.1% Cu from 97m.

GC3 was designed to test the eastern UTEM anomaly and the down dip continuation of the two mineralised zones intersected in GC1. The hole intersected two pyroxene-garnet-magnetite-pyrrhotite skarn horizons in biotite hornfels at 156-165m and 184-200m. Below this, 15m of massive and banded sulphides containing pyrite, pyrrhotite, magnetite and chalcopyrite contained an interval of 3m at 0.37% Cu. The hole ended at 376m in biotite altered quartzite containing quartz veining and sulphides, which returned 4m at 0.42% Cu with a max value of 7250ppm Cu.

Following the work by Geopeko, New Holland Mining NL (New Holland) commissioned Dr D E Leaman to evaluate the aeromagnetic and gravity data. His interpretation suggested one or more spines of Heemskirk Granite shelving north under the Granville Harbour area at depths of less than 1.5km (Leaman, 1988).

Leaman suggested that the strong magnetic signature in the Gourlays Creek area was most prospective and should be assessed for tin-base metal replacement style mineralisation of the Renison Bell type. However, New Holland relinquished the area without completing any work.

Following re-appraisal of the 1984 Geopeko UTEM survey, Young (2007) suggested that the conductors in the southern part of the grid were representative of stratabound replacement lodes, which steepened and extended northwards under basalt cover. To test this possibility, Stellar Minerals Limited (Stellar) completed an initial scout program of 7 RC drill holes at Gourlays Creek in 2007 (Figure 8). The 780m drilling program was designed to test the magnetic and EM anomalies identified by the Geopeko 1984 UTEM survey. Due to difficult drilling conditions only three holes intersected the target.

Drill hole SGR1 contained 3m at 0.32% Cu from 75m and 3m at 0.86% Cu from a depth of 81m in magnetite skarn. A lower zone from 147 to 150m returned copper values to 2,954ppm Cu. The most easterly hole, SGR3, was drilled within a non magnetic zone but had to be abandoned at 57m. Prior to that depth the hole intersected 3m at 1.45% Cu from 44m and 4m with 0.3g/t Au from 53m.

The results confirmed the predicted correlation between the EM response and both the calc-silicate altered turbidites and the chlorite-magnetite-pyrite altered turbidites (Morrison, 2007).

The main magnetic anomaly trends northwards then arcs towards the coast in an EW direction and appears to coincide with the interpreted position of the southern boundary of the Duck Creek Graben where Palaeozoic rocks are faulted against the Oonah Formation sediments. The area is generally covered by thin Tertiary gravels and windblown sand deposits. There is potential for a significant tin/tungsten skarn deposit hosted by carbonate rocks in this area.

Planned Exploration and Expenditure

Exploration results from previous soil geochemistry, ground magnetics IP and UTEM surveys suggest that there is potential for skarn or replacement style tin and copper mineralisation within the banded calc-silicate rocks of the Oonah Formation at Gourlays Creek. The previous work has shown that there is a banded unit within siltstones, containing pyrite, magnetite, pyrrhotite and chalcopyrite, which is continuous along strike and coincident with the airborne magnetic anomaly. It is overlain by a discrete zone of anomalous soil geochemistry containing high tin values to a max 1000ppm Sn and generally coincident anomalous Cu and Zn values. Columbus also propose drill testing of the interpreted position of the southern boundary of the Duck Creek Graben where a significant mineralised skarn may be present.

Previous drilling has inadequately tested the anomalous UTEM conductive zone and infill drilling to test the geophysical anomalies is warranted. Columbus proposes to spend \$361,250 in the first year on exploration and drilling to test the targets. A further \$150,500 has been allocated for expenditure in the second year for exploration drilling to test the south skarn aeromagnetic anomalies such as Gourlays Creek and Tuckers Creek.

Rayne EL 49/2004

Introduction

Rayne EL49/2004 covering an area of 28km² is located 8km NE of Zeehan. The tenement was acquired to cover the large Cuni aeromagnetic anomaly (MRT, 1981) situated immediately south of the western part of the Renison Bell Mining Lease and west of the Cuni copper nickel prospects at Melba Flats. The magnetic anomaly, covering ~6km² is relatively untested apart from one hole drilled by Renison in 1985, which intersected only Crimson Creek Formation (Kilpatrick, 1985).

Because of favourable geology, abundance of faulting and proximity to the Renison and Razorback tin mines there is potential for replacement style tin deposits, as well as fault-infill and skarn style mineralisation.

Geological Setting

Two major displacement faults cut through the northern area of the Rayne tenement and control the distribution of stratigraphic units. A sedimentary wedge of Lower Cambrian Success Creek Group and Crimson Creek Formation has been faulted against Proterozoic Oonah Formation by the Dunkley Fault in the north-western part of the tenement. The NE-trending fault extends over 7km from north of Zeehan.

The major part of the tenement consists of Siluro-Devonian Eldon Group sediments represented by shallow marine quartzose sandstones similar to those outcropping on the Boodecker Ridge in the southern part of the tenement (Figure 9). The sediments occupy the eastern limb of a gently folded syncline, which is in contact with Crimson Creek Formation along the NNW trending Boodecker Fault.

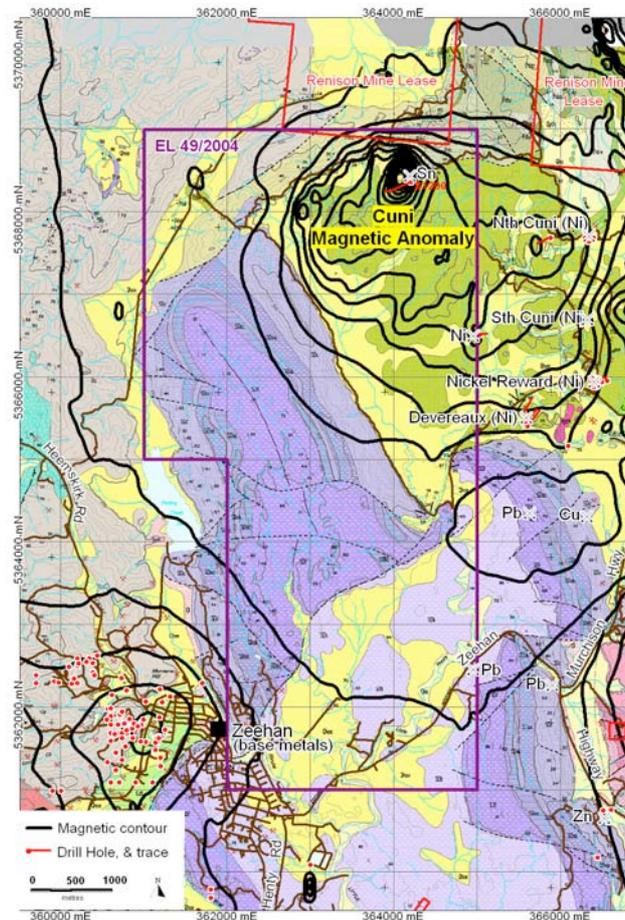


Figure 9. Rayne geological map and magnetic contours

The Upper Success Creek Group in this region consists of a basal polymictic conglomerate overlain gradationally by interbedded quartz sandstone, siltstone and conglomerate of the Dalcoath Formation (Brown, 1986). The sequence includes two major dolomite-siderite horizons, 10-20m thick, which form part of the Renison Mine sequence. Conformably overlying the Success Creek Group is the Crimson Creek Formation, a thick volcanoclastic succession of tuffaceous siltstones, greywacke and interbedded, clastic sediments. The Success Creek Group and the Crimson Creek Formation are separated by the Red Rock Member consisting of a mixture of haematitic agglomerates, cherts, tuffs, sandstones and thin carbonates.

Immediately to the east of the licence, in the Cuni area, north-trending, Cambrian pyroxenite and gabbro dykes within the Crimson Creek Formation extend over a strike length of 2-3km. Thin lenses of nickel and copper massive sulphides generally occur along the footwall contact of the dykes or within the underlying sediments.

Local structure is dominated by gentle to moderate open folding, which is overprinted by widespread, steep to moderately-dipping normal faults.

Previous Exploration

Nickel-copper mineralisation was first discovered in 1893 in the Cuni area, located immediately east of the Rayne tenement. Initial interest in the region lasted five years during mining of the North and South Cuni and Nickel Reward mines.

A second period of activity began in 1909 following completion of the Emu Bay Railway connecting Zeehan with Burnie and continued until 1914 when the outbreak of World War 1 closed operations. Interest was renewed when the Vaudeau workings were re-opened in 1938 by Australian Nickel NL and the Tasmanian Mines Department investigated the area between 1939 and 1940. Mining continued at the Vadeau mine until 1948 when 750 tonnes of ore were removed before operations were abandoned due to lack of available markets (Greenhill, 1995). Overall it is estimated that historical production from the small prospects and workings was 10,000 tonnes at anomalously high grades of 9.5% Ni and 3.5% Cu (Young, 2005).

The deposits were hosted by two parallel, fault-controlled, gabbroic dykes extending north-south over a strike length of 2 to 3km. The ore consists of both massive and disseminated pentlandite–chalcopyrite and millerite–chalcopyrite–pyrite mineralisation (Greenhill, 1995).

Following a BMR geophysical survey covering the area in 1952-53, Eagle Mines NL drilled four holes in the period between 1955 and 1957 and the Tasmanian Mines Department drilled 18 holes in conjunction with the Montana Silver-Lead Company NL.

The deposits have proven to be highly prospective and early modern exploration in the Cuni area was undertaken by EZ in EL2/62 directed at Ni/Cu mineralisation associated with amphibolite and gabbro dykes.

In 1960, Rio Tinto Australia Exploration (Rio Tinto) initially explored the 4km wide, aeromagnetic anomaly extending west from the Cuni/Melba Flat area and now covered by the northern part of the Rayne tenement EL 49/2004 (Figure 9). Following a program comprising limited soil sampling, ground magnetics and SP geophysics, Rio Tinto concluded that the anomaly was due to an ultrabasic intrusive and withdrew from the area.

In 1965 the Cuni aeromagnetic anomaly was again identified in an airborne survey flown for Aberfoyle Exploration Pty Ltd and in 1972 Renison Limited selected the anomaly as a potential target for Renison Bell style tin mineralisation.

During summer 1973-1974, Renison Limited set up the Dunkley Fault grid and completed preliminary ground magnetics to assess the area. The resulting magnetic anomaly was attributed to basic intrusives or tuffaceous units within the Crimson Creek Formation and further evaluation was recommended but not completed. The anomaly was confirmed in more

detail following a regional aeromagnetic survey flown for the Tasmanian Department of Mines in 1981 (Figure 10).

Renison again recommended detailed evaluation of the Cuni aeromagnetic anomaly in 1981-1982 and rehabilitated the Dunkley Fault grid. Renison suggested the anomaly was due to hornfelsed sediments capping an underlying granite cupola, intruded at approx 1200m below surface and initiated re-evaluation of the magnetic anomaly. Line clearing commenced in March 1983 followed by ground magnetics, mapping and bedrock geochemical sampling.

There is limited fresh rock exposure, but a sample of ferruginous chert breccia collected from near the Dunkley Fault was tentatively correlated with the Red Rock Member of the Renison mine sequence.

Bedrock geochemistry also indicated that there was potential for fault-infill mineralisation in two possible areas associated with a north-south geochemical trend anomalous in Zn, Pb, Cu, As along the Boodecker Fault and at the northern end where a strongly localised tin and base metal zone is superimposed near the junction of the Dunkley and Boodecker Faults. The geochemical anomaly was not tested.

A further ground magnetic survey defined a number of localised anomalies consisting of three distinct magnetic peaks superimposed on the main Cuni aeromagnetic anomaly.

Renison modelled the peak of the Cuni anomaly as either a basic intrusive or a massive to semi-massive pyrrhotite replacement body. The depth to the source of the discrete anomaly was modelled to be 200 to 400m deep (Kilpatrick, 1985).

Drillhole (S1200) was drilled during Oct/Nov 1984 to a depth of 598.6m to test the main peak magnetic anomaly (Figure 10).

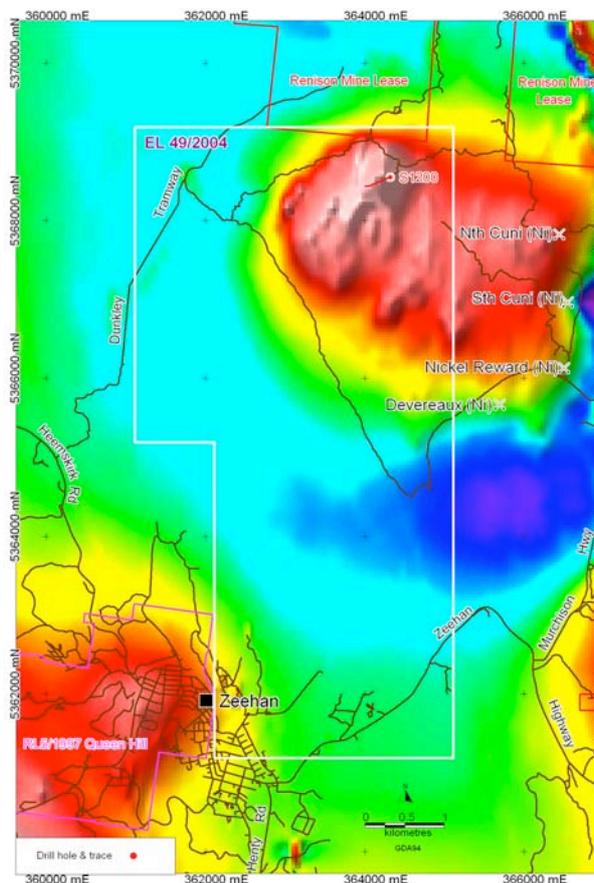


Figure 10. Rayne magnetic image and drillhole location

The hole intersected Crimson Creek Formation but failed to pass into Success Creek Group sediments or intersect significant mineralisation. Calcite veining was more prevalent in the lower part of the hole with minor fracture related pyrrhotite and pyrite disseminations and there was some evidence of chlorite replacing lithic fragments below 300m. No metasomatic alteration was reported and metal values from selected intervals downhole were low (Evans, 1987). As the source of the anomaly was not apparent, magnetic susceptibility measurements were taken. The recorded susceptibilities were considered to be insufficient to have caused the ground magnetic anomaly and it was concluded that the source of the large aeromagnetic anomaly was not intersected by the hole.

Renison concluded that there remained potential for mineralisation at depth in the vicinity of the hole and completed a ground EM survey but the results were not encouraging. EM responses were attributed to graphitic shale units within the underlying sediments, but no large conductive body that could be considered indicative of the modelled shallow, massive pyrrhotite body was detected.

The conclusion was that the source of the magnetic anomaly either was at a greater depth than tested by the drill hole or that the hole passed over the top of the modelled pyrrhotite body lying below the penetration depth of the EM technique, considered to be 150 to 250m (Kilpatrick, 1985). Although Renison proposed downhole EM to locate conductive zones in the vicinity of S1200 this was not carried out and the source of the aeromagnetic anomaly remains unexplained. Renison continued exploring the area until the fall in the tin price in 1984. There has been no exploration since then.

CSR completed low-level aeromagnetics and follow-up ground magnetics over the Cuni nickel area in 1985. CSR completed a 226.7m diamond drill hole (CG4) to test the southern margin of the Cuni aeromagnetic anomaly at its western boundary to the east of the Rayne tenement in 1986. The hole intersected a series of lithic sandstones and tuffs and a shale horizon, between 116.3 and 164.9m, containing finely disseminated pyrite, minor pyrrhotite and traces of chalcopyrite and sphalerite but also failed to explain the source of the magnetic anomaly.

Potential

Columbus has proposed that there is a Renison style sulphide-carbonate replacement tin target associated with the large sub-circular Cuni aeromagnetic anomaly, in the northern part of the Rayne tenement. A specific magnetic peak superimposed on the anomaly may relate to mineralisation occurring in dolomitic stratigraphy interpreted to occur at depth.

The magnetic anomaly is relatively untested apart from a hole drilled by Renison in 1985 to a depth of 598.6m to test the main peak of the magnetic anomaly. Assuming that carbonates of the Renison Mine Sequence underlie the Crimson Creek Formation intersected in the drillhole there is potential for a substantial tin deposit based on Renison sulphide-carbonate replacement tin mineralisation and fault-infill style targets associated with the magnetic anomaly.

Geological models previously developed by Renison interpreted a magnetic body of moderate depth extent at around 350m below surface but the drilling did not successfully explain the anomaly. Consequently, Renison concluded that it is likely that the magnetic body is flat lying and is present at about 600-700m below surface, which corresponds with the depth of Renison Mine Sequence as interpreted from hole S1200.

Infill geochemical sampling by Renison in the NW corner of the tenement confirmed anomalous Sn in soils at a number of spot highs near the junction of the Dunkley and Boodecker Faults. A Zn-Pb response associated with the Boodecker Fault also represents a potentially interesting target for Columbus. The source is assumed to be a fault-controlled tin and base metal sulphide zone, which could be tested with EM or IP. The opportunity for Stellar is to undertake step out drilling along the fault to discover areas of tin mineralisation associated with the anomalous soil geochemistry.

Proposed Exploration and Expenditure

Columbus proposes to re-evaluate the geophysical data because the source of the broad, sub-circular aeromagnetic anomaly in the northern part of Rayne remains unexplained.

Columbus intends to further refine the target definition using geophysical exploration techniques aimed at detecting sulphides in the interpreted Renison Mine Sequence prior to drilling. Columbus proposes to obtain from MRT, the 3D model built by the pmd*CRC for Tasmania in order to confirm the interpreted stratigraphy, which appears to be placing the Renison Mine Sequence at around a depth of 600 metres below surface and within approximately 1km of buried granite, with the intention of confirming Renison's original interpretation.

Columbus will also use the best available ground and airborne magnetic data covering EL49/2004, to highlight structures that were possibly controlling fluid flow from the granite. It is proposed to remodel the main magnetic target drilled assuming not only vertical but also flat-lying bodies with the aim of confirming the target depth.

Columbus will also re-assess an historical UTEM survey near this target to determine if there is a flat-lying sulphidic body at depth. Columbus will consider carrying out a UTEM survey with a large loop directly over the target covering other major faults highlighted from the previously completed magnetic survey.

Should the results of geophysical modelling validate Columbus' preliminary interpretation of the existing data then the target will be tested initially by a deep diamond drill hole.

Columbus has allocated an expenditure of \$416,500 in the second year of operations. Most of this will be spent on drilling to test the Cuni aeromagnetic anomaly. \$208,250 is allocated as contingency for an additional diamond hole if required. Columbus considers that, although the exploration drilling will be expensive due to the deep nature of the target, the potential value of a discovery will justify the program.

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