ANNUAL REPORT

EL-25399 – COMPASS CREEK

NORTHERN TERITORY

PERIOD: 12th April 2008 to 11th April 2009

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SUMMARY

Hapsburg Exploration Pty Ltd was granted EL-25399 in April 2007. The tenement is located about 130 km south-east of Darwin, 55 km NNW of Pine Creek and about 15 km east of Ban Ban Springs. The tenement consists of 16 sub-blocks and is about 53.4 km^2 in area.

This report summarises the geology, prospectivity and past exploration done in the region and more specifically the work done on nine historic tenements that have covered all or part of the current EL-25399. In addition the report presents the work done by Hapsburg over the past two years, and the proposed ongoing work.

Most early exploration around Compass Creek was focussed on trying to find gold and/or tin deposits. The Mount Wells tin mine is located about 10 km south-east of EL-25399, while the Woolwonga gold mine is located about 10 km west of EL-25399.

Geology

EL-25399 is located near the centre of the Pine Creek Orogen, and contains exposures of mid to upper Early Proterozoic age rocks known as the Finnis River and South Alligator Groups (Finnis being the younger group). The tenement encompasses the Burrell Creek Formation of the Finnis River Group, which is described as hematitic siltstone, shale and greywacke. Units of the older South Alligator Group occur along the south boundary of the tenement and consist of (oldest to youngest): the Koolpin Formation, Gerowie Tuff and Mount Bonnie Formation. The Koolpin Formation consists of pyritic and carbonaceous shale, ferruginous sandstone and chert, plus minor carbonate and iron units. The Gerowie Tuff consists of black cherty tuff and grey siliceous pyroclastics and pelites. The Mount Bonnie Formation is transitional between the Gerowie volcaniclastics and the overlying Burrell Creek greywackes. Dolerite sills are locally present throughout the sedimentary section. A major NNW trending shear zone (Pine Creek Shear Zone) passes through the tenement, and the northern tip of the Prices Springs Granite (1840 to 1780 Ma) occurs in the south-west quarter of the tenement.

Gold and Tin Discoveries

Gold was discovered in the Mount Wells area about 1875 and tin was discovered in 1881. About 28,000 ounces of gold was produced from the Woolwonga mine (10 km west) while a smaller production came from the McKinlay gold mine about 5 km east of EL-25399. Since 1957, the Jessops mine, located about 20 km east-north-east of EL-25399, has produced about 200 tonnes of tin concentrate; while the Mount Wells mine produced 1690 tonnes of tin concentrate from 1892 to 1956. The Mavis Tin mine, which is located on the southern boundary of EL-25399, was discovered in 1958, and has produced about 4 tonnes of tin concentrate.

Exploration Potential of the Compass Creek Area

In the Central part of the Pine Creek Orogen all known gold deposits occur within a 5 km contact (metasomatic) aureole of the post orogenic I-type granites that make up the Cullen Batholith. Tin and other metal mines are also mainly within these intrusive aureoles. The Compass Creek tenement straddles the contact with the Prices Springs Granite (I-type), and almost all the tenement area is within the contact aureole.

Many gold, tin and base-metal mines occur within the north-northwest trending Pine Creek Shear Zone (PCSZ) which is about 10 km wide. The Compass Creek tenement is wholly within the PCSZ. Many mines and prospects (Au, Sn & basemetals) occur from 8 to 50 km south-southeast of Compass Creek in the PCSZ. Therefore, given that no significant physical exploration has been done in the Compass Creek area, it is reasonable to assume that similar deposits may yet be found at Compass Creek.

The past reconnaissance exploration of the Compass Creek area has highlighted four prospective targets on EL-25399.

(1) The elevated and hilly terrane north of the Mavis tin mine (Mavis North) contains the following positive exploration results.

- Widespread area of anomalous rock chip geochemistry (2.5 x 1.5 km) showing high values of Sn-As-Pb-Ag and anomalous amounts of Cu, Au, & Nb.
- The presence of moderate stream BCL anomaly located about 4 km north of the Mavis tin mine. This may be reflecting mineralisation from Jason's Peak?
- Three breccia gossan zones (Jason's Peak, Kamas Cauldron & Mt. Hewson) are hosted in apparent volcanic rocks that have undergone strong alteration and carry high Sn-As-Pb. One of these breccia bodies (Kamas Cauldron) is circular, and is inferred to be a breccia pipe or caldera. The presence of volcanic rocks is unusual as they are rare to non-existent in the Burrell Creek Formation. This raises the possibility that these bodies are intrusive breccias carrying fine grained igneous rock fragments.
- A Landsat TM interpretation (by Cyprus/Arimco) shows a 1-2 km diameter circular anomaly located just to the north of the Mavis tin mine (within the elevated hilly terrane). This interpretation also shows a major north-west trending fault lineament projecting through the circular structure. There are also several easterly trending "cross structures" interpreted in this area. The presence of mineralised NW-SE and E-W fault structures is documented from field reconnaissance sampling and mapping.
- The regional aeromagnetic survey shows a broad magnetic low over the area to the north of the Mavis tin mine. This could represent the presence of the Prices Springs Granite at shallow depth, or magnetite destruction due to hydrothermal alteration, possibly from a buried intrusive.

(2) The presence of an aeromagnetic high located 1.5 km SW of the Mavis tin mine, and occurring on the contact of the Prices Springs Granite. This magnetic high may represent a pyrrhotite bearing skarn or mineralised body (greisen?) that could host significant tin and other metals. Although this target is south of Hapsburg's EL-25399, an attempt should be made to arrange a JV or option over the area.

(3) A major WNW trending quartz-breccia vein is present in the SW quarter of EL-25399. This major vein forms a prominent ridge extending over 3 km in length. Unfortunately, more than half of this quartz breccia vein extends beyond the western boundary of EL25399. The eastern end of this major vein appears to contain higher As and lower Cu, while the western end has anomalous Cu and only weak As. This may be indicating some primary zoning in a hydrothermal system. Occasionally gold is weakly anomalous in rock and soil samples.

(4) A second smaller quartz vein (1m wide) is reported to occur within the Prices Springs Granite where the northern tip of the granite is located in the SW quarter of EL-25399. The vein is reported to trend 2 km NW-SE just inside and sub-parallel to the granite contact with metasediments. One sample from this vein returned 27.8% As & 0.50 g/t Au.

Recommendations
Hapsburg's EL-25399 requires significant exploration effort to test for a stockwork or greisen style tin deposit (+/- basemetals & gold), and/or a series of high grade veins or breccia zones carrying such mineralisation. Both scenarios have the potential for valuable by-product base and precious metals. One of the aims would be to test major structural intersections or breccia pipes at depth, to find mineralisation within the hydrothermal system, possibly closer to the magmatic source, or within a more favourable sedimentary unit. Also, negotiations should be undertaken to acquire the two sub-blocks at the Mavis tin mine, where a strong magnetic anomaly may be indicating the presence of magnetite or pyrrhotite skarn (or greisen) with possible Sn & Au mineralisation.

Also, the SW quarter of EL-25399 contains two major quartz-breccia veins carrying arsenic and low level gold values. Both of these veins need to be examined and assessed as possible drill targets.

The potential for uranium is unknown due to the lack of any testing in the past. However, it is not unusual for uranium to occur with base and precious metal deposits in this region; therefore it would be worth testing for uranium along with tin and the other metals. It is possible that uranium could have been released by the hydrothermal activity, and may have been enriched in structures and/or sediments to the north of the inferred hydrothermal system.

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INTRODUCTION

Location

Hapsburg Exploration Pty Ltd was granted EL-25399 on the 10th of April 2007 for a period of six years. The tenement is located about 130 km south-east of Darwin, 55 km NNW of Pine Creek and about 15 km east of Ban Ban Springs (Figs 1 & 2). More specifically the tenement lies between 131^0 37' and 131^0 41' East Longitude and from 13^0 22' to 13^0 26' South Latitude.

The tenement consists of 16 sub-blocks (1'x1') and covers an area of 53.44 square kilometres. There are no known mineral claims or leases within the Exploration Licence. The McKinlay River (5271) 1:100,000 sheet and the Ban Ban (14/3-111) 1:50,000 sheet cover the EL.

This general area was part of the Mt. Wells Policy Reserve from 1964 to June 1988. This Policy Reserve limited exploration to small scale prospecting only. Hence no significant work was done in this area during this period.

Topography & Vegetation

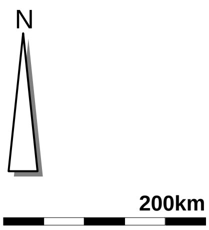
The area is moderately dissected with hills and ridges of more resistant sedimentary units separated by alluvial valleys with incised tributaries of the north flowing McKinlay River and Compass Creek systems. The drainage pattern is sub-dendritic, and most streams flow only during the wet season. The vegetation is typically eucalyptus dominated open savannah woodland with moderate to thick ground cover of annual grasses. The spear grass is a problem for mapping and prospecting in the area. The climate is monsoonal with the wet season between December and April, with a total rainfall of 1500mm per annum (Dreverman, Arimco 1990).

Review of Past Exploration

A review of past exploration examined nine historic tenements that have covered all or part of EL-25399 since 1988. The nine historic ELs reviewed were:

EL-6138	Cyprus Gold Australia & Arimco NL
EL-6170	Newmont Australia
EL-6393	Rose Quartz Mining NL
EL-6443	Billiton Australia
EL-7115	Northern Gold NL
EL-7758	NT Gold Pty Ltd
EL-9098	Tom Starr / Ban Ban Springs Station
EL-9324	Corporate Developments Pty Ltd & Centrex Resources NL
EL-9352	Triple-Eight Gold Pty Ltd

Another three historic ELs were noted to occur south and west of Hapsburg's EL-25399, but none contained any significant data relevant to Hapsburg's area. These were ELs-615, 4415 & 4834. A summary of the review of past exploration is presented in this report (see below).



HAPSBURG EXPLORATION PTY LTD

COMPASS CREEK
EL25399

LOCATION MAP

Drawn: Jim McG-D / MontanaGIS
Date: 18may09

Figure 1.

GENERAL GEOLOGY

The following is a summary of the regional and prospect geology as presented by P. C. Dreverman of Arimco NL in EL-6138 (Nov 1990), with additional information obtained from D.F. Thompson & R. Wall of Newmont in EL-6170 (June 1990).

Stratigraphy

The Pine Creek Orogen (previously "Geosyncline") consists of approximately 14 km thickness of Lower Proterozoic sedimentary strata, with interbedded volcanics and mafic sills. The location of EL-6138 was near the centre of the Pine Creek Orogen (Geosyncline), so only the geology of this central area was presented by Dreverman (1990). The full review of the geology is in Needham & Stuart-Smith (1984).

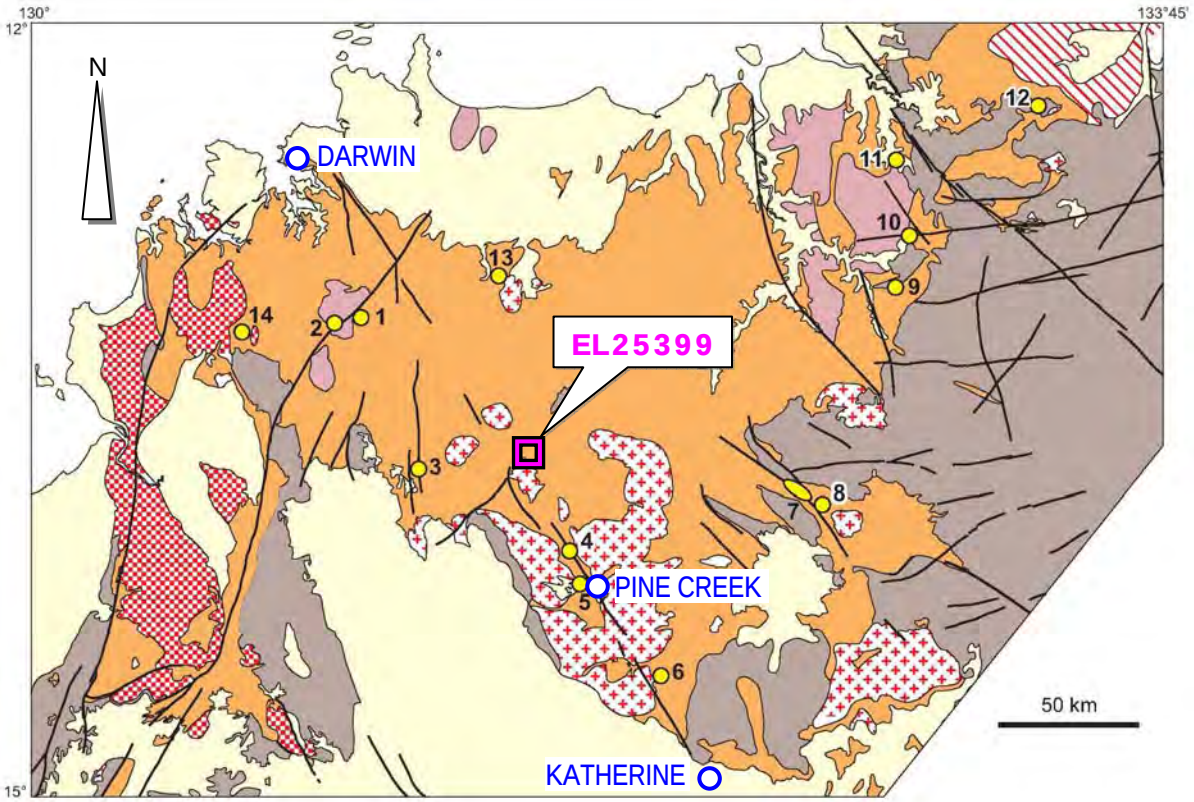
The oldest formation outcropping in the centre of the geosyncline is the Masson Formation which is exposed in the core of the Mount Masson Anticline and consists of carbonaceous and dolomitic pelites. Needham & Stuart-Smith (1984) proposed that the lower parts of the Masson Formation may be the distant equivalent of the Beetson Formation and the Kakadu Group, and therefore may disconformably overlie the Archean basement in the centre of the geosyncline.

The Masson Formation is overlain (disconformably?) by the three units of the Mount Partridge Group. The lower unit of the Mount Partridge Group is the Mundogie Sandstone which consists of a sequence of coarse grained psammites (sandstone/quartzite) with minor interbedded pelites (siltstones). These units were deposited in a high energy environment, and probably represent a period of uplift and rapid erosion. These quartzites and siltstones outcrop as steep strike ridges. The Mundogie Sandstone is conformably overlain by two units of the Wildman Siltstone; a lower hematitic, dominantly pelitic unit, and an upper sequence of interbedded pelites and quartzose sandstone.

The Mount Partridge Group is unconformably overlain by iron-rich sediments, carbonates and tuffs of the South Alligator Group. The oldest formation in the South Alligator Group is the Koolpin Formation which consists of pyritic, carbonaceous shale, ferruginous sandstone and chert, plus minor carbonate and iron formations which were deposited in a shallow marine environment.

The Koolpin Formation is unconformably overlain by the Gerowie Tuff which consists of black cherty tuff and grey siliceous pelites. This tuff was the product of felsic volcanism dated at 1880Ma (Stuart-Smith et al 1986). The Gerowie Tuff is overlain by, and grades into, the Mount Bonnie Formation, which is a transitional unit between the predominantly volcanic units of the Gerowie Tuff and the greywacke units of the overlying Burrell Creek Formation. The base of the Mount Bonnie Formation is marked by a one metre thick greywacke unit, and the top is defined by the last one metre thick tuffaceous unit.

The Burrell Creek Formation is part of the Finnis River Group and is the youngest Lower Proterozoic stratigraphic unit in the centre of the Pine Creek Geosyncline. The lithologies present include hematitic siltstone, shale and greywacke. The greywacke content increases towards the east. The Burrell Creek Formation represents a change in conditions to deeper water flysch style sedimentation. The shales and slates of this unit outcrop as low hills in the McKinlay and Margaret River catchments. This represents the last episode of Early Proterozoic deposition in the geosyncline.



Key to mineral deposits

1-Woodcutters Zn-Pb-Ag; 2-Rum Jungle deposits U-Cu-Pb-Co-Ni-Ag; 3-Cosmo Howley Au; 4-Union Reefs Au; 5-Enterprise Au; 6-Mount Todd field Au; 7-South Alligator River Valley U; 8-Coronation Hill U-Au-Pt-Pd; 9-Koongarra U-Au; 10-Ranger 1 U; 11-Jabiluka U-Au; 12-Nabarlek U; 13-Toms Gully Au; 14-Goodwill Sn-Ta

Phanerozoic cover

Platform cover sequences (McArthur & Victoria-Birrindudu Basins)

Pine Creek Orogen basin sediments & volcanics

Cullen age granitoids (1840-1820 Ma)

Litchfield Province granitoids (1850-1840 Ma)

Nimbuwah Complex granitoids (1870-1860 Ma)

Archaean granite-gneiss complexes

Source: Ahmad M., & Lally JH.
NTGS 2003-003

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EL25399

REGIONAL GEOLOGY

Drawn: Jim McG-D / MontanaGIS
Date: 18may09

Figure 2.

Intrusive Complexes
The Proterozoic stratigraphy has been intruded by a series of doleritic sills known as the Zamu Dolerite and a suite of granitic rocks of Carpentarian age.

The term Zamu Dolerite refers to all mafic intrusives that were intruded prior to the Lower Proterozoic orogeny between 1870 and 1780 Ma. They consist predominantly of sills and are a continental thoelitic suite of rocks (Ferguson and Needham).

The Lower Proterozoic sequence was intruded by a series of granitoids between 1840 and 1780 Ma. These intrusions are related to a major orogeny between 1870 to 1780 Ma (see "Deformation and Metamorphism" and "Structure" below).

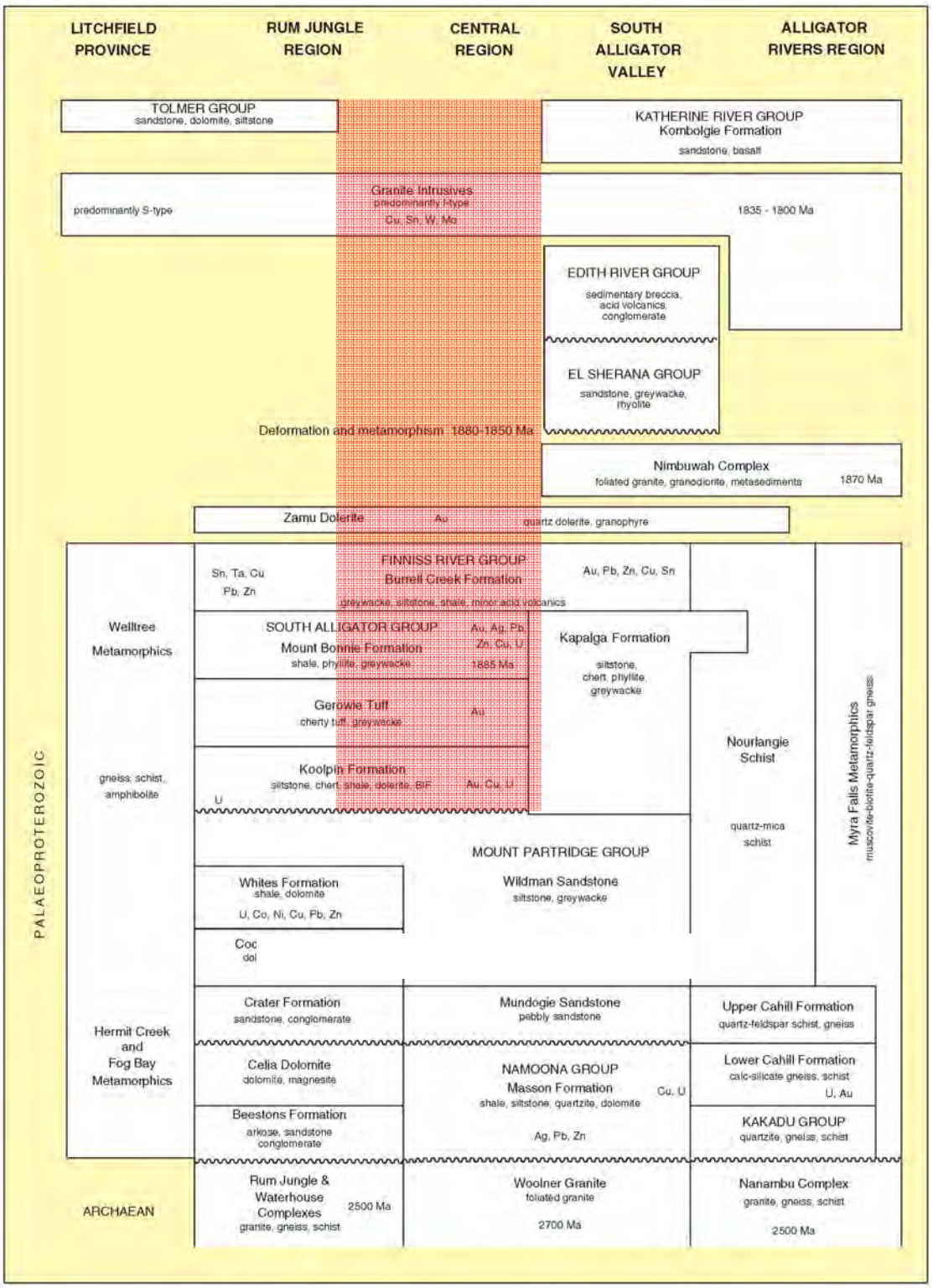
The main intrusive granitoids in the centre of the geosyncline (orogen) are the Margaret, Burnside, Shoobridge, Fenton, Prices Springs and McKinlay intrusions which are all part of the Cullen Batholith. The Cullen Batholith consists of at least fifteen separate intrusions with seven additional satellite plutons. The granitoid types range from granite, through granodiorite to monzodiorite (Bajwah, 1994). In the centre of the geosyncline the plutons range in composition from granite to quartz syenite (Stuart-Smith & Needham 1984).

Deformation and Metamorphism
The Pine Creek Orogen (Geosyncline) was subject to deformation and metamorphism between 1870 and 1780 Ma (Stuart-Smith & Needham 1984). During this period the tensional regime that had opened the sedimentary basin, change to compression in an east-west direction (F-1). This caused the sediments in the centre of the basin to become tightly to isoclinally folded, and developed a strong axial plane cleavage. The deformation increased to the east, especially to the east of the South Alligator fault.

The units in the centre of the geosyncline were subject to regional lower greenschist facies metamorphism (Ferguson 1980). The mafic sills of the Zamu Dolerite were altered to amphibolites. The Carpentarian Granites produced contact aureoles of varying thicknesses, and resulted in the development of andalusite crystals in the pelitic units and amphiboles in the mafic sills of the Zamu Dolerites (Page et. al. 1980).

Structure
In the area of EL-25399 the rocks have undergone additional deformation due to the presence of the Pine Creek Shear Zone (PCSZ), which trends NNW - SSE through this area (Figs 6 & 7). The PCSZ extends through the centre of the Pine Creek Orogen, from Katherine in the SSE, to near Darwin in the NNW; a distance of over 200 kilometres (Fig 2). Dreverman (1990) noted that tight complex folding was present locally, but in general the sedimentary units appear to have been folded into a series of overturned folds. These folds have then been flexured by the intrusion of the Prices Springs Granite, forming an open north-east trending anticlinorium (F-2). This has resulted in the South Alligator Group of sediments and tuffs almost rimming the granite around the northern half, and then plunging beneath the younger Burrell Creek Formation to the north-east.

The Thematic Imagery interpretation done by Cyprus/Arimco (1990) shows the major Pine Creek Shear Zone passing through the area of EL-25399 (& EL-6138). This interpretation also revealed many major faults trending NNW parallel with the shear, and also north-east cross faulting in the shear corridor. Three significant circular structures are interpreted to occur within EL-25399, one of which is located just to the north of the Mavis tin mine.



Rock exposure in the Compass Creek Area

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COMPASS CREEK
EL25399

STRATIGRAPHIC CORRELATION SHOWING CENTRAL REGION

Source: Ahmad M., & Lally JH.
NTGS 2003-003

Drawn: Jim McG-D / MontanaGIS
Date: 18may09

Figure 3.

LOCAL GEOLOGY

Stratigraphy

Almost all of EL-25399 is within the Burrell Creek Formation which forms low hills and strike ridges on the grey soil plain. Here the formation is dominantly fine grained greywackes and siltstones which are both massive and strongly cleaved. Small bodies of fine to medium grained quartz dolerite are noted to be present locally within the EL.

The south-eastern boundary of the EL contains a small amount of the Mount Bonnie Formation which outcrops on low hills as iron rich shales and siltstones. This extends up to a couple of kilometres south where it has been intruded by the granite. The lower units of the South Alligator Group are also present below the Mount Bonnie Formation, but the isoclinal folding and faulting has complicated the geology. The oldest unit is the Koolpin Formation which consists of strongly carbonaceous argillites that have been stoped out along the contact with the granite. The Koolpin is overlain by the Gerowie Tuff which here consists of a sequence of ferruginous micaceous sandstones or greywacke and a fine argillite-chert member which is weakly carbonaceous and frequently has white powdery coatings. Extensive quartz veining occurs throughout these units, including the Burrell Creek Formation within EL-25399. Dreverman (1990) reported there are two phases of quartz veins; the minority phase is mineralised, while the dominant phase is barren. Thompson & Wall (1990) describe the quartz veining in the area of EL-25399 as extensive, with most veins less than 1m in width and consisting of white barren quartz with large crystals in vughs and later low temperature fracture fillings quartz. In the south-west part of the EL there is a major quartz vein outcropping as a prominent ridge extending for 3 km (half is off the tenement to the west). This quartz vein strikes WNW and dips steeply SE (back towards the granite). It is predominantly barren white quartz, but there are small gossanous zones, and a hematite cemented breccia. Arsenic is quite high in rock chip samples from this vein (up to 14.7% As from Arimco), and locally gold can be weakly anomalous (0.06 g/t Au from Arimco, and 0.4 & 1.2 g/t Au from Newmont).

Prices Springs Granite

The small northern tip of the Prices Springs Granite is covered by the south-west corner of the EL. The granite has elevated bouldery hills and jointed pavements in the centre (south of EL-25399), while it is deeply weathered around the margins. The Prices Springs Granite is described in detail by Bajwah (1994). The following are selected quotes from Bajwah's descriptions:

> *The Prices Springs Granite forms a relatively small sub-rectangular pluton covering an area of about 75 km^2.*
>
> *The pluton is dominated by two textural types. The marginal variety is comprised of fine-grained rocks (light grey in colour) with phenocrysts of feldspar and quartz occaisionally. Matrix to phenocryst ratio appears to be 9:1. This variety grades into medium-grained rocks towards the central part of the pluton which is mostly equigranular, and characterized by a light pink colour.*
>
> *The Prices Springs Granite intrudes the Palaeoproterozoic metasediments and dolerite. The contact with the metasediments is highly irregular and faulted in places (Stuart-Smith, 1985). Quartz reefs have been observed in the central part of the pluton parallel to the major northwest and northeast joints. Small bodies of greisen occur along the western (correction – eastern) margins, where the granite body is*

related to the Mount Wells Sn-sulphide mineralization in the Burrell Creek Formation. Towards the southwest, the Koolpin Formation has been extensively hornfelsed, and needles of chiastolite may be readily observed in a fine-grained, ferruginous matrix.

Petrography: *The Prices Springs Granite consists of quartz, K-feldspar, plagioclase, biotite and rare hornblende. The accessory phases are apatite, zircon, sphene and rare magnetite and allanite. Quartz is one of the major constituents and may amount to 35% in the rock.*

Greisen: *Diamond drilling at Mount Wells tin mine has intersected a cupola of greisenised granite which may be related to the Prices Springs Granite. The greisen is essentially medium-grained, equigranular with substantial development of muscovite (up to 15%). However the primary mineral fabric is preserved. Quartz (30%) occurs as strained equant to sub-equant or tabular crystals which may be replaced by chlorite and/or muscovite. Chlorite forms irregular patches or rare rosettes. Biotite is rare and is often replaced by muscovite. Accessories, such as magnetite, pyrite, pyrrhotite and zircon are randomly distributed in the matrix. Minor cassiterite is also present in some rocks.*

Geochemical Variations: *The Prices Springs Granite is one of the most felsic plutons that form the Cullen Batholith; it is characterized by a relatively narrow range in SiO_2 concentration from 67.9 – 73.98%. Also K_2O is predominant over Na_2O.*

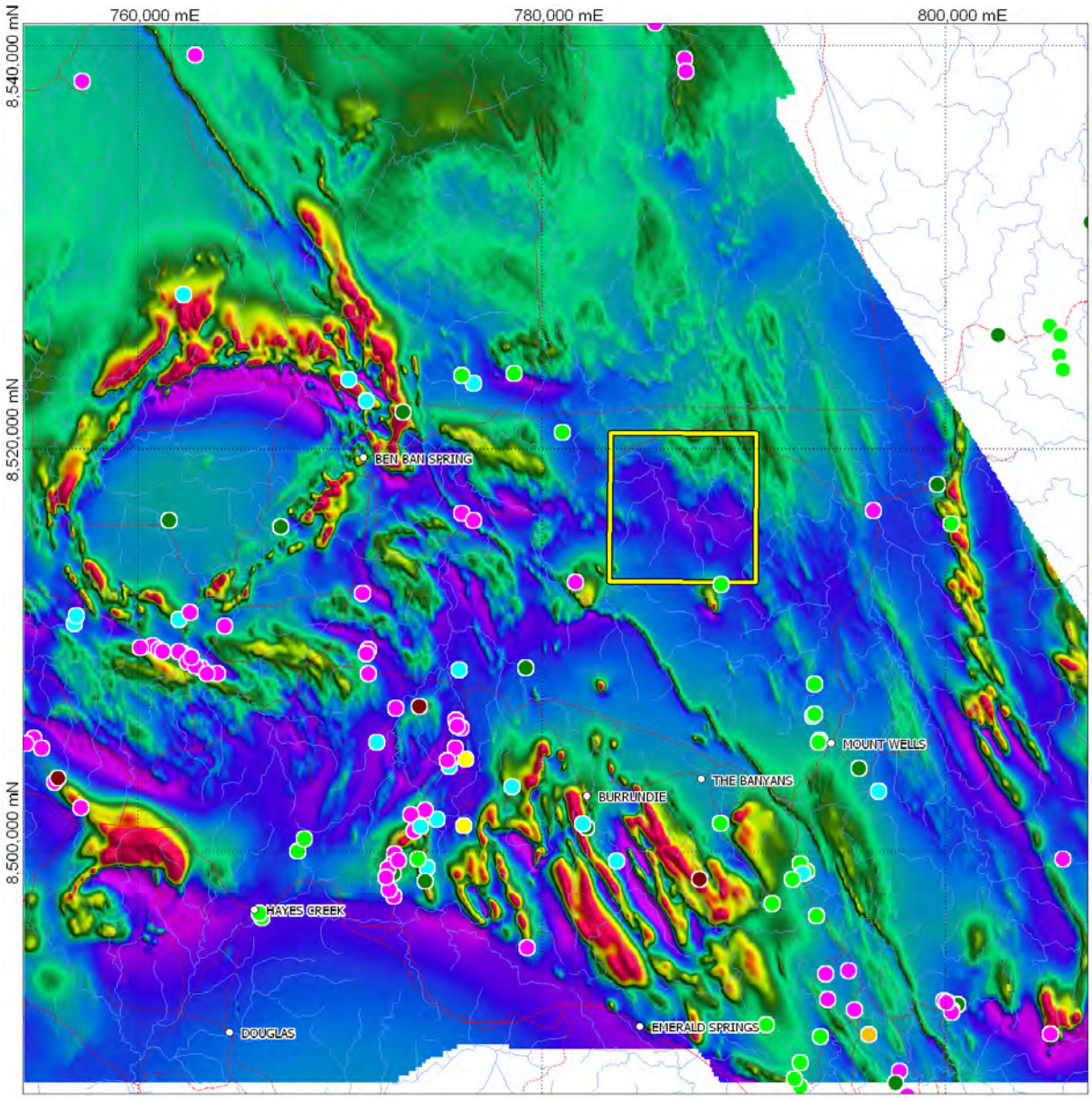
The Prices Springs Granite is spatially and temporally related to the Sn-sulphide mineralization at Mount Wells. However, measured Sn concentrations from the granite are low, ranging from 2 – 5 ppm and averaging 3 ppm Sn, which are similar to the Sn values reported for the other phases of the Cullen Batholith. An important feature is the considerably high concentrations of fluorine (800 – 1500 ppm) in comparison to the other plutons in the Cullen Batholith, except the Burnside Granite which also shows similar fluorine values.

The rock geochemical data and petrographic data of the Prices Springs Granite are consistent with this magma belonging to the I-type group as defined by Chappell and White (1974). The granite plutons constituting the Cullen Batholith have low initial strontium ratios (0.7057 +/- 0.0010). However, when the I_{sr} ratios are calculated for the individual plutons, the Prices Springs Granite has the highest value (0.7062 +/- 0.0010) suggesting contamination of the magma by an upper crustal sedimentary component during underplating which was probably rich in boron and fluorine.

In such cases, the source metasedimentary rocks are characterised by the presence of boron and fluorine bearing minerals which provide volatile components, responsible for transportation and the enrichment of the final stages of the residual magma in Sn. This residual phase (enriched in Sn) which is the ultimate product of crystal fractionation leads to the formation of Sn deposits either in the form of greisen or emplaced as quartz vein system in the adjacent metasediments, for example Mount Wells.

Mavis Tin Mine

The Mavis tin mine lies on the southern boundary of EL-25399 (Figs 6 & 7) at about 13^0 26' South and 131^0 40.21' East. The mineralized system around the mine appears to extend northward into EL-25399. This mine was discovered in 1958 and has produced about 4 tonnes of tin concentrate from both lode and alluvial workings. The area was mapped by P. G. Dunn for the BMR in 1960. Cassiterite bearing quartz hematite veins were reported to be 15 to 45 cm thick and in some places carried 50% coarse grained cassiterite. The veins are hosted in carbonaceous black slates and greywacke of the Mount Bonnie Formation. Prior explorers have not made a tonnage estimate because of the highly variable vein thicknesses and the coarse nature of the cassiterite. Exposures in the open cuts and the adit indicate the veins are conformable with the bedding which forms a broad open fold that is plunging to the north-east (5 to 40^0). The most likely source of the tin veins is the Prices Springs Granite. Nearby tin mineralization north of the Mavis Mine (in EL-25399) will be discussed below in the review of Newmont's EL-6170.



EL25399 Tenement Boundary

Mineral Occurrences

- Copper
- Gold
- Lead
- Silver
- Tin
- Uranium
- Zinc

N

10km

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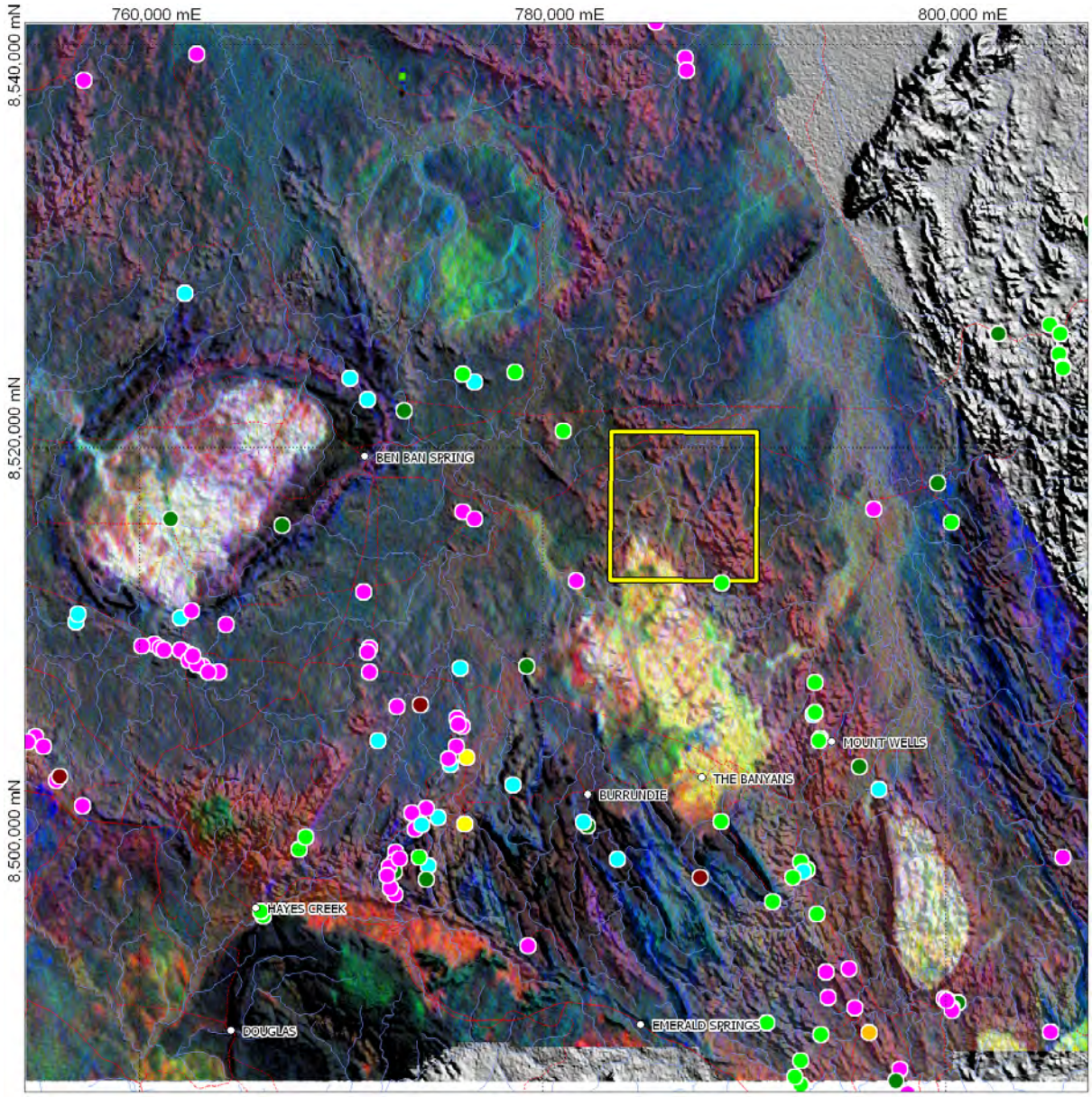
COMPASS CREEK
EL25399

REGIONAL MAGNETICS

Magnetics from Homestake Gold of Australia
Tipperary-Fenton Survey, Sept 1999 (CR2000-0017)

Drawn: Jim McG-D / MontanaGIS
Date: 18may09

Figure 4.



EL25399 Tenement Boundary

Mineral Occurrences

- Copper
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10km

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EL25399

REGIONAL RADIOMETRICS ON SRTM IMAGE

Radiometrics from Homestake Gold of Australia
Tipperary-Fenton Survey, Sept 1999 (CR2000-0017)

Drawn: Jim McG-D / MontanaGIS
Date: 18may09

Figure 5.

EXPLORATION & TARGET CONCEPTS

EL25399 is located on the northern margin of the Prices Springs Granite and largely covers exposures of the Burrell Creek Formation within the Finnis River Group. The NNW – SSE trending Pine Creek Shear Zone passes through the EL. Most early exploration around Compass Creek was focussed on gold and tin mining, with some uranium exploration in the region, but not documented in or around EL25399.

Gold was discovered in the Mount Wells (Fig 6) area about 1875 and tin was discovered in 1881. About 28,000 ounces of gold was produced from the Woolwonga mine located about 10 km west of EL-25399, and the smaller McKinlay gold mine lies about 5 km east of EL-25399. Since 1957, the Jessops mine, located about 20 km east-north-east of EL-25399, has produced about 200 tonnes of tin concentrate; while the Mount Wells mine, about 10 km south-east, produced 1690 tonnes of tin concentrate from 1892 to 1956. The Mavis tin mine, which is located on the southern boundary of EL-25399 (Figs 6 & 7), was discovered in 1958, and has produced about 4 tonnes of tin concentrate.

Past exploration by Cypress Gold Australia was aimed at stratabound gold and base metal deposits in the Burrell Creek Formation, while most other tenement holders (Newmont, NT Gold etc) were looking for gold deposits of open pittable size. Hapsburg has multiple target concepts for EL-25399, including stratabound or structurally controlled (vein) uranium mineralization, and high grade tin or gold in veins. There is also the possibility of a bulk tonnage, open pittable low grade tin deposit related to stockwork veining and/or disseminations in altered sediments.

Target Models

A series of target models were prepared by Dave Bennett (2008), and are presented here:

Uranium Targets

Since 1953, uranium exploration in the Central Region of the Pine Creek Orogen has located 14 occurrences. Uranium is characteristically found in sulphide rich quartz veins in small NW to NE trending faults and fractures, and associated with Early Proterozoic granites.

Fleur de Lys model

This target model consists of quartz vein mineralisation derived from hydrothermal late-stage fluids of the Cullen Batholith, and hosted in sediments of the Gerowie Tuff and Burrell Creek Formation. Uraniferous veins in shears, faults and joints are hosted in arenites and pelites. Pitchblende is the main ore mineral and occurs with sulphides (pyrite, arsenopyrite, chalcopyrite, chalcocite and galena). Gangue minerals are quartz, sericite, feldspar and muscovite. Secondary minerals are torbernite, autunite, malachite, azurite and cuprite.

The ***Fleur de Lys*** **U-Cu mine** is located 2 km NW of Cosmo Howley mine. It was found in 1953 and developed by Brock's Creek Uranium Company NL. Total recorded production was 170t @ 0.12% U_3O_8, from 5 shafts to 30m. Local geology is metamorphosed and tightly folded sediments of Gerowie Tuff in the hinge zone of the Cosmo Howley Anticline. Strike is 330^0, dip 70^0SW. Host lithologies are siltstones, slates and lithic arenite. Fractures and joints are often filled with vein quartz. Primary mineralisation is pitchblende and sulphides. Secondary minerals are torbernite, malachite and azurite.

The Burrell Creek Formation hosts the ***Adelaide River*** and ***George Creek*** mines and the ***Waterhouse No.2 East***, ***Mount Thomas***, ***Kilfoyle Creek*** and ***Mount Tolmer*** U prospects.

The ***Adelaide River mine*** is located 3.5 km south of Adelaide River. It was discovered in 1954 and worked to 1957. Ore was trucked to Rum Jungle for treatment. Total production was 3,800t @0.51% U_3O_8. Workings consist of 9 shafts to 80m, and 2 adits. Remaining reserves are 1,500t @ 0.50% U_3O_8 in the stopes, and 5,500t @ 0.22 U_3O_8 at depth. The local geology is tightly folded and faulted Burrell Creek Formation striking 330^0, dip 65^0SW on the western limb of a south plunging anticline. Mineralisation is concentrated at greywacke – fault intersections and consists of narrow veinlets of pitchblende and sulphides. Torbernite characterises the oxidised zone.

Gold Targets

Woolwonga Model

The Central Region contains most of the gold known from the Pine Creek Orogen.
Steep dipping quartz veins follow fold axes confined to the NW trending Pine Creek Shear Zone (Noonamah – Katherine lineament). Deposits are within the contact aureole of granitoids.
The Woolwonga Mine lies 6 km from the western boundary of EL-25399 (Fig 6), and was worked from 1871-1908. Deepest shaft reached 52m with primary ore of quartz, pyrite and arsenopyrite. Dominion Mining outlined reserves of 2.1Mt @ 2.78g/t in 1985. Auriferous saddle reefs are hosted in Mount Bonnie Formation in a 300^0, 35^0SE plunging anticline. Primary ore is arsenopyrite with Au inclusions, pyrite, chalcopyrite, chalcocite, sphalerite and galena. Gangue minerals are quartz, siderite, K feldspar and tourmaline.

Cosmo Howley Model

The Howley Line of Lode extends for 24 km along the axis of the Howley Anticline.
Mines are *Cosmo Howley, Big Howley, Howley North, Bridge Creek* and *Mt Paqualin*.

Stratiform gold mineralisation is associated with BIF in the middle Koolpin Formation. Microscopic Au is contained in arsenopyrite and pyrite. Some free gold is also present. BIF markers are identified by gossans and chert nodules..

The Cosmo Howley Mine is the largest in the above group. Historical production was 1.05 t gold @ 22 g/t Au. Reserves in 1990 stood at 6 Mt @ 2.54 g/t Au. The mine could produce 4 t Au/yr at full capacity.
Mineralisation is hosted by the 30-100 m thick middle Koolpin Formation which contains 5 lodes. Lithologies are BIF horizons, mudstone, carbonaceous mudstone and siltstone. Zamu Dolerite intrudes the mine sequence as 5 horizons. Tourmalinite (to 60% tourmaline, quartz, muscovite) occurs towards the base of this sequence and represents metamorphosed boron-rich sediments. The asymmetric NW trending Howley Anticline controls structure. Most Au is as micron particles in arsenopyrite. Other sulphides are minor chalcopyrite and pyrrhotite.

Tin Targets

Mount Wells Model

Steep dipping Sn-quartz lodes in Burrell Creek Formation extending to greisen. Cassiterite occurs as crystals or aggregates along the hanging wall of the lode. Primary ore sulphides are pyrite, arsenopyrite, chalcopyrite and pyrrhotite. Scorodite (Fe arsenate) is a diagnostic secondary mineral.

The Mount Wells Mine operated between 1879-1929. Recorded production 1,500t SnO_2 @ 1% Sn. Six lodes (tension gash veins) have been defined, strike 020^0, dip 80^0 over a strike length of 1000m and depth to 200m.

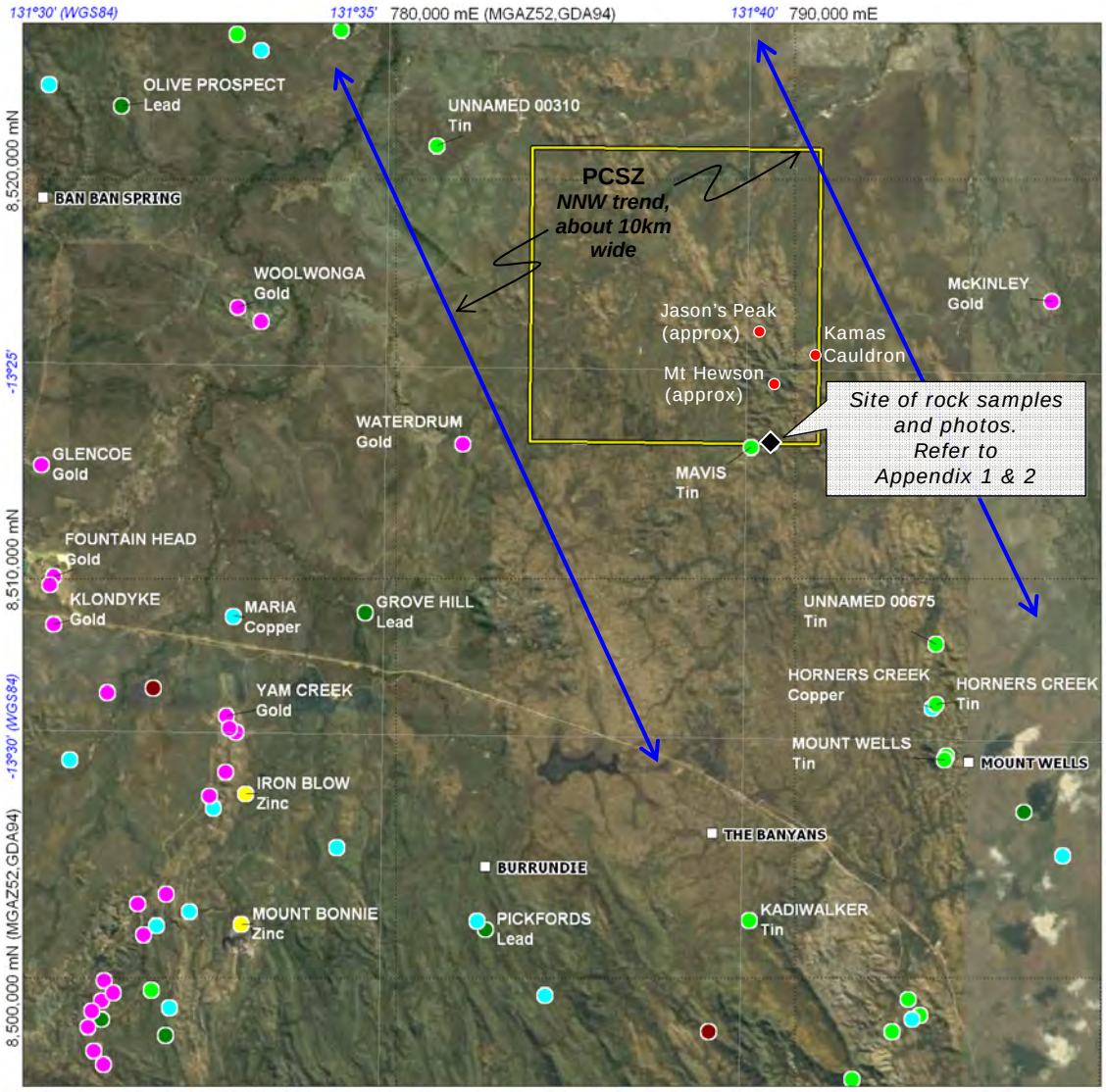
The Jimmy's Knob mine 7 km to the south shows a similar mineralisation style. Quartz-filled fractures are near the contact of Mount Bonnie Formation greywacke and a quartz syenite intrusive, but show sericite alteration rather than greisen. The mine was worked mainly from the 1880's to 1909 with shaft development to 60m. No production records are available.

Mineralization Related to the Pine Creek Shear Zone

(additional section added by JM-D)

In addition to the obvious correlation between gold, base-metal and tin mineralization with intrusions of the Cullen Batholith, there is also a strong spatial relationship with the Pine Creek Shear Zone (PCSZ). The PCSZ has obviously provided structural passage ways and dilation zones for the precipitation of the various mineralizing systems. The Compass Creek tenement is clearly within the PCSZ (Figs 6 & 7), and straddles the contact with the Prices Springs Granite, and appears to be partially underlain by this intrusive.

A series of nine gold mines and prospects, about 12 base-metal prospects, and seven tin mines occur between 8 and 50 km south-southeast of Compass Creek, within the PCSZ. Given the fact that no major physical exploration (drilling, trenching or geophysics) has been conducted in the Compass Creek area; it is reasonable to assume that mineral deposits will occur in the PCSZ in the Compass Creek area.



EL25399 Tenement Boundary

Mineral Occurrences

- Copper
- Gold
- Lead
- Silver
- Tin
- Uranium
- Zinc

N

5km

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COMPASS CREEK
EL25399

LANDSAT WITH PROSPECTS and SAMPLE/PHOTO LOCATIONS

Drawn: Jim McG-D / MontanaGIS
Date: 18may09

Figure 6.

REVIEW OF HISTORIC EXPLORATION

Past explorers in this area were mainly looking for bulk tonnage, open pittable gold deposits, or higher grade vein deposits of tin and/or gold. Hapsburg's target concept for EL-25399 includes stratabound or structurally controlled uranium mineralization, high grade veins of tin and/or gold, and possible bulk tonnage, open pittable tin deposits with significant by-product base and precious metals. The concept of a bulk tonnage tin deposit is based on the work of past explorers that show tin mineralisation is occurring in breccias, stockwork veins and as possible disseminations in altered sediments. Many rock chip samples also include significant values for base and precious metals.

The review of work done by nine previous explorers has highlighted several encouraging exploration results. These are discussed here in chronological order:

Cyprus/Arimco obtained high arsenic results (up to 0.13% As) from samples in the SE of EL-25399 and very high arsenic (up to 14.7% As) from seven samples collected from a major breccia quartz vein in the SW part of EL-25399. A Landsat TM interpretation showed three major NW trending lineaments and several weaker ESE to NE trending cross lineaments in the area of EL-25399. Also three circular structures of 1 – 2 km diameter are present in the southern half of EL-25399; the easternmost one is located directly north of the Mavis tin mine. Aeromagnetic data obtained by Cyprus/Arimco shows a very strong magnetic high about 1.5 km SW of the Mavis tin mine. This straddles the contact of the Prices Creek Granite and the Koolpin Formation. Interestingly, Cyprus/Arimco's geologic map shows an occurrence of pyrrhotite at the site of the magnetic high and a second pyrrhotite occurrence at the Mavis tin mine. It is possible this magnetic high represents a magnetite bearing skarn body.

Newmont conducted rock chip, soil and stream BCL sampling over most of what is now Hapsburg's EL-25399. Stream BCL results were generally low (<1.0 ppb Au) with only rare values over 1.5 ppb Au. Several weakly anomalous gold soil results were found along the base of the breccia-quartz vein ridge (west of EL-25399), up to 3.2 ppb Au. The most interesting results were returned from rock chip samples over a widespread area (2.5 x 1.5 km) north of the Mavis Tin mine, and within the SE quarter of EL-25399. Here Newmont collected 19 rock chip samples from silicified metasediments with pyrite and iron staining, and quartz-hematite-siltstone-breccias. Almost all these samples were anomalous for one or more elements of Sn, As, Pb & Ag; and weakly anomalous for gold and copper. The following are the averages for all 19 samples with the highest value in brackets: Sn = 2040 ppm (2.5%), As = 605 ppm (0.21%), Pb = 1870 ppm (1.56%), Ag = 2 ppm (12 ppm), Cu = 79 ppm (415 ppm), and Au = 0.065 ppm (0.575 ppm). Seven of the 19 samples were low for most elements, so the remaining 12 mineralized samples would average considerably higher. It is interesting that higher assays come from both the silicified metasediments and the quartz-hematite-siltstone breccias. The terrane from which these anomalous samples were collected is quite hilly with an elevation of 50m to 100m higher than the surrounding countryside.

Northern Gold NL also explored the hilly terrane north of the Mavis tin mine with 55 BCL stream samples and 14 rock chip samples. In contrast to Newmont's results of generally less than 1.0 ppb Au, the Northern Gold BCL samples returned higher levels of gold (0.8 to 2.85 ppb Au). This included a group of 5 adjacent sites about 4 km north of the Mavis tin mine, with anomalous values between 2.35 and 6.8 ppb Au. However these results "pale" in comparison with one site from the stream draining the Mavis tin mine which returned 252.8 ppb Au. The 14 rock chip samples were low for gold except for four samples from veins at the Mavis tin mine that returned 0.086, 0.094, 0.307 & 0.634 g/t Au. One of these four samples also returned 6.1% tin. Two other samples from a dump about 1.2 km NNW of the Mavis tin mine both returned 1.15% Sn.

NT Gold Pty Ltd prospected what is now the southern half of Hapsburg's EL-25399. In addition to basic dollying and panning of interesting sites, the company did assay a few samples. An interesting quartz-sulphide sample with 28% As, 400 ppm Bi and 0.50 g/t Au came from a NW trending vein within the granite, near the NE contact with sediments. This vein is reported to be 1m wide and traceable over 2 km. However, the main focus of NT Gold's work was on two gossanous prospects in the hilly terrane north of the Mavis tin mine. These are known as Kamas Cauldron and Jason's Peak. The **Kamas Cauldron** is an 80m diameter circular gossan which occurs on top of a hill, and is inferred to be a pipe like breccia body. Two gossan samples returned 0.30% & 0.18% Sn and 0.15% & 0.85% As. The **Jason's Peak** prospect consists of a gossan 50m long and about 5m wide. Significant results were returned from the two rock chip samples collected from this gossan body. One from gossan material returned 170 ppm Sn, 0.23% Pb & 3.4% As, while the second, from a quartz vein in the roof of a collapsed adit, assayed 14.8% Sn, 0.41% Pb & 0.14 % As.
Corporate Development Pty Ltd also examined the Kamas Cauldron and Jason's Peak prospects, as well as another fault/vein prospect at Mt. Hewson in the centre of the hilly terrane north of the Mavis tin mine. Several reconnaissance rock chip samples were also collected throughout the area. Unfortunately these samples were only assayed for gold, so there is no information on the other metals of interest. Corporate Development described the **Mt. Hewson prospect** as an E-W trending 1.5m wide fault breccia zone supposedly carrying gold mineralisation. The host rock is described as an andesitic tuff and the breccia vein is quartz with iron and manganese oxides filling breccia voids. Four rock chip samples failed to show any gold. Corporate Development described the **Kamas Cauldron** as an 80m diameter andesitic breccia that is in part ferruginous and altered dolerite with sericite and chlorite. The **Jason's Peak** prospect was described as a ferruginous trachyandesitic tuff containing pyrite boxworks, sericite and jarosite over a strike of 70m and up to 5m wide.
Triple Eight Gold Pty Ltd held large areas to the north and east of EL-25399. No physical work was reported, but they did compile the BMR geology and aeromagnetic data. The regional aeromagnetic data shows a broad magnetic low over the elevated hilly terrane north of the Mavis tin mine, as well as the high magnetic response located about 1.5 km SW of the Mavis tin mine. The magnetic low over the anomalous Sn-As-Pb-Ag area is considered significant, as it may indicate hydrothermal alteration related to a shallow buried intrusive beneath this area.
Three tenements are not mentioned in this summary, as they had no meaningful work related to Hapsburg's EL-25399.
The exploration work reported in the nine historic ELs covering the current EL-25399, shows no drilling of any type, and no ground geophysics, such as magnetics or IP/Resistivity. Also, apart from one old dozer cut and some old prospector diggings, there have been no trenches or other physical exploration activity. Given the many anomalous surface geochemical results, this area is clearly under-explored.

EXPLORATION TARGETS DEFINED

The past reconnaissance exploration has highlighted four prospective targets on EL-25399.

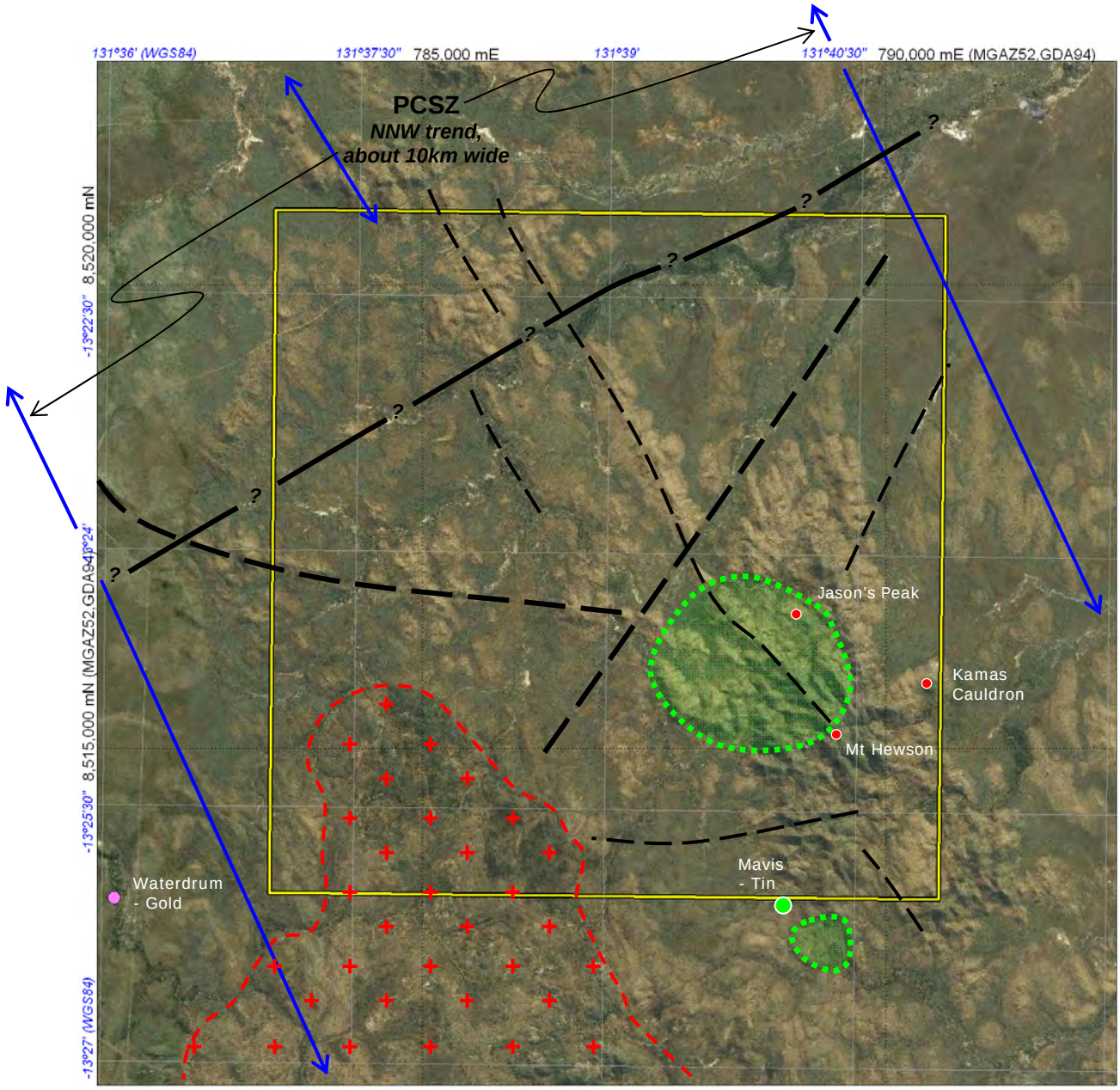
(1) The elevated and hilly terrane north of the Mavis tin mine (Mavis North) contains the following positive exploration results.

- Widespread area of anomalous rock chip geochemistry (2.5 x 1.5 km) showing high values of Sn-As-Pb-Ag and anomalous amounts of Cu, Au, & Nb.
- A moderate stream BCL anomaly located about 4 km north of the Mavis tin mine. This may be reflecting mineralisation from Jason's Peak?
- Three breccia gossan zones (Jason's Peak, Kamas Cauldron & Mt. Hewson [Figs 6 & 7]) are hosted in apparent volcanic rocks that have undergone strong alteration and carry high Sn-As-Pb. One of these breccia bodies (Kamas Cauldron) is circular, and is inferred to be a breccia pipe or caldera. The presence of volcanic rocks is unusual as they are rare to non-existent in the Burrell Creek Formation. This raises the possibility that these bodies are intrusive breccias carrying fine grained igneous rock fragments.
- A Landsat TM interpretation (by Cyprus/Arimco) shows a 1-2 km diameter circular anomaly located just to the north of the Mavis tin mine (within the elevated hilly terrane). This interpretation also shows a major north-west trending fault lineament projecting through the circular structure. There are also several easterly trending "cross structures" interpreted in this area. The presence of mineralised NW-SE and E-W fault structures is documented from field reconnaissance sampling and mapping.
- The regional aeromagnetic survey shows a broad magnetic low over the area to the north of the Mavis tin mine (Fig 4). This could represent the presence of the Prices Springs Granite at shallow depth, or magnetite destruction due to hydrothermal alteration, possibly from a buried intrusive.

(2) The presence of an aeromagnetic high located 1.5 km SW of the Mavis tin mine, and occurring on the contact of the Prices Springs Granite (Fig 4). This magnetic high may represent a pyrrhotite bearing skarn or mineralised body (greisen?) that could host significant tin and other metals. Although this target is south of Hapsburg's EL-25399, an attempt should be made to arrange a JV or option over the area.

(3) A major WNW trending quartz-breccia vein is present in the SW quarter of EL-25399. This major vein forms a prominent ridge extending over 3 km in length. Unfortunately, more than half of this quartz breccia vein extends beyond the western boundary of EL25399. The eastern end of this major vein appears to contain higher As and lower Cu, while the western end has anomalous Cu and only weak As. This may be indicating some primary zoning in a hydrothermal system. Occasionally gold is weakly anomalous in rock and soil samples.

(4) A second smaller quartz vein (1m wide) is reported to occur within the Prices Springs Granite where the northern tip of the granite is located in the SW quarter of EL-25399. The vein is reported to trend 2 km NW-SE just inside and sub-parallel to the granite contact with metasediments. One sample from this vein returned 27.8% As & 0.50 g/t Au.



EL25399 Tenement Boundary

Prices Springs Granite (post orogenic)

PCSZ Pine Creek Shear Zone

Major Fault Lineament

Minor Fault Lineament

Possible circular structure (intrusive/caldera)

N

2km

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COMPASS CREEK
EL25399

LANDSAT AND STRUCTURAL INTERPRETATION

Drawn: Jim McG-D / MontanaGIS
Date: 18may09

Figure 7.

2007 / 2008 WORK DONE

(Prepared by Dave Bennett – March 2008)

An orientation field visit was made to EL-25399 "Compass Creek" in August 2007, as a preliminary to a Universal Tracking Systems P/L (UTS) aeromagnetic survey planned for early September. Limited radiometric traverses were conducted over the eastern half of the EL. Samples of local lithologies were taken for measurement of magnetic susceptibility. No samples were taken for assay, but meetings held with Pine Creek-based North Australian Laboratories P/L in preparation for further work.

Radiometrics

Ground radiometrics were continually monitored in a traverse between Mavis, Kamas Cauldron, Jason's Peak and Mt. Hewson prospects. Instrument carried was an analogue Saphymo SRAT SPP-2 NF scintillometer. No readings above background (80-100 cps) were recorded. Lithologies were all Burrell Creek Formation cleaved psammite.

Magnetic Susceptibility

A Fugro GMS-2 magnetic susceptibility meter was used as an aid to geological interpretation of the aeromagnetic survey. Samples were collected from the major rock types from the Burrell Creek Formation, Prices Springs Granite and the Zamu Dolerite. Magnetic susceptibility for the Prices Springs Pluton ranges from 6.45-12.10 x 10^{-4} emu/g, placing it in the I-type, magnetite series. Iron ratios from previous studies for this granite type should be >0.5, but in this case are <0.5. It is postulated that reducing conditions were generated by intrusion into carbonaceous sediments, thereby lowering fO_2 and enabling fluids to transport Sn.

Airborne Magnetics

(This section added by JM-D)

In September 1999, a large (regional) airborne magnetic and radiometric survey was flown over a large part of the Pine Creek gold district for Homestake Gold of Australia Pty Ltd. This survey was obtained from the Northern Territory Geological Survey (from CR – 2000-0017: Tipperary – Fenton Survey NT). This survey included the Compass Creek prospect and surrounding area. The data was processed for Hapsburg by Geoimage Pty Ltd (Nov. 2007), and additional data such as tenements, topographic features and mineral occurrences were added by Monaro Mining NL (Dec. 2007). This survey was deemed adequate for Hapsburg's purposes, and therefore the proposed airborne magnetic survey by UTS (see above) was cancelled.

2008 / 2009 WORK DONE

Field Visit

A brief field visit was made to the site in August 2008. The purpose of this visit was to meet the manager of the pastoral company, assess the access tracks into the area, and examine the Mavis tin mine.

Contact was made with the manager of Ban Ban Springs Pastoral Company (Mr. John Coghill [08] 8978-2438) and later we met on site. The manager was helpful with his directions on how to access the Compass Creek area.

The access on the McKinlay River road north of Mount Wells was good. A previously washed out bridge had been by-passed with a dry river road cut (ford). The access from the McKinlay River road into the Mavis tin mine was also good, as a local tin miner had cleaned up creek crossings into the area.

The visit to the Mavis mine confirmed the presence of strong hornfels development, related to a nearby granite contact at depth, and chlorite alteration related to hydrothermal fluids from the granite and/or veins carrying various sulphides, quartz and cassiterite (+/- precious metals) (see photos in Appendix 1).

Exposure of mineralisation in the Lower Mavis workings is very poor, so it is not possible to determine the number of veins or trends of veins and/or structures. In contrast the Upper Mavis workings on top of the ridge (to the east) clearly shows a significant breccia-vein (up to 1m thick) striking 045^0 (NE) (to magnetic north), and dipping 50^0 to the NW. Several other costeans and vein float on the ridge may indicate the presence of additional veins.

The exposure of this large NE trending vein (in outcrop & shallow costean) is located about 15 to 20m south of Hapsburg's southern tenement boundary, but the vein is dipping into Hapsburg's ground. Any NE extension will carry the vein onto Hapsburg ground, while the surface trace of a SW extension of the vein would tend to follow Hapsburg's boundary due to the drop in topography. It is possible this vein (trend) may extend SW to the Lower Mavis workings which are actually inside Hapsburg's ground. However, any SW extension from the Lower Mavis workings would see this vein (trend) pass out of Hapsburg ground.

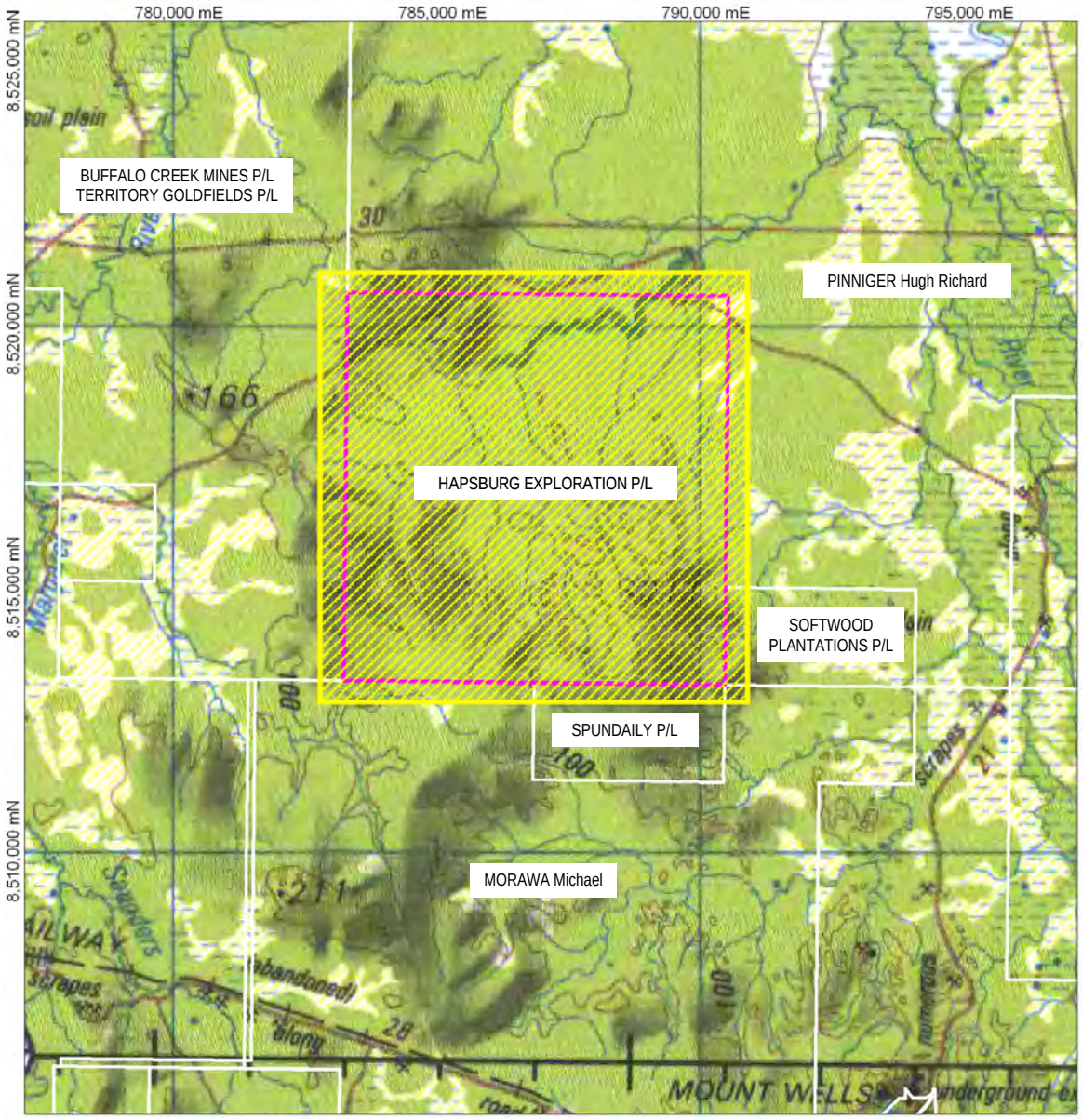
Two "spot" (or grab) rock chip samples of vein material were collected from the Lower & Upper Mavis workings. The analytical results from the upper workings (Appendix 2) show weak to moderately anomalous values for arsenic, bismuth, base-metals and gold; while the quartz vein sample from the lower workings was not significant. It should be noted that these were only small grab samples, and they only provide a guide to possible mineralisation in this vein. Much more extensive sampling will be required to provide a reasonable estimate of the grade of the Mavis area. Obviously tin will be present in higher amounts in parts of this vein system.

Commission Airborne Electromagnetic (EM) Survey

In December 2007, Geoscience Australia (GA) announced that a regional airborne electromagnetic (EM) survey was to be flown over the Pine Creek region and other parts of the Northern Territory (NT). The survey was to be flown by "Fugro" using the "Tempest" EM system. The flight line spacing was to be between 2 km and 5km for the regional survey. However, GA invited tenement holders to apply for additional infill flight lines to be flown over their tenements.

Hapsburg accepted the offer and applied for a total of 344 line kilometres of EM at a line spacing of about 238m (See Fig 8 for plan of the in-fill survey). This is considered to provide excellent coverage as the Tempest system has a "foot-print" of 300m. At $105 per line kilometre, the cost to Hapsburg for this infill survey will be $36,120. This survey was to be flown in mid to late 2008, with the data being available in early 2009. However, due to delays (by Fugro?) the survey may not be completed until March 2009, and results delivered about June 2009.

Hapsburg is committed to obtaining this data, and has requested an extension for the work program on the tenement. The results of this EM survey will be used to guide our exploration program; so it is not possible to plan major exploration programs until the data has been delivered and assessed.



EL25399 Tenement Boundary

Survey Area

N

5km

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COMPASS CREEK
EL25399

AIRBORNE EM COVERAGE

Drawn: Jim McG-D / MontanaGIS
Date: 18may09

Figure 8.

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Appendix 1

Compass Creek Photos – Mavis Tin Mine

Compass Creek Photos – Mavis Tin Prospect Area

Photo 1: Mount Wells drill roads & McKinlay River access road (8 km SSE of Mavis mine)

Photo 2: Mavis Prospect – Lower Workings (costean)

Photo 3: Mavis Prospect – Lower Workings (shallow shaft)

Photo 4: Mavis Prospect – Lower Workings (shallow shaft)

Photo 5: Mavis Prospect – Access track and old mill foundation.

Photo 6: Breccia/gossan vein on chlorite altered (?) hornfels (Chiastolite?)

Photo 7: View looking easterly from ridge above and ~ENE of Mavis prospect.
Note large quartz vein outcrop in centre right of picture.

Photo 8: Mavis prospect – Vein sub-crop & dump material from upper workings.

Photo 9: Mavis prospect – Vein outcrop in costean, about 1m thick (Upper workings). Looking NE along the strike of the vein.

Photo 10: Mavis prospect – Vein outcrop in costean, about 1m thick (Upper workings). Looking SW along the strike of the vein.

Photo 11: Mavis prospect – Vein outcrop/sub-crop, about 1m thick (Upper workings).

Appendix 2

Mavis Rock Samples & Photo Descriptions

Compass Ck		Sample	Au Avg	Cu	Pb	Zn	Ag	U	Th	Ba	Be	Bi	Sn	As	Sb	Fe	Mn	P	SUMMARY GEOLOGY ALTERATION & MINERALIZATION
East	North	Number	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	
789145	8513390	CC-R001	0.003	49	18	10	<0.5	5	26	80	1.2	11	21	184	<5	6.14	100	530	Mavis Lower Workings: photos of shallow costeans and shafts. Sample of quartz veining (locally vuggy) in fine grained quartzose rock (probably altered meta sandstone). Phyllic alteration w/ minor FeOx boxworks after sulphides. Lat/Long co-ordinates are 13 deg 25.997 min South & 131 deg 40.210 min East. Photo of vein sample on strongly hornfels sediment with green (chlorite) alteration.
789349	8513456	N/S																	Site of 3 photos taken from ridge above Mavis prospect, looking ENE to hills cleared by fire.
789423	8513328	N/S																	Site of photos from ridge above Mavis prospect, looking 080 deg.
789360	8513366	N/S																	Photos of gossan-vein boulders (float) from nearby workings.
789370	8513356	CC-R002	0.067	673	124	128	<0.5	26	34	170	7.2	235	8	444	15	47.2	1310	5870	Upper Mavis workings: shallow costeans exposing one or more breccia-gossan-quartz veins. Quartz vein material is minor and appears to cut the gossan material which is largely made up of remobilised iron. The main vein on top of the hill is about 1m thick and trends 045 deg (mag) and dips 50 deg NW (into Hapsburg's ground). The Lat/Long co-ords of the main vein are: 13 deg 26.009 min South & 131 deg 40.338 min East.

AMG co-ordinates are Zone 52 (GDA 94)

Assays by ALS in Brisbane. Analytical Method: Au by AA22, Sn, U & Th samples by XRF05, all others by ICP61. The following elements were also analyzed, but results were very low or below detection: Al, Ca, Cd, Co, Cr, Ga, K, La, Mg, Mo, Na, Ni, S, Sc, Sr, Ti, Tl, V, & W.