

ANNUAL REPORT
For the period 12th April 2007 to 12th April 2008
EL-25399 “ Compass Creek”

To

NORTHERN TERRITORY GOVERNMENT
Department of Primary Industry, Fisheries and **Mines**

August 2008

Hapsburg
Exploration Pty Ltd

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Summary

EL-25399 was granted to Hapsburg Exploration Pty Ltd in April 2007 for a 6-year period. The tenement is located 130 km SE of Darwin, 55 km NNW of Pine Creek and 15 km E of Ban Ban Springs Station. It comprises 16 sub-blocks with area of 53.5 sq. km.

The EL is situated in the Central Region of the Pine Creek Orogen and has a favourable geological and structural setting for Sn, Au and U mineralisation. Strong NW lineaments related to the Pine Creek Shear traverse the area. Local stratigraphy includes the Finnis River Group (Burrell Creek Formation) and South Alligator Group (Mount Bonnie Formation, Gerowie Tuff, Koolpin Formation), which are known to host U and precious metal mineralisation elsewhere in the region.

There are Sn workings dating from the 1950's and 1960's at Mavis and Mt Hewson prospects, evidenced by several collapsed shafts, adits and dozer cuts. A small Au mine was worked at McKinlay 5 km to the east, and several Sn lodes have been drilled at Mt Wells 10 km to the south, which intersected greisen at around 150m from surface. No exploratory drilling has so far been undertaken on EL-25399.

Exploration since the late 1980's has been primarily directed towards bulk, low tonnage Au mineralisation suitable for open-cut operations. This has located two major, but weakly mineralised quartz veins to the west and passing out of the Hapsburg tenement.

Results of stream and rock chip geochemistry, aeromagnetism and remote sensing by several explorers, notably Cyprus Gold/Arimco, Newmont and Northern Gold NL, point to a circular area of alteration and mineralisation several kilometres in diameter immediately to the north of Mavis Prospect. Sn, As and Pb are strongly anomalous; Au, Ag, Cu and Zn are less so.

An aeromagnetic and radiometric survey was contracted for early September 2007. This was cancelled after long delays due to mechanical problems. Alternative airborne magnetic data was procured from the NT Department of Mines and is currently under review and interpretation.

Further work is recommended to better define drill targets. This would involve an access upgrade, establish base camp, ground magnetism over the Mavis alteration area, investigation of other prospects, namely Kamas Cauldron, Jason's Peak and Mt. Hewson. The major WNW quartz veins to the west of the EL should also be investigated and the SW corner of EL-25399 investigated for Gerowie Tuff and Mount Bonnie Formation Au mineralisation. Hapsburg Exploration will also participate in the Geoscience Australia Pine Creek Regional AEM survey to be conducted in late 2008.

1. INTRODUCTION

Hapsburg Exploration Pty Ltd was granted EL-25399 “Compass Creek” on the 12th April 2007 for a 6year period. The tenement comprises 16 sub-blocks covering an area of 53.44 sq. km. There are no current mineral claims or leases within the EL. The tenement was subject to arbitration after the original leaseholders re-applied, and was only granted after a review of technical qualifications and financial commitments of both parties. Continuation of the licence is dependent on compliance with the expenditure covenant and the exploration programme.

Minimum expenditure commitment is \$110,000 for Year 1 of the licence; annual rental is \$176.

The EL and surrounding area was part of the Mt.Wells Policy Reserve from 1964 to June 1988, which restricted exploration, and no significant work was undertaken during this period.

2. LOCATION, ACCESS and LOGISTICS

EL-25399 “Compass Creek” is located 130 km SE of Darwin, 55 km NNW of Pine Creek and 15 km E of Ban Ban Springs Station, and covered by the Pine Creek 1:250,000 (SD52-08) and McKinley River (5271) sheets. The NW corner of the lease is located at 131⁰ 37’ East longitude and 13⁰22’ South latitude (**Figure 2-1**).

Access is by the Stuart Highway to Hayes Creek (180 km) or Pine Creek (220 km), then unsealed road to the Mt Wells Battery. Private station tracks connect Mt Wells with the Mavis Prospect and Ban Ban Springs Station.

Ban Ban Springs maintains an airstrip and operates a Bell helicopter. Apart from cattle, the station runs buffalo and employs a pet food shooter to control donkeys and wild horses. The main track is washed-out at Mt Wells and would require an estimated \$45,000 to upgrade for heavy machinery access (**Appendix 1**). The track into Mavis Prospect involves several creek crossings needing rehabilitation after the Wet Season.

Camping accommodation, fuel and meals are available at Hayes Creek and Pine Creek, however accommodation at Pine Creek is limited due to the present level of mining activity. Basic accommodation and camping are provided at Grove Hill Hotel. No facilities are available at Mt Wells. Mobile phone and *nextG* broadband (using aerial) coverage can be picked up at Grove Hill and Mavis Prospect.

Formal contact was made with all landowners, and meetings arranged when convenient. Due to current gold and iron ore mining and exploration on, and around, Ban Ban Springs Station, management is not well disposed towards mining companies, and has been litigious in the recent past. However, verbal permission for limited access was granted after the Hapsburg exploration programme was outlined.

3. CLIMATE, TOPOGRAPHY and VEGETATION

Climate is semi-arid-monsoonal, with a warm dry season from April to September, and hot wet season from October to March. Average annual rainfall is 1500 mm. The hottest months October and November with a temperature range of 22-37⁰C. Coolest months are June and July with a range of 12-30⁰C.

EL-25399 is bounded to the east by the McKinley River, and its tributary Compass Creek to the north. These drainages form part of the Mary River System and are adjacent to the drainage divide with the Adelaide River System. Drainage pattern is sub-dendritic, with smaller streams flowing only in the Wet Season.

The tenement area is one of stark relief with grassy plains surrounding uplifted, folded and dissected Burrell Creek flysch sediments, with low steep hills and narrow valleys. This topography type can be confusing and GPS navigation is recommended (**Figure 3-1, Figure 3-2**).

Vegetation is savannah woodland characterised by sparse eucalypts and a moderate to thick cover of grasses. Fire danger is high, and the area was burnt out in September 2007 after lightning strikes. Ban Ban Springs Station does not permit open fires to be lit during the Dry Season.

4. REGIONAL GEOLOGY

EL-25399 lies close to the axis of the Pine Creek Orogen (previously termed Pine Creek Geosyncline). This structure is an Early Proterozoic intracratonic sedimentary basin deposited unconformably on Archaean granitic and metamorphic basement. The sediments are 14 km thick in the area of interest.

The Orogen can be divided into 5 provinces (**Figure 4-1**). From east to west they are:

- East Alligator Rivers Region : amphibolite facies metamorphism, upright folding,
- South Alligator River Valley Region : greenschist metamorphism, northerly folding,
- Central Region : northwest folding, I-type granitoids, vein mineralisation (Au, Sn, Cu-Pb-Zn), stratabound Au and polymetallic deposits.
- Rum Jungle Region : Archaean granitic basement, mineralisation : U, Mg, basemetals
- Litchfield Province : isoclinally folded metamorphics, S-type granitoids, mineralisation : Sn, Ta pegmatites

Depositional environment in the Orogen varies from shallow marine, deltaic and fluvial in lower and middle strata, to flysch in the upper section intruded by dolerite sills. Sediments were multiply folded and metamorphosed to lower greenschist facies during the Top End Orogeny (1870-1800 Ma), and granitoids, with accompanying contact metamorphism, emplaced.

EL-25399 is located in the Central Region of the Orogen. Simplified regional geology is shown in **Figure 4-2**.

5. LOCAL GEOLOGY

EL-25399 lies towards the top of the sedimentary pile in the Central Region (**Figure 5-1**). Here, stratigraphy is determined, from younger to older, as :

Cullen Batholith

19 separate intrusions predominantly I-type. Mineralisation : Sn, W, Cu, Mo
Prices Springs Granite predominates at EL-25399

Zamu Dolerite

quartz dolerite, granophyre as sills to 150m thick, with sharp contacts to country rock;
mineralisation : minor Au

Finniss River Group

Burrell Creek Formation : 1500m flysch sedimentation (greywacke, siltstone, shale, minor acid volcanics); vein mineralisation : Au, Sn, Cu-Pb-Zn

South Alligator Group

Mount Bonnie Formation: 700m shale, phyllite, greywacke; mineralisation : U, Au, Cu-Pb-Zn

Gerowie Tuff : 400m cherty tuff, greywacke; mineralisation : Au

Koolpin Formation : 500m siltstone, chert, shale, dolerite, BIF; mineralisation : U, Au, Cu

Burrell Creek Formation underlies the majority of EL-25399 “Compass Creek”. Lithologies are tightly folded psammites and pelites with axial plane cleavage. Small bodies of dolerite occur through the sequence.

An apophysis of Prices Springs Granite outcrops in the SW corner of EL-25399, and ranges in composition from adamellite to granodiorite. This intrudes sediments and shows an aureole characterised by cordierite and chiastolite growths.

The SE corner of EL-25399 is underlain by upper South Alligator Group Mount Bonnie Formation, which outcrops as low hills of shale and siltstone. The Gerowie Tuff consists of micaceous sandstones or greywacke and chert with white powdery coatings.

Quartz veining is common in all units as white buck quartz and low temperature fracture fillings. A major quartz vein outcrops as a 3 km ridge in the west of the EL. Strike is WNW, dip steep to SE. It is mainly barren white quartz, but there are occasional gossans and a haematite breccia along its length. As content is high (to 15%), and Au locally anomalous (0.06-1.2g/t Au)

5.1 Mavis Tin Prospect

This prospect lies on the south boundary of EL-25399. It was discovered in 1958 and produced 4 t of Sn concentrate from trenching and pits. Quartz haematite veins to 0.5m thick carry up to 50% cassiterite, and are hosted in Mount Bonnie Formation black slates and greywacke. Veins conformable to bedding which are broadly folded and plunges NE to 40°.

6. TARGET MODELS

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.

6.1 Uranium : Fleur de Lys model

Target model is 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% U₃O₈, 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°, dip 70°SW. 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% U₃O₈. Workings consist of 9 shafts to 80m, and 2 adits. Remaining reserves are 1,500t @ 0.50% U₃O₈ in the stopes, and 5,500t @ 0.22 U₃O₈ at depth.

The local geology is tightly folded and faulted Burrell Creek Formation striking 330°, dip 65°SW 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.

6.2 Gold : 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, 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 300⁰, 35⁰SE plunging anticline. Primary ore is arsenopyrite with Au inclusions, pyrite, chalcopyrite, chalcocite, sphalerite and galena. Gangue minerals are quartz, siderite, K feldspar and tourmaline (**Figure 6-1**).

6.3 Gold : 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 (**Figure 6-2**).

6.4 Tin : 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 SnO₂ @ 1% Sn. Six lodes (tension gash veins) have been defined, strike 020⁰, dip 80⁰ over a strike length of 1000m and depth to 200m (**Figure 6-3**).

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.

7. PREVIOUS EXPLORATION

A comprehensive review of previous exploration since 1988 over, and in the immediate surrounds of EL-25399 “Compass Creek” is detailed in the report by J.McGregor-Dawson, and summary features are described here. The area of this study is shown in **Figure 7-1**.

Exploration was mainly directed towards bulk tonnage, open pittable vein and stratabound Au and base metals in the Finnis River and South Alligator Groups – the Woolwonga and Cosmo Howley models described above. No modern exploration targetted Sn.

7.1 Cyprus Gold Australia / Arimco (1988)

Six sub-blocks, mostly to the south of EL-25399. Work consisted of rock chip sampling, mapping, aeromagnetic interpretation and Landsat TM.

Rock chip assays in SE corner of EL-25399 show Au weakly anomalous (to 0.11 g/t), As anomalous (to 0.13%). The WNW quartz ridge in the SW quadrant of EL-25399 strongly anomalous As (av. 3.0%, max 15%), but low Au.

Landsat TM shows 3 strong NW lineaments crossing EL-25399, and 3 circular features 1-2 km in diameter (**Figure 7-2**). A small circular anomaly is present immediately north of the Mavis Prospect, and is cut by one of the NE lineaments. This is also the area of anomalous Sn, Pb and As outlined subsequently by Newmont.

Aeromagnetic data is outside EL-25399, and shows a 1 km diameter anomaly 1.5 km SW of Mavis Prospect. This is over the contact of Prices Creek Granite and Koolpin Formation, and was interpreted as a magnetite body. Alternative interpretations are mineralisation with abundant pyrrhotite, or magnetic skarn in carbonate rich Koolpin sediments (**Figure 7-3, Figure 7-4**).

7.2 Newmont Australia (1988)

Exploration target was Zamu Dolerite intruding Burrell Creek Formation, with Au in stockworks, fractures and alteration.

Model used was McKinlay Gold mine 5 km from the eastern boundary of EL-25399. The McKinlay lode is 1160m long, strikes 165° and is near the crest of an anticline. From 1938-1939, it produced 127 t @ 3.3 g/t Au. It is hosted in sandstones, greywacke and shale of the Burrell Creek Formation and intruded by Zamu Dolerite.

Newmont collected 175 BLEG stream and soil samples with good coverage over EL-25399, but no anomalous results. BLEG soil was also run down the WNW quartz ridge with weakly anomalous Au results (to 3.2ppb)

19 rock chip samples were taken over an area of 2.5 km N of Mavis Prospect by 1.5 km E-W. Most were strongly anomalous for As, Pb, and Sn, and less so for Au, Ag and Cu. Lithologies are silicified pelites with pyrite and iron staining, and quartz haematite siltstone breccia (**Figure 7-5, Figure 7-6, Appendix 2**).

7.3 Northern Gold NL (1990)

The tenement consisted of 27 sub-blocks and covered the central portion of the current EL-25399. Work was similar to that of Newmont, and confirmed their results.

Northern Gold collected 55 BLEG stream sediment and 14 rock chip samples. Results were marginally higher than Newmont's and a zone 4 km north of Mavis Prospect gave 5 sites from 2.4 to 6.8 ppb Au. One sample from below Mavis gave 253 ppb Au.

Rock chip samples from Mavis were anomalous in Sn (to 6%), As, Pb and Cu. Two rock chip samples from 1.5 km north of Mavis were anomalous in Sn (1.2% Sn), As and Pb.

7.4 NT Gold Pty Ltd (1992)

The tenement comprised 8 sub-blocks covering 25km², and coincides with the southern half of Hapsburg's EL-25399. The tenement was a Joint Venture between NT Gold and J. Langley (prospector).

A NW trending 1m wide quartz arsenic reef with strike length of 2,000 m was located in Prices Springs Granite near the contact with Burrell Creek Formation. This area is in the SW corner of EL-25399. This reportedly assayed 28% As, 0.5 g/t Au and 400 ppm Bi at a location known as Dingo Creek.

J. Langley previously located two other gossan prospects in 1987, namely the Kamas Cauldron and Jason's Peak, and these were investigated (**Figure 7-7**). Lease boundary markers (plastic pipe) are still standing.

Kamas Cauldron Prospect is located near EL-25399 boundary, and consists of an 80m gossan at the top of a hill described as an andesitic breccia, and interpreted by NT Gold to be a pipe. Gossan samples gave anomalous Sn (to 0.30%) and As (0.85%). Au, Ag and Cu were not anomalous.

Jason's Peak Prospect is a 50m by 5m gossan and has a collapsed adit. It is located at the northern end of the Mavis Prospect, and is anomalous in Sn, Pb, and As.

Sampling quartz vein material from the roof of the adit gave an assay of 15% Sn, 0.40% Pb and 0.14% As. Lithology is trachyandesitic tuff with pyrite boxworks, sericite and jarosite alteration.

7.5 Corporate Development P/L & Centrex Resources NL (1995)

The tenement consisted of 4 sub-blocks with area of 12.5 sq. km, and coincident with the SE quadrant of Hapsburg's EL-25399. Title was transferred to Centrex Resources in 1996. The Kamas Cauldron and Jason's Peak prospects were excluded as they were under mineral claim.

The Mt. Hewson Prospect in the centre of EL-25399 was also investigated. There is an old campsite with a car body at this location.

8. FIELD INVESTIGATIONS 2007

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.

8.1 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

8.2 Magnetics

8.2.1 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 $6.45-12.10 \times 10^{-4}$ 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.

8.2.2 Ground Magnetics

It was intended to run a ground magnetic survey along N-S and E-W lines over the Mavis Prospect and the area to its immediate north. To this end, Hapsburg Exploration purchased a Geometrics Portable Cesium Vapour Magnetometer (Model G-859 Mineral Mag) in June 2007. On commissioning, it was found to be unsuitable (couldn't hold charge) and was returned to the supplier.

A replacement GEM Systems GSM-19TW was purchased in September 2007, but to date has not been used in the field

8.2.3 Aeromagnetics

A UTS combined aeromagnetic and radiometric survey was planned for September, 2007. 948 line km were to be flown at a sensor height of 50m, with traverse spacing of 100m. However, the aircraft (fixed wing Fletcher FU4 single engine) experienced mechanical difficulties when mobilising, and was damaged on forced landing.

A replacement aircraft was only operational into the Wet Season in late December, and the survey was cancelled due to the prevalence of electrical storms affecting magnetics and the adverse effect of high water table on radiometrics. In the interim, data from a previous aeromagnetic survey were obtained from the NT Mines Department, and is presently under review.

9. CONCLUSIONS

EL-23599 “Compass Creek” is highly prospective for Sn and, to a lesser extent Au and U. Prospective stratigraphic units present on the EL are Finniss River Group (Burrell Creek Formation), and South Alligator Group (Mount Bonnie Formation, Gerowie Tuff, Koolpin Formation). The Price’s Springs Granite provides a heat source and generated reducing magmatic fluids suitable for metal transport.

Locally, tin mineralisation is present to the south at Mt. Wells and Jimmy’s Knob from quartz veins genetically related to a buried, altered intrusive into Burrell Creek Formation and Mount Bonnie Formation sediments.

All results from previous work point to a circular, strongly mineralised and altered area encompassing the Mavis Prospect and area north for several kilometres. A possible model is for disseminated Sn mineralisation in lodes and microfractures above a shallow cupola.

The target has potential for bulk tonnage, open pit mining and with Sn prices at record high (\$9.4/lb, \$20.60/kg, \$20,600mt), 0.3% Sn could be economic.

Gold has been produced from the Burrell Creek Formation (largest producer in Pine Creek Orogen), Mount Bonnie Formation and to a lesser extent, Gerowie Tuff and Koolpin Formation (**Figure 9-1**). There is a strong relationship with the composite Cullen Batholith, represented on the EL-25399 by the Prices Springs Granite.

Uranium mineralisation is known at Fleur de Lys hosted by Gerowie Tuff, and at Adelaide River hosted by the Burrell Creek Formation. This setting is present at EL-23599.

10. RECOMMENDATIONS FOR FURTHER WORK

There has been no exploration drilling to date on the prospects recorded on EL-25399 “Compass Creek”. Previous low-level mining activity in the 1950’s is evidenced by a small number of shafts and adits (now collapsed), pits and dozer trenches to remove high-grade Sn quartz veins. There must be an old track into the Mt. Hewson camp, but this was only located in parts. Target areas are highlighted on **Figure 10-1**. The following recommendations are given in point form :

- Upgrade road and track from Mt Wells to Mavis and Mt. Hewson Prospects
- Establish base camp
- Ground magnetics to be run over circular area of mineralisation and alteration to the north of Mavis Prospect. This would generate specific drill targets.
- Further field investigation and sampling of prospects (location within EL-23599) :

Kamas Cauldron	(east)
Jason’s Peak	(east)
Mt. Hewson	(central)
WNW qtz vein-strike length 2000m	(west-central)
Qtz vein- strike length 1500m	(southwest)
Gerowie Tuff/Prices Springs Granite contact	(southwest)
- Air photo interpretation. Photos have already been purchased.

11. REFERENCES

- Ahmad, M et al 1993 1:250,000 Metallogenic Map Series . Pine Creek
SD52-8 Explanatory Notes. *NT Geological Survey*
- Ahmad, M et al 1999 Gold Deposits of the Northern Territory
NT Geological Survey
- McGregor-Dawson, J 2007 Review of Historic Exploration Compass Creek, for
Hapsburg Exploration Pty Ltd

APPENDIX 1

Newmont Australia Sample Sheets :

Mavis North Prospect

WNW Quartz Vein