



**STELLAR RESOURCES LIMITED**  
Rubicon MinTech Ventures Pty. Ltd.

**EL 44/2006 CORINNA**

**ANNUAL REPORT FOR THE PERIOD  
17 APRIL 2008 – 16 FEBRUARY 2009**

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**SUBMITTED TO: Executive Chairman**

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## **ABSTRACT**

This second Annual Technical Report for EL 44-2006, Corinna covers the period 17 April 2008 to 16 February 2009.

The Corinna licence area covers a large portion of the Arthur Lineament running northeast from the West Coast to just south of Savage River. The Pieman River bisects the tenement at Corinna, which is the only population centre in the licence. EL 44-2006 surrounds the Cominex Silica Lease.

Rocks in the tenement comprise a sheared, high strain tectonic zone composed of Cambrian metasedimentary and mafic igneous lithologies of the eastern Ahrberg Group, the Bowry Formation and a high strain part of the Oonah Formation. Regionally, the Arthur Lineament separates the Neoproterozoic Rocky Cape Group and western Ahrberg Group from the more easterly low strain parts of the Oonah Group.

The area is prospective for gold, copper/magnetite, copper/gold and silica mineralisation.

Collection and review of historic exploration data continues. No fieldwork was carried out in the reporting period.

Total expenditure on EL 44-2006 for the year was \$45,015.

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# 1. INTRODUCTION

## 1.1. EXPLORATION RATIONALE & GEOLOGICAL SETTING

EL 44/2006 is structurally positioned on a gravity divide between the Meredith and Pieman Granites. A series of arcuate, fault bounded, NE-trending linear magnetic anomalies are prominent. Cambrian deformation has produced steep west dipping; thrust zones, which created the strong, regional linear structural expression visible on the magnetic image (Figure 7).

The Bernafai, Tunnelrace and Lucy volcanic formations containing tholeiitic basalt and associated volcanoclastic sediments are considered to be representative of a rift margin or island arc environment. These units are prospective for gold, copper/magnetite and copper/gold mineralisation. High strain metasediments within the Arthur Lineament, which also contain amphibolites, are considered to be equally prospective.

An important style of mineralisation in the general area is the Alpine copper deposit developed in impure carbonate and banded iron formation sediments of the Bowry Formation adjacent to the Corinna licence in EL 46-2003. The Bowry Formation is the amphibolite-bearing unit, which contains the pyrite-magnetite lenses mined at Savage River 20km NE of Corinna.

Within the Corinna licence historic exploration has been directed at commercial silica flour deposits within the Cominex Silica lease, alluvial gold mineralisation sourced mainly from Tertiary gravels overlying Savage Dolomite in the Brookside area and reported epithermal gold hosted in silicified Savage Dolomite.

Other exploration within the licence has been for Besshi-style mineralisation typically occurring as banded/laminated pyrite and associated chalcopyrite in metamorphosed iron-rich sediments and tuffs.

### 1.1.1. Geological Setting

The Corinna licence covers a major part of the Arthur Lineament – a sheared, high strain tectonic zone composed of Cambrian metasedimentary and mafic igneous lithologies of the eastern Ahrberg Group, the Bowry Formation and a high strain part of the Oonah Formation. Regionally, the Arthur Lineament separates the Neoproterozoic Rocky Cape Group and western Ahrberg Group from the more easterly low strain parts of the Oonah Group. Refer to Figure 6.

The northerly trending Lefroy Ridge Fault, which runs up the eastern half of the licence, forms the western margin of the Arthur Lineament. The Arthur Lineament, which includes high strain metamorphics, and the prospective mineralised Bowry Formation straddles the eastern margin of the licence.

Early folding and thrusting is reported to have caused emplacement of the Bowry Formation, interpreted to occur as a fault-bounded allochthonous slice on the margin of the eastern Ahrberg Group metasediments.

Geology along the western half of the licence is complex and the stratigraphy not completely resolved. From west to east across the licence the westernmost Donaldson Group micaceous quartzwacke and slaty pelitic siltstone with minor basal banded chert and conglomerate overlies orthoquartzite and siltstone of the Rocky Cape Group with inferred angular unconformity. Above the Donaldson Group, fine-grained dolomite interbedded with carbonaceous siltstone and stromatolitic dolomite (Savage Dolomite) is conformably overlain by interbedded metabasalt, quartzite, phyllitic siltstone and tuffaceous metasiltstone (Bernafai Volcanics). The volcanics are overlain by Corinna Dolomite and the Tunnelrace Volcanics, an upper volcanic sequence consisting of tuffaceous and chloritic metasiltstone with interbedded metabasalt, which is cut by the Lefroy Ridge Fault. Mafic rocks within the volcanics have been classified as subalkaline to alkaline basalts.

East of the Lefroy Ridge Fault the Arthur Lineament comprises metasediments, a basal conglomerate and infolded amphibolites of the eastern Ahrberg Group - part of the Arthur Metamorphic Complex - faulted against the Bowry Formation. The amphibolites, which occur in the Lucy (magnetic) and Nancy Formations (weakly magnetic) and the Bowry Formation (strongly magnetic) lie outside the licence.

There appears to be no mapped or outcropping granite within the licence. However, a small granite porphyry intrudes Cambrian metamorphic rocks in Timbs Creek, east of the licence, midway between the Brookside gold workings and outcropping Meredith Granite, 8km NE of Corinna. The porphyry is geochemically uninteresting but contains abundant disseminated pyrite (Nick Turner).

The overlying Tertiary rocks comprise sheet or channel-fill gravels, sand and clay generally in ridge top situations overlain by basalt. Previous work has shown their potential as tin/gold placer deposits is limited and probably not viable. Gold from the alluvials generally contributes to contamination of geochemical heavy mineral suites in the creeks.

### **1.1.2. Regional Geophysics**

The linear, arcuate magnetic distribution is consistent with thrust tectonics and tight isoclinal folding.

The Rocky Cape Group is not magnetically active. Conglomerate occurring at the base of the Donaldson Formation indicates it is unconformable on the Rocky Cape Group. Bernafai Volcanics are magnetic but not as strongly magnetic as the Tunnelrace Volcanics.

The regional geophysics generally maps out terrane geology consistent with the MRT stratigraphy including phyllite, metaquartzites and amphibolite (Lucy Formation) of the Arthur Metamorphic Complex and strongly magnetic Bowry Formation.

The Lefroy Ridge Fault, a major fault running the length of the Tunnelrace Volcanics may be an anastomosing rather than sharp-edged thrust fault. It forms the western margin of the Arthur Lineament.

### **1.1.3. Regional Geochemistry**

Regionally, stream sampling has been concentrated in a number of preferred target areas and large areas of the Corinna licence have received no attention. In fact, most of the stream sediment sampling within the Corinna licence corresponds with the majority of sampling for gold in the vicinity of the Cominex Silica lease and the Brookside gold prospect (Figure 9). Otherwise, 7 samples in Newdegate Creek and about 25 samples near the East Lefroy Ridge prospect north of Hangmans Creek are the only other sampled areas. An unnamed tributary of Newdegate Creek draining from the Tunnelrace Formation contained stream values to 65ppm Cu, 0.021ppm Au, and 300ppm Zn. One sample near the junction of the tributary and Newdegate Creek returned a value of 1450 ppm Sn. There has been no sampling northeast of the junction, where Newdegate Creek drains the Bernafai and Tunnelrace Volcanics. A nearby rock chip sample from the eastern Bernafai Volcanics assayed 230ppm Cu and 135ppm Zn. Six rockchip samples along the Wilson Road across the Tunnelrace Volcanics assayed from 64 to 410ppm Cu.

Discovery Nickel Limited acquired and processed all stream sediment samples from the MRT database to produce regional stream sediment images for Cu and Ni. The work showed that all the anomalous Cu results plot in the northern part of the Corinna licence in the area covered by the Cominex Silica lease (Figure 9). This cluster of anomalous Cu values in this part of the Corinna licence further draws attention to the mineralised Brookside area. A highly anomalous stream sample containing 0.52% Cu occurs in a tributary of Little Hunter Creek south of the Eastside grid. Several highly anomalous streams including Doodie Creek, although situated within the Silica lease, appear to drain areas outside the eastern lease boundary.

Mafic rocks from the Corinna area were among 48 samples collected by Discovery Nickel and submitted for whole rock analysis. Rocks collected from west of the Arthur Lineament include the Bernafai Volcanics consisting of mafic volcanics and sediments that have experienced low grade regional metamorphism and the Tunnelrace Volcanics which comprise a more magnetic, fault-bounded slice of mafic volcanics and sediments. The mafic rocks have high Fe<sub>2</sub>O<sub>3</sub>, Al<sub>2</sub>O<sub>3</sub>, TiO<sub>2</sub>, high K<sub>2</sub>O and low CaO composition. They classify as subalkaline to alkaline basalts and are generally enriched in the light rare earth elements. The overall chemistry of these rocks is consistent with relatively low-degrees of partial melting of an enriched mantle source coupled with subsequent fractionation and a degree of crustal contamination.

The key indices of chalcophile element enrichment and depletion are conflicting and inconclusive.

## LICENCE

Tenement Number: 44/2006

Tenement Name: Corinna

Tenement Location: The central (and only) populated location is Corinna at the punt crossing on the Pieman River. Corinna is 23km southwest of Savage River via the Corinna Road, and 45km northwest of Zeehan via the Heemskirk Road. The licence covers 125km<sup>2</sup> and extends 14km to the NNE of Corinna, and 12km to the southwest, to the coast. (Figure x). Two small cadastral blocks lie at Corinna, and four larger cadastral blocks lie in the southwest of the licence near the coast, centred on 333500mE, 5380000mN (GDA94). The remainder of the EL area is Crown Land, and is managed in accordance with the Waratah/Wynyard Planning Scheme 2000 to the north of Corinna, and with the West Coast Planning Scheme 1999 to the south of Corinna. Land use is designated as "Environmental Protection", "Environmental Management" and "Primary Industry". The Pieman River State Reserve, along the Pieman River in the centre of the licence, is excluded from exploration. Most of the licence has a moderate to steep topography, and is covered by Nothofagus/Atherosperma and Nothofagus/Phyllocladus rainforest and associated scrub (90%), with the remainder comprising wet Eucalyptus obliqua forest, wet heathland/button grass, and other (Figure x). The Heemskirk and Corinna Roads provide the main access, with forestry and mining tracks providing good access in the silica mining lease area centred 4.5km northeast of Corinna. Elsewhere there are limited vehicular tracks providing access. Much of the area is not well serviced by tracks and may at present only be accessible by foot or by helicopter.

Reporting Period: 17<sup>th</sup> March 2008 to 16<sup>th</sup> March 2009.

Tenement Holder: Rubicon Min Tech Ventures Pty Ltd., a wholly owned subsidiary of Stellar Resources Ltd.

## 1.2. LOCATION OF LICENCE

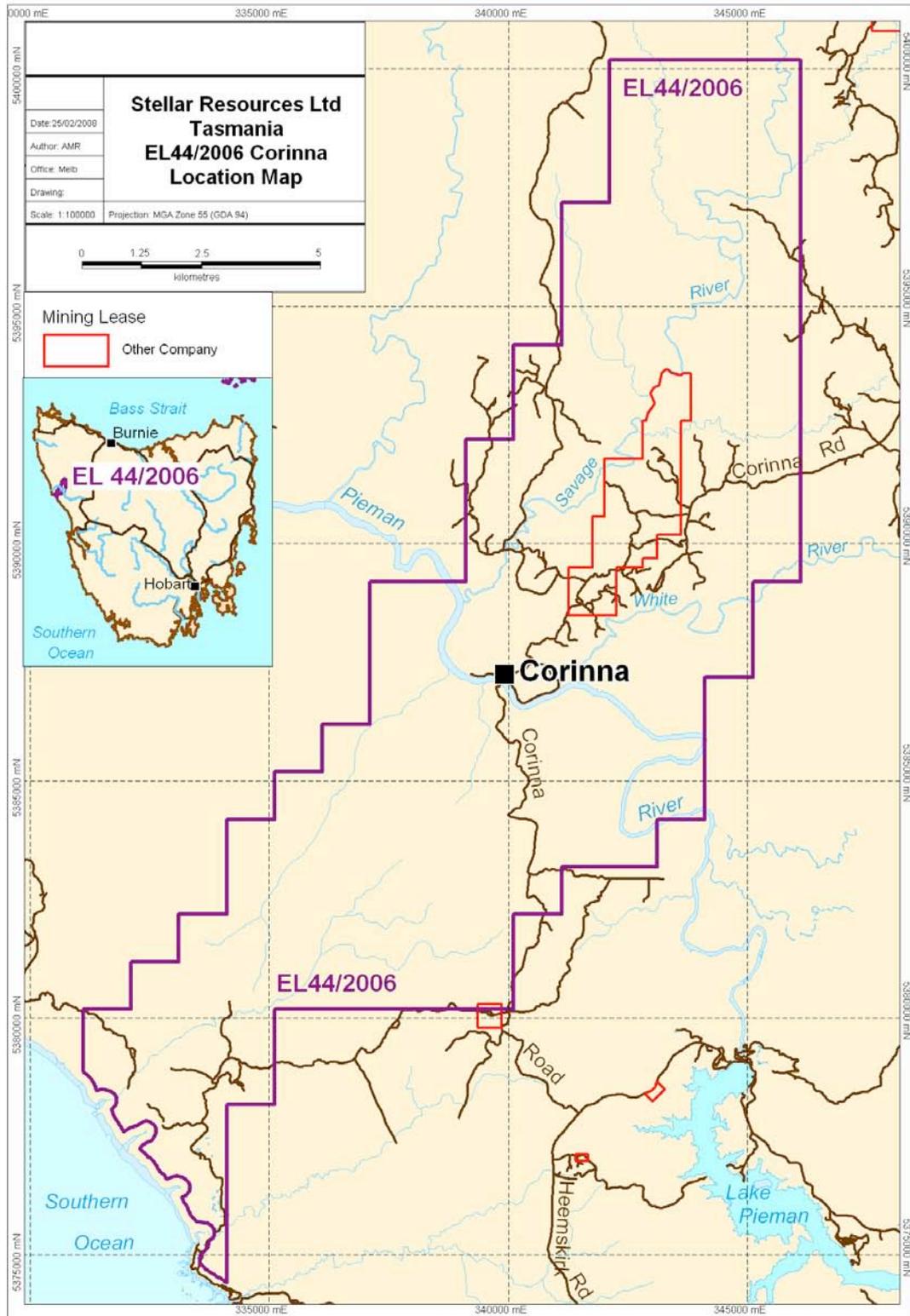


Figure 1. EL44/2006, Location Map.

### 1.3. LAND TENURE

#### SCHEDULE

LAND DISTRICTS OF RUSSELL & MONTAGU VICINITY OF CORINNA  
MUNICIPALITIES OF WEST COAST, CIRCULAR HEAD & WARATAH/WYNYARD  
EXPLORATION LICENCE 44/2006 121 SKM  
RUBICON MINTECH VENTURES PTY LTD

Commencing at a north west corner at grid coordinates 342 000 metres E 5 400 000 metres N thence grid east to 346 000 metres E grid south to 5 389 000 metres N grid west to 345 000 metres E again grid south to 5 387 000 metres N again grid west to 344 000 metres E again grid south to 5384 000 metres N again grid west to 343 000 metres E again grid south to 5383 000 metres N again grid west to 341 000 metres E again grid south to 5382 000 metres N again grid west to 340 000 metres E again grid south to 5380 000 metres N again grid west to 335 000 metres E again grid south to 5 378 000 metres N again grid west to 334 000 metres E again grid south to a point 200 metres inland from the high water mark on the West Coast of Tasmania thence in a general north-westerly direction 200 metres inland from and parallel to that high water mark to 331 000 metres E thence grid north to 5 380 000 metres N aforesaid again grid east to 332 000 metres E again grid north to 5381 000 metres N again grid east to 333 000 metres E again grid north to 5 382 000 metres N aforesaid again grid east to 334 000 metres E aforesaid again grid north to 5384 000 metres N aforesaid again grid east to 335 000 metres E aforesaid again grid north to 5385 000 metres N again grid east to 336 000 metres E again grid north to 5 386 000 metres N again grid east to 337 000 metres E again grid north to 5 389 000 metres N aforesaid again grid east to 339 000 metres E again grid north to 5 392 000 metres N again grid east to 340 000 metres E aforesaid again grid north to 5394 000 metres N again grid east to 341 000 metres E aforesaid again grid north to 5397 000 metres N again grid east to 342 000 metres E aforesaid thence again grid north to the point of commencement.

Coordinate datum - AGD66 AMG Zone 55.

#### EXCLUSIONS

- (a) Any land owned or leased by the Commonwealth of Australia.
- (b) All forms of mineral tenements amounting to 602ha (more or less) including mining leases, retention licences and exploration licences, which were applied for or in force prior to the date of application for this licence.
- (c) Land reserved under the *National Parks and Wildlife Act 1970*, *Forestry Act 1920* and the *Crown Lands Act 1976* unless such areas have been brought under the provisions of the *Mineral Resources Development Act 1995*.
  - 12.4 skm Pieman River State Reserve
  - 3.5 skm Proposed Pieman River State Reserve
- (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*.
- (e) Areas of private land which either have been, or are in the process of being, purchased by the Crown under the Regional Forest Agreement - Private Forests Reserves Program and / or private land over which the landowners have agreed, or are in the process of agreeing, to place a covenant or management agreement for conservation purposes under the Regional Forest Agreement - Private Forests Reserves Program or the Protected Areas on Private Land Program.

## LAND TENURE

The area comprises:

- Private Land
- State / Multiple Use Forest MDC Informal Reserve
- Proposed Informal Reserve - RF A
- Part of Bemafai Ridge Conservation Area,
- Part of Meredith Range Regional Reserve
- Part of Tikkawoppa Plateau Regional Reserve
- Part of Four Mile Beach Regional Reserve
- Part of Donaldson River Nature Recreation Area

The licence area contains areas, which are listed (including listed on an interim basis) on the Register of the National Estate kept under the *Australian Heritage Commission Act 1975*.

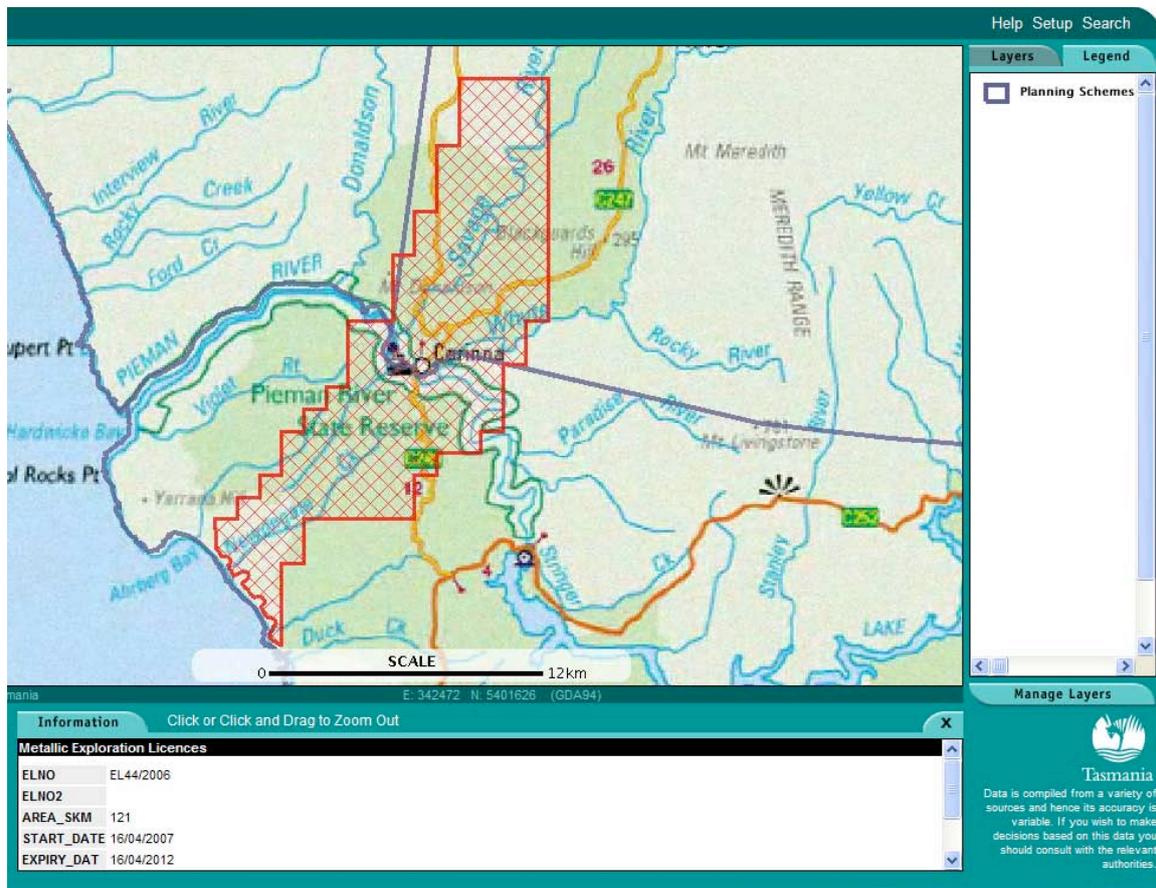


Figure 2. EL 44-2206 Land Tenure - Nth of Corinna, Waratah-Wynyard PS 2000 & Sth of Corinna West Coast PS 1999

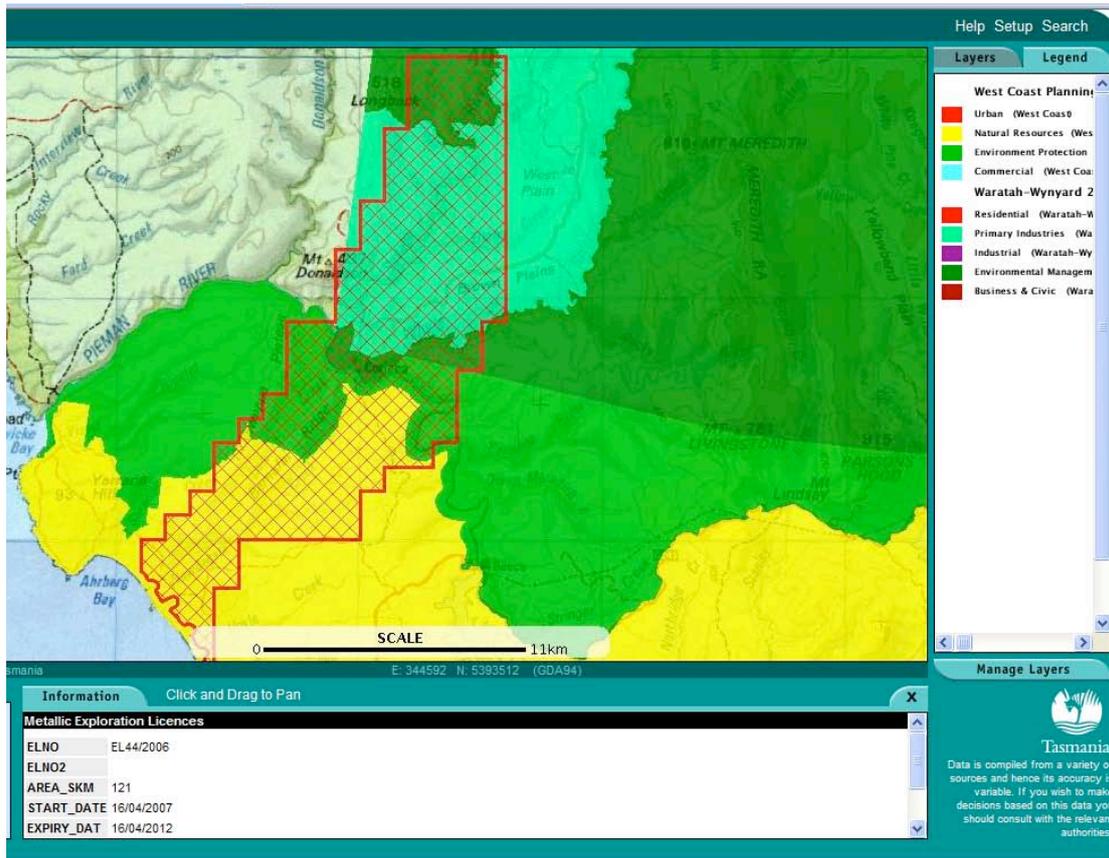


Figure 3. EL 44-2006 Land Tenure - Waratah-Wynyard & West Coast Planning schemes

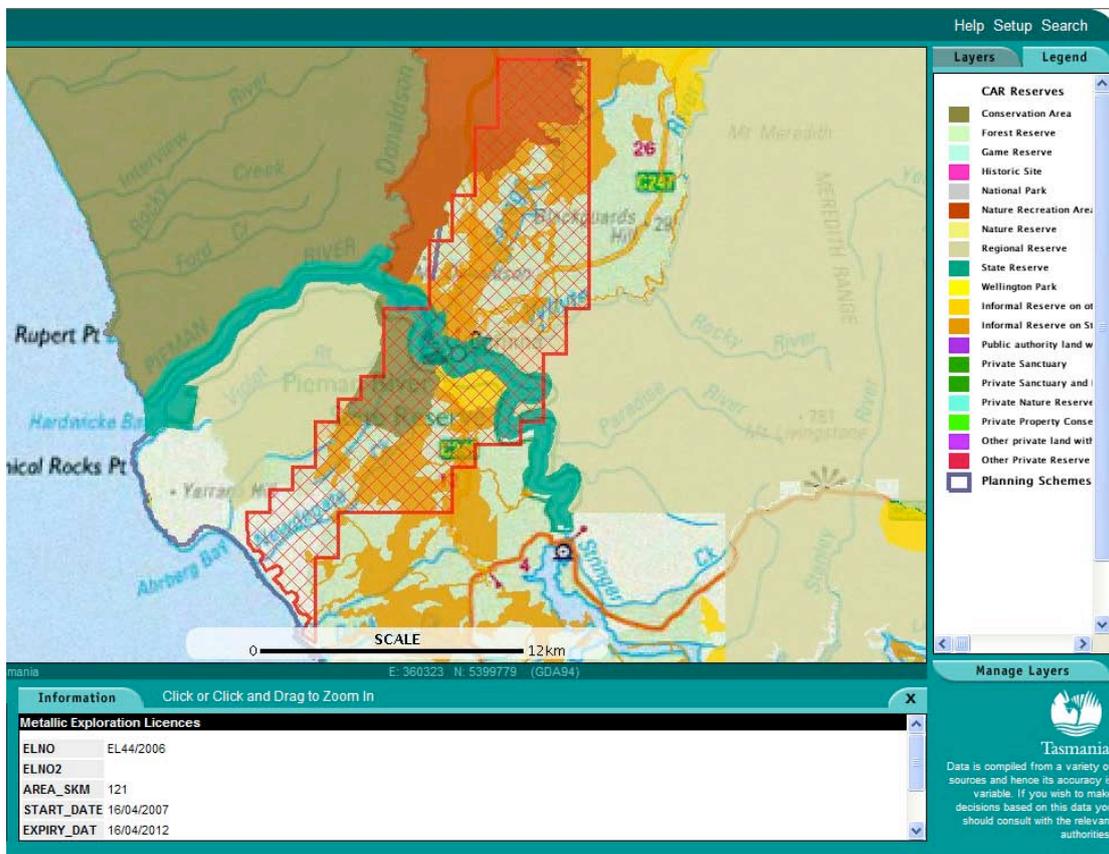


Figure 4. EL 44-2006 Land Tenure - CAR Reserves

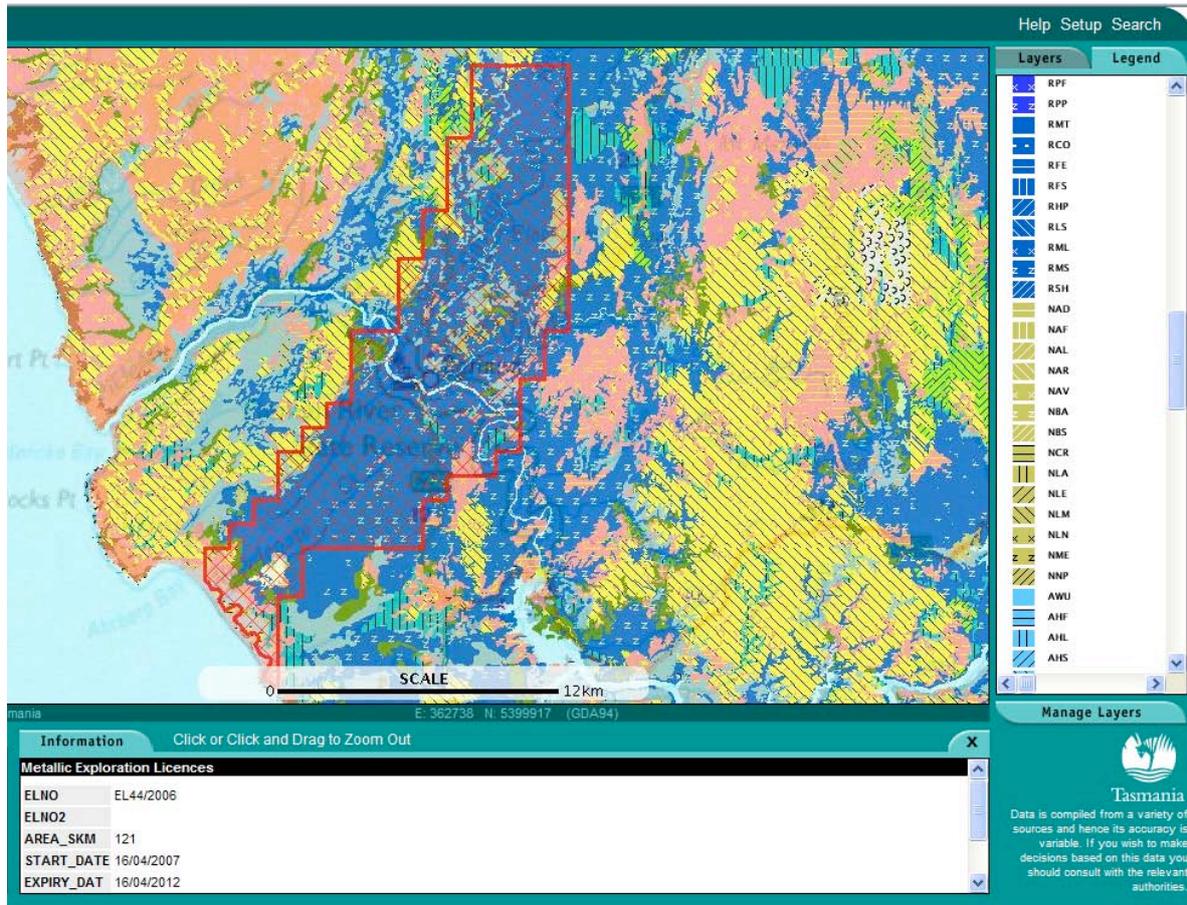


Figure 5. EL 44-2006 Land Tenure - Forest Classification

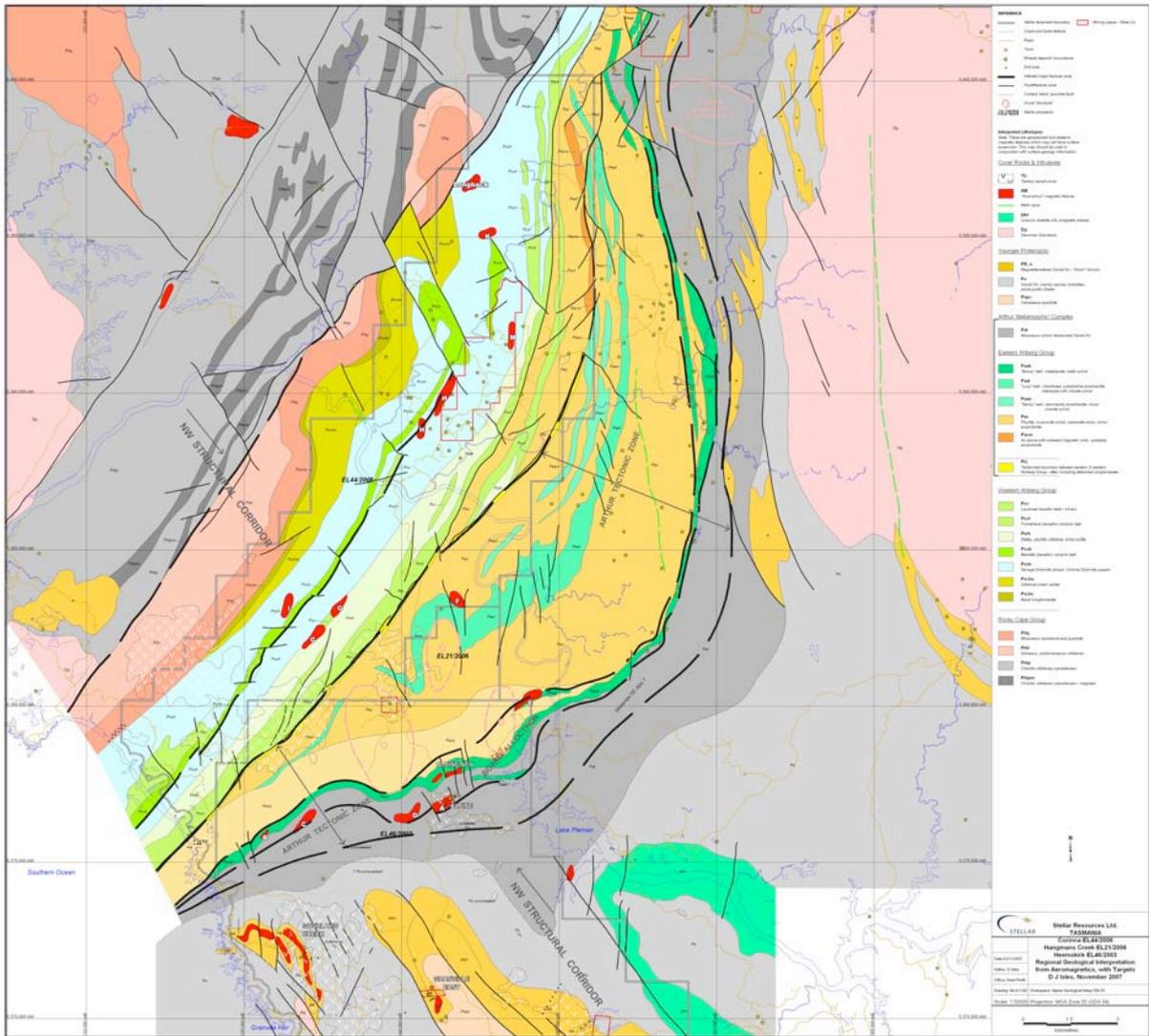


Figure 6. EL44-2006, MRT Geology.



## 2. REVIEW OF PREVIOUS WORK

The common exploration procedure for this area has been to select areas, which were rapidly appraised using panned heavy mineral and stream silt sampling, followed by rock chip and soil sampling on cut grids. Besides some geological grid mapping, occasional stream and road geological traverses were also carried out.

Figure 8 shows the Corinna, Hangmans Creek and Heemskirk licences, the outline of the Cominex Silica lease and distribution of previous sampling activities.

There was limited follow up drilling. Eight holes were drilled within the area of the Silica lease. In 1989 five holes were drilled at Brookside to test for dolomite hosted gold but results are not available. Three holes were drilled in 1990 to test the silica flour potential above the silicified dolomite. One reported high copper value (1313ppm Cu) was said to be due to contamination.

A total of fourteen holes were drilled in the Corinna licence outside the Silica lease. No information is available on three holes drilled in 1934 1.3km west of the Silica lease. Two geotechnical holes drilled by the HEC at Hells Gates on the Pieman River near Corinna intersected partially silicified dolomite below Cainozoic cover. A further eight geotechnical holes drilled in the Delville Saddle area, in the south-west part of the Corinna licence intersected weathered silicified dolomite and Bernafai Volcanics under Tertiary cover. Hole Longback #1, was drilled by Geopeko in 1985 to test a prominent aeromagnetic anomaly in the northern part of the licence. The 302m hole returned disappointing results containing a max. 150ppm Cu and 155ppm Zn. The magnetic anomalism was attributed to syngenetic pyrrhotite. Due to inadequate information or mapping there is some uncertainty about the precise location of this hole.

North of the Pieman River major exploration grids were set up at Battys Bend (Cu, Pb, Zn), Eastside (Au), Brookside (Au) and Longback (Sn, W, skarn) within the area of dolomite or along the dolomite/volcanic contact with the Tunnelrace Volcanics.

Apart from stream sampling at the Lefroy Ridge East prospect in an area adjacent to northern boundary of the Hangmans Creek licence there has been very little exploration in the southern half of the Corinna licence, presumably due to lack of access and a widespread veneer of Tertiary alluvial gravels making exploration difficult.

### Battys Bend (Savage Resources/EZ)

The Battys Bend grid is located in the far northern part of the Corinna licence west of mapped amphibolite in the Tunnelrace Volcanics and the Lefroy Ridge Fault. It was set up to explore anomalous lead and base metal stream results in a tributary of the Savage River.

The soil grid (10 lines 800m long and 100m apart) covers the N-S trending faulted contact between dolomite and haematitic phyllite. Eastwards the phyllite passes into chloritic, schistose meta-sandstone in contact with amphibolite of the Tunnelrace Volcanics.

Raised levels of Cu, Pb, Mn and Zn are present in "c" horizon soils over the phyllite. Anomalous Pb, Zn values occur over the dolomite. The most anomalous sample containing 150ppm Cu, 2750ppm Pb, 285ppm Zn lies on the fault contact. The sediments in contact with the amphibolite are characterised by elevated iron values. Raised Cu and Ba levels suggest they are exhalative meta-volcanics.

Soil results were patchy. There is some evidence for Mn scavenging of copper and zinc. Soil values collected over the dolomite returned anomalous high Pb and there was some anomalous base metal response over the haematitic, phyllite meta-volcanic lithologies adjacent to the dolomite contact.

This stratigraphic horizon, which is strongly anomalous in Cu and Mn and weakly anomalous in Zn is in contact with amphibolite or a basic volcanic unit characterised by high Cu and Mn on its eastern margin. The absolute values of copper, although anomalous, do not strongly suggest mineralisation but appear to define a prospective horizon for exhalative copper-iron mineralisation of possible mafic volcanic origin. Whereas EZ were not prepared to drill any holes or continue with exploration they did suggest any further exploration should concentrate on a search for Besshi type or similar stratabound Cu-Zn deposits within the volcanics along the western part of the Tunnelrace Volcanics.

### Eastside Grid (EZ)

The grid is located 6km south of Battys Bend and east of the northern part of the Silica Mine lease in a similar stratigraphic position to the Battys grid i.e. covering the contact between dolomite and Tunnelrace Volcanics.

The Eastside soil grid (14 lines 600m long and 100m apart) was set up to cover the contact and an ESSO 1973 Input EM anomaly. The target mineralisation was gold hosted in dolomite close to the volcanic contact. Work included mapping the contact and rock chip and soil auger sampling. The rock chip samples did not contain gold but low level gold (8-150ppb) was detected in some soil samples. The Corinna Dolomite is generally grey white and massive with patchy silicification and minor quartz and carbonate veining. In the SW of the grid it tends to be argillaceous and laminated. Near the contact, the Tunnelrace Volcanics consist of dark green phyllite with minor interbedded slates. The phyllite shows chloritic and sericitic alteration with minor carbonate veining. Sampled pyritic arenite, ironstone and lacy agate float yielded disappointing results. No further work was carried out but EZ suggested the Corinna Dolomite/Bernafai Volcanics contact was prospective for gold along the contact.

Regional stream geochemical targets identified by Discovery Nickel included a strong distribution of anomalous copper sites in streams centred on the Brookside/Silica Mine lease. Within the lease area a cluster of anomalies with values in excess of 100ppm Cu occur over Corinna Dolomite in the vicinity of the Brookside mine. Follow-up rock chip sampling indicated the presence of anomalous copper (115-420ppm) and arsenic (2-1500ppm) values in pyritic mudstones along the dolomite/volcanic contact.

A plot of stream Cu results from the MRT database shows a significant distribution of anomalous Cu sites between the Savage River and main road in the area of the Silica lease NE of Corinna (Figure 9). Several anomalous samples, with values to 0.52% Cu, occur outside the lease area in a tributary of Little Hunter Creek. Copper is also strongly anomalous in nearby Doodie Creek suggesting the main ridge between the two is a prospective target. The anomalies are coincident with the magnetic spine of the Tunnelrace Volcanics. The area is a priority target for follow up exploration in the region south of the Eastside grid.

### Gold mineralisation related to silica flour deposits.

The Brookside gold prospect is located 5km NE of Corinna. Gold mineralisation occurs at the faulted contact between overlying Corinna Dolomite and mudstones of the Bernafai Volcanics. Gold occurrences are complicated by the presence of Tertiary auriferous gravels. Exploration by EZ showed that mudstones adjacent to the faulted contact are heavily iron stained and were thought to host the mineralisation. Pyrite occurs in stratiform bands in the mudstone. Rock chip geochemistry contains enhanced copper, arsenic and lead. Pan concentrates indicate three types of gold. Hard rock varieties consist of yellow, angular gold containing high silver content to av. 16 wt% Ag. However, no conclusive evidence as to the source of the gold has been identified. Network colloform quartz veins are present and it has been suggested that the silicified dolomite might be the result of hydrothermal alteration.

The silica flour deposits occur as pod-like residual bodies overlying upper Proterozoic dolomite. The deposits contain 99.9% silica with minor aluminium, iron, calcium and titanium. The dolomite is cut by various sets of quartz carbonate vein networks. Quartz veins with lacy agate texture have been noted. The veining is associated with extensive silicification of the dolomite. The close association of silica flour and gold grains in the Corinna area suggests a genetic link whereby gold was derived from the same hydrothermal fluids thought to have caused silicification of the dolomite.

Ross Large (1988) suggested the coincidence of crystalline gold, geochemically anomalous sediments and extensive silicification of Corinna Dolomite containing colloform quartz veins and jasper/chert indicated the likely presence in the area of a Carlin-style, carbonate-hosted epithermal gold deposit. Subsequently, extensive gold exploration was carried out at Brookside but without success.

EZ carried out a limited program of rock chip, soil and stream sampling with disappointing gold results. No rock chip samples contained detectable gold and the highest soil sample was 50ppb Au. Soil values ranging from 80 to 150ppb Au were associated with anomalous arsenic in places proximal to

the dolomite/volcanic contact but no significant results were obtained from stream or panned concentrates.

Implications from fluid inclusion studies were that silicification was due to hydrothermal alteration with temperatures to 300C. Later work by Khin Zaw indicated no evidence of boiling, precluding the possibility that an epithermal event caused the intense regional silicification of the dolomite. The fluids were enriched in CO<sub>2</sub> suggesting a source magmatic fluid source led to the eventual formation of the quartz/carbonate veins. The high temperature fluid characteristics suggest that precious metals could have been transported with the fluids.

To confirm this Aberfoyle selected 24 samples of dolomite showing a range of silicification types from the Corinna district. The samples were assayed for low-level Au by neutron activation, SiO<sub>2</sub> and CaO. The objective was to show a positive correlation between SiO<sub>2</sub> content, CaO depletion and Au content to prove that the regional silicification of dolomites in the Corinna district also introduced precious metals during hydrothermal replacement of dolomite. Results were disappointing with no correlation observed between Au and either SiO<sub>2</sub> or CaO. The poor correlation between silica and gold appears to have downgraded the suggested Carlin-style origin for the gold.

The presence of granite porphyry in Timbs Creek and anomalous gold in rock chip samples at Lucy Spur east of the Corinna licence indicates there may be granite at shallow depths below the Brookside gold workings. This could be represented by the vague circular structure visible in the magnetic image at the northern end of the Silica lease.

Anomalous Cu, Au, As, Sb and Hg in soils from earlier work remains unexplained. Nevertheless, Aberfoyle withdrew having failed to generate a target considered worthy of additional exploration expenditure.

#### Longback Grid (Geopeko)

The grid was set up by Geopeko to explore a prominent discrete magnetic anomaly located in difficult terrain 8km SW of Savage River Township. Access was by helicopter. Exploration for tin bearing pyrrhotite mineralisation consisted of reconnaissance gridding, geological mapping, ground magnetics, limited stream and rock chip sampling and power auger geochemical sampling. The generally N-S trending sequence of rocks, which dip steeply west consist of stromatolitic dolomite, black pyritic shale and dolomitic shale, pebbly tremolitic mudstone and shale with pyrrhotite (2-5%) and silicified carbonate. The NE-trending Savage Fault cuts across the stratigraphy immediately north of the magnetic anomaly.

Rock chip sampling failed to detect tin and the highest copper value was 160ppm Cu. Two samples from the western dolomite horizon contained 430 and 550ppb Au. Twelve stream samples were not anomalous for Cu, Pb, Zn, Sn, W or Au and the soil geochemistry did not reveal any base metal anomalies. Values varied up to 280ppm Cu. The best result, a spot high of 185ppm Cu, 220ppm Pb 480ppm Zn was located over carbonate. A NW directed diamond hole, Longback #1, was drilled to test the magnetic anomaly. The hole, which was drilled to 302m, intersected a sequence of black shale and dolomitic grey shales containing minor veined sulphide and disseminated fine magnetite and streaks of fine pyrrhotite.

There is some doubt about the location of the drillhole. Nevertheless, initial exploration results were not encouraging and drillhole results were disappointing. The best result was 150ppm Cu while Sn and W were below detection. The drilling would appear to have downgraded the potential of the Longback magnetic anomaly.

#### Hangmans Creek Grid (Goldstream Mining/Titan Resources)

The northern area of Hangmans Creek licence bordering on the SE margin of the Corinna licence was referred to as the Lefroy Ridge East prospect. The area was selected on the basis of anomalous BLEG stream results related to the southern part of the Lucy Formation where magnetite-bearing, mafic, meta-igneous rocks including chlorite schist are intercalated with weakly magnetic, muscovite schist.

Extensive follow up exploration included panned concentrate stream sampling for gold and -80# silt fraction for Au, Cu, Pb, Zn, As, Ag, Sb, Bi, Mo, Sn and W. Anomalous results included gold values to 310ppb and 77ppm Cu above a threshold of 50ppm Cu in the northern creeks of the prospect.

Goldstream completed soil sampling across the ridge where values were not abnormally high. The folded nature of mafic rocks in the Lucy Formation is readily apparent on the magnetic image and Goldstream opted to drill two diamond holes to test prominent aeromagnetic highs related to the Lucy Formation. LREDDH1 was drilled into a long northerly-trending high from a position beside the Heemskirk Road. The hole intersected mainly chlorite schist and massive metabasalt with the best result 129ppb Au and 2679ppm Cu from 153-154m. LREDDH2, drilled to test magnetic layering within a regional fold closure and an associated 3.8ppb Au, 18.2ppm Cu soil geochemical anomaly, intersected magnetite bearing metabasalt in the top 140m. The best result was 77ppm Cu from 180-181m.

#### Stellar Resources

Stellar's consultants analysed historic data and identified 6 target areas. These are depicted on Figure 10 and summarised below.

- anomalous copper in stream sediments in the area drained by the Little Hunter and Doodie Creeks east of the Silica lease (Target A)
- anomalous copper in streams draining Tunnelrace Volcanics immediately north of the Silica lease (Target B)
- enhanced copper and base metal values in soils associated with the dolomite/phyllite contact on the western margin of the Tunnelrace Volcanics indicate the contact is prospective. Any magnetic "oddities" associated with this contact should be investigated
- an EM conductor anomaly coincident with the same contact occurs in the vicinity of Corinna Creek immediately south of the Pieman River (Target C)
- low level anomalous gold and copper in streams and rock chips related to the Bernafai/Tunnelrace Volcanics in the Newdegate Creek area in the SW of the licence. One stream sample site also contained 1450ppm Sn (Target D)
- low-level anomalous gold and copper in streams related to an aeromagnetic high ridge in Lucy Formation rocks north of the Hangmans Creek licence (Target E).

These targets were subsequently refined and added to based on analysis of aeromagnetic data. The targets areas identified are subdivided into 'southern' and 'northern' groups based on geography, structural setting and degree of exploration attention. The various targets are depicted on Figures 11 & 12 and tabulated below in Table 1.

**Table 1, Exploration Targets**

TARGETS (Isles)	TARGETS (Bravo)	PRIORITY	Description
<b>Southern Targets</b>			
DIF / GBE	E	High	magnetic high in Lucy Formation. In elevated Au & Cu geochem area.
GBC	C	Medium - Low	EM anomaly coincident with 'Tunnelrace'/dolomite contact.
DIG		Low	2 discrete magnetic units near siltstone/Corinna Dolomite contact.
GBD	D	Low	Anomalous Au & Cu geochemistry. One sample 1450 ppm Sn
DII		Medium - High	Magnetic feature in Savage Dolomite
<b>Northern Targets</b>			
GBA	A	High	Anomalous stream sed. Cu from Tunnelrace basalt/ Corinna Dolomite
GBB	B	Medium – High	Similar to GBA but lower level geochemistry
DIJ		Medium	Along strike from GBB with magnetic units in Corinna Dolomite
Longback		Low	Discrete magnetic feature drilled by Geopeko in 1980's
DIK		Medium	Group of magnetic anomalies with strong AEM conductors on flanks
DIL		Medium	Belt of volcanics at 90° to geol. trend. Scheelite in granite reported
DIH		Medium - High	2 thin magnetic units in Corinna Dolomite. Anomalous Cu.

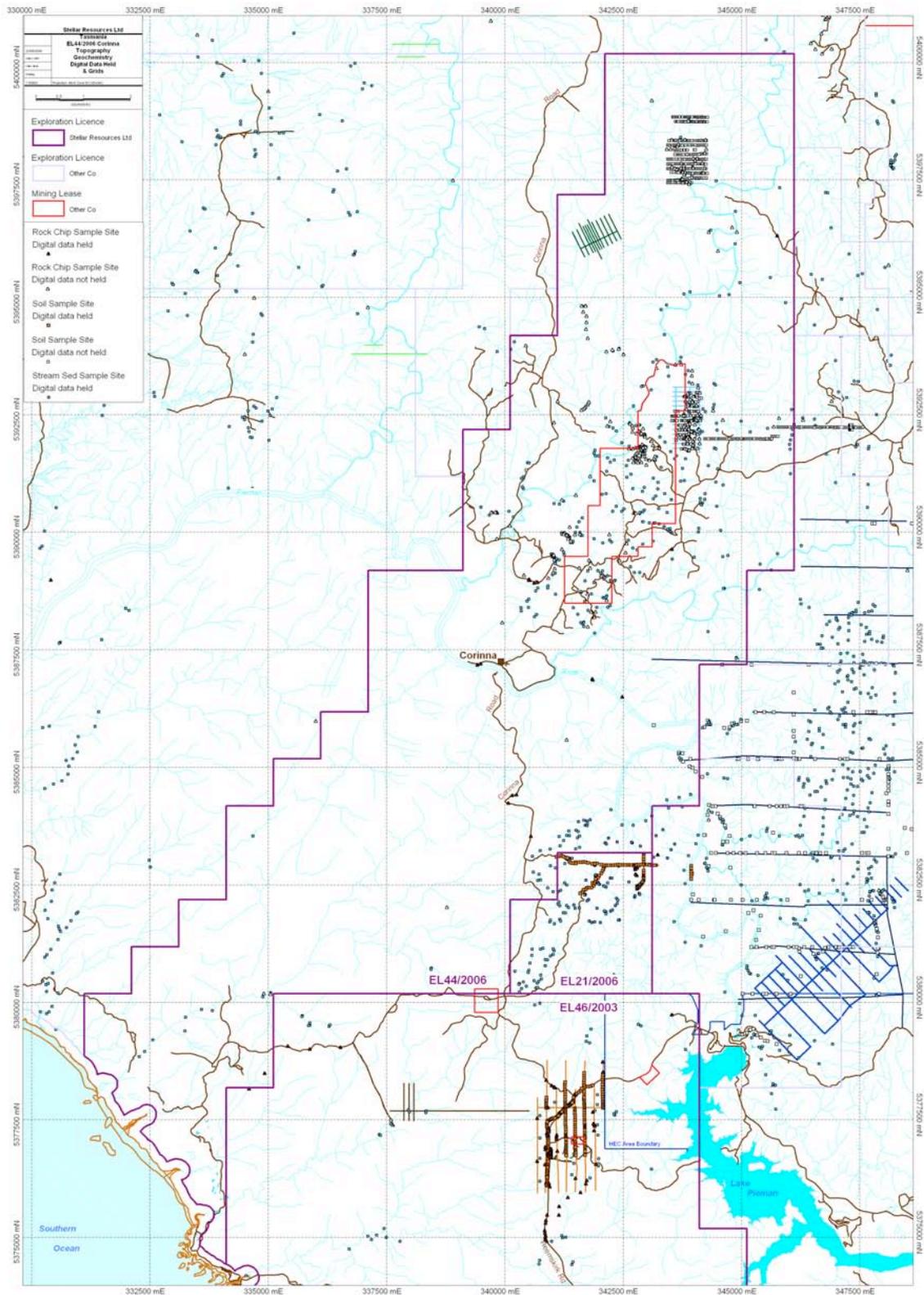


Figure 8. EL 44-2006, Previous exploration activities.

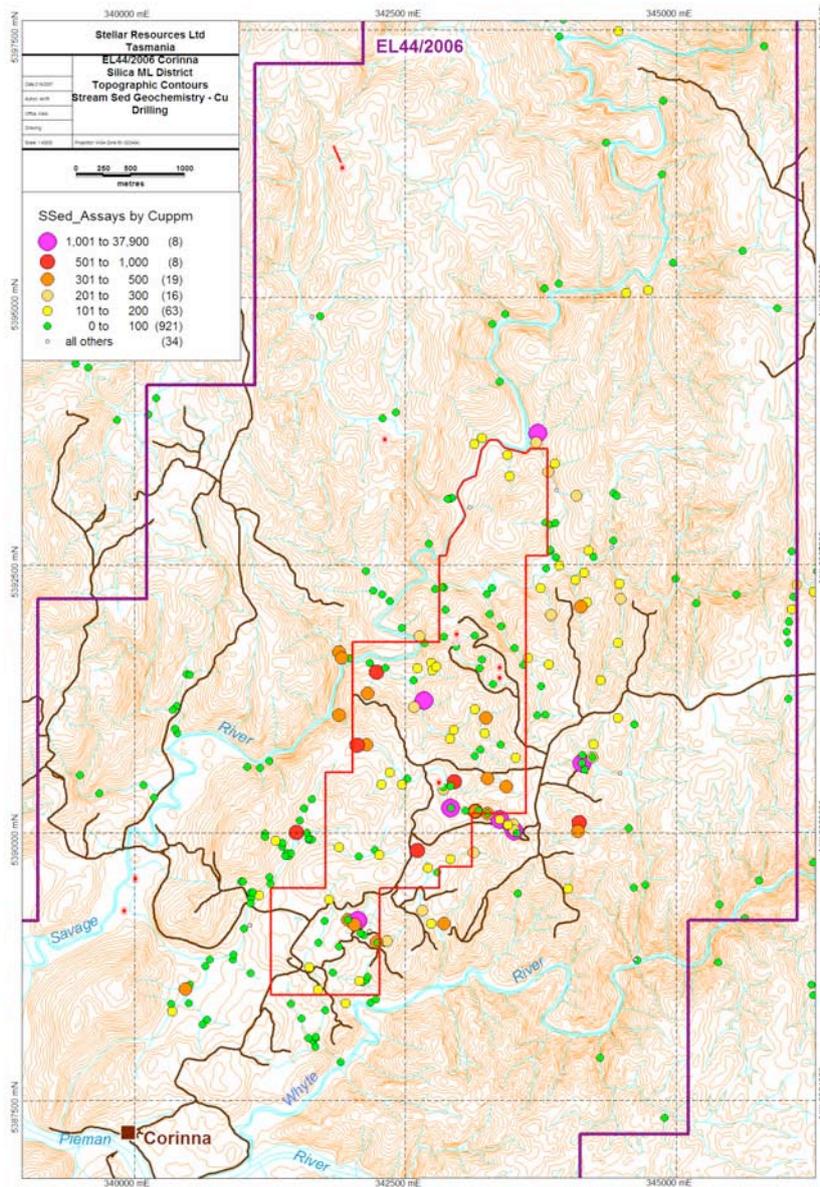


Figure 9, EL 44-2006, Anomalous stream copper distribution in vicinity of Cominex Silica lease

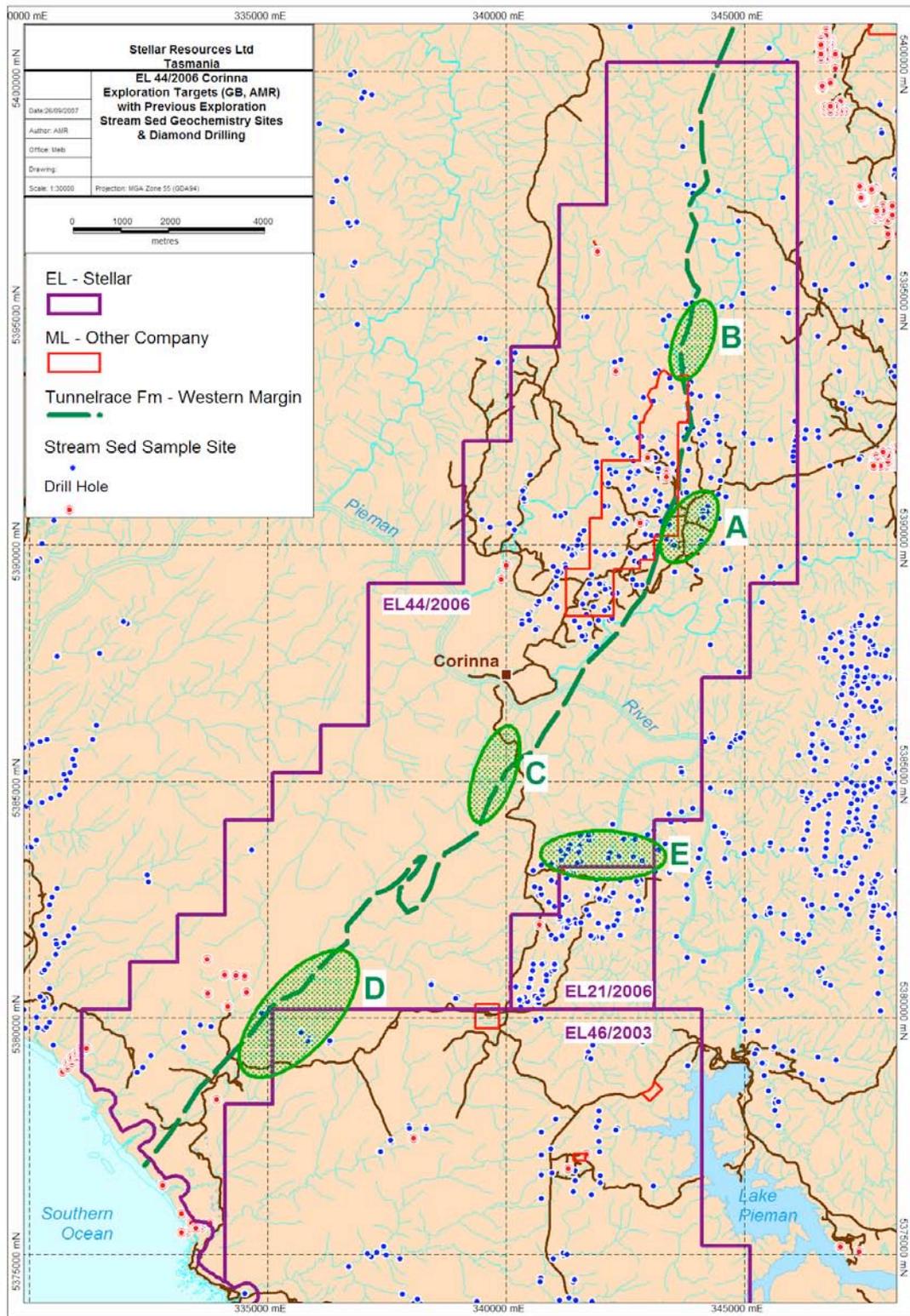


Figure 10. EL 44/2006, Stellar's Exploration Targets showing Previous Exploration Data.



### **3. EXPLORATION COMPLETED DURING THE REPORTING PERIOD**

#### **3.1. REGIONAL EXPLORATION ACTIVITIES**

##### **3.1.1. Data Acquisition, Mapping & Drafting**

Collection and review of historical exploration data continued throughout 2008. The data depicted on Figure 8 summarises this data review.

No fieldwork was carried out on EL44/2006 during 2008.

#### **4. DISCUSSION OF RESULTS**

The target areas delineated during 2007 and depicted on Figures 11 & 12 warrant geological reconnaissance and focussed geochemical sampling.

## **5. CONCLUSIONS**

Research, review and re-analysis of historic exploration data has identified and ranked a number of exploration target areas, which warrant further field evaluation. This work will result in further prioritization and eventual drill testing.

### **5.1. RECOMMENDATIONS**

- ground truth the historic field data in priority areas
- reconnaissance geological surveys of priority areas
- focussed geochemical sampling in priority areas
- development of drill targets in priority areas
- drill testing of defined targets in priority areas.

## **6. ENVIRONMENT**

There has been no substantive field activity in the licence and therefore no environmental impact to report and rehabilitation work has been required.

## 7. EXPENDITURE

Transaction Report						Page: 1
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Printed At: 17/03/2009 3:51:27 PM						
Job No	Job Details	Department	Class	Group		
Tran. Date		Doc Ref - Description		Posting Ref		Amount
Job Code: 6506	EL 44/2006 Corinna	D1	01	GROUP		
	1051	Administration Management		Total		AUS312.50
	1053	Technical		Total		AUS11,041.96
Phase Total	105	STAFF COSTS				AUS11,354.46
	1061	Professional Technical		Total		AUS19,553.73
Phase Total	106	CONTRACT PERSONNEL				AUS19,553.73
	1072	Geoscientist		Total		AUS11,314.15
Phase Total	107	CONSULTANT PERSONNEL				AUS11,314.15
	1251	Vehicle Costs All		Total		AUS472.64
	1252	Office Costs		Total		AUS137.26
Phase Total	125	SUPPORT COSTS				AUS609.90
	1551	Meals and Accomodation		Total		AUS1,446.23
	1552	Airfares		Total		AUS737.35
Phase Total	155	TRAVEL				AUS2,183.58
Job Total : 6506	Class 01					AUS45,015.82
Report Total:						AUS45,015.82

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## **Keywords**

Location: Corinna  
Mineralisation environment: Carbonate replacement, skarns, Besshi type.  
Minerals: Chalcopyrite, Magnetite, Gold, Silica  
Exploration methods: Mapping, Geochemistry, Aeromagnetics, Drilling  
Stratigraphic name: Tunnelrace Volcanics, Corinna Dolomite, Bernafai Volcanics, Savage Dolomite, Donaldson Group, Rocky Cape Group & Ahrberg Group,  
Lithology: quartzwacke, siltstone, slate, dolomites, metabasalt, quartzite  
Geological Province: Arthur Lineament  
Geological age: Neoproterozoic, Cambrian, Tertiary