

EL25/2020
Badger Plains
Property Summary
for
Georgina Resources
August 2021

EL25/2020 Summary

EL25/2020 is a 197km² parcel located in the vicinity of Corinna and Savage River in NW Tasmania, centred approximately 8km NNE of Corinna, and 11km SW of Savage River (see Figure 1). The property is underlain primarily by Mesoproterozoic to Neoproterozoic metasediments and metavolcanics of the Rocky Cape Group, Ahrberg Group, and the Arthur Lineament. Much of the area to the south of the Pieman River is overlain by Tertiary basalt and sediments. Magnetics data shows Ahrberg Group rocks continuing below Tertiary sediments.

A total of 14 mineral occurrences are located on the property, including 6 hardrock and 8 alluvial showings. No hard rock mining is known on the property, and historic alluvial operations were small scale generally targeting gold in Tertiary sediments. The Savage River magnetite mine is located adjacent to the NE margin of the property, but the host Bowry Formation rocks are not located within the EL25/2020.

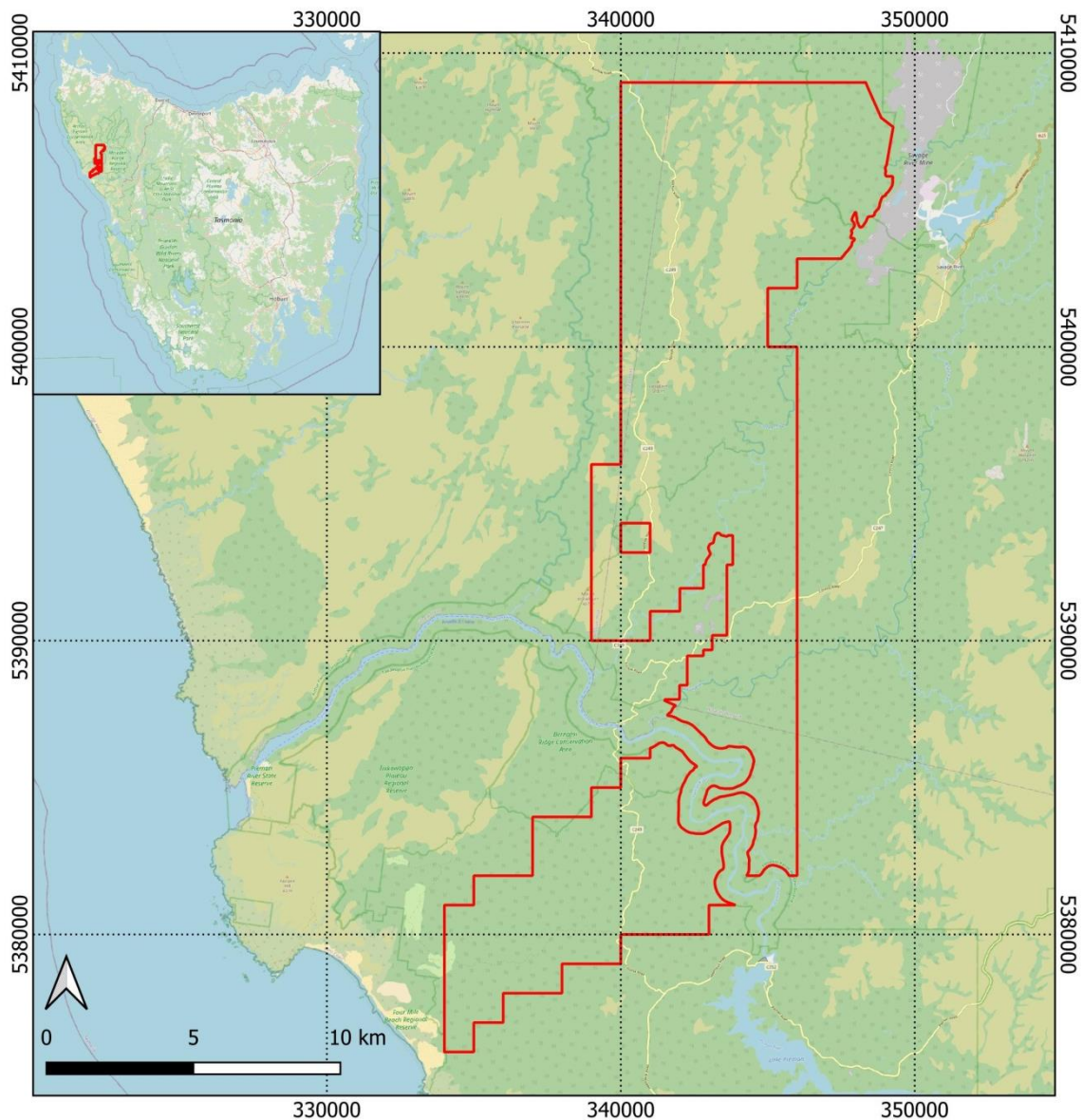


Figure 1: Location of EL25/2020.

Access

North of the Pieman River, access to the western side of the property is excellent via Norfolk Road. Corinna Road and several minor trails of unknown condition provide moderate access to parts of the property to the east of Savage River. The NE part of the property would be best accessed via the Savage River Mine site, or alternatively by helicopter. Areas south of the Whyte River may be best accessed by either boat or helicopter.

South of the Pieman River, moderate access is provided by Corinna Road and 4wd access to Four Mile Beach, with generally good access to the main areas of interest. Vegetation over the area is generally a mix of buttongrass, rainforest, and thick regrowth following bushfires.

Geology, Structure and Mineralisation

The geology of EL25/2020 is shown in Figure 2, with the geology legend in Figure 4. The geology is dominated by Proterozoic metasediments and metavolcanics of the Rocky Cape Block in the west, and rocks of the Arthur Lineament in the east. The Rocky Cape Group are considered to represent a block of the autochthonous basement to Palaeozoic Tasmania (Seymour et al, 2013). The Balfour Subgroup are the oldest rocks in the area, and are composed predominantly of siltstones and undifferentiated cross-bedded quartzarenites, micaceous quartz sandstone, slaty to massive siltstone, and mudstone. These rocks are relatively undeformed and weakly metamorphosed, with deformation possibly produced during the Neoproterozoic Wickham Orogeny, coincident with the intrusion of dolerite dykes. Rocks generally strike NNW-NNE, and dip towards the east. Mineral occurrences are relatively rare in these rocks, with none located within the Balfour Subgroup rocks within EL25/2020.

Balfour Subgroup rocks are overlain by Neoproterozoic rocks of the Ahrberg Group to the east. South of Mt Donaldson, this contact is often faulted sub-parallel with the NE-trending Arthur Lineament, and is possibly related to normal faulting during Late Neoproterozoic to Early Cambrian extension. The base of the Ahrberg Group is formed by Donaldson Formation conglomerates, sandstones, quartzwacke, siltstones and mudstones, which are overlain by the Savage Dolomite, a grey to grey to cream fine-grained and locally oolitic dolomite with stromatolites and interbedded with carbonaceous siltstone. Large areas are now occupied by lag of silicification products of the dolomite, including silica flour.

The Savage Dolomite is in turn overlain by the Bernafai Volcanics, composed predominantly of tuffaceous metasiltstones and sandstones and metabasalt, with rare lenses of dolomite. These are unconformably overlain by the Corinna Dolomite and associated lag products of silicification. The former Brookside alluvial workings are located on this margin.

The Lefroy Ridge Fault forms the eastern margin of the Western Ahrberg Group. This fault trends N through much of the property, and forms the western margin of the Arthur Metamorphic Complex. Bravo and Rigg (2008) suggest this may be an anastomosing fault. A short distance to the south of the Savage River Mine it turns to the NE and truncates part of the Timbs Group, merging with several other large faults to the immediate east of EL25/2020. Proterozoic Rocky Cape Group sediments are truncated by faulting a short distance to the NW here, and are unconformably overlain by a faulted slice of tholeiitic rocks similar to those observed to the south, but generally more magnetic. These rocks have been referred to as the Tunnelrace Volcanics by some, largely due to their higher magnetite content than equivalent rocks to the south. However, Turner and Crawford (1993) suggest this may have been caused by their higher metamorphic grade rather than being a separate unit. Rock compositions of the Tunnelrace Volcanics and Bernafai Volcanics are classified as subalkaline to alkaline tholeiites by Turner and Crawford (1993), and it is considered here that the two units may be of the same provenance, although Bravo and Rigg (2008) notes the Tunnelrace Volcanics are generally situated within and above the Corinna Dolomite.

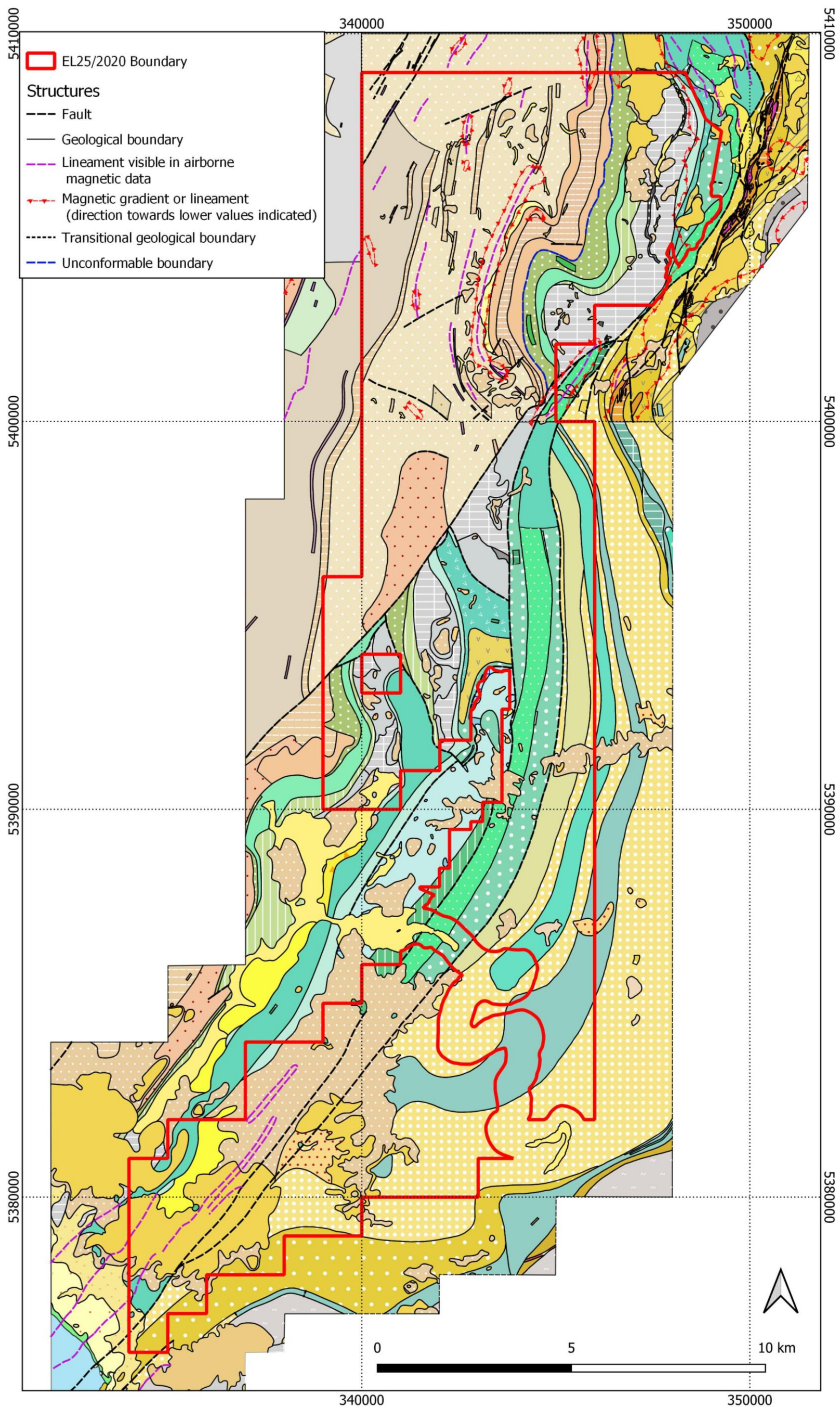


Figure 2: Geology of EL25/2020. Geological legend provided below in Figure 3.

 EL25/2020 Boundary

EL25_2020 Geology

-  Quaternary sediments
-  Quaternary mine tailings and man disturbed ground
-  Older aeolian sand and sand dunes
-  Quaternary talus and scree
-  Tertiary sediments
-  Tertiary interbedded siliceous gravel, quartz sand, and clay
-  Tertiary rounded and angular gravel, mainly vein quartz
-  Tertiary basalt
-  Silurian Eldon Group Correlate. Shallow marine sandstone, siltstone and shale
-  Neoproterozoic Oonah Formation pale weathering siltstone and shale
-  Neoproterozoic massive magnetite
-  Neoproterozoic Keith Schist and correlates. Quartz-mica schist, phyllite and rare dolomite
-  Neoproterozoic grey slaty pelitic siltstone with minor banded chert and thin interlayers of silicified litic carbonate
-  Neoproterozoic lag of silicification products of dolomite including silica flour
-  Neoproterozoic lag of silicification products of dolomite including silica flour
-  Neoproterozoic variably silicified dolomite
-  Neoproterozoic variably silicified dolomite
-  Neoproterozoic pale grey and cream massive fine grained dolomite
-  Neoproterozoic pale grey and cream massive fine grained dolomite locally oolitic or interbedded with carbonaceous siltstone
-  Neoproterozoic grey slaty pelitic siltstone with minor banded chert and thin interlayers of silicified dolomite
-  Neoproterozoic dolomite within Bernafai Volcanics
-  Neoproterozoic laminated pelitic siltstone and mudstone with fine-grained sandstone
-  Neoproterozoic poorly sorted conglomerate with well sorted conglomerate and sandstone near base
-  Neoproterozoic slaty or phyllitic to relatively massive green to grey tuffaceous and pelitic chloritic meta siltstone
-  Neoproterozoic massive meta basalt or fine grained meta dolomite
-  Neoproterozoic grey tuffaceous and pelitic meta siltstone with pebbly basaltic wacke
-  Neoproterozoic grey tuffaceous and pelitic meta siltstone
-  Neoproterozoic metabasalt with grey tuffaceous and pelitic siltstone
-  Neoproterozoic metamorphosed basalt, basaltic wacke, slaty to phyllitic siltstone quartz wacke and minor dolomite
-  Neoproterozoic dolerite dyke - relatively felsic
-  Neoproterozoic dolerite dyke - foliated variety
-  Neoproterozoic graded micaceous quartzwacke with interlayered siltstone and mudstone
-  Neoproterozoic micaceous quartzwacke, pelitic siltstone, mudstone and conglomerate
-  Neoproterozoic planar laminated carbonaceous siltstone
-  Mesoproterozoic siliceous to carbonaceous siltstone
-  Mesoproterozoic Quartzite schist with lesser quartz-mica schist and phyllite
-  Mesoproterozoic felsic albite schist with relict medium grained microcline-albite granitoid
-  Mesoproterozoic massive to banded magnesite or dolomite with interbanded mafic rocks
-  Mesoproterozoic grey phyllite common to dominant
-  Mesoproterozoic talc-carbonate schist with boudinaged, blocky, massive basalt, meta-dolerite and banded carbonate
-  Mesoproterozoic interbanded phyllite fine grained schist and minor actinolitic amphibolite. Minor boudinaged thin beds
-  Mesoproterozoic interbanded phyllite fine grained schist and minor actinolitic amphibolite with micaceous quartz schist
-  Mesoproterozoic chlorite-albite and/or epidote, amphibole, carbonate meta-mafic rocks
-  Mesoproterozoic quartz-chlorite-albite schist with 1-2mm rounded albite porphyroblasts
-  Mesoproterozoic chloritic schist with minor phyllite, dolomite, and magnetite
-  Mesoproterozoic amphibolite with lenses of massive magnetite interlayered with chloritic phyllite and schist
-  Mesoproterozoic amphibolite with rare magnetite interlayered with chloritic phyllite and schist
-  Mesoproterozoic foliated coarse-grained gabbro
-  Mesoproterozoic amphibolite
-  Mesoproterozoic undifferentiated Rocky Cape Group rocks
-  Mesoproterozoic laminated grey pelitic sandstone and mudstone with thin dolomite interbeds
-  Mesoproterozoic variably silicified quartzarenite, well bedded
-  Mesoproterozoic laminated to thinly bedded chloritic to siliceous siltstone to fine sandstone
-  Mesoproterozoic undifferentiated cross-bedded quartarenite, micaceous quartz sandstone, siltstone
-  Mesoproterozoic interbedded packages of quartzose sandstone to siliceous sandstone with shale
-  Mesoproterozoic slaty to relatively massive chloritic planar siltstone with lenticular graded siltstone

Figure 3: Legend of geology for EL25/2020.

Western Ahrberg Group rocks generally dip towards the E-NE, are contained within a NE-trending zone parallel with the Arthur Metamorphic Zone separating the Rocky Cape Block from the Tyennan Block. The Savage Dolomite to Bernafai Volcanics are also multiply faulted in a NW-SE direction, producing three large normal fault blocks within EL25/2020. Several large folds sub-parallel with these faults are visible within the dolomite and limestone units.

To the east of the Lefroy Ridge Fault is the Arthur Metamorphic Complex (AMC). The AMC is an allochthonous fault-bounded slice produced by high strain faulting and folding during the Tyennan Orogeny, composed predominantly of phyllite, schist and amphibolite. The rocks are highly deformed, generally greenschist facies, with minor retrograde blueschist facies glaucophane. The westernmost rocks are composed of interbanded phyllite, fine-grained schist and minor actinolitic amphibolite, with boudinaged thin beds and probable flattened clasts of annealed quartzarenite, reflecting thrusting over Proterozoic quartzarenites. The main unit in the AMC is composed of chloritic schist with minor phyllites, dolomite and magnetite, and encompasses other units including the Lucy and Nancy Formations. The highly mineralised Bowry Formation on the eastern margin of the AMC sits a short distance outside EL25/2020.

The Lucy and Nancy Formations are characterised by amphibolite. More than half the Lucy Formation is composed of interbanded metasediments, while the Nancy Formation is dominated by meta-igneous materials (Turner and Crawford, 1993). The Lucy Formation has a distinct aeromagnetic signature, which is lower than the Bowry Formation but greater than the Nancy Formation, explained by disseminated magnetite in the Nancy Formation. Metabasalts from these formations were noted by Crawford (1992) to have very similar geochemistry to the Bernafai Volcanics, although current interpretation is that the Bernafai Volcanics are much younger.

Minor granitic bodies have been mapped in the vicinity of Lucy Spur (outside EL25/2020, and Bates (2010) interprets features in aeromagnetic data as possible shallowly buried granitic bodies hosted by the Lucy Formation within the tenement. Structures within the AMC are typically moderate to steep, and oriented N to NNE, subparallel with the Lefroy Fault.

Known mineralisation in the area are concentrated in the Ahrberg Group, with Lefroy Ridge East being the only known hard rock occurrence within the AMC in EL25/2020. All hard rock and alluvial mineral occurrences target gold, with alluvial mineral occurrences within the Bernafai Volcanics also targeting heavy minerals. A large number of alluvial gold workings are also located within the Corinna Dolomite in the vicinity of the Brookside workings just outside EL25/2020, with investigations in these areas and the Nancy Spur area in the AMC suggesting a large proportion of gold in sediments is locally derived. Gold appears to be concentrated near the intersection of NNE and NW trending fault intersections. Potential for Carlin-style mineralisation was raised by Large (1987), but he and subsequent workers did not locate economic mineralisation. The source of gold mineralisation in the Western Ahrberg Group remains uncertain, with supergene enrichment suggested for gold within dolomitic units, but an intrusive body would appear to better fit the Longback anomaly targeted by Cominex in the lower part of the Bernafai Volcanics. Devonian granites are a likely source of mineralisation in the vicinity of Nancy Spur, with minor intrusive bodies mapped at the nearby Lucy Spur.

Previous Workings and Prospects

Rigg (2007) provides a concise summary of exploration activities over the majority of EL25/2020 up to 2009. Since then, little new exploration has been completed with EL25/2020, with activity mostly consisting of data reviews. Figure 4 shows the distribution of prospect zones, while Table 1 shows details of the 10 individual prospect zones selected within EL25/2020. Prospect zones were chosen largely based on geology, with greater detail given on any areas of specific interest within each zone. Historic soil, sediment, and rock samples collated from publicly available data are shown in Figure 5.

Table 1: Grouping of mineral occurrences within prospect zones in EL25/2020 and respective prospect ratings.

PROSPECT ZONE	Prospects	Commodities	Prospectivity Rating
South-West		Cu	MEDIUM
South Arthur Lineament		Cu	LOW
Lefroy Ridge	Lefroy Ridge East	Cu, Au	MEDIUM-HIGH
Frenchman's	Frenchman's Peak, Frenchman's Creek, Nancy Spur, Nancy Creek	Cu, Au	MEDIUM
X6	Anomaly X6, Unnamed	Cu	MEDIUM
Longback	P12, P18, L23, Brooklyn, Unnamed	Cu	LOW
North-West			VERY LOW
North-East	Unnamed	Cu, Zn	LOW-MEDIUM

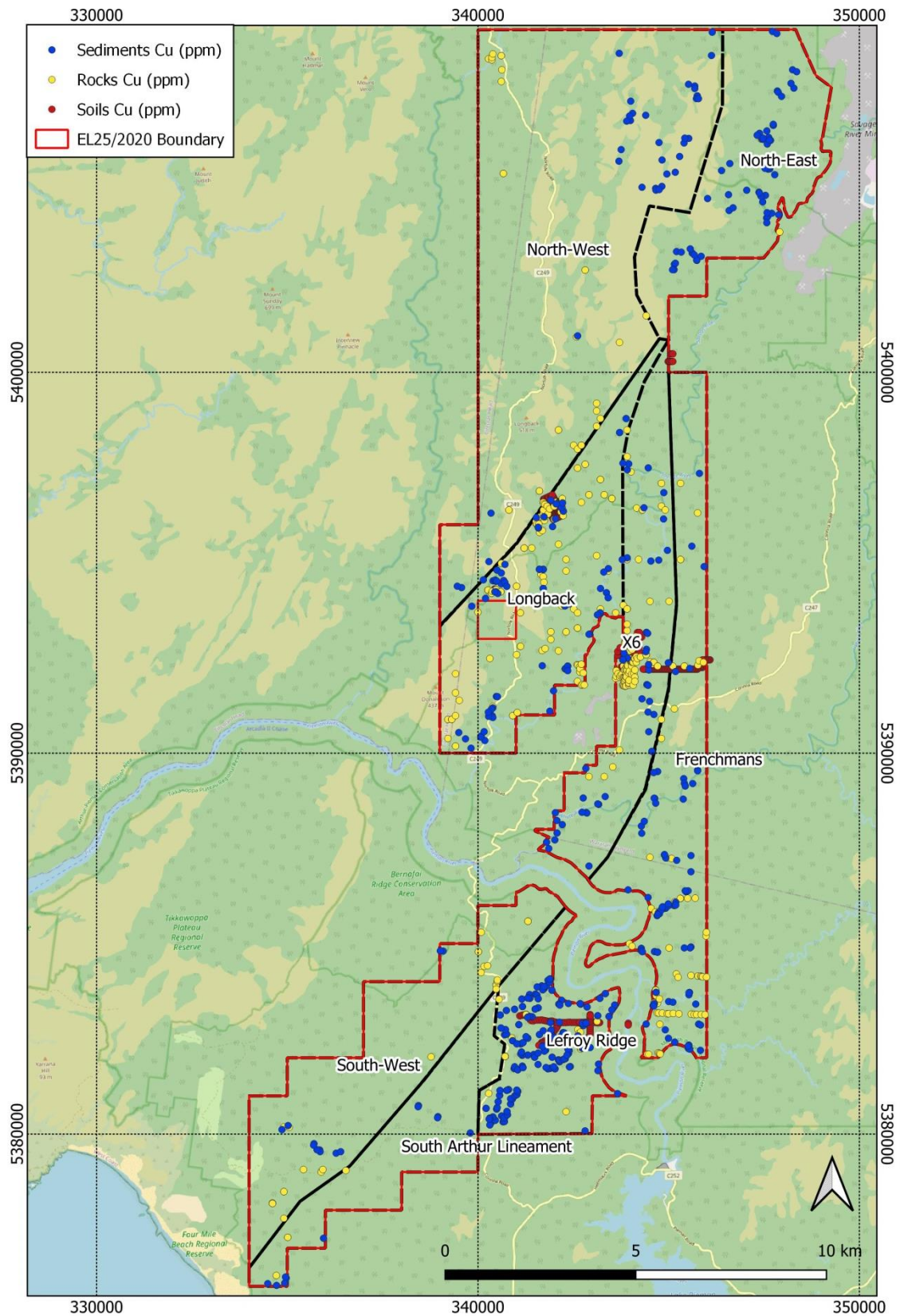


Figure 5: Historic rock, soil and stream sediments for EL25/2020. Several stream and rock samples were collected marginally outside of EL25/2020, with sediments typically draining from marginal or within EL25/2020.

General Comments

- A total of 876 stream sediments and heavy mineral samples, 912 rock samples (including drill core samples), and 461 soil samples are known from within the EL25/2020.
- Reasonable stream sediment coverage over most of the property, with several notable exceptions.
- Stream sediment data from MRT needs to be treated with care due to errors in units (ppm vs. ppb), with no clear division between the two.
- Surface geochemical methods often do not correlate very well, and may reflect poor/unrepresentative sample selection, particularly for soils.
- Soil sampling in the X6-Frenchman's zones suggests elevated multi-element geochemistry proximal to NE-trending faults, and coincide with mention of a porphyritic intrusive.
- Rocky Cape Group rocks forming the western side of the property appear to be generally unprospective.
- Inconsistent approach to exploration by previous groups due to diverse range of targets, including: Cu, Au, Ni-Co, Os, diamonds, and silica flour.
- Much of the area does not appear to have been visited at all by modern exploration activities. Very little detailed mapping of the area.
- Only 3 drillholes known in the area, two at Lefroy Ridge, and one at Longback. All stored at MRT in Mornington.
- Sampling of Longback hole inadequate. One metre samples at 5 metre intervals.
- Geophysical anomalies identified by Stellar resources were not explored.

PROSPECT ZONE	South-West
PROSPECTS	
LOCALITY	8km W of Reece Dam, 7km SW of Corinna (approx. 336900E, 5380600N)
COMMODITY	Cu
STYLE	Unknown
STATUS	Greenfields
PROSPECTIVITY RATING	Moderate

SUMMARY:

A very poorly explored area of the Bernafai Volcanics with extensive Tertiary cover. Exploration to date has been restricted to areas with easy access, with no known work in the majority of the area. Of the work that has been completed, no consistent approach has been taken, as exploration targets have included base metals, silica flour, Cu-Au, and diamonds.

Of the geochemistry that does exist, a maximum of 1450ppm Sn and 0.021ppm Au was detected in Newdgate Creek by Aberfoyle, but this was not supported by minimal rock chip sample results and dismissed as sourced from reworked Tertiary gravels.

No geochemistry or geological mapping exists in the vicinity of a pair of aeromagnetic anomalies near the centre of the area. These anomalies are located near the lower margin of the Tunnelrace Volcanics, with 1:25000 mapping suggesting extensive Tertiary cover in the area. However, it is suspected that the majority of this area has not been physically mapped, and mapping and sampling are recommended in the vicinity of the anomalies. Figures 6 & 7 show locations of geophysical anomalies and geochemical samples.

GEOLOGY:

The geology of the area is poorly understood as it is mostly covered by Quaternary and Tertiary sediments and basalts. The Western Ahrberg Group dominates the geology of the area, with the older rocks generally striking SW-NE, parallel to the Lefroy Ridge Fault which forms the SE margin of the prospect zone, and young from NW to SE. Aeromagnetics data suggests the Bernafai Volcanic and more pelitic Tunnelrace Volcanics dominate the area, with a body of Corinna Dolomite becoming progressively thinner to the SW, and a small zone of the older Savage Dolomite in the far west of the zone.

The Tunnelrace Volcanics of the Bernafai Volcanics are the dominant magnetic feature in the area, and they appear to broaden and become less distinct in the western part of the area, essentially blending with the lower Bernafai Volcanics. Airborne magnetics show two moderately magnetic features a short distance to the NW of the inferred position of this unit which are currently unexplained, and may represent a faulted offset of the unit, a minor intrusive phase, or possibly a structurally hosted mineralised body. Isles (2008) notes that similar to the Alpine prospect a short distance to the south, this zone lies within the "NW structural corridor".

MINERALISATION:

Little mineralisation is known, and there has been no consistent approach to exploration owing to the diversity of exploration targets (base metals, silica flour, copper and diamonds).

SAMPLES:

No soil samples in area.

Sediments: Only 11 stream sediments are known in the area, with one sample returning 0.021ppm Au, 300ppm Zn, and 1450ppm Sn.

Rocks: 27 rock samples taken by a variety of companies, including 17 whole-rock analyses, mostly collected by Discovery Nickel and Index, who were respectively exploring for ultramafics and silica flour with minimal contaminants. Au and Ag are generally below or on detection limits, while Cu, Ni and Zn returned maximum of 410ppm, 220ppm, and 172ppm respectively.

HISTORICAL MINING / PROSPECTING:

None known.

PREVIOUS EXPLORATION:

Esso conducted an airborne magnetics survey over EL2/1973 in 1973, with this survey showing 13 anomalies located within EL25/2020. Two of these are located in the South-West zone, but very limited follow-up failed to locate outcrop, with no further work undertaken.

MLMRC briefly held EL26/1978 over the southern half of the Arthur Lineament, including the northern half of the South-West zone of EL25/2020. Their exploration focus was diamonds, following up on reports of diamonds in the area during early alluvial operations. Twelve bulk samples were taken, 5 from within EL25/2020. No kimberlitic materials were found within the samples, and the licence was relinquished.

The Index Group briefly explored the area to the south of the Pieman River for high-grade silica flour under EL11/2003. Work was minimal, consisting of 17 pits dug by excavator, of which 8 were dug within the South-West zone. Results showed chromite contents were acceptable, but ilmenite contamination was too high. No further work is known by Index.

Discovery Nickel Ltd. held ground over much of EL25/2020 under EL18/2004, exploring for Ni-Cu-PGE deposits within mafic-ultramafics, with work indicating the area was not prospective for magmatic nickel-copper sulfide deposits, but there remained potential for hydrothermal nickel sulfide deposits similar to Avebury. Analysis of existing stream sediment data showed an area of anomalous Ni within the South-West zone. 18 rock samples were collected (9 within EL25/2020) and submitted for whole rock analysis, with findings including basalts in the area can be divided into three groups, all of which are enriched in LREE. A magnetic feature to the west of the Pieman was noted to correlate with possible picrites identified in the MRT whole-rock database, but DNL did not sample this area prior to relinquishing the property in a change of focus.

Stellar Resources identified two elongate magnetic features to the NW of the Lefroy Ridge Fault on the inferred margin of the Bernafai Volcanics and within the NW structural corridor and under Tertiary cover, with D. Isles giving this area a medium-high priority for follow-up. No interpretation of these features was attempted, and it was noted that access to the area was difficult. Follow-up was recommended but not completed prior to relinquishment.

KEY RESULTS/FINDINGS:

- Extensive Tertiary and Quaternary cover, and very minimal exploration completed, mostly along roads.
- Unpromising geochemical dataset, but no consistent approach used for exploration due to diversity of targets.
- No geochemical data in vicinity of main area of interest.
- Highly anomalous stream sediment sample containing 1450ppm Sn not supported by rockchip sample results, most likely derived from reworked Tertiary materials.
- Cu in stream sediments and rock chip samples generally elevated over inferred Tunnelrace Volcanics. Possibly elevated by coincident Tertiary basalts?

NOTES / RECOMMENDATIONS:

- Very extensive Tertiary and Quaternary cover shown on 1:25,000 maps, with several small windows showing underlying geology. Comments about difficult access may have dissuaded investigations, and outcrop may be more extensive?
- Prospect scale mapping in vicinity of the geophysical anomalies may establish if anomalies are due to Tertiary materials or a deeper source.
- Extremely poor geochemical coverage over the area. Additional stream sediment and rock chip sample are required from the entire area to properly assess the area.
- Due to the likelihood of contamination of Tertiary gravels in stream sediment sampling, pan concentrate samples are recommended to also be split and inspected by hand to assess the angularity of any gold grains.

REFERENCES:

Hutton M.J. (1980): Exploration Licence 26/78 (Tasmania), Pieman Precious Stones. Relinquishment Report. The Mount Lyell Mining and Railway Company Limited. MRT Report No. 81-1517.

Isles, D. (2008): Stellar Resources, Tasmania, Alpine-Hangman-Corinna District, Summary of Aeromagnetic Interpretation and Exploration Targets. Appendix 3 *in* EL44/2006 Corinna Annual Report for the Period 17 April 2007 – 16 February 2008. Stellar Resources Limited. MRT Report No. 08_5609.

Johnstone, A. (2006): Exploration Licence EL 18/2004 – Corinna, Tasmania. Final Report 19 June 2006. Discovery Nickel Limited.

MacCulloch, I.R.F. (2005): Annual Report EL11/2003. January 2005. Index Group of Companies.

Neale, R.C. (1973): Pieman River Exploration Licence 273 – Tasmania. Progress Report for the Period January 31 – July 31, 1973. By Esso Australia Ltd. MRT Report No. 73-0964.

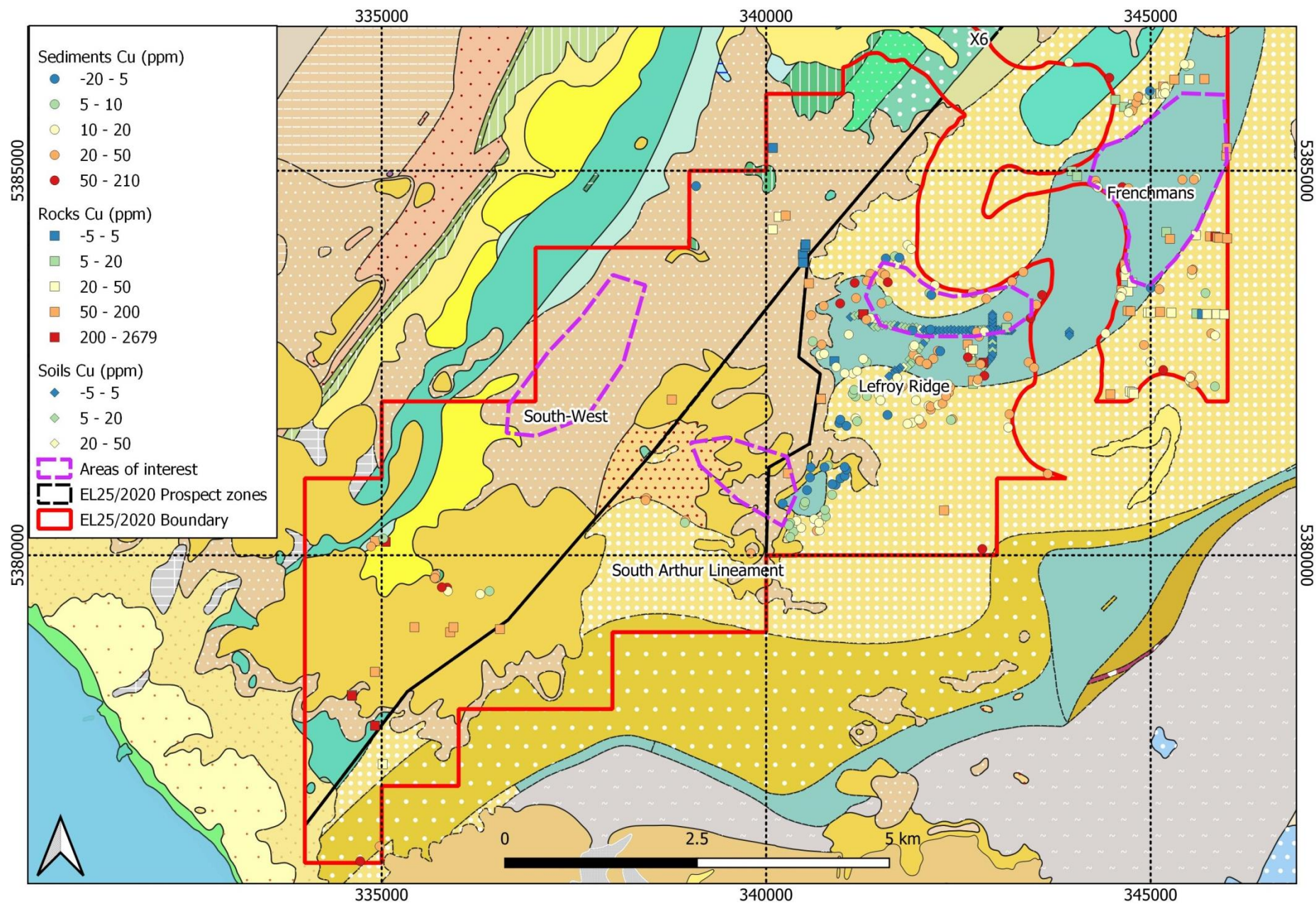


Figure 6: Geology of EL25/2020 west of Pieman River, showing areas of interest in the South-West, South Arthur Lineament, and Lefroy Ridge zones. See Figure 3 for geology legend.

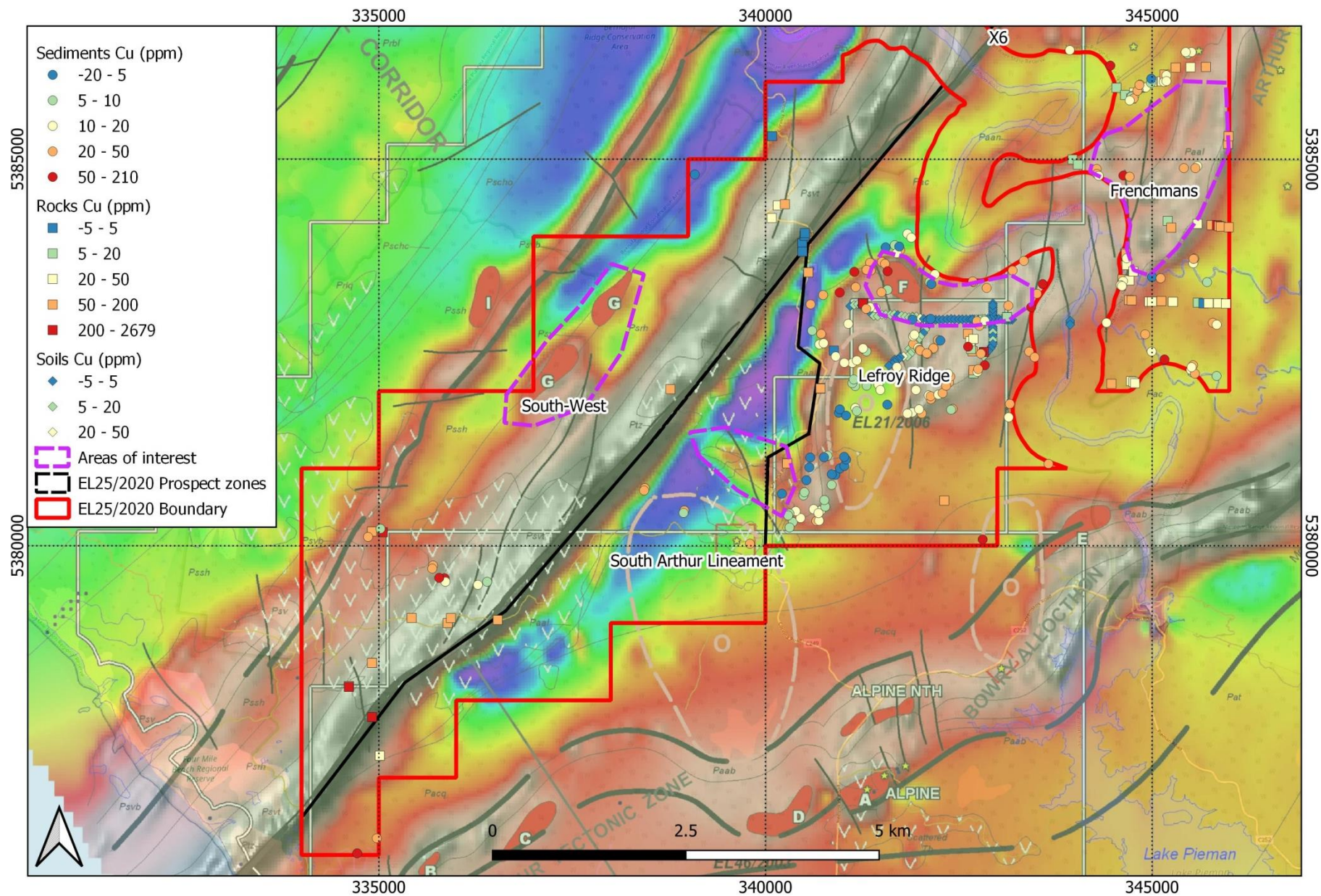


Figure 7: Aeromagnetics data over EL25/2020 west of the Pieman River. Outlined areas represent areas of interest in the South-West, South Arthur Lineament, and Lefroy Ridge zones. Aeromagnetics image from Stellar Resources.

PROSPECT ZONE	South Arthur Lineament
PROSPECTS	
LOCALITY	7km W of Reece Dam (approx. 338000E, 5379400N)
COMMODITY	Cu
STYLE	
STATUS	Greenfields
PROSPECTIVITY RATING	LOW

SUMMARY:

A poorly explored and mostly unprospective area within the AMC, with the Lefroy Ridge Fault forming the NW boundary. Geology is dominated by chloritic schist with minor phyllite, with this overlain by phyllites and fine-grained schist with minor amphibolite and micaceous quartz schist. The Lucy Formation is inferred by aeromagnetic data to extend below Tertiary materials in the NE, and form the most prospective rocks in the area.

Geochemical data is sparse, with highly elevated Sn values probably related to nearby Tertiary gravels. Elevated Cu and Zn in stream sediment and rock samples in the SW part of the zone are coincident with increased magnetic intensity, but there are currently insufficient data to infer if Cu values are anomalous, or what the Zn assay of 6050ppm may be related to.

Potentially prospective zones are restricted to the area of elevated geochemistry mentioned above, and the amphibolite continuing below Tertiary cover in the eastern part of the area. Prospect scale mapping and geochemical sampling would be relatively simple in the SW, but Tertiary cover precludes surface mapping and geochemistry of the extension of the Lucy Formation rocks in the E, with exploration here restricted to geophysics and drilling.

GEOLOGY:

As the name suggests, the area is within the Arthur Lineament, with the Lefroy Ridge Fault marking the NW margin of the Arthur Metamorphic Zone forming the NW boundary, and the SE margin of the metamorphic zone is outside the property boundary. The area is largely covered by Tertiary gravels and basalts, with minor Quaternary sands near the western end of the area.

Precambrian geology is composed of chloritic schist with minor phyllite, dolomite and magnetite, overlain by interbanded phyllite, fine-grained schist and minor actinolitic amphibolite, with micaceous quartz schist. Although the chloritic schist unit is described as hosting magnetite, this does not appear to be the case in this area, as aeromagnetic data is very subdued with the exception of minor features related to overlying Tertiary basalts. Rocks generally dip moderately to the SE, appearing to steepen with proximity to the Lefroy Ridge Fault. Aeromagnetism shows the deformed Lucy Formation amphibolite extending to the NW from the Lefroy Ridge East zone, where approximately N-S folding with locally gentle plunge to the S is apparent. This is believed to be the aeromagnetic anomaly identified by Renison, but it occurs under Tertiary basalts and gravels, and has not been tested to date.

MINERALISATION:

None described.

SAMPLES:

Stream sediments: 11 stream sediment samples are known in the area. Au and Ag are below detection in all samples, while Cu reaches a maximum of 110ppm at the SW end of the property. It is unclear if this was sourced from within EL25/2020. An isolated sample also assayed at 6050ppm Zn near the southern boundary. Possible sources for this anomaly are schistose AMC rocks or Tertiary gravels, located at the head of the catchment. Several samples are also located in the vicinity of the aeromagnetic feature in the NE part of the area, and are mapped as marginally within AMC rocks. These show Sn up to 1750ppm, and are suspected to be sourced from the extensive Tertiary materials to the immediate NE.

Rocks: Only three rock sample assays are known, with whole rock geochemistry showing basaltic

composition. 1:25,000 mapping places one of these within the Tertiary basalts, while FeO values suggest the remaining two samples are from the older tholeiitic basalts, and show elevated Ni, up to 209ppm. Au values are on detection limits and Cu up to 81ppm, with no other elevated elements.

HISTORICAL MINING / PROSPECTING:

None known.

PREVIOUS EXPLORATION:

CRAE held ground over the South Arthur Lineament and South-West zones under EL1/1977, exploring for tin and base metals associated with pyrrhotite and/or magnetite. Work within EL25/2020 was completed in the Hoyle Creek/Ahrberg Bay area, after a statistical analysis of stream sediment samples showed a single Cu-Pb-Zn anomaly coinciding with a 10km long aeromagnetic anomaly interpreted to be caused by Bernafai Volcanics or a source within the Savage Dolomite. Three rock chip samples from within EL25/2020 were collected, with Sn below detection limit in all samples. Extensive Tertiary cover prevented adequate assessment of the anomaly, with a recommendation to conduct auger sampling of the area, but this was not completed, with work directed to more prospective parts of their property.

MLMRC briefly held EL26/1978 over the southern half of the Arthur Lineament, including the northern half of the South Arthur Lineament zone of EL25/2020. Their exploration focus was diamonds, following up on reports of diamonds in the area during early alluvial operations. Twelve bulk samples were taken, 5 from within EL25/2020. No kimberlitic materials were found within the samples, and the licence was relinquished.

Renison-ACI conducted an aeromagnetic survey over the area, revealing a strong anomaly extending below Tertiary cover which was not followed up on. Although this anomaly is broadly coincident with Tertiary basalts, it is interpreted as a deformed extension of the Lucy Formation amphibolite below cover.

The Index Group briefly explored the area to the south of the Pieman River for high-grade silica flour under EL11/2003. Work was minimal, consisting of 17 pits dug by excavator, of which 2 were dug within the South Arthur Lineament zone. Results showed chromite contents were acceptable, but ilmenite contamination was too high. No further work is known.

Stellar Resources held the ground as part of EL44/2006, but did not complete any ground work in the area, choosing to focus on apparently more prospective zones.

KEY RESULTS/FINDINGS:

- Diverse range of exploration targets, with minimal exploration for gold and base metals.
- Chloritic schist unit generally very poorly magnetic in the area, suggesting no significant magnetite. Deep Tertiary gravel cover may also be contributing to magnetic lows in the area.
- Extremely sparse geochemical data and minimal work, due to a combination of generally poorly prospective rocks and extensive Tertiary cover.
- Highly anomalous Sn up to 1750ppm in stream sediments most likely derived from adjacent Tertiary gravels.
- Elevated(?) Cu to 110ppm and anomalous Zn to 6050ppm in the SW corner are coincident with higher magnetic signal, possibly reflecting increased magnetite within the schist?

NOTES / RECOMMENDATIONS:

- The most prospective rocks in the area are amphibolites located below Tertiary basalts and gravels of unknown thickness, and potentially more magnetic schists and phyllites in the SW of the area, with coincident elevated stream sediment geochemistry.
- Surface geochemistry not appropriate in many areas unless cover is not as extensive as 1:25,000 geology suggests.
- No work targeting amphibolites recommended unless findings within the amphibolite unit in the Lefroy Ridge zone are sufficient to warrant follow-up.
- Follow up stream sediment and rock sampling combined with prospect scale mapping in SW area to confirm values, and apply regression to other samples within these units across the

tenement(s) to ascertain if they are anomalous.

REFERENCES:

Hazeldene, R.K. (2008): EL44/2006 Corinna. Annual Report for the Period 17 April 2007 – 16 February 2008. Stellar Resources Limited. MRT Report No. 08_5609.

Hutton M.J. (1980): Exploration Licence 26/78 (Tasmania), Pieman Precious Stones. Relinquishment Report. The Mount Lyell Mining and Railway Company Limited. MRT Report No. 81-1517.

MacCulloch, I.R.F. (2005): Annual Report EL11/2003. January 2005. Index Group of Companies.

Porter, T.M. (1980): EL1/77 Rocky Cape, North West Tasmania. Progress Report January 1 to December 31, 1979. C.R.A. Exploration Pty. Limited. MRT Report No. 80-1469.

PROSPECT ZONE	Lefroy Ridge
PROSPECTS	Lefroy Ridge East
LOCALITY	4.5km NW of Reece Dam (approx. 341900E, 5382600N)
COMMODITY	Cu, Au
STYLE	Intrusive related (IOCG?)
STATUS	Brownfields
PROSPECTIVITY RATING	MODERATE-HIGH

SUMMARY:

Within the AMC, a zone of amphibolite (Nancy Formation) hosted by chloritic schists is the focus of exploration in the Lefroy Ridge area, with significant work completed including detailed stream sediment and pan concentrate sampling, ridge and spur soil sampling, and two diamond drillholes which were sampled from top to bottom. A smaller exposure of amphibolite is partially exposed under Tertiary sediments and basalts to the SW, but exploration results to date have not been as promising in this area.

The amphibolite is composed primarily of metabasalt, but work by Goldstream raises the possibility of minor felsic granite-related intrusive rocks, greatly increasing the prospectivity for intrusive-related mineralisation.

Surface geochemistry is dominated by a zone of elevated to anomalous geochemistry in the NE part of the amphibolite, with multiple highly anomalous Au in pan concentrates, and elevated to anomalous Cu, Au, Zn and Ag in stream sediments. Both diamond drillholes completed in the area have targeted the amphibolite, but were located over 1km from the most anomalous surface geochemistry, were located in what a broad synclinal structure, and drilled away from subsequently modelled geophysical targets. It is possible the drill sites were selected based on convenience rather than sited in the best possible location.

The majority of the area appears to be well explored, but the northern margin of the amphibolite should be mapped and sampled where possible, especially in the vicinity of anomalous pan concentrate samples and the geophysical feature identified by Stellar Resources to the NE of DH LRE2 (see Figure 8). Existing sediment data could be reassessed to determine drainages of the highest priority. Drill core could also be relogged to assist with understanding the geology.

GEOLOGY:

The Lefroy Ridge zone is located within the Arthur Lineament, and is composed of broadly E-W oriented Proterozoic amphibolite bounded to the north and south by chloritic schist with phyllites. On the north-west margin of the zone is the Lefroy Ridge Fault, forming the western margin of the Arthur Lineament. North of this major structure are Timbs Group phyllites and schist. Amphibolites are locally known as the Nancy Formation (Turner, 1997), and is composed predominantly of chloritic schist and metabasalt with variably disseminated magnetite and pyrite. This unit appears as highly magnetic on aeromagnetic data, contrasting well with the surrounding weakly magnetic muscovitic schist. Turner (1998) describes several rock samples collected in the area as fine-grained, massive felsic rocks, and possibly related to Devonian intrusives.

Proterozoic rocks are highly deformed, and locally show a strong S1 foliation displaying metamorphic segregation in schists producing quartz vein boudins containing carbonate and chlorite. Crenulation cleavage is also present, and may be related to regional fold closures (Turner, 1997). Available mapping data suggests this part of the AMC has been shortened in an ENE-WSW direction, producing broad, open folds dipping gently to the south.

Tertiary basalt, gravels, sands and clay form cover to the west. Magnetism data shows a small magnetic feature trending NW from the margin of the Lefroy Ridge zone. This was interpreted by Goldstream as the continuation of the Nancy Formation under Tertiary sediments, mirroring the

Bowry Formation to the south, which markedly thins over this area, prior to being terminated by the SW-NE trending Lefroy Ridge Fault. Tertiary basalts are mapped in this area in addition to Tertiary gravels, creating difficulties in interpretation of the geology here.

MINERALISATION:

Mineralisation spatially associated with magnetite and the metabasalt. In LREDDH1, Au values generally appeared to be higher towards the top of basaltic units, while Cu is elevated near the base. Turner (1998) raises the possibility of polymetallic mineralisation, presumably related to intrusives.

SAMPLES:

Amphibolites in the Lefroy Ridge zone have been well sampled, with few samples outside of this. However, soil and rock samples have not been taken over an area of interest identified by Stellar Resources, although stream sediments show this to be a highly anomalous zone, with rock and soil sampling possibly not reaching the main anomalous areas.

Stream sediments: 206 stream sediment and 62 pan concentrate samples have been collected in the area, concentrating on the amphibolite and immediate vicinity. Two stream sediment samples were highly anomalous, with 0.5 and 0.47ppm Au but the source of gold is uncertain, as drainages contain amphibolite and Tertiary sediments. However, several other drainages with no Tertiary sediments mapped also contain elevated Au. Unlike Au, base metals are only elevated over the northern part of the amphibolites, with base level results over the southern exposure. Results are summarised in the table below. Cu-Zn and Cu-Pb show strong correlations, while As-Zn have a moderate correlation. Au does not correlate well with any elements analysed.

Pan concentrate samples were analysed for Au only, and were recorded as micrograms per 9 litres. Converting these to ppm gives a maximum value of 2139ppm Au, and an average of 7.83ppm, and three samples above an anomalous threshold of 58ppm Au. These three samples are located in close proximity, draining an area near the northern margin of the amphibolite, and may not have been adequately tested by soil or rock sampling.

Stream sediment statistics, Lefroy Ridge.

	Ag_ppm	As_ppm	Au_ppm	Cu_ppm	Pb_ppm	Sn_ppm	Zn_ppm
# of Samples	130	130	191	133	132	119	132
Max	1.1	17	0.5	110	49.6	130	209
Average	0.08	0.99	0.01	21.44	9.29	7.44	37.77
Anomalous value	0.39	4.63	0.12	59.62	26.07	40.14	111.68
# Anomalous Samples	6	3	2	4	2	2	6
Au Corr Coeff.	0.02	-0.05	1.00	0.00	0.06	0.06	-0.11
Cu Corr Coeff.	0.11	0.35	0.00	1.00	0.74	-0.17	0.82
As Corr. Coeff.	0.14	1.00	-0.05	0.35	0.67	-0.09	0.63
Zn Corr Coeff.	0.05	0.63	-0.11	0.82	0.82	-0.21	1.00

Rocks: 409 rock samples are known, of which 395 are split core from two diamond drillholes. Maximum Au, Ag, Cu, Pb and Zn values are all from drillholes, with assays of up to 0.167ppm, 6ppm, 2679ppm, 1680ppm, and 910ppm respectively. All anomalous samples are located within the amphibolite unit, with results summarised in the table below. None of the main elements analysed show any correlation. For Au, Ag, As and Pb, this may be partially caused by many samples below detection limits. Based on stream sediment results, Cu-Zn were expected to correlate, and this may suggest Tertiary contamination of sediments.

Rock sample statistics, Lefroy Ridge.

	Ag_ppm	As_ppm	Au_ppm	Cu_ppm	Pb_ppm	Zn_ppm
# of Samples	406	406	406	409	408	408
Max	6	18.9	0.167	2679	1680	910
Average	1.02	3.20	0.00	185.94	20.25	174.55
Anomalous Threshold	2.69	9.91	0.04	683.78	195.28	383.72
# Anomalous Samples	18	25	8	13	3	14
Au Corr. Coeff.	-0.03	-0.11	1.00	0.28	0.07	-0.02
Cu Corr. Coeff.	-0.01	-0.21	0.28	1.00	0.02	0.16
Zn Corr. Coeff.	-0.10	-0.04	-0.02	0.16	0.13	1.00

Soils: Goldstream collected 107 C-horizon soil samples in a ridge and spur sample program over the amphibolite, analysing for Cu, Au and Ag. Maximum values were 0.9ppm Ag, 34.47ppm Cu, and 0.01ppm Au, with samples summarised in the table below.

Soil sample statistics, Lefroy Ridge.

	Ag	Au	Cu
# of Samples	107	107	107
Max	0.90	0.010	34.47
Average	0.02	0.003	5.95
Anomalous Threshold	0.19	0.008	17.40
# Anomalous Samples	11	5	5
Au Corr. Coeff.	-0.02	1.00	0.46

HISTORICAL MINING / PROSPECTING:

None known.

PREVIOUS EXPLORATION:

MLMRC briefly held EL26/1978 over the southern half of the Arthur Lineament, including the Lefroy Ridge zone of EL25/2020. Their exploration focus was diamonds, following up on reports of diamonds in the area during early alluvial operations. Twelve bulk samples were taken, 5 from within EL25/2020. No kimberlitic materials were found within the samples, and the licence was relinquished.

Fodina Minerals conducted stream sediment sampling on EL2/93 as a follow-up to anomalies identified in existing airborne magnetics data, sampling to the north and south of the Pieman River within the Nancy and Lefroy Ridge zones. Samples did not return any highly anomalous values, with a maximum of 1018ppm Cu from a tributary on the southern side of the Pieman River (within the Pieman River buffer zone). No anomalous results were returned from samples taken within EL25/2020, but the catchment of the tributary from which the above sample was taken crosses into the Lefroy Ridge zone. Fodina interpreted the results as associated with a high Cu background within the magnetite-bearing rocks, not indicative of highly mineralised zones, and subsequently relinquished the property.

Goldstream and Titan explored the Lefroy Ridge area under EL43/1994, collecting stream sediments, soil, and rock chip samples, in addition to completing 2 diamond drillholes targeting magnetic high features. Drillhole LREDDH2 was also tested with downhole EM. Holes were drilled oblique to the inferred dip of magnetic features, and intersected chlorite schist and metabasalt with disseminated

magnetite. Leaman (1997) interpreted airborne magnetics data as caused by up to three moderately iron-rich bodies, possibly basalt. Available logging data for LREDDH2 is highly limited, and provides little meaningful information of lithologies, but it appears metabasalt dominates the initial 140m, with the main magnetic bodies located between 30 and 140m downhole. Holes were sampled from top to bottom for Au and base metals, with Au mostly below detection. Maximum assay values for Au and Cu were 0.155ppm Au and 2679ppm Cu in LREDDH1, and 0.167ppm Au and 1790ppm Cu in LREDDH2. In LREDDH1, Au values generally appeared to be higher towards the top of basaltic units, while Cu was elevated near the base. Stream sediment sampling showed three subtle Au anomalies, with the SW one of these coinciding with a large Ag anomaly, and the northern zone roughly coincident with Cu, Pb, Zn and Ag anomalies. Gold in panned concentrate samples were observed as retaining some crystallinity, indicating limited transport. Ridge and spur soil C-horizon soil sampling in the area was mostly oriented E-W, with two small N-S and NE-SW lines. These cross the majority of the Nancy Formation magnetic feature, but generally did not return highly anomalous values, with maxima of 0.9ppm Ag, 34.47ppm Cu, and 0.1ppm Au. However, three areas were noted as elevated in Au and the range of values was considered similar to the Lucy Spur and Rocky River prospects. A large Ag anomaly coincident with smaller polymetallic anomalies in stream sediments led Turner (1998) to raise the possibility of a polymetallic system. In a review of the exploration program, Marchant (1998) suggests Vanadium may be a useful pathfinder, using Berg Aukas in Namibia as an example, but this is not an analogous setting (supergene deposition within karst infill) to geology observed in the area.

The Index Group briefly explored the area to the south of the Pieman River for high-grade silica flour under EL11/2003. Work was minimal, consisting of 17 pits dug by excavator, several of which were dug within the Lefroy Ridge zone. Results showed chromite contents were acceptable, but ilmenite contamination was too high. No further work is known.

Stellar Resources did not complete any ground work on the property, but Hazeldene (2008) noted a “favourable structural magnetic anomaly exists in the Corinna licence north of the previously drilled LREDDH1 and 2. Stream anomalies below this to 40ppm Cu are at the upper limit for this area and could be considered anomalous”.

KEY RESULTS/FINDINGS:

- Sub-economic mineralisation in DH, with maximum values of 0.167ppm Au, 6ppm Ag, and 0.268% Cu.
- Highly anomalous Au in pan concentrate samples a large distance from mapped Tertiary materials, and retaining crystallinity indicating limited transport.
- Broad area of elevated to anomalous Cu on northern side of Nancy Formation.
- AMC rocks locally shortened E-W, with elevated geochemistry appearing to be generally elevated towards footwall in broad anticline.
- Southern exposure of amphibolite does not appear as geochemically anomalous.
- Area of interest identified by Stellar Resources on northern margin of Nancy Formation untested.
- Report of minor fine-grained felsic Devonian intrusives increases possibility of IOCG mineralisation.

NOTES / RECOMMENDATIONS:

- Given moderate-high rating due to combination of effectively untested geophysical anomaly and inadequate testing of the area containing multiple pan concentrate anomalies.
- Sufficient stream sediment data exists in the area to complete a catchment analysis of the area.
- Mapping and rock sampling of Nancy Formation rocks, with increased detail in the northern part of the unit.
- Ground or drone magnetics may assist with mapping if extensive cover exists in the area.

REFERENCES:

Hazeldene, R.K. (2008): EL44/2006 Corinna. Annual Report for the Period 17 April 2007 – 16

February 2008. Stellar Resources Limited. MRT Report No. 08_5609.

Hutton M.J. (1980): Exploration Licence 26/78 (Tasmania), Pieman Precious Stones. Relinquishment Report. The Mount Lyell Mining and Railway Company Limited. MRT Report No. 81-1517.

Leaman, D.E. (1996): Assessment of Magnetic Anomalies, Corinna Area, Tasmania. For Goldstream Mining N L. In Exploration Licence N. 43/94 Corinna, Western Tasmania. Annual Report to 4/1/98. For Goldstream Mining NL and Titan Resources NL. MRT Report 97-4108.

MacCulloch, I.R.F. (2005): Annual Report EL11/2003. January 2005. Index Group of Companies.

Marchant, J. W. (1998): A review of aspects of the program of geochemical exploration near Corinna (EL43/94) 29th May 1998. Appendix 7 in Corinna Project. EL 43/94 Corinna, Western Tasmania. Annual Report to 4/1/99. For Goldstream Mining NL and Titan Resources NL. MRT Report 99-4261.

Poltock, R. (1994): Relinquishment and Annual Report to 10 May, 1994. EL14/89 Corinna, EL56/89 Corinna South and EL2/93 Pieman River. Fodina Minerals Pty Ltd. MRT Report No. 94-3566.

Turner, N.J. (1997): Exploration Licence No 43/94 Corinna, Western Tasmania. Annual Report to 4/1/98. For Goldstream Mining NL and Titan Resources NL. MRT Report 97-4108.

Turner, N.J. (1998): Corinna Project. EL 43/94 Corinna, Western Tasmania. Annual Report to 4/1/99. For Goldstream Mining NL and Titan Resources NL. MRT Report 99-4261.

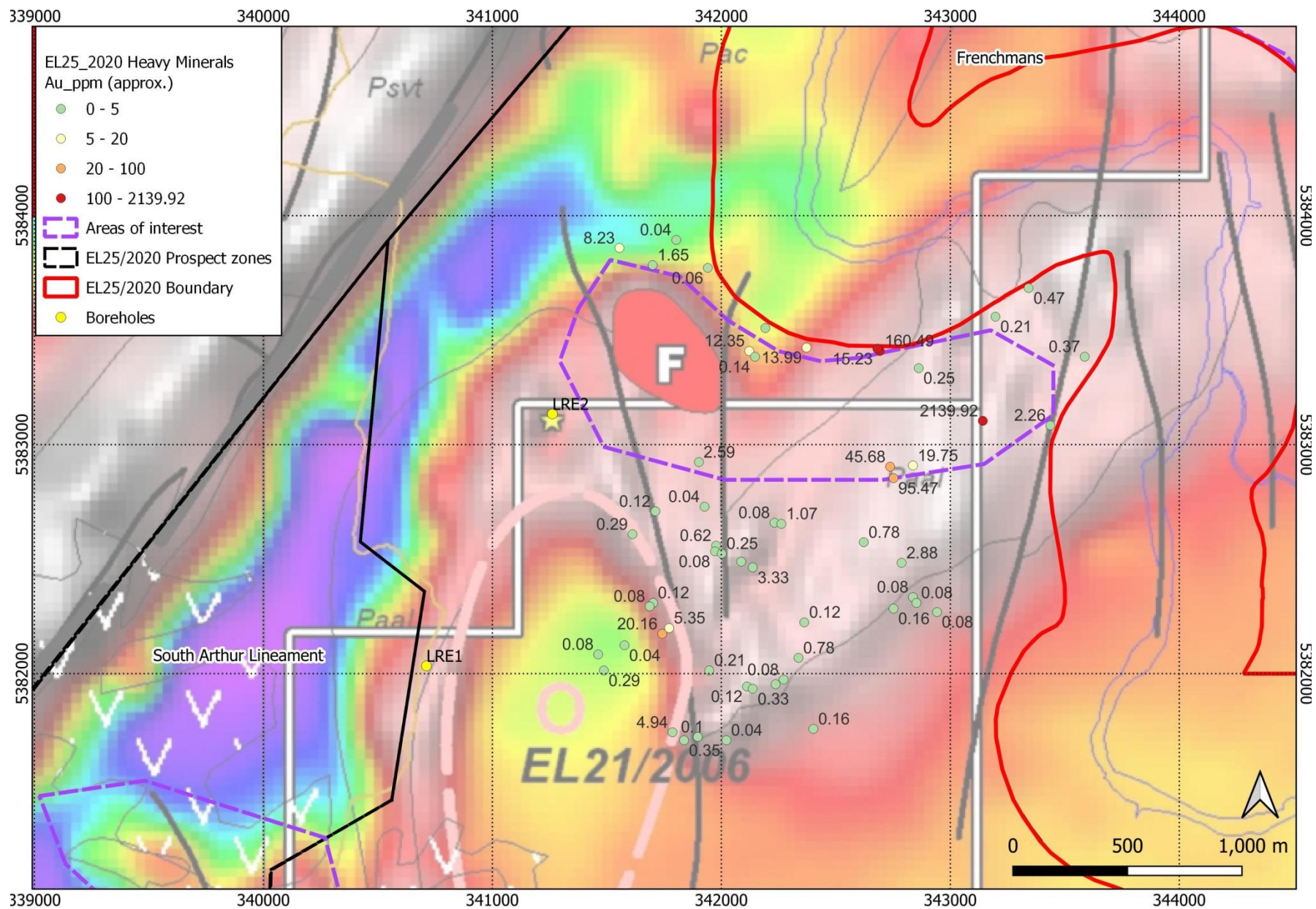


Figure 8: Results for pan concentrate samples at Lefroy Ridge after an approximate conversion to ppm Au, and the identified main area of interest. High Au appears generally associated with the northern (basal) side of the amphibolite-dominated unit. Aeromagnetics underlay taken from Stellar Resources.

PROSPECT ZONE	Frenchman's Creek
PROSPECTS	Nancy Spur, Nancy Creek, Frenchman's Peak, Frenchman's Creek
LOCALITY	5.5km E of Corinna (approx. 345200E, 5386300N)
COMMODITY	Cu, Au
STYLE	Intrusive related polymetallic(?)
STATUS	Greenfields
PROSPECTIVITY RATING	MODERATE

SUMMARY:

The Frenchman's Creek zone is a very elongate area, composed of AMC rocks within EL25/2020 to the north of the Pieman River. The western margin of the area is marked by the Lefroy Ridge Fault, and rocks are dominated by steeply E dipping chloritic schist, phyllite and amphibolite, including the Batty's Bend and Nancy Formations. Very little work has been completed in the northern part of this zone, with exploration activity focused on the amphibolite units in the vicinity of alluvial workings in the Frenchman's Creek and Nancy Creek areas. No hard rock mineral occurrences are known in the area. Four alluvial mineral occurrences are located in the southern part of the area, and microscopy work on Au in these samples suggests limited transport of gold grains.

The Nancy Formation is significantly more magnetic than the Batty's Bend Formation, with highly magnetic zones within the Batty's Bend Formation commonly related to fault zones and possible intrusives.

Geochemical coverage of the southern part of the property is reasonable, and often shows elevated metals in the vicinity of interpreted structures or highly magnetic features within the Nancy Formation.

Specific areas of interest include:

- The Nancy Formation to the immediate NE of the Pieman Reserve ground, where complex magnetics are mapped.
- Timbs Creek, in the vicinity of the singe soils line across the property. Porphyritic granite was sampled from here, but no description of this unit is known. Polymetallic geochemistry is elevated in the immediate vicinity of inferred faults.
- Northern end of the zone, where amphibolite units are deflected to the NW and truncated by the Lefroy Ridge Fault. Multiple faults are interpreted here, accompanied by a complex magnetic signal.

GEOLOGY:

The rocks in the Frenchman's Creek Zone consist of altered and deformed Proterozoic rocks with minor areas of Tertiary and Quaternary gravels, basalt, and sediments.

The western margin of the area is formed by the N-NNE trending Lefroy Ridge Fault, which forms the western margin of the AMC ophiolite. Cleavage is generally aligned with this fault, with the few bedding measurements and individual unit boundaries also sub-parallel, dipping steeply to the E and ESE.

Proterozoic rocks are composed of four main units, younging from west to east:

- Interbanded phyllite, fine-grained schist and minor actinolitic amphibolite, with intervals of boudinaged thin beds and probable flattened clasts of annealed meta-quartzarenite
- Chloritic schist with minor phyllite, dolomite and magnetite
- Dominantly amphibolite with rare magnetite, interlayered with chloritic phyllite and schist
- Amphibolite

The boudinaged beds and flattened clasts of meta-quartzarenite in the westernmost phyllites unit likely represent upper parts of the Rocky Cape block. Chloritic schist encompasses the two amphibolite units, and although the general unit description includes dolomite and magnetite, no specific occurrences of these are known in the area.

The western amphibolite unit encompasses the Frenchman's alluvial mineral occurrences, and has

been referred to as the Batty's Bend Formation. The eastern amphibolite is known as the Nancy Formation (Turner, 1997). Both are composed predominantly of metabasalt and chloritic schist with variably disseminated magnetite and pyrite. The Nancy Formation amphibolite is generally more magnetic than the Batty's Bend Formation, although the majority of it is outside EL25/2020.

Towards the northern end of the zone the Lefroy Ridge Fault trends NE, truncating Proterozoic rocks and effectively narrowing the AMC, with this accompanied by massive magnetite deposits including the Long Plains and Savage River deposits, located outside EL25/2020.

Interpretation of aeromagnetics data has suggested the possibility of shallowly buried granitic bodies in the SE part of the zone within chloritic schists and along trend from minor granite outcrops mapped at the Lucy Spur workings (Bates, 2010). Whole rock analyses in the area include one sample with 74.5% SiO₂, and is described as a porphyritic Devonian granite. No further description is available, but this is hosted by phyllite to the west of the amphibolites, near an inferred fault crossing the soil sample line in the centre of the zone, and is accompanied by a broad magnetic high. Fault-bound zones of magnetic high features have also been interpreted at the northern end of the Nancy Formation, with several moderately magnetic features within the Batty's Bend Formation and chloritic schist coincident with NE and NNW-trending faults interpreted as crossing the Lefroy Ridge Fault.

MINERALISATION:

With the apparent relationship between faults and inferred fault positions, mineralisation is interpreted as epigenetic, and almost certainly related to a granitic body, as inferred by a porphyritic sample recorded in the area.

SAMPLES:

Much of the southern part of the area is well sampled, but sampling of areas of interest in the central and northern end of the prospect is insufficient.

Stream sediments: 88 stream sediments are known in the area, with maximums of 100ppm Cu, 31ppm As, and 80ppm Ni. Results are summarised in the table below. Au is not included due to unreliable data, with some samples recorded in ppm and others in ppb. As shows a moderate correlation with Co, Ni and Pb, while Ni correlates well to very well with Co, Cr, Cu and Zn. Anomalous Cu are mostly in the S and SE parts of the Nancy/Frenchman's area of workings, and infer a mafic source of mineralisation rather than an intrusive.

	As_ppm	Co_ppm	Cr_ppm	Cu_ppm	Ni_ppm	Pb_ppm	Zn_ppm
# of Samples	65	22	9	76	23	73	75
Max	31	50	70	100	80	50	183
Average	4.71	21.45	55.11	24.88	33.35	9.30	44.85
Anomalous Threshold	15.52	51.26	85.17	62.68	67.29	29.54	109.48
# Anomalous Samples	3	0	0	4	2	5	4
As Corr. Coeff.	1.00	0.67	0.00	0.29	0.56	0.59	0.43
Cu Corr. Coeff.	0.29	0.77	0.13	1.00	0.70	0.52	0.66
Ni Corr. Coeff.	0.56	0.76	0.83	0.70	1.00	0.58	0.84
Zn Corr. Coeff.	0.43	0.84	0.30	0.66	0.84	0.46	1.00

Rocks: 67 rock samples are known. Au ranges to 0.033ppm, Cu to 450ppm, and 325ppm Zn. Results are summarised in the table below. Au does not correlate well with any elements analysed, but the large number of samples with Au below detection has strongly affected these values. For other elements, Cr and Ni show a strong relationship, with anomalous and elevated values possibly

indicating the presence of ultramafics or serpentinite. Although the number of samples is limited, there appears to be a strong inverse relationship between La and Cu, and La and Ni.

	Au_ppm	Cr_ppm	Cu_ppm	La_ppm	Ni_ppm	Pb_ppm	Zn_ppm
# of Samples	44	50	50	9	50	50	50
Max	0.033	715	450	30	240	100	325
Average	0.00	160.61	75.08	12.74	66.45	15.32	93.65
Anomalous Threshold	0.01	372.28	221.90	27.62	148.47	52.50	235.17
# Anomalous Samples	2	1	2	1	2	2	3
Au Corr. Coeff.	1.00	-0.24	-0.54	#DIV/0!	-0.64	-0.37	-0.61
Cu Corr. Coeff.	-0.07	0.00	1.00	-0.24	0.24	-0.03	0.28
Ni Corr. Coeff.	-0.05	0.73	0.24	-0.83	1.00	-0.05	0.47
Zn Correl. Coeff.	-0.14	0.17	0.28	-0.39	0.47	0.44	1.00

Soils: 40 C-horizon soil samples have been taken along an E-W line in the centre of the area, with maximum values of 340ppm Cu, 235ppm Zn, 150ppm Ni, and 48ppm Te. Results are summarised in the table below. Ag was below detection limits in all samples. Only Zn and Ni show a strong correlation.

Elevated geochemistry appears strongly related to the magnetic high feature and structures interpreted by Bass Metals.

	As_ppm	Ba_ppm	Cu_ppm	Ni_ppm	Pb_ppm	Te_ppm	Zn_ppm
# of Samples	40	36	40	40	40	36	40
Max	43.00	939.00	340.00	150.00	185.00	48.00	235.00
Average	7.13	452.58	46.75	41.88	18.38	10.39	57.50
Anomalous Threshold	30.23	973.14	190.15	102.94	82.89	31.90	168.95
# Anomalous Samples	3	0	3	1	2	1	2
As Corr. Coeff.	1.00	0.22	0.08	0.11	0.67	0.06	0.18
Cu Corr. Coeff.	0.08	-0.44	1.00	0.36	-0.04	0.39	0.36
Ni Corr. Coeff.	0.11	-0.06	0.36	1.00	0.02	0.18	0.92
Te Corr Coeff.	0.06	-0.13	0.39	0.18	0.02	1.00	0.11
Zn Corr. Coeff.	0.18	-0.04	0.36	0.92	0.00	0.11	1.00

HISTORICAL MINING / PROSPECTING:

Four alluvial workings targeting gold in Lower Tertiary sediments.

Nancy Spur is located in the headwaters of Frenchman's Creek, which hosts other alluvial workings in the prospect. Blake (1939) describes the area as a narrow belt of Lower Tertiary gravels overlying schistose quartzites and phyllites. Work in the area was short-lived, with a report of 7oz of gold over 3 weeks work in 1894, with work ceased due to insufficient water. Subsequent operators obtained poor gold returns in the area.

No details are known of returns from the three other alluvial workings in the area.

Penny et al (1984) notes several unrecorded alluvial workings in the vicinity of Timbs Creek/Brown Plains, but no details are available.

PREVIOUS EXPLORATION:

IMI held ground over the eastern part of EL25/2020 as part of EL4/1961. Although most of their work focused on the Specimen Reef area to the NE, they also conducted some stream sediment, soil and rock sampling within the Frenchman's Creek, X6, North-East, and Longback areas within EL25/2020.

MLMRC briefly held EL26/1978 over the southern half of the Arthur Lineament, including the Nancy zone of EL25/2020. Their exploration focus was diamonds, following up on reports of diamonds in the area during early alluvial operations. Twelve bulk samples were taken, 5 from within EL25/2020. No kimberlitic materials were found within the samples, and the licence was relinquished.

EZ held ground over the Nancy zone as part of EL22/1985. They collected stream sediments, pan concentrates, rock chip and soil samples over the area. Several E-W lines were cut and sampled, from the eastern margin of the property to the Pieman River. Results included 770ppm Cu, 550ppm Pb, and 305ppm Zn. Au was generally below detection. Petrography of 35 samples, geological mapping and a ground magnetics survey were also completed over part of the grid. While some anomalous base metal results were found in metasediments and basic volcanics in the western part of the survey area, base metals were generally more elevated in Bowry Formation rocks to the east of EL25/2020. Pan concentrate samples included results of up to 20.29ppm Au, but it was concluded that these were derived from reworked Tertiary gravels. After efforts to find a joint venture partner failed, EZ relinquished the property in 1988.

Fodina Minerals conducted stream sediment sampling on EL2/93 as a follow-up to anomalies identified in existing airborne magnetics data, sampling to the north and south of the Pieman River within the Nancy and Lefroy Ridge zones. Samples did not return any highly anomalous values, with a maximum of 1018ppm Cu from a tributary on the southern side of the Pieman River. No anomalous values were obtained in the Nancy zone. Fodina interpreted the results as associated with a high Cu background within the magnetite-bearing rocks, not indicative of highly mineralised zones, and subsequently relinquished the property.

Bass Metals held ground over the area as part of EL36/2005, but do not appear to have completed any ground work during this time, analysing existing data and focusing on the Lucy Spur area to the east. However, they did speculate whether features in aeromagnetics data in the SE part of the zone could be caused by buried granitoids similar to those mapped at the Lucy Spur hard rock workings. This was not followed up, and the ground was relinquished in 2010.

KEY RESULTS/FINDINGS:

- Work to date concentrated in the southern part of the area.
- Insufficient sampling and mapping of the "Batty's Bend" formation in the northern part of the area, particularly in the vicinity of fault-bound magnetic features.
- Rock sampling in vicinity of historic alluvial workings show anomalous Cu, but Au was mostly below detection.
- Multiple areas of complex magnetics, especially in Nancy Formation, and elevated magnetics in Batty's Bend formation associated with interpreted faults.
- Soil sampling in the centre of the area suggests mineralisation may be structurally hosted, and are coincident with a porphyritic granite sample and magnetic high.
- Faults cutting across Lefroy Ridge Fault may be Devonian in age?? Commonly associated with elevated magnetics in Batty's Bend formation and chloritic schist.
- Soils suggest possible polymetallic anomaly coincident with porphyritic granite sample.

NOTES / RECOMMENDATIONS:

- Digitising of EZ geological mapping and detailed research of mention of granites in the zone prior to any ground work.
- Increase geochemical sampling and geological mapping of the central and northern end of the zone, with special attention to faulting and intrusives. Ground magnetics on E-W lines could delineate structures under cover.
- Aeromagnetics of the southern part of the Nancy Formation is complex. Surface

geochemistry coverage exists but is all pre-1988, and on widely spaced lines. Geological mapping, surface sampling and several E-W oriented lines of ground magnetics, or a fine gravity survey should greatly improve understanding here.

REFERENCES:

Bates, S. (2010): Paradise River Project (Pieman River Group) Tasmania, EL36/2005. Final Report 27th February 2010 to 16th March 2010. Bass Metals Ltd. MRT Report No. 10_6053.

Blake, F. (1939): Report on the Corinna alluvial goldfield. MRT Report No. UR1939_026_46.

Hutton M.J. (1980): Exploration Licence 26/78 (Tasmania), Pieman Precious Stones. Relinquishment Report. The Mount Lyell Mining and Railway Company Limited. MRT Report No. 81-1517.

Mathison, I.J., Ferguson, N. (1987): Electrolytic Zinc Company of Australasia Limited. EL22/85 – Savage River, Annual Report on Exploration Activity, August 1986 to August 1987. MRT Report No. 87-2734.

Penny, B.G., Shannon, C.H.C., Vanzino, L. (1984): Report on Field Investigations within Exploration Licence 4/61. West Coast, Tasmania. Summer Field Season 1983-1984. Industrial and Mining Investigations Pty. Limited. MRT Report No. 84-2662.

Poltock, R. (1994): Relinquishment and Annual Report to 10 May, 1994. EL14/89 Corinna, EL56/89 Corinna South and EL2/93 Pieman River. Fodina Minerals Pty Ltd. MRT Report No. 94-3566.

Taylor, S. (1988): Electrolytic Zinc Company of Australasia Limited. Exploration Licence 22/85 – Savage River. Final Report, Summarising Exploration in the 1986-1988 Period. MRT Report No, 88-2882.

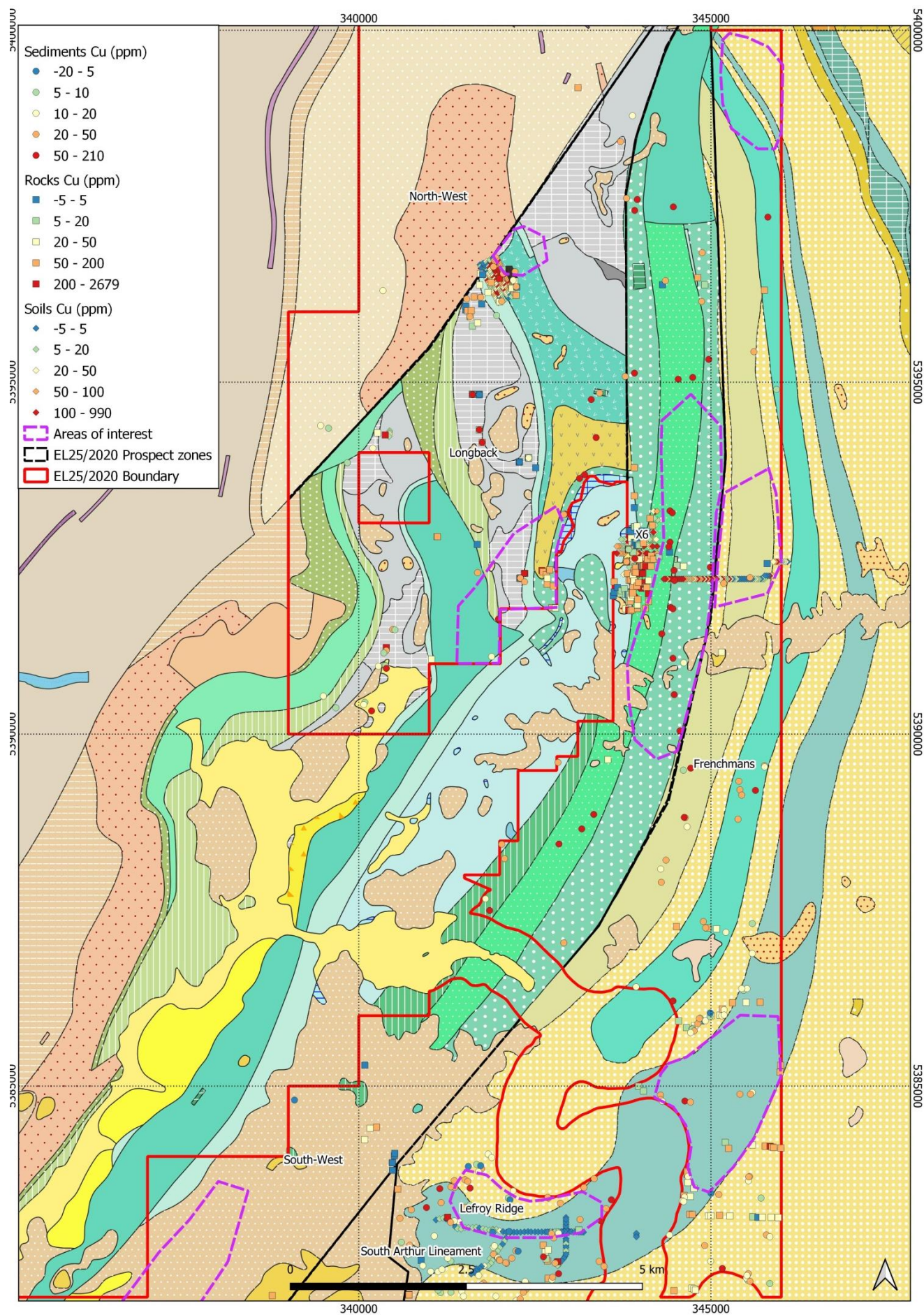


Figure 9: Geology and surface geochemistry for Cu over the Frenchman's, X6, and Longback zones. Identified areas of interest shown by purple polygons. Refer to Figure 3 for geology legend.

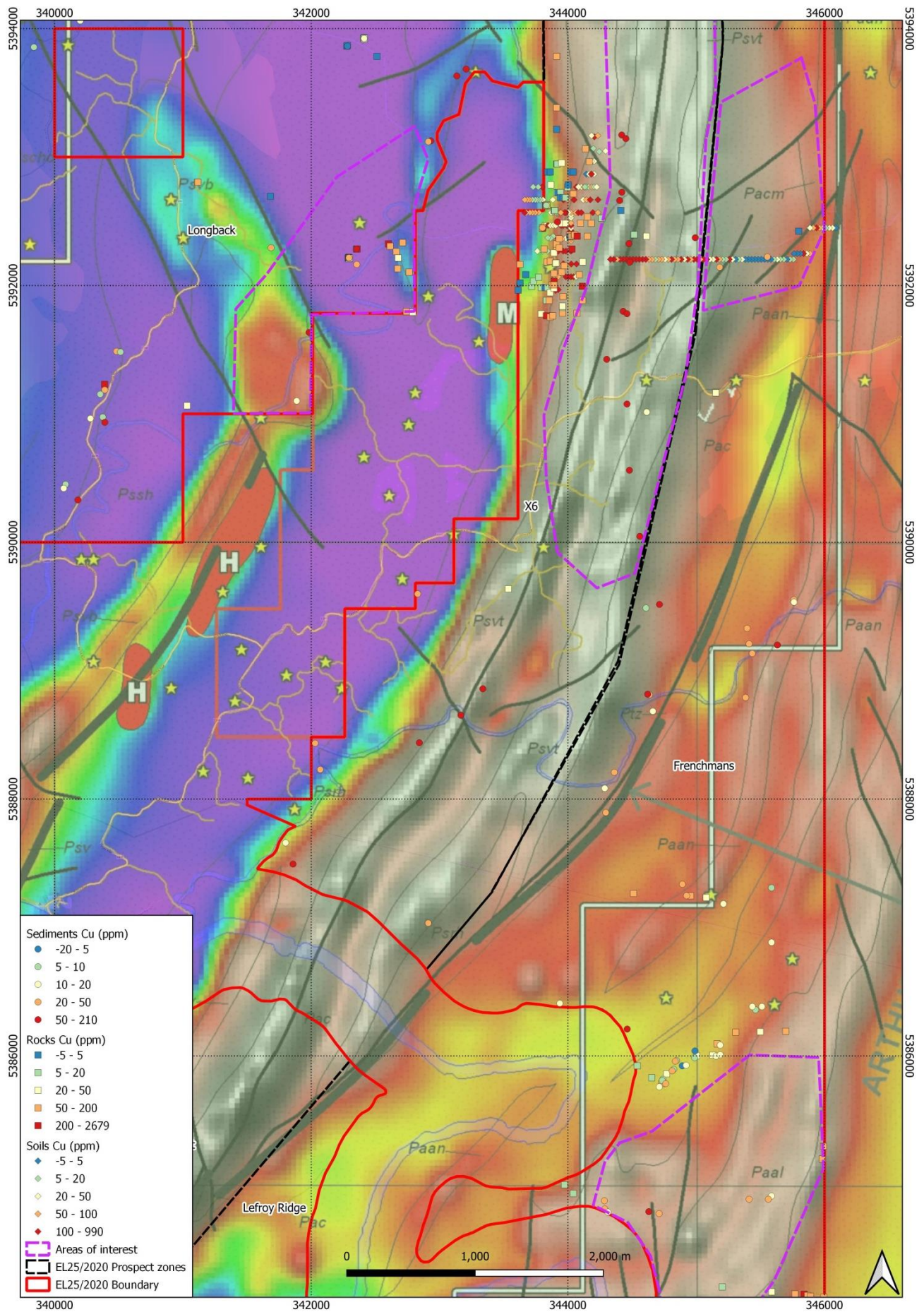


Figure 10: Geology and surface geochemistry for Cu over the Frenchman's, X6, and Longback zones. Identified areas of interest shown by purple polygons. Anomalous soil geochemistry appears associated with interpreted NE-trending faults, possibly associated with a reported porphyritic granite. The zone of complex magnetics in the south of the area appears to be an extension of the Lefroy Ridge feature.

PROSPECT ZONE	X6
PROSPECTS	X6
LOCALITY	8km NE of Corinna, 12.5km SW of Savage River (approx. 344500E, 5393600N)
COMMODITY	Cu
STYLE	Intrusive related(?)
STATUS	Greenfields
PROSPECTIVITY RATING	MODERATE

SUMMARY:

Composed of the Tunnelrace Volcanics with minor zones of the Corinna Dolomite, the central part of this zone was initially identified as an aeromagnetic anomaly, with the majority of subsequent work in the area concentrating in this area. The X6 zone marks the easternmost part of the Rocky Cape Block, with the Lefroy Ridge Fault and Arthur Lineament to the east of this.

Sub-economic Au appears to be hosted by the Corinna Dolomite, while Cu and Ni are often elevated to anomalous proximal to magnetic highs presumably associated with metabasalt, and fault zones.

Stream sediments include a result of 0.298ppm Au in the south of the area, but this has been attributed to Tertiary sediments rather than bedrock. A 1.42ppm Au rock sample collected in the centre of the area was described as ironstone float, with other samples returning background Au. Rock samples returned up to 1650ppm Cu and 1300ppm Zn, while soils contained 990ppm Cu and 670ppm Zn. Soil sampling to the east of the X6 anomaly suggests mineralisation may be related to faulting which crosses the Arthur Lineament (possibly from Devonian granites?).

Recommended work includes:

- Extension of soil and rock chip sampling to the east. Covering zone to north of existing soils line. This could be followed by ground magnetics and gravity if results are encouraging.
- Further geological mapping and stream sediment and rock chip sampling to properly assess the northern and southern parts of the area, including areas of interest identified by Stellar Resources.
- No further work is recommended over the original X6 anomaly.

GEOLOGY:

With the exception of several zones of Tertiary and Quaternary gravels and sediments, the geology of the X6 zone is composed of Proterozoic rocks of the Ahrberg Group, mostly of the upper Bernafai Volcanics, which are also known as the Tunnelrace Volcanics. The eastern margin of the X6 zone is the eastern extent of the Rocky Cape Block, and is marked by the Lefroy Ridge Fault, with the allochthonous rocks of the Timbs Group in the Arthur Lineament, which includes the highly mineralised Bowry Formation to the east of this.

The Tunnelrace Volcanics unconformably overlie the Proterozoic Corinna Dolomite to the east, a dolomitic unit with extensive zones of silicification and lag products associated with silicification which has been mined for high purity silica flour a short distance outside EL25/2020.

The Tunnelrace Volcanics consist of two main units: Interbanded slaty or phyllitic to relatively massive, green to grey, tuffaceous and pelitic, chloritic metasilstone with minor fine-grained foliated metamorphosed basalt and basaltic wacke, and an upper unit of mostly metabasalt with tuffaceous and pelitic siltstone. The Bernafai Volcanics are described as chlorite-sericite altered with carbonate veining in the vicinity of the X6 mineral occurrence (Hazeldene, 2008), and assessed as prospective for gold along the Corinna Dolomite/Bernafai Volcanics contact. Ages given for the Bernafai Volcanics are poorly constrained, but minor zones of dolomite have been mapped in this zone, which may suggest sedimentation and volcanism contemporaneous with formation of the Corinna Dolomite.

Airborne magnetics show two distinct bands of magnetic high features located near the eastern margins of the mapped position of the main metabasalt and phyllite bodies, while zones of interest

identified by multiple groups are located on the western margin of the area, with the Corinna Dolomite to the immediate west producing a deep magnetic low. The X6 INPUT EM anomaly was described by Taylor (1988) as “a 100m wide unit of dark grey, non-sulphidic, slightly carbonaceous shale within the Upper Volcanic sequence”. Processing of aeromagnetic data by Stellar Resources suggested the main geophysical feature of interest in this area lies immediately outside EL25/2020, on the western margin of a small zone of Bernafai Volcanics within the Corinna Dolomite, and a further two lesser magnitude magnetic features were identified approximately 1.5 and 2km to the north.

Although not noted in the immediate area, minor granitic intrusives are recorded in the AMC a short distance to the east, and is considered a possible source of mineralisation, particularly for structurally controlled mineralisation.

MINERALISATION:

Taylor notes crystalline gold in panned concentrate samples near X6, which is confirmed by Virgoe (1989), who also noted that all crystalline Au known in the area occurred within 500m of the intersections of NNW and E-W trending structures. Leaman (1988) notes that all known mineralisation occurs within these zones, including the pyrrhotite-rich zone drill tested by Geopeko at the Longback prospect, also located within Bernafai Volcanics about 4.5km to the NW.

The source of crystalline Au in the area is unresolved, with possible sources including epithermal fluids or supergene enrichment.

SAMPLES:

The majority of samples have been collected in the vicinity of the X6 geophysical anomaly in the centre of the zone, with few samples taken in the northern or southern areas.

Stream sediments: 47 stream sediment samples have been collected within the X6 zone, with the majority of these returning Au and Ag assays below detection limits. The table below summarises results, but the suggested strong correlations between Ag-As and Ag-Cu are strongly affected by the number of Ag samples below detection. There are insufficient Au results for analysis. The only strong correlation is between Cu and Ni, with anomalous and elevated samples located near the (conformable?) contact between Tunnelrace Volcanics units. Samples downstream but outside EL25/2020 show minimal Au, Ag, and Cu.

A single stream sediment sample collected by Aberfoyle in the southern part of the area returned 0.298ppm Au. This was interpreted as associated with Tertiary gravels, as it was accompanied by 30ppm Sn.

	Ag_ppm	As_ppm	Ba_ppm	Cu_ppm	Ni_ppm	Pb_ppm	Zn_ppm
# of Samples	15	34	32	39	23	35	43
Max	1.50	23.00	440.00	210.00	150.00	155.00	405.00
Average	0.33	5.29	155.26	82.82	73.04	22.32	113.14
Anomalous Threshold	1.34	14.98	372.58	196.17	134.60	97.11	266.39
# Anomalous Samples	1	2	3	2	1	4	2
As Corr. Coeff.	0.75	1.00	0.48	0.23	-0.31	-0.09	-0.29
Au Corr. Coeff.	-0.15	-0.13	-0.27	-0.21	#DIV/0!	0.16	-0.04
Cu Corr. Coeff.	0.93	0.23	0.46	1.00	0.81	-0.19	-0.10
Zn Corr. Coeff.	-0.14	-0.29	-0.18	-0.10	0.24	0.54	1.00

Rocks: Assay results for 107 rock samples are known in the X6 zone. Of 99 samples assayed for Au, 13 returned assays above detection, including 1.42ppm Au in siliceous ironstone float at the X6 geophysical anomaly. However, with the exception of the siliceous ironstone float, all assays in excess of 0.01ppm Au are located within the Corinna Dolomite, close to the margin of EL25/2020.

Ag was below detection in all samples, while Cu assayed up to 1650ppm in siltstones and phyllites of the Bernafai Volcanics. Results are summarised in the table below. Metals generally show little to no correlation, with the exception of moderate to strong correlations between As-Te and Hg-Pb, although only 14 samples were analysed for Te and Hg.

	As_ppm	Au_ppm	Cu_ppm	Hg_ppm	Pb_ppm	Te_ppm	Zn_ppm
# of Samples	99	99	105	14	104	14	105
Max	90	1.42	1650	0.33	215	5	1300
Average	6.17	0.02	91.99	0.06	26.67	0.50	136.45
Anomalous Threshold	31.58	0.30	469.64	0.26	83.64	3.02	478.84
# Anomalous Samples	3	1	4	1	4	1	3
As Corr. Coeff.	1.00	-0.03	-0.01	0.36	0.00	0.75	0.53
Au Corr. Coeff.	-0.03	1.00	-0.03	-0.07	-0.06	-0.06	0.07
Cu Corr. Coeff.	-0.01	-0.03	1.00	0.17	-0.02	0.46	0.10
Pb Corr. Coeff.	0.00	-0.06	-0.02	0.77	1.00	-0.11	0.18

Soils: 133 soil samples are known in the area, with Cu, Pb and Zn assaying up to 990ppm, 132ppm, and 132ppm respectively. Only 2 out of 105 samples assayed for Au were above detection, with a maximum of 0.015ppm Au. As with stream sediment and rock samples, correlations are generally poor, with only Mn showing a moderate correlation with Cu and Zn out of elements analysed. Results are summarised in the table below.

	As_ppm	Cu_ppm	Mn_ppm	Pb_ppm	Zn_ppm
# of Samples	132	132	102	132	132
Max	100	990	30500	220	670
Average	12.27	104.09	853.24	22.90	92.88
Anomalous Threshold	49.32	336.45	7331.14	96.25	249.46
# Anomalous Samples	8	4	3	7	4
As Corr. Coeff.	1.00	0.09	0.43	0.13	0.12
Cu Corr. Coeff.	0.09	1.00	0.60	-0.11	0.35
Zn Corr. Coeff.	0.12	0.35	0.68	0.07	1.00

HISTORICAL MINING / PROSPECTING:

Penny et al (1984) notes several unrecorded alluvial workings in the vicinity of Timbs Creek/Brown Plains, but no details are available.

PREVIOUS EXPLORATION:

IMI held ground over the eastern part of EL25/2020 as part of EL4/1961. Although most of their work focused on the Specimen Reef area to the NE, they also conducted some stream sediment, soil and rock sampling within the Arthur Lineament, X6, North-East, and Central areas within EL25/2020. Within the X6 zone, this work comprised of a single E-W line of 32 soil samples to the south of Timbs Creek. Results included up to 900ppm Cu, with some anomalous As, Pb and Zn also. Follow-up soil sampling of this area confirmed the geochemical anomaly, but Au values were very low, and no further work was recommended.

Esso conducted an airborne magnetics survey over EL2/1973 in 1973, with this survey showing 13 anomalies located within EL25/2020. Anomaly X6 was located in the X6 zone, but there does not appear to have been any follow-up on this feature.

MLMRC briefly held EL26/1978 over the southern half of the Arthur Lineament, including the X6 zone of EL25/2020. Their exploration focus was diamonds, following up on reports of diamonds in the area during early alluvial operations. Twelve bulk samples were taken, 5 from within EL25/2020. No kimberlitic materials were found within the samples, and the licence was relinquished.

Cominex and several other parties explored the area to the NE of Corinna under EL37/1982, initially with Geopeko for pyrrhotite-magnetite skarn with potential to host Sn mineralisation. Work in the area included geological mapping, soil, rock-chip and stream sediment sampling, and a review of geophysical data. Apart from a high grade silica flour deposit outside of EL25/2020 which was developed into a mine, results delineated a weakly anomalous zone of Au and As within 100m of the Corinna Dolomite/Bernafai Volcanics contact, but were generally disappointing.

Discovery Nickel Ltd. held ground over much of EL25/2020 under EL18/2004, exploring for Ni-Cu-PGE deposits within mafic-ultramafics, with work indicating the area was not prospective for magmatic nickel-copper sulfide deposits, but there remained potential for hydrothermal nickel sulfide deposits similar to Avebury. Analysis of existing stream sediment data revealed a large area of anomalous Cu in the vicinity of the X6 prospect. 17 rock samples were collected (9 within EL25/2020) and submitted for whole rock analysis, with findings including basalts in the area can be divided into three groups, all of which are enriched in LREE. A magnetic feature to the west of the Pieman was noted to correlate with possible picrites identified in the MRT whole-rock database, but DNL did not sample this area prior to relinquishing the property in a change of focus.

Stellar identified two zones of medium to high interest in the area about 1.5-2km north and south of the original X6 aeromagnetic anomaly identified by EZ. These zones were identified primarily through anomalous historic geochemistry, but no work was completed in the area prior to relinquishment of EL44/2006.

KEY RESULTS/FINDINGS:

- Exploration by all parties has focused on the X6 geophysical anomaly. Stellar Resources identified two areas of interest about 1.5 and 2km to the north of X6, but no work was completed in the area.
- Extensive sampling of the X6 area shows elevated geochemistry coincident with magnetic highs (bands of metabasalt?) and fault zones (similar to Frenchman's Creek zone?).
- Au generally below detection in all surface geochemistry. Corinna Dolomite hosts more Au above detection, but is marginal to the property boundary.
- 0.298ppm Au in stream sediment sample to south of X6 attributed to Tertiary gravels.

NOTES / RECOMMENDATIONS:

- Cu and Ni elevated around magnetic highs explained by higher background in mafic volcanics?
- Au mostly associated with dolomite on property boundary. Source of gold is unknown, but possibilities include Devonian granite and supergene enrichment. Work on adjacent ground suggests economic Au mineralisation is unlikely.
- Sufficient stream sediments have been collected over the X6 anomaly. Additional soils and/or rock chip sampling and mapping could be completed to the east, complimenting work in the Frenchman's Creek zone.
- Areas of interest identified by Stellar are deserving of follow-up, initially including stream sediment and rock chip sampling combined with mapping.
- If geochemistry and mapping are promising, this could be followed up with ground magnetics and gravity.
- Moderate rating due to the most promising prospect being well sampled, but elevated geochemistry to the east, untested geophysical features, and possible intrusive relation.

REFERENCES:

Hazeldene, R.K. (2009): EL 22/2006 Corinna. Final Report Relinquishment. Stellar Resources Limited. MRT Report 09_5903.

Hutton M.J. (1980): Exploration Licence 26/78 (Tasmania), Pieman Precious Stones. Relinquishment

Report. The Mount Lyell Mining and Railway Company Limited. MRT Report No. 81-1517.

Johnstone, A. (2006): Exploration Licence EL 18/2004 – Corinna, Tasmania. Final Report 19 June 2006. Discovery Nickel Limited.

Leaman, D.E. (1988): EL37/82 – The Longback, Tasmania. Review of Magnetic and Gravity Data for Norgold Limited. In E.L. 37/82 Longback. Annual Report on exploration Activity, April 1988-April 1989. Electrolytic Zinc company of Australasia Limited. MRT Report No. 89-2959.

Neale, R.C. (1973): Pieman River Exploration Licence 273 – Tasmania. Progress Report for the Period January 31 – July 31, 1973. By Esso Australia Ltd. MRT Report No. 73-0964.

Nolan, H.D. (1992): Final Report of Exploration on Surrender of EL37/82 Longback. Cominex. MRT Report No. 92-3324.

Penny, B.G., Shannon, C.H.C., Vanzino, L. (1984): Report on Field Investigations within Exploration Licence 4/61. West Coast, Tasmania. Summer Field Season 1983-1984. Industrial and Mining Investigations Pty. Limited. MRT Report No. 84-2662.

Taylor, S. (1988): Annual Report on exploration for the Period 1.5.87 to 5.4.88. Exploration Licence 37/82 Longback, Tasmania. Norgold Limited on behalf of the H D Nolan-Norgold-Savage Resources “Longback” Joint Venture. MRT Report No. 88-2800.

Virgoe, K.J. and Mathison, I.J. (1989): E.L. 37/82 Longback. Annual Report on exploration Activity, April 1988-April 1989. Electrolytic Zinc company of Australasia Limited. MRT Report No. 89-2959.

PROSPECT ZONE	Longback
PROSPECTS	Longback
LOCALITY	7km N of Corinna, 12.5km SW of Savage River (approx. 341500E, 5393900N)
COMMODITY	Cu
STYLE	
STATUS	Greenfields
PROSPECTIVITY RATING	LOW

SUMMARY:

A large block-faulted zone of predominantly Proterozoic Ahrberg Group Savage River Dolomite and the basaltic Bernafai Volcanics, with minor Mesoproterozoic sediments on the western margin. Four mineral occurrences are listed in the area, none of which are former workings. Three of these perhaps do not deserve this title, as mapping notes only mention lacy agate, samples taken to not contain significant mineralisation aside from anomalous As in one sample. The fourth mineral occurrence (Longback) has been drill tested, but sampling was inadequate, and remodelling of geophysical data suggests the geophysical target may have been narrowly missed.

Mineralisation has been interpreted as epigenetic, and structurally controlled, with Devonian intrusives the most obvious source. Rock samples include up to 0.55ppm Au, 460ppm Cu, and 292ppm As.

The Mesoproterozoic rocks and Savage River Dolomite are viewed as unprospective for economic mineralisation, and geophysics suggests the most viable target in the area (Longback) has been explored, although with major flaws.

Suggested work includes relogging and possibly resampling of drill core, confirming locations of all stream sediment samples (issues noted with location of downloaded stream sediment samples), and mapping and sampling of the SE part of the area, where interpretation of geophysics has suggested a possible shallow intrusive.

GEOLOGY:

The geology of the Longback zone is composed of Proterozoic rocks with younging generally to the NE and E. The area is structurally complex, with multiple faulting and folding events, and margins of the zone described here marked by large faults.

The oldest rocks in the area are Mesoproterozoic Balfour Group quartzarenite, micaceous quartz sandstone and bedded slaty to massive chloritic siltstone and mudstone to the NW, which are unconformably overlain by Neoproterozoic Donaldson Formation conglomerate. The conglomerate is overlain by micaceous quartzwacke with interbeds of slate, siltstone and mudstone, followed by slaty micaceous pelitic siltstone and chert with minor dolomite. The Donaldson Formation is overlain by the Savage Dolomite, consisting of fine-grained dolomite, locally oolitic with stromatolites and interbedded with carbonaceous siltstone, and lag of silicification products of dolomite.

The Bernafai Volcanics overlie the Savage Dolomite, mostly composed of grey tuffaceous and pelitic metasilstones, with minor zones of dolomite. The metasediments are overlain by similar metasediments with minor layers of pebbly basaltic wacke, followed by massive metabasalt or fine-grained metadolerite. Interbanded slaty to massive green to grey tuffaceous and pelitic chloritic metasilstone with minor fine-grained foliated metabasalt and basaltic wacke forms the top of the Bernafai Volcanics. Geological mapping by Aberfoyle suggests the metabasalt unit extends about 400m further to the south than currently plotted on 1:25000 maps. In the SE of the area, the Corinna Dolomite, a pale grey to cream massive, fine-grained dolomite, variably silicified dolomite, accompanied by lag of silicification products of dolomite including silica flour, is faulted over the Bernafai Volcanics by the Brookside Fault. The Lefroy Ridge Fault forms the eastern boundary of the zone, with Bernafai Volcanics thrust over Longback rocks.

The above units are occasionally obscured by Tertiary gravels and Quaternary sediments, with Tertiary gravels known to host both transported and local gold in uneconomic quantities.

The structure of the zone is dominated by two large fault systems oriented SW-NE, and SE-NW. The dominant SW-NE faults are associated with the Arthur Lineament, developed in the Cambrian, and combined with the SE-NW trending faults, have produced large fault blocks with repetition of Ahrberg stratigraphy across the zone and the adjacent Mt Donaldson zone.

Geophysically, the area is very poorly magnetic, with the exception of three areas within the Bernafai Volcanics:

1. In the south, a large moderately magnetic feature coincides with a body of Bernafai Volcanics interpreted here to dip towards the east, truncated at the boundary of EL25/2020 by a fault. This corresponds with an increase in susceptibility towards the east.
2. A weakly magnetic feature corresponds with a zone of massive metabasalt immediately below the Brookside faulted contact with the Corinna Dolomite.
3. The Longback anomaly, as targeted by several companies including drilling by Geopeko. This is also located within the Bernafai Volcanics, but on their western margin. It is a relatively small feature, but is highly anomalous.

A review of magnetics and radiometric data by Muir (2014) showed several anomalous magnetic zones coincident with elevated K/Th radiometrics along the Brookside Fault, which extends into the Longback zone, suggesting elevated K may relate to alteration, and hence form a priority exploration target. The majority of this feature is not within EL25/2020, but appears coincident with a fault intersection.

MINERALISATION:

At the adjacent Brookside gold prospect, Large (1987) identified two distinct types of gold from panned concentrate samples: One showing signs on transport with a low Ag content, and a crystalline, Ag-rich type that was interpreted as sourced locally from the faulted contact zone (Brookside Fault) between Proterozoic mudstones forming part of the Bernafai Volcanics and the Corinna Dolomite. Some crystalline gold grains also showed some signs of transport. The crystalline gold is accompanied by anomalous Cu-As in rock chip samples, and was interpreted as promising for carbonate-hosted epithermal gold. Henham (1990a) noted silicified dolomites contained minor disseminations of pyrite with rare chalcopyrite, with the bulk of mineralisation within coliform pyrite-quartz banded zones. Large (1988) interpreted the Corinna Dolomite as a potential host for Carlin-style epithermal gold, but later fluid inclusion work suggested coliform banding of quartz-carbonate veins were of magmatic origin rather than hydrothermal.

SAMPLES:

Stream Sediments: 56 stream sediment samples are known in the area, and include 125ppm Cu, 205ppm Zn, and 0.035ppm Au. Several heavy mineral concentrates have also been collected, but these have had their mineralogy described, and no assays are known. The location of samples within the MRT database is uncertain and has been noted to be up to 2.5km in error from original reports, and several of these samples are also suspected to be recorded in ppb rather than ppm. The table below summarises stream sediment results, minus Au results. Cu and Pb show a moderate correlation with Fe, possibly indicating minor chalcopyrite and associated minerals. As and Sn correlate very well, while Mo and Zn appear to have a weak inverse correlation.

	As_ppm	Au_ppm	Cu_ppm	Fe_ppm	Mo_ppm	Pb_ppm	Sn_ppm	Zn_ppm
# of Samples	46	42	52	23	11	47	30	55
Max	45	0.035	125	46500	55	70	35	205
Average	6.04	0.01	36.49	22326.09	21.46	16.49	8.73	66.76
Anomalous Threshold	28.42	0.02	99.42	46064.46	51.97	50.94	31.77	161.04
# Anomalous Samples	4	2	4	1	1	2	1	4

As Corr. Coeff.	1.00	-0.11	0.06	0.14	-0.09	0.56	0.87	0.16
Au Corr. Coeff.	-0.11	1.00	0.05	0.25	#DIV/0!	0.13	-0.15	-0.19
Cu Corr. Coeff.	0.06	0.05	1.00	0.66	-0.03	0.16	0.46	0.63
Pb Corr. Coeff.	0.56	0.13	0.16	0.58	-0.22	1.00	0.42	0.44
Zn Corr. Coeff.	0.16	-0.19	0.63	0.52	-0.45	0.44	0.35	1.00

Rocks: 132 rock samples have been collected in the area, with up to 0.55ppm Au, 450ppm Cu, and 385ppm Zn. One sample within the dolomite returned 35ppm and 16ppm for Sn and W respectively, and it is suspected this may be float. Results are summarised in the table below, showing a weak correlation between Cu and Zn, and a very strong correlation between Pb and Hg.

	As_ppm	Au_ppm	Cu_ppm	Fe_ppm	Hg_ppm	Pb_ppm	Zn_ppm
# of Samples	66	69	132	86	22	132	132
Max	292	0.55	460	550000	0.14	110	385
Average	12.59	0.02	77.05	63712.79	0.03	20.93	80.55
Anomalous Threshold	110.47	0.18	219.89	204532	0.08	55.46	199.13
# Anomalous Samples	2	4	5	3	1	2	5
As Corr. Coeff	1.00	-0.05	0.24	0.30	0.08	0.04	0.20
Au Corr. Coeff.	-0.05	1.00	-0.11	-0.09	-0.08	0.19	-0.12
Cu Corr. Coeff.	0.24	-0.11	1.00	0.40	0.21	0.15	0.58
Fe Corr. Coeff.	0.30	-0.09	0.40	1.00	#DIV/0!	0.13	-0.20
Pb Corr. Coeff.	0.04	0.19	0.15	0.13	0.94	1.00	0.34

Soils: 150 soil samples have been collected at the Longback anomaly and another 5 within silicified dolomite about 2.5km to the SW of the Longback soils. Sn is elevated in these soils, and it is expected there is a Tertiary component to these samples. At Longback, Cu and Zn assayed at up to 280ppm and 480ppm respectively. Results are summarised in the table below. As with stream sediment samples, there is a moderate correlation between Cu and Fe, but other moderate correlations in stream sediment sample data are absent.

	Ag_ppm	As_ppm	Cu_ppm	Fe_ppm	Pb_ppm	Sn_ppm	Zn_ppm
# of Samples	151	155	155	144	155	155	155
Max	8	80	280	160000	220	35	480
Average	1.72	8.67	62.07	51937.50	25.81	0.77	75.73
Anomalous Threshold	3.35	33.54	164.59	120829.23	68.36	7.51	197.29
# Anomalous Samples	1	5	6	5	2	3	6
Ag Corr. Coeff,	1.00	0.01	0.40	0.49	0.13	-0.22	0.13
As Corr. Coeff.	0.01	1.00	0.14	0.13	0.40	0.13	0.24
Cu Corr. Coeff.	0.40	0.14	1.00	0.60	0.29	-0.07	0.22
Zn Corr. Coeff.	0.13	0.24	0.22	0.16	0.46	0.02	1.00

HISTORICAL MINING / PROSPECTING:

Minor alluvial workings. No details known.

PREVIOUS EXPLORATION:

IMI held ground over the eastern part of EL25/2020 as part of EL4/1961. Although most of their work focused on the Specimen Reef area to the NE, they also conducted some stream sediment, soil and rock sampling within the Arthur Lineament, X6, North-East, and Central areas within EL25/2020. Within the Central zone, this work followed up on a weak magnetic anomaly, and comprised of four soil sample lines, of which the western ends of two lines cross onto EL25/2020. No anomalous values were obtained, and no further work was recommended in the area.

Esso conducted an airborne magnetics survey over EL2/1973 in 1973, with this survey showing 13 anomalies located within EL25/2020. Anomalies X9, X10 and X11 were located in the Central zone, but no outcrop was located at the X9 anomaly, and X10 and X11 were not visited.

MLMRC briefly held EL26/1978 over the southern half of the Arthur Lineament, including the Central zone of EL25/2020. Their exploration focus was diamonds, following up on reports of diamonds in the area during early alluvial operations. Twelve bulk samples were taken, 5 from within EL25/2020. No kimberlitic materials were found within the samples, and the licence was relinquished.

MLMRC also held EL27/1978 at the same time, focusing on precious and base metal mineralisation. Work on this property was very limited, with most effort being directed towards diamond exploration within EL26/1978. Several stream sediment samples and four rock samples were collected in the southern part of the area, with a maximum of 450ppm Cu returned from rock chip sampling. Despite acknowledging the detail of work was insufficient to properly assess the property, MLMRC subsequently relinquished the property.

Cominex and several other parties explored the area to the NE of Corinna under EL37/1982. Initial work focused on silica flour, shifting to gold and base metals on the discovery of locally sourced gold in panned concentrate samples in the vicinity of the former Brookside alluvial workings. Purvis (in Taylor, 1988) mapped much of the area, with several of his sample locations describing lacy agate within the dolomite, including the "P12" and "P18" mineral occurrences. However, no mineralisation of note was found at these locations.

Geopeko explored the area for pyrrhotite-magnetite skarn with potential to host Sn mineralisation. Work included one diamond drillhole, ground magnetics, geological mapping, geochemistry (panned concentrate and stream sediment, rock chip, and several C-horizon soil samples), geological mapping, a fluid inclusion study, and microscopy. Fine crystalline gold was observed within silicified dolomite proximal to the faulted contact between the Corinna Dolomite and mudstones of the Bernafai Volcanics. Fluid inclusion studies did not find evidence of boiling, with silicification attributed to relatively low temperature silica, likely sourced from a gold-poor magmatic source (Henham, 1990). The majority of samples were taken a short distance outside EL25/2020, but several samples within the property were anomalous in Cu and Zn, with up to 265ppm and 305ppm respectively. They collected 150 C-horizon samples over a magnetic anomaly on the SW margin of the Bernafai Volcanics, but no anomalies were revealed except for a spot anomaly within carbonates (185ppm Cu, 220ppm Pb, and 480ppm Zn). Ba was anomalous over the magnetic anomaly. Rock sample assays were disappointing. They subsequently drilled a 302m diamond hole, which also returned disappointing results, with Sn below detection for all samples, and a maximum of 150ppm Cu from 30-31m. 1m samples were taken at 5m intervals throughout the hole with no regard for lithology. Processing of magnetics data by Stellar also suggests Geopeko may have missed their magnetic target, although there was some uncertainty over the precise drillhole location.

KEY RESULTS/FINDINGS:

- Silica flour has been the main exploration target for several parties.
- Assay results generally disappointing. Maximum 460ppm and 280ppm Cu in rocks and soils respectively.
- The "P12", "P18", and "L23" mineral occurrences host lacy agate, but no evidence of mineralisation has been noted. These are not deserving of being listed as mineral

occurrences. - Drilling by Geopeko intersected elevated Cu in one sample, but sampling was possibly inadequate at 1m samples every 5m. - Geophysical modelling by Stellar suggests Geopeko may have largely missed their geophysical target, and remains one of the more viable geophysical targets in the area. - In contrast with Upper Bernafai Volcanics (Tunnelrace Volcanics), Lower Bernafai Volcanics have no distinct magnetic signature. - Anomalous Sn and W in rock assumed to be from sampling of float. - Speculation of possible shallow granite near the P12 occurrence, and possible K alteration along the Brookside Fault, further indicating possible nearby granite. - Mineralisation noted as more common at fault intersections.
NOTES / RECOMMENDATIONS: - Stream sediment sample locations downloaded from MRT site questionable. - No field work recommended until locations of stream sediment samples confirmed. - Relog and possibly resample Longback drill core (stored at MRT). - Mapping and sampling of SE part of area, near the contact with the Corinna Dolomite and the P12 occurrence.
REFERENCES: Henham, R.J. (1990): Exploration Licence 35/85 Corinna, West Tasmania. Report on Exploration to 20th April, 1990. For Aberfoyle. MRT Report No. 90-3018. Henham, R.J. (1990a): Brookside Joint Venture. Corinna District, Western Tasmania. ML's 98-102M/84 Brookside, EL35/85 Corinna, EL22/88 Newdgate Creek and EL 57.83 Mt. Donaldson. Final Report on Exploration to 1st August, 1990. MRT Report No. 90-3191. Hutton M.J. (1980): Exploration Licence 26/78 (Tasmania), Pieman Precious Stones. Relinquishment Report. The Mount Lyell Mining and Railway Company Limited. MRT Report No. 81-1517. Hutton M.J. (1981): Exploration Licence 27/78 (Tasmania), Donaldson, All Minerals. Progress Report. The Mount Lyell Mining and Railway Company Limited. MRT Report No. 81-1520. Large, R. R. (1987): A Report to Cominex on an assessment of the data on the Brookside Gold Prospect, Corinna District, Tasmania. MRT Report No. 88-2787. Taylor, S. Leaman, D.E. (1988): EL37/82 – The Longback, Tasmania. Review of Magnetic and Gravity Data for Norgold Limited. In E.L. 37/82 Longback. Annual Report on exploration Activity, April 1988-April 1989. Electrolytic Zinc company of Australasia Limited. MRT Report No. 89-2959. Muir, P. (2014): Report on Aeromagnetic Data over exploration licence EL36/2010. Corinna area, western Tasmania. August 2014. Appendix 1; Annual Report 2013-2014 for EL36/2010 by Gregory, R. MRT Report No. 15_7126. Neale, R.C. (1974): Exploration Licence 2/73 Pieman River, Tasmania. Completion Report. MRT Report No. 74-0987. Pemberton, J. (1984): Progress report on Longback E.L. 37/82 Tasmania. For Geopeko. MRT Report No. 84-2111. Pemberton, J. (1984a): Progress Report in E.L. 37/82 Longback, Tasmania. For Geopeko. MRT Report No. 85-2364. Penny, B.G., Shannon, C.H.C., Vanzino, L. (1984): Report on Field Investigations within Exploration Licence 4/61. West Coast, Tasmania. Summer Field Season 1983-1984. Industrial and Mining Investigations Pty. Limited. MRT Report No. 84-2662. Taylor, S. (1988): Exploration Licence 37/82 Longback, Tasmania. Annual Report on Exploration for the Period 1.5.87 to 5.4.88. Norgold Limited. MRT Report no. 88-2800.

PROSPECT ZONE	North-West
PROSPECTS	
LOCALITY	9km west of Savage River (approx. 342200E, 5402600N)
COMMODITY	
STYLE	Structural
STATUS	Greenfields
PROSPECTIVITY RATING	VERY LOW

SUMMARY:

The North-West zone is considered a low-prospectivity zone, dominated by Mesoproterozoic to Neoproterozoic sediments of the Rocky Cape Block including quartzarenite, sandstone, siltstone and mudstone. These rocks have been intruded by the Neoproterozoic Tayatea Dolerite dykes, and overlain by zones of Tertiary and Quaternary gravels and sediments.

Exploration and sampling in the area has been centred around airborne magnetics features, which have generally been caused by stratigraphy, including bands of shale and units with graphitic shear but have not been fully explored, and form the most viable exploration targets, with insufficient sampling and mapping of a major magnetic feature in the eastern part of the property.

In the northern part of the area stream sediment and rock sample data have been collected in varying locations, with sediments testing ground in the east, and rock samples mostly located in the NW or southern parts of the company. Maximum assays for stream sediment samples have included 20ppm Cu and 60ppm Zn, with precious metals rarely assayed.

GEOLOGY:

The North-West zone is composed predominantly of Mesoproterozoic sediments. These sediments include a lower unit of cross-bedded quartzarenite, micaceous quartz sandstone, slaty to massive chloritic siltstone and minor mudstone, interlayered(?) with siliceous to carbonaceous laminated siltstone, quartzose sandstone and laminated carbonaceous shale. Minor intrusions of Neoproterozoic dolerite occur within these sediments in the form of dykes intruded along bedding. The easternmost part of the zone is underlain by units poorly constrained in age, either Meso- or Neoproterozoic in age. These are composed of two packages: (1) pale weathering, variably silicified quartzarenite, well bedded and commonly with cross-lamination of trough and planar-tabular types and oscillation ripple bedforms, and with minor horizons of laminated siltstone, and (2) dominantly planar laminated grey and dark grey to pale-cream weathering pelitic siltstone and mudstone with thin micaceous fine-grained cross-bedded quartzose sandstone interbeds. These packages are interlayered, and the siltstone beds may represent periods of basin subsidence. Bedding generally dips moderate to steeply to the east, trending towards the NE in the southern part of the area. The nature of the contact with the underlying sediments is unknown, but given the uncertainty in the age of this unit, it is assumed to be unconformable.

Parts of the area are covered with siliceous gravel, quartz sand and clay of Tertiary age, with Quaternary talus and sediments also present.

Magnetics data show several magnetic features within the Balfour Subgroup sediments which are aligned with geology. The most prominent of these is near the eastern margin of the unit, and closely follows the stratigraphy in line with an exposure of the Tayatea Dolerite. However, dolerite in other locations does not produce a magnetic anomaly, so this is unlikely to be the cause. It is instead suggested these features are related to graphitic shear related to the development of the Arthur Lineament, or less likely, ultramafics intruding along structural weaknesses (none have been described in the area).

MINERALISATION:

None noted, but likely structurally controlled.

SAMPLES:

Sampling of the area is patchy at best. Stream sediment samples are concentrated in the NE part of

the area, while assay results for only 13 rock samples are known, and concentrated in the NW and S of the area. No soil samples have been collected in the area apart from several on the northern side of the Longback prospect, which have been included in that zone.

Stream sediments: 34 stream sediments and one pan concentrate are known in the area. The pan concentrate was noted as containing no heavy minerals, and was not analysed. Only one sample was tested for Au, and this was below detection, while 14 of the 18 samples analysed for Cu were on the detection limit of 5ppm, up to a maximum of 20ppm. Two samples elevated in Cu (20 and 15ppm Cu) were also anomalous in Zn, with 25 and 60ppm returned respectively. There are insufficient data for analysis.

Rocks: Of 35 rock samples, assays are only known for 13 samples. There are insufficient data for any statistics, but values were generally low, with a maximum of 360ppm Cu and 120ppm Zn. One sample returned 1ppm Ag and 5ppb Au, but no description is available for these samples.

HISTORICAL MINING / PROSPECTING:

No details are available, but alluvial workings have targeted Tertiary sediments in the area.

PREVIOUS EXPLORATION:

Esso conducted an airborne magnetics survey over EL2/1973 in 1973, with this survey showing 13 anomalies located within EL25/2020. Anomalies X2, 14, 15, 16, 17, 19 and 20 were located within the North-West zone. Of the 5 sites visited on foot, outcrop was only located at one (X17), which consisted of black slate, with the same conductive source interpreted for the remainder of the anomalies. A rock sample taken from X17 returned low values for base metals, and no further work was carried out in the area.

MLMRC briefly held EL26/1978 over the southern half of the Arthur Lineament, including the North-West zone of EL25/2020. Their exploration focus was diamonds, following up on reports of diamonds in the area during early alluvial operations. Twelve bulk samples were taken, 5 from within EL25/2020. No kimberlitic materials were found within the samples, and the licence was relinquished. They also held EL27/1978 at the same time, focusing on precious and base metal mineralisation. Work on this property was very limited, with most effort being directed towards diamond exploration under EL26/1978. Several stream sediment samples were collected in the southern part of the area, but no anomalous assays were returned.

In 1983, Geopeko followed up on magnetic anomalies obtained in a 1981 Mines Department survey, completing ground magnetics and soil sampling at 7 sites. Anomaly Bolt 2 is located in the NW of EL25/2020, and forms a minor lenticular anomaly. Ground magnetics gave a small response, with the geology of the area composed of weathered amphibolite and laminated black shale/grey siltstone. Soil samples may have been taken here, but assay results provided by Geopeko over all the anomalies have no geographic reference. No further work was recommended for anomaly Bolt 2.

M. Sweeney held a small parcel within the North-West zone from 2004-2007, and prospected for heavy minerals. A total of 20 heavy mineral concentrates, sediments and rock samples were taken, with descriptions of sample contents provided, but no assays are known. Chromite was noted in 7 samples, rutile in 5, and cassiterite and magnetite in 3. Rock samples did not contain notable amounts of the above minerals. No interpretations of providence were provided, and the claim was relinquished in 2007.

McDermott Mining held ground over part of the North-West zone under EL26/2006, and reviewed historical work in the area, noting that Cominex/Geopeko did not test two "significant" geophysical anomalies. McDermott planned to follow up on these untested anomalies, but relinquished the prior to doing so.

Regalpoint Exploration assayed several samples of siltstone and quartzite near Proterozoic dolerite in the NW of the property close to Norfolk Road for various forms of uranium deposits during exploration on 56/2007. However, assay results were disappointing with a maximum of 25.4ppm U, and no further work was completed on the property.

KEY RESULTS/FINDINGS:

- Very little work conducted on property, mostly following up on modelled conductors.
- Insufficient rock chip or stream sediment samples for proper assessment.
- Maximum Cu in sediments 20ppm, and Zn to 120ppm. Cu to 360ppm in rock samples.

NOTES / RECOMMENDATIONS:

- Chromite and cassiterite in sediments probably sourced from ultramafic and granitic materials within Tertiary sediments not shown on 1:25,000 maps.
- No highly attractive targets, with geophysical anomalies generally attributed to stratigraphic features.
- Geological mapping of the large magnetic feature in the SE of the area may establish the nature of the anomaly, with this possibly accompanied by stream sediment sampling (see Figure 11).
- No anomalous highly anomalous geochemistry in available data.
- Very low prospectivity due to likelihood of stratigraphic features causing EM and magnetic anomalies.

REFERENCES:

Gauci, M. (2010): Combined Annual Report for the Period 23 January 2009 to 22 January 2010, Rocky Cape Project. EL56/2007, EL57/2007, EL58/2007. Regalpoint Exploration Ltd. MRT Report No. 09_5988.

Hutton M.J. (1980): Exploration Licence 26/78 (Tasmania), Pieman Precious Stones. Relinquishment Report. The Mount Lyell Mining and Railway Company Limited. MRT Report No. 81-1517.

Hutton M.J. (1981): Exploration Licence 27/78 (Tasmania), Donaldson, All Minerals. Progress Report. The Mount Lyell Mining and Railway Company Limited. MRT Report No. 81-1520.

McDermott, K. (2009): Relinquishment Report for EL26/2006, Donaldson River. McDermott Mining Pty. Ltd.

Neale, R.C. (1974): Exploration Licence 2/73 Pieman River, Tasmania. Completion Report. MRT Report No. 74-0987.

Pemberton, J. (1984): Annual Report on E.L. 17/83 Mt Bolton, Tasmania. Geopeko. MRT Report No. 84-2152.

Sweeney, M. (2006): Exploration Licence EL17/2004, Annual Report.

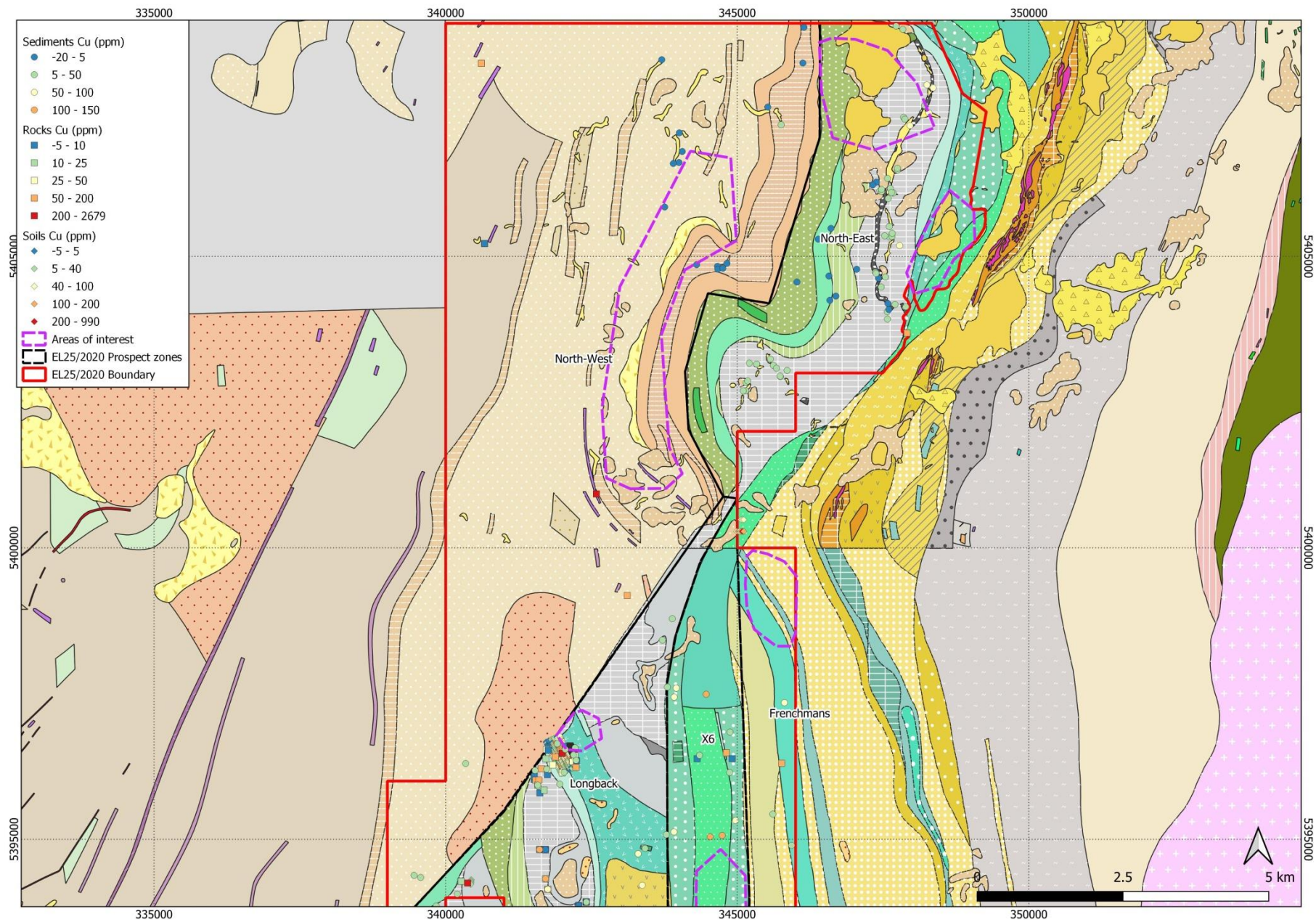


Figure 11: Geology of the North-West and North-East zones with surface geochemistry for Cu, and main areas of interest. Refer to Figure 3 for geology legend.

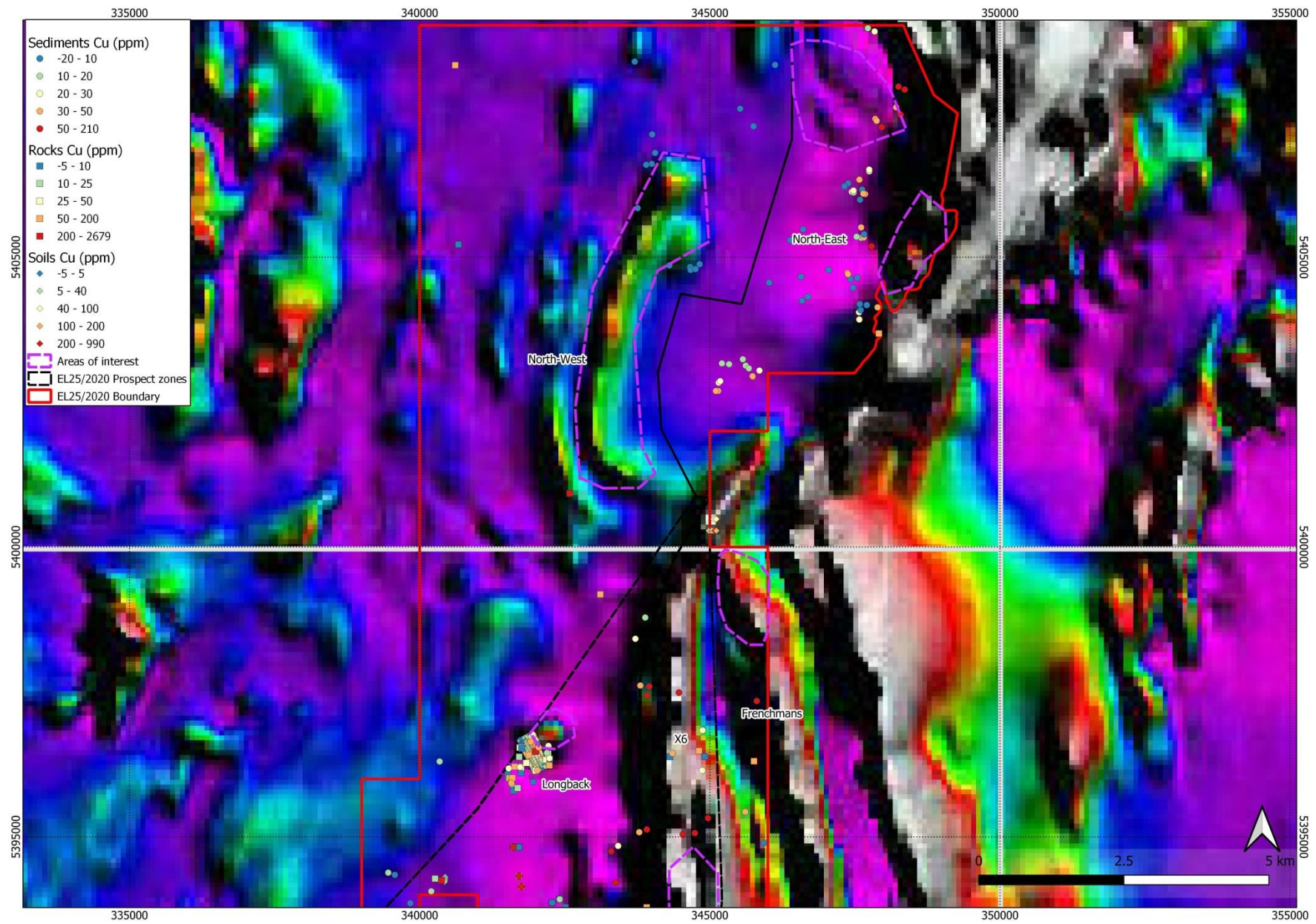


Figure 12: Regional aeromagnetics data over the North-West and North-East zones with surface geochemistry for Cu and main areas of interest. Main aeromagnetic anomaly in the North-West zone has not been sufficiently explained, while areas of interest in the North-East zone relate to NW-trending structures and volcanics adjacent to the Savage River deposit.

PROSPECT ZONE	North-East
PROSPECTS	
LOCALITY	4.5km NW of Savage River (approx. 347500E, 5405700N)
COMMODITY	Cu-Zn
STYLE	
STATUS	Greenfields
PROSPECTIVITY RATING	LOW-MODERATE

SUMMARY:

Geology of the area is predominantly Ahrberg Group, ranging from Donaldson Formation conglomerate to the upper Bernafai Volcanics (Tunnelrace Volcanics), with areas overlain by Tertiary basalts and gravels. Minor alluvial workings have been noted, but no details are known.

Sampling of the area consists of stream sediment and pan concentrate sampling, with elevated geochemistry for Cu, Zn, Ni and Co mostly located in the north. Only one rock sample has been assayed in the area. The source of elevated geochemistry is unknown, but likely related to NW structures visible in magnetics data, and are worthy of investigation.

Magnetics data over the Bernafai Volcanics is at least partially masked by the Savage River magnetic high, but may also be worth additional stream sediment sampling and reconnaissance mapping.

GEOLOGY:

The geology of the North-East zone is mostly Proterozoic Ahrberg Group, and generally oriented NNE-SSW, and youngs to the east. Donaldson Formation conglomerate with minor zones of laminated to slaty siltstone and mudstone are the oldest rocks in the area, overlying Rocky Cape Group rocks to the west. The conglomerate is overlain by micaceous quartzwacke, again with laminated to slaty silt and mudstone interbeds, with a pelitic siltstone with minor chert and thin dolomitic interbeds forming the top of the Donaldson Formation.

The fine-grained and locally oolitic Savage Dolomite overlies the Donaldson Formation, and composes the majority of the rocks in the area, with an extensive sub-unit of planar laminated carbonaceous siltstone in the centre of the area providing an excellent stratigraphic marker.

Bernafai Volcanics unconformably overlie the Savage Dolomite to the east. A tuffaceous and pelitic metasilstone forms the base of the volcanics, with layers of pebbly basaltic wacke becoming more common, and this overlain by flows of massive basalt and interbanded slaty or phyllitic to massive tuffaceous and pelitic chloritic metasilstone. An extensive unit of metabasalt overlies these, with interbeds of tuffaceous and pelitic siltstone, continuing past the margin of EL25/2020.

Immediately overlying the Bernafai volcanics to the east are Arthur Lineament rocks, hosting massive magnetite at the Savage River mine.

Tertiary basalts and gravels cover large areas in the northern part of the zone, with Quaternary sediments common in drainages.

Rocks have been multiply deformed, with at least two generations of folding, oriented NNE and SE, with rocks generally dipping towards the SE.

Aeromagnetics data show Donaldson Formation sediments and Savage Dolomite to be magnetically unresponsive. Bernafai Volcanics are weakly magnetic, but the extreme high produced by massive magnetite in the Savage River deposit obscures much of the magnetic signal of these rocks. Weak magnetic features in the NW of the area are probably caused by basalts, but may also reflect NW-trending structures, and are coincident with elevated geochemistry in drainages.

MINERALISATION:

No primary mineralisation noted. Minor alluvial workings in area.

SAMPLES:

Stream sediments: 36 stream sediment and 21 pan concentrate samples are known within the north-east zone, and are spread throughout the zone within the extensive Savage Dolomite, with streams sourced from the dolomite, Donaldson Formation sediments, Bernafai Volcanics, and

Tertiary basalts and gravels. Co-Ni show an extremely strong correlation, while Cu-Ni and Cu-Zn have strong correlations in both stream sediments and pan concentrates. The northern end of the area appears to have the most consistently elevated geochemistry, but this occurs sporadically throughout the property and from all units, possibly suggesting influence from Tertiary and Quaternary materials.

North-East zone stream sediment samples.

	As_ppm	Ba_ppm	Co_ppb	Cu_ppm	Ni_ppm	Pb_ppm	Zn_ppm
# of Samples	15	15	15	36	15	33	36
Max	16.00	873.00	65.00	50.00	150.00	55.00	205.00
Average	6.53	284.20	35.00	17.44	75.73	11.55	64.86
Anomalous Threshold	14.86	726.12	64.89	49.76	156.40	30.13	175.05
# Anomalous Samples	2	1	1	2	0	1	1
As Corr. Coeff.	1.00	0.73	-0.36	0.32	-0.29	0.36	-0.09
Cu Corr. Coeff.	0.32	0.37	0.52	1.00	0.65	0.24	0.88
Ni Corr. Coeff.	-0.29	-0.16	0.91	0.65	1.00	-0.29	0.68
Zn Corr. Coeff.	-0.09	-0.11	0.59	0.88	0.68	0.18	1.00

North-East zone pan concentrate samples.

	As_ppm	Ba_ppm	Co_ppm	Cu_ppm	Ni_ppm	Pb_ppm	Zn_ppm
# of Samples	19	21	21	21	21	21	21
Max	16	1620	65	85	200	55	205
Average	6.95	416.19	36.90	41.19	86.95	12.14	113.33
Anomalous Threshold	15.34	1280.80	68.30	81.53	186.29	36.36	211.23
# Anomalous Samples	1	2	0	1	1		0
As Corr. Coeff.	1.00	0.49	-0.05	0.27	-0.11	0.33	0.15
Cu Corr. Coeff.	0.27	0.67	0.64	1.00	0.74	-0.07	0.57
Ni Corr. Coeff.	-0.11	0.40	0.91	0.74	1.00	-0.17	0.67
Zn Corr. Coeff.	0.15	0.47	0.62	0.57	0.67	0.02	1.00

Rocks: Only one assay is known for rocks in the North-East zone, with this of basaltic composition and containing unremarkable base metal content.

HISTORICAL MINING / PROSPECTING:

Historic alluvial workings are noted on the margin of Savage River by Penny (1984), and reported as platinoids, gold, osmiridium and iridium, but no details on recovery are known.

PREVIOUS EXPLORATION:

IMI held ground over the eastern part of EL25/2020 as part of EL4/1961. Although most of their work focused on the Specimen Reef area to the NE, they also conducted some stream sediment, soil and heavy mineral sampling within the Arthur Lineament, X6, North-East, and Central areas within EL25/2020.

Within the North-East zone, this work comprised 22 heavy mineral samples in two drainages exploring for diamonds hosted by potential kimberlite intrusions into the Precambrian rocks. This was shown to be incorrect, with the area underlain by dolomite, and no diamonds or diamond indicator minerals detected.

MLMRC briefly held EL26/1978 over the southern half of the Arthur Lineament, including the North-East zone of EL25/2020. Their exploration focus was diamonds, following up on reports of diamonds

in the area during early alluvial operations. Twelve bulk samples were taken, 5 from within EL25/2020. No kimberlitic materials were found within the samples, and the licence was relinquished.

KEY RESULTS/FINDINGS:

- Elevated multi-element geochemistry in northern part of area, with no explanation known.
- Subtle magnetic features in NW of area may be related to basalts, but appear to highlight two NW-trending structures sub-parallel with the northern termination of the Savage Dolomite.
- Few assays for precious metals.

NOTES / RECOMMENDATIONS:

- Consistently elevated stream sediments in the northern part of the property are possibly related to NW trending structures, and warrant follow-up.
- Recommend stream sediments and mapping in the northern part of the property, especially in the vicinity of the Bernafai Volcanics, and in the NW corner, where possible NW-SE structures are evident within magnetics (possibly topography and basalt related??)
- Would have received moderate prospectivity rating, but to elevated geochemistry in north, but downgraded due to extensive Tertiary material in the area.

REFERENCES:

Hutton M.J. (1980): Exploration Licence 26/78 (Tasmania), Pieman Precious Stones. Relinquishment Report. The Mount Lyell Mining and Railway Company Limited. MRT Report No. 81-1517.

Penny, B.G., Shannon, C.H.C., Vanzino, L. (1984): Report on Field Investigations within Exploration Licence 4/61. West Coast, Tasmania. Summer Field Season 1983-1984. Industrial and Mining Investigations Pty. Limited. MRT Report No. 84-2662.

References:

Bravo, G. and Rigg, A. (2008): Exploration Targets within Corinna EL44/2006. Appendix 2 in EL44/2006 Corinna Annual Report for the Period 17 April 2007 – 16 February 2008. Stellar Resources Limited. MRT Report No. 08_5609.

Crawford, A.J. (1992): Geochemistry and implications of mafic metavolcanics in the Corinna-Savage River area, in: TURNER, N. 1. (ed.). Corinna 1:50000 Geological Map. Field guide to selected rock exposures. *Report Department of Mines Tasmania. 1992/06.*

Holm, H., Crawford, A.J., and Berry, R.F. (2003): geochemistry and tectonic settings of meta-igneous rocks in the Arthur Lineament and surrounding area, northwest Tasmania. *Australian Journal of Earth Sciences* 50:6, 903-918.

Rigg, A.M. (2007): EL44/2006 Corinna – Literature Search Chronology of Prior Exploration. In EL44/2006 Corinna. Annual Report for the Period 17 April 2007 – 16 February 2008. Stellar Resources Limited. MRT Report 08_5609.

Seymour, D.B., Green, G.R., Calver, C.R. (2013): The Geology and Mineral Deposits of Tasmania” a summary. Third Edition. Geological Survey Bulletin 72. Mineral Resources Tasmania.

Turner, N.J. and Crawford, A.J. (1993): General features and chemical analyses of mafic and other rocks, Corinna geological map quadrangle. Mineral Resources Tasmania Report 1993/23.