



PARAGON RESOURCES:

ANNUAL REPORT, EL18/2010, ELLIOTT BAY

prepared by **Dr Alistair Reed, BSc, PhD, MAIG**

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SUMMARY

This is the first Annual Report for EL 18/2010, Elliott Bay. It provides details of Paragon Resources Pty Ltd exploration philosophy and progress for the year to October, 2011.

A literature review has commenced in conjunction with purchase of a package of maps detailing the results of processing of geophysical and remote sensed data. The package was completed in 2003 by Earthsearch Australia (now Metalstocks Australia) but was not made available until 2010.

Previous exploration in the Elliott Bay area focussed on Rosebery-style massive-sulphide lead-zinc mineralisation, with relatively little exploration for gold. Yet, the Mount Read Volcanics have produced a number of >1Moz gold deposits. The Elliott Bay area also boasts considerable untested gold anomalism, up to 484g/t gold.

The source of gold at Elliott Bay has gone unexplained. Yet, processing of regional WTRMP aeromagnetic and radiometric data sets, satellite data and historic geology and geochemistry by Earthsearch shows hitherto unmapped structures. These structures lie close to many high-value gold anomalies in nearby streams and are a potential foci for gold mineralisation.

The levels of gold anomalism, age and style of mineralisation, and identification of discrete structures and areas of alteration support Elliott Bay as being prospective for a >1Moz Henty-style gold deposit.

Exploration targets have been prioritised with initial field-checking of new targets recommended for summer, 2012.

Total expenditure on EL18/2010 for Year 1 has been \$53,019.

INTRODUCTION

Exploration philosophy

The Elliott Bay region in the Southern Mount Read Volcanic belt (SMRV) has been held under exploration licence almost continually since the early 1960's. Most work in the area has focussed on identifying and testing for lead and zinc mineralisation in what have been interpreted as VHMS-related mineralising systems. By contrast, little effort has been spent on following up on extensive gold anomalism in the region.

Historic stream sediment data from the 1980's shows anomalous panned concentrate (pancon) gold results throughout the Elliott Bay licence area that range up to more than 500 grams/t gold. These very high values were not always accompanied by high lead and zinc and, as such, were often explained as relating to transported gold in Tertiary gravels or to locally remobilised gold into Devonian age vein systems. The distribution of the gold is certainly inconsistent with mapped distribution of Tertiary gravel.

Previous exploration efforts in the SMRV were biased toward discovery of large, high-grade, poly-metallic massive sulphide deposits, exemplified by Rosebery and Hellyer. However, the most interesting target for gold mineralisation in the SMRV is a deposit similar to the currently operating Henty – Mt Julia gold mine. The Henty deposit is the most recent discovery brought into production in the Mount Read Volcanic belt, and was not well understood when most regional work was being done in the SMRV.

The Henty deposit is significantly different to the other poly-metallic massive sulphide deposits located in the northern MRV and which were used as templates for exploration in much of the Elliott Bay area. The existence of a small lens of massive pyrite (detected by IP survey) led to the initial discovery of Henty in 1974. However, unlike the other massive sulphide deposits, the ore zone at Henty is relatively quartz-rich and sulphide-poor. The gold potential at Henty went unrecognised until 1984 and it required a further 5 years persistent exploration drilling to realize its full significance. The main part of the resource was intersected in the 96th hole.

Similar gossanous pods outcrop at various locations throughout the SMRV, within EL18/2010.

Furthermore, structures associated with areas of stream sediment anomalism have since been identified using Western Tasmanian Regional Minerals Program (WTRMP) radiometric and aeromagnetic data (EarthSearch, now Metalstocks Pty Ltd). These data clearly show anomalies across multiple radiometric and aeromagnetic datasets in areas of anomalous gold in stream sediment. These geophysical features are not always shown on regional geological maps, but do match known trends within the mapped geology.

Recent development of genetic models and recognition of Henty as an economic deposit-style have positive implications for the conceptual prospectivity of the SMRV, whereas recognition of structures associated with anomalous gold enhance prospectivity on the ground. Yet, Elliott Bay is remote, access is difficult and prospective ground is included within a Conservation Area. The question, therefore is not one of prospectivity, but, rather, whether it makes economic sense to explore. A larger size of deposit is required to justify higher capital and operating costs. However, there are several economic and strategic arguments for exploring at Elliott Bay.

Firstly, the price of gold has increased from about \$US250-350/oz in the early 2000's to more than \$US1500 in recent years. This is offset to some extent by rising operating costs and a stronger \$A, but remains significantly greater than during previous exploration. The higher gold price in context of better defined and better-justified exploration targets justifies exploration today more than it did in the past.

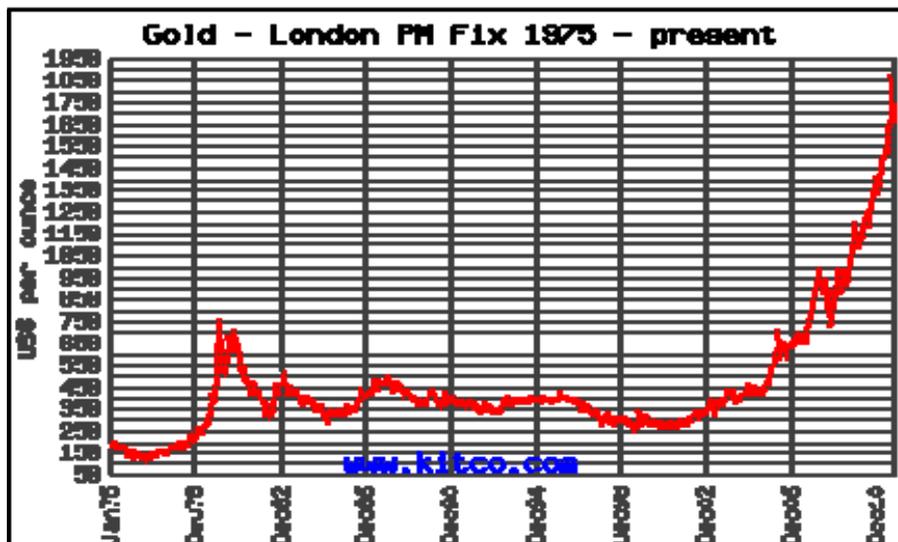


Figure 1. Gold price in \$US/oz (1975-present). Source www.kitco.com.

Secondly, the cost-benefit gap between exploration in traditional areas such as the Yilgarn in Western Australia and those in Tasmania has closed. Where the cost of exploring in traditional gold provinces is increased, so too has the chance of an exploration success diminished. Companies either spend more and look deeper or, alternatively, choose to spend money in regions with higher sovereign risk. Higher exploration costs are also matched by higher capital and operating costs.

By contrast, the levels of gold anomalism in the SMRV are much higher than what you would normally expect in Western Australia, or even overseas. Mineralisation is visible at surface with little or no cover.

EL18/2010 is contained within a conservation area but is also part of a Special Prospectivity Zone (SPZ). This legislation is unique to Tasmania and aims to reduce sovereign risk to the explorer by providing compensation should there be a change of land status. The SPZ legislation offers greater certainty to the explorer than might ordinarily be expected elsewhere in Australia.

Finally, Native Title is not the same issue in Tasmania as it is elsewhere in Australia. The *Native Title (Tasmania) Act 1994 (Tas)* confirms State ownership of all natural resources, control and regulation of the flow of water, and existing fishing access rights under State law; as well as existing public access to and enjoyment of waterways, beds, banks and foreshores of waterways, coastal waters, beaches and areas that were public places as at 31 December 1993. There are no claims for native title over Elliott Bay.

In summary, difficult access and a low gold prices has contributed to a lack of exploration in the SMRV. For the work that has been completed, a focus on looking for massive sulphide deposits of lead and zinc and a concomitant lack of understanding of models governing gold mineralisation has contributed to a blinkered approach to exploration. The gold price is now much higher than at any time in the past, with any added cost of exploring offset against the shallow nature of the mineralisation and lack of cover. Exploration is also focussed, with a number discreet high quality targets identified nearby to previously unexplained high levels of gold anomalism.

Regional setting

Rocks of cover sequences that postdate the major metallogenic events in Tasmania cover about a third of the State. A further approximately 19% of the State is World Heritage Area and unavailable for exploration. The latter area covers mainly Pre-Cambrian terranes of relatively little economic significance.

The remaining roughly 50% of the State can be broadly classified into metallogenic domains hosting a number of mineral deposit types. These are in order of age:

- The north, north – east trending Late Proterozoic Arthur lineament that hosts iron ore and magnesite in north – west Tasmania;
- The Early Cambrian minor mineralisation styles in mafic and ultra-mafic rocks including platinum group minerals (PGMs), nickel, copper, cobalt, gold and other minerals;
- The well-mineralised Middle Cambrian Mount Read Volcanics (MRV) which host volcanic hosted massive sulphides (VHMS) and disseminated deposits;
- The Middle Devonian mesothermal gold deposits hosted by the Mathinna Beds of northern and north – eastern Tasmania; and
- Late Devonian to Early Carboniferous granite associated tin and tungsten deposits as well as a wide variety of other mineralisation styles.

The MRV hosts three of Tasmania's six 'world – class' deposits. The potential size of this style of mineral deposit discovery can be seen in *Table 1.1*.

Table 1 Pre-Mining Resources – Examples of some Cambrian MRV hosted deposits (up to 2003)

Deposit	Tonne (million)	Cu %	Zn %	Pb %	Ag g/t	Au g/t	World Class
Mt Lyell (field)	311.0	0.97				0.31	*
Rosebery	31.7	0.58	14.3	4.4	146.0	2.30	*
Hellyer	16.5	0.38	13.9	7.2	169.0	2.55	*
Hercules	3.33	0.40	17.3	5.5	171.0	2.80	
Que River	3.3	0.70	13.3	7.4	195.0	3.30	
Henty – Mt Julia	1.82					13.44	

* *Criterion is 100t of gold (3.2 million ounce) or equivalent*

EL18/2010 is contained within the Southern Mt Read Volcanics (SMRV) and is highly prospective for VHMS- and/or porphyry-related gold (and base metal) mineralisation of Cambrian age. This is the same style and age of mineralisation as with the world-class deposits elsewhere in the MRV.

Exploration Licence EL18/2010, Elliott Bay

The Elliott Bay project (EL18/2010) is located in the SMRV (Southern Mount Read Volcanics). The tenements covers the southern section of the MRV volcanics and related intrusives.

Major mineralised systems occur in the northern section of the MRV as shown in *Table 1.1* and located in Figure 1. Three of these have been classified as 'World – class', i.e. Mt Lyell (Cu – Au), Rosebery and Hellyer (Zn – polymetallic).

The SMRV Project area has not recorded any metal production to date.

Reconnaissance exploration commenced in the 1950's with focussed modern mineral exploration really only starting in the 1970s, mainly by Geopeko Ltd, in the Elliott Bay area. A number of exploration programs were undertaken over a number of phases. These have been undertaken by a number of different companies, ranging from small private and ASX listed companies through to large multi national companies.

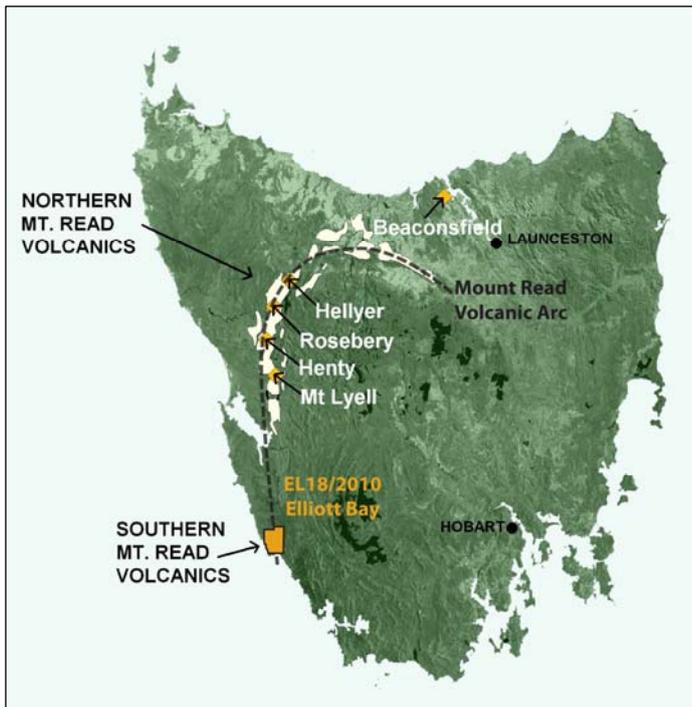


Figure 2. Location map showing Elliott Bay licence and major Tasmanian mineral deposits hosted within the same Mt Read Volcanic belt.

Lewis River zone, the Hudson River zone and around the Low Rocky Point granite, gold anomalism is widespread and the sources have not been satisfactorily explained.

A major conceptual gold target is a deposit similar to the Henty – Mt Julia system in the northern section of the MRV. Recent reinterpretation of new aeromagnetic data coupled with a detailed appreciation of a ‘Henty-style’ conceptual genetic model has indicated good prospectivity in a number of areas in the SMRV for this style of mineralisation.

EL18/2010 was granted on 24th November 2010 without objection. The tenement covers about 168km² of Mount Read

The geology comprises a belt of Cambrian calc – alkaline felsic to mafic volcanics. Volcanic rocks outcrop and are highly prospective for gold, silver and base metals (copper, lead, zinc).

The region has been significantly under-explored in comparison with the much better known northern section of the volcanic belt. This northern section covering approximately eighty kilometres of strike of similar volcanics from Hellyer to Mount Darwin host the substantial mineralised deposits listed in Table 1.

Access & weather

Access to the area is by unformed track from Macquarie Harbour. Larger vehicles (such as drill rigs and support vehicles) need to be ferried across Macquarie Harbour by barge or boat. Alternatively, Frontier Resources barged drilling equipment down the west coast, landing west of EL18/2010.

Access for light exploration is best by helicopter or light aircraft. There is a formed airstrip 5km north of the northern boundary of EL18/2010. However, access is subject to the weather.

The area is exposed to south westerly weather that dominates the western side of Tasmania. Fieldwork is seasonal with ground access easiest between December and May.

There is a significant amount of data available for the area, including some detailed regional geological maps produced by the Tasmanian government in the 1980's and early 1990's.

Exploration targets have been similar, both gold and base metal sulphides conceptually similar to the VHMS deposits known in the northern MRV. More recently the potential for some different gold targets has also been recognised.

At Elliott Bay exploration has almost entirely focused on Wart Hill, a VHMS style massive sulphide occurrence where lenses of massive sulphide have been found at surface in a favourable geological environment. Results include 1.1 metres at 10.39% Pb, 23.55% Zn, 123 g/t Ag and 0.63 g/t Au and 2m of 11.7% Zn, 6.02% Pb, 59g/t Ag and 2.33 g/t Au. Frontier estimated an inferred resource at Wart Hill of 550,000t at 7.2% Zn, 3.4% Pb, 94.3 g/t Ag and 0.5 g/t Au. Mineralisation at Wart Hill is currently held by Frontier Resources (an enclave contained within Paragon's EL18/2010).

Exploration at Wart Hill for base metal mineralisation has focussed attention away from the many other geochemical anomalies in the Elliott Bay area. At the

Land status

Certain sectors of central and south – west Tasmania are World Heritage listed. The MRV (and some areas of volcanics on the Sorell Peninsula) have been specifically excluded from this listing on the basis of their mineral prospectivity.

Prior to the World Heritage listing all areas were classified as part of the South West Conservation Area. In 1992, the Tasmanian Government proclaimed the prospective rocks south of Macquarie Harbour to be within the Sorell Peninsula Prospectivity Zone in recognition of the mineral potential of the area. Any change in the status of the land within the Zone requires approval of both houses of the Tasmanian parliament with any affected party entitled to compensation.

EL18/2010 comprises entirely Crown land. There is no private land.

There are no Native Title claims over the Elliott Bay region.

GEOLOGY

This section gives a brief overview of the regional Palaeozoic geological setting of the Mount Read Volcanics (MRV) and the geology of Southern Mount Read Volcanics (SMRV) in the vicinity of EL18/2010 (Elliott Bay).

Regional geology

A major period of volcanic eruption in the Cambrian period (circa 500Ma) resulted in the development of the MRV. A chain of volcanoes developed along the eastern edge of a water filled rift, which developed in the Tasmanian Continental Crust forming an arcuate ocean basin.

The initial volcanism was predominantly rhyolitic – dacitic in composition. The main unit, the feldspar phyric Central Volcanic Complex, is host to the Rosebery and Hercules VHMS deposits and the ‘footwall style’ Mt Lyell copper deposit. The predominantly quartz – feldspar phyric Eastern Quartz Phyric Sequence erupted to the east.

This was followed by a phase of andesitic – basaltic volcanism with further rifting focussed to some extent on the Henty fault system. Major units are host to the Que River and Hellyer VHMS deposits and may also mark the time at which the Mount Lyell deposit formed.

Further rifting occurred on the Henty fault system followed by the mainly felsic final phase of volcanism. Coeval with the deposition of these dominantly volcanic sequences was the deposition of the Western Volcano-Sedimentary Sequences containing sediments of mixed volcanic or metamorphic provenance and minor felsic and andesitic volcanics.

Both Henty and Mt Lyell are major mineralised deposits hosted or controlled by faults. Gold-rich deposits such as Henty and Mt Lyell have characteristics of both VHMS- and porphyry copper-gold -style mineralisation.

A thick, often fault-controlled sequence of sandstone and conglomerate (the Owen conglomerate) was deposited in the Dundas Trough in the late Cambrian to Ordovician.

Subsequent intrusion of granitoids during the Devonian led to formation of tin and tungsten mineralisation and deposits and to a lesser extent, base metal and gold vein deposits.

Geology of the Southern Mount Read Belt (SMRV)

The SMRV are separated from the main belt of MRV north of the Gordon River. Geological understanding of the relationship between the northern and southern MRV is hindered by intervening Tertiary cover and a relative lack of drilling.

The simplified geology of EL18/2010 (Elliott Bay) is shown in Figure 3 and is briefly described below.

Basement to the Elliott Bay area likely comprises a sequence of deformed Precambrian metasediments (similar to those outcropping to the west of EL18/2010) and/or mafic lavas and associated sedimentary rocks.

Basement rocks are overlain by volcanoclastic and siliciclastic sediments correlated with the Sticht Range beds of the northern MRV sequence. This unit unconformably overlies and is in part fault contact with Precambrian metasediments east of EL18/2010.

Prospective Cambrian rocks in the Elliott Bay include a sequence, at the base of which is a 2 to 3 kilometre thick quartz – feldspar – biotite porphyry (Elliott Point Porphyry). The Elliott Bay porphyry outcrops in the east of the licence area.

The Lewis River Volcanics lie west and stratigraphically above the Elliott Point Porphyry. These are subdivided into the Hudson River and Wart Hill Pyroclastics. These consist of quartz – feldspar – phyrlic volcanoclastics including sediments and possible pyroclastics, quartz – feldspar phyrlic lavas (intrusives?), quartz – feldspar – biotite phyrlic lavas and intrusives and minor intermediate lavas or intrusives.

The Waterloo Creek Group unconformably overlies the volcanics and comprises a unit of felsic derived volcanoclastics, overlain by a unit of black pyritic shale with minor horizons of micaceous siltstone. The Ordovician Owen Conglomerate siliciclastics conformably overlie the Waterloo Creek Group.

The Copper Creek fault is a major fault that extends from south to south – southwest through the west of EL18/2010. To the west of this fault the Western Epiclastics contain mafic volcanics possibly akin to the Mainwaring River Group further to the west.

Rocks west of the north-trending Copper Creek Fault (in the west of EL18/2010) consist predominantly of sedimentary and volcanoclastic rocks of quartz – feldspar – phyrlic and feldspar – phyrlic composition. There are also units of plagioclase – pyroxene – phyrlic lavas, black to grey shales, siltstones and sandstones with an intercalated felsic to intermediate volcanoclastics, as well as tholeiitic mafic lavas (intrusives) and mafic derived volcanoclastics.

Three granitoid bodies intrude the MRV at Elliott Bay; the Low Rocky Point granite, the Little Rocky River granite and the Stoney Creek porphyritic granite. The Low Rocky Point granite is a composite intrusion consisting of pink granite, cream adamellite and coarse porphyritic granite. The Stoney Creek body comprises granite porphyry with feldspar, quartz and biotite phenocrysts in an intensely sericitised and cleaved matrix. The Little Rocky River granite is also a composite intrusion consisting of massive granite porphyry and a strongly foliated medium – grained quartz feldspar porphyry.

Palaeozoic-age rocks at Elliott Bay have been folded and faulted during at least 2 phases of deformation. North to northwest-trending folds are accompanied by foliation development. Faults are common but not always well shown on regional maps. Faults typically (but not always) trend north to North-west, the latter possibly of importance with respect to focusing mineralisation in the northern MRV.

The relative timing of the intrusions and folding events is not known. There is, however, fairly good consensus that the granitoids are more or less synvolcanic i.e. Cambrian and predate Devonian deformation.

Sericite and/or chlorite alteration is common and can be pervasive.

General correlations have been made with the major units of the Elliott Bay area with those in the main part of the MRV to the north. Although specific correlations with the better known lithostratigraphy of the northern section of the MRV (north of Macquarie Harbour) are unavailable, there is consensus that the Elliott Bay area does represent the southern continuation of the MRV.

Mineralisation in the Elliott Bay area

A number of exploration programs in the Elliott Bay area has identified different types of mineralisation. Early prospects were often named after historic spacecraft (eg Voyager, prefix 'V'; Figure 3).

Gold mineralisation as:

- High grade in silicified structures – possibly 'Henty-style';
- In VHMS deposits, eg at Wart Hill (V19);
- As quartz – pyrite – tourmaline alteration zones related to shears, eg at North Lewis (V12);
- As quartz – gossanous zones associated with magnetite – chlorite alteration at granite margins, eg the Low Rocky Point granite;
- As stratabound vein style mineralisation in coarse pyroclastics, eg Sassy Creek (V24);
- As quartz veins, eg Hudson River Zone; and

- In Tertiary gravels.

Base metal sulphide mineralisation as:

- VHMS massive sulphide style, eg Wart Hill (V19);
- Vein style galena, sphalerite and arsenopyrite mineralisation along the Copper Creek fault eg. V31;
- Disseminated Pb – Zn – Ag mineralisation in volcanoclastics eg. Lewis River
- Postulated Besshi style, eg Mainwaring Group prospects

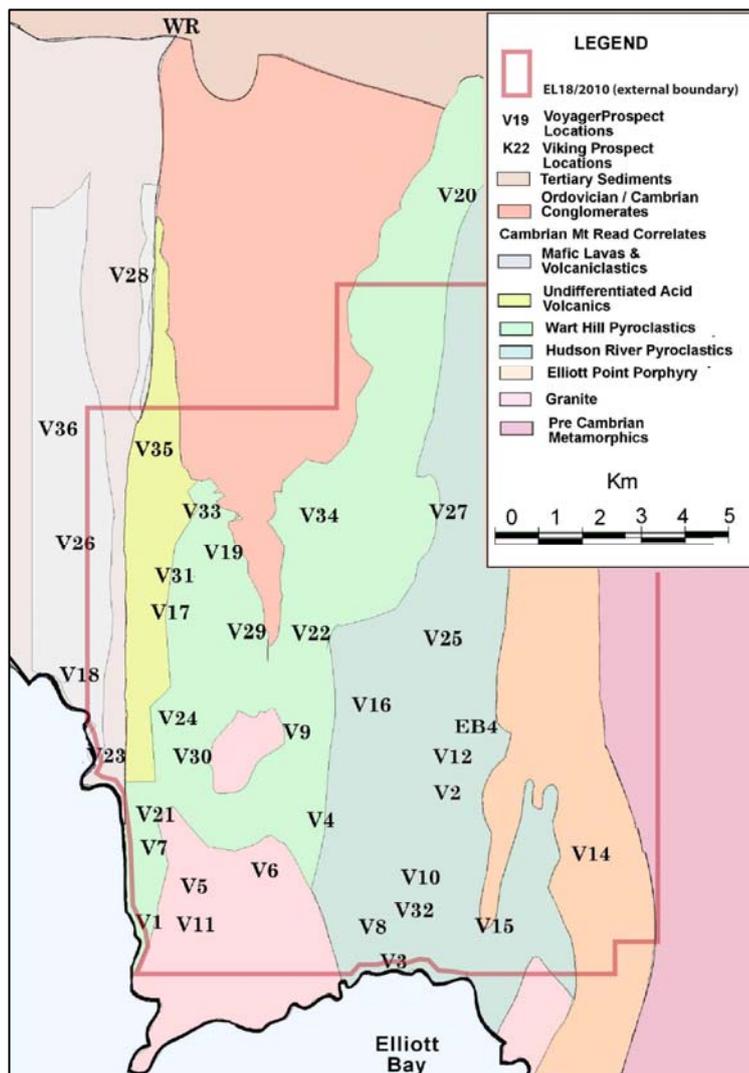
Lead isotope work has recognised mineralisation as early Cambrian but with some Devonian age remobilisation.

EXPLORATION

Exploration models

Previous exploration efforts in the MRV were biased toward discovery of large, high-grade, poly-metallic massive sulphide deposits, exemplified by Rosebery and Hellyer.

The volcanic hosted massive sulphide (VHMS) deposit style of mineralisation in Tasmania is typified by the deposits already known in the northern section of the MRV. "Palaeozoic Australian VHMS deposits occur within the submarine portion of calc – alkaline volcanic belts that are composed of a series of complex volcanic centres with related epiclastic facies" (Large, 1992). In the northern section of the MRV two types of VHMS deposits are known, viz high grade polymetallic stratiform massive zinc – lead – copper sulphides and low grade copper-rich disseminated to massive stratabound deposits. The latter have also been described as porphyry- or hybrid VHMS-porphyry-style.



The precious metal contents of the MRV deposits are particularly high in comparison with other massive sulphide deposits worldwide.

Large (1992) reported on 30 Australian VHMS deposits. The average size of sixteen Cu deposits was estimated to be 12.6 million tonnes at 1.3% Cu and 1.6 g/t Au and of ten Zn – Pb – Cu deposits was 7.6 million tonnes at 11.8 % Zn, 4.7 % Pb, 1.0 % Cu, 117 g/t Ag and 2.0 g/t Au. The four Zn – Pb – Cu deposits in the northern MRV are larger and higher grade than most other Australian VHMS deposits. Rosebery, Hercules, Hellyer and Que River average 10.3 million tonnes at 14.8% Zn, 6.0% Pb, 0.6% Cu, 161 g/t Ag and 2.7 g/t Au.

Perhaps the most interesting target for gold mineralisation in the SMRV is a deposit similar to the currently operating Henty – Mt Julia gold mine in the northern MRV. This deposit hosts gold associated with sulphides in an alteration zone adjacent to the Henty fault that is a major syndepositional structure transgressing the MRV. The main controls appear to be the conjunction of a favourable litho-stratigraphic, or chrono-stratigraphic, host unit and a major, semi-regional, probably syn-volcanic fault. Intersections of major syn-depositional faults may be particularly favourable locations.

The Henty – Mt Julia gold deposit is the most recent discovery in the MRV. It is significantly different to the massive sulphide VHMS-style of mineralisation previously targeted in the SMRV.

3/2010),

The existence of a small lens of massive pyrite (detected by IP survey) led to the initial discovery of the Henty deposit in 1974. Henty is different in that the ore zone is relatively quartz-rich and sulphide-poor. These atypical features contributed to a protracted exploration history. The gold potential was unrecognised until 1984 and it required a further 5 years persistent exploration drilling to realize its full significance. The main part of the resource was intersected in the 96th hole.

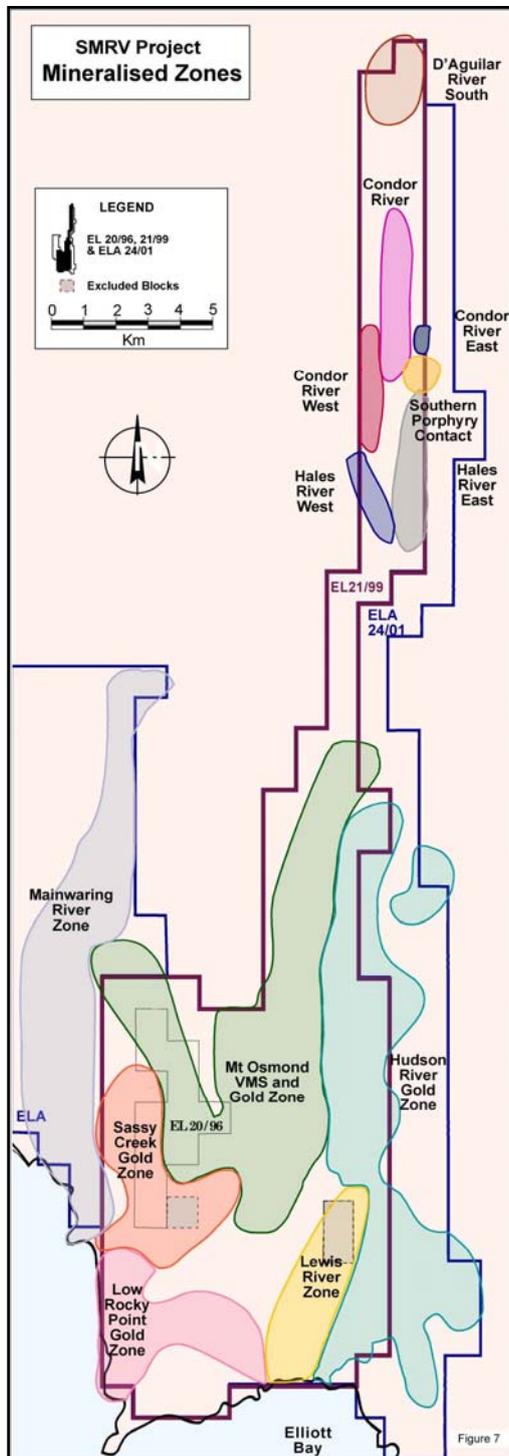


Figure 4. Modified Figure 7 from Stagg, 2002, showing mineralised zones highlighted by Tasgold (subsequently Frontier Resources). See also Table 2.

The long uncertainty over the origins of the deposit has hindered exploration for similar deposits elsewhere. The geological parameters were not well understood when the last comprehensive exploration programs were being carried out in the SMRV, during the mid-1980s. The recent development of genetic models and recognition of Henty as an economic deposit-style has positive implications for the prospectivity of the SMRV.

The fundamental geological parameters and genetic implications of the Henty – Mt Julia system are:

- The ore lenses are stratabound, in steeply dipping to overturned, east facing felsic volcanoclastics in the upper part of the Central Volcanic Complex (CVC), possibly extending into the lowermost units of the Tyndall Group. Volcanic facies associations indicate a shallow marine depositional environment for the host rocks;
- The ore lenses and enclosing sericite +/- pyrite alteration facies are closely spatially related to the steeply west dipping Henty Fault; they do not extend more than about 150-200 m down dip along the strata, away from their intersection with the fault;
- The quartz-rich ore lenses are strongly fractured, veined and faulted, and the enclosing sericitic alteration zones highly foliated. This indicates that the alteration zones were formed before the major Middle Devonian deformation;
- Pb-isotope data suggests the associated sulphides in veinlets in the ore zone, and in thin lenses near the stratigraphic top of the mineralised unit, are of Cambrian origin. That is, the sulphides were more or less syn-volcanic (but possibly re-mobilized during subsequent deformation/s); and
- Other isotopic data ($\delta^{34}\text{S}$ in sulphides and $\delta^{13}\text{C}$, $\delta^{18}\text{O}$ in carbonates) and metal associations (anomalous Bi) indicate a mixed seawater and magmatic water hydrothermal system. Recent research suggests it was a "hybrid" shallow marine VHMS-epithermal gold system.

The main controls appear to be the conjunction of a favourable litho-stratigraphic, or chrono-stratigraphic, host unit and a major, semi-regional, probably syn-volcanic fault. Intersections of major syn-depositional faults may be particularly favourable locations. The Henty deposit is located near the intersection of the Henty and Great Lyell fault zones and is interpreted as high-sulphidation epithermal or hybrid VHMS deposit..

The positioning of mineralisation near faults appears important. Faults are ideal conduits. Some known gold prospects in the SMRV lie close to mapped north west trending fault zones (e.g. V12, V24, V30; Figure 2) or near intersections of meridional and north west trending faults (e.g. V33).

The Earthsearch interpretation of regional WTRMP aeromagnetic and radiometric data sets, satellite data and historic geology and geochemistry supports the conceptual Henty-style prospectivity of Elliott Bay. Linear anomalies in the magnetic and radiometric data

match previously mapped north to north-northeast and north west to north-northwest trending faults.

These structures lie close to anomalous sites of anomalous geochemistry and may represent favourable zones for gold mineralisation.

Past exploration

The Elliott Bay area saw some minor historical prospecting probably in the period between 1890 and 1910 and old workings are visible at Voyager 1 (V1) also known as Penders Prospect, Lewis River (V2), and V3. The extensive alluvial gold at Sassy Creek was apparently overlooked during this early prospecting phase.

In 1957 the L. E. E. joint venture held the first modern EL in Tasmania the "Gordon Concession" which covered a large area of south – west Tasmania. They undertook an airborne EM, magnetics and scintillometer survey and undertook inspection and some mapping and sampling of the old workings.

BHP explored the south – west of Tasmania from 1965 to 1975. They also undertook airborne surveys (magnetics and scintillometer) as well as stream sediment geochemical sampling of the MRV and some soil geochemical sampling. They also undertook an airborne EM survey (McPhar H-400)

Geopeko (a division of Peko – Wallsend Operations) undertook an extensive exploration program in the area between 1976 and 1985 recognising the potential of this southern extension of the MRV. The work started collecting stream sediment geochemical samples, geological mapping and followup of regional EM and aeromagnetic anomalies. This work identified 35 prospects called Voyager, numbered V1 to V12 and V14 to V36. The prospects were identified by various methods as historical prospects and outcrops (V1, V2, V3, V12, V18 and V23), aeromagnetic anomalies (V5, V6, V7, V14, V15 and V17), airborne EM anomalies (V11, V21, V26 and V46), stream sediment geochemical anomalies (V8, V10, V24, V25, V27, V30, V31, and V35), soil geochemical anomalies (V28 and V29), favourable geology (V32, V33 and V35) and multi – disciplinary anomalies (V4, V9, V14, V19, V20 and V29).

Further work included variously covering prospects with systematic gridding, soil geochemical sampling including C – horizon sampling (Figure 6), ground magnetics, VLF – EM and drilling. A total of 32 holes (3,573m) were drilled on 9 prospects. Between 1978 and 1981, drilling focussed on the prospectivity of the V2 (Lewis River), V3, V9, V12 (North Lewis) and V24 (Sassy Creek) /V30 (Pleiades) prospects. In 1981, regional geochemical sampling and follow up mapping resulted in the discovery of the V19 (Wart Hill) prospect where small zones of massive sulphide were discovered with highly anomalous rock chip geochemical sampling results. Trenching and drilling of this prospect was followed by more regional work (IP and C - horizon soil geochemical sampling) in the Mt Osmund syncline. This work led to the identification of the V22, V29 (East Camp), V33 (Copper Creek and North Wart) and V34 (Aldebaran) anomalies. Subsequently V33 was drill tested.

Geopeko withdrew from the area in 1984 for a number of reasons, they had concluded that potential to locate an economic high-grade VHMS deposit within 100m of surface was low, exploration projects were being rationalised Australia wide and they were unable to attract a joint venture partner on favourable terms.

Cyprus Gold Australia Corporation (Cyprus) acquired the exploration rights in 1985 and undertook exploration between 1985 and 1990 targeting VHMS style massive sulphide deposits and gold. After a complete review of the Geopeko work, Cyprus undertook a helicopter borne Dighem – EM and magnetic geophysical survey as well as additional C – horizon soil and rock chip geochemical sampling and geological mapping. Anomalous areas were followed up with priority on V12 (North Lewis), V24 (Sassy Creek), V29 (East Camp) and V19 (Wart Hill).

At North Lewis (V12) Cyprus drilled 5 diamond core holes (349.6 m). Follow up geochemical soil sampling at Sassy Creek (V24) led to a recommendation to drill, but this was not undertaken. Cyprus drilled 3 diamond core holes (409 m) at East Camp (V29). Cyprus also drilled 12 diamond core holes (1,962.3 m) at Wart Hill (V19). Down the hole EM was completed on the majority of the drill holes.

In 1989 – 1990 Cyprus joint ventured the area with Aberfoyle Resources Limited (Aberfoyle). They undertook an airborne QUESTEM geophysical survey covering a large part of the area. This survey identified 9 anomalies (EB1 – EB9) that warranted ground follow up. Ground EM and soil geochemical sampling was undertaken over some of the anomalies. Drilling was attempted at anomaly EB1, located adjacent to V3 prospect but its effectiveness was limited owing to difficult ground conditions. Further work was recommended at EB4 that had gossanous outcrops associated with it, only 600m along strike from North Lewis (V12) but was not undertaken. Aberfoyle also supported lead and sulphur isotopes work at the CSIRO and CODES (University of Tasmania).

Plutonic Operations Ltd (Plutonic) successfully tendered for the area in 1994 and carried out work from 1994 – 1995. Plutonic reviewed data and geologically mapped core and outcrop at V3, Wart Hill (V19) and East Camp (V29), reviewed various geophysical surveys and undertook a moving loop SIROTEM and ground magnetic survey at Wart Hill (V19). They undertook a detailed geological re-evaluation of Wart Hill attempting to define vectors to mineralisation but decided not to undertake any further drilling at Wart Hill for massive sulphides although drilling targets on geophysical anomalies were recommended. As drilling was a major condition of the tenement grant, Plutonic relinquished the tenement in 1996.

Macmin applied for an exploration license surrounding the Cyprus / Aberfoyle license in 1994. This was targeted on 3 geochemically anomalous areas; the margins of the Low Rocky Point granite, the Three Creeks and Upper Hudson River areas. Macmin undertook field reconnaissance and soil (auger samples) and pan concentrate geochemical sampling.

Exploration & Management Consultants Pty Ltd (EMC) successfully tendered for the exploration rights to the SMRV area after Plutonic relinquished it and undertook a review of all the past work. In 1998 they joint ventured the area with Fimiston Mining NL (Fimiston).

Fimiston conducted a review and reprocessing of geophysical data then drilled two diamond core drillholes (752 m). One hole was drilled at Wart Hill (V19) and the other was drilled 500m to the south towards the East Camp prospect targeted on anomalous geochemical analyses and geophysics. Fimiston withdrew from the area in 1999. EMC has since focussed on digitising the large body of technical data.

TasGold, subsequently Frontier Resources, held ground in the Elliott Bay region under several licences, including; EL20/2006 Lewis River, EL21/1999 Wanderer River and EL20/1996 Elliott Bay. EL 20/1996 still exists as an exclave within Paragons EL18/2010 and includes the Wart Hill and Sassy Creek prospects.

Frontier acquired the ground with the aim of following up on multiple prospects, including adopting a Henty-style model for exploring for gold, but ultimately focussed on looking for extensions to base metal mineralisation at Wart Hill. Exploration was focussed within the Wart Hill area and along strike to the east and north and included drilling and geophysical (IP) surveys.

PARAGON RESOURCES

Work to date

Year 1 works have included downloading and commencing review of the extensive amount of information (>11Gb) spanning almost 50 years of exploration in the Elliott Bay area. This is an ongoing process.

Paragon Resources has purchased processed public domain geophysics and imagery from Earthsearch (now Metalstocks Australia Pty Ltd). The Earthsearch project provides Paragon Resources with targets based on multiple data-sets for immediate follow-up.

The Earthsearch Project was completed 2003 but kept confidential until 2010. A presentation and 17 targeting maps are included as Appendix 1 with this report.

Raw data used to create the Earthsearch maps in 2003 are not included and are no longer available as part of the Earthsearch targeting package. However, the information used to create the targeting maps was information that was in the public domain and available from Mineral Resources Tasmania in 2003.

Exploration targets

EMC, and subsequently Tasgold, focussed exploration interest into a number of Prospective Zones (Figure 3 from Independent geologists report, Tasgold, 2002), all of which comprise a number of the historical prospects. The focus of their exploration was predominantly around Wart Hill in the Mt Osmund Zone, and to the south in the Sassy Creek Zone.

Paragon Resources is more focussed on gold anomalism in the Hudson River Gold Zone, the Lewis River Zones. These areas form a roughly north-south corridor 4km wide by about 18km long. This corridor roughly parallels the stratigraphy and is contained within the Lewis River Volcanics.

The Hudson and Lewis River Zones have received little modern attention despite outcropping gossans and highly anomalous panned concentrate results of up to 456g/t Au. This source of this gold has never been explained.

One issue with past exploration work was that anomalous panned concentrate results were often not well duplicated in subsequent -80# surveys. This issue has never been given proper consideration. Traditional -80# sampling is sensitive to alluvial gold and localised "noise" sources (eg Sassy Creek?) and is not always a good indicator for detecting fine disseminated gold (Marshall 2011) such as you might expect from a Henty-style deposit. Rather, a -200# survey would perhaps be more appropriate.

An interesting exercise will be to look at -80# stream sediment results from around the Henty deposit.

Gold anomalism in stream sediments has been explained as being the product of Tertiary remobilisation and transport. However, the distribution of gold in stream sediments does not match the mapped distribution of tertiary sediments shown on regional geological maps. Furthermore, gold is neither uniformly distributed nor random across the Elliott Bay area as you might expect from reworking.

Reprocessing by EarthSearch has also since identified structures and alteration throughout these areas that are not explained by the mapped geology and which may be a source for gold in the streams. Earthsearch combined processing of WTRMP aeromagnetic data, radiometric data, satellite imagery, mapped geology and geochemistry to identify seventeen targets in and around what is now EL18/2010. Twelve of the Earthsearch targets lie within the Hudson and Lewis River Gold Zones (Targets 1,2,3,4,5,6,7,8,14,15,16,17; Appendix 1).

There has been little or no work done in the Hudson and Lewis River Gold Zones since 2003 that would test the targets identified within the Earthsearch package. This, despite an independent geologists report (Stagg, Tasgold, subsequently Frontier Resources, 2002) highlighting some of the same geochemical anomalism as is shown on the Earthsearch maps.

Frontier Resources did complete one soil survey in the Hudson River catchment in 2008, and despite concerns previously expressed by Stagg (2002) as to the efficacy of soil surveys in the area. The soil survey by Frontier followed up on stream sediment anomalism but appears to have missed the main geophysical target evident on the Earthsearch maps. This has yet to be confirmed.

Table 2 attempts to correlate targets identified during earlier exploration with those identified in the EarthSearch package. More detailed notes on each Earthsearch target are included in Appendix 1 and also shown on individual targeting maps (also Appendix 1).

Table 2 Preliminary exploration targets (in context with earlier works), Elliott Bay area.

<i>Gold Zone (of EMC, Tasgold, Frontier, Fig 3)</i>	<i>Nearest previous prospect ID (Figure 2)</i>	<i>Earthsearch target (and priority). Appendix 1</i>	<i>Paragon Resources priority(subject to review)</i>
Hudson River	Vicinity of V15 (extending to vicinity V15, V32)	1 (2)	2?
Hudson River	Vicinity of V15 (extending to vicinity V15, V32)	2 (1)	1?
Hudson River	Vicinity of V15 (extending to vicinity V15, V32)	3 (2)	2
Lewis River and/or Hudson River	Vicinity of V8, V10, V32, extending to V15	4 (1)	1
Lewis River and/or Hudson River	Vicinity of V8, V10, V32, extending to V15	5 (2)	2? Review Frontier's Hudson River soil survey in context of Earthsearch targeting.
Hudson River	Vicinity of V2, V12, EB4	6 (2)	2
Hudson River	Vicinity of V25, V27	7 (1)	1
Hudson River	Vicinity of V25, V27	8 (1)	1
Mt Osmond	Vicinity of V34	9 (1)	Check work by Frontier Resources
Mt Osmond	Vicinity V19, V29, V33	10 (1)	Outside of EL18/2010
Mt Osmond	Vicinity of V22	11 (1)	Check work by Frontier Resources, on licence edge.
Mt Osmond	Vicinity V19, V29, V33	12 (1)	Outside of EL18/2010
Lewis River and/or Mt Osmond	Vicinity of V16 (extending to V4)	13 (1)	1
Lewis River	Vicinity of V2, V12	14 (1)	1
Hudson River	Vicinity of V16	15 (1)	1?
Hudson River	Vicinity of V2, V12, EB4	16 (1)	1
Hudson River and/or Mt Osmond	Vicinity of V25 (extending to EB4)	17 (2)	2
Sassy Creek	Vicinity of V24, V30	18 (1)	Outside of EL18/2010

Expenditure to date*Quarter ended December 2010 (quarterly report submitted)*

Remote sensing	Purchase of remote sensing package from Earthsearch (now Metalstocks Australia) - included herein as Appendix 1	\$30,000
Geology costs	Visit to MRT core store. Collation and reading of more than 11Gb of reports.	\$10,500
Rental costs		\$3,769
General administration		\$1,500
Q1 total		\$45,319
YTD expenditure		\$45,319

Quarter ended March 2011 (quarterly report submitted)

Q2 total		\$0
YTD expenditure		\$45,319

Quarter ended June 2011 (quarterly report submitted)

Geology costs	Commence preparing data for inclusion in GIS, scanning, cleaning and rectifying geological maps.	\$4,000
General administration		\$400
Q3 total		\$4,400
YTD expenditure		\$49,719

Quarter ended October 2011 (this report)

Geology costs	Ongoing preparation of maps for inclusion in GIS and commence image processing to compliment Earthsearch package. Annual report preparation.	\$3,000
General administration	Including sourcing experienced field geologist to assist in summer field program.	\$300
Q3 total		\$3,300
YTD expenditure		\$53,019

Total year 1 expenditure: \$53,019

Future work

Reassessment of earlier work is ongoing. This will include some re-logging of any old core that may still exists from nearby priority targets (Table 2). Core is currently stored at Mineral Resources Tasmania.

Pending program approval, fieldwork is planned for late January to early February, 2012. This will include site visits to areas identified as priority targets. Fieldwork will necessitate camping with access to the area by boat or helicopter.

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KEYWORDS

Elliott Bay, Mount Read Volcanics, VHMS, massive sulphide, gold, Henty.

STATEMENT OF EXPERIENCE

This report has been prepared by Dr Alistair Reed, BSc (1st), PhD, Consulting Geologist who has had over 18 years experience in exploring for base metals and gold systems. Dr Reed is a Member of the Australian Institute of Geoscientists (AIG) and is qualified to report under the Joint Ore Reserve Committee (JORC) and VALMIN Codes.

DISCALIMER

The information used to prepare the report is drawn from reports prepared by previous tenement holders, consultants and MRT. I do not doubt the authenticity or substance of previous investigation reports, but have not carried out a total audit of the available information. The statements and opinions contained in this report are given in good faith.

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APPENDIX 1

Earthsearch presentation and targeting maps

The Earthsearch maps were created in 200. The raw data are not included here and are no longer available as part of the Earthsearch targeting package. However, the information used to create the targeting maps was information that was in the public domain and available from Mineral Resources Tasmania in 2003.

Elliott Bay Southwestern Tasmania, Australia.

Report accompanies 17 PDF and 17 bitmap images and 1 Powerpoint presentation



Monday, 13 January 2003

Introduction

The Elliott Bay region lies in southwestern Tasmania, located south of Macquarie Harbour within the Southern Mt Read Volcanic Belt (SMRVB).

The region comprises a geology correlated with Cambrian calc-alkaline felsic and mafic volcanic and volcanic-related clastic sequences north of Macquarie Harbour, and that contain mined deposits such as Mt Lyell, Rosebery, Hellyer, Hercules and Que River.

Access to the Elliot Bay region is difficult (as it was once for much of the Mt Read Volcanic Belt), and for this reason the area remains underexplored relative to the Mt Read Volcanic Belt north of Macquarie Harbour.

The area is highly anomalous with respect to base-metal and gold. Examples include clasts or pods of Pb-Zn massive sulphide (up to 6m wide by 20m long) and assayed panned stream sediment samples returning up to about 500g/t Au. Previous exploration has focused on Pb-Zn anomalism, targeting focusing mainly on determining prospective stratigraphic units. Structural geology has largely been ignored and the source of many anomalies remains unknown.

The geology of the Elliot Bay region is currently under review as part of the joint Tasmanian and Commonwealth governments Western Tasmanian Regional Minerals Program (WTRMP) initiative. However, the use of new high quality magnetic and radiometric data in this review is limited to third-party production of regional-scale images. There has been no detailed image processing of mineralised areas.

This project has processed WTRMP data to enhance areas of gold and base-metal anomalism within the Elliot Bay region. This area covers those remaining parts EL20/1996, due for relinquishment in April, 2003, and surrounding areas. EL20/1996 contains the highly prospective Wart Hill, East Camp, Sassy Creek and Lewis River prospects. Output from image processing has been combined with company and government geological and stream sediment data and relogging of diamond drill core. Combining these data emphasizes relationships between structure and anomalism and is relevant to detecting the fluid conduits feeding either syngenetic or epigenetic deposit styles. It also emphasizes inconsistencies in previous geological interpretations and, hence, potential errors incorporated into previous exploration philosophies.

Scope

- This study presents regional image data processed to enhance areas of mineralization in and around EL20/1996.
- Images are presented with interpretation, but can also be used for further interpretation at a later date.
- Targeting maps have been produced, highlighting 18 geographically constrained areas of structural, magnetic, radiometric and geochemical anomalism.

Methodology

Collation

- Aeromagnetic, gravity, satellite, topographic and radiometric data.
- Scanning and georeferencing of company maps and images.

Processing

- Image processing single- and multi-band data.
- Digitise company data.

- Digitise topographic data
- Incorporate data into a Geographic Information System.

Analysis

- Interpret processed imagery.
- Combine interpretations and delineate structures apparent in three or more images.
- Correct radiometric data for vegetation by processing satellite data for vegetation, then reclassifying and subtracting from radiometric image.
- Define features showing radiometric anomalism along structures or over magnetic features.
- Assess features in context to previously collected stream-sediment and rock-chip data.
- Assess in context of structural geology and previously recorded rock types evident in diamond drill core.

Deliverables

- 17 A1 maps in PDF (encrypted vector) format.
- 17 bitmap images of the maps suitable for incorporation into reports or for presentation.
- 1 34 slide Microsoft Powerpoint presentation presenting 18 targets.

Results

Delineation of 18 targets. These are detailed in the accompanying Powerpoint presentation.

Importantly, these targets have been generated independently of any interpretations of the geology made by previous explorers.

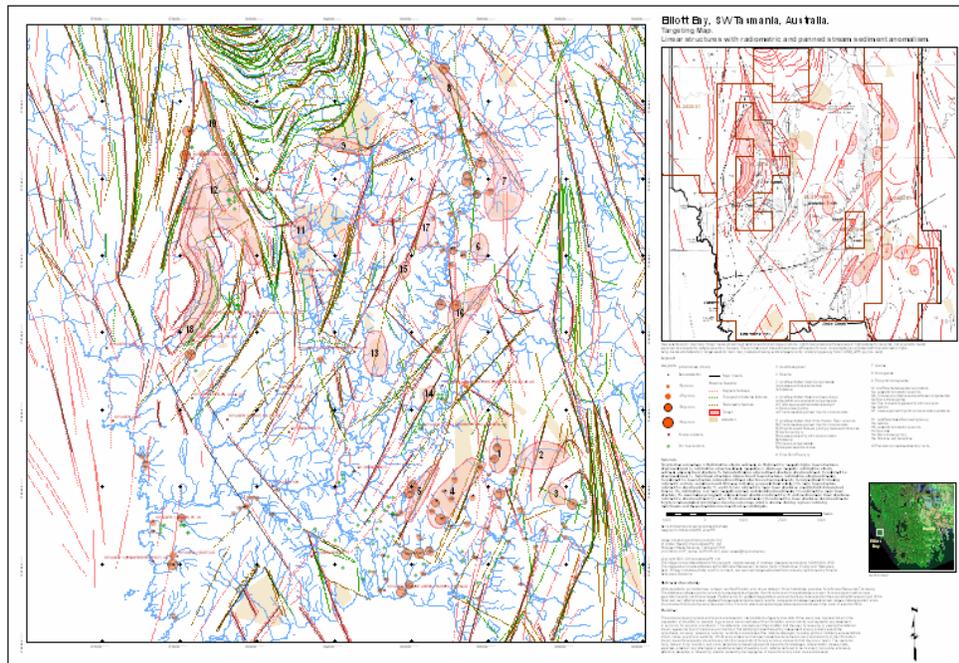


Figure 1 Targeting map for Elliott Bay region.

Error assessment/data quality

Known error source	Information on error	Mitigation
Correction of the received signal for removal of noise (primary field, aircraft, atmospheric, cultural), calibration for instrument drift and normalisation to standard parameters.	No data are available to quantify potential errors resulting from these processes.	Interpretations of image data are made from features that are continuous in extent, resulting from multi-line responses. It has been assumed that the position error of features imaged is within line spacing (200m).
Databases position and attribute error.	Data from Mineral Resources Tasmania is of variable quality and completeness. Errors in point data can be greater than 1km, but are typically much less.	These data are not used for interpretation or analysis but are included on output. Drill hole data are known to be incomplete for, for example, the Wart Hill area.
Georeferencing error.	Up to 150m at image extremities, but typically less than 30m.	Error is within resolution of image presentation and target definition.

Disclaimer

This presentation, and accompanying maps and reports are based on interpretations of geophysical data. While every care has been taken in the preparation of this data, no warranty is given as to the correctness of the information and no liability is accepted for any statement or opinion or for any error or omission. This material is provided upon the condition that the user, by receiving or viewing the material shown, agrees not to act in reliance upon it without first satisfying himself/herself by independent enquiry or advice as to the correctness, accuracy, relevance, currency, reliability or otherwise of the material displayed, including (without limitation) representations of fact, nature, quality and suitability. Whilst every endeavour has been made to ensure the accuracy and reliability of the information shown, the author expressly disclaims any liability or responsibility for any errors or omissions that may occur herein. The user shall have, make or bring no action, suit, claim, demand or proceedings against the author for damages, compensation, losses, costs, expenses, orders or any other legal or equitable remedy should any such material be found to be incorrect, inaccurate, erroneous, defective, deceptive or misleading, whether caused by the negligence of the author or any other cause whatsoever.

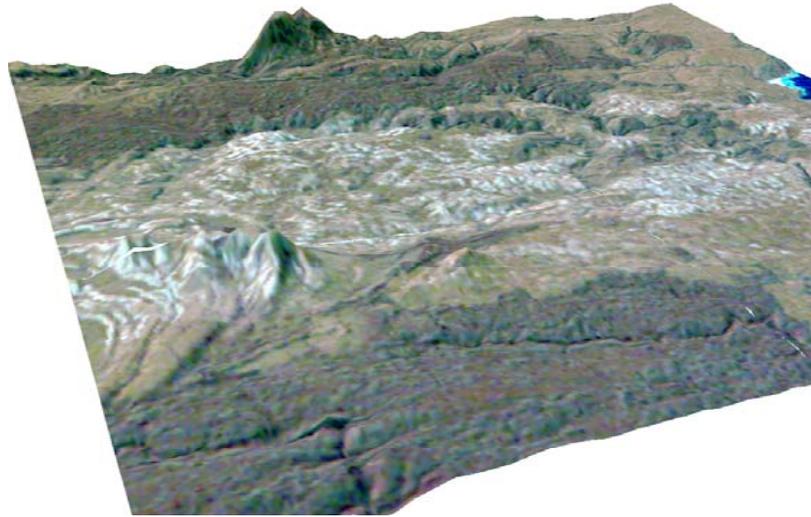
Copyright

All data is Copyright 2003. Ochre Australia Pty. Ltd. This package also incorporates data which is copyright, Commonwealth of Australia (Geoscience Australia) 1996, 1999, 2002. No part shall be copied or distributed without prior permission.

This presentation also includes data derived from Mineral Resources Tasmania, Dept. Infrastructure, Energy and Resources, Dept. Primary Industries, Water and Environment, and scanned images extracted from company reports held by Mineral Resources Tasmania.

This presentation (34 slides) summarises NEW information about

Elliott Bay, SW Tasmania



3D view of the Elliot Bay region,
looking southeast.

- A region containing high grade (>25% combined Pb+Zn) lenses of massive sulphide clasts originating from as yet undiscovered sources.
- Numerous examples of low grade base metal and gold mineralisation and widespread hydrothermal alteration, with panned concentrate samples containing up to 500ppm Au.
- Relatively unexplored compared to the rest of the Mt. Read Volcanic belt.

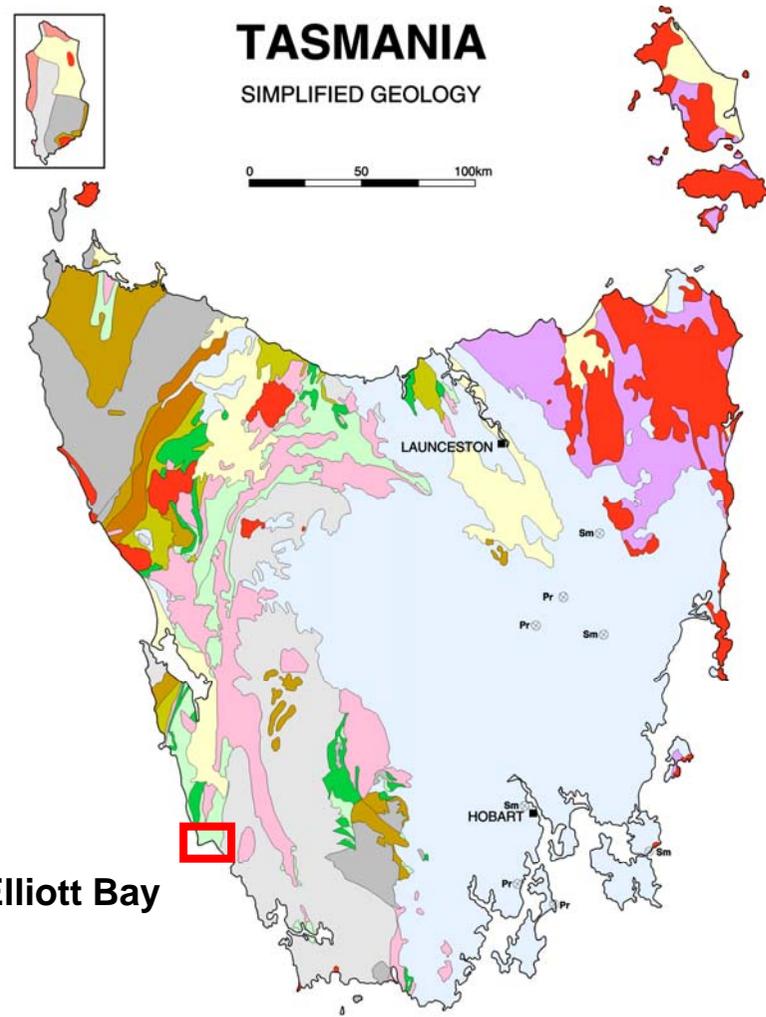
Click your left mouse button or 'down arrow' to proceed. The 'up arrow' will move you backwards through the presentation.

Elliott Bay, Tasmania, Australia

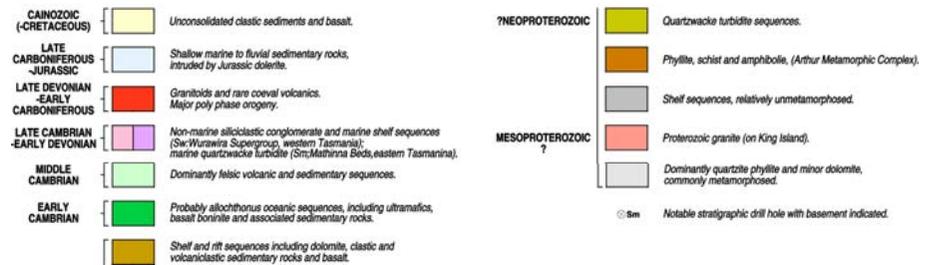
Contained within the Mt. Read Volcanic Belt (MRV).

Other deposits within the MRV.

Hellyer	15.5Mt @ 12.6% Zn, 5.9% Pb, 2.2 g/t Au
Que River	3.3Mt @ 13.3% Zn, 7.4% Pb, 2.7 g/t Au
Rosebery	28.3Mt @ 14.3% Zn, 4.3% Pb, 2.4 g/t Au
Hercules	2.6Mt @ 16.7% Zn, 5.2% Pb, 2.7 g/t Au
Henty	1.5Mt @ 14.9 g/t Au
Mt Lyell	311Mt @ 0.97%Cu, 0.31 g/t Au



Elliott Bay



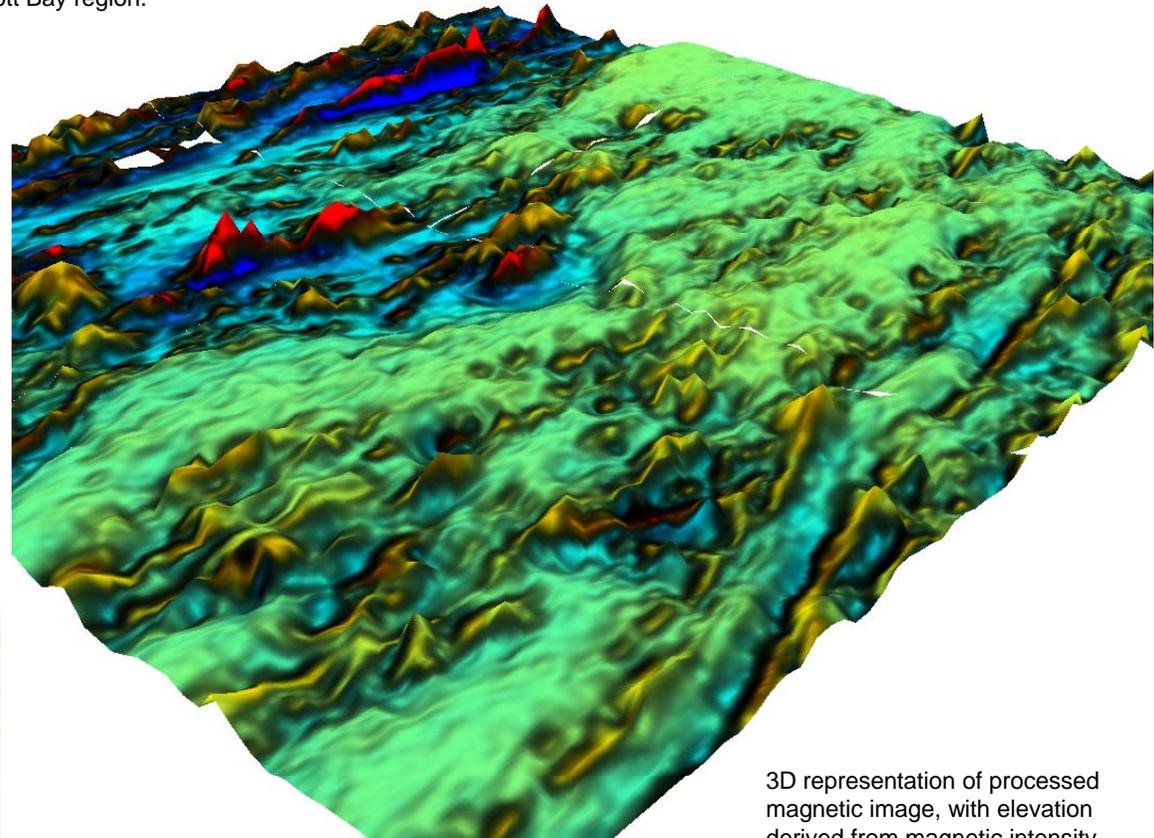
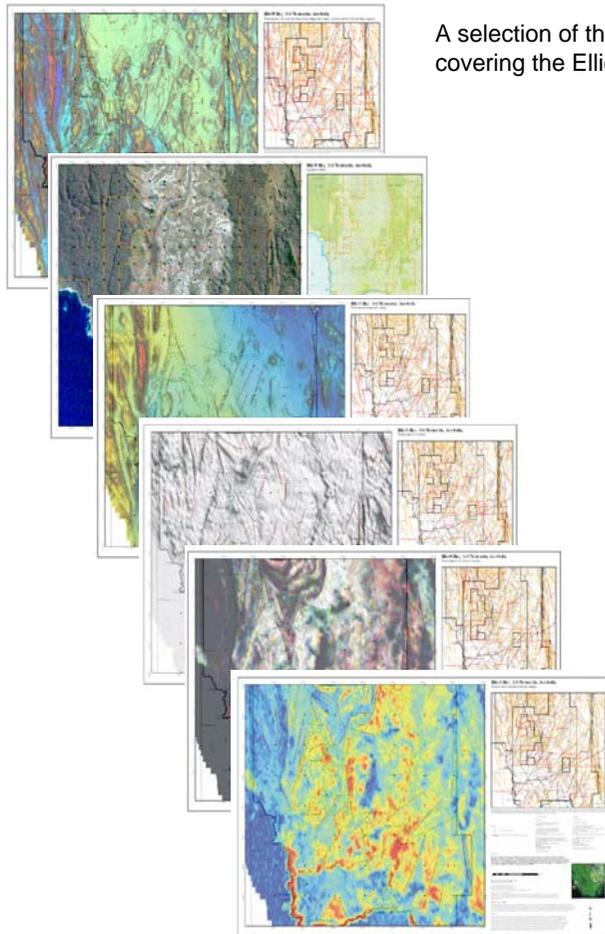
Legislation to protect explorers.

The Elliott Bay region is contained within the Cape Sorell Special Prospectivity Zone. This means explorers are protected against perceived sovereign risk. Should there be any change in land status then explorers can be compensated.



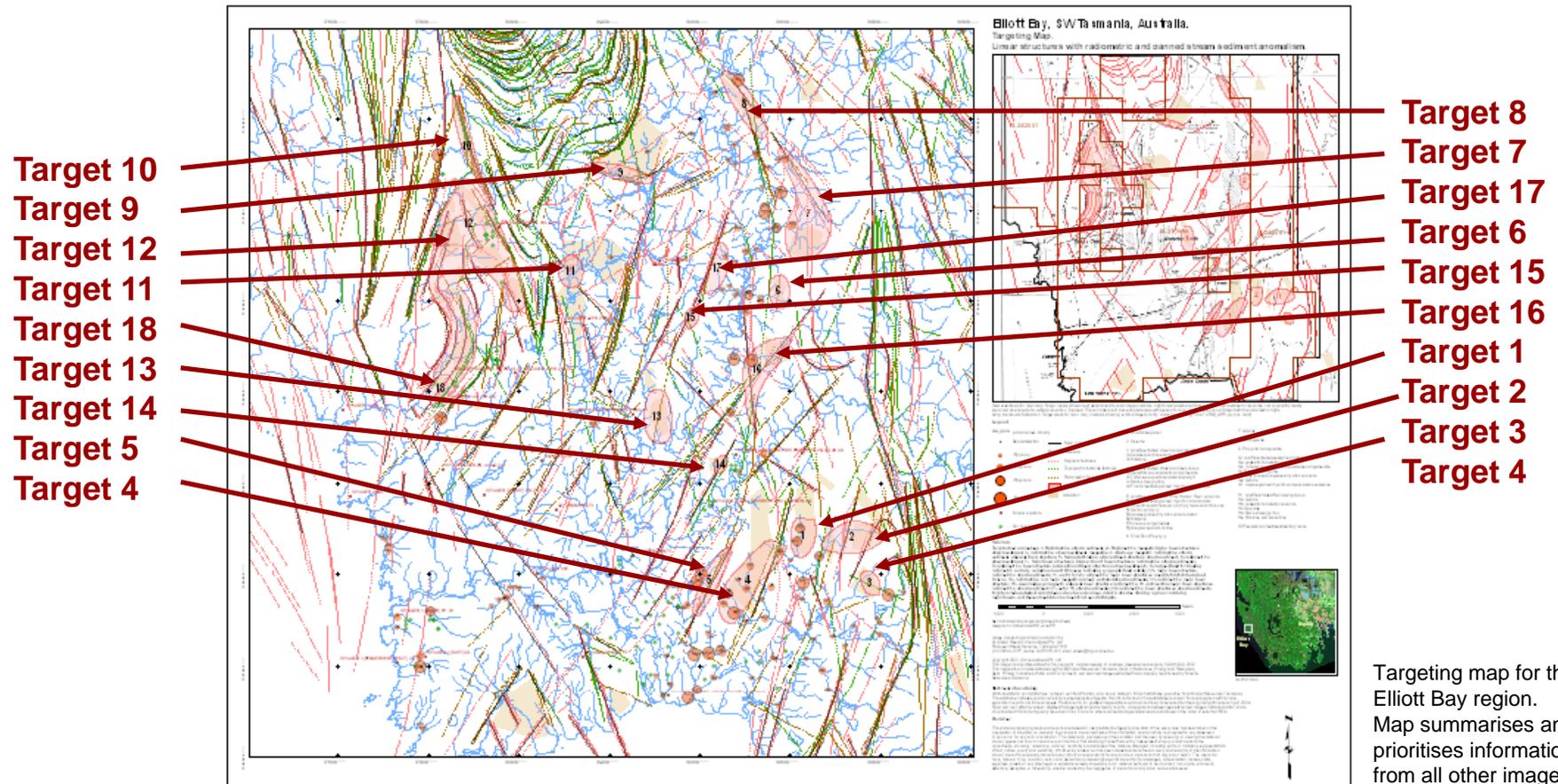
Data

Processing of new high-quality federally-funded geophysical data has facilitated unprecedented imaging of the Elliott Bay geology. Processed images have been combined with existing geological and other data to produce 17 maps showing new and untested gold and base metal targets.



Analyses of these data show:

- Eighteen targets, sixteen of these unrecognised and untested.
- An association between targets and Au values of up to several hundred ppm in nearby stream sediments.
- Flaws in geological models used by previous explorers to target high grade Pb-Zn mineralisation.



Targeting ore

Geological structures, such as faults, are important conduits for mineralising fluids.

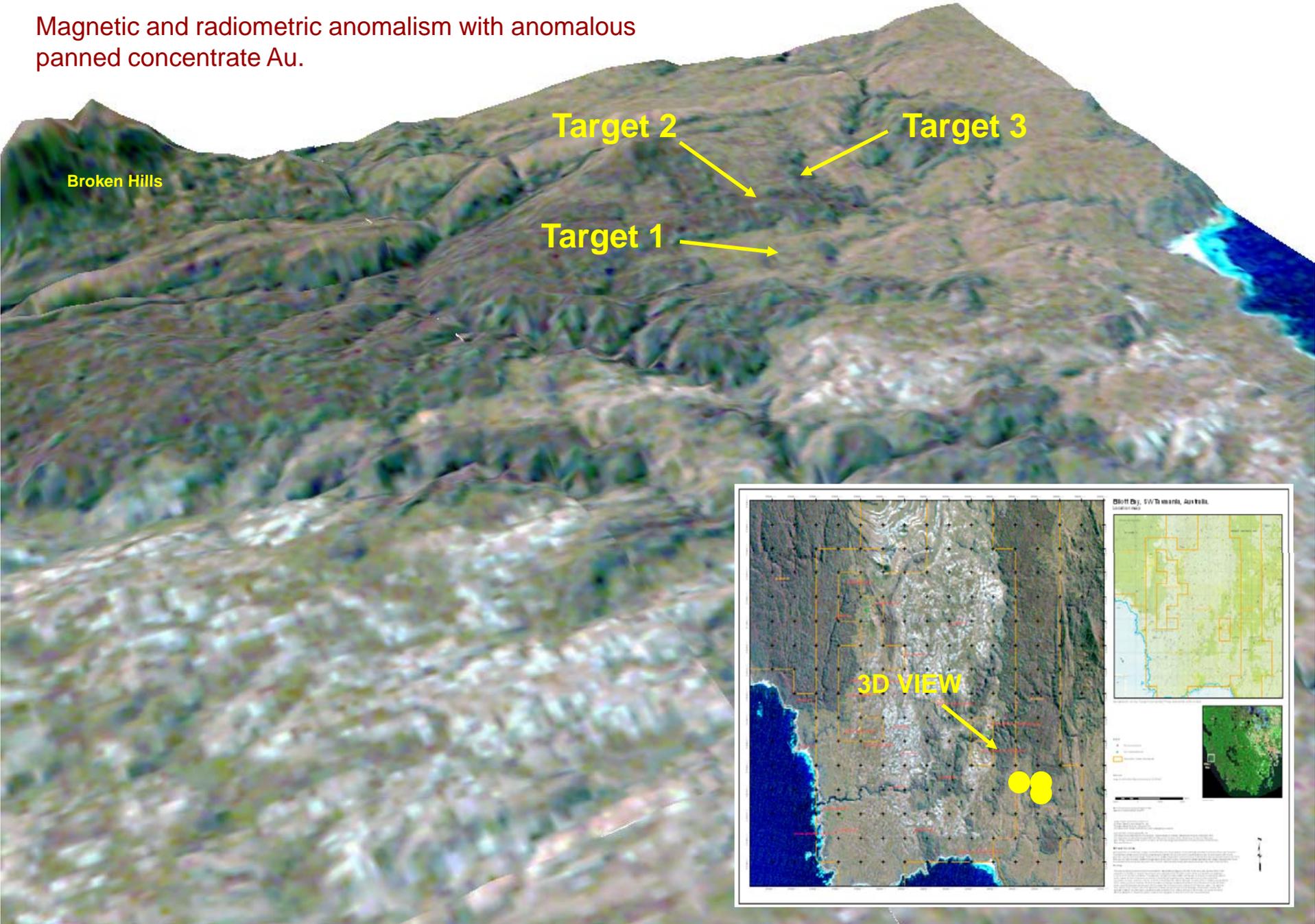
Identifying these structures can be critical to locating mineral deposits.

Targeting methodology

- ✓ Linear structures were interpreted from processed aeromagnetic, radiometric, topographic and satellite data. Major linear features are those apparent in more than three datasets .
- ✓ Radiometric anomalies were determined by processing satellite imagery for vegetation and subtracting this from processed radiometric data. This process enhances areas of rock alteration.
- ✓ Results were then combined with mapped geology, stream sediment analyses and structural data derived from drill core to show areas of anomalism relative to areas previously tested.

Targets 1, 2 & 3

Magnetic and radiometric anomalism with anomalous panned concentrate Au.

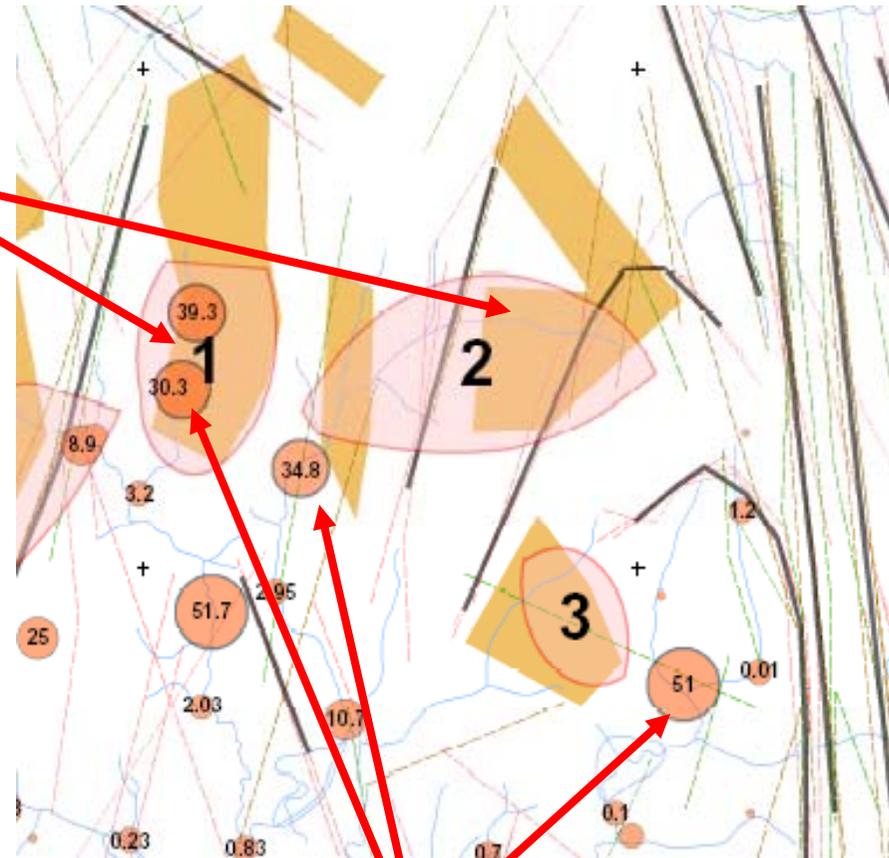
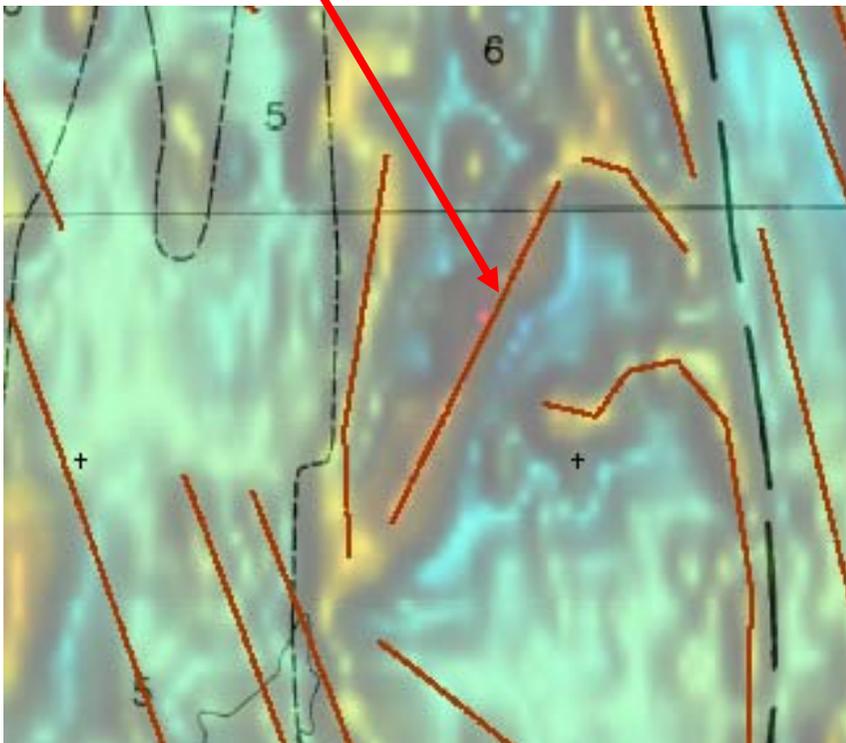


Targets 1, 2 & 3

Areas of magnetic and radiometric anomalism with anomalous panned concentrate Au adjacent to major linear structures.

Zone of anomalous radiometric signature after corrections for vegetation

Major linear magnetic anomaly



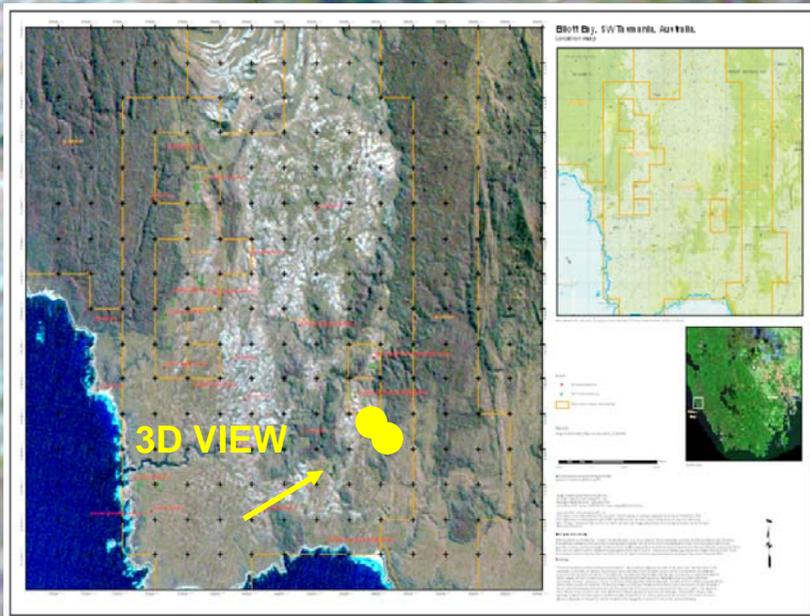
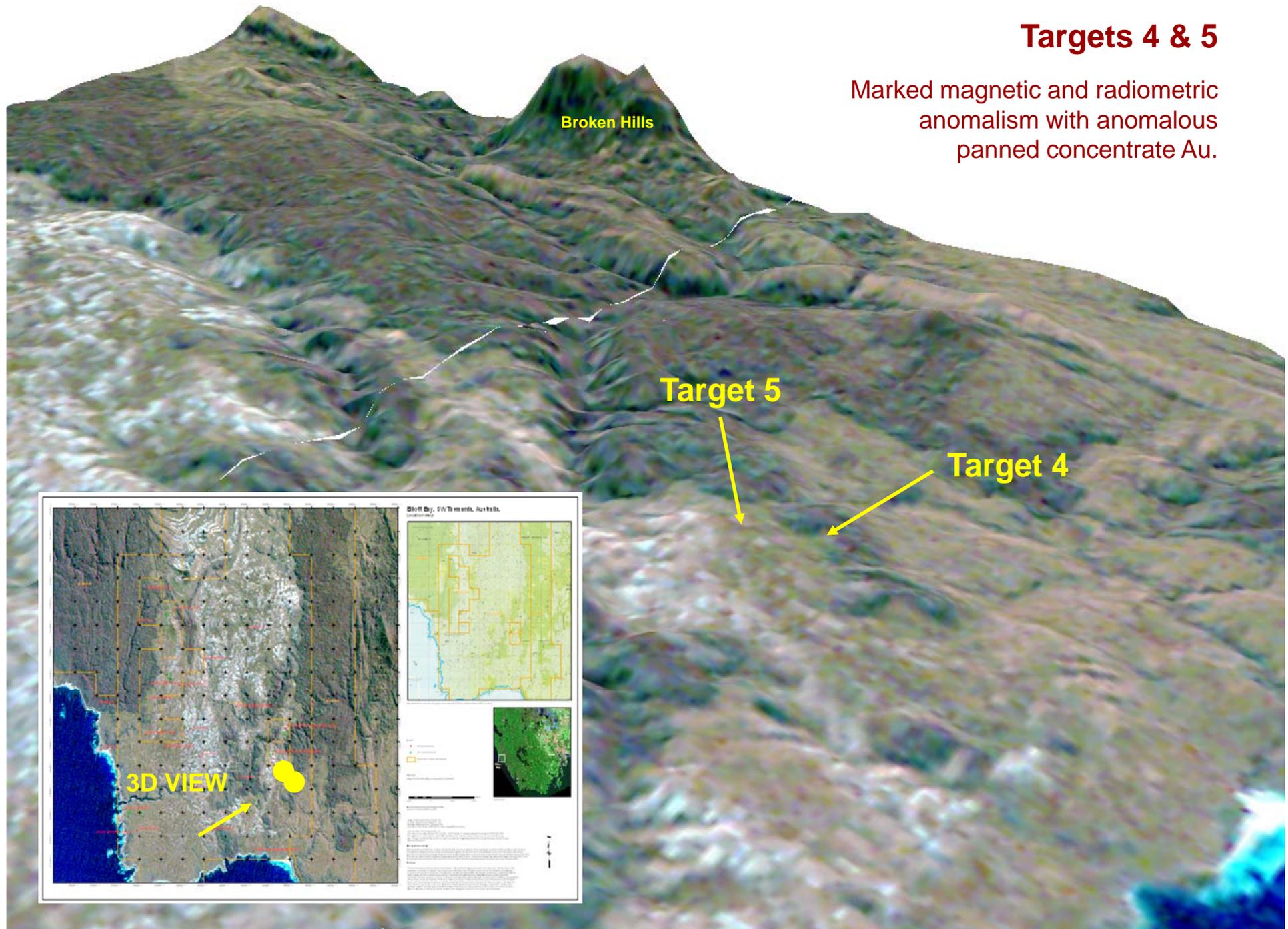
Anomalous panned concentrate stream sediment sample (Au, ppm)

Targeting map showing areas of radiometric anomalism, linear structures and panned concentrate Au.

Magnetic image draped by geology from Cyprus Gold.

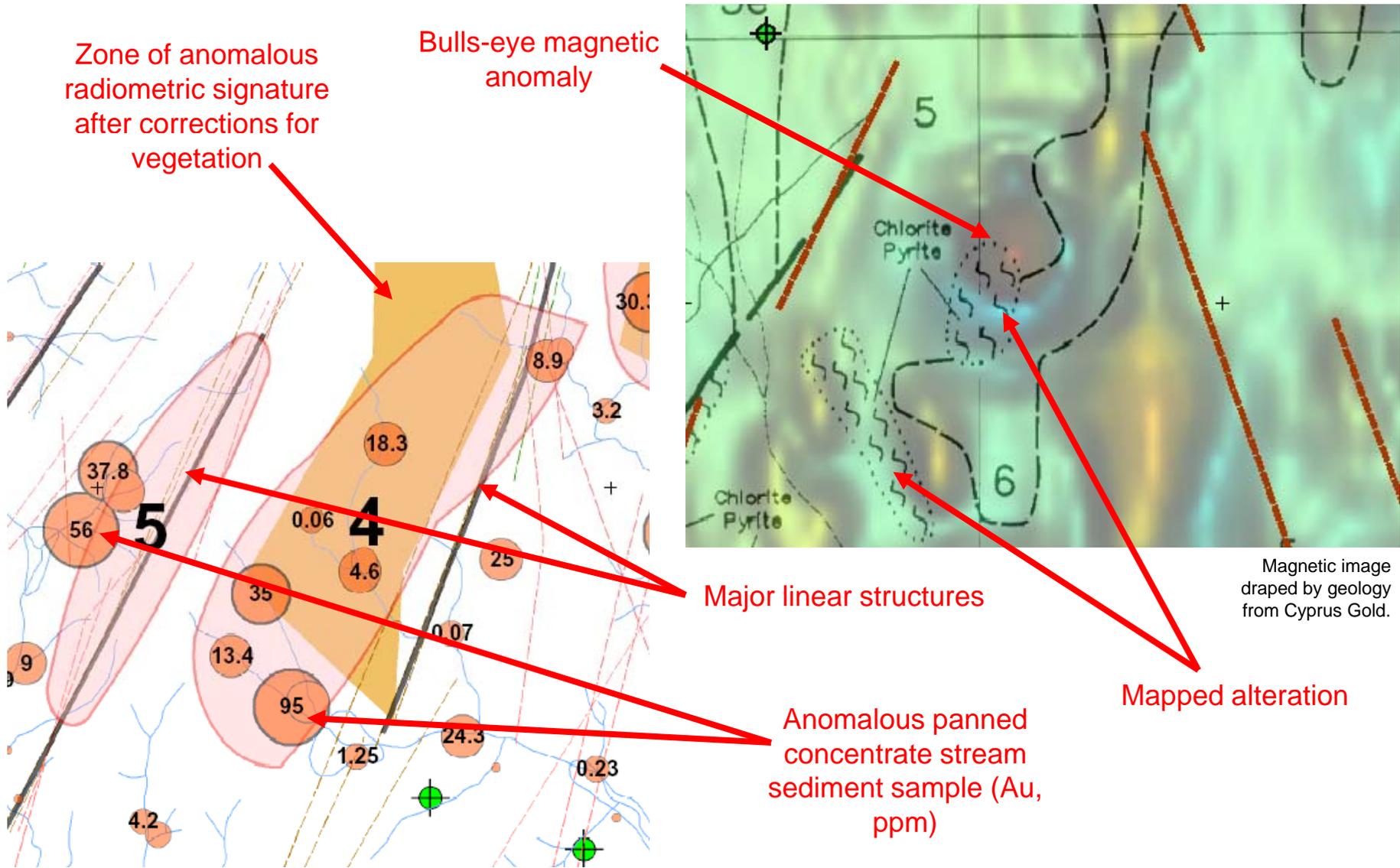
Targets 4 & 5

Marked magnetic and radiometric anomalies with anomalous panned concentrate Au.



Targets 4 & 5

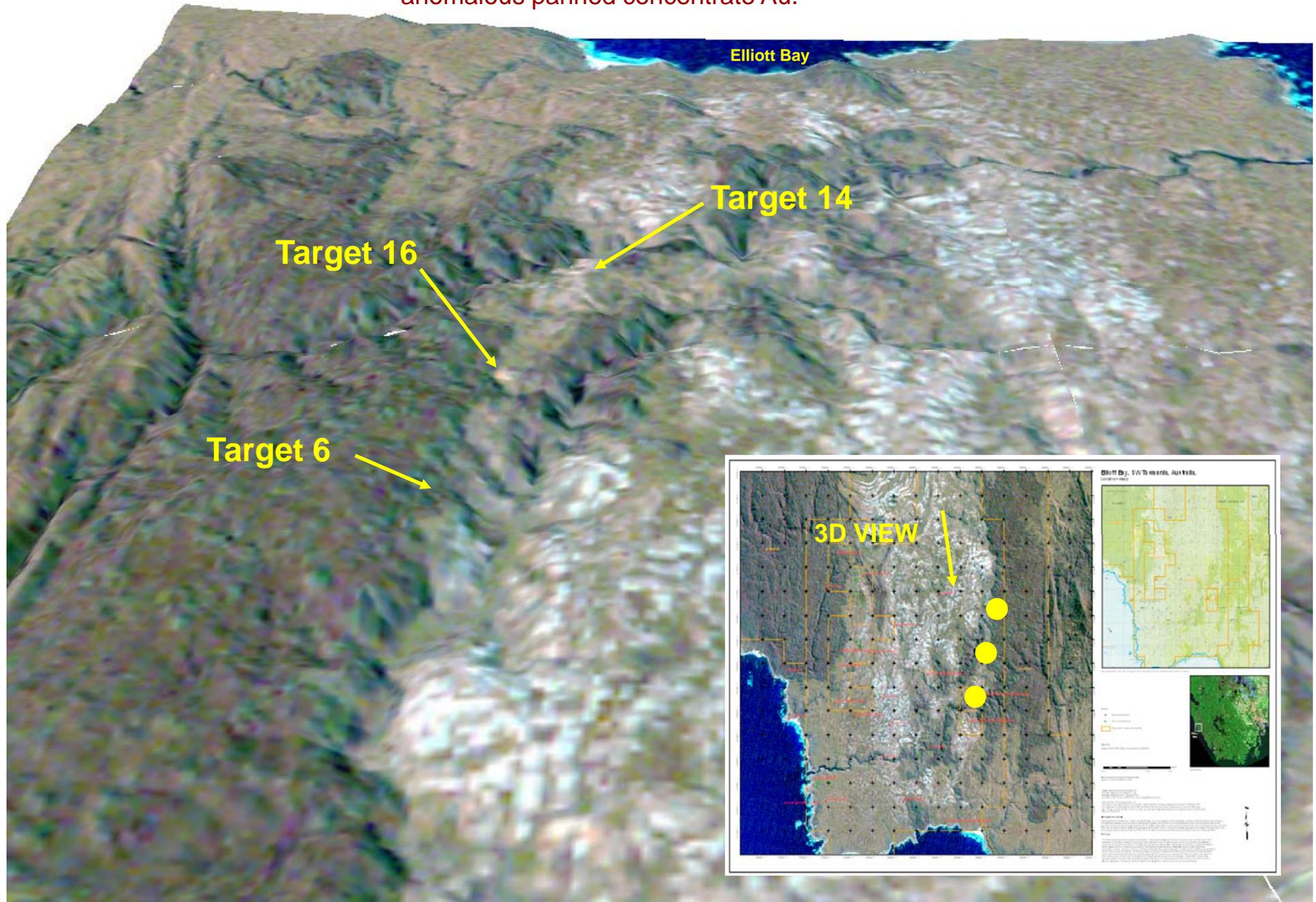
Areas of marked magnetic and radiometric anomalism with anomalous panned concentrate Au.



Targeting map showing areas of radiometric anomalism, linear structures and panned concentrate Au.

Targets 6, 14 & 16

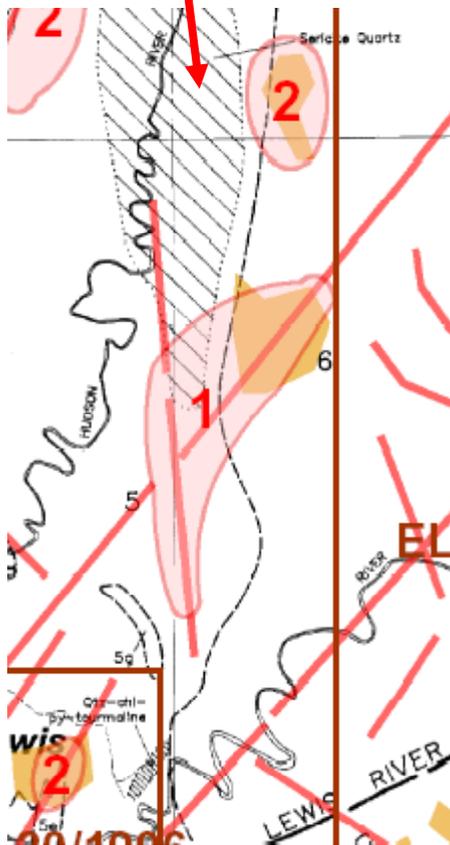
Radiometric anomalism along and at the intersection of linear structures, with anomalous panned concentrate Au.



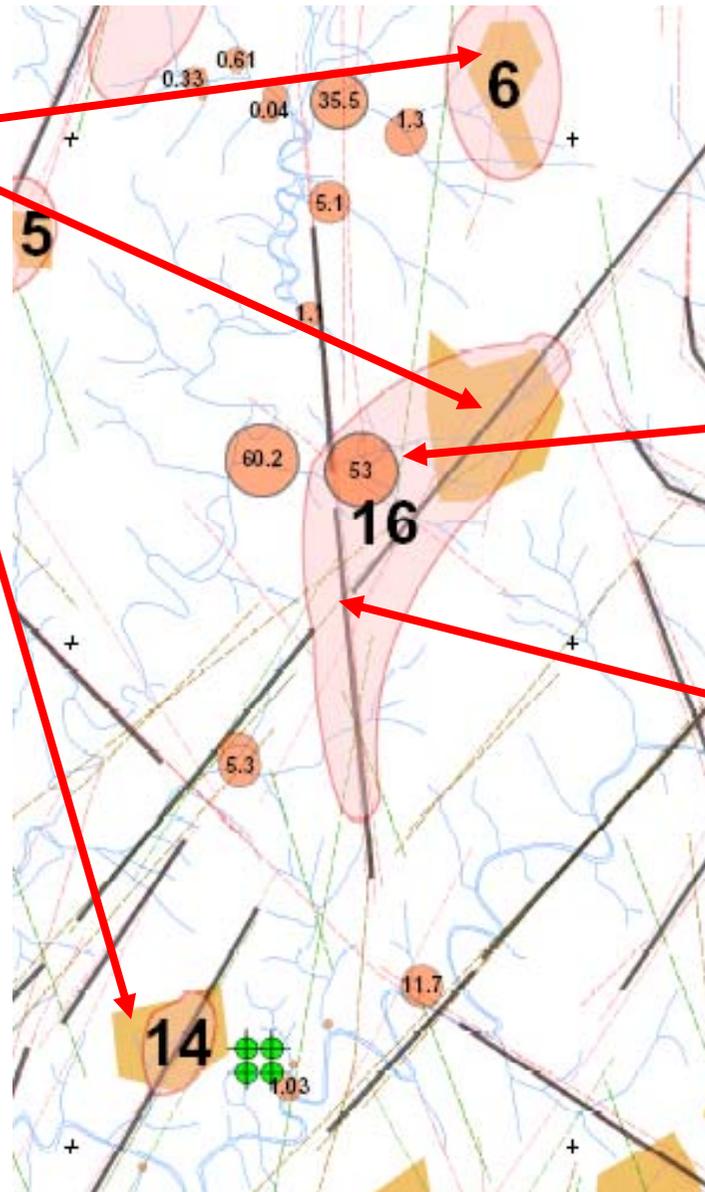
Targets 6, 16 & 14 Areas of radiometric anomalism along and at the intersection of linear structures, with anomalous panned concentrate Au.

Zones of anomalous radiometric signature after corrections for vegetation

Mapped alteration



Targeting map showing areas of radiometric anomalism, with geology from Cyprus Gold. Numbers refer to target priority.



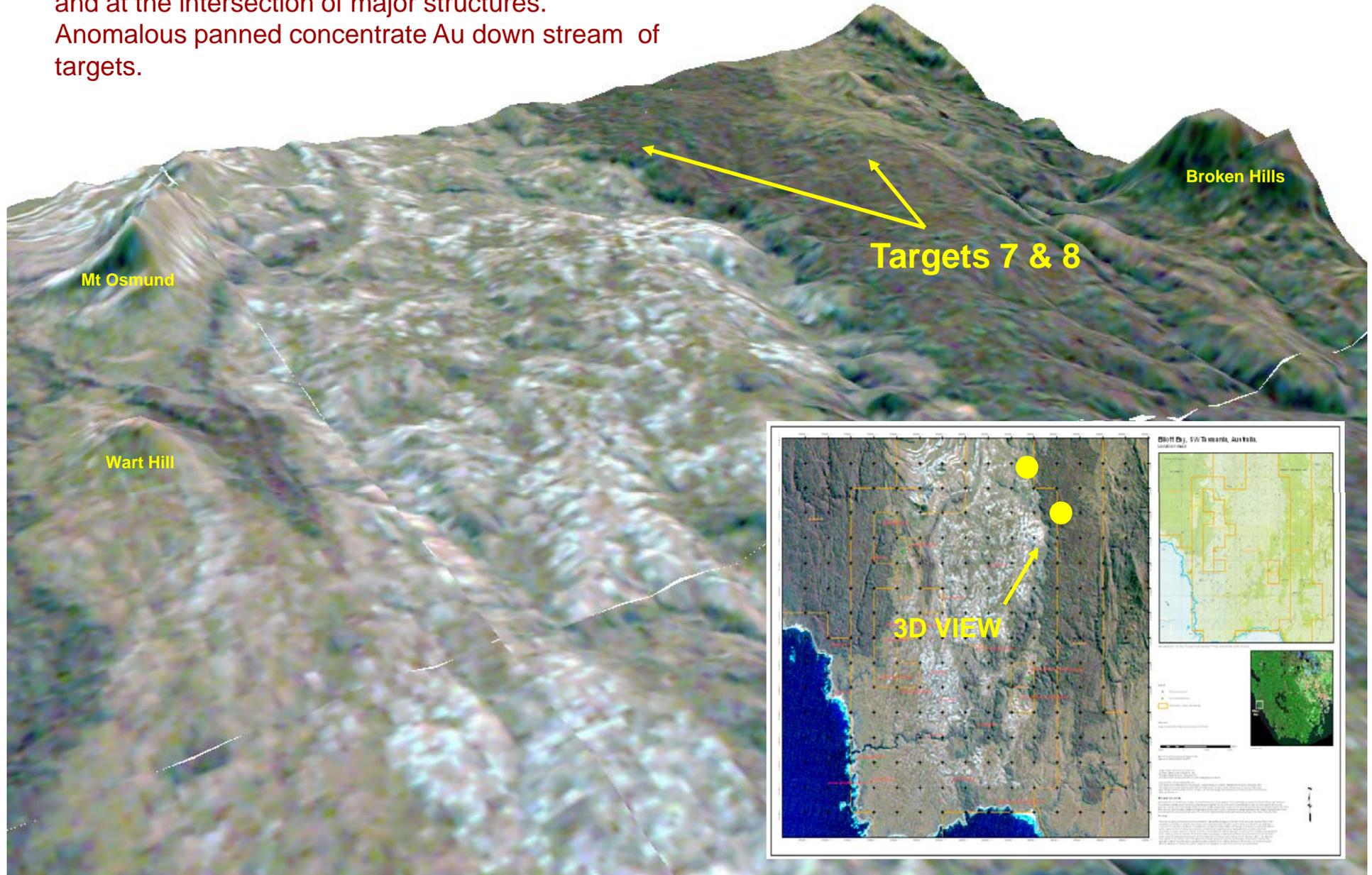
Anomalous panned concentrate stream sediment sample (Au, ppm)

Intersection of major linear structures

Targeting map showing areas of radiometric anomalism, linear structures and panned concentrate Au.

Targets 7 & 8

Marked magnetic and radiometric anomalism along and at the intersection of major structures.
Anomalous panned concentrate Au down stream of targets.

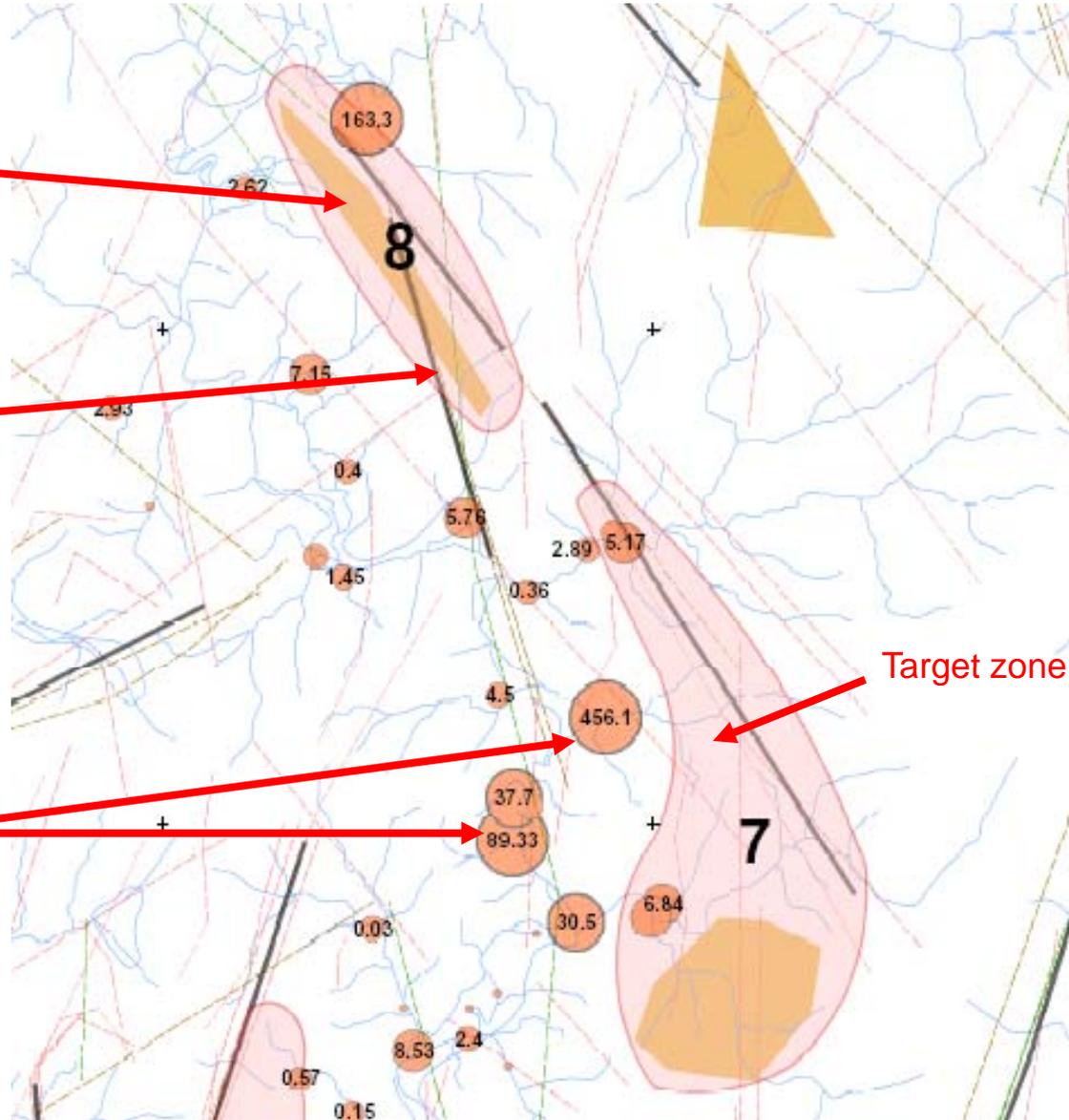


Targets 7 & 8 Marked magnetic and radiometric anomalism along and at the intersection of major structures. Anomalous panned concentrate Au down stream of targets.

Zone of anomalous radiometric signature after corrections for vegetation

Major linear (identifiable in 3 or more processed images).

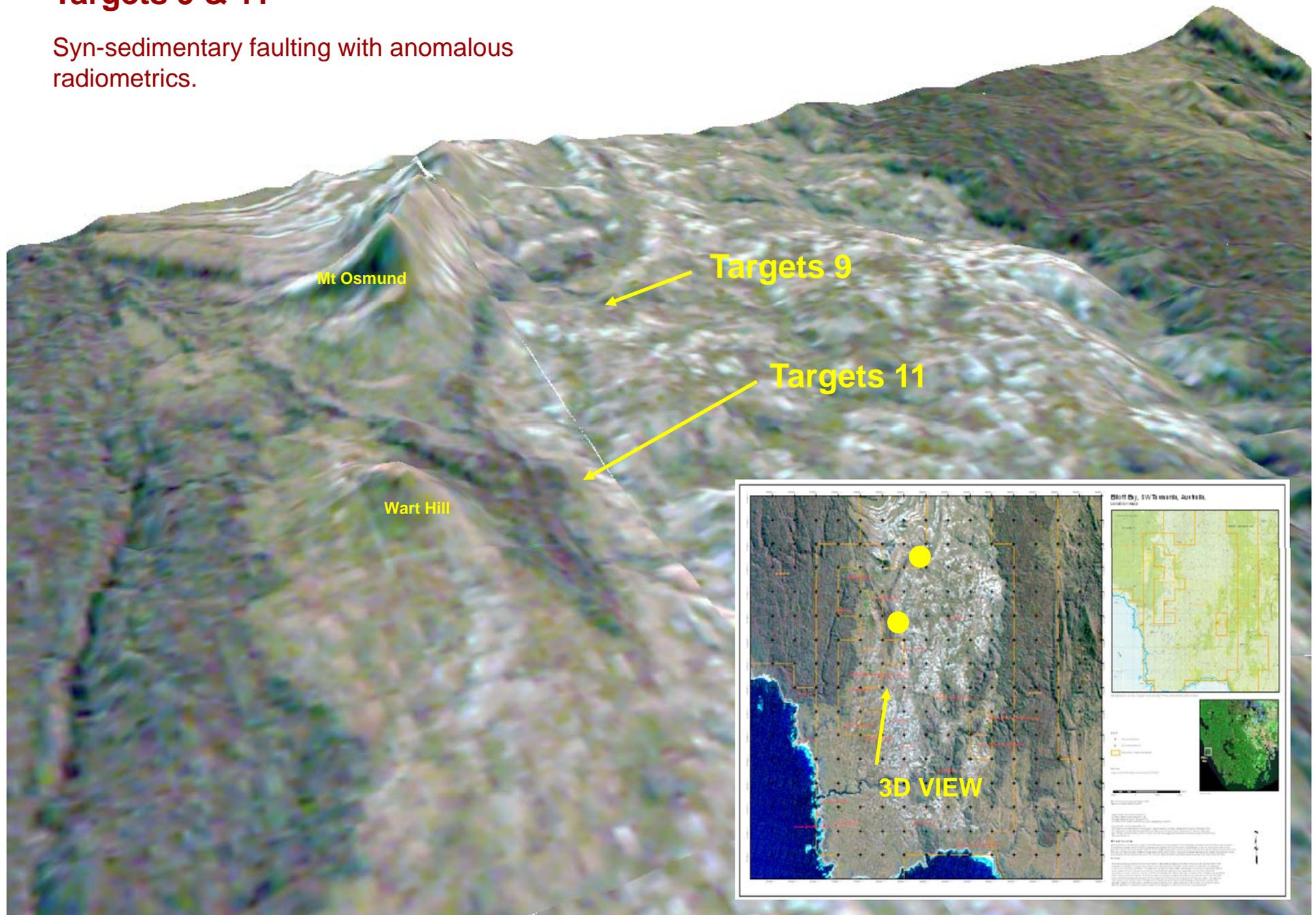
Anomalous panned concentrate stream sediment sample (Au, ppm)



Targeting map showing areas of radiometric anomalism, linear structures and panned concentrate Au.

Targets 9 & 11

Syn-sedimentary faulting with anomalous radiometrics.



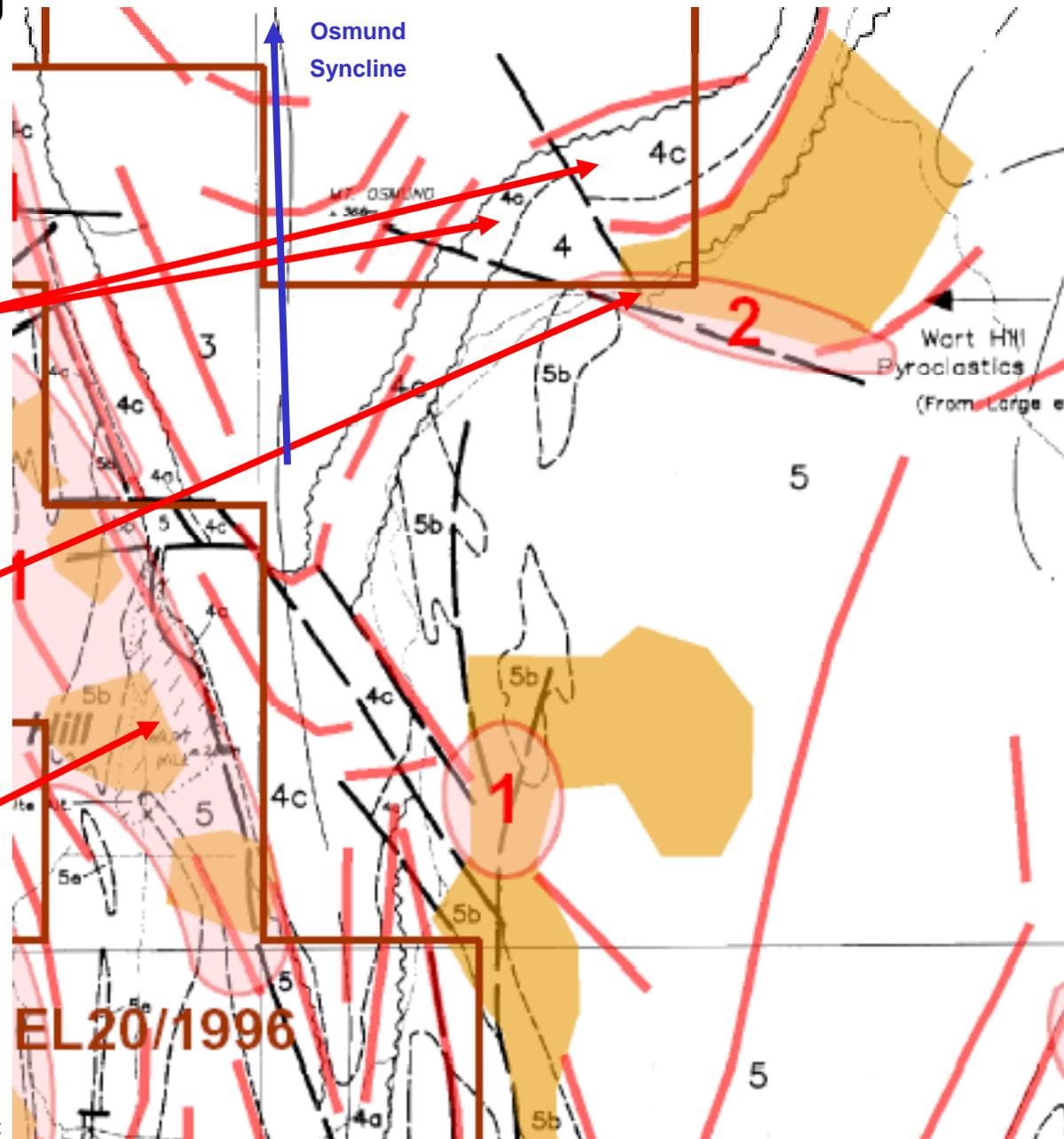
Targets 9 & 11

Evidence for syn-sedimentary faulting (a known control on VHMS-style mineralisation elsewhere) with anomalous radiometrics.

Thickness variations across faults consistent with their being active during sedimentation and possibly Pb-Zn mineralisation.

Radiometric anomalism stops at mapped fault.

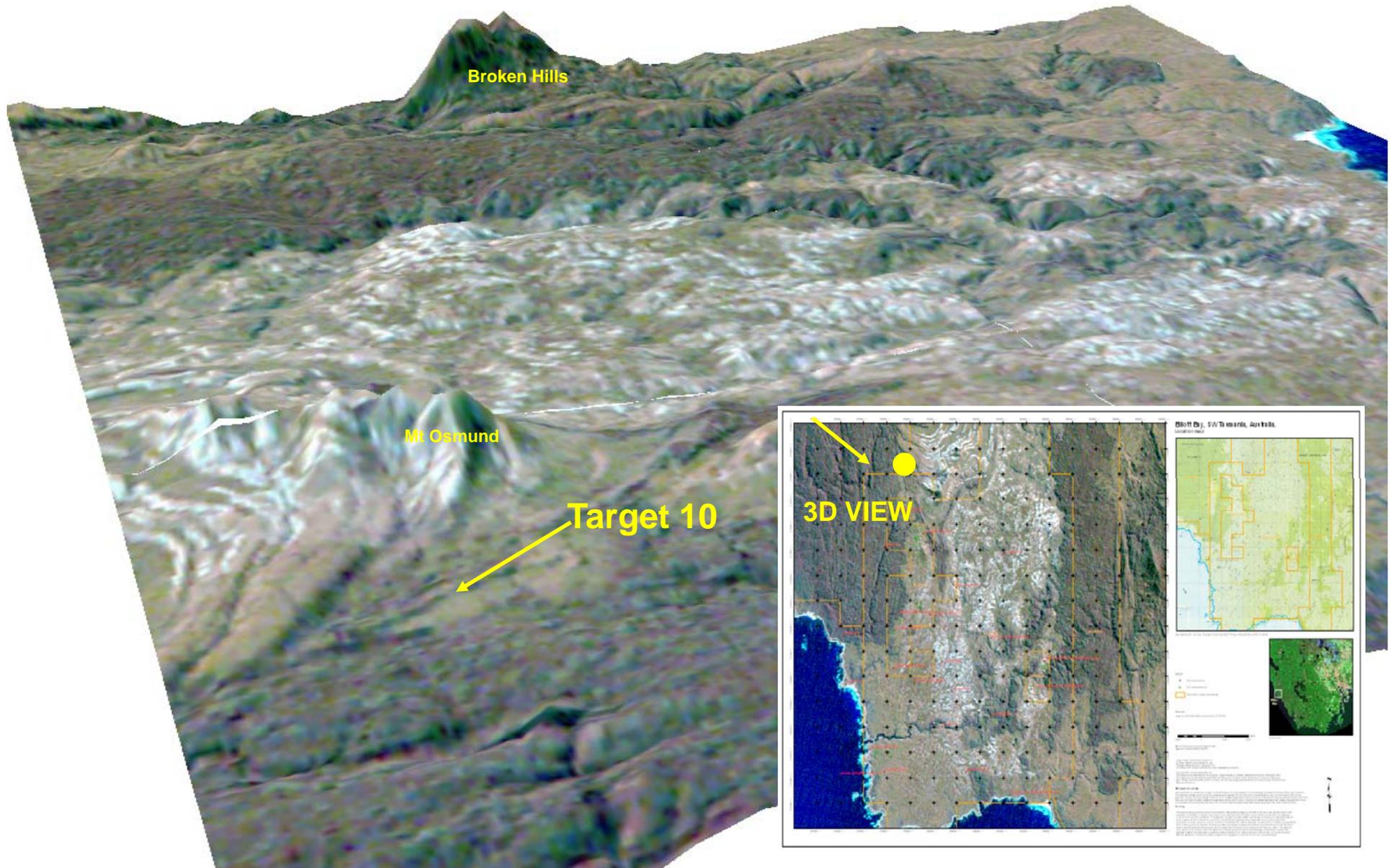
Appears as the same horizon as that containing pods of massive sulphide at Wart Hill.



Targeting map showing areas of radiometric anomalism, with geology from Cyprus Gold. Numbers refer to target priority.

Target 10

Marked magnetic and radiometric anomalism along major structure. Anomalous panned concentrate Au.

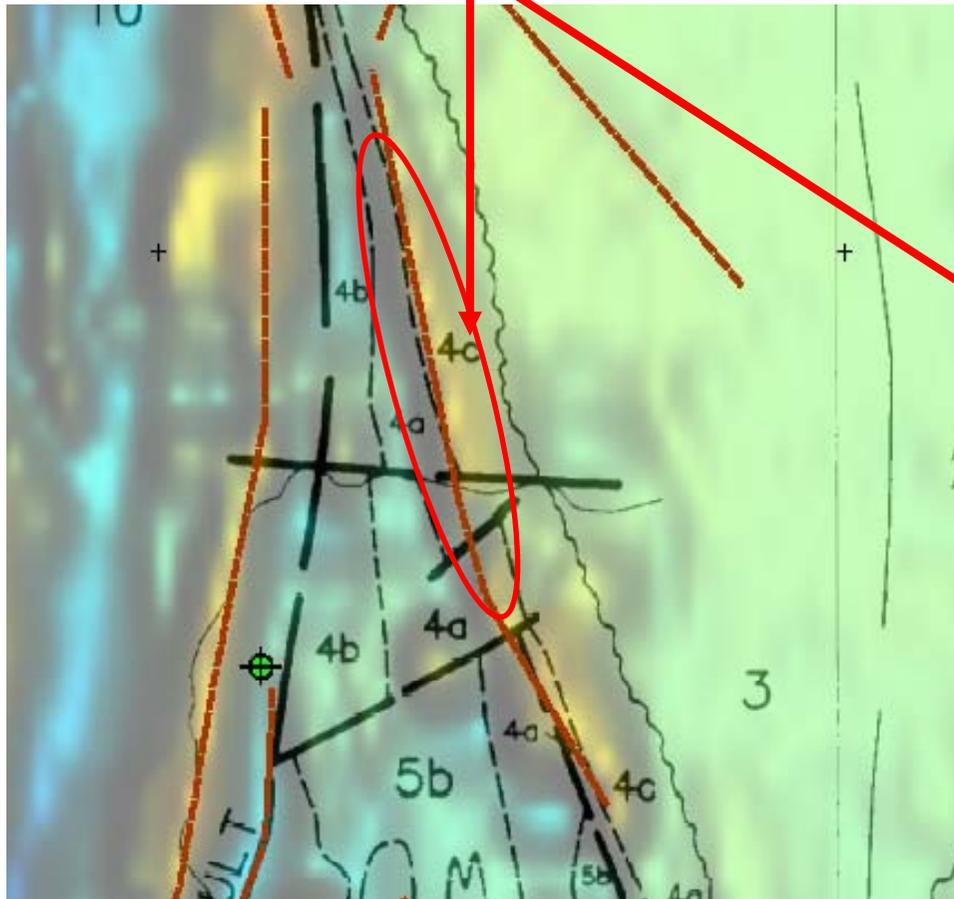


Target 10 Marked magnetic and radiometric anomalism along major structure. Anomalous panned concentrate Au.

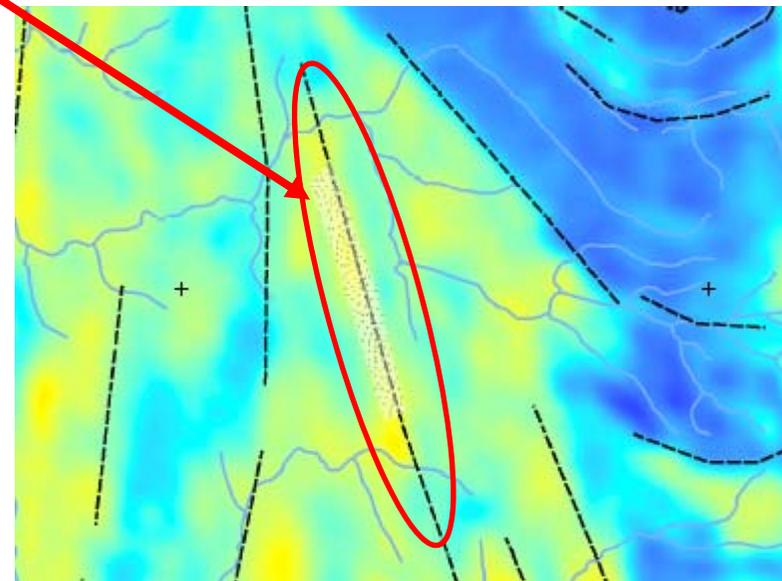
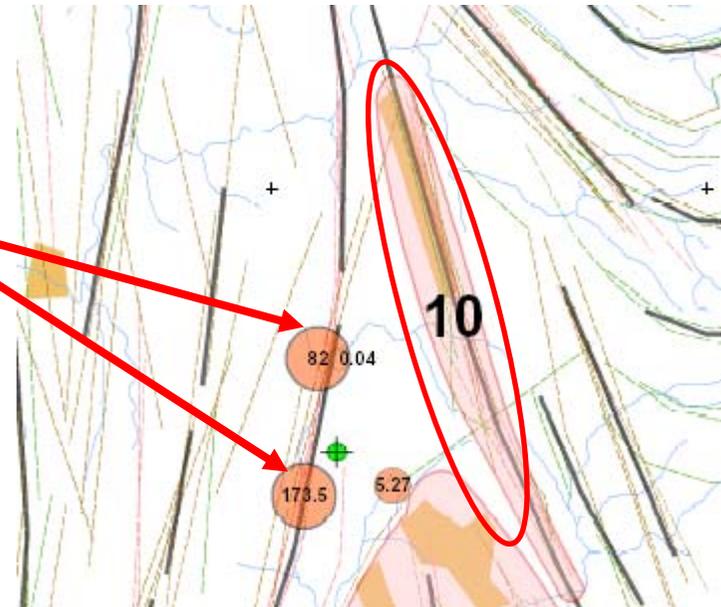
Magnetic and radiometric anomaly along major linear

Stream sediment anomalism

Targeting map showing areas of radiometric anomalism, linear structures and panned concentrate Au.



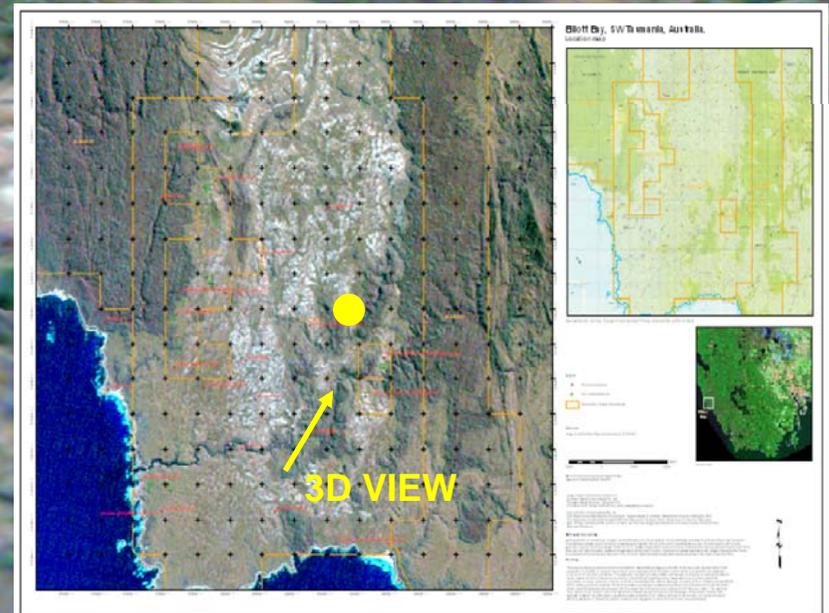
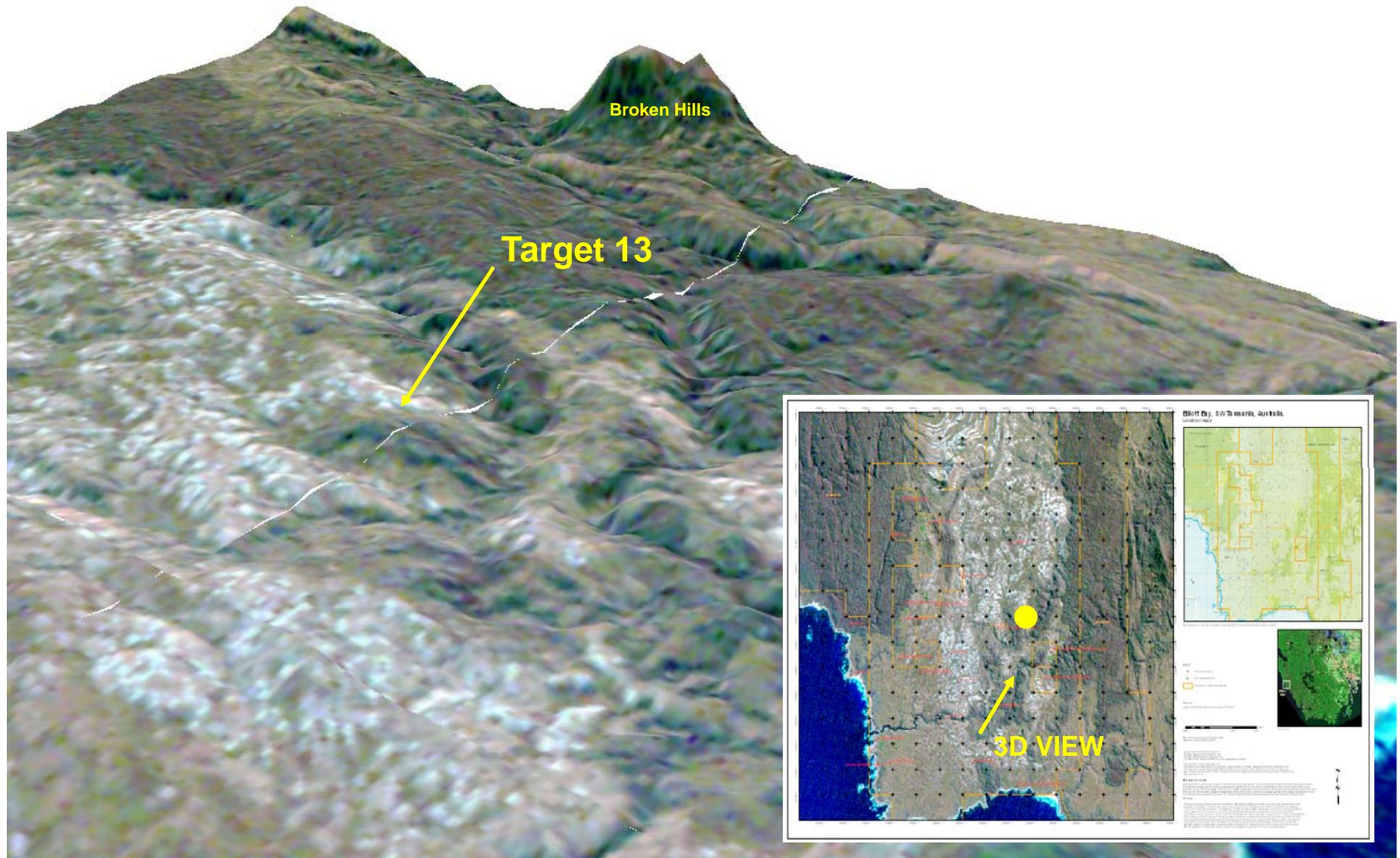
Magnetic image draped by geology from Cyprus Gold.



Radiometric image after correction for vegetation with major linear structures.

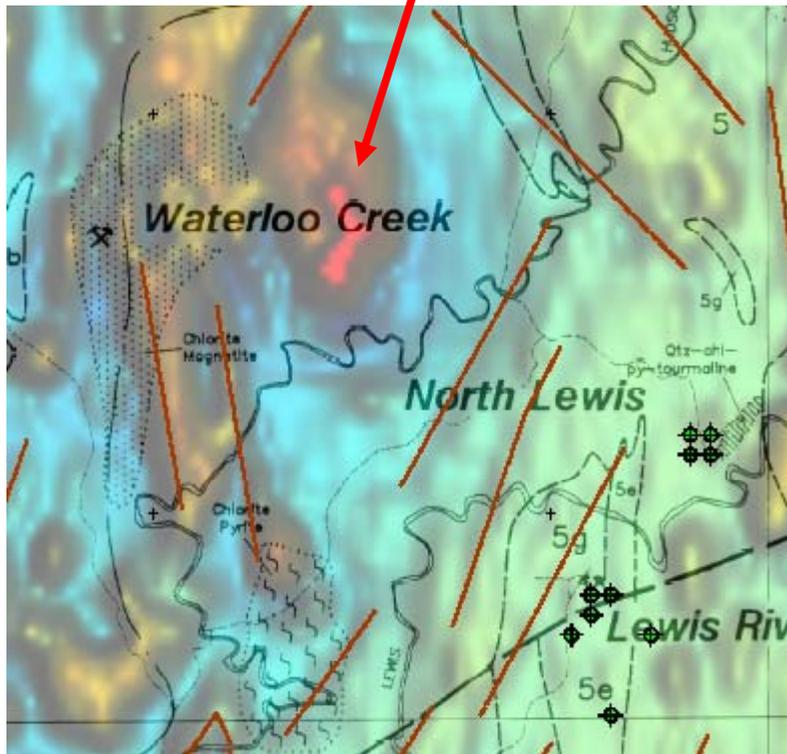
Target 13

Prominent untested magnetic and radiometric
anomalism near access track.



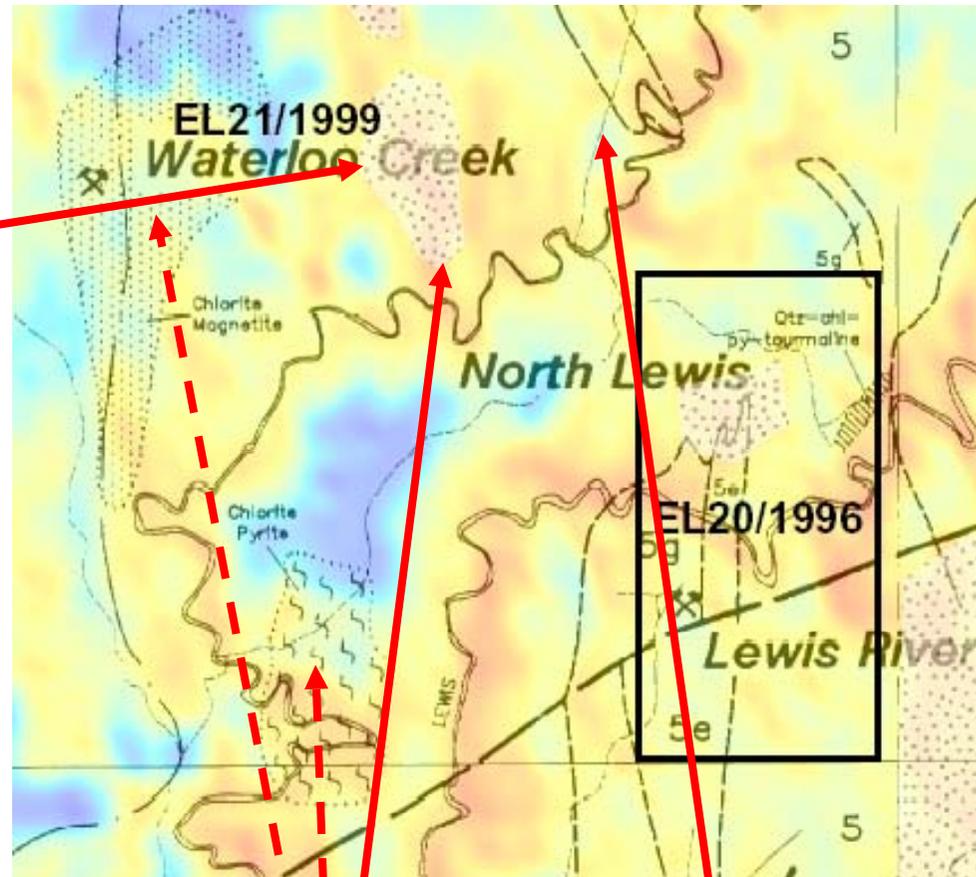
Target 13 Zone of prominent untested magnetic and radiometric anomalism.

Marked magnetic and radiometric anomaly



Magnetic image draped by geology from Cyprus Gold.

Radiometric image after correction for vegetation with major linear structures. Geology from Cyprus Gold.

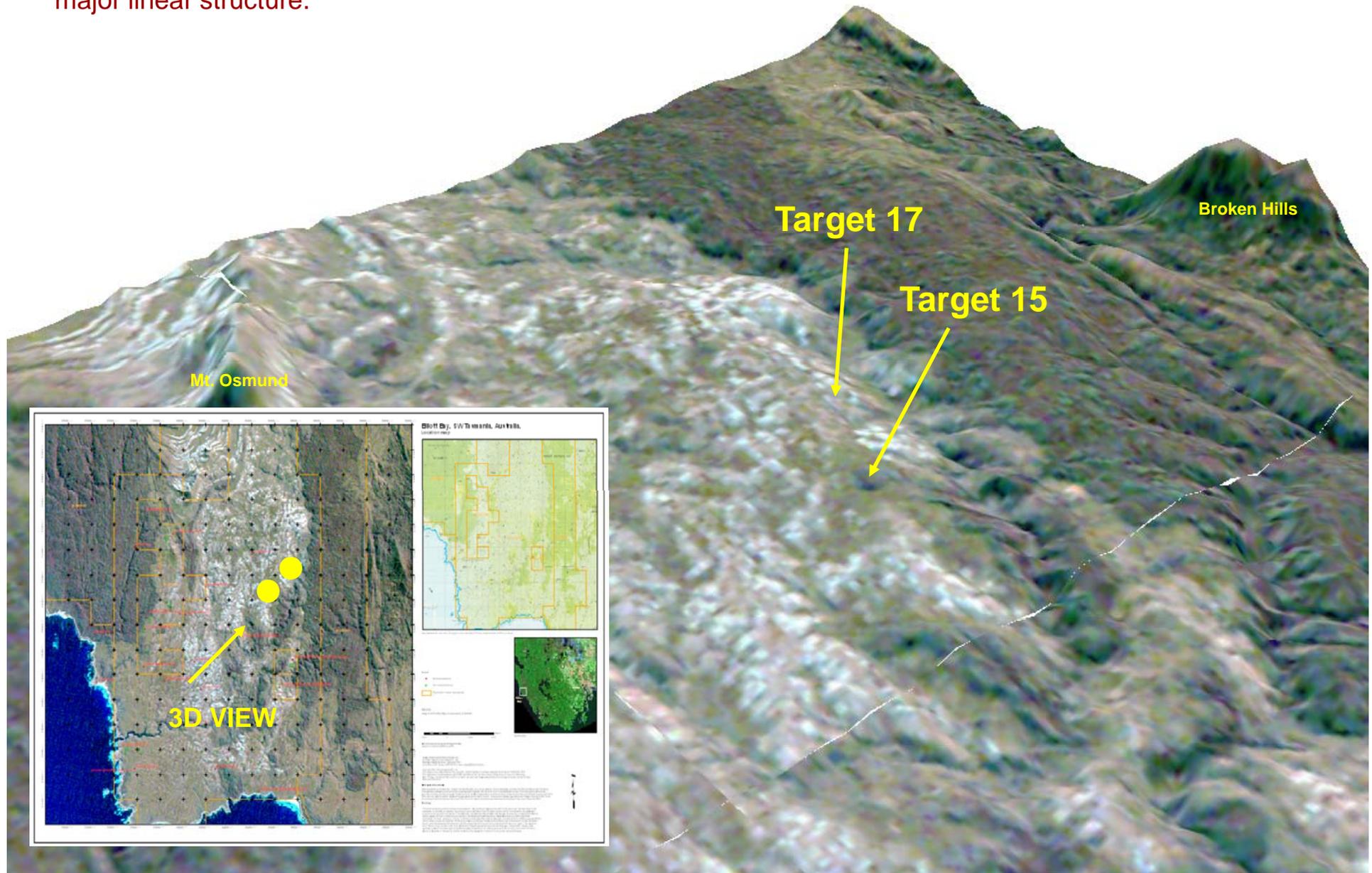


Only 700m from a major access track but untested by stream sediment sampling.

Radiometric anomalism differs to that associated with mapped chlorite-pyrite and chlorite-magnetite alteration.

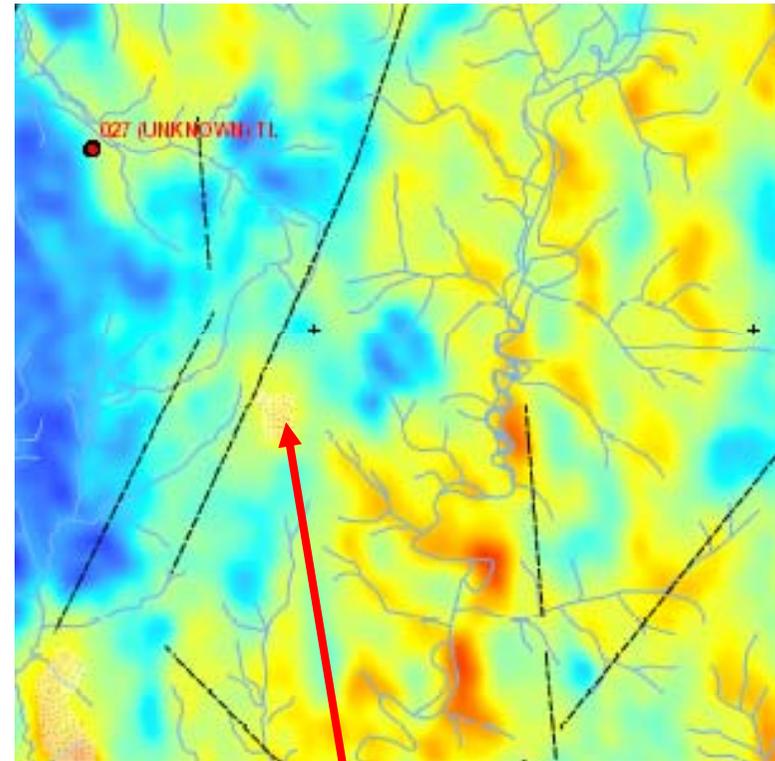
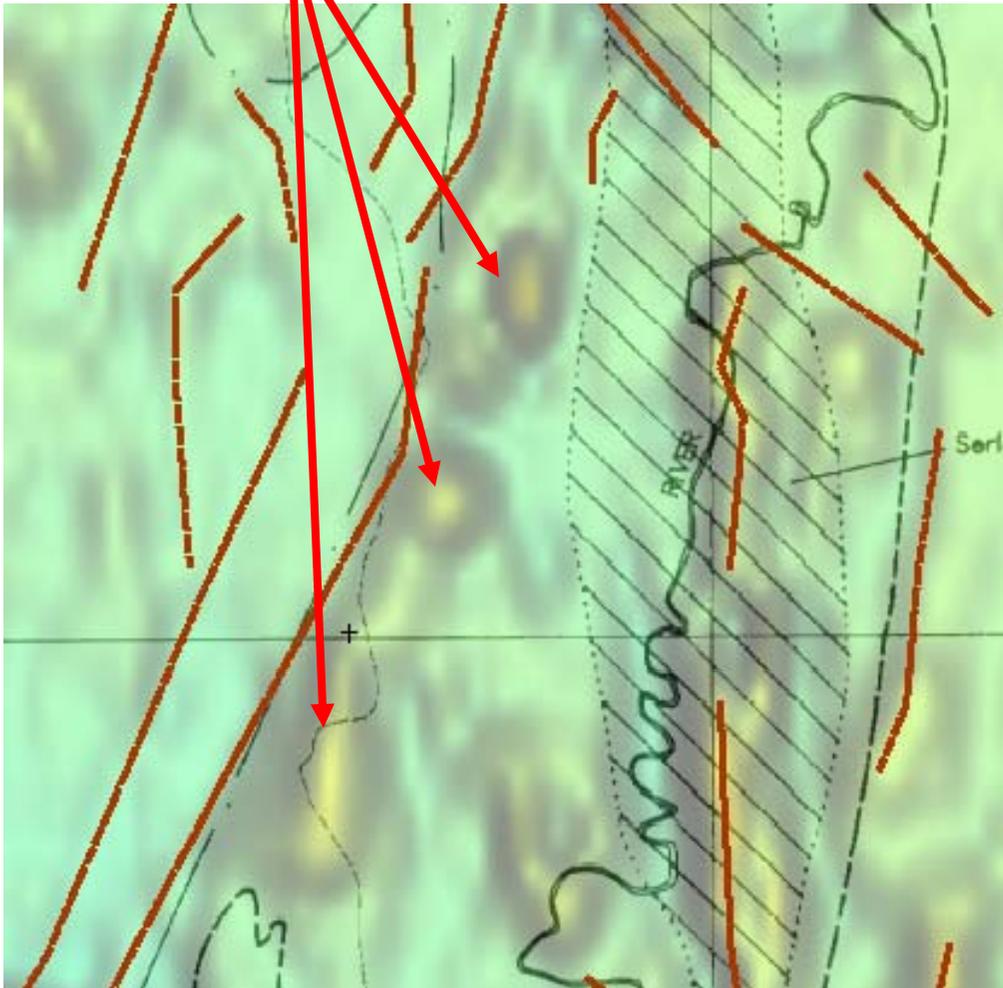
Targets 15 & 17

Magnetic and radiometric anomalism adjacent to major linear structure.



Targets 15 & 17 Areas of magnetic and radiometric anomalism adjacent to major linear structure.

Elliptical anomalies adjacent to major linear structure.



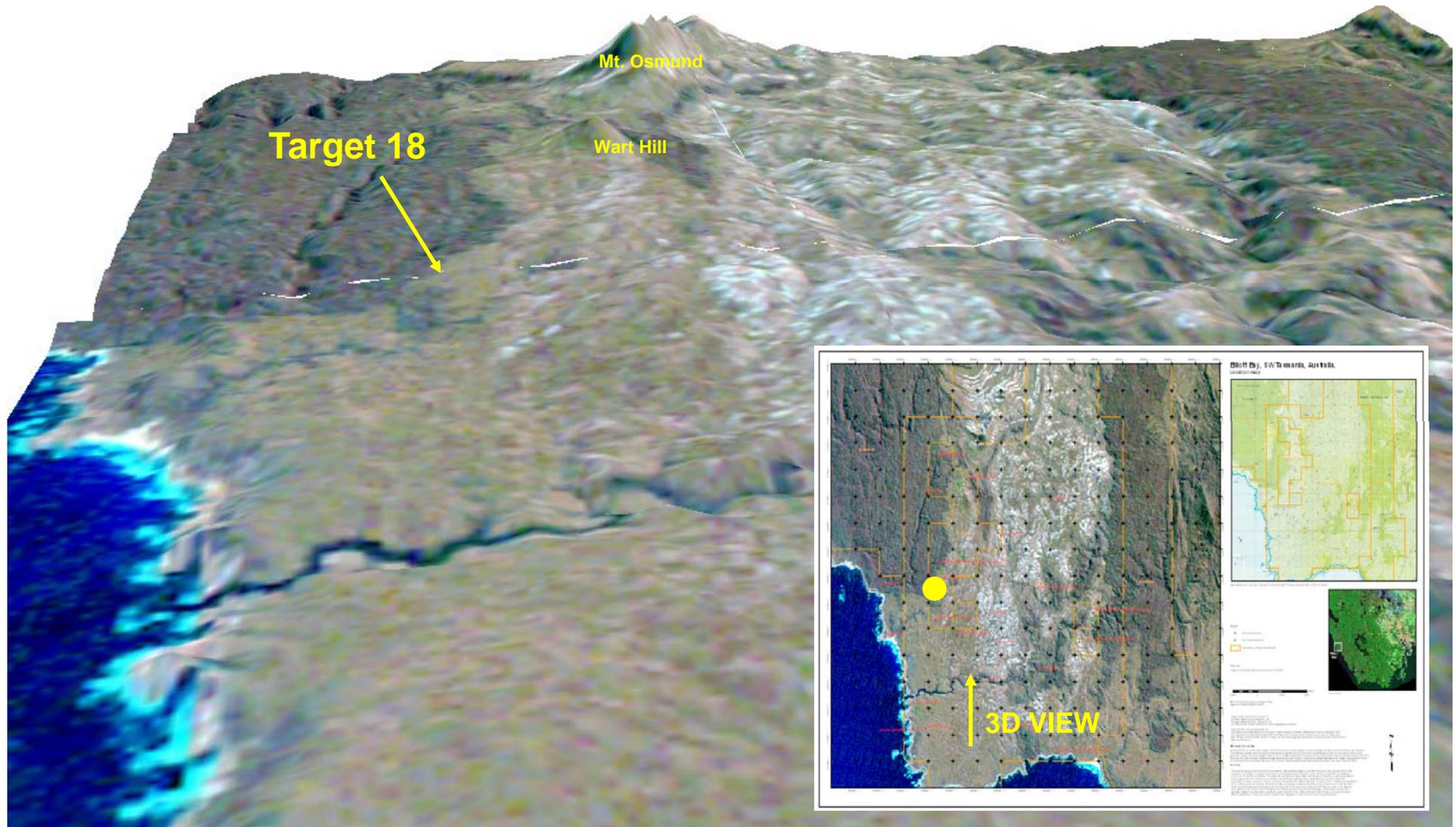
Radiometric image after correction for vegetation with major linear structures.

Radiometric anomalism.

Magnetic image draped by geology from Cyprus Gold.

Target 18 Sassy Creek

Radiometric anomalism. Highly anomalous panned concentrate Au.



Target 18 Radiometric anomalism with highly anomalous panned concentrate Au.

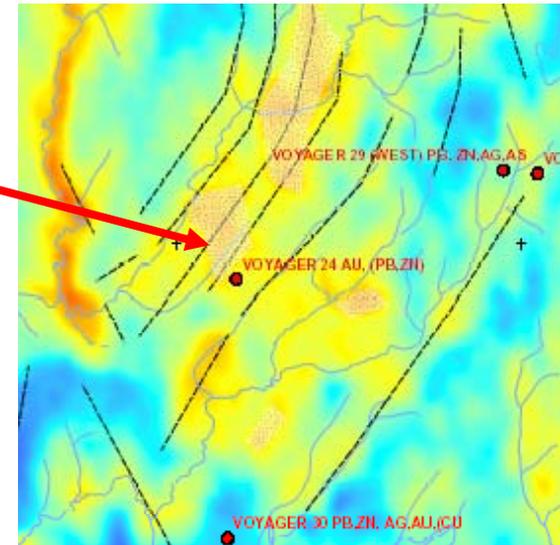
Radiometric anomalism.

Major stream sediment anomalism.

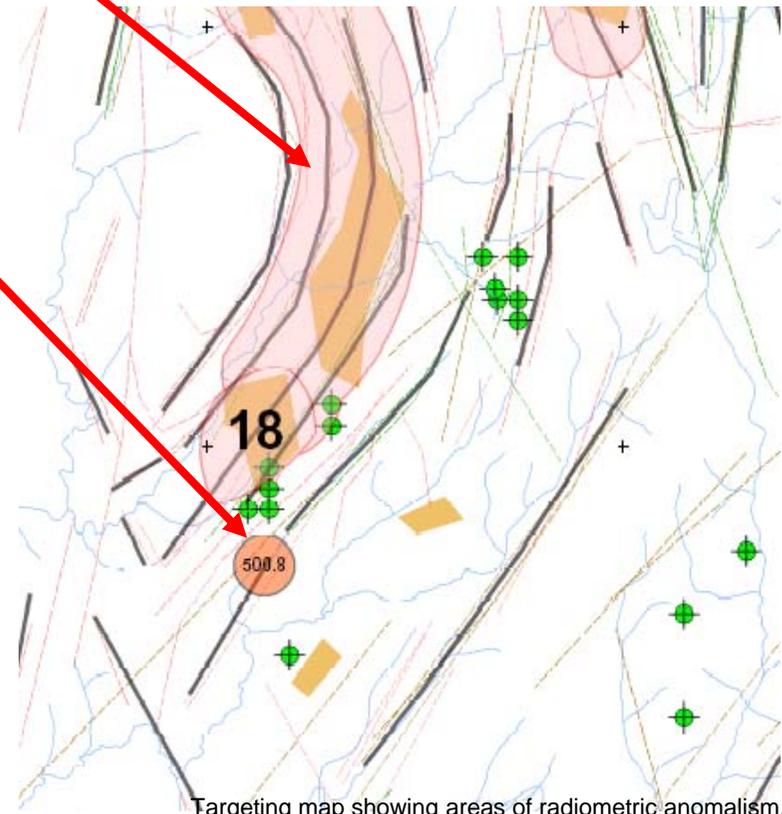
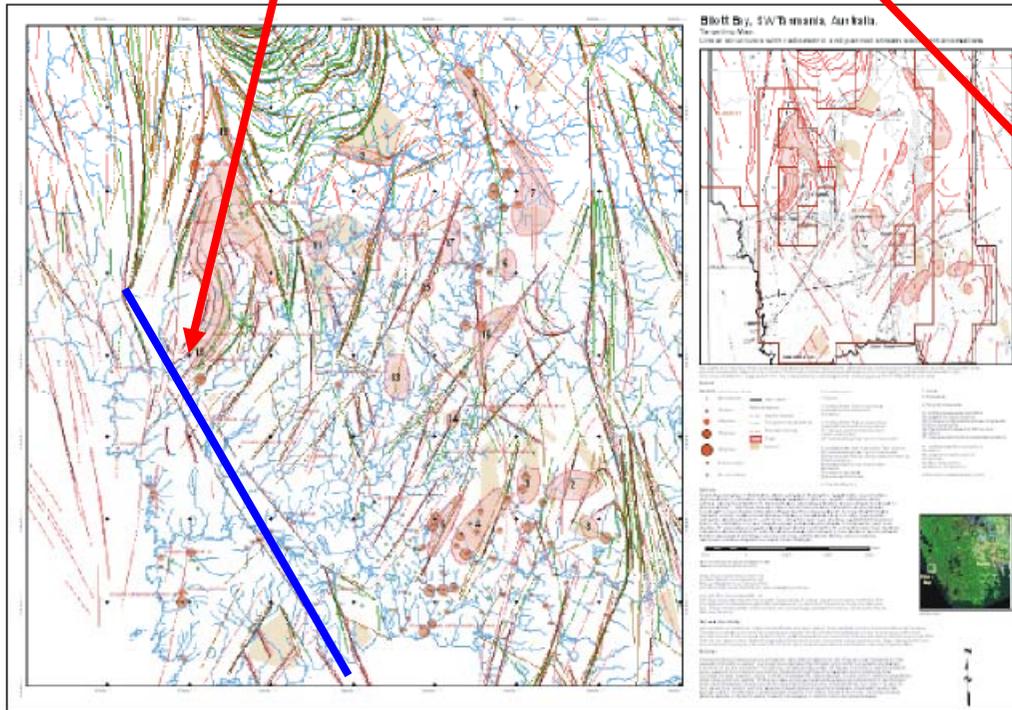
Located adjacent to regional-scale linear structure.

Located on same horizon as Wart Hill massive sulphide prospect.

Radiometric image after correction for vegetation with major linear structures.

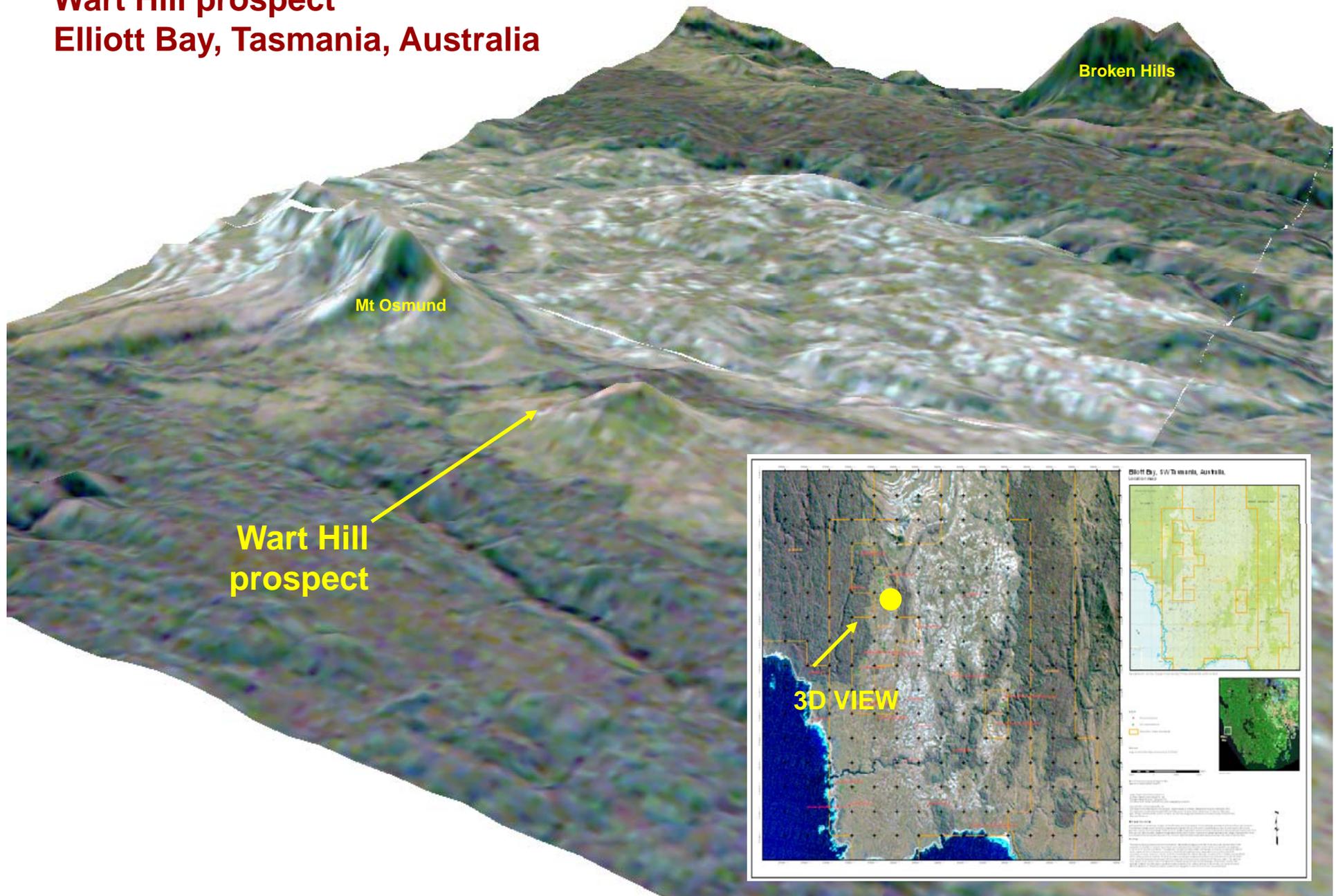


Targeting map



Targeting map showing areas of radiometric anomalism, linear structures and panned concentrate Au.

Target 12
Wart Hill prospect
Elliott Bay, Tasmania, Australia



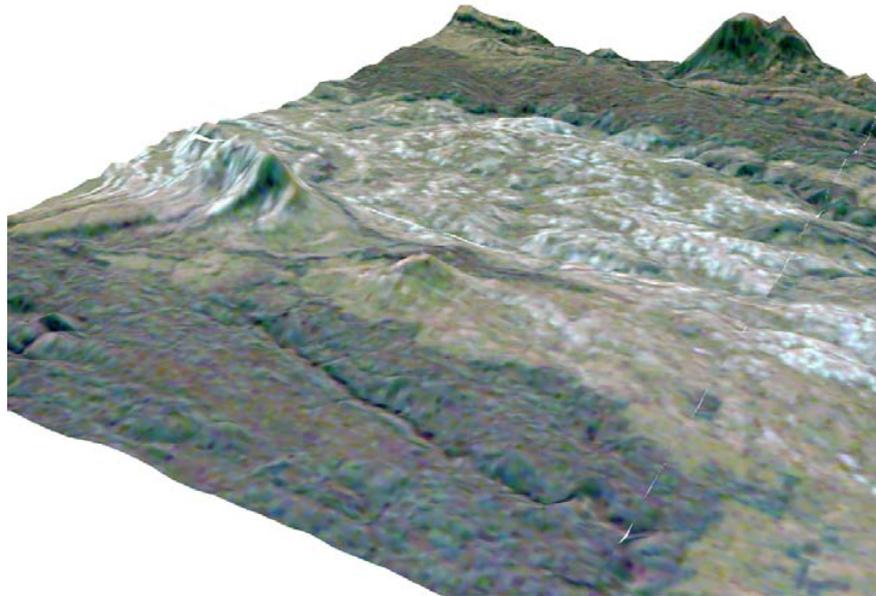
Wart Hill

Discovery of exposed pods/clasts of Pb- and Zn-rich massive sulphide (>25% Pb+Zn).

Exploration targeted the underlying (footwall horizon) rocks, thought to contain the deposit from which the sulphide clasts originated.

Explorers placed little emphasis on understanding the structural geology of the Wart Hill prospect, despite controversy as to the direction of the footwall rocks.

New information derived from re-logging diamond drill core and image processing shows important aspects of the Wart Hill geology not previously discussed.....

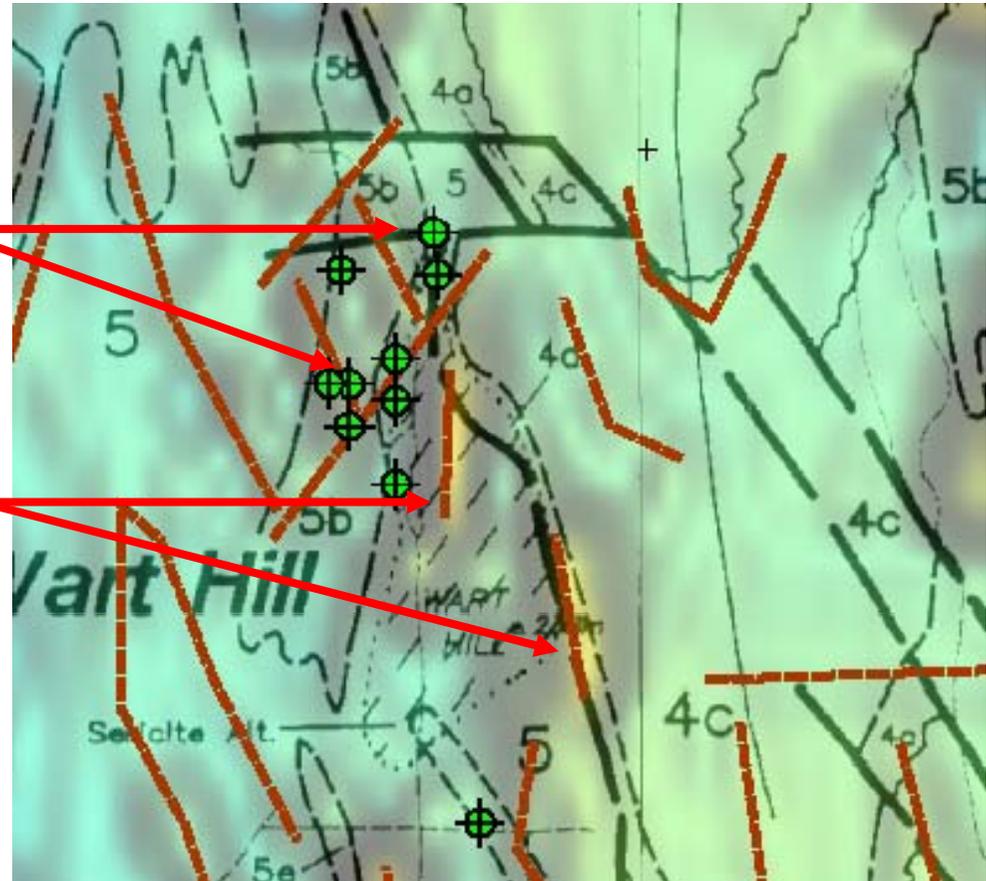
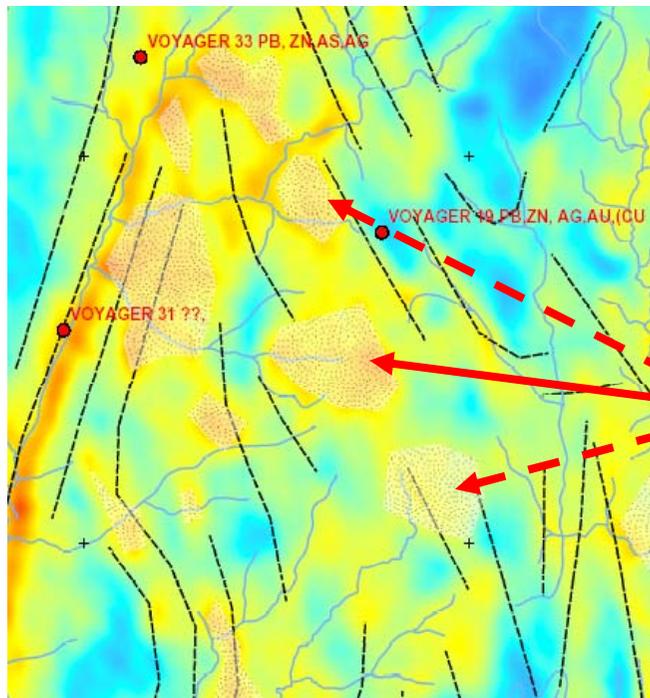


Wart Hill

Aeromagnetic image draped by interpreted geology and drill hole locations; radiometric anomaly map.

Approximate locations of mapped sulphide clasts.

Magnetic anomalies with overlying mapped sericite alteration?



Magnetic image draped by geology from Cyprus Gold.

Alteration at Wart Hill apparent in radiometric image. It forms one of several anomalous zones spaced regularly along strike from Wart Hill.

Radiometric image after correction for vegetation with major linear structures.

Wart Hill

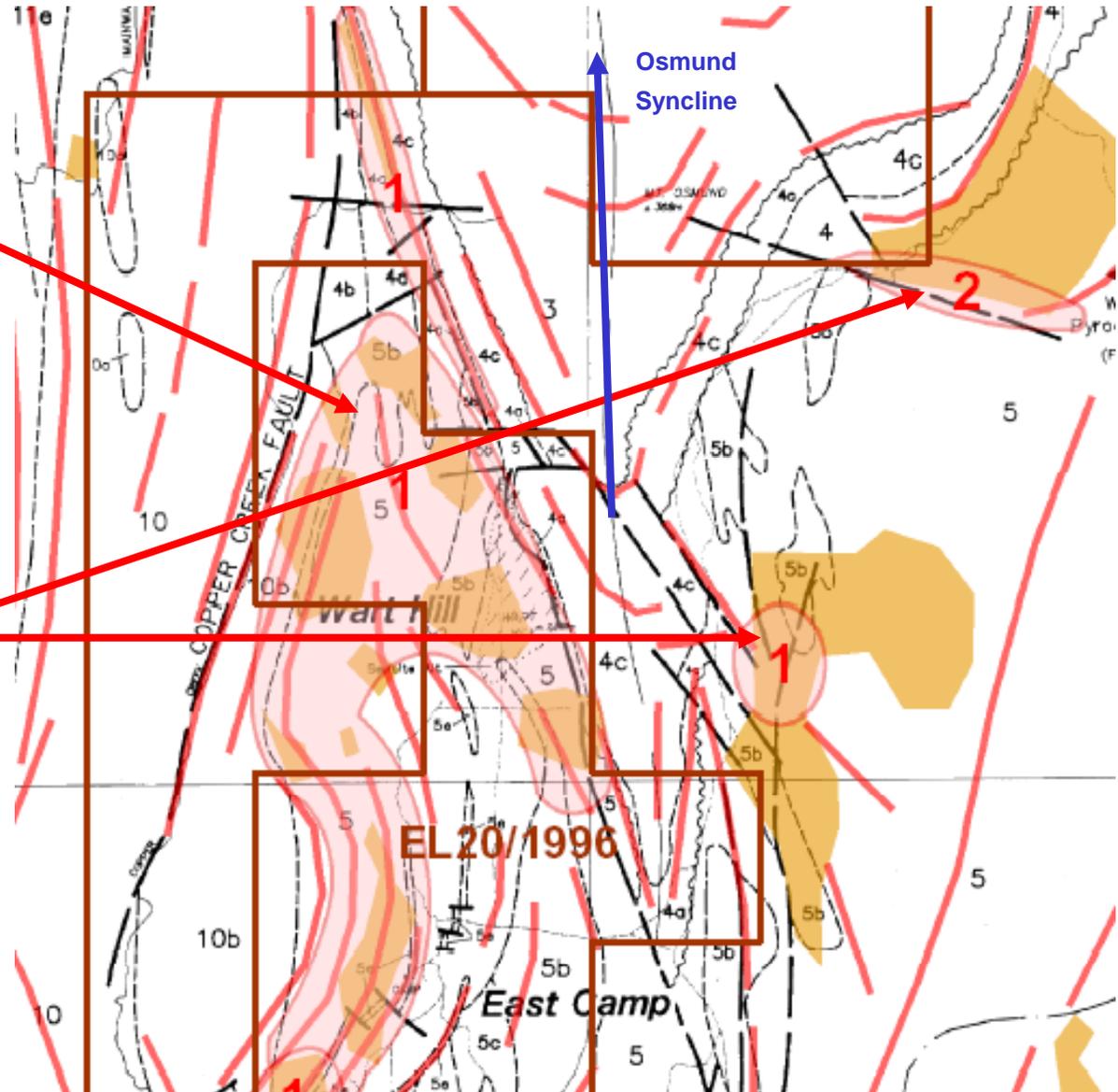
Linking rocks hosting Wart Hill, East Camp, and Sassy Creek prospects.

Targeting map showing areas of radiometric anomalism, with geology from Cyprus Gold. Numbers refer to target priority.

Image data suggests folded mineralised horizon.

Prospective rocks may extend around the keel of the Osmund Syncline to target areas on the syncline's eastern flank.

Thickness variations in the stratigraphy are consistent with faults there (those at high angle to stratigraphy) being active during sedimentation and Pb-Zn mineralisation.

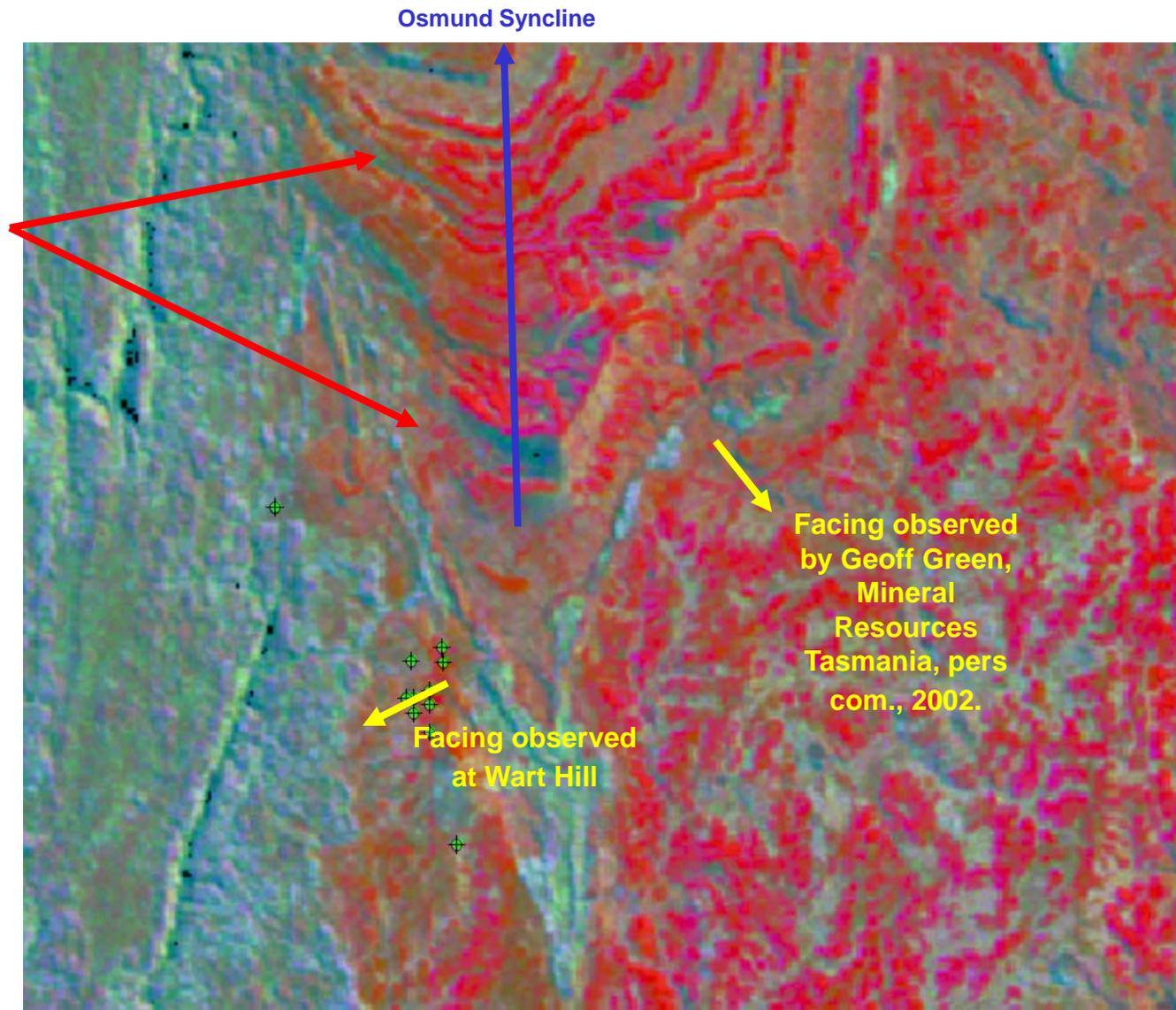


Wart Hill

Facing in Cambrian rocks is consistent with the Osmund syncline refolding an earlier phase of tight to isoclinal folds.

Apparent fold closures, indicating a phase of folding that predates the formation of Osmund Syncline.

Refolding is consistent with evidence for 2 phases of folding in Wart Hill drill core.

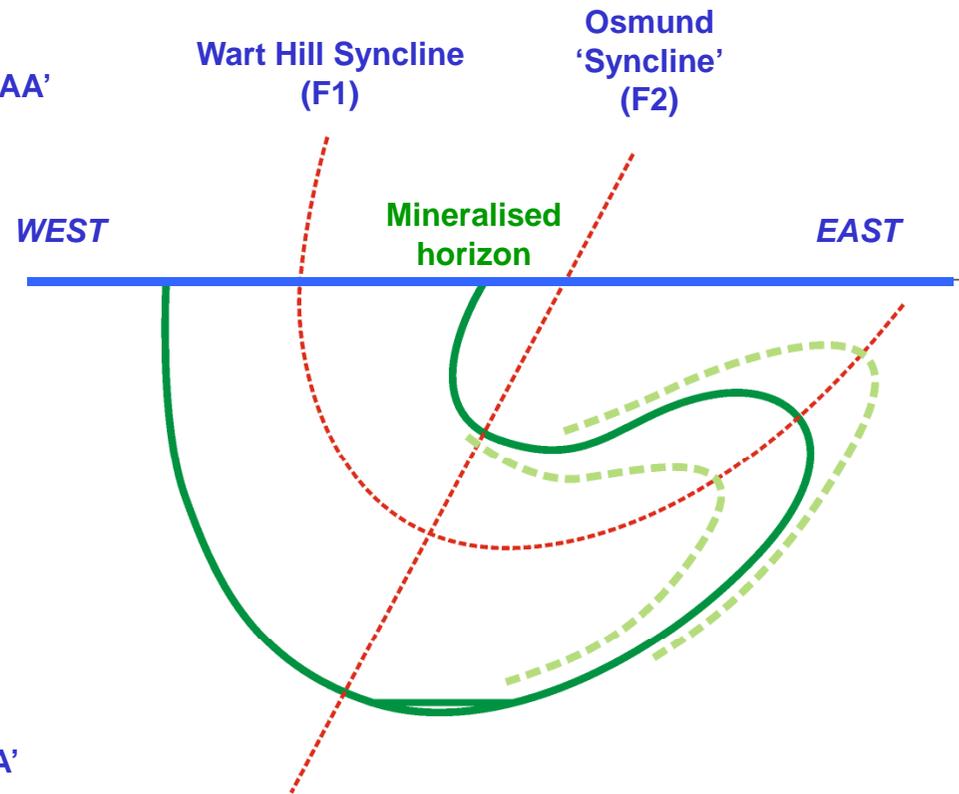
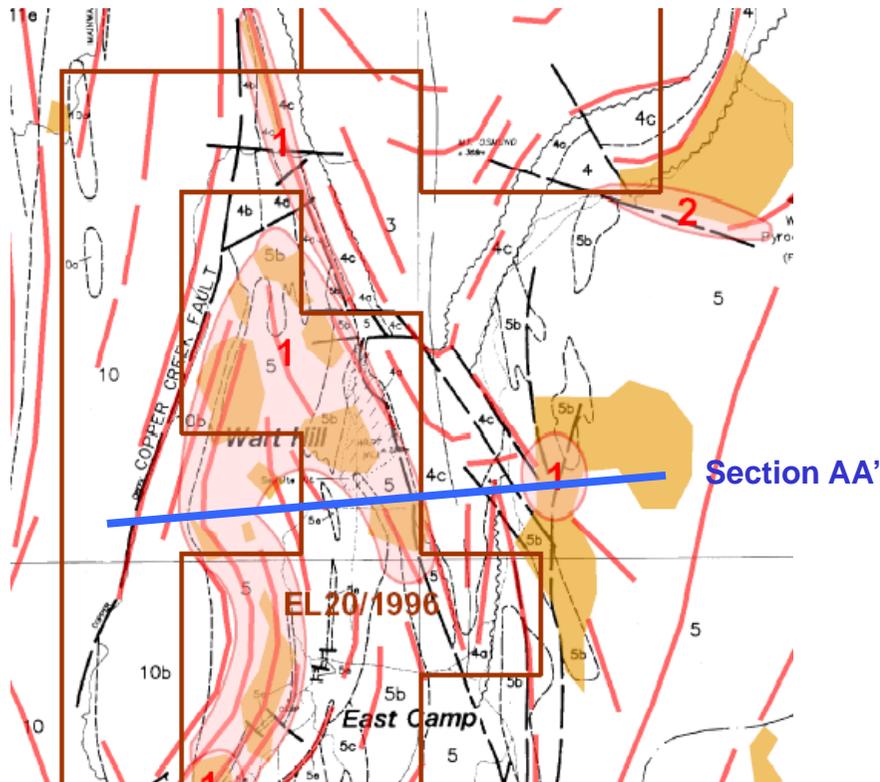


Processed multi-band satellite image

Wart Hill

Refolding at Wart Hill requires a faulted contact between Wart Hill Pyroclastics and younger Waterloo Creek. If the contact between these packages is conformable then the Waterloo Creek must be the older unit.

Targeting map showing areas of radiometric anomalism, with geology from Cyprus Gold. Numbers refer to target priority.



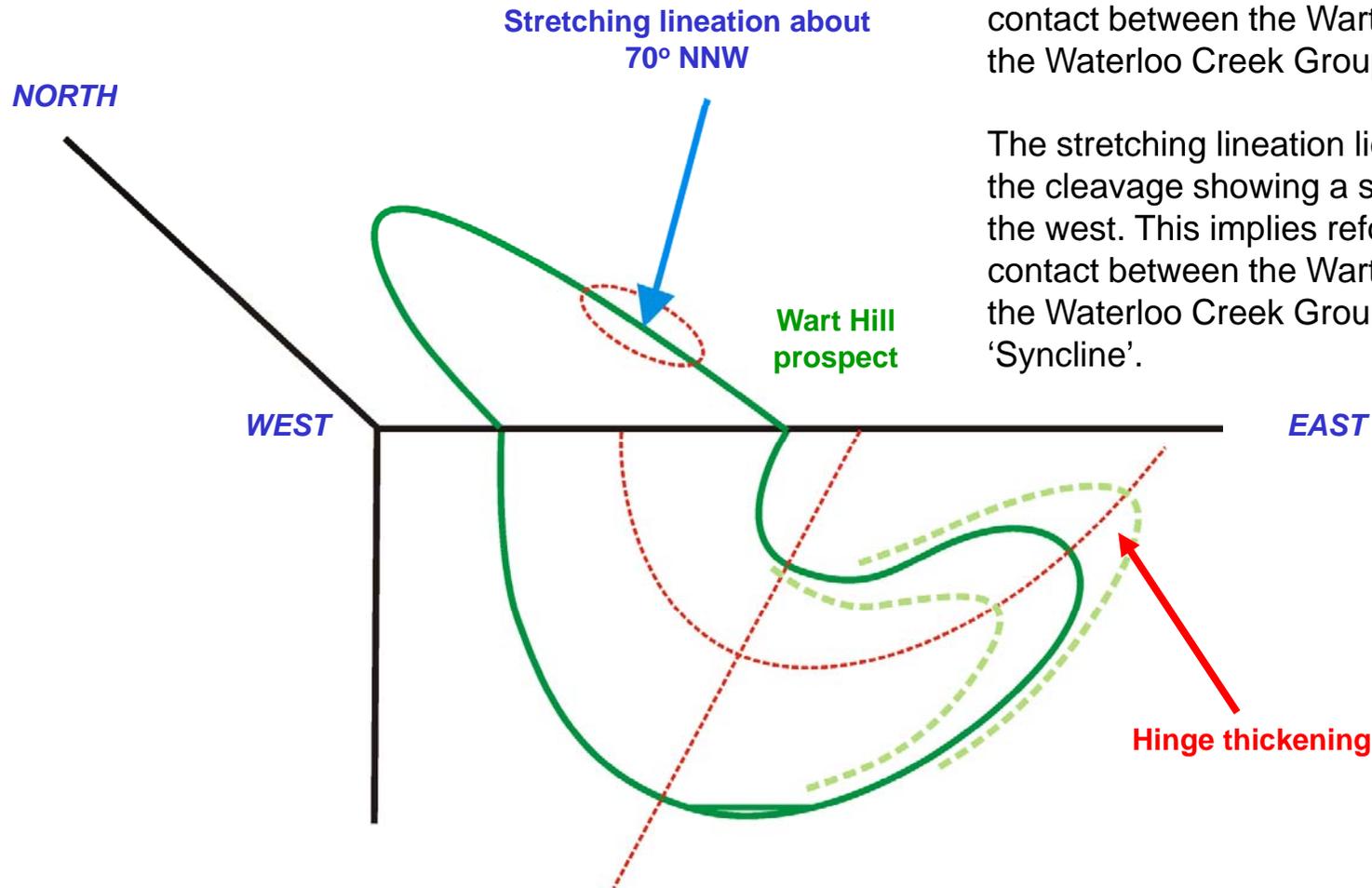
A possible geometry for the Wart Hill area showing the Wart Hill mineralised horizon folded and then re-folded under the Osmund Syncline. The extent of refolding can be determined through structural mapping along the eastern flank of the Osmund 'Syncline'.

Wart Hill

Targeting mineralisation.

A prominent stretching lineation in Wart Hill drill core is consistent with faulting at the contact between the Wart Hill pyroclastics and the Waterloo Creek Group.

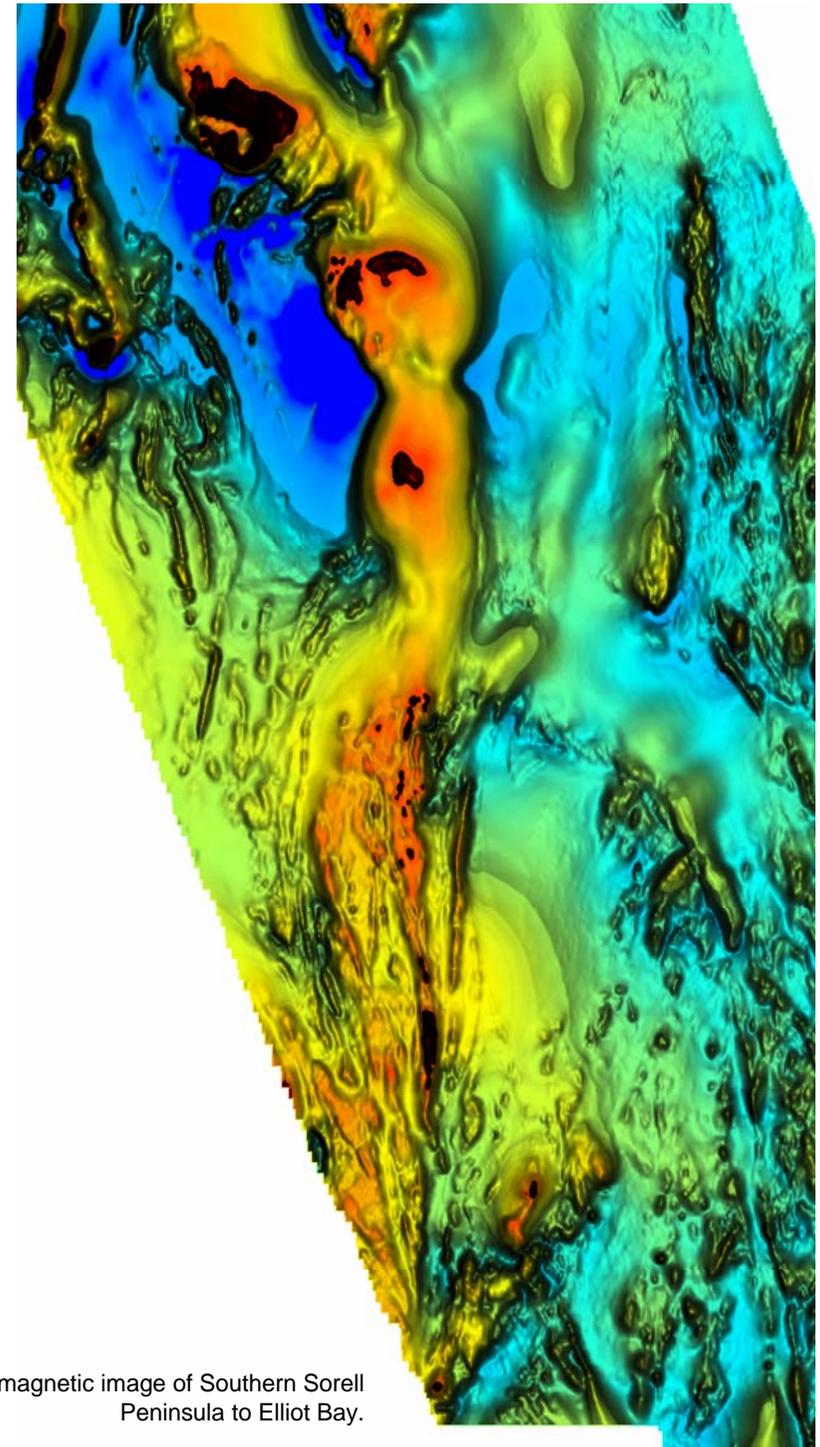
The stretching lineation lies within the plane of the cleavage showing a sunclinal fold axis to the west. This implies refolding of the faulted contact between the Wart Hill pyroclastics and the Waterloo Creek Group about the Osmund 'Syncline'.



Fluid migration during folding and hinge thickening make the hinge zone an excellent target zone. The location of the fold hinge itself may have been influenced by sulphide mineralisation, eg. as at Hellyer.

Conclusions

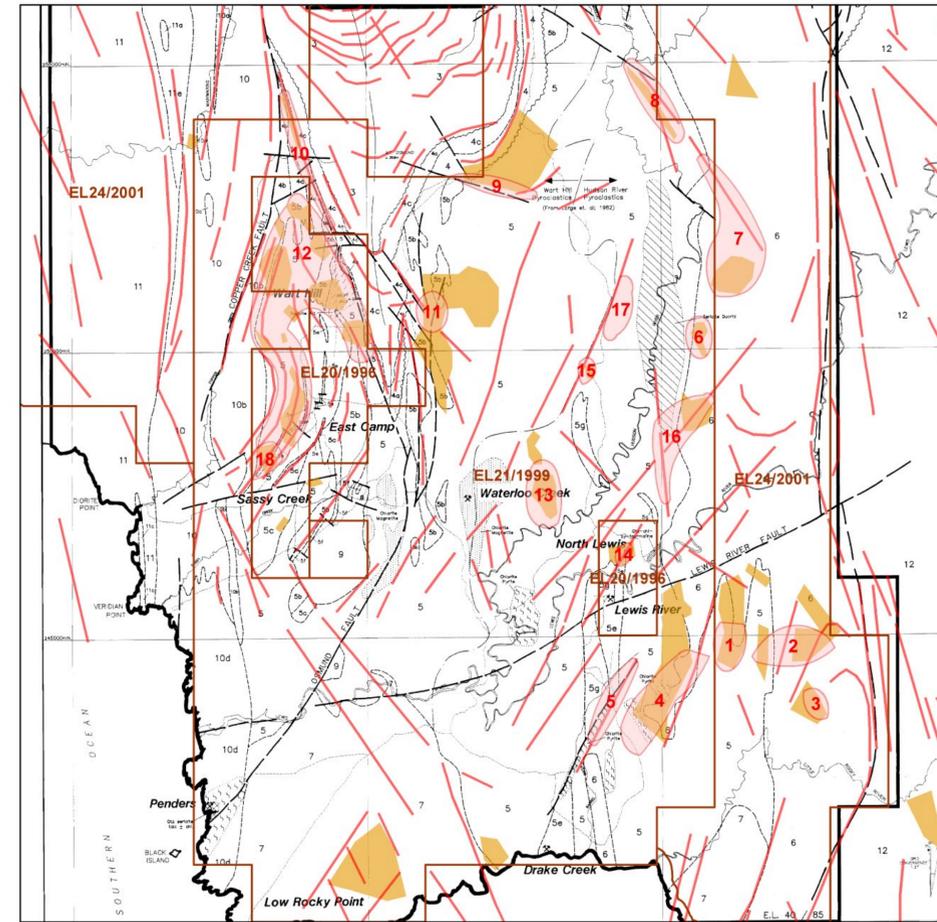
- Eighteen targets have been identified, sixteen of these have not previously been recognised or tested.
- There is a common association between these targets and unaccounted for Au values of up to several hundred ppm in nearby stream sediments.
- Geological models used by previous explorers to target high grade Pb-Zn mineralisation at Wart Hill were flawed and the prospect remains untested.



Processed magnetic image of Southern Sorell Peninsula to Elliot Bay.

Elliott Bay, SW Tasmania, Australia.

Targeting Map. Satellite image with major linear structures, radiometric and panned stream sediment anomalies.



View extents as for main map. Major linears (shown red) determined from all image products. Light brown areas are those areas of high radiometric response, not apparently readily explained as a result of a watercourse cut in the area. The coincidence of these stippled areas with areas of known mineralisation is consistent with the radiometric highs being the result of alteration. Numbered target areas are the same as shown on the main map (here shown red). Underlying geology from TCR88_2853 (Cyrus Gold).

Legend

Au_ppm (actual values shown)		1 Quartzose gravel	7 Granite
• Below detection		2 Dolerite	8 Microgranite
• <5ppm Au		3 Undifferentiated Owen Conglomerate	9 Porphyritic microgranite
• <25ppm Au		3a Coarse quartzose sandstone	10 Undifferentiated western epiclastics
• <50ppm Au		3b Siltstone	10a Andesitic to basaltic volcanics
• >50ppm Au		4 Undifferentiated Waterfool Creek Group	10b Tuffaceous siltstone and quartzose conglomerate
◆ Drill hole location		4a Hematitic volcanoclastic conglomerate	10c Black shale (pyrite)
	— Major linears	4b Tuffaceous quartz sandstone and grt	10d Fine to medium grained rhyolitic volcanics
	— SWrivers selection	4c Black shale (pyrite)	10e Gabbro
	■ Target	4d Fine to medium grained rhyolitic volcanoclastic	10f Coarse grained rhyolitic volcanoclastic sandstone
	■ Alteration	5 Undifferentiated Wart Hill & Hudson River volcanics	11 Undifferentiated Mainwaring Group
		5a Fine to medium grained rhyolitic volcanoclastic	11a Gabbro
		5b Rhyolitic quartz feldspar porphyry lavas and intrusives	11b Andesitic to basaltic volcanics
		5c Dacitic porphyry	11c Dolomite
		5d Coarse grained rhyolitic volcanoclastic	11d Black shale (pyrite)
		5e Siltstone	11e Siltstone and sandstone
		5f Siliceous conglomerate	12 Precambrian metasedimentary rocks
		5g Greywacke and siltstone	
		6 Elliott Point Porphyry	

Main map.

Targets (numbered on inset). Anomalous: 1 - Radiometrics, stream sediment; 2 - Radiometrics, magnetic highs, linear structures, stream sediment; 3 - radiometrics, stream sediment, magnetics; 4 - Bulls-eye magnetic, radiometrics, stream sediment, adjacent linear structure; 5 - Mapped alteration, adjacent linear structure, stream sediment; 6 - radiometrics, stream sediment; 7 - Major linear structures, intersection of linear structures, radiometrics, stream sediments; 8 - radiometrics, linear structure, intersection of linear structures, stream sediments; 9 - mapped fault terminating radiometric anomaly, variations in unit thickness indicating syngenetic fault activity; 10 - major linear structure, radiometrics, stream sediments; 11 - as for 9; 12 - radiometrics, major linear structures, possible folded mineralised horizon; 13 - radiometrics over major magnetic anomaly, untested stream sediments; 14 - radiometrics, major linear structure; 15 - weak bulls-eyes magnetic, adjacent linear structure, radiometrics; 16 - intersection major linear structures, radiometrics, stream sediment; 17 - as for 15, stream sediments; 18 - radiometrics, linear structures, stream sediments. Targets remain untested. Anomalous values have also been noted in streams draining regions containing major linears, and these should also be considered as valid targets.



Non-standard map scale (optimised to sheet).
Geographic Datum AGD95, Zone 55.

Image processing and map production by:
Dr Alistair Reed, Ochre Australia Pty. Ltd.
50 Queen Street, Bellevue, Tasmania 7018
ph 03-6244-1317, mobile 0407-115-123, email alreed@bigpond.net.au

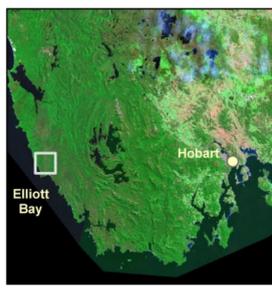
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This image also includes data derived from Mineral Resources Tasmania, Dept. Infrastructure, Energy and Resources, Dept. Primary Industries, Water and Environment, and scanned images extracted from company reports held by Mineral Resources Tasmania.

Statement of uncertainty.

Attribute data for point data have not been verified. Position error as per stated in Miroloch database (available from Mineral Resources Tasmania). This database indicates position errors for some deposits of greater than 1km. Dons drill hole database is known from comparison with mineral exploration reports not to be complete. Position error for gridded image data is unknown but likely to be less than the original flightline spacing of 200m. Road and river data have been digitised from georeferenced company reports. Comparisons between georeferenced images indicate position errors of up to about 100m (but typically less than 30m). Errors for other scanned and georeferenced products are in the order of less than 50m.

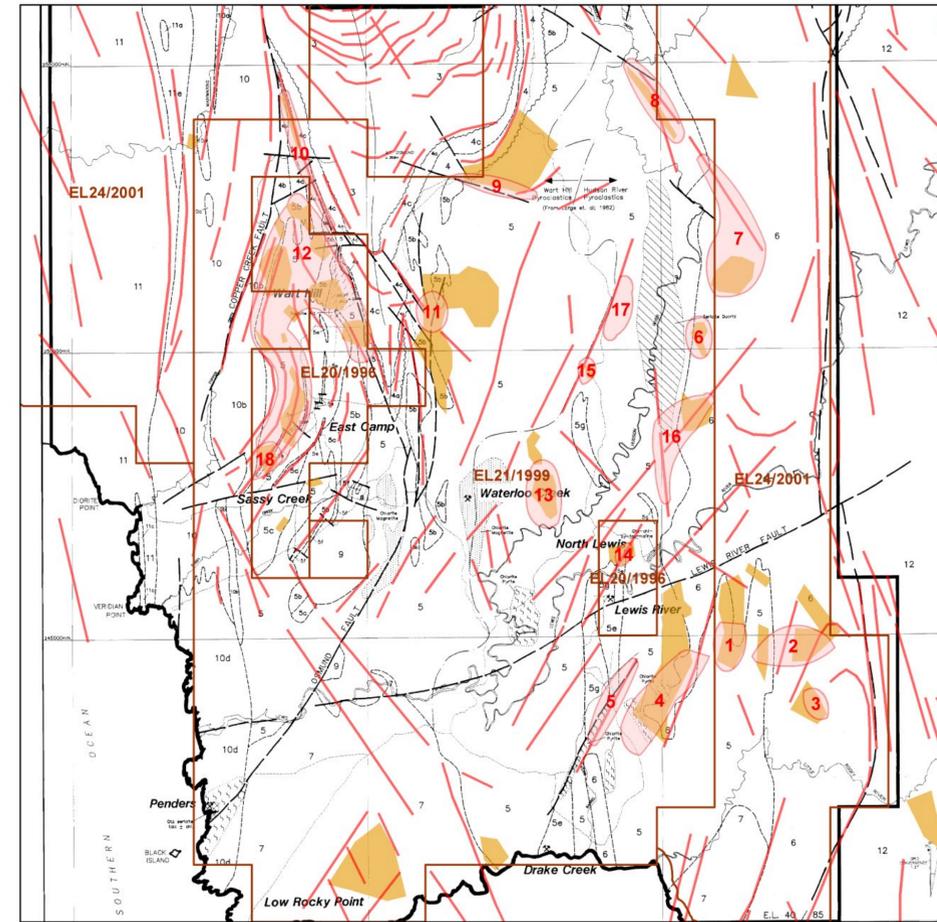
Disclaimer

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Elliott Bay, SW Tasmania, Australia.

Targeting Map. Radiometric anomalism map with major linear structures and panned stream sediment anomalies.



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		4d Fine to medium grained rhyolitic volcanoclastic	10f Coarse grained rhyolitic volcanoclastic sandstone
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		5e Siltstone	11e Siltstone and sandstone
		5f Siliceous conglomerate	12 Precambrian metasedimentary rocks
		5g Greywacke and siltstone	
		6 Elliott Point Porphyry	

Main map.
 Radiometric map corrected for vegetation. Bright areas away from watercourses are considered anomalous. Targets (numbered on inset). Anomalies: 1 - Radiometrics, stream sediment; 2 - Radiometrics, magnetic highs, linear structures, stream sediment; 3 - radiometrics, stream sediment, magnetic; 4 - Bull's-eye magnetic, radiometrics, stream sediment, adjacent linear structure; 5 - Mapped alteration, adjacent linear structure, stream sediment; 6 - radiometrics, stream sediment; 7 - Major linear structures, intersection of linear structures, radiometrics, stream sediments; 8 - radiometrics, linear structure, intersection of linear structures, stream sediments; 9 - mapped fault terminating radiometric anomaly, variations in unit thickness indicating syngenetic fault activity; 10 - major linear structure, radiometrics, stream sediments; 11 - as for 9; 12 - radiometrics, major linear structures, possible folded mineralised horizon; 13 - radiometrics over major magnetic anomaly, untested stream sediments; 14 - radiometrics, major linear structure; 15 - weak bull's-eye magnetic, adjacent linear structure, radiometrics; 16 - intersection major linear structures, radiometrics, stream sediment; 17 - as for 15, stream sediments; 18 - radiometrics, linear structures, stream sediments. Targets remain untested. Anomalous values have also been noted in streams draining regions containing major linears, and these should also be considered as valid targets.

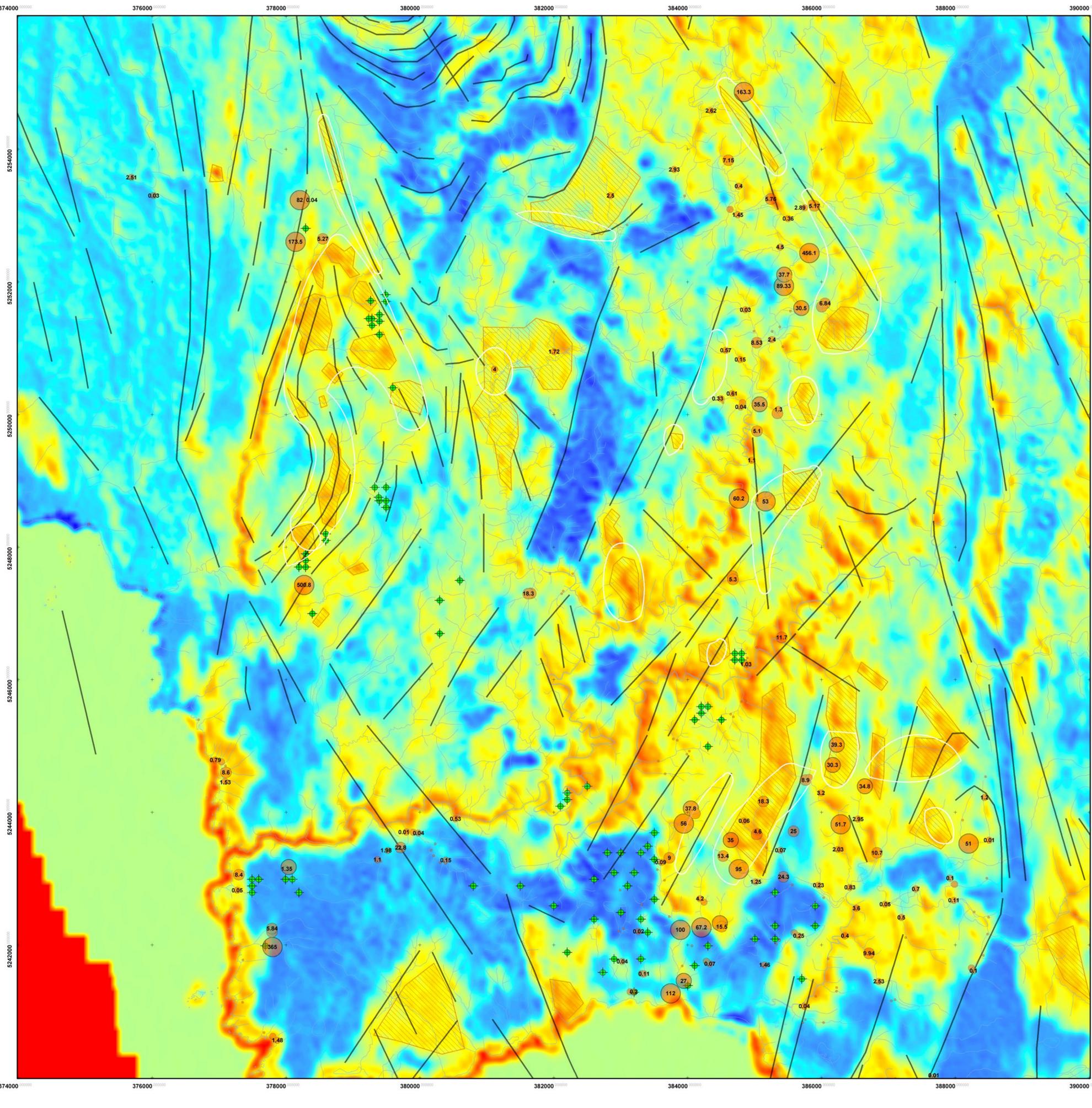
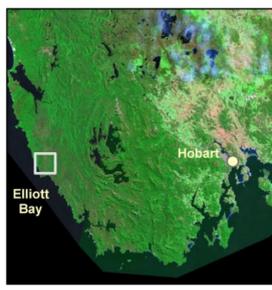


Image processing and map production by:
 Dr Alistair Reed, Ochre Australia Pty. Ltd.
 50 Queen Street, Bellevue, Tasmania 7018
 ph 03-6244-1317, mobile 0407-115-123, email alreed@bigpond.net.au

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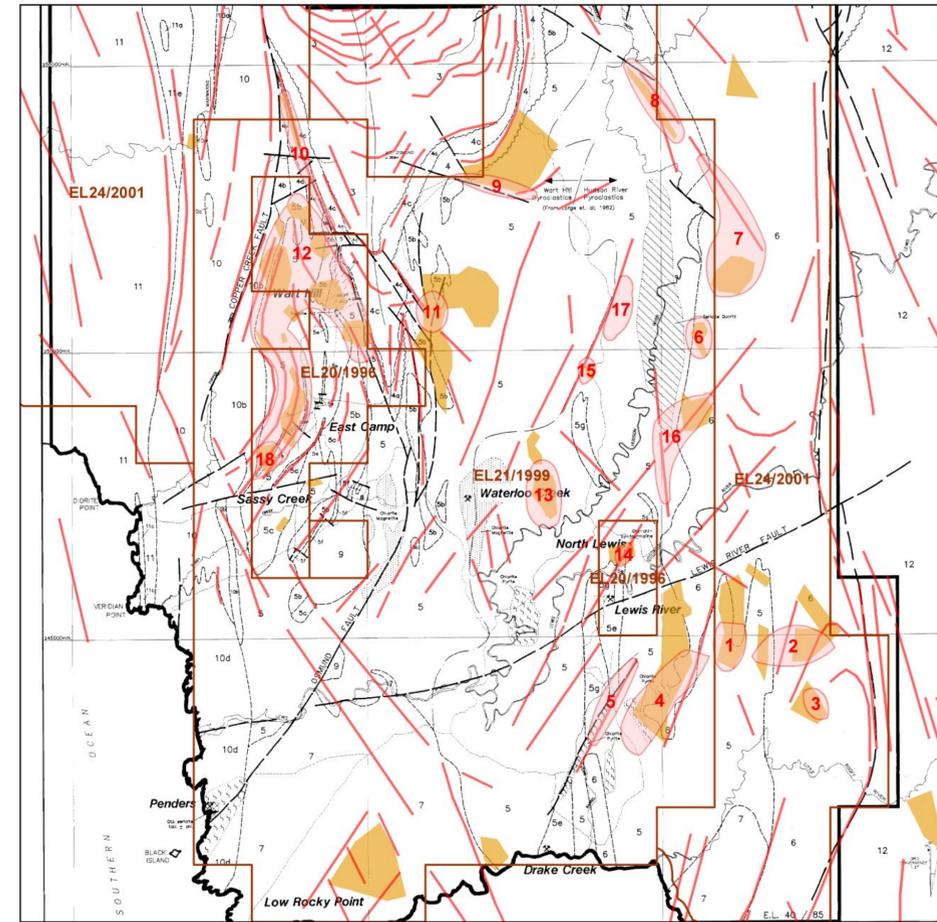
Statement of uncertainty.
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Elliott Bay, SW Tasmania, Australia.

Targeting Map. Magnetic map with major linear structures, radiometric and panned stream sediment anomalies.



View extents as for main map. Major linears (shown red) determined from all image products. Light brown areas are those areas of high radiometric response, not apparently readily explained as a result of a watercourse cut in the area. The coincidence of these stippled areas with areas of known mineralisation is consistent with the radiometric highs being the result of alteration. Numbered target areas are the same as shown on the main map (here shown red). Underlying geology from TCR88_2853 (Cyrus Gold).

Legend

Au_ppm (actual values shown)		1 Quartzose gravel	7 Granite
• Below detection		2 Dolerite	8 Microgranite
• <5ppm Au		3 Undifferentiated Owen Conglomerate	9 Porphyritic microgranite
• <25ppm Au		3a Coarse quartzose sandstone	10 Undifferentiated western epiclastics
• <50ppm Au	— Major linears	3b Siltstone	10a Andesitic to basaltic volcanics
• >50ppm Au	— SWivers selection	4 Undifferentiated Waterloo Creek Group	10b Tuffaceous siltstone and quartzose conglomerate
◆ Drill hole location	— Target	4a Hematitic volcanoclastic conglomerate	10c Black shale (pyrite)
	— Alteration	4b Tuffaceous quartz sandstone and grit	10d Fine to medium grained rhyolitic volcanics
		4c Black shale (pyrite)	10e Gabbro
		4d Fine to medium grained rhyolitic volcanoclastic	10f Coarse grained rhyolitic volcanoclastic sandstone
		5 Undifferentiated Wart Hill & Hudson River volcanics	11 Undifferentiated Mainwaring Group
		5a Fine to medium grained rhyolitic volcanoclastic	11a Gabbro
		5b Rhyolitic quartz feldspar porphyry lavas and intrusives	11b Andesitic to basaltic volcanics
		5c Dacitic porphyry	11c Dolomite
		5d Coarse grained rhyolitic volcanoclastic	11d Black shale (pyrite)
		5e Siltstone	11e Siltstone and sandstone
		5f Siliceous conglomerate	12 Precambrian metasedimentary rocks
		5g Greywacke and siltstone	
		6 Elliott Point Porphyry	

Main map.

Targets (numbered on inset). Anomalies: 1 - Radiometrics, stream sediment; 2 - Radiometrics, magnetic highs, linear structures, stream sediment; 3 - radiometrics, stream sediment, magnetics; 4 - Bulls-eye magnetic, radiometrics, stream sediment, adjacent linear structure; 5 - Mapped alteration, adjacent linear structure, stream sediment; 6 - radiometrics, stream sediment; 7 - Major linear structures, intersection of linear structures, radiometrics, stream sediments; 8 - radiometrics, linear structure, intersection of linear structures, stream sediments; 9 - mapped fault terminating radiometric anomaly, variations in unit thickness indicating syngenetic fault activity; 10 - major linear structure, radiometrics, stream sediments; 11 - as for 9; 12 - radiometrics, major linear structures, possible folded mineralised horizon; 13 - radiometrics over major magnetic anomaly, untested stream sediments; 14 - radiometrics, major linear structure; 15 - weak bulls-eye magnetic, adjacent linear structure, radiometrics; 16 - intersection major linear structures, radiometrics, stream sediment; 17 - as for 15, stream sediments; 18 - radiometrics, linear structures, stream sediments. Targets remain untested. Anomalous values have also been noted in streams draining regions containing major linears, and these should also be considered as valid targets.



Non-standard map scale (optimised to sheet).
Geographic Datum AGD95, Zone 55.

Image processing and map production by:
Dr Alistair Reed, Ochre Australia Pty. Ltd.
50 Queen Street, Bellevue, Tasmania 7018
ph 03-6244-1317, mobile 0407-115-123, email alreed@bigpond.net.au

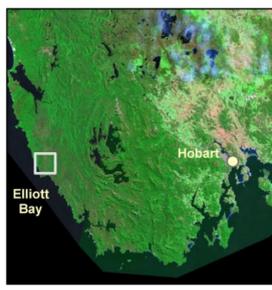
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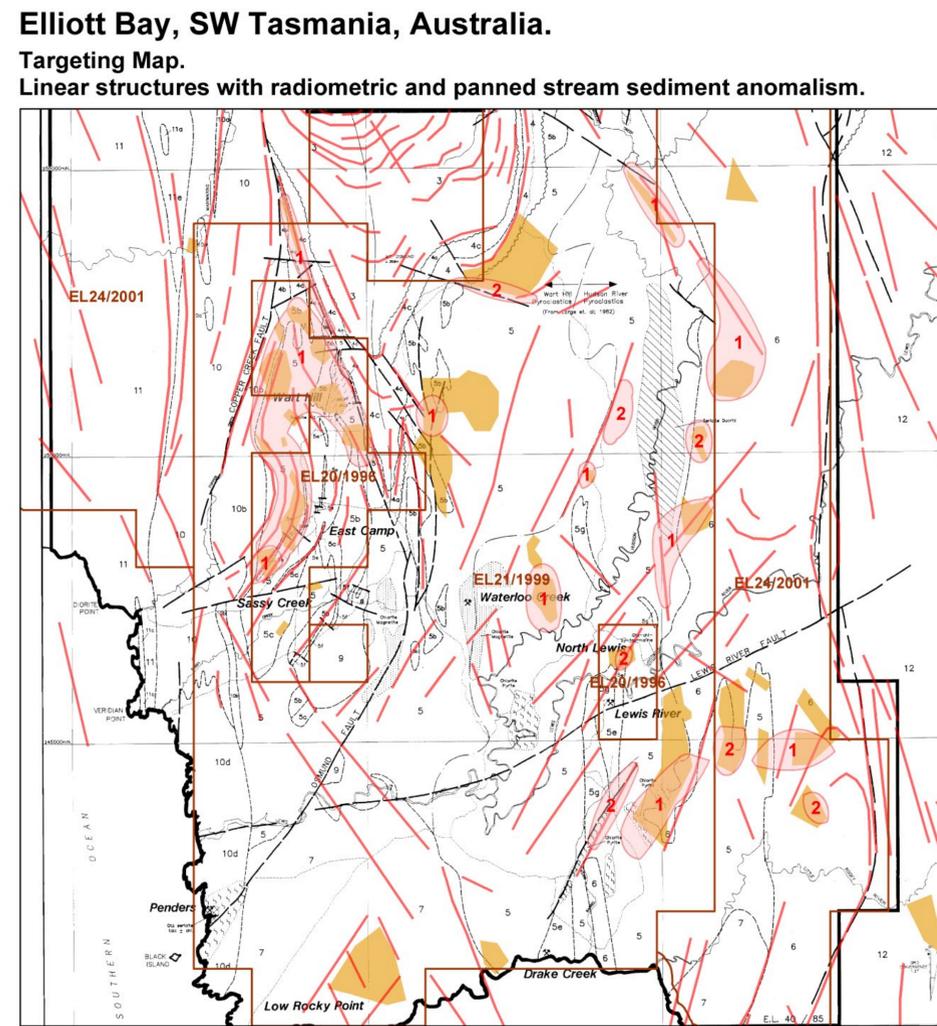
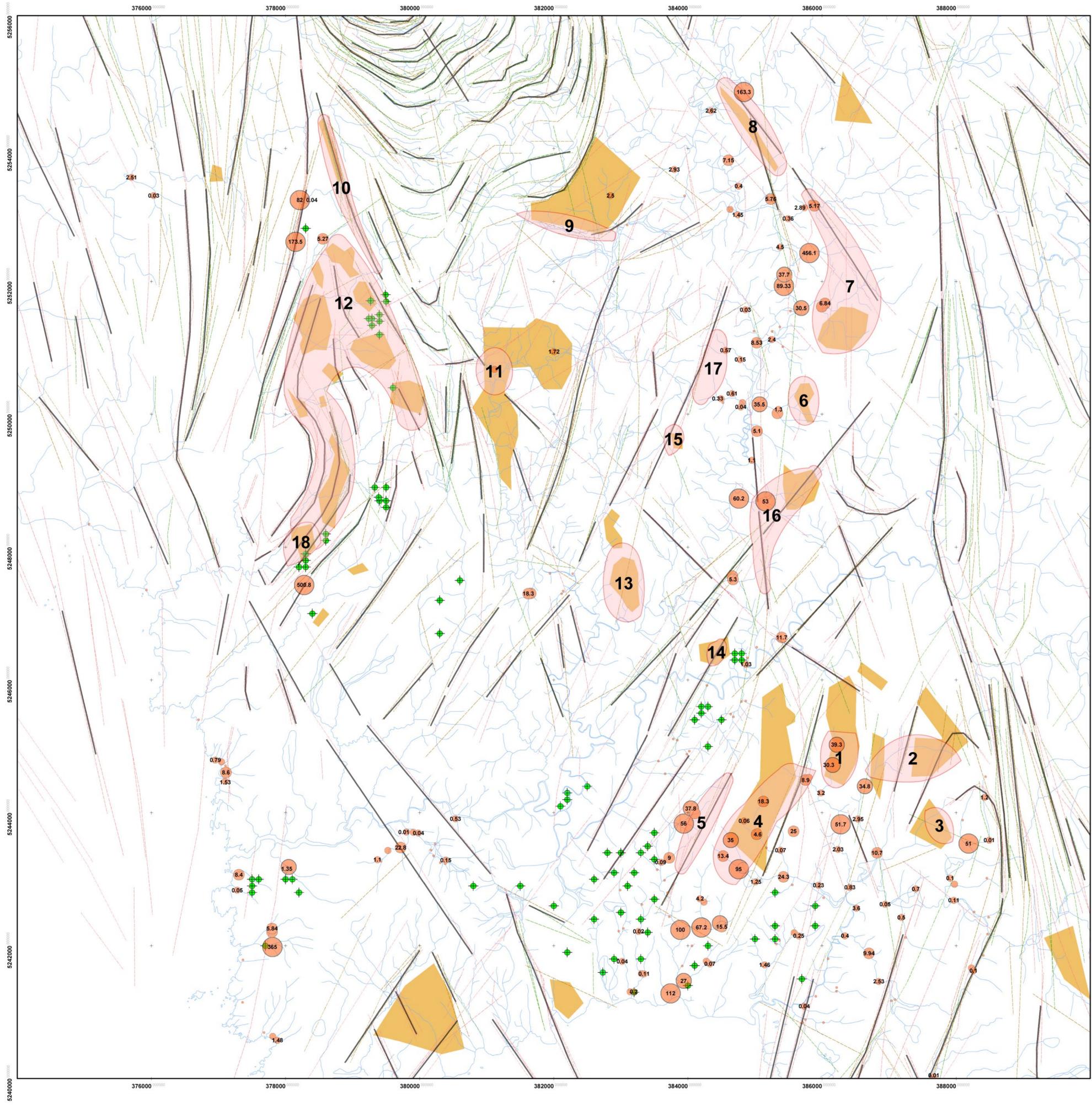
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Location map.





View extents as for main map. Major linears (shown red) determined from all image products. Light brown areas are those areas of high radiometric response, not apparently readily explained as a result of a watercourse cut in the area. The coincidence of these stippled areas with areas of known mineralisation is consistent with the radiometric highs being the result of alteration. Target areas for main map, numbers showing relative target priority. Underlying geology from TCR88_2853 (Cyprus Gold).

Legend

● Below detection	Major linears	1 Quartzose gravel	7 Granite
● <5ppm Au	Magnetic features	2 Dolerite	8 Microgranite
● <25ppm Au	Topographic/satellite features	3 Undifferentiated Owen Conglomerate	9 Porphyritic microgranite
● <50ppm Au	Radiometric features	3a Coarse quartzose sandstone	10 Undifferentiated western epiclastics
● >50ppm Au	SWrivers selection	3b Siltstone	10a Andesitic to basaltic volcanics
Drill hole location	Alteration	4 Undifferentiated Waterloo Creek Group	10b Tuffaceous siltstone and quartzose conglomerate
		4a Hematitic volcanoclastic conglomerate	10c Black shale (pyrite)
		4b Tuffaceous quartz sandstone and grit	10d Fine to medium grained rhyolitic volcanics
		4c Black shale (pyrite)	10e Gabbro
		4d Fine to medium grained rhyolitic volcanoclastic	10f Coarse grained rhyolitic volcanoclastic sandstone
		5 Undifferentiated Wart Hill & Hudson River volcanics	11 Undifferentiated Mainwaring Group
		5a Fine to medium grained rhyolitic volcanoclastic	11a Gabbro
		5b Rhyolitic quartz feldspar porphyry lavas and intrusives	11b Andesitic to basaltic volcanics
		5c Dacitic porphyry	11c Dolomite
		5d Coarse grained rhyolitic volcanoclastic	11d Black shale (pyrite)
		5e Siltstone	11e Siltstone and sandstone
		5f Siliceous conglomerate	12 Precambrian metasedimentary rocks
		5g Greywacke and siltstone	
		6 Elliott Point Porphyry	

Main map.
 Targets show anomalous: 1 - Radiometrics, stream sediment; 2 - Radiometrics, magnetic highs, linear structures, stream sediment; 3 - radiometrics, stream sediment, magnetics; 4 - Bulls-eye magnetic, radiometrics, stream sediment, adjacent linear structure; 5 - Mapped alteration, adjacent linear structure, stream sediment; 6 - radiometrics, stream sediment; 7 - Major linear structures, intersection of linear structures, radiometrics, stream sediments; 8 - radiometrics, linear structure, intersection of linear structures, stream sediments; 9 - mapped fault terminating radiometric anomaly, variations in unit thickness indicating syngenetic fault activity; 10 - major linear structure, radiometrics, stream sediments; 11 - as for 9; 12 - radiometrics, major linear structures, possible folded mineralised horizon; 13 - radiometrics over major magnetic anomaly, untested stream sediments; 14 - radiometrics, major linear structure; 15 - weak bulls-eye magnetic, adjacent linear structure, radiometrics; 16 - intersection major linear structures, radiometrics, stream sediment; 17 - as for 15, stream sediments; 18 - radiometrics, linear structures, stream sediments. Targets remain untested. Anomalous values have also been noted in streams draining regions containing major linears, and these should also be considered as valid targets.

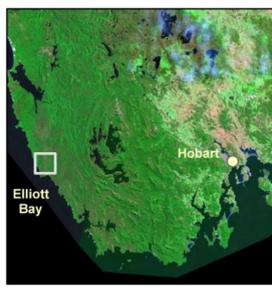


Image processing and map production by:
 Dr Alistair Reed, Ochre Australia Pty. Ltd.
 50 Queen Street, Bellevue, Tasmania 7018
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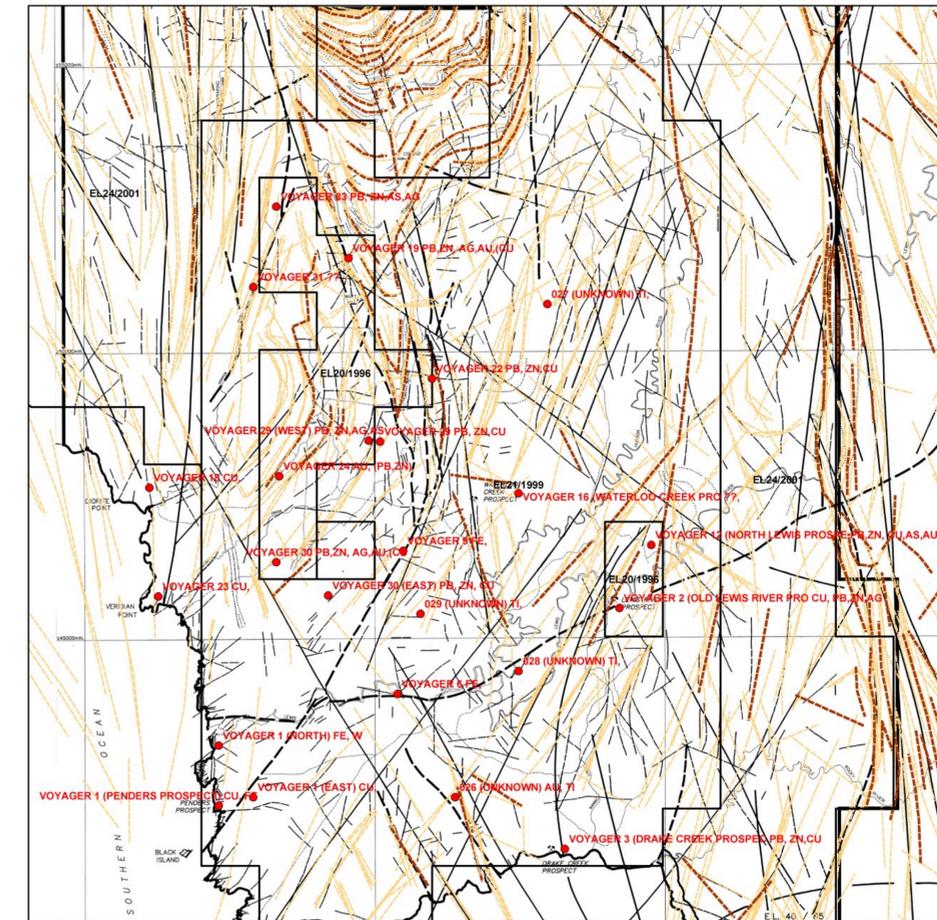
Statement of uncertainty.
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Elliott Bay, SW Tasmania, Australia.

Processed satellite data.



View extents as for main map. Map of linears from Torrey et al., Cyprus Gold Australia Co., TCR88-2853 (held by Mineral Resources Tasmania). Red lines shown are those interpreted from main the image. Light orange dashed linears are those interpreted from other datasets processed during the course of this investigation. Mineral deposits shown are from Mineral Resources Tasmania (MIRLOCH database). Map shows clear differences between previously interpreted linears and those interpreted using more recent data.

- | | | | |
|----|---|-----|---|
| 1 | Quartzose gravel | 7 | Granite |
| 2 | Dolerite | 8 | Microgranite |
| 3 | Undifferentiated Owen Conglomerate | 9 | Porphyritic microgranite |
| 3a | Coarse quartzose sandstone | 10 | Undifferentiated western epistatics |
| 3b | Siltstone | 10a | Andesitic to basaltic volcanics |
| 4 | Undifferentiated Waterloo Creek Group | 10b | Tuffaceous siltstone and quartzose conglomerate |
| 4a | Hematisic volcanoclastic conglomerate | 10c | Black shale (pyrite) |
| 4b | Tuffaceous quartz sandstone and grit | 10d | Fine to medium grained rhyolitic volcanics |
| 4c | Black shale (pyritic) | 10e | Gabbro |
| 4f | Fine to medium grained rhyolitic volcanoclastic | 10f | Coarse grained rhyolitic volcanoclastic sandstone |
| 5 | Undifferentiated Wart Hill & Hudson River volcanics | 11 | Undifferentiated Mainwaring Group |
| 5a | Fine to medium grained rhyolitic volcanoclastic | 11a | Gabbro |
| 5b | Rhyolitic quartz feldspar porphyry lavas and intrusives | 11b | Andesitic to basaltic volcanics |
| 5c | Basaltic porphyry | 11c | Dolerite |
| 5d | Coarse grained rhyolitic volcanoclastic | 11d | Black shale (pyritic) |
| 5e | Siltstone | 11e | Siltstone and sandstone |
| 5f | Siliceous conglomerate | 12 | Precambrian metasedimentary rocks |
| 5g | Greywacke and siltstone | | |
| 6 | Elliott Point Porphyry | | |

Main map.
 Processed satellite image of the Elliott Bay Region. Image classification is based on various parameters including vegetation, rock type, iron oxide and clay contents. Of particular interest is the distinction of units within the Wart Hill and Ordovician (Osmond Syncline) sequences. The Ordovician rocks clearly show 3 phases of folding; an early tight to isoclinal foldset (see separate more detailed image), refolded by the later north-northwest-trending Osmond Syncline. The Osmond Syncline itself is deformed by open northwest trending folds. This isoclinal fold phase is the only phase of folding consistent with the prominent stretching lineation observed in Wart Hill drill core. This early phase of folding also explains observations showing sub-vertical bedding at Wart Hill to be younging toward the southwest, opposite that given positioning relative to the Osmond Syncline. Southeastward younging in Cambrian rocks has also been noted in outcrop located on the southeastern limb of the Osmond Syncline (Geoff Green, pers comm). Strategies for targeting rocks footwall to Wart Hill mineralisation need to be rethought in light of this new information.



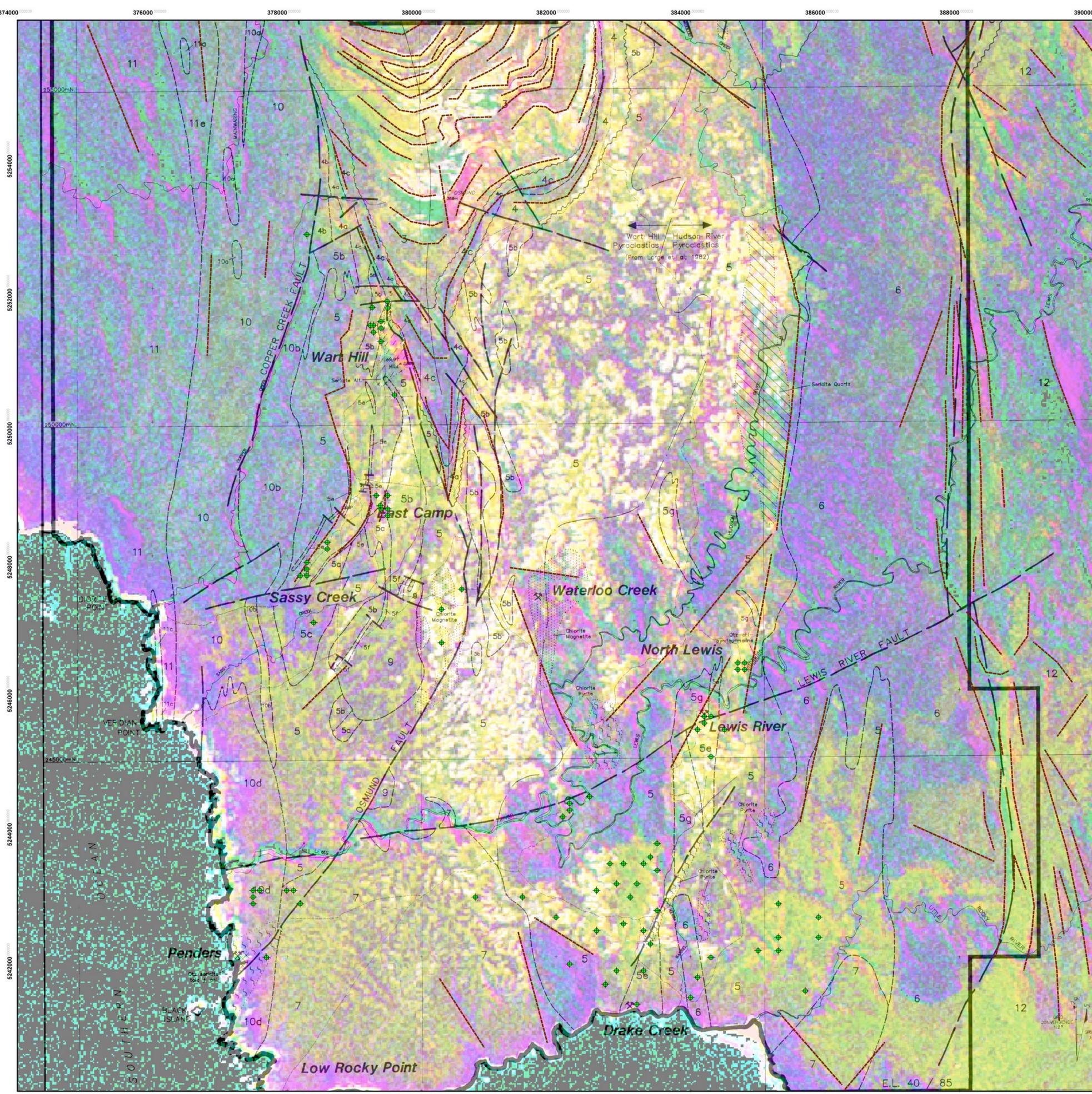
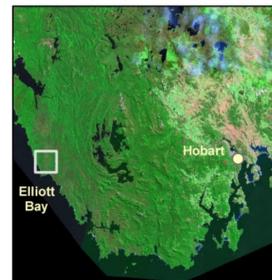
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 Geographic Datum AGD66, Zone 55.

Image processing and map production by:
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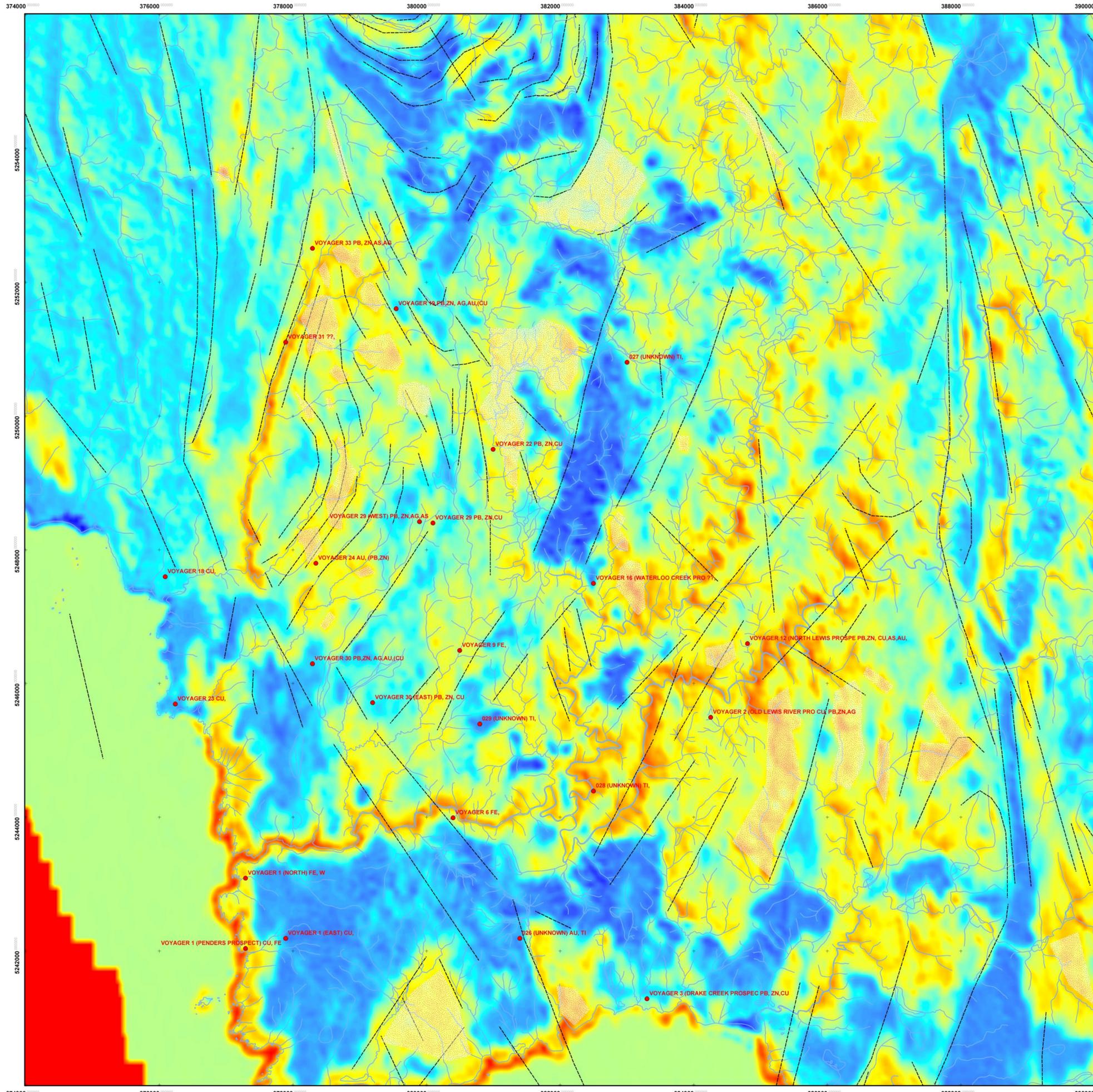
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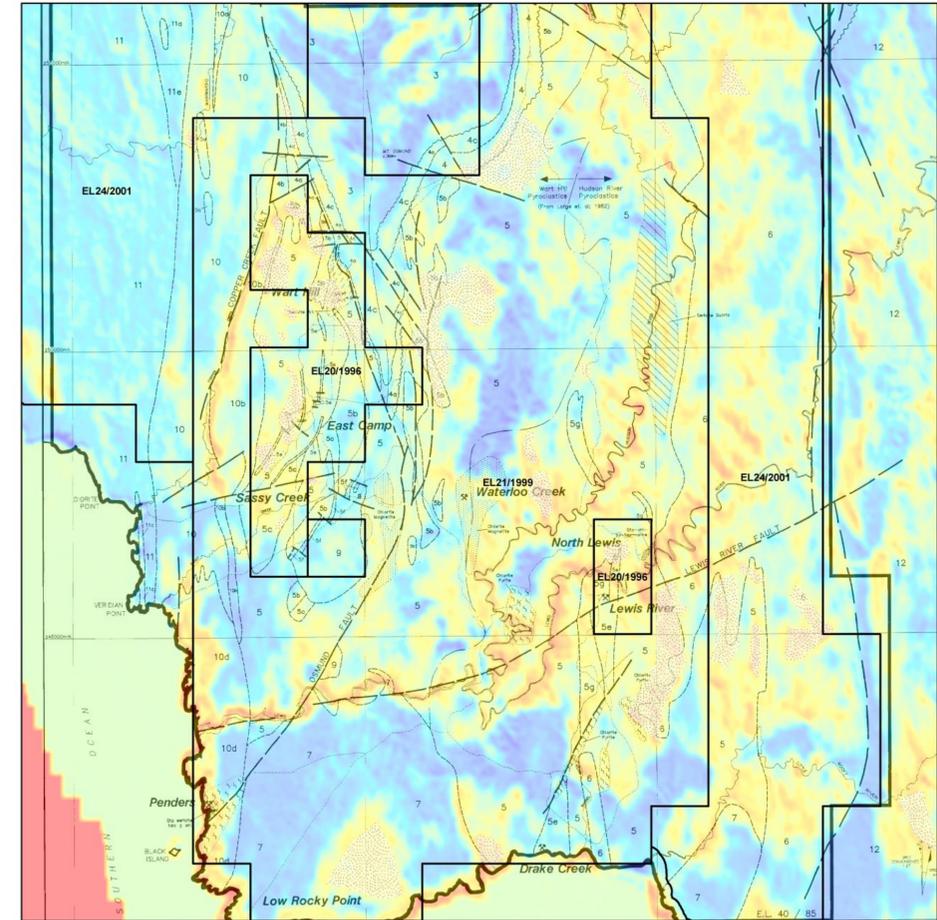


E.L. 40 / 85



Elliott Bay, SW Tasmania, Australia.

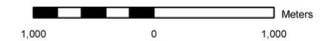
Radiometric map corrected for vegetation (enhanced for alteration).



View extents as for main map. Map showing geology from Torrey et al., Cyprus Gold Australia Co., TCR88-2853 (held by Mineral Resources Tasmania). Image shows modified radiometric image overlying mapped geology. Stippled areas are those 'highs' that do not appear as readily related to watercourses.

- Legend**
- Mineral locations
 - Major linears
 - Alteration
- | | |
|--|---|
| 1 Quartzose gravel | 7 Granite |
| 2 Dolerite | 8 Microgranite |
| 3 Undifferentiated Owen Conglomerate | 9 Porphyritic microgranite |
| 3a Coarse quartzose sandstone | 10 Undifferentiated western epiclastics |
| 3b Siltstone | 10a Andesitic to basaltic volcanics |
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| 4a Hiemalitic volcanoclastic conglomerate | 10c Black shale (pyritic) |
| 4b Tuffaceous quartz sandstone and grit | 10d Fine to medium grained rhyolitic volcanics |
| 4c Black shale (pyritic) | 10e Gabbro |
| 4d Fine to medium grained rhyolitic volcanoclastic | 10f Coarse grained rhyolitic volcanoclastic sandstone |
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| 5d Coarse grained rhyolitic volcanoclastic | 11d Black shale (pyritic) |
| 5e Siltstone | 11e Siltstone and sandstone |
| 5f Siliceous conglomerate | 12 Precambrian metasedimentary rocks |
| 5g Greywacke and siltstone | |
| 6 Elliot Point Porphyry | |

Main map.
 Processed radiometric image of the Elliott Bay region. Single band pseudocolour image. This image has been extensively reprocessed by resampling (100m x 100m moving average) the 3 band radiometric image of the Elliott Bay area and then subtracting from this from a similarly processed satellite image (itself processed to enhance vegetation types). The result is a radiometric image corrected to a large extent for the influence of vegetation. Water courses show as radiometric highs due to increased silt/clay content. Stippled areas are those areas of high radiometric response, not apparently readily explained as a result of a watercourse, etc. in the area. The coincidence of these stippled areas with areas of known mineralisation is consistent with the radiometric highs being the result of alteration. Dashed lines are major linears defined from combining linear features from all processed datasets.



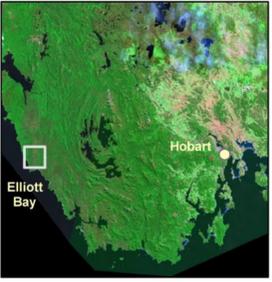
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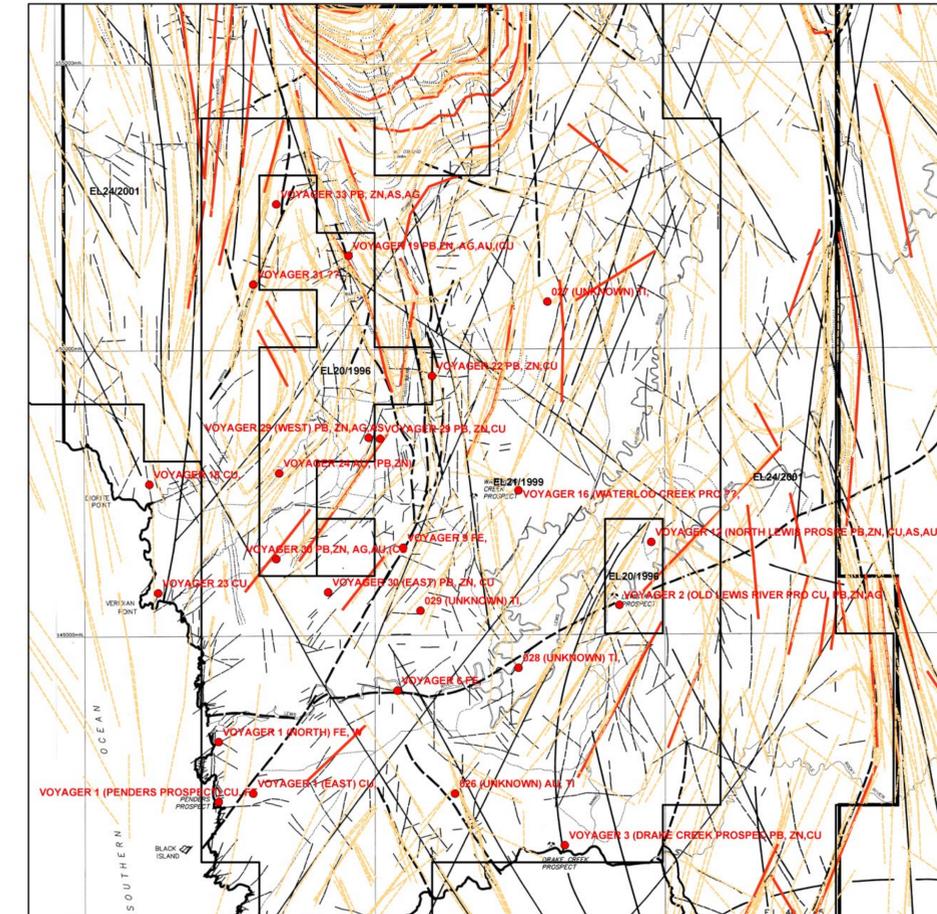


Location map.



Elliott Bay, SW Tasmania, Australia.

Radiometric (3 band) linears.



View extents as for main map. Map of linears from Torrey et al., Cyprus Gold Australia Co., TCR88-2853 (held by Mineral Resources Tasmania). Red lines are those interpreted from main image. Light orange dashed linears are those interpreted from other datasets processed during the course of this investigation. Mineral deposits shown are from Mineral Resources Tasmania (MIRLOCH database). Map shows clear differences between previously interpreted linears and those interpreted using more recent data.

- | | |
|--|---|
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| 3b Siltstone | 10a Andesitic to basaltic volcanics |
| 4 Undifferentiated Waterloo Creek Group | 10b Tufaceous siltstone and quartzose conglomerate |
| 4a Hematitic volcanoclastic conglomerate | 10c Black shale (pyritic) |
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| 4c Black shale (pyritic) | 10e Gabbro |
| 4d Fine to medium grained rhyolitic volcanoclastic | 10f Coarse grained rhyolitic volcanoclastic sandstone |
| 5 Undifferentiated Wart Hill & Hudson River volcanics | 11 Undifferentiated Mainwaring Group |
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| 5b Rhyolitic quartz feldspar porphyry lavas and intrusives | 11b Andesitic to basaltic volcanics |
| 5c Dacitic porphyry | 11c Dolomite |
| 5d Coarse grained rhyolitic volcanoclastic | 11d Black shale (pyritic) |
| 5e Siltstone | 11e Siltstone and sandstone |
| 5f Siliceous conglomerate | 12 Precambrian metasedimentary rocks |
| 5g Greywacke and siltstone | |
| 6 Elliot Point Porphyry | |

Main map.
 Processed radiometric image of the Elliott Bay region. Three band image, with red showing potassium, green showing thorium and blue showing uranium. Image not normalised (normalisation emphasising potassium at the expense of the other bands. Layering within the Osmund syncline (north of the Wart Hill prospect) is marked. Convergence of layering appears due to folding prior to formation of Osmund syncline (see also satellite imagery). Unit 4 shows as marked low in all three bands, closely matching an area mapped as unit 10b, located southwest of the Wart Hill prospects and west of the East Camp prospect. This area shows as a prominent bulge in magnetic data, with characteristics in that data also similar to units 4 and 5. Wart Hills shows up as a radiometric high in all three bands, reflecting both probable alteration and sparse vegetation. A northeast-trending radiometric low, east of east camp, matches Tertiary age (or younger) structures. Increased potassium in the eastern part of the image corresponds to denser vegetation, possibly resulting in a subdued response from the Th and U bands in this area.



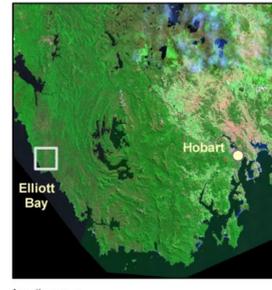
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 Geographic Datum AGD66, Zone 55.

Image processing and map production by:
 Dr Alistair Reed, Ochre Australia Pty. Ltd.
 50 Queen Street, Bellarine, Tasmania 7018
 ph 03-6244-1317, mobile 0407-115-123, email alreed@bispod.net.au

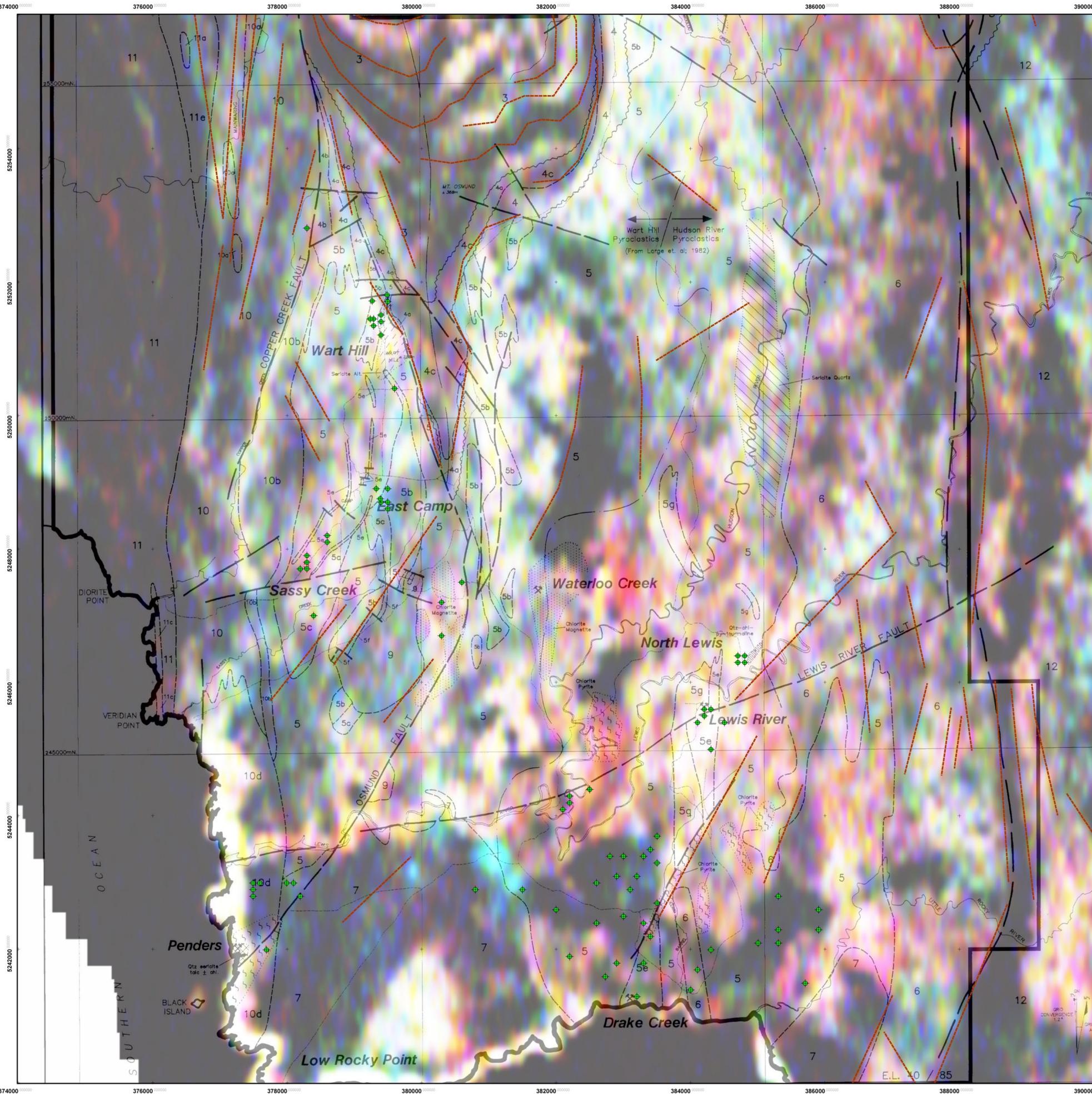
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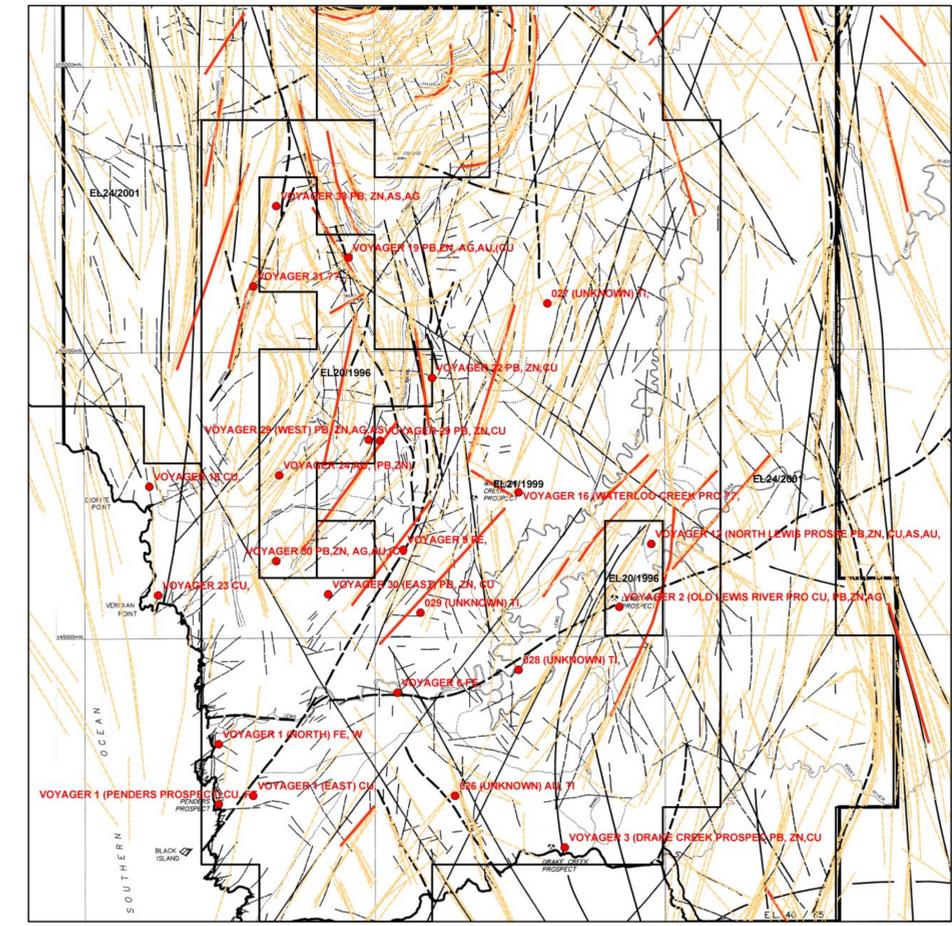
Location map.



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Elliott Bay, SW Tasmania, Australia.

High end radiometric (3 band) linears.



View extents as for main map. Map of linears from Torrey et al., Cyprus Gold Australia Co., TCR88-2853 (held by Mineral Resources Tasmania). Red lines shown are those interpreted from main image. Light orange dashed linears are those interpreted from other datasets processed during the course of this investigation. Mineral deposits shown are from Mineral Resources Tasmania (MIRLOCH database). Map shows clear differences between previously interpreted linears and those interpreted using more recent data.

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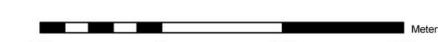
Legend

◆ Drill hole locations

--- High end radiometric linears (shown red on inset)

Main map.

Processed radiometric image of the Elliott Bay region, emphasising the higher ends of the radiometric bands. Three band image, with red showing potassium, green showing thorium and blue showing uranium. Image not normalised (normalisation emphasising potassium at the expense of the other bands). This image emphasises detail in the range expressed over the Wart Hill prospect. Note, the regularity (~800m spacing) of radiometric highs northwest and southeast along the contact between units 4 and 5. This marked response extends along this contact all the way around the Osmund syncline. The Lewis River prospect shows a very positive response, albeit higher in potassium, probably as a result of greater influence by nearby granite.



Non-standard map scale (optimised to sheet).
Geographic Datum AGD66, Zone 55.

Image processing and map production by:
Dr Alistair Reed, Ochre Australia Pty. Ltd.
50 Queen Street, Bellarine, Tasmania 7018
ph 03-6244-1317, mobile 0407-115-123, email alreed@bigpond.net.au

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Statement of uncertainty.

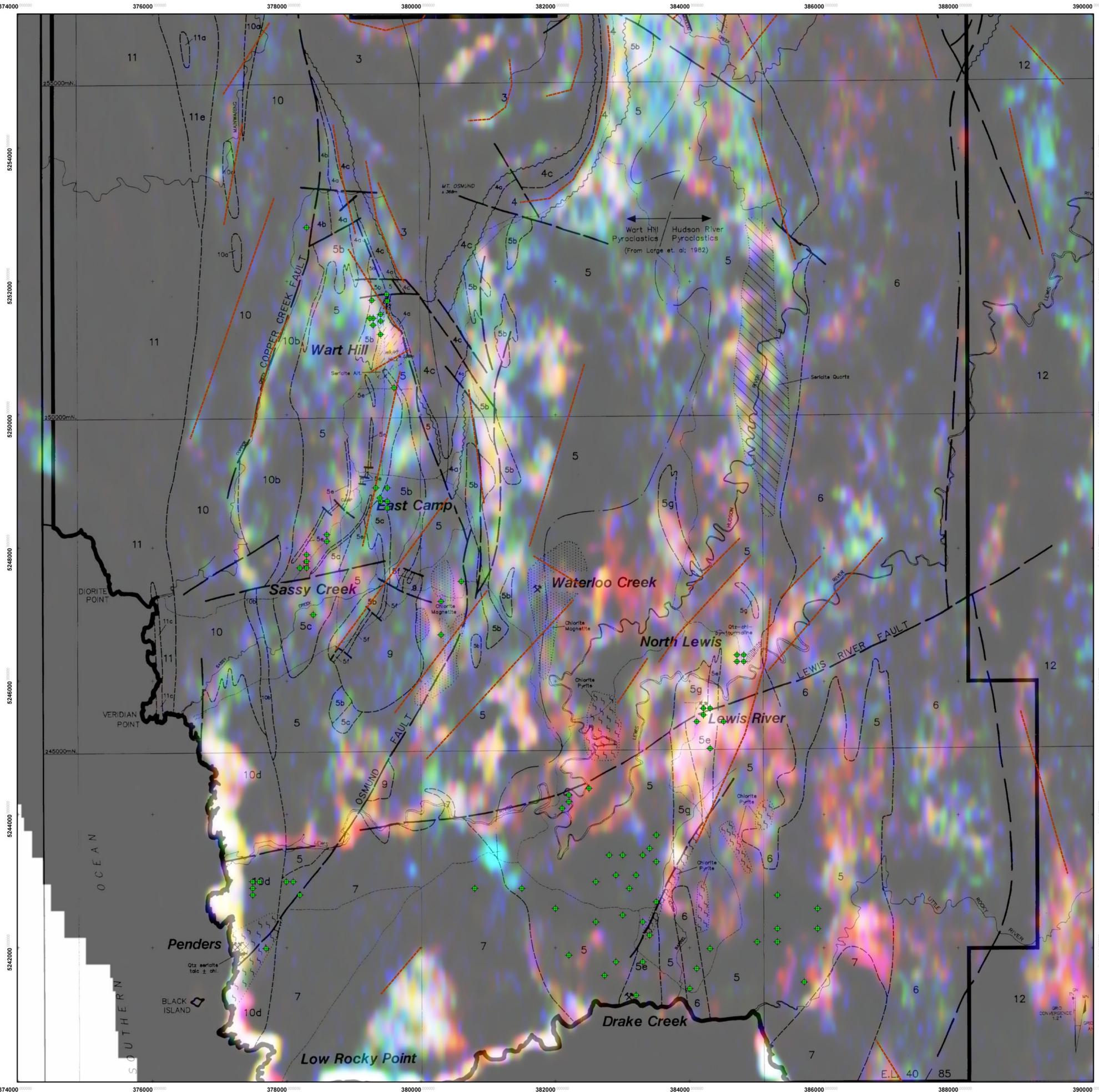
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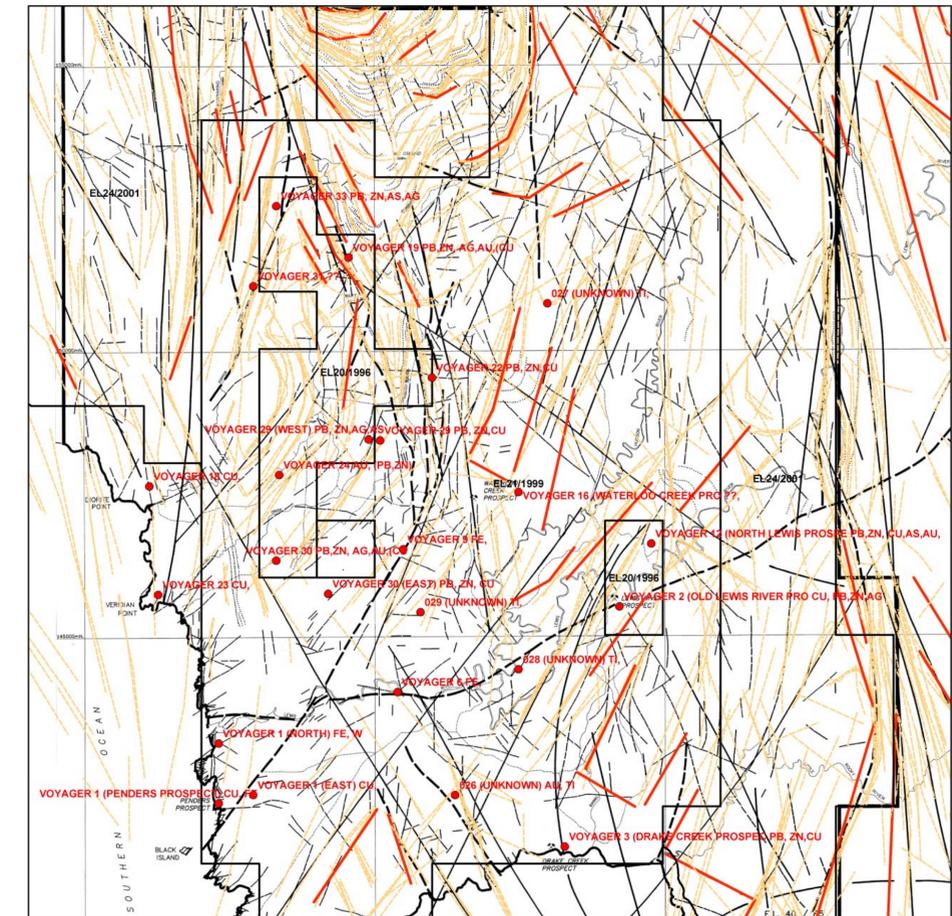


Location map.

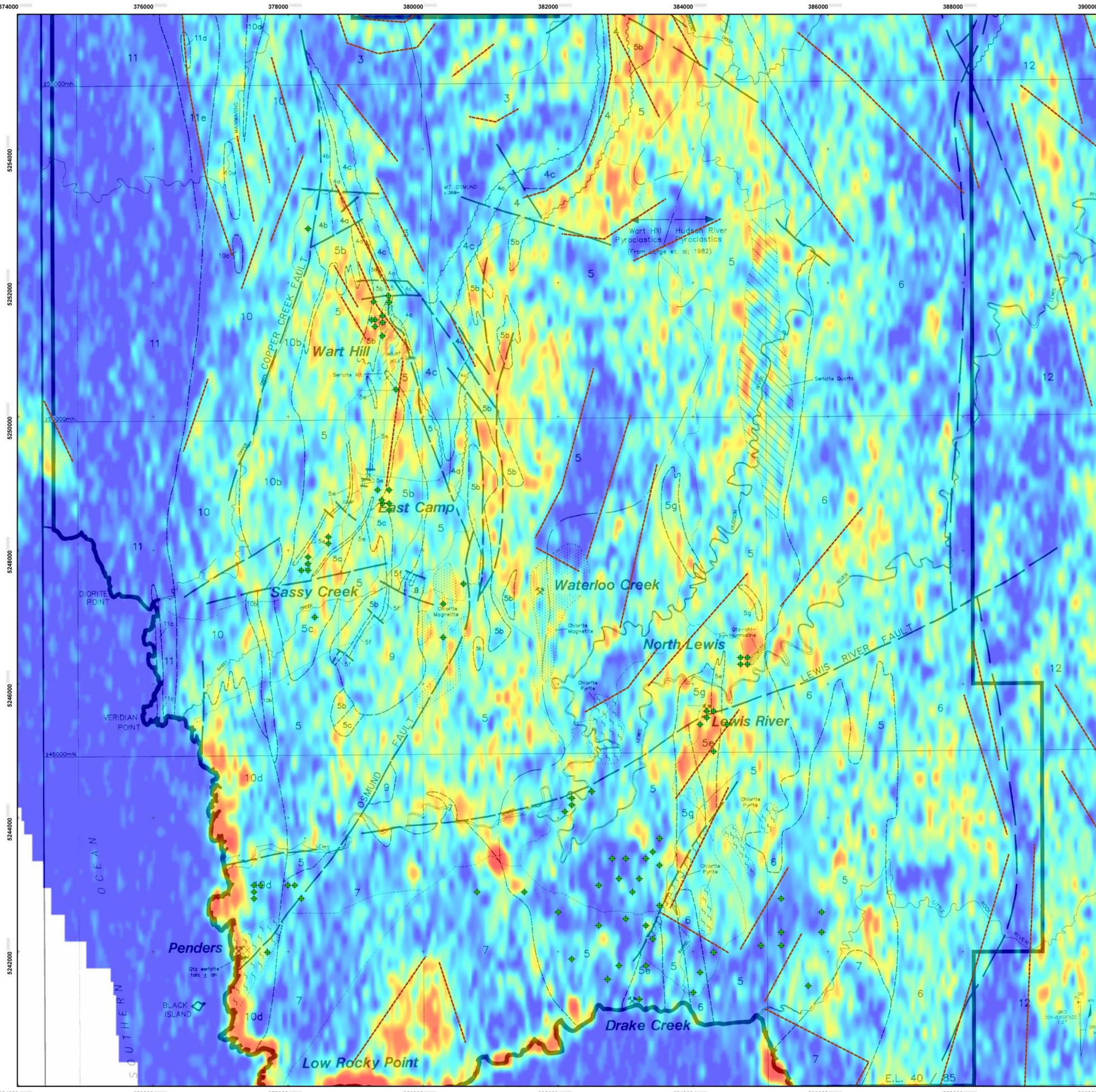


Elliott Bay, SW Tasmania, Australia.

Single band uranium (U) image.



View extents as for main map. Map of linears from Torrey et al., Cyprus Gold Australia Co., TCR88-2853 (held by Mineral Resources Tasmania). Red lines shown are those interpreted from main image. Light orange dashed linears are those interpreted from other datasets processed during the course of this investigation. Mineral deposits shown are from Mineral Resources Tasmania (MIRLOCH database). Map shows clear differences between previously interpreted linears and those interpreted using more recent data.



- Legend**
- ◆ Drill hole locations

Main map.
 Processed radiometric image of the Elliott Bay region. Single band pseudocolour image showing variation in uranium. This image shows more noise than images of K and Th. This is because of the lower levels of U compared to these elements. However, this image also appears to show more detail at the prospect level. Various linear features are apparent at Wart Hill, possibly either strata or structure. Note anomalies along the contact between units 4 and 5. This marked response extends along this contact all the way around the Osmund syncline and appears stronger on the eastern limb of the syncline. Note also the periodic abrupt termination of anomalies along this contact, coincident in at least one location with a mapped west-northwest fault. Faults such as this are oriented at a high angle to the stratigraphy, consistent with, for example, the orientation of possible syn-mineralisation transfer faults. In other locations along this contact, thorium anomalies peaks coincide with these cross structures (eg. due east of Wart Hill prospect). Importantly, uranium anomalies coincide with most of the major prospects in the area.



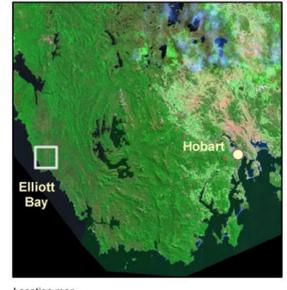
Non-standard map scale (optimised to sheet).
 Geographic Datum AGD66, Zone 55.

Image processing and map production by:
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 50 Queen Street, Bellarine, Tasmania 7018
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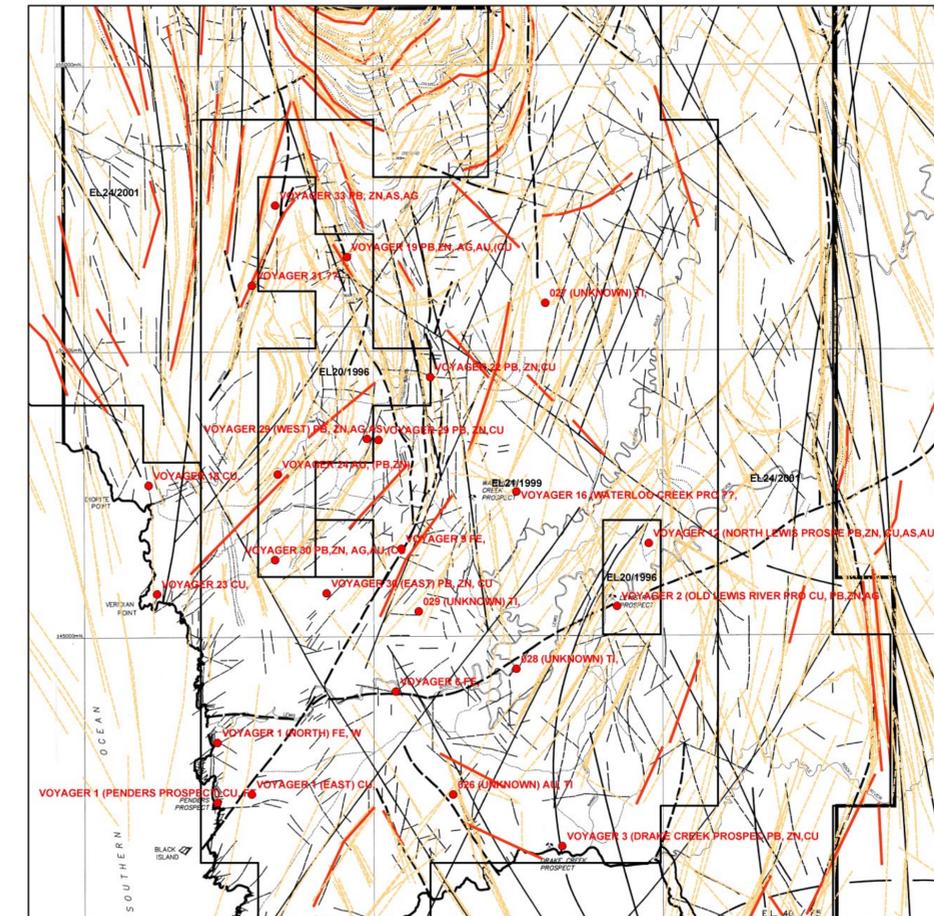
Statement of uncertainty.
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Elliott Bay, SW Tasmania, Australia.

Single band thorium (Th) image.



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| 5g Greywacke and siltstone | |
| 6 Elliott Point Porphyry | |

Legend

- ◆ Drill hole locations
- Thorium linears (shown red on inset)

Main map.

Processed radiometric image of the Elliott Bay region. Single band pseudocolour image showing variation in thorium. Note anomalous along the contact between units 4 and 5. This marked response extends along this contact all the way around the Osmund syncline and appears stronger on the eastern limb of the syncline. Note also the periodic abrupt termination of anomalous along this contact, coincident in at least one location with a mapped west-northwest fault. Faults such as this are oriented at a high angle to the stratigraphy, consistent with, for example, the orientation of possible syn-mineralisation transfer faults. In other locations along this contact, thorium anomalous peaks coincident with these cross structures (eg. due east of Wart Hill prospect).



Non-standard map scale (optimised to sheet).
Geographic Datum AGD66, Zone 55.

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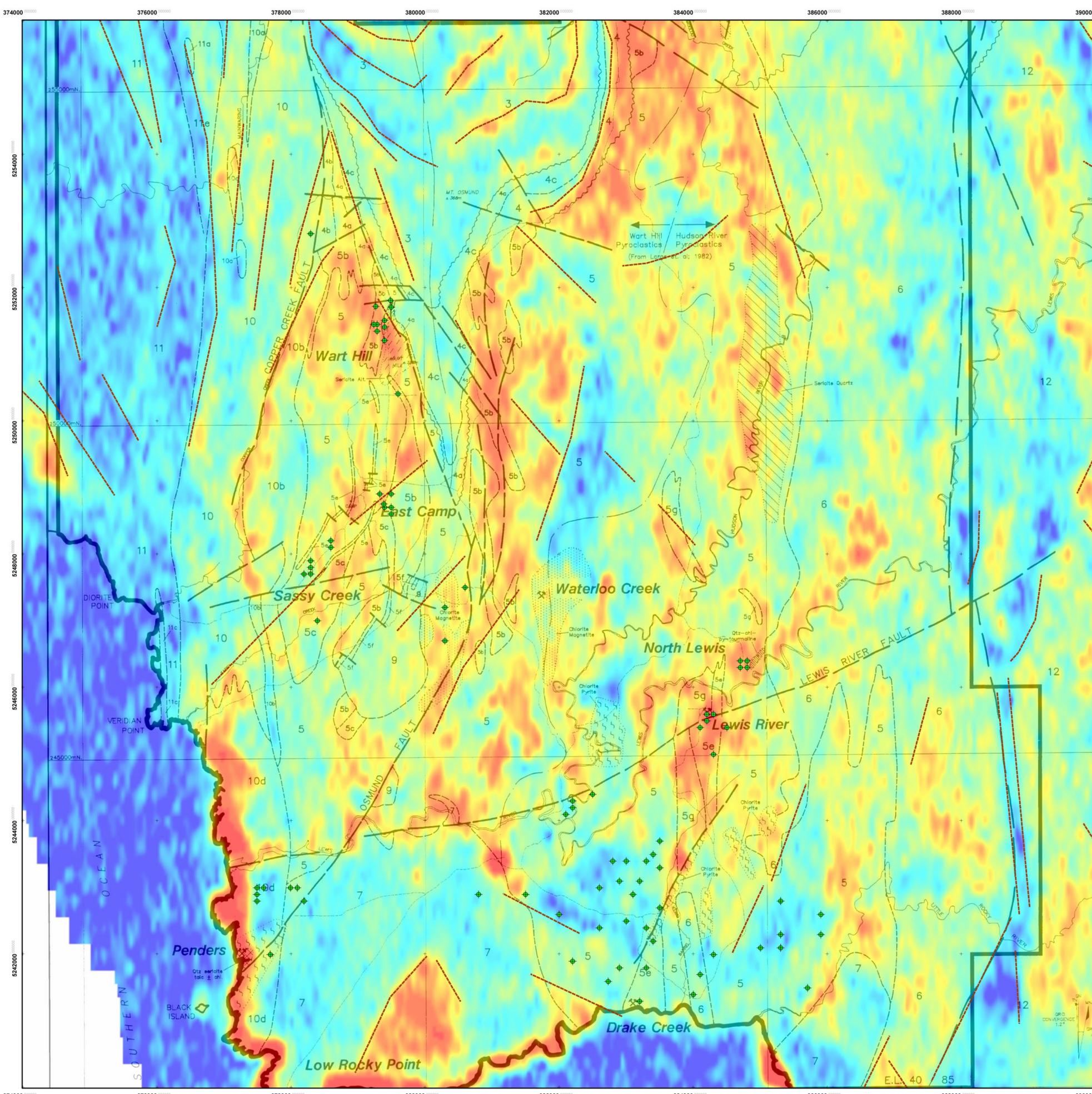
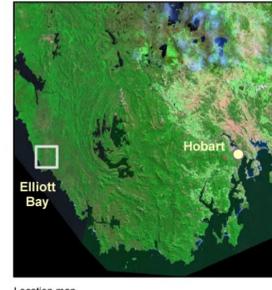
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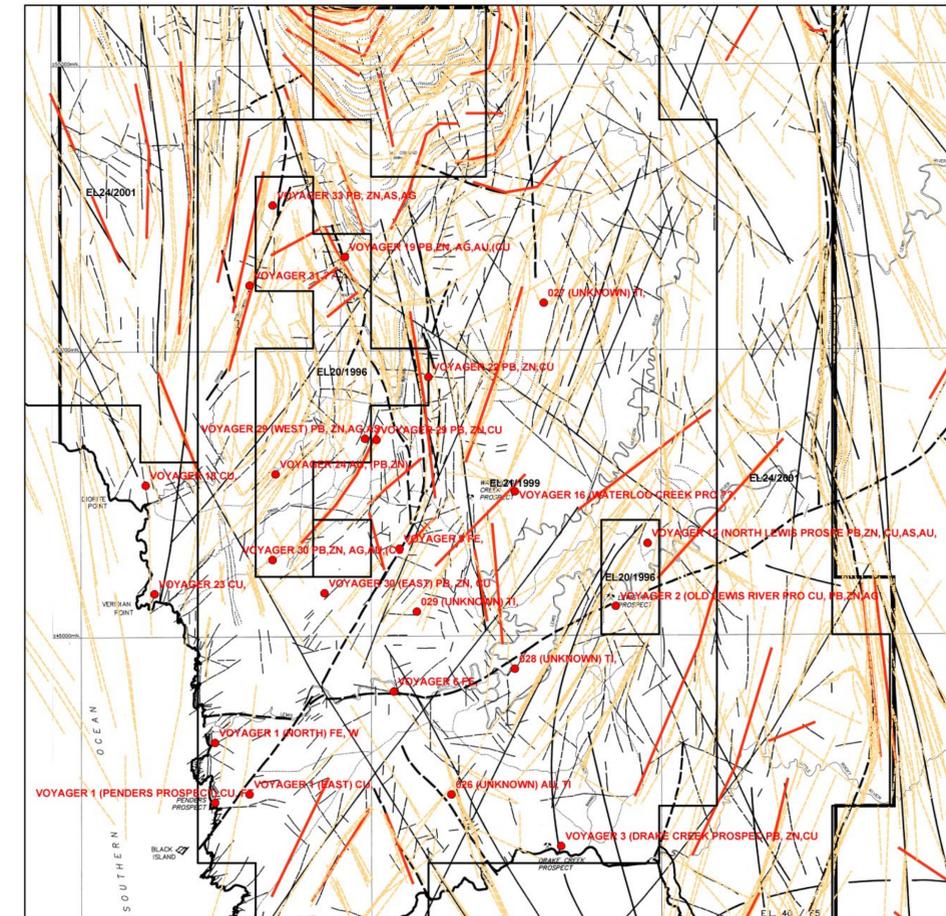
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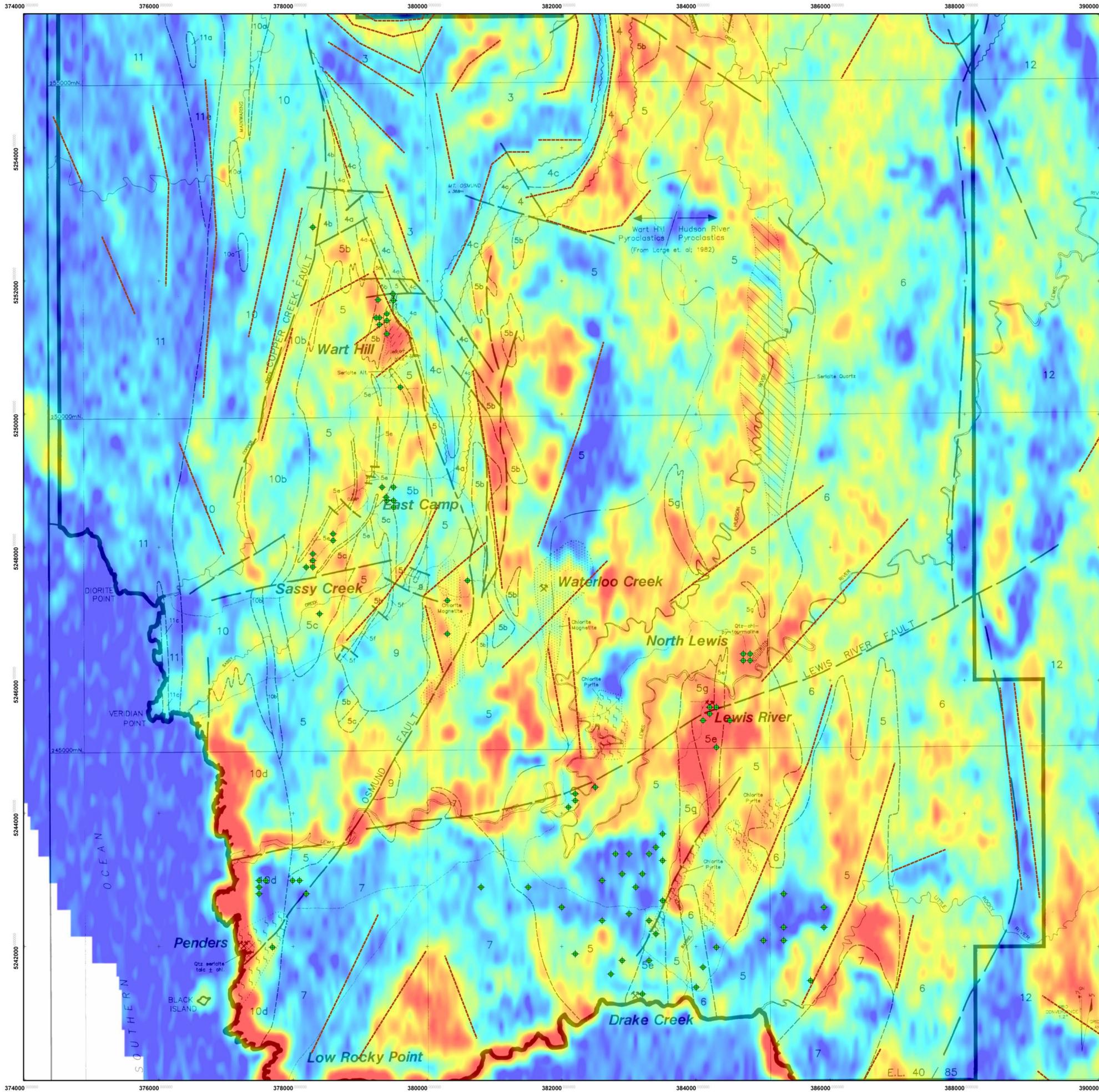


Elliott Bay, SW Tasmania, Australia.

Single band potassium (K) image.



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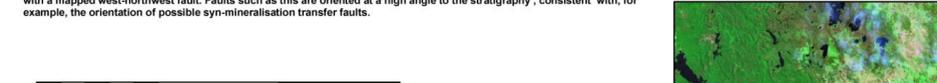


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Legend

- ◆ Drill hole locations
- Potassium linears (shown red on inset)

Main map.
 Processed radiometric image of the Elliott Bay region. Single band pseudocolour image showing variation in potassium. Note, the regularity (~800m spacing) of radiometric highs northwest and southeast along the contact between units 4 and 5. This marked response extends along this contact all the way around the Osmund syncline and appears stronger on the eastern limb of the syncline. Note also the periodic abrupt termination of anomalous along this contact, coincident in at least one location with a mapped west-northwest fault. Faults such as this are oriented at a high angle to the stratigraphy, consistent with, for example, the orientation of possible syn-mineralisation transfer faults.



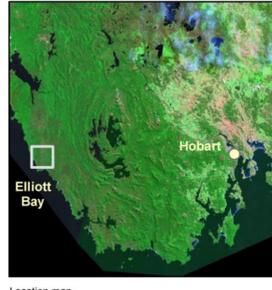
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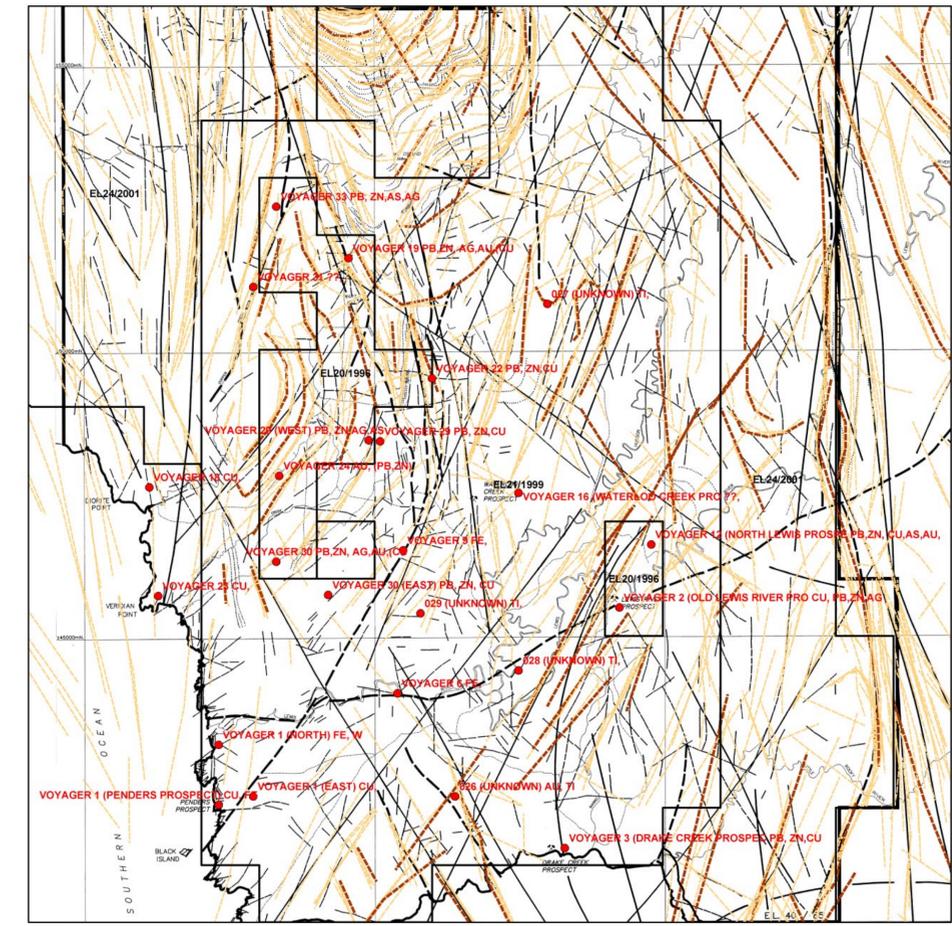
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Elliott Bay, SW Tasmania, Australia.

Processed 1st vertical derivative magnetic data, enhanced for low magnetic response units.



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| 5a Fine to medium grained rhyolitic volcanoclastic | 11a Gabbro |
| 5b Rhyolitic quartz feldspar porphyry lavas and intrusives | 11b Andesitic to basaltic volcanics |
| 5c Diapic porphyry | 11c Dolomite |
| 5d Coarse grained rhyolitic volcanoclastic | 11d Black shale (pyritic) |
| 5e Siltstone | 11e Siltstone and sandstone |
| 5f Siliceous conglomerate | 12 Precambrian metasedimentary rocks |
| 5g Greywacke and siltstone | |
| 6 Elliot Point Porphyry | |

Main map.
 First vertical derivative clipped image, with emphasising features in the lower data range. Image has been merged with geological map from from Torrey et al., Cyprus Gold Australia Co., TCR88-2853 (held by Mineral Resources Tasmania). There are considerable differences between the geology previously interpreted and that shown here (eg. there appears little evidence for the east-trending Lewis River Fault). One important result is what appears to be a close north-trending fold, the western limb abutting the Copper Creek Fault. Possible refolding is evident as a prominent bulge within the western epicrostic sequence (unit 10). This geometry suggests that felsic rocks of units 5 and 10 (Wart Hill Volcanics and Western Epicrostic sequence, respectively), may either be the same unit or along-strike lateral equivalents to one another. An important implication of this is that the Wart Hill and East Camp prospects then share a common mineralised horizon. Northeast-trending faults (?) appear to predominate in the Lewis River region, consistent with terminations of stratigraphic units and contrary to previous interpretations showing a single easterly-trending regional fault.

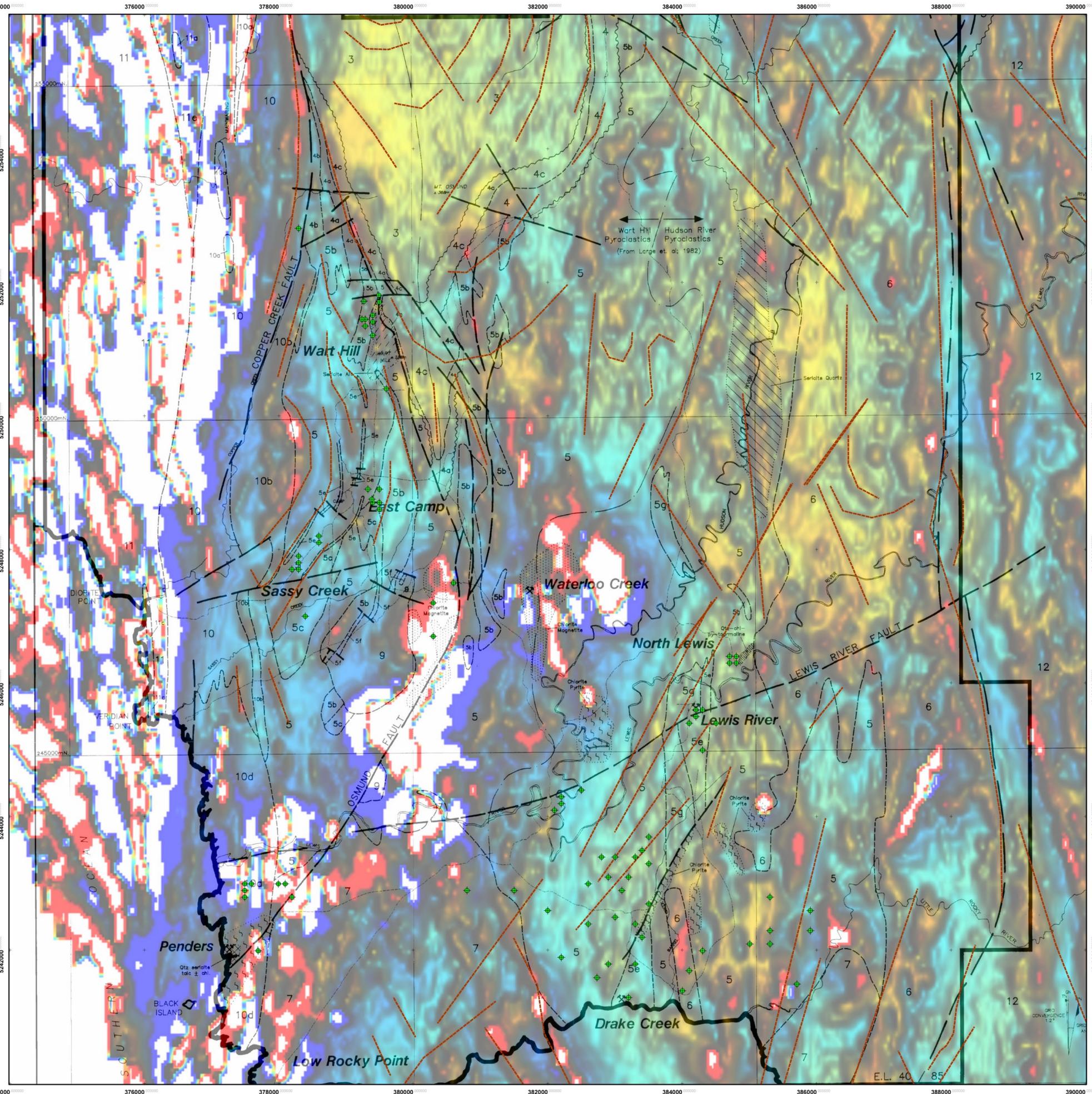
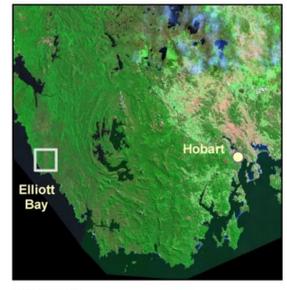


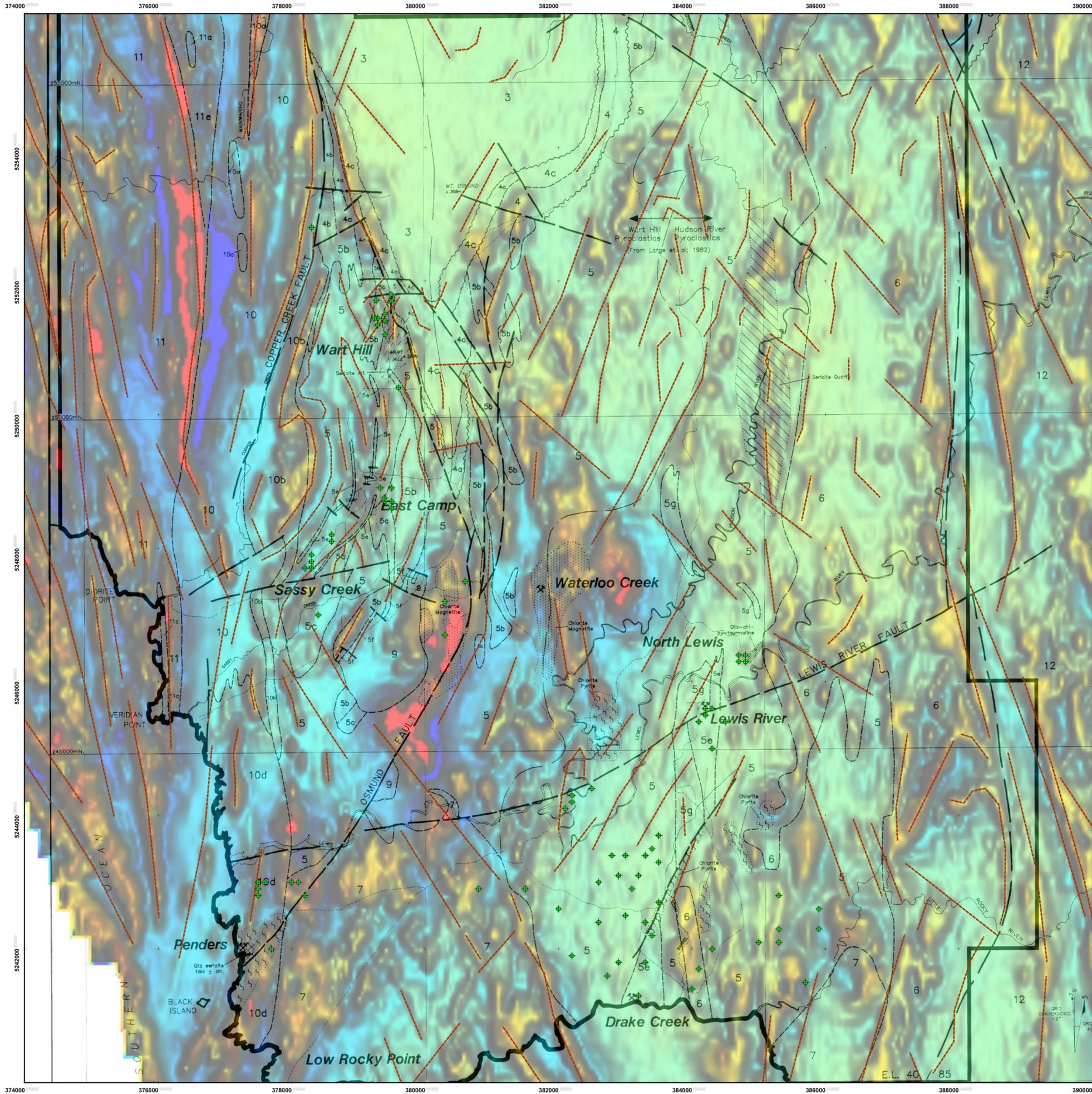
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 Geographic Datum AGD66, Zone 55.
 Image processing and map production by:
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 50 Queen Street, Bellerive, Tasmania 7018
 ph 03-6244-1317, mobile 0407-115-123, email alreed@bigpond.net.au

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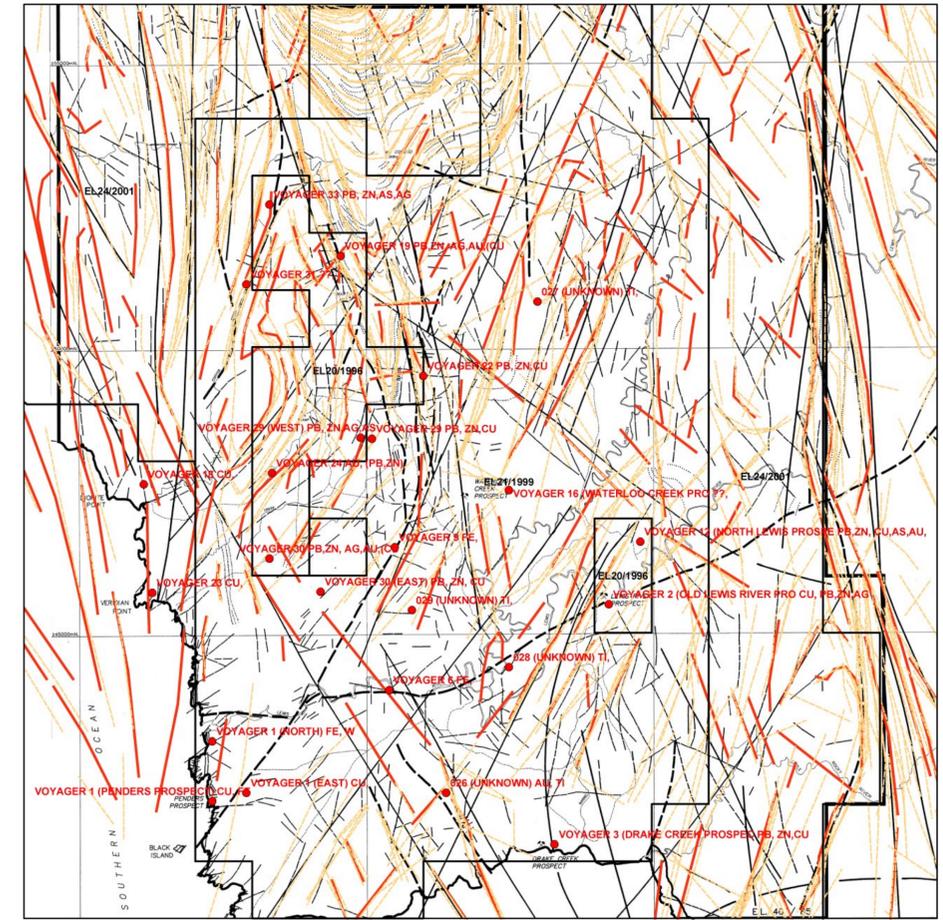
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Elliott Bay, SW Tasmania, Australia.

Processed 1st vertical derivative magnetic data - enhanced for Elliott Bay region.



View extents as for main map. Map of linears from Torrey et al., Cyprus Gold Australia Co., TCR88-2853 (held by Mineral Resources Tasmania). Red lines shown are those interpreted from main the image. Light orange dashed linears are those interpreted from other datasets processed during the course of this investigation. Mineral deposits shown are from Mineral Resources Tasmania (MIRLOCH database). Map shows clear differences between previously interpreted linears and those interpreted using more recent data.

- | | |
|--|---|
| 1 Quartzose gravel | 7 Granite |
| 2 Dolerite | 8 Microgranite |
| 3 Undifferentiated Oven Conglomerate | 9 Porphyritic microgranite |
| 3a Coarse quartzose sandstone | 10 Undifferentiated western epistatics |
| 3b Siltstone | 10a Andesitic to basaltic volcanics |
| 4 Undifferentiated Waterloo Creek Group | 10b Tuffaceous siltstone and quartzose conglomerate |
| 4a Hematitic volcanoclastic conglomerate | 10c Black shale (pyrite) |
| 4b Tuffaceous quartz sandstone and grit | 10d Fine to medium grained rhyolitic volcanics |
| 4c Black shale (pyritic) | 10e Gabbro |
| 4d Fine to medium grained rhyolitic volcanoclastic | 10f Coarse grained rhyolitic volcanoclastic sandstone |
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| 5c Dacitic porphyry | 11c Dolomite |
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| 5e Siltstone | 11e Siltstone and sandstone |
| 5f Siliceous conglomerate | 12 Precambrian metasedimentary rocks |
| 5g Greywacke and siltstone | |
| 6 Elliot Point Porphyry | |

Legend

- ◆ Drill hole locations
- 1VD Regional linears (shown red on inset)

Main map.

First vertical derivative image, with data processed for all of the Elliott Bay region. Image has been merged with geological map from Torrey et al., Cyprus Gold Australia Co., TCR88-2853 (held by Mineral Resources Tasmania). There are considerable differences between the geology previously interpreted and that shown here (eg. there appears little evidence for the east-trending Lewis River Fault). One important result is what appears to be a close north-trending fold, the western limb abutting the Copper Creek Fault. Possible refolding is evident as a prominent bulge within the western epistatic sequence (unit 10). This geometry suggests that felsic rocks of units 5 and 10 (Wart Hill volcanics and Western Epistatic sequence, respectively), may either be the same unit or along-strike lateral equivalents to one another. Note also recorded chlorite-sericite alteration over bullseye magnetic anomaly at 385200mE, 5244230mN.



Non-standard map scale (optimised to sheet).
Geographic Datum AGD86, Zone 55.

Image processing and map production by:
Dr Aislinn Reed, Ochre Australia Pty. Ltd.
50 Queen Street, Bellarine, Tasmania 7018
ph 03-6244-1317, mobile 0407-115-123, email areed@bigpond.net.au

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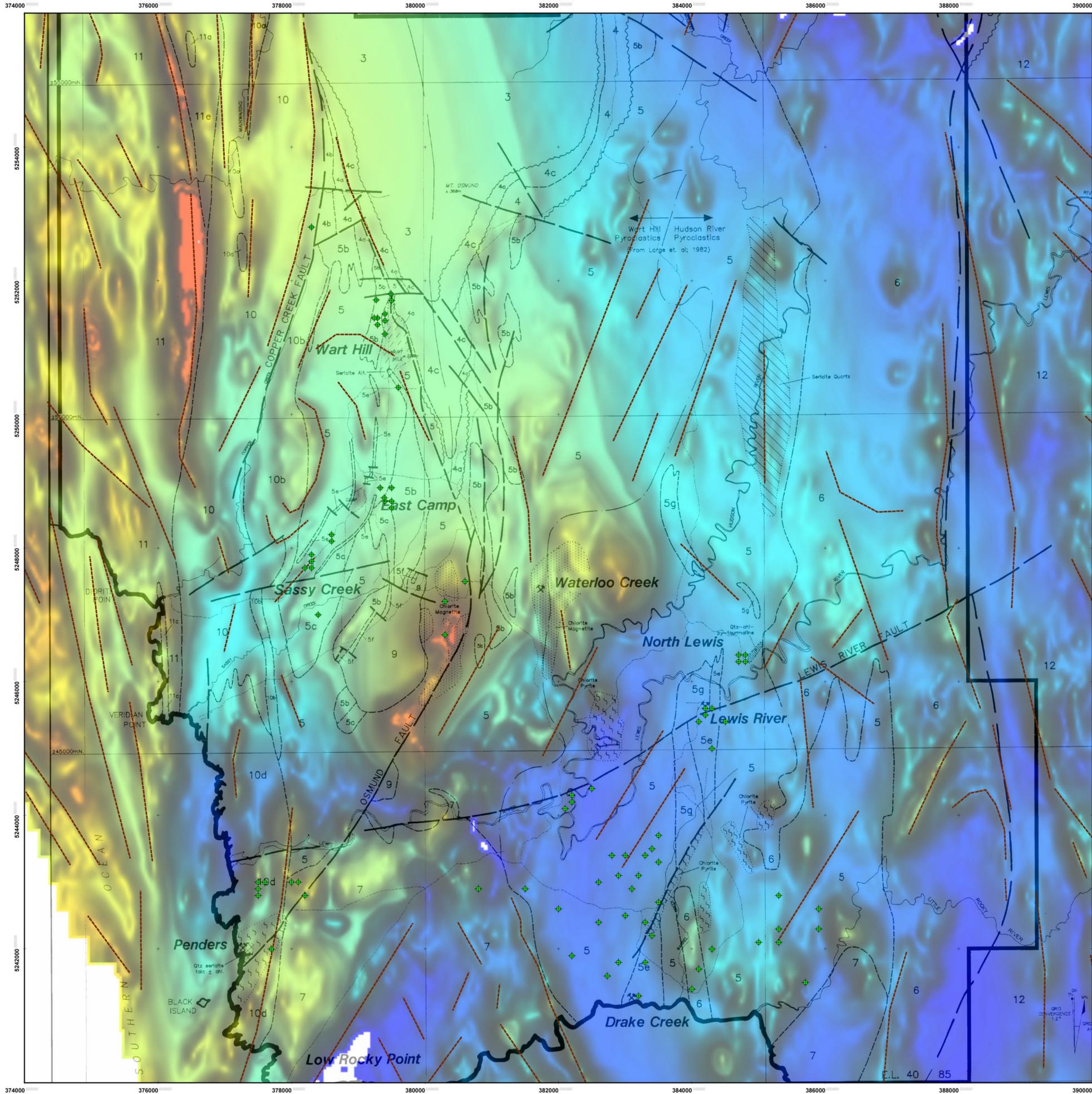
Statement of uncertainty.

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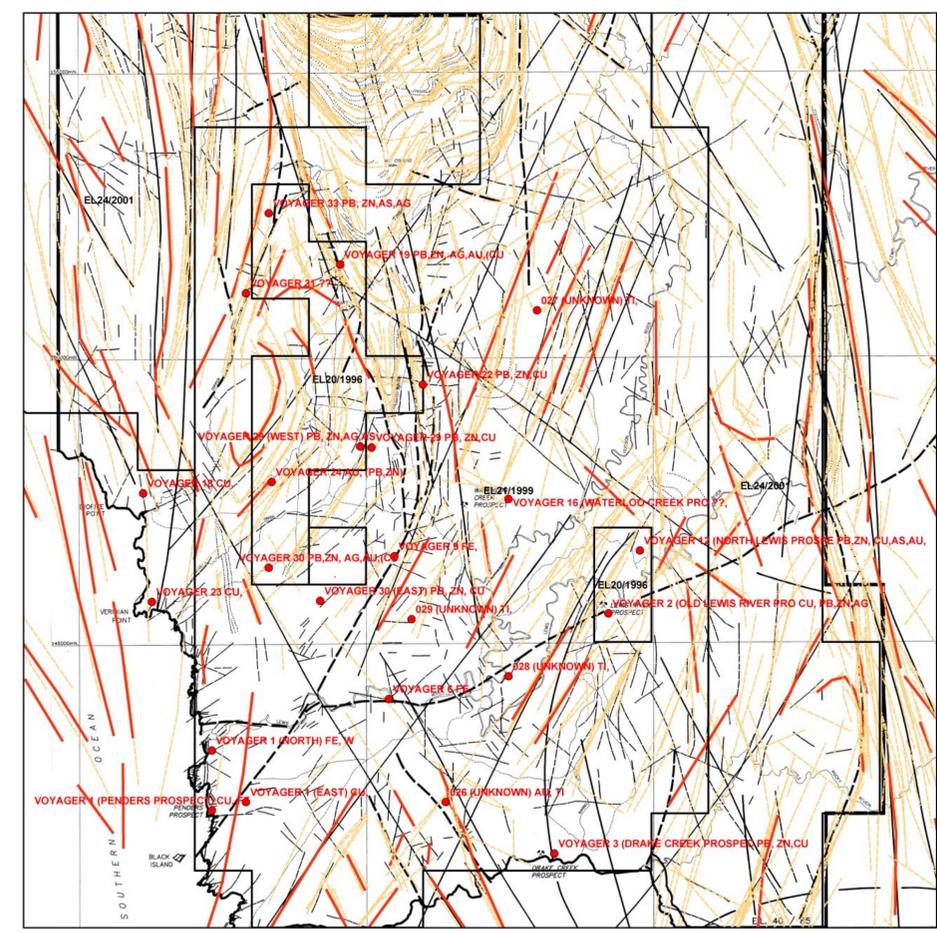
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Elliott Bay, SW Tasmania, Australia.

Processed magnetic data.



View extents as for main map. Map of linears from Torrey et al. Cyprus Gold Australia Co., TCR88-2853 (held by Mineral Resources Tasmania). Red lines are those interpreted from main the image. Light orange dashed linears are those interpreted from other datasets processed during the course of this investigation. Mineral deposits shown are from Mineral Resources Tasmania (MIRLOCH database). Map shows clear differences between previously interpreted linears and those interpreted using more recent data.

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| 4a Hematitic volcanoclastic conglomerate | 10c Black shale (pyritic) |
| 4b Tuffaceous quartz sandstone and grit | 10d Fine to medium grained rhyolitic volcanics |
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| 5f Siliceous conglomerate | 12 Precambrian metasedimentary rocks |
| 5g Greywacke and siltstone | |
| 6 Elliot Point Porphyry | |

Main map.
 Processed magnetic data of the Elliott Bay Region. As with 1st vertical derivative (VD) images, this magnetic image shows a distinct bulge in what has previously been mapped as unit 10b of the western episclastic sequence. This unit lies east Copper Creek Fault, a feature which, in this image, look as though it may trend further west than previously mapped. As with the 1st VD images, the bulging shape and character of unit 10b is consistent with refolding of the western limb of a northnorthwest-trending fold (the eastern limb containing the Wart Hill prospect). This link raises the hypothesis that units 10f of the western episclastic sequence are correlates, if not the same, as units 4 and/or 5 within the Waterloo Creek and Wart Hill sequences, respectively.



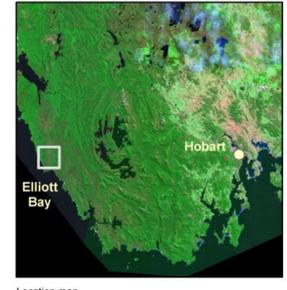
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 Geographic Datum AGD66, Zone 55.

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 50 Queen Street, Bellerive, Tasmania 7018
 ph 03-6244-1317, mobile 0407-115-123, email alreed@bigpond.net.au

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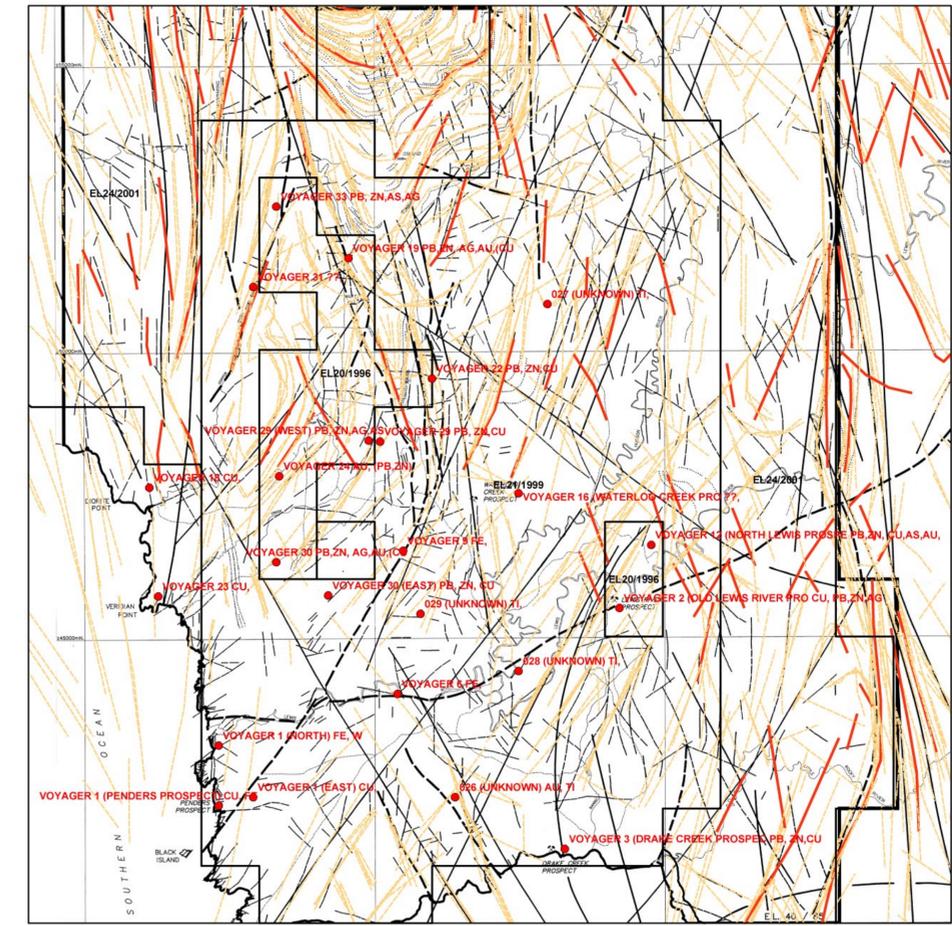
Statement of uncertainty.
 Attribute data for point data have not been verified. Position error as per stated in Mirloch database (available from Mineral Resources Tasmania). This database indicates position errors for some deposits of greater than 1km. Doris drill hole database is known from comparison with mineral exploration reports not to be complete. Position error for gridded image data is unknown but likely to be less than the original flightline spacing of 200m. Road and river data have been digitised from georeferenced company reports. Comparisons between georeferenced images indicate position errors of up to about 100m (but typically less than 30m). Errors for other scanned and georeferenced products are in the order of less than 50m.

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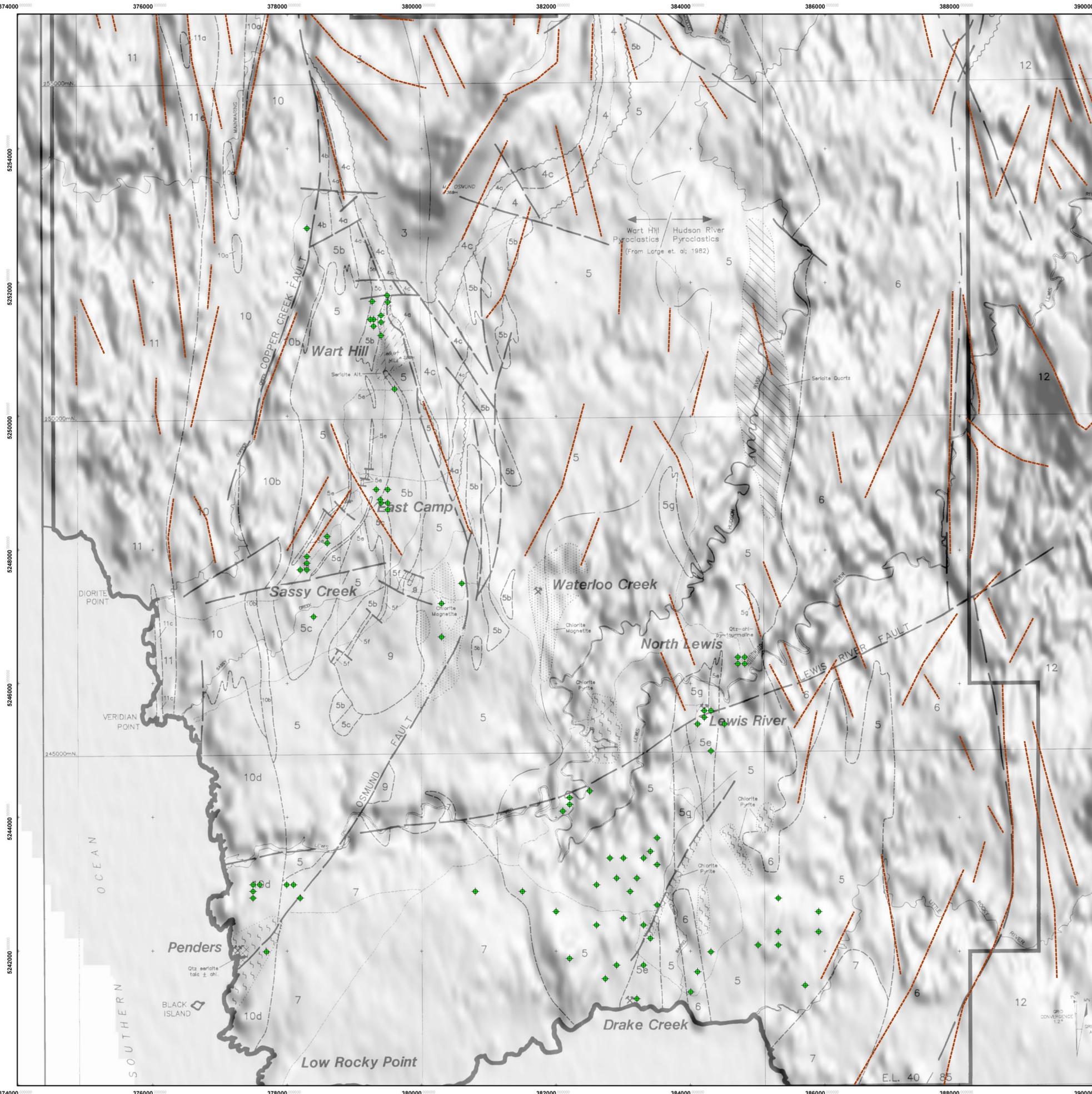


Elliott Bay, SW Tasmania, Australia.

Topographic linears.

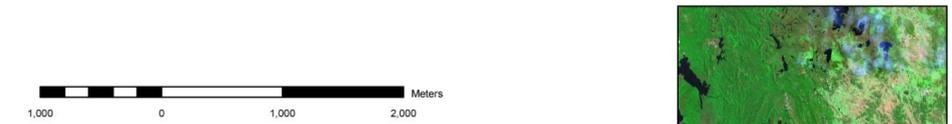


View extents as for main map. Map of linears from Torrey et al., Cyprus Gold Australia Co., TCR88-2853 (held by Mineral Resources Tasmania). Red lines shown are those interpreted from main the image. Light orange dashed linears are those interpreted from other datasets processed during the course of this investigation. Mineral deposits shown are from Mineral Resources Tasmania (MIRLOCH database). Map shows clear differences between previously interpreted linears and those interpreted using more recent data.



- | | |
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| 4b Tuftaceous quartz sandstone and grit | 10d Fine to medium grained rhyolitic volcanics |
| 4c Black shale (pyritic) | 10e Gabbro |
| 4f Fine to medium grained rhyolitic volcanoclastic | 10f Coarse grained rhyolitic volcanoclastic sandstone |
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| 5d Coarse grained rhyolitic volcanoclastic | 11d Black shale (pyritic) |
| 5e Siltstone | 11e Siltstone and sandstone |
| 5f Siliceous conglomerate | 12 Precambrian metasedimentary rocks |
| 5g Greywacke and siltstone | |
| 6 Elliot Point Porphyry | |

Main map.
 Digital Elevation Model for the Elliott Bay Region. Northeast-trending linears, east of Wart Hill and East Camp prospects are of an orientation matching Tertiary (or younger) sedimentary basins. Northwest-trending linears in the vicinity of the Lewis River prospect approximate the strike of mapped units. The subdued topography in the Wart Hill region shows little structure with the exception of the river valley corresponding to the mapped position of the Copper Creek Fault.

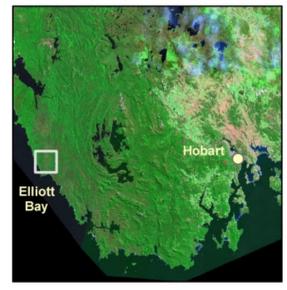


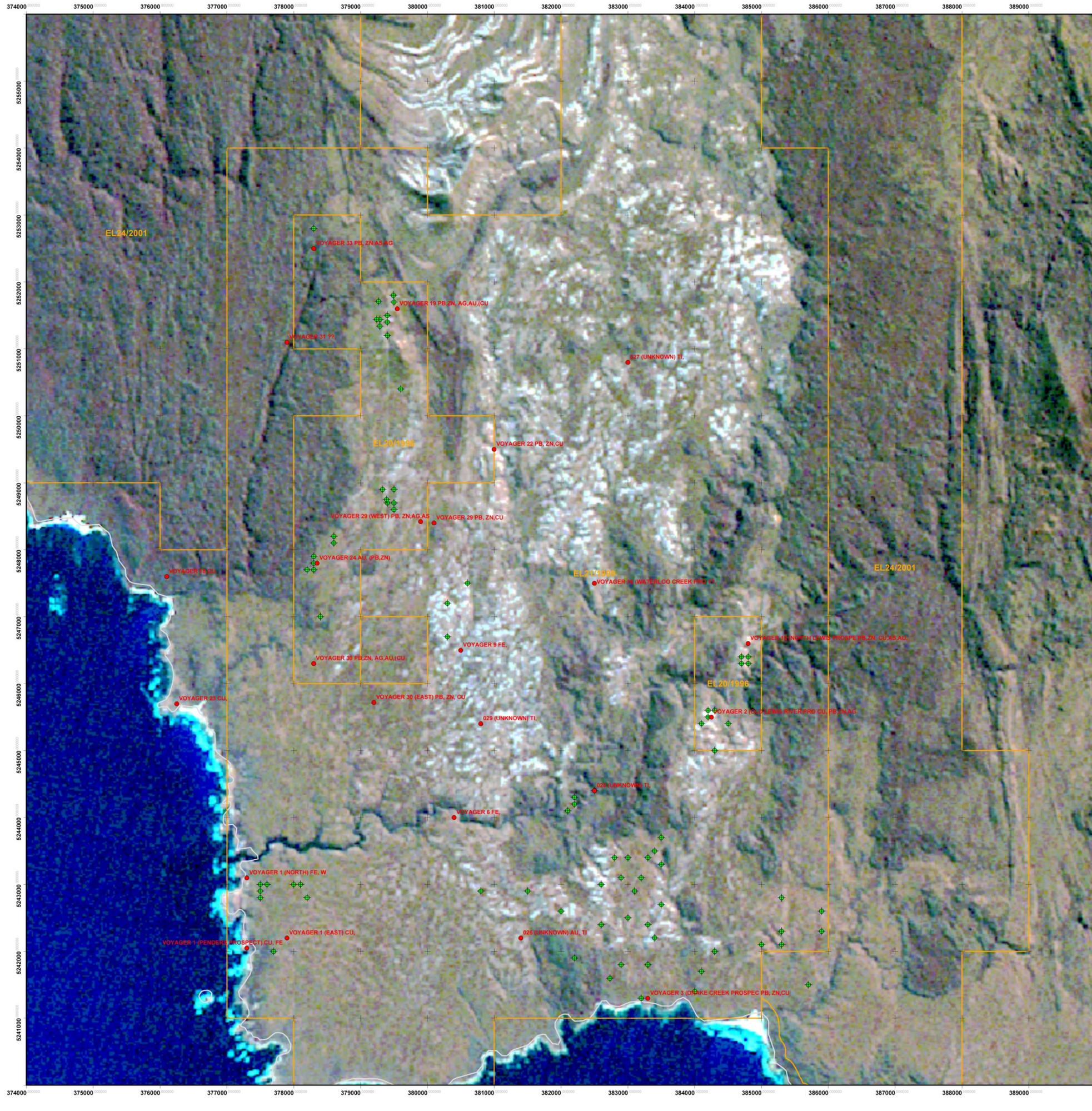
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Statement of uncertainty.
 Attribute data for point data have not been verified. Position error as per stated in Mirloch database (available from Mineral Resources Tasmania). This database indicates position errors for some deposits of greater than 1km. Doris drill hole database is known from comparison with mineral exploration reports not to be complete. Position error for gridded image data is unknown but likely to be less than the original flightline spacing of 200m. Road and river data have been digitised from georeferenced company reports. Comparisons between georeferenced images indicate position errors of up to about 100m (but typically less than 30m). Errors for other scanned and georeferenced products are in the order of less than 50m.

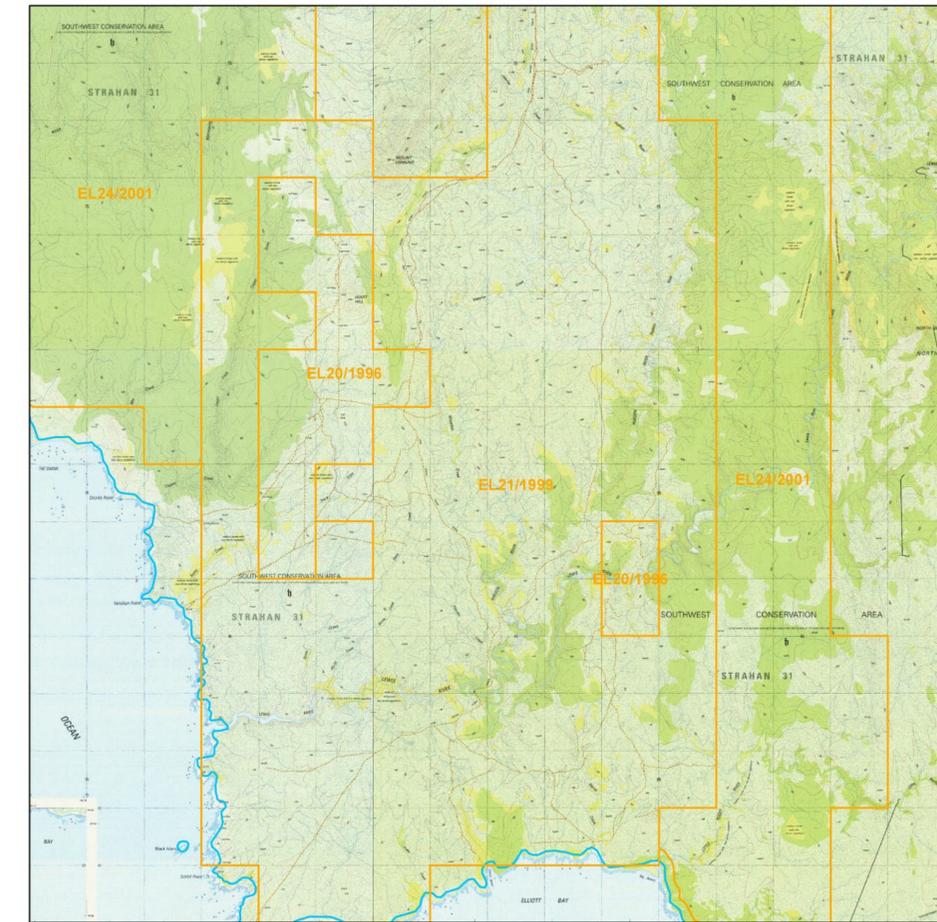
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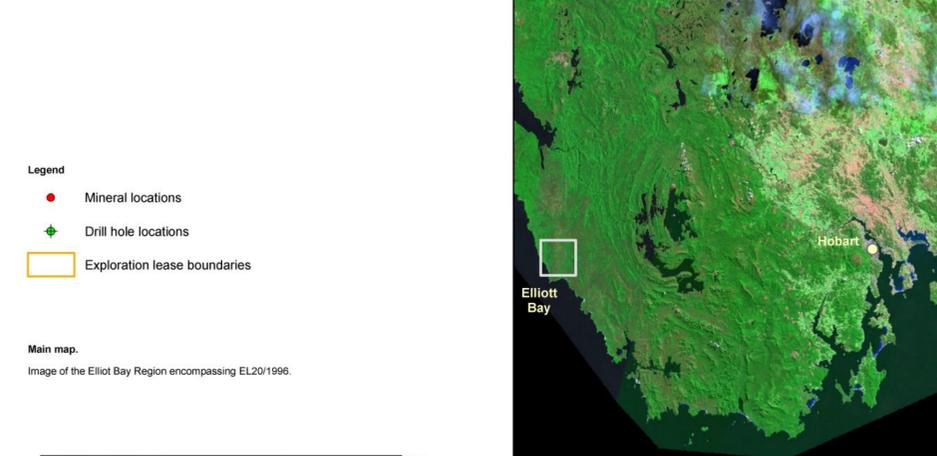


Elliott Bay, SW Tasmania, Australia.

Location map



View extents as for main map. Topographic map inset (Dept. Primary Industries Water and Environment)



- Legend**
- Mineral locations
 - ◆ Drill hole locations
 - Exploration lease boundaries

Main map.
Image of the Elliott Bay Region encompassing EL20/1996.

Non-standard map scale (optimised to sheet).
Geographic Datum AGD66, Zone 55.

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