

PARAGON RESOURCES:

PARTIAL SURRENDER REPORT

EL18/2010, ELLIOTT BAY



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SUMMARY

This report results from the partial surrender of EL 18/2010, Elliott Bay (Figure 1).

Work by Paragon Resources at Elliott Bay has focussed on Cambrian age gold mineralisation. The original outline of EL18/2010 was designed to capture all Cambrian age rocks in the southern Mount Read Volcanics in which there was evidence in historic regional stream sediment data for Cambrian age gold mineralisation.

A review of historic lead isotope work for EL18/2010 reveals multiple populations of lead isotope associated with mineralisation at Elliott Bay. One population of Devonian affinity is associated with vein-style gold mineralisation in the western parts of Elliott Bay, including at and near Sassy Creek (V24).

A Devonian age for gold mineralisation in the western parts EL18/2010 is consistent with mineralisation there being contained in the upper (younger) parts of the volcanic sequence.

Remaining populations of data indicate gold mineralisation in the eastern parts of the Elliott Bay licence to be of Cambrian age. This is consistent with their being of a more disseminated style and associated with typically Cambrian chlorite-, sericite-, and pyrite alteration.

It is the opinion of Paragon Resources that Devonian vein style gold mineralisation in western regions of Elliott Bay is unlikely to produce a gold deposit of any significant size or consistency of grade to be economic (in the foreseeable future) given the remoteness of the region.

A low prospectivity and chance of success in western, granite- and porphyry dominated parts of the EL18/2010 and coastal regions has resulted in a decision to relinquish these areas.

The areas to be relinquished have not been visited and no work has been conducted in these areas save a review of publically available information.

1. INTRODUCTION

EL18/2010 comprised 168 km² located in the Southern Mount Read Volcanic belt (SMRV) of southwestern Tasmania (Figures 1 and 2). Parts of the licence area are considered prospective for metallic minerals with potential for non-metallic by-product.

The licence in its entirety was granted on 24th November 2010 without objection.

The licence covers the southern section of exposed Cambrian volcanic and related intrusive rocks. Exploration at Elliott Bay in the past has focussed on VHMS-style massive sulphide (lead and zinc) mineralisation with little regard to explaining the considerable gold anomalism in the area. Paragon Resources is focussed on looking at alternative models for mineralisation which shows VHMS-style mineralisation elsewhere in Australia to be associated with shear zone related gold.

The licence currently comprises 168 sq km (Figures 1.1 and 1.2). The area to be relinquished totals 61 sq km (Figure 1.1).

Elliott Bay has been held under exploration licence almost continually since the early 1960's. Early work was of a regional nature, with most subsequent work focussed on specific prospects in the central (eg Wart Hill, Sassy Creek; contained within but not included as part of EL18/2010) and eastern parts of the current licence area.

Exploration has shown a progression from regional to prospect-scale, with most work focussed on identifying and testing for massive sulphide VHMS-style lead and zinc mineralisation (eg Wart Hill).

Gold- and copper mineralisation at Elliott Bay that did not fit a classic VHMS model was largely disregarded, despite regionally anomalous stream sediment gold results.

A lack of rigorous exploration in parts of the Elliott Bay area has opened opportunities for companies such as Paragon Resources to reassess earlier results in light of new exploration models.

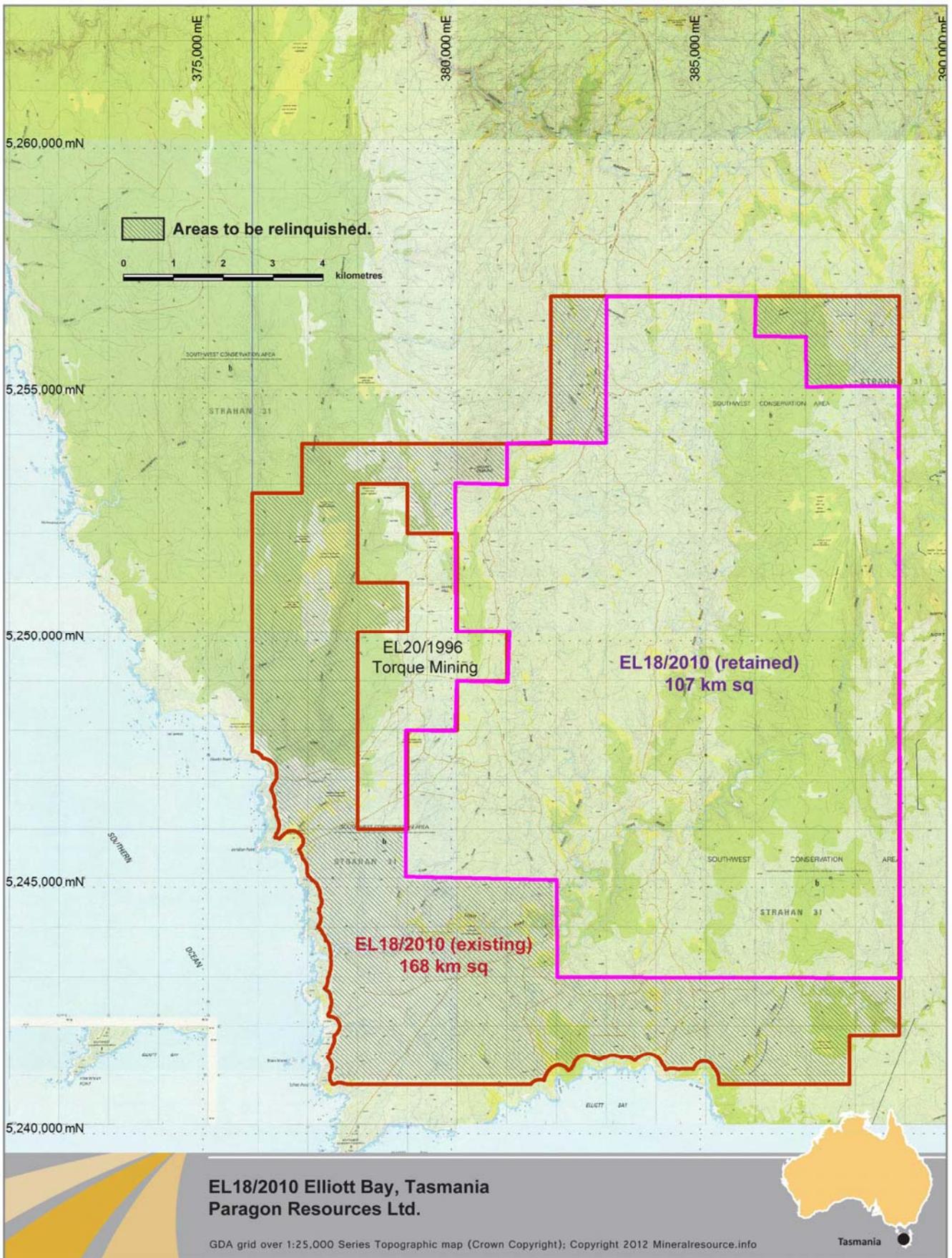


Figure 1.1. Map showing Elliott Bay licence area, and areas to be relinquished. The area to be retained is considered prospective for yielding a Cambrian age mineral deposit of economic size (>2Moz gold eq)

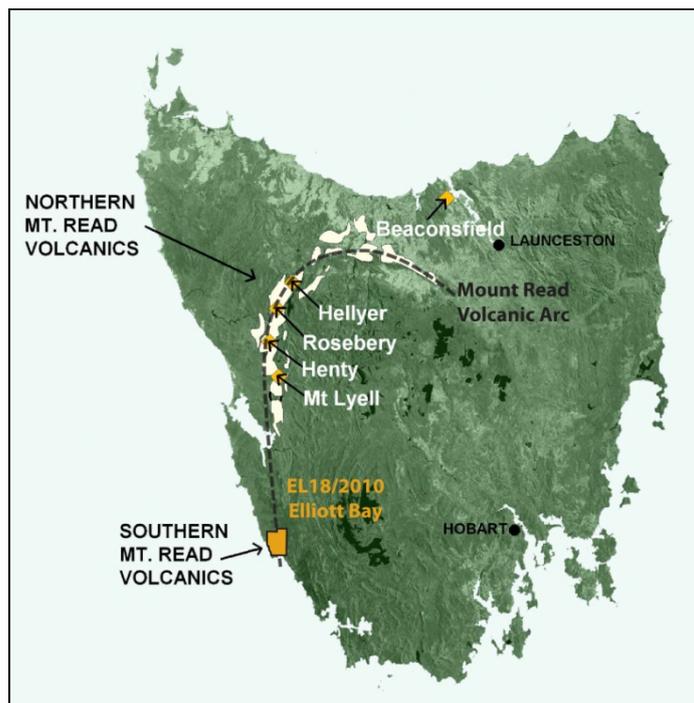


Figure 1.2. Map of Tasmania showing the location of EL18/2010 in southwestern Tasmania. The Elliott Bay licence encompasses 168 sq km of the highly mineralised Mount Read Volcanic belt.

2. EXPLORATION PHILOSOPHY

The exploration philosophy adopted by the company is a matter of constant review.

Initial targeting of the Elliott Bay area resulted from realisation that anomalous and unexplained gold results in historic panned concentrates coincided with structures mapped from WTRMP geophysical data (Reed, 2011).

More recently discovered deposits such as Henty have affinity with both sea-floor volcanism and deeper fault-related mineralisation.

VHMS-style mineralisation is present at Elliott Bay (eg Wart Hill) but only in the upper parts of the Elliott Bay volcanic sequence. Gold mineralisation at Elliott Bay was originally noted to be widespread, but has since been separated based on a review of lead isotopes and lithological description into mineralisation of probable Cambrian age and that of probable Devonian age.

Only Cambrian age mineralisation is considered a valid target for Paragon Resources. Devonian gold deposits can be economic, but are typically smaller, more nuggetty, are technically more difficult to mine (higher cost) than Cambrian deposits. The remoteness of Elliott Bay region makes discovery of a Devonian gold deposit of greater than 2 Moz unlikely (2 Moz being the minimum size considered to be a viable target by Paragon Resources).

3. TENURE AND SOVEREIGN RISK

EL18/2010 (including that part to be relinquished) is wholly Crown land. There is no private land, nor are there farming or grazing leases covering the licence area.

EL18/2010 is contained within one of a number of Conservation Areas located in prospective areas of Tasmania. It is not part of the World Heritage Area. Work at Elliott bay is subject to review by the Mineral Exploration Working Group, an advisory group to Mineral Resources Tasmania.

Elliott Bay falls within the Cape Sorell Strategic Prospectivity Zone (SPZ; Figure 3.1). SPZ's are recognised regions of high prospectivity for mineral discovery. They were established under 1993 legislation enacted to provide resource security for the minerals industry. Under this legislation, the status of significant parcels of Crown land within SPZs cannot be changed to a tenure excluding mineral exploration and mining without the approval of both Houses of State Parliament. The approval of the Director of Mines is needed for small parcels of land (less than 500 hectares). **If the status of land is changed so that a mineral tenement is voided or diminished in size, the holder may be compensated** (Mineral Resources Tasmania, Annual Review 2000-01, text copied from ABS website, <http://www.abs.gov.au/ausstats/abs@.nsf/0/42124675B8A0F173CA256C32002416BE?opendocument>). SPZ 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.

There is no native title claim over Elliott Bay. Nor is Native Title the same issue in Tasmania as it is elsewhere in Australia. Rather, the Native Title (Tasmania) Act 1994 (Tas) confirms State ownership of all natural resources.

Sovereign risk in Tasmania is possibly lower than other States in Australia, in large part due to lower native Title risk and greater certainty of tenure through SPZ legislation. However, there is a high 'perceived risk' by the investment community, compounded more recently by the failure of the intergovernmental process (Intergovernmental Agreement; IGA) between forestry and environmental groups. Reducing the size of EL18/2010 to exclude coastal areas is likely to prove beneficial to perceptions about the remainder of the licence being retained.



Figure 3.1. Location map showing Strategic Prospectivity Zones (SPZ's) in Tasmania. Elliott Bay (EL18/2010) is contained within the Cape Sorell SPZ.

4. LAND ACCESS AND INFRASTRUCTURE

Elliott Bay is located on the high rainfall west coast of Tasmania, with the potential for adverse weather conditions at any time of the year. Eastern parts of the Elliott bay licence tend to be more undulating (Figure 4.1) and therefore more sheltered than exposed button-grass plains and coastal regions to the west. However, fieldwork is best restricted to summer months, between November and April.

Access to and within the Elliott Bay area is difficult. Vehicular access is restricted to quad-bike tracks. Lighter equipment and personnel can be flown by helicopter from Strahan or Strathgordon. Helicopter services (B2 Squirrel) are based from Strahan during the summer months with additional operators (B2 Squirrel and Longranger helicopters) located on the north coast. Helicopter service providers are experienced in both slinging mineral exploration equipment and the Elliott bay area.

There is an old but still serviceable airstrip located a few kilometres north of the EL18/2010 at Moores Valley (Figure 4.1). Air Tasmania have advised that they are prepared to fly their Islander aircraft to Moores valley from Hobart. Islanders are proven aircraft with a carrying capacity of about 900kg. They are a cost and time effective alternative to helicopters for transport of personnel and light equipment from Hobart for larger programs.

Heavier equipment has previously been barged down the west coast from Strahan (eg Frontier Resources). An alternative for accessing the eastern parts of Elliott bay is to sling gear to site from a barge using a helicopter.

There are few facilities with the exception of a very basic government-maintained campsite at Wart Hill. Personnel can camp at site of be located from Wart Hill using a smaller Robinson helicopter.

5. REGIONAL SETTING OF MINERALISATION

About 50% of Tasmania can be broadly classified into metallogenic domains hosting a number of mineral deposit types; including:

- Late Proterozoic Arthur lineament in the northwest of the State, yielding iron ore and magnesite .
- Early Cambrian mafic and ultra-mafic rocks containing platinum group minerals (PGMs), nickel, copper, cobalt, gold and other minerals.
- **Middle Cambrian Mount Read Volcanics (MRV), hosting polymetallic volcanic hosted massive sulphides (VHMS) and disseminated copper-gold deposits.**
- Middle Devonian mesothermal gold deposits in north-eastern Tasmania.
- Late Devonian to Early Carboniferous granite associated deposits.

Elliott Bay is contained within the Middle Cambrian Mount Read Volcanic (MRV) belt. The MRV belt is highly mineralised, hosting three of Tasmania's six 'world-class' deposits.

EL18/2010 (Elliott Bay) is contained within the Southern Mt Read Volcanics (SMRV). Mineralisation here is of the same age and style as further north but due to its remote location, has received less exploration attention and, as a result, is less well understood.

6. 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) and including areas to be relinquished.

Regional geology of the Mount Read Volcanics

The geology of the MRV is best understood in the north but is more controversial in the southern MRV where Elliott Bay is located.

In the north, the MRV resulted from a major period of volcanism along the eastern edge of a water filled rift in the Cambrian (circa 500Ma). Volcanism was initially rhyolitic to dacitic in composition in the centre of the trough (Central Volcanic Complex; CVC), with predominantly quartz- feldspar-phyric rocks erupted to the east (Eastern Quartz-phyric sequence).

The CVC in the northern MRV hosts the Rosebery and Hercules deposits.

Andesitic to basaltic volcanism followed with further rifting focussed to some extent on the Henty fault system. These Tyndall Group rocks host the Que River and Hellyer VHMS deposits.

Further rifting was centred on the Henty fault system and was 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 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.

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 relative lack of drilling south of Macquarie Harbour.

The geology at Elliott Bay comprises Cambrian calc-alkaline felsic to mafic volcanics (Figure 6.1). Volcanic rocks are prospective for gold, silver and base metals (copper, lead, zinc). Copper gold anomalism is more prevalent in the east of the licence area at what are probably deeper stratigraphic levels, whereas lead and zinc of VHMS affinity (with or without remobilised Devonian age gold) are more prevalent in the west (Figure 6.2).

Basement likely comprises a sequence of deformed Precambrian metasediments (similar to those outcropping to the east 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.

The remaining geology and its correlation with rocks further north is more controversial. In general, the Cambrian sequence is thought to young and face west. Rocks are generally tilted to the west, with the oldest rocks in the east of the licence area.

The sequence is well foliated but demonstrates little clear folding.

In the east, the base of the Cambrian sequence outcrops includes what has been mapped as a 2 to 3 kilometre thick quartz-feldspar-biotite porphyry (Elliott Point Porphyry). There are minor occurrences of porphyry in the northern and southern parts of EL18/2010 to be relinquished.

The Lewis River Volcanics lie west and stratigraphically above the Elliott Point Porphyry. These are subdivided into the Hudson River and Wart Hill Pyroclastics, and consist of variably quartz-, biotite- and feldspar-phyric volcanic sediments and lavas and/or intrusives.

Much is made in the literature about the quartz-rich rhyolitic nature of these rocks and their correlation with rocks in the Eastern Quartz-phyric sequence in the northern MRV. To an extent, this correlation has justified earlier exploration being focussed in the west of the current licence area to the detriment of the east.

As well as quartz, sericite and/or chlorite alteration is common and can be pervasive.

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 Waterloo Creek Group has been correlated with the Tyndall group further north. Waterloo Creek rocks occupy parts of the central northern areas to be relinquished.

Ordovician Owen Conglomerate and sandstone conformably overlies the Waterloo Creek Group and was specifically excluded from the original licence application.

The Copper Creek fault is a major north-south fault in the west of the licence area and is to be relinquished. West of this fault are the Western Epiclastics (including mafic volcanics). These rocks are possible correlates of the Mainwaring River Group further to the west. The age of this fault is unknown but localised mineralisation along its length is presumed to be Devonian and, thus, of little interest to Paragon.

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 occupies a large part of the southwestern part of EL18/2010 to be relinquished. It is a composite intrusion consisting of pink granite, cream adamellite and coarse porphyritic granite. It may be a source of mineralisation but is in itself considered to be of low prospectivity. 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.

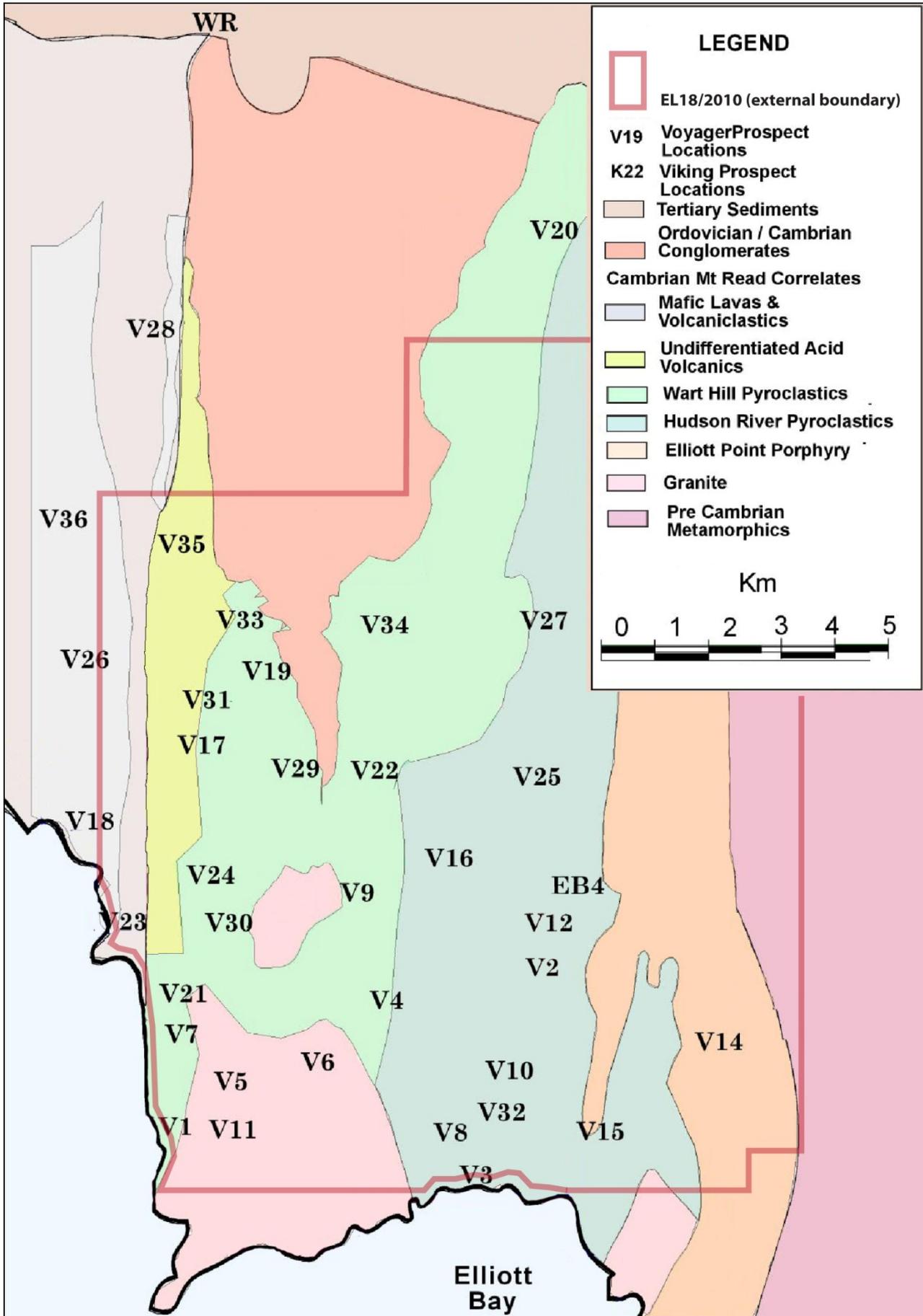


Figure 6.1. Simplified geological map of the Elliott Bay area.

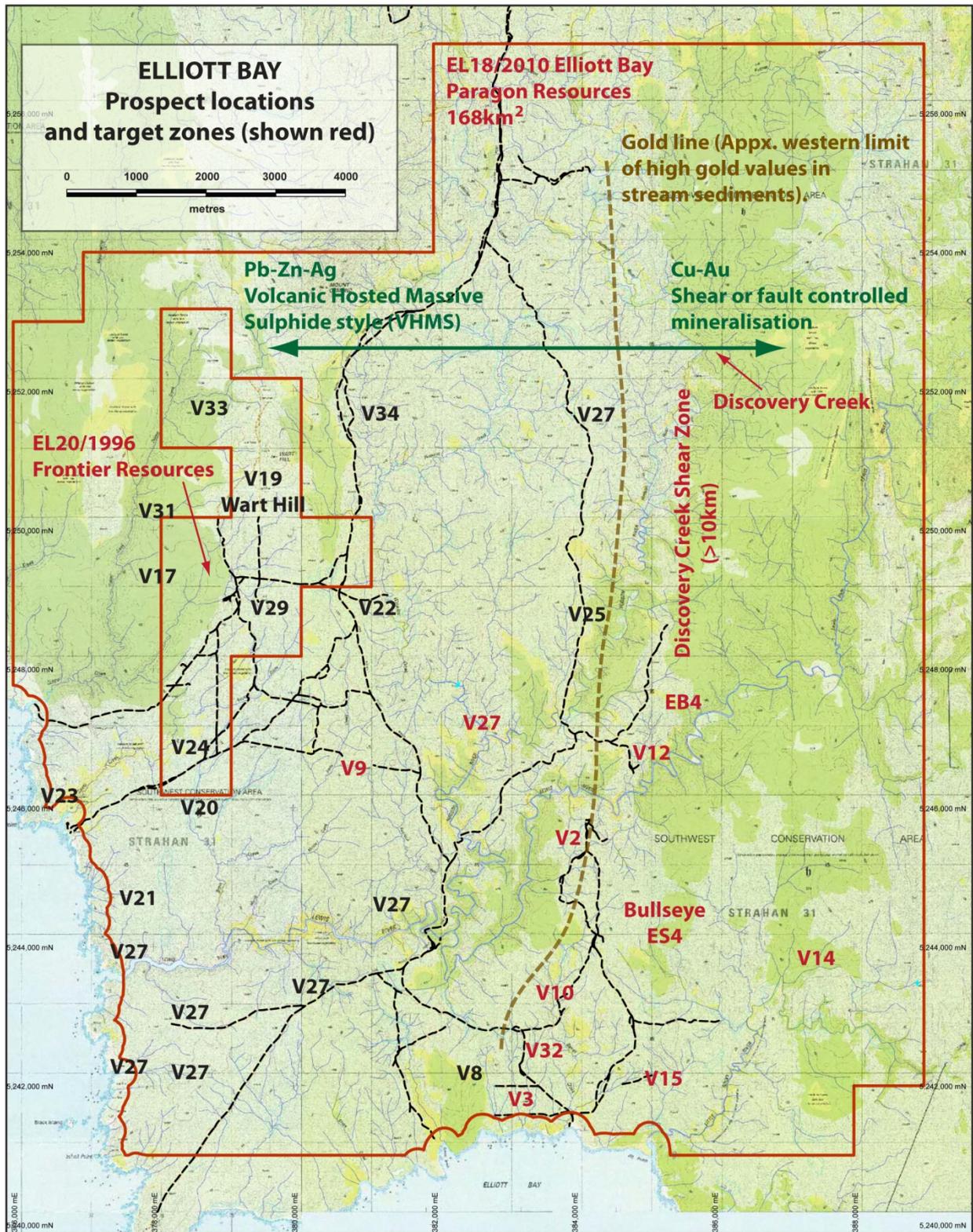


Figure 6.2. A topographic map showing the extents of EL18/2010 (prior to partial relinquishment) and some of the many prospect locations. EL18/2010 encompasses Frontier Resources tenement EL20/1996 which includes the Wart Hill Prospect (V19). Wart Hill has been the focus of much work in the Elliott Bay, often to the detriment of exploration of prospective ground in surrounding areas. Gold anomalism in stream sediments that is associated with Cambrian age mineralisation at Elliott bay tends to be higher in the east.. Lead isotope work suggests that less widespread vein-style gold in the west (eg V24, Sassy Creek) is of probably younger Devonian age (ie remobilised gold). (grid shown is AMG with offset coordinates being GDA)

7. EXPLORATION HISTORY

The exploration history for Elliott Bay is complex, with much of the area held under licence continuously since the early 1960's. Most work has occurred outside of those areas to be relinquished as part of EL18/2010.

Overall, the Elliott Bay region has been significantly under-explored in comparison with the much better known northern section of the volcanic belt. There is extensive metal anomalism in regional stream sediment surveys with more than 25 additional discrete mineral prospects identified to date (eg Figures 6.1 and 6.2).

There has been a low density of drilling throughout the licence area and little modern drilling. Frontier Resources completed drilling at V19 (Wart Hill) and areas to the south and along strike to the east and north (Alderbarren; vicinity of V22-V34). These sites sit in the west of the Elliott bay licence extending into the areas to be relinquished. They are not of direct interest to Paragon Resources.

Most historic drilling is shallow sub-soil test work only, with few of the remaining holes extending beyond a depth of 100m.

The SMRV Project area has not recorded any metal production to date. There is a small resource at Wart Hill, encompassed by, but not included within EL18/2010. Wart Hill comprises 'rafts' of massive sulphide mineralisation from a probable nearby source but one that has yet to be discovered. This mineralisation may be at depth or have been eroded, but, regardless, clearly demonstrates the Elliott Bay area as a centre of mineralisation.

There is a significant amount of data available for the Elliott Bay area, including some detailed regional geological maps published by the Tasmanian government in the early 1990's. These data and maps have been produced and interpreted almost solely in context with a stratabound VHMS massive sulphide style of mineralisation in mind. There has been little if any work toward understanding the complex structural geology in the Elliott Bay area. A stratigraphy for the area also remains controversial and is a matter of debate throughout the company literature.

The Elliott Bay area saw minor prospecting in the period between 1890 and 1910 with old workings visible at Voyager 1 (V1) also known as Penders Prospect, Lewis River (V2), and V3 (Figures 6.1 and 6.2). Penders prospect is contained within the western coastal parts of the area to be relinquished.

Most exploration has targeted stratabound deposits of similar style to those VHMS deposits known in the northern MRV.

In 1957 the L. E. E. joint venture held the first modern EL in Tasmania the "Gordon Concession" which covered a large area of southwest 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 southwest of Tasmania from 1965 to 1975. They undertook airborne surveys as well as stream sediment geochemical sampling of the MRV and some soil geochemical sampling.

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 (after the Voyager spacecraft), 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 multidisciplinary 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. Plutonic geologists recommended work in the Eastern Elliott Bay area at V12/Lewis River (Hermann, Plutonic, 96/3841), but given disappointing results for Wart Hill Plutonic decided to relinquish 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.

In 2012, Frontier spun out its Tasmanian assets into Torque Mining. This included Wart Hill.

Exploration at Wart Hill has almost universally focussed attention away from the many other geochemical anomalies in the Elliott bay area. It is these features that are the subject of interest for Paragon Resources.

8. PARAGON RESOURCES: A SUMMARY WORK (AREA TO BE RELINQUISHED)

No work beyond a review of the existing extensive publically available literature has been conducted by Paragon Resources for the areas to be relinquished. All work has been focussed on the area to be retained.

A literature review commenced in Year 1 and has continued through Year 2. It is the review of lead isotope data that has led Paragon to believe that gold-bearing rocks in the upper parts of the Elliott Bay volcanic sequence are unlikely to yield a sizeable mineral deposit. A summary of this review is given below:

Lead isotope work: implications

There have been a number of lead isotope studies that have included samples from Elliott Bay. These studies compare mineralisation at Elliott Bay to VHMS-style mineralisation in the northern MRV and to likely source rocks. They are important to Paragon in differentiating Cambrian mineralisation from younger Devonian mineralisation. Amongst other characteristics, Cambrian deposits tend to be larger and more economically viable than Devonian deposits.

Devonian age mineralisation at Elliott bay is unlikely to be economic and is not of interest to Paragon Resources (for reasons already stated). Lead isotope data have proven critical to Paragon prioritising exploration in the east of the current licence area.

Importantly, a number of populations of lead isotope data have been identified at Elliott bay that are thought to represent both Cambrian and Devonian age mineralisation.

Gulson et al (1987) concluded that Cambrian massive sulphide mineralisation at Elliott Bay constituted the least radiogenic population of data, whereas vein-style mineralisation thought to be of later Devonian age constituted the most radiogenic. A third group of intermediate composition was related to mineralisation near the margins of the Elliott Bay porphyry.

Cyprus collected further samples for lead isotope analysis, to be combined with those of Gulson (part of an initially confidential Centre for Ore Deposit Exploration Studies (CODES), CSIRO, and Aberfoyle project; Gemmell, in TasGold, 03/4983).

Gemmell identified four distinct clusters of data (in order of radiogenicity):

- Group A (least radiogenic): Galena - sphalerite clasts from Wart Hill (western Elliott Bay)
- Group B: Voyager 2 mineralisation (eastern Elliott Bay)
- Group C: disseminated and vein mineralisation from V9 (Central-western Elliott Bay)
- Group D (most radiogenic): disseminated and vein mineralisation of younger age

Importantly, Groups A-C (including mineralisation in eastern Elliott bay area) are considered to be of Cambrian age. These data corroborate Paragon targeting Cambrian gold mineralisation in eastern Elliott Bay.

Group D is consistent with gold mineralisation in the western Elliott Bay area, eg at V24 (Sassy Creek), being of Devonian age. A Devonian age is consistent with mineralisation at Sassy Creek being described in the literature as being of a vein-style and different to the more disseminated, chlorite- sericite- pyrite-alteration associated mineralisation further east.

Stream sediment data do not discriminate between Cambrian and Devonian age mineralisation. However, combined with the lead isotope work, it appears that gold mineralisation higher in the volcanic stratigraphy in western Elliott Bay is of Devonian age, possibly remobilised from older Cambrian age gold deeper in the sequence in eastern Elliott bay.

Devonian mineralisation is of limited interest to Paragon Resources and, as such, western areas to be relinquished.

9. EXPENDITURE TO DATE

There has been minimal expenditure on the areas to be relinquished. Expenditure is limited to time reviewing the literature, equating to an estimated total over 2 years of less than \$5000.

10. CONCLUSION

Gold associated with anomalous stream sediment data for western areas of EL18/2010 is considered on the basis of lead isotope and textural studies to be of probably Devonian age and of little interest to Paragon Resources.

11. SOURCES OF INFORMATION

Unpublished and company reports

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12. METADATA

Tenement holder: Paragon Resources Pty Ltd

Activities: Literature review

Contractor to Paragon Resources: Metalstocks Australia Pty Ltd (Dr Alistair Reed)

Keywords: Elliott Bay, Mount Read Volcanics, VHMS, massive sulphide, gold, lead isotopes.

13. STATEMENT OF EXPERIENCE

This report has been prepared by Dr Alistair Reed, BSc (1st), PhD, Consulting Geologist who has had over 20 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.

14. 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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