



(A.B.N. 96 095 684 389)

P.O. Box 79
Rokeby
Tasmania 7019
AUSTRALIA

Telephone: +61 (3) 6247 9646
Facsimile: +61 (3) 6247 9644
Email: info@frontierresources.com.au
Internet: www.frontierresources.com.au

EL20/96 - Elliot Bay,

Annual Report to 11th June, 2008

**Robert Reid
Exploration Manager - Tasmania
Frontier Resources Ltd.
June 9th, 2008**

Contents

Summary	4
Introduction.....	5
Location/Access.....	6
Land Status/Usage	7
Environmental Concerns.....	9
Tenure	9
Work Program - Wart Hill Area	10
Geophysics.....	10
Ground magnetics	10
Gravity	12
Electromagnetics.....	14
Geology.....	19
Alteration	22
Genetic Model Interpretation.....	23
Structure.....	25
Geochemistry	26
Drilling.....	29
V19.....	29
South East V19	31
South and South West Wart.....	32
V24.....	35
Economic and Metallurgical Study – V19 Resource	35
References.....	37
APPENDICES	38
Appendix 1.....	39
Review of V19 (Pb-Zn-Ag Mineralisation) Mining Economics	39
LOCATION.....	43
MANNING STRUCTURE.....	44
TOPOGRAPHY.....	45
MINING OPERATIONS.....	45
DEVELOPMENT	46
VENTILATION AND STOPING.....	47
DEVELOPMENT PROGRAMME.....	48
MANPOWER	50
Days. Ore Transported using own Plant Ops.....	51
METALLURGICAL PROCESSING	51
PROCESSING OF CONCENTRATES	54
ACCOMODATION.....	55
PROCESS PLANT LABOUR REQUIREMENTS	55
MANAGEMENT.....	56
HEAD OFFICE COSTS	56
Appendix 2: Metallurgical Test Work.....	
Appendix 3: Drill Hole Logs	
Appendix 4: Drill Hole Geology Legend.....	
Appendix 5: Lithologies Lookup Table.....	
Appendix 6: Geochemical Analysis.....	
Appendix 7: Digital Data.....	

List of Figures and Tables

Figure 1: Location of Frontier’s Exploration Licences.....	8
Figure 2: Wart Hill Area ground magnetics	11
Figure 3: Prelim ground Magnetics for V24 over geology.....	12
Figure 3: Wart Hill Area Residual Gravity.....	13
Figure 4: Wart Area SIROTEM.....	16
Figure 5: Wart Area SIROTEM CH11	17
Figure 6: Wart Area SIROTEM CH21	18
Figure 7: Geology re-interpretation in progress.....	20
Figure 8: Hellyer VHMS Vector Model	23
Figure 9: Wart Hill Area Fe/Mn Ratio in Soils.....	27
Figure 10: Wart Hill Area Cu in soils.....	28
Table 1: Wart Hill (EL20/96) drill collars	29
Table 2: Significant intersections 2008, Wart Hill area.....	30
Figure11: 3D view showing targeting features for WD021.....	31
Figure 12: Wart Hill Area 150m chargeability	33
Figure 13: Wart Hill Area draft geology and structural interpretation	34

Summary

Frontier Resources drilling at Wart Hill in Southwest Tasmania was a technical success defining positive vectors to massive base and precious metal (zinc-lead-silver-gold) sulphide mineralisation. Interpretation of 9 drill holes totalling 2900.5m has led to these highly significant advances. Frontier's drilling commenced in early January (~10/1/2008) with the program completed early in May (~7/5/2008). Drilling was focused upon defining upgrades and extensions to the known mineralisation. Previously drilling has returned intersections to 7m @55.6g/t Ag, 6.16% Zn, 3.33% Pb, 0.22% Cu & 1.81g/t Au (~16% Zn Equivalent) from 197m in WD009.

Renewed geological interpretation leads Frontier to believe they are poised to drill the inferred fault offset of the V19 mineralisation during the coming field season. Principal among the geological advances is the recognition and characterisation of a NNE orientated dextral offset wrench fault, combined with better understanding of alteration distribution with regard to volcanic facies.

Frontier's SMRV 2008 field season drilling started with an attempt to extend the V19 base metal mineralisation to depth on Section 13155mN. Previously reported results were disappointing with no significant base metal intersected, however sub host horizon an extensive elevated basemetal zone returned 130m @ 0.2% Zn equivalent, with minor intervals of up to 3.2% Zn equivalent intersected in WD017.

The best interval returned from WD018 was 1.4m @ 17.6% Zn equivalent. In WD019, the host horizon was found to be faulted off, with two narrow mineralised intervals of up to 0.4m @ 11.3% Zn equivalent being returned; the latter from the massive base metal sulphide on the host horizon directly overlying significant carbonate-sericite and chlorite alteration.

Subsequent drilling focused upon relocating massive sulphide on the south side of the fault offset at the southern end of the V19 resource. Initial drilling targeted a magnetic high located footwall to a zinc in soil anomaly; a scenario closely comparable to that for the known V19 mineralisation. WD020 intersected a strong chlorite-carbonate-magnetite +/- minor basemetal zone from what is now recognised as the "Upper Host Horizon". WD021 drilled the projected southern plunge of the V19 mineralisation on the eastern side of the offsetting fault, but failed to reach the host horizon. WD022 further targeted both the "Lower" and the "Upper Host Horizon", the former being faulted off and the latter setting found to be relatively distal to massive sulphide. These holes completed a fence perpendicular to the host horizon, some 150m south of the known V19 mineralisation extent. No strong analysis were returned, but geological advances were significant.

Focus then changed to the South Wart Prospect, where an electromagnetic (SIROTEM) and chargeability anomaly (3D-IP 2005/6 survey) of similar character to that at V19 was targeted in an extensive area of elevated lead +/- zinc in soils, flanked by a magnetic high. Initial macroscopic results are highly favourable, with 88m of low grade disseminated and stringer veinlet style base metal mineralisation intersected (Returning 98.3m @ 0.3% Zn equivalent) in SWD002. Alteration and mineralisation character likely suggests a relatively proximal to VHMS environment.

SWD003 intersected the “Lower Host Horizon”, on section 175m west of SWD002. Footwall alteration comprised very promising moderate to strong chlorite followed by a strong grey pervasive silica overprinted by moderate sericite alteration; the alteration appearing stronger than that evident in the V19 footwall. A dark grey volcanoclastic siltstone / shale with a silicified top. being a marker for the lower host horizon, returned 1m @ 2.24% Zn Equiv. Other significant intervals included a relatively extensive low grade 25m @ 0.16% Zn Equiv from 177m.

The last hole for the field season SWD004 targeted a promising coincident gravity high and electromagnetic (UTEM) anomaly in the West Wart area. This anomaly targeted was apparently sourced down dip from the surface mapped “Lower Host Horizon” and lay adjacent to a recently characterised NNE aligned fault with interpreted dextral wrench offset of mineralisation from V19. SWD004 was temporarily terminated at 297.1m, largely due to logistical timing reasons with the end of hole still in promising mineralisation, as evidenced by two near end of hole extensive low grade intervals of 13.5m @ 0.2% Zn equiv from 265m and 10m of 0.1% Zn to 297.1m (EOH) from disseminated sulphide zones. Continued drilling after re-entry is the first priority for the next field campaign.

Ground magnetics cover was improved over the Wart hill area with a small test area surveyed at V24.

A study of the economics of the V19 resource was undertaken by a consultant, Swain and Associates. Swain comments “The financial results are not encouraging in that a positive cash flow is not achieved from the current mineralised resource found at Wart Hill. However, if further exploration adjacent to Wart Hill demonstrates an increase of the size of the mineralised resource available for mining, then the project should be reconsidered for investment”.

Down hole EM on the southern most drill holes at V19 and South Wart will likely be undertaken in the coming field season. Further the potential for a revised gravity survey utilising the new DGPS located grid is to be assessed.

Introduction

The following report details Frontier Resources Ltd.’s exploration within EL20/1996, during the 2007/8 field season. The data presented represents the current status of ongoing interpretation and reporting, noting that some figures are not updated at present.

The primary targets are high-grade gold (such as Henty) and high-grade polymetallic volcanic hosted massive sulphide deposits (such as Rosebery). Hybrid VHMS models for mineralisation were also tested during the 2007/8 field season.

The 2007/8 field season followed on from the 2005 field season, during which drilling focused upon evaluating the resource potential of the V19 prospect at Wart Hill and defined an extensive base / precious metal mineralised horizon with locally high grades, showing the prospect has excellent potential for a major deposit to be discovered. The continuity of base/ precious metal mineralisation has now been

documented by drilling over a minimum 290m distance down plunge on the host horizon. A total of 13 drill holes for ~1875m were completed here and at West Wart during the 2005 summer field season. High-grade massive sulphides were intersected in 6 of the 13 holes drilled, normally in relatively narrow intervals. In addition, moderate and lower grade semi-massive and disseminated sulphides have been noted in a total of 10 of the 13 holes, with intersection widths up to 13.4m. The best assays from 2005 include 7m @55.6g/t Ag, 6.16% Zn, 3.33% Pb, 0.22% Cu & 1.81g/t Au from 197m in WD009.

Detailed core logging, mapping and re-interpretation of all available information has substantially increased the understanding of the mineralised system at Wart Hill, refining the mineralisation model and improving drill hole targeting ability. Frontier Resources intend to capitalise upon these advances during the up coming 2008/9 field season.

Location/Access

EL 20/96 is located in the remote southwest of Tasmania (see Figure 1) around 40 kilometres west of Strathgordon and 70 kilometres south of Strahan. Access to the area is difficult as infrastructure is minimal to non-existent. The southwest of Tasmania is exposed to the roaring forties and is often windy and wet even in mid-summer.

A rough 4WD track (Low Rocky Pt Track) runs from the southern end of Birches Inlet (south-eastern corner of Macquarie Harbour) to the unmanned lighthouse at Low Rocky Point. The track was initially constructed by Exploration companies in the 1950's and 1960's but has been rarely used since. Barging of heavy equipment across Macquarie Harbour to access the track has occurred successfully in the past. Previous exploration has seen bombardiers, excavators and drilling rigs (L38's) unloaded here and driven down to the Elliott Bay area. 4WD bike and motorbike enthusiasts occasionally use the track.

The alternative access is by air. The Moores Valley airstrip (10 kilometres north of Mt Osmund) was constructed in the 1950's and is serviceable by light aircraft.

Previous exploration campaigns have accessed the area by helicopter and light plane either from Strathgordon or Strahan. Large equipment has been transported down the coast by boat or barge and airlifted from the deck whilst the boat/barge is sheltered in the mouth of the Mainwaring River or Cowrie Beach. TasGold's 2004 exploration campaign was mobilised in this manner.

TasGold's January 2005 mobilisation utilised the Hobart Ports barge "Kalundra" with some 45tonnes of gear loaded in Hobart and boated to the Lewis River mouth. The barge doors were lowered onto an outcropping point, allowing unloading of tracked vehicles. Other equipment and supplies were sling loaded from the river mouth to the Wart Hill drill site and camp.

A semi-permanent camp is located just south of Wart Hill. The Camp was first constructed by Geopeko Ltd. and is currently managed by Mineral Resources

Tasmania. This facility was re-established by TasGold Ltd after it was vandalised and burned in 2003.

The 2007/8 field season commenced with an initial mobilisation on 22/11/2007, which was undertaken via sling loading from Strahgordon. Gear mobilised included quad bikes, camping equipment, magnetometers and associated geological field gear to support regional exploration work on the adjacent EL's 21/1999 and 20/2006.

Frontier's drilling exploration on EL20/1996 was mobilised in early January 2008 and extended through to May 2008. Mobilisation of drilling gear and associated equipment was initially aborted when too much swell (~2+m) prevented the barge "Kalundra" from safely entering the Lewis River. The barge continued to Strahan prior to returning several days later when sea conditions moderated.

Much of Frontier's field gear, the drill rig, 3 quad bikes, an excavator and crawler dumper was left on site at the completion of the 2008 field season, thus minimising costs associated with mobilisation next season. A minimal demobe to Strahan was undertaken via helicopter internal loads at seasons end. Next seasons mobilisation will largely involve sling loading of fuel.

Land Status/Usage

Much of the southwest of Tasmania is listed as a World Heritage Area and the land tenure is classified as National Park. However the strip of land between Elliott Bay in the south and the southern shore of Macquarie Harbour to the north has been deliberately excluded from the World Heritage Area on the basis of its prospectivity (and lesser wilderness values).

The Elliott Bay area remains classified as Conservation Area and as such is open to mineral exploration. The Tasmanian Government proclaimed the prospective rocks south of Macquarie Harbour to be within the Sorell Peninsula Prospectivity Zone, a recognition of the mineral potential of the area. Under this act any change in the status of the land within the zone requires the approval of both houses of the Tasmanian parliament with any affected party entitled to compensation (this does not cover any decisions of the Federal government).

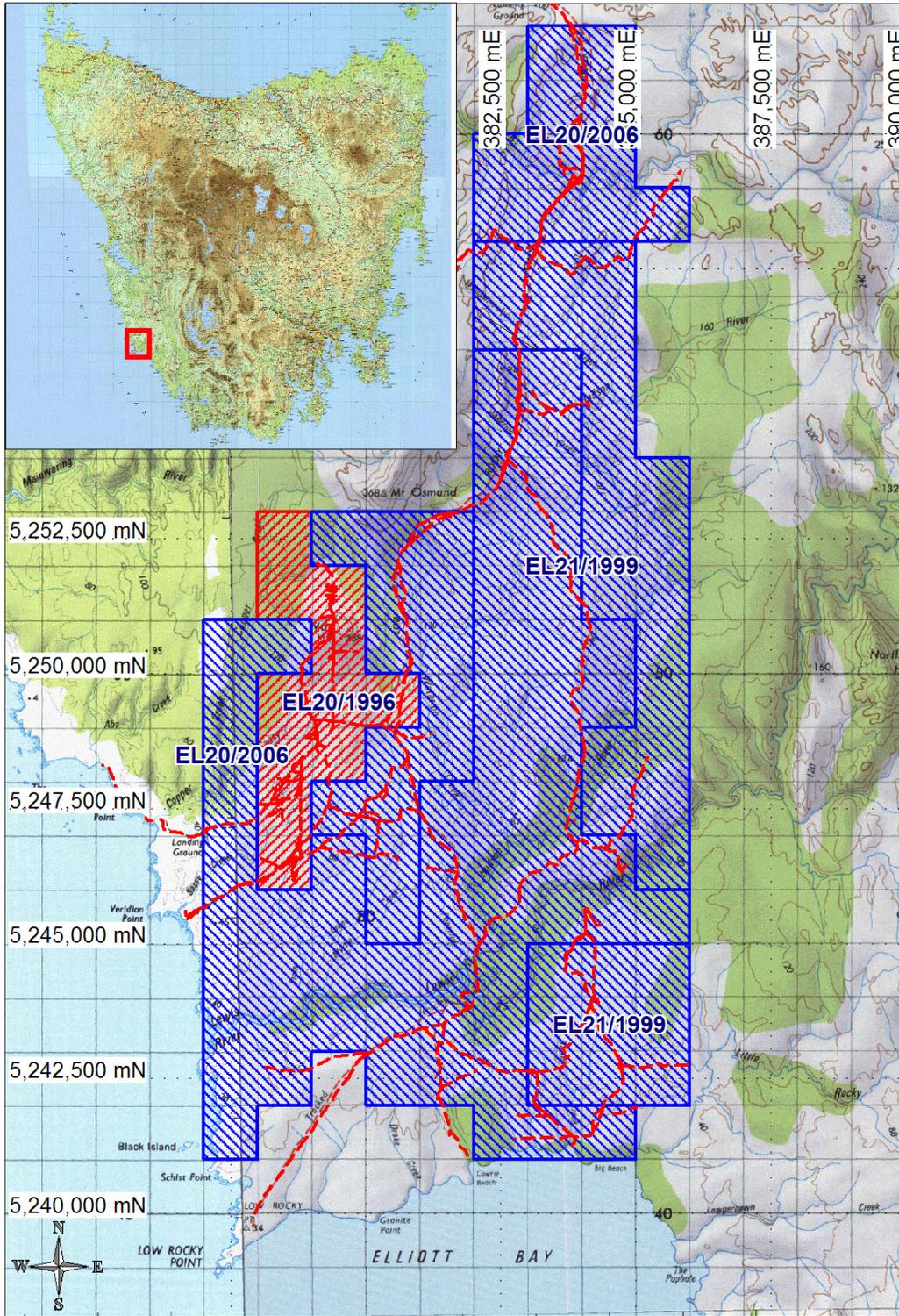


Figure 1: Location of Frontier's Exploration Licences and 1:100,000 scale topography.

Environmental Concerns

No Orange Bellied Parrot or Eagle surveys were required to be undertaken for the 2007/8 field season.

The company is well aware of the environmental obligations in the EL area's. Frontier Resources Ltd. believe they can conduct further exploration programs within this context, having established contact with appropriate contractors and met the conditions set out by the MEWG for past environmental surveys. Frontier was required to undertake several expensive environment surveys to comply with the requirements of the MEWG (Mineral Exploration Working Group), prior to exploration commencement for the 2004 and 2005 field seasons. Orange bellied parrot surveys conducted by independent consultants in December 2003 and from 28/12/2004 to 3/1/2005, investigated areas of planned exploration activity, finding no evidence of these rare parrots. A wedge tailed eagle accompanied the latter. An Aboriginal heritage survey by independent consultants from 19/12/2004 to 22/12/2004 investigated the proposed Lewis River landing and route to camp. This survey found no aboriginal relicts in the area covered.

Quad bike support was utilised for daily employee movements to and from the camp to the work sites, with foot access beyond the existing tracks. Quad and other vehicle movements were minimised to essential traffic, particularly with regard to short new drill pad accessing tracks.

All equipment (including quad bikes) was washed down prior to mobilisation to minimise the threat of phytosphthora infection. All activities were undertaken within the guidelines outlined in Mineral Resources Tasmania's Mineral Exploration Code of Practice.

All drill pads created within the current field season were re-covered with the peat and button grass set aside before drilling. An exception is the SWD004 drill pad which has been left open, with HQ casing left in the hole in preparation for re-entry next field season. Water grips on the main base line track extending from camp to Wart Hill were reformed and access to this track was blocked prior to demobe.

Tenure

Presently, Frontier Resources Ltd. are the sole tenement holders in the Elliott Bay Region. The location of the licences is shown in Figure 1.

E.L. 20/96 was granted to Exploration and Management Consultants (EMC) in 1997. After reviewing the historic data, EMC joint ventured the EL to Fimiston Ltd in 1998, who completed two drill holes at Wart Hill and then withdrew from the JV in 1999. EL20/96 now occupies 11 km², with much of the relinquished area acquired by TasGold Ltd as EL21/99. A term of extension for the remainder of EL20/96 was granted to TasGold Ltd on the proviso they completed expenditure commitments after capital raising on the share market. EL20/96 is due for expiry in April 2006. Further requests for a annual terms of extension were granted following the 2004/5 and 2005/6 field seasons.

Work Program - Wart Hill Area

Frontier's work program for the 2007/8 field season addressed three principal areas; upgrades to the V19 resource via drilling and locating the fault offset southern extension this mineralisation. Limited ground magnetic surveying and geological mapping accompanied this work. Considerable effort went toward reviewing and reprocessing existing data sets for the Wart Hill area to improve targeting. Aside from field activities a consultant was engaged to investigate the economics of the V19 mineralisation; Bulk sampling of the surface exposed sulphide Lens' A & B for metallurgical analysis complimented this work.

Drilling for 2007/8 (2900.5m) was planned to focus upon evaluating the resource potential of the V19 prospect, where exploration to-date has shown an extensive base / precious metal mineralised horizon with locally high grades that shows the prospect has excellent potential for a major deposit to be discovered. The current interpretation indicates that sulphides plunge moderately to the south, through and beyond the known mineralised intersections.

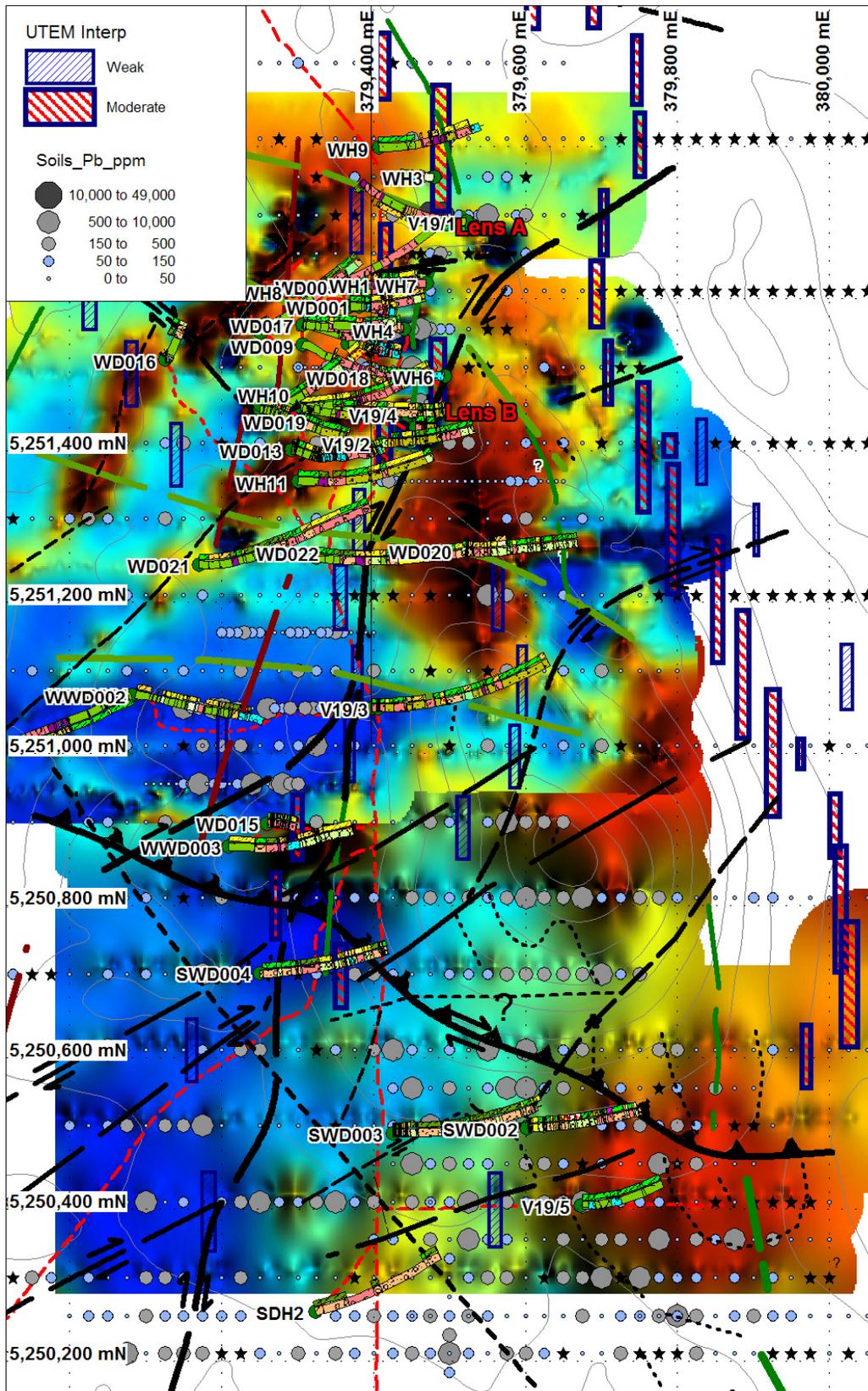
Geophysics

Ground magnetics

A ground magnetics survey was undertaken over the V19 area during Late November to Early December 2007. Battery failure resulted in less data being collected than planned, with further ground magnetics to be undertaken next field season. Data was collected on obstacle dependent GPS guided northing line intervals of 25 to 50m (total 21.8km); GPS located magnetic stations being recorded at an approximate interval range of 0.3 to 0.5m. Data are appended and illustrated in figure 2.

Data collated to date is a great advancement upon previous ground magnetic and aeromag surveys. Initial analysis shows NE trends, at odds to previously gridded N and NW trends. This better differentiation resulted from much closer survey line spacing; relative to previous 100m spaced lines. (Data is yet to be properly levelled, but since it was collected sequentially N to S this is will not change the image significantly.

A cursory ground magnetic survey was also completed over V24 on a 150 by 180m grid at approximately 20m line spacing, totalling ~1860m. This limited survey aimed to better define structure in the immediate prospect area. An interesting spot high magnetic feature was resolved, lying directly on a mapped fault, however the survey needs to be expanded to better delineate the V24 area in general (Figure 3).



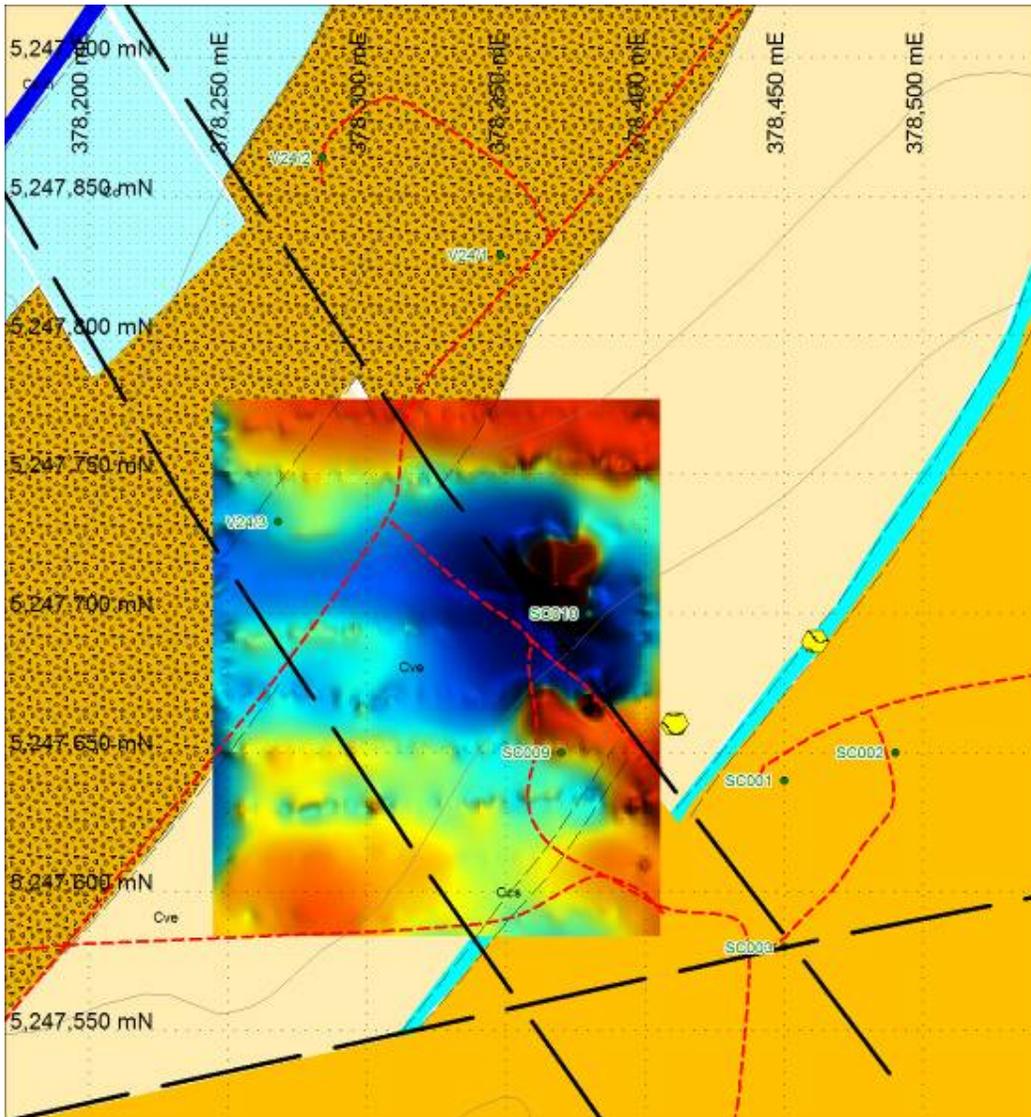


Figure 3: Prelim ground Magnetics for V24 over geology.

Gravity

Gravity data was reprocessed revealing many structures and relative gravity highs (Figure 3). Further gravity survey work is recommended to define both structure and VHMS targets at other SMRV prospects, but also potentially repeating the Wart Hill area where the initial survey is not well height corrected.

A number of NE aligned gravity lineaments were identified and possibly reflect Cambrian graben margin rift faults; VHMS focus is likely where the host horizon intersects these potential fluid conduit faults. A potential example being in the South Wart Hill area where significant extensive footwall style disseminated and stringer base metal sulphide was intersected in SWD002, proximal to an inferred structure revealed by gravity.

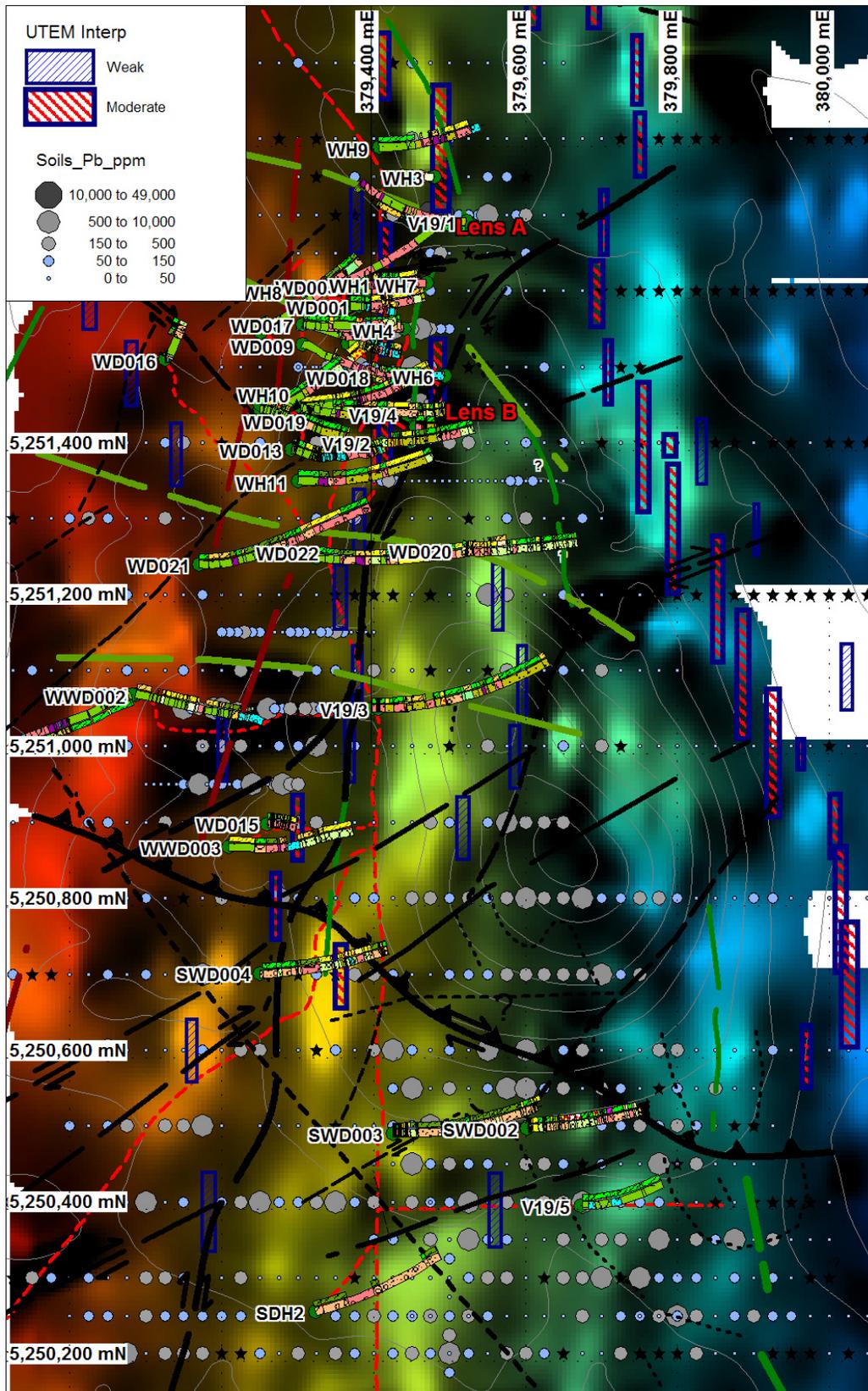


Figure 3: Wart Hill Area Residual Gravity

Electromagnetics

The Plutonic SIROTEM survey from the early 90's was a moving loop survey utilising 50m loop spacings and EM soundings within each loop. The depth reached by the survey is unclear, considering the highly resistive ground in general, maximum depth is possibly in the order of <200m. Thus the absence of a clear EM high at low frequencies beneath Wart Hill itself, doesn't necessarily preclude conductors at depth beneath here as is projected from current drilling at V19. Grid locations for the SIROTEM data were checked against DGPS data, finding the SIROTEM data plots approximately 15m north of it's true reading position. This is likely to be corrected at some stage but lies within acceptable accuracy bounds especially given the coarseness of the data. Wynn, (In Herrmann 1996; TCR96-3841) notes that EM negatives were associated with disseminated sulphides at surface.

An image presumably created by Fimiston, apparently presents the data as those anomalies that extend best to depth; the exact processing methodology is unclear, but it likely examines the relationship between peak anomaly heights for the various channels/frequencies sampled. This survey defines a weak anomaly over V19 and a more pronounced anomaly immediately north of V19/5 (South Wart; Figure 4). The latter is enveloped by magnetic high.

Examining a few channels in gridded detail (CH5,11 & 21; Figures 5 & 6) the broad relationship between shallow features (mostly evident in the high frequency low channel Numbers eg. 5) and those reflecting genuine bedrock conductors (Low frequency eg. Channel 21) is revealed. The low frequency channels 5 and 11 readily agree with mapped structure and stratigraphy. Channel 5 appears to pick out the hangingwall alteration quite well, whereas channel 11 defined a broad conductor over both host horizon and hangingwall. Channel 14 corresponds very well with Pb in soil geochemistry.

The channel 21 low frequency responses grid up to form a host horizon parallel conductor extending south from V19. Some other anomalies are approximately E-W in nature, lying sub parallel to WNW aligned resistivity ridges evident in the 3D IP. A major E-W aligned conductor is defined in the area immediately north of V19/5 (south Wart). This area also corresponds to the biggest zone of widespread high Pb in soils for the entire Wart Hill area. High Fe and Mn in soil define two horizons immediately north of this.

Reprocessing of the data was undertaken to assess various basic statistical parameters. Skewness of the (between peak ratios) point sampled EM responses was examined for channels 3 to 19. This measures those samples with transient EM response changes tending toward a more positive distribution, with conductance at longer times, and readily highlights the V19 mineralisation as well as the South Wart (V19/5 Area) anomaly. The latter being a stronger anomaly in skewness terms. This data analysis approach further highlights a very strong anomaly coincident with the host horizon to the immediate south of the Ag Trench (WWD003). The EM appears to reflect a hangingwall bleed away from this zone! Black shale responses at the eastern grid margins are also highlighted as strong.

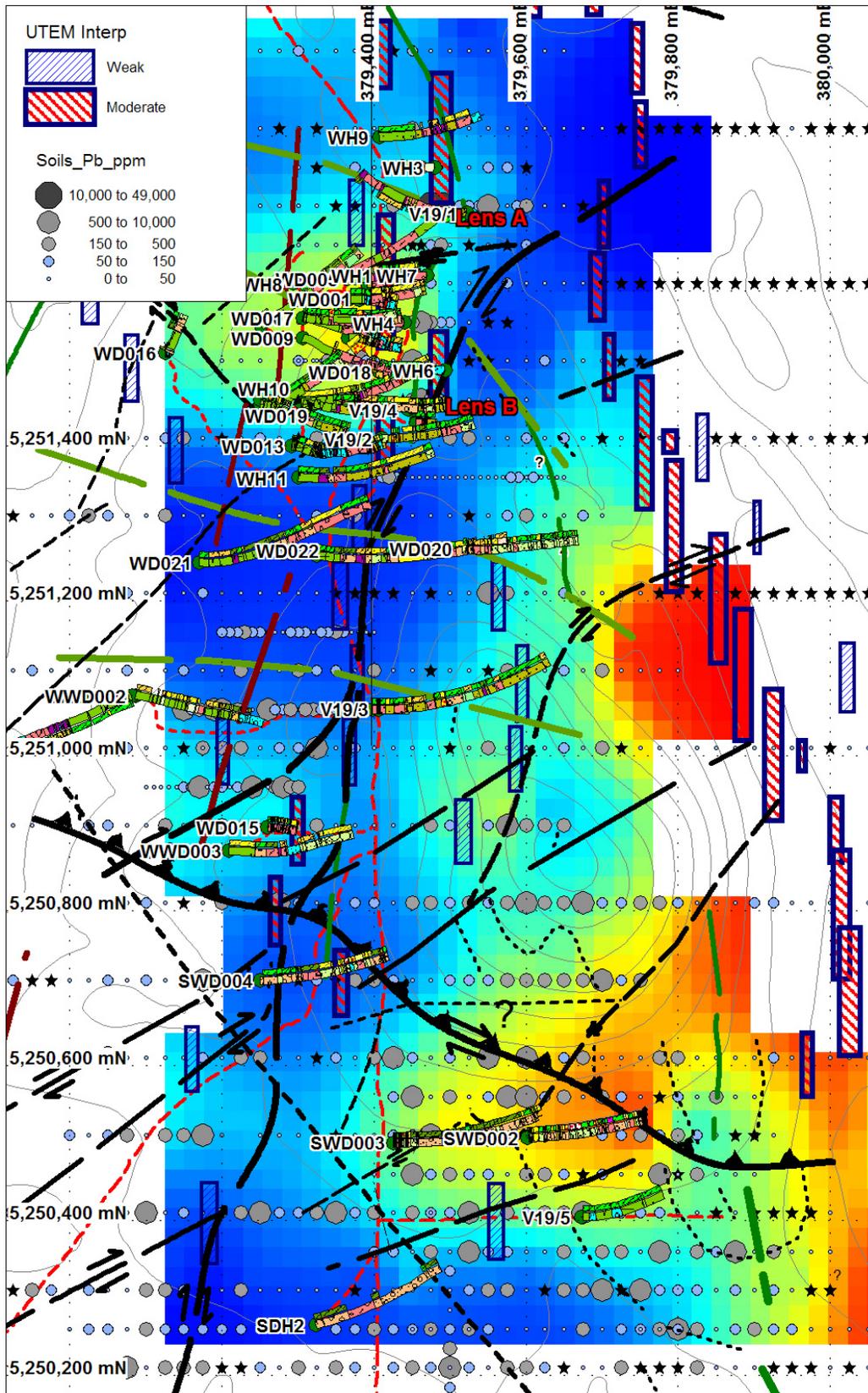
The sum of the total difference between peak ratios (equivalent to the average peak ratio) clearly discriminates V19 and the South Wart EM target as having low sums.

Anomalous low sum also extends NE and W of the South Wart EM target. The South Ag Trench anomaly differs entirely in this case, having a relatively high sum, whereas the 379800mE, 5251100mN (immediately N of EW001P) anomaly has similar character to the V19 and South Wart Anomalies. Note the actual Ag Trench has a similar but weaker response to V19.

Standard deviation of transient EM (SD-EM) responses attempts to show point data with high standard deviation potentially reflecting broad scale large anomalies. Again V19, South Wart and 379800mE, 5251100mN (immediately N of EW001P) respond well to this analysis. Note UTEM responses in the “Shale” immediately east of here are notably different to those to the NE, where overlying the black shale UTEM responses are discriminated by low SD-EM response, similar for the South Ag Trench area. Standard deviation appears to reflect the inverse of the sum of channel ratio differences.

In summary, the V19 SIROTEM response is shown to have high data skewness, low sum of between peak ratios and high standard deviation. Other areas reflecting this presumably VHMS related response are South Wart / V19/5, and EW001P area (located SW of V19).

Existing Geopeko UTEM summary results were digitised. This UTEM was undertaken with the transmitter loop located to the west, resulting in poor coupling with westerly dipping conductors. Since the stratigraphy is overturned dipping west, the survey can only be considered partially effective (Wynn, in Herrman 1996). A repeat survey with transmitter loop located to the east could more effectively detect conductors. The SIROTEM survey appears to detect signals in some cases coincident but also offset to the west by ~80m. UTEM anomalies appear to consistently fall near mapped polymict debris flow / the host horizon and also with coincident Pb in soils commonly.



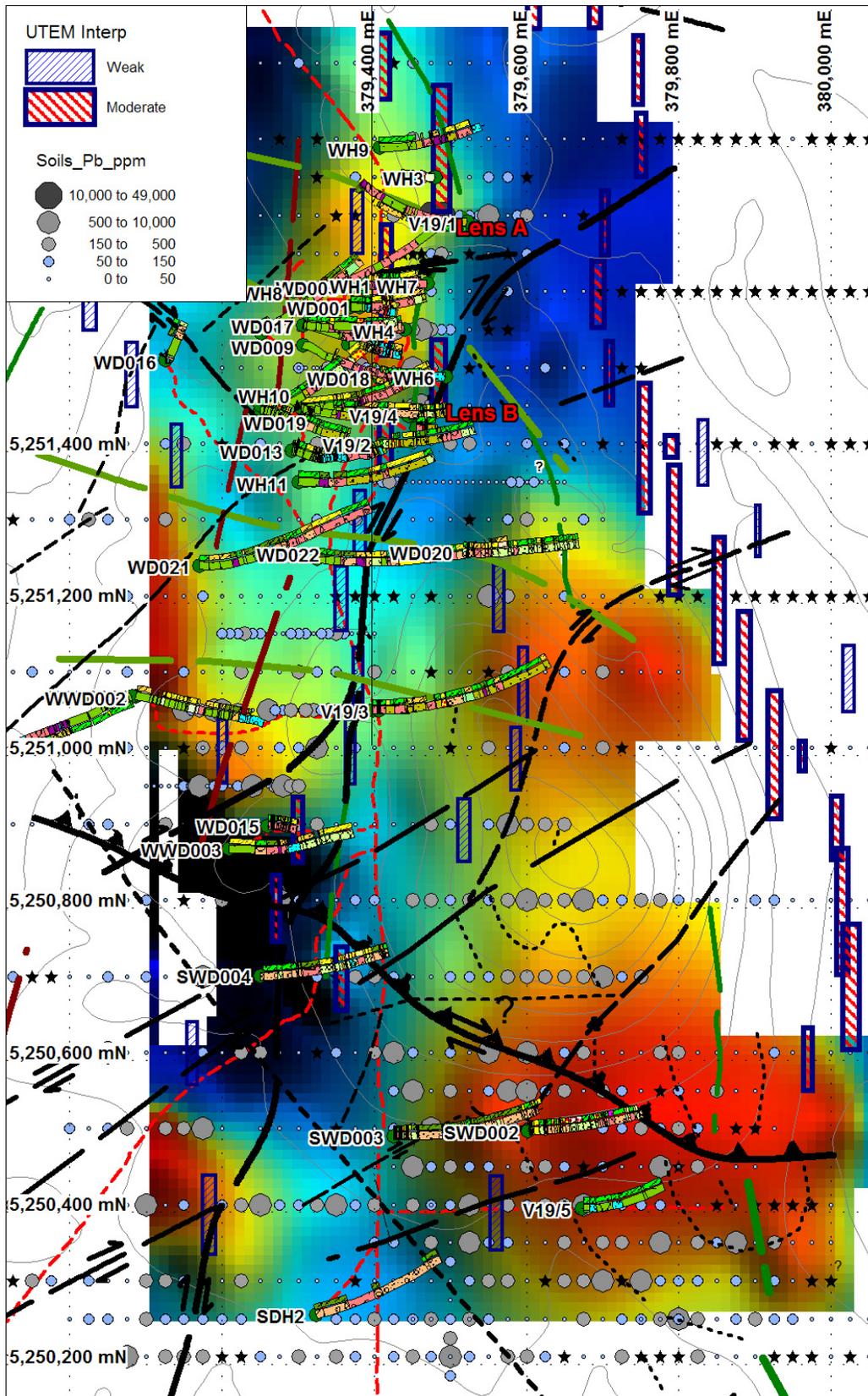


Figure 5: Wart Area SIROTEM CH11, showing drill hole traces (geology), Pb in soils and structure interpretation

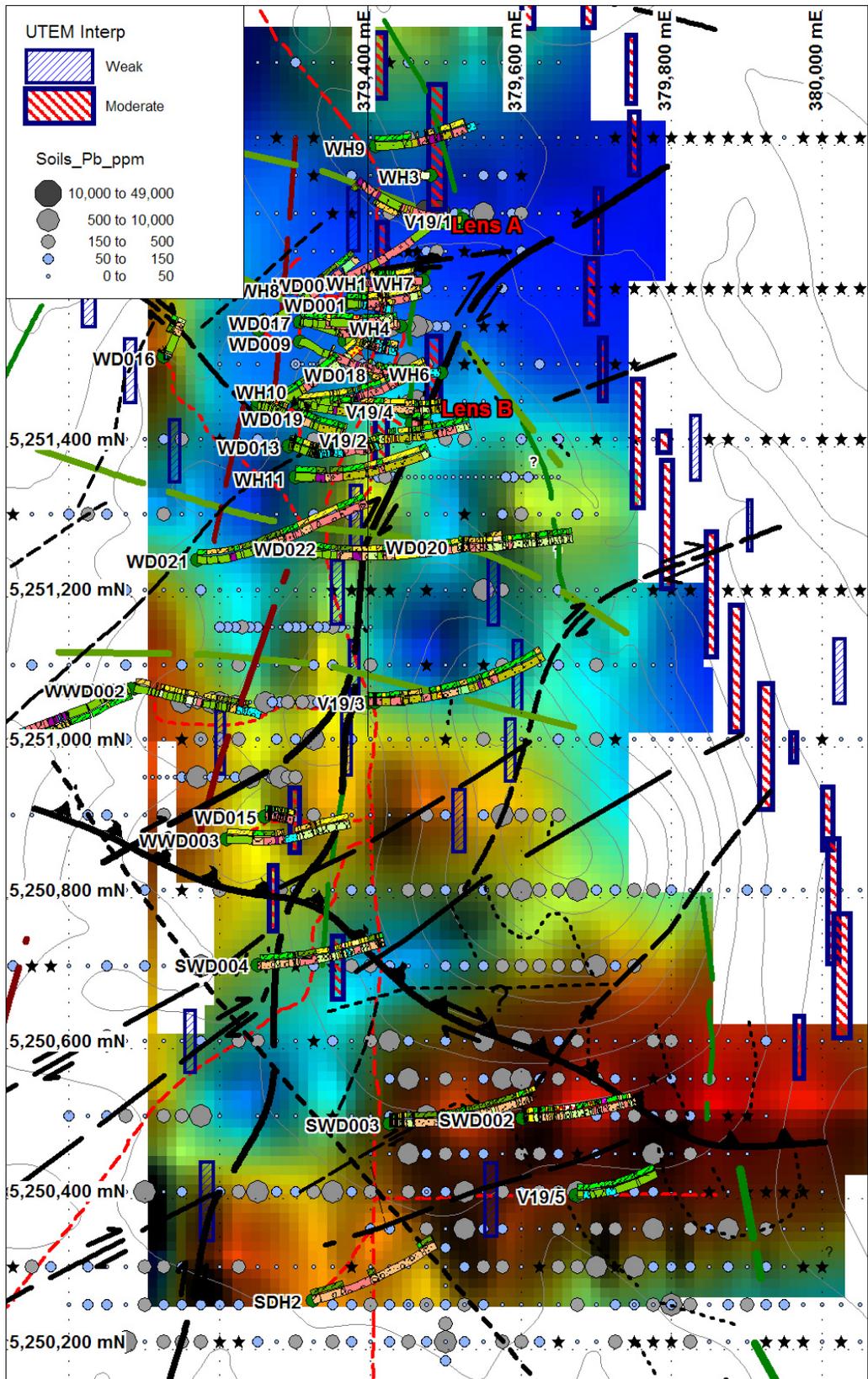


Figure 6: Wart Area SIROTEM CH21, showing drill hole traces (geology), Pb in soils and structure interpretation

Geology

The geology of the Wart Hill area has been discussed in past annual reports. Herein is evolving notes pertaining to recent advances in geological understanding. Outcrop data from past seasons was further refined enabling updates to the evolving geological map.

Revision of previous stratigraphic interpretation was required to get a fresh geological appraisal. Quartz-rich volcanoclastic facies are shown to commonly lie near polymict facies of the host horizon. Some instances are located well away from the mapped Tyndall equivalent quartz – rich volcanics at the base of the Osmund Syncline hosting Denison Group / Ordovician sediments. This observation questions the validity of the Upper Tyndall / Lower Denison Group assignment of the sulphide clast bearing unit's to the immediate east of V19. These, particularly considering the included massive silica-pyrite-sericite altered clasts are likely proximal to host horizon and are conformable with other volcanics in the vicinity. Geopeko and Mineral Resources Tasmania had previously mapped an unconformity in this vicinity; considered these quartz – rich volcanic facies to be at the base of the Denison Group. These observations are important in developing a link between the host horizon like SE Wart Area and V19. Further weight to the argument of assigning the quartz rich breccia on V19's eastern side to the MRV is the continuity of the Cambrian volcanic basement like gravity in this vicinity, extending out into an area previously mapped as Denison Group.

At V19, three significant dyke-like ground magnetic trends are evident. The western most of these has an apparent 50m dextral offset dislocating it. A line of quartz vein lag delineates this structure. This dislocation incidentally has been drilled by WD016, however it's unfortunate placement didn't allow for testing the magnetic unit. A strong Zn in soil anomaly is coincident with the western margin of this magnetic anomaly at 379230mE, 5251600mN. This is consistent with being in the immediate hanging wall to the basalt or more likely since the basalt apparent occurs within porphyry, it may be feeder basemetal accessing along a basalt dyke margins. NB: V19 ore typically lies in the hangingwall to basalt. Whilst basalt apparently correlates well with the magnetic anomalies identified, drilling the magnetic target in WD020 revealed a chlorite-magnetite alteration source for the strong linear magnetic anomaly.

An interesting narrow E-W aligned tail off to the east of a magnetic anomaly diverging from a more significant N-S aligned magnetic anomaly, located south west of V19, could be interpreted as a basalt feeder. The latter has a sharp surface expression but the gradient is wide / only moderately steep either side, suggesting a continuous / larger source seated beneath. As noted above, drilling identified the source as chlorite – magnetite alteration coincident with potential host horizon breccia. Whilst base metal anomalism is not strong here (~0.12% Zn) it likely represents the up dip expression of VHMS at depth beneath the syncline.

The likely insitu occurrence of volcanoclastic siltstone/shale has implications for the area's stratigraphy and palaeo topographic setting. The shale lithic bearing breccias are a marker in the footwall and somewhat in the hangingwall to the V19 mineralisation. Considering that shale is likely insitu within SWD003, then the horst margin could be north between South Wart and V19, and by association, the main VHMS fluid source.

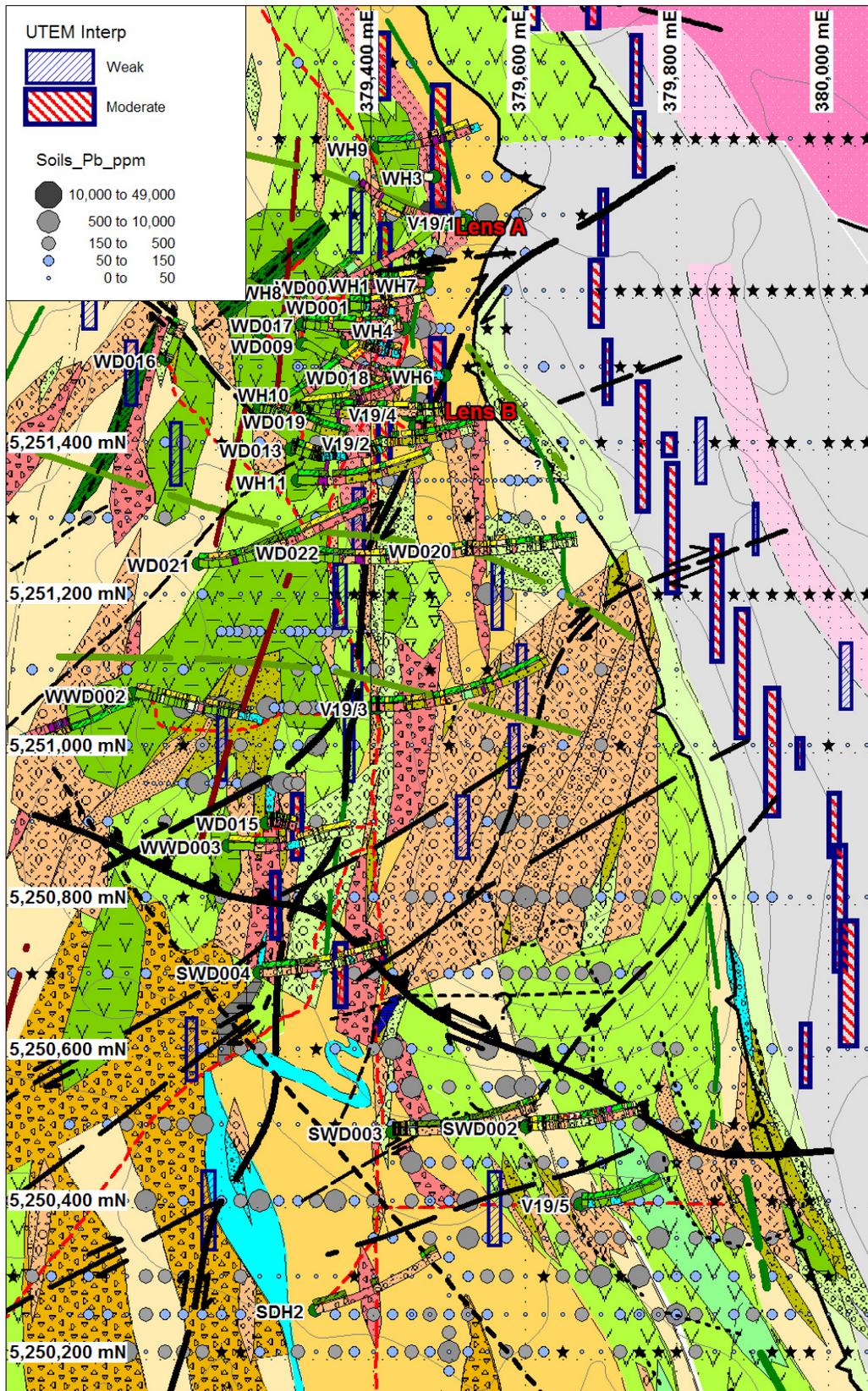


Figure 7: Geology re-interpretation in progress, Note displayed over old Geopeko geology

More consideration of the black shale distribution is required; black shale is evident as clasts in the approximately the host horizon position immediately south of WH11. Similarly black shale is evident as clasts in the Wart Hill Camp vicinity. These likely originated as basal rip up clasts; the location of the bulk of the insitu shale unit of derivation being unclear (A thin shale is apparently insitu in SWD003 and is mapped in soils immediately NE of V19.), but certainly reflecting a relatively long period of quiescence at that stratigraphic level potentially enabling significant VHMS development. The black shale mapped as basal Denison Group appears unlikely to be at this level, but could be a later facies related to the earlier clearly Cambrian shale. Notably, felsic volcanics are evident in the basal Denison Group, particularly near V34 and perhaps the Denison Group siliciclastics on-lapped and interfingered with the Tyndall Group equivalents of the Wart Hill region. This is particularly possible, noting that siliciclastic / epiclastic sandstones occur within the felsic volcanic pile to the south of Wart Hill. These possibly reflect at some continentally derived sediment input during the Cambrian Volcanism and / or distal high density turbidite facies; notably “black shale” in SWD003 appears like very dark green volcanoclastic siltstone; it’s not a genuine pelagic influenced shale. Further to this argument is the occurrence of Cu, Pb and Zn in soil anomalism overlying mapped black shale, which potentially reflect bleed of a VHMS system during late waning stages (Late Cambrian to earliest Ordovician; NB: a significant but minimally VHMS altered black shale unit overlies the Hellyer orebody!).

There’s apparently a prograde turbiditic volcanoclastic system operating in the Wart Hill area, possibly associated with Tyndall volcanism onset. In general a more hangingwall volcanics are exposed toward the south. A deepening basin toward the SW is likely, with volcanoclastic flows inferred to be roughly towards the west and south.

WD017 failed to intersect significant base metal sulphides but drilled exhalite, located at 180 to 182m, which is interpreted as and located proximal to massive sulphide. This example illustrates that a lack of significant base metal analysis from a given exhalite-like intersection should not be discouraging since VHMS ore can still be located relatively proximal.

The distribution of coherent porphyry in the Wart Hill area is now recognised as likely being volumetrically less than previous mapping reflects. This is largely to strong silica alteration creating pseudo-porphyry textures, such as likely occurs for the outcrop on the west flank of the Wart Hill northern spur has many similarities to porphyry as mapped by MRT. Notably, a strong resistive ridge (in the 3D IP data) correlates well with porphyry distribution from V19 and extending to the SSW, but similar strength resistivity is absent from areas of mapped porphyry on Wart Hill and extending through the South Wart area.

Porphyry facies are typically massive, particularly at V19, showing little internal heterogeneity. Elsewhere on the western flank of the northern Wart Hill knoll, porphyry block breccia apparently represents proximal to extrusive dome hyaloclastite breccia. Comparatively, on the main Wart Hill summit, what appears to be flow banded porphyry facies is evident striking roughly parallel to the stratigraphy. This feature has been contentious in terms of genetic origin, another possibility being, in part inferred from the significant aerial extent, thin bedded volcanoclastics (grain

flow?). If the outcrops were porphyry, then flow foliation folds provide potential vectors to a porphyry vent site. Folds on top of Wart Hill are of similar orientation to the V19 mineralisation plunge. A rough vector to vent on this basis is ~-40 to -60 down plunge to the NW. In support, McPhie (et. al. 1993) state that internal flow banding in subaqueous silicic lavas is commonly sub parallel to the base and top contacts; i.e. flow foliation is shallow dipping w.r.t enveloping stratigraphy, whereas steep dips are evident at the sides of flows and domes.

Despite this postulation, volcanoclastics in drill hole SWD002 are of similar to porphyry nature, the matrix being very fine grained and now altered / swamped by silica and in SWD003 porphyry-like texture is clearly revealed by quartz phenocryst size distribution to be relict volcanoclastic, again swamped by silica. Thus apparent flow foliation in the Wart Summit “Porphyry” is considered to reflect volcanoclastic facies. The alternative and favoured origin for these deposits is as grain flows on a steep slope adjacent to volcanic edifice. The coincident orientation of microfolds with those observed elsewhere in volcanoclastics supports this interpretation.

Alteration

The figure below (from Gemmell and Fulton, 2000) provides an insight into the Hellyer system that was rapidly buried, whilst evidently waning at that time. This contrasts with Wart Hill, where numerous episodes of rapid burial occurred. The series of lens’ at Rosebery, incorporated in a relatively thick but highly deformed volcanoclastic package, may be a closer analogy to Wart Hill. Alteration relationships from the little deformed Hellyer deposit are pertinent for consideration of a hybrid model involving rapid burial of an active seafloor hydrothermal system.

The alteration evident within the Osmund area has many similarities to that at Hellyer. The silica-albite is present, but an additional hangingwall alteration style is silica-hematite, possibly reflecting low sulphur relative to iron in the later stages of formation.

Quartz – chlorite – carbonate +/- basemetal veining is crosscut by later q-carb veining locally in WD020 (See drill hole notes for additional commentary on alteration). Further evidence in the form of a weakly banded hematite – pyrite clast cross cut by a pre host volcanoclastic carbonate – pyrite vein indicates that carb-basemetal (+/-qtz) veining was active during VHMS formation. Further Devonian quartz veins are evidently scavenging chlorite and base-metal from within the volcanic pile.

Chlorite – carbonate and fuchsite, with analogy to Hellyer suggest a setting marginal to a VHMS mound, possibly as diffused footwall to near host horizon alteration. Chlorite-magnetite-sulphide mineralisation in WD020 is likely an up dip correlate of the semi massive sulphide intersected in V19/5, with basalt deeper into both these holes also possibly correlating.

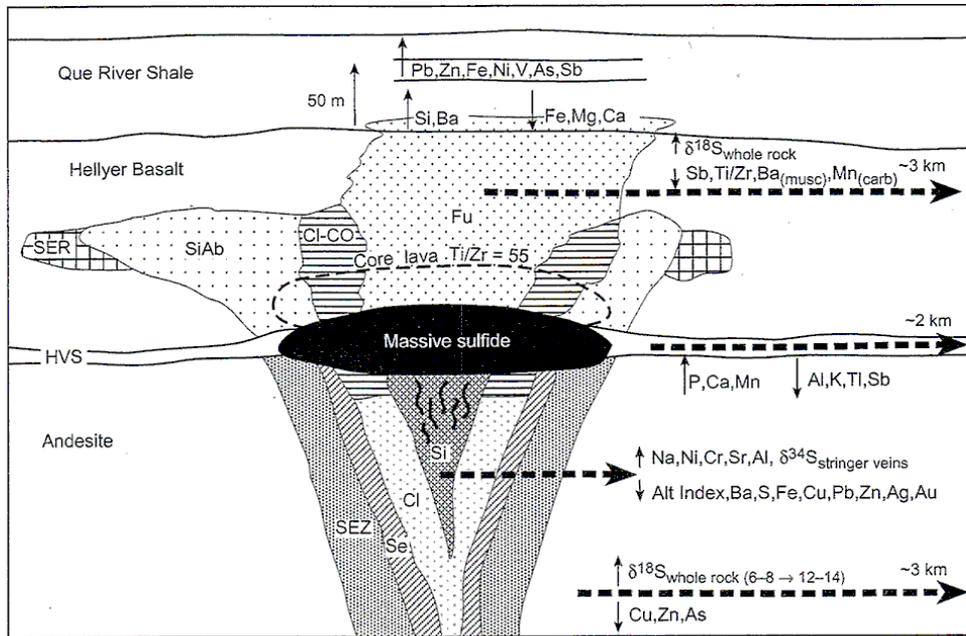


Figure 3. Schematic model of the lithogeochemical halo model and vectors to ore for the footwall alteration pipe, footwall lithologies within the district, hangingwall volcanoclastic sequence (HVS), Hellyer basalt and Que River shale. Thick dashed arrows indicate changes with distance away from Hellyer VHMS deposit. Small up and down arrows indicate an increase or decrease in the respective element concentration, alteration index or isotope values. Abbreviations: footwall; Si - siliceous core alteration zone, Chl-Co - chlorite-carbonate (dolomite) alteration zone, Ser - sericitic alteration zone, SEZ - sericite-quartz alteration of the stringer envelope zone, hangingwall; Chl-Co - chlorite and carbonate (calcite) alteration zones, SiAb - quartz-albite alteration zone, Ser - sericite alteration zone, Al - alteration index, musc - white mica, carb - carbonate.

Figure 8: Hellyer VHMS Vector Model

Chlorite-magnetite-carbonate alteration is assumed to be late and or semi distal to VHMS. A model incorporating structure control in the footwall combined with exhalation on the host horizon, but also likely slightly later as in part semi-pervasive sub-seafloor alteration along favourable horizons is envisaged for this alteration stage. Thus the magnetic zone crosscutting footwall porphyry at immediately west of V19 is explained, whereas this alteration appears stratabound elsewhere and also locally diffuse, particularly in the immediate V19 footwall and V19/5 area. Note that significant pervasive silica-sericite, apparently locally overprinting chlorite and also locally bearing magnetite is evident along the Wart Hill peaks. This alteration has possibly destroyed the magnetic signature to some degree. Further, the magnetite-chlorite association and very pure light coloured sphalerite, point to a general paucity of sulphide and iron in the system. This possibly in part explains why sulphide (pyrite) alteration is not particularly intense near mineralised bodies.

Genetic Model Interpretation

- Porphyry footwall in part controls topography, being localised at near graben margin faults and of relative high relief from which debris is shed (North Wart / V19 area)
- Porphyry margin provides a relatively focused edge for hydrothermal fluids, also with top of porphyry depression filling massive sulphide (Ag Trench area and south).

- An exhalative VHMS lower horizon forms at the porphyry and / or slightly higher level (correlated with the top of regionally close black shale; basal to MS shale lithic/debris bearing breccias)
- Porphyry top breccias are initially carbonate clast bearing reflecting system onset and distal to massive sulphide facies
- Whereas silica clast breccia appears to be first in the south wart area, likely in a graben setting relative to the V19 porphyry top massive sulphide.
- Synformational massive sulphide is eroded as clasts from a porphyry edifice / topographic high (Horst rift block / Graben margins?) [from a relative topographic high and / or on top of the porphyry mound in the V19 vicinity]
- Lower Hangingwall high density turbidite (HDT) volcanoclastic influx covers the active exhalative VHMS system. These HDT's are initially fine grained reflecting distal setting to onset of Tyndall Volcanism, possibly weakly channelised; later higher in the hangingwall they become medium to locally coarse grained, possibly reflecting more active mid cycle volcanism and filling up to the topographic highs / the porphyry top near V19. Thus the early depression filling HDT flows are not thickly reflected in the topographic high areas such as at V19. Note thin bedded volcanoclastic siltstone is evident footwall to Lens B, possibly reflecting thin blanket deposits marginal to the main depression filling main flow body.
- A diffuse (slower quenched) alteration system operates within cool seawater pore filled, rapidly emplaced volcanoclastics, resulting in disseminated and stringer basemetal forming a halo into the Lower Exhalative Horizon's hangingwall. Alteration is evidently zoned from dominantly chloritic, progressing to pervasive silicification and finally intense pervasive silicification bearing disseminated galena and sphalerite. Chloritic alteration is commonly overprinted by semi to pervasive sericite, carbonate veining and disseminated and veined galena-sphalerite +/- pervasive silica. Minor exhalative activity results at the Upper Host Horizon; Carbonate and chert exhalite is certainly evidenced as eroded clasts, but no massive sulphide clasts are evident at this level.
- Above the Upper Host Horizon, eroded jasper clasts as well as discontinuous veins with jasper and hematite reflect distal areas of the system. Jasper clasts are also evidently eroded from thin bedded volcanoclastics and breccia on the inferred Lower Host Horizon, south of the Ag trench area.
- Basemetal sulphide deposit form may differ between topographically elevated (V19) and Graben (South Wart) sites; Massive ores being more common on and immediately adjacent to the porphyry, with dispersed basemetal in the more actively filling adjacent graben.
- Relative graben appears to be located in South Wart area. In general more hangingwall volcanics are exposed toward the south. A deepening basin toward the SW from V19 is likely, with volcanoclastic flows inferred to be roughly towards the west and south.
- Early onset mineralisation seems to be weaker; reflected by silica and carbonate clasts in breccias, with massive sulphide clasts following later and finally in the upper most stratigraphy are silica +/- jasper clast dominated units. There are possibly 3 host horizons, maybe more; the problem being identifying and tracking those where sea floor exposure was longest.

- The number of breccia units / host horizons in the V19 vicinity maybe restricted, when compared to South Wart, through periodic erosion of surfaces and apparent thinning due to lower externally derived / distal sediment input. The effects of potential fold repeats has not been adequately assessed at present.

Structure

The inferred NNE fault (V19 Fault) is wavy in form with inferred dextral offset. Quartz – carbonate – chlorite – basemetal veins are evident on this structure in the V19 hangingwall in core and at the Ag trench, which lies at a flexure in the inferred fault. surficial quartz lag can be traced sporadically at surface along the structure and on related possible P shear orientations. Existence of the fault is supported by trends in gridded gravity and high to mid frequency SIROTEM data.

The V19 Fault's form results in apparent thickening of the host package to potentially 200m between the Ag trench and V19; this is possibly reflected as a fattened resistivity zone in the 3D IP (see below). The eastern package comprises basal minor porphyry with hyaloclastite porphyry breccia (379450mE, 5251200mN). These facies indicate a close proximity to a porphyry extrusive flow margin; and probably link up with porphyry mapped to the NE of V19. The VHMS horizon provides a likely vicinity for fault slippage, particularly considering the enveloping sericite alteration with the main porphyry acting as a buttress as the fault slips past.

The thickened 3D resistivity zone lies in the vicinity of the fault - host horizon cross over and potentially represents a fault thickened resistive footwall package. Further, resistive bands line up WNW, reflecting annealed structure in that orientation? This is the equivalent of R shears in the inferred late Devonian sinistral wrench rebound. Similar offset is likely for a fault crossing south of the Wart Hill peak.

The interplay of early SW-NE compression related faults with later rebound NW-SE compression (SW-NE extension) possibly results in crustal shortening wedging out from the vicinity immediately south of the Ag trench, displacing the host horizon slightly to the SE into the South Wart area.

WD013 lies at the SE surface projection of a dextral wrench fault, evident in the magnetics. This likely explains the highly variable down hole azimuths and finally the loss of the hole due to difficult drilling.

VHMS mineralisation may be controlled by WNW structures, with later NE structures offsetting the host volcanics. The WNW control is reflected in resistivity bands of that orientation as well as the SIROTEM anomaly running E-W in the V19/5 area.

In the immediate V19 area, folding evident in the outcropping massive sulphide is probably controlled by Z folds on the limbs of the overturned western synclinal limb.

An evolving interpreted temporal structural sequence is:-

Cambrian Graben margin faults

- Reflected as gravity lineaments (NE aligned)
- Foci for porphyry intrusion
- Foci for VHMS fluids

Devonian NE Dextral offset wrench

- SW – NE compression
- Reactivates Cambrian Graben faults as dextral R shears
- Forms V19 Fault as dextral P shear offsetting the southern end of V19 to the south
- Porphyry acts as a buttress, with stronger folding outside it's bounds (i.e south).
- Structural regime results in relative extension in zones such as the Ag trench; vein remobilised VHMS

Late Devonian NW Sinistral offset fault

- R shear related to NW-SE compression; same orientation as resistivity ridges
- Quartz veins formed on to R and P extensions
- Relaxation event after main SW-NE Devonian compression.
- Reflected in Fe in soils offset of ~100m
- P shear results in minor dislocations of the Lower Host Horizon near the V19 Offset target
- The fault pattern is interpreted to wedge out the host horizon, and is likely focused upon the strongest VHMS location.

Geochemistry

Zn ratio in soils is used as a VHMS discrimination tool. Rock analysis with elevated Zn Ratio ($Zn/(Zn+Pb)*100$) have been shown to be related to other Tasmanian VHMS. Similarly Cu Ratio ($Cu/(Cu+Zn)*100$) was investigated. This ratio shows a much cleaner image than straight Cu in soils and apparently defines the V19 mineralisation where VHMS is known near surface, as well as host horizon extensions elsewhere. Note that straight Cu in soils gridded defines the extent of drilled resource well (Figure 10).

Mn in soils can be used by analogy to Hellyer, where Mn is elevated in the near VHMS zone footwall, whilst it's depleted in the equivalent hangingwall zone.

In general it appears that the host horizon and footwall are best defined by Pb in soils, whereas Zn best defines hangingwall alteration; both being high where actual VHMS mineralisation is near directly sampled. However notably soil base-metal anomalies can be <0.1% within several metres of VHMS Len's at V19.

A considerable size zone of elevated Pb and Zn lies in the footwall, immediately west of SWD002 (V19/5 area), providing a vector to ore being beneath the southern main Wart Hill summit.

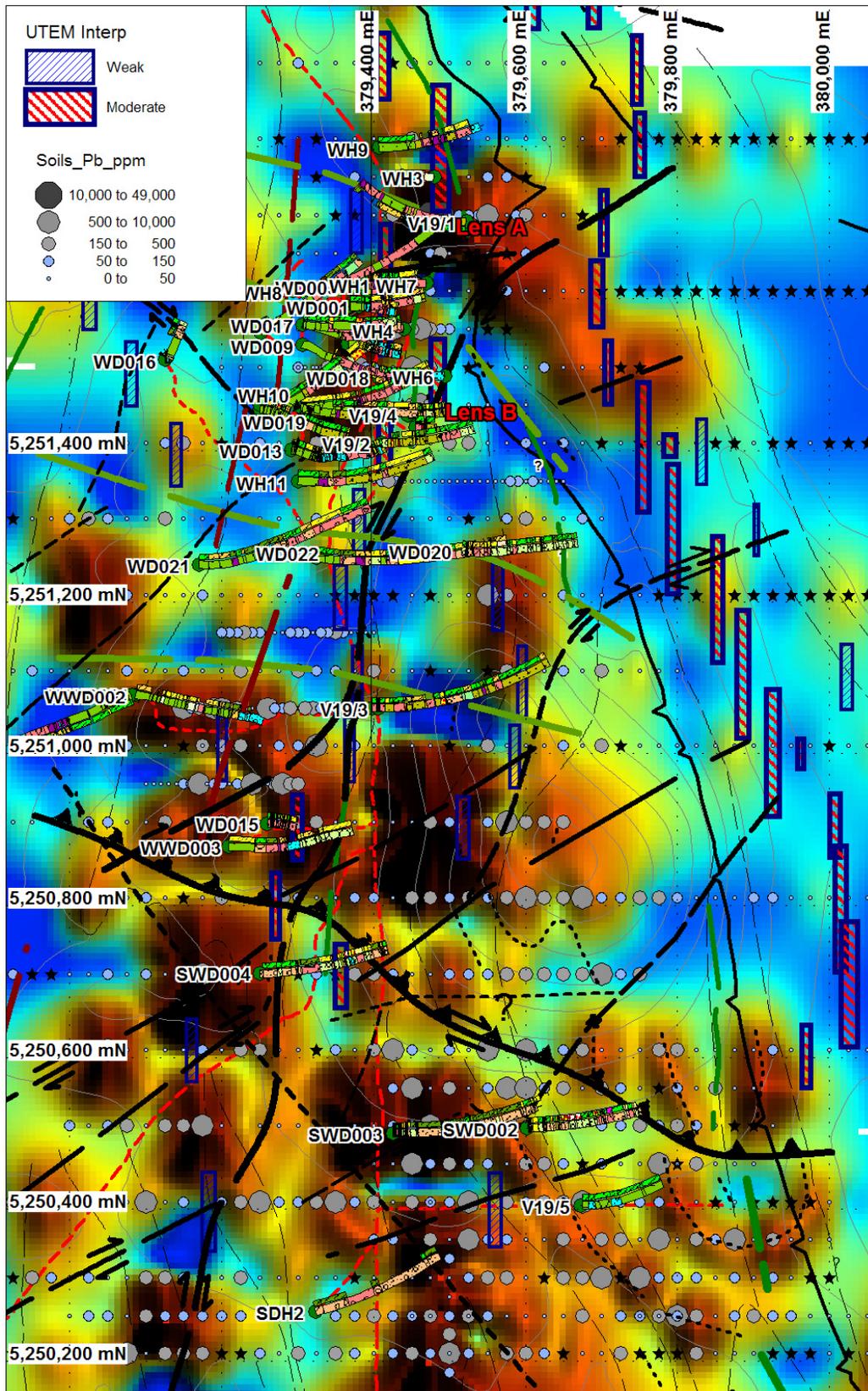


Figure 10: Wart Hill Area Cu in soils

Drilling

Frontier Resources drilling at Wart Hill was a technical success defining positive vectors to massive base and precious metal (zinc-lead-silver-gold) sulphide mineralisation. Interpretation of 9 drill holes totalling 2900.5m (Table 1) has led to these highly significant advances. Frontier's drilling commenced in early January (~10/1/2008) with the program completed early in May (~7/5/2008). A summary of results is presented here with further detailed interpretation ongoing.

The mineralisation at Wart Hill was tracked plunging southerly for 290m by Frontier's previous drilling, before being faulted off at the southern end at depth. Drilling this field season attempted to undertake expansion and infill resource definition at V19, locate the fault offset mineralised horizon and test the potential of the South Wart area.

The target is a Rosebery / Hellyer / Eskay Creek type high-grade, high tonnage, zinc-lead-silver-gold, volcanic hosted massive sulphide deposit. Previous Frontier high grade drill results at Wart Hill have included 7m at 55.6g/t silver, 6.16% zinc, 3.33% lead, 0.22% copper and 1.81g/t gold (16% Zn Equivalent; from 197m in WD009), with historic trench values such as 3m of 680g/t silver + 21.9% zinc + 13.9% lead + 0.84g/t gold (59% Zn Equivalent).

Hole ID	Easting	Northing	RL	Depth	Azi mu th	Dip	Date Commenced	Date Completed
WD017	379307	5251566	156.5	288	98	-65	29/01/2008	7/02/2008
WD018	379407	5251496	157.7	109.4	92	-60	9/02/2008	13/02/2008
WD019	379322	5251455	158.1	233.5	94	-50	15/02/2008	21/02/2008
WD020	379516	5251267	181.2	325.6	96	-65	23/02/2008	1/03/2008
WD021	379170	5251250	155.5	536.05	95	-65	3/03/2008	16/03/2008
WD022	379325	5251259	164.1	478.6	98	-60	19/03/2008	5/04/2008
SWD002	379602	5250507	165.3	278.1	86	-60	7/04/2008	13/04/2008
SWD003	379425	5250500	166	354.1	90	-60	15/04/2008	24/04/2008
SWD004	379250	5250710	161.5	297.1	90	-60	26/04/2008	06/05/08

Table 1: Wart Hill (EL20/96) drill collars (NB: SWD004 is incomplete and to be re-entered; Coordinates AMG, Zone 55).

V19

Frontier's SMRV 2008 field season drilling started with an attempt to extend the V19 base metal mineralisation to depth on Section 13155mN. WD017 was planned to intersect the inferred VHMS host horizon at ~55m vertically beneath WD007 and 55m north of the WD009 intersection. Results were disappointing with no significant base metal intersected. The host horizon was represented by a chert / exhalite unit returning minor base metal (1800ppm Zn and 8g/t Ag). Stratigraphically beneath this horizon was extensive elevated basemetal, that overall returned 130m @ 0.2% Zn equivalent, with minor intervals of up to 3.2% Zn equivalent (see Table 2). These results came from polymict volcanoclastic breccia bearing base metal clasts and overprinted by semi pervasive silica-pyrite alteration.

Hole_ID	From	To	Interval Length	Au (g/t)	Ag (g/t)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Zinc Equiv%
WD017	79.5	89.9	10.4	0.00	0.2	14	139	364	0.06
WD017	92.7	102.1	9.3	0.01	1.7	99	915	1337	0.33
Incl.	99.7	100.0	0.4	0.02	12.0	1422	7225	2157	1.92
WD017	74.9	205.5	130.6	0.00	1.8	29	344	657	0.17
WD017	145.2	152.3	7.1	0.00	4.7	90	1886	3586	0.73
WD017	151.9	152.3	0.4	0.04	12.0	63	9570	16700	3.09
WD017	163.7	168.8	5.2	0.04	17.2	198	1845	4328	1.24
Incl.	163.7	164.5	0.8	0.08	30.0	394	4124	11100	2.66
WD018	30.4	33.4	3.0	0.18	71.5	570	18244	49282	9.32
Incl.	31.2	32.6	1.4	0.32	131.9	442	34575	94794	17.42
WD018	65.0	65.8	0.8	0.06	8.0	120	5099	5758	1.47
WD019	56.7	57.0	0.3	1.92	41.0	28	20600	22900	8.39
WD019	149.5	156.6	7.1	0.02	5.5	100	2046	3057	0.74
WD019	159.7	160.1	0.4	0.43	120.0	470	22400	47900	11.29
WD020	29.8	37.3	7.5	0.00	0.9	17	81	1016	0.14
WD021	233.2	240.3	7.1	0.00	0.8	17	150	590	0.10
WD021	317.9	328.8	10.9	0.01	3.8	49	480	809	0.27
Incl.	317.9	318.3	0.4	0.04	10.0	222	3456	7018	1.49
WD021	428.1	429.5	1.4	0.00	8.2	22	133	313	0.28
WD021	482.6	483.0	0.4	0.05	9.0	319	14100	9053	2.83
WD022	62.1	67.5	5.4	0.00	1.4	11	131	412	0.10
Incl.	62.1	63.1	1.0	0.00	2.0	15	590	1776	0.30
SWD002	79.7	178.0	98.3	0.01	1.5	36	1010	1368	0.31
Incl.	134.0	140.0	6.0	0.02	2.7	166	2856	4965	0.97
Incl.	166.0	176.0	10.0	0.02	3.5	46	2689	2213	0.64
Incl.	175.0	176.0	1.0	0.08	8.0	222	6399	4560	1.56
SWD003	65.4	66.4	1.0	0.01	4.0	184	6556	13500	2.24
SWD003	126.0	130.0	4.0	0.01	2.0	227	1319	3330	0.63
Incl.	128.0	129.0	1.0	0.01	2.0	99	1879	8262	1.13
SWD003	177.0	202.0	25.0	0.00	1.4	48	252	732	0.16
Incl.	186.0	187.0	1.0	0.00	2.0	156	746	5253	0.72
SWD004	197.0	227.0	30.0	0.00	1.3	180	454	1330	0.29
Incl.	202.0	207.0	5.0	0.00	4.0	506	1265	4883	0.94
Incl.	205.0	206.0	1.0	0.00	11.0	1318	3433	15200	2.73
SWD004	265.0	278.5	13.5	0.00	1.1	202	290	870	0.23
SWD004	285.5	297.1	11.6	0.00	0.8	17	217	576	0.11

Table 2: Significant intersections 2008, Wart Hill area (NB: Zn% Equivalent is based upon metal prices on 5/6/2008, being US\$0.8818/lb Zn, US\$0.921/Lb Pb, US\$3.656/lb Cu, US\$16.835/oz Ag & US\$881.6/oz Au; The formula used is Zn% Equivalent = %Zn + 1.04445 x %Pb + 4.14606 x %Cu + 0.02784 x g/t Ag + 1.45803 x g/t Au)

A further two holes (WD018 and 019) targeted additions to the resource and returned low tenor mineralisation. WD018 was drilled on section 13085mN, where the host horizon was only partially tested, with a significant 100m down dip hole existing in the drilling between previous intersections in WH6 and 10. The best interval returned was 1.4m @ 17.6% Zn equivalent (see table). WD019 on section 13045mN targeted

the host horizon some 50m beneath the WD012 intersection of 2m at 47g/t Ag, 7.34% Zn, 3.64% Pb and 0.97g/t Au from 193m and down plunge from WD009, which returned 7m at 55.6g/t Ag, 6.16% Zn, 3.33% Pb, 0.22% Cu and 1.81g/t Au from 197m. The host horizon was found to be partially faulted off. Two narrow mineralised intervals of up to 0.4m at 11.3% Zn equivalent were returned; the latter from massive base metal sulphide on the host horizon. A basemetal Fe-rich quartz vein returned 8.4% Zn equivalent over 30cm from 56.8m.

South East V19

Subsequent drilling focused upon relocating massive sulphide on the south side of a fault, offsetting the southern end of the V19 resource. Initial drilling targeted a magnetic high located footwall to a zinc in soil anomaly; a scenario closely comparable to that for the known V19 mineralisation. WD020 intersected a strong chlorite-carbonate-magnetite +/- minor basemetal zone from what is now recognised as the “Upper Host Horizon” (7.5m @ 0.14% Zn Equiv from 29.8m). WD021 drilled the projected southern plunge of the V19 mineralisation (Figure 11) on the eastern side of the offsetting fault, but failed to reach the host horizon. WD022 further targeted both the “Lower” and the “Upper Host Horizon”, the former being faulted off and the latter setting found to be relatively distal to massive sulphide. These holes completed a fence perpendicular to the host horizon, some 150m south of the known V19 mineralisation extent. No strong analysis were returned (See Table 2), but geological advances were significant.

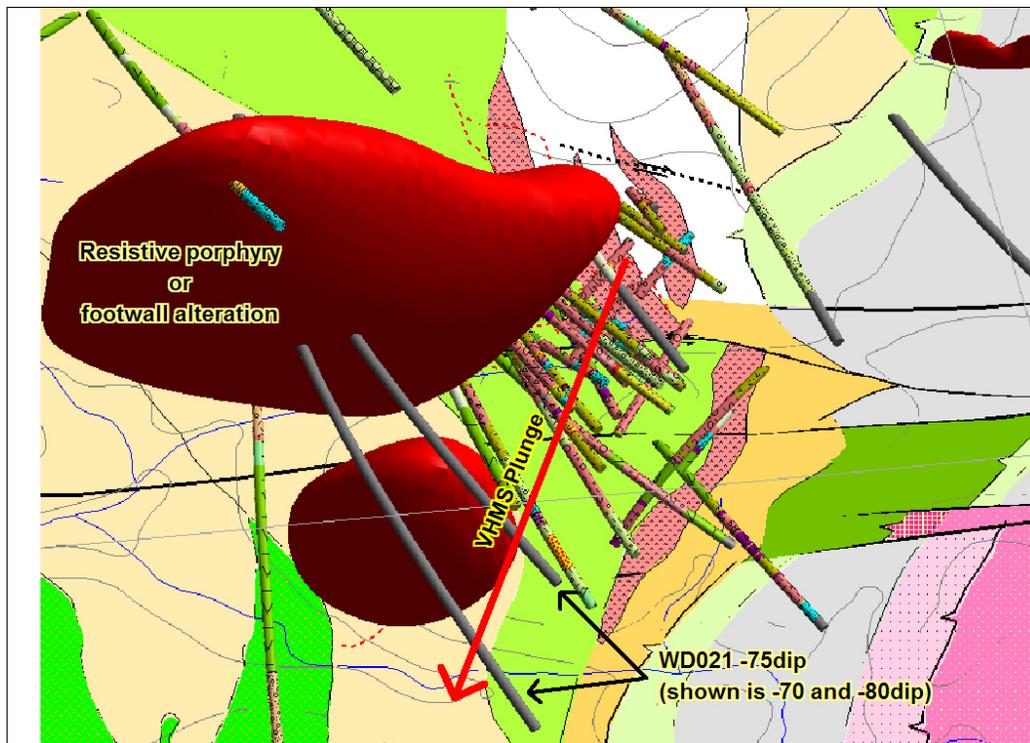


Figure11: 3D view from beneath and looking to ~NNW; shows targeting features for WD021, the resistivity high and geology in drill holes.

South and South West Wart

Focus then changed to the South Wart Prospect, where an electromagnetic (SIROTEM; Figure 4) and chargeability anomaly (3D-IP 2005/6 survey; Figure 12) of similar character to that at V19 was targeted in an extensive area of elevated lead +/- zinc in soils, flanked by a magnetic high. Initial macroscopic results are highly favourable, with 88m of low grade disseminated and stringer veinlet style base metal mineralisation intersected (Returning 98.3m @ 0.3% Zn equivalent) in SWD002. Within this broad intersection galena and sphalerite commonly vary from trace to 0.5%, but zones of 1%+ combined are evident. Alteration is zoned from dominantly chloritic, progressing to pervasive silicification and finally intense pervasive silicification bearing up to ~1% combined galena and sphalerite over the interval 170 to 176.5m; results were significantly lower than visually anticipated, returning 1m @ 1.6% Zn% Equivalent from 176m. This interval was contained within a final significant interval of 10m @ 0.6% Zn equivalent from 166m (Table 2). Notably, metal grade was relatively consistent throughout the main interval. This alteration zonation is thought to be consistent with diffuse migration of the hydrothermal system to higher levels following a fresh influx of volcanoclastic sediment, burying the “Lower Host Horizon”; the equivalent of the V19 mineralised horizon. Alteration and mineralisation character likely suggests a relatively proximal to VHMS environment.

SWD003 intersected the “Lower Host Horizon”, on section 175m west of SWD002. Footwall alteration comprised very promising moderate to strong chlorite followed by a strong grey pervasive silica overprinted by moderate sericite alteration; the alteration appearing stronger than that evident in the V19 footwall. This alteration merges with lapilli breccia bearing silicified and cherty carbonate veined clasts, beyond which is dark grey volcanoclastic siltstone / shale with a silicified top. This unit is a marker for the lower host horizon, returning 1m @ 2.24% Zn Equiv, above which lithic volcanoclastic / breccia bearing sparse massive sulphide derived base metal clasts was intersected. Sporadic alteration and mineralisation of similar character to the SWD002 hangingwall base metal “plume” was intersected sporadically down hole; the hole possibly not reaching the down dip equivalent of the latter. Significant intervals included a relatively extensive low grade 25m @ 0.16% Zn Equiv from 177m (Table 2).

The last hole for the field season SWD004 targeted a promising coincident gravity high and electromagnetic (UTEM) anomaly in the West Wart area. This anomaly targeted was apparently sourced down dip from the surface mapped “Lower Host Horizon” and lay adjacent to a recently characterised NNE aligned fault with interpreted dextral wrench offset of mineralisation from V19. SWD004 was temporarily terminated at 297.1m, largely due to logistical timing reasons with the end of hole still in promising mineralisation, as evidenced by two near end of hole extensive low grade intervals of 13.5m @ 0.2% Zn equiv from 265m and 10m of 0.1% Zn to 297.1m (EOH; Table 2) from disseminated sulphide zones. Continued drilling after re-entry is the first priority for the next field campaign.

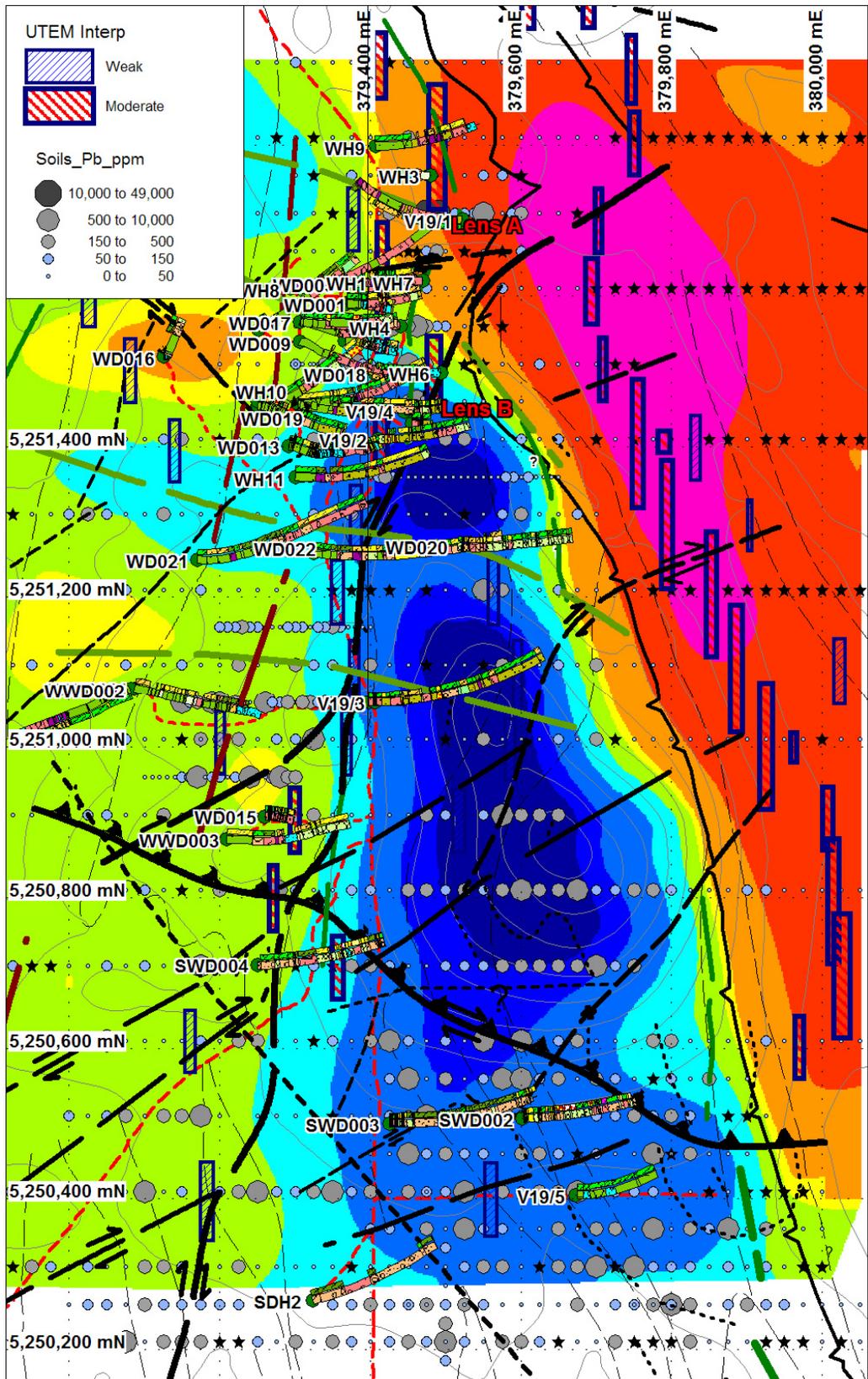


Figure 12: Wart Hill Area 150m chargeability; note weak incursion immediately north of V19/5.

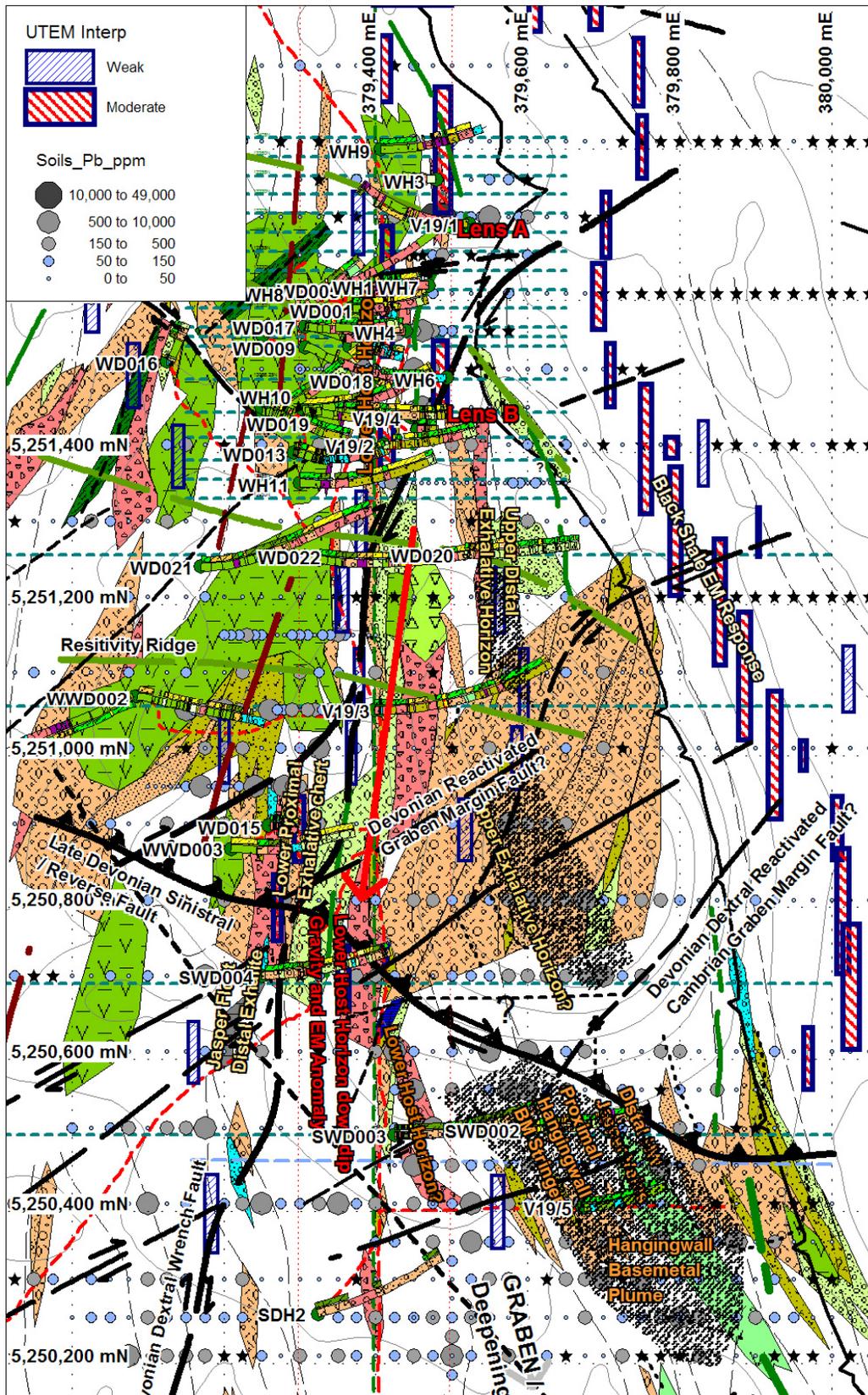


Figure 13: Wart Hill Area draft geology and structural interpretation

V24

Minor assessment of this prospect was undertaken with the view to identifying further drill targets for the 2008/9 field season.

Ground magnetics identified a strong mag high point source near the collar of SC009 (~8m north; Figure 3). This is also coincident with elevated base metal to ~600ppm in soils. A hole was dug to 60cm to investigate the magnetic anomaly. Bedrock was not reached however a panned concentrate from 2 5litre pans of quartz lag gravel returned 3 very fine grained Au grains.

Investigating the V24/1 drill trace which targeted a broad Au in soil anomaly revealed a sequence of apparently west facing high density mass flow / turbidite q-f crystal – lithic felsic volcanoclastic sandstone. Weak to moderate silicification in one outcrop ~50m east of the collar may be related to the Au source. Previous workers have hypothesised that the source is stratabound and in fact Au in soil anomalies sub parallel to strike are readily interpreted. However notably a series of quartz veins were measured in outcrop along the drill hole trace that were striking sub parallel to the drill hole and dipping 25 to 80degrees north/east. Frontier observations indicate that a significant component of the Au may occur as quartz vein hosted form. This is shown by a number of occurrences of coarse (to 6mm length) Au with attached quartz panned from the nearby Sassy Creek. Thus V24/1 (and other nearby drill holes) whilst returning appreciable Au, possibly did not adequately target Au from a vein source.

Regardless, high base metal in the area (eg. drill hole V24/3) attests to the VHMS potential of the V24 area, which is to be further investigated.

Economic and Metallurgical Study – V19 Resource

The current in house inferred non JORC compliant resource estimation for V19 was calculated utilising a simple block model by Reid (2006). Two inferred resource outcomes were generated; being a conservative 460,000tonnes @ 41.5g/t Ag, 0.72g/t Au, 1.81% Pb and 3.41% Zn and optimistic 600,000tonnes @ 40.5g/t Ag, 0.67g/t Au, 1.74% Pb and 3.30% Zn.

A study of the economics of the V19 resource was undertaken by a consultant, Swain and Associates, in part utilising this data. Swain comments “The financial results are not encouraging in that a positive cash flow is not achieved from the current mineralised resource found at Wart Hill. However, if further exploration adjacent to Wart Hill demonstrates an increase of the size of the mineralised resource available for mining, then the project should be reconsidered for investment”. Swain (pers comm.) says that the resource may become economic given approximately twice the resource. See the appended report for further detail.

Metallurgical test work was undertaken on a 30kg bulk sample derived from Lens’ A and B. Amdel Mineral Laboratories in Welshpool, Western Australia undertook the work and comment that “The flotation and assay head results demonstrate that this material is very high grade i.e 32% Zinc, 16.3% Pb, 24% Sulphur, 6% Fe. This equates to ~78% sulphides which is extremely high and difficult to produce a low

mass high grade concentrate, hence the very high mass recoveries in Tests 4 to 6.” Notably this very high grade of this material is not entirely representative of drill intersections at V19 and further test work would be useful. Final reporting has not been undertaken to-date, but test work results are appended.

References

- Gemmell, J. B., and Fulton, R., 2000. Exploration implications of the geological and geochemical characteristics of footwall and hangingwall alteration, Hellyer VHMS deposit, Tasmania, Australia. Volcanic Environments and Massive Sulphide Deposits Conference. CODES Special Publication 3. pp57 – 60.
- Large, R. R., Mc Phie, J., Gemmell, J.B., Herrmann, W., and Davidson, G., 2001, The Spectrum of Ore Deposit Types, Volcanic Environments, Alteration Halos, and Related Exploration Vectors in Submarine Volcanic Successions, Some Examples from Australia: Economic Geology, v. 96, p. 913-938.
- Herrman, W., TCR96-3841. EL53/94 Elliott Bay Tasmania. Annual report Feb95 to Jan96. Plutonic Operations Ltd
- Peter, J. M., 2000, in Volcanic Environments and Massive Sulphides, CODES Special Publication 3. pp143 - 145
- Reid, R. O., 2005. TasGold Annual Report on Exploration EL21/99– Elliott Bay: Annual Report to January 27, 2005.
- Reid, R. O., 2006. Frontier Resources Ltd. Annual Report on Exploration EL20/96– Elliott Bay: Annual Report to July 11, 2006.

APPENDICES

Appendix 1

FRONTIER RESOURCES

EL20/1996 – ELLIOT BAY

Review of V19 (Pb-Zn-Ag Mineralisation) Mining Economics

**HD/PA Swain Family Trust Trading As Swain Associates
4 Genesta Crescent Dalkeith WA 6000
ABN 44 609 446 285**

EXECUTIVE SUMMARY

The following study of the Elliot Bay prospect is intended to identify a possible approach to successfully mine the Mineralised Structure and also quantify principal centres of cost affecting profitability of the project.

From an economic aspect, the most important feature of the orebody is its small size. At current metal prices and assuming conservative values for recovery (in the absence of any metallurgical analysis of process recovery for each metal) the possible revenue from the structure defined in the resource statement is about USD65M (AUD75M) using conservative metal prices.

As the thickness and strike of the mineralised structure are limited, the structure extends in depth and an underground mining method is indicated. For success, a labour efficient mining method is chosen with access by simple decline roadway from an access adit. Mineralised material will be mined from the stoping area by long hole blasting from a series of horizons 20m apart. Ore is brought to the plant by truck from UG.

Processing of the ore follows the traditional flotation method of extraction of metals in concentrate. The process consists of Crushing and Milling of the ore followed by flotation to produce a concentrate containing Silver Gold Lead and Zinc metals. This route produces tailings which must be contained in a tailings dam at site. At this stage, processing will be carried out in Rosebery Tasmania, 100km North of Strahan.

Other process routes are discussed in the report but metallurgical testing must be completed before these can be put forward as serious alternatives to flotation which has the advantage that metallurgical parameters are already well established.

The financial results are not encouraging in that a positive cash flow is not achieved from the current mineralised resource found at Wart Hill. However, if further exploration adjacent to Wart Hill demonstrates an increase of the size of the mineralised resource available for mining, then the project should be reconsidered for investment.

FINANCIAL RESULTS

Gross Revenue is shown in Table 1 below. The size of the mineralised structure is small and revenue limited (See below).

Table 1 Estimate of Gross Revenue is as follows

Estimated In-Situ Tons		460,000t					
Mining Dilution		15%		AUD1.0	= USD0.85		
Possible Diluted Tons		540,000t		LME			
	Grade		In Situ	Estimate of	Value	Net Revenue	
	In Situ	Diluted	Metal	Metal Recovered	USD	USD	AUD
Silver	41.5g/t	36.0g/t	19.44t	16.031t (80%)	480,000/t	7,694,000	9,053,000
Gold	0.72g/t	0.63g/t	340kg	282kg (85%)	27,331/kg	7,694,000	9,052,000
Zinc	3.41%	2.97%	16,000t	14,116t (90%)	2,300/t	32,470,000	38,200,000
Lead	1.81%	1.57%	8,500t	7,493t (90%)	2,600/t	19,483,000	22,921,000
	Total Metal Content		24,362t	22,000t	Total	67,342,000	79,226,000
	Estimated Concentrates			39,300t	Value/t	USD1,717/t	A\$2,020/t

NB Estimates rounded off (Metallurgical Recovery%)

After examination of several production schedules, a production rate of 900tpd was chosen as suitable for Wart Hill.

Table 2 : Distribution of Revenue and Expenditure at 900t/day

Item		Pre Year	1st Year	2nd Year	3rd Year
Production					
Working Days/year	days/year	220	334	334	334
Production	days	-	260	329	-
ROM Tonnes	tonnes	-	233,700	296,400	-
Gross Value \$		-	34,927,591	44,298,409	-
Less Royalty \$	5.50%	-	1,921,018	2,436,412	-
Less Smelter \$	5.00%	-	3,300,657	4,186,200	-
Net Revenue before Tax			29,705,916	37,675,797	
Labour Costs inc. Overheads		3,183,162	11,592,913	10,732,803	455,000
Total Explosives		303,151	1,023,897	805,657	-
UG Power Cost		111,837	169,532	169,532	-
UG Fuel		44,067	51,933	65,867	-
Prophylactic Support		143,856	218,068	42,656	-
Rock Drill Consumables		239,759	363,447	71,093	-
Maintenance Allowance		214,000	214,000	214,000	-
Process Costs		-	3,784,859	4,800,309	-
Accommodation inc Catering		401,007	1,204,933	1,182,347	187,040
Head Office, Rates, Airtravel etc		1,012,610	1,535,000	1,535,000	1,535,000
Barge Hire, Telephone etc.					
Total Expenditure		5,653,448	20,158,583	19,619,263	2,177,040
Net Cash Flow Before Tax		- 5,653,448	9,547,334	18,056,533	- 2,177,040
Case Investigated		Capex	Discount	NPV	
1 : Results per Report		- 30,000,000	10%	-\$13,790,861	
2 : Results per report x 200%		- 40,000,000	10%	\$25,169,801	

Case 1 refers to the costs and revenue shown in Table 2. It shows a negative npv both at 10% discount and also at 0% discount.

Case 2 refers to the costs and revenue both increased by a factor of 200%. It demonstrates a positive npv at 10% discount.

Conclusion

The financial results are not encouraging in that a positive cash flow is not achieved from the current mineralised resource found at Wart Hill. However, if further exploration adjacent to Wart Hill demonstrates an increase of the size of the mineralised resource available for mining, then the project should be reconsidered for investment.

REVIEW OF THE WART HILL PROJECT ELLIOT BAY TASMANIA

LOCATION

Several factors control success of a mining operation at Wart Hill.

Remote location

Wart Hill is situated in a remote location with bad weather at times being in the latitude of the roaring forties. The work force will look for compensatory factors for putting up with these conditions and of course, will now have support from the recently reactivated union structure (nationally).

Difficulty of access

Access to Wart Hill is difficult and a strategy must be established to ensure that the movement of plant and equipment, consumables and material to Birches Inlet at times of fair weather in Macquarie Harbour anticipates needs at site when weather is likely to be foul. Another part of the strategy is to adopt a mining and processing method utilising mobile and portable plant and equipment minimising construction of permanent structures at site. That is, trackless mining methods are adopted for underground access by adit from a suitable portal.

Accommodation and amenities

All requirements will be provided by prefabricated housing and buildings brought to Wart Hill and erected at site. Particular attention must be paid to insulation of the buildings as the climate can be very cold with snow in winter but also hot in summer. Buildings must be durable and noiseproof in an environment of high velocity freezing winds. The site selected should face North with shelter on the South and West aspects. Wart Hill is devoid of trees due to the prevailing high winds, however, in the valleys which provide shelter, there is substantial tree growth with a significant undercroft such as found in Copper Creek which is less than 1km from the mineralised structure.

ACCESS

The project is located in one of the less accessible locations in Australia. For success, current access arrangements must be improved to facilitate movement of personnel, heavy plant and equipment and export of product but at the same time limit entry of unwanted persons to the site.

We propose that the company hires/retains a motorised barge of approximately 150t displacement and maximum 3m draught, with drive on/drive off facilities for movement of Plant and Equipment from Strahan to Birches Inlet (South coast of Macquarie Harbour) and then via a refurbished road to EL20/1996.

Strahan is about 45 km by water to the South part of the Birches Inlet which is a further 40km by a narrow gravel road to the minesite. It is intended that all goods, consumables and equipment will be carried by truck from Strahan direct to Birches Inlet utilising the barge facility and then drive off onto the road (upgraded) to site under their own power avoiding rehandling. Low loaders will carry track equipment onto the barge at Strahan to Birches and then to site.

The ramps at Strahan and at Birches Inlet will need to be concreted for safety and long term stability particularly with heavy equipment driving over from/to the barge. Birches ramp will connect to the present track already in existence which will need remodelling and modifications according to considerations of safety and tractability of haulage equipment using the road. By use of a drive on/drive off motorised barge, load and offload facilities are simple with low cost for establishment.

The road will be upgraded by formation and compaction of the rock base into a crowned road with a fall of 1% to each perimeter drain to facilitate drainage of water from the road surface. Fortunately, most of the road passes through Tertiary Gravels which are suitable in themselves for gravel road construction as they will respond well to compaction and grading. All perimeter drains will be linked and fall away from the road into the natural drainage of each locality traversed by the road.

A major consumable will be fuel and oils. It is proposed that Frontier follow the example of the fuel supply contractor to Rottneest Island 14km off the coast of WA. The fuel supply company (Caltex) sends their standard road tanker by commercial drive on-drive off barge to the island where it drives onto the jetty/road and visits each consumer and then returns by the same barge to Perth. Similarly, Frontier can follow a similar arrangement, a road tanker will be filled in Strahan and then travel to site by drive on-drive off barge to discharge into storage facilities at site. Oils can be treated as a consumable and be brought in drums as a general supply item on normal trucks.

All Power Generation and Mobile equipment will be diesel powered, explosives will be Ammonium Nitrate/Diesel Fuel based (mixed at site). Therefore, only one fuel type will be transported. Explosive materials will also be brought to Wart Hill in the same manner by truck from the Supply Magazine in Tasmania (Helyer, Zeehan or Queenstown) to Strahan, cross to Birches Inlet by Barge and drive to the site magazine following the procedures laid down in the mining regulations.

MANNING STRUCTURE

Table 3 shows the organisation of 3 teams of men working in the mine and process plant to maintain the development and production programme.

Table 3 : Shift Structure; 2 Weeks on 1 Week off

	Complete Cycle = 6 Weeks					
Team	1	2	3	4	5	6
A	A	A		A	A	
B	B		B	B		B
C		C	C		C	C

The mine will operate on a 334 day year basis = 48 weeks. Consequently 8 cycles of 6 weeks duration are worked by each team in each year. A helicopter will complete the transfer at each team change bringing men to site and transporting the retiring shift to Strahan. The oncoming team will commence work on arrival at site and the outgoing team will board the helicopter on its return journey. Shifts will be 10 hours, say 0700hrs to 1700hours and 1800hours to 0400hours

TOPOGRAPHY

The Mineralised Structure outcrops for about 130m on a North-South strike axis situated in flat terrain 150mRL above sea level about 4km East of the Indian Ocean. Below surface the mineralised structure plunges at about 60° under Wart Hill which is at the North end of the line of strike.

The bed of Copper Creek to the South East is more than 80m below the outcrop level at 800m from the structure. At this time, this point is selected as the site for a portal to an Adit & Decline system.

MINING OPERATIONS

It is proposed to access the mineralised structure by an adit inclined at +1% (for drainage) commencing in Copper Creek 80m below the outcrop and about 800m West from the North end of the structure. All Inclines/declines will be at 8% or 10% to give access to horizons at each 24m elevation in the Mineralised Structure. A model for this form of access is found at Bamboo Creek WA.

Each extraction horizon will be horizontal (slightly inclined for drainage) providing access for long hole drilling in the orebody removing the need for hand mining techniques. The mineralised material will be broken in the stope utilising long hole blasting and remote control LHD machines will be load out the broken material from each ring when blasted, haul and dump the material directly into a truck or into a stockpile area for later collection. Each longhole ring will be inclined at 70° to improve fracture and limit throw.

Table 4 : Proposed Plant & Equipment for Mining.

Equipment	Manufacturer	No	\$M ea	\$M
Face Jumbo/ universal boom	Atlas Copco or Tamrock	2	1.3	2.6
Decline Haul Truck 20t (8m3)	Volvo BM or CAT Tasmania	2	1.0	2
Decline Front End Loader	CAT 966 3m ³ Bucket	1	1.1	1.1
Production LH Drill Rig	Atlas Copco Semi Auto.	2	0.8	1.6
Production LHD Machine	CAT 5m ³ Bucket	2	1.2	2.4
4W Drive Tray Trucks	Toyota Diesel convert to UG	4	.05	0.2
Portal 15m + Long Cable Bolts	Armco 5m x 5m Culvert	1	0.5	0.5
Workshop Building	Purchase and erection	1	0.25	0.25
General equipment, + Rock Drill/Portable Compressor etc Reticulation/Transformers/Switchgear/Generator/Fans/Fuel Running Spares, Theodolite, Tech/Office Equip etc				3.00
Magazine, Initial Explosives, ANFO mixing equip, dets		1	0.5	0.5
Hire of a Tractor etc. for construction and general works inc Tailings dam				0.5
Portal Concrete +Workshop Pad				0.15
			Total rounded off	13.0

All drilling equipment is electrically powered. Electrical supply to the Drill Jumbo is 440V from a portable 1100V/440V transformer substation. Initially, the substation is

located at the portal but as the face advances and power is required for ventilation and to maintain full voltage at the face, a 1100V cable is installed from the generator to a cuddy in the adit and the substation is relocated to supply 440V to the Jumbo using a local extendable cable.

All equipment is electrically earthed, protected by multiple sensory systems AND earth leakage to protect operators directly. Local earthing is established at the Substation for the Jumbo as an added precaution according to appropriate electrical engineering advice. A 1MW generator is housed at the workshop or in an enclosure at the portal or as part of the power station at the adjacent plant site for supply to the workshop and the mining equipment working inside the adit.

DEVELOPMENT

Development of the mineralised structure using the plant and equipment costed above is described as follows. The first jumbo will work in the adit and through to the Mineralised Structure. When the planned intersection of the adit with the Incline and Decline is bisected at about 250m from the Mineralised Structure, the second jumbo will be brought to site in time to assist development and ensure fastest development of the Decline, Incline and continuation of the Adit to bisect the Mineralised Structure for access of the Long Hole drilling machine.

It is important that the

1. first three horizons are established at the earliest time
2. interval between the horizons is restricted to 20m roof to floor as this interval is within the accuracy of long hole drilling.

The Jumbos work as part of a cycle of drill, blast and muck out of the broken rock from the heading. Based on WA experience in hard competent rock, a cut of 3m per cycle is reliable as an estimate of development performance. It takes into account maintenance schedules and unscheduled breakdowns/difficulties. In good conditions, 3 cycles advancing 4.5m/shift can be achieved in 2 consecutive (10 hour) shifts. Each Jumbo is equipped with with a diesel motor for independent movement of the Jumbo from the face ready for blasting (No cable handling).

Application of a Road Header has been investigated. This is a large machine, track mounted and works as a continuous miner, extending the adit and horizontal/inclined/declined drives as appropriate. The cuttings are conveyed from the front of the machine by conveyor to an elevating conveyor at the rear, building a pile of cuttings behind the advancing machine.

A front end loader loads out these cuttings and hauls them to a stockpile area behind the face where the cuttings are dumped in storage awaiting transport to the surface using the 20t truck.

A road header has the advantage that no explosives are required and that mining is continuous. Unblasted Rock is much more stable than blasted rock as the bedding planes remain undisturbed and necessary support is reduced. The disadvantage is that the rock characteristics must be suitable for operation of the machine without unacceptable cutting tip wear. Purchase and application of a road header is under consideration due to the observations of the exploration team when diamond drilling.

They experienced high penetration speeds during drilling. Unconfined compressive testing is required to confirm suitability (say University of Tasmania : Dept of Geology or Materials Testing). At this stage, until more is known about performance and rate of penetration of the rock, this approach is yet to be fully evaluated.

VENTILATION AND STOPPING

Force ventilation will be used for the initial part of the adit changing to extraction ventilation near to the face with cross over force ventilation to the working face. Plastic coated fabric ventilation tubing will be used as it has a low coefficient of friction, low cost and is easy to handle. In line fans will be used and the German Zet Fan is recommended for moderate cost and superior design.

At the earliest time, long hole raising will be used to connect to surface at the bisection of the incline with the North end of the mineralised structure at the elevation of the first horizon (<20m to surface) and again at the South end of the mineralised structure at the Wart Hill end.

Each raise will be fitted with a fan to provide a through ventilation system and as soon as adequate flow is established, the ventilation system in the adit can be withdrawn/modified. The raise will be extended to the adit horizon (Second horizon) when the adit bisects the North end of the Mineralised Structure at the elevation of the Second Horizon and again at the South end when the Second Horizon bisects the South end (Wart Hill) of the Mineralised Structure.

It is important that the decline to the third horizon and the third horizon itself are completed simultaneous to the First and Second Horizons. This is made possible by the choice of a horizontal adit from Copper Creek adit with an incline and decline commencing at about 250m from the Mineralised Structure providing access to the perimeter at three horizons. The South (Wart Hill) raise from the Second Horizon to the First Horizon and from the Third Horizon to the Second Horizon will be developed by long hole blasting providing through ventilation from the third horizon to surface.

At commencement of production, the raise between the Second Horizon to the First Horizon will be opened by long hole blasting into a cut extending to the full width of the mineralised structure to provide 3m wide nominal free space for blasting of the stope rings. Ring Blasting will be drilled from the South (Wart Hill) end of the Mineralised Structure between the First Horizon and the Second Horizon and will retreat from the South perimeter of mineralisation to the North perimeter.

A crown pillar will be preserved every two horizons to prevent uncontrolled caving of the sidewall of the stoping area diluting the ore beneath. This is provided say, by increasing the interval between two horizons according to the depth of the proposed pillar and then limiting ring blasting to the lower perimeter of the proposed pillar. The position of the pillar is flexible to some extent and will be placed where the mineralised structure is narrow, viz <3m.

The practice of providing ventilation through the stoping area and at the bisection of the decline with the Mineralised Structure will continue through the life of the project. The North raise system is maintained at all times as the major fresh air supply airway.

Return air will be drawn through the stopes by the fan on surface removing foul air away from operations on the horizons. Decline development must always be in advance of stoping by one horizon so that the South raise can be developed to provide through ventilation whilst safe access is available prior to cut development on the horizon above.

DEVELOPMENT PROGRAMME

Table 5 describes the development programme and process time. The brackets indicate the sequence of decline development prior to start of production.

Table 5 : Development & Production Programme by Horizon
Process Production Rate 900t/day

Jumbo	6	m/day	Elevation	Equip.+Time		Production			
				2xJumbo	Days	Drives	Stopes	Total	Process
<i>Horizons</i>		Outcrop	153m						
Portal	Adit		110m	J1	21	t	t	t	Days
Adit	Intersection		115m	J1	125				
First	Incline		140m	J1+J2	74	5580		5580	6
Second	Adit Cont.		117m	J1+J2		5580	42780	48360	53
Third	Decline		94m	J1+J2		5580	42780	48360	53
Fourth	Decline		71m	J1+J2	71	5580	42780	48360	53
Fifth	Decline		48m	J1+J2	41	5580	42780	48360	53
Sixth	Decline		25m	J1+J2	41	5580	42780	48360	53
Seventh	Decline		2m	J1+J2	41	5580	42780	48360	53
Eighth	Decline		-21m	J1+J2	41	5580	42780	48360	53
Ninth	Decline		-44m	J1+J2	41	5580	42780	48360	53
Tenth	Decline		-67m	J1+J2	41	5580	42780	48360	53
Eleventh	Decline		-90m	J1+J2	41	5580	42780	48360	53
Twelfth	Decline		-113m	J1+J2	41	5580	42780	48360	53
						66960	470580	537540	589

NB Development of each component of the decline requires a greater time (41 days), than that required to develop the appropriate horizon (33 days). Therefore only the decline development time is shown as it is greater.

NNB Stopping rate is governed by the rate of processing. At a production rate of 900t per day, each “standard horizon”, including the ore obtained from horizon development, produces sufficient mineralised material for 53 days production. Development of the decline and access to the remaining mineralised structure can be developed without causing delays in stoping production as long as 6m per day per Jumbo is maintained.

Stage 1 Portal Development and Initial Horizon Access

Firstly, the Portal must be constructed and made safe. A rock face is selected in the wall of Copper Creek Valley as the portal site and prepared using the hired tractor. It must be 15m high x15mwide to accommodate a 5m diameter steel culvert which forms the portal entrance. Initial drilling and blasting at the Portal will use presplit

techniques to prevent vibration from blasting affecting the country rock. Advance will be about 1m per cycle until say 25m penetration is achieved.

The culvert will be extend 15m into the rock and project 10m from the opening to protect personnel from rock falling from above the portal face. For the proposed trackless mining operation, a 5m x 5m culvert provides sufficient operating room for passage of equipment. Cable Bolt holes are drilled into the prepared surface following a perimeter 0.75m greater diameter than the diameter of the steel culvert. The long hole perimeter will be drilled on a diameter of 6.5m. Other long holes will be placed in a fan above and to each side of the portal for stabilisation of the rock in the roof and sidewalls of the opening. The gap between the rock and culvert outer wall will be grouted to limit movement of the rock wall.

After installation of the culvert, drill and blast advance will be limited until the face is +30m from the entrance whence full 3m rounds will commence. Experience on the Goldfields in WA indicates that a constant 3m advance per cycle is a reliable objective taking into account maintenance and unexpected downtime. The most likely improvement that can be achieved is 3 cycles per 2 shifts, ie. 4.5m/shift.

Pattern prophylactic roof bolting in all underground openings is necessary for long term safety and bolts must be inserted at the earliest time. However careful selection of roofbolts must be made to avoid unreliable performance. Use of a multidirectional boom jumbo enables drilling of pattern roofbolt holes by the jumbo operator and installation of the bolt by the assistant jumbo operator. The jumbo will be electric/hydraulic and any air supply required will be provided by a compressor mounted on the jumbo.

Stage 2 Decline and Horizon Development: Stages 1,2,3&4 (Bracket A)

These developments should be achieved simultaneously insomuch that the Incline Development 1 and Decline Development 3 are developed when the Initial Horizon Access is 300m from intersection with the mineralisation. Incline Development 1 inclines up to +24m above the bisection of the Adit (Horizon 2 elevation) with the mineralised structure and Decline 3 declines down to -24m below. As the adit inclines at 1% and Incline 1 commences at about 250m from the mineralised structure then the actual level of the Horizon development is +5m higher than the Portal.

Horizon Development 1, 2 & 3 commences as a continuation of Decline Development 1 & 3 and of the Adit. Priority will be given to Horizon Development 1 & 2 so that long hole raising can commence without delay at the remote end of the structure and provide the initial free space for blasting of the stope. Long Hole raising may be necessary every 30m on strike to ascertain the position of mineralisation and thickness. In the uppermost horizon, A 10m Crown Pillar (rock mechanics advice to confirm) is left in place at surface to prevent water inflow from rain, snow and hurricane.

First mineralised material will be produced from development of Horizons 1,2 & 3 followed by long hole stoping in the panels above Horizons 2,3 & so on. Two fans of long holes will be blasted each day to meet production requirements with carefully placed low explosive perimeter holes designed to limit the destructive effect of

blasting on the contact with the country rock. The rings will be pitched at 70° which improves break and limits throw.

Remote controlled LHD machines will be used to collect the mineralised rock and place it in a stockpile at the bisection with the access decline drive.

MANPOWER

Manpower changes during each stage of development and production from the mine are listed as follows

Table 6 : Stage 1 Development of Adit to Intersection, 146 days

Portal Adit Development		146 Days	
Position	Number	Salary/annum	Total/annum
Mining	Manshift	\$	\$
Jumbo Operator	1	150,000	150,000
Assistant JO	1	130,000	130,000
Plant Ops	2	120,000	240,000
Powder Monkey	1	120,000	120,000
Mechanic/Fitter	1	150,000	150,000
TA	1	120,000	120,000
Totals	7		910,000
Rotation teams	3		
Manpower	21	Men	
			\$ 2,730,000

Please note, if the rock can be cut by a Road Header then blasting damage to the underground openings does not occur and are more likely to stand open over time. Prophylactic roofbolting is still required but the structure is inherently much safer.

Table 7 : Stage 2 Development of Incline and Decline to Final Horizon, 474 days

Portal + Adit Development after Intersection to Twelfth Horizon				474 days
Position	Number	Salary/annum	Total	
Mining	Manshift	\$	\$	
Jumbo Ops	2	150,000	300,000	
Assistant JO	2	130,000	260,000	
Plant Ops	2	120,000	240,000	
Powder Monkey	1	120,000	120,000	
Mechanic/Fitter	1	150,000	150,000	
TA	1	120,000	120,000	
Total	9		1,190,000	
Rotation teams	3			
Manpower	27			
			\$ 4,632,849	

NB Please note that the first 74 days of Stage 2 is used to develop access to and development of the First, Second and Third Horizons, viz 220 days from Portal Development.

Table 8 : Stage 3 Stopping, Part 1, 192 Days ; Transport of Product by Plant Ops from Development Crews

Stoping commences at		220	Days Production		589	days
Development/Stoping		192	Days, Ore Transported using Development Plant Ops			
	Position	Number	Salary/annum	Total		
	Mining	Manshift	\$	\$		
	Stoping Ops	1	150,000	150,000		
	Assistant SO	1	130,000	130,000		
	Powder Monkey	2	120,000	240,000		
	Mechanic/Fitter	1	150,000	150,000		
	TA	2	120,000	240,000		
	Totals	7		910,000		
	Rotation teams	3				
	Manpower	21				
				\$	3,866,877	

Table 9 : Stage 3 Stoping, Part 2, 397 Days ; Transport of Product by Plant Ops from Stoping Crew

Stoping commences at		325	Days. Ore Transported using own Plant Ops			
	Mining	Manshift				
	Stoping Ops	1	150,000	150,000		
	Assistant SO	1	130,000	130,000		
	Plant Ops	2	120,000	240,000		
	Powder Monkey	2	120,000	240,000		
	Mechanic/Fitter	1	150,000	150,000		
	TA	2	120,000	240,000		
	Totals	9		1,150,000		
	Rotation teams	3				
	Manpower	27				
				\$	1,814,795	

Sufficient excess Transport Capacity is available from within the Development Transport team (Item : Plant Ops) for removal of waste from decline development and transport of mineralised material from horizon development and stoping. On completion of development on Horizon 12, the Plant Ops transfer to Stoping Manpower.

METALLURGICAL PROCESSING

As Wart Hill is a remote area with difficult logistics, metallurgical processing is necessary to reduce the volume of material exported from site and transport costs. Processing can follow three routes which are outlined below.

- 1 Crushing and Milling of the ore followed by flotation to produce a concentrate containing Silver Gold Lead and Zinc metals. This route produces tailings which must be contained in a tailings dam at site. Processing will be carried out in Tasmania at a site yet to be determined.
- 2 Crushing and Milling of the ore followed by processing in a reactor, recently developed, which produces each metal being Silver Gold Lead and Zinc as a separate item. This route produces tailings which must be contained in a tailings dam at site. The volume of metals is less than half the volume of concentrates and can be melted in Strahan by Frontier into ingots for transport to the market or sold to Risdon Refinery.
- 3 Recovery of the metals in situ or, subsequent to Crushing, by hydrometallurgical techniques (heap leach methods). This method produces each metal being Silver Gold Lead and Zinc as a separate item by electrolysis and chemical means. The volume of metals is less than half the volume of concentrates and can be smelted in Strahan into ingots for transport to the market or sold to the Risdon Refinery. There are no tailings produced as such from the material leached in situ but material leached on surface will remain as heaps of leached material after processing.

Process routes 1 and 2 require crushing and grinding of the material before processing. If process route 3 is chosen, in situ leaching requires access and fragmentation of the material by blasting to allow passage of leach liquor for recovery of the metals in solution. Alternatively preparation of mineralised material for heap leaching on surface requires crushing before construction of the heap leach structure. Please note, although a cheap method of recovery of pure metal by electrolysis of the liquors, the rate of recovery is low probably taking some years for completion.

At this stage, recovery by flotation is certain (process route 1), availability of process route 2 has yet to be confirmed, process route 3 has to be fully tested before adoption. In all cases, the mineralised material has to be subjected to appropriate metallurgical testing to determine suitability in terms of the cost of crushing and grinding, power consumption (BWI), reagent usage, recovery of each metal into concentrate form and the cost of off-site processing for completion of the processing of the metals for sale.

For the purposes of this report, previous information assembled for evaluation of a lead, silver, gold mineralised resource has been used for a first pass cost estimate of the economics of this project. The results are indicative at this stage as no metallurgical work has been completed to date.

Table 10 contains a list of possible process equipment for conventional flotation of the mineralised material into a saleable concentrate. It also includes provision for accommodation using motel style units made by Pacific Homes of New Zealand or an Australian equivalent. Adoption of Motel units makes heating/cooling communal and more efficient.

Table 10 : List of Costs of Process Equipment and Accommodation etc.

Item	AUD x 1.0M
Primary Bin + Conveyor 50t	0.100
Jaw Crusher 150mm x 150mm + Conveyor	0.450
SAG Mill or Ball Mill 150tph	1.500
Regrind Mill 50tph	0.700
Mill Recirculation Pumps	0.100
Classification Screen (DSM)	0.100
Conditioner/Storage Vessel 500t	0.300
Flotation Circuit 50tph capacity	0.500
Filter/Dryer Cyclones	0.350
Storage Shed with hopper and bagging appliance	0.200
Support Steelwork/pipework/Valves	0.500
Building & Offices/Facilities + Portable XRF	0.400
Diesel Power plant say 2MWhr installed	1.500
Electrical Switchgear & Distribution	0.400
Concrete \$500/m ³ Delivered \$500/m ³	0.250
Water Supply and Pipeline	0.200
Tailings Dam and Pipeline (Marine disposal ?)	0.250
Site Preparation	0.500
Upgrade road from Birches Inlet (inc bridges)0	1.000
Concrete Ramps at Strahan + Birches Inlet	0.250
Design Construction Supervision	2.500
Diesel powered forklift	0.150
Total	<u>AUD12.0 M</u>
Accommodation	
Prefabricated Accommodation & Mess for 80 persons + 10 ancillaries being guests, caterers, etc. Heated by hot water circulated in radiators from Power Plant. With linen, bedding, utensils, Laundry, Drying Room, etc (Budget Price \$20,000 per person housed) Including concrete pad for each block).	
	<u>2.000</u>
Total	<u>say AUD14.0M</u>
Mining Capex (from Page 13)	AUD13.0M
Additional Funds for items not included	AUD 3.0M
 Total Capex, Mining & Process	 <u>AUD30.0M</u>

A conventional process plant will receive the ROM material at the Primary Bin which has a 50t capacity. A brute force feeder onto a conveyor belt for transport will draw off material to the SAG Mill. The outflow is pumped to an elevated DSM Screen and the correct size underflow is transferred by a launder to a Conditioner Storage Vessel. The oversize overflow is transferred by launder to the SAG Mill for reprocessing. A Regrind Mill is included in the Capex list to ensure complete grinding of all

components of the ROM feed to the desired size range for liberation of the contained metals.

ROM material is then transferred from the DSM screen to the Conditioning Vessel. Reagents are added in the vessel ready for flotation. The Flotation circuit contains three stages being Roughing, Cleaning and Scavenging. The circuit is simple with recycling of underflow between stages as necessary to enhance recovery of all metals.

The concentrate is dewatered on a drum filter and then dried in a cyclone drier using hot exhaust gasses from the power plant. The dried concentrate is allowed to cool in a weatherproof hopper and then it is drawn off into Bulka bags which are sealed for transport of the bags direct to the smelting/refining facility from site via the ferry.

PROCESSING OF CONCENTRATES

Due to the complex polymetallic nature of the mineralised material, Toll Processing is likely to be expensive. Concentrate will be loaded in Bulka Bags on a truck at site, trucked to Birches Inlet, ferried across Maquarie Harbour to Strahan and then transported to an overseas destination via Burnie or process facility in Tasmania. In either case, the plant at site will consist of equipment sufficient to recover all metals to an acceptable level to produce a polymetallic concentrate.

1. Cargo Vessel : Sale Overseas

Experience in Burma indicated that there are a number of companies in China who use the metals found at Wart Hill in their manufacturing processes and appear to purchase the metals in concentrates at an LME price less the cost of processing and losses during processing.

If this choice is made then the Bulka Bags and/or containers will be taken to Burnie and put on cargo ships for China. However, the cost of transport from site to China including port charges in Australia and the South Coast of China is considerable and this approach was abandoned.

To avoid road transport to Burnie, direct loading on an ocean going vessel in Strahan Harbour was considered but access is limited by "Hells Gates". Only vessels with a draft of <3.2m. viz a flat bottom barge of about 100t up to 150t capacity can navigate the gates (3 such barge units already in Strahan Harbour for various purposes). An alternative approach where Bulka Bags are loaded onto a cargo vessel at sea off the West Coast was examined. Barges would operate say, from the estuary of the Mainwaring River, Lewis River or Copper Creek. However, sea conditions on the West Coast are not reliable and there is a risk of cargo loss. Furthermore, we are informed that the only regular service, ANL, operating via the West Coast between Hobart and Burnie ceased operations in 2008.

2.Road Transport : Process in Tasmania

A 150t barge will be sufficient for movement for transport of several truckloads of Bulka Bags each trip to Strahan for road transport in Tasmania. The nearest processing centre in Tasmania is found at Rosebery 100km North of Strahan.

Toll processing for concentrates is notoriously expensive in Australia as a royalty is imposed by the toll company. This charge would be in excess of the costs of transport to the smelter and processing/refining at the smelter. A Toll Charge of 10% for transport/smelting/refining is deducted in the financial estimates.

ACCOMODATION

Accommodation will be purchased as prefabricated units which are fully insulated against low temperatures. Heat exchangers will be fitted to the water cooling circuits of the electricity generators to provide circulating hot water for underfloor heating/radiators or other heating devices in the accommodation area, offices, crib rooms, laundry and drying room, workshops etc. Buildings will be placed closely to each other to reduce heat loss in the communal heating system.

PROCESS PLANT LABOUR REQUIREMENTS

The process plant will work continuously 24 hours per day. Process time is based on a 8000 hour year. Based on experience at other small operations, 12 men per 12 hour shift will be sufficient to man the process plant. These men will work on a 14 day on/7 day off shift regime also with one team changing each week.

Work up is a series of lectures on safety, procedures and of wet operation of the process plant using mineralised material from First Horizon. The Mechanic/Fitter can check bearing temperatures etc and correct as necessary before serious production commences. All motors and switchgear will be selected from common size(s) and connected to the power supply by plugs and sockets. If a motor or switch unit fails then it can be changed out by the mechanic/fitter without an electrician.

Table 13: Stage 3 Processing, 20 days work up + 589 days Processing

	Allow	30	days Work up the Concentrator Crew	
Stoping commences after	220	days. Process	547	days
Position	Number	Salary/annum	Total	
General Foreman	1	200,000	200,000	
Primary Crusher	2	120000	240,000	
Concentrator	3	120,000	360,000	
Tailings	1	120,000	120,000	
Mechanic/Fitter	1	150,000	150,000	
TA	2	120,000	240,000	
Metallurgical	1	200,000	200,000	
Analytical	1	120,000	120,000	
	12	\$	1,630,000	
Rotation teams	3			
	36	\$	4,890,000	

MANAGEMENT

A management team will commence work to establish Accommodation at site sufficient to house the management team and the initial workforce. The latter will be responsible for construction of concrete ramps at Strahan and Birches Inlet, supervision of road upgrade from site to Birches Inlet, the portal, and the concrete works for all buildings for housing the Process Plant, Mine Workshop and Generators. Construction of these buildings provides weatherproof accommodation and workspace for the ongoing work programme which is summarised as follows

- a. Transport of all supplies, plant & equipment and construction gear to site on time,
- b. Installation of skid mounted generators and electrical distribution for power to the drill jumbos which will enable construction of the portal and adit to proceed.
- c. Construction of the process plant and power plant under cover.
- d. Construction of further accommodation ready for Stage 2 of mining development, production and processing personnel.

Table 14 : Management say 1060days at site

Position	Number	Salary/annum	Total
Manager	1	250,000	250,000
General Foreman	1	150,000	150,000
Surveyor	1	150,000	150,000
Assistant	1	120,000	120,000
Ferry Crew	Hired with the Barge		
Truck Drivers	2	120,000	240,000
Management	8	\$	910,000

Subsequent operations have been described above. The adit will be developed following the programme as outlined and the process plant will be constructed by the construction company nominated for design and construction.

After all mineralised material has been processed the management team will remain to either remove all equipment from site and rehabilitate any damage or continue operations in another part of the lease. Rehabilitation will require heavy earthmoving equipment. Provision for these items is included in the Capex list.

HEAD OFFICE COSTS

The following costs are attributed to/administered by Head Office in Hobart.

Table 15 : Head Office Costs

Item of Expenditure	Cost per Annum \$
Office Consumables	20,000
Computer/Word Processor	15,000
Power/Heating/Air Conditioning	50,000
Helicopter Travel, Strahan-Site	300,000
Barge Hire at Strahan – Birches It	500,000
Administration, Office Rent, Tel.	100,000
Country Rates, Elliot Bay	50,000
Partial Salaries Expenses etc.	500,000
Total Head Office Costs	1,535,000

Appendix 2: Metallurgical Test Work

NB: Tests 1 to 3 are not presented as these apply to another resource outside EL20/96.

Appendix 3: Drill Hole Logs

WD017 to WD022
SWD002 to SWD004

Appendix 4: Drill Hole Geology Legend

V19 Drill Holes Geology Legend	
 Os Ordovician quartz sandstone	 Cvc Volcaniclastic Conglomerate (Cambro-Ordovician?)
 Cfl Quartz-feldspar-(biotite) porphyritic lava	 FALT Fault
 Ccb Basalt	 QVN Quartz vein (+/-chlorite, carbonate & sulphides)
 Ccd Dolerite	 MEX Chert / Exhalative
 Csh Shale	 MSSX Massive base metal sulphide
 Cvl Limestone	 SMSX Semi-massive sulphide
 Cve Epiclastic Sandstones	 SISX Pervasive silica-sulphide
 Cqvs Quartz crystal-rich felsic volcaniclastics	 Si Pervasive silica alteration
 Cv Felsic volcaniclastics, variably quartz and feldspar phytic / crystal bearing	 Cb Carbonate alteration
 Cflq Quartz porphyritic lava	 Ch Chlorite alteration
 Cveb Polymict Lithic Volcaniclastic Sandstone and Breccia; commonly sulphide clast bearing	 Ser Sericite alteration

Appendix 5: Lithologies Lookup Table

ID	Geol Code	Text
1	Ocs	Ordovician Conglomerate
2	Os	Ordovician quartz sandstone
3	Osh	Ordovician Shale and siltstones (pyritic)
4	Ctvc	Volcaniclastic Conglomerate (Cambro-Ordovician?)
5	Ctvls	Lithic bearing quartz crystal-rich felsic volcaniclastic sandstone (often rounded)
6	Ctqvs	Quartz crystal-rich felsic volcaniclastic sandstone
7	Ccb	Basalt
8	Ccd	Dolerite
9	Csh	Shale
10	Cvl	Limestone
11	Cve	Epiclastic Sandstones
12	Cvslt	Felsic volcaniclastic siltstone
13	Cvst	Felsic quartz-phyric volcaniclastic sandstone
14	Cvls	Felsic quartz-phyric lithic volcaniclastic sandstone, undifferentiated
15	Cvb	Felsic volcaniclastic breccia, undifferentiated
16	Cveb	Polymict Lithic Volcaniclastic Sandstone and Breccia; commonly sulphide clast bearing
17	Cvebs	Polymict Lithic Volcaniclastic Sandstone, commonly sulphide clast bearing
18	Cvebb	Polymict Breccia, commonly sulphide clast bearing
19	Cflq	Quartz porphyritic lava
20	Cfl	Quartz-feldspar-(biotite) porphyritic lava
21	Cv	Felsic volcaniclastics, variably quartz and feldspar phyric / crystal bearing
22	Cu	Cambrian undifferentiated felsic volcanic
23	FALT	Fault
24	QVN	Quartz vein (+/-chlorite, carbonate & sulphides)
25	MEX	Chert / Exhalative
26	MSSX	Massive base metal sulphide
27	SMSX	Semi-massive sulphide
28	DSX	Disseminated Sulfide
29	SiSX	Pervasive silica-sulphide
30	Si	Pervasive silica alteration
31	Jsp	jasper / red / brown pervassive silica
32	Cb	Carbonate alteration
33	Ch	Chlorite alteration
34	Ser	Sericite alteration
36	OX	Oxidised, including FeO
35	Ab	pink Albitic alteration
36	KSP	Potassium Feldspar (/Hematite?) Alteration
37	Sil-Hm	Pervassive silica-hematite alteration - similar to jsp

Lith Code	Lithology	Lith_ID
	Clastic	
Sh	shale	1
Lmst	limestone	2
Mdst	mudstone	3
Slst	siltstone	4
Sst	sandstone	5
SSst	siliciclastic sandstone	6
Congl	conglomerate	7
ESst	epiclastic sandstone	8
VMdst	volcaniclastic mudstone	9
VSlst	felsic volcaniclastic siltstone	10
VSst	felsic volcaniclastic sandstone	11
VQXSst	felsic quartz-crystal-rich volcaniclastic sandstone	12
VFQSst	feldspar-quartz-phyric felsic volcaniclastic sandstone	13
VQFSst	quartz-feldspar-phyric felsic volcaniclastic sandstone	14
VPSst	felsic pumiceous volcaniclastic sandstone	15
VLsSt	felsic lithic volcaniclastic sandstone	16
VLLSst	felsic lapilli lithic volcaniclastic sandstone	17
VBLsSt	felsic block lithic volcaniclastic sandstone	18
VQQLSst	felsic quartz-crystal-rich lithic volcaniclastic sandstone	19
VPLLSst	polymict lapilli lithic volcaniclastic sandstone	20
VPBLsSt	polymict block lithic volcaniclastic sandstone	21
VCPLSst	polymict carbonate clast-bearing lithic volcaniclastic sandstone	22
VMPLSst	polymict MS clast-bearing lithic volcaniclastic sandstone	23
VB	volcanic breccia (undifferentiated)	24
VH	felsic monomict volcanic breccia (hyaloclastite?)	25
VLB	felsic lapilli volcanic breccia	26
VQLB	felsic quartz-crystal-rich lapilli volcanic breccia	27
VBB	felsic block volcanic breccia	28
VQQB	felsic quartz-crystal-rich block volcanic breccia	29
VPB	polymict volcanic breccia	30
VPLB	polymict lapilli volcanic breccia	31
VPBB	polymict block volcanic breccia	32
VCPB	polymict carbonate clast-bearing volcaniclastic breccia	33
VMPB	polymict MS clast-bearing volcaniclastic breccia	34
VC	volcaniclastic conglomerate	35

Lith Code	Lithology	Lith_ID
	Coherent Rocks	
LR	felsic porphyry	36
LQR	quartz-phyric rhyolitic porphyry (/lava)	37
LQFR	quartz-feldspar-phyric rhyolitic porphyry (/lava)	38
LQFBD	quartz-feldspar-biotite-phyric dacite porphyry (/lava)	39
LQFHD	quartz-feldspar-hornblende-phyric dacite porphyry (/lava)	40
LB	basalt	41
IB	dolerite	42
IG	granite	43
	Undifferentiated	
UR	felsic volcanic (undifferentiated)	44
URQQ	quartz-crystal-rich felsic volcanic (undifferentiated)	45
URQ	quartz-phyric felsic volcanics	46
UFQR	feldspar-quartz-phyric felsic volcanics	47
UQFR	quartz-feldspar-phyric felsic volcanics	48
UB	mafic (undifferentiated)	49
	Structure	
FALT	fault	50
	Mineralisation and Alteration	
VN	Vein	51
QVN	quartz veining	52
SQV	sulphide-bearing quartz vein	53
MSSX	massive sulphide	54
SMSX	semi-massive sulphide	55
DSS	disseminated sulphides	56
Ch	chlorite	57
Ser	sericite	58
Si	silica - pervasive	59
Fk	Fuchsite	60

Appendix 6: Geochemical Analysis

Burnie Research Laboratory
Frontier Resources Ltd.
Job No. 20080214

Sample Type: Rockchips

Sample	Cu	Pb	Zn	Ag	Au
	ppm	ppm	ppm	ppm	ppm
433701	17	212	826	1	<0.01
433702	34	742	1169	3	<0.01
433703	41	685	752	3	<0.01
433704	4	30	221	<1	<0.01
433705	15	282	843	<1	<0.01
433706	13	138	476	<1	<0.01
433707	13	166	412	<1	<0.01
433708	11	90	238	<1	<0.01
433709	15	105	235	<1	<0.01
433710	10	79	174	<1	<0.01
433711	18	153	270	<1	<0.01
433712	14	92	208	<1	<0.01
433713	13	86	192	<1	<0.01
433714	15	113	197	<1	<0.01
433715	9	42	245	<1	<0.01
433716	21	226	792	1	<0.01
433717	15	202	446	1	<0.01
433718	12	117	238	<1	<0.01
433719	24	274	439	<1	<0.01
433720	7	206	476	<1	<0.01
433721	16	398	794	1	0.03
433722	11	297	739	<1	<0.01
433723	32	873	1147	2	0.02
433724	43	1965	3687	4	<0.01
433725	203	752	1740	2	<0.01
433726	34	623	1403	2	<0.01
433727	39	564	1444	1	<0.01
433728	1422	7225	2157	12	0.02
433729	36	397	566	<1	<0.01
433730	34	577	1051	1	0.02
433731	29	666	1214	1	0.02
433732	74	1610	2697	3	0.03
433733	57	1556	2753	3	0.02
433734	44	1144	1344	1	<0.01
433735	52	448	1030	2	<0.01
433736	6	86	175	<1	<0.01
433737	6	144	44	<1	<0.01
433738	5	55	48	<1	<0.01
433739	104	514	1215	5	<0.01
433740	38	591	1539	1	<0.01
433741	23	756	863	1	<0.01
433742	25	595	1205	1	<0.01

Duplicates

Sample	Cu	Pb	Zn	Ag	Au
	ppm	ppm	ppm	ppm	ppm
433713	n/a	n/a	n/a	n/a	<0.01
433721	16	399	812	1	n/a
433734	n/a	n/a	n/a	n/a	<0.01
433742	23	590	1152	1	n/a

Frontier Resources Ltd.
Job No. 20080219

Sample Type: Rockchips

Sample	Cu	Pb	Zn	Ag	Au
	ppm	ppm	ppm	ppm	ppm
433743	17	511	789	4	<0.01
433744	22	437	403	3	<0.01
433745	5	79	74	2	<0.01
433746	5	60	70	1	<0.01
433747	5	37	99	1	<0.01
433748	8	46	83	1	<0.01
433749	4	22	59	1	<0.01
433750	5	19	62	1	<0.01
433751	36	135	249	2	<0.01
433752	12	58	232	2	<0.01
433753	11	58	232	2	<0.01
433754	7	193	96	2	<0.01
433755	41	649	799	3	<0.01
433756	28	372	509	3	<0.01
433757	208	3252	7010	6	<0.01
433758	248	4477	8734	7	<0.01
433759	9	134	164	1	<0.01
433760	32	361	622	3	<0.01
433761	74	1389	3221	7	<0.01
433762	43	988	1624	6	<0.01
433763	136	931	1617	5	<0.01
433764	9	110	324	2	<0.01
433765	63	9570	16700	12	0.04
433766	394	4124	11100	30	0.08
433767	246	1992	3280	16	0.04
433768	195	2209	5512	18	0.04
433769	14	217	273	4	<0.01
433770	262	1522	3128	29	0.05
433771	197	2047	4916	19	0.04
433772	77	628	411	5	<0.01
433773	29	350	760	4	<0.01
433774	52	712	1075	7	0.02
433775	101	479	1009	8	<0.01
433776	51	697	1802	7	<0.01
433777	3	96	240	2	<0.01
433778	10	21	344	2	<0.01

433779	9	354	1014	3	<0.01
433780	7	103	538	3	<0.01
433781	4	18	257	2	<0.01
433782	1	1	176	2	<0.01
433783	15	154	244	3	<0.01
433784	83	3671	8361	14	0.03
433785	723	58000	160000	210	0.51
433786	169	11800	31400	56	0.14
433787	1212	2945	6914	18	0.05
433788	16	435	768	4	<0.01
433789	19	219	1183	3	<0.01
433790	58	937	1784	4	0.02
433791	66	1149	2420	5	0.02
433792	89	2964	5547	11	0.04

Duplicates

Sample	Cu	Pb	Zn	Ag	Au
	ppm	ppm	ppm	ppm	ppm
433749	n/a	n/a	n/a	n/a	<0.01
433767	257	2007	3384	16	n/a
433770	n/a	n/a	n/a	n/a	0.04
433791	n/a	n/a	n/a	n/a	0.02
433792	83	3099	5474	10	n/a

Frontier Resources Ltd.
Job No. 20080226

Sample Type: Drillcore

Sample	Cu	Pb	Zn	Ag	Au
	ppm	ppm	ppm	ppm	ppm
433793	13	309	888	1	0.02
433794	37	617	1628	3	0.03
433795	32	619	1474	3	0.02
433796	120	5099	5758	8	0.06
433797	15	383	472	1	0.02
433798	28	20600	22900	41	1.92
433799	23	344	503	1	0.02
433800	36	580	894	1	0.02
433809	21	280	472	1	0.01
433810	35	473	951	1	0.02
433811	47	714	700	2	0.02
433812	22	346	433	1	0.02
433813	7	83	131	1	0.01
433814	38	300	540	1	0.02
433815	36	920	1616	2	0.02
433816	86	1319	1898	4	0.02
433817	112	7211	8602	8	0.02
433818	166	1283	2151	4	0.01
433819	74	879	1363	3	0.01
433820	222	773	1867	11	0.03

433821	114	999	3010	9	0.02
433822	15	2067	3252	4	<0.01
433823	23	837	1580	3	<0.01
433824	470	22400	47900	120	0.43
433825	14	442	1099	<1	0.02
433826	9	1490	2230	2	0.01
433827	5	334	301	<1	0.01
433828	7	1115	1736	1	0.01
433829	6	599	964	1	<0.01
433830	6	294	910	<1	<0.01
433831	5	121	479	<1	<0.01
433832	11	100	247	<1	<0.01

Duplicates

Sample	Cu	Pb	Zn	Ag	Au
	ppm	ppm	ppm	ppm	ppm
433816	90	1317	1908	4	n/a
433821	n/a	n/a	n/a	n/a	0.03
433832	14	103	228	<1	n/a

Frontier Resources Ltd.
Job No. 20080305

Sample Type: Rockchips

Sample	Cu	Pb	Zn	Ag	Au
	ppm	ppm	ppm	ppm	ppm
433833	25	100	463	1	<0.01
433834	10	83	1057	1	<0.01
433835	13	56	1735	1	<0.01
433836	8	71	1328	1	<0.01
433837	23	164	698	1	<0.01
433838	28	58	1202	1	<0.01
433839	8	45	641	<1	<0.01
433840	15	53	1450	1	<0.01
433841	10	72	630	1	<0.01

Duplicates

Sample	Cu	Pb	Zn	Ag	Au
	ppm	ppm	ppm	ppm	ppm
433839	n/a	n/a	n/a	n/a	<0.01
433841	11	67	611	1	n/a

Frontier Resources Ltd.
Job No. 20080325

Sample Type: Rockchips

Sample	Cu	Pb	Zn	Ag	Au
	ppm	ppm	ppm	ppm	ppm
433842	11	592	147	1	<0.01
433843	10	278	190	1	<0.01
433844	13	50	190	<1	<0.01
433845	52	331	1480	1	<0.01
433846	38	458	1699	2	<0.01
433847	27	356	1397	2	<0.01
433848	19	95	390	1	<0.01
433849	20	242	867	2	<0.01
433850	222	3456	7018	10	0.04
433851	97	708	1418	3	<0.01
433852	17	156	215	1	<0.01
433853	87	1137	1312	6	0.02
433854	78	1088	1541	10	0.03
433855	32	239	269	10	<0.01
433856	9	18	170	1	0.02
433857	7	20	185	<1	<0.01
433858	24	146	243	2	<0.01
433859	25	159	253	2	<0.01
433860	89	709	560	18	<0.01
433861	7	25	102	1	<0.01
433862	108	768	995	7	<0.01
433863	13	64	141	<1	<0.01
433864	49	200	624	2	<0.01
433865	40	210	268	18	<0.01
433866	10	85	342	2	<0.01
433867	319	14100	9053	9	0.05
433868	166	1525	6180	2	<0.01

Duplicates

Sample	Cu	Pb	Zn	Ag	Au
	ppm	ppm	ppm	ppm	ppm
433858	25	139	245	2	n/a

Frontier Resources Ltd.
Job No. 20080401

Sample Type: Rockchips

Sample	Cu	Pb	Zn	Ag	Au
	ppm	ppm	ppm	ppm	ppm
433869	15	590	1776	2	<0.01
433870	12	73	124	2	<0.01
433871	11	33	92	1	<0.01
433872	10	30	83	2	<0.01
433873	12	31	115	1	<0.01
433874	9	<1	94	1	<0.01
433875	6	4	96	1	<0.01

Duplicates

Sample	Cu	Pb	Zn	Ag	Au
	ppm	ppm	ppm	ppm	ppm
433875	6	3	90	1	n/a

Appendix 7: Digital Data

List of appended digital data files:-

EL201996_200806_01_Digital_Files.txt
EL201996_200806_02_Report.pdf
EL201996_200806_03_Appendix2_Amdel Met Test Results.pdf
EL201996_200806_04_V19GroundMagnetics.txt
EL201996_200806_05_V24GroundMagnetics.txt
EL201996_200806_06_WD017DrillLog.pdf
EL201996_200806_07_WD018DrillLog.pdf
EL201996_200806_08_WD019DrillLog.pdf
EL201996_200806_09_WD020DrillLog.pdf
EL201996_200806_10_WD021DrillLog.pdf
EL201996_200806_11_WD022DrillLog.pdf
EL201996_200806_12_SWD002DrillLog.pdf
EL201996_200806_13_SWD003DrillLog.pdf
EL201996_200806_14_SWD004DrillLog.pdf
EL201996_200806_15_DH_Collar.csv
EL201996_200806_16_DH_Survey.csv
EL201996_200806_17_DH_Assay.csv
EL201996_200806_18_DH_Lithology.csv