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EL21/1999 – WANDERER RIVER

RELINQUISHMENT REPORT TO 26th DECEMBER 2008

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December 20th 2008

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Summary

EL21/1999, Wanderer River (44 km^2), currently held by Frontier Resources, is due for expiry on the 26th January, 2009. This is the Final Relinquishment Report for the tenement. The Exploration Licence has been surrendered in favour of increasing exploration activity at the nearby SMRV Exploration Licences – EL20/1996 Elliot Bay, and EL20/2006 Lewis River – as well as the northern Tasmanian tenements - Narrawa and River Lea (RL's 3&4/2005).

Detailed within is Frontier's exploration progress during the year to 20th November, 2008. This work primarily targeted base metal-rich VHMS.

Field work was conducted from November (2007) through early January (2008) and included grid based soil sampling and ground magnetics, run concurrently on an adjacent portion of EL20/2006 (Lewis River). All work on the NE Osmund Prospect spanning both these exploration licenses is reported herein.

Frontier's primary focus was the NE Osmund Prospect, where highly anomalous gold stream geochemistry coincident with a porphyry contact, airborne EM conductor, as well as radiometric and magnetic highs was tested by grid based soil sampling and ground magnetics. Geological mapping accompanied this work.

No obvious targets were generated, however soil anomaly trends and mapped lithology and alteration were positive, with close similarity to the V34 stratigraphy being evident. As at V34/Aldebarran, two potential base metal host horizons were identified. Good hangingwall alteration evident adjacent to the west of the main porphyry body hints at VHMS potential beneath the inferred syncline parallel to this zone.

Introduction

EL21/1999, Wanderer River (44 km^2), is one of three tenements held by Frontier Resources in the highly prospective Southern Mount Read Volcanic (SMRV) province. This final relinquishment report for the tenement and details Frontier Resources Ltd.'s exploration within EL21/1999 during the tenure year to 26th December 2008 (NB: the actual end of tenure date is 26th January, 2009). Field work undertaken by Frontier Resources Ltd. within EL21/1999 (and EL20/2006) during the 2007/8 field season included grid-based soil sampling, ground magnetics and geological mapping.

Work was primarily undertaken during November (2007) through early January (2008) from a tented field camp located on the north bank of the Wanderer River, immediately west of the Low Rocky Point Bridge. Ground support comprised 2 quad bikes, utilised to transport a motorised soil auger and personnel.

Key target deposit styles for the EL21/1999 are high grade polymetallic sulfide VHMS deposits, Henty-style high grade gold deposits and other Hybrid VHMS types. Evaluation of prospectivity has been GIS based with fresh data being amalgamated with existing geochemical and geophysical data, stream sediment and soil data, as well as sound geological and structural mapping.

Location, Access and Land Use

EL21/1999 is located in the remote south-west 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 south-west of Tasmania is exposed to the roaring forties and is often windy and wet, even in mid-summer.

Much of the south-west 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 Lewis River 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).

A rough 4WD track (Low Rocky Point 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 fixed wing 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 (now Frontier Resources Ltd.) January 2005 mobilisation efficiently utilised the Hobart Ports barge "Kalundra" with some 45 tonnes 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 which included an 7.5t excavator and two 3.5t rubber tracked crawler dumpers. Other equipment and supplies were sling loaded from the river mouth to the Wart Hill drill site and camp. Demobilisation followed the reverse procedure late in the 2005/6 field season. The barge was again used to mobilise into the area for the 2007/8 field season.

A semi-permanent camp is located just south of Wart Hill (on EL20/1996). 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. Frontier has added temporary accommodation units. Some Frontier equipment remains in the vicinity of the camp in readiness for the coming field season on EL20/1996.

2007/8 Field Season Mobilisation

Frontier's exploration for the 2007/8 field season commenced in late November 2007 and extended through to early January 2008.

Mobilisation was minimal, with equipment sling loaded to the site via helicopter from Strathgordon. Several personnel support trips were undertaken via fixed wing aircraft utilising the nearby Moores Valley airstrip. Work was undertaken from a temporary tented field camp located on the north bank of the Wanderer River, immediately west of the Low Rocky Point Bridge (383700mE, 5259300mN; AMG66, Zone55). Ground support comprised 2 quad bikes, utilised to transport a motorised soil auger and personnel. All of Frontier's field gear was removed from site at the completion of the field work.

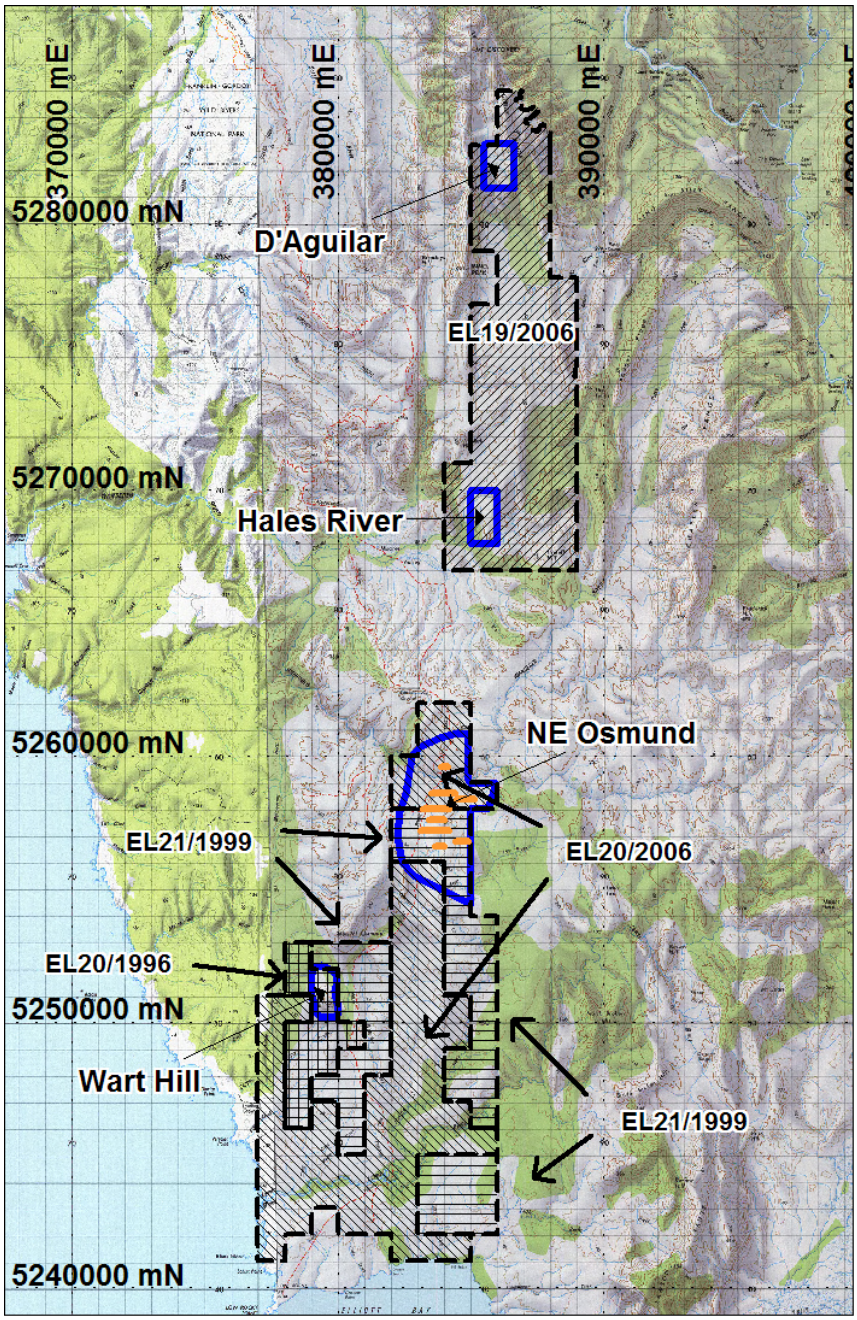

Figure 1: Location of Frontier's Exploration Licences and key exploration areas - EL21/1999 (Wanderer River), EL20/2006 (Lewis River), and EL20/1996 (Elliot Bay). NB: EL19/2006 (Innes Peak) is now relinquished.

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.

EL21/1999 Wanderer River (44km2) was granted to Exploration & Management Consultants Pty Ltd and McNeil Associates Pty Ltd on 26

January 2001. TasGold (now Frontier Resources Ltd.) acquired a 90% interest in this and the adjoining EL20/1996 (Elliott Bay) from Exploration & Management Consultants Pty Ltd and McNeil Associates Pty Ltd. The vendors retain a 10% free carried interest in the tenement to completion of a bankable feasibility study. The current EL expiry is 26th January 2009, with the $125,000 expenditure commitment anticipated to be easily met by the planned upcoming work program.

A partial voluntary relinquishment for EL21/1999 occurred in 2005 and acquisition via the ERA process of Lewis River (EL19/2006) and Innes Peak (EL20/2006; now surrendered) followed. EL19/2006 covers 72 square kilometres in 2 non contiguous parts, covering much of the former EL21/1999.

The remaining part of EL21/1999 is shown in Fig 1.

NE Osmund Prospect Key Features

A variety of key VHMS vectoring factors are evident in the NE Osmund Syncline Anomaly area (see salient features below). Frontier considered this to be a key target for exploration activities in SW Tasmania during the 2007/8 field season. Notably, despite the presence of strongly anomalous base-metals in soils, VHMS – like alteration and the right volcanostratigraphy, the V20 / NE Osmund area has largely been ignored by past explorers, with Geopeko not following up on their initial soil sampling.

In 1991 Aberfoyle exploration conducted a QuestEM survey over a large area of their Elliot Bay EL. This survey delineated anomalous conductors that Frontier considered worthy of follow up. Two of these targets in particular are coincident with areas of high total count radiometrics. The anomalies were initially gridded and reconnaissance mapped with no further work proposed after the EB6 anomaly was considered to be from a surficial source and EB7 was mapped, with Aberfoyle not locating units they considered prospective. Frontier's regional understanding identifies close similarity of EB6 with conductive hangingwall volcaniclastics identified further south at V34/Aldebarran.

Salient features of the NE Osmund Anomaly area include:-

- An intense radiometric high with marked boundary (Similar to the V19 hangingwall!). This is possibly the strongest total radiometric anomaly of the whole SW Tasmania survey data. The total count radiometrics is laterally limited, whereas K extends and broadens further NE in the prospect area. The total count radiometrics eastern margin is distinct and coincident with the western margin of a significant porphyry body; the inferred immediate VHMS footwall. Whereas K apparently transgresses lithological boundaries.
- Magnetic high zones / pods located at the radiometrics margin (similar to the V19 footwall?)
- QuestEM anomaly (EB6) coincident with and adjacent to porphyry margin (similar to the V19 footwall).

- Basalt (Equiv to V19 host horizon?) mapped along strike to south of EB6 QuestEM anomaly.
- Very strong Au in PC (to 130g/t Au) and -80# (to 9.3g/t Au); base metals are generally weak but slightly elevated along strike to the south of the EB6 QuestEM anomaly. Similarly, Voyager 20 has a weak base metal response in both soils and stream sediments.
- The NE Osmund area in general has a peak stream sediment anomaly of 55ppm Pb, 80ppm Zn and 1.04% Fe draining a 2km square area centred upon 384500mE, 5259300mN (Large 1981).
- A sub gossanous galena bearing zone was discovered outcropping in the Wanderer (Large 1981).
- Stratigraphy is interpreted to be a generally west dipping and facing sequence of probable equivalence to V19.
- Volcanostratigraphy is relatively compressed w.r.t further south where outcrop is more extensive in a zone of inferred more open folding. Palaeo high?

EB6

- The EB6 anomaly is possibly identified as Dighem anomaly 7.
- This anomaly corresponds with hematitic hangingwall volcaniclastics; as is also seen at V34 (2005 3D IP survey). This indicates that the upper host horizon is likely slightly deeper in the stratigraphy closer to the porphyry.
- The anomaly was previously largely untested by soil sampling, but strong Pb is evident proximal to the central portion of the anomaly. Follow up did not delineate any substantial base metal anomalism in soils related to EB6.
- EB6 possibly corresponds with a hangingwall zone of strong silica-kspar-hematite alteration, similar to the hematite at V34 / Aldebarran?.

EB7

- Is likely equivalent to Dighem Anomaly No 1, identified by Cyprus (TCR86-2568), in a memorandum from Poseidon (D. R. Edgrecombe).
- Reconnaissance showed the EB7 anomaly was coincident with a debris flow breccia bearing large (>5m) rafts of grey chert (possible exhalite?), probably underlying porphyry.

EB8

- The EB8 anomaly appears to represent shale within the Ordivician Denison Group.

Geology

Mapping indicates that two potential VHMS host horizons, similar to those at V34/Aldebarran (EL21/1999) likely exist in the NE Osmund area. Similar to V34, hematitic volcaniclastics lie stratigraphically above a deeper pervasive silica – disseminated galena horizon within the lava/porphyry. Various salient geological features of the NE Osmund area are outlined below.

Wilson (et. al., 1982; TCR82-1882) provides a concise geological description of the NE Osmund area. Geopeko mapping presented therein shows a clear distinction between the hangingwall hematitic sandstones and footwall to host horizon chloritic volcanics (largely porphyry; Figure 2 & 3). Notably, disseminated galena is mapped at ~10150E, 11200N (Geopeko grid), within 200m of the porphyry contact on the banks of the Wanderer River. Apparently little altered areas of felsic volcanics locally crop out between the chlorite and hematite altered volcanics.

Of interest is a 10cm band of agglomerate within the hematitic tuffs bearing angular clasts of dark grey vitric tuff (Large, 1982). This may indicate erosion of a black shale / fine grained vitric tuff/volvcaniclastic siltstone; possibly representing a horizon of relative quiescence upon which VHMS mineralisation could develop. The location/extent of this unit is unclear, but should be resolved.

Quartz-feldspar crystal rich volcaniclastics similar to the hangingwall sequence at Aldebarran are evident west of the main porphyry body.

Thin andesitic / basaltic units are mapped by MRT (1:25000 geology). These evidently correspond with aeromagnetic anomalies in some cases. The later anomalies lie either side of dacite porphyry to the south of the existing V20 griding, and within the gridded area are locally coincident with strong Pb in soils (eg. The 2.25% Pb anomaly). The andesite / basaltic units could not be located, however chloritic feldspar-quartz phyric volcaniclastics were located in the vicinity.

As per above, cream and pink feldspar bearing, often silty volcaniclastics with minor medium grained crystal volcaniclastic sandstone is evident within the main porphyry body. Chlorite in pervasive and mineral selective form is common, as often are disseminated dark sub metallic flecks of possible base-metal origin.

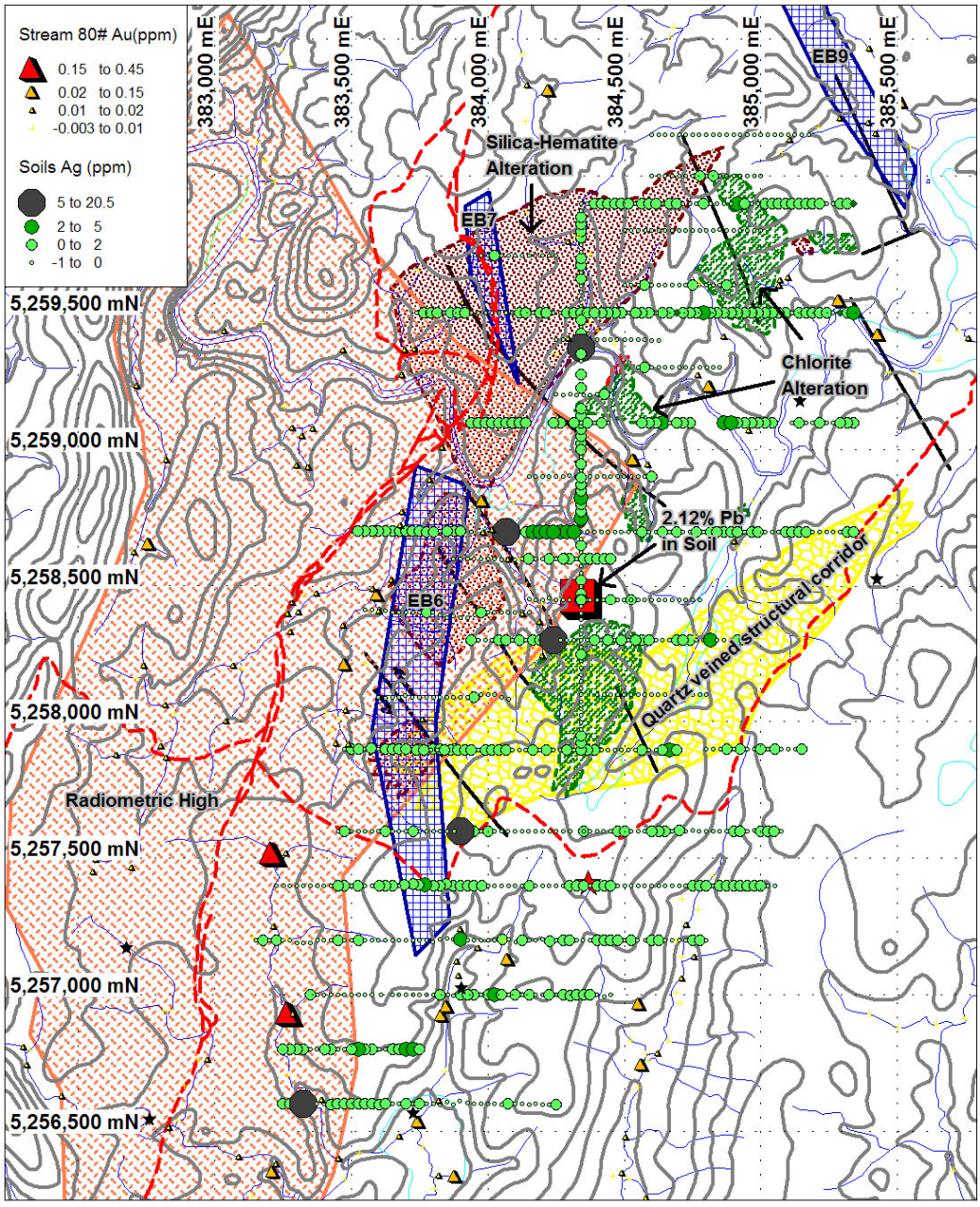

Figure 2: Summary of Geopeko alteration mapping showing QUESTEM anomalies (EB series) and radiometric high.

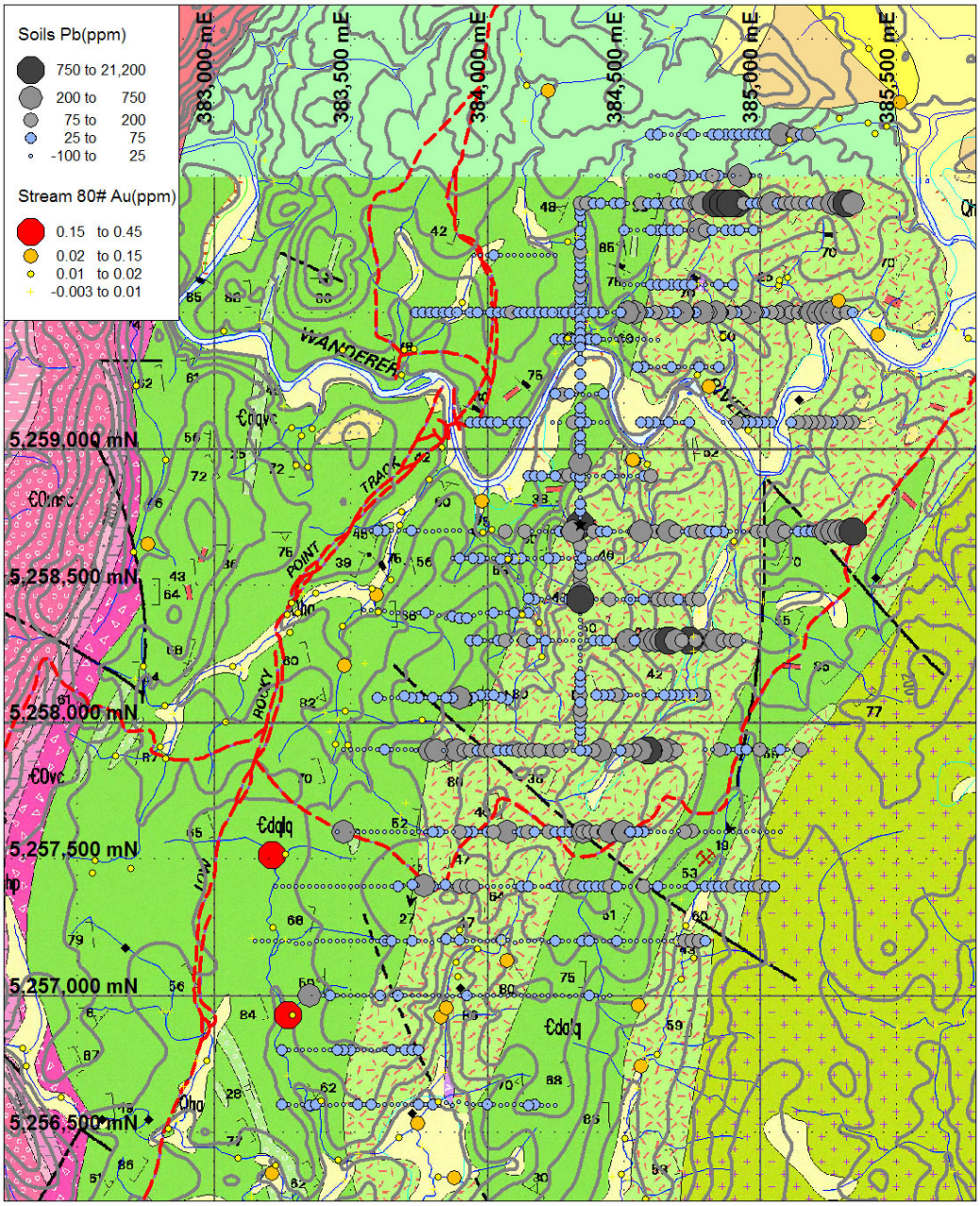

Figure 3: Geology of the NE Osmund Prospect (after MRT 1:25K mapping).

The prospect's central main quartz-feldspar-biotite porphyry body apparently comprises at least 2 flow levels, with interfinging chloritic volcanosediments. A cream to pale green aphanitic matrix is commonly evident. Locally fine grained feldspar crystals appear to form the porphyry groundmass. Hyaloclastite porphyry is evident west of the main porphyry body. This appears to grade south to flow banded and weakly brecciated porphyry and north to granule/lapilli porphyry lithic bearing crystal volcaniclastic sandstone.

Alteration within the porphyry is commonly subdued when compared to the more porous hangingwall volcaniclastics. Chloritisation of biotite is locally common, along with minor silicification. Porphyry (immediate footwall) in the central 7200 to 7400N grid line area was only weakly sericitic, with chlorite being very sparse. Indications from Geopeko's mapping are that significant chlorite alteration of the porphyry occurs within their grid area.

Mineralisation and Alteration

Encouraging VHMS – style alteration is evident in the NE Osmund area. Two VHMS host horizons are possible/likely in the NE Osmund area; by analogy with V34/Aldebarran where hematitic volcaniclastic siltstone and carbonate lies stratigraphically above a deeper pervasive silica – disseminated galena horizon within the lava/porphyry.

Jasper was evident as float to 10cm diameter in several locations stratigraphically above the porphyry and proximal to banded volcaniclastics. These clasts are likely related to an upper exhalative horizon. In the southwest of the gridded area, jasper is incorporated in a lapilli volcaniclastic as a clast, indicating erosion of an exposed exhalative horizon. Pervasive silica-hematite alteration is commonly located stratigraphically above the porphyry and appears to be transitional to semi-pervasive hematite-silica veins and further distal to hematite veins. This alteration is possibly related to jasper forming fluids permeating out through fresh influx of wet volcaniclastic sandstone. Notably, pervasive albite-silica alteration is most prevalent proximal to the main porphyry body.

Grey chert is found as large (to 5m+) rafts/clasts within volcaniclastic breccia adjacent to the west of porphyry in the NW of the prospect area (coincident with QUESTEM anomaly EB7); the large clast form possibly indicates relative proximity to a potentially hydrothermal fluid focusing fault scarp / steep slope. Given the sub 50m proximity of similar little mineralised chert at V19 (Wart Hill; EL20/1996) to mineralised massive sulphide, this occurrence could represent erosion of a relatively proximal to exhalative VHMS chert. However, the jasper component is missing here and significant pervasive alteration is not present, thus this chert clast bearing volcaniclastic breccia occurrence is likely distal to a VHMS system.

Sericite is widespread but most intense in the hangingwall, often with albite alteration.

Geopeko mapped chlorite altered zones are largely coincident with porphyry (Wilson et. al., 1982). No strong chlorite-pyrite zones were located. This may suggest either a weak system or peripheral alteration with mineralisation located at depth. Porphyry (immediate footwall) in the central 7200 to 7400N area was only weakly sericitic, with chlorite being very sparse.

Cursory evaluation of the V20 Prospect provides no major encouragement in terms of alteration and mineralisation. Minor iron stain was observed with the highlight being moderately sericitic volcanics, with pervasive silica particularly

near quartz veined zones. Medium grained well sorted quartz-rich volcaniclastic sandstone was located as float to the north east of V20, where Elliott Point Porphyry has been mapped. These occurrences in the footwall to the recognised V20 Prospect are potential equivalents the Lower Host Horizon at V34/Aldebarran.

Figure 4 below provides an insight into the Hellyer system that was rapidly buried, whilst evidently waning at that time. This contrasts with the Wart Hill area, where numerous episodes of rapid burial occurred. The series of lenses at Rosebery, incorporated in a relatively thick but highly deformed volcaniclastic package, may be a closer analogy to the Wart Hill area. 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 at NE Osmund.

The alteration evident within the Osmund area has many similarities to that at Hellyer. Pervasive 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. Further, sparse occurrences of probable fuchsite are present in the hangingwall volcaniclastics and chlorite zones are evident in the footwall.

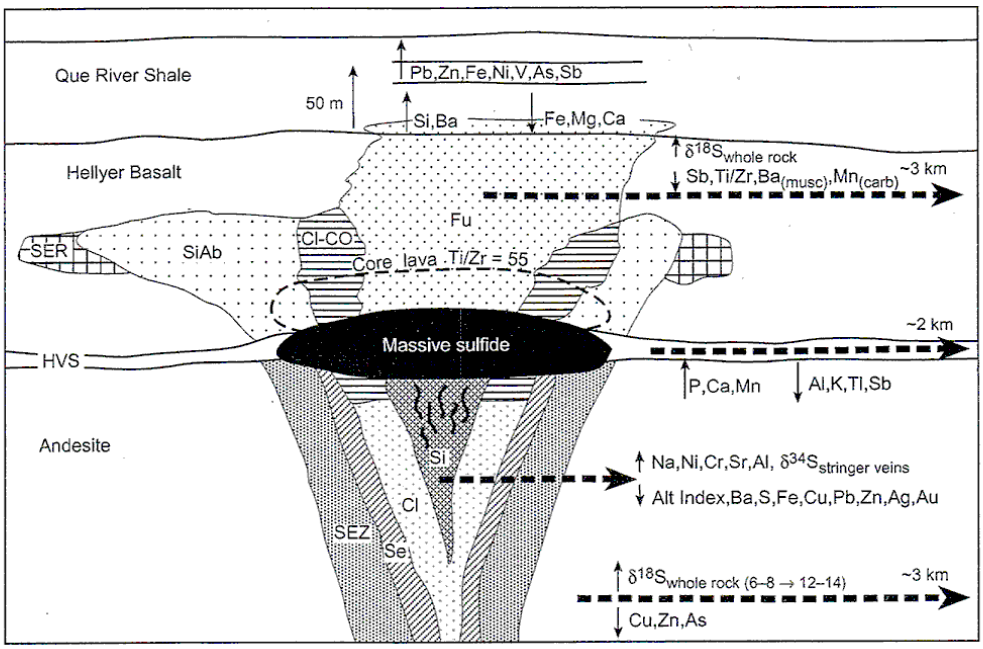

Figure 3. Schematic model of the lithogeochemical halo model and vectors to ore for the footwall alteration pipe, footwall lithologies within the district, hangingwall volcaniclastic sequence (HVS), Hellyer basalt and Que River shale. Thick dashed arrows indicate changes with distance away from Hellyer 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 - sericite 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 4: Hellyer VHMS alteration zonation, See caption above (after Gemmell and Fulton, 2000).

Structure

An ENE aligned corridor of quartz veining is noted in the southern portion of the Geopeko V20 grid (Figure 2). Gold anomalism is reported from both the SW and NE extents of this feature. The NE end of the feature apparently thins, with a strong magnetic feature being located (within the Low Rocky Point Porphyry) parallel and to the south of the corridor. The Au and basemetal content of these veins may be worth assessing to determine if scavenging has occurred from buried VHMS beneath.

A NNW to NW (Devonian-related) structural grain is evident through the NE Osmund area. This is mapped by Geopeko and clearly displayed on radiometric images. ENE cross structures are locally mapped and have an orientation parallel to the quartz vein corridor. Offset of mapped hematite alteration possibly indicates a series of sinistral offsets related to the NNW structures. However, this is at odds to the mapped dextral offsets shown more regionally in the Osmund 1:25000 scale (MRT) geology.

Foliation appears strongest in the vicinity of the main porphyry body margin (eg. The galena bearing volcaniclastic outcrop on the Wanderer River). Extending away from this margin the intensity becomes less. Field relationships indicate a syncline is likely located immediately west of the main porphyry body. Similar to the Wart Hill area, the western limb of the syncline is possibly overturned, with folding inferred to be more open and regular toward the west. This scenario could result from the influence of a harder horst block margin and/or large porphyry dome located in the mapped main porphyry body vicinity. Tentatively supporting this is that:-

- only minor relatively thin porphyry is located west of the main porphyry body.
- sub porphyry (?) volcanic breccia bears large (>5m) clasts of grey chert; presumably relatively proximally derived and initiated by earthquakes at fault and porphyry intrusion onset.
- mass flow crystal sandstone facies appear to be located mostly west of and stratigraphically above the porphyry margin, likely as graben fill, avoiding higher porphyry palaeo-relief.
- southward plunging microfolds (~48 to 175 and 200) indicating east vergence to an anticline were located west of the main porphyry body; These folds are very similar to those identified on Wart Hill (EL20/1996).

Work Program

Frontier's primary regional focus in EL21/1999 was the NE Osmund area (Figure 1 & 2), where highly anomalous gold stream geochemistry coincident with a porphyry contact, airborne EM conductor, as well as radiometric and magnetic highs was tested by geological mapping, informal GPS grid based soil sampling and ground magnetics. Exploration commenced in late November 2007 and extended through to early January 2008.

Ground Magnetics

A ground magnetics survey was conducted over the gridded area to better delineate the variable magnetic character reflected in the WTRMP aeromagnetics. This survey was considered likely to identify basalt coincident with the VHMS host horizon.

Ground magnetic data was collected over all gridded areas. Survey points were GPS located, without need for grid cutting. Frontier Resources company owned magnetometers were utilised for the approximately 16 line kilometre survey. Digital data is appended with gridded total magnetic intensity displayed in figure 5.

Soil Geochemistry

Geopeko Soil Sampling

Geopeko Zn and Pb anomalies not un-expectantly are found within the porphyry as well as in the vicinity of the porphyry / volcaniclastic boundary. Ag is generally elevated away from the Pb-Zn in soil anomalies and ranges to 5.5g/t, with a 20.5g/t soil sample taken from the vicinity of the hematitic volcaniclastics outcropping in the Wanderer River. Frontier's 2007/8 work followed up and extended the earlier Geopeko soil sampling. Part of the current sampling rationale was to cover the more recently defined airborne electromagnetic conductors and to extend south west further to cover the principal gold in drainage anomalies. As noted below in the geological discussion, the hematite – chlorite alteration boundary extends on a NNE alignment through this area. Further, the ENE quartz veined corridor projects into the northern portion of the high gold in panned concentrates zone. This suggests either an origin either as Devonian vein gold or gold scavenged and upgraded from a Cambrian source beneath; Henty Lode style gold should be assessed in this area.

Georeferencing of the Geopeko (Wilson, et. al., 1982) soil sample map data is problematic; systematic errors introduced in Geopeko plans have previously resulted in data misslocations. This error of add 40m to northings and subtract 80m from eastings was found to be present in the V20 soil sampling maps. Consequently, maps have been modified to fit the actual AMG location. Coincident / duplicate samples were averaged for display herein; noting that repeatability was good. Data was verified from the original analysis reports and is digitally appended.

A key Geopeko soil target for resampling was **2.21% Pb**. Geopeko had proposed pitting to test this strong anomaly. In this program relocation via soil augering, followed by infill down to 5m was conducted but failed to repeat the result. Other key soil anomalies identified by Geopeko (Wilson, et. al., 1982; TCR82-1882) for follow up were:-

Co ordinates	Soil geochemistry
9325N 1000E	2.25% Pb
9200N 10325E	1700ppm Pb, 2150ppm Zn
10800N 10575E	4500ppm Pb, 1700ppm Zn
9850N 10000E	340ppm Pb, 2400ppm Zn

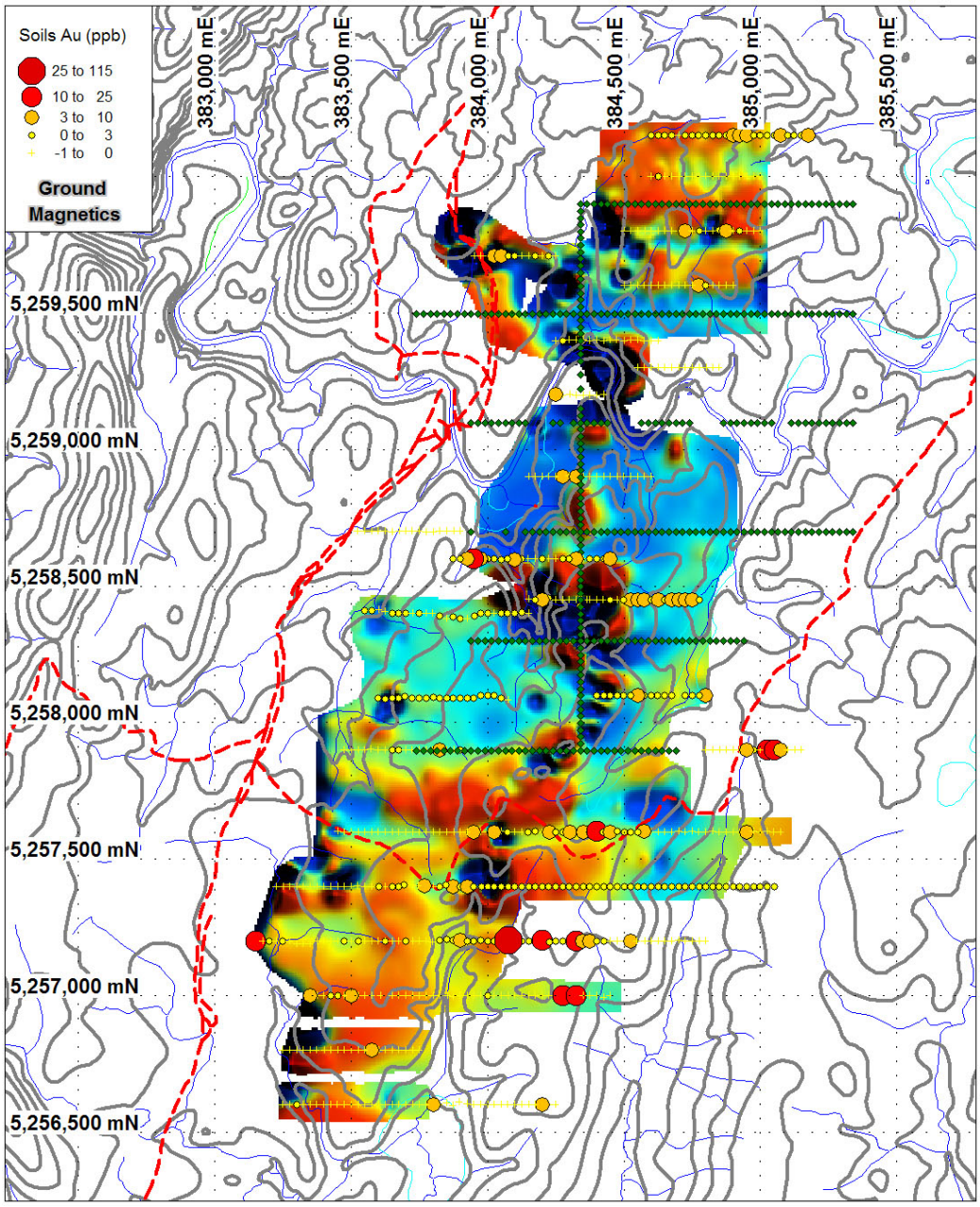

Figure 5: Ground magnetics total magnetic intensity (& Au in soil) for the NE Osmund grid.

Frontier Soil Sampling

East – west aligned soil grids with 25m spaced sampling were wider spaced for the initial priority broad focus phase (200m), but were infilled at 100m on key targets areas. Soil lines were prioritised according to their perceived prospectivity, given Geopeko's historic soil data, stream sediments data, aeromagnetics and Mines Department mapping of the prospective porphyry and contact. Line priorities were refined as the program progressed to achieve maximum coverage of priority areas. Given that hematitic hangingwall volcaniclastics and porphyry contact are readily identified, Frontier was able in many cases to relatively accurately test the inferred VHMS horizons with focused soil auger test lines.

Approximately 15700m of soil sampling was undertaken, totalling 628 samples. A power auger was efficiently utilised for sampling, with infill via hand auger in thick scrub or steep areas. As most of the country is relatively open, soil sampling occurred via a single pass of a quad bike mobilised power auger with GPS located sample sites on an informally located grid. Access across creeks was difficult, thus a common approach was to access down the lesser vegetated spurs with wing lines off the spurs. Strongly vegetated and creek areas were hand auger in-filled. Grid cutting was minimal, only being required in several areas of thick scrub.

Peak soil analysis returned were 132ppm Cu, 699ppm Pb, 1067ppm Zn, 6ppm Ag and 111ppb Au; these were not highly elevated when compared to the earlier Geopeko peak samples returning 480ppm Cu, 2.12% Pb, 2400ppm Zn, 20.5ppm Ag. Comparison of duplicate data from the laboratory (Burnie Research Laboratory) for recent samples shows that repeatability is good.

Both the Geopeko and Frontier samples were C-horizon, however the former were also sieved. Direct comparison is not entirely valid also since many of Frontiers samples were collected in peripheral areas, extending the grid, as well as infill. The table below summarises the statistical comparison at face value. This could be improved by removing all anomalous results (95th percentile) and re-comparing; which has not been undertaken at this stage.

Pb in soils defines several areas of interest at NE Osmund. Possibly the best anomaly is a Pb and Zn response from the lower host horizon in the NE of the grid (Figure 6). Frontier soil sampling extension defines this horizon, leaving it open to the north but trending toward a Questem EM anomaly EB9. Note that Pb is found to best define the host horizon in the V19 area. In the grid centre Pb is elevated in soils where the EB6 Questem Anomaly intersects the volcaniclastic – porphyry contact. Similarly elevated Pb is defined at the western end of two of the southern most grids (7000 and 7600N) in the vicinity of the areas strongest -80# stream sediment Au. A weak basemetal response was returned from the EB7 conductor, which corresponds with a folded western repeat of the host horizon, inferred to be distal to a VHMS source.

Pb (Figure 6) and Zn (Figure 7) are weak in the hangingwall rocks to the west of the porphyry and including the northern portion of the EB6 Questem anomaly.

	FR	Geopeko	FR	Geopeko	FR	Geopeko
	Cu	*Cu*	*Pb*	*Pb*	*Zn*	*Zn*
Mean	6.25	15.89	33.90	193.57	85.17	310.82
Standard Error	0.41	1.95	2.32	61.71	4.74	17.75
Median	4.00	10.00	20.00	50.00	41.00	210.00
Mode	3.00	10.00	-1.00	15.00	25.00	115.00
Standard Deviation	10.24	36.77	58.01	1164.35	118.77	334.95
Sample Variance	105	1352	3365	1355701	14107	112194
Kurtosis	67.65	105.82	62.30	301.10	15.93	10.57
Skewness	7.10	9.76	6.83	16.82	3.43	2.77
Range	133	485	700	21205	1061	2390
Minimum	-1.00	-5.00	-1.00	-5.00	6.00	10.00
Maximum	132	480	699	21200	1067	2400
Count	627	356	627	356	627	356
Confidence Level(95.0%)	0.80	3.83	4.55	121.36	9.31	34.91

Table 1: Comparison of Frontier and Geopeko C-horizon soil analysis.

Cu in soils (Figure 8) is typically low with peak analysis potentially reflected hotter hydrothermal fluid foci, as well as late Au bearing structure (see below).

Gold forms a NW aligned linear, coincident with Cu in soils in the SW of the grid (Figures 5 & 8), near the anomalous 80# and panned concentrate Au stream sediment samples. Similar trends (incl. 111ppb entire survey high) are repeated NE of this anomaly, coincident with the southern end of the EB6 anomaly and mapped or inferred faults. This trend is oblique to the stratigraphy and likely reflects late (Devonian? vein) overprint, but interestingly evidently flanks the mapped main ENE aligned zone of Devonian quartz veining (NB: veins are dominantly NW aligned within this zone). Observations are possibly consistent with late dextral movement, with a foci at approximately 384350mE, 5258100mN; coincident with an extensive chlorite altered zone.

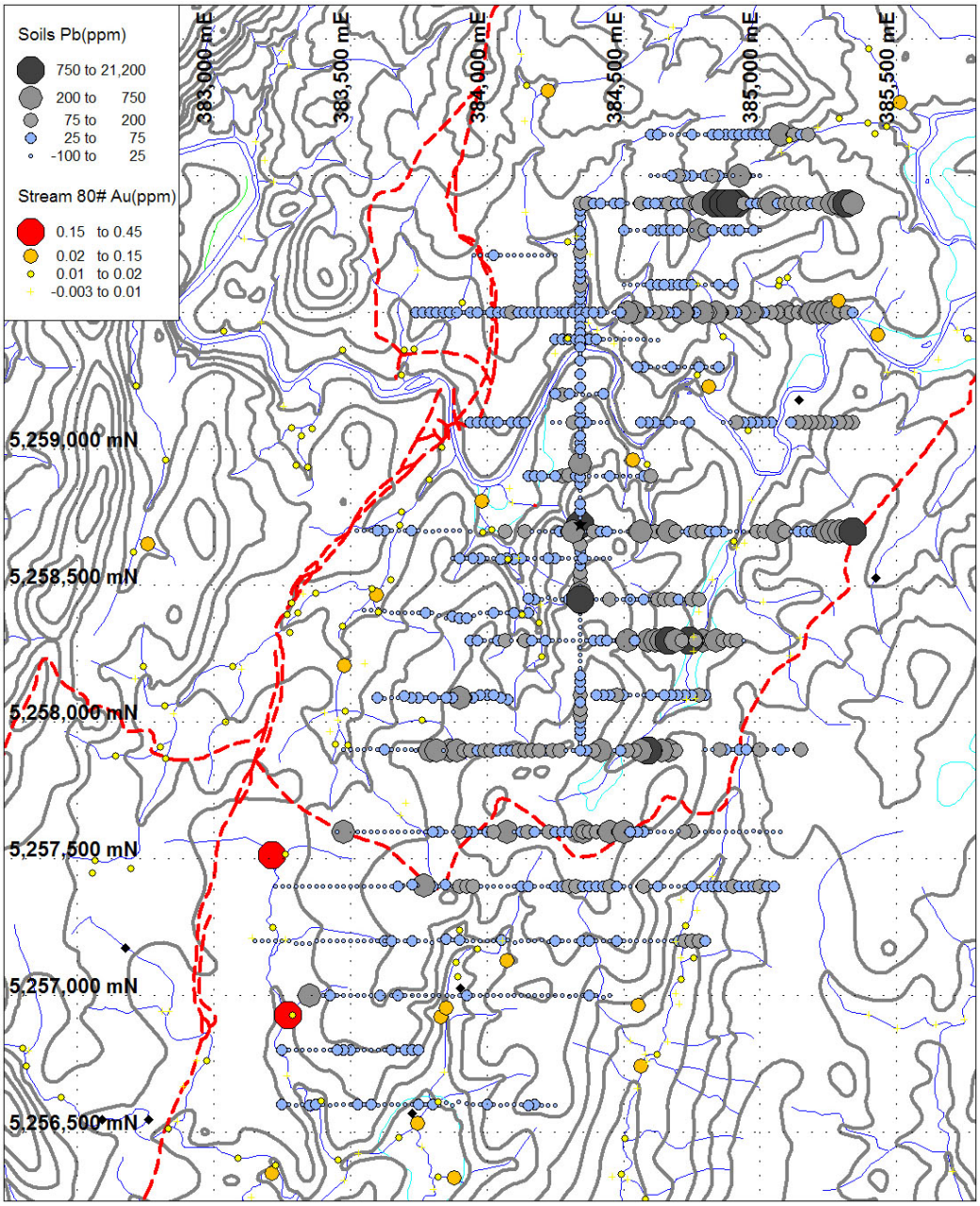

Figure 6: Pb in soils for the NE Osmund grid.

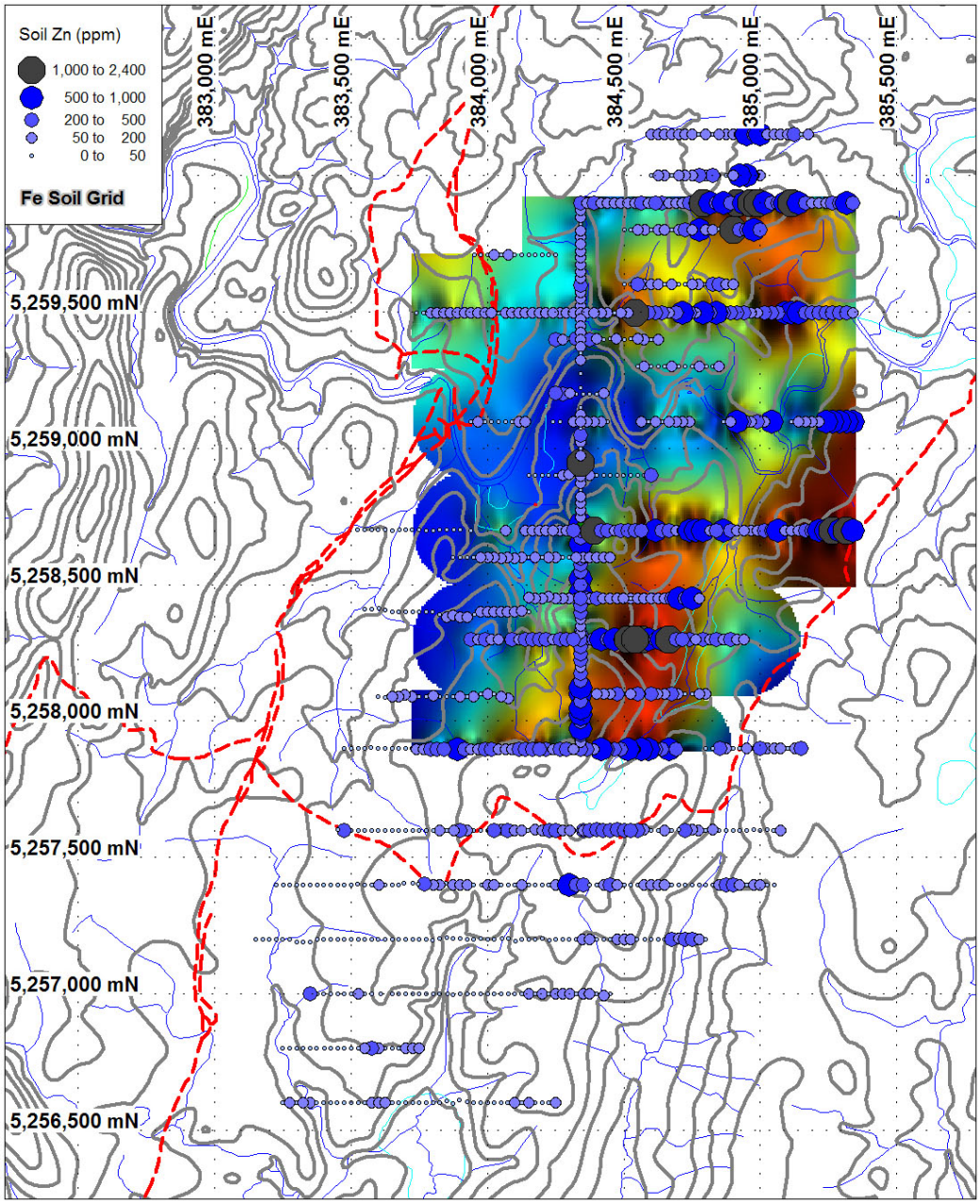

Figure 7: Zn over gridded Fe in soils for the NE Osmund grid.

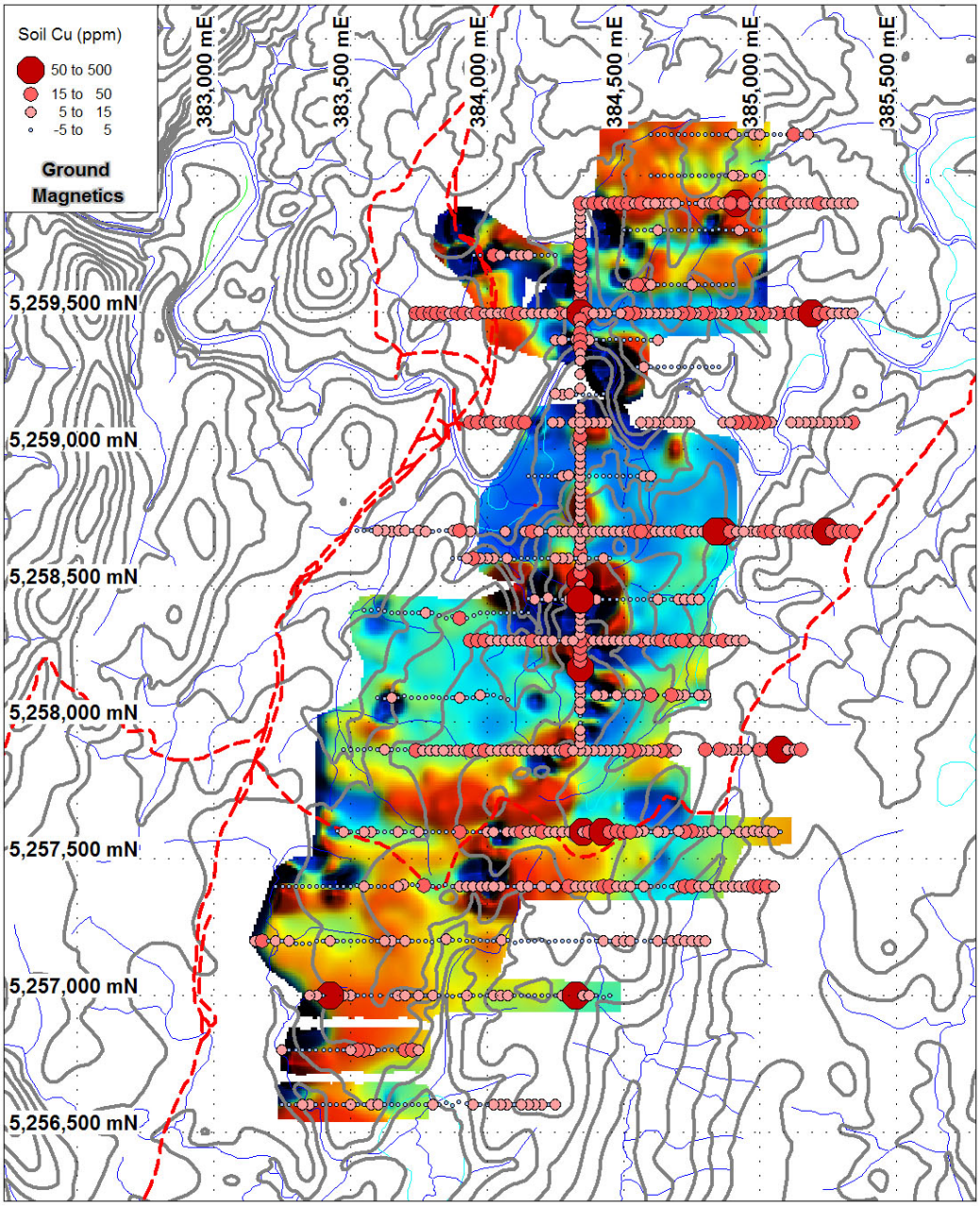

Figure 8: Ground magnetics total magnetic intensity and Cu in soils for the NE Osmund grid.

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., 1981. Progress Report E.L. 27/76 Elliott Bay Tasmania, 1979-1980 Field Season, Geopeko (TCR81-1555).

Wilson, P.A., Moore, D., Sumpton, J. D. H., Pemberton, J., and Perring, R., 1982, Progress Report E.L. 27/76 Elliott Bay Tasmania, 1981-1982 Field Season, Geopeko (TCR82-1882)

Appendices

Appendix 1

List of appended digital data files:-

EL211999_200812_01_Digital_Files.txt
EL211999_200812_02_Report.pdf
EL211999_200812_03_FrontierSoils.txt
EL211999_200812_04_GeopekoV20Soils.txt
EL211999_200812_05_GroundMagnetics.txt

Appendix 2

Analysis Reports