Corona Minerals

Report on progress at the Prince Darwin Zone, South Darwin Prospect

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EXECUTIVE SUMMARY

At the time of writing 3 diamond holes have been drilled into the Prince Darwin Zone with another underway.

Significant copper-gold mineralisation was intercepted in discovery hole SDD001. Work is ongoing but initial observations indicate this mineralization is related to a series of quartz porphyries and possibly andesites that have intruded a westerly dipping sequence of predominantly feldspar phyric volcanics. Significant magnetite mineralization was also intercepted which is broadly related to the Cu-Au mineralization.

The geometry of the mineralisation is poorly understood, although contact relationships observed in holes SDD002, 003 and 004 indicate that the Quartz porphyries and andesite bodies are dipping variably to the east.

The provenance of the mineralisation is subject to ongoing work, however, several factors indicate the mineralisation may be related or analogous to that seen at Prince Lyell.

Charles Hughes
Geologist
11/12/2012

1.0 INTRODUCTION

A technical note has been prepared compiling and accounting for all information on the Prince Darwin Zone at the time of writing. Current thinking by the author is presented here in, but may be subject to change as the available information increases in the light of further drilling, scientific studies and etc.

1.1 Location, access, infrastructure and physiography

The Prince Darwin Zone is one of a number of magnetic anomalies within the South Darwin Prospect ("SDP", "the Prospect"), which forms part of Corona Minerals Ltd's ("Corona", "the Company") Queenstown Project on the West of Tasmania. The Prospect is located south of Mt Darwin, incorporating most of the South Darwin plateau, the western flanks of the plateau and part of Mt Darwin. The prospect is located within EL51/2008, Corona Minerals Ltd have 80% of the tenement and are operators, Jaguar Minerals Ltd have 20% of the tenement and have elected to contribute to exploration costs.

Access to the South Darwin Prospect is via a 4WD track originally constructed by BHP in the late 1960's using a bulldozer, and recently renovated by Corona using contractor Rob Mackenzie of Soli Investments Pty Ltd. A 20t excavator was used to renovate the track. A gate has been put in at the bottom of the track, a key for which is held by Corona and Parks and Wildlife-Queenstown. The public are allowed access to the track, but are required to sign a form at the Parks and Wildlife office in Queenstown, giving personal details before a key is handed over. The track up to the South Darwin Plateau was previously used by 4WD groups in Tasmania as it presented several challenges to drivers. The track to the South Darwin Plateau branches off the north-south Pilinger Road about 11km south of the Darwin Dam, which leads south out of Queenstown (known as the Mt Jukes Road there) going via Mt Jukes and Lake Burbery to the historical site of Pilinger located on the shores of Macquarie Harbour. The road is bituminised up to Darwin Dam, at the southern end of Lake Burbery, and is good quality compacted gravel after that.

Queenstown is located, as the crow flies, roughly 20km to the north of the South Darwin Prospect. There is a HydroTasmania owned and operated-hydroelectric power station located on the King River about 15km to the north of the Prospect.

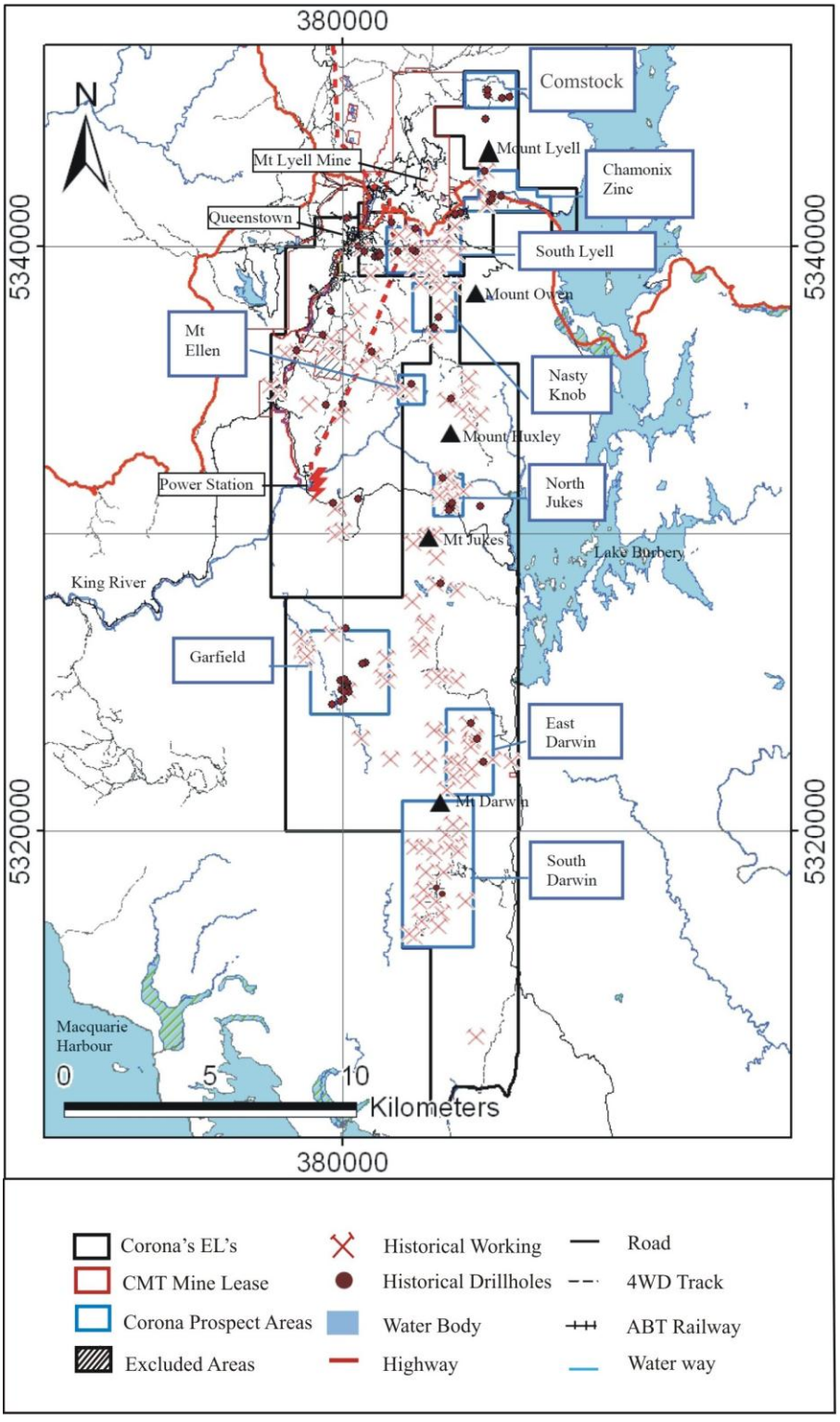

FIGURE 1: Location and Overview

A field camp has been established at the Prospect for housing exploration crews. The camp consists of a series of “garden sheds” that have been modified and reinforced to allow them to be
flown by helicopter (B2 or B3 needed). A kitchen, 3 accommodation rooms, a shower and a store room are there. The camp is located at the old BHP core shed site, nestled below a low hill to the west which protects it from strong westerly winds which the plateau area is so exposed to.

Mobile phone reception can be found in certain areas on the plateau. There is no other infrastructure in the area. The Prospect is remote, taking one and a half hours to drive from camp to Queenstown.

The West Coast Range dominates the geography of the area with Mt Darwin to the north and Mt Sorrel to the West. The Clarke Valley is due west of the South Darwin plateau, and is thickly vegetated.

Macquarie Harbour is to the south west with the historical penitentiary of Sarah Island visible. Vegetation is sparse to moderate on the top of the plateau. One major creek is found 500m north of the camp which supplies water for drilling and camp purposes but is liable to dry up if an extended dry spell is had. Vegetation is thicker on the flanks of the plateau where the Prince Darwin Zone is found and is predominantly regrowth; thin gum trees with bauera, horizontal and cutting grass.

The weather in the Prospect area is highly variable at all times of the year and is particularly exposed to strong westerly weather systems. Snow and hail can be expected through the summer months as well as the winter months. Winds can be vey strong, in which case it is unsafe to be on the flank of the plateau due to the likelihood of the thin gum trees blowing over.

Low levels of ozone above Tasmania means that sunburn can occur even when cloudy and overcast if necessary precautions aren’t taken.

1.2 Regional Geology

The South Darwin Prospect is located within the Cambrian aged Mount Read Volcanics (MRV) which hosts several major volcanogenic ore deposits throughout the West Coast of Tasmania, including Mt Lyell Cu-Au mine located 20km to the north in Queenstown. The geology of the MRV has been summarised by many authors, of which Corbett (2001) is amongst the most comprehensive and current. Two major units within the South Darwin Prospect are the Central Volcanic Complex (CVC) and the Darwin Granite.

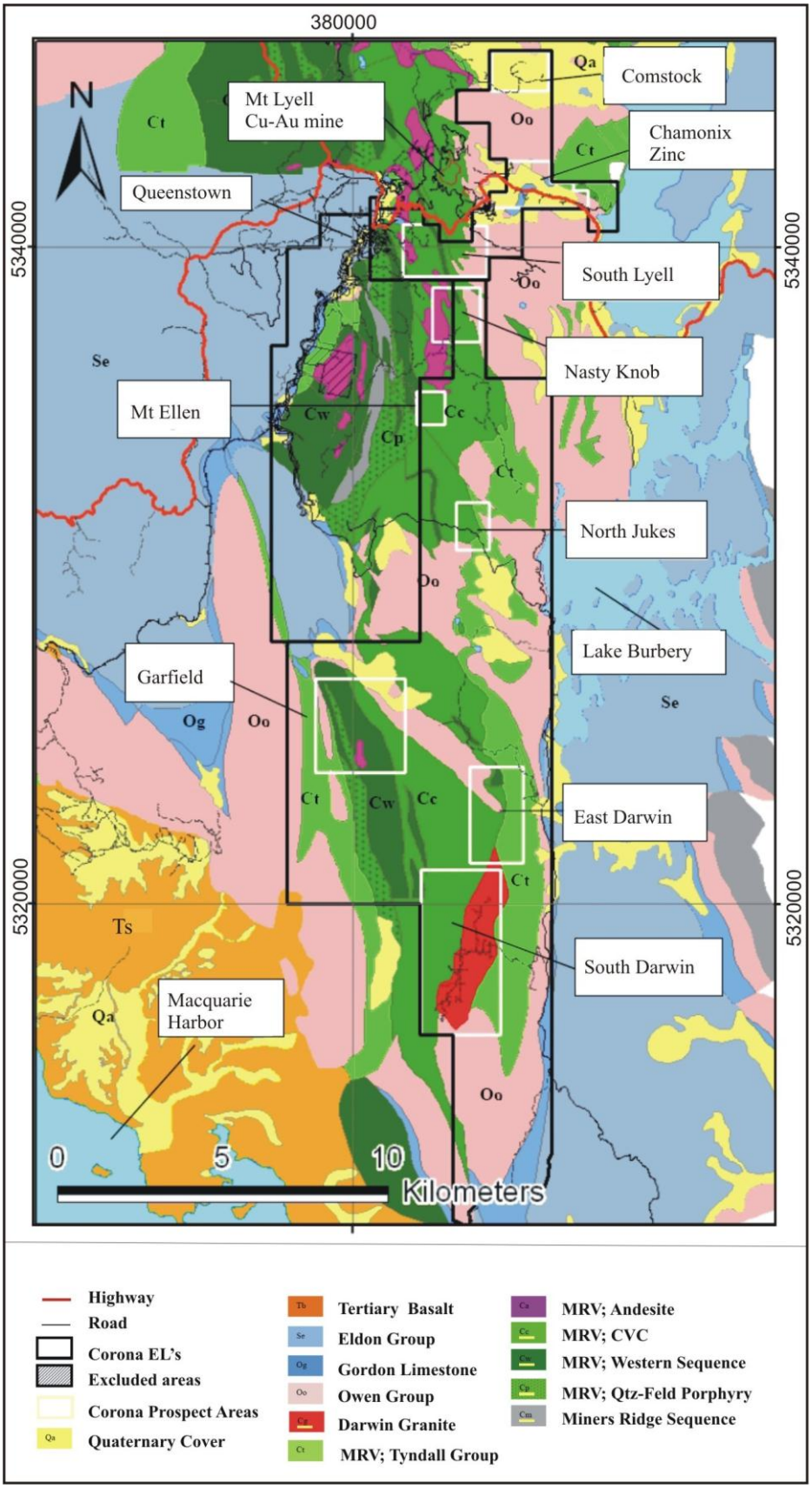

FIGURE 2: Regional Geology

1.3 South Darwin Prospect Geology

The plateau is dominated by the Cambrian aged Darwin Granite, a magnetite series I-type granite that is modelled to have intruded at a depth of about 4km (Wyman, 2001), which is present as several differing granitoid bodies and is moderately altered by green sericite. The granite is interpreted to be a sub-vertical intrusion (Lehman, 1986).

The granite has apparently intruded a package of coherent felsic volcanics, interpreted to be either lavas or subvolcanic intrusives, which are normally feldspar phyric, amygdaloidal and often display spherulitic texture. The volcanics are most often a white colour when weathered and pink-red when fresh. Dips observed by the author in the west of the plateau indicate this phase of volcanics has a moderate south westerly dip, varying between 45 and 60 degrees. This package of volcanics is interpreted by Corbett (1976) to be a correlate of the Central Volcanic Complex, and are part of the “Suite 1” volcanics of Crawford et. Al (1994). Bitotite alteration at the contact with felsic coherent volcaincs to the west of the Darwin camp is possible evidence of contact metamorphism. Microgranite dykes are seen cutting mineralisation within the Prince Darwin Zone.

The granite is unconformably overlain by middle Tyndal volcaniclastics/epiclastis on the eastern side of the plateau, with blocks and clasts of the granite visible within the Tyndal group rocks.

A major NNE bearing, probably steeply east dipping fault is found on the western edge of the plateau, and extends at least through to the East Darwin Prospect where historical workings intersected the fault (Ruddock, 1976).

A striking quartz eye porphyry has been mapped outcropping, and seen in drill core. The porphyry carries quartz and feldspar in varying amounts, with the feldspar variably altered to sericite, chlorite and biotite. Quartz phenocrysts are upto 10mm, and quite rounded. This porphyry looks similar to the Bonds Range Porphyry (K Denwar pers. comm.). A small amount of work on the chemistry of the porphyry has been done and more is planned. The porphyry dips steeply to the east and appears to cut the south westerly dipping CVC. A quartz porphyry with a Ti/Zr ratio of about 10-15 seems to be associated with mineralisation in SDD001, whether it is the same porphyry as the one which cuts mineralisation in hole SDD003 needs to be corroborated.

Magnetite breccia zones (of which the Prince Darwin Zone is one) have been observed and are indicated by aeromagnetics. They are broadly NNE striking, and the Prince Darwin Zone appears to dip steeply east. Tourmaline dykes/breccia zones dipping moderately to the SW cut both the granite and CVC rocks. A set of magnetite veins carrying sulphides (only pyrite noted) also dip moderately to the SW cutting both granite and CVC. These are observed in core and appear to offset lithology.

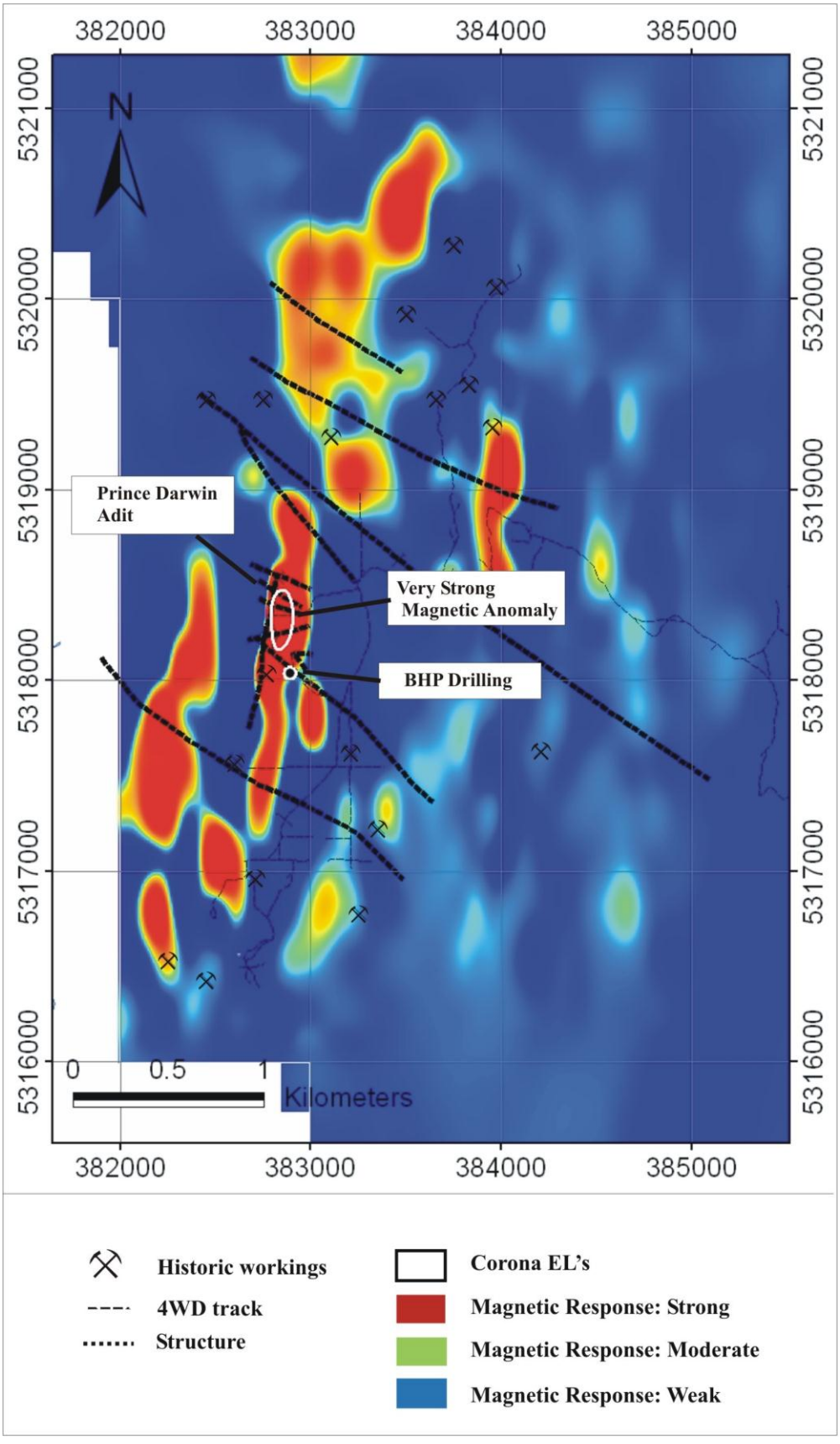

FIGURE 3: SDP aeromagnetics

2.0 PRINCE DARWIN ZONE

2.1 Overview

A zone of copper-gold mineralisation and magnetite mineralisation (also carrying anomalous Ag, REE, W, Mo, and Co) has been "discovered" on the western flank of the South Darwin plateau. Discovery hole SDD001 intersected 124m @ 0.4% Cu, 0.15 g/t Au. No firm indications of width and strike are able to be made at present. The mineralisation is related to a large (>100m true width) breccia zone, of significance the copper mineralisation appears to be a later part of the entire mineralised system, and doesn't particularly "follow" the magnetite-pyrite development. The mineralisation appears to be intimately associated with both a major NNE trending structure and Quartz porphyry intrusions which are seen at the centre of the copper-gold mineralisation in hole SDD001 and are seen cutting non-copper mineralised magnetite-pyrite breccias in hole SDD003. The porphyry in both cases appears to intrude dominantly feldspar phyric volcanics which probably belong to the Central Volcanic Complex, and has a very different Ti/Zr ratio to the feldspar phyric volcanics. The Ti/Zr ratio seen in these porphyries is normally associated with the "Suite II" volcanics (e.g Garfield andesite, Prince Lyell andesite) which are more than likely the drivers of the porphyry style mineralisation seen at Mt Lyell and Garfield. Work is progressing on the Prince Darwin Zone with another diamond drilling program set to start at the time of writing, several

2.2 Historical work

Prior to Corona's involvement only a limited amount of work was completed on the Prince Darwin Zone, or indeed on the South Darwin Prospect as a whole. Twelvetrees (1912) visited the area in the early part of the 1900's when several prospectors were working the ground. The "Prince Darwin Mining Company" had driven an exploration adit into the Prince Darwin Zone recording copper mineralisation along it length of about 50m. Serious mining potential was curtailed when the Crotty smelter was closed as there was nowhere for ore to be transported. The Mount Lyell Mining and Railway Company (MLMR) were the next to investigate the Prince Darwin Zone, in the early 1950's. Some channel samples were taken from the Prince Darwin adit but they concluded it was uneconomical. BHP bulldozed tracks into the South Darwin plateau in the late 1960's and conducted ground magnetics and self potential geophysics over the Prince Darwin Zone. The self potential geophysics indicated a southerly plunge to the mineralisation. This culminated in the drilling of two diamond holes some 600m to the south of the adit, it is likely the drill site was chosen because the bulldozer couldn't go any further due to steep slopes. A detailed aeromagnetic survey conducted by Corona indicates that BHP was drilling a separate zone to the Prince Darwin Zone, although they did intersect copper mineralisation: 5m @ 0.5% Cu. No record of reporting is available for this work; only assays. Post BHP no field work was carried out on the Prince Darwin Zone before Coronas involvement.

2.3 Work by Corona

To date Corona has conducted field mapping, confirmed the existence/rediscovered the historical Prince Darwin adit, contracted Geotech Airborne Pty Ltd to fly an airborne VTEM-Magnetics survey on 125m spacing (as part of a larger survey covering the whole Queenstown Project with nominal line spacings of 250m), and Southern Geoscience Ltd to manage/interpret

the survey data, sent one sample for petrology to “Pathfinder Exploration”, conducted 723.35m of diamond drilling using Van Dieman Holdings and had the core assayed for multi elements by ICP-MS, and gold by fire assay at Genalysis/Intertek Adelaide for Ag, Al, As, Au, Ba, Bi, Ca, Cd, Ce, Co, Cr, Cu, Fe, K, La, Li, Mg, Mn, Mo, Na, Ni, P, Pb, S, Sb, Sc, Sn, Sr, Te, Ti, Tl, V, W, Zn, Zr using a 4-acid digest. A limited amount of SG work was carried out on hole SDD001. At the time of writing a diamond drilling program is currently underway using Edrill Pty Ltd utilising a Marooka Mounted LF70 rig.

2.4 Results of mapping

A compass will not work in the vicinity of the Prince Darwin Zone due to high levels of magnetite. Mapping in the vicinity of the Prince Darwin Zone has confirmed the moderate-westerly dip of the coherent felsic volcanics that host the mineralisation. The wester;ly dipping volcanics at surface are strongly weathered, normally to a whitish colour but pink when fresh, can be seen as aphyric or feldspar phyric, and amygdaloidal. They are generally massive and have two sets of jointing: vertical north-south joint set and a set dipping moderately to the south west. Magnetite-chlorite breccia is expressed at surface in the vicinity of the Prince Darwin adit and can be traced with certainty south for at least 50m and north for at least 20m. Pyrite is observed at surface within the magnetite-chlorite breccia as stringers and disseminations, particularly around the Prince Darwin adit. Pyrite stringers within the mouth of the Prince Darwin adit dip steeply to the east. Covellite is observed near the Prince Darwin adit, and is the only evidence of copper at surface found to date, although, it is very difficult to see as the magnetite takes on a dark blueish colour when it weathers. Another outcrop of the magnetite-chlorite breccia is seen 150m south of the Prince Darwin adit, about 50m north of SDD002 and SDD003, and stops abruptly at a NNW striking creek to the south of the outcrop, interpreted to be a fault, with brecciated felsic volcanics outcropping south of the creek which continue for another 150m south to another major creek and attain a width at surface of about 100m. A very weathered outcrop near pad SDD001 which is due west of the magnetite-chlorite breccia appears to be a volcaniclastic with clasts of magnetite in, the significance of this at the time of writing is not fully understood. A major NNE fault is seen at surface to the west of the mineralisation, at least one of a series of NNW striking faults has been confirmed, possibly offsetting mineralisation in the vertical plane between holes SDD001 and 002&003.
No surface expression of Granite has been recognised within the Prince Darwin Zone. Small pods of chlorite-pyrite-magnetite alteration occur between the Prince Darwin Zone and the Granite contact some 500m to the east, with one such “pod” found at the pad for SDD004, possibly controlled by a small shear zone. A small lenticular andesite body occurs at the pad for SDD004. The andesite is dark green, and carries abundant feldspar phenocrysts. The andesite weathers more than the surrounding CVC felsic volcanics, and it is this feature that is the probable reason why none has been mapped before.
The North Prince Darwin adit was found about 100m to the north of the Prince Darwin adit with brecciated felsic volcanics carrying fine disseminated pyrite and magnetite outcropping near by. More work is being done on the complicated geology of the Prince Darwin Zone.

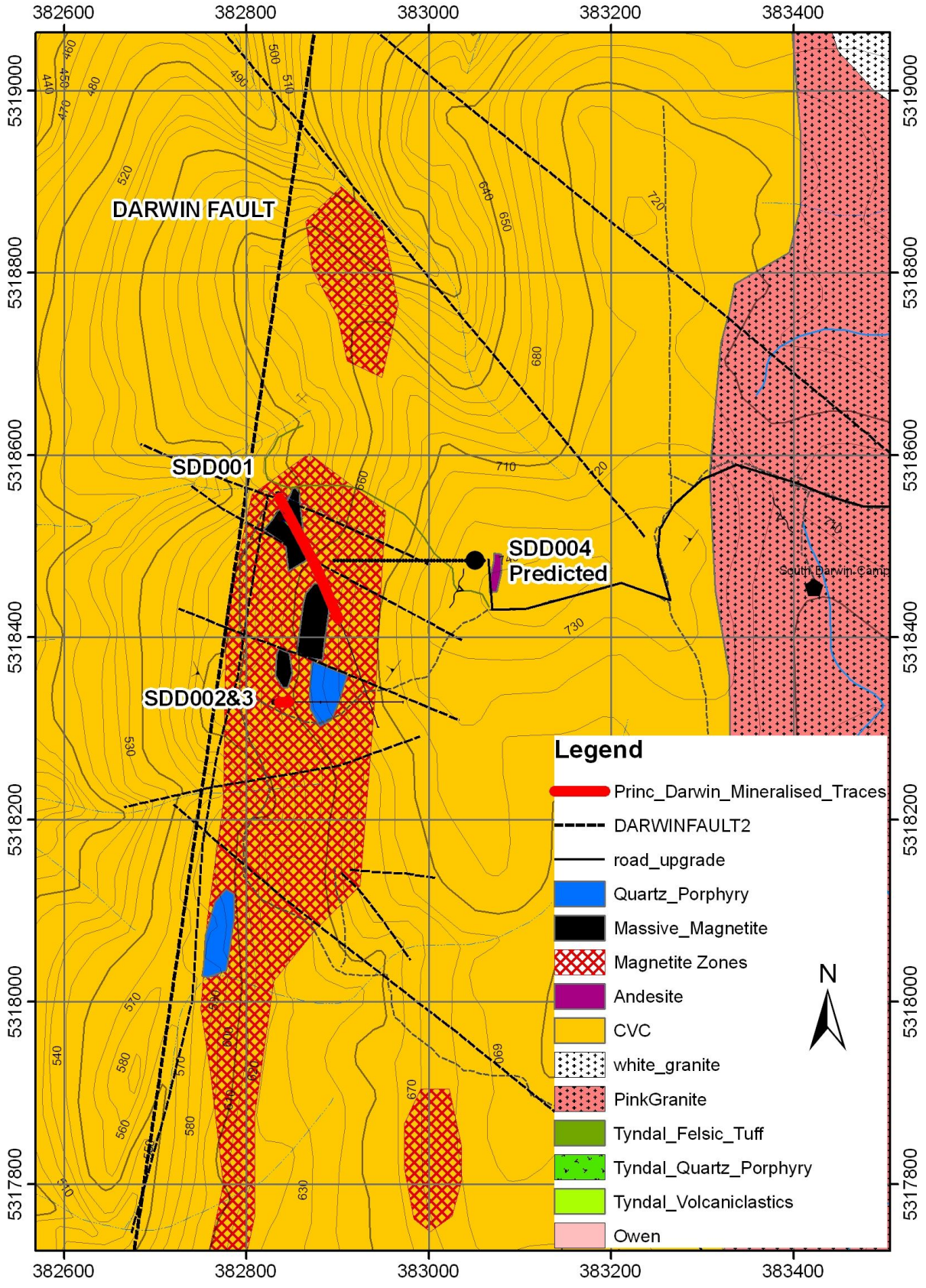

FIGURE 4: Prince Darwin Zone Geology

2.5 Results of VTEM/Magnetics Survey

No VTEM response registered over the Prince Darwin Zone. Modelling of the aero-magnetics indicates a body 70m wide, 240m long, 1500m deep with a magnetic susceptibility of 1, indicating an average of 30% Magnetite. The modelling indicates a NNE strike and an 80 degree dip to the east. Figure 5 below shows all the mag models in the South Darwin Prospect, and Figure x shows the particulars of the Prince Darwin Mag model.

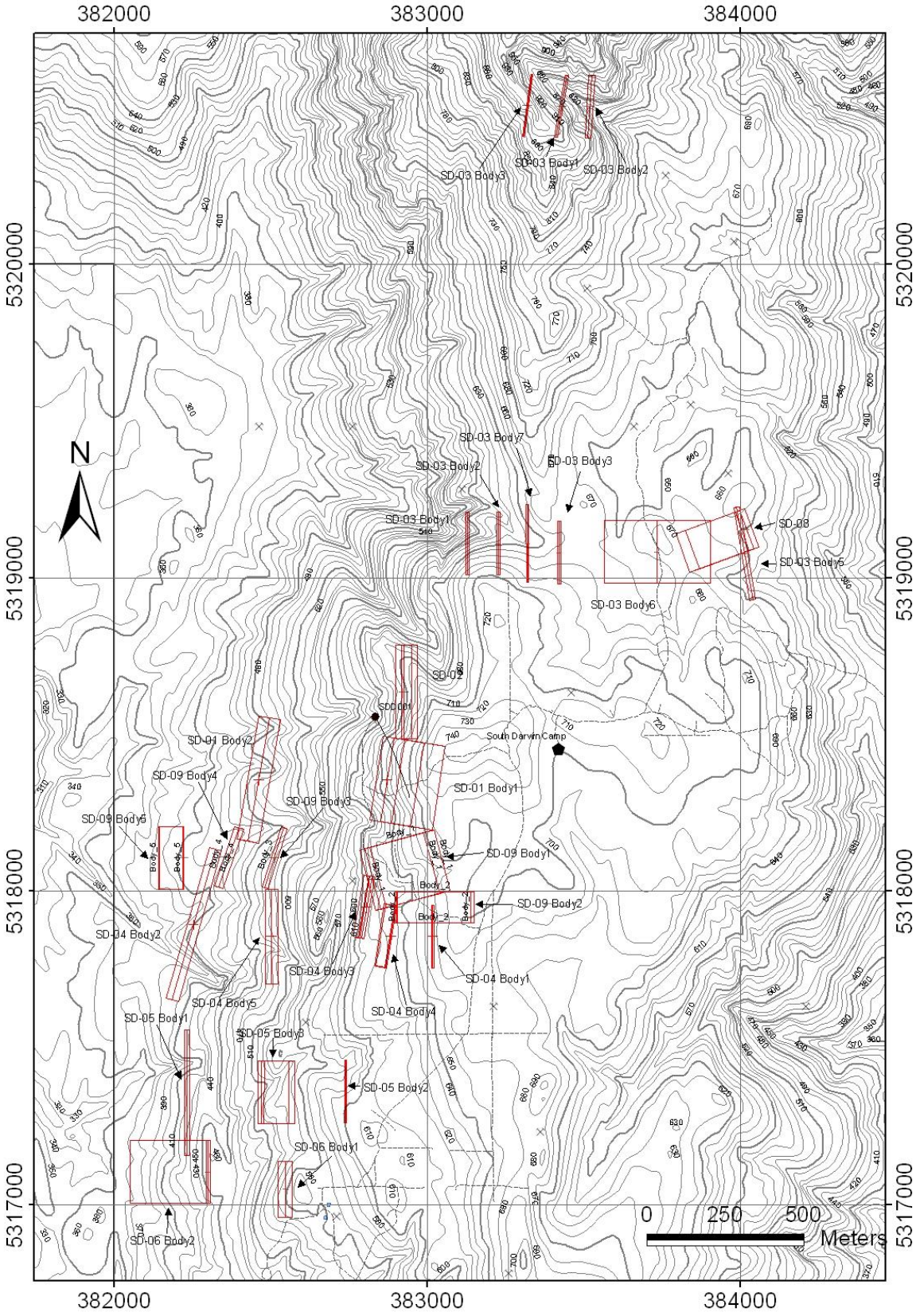

FIGURE 5: Magnetic Models within the SDP

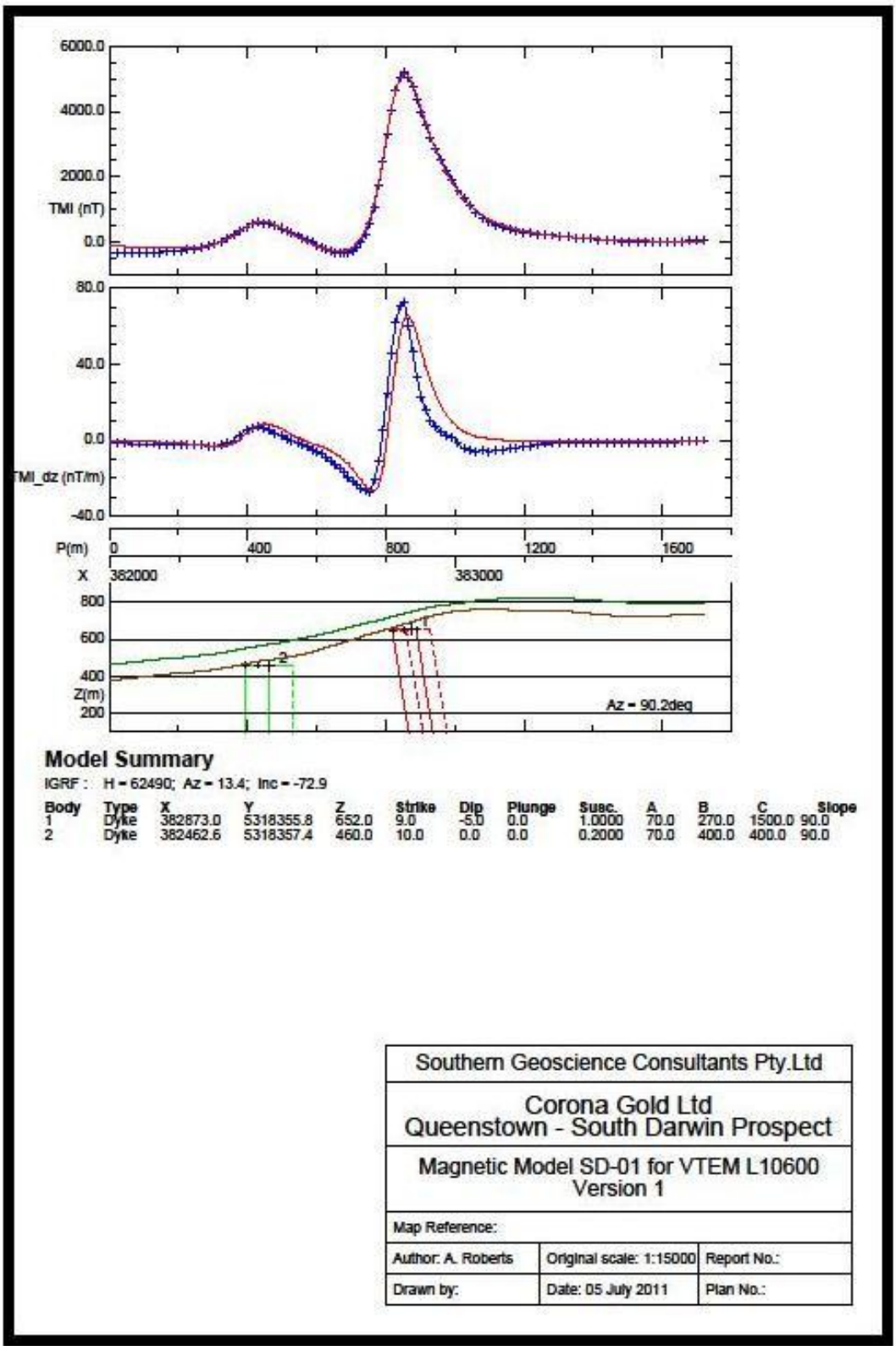

FIGURE 6: Prince Darwin Zone magnetic model profile

2.6 Results of petrological study

Pathfinder Exploration Pty Ltd was contracted to take a thin section of some mullock found near the Prince Darwin adit. Host rock was a quartz-plagioclase phyric rhyodacitic porphyry that was subjected to brittle tectonism with concomitant pyrite-magnetite-chalcopyrite stringers and quartz-chlorite alteration.

Professor Anthony J Crawford has been contracted to undertake some petrological studies on 11 samples from holes SDD001, 002, 003 tabulated below. Results/reports have yet to be received.

Table 1: Petro Samples

Hole ID	Sample Interval	Description	Corresponding sample ID	Comment
SDD001	123.82	Mineralised magnetite breccia	10140	W>1000ppm scheelite
SDD001	133.92	Mineralised magnetite breccia	10151	High REE, low P
SDD001	138.92	Mineralised magnetite breccia	10156	High REE, high P
SDD001	178.89	Mineralised magnetite breccia	10201	Max Cu
SDD001	196.98	Unit cross cutting breccia	10221	Microgranite?
SDD001	210.2	Mineralised magnetite breccia	10235	Mo >300ppm
SDD001	239.84	Tourmaline Breccia	10267	
SDD002	128.26	Kspar Rhyolite and matrix	10425	
SDD002	198.71	“least altered” rhyolite	10439	Ser-carb alteration
SDD003	32.19	Biotite-apatite-magnetite breccia	10473	
SDD003	130.98	Quartz eye porphyry cross cutting alteration	10514	

2.7 Results of drilling

Three holes were drilled into the Prince Darwin Zone between Nov 2011 and Jan 2012 for a total of 723.35m. A deviflex tool was used for downhole surveys as an Eastman camera is unusable in strongly magnetic ground. Core orientations were done with a spear and crayon and proved to be wholly unreliable.

Table 2: Drillhole Collar details

ID	Hole ID	GDA_Easting	GDA_Northing	RL	DIP	GDA_azi	Max depth
1	SDD001	382834.7	5318556.7	567.1	45.7	153	376
2	SDD002	382830.5	5318328.8	638	45	90	199.6
3	SDD003	382830.5	5318328.8	638	70	90	147.75

Once the core was retrieved it was oriented where possible, meter marked, MagSus was carried out on meter marks and written on the core. The core was the logged and sample interval and ID's written on the core and the core trays for the Field assistant to cut. Sampling was done by lithology and nominally every metre.

Hole SDD001 was collared in strongly brecciated felsic volcanics with visible native copper and copper oxides. The hole intersected a package of variably brecciated coherent felsic volcanics with breccia fill being predominantly magnetite, which varies from about 5% through to about 90% of the whole rock. Other minerals associated with the breccia are hematite, pyrite, chlorite silica, carbonate, biotite, chalcopyrite, ?tourmaline (very hard jet black mineral seen in breccia fill), ?apatite (white to colourless tabular crystal with hexagonal cross section associated with biotite alteration), biotite, scheelite, sericite, and fluorite. ~200 m of breccia was encountered in SDD001 before abruptly terminating at a massive tourmaline vein/breccia. Granite dykes are seen cross cutting mineralisation, but appear to be altered by small tourmaline veinlets. Hole SDD002 was collared in strongly brecciated felsic volcanics and has minor zones of more massive magnetite, very little copper mineralisation is visible within this core. SDD003 was also collared in strongly brecciated felsic volcanics and drilled down dip of SDD002. More copper mineralisation is visible in hole 3 perhaps indicating that mineralisation is increasing with depth. A significant quartz porphyry was intersected in hole 3, the porphyry cuts mineralisation, is only weakly altered, dips steeply to the east and appears to have two zones of more magnetite rich breccia on either side of it. Structural relationships from holes 2 and 3 almost certainly indicate a steep easterly dip to mineralisation at the Prince Darwin Zone. Holes 2 and 3 have significantly less mineralisation than hole 1, in terms of both grade and thickness. This is all discussed in more detail in Section 2.10 geology, mineralisation and alteration of the Prince Darwin Zone.

2.8 Results of geochemical analysis on drill core

Ag, Al, As, Au, Ba, Bi, Ca, Cd, Ce, Co, Cr, Cu, Fe, K, La, Li, Mg, Mn, Mo, Na, Ni, P, Pb, S, Sb, Sc, Sn, Sr, Te, Ti, Tl, V, W, Zn, and Zr were assayed for at Genalysis/Intertek Adelaide using a 4 acid digest and ICP-MS. Average lab turnaround time to date is 6 weeks.

Potential elements of economic interest are Cu (Max 1.14%), Au (Max 0.48 g/t), Ag (Max 5 g/t), REE (Max Ce 8284ppm), Fe (Max 57.4%), and possibly Mo (Max 308ppm) and W (Max 1232 ppm), although anomalous Mo and W results are scattered. All results above report from hole SDD001. Assays from holes SDD002 and SDD003 were significantly lower.

Anomalous copper in SDD001 (greater than 250ppm Cu, significantly above background for MRV) was intersected between 8-234m averaging 2674ppm Cu, 247-259m averaging 426ppm Cu and 270-273.1m averaging 1815 ppm Cu. Anomalous copper in SDD002 was intersected between 7-22m averaging 500ppm Cu. Anomalous copper in SDD003 was intersected between 3-4m averaging 549ppm Cu, 18-28m averaging 1208ppm Cu, 37-53m averaging 1192ppm Cu, this data is tabulated below.

Table 3: Anomalous copper intersections

Table Showing Geochemical Details of Anomalous Copper Intersections at the Prince Darwin Zone							
Hole ID	Anomalous copper Interval	Cu result over interval	Best intersection (no cut off)	Max Cu result	Results at 0.25%Cu cut off (only significant intersections for hole shown)	Results @ 0.5% Cu cut off (>5m)	Results @ 0.8% Cu cut off (>2m)
SDD001	8-234m	2674 ppm	124m @ 0.4%Cu, 0.11 g/t Au, 1.9 g/t Ag, 1347ppm Ce, 21%Fe, 2.2% S from 66m	1m @ 1.14% Cu, 0.28g/t Au, 3.2 g/t Ag, 918 ppm Ce, 46.5% Fe, 5.4% S, from 138m	*21m @ 0.55% Cu, 0.15 g/t Au, 2.24 g/t Ag, 512ppm Ce, 15% Fe, 1.3% S. from 66m *13.4m @ 0.44% Cu, 0.14 g/t Au, 1.84 g/t Ag, 863ppm Ce, 16.8 % Fe, 2.1 % Sfrom 92.6m *16m @ 0.42% Cu, 0.12 g/t Au, 2.52 g/t Ag, 1741 ppm Ce, 22.2% Fe 2.2% S from 109m *26m @ 0.44% Cu, 0.14 g/t Au, 1.78 g/t Ag, 1198 ppm Ce, 22.8 % Fe, 3.8% S from 134m *10m @ 0.41% Cu, 0.12 g/t Au, 2.25 g/t Ag, 1350 ppm Ce, 24.5 % Fe, 3.8% S from 167m	5.85m @ 0.78% Cu, 0.21 g/t Au, 3.1 g/t Ag, 673ppm Ce, 16% Fe, 1.6% S from 71m 6m @0.83% Cu, 0.32g/t Au, 3.1g/t Ag, 2050 ppm Ce, 38% Fe, 5.9% S From 136m.	2m @ 0.97% Cu, 0.24 g/t Au, 3.4 g/t Ag, 380 ppm Ce, 19.7% Fe, 1.7% S. From 72m. 2m @ 0.93% Cu, 0.29 g/t Au, 3.4 g/t Ag, 869 ppm Ce 30% Fe, 2.6% S from 93m. 2m @ 0.87% Cu, 0.24 g/t Au, 3.1 g/t Ag, 666 ppm Ce, 19% Fe, 2.9% From 113m. 4m@ 0.94 % Cu, 0.4 g/t Au, 3.2 g/t Ag, 1867 ppm Ce, 34 % Fe, 5.5% S.From 137m
SDD001	247-259m	426ppm	5m @ 579 ppm Cu		N/A	N/A	N/A
SDD001	270-273.1m	1815ppm	3.1m @ 1815 ppm Cu, 0.015 g/t Au, 0.62 g/t Ag, 11 ppm Ce, 6% Fe, 0.6% S		1.14m @ 0.31% Cu, 0.04 g/t Au, 1.7 g/t Ag, 0 Ce, 7% Fe from 272m	N/A	N/A
SDD002	7-22m	502ppm	1m @ 1280ppmCu, 0.02 g/t Au, 0.6 g/t Ag, 914 ppm Ce, 24% Fe, 9.8 % S		N/A	N/A	N/A
SDD003	3-4	549ppm	1m @ 549ppm Cu, 0 g/t Au, 0.6 g/t Ag, 242ppm Ce, 6.5% Fe, 0.2% S.		N/A	N/A	N/A
SDD003	18-28	1208ppm	1m @ 0.4% Cu, 0.13 g/t Au, 2.3 g/t Ag, 606ppm Ce, 22.4% Fe, 2.8% S		1m @ 0.4% Cu, 0.13 g/t Au, 2.3 g/t Ag, 606ppm Ce, 22.4% Fe, 2.8% S from 22m 0.25m @ 0.49% Cu, 0.14 g/t Au, 2.8 g/t Ag, 42ppm Ce, 10.4% Fe, 0.75% S. from 26m	N/A	N/A
SDD003	37-53	1192ppm	11 @ 0.16% Cu, 0.03 g/t Au, 1.15 g/t Ag, 143ppm Ce, 15% Fe, 1.1 %S		2m @ 0.27% Cu, 0.06 g/t Au, 0.65 g/t Ag, 218ppm Ce, 14%Fe 1.2 % S.	N/A	N/A
*as calculated by TWM Jan 2012							

In general it appears that Cu anomalism is not wholly dependant on Fe anomalism. This is inline with observations made on the core suggesting chalcopyrite mineralisation may be a later stage of mineralisation. This has yet to be corroborated by a petrologist, although a batch of samples is at present with Professor Anthony J Crawford in Hobart.

A table is presented below showing the correlations between elements. Broadly speaking Cu only correlates well with Au, however Sb is a good indicator element associated with the Cu mineralisation. There is some sort of correlation between Ti/Zr ratios and Cu-Au mineralisation as seen in hole SDD001, which suggests there may be a lithological association with Cu-Au mineralisation.

To date it can be tentatively shown that there is a broad association between Cu and Fe, but not a direct one. It appears that Ag is associated both with Cu and the Fe.

REE seems to be loosely associated with Fe, but there is no “one for one” association. There is however a more direct correlation between REE, P, Mg, and Sc.

K and Ba are closely associated which possibly indicates that barium is sitting within K-feldspar and both elements have a partial negative correlation with the Cu and Fe-O mineralisation.

Na seems partially lithology dependant but is strongly depleted in general through out the Cu/Fe-O mineralisation, although it is markedly stronger in the end of holes SDD002 and 003.

Mo has a very close correlation to Fe, whilst W doesn’t seem to associate with anything.

Zn doesn’t seem to associate with anything and is consistent throughout all holes. Pb seems to be enriched in hole SDD002, but is depleted in holes SDD001 and SDD003. The potential significance of this will be discussed in section 2.10.

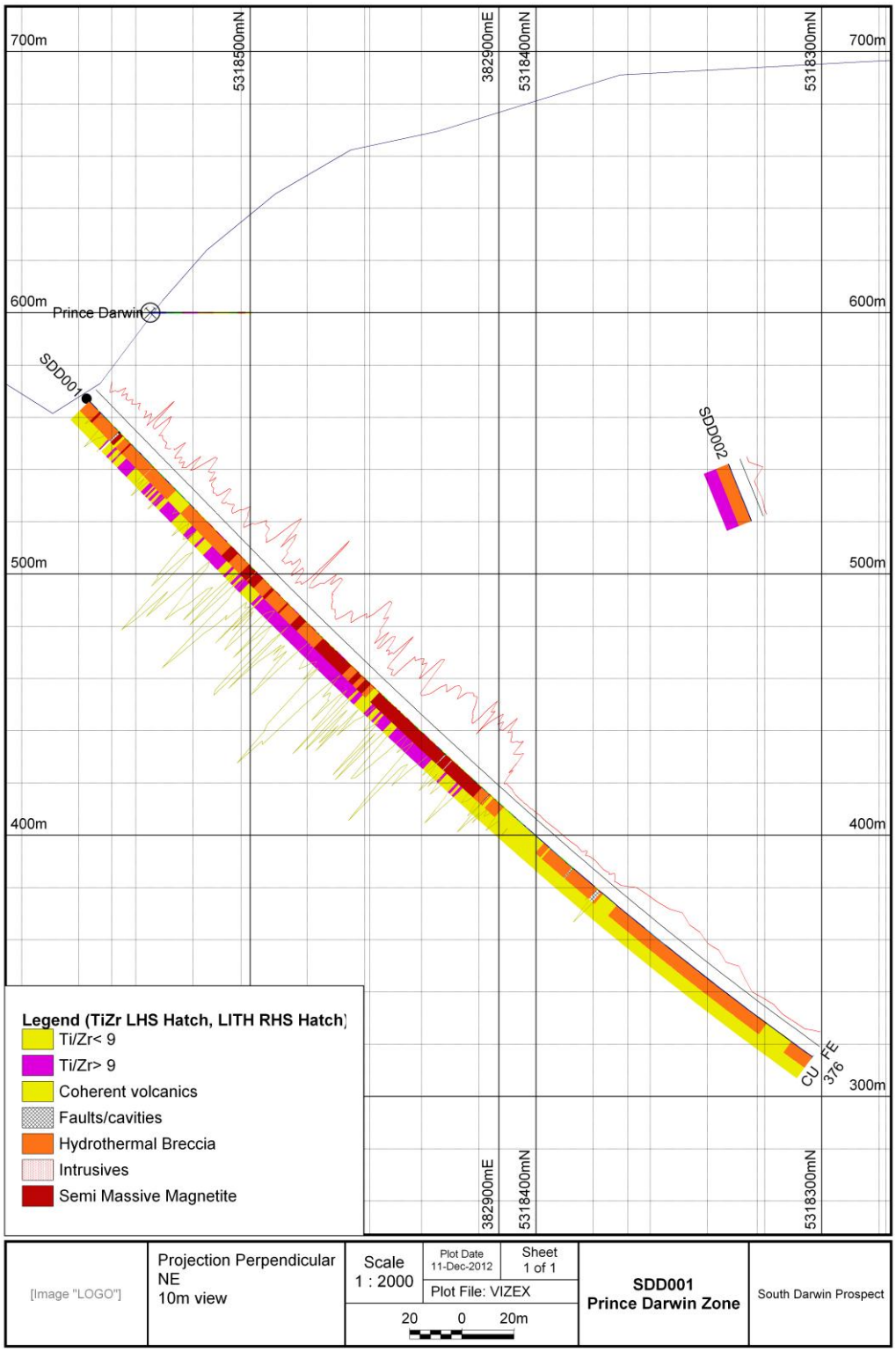

FIGURE 7: SDD001 cross section

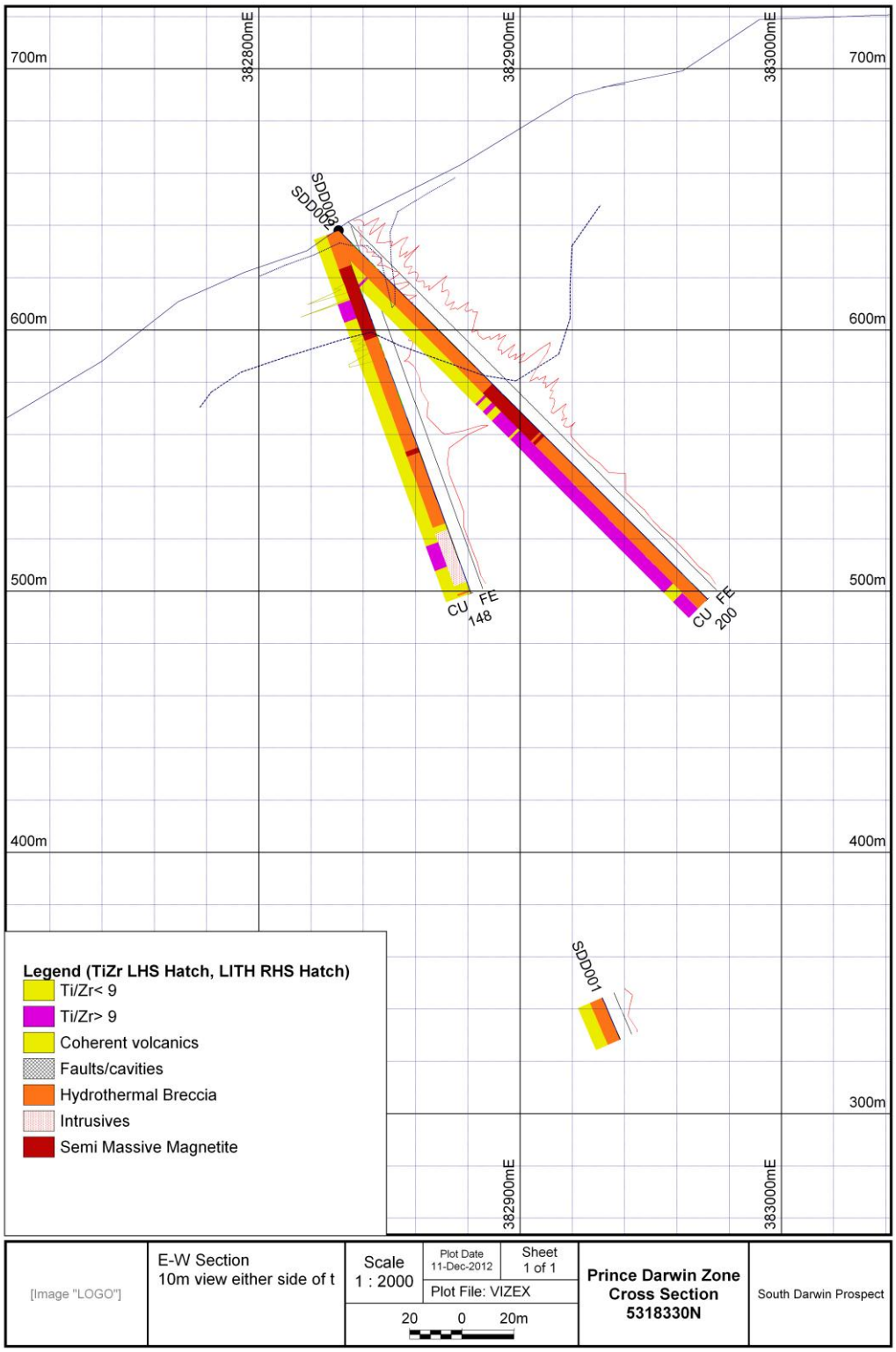

FIGURE 8: SDD002 and SDD003 cross section

Table 4: Element correlations

Table showing correlation between elements and Cu and Fe mineralization within the Prince Darwin Zone- Nov 2012																																		
	Ag	Al	As	Au	Ba	Bi	Ca	Cd	Ce	Co	Cr	Cu	Fe	K	La	Li	Mg	Mn	Mo	Na	Ni	P	Pb	S	Sb	Sc	Sn	Sr	Te	Ti	Tl	V	W	Zn
Probable positive correlation with Cu mineralisation				X								X																						
Partial positive correlation with Cu mineralisation	X		X										X					X			X			X	X		X							
Probable negative correlation with Cu Mineralisation																																		
Partial negative correlation with Cu mineralisation					X		X							X									X					X						
Probable positive correlation with FeO mineralisation													X						X													X		
Partial positive correlation with FeO mineralisation	X		X			X	X		X	X		X			X		X	X			X	X		X		X	X		X					
Probable negative correlation with FeO mineralisation		X			X									X														X		X				
Partial negative correlation with FeO mineralisation																																		
Probable positive correlation with pyrite										X								X						X										
Partial positive correlation with pyrite												X	X																					
Probable negative correlation with pyrite																																		
Partial negative correlation with pyrite																																		
Probable correlation with lithology					X									X						X														
Partial correlation with lithology																																		
No correlation								X			X					X															X		X	X

2.9 Results of SG work on drill core

Selected SG work was carried out from hole SDD001 as tabulated below.

Table 5: S.G. results

Hole	Sample No	From	To	Lithology	S.G.
SDD001	10010				3.15
SDD001	10051				3.11
SDD001	10074				3.09
SDD001	10094				3.16
SDD001	10153				3.17
SDD001	10187				3.17
SDD001	10211				3.16
SDD001	10270				2.54
SDD001	10281				2.77

2.10 Geology, mineralisation and alteration of the Prince Darwin Zone

At the time of writing there is not enough drilling information or test work received to make in-depth scientifically astute comments on the geology, mineralisation and alteration of the Prince Darwin Zone. Some broad observations can be made however, Cu-Au mineralisation seems to have some sort of relationship with rocks that have a Ti/Zr ratio greater than 10 (i.e. intermediate rocks), and that there is only a broad association between copper mineralisation and the magnetite-pyrite mineralisation.

Field mapping in the vicinity of the Prince Darwin Zone indicates the dominant rock type, and the probable “host” to the Prince Darwin Zone is a package of coherent (i.e. lavas or subvolcanic intrusions) felsic volcanics that roughly dip to the west/south-west down the western flank of the South Darwin Plateau, possibly shallowing from a 60 degree dip on top of the plateau to a 45 degree dip toward the bottom of the western flank. This westerly dipping sequence is intruded to the east by the Cambrian aged Darwin Granite. Dykes of this granite also seem to appear within the Prince Darwin Zone, cutting mineralisation. A quartz +/- feldspar porphyry also cuts both the westerly dipping volcanic package and mineralisation as seen in SDD002, and appears to dip steeply to the east. This porphyry is seen outcropping in the vicinity of the Prince Darwin Zone and has a Ti/Zr ratio of >10. A major NNE striking fault zone is seen at surface dominating topography, and in air photos, and appears to run through to the East Darwin Prospect (located to the north) for at least 10km. The fault separates a package of mineralised volcaniclastics and hard pink coherent volcanics at the East Darwin Prospect, and is recorded as dipping steeply to the east. The strike of the Darwin Granite appears to follow the strike of this fault, herein termed the “Darwin Fault”. The strike of the magnetic bodies within the South Darwin Prospect, which are the subject of Corona’s interest, also seem to follow the strike of the Darwin Fault.

At surface multiple sets of jointing, veining, shears, and fractures within the coherent felsic volcanic package present a complicated picture. However, some consistent features can be identified. A set of joints that are sub vertical and strike ~north-south are fairly consistent, as

are a set that dip moderately to the west. A NW striking, west dipping, series of tourmaline veins/breccias occur and are seen cutting the granite. Major topographical features follow this NW strike including a large steep gulley some 200m north of the Prince Darwin Zone. Massive magnetite veins are seen at surface following this same direction also cutting the granite, sometimes carrying pyrite. A foliation is often developed within the granite (which has often been sericitised) that follows this NW trend. A series of relatively flat, quartz+/-chlorite+/-carbonate are seen within the Prince Darwin adit, with veins reaching 15cm in width, seen offsetting pyrite stringers. These veins are often interpreted as being Devonian in age, and often carry some chalcopyrite (probably remobilised) and pyrite. A series of irregular monomineralic carbonate veins are seen in the core (not at surface normally due to weathering) the orientation of these veins has not been established but they are steep dipping as opposed to flat, sometimes appear to form an open stockwork or breccia, and they cut and offset the flat lying quartz vein set. Fluorite is seen within these veins at a certain point within the magnetite-pyrite breccia body, in holes SDD001 and SDD002, and the absence of this feature in SDD003 may be because the hole wasn't drilled deep enough. Pyrite stringers and magnetite stringers within the Prince Darwin adit are seen dipping steeply east.

Mineralisation at the Prince Darwin Zone is hosted within a large breccia, the dimensions, nature and provenance of which are not yet fully understood. The magnetite alteration/mineralisation appears to be concomitant with the formation of the breccia. The magnetite phase is accompanied by the bulk of the pyrite alteration seen within the Prince Darwin Zone. Magnetic modelling indicates the magnetite body is dipping steeply to the east; this can be corroborated with field evidence. Copper-gold mineralisation appears to be later than the magnetite-pyrite phase, with chalcopyrite often seen rimming pyrite. In hole SDD001 the copper mineralisation appears to be sitting on the western side of the magnetite body not particularly associated with the higher grades of Fe. Cu grades are fairly consistent at about 0.4%, with a consistent Cu:Au ratio of 3:1, identical to Garfield and Prince Lyell. It is not known whether the copper-gold mineralisation will follow the morphology of the magnetite mineralisation.

Alteration within the Prince Darwin Zone, as seen in core and as reported from petrology, consists of a number of minerals but not enough work has been done to be able to correlate these phases and interpret their significance. Silica, sericite, chlorite, pyrite, magnetite, specular hematite, tourmaline, calcite, ?manganiferous carbonate, ?apatite (pending confirmation from petrologist), biotite are all present. If apatite is confirmed as being present a comparison may be drawn to Garfield and Prince Lyell, as apatite is an important alteration mineral there. Magnetite-apatite and fluorite are all present at both Garfield and Prince Lyell. From observing the core none of the above mentioned minerals appear to have any direct relationship with copper-gold mineralisation (this needs to be corroborated by petrology), although a broad relationship does exists.