



**BASS METALS LTD**

**Mt Charter Au-Ag-(Zn) Deposit**  
**Project summary - September 2006**

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## **EXECUTIVE SUMMARY**

The Mt Charter alteration zone and shallow Au-Ag mineralization was drilled by Aberfoyle Exploration while exploring for deep Hellyer/Que River style massive sulfide mineralization. Two drilling programs have been completed by Bass Metals Ltd to better define the Mt Charter Au-Ag-(Zn) mineralization and an approximate 50x50m drill spacing now exists.

Mineralization is closely associated with barite±quartz veins which are found to be sub-vertical and NNW striking. The veins are hosted within the 'Mixed Sequence' of felsic volcanic rocks including dacitic lava and volcanoclastic sediments. The vein package has an enveloping surface which is steeply west-dipping to subvertical and strikes NNE.

The barite-rich veins also host sphalerite and galena mineralization. The single vein set therefore hosts Au, Ag, Zn, and Ba mineralization at Mt Charter. Pre-existing sericite-pyrite VHMS-style alteration of the dacitic rocks does not host mineralization.

Continuity of the vein package and mineralization at Mt Charter has been established through the more recent drill-program and it is appropriate for a resource estimate to be calculated on the mineralization.

<b><u>CONTENTS</u></b>	<b><u>Page</u></b>
<b>Executive Summary</b>	<b>1</b>
<b>1. Introduction</b>	<b>3</b>
1.1 Geological Overview	3
1.2 Exploration History of the Hellyer-Mt Charter region	4
<b>2. Previous Work in the Mt Charter area</b>	<b>9</b>
<b>3. Stage 1 and 2 Bass Metals Ltd Drill Programs</b>	<b>9</b>
3.1 Drilling Summary	9
3.2 Geological Interpretation	10
3.3 Sample collection, data collection, and sample preparation	17
3.4 QAQC	19
3.4.1 Standards	19
3.4.2 Duplicates	20
3.4.3 Pulp reassays	22
3.4.4 Blanks	24
<b>4. CONCLUSIONS</b>	<b>26</b>
 <b><u>LIST OF FIGURES</u></b>	
Figure 1. Schematic stratigraphic long-section of the Mt Charter - Hellyer area	3
Figure 2. Geological plan of the Mt Charter - Hellyer area	6
Figure 3. Photographs of representative vein types at Mt Charter	11
Figure 4. Stereographic projections of core orientation data for the main vein types and foliation.	12
Figure 5. Core photos of the Mt Charter ore zone and bounding higher-strain zone	14
Figure 6. Scatterplots of assay data illustrating inter-relationship of Au, Ag, Zn, and Ba	15
Figure 7. Schematic cross-section on cross section 4690mN	16
Figure 8. Geological plan of the Mt Charter area	17
Figure 9. Photographs of the key process steps and facilities for sample and data collection	19
Figure 10. Data for standards (certified reference materials) used in the Mt Charter Project and assayed by BRL.	19
Figure 11. Duplicate data for Mt Charter	21
Figure 12. Mean Percentage Difference graphs for Mt Charter duplicate data	22
Figure 13. Pulp Reassay data for Mt Charter	23
Figure 14. Mean Percentage Difference graph comparing Ammtec-BRL vs Genalysis for Au determination	24
Figure 15. Analyses of the blank material used during the Mt Charter drill program	25

## 1. INTRODUCTION

The Mt Charter area has been a focus of exploration since the 1970's due to the extensive Silica-Sericite-Pyrite-(Barite) alteration exposed at surface. This alteration is similar to the footwall alteration associated with the nearby Hellyer and Que River VHMS Zn-Pb-Ag-Au deposits.

Early work at Mt Charter aimed at testing the lower contact of the altered Dacite to test the equivalent of the Hellyer/Que River orebody stratigraphic position. In doing so, significant Au-Ag-Ba mineralization was intersected from surface but not fully evaluated.

Bass Metals Ltd has begun to evaluate the Au-Ag-Ba-(Zn) mineralization through two diamond-drill programs. Results to date suggest that the mineralization is continuous and of moderate grade and sufficient data has been collected to enable a resource calculation. This report aims to give some background to the Mt Charter Project to assist in the resource calculation process to be undertaken by Snowden Mining Consultants.

### 1.1 Geological Overview

The base and precious metal deposits of the Hellyer-Que River-Mt Charter area lie above the main Central Volcanic Complex of the Mt Read Volcanics as it passes into a sequence of volcanics and sediments, which near Hellyer and Que River is called the Mt Charter Group. Within the Mt Charter Group is a volcanic package called the Que Hellyer Volcanics (QHV) comprising a group of andesitic to dacitic volcanics and sediments. Que River, Hellyer and Mt Charter are hosted by the highly variable 'Mixed Sequence', sandwiched between basaltic to andesitic volcanics. Volcanic-related and marine sediments cover the volcanics.

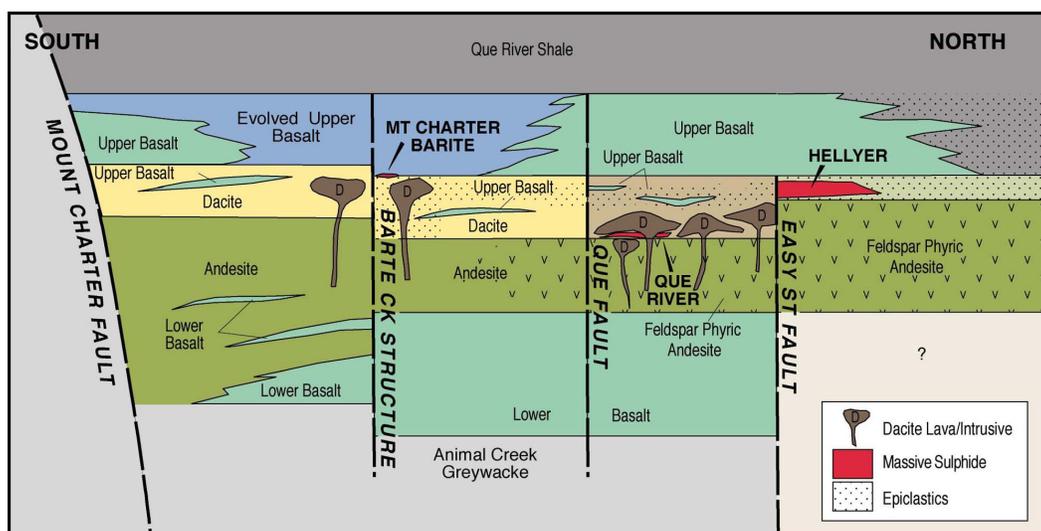


Figure 1. Schematic stratigraphic long-section of the Mt Charter - Hellyer area

The QHV is up to 1000m thick near Que and Hellyer, but wedges out to less than 50m to the northwest of Hellyer. Beneath the QHV are the Animal Creek Greywacke and Black Harry Beds, a sequence of sediments defining the base of the Mt Charter Group.

The Upper or Hellyer Basalt consisting of massive to pillowed amygdaloidal basalt lava and volcanoclastic.

- The Mixed Sequence host to the Que River, Hellyer and Mt Charter systems is comprised of epiclastics, dacitic lavas and breccias.
- The Feldspar Phyrlic Andesite, a porphyritic andesite lava, which in turn is underlain by the Lower Basalt, a sequence of basaltic pillow lavas and volcanoclastics, form the immediate footwall at Que River and Hellyer.

Overlying the QHV is the Que River Shale, which is in turn overlain by felsic volcanoclastics, greywacke and shale of the Southwell subgroup. The Southwell subgroup is overlain by the Mt Cripps subgroup (a correlate of the Tyndall beds at the Henty mine) which is a sequence of volcanoclastics, siltstones and conglomerates only outcropping along the eastern boundary of the Hellyer area tenements.

## **1.2 Exploration History of the Hellyer - Mt Charter region**

The earliest known exploration in the Hellyer area was prospecting carried out around 1920 leading to the discovery of alluvial gold and boulders containing zinc and lead sulphides in a creek draining the area of Que River S lens.

Modern exploration of the Que Hellyer Volcanics (QHV) was carried out almost exclusively by Aberfoyle Resources Ltd (Aberfoyle). Only deep QHV beneath Southwell Subgroup cover, west of the Murchison Highway, have been explored by other companies (CSR, Placer, BHP, Pasminco).

Aberfoyle's involvement began in 1970 with the granting of EL 2/70 and in 1971 the prospectivity of "acid volcanic belts" in the west of the exploration licence was recognised. At this time a regional mapping and stream sediment sampling programme covering west of the Mackintosh River was carried out. In early 1972 a combined airborne electromagnetic (EM) and magnetic survey was flown and one of the six anomalies recommended for follow up was coincident with anomalous stream sediment geochemistry. A follow up ground EM and soil sampling survey in 1973 discovered the outcropping S Lens mineralisation at Que River. The first diamond drill hole (QR1) in April 1974 intersected 11m of massive sulphide mineralisation and was followed by 25,000m of ore resource delineation drilling, which defined the main PQ lens and the P North, QR32 and S lenses. The Que River reserve was defined as containing 3.3Mt @ 13.6% Zn, 7.4% Pb, 0.7% Cu, 3.3 g/t Au and 195 g/t Ag.

The Que River lenses were mined mainly underground, using a shaft, with small opencuts, from February 1981 until 1990, with 2.46Mt of material trucked to and processed at Rosebery. The S lens was the final orebody

mined, with its relatively lower grade Pb/Zn material blended with and processed at Hellyer.

Following the discovery at Que River, exploration was heavily focused on testing along strike from the known mineralisation. This led to step out diamond drill testing, on approximately 100m centres, for about 1.5km north and 1km south of the orebody. These holes were relatively shallow (< 500m) and resulted in definition of the linear (footwall) alteration zone which hosts the Que River orebodies and extends north to eventually underlie the Hellyer orebody.

The period from the mid 1970's to the discovery of Hellyer in 1983 was one in which the main surface geological, geochemical and geophysical programmes were carried out over the QHV. The prospective stratigraphy was mapped at 1:2 500 scale and covered with -80# C-horizon soil sampling on 50 or 100m spaced lines.

Geophysical programmes during this period were heavily influenced by the fact that surface EM testing at Que River failed to detect the main PQ lens, which came close to surface at the southern end of the orebody. This ultimately would be shown to be due to lack of electrical connectivity owing to the disrupted nature of the southern end of the orebody. At the time, this feature was taken to indicate that surface EM was not the best geophysical technique for application to the surrounding volcanics.

Induced Polarisation (IP) however did provide a strong anomalous response at Que River and IP was chosen as a drill targeting tool and widely applied throughout the QHV. However, IP was responding to the strongly pyritic footwall alteration zone enclosing the Que River orebodies rather than the ore itself. During this period, many drill holes were targeted at coincident soil geochemical and IP anomalies, only to intersect geochemically anomalous alteration.

Failure of IP to discover new deposits led to trialling of a new fixed loop time domain EM system - UTEM, at Que River mine in 1983. This time UTEM detected PQ Lens and it was therefore decided to completely cover all prospective volcanics with this system. Only one conductor as strong as Que River was detected; on the most northern line of the survey. The survey was extended to the north and indicated a deep moderately conductive body over a strike length of 400m, open to the north, where it plunged under conductive Que River Shale. The UTEM anomaly was coincident with weakly anomalous soil geochemistry, barite veining and fuchsite alteration.

In August 1983 the first hole intersected 24m of massive sulphide in the Hellyer orebody. By November 1984 approximately 22,000m of delineation drilling had been completed and in June 1986 a 1.3km adit was driven to intersect the orebody. The Hellyer reserve was defined as 16.9Mt @ 13.8% Zn, 7.2% Pb, 0.4% Cu, 167 g/t Ag and 2.5 g/t Au.

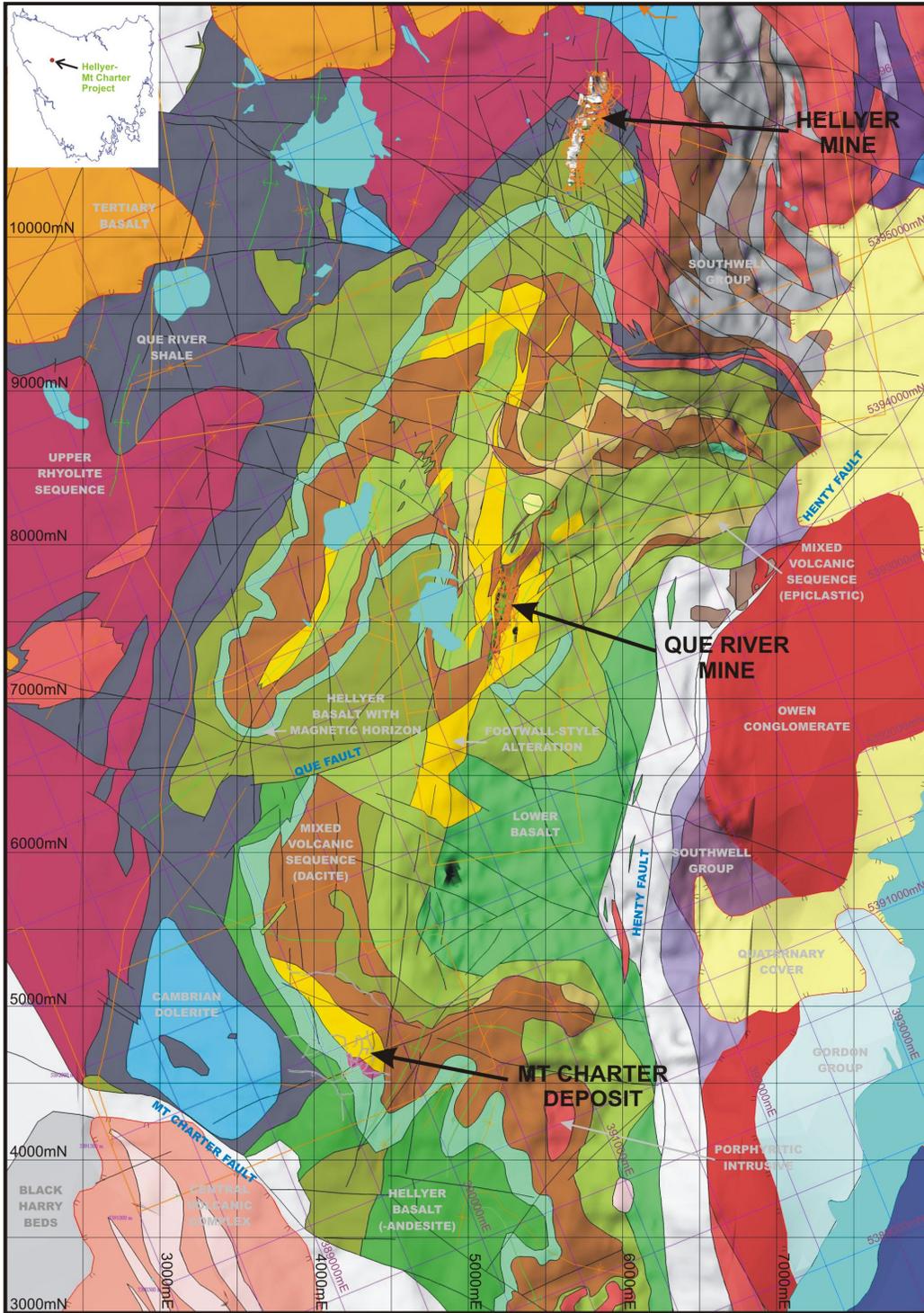


Figure 2. Geological plan of the Mt Charter - Hellyer area

Production commenced in December 1986, using underground methods, with production peaking at around 1.3mt pa until the orebody was mined out in June 2000. Material was processed at the newly constructed 1.3Mtpa Hellyer mill, purpose built to accommodate the fine grinding necessary to liberate the sulphides via flotation.

Knowledge gained from the Hellyer drillout showed that a clear relationship exists between the orebody and the stratigraphic contact between footwall andesite and hangingwall basalt. This horizon, the Mixed Sequence, became a key target throughout the QHV. Comparison with Que River indicated the similar stratigraphic position of the Que River orebodies within a thicker Mixed Sequence. The Mt Charter mineralization is also hosted by this unit.

From 1984 to around 1992 exploration focussed on drill testing three styles of target:

1. continued drill testing of surface EM anomalies
2. testing of targets at the Hellyer ore position at various prospective structural locations and in some cases a slightly deeper Que River ore position and
3. testing of the Hellyer ore position, on top of the Hellyer footwall alteration zone, down plunge, north of the Hellyer orebody.

Generally, targets of the first and second categories intersected barren ore positions with no significant alteration. All holes were surveyed with downhole EM. North of Hellyer, a barren ore position underlain by strong footwall alteration and overlain by thick strongly fuchsite-carbonate altered basalt was followed north to 11400N in step-outs of up to 200m.

By 1992 it became clear that surface EM had effectively sterilised the QHV down to 200m for a Que River sized target and 400m for a Hellyer sized target. Exceptions to this were unusually oriented targets (eg steeply plunging) that could still remain undetected by the largely out-of-loop surveys that had been conducted. Any future discovery would be deep and a new method of target generation was required.

In 1992 Etheridge and Henley (now SRK) were approached and a regional structural model was devised to generate conceptual, deep, structural/stratigraphic targets. The aim was to integrate geological, geophysical and geochemical data to develop a three-dimensional structural model of the entire QHV basin and to delineate the synvolcanic fault network within the basin.

The structural study proposed a syndepositional fault network of linked NE trending normal faults and NW trending transfer faults. In addition, important NNE trending structures such as the Que - Hellyer structure (reflected by the Que River to Hellyer footwall alteration zone) were recognised and seen as reactivated basement faults, which had undergone oblique extension.

Localised dilation and subsidence, at or near structural intersections, were thought to allow focussed hydrothermal fluid flow, which could lead to orebody formation. Prospective stratigraphy, adjacent to these structures, below surface EM range, was seen as a valid deep drill target. A total of 26 target areas were defined and these were prioritised for drilling using geophysical, alteration, geochemistry and stratigraphic indicators.

During the period 1992 to 1994 supporting data was gathered, such as close spaced aeromagnetics and additional gravity data. The structural / stratigraphic targets began to be tested from 1993 as the structural model evolved and targets became evident.

At this time reinterpretation of Mount Read Volcanics raised the possibility that the Rosebery orebody may be younger than Hellyer (rather than older as previously thought) and hosted by correlates of the Southwell Subgroup. Prospectivity of felsic volcanic sequences north of Hellyer was increased and these rocks were surveyed with surface EM. Only one anomaly worthy of follow up was located and drill tested. It was found to be due to Tertiary sediment.

The main period of drill testing from 1995 to 1996 identified structural / stratigraphic targets, with nine of the highest ranked areas being tested by at least one hole. Some targets provided sufficient encouragement for further drilling which was also carried out during this period. Of note was the “rediscovery” of the Hellyer alteration system down-plunge from the orebody on section 12000N, where from earlier drilling it was thought to have died out. Although deep, the system remains open to the north.

Partial digest or Mobile Metal Ion (MMI) geochemistry was used in the Hellyer area in 1996. In-house research showed that partial digest soil geochemistry detected an anomalous response 300m above the Hellyer orebody. Given this potential it was decided to survey approximately 10km along strike north from Hellyer mine to the exploration licence boundary. The aim of the survey was to detect a body of massive sulphide buried beneath barren cover rocks. The target body could be hosted by deep QHV or overlying felsic sequences.

The survey only detected one coherent anomaly, which coincided with the highly ranked Mayday structural target, 4km north of Hellyer which was drilltested in 1997 with a 1500m vertical diamond hole but it failed to intersect the QHV or a source for the anomalous soil geochemistry.

Western Metals took ownership in late 1998 and drilled four holes prior to the completion of mining at Hellyer. The Tasmanian Government (MRT), together with AMIRA completed a regional seismic traverse in 1996, with data available in 1998, across the Hellyer area to improve regional understanding. This was complemented in 2002-03 when the MRT flew close spaced airborne magnetics, radiometrics and EM across the entire Mt Read Volcanics belt.

## **2. Previous work in the Mt Charter area.**

Six historic holes (MAC and MC prefix) intersect the Mt Charter Au-Ag-(Zn) mineralization. These holes are drilled on varying orientations and are generally deeper than recent programs so as to test the Hellyer-position contact at depth for base metal massive sulfide mineralization. The holes were systematically assayed for the same suite of metals as the Bass Metals Ltd recent programs however, as the focus was not on gold at the time, a core-grind method was employed over intervals ranging from 4 to 10 metres to obtain indicative geochemical data only. Bass Metals Ltd have cut and sampled sections of these earlier holes to obtain valid and representative geochemical information. The database includes a field indicating whether the sample represents a core-grind or half-core sample.

Some of the intercepts from the early phases of drilling at Mt Charter have included:

- 56.4m @ 1.6g/t Au, 38g/t Ag
- 64m @ 0.8g/t Au, 7g/t Ag
- 22m @ 1.0g/t Au, 46g/t Ag

## **3. STAGE 1 AND 2 BASS METALS LTD DRILL PROGRAMS**

### **3.1 Drilling Summary**

The Bass Metals drill programs occurred in November-December 2005 and April-July 2006.

The 2005 program aimed to test the near surface Au-Ag mineralization and 5 diamond-drill-holes were completed on sections ~4640mN and 4740mN on the local grid (Grid Nth is 10 degrees east of Mag Nth and 22 degrees east of AMG Nth). This program was successful and intersected wide zones of mineralization spatially associated with zones of intense barite-quartz veining. The barite veins are generally in the order of 2cm to breccia zones of ~3m and also carry sphalerite and galena.

Mineralization was interpreted to be related to the upper stratigraphic contact of the Dacite and a sub-vertical feeder zone was hypothesized. Some of the intercepts obtained included:

- 113m @ 1.4g/t Au, 49g/t Ag
- 49.4m @ 1.4g/t Au, 22g/t Ag, and 2.6% Zn

Higher Zn grades in the Au-Ag system were due to increased amounts of sphalerite in the host barite-rich vein set.

These intercepts justified a second phase of drilling to extend the area of known mineralization as well as to establish continuity of the system through drilling of infill sections. The 2006 program consisted of 12 diamond holes

and tested the mineralization over 300m of strike and down to approximately 150m below surface. Sections drilled were as follows:

- 4590mN
- 4640mN
- 4690mN
- 4740mN
- 4790mN
- 4840mN

Consistent with the initial program, Au-Ag-(Zn) mineralization was observed to be associated with barite-dominant veins. The enveloping surface of the vein package is sub-vertical to steeply west-dipping and strikes NNE with respect to the local mine-grid. The zone of veining was found to be continuous over approximately 225m of strike and 200m down-dip also. Grade variation in intersections was directly proportional to the frequency of barite+sphalerite+galena veins.

Some of the intersections obtained during this program included:

- 51m @ 1.1g/t Au, 32.9g/t Ag, and 1.25% Zn
- 92m @ 1.3g/t Au, 32.8g/t Ag
- 51.7m @ 1.1g/t Au, 22g/t Ag
- 78m @ 1.7g/t Au, 70g/t Ag

### **3.2 Geological Interpretation**

Core orientation data was obtained from recent drilling to add to the geological observations which were being compiled. The key feature to orient was the barite veins with associated sulfide to determine whether the drilling orientation chosen was optimum for sampling of the mineralized veins, and to assess whether the interpreted sub-vertical/steep westerly dip and NNE strike correlated with the vein-scale observations.

A classification of veins based on mineralogy and cross-cutting relationships. The main vein classes in order of relative timing were:

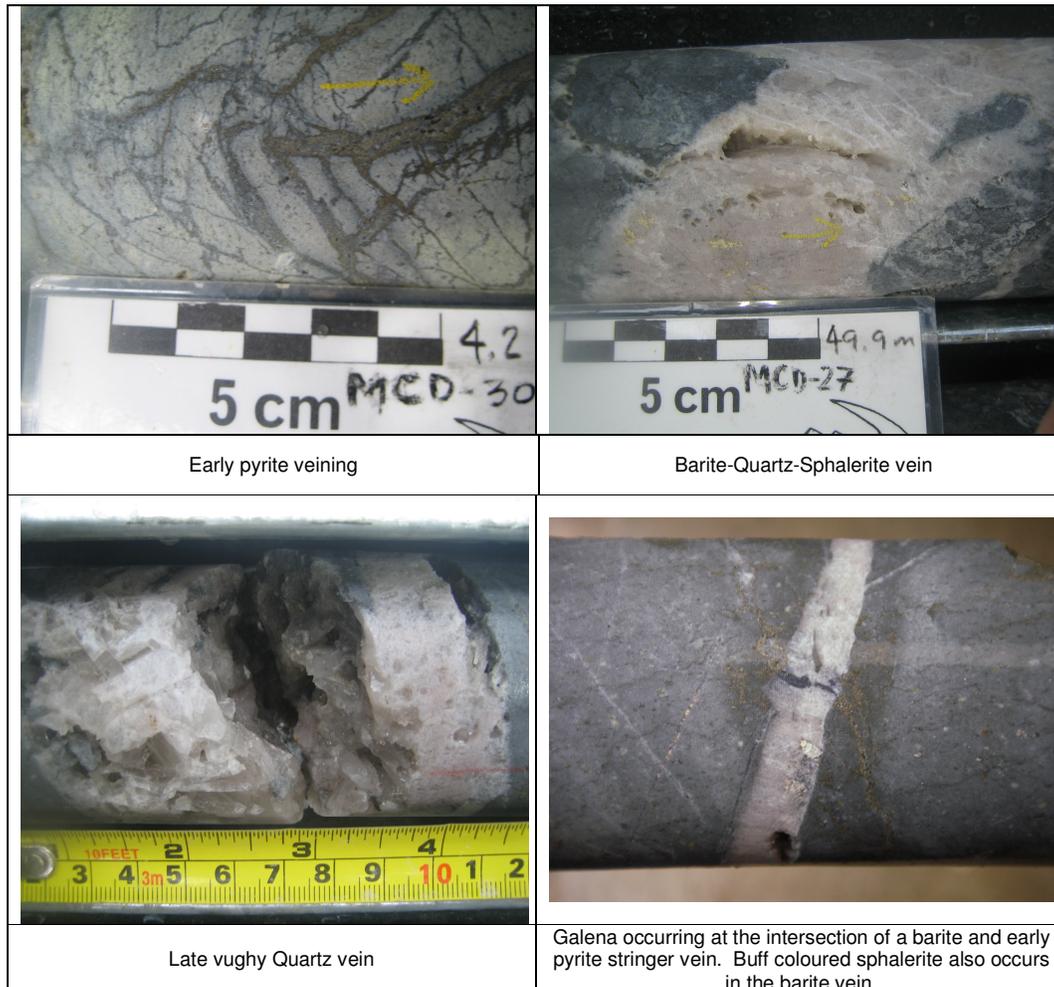
- early pyritic stringer veins (A)
- mineralized barite+sulfide veins (B)
- late cross-cutting quartz-dominant veins (C)

Foliation was also recorded where observed.

From the stereographic projections below, it is apparent that early pyritic veins are generally flat-lying. Note that this vein type is most likely associated with Cambrian VHMS fluid systems and is characteristic of the footwall alteration at Que River and Hellyer.

Barite+sphalerite+galena veins cross cut the earlier pyritic stringers and several observations have been made where sphalerite and galena occurs at the intersection of barite-dominant and early pyrite veins. This has implications for the extensional exploration of the Mt Charter deposit as it may

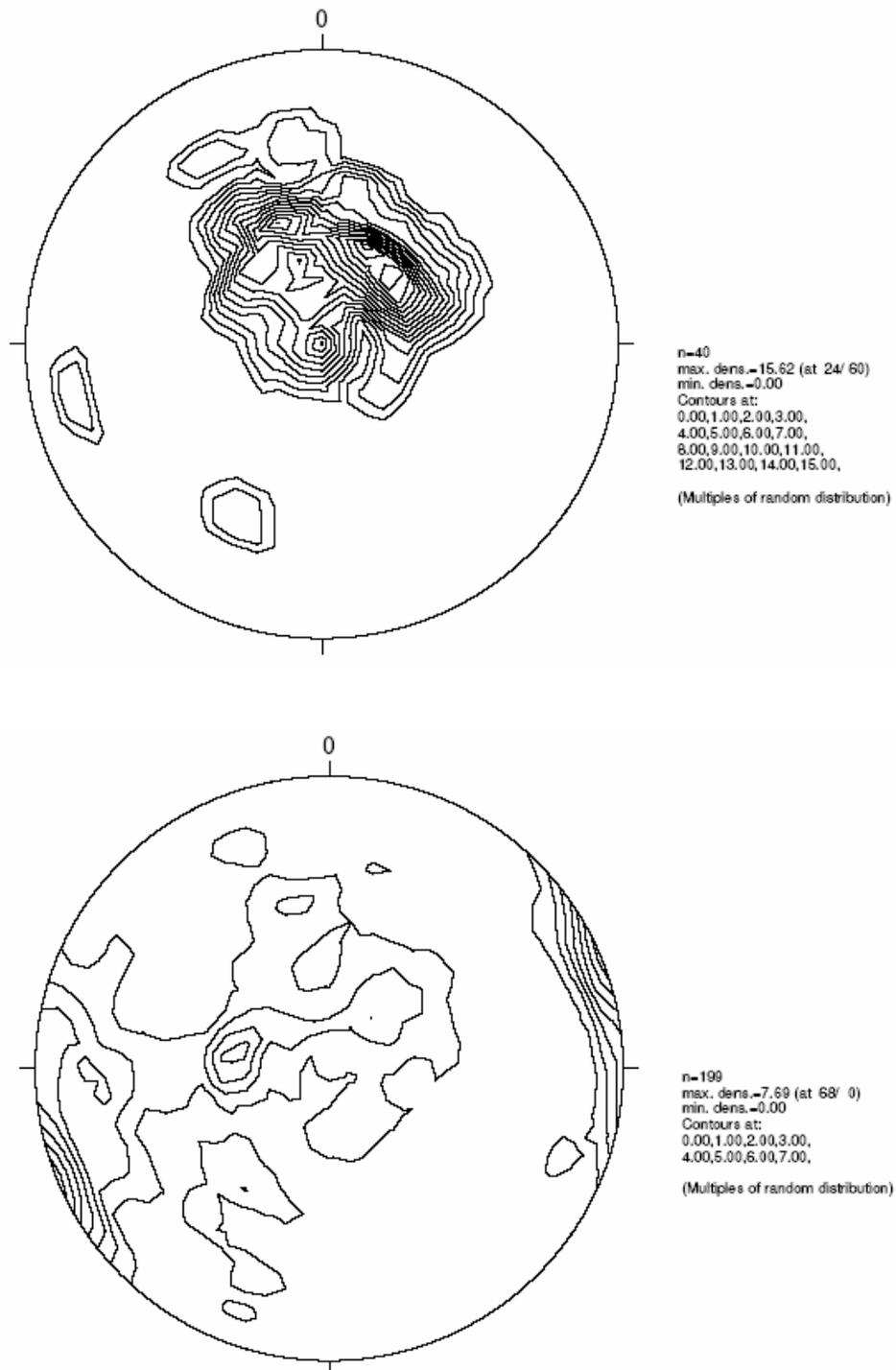
mean that the early pyritic alteration is implicit in base metal and gold deposition. Further drilling and detailed metallurgical work will shed more light on this issue. The stereographic projection illustrates a dominant sub-vertical NNW trend to these veins with the vein package constrained by a NNE trend enveloping surface as indicated by drilling results. The presence of some flat-lying veins suggests dilation of early pyritic veins and this has been observed in core.



**Figure 3. Photographs of representative vein types at Mt Charter**

Type C veins comprise flat-lying extensional quartz veins which are often fibrous and/or vughy. The veins are interpreted to have occurred during Devonian tectonism and are the youngest veins recognized. Coarse galena and sphalerite has been observed in some of these veins and this is interpreted as remobilization of the pre-existing mineralization.

Two trends are apparent in the foliation measurements which correlate with the abovementioned vein orientations. There is a strong correlation between the mineralized barite+sulfide veins and foliation orientations as seen in the projections below. The interpretation of this relationship is of dilation of cleavage planes and pre-existing pyritic stringer veins during barite-vein



**Figure 4. Stereographic projections of core orientation data for the main vein types and foliation. (All plots are of contoured poles, equal area projection, and lower hemisphere)**

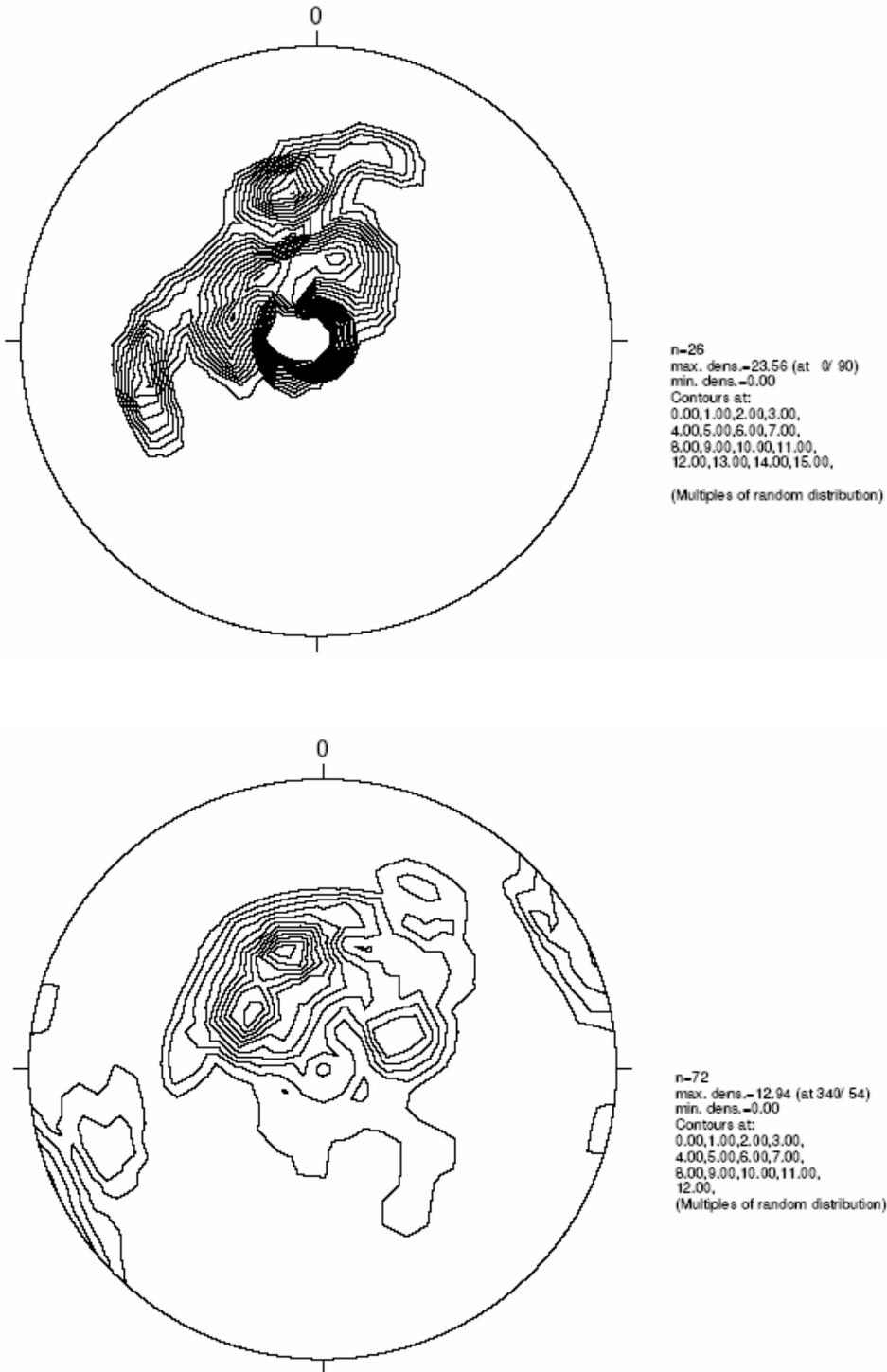


Figure 4. continued.

emplacement. Some examples of this have been recognized in the drill-core. This interpretation requires the Mt Charter Au-Ag-(Zn) emplacement to occur syn- to post- deformation thereby temporally distinguishing this mineralization from the VHMS mineralization dominating in the region. It is possible that this mineralization represents remobilization from a Hellyer-style ore position at depth. Ongoing work is underway to test this hypothesis.

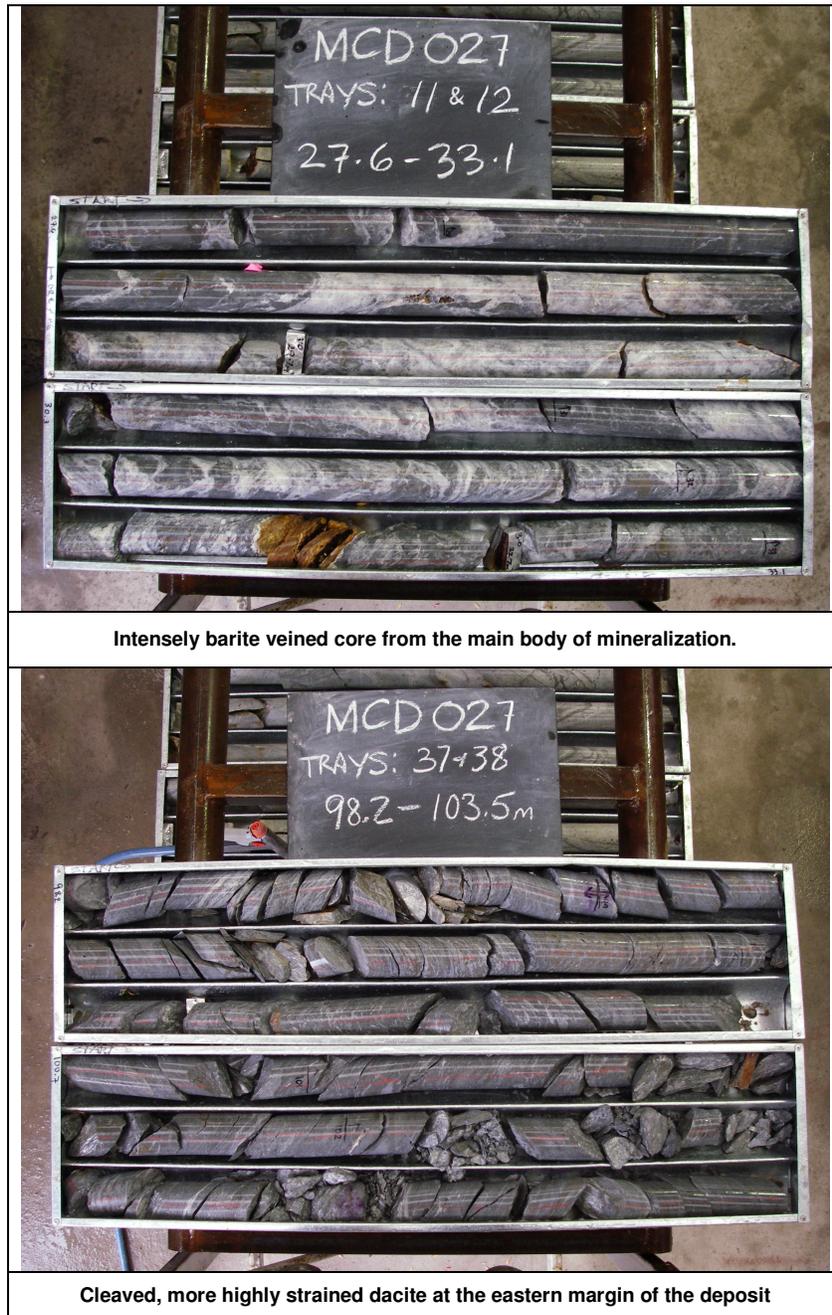
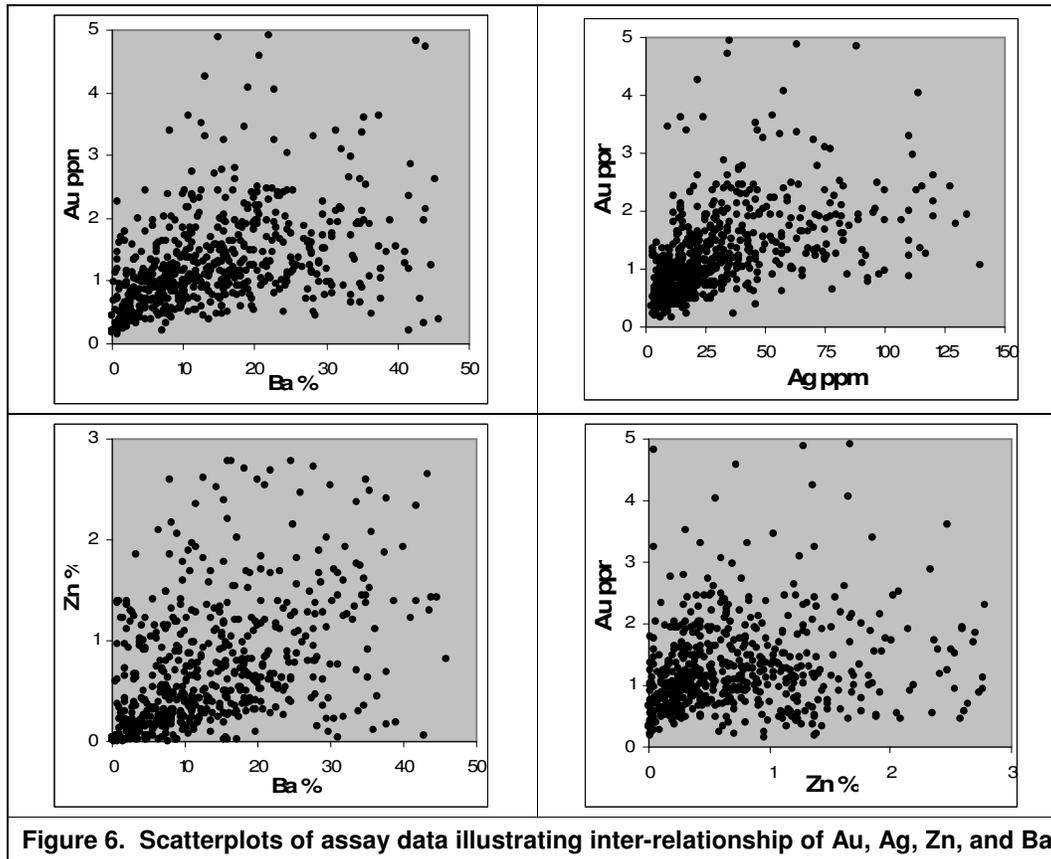


Figure 5. Core photos of the Mt Charter ore zone and bounding higher-strain zone



**Figure 6. Scatterplots of assay data illustrating inter-relationship of Au, Ag, Zn, and Ba**

Positive correlation between each of Au, Ag, Zn, and Ba supports the interpretation that the one vein-set is host to each of the metals of interest in this body of mineralization as opposed to overprinting mineralizing episodes. The same can be said for Cu and Pb though these occur at lesser concentrations.

The eastern boundary of the deposit is recognized by a higher strain zone observed as more strongly foliated core. This zone is interpreted to be a manifestation of the regional NNE trending structure immediately to the east of the Mt Charter. Upon entry into this higher strain zone, vein density and therefore Au-Ag-(Zn) mineralization decreases markedly. MCD034 was drilled through this zone and passed into similar sericite-pyrite altered dacite but without the presence of barite veins. This suggests that

The following simplified cross-section indicates the interpreted steeply west-dipping enveloping surface to the Au-Ag-(Zn) mineralization and a general reduction in grade with depth. This observation implies that the upper contact of the dacite has some genetic controls on the localization of mineralization. However, recent drilling suggests that the main body of mineralization is more closely associated with the intersection of regional faults identified from

airborne geophysical data. The drill-density and level of exposure at Mt Charter do not allow us to confirm this, however, as indicated on the plan view below, the southern boundary to the mineralization is approximately east west and sub-vertical.

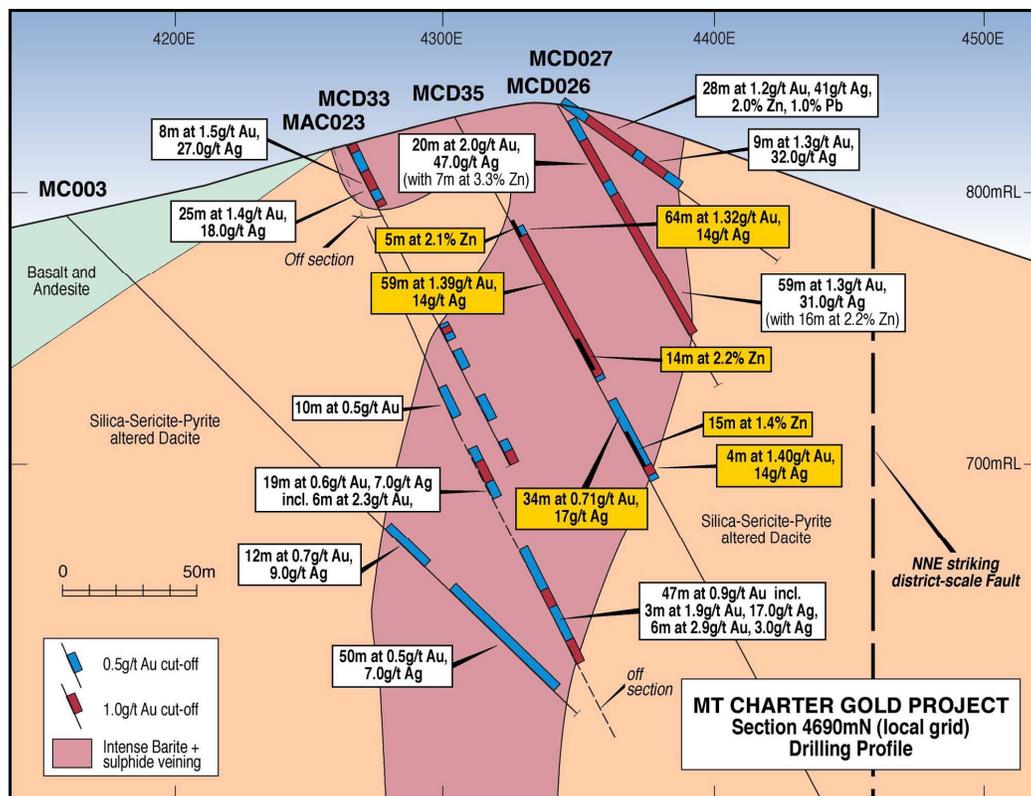
Higher than average grade intercepts and broader zones of mineralization in MCD20, 21, 34 on section 4640mN may be located within an area of influence of the broadly east-west trending structure. Note that the andesite/dacite contact is interpreted to dip gently to the SW and mineralization is shown not to follow this contact at depth (MCD025 - no significant intercept at the andesite/dacite contact).

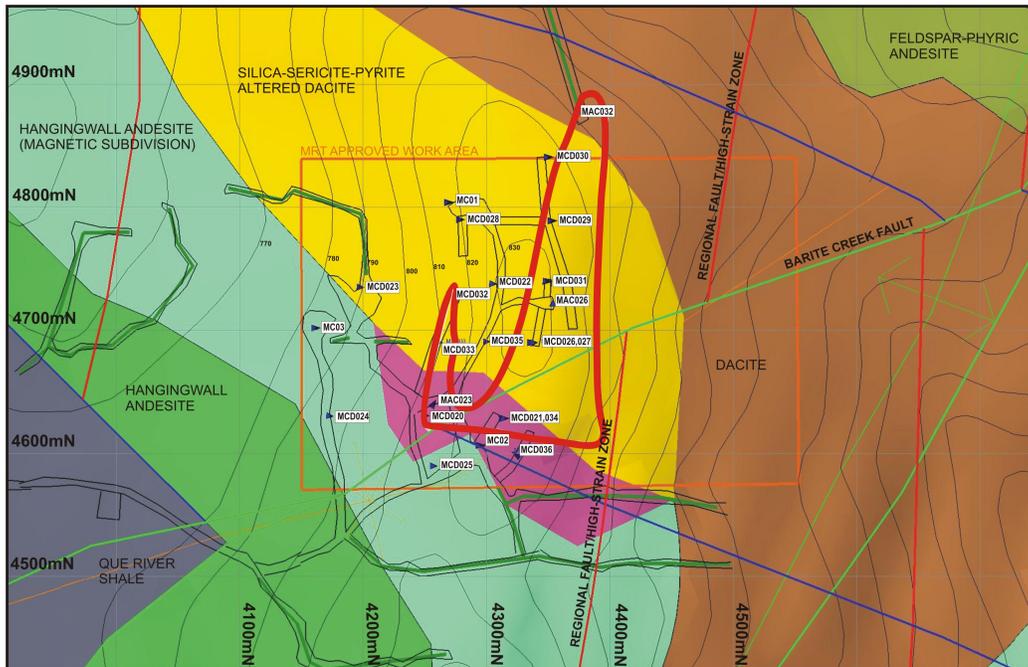
In summary, the dominant controls on the localization of the Mt Charter Au-Ag-(Zn) deposit are:

- proximity to the NNE trending regional structure
- proximity to an intersection of the above with WNW and/or ENE regional faults
- location within pre-existing silica-sericite-pyrite altered dacite (interpreted).

Controls on the tenor of mineralization are:

- frequency/intensity of barite+sulfide veining
- overprint of the above on pre-existing pyritic stringers effecting deposition of some of the sphalerite and galena (interpreted)





**Figure 8. Geological plan of the Mt Charter area**

(pink area in the centre of the diagram represents an interpreted barite-'cap'. This is under review and may just represent more intense baritic veining in this location; this red line approximates the +1.0g/t Au outline at surface)

### 3.3 Sample collection, data collection, and sample preparation

All holes drilled on Mt Charter by Bass Metals Ltd have utilized small modified diesel-powered underground diamond drill-rigs ideally suited to both the rough terrain and smaller drill-sites constructed with minimal disturbance. These rigs also have the advantage of being able to drill low angle holes as has been required in this last drill-program

The core recovered is of NTW size which has 76mm diameter. The rig is equipped with a 3.0m barrel and therefore drilling advances on 3.0m drill-runs. Core orientation was achieved initially using a spear method and midway through the program the Ace Drilling - Core Orientation Tool was employed. This computerized unit is housed at the back of the core barrel and is used to locate the bottom of hole point on the piece of core caught in the lifter.

The diamond core is logged for colour, stratigraphy, lithology, alteration, veining, mineralization, structure, and RQD. This data is stored within an excel spreadsheet.



**Figure 9. Photographs of the key process steps and facilities for sample and data collection**

All core is photographed both wet and dry prior to splitting using a purpose-built core-saw. Half-core samples (generally in 1.0m intervals) were collected in calico bags and placed in larger cable-tied polyweave bags. The bags were delivered to the laboratory by Bass Metals personnel.

Samples were submitted to the Burnie Research Laboratory (Ammtec Ltd) on a hole by hole basis and analyzed as follows:

- Au (0.01ppm detection level) by fire assay
- Ba (0.02% detection level) by pressed-powder XRF
- Cu, Pb, Zn, Ag, As, Fe (10ppm detection limit for Cu, Pb, Zn; 1ppm for Ag; 50ppm for As) by triple acid digest and AAS.
- SG by weight in air/weight in water method

Certified reference material, blank material, and duplicates were inserted at a nominal 1 in 25 sample frequency.

### 3.4 QAQC

#### 3.4.1 Standards

Three gold standards and a gold+base metal standard were used in the program.

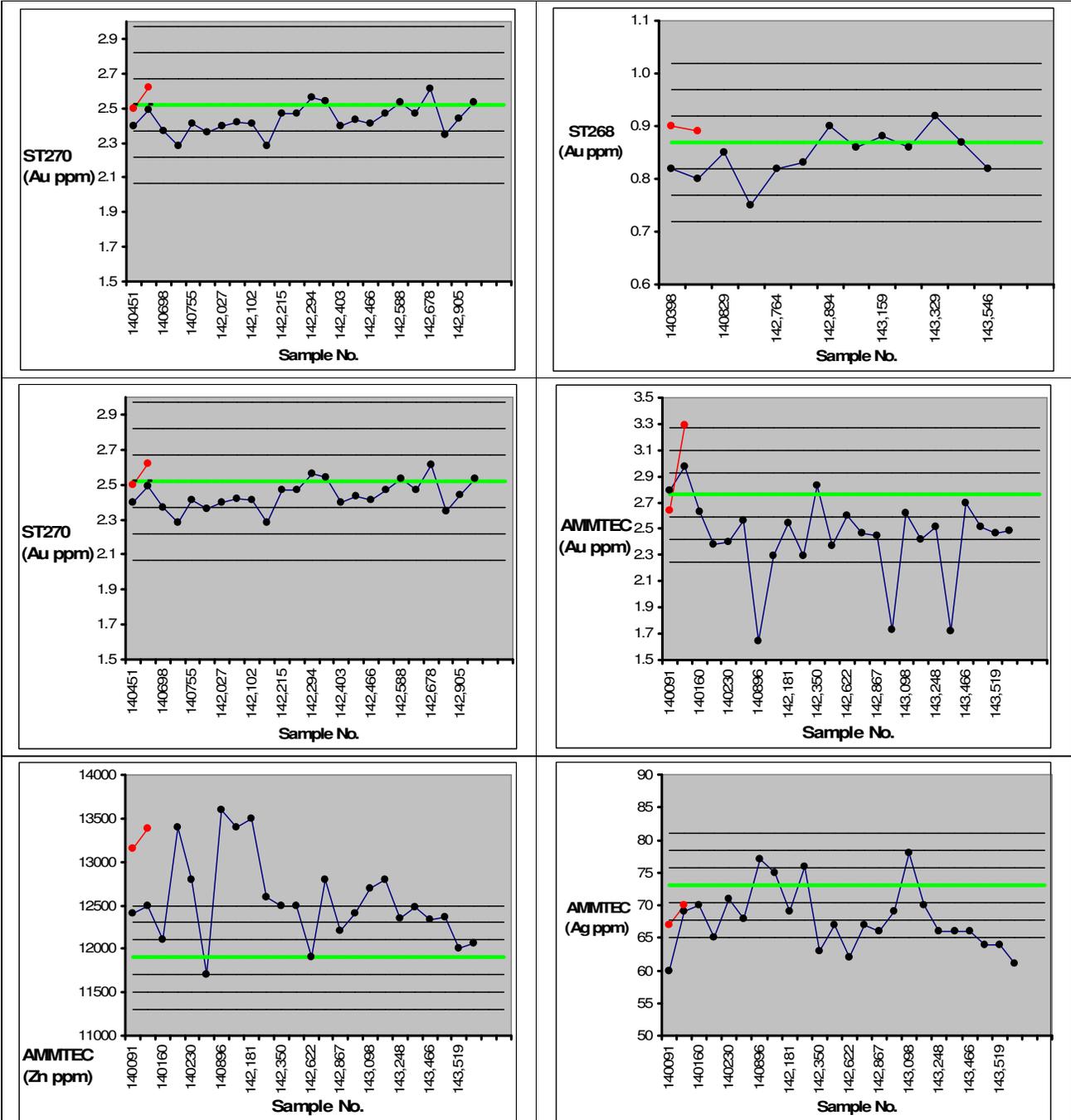


Figure 10. Data for standards (certified reference materials) used in the Mt Charter Project and assayed by BRL. Green lines indicate the mean or expected value and black lines are 1, 2, and 3 standard deviations from the mean. Red data points represent analyses by Genalysis as part of the pulp reassay program.

Gold standards were obtained from Gannet Holdings Pty Ltd and the Ammtec *standard* is an internal reference material produced by Ammtec-Burnie Research Laboratory and analysed 22 times by that same laboratory. This material is therefore not officially a certified reference material. As a comparison, the ST268, ST270, and ST277 CRM was analyzed at 94, 95, and 83 laboratories respectively.

The ST\* gold standards performed well and a negligible number of samples lie outside of 2 standard deviations from the mean. The Ammtec IRM is more variable however a minor underestimation of the gold grade is apparent in all four gold reference materials.

The red data points represent reference material included with pulps for reassay at Genalysis - Perth as a check against the Burnie Research Laboratory. These analyses are within an acceptable range.

### **3.4.2 Duplicates**

Duplicates are taken every 25 samples by submitting quarter core samples over the same interval. Some variation at the centimetre scale is expected given the clot-like nature of sphalerite and galena in the barite veins. That is, the base metal sulfides do not occur as continuous laminar sheets within veins. Variability in the gold values above 0.5g/t Au.

Ag, Ba, and Zn also show good correlation whereas Cu and Pb are more variable, possibly because they are at lower concentrations.

Mean Percentage Difference plots of the Au duplicate pairs reveals significant variability as does the Ag and Zn. This may be a factor of the lower grades at Mt Charter in that a 0.5g/t difference would be insignificant for a gold deposit with a global grade of 6g/t Au but is significant where the global grade is 1.5g/t. This variability at the centimetre scale, while significant, is outweighed by the incredibly uniform grades in drill-holes traversing the broader ore-zone. These 'composite' grades are very consistent up/down dip as well as along strike which suggests that the method employed is effectively sampling the orebody.

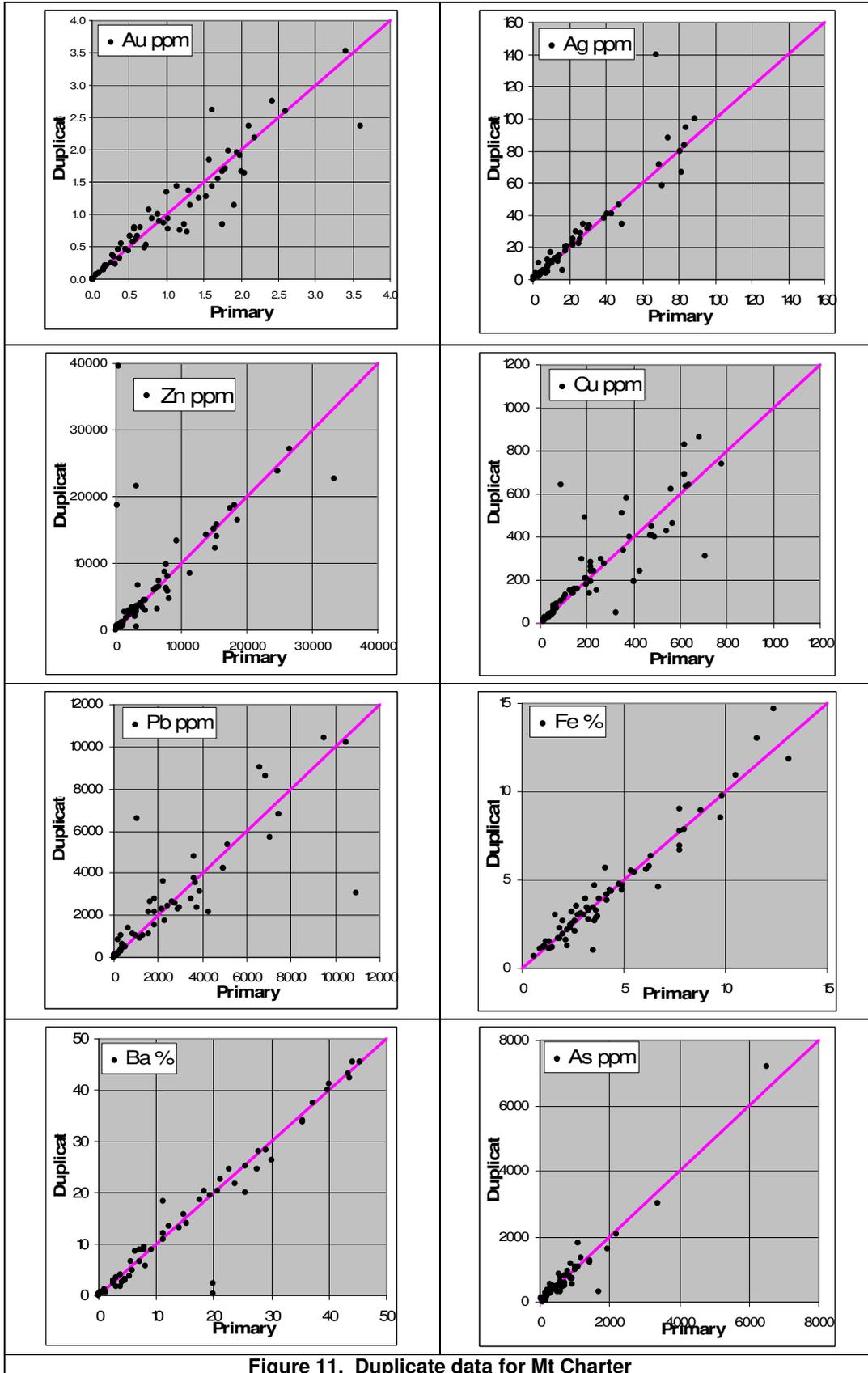
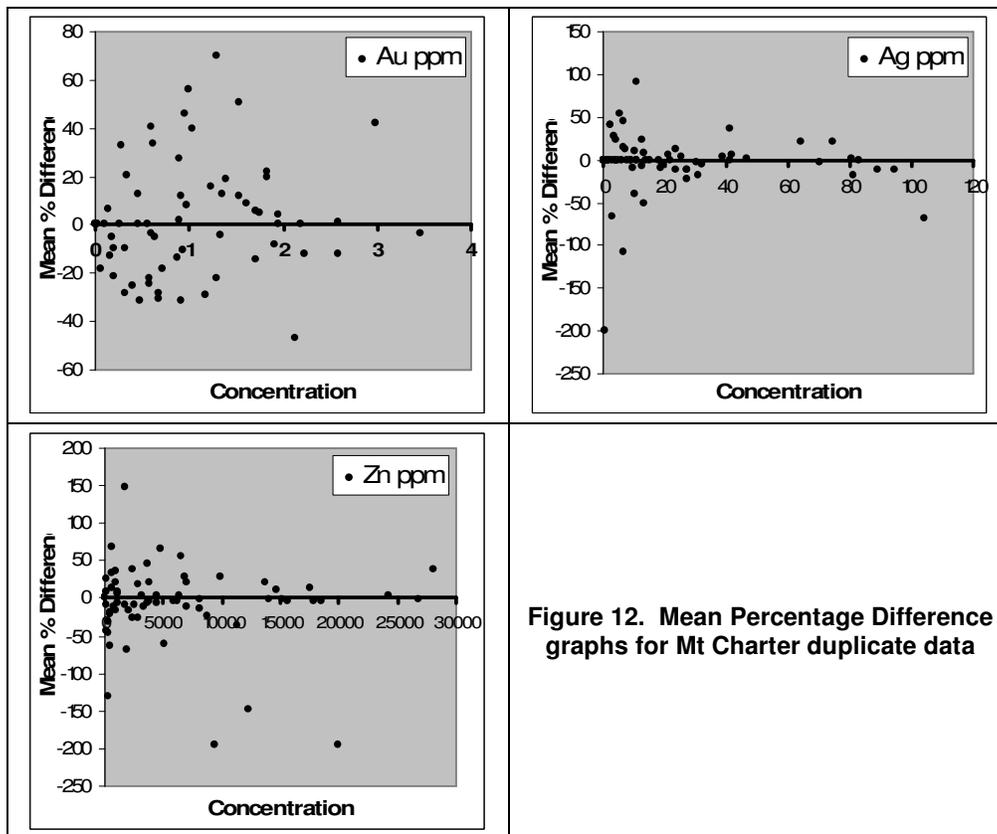


Figure 11. Duplicate data for Mt Charter

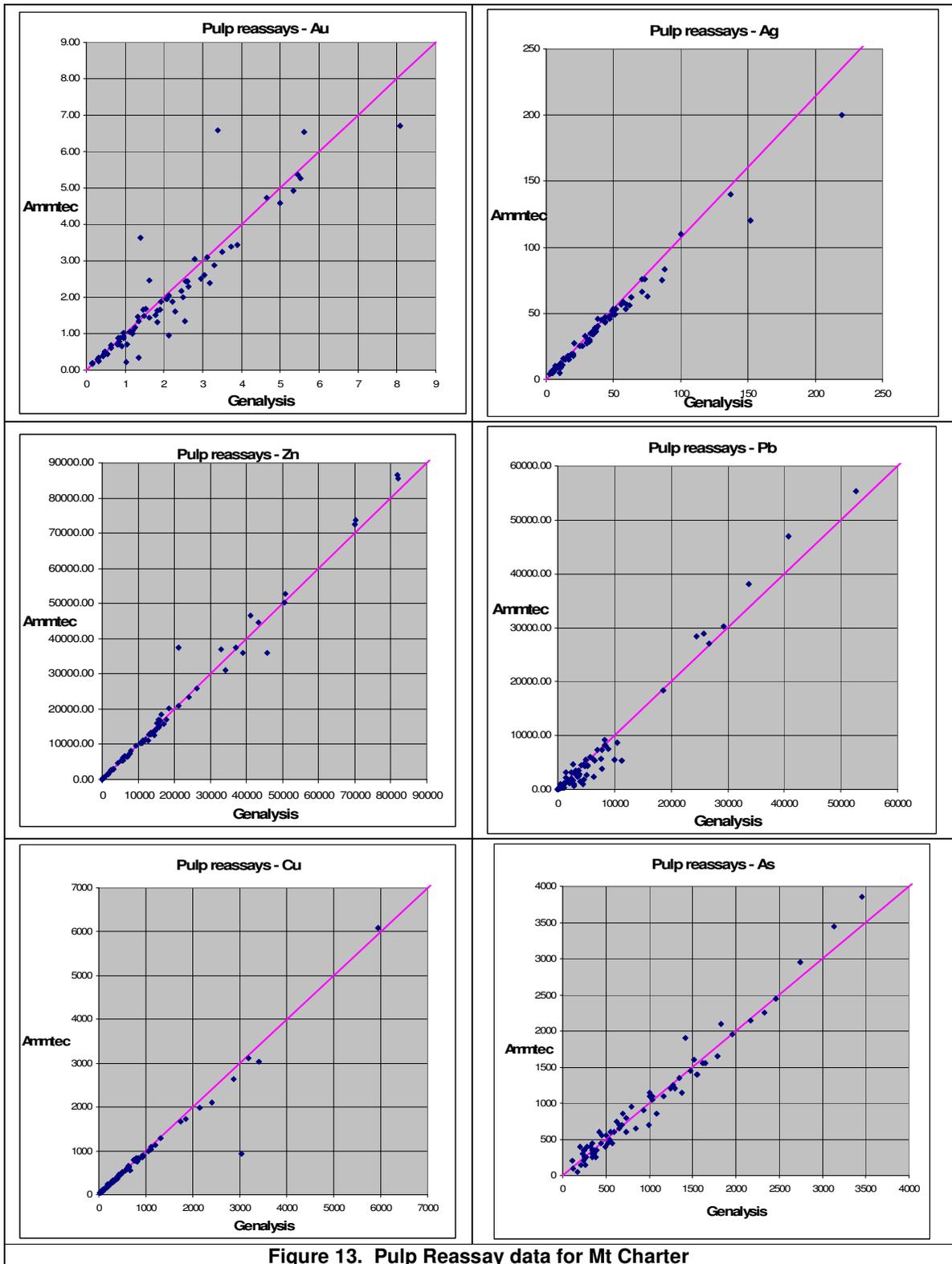


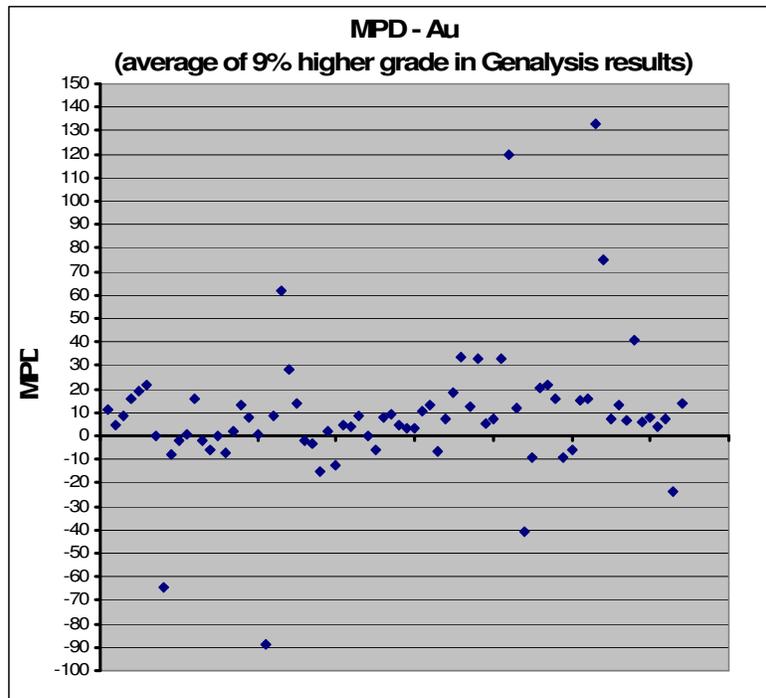
### 3.4.3 Pulp reassays

As a further check on the performance of the Burnie Research Laboratory, a selection of 82 samples including 8 of reference material, were sent to Genalysis (Perth) for assaying of the same suite of elements and via equivalent process.

The results for the reference material are shown in the graphs illustrating performance of the standards on Page 19. The Genalysis determination of gold (ST\*) certified reference materials were all within one standard deviation thereby establishing high confidence in this small (74) number of repeat analyses.

The following graphs show good correlation between the laboratories with the key difference that Genalysis returned gold assays which averaged at 9% higher than the original by Ammttec-BRL.





**Figure 14. Mean Percentage Difference graph comparing Ammttec-BRL vs Genalysis for Au determination**

### 3.4.4 Blanks

Blank material was inserted into the sample sequence on a 1 in 25 basis. The material used consists of locally sourced quartz gravel. The following graphs illustrate the assay results for the analyzed blank material and generally the concentrations approximate detection limits for the elements analyzed. Outliers are recognized and are discussed with the laboratory as required. We do not have good control on the expected grades of the blank material and cannot therefore hold the laboratory to perform within certain acceptable limits.

Note that the blank material is also useful for detecting sample-swap issues and errors associated with the order in which the laboratory processes samples. This has not been an issue in this program and all CRM and blank analyses have been reported in the correct sample sequence.

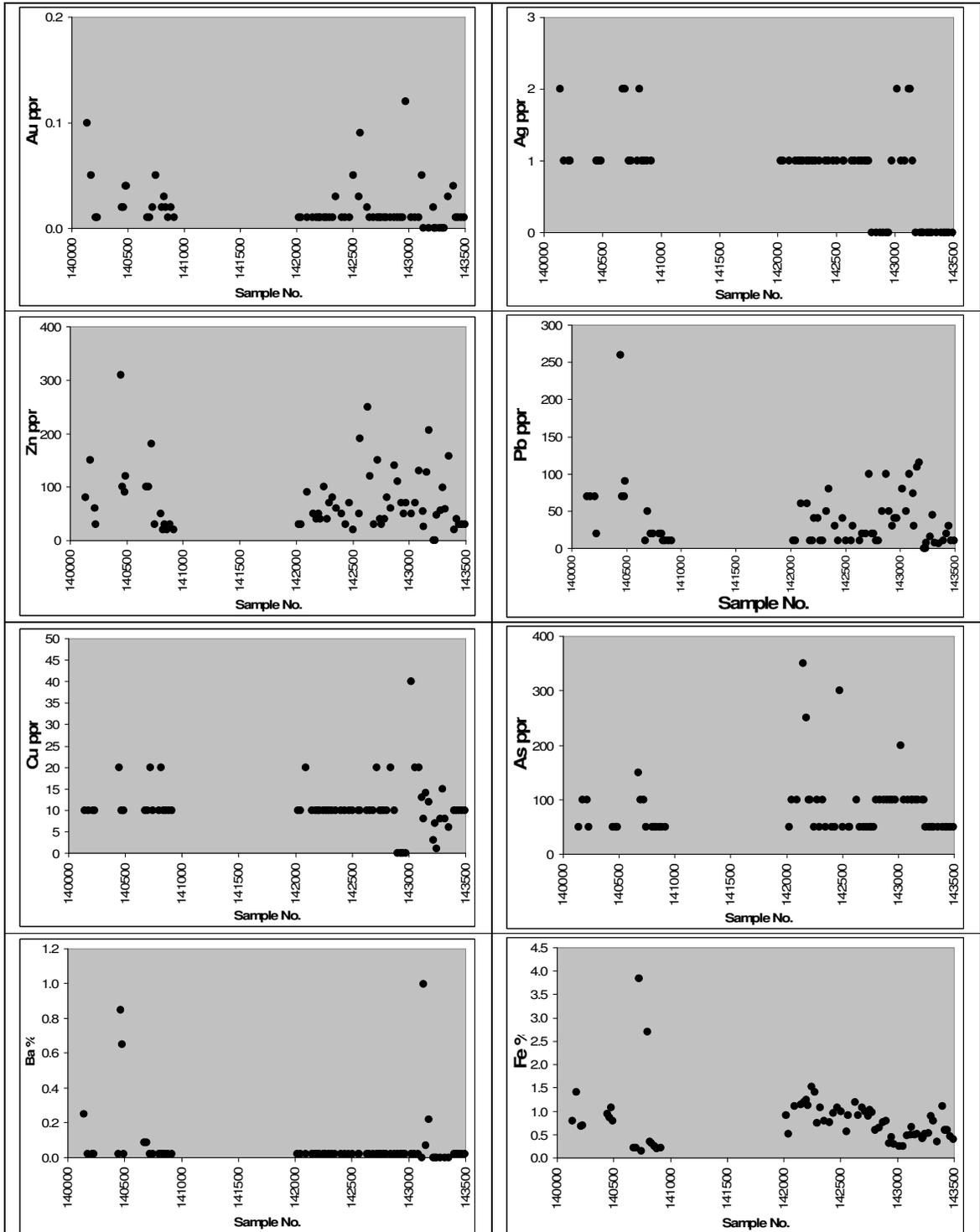


Figure 15. Analyses of the blank material used during the Mt Charter drill program

#### 4. CONCLUSIONS

The Mt Charter project is now considered to be at a stage where resource estimation is appropriate given that the continuity geological observations (e.g. the barite vein package) and mineralization has been established and the controls on the localization of mineralization are better understood.

The relationship between Au, Ag, Zn, and Ba confirms observations from the drill-core which indicate that the one vein-type hosts each of these elements, that is, the veins are comprised of barite±sphalerite (and galena). Au grade is intimately associated with the abundance of baritic veins in the core and diminishes rapidly in the absence of barite±veins.

The mineralization is hosted by the thick 'mixed sequence' of felsic volcanics and there is no apparent lithological control on mineralization beyond this scale. The key controls on the localization of mineralization relate more to the proximity to regional scale faults/structure and intersections of these structures. The barite vein package appears to parallel a regional fault network interpreted as being active during Cambrian VHMS mineralization.

There are no significant issues with respect to QAQC of the sampling and laboratory performance that should hinder resource estimation of the Mt Charter mineralization.