

Figure 8 Stratigraphic Column, Northwest Somerset Island

settings. The underlapping, 30° releasing sidestep model in Dooley and McLay (1997) bears a strong resemblance to the Central Graben at the Storm showing.

## **7.4 Mineralization**

Base metal mineralization has been identified within the Property in two distinct areas namely the Seal zinc showing and the Storm copper showing. The Seal zinc showing occurs within the lower portion of the Early Ordovician Ship Point Formation, proximal to Aston Bay. The Storm copper showing is comprised of four distinct zones surrounding the Central Graben and is hosted within the upper 80 metres of the Late Ordovician to Early Silurian Allen Bay Formation.

### **7.4.1 Seal Zinc**

The Seal Zinc showing is located in the northwestern part of the Property at the base of a small peninsula immediately northwest of the Aston Peninsula on Aston Bay. It occurs on a steep, southwest facing hill as scree, as minor outcrop of disseminated sphalerite in pseudo brecciated Turner Cliffs Formation, and as massive sphalerite and pyrite in the Ship Point Formation. Scattered blocks containing sphalerite occur along the 1,500 m length of this peninsula. The Aston Peninsula proper contains small patches of rusty sandstone and sandy limestone in a similar stratigraphic position, but no sphalerite was found.

Strata on the north side of Aston Bay span the Gallery to Allen Bay formations and consist of the Gallery, Turner Cliffs, Ship Point, Bay Fiord, Thumb Mountain, Irene Bay and Allen Bay formations. Similar rock types in the Thumb Mountain, Irene Bay and Allen Bay formations make differentiating them problematic. For mapping purposes, a recessive weathering interval between the Thumb Mountain and Allen Bay formations was interpreted to be the Irene Bay Formation.

The mineralization is hosted in an 8-10 m thick porous and permeable basal quartz-arenite with interbeds of dolostone and sandy dolostone (Cook and Moreton, 2009; Smith, 2001). Zinc mineralization is present in two forms within the Seal Zinc showing, firstly as coarse-grained, reddish-brown blackjack sphalerite and secondly as honey yellow, colloform sphalerite. The zinc mineralization occurs as local to complete replacement of the sandy dolostone interbeds as well as interstitial disseminations in massive sandstone beds (Cook and Moreton, 2009).

The known mineralization extends for 400 m along strike and is 50-100 m in width and upwards of 20 m in thickness, containing 7-8% Zn and 23-27 g/t Ag (Cook and Moreton, 2009). Fine-grained marcasite is the dominant sulphide with lesser amounts of coarse pyrite associated with the dolostone interbeds. Post-mineralization faulting may have resulted in repetition and thickening of the mineralized zone (Cook and Moreton, 2009). Although the mineralization appears to be lensoid, it is believed to be stratabound.

The footwall of the mineralization is marked by a large hydrothermal alteration zone within the Turner Cliffs Formation. This alteration zone is described as a pseudobreccia and pervasive solution breccia cemented with coarse-grained white dolospar (Leigh, 1996). The northwest-trending alteration zone has a strike length of over 600 m and a stratigraphic thickness of 150 m (Smith, 2001). Minor mineralization is evident within the alteration zone expressed as disseminated sphalerite filling voids and veins and associated with the dolospar cement (Cook and Moreton, 2009).

The pseudobreccia alteration zone has a sharp upper contact with a laminated dolomicrite unit and a sharp lower contact with argillaceous nodular dolostone (Smith, 2001). The upper and lower contacts of the pseudobreccia zone likely represent aquitards focussing the flow of the hydrothermal alteration (Leigh, 1996). Cook and Moreton (2009) suggest that the alteration zone represents the feeder zone for the Seal Zinc mineralization.

#### **7.4.2 Storm Copper**

The Storm Copper mineralization is located adjacent to, and offset by, the north and south bounding faults of the Central Graben structure and includes four discrete zones of copper mineralization: 2200N, 2750N, 3500N and 4100N. The first three zones outcrop at surface whereas zone 4100N is blind, covered by a veneer of the Cape Storm Formation (Cooke and Moreton, 2009; Grexton, 2008; Leigh and Tisdale, 1999).

Three formations are exposed in the vicinity of the Storm Copper showings, the Allen Bay, Cape Storm and Duoro formations. The Allen Bay Formation hosts the majority of the mineralization at the Storm Copper showing. It is conformably overlain by the Cape Storm Formation, which is in turn, conformably overlain by the Duoro Formation.

The Storm Copper mineralization is hosted within the upper 80 metres of the Silurian Allen Bay Formation. The mineralization occurs within an alternating sequence of recrystallized and variably fossiliferous dolostones lying above a thick reef unit (Cook and Moreton, 2009). Copper mineralization is largely located within structurally prepared ground occurring within crackle breccia, solution breccia, solution crackle breccia and tectonic breccias (Cook & Moreton, 2009; Grexton, 2008). Mineralization is most common within crackle breccia horizons. The crackle breccia is monomictic with angular to subangular, centimetre-scale clasts cemented with *in situ* micritic dolomite, lime mud and calcite with lesser copper and iron sulphides (Cook and Moreton, 2009).

Copper mineralization occurs as breccia cement and fracture fill within brecciated, recrystallized and locally silicified Allen Bay Formation dolostone. Pyrite and marcasite are the principal sulphides; these are locally replaced by copper sulphides. Copper mineralization within the fossiliferous units is typically disseminated, void-filling and net textured replacement of the host, whereas the mineralization in the less porous units is within crackle breccia, stringers and veins (Cook and Moreton, 2009).

Chalcocite, covellite and bornite, with lesser chalcopyrite, are the dominant copper sulphides present within the Storm copper zones. Accessory cuprite, azurite, covellite and native copper are also present (Grextan, 2008). Alteration within the Storm copper showing is expressed as sucrosic recrystallization and local dedolomitization of the host dolostone, along with local strong hematite and limonite with irregular pockets of silicification (Cook and Moreton, 2009).

Low-grade copper mineralization extends over a distance of five kilometres in the four main zones which are referenced by their UTM northings (2200N, 2750N, 3500N and 4100N). The 2200N, 2750N and 3100N zones occur in outcrop. The 4100N zone lies largely beneath the Cape Storm Formation with only minor mineralization noted at surface. Mineralization occurs within the upper 80 m of the Allen Bay Formation. Alteration and minor copper sulphides occur in the Cape Storm and Duoro formations. This alteration includes moderate to intense fracturing, small zones of mosaic packbreccias with calcite, pyrite and subordinate chalcocite cement, pervasive hematite staining and rare malachite/chalcocite in fractures.

The 2200N and 2750N zones show evidence of vertical plumbing and the copper mineralization does not appear to be stratabound. The 4100N zone is again fault proximal and vertically plumbed though the dominant copper mineralization is stratabound (Cook and Moreton, 2009). The 4100N zone has less pyrite and marcasite than the other Storm Copper zones.

A genetic link between the Storm Copper zones and the Central Graben has been outlined by Cook and Moreton (2009). The west-directed Caledonian compressional event (Taconic Orogeny) resulted in a recharge of fluids from adjacent highlands through the evaporite hosting basin and circulation of deep basinal fluids through red beds of the Aston Formation. The Aston Formation red beds appear to be the source of metals for both the Storm and Seal mineralized systems.

The 2200N zone is exposed along the Aston River ridge proximal to the 2200N fault. Soil geochemical anomalies extend 600 m with subsurface continuity of mineralization mapped by IP and HLEM surveys. Drilling has defined a 300 m long, 40 m thick and 60 m wide mineralized zone. Poddy to net-textured chalcocite and bornite occurring as breccia cement, fracture fill and veins replacing iron sulphides and *in situ* organic matter are the dominant copper minerals (Cook and Moreton, 2009; Grextan, 2008). Semi-massive sulphide zones are separated by wide intervals containing sporadic stringers and veins. Fine-grained, disseminated native copper occurs in near vertical, irregular wavy stringers and net textured veinlets proximal to the 2200N fault (Cook and Moreton, 2009).

The surface exposure of the 2750N zone consists of a 100 m long, east-west trending malachite-stained gossan adjacent to the 2750 Fault (or South Boundary Fault) of the Central Graben. This is also referenced as the Southern Fault of the Central Graben (Cook and Moreton, 2009). Drilling indicates that the mineralized zone continues from surface to 80 m depth, the zone narrows from 50 m width at surface to 25 m at depth, and occurs in an area of complex faulting.

Massive chalcocite along with pervasive low grade bornite in crackle breccia comprise the mineralization within the 2750N zone. Areas on surface closest to the fault are silicified. Hematite-cemented breccia zones are a common feature of the 2750N zone.

Cook and Moreton (2009) note a progressive zonation of copper minerals both vertically and laterally away from the 2750 fault. A chalcocite-bornite zone dominates from surface to 50 m depth; this gives way to a chalcopyrite zone which dominates to 70 m depth. Cook and Moreton (2009) report that a silicified, pervasive solution breccia occurs as a broad envelope beneath the mineralization, whereas hematite cemented crackle breccia occurs marginal to the mineralization and adjacent to the 2750 Zone.

Mineralization at 3500N is expressed as a 300 m rubble and outcrop zone of copper oxides and rusty limonitic recrystallized rocks of the Allen Bay Formation (Leigh and Tisdale, 1999). Drilling indicates that the zone is extremely erratic and discontinuous with an overall strike length of 200 m and is upwards of 75 m thick with an undetermined width (Cook and Moreton, 2009). Mineralization occurs within a complex of intersecting faults that juxtapose the Allen Bay and Duoro formations. Chalcocite and bornite occur as disseminations, stringers and veins within coarsely recrystallized dolostone.

The 4100N zone has a limited surface expression and is located at the intersection of the North Boundary fault with three or more subtle northwest structural lineaments. The mineralized zone defined to date extends over 1000 m strike and 400 m width with the potential for deep extensions to the south of the 4100N fault (Leigh and Tisdale, 1999). The zone is open to the north, east and west (Cook and Moreton, 2009). Previous authors have noted that the zone is irregular though persistent and occurs in a predictable stratigraphic position (Cook and Moreton, 2009; Grexton, 2008).

Copper mineralization dominated by chalcocite occurs in steeply dipping veins and breccias as well as stratabound disseminations filling voids and replacing organic partings and macrofossils. Copper mineralization extends through 80 metres of stratigraphy from the basal, hematite-altered Cape Storm Formation into the ADMW and BPF units of the upper Allen Bay Formation (Cook & Moreton, 2009; Grexton, 2008). The 4100N occurrence also exhibits a vertical copper mineralization zonation from top to bottom of chalcocite-bornite-chalcopyrite-native copper. In the west end of the 4100N zone an outer lead-zinc zone of galena-sphalerite-chalcopyrite in the footwall adjacent to copper mineralization is present (Cook and Moreton, 2009; Grexton, 2008; MacRobbie *et al.*, 2000).

There were two main diagenetic events. The first was dolomitization accompanying the precipitation of pyrite and chalcocite with bornite intergrowths. Silica, occurring as cryptocrystalline quartz, minor sphalerite and galena were deposited at the margins of the alteration system. The second diagenetic event consists of minor dissolution and dedolomitization of dolomite, dissolution of galena and the precipitation of zinc oxides.

Oxidation of chalcopyrite-bornite and pyrite led to their replacement by chalcocite, covellite and native copper. Chalcopyrite and bornite occur as remnants with chalcocite and covellite. Hematite staining is commonly associated with the zones of chalcocite. The second event was accompanied by calcite precipitation. Copper mineral surfaces were subsequently altered to malachite and azurite.

## **8: DEPOSIT TYPES**

Two types of primary mineralization within the Storm property have been observed to date, lead – zinc (Pb-Zn) in calcareous sediments and copper – silver (Cu-Ag) also hosted in calcareous sediments. The two types of mineralization are spatially and stratigraphically distinct from each other. The Pb-Zn showings identified to date are comparable to Mississippi Valley type deposits with the variation that these are hosted within clastic calcareous sandstones. The Cu-Ag showings appear to be similar to mineralization in sediment hosted copper deposits such as Kupfersheifer and Kipushi.

### **8.1 Mississippi Valley-Type Lead Zinc Deposits**

Mississippi Valley Type (MVT) deposits are epigenetic, stratabound deposits that occur in unmetamorphosed platform carbonate rocks with a particular affinity to dolomites. The majority of the host rocks to MVT deposits are Cambrian – Ordovician and Carboniferous in age, and are believed to have formed as part of the normal evolution of a sedimentary basin. Mississippi Valley Type deposits typically occur at or near basin edges or along arches between basins, though they can also be associated with foreland fold and thrust belts and rift zones (Leach and Sangster, 1993).

Individual MVT deposits typically form in clusters creating mineral districts. Typical alterations associated with MVT deposits are dolomitization, brecciation, local recrystallization and dissolution (Leach and Sangster, 1993). Ore fluids are low temperature basinal brines: 75 – 200°C, dense, highly saline with 10-30 wt.% salts dominated by Na, Ca (Anderson and Macqueen, 1982). Groundwater is recharged within the orogenic flank during uplift and migrates through the deep portions of the basin via topographically driven fluid flow acquiring heat and leaching metals (Anderson and Macqueen, 1982; Leach and Sangster, 1993). These metals are carried as chloride complexes and precipitate as sulphides.

Ore formation has been attributed to three genetic models, or a combination of the models. The reduced sulphur or “non-mixing” model requires that the metals and reduced sulphur travel together in a single fluid, precipitation of sulphides occurs during cooling, dilution or changes in pH. The sulphate reduction model is a variation of the reduced sulphur model. Again both reduced sulphur and metals are transported in the same fluid, addition of reduced sulphur at the deposition site from the presence of methane or other organic material reduces the sulphate to precipitate sulphides (Leach and Sangster, 1993). The “mixing” model involves the interaction between a metal-rich brine and an H<sub>2</sub>S-rich fluid at the deposition site (Anderson and Macqueen, 1982; Leach



and Sangster, 1993). MVT deposits are typically small (<10 Mt ore) and combined Pb + Zn grades seldom exceed 10%, though their tendency to occur as clusters forming districts greatly aids in the economics (Leach and Sangster, 1993). One relevant exception to this is the Polaris mine which produced 22 Mt of ore grading 18% combined lead and zinc.

## **8.2 Sediment-Hosted Stratiform Copper Deposits**

Sediment-hosted stratiform copper deposits occur throughout the world in variable host rocks. Several key features typify the deposit type, including: stratiform configuration of the ore zone; fine-grained, disseminated sulphides forming the ore zone; zonation of metals; and red beds present in the footwall and located within or associated with rift basins. The footwall red bed unit is the source for the metals which are leached and transported by circulating brines.

These brines then cross a redox boundary into a typically fine-grained, porous and permeable, sulphur-enriched reducing unit which causes the metals to precipitate as sulphides (Brown, 1992). As copper is the least soluble base metal it is the first to form sulphides and precipitate, starting with copper-rich phases of chalcocite and bornite and later chalcopyrite. Lead and zinc, being more soluble, are transported further in solution and are precipitated closer to the margins of the ore zone as the brine migrates (Brown, 1992). This results in an overprinting of the syn-diagenetic iron sulphides and sulphates in the host rock by base metal sulphides. Sediment-hosted stratiform copper deposits are related to the normal evolution of a continental rift basin. Two applicable sub-types to the exploration program at the Storm Copper showing, Kupferscheifer and Kipushi, are discussed below.

### **8.2.1 Kupferscheifer type**

Kupferscheifer type deposits are typically hosted in epicontinental, shallow marine-derived sedimentary rocks such as carbonaceous shales, mudstones and siltstones. Red beds, evaporites and lesser rift-related mafic volcanic rocks are associated. The ore zone of Kupferscheifer deposits is hosted within fine-grained clastic rocks, and is typically stratiform and tabular, though it may be irregular in shape and cross cut several lithologies.

The main ore minerals are chalcopyrite, bornite, chalcocite and native copper with minor galena and sphalerite, which are present as fine-grained disseminations or veinlets. There is a lateral and vertical zonation upwards and away from the base of the ore zone. Copper concentrations are elevated at the base of the ore zone with lead and zinc concentrations increasing towards the margin. Silver, cobalt, lead and zinc are all important by-products. Alteration associated with Kupferscheifer deposits is limited to a strong hematite zone at the base of the ore zone. The ore zone is hosted within a reducing lithological unit.

### 8.2.2 Kipushi-type

Kipushi type deposits are formed along continental margin platforms or within deeper portions of intracratonic basins. Dolomites are the typical host rock for Kipushi deposits. This type of deposit is associated with mafic volcanic rocks. Host rocks have high porosity and permeability due to karst formation or brecciation, and are spatially related to transcurrent rift faults. A regional transition from platform carbonates to basinal shales is evident. The presence of stromatolites or reef complexes is common.

Kipushi deposits occur proximal to dolomitization fronts with limestone. The formation of these deposits requires a shale or other impermeable layer within the carbonate sequence to trap and focus fluid flow. Kipushi-type deposits are strongly associated with hydrocarbons. The ore zone consists of structurally controlled, stratiform stockwork veins. Within the ore zone there are abundant open vugs resulting in colloform textures and common rosettes and blades.

The main ore minerals are bornite, chalcocite, chalcopyrite, carrollite, sphalerite, galena and tennantite. Surficial supergene malachite and azurite caps are common. A lateral and vertical zonation away from the core of the mineralized zone is evident. The highest concentration of copper is at the core, with lead, zinc and iron concentrations increasing towards the margins. Geochemically, Kipushi-type deposits show high Co/Ni, As/Sb and Ag/Au ratios. Alteration is expressed as dolomitization, sideritization and silicification.

## 9: EXPLORATION

### 9.1 Introduction

In 2012 APEX was retained by Aston Bay to conduct an exploration program on the Storm Property. The 2012 program involved interpretation of the VTEM and aeromagnetic survey from 2011 by Intrepid Geophysics. This was followed by a property visit, prospecting, surface sampling and sampling of existing diamond drill core and ground truthing of the VTEM anomalies by APEX and Aurora personnel. The sampling of historic drill core was intended to validate the historical results and fill data missing from the historic record. The cost to complete the Storm Property exploration in 2012 totalled approximately \$448,000 (Appendix 2).

### 9.2 VTEM Airborne Geophysical Survey

In July 2011 Commander retained Geotech Ltd. (Geotech) to complete a helicopter-borne Versatile Time-Domain Electromagnetic (VTEM) and aeromagnetic survey over the Storm Property (Figure 9). Between July 6<sup>th</sup> and July 24<sup>th</sup> 2011, a total of 3,969.7 line-km were flown. The primary VTEM survey flight lines were oriented 030°/210° and spaced at 150 m with parallel infill lines spaced at 75 m and orthogonal tie lines spaced at 1,500 m. The helicopter-borne survey measured electromagnetics (EM; Figure 9) and magnetics (Figure 10) using a Geotech Time Domain EM (VTEM plus) system and



a Geometrics optically pumped caesium vapour magnetic field sensor mounted at 35 m and 13 m, respectively, below the aircraft. E M and magnetic readings were taken every 0.1 seconds (sec). The helicopter, a Eurocopter Aerospatiale (A-Star) 350 B3 owned and operated by Geotech, maintained a mean altitude of 77 m above ground with a survey airspeed of 80 km/h. A combined Geometrics caesium vapour magnetometer/GPS base station was used to compensate and correct for background magnetic field and GPS variations.

Data quality and completeness were verified through field data processing and analysis on a daily basis. Maps displaying magnetic and conductive properties of the surveyed areas were produced from the data. Accurate positioning of the data was ensured through differential GPS navigational corrections.

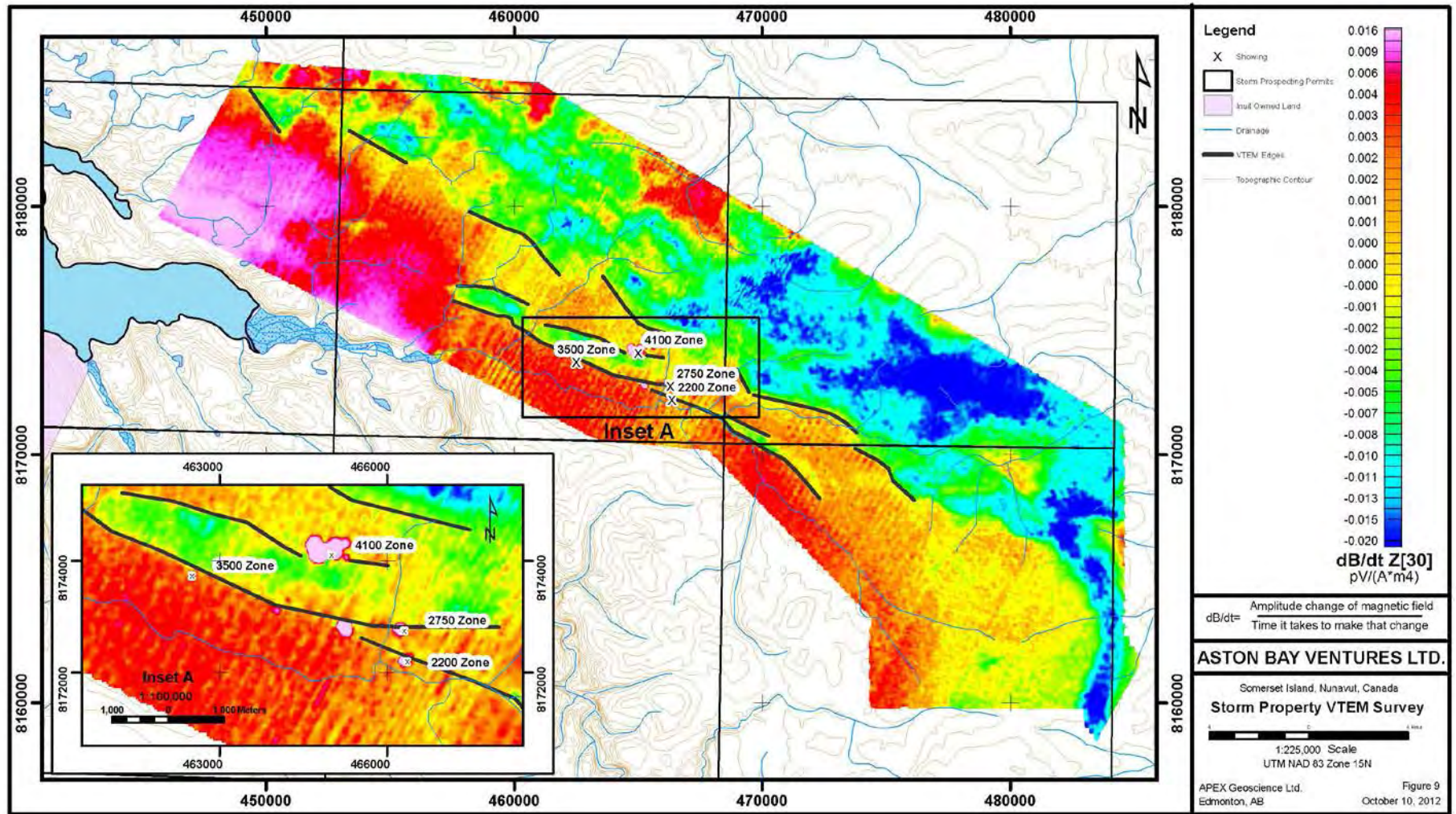


Figure 9 Storm Property VTEM Survey



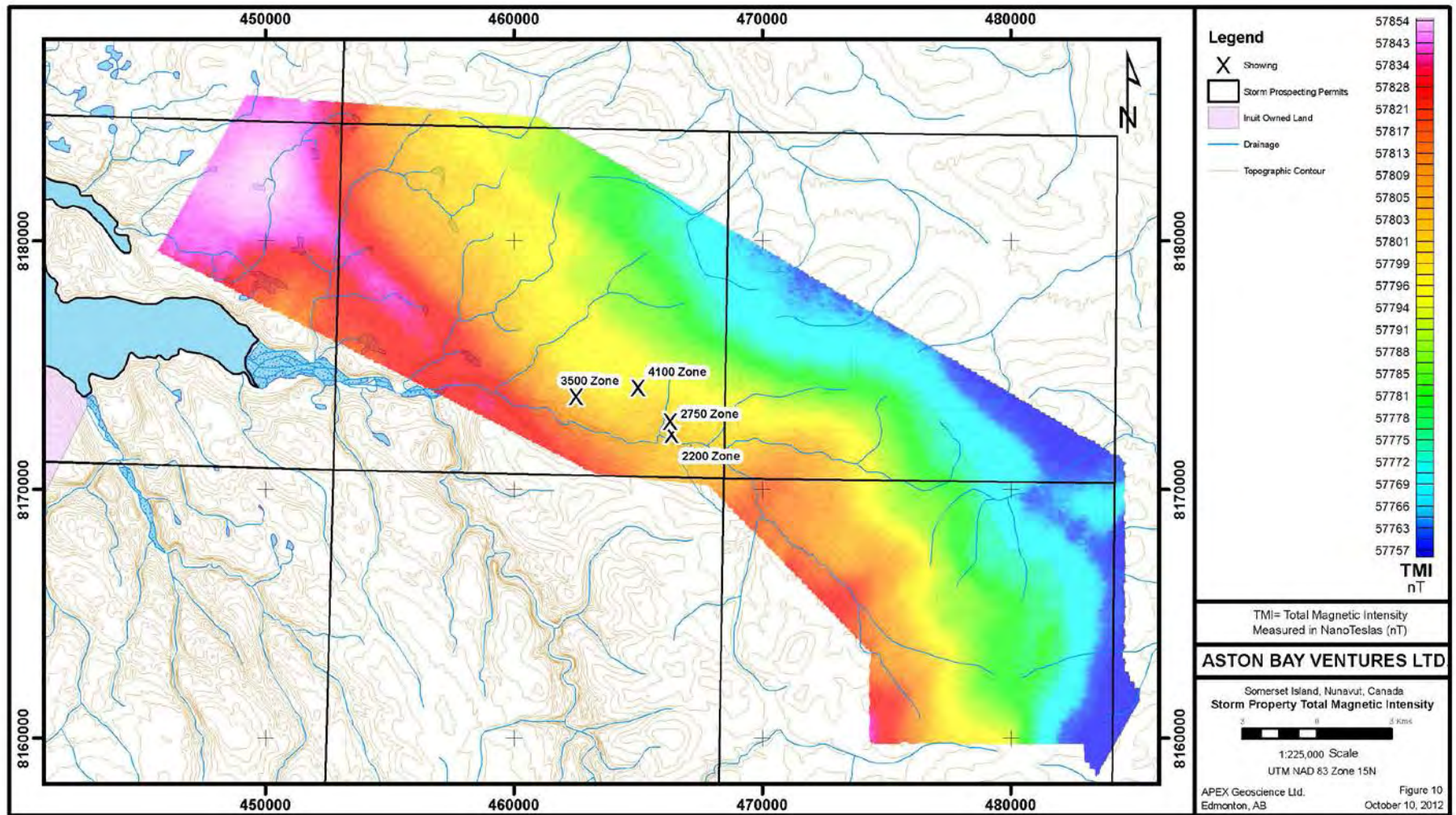


Figure 10 Storm Property Airborne Total Magnetic Intensity

### 9.3 Airborne Geophysical Interpretation

In 2011, Intrepid Geophysics Ltd. (Intrepid) was retained by Commander to provide an advanced interpretation of the geophysical data collected during the July 2011 VTEM survey. As part of this interpretation, enhanced derivative grids of the magnetics were generated and imaged, and a texture and phase analysis of the magnetics was undertaken in order to identify and map possible zones of structural complexity which may in turn indicate zones of favourable mineralization. A profile by profile review of all airborne electromagnetic anomalies was carried out preparatory to identifying high-priority areas of interest and zones for further investigation and ground follow-up.

The following is a summary from the Intrepid report (Campbell, 2011) which is included as Appendix 3 at the end of this report.

Enhanced derivative grids of the airborne magnetic data were generated and imaged as part of the geophysical data reprocessing exercise and they have highlighted a limited number of structural orientations and trends. The aeromagnetic data is primarily reflecting very long wavelength, buried features believed to be sourced in the Proterozoic basement at some depth. A high-frequency, shallow component is however, evident throughout and is possibly related to detrital materials within the sedimentary rocks and perhaps related to variation in sea levels. Significant linear features are mapped based upon analysis of all derivatives; these are interpreted as most likely occurring within the sedimentary section (based on frequency content) and may be related to horizons equivalent to the known Storm Copper zones. These features are presented as possible structural controls impacting the stratiform sulphide mineralization (Campbell, 2011). Figure 11 shows all of the derivatives with interpreted structural features traced over the magnetic derivative map.

The principle anomalies of interest occur coincident to the known 4100N, 2750N and 2200N zones. Also responding well to the VTEM system are the ST97-15 and ST99-34 zones which were named during the course of the geophysical interpretation (see Figure 4); these 5 zones comprise the sole, unambiguous bedrock responses in the entire survey (Figure 9). The 3500N zone does not have a significant positive AEM response, but does lay right along the gradient edge from positive (extended and layered conductive zone) to negative response, apparently at the southern edge of the NW-trending graben. All of these conductive responses are distinguished by a complete lack of direct magnetic correlation.

Based on initial test modelling of selected lines, a consecutive series of 41 flight lines over the main Storm Copper zone were chosen for detailed resistivity depth imaging (RDI) by the airborne contractor. Results were provided as section images and grids for each line as well as a 3D voxel model of the apparent resistivity. These data were analyzed in 3D using Encom PA visualization and interpretation software. Analysis of the RDI inversions in conjunction with the historical drilling



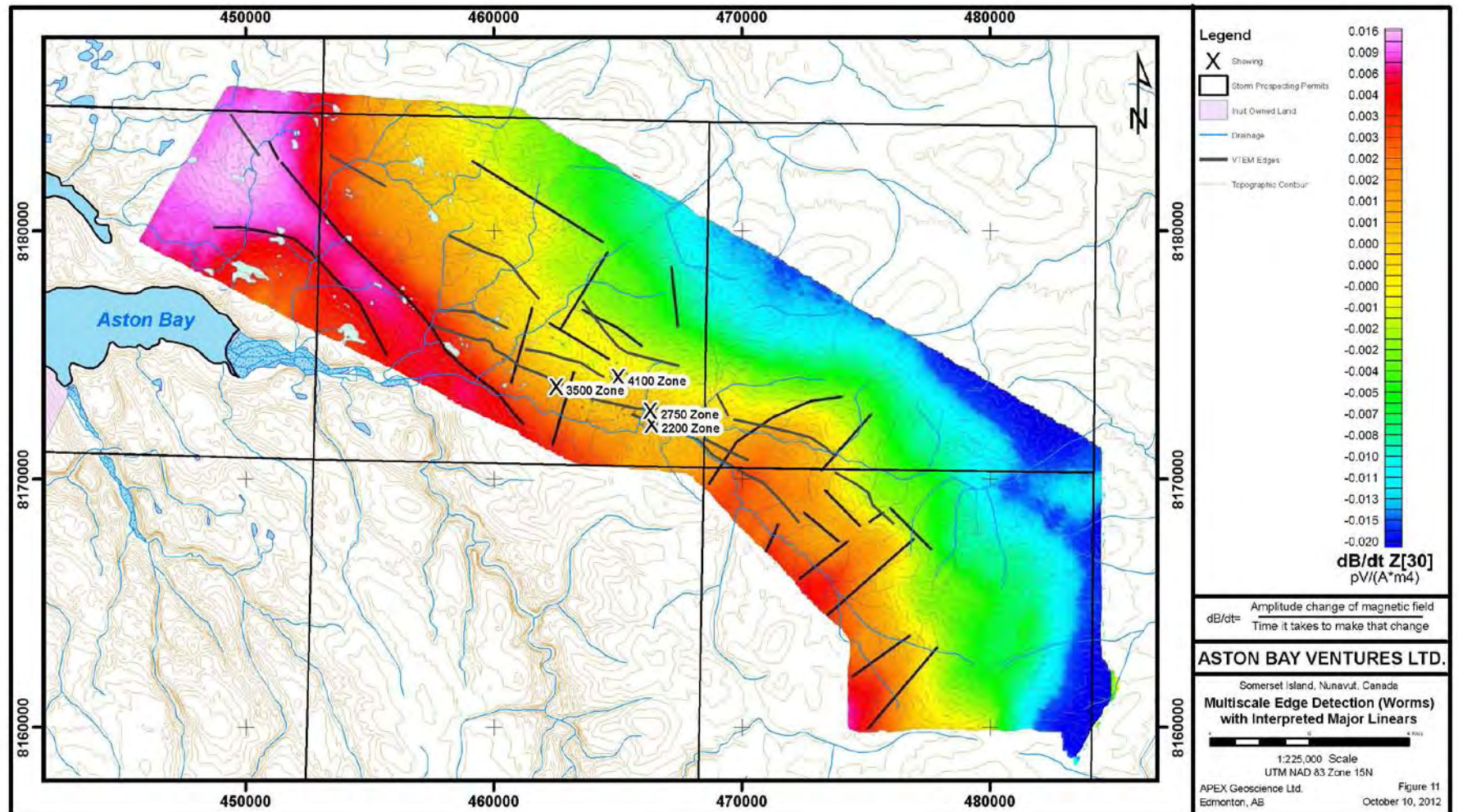


Figure 11 Multiscale Edge Detection (Worms) with Interpreted Major Linears

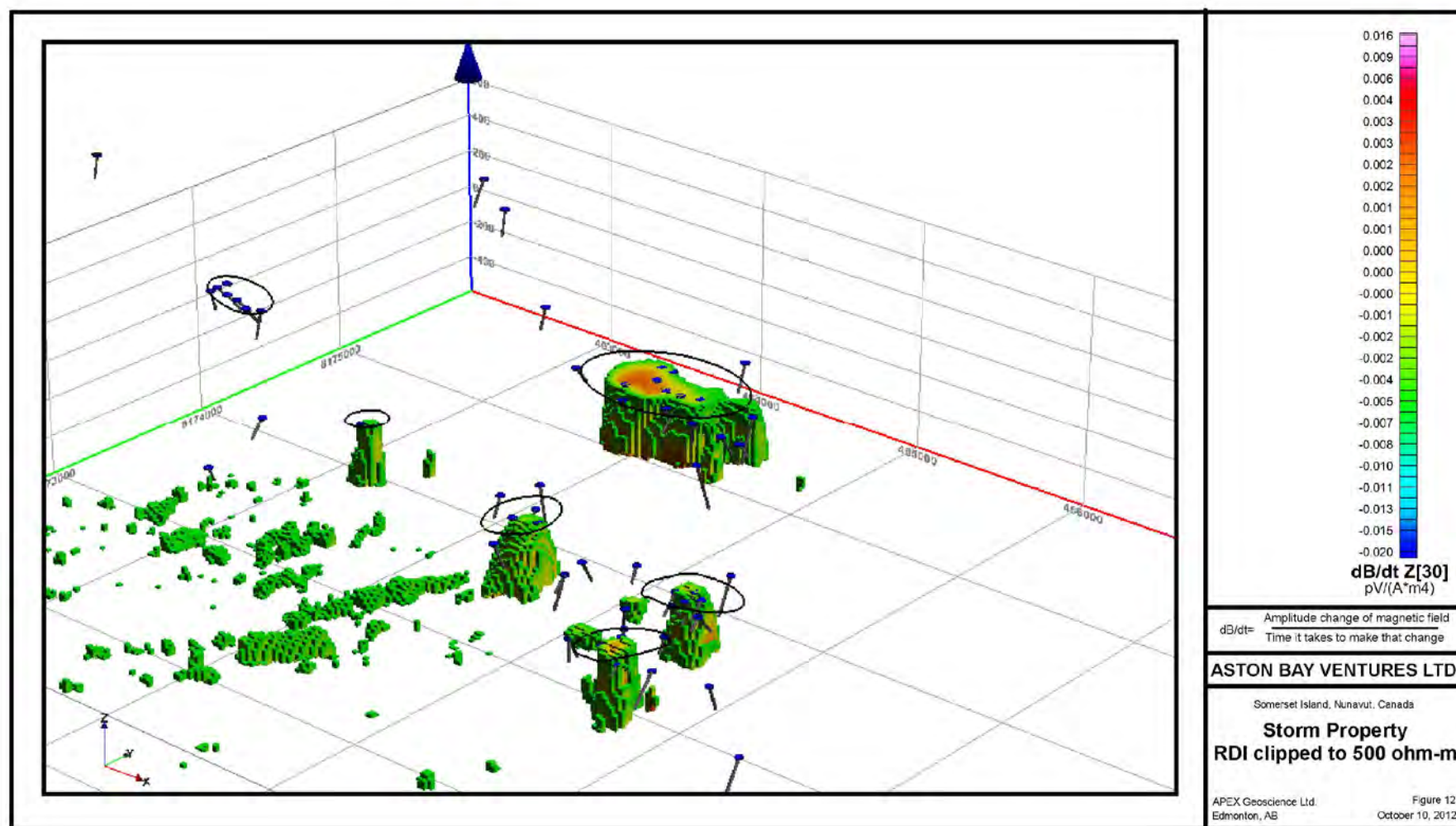


Figure 12 Storm Property RDI Clipped to 500 ohm-m



suggests that there remain portions of the 4100N, ST97-15, ST99-34 and 2200N zones that have not been drill tested adequately. Figure 12 shows an inclined view of the voxel model clipped to 500 ohm-m for clarity and with the historic drillhole traces shown to illustrate the need for further drilling.

Furthermore, the deep (100 to 200 m below sea level) conductive trends shown to be extending southward from the 4100N zone have not been tested at all. Additional modeling of the VTEM data using the Maxwell plate modelling software should provide precise drill targeting for these bodies.

## **9.4 Surface Sampling & Mapping**

The prospecting program confirmed the presence, location and extent of known historic zinc and copper mineralization at the Seal Zinc and Storm Copper showings, respectively and their correlation with geophysical anomalies. Rock grab samples were collected to verify historically reported values at the Seal Zinc and Storm Copper zones (Figure 13). A total of 14 rock grab samples were collected from the Storm Copper, Seal Zinc and from Seal Island (Figure 13). Two samples were collected from two discrete zones, 2750N and 2200N, within the overall Storm Copper zone, both assayed greater than 40% Cu. Six quartz arenite samples were collected along the trend of known mineralization at the Seal Zinc showing. Assays from the Seal zinc samples returned up to greater than 30% Zn. Copper and zinc over limit assays were still pending at the writing of this report. On Seal Island, areas of historically reported mineralized outcrops and anomalous assays were visited. Six samples were collected though none returned anomalous assays. Detailed rock grab sample data and assays are provided as Appendix 4.

## **9.5 Historical Diamond Drill Core Sampling and Collar Surveying**

A total of 399 drill core samples were collected from holes AB95-02, -03, -04, -05, -06, -07, -08, -10, -11, -12, and -13, and ST97-07, -08, -09, -10, and -11 (Appendix 5). The minimum sample length was 0.5 m, with a maximum sample length of 2.0 m, and an average sample length of 1.25 m. A summary of significant diamond drill sample composite length, weighted average grades is provided in Tables 7 and 8. A total of eighty two samples were collected from previously unsampled whole core and 317 samples were collected from previously sampled intervals which did not have detailed assay data associated with them yet appeared to lie within the mineralized envelope, particularly no data was available for any of the AB95 designated holes from the Seal Zinc occurrence.

Diamond drill core samples were collected from historical drill core to fill in the gaps of unreported historic results. The sampling focused primarily on mineralized zones identified through preliminary 3D modelling. Approximately 80% of the drill core sampled in 2012 was previously sampled by Cominco, though detailed assay results were not available, therefore only half cores were remaining. The half core was again halved in order to obtain a representative (quarter core) sample over the desired intervals, while leaving a quarter core representative sample in the core box for further study if required. The samples were quartered using either a core splitter or a diamond bladed rock saw. For each sample, one quarter was left in its original position in the core box, on

site, for future reference. The other quarter was placed, along with a numbered sample tag, into a labelled plastic sample bag, and sealed. Figure 14 shows the historic drillholes that were sampled during the 2012 exploration program.

In addition to sampling the previously sampled portions of the drill core, 82 samples were taken from previously un-sampled portions of the core. These samples were collected where copper mineralization was noted in visual examination of the core, or where shoulder samples were not collected around historic mineralized intervals, or where un-sampled intervals existed between mineralized zones. Approximately 30% of the previously un-split core which was sampled and assayed during 2012 yielded assay results in the 0.1 to 0.3% range for Cu.

A total of eighty drillhole collars were located and re-surveyed using a handheld GPS unit. Seventeen of the holes were from the Seal Zinc showing, and sixty-three were from the Storm Copper showings. It was necessary to re-survey the drillholes as a discrepancy had been observed between locations reported by Cominco in assessment reports, and the actual locations of the collars in the field. There was some concern that the error in reported drillhole locations may have affected exploration results in the past. This is, however, unlikely as many of the historic drillholes were collared to intersect showings visible in outcrop, and in all likelihood, historic ground geophysical surveys and drill programs used the same local picketed grids for surveying and spotting drill collars.

Table 7 2012 Seal Zone Significant Assay Highlights From Historic Drill Holes

Drill Hole ID	From (m)	To (m)	Length (m)	Zn (%)	Ag (g/t)
AB95-02	51.8	70.6	18.8	8.46	24.2
AB95-03	76.6	81	4.4	12.23	39.3
AB95-03	88	101.7	13.7	6.74	34
AB95-06	100	120.2	20.2	5.86	23.43
AB95-06	127.3	134.5	7.2	3.71	30.18
AB95-07	132	137	5	10.45	69.46
AB95-10	140	146	6	1.76	30.98
AB95-11	191	194	3	1.15	34.87
AB95-11	203	208	5	1.79	53.58

Table 8 2012 Storm Prospect Significant Assay Highlights From Historic Drill Holes

Drill Hole ID	From (m)	To (m)	Length (m)	Cu (%)
ST97-08	0	18.7	18.7	2.06
ST97-08	25.2	58	32.8	3.78
ST97-08	72	82.5	10.5	2.06
ST97-09	62	86.5	24.5	2.03
ST97-10	91.5	99	7.5	0.95

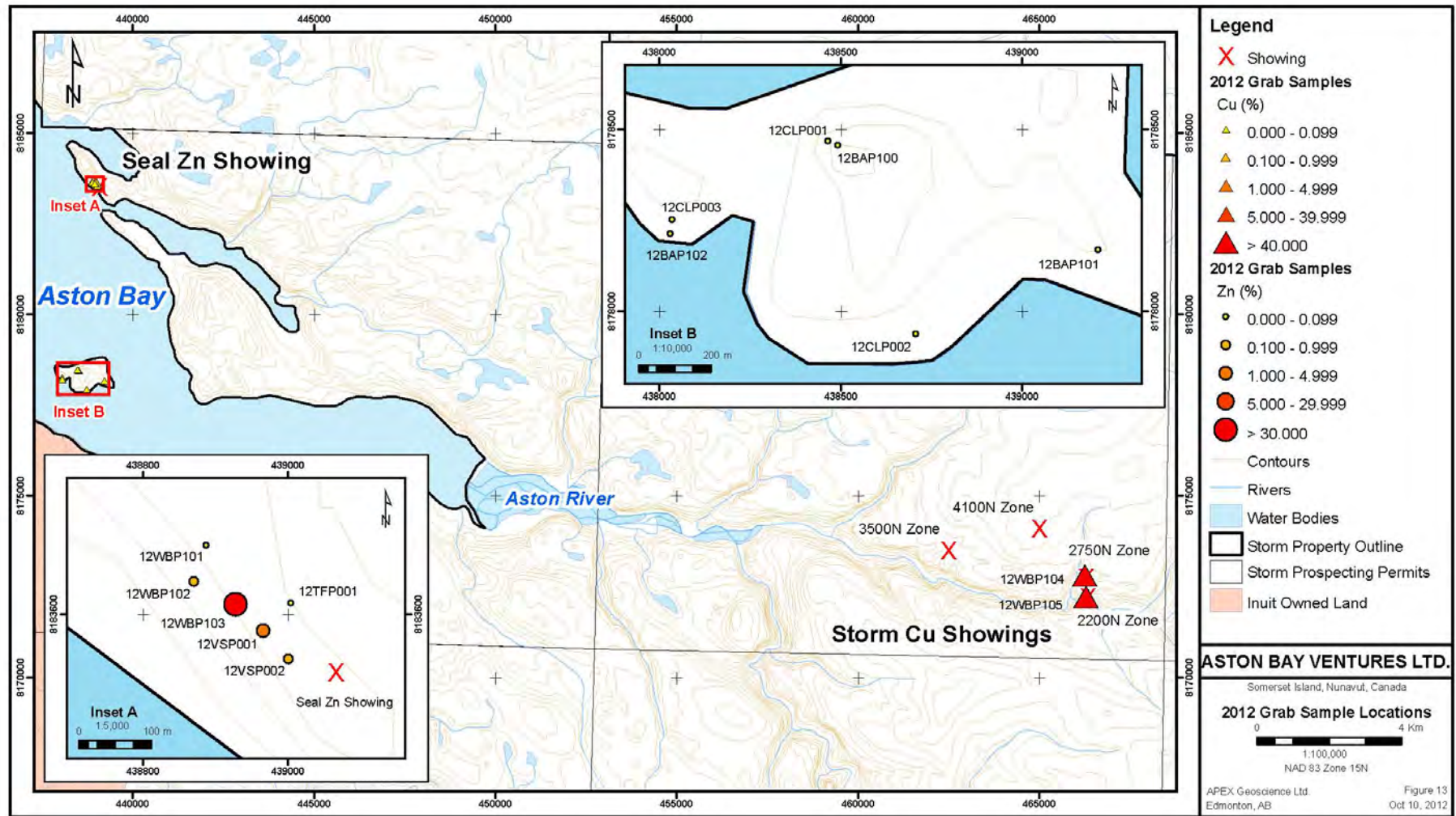


Figure 13 2012 Grab Sample Locations



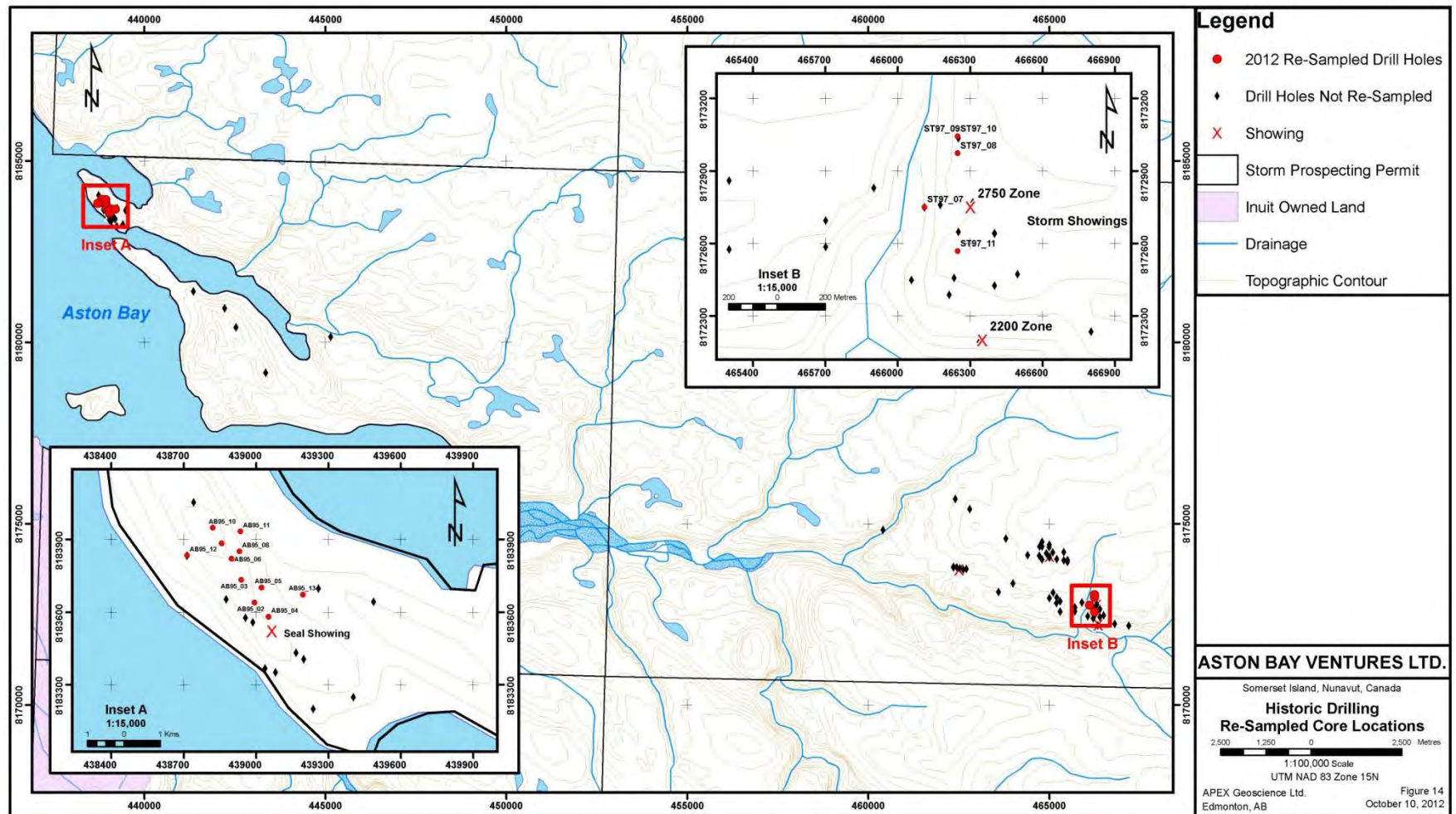


Figure 14 Historic Drilling Re-sampled Core Locations

## **10: DRILLING**

Previous drilling has been described and significant results listed in the History section. To date, Aston Bay has not conducted any diamond drilling on the Storm Property

## **11: SAMPLE PREPARATION, ANALYSES AND SECURITY**

### **11.1 Sample Collection and Shipping**

Rock grab samples were collected from the Storm Copper and Seal Zinc showings and from Seal Island. The samples were described including by lithology, alteration, mineralogy, grain size, and texture. These observations were recorded in a fieldbook and later transcribed to an Excel spreadsheet (Appendix 4). The samples which were roughly fist-sized pieces of rock, each weighing no more than 5 kg, were placed into labelled plastic sample bags and sealed. Rock samples were collected such that the specimens represented the overall characteristics of mineralization from each particular location. Sample locations were recorded with a handheld GPS and marked with a labelled, representative sample in the field.

The drill core sampling focused primarily on mineralized zones, and wherever possible, the original Cominco sample intervals were used. The majority of the drill core intervals sampled in 2012 were previously sampled by Cominco resulting in only half cores remaining. The half core was again halved in order to obtain a representative (quarter core) sample over the desired intervals. In addition to resampling the previously sampled portions of the drill core, several samples were taken from previously un-sampled portions of the core. These samples were collected where copper mineralization was noted in visual examination of the core, and where shoulder samples were not collected around historic mineralized intervals, or where un-sampled intervals existed between mineralized zones. All sampled drill core was halved using either a core splitter or a diamond bladed rock saw. For each sample, half was left in its original position in the core box, on site, for future reference. The other half was placed, along with a numbered sample tag, into a labelled plastic sample bag, and sealed. The minimum sample length was 0.5 m, the maximum sample length was 2.0 m, and the average sample length was 1.25 m.

### **11.2 Sample Preparation, Analyses and Security**

Individual rock grab and diamond drill core samples were placed into sealed plastic bags and then into poly woven (rice) bags for shipment to the independent laboratory immediately following collection. Numbered security tags were used to seal each rice bag prior to shipping. All rock samples were collected by APEX personnel and shipped to the ALS Minerals preparation lab in Yellowknife, NT.



Once received by ALS Minerals, rock and drill core samples were logged in to the ALS Minerals computerized tracking system and assigned bar code labels. Samples were dried prior to preparation and then crushed to pass a U.S. Standard No. 10 mesh, or 2 mm screen (70% minimum pass) using a mechanical jaw crusher. The samples were then split to 250 g using a riffle splitter, and sample splits were pulverized to pass a U.S. Standard No. 200 mesh, or 0.075 mm screen (85% minimum pass) using a steel ring mill (ALS Minerals, 2010).

The prepared samples were then shipped within the ALS Minerals network to the Vancouver Minerals Lab, located in North Vancouver, British Columbia. The Vancouver Minerals Lab facility is currently registered with ISO/IEC 17025:2005 accreditation from the Standards Council of Canada (SCC). ALS reported nothing unusual with respect to the shipment, once received. Security tags were reported to be intact and corresponded correctly with each bag of rock and drill core samples. The author did not have control over the samples at all times during transport, and therefore cannot personally verify what happened to the samples from shipping up to the time they were received by ALS. However, the author has no reason to believe that the security of the samples was compromised in any way once they entered the ALS chain of custody.

Rock grab sample pulps were subject to multi-element trace level analysis by Inductively Coupled Plasma - Atomic Emission Spectroscopy (ICP-AES) using nitric aqua regia digestion. A prepared sample is digested with aqua regia, diluted to 12.5 mL with deionized water, and analyzed by ICP-AES. The analytical results are corrected for inter-element spectral interference (ALS Minerals, 2009a). Samples that returned values greater than 100 ppm for Ag, and greater than 1% (10,000 ppm) Cu, Pb, or Zn were subjected to ore-grade (OG) ICP-AES analysis (ALS Minerals, 2009b). A prepared sample is digested with concentrated nitric acid and diluted with concentrated hydrochloric acid. The samples are then diluted with demineralized water in a 100 or 250 ml volumetric flask, and analyzed by ICP-AES or by atomic absorption spectrometry (AAS).

Diamond drill core sample pulps were subject to multi-element trace level analysis by ICP-AES using four acid digestion (ALS Minerals, 2009c). A prepared sample (0.25 g) is digested with perchloric, nitric, hydrofluoric, and hydrochloric acids. The residue is topped up with dilute hydrochloric acid and the resulting solution is analyzed by ICP-AES. Results are corrected for spectral interference. Samples that returned values greater than 100 ppm for Ag, and greater than 1% (10,000 ppm) Cu, Pb, or Zn were subjected to ore-grade (OG) element ICP-AES analysis (ALS Minerals, 2009b). A prepared sample is digested with nitric, perchloric, hydrofluoric, and hydrochloric acids, and then evaporated to incipient dryness. Hydrochloric acid and de-ionized water are added for further digestion, and the sample is heated for an additional allotted time. The sample is then cooled to room temperature and transferred to a 100 ml volumetric flask. The resulting solution is diluted to volume with de-ionized water, homogenized, and the solution is analyzed by ICP-AES or by ICP-AAS (ALS Minerals, 2009b).

It is the opinion of the authors that the sample preparation, analysis and security procedures employed were appropriate for the current level of investigation as well as for the commodities of interest.

## **12: DATA VERIFICATION**

The authors conducted property visits to the Storm Property on August 4, 2012 (Mr. Robinson) and July 28 to August 3, 2012 (Mr. Atkinson) to supervise the 2012 exploration program and verify historical results. The authors visited the Seal, 2200N Zone, 2750N Zone, 3500N Zone, and 4100N Zone showings to verify the geology and mineralization reported at each showing. Rock grab samples were taken as samples to verify the mineralization at the Seal, 2200N Zone, and 2750N Zone showings. Additionally, the authors reviewed sections of mineralized drill core and collected drill core samples of several intervals which were historically reported to have anomalously high copper or zinc values.

At the ALS Minerals laboratory quality assurance and quality control (QA/QC) measures include routine screen tests to verify crushing and pulverizing efficiency, sample preparation duplicates (every 50 samples), and analytical quality controls (blanks, standards, and duplicates). Quality control samples are inserted with each analytical run, with the minimum number of QC samples dependant on the rack size specific to the chosen analytical method. Results for quality control samples that fall beyond the established limits are automatically red-flagged for serious failures and yellow-flagged for borderline results. Every batch of samples is subject to a dual approval and review process, both by the individual analyst and the Department Manager, before final approval and certification (ALS Minerals, 2012).

The QA/QC measures employed by APEX for the 2012 field program involved inserting blanks, analytical standards, and field duplicates in the diamond drill core sample stream. These QA/QC measures were completed as part of the drill core sampling program, prior to shipment to the laboratory, and are in addition to the normal QA/QC measures taken by the laboratory. Laboratory pulp standards inserted into the sample stream by APEX were compared to expected values, in order to ensure the lab results fell within the acceptable margin of error. Similarly, blanks were compared to expected values to ensure that contamination was not an issue.

It is the author's opinion that the sample preparation, security, analytical, and QA/QC procedures were more than adequate for this stage of exploration at the Storm Property.

Based on the property visit and the assay results, the authors have no reason to doubt the historic exploration results. Samples from the drill core yielded grade over width assays that were comparable to historically reported assays.

### **13: MINERAL PROCESSING AND METALLURGICAL TESTING**

No mineral processing or metallurgical testing has been carried out by or on behalf of Aston Bay for the Storm property.

### **14: MINERAL RESOURCE ESTIMATES**

Aston Bay has not yet produced a mineral resource estimate for the Storm property.

### **15: ADJACENT PROPERTIES**

A group of eight contiguous prospecting permits abuts the property on the southern edge. These permits cover the eastern halves of NTS 1:50,000 map sheets 58C3 and 58C6, and the western halves of sheets 58C2 and 58C4. The northern block of four permits was issued in the name of David Dupre, and the southern four in the name of ColtStar Ventures (ColtStar). All of the permits are shown as “Active” online on the Government’s (Aboriginal Affairs and Northern Development Canada’s) mineral rights viewing website (<http://ism-sid.inac.gc.ca/website/sidvh1/viewer.htm>). ColtStar refers to their permits as the Allen Bay property on their website ([www.colstarventures.com](http://www.colstarventures.com)). The Nunavut Geoscience Nunavut minerals (NUMIN) database lists three showings on the ColtStar Allen Bay Property. These are the Peuyuk kimberlites, the Selatiavak kimberlite cluster, and the Typhoon zinc - lead showing. These showings have been the subject of sporadic exploration efforts in the past, but no diamonds or base metals of economic significance have been located.

### **16: OTHER RELEVANT DATA AND INFORMATION**

The authors are not aware of any other information of a material nature relating to the Storm property. There is no information relating to the property, mineralization, metallurgical, environmental or social issues known to the authors not mentioned in this report.

### **17: INTERPRETATION AND CONCLUSIONS**

The Storm Property is largely unexplored apart from the areas directly associated with the known showings. There have been several phases of airborne and ground geophysical surveying as well as a limited amount of diamond drilling. Of the 9000 m of drilling completed on the Storm showings, most were short holes (<150 m). Many of the mineralized zones intersected by drilling in the past are still open laterally and at depth, and none of the deeper VTEM anomalies have yet been drill tested. There has been some concern that the errors in the reported collar coordinates may have resulted in some of

the holes not intersecting their intended targets, but this concern is probably overstated as discussed in section 9, above.

The remote location, challenging terrain and climate have thus far limited the effective determination of the size and characteristics of the Seal Zinc and Storm Copper mineral deposits. At Seal Zinc, steep terrain makes it problematic to collar drill holes in the optimum locations for drill testing the stratabound mineralization. At Storm Copper, the majority of the mineralization in the largest zone is covered, or masked, by complexly faulted units lying within the Central Graben. These risks can be mitigated by employing a systematic approach to exploration throughout the property. Soil geochemistry, geophysical surveys and drilling results to date indicate that further work is warranted to outline and better define both showings.

Enhanced derivative grids of the airborne magnetic data were generated and imaged as part of the geophysical data reprocessing exercise and they have highlighted a limited number of structural orientations and trends. The aeromagnetic data is primarily reflecting very long wavelength, buried features believed to be sourced in the Proterozoic basement at some depth. A high-frequency, shallow component is however, evident throughout and is possibly related to detrital materials themselves related to variation in sea levels. Significant linear features are mapped based upon analysis of all of the derivatives. These are interpreted as most likely occurring within the sedimentary section (based on frequency content) and may be related to horizons equivalent to the known Storm Copper zones. These features are presented as possible structural controls impacting the stratiform sulphide mineralization (Campbell, 2011).

A comprehensive post-processing study carried out on the 2011 airborne VTEM data shows that the mineralized zones of the Storm deposit can be accurately mapped and modeled. The following is quoted from the Airborne Geophysical Interpretation Report by Christopher Campbell (Campbell, 2011) which is appended to this report and forms Appendix 3.

*“Based on initial test modelling of selected lines, a consecutive series of 41 flight lines over the main Storm Copper zone were chosen for detailed resistivity depth imaging (RDI) by the airborne contractor; results were provided as section images and grids for each line as well as a 3D voxel model of the apparent resistivity. These data were analyzed in 3D using Encom PA (visualization and interpretation software). Analysis of the RDI inversions in conjunction with the historical drilling suggests that there remain portions of the 4100N, ST97-15, ST99-34 and 2200N Zones that have not been drill tested adequately. Further, the deep (100 to 200 m below sea level) conductive trends shown to be extending southward from the 4100N Zone have not been tested at all. Additional modeling of the VTEM data using the Maxwell plate modelling software should permit precise drill targeting for these bodies.”*

An additional nine secondary anomalous areas were identified through inversion modeling of the VTEM data (Figure 15). These zones do not have characteristics similar to those of the main Storm deposits, but do represent areas of surficial or near surface conductivity, and merit further exploration.

Comparison of the assay results from the 2012 core sampling program against summarized historic intervals mentioned in other reports and documents shows that the 2012 results (grade over width) are comparable to the historic data. It was not possible to perform statistical analyses on the sample sets due to sample intervals not exactly coinciding with historical sample intervals. Table 9 provides a comparison between historic and recent assay results. The 2012 core sampling program has confirmed the continuity and tenure of the zinc and copper mineralization as well as infilling information which was previously unavailable. This was particularly important in drillholes which were located within the mineralized envelopes at the showings that did not have associated assay information and therefore affected the understanding of the size and grade of the potential mineralized body. Prospecting in 2012 confirmed the location and surficial extent of historic mineralized zones at the Seal Zinc and Storm Copper showings. The 2012 rock grab samples from these areas returned highly anomalous results >30% Zn (Seal Zinc) and >40% Cu (Storm Copper). Overlimit assay results for these samples are still pending.

The review of the historic data along with the 2012 work program has highlighted the potential of the Storm Property to host significant zinc and copper mineralization within at least two distinct deposit types. Both the zinc and copper mineralization identified to date appear to have sufficient continuity in both extent and grade to warrant further follow up exploration. With the use of the VTEM geophysical data there also exists a large potential for identifying previously unknown mineralization within the property, further test work is required throughout the property to fully ascertain the potential of the property to host economic mineralization.



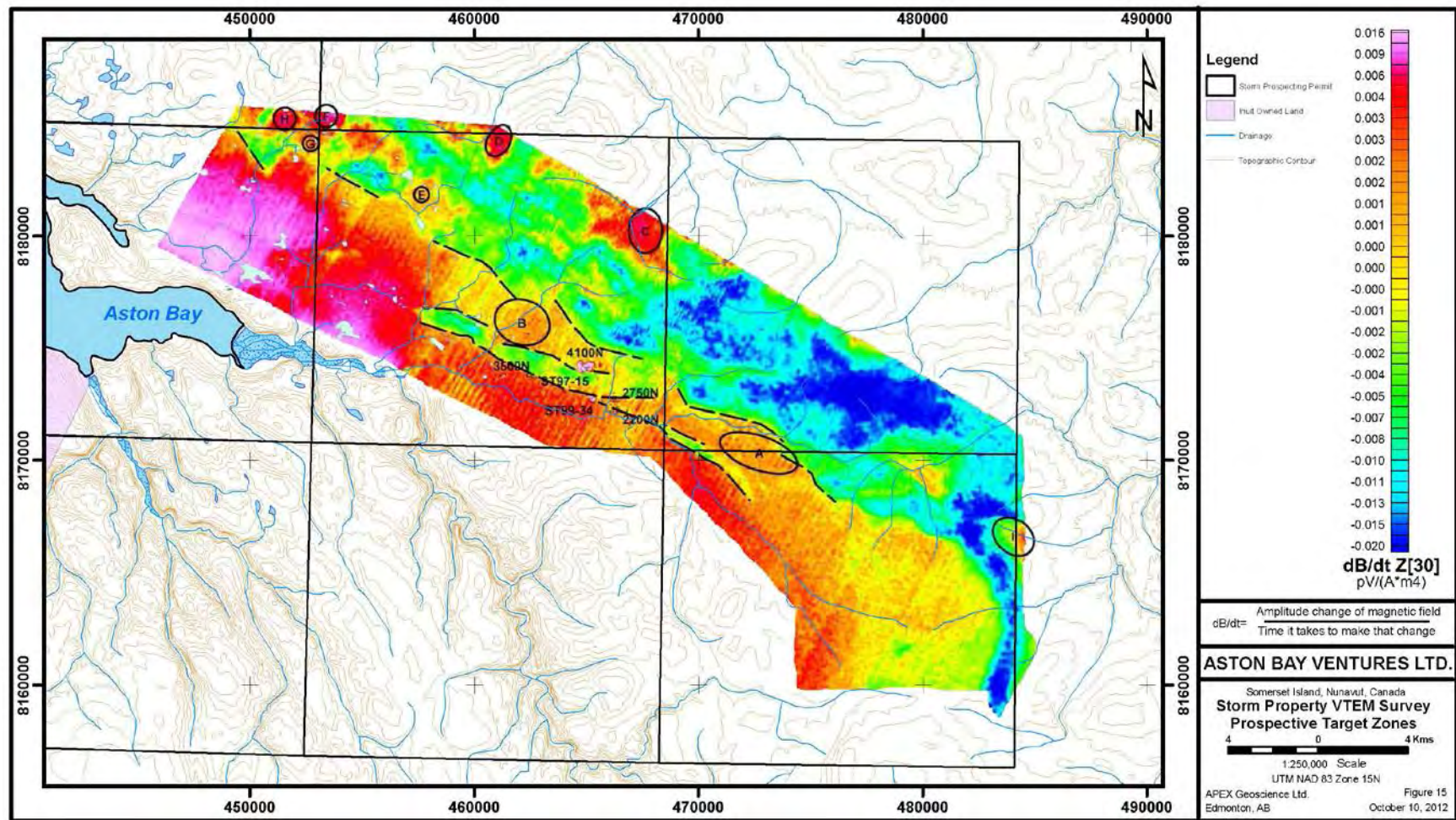


Figure 15 Storm Property VTEM Survey Prospective Target Zones



Table 9 Comparison of Historic to 2012 Assay Results for Selected Intervals

Drill Hole	From (m)	To (m)	Length (m)	Ag (ppm)		Zn (%)	
				Hist	2012	Hist	2012
AB95-02	51.8	63	11.2	33.90	25.20	14.82	9.24
AB95-02	65	70.6	5.6	39.53	35.10	11.58	10.53
Drill Hole	From (m)	To (m)	Length (m)	Ag (ppm)		Cu (%)	
				Hist	2012	Hist	2012
ST97-08	5	110	105	4.95	3.40	2.92	2.09
including	5	58	53	5.66	4.20	5.09	3.18
including	27.8	29.1	1.3	14.80	21.90	18.74	13.65
and	50.3	54	3.7	2.68	4.20	14.68	9.67
and	72.5	82	9.5	7.82	5.20	4.04	1.98

## 18: RECOMMENDATIONS

Analysis of the RDI inversions on the airborne VTEM data, in conjunction with the historical drilling suggests that there are portions of the 4100N, ST97-15, ST99-34 and 2200N zones that have not been tested adequately by drilling. In addition, the deep (100 to 200 m below sea level) conductive trends shown to be extending southward from the 4100N zone have not been tested at all. Further modeling of the VTEM data using the Maxwell plate modelling software should be completed over the winter to precisely identify drill targets in the underexplored areas in and near the VTEM anomalies at the Storm deposit.

In addition to the known showings and their possible extensions, there are nine other areas of interest identified by examination of the geophysical data (Campbell, 2011). These targets do not have characteristics similar to the main Storm zones discussed above, but nonetheless present themselves as possible areas for ground follow-up and geochemical sampling. They may reflect sulphides deficient in copper, or sulphides dominant in zinc and/or lead mineralization and thus not amenable to direct detection by electromagnetic methods.

A program of geological prospecting, sampling and ground geophysics consisting of 3D induced polarization/resistivity is recommended to further delineate the conductive zones in the vicinity of the 4100 zone and possibly identify disseminated sulphides which in turn could indicate anomalous Cu mineralization. A reasonable Stage 1 exploration plan for the short term should entail a multi-faceted program to produce a preliminary resource estimate for the Seal Zinc deposit from existing drillhole data and good follow-up drill targets for a subsequent diamond drill program on the Storm Copper showings (Table 10). The original Seal drilling data should be acquired from Teck along with follow-up geological and engineering studies leading to a NI 43-101 compliant mineral resource for the prospect.

Table 10 Estimated cost to conduct Stage 1 and 2 exploration programs during 2013

Item	Unit Cost	Units	Subtotal
<b>1 Stage 1:</b>			
<b>Accommodation: Camp, Food &amp; Supplies</b>	\$60,000	1	\$60,000
<b>Geological Personnel &amp; Camp Management</b>	\$50,000	1	\$50,000
<b>Geophysics Crew &amp; Equipment</b>	\$20,000	1	\$20,000
<b>Fixed-Wing Aircraft Support</b>	\$100,000	1	\$100,000
Includes Buffalo & Twin Otter mobilization of camp, supplies, fuel, weekly support & demob			
<b>Helicopter</b>	\$1,600	40	\$64,000
<b>Fuel</b>	\$10,000	1	\$10,000
Includes diesel, Jet A and propane			
<b>Sample Assays: Core &amp; Surface</b>	\$35.00	170	\$6,000
<b>Engineering &amp; Environmental Studies</b>	\$15,000	1	\$15,000
<b>Administration, Reporting, Fees &amp; Contingency</b>	\$50,000	1	\$50,000
<b>TOTAL STAGE 1 COSTS</b>			<b>\$375,000</b>
<b>2 Stage 2:</b>			
<b>Accommodation: Camp, Food &amp; Supplies</b>	\$95,000	1	\$95,000
<b>Geological Personnel &amp; Camp Management</b>	\$80,000	1	\$80,000
<b>Geophysics Crew &amp; Equipment</b>	\$150,000	1	\$150,000
<b>Fixed-Wing Aircraft Support</b>	\$315,000	1	\$315,000
Includes Buffalo & Twin Otter mobilization of camp, supplies, fuel, weekly support & demob			
<b>Helicopter</b>	\$1,800	105	\$190,000
<b>Fuel</b>	\$45,000	1	\$45,000
Includes diesel, Jet A and propane			
<b>Drilling 1,200 m</b>	\$175/m	1200	\$210,000
Includes all drilling contract costs, including mob-demob meterage cost and man-hours			
<b>Sample Assays: Core and Surface</b>	\$35.00	1400	\$49,000
<b>Engineering, Resource Studies &amp; Tech Report</b>	\$75,000	1	\$75,000
<b>Administration, Reporting, Fees &amp; Contingency</b>	\$83,000	1	\$90,000
<b>TOTAL STAGE 2 COSTS</b>			<b>\$1,300,000</b>

Concurrent with the Seal planned work, exploration for the Storm showings should comprise; the completion of the reprocessing of the airborne VTEM data using the Maxwell plate modelling software, ground electromagnetic or induced polarization surveying, and prospecting, mapping and geochemical

sampling. This program is recommended to further delineate the conductive zones and possibly identify disseminated sulphides which in turn could indicate additional anomalous Cu mineralization. This Stage 1 program is estimated at \$375,000 (not including GST) and would result in the location and prioritization of prospective targets to be drilled at the Seal and Storm areas in a subsequent Stage 2 program (Table 10). Table 10 provides a best estimate of costs associated with the proposed, Stage 1 exploration program. It is anticipated that a follow-up Stage 2 drilling program could also be completed during 2013. A program of 1,200 m of diamond drilling tagged onto the Stage 1 field based exploration program is estimated at \$1,300,000 not including GST (Table 10). However, the Stage 2 drilling program is contingent upon the results of the Stage 1 field work.

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## **Appendix 1**

### **Aston Bay Mineral Tenure Confirmation Letter**



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**Brian Abraham**  
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November 7, 2012

Aston Bay Ventures Limited  
2900 - 550 Burrard Street  
Vancouver, BC V6C 0A3

Dear Sirs/Mesdames,

**RE: Commander Resources Ltd. ("Commander")  
Storm Property, Nunavut**

We have been asked by Commander to report on prospecting permits held by Commander in Nunavut. In that capacity, we have been instructed to provide you with the following report relating to the prospecting permits relating to the property known as the "Storm Property" located in Nunavut, all as more particularly described in Schedule "A" hereto (the "Permits").

In reviewing Commander's interest in the Storm Property, we examined all of the Permits. The examination of the Permits included a review of copies of the permits issued by the Department of Indian and Northern Affairs Canada (now known as Aboriginal Affairs and Northern Development Canada); correspondence from the Nunavut Mining Recorder's office, dated February 1, 2008, and February 1, 2010; and correspondence with the Nunavut Mining Recorder's office on October 31, 2012, and November 7, 2012. We have also conducted online searches on SidViewer and NT GeoViewer, the online Northwest Territories and Nunavut mineral tenure maps, on October 29, 2012, and November 6, 2012.

Based upon, and subject to our searches and examinations described above and the qualifications listed below, we report that:

1. the Permits are granted in the name of "Commander Resources Ltd.";
2. each of the Permits in Schedule A is active and in good standing under the *Northwest Territories and Nunavut Mining Regulations* ("NTNMR") (formerly known as the *Canada Mining Regulations*) until the "Expiry Date" stated for such Permit, as set out in Schedule A;
3. Commander is the holder of a Prospector's Licence Number N30922, which is currently active in Nunavut until March 31, 2013.

This report relating to the Permits is subject to the following exceptions, qualifications and assumptions:

1. The report in paragraphs 1 and 2 is subject to any unrecorded interest of third parties.
2. The report in paragraphs 1 and 2 is subject to the requirement under the NTNMR to conduct exploratory work or pay any related fees as required.

2. The report in paragraphs 1 and 2 is subject to the requirement under the NTNMR to conduct exploratory work or pay any related fees as required.
3. The Permits are subject to any rights previously acquired or applied for by any person in the areas which the Permits apply.
4. No investigation was made of the original application for filing of, the location of, the boundaries of, or the existence of any interest in any of the Permits.
5. The documents stated to have been examined are the only documents we examined relating to the Permits.
6. The persons who purported to execute documents examined by us were the persons named therein and the persons who purported to execute such documents on behalf of corporations and government departments were duly authorized to do so.
7. Copies of documents examined were, in fact, true copies of documents in existence and that the originals of such documents were properly executed.
8. No search or other correlation was made with respect to tax assessed by any applicable government authority.
9. No search or other correlation was made with respect to any miners, statutory or other liens for which a claim of lien has not been recorded.
10. No review was conducted of any applicable taxation legislation, bankruptcy, insolvency, reorganization, arrangement, compromise, moratorium and other similar laws relating to or affecting the Permits.
11. Other than as disclosed herein, no search or other correlation was made with respect to any overlapping or conflicting surface rights or titles, including Inuit Owned Land.
12. No examination was made of any prospector's licence, assessment report or other record to determine its compliance with the provisions of the NTNMR.
13. No representation is made as to the possible effect on the Permits of aboriginal land claims, traplines, environmentally sensitive areas, unique animal species, Caribou protection measures, parks proposals, protected areas, species at risk federal or territorial legislation, or land resource use plans.
14. No representation is made as to whether any registered title exists in respect of any lands in the general location of the Permits other than as disclosed herein.

This report is delivered exclusively for the use of the persons to whom it is addressed and is not to be used or relied upon by third parties. This report may not be quoted from or referred to in dealings with third parties without our prior written consent. We disclaim any obligation to update this report in the future as a result of changes of fact or law which may come to our attention.

Yours truly,

*Fraser Milner Casgrain LLP*

*Fraser Milner Casgrain LLP*



**SCHEDULE A  
STORM PROPERTY**

Permit No.	Permit Status	Owners Name	Claim Sheet	Quarter	Issued Date	Expiry Date	Length (Years)	Acres	Notes
7547	Active	Commander Resources Ltd.	058C10	NW	2008-02-01	2013-01-31	5	55,851.22	
7548	Active	Commander Resources Ltd.	058C11	NE	2008-02-01	2013-01-31	5	55,851.21	
7549	Active	Commander Resources Ltd.	058C11	NW	2008-02-01	2013-01-31	5	42,318.99	1
7880	Active	Commander Resources Ltd.	058C10	SW	2010-02-01	2015-01-31	5	54,265.00	

All of these prospecting permits were granted to Commander Resources Ltd. pursuant to the *Northwest Territories and Nunavut Mining Regulations*. All of these prospecting permits are active and in good standing until the dates shown subject to any exploratory work requirements, any annual payments and reporting requirements.

**Notes**

1. Permit 7549: This prospecting permit is partially located on Inuit Owned Land. As of July 9, 1993, the Inuit of Nunavut were granted title to these lands pursuant to the Nunavut Land Claims Agreement. Surface access to Inuit Owned Land will require written permission from the Regional Inuit Association.

## **Appendix 2**

### **Aston Bay APEX Costs 2011-2012**

**APEX Geoscience Ltd.**  
**Aston Bay Ventures Inc. - Storm Project, Somerset Island, Nunavut**  
January 2011 through December 2012 Exploration Costs

ITEM	Amount	Subtotal
<b>Salaries</b>		
Principal Consultants	26,894.00	
Geological Fieldwork	39,682.75	
Geological Compilation, Modelling & Interpretation, Pre and Post Field Logistics, Land Use	71,665.00	
<b>Total Eligible Salary Costs</b>		138,241.75
<b>APEX Rentals and Fees</b>		19,414.28
<b>Assays &amp; Related Analytical Costs</b>		10,877.94
<b>Field Supplies</b>		4,323.62
<b>Freight</b>		1,787.54
<b>Subcontract &amp; Other Consulting</b>		28,688.00
Intrepid Geophysics, Discovery Mining, Oreninc etc		
<b>Accommodations &amp; Food</b>		46,575.53
Hotels & Canadian Arctic Holidays Camp		
<b>Travel - Airfares &amp; Charter</b>		180,700.80
Various Airfares Field Crew to Somerset Island & Return	19,273.10	
Canadian Arctic Holidays: Airfare & Freight to Somerset Island & Return	37,000.00	
Arctic Sunwest to Somerset Island & Return	7,000.00	
Great Slave Helicopters Charter	117,427.70	
<b>Travel - Fuel</b>		11,535.56
<b>Computer Supplies &amp; Software</b>		3,008.00
<b>Phone, Miscellaneous Travel, Fees &amp; Charges</b>		2,089.05
<b>Total Eligible 3rd Party Costs</b>		309,000.32
<b>Total Eligible Project Expenses</b>		447,242.07