# TECHNICAL REPORT ON THE EXPLORATION HISTORY AND CURRENT STATUS OF THE STORM PROJECT,

SOMERSET ISLAND, NUNAVUT

NTS Sheets 58C/10, 11, 13, 14
(73°39’ N Latitude and 94°20’ W)
UTM: 8173459N 458108E NAD83z15
Prospecting Permits: 7547, 7548, 7549, 7880, 8340, 8341, 8342, 8343

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Effective Date: October 31, 2012
Yellowknife, Northwest Territories
Canada

# CERTIFICATE OF QUALIFICATIONS, CONSENT AND DATE AND SIGNATURES

I, Ronald James Robinson residing at 3506 McDonald Drive, Yellowknife, Northwest Territories, Canada hereby certify that:

I am presently employed by Aurora Geosciences Ltd. of Yellowknife, Northwest Territories, Canada as a senior resource geologist.

I am a graduate of the University of British Columbia (1985) and hold a B.Sc. degree in geology. I have been employed in my profession by various mining and consulting companies since my graduation. I have produced and supervised the production of mineral resource estimates and mineral reserve documents on numerous deposits and deposit types for the past twenty years.

I am a member of the Northwest Territories Association of Professional Engineers, Geologists, and Geophysicists (Member #1662).

I have read the definition of “Qualified Person” set out in National Instrument 43-101 (“NI 43-101) and certify that by reason of my education, affiliation with a professional association (as defined by NI 43-101) and past relevant work experience, I fulfill the requirements to be a “Qualified Person” for the purposes of NI 43-101.

I am responsible for the preparation of all sections of the Technical Report titled “*Technical Report on the Exploration History and Current Status of the Storm Project, Somerset Island, Nunavut”*, and dated October 31st, 2012 (the “Technical Report”). I visited and inspected the property on August 4, 2012.

I have had no involvement with Aston Bay Ventures Ltd., its predecessors or subsidiaries nor in the Storm Property prior to visiting the property and researching and writing this report, and I am independent of the issuer and vendor applying all of the tests in section 1.5 of both NI 43-101 and 43-101CP.

I have not received nor expect to receive any interest, direct or indirect, in Aston Bay Ventures Ltd., its subsidiaries, affiliates and associates.

I have read “Standards of Disclosure for Mineral Projects”, National Instrument 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that Instrument and Form.

As of the date of this certificate, to the best of my knowledge, information and belief, I am not aware of any material fact or material change with respect to the subject matter of the Technical Report that is not reflected in the Technical Report, the omission or addition of which would make the Technical Report misleading.

I consent to the public filing of this technical report with any stock exchange and other regulatory authority and consent to the publication for regulatory purposes, including electronic publication in the public company files or their websites accessible to the public, of extracts from the Technical Report.

Dated at Yellowknife, Northwest Territories, this 31st day of October, 2012.


__________________________

R. J. Robinson, P. Geol.
Northwest Territories and Nunavut Association of Professional Engineers and Geoscientists
Senior Resource Geologist
Aurora Geosciences Ltd.

## Certificate of Author

I, Bryan Roy Atkinson, B.Sc., P.Geol., MAusIMM, do hereby certify that:

1. I am a senior geologist with: APEX Geoscience Ltd.<br>Suite 200, 9797 – 45th Avenue<br>Edmonton, Alberta T6E 5V8
2. I graduated with a B.Sc. with Specialization in Geology from the University of Alberta in 2004.
3. I am and have been registered as a Professional Geologist with the Association of Professional Engineers, Geologists and Geophysicists of Alberta since 2008.
4. I have worked as a geologist and practiced my profession for more than eight years since my graduation from university and have been involved in mineral exploration, mine site geology and operations and mineral resource estimations on numerous projects and deposits in Canada, the United States, Mexico, South America, Africa, Australia, Indonesia and Saudi Arabia.
5. I have read the definition of "Qualified Person" set out in National Instrument 43-101 ("NI 43-101") and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "Qualified Person" for the purpose of NI 43-101.
6. I am responsible for and have supervised the 2012 exploration and preparation of the Technical Report titled *"Technical Report on the Exploration History and Current Status of the Storm Project, Somerset Island, Nunavut"*, and dated October 31st, 2012 (the "Technical Report"). I visited the Property between July 28th and August 31st, 2012.
7. Prior to the completion of this report I have not had prior involvement with the property that is the subject of the Technical Report.
8. To the best of my knowledge, information and belief, the Technical Report contains all relevant scientific and technical information that is required to be disclosed, to make the technical Report not misleading.
9. I own 25,000 shares of Aston Bay Ventures Ltd. The level of investment does not compromise my independence as set out in sections 1.5.1 and 1.5.2 of NI 43-101. I have read National Instrument 43-101 and Form 43-101F1, and the Technical Report has been prepared with that instrument and form. I am independent of the vendor applying all of the tests in section 1.5 of both NI 43-101 and 43-101CP.
10. I consent to the filing of the Technical Report and extracts of such with the regulatory authority and any publication by them for regulatory purposes, including electronic publication in the public company files or their websites.

Dated this October 31st, 2012
Edmonton, Alberta, Canada


Bryan R. Atkinson, B.Sc., P.Geol., MAusIMM

**TECHNICAL REPORT ON THE EXPLORATION HISTORY AND CURRENT STATUS OF THE STORM PROJECT, SOMERSET ISLAND, NUNAVUT**

# TABLE OF CONTENTS

## LIST OF FIGURES

## LIST OF TABLES



## APPENDICES (At end of document)

# 1: SUMMARY

## 1.1 Introduction

In 2012, Aston Bay Ventures Ltd. (Aston Bay) commissioned APEX Geoscience Ltd. (APEX) to complete a field based sampling program and, in conjunction with Aurora Geosciences Ltd. (Aurora), prepare an independent, Canadian National Instrument 43-101 (NI 43-101) Technical Report, for the Storm Property ("the Property"), located on Somerset Island, in Nunavut, Canada. The Storm Property contains the Seal zinc-silver prospect and multiple copper-silver showings that collectively represent the Storm prospect. This report provides details of historic and recent base metal exploration conducted at the Property to date, which includes a recent airborne geophysical survey and follow-up interpretation during 2011 and 2012, and a field based surface and historic core sampling program along with ground truthing of the recently identified geophysical anomalies during 2012.

A detailed post-processing study carried out on the 2011 airborne VTEM data in 2012 indicated that the mineralized zones of the Storm deposit can be accurately mapped and modeled. Analysis of the resistivity depth imaging (RDI) inversions in conjunction with the historical drilling suggests that there remain several 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.

A further nine secondary anomalous areas were identified through inversion modeling of the VTEM data. 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 investigation.

The 2012 drill core resampling program indicates that the 2012 assay values agree very well with the historic summarized intersections where available. Sampling of selected, previously untested sections of the stored drill core commonly yielded copper assays in the range of 0.1 to 0.3% copper.

This report provides details of base metals exploration conducted to date in order to indicate that the Storm property is a property of merit, suitable for further advancement.

## 1.2 Location and Ownership

The property is located 112 km south of the community of Resolute Bay, Nunavut on Somerset Island and centred geographically at approximately 73°39' North latitude and 94°20' West longitude. The property is a land package consisting of four Commander prospecting permits totaling 195,438.9 acres or 79,091 hectares, along with four prospecting permits held by Michael Dufresne on behalf of Aston Bay, totaling 167,598 acres or 67,825 hectares. The total property area is 363,037 acres or 146,916 hectares.

The Storm property covers an area roughly 63 kilometres long by 42 kilometres wide. The known Storm Copper showings and geophysical anomalies cover a broad area east of Aston Bay. The showings extend east/west 34 km from 450000E to 484000E and north/south 20 km from 8165000N to 8185000N. The Seal Zinc showings cover a smaller area 6 km north/south and 2 km east /west on a peninsula and island in Aston Bay

With respect to the four (4) permits held by Commander there is an option agreement with Aston Bay whereby the latter can earn a 70% ownership stake by becoming publicly listed, transferring 3,000,000 common shares and $150,000 to Commander, plus incurring $15 million in exploration expenditures to advance the property, including delivery of an Indicated Resource as defined by NI 43-101, before December 31, 2019.

Aston Bay and Escudo entered into an arrangement agreement pursuant to which all of the issued and outstanding Aston Bay shares will be transferred to Escudo in exchange for one common share of Escudo. Upon completion of the transaction Aston Bay will become a wholly owned subsidiary of Escudo.

## 1.3 Geology

The Storm property covers a portion of the Cornwallis Fold and Thrust Belt which affects sediments of the Arctic Platform deposited on a stable, passive continental margin that existed from Late Proterozoic to Late Silurian time. The oldest rocks in the sedimentary sequence are intruded by 1,270 Ma MacKenzie diabase dykes and 623 Ma Franklin diabase dykes.

The Late Silurian to Early Devonian Caledonian Orogeny shed clastic sediments onto the Arctic Platform from the east and created localized, basement-cored uplifts. The most significant basement uplift is the Boothia Uplift, a north-south trending basement feature 125 km wide by 1,000 km long and possibly rooting the Sverdrup Basin to the north.

Southward compression during the Ellesmerian Orogeny in Late Devonian to Early Carboniferous time produced a fold and thrust belt north and west of the former continental margin, effectively ending carbonate sedimentation throughout the region. It is this tectonic event that is believed to have generated the ore-bearing fluids responsible for Zn-Pb deposits in the region.

## 1.4 History and Mineralization

Historical exploration around the Storm Property has defined two distinct styles of mineralization, each associated with its own specific stratigraphic horizon. The stratabound Seal Zinc (Zn) showing occur in Early to Middle Ordovician Ship Point Formation rocks. The stratigraphic and structurally controlled Storm Copper (Cu) showings occur at least 800 m higher in the stratigraphic column in the Late Ordovician to Late Silurian Allen Bay Formation (Cook and Moreton, 2000).

Mineralization at the Seal Zn showings is primarily hosted within a quartz arenite unit with interbedded dolostone and sandy dolostone of the Ordovician Ship Point Formation. Mineralization at the Storm Cu showings is epigenetic, carbonate-hosted and lies within an intracratonic rift basin that has been modified by folding and faulting. The mineralization is spatially associated with the north and south boundary faults of the Central Graben. This structure is interpreted as a pull-apart basin developed as a result of translational movement along basement-rooted faults. The basal Aston Formation red beds are thought to be a plausible source of metals for the mineraliztion at both the Seal Zn and Storm Cu showings.

The area has been an exploration target since 1960 when mineralization was first discovered by Bankeno Ltd. while conducting oil and gas exploration in the region. Bankeno entered into a 25% joint venture with Cominco Ltd. in 1964 to explore properties in the Cornwallis Zn-Pb district, including the area of the Storm showings. From early 1964 until 2007, Cominco was actively conducting exploration within the Storm Property. A joint venture agreement with Noranda Inc. covered exploration from 1999 to 2001. Commander Resources acquired Prospecting Permits in the area after the land package held by Cominco had substantially lapsed in 2007.

In writing this report the authors relied upon government research, personal communications, assessment reports and historical internal reports summarized by and on behalf of Cominco, Noranda and Commander. The author also utilized information from Cominco, later Teck-Cominco Ltd. (Teck), who had maintained mineral tenure in the region since 1964.

## 1.5 Work Completed

The 2012 program involved further interpretation of the VTEM and aeromagnetic survey flown in 2011 by Intrepid Geophysics. Modelling of the historic drill hole data in 3D to identify trends within the mineralized envelopes of the known showings. This was followed by a property visit, prospecting, surface sampling, sampling intervals of historical diamond drill core that had not been previously sampled or had been sampled but the assays were not made available to Aston Bay and ground truthing of the VTEM anomalies by APEX and Aurora personnel. Resurveying of the drill collars was necessary as it had been noted that previously published collar locations did not correspond to the actual locations of the drillhole collars in the field.

The drill core sampling program was designed to validate certain historical results, extend several of the mineralized historically sampled intervals and infill data missing (not reported) from previous drill programs. The sampling focussed on intervals of core that through preliminary modelling appeared to lie within the mineralized envelope at both Seal and Storm yet did not have publically available assays associated with them. 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. Most of these sample intervals were shoulder samples, or samples from between previously recognized mineralized zones.

Prospecting 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. A total of 14 rock grab samples were collected from the Storm Copper, Seal

Zinc and from Seal Island. Two samples were collected from two discrete zones, 2750N and 2200N, within the overall Storm Copper zone, both assayed greater than 40% Cu. Six samples were collected along the trend of known mineralization at the Seal Zinc showing, returning assays up to greater than 30% Zn. On Seal Island, six samples were collected from areas of historically reported mineralized outcrops and anomalous assays; none of the 2012 returned anomalous assays.

The 2012 Storm exploration expenditures were approximately CDN $448,000.

## 1.6 Conclusions

The combination of terrain, climate and remote location are challenges to the effective determination of the size and characteristics of the Seal Zn and Storm Cu mineral deposits. At the Seal Zn showings, steep terrain makes it problematic to place drill holes in the optimum locations for drill testing the stratabound mineralization. At the Storm Cu showings, essentially most of the mineralization in the largest zone is covered or masked by complexly faulted units lying within the Central Graben. However, 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 this study. These 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. 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 equivalent horizons to the known Storm copper zones. These features are presented as possible structural controls impacting the stratiform sulphide mineralization.

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. Analysis of the resistivity depth imaging (RDI) inversions in conjunction with the historical drilling suggests that there remain portions of the 4100N, ST97-15, ST99-34, 3500N, 2750N and 2200N zones that have not been drill tested adequately. 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 permit precise drill targeting for these bodies.

An additional nine secondary anomalous areas were identified through inversion modeling of the VTEM data. 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 investigation.

The 2012 drill core sampling program did not include samples from core for which historic detailed sample data are available. However, in comparing assay results from the 2012 program with summarized intervals mentioned in other reports and documents, it can be seen that the 2012 assay values agree very well with the historic data. Sampling of selected previously untested sections of the stored drill core commonly yielded copper assays in the range of 0.1 to 0.3% Cu. It was not possible to perform statistical analyses on the sample sets due to the sample intervals not exactly coinciding with historic intervals, but the results appear to agree within one to two standard deviations.

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.

## 1.7 Recommendations

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 and good follow-up drill targets for a subsequent diamond drill program on the Storm Copper showings. The original Seal drilling data should be acquired from Teck along with follow-up geological and engineering studies leading to the determination of a NI 43-101 compliant mineral resource for the prospect.

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 over the 4100 Zone. 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 exploration 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. It is anticipated that a follow-up Stage 2 drilling and extensive ground geophysical program could also be completed during 2013. A program of 1,200 m of diamond drilling and ground electromagnetics, magnetics and induced polarization tagged onto the Stage 1 field based exploration program is estimated at $1,300,000 not including GST. However, the Stage 2 program is contingent upon the results of the Stage 1 field work.

# 2: INTRODUCTION

In 2012, Aston Bay Ventures Ltd. (Aston Bay) commissioned APEX Geoscience Ltd. (APEX) to complete a field based sampling program and in conjunction with Aurora Geosciences Ltd. (Aurora), prepare an independent, Canadian National Instrument 43-101 (NI 43-101) Technical Report, for the Storm Property ("the Property"), located on Somerset Island, Nunavut, Canada. This Report is a technical summary, and is written to comply with the standards set out in NI 43-101 for the Canadian Securities Administration (CSA), and presents the results and expenditures of the work done on behalf of Aston Bay by APEX and Aurora in 2012.

The Storm Property, located east of Aston Bay on northwestern Somerset Island, Nunavut, Canada, is approximately 112 km south of the community of Resolute Bay on Cornwallis Island and 1,500 km northwest of Iqaluit, the capital of Nunavut (Figure 1). The Storm Property (the "Property" or the "Storm Property"), is comprised of 8 prospecting permits, including four permits, numbered 7547, 7548, 7549, 7880, which are 100% owned by Commander Resources Ltd. (Commander) and four permits, numbered 8340, 8341, 8342, and 8343, which are 100% owned by Michael Dufresne on behalf of Aston Bay. On November 17, 2011, Aston Bay entered into an option agreement with Commander whereby Aston Bay can earn up to a 70% interest in Commander's portion of the Storm Property land package. Subsequent to the work program Aston Bay entered into an agreement with Escudo Capital Corp (Escudo), pursuant to which each of the issued and outstanding Aston Bay shares will be transferred to Escudo in exchange for one common share of Escudo. Upon completion of the transaction, Aston Bay will become a wholly owned subsidiary of Escudo.

The lead author, Mr. Jim Robinson, P.Geol., a senior geologist with Aurora, and an independent and Qualified Person as defined in National Instrument 43-101, has prepared a compilation of proprietary and publicly available information for Storm. Mr. Robinson visited the property on August 4th, 2012.

The second author, Mr. Bryan Atkinson, B.Sc., P.Geol., a senior geologist with APEX, and a Qualified Person, conducted a field visit to the property between July 28th and August 3rd, 2012. This report summarizes the available historic geological, geophysical, and geochemical information for the property along with the results of the 2011 VTEM airborne survey, further interpretation of the airborne data carried out in 2012 and the 2012 field work conducted by APEX and Aurora personnel and has been prepared on behalf of Aston Bay and Escudo. APEX personnel were involved in all aspects of the 2012 field work.

The authors, in writing this report, use sources of information as listed in the references. The report is a compilation of proprietary and publicly available information as well as information obtained during property visits, and research by government and university geoscientists. Government reports were prepared by qualified persons holding post-secondary geology, or related university degree(s), and are therefore deemed to be accurate. For those reports which were written by others who may or may not be qualified persons, the information in those reports is assumed to be reasonably accurate, based on the data review and field visits conducted by the authors. However, they are not the basis for this report.

Unless otherwise stated, all units used in this report are metric, all dollar amounts ($) are in Canadian currency, and Universal Transverse Mercator (UTM) co-ordinates in this report and accompanying illustrations are referenced to the North American Datum 1983 (NAD83), Zone 15 North.

For the convenience of the reader, the following table lists common units and abbreviations employed in the SI (metric) system of measurement.

Table 1 List of Abbreviations

Units of measurement used in this report conform to the SI (metric) system.

| | | | |
|---|---|---|---|
| μ | micron | kPa | kilopascal |
| °C | degree Celsius | kVA | kilovolt-amperes |
| °F | degree Fahrenheit | kW | kilowatt |
| °K | degree Kelvin | kWh | kilowatt-hour |
| μg | microgram | L | litre |
| μm | micrometre | L/s | litres per second |
| A | ampere | M | mega (million) |
| ASL | Above Sea Level | m | metre |
| a | annum (year) | m2 | square metre |
| bbl | barrel | m3 | cubic metre |
| Btu | British thermal unit | MASL | metres above sea level |
| cal | calorie | mi. | statute mile |
| cfm | cubic feet per minute | min. | minute |
| cm | centimetre | mm | millimetre |
| $cm^2$ | square centimetre | mph | miles per hour |
| d | day | MVA | megavolt-amperes |
| dia. | diameter | MWh | megawatt-hour |
| dmt | dry metric tonne | MW | megawatt |
| dwt | dead-weight ton | m3/h | cubic metres per hour |
| ft. | foot | opt | Troy ounce per short ton |
| ft./s | foot per second | oz. | Troy ounce (31.1035g) |
| $ft.^2$ | square foot | oz/dmt | ounce per dry metric tonne |
| $ft.^3$ | cubic foot | ppb | parts per billion |
| g | gram | ppm | parts per million |
| G | giga (billion) | psia | pound per square inch absolute |
| Gal | Imperial gallon | psig | pound per square inch gauge |
| g/L | gram per litre | RL | relative elevation |
| g/t | gram per tonne | s | second |
| gpm | Imperial gallons per minute | st | short ton |
| $gr/ft.^3$ | grain per cubic foot | stpa | short ton per year |
| ha | hectare | t | metric tonne |
| hp | horsepower | tpa | metric tonne per year |
| hr. | hour | tpd | metric tonne per day |
| in. | inch | US$ | United States dollar |
| $in.^2$ | square inch | USg | United States gallon |
| J | joule | USgpm | US gallon per minute |
| k | kilo (thousand) | V | volt |
| kcal | kilocalorie | W | watt |
| kg | kilogram | wmt | wet metric tonne |
| km | kilometre | $yd^3$ | cubic yard |
| km/h | kilometre per hour | yr. | year |
| $km^2$ | square kilometre | ‰ | per mille |

Figure 1, below, shows the general location of the Storm property on the northern end of Somerset Island.

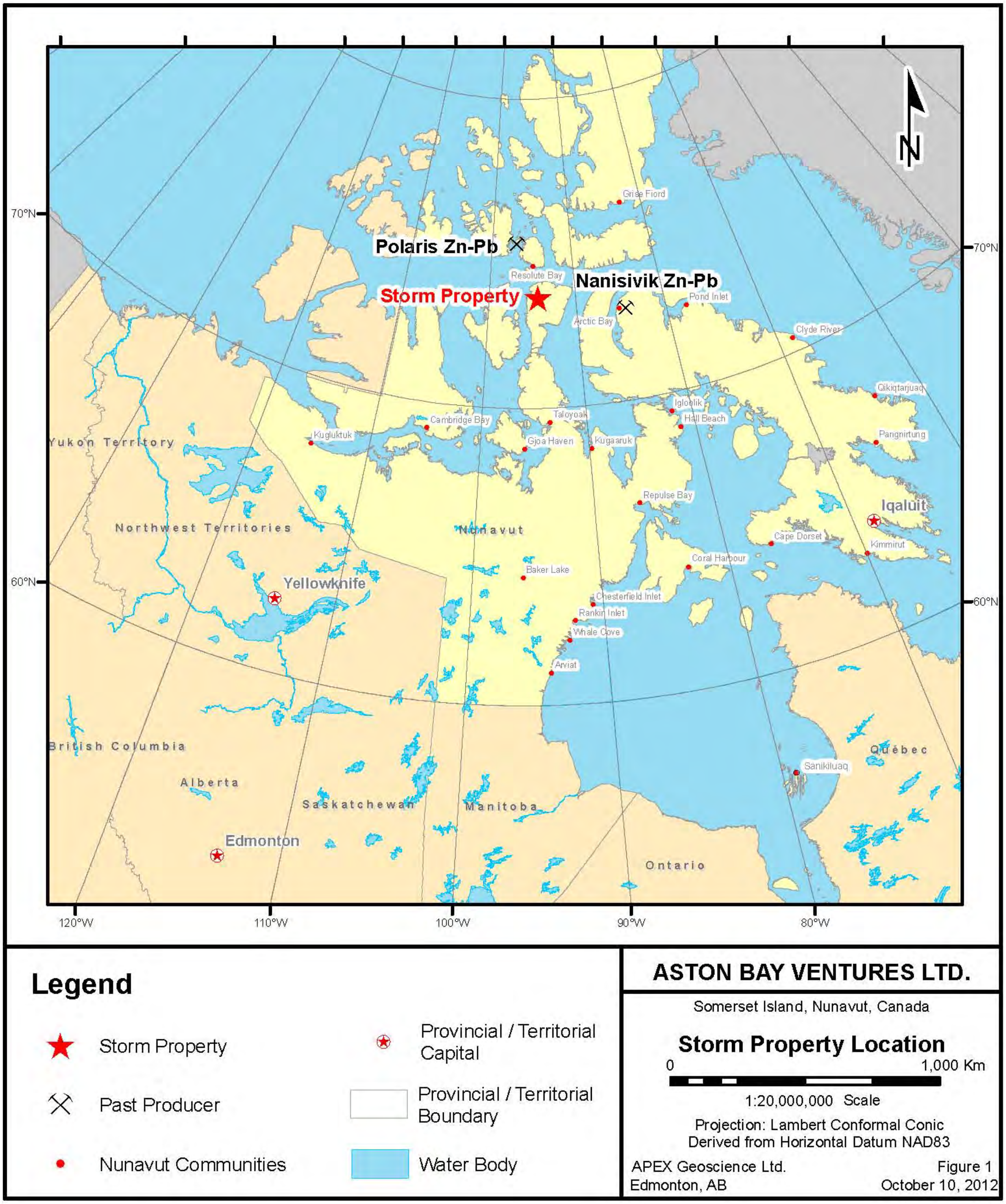


Figure 1 Storm Property Location Map

# 3: RELIANCE ON OTHER EXPERTS

Fraser Milner Casgrain LLP conducted a review of the status of Commander's four Nunavut prospecting permits (permits 7547, 7548, 7549 and 7880), which comprise a portion of the Storm Property. The review is in the form of a letter dated November 7th, 2012 and states that prospecting permits are registered in the name of Commander and that they are active and in good standing as of the date of the review (Fraser Milner Casgrain, 2012; Appendix 1). The authors of the Technical Report have made no attempt to verify the legal status and ownership of the Commander permits or the other permits and mineral claims that comprise the Property, nor are they qualified to do so. The Property comprises 8 prospecting permits; 7547, 7548, 7549, 7880, 8340, 8341, 8342 and 8343 that are shown as "Active" and in good standing 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) as of October 31, 2012. Commander's permits 7547, 7548 and 7549 are set to expire on January 31, 2013. Within these expiring permits, 47 mineral claims have been staked and are listed as pending in the name of Commander Resources Ltd. The claims have a record date of September 19, 2012 and an anniversary date of September 12, 2014. The claims have not been legally surveyed. The mineral claims will come into full effect once the three Commander permits lapse. The claims comprise 113,632.4 acres, which covers all of the prospective ground identified within the expiring prospecting permits. Permit 7880 has an expiry date of January 31, 2015. Permits 8340 to 8343 are listed as being active and in good standing in the name of Michael Dufresne (on behalf of Aston Bay). The government online website shows that Permits 8340 to 8343 have an expiry date of January 31, 2017.

# 4: PROPERTY DESCRIPTION AND LOCATION

The Storm Property is located in the general area of Aston Bay, on northwestern Somerset Island, Nunavut, Canada (Figure 1). The property is approximately 112 km south of Resolute Bay on Cornwallis Island, the nearest community. It is 1,500 km northwest of Iqaluit, the capital of Nunavut and ~1,500 km northeast of Yellowknife, NT. It is located in the Qikiqtaaluk Region of Nunavut, within the 1:50,000 scale NTS (National Topographic System) map sheets 058C10, C11, C13 and C14.

The Storm Property is comprised of eight contiguous prospecting permits, numbered 7547, 7548, 7549, 7880, 8340, 8341, 8342, and 8343, covering a combined area of approximately 363,037 acres (146,916 hectares; Table 2, Figure 2). The Property is bounded by latitudes 73°30' N and 73°52.5' N, and longitudes 93°30' W and 95°30' W, and is centred at approximately 73°39' N latitude and 94°20' W longitude (Figure 2). Commander currently maintains 100% interest in permits 7547, 7548, 7549, and 7880; permits 8340, 8341, 8342, and 8343 are held 100% by Michael Dufresne on behalf of Aston Bay.

During July and August 2012, APEX, on behalf of Commander and Aston Bay, staked 47 mineral claims, totalling 113,632 acres (45,985.4 ha), within permits 7547, 7548, and 7549 which are due to be expire January 31, 2013 (Figure 2). These claims are currently Pending. They have a record date of September 19, 2012 and an anniversary date of September 12, 2014 and will come into effect once the permits lapse.

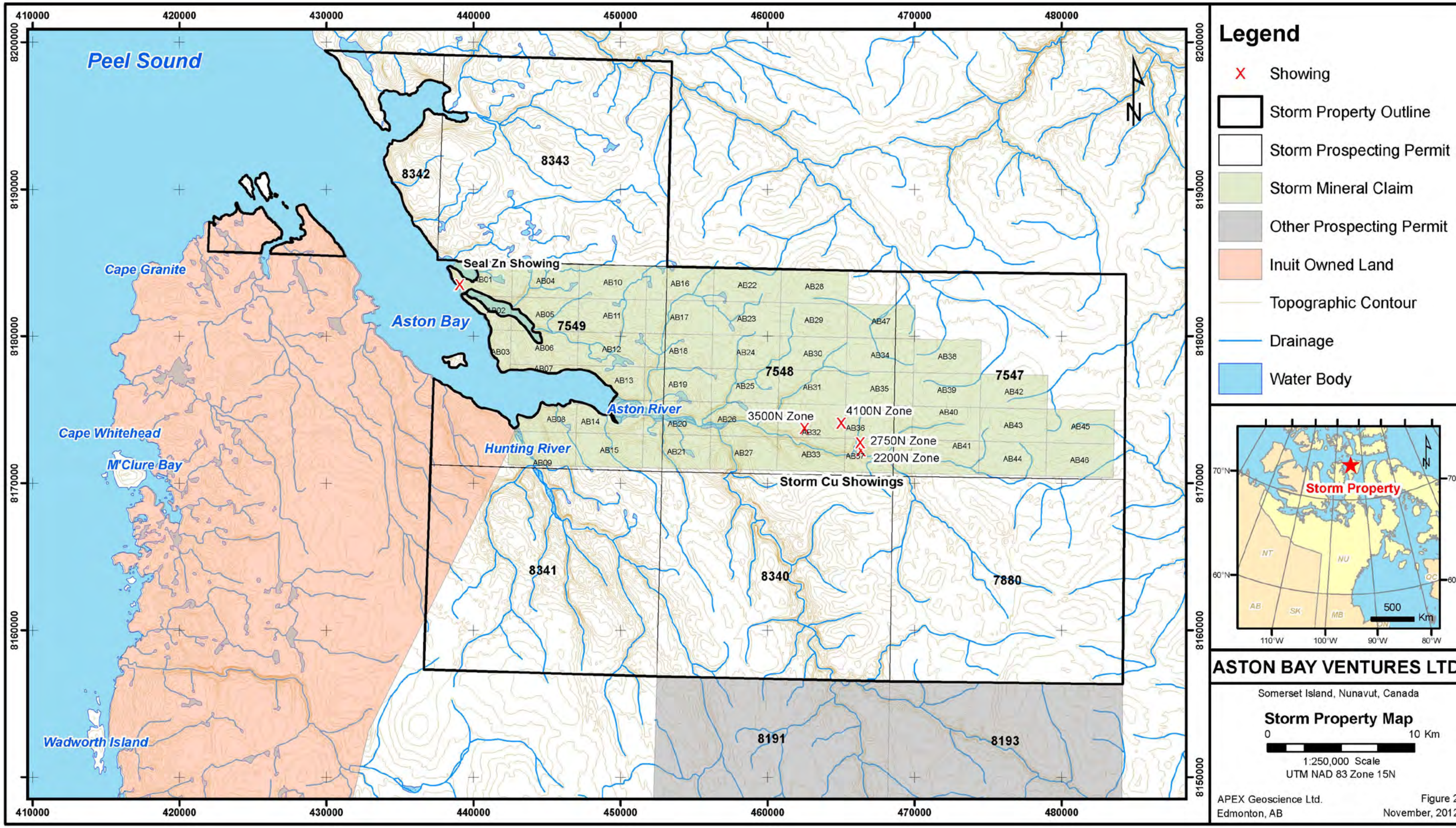


Figure 2 Prospecting Permit and Claim Location Map

Table 2 Storm Property Prospecting Permit and Mineral Claim Details

| Permit Number | Owner | NTS Sheet | Area (acres) | Date Issued | Expiry Date |
|---|---|---|---|---|---|
| 7547 | Commander Resources Ltd. | 058C10 | 51,040.00 | Feb. 1, 2008 | Jan. 31, 2013 |
| 7548 | Commander Resources Ltd. | 058C11 | 51,040.00 | Feb. 1, 2008 | Jan. 31, 2013 |
| 7549 | Commander Resources Ltd. | 058C11 | 42,318.89 | Feb. 1, 2008 | Jan. 31, 2013 |
| 7880 | Commander Resources Ltd. | 058C10 | 51,040.00 | Feb. 1, 2010 | Jan. 31, 2015 |
| 8340 | Aston Bay Ventures Inc. | 058C11 | 51,040.00 | Feb. 1, 2012 | Jan. 31, 2017 |
| 8341 | Aston Bay Ventures Inc. | 058C11 | 51,040.00 | Feb. 1, 2012 | Jan. 31, 2017 |
| 8342 | Aston Bay Ventures Inc. | 058C13 | 15,285.07 | Feb. 1, 2012 | Jan. 31, 2017 |
| 8343 | Aston Bay Ventures Inc. | 058C14 | 50,233.00 | Feb. 1, 2012 | Jan. 31, 2017 |
| | | **Total Acres:** | **363,036.96** | | |
| | | **Total Ha:** | **146,915.84** | | |

| Tag Number | Claim Name | Date Staked | Record Date | Expiry Date | Area (acres) | Owner |
|---|---|---|---|---|---|---|
| 16471 | AB1 | 24/07/2012 | 12/09/2012 | 12/09/2014 | 2237 | Commander Resources Ltd. |
| 16472 | AB2 | 24/07/2012 | 12/09/2012 | 12/09/2014 | 1331 | Commander Resources Ltd. |
| 16473 | AB3 | 24/07/2012 | 12/09/2012 | 12/09/2014 | 895.2 | Commander Resources Ltd. |
| 16474 | AB4 | 24/07/2012 | 12/09/2012 | 12/09/2014 | 2582.5 | Commander Resources Ltd. |
| 16475 | AB5 | 24/07/2012 | 12/09/2012 | 12/09/2014 | 2582.5 | Commander Resources Ltd. |
| 16476 | AB6 | 24/07/2012 | 12/09/2012 | 12/09/2014 | 2582.5 | Commander Resources Ltd. |
| 16477 | AB7 | 24/07/2012 | 12/09/2012 | 12/09/2014 | 550.7 | Commander Resources Ltd. |
| 16478 | AB8 | 24/07/2012 | 12/09/2012 | 12/09/2014 | 1506 | Commander Resources Ltd. |
| 16479 | AB9 | 24/07/2012 | 12/09/2012 | 12/09/2014 | 2545 | Commander Resources Ltd. |
| 16480 | AB10 | 24/07/2012 | 12/09/2012 | 12/09/2014 | 2582.5 | Commander Resources Ltd. |
| 16481 | AB11 | 24/07/2012 | 12/09/2012 | 12/09/2014 | 2582.5 | Commander Resources Ltd. |
| 16482 | AB12 | 24/07/2012 | 12/09/2012 | 12/09/2014 | 2582.5 | Commander Resources Ltd. |
| 16483 | AB13 | 24/07/2012 | 12/09/2012 | 12/09/2014 | 1661 | Commander Resources Ltd. |
| 16484 | AB14 | 24/07/2012 | 12/09/2012 | 12/09/2014 | 2189 | Commander Resources Ltd. |
| 16485 | AB15 | 24/07/2012 | 12/09/2012 | 12/09/2014 | 2582.5 | Commander Resources Ltd. |
| 16486 | AB16 | 25/07/2012 | 12/09/2012 | 12/09/2014 | 2582.5 | Commander Resources Ltd. |
| 16487 | AB17 | 25/07/2012 | 12/09/2012 | 12/09/2014 | 2582.5 | Commander Resources Ltd. |
| 16488 | AB18 | 25/07/2012 | 12/09/2012 | 12/09/2014 | 2582.5 | Commander Resources Ltd. |
| 16489 | AB19 | 25/07/2012 | 12/09/2012 | 12/09/2014 | 2582.5 | Commander Resources Ltd. |
| 16490 | AB20 | 25/07/2012 | 12/09/2012 | 12/09/2014 | 2582.5 | Commander Resources Ltd. |
| 16491 | AB21 | 25/07/2012 | 12/09/2012 | 12/09/2014 | 2582.5 | Commander Resources Ltd. |
| 16492 | AB22 | 25/07/2012 | 12/09/2012 | 12/09/2014 | 2582.5 | Commander Resources Ltd. |
| 16493 | AB23 | 25/07/2012 | 12/09/2012 | 12/09/2014 | 2582.5 | Commander Resources Ltd. |
| 16494 | AB24 | 25/07/2012 | 12/09/2012 | 12/09/2014 | 2582.5 | Commander Resources Ltd. |
| 16495 | AB25 | 25/07/2012 | 12/09/2012 | 12/09/2014 | 2582.5 | Commander Resources Ltd. |
| 16496 | AB26 | 25/07/2012 | 12/09/2012 | 12/09/2014 | 2582.5 | Commander Resources Ltd. |
| 16497 | AB27 | 25/07/2012 | 12/09/2012 | 12/09/2014 | 2582.5 | Commander Resources Ltd. |
| 16498 | AB28 | 25/07/2012 | 12/09/2012 | 12/09/2014 | 2582.5 | Commander Resources Ltd. |

| Tag Number | Claim Name | Date Staked | Record Date | Expiry Date | Area (acres) | Owner |
|---|---|---|---|---|---|---|
| 16499 | AB29 | 25/07/2012 | 12/09/2012 | 12/09/2014 | 2582.5 | Commander Resources Ltd. |
| 16500 | AB30 | 25/07/2012 | 12/09/2012 | 12/09/2014 | 2582.5 | Commander Resources Ltd. |
| 16501 | AB31 | 25/07/2012 | 12/09/2012 | 12/09/2014 | 2582.5 | Commander Resources Ltd. |
| 16502 | AB32 | 26/07/2012 | 12/09/2012 | 12/09/2014 | 2582.5 | Commander Resources Ltd. |
| 16503 | AB33 | 26/07/2012 | 12/09/2012 | 12/09/2014 | 2582.5 | Commander Resources Ltd. |
| 16504 | AB34 | 26/07/2012 | 12/09/2012 | 12/09/2014 | 2582.5 | Commander Resources Ltd. |
| 16505 | AB35 | 26/07/2012 | 12/09/2012 | 12/09/2014 | 2582.5 | Commander Resources Ltd. |
| 16506 | AB36 | 26/07/2012 | 12/09/2012 | 12/09/2014 | 2582.5 | Commander Resources Ltd. |
| 16507 | AB37 | 26/07/2012 | 12/09/2012 | 12/09/2014 | 2582.5 | Commander Resources Ltd. |
| 16508 | AB38 | 26/07/2012 | 12/09/2012 | 12/09/2014 | 2582.5 | Commander Resources Ltd. |
| 16509 | AB39 | 26/07/2012 | 12/09/2012 | 12/09/2014 | 2582.5 | Commander Resources Ltd. |
| 16510 | AB40 | 26/07/2012 | 12/09/2012 | 12/09/2014 | 2582.5 | Commander Resources Ltd. |
| 16511 | AB41 | 26/07/2012 | 12/09/2012 | 12/09/2014 | 2582.5 | Commander Resources Ltd. |
| 16512 | AB42 | 26/07/2012 | 12/09/2012 | 12/09/2014 | 2582.5 | Commander Resources Ltd. |
| 16513 | AB43 | 26/07/2012 | 12/09/2012 | 12/09/2014 | 2582.5 | Commander Resources Ltd. |
| 16514 | AB44 | 26/07/2012 | 12/09/2012 | 12/09/2014 | 2582.5 | Commander Resources Ltd. |
| 16515 | AB45 | 26/07/2012 | 12/09/2012 | 12/09/2014 | 2582.5 | Commander Resources Ltd. |
| 16516 | AB46 | 26/07/2012 | 12/09/2012 | 12/09/2014 | 2582.5 | Commander Resources Ltd. |
| 16517 | AB47 | 01/08/2012 | 12/09/2012 | 12/09/2014 | 2582.5 | Commander Resources Ltd. |
| | | | | **Total Acres** | **113632.4** | |
| | | | | **Total Hectares** | **45985.4** | |

On November 17, 2011, Aston Bay entered into an option agreement with Commander whereby Aston Bay can earn up to a 70% interest in the 4 permits held by Commander and a 5 km area of interest that buffers the these permits by: becoming publicly listed, issuing a total of 3 million shares to Commander, making total cash payments of $150,000 and funding $15 million in exploration, including delivery of an Indicated Resource, as defined in NI 43-101, by December 31, 2019. The first $6 million in expenditures must be completed by the end of 2015 in a stepwise fashion, $1 million in expenditures in both 2012 and 2013, rising to $2 million in expenditures in 2014 and 2015. Aston Bay can purchase the remaining 30% interest in the property by either paying $15 million to Commander or transferring 20% of the outstanding Aston Bay shares to Commander. Commander's interest in the property reverts to a 0.875% Gross Overriding Royalty (GOR) if their ownership of the property drops below 10%.

Aston Bay and Escudo entered into an arrangement agreement dated January 11, 2013, pursuant to which each of the issued and outstanding Aston Bay shares will be transferred to Escudo in exchange for one common share of Escudo (the Transaction). Upon completion of the Transaction, Aston Bay will become a wholly owned subsidiary of Escudo. The Transaction is intended to constitute Escudo's Qualifying Transaction, as defined by TSX Venture Exchange policies.

Under the current Nunavut mining law prospecting permits are valid for either three or five years depending on whether they are located below or above the 68$^{th}$ parallel (68° north latitude). All permits comprising the Storm Property are north of this administrative boundary. The holder of an active prospecting permit has exclusive rights to stake mineral claims within the permit area. There are no surface rights associated with a prospecting permit.

For Prospecting permits representative work equivalent to $0.10 per acre is required during the first work period (1 or 2 years depending on whether the permit is valid for 3 or 5 years), during the second work period (again either 1 or 2 years) representative work equivalent to $0.20 per acre is required. In the final year of the prospecting permit, representative work totalling $0.40 per acre is required. A deposit equal to the required expenditures must be submitted either as payment in lieu of, or work completed prior to the start of the work period. If a prospecting permit expires or is relinquished the holder cannot stake mineral claims in the area for a period of one year. Where Prospecting Permits include areas of ocean, these areas subtracted or 'clipped' from the total surface area.

Mineral claims can be staked by or on behalf of an individual or corporation that holds a valid prospecting licence. Claims must be rectangular in shape wherever possible, with north – south and east – west oriented boundaries. Claims cannot exceed 2,582.5 acres in size. Claims are valid for a total of 10 years. Mineral claims require representation work commitments of $4/acre, due following the first two years of the claim's existence, and $2/acre for each year thereafter. Representation work must be filed with the relevant Mining Recorder's office within 30 days of the anniversary date of the claim or within 60 days of the date of the issuance of a lapsing notice. Mineral claims can be grouped for the purposes of applying assessment credit. After the 10 year period, mineral claims are either relinquished or taken to lease. Conversion of a mineral claim to a mineral lease also requires that a legal survey of the claim be completed and registered. Once converted, a mineral lease can be maintained by making annual payments of $1/acre with no further work and/or expenditure commitments. A mineral lease is valid for a period of 21 years and may be renewed indefinitely. Renewal of a mineral lease for subsequent 21 year periods requires a payment of $2/acre.

A small portion of the western extents of permits 7549, 8341 and 8342 are located within Inuit owned Lands (IOL) surface rights land parcel RB-02. The remainder of the permit area and the entire area of the staked mineral claims lies on Crown owned land.

Water use activities (i.e. for camps and/or drilling) within Nunavut require a Water Licence to be granted by the Nunavut Water Board (Article 12 of Nunavut Land Claims Agreement). To establish an exploration camp on Crown Lands in Nunavut requires a land use permit issued by Indian and Northern Affairs Canada (INAC). All IOL licences, water licences and INAC land use applications are screened by the Nunavut Impact Review Board (NIRB) under Article 13 of Nunavut Land Claim Agreement. NIRB screens project proposals to determine whether they may have significantly adverse environmental and socio-economic impact potential. Surface access to lands within the IOL surface parcel requires permission from the Qikiqtani Inuit Association (QIA).

An INAC land use permit for a camp and drilling in the name of Commander is active and in good standing. A camp has not been constructed and nor has drilling been conducted to date under the permit. A Nunavut Water Licence has been recently issued to Commander that allows for a camp to be established and drilling to be conducted. The author is not aware of any agreements, encumbrances or environmental liabilities to which the Property is subject to or any other reasons that would prevent Aston Bay from acquiring the necessary permits to conduct the work described in the 'Recommendations' section of this report.

# 5: ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

## 5.1 Access, Local Resources, and Infrastructure

The Storm Property is located on northwestern Somerset Island, in the Canadian Arctic Archipelago. Due to the Property's remote location, access is typically restricted to charter air service from Resolute Bay, located 112 km north of the property. Resolute Bay has a modern airport facility with a 1,982 m (6,504 ft.) gravel runway. Daily commercial air service to Resolute Bay is available via Iqaluit, with connections from Ottawa or Montreal. A weekly service between Yellowknife, NT and Resolute Bay is also available. Chartered air service can be obtained from either Yellowknife or Iqaluit.

Hotel accommodations, groceries, camp outfitters, and construction supplies can be acquired locally in Resolute Bay; however food and other supplies can be sourced more cost-effectively from Yellowknife or Ottawa. There is a health clinic in Resolute Bay, the closest hospitals are in Iqaluit, 1,500 km southeast, and Yellowknife, 1,500 km southwest of the Property. Local labour is available from surrounding Inuit communities. Industry services are typically contracted out of Yellowknife or southern Canada, with limited services available out of Iqaluit.

Infrastructure at the Storm Property is limited to an unmaintained 192 m (630 ft.) airstrip, located adjacent to an old Cominco exploration camp site at approximately 73°42' N latitude and 94°43' W longitude. In its current condition, the airstrip is suitable for landing Single or Twin Otter aircraft. Several lakes on the Property are large enough to land small float-equipped aircraft during the summer months. During the winter, a Twin Otter or DC-3 aircraft fitted with skis can be landed on the sea ice in Aston Bay, allowing for off-season stocking of fuel and other supplies. A prepared ice strip on Aston Bay would be able to accommodate DHC-5 Buffalo, Dash 7 or C-130J Super Hercules aircraft. The current airstrip at the Storm Property is located in an area with the potential for expansion to accommodate larger aircraft. Furthermore, several areas east of the current airstrip would be suitable for construction of a longer airstrip.

Fifty kilometres to the northeast of the property at Cumberland Sound, is Arctic Watch Lodge, a wilderness adventure resort. The lodge maintains a 1,036 m (3,400 ft.) gravel airstrip and is also able to deliver other support services. The Arctic Watch airstrip is capable of handling various turboprop cargo aircraft, such as DHC-5 Buffalo, Dash 7 and C-130J Super Hercules, and could be used as a staging area for future exploration programs. During the 2012 exploration program, the field crew was based out of the Arctic Watch Lodge. The lodge provided accommodations and meals, as well as storage space for gear and samples, and is a viable alternative to establishing a stand-alone camp for small or short duration field programs.

The most efficient means of mobilizing fuel, heavy equipment, and supplies to the Storm Property is by sea-lift. Ocean shipping lanes servicing Resolute Bay and the former Polaris Mine operation run in close proximity to the Storm Property (Figure 1). The west end of the Property borders the tidewater of Aston Bay on Peel Sound, part of the Northwest Passage (Figures 1 and 2). Desgagnés Transarctik Inc. and NEAS offer an annual sea-lift service to a number of coastal northern communities, including Resolute Bay. Because Aston Bay is free of sea ice for 8 to 10 weeks per year, the option of direct offloading at Aston Bay is available. Furthermore, in the future, a protected, deep water port could be constructed along the northern shore of Aston Bay.

## 5.2 Climate and Physiography

The property is located in the Northern Arctic Ecozone consisting of plateaux and rocky hills. Coastal areas typically constitute wide plains 'fenced' by boulders carried onshore by sea ice, strong tidal currents and storm waves. The Northern Arctic Ecozone is characterized by low mean temperatures and minor precipitation, mainly falling as snow. Daylight hours vary dramatically from 24 hour darkness in the middle of winter to 24 hour sunlight at the height of summer. Table 3 summarizes historic climate statistics for Resolute Bay, the nearest community. January and February are the coldest months, with average temperatures below -30°C. Summers are typically brief, cool, and damp with a mean temperature through July and August of under 3°C. Snow cover during winter months may be as little as 30 cm, however due to constant northwest winds, drift accumulations can be significant. The entire region is subject to continuous permafrost, extending to depths of 400 to 500 metres.

Table 3 Selected Historic Climate Statistics for Resolute Bay, NU (Environment Canada, 2012)

| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Year |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Temperature | | | | | | | | | | | | | |
| Daily Average (°C) | -32.4 | -33.1 | -30.7 | -22.8 | -10.9 | -0.1 | 4.3 | 1.5 | -4.7 | -14.9 | -23.6 | -29.2 | -16.4 |
| Precipitation | | | | | | | | | | | | | |
| Rainfall (mm) | 0 | 0 | 0 | 0 | 0.5 | 6.5 | 15.7 | 21.8 | 5.4 | 0.5 | 0 | 0 | 50.3 |
| Snowfall (cm) | 4.7 | 3.7 | 7 | 6.6 | 11.1 | 8.7 | 4.2 | 13.1 | 21 | 16.2 | 8.6 | 5.5 | 110.3 |

The Storm Property is in a region characterized by rolling terrain with low relief. The topography initially rises abruptly from sea level to about 100 m, and then levels out eastward, to an average of roughly 200 to 300 m above sea level. The Aston River is the main watercourse in the area; it runs east-west through the Storm Property, draining into Aston Bay. The Aston River and other major drainages are characterized by steep incised canyons, typically exposing good outcrop along the canyon walls.

Flat areas are dominated by felsenmeer and cryoturbated soils. Cryoturbation produces features such as frost boils, ice-wedge polygons, stone nets and stone stripes.

Vegetation at the Storm Property consists mainly of moss, lichens, stunted plants and Arctic grasses. The grasses are typically observed growing at lower elevations in areas associated with river drainage basins. Muskox are commonly observed grazing in these areas. Arctic fox, hare, and lemmings have also been noted at the property. Polar bears and caribou are rarely observed.

# 6: HISTORY

Commander Resources Ltd. initially acquired the Storm Property as three contiguous Prospecting Permits in February 2008. One additional permit was added in February 2010. Much of the area covered by these permits was part of a larger mineral claim package, previously held by Cominco Ltd. (“Cominco”), and later Teck-Cominco Ltd. (now known as Teck Resources Ltd.). The last remnants of the Cominco land package lapsed in 2007. Exploration work in the areas around Aston Bay and the Storm Property has been carried out intermittently since the 1960s. Most of the historical work at the Storm Property was undertaken by, or on behalf of, Cominco. Figures 3 and 4 illustrate historic exploration drilling at the Seal and Storm showings respectively. A summary of historic work is provided in Table 4.

1966 Cominco: Stream geochemistry with a sample density of 1 per 2.4 square miles (6.2 square km) was conducted over parts of northwestern Somerset Island; reconnaissance prospecting was also undertaken. Three soil samples were taken from the area of the Seal showing (Whaley, 1975).

1970 J.C. Sproule and Associates Ltd.: Photogeological mapping, limited reconnaissance prospecting, and stream sediment geochemical sampling were conducted (Neale and Campbell, 1970). The geochemical survey included areas of the far eastern side of the current Storm Property and returned some anomalous copper assay values.

1973 Cominco: Geological mapping, prospecting, and soil sampling were carried out in the Aston Bay area as a follow up to 1966 work. Anomalous soil and rock samples were described with zinc values up to 5% in rubble at the main Seal showing. Consequently, claims PAT 1-10 were staked on September 24, 1973 (Whaley, 1974).

1974 Cominco: Geological mapping, prospecting and soil sampling were carried out on the Astec Property (Seal showing), consisting of the PAT 1-10 claim group. Fifteen soil samples were collected and analyzed for zinc and lead (Whaley, 1975).

1978 Esso Minerals: Prospecting, geological mapping, geochemical surveys and an airborne radiometric survey exploring for uranium mineralization were conducted at Aston Bay by Trigg, Woollett

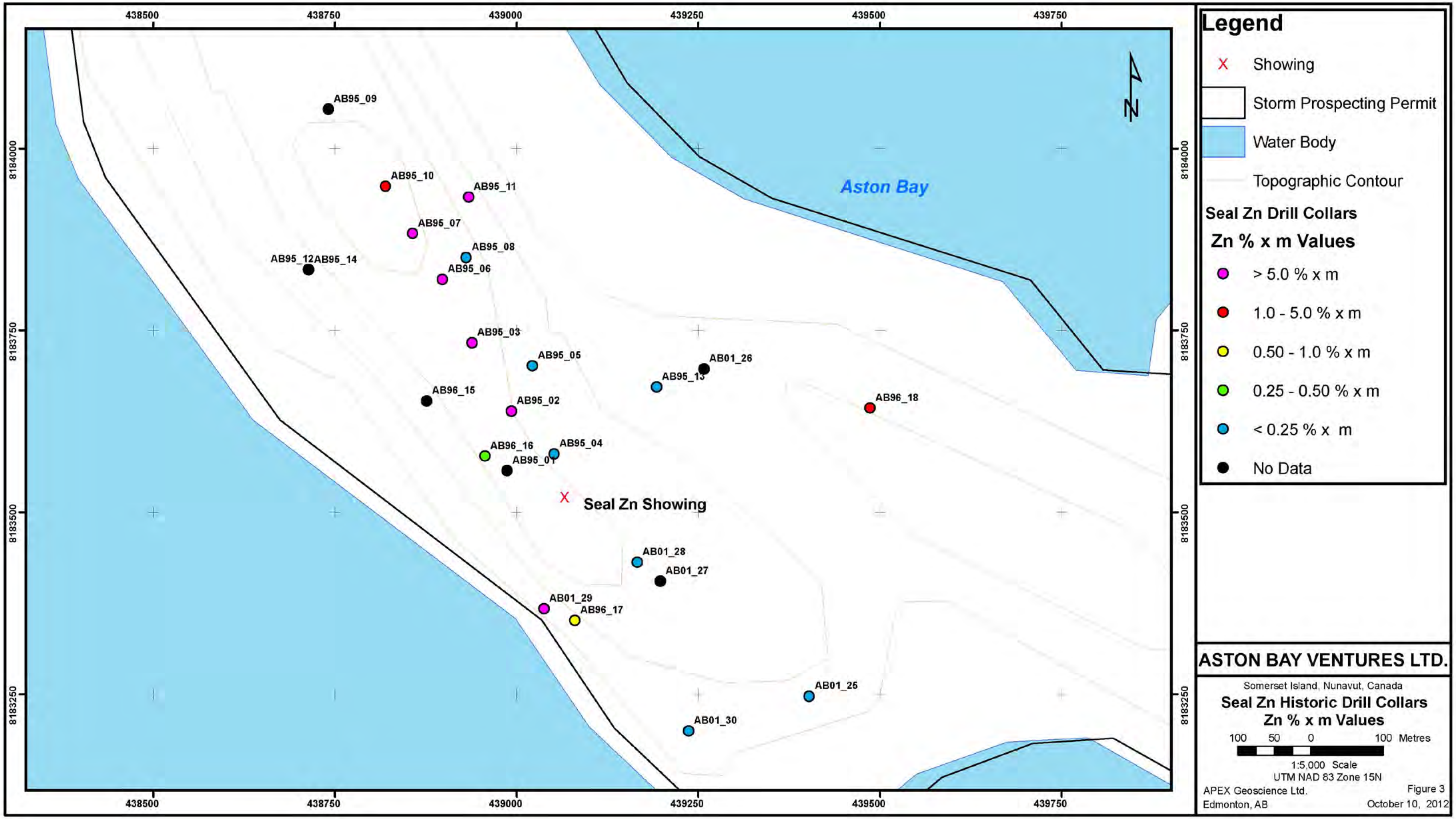


Figure 3 Seal Zone Historic Drillhole Collars

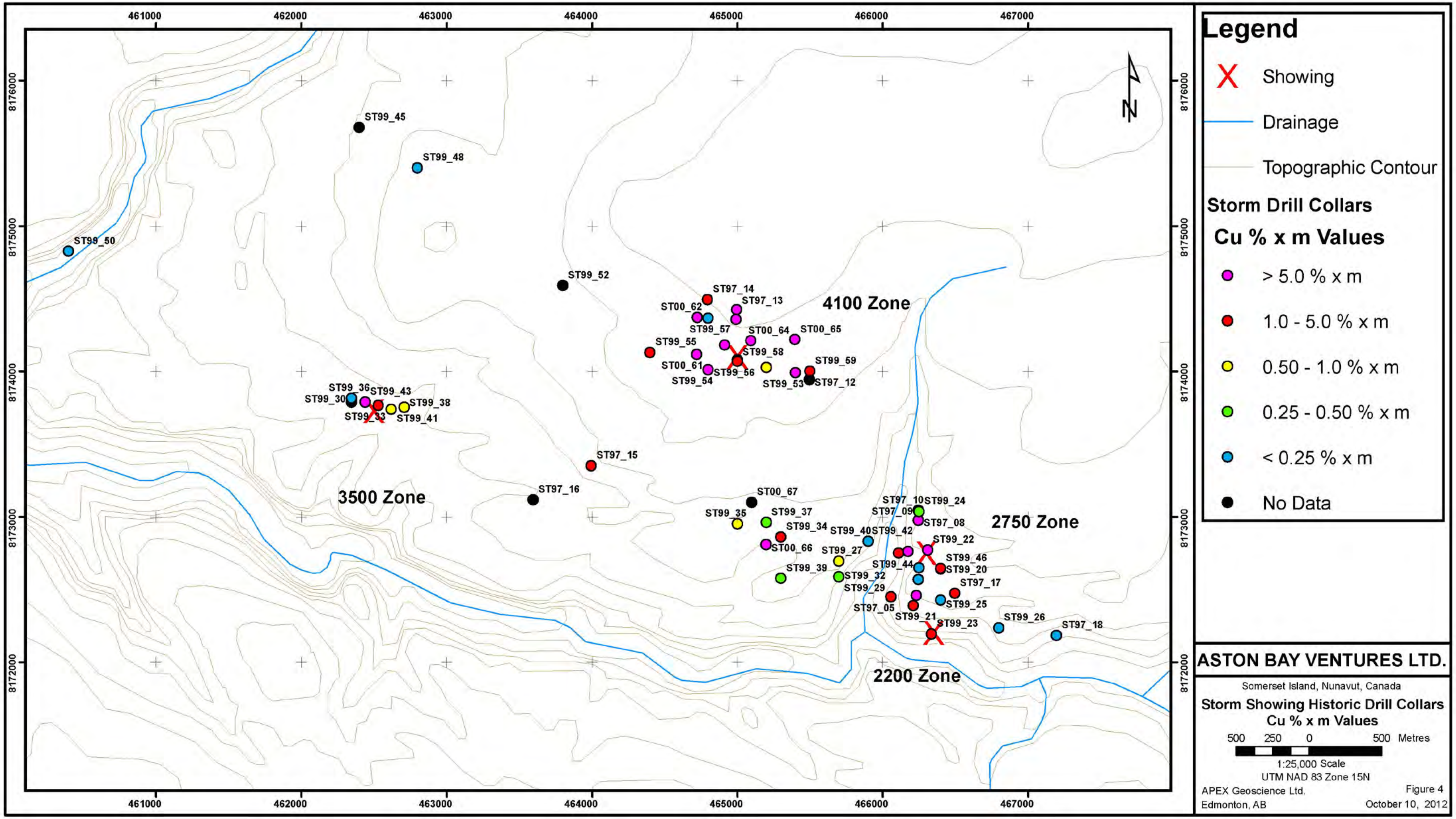


Figure 4 Storm Showing Historic Drillhole Collars

Table 4 Storm Property Historical Exploration Summary

| Type of Work | Year | Target Area | Summary |
|---|---|---|---|
| Diamond Drilling | 1995 | Seal Zn Zone | 14 holes, 2,465.7 m |
| | 1996 | Seal Zn Zone | 10 holes, 1,828 m |
| | 1996 | Storm Cu Zone | 1 hole, 290.3 m |
| | 1997 | Storm Cu Zone | 17 holes, 2,801.3 m |
| | 1999 | Storm Cu Zone | 41 holes, 4,593.4 m |
| | 2000 | Storm Cu Zone | 8 holes, 1,348.5 m |
| | 2001 | Seal Zn Zone | 6 holes, 822 m |
| Soil Sampling | 1973 | Aston Bay | 15 samples |
| | 1994 | Aston Bay | 434 samples North & South Peninsula, & Seal Island |
| | 1995 | Aston Bay | 225 samples from South Peninsula and Seal Island |
| | 1995 | Regional | Regional sampling in areas south of Aston Bay |
| | 1997 | Storm Cu Zone | 536 samples (grid) |
| | 1998 | Storm Cu Zone | 851 samples (grid) |
| | 1998 | Storm Property | 1338 samples (regional) |
| | 1999 | Storm Cu Zone | 750 samples (grid) |
| Stream Sediment | 1966 | Regional | Sample density 1 per 6.2 $km^2$ |
| | 1970 | Regional | 198 samples taken on current Property |
| | 1993 | Aston Bay | No data available |
| | 1994 | Regional | 50 heavy mineral samples |
| Rock Sampling | 1973 | Aston Bay | Prospecting Seal showing and North Peninsula; no data available |
| | 1993 | Aston Bay | Prospecting in Aston Bay area; no data available |
| | 1994 | Aston Bay | 65 samples North & South Peninsula, & Seal Island |
| Geophysics | 1994 | Aston Bay | 168 line-km of IP and 62 line-km of gravity |
| | 1995 | Aston Bay | HLEM survey on North Peninsula |
| | 1997 | Storm Cu Zone | 89 line-km of IP and 71.75 line-km of HLEM |
| | 1997 | Storm Property | 10,741 line-km high-resolution aeromagnetic survey |
| | 1998 | Storm Cu Zone | 44.5 line-km of IP |
| | 1999 | Storm Cu Zone | 57.7 line-km of IP |
| | 1999 | Storm Property | Airborne hyperspectral survey |
| | 2000 | Storm Property | 3,260 line-km GEOTEM airborne survey |
| | 2000 | Storm Cu Zone | Ground geophysics: 100.5 km of UTEM, 69.2 km of gravity, 11 km of magnetics, and 6.5 km of HLEM |
| | 2011 | Storm Property | 3,970 line-km VTEM airborne survey |
| Geological Mapping | 1970 | Regional | Photogeological mapping of NW Somerset Island |
| | 1973 | Aston Bay | 1":1/4 mile mapping of North and South Peninsulas |
| | 1994 | Aston Bay | Detailed mapping of Seal Island and North and South Peninsulas |
| | 2000 | Storm Cu Zone | Detailed geological mapping |

& Associates. Geochemical samples of lake and stream sediments were taken in the Aston Bay area (Cannuli and Olson, 1978).

1993 Cominco: Stream sediment geochemistry and prospecting were completed in the Aston Bay area. Nine mineral claims were staked, totalling 23,242.50 acres. Three prospecting permits, totalling 163,602 acres, were applied for (Leigh, 1996).

1994 Cominco: Detailed geological mapping was carried out on Seal Island and the North and South peninsulas of Aston Bay. (The North and South peninsulas refer to the north end and south end of the peninsula on which the Seal Zinc showing is located). Induced polarization (IP) and gravity geophysical surveys were conducted on Seal Island and the North Peninsula. A total of 168 line-km of IP and 62 line-km of gravity were completed. Soil geochemical sampling was conducted along the Seal Island and North Peninsula geophysical grids. Soil sampling, prospecting, and mapping were done on the South Peninsula. A total of 434 soil samples and 65 rock grab samples were analyzed. Soil sampling highlights included 15 samples with greater than 1% zinc (Zn), including a 1.06% Zn sample from the South Peninsula. Rock sampling highlights included 18 samples from Seal Island and the North Peninsula with greater than 1% Zn. Most of the high grade samples were found proximal to the Seal main showing; the highest value returned was 8.8% Zn in soils and 40% Zn with 200 grams per tonne (g/t) silver (Ag) in rock samples. Helicopter reconnaissance and heavy mineral sampling were conducted south of Aston Bay. The highest grade observed was 2,230 parts per million (ppm) Zn with 229 ppm lead (Pb). Twelve additional claims (SEAL 1-12), totalling 28,911.7 acres, were staked in the Aston Bay area. Two prospecting permits (1491, 1492), located southeast of Aston Bay, were granted, totalling 108,530 acres (Smith, 1995).

1995 Cominco: Fourteen diamond drill holes (AB95-1 to AB95-14) were completed on the North Peninsula of Aston Bay for a total of 2,465.7 m (Figure 3 and 4). Drill intersections of up to 10.5% Zn and 28 g/t Ag over 18 m core length were obtained for the Seal Zinc Deposit (Table 5). A horizontal-loop electromagnetic (HLEM) survey was also conducted on the North Peninsula. Results from the drill program and HLEM survey were not filed as assessment work and are not publicly available at this time. Regional scale soil sampling and prospecting was completed on the South Peninsula, Seal Island, and the area south of Aston Bay. Zinc values of up to 850 ppm were recorded in soils on the South Peninsula. All areas returned multiple samples with greater than 100 ppm Zn. Nine adjoining claims (SEAL 13-21) were staked in the Aston Bay area and 16 additional claims were staked to the south of, and adjoining, the prospecting permits (Leigh, 1995).

1996 Cominco: Ten diamond drill holes (AB96-15 to AB96-24), totalling 1,733.0 m were completed on the North and South peninsulas of Aston Bay (Figures 3 and 4). Four holes were drilled on the North Peninsula (841.0 m), and five holes were drilled on the South Peninsula (983.2 m). The best results were from the North Peninsula drill holes, including 1.8% Zn with 14 ppm Ag over 0.5 m in hole AB96-17; 2.8% Zn with 10 ppm Ag over 1 m and 2.2% Zn over 1 m in hole AB96-17 (Leigh, 1996). On July 14, 1996, during a regional reconnaissance program, Cominco geologists discovered large chalcocite boulders in Ivor Creek, about 20 km east of Aston Bay, at the subsequently named 2750 Zone at the Storm Copper

Showing. Copper mineralization, hosted by Paleozoic dolostone and limestone, was found over a 7 km structural trend (Cook and Moreton, 2009). A single drill hole (330 m) was completed to test for economic copper mineralization (Smith, 2001). The exact collar location and analytical results from this drill hole are not publicly available at this time. Claims STORM 1-19 were staked (Leigh and Lajoie, 1998).

Table 5 Seal Zone Significant Drill Hole Intersections

| Drill Hole ID | | From (m) | To (m) | Length (m) | Zn (%) | Ag (g/t) |
|---|---|---|---|---|---|---|
| AB95-02* | | **50.00** | **68.00** | **18.00** | **10.50** | **28.00** |
| AB96-17 | | 28.50 | 29.00 | 0.50 | 1.80 | 14.00 |
| | | 48.20 | 48.40 | 0.20 | 2.20 | 8.00 |
| AB96-18 | | 144.00 | 147.00 | 3.00 | 2.00 | 6.00 |
| AB01-29 | | 51.10 | 78.00 | 26.90 | 0.78 | 1.75 |
| | ***includes*** | **51.10** | **54.60** | **3.50** | **2.73** | **9.55** |
| | ***and*** | **74.30** | **78.00** | **3.70** | **1.06** | **0.99** |

* Historic assay certificates for intersection not available. Data taken from Cominco cross section (Grexton, 2009).

1997 Cominco: Sander Geophysics Ltd., on behalf of Cominco, conducted a high-resolution aeromagnetic survey over a 5,000 square kilometre area of northern Somerset Island. A total of 204 SW-NE oriented traverse lines and 21 NW-SE oriented control lines were flown for a total of 10,741 line-km. Traverse lines were spaced at 500 m and control lines were spaced at 2,500 m (O'Connor, 1997). Eighty-nine line-km of IP and 71.75 line-km of HLEM were completed, and 536 soil samples were collected at the Storm Copper showing. Seventeen diamond drill holes, for a total of 2,784 m, were completed in the central graben area of the Storm Zone. Assay highlights included: 49.71% copper (Cu) with 17.1 ppm Ag over 0.6 m and 19.87% Cu over 1.1 m in hole ST97-02; 4.67% Cu over 4.8 m and 4.13% Cu over 1.4 m in hole ST97-03; and 14.62% Cu with 23.5 g/t Ag over 1.3 m and 4.41% Cu with 12.4 g/t Ag over 1.4 m in hole ST97-13 (Table 6). The present day copper zones at the Storm Showing were established: the 2200N, 2750N, 3500N, and 4100N zones (Cook and Moreton, 2009). Claims STORM 20-89 were staked (Leigh, 1998).

1998 Cominco: A total of 44.5 line-km of IP were completed and 2,090 soil samples were collected at the Storm Zone. Eight-hundred fifty-one (851) soil samples were collected along the IP grid and 1,239 base-of-slope samples were collected during regional drainage prospecting traverses. An area 700 m by 100 m on the soil grid was found to contain >500 ppm Cu, trending parallel to the graben structure. The highest Cu value attained was 1,920 ppm. The anomalous area is centred over the 3500N Zone. Highlights from the regional soil survey included 458 ppm Cu with 856 ppm Zn and 221 ppm Cu with 508 ppm Zn, both related to rusty limonitic soils (Leigh, 1998b). Regional soil sampling was also conducted on Cominco's SEAL claims. A total of 209 samples were collected, with maximum values of 33 ppm Cu and 108 ppm Zn (Leigh, 1998a & 1998b).

Table 6 Storm Zone Significant Historic Drill Hole Intersections

| Drill Hole ID | | From (m) | To (m) | Length (m) | Cu (%) |
|---|---|---|---|---|---|
| ST97-02 | | 0.00 | 15.00 | 15.00 | 4.24 |
| | *includes* | **0.00** | **6.84** | **6.84** | **8.98** |
| | *includes* | **0.00** | **4.30** | **4.30** | **13.76** |
| ST97-03 | | 0.00 | 50.90 | 50.90 | 1.22 |
| | *includes* | **0.00** | **6.40** | **6.40** | **3.96** |
| | *and* | **38.40** | **42.60** | **4.20** | **2.92** |
| ST97-05 | | 28.50 | 38.20 | 9.70 | 1.22 |
| ST97-13 | | 59.80 | 113.00 | 53.20 | 1.34 |
| | *includes* | **59.80** | **70.00** | **10.20** | **2.89** |
| | *and* | **107.30** | **112.00** | **4.70** | **2.73** |
| ST97-14 | | 92.30 | 98.20 | 5.90 | 1.07 |
| ST97-15 | | 48.00 | 51.00 | 3.00 | 1.51 |
| ST99-19 | | 12.20 | 68.50 | 56.30 | 3.07 |
| | *includes* | **12.20** | **47.70** | **35.50** | **4.75** |
| | *and* | **33.30** | **46.60** | **13.30** | **10.06** |
| ST99-21 | | 73.10 | 76.90 | 3.80 | 0.99 |
| ST99-22 | | 44.30 | 58.40 | 14.10 | 1.56 |
| ST99-23 | | 42.60 | 46.40 | 3.80 | 1.07 |
| ST99-31 | | 4.60 | 59.70 | 55.10 | 1.23 |
| | *includes* | **7.60** | **35.80** | **28.20** | **1.85** |
| | *includes* | **7.60** | **11.80** | **4.20** | **4.72** |
| | *and* | **33.00** | **35.80** | **2.80** | **6.74** |
| ST99-33 | | 0.00 | 19.30 | 19.30 | 0.57 |
| ST99-34 | | 72.60 | 77.10 | 4.50 | 1.62 |
| ST99-43 | | 41.00 | 77.40 | 36.40 | 0.96 |
| | *includes* | **41.00** | **52.80** | **11.80** | **1.61** |
| ST99-47 | | 43.40 | 111.00 | 67.60 | 1.34 |
| | *includes* | **75.90** | **87.40** | **11.50** | **4.75** |
| ST99-53 | | 17.30 | 43.00 | 25.70 | 1.66 |
| | *includes* | **20.30** | **25.10** | **4.80** | **3.70** |
| | *and* | **38.60** | **43.00** | **4.40** | **4.62** |
| ST99-56 | | 32.60 | 67.80 | 35.20 | 1.25 |
| | *includes* | **52.40** | **62.60** | **10.20** | **3.25** |
| ST00-60 | | 54.00 | 58.90 | 4.90 | 2.26 |
| | | 73.40 | 78.30 | 4.90 | 2.32 |
| | | 114.10 | 132.70 | 18.60 | 0.57 |
| ST00-61 | | 50.3 | 70.1 | 19.80 | 1.10 |
| | *includes* | **59.40** | **64.40** | **5.00** | **2.12** |
| ST00-62 | | 60.00 | 106.00 | 46.00 | 1.25 |
| | *includes* | **78.80** | **106.00** | **27.20** | **1.87** |
| | *includes* | **96.50** | **106.00** | **9.50** | **2.32** |
| ST00-63 | | 63.60 | 73.30 | 9.70 | 1.42 |
| ST00-64 | | 56.60 | 76.25 | 19.65 | 1.40 |
| ST00-65 | | 46.00 | 47.00 | 1.00 | 2.65 |
| | | 66.00 | 67.00 | 1.00 | 1.86 |
| ST00-66 | | 55.50 | 69.60 | 14.10 | 1.14 |
| | | 102.45 | 103.20 | 0.75 | 20.07 |

1999 Cominco: A total of 57.7 line-km of IP were completed in the Storm Copper Zone. Seven-hundred fifty (750) soil samples were collected at the main Storm grid. The maximum Cu and Zn values achieved in the main grid were 592 ppm and 418 ppm, respectively (Leigh, 1999). Forty-one (41) diamond drill holes, for a total of 4,560.8 m, were completed at the Storm Copper showings, testing IP/Resistivity anomalies with the highlights presented in Table 6. Assay highlights included: 1.35% Cu over 3.8 m in hole ST99-23 (2200N Zone); 5.5% Cu over 28.7 m, including 9.56% Cu over 13.3 m in hole ST99-19 (2750N Zone); 2.9% Cu over 9.2 m, including 6.3% Cu over 2.8 m hole ST99-31 (3500N Zone); 4.9% Cu over 11 m in hole ST99-47 (4100N Zone); and 13.5% Cu with 23 g/t Ag over 1.9 m in hole ST99-56 (4100N Zone). As a result of the extensive 1999 drilling, Cominco geologists divided the upper Allen Bay Formation into three main stratigraphic marker units: alternating dolomicrite and dolowackestone (ADMW), brown dolopackstone and dolofloatstone (BPF), and varied stromatoporoid (VSM) (Leigh and Tisdale, 1999).

1999 Noranda Inc.: Noranda Inc. ("Noranda") entered into an option agreement with Cominco whereby Noranda could earn a 50% interest in the STORM property package (48 claims) by incurring exploration expenditures of $7 million over a four year period, commencing in 1999. An airborne hyperspectral survey completed by Noranda identified 26 airborne electromagnetic and magnetic (AEM/MAG) and 266 colour anomalies (MacRobbie *et al*., 2000).

2000 Noranda Inc.: A 3,260 line-km GEOTEM electromagnetic and magnetic airborne geophysical survey was flown over the Property at 250 m to 300 m line spacings. A total of 29 anomalies of interest were identified, including a conductor coincident with the 4100N Zone. Ground geophysical surveys were carried out as a follow up to the airborne surveys, including 100.5 line-km of UTEM, 69.2 line-km of gravity, 11 line-km of magnetics, and 6.5 line-km of HLEM. In addition to the geophysical surveys, geological mapping, prospecting, and soil sampling were carried out to evaluate the 2000 AEM and 1999 hyperspectral anomalies. Eleven diamond drill holes, for a total of 1,885.5 m, were completed; eight of the holes, for a total of 1,348.5 m, were completed within the current Storm Property, at the 4100N Zone showing (MacRobbie *et al*., 2000).

2001 Noranda: The ASTON claims (7 claims) were added to the original option agreement with Cominco. Reconnaissance follow up on selected airborne targets from the 1999 and 2000 airborne surveys was completed. Six diamond drill holes, for a total of 822 m, were completed on the Seal Zinc showing. Assay highlights for 2001 drilling include: 7.65% Zn with 26.5 g/t Ag over 1.1 m in hole AB01-29 (Smith, 2001).

2007 The last of the original Cominco property package lapsed.

2008 Commander: Prospecting permits 7547, 7548, and 7549, comprising the Storm Property, were issued to Commander in February 2008. Scott Wilson Roscoe Postle Associates Inc. ("Scott Wilson RPA") was retained by Commander to prepare an independent Technical Report on the Property (Cook and Moreton, 2009). Field work included traversing geological contacts at the Seal, 2200N, 2750N, and 4100N showings to evaluate the accuracy of previous mapping. Collars for all the holes in the 4100N

Zone were examined. Additionally, in order to verify historic drill results, core stored at the former Aston Bay camp site was selectively sampled. Seven holes were sampled, including two from the Seal occurrence and five from the Storm copper showings. Duplicate analyses for the Storm holes corresponded well with original results. Original certificates of analysis for the Seal holes were not available; however, results confirmed good zinc and silver content in the drill core (Grexton, 2009).

2011 Commander: Geotech Ltd., on behalf of Commander, conducted a helicopter-borne versatile time domain electromagnetic (VTEM plus) and aeromagnetic survey over the Storm Property. A total of 3,969.7 line-km were flown. The primary VTEM survey flight lines were oriented 030/210 at 150 m spacing with parallel infill lines at 75 m spacing and orthogonal tie lines at 1,500 m spacing.

# 7: GEOLOGICAL SETTING AND MINERALIZATION

## 7.1 Regional Geology

The Boothia Uplift, which formed predominantly during the Late Silurian to Early Devonian Caledonian Orogeny, is a Precambrian basement high forming a major linear structural feature that dominates the regional geology of Somerset Island and the Boothia Peninsula (Okulitch, *et al*., 1985). The Boothia Uplift extends 1,000 km northward from the Boothia Peninsula into the Arctic Archipelago and ranges from 80 to 125 km wide (Okulitch, *et al*., 1985; Packard, *et al*., 1987). The Boothia Uplift was formed by west-directed compressive stresses of the coeval late stages of the Caledonian (Taconic) Orogeny (Okulitch, *et al*., 1985; de Freitas, *et al*., 1999). Proterozoic stratigraphy on Victoria Island and Baffin Island shows broad folding indicative of another deformation event that may have affected Somerset Island rocks (Smith, 1995).

The core of the Boothia Uplift is composed of Archean and Aphebian granulite facies metasedimentary and metavolcanic crystalline rocks with near-vertical bedding and foliation reflecting north – south trending, tight, upright folds. The folded and faulted sequence of Late Proterozoic and Paleozoic carbonates and clastic rocks flanking the Boothia Uplift to the east and west constitute the Cornwallis Fold and Thrust Belt (Okulitch, *et al*., 1985; Smith, 1995; Cook, *et al*., 2009; Grexton, 2009).

The Cornwallis Fold and Thrust belt was formed by basement and platform rocks being thrust westward during the closing pulses of the Caledonian Orogeny, wherein forces in the crystalline basement extended upwards into the overlying carbonate and clastic rocks of the Late Proterozoic and Early Phanerozoic eras (Okulitch, *et al*., 1985; Smith, 1995). Evaporite units in the stratigraphy may have acted as intermediate decollement zones. Fold structures exposed at surface within the Cornwallis Fold and Thrust Belt are largely broad open anticlines and synclines with north – south axes. The distribution of Paleozoic rocks on Somerset Island defines a large asymmetrical syncline with the youngest strata preserved in the center. Structures related to local block faulting, flexures and gentle folding overprint the main synclinorium. Three dominant fault orientations have been observed on Somerset Island; north – south, northwest – southeast and northeast – southwest.

Compressional stress from the Late Devonian Ellesmerian Orogeny, west of the Boothia Uplift, affected structures on Bathurst Island as well as Cornwallis Island and the Grinnell Peninsula of Devon Island, where basement structures were reactivated to form complex interference patterns in the overlying sedimentary cover. The area south of Barrow Strait acted as a buttress for the Parry Island Fold Belt and therefore compressional stresses related to the Ellesmerian Orogeny are not believed to reach as far south as Somerset Island (Okulitch, *et al*., 1985; Grexton, 2009; Smith, 1995).

The last major tectonic event that affected the region was the Tertiary - Eocene Eurekan Orogeny that reactivated older faults via compressional events in the Sverdrup Basin (Cook, *et al*., 2009; Grexton, 2009), creating north-trending dextral strike-slip and dextral oblique reverse faults (Guest, *et al*., 2011). Tertiary faulting along the Boothia Uplift resulted in the preservation of Tertiary and older strata by producing fault-bounded grabens (Okulitch, *et al*., 1985; Smith, 1995).

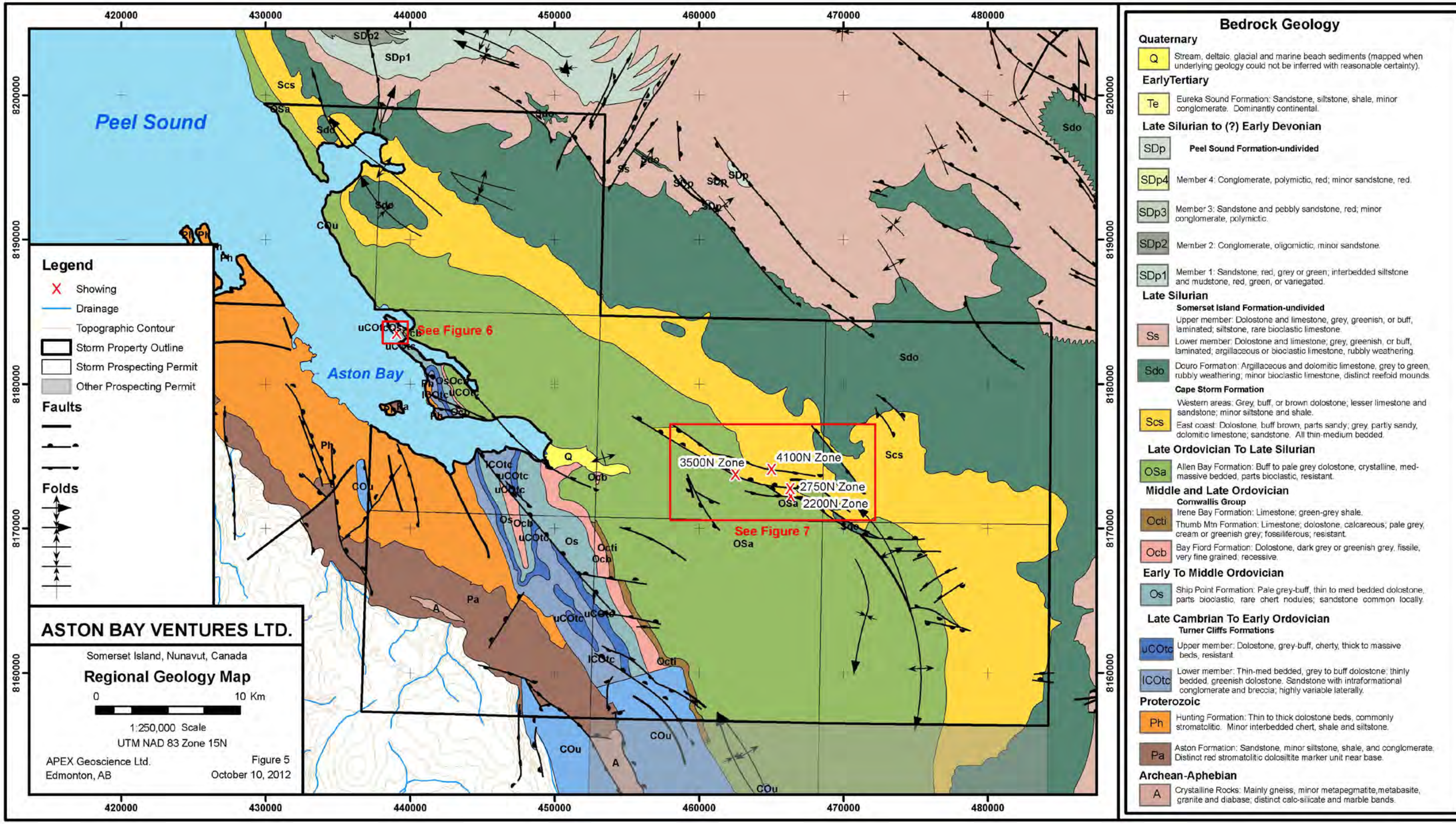


Figure 5 Regional Geology

## 7.2 Local Geology

Proterozoic carbonate rocks are not well exposed on Somerset Island, therefore most of their depositional history is derived from nearby Victoria and Baffin Islands. An 800 m thick sequence of Middle Proterozoic, red weathering fine- to medium-grained hematitic silica cemented sandstone and conglomerate comprising the Aston Formation sits unconformably atop the crystalline basement of Somerset Island (Okulitch *et al*., 1991). Following a period of uplift, intrusion of the Mackenzie dyke swarm at 1.27 Ga (LeCheminant and Heaman, 1989), and erosion, the Huntington Formation was deposited unconformably atop the Aston Formation.

The Huntington Formation is a 2,100 m thick unit comprised of thin- to medium-bedded, locally stromatolitic dolostone with minor gypsum. The 1,400 m thick Patrick Formation, an informal formation name used by Cominco geologists, is comprised of shallow-water carbonates overlain by black shale, lying conformably over the Huntington Formation. The Patrick Formation is exposed on Seal Island in Aston Bay (Cook, *et al*., 2009). The Patrick, Huntington and Aston formations show evidence of minor faulting and folding prior to the intrusion of the 723 Ma Franklin diabase dykes and sills (Heaman, *et al*., 1992).

A sequence of Cambrian to Late Ordovician carbonate and clastic sedimentary rocks, that young to the east, unconformably overlie the Patrick Formation. The 350 m thick Turner Cliffs Formation sits directly atop the rocks of the Patrick Formation. The Turner Cliffs Formation is comprised of an upper massive cherty dolostone layer and a lower interbedded unit of sandy, dolomitic and argillaceous rocks (Miall and Kerr, 1980).

The Ship Point Formation (64 – 250 m thick) sits conformably above the Turner Cliffs Formation and is comprised of pale grey thin- to medium-bedded dolostone with local minor stromatolitic, oolitic, and bioturbated beds (Miall and Kerr, 1980). Dark grey to brownish grey recessive fissile dolostone of the Bay Fiord Formation (6 to 196 m thick) sits conformably upon the Ship Point Formation (Miall and Kerr, 1980).

The fossiliferous 0 – 115 m thick Thumb Mountain Formation consists of pale grey, thinly bedded dolomitic biomicrite which lies unconformably above the Bay Fiord Formation. Interbedded greenish grey recessive argillaceous dolomitic limestone and shales of the Irene Bay Formation (0-34 m thick) sit conformably atop the Thumb Mountain Formation. The Bay Fiord, Thumb Mountain and Irene Bay formations make up the Cornwallis Group.

The Allen Bay Formation, deposited during the Late Ordovician and Early Silurian, sits unconformably atop the Irene Bay Formation and is comprised of a basal unit of massive dolostone containing Arctic Ordovician Fauna and an upper crystalline dolomite unit with common stromatolitic and bioclastic horizons (Miall and Kerr, 1980).

The Silurian Cape Storm, Douro and Cape Crauford Formations constitute a succession which sits conformably upon the Allen Bay Formation. The Cape Storm Formation consists of thinly-bedded, flaggy dolostone and ranges between 120 and 240 m thick. The 170 – 240 m thick Duoro Formation is dominated by nodular, argillaceous, fossiliferous limestone. The Cape Crauford Formation is an equivalent facies to the upper portion of the Allen Bay Formation on central Somerset Island and is comprised of evaporites and dolomites.

During the Late Silurian to Devonian, tectonic movement of the Boothia Uplift resulted in the deposition of a clastic wedge, markedly dolostone and limestone of the Somerset Island and the Peel Sound Formations, which is preserved in small areas of the northwestern portion of the Property. The clastic wedge lies conformably above the Douro Formation (MacRobbie *et al*., 2000; Cook & Moreton, 2009).

During the Late Cretaceous (103 Ma – 94 Ma), kimberlite diatremes intruded the northeastern portion of Somerset Island (Wu *et al*., 2012; Smith *et al*., 1989). These bodies intruded along the dominant fault orientations in the region, in addition to following apparent dyke swarm orientations.

The Property and surrounding area underwent several distinct periods of major tectonic deformation from the Proterozoic through to the Tertiary, and the rocks within the Property show resultant complex folding and faulting (Grexton, Assessment Report Storm Property: 2008; Technical Evaluation, 2009; Smith, 1995). The most recent deformation event reactivated older structures and created large grabens during transtensional movement, while preserving Tertiary and older strata (Cook, *et al*., 2009; Smith, 1995). The Central Graben structure on the Storm Property (Figure 5), bounded by north – south trending faults, preserves rocks of the down-dropped Douro Formation, indicating faults likely cut through the full stratigraphic column underlying the Silurian Douro Formation (Cook, *et al*., 2009).

## 7.3 Property Geology

Property-scale geology for the areas of the Seal and Storm showings is illustrated in Figures 6 and 7, respectively. Geology unit abbreviations are illustrated on Figures, 5, 6 and 7. A stratigraphic column which serves to illustrate and simplify the lithological relationships in the Property area is presented in Figure 8 for reference.

The material in this section is summarized from Dewing and Turner (*pers*. *comm*., 2012), Leigh (1996), Leigh and Tisdale (1999), MacRobbie *et al*. (2000), and Smith (2001). The geological information has been gathered from both drill core and limited bedrock exposure throughout the property, though the focus is on the Seal and Storm mineralized zones.

The oldest rocks observed on the property belong to the 200 m thick Turner Cliffs Formation (units uCOtc and lCOtc). The rocks of the Turner Cliffs Formation were deposited within and proximal to the intertidal zone. The unit consists of a series of interbedded cryptalgal laminates, stromatolites and flat pebble conglomerates. A leached dolostone with chert nodules occurs within the succession. It is described as a pseudobreccia, contains abundant white dolospar and calcite (making up 60% of the zone) with 5-20% of the rock being comprised of cavities. Locally, brown resinous sphalerite is present within the cavities of the pseudobreccia.

Lying conformably above the Turner Cliffs Formation within the property are rocks of the Ship Point Formation (Os). The contact between the Turner Cliffs and Ship Point formations is marked by the first occurrence of sandy dolostone and the disappearance of laminated dolomicrite. The Ship Point Formation is a resistant, ridge-forming rock unit which was deposited in a shelf environment and has a distinctive dull grey weathered colour. The base of the Ship Point Formation consists of a 1.5 – 2 m thick sandy dolostone bed which is overlain by a distinctive 8 – 10 m well-sorted quartz arenite with well-preserved planar cross-beds. The sandstone unit is locally pyritic with associated elevated zinc values. The upper 50 m plus of the Ship Point Formation is comprised of medium-bedded sandy dolostone, bioturbated mottled dolostone, cross-bedded arenaceous sandstone and local oolitic dolostone.

The Bay Fiord Formation (unit Ocb) lies conformably upon the Ship Point Formation and consists of green to grey to brown, thinly-bedded to laminated silty dolostone and shale. Conformably above the Bay Fiord Formation is the Ordovician Thumb Mountain Formation which is comprised of bioturbated argillaceous dolostone with abundant scattered chert nodules.

In the western portion of the Property the Thumb Mountain Formation (unit Octi) is in fault contact with the overlying Silurian Allen Bay Formation (unit OSa). Though the Allen Bay Formation is the youngest unit present in the western portion of the property, the same cannot be said in the eastern portion of the property where the Allen Bay Formation hosts the Storm copper mineralization.

The Allen Bay Formation in general consists of buff dolostone with common chert nodules and vuggy crinoidal dolowackestone along with carbonate muds. The upper Allen Bay Formation has been subdivided into three members. The 150 m plus thick buff to light-grey, lower Varied Stromatoporoid (VSM) unit is comprised of interbedded dolofloatstone, dolorudstone, stromatoporoid boundstone, framestone and thinly-bedded to laminated dolomicrite.

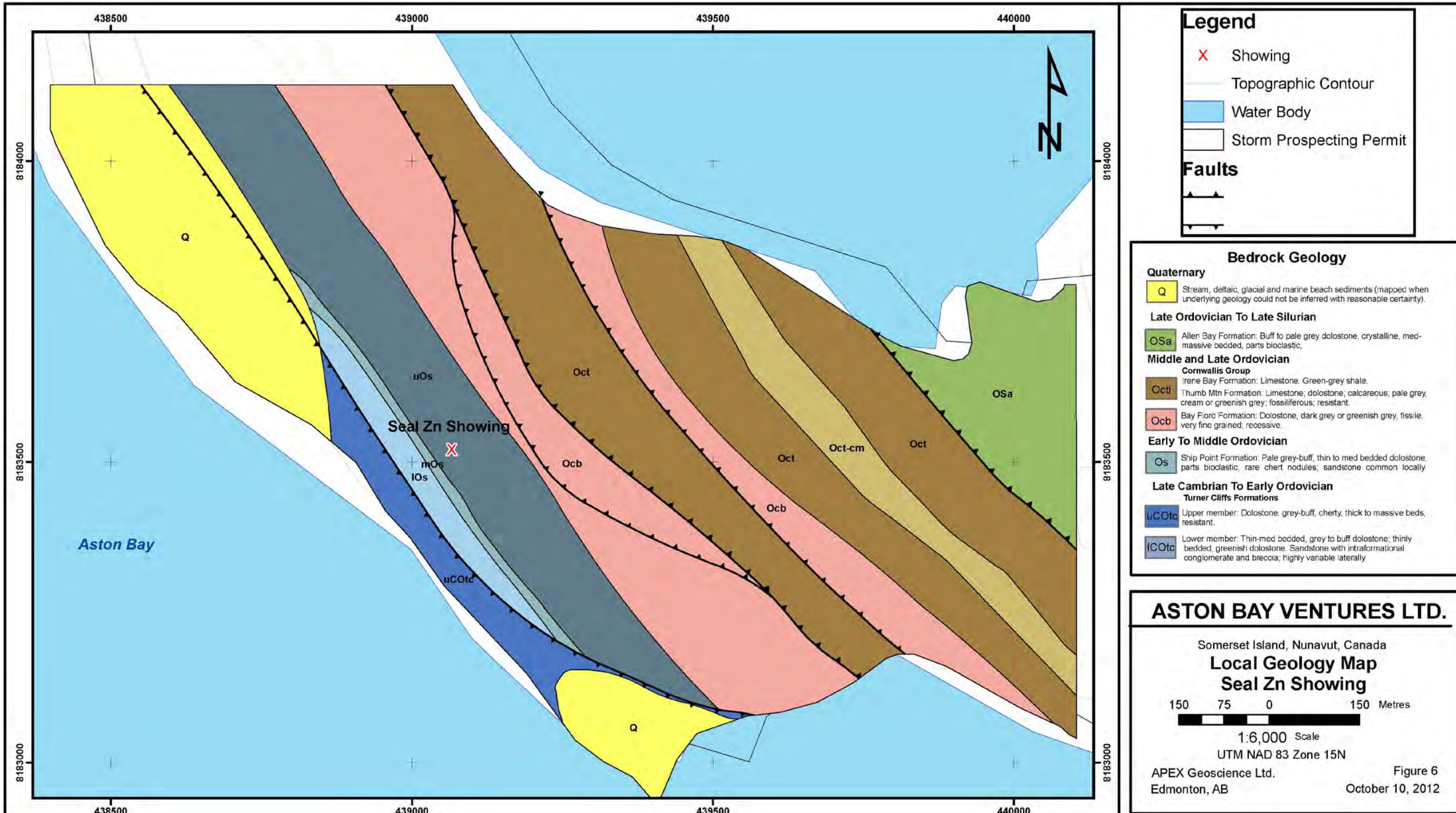


Figure 6 Seal Zinc Showing Property Geology

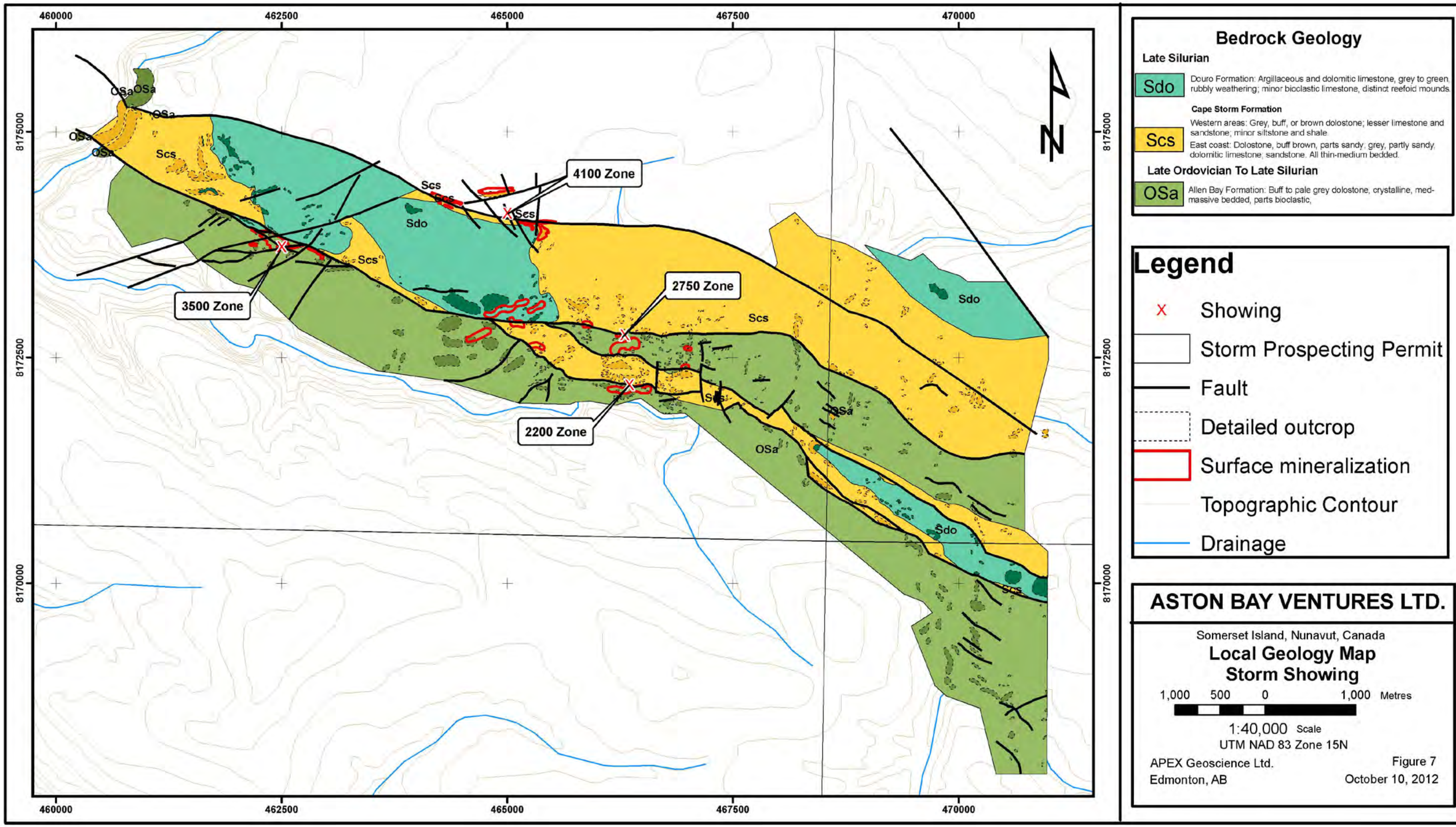


Figure 7 Storm Copper Showing Property Geology

Three marker horizons are present within the VSM: the Oolitic Marker (OP), the Rudstone Chip Marker (RCM) and the Stromatoporoid Boundstone/Framestone Marker (SBFM). The OP occurs 40 m from the top of the VSM and is made up of 1 to 2 reverse-graded oolitic to oncolitic packstone beds. The RCM is less than 1 m in thickness and consists of a coarse mixture of elongate fossil fragments. Five metres above the RCM is the 6 m thick SBFM which occurs near the top of the VSM. The SBFM contains light brown digitate stromatoporoids in growth position.

The 35 m thick middle unit of the upper Allen Bay Formation is termed the Brown Dolopackstone and Dolofloatstone (BPF). The BPF is medium to dark brown comprised of coral-rich dolofloatstone and dolopackstone, with scattered fragmented stromatolites and local dolomicrite interbeds. Chert nodules are common in two horizons within the BPF. Thirty-five to fifty metres of Alternating Dolomicrite and Dolowackestone (ADMW) makes up the upper unit of the upper Allen Bay Formation. The ADMW is made up of thickly-bedded to massive dolomicrite with common internal laminations and metre-scale beds of dolowackestone with fossil debris.

The Cape Storm and the Duoro formations conformably overlie the Allen Bay Formation. The Cape Storm Formation (unit ScS) was deposited in a shallow water to emergent environment and is comprised of platy light- to medium-grey dolostone with widely spaced argillaceous interbeds. The dark green colour of the Duoro Formation (unit Sdo) distinguishes this unit from the others within the eastern portion of the Property. The Duoro Formation consists of nodular argillaceous limestone containing fossilized bivalves, rugose and colonial corals.

The dominant structural feature in the eastern portion of the property is the ESE trending Central Graben. It appears that the Storm copper mineralization was deposited early in the formation of the graben and later structurally modified.

According to Dewing and Turner (*pers*. *comm*., 2012), bedding at the Seal Zinc showing forms a northeast-dipping monocline. On Aston Peninsula, beds dip 14° closest to the ocean, increasing to 34° in the Thumb Mountain Formation, then decreasing northeastward. The monocline is in faulted contact with the Proterozoic Thumb Mountain Formation and locally folded into anticline-syncline pairs with northeast-trending fold axes and plunges. There are small normal faults which offset rock units on Aston Peninsula and near the Seal showing; however there appears to be no direct correlation between mineralization and structure.

The Storm Copper showings are located along faults that define the east-west trending Central Graben. This structure is about 1 km across at the western end, widening to 2 km across where the axis of the graben turns towards a northwest-southeast orientation. The faults are sub-vertical or dip slightly in towards the graben. Local fault juxtaposition of the Allen Bay and Duoro formations indicate a minimum throw of 250 m. Besides the main graben boundary faults, smaller fault splays and sub-grabens exist (Dewing and Turner, *pers*. *comm*., 2012).

The Central Graben is similar to structural sandbox models of pull-apart basins described by Dooley and McLay (1997). The authors modeled a number of releasing bends in strike-slip structural