

# **TECHNICAL REPORT**

## **SCOTIA PROPERTY SCOTIA RIVER AREA, SKEENA MD**

BRITISH COLUMBIA, CANADA

NTS: **103I**

Lat/Long: **54° 05' 17" N, 129° 40' 39" W**

Report For:

**GeoNovus Minerals Corp.**

Report Compiled By:

**Arnex Resources Ltd.  
and Giroux Consultants Ltd.**

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Report Date:

**October 26, 2011**

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## 1 SUMMARY

The Scotia Prospect is located in the Scotia River area, approximately 40 km southeast of Prince Rupert in west central British Columbia. The Scotia group of claims consists of seven cell selected mineral claims that total 8,366 hectares in area.

Under a plan of arrangement transaction, GeoNovus Minerals Corp. (“GeoNovus”) has the right to acquire 100% interest in the Scotia Property from Geo Minerals Ltd., who currently holds title to the Property.

Infrastructure in the area is good, with all of the main valleys in the area accessible by logging roads. Currently, access to the property is via helicopter, approximately a 30 minute trip from Prince Rupert.

The property lies within a belt of Paleozoic metavolcanic and metasedimentary rocks trending approximately north-south between the Skeena River to the north and the Ecstall River to the south. The volcanic rocks have been subjected to upper amphibolite grade metamorphism during three periods of folding and are now represented by amphibolites, gneisses and schists. The lithologies underlying the Scotia property belong to a metavolcanic unit which is intruded by the Ecstall granite along the west side of the property, and by several stages of dioritic to pegmatitic dykes.

North and south of the Ecstall River, several occurrences and VMS-type zinc (+/- copper-lead-silver-gold) deposits are known that are hosted within the metavolcanic unit. Eleven occurrences of this type are located within ten kilometers of the southern margin of the Scotia Property.

The Albere Zone at the Scotia Property was discovered by Texas Gulf Sulphur in 1958 during a regional reconnaissance program. The Albere Zone is characterized by coarsely crystalline, massive to semi-massive sphalerite with lesser amounts of pyrite, galena, pyrrhotite, magnetite and chalcopyrite. The style mineralization is suggestive of proximal Volcanogenic Massive Sulphide type. The mineralized zone is essentially open to the north and west. The mineralized zone lies at the base of a felsic metavolcanic sequence and is underlain by intermediate and mafic metavolcanic rocks. Up to six zones have been intersected by diamond drilling. Evidence suggests that repetition of the mineralization may be due to isoclinal folding which may be present. Mineralization may represent one previously extensive sphalerite lens that has been repeatedly folded and migmatized, or up to three or more lenses that may intersect locally. Alternatively, two main mineralized zones are intersected in many holes. The two bands are commonly mineralogically different and may represent two massive sulphide layers that are discrete from each other, as opposed to being repeated by folding.

In 1960, 10 holes were drilled by Texasgulf Inc. of which seven intersected massive sulphide zones. Drill intersections ranged between 2.2 to 7.7 metres in length. The best intersection was from drill hole S-01-60 which assayed 19.9% zinc and 26 g/t silver over 7.7 metres. In 1980, additional diamond drilling by Kidd Creek Mines Ltd. expanded the strike length and down-dip

dimensions of the massive sulphide mineralization at the Albere Zone. Massive sulphides were intersected in six holes with the best being 9.8% zinc and 14 g/t silver over 18.1 metres.

In 1997, a drill program was conducted by Arnex Resources Ltd for Bishop Resources Inc. at the Albere Zone. Disseminated, semi-massive and massive base metal sulphide intersections were encountered in nine of the ten holes drilled. The thickest intersection was in drill hole S-37-97 which encountered 26.7 metres grading 9.0% zinc, 1.2% lead, 21.5 g/t silver, 0.3 g/t gold and 0.2% copper. Mineralized intersections greater than 15 metres in length were also intersected in two additional holes.

The 1997 drill program extended potentially economic grades in the Albere Zone by about 45 meters, to 205 meters north of the outcrop of the main Albere Showing, and it remains open in this direction. The vertical extent of the mineralization encountered is increasing to the north. Results established a vertical range of sub-economic to economic grades of mineralization of 95 meters, and a horizontal range of over 60 meters at the base of the zone. The high grade "core" area widened to about 30 meters about 190 meters north of the main showing. Also, the grade of zinc mineralization encountered in the deeper western zones appears to be gradually increasing to the north.

The Albere Zone on the Scotia Property lies along the western limb of a broad south-plunging anticline. The Albere Zone is characterized in outcrop by a well developed gossan which is readily apparent from the air. A very similar gossan outcrops in cliff faces which lie along the eastern limb of the anticline adjacent to the Albere Zone (the "East Limb" gossan zone).

A field exploration program was conducted during the period June 30 to July 3, 2005 by a crew of three to five persons. Expenditures totaled \$43,030.71 as per a Statement of Exploration and Development Work filed as Event Number 4052977. The objectives of the program were to resample selected intervals of the 1997 drill core and to prospect and sample the exposed outcropping East Limb gossanous area.

Inclement weather conditions limited helicopter access to the Property. Selected intervals of the 1997 drill core were re-sampled. Numerous samples were "over-limit" for the geochemical analysis that was performed.

Only limited time was spent prospecting and sampling the East Limb gossan zone. Abundant limonite and some pyrite were found associated with a small portion of the gossan that was visited. Elevated base metal values were present in some of the samples that were taken.

A grid based soil geochemical program was conducted on the Scotia Property by up to a five-person field crew during the period September 1 to 11, 2006. A total of 106 soil samples were taken. Expenditures totaled approximately \$70,850. The samples were analyzed by 30 element ICP-ES as well as fire assay and ICP-ES for 30 gram gold assay.

Soil Geochemistry Contours of Zn (ppm) shows highest values for Zn at the easternmost end of several lines. This may partially reflect down-slope dispersion from the two spot highs located in the central portion of the grid. The highest Zn value of 192 ppm on the south-eastern corner of the grid is coincident with high Pb values and probably represents an in-situ polymetallic



anomaly. The south-central Zn anomaly is coincident with a Pb high, while the north-central Zn anomaly is in the same area as a Cu high. Two high values are present on the northernmost line indicating that the soil anomaly is still open upslope to the north. The highest Cu values and best Cu anomalies are also present on the northernmost portion of the grid.

Geochemical soil anomalies are present beyond and lateral to the drilled portion of the Albere Zone.

An ASTER Remote Sensing Interpretation study was conducted in November, 2006 for the Scotia Property by John Berry and Associates at a cost of approximately \$27,600. The report suggested that mineralization at Scotia is associated with cross-folding and the contacts between mafic and felsic gneisses of volcanic or oceanic origin. The ore is probably of Kuroko type, and so deposits may be expected to be small but numerous. The study identified other exploration targets on the Property.

A core re-sampling program was carried out as part of Data Verification of the 1997 drill program results. It was concluded that the re-sample program verified the 1997 results for the selected intervals sampled and that this data has been verified for purposes of determining a Resourced Estimate.

An airborne geophysical survey was conducted by Aeroquest Limited during August 2008. The 2008 Airborne Geophysical Survey identified several distinctive anomalies, some of which appear to be related to the Albere Zone mineralization and also encountered regional anomalies where no recorded historical work has been conducted.

An Orthophoto Map compilation program was conducted during the period November 13, 14, 2009 at a cost of \$24,313.01.

The 2010 field exploration program consisted of a geochemical survey targeted on Airborne Anomalies similar to the anomaly generated by the Albere zone. Soil, moss mat (stream sediment) and rock chip samples were taken. The type of sample taken was determined in the field based on selecting the best type of sample to be taken to give the best chance of detecting poly-metallic base and precious metal mineralization that may be present associated with the Airborne Anomalies.

Virtually all Airborne Anomalies sampled returned geochemically anomalous or elevated values for the various sample types taken. No "ore grade" showings were found but values of over 1,000 ppm Zn were encountered from "in place" rock chip sampling.

A Resource Estimate for the Scotia Property based on historical drill results has been compiled by Giroux Consultants Ltd for inclusion in this Technical Report. The resource is based on 42 diamond drill holes totaling 4,343 m. A three dimensional geologic solid was used to constrain the massive sulphide mineralization and capping was applied to both variables within and outside this mineralized solid. Uniform downhole composites 2 m in length were used to model the grades with semivariograms. Grades for Zn, Cu, Pb, Ag and Au were interpolated into 10 x

10 x 5 m blocks using ordinary kriging. As no specific gravity measurements were taken historically for this property a specific gravity was calculated for each block based on lead-zinc estimated values. Grade continuity as measured in the semivariograms was used to classify the resource. Two sets of results are presented: the first assumes one could mine to the limits of the mineralized solids and reports mineralization within the mineralized zone while the second assumes one would mine to the limits of 10 x 10 x 5 m blocks and reports the edge dilution present in mining total blocks. Reality is somewhere between these two estimates.

The following table identifies resources for various categories using a 1% Zn cut-off. The 1% Zn cut-off was used as a portion of the Scotia Resource may possibly be amenable to bulk tonnage surface mining as a starter open-pit. It is emphasized that no economic parameters have been defined by the current Resource Estimate as to an appropriate cut-off for various types of mining.

### Resource Estimate Summary Scotia Property

Category	Tonnes	Zn(%)	Ag(g/t)	Cu(%)	Au(g/t)	Pb(%)
Measured Resource - within Mineralized Shell	246,000	5.73	14.25	0.08	0.16	0.63
Indicated Resource - within Mineralized Shell	557,000	4.49	13.7	0.10	0.17	0.48
Inferred Resource - within Mineralized Shell	702,000	4.47	13.74	0.10	0.19	0.45
<b>Measured + Indicated Resource - Mineralized Shell</b>	<b>802,000</b>	<b>4.87</b>	<b>13.87</b>	<b>0.09</b>	<b>0.17</b>	<b>0.53</b>
Measured Resource - Total	258,000	5.41	13.35	0.07	0.15	0.59
Indicated Resource - Total	618,000	3.91	11.85	0.09	0.15	0.42
Inferred Resource - within Mineralized Shell	795,000	3.76	11.53	0.09	0.16	0.38
<b>Measured + Indicated Resource - Total</b>	<b>876,000</b>	<b>4.35</b>	<b>12.29</b>	<b>0.08</b>	<b>0.15</b>	<b>0.47</b>
by Giroux Consultants Ltd - using 1% Zn cut-off						

A surface exploration program is recommended for the core claims at the Albere Zone as a Phase 1A program at an estimated cost of \$250,000 plus HST. Initial field work should include ground geological mapping, soil geochemistry and geophysics in the vicinity of the drilled zone to extrapolate drill targets. Geochemical anomalies could possibly be traced by a helicopter portable backhoe and mapped and sampled. Ground geophysics may include magnetic, UTEM, IP and bore-hole geophysical surveys.

A non-contingent Phase 1B diamond drill program is recommended in the vicinity of the Albere Zone to explore targets identified by the Airborne Geophysical Survey and the Phase 1A surface exploration program. An expenditure of \$500,000 plus HST is warranted for the Phase 1B program

Subject to the results of the Phase 1A and Phase 1B programs, a contingent major diamond drilling program may be warranted. A detailed Work Program and Budget should be prepared when the results of the Phase 1A and 1B Work Programs have been compiled.

## 2 INTRODUCTION AND TERMS OF REFERENCE

### 2.1 *Terms of Reference*

GeoNovus Minerals Corp. (“GeoNovus”) has authorized Arne O. Birkeland, P.Eng. of Arnex Resources Ltd. (“Arnex”) to act in the capacity as an independent Qualified Person and to prepare a Technical Report on the Scotia mineral occurrence (the “Property”) located in the Skeena Mining Division, Scotia River Area, northern BC. The Technical Report shall conform to the required headings and guidelines as contained in CSA Form 43-101F1.

### 2.2 *General*

The purpose of the preparation of this Technical Report is to support a plan of arrangement transaction involving GeoNovus and GeoNovus’s application to become a reporting issuer.

The objective of the Technical Report is to document the following:

- Summarize the exploration history of the Property by describing historical programs and results based on a review of available Assessment Reports,
- Compile and discuss results of previous exploration programs carried out on the Property,
- Compile and discuss in detail results of a previous exploration program carried out on the Property during 1997 by Arnex,
- Compile and discuss the results of a core sampling verification program carried out in 2005;
- Compile and discuss the results of a grid soil sampling program carried out in 2006;
- Discuss and include the results of an Aster study conducted on the Property in 2006;
- Summarize Results of a surfaced exploration program conducted during fall, 2010;
- Document exploration potential and prioritize exploration targets,
- Make recommendations regarding further development of the Property.

Sources of information and data used in the preparation of the Technical Report include:

- Ministry of Energy and Mines (“MEM”) Assessment Reports,
- Aris Assessment Reports,
- Various company reports on historical programs,
- Ministry of Energy and Mines GIS database,
- MapInfo GIS database compiled by Great Bear Geological Services under the direction of Arnex,
- Gemcom GIS database compiled by Leo Lindinger under the direction of Arnex,
- Field sample data conducted by Arnex,
- Remote Sensing Interpretation, John Berry Associates, October 11, 2006.

- Airborne Geophysical Survey – Aeroquest Limited

Expenditures on the Property during the past three years total \$114,940.16. The orthophoto map compilation program carried out during November 2009 cost \$24,313.01 while the geochemical sampling program carried out during September, October 2010 cost \$90,627.15.

Arne O. Birkeland, P.Eng. supervised and was involved in the field operations pertaining to the diamond drill exploration program carried out on the on the Property by Arnex during 1997. Birkeland also supervised the core sampling program carried out in 2005, the grid soil sampling program carried out in 2006 and the surface exploration program carried out in 2010. The most recent site visit to the Property by Birkeland was during the period September 18 to October 8, 2010. No material field work has been conducted on the Property since the 2010 exploration program.

### **3 RELIANCE ON OTHER EXPERTS**

Regarding Section 3.6, Property History, the author has researched Aris Assessment Reports and various company reports and files which have been compiled for the preparation of this Technical Report.

Giroux Consultants Ltd of Vancouver, BC has been responsible for compiling a geologic block model and a Resource Estimate that has been used for the preparation of this Technical Report. Gary Giroux, P.Eng., principal, acting as independent Qualified Person, is co-author of Section 17 of this Technical Report.

The author is not aware of any environmental liabilities related to the Scotia Property. The author is aware that a reclamation program was carried out on the Property by Falconbridge Limited at the conclusion of their exploration work on the Property. An additional reclamation program was carried out for Falconbridge and for Bishop Resources Inc. by Arnex Resources Ltd during the period August 28 to October 3, 2001. At this time, drill site timbers were slung to the camp and core location at the ridge-top and stacked for storage. Drill core is also cross-stacked for storage at the same location. A Report of Inspector of Mines based on a field inspection carried out on October 3, 2001 stated that all reclamation requirements pertaining to the Notice of Completion dated October 31, 2001 had met or exceeded the requirements of the Mineral Exploration Code. The author has not researched native land claim issues. The author does not satisfy the criteria of acting as a Qualified Person to comment on matters regarding this issue.

The author offers no comment on, and has not determined the relevant extent of, local resource issues dealing with the availability and sources of power, water, mining personnel, potential tailings storage areas, potential waste disposal areas, or potential processing plant sites. The Scotia Property is at a relatively early stage of exploration. The above noted issues are to be addressed as the development of the Property advances.

## **4 PROPERTY DESCRIPTION AND LOCATION**

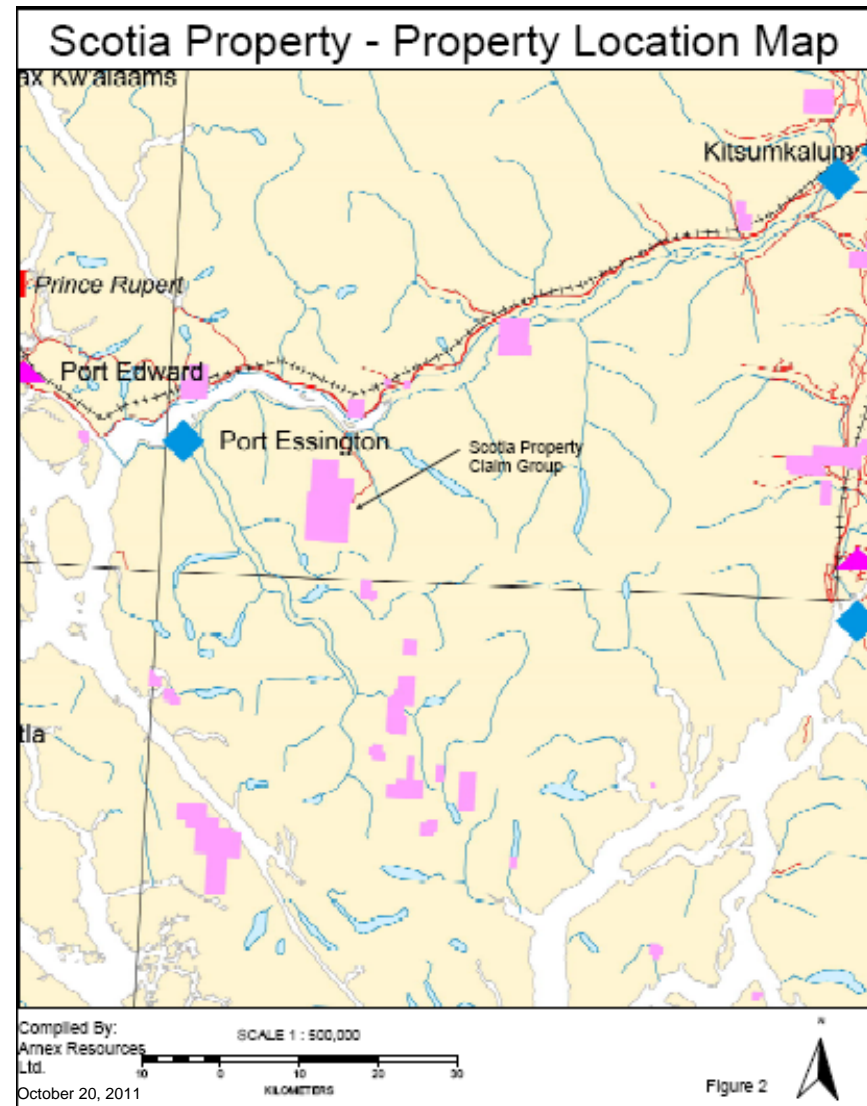
### ***4.1 Location***

The Scotia Prospect is located in the Scotia River area, approximately 40 km southeast of Prince Rupert in west central British Columbia (Figure 1). The Property is centered on latitude 54 degrees, 05 minutes, 17 seconds North and longitude 129 degrees, 40 minutes, 39 seconds West. The property lies within a belt of metavolcanic degrees, and metasedimentary rock trending approximately north-south between the Skeena River to the north and the Ecstall River to the south (Figure 2).

Figure 1: Location Map



Figure 2: Property Location Map



#### **4.2 Property Description and Ownership**

The original Scotia group of claims consisted of seven cell mineral claims totaling 4,939.4 hectares that were owned by Doublestar Resources Ltd (“Doublestar”), owner number 139464. The claims were subject to the provisions of an agreement between Doublestar and Falconbridge Limited. Doublestar has since confirmed that the Falconbridge agreement has been terminated and no longer exists.

Subject to the provisions of an option agreement dated April 12, 2005, Ialta Industries Ltd (“Ialta”) acquired a 50% working interest in the Property from Doublestar by issuing staged share issuances totaling 350,000 shares and incurring \$2,000,000 in exploration expenditures by October 31, 2010. Ialta subsequently assigned its option right to Geo Minerals Ltd. (“Geo”). Pursuant to an agreement dated May 27, 2007 and amended August 14, 2007, Geo acquired all of Doublestar’s interest in the Property. In consideration of Doublestar’s interest in the Property, Geo paid, in a series of installments, an aggregate total of \$310,000 on or before October 31, 2007. Additionally, Geo issued an aggregate of 300,000 Common Shares to Doublestar, and granted Doublestar a 2.0% NSR, of which Geo may purchase, at any time upon notice to Doublestar, 1.0% of the NSR for a cash payment of \$1,000,000.

The original claim group was restaked as its current configuration between October 2008 and November 2009.

In September 2010, Geo optioned a 51% interest in the Property to Hawkeye Gold and Diamond Inc for consideration consisting of cash payments totaling \$210,000, issuance of 1,000,000 common shares over a three year period and incurring \$1,150,000 in work commitment expenditures on the Property over a four year period. Hawkeye could earn an additional nine percent interest by incurring \$500,000 in property expenditures until a feasibility study is completed and issuing an additional 500,00 shares to Geo within 15 days following completion of the feasibility study. Hawkeye announced on October 6, 2011 that the Scotia Property Option Agreement had lapsed with Geo whereby Geo had subsequently retained its 100% interest in the Property.

Pursuant to a business combination agreement dated October 14, 2011 among Geo, its wholly-owned subsidiary GeoNovus Minerals Corp. (“GeoNovus”), and New Gold Inc., Geo will transfer its 100% interest in the Scotia Property and all related rights and obligations including surface rights and right of legal access to the Property to GeoNovus, in consideration for common shares in the capital of GeoNovus.

Other than any future First Nations claims, the author is not aware of any significant factors and risks that may affect access, title or the right or ability to perform work on the Property.

Tenure information is contained in Table 1.

**Table 1: Claim Tenure**

Tenure Number	Claim Name	Owner	Map Number	Good To Date	Status	Area (ha)
593613	SCOTIA	210426 (100%)	103I	2012/nov/20	GOOD	5576.2680
629323	SCOTIAAREASTAKED1	210426 (100%)	103I	2012/nov/20	GOOD	455.8591
629324	SCOTIAAREACLAIM2	210426 (100%)	103I	2012/nov/20	GOOD	474.7907
629325	SCOTIAAREACLAIM3	210426 (100%)	103I	2012/nov/20	GOOD	474.8134
666263	SCOTIA EAST	210426 (100%)	103I	2012/nov/20	GOOD	473.9326
666283	SCOTIA EAST1	210426 (100%)	103I	2012/nov/20	GOOD	455.2423
666284	SCOTIA EAST2	210426 (100%)	103I	2012/nov/20	GOOD	455.5040
<b>Total</b>	<b>7 Claims</b>					<b>8366.4101</b>

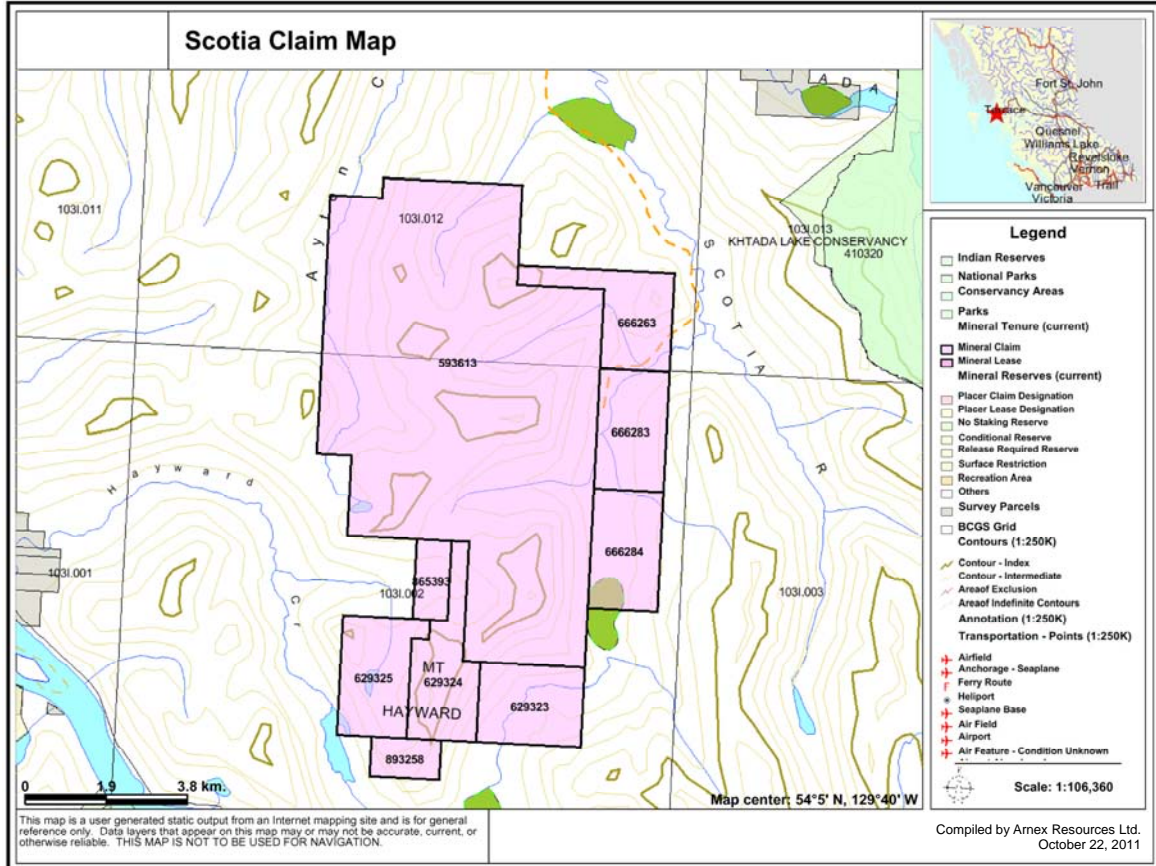
The claims are plotted on Figure 3, Scotia Claims.

The principle mineralized zone on the Property is the Albere Zone. It is located in the central portion of Tenure Number 593613.

There are no known environmental liabilities to which the Property is subject.

A *Mineral Notice of Work and Reclamation Program* has been filed with the Ministry of Energy and Mines to obtain a Mines Act Permit for conducting the Phase 1B diamond drill program recommended in this Technical Report.

**Figure 3: Scotia Claims**





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

### ***5.1 Topography, Elevation and Vegetation***

The Scotia Claim Group is located on a steeply sloping south facing hillside between two southeastern tributaries of the Scotia River (Figure 12). The Alberes showing outcrops at an elevation of approximately 2700 feet. The Alberes showing is at treeline, with conifer forest occurring down-slope and alpine scrub and brush occurring up-slope.

### ***5.2 Accessibility***

Access to the Property is by helicopter from Prince Rupert located 40 kilometres to the northwest. Truck access is by barge from Kwinitza on the north shore of the Skeena River to the Scotia River logging camp on the south shore of the Skeena River, owned by Interfor (International Forest Products) and operated by Bear Creek Contracting of Terrace, BC (Figure 2), then by driving on the Scotia Mainline logging road, then traversing to the Property.

### ***5.3 Climate and Vegetation***

The Prince Rupert area has a coastal climate characterized by high precipitation and moderate temperatures. Winters are mild and wet with precipitation occurring mostly as rain and snowfall generally restricted to higher elevations. Temperatures reach lows of about -10°C. Summer weather is variable, typically with mixed rain and cloud, and temperatures from 10°C to 25°C. Lakes are generally ice-free by early April. Freeze-up typically occurs in mid-November.

Heavy forest cover is restricted to parts of main valley floors, with sparse coniferous growth on hillsides up to about 1,000 meters. Fir, hemlock and willows dominate with lesser poplar, birch and alder. Short brush and lichen dominates above 1,000 meters.

### ***5.4 Infrastructure***

All of the main valleys in the area are accessible by logging roads maintained by Bear Creek Contracting. The area is intermittently logged and most valleys have been logged from recently to over 30 years ago. More recent, deactivated logging roads are still accessible by four wheel drive vehicles.

A Canadian National rail line is located along the north bank of the Skeena River, which links Prince Rupert with interior British Columbia. Electric power is available on the south bank of the Skeena River near the Scotia River camp (see Figure 2). Water is plentiful year round. A year round deep-sea shipping port is located at Prince Rupert.

### **5.5 *Physiography***

Most of the area covers the Kitimat Ranges of the Coast Mountains at elevations from 25 meters at the Skeena River to peaks up to 1,580 meters. Terrain is mostly mountainous with smooth, steep, bare rock faces to moderate brush and tree-covered slopes and intervening, U-shaped swampy river valleys of the Scotia River, Big Falls Creek and Carthew Creek drainage systems (see Figure 2).

## **6 PROPERTY HISTORY**

### **6.1 *Regional Exploration***

Regionally, most exploration in the area was conducted in the 1950's and 1960's when the Texas Gulf Sulphur Company was developing the Ecstall VMS deposit for its sulphur content. Reserves of approximately six million tons were delineated by extensive diamond drilling and underground development. As cheap sources of sulphur were then developed as a by-product of the petroleum industry, the Ecstall deposit was never mined.

Most regional exploration has historically been centered on the Ecstall area in the southern portion of the Scotia-Quaal belt. Texasgulf and Cominco drilled the Packsack claims and Noranda carried out extensive geophysical surveys and limited drilling at the Horse Fly prospect. Atna drilled the Horse Fly prospect in 1995 with encouraging results.

A regional geochemical stream sediment and water reconnaissance program was carried out by the British Columbia Geological survey on NTS map sheets 103I - Terrace and 103J - Prince Rupert in 1978 and 1979. These samples were reanalyzed in 1991 and published as BC RGS 42 in June 1995. The release includes previously unreleased data for 26 metals in stream sediments. A total of 2,253 stream sediment and 2,237 stream water samples were collected from 2,128 sites.

A two year geological mapping program was conducted by the BCGSB by D Alldrick. The 1:20,000 scale mapping was released in 2001 as a Geoscience Map titled Geology and Mineral Deposits of the Ecstall Greenstone Belt, North West BC.

The GSB subsequently conducted a Regional Geochemical Survey (Open File 2001-13) reporting the results of stream sediment and water sampling of 228 sites over a 1,800 square kilometre area.

### **6.2 *Scotia Property Exploration***

The Albere Zone at the Scotia Deposit was discovered by Texas Gulf Sulphur in 1958 during a regional reconnaissance program. There is very limited data available pertaining to the early exploration work carried out at this time.

In 1960, 10 holes were drilled by Texasgulf Inc. for a total of 570 metres. Of the 10 holes drilled, seven holes intersected significant base and precious metal mineralization (Table 2, Texasgulf Inc. – Significant 1960 Drill Intersections). Drill intersections ranged between 2.2 to 7.7 metres in length. All intersections are reported as apparent widths as there is insufficient data to estimate true widths. The best intersection was from drill hole S-01-60 which assayed 19.9% zinc and 26 g/t silver over 7.7 metres. All drill hole intersections are apparent widths.

**Table 2: Texasgulf Inc. – Significant 1960 Drill Intersections**

**TEXASGULF INC - SCOTIA PROJECT  
SIGNIFICANT 1960 DRILL INTERSECTIONS  
WEIGHTED INTERVALS - DRILLED LENGTH IN METERS**

HOLE		FROM	TO	WIDTH	Zn %	Pb %	Cu %	Ag g/t	Au g/t
S-01-60		16.1	23.8	7.7	19.89	0.92	0.34	26.2	0.1
S-02-60		3.5	7.0	3.5	14.58	1.28	0.16	30.2	0.0
S-02-60		14.9	17.2	2.3	14.29	0.25	0.61	21.3	0.0
S-06-60		17.1	21.3	4.2	9.15	1.13	0.17	13.7	0.0
S-06-60		29.3	33.1	3.8	28.73	4.44	0.41	68.6	0.7
S-07-60		29.9	34.1	4.2	11.39	1.93	0.16	81.1	1.3
S-09-60		36.9	39.1	2.2	12.33	2.29	0.13	16.4	0.3
S-09-60		44.9	48.3	3.4	11.56	1.18	0.12	13.3	0.0
S-10-60		57.4	61.3	3.9	0.13	2.41	0.13	22.8	0.6

**KIDD CREEK MINES LTD - SCOTIA PROJECT  
SIGNIFICANT 1980 DRILL INTERSECTIONS  
WEIGHTED INTERVALS - DRILLED LENGTH IN METERS**

HOLE		FROM	TO	WIDTH	Zn %	Pb %	Cu %	Ag g/t	Au g/t
S-11-80		63.3	81.4	18.1	9.78	1.01	0.08	13.7	0.1
S-11-80	Incl	63.3	65.4	2.1	28.70	1.00		20.6	
S-11-80	Incl	71.4	72.2	0.8	33.50	2.70		30.9	
S-11-80	Incl	76.1	76.6	0.6	24.40	8.10		154.3	
S-11-80	Incl	79.3	81.4	2.2	35.90	3.20		24.0	
S-12-80		64.6	67.2	2.6	4.89	0.23	0.10	18.1	0.3
S-12-80		77.3	77.8	0.5	18.00	0.30		13.7	
S-13-80		59.2	62.0	2.8	7.50	0.99	0.32	29.6	0.5
S-14-80		132.1	135.5	3.4	7.83	0.27	0.06	9.9	0.1
S-15-80		66.5	73.7	7.2	7.10	1.60		27.4	0.6
S-16-80		69.0	73.7	4.7	2.84	1.79	0.26	29.6	0.2

A report by Delancey, 1977 documents the following observations and interpretations based on geologic and drill data:

1. *The felsic unit is about 60 m thick. It probably pinches out to the northeast and may become thicker down dip to the southwest.*

2. *The sulphides are generally confined to the felsic unit. Where exposed at surface, the Sulphides occur near the “pinch out” of the felsic unit and the footwall (structural) mafic gneiss. To the northwest the Sulphides occur within the felsic unit, structurally above the mafic gneiss-felsic gneiss contact.*
3. *The massive sulphide zone, exposed at surface, is an irregular lensoid body, crudely conformable with the host rocks, and consisting of a massive zone with associated bands and lenses.*
4. *Although several of the massive sulphide sections may be complexly folded portions of the same band or body drilling data to the northwest suggest that there is more than one sulphide lens or horizon.*
5. *Although it is not possible to project individual intersections from one section to another, the sulphide “zone” itself can be projected a distance of 110 metres from the surface exposure to the last drill section to the northwest.*
6. *Sulphides appear to be concentrated in the crests of folds. This may in part be due to sulphide re-mobilization during metamorphism.*
7. *Pyrite bands occur both structurally above and lateral to the massive sphalerite body.*

In 1970, limited mapping and soil geochemistry were performed by Texasgulf. A well defined multi-element soil anomaly was present associated with the massive sulphide outcrop at the Albere zone.

Seven holes with an aggregate length of 960 metres were drilled in 1980 (see Table 2 on page 10, Kidd Creek Mines Ltd., Significant 1980 Drill Intersections). Massive sulphides were intersected in six holes with the best being 9.8% zinc and 14 g/t silver over 18.1 metres. The diamond drilling by Kidd Creek expanded the strike length and down-dip dimensions of the massive sulphide mineralization at the Albere Zone.

In 1981, 1:5,000 scale mapping of the south central area of the claims was completed. Four broadly spaced step-out holes were drilled with an aggregate length of 1,104.2 metres. Three of the holes were drilled in the vicinity of the main zone at the Albere Showing. Although a substantial section of the pyrite-sericite host-rock “alteration zone” was cut, no massive sulphides were intersected and the 1980 dimensions of the zone were not increased. The fourth hole that was drilled one kilometre to the northwest to test a gossanous zone did not return encouraging assay results. A down hole pulse EM geophysical survey was also conducted using holes S-11, 14, 16, 17, 19 and 20.

In 1984, Andaurex Resources Inc. optioned the property and drilled 11 holes with an aggregate length of 767 m. Drilling confirmed earlier results and demonstrated continuity to the massive sulphides within the drilled zone.

Andaurex allowed the option to forfeit and in 1987 Kidd Creek cut 10 kilometres of grid lines and conducted magnetometer, VLF-EM and litho-geochemical surveys. A total of 159 grab samples were studied in order to locate areas of hydrothermal alteration that may be related to

massive sulphide occurrences. The geophysical surveys found conductors associated with the massive sulphide mineralized zones. The surveys concluded the following:

1. *The strong north trending V.L.F. responses are encouraging and may represent the trace of the known mineralization and/or new mineralized horizons.*
2. *The magnetic data (magnetic highs) show that a fair amount of erratically disseminated magnetite is present in certain horizons. The higher magnetic susceptibility of these horizons generally indicates that the bedrock is more mafic. The areas of magnetic lows (low magnetic susceptibility) may be due to felsic volcanic horizons or metasediments.*
3. *It is interesting to note that the stronger V.L.F. conductors tend to run along the magnetically inferred contact between mafic and felsic rock.*

A Falconbridge Limited (“Falconbridge”) Memorandum by Money, 1989, states the following:

1. *The limited exploration on the Scotia property has indicated that the claims are underlain by favourable geology, which host Zn dominant massive sulphides.*
2. *An evaluation of the available data indicates that a 2,000 metre drill program should be conducted in conjunction with geologic mapping and prospecting. The drilling should consist of 1,300 metres to test favourable stratigraphy with two drill sections 400 and 800 metres along strike from the Scotia deposit.*

Figures 4 to 6 (see Falconbridge Figures 2-4) show a plan map and two sections showing the location of VLF-EM conductors and the proposed step-out section drilling.

Figure 4: Dill Hole Location and Compilation Map

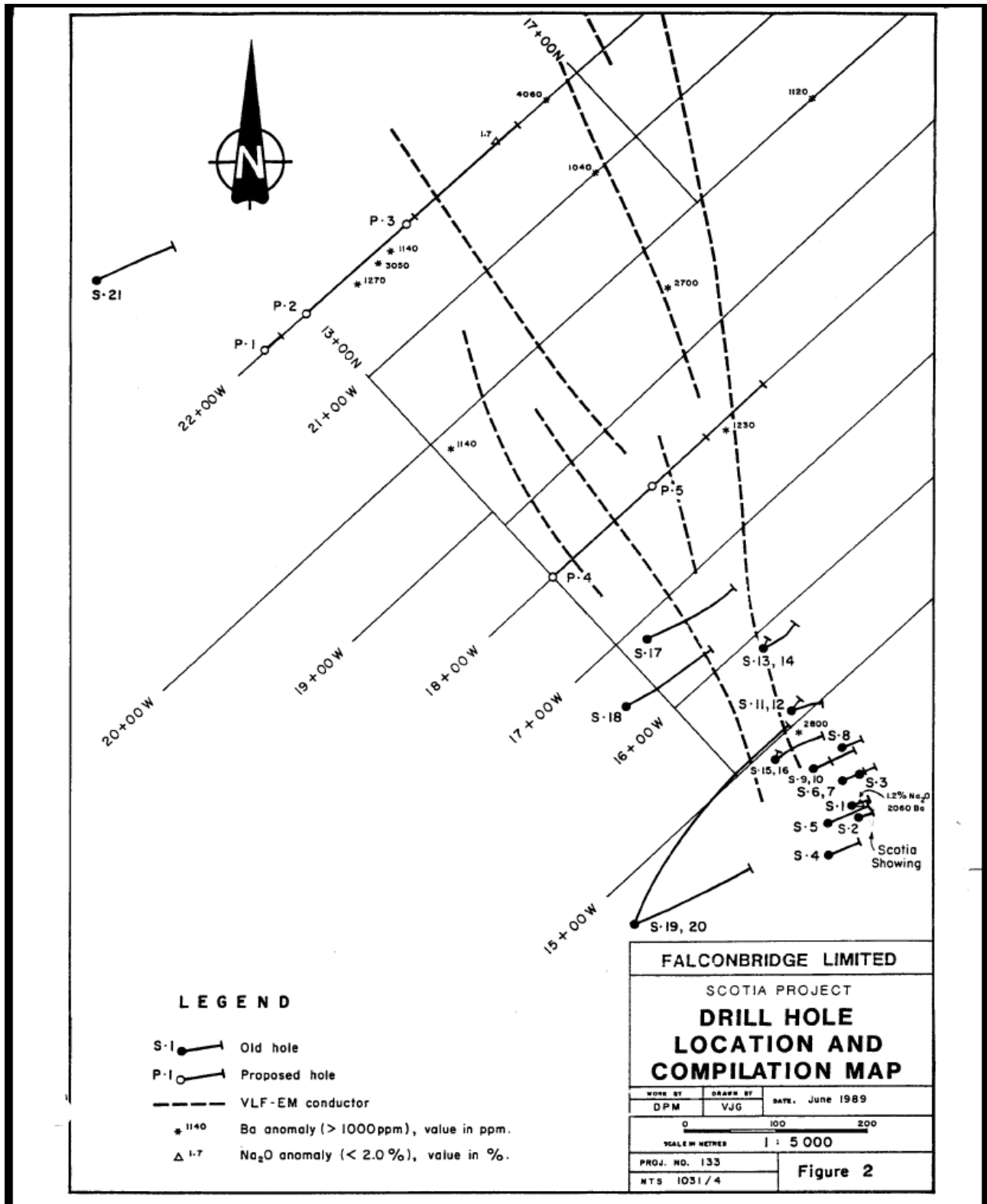


Figure 5: Section 22+00W

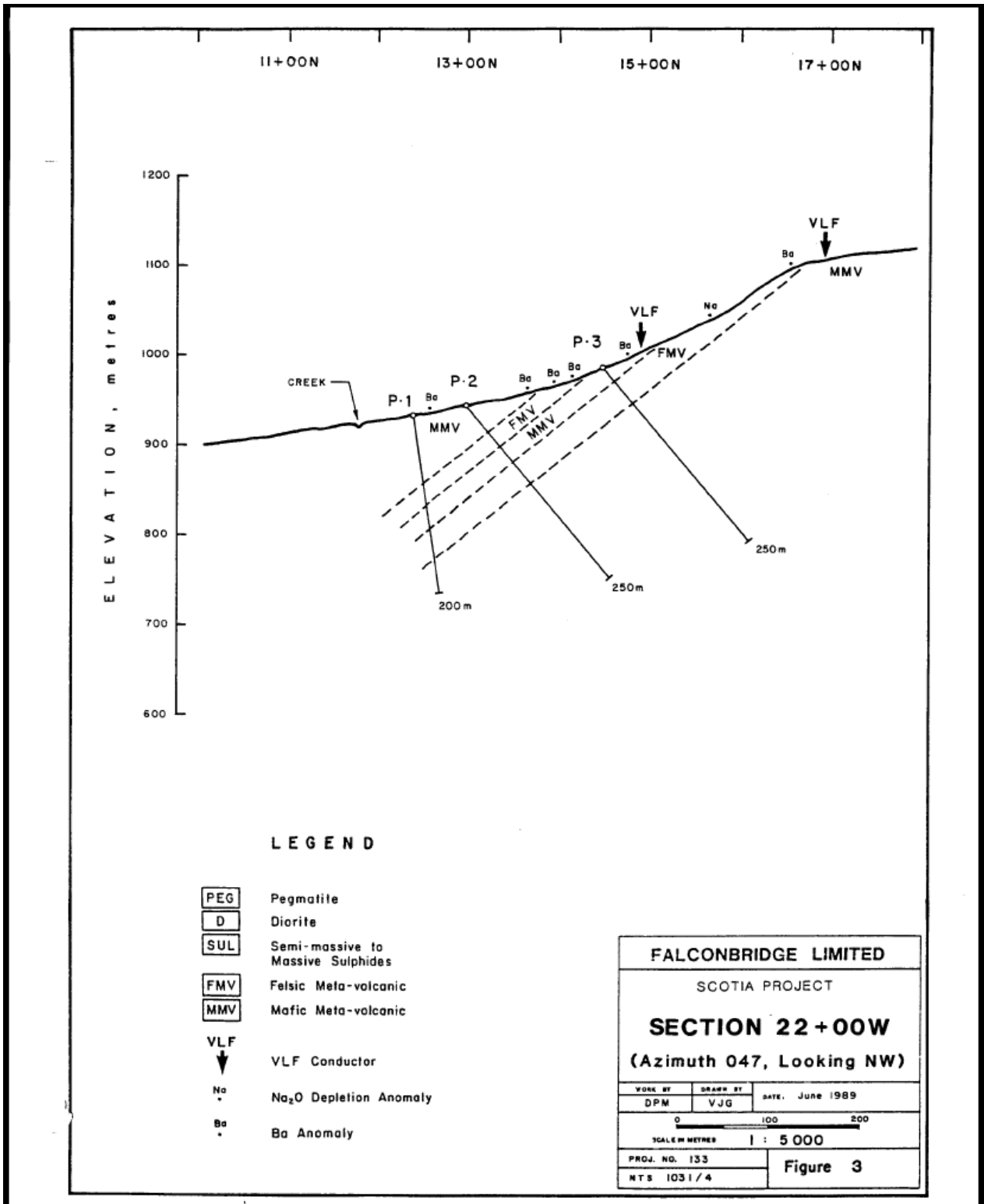
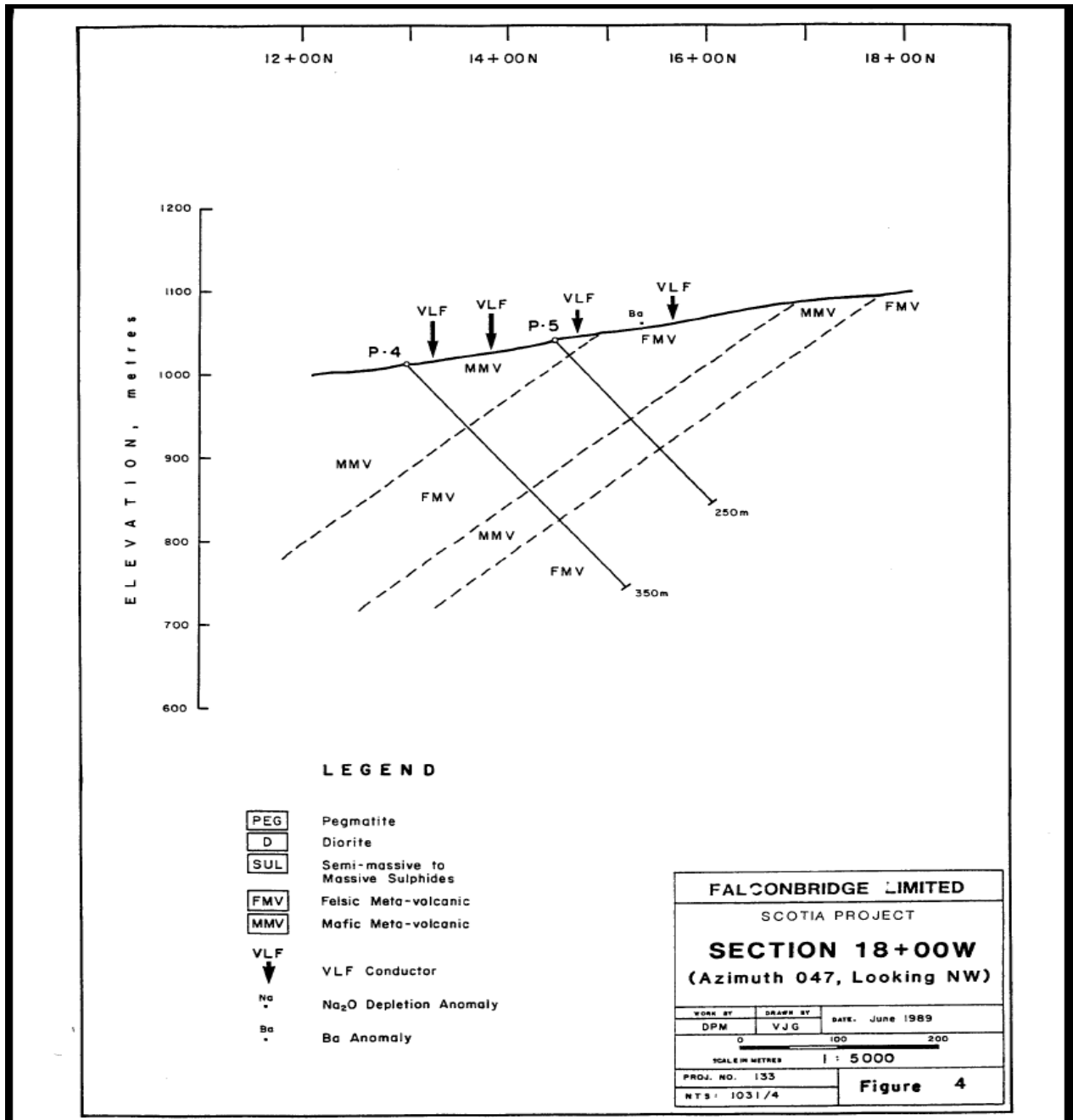


Figure 6: Section 18+00W



Falconbridge Limited conducted an environmental reclamation program on the property in 1992.

Bishop Resources Inc. (“Bishop”) entered into an option agreement in 1996 with Falconbridge to acquire 100% interest in the Scotia Property subject to certain terms and conditions. In 1997, a drill program was conducted by Arnex Resources Ltd. (“Arnex”) for Bishop at the Albere Zone. Disseminated, semi-massive and massive base metal sulphide intersections were encountered in nine of the ten holes drilled. The thickest intersection was in drill hole S-37-97 which encountered an apparent width of 26.7 metres grading 9.0% zinc, 1.2% lead, 21.5 g/t silver, 0.3



g/t gold and 0.2% copper. *Mineralized intersections greater than 15 metres in length were also intersected in two additional holes.*

The 1997 drill program extended potentially economic grades in the Albere Zone by about 45 meters, to 205 meters north of the outcrop of the main Albere Showing, and it remains open in this direction. The vertical extent of the mineralization encountered is increasing to the north. Results established a vertical range of sub-economic to economic grades of mineralization of 95 meters, and a horizontal range of over 60 meters at the base of the zone. The high grade "core" area widened to about 30 meters about 190 meters north of the main showing. Also, the grade of zinc mineralization encountered in the deeper western zones appears to be gradually increasing to the north.

Chapter 5 of this Technical Report discusses the details of the 1997 Arnex drill program.

Although the results of the 1997 drill program were encouraging, a poor mining exploration financing environment in BC at the time precluded Bishop from meeting its Work Commitments and the Property reverted to Doublestar Resources Ltd. through an agreement with Falconbridge. Doublestar have since stated that the Falconbridge agreement was terminated and no longer exists.

A Reclamation Program was completed on the Scotia Property in 2001 by Arnex for Falconbridge and Bishop. All drill sites were de-constructed and all reusable timbers were flown to the core storage area on the Scotia ridge top. Core logging and processing facilities were reclaimed. All core was cross stacked for permanent storage.

Ialta Industries Ltd. entered into an option agreement with Doublestar dated April 12, 2005 to acquire a 50% working interest in the Property by issuing 350,000 shares and incurring \$2,000,000 of Exploration Expenditures by October 31, 2010. Ialta subsequently assigned its option right to Geo. Pursuant to an agreement dated May 27, 2007 and amended August 14, 2007, Geo acquired all of Doublestar's interest in the Property. In consideration of Doublestar's interest in the Property, Geo must pay, in a series of installments, an aggregate total of \$310,000 on or before October 31, to date, this aggregate total has been paid in full. Additionally, Geo issued an aggregate of 300,000 Common Shares to Doublestar, and granted Doublestar a 2.0% NSR, of which Geo may purchase, at any time upon notice to Doublestar, 1.0% of the NSR for a cash payment of \$1,000,000.

Arnex conducted a core sampling verification program for Geo in 2005. Arnex also conducted a grid soil geochemical program for Geo in 2006. The results of these programs are discussed in detail in section 6, Item 12 – Exploration.

A Remote Sensing Interpretation study was conducted by John Berry Associates for Geo dated October 11, 2006. The study is discussed in section 6.1.3.

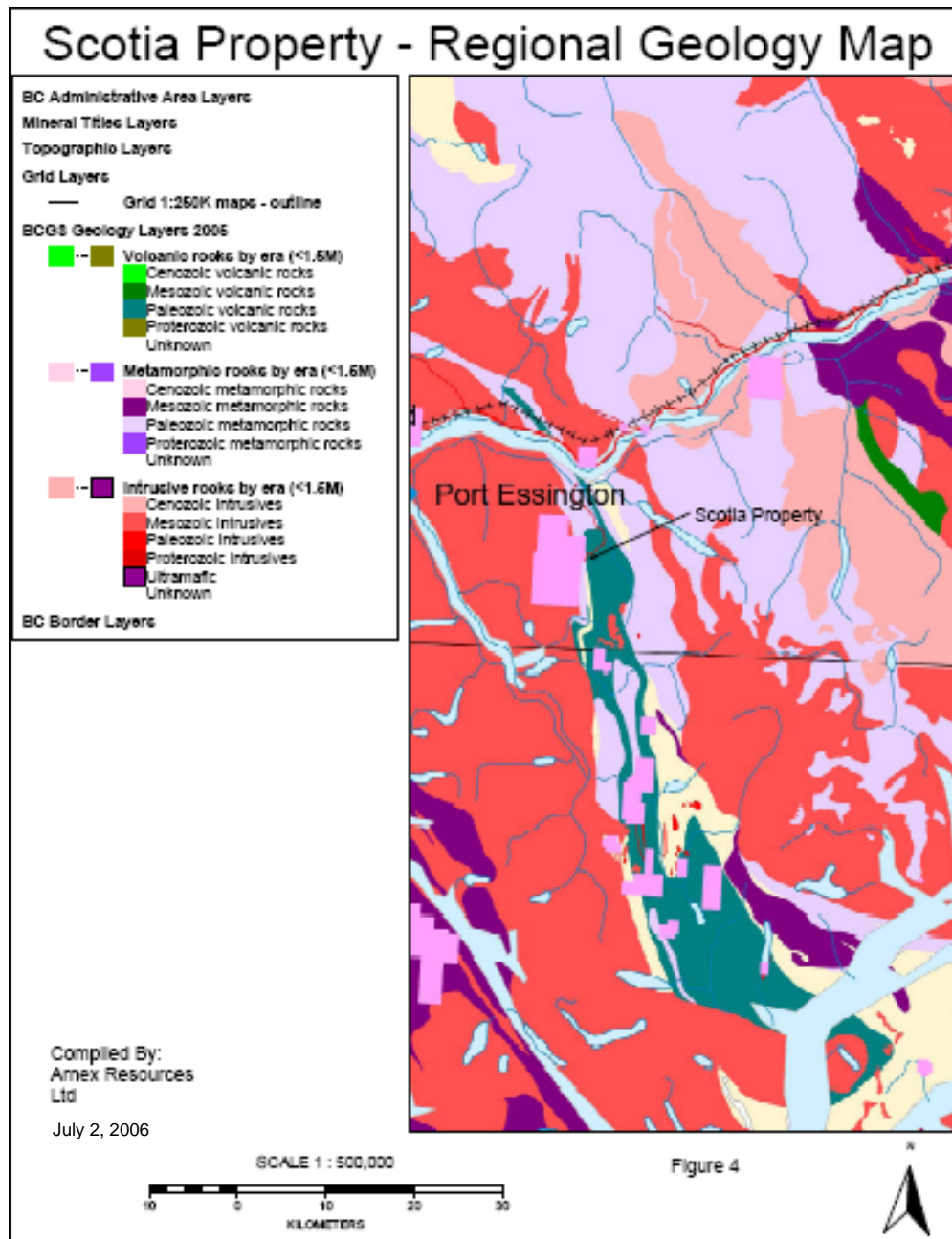
Arnex conducted a prospecting and geochemical sampling program in fall of 2010.

## 7 GEOLOGICAL SETTING AND MINERALIZATION

### 7.1 Regional Geology

Most of the Prince Rupert - Skeena area is underlain by plutonic and metamorphic rocks of the Coast Plutonic Complex (Hutchinson, 1982). The regional distribution of the metavolcanic rocks of the Ecstall Greenstone Belt is illustrated in Figure 7, Scotia Property – Regional Geology. Plutonic rocks consist of major plutons and smaller irregular bodies, mostly of quartz diorite and granodiorite. Diorite and quartz monzonite are less common, and gabbro and granite are rare. Most of the plutonic rocks are probably Mesozoic in age.

Figure 7: Regional Geology Map



A north-northwest-trending belt of metavolcanic and metasedimentary rocks known as the Scotia - Quaal metamorphic complex has been mapped through the area between the Skeena River and Douglas Channel. Both metavolcanic and metasedimentary rocks are present. Map units represent lithologic-metamorphic packages which probably contain strata of variable ages. Because of the strong metamorphic overprint and lack of fossils, the age of these strata is uncertain, however, radiometric dating places them at pre-Early Jurassic age.

With the exception of a small wedge of metasedimentary rocks at the western margin of the belt, the units from west to east, as defined by Gareau (1997) are: the Big Falls orthogneiss, in the southern part only; a metavolcanic unit, a metasedimentary clastic unit, a quartzite unit and a layered gneiss unit. The units of interest are the metavolcanic unit, which hosts the Scotia Deposit and several other VMS-type deposits north and south of the Ecstall River, and the metasedimentary unit, particularly near its contact with the metavolcanic unit.

The region has undergone three phases of deformation. Metamorphism is variable, from low to high grade and generally increasing in grade from west to east. The major structural trend in the area is northwest.

The Ecstall Pluton, which borders the Scotia - Quaal metamorphic belt to the west, is Cretaceous in age while the Quottoon Pluton to the east is Late Paleocene to Early Eocene in age (Gareau, 1997). The Ecstall Pluton appears to have been generated and mobilized from east to west during an intense period of metamorphism of Late Cretaceous age (Hutchinson, 1982).

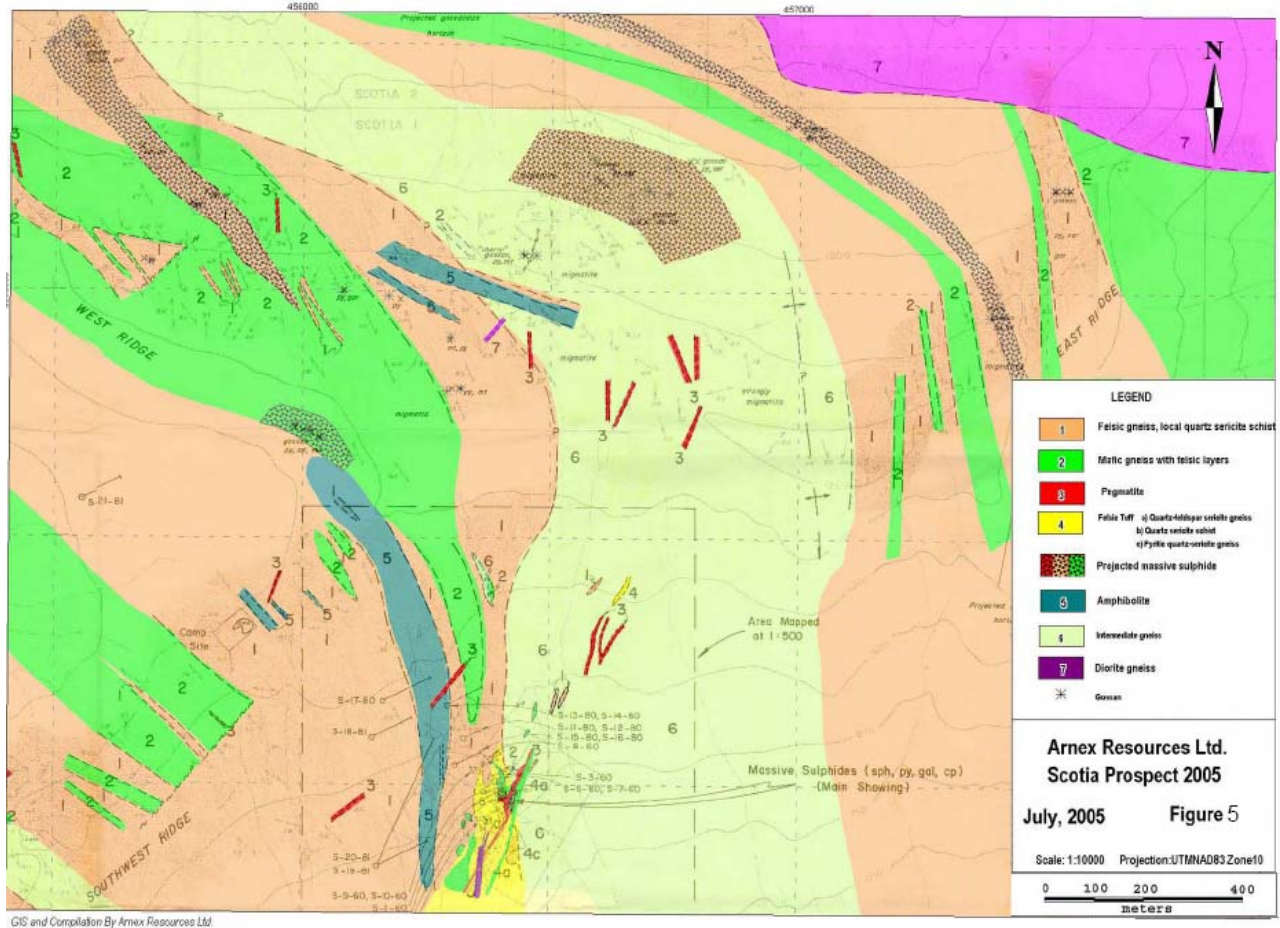
## ***7.2 Local Surficial Geology***

The area has been heavily glaciated by alpine and valley glaciers and by at least one ice sheet, although glacial deposits are rare (Hutchinson, 1982). Discontinuous deposits of colluvium till and talus are present on mountain slopes locally, and thick Pleistocene and Recent fluvial deposits occupy river valleys. At higher elevations, outcrop is abundant, and in flatter areas is partly covered by a thin mantle of unconsolidated materials. The area is geologically favorable for development of transportation and utility routes, and many roads have already been constructed in the valleys to facilitate logging.

## ***7.3 Local Geology***

The lithologies underlying the Scotia property belong to the Devonian metavolcanic unit that have been intruded by the Cretaceous Ecstall granite intrusion to the north of the property, and by several stages of dioritic to pegmatitic dykes of late Cretaceous to Eocene age (Figure 8). The metavolcanic rocks are tentatively parts of a bimodal suite of tholeiitic basalt and andesite, and calc-alkalic dacite to rhyolite (Manojlovic, et. al. 1987), possibly of Island Arc affinity.

Figure 8: Scotia Prospect 2005, July, 2005



The volcanic rocks have been subjected to upper amphibolite grade metamorphism that slightly post-dated the second of two stages of intense isoclinal folding (Gareau, 1991a, b; Krage, 1984). Gareau (1991a, b) states that metamorphic grade increases to the north and east and is a reflection of increasing levels of uplift and erosion in those directions. At least one megascopic antiform-synform pair has been mapped on the property (Eldridge, 1983). A third stage of folding appears to be post-metamorphic and is characterized by broad "warps" of all pre-intrusion lithologies and is thought to be temporally associated with the intrusion of the Ecstall intrusive rocks (Eldridge, 1983).

On the Scotia Property the volcanic lithologies have been deformed and recrystallized. Units now termed amphibolite are characterized by a melanocratic, gneissic to sub-gneissic hornblende-rich rock. The amphibolite can occur as massive, 20 plus meter to less than 2 cm thick units. The outlines of stretched lapilli-sized fragments are commonly seen in outcrop due to differential weathering. Other mafic metavolcanic rocks are usually black, biotite-rich gneisses and schists, although hornblende and biotite do occur together locally. Myers (1982) thought that these rocks might be meta-andesites. Intermediate metavolcanic rocks contain visually 10 to 30 percent mafic minerals, usually biotite.

These mafic and intermediate rocks are almost invariably non to weakly magnetic. A unit called interbanded gneiss is characterized by numerous interbanded felsic with mafic, intermediate and amphibolite units. These bands range from three to over 10 per meter. The felsic bands are usually moderately magnetic.

Felsic metavolcanic rocks are dominantly feldspar-rich, gneissic and less commonly schistose rocks with up to 10% biotite, and rare hornblende. Quartz is rare. The most common type is commonly moderately to strongly magnetic. Other felsic rocks are found only within and near the Albere zone mineralization. These are chert, chert breccia, "exhalite", and quartz porphyry schist. These highly siliceous rocks display very well preserved textures that suggest both replacement and primary silica deposition, presumably of hydrothermal origin. These units are almost always present in close proximity to sulphide mineralization.

There are several other rock units that are spatially associated with sulphide mineralization. These are brown biotite gneiss and schist, felsic brown biotite gneiss and schist, felsic sericite gneiss and schist, felsic muscovite gneiss and schist, and massive sericite to muscovite gneiss and schist. These rocks are located either with or to the west of the sulphide mineralization. They may represent hydrothermally altered equivalents of the units described above. Units containing brown biotite usually occur between unaltered and sulphide-bearing or muscovite-sericite altered units. This suggests that brown biotite, sericite and muscovite represent increasingly altered equivalents of unaltered hornblende and black biotite-bearing rocks. This appears to be particularly evident for the more mafic units, i.e. black biotite - brown biotite - massive sericite gneiss/schist.

Several episodes of mafic, felsic and pegmatitic dyking have occurred. These appear to be of late deformation age to very late and undeformed. Pegmatite dykes also occur throughout the property. They are quite variable in composition. An unusual white, garnet-bearing plagioclase-rich type is compositionally similar to felsic gneisses and may be a partial melt of felsic units. Other leucocratic, plagioclase-rich pegmatite dykes appear to be confined to hinge zones of folds.

#### **7.4 Regional Mineralization**

North and south of the Ecstall River, several VMS-type zinc (+/- copper-lead-silver-gold) occurrences and deposits are known within the metavolcanic unit. Eleven deposits of this type are located within ten kilometers of the southern margin of the Bishop claims. Most of these are within claims previously held by Atna Resources Limited or Ecstall Mining Corporation, both of Vancouver, BC.

Horsefly, Third Outcrop, East Plateau, Packsack and Trench are all located north of the Ecstall River. The Ecstall, Phoebe Creek, Mariposite, West Grid, Thirteen Creek Cirque, El Amino, South Creek Grid are located south of the Ecstall River.

#### **7.5 Mineralization and Structure**

The deposit type being investigated and explored for on the Scotia Property is classified as Volcanogenic Massive Sulphide ("VMS").

The Albere Zone is characterized by thick, massive to interweaving pods, lenses and stringers of coarsely crystalline massive to semi-massive, very dark brown sphalerite, with lesser amounts of pyrite, galena, pyrrhotite, magnetite and chalcopyrite in decreasing abundance. The Main Showing exposes some of the thickest known mineralization, and outcrops with a pod-like core of massive mineralization almost 10 meters in diameter with bands, pods and stringers striking up-dip to the east and down dip to the west by about 20 to 30 degrees. Drilling indicates that this 'core zone' strikes at 340 degrees and plunges about 8 degrees to the south-southeast. Up to six zones have been intersected. Figure 9, Scotia Prospect - Geology Map illustrates the outcrop of the Massive Sulphide Zone at the contact between the overlying Felsic Tuffs (Unit 4) and underlying Mafic Gneiss (Unit 2) in the vicinity of the cross-cutting late stage Pegmatite Dyke (Unit 3).

The up-dip extensions pinch out completely, or occur as thin but high grade sphalerite sheets up to 30 cm thick that decrease in size and intensity to the east. These often occur at the sharp, abrupt contact between black biotite schist-gneiss and felsic gneiss. The down-dip extensions to the west usually grade into increasingly iron sulphide-rich disseminated mineralization. This mineralization is associated with sericite- and muscovite-rich rocks that may be the hydrothermally altered equivalents of black biotite-bearing rocks. Low grade zinc mineralization has been intersected over 100 meters down dip with approximately an order of magnitude greater pyrite and pyrrhotite mineralization. This suggests that the iron sulphide-rich zone may be the down dip feeder zone. It is this zone that outcrops southwest of the sphalerite outcrop as bright red, rusty rocks.





The mineralized zone is essentially open to the north and west. There is a possibility of high grade pods occurring to the east, especially under known soil anomalies. The nature of the soil anomalies discovered above the Albere Zone in 1977 (DeLancey, 1977), combined with the intersection of steeply east dipping mineralization in hole S-36-97, 185 meters north of the main showing, suggest that steeply dipping mineralization may crop out under a thin veneer of overburden. Visual examination of many of the drill sites above the Main Showing indicates much steeper west to even east dipping geology than has been previously recognized. Evidence suggests that repetition of the mineralization due to isoclinal folding is present, especially in the lower zones. It is possible to interpret the geology so that one previously extensive sphalerite lens is present, that has been repeatedly folded and migmatized to derive the shape of the deposit today. However the increasing spread of mineralization encountered to the north makes this scenario less likely than the possibility of up to three (or more) lenses that may intersect locally.

The single lens scenario is attractive because of the increased tonnage potential; however this was not used in the accompanying interpretations except where the evidence supporting such a scenario was strong.

The mineralization and its characteristic hosting rocks are dipping at about 40 degrees to the west. These rocks are structurally underlain by a thick unit of interbanded to mafic gneisses. To the east, the sequence of thick felsic and mafic gneisses become increasingly steeply dipping based on outcrop and drill information. The zone is structurally overlain by a thick felsic gneiss package, which in turn is overlain by a moderately west dipping amphibolite unit above 875 meters in elevation.

## **8 DEPOSIT TYPE**

The deposit type being explored for on the Scotia Property is classified as being Volcanogenic Massive Sulphide type (Kuroko type). It is interpreted that gneisses on the Property are metamorphosed felsic volcanics and that amphibolites are metamorphosed mafic volcanics. The massive sulphide mineralization at the Albere zone occurs stratabound to the basal contact of a gneiss (felsic volcanic) sequence.

Volcanogenic Massive Sulphide ("VMS") deposits are a type of metal sulphide ore deposit, mainly copper, zinc and lead which are associated with, and created by, volcanic associated hydrothermal events in submarine environments. They are predominantly layered accumulations of sulphide minerals that precipitate from hydrothermal fluids on or below the seafloor in a wide range of ancient and modern geological settings. In modern oceans, they are synonymous with sulfurous plumes called black smokers.

They occur in environments dominated by volcanic or volcanic derived (eg volcano sedimentary) rocks, and the deposits are contemporary and coincident with the formation of associated volcanic rocks. As a class, they represent a significant source of the world's copper, zinc, lead, gold and silver ores.



## **9 EXPLORATION**

### ***9.1 1997 Diamond Drill Program***

#### **9.1.1 Introduction and Objectives**

The Albere Zone has been drilled by various operators in the past with encouraging results. The objectives of the 1997 program were as follows:

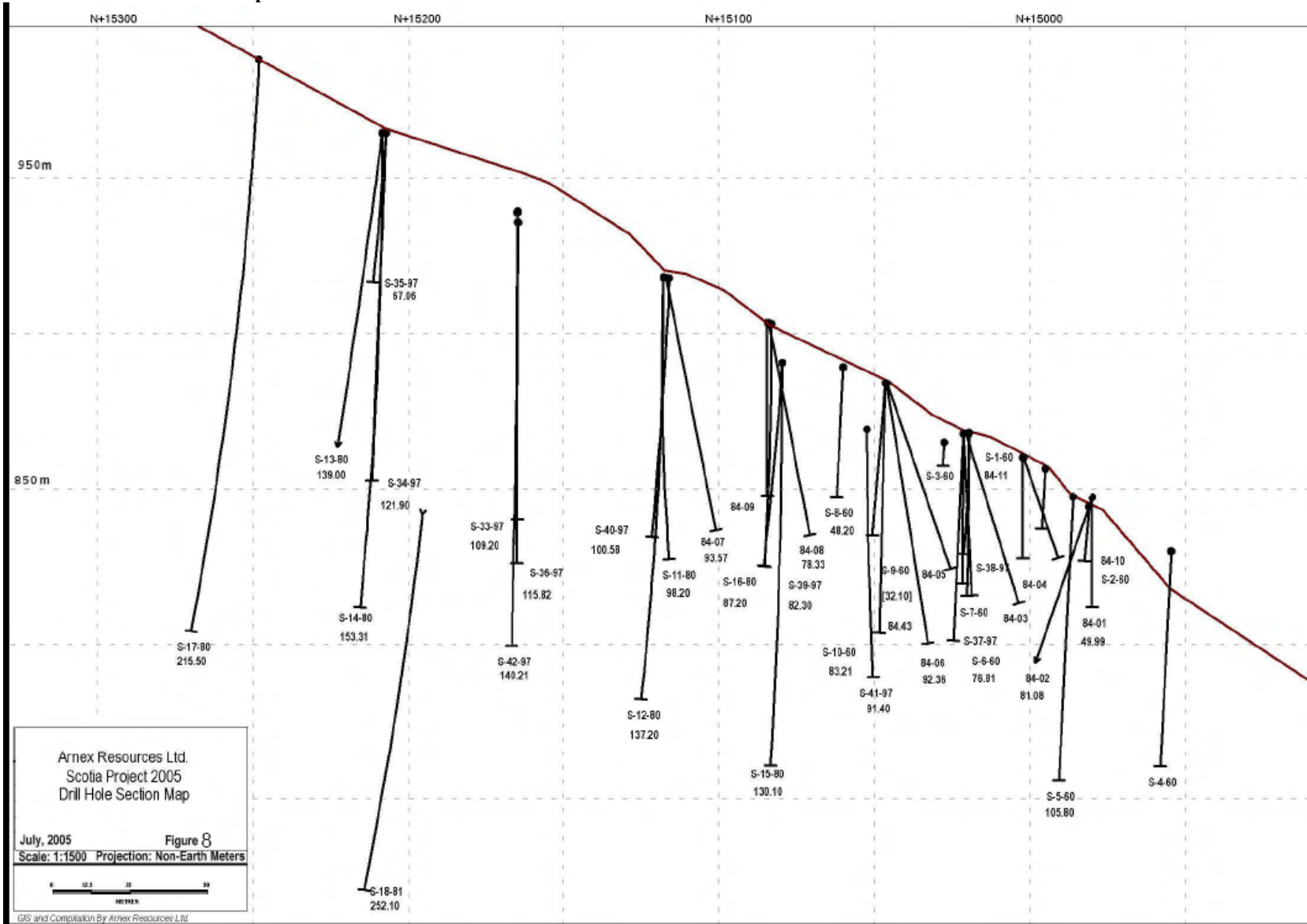
1. To compile all existing historical data in digital format using GIS and PC Explore software programs and to build a database to assist in documenting the 1997 program,
2. To identify drill targets based on past results for both step-out and in-fill drilling to establish a geological resource for the Albere Main Zone,
3. To complete drilling, logging and sampling of the drill core,
4. To report results in assessment report format
5. To calculate a geological resource for the Albere Zone.

#### **9.1.2 Drill Hole Summaries and Results**

Drill hole locations are compiled on Figure 10, Drill Hole Location Map. Drill hole traces are shown as a Longitudinal Section on Figure 11, Drill Hole Section Map. Results are tabulated in Table 3, Arnex Resources Ltd. – Significant 1997 Drill Intersections.



Figure 11: Drill Hole Section Map



**Table 3: Significant 1997 Drill Intersections**

**ARNEX RESOURCES LTD - SCOTIA PROJECT**  
**SIGNIFICANT 1997 DRILL INTERSECTIONS**  
**WEIGHTED INTERVALS - DRILLED LENGTH IN METERS**

HOLE		FROM	TO	WIDTH	%Zn	%Pb	ppm Ag	ppbAu	%Cu
S-33-97		47.4	47.8	0.4	6.8	0.9	26.0	120.0	0.1
S-33-97		68.7	90.1	21.4	6.7	1.1	25.9	559.4	0.1
S-33-97	Incl	68.7	72.3	3.6	22.6	2.3	47.0	1206.4	0.2
S-33-97	Incl	69.2	72.3	3.1	25.5	2.6	53.6	1394.5	0.2
S-33-97	Incl	79.4	80.0	0.6	4.8	1.4	42.0	745.0	0.1
S-33-97	Incl	85.8	90.1	4.3	13.8	2.5	39.3	283.6	0.2
S-33-97	Incl	86.9	90.1	3.2	16.3	2.7	46.0	324.1	0.2
S-33-97	Min-En	85.8	90.1	4.3	13.2	2.6	51.7	298.2	#N/A
S-34-97		62.2	62.6	0.4	18.7	1.9	47.0	90.0	0.2
S-35-97		NO SIGNIFICANT INTERSECTIONS							
S-36-97		11.0	26.2	15.3	7.8	0.1	7.9	90.5	0.2
S-36-97	Incl	11.0	13.5	2.5	14.9	0.3	20.0	114.9	0.5
S-36-97	Incl	18.1	20.7	2.6	4.8	0.0	8.0	183.1	0.3
S-36-97	Incl	22.8	26.2	3.5	19.3	0.1	12.3	133.8	0.3
S-36-97	Incl	24.1	26.2	2.1	29.7	0.1	21.3	345.0	0.3
S-36-97		74.4	76.1	1.8	11.9	0.4	35.6	184.5	0.8
S-36-97	Incl	74.4	75.7	1.3	1.3	0.3	42.8	230.0	1.0
S-36-97	Incl	75.7	76.1	0.5	42.1	0.6	15.0	55.0	0.2
S-36-97		81.1	90.1	8.9	7.2	0.8	18.4	287.5	0.1
S-36-97	Incl	81.1	84.3	3.1	5.2	1.4	19.1	194.1	
S-36-97	Incl	81.1	81.6	0.5	32.0	0.4	17.0	70.0	
S-36-97	Incl	85.9	90.1	4.1	11.5	0.3	9.9	86.9	
S-36-97	Incl	87.0	90.1	3.1	14.7	0.4	10.9	78.7	
S-37-97		15.6	42.3	26.7	9.0	1.2	21.5	297.9	0.2
S-37-97	Incl	15.6	16.4	0.8	3.6	0.8	17.3	114.6	
S-37-97	Incl	15.8	16.4	0.6	4.1	0.9	18.4	85.0	
S-37-97	Incl	21.6	42.3	20.7	11.2	1.4	24.3	339.3	0.2
S-37-97	Incl	21.6	38.1	16.4	11.6	1.4	25.5	380.0	0.2
S-37-97	Incl	21.6	22.1	0.4	8.8	8.6	66.0	130.0	
S-37-97	Incl	25.9	27.7	1.8	32.9	4.7	67.0	425.0	
S-37-97	Incl	30.6	32.1	1.5	7.7	1.0	36.0	1120.0	
S-37-97	Incl	33.0	38.1	5.1	23.0	1.3	28.5	469.6	0.3
S-37-97	Incl	40.6	42.3	1.7	22.6	3.7	45.7	406.9	0.3
S-38-97		17.4	18.0	0.7	46.4	3.5	55.0	450.0	
S-38-97		28.1	30.1	2.0	5.0	0.4	9.8	118.9	
S-38-97	Incl	28.9	30.1	1.2	6.7	0.7	11.7	179.8	
S-38-97		36.8	37.0	0.2	24.9	0.0	12.0	25.0	
S-38-97		47.9	48.5	0.6	3.2	0.3	30.0	30.0	
S-39-97		30.2	33.0	2.8	1.1	0.4	13.6	253.8	0.3

All drill hole intercepts are reported as apparent widths. True widths of the drill intersections reported cannot be determined from the information and/or data available.

Hole S-33-97 was collared at 15185N, 4975E, 939.2 meters elevation at a bearing of 070 degrees and a dip of -66°. It was collared approximately 40 meters north of holes S-11-80, S-12-80 and 84-07, which were the northernmost holes intersecting potentially economic zinc grades, and 190 meters north of the "main showing". The hole succeeded in intersecting four zones of zinc mineralization, two of which contain potentially economic zinc grades. These two zones are: from 68.7 meters to 72.3 meters, grading 22.6% zinc and 2.3% lead; and from 85.75 meters to 90.1 meters grading 18.8% zinc and 2.5% lead. Moderate silver and low gold and copper grades were also encountered. This hole succeeded in extending to the north the potentially economic zinc-lead mineralization encountered in hole 84-07.

Hole S-34-97 was collared approximately 40 meters north of hole S-33-97 at 15227N, 1973E and 964.3 meters elevation at a bearing of 66 degrees, a dip of -66°. The hole was collared at the same location and approximately the same bearing as holes S-13-80 and S-14-80, which dip -55° and -90° east, respectively. The purpose of this hole was to intersect the northern projection of the potentially economic mineralization encountered in hole S-33-97, and thought to project between holes S-13-80 and S-14-80. The hole encountered several weakly mineralized zones. The only potentially economic zone was intersected from 62.2 to 62.6 meters, which graded 18.7% zinc, 1.9% lead and 47 ppm silver with weakly anomalous gold and copper. The nature of the mineralization encountered suggests that the hole was drilled about 10 to 15 meters east of the window projecting the best mineralization encountered in hole S-33-97 and S-36-97, and up-dip and east of the mineralization encountered in hole S-14-80.

Hole S-35-97 was collared from the same site and bearing as hole S-34-97, at a dip of -45° east. The hole was designed to intersect the projection of a shallow lens of zinc mineralization encountered in hole S-13-80 (drilled at -55°), that from 59.2 meters to 62.0 meters reported 7.5% zinc and 1% lead. A weakly altered zone with poor core recovery was encountered from 44 to 47 meters reporting weakly anomalous values, directly above the zone encountered in hole S-13-80. This zone is vertically above the zone encountered in hole S-13-80.

Hole S-36-97 was drilled at the same location and bearing as S-33-97 at a dip of -77° east. This hole was drilled to intersect the western projections of the mineralization encountered in hole S-33-97. The hole was successful in intersecting all the zones intersected in hole S-33-97, but with generally lower grades. Also a new, shallow, very steeply dipping zone was encountered from 11.5 meters to 26.0 meters. This zone apparently dips steeply east, sub-parallelizing the drill hole, as no trace of this zone is encountered in other drill holes on that section. Highlights of this hole are: from 11.0 meters to 26.3 meters grading 7.8% zinc with low, lead, silver and gold values but 0.21% copper; from 74.4 meters to 76.1 meters which graded 11.9% zinc with low lead and moderate silver, and anomalous gold with 0.70% copper; from 81.1 meters to 84.25 meters which graded 5.2% zinc 1.4% lead with anomalous silver and gold values; and from 86. metres to 90.1 meters which graded 13.2% zinc, 2.6% lead, 52 g/t silver and 300 ppb gold.

Hole S-37-97 was collared at 15040N 5000E, 867.8 meters elevation from the same site S-6-60, S-7-60, 84-03 and 84-04, at a bearing of 070° and a dip of -72° east. This hole was designed to intersect the zinc mineralization encountered between holes S-6-60 and S-7-60 (hole 84-04 was essentially a repetition of hole S-6-60 but drilled with larger diameter core and with possibly better recovery). This hole intersected four significant mineralized intersections. These are:

from 15.6 meters to 16.4 meters grading 3.6% zinc and 1.0% lead; from 21.6 meters to 22.1 meters grading 8.8% zinc; and a composite of three zones from 25.9 meters to 42.3 meters grading 15.9% zinc.

Hole S-38-97 was collared at the same location and bearing as S-37-97 but at a dip of  $-45^{\circ}$  east. This hole was designed to intercept mineralization east of the zones encountered in holes S-6-60 and 84-04. The same zones were encountered, however only two were significantly mineralized. These are: from 17.4 meters to 18.0 meters which graded 46.5% zinc, 3.5% lead, 55 ppm silver and 450 ppb gold; and from 28.1 meters to 30.1 meters grading 5% zinc with anomalous lead, silver and gold.

Hole S-39-97 was collared at 15103N 4977E, 903.1 meters elevation, at a bearing of 070, and a  $-72^{\circ}$  east dip. The hole was drilled from the same set-up as holes 84-08 and 84-09. This hole was designed to intersect the significant mineralization projected north from S-9-60 and south from hole 84-07, west of the relatively weak mineralization encountered in holes 84-08 and 84-09, and east of the mineralized zones encountered in hole S-16-80. This hole was successful in intersecting five mineralized zones similar to those encountered in the previously mentioned drill holes. Two of these zones returned economically significant mineralization. These are: from 46.5 meters to 49.5 meters grading 16.5% zinc with anomalous lead, silver and gold; and from 62.6 meters to 65.9 meters grading 3.1% zinc, 1.1% lead, 24.8 ppm silver and 626 ppb gold.

Hole S-40-97 was collared at 15136N, 4977E, 917.8 meters elevation at a bearing of  $70^{\circ}$  and a dip of  $-56^{\circ}$  east. This hole was designed to intersect the east projection of the mineralization encountered in hole S-11-80 which was drilled from the same site. Five mineralized zones were encountered. Three returned sub-economic to potentially economic mineralization. These are: from 42.4 meters to 44.0 meters grading 6.3% zinc 1.3% lead 37 g/t silver 1.1 g/t gold and 0.1% copper; from 60.8 meters to 62.7 meters grading 3.4% zinc 1.8% lead with accompanying silver and gold values; and from 81.7 meters to 82.3 meters grading 17.5% zinc, 5% lead and 61 ppm silver with anomalous gold and copper.

Hole S-41-97 was collared at 15072N, 4026E, 869.2 meters elevation, at a bearing of  $70^{\circ}$  and a dip of  $-60^{\circ}$  east. This hole was designed to intersect a deep western zone of zinc mineralization encountered in several drill holes. The closest is hole S-16-80, some 30 meters northeast. Hole S-41-97 intersected strongly muscovite altered wall rock with disseminated pyrite mineralization. Several intersections grading up to 2% zinc over one meter were encountered from 60 meters to 80 meters. Upon surveying this hole the location of hole S-16-80 was located and also surveyed. Its location was seven meters east and five meters above of its previously plotted location.

Hole S-42-97 was collared at 15185N 4951E, 935.7 meters elevation at a bearing of 070 and a dip of  $-77^{\circ}$  east. This hole was designed to intersect the western projection of the mineralization encountered in hole S-36-97 some 30 meters to the east, and the projection of mineralization encountered in holes S-12-80 and S-14-80 some 40 meters to the south and north respectively. This hole encountered six zones grading at least 2% zinc over one meter. The best intersections are: from 71.7 meters to 73.6 meters grading 8.5% zinc; from 77.6 meters to 78.0 meters grading 7.9% zinc; from 91.7 meters to 94.7 meters grading 4.7% zinc; from 99.1 meters to 100.3 meters grading 10.1% zinc; and from 103.5 meters to 104.3 meters grading 5.5% zinc, and 2.1% lead.

### 9.1.3 Results

Prior to the 1997 drill program, potentially economic zinc mineralization extended approximately 160 meters north of the "main showing". This zone generally occupied a 340° striking zone about 20 meters wide and 25 meters high with thinner extensions to the west at depth, and to the east up dip. The zone plunges about 8° to the south. Several zones of discontinuous mineralization were intersected in relatively widely-spaced drill holes north of this location indicating that the mineralized trend probably continued to the north but the higher grade "core" was missed due to the wide drill hole spacing.

The results from S-33-97 confirmed that the zone did continue north. With additional results from holes S-34-97 and S-36-97, the continuation of the trend to the north was extended but still remains open. Potentially economic grades have been extended by about 45 meters to 205 meters north of the main showing, allowing for a 20 meter projection north of the intersections encountered in holes S-33-97, and S-36-97. The vertical extent of the mineralization encountered is increasing to the north as hole S-36-97 intersected several zones zinc mineralization from 11 meters to 95 meters, a drill length of 80 meters and a true vertical extent of 75 meters. These results, taken with the drill results encountered S-14-80 and S-42-97 establish a vertical range of sub-economic to economic grades of mineralization of 95 meters, and a horizontal range of over 60 meters at the base of the zone. The high grade "core" area has widened to about 30 meters about 190 meters north of the main showing. Also, the grade of zinc mineralization encountered in the deeper western zones appears to be gradually increasing to the north. Copper grades appear to increase to the north.

The general south plunge appears to locally flatten and individual zones can plunge northward. These variations can be primary and/or a reflection of folding.

Two resource calculations (Method of Section) were done as part of the 1997 program. The results of these resource estimates are not presented as part of this Technical Report as they predate NI 43-101 guidelines.

## 9.2 2005 and 2006 Field Exploration Programs

Arnex conducted exploration programs on the Scotia Property for Geo during 2005 and 2006.

### 9.2.1 2005 Field Exploration Program

The objectives of the 2005 field exploration program were as follows:

- To resample selected drill core intervals from stored drill core to verify analytical and assay results from the 1997 drill program,
- To prospect and sample a gossanous area outcropping in cliff faces east of the Albere Zone.

The field program was conducted by a five person crew during the period June 30 to July 3, 2005.

A Statement of Exploration and Development Work was filed as Event Number 4052977. Expenditures totaled \$43,030.71.

The field crew consisted of the following:

<b>Person</b>	<b>Affiliation</b>	<b>Activities</b>
A O Birkeland	Arnex Resources Ltd.	Project Geologist
Paul Gray	Doublestar Resources Ltd.	Geologist, Core Sampler
Aaron Bradley	Doublestar Resources Ltd.	Geologist, Core Sampler
Piotr Lutynski	Subcontractor	Climber, Geologist
Jolanta Sanford	Subcontractor	Climber, Sampler

A total of 83 samples were taken for the core re-sampling program. A total of nine rock chip samples and one silt sample were taken from the East Limb Zone.

Inclement weather and low ceilings prevented helicopter access to the Property except for limited periods. The core re-sampling program was achieved, but only limited prospecting and sampling was carried out on the outcropping gossanous area east of the Albere Zone.

#### Diamond Drill Core Re-sampling Program

Diamond drill core from some of the previous exploration programs carried out on the Property is cross-stacked at an old campsite and core processing facility located on the ridge-top above the Albere Zone showing area. The drill core from the 1997 drill program was intact and accessible. Due to the deterioration of the wooden core boxes, some of the drill core from other historical programs has been dumped and is not available for re-sampling. Other core would have to be re-boxed and re-tagged prior to any further processing.

Selected intervals from six drill holes from the 1997 program were chosen to be re-sampled to allow verification of results to conform to NI 43-101 requirements. It was intended that the one-half core remnants from the 1997 program would be sawed into quarter splits for re-sampling, however lack of time due to poor flying conditions did not allow for sawing of the core. Instead, the one-half splits remaining from the 1997 program were taken as part of the re-sampling program. Representative specimens were left for selected core intervals. The same intervals that were sampled during the 1997 program were selectively re-sampled during the 2005 program.

Core samples were placed in plastic sample bags then sealed in plastic containers and flown by helicopter to Prince Rupert. The samples were then trucked to North Vancouver and stored at Arnex's locked storage facility prior to delivery to Acme Labs in Vancouver.

The samples were analyzed by 30 element ICP-ES as well as fire assay and ICP-ES for 30 gram gold assay. Results for selected elements for core intervals sampled are presented as Table 4.



Table 4: Diamond Drill Core Verification Sampling

Date Sampled: 3-Jul-05  
 Sampled By: Arne Birkeland

Drill Hole Number	Intersection From (m)	To (m)	Interval	Acme Sample #	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Au ppb
S-33-97	47.40	47.80	0.40	128755	2174	7115	>10000	25.2	104
S-33-97	68.70	69.20	0.50	128756	968	5935	>10000	9.3	129
S-33-97	69.20	69.80	0.60	128757	3649	>10000	>10000	>100	2369
S-33-97	69.80	70.20	0.40	128758	1479	>10000	>10000	32.5	226
S-33-97	70.20	70.80	0.60	128759	771	674	1077	2.4	38
S-33-97	70.80	72.30	1.50	128760	1571	>10000	>10000	43.7	1529
S-33-97	79.40	80.00	0.60	128761	1365	>10000	>10000	40.5	603
S-33-97	85.75	86.05	0.30	128762	1034	>10000	>10000	71.3	119
S-33-97	86.05	86.90	0.85	128763	880	8147	4385	11.3	194
S-33-97	86.90	88.70	1.80	128764	2001	>10000	>10000	63.2	124
S-33-97	88.70	89.10	0.40	128765	1400	>10000	>10000	20.8	206
S-33-97	89.10	90.10	1.00	128766	1078	>10000	>10000	20.1	100
S-36-97	10.00	10.95	0.95	126501	848	719	1920	2.4	31
S-36-97	10.95	12.45	1.50	126502	4895	5806	>10000	24.0	207
S-36-97	13.46	13.96	0.50	126503	732	676	2192	1.5	108
S-36-97	12.45	13.46	1.01	126504	2938	758	>10000	7.1	137
S-36-97	13.96	14.84	0.88	126505	919	421	>10000	2.7	295
S-36-97	14.84	15.55	0.71	126506	223	284	303	0.5	6
S-36-97	15.55	15.87	0.32	126507	645	559	>10000	1.3	52
S-36-97	15.87	16.98	1.11	126508	296	302	585	0.8	29
S-36-97	16.98	18.10	1.12	126509	55	90	119	<.3	48
S-36-97	18.10	18.51	0.41	126510	2359	308	>10000	7.1	144
S-36-97	18.51	20.74	2.23	126511	2194	595	>10000	6.8	97
S-36-97	20.74	21.75	1.01	126512	194	155	335	<.3	9
S-36-97	21.75	22.75	1.00	126513	279	104	314	0.5	8
S-36-97	22.75	24.10	1.35	126514	912	649	>10000	3.1	58
S-36-97	24.10	24.52	0.42	126515	2319	299	>10000	9.1	63
S-36-97	0.00		0.00	126516	3554	2593	>10000	17.5	316
S-36-97	0.00		0.00	126517	2804	2045	>10000	11.5	467
S-36-97	0.00		0.00	126518	1800	449	1310	8.1	262
S-36-97	74.35	75.66	1.31	126519	>10000	4040	>10000	49.3	162
S-36-97	75.66	76.12	0.46	126520	2841	>10000	>10000	33.5	319
S-36-97	80.38	81.12	0.74	126521	692	3305	1746	16.4	457
S-36-97	81.12	81.61	0.49	126522	989	5924	>10000	12.2	120
S-36-97	81.61	82.75	1.14	126523	538	6421	7494	8.0	109
S-36-97	82.75	83.42	0.67	126524	244	4584	476	3.8	53
S-36-97	83.42	84.25	0.83	126525	2065	>10000	3031	20.6	174
S-36-97	84.25	84.84	0.59	126526	2268	1932	5418	9.0	369
S-36-97	84.84	85.91	1.07	126527	2053	>10000	>10000	62.3	1480
S-36-97	85.91	87.00	1.09	126528	293	2738	>10000	9.6	317
S-36-97	87.00	88.00	1.00	126529	529	6515	>10000	10.3	78
S-36-97	88.00	89.00	1.00	126530	672	1218	>10000	2.3	75
S-36-97	89.00	90.05	1.05	126531	2686	4707	>10000	14.9	83
S-37-97	15.57	15.79	0.22	128532	2504	7091	>10000	15.2	209
S-37-97	15.79	16.35	0.56	128533	2707	>10000	>10000	21.0	94
S-37-97	17.00	19.13	2.13	128534	2850	4327	>10000	13.0	111
S-37-97	21.64	22.08	0.44	128535	1512	>10000	>10000	50.2	143
S-37-97	22.08	23.88	1.80	128536	239	6365	2197	7.1	75
S-37-97	23.88	25.94	2.06	128537	612	3111	581	10.4	104

Of the 83 core interval samples taken, 60 returned “over-limit” base metal values >10,000 ppm. Due to a lack of funds, these over-limit samples were not assayed to definitively determine grades. Assaying of the over-limit samples is required as well as a statistical comparison of the 1997 sampling to the 2005 sampling to verify the 1997 results.

### East Limb Prospecting and Sampling Program

A total of nine rock chip samples and one active stream sediment sample were taken by climber-geologists on the East Limb Zone. As with the core re-sampling program, the samples were analyzed by 30 element ICP-ES as well as fire assay and ICP-ES for 30 gram gold assay.. Descriptions of the samples taken are contained in Table 5, Geochemical Data Sheet, and results for selected elements are presented as Table 6. Locations of the samples taken are identified on Figures 12 and Figure 13.

**Table 5: Geochemical Data Sheet**

#### ROCK CHIP SAMPLING - Scotia Property

PROJECT: Scotia Sampler: P. Lutinski

Date: July, 2005

Sample Number	UTM Location		Sample Type	Width App/True	Rock Type	Alteration	Weathering	Mineralization
	Easting	Northing						
128951	456843	5992650	Rep Chip	1.0m TW	Rhyolite			Limonite
128952	456840	5992648	Rep Chip	3.0m TW	Rhyolite	Sericite		Limonite
128953	456841	5992644	Rep Chip	1.0m TW	Rhyolite	Sericite		Limonite
128954	456839	5992642	Rep Chip	2.1m TW	Rhyolite	Sericite		Limonite, Magnetite
128955	456829	5992621	Rep Chip	1.9m TW	Rhyolite	Sericite	Sheared	Limonite, Magnetite
128956	456827	5992618	Rep Chip	1.7m TW	Rhyolite	Sericite	Sheared	Limonite
128957	456700	5992520	Rep Chip		Rhyolite	Sericite		Limonite, Pyrite
128958	456690	5992510	Float Grab		Rhyolite			
128959	456690	5992500	Silt				Weathered	Limonite

**Table 6: 2005 Rock Chip Sampling - Analytical Results - Selected Elements**

#### Scotia Property

Date Sampled:

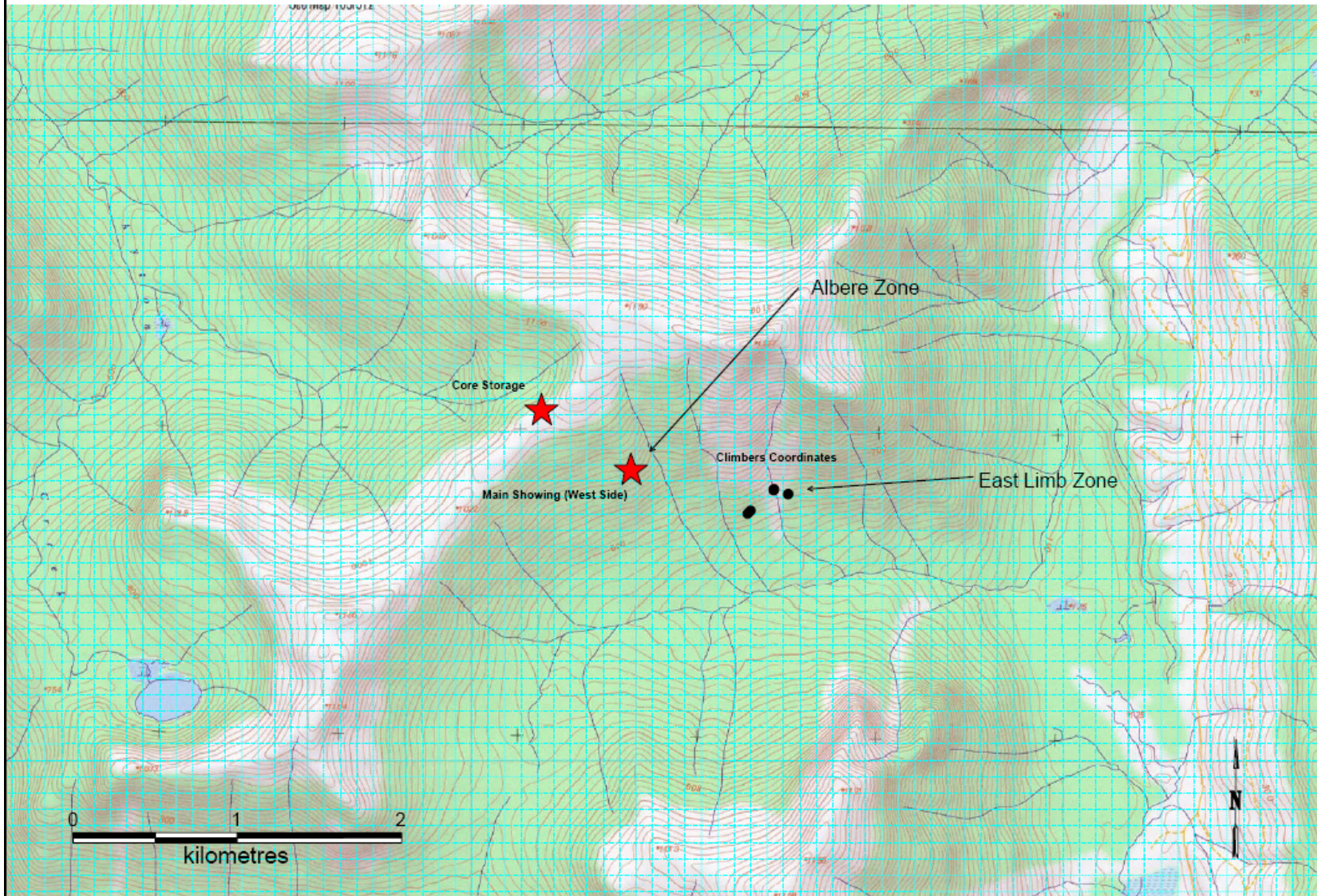
2-Jul-06

Sampled By:

Piotr Lutinski

Sample #	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Au ppb
128951	7	4	116	<.3	2
128952	67	12	147	<.3	4
128953	31	5	150	<.3	6
128954	22	6	208	<.3	2
128955	233	5	81	<.3	<2
128956	19	<3	43	<.3	<2
128957	118	5	133	0.4	5
128958	156	4	90	<.3	11
128959	28	4	102	<.3	3

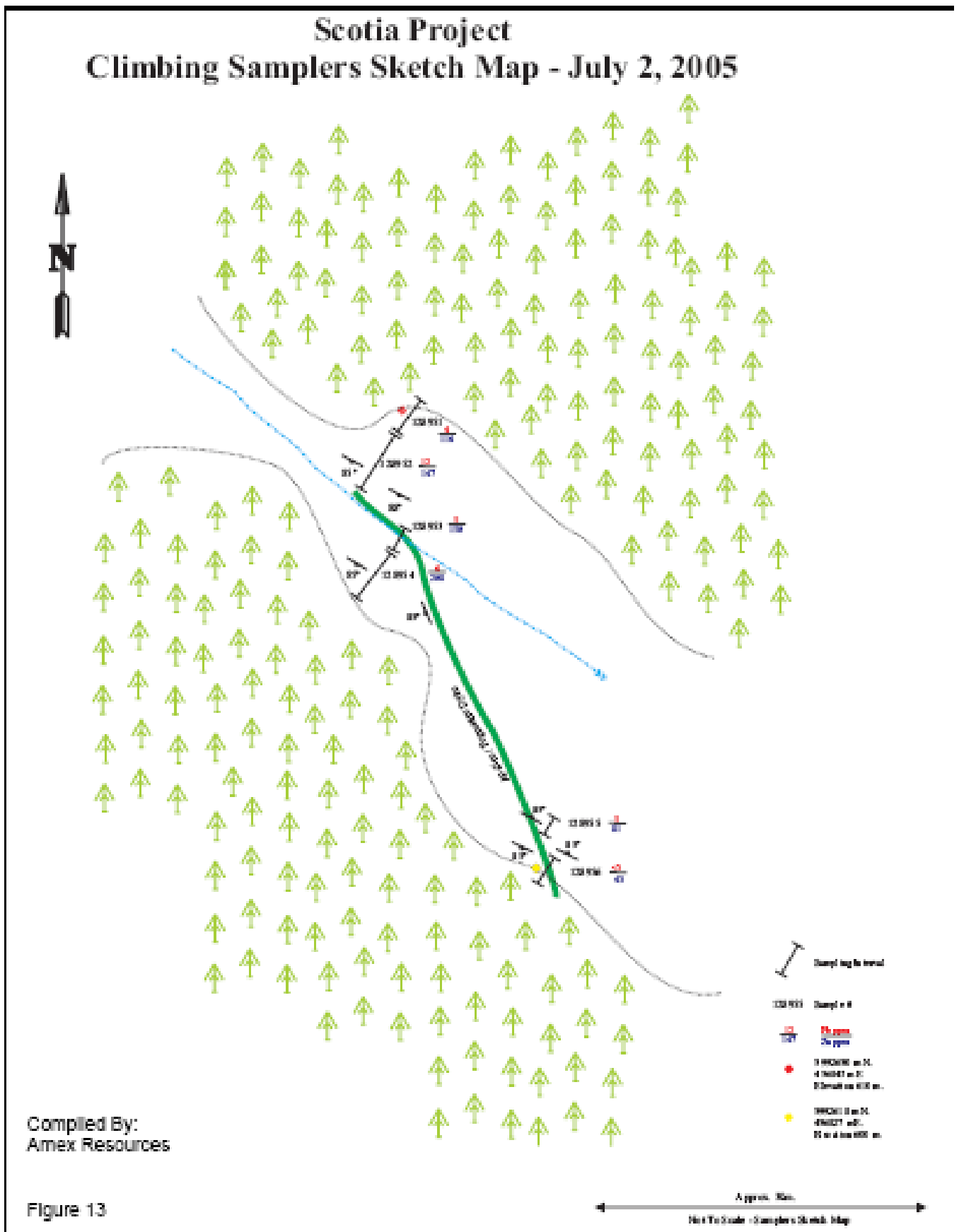
**Figure 12: East Limb Zone**  
Location Map -  
East Limb Zone



Compiled By:  
Anex Resources July 2, 2006

Figure 12

Figure 13: Climbing Samplers Sketch Map





Abundant limonite and some pyrite were present. Pervasive sericitic alteration was also noted. Three samples carried weakly anomalous Cu values, and three additional samples returned weakly anomalous Zn, Ag and Au values.

### 9.2.2 2006 Field Exploration Program

A grid based soil geochemical program was conducted on the Scotia Property by up to a five-person field crew during the period September 1 to 11, 2006. Access to and from the Property was by helicopter based at Prince Rupert. The soil sampling crew fly-camped on the Property for the duration on the program. A total of 106 soil samples were taken. Expenditures totaled approximately \$70,850.

The field crew consisted of the following:

Person	Affiliation	Activities
A O Birkeland	Arnex Resources Ltd.	Project Supervisor
Earl Williams	West Resource Group	Soil sampler, Supervisor
Buddy Sampare	West Resource Group	Soil Sampler
Jordon Muldoe	West Resource Group	West Resource Group
Peter Johnson	West Resource Group	West Resource Group

Soil samples were collected from the B-horizon where possible. Soil samples were placed in cloth sample bags and securely stored at the campsite until being flown by helicopter and then trucked to a locked storage facility in Smithers. The samples were then picked up and shipped by a bonded carrier to Acme Labs in Vancouver.

The samples were analyzed by 30 element ICP-ES as well as fire assay and ICP-ES for 30 gram gold assay. Results for selected elements are contained in Table 7. Geochemical Contour Maps for Zn, Pb and Cu are presented as Figures 14, 15 and 16 respectively.

Figure 14: Contours of Zn (ppm)

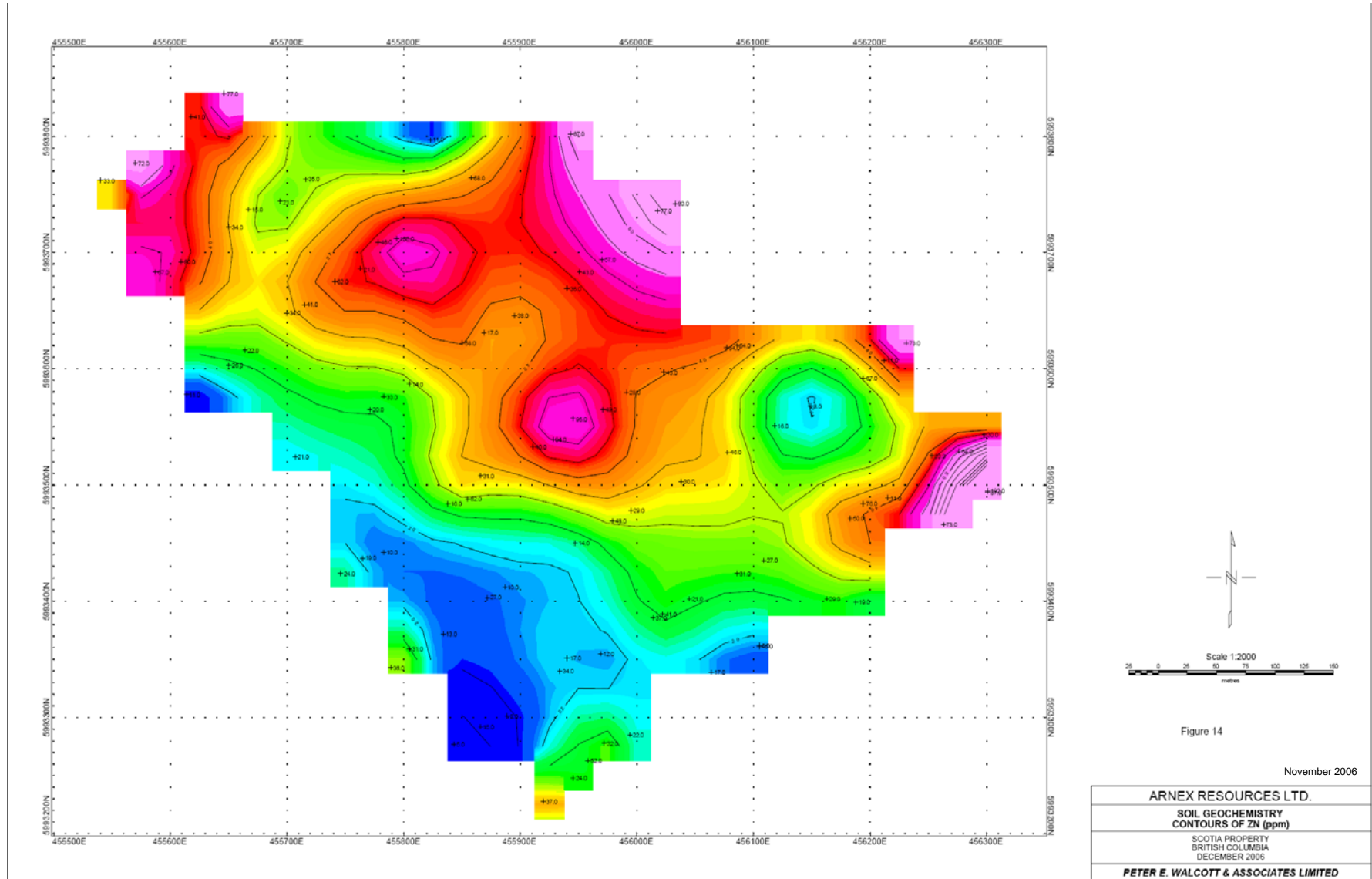


Figure 15: Contours of Pb (ppm)

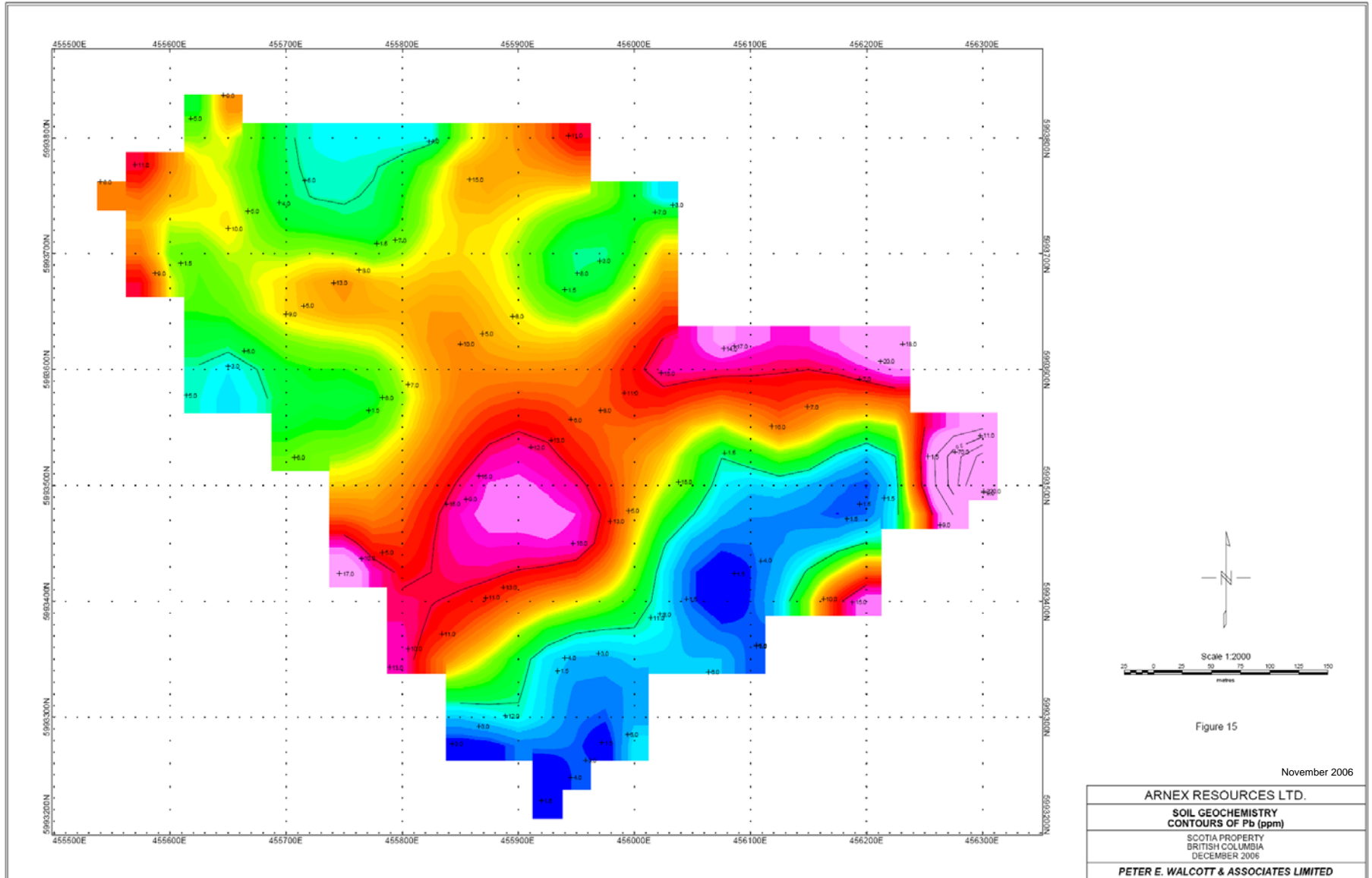


Figure 16: Contours of Cu (ppm)

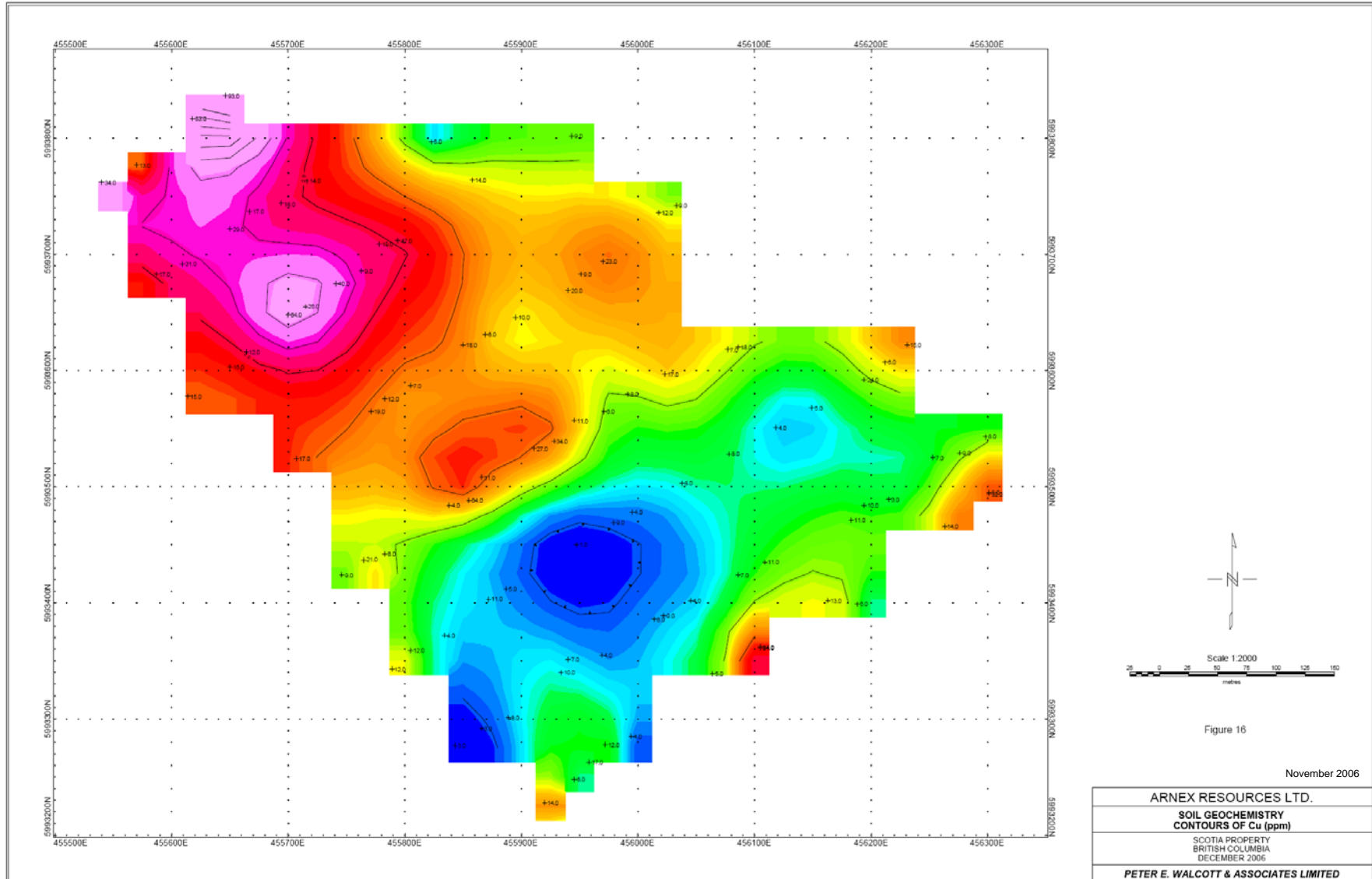




Table 7; Analytical Results - Selected Elements

## 2006 Analytical Results - Selected Elements

Arnex Resources Ltd.

Acme file # A607725 114 samples in this disk file.

Analysis: GROUP 1D - 0.50 GM SAMPLE ANALYSED BY ICP-ES.

Analysis: GROUP 3B - 30 GM SAMPLE FIRE ASSAY ANALYSED BY ICP-ES

Datum: NAD 83, Zone 9

Grid	ELEMENT	North	East	Zn	Ag	Pb	Cu	Au
Station	SAMPLES			ppm	ppm	ppm	ppm	ppb
				45	0.3	<3	4	<2
6+025L15+2N	Line 1 WP 67SS48	455920	5993228	37	<3	<3	14	<2
6+075	Line 1 WP 68SS49	455945	5993248	24	<3	4	8	<2
6+100	Line 1 WP 69SS50	455958	5993263	52	<3	3	17	<2
6+125	Line 1 WP 71SS51	455972	5993278	32	<3	<3	12	<2
6+150	Line 1 WP 72SS52	455994	5993285	22	<3	5	4	<2
6+175	Line 1 WP 73SS53	456084	5993339	17	<3	6	5	<2
6+200	Line 1 WP 75SS54	456105	5993362	6	0.5	5	44	6
6+225	Line 1 WP 76SS55	456105	5993361	45	0.7	<3	24	3
6+350	Line 1 WP 80SS58	456183	5993402	29	0.4	10	13	<2
6+350	RE Line 1 WP 80SS58			29	<3	10	13	3
6+400	Line 1 WP 81SS59	456188	5993399	19	<3	15	6	<2
6+425	Line 1 WP 83SS60	456263	5993466	73	<3	9	14	<2
6+450	Line 1 WP 84SS61	456301	5993495	192	0.3	220	8	<2
6+475	Line 1 WP 85SS62	456301	5993494	87	0.4	9	32	<2
	Line 1 WP A SS A			31	0.3	3	13	<2
	Line 1 WP B SS B			22	<3	<3	6	<2
	Line 1 WP C SS C			21	<3	5	7	<2
	Line 1 WP D SS D			7	<3	<3	3	<2
4+950L15+3N	Line 2 WP 84 SS 1	455843	5993277	5	0.9	3	3	13
4+975	Line 2 WP 85 SS 2	455866	5993292	16	<3	3	3	<2
6+000	Line 2 WP 86 SS 3	455889	5993301	9	<3	12	8	<2
6+050	Line 2 WP 88 SS 4	455934	5993340	34	<3	<3	10	<2
6+075	Line 2 WP 89 SS 5	455940	5993351	17	<3	4	7	7
6+100	Line 2 WP 70 SS 6	455989	5993355	12	0.4	3	4	3
6+150	Line 2 WP 72 SS 7	456014	5993388	37	<3	11	8	<2
6+175	Line 2 WP 73 SS 8	456022	5993389	41	0.3	8	9	<2
6+200	Line 2 WP 74 SS 9	456045	5993402	21	<3	<3	4	3
6+250	Line 2 WP 76 SS 10	456086	5993424	31	<3	<3	7	<2
6+275	Line 2 WP 77 SS 11	456109	5993435	27	<3	4	11	7
6+350	Line 2 WP 80 SS 13	456183	5993471	50	<3	<3	11	2
6+375	Line 2 WP 81 SS 14	456194	5993484	76	<3	<3	10	2
6+400	Line 2 WP 82 SS 15	456215	5993489	11	<3	<3	3	<2
6+450	Line 2 WP 84 SS 16	456253	5993525	33	<3	<3	7	<2
6+475	Line 2 WP 85 SS 17	456276	5993529	64	<3	70	9	<2
4+950	Line 2 WP 84 SS 18	456298	5993543	30	<3	11	8	<2
4+900 L15+5	Line 3 WP 39 SS 1	455789	5993343	36	0.6	13	12	<2
4+925	Line 3 WP 40 SS 2	455805	5993359	31	<3	10	12	<2
4+975	Line 3 WP 41 SS 3	455834	5993372	13	<3	11	4	<2
6+000	Line 3 WP 43 SS 4	455872	5993403	27	<3	11	11	<2
6+025	Line 3 WP 44 SS 5	455887	5993412	10	0.3	13	5	<2
6+100	Line 3 WP 47 SS 7	455947	5993450	14	<3	16	1	<2
6+125	Line 3 WP 48 SS 8	455979	5993469	48	<3	13	9	<2
6+150	Line 3 WP 49 SS 9	455995	5993478	29	<3	5	4	<2
6+200	Line 3 WP 51 SS 10	456038	5993503	30	<3	15	8	<2
6+250	Line 3 WP 53 SS 12	456078	5993528	46	<3	<3	8	<2
6+300	Line 3 WP 55 SS 13	456118	5993551	16	<3	16	4	<2
6+325	Line 3 WP 56 SS 15	456149	5993568	8	<3	7	5	<2
6+350	Line 3 WP 57 SS 15			10	<3	13	7	<2
6+400	Line 3 WP 59 SS 16	456194	5993592	67	<3	7	24	<2
6+425	Line 3 WP 60 SS 17	456212	5993607	11	<3	20	8	<2
	Line 3 WP 61 SS 18	456231	5993622	73	<3	18	15	<2
6+250L15+7	Line 4 WP 34 SS 24	455858	5993764	58	<3	15	14	<2
4+925L15+5	Line 4 WP 40 Hait 1	455746	5993424	24	<3	17	9	<2
4+950	Line 4 WP 41 SS 28	455785	5993437	19	<3	10	21	<2

Arnex Resources Ltd.

Acme file # A607725 114 samples in this disk file.

Analysis: GROUP 1D - 0.50 GM SAMPLE ANALYSED BY ICP-ES.

Analysis: GROUP 3B - 30 GM SAMPLE FIRE ASSAY ANALYSED BY ICP-ES

Datum: NAD 83, Zone 9

Grid	ELEMENT	North	East	Zn	Ag	Pb	Cu	Au
Station	SAMPLES			ppm	ppm	ppm	ppm	ppb
				45	0.3	<3	4	△
4+975	Line 4 WP 42 SS 29	455783	5993442	10	<.3	5	8	△
5+025	Line 4 WP 44 SS 30	455838	5993484	18	<.3	15	4	△
5+050	Line 4 WP 45 SS 31	455855	5993488	82	<.3	9	64	△
5+075	Line 4 WP 48 SS 32	455888	5993508	31	<.3	15	11	△
5+125	Line 4 WP 48 SS 33	455911	5993533	40	<.3	12	27	△
5+150	Line 4 WP 49 SS 34	455928	5993539	94	<.3	13	34	△
5+175	Line 4 WP 50 SS 35	455945	5993557	95	<.3	6	11	△
	RE Line 4 WP 50 SS 35			98	0.3	7	11	△
5+225	Line 4 WP 52 SS 36	455971	5993565	49	<.3	8	8	4
5+250	Line 4 WP 53 SS 37	455991	5993580	28	<.3	11	8	△
	Line 4 WP 53 SS 38	456023	5993597	43	<.3	15	17	△
5+325	Line 4 WP 56 SS 39	456077	5993618	34	0.3	14	7	△
5+350	Line 4 WP 57 SS 40	456088	599362	54	<.3	17	18	△
5+375	Line 4 WP 58 SS 41			82	<.3	10	34	△
5+425	Line 4 WP 60 SS 42			156	0.3	9	28	△
4+900L15+8	Line 5 WP 21 SS 2	455707	5993524	21	<.3	6	17	△
4+975	Line 5 WP 24 SS 4	455771	5993565	20	<.3	<3	19	△
5+025	Line 5 WP 25 SS 5	455783	5993578	33	<.3	8	12	△
5+050	Line 5 WP 26 SS 6	455805	5993587	14	<.3	7	7	△
5+100	Line 5 WP 28 SS 7	455850	5993622	58	<.3	10	18	2
5+125	Line 5 WP 29 SS 8	455889	5993631	17	<.3	5	6	△
5+150	Line 5 WP 30 SS 9	455895	5993646	38	0.3	8	10	2
5+200	Line 5 WP 32 SS 10	455940	5993669	36	<.3	<3	20	△
5+225	Line 5 WP 33 SS 11	455951	5993683	43	<.3	8	9	△
5+250	Line 5 WP 34 SS 12	455970	5993694	57	<.3	3	23	2
5+300	Line 5 WP 38 SS 13	456018	5993738	77	<.3	7	12	△
5+000L15+8	Line 5 WP 37 SS 14	456033	5993742	80	<.3	3	9	2
5+200	Line 6 WP 17 SS 14			68	<.3	10	45	△
4+975L15+7	Line 6 WP 24 SS 17	455884	5993618	22	<.3	5	12	3
	Line 7 WP 007 SS 0			70	<.3	7	29	2
	Line 7 WP 7 SS 9			35	<.3	6	13	2
	Line 8 WP 3 SS 2	455640	5993762	33	<.3	8	34	2
	Line 8 WP 4 SS 3	455670	5993777	72	<.3	11	13	△
	Line 8 WP 5 SS 4	455618	5993817	41	<.3	5	63	2
	WP 2 SS 0			185	0.3	11	48	3
	WP 6 SS 5	455646	5993837	77	0.3	9	93	8
	RE WP 6 SS 5			84	0.4	10	100	3
	WP 10 SS 8	455587	5993683	67	<.3	9	17	△
5+050	WP 11 SS 9	455609	5993692	80	<.3	<3	31	2
5+075	WP 12 SS 10	455650	5993722	34	<.3	10	29	2
5+100	WP 13 SS 11	455687	5993737	15	<.3	5	17	△
5+200	WP 15 SS 12	455694	5993744	21	<.3	4	19	3
5+225	WP 16 SS 13	455718	5993763	35	<.3	5	14	3
4+900L15+7N	WP 21 SS 15	455614	5993578	11	<.3	5	15	4
4+925	WP 22 SS 3			17	<.3	<3	25	3
4+950	WP 23 SS 16	455650	5993603	28	<.3	3	18	3
5+025	WP 25 SS 18	455700	5993648	34	<.3	9	64	△
5+050	WP 26 SS 19	455715	5993655	41	<.3	5	26	7
5+075	WP 27 SS 20	455741	5993675	62	<.3	13	40	2
5+100	WP 29 SS 21	455783	5993688	21	<.3	8	9	3
5+125	WP 30 SS 22	455778	5993709	48	<.3	<3	19	△
5+150	WP 31 SS 28	455823	5993797	11	<.3	4	5	△
5+225	WP 33 SS 23	455794	5993712	150	<.3	7	47	△
5+300	WP 36 SS 25	455943	5993802	87	<.3	11	9	2

Figure 14, Soil Geochemistry Contours of Zn (ppm) shows highest values for Zn at the easternmost end of several lines. This may partially reflect down-slope dispersion from the two spot highs located in the central portion of the grid. The highest Zn value of 192 ppm on the south-eastern corner of the grid is coincident with high Pb values as illustrated by Figure 15 on page 35), Soil Geochemistry Contours of Pb (ppm), and probably represents an in-situ polymetallic anomaly. The south-central Zn anomaly is coincident with a Pb high, while the north-central Zn anomaly is in the same area as a Cu high (Figure 16 on page 35), Soil Geochemistry Contours of Cu (ppm). Two high values are present on the northernmost line indicating that the soil anomaly is still open upslope to the north. The highest Cu values and best Cu anomalies are also present on the northernmost portion of the grid.

Geochemical soil anomalies are present beyond and lateral to the drilled portion of the Albere Zone.

### **9.2.3 2008 AeroQuest Airborne Geophysical Survey**

A report by Aeroquest dated October 2008 describing the multi parameter helicopter airborne geophysical survey that was conducted during August, 2008 is presented as follows.

#### **(A) Report on a Helicopter AeroTEM System Electromagnetic, Magnetic and Radiometric Survey, Aeroquest, OCTOBER 2008 (the “Aeroquest Report”)**

A multi parameter helicopter airborne geophysical survey was conducted by Aeroquest over a 50 square kilometre block of the Property during the period July 31 to August 6, 2008. Line spacing was 100 metres orientated at 070/250 degrees which is perpendicular to the regional geologic trend.

The survey incorporated the AeroTEM II time domain electromagnetic system coupled with a high-sensitivity caesium magnetometer. A secondary Airborne Gamma Ray Spectrometer was also employed. The survey also utilized real time GPS navigation, radar altimeter control, video recorder data gathering as well as a recording base station magnetometer to measure magnetic diurnal variations. Adequate QC/QA procedures were adopted by Aeroquest.

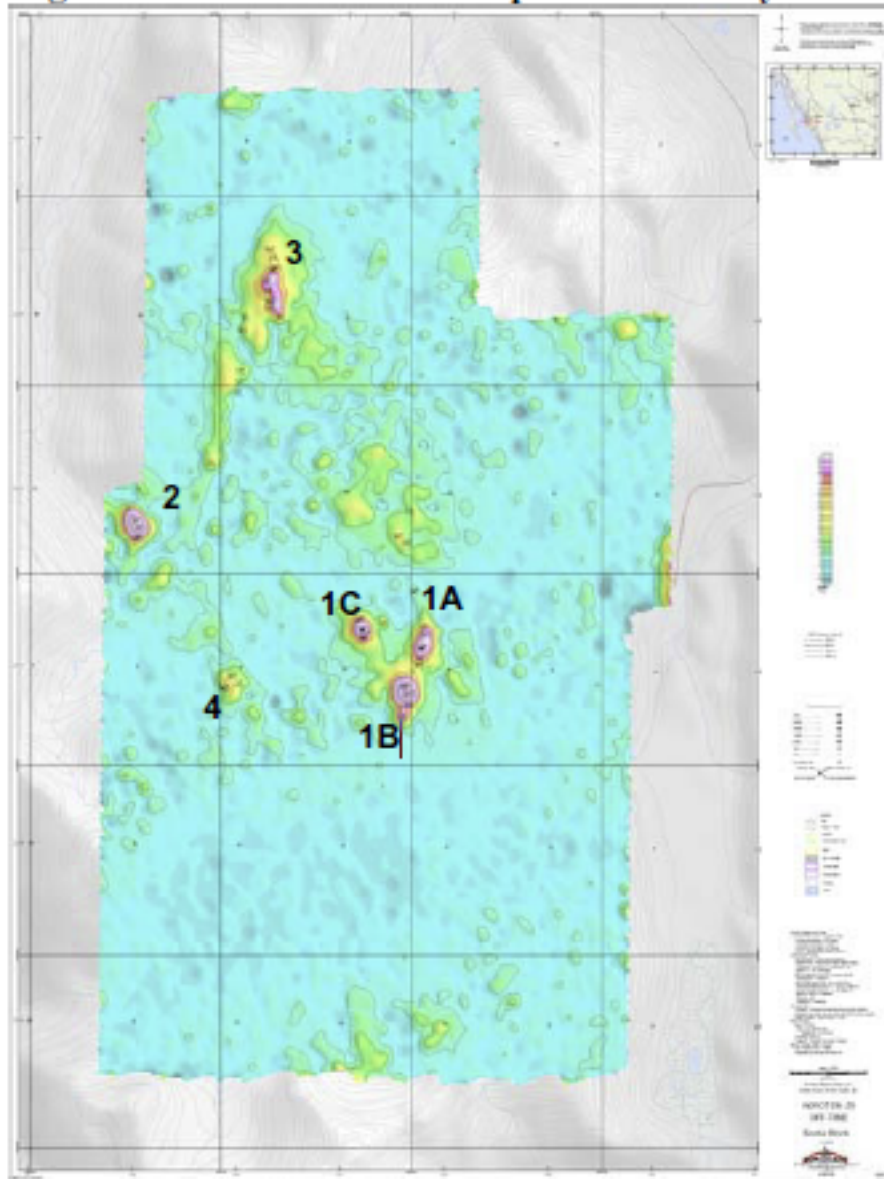
The survey was successful in mapping the magnetic and electromagnetic properties of the geology and related sulphide mineralization throughout the survey area.

A summary presentation of results and an interpretation of anomalies by Aeroquest are presented as follows.

#### **(B) Aeroquest Report – Interpretation (January 21, 2009)**

Four areas were identified from the AeroTEM data for potential follow-up interpretation. The areas are labeled 1-4 in Figure 1.

**Figure 1. Zoff Channel 1 Map with anomaly locations.**



**(B) 1. Anom 1**

The area identified as Anom 1 consists of three responses (1A, 1B and 1C). Each of these responses were well modeled with a flat lying plate at a depth of approximately 100 m and a conductance of 3 S. The plates are shown in Figure 2. The models suggest that the source of EM response lie below the peaks of the anomalies.

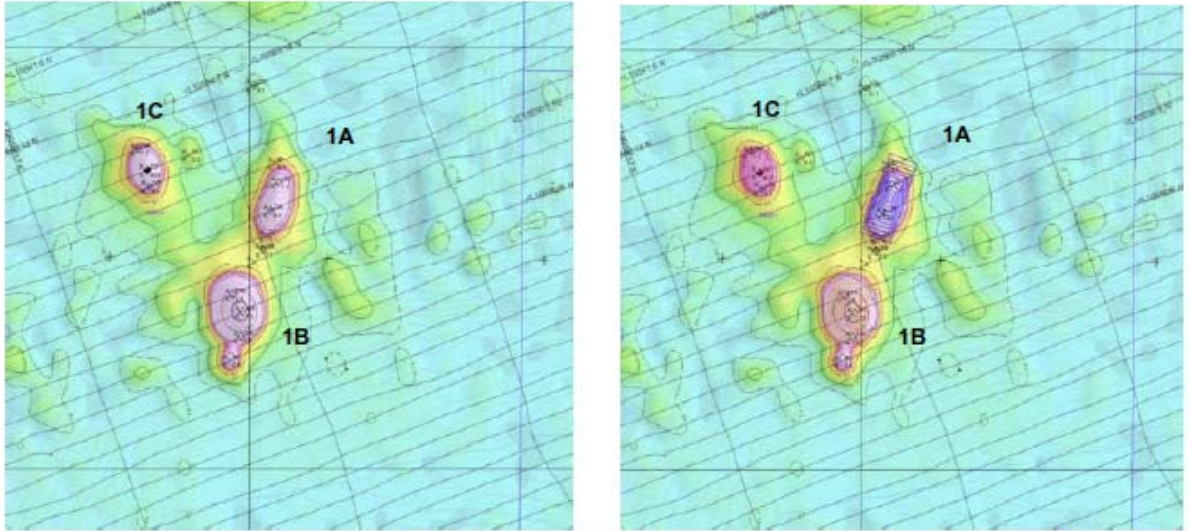


Figure 2. Zoff Channel 1 Data for Anom 1. Left panel shows the data. Right panel shows the interpreted plate models.

Plate	Easting (m)	Northing (m)	Depth (m)	Dip (degrees)	Strike (degrees)	Strike Length (m)	Depth Extent (m)	Conductance (S)
1A	456205	5993270	-120	0	220	400	150	3
1B	456030	5992740	-100	0	185	300	200	3
1C	455545	5993440	-90	0	172.5	200	150	4

Table 1. Anom 1 Plate modelling details. The Easting and Northing indicate the location of the point at the center of the plate on the up dip edge.

## (B) 2. Anom 2

The response identified as Anom 2 was well modeled with a shallowly dipping plate (dip 20 degrees and dip direction 262.5 degrees) at a depth of approximately 50 m and a conductance of 4.8 S. The plate is shown in Figure 3.



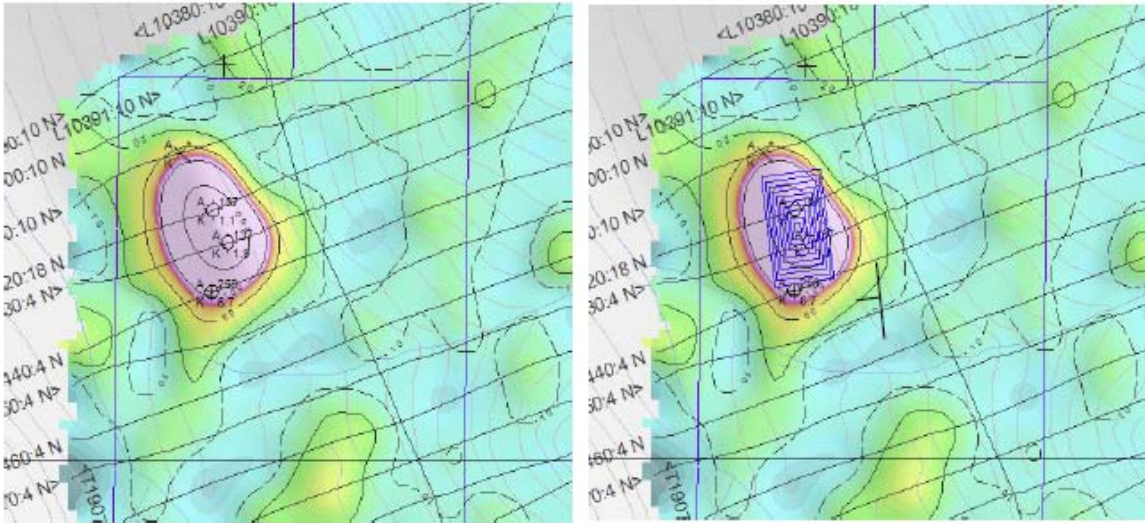


Figure 3. Zoff Channel 1 Data for Anom 2. Left panel shows the data. Right panel shows the interpreted plate models. The plate is dipping 20 degrees to the west.

Plate	Easting (m)	Northing (m)	Depth (m)	Dip (degrees)	Strike (degrees)	Strike Length (m)	Depth Extent (m)	Conductance (S)
2	453185	5994530	-50	20	172.5	250	150	4.8

Table 2. Anom 2 Plate modelling details. The Easting and Northing indicate the location of the point at the center of the plate on the up dip edge.

### (B) 3. Anom 3

The response identified as Anom 3 was well modeled with *two dipping plates* (dip 35 and 40 degrees and dip direction 77.5 and 85 degrees) at a depth of approximately 65 m and a conductance of 5 S. The plates are shown in Figure 4.

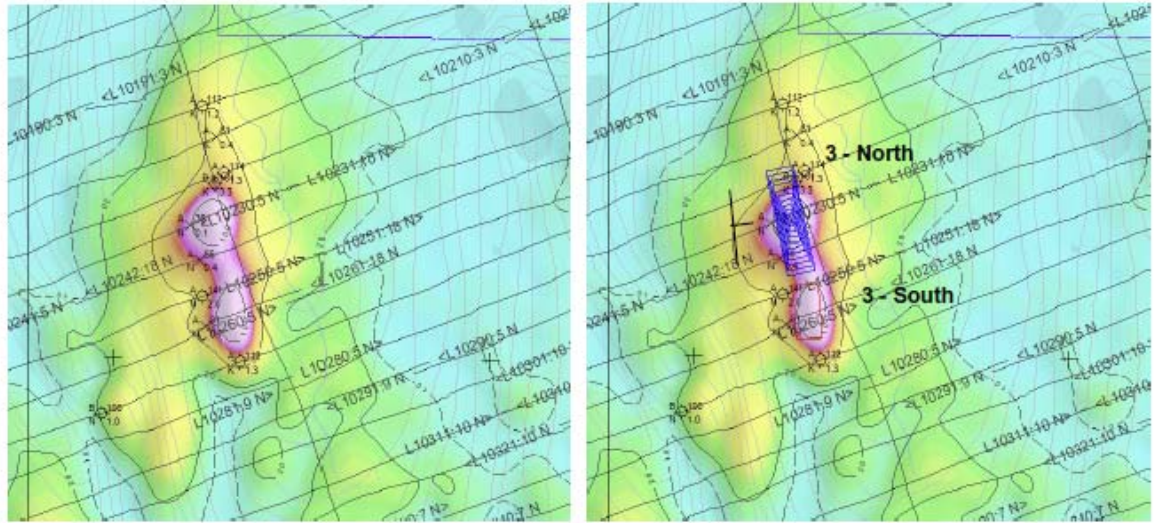


Figure 4. Zoff Channel 1 Data for Anom 3. Left panel shows the data. Right panel shows the interpreted plate models. The plates are dipping 40 degrees to the east.

Plate	Easting (m)	Northing (m)	Depth (m)	Dip (degrees)	Strike (degrees)	Strike Length (m)	Depth Extent (m)	Conductance (S)
3-North	454485	5997095	-70	35	347.5	300	100	5
3-South	454535	5996850	-60	40	355	150	100	5

Table 3. Anom 3 Plate modelling details. The Easting and Northing indicate the location of the point at the center of the plate on the up dip edge.

#### (B) 4. Anom 4

The response identified as Anom 4 was well modeled with a single steeply dipping plate (dip 70 degrees and dip direction 235 degrees) at a depth of approximately 40 m and a conductance of 2 S. The plates are shown in.



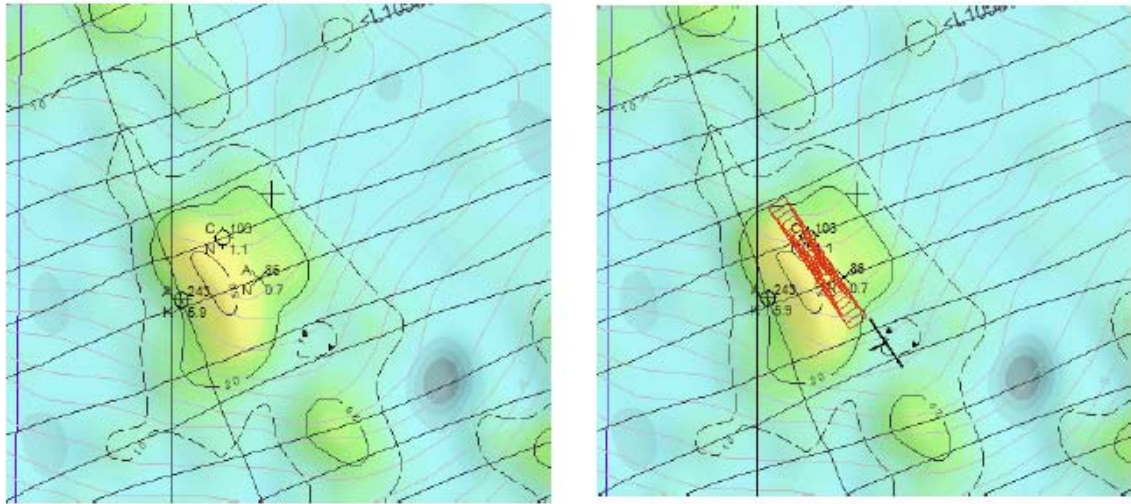


Figure 5. Zoff Channel 1 Data for Anom 4 Left panel shows the data. Right panel shows the interpreted plate model. The plate is dipping 70 degrees to the south west.

Plate	Easting (m)	Northing (m)	Depth (m)	Dip (degrees)	Strike (degrees)	Strike Length (m)	Depth Extent (m)	Conductance (S)
4	454125	5992915	-40	70	145	300	125	2

Table 4. Anom 4 Plate modelling details. The Easting and Northing indicate the location of the point at the center of the plate on the up dip edge.

## (B) 5. Summary

Each of the anomalies selected for interpretation were well modeled using weakly conductive plates at depths ranging from 50 to 100 m. When planning follow up (either prospecting or drilling) it is important to account for the dip of the plates. The sources of Anom 1A, 1B and 1C are interpreted to be flat lying, however the dips of the plates used to interpret Anoms 2, 3 and 4 have increasingly steeper dips.

## (B) 6. Limitations

The interpretation of this data was highly subjective. The goal of this interpretation was to extract features from the electromagnetic data that, when combined with other data sets, may provide a means for focusing future exploration activities within defined areas of interest. The definition of “targets” should in no way be taken as recommendation for drill testing. All cases should be considered when analyzing the interpreted areas of interest and prioritizing for follow-up.

### 9.2.4 2010 Field Exploration Program

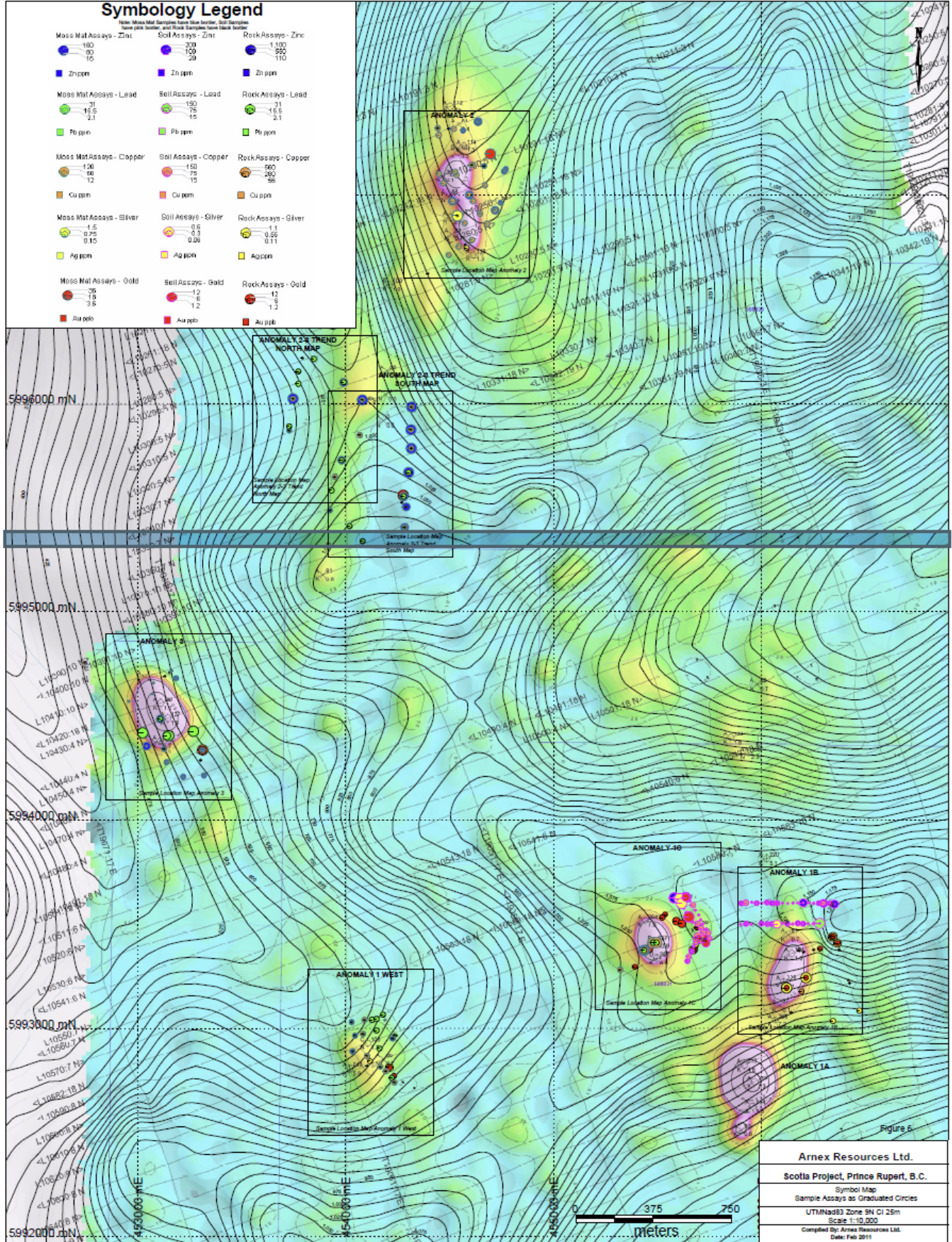
During 2010 a field geochemical survey program was conducted by Arnex Resources Ltd during the period September 18, 2010 to October 8, 2010. The Author, A.O. Birkeland, visited the Property for a one day period on September 18, 2010 to initiate the program. Fieldwork was conducted by a series of short fly-camps utilizing helicopter support based out of Prince Rupert.



A total of 64 rock chip, 136 moss mat - active stream sediment and 67 soil samples were taken. Samples were flown by helicopter to Prince Rupert and transported by locked truck and delivered to Acme labs processing facility on Powell Street, Vancouver. Expenditures for conducting the 2010 field program totaled \$90,331.48 and were filed As Geochemical Technical Work, Event # 4807718.

Figure 17 below - Symbol Map - Sample Assays as Graduated Circles, is a presentation of the results of the 2010 geochemical survey plotted on an airborne geophysical anomaly base map.

Figure 17: Symbol Map - Sample Assays as Graduated Circles



Virtually all Airborne Anomalies sampled returned geochemically anomalous or elevated values for the various sample types taken. No “ore grade” showings were found but values of over 1,000 ppm Zn were encountered from “in place” rock chip sampling in the general vicinity of the Albere Zone.

## **10 DRILLING**

The type and extent of diamond drilling including a summary and interpretation of all results are described in Section 6 – Property History and in Section 9.1 – 1997 Drill Program contained in this Technical Report.

The relationship between the sample lengths and the true thicknesses of the mineralization cannot be stated because the orientation of the mineralization is unknown.

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

### ***11.1 Historical Drilling***

A description of sampling methods and a description of drilling and factors that could impact the accuracy of results including a discussion of sample quality, description of rock types, geologic controls, widths of mineralized zones and summary of samples composites with values and apparent widths for historical programs including drilling are contained in Section 6 – Property History in this Technical Report.

### ***11.2 1997 Diamond Drill Program***

A description of sampling methods and a description of drilling and factors that could impact the that could impact the accuracy of results including a discussion of sample quality, description of rock types, geologic controls, widths of mineralized zones and summary of samples composites with values and apparent widths for the 1997 Diamond Drill Program are contained in Section 9.1 – 1997 Diamond Drill Program in this Technical Report.

### ***11.3 2005, 2006 and 2010 Field Exploration Programs***

The core re-sampling program conducted in 2005 sampled the same intervals as were sampled during the 1997 drill program for selected drill holes. Due to poor weather and a lack of time, the remaining half splits of the core could not be sawed into quarters. Instead, the remaining half split core was taken in its entirety except for occasional specimens that were preserved in selected intervals. Limited rock chip sampling was conducted during the East Limb Prospecting and Sampling Program that was carried out in 2005. Both float and representative outcrop chip samples were taken.



Soil samples taken during the 2006 soil geochemical survey were taken on a grid basis with lines orientated normal to the geologic trend. Line spacing was 100 metres and sample intervals were 25 metres along the lines. Holes were dug by shovel at each station and the B-horizon sampled wherever possible.

A variety of sampling methods were employed by the 2010 geochemical survey program. Moss mat (active stream sediments) samples were taken where drainages were present in the target area. Reconnaissance style contour soil sampling was conducted below airborne geophysical anomalies where moss mat sampling was not present. Rock chip sampling was done where prospecting identified the presence of sulphide mineralization. No set sampling interval was used as each mineralized area was unique in size and distribution.

#### ***11.4 Historical Drilling***

For historical drill programs, such as they are known, sample preparation methods and quality control measures employed by historical programs are presented in Section 6 – Property History in this Technical Report.

#### ***11.5 1997 Diamond Drill Program***

For the 1997 Diamond Drill Program, such as they are known, sample preparation methods and quality control measures employed programs are presented in Section 9.1 – 1997 Diamond Drill Program in this Technical Report.

#### ***11.6 2005, 2006 and 2010 Field Exploration Programs***

The samples taken as part of the 2005 drill core re-sampling program were placed in plastic sample bags and flown by helicopter to a landing site on the Skeena River, then trucked in a locked compartment to Acme Labs in Vancouver for preparation and analysis. No quality control measures were taken prior to the dispatch of samples to the lab for this program.

The samples taken as part of the 2005 East Limb prospecting program were placed in plastic sample bags and flown by helicopter to a landing site on the Skeena River, then trucked in a locked compartment to Acme Labs in Vancouver for preparation and analysis.

The soil samples taken as part of the 2006 and 2010 soil sampling programs were placed in cloth bags and each sample site marked in the field using metal tags and pickets. The samples were placed in secure containers and flown by helicopter to a landing site on the Skeena River, then trucked in a locked compartment to a locked warehouse operated by CJL Enterprises in Smithers. The samples were then shipped by a bonded carrier to Acme Labs in Vancouver.

All rock samples taken during the 2005 and 2010 programs were prepared and analyzed by Acme Labs of Vancouver, who are independent to Geo and Geonovus. Acme Labs is ISO Certified.. Rock samples were crushed to -10 mesh (70%), split and a 250 g split pulverized to -150 mesh (95%), (Acme Preparation Code R150). Sample pulps were leached in hot (95°C) Aqua Regia. Solutions were analyzed by 30 element ICP-ES (Acme Analytical Code 1D). A 30 g lead-collection fire-assay fusion for total sample decomposition, digestion of the Ag dore bead and analysis by ICP-ES for Au (Acme Code Group 3B) was also conducted on each sample.

All soil samples taken during the 2006 and 2010 programs were prepared and analyzed by Acme Labs of Vancouver. The soil samples were dried at 60°C and up to 100 g sieved to -80 mesh. Sample pulps were leached in hot (95°C) Aqua Regia. Solutions were analyzed by 30 element ICP-ES (Acme Analytical Code 1D). A 30 g lead-collection fire-assay fusion for total sample decomposition, digestion of the Ag dore bead and analysis by ICP-ES for Au (Acme Code Group 3B) was also conducted on each sample.

At no time did any personnel other than Arnex and its subcontractors have access to any of the 2005 or 2006 samples during the sampling, storage or shipping process.

All rock and soil sample analysis performed by Acme Labs incorporated standard quality control methods of analyzing routine duplicate samples and standards.

## **12 DATA VERIFICATION**

In the opinion of the author, acting as Qualified Person, the data used for purposes in the preparation of this Technical Report is adequate and accurate.

The objective of the 2005 drill core re-sampling program was to verify the core sampling results obtained from the 1997 core drilling program. Arnex Resources Ltd (“Arnex”) conducted the core re-sampling program during the 2005 field season. Selected mineralized core intervals from six of the 1997 drill holes were sampled by Arne Birkeland, P.Eng. acting as Qualified Person for Geo for the Scotia Property. The samples were flown by helicopter to Prince Rupert, then trucked by Arnex to Vancouver and were hand delivered to Acme Labs Ltd. Geochemical analysis of the samples utilizing a multi-element ICP-ES technique was completed by Acme. Many samples returned over-limit values of >10,000 ppm for zinc and lead. During April of 2008, pulps from the over-limit samples were assayed by Acme utilizing Aqua-Regia digestion and Group 7AR ICP-ES finish.

The accompanying table, Summary – Drill Core Re-sampling Program compares selected weighted mineralized intercepts from the 1997 drilling to corresponding intervals for values for the pulp assays received in April, 2008.

Generally, there was very good agreement between the 1997 high-grade intercepts with the 2008 data. Average variations for zinc, copper and silver for all weighted intercepts were <5%. Variations for lead and gold were moderately higher but still well within acceptable ranges. It is concluded that the re-sample program verified the 1997 results for the selected intervals sampled and that this data has been verified for purposes of determining a Resourced Estimate.

Table 8: Summary - Drill Core Re-sampling Program

Hole	From	To	Interval	Sample #	Zn %	Pb %	Cu %	Ag g/t	Au ppb	Zn %	Pb %	Cu %	Ag g/t	Au ppb
	Metres	Metres	Metres	1997	1997	1997	1997	1997	1997	2008	2008	2008	2008	2008
S-33-97	47.40	47.80	0.40	301014	6.78	0.90	0.13	26.0	120	6.84	0.67	0.20	22.0	104
	<b>68.70</b>	<b>72.30</b>	<b>3.60</b>		<b>22.54</b>	<b>2.28</b>	<b>0.18</b>	<b>47.0</b>	<b>1206</b>	<b>23.10</b>	<b>2.31</b>	<b>0.15</b>	<b>42.5</b>	<b>1081</b>
	79.40	80.00	0.60	301034	4.81	1.37	0.13	42.0	745	4.13	1.76	0.12	37.0	603
	<b>85.75</b>	<b>90.10</b>	<b>4.35</b>		<b>15.60</b>	<b>2.50</b>	<b>0.16</b>	<b>39.2</b>	<b>236</b>	<b>14.65</b>	<b>2.96</b>	<b>0.14</b>	<b>38.6</b>	<b>139</b>
S-34-97	62.20	62.60	0.40	301056	18.70	1.93	0.19	47.0	90	17.25	1.19	0.18	33.0	69
S-36-97	<b>10.95</b>	<b>24.52</b>	<b>13.57</b>		<b>4.97</b>	<b>0.08</b>	<b>0.19</b>	<b>6.6</b>	<b>72</b>	<b>3.90</b>	<b>0.09</b>	<b>0.15</b>	<b>6.2</b>	<b>90</b>
	74.35	76.12	1.77		11.93	0.39	0.79	35.6	185	8.09	0.84	0.75	37.0	203
	<b>81.12</b>	<b>90.05</b>	<b>8.93</b>		<b>7.18</b>	<b>0.79</b>	<b>0.10</b>	<b>18.4</b>	<b>288</b>	<b>7.38</b>	<b>0.59</b>	<b>0.11</b>	<b>16.1</b>	<b>308</b>
S-37-97	15.57	16.35	0.78		3.61	0.85	0.25	17.3	115	4.17	0.93	0.25	16.9	126
	17.00	19.13	2.13	301156	1.88	0.36	0.27	11.0	90	1.52	0.43	0.27	10.0	111
	<b>21.64</b>	<b>43.29</b>	<b>21.65</b>		<b>10.64</b>	<b>1.35</b>	<b>0.15</b>	<b>22.2</b>	<b>276</b>	<b>10.16</b>	<b>1.14</b>	<b>0.14</b>	<b>17.7</b>	<b>595</b>
S-39-97	31.90	32.10	0.20	301074	5.90	1.06	0.23	26.0	425	7.49	1.11	0.26	26.0	822
	32.65	33.00	0.35	301076	4.90	1.60	0.14	27.0	250	6.28	1.40	0.13	25.0	286
	<b>46.50</b>	<b>49.50</b>	<b>3.00</b>		<b>16.49</b>	<b>0.42</b>	<b>0.21</b>	<b>14.5</b>	<b>187</b>	<b>16.54</b>	<b>0.43</b>	<b>0.23</b>	<b>14.0</b>	<b>154</b>
	55.30	57.10	1.80	301087	3.60	0.77	0.07	25.4	550	2.79	0.79	0.08	26.0	1307
	65.10	65.90	0.80		6.78	2.00	0.05	24.9	89	6.05	2.14	0.05	27.0	303
S-42-97	91.73	93.30	1.57		5.71	0.44	0.03	10.9	142	7.54	0.71	0.03	15.7	200
	<b>97.00</b>	<b>100.27</b>	<b>3.27</b>		<b>4.99</b>	<b>0.18</b>	<b>0.19</b>	<b>11.3</b>	<b>69</b>	<b>3.43</b>	<b>0.18</b>	<b>0.16</b>	<b>9.2</b>	<b>54</b>
	102.90	103.51	0.61	301252	0.35	0.13	0.12	9.0	70	0.18	0.09	0.09	7.0	69

### 13 MINERAL PROCESING AND METALLURGICAL TESTING

No Mineral Processing or Metallurgical Testing has been conducted to date.

### 14 RESOURCE ESTIMATE

This resource was completed by Giroux Consultants Ltd. in November 2006. G.H. Giroux is the qualified person responsible for the resource estimate. Mr. Giroux is a qualified person by virtue of education, experience and membership in a professional association. He is independent of both the issuer and the vendor applying all of the tests in section 1.5 of National Instrument 43-101. Mr. Giroux has not visited the property.

The effective date for this resource is November 2006. Since no further drilling has been done on the property since this resource was estimated, it is still current. The author knows of no legal, political, environmental or other risks that could materially affect the potential for the development of this resource.

#### 14.1 Data Analysis

The data base for the Scotia resource estimate was provided Arnex Resources from historical drill programs conducted on the Property and consisted of ten holes drilled in 1960 (S-1-60 to S-10-60), seven holes drilled in 1980 (S-11-80 to S-17-80), four holes drilled in 1981 (S-18-81 to S-21-81), eleven holes drilled in 1984 (84-1 to 84-11) and ten holes drilled in 1997 (S-33-97 to S-42-97) for a total of 42 diamond drill holes totaling 4,343 m (see Table 34 for drill hole listing). The data base consisted of collar coordinates, down hole surveys and assays for Zn (%), Pb (%), Cu (%), Ag (g/t) and Au (ppb). The drill hole coordinates were given in a “mine grid” system which was aligned 20 degrees west of north. As a result to bring all data into the same relative space 20 degrees were added to each Azimuth. Samples not assayed within the massive sulphide units and outside them were replaced in the data base with a nominal 0.001 % for Zn, Pb and Cu, with 0.001 g/t for Ag and with 0.7 ppb for Au.

The massive sulphide units were identified in each drill hole and the assays within the massive sulphide units were separated from the background lower grade values. A summary of the grade statistics for all variables within the massive sulphide units and in the surrounding waste are presented in Tables 9 and 10 respectively.

**Table 9: Summary of grade statistics for assays in Massive Sulphide units**

	Zn (%)	Pb (%)	Cu (%)	Ag (g/t)	Au (ppb)
Number	424	424	424	424	424
Mean	7.86	0.85	0.09	17.89	222
Standard Deviation	11.55	1.42	0.13	20.67	333
Minimum value	0.001	0.001	0.001	0.001	0.7
Maximum value	49.47	10.84	0.99	153.30	2200
Coefficient of Variation	1.47	1.67	1.41	1.16	1.57

**Table 10: Summary of grade statistics for assays in Waste units**

	Zn (%)	Pb (%)	Cu (%)	Ag (g/t)	Au (ppb)
Number	392	392	392	392	392
Mean	0.12	0.06	0.03	2.89	42
Standard Deviation	0.53	0.46	0.05	7.89	111
Minimum value	0.001	0.001	0.001	0.001	0.7
Maximum value	9.69	8.82	0.47	124.11	1420
Coefficient of Variation	4.22	7.98	2.16	2.73	2.61

For each variable the assays from the massive sulphide intervals were plotted on a lognormal cumulative probability plot. A single lognormal population will plot as a straight line in this graphical technique. Multiple overlapping populations will plot as a curve line with inflection points determining the breaks between these populations. On the graphs below the solid black dots represent the data points. The vertical lines show the interpreted inflection points between the populations. Breaking or partitioning these populations out produces the lines shown as open circles. Recombining these interpreted populations back is a check on how valid the interpretation is and is shown as open triangles.

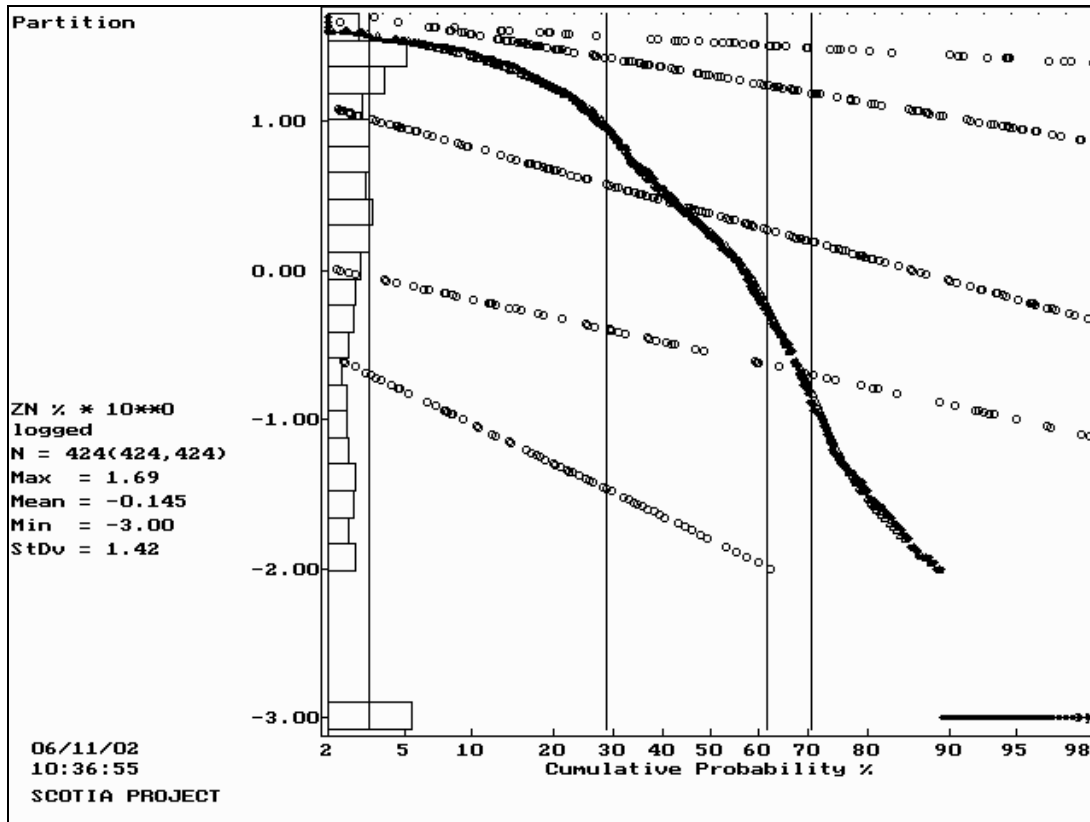
The plot for zinc shown as Figure 18 shows 5 overlapping lognormal populations as described in Table 11. Populations 1, 2 and 3 represent the massive sulphide mineralization and are not considered erratic. Populations 4 and 5 represent internal waste and missing samples within the massive sulphide units. A capping level to reduce the effect of the upper tale of population 1 would be 2 standard deviations above the mean of population 1, a level of 46.5 % Zn. One assay for zinc was capped at 46.5 %.

**Table 11: Summary of Zn populations within the Massive Sulphide Units**

Population	Mean (Zn %)	Proportion of Total samples	Number of Samples
1	33.84	3.33 %	14
2	20.16	25.46 %	108
3	2.39	33.09 %	140
4	0.28	8.68 %	37
5	0.02	29.43 %	125



Figure 18: Lognormal cumulative frequency plot for Zn within massive sulphide units

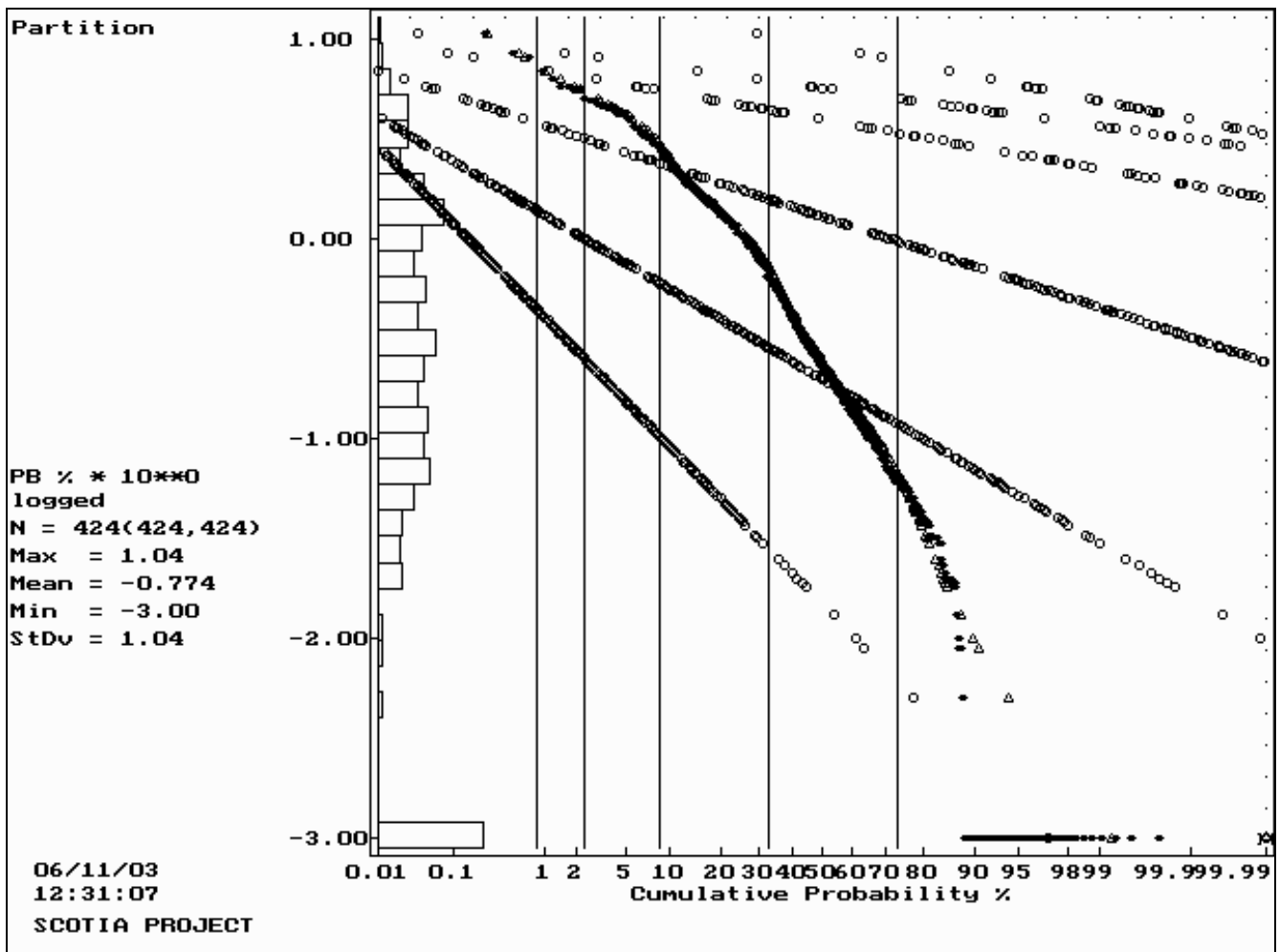


A similar plot for lead shown as Figure 19 shows 6 overlapping lognormal populations as described in Table 12. Population 1 was considered erratic high grade and a capping level of 2 standard deviations above the mean of population 2 was used as a capping level. A total of 2 assays were capped at 8.3 % Pb. Populations 2, 3 and 4 represent the massive sulphide mineralization. Populations 5 and 6 represent internal waste and missing samples within the massive sulphide units.

**Table 12: Summary of Pb populations within the Massive Sulphide Units**

Population	Mean (Pb %)	Proportion of Total samples	Number of Samples
1	9.34	0.84 %	4
2	5.73	1.48 %	6
3	3.99	6.35 %	27
4	1.30	24.03 %	102
5	0.20	40.90 %	173
6	0.02	26.41 %	112

**Figure 19: Lognormal cumulative frequency plot for Pb within massive sulphide units**

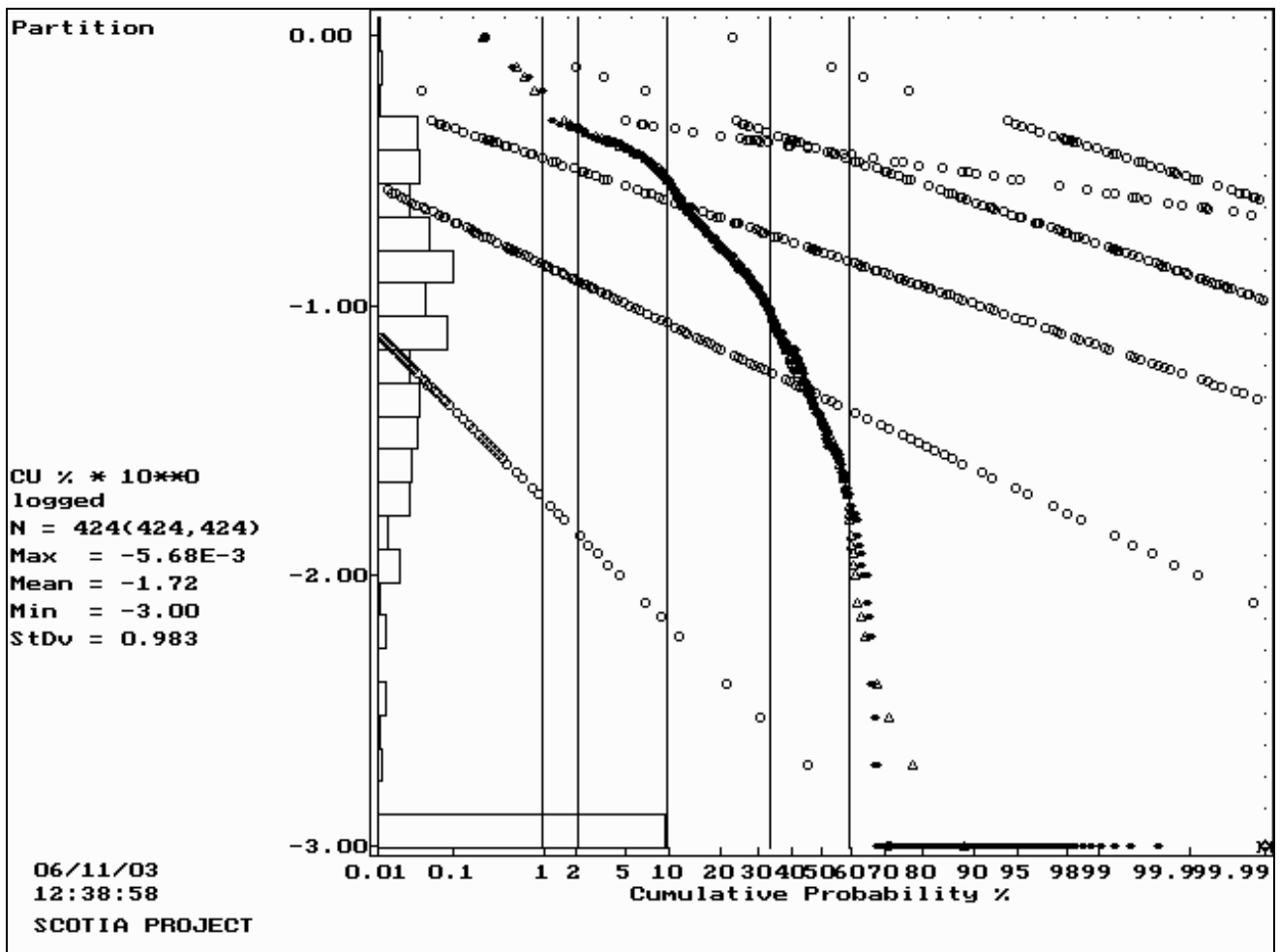


A log probability plot for copper, shown as Figure 20, shows 6 overlapping lognormal populations as described in Table 13. Population 1 was considered erratic high grade and a capping level of 2 standard deviations above the mean of population 2 was used as a capping level. A total of 2 assays were capped at 0.74 % Cu. Populations 2, 3 and 4 represent the massive sulphide mineralization. Populations 5 and 6 represent internal waste and missing samples within the massive sulphide units.

**Table 13: Summary of Cu populations within the Massive Sulphide Units**

Population	Mean (Cu %)	Proportion of Total samples	Number of Samples
1	0.782	0.96 %	4
2	0.375	1.10 %	5
3	0.374	7.71 %	33
4	0.157	23.53 %	100
5	0.046	25.89 %	110
6	0.002	40.81 %	172

**Figure 20: Lognormal cumulative frequency plot for Cu within massive sulphide units**

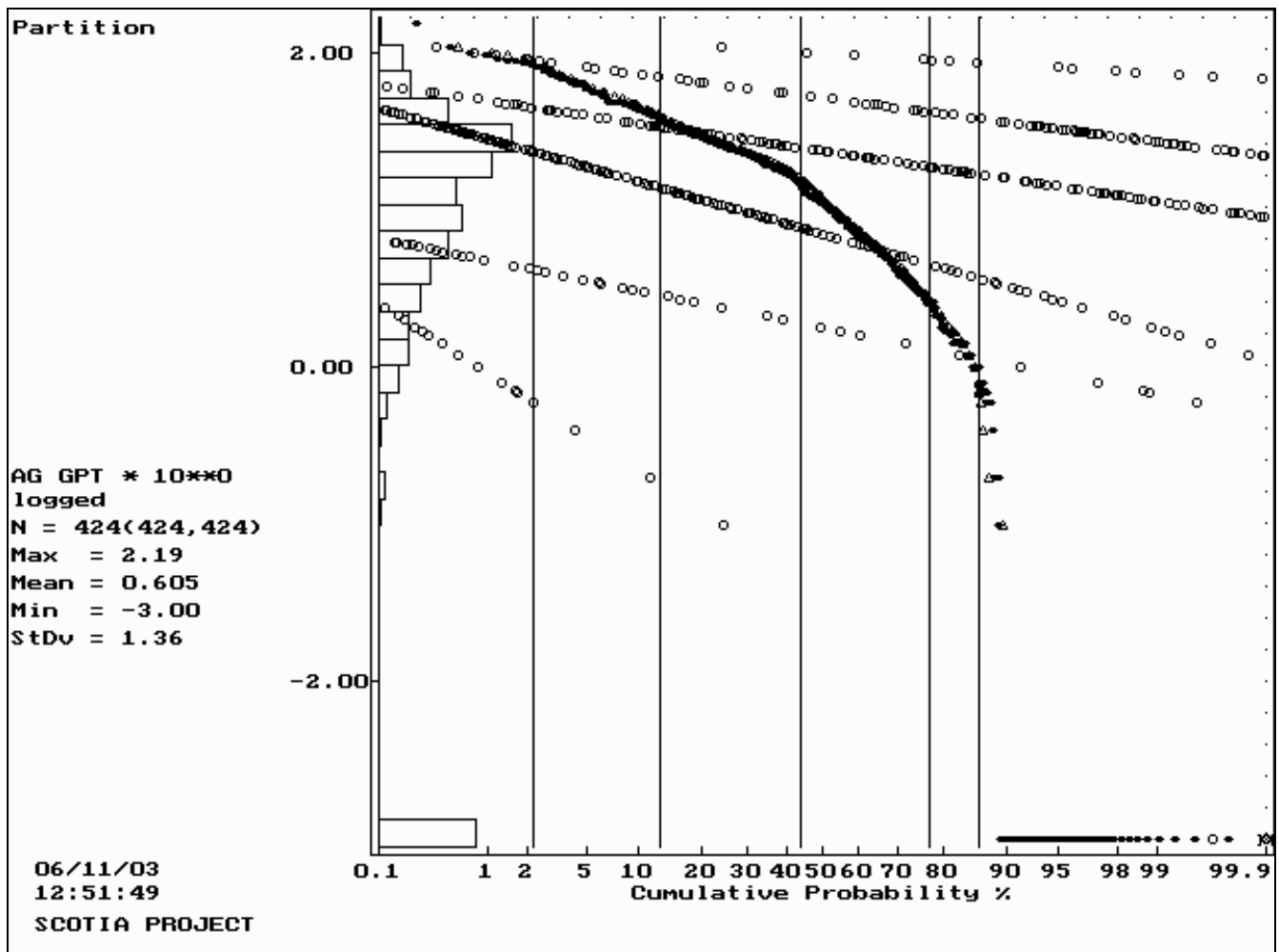


A log probability plot for silver, shown as Figure 21, shows 6 overlapping lognormal populations as described in Table 14. Population 1 for silver was not considered erratic high grade and a capping level of 2 standard deviations above the mean of population 1 was used as a capping level. One assay was capped at 125 g/t Ag. Populations 1, 2, 3 and 4 represent the massive sulphide mineralization. Populations 5 and 6 represent internal waste and missing samples within the massive sulphide units.

**Table 14: Summary of Ag populations within the Massive Sulphide Units**

Population	Mean (Ag g/t)	Proportion of Total samples	Number of Samples
1	98.01	2.20 %	9
2	51.03	10.70 %	45
3	23.50	31.07 %	132
4	7.01	33.22 %	141
5	1.79	9.03 %	38
6	0.04	13.79 %	59

**Figure 21: Lognormal cumulative frequency plot for Ag within massive sulphide units**

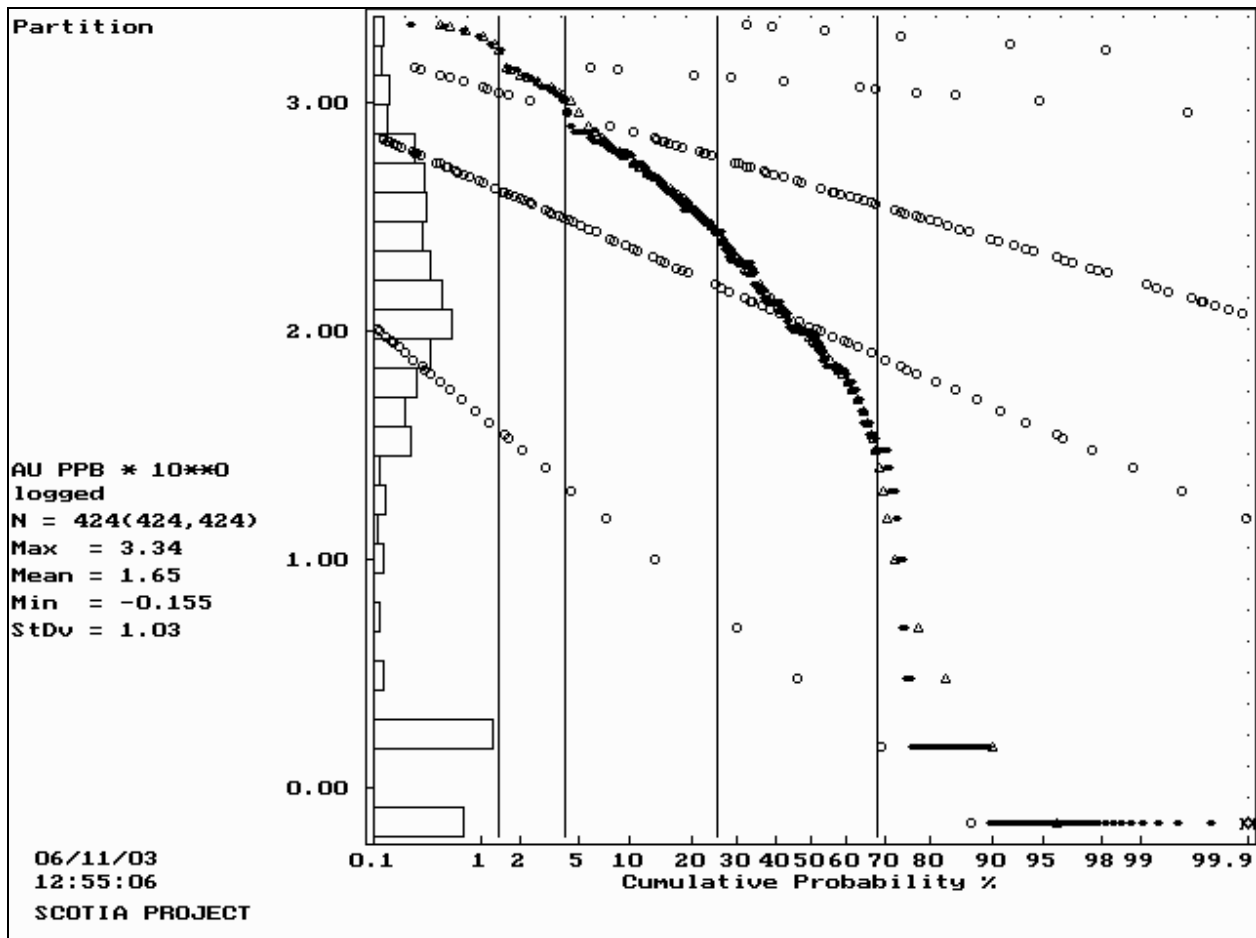


A log probability plot for gold, shown as Figure 22, shows 5 overlapping lognormal populations as described in Table 15. Population 1 for gold was considered erratic high grade and a capping level of 2 standard deviations above the mean of population 2 was used as a capping level. A total of 6 gold assays were capped at 1510 ppb Au. Populations 2 and 3 represent the massive sulphide mineralization. Populations 4 and 5 represent internal waste and missing samples within the massive sulphide units.

**Table 15: Summary of Au populations within the Massive Sulphide Units**

Population	Mean (Au ppb)	Proportion of Total samples	Number of Samples
1	2101	1.36 %	6
2	1215	2.74 %	12
3	438	21.28 %	90
4	104	42.66 %	181
5	2.7	31.95 %	135

**Figure 22: Lognormal cumulative frequency plot for Au within massive sulphide units**



Assays outside the massive sulphide units were also evaluated and capped to reduce the effect of isolated high grades in material considered waste. These assays were used to determine reasonable dilution values for blocks along the edges of the massive sulphide solids. Table 16 shows the capping levels and number of samples capped in the waste units.

**Table 16: Summary of capping levels for assays in waste**

Variable	Cap Level	Number Capped
Zn	1 % Zn	3
Pb	1 % Pb	2
Cu		None capped
Ag	20 g/t Ag	4
Au	500 ppb	3

The results of capping can be seen below in Tables 17 and 18 with reduced mean values and coefficient of variations in both the massive sulphide units and waste.

**Table 17: Summary of capped assay grades in Massive Sulphides**

	Zn (%)	Pb (%)	Cu (%)	Ag (g/t)	Au (ppb)
Number	424	424	424	424	424
Mean	7.85	0.84	0.09	16.83	205
Standard Deviation	11.53	1.38	0.13	20.27	299
Minimum value	0.001	0.001	0.001	0.001	0.7
Maximum value	46.50	8.30	0.74	125.0	1510
Coefficient of Variation	1.47	1.63	1.39	1.13	1.46

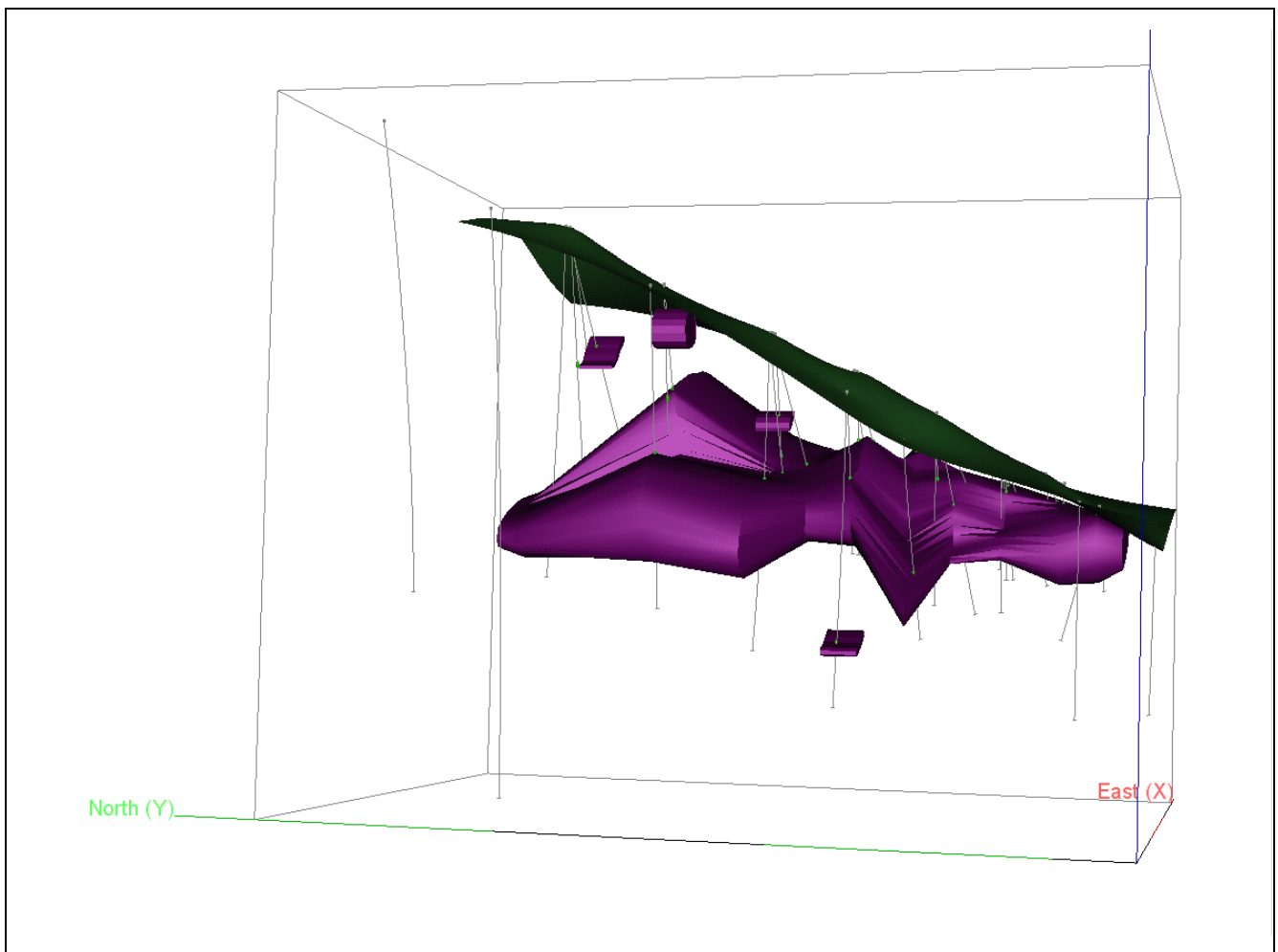
**Table 18: Summary of capped assay grade in Waste units**

	Zn (%)	Pb (%)	Cu (%)	Ag (g/t)	Au (ppb)
Number	392	392	392	392	392
Mean	0.10	0.04	0.03	2.46	39
Standard Deviation	0.20	0.10	0.05	4.05	85
Minimum value	0.001	0.001	0.001	0.001	0.7
Maximum value	1.00	1.00	0.47	20.0	500
Coefficient of Variation	1.97	2.84	2.16	1.64	2.15

### 14.2 Geologic Model

Individual drill holes were examined with the top and bottom of massive sulphide mineralization flagged. Intervals with small gaps in data or low grade sections were included as internal waste. In some holes, with larger gaps between sulphide units, hanging wall or foot wall zones were coded. These intervals were then joined to form a three dimensional solid that encompasses the massive sulphide mineralization (see Figure 23).

**Figure 23: View looking roughly east, showing massive sulphide solids in purple, surface topography in green and drill hole traces in grey**



### 14.3 Composites

Uniform down hole composites, 2 m in length, were formed that honored the massive sulphide solid boundaries. Composites at the bottom of the solids that were less than 1 m in length were combined with the adjoining sample to produce a uniform support of  $2 \pm 1$  m. A similar exercise was completed for all assays outside the massive sulphide solids in areas considered waste. Tables 19 and 20 show a summary of composite grades for each variable. Within waste units unsampled intervals between the tops of holes and the first assay and between the last assay and

end of holes were added at values of 0.001% for Zn, Pb and Cu, 0.001 g/t for Ag and 0.7 ppb for Au. This addition results in many more 2 m composites than the assays shown in Tables 19 and 20 and also results in higher coefficients of variation. Determining composites for waste intervals made it possible to estimate a grade for volumes of blocks along and outside the edges of the massive sulphide solids. In this manner realistic levels of dilution could be determined.

**Table 19: Summary of 2 m Composites in Massive Sulphides**

	Zn (%)	Pb (%)	Cu (%)	Ag (g/t)	Au (ppb)
Number	314	314	314	314	314
Mean	5.90	0.61	0.07	13.77	158
Standard Deviation	8.30	0.87	0.10	15.54	235
Minimum value	0.001	0.001	0.001	0.001	0.7
Maximum value	35.99	5.69	0.67	92.75	1398
Coefficient of Variation	1.40	1.42	1.44	1.12	1.49

**Table 20: Summary of 2 m Composites in Waste units**

	Zn (%)	Pb (%)	Cu (%)	Ag (g/t)	Au (ppb)
Number	1,761	1,761	1,761	1,761	1,761
Mean	0.023	0.006	0.005	0.47	8.4
Standard Deviation	0.091	0.030	0.017	1.71	35.1
Minimum value	0.001	0.001	0.001	0.001	0.7
Maximum value	0.94	0.79	0.28	18.50	500
Coefficient of Variation	3.95	4.81	3.57	3.67	4.19

#### **14.4 Variography**

Grade continuity was examined for each variable using pairwise relative semivariograms. The directions of longest continuity were along strike, Grid Azimuth 0 and across dip at Grid Azimuth 090 dip -45. Nested spherical models were fit to the anisotropy with massive sulphide models shown in Figures 24-38 and parameters summarized in Table 21 for the massive sulphides and Table 22 for waste.



**Table 21: Summary of semivariogram parameters for Scotia Massive Sulphide Units**

Variable	Azimuth	Dip	Nugget Effect $C_0$	Short Structure $C_1$	Long Structure $C_2$	Short Range $a_1$ (m)	Long Range $a_2$ (m)
Zinc	0°	0°	0.60	0.43	0.27	15	60
	90°	-45°	0.60	0.43	0.27	5	40
	270°	-45°	0.60	0.43	0.27	15	20
Lead	0°	0°	0.70	0.28	0.22	15	50
	90°	-45°	0.70	0.28	0.22	12	30
	270°	-45°	0.70	0.28	0.22	15	18
Copper	0°	0°	0.20	0.55	0.28	15	50
	90°	-45°	0.20	0.55	0.28	30	60
	270°	-45°	0.20	0.55	0.28	10	30
Silver	0°	0°	0.40	0.55	0.17	10	60
	90°	-45°	0.40	0.55	0.17	15	40
	270°	-45°	0.40	0.55	0.17	15	30
Gold	0°	0°	0.40	0.58	0.23	15	48
	90°	-45°	0.40	0.58	0.23	10	40
	270°	-45°	0.40	0.58	0.23	10	40

**Table 22: Summary of semivariogram parameters for Scotia Waste**

Variable	Azimuth	Dip	Nugget Effect $C_0$	Short Structure $C_1$	Long Structure $C_2$	Short Range $a_1$ (m)	Long Range $a_2$ (m)
Zinc	0°	0°	0.08	0.12	0.25	18	50
	90°	-45°	0.08	0.12	0.25	18	50
	270°	-45°	0.08	0.12	0.25	10	20
Lead	0°	0°	0.05	0.08	0.15	15	40
	90°	-45°	0.05	0.08	0.15	12	50
	270°	-45°	0.05	0.08	0.15	8	12
Copper	0°	0°	0.04	0.10	0.15	10	30
	90°	-45°	0.04	0.10	0.15	12	45
	270°	-45°	0.04	0.10	0.15	10	12
Silver	0°	0°	0.10	0.20	0.24	35	40
	90°	-45°	0.10	0.20	0.24	25	40
	270°	-45°	0.10	0.20	0.24	10	12
Gold	0°	0°	0.08	0.20	0.27	40	50
	90°	-45°	0.08	0.20	0.27	20	45
	270°	-45°	0.08	0.20	0.27	20	30

### 14.5 Block Model

Blocks 10 x 10 x 5 m high were superimposed on the three dimensional solids model to determine the percentage of massive sulphide solid within each block. Blocks were also compared to the topographical surface, interpolated from drill hole collars, to determine the proportion of each block below topography. The block model was oriented parallel to the grid and 20 degrees west of north. The origin in grid coordinates is as follows:

Lower left corner	4910 E	10 m wide	17 columns
	14980 N	10 m long	28 rows
Top of model	970 Elevation	5 m high	40 levels
No Rotation			

### 14.6 Bulk Density

There were no specific gravity determinations provided with the data base. Based on the fact this deposit has massive sulphides the bulk density at any point will be a function of sulphide content. Based on the assumption that the sulphides present were sphalerite (quantified by Zn assay) and galena (quantified by Pb assay) a specific gravity was calculated for each composite based on the Zn and Pb value of the composite. The approach was to assume 0 porosity, a base specific gravity of the host rock at 2.70 and the only sulphides present are sphalerite and galena. This assumption is surely conservative as there are certainly other sulphides such as pyrite, pyrrhotite and chalcopyrite as well as magnetite present in many composites. Unfortunately there were no assays for iron so the iron sulphides and oxides could not be included in the estimate. The procedure and assumptions were as follows:

- All lead values were in galena with SG = 7.50
- All zinc values were in sphalerite with SG = 3.90
- Host rock had an SG = 2.70
- A porosity of 0% was assumed

The bulk density for each block was calculated as follows:

First the weight percent for each mineral was calculated as:

- Wt. % Sphalerite was equal to the composite value of Zn \* 1.490
- Wt. % Galena was equal to the composite value of Pb \* 1.155
- Wt. % host rock was equal to 100 – Wt% Sphalerite – Wt% Galena

Then the SG for the block was calculated in a series of iterations starting at SG=2.70 and increasing SG each iteration by 0.01, until the Total equaled 100%.

For Example SG starts at 2.70

Total = %Sph + % Gal + % Rock

Where :  $\%Sph = (Wt\% \text{ Sphalerite} * SG) / 3.90$

$\%Gal = (Wt\% \text{ Galena} * SG) / 7.50$

$\%Rock = (Wt\% \text{ Rock} * SG) / 2.70$

If (Total = 100%) stop

If (Total < 100%) SG = SG+0.01 and repeat loop

Specific gravities for composites in both the massive sulphide zones and waste were calculated and the minimum, maximum and means are shown below.

**Table 23: Statistics for Calculated Composite Density Values**

	<b>Calculated SG In Massive Sulphides</b>	<b>Calculated SG In Waste</b>
Number of Composites	314	1,761
Mean SG	2.80	2.71
Minimum	2.71	2.71
Maximum	3.35	2.72

Using the composites and the search ellipses for zinc, a value for specific gravity was interpolated into each block estimated using inversed distance squared. As mentioned above these specific gravity determinations are most certainly conservative since they fail to account for other sulphides present, however they do take the measured Zn and Pb sulphides into account and are therefore better than applying an average to all blocks.

Future drill programs should collect as many specific gravity determinations as possible from both the massive sulphide and waste zones to better relate bulk density to grade.

#### ***14.7 Block Model Interpolation***

Grades for zinc, lead, copper, silver and gold were interpolated into each block with some proportion of massive sulphide present by ordinary kriging. The kriging exercise was completed in a series of four passes with the dimensions for the search ellipse expanding each pass. Each pass used a search ellipse oriented along the orthogonal axis described by the semivariogram. The first pass used an ellipse with dimensions equal to  $\frac{1}{4}$  the range of the semivariogram in each of the three principal directions. If a minimum of 4 composites were found in the search the block was estimated. If not, the search ellipse was expanded with dimensions equal to  $\frac{1}{2}$  the range of the semivariogram in each direction. Again a minimum of 4 composites were required to estimate the block. For those blocks still not estimated, the search ellipse was expanded to the full semivariogram range in pass 3 and finally in pass 4, to twice the range. In all cases, if more than 12 composites were found, the closest 12 were used. Only composites within the mineralized massive sulphide zone were used for this estimate.

The exercise was then repeated to estimate zinc, lead, copper, silver and gold within the waste zone for any block on the edge of the massive sulphide solid with some proportion of contained waste. For this exercise only waste composites were used. The kriging exercise described above was again used.

For blocks that contained both massive sulphides and waste a weighted average grade was calculated.

Tables 24 and 25 show the search parameters used in kriging massive sulphide and waste respectively.

Table 24: Summary of Search Parameters for Kriging Massive Sulphide Zone

Zone	Variable	Pass	Number Estimated	Direction	Dist. (m)	Direction	Dist. (m)	Direction	Dist. (m)
Massive Sulphide	Zn	1	252	Az 0 Dip 0	15	Az 270 Dip -45	5	Az 90 Dip -45	12.5
		2	579	Az 0 Dip 0	30	Az 270 Dip -45	10	Az 90 Dip -45	25
		3	543	Az 0 Dip 0	60	Az 270 Dip -45	20	Az 90 Dip -45	50
		4	305	Az 0 Dip 0	120	Az 270 Dip -45	40	Az 90 Dip -45	100
	Pb	1	120	Az 0 Dip 0	12.5	Az 270 Dip -45	4.5	Az 90 Dip -45	7.5
		2	482	Az 0 Dip 0	25	Az 270 Dip -45	9	Az 90 Dip -45	15
		3	635	Az 0 Dip 0	50	Az 270 Dip -45	18	Az 90 Dip -45	30
		4	442	Az 0 Dip 0	120	Az 270 Dip -45	40	Az 90 Dip -45	100
	Cu	1	331	Az 0 Dip 0	12.5	Az 270 Dip -45	7.5	Az 90 Dip -45	15
		2	651	Az 0 Dip 0	25	Az 270 Dip -45	15	Az 90 Dip -45	30
		3	545	Az 0 Dip 0	50	Az 270 Dip -45	30	Az 90 Dip -45	60
		4	152	Az 0 Dip 0	120	Az 270 Dip -45	40	Az 90 Dip -45	100
	Ag	1	301	Az 0 Dip 0	15	Az 270 Dip -45	7.5	Az 90 Dip -45	10
		2	654	Az 0 Dip 0	30	Az 270 Dip -45	15	Az 90 Dip -45	20
		3	550	Az 0 Dip 0	60	Az 270 Dip -45	30	Az 90 Dip -45	40
		4	174	Az 0 Dip 0	120	Az 270 Dip -45	40	Az 90 Dip -45	100
	Au	1	306	Az 0 Dip 0	12	Az 270 Dip -45	10	Az 90 Dip -45	10
		2	720	Az 0 Dip 0	24	Az 270 Dip -45	20	Az 90 Dip -45	20
		3	571	Az 0 Dip 0	48	Az 270 Dip -45	40	Az 90 Dip -45	40
		4	82	Az 0 Dip 0	120	Az 270 Dip -45	40	Az 90 Dip -45	100

Table 25: Summary of Search Parameters for Kriging Waste

Zone	Variable	Pass	Number Estimated	Direction	Dist. (m)	Direction	Dist. (m)	Direction	Dist. (m)
Waste Blocks	Zn	1	159	Az 0 Dip 0	12.5	Az 270 Dip -45	5	Az 90 Dip -45	12.5
		2	404	Az 0 Dip 0	25	Az 270 Dip -45	10	Az 90 Dip -45	25
		3	373	Az 0 Dip 0	50	Az 270 Dip -45	20	Az 90 Dip -45	50
		4	134	Az 0 Dip 0	100	Az 270 Dip -45	40	Az 90 Dip -45	100
	Pb	1	77	Az 0 Dip 0	10	Az 270 Dip -45	3	Az 90 Dip -45	12.5
		2	308	Az 0 Dip 0	20	Az 270 Dip -45	6	Az 90 Dip -45	25
		3	458	Az 0 Dip 0	40	Az 270 Dip -45	12	Az 90 Dip -45	50
		4	227	Az 0 Dip 0	100	Az 270 Dip -45	40	Az 90 Dip -45	100
	Cu	1	63	Az 0 Dip 0	7.5	Az 270 Dip -45	3	Az 90 Dip -45	11.25
		2	224	Az 0 Dip 0	15	Az 270 Dip -45	6	Az 90 Dip -45	22.5
		3	478	Az 0 Dip 0	30	Az 270 Dip -45	12	Az 90 Dip -45	45
		4	305	Az 0 Dip 0	100	Az 270 Dip -45	40	Az 90 Dip -45	100
	Ag	1	66	Az 0 Dip 0	10	Az 270 Dip -45	3	Az 90 Dip -45	10
		2	280	Az 0 Dip 0	20	Az 270 Dip -45	6	Az 90 Dip -45	20
		3	454	Az 0 Dip 0	40	Az 270 Dip -45	12	Az 90 Dip -45	40
		4	270	Az 0 Dip 0	100	Az 270 Dip -45	40	Az 90 Dip -45	100
	Au	1	209	Az 0 Dip 0	12.5	Az 270 Dip -45	7.5	Az 90 Dip -45	11.25
		2	442	Az 0 Dip 0	25	Az 270 Dip -45	15	Az 90 Dip -45	22.5
		3	324	Az 0 Dip 0	50	Az 270 Dip -45	30	Az 90 Dip -45	45
		4	95	Az 0 Dip 0	100	Az 270 Dip -45	40	Az 90 Dip -45	100

## 14.8 Classification

Based on the study herein reported, delineated mineralization of the Scotia Deposit is classified as a resource according to the following definition from National Instrument 43-101.

*“In this Instrument, the terms "mineral resource", "inferred mineral resource", "indicated mineral resource" and "measured mineral resource" have the meanings ascribed to those terms by the Canadian Institute of Mining, Metallurgy and Petroleum, as the CIM Standards on Mineral Resources and Reserves Definitions and Guidelines adopted by CIM Council on August 20, 2000, as those definitions may be amended from time to time by the Canadian Institute of Mining, Metallurgy, and Petroleum.”*

*“A **Mineral Resource** is a concentration or occurrence of natural, solid, inorganic or fossilized organic material in or on the Earth's crust in such form and quantity and of such a grade or quality that it has reasonable prospects for economic extraction. The location, quantity, grade, geological characteristics and continuity of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge.”*

The terms Measured, Indicated and Inferred are defined in NI 43-101 as follows:

*“A '**Measured Mineral Resource**' is that part of a Mineral Resource for which quantity, grade or quality, densities, shape, physical characteristics are so well established that they can be estimated with confidence sufficient to allow the appropriate application of technical and economic parameters, to support production planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough to confirm both geological and grade continuity.”*

*“An '**Indicated Mineral Resource**' is that part of a Mineral Resource for which quantity, grade or quality, densities, shape and physical characteristics, can be estimated with a level of confidence sufficient to allow the appropriate application of technical and economic parameters, to support mine planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough for geological and grade continuity to be reasonably assumed.”*

*“An '**Inferred Mineral Resource**' is that part of a Mineral Resource for which quantity and grade or quality can be estimated on the basis of geological evidence and limited*

*sampling and reasonably assumed, but not verified, geological and grade continuity. The estimate is based on limited information and sampling gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes.”*

The classification of the resource is a function of geologic and grade continuity. Geologic continuity is established by drill holes and surface mapping. Grade continuity can be quantified by geostatistics using the semivariogram. The process of estimating the resource using different search ellipsoids tied to the semivariogram range allows for the grade continuity to be used as a classification tool. For the Scotia deposit classification of the resource was completed as follows:

- Measured – Blocks estimated during pass 1 for Zn using a search ellipsoid with dimensions equal to ¼ the semivariogram range
- Indicated – Blocks unclassified and estimated in Pass 2 for Zn using a search ellipsoid with dimensions equal to ½ the semivariogram range
- Inferred – All other Blocks estimated.

The results are presented as a series of grade-tonnage tables for each classification type. A one percent Zn cutoff is highlighted to compare with previous manual estimates. At this time no economic studies have been completed and as a result no information is available to determine a proper economic cutoff. Tables 26 to 29 show the results confined to the mineralized solids (what you would expect if you could mine to the solid boundaries).

**Table 26: Scotia Measured Resource - Within Mineralized Shell**

SCOTIA MEASURED RESOURCE - WITHIN MINERALIZED SHELL						
Cutoff	Tonnes > Cutoff	Grade > Cutoff				
(ZN %)	(tonnes)	Zn (%)	Ag (g/t)	Cu (%)	Au (g/t)	Pb (%)
<b>1.00</b>	<b>246,000</b>	<b>5.73</b>	<b>14.25</b>	<b>0.08</b>	<b>0.16</b>	<b>0.63</b>
2.00	188,000	7.05	15.13	0.08	0.16	0.73
3.00	164,000	7.68	15.79	0.08	0.17	0.79
4.00	146,000	8.22	16.26	0.08	0.17	0.81
5.00	128,000	8.71	16.82	0.08	0.18	0.83
6.00	99,000	9.67	17.23	0.07	0.18	0.87
7.00	85,000	10.23	17.93	0.08	0.19	0.90
8.00	58,000	11.51	18.03	0.07	0.16	0.98
9.00	42,000	12.63	19.71	0.07	0.17	1.08
10.00	37,000	13.02	20.58	0.07	0.18	1.11
11.00	26,000	14.20	22.00	0.07	0.20	1.11
12.00	24,000	14.46	23.35	0.08	0.20	1.16
13.00	17,000	15.31	21.77	0.08	0.23	1.14
14.00	14,000	15.76	21.91	0.07	0.20	1.24
15.00	9,500	16.30	22.22	0.07	0.21	1.22
16.00	3,000	17.76	22.70	0.01	0.30	0.98
17.00	1,500	18.53	31.19	0.01	0.39	1.29
18.00	1,500	18.53	31.19	0.01	0.39	1.29

Table 27: Scotia Indicated Resource - Within Mineralized Shell

SCOTIA INDICATED RESOURCE - WITHIN MINERALIZED SHELL						
Cutoff	Tonnes > Cutoff	Grade > Cutoff				
(ZN %)	(tonnes)	Zn (%)	Ag (g/t)	Cu (%)	Au (g/t)	Pb (%)
<b>1.00</b>	<b>557,000</b>	<b>4.49</b>	<b>13.70</b>	<b>0.10</b>	<b>0.17</b>	<b>0.48</b>
2.00	401,000	5.66	15.64	0.10	0.19	0.58
3.00	328,000	6.37	16.99	0.11	0.21	0.64
4.00	273,000	6.95	17.83	0.11	0.23	0.70
5.00	218,000	7.59	18.64	0.11	0.24	0.71
6.00	165,000	8.26	18.88	0.11	0.25	0.74
7.00	103,000	9.33	18.38	0.10	0.22	0.80
8.00	68,000	10.28	16.48	0.10	0.17	0.83
9.00	44,000	11.32	14.86	0.10	0.16	0.81
10.00	36,000	11.70	14.80	0.10	0.15	0.79
11.00	23,000	12.33	16.11	0.10	0.16	0.77
12.00	9,900	13.49	17.68	0.10	0.13	0.91
13.00	6,400	13.97	17.39	0.08	0.11	0.89
14.00	2,200	15.12	22.71	0.07	0.18	0.99
15.00	700	16.35	23.39	0.08	0.22	1.15
16.00	700	16.35	23.39	0.08	0.22	1.15

Table 28: Scotia Inferred Resource - Within Mineralized Shell

SCOTIA INFERRED RESOURCE - WITHIN MINERALIZED SHELL						
Cutoff	Tonnes > Cutoff	Grade > Cutoff				
(ZN %)	(tonnes)	Zn (%)	Ag (g/t)	Cu (%)	Au (g/t)	Pb (%)
<b>1.00</b>	<b>702,000</b>	<b>4.47</b>	<b>13.74</b>	<b>0.10</b>	<b>0.19</b>	<b>0.45</b>
2.00	536,000	5.40	15.59	0.11	0.22	0.53
3.00	406,000	6.32	17.73	0.11	0.26	0.61
4.00	351,000	6.76	18.74	0.12	0.28	0.65
5.00	283,000	7.29	19.75	0.12	0.29	0.68
6.00	214,000	7.88	20.20	0.13	0.30	0.71
7.00	140,000	8.56	20.16	0.13	0.30	0.69
8.00	92,000	9.10	21.24	0.14	0.34	0.70
9.00	37,000	9.86	21.45	0.11	0.29	0.82
10.00	8,600	11.24	22.80	0.07	0.16	1.18
11.00	3,700	12.51	20.46	0.06	0.14	1.08
12.00	2,400	13.28	18.41	0.05	0.09	0.93
13.00	2,000	13.51	18.99	0.05	0.10	0.94



**Table 29: Scotia Measured plus Indicated Resource - Within Mineralized Shell**

<b>SCOTIA MEASURED PLUS INDICATED RESOURCE - WITHIN MINERALIZED SHELL</b>						
<b>Cutoff</b>	<b>Tonnes &gt; Cutoff</b>	<b>Grade &gt; Cutoff</b>				
<b>(ZN %)</b>	<b>(tonnes)</b>	<b>Zn (%)</b>	<b>Ag (g/t)</b>	<b>Cu (%)</b>	<b>Au (g/t)</b>	<b>Pb (%)</b>
<b>1.00</b>	<b>802,000</b>	<b>4.87</b>	<b>13.87</b>	<b>0.09</b>	<b>0.17</b>	<b>0.53</b>
2.00	589,000	6.10	15.48	0.10	0.18	0.63
3.00	493,000	6.81	16.59	0.10	0.20	0.69
4.00	418,000	7.39	17.28	0.10	0.21	0.74
5.00	345,000	8.00	17.97	0.10	0.22	0.75
6.00	264,000	8.80	18.26	0.10	0.23	0.79
7.00	188,000	9.74	18.18	0.09	0.21	0.84
8.00	126,000	10.85	17.20	0.08	0.17	0.90
9.00	86,000	11.96	17.24	0.08	0.17	0.94
10.00	74,000	12.37	17.73	0.08	0.16	0.96
11.00	49,000	13.32	19.23	0.08	0.18	0.95
12.00	34,000	14.18	21.69	0.08	0.18	1.08
13.00	23,000	14.94	20.55	0.08	0.20	1.07
14.00	16,000	15.67	22.02	0.07	0.20	1.20
15.00	10,000	16.30	22.30	0.07	0.21	1.21
16.00	3,700	17.49	22.83	0.02	0.28	1.01
17.00	1,500	18.53	31.19	0.01	0.39	1.29
18.00	1,500	18.53	31.19	0.01	0.39	1.29

Tables 30 to 33 include the dilution expected if one were to mine complete blocks.

**Table 30: Scotia Measured Resource - Total Blocks**

<b>SCOTIA MEASURED RESOURCE - TOTAL</b>						
<b>Cutoff</b>	<b>Tonnes &gt; Cutoff</b>	<b>Grade &gt; Cutoff</b>				
<b>(ZN %)</b>	<b>(tonnes)</b>	<b>Zn (%)</b>	<b>Ag (g/t)</b>	<b>Cu (%)</b>	<b>Au (g/t)</b>	<b>Pb (%)</b>
<b>1.00</b>	<b>258,000</b>	<b>5.41</b>	<b>13.35</b>	<b>0.07</b>	<b>0.15</b>	<b>0.59</b>
2.00	198,000	6.60	14.15	0.07	0.15	0.68
3.00	168,000	7.31	14.99	0.07	0.16	0.74
4.00	146,000	7.91	15.66	0.07	0.16	0.78
5.00	126,000	8.42	16.33	0.08	0.17	0.81
6.00	93,000	9.53	16.75	0.07	0.18	0.85
7.00	75,000	10.28	17.22	0.08	0.18	0.87
8.00	56,000	11.22	17.75	0.07	0.15	0.96
9.00	39,000	12.41	20.00	0.07	0.16	1.08
10.00	31,000	13.20	21.45	0.07	0.18	1.15
11.00	24,000	14.12	22.92	0.07	0.20	1.13
12.00	24,000	14.12	22.92	0.07	0.20	1.13
13.00	13,000	15.38	23.24	0.07	0.25	1.15
14.00	10,000	15.92	21.82	0.06	0.20	1.20
15.00	7,500	16.47	23.00	0.05	0.22	1.17
16.00	3,000	17.76	22.70	0.01	0.30	0.98
17.00	1,500	18.53	31.19	0.01	0.39	1.29
18.00	1,500	18.53	31.19	0.01	0.39	1.29

Table 31: Scotia Indicated Resource - Total Blocks

SCOTIA INDICATED RESOURCE - TOTAL						
Cutoff	Tonnes > Cutoff	Grade > Cutoff				
(ZN %)	(tonnes)	Zn (%)	Ag (g/t)	Cu (%)	Au (g/t)	Pb (%)
<b>1.00</b>	<b>618,000</b>	<b>3.91</b>	<b>11.85</b>	<b>0.09</b>	<b>0.15</b>	<b>0.42</b>
2.00	430,000	4.98	13.68	0.09	0.17	0.51
3.00	315,000	5.88	15.28	0.10	0.20	0.58
4.00	243,000	6.59	16.83	0.10	0.22	0.66
5.00	181,000	7.34	18.09	0.10	0.23	0.68
6.00	132,000	8.04	18.71	0.10	0.25	0.74
7.00	84,000	8.93	18.36	0.09	0.22	0.77
8.00	44,000	10.20	15.83	0.08	0.17	0.81
9.00	29,000	11.17	14.14	0.08	0.16	0.76
10.00	24,000	11.48	14.19	0.08	0.15	0.76
11.00	14,000	12.14	15.62	0.08	0.16	0.72
12.00	4,400	13.79	17.10	0.06	0.11	0.81
13.00	4,400	13.79	17.10	0.06	0.11	0.81
14.00	1,500	14.51	22.39	0.06	0.15	0.91

Table 32: Scotia Inferred Resource - Total Blocks

SCOTIA INFERRED RESOURCE - TOTAL						
Cutoff	Tonnes > Cutoff	Grade > Cutoff				
(ZN %)	(tonnes)	Zn (%)	Ag (g/t)	Cu (%)	Au (g/t)	Pb (%)
<b>1.00</b>	<b>795,000</b>	<b>3.76</b>	<b>11.53</b>	<b>0.09</b>	<b>0.16</b>	<b>0.38</b>
2.00	562,000	4.70	13.63	0.09	0.20	0.46
3.00	393,000	5.65	16.01	0.10	0.24	0.55
4.00	308,000	6.26	17.55	0.11	0.27	0.59
5.00	215,000	7.00	19.24	0.12	0.29	0.65
6.00	150,000	7.69	20.32	0.13	0.32	0.68
7.00	81,000	8.60	20.84	0.14	0.33	0.66
8.00	62,000	8.94	22.01	0.15	0.38	0.67
9.00	26,000	9.52	22.52	0.12	0.32	0.79
10.00	2,900	10.30	29.24	0.07	0.22	1.32

Table 33: Scotia Measured plus Indicated Resource - Total Blocks

SCOTIA MEASURED PLUS INDICATED RESOURCE - TOTAL						
Cutoff	Tonnes > Cutoff	Grade > Cutoff				
(ZN %)	(tonnes)	Zn (%)	Ag (g/t)	Cu (%)	Au (g/t)	Pb (%)
<b>1.00</b>	<b>876,000</b>	<b>4.35</b>	<b>12.29</b>	<b>0.08</b>	<b>0.15</b>	<b>0.47</b>
2.00	628,000	5.49	13.83	0.09	0.16	0.56
3.00	483,000	6.38	15.18	0.09	0.18	0.64
4.00	389,000	7.09	16.39	0.09	0.20	0.70
5.00	307,000	7.78	17.37	0.09	0.21	0.73
6.00	225,000	8.65	17.90	0.09	0.22	0.79
7.00	159,000	9.56	17.82	0.09	0.20	0.82
8.00	101,000	10.77	16.90	0.08	0.16	0.89
9.00	68,000	11.88	17.53	0.07	0.16	0.94
10.00	55,000	12.44	18.24	0.07	0.17	0.98
11.00	38,000	13.37	20.15	0.08	0.19	0.98
12.00	28,000	14.07	22.01	0.07	0.18	1.08
13.00	18,000	14.98	21.72	0.07	0.22	1.06
14.00	12,000	15.75	21.89	0.06	0.20	1.17
15.00	7,500	16.47	23.00	0.05	0.22	1.17
16.00	3,000	17.76	22.70	0.01	0.30	0.98
17.00	1,500	18.53	31.19	0.01	0.39	1.29
18.00	1,500	18.53	31.19	0.01	0.39	1.29

The results are also presented as a series of grid north-south cross sections showing drill holes projected up to 25 m on either side of sections and both estimated blocks and drill hole composites within the mineralized zone colour coded by zinc grade. The sections are shown to demonstrate the grade distribution and show the relationship between composites and estimated grades.

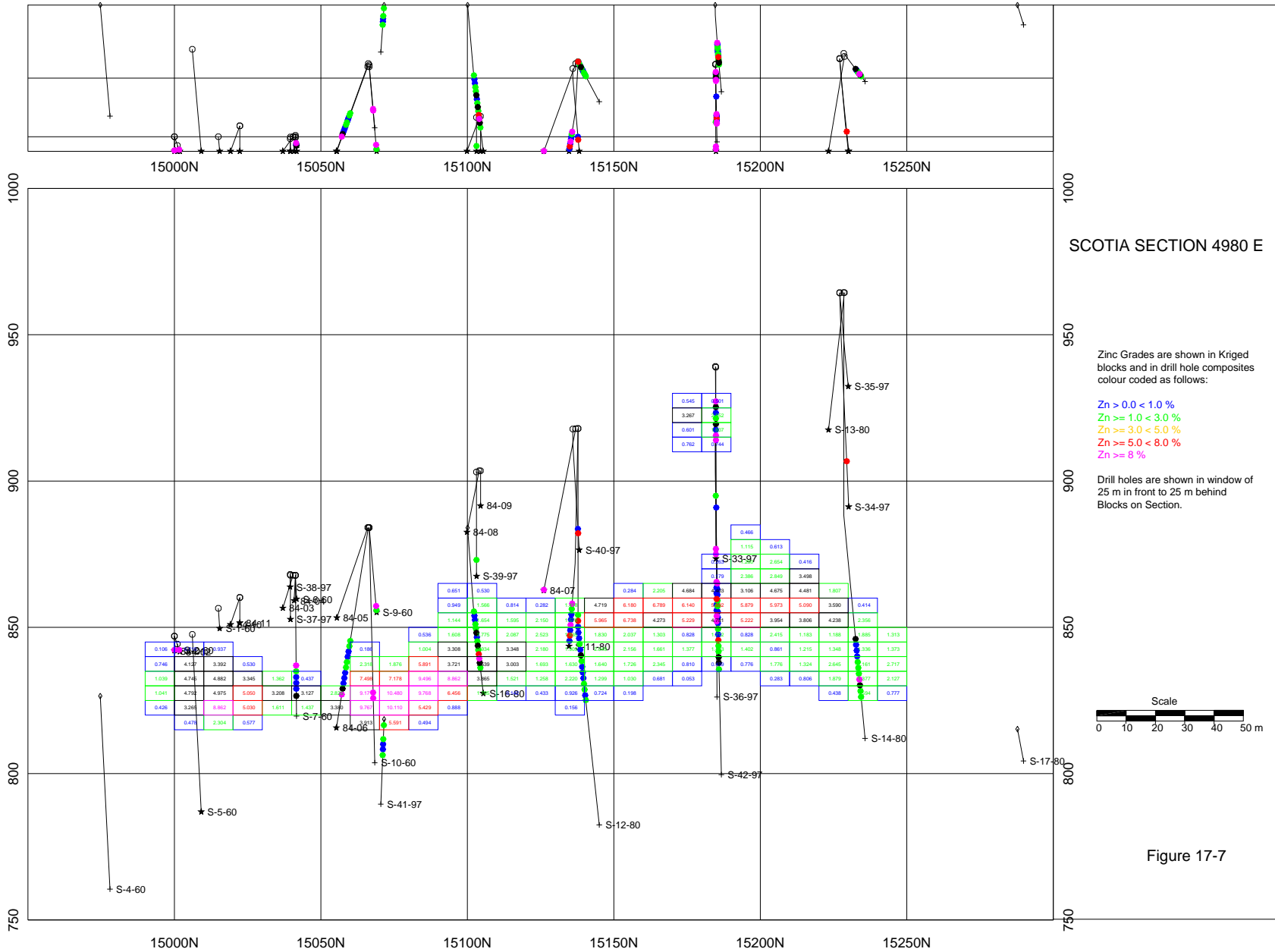
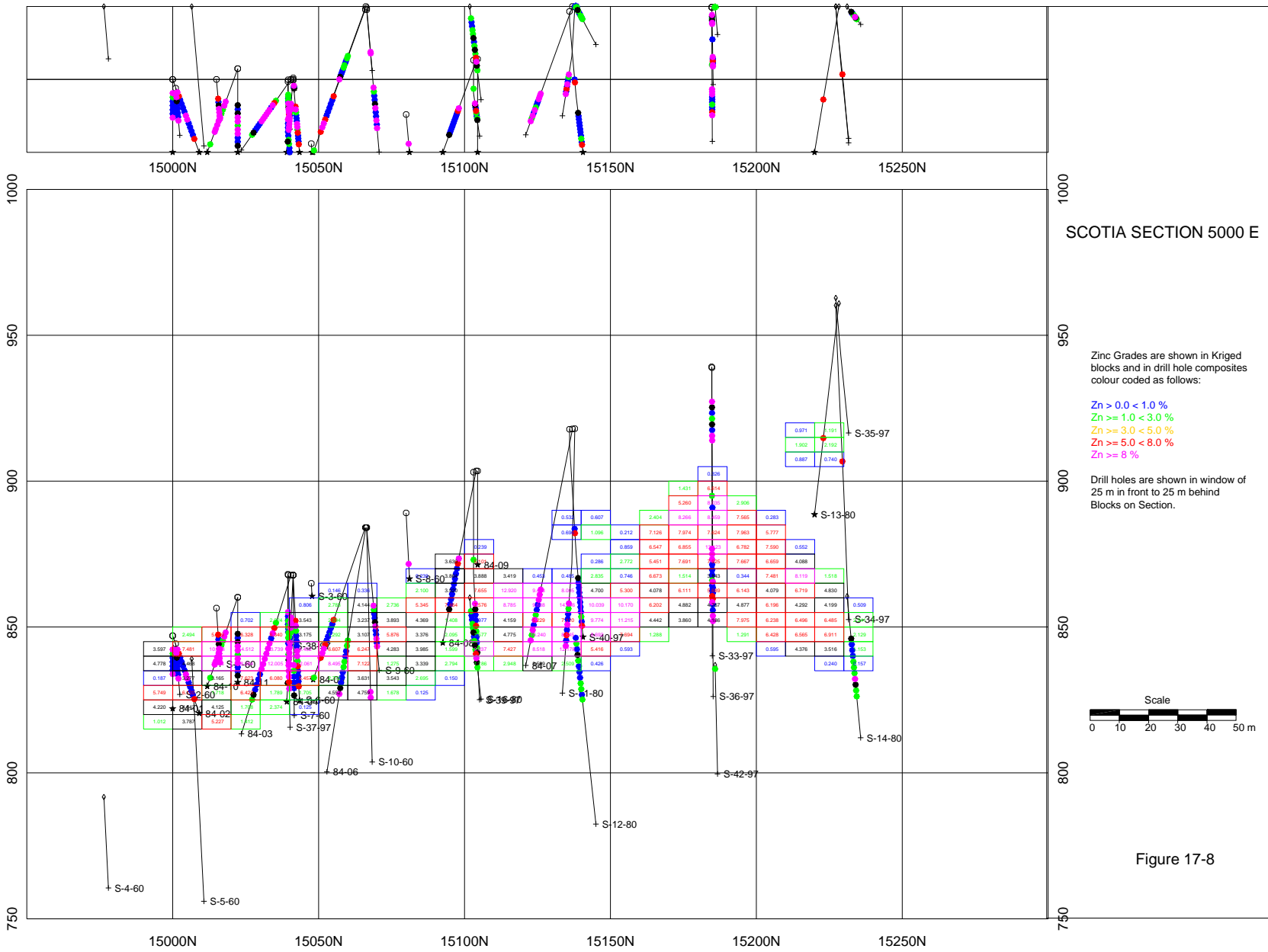


Figure 17-7



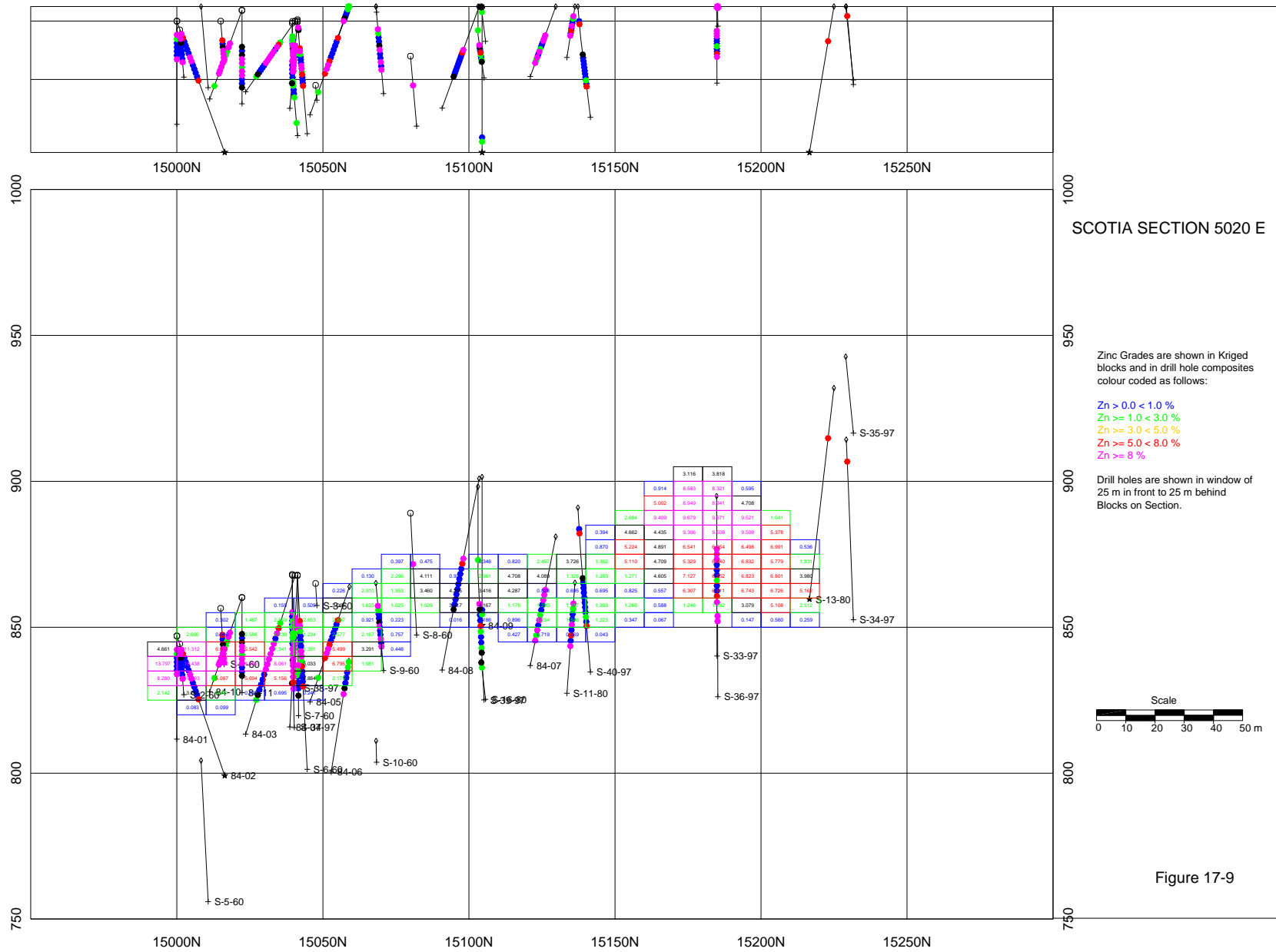


Figure 17-9

**Table 34: Listing Of Drill Holes Used In Resource Estimate**

HOLE	EASTING	NORTHING	ELEVATION	HLENGTH
84-01	5000.00	15000.00	847.00	50.00
84-02	5000.00	15000.00	847.00	81.10
84-03	5000.00	15040.50	867.80	61.90
84-04	5000.00	15041.30	867.80	60.00
84-05	4976.00	15066.00	884.10	84.40
84-06	4975.00	15066.20	884.10	92.40
84-07	4975.00	15137.00	917.90	93.60
84-08	4993.60	15104.00	903.50	78.30
84-09	4993.00	15104.50	903.50	78.30
84-10	4996.30	15022.30	860.20	45.70
84-11	4996.30	15022.30	860.20	45.70
S-1-60	5000.00	15015.00	856.50	23.80
S-10-60	4975.50	15066.50	884.10	83.20
S-11-80	4975.20	15137.80	918.00	98.20
S-12-80	4974.40	15137.80	917.90	137.20
S-13-80	4972.60	15228.70	964.40	139.00
S-14-80	4971.50	15228.50	964.40	153.30
S-15-80	4948.30	15099.60	890.60	130.10
S-16-80	4949.50	15099.60	890.60	87.20
S-17-80	4852.00	15268.00	988.00	215.50
S-18-81	4807.00	15208.00	945.00	252.10
S-19-81	4728.00	14970.00	795.00	268.20
S-2-60	5003.00	15001.00	844.30	23.80
S-20-81	4728.00	14970.00	795.00	382.40
S-21-81	4400.00	15845.00	920.00	201.50
S-3-60	5022.00	15047.50	865.00	9.10
S-33-97	4975.30	15184.70	939.20	109.20
S-34-97	4973.20	15227.10	964.30	121.90
S-35-97	4973.40	15227.10	964.40	67.10
S-36-97	4975.20	15184.80	938.90	115.80
S-37-97	5000.10	15039.60	867.80	54.86
S-38-97	5000.70	15039.50	868.10	54.86
S-39-97	4993.40	15103.10	903.10	82.30
S-4-60	4953.00	14974.50	830.00	80.20
S-40-97	4976.70	15136.00	917.80	100.58
S-41-97	4926.30	15072.40	869.20	91.40
S-42-97	4950.90	15184.60	935.70	140.21
S-5-60	4970.10	15006.10	847.60	105.80
S-6-60	5000.30	15041.30	867.80	76.80
S-7-60	4999.50	15041.30	867.80	48.30
S-8-60	5012.00	15080.00	889.10	48.20
S-9-60	4976.10	15066.50	884.10	69.20

Figure 24: Semivariogram In Massive Sulphide Units for Zn Az 0 Dip 0

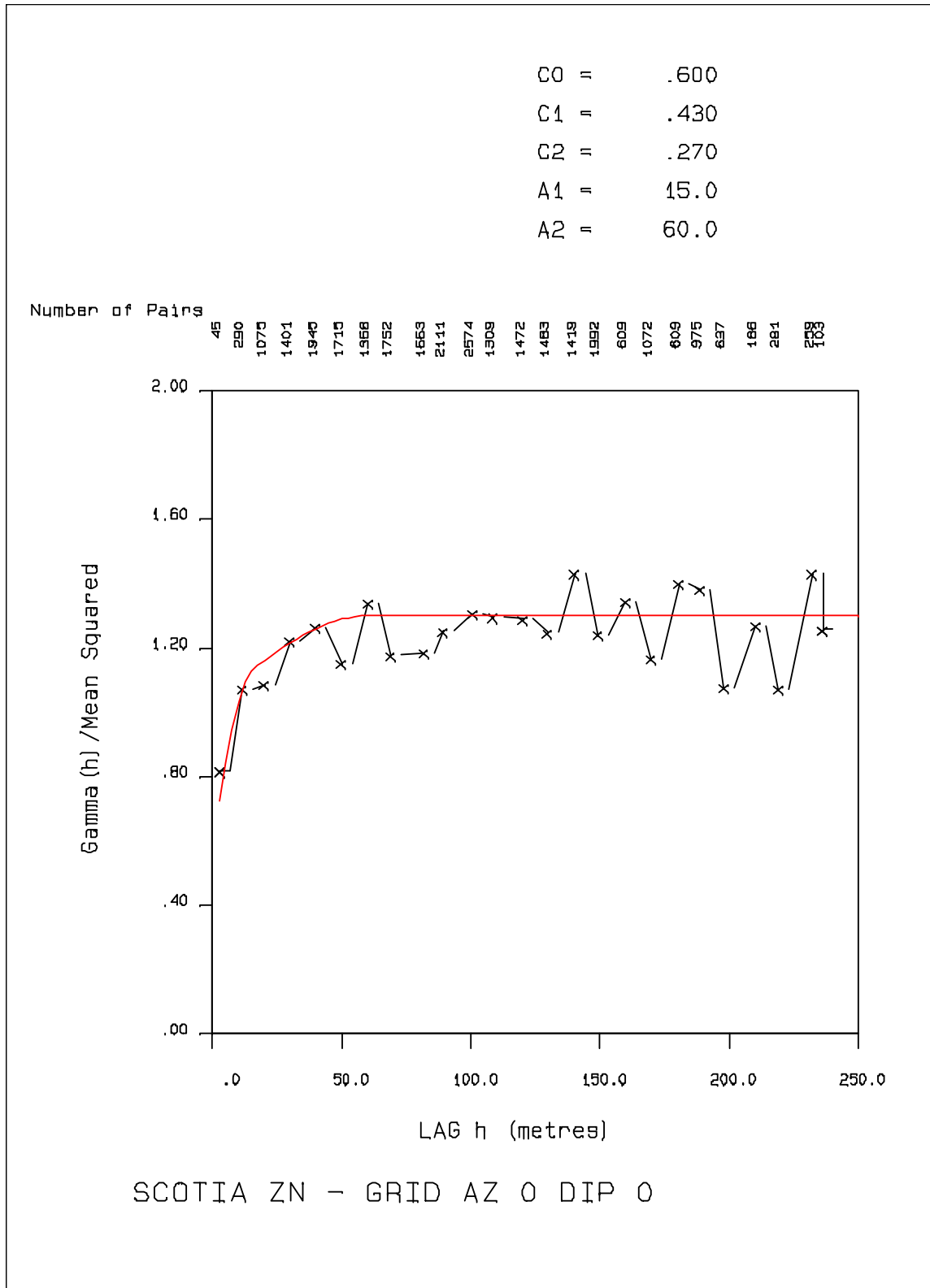




Figure 25: Semivariogram In Massive Sulphide Units for Zn Az 270 Dip -45

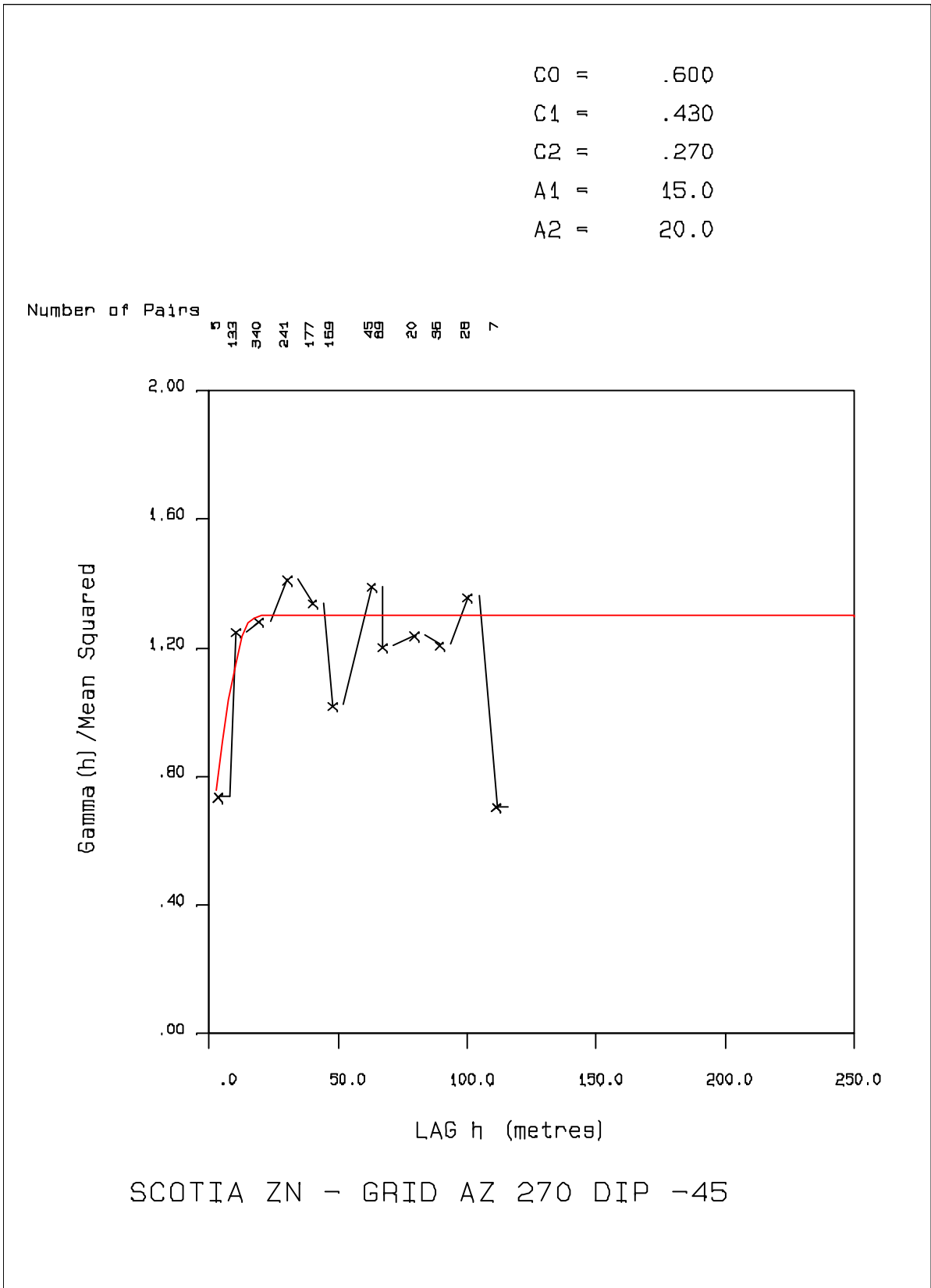


Figure 26: Semivariogram In Massive Sulphide Units for Zn Az 90 Dip -45

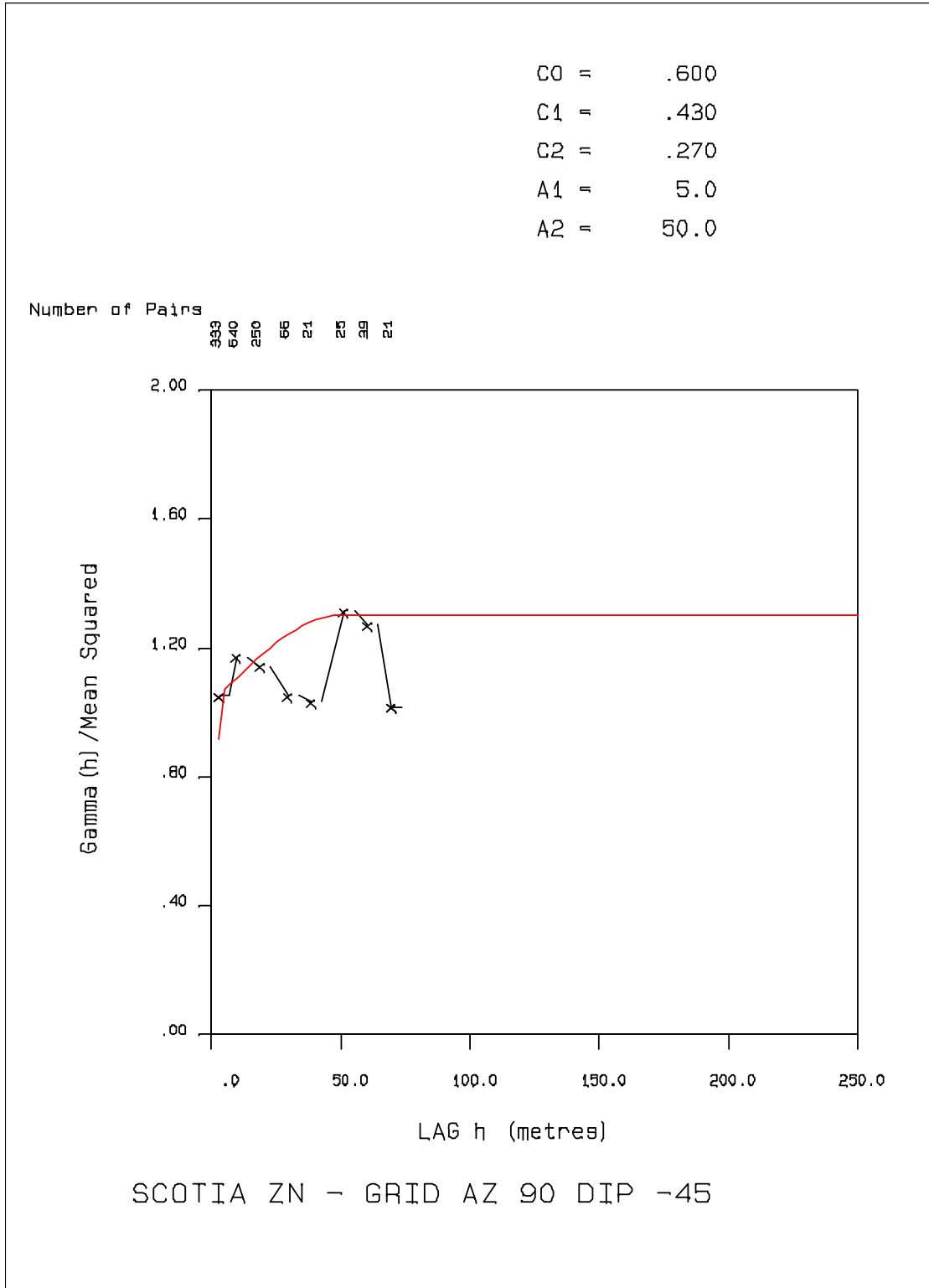


Figure 27: Semivariogram In Massive Sulphide Units for Pb Az 0 Dip 0

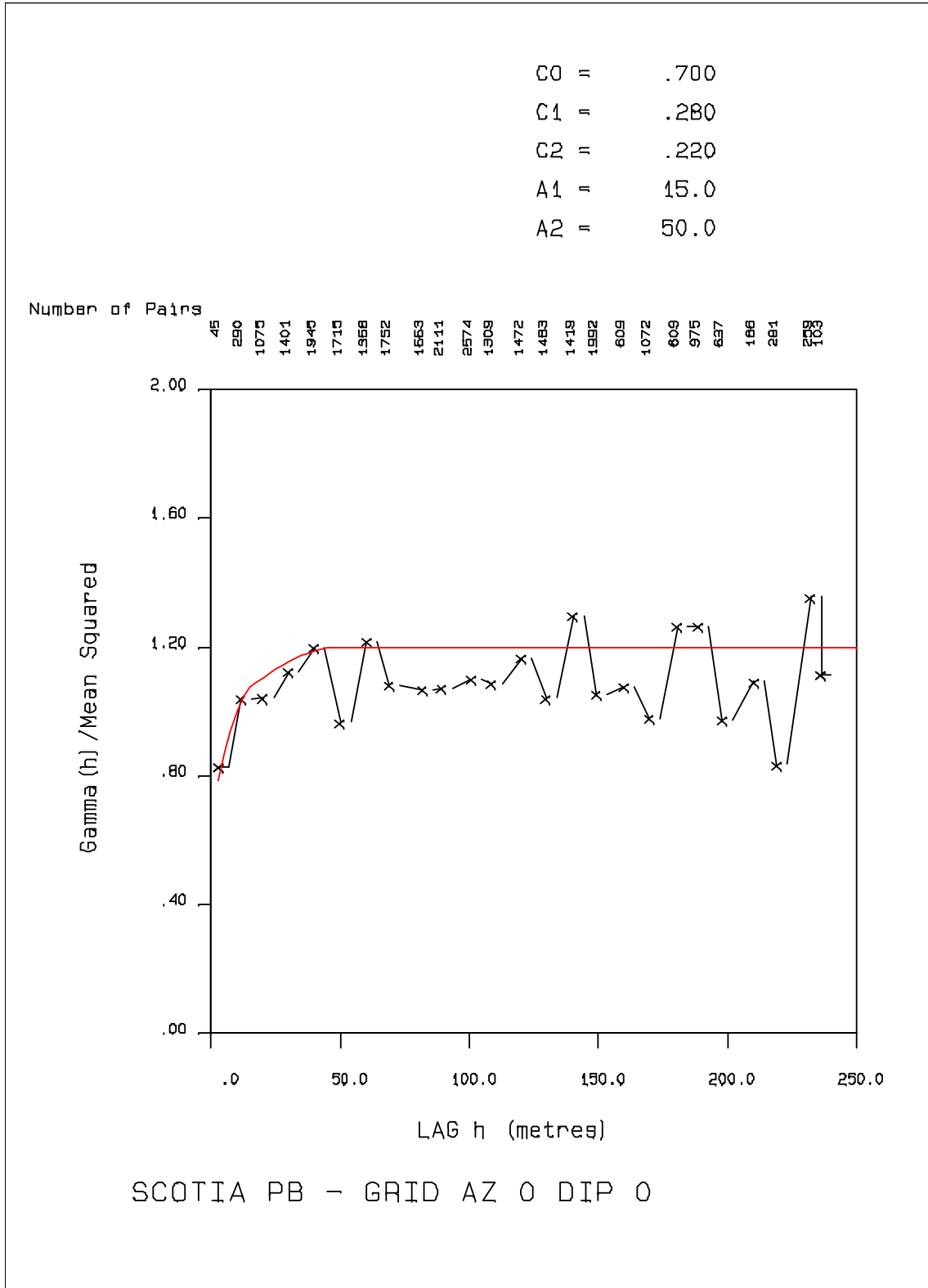


Figure 28: Semivariograms In Massive Sulphide Units for Pb Az 270 Dip -45

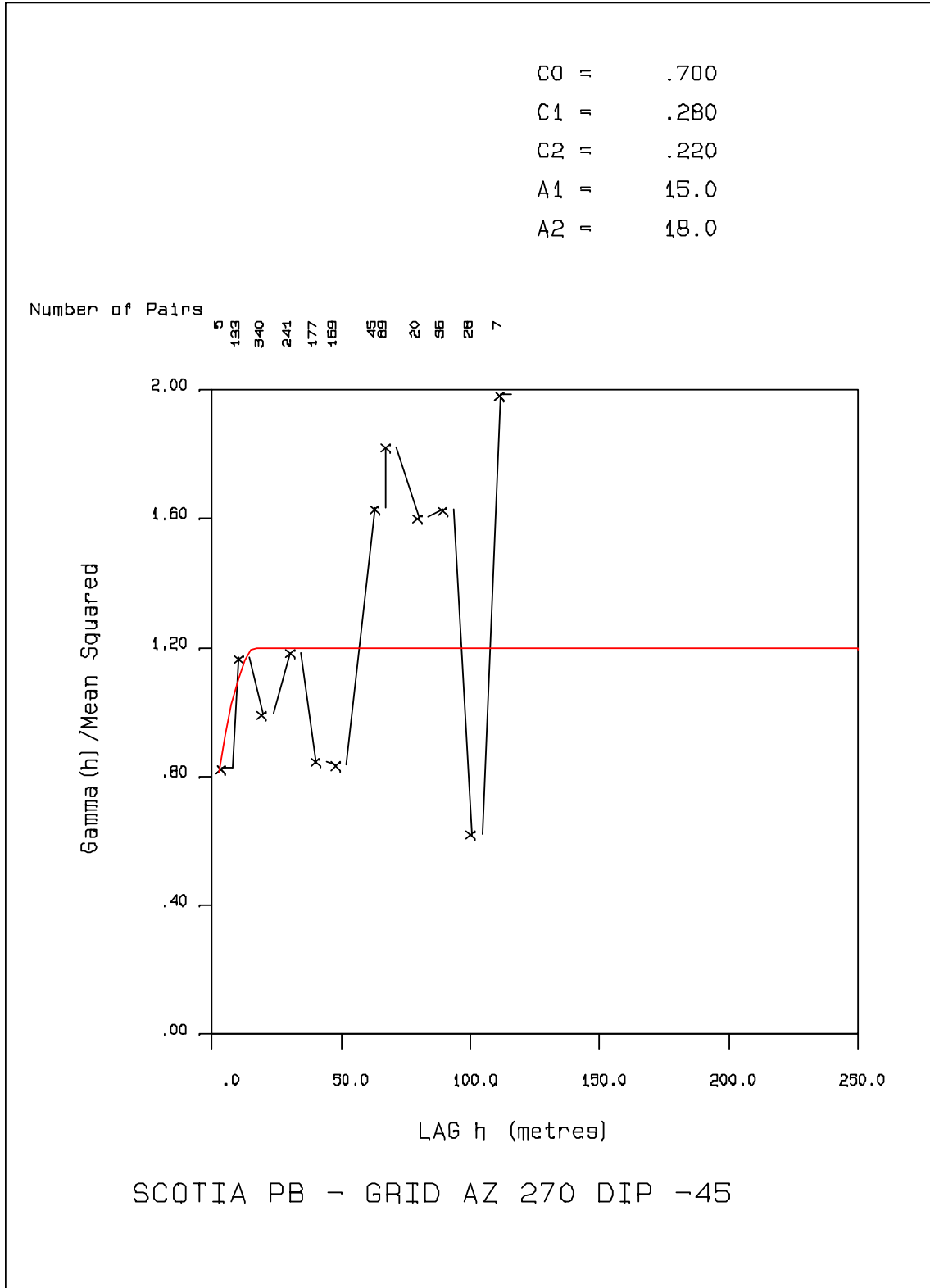


Figure 29: Semivariograms In Massive Sulphide Units for Pb Az 90 Dip -45

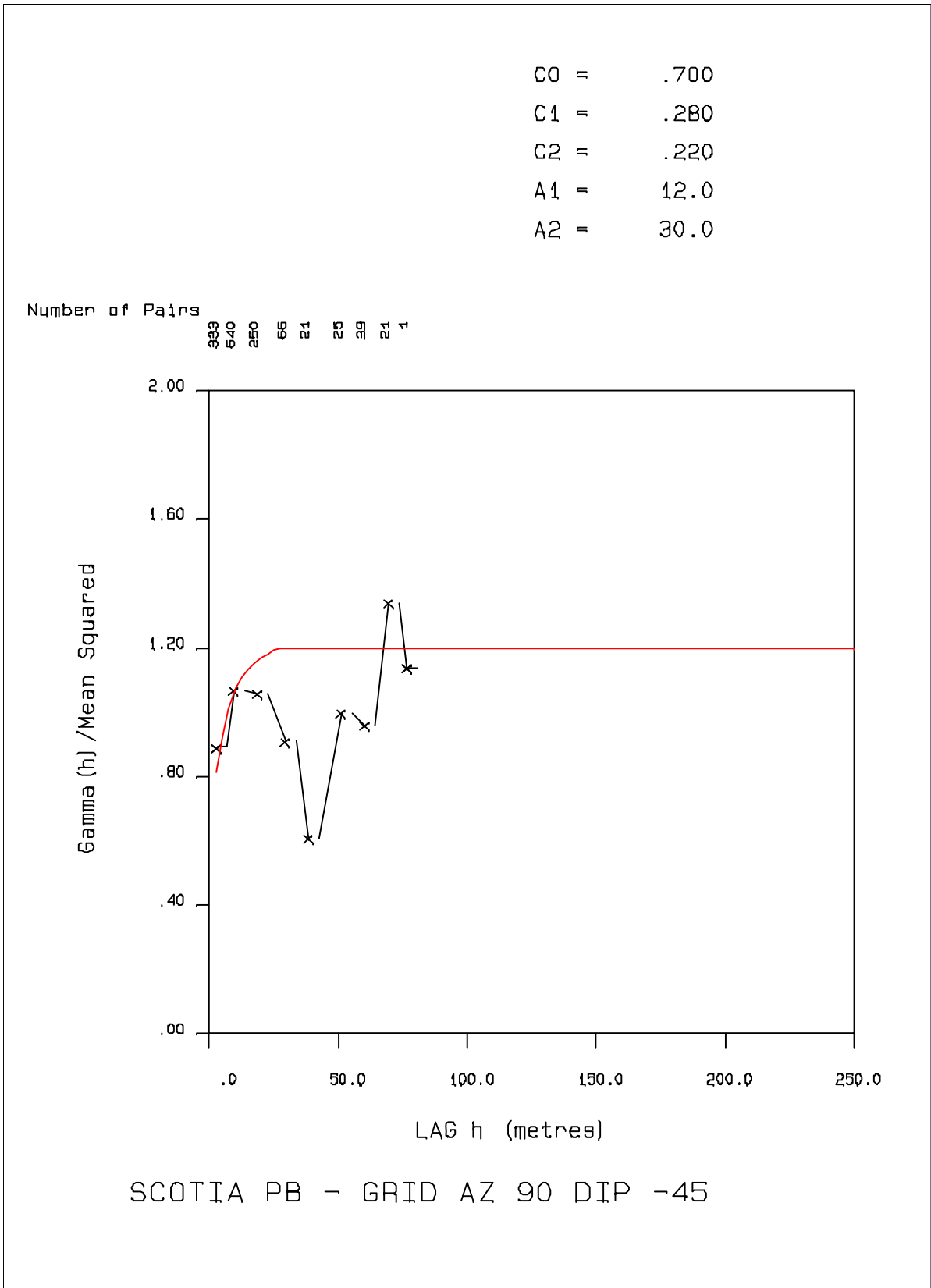


Figure 30: Semivariograms In Massive Sulphide Units for Cu Az 0 Dip 0

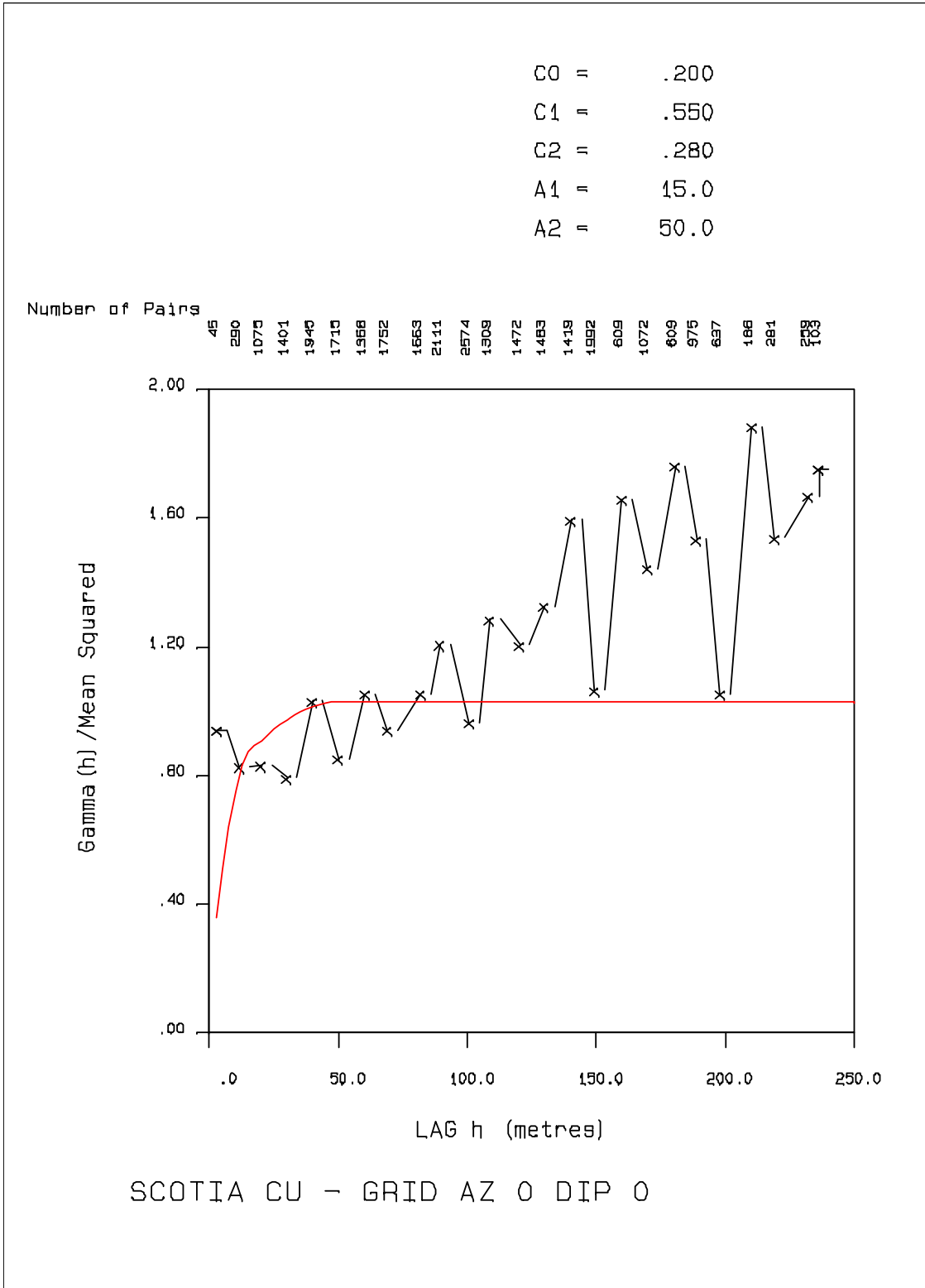


Figure 31: Semivariograms In Massive Sulphide Units for Cu Az 270 Dip -45

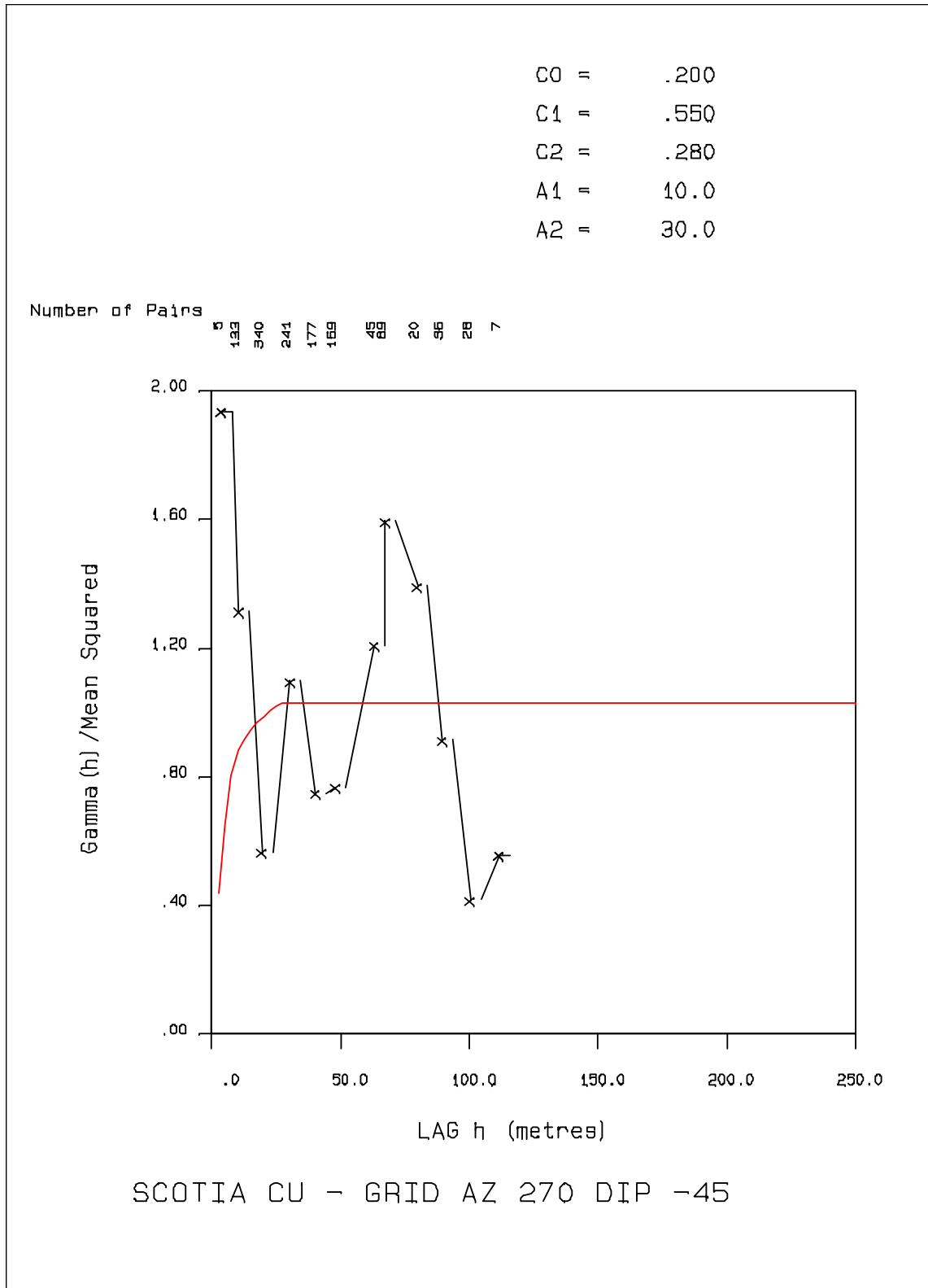


Figure 32: Semivariograms In Massive Sulphide Units for Cu Az 90 Dip -45

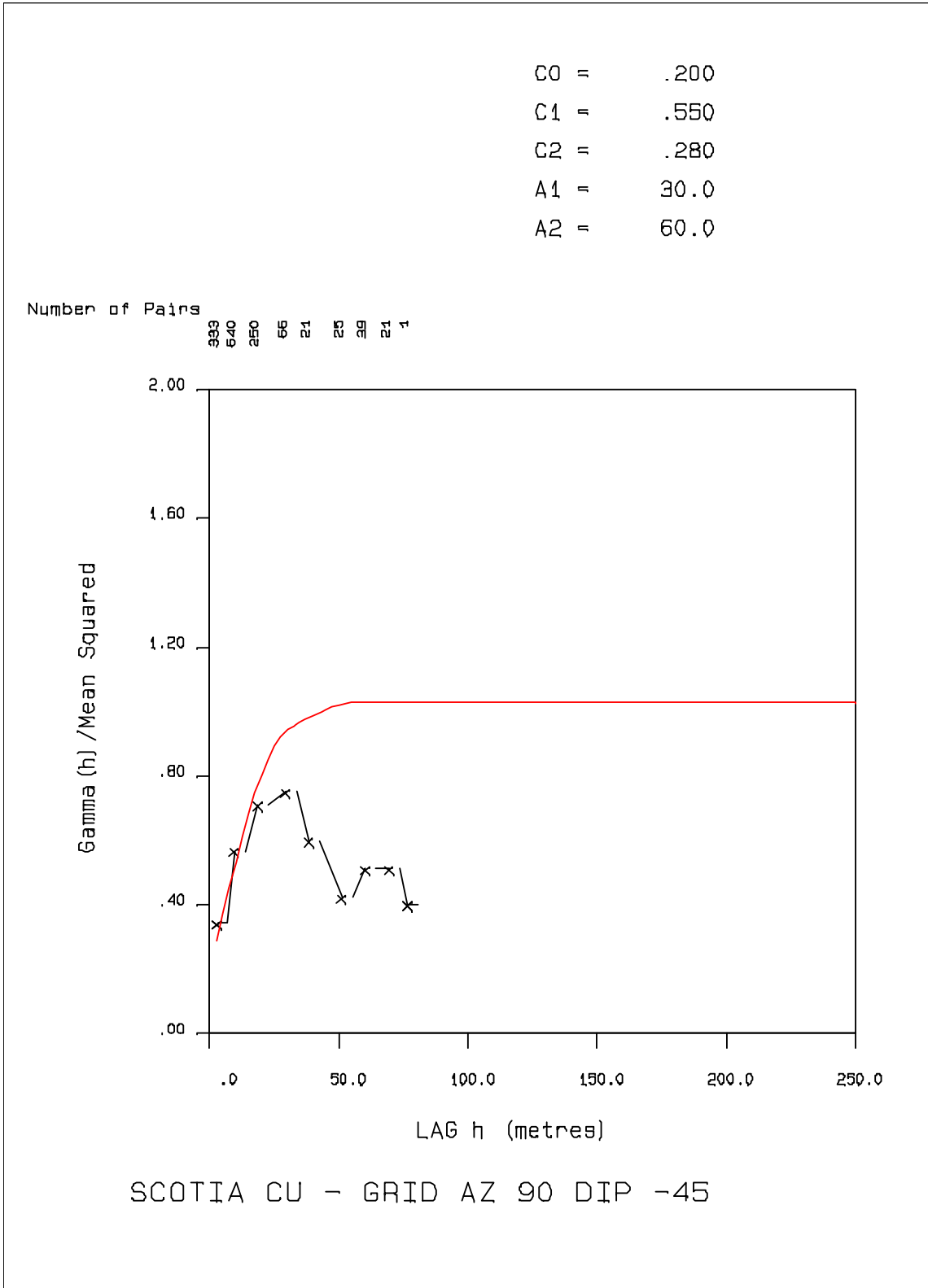




Figure 33: Semivariograms In Massive Sulphide Units for Ag Az 0 Dip 0

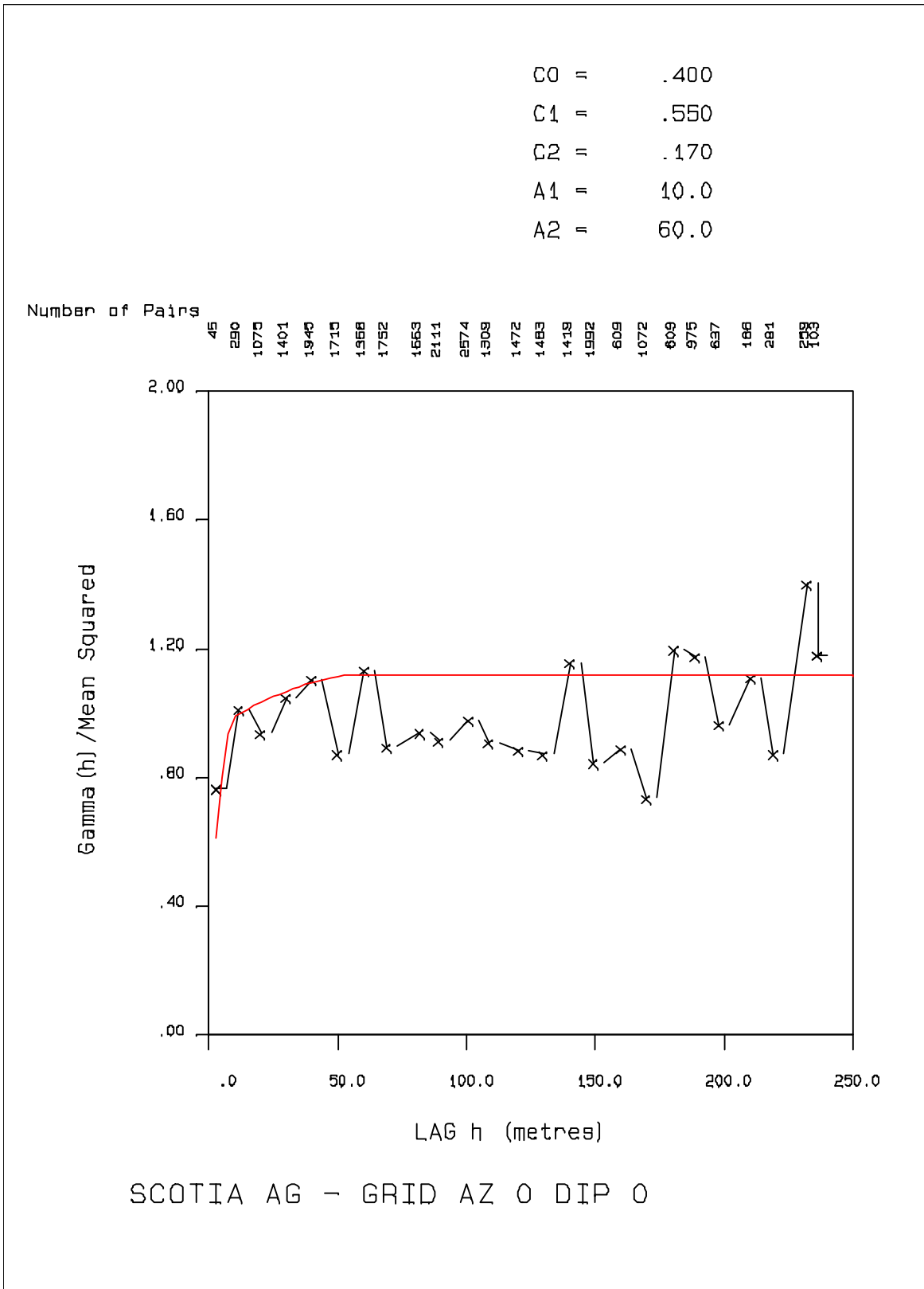


Figure 34: Semivariograms In Massive Sulphide Units for Ag Az 270 Dip -45

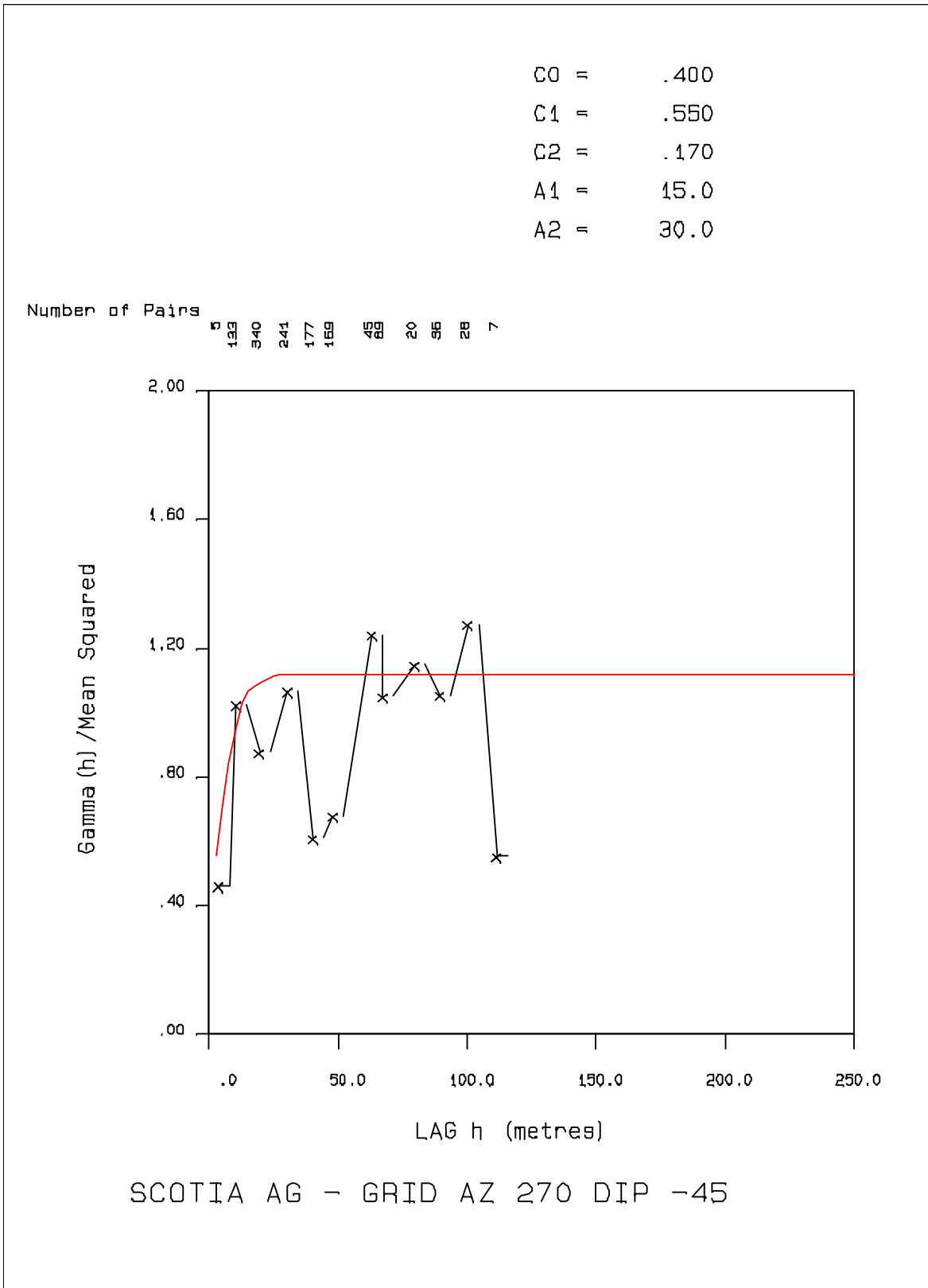


Figure 35: Semivariograms In Massive Sulphide Units for Ag Az 90 Dip -45

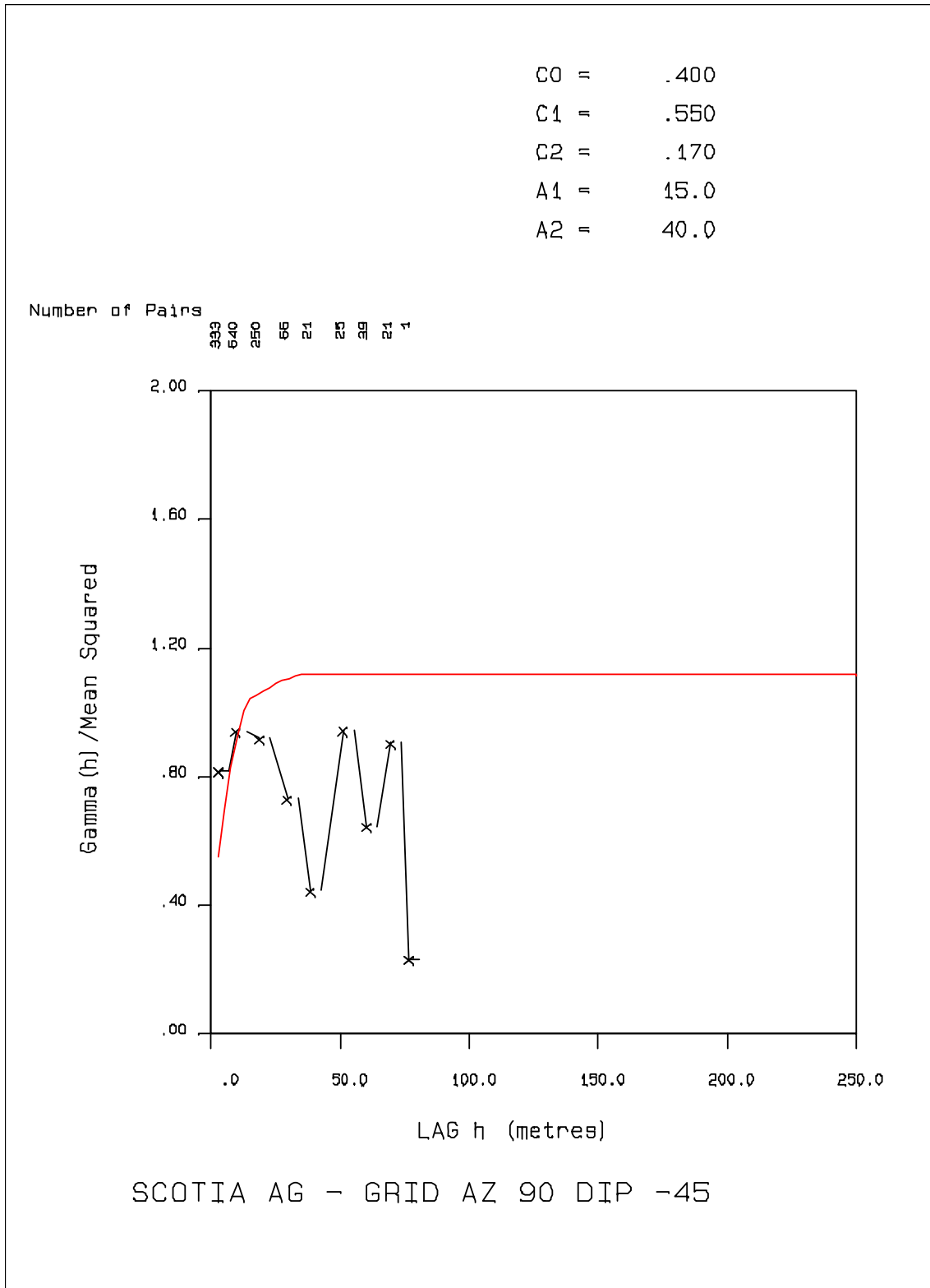


Figure 36: Semivariograms In Massive Sulphide Units for Au Az 0 Dip 0

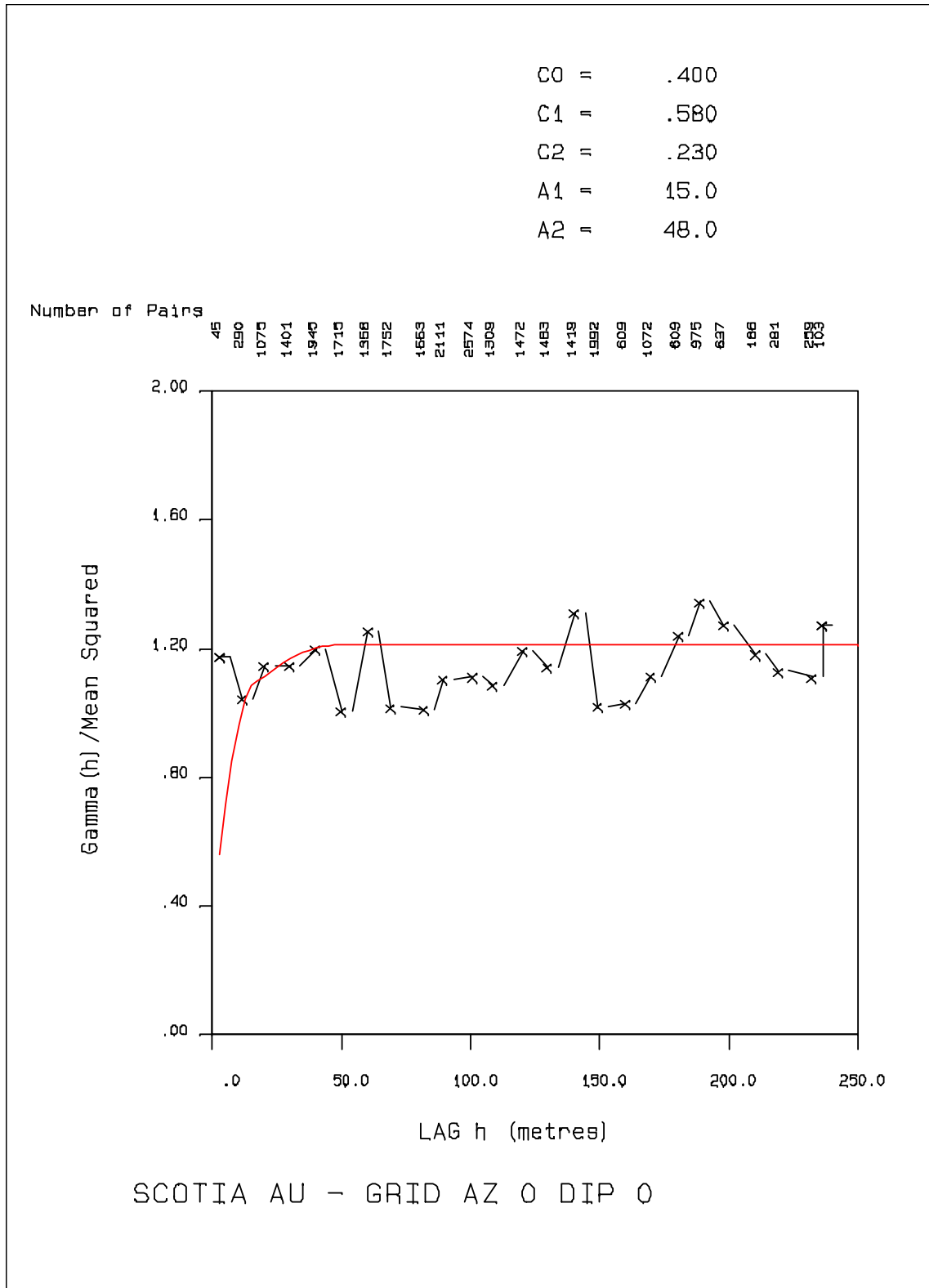


Figure 37: Semivariograms In Massive Sulphide Units for Au Az. 270 Dip -45

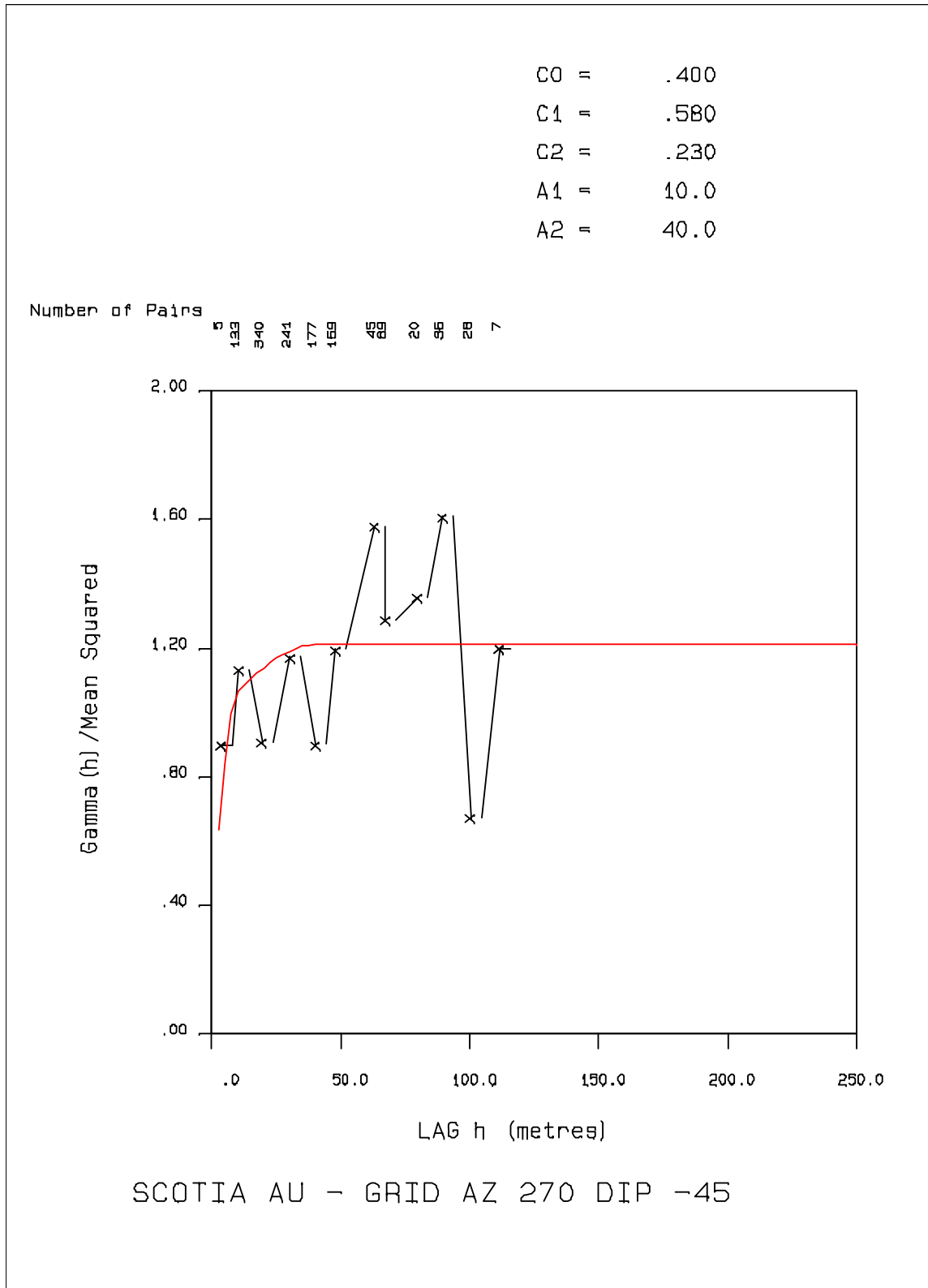
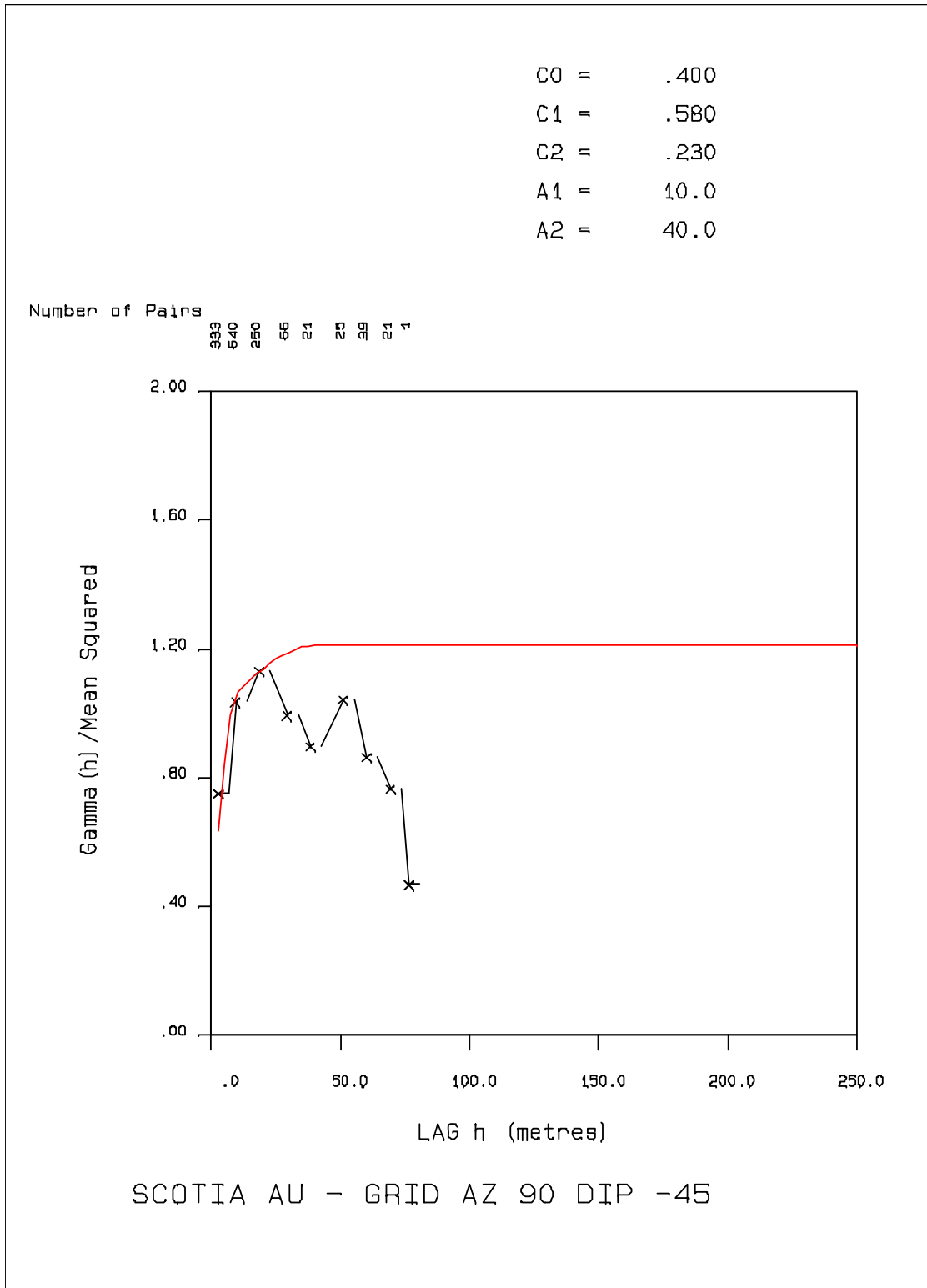


Figure 38: Semivariograms In Massive Sulphide Units for Au Az 90 Dip -45



## **15 MINERAL RESERVE ESTIMATES**

No Mineral Reserve Estimate studies have been conducted.

## **16 MINING METHODS**

The Scotia Property is at an early stage of development. As such, no Economic Analysis was employed to determine cut-off grades for the Resource Estimate that is reported in Section 14 as cut-off grades were assigned as reported. Therefore, a discussion of Mining Methods is not applicable for this report.

## **17 RECOVERY METHODS**

The Scotia Property is at an early stage of development. As such, no Economic Analysis was employed to determine cut-off grades for the Resource Estimate that is reported in Section 14 as cut-off grades were assigned as reported. Therefore, a discussion of Recovery Methods is not applicable for this report.

## **18 PROJECT INFRASTRUCTURE**

The Scotia Property is at an early stage of development. As such, no Economic Analysis was employed to determine cut-off grades for the Resource Estimate that is reported in Section 14 as cut-off grades were assigned as reported. Therefore, a discussion of Project Infrastructure is not applicable for this report.

## **19 MARKET STUDIES AND CONTRACTS**

The Scotia Property is at an early stage of development. As such, no Economic Analysis was employed to determine cut-off grades for the Resource Estimate that is reported in Section 14 as cut-off grades were assigned as reported. Therefore, a discussion of Market Studies and Contracts is not applicable for this report.

## **20 ENVIROMENTAL STUDIES, PERMITTING AND SOCIAL OR COMMUNITY IMPACT**

The Scotia Property is at an early stage of development. As such, no Environmental Studies, Permitting of Social Community Impact studies have been conducted.

## **21 CAPITAL AND OPERATING COSTS**

The Scotia Property is at an early stage of development. As such, no Economic Analysis was employed to determine cut-off grades for the Resource Estimate that is reported in Section 14 as cut-off grades were assigned as reported. Therefore, a discussion of Capital and Operating Costs is not applicable for this report.

## **22 ECONOMIC ANALYSIS**

The Scotia Property is at an early stage of development. As such, no Economic Analysis has been conducted to date.

## **23 ADJACENT PROPERTIES**

There are no other properties adjacent to the Scotia Property.

## **24 OTHER RELEVANT DATA AND INFORMATION**

### *24.1 Orthophoto Mosaic Maps*

Orthophoto Mosaic maps for the Scotia Property have been prepared by Eagle Mapping dated June 8, 2008. The maps were produced from colour aerial photography flown in June 2008. Eight maps at a scale of 1:5,000 with contour interval of 20 metres and three maps at a Scale of 1:2,500 with 10 metre contour intervals were prepared as base maps for ground control for future exploration work.

### *24.2 Airborne Geophysical Survey*

A helicopter-borne geophysical survey was conducted by Aeroquest limited during August 2008. A total of 562.5 line-kilometres were flown using Aeroquest's AeroTEM II time domain EM and cesium magnetometer and gamma ray Spectrometer system. A report on the survey including maps by Aeroquest dated October 2008 has been used to identify regional targets on the Property for follow-up exploration by the 2010 surface exploration program. An Interpretation Report by Aeroquest dated January 21, 2009 was also used to identify regional exploration targets on the Property for follow-up exploration.

### *24.3 Remote Sensing Interpretation Study*

A Remote Sensing Interpretation Study was conducted by John Berry and Associates. A report and maps on the Interpretation study were completed by Berry and Associates dated November 14, 2006. The results of the report were used to design the 2006 Grid Geochemical Soil Sampling program.

## **25 INTERPRETATION AND CONCLUSIONS**

### *25.1 Interpretation*

Geologic mapping, rock sampling and diamond drilling has been conducted on the Scotia Property during the course of many historical and recent programs. Although the rocks have been folded and metamorphosed, the geologic environment, alteration, structural setting and metallogeny suggest that the mineralization at the Albere Zone is of the economically important polymetallic volcanogenic massive sulphide type (Kuroko type). This type of geologic model suggests that there may be a cluster of several deposits hosted on the Scotia Property, of which the Albere Zone is only one. Preliminary work



on the East Limb Zone and the findings of the Aster study and airborne geophysical survey support this interpretation.

The adequacy of data density and data reliability of historical work conducted on the Property appears to the author to have followed standard engineering practices of the time and the author considers the historical data presented in this Technical Report to be valid and reliable such as it is known.

## 25.2 *Conclusions*

The following can be concluded from the work conducted on the Scotia Property to date:

- High-grade polymetallic massive sulphide mineralization outcrops at the Albere Zone;
- Based on results from diamond drilling, the mineralized zone strikes 340°, has moderate varying dips to the southwest and plunges 8° to the south;
- Drilling has established that the mineralized zone occurs over a strike length of 205 metres, has a down-dip dimension of 95 metres and has widths of up to +20 metres;
- Drilling suggests that the zone is open along strike to the northwest and down-dip to the southwest;
- Soil geochemistry indicates that mineralization may be present beyond the area drilled;
- Preliminary prospecting, mapping and rock chip sampling indicates that an additional mineralized zone is present to the east of the Albere Zone on the east limb of a large anticline;
- A Remote Sensing Interpretation (ASTER) study concludes that additional exploration targets are present elsewhere on the Property.
- An Airborne Geophysical Survey identified anomalies adjacent to the Albere Zone and elsewhere regionally on the Property;
- A follow-up geochemical sampling program identified poly-metallic geochemical anomalies associated with several of the Airborne Geophysical anomalies;
- A Resource Estimate conducted by Giroux Consultants Ltd has estimated Total Measured plus Indicated Resources for the Property using a 1% Zn cut-off to be 876,000 tonnes grading 4.35% Zn, 12.29 g/t Ag, 0.08 % Cu, 0.15 g/t Au and 0.47% Pb.

The 1997 Diamond Drill Program conducted on the Scotia Property met the projective objectives of defining the partial extent of the Albere massive sulphide zone.

The 2005 drill core re-sampling program for selected drill intervals partially met project objectives. Verification sampling confirmed that that the re-sampling and analysis of the 1997 drill core returned drill intercepts within a range of acceptable variation and established the validity of the 1997 drill data.

The 2006 soil grid geochemical survey met project objectives and outlined anomalies for future exploration follow-up.

The 2008 Airborne Geophysical Survey identified several distinctive anomalies, some of which appear to be related to the Albere Zone mineralization and also encountered regional anomalies where no recorded historical work has been conducted.

The 2010 field exploration program consisted of a geochemical survey targeted on Airborne Anomalies similar to the anomaly generated by the Albere zone. A total of 267 soil, moss mat (stream sediment) and rock chip samples were taken. The type of sample taken was determined in the field based on selecting the best type of sample to be taken to give the best chance of detecting poly-metallic base and precious metal mineralization that may be present associated with the Airborne Anomalies. Expenditures for conducting the 2010 field program totaled \$90,331.48 and were filed As Geochemical Technical Work, Event # 4807718.

Virtually all Airborne Anomalies sampled returned geochemically anomalous or elevated values for the various sample types taken. No “ore grade” showings were found but values of over 1,000 ppm Zn were encountered from “in place” rock chip sampling.

The author is not aware of any significant risks and uncertainties that could affect the reliability or confidence in the exploration information contained in this Technical Report. The author is not aware of any foreseeable impacts of these risks and uncertainties as they pertain to the Project’s potential economic viability or continued viability.

## **26 RECOMMENDATIONS**

A two phase exploration program for the continued exploration of the Scotia Property is warranted and is summarized in Table 8, Recommendations - Scotia Property. Phase 1 recommendations in the amount of \$750, 00 net of HST (\$805,000 total) constitute a non-contingent work program recommended for the Property.

### ***26.1 Phase 1A – Geological, Geochemical, Prospecting Field Program***

A Phase 1A Field Program in the amount of \$250,000 net of HST is recommended. Highest priority should be given to the anomalies on strike and adjacent to the historical drilling done at the Albere Zone and geochemical anomalies associated with Airborne Geophysical anomalies. The fieldwork should consist of preliminary geologic mapping, rock, stream sediment (moss mat) and reconnaissance style soil sampling. The objective would be to discover base metal mineralization that may be present outside the currently drilled portion of the Albere Zone or associated with the airborne anomalies. It is recommended that the field work be carried out by an experienced senior two to four person crew based in Prince Rupert utilizing daily helicopter access to the Property. A provision for up to a seven-day fly camp is included.

**Table 35: Recommendations - Scotia Property**

<b>Work Program</b>	<b>Description</b>	<b>Net Amount</b>	<b>HST</b>	<b>Total Amount</b>
Phase 1A	Geological, Geochemical, Prospecting Program	\$250,000	\$30,000	\$280,000
Phase 1B	Diamond Drilling	\$500,000	\$25,000	\$525,000
<b>Subtotal Phase 1</b>		<b>\$750,000</b>	<b>\$55,000</b>	<b>\$805,000</b>

### ***26.2 Phase 1B – Diamond Drilling***

Diamond drilling in the vicinity of the airborne anomalies and on strike and adjacent to the Albere Zone is warranted. The objectives of the program should be to test the airborne geophysical anomalies and to attempt to extend the dimensions of the Albere Zone to add to the identified resource base. Prior to the commencement of a drill program, it is a requirement to update the Notice of Work and Reclamation permit that has been filed with MEMPR. A drill budget in the amount of \$500,000 net of HST is recommended.

Contingent on the results of the Phase 1 Program, a Phase 2 diamond drilling program may be warranted.

#### **Technical Report dated this 26th day of October, 2011**

“signed and sealed”

*"Arne O. Birkeland"*

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Arne O. Birkeland, P. Eng.  
**President, Arnex Resources Ltd.**

“signed and sealed”

*"Gary Giroux"*

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G. H. Giroux, P.Eng., M.A.Sc.

## 27. REFERENCES

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"Wikipedia Encyclopedia - Volcanogenic Massive Sulphide Ore Deposits"

## 28. CERTIFICATE OF AUTHORS

**Arne O. Birkeland, P.Eng.**  
**Arnex Resources Ltd.**  
**2069 Westview Drive**  
**North Vancouver, BC, Canada, V7M 3B1**  
**Telephone/Fax: (604) 904-0606**  
**Email: [arnex@shaw.ca](mailto:arnex@shaw.ca)**

I, Arne O. Birkeland, P.Eng., do hereby certify that:

1. I am currently employed as a Geological Engineer by:  
 Arnex Resources Ltd.  
 2069 Westview Drive,  
 North Vancouver, British Columbia, Canada,  
 V7M 3B1
2. I graduated with a Bachelor of Science Degree in Geological Engineering from the Colorado School of Mines in 1972. I am a 1969 graduate of BCIT obtaining a Diploma of Mining Technology.
3. I have been a practicing Professional Engineer registered with the Association of Professional Engineers and Geoscientists of British Columbia since 1975, Registration Number 9870. I am a member of the Canadian Institute of Mining, Metallurgy, and Petroleum, Geological Society Member Number 90102. I am a member of the Association of Mineral Exploration of British Columbia.
4. I have worked as a geologist for a total of 38 years since my graduation from university. My primary employment since 1966 has been in the field of mineral exploration and development. My experience has encompassed a wide range of geological environments including extensive experience in classification of deposit types as well as considerable familiarization with geochemical and geophysical survey techniques and diamond drilling procedures. Since 1990, my primary involvement in exploration activities has been focused on the BC Cordillera, primarily exploring for Volcanogenic Massive Sulphide and Porphyry type targets.
5. I have read the definition of “Qualified Person” as set out in National Instrument 43-101 and certify that by reason of my education, affiliation with a professional Association as defined in National Instrument 43-101 and past relevant work experience, I fulfill the requirements to be a “Qualified Person” for the purposes of National Instrument 43-101.

6. I am responsible for the items contained in (except Item 14) the Technical Report titled "Technical Report, Scotia Property, Scotia River Area, Skeena MD" dated October 26, 2011 relating to the Scotia Property. I have personally conducted and supervised the exploration fieldwork carried out by Arnex Resources Ltd. during 1997, 1998, 1999, 2002, 2005, 2006, and 2010 on the subject Scotia Property. Arnex Resources Ltd. currently acts as an independent consultant and contractor for GEO Minerals Ltd. and subsidiary GeoNovus Minerals Corp.
7. I last visited the Property for a one day period on September 18, 2010.
8. I have had prior involvement with the Scotia Property that is the subject of the Technical Report. The nature of my prior involvement was that I was party to the option of the claims comprising the Scotia Property in 1996 by Bishop Resources Inc. The Option forfeited in 2001. The author now has no interest in the Scotia Property that is the subject of this Technical Report.
9. 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, or the omission to disclose which makes the Technical Report misleading.
10. I am independent of the issuer applying all of the tests as described in section 1.5 of National Instrument 43-101.
11. I have read National Instrument 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form.

Dated this 17<sup>th</sup> day of November, 2011

"signed and sealed"

*"Arne O. Birkeland"*

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Arne O. Birkeland, P. Eng.  
**President, Arnex Resources Ltd.**

Giroux Consultants Ltd.  
1215 – 675 W. Hastings St.  
Vancouver, B.C. V6B 1N2  
Phone – 604 684-0899 email – [gclmail@telus.net](mailto:gclmail@telus.net)

I, G.H. Giroux, of 982 Broadview Drive, North Vancouver, British Columbia, do hereby certify that:

- 1) I am a consulting geological engineer with an office at #1215 - 675 West Hastings Street, Vancouver, British Columbia.
- 2) I am a graduate of the University of British Columbia in 1970 with a B.A. Sc. and in 1984 with a M.A. Sc., both in Geological Engineering.
- 3) I am a member in good standing of the Association of Professional Engineers and Geoscientists of the Province of British Columbia.
- 4) I have practiced my profession continuously since 1970. I have had over 30 years experience calculating mineral resources. I have previously completed resource estimations on a wide variety of massive sulphide deposits both in B.C. and around the world, including the HW, Wolverine and Windy Craggy.
- 5) I have read the definition of “qualified person” set out in National Instrument 43-101 and certify that by reason of education, experience, independence and affiliation with a professional association, I meet the requirements of an Independent Qualified Person as defined in National Instrument 43-101.
- 6) This report titled “TECHNICAL REPORT, SCOTIA PROPERTY, SCOTIA RIVER AREA, SKEENA MD” dated October 26, 2011, is based on a study of the data and literature available on the Scotia Property. I am responsible for the mineral resource estimation Section completed in Vancouver during 2006. I have not visited the property.
- 7) I have not previously worked on this property.
- 8) As of the date of this certificate, to the best of my knowledge, information and belief, the technical report contains all scientific and technical information that is required to be disclosed to make the technical report not misleading.
- 9) I am independent of the issuer applying all of the tests in section 1.5 of National Instrument 43-101.
- 10) I have read National Instrument 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form.

Dated this 17<sup>th</sup> day of November, 2011

“signed and sealed”

“Gary Giroux”

G. H. Giroux, P.Eng., MASc.