NSS RESOURCES INC.

TECHNICAL REPORT

On the

SENECA VMS PROJECT

British Columbia

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NSS Resources Inc.
July 30, 2014

Date and Signature Page

Report to:
NSS RESOURCES INC.

TECHNICAL REPORT ON THE SENECA VMS PROJECT BRITISH COLUMBIA

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[signed]

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Donald G. Allen, PEng (B.C.)

Signed on the 30th day of July 2014.

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1.0 SUMMARY

NSS Resources Inc. ("NSS" or "the Company") holds 100% interest, subject to a royalty interest to Asante Gold Corporation, in 9 mineral claims comprising their Seneca property. The claims surround four claims that cover the historical Seneca Deposit and two claims that cover the Vent Zone (these six third party claims total 150 hectares and are referred to as the 'Adjacent Property'). Neither the Seneca Deposit nor the Vent Zone is a part of the NSS Property. The property is centered about 80 kilometres ENE of Vancouver (about 120 kilometres by road), British Columbia, in the New Westminster Mining Division.

The Seneca Deposit and the general area have been the subject of considerable mineral exploration since the 1920's when massive sulfide Au, Ag, Cu, Pb and Zn mineralization was first discovered. Since the 1960's a series of mining exploration companies have tested the property with geological mapping, geochemical sampling, geophysical surveys and diamond drilling. The most recent work has been by Carat Exploration Inc. ("Carat") who carried out a program on the property during 2004 to 2006. Hoy (1991) and Arnold (1966) report that on the adjacent Seneca Deposit, an estimate of 1.506 million tonnes at 0.82 g/t Au, 41.13 g/t Ag, 0.63% Cu, 0.15% Pb, and 3.57% Zn was calculated by Wright Engineers in an unpublished 1984 report (not 43-101 compliant).

Based on assessment reports filed with the BC Ministry of Energy and Mines and referenced herein, numerous drill holes, geochemical, ground and airborne geophysical surveys have been completed not only on the Seneca and Vent zones, but on claims held by NSS which are the subject of this report. Drilling at the 'Fleetwood zone' (which is on 100% owned NSS Property located 3.0 km northwest of the Seneca Deposit) for example, returned significant intersections of 31.2 metres of stockwork type mineralization at a depth of 153 metres grading 2.1 % Zn, 0.3% Cu, 0.1% Pb, 8.1 g/t Ag and 0.1 g/t Au; and at the 33 Zone located 350 metres to the southwest of Fleetwood, a 3.2 metre drill intersection grading 23.30% Zn, 1.83% Cu, 1.71 % Pb, 133g/t Ag, 2.33g/t Au was reported.

In spite of the considerable work having been conducted in the general Seneca area, there are a number of untested stream sediment and soil geochemical anomalies, and electromagnetic anomalies. The favorable mineralized Seneca Horizon has a shallow dip to the northeast and is untested east of the main Seneca deposit. There is evidence suggesting that the Horizon resurfaces in the vicinity of Weaver Lake, a distance of 4.6 km to the northeast of the deposit. It is concluded that significant exploration potential remains in the area covered by NSS claims. A 2 phase exploration program is recommended to evaluate the NSS property.

2.0 INTRODUCTION

2.1 Terms of Reference

NSS Resources Inc. ("NSS") holds 9 claims, Seneca 1-9, in the New Westminster Mining Division of southern British Columbia. The claim area is has been the subject of considerable mineral exploration since the 1920's when Kuroko style massive sulfide hosted Au, Ag, Cu, Pb and Zn mineralization was first discovered. Since then, major mining companies including Noranda, Cominco Ltd., Chevron Canada, BP Selco Canada, and Minnova, and a number of junior companies have at various times held options and conducted exploration in the area. The Seneca claims surround but do not include the well-known Seneca deposit with published historical non NI43-101 compliant resources of 1.506 million tonnes at 0.82 g/t Au, 41.13 g/t Ag, 0.63% Cu; 0.15% Pb, and 3.57% Zn. **Neither this author nor previous authors who have worked in the Seneca area have been able to verify the historical resource information. This information is not necessarily indicative of the mineralization on the property that is the subject of this technical report.**

In May 2014, director Douglas MacQuarrie and CEO Jag Sandhu commissioned the author review results of historic work conducted in the property area, to evaluate exploration potential, and prepare an independent report ("Report"). This report is consistent with the Canadian Securities Administrators National Instrument 43-101 and is expected to be used to support NSS's application for a listing on the Canadian Securities Exchange.

NSS was incorporated on March 28, 2012, under the applicable corporate legislation of the Province of British Columbia, Canada.

2.2 Qualification of Author

Donald Allen is an independent consulting economic geologist with extensive experience in mineral exploration in North and South America and Africa.

The author of this report does not have any material interest in NNS nor the mineral assets considered in this report. Remuneration for this report is by way of a professional fee which is not determined by the outcome of this report.

2.3 Purpose of the Report and Scope of Work

The purpose of this report is to review the geology of the NSS claims and historic exploration in the area and to evaluate the exploration potential.

2.4 Personal Inspection

The author visited the property on May 8, 2014 with director Douglas MacQuarrie and CEO, Jag Sandhu. Road access was investigated and the main mineral showings in the area were visited. In addition a number drill sites were located, and several outcrops and areas of float were examined. Four samples of outcrop and float were collected.

3.0 RELIANCE ON OTHER EXPERTS

Background information is based on assessment reports on file at the British Columbia Ministry of Energy Mines and Resources, most of which have been prepared by professional geologists, and on NI43-101 reports filed on SEDAR. This report draws largely on the extensive fieldwork of Sean McKinley, on his M.Sc. thesis and numerous published and unpublished reports of which he was sole or primary author (McKinley, 1996, 2005, 2006; McKinley and Giles, 2007; McKinley et al., 1995; McKinley et al., 1996; McKinley et al., 2004). These reports and others are listed under References at the end of this report.

D. R. MacQuarrie, PGeo. (B.C.) assisted with review and interpretation of geophysical data.

The author of this report is not qualified to provide extensive comment on legal and other issues associated with the NSS claims. However examination of the records at Mineral Titles Online shows that the claims are registered in the name of NSS.

4.0 PROPERTY DESCRIPTION AND LOCATION

4.1 Property Area

The NSS property holdings comprise 9 mineral claims, Seneca 1-9 (Figure 1), as follows:

Name	Tenure Number	Area (hectares)	Good Standing until
Seneca 1	1027931	2104.71	April 29, 2015
Seneca 2	1027932	715.75	April 29, 2015
Seneca 3	1027933	463.31	April 29, 2015
Seneca 4	1027935	126.32	April 29, 2015
Seneca 5	1027936	421.20	April 29, 2015
Seneca 6	1028130	210.39	May 7, 2015
Seneca 7	1028131	42.09	May 7, 2015
Seneca 8	1028133	147.29	May 7, 2015
Seneca 9	1029527	147.30	July 10, 2015

Total area is 4,124 hectares (after subtracting 103 hectares and 150 hectares respectively for overlap with Hemlock Ski Development Area to the north of Seneca 3 and Seneca 6, and internal claims within Seneca 4 and Seneca 5).

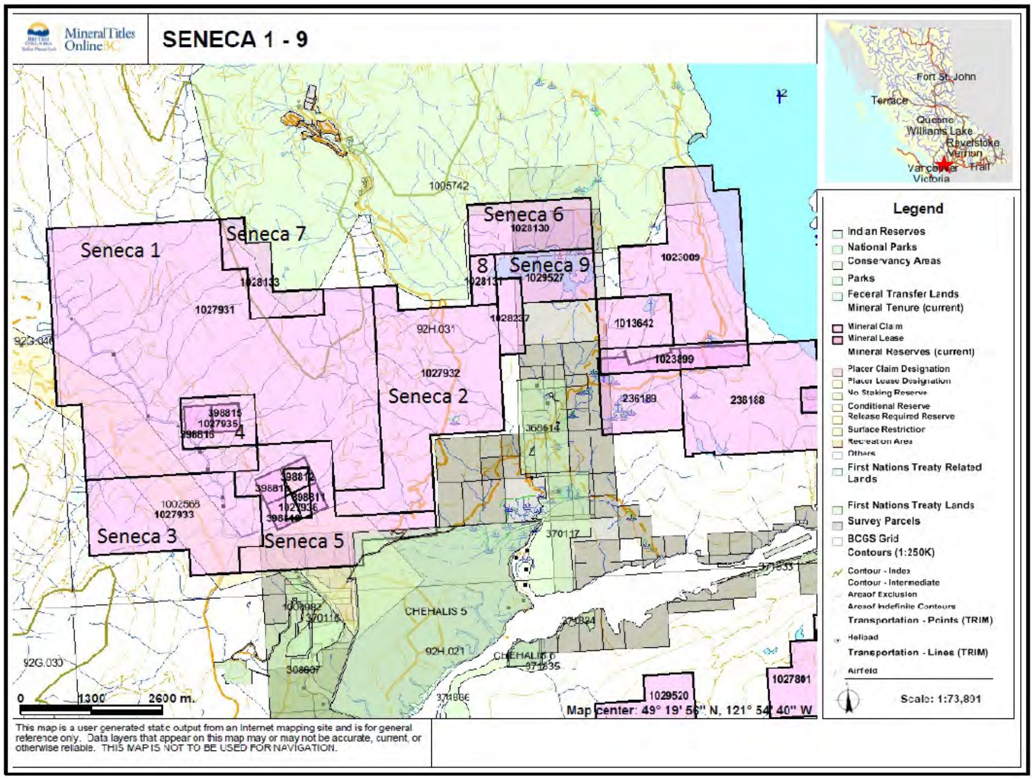

Figure 1. Claim map (after B.C. Ministry Of Mines & Energy)

4.2 Property Location

The property is centered about 80 kilometres ENE (about 120 kilometres by road) of Vancouver, British Columbia, in the New Westminster Mining Division (Figure 2). It is centered on UTM coordinates 576000E, 5465000N Zone 10 NAD83 (latitude 49° 20'N, longitude 121° 57' W) and within NTS map area 92H/5.

Figure 2. Location Map

4.3 Property Title

The Seneca 1-9 claims are registered in the name of NSS Resources Inc. at the British Columbia Ministry of Energy and Mines. NSS holds a 100% interest, subject to a 2% net smelter returns royalty, recently purchased by Asante Gold Corporation (Asante Gold June 10, 2014 News Release).

5.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

The Seneca property lies about 120 kilometres by road east of Vancouver, British Columbia, and about 35 km northeast of the city of Mission. Access is by paved Highways 1 and 7 through Harrison Mills and the Morris Valley Road to the Chehalis Fleetwood Forest Service Road. Extensive past and ongoing logging operations have left a good network of trails and 4-wheel drive accessible roads throughout the property. An electrical power line crosses the southernmost boundary of the property. Major highways, railway and tidal - barge access are readily available. Local resources and infrastructure are therefore excellent.

The climate is typical of the west coast with moderate temperatures and much rainfall with snow accumulation in winter on ridges over 1500 m elevations.

The Seneca property lies within the Coast Mountain Range along the east side of the Chehalis River. Elevations range from 60 m above sea level to over 1350 m at Mount Keenan with moderate to steep relief. The Chehalis River valley is a broad U-shaped valley of glacial origin. Above 500 m elevation outcrop exposure is fair to good. Below this elevation glacial till is extensive and thick (up to 30 m) and except for abundant tributary creek beds, outcrop exposure is poor.

Forest cover ranges from recent logged-off areas to mature first and second growth stands of hemlock and cedar.

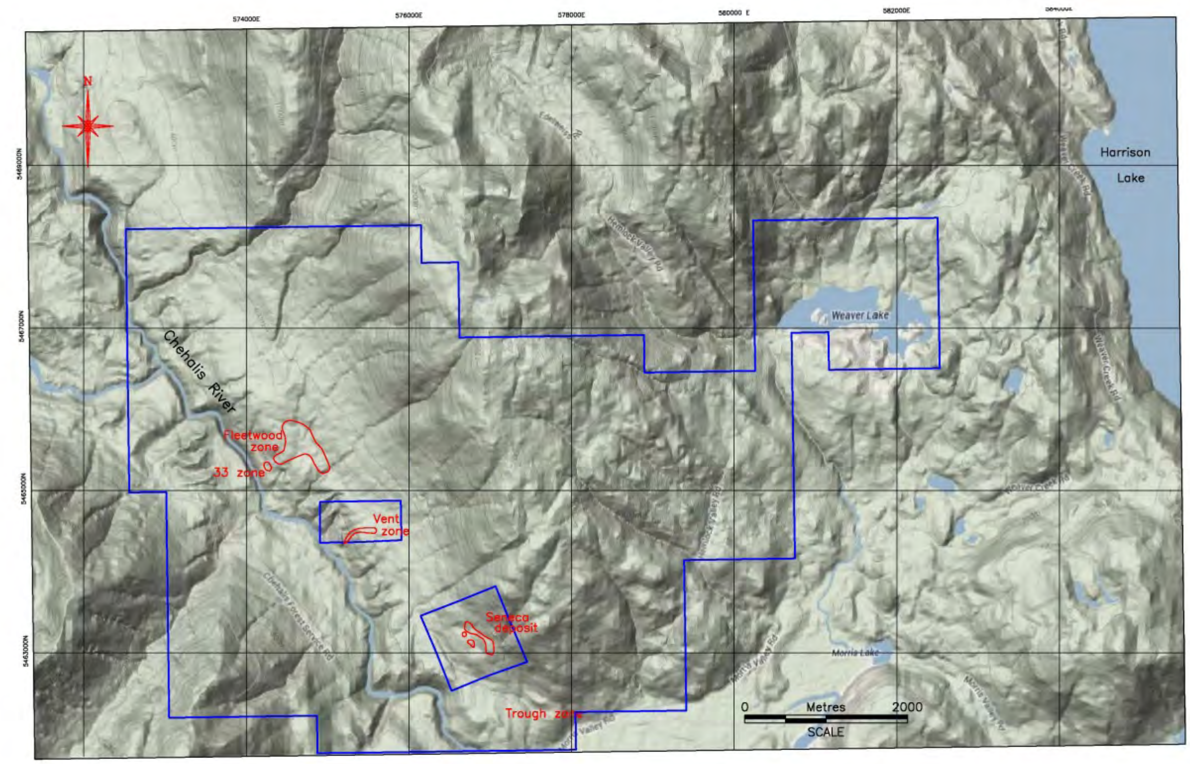

Figure 3. Topography and claim boundaries (claim boundaries shown in blue, mineralized zones shown in red).

6.0 HISTORY

6.1 1920 to 2004

The following history is taken from McKinley (op.cit.).

1920's: Discovery of high grade massive sulphide float from a creek in the Seneca pit area.

1950's: Mineralized float/outcrop (?) found in road building for logging operations. The property was optioned to Noranda who drilled 14 xray holes totalling 423 feet.

1960-1962: M & H Mining Company prepared roads and excavated an open cut on the Seneca Lucky Jim claim. At the same time a 470-foot (143 m) long adit was driven eastward toward the open cut and 45 feet below it. Limited diamond drilling was done, but no record is available for the core. The BC Ministry of Mines and Petroleum Resources reported that an open pit was excavated at the Seneca property in 1961 and a bulk tonnage of 287 tons of crude ore shipped to Britannia Mines, where 17 oz Au, 959 oz silver and 7,118 lb copper and 40,657 lb zinc were recovered (Min. of Mines & Pet. Res., 1962).

1962: Property was optioned to Continental Consolidated Mines Ltd who drilled 9 holes.

1964-65: Noland Mines Ltd. held the property in 1964-65 and completed a self potential survey and drilled two diamond-drill holes south of the open pit, assuming a steep southerly dip to mineralization in the pit area. No mineralization was found and the option dropped.

1969: Zenith Mining Corp acquired the property and outlined an anomalous zone southwest of the showing through an induced polarization (IP) survey. The company drilled 10 closely spaced diamond-drill holes across the anomaly finding only minor mineralization.

1971-1976: Cominco optioned the property from Zenith in 1971 and held an option on the property until 1976. Cominco did geochemical, geophysical, and geologic surveys augmented with a BC Department of Mines and Petroleum Resources mapping program in 1972 (Thompson, 1972). Cominco drilled 36 diamond-drill holes and an undergraduate thesis on sulphide mineralogy from the Seneca pit area was completed by Pride (1973).

1977-1981: Chevron Canada Ltd. optioned the property and did extensive geological sampling and mapping, as well as drilling 25 diamond-drill holes totalling 2816 metres.

1982: Chevron in joint venture with Curator Resources ran IP surveys over three areas, did geological mapping and geochemical sampling.

1983: Curator Resources drilled 18 diamond-drill holes totalling 2558 metres. Wright Engineers completed an ore reserve estimate for Curator.

1985: Curator changed its company name to International Curator Resources. Company discovered the Vent Zone and completed 12 diamond-drill holes totalling 1375 metres.

1986: BP-Selco optioned the property and continued exploration primarily on the Vent Zone drilling 28 diamond-drill holes for 2672 metres. 1987: International Curator Resources reacquired the property and drilled 12 diamond-drill holes totalling 3042 metres.

1990-1993: MMC/Minnova discovered the Fleetwood Zone and cut 139.1 km of grid lines, collected over 2,700 soil and rock samples, completed 67 km of geophysics, conducted downhole geophysical testing in 9 holes and completed 41 diamond-drill holes totaling 12,109 metres.

1994: Minnova became Inmet Mining and continued diamond drilling on the property, drilling one deep hole (94-41) east of the pit area. Inmet dropped its option with International Curator in 1994.

1996-1998: Riverstone Resources optioned the Seneca property from International Curator Resources in 1996. Riverstone drilled 6 diamond-drill holes north of Vaughan Creek on IP anomalies, finding disseminated pyrite, but no significant base metal sulphides. In 1998, Riverstone did geochemical sampling in the northeast part of the property and sampled silicified volcanics north of Weaver Lake.

2002: Efrem Specogna staked the property with several 2-post mineral claims in December 2002.

2004: Specogna's six 2-post claims were optioned by Carat Exploration Inc. The Seneca 2 to 13 claims were staked in June and July, 2004 by Discovery Consultants on behalf of Carat Exploration.

McKinley and Giles (2007) further state the following.

The Seneca property has seen a significant amount of diamond drilling over its exploration history from an initial drill program by Noranda in 1950-51 through to the exploration programs of Minnova (now Inmet Mining) in the 1990s. A total of over 33,000 metres of diamond drilling has been completed at Seneca from over 215 drillholes. The vast majority of this drilling was completed between 1971 and 1994 by Cominco, Chevron Standard Ltd., International Curator Resources Ltd., BP Resources (Selco Division) and Minnova. Riverstone Resources held on option on the Seneca property in the late 1990s and drilled 6 drillholes in the Vaughn Creek area, but these are north of the existing claim block discussed in this report….

Most of the Seneca Deposit massive sulphide mineralization in the Pit Area was defined by the diamond drilling in the 1970s and early 1980s; the Vent Zone and Fleetwood/33 Zone mineralization were outlined during the mid-1980s and early 1990s programs respectively. A significant amount of these drillcores are still stored on the property, but a large amount of the core is unusable due to decay of the core boxes and/or illegibility of box numbers or core footage markers. In addition, the mineralized intervals, particularly from the Pit Area massive sulphide intersections, are heavily sampled or even absent in these cores, making an accurate assessment of the mineralized zone difficult if not impossible. Nonetheless, Sean McKinley viewed numerous of these intersections while they were still in good repair during his M.Sc. thesis research in 1993-94 (included in McKinley, 1996) and can vouch that previous reports of the nature and thicknesses of the mineralization are most likely accurate.

Almost all of the past diamond drilling at Seneca was carried out in a 4.5 x 1.5 km corridor along the eastern side of the Chehalis River valley. It bears noting that a large number of the drillholes listed above were drilled in a somewhat small 1500 m by 400 m area in the immediate vicinity of the original massive sulphide discovery in the Pit Area. This dense drilling pattern is due to a combination of having numerous operators working the property and the geological constraints controlling the size and continuity of this type of target. A second cluster of relative dense drillholes exists around the Vent Zone stockwork mineralization drilled in the mid-1980s by BP-Selco. Only the most recent phase of drilling by Minnova in the early 1990s, primarily around the Fleetwood Zone, was done so at a more 'normal' exploration spacing with drillholes placed at 100 to 150-m centers.

Given the vintage of the past drilling at Seneca, it is very difficult to verify drillhole collar locations which have been buried or obscured over time by vegetation or debris from logging operations. However, several old drill collars were located during the 2004 field work and their locations matched favourably with those in previous reports.

6.2 Recent History 2004 to 2007

Carat Exploration Inc. (“Carat” - subsequently renamed Eagle Mountain Gold Corp., and more recently through an amalgamation, Goldsource Mines Inc.) acquired the Seneca property in June 2004. Carat conducted geological mapping, drill core relogging, rock and stream silt geochemical surveys, 347.2 line kilometres of airborne magnetic and electromagnetic geophysical surveys, 2473 metres of diamond drilling in 19 holes on the Seneca zone and electromagnetic anomalies, and 2879 metres of diamond drilling in 10 holes on the Weaver Zone (north of the NSS’ Seneca 6 claim). The results are reported in McKinley (2005, 2006, and McKinley and Giles, 2007). Carat allowed most of the claims in the area to expire, presumably to focus exploration efforts in Guyana, but still holds the Seneca and Vent prospects (the 6 internal claims within the Seneca 4 and 5 claims).

Arnold (1996) and Hoy (1991) report that an estimate of 1.506 million tonnes grading 3.57% zinc, 0.63% copper, 0.15% lead, 41.1 grams/tonne silver and 0.8 grams/tonne gold was calculated for the Seneca Deposit by Wright Engineers in an unpublished 1984 report. This resource may not conform to present day NI 43-101 standards, and is presented herein strictly as geological information. Neither this author nor previous authors who have worked in the Seneca area have been able to verify this information. This information is not necessarily indicative of the mineralization on the property that is the subject of the technical report.

7.0 GEOLOGICAL SETTING

7.1 Regional Geological Setting

Regional geology of the Harrison Lake area has been studied by Monger, (1986) and Arthur et al. (1993). The Harrison Lake area lies in the southwestern part of the Coast Belt of British Columbia, one of five major morphogeological belts in the Canadian segment of the North American Cordillera. The southern Coast Belt in turn can be divided into western and eastern parts based on differences in plutonic rocks, terranes and structural style (Monger and Jorneay, 1994). The southwestern Coast Mountains feature about 80 percent Middle Jurassic to mid-Cretaceous plutons (ca. 165-91 Ma) which intrude supracrustal sequences ranging in age from Middle Triassic to Middle Jurassic of Wrangellia and Harrison Lake terranes, and overlapping Jura-Cretaceous volcanic and sedimentary rocks.

Most of the Canadian Cordillera consists of a tectonic "collage" of allochthonous terranes (Fig. 2.1), each of which is characterized by a geological history that sets it apart from the others and from autochthonous or parautochthonous North American rocks (Davis et al., 1978; Monger et al., 1982). The larger terranes (Quesnellia, Stikinia, Wrangellia and Alexander) are coherent bodies comprising laterally persistent tectonostratigraphic assemblages that are dominated by oceanic volcanic arc rocks. They are bordered by disrupted terranes that appear to be mainly oceanic accretionary prisms marking the sites of former ocean basins, marginal seas or back-arc basins.

These disrupted terranes or “tectonic flakes” (Price, 1994) consist of upper crustal rocks that have been detached from their lower crustal and upper mantle lithosphere counterparts, and have been juxtaposed over the western margin of the North American craton and over each other along a system of major interleaved, northeast and southwest verging thrust faults. The tectonic flakes apparently were produced by tectonic wedging during collisions with the North American continental margin, and by delamination of oceanic lithosphere that separated the tectonic flakes from the dense lower crustal and mantle rocks that have been subducted.

The Harrison Terrane on the west side of Harrison Lake comprises a sequence of Triassic to Cretaceous volcanic and sedimentary rocks (McKinley, op. cit.). At the base are silicified argillite and siltstone of the Camp Cove Formation. The stratigraphically lower part of the sequence is intruded by Upper Jurassic quartz diorite batholiths west and north of the property. The Harrison Lake Formation, within the Harrison Terrane, is a Lower to Middle Jurassic succession up to 2500 metres thick that strikes north-northwest with gentle to moderate easterly dips. From oldest to youngest, the Harrison Lake Formation is composed of the Celia Cove Member, the Francis Lake Member, the Weaver Lake Member and the Echo Island Member. The Celia Cove Member comprises mostly deep water sedimentary rocks unconformably overlying Triassic rocks. The Francis Lake member represents the onset of volcanism that characterizes the Harrison Lake Formation. Regionally the Weaver Lake Member is dominated by intermediate to felsic volcanic rocks and related intrusions and is overlain by the Echo Island Member which comprises mostly volcaniclastic sediments. Although not fully constrained, the Seneca property is interpreted to lie within the upper part of the Weaver Lake Member.

To the west of Chehalis River and Chehalis Lake the Harrison terrane is intruded by Jurassic plutonic rocks of the Coast Belt.

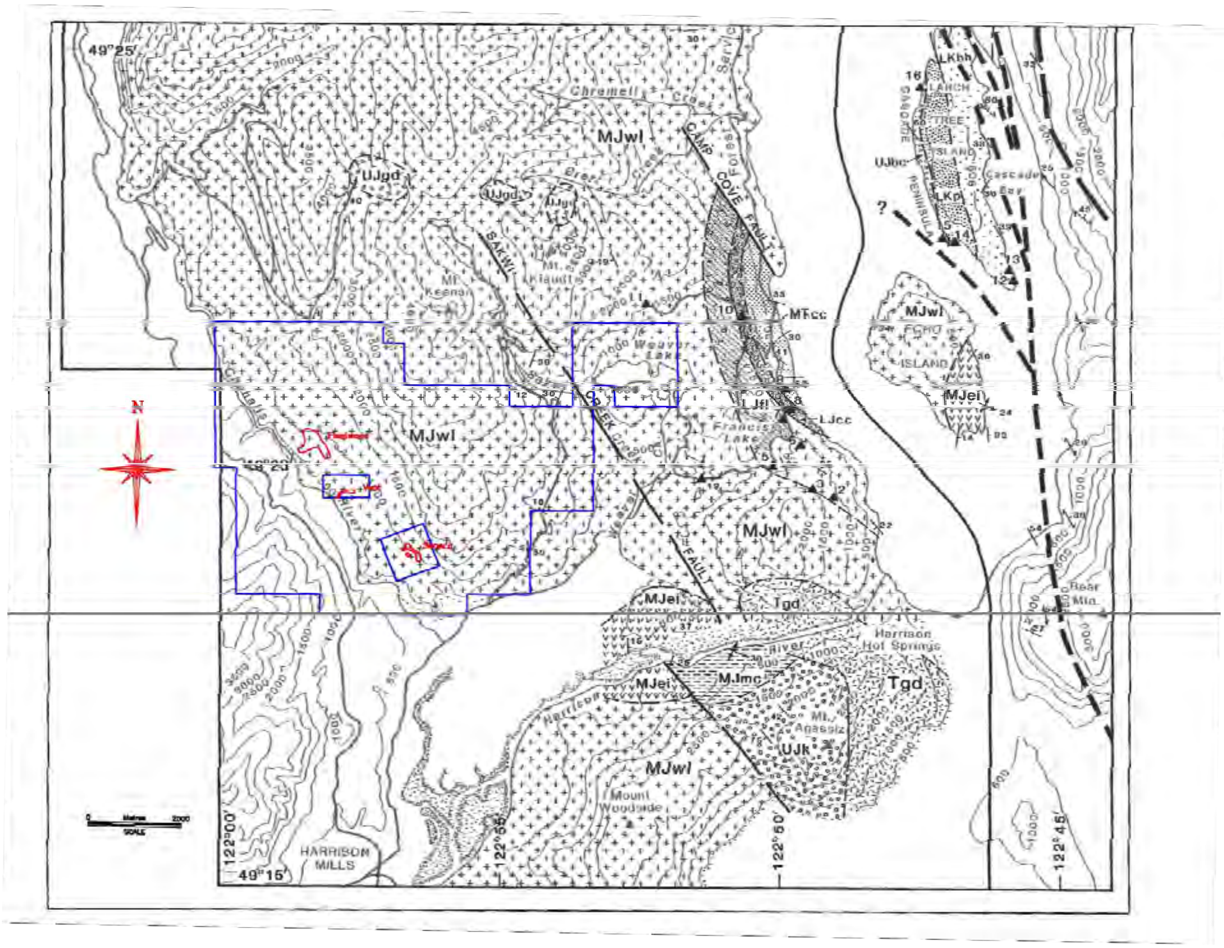

Figure 4. Geological map, west side Of Harrison Lake. Modified after Andrew, et.al. (1993). NSS claim boundary shown in blue. Fleetwood, Vent and Seneca Zones shown in red.

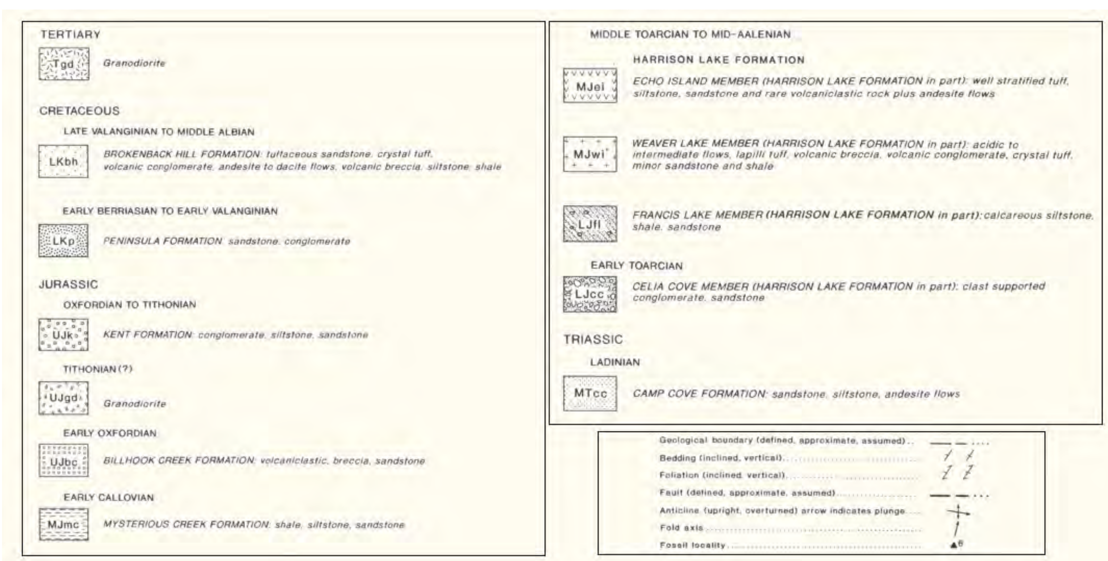

Figure 4a. Legend for Figure 4.

7.2 Local Geology

The following is from McKinley et al (op.cit.). Note: the Pit area referred to in this discussion is the main Seneca deposit, and along with the Vent Zone, is not part of NSS claim holdings, however their inclusion in the discussion of the geology is pertinent to an understanding of the mineralized environment.

The Seneca property is dominated by numerous felsic and intermediate flow dome complexes and their associated volcaniclastic debris (Burge, 1994; McKinley et al., 1996). Mafic flows, intermediate pyroclastics, volcaniclastic debris flows and argillites are also commonplace. These units display rapid facies changes at Seneca (Thompson, 1972). A strike of 150 degrees with a shallow northeasterly dip was noted in volcaniclastic sediments northwest of the pit area along the Fleetwood Chehalis forest service road. This is consistent with attitudes determined by (McKinley et al, 1996).

McKinley (1996) divided the major lithologic units at Seneca on the basis of their proximity to their primary source which is, in this case, a volcanic centre or vent(s). The four principal volcanic facies within the Weaver Lake member on the Seneca Property are described as follows:

Facies 1 - Vent to vent-proximal facies: Lavas of basaltic to rhyolitic composition consisting of flows, domes and associated in situ hyaloclastites and autoclastic breccias;

Facies 2 - Vent-proximal to distal facies: Volcaniclastic rocks consist of juvenile to reworked coarse volcanic breccias and tuffs to fine grained siltstones and ashes;

Facies 3 - Coeval Intrusions: Intrusions consist of basaltic to rhyolitic composition sills and dykes that have intruded lavas and wet volcaniclastic sediments; and

Facies 4 - Distal Marine: Rocks of volcano-sedimentary origin consisting of an argillite that often contains flattened feldspar (± quartz)-phyric pumice clasts (flamme).

Facies 1 to 3 are generally observed in all drillholes on the property, but their relative abundances vary greatly from hole to hole, often over small distances, thus making correlation on the basis of facies difficult. The fourth facies is often in close proximity to mineralization and is spatially restricted to the Pit Area and the Trough zone and does not correlate to other parts of the property. Observations in drillcore suggest that strata on the property strike approximately to the northwest and are essentially flat lying or moderately dipping in an easterly direction.

Distinct marker units are not evident, but at least three packages of distinct lithologies and facies are identified at specific stratigraphic levels and are correlatable across the Seneca property. Each of these horizons comprises varying proportions of all three volcanic facies, but each horizon has a particular unit, or sub-facies, or a facies association making it unique. The three horizons are named on the basis of their positions relative to the mineralized zones and are, from *stratigraphically lowest to highest: the Footwall Interval, the Seneca Horizon and the Hangingwall Interval .*

7.2.1 Footwall Interval

The Footwall Interval is characterized by the presence of mafic lavas and breccias, or by the presence of coarse volcaniclastic units having a mafic component that has been derived from these mafic lavas. Synvolcanic sills and dikes (Facies 3) of dacitic to rhyolitic composition are common. Felsic flows and volcaniclastic units are also present, but are much less common than the other units. Due to its position stratigraphically below the main mineralized zones, the Footwall Interval hosts some minor mineralization in the form of disseminated and stringer sulphides. Localized areas of strong hydrothermal alteration are present, but overall the horizon is only weakly to moderately altered.

The Footwall Interval is best exposed in drillcore from the Fleetwood and Vent Zones, which generally penetrate deeper into the sequence than drillcore from the Pit Area. True extrusive mafic lavas, or 'fire fountain debris', distinguished by their hydroclastic fragmental textures, were observed in the lowermost portions of drillcore in the Fleetwood and Vent Zones, but were not observed in the Pit Area.

The last, or uppermost, occurrence of this mafic unit marks the upper boundary of the Footwall Interval.

7.2.2 Seneca Horizon

The Seneca Horizon hosts all major stratiform sulphide-mineralized zones on the property. It is thinner and more discontinuous than the two other horizons and is comprised of felsic flows and flow breccias, poorly-bedded, coarse grained, felsic dominated volcaniclastic units as well as felsic, and lesser mafic, synvolcanic intrusions. The base of the horizon is commonly marked by a moderately to poorly sorted volcanic breccia or debris flow unit dominated by angular to subrounded feldspar-phyric clasts and lesser mafic clasts. Mafic lavas are uncommon in this horizon and coarse-grained volcaniclastic debris flows are more prevalent than well bedded volcaniclastic siltstones and turbidites. The Seneca Horizon includes the sequence of rocks overlying the uppermost occurrence of mafic lavas and which underlies the lowermost occurrence of dominantly fine-grained volcaniclastic units. Alternatively, the Seneca Horizon is marked by the presence of stockwork and semimassive sulphides (pyrite-sphalerite-chalcopyrite-galena) and associated zones of strong silica and sericite alteration. The former criteria are used when mineralization or strong alteration are absent.

In the Pit Area the Seneca Horizon is characterized by a coarse volcaniclastic unit, termed the ore zone conglomerate ("OZC"). The term is historical and the use of "ore" in the unit name does not imply any mineral resource value. This unit is texturally distinct from other units. It contains rounded and subrounded felsic clasts, is generally moderately to strongly hydrothermally altered and hosts disseminated to semi-massive sulphides. The OZC is interpreted to be a mass flow unit *having a discontinuous sheet-like or possibly channelized morphology (R. Allen, personal communication). This unit is not present in the Fleetwood and Vent Zones to the northwest, but is considered part of the Seneca Horizon because of its similar stratigraphic position to the other mineralized zones and its similar relationship with bounding lithologies; the OZC is underlain by felsic volcanic breccias and is overlain by the first, or lowermost, occurrence of well-bedded, finer-grained volcaniclastic siltstones and turbidites. Basaltic andesite commonly intrudes the Seneca Horizon/OZC in the Pit Area. These mafic units are interpreted to be synvolcanic sills based on their massive nature, their common peperitic margins and their lateral continuity (McPhie et al., 1993). Also commonly associated with the OZC is a thin dark brown to black argillite unit which often contains suspended clasts of rhyolitic pumice.*

7.2.3 Hangingwall Interval

The Hangingwall Interval comprises essentially all units stratigraphically overlying the mineralized zones of the Seneca Horizon. It is composed almost entirely of dacitic to rhyolitic rocks. Vent to vent-proximal flows and breccias are common in the Fleetwood and Vent Zones; portions of the stockwork zones in these areas are hosted by distinctly banded and brecciated felsic flows. Synvolcanic sills are more prevalent than flows in the Pit Area. The distinctive lithologies common to all areas, however, are well-bedded volcaniclastic turbidites and massive to bedded and laminated gravity-settled volcaniclastic sandstones to siltstones. These units are intercalated with the felsic flows in the Fleetwood-Vent Zones and are intruded by the synvolcanic sills in the Pit Area. Coarser-grained fragmental units are present in the Hangingwall Interval, but they tend to be subordinate to the fine-grained material. This horizon is essentially unaltered and unmineralized, in sharp contrast to the underlying Seneca Horizon.

7.2.4 Trough Zone

Drillhole 91-03 located 1.5 km south of the Pit Area intersects a 150 m thick sequence of uninterrupted Facies 2 volcaniclastic beds - the most continuous section of distal facies rocks observed at Seneca. Unlike all other drillcore examined, DDH 91-03 is unique in that no flows or synvolcanic intrusions were intersected. Despite its distance from drillholes in the Pit Area, DDH 91-03 has some notable similarities to parts of the Pit Area stratigraphy. The volcaniclastic units in both areas display an upward transition from poorly-bedded to well-bedded material. Pumiceous clasts and argillaceous beds are also more common in the upper sections of each area. Although no mineralization or hydrothermal alteration was observed in the Trough Zone, it appears to be roughly correlatable with the Seneca-Hangingwall Interval observed in the Pit Area drillcore.

7.2.5 Discussion of Volcanic Facies Relationships

The prevalence of both mafic and felsic lavas, flow breccias and coarse hydroclastic breccias in the Fleetwood and Vent Zones suggests a vent to vent-proximal facies. Mafic lavas in the Footwall Interval appear to be continuous between these two zones. However, the felsic lavas that dominate the Hangingwall Interval form two, or possibly more, separate flow-dome complexes centered *roughly around drillholes 91-18 and 86-22. The brecciated margins of these flows were eroded and redeposited to form the coarse hydroclastic beds at the base of the Seneca Horizon as well as some of the coarse distal debris flows. The felsic flows appear to have been largely constructive in nature, forming domes consisting of a series of superposed alternating flows and breccias. Some of the more massive, near-surface (near paleo-seafloor) sills that lack internal structure or brecciation may in places have emerged through the volcaniclastic cover to form true flows similar to the mechanism described for cryptodomes (McPhie and Allen, 1992). Other intrusions common at all stratigraphic intervals were likely feeders for these and subsequent flows, or were high level sills that did not reach the paleo-seafloor.*

Volcaniclastic units have two possible sources: 1) redeposited hyaloclastite from margins of flow-domes, and 2) gravity-settled fallout from pyroclastic eruptions. The nature of the angular, poorly sorted breccias in the lower portions of the stratigraphy favour transportation as a debris flow. The commonly normal graded and well bedded finer grained beds of the upper volcaniclastic interval favours transportation of volcanic debris as turbidites or deposition of pyroclastic debris by gravity settling. The unbedded volcaniclastic siltstone beds were likely deposited by gravity settling of volcanic ash possibly erupted from a distal pyroclastic source. These beds were likely below wave base since they are often bounded by well laminated beds. The entire sequence observed in the Trough Zone may represent a single eruptive event characterized by an initial high energy surge which deposited the coarser massive debris flow material, followed by the deposition of finer volcaniclastic turbidites during the waning stages of the eruption. Such an eruption may have marked the onset of the felsic-dominated extrusive volcanism that is prevalent in the upper parts of the sequence elsewhere on the property. This same eruptive event may have deposited the lava clast breccias that are common in the interval stratigraphically above the mafic lavas. Following or partly contemporaneous with this event, was a period of more effusive volcanism that formed the felsic flows and breccias common in the Fleetwood and Vent Zones. The intercalation of pumice-bearing fine volcaniclastic beds with the flows suggests that ash and coarser pyroclastic debris continued to rain down during this effusive period, perhaps 'draping' volcaniclastic material over the flows. However, this material may have originated from many kilometres away and may not necessarily reflect the volcanic processes acting in a particular area at that time. The ultimate origin of the fine-grained volcaniclastic beds is purely speculative at this point.

The similarities between the finer-grained volcaniclastic units in the Hangingwall Interval of both the Fleetwood Zone and the Pit Area suggest that these stratigraphic intervals are correlatable; the debris flow and gravity settling processes that deposited these units are favourable for a more areally extensive deposition of volcanic detritus which would account for the occurrence of these units in all areas of the Seneca property. These areas differ in that felsic flows are more common in the Hangingwall Interval of the Fleetwood Zone and the Vent Zone than in the Pit Area; the Pit Area appears to have been more distal and as such does not contain an abundance of extrusive vent to vent proximal facies rocks. The Trough Zone appears to be more distal than all of the other areas since it lacks the synvolcanic intrusions or feeders that are abundant in the Pit Area. These observations indicate that there is an overall facies change northwest to southeast across the

Seneca property from vent to vent-proximal facies rocks in the Fleetwood Zone to distal facies-dominated rocks in the Pit Area and Trough Zone.

7.2.6 Alteration

Pit Area

The most areally extensive zone of alteration at Seneca occurs in the Pit Area and is associated with the ore zone conglomerate ("OZC"). Moderate to intense silicification and sericitization is the dominant alteration style in this unit. In places the sericite alteration has completely destroyed the matrix material leaving only some of the more resistant lava clasts as evidence of the unit's original fragmental texture. The alteration is confined to a shallowly dipping interval of varying thickness, which was intersected in drillholes at depths varying from near surface to a maximum depth of 150 m. The surface projection of this zone delineates an area of approximately 500 m by 500 m around the Pit Area. The thickness of the altered OZC varies from 2 metres to over 15 metres. Although the alteration in this unit is very strong and is widespread, it is essentially stratabound and there is no apparent stockwork zone immediately underlying the OZC that could be interpreted as a feeder zone. It appears that the permeability of the coarse, less well sorted OZC provided a more favourable conduit for the hydrothermal fluids compared with its bounding strata of felsic flows and fine grained volcaniclastic rocks.

Fleetwood and Vent Zones

In contrast to the Pit Area, hydrothermal alteration in the Fleetwood and Vent Zones is discordant and is not as areally extensive. Alteration is confined to discrete stockwork zones that are within basaltic to rhyodacitic flows, breccias and intrusions and can reach over 50 metres in vertical extent. These zones of stockwork-related hydrothermal alteration all lie along a northwest-southeast striking trend; drillholes located to the northeast of this did not intersect any zones of strong alteration. The most extensive individual stockwork outcrops at surface and is intersected by numerous drillholes in the Vent Zone. This area of strong silicification and sericitization extends over an area of 100 to 200 metres in diameter and can be traced to depths of over 100 metres. The stockwork alteration in the Fleetwood Zone to the northwest of the Vent Zone is less extensive both laterally and vertically. Lithological relationships suggest that alteration in the Vent and Fleetwood Zones occurs in the same stratigraphic interval.

The stratabound alteration in the Pit Area is along strike from the stockworks in the Fleetwood and Vent Zones suggesting a possible larger-scale structural control on the hydrothermal activity, as well as a possible genetic relationship between the different alteration zones. However, no large-scale controlling structures were recognized in the limited drillcore.

8.0 DEPOSIT TYPES

8.1 Deposit classification

Mineralization in the Seneca area is considered a volcanic hosted massive sulphide VHMS or VMS, which is a type of metal sulfide ore deposit, mainly Cu-Zn associated with and created by volcanic-associated hydrothermal events in submarine environments. Volcanogenic massive sulphide deposits are strata bound accumulations of sulphide minerals that precipitated at or near the seafloor in spatial, temporal and genetic association with contemporaneous volcanism.

VHMS deposits consist of two parts, a concordant massive sulphide lens (>60% sulphides) and a discordant vein-type sulphide mineralization located mainly in footwall strata, known as the 'stockwork' (Figures 5 & 6. They are hosted by rocks of direct and indirect volcanic origin (pyroclastics, volcanoclastics) and occasionally hosted by shales and greywackes (with nearby volcanic rocks).

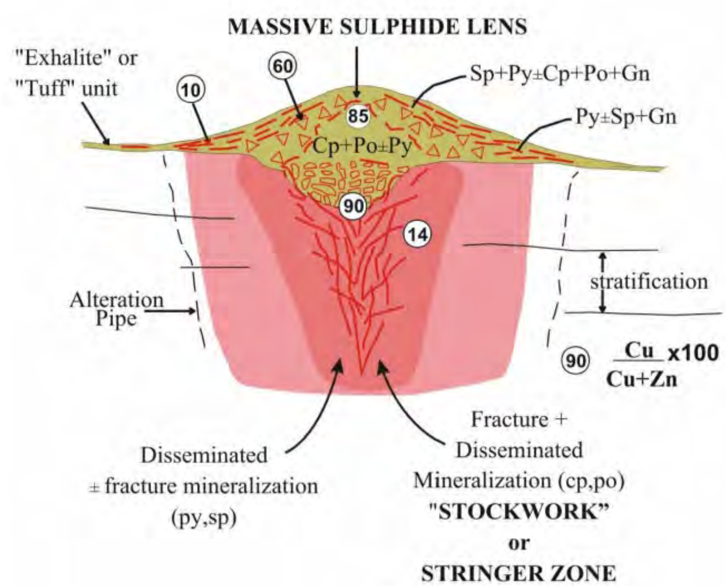

Figure 5. Idealized VMS deposit showing a stratiform lens of massive sulphide overlying a discordant stringer sulphide zone within an envelope of altered rock (alteration pipe). Basemetal zonation indicated by numbers in circles with the highest numbers being cu-rich and the lower numbers more Zn-rich (py = pyrite, cp = chalcopyrite, po = pyrrhotite, sp = sphalerite, and gn = galena (modified from Gibson et al, 2007).

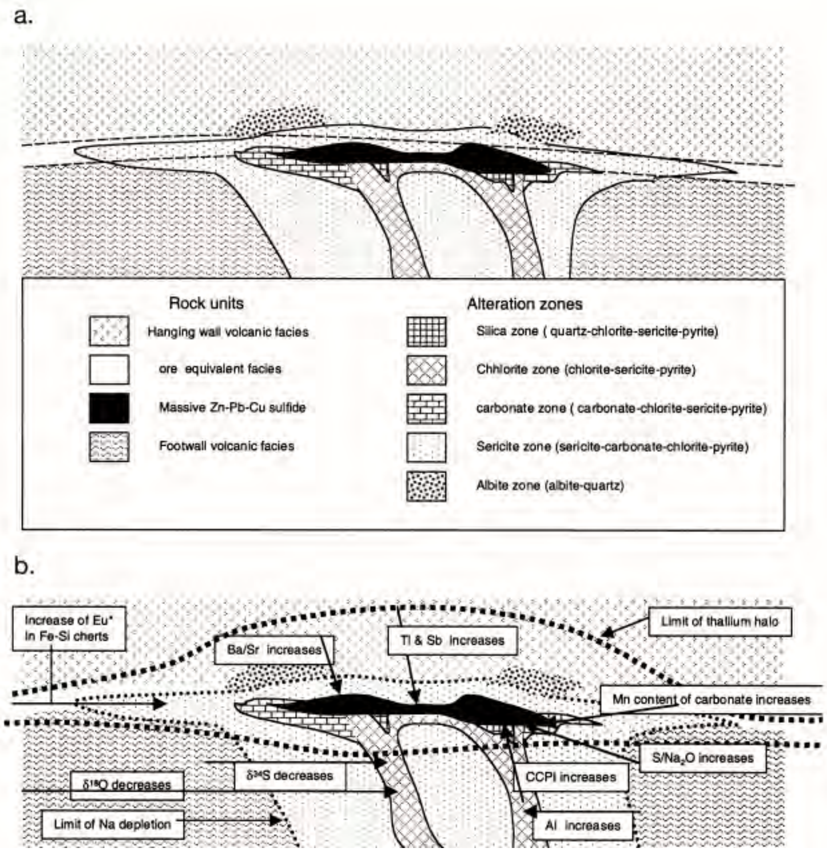

Figure 6. Model of alteration zonation associated with Zn-rich polymetallic volcanogenic hydrothermal massive sulphide deposits and alteration vectors useful for exploration (Large, et. al., 2001).

VMS deposits have been classified in many different ways over the last 25 years, including on the basis of their composition and host rock composition. Franklin et al. (2005) classify VMS districts using a lithostratigraphic scheme based primarily on the principle volcanic and sedimentary lithological units that formed concurrently with the deposits in a given district. Five lithostratigraphic types of VMS districts according to Franklin et al. are:

- Bimodal-mafic
- Mafic
- Pelitic-mafic
- Bimodal-felsic
- Siliciclastic felsic

Although most VMS deposits can be classified into one of the principle types, there are some deposits that are transitional.

Three type examples exist for VMS deposits:

- Cyprus-Type VMS deposits and contemporary MOR hydrothermal systems (e.g. Tag). These are Cu-rich, deep marine and associated with ophiolitic suites, and thoeliitic basalts.
- Kuroko-Type VMS deposits and contemporary back-arc hydrothermal systems (e.g. Manus Basin). These are Pb-Zn-rich, shallow marine to continental settings and associated with bimodal volcanism, particularly rhyolites and dacites.
- Primitive Abitibi-Type VMS deposits and contemporary paired active-arc-back-arc hydrothermal systems. These are Cu-Zn-rich, Archean in age and associated with ultramafic rocks, mafic intrusions, granitoid rocks, and Precambrian sediments.

Ancient VMS deposits formed in collisional environments during periods of extension and rifting. At convergent margins: in island arcs and continental margins. At divergent margins: (ophiolite associated deposits) MOR's or back-arc basins.

For each of the five lithostratigraphic types of VMS district classified by Franklin et al. (2005):

The first three types, bimodal-mafic, mafic & pelitic-mafic are related to ocean-ocean subduction zones, and represent an evolution from nascent arc rifting (bimodal-mafic) to mature back arc development (pelitic-mafic). In Archean greenstone terranes such as Abitibi, bimodal-mafic also includes mantle plumes.

Bimodal-felsic & siliciclastic felsic formed in ocean-continental margin to continental back arc environments. Bimodal-felsic occurs in the early suprasubduction arc rifting stage and siliciclastic felsic occurs in mature epicontinental back arcs.

The mineralization in the Seneca area has been classified by Thompson, (1972) and Hoy (1991) as Kuroko style, and confirmed by McKinley (op. cit.); that is, a type associated with felsic volcanics particularly rhyolite domes (back arc rifting), copper/zinc/lead with gold and silver, e.g. Kuroko deposits (Japan). In the classification system of Franklin (op. cit.) Seneca can be classified as Bimodal-felsic or siliciclastic felsic.

8.2 Mineralization

Continuing with the discussion of mineralization by McKinley (op.cit.):

8.2.1 PIT AREA (Main Seneca deposit – Adjacent Property, not on NSS claims)

Pride (1973) and Urabe at al. (1983) recognized the strong association of mineralization in the Pit Area with a dominantly felsic fragmental footwall unit which is now referred to as the ore zone conglomerate (OZC). Their studies describe a zoned massive sulphide body with a chalcopyrite and pyrite-rich base which is overlain by a sphalerite-barite-galena-rich ore. These zones are analogous to the yellow and black ores respectively that occur in the typical Japanese Kuroko deposits. McKinley et al. (1996) stated that such a zonation was not as readily discernible in drillcore, although many of the cores examined in that study were 100 to 200 m away from the main sulphide zone in the pit. Pride (1973) also documented fragmental sulphides, which suggest that *the mineralization formed at or close to the paleoseafloor allowing some slumping and reworking to occur.*

Sulphide mineralization associated with the OZC is dominated by disseminated to semi-massive and stringer pyrite. Massive and semi-massive sulphides are generally restricted to the middle and upper parts of the unit and reach thicknesses of up to 2 metres, but are more commonly around 0.5 metres. These intervals are composed of locally 20 to 50 % sphalerite, up to 75 % pyrite, less than 15 % chalcopyrite, up to 15 % barite and generally at least 10 % felsic fragmental material. Galena is also present in small amounts, but is only discernible in polished thin section. The massive sulphides are discontinuous and usually cannot be correlated between adjacent drillholes, and some intersections of the OZC contain nothing more than disseminated pyrite.

Pyrite is generally the dominant sulphide mineral and occurs as disseminated euhedral grains or as matrix-filling material interstitial to felsic clasts of the OZC. Pyrite also rims the lava clasts in places. Stringers of sulphides (pyrite>chalcopyrite>sphalerite) up to 2 cm wide are also observed to crosscut the OZC below the massive sulphides.

Chapman (1999) produced a compilation report and listed some of the significant massive sulphide intersections associated with the Ore Zone Conglomerate. These include:

DDH 71-6: 7.8 m[1] @ 9.1% Zn, 1.0% Cu, 84.6 g/t Ag, 2.8 g/t Au*
DDH 74-31: 5.0 m[2] @ 11.3% Zn, 0.6% Cu, 125.1 g/t Ag, 0.9 g/t Au*
DDH 83-6: from 121.4 – 122.7 m for 1.3 metres[3] @ 17.7% Zn, 5.11% Cu, 144.3 g/t Ag, 6.96 g/t Au*

** these core length measurements are considered close to true thickness of mineralization as the holes were drilled close to perpendicular to bedding (steep/vertical holes testing near horizontal beds).*

[1] Data for DH 71-6 not available in assessment reports; the authors rely on Chapman's report for the accuracy of these numbers.

[2] Assay data for DDH 74-31 not available in assessment reports; AR 5233 reports 1.4 metres of massive sulphides from 95.6 – 96.9 m within a wider mineralized interval from 88.4 – 98.8 m; the reported mineralization most likely occurs in this interval.

[3] Location of DH 83-6 unavailable in assessment records; authors relied on report of Chapman (1994) for accuracy of these numbers and report this intersection strictly as an anecdotal account.

These numbers illustrate the potential for high-grade base metal sulphides as well as the local enrichments in precious metals These numbers illustrate the potential for high-grade base metal sulphides as well as the local enrichments in precious metals. The Seneca Ore Zone Conglomerate is transported, with diverse clasts of rock and sulphides, in a debris flow deposit. The source area might contain a mixture of footwall stringer style mineralization, in-situ massive sulphides and transported debris flow sulphide clasts.

As a result of their 2005-2006 drilling program conducted at Seneca Carat (March 28, 2006 news release) stated: *Mineralized intercepts comprised stringer to massive pyrite-chalcopyrite-sphalerite*

± galena hosted by a strongly quartz-sericite altered volcanic fragmental unit that has historically been termed the 'ore zone conglomerate' (OZC). The drilling has demonstrated that, in the area tested, the OZC and the mineralization have been intruded by a synvolcanic mafic sill that has 'dismembered' the zone giving the appearance that there are numerous small, discontinuous lenses. In fact, relationships suggest that there was originally one mineralized horizon that was split apart and artificially terminated in places by the mafic sill. Despite this, however, the drilling has successfully demonstrated the high grade, polymetallic nature of the massive sulphide mineralization at Seneca. For instance, one 2.6 metre intercept in hole 57 reaching grades of 0.94% Cu, 20.28% Zn, 100 g/t Ag and 3.05 g/t Au. The Seneca Zone remains a viable target for continued massive sulphide exploration focussing on potential along-strike extensions of the known zone.

8.2.2 VENT ZONE (on Adjacent Property, not on NSS claim)

Mineralization in the Vent Zone consists entirely of stockwork veins hosted by a strongly altered massive dacite porphyry intrusion. The veins are 1 to 10 mm wide and are composed of principally quartz, pyrite and sphalerite with scattered blebs of chalcopyrite. Locally, the veins comprise 10 to 15 % of the rock, but more commonly make up less than 5 % of the rock. Although the vein mineralization is relatively extensive, the metal grades are generally quite low. Typical assays for the zone are less than 0.50 % Zn and less than 0.20 % Cu with only trace amounts of precious metals. Higher grade zones reach up to 4.0 % Zn and 0.75 % Cu over 2 metres, but such zones are sparsely distributed. The basaltic breccias that form the immediate footwall to the main stockwork zone contain disseminated and stringer sulphides and in places contain over 3.0 % Zn and up to 1.0 % Cu over a 2 metre interval. Some of the more significant intersections of the stockwork mineralization in the Vent Zone include the following (from Chapman, 1999):

DDH 85-09: from 25.9 – 38.4 m for 12.5 m @ 3.3% Zn, 0.5% Cu, 0.1% Pb, 13.1 g/t Ag, 0.12 g/t Au*
DDH 85-12: from 43.4 – 53.0 m for 9.6 m @ 3.8% Zn, 0.2% Cu, 1.2% Pb, 28.8 g/t Ag, 0.73 g/t Au*
** these are core length measurements through a mineralized zone interpreted to be steeply-dipping, to be cross-cutting stratigraphy and having an irregular shape; as such it is difficult to assess 'true thickness' accurately with the available information and these measurements should be regarded simply as a sample of the mineralization, but not necessarily a good representation of its actual size. (Based on surface chip sampling and two different possible strikes for the mineralized zone, Pegg (1986) calculated that the true width of the Upper Vent Zone ranged from 57 to 62 metres).*

8.2.3 FLEETWOOD ZONE

As described by Chapman (1999): *The Fleetwood Zone (Figure 7) covers an area of approximately 700 m by 550 m and occurs 1 km northwest of the Vent Zone. It has been drill tested on broadly spaced 150 m centers by 33 holes and consists of a bedded massive sulphide layer at a depth of about 150 m. The massive sulphides are hosted by a laminated felsic ash overlying a strongly brecciated stockwork zone in a silicified and sericitized rhyolite/dacite dome. Wide intercepts of* *lower grade material have been encountered in drill holes beneath the massive sulphide horizon:*

Hole #	Mineralization	Zn	Cu	Pb	Ag	Au	Interval
DDH-91-16	Massive	5.56%	0.38%	0.37%	162 g/t	2.37 g/t	1.10 m
	Stockwork	2.06%	0.31%	0.11 %	8.1 g/t	0.07 g/t	32.1 m
DDH-91-1O	Massive	13.77%	0.84%	0.42%	28.9 g/t	0.65 g/t	1.35 m
	Stockwork	2.25%	0.2%	0.04%	12 g/t	0.07 g/t	13.6 m
DDH-87-12	Massive	6.45%	0.47%	3.04%	326 g/t	2.29 g/t	0.46 m
	Stockwork	2.03%	0.1%	0.45%	21 g/t	0.34 g/t	13.9 m
DDH-91-18	Stockwork	5.74%	0.79%	0.10%	7.5 g/t	0.07 g/t	8.24 m

* As noted by McKinley, this zone is interpreted to be a steeply-dipping, cross-cutting stockwork or feeder system; as such, since 91-16 is a vertical hole, these core length measurements and grade intervals should be regarded as a sample of the mineralization present within the zone, but not necessarily a good representation of its actual size.

….The volcanic pile, which gave rise to the mineralization encountered in the Fleetwood Zone, appears to be dipping to the southwest in the vicinity of hole 92-33. The high grade massive sulphide mineralization encountered in hole 92-33 appears to be close to the base of slope of the volcanic sequence as the dips recorded in hole 92-39 to the southwest show a flattening. Abundant diking and faulting in this area has significantly complicated the stratigraphic sequence.

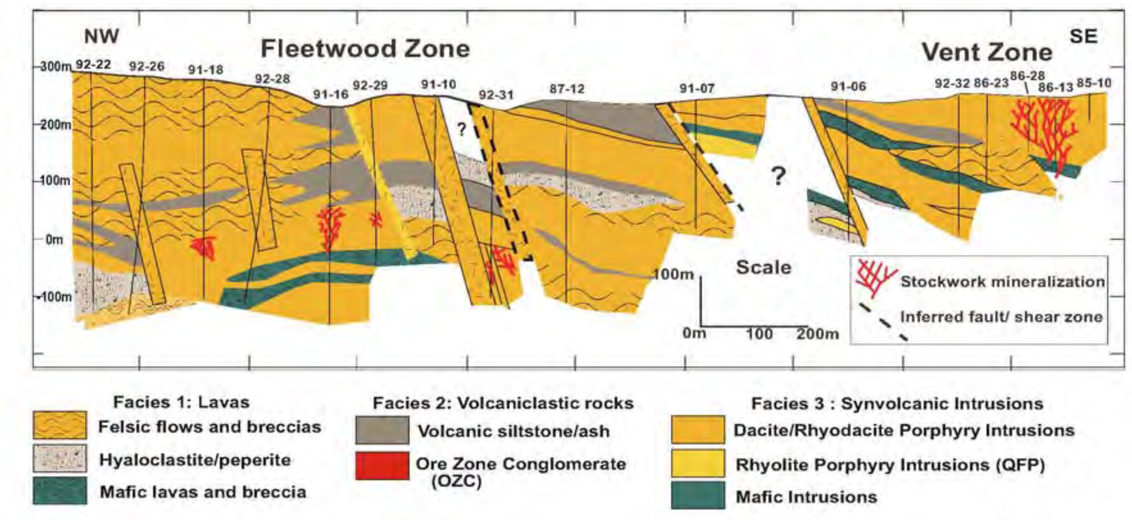

Figure 7. NW-SE Longitudinal section through the fleetwood and vent zones. (after McKinley, 2004; refer to figure 13 for section location)

8.2.4 33 ZONE

According to Chapman (1999):

To the southwest of the Fleetwood Zone DDH-92-33 intersected a lens of high grade massive sulphides which has been designated the 33 Zone. This material likely represents the down slope pooling and thickening of the sulphide mineralization produced by the Fleetwood system as no underlying feeder zone was intersected.

Hole #	*Mineralization*	*Zn*	*Cu*	*Pb*	*Ag*	*Au*	*Interval*
DDH-92-33	*Massive*	*23.30%*	*1.83%*	*1.71 %*	*133 g/t*	*2.33 g/t*	*3.20 m*

The presently known extent of the Fleetwood/33 zone mineralization is 800m by 700m (Figures 7 & 13). *The wide spacing of the drill holes and the presence of dyke swarms has left abundant space between intercepts for the presence of small to medium sized massive sulphide bodies (up to 1,000,000 tonnes) of the Battle or Gap (Buttle Lake) variety.* (Note: This is a reference to the Myra Falls VMS deposit on Vancouver Island where three main orebody clusters, the H-W, 43 Block, and Battle-Gap are currently being mined, but several other zones including the Lynx-Myra-Price trend have seen production, e.g. Chong et. al., 2005; however, this is not an indication that similar multiple zones will be found on the Seneca property).

8.2.5 SENECA HORIZON CONGLOMERATE - NSS claims

Chapman (1999) in his data compilation notes the following:

The fragmental character of the Seneca ore indicates that it has been transported downslope from its source. A felsic dome, with weak stringer type mineralization intersected in DDH-91-4, to the southwest of the Seneca was thought to be the source of the Seneca massive sulphides. Subsequent drilling of both the Fleetwood/33 zones and the Mercury Hill, to the northeast, anomaly indicate that the paleoslope may have been southwesterly. Step out drilling to the northeast of the Seneca deposit (DDH-85-3) intersected both fragmental and massive sulphide ore, which may represent an upslope style of mineralization.

A northerly source is also supported by hole DDH-94-4 1, located 800m northeast of the Seneca deposit which intersected hydrothermally altered and mineralized felsic ash and lithic lapilli tuff overlying a pyritic argillite (semi massive) which is very similar to the ore zone sequence at the Seneca deposit. Elevated gold values (2.65g/t) are present in the 0.9m interval underlying the base metal mineralization in DDH-94-41 as in the Seneca deposit and DDH-85-3.

Hole#	*Mineralization*	*Zn*	*Cu*	*Pb*	*Ag*	*Au*	*Interval*
DDH-85-3	*Massive*	*10.1%*	*0.36%*	*0.72%*	*233.9 g/t*	*5.41 g/t*	*0.65m*
DDH-94-41	*Stockwork*	*2.16%*	*0.10%*	*0.06%*	*4.0 g/t*	*0.1 g/t*	*3.30m*

An equivalent sequence at the same stratigraphic horizon was intersected in DDH-72-18 and 19 which were located to test a large mercury anomaly northeast of the Seneca deposit. These holes are located 500m southeast and east of DDH-94-41 respectively. An argillaceous and baritic fragmental unit, equivalent to the Ore Zone Conglomerate, encountered in DDH-72- 19 contained 1.1% zinc over lm, or 0.65% zinc over 3.5m. No assays are available from DDH-72-18 however the drill logs record the same sequence at the same stratigraphic level as shown on the Seneca section. The equivalent horizon was also intersected in DDH-72-17, 1 km to the southeast, which contained sphalerite and barite but was not sampled at that time.

Considerable exploration has also been conducted in the area to the north of Weaver Lake, where prospective volcanic-sedimentary horizons similar to the Seneca were encountered during prospecting and sampling on the eastern side of the Seneca property.

9.0 EXPLORATION

No exploration work has yet been conducted by NSS on the Seneca property, other than a brief examination of the Vent and Seneca zones. In a brief reconnaissance of the area to the east of the Fleetwood Zone the writer encountered scattered siliceous float boulders and cobbles with abundant disseminated pyrite in glacial till over an area of at least 80 by 400 metres.

The most recent work which is relevant to NSS claims is that of Carat and reported by McKinley (2004, 2005, 2006) as follows:

9.1 Rock Geochemistry

During Carat's 2004 Seneca exploration program, McKinley et al (op. cit.) collected a total of 60 rock samples for geochemical analyses. Rock samples were taken as individual grab samples, as composite chip samples taken over intervals of up to 4 m, or as continuously cut channel samples. Of particular significance are anomalous results for sample RDC-21 which was taken over a two metre thickness and analyzed 926 ppm Cu, 4289 ppm Zn, and 31 ppm Ba. This sample is located just northeast of the east end of the Fleetwood Zone and probably reflects a stockwork style of mineralization consistent with low Ba values. The sample is described as tuffaceous. Upstream from sample RDC-21, sample RDC-24 analyzed 145 ppm Cu, 326 ppm Zn and 6 ppm Ba within a siliceous, brecciated fragmental volcanic.

Four samples were collected by this author for the purpose of comparison and characterization, one sample of each of the Seneca and Vent zones, and 2 reconnaissance samples (plotted on Figure 13). Selected multielement data are presented in the table below. Cu, Zn, Pb, Ag and Au grades and multielement geochemistry are as expected for the former. Although the latter are interesting mineralogically, multielement results are not anomalous.

Sampleid	UTM E	UTM N	Type	Description
NSS 001	576670	5463238	Grab sample	Seneca Pit. Semi-massive fine grained granular mixture pyrite, sphalerite and chalcopyrite
NSS 002	575374	5464536	2.0 m chip/channel sample. Carat sample site 132053.	Siliceous, quartz veined, locally brecciated. Pyrite, sphalerite minor amounts of chalcopyrite disseminated and in quartz veinlets.
NSS 003	575075	5465271	2.5 m chip/channel	Across fracture/shear zone; weakly to locally moderately silicified porphyritic dacite with irregularly disseminated pyrite.
NSS 004	575148	5465770	Grab sample of float over area of about 200 square m.	Siliceous volcanic(?) with abundant pyrite disseminated and in occasional seams.

Sample_id	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Au ppb	Mn ppm	Fe %	As ppm	Cd ppm	Sb ppm	Bi ppm	Hg ppm	Tl ppm	S %	Se ppm	Te ppm
NSS 001	53.4	21130	684.6	96300	101	2640.1	339	24.43	902.2	418.6	91.2	16.4	2.82	43.1	>10.00	6.9	3.9
NSS 002	57.4	2460	345.6	2300	8.7	189.2	100	2.9	131.1	105.3	7.2	0.7	0.35	5 2	3.65	1.2	0.4
NSS 003	1.1	27.2	3.7	216	0 3	1.5	2356	11.53	3.4	0.3	<0.1	1.3	0.01	0 2	6.21	4.4	1.1
NSS 004	4 2	17.7	2.3	42	0 3	1.3	206	3.07	0.8	0.2	<0.1	0.5	0.01	<0.1	2 38	1.7	0.6

9.2 Stream Sediment Geochemistry 2004

During the period June 30 to July 19, 2004, Discovery Consultants, for Tecucomp Geological Inc. on behalf of Carat Exploration Inc., conducted a stream sediment survey in the Seneca property area. Sampling was conducted at sites characterized by active stream channels containing a range of coarse immature sediments, dominated by gravels, cobbles and boulders. The priority was to collect sufficient sample to obtain at least 30 g of minus 80 mesh material. In a few instances moss-mats were used to augment streambed sediments where streambed sample sizes were inadequate. Samples were collected at approximately 200 m intervals along the creeks. GPS readings and thread chain were used to locate the sites. The area effectively surveyed is approximately 50 km^2. Upon compiling and interpretation of results, recommendations were made for further exploration. Results were replotted on an NSS claim base and are presented as size-ranged symbol plots in Appendix 2 (Zinc symbols are also included on Figure 11).

The 2004 multielement data was summarized and generalized by McKinley (op. cit.) into six anomalous areas indicative of Seneca-style mineralization, the extent and significance of which apparently has not yet determined. Four anomalies, 1, 2, 3, and 5 are in creeks which drain NSS claims as follows:

9.2.1 Geochemical Anomalies in Western Seneca

Several multielement geochemical anomalies exist along strike from the Seneca pit area show high threshold to anomalous values in all elements except gold and antimony. Note that many of these significant values are not cut off upstream. The sources of these anomalies are at least 1.5 km east of the Seneca – Vent – Fleetwood trend of mineralization, or along strike, in areas untested by drilling.

Anomaly 1 (Zn-Cu-Pb-Ag-Te-Se-S-As):

A dispersion train of multielement stream anomalies is located in a southwesterly flowing creek about 3 km north of the Seneca Pit, east of the Fleetwood zone. The anomaly is increasing in magnitude upstream, indicating a possible source in the Hangingwall Horizon of the Seneca sequence. Responses in the lower portion of the creek may be detecting outcropping of the Fleetwood Zone previously only detected in drillcores.

Anomaly 2 (Zn-Cu-Te-Se-S):

Anomaly 2 is located north of the above creek, and is present in up to four south westerly flowing tributaries of the Chehalis River; the anomaly is open up stream. This anomaly may be related to mineralization earlier detected along Vaughan Creek.

Anomaly 3 (Zn-Cu-Pb-Ag-Au-Sb):

At the south end of the property and east of the Chehalis River, a Zn-Cu-Pb-Ag-Au- Sb anomaly (Anomaly 3) is located approximately one kilometer southeast of the known Seneca deposit. These anomalies are along strike from the Seneca deposit, in an area untested by drilling. In addition two small creeks, just east of the Chehalis River, at the southern claim boundary remain to be sampled for heavy mineral concentrates.

Limited soil sampling over an area of about 900 by 490 metres was conducted Chevron Standard Ltd. in 1977 (Howell & Arscott, 1977). This work defined several irregular Zn +/- Cu +/- Ag anomalies south of stream anomaly 1.

9.2.2 Geochemical Anomalies in Eastern Seneca

Anomaly 5 (Zn-Cu-Ag-Te-Se-S-As-Sb):

Anomaly 5 is located in four northwest flowing tributaries of a south easterly flowing tributary of Sakwi creek; the anomaly is defined by only one sample per creek.

Mafic "fire fountain" facies volcanics are present in several localities near Sakwi Creek. It is not certain at this time if these volcanic rocks definitively mark the footwall of a Seneca sequence of volcanic-sedimentary lithologies. However, the presence of the three geochemical anomalies in this area described above, combined with the presence of these important mafic rocks, renders this area worthy of follow-up exploration.

9.2.3 Gold Anomalies – Chehalis Valley

Two groupings of anomalous high (50 to 754 ppb Au) gold in silt anomalies occur proximal to, and generally downstream from, the Vent and Seneca pit mineralized areas. The highest value, 754 ppb Au occurs upstream some 400 m to the east of the Vent showing on the NSS Seneca 4 claim and it may indicate a possible new gold zone to the East and stratigraphically above the Vent Zone.

In addition, on the NSS Seneca 3 claim, a value of 320 ppb Au was noted some 800 m to the west of the Seneca pit in a small drainage which cuts a newly interpreted possible EM conductor (see section 9.4 Geophysics – 60Hz anomaly). Geochemical samples taken in this drainage upstream from this interpreted conductor are not anomalous (0.2 to 2.5 ppb Au).

The results of the 2004 silt sampling program at Seneca point to significant exploration potential in areas which have not been drill tested or mapped in detail. At the south end of the property and east of the Chehalis River, a Zn-Cu-Pb-Ag-Au-Sb anomaly (Anomaly 3) is located approximately one km southeast of the known Seneca deposit. This anomaly is particularly significant as the area (the Trough Zone) is interpreted by McKinley et al (1996) as a facies change from vent to vent-proximal facies at the Seneca pit area to more distal facies comprising a volcaniclastic sequence, based on observations from drill core from drill hole 91-03. The anomaly (with three >300ppm Zn silt samples over a distance of 600m) may reflect an in situ style of massive sulfide mineralization which has not been tested to date. Northeast of the Fleetwood Zone, significant anomalous Zn values with coincident elevated Cu values occur northeast of the Fleetwood Zone (Anomaly 1). This anomaly is located in rocks higher in the volcanic succession and may represent a stacking of mineralized horizons in an area which has not been drill tested.

9.2.4 Stream Sediment Geochemistry 2005

During 2005, Discovery Consultants, for Cambria Geosciences Inc. on behalf of Carat Exploration Inc., conducted a stream sediment survey on the eastern half of their Seneca property. In total, 241 samples were collected (including blanks and field duplicates) from 223 unique sites. Much of the area sampled is not now covered by the NSS claims, but lies within the Hemlock Valley Ski Development area immediately to the north of the Seneca 6 claim. A highly anomalous area over 600 m east-to-west by over 250 m north-to-south has been identified immediately north of Weaver Lake in the northeast part of the NSS property and extending off to the north. This zone is anomalous in Cu, Pb, Au and Ag, but is most highly anomalous in Zn. Zinc values in this area are generally greater than 300 ppm, but locally exceed 1000 ppm. Subsequent to 2005, drilling by Carat encountered significant Zn Cu mineralization about 1.8 to 2.3 km north of Weaver Lake and 1.0 to 1.4 km north of the NSS Seneca 6 claim (Carat April 13, 2007 news release). Carat describes the drill hole intersections as wide areas of locally strong hydrothermal alteration and associated stringer to locally semi-massive sulphides in a package of andesitic and dacitic volcanic rocks and interlayered sedimentary rocks. Interestingly, these holes were spotted some 200 to 300m east of a continuous, but generally weak, north south trending Aeroquest EM conductor and co-incident magnetic linear which trends onto the NSS Seneca 6 claim and does not appear to have been tested by the drilling. Three anomalous gold in silt geochemical anomalies (82 to 468 ppb Au) were also noted downstream from this conductor.

9.3 Ground Geophysical Surveys

Cominco Ltd. in 1988 completed ~40 line km of ground UTEM (University of Toronto EM) on the west side of Mt. Keenan (Holroyd, 1988, assessment report 18261). Holroyd noted that numerous weakly conductive features were outlined – and commented on the two strongest – one a shallow target just off the NSS property to the NE of the Seneca 7 claim – and to be "…related to stringer type pyrite mineralization at the margins of quartz porphyry dykes…"and believed by this author to be in the footwall of the Seneca horizon". The second target trends EW some 1.4 to 2.0 km ENE of the Vent Zone. It was interpreted to be caused by a cultural source "such as a buried cable" left over from previous logging operations. The author noted the anomaly shape was quite complex, that it was observed on three survey lines, had considerable strike but limited depth extent, and that responses down to channel 2 (normally indicative of a deep response) were recorded. The target Seneca horizon is estimated to be at a depth of 300 m to 400 m at this location. Given that the EM responses of the Seneca VMS mineralization to date appear to be quite weak (Cominco was expecting strong, high conductivity targets) and that the target Seneca horizon is generally flat may suggest that this weak EM anomaly requires a closer examination.

Five other weak generally EW trending conductors, interpreted to be in the Seneca horizon or the hanging wall of the horizon, occur in a 4.2 km long by 0.6 km wide NS trending corridor which significantly originates at the Seneca Main pit area. This may suggest a series of lenses of poorly conducting and flat lying VMS mineralization, each lens corresponding with a weak conductor, and down or up dip from the Seneca Main pit mineralization – depending on the original paleoslope on which the VMS mineralization was deposited. Further detail geological mapping, ground geophysical surveys and drilling will be required to determine the economic potential of this interpretation.

Induced Polarization (IP) surveys were completed for Curator in 1985 and the grid later extended in 1986 for Selco Division – BP_ Resources Canada Ltd. in the Vent zone area (Pegg, 1986, assessment reports 15734A & B). A total of 13.3 line km of pole-dipole surveying with an 'a' spacing of 25 m and an 'n' spacing of 1 to 4 was completed by Lloyd Geophysics. Follow up sampling and drilling by BP noted that the …"IP survey outlined some 37 anomalies of varying strength, of which 12 were drilled tested. Drilling indicates that the anomalies are reflecting brecciated, silicified and pyritic strata which only locally contain coincident base metal mineralization. The significant mineralization appears to be restricted to the 'Upper Vent' showing portion of the so called 'Vent Zone'."

9.4 Airborne Geophysical Surveys

The following is based on unpublished geophysical reports and data supplied by Carat (Aeroquest, 2005 & 2006, McKinley, 2006a).

Between April 10th and April 19th, 2005, and July 2nd and July 7th, 2006, helicopter-borne geophysical surveys were carried out over the NSS property and the surrounding area. These surveys were conducted by Aeroquest Limited on behalf of Tecucomp Geological Inc. and for Carat. Geophysical sensors included Aeroquest's AeroTEM™ and AeroTEMII™ time domain helicopter electromagnetic system and a high sensitivity cesium vapour magnetometer.

The surveys were flown in the direction N056°and N057°E, at a mean 100 m line separation. The magnetic control on tie lines was flown perpendicular to the survey lines at a nominal spacing of 1250 m. The earlier survey covered most of the west central part of the NSS property and totalled some 347.2 line km; and the second survey covered the balance of the eastern part of the property and a considerable area to the east and north of the property, totalling some 1,104 line km. Nominal EM bird terrain clearance was reported as ~30 m. The magnetometer sensor was mounted in a smaller bird connected to the tow rope 21 m above the EM bird and 17 m below the helicopter. Nominal survey speed was 75 km/hr.

9.4.1 Airborne Magnetic Surveys

For this report the final levelled total field magnetic values from each of the Aeroquest airborne surveys were re-levelled and merged to make one continuous magnetic data set. This data was then filtered to produce a reduced to the pole (RTP) magnetic map (Figure 8). This data was also filtered with a high pass filter to accentuate near surface features in the generally low amplitude magnetic responses near the Seneca Pit, Vent and Fleetwood Zones.

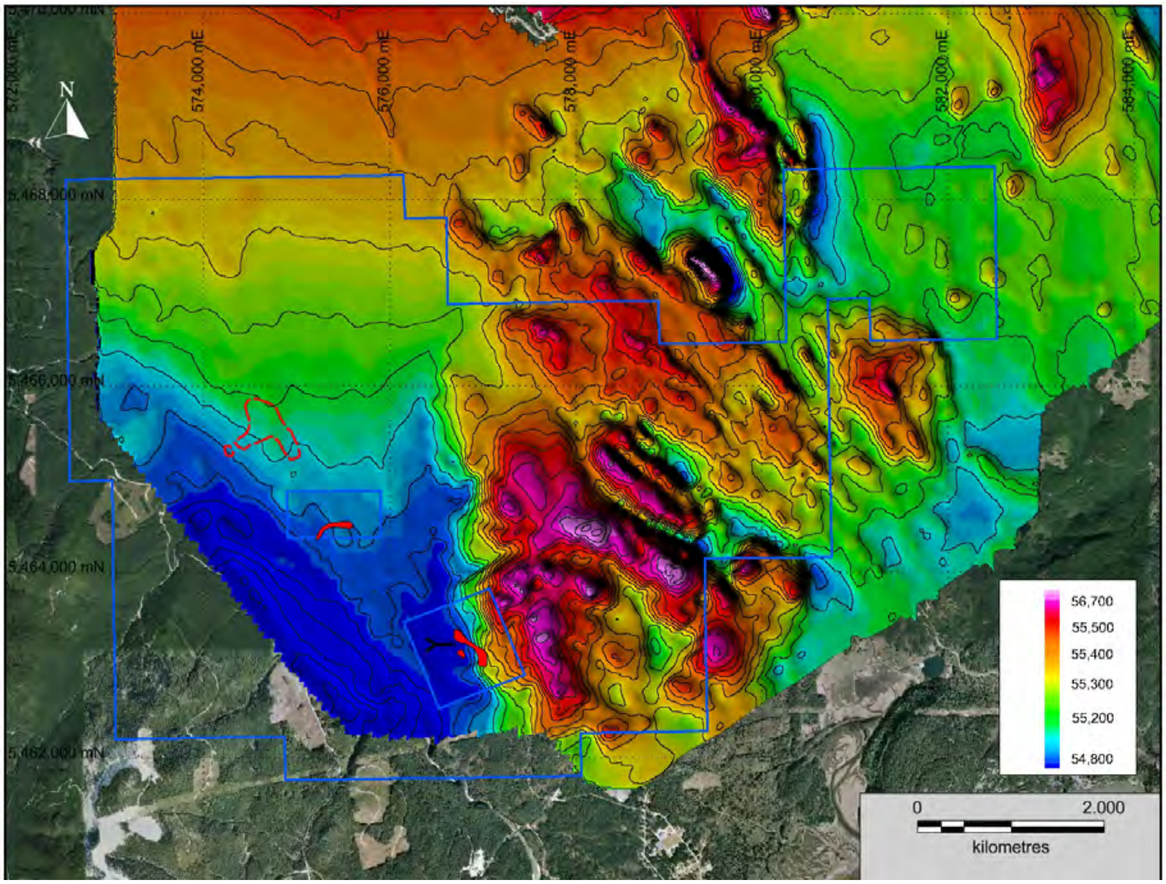

Figure 8. Aeroquest mag data - reduced to the pole, smoothed total magnetic field map (sun shaded from SW - sun elevation 45; colour scale bar: Nano-teslas)

The RTP magnetic survey results indicate generally low amplitude responses on the western and eastern, low topographic elevation, parts of the NSS claims. In the central, generally higher topography areas, the magnetic responses are considerably elevated – reflecting the presence of a thick high magnetic susceptibility unit stratigraphically above the Seneca horizon. This central area exhibits strong NNW trending linears – which are sub parallel to a splay of the regional Harrison Lake fault system and likely represent additional faults and or dykes.

It is also noted that the central areas with high magnetic susceptibility generally correspond with a scarcity of anomalous multi-element silt or rock geochemistry – again confirming that the favourable Seneca horizon is buried beneath the hangingwall volcanics. Across the NSS claims, depths to the Seneca horizon vary from outcropping to likely more than 500 m.

On the High Pass filtered RTP Magnetic Map (Figure 9) two distinct north-northwesterly trending magnetic high zones are noted (dashed black lines).

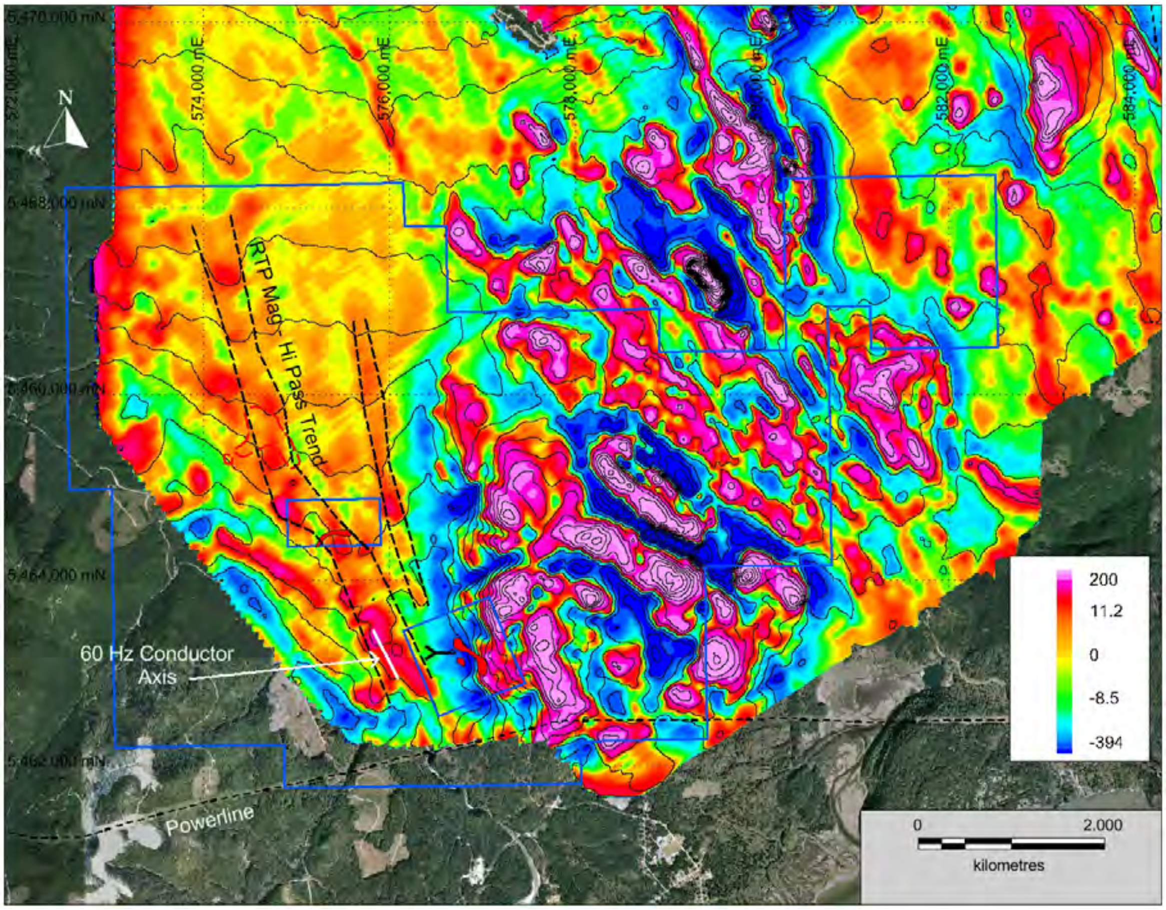

Figure 9. Aeroquest mag data - RTP magnetic field map, high pass filter (colour scale bar: Nano-teslas, on google earth satellite image)

The High Pass filter is designed to accentuate near surface magnetic (geological) features in the generally non-descript low magnetic amplitude data of the targeted Seneca horizon. The western anomalous trend traverses southerly through the Fleetwood and Vent mineralized zones…and on to an area ~800 m west of the main Seneca Pit on the NSS 3 and 5 claims. A possible EM conductor (white solid line) has been interpreted from the Aeroquest 60 HZ sensor data, based on signals transmitted from the high tension 60 Hz power line located along the southern property boundary. The 60 Hz primary field is near vertical away from the power line and should couple well with any flat lying conductors if present. The source of this interpreted conductor/magnetic high susceptibility anomaly is currently unknown.

9.4.2 Airborne Electromagnetic (EM) Surveys

No significant bedrock conductors are evident from the Aeroquest 2005 survey, and in particular, no distinct EM conductors were noted in the Seneca Pit, Vent Zone or Fleetwood Zone mineralized areas. This suggests that the historical mineralization, locally containing massive conducting sulfides (pyrite and chalcopyrite), is not sufficiently thick and continuous enough to be detected by the main Aeroquest EM system utilized. Given that strong lateral and vertical mineral zoning is typically present in Kuroko type VMS deposits, it is possible that sphalerite and silica/quartz (both poor conductors) are acting as insulators and may be inhibiting the EM responses. In addition, the EM system configuration used in the surveys was not particularly sensitive to resolving thin, flat lying conductors.

Two very weak responses were noted on the early time channels (generally indicative of near surface conductors) some 900 m NNE and 2,500 m E of the Fleetwood Zone, but both were interpreted by previous authors to be of low economic interest. One was drill tested with negative results (drill holes SN05-59 & 60), and interpreted to be related to surficial glacial clay deposits.

Numerous interpreted generally weak conductors were picked by Aeroquest from their 2006 survey. Six targets of interest to NSS, totalling 2.8 km in strike length, occur in the Weaver Lake area in the NE section of the property on the Seneca 6, 8 and 9 claims (Figure 9).

Interpreted conductivities vary from 0.15 to 2.77 siemens. The best EM anomaly strikes generally NS and is located on the west side of the Seneca 6 claim from the northern claim boundary to the north side of Weaver Lake. This EM target also correlates with a high gradient magnetic susceptibility response, interpreted as a major lithological contact (similar to the magnetic contact signature noted at the Seneca Pit area where low magnetic susceptibility Seneca horizon footwall volcanics and sediments are in contact with overlying higher magnetic susceptibility volcanics. This same conductor appears to change strike direction to azimuth 120° for some 1.3 km under Weaver Lake to the southern boundary of the Seneca 9 claim.

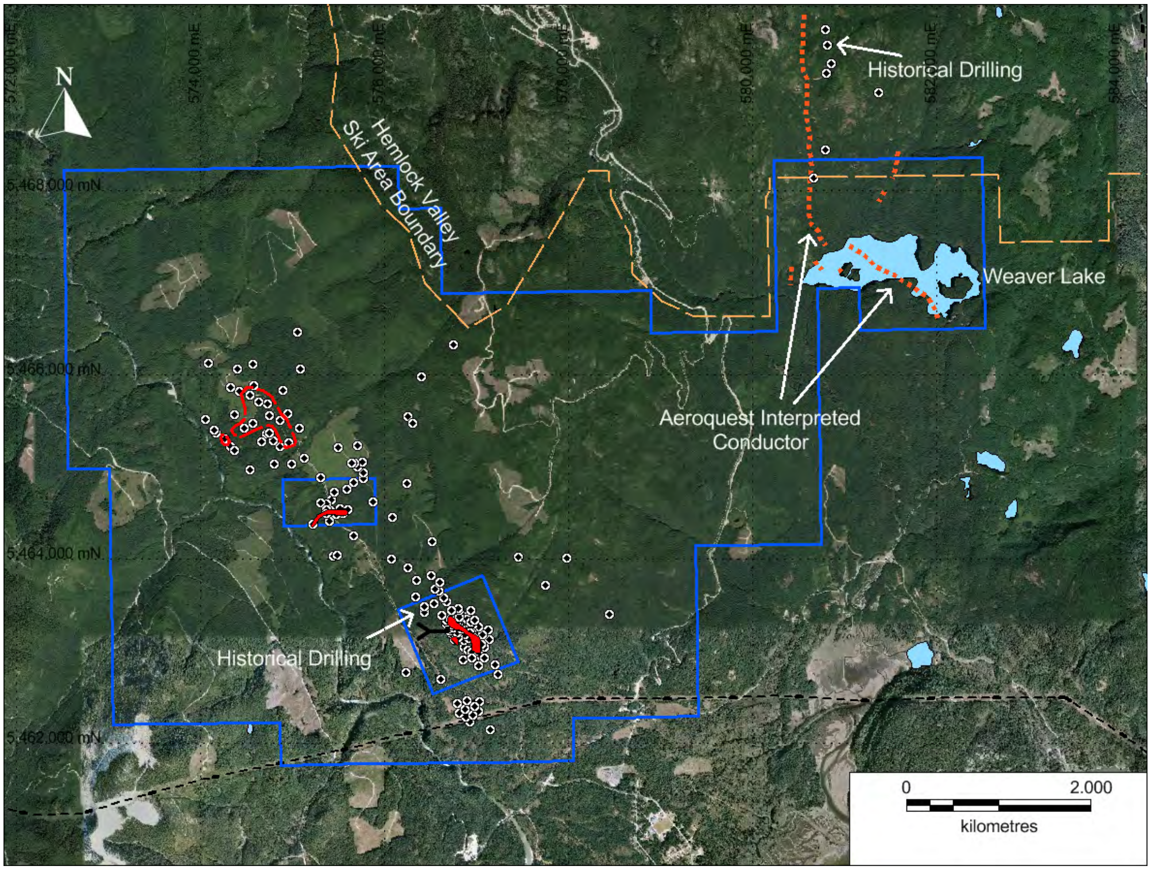

Figure 10. Aeroquest EM conductors, Weaver Lake area (on google earth satellite image)

The above noted EM anomalies occur in a broad area of anomalous multi-element silt and rock samples and in an area where the projection of the Seneca horizon from the Seneca Pit area at azimuth 041° and dip 17° SE would either outcrop or be at shallow depth, and are therefore considered to be prime exploration targets. This interpretation is supported by geological mapping north and west of Weaver Lake where bedding attitudes trend in a general sense NW-SE with gentle to moderate dips to the SW (e.g., Arscott, 1978; Hitchens & LeBel, 1978) and by the reported local presence of abundant disseminated and fracture controlled pyrite, commonly with trace to minor amounts of sphalerite, chalcopyrite and barite (e.g., Ash, 1974 a & b; Arscott, 1978). Limited drilling by Carat 1.0 to 1.5 km north of the Seneca 6 northern boundary appear to have been collared to the east of the conductor axis and do not appear to have directly tested the EM anomaly.

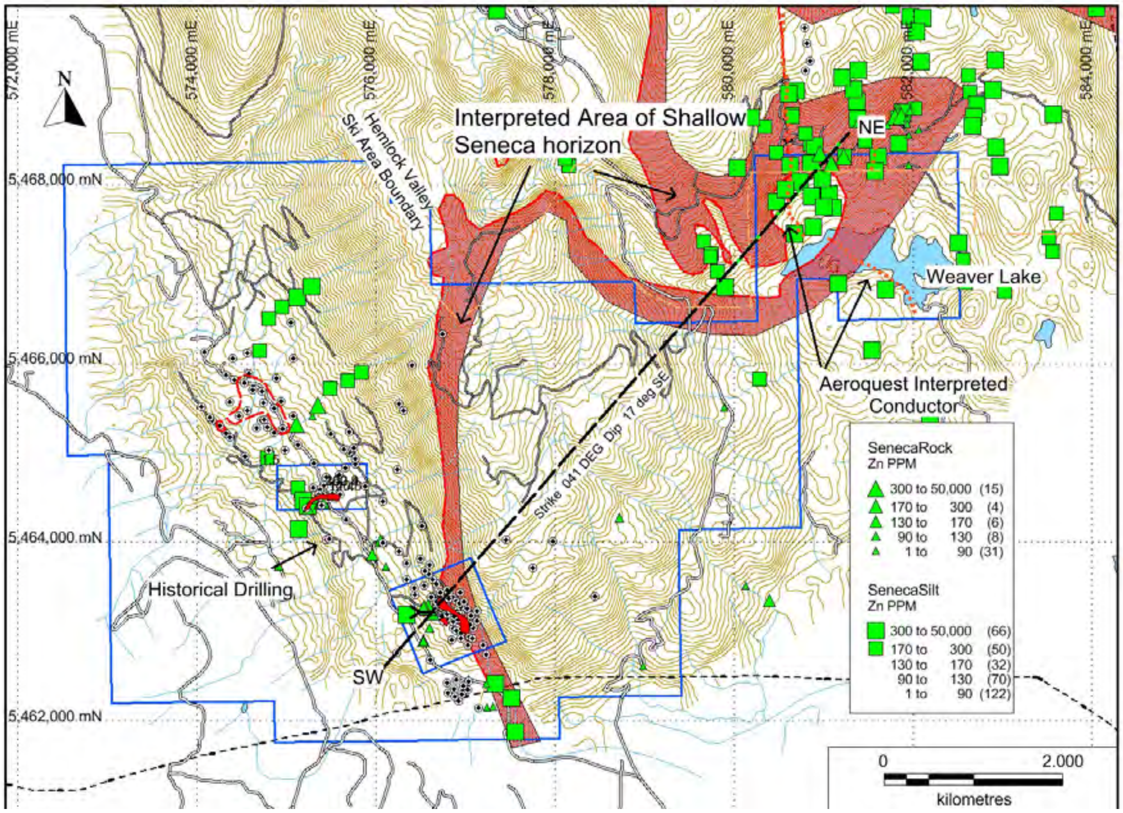

Figure 11. Interpretation of a near surface relatively flat lying favorable VMS hosting horizon.

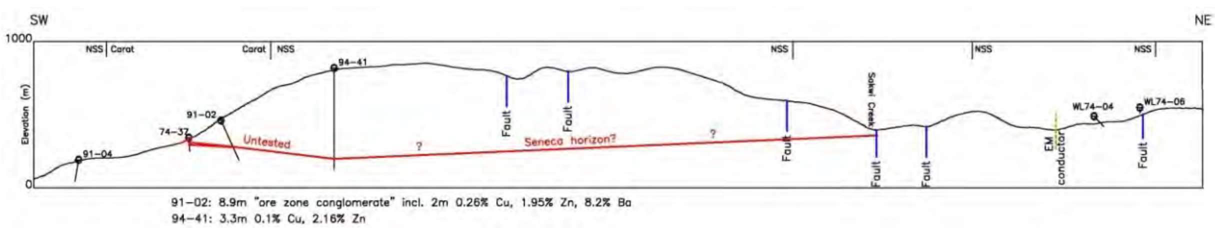

Figure 12. Interpreted topographic section sw-ne through drill holes 91-04, 94-41, and projected to area N of Weaver Lake (no vertical exaggeration, see figures 11 & 13 for section line).

10.0 DRILLING

A list of drill holes on the NSS claims along with those mentioned in the text of this report from the Seneca and Vent zones are presented in Appendix 1. Data is incomplete and many details are not all available to the writer. Coordinates are taken from various assessment reports and from a compilation by McKinley (op. cit.)

The most significant drilling results pertinent to NSS are on the Fleetwood zone and are summarized above.

The most recent drilling was conducted by Carat between December 2005 and February 2006, mostly on the Seneca Zone. Of a total of 2472 metres in 19 drillholes, two drillholes SN06-59 and SN06-60, totalling 629 m, were drilled on claims now held by NSS to initially test electromagnetic conductors revealed by the 2005 AeroTEM survey to the northeast of the Seneca deposit. Results were essentially negative. Since no evidence was seen in the drill core to explain the anomalies, it was concluded that the anomalies resulted from conductive clay layers in the overburden, likely kame terrace sediments, and do not represent bedrock occurrences of massive sulphide mineralization (Carat News Release March 28, 2006).

11.0 SAMPLE PREPARATION, ANALYSIS, SECURITY

Sample collection, preparation, analysis and security for Carat's geochemical surveys and drilling programs were discussed in detail by McKinley (op. cit.). In the opinion of this writer, all aspects, including quality control, quality assurance, and data verification were conducted in accordance with accepted industry best practices and to NI 43-101 standards.

The 4 samples collected by the writer were personally delivered to Acme Laboratories Ltd., for multi-element chemical analysis (Acme's AQ200 and 7TD1 procedures). Acme Laboratories Ltd. has registered international ISO 9001:2000 accreditation, which fully meets all N.I. 43-101 standards.

12.0 DATA VERIFICATION

Data verification was also discussed by McKinley in his 43-101 report (op. cit.). This author also agrees and assumes that government and scientific publications are accurate in their descriptions of historical exploration, methods of sampling, modes of mineralization and geological settings. Published 'resource' figures mentioned in this report for the Adjacent Property have not been verified as to their compliance with National Instrument 43-101 and therefore cannot be called resources. The figures are cited for geological information only.

Apart from collecting several samples, the writer verified the existence of a number of drill hole sites in the Seneca, Vent and Fleetwood areas.

13.0 MINERAL PROCESSING AND METALLURGICAL TESTING

Not applicable.

14.0 MINERAL RESOURCE ESTIMATES

Not applicable.

15.0 MINERAL RESERVE ESTIMATES

Not applicable.

16.0 MINING METHODS

Not applicable.

17.0 RECOVERY METHODS

Not applicable.

18.0 PROJECT INFRASTRUCTURE

Infrastructure in the area is excellent, being within 100 km of the city of Vancouver. Major highways, railroads, and power lines are within a short distance of the project area.

19.0 MARKET STUDIES AND CONTRACTS

Not applicable.

20.0 ENVIRONMENTAL STUDIES, PERMITTING AND SOCIAL OR COMMUNITY IMPACT

The company and property will be subject to the mine permit regulations of British Columbia. A permit will be required for any bulk sampling and proposed drilling. There has been considerable forest logging activity in the area with the associated land disturbance and road building. Any exploration programs proposed by the company will be subject to review by the British Columbia Ministry of Mines and Energy and British Columbia Ministry of Forests, Lands and Natural Resources.

Crowell and Wilkins (2010) in their environmental study for the Hemlock Valley Ski area identified several environmental issues in the area, including species at risk, fish habitat in Sakwi Creek and sensitive ecosystems near Sakwi Creek. However in their report they mention and summarize ways of avoiding and mitigating many environmental impacts.

The Seneca Property may in the future be the subject of First Nations land claims. The legal nature of aboriginal land claims is a matter of considerable complexity. The impact of any such claim on the Company's ownership interest in the property cannot be predicted with any degree of certainty and no assurance can be given that a broad recognition of aboriginal rights in the area by way of a negotiated settlement or judicial pronouncement would not have an adverse effect on the Company's activities. Even in the absence of such recognition, the Company may at some point be required to negotiate with First Nations in order to facilitate exploration and development work on the properties optioned or owned by the Company.

To the writer's knowledge there are no outstanding environmental problems associated with the claims.

21.0 CAPITAL AND OPERATING COSTS

Not applicable.

22.0 ECONOMIC ANALYSIS

Not applicable.

23.0 ADJACENT PROPERTIES

Apart from the six aforementioned claims covering the Seneca deposit and Vent zone, the only other mineral occurrence of significance is 1 to 1.5 km north of the Seneca 8 claim. This area now lies in the Hemlock Valley Ski Development area. Carat in 2008 conducted geological and geochemical surveys and completed 2879 m of drilling in 10 drillholes. Drilling intersected wide areas of locally strong hydrothermal alteration and associated stringer to locally semi-massive sulphides in a package of andesitic and dacitic volcanic rocks and interlayered sedimentary rocks. These stringer zones are predominantly made up of pyrite and chalcopyrite but locally contain notable amounts of sphalerite. Reported drill hole assays (Carat news releases February 8 and April 13, 2007) include:

WL06-02 3.0 m wide interval that graded 2.7% Cu and 12.5 g/t Ag from 82.5 to 85.5 m depth including a higher grade 1.0 m interval grading 4.9% Cu.

WL06-04 contained a 2.3 m interval from 97.9 to 100.2 m that averaged 3.5% Cu and 0.3% Zn. This included a 1.5 m interval from 97.9 to 99.4 m that graded 5.3% Cu, 0.41% Zn and 24.8 g/t Ag.

WL06-05 featured an interval of 9.0 m from 6.4 to 15.4 m that averaged 0.77% Zn. A second zone of zinc enrichment was encountered in hole 05, a 6.9 m interval from 217 to 223.9 m that assayed 1.59% Zn.

WL06-06 yielded an interval of 4.0m from 10.0 to 14.0 m that averaged 0.69% Zn.

Hole WL06-07 contained a copper rich zone from 38.6 to 40.4 m that averaged 1.1% Cu over 1.8 m. A zinc rich 2.0 m interval from 210.5 to 212.5 m was assayed down hole from this and produced 2.89% Zn.

WL06-08 contained a similar zinc rich horizon at a depth of 195.0 to 206.7 m that averaged 0.56% Zn over 11.7 m.

24.0 OTHER RELEVANT DATA & INFORMATION

To the writer's knowledge, there is no other relevant data for this project.

25.0 INTERPRETATION & CONCLUSIONS

In conclusion, geotectonic, petrographic, and geochemical considerations suggest that mineralization in the Seneca area belongs to the Kuroko-type VMS classification of Sawkins (1976), or to the bimodal mafic VMS-type of Franklin et al. (2005). Such deposits commonly occur in clusters that define VMS districts, and may occur in more than one stratigraphic interval. At the deposit scale VMS deposits generally occur within fault-bounded basins, depressions or grabens defined by abrupt changes in facies such as the occurrence of a thick ponded flow and/or volcaniclastic facies.

Although considerable drilling has been undertaken in the Seneca area, exploration opportunities still exist. Chapman (1999) concluded: *The Seneca property hosts a small resource of potential ore grade massive sulphide mineralization.* **Note: neither this author nor previous authors who have worked in the Seneca area have been able to verify the historical resource information. This information is not necessarily indicative of the mineralization on the property that is the subject of this technical report**.

Chapman (1999) continued: *There are three other partially delineated mineralized zones, which locally are of extremely high grade (up to 32% zinc). The Seneca, Vent, Fleetwood and 33 zones occur along a 4.5 kilometre northwest trending belt of felsic to intermediate volcanics of the Weaver Lake member of the Harrison Lake Formation, which occupy the western limb of a broad open syncline. Within this belt detailed drilling has only been carried out locally at the Seneca and Vent zones. This leaves ample room for the occurrence of a number of additional massive sulphide bodies within the following areas:*

1) Northeast of the Seneca deposit an 800 m by 800 m area contains no drill holes and is bounded by mineralized intercepts

2) Between the Seneca and the Vent zones a 500 m by 500 m area containing an EM anomaly remains untested.

3) A similar 500 m gap in the drilling to the northwest of the Vent and southeast of the Fleetwood contains a low intensity magnetic anomaly.

4) The wide spaced drilling of the Fleetwood zone (200 m centres) leaves ample room for the occurrence of other mineralized bodies.

Chapman (op.cit.) also notes: *The fragmental character of the Seneca ore indicates that it has been transported downslope from its source. A felsic dome, with weak stringer type mineralization intersected in DDH-91-4, to the southwest of the Seneca was thought to be the source of the Seneca massive sulphides. Subsequent drilling of both the Fleetwood/33 zones and the Mercury Hill, to the northeast, anomaly indicate that the paleoslope may have been southwesterly. Step out drilling to the northeast of the Seneca deposit (DDH-85-3) intersected both fragmental and massive sulphide ore, which may represent an upslope style of mineralization.*

A northerly source is also supported by hole DDH-94-41, located 800 m northeast of the Seneca deposit which intersected hydrothermally altered and mineralized felsic ash and lithic lapilli tuff overlying a pyritic argillite (semi massive) which is very similar to the ore zone sequence at the Seneca deposit. Elevated gold values (2.65g/t) are present in the 0.9 m interval underlying the base metal mineralization in DDH-94-41 as in the Seneca deposit and DDH-85-3.

Furthermore, geologic mapping and sampling in the Weaver Lake area has identified favorable hosts for VMS mineralization, confirmed in drilling by Carat. Bedding attitudes west and northwest of Weaver Lake generally dip at low angles to the southwest, and those in the Seneca dip gently to the northeast. So the horizon at Weaver Lake and Seneca, although undoubtedly affected by faulting, folding and intrusion of synvolcanic dikes, may be one and the same, suggesting significant exploration potential.

McKinley also comments that east of the Seneca Pit Area, the area between drill hole 91-02 and drill hole 94-41 remains untested. (Figure 13).

In summary, considerable exploration potential exists on the NSS claims between Weaver Lake and the Seneca, Vent and Fleetwood mineralized zones.

Based on the evidence in many reports reviewed, and on field examination by this writer, it is his opinion that the Seneca project constitutes a property of merit and justifies further work to explore for additional VMS style mineralization.

26.0 RECOMMENDATIONS

A modest Phase I program is recommended to further evaluate the NSS Seneca property.

Questions remain on why the Seneca and Vent deposits apparently have very little EM geophysical expression, and what is the significance of the geophysical anomaly to the west of the Seneca Main Pit and to the east of the Fleetwood zone. Compilation of previous geophysical surveys and re-interpretation of the previous airborne geophysical surveys to support mapping and for direct detection (MAG, EM, radiometric) is recommended. In addition, a test program of VLF ground surveys over the Seneca zone, the Weaver Lake EM anomalies and the EM anomaly to the northeast of the Fleetwood zone is recommended. Limited soil sampling is also recommended to verify the soil geochemical anomaly defined by Chevron (Howell and Ascott, op.cit.).

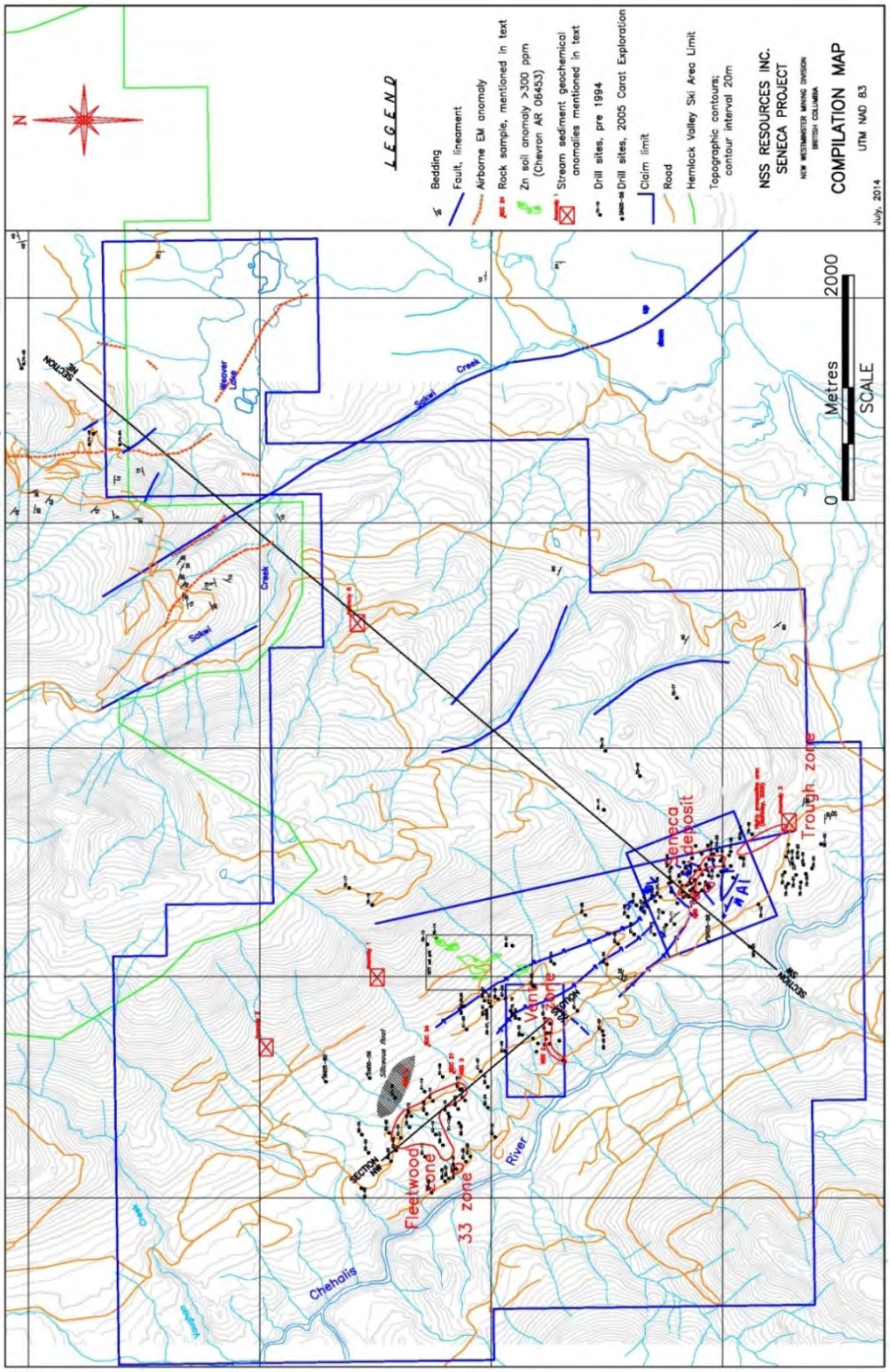

Figure 13. Compilation map

Also recommended is detailed mapping to assist in interpretation of the geophysical surveys, and to possibly identify synvolcanic faults, intrusions, and proximal volcanic environments permissive for VMS formation. Outcrop is sparse in drift covered areas, but mapping tributaries of the Chehalis River and Sakwi Creek (Figure 13) is warranted to look for lateral alteration patterns or possible exhalites which are useful indicators of the stratigraphic level of hydrothermal activity in some ancient volcanic massive sulfide belts (e.g., Davidson et al, 2001), for example, to determine the significance of siliceous float (exhalite?) encountered in the area east of Fleetwood.

A Phase 2 program will be subject to results of Phase 1 and would comprise geophysical surveys in selected areas and follow up drilling.

27.0 COST ESTIMATE

Phase 1

Re-interpretation of geophysical surveys	$ 10,000
Preliminary VLF electromagnetic survey 12 days @ $800	9,600
Geological mapping, sampling, Geologist and assistant 20 days @ $1000	20,000
Vehicle, fuel	5,500
Room and board	6,000
Geochemical Analyses	6,000
Supplies	1,000
Report	6,000
Subtotal	$64,100
Contingencies	5,700
Total Phase 1	**$69,800**

Contingent on results of Phase 1, a Phase 2 program may be warranted

Phase 2

Geophysical surveys, drilling, reporting	130,200
Total, Phases 1 and 2	**$ 200,000**

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CERTIFICATE OF QUALIFICATION

To accompany the report for NSS Resources Inc., entitled:

TECHNICAL REPORT ON THE SENECA VMS PROJECT, BRITISH COLUMBIA

I, **Donald G. Allen**, M.A.Sc., P.Eng (B.C.), do hereby certify that:

I am a Canadian citizen, resident at Vasco de Contreras 342 y Moncayo, Quito, Ecuador.

I am a graduate of the University of British Columbia, and hold degrees in Geological Engineering, B.A.Sc. (1964) and M.A.Sc. (1966). I have been employed in my profession as an exploration geologist on a full time basis since graduation.

I am registered member of the Association of Professional Engineers and Geoscientists of British Columbia, and a member of the Society of Economic Geologists.

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

I visited the Seneca Project, which is the subject of this report, on May 18, 2014.

I am author of this report and as such accept full responsibility for the accuracy and the content of the information in this report.

Neither I nor any affiliated persons currently own, directly or indirectly, any interest in the properties or in the share capital of NSS Resources Inc.

I am not aware of any material change with respect to the subject matter of this technical report that is not reflected in this report, the omission to disclose which would make this report misleading.

I am familiar with the NI 43-101, Form 43-101FI and this report has been in compliance with that instrument and form.

I consent to the use of this report for the purpose of complying with the requirements set out in NI 43-101 for submitting a technical report.

I have read National Instrument 43-101F1, and the Technical Report has been prepared in compliance with NI 43-101 and Form 43-101F1.

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.

Dated at Quito, Ecuador this 30th day of July, 2014.

(Signed & Sealed)

Donald G. Allen, M.A.Sc., P.Eng (B.C.)

APPENDIX 1 – HISTORICAL DRILL HOLE LIST

Drillhole	UTM East NAD83 Z10	UTM North NAD83 Z10	Elevation (m)	Azimuth (°)	Dip (°)	Length (m)	Info source*
71-13	576342	5463588	298				NA
72-17	578445	5463395	465				NA
72-18	577751	5463714	700				NA
72-19	577976	5464012	715				NA
WL74-04	580666	5468132	490	35	-47	99.1	AR 04977
WL74-05	581375	5469058	600	70	-45	136.9	AR 05001
WL74-06	580793	5468437	555	145	-45	53.7	AR 05001
74-37	576797	5463274	350	105	-80	93.9	AR 05233
79-4	576591	5463648	390				AR 7632B
79-6	576602	5463744	400				AR 7632B
79-7	576547	5463677	375				AR 7632B
79-8	576501	5463817	390				AR 7632B
79-9	576514	5464186	440				AR 7632B
79-10	576977	5462396	185		-90	175	AR 7632B
79-11	576977	5462396		260	-60	25	AR 7632B
79-12	576611	5462689	195		-90	100	AR 7632B
79-13	576255	5465551	680		-90	128	AR 7632B
79-14	576308	5465475	655		-90	73	AR 7632B
79-15	576896	5462462	185		-90	115	AR 7632B
79-16	576604	5466027	1015		-90	160	AR 7632B
79-17	576756	5466226	1105		-90	188	AR 7632B
79-18	577034	5462451	175		-90	200	AR 7632B
79-19	576963	5462300	190		-90	112	AR 7632B
79-20	576882	5462280	190		-90	62	AR 7632B
79-21	576873	5462363	190		-90	54	AR 7632B
79-22	576929	5462227	190		-90	62	AR 7632B
79-23	577026	5462351	185		-90	89	AR 7632B
79-24	576806	5462323	190		-90	51	AR 7632B
79-25	576795	5462433	190		-90	52	AR 7632B
85-03	576813	5463440	410				NA
85-07	576848	5462908	260		-80		AR22171
86-1	575829	5464867	375	325	-45		AR 15734
86-2	575829	5464867		325	-60		AR 15734
86-3	575829	5464867		0	-90		AR 15734
86-4	575801	5465034	397	0	-90		AR 15734
86-5	575801	5465034	397	55	-60		AR 15734
86-6	575801	5465034	397	355	-60		AR 15734
86-7	575710	5464844	335	0	-90		AR 15734
86-8	575710	5464844	335	145	-60		AR 15734
86-9	575859	5464145	355	0	-90	27.43	AR 15734

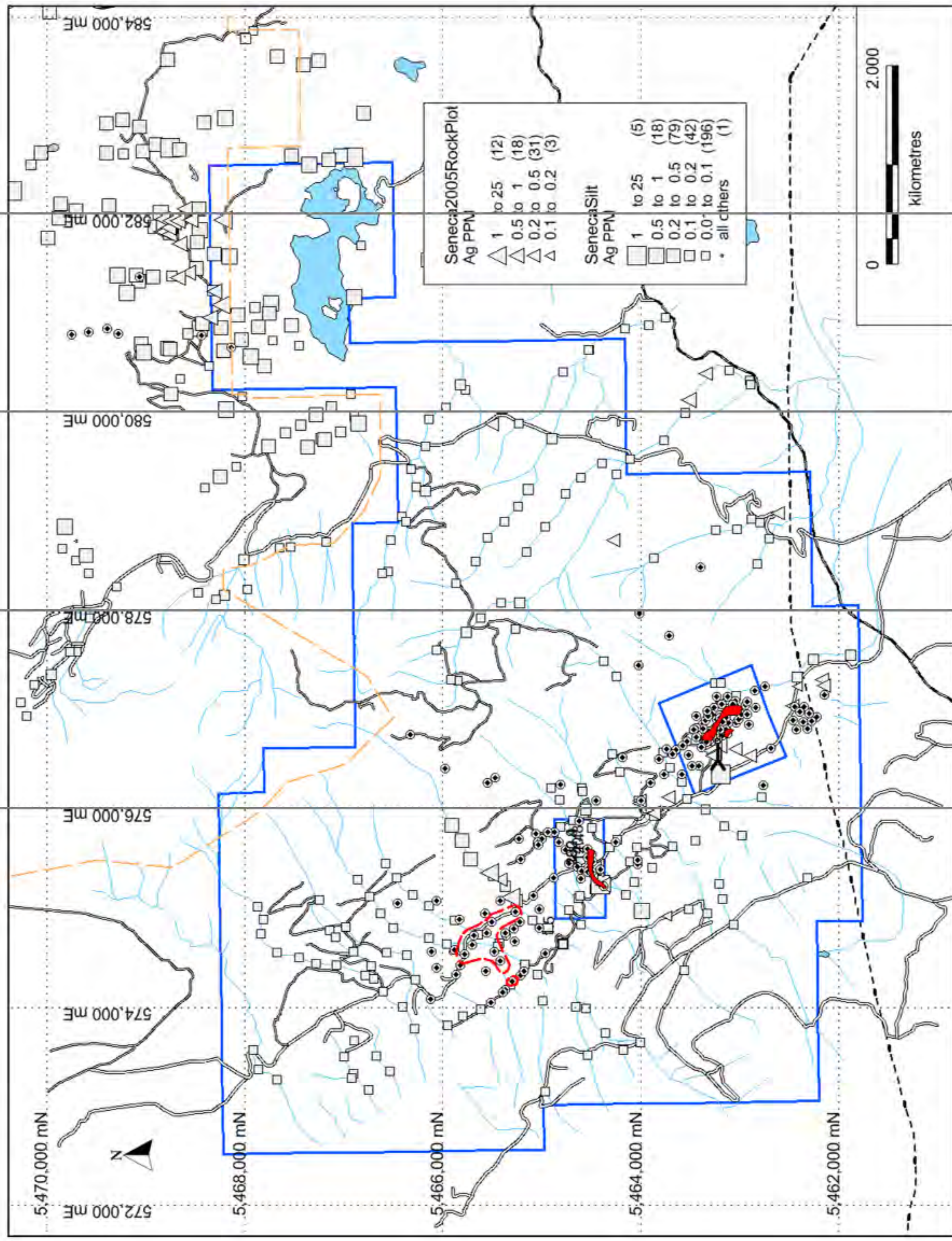
Drillhole	UTM East	UTM North	Elevation (m)	Azimuth (°)	Dip (°)	Length (m)	Info source*
86-10	575469	5464313	250	325	-60	3.05	AR 15734
86-11	575442	5464373	250	145	-45	9.14	AR 15734
86-15	575484	5464214	250	0	-90	21.34	AR 15734
86-18	575757	5464637	310	0	-90		AR 15734
86-19	575757	5464637	310	145	-60		AR 15734
86-20	575684	5464575	288	145	-45	21.95	AR 15734
86-21	576349	5464578	450	0	-90	36.88	AR 15734
86-22	576169	5463821	290	0	-90	3.05	AR 15734
86-23	575557	5464469	270	0	-90	12.19	AR 15734
86-24							AR 15734
86-25	575545	5463838	190	0	-90	30.48	AR 15734
86-26							AR 15734
86-27							AR 15734
86-28							AR 15734
87-01	575702	5465002	340		-90	207.57	AR17496
87-02	575776	5464881	330		-90	213.36	NA
87-03			320		-90	212.53	NA
87-04	576082	5464454	330		-90	212.44	NA
87-05	576258	5463902	320		-90	72.85	NA
87-06	576343	5463763	320		-90	242.93	NA
87-07	575484	5464036	200		-90	232.26	NA
87-08	574055	5465512	170		-90	434.04	NA
87-09	574323	5465217	175		-90	256.95	NA
87-10	574541	5464966	165		-90	330.4	NA
87-11	575664	5464254	260		-90	308.15	NA
87-12	574962	5465268	260		-90	319.43	NA
91-02	576939	5463442	461	53	-65	300.2	AR 22171
91-03	577146	5462148	139	50	-80	159.7	AR 22171
91-04	576234	5462763	192	230	-80	149.7	AR 22171
91-05	575499	5465213	360				NA
91-06	575307	5464881	275				NA
91-07	575126	5465091	275				NA
91-08	574866	5465225	265				NA
91-09	575076	5465418	310				NA
91-10	574863	5465503	295				NA
91-12	574727	5465689	290				NA
91-13	574721	5465359	260				NA
91-14	574946	5465574	315				NA
91-15	574751	5465372	265				NA
92-16	574564	5465478	270				NA

Drillhole	UTM East	UTM North	Elevation (m)	Azimuth (°)	Dip (°)	Length (m)	Info source*
91-17	574367	5465570	285				NA
92-18	574534	5465779	305				NA
91-19	574891	5465830	350				NA
92-20	574578	5465881	342				NA
92-21	574988	5465029	265				NA
92-22	574327	5465864	310				NA
92-23	574402	5466059	360				NA
92-24	574564	5466117	360				NA
92-25	574087	5466122	330				NA
92-26	574423	5465820	315				NA
92-27	574423	5465820	262				NA
92-28	574629	5465706	290				NA
92-29	574748	5465557	285				NA
92-30	574667	5465277	250				NA
92-31	574790	5465285	270				NA
92-33	574259	5465302	190				NA
92-34	574803	5465028	210				NA
92-35	574147	5465398	188				NA
92-36	574368	5465179	190				NA
92-37	574173	5465365	188				NA
92-38	574259	5465302	190				NA
92-39	574259	5465302	190				NA
92-40	574259	5465302	190				NA
94-41	577451	5464025	820	0	-90	694	AR 23417
SN06-58	576278	5463120	225	48	-80	230.7	AR 28511
SN06-59	575065	5466048	396	48	-80	319.1	AR 28511
SN06-60	575034	5466428	445	48	-80	310	AR 28511

*NA = detailed information not available.

AR = B.C. Ministry of Energy & Mines Assessment Report

APPENDIX 2 – GEOCHEMICAL PLOTS


Seneca2005RockPlot
Ag PPN
1 to 25 (12)
0.5 to 1 (18)
0.2 to 0.5 (31)
0.1 to 0.2 (3)
SenecaSilt
Ag PPN
1 to 25 (5)
0.5 to 1 (18)
0.2 to 0.5 (79)
0.1 to 0.2 (42)
0.0 to 0.1 (196)
all others (1)
0
2,000
kilometres
N
5,470,000 mN
5,468,000 mN
5,466,000 mN
5,464,000 mN
5,462,000 mN
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574,000 mE
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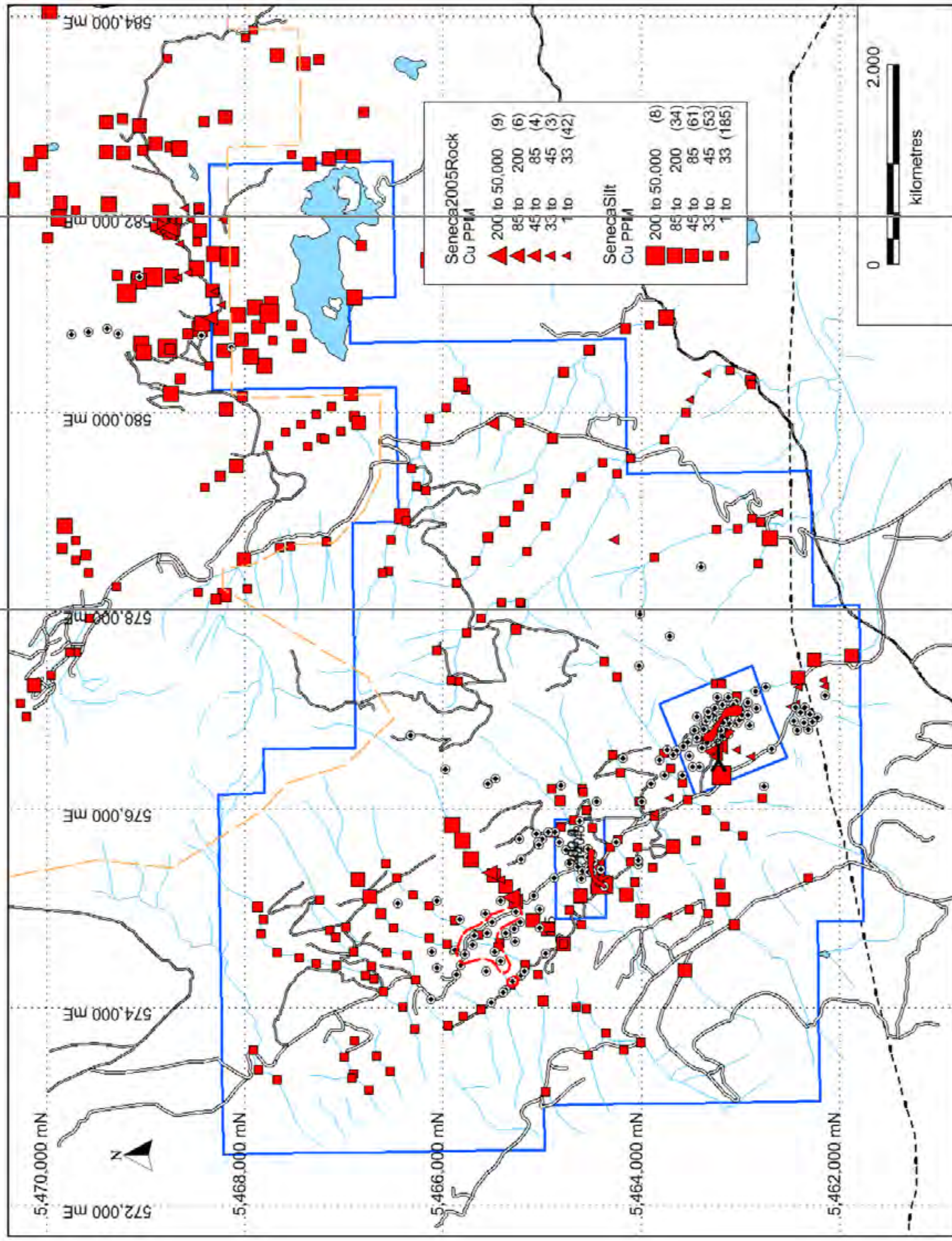
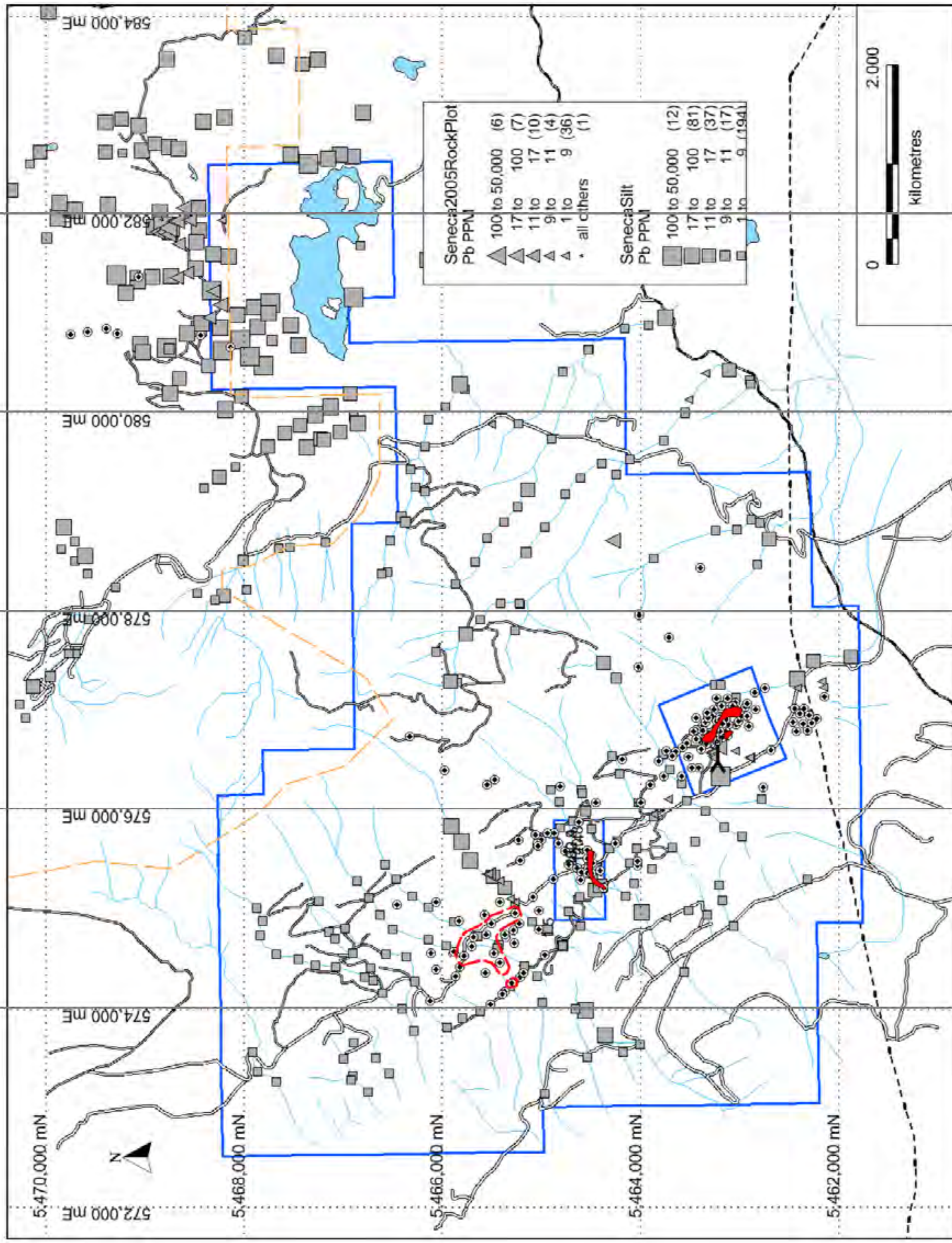
580,000 mE
582,000 mE
584,000 mE


Seneca2005Rock
Cu PPM
200 to 50,000 (9)
85 to 200 (6)
45 to 85 (4)
33 to 45 (3)
1 to 33 (42)
SenecaSilt
Cu PPM
200 to 50,000 (8)
85 to 200 (34)
45 to 85 (61)
33 to 45 (53)
1 to 33 (185)
0
2,000
kilometres
N
584,000 mE
582,000 mE
580,000 mE
578,000 mE
576,000 mE
574,000 mE
572,000 mE
5,470,000 mN
5,468,000 mN
5,466,000 mN
5,464,000 mN
5,462,000 mN


Seneca2005RockPlot
Pb PPM
100 to 50,000 (6)
17 to 100 (7)
11 to 17 (10)
9 to 11 (4)
1 to 9 (36)
all others (1)
SenecaSilt
Pb PPM
100 to 50,000 (12)
17 to 100 (81)
11 to 17 (37)
9 to 11 (17)
1 to 9 (194)
0
2,000
kilometres
584,000 mE
582,000 mE
580,000 mE
578,000 mE
576,000 mE
574,000 mE
572,000 mE
5,470,000 mN
5,468,000 mN
5,466,000 mN
5,464,000 mN
5,462,000 mN
N

APPENDIX 3 – GLOSSARY OF TERMS & ABBREVIATIONS

Alluvium	Sediment deposited by flowing water, as in a riverbed, flood plain, or delta
Allochthonous	Geological material, deposits, terrane, that have been transported and then accumulates elsewhere (opposite of autochthonous).
Anomaly, Anomalous	A deviation from a normal value, suggestive of buried mineralization
Anticline	An arched fold of stratified rock from whose central axis the strata slope downward in opposite directions
Argillite	A highly compacted sedimentary or slightly metamorphosed sedimentary rock consisting primarily of particles of clay or silt
Arsenopyrite	A silvery grey metallic mineral consisting of a sulphide of iron and arsenic, FeAsS; a mineral commonly associated with gold mineralization
Autochthonous	Rocks, deposits, etc. found where they and their constituents were formed (opposite of allochthonous).
Back arc basin	Back-arc basins are geologic features, submarine basins associated with island arcs and subduction zones. They are found at some convergent plate boundaries, presently concentrated in the Western Pacific ocean.
Barite	A mineral consisting of barium sulfate ($BaSO_4$)
Basalt	A common extrusive volcanic rock, fine grained, grey to black in colour, formed from the rapid cooling of basaltic lava.
Breccia	A rock composed of broken fragments of minerals or rock cemented together by a fine-grained matrix, that can be either similar to or different from the composition of the fragments.
Chalcopyrite	A mineral consisting of copper, iron and sulfur (Cu_5FeS_4).
Chlorite, Chloritized	A group of usually greenish, soft minerals, (Mg,Al,Fe)(Si,Al)O(OH), that break into thin, flexible, mica like sheets and are usually found in metamorphic rocks
cm	Centimetre, one hundredth of a metre, which is the International System of Units (SI) base unit of length.
Conglomerate	A sedimentary rock consisting of individual rounded fragments within a finer-grained matrix that have become cemented together.
Conductor	Term used to describe a group of anomalously high conductivity results from electromagnetic surveys, measured in units of Siemens or milli Siemens
Craton	The term craton is used to distinguish the stable portion of the continental crust from regions that are more geologically active and unstable.
Cretaceous	A geologic period and system from about 145 to 66 million years (Ma) ago.
Cryptodome	A lava dome is a roughly circular mound-shaped protrusion resulting from the slow extrusion of viscous lava from a volcano.
Dacite	A fine grained light gray volcanic rock containing a mixture of plagioclase and other crystalline minerals
Diamond Drilling	Rotary drilling using diamond-set or diamond-impregnated bits, to produce a solid continuous core of rock sample
Dip	The angle that a structural surface, a bedding or fault plane, makes with the horizontal, measured perpendicular to the strike of the structure
Dike, dyke	A sheet of rock that formed in a crack in a pre-existing rock body. It is a type of tabular or sheet intrusion, that either cuts across layers in a planar wall rock structures, or into a layer or unlayered mass of rock.

EM, Electromagnetic Survey	Measurement of the apparent conductivity or resistivity of the sub-surface by recording the response of a secondary electrical field induced by the pulsing of a current through a fixed or mobile loop
Fault	A surface or zone of rock fracture along which there has been displacement
Facies	Facies refers to a body of rock with specified characteristics. Ideally, a facies is a distinctive rock unit that forms under certain conditions of sedimentation, reflecting a particular process or environment.
Feldspar	A group of rock-forming tectosilicate minerals that make up as much as 60% of the Earth's crust, comprised of potassium, calcium, aluminum, silicon and oxygen.
Felsic	Refers to igneous rocks that are relatively rich in elements that form feldspar a nd quartz
Flow dome	In volcanology, a roughly circular mound-shaped protrusion resulting from the slow extrusion of viscous lava from a volcano. The characteristic dome shape is attributed to high viscosity that prevents the lava from flowing very far.
Footwall	The two sides of a non-vertical fault or vein are known as the hanging wall and footwall. By definition, the hanging wall occurs above the fault plane and the footwall occurs below the fault or vein.
Formation	A distinct layer of sedimentary rock of similar composition
g/t	1 gram per (metric) tonne = 1 ppm = 1000 ppb = 0.0292 troy ounce per short ton
Galena	A mineral consisting of lead and sulfur (PbS).
Geochemical	The distribution and amounts of the chemical elements in minerals, ores, rocks, solids, water, and the atmosphere
Geophysical	The mechanical, electrical, gravitational and magnetic properties of the earth’s crust
Geophysical Surveys	Survey methods used primarily in the mining industry as an exploration tools, applying the methods of physics and engineering to the earth’s surface
Granite	A common, coarse-grained, light-colored, hard igneous rock consisting chiefly of quartz, orthoclase or microcline, and mica
Greenstone	Any of various altered basic igneous rocks colored green by chlorite, hornblende, or epidote
Greywacke	Any dark sandstone or grit having a matrix of clay minerals
Hanging wall	The two sides of a non-vertical fault or vein are known as the hanging wall and footwall. By definition, the hanging wall occurs above the fault plane and the footwall occurs below the fault or vein.
Host Rock	The rock in which a mineral or an ore body may be contained
Hyaloclastite	A hydrated tuff-like breccia rich in black volcanic glass, formed during volcanic eruptions under water, under ice or where subaerial flows reach the sea or other bodies of water. It has the appearance of angular flat fragments sized between a millimeter to few centimeters. The fragmentation occurs by the force of the volcanic explosion, or by thermal shock during rapid cooling.
Hydrothermal	The products of the actions of heated water, such as a mineral deposit precipitated from a hot solution
Igneous	Rocks that have solidified from magma
IP	Induced Polarization – to map anomalous ground chargeability which is often

	related to disseminated type sulphide deposits
Isocline	A geologic fold that has two parallel limbs
ISO 9001	ISO 9001:2008 sets out the criteria for a quality management system and is the only standard in the family that can be certified to (although this is not a requirement). It can be used by any organization, large or small, regardless of its field of activity. In fact ISO 9001:2008 is implemented by over one million companies and organizations in over 170 countries.
Jurassic	A geologic period and system that extends from 201.3 Ma (million years ago) to 145 Ma
km	Kilometre
Lapilli	Small rounded or irregularly shaped pieces of lava between the size of a pea an d a walnut, ejected together with volcanic bombs and ash during volcanic erupt ions.
Lithosphere	The brittle uppermost shell of the earth, broken into a number of tectonic plates. The lithosphere consists of the heavy oceanic and lighter continental crusts, and the uppermost portion of the mantle.
Lithostratigraphic	Stratigraphy based on the physical and petrographic properties of rocks
m	Metre; 1 metre is equal to 1000 mm (millimetre), or 1000000 µm (micrometre).
M	Million
Ma	Million years
Mafic	Containing or relating to a group of dark-colored minerals, composed chiefly of magnesium and iron, which occur in igneous rocks.
Magnetic Survey	One of the tools used by exploration geophysicists in their search for mineral-bearing ore bodies; the essential feature is the measurement of the magnetic-field intensity. Geologists and geophysicists also routinely use it to tell them where certain rock types change and to map fault patterns.
Magmatism	The formation of igneous rock from magma
Mesozonal	Zone of development of mineralization or magmatism at moderate depth (7-16 km) in the earth's crust.
Metamorphic, metamorphism	Change in structure or composition of a rock as a result of heat and pressure
µm	A micrometre, µm is an SI unit of length equal to one millionth of a metre, or about a tenth of the size of a droplet of mist or fog.
Mineral	A naturally occurring inorganic crystalline material having a definite chemical composition
Mineralization	A natural accumulation or concentration in rocks or soil of one or more potentially economic minerals, also the process by which minerals are introduced or concentrated in a rock
mm	Millimetre, one thousandth of a metre, the International System of Units (SI) base unit of length.
National Instrument 43-101 or NI 43-101	Standards of disclosure for mineral projects prescribed by the Canadian Securities Administration.
Nugget effect	The often complex, erratic, and localized nature of gold is a common feature of many vein-style gold deposits. This style of mineralization is often referred to as

	being nuggety or possessing a high-nugget effect.
Ore	Mineral bearing rock that can be mined and treated profitably under current or immediately foreseeable economic conditions
Ore body	A mostly solid and fairly continuous mass of mineralization estimated to be economically mineable
Orogenic	The formation of mountain ranges by intense upward displacement of the earth's crust, usually associated with folding, thrust faulting, and other compressional processes
Pelite, pelitic	A sediment or sedimentary rock composed of fine fragments, as of clay or mud.
Peperite	A sediment or sedimentary rock composed of fine fragments, as of clay or mud.
Phyllite	A compact lustrous metamorphic rock, rich in mica, derived from a shale or other clay-rich rock
Plutonic	Pertaining to igneous rocks derived from magma that has cooled and solidified below the surface of the earth.
ppb	Parts per billion, a measurement of concentration
ppm	Parts per million, a measurement of concentration. 1 ppm = 1000 ppb = 1 gram per tonne.
Porphyry, porphyritic, phyric	The texture of a rock in which relatively large phenocrysts with regular crystal f aces are set in a generally fine-grained groundmass.
Pumice	A volcanic glass formed by the solidification of lava that is permeated with gas bubbles. Usually found at the surface of a lava flow, it is colorless or light gray and has the general appearance of a rock froth.
Pyrite	A mineral composed of iron and sulfur (FeS_2)
Pyroclastic	Pyroclastic flow, turbulent, fluidized mixture of rock, volcanic ash, and hot gas that moves like an avalanche away from a volcanic eruption.
QA/QC	Quality Assurance/Quality Control is the process of controlling and assuring data quality for assays and other exploration and mining data
Qualified Person	The term “qualified person” refers to an individual who is an engineer or geoscientist with at least five years of experience in mineral exploration, mine development or operation or mineral project assessment, or any combination of these, has experience relevant to the subject matter of the mineral project and the technical report and is a member in good standing of a recognized professional association.
Resistivity	The inverse of a conductivity, expressed in units of ohm metres
Rhyolite	A fine-grained light-colored acidic volcanic rock. Rhyolite is chemically the equivalent of granite, and is thus composed primarily of quartz and orthoclase feldspar with subordinate amounts of plagioclase feldspar, biotite mica, amphiboles, and pyroxenes.
Rock	Indurated naturally occurring mineral matter of various compositions
RTP	Reduction to pole. The simplification of the interpretation of magnetic anomalies by modifying the anomaly pattern to that which it would be in a vertical field, i.e. if the locality were at the north (or south) magnetic pole; induced magnetic effects would then be symmetrical.

Sericite, sericitization	A variety of white mica, usually muscovite, $KAl_2[AlSi_3O_{10}](OH)_2$. A hydrothermal or metamorphic process involving the introduction of or replac ement by sericite.
Shale	A fine-grained laminated or fissile sedimentary rock made up of silt- or clay-size particles
Silicification	Introduction of or replacement by silica (SiO_2 naturally occurring silicon dioxide).
Sill	A sill is a tabular sheet intrusion that has intruded between older layers of sedimentary rock, beds of volcanic lava or tuff, or even along the direction of foliation in metamorphic rock.
Sphalerite	A mineral composed of zinc, iron and sulfur ([Zn,Fe]S)
Stockwork	A mineral deposit in the form of a network of veinlets diffused in the country rock
Strike	The direction or trend that a structural surface, e.g. a bedding or fault plane, takes as it intersects the horizontal
Subduction	Subduction is the process that takes place at convergent boundaries by which one tectonic plate moves under another tectonic plate and sinks into the mantle as the plates converge.
Sulfide, sulphide	A mineral including sulfur (S) and iron (Fe) as well as other elements
Tectonic	Relating to the forces that produce movement and deformation of the Earth's crust
Tectonostratigraphic	Relating to the correlation of rock formations with each other in terms of their connection with a tectonic event
Terrane	A terrane in geology is a shorthand term for a tectonostratigraphic terrane, which is a fragment of crustal material formed on, or broken off from, one tectonic plate and accreted or "sutured" to crust lying on another plate.
Triassic	A geologic period and system that extends from about 250 to 200 Ma (252.2 ± 0.5 to 201.3 ± 0.2 million years ago).
Tuff	A type of rock consisting of consolidated volcanic ash ejected from vents during a volcanic eruption.
Tonne	Metric ton = 1000 kilograms = 1.102311 tons (short)
Turbidite	A sedimentary deposit formed by a turbidity current
Vein	A thin, sheet-like crosscutting body of hydrothermal mineralization, principally quartz
Volcanic Arc	A usually arc-shaped chain of volcanoes located on the margin of the overriding plate at a convergent plate boundary
Volcaniclastic	Clastic rock containing volcanic material in any proportion.
VMS, VHMS	Volcanogenic massive sulphide; Volcanic hosted massive sulphide. A type of metal sulfide ore deposit, mainly Cu-Zn associated with and created by volcanic-associated hydrothermal events in submarine environments.
VTEM	A proprietary deep sensing airborne geophysical survey system that identifies electrical conductivity of rock units