NTS: 092J/15E
Lat: 50º 51′19″ N
Long: 122º 41′42″ W
UTM: 10: 5633900 N 521575 E

BC Geological Survey
Assessment Report
33531

GEOCHEMISTRY, CLAST LITHOLOGY AND TEXTURAL ANALYSIS OF GLACIAL TILL & MAGNETOMETER SURVEY

MaryMac Property

Goldbridge, B.C.

Lillooet Mining Division

Mineral Tenure Numbers

507082, 507139, 507142,
507146, 603366, 606665

Event Number 4975267

Mineral Title Holder:

Robert Rosenblat
Vancouver BC

Owner:

Alan Brent Hemingway
#50-1640-162nd Street,
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By:

Alan Brent Hemingway B.Sc FGAC
Geologist

November 14, 2011

Amended January 6, 2013

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Summary

The MaryMac Property is located on the northern portion of Truax Creek just immediately south of Carpenter Lake BC at approximately 240 km distant from Vancouver. Access from Vancouver BC is via Highway 99 to the village of Pemberton, thence west on a well paved road to the Hurley River forest access road that connects to the hamlet of Goldbridge BC. Goldbridge is 20 road kilometres to the west of the property offering accommodations, ambulatory care, road excavating equipment, and limited supply services. The MaryMac Property consists of 6 mineral tenures encompassing an area of ≈1400ha.

The Truax Creek lies within a typical U-shaped valley representative of an Alpine glaciated Trough where the lower elevations are of gentle slopes transforming parabolically into precipitous hillsides and cliffs. Soil development in the valley bottom consists primarily of thick successions of lodgement and glacial till and are cut in a few places by basal melt wash channels; in some but not all areas recent episodes of landslides cover the foregoing: a Rhyolitic ash covered the area 2350 years BP and acts as a good marker horizon for determining whether the soil horizon is of landslide or glacial origin, therefore recognition of the type of transport mechanism in soil formation is of utmost importance in this survey.

The Property is centrally located in the Bridge River Mining District which has had a long history of gold mining. The District, with all its countless former gold mines, is considered the largest historical lode gold producer in the Canadian Cordillera, totalling more than 4.1 million ounces of gold produced from 1897 to 1971. The Property contains three known mineral occurrences: MaryMac Main former antimony producer, the North Showing, and the MaryMac South Prospect. The Property has had a long history of exploration and a short duration as an Antimony producer in the early 1970s. The primary target of past exploration programmes were the gold quartz veins situated either at the contacts of felsic porphyry dykes or within the echelon-type shear zones that traverse the valley in the vicinity of the MaryMac Main.

The current work consisted of the collection of three bulk soil samples taken at the “C” or basal till horizon at each station; three sampling stations were selected based upon the ‘head’ in the model as described within this report. Each bulk sample was divided into five mesh sizes: the -5+40 mesh and the -40mesh +100mesh were assayed; the +1.0 inch, +1/2 inch and +40 were viewed with a bi-ocular microscope. More than 5000 rock clasts were viewed, studied and classified with the aid of a bi-ocular microscope to determine texture, angularity and lithology of each fragment with emphasis on identifying any present sulphides or indicator clasts. The main intent of the current survey was to vector in towards the source area that has caused the gold in soil anomaly discovered in the previous soil sampling programme in September 2008. This report is part of an ongoing "work in progress programme" of which the most recent results are encouraging enough to warrant further work.

Introduction and Terms of Reference

This report outlines the history of exploration, geology, new work conducted, and recommendations for future work on the MaryMac Property (Property) at Truax Creek, Lillooet Mining Division of British Columbia. The current programme is a “work in progress” project. The author of this report is also the owner of the MaryMac Claim group but not the current mineral title holder. The basis of this report relies upon a compilation of published data, maps, and reports referenced from the B.C. Government geological database and other relevant sources.

The author while in the presence of an assistant personally examined the geological aspects of the Property area from August 3rd to August 7th, 2011. The purpose of this bulk soil sampling survey was to narrow the location range of the source area that caused the anomalous gold result at station 460N. Station 460N represents the “head” of a 220 metre long “train” of elevated gold-in-soil values as documented in the 2008 and 2010 assessment reports. Three sampling stations were selected as sites for the new work based upon the model of metal dispersion trains in glaciated terrains; namely the “gap, foot and head” of the schematic profile representing compositional variance of indicator erratics with distance of glacial transport from the source area and slope of clasts dispersal from bedrock source (R. Klassen).

The current programme consisted of the collection, assaying and lithological analysis of three bulk soil samples weighing at least >5kg that were taken from three sampling stations of which each station had one hand-dug pit into the basal or lodgement soil horizon. The pits were at least 1.5 metres in depth from the road surface and at least 2.5 metres below the ash layer near the top of the glacial till profile (true depth projection). The purpose of the work was to note the soil texture and glacial features within each hole and to collect enough material for a further lithological analysis of the diluvium with the view of determining the nature or mode of the potential mineralized source which created the gold-in-soil anomaly.

The author personally submitted 3 bulk samples and 3 rock samples to Assayers Canada of Vancouver (SGS) for preparation and assaying. Each bulk sample was sized into 5 mesh fractions by Assay Canada Laboratory (SGS) of Vancouver; the +1.0 inch, +1/2 inch, +40 were selected for study of rock clasts lithology and textural analysis by the author; the -5 +40 and the -40 +100 mesh sizes totalling 6 samples were submitted for assaying. The detailed lithology and textural study of the rock clasts from the coarser size fractions was to complement the assays obtained from the finer fractions. A total of 9 size fractions representing more than 5000 rock clasts were viewed during this study and a further 230 rock clasts were sorted into rock type categories, studied, compared with the assays of the finer fractions and then tabulated; a time consuming, labour intensive, tedious task.

Further work included; the collection and assaying of three rock samples from the shallow bedrock encountered at station 430N, mapping the geological features thereof, and a limited magnetometer survey over the same area with the purpose of correlating those results with the anomalous soil assays from the previous programs. A total of 198 magnetometer readings were recorded and tabulated during the work period.

Insufficient data was obtained from the current work to conclusively determine the exact location(s) of the gold source(s) to the 220m long gold dispersion train but the current data has narrowed the range. Further detailed bulk soil sampling work may provide enough data to locate the source area of gold-in-soil anomaly.

The recommendations in this report are based upon the results from the current work program, published data, and the author's personal exploration experience. This report details the findings of the current portion of the "work-in-progress" programme and is submitted for assessment work credits.

Property Location, Access and Legal Description

The MaryMac Property is located on the North Slope of the Bendor Range within the eastern side of the Coast Mountains in south-western British Columbia (Fig 1). The Property occupies the northern portion of Truax Creek that flows into the south side of Carpenter Lake at approximately 12 km by air east from the Hamlet of GoldBridge (Fig.2). The claim group is centered at Lat: N 50.8685˚, Long: W 122.6915˚ and is about 240 km north of Vancouver BC. Access to the property from Vancouver is via Highway 99 leading northwards to Pemberton BC, thence westward along the Lillooet valley road to the turnoff of Hurley River Forest service road bearing northward to GoldBridge BC. From GoldBridge take the Haylmore road heading east along the south shore of Carpenter Lake for about 13 kms. The well maintained gravel road then slowly snakes up the hill to the property. Total driving distance from

GoldBridge is approximately 20 kms to the old Mary Mac Mine road turnoff, a four-wheeled drive vehicle is recommended.

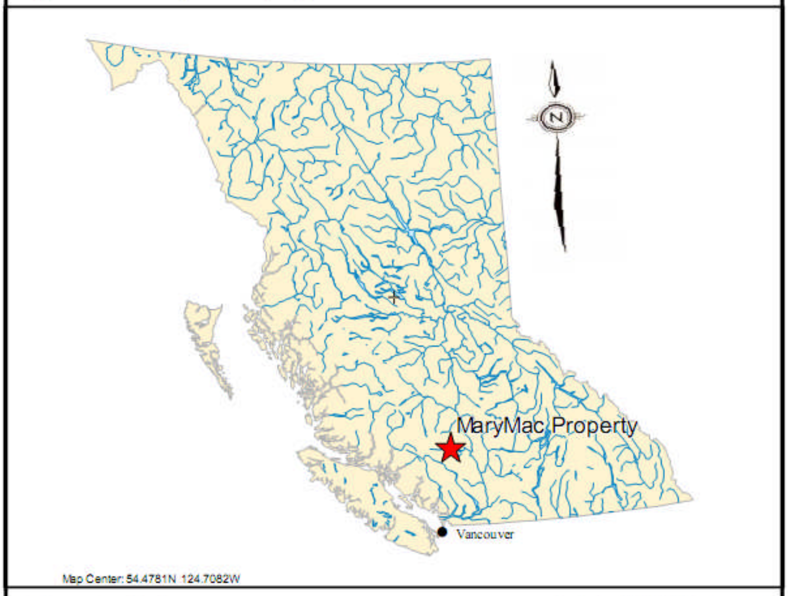
Gold Bridge is the nearest community providing food and lodging amenities, an ambulatory emergency station, light road construction equipment, hydro electric power generation, and a library with internet connections. The main service center in the region is the town of Lillooet, a community 100 road Kms to the east of Gold Bridge and connected via a well paved two lane road maintained year round for access. Lillooet provides major road and rail links, airport, and other major construction equipment providers to the mining industry.

The Property consists of six contiguous claim blocks known as: Carpenter (Mineral Tenure # 507142), Williams (507146), no named (507082), Merry Mac (507139), MARY (603366), and MM (606665); all of which are 100% owned by the author of this report, Alan Brent Hemingway of Surrey BC. The Claim group covers an area of approximately 1427.897ha. Table 1 provides the legal description of the claims as of the date of this report:

Table 1

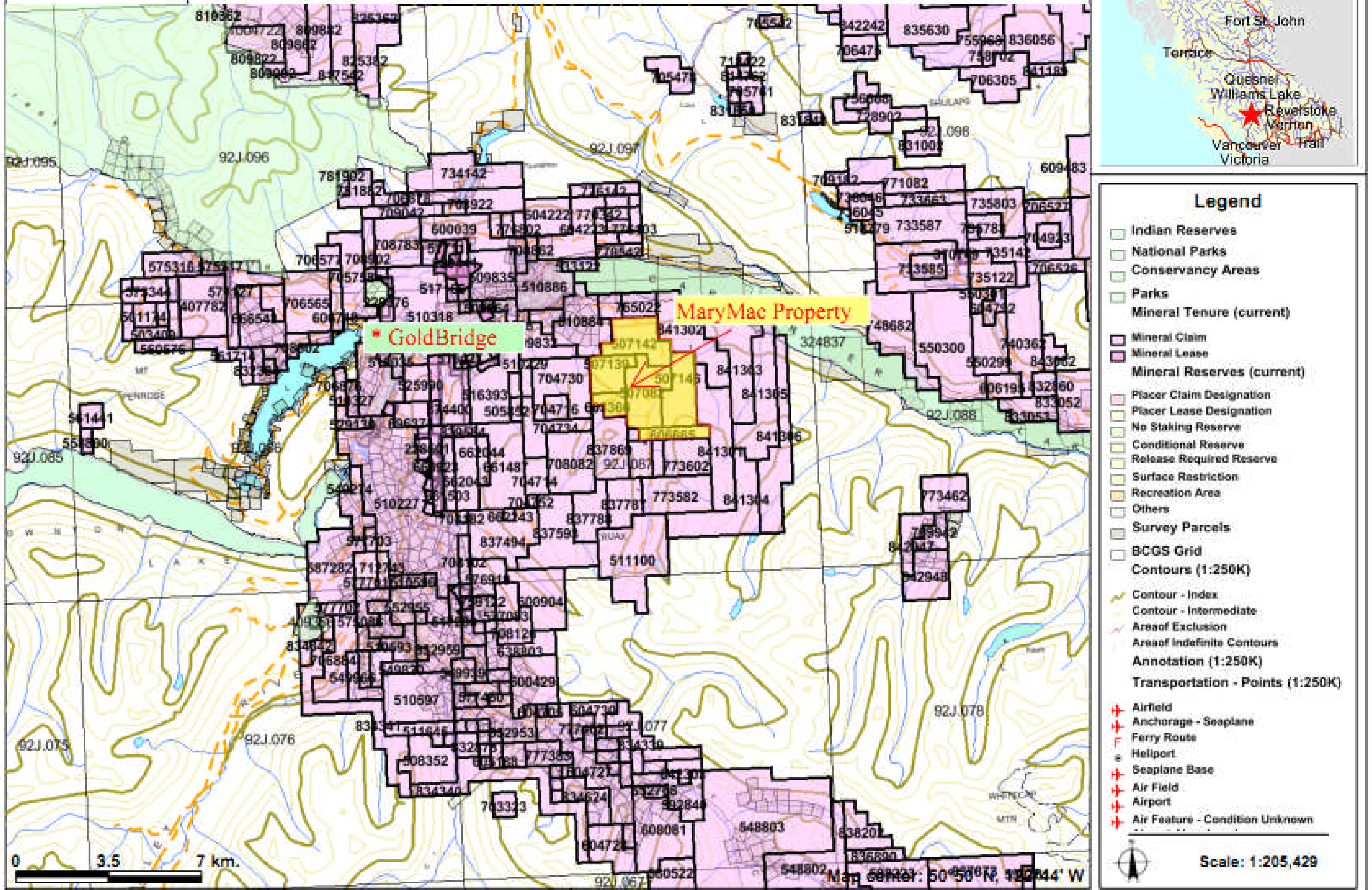
Tenure Number	Claim Name	Mineral Title Holder	Tenure Type	Tenure Sub Type	Map Number	Issue Date	Good To Date	Status	Area (ha)
507082		249702 (100%)	Mineral	Claim	092J	2005/feb/14	2012/aug/10	GOOD	367.202
507139	Merry Mac	249702 (100%)	Mineral	Claim	092J	2005/feb/14	2012/aug/10	GOOD	203.971
507142	Carpenter	249702 (100%)	Mineral	Claim	092J	2005/feb/14	2012/aug/10	GOOD	326.286
507146	Williams	249702 (100%)	Mineral	Claim	092J	2005/feb/14	2012/aug/10	GOOD	305.999
603366	MARY	249702 (100%)	Mineral	Claim	092J	2009/apr/24	2012/aug/10	GOOD	102.0066
606665	MM	249702 (100%)	Mineral	Claim	092J	2009/jun/26	2012/aug/10	GOOD	122.4323
								Total Ha	**1427.897**

Figure 1 **MaryMac Property Location**



Reference (modified): http://webmap.em.gov.bc.ca/mapplace Scale 1: 11,688,208 (approx.)

Figure 2 **MaryMac Claim Group**



This map is a user generated static output from an Internet mapping site and is for general reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable. THIS MAP IS NOT TO BE USED FOR NAVIGATION.

Notes: 507082, 507139, 507142, 507146, 603366, 606665

MaryMac Property Highlighted in Yellow

Reference: (modified) http://webmaps.gov.bc.ca

The writer is aware of several First Nations that may have an aboriginal interest on some of the MaryMac Claim Block, however as of this date there are no Treaties covering the Truax Valley and surrounding area with BC Government. The Property occupies entirely on Crown Land and there are no private surface rights holders (see Appendix for Encumbrance Report). However, a proposed Run-of-River (ROR) Project on Truax Creek by Max-Power (Syntaris) of Vancouver BC has applied for the use of surface and water rights. The Property has no environmental wildlife concerns and has on-going, intermittent logging operations.

The only encumbrance to future prospecting, exploration, or mining operations is the aforementioned "ROR" Project which grants surface rights that covers the most prospective portion of the Property; the area affected contains known mineral reserves with a high potential for both deposit development and discovery. A submission paper by the author outlining the impact of the ROR project was filed with FrontCounter BC in Kamloops on March 13th, 2008.

Physiography and Climate

The Mary Mac Property is located on the north-eastern slope of the Coast Mountain's Bendor Range in south-western British Columbia. The Claim area straddles the lower reaches and hillsides of the Truax Creek valley which drains northward into Carpenter Lake. The elevation at the northern boundary of the Property immediately south of Carpenter Lake rises from 800m to almost 2200m on the south-eastern and the south-western corners of the claim group.

The Truax Valley has a typical U-shaped topographic signature of an Alpine glaciated Trough, where the lower elevations are of gentle slopes transforming parabolically into precipitous hillsides and cliffs (Photo 1 next page). The author did not find any glacial direction indicators during the current survey, but has generally assumed to be down valley northwards towards Carpenter Lake. Soil development in the valley bottom consists primarily of thick successions of lodgement-glacial till that are cut in a few places by basal melt wash channels. In some but not all areas recent episodes of landslides cover and disrupt the foregoing: the steep gradient of the upper slopes east of Truax Creek is the source area for the majority of the recent landslides that cover the valley floor in the vicinity of the Mary Mac mineral occurrences whereas the western hillside gradient is moderate with no evidence of landslides even though the elevation rises equivalent to the eastern side. Recent logging operations on the north side of the Property has refurbished the main access road on a switch bend at the 1100m elevation with a fresh bank cut, the soil profile at this location signifies an earlier landslide event in the immediate area (Photo 2). The best rock exposures are found in road cuts, ridge crests, and in some of the creeks on the slopes near the valley floor.

A Rhyolitic ash covered large areas over the glacial colluvium 2350 years BP and acts as a good marker horizon for determining whether the top of the glacial soil horizon has been disturbed by recent landslides (Photo 2). The ash is a light yellow coloured, coarse-grained Rhyodacite pumice of which the source is from a volcanic vent on Plinth Mountain in the upper Lillooet River Valley about 50km to the southwest of the Gold Bridge area. The ash layer covers the majority of the claims from an average thickness of 6.0 to 30 cm in the lower forested elevations to almost non-existent in the steeper slopes due to the erosive action of the weather.

Photo 1 Topography of the Truax Valley

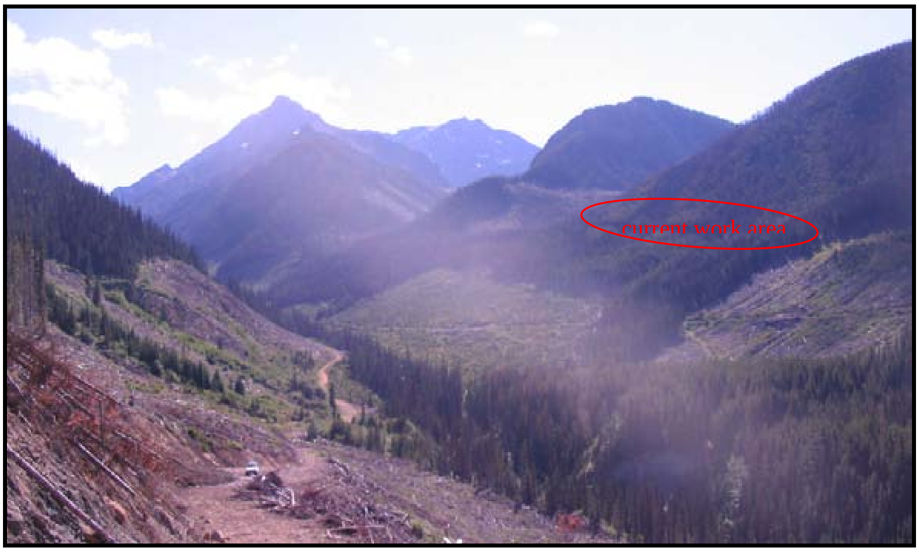


Photo taken just North of the Mary Mac Mill in Valley below, view is looking south towards the Bendor Range and the headwaters of Truax Creek.

Photo 2 Picture of Landslide and Ash Layer in Road Cut

Photo taken on the main forest road leading from Carpenter Lake up into Truax Valley, Elevation 1100m

The climate in the area is typical of the Chilcotin-Lillooet region except much wetter due to being within the rain shadow of the Bendor Mountain Range. The nearest reporting weather station is at Lytton. The table below describes the statistics for the region

Table 2 **Weather Statistics: Lytton BC** Lat: 50.14˚N Long: 121.35˚ Altitude 258m

Temperature °C	**J**	**F**	**M**	**A**	**M**	**J**	**J**	**A**	**S**	**O**	**N**	**D**
Maximum	1	5	11	16	20	24	28	28	22	15	6	1
Minimum	-5	-2	1	4	8	12	15	15	10	5	0	-4
Mean	-1	1	6	10	14	18	21	21	16	10	3	-1
Precipitation												
Rain (mm)	34	24	28	18	18	18	14	17	26	35	48	43
Snow (cm)	42	23	5	1	0	0	0	0	0	1	20	34
Total (mm)	65	41	32	19	18	18	14	17	26	36	65	70
Snow Depth(cm)	-	5	0	0	0	0	0	0	0	0	4	6
Sunshine (h)	58	85	144	195	241	257	281	242	184	129	61	46
Number of Days where												
Min. Temp.<=0°C	25	19	13	3	0	0	0	0	0	4	15	23
Rain >=0.2 mm	6	8	9	7	7	7	5	6	7	9	10	7
Rain >=5 mm	2	2	2	1	0	1	0	1	2	2	3	3
Rain >=10 mm	1	0	0	0	0	0	0	0	0	0	1	1
Snow >=0.2 cm	8	5	2	0	0	0	0	0	0	0	4	9
Snow >=5 cm	3	1	0	0	0	0	0	0	0	0	1	2
Precip.>=0.2 mm	12	11	10	7	7	7	5	6	7	10	13	14
Precip.>=5 mm	4	3	2	1	0	1	0	1	2	2	4	4
Precip.>=10 mm	2	1	0	0	0	0	0	0	0	0	2	2
Snow Depth>=20cm	6	1	0	0	0	0	0	0	0	0	2	-

The weather statistics displayed above represent the mean value of each meteorological parameter for each month of the year. The sampling period for this data covers 30 years from 1961 to 1990.
Lytton ≈112 km SE of GoldBridge is the nearest statistical reporting station.
Reference: http://www.theweathernetwork.com/statistics/C02095/cabc0172

The property is situated on the North-east facing slope of the Bendor Range as such, snow remains on the ground from Mid-November to late May or Mid-June.

History of Exploration

Circa 1930

The original Mary Mac Claims were staked by George and Jack Morrison of Vancouver. Work consisted of a few short exploration adits on the eastern bank of Truax Creek at the present site of the Mary Mac Main zone.

1949

A truck road leading up Truax Creek to the headwaters was constructed to provide access to an area now known as the Grey Rock Mine.

1960s-1974

In the 1960s Mr. Harry Street of Gold Bridge drove the main adit at the Mary Mac Main at the present day location as well constructed a small mill to grind the stibnite ore. In 1974, production of 3 to 4 tonnes per day of rough stibnite was won from the narrow quartz veins.

1980

W. Cook staked the area and consequently sold 50% to Keron Holdings of Vancouver, BC. A reconnaissance soil survey covered most of vicinity and a detailed survey between the south and main zones (Gruenwald, 1980). Several anomalies were outlined having high molybdenum and arsenic values.

1981

Hudson’s Bay Oil & Gas Co. performed a major trenching and road building (4.5kms) on the eastern side of the valley above the old Mary Mac adit. Geological mapping and sampling of the trenches that were later analyzed for gold, arsenic, and antimony (Hall, 1983). Hudson’s Bay was later taken over by Dome Petroleum.

1983-1984

Andaurex Resources of Toronto, Ontario optioned the property and performed several drill programs on the Main, North and South zones to further delineate the mineralization which led to a resource calculation for each zone (Kerr, 1983). Although the results were encouraging for further exploration, Andaurex declined to continue with the option with Dome Petroleum. Late in 1984 Dome declined to continue the option with Keron et al; and the property was returned.

1985-1986

The property was optioned to a major U.S coal company, Pilgrim Coal Corporation of Atlanta Georgia, who performed various exploration programs over the whole area including: further soil sampling, magnetometer, VLF-EM, geological mapping, and trenching surveys (Wynne, 1986).

1987

Dawson Geological Consultants were commissioned by Pilgrim Coal to manage a drill program due to the encouragement received by the previous surface exploration work. The 1987 drilling of 11 holes totalled 998m in all of the three mineral occurrences: North, Main and South zones. The results were not encouraging enough for the company to continue with the option (Dewonck, 1987).

1998

Werner Gruenwald of Kamloops BC staked the area after the ground became open and later sold the property to a company controlled by Mr. Alan Savage of Vancouver BC.

1999-2000

The claims were forfeited and the Author of this report staked the Merry Claims in mid 1999. In 2000, a preliminary magnetic survey and slide analysis of the property was initiated by the Author (Hemingway, 2000).

2001

The property was optioned to Princeton Ventures of Vancouver BC which conducted a Satellite Imagery Analysis in several band widths for determination of alteration mineralization (Ostler, 2001).

2004-2005

Action Resources of Vancouver BC optioned the claims from the Author. A reconnaissance geochemical silt, moss and rock assaying was conducted by the company (Kowalchuk, 2006). The results of the program were sufficient to warrant the next phase of exploration.

2006

Bradford Minerals of Vancouver BC on behalf of Action Minerals engaged Peter Walcott & Associates for a Heliborne Magnetic & Electromagnetic Survey over the entire property (Walcott, 2006). Results from the program indicated a number of conductive trends and anomalies, further work was recommended. However, the company elected to return the property to the vendor who is the author of this report.

2008-2010

The Author conducted several soil sampling programs which targeted specific areas of the Property based upon the geophysics program in 2006. The result was a linear trace of a gold-in-soil anomaly extending 220m trending parallel to the direction of the valley. The soil anomaly is open to the east and west which has not been fully delineated as to the extent.

Geological Setting

The following selected information based upon relevance to the geological setting of the Property (Fig. 3) is adapted from Geoscience BC Report 2009-1, pages 91-102 “Sulphur Sources for Gold Deposits in the Bridge River-Bralorne Mineral District, South-western British Columbia” by Hart, C.J.R. et al.

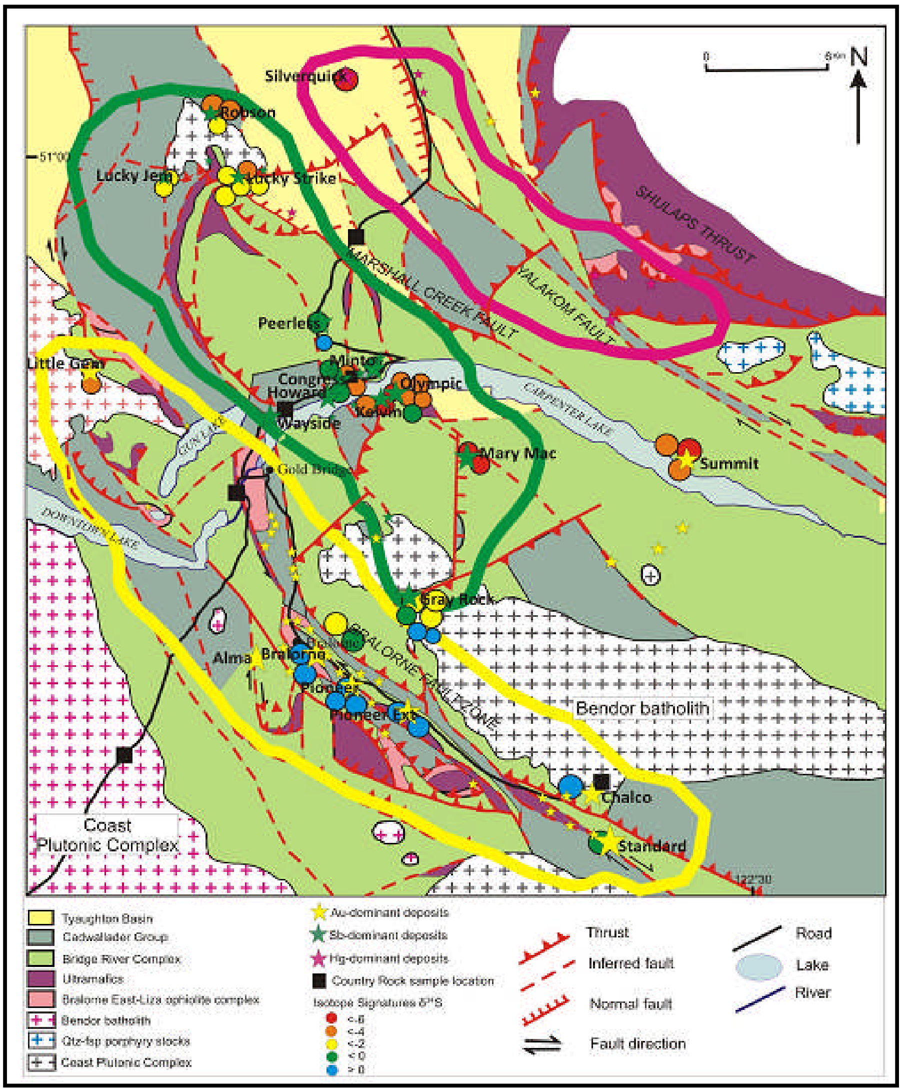
Geological Description of Region (Hart et al 2008)

> “The Bridge River–Bralorne mineral district straddles the boundary between the Middle Jurassic–Late Cretaceous Coast Belt and the Late Paleozoic–Mesozoic Intermontane Belt that together comprise this part of the southwestern Canadian Cordillera (Schiarizza et al., 1997). This complex region resulted from episodic deformational, depositional and magmatic events from the Late Paleozoic to Middle Tertiary. In the Middle–Late Jurassic, two main tectonic assemblages collided: the oceanic backarc basin Bridge River Complex (Figure 3) comprising basalt, gabbro, chert, shale, argillite and ultramafic rocks was juxtaposed with the island arc Cadwallader Group, which consists of volcanic rocks and marine and arc-marginal clastic strata (Schiarizza et al., 1997). During and after terrane collision, the Late Jurassic–Cretaceous Tyaughton Basin, which consists of mostly clastic sedimentary rocks and shale, was deposited on top of these two terranes (Church, 1996).
>
> Contractional deformation during the mid-Cretaceous resulted in a series of major structural systems. In the Bridge River district, these are the Bralorne fault zone (Cadwallader break), the Yalakom fault system, the Shulaps thrust and a network of northwest-trending faults (Figure 3; Leitch, 1990; Schiarizza et al., 1997). Deformation above the Cadwallader Group occurred along the Shulaps thrust, the Bralorne fault zone and Bralorne–East Liza ophiolite assemblages, respectively, resulting in wedges of ophiolite and ultramafic rocks along these zones, marking the region of crustal shortening. The ophiolite rocks include greenstone, diorite, gabbro, tonalite and serpentinite (Schiarizza et al., 1997).

Regional plutonic and volcanic events were episodic during the Cretaceous and Tertiary. The Coast Plutonic Complex (CPC) is the main component of the southwestern Coast Belt, as well as the main granitic intrusion of this region, and marks the southwest corner of the mineral district (Schiarizza et al., 1997). The Bendor batholith is a younger constituent east of the CPC, in the form of an outlier pluton, which runs for 20 km in a northwest-trending direction between the Bralorne fault zone and the Marshall Creek fault (Figure 3). These intrusions comprise granodiorite to quartz diorite, characterized by massive hornblende> biotite>pyroxene and magnetite-titanite, and generally have sharp contacts with a 1 km contact metamorphism halo. A mass of mafic to felsic dikes intrude all of the units. These dikes include 85.7 Ma hornblende porphyry, 86–91 Ma albitite dikes, plagioclase porphyry and lamprophyre. These are all considered to be hypabyssal equivalents of the CPC (Church, 1996).

Dextral strike-slip movement reactivated many of the older northwest-trending faults, especially along the Yalakom fault system, which includes the Marshall Creek, Shulaps thrust, Castle Pass, Bralorne fault zone and Relay Creek faults (Umhoefer and Schiarizza, 1996). These structures post date the accretionary contractional structures at 67 Ma, but continued to be active through to 40 Ma (Schiarizza et al., 1997)."

Figure 3 Regional Geology Map (adapted)



The map displays the regional geology of the Bridge River–Bralorne mineral district showing the major mineral occurrences, type and distribution. Distribution pattern is represented by circular coloured lines; green, Sb type; pink, Hg type; yellow, Au type. Modified after Church (1996), Maheux (1989) and Schiarizza et al. (1997)

Geological Description of Property Area

The following is a brief description of the applicable rock formations together with a schematic stratigraphy (Figure 4) encountered within the Mary Mac Property and the immediate vicinity. The Property is mainly underlain by the Fergusson Assemblage of the Bridge River Complex and to lesser extent the Pioneer Formation (Figure 5). The Complex has been well documented by Dr. B.N. Church of the BCGS in “Geology of the Bridge River Mining Camp” Paper 1995-3; below is a limited description of the strata that are found on the Property:-

The northern portion of the Property is underlain by the Late Jurassic-Early Cretaceous Relay Mtn Group (unit 5 on Figure 5); a repetitive sequence of Buchia-bearing shales, siltstones and lesser greywackes that are in a down-faulted block with the Fergusson and Tyax Assemblage sub-groups of the Bridge River Complex . The Fergusson and Tyax Assemblage essentially occupy the central portion of the Property and also host the major gold-quartz veins.

The Fergusson Assemblage (unit 1a, Figure 5) is a deformed strata consisting predominantly of light to medium grey ribbon cherts intercalated with black graphitic argillite, greenstone, and thin bands of crystalline limestone (the only known stratigraphic marker horizon within the succession) which contains a few, indistinct microfossils that are believed to be of Paleozoic in age. The unit is complexly folded which has resulted in some sections being intensely fragmented and milled to the point that the unit almost resembles a pebbly conglomerate. The Fergusson strata near the contacts of granitic intrusions are metamorphosed into several rock types consisting primary of garnetiferous-biotite-quartz gneiss, schists bearing andalusite, and amphibolite.

The Tyax Assemblage (unit 1x, Fig.5) is very similar to the Fergusson strata with the only difference of the latter containing a volcanic component of basaltic lavas, sills and dikes. The Tyax age is more definitive than the Fergusson because of the variety of distinct fossils that are from the Middle Triassic to Early Jurassic period. The Tyax is stratigraphically and lithologically similar to the Pioneer Volcanics that outcrop on the west central side of the property. The Pioneer has an abundance of basaltic pillow lavas, flow breccias, lava flows and sills with a sparse sedimentary component verses the Tyax that has an abundance of a sedimentary rocks intercalated with rare basaltic flows and pillows.

**Figure 4		Schematic Stratigraphy**

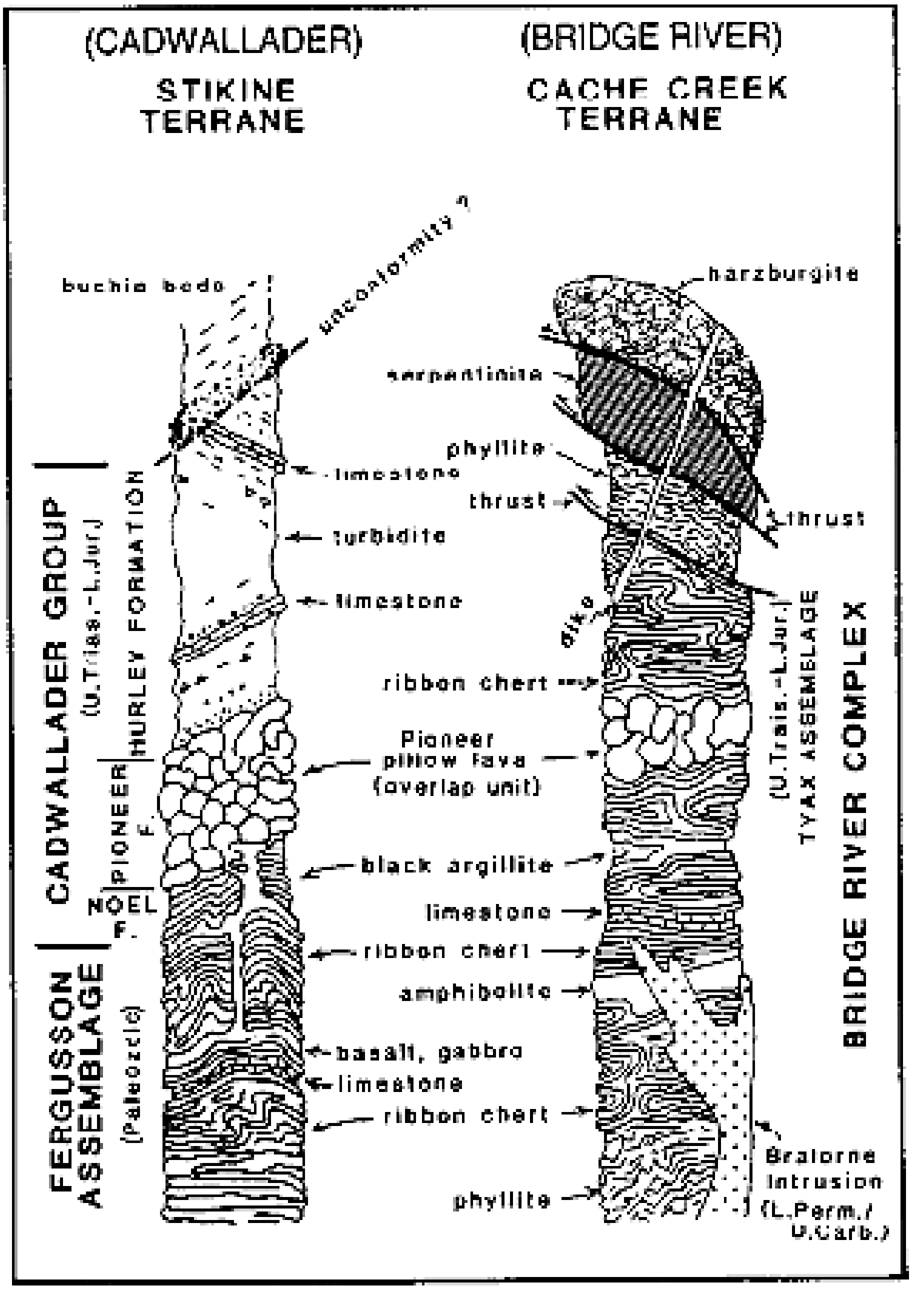
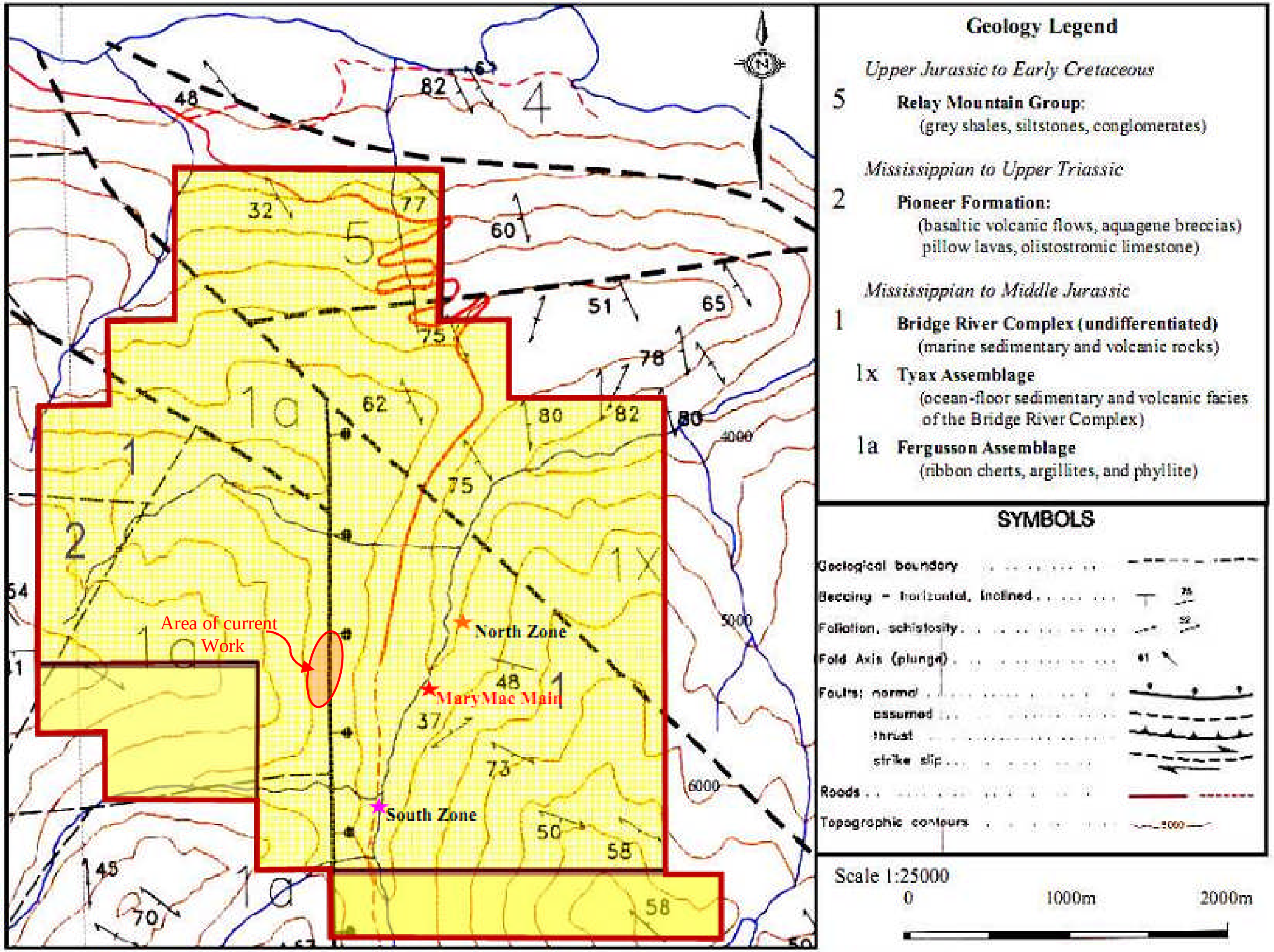


Figure 2.2. Schematic stratigraphy of the Cadwallader and Bridge River terranes in the Bridge River area.

Reference: B.N. Church 1995

The majority of the rocks on the Property have been generally altered to the lower Greenschist facies but the near the contacts with the intrusive felsic and mafic dykes, the grade of alteration increases to amphibolite-propyllitic-phyllic facies. Most country rock exposures are well fractured and in some areas often contain masses of quartz veins/lets.

Figure 5 **Generalized Geology of the Mary Mac Property Area**



Reference: BCEM Paper 1995-3 Bridge River Mining Camp Paper 1995-3 B.N. Church

Elevation in feet

Economic Geology

The primary target of past and recent explorers has been the gold-bearing quartz veins situated within the property boundaries. There are four known, documented mineral occurrences within the Property boundaries with each having their own distinct settings, from North to South; the BillyO (Minfile # 092JNE107), MaryMac North prospect (Minfile # 092JNE107), the MaryMac Main producer (Minfile # 092JNE067) and the MaryMac South prospect (Minfile # 092JNE096). There are at least three types of mineral deposit models that are evident on the Property. The following is a brief description of the occurrences and types of mineralization.

In the early 1970's a small mill was established near the present site of the MaryMac Main adit to process antimony ore mined from a small, stibnite deposit (18000 tons @20% antimony). The source of the stibnite was attained from a series of mesothermal quartz veins that also had a precious metals signature. The precious metals occur as two distinct habitats with the quartz stibnite veining; silver is highly concentrated within stibnite thus giving the mineral a slight bluish tinge to the otherwise dull steel grey appearance, however, gold is partially associated with stibnite but also occurs entirely separate with no relationship to the mineral. The mining operation eventually failed being too small with winning only a token amount of ore each day.

Dr Neil Church of the BC Geological Survey visited the Property in 1986/87, mapped the Property, examined the mineral occurrences, sampled the main zone and later compiled a report of his findings (BCGS Paper 1995-03). A reference from page 82 of his report gives a historical account of the showings with emphasis in red:

> ...."The mineral showings occur mainly at the contacts of a northerly dipping hornblende feldspar porphyry dike about 40 metres below the waterfall on Truax Creek, northeast of the mill site. The mineralized zone consists of quartz and carbonate veins 0.5 to 2 metres wide, emplaced on west-northwest trending fractures. Coarsely crystalline stibnite is accompanied by small amounts of arsenopyrite, pyrrhotite, chalcopyrite, limonite, tetrahedrite and/or jamesonite (?). On the east side of the creek this zone assays 7.64 grams per tonne gold and 17.1 grams silver across a sampling width of 5 m. Chloritic alteration is widespread and accompanied locally by sericitization and pyritization. Numerous crosscutting molybdenite-bearing quartz veinlets related to an earlier mineralizing event occur within the porphyry dike. Molybdenite is also found in quartz stringers at higher elevations on Mount Williams.
>
> Another mineralized zone, 170 metres northeast of the waterfall, was the chief source of the stibnite ore for the mill. This showing is smaller but higher grade than the main zone and is related to the faulted and serpentinized south contact of another porphyry intrusion. Assays from this site, across 4 to 5-metre widths in stibnite-bearing quartz veins returned gold values in the range 1.7 to 3.4 grams per tonne. The grade of stibnite is reported to be 20% over 2.1 metres, with reserve estimates ranging

from 13000 to 18000 tonnes (MINFILE 092JNE067). A report for Andaurex Resources Limited gives a larger tonnage estimate based on additional drilling (Kerr, 1983).

The Mary Mac south showing (MINFILE 092JNE096) is hosted by a northerly dipping zone of brecciated andesitic metavolcanics, 1 to 6 metres wide, just southeast of the bridge on Truax Creek, about 800 metres south of the main zone. The breccia is cemented by quartz and contains concentrations of stibnite and pyrite; assays indicate traces of molybdenum and copper. The adjacent, altered Bridge River metasedimentary rocks, containing up to 8% disseminated pyrite forms a halo around the base of Mount Williams.

Workings on the south zone consist of surface trenching and three drill holes. Ore estimates calculated in 1983 (Kerr, 1983) are 27300 tonnes with an average grade of 8.18 grams per tonne gold, over an average width of 2.4 metres (cut-off grade is 3.11 g/t)….."

The above describes at least two of the three deposit types; gold-bearing quartz veins/quartz healed breccia with or without stibnite that are structurally emplaced within the host rocks near the porphyry dyke contacts, as well within the porphyry dykes are sets of cross-cutting molybdenite bearing quartz veins related to an earlier mineralizing event. Several previous workers have postulated a buried porphyry intrusion is the source of the molybdenite and gold, evidence above in the quoted text shows several characteristics related to this deposit style. A halo of disseminated pyrite within the country rocks contiguous to a buried intrusive porphyry system is a common occurrence together with and branching out from the same igneous source with an equivalent mineralogy and mineralization are the frequent offshoots of ring or radial dykes.

The third style of mineralization near the MaryMac South prospect was discovered in rock float from talus scree by the author in 2005 (AR 28163); the rock contained massive pyrrhotite with minor amounts of copper and tungsten and appeared to be intensely altered consistent of a skarn type environment.

The fourth style of mineralization may occur within the Bridge River Oceanic Volcanics at the south zone. The geological environment at this locale is favourable for the occurrence of Cyprus type volcanic hosted massive sulphide deposits. The first indicator was the geochemical analysis of the andesite-basalt-skarn float found at the location yielding elevated copper and zinc values (AR 28163). The second indicator is the widespread occurrence of disseminated to massive pyrite-pyrrhotite in the andesite-basalt-argillite intervals reported in the drill core. The drill core at one interval intersected a significant increase in gold values (0.240 verses 0.0130 ozs/ton) in a grayish-green andesite section containing semi-massive pyrrhotite with minor chalcopyrite (AR 16378). The third indicator is the various reports of jasperoid alteration within the same volcanic unit.

The ore reserves calculated (Kerr, 1983) as follows: Main Zone 22,300 tonnes grading 7.4338 grams per tonne gold or 78,000 tonnes of ore grading 2.8927 grams per tonne; the indicated reserves for the North Zone 10,800 tonnes grading 5.256 grams per tonne or 39,200 tonnes at 2.3328 grams per tonne gold; and the South Zone 27,300 tonnes grading 8.18 grams per tonne gold.

Survey Description

Preface

The geochemical soil sampling performed on the Property in September 2008 was a preliminary test of the suitability of soil sampling to provide meaningful results that may outline a buried mineral deposit. The results from that previous program outlined a 220m long gold-in-soil glacial dispersion train. The program was successful; however, the difficulty in obtaining creditable data in a soil horizon developed by slide and glacial factors is tenuous as most results may be of a transported nature from a distant source area. Several factors that may increase the reliability of results obtain in this sampling medium are: depth to bedrock, the type of glacial material, recognition of soil formation, and identifying appropriate marker horizons within the solum profile. The previous exploration programs have tentatively given an indication of the amount of glacial drift to soil formation; areas of known mineralization that have been delineated by drilling show associated soil anomalies with a glacial drift factor . At the MaryMac Main the gold-in-soil anomaly associated with the zone appears to have an average northward drift component of about 100-150 metres comparable to the South Zone gold-in-soil anomaly northward drift of 75-125 metres (AR 15777). Depth to bedrock documented in previous drill holes ranges from 2.0 to 5.0 metres at the South Zone on the valley west shoulder and 3.0 to 12.0 metres at Mary Mac Main on the lower hillside slope immediately east of Truax Creek (AR 16378).

Exploration Methodology

The purpose of the current work was to narrow the range of the bedrock source of the 220m long gold-in-soil glacial dispersion train as outlined in the former 2008 program by conducting a detailed lithological and clast study of the glacial diamicton at selected sampling sites that are based upon the "head and foot" model of a generalized glacial dispersal curve of the indicator clasts (Figure 6). By comparing the geochemical analysis of the bulk soil samples with a lithological study of the rock clasts of the glacial material may provide clues as to the cause of the gold-in-soil dispersal train as well refine the target area of the in-situ gold source by vectoring the plume angle of dispersion (Figure 7).

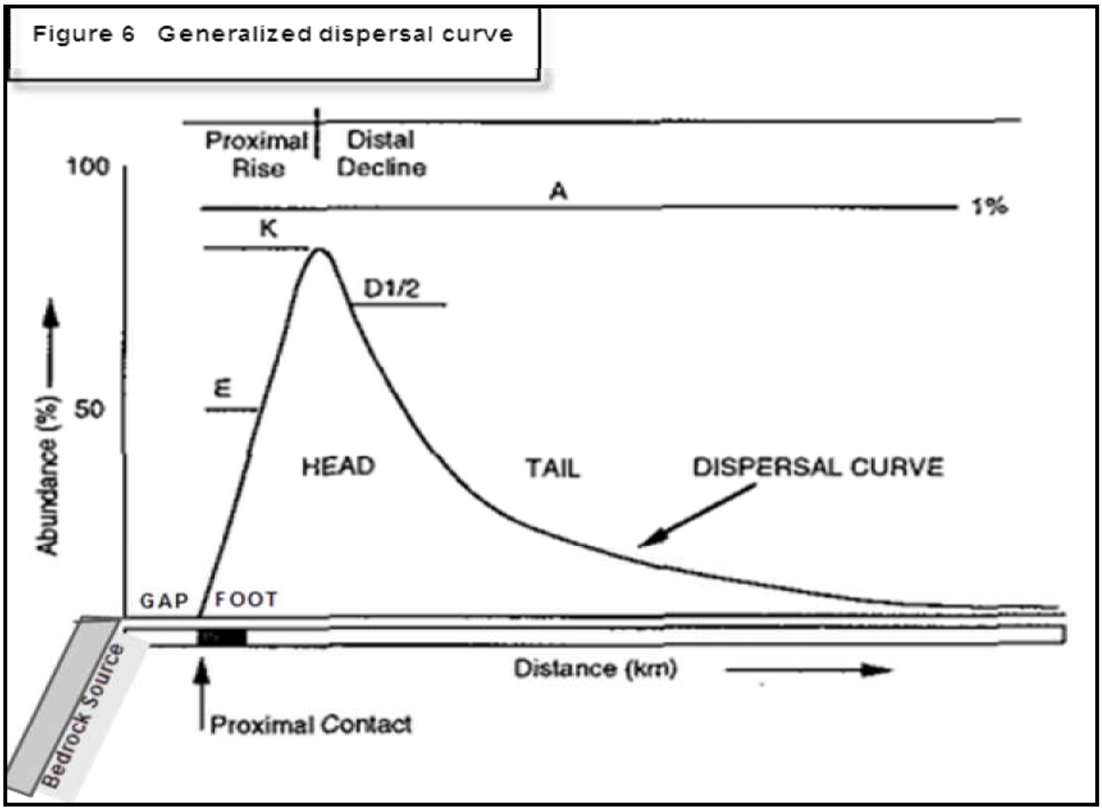
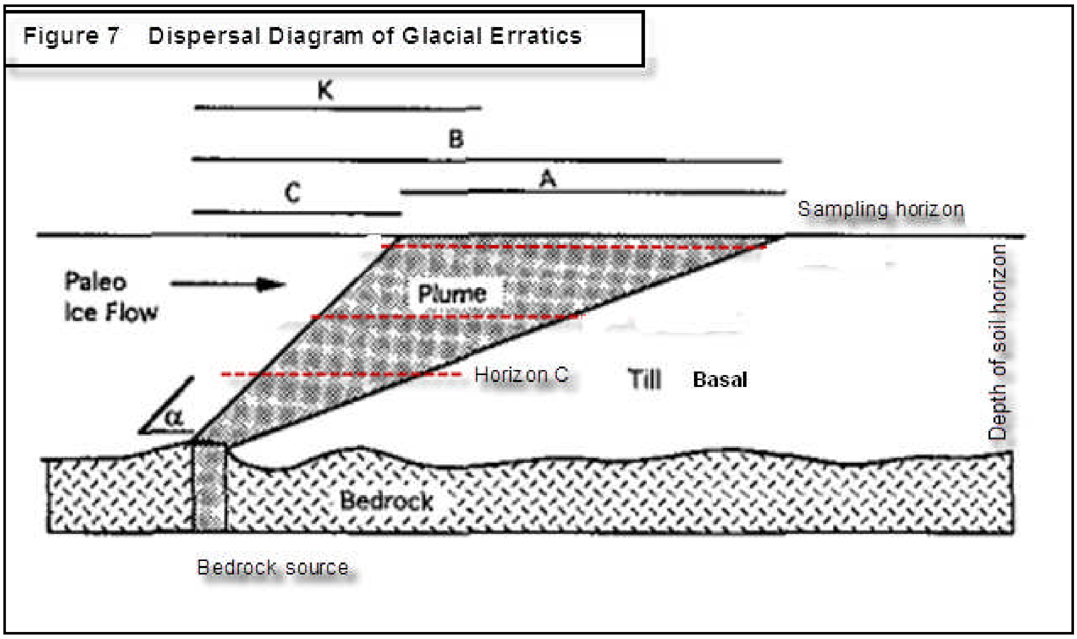


Figure 6 Generalized dispersal curve

Reference: Bobrowsky P. T., Lithological Analysis in Drift Prospecting Studies in Glacial Drift Exploration, Paper 1995-02 BC Geological Survey; modified by the author.

Figure 6 is a depiction of a typical dispersal curve of the amount or percentage of indicator clasts verses transport distance from the first indicator source or “foot” to down ice dispersal extinction or “tail”. The curve shows the maximum concentration or highest anomalous assay point or the “head”. The shape of the curve is variable depending upon the ice flow velocity; stagnated conditions usual yield irregular amoeboidal shaped dispersion trains (Klassen) whereas the example above is a standard shape of a faster ice flow clast uptake from source. The illustrative parameters; K = distance from proximal contact of indicator source to maximum concentration of clasts or highest anomalous assay, A = total length of the indicator train from the apical clast to the 1% frequency limit, E = the distance from the apical clast to where the frequency reaches 50% of the total or the renewal distance; D ½ = is the distance where the frequency of an indicator clast declines to 50% of its value or half-distance. The Gap is the distance from the bedrock source to the first observance of an indicator clast at the surface referred as the apical or proximal point. The distance between this point and the bedrock source can be estimated if the angle (α) of climb is known (Figure 7). The above diagram has been adapted by the author in this report for the rise and dispersion of soil assay values from the 2008 program.

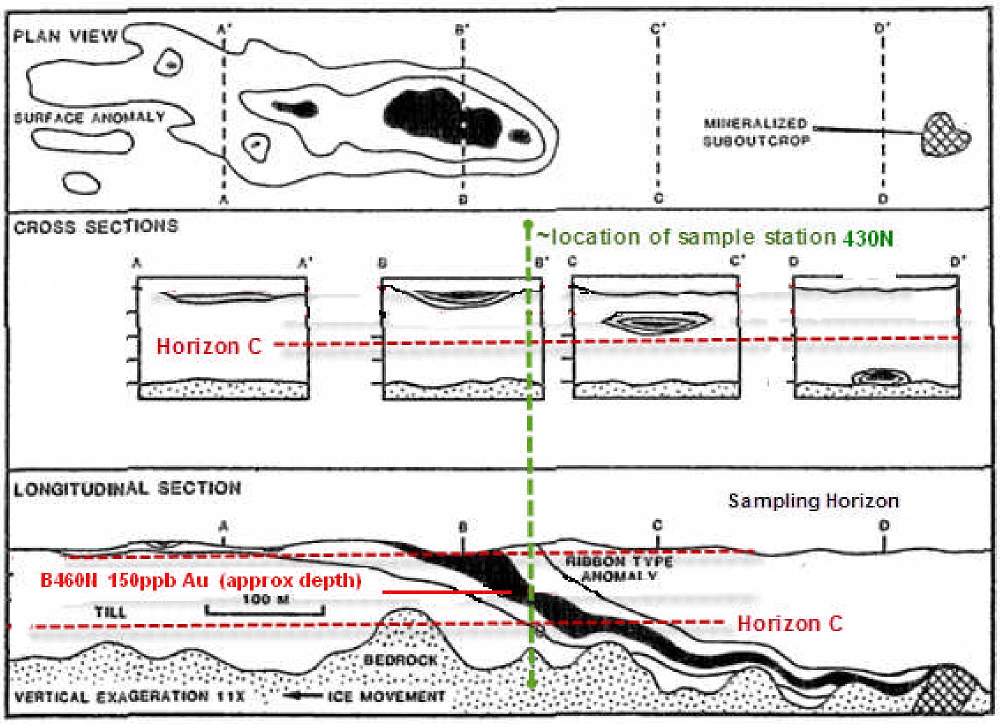


Reference: Bobrowsky P. T., Lithological Analysis in Drift Prospecting Studies in Glacial Drift Exploration, Paper 1995-02 BC Geological Survey; modified by the author.

Figure 7 is an idealized profile of a glacial soil cross-section showing distance from the bedrock source to the mineralized clasts as a function of rate of climb and down ice dispersion or extinction. The descriptive parameters K = distance from proximal or bedrock contact of indicator source to maximum concentration of clasts, B = distance of indicator source and the farthest transported clast, A = total length of the indicator train from the apical clast to the last dispersal clast down ice, C = distance from proximal contact of indicator source and the first or apical clast at surface, α = angle of plume climb of clasts from source to surface. Horizon C is assumed to be within the basal or lodgement glacial till base and in this study is the sampling depth from a marker layer, the ubiquitous cover of the Rhyolite Ash Layer in the solum profile (Photo 2 page 9 of this report).

The angle of plume climb (α) is the controlling factor for estimating the transport distance of mineralized clasts at surface from the bedrock source. Various workers, as cited by Bobrowsky, have calculated the plume (α) from the bedrock source to the ground surface varying from 0°30′ to 3°50′ but averaging 1°50′. Rate of climb angle has several determining factors such as; deflection parameters of the bedrock based on abrasiveness, structural or fracturing competency, and rock lithology can increase the angle of climb rate (α) to as high as 10°. Figure 8 illustrates the affect of undulating bedrock on the glacial dispersal train and plume angle α.

Figure 8 Idealized Model of a glacial dispersal train



Reference: R.N.W. DiLabio, Geological Survey of Canada

Figure 8 illustrates the increase of the angle of climb (α) of the indicator plume due to bedrock irregularity at ≈10°. The figure has been modified by the author to reflect the sampling horizon location within the glacial profile and the approximate position of sample station 460N within the model based upon the current data (further discussion in the conclusions of this report). At 430N, a 10kg bulk sample was taken at the basal till horizon.

By sampling and studying the clast lithology of the basal till as well as assaying the various size fractions at each location could provide meaningful data that would indicate the location of the bedrock gold source based upon the above example in Figure 8.

For example: an anomalous assay in one horizon but not in the other horizons within the same cross section profile at one station and by combining all the assay values from the cross section sampling at different lengths along the dispersal train should provide a picture of the angle of climb to the plume. For example; if say the 260N station may give anomalous results in Horizon C but not in either “A” or “B” from the same station whereas another station say at 320N further down-ice from the previous station may give an anomalous reading in Horizon B but not in “A” or “C” and then further down-ice from the last station say 420N may give an anomalous reading in Horizon A but not in "B" or "C". By knowing the depth of each anomalous sample from the marker horizon and knowing the distance between each anomalous sample at the various stations would provide sufficient data to calculate the angle of climb to the indicator plume and hence be able to determine the distance to the bedrock source that is causing the soil anomaly. The above exploration methodology was applied by the author in the current work program as a preliminary "test" for determining its effectiveness in providing meaningful results.

In this case from the previous exploration program in 2009 station B460N was anomalous in gold, arsenic, and copper; station B location is marked on Figure 8. By trending up ice direction from B460N and sampling the basal horizon (horizon C) at various stations or locations may give similar anomalous results as in B460N; hence an angle of climb could then be calculated and the bedrock source location estimated.

Geochemical Sampling and Analysis Description

The current portion of the "work in progress" program was the initial phase of an on-going sampling survey of the property. Results from this survey will form the exploration parameters of future programs. A total of three bulk-till samples and three rock samples were collected by the author in the presence of an assistant for the purpose of assaying and for a lithological-textural study of the containing rock clasts. Figure 9 is a generalized map of the area where the current work program was carried out.

The previous 2008 soil sampling program (AR31087) resulted in a 280m long glacial dispersion train of anomalous gold-in-soil values starting from sample station 400W+320N to 400W+600N. Three of the sampling stations were selected for further testing and based upon the following: - Station 400W+430N had the best angle of glacial clast dispersion from a bedrock source at ≈ -2.0° down dip from B460N (the highest gold value signifying the "head" of the gold dispersion train); Station 400W+405N is an arbitrary site being 25m further south than 430N and Station 400W+380N was selected as an equal up-ice distance from 405N to 430N (Figure 10). Photo 3 shows a typical sampling pit.

At each of the above stations, 1 bulk till sample was collected from a depth within the glacial till profile representing the basal till in the west bank of the road cut. Horizon C sample was taken just immediately below the road surface at a minimum depth of 1.5m (Figure 11) from thereof. At each sampling site the soil texture, color, and fabric of the till was noted. At every station >5 kilograms of till was collected then placed into 6 mil plastic bags and marked with an identifying number as to its location. Every sample was carefully handled to represent an accurate content of the sample site without contamination from external sources.

A total of three bulk-till samples were air dried and submitted by the author to SGS Canada of Vancouver BC for sieve screening, ICP-AE spectrometry analysis, and Fire Assay. SGS Canada used their standard procedures for preparation and analyses of the received samples by the following steps: - weighed and screened each sample into 5 mesh sizes: +1.0 inch; + ½ inch; -5+ 40 mesh; -40+100 mesh; and -100 mesh of which each size fraction was weighed and recorded (Table 3). A total of six sample fractions were assayed and another nine sample fractions were examined for fragment lithology and texture for the purpose of detecting mineralized clasts and to note the lithological environment of the origin of the clasts by classifying the angularity of each fragment. The -5+40 and the -40+100 mesh fractions were routinely prepared by SGS for analysis of 53 elements with the ICP-AES machine and gold by Atomic Absorption Fire Assay geochem. Preparation consisted of taking a 0.5gram sample of sieved material from each mesh fractions for digestion with 5ml of 3:1 HCL/HNO3 at 95°C for 2 hours then diluted to 25ml and placed into the ICP-AES machine for analysis of 53 elements; for gold analysis SGS used their standard preparation procedure for Atomic Absorption by fire assay of a 30gram sample of sieved material from each of the size fractions; the assays are displayed as: - Table 4 for gold and Multi-element of soils and Table 5 for rock. Scanned copies of the Geochemical Analysis Certificates are presented in the appendix 2. No duplicates were taken in the field for quality control purposes in the assaying portion of this study except for SGS internal quality control.

The +1.0 inch, +½ inch and the -5+40mesh fractions of each sample were examined for lithological and textural characteristics. No sample preparation was carried out by the field personnel other than air drying.

From Station Pit 430N, three rock samples were collected from the bedrock: Rk 430A was from the bedrock just below the soil sample 430N; Rk 430A was obtained from a very rusty deep brownish goethitic area of the outcrop containing quartz-pyrite in a siliceous well fractured zone trending 162°/25°W; Rk 430B was from a rusty, yellow 20cm wide, fracture/minor fault zone containing limonite, quartz and pyrite trending 040°/62°E; Rk 430C is a chip sample across the outcrop (Photo 4).

Figure 9 Location Map

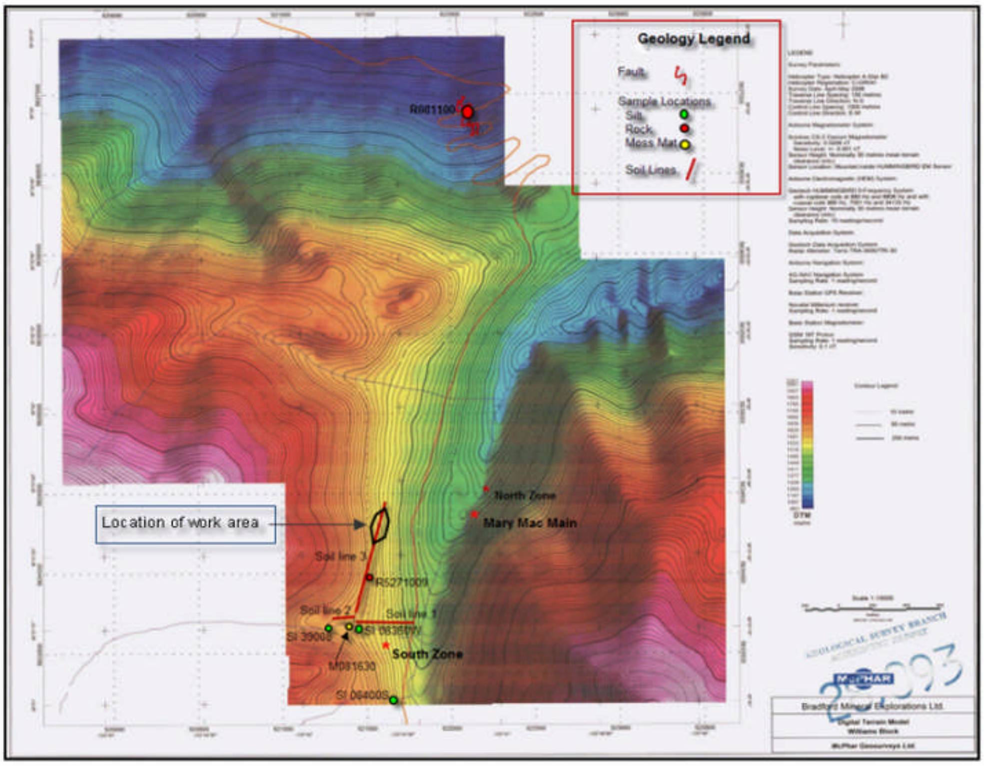


Figure 9 is a contour map copied from the previous assessment report AR 31087 on the Mary Mac Property and modified by the author. The black shaped polygon on line 3 outlines the location of the current soil sampling work program. The current magnetometer work was performed on the total length of Soil line 3 as on the map from station 400W-060N to 400W-700N. The red stars are the approximate locations of the mineral occurrences.

Photo 3 The sampling pit at station 405N in the west bank base of the road cut (View is towards the southwest)

Photo 4 Sampling pit 430N in west bank of road cut showing bedrock and sample locations Rk 430A, 430B, 430C

. (View is to the south)

Figure 10 Locations of the Sampling Stations

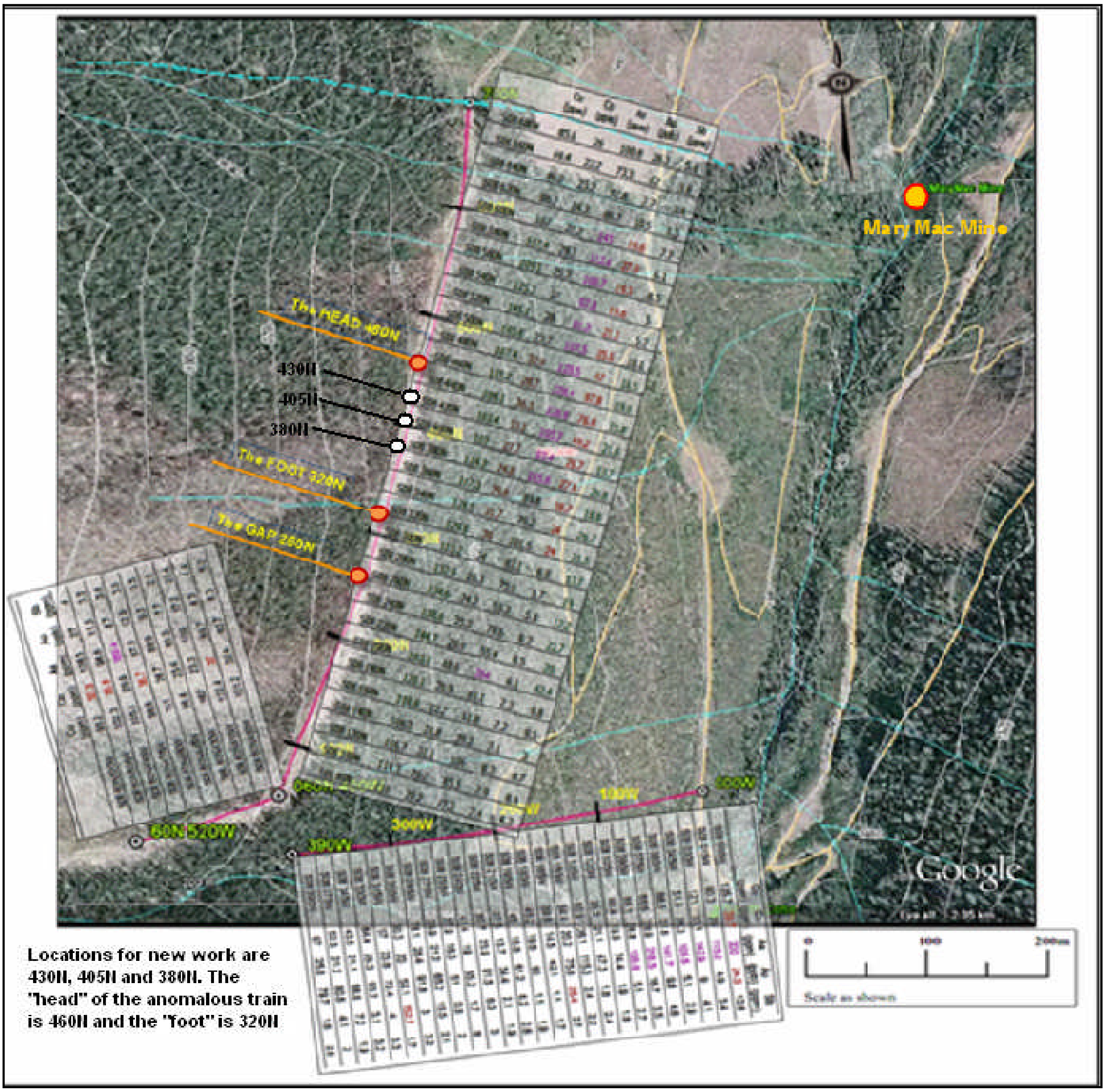
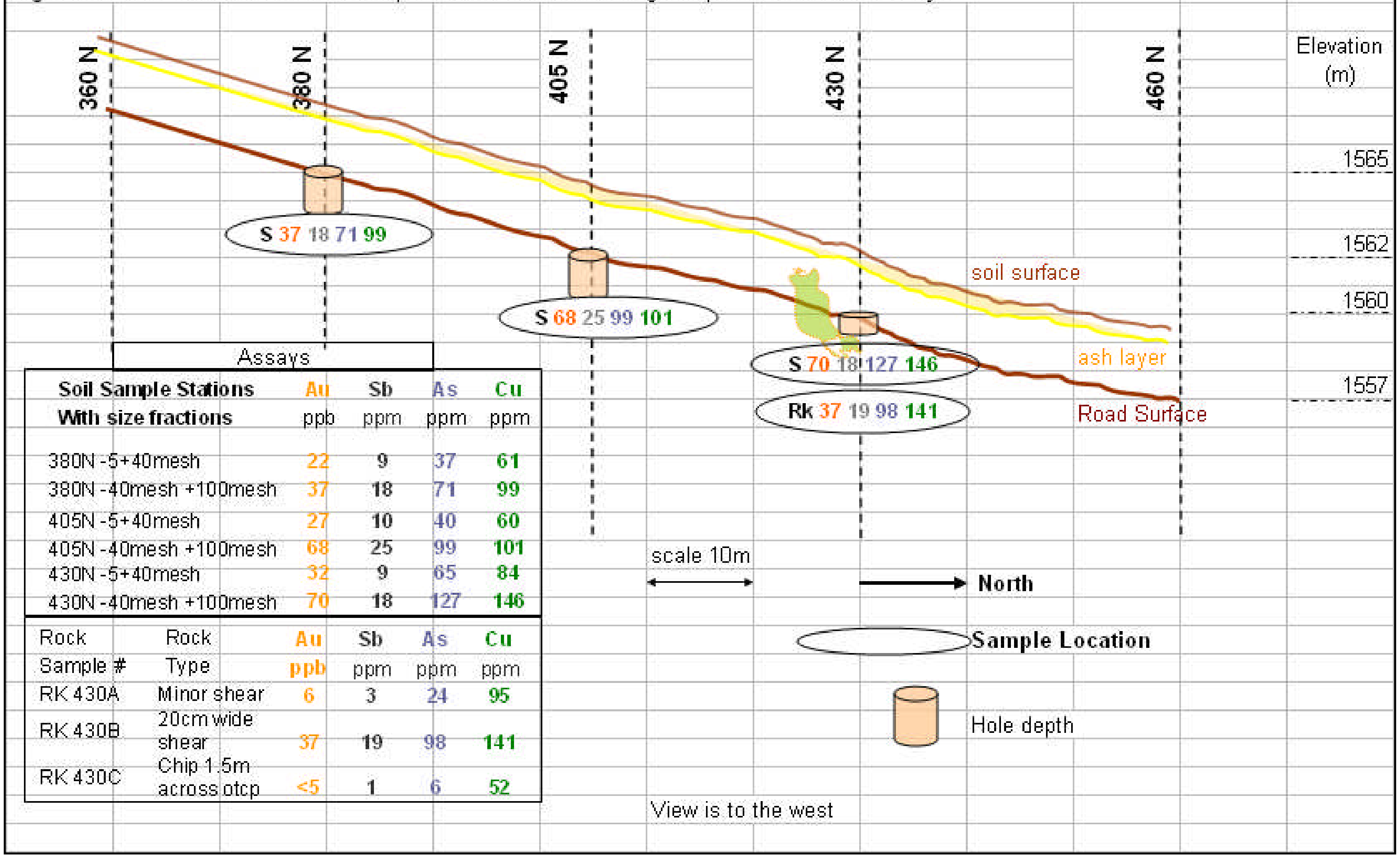


Figure 10 is a copy from the previous assessment report (AR31087) showing Cu-Co-As-Au-Sb soil assays at the various sampling stations on a topographic map of the area (Google earth). The anomalous gold-in-soil train starts at 400W-320N and diminishes at 400W-540N. Modified to show new work sampling stations.

Figure 11 Illustration of the Glacial till profile in Road Cut showing sample locations with assays



Assays

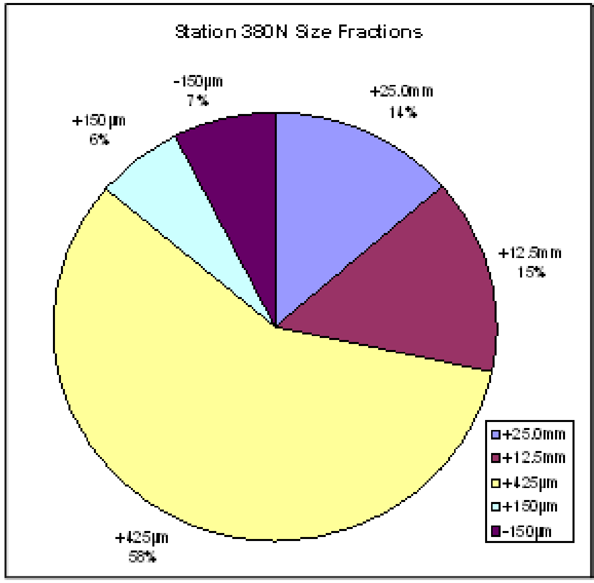
Soil Sample Stations With size fractions	Au ppb	Sb ppm	As ppm	Cu ppm
380N -5+40mesh	22	9	37	61
380N -40mesh +100mesh	37	18	71	99
405N -5+40mesh	27	10	40	60
405N -40mesh +100mesh	68	25	99	101
430N -5+40mesh	32	9	65	84
430N -40mesh +100mesh	70	18	127	146

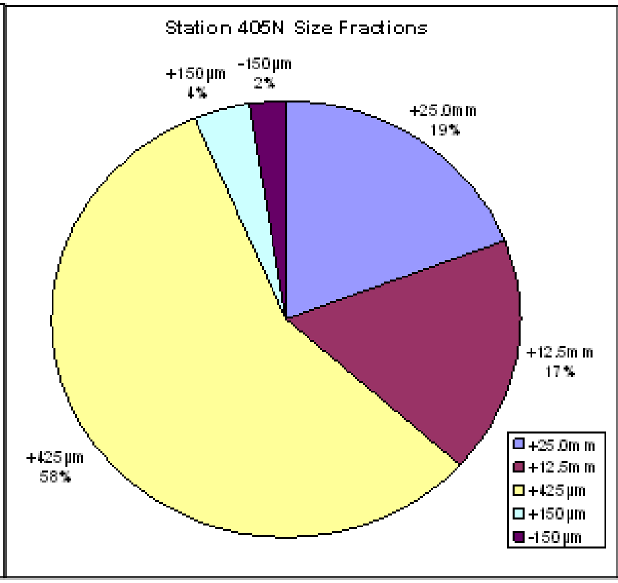
Rock Sample #	Rock Type	Au ppb	Sb ppm	As ppm	Cu ppm
RK 430A	Minor shear	6	3	24	95
RK 430B	20cm wide shear	37	19	98	141
RK 430C	Chip 1.5m across otcp	<5	1	6	52

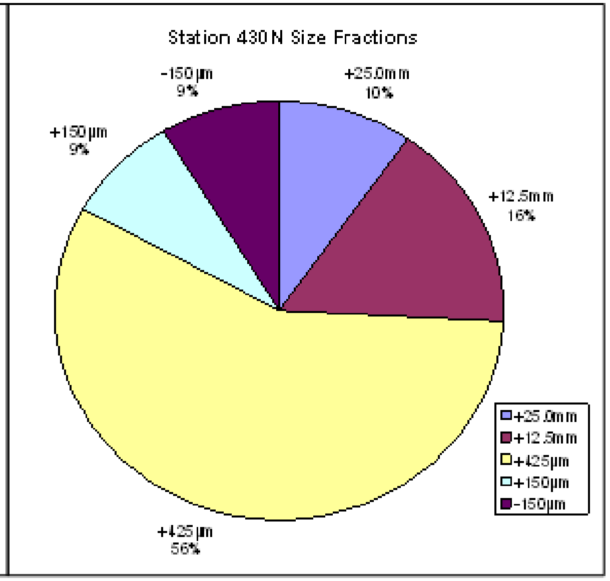
Figure 11 is a profile illustration of the sample locations. Scale horizontally as shown and scale vertically is exaggerated as shown on the right. Light green area depicts outcrop buried just a few centimeters under the surface cover in road cut and in the road pit.

Table 3 **Soil Sample Number with size fractions and weights with Pie Chart Distribution**

ANALYTE	WtKg	Wt	+25.0mm	+12.5mm	+425µm	+150µm	-150µm	WtKg	WtKg loss
METHOD	WGH79	SCR32	SCR32	SCR32	SCR32	SCR32	SCR32		
UNITS	total kg	kg	kg	kg	kg	kg	kg	kg	kg
380N	10.36	10.36	1.33	1.42	5.64	0.63	0.73	9.75	0.61
405N	10.875	10.88	2.00	1.79	5.90	0.42	0.25	10.36	0.51
430N	5.605	5.61	0.51	0.85	3.01	0.45	0.45	5.27	0.33







The highlighted red total weight fraction is sum of the individual weight fractions of the soil sample, the weight difference is assumed as a standard laboratory processing procedure for geochemical analysis and laboratory drying of the sample. Conversion of µm to mesh as follows: ±150 = 100mesh; +425 = 40mesh; +12.5mm = ½ inch mesh; +25mm = 1.0 inch mesh..

Table 4 Multi-Element Soil Assays (by SGS Canada Inc)

ANALYTE	Au	Al	B	Ba	Ca	Cr	Cu	Fe	K	Li	Mg	Mn	Na	Ni	P	S	Sr	Ti	V
METHOD	FAA 313	← ICM 14B →																	
DETECTION	5	0.01	10	5	0	1	0.5	0	0.01	1	0.01	2	0.01	0.5	50	0.01	0.5	0.01	1
UNITS	ppb	%	ppm	ppm	%	ppm	ppm	%	%	ppm	%	ppm	%	ppm	ppm	%	ppm	%	ppm
Sample Number with Mesh size																			
380N -5+40mesh	22	1.29	70	251	0.5	46	61.1	3	0.3	11	0.82	1100	0.04	46.5	480	0.02	22.9	0.12	56
380N -40mesh +100mesh	37	1.84	70	274	0.7	72	98.7	4.4	0.37	15	1.28	1490	0.04	72.8	800	0.01	30.4	0.17	85
405N -5+40mesh	27	1.33	70	220	0.4	44	60.5	3.2	0.36	11	0.9	859	0.04	43.9	500	0.02	21.7	0.11	59
405N -40mesh +100mesh	68	2.19	80	259	0.7	78	101	5.1	0.46	19	1.56	1480	0.04	92.2	830	0.01	30.8	0.17	98
430N -5+40mesh	32	0.9	70	241	0.3	32	83.7	3	0.26	7	0.56	2160	0.03	36.2	330	0.07	18.8	0.07	43
430N -40mesh +100mesh	70	1.44	60	328	0.5	56	146	4.7	0.35	11	0.91	4280	0.04	69	610	0.01	32	0.12	71
Statistical median	34.5	1.39	70	255	0.5	51	91.2	3.8	0.36	11	0.91	1485	0.04	57.8	555	0.02	26.7	0.12	65
Standard Deviation	21.01111	0.45	6.3	37	0.2	17.6	31.8	0.9	0.07	4.1	0.36	1249	0.004	21.4	194.9	0.02	5.63	0.04	20.2

	Zn	Zr	Ag	As	Be	Bi	Cd	Ce	Co	Cs	Ga	Hf	Hg	In	La	Lu	Mo	Nb	Pb
DETECTION	1	0.5	0	1	0.1	0.02	0.01	0.1	0.1	0.1	0.1	0.05	0.01	0.02	0.1	0.01	0.05	0.05	0.2
UNITS	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
380N -5+40mesh	65	7.8	0.3	37	0.5	0.22	0.36	20	12.5	1.8	5.1	0.18	0.07	0.04	10.1	0.07	2.65	0.82	3.9
380N -40mesh +100mesh	113	6.9	0.4	71	0.7	0.31	0.45	32	21.2	3.1	7	0.12	0.14	0.06	15.9	0.11	3.81	1.01	5.5
405N -5+40mesh	71	6.4	0.3	40	0.4	0.22	0.33	22	12.6	2.2	5.2	0.14	0.06	0.04	11.4	0.07	3.05	0.68	3.6
405N -40mesh +100mesh	134	6.1	0.5	99	0.8	0.37	0.63	35	24.3	5.3	7.9	0.09	0.14	0.06	18.6	0.14	4.06	1.21	5.9
430N -5+40mesh	189	5.9	0.2	65	0.4	0.42	1.77	17	11.4	1.3	3.7	0.15	0.07	0.08	8.7	0.05	2.61	0.63	2.4
430N -40mesh +100mesh	381	8.2	0.3	127	0.7	0.68	3.66	31	20.4	2.3	5.5	0.16	0.16	0.16	15.6	0.1	3.81	0.93	4.3
Statistical median	123.5	6.65	0.3	68	0.6	0.34	0.54	27	16.5	2.3	5.35	0.145	0.105	0.06	13.5	0.09	3.43	0.88	4.1
Standard Deviation	117.9024	0.94	0.1	34.8	0.2	0.172	1.32	7.1	5.54	1.4	1.49	0.032	0.045	0.05	3.876	0.03	0.64	0.22	1.28

	Rb	Sb	Sc	Sn	Tb	Te	Th	Tl	U	W	Y	Yb
DETECTION	0.2	0.05	0.1	0.3	0.02	0.1	0.1	0.02	0.05	0.1	0.05	0.1
UNITS	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
380N -5+40mesh	14	9.43	6.5	0.4	0.31	0.1	1.3	0.18	0.24	0.2	6.99	0.5
380N -40mesh +100mesh	17	18.3	10.4	2.2	0.5	0.2	1.8	0.26	0.44	0.3	11.7	0.8
405N -5+40mesh	16	9.87	6.7	0.3	0.34	0.1	1.4	0.18	0.27	0.2	7.46	0.5
405N -40mesh +100mesh	23	24.6	12.5	0.5	0.63	0.2	1.9	0.27	0.56	0.3	15.6	1.1
430N -5+40mesh	12	9	4.7	0.3	0.25	0.2	1.2	0.14	0.24	0.2	5.2	0.4
430N -40mesh +100mesh	17	18.2	7.9	0.5	0.44	0.3	2	0.22	0.44	0.3	9.58	0.7
Statistical median	16	14.04	7.3	0.5	0.39	0.2	1.6	0.2	0.355	0.25	8.52	0.6
Standard Deviation	3.7	6.428	2.86	0.7	0.14	0.1	0.34	0.051	0.134	0.05	3.768	0.26

Re-arranged from the original assay certificate by the author for continuity, statistics in colour added by author, elements showing less than detection limit were not displayed

Table 5 Multi-Element Rock Assays (by SGS Canada)

ANALYTE	WtKg	Au	Al	B	Ba	Ca	Cr	Cu	Fe	K	Li	Mg	Mn	Na	Ni	P	S
METHOD	WGH79	FAA313	ICM14B														
DETECTION	0.001	5	0.01	10	5	0.01	1	0.5	0.01	0.01	1	0.01	2	0.01	0.5	50	0.01
UNITS	kg	ppb	%	ppm	ppm	%	ppm	ppm	%	%	ppm	%	ppm	%	ppm	ppm	%
RK 430A	2.43	6	0.37	50	274	0.13	151	94.7	2.6	0.14	3	0.23	5580	0.02	28.6	100	0.47
RK 430B	3.715	37	1.1	50	266	0.37	95	141	7.55	0.45	9	0.66	2080	0.04	31.1	820	0.16
RK 430C	3.175	<5	0.63	50	125	0.12	207	52.3	2.39	0.14	6	0.42	2390	0.03	13.9	270	0.29

	Sample WtKg	Sr	Ti	V	Zn	Zr	Ag	As	Be	Bi	Cd	Ce	Co	Cs	Ga	Ge	Hf
DETECTION		0.5	0.01	1	1	0.5	0.01	1	0.1	0.02	0.01	0.05	0.1	0.05	0.1	0.1	0.05
UNITS	kg	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
METHOD		ICM14B															
RK 430A	2.43	20.4	<0.01	28	260	2.2	0.15	24	0.2	0.55	3.17	8.17	15.1	0.73	2.1	<0.1	<0.05
RK 430B	3.715	29.4	0.14	63	198	7.9	0.24	98	0.4	2.11	0.74	22	13.8	1.96	5.2	<0.1	0.19
RK 430C	3.175	10.9	0.01	21	76	1.8	0.09	6	0.2	0.78	0.58	14.4	5.8	0.77	3.2	<0.1	<0.05

	WtKg	Hg	In	La	Lu	Mo	Nb	Pb	Rb	Sb	Sc	Se	Sn	Ta	Tb	Te	Th
DETECTION		0.01	0.02	0.1	0.01	0.05	0.05	0.2	0.2	0.05	0.1	1	0.3	0.05	0.02	0.05	0.1
UNITS	kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
METHOD		ICM14B															
RK 430A	2.43	0.08	0.13	3.9	0.03	3.31	0.14	2.3	6.2	3.41	2.4	<1	<0.3	<0.05	0.13	0.18	0.7
RK 430B	3.715	0.16	0.33	10.3	0.05	4.67	1	3.4	15.4	19.3	6.1	2	0.7	<0.05	0.26	0.99	1.3
RK 430C	3.175	0.03	0.05	5.7	0.03	2.73	0.1	1.6	6	1.34	3.4	<1	<0.3	<0.05	0.2	0.4	0.6

	WtKg	Tl	U	W	Y	Yb
DETECTION		0.02	0.05	0.1	0.05	0.1
UNITS	kg	ppm	ppm	ppm	ppm	ppm
METHOD		ICM14B				
RK 430A	2.43	0.13	0.26	0.1	3.11	0.3
RK 430B	3.715	0.25	0.39	0.3	5.48	0.4
RK 430C	3.175	0.1	0.13	<0.1	3.36	0.3

Re-arranged from the original assay certificate by the author for continuity purposes, sample weight displayed under WtKg. Statistical analysis was not calculated due to the limited number of samples.

Lithological Analysis and Description

The purpose of the lithological study was to analyze the rock fragments from the various size fractions to identify: - the dominant rock type, detect the presence of any sulphide mineralization, note structural or fractioning characteristics, and alteration. In addition, physical characteristics (texture) of the rock fragments were also examined as to percentage of size components or fractions of the total sample (Pie Chart Table 3), weathering and roundness degree; these features have been used as exploration tools by other researchers to deduce glacial transport distances from the bedrock source. As well, weathering processes can leach and remobilize the sulphide particulate from the upper supra-englacial diamicton and concentrate them at the lower basal till base thereby creating false anomalies or heighten assay results. The roundness factor of rock particles is a dynamic physical process of glacial action on the bedrock and contained rock clasts; it is assumed that the rounder the clast fragment the longer it has been subjected to internal glacial abrasion and hence the longer it has travelled from the bedrock source. However, rock lithology, brittleness, and structural fracturing has an influence on the roundness factor; a brittle, fractured clast subjected to the slightest abrasive pressure may shatter into several jagged pieces rather than remain intact with rounded edges.

The lithological and textural analysis of the rock clasts from the +1", the + ½" and the +40 mesh size fractions of each bulk soil sample were studied and recorded in Table 6. By comparing the texture and lithology of the rock clasts and the number of indicator clasts from the coarser fraction sizes with the assay results from the finer size fractions of each sample may explain the cause of the geochemical soil anomaly and infer the transport distance from the parent bedrock source.

The author examined all of the +1" (count 70) and + ½" (count 160) size fractions; nevertheless with the majority of the sample weight falling within the +40 mesh size only a random selection of +1000 rock clasts were examined from this portion otherwise viewing all the clasts would involve a long and tedious study spanning months of work. The roundness factor of the clasts was visual estimated and not mathematical calculated by measuring across the opposing diameters in order to save time. From the size fraction, the author would separate the individual clasts and visually group them according to a roundness class (Powers 1953) with each class then visually estimated as a percentage of totals; the same methodology was used for grouping of the lithological classes of the rock fragments. A total of 5000+ clasts were pain-stakingly viewed with a binocular microscope, particular attention to mineralized clasts with the presence of sulphides and the weathering aspects; the task was tedious and very taxing consuming many hours of observation.

Table 6 Clast Lithology and Textural Descriptions of Sample Fractions

Sample Station	Mesh Size Fraction	Very Angular	Angular	Sub-Angular	Sub-rounded	Rounded	Well rounded	Comments	clast indicators
		(in percentage of size fraction)							
C380N	+1.0"		30%	50%	10%	10%			
								The angular group of fragments are reddish to slight greenish chert clasts, well fractured and healed with many hairline greyish quartz veinlets possible filled with a greyish to black manganite?, the majority of these clasts are slightly pyritic, cryptocrystalline almost jasperoid like in appearance. Fresh rock reflects the weather variety without the rusty appearance of pyrite. The odd speck of hematite was noticed in one clast, another clast shows an open echelon shaped cavity about 4mm wide and 2.0cm long encrusted with a thin rim of quartz which one end of the cavity is completely filled with white crystalline quartz. A few of the clasts are typical dark grey argillite-chert mixture well fractured and slightly pyritic typical Bridge River complex or unit 1 as displayed in the regional geology map by Dr. Neil Church earlier in this report.	
								The sub-angular group have at least one edge slightly rounded, the shape of the majority of fragments are equa-dimensional and appear to be the typical chert-argillite of the Unit 1, cryptocrystalline with many well healed random orientated fractures, one dark grey argillitic clast shows an open void or cavities due to weathering of pyrite associated with white quartz. Some clasts show a triangular shape similar to clasts that are associated with the basal till environment but without the keels that are normally correlated to the pilot stones thereof.	
								The sub-rounded group are classified as at least two surfaces that are slightly rounded to rounded, there are only two clasts in this category both show the typical Bridge River Unit 1 characteristics of slightly pyritic with muddled entwined fragments of med green cryptocrystalline chert with dark grey argillite.	

Abbreviation Guide for Table 6

Colour				Minerals/lithology			
dark	drk	brown	Brwn/brn	quartz	qtz	phenocrysts	phenos
light	lt	grey	gry	calcite	cal	breccia	brx
black	blk	yellow	ylw	Arsenopyrite	Aspy/AsPy	very fine grain	vfg
green	grn			argillite	arg	fine grain	fg
approximate	~			crystalline	xtal	medium	med

<u>Total Clasts per Size Fraction Viewed</u>

Station	Size fractions (#clasts) 1.0 inch	½ inch	+40mesh
380N	23	55	>2000
405N	35	69	>2000
430N	12	36	≈1000+

Sample Station	Mesh Size Fraction	Very Angular	Angular	Sub-Angular	Sub-rounded	Rounded	Well rounded	Comments	clast indicators
		(in percentage of size fraction)							
								The rounded group are classified as at least three surfaces having a slightly to moderately rounded aspect to the face edges. There are only two clasts in this group, one appears to be a fine grain sandstone version of a mottled mixture of med- green chert with dark-grey argillite giving an overall color of a slight greenish grey to the rock, it is not well fractured nor healed with any qtz veinlets. The other clast is well fractured and healed with greyish quartz, it is rusty along some fractures but the matrix appears with very little rust or pyrite; the rock is varied coloured with large areas of light greenish material with small white lathes of plagioclase phenocrysts similar to the porphyry dykes that occur in the area, there appears to be a clast fragment contained within the rock that is of argillitic origin.	
	+0.5"		15	60	18	7			
								The angular group of clasts are slightly rusty, reddish to moderate green to dark grey in color. The group appears to be equally split in quantity between equa-dimensional to oblong to triangular in shape. The majority appear to be a cryptocrystalline quartz either massive with many rusty fractures or as a cluster of greenish chert fragments welded together, the fractures show rusty stains as well some of the matrix is stained giving a rusty reddish color as a background to the otherwise greenish matrix. Some clasts consists of dark grey massive argillite with some showing red garnetization (rare).	
								A few ribbon chert clasts are noticeable by the reddish and dark grey alternating layers. The sub- angular group lithology is the same as the angular group above except one dark grey argillitic clast shows a riddling of white to cream colored quartz veinlets randomly oriented. The sub-rounded to rounded clasts are essentially the same lithological make up as the first two groups.	
								A collection of unusual clasts from the study group were selected due to the quartz content and alteration. The primary purpose is to study the dispersal erratics in the size fraction and to note the characteristics thereof. This group is now included in the study as the number of clasts are increasing in content with a corresponding decrease in the overall clast size of the fraction.	

Sample Station	Mesh Size Fraction	Very Angular	Angular	Sub-Angular	Sub-rounded	Rounded	Well rounded	Comments	clast indicators
		(in percentage of size fraction)							
								A total of six clasts show mineralization with arsenopyrite and stibnite, all clasts consist of a milky white quartz either in fragmental clusters within the clast and as veinlets in a soft green cryptocrystalline matrix. Another clast displays a hydrothermal origin as the milky quartz occurs in a framboidal habitat as well shows a greyish cryptocrystalline (chalcedonic) layering in ribbons, typical of an epithermal/ mesothermal environment, it is not well fractured. The clast contains pyrite, stibnite and arsenopyrite in blebs and masses infilling between the quartz framboidal shaped clusters. Another quartz clast is slightly bleached and shows several rusty weathered voids shaped in the form of chalcopyrite and arsenopyrite (ghost outlines) and contains numerous rusty microfractures. Both clasts are angular and irregular shaped, characteristic of a saturated hydrothermal quartz environment.	9
	-0.5"+40		60	35	<5	<5			
								The roundness factor of this group fraction is difficult to measure due to the minuteness of the clasts. The majority of the clasts are made up of a cream colored with a slight rusty hue chert; chert textures consist of sugary to chalcedonic to framboidal in equal amounts; the cream colored variety normally has minute veining of possible black calcite associated with hydrothermal veins, these are randomly orientated throughout and consistent between the similar clasts studied. The chalcedonic chert varies in color from clast to clast; light grey to light green and sometimes light red, the odd speck of rusty filled voids of pyrite are clearly visible, weathered triangle voids are noticeable and may indicated arsenopyrite as well rare "house shaped" voids occur (stibnite?). The next lithological group consists of metamorphosed equivalent of the black/grey argillites and ribbon cherts of the Unit 1, 1a of Bridge River formation. A few well rounded sandstone clasts are noted composed usually of well rounded med black to dark grey sand grains. A few granitic clasts also occur in the study collection.	

Sample Station	Mesh Size Fraction	Very Angular	Angular	Sub-Angular	Sub-rounded	Rounded	Well rounded	Comments	clast indicators
		(in percentage of size fraction)							
								Selected out from the main study group was a collection of clasts containing massive white creamy quartz and bleached particles. This group was selected with promising hydrothermal alteration characteristics that may contain mineralization. This group percentage of the study size fraction is about 14%. Most clasts were very angular and platy. One only one grain showed fresh arsenopyrite as specks and masses within a milky white sugary quartz matrix, all other grains contained black to white veinlets of calcite and minor pyrite in a creamy colored chalcedonic quartz matrix, one rare fragment had clear quartz veinlets. A few grains were highly bleached with a frothy appearance to the matrix, these grains also had the odd pyrite speck.	
C405N	+1.0"		25	60	9	6			
								The angular group consists mostly cream colored chert, very brecciated with rehealed anastomosing rusty stained fractures containing pyrite, there are no rotation of the breccia blocks within the clasts. One clast appears with extensional open voids that appear to be fracture controlled, the clast is dark grey contains broken phenos and appears to be of basaltic origin.	
								The sub-angular group is consists of light reddish to light orange colored, highly shattered with healed fractures containing a black mineral possibly calcite or pyrolusite. Some show a slight bleaching to the otherwise fg chalcedonic matrix. Other clasts show cataclasis rotation of the fractured controlled blocks. Other clasts included med grey sugary to sandy grained chert with numerous black calcite/quartz filled veinlets. One bleached altered clast is riddled with black veinlets, discontinuous and broken. There is only one well mineralized, 5.0cm x 2.0cm clast showing >2.0% est arsenopyrite, > 5% pyrite and rare stibnite. It is well brecciated, has a dark green grey sandy angular granules within, the sulphides form mats, occur in specks, blebs and grains; clear triangular shaped quartz occurs seldomly. The clast appears similar to the south zone green-grey brecciated andesites as described in previous reports.	1
								The sub-rounded group has only two clasts, both are platy. One appears to be a collection of shattered milky white quartz grains within a matrix of argillite. The other clast is very platy and is definitely of sandstone origin it is brown colored with no quartz	

Sample Station	Mesh Size Fraction	Very Angular	Angular	Sub-Angular	Sub-rounded	Rounded	Well rounded	Comments	clast indicators
		(in percentage of size fraction)							
								The rounded group has only two dark grey clasts of sedimentary origin, one is argillic the other shows a light grey siltstone layer sandwiched between two argillic layers.	
	+0.5"		30	22	40	8			
								A control random collection from the fraction size was used in this category, a total of 122 clasts were examined and from this study selection a further 36 clasts were singled out as having the characteristics of hosting mineralization for further inspection.	
								The majority of the clasts are equally split in quantity between the two lithological groups: undifferentiated Unit 1 argillic black to red cherts is slightly more dominate in quantity over Unit 1a ribbon red cherts and highly brecciated and welded ribbon red cherts and chert breccia	
								The angular group selection from the study group are typically welded brecciated ribbon and red cherts; quartz veinlets are highly broken in short discontinuous sections scattered throughout the clast, some clasts show a slight bleaching with a rusty stain to the weathered surface. Fresh pyrite in specks are visible on the weathered surfaces of some argillic chert clasts together with their weathered counterparts as well the odd arsenopyrite bleb is intacted. Some of the veinlets in a few clasts have open voids, one clast has a section of "honeycombing" of such voids in small area.	
								The sub angular group selection is less vuggy than the first group with voids being restricted to veinlets, this selection is typically brecciated welded chert usually clast color varies from light reddish to a mixture of greys with reds. Pyrite is fine grained whereas the first group was much coarser and with the occasional eroded cubes. The group as a whole appears to have more grey quartz within each clast compared to the first group.	
								the subrounded group selection tends to have more argillic content, is less fractured and more healed fractures with grey quartz, less pyritic with only a few specks of visible pyrite. It is less brecciated than the two previous clast groups. The shape tends to be more equadimensional whereas first two groups tend to have one axis slightly longer than the other dimensional axis's	

Sample Station	Mesh Size Fraction	Very Angular	Angular	Sub-Angular	Sub-rounded	Rounded	Well rounded	Comments	clast indicators
		(in percentage of size fraction)							
								The rounded group selection is the least fractured of the entire selection, only three clasts make up this selection, two appear to be a quartz/ mafic grained sandstones, the other is more siliceous with rare augite phenos, possibly of an intrusive origin. Although lacking pyrite, rusty staining is very sparse.	
								Overall this fraction size selected group is shows more arsenopyrite than all the previous reviewed fractions. It has more clasts that contain fresh pyrite and is more vuggy than all the previous fractions. It contains more brecciated welded quartz clasts together with more grey colored quartz than the previous.	14
	-0.5+40		60	35	<5	<5			
								Roundness factor is a visual estimate only but majority of clasts are angular to sub-angular; sub-rounded to rounded clasts are very rare and as a group consist of < 5% in total. This random sample weighed 69.15 grams and was sieved with a 10mesh screen from the size fraction, for each gram there are approximately 50 clasts. The amount of clasts that were of the size fraction of 0.5cm to 1.0cm or lapilli size was virtually missing in this size total size fraction Majority of the sieved clasts are about 3.0mm long and generally are triangular in shape.The lithology of the clasts without pain stakingly viewing every single clast is estimate to be at least evenly divided between black and red colored chert, black chert is more of an argillic origin whereas the reddish chalcedonic variety is assumed to be of ribbon chert or ribbon breccia chert origin. The number of gneissic clasts is more frequent in this size fraction than from the previous viewed size fractions. Very few clasts showed signs of rust encrustations on their surfaces or within the clast matrix.	
								The sample was further sectioned by pain stakingly separating all clasts that have grey to white quartz and alteration with the view for further study that this group has a strong association to metallic mineralization. This second divided group weighs about 3.5 grams or about 5% of the total clasts in the random sample. This set is generally has more rusty voids shaped in the form of pyrite than the above set, one weathered cavity is shaped in the form of chalcopyrite. Most clasts are either cryptocrystalline to chalcedonic quartz with odd clast having a sugary texture. The amount of bleached or altered clasts are rare. The amount of equi-dimensional clasts shapes has increased	

Sample Station	Mesh Size Fraction	Very Angular	Angular	Sub-Angular	Sub-rounded	Rounded	Well rounded	Comments	clast indicators
		(in percentage of size fraction)							
								in this sub group to at least 30% of clasts.	
C430N	+1.0"		35	55	<10				
								This size fraction consists mostly of brecciated grey chalcedonic chert with interstitial fresh sulphides of pyrite, arsenopyrite, and with weathered chalcopyrite outlines. Pyrite is partially weathered to light red rusty rims, arsenopyrite is in masses, specks and blebs but overall the weathering of these clasts is not extensive. Some equa-dimensional clasts are greyish cream to light brownish coloured crystalline to chalcedonic quartz breccia with pyrite cubes, vuggy with some extensional shaped cavities; the sulphides also appear more extensively weathered than the triangular shaped clasts. Micro fracturing is prevalent throughout all of the clasts with exception of the sub-rounded clasts where they appear most massive in content. Only the sub-rounded clasts show a change in texture and sulphide content, they are mostly argillic greyish black chert and vfg with minor pyrite. The size fraction consists of only 12 clasts and the number of indicator clasts are 10 making this size fraction the highest in	10
								indicator clasts as a percentage of the total.	
	+0.5"		20	22	30	28			
								The majority of the clasts in the angular to sub-angular group are of mixed lithologies, generally less in sulphide content than the above group and the sulphides are mostly weathered pyrite to bright rusty red color. Some clasts are massive black argillic chert with a few specks of rusty pyrite. The majority are brecciated grey chalcedonic chert and sugary quartz with fresh pyrite that is less weathered. Some clasts are massive, highly fractured greyish chalcedonic chert and a few are ribbon cherts some intact bedding and others brecciated but showing layering. A few of the sugary quartz have voids of epithermal process as the clasts are "frothy" in texture.	11
								The sub-rounded group is also a mixed lithology with several clasts showing a volcanic basalt origin as they are dark grey, vfg, with what appears to be a "ropey" texture to the matrix. Other clasts in this group include again the white, sugary quartz, pyritic textured types with some vugs. A few clasts are the typical brecciated to massive grey chalcedonic chert. The overall sulphide content of this group is significantly less than the above albeit one clast showing masses of arsenopyrite.	4

Sample Station	Mesh Size Fraction	Very Angular	Angular	Sub-Angular	Sub-rounded	Rounded	Well rounded	Comments	clast indicators
		(in percentage of size fraction)							
								The rounded group consists of vfg massive argillitic chert, some clasts are again the typical cream-colored brecciated chalcedonic, pyritic chert and grey chalcedonic breccia chert. Overall this group shows very little fresh pyrite that occurs in specks and weathered bright red cubes.	3
								This size fraction contains more indicator clasts than the above size fraction but as percentage basis of the number of clasts is far less than the 1" fraction estimating 15% of the total by visual inspection of the whole fraction content.	
	-0.5+40		60	35	<5	<5			
								The roundness factor is a visual estimate only, the lithology of the majority of the clasts range from grey chalcedonic chert, brecciated or massive. Red chert clasts may be broken ribbon cherts, black chert possibly argillite. The number of clasts showing fresh pyrite and rusty pyrite has increased in this size fraction over the above similar fraction group of all above samples. One clast viewed appears to be composed of massive specks of pyrite and a greyish vfg mineral possibly arsenopyrite. Weather outlines of Chalcopyrite specks were noticed in a few milky white quartz clasts as well rare intact chalcopyrite. Weathering of the clasts are less intense and appear fresh with only showing the effects of a rusty surface.	
								Again the random sample from the main batch of this size fraction was further divided into a group of clasts that consisted essentially of sugary frothy quartz, milky white quartz, and a mixture of quartz, quartz breccia. Greater than 90% of this group contain fresh pyrite in cubes generally contained within the matrix of the milky white quartz clasts. There are also several massive disseminated fg blackish pyrite associated with bright pyrite cubes strewn throughout the clast. Some of the sugary quartz fragments are vuggy and appear to be crustiform intergrowths. Some chalcopyrite was noticed in some clasts. Rusty weathering is seldom on some of the clasts. This population is approx 12.5% of the random sample.	

Rock Descriptions from 430N outcrop

General Description		
	The rock outcrop at station 430N contains predominantly a black argillic chert, breccia chert and weathers to a smooth rusty brown surface possibly due to glacial action, there are no sharp rock protrusions all are rounded. There is evidence that the outcrop was at one time subjected to flowing water as several 15cm circular pot holes or swirl holes are visible in the smooth surface. The outcrop is very siliceous, indurated and welded with a surface cement of a thin crusted, rusty ferricrete; in the hollow areas it is more than 3.0cm thick and generally has a thin brownish rust dusting over the rest of the outcrop.	
Rk430A		
	This sample was from the bedrock directly below the soil sample 430N. The rock is a mixture of sugary white and chalcedonic pyritic quartz with rare arsenopyrite, chalcopyrite and stibnite. It has a rusty weathering but fresh is whitish grey to light brown white. Pyrite occurs interstitially and in fractures as well as do the other sulphides. The fractures appear parallel to each other with a spacing 1.0-3.0mm apart. The sample also has open cavities and may have been a shear that is healed, attitudes measured on the fracture faces are 162°/25°W	
Rk430B		°
	this sample is from another shear zone, it consists of brecciated angular pieces of rock cemented with fine grains of bleached parent rock then compressed. It appears to a dry condition of fault gouge, very gritty and some of the rock fragments show that they are also bleached. Sulphides are very sparse, the weathered surface is a mixture of various degrees of rusty brown to honey brown and goethitic, fresh rock is rare but when obtained appears to be a whitish grey to light brown sugary quartz possibly a bleached equivalent to the chalcedonic cherts. The sample was taken from a 20cm wide shear zone with an attitude of 040°/62°E	
Rk430C		
	this is a rough chip sample across the whole outcrop about 1.50m in width. The major fracturing is 050°/50°S. Again the majority of outcrop is pyritic, muddled grey to whitish chalcedonic quartz with many healed anastomozing light grey quartz veinlettes and healed fractures. There are minor amounts of arsenopyrite, chalcopyrite and stibnite but some fracture surfaces show a wispy sheen of molybdenite. Photos are following this section with descriptions	

Geophysics Survey

The current magnetometer work was carried out on August 5th and rechecked on the morning of August 6th 2011 with an assistant, and consisted of 195 magnetometer readings on a traverse line which followed the road cut on the previous soil sampling line as shown in Figure 10 Page 26 of this report. Readings were taken at 10metre intervals starting at soil sample station 400W/700N and continued to the end of the line at 400W/60N. At each 10metre interval 3 readings were recorded in gammas. The magnetometer instrument used was a Geometrics Model G 816 Portable Proton magnetic measuring machine rented from SJ Geophysics of Delta BC. The magnetometer readings were recorded at each station representing the most consistent values of two readings, a further check was done the following day. A total of 1920 metres was traversed with readings taken at 65 stations with a control loop (diurnal time correction reading) at the end of the survey at station 700e. Each station was traversed three times in order to obtain consistent values. Data from the survey is tabulated in Table 7 (diurnal loop highlighted in red) and the average gamma readings from each station were profiled on Figure 12. The magnetometer results were compared to the geomagnetic field data obtained from Natural Resources Canada at Victoria BC (Figure 13) which showed an inconsistent field flux to the Earth's magnetic field or magnetic storm at the time of this magnetometer survey, hence readings are relatively erratic from station to station.

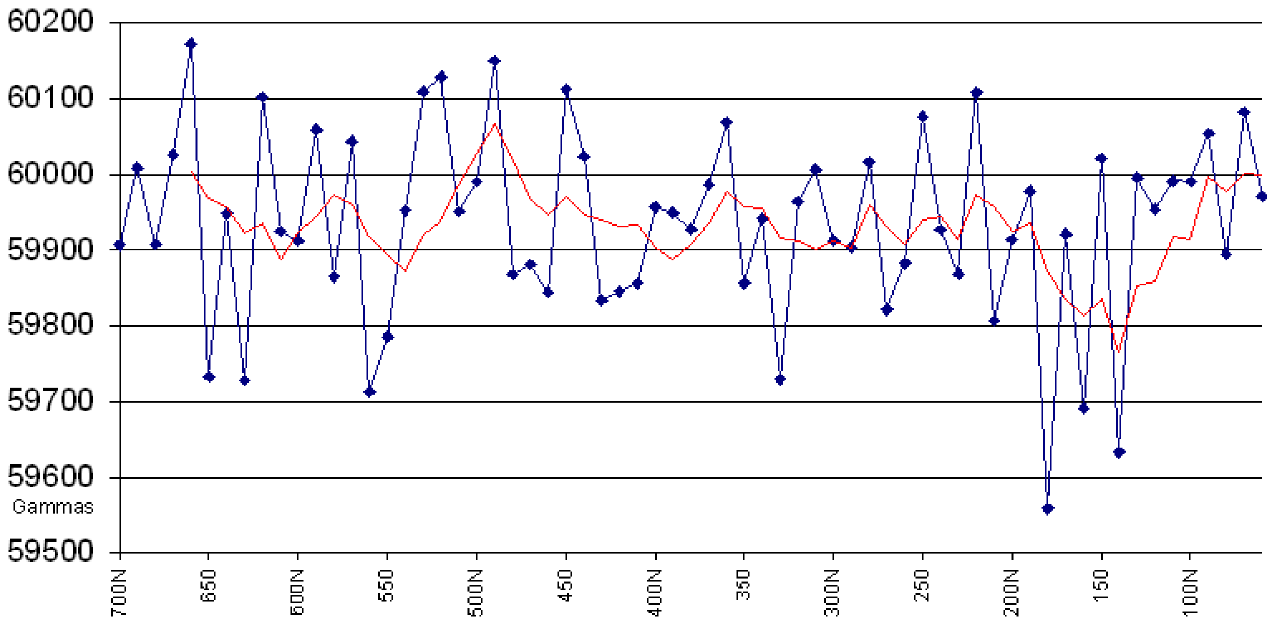
Table 7 Magnetometer Readings

Station	Readings (in gammas) 1st	2nd	3rd	average
700N	59640	59845	60235	59907
690	59746	60486	59795	60009
680	59819	60110	59794	59908
670	60106	60016	59957	60026
660	60300	60429	59788	60172
650	59789	60068	59340	59732
640	59840	60049	59956	59948
630	59643	59855	59686	59728
620	59691	60010	60605	60102
610	59986	60132	59656	59925
600N	60037	60098	59601	59912
590	60050	60181	59946	60059
580	59827	59835	59934	59865
570	60106	60121	59903	60043
560	59473	59804	59861	59713
550	59708	59866	59782	59785
540	59931	60026	59900	59952
530	60271	60001	60056	60109
520	59889	59972	60525	60129
510	60173	59700	59980	59951
500N	60069	59843	60059	59990
490	60111	60209	60131	60150
480	59486	59936	60182	59868
470	60136	59710	59797	59881
460	59708	59833	59994	59845
450	59967	60055	60316	60113
440	60046	59933	60091	60023
430	59592	60151	59758	59834
420	59718	59775	60043	59845
410	59858	59776	59935	59856
400N	60316	59740	59815	59957
390	59886	60295	59668	59950
380	59861	60103	59819	59928
370	59681	59800	60479	59987
360	59600	60681	59923	60068
350	59896	59870	59802	59856
340	59886	59978	59962	59942
330	59807	59965	59418	59730
320	60011	59973	59909	59964
310	59988	59960	60072	60007
300N	59869	60018	59849	59912
290	59687	60054	59969	59903
280	60080	59776	60192	60016
270	59644	59593	60227	59821
260	59678	59737	60232	59882
250	60262	59969	59998	60076
240	59956	59830	59994	59927
230	59853	59842	59911	59869
220	59978	60275	60070	60108
210	59857	59897	59666	59807
200N	59866	59992	59884	59914
190	59966	60259	59709	59978
180	59642	59648	59386	59559
170	59904	59968	59890	59921
160	59926	59681	59467	59691
150	59864	59832	60367	60021
140	59814	59616	59470	59633
130	59929	59857	60200	59995
120	59990	60091	59780	59954
110	59948	59975	60052	59992
100N	59936	60015	60020	59990
90	59864	60123	60174	60054
80	59957	59872	59855	59895
70	59918	60131	60197	60082
060N/400W	59907	60069	59937	59971

Total Magnetometer Readings 195

Figure 12

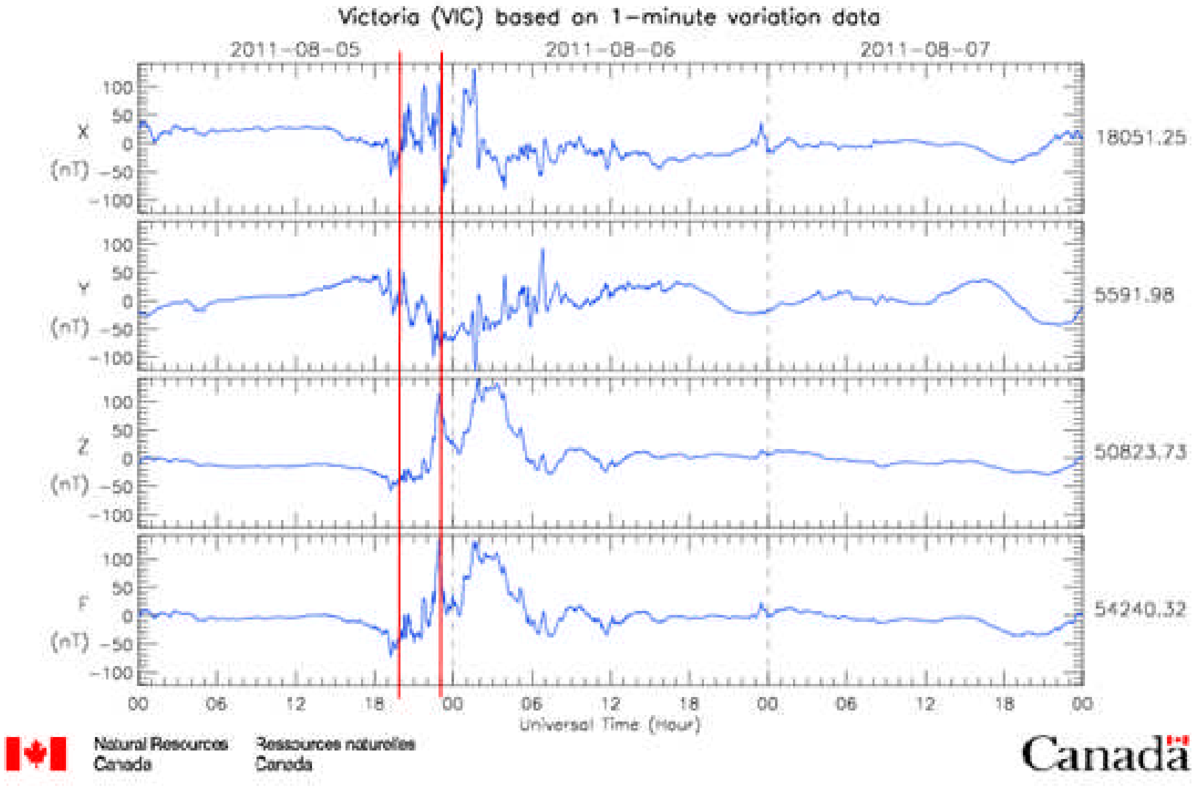
Magnetometer Profile



Stations 400W/700N to 400W/60N

Red Line is 5 station Moving Average

Figure 13 Geomagnetic field from Aug 5 to 7 2011



Region between the red lines represents the approx time of initial survey

Discussion of Survey Results and Methodology

The geochemical analysis of the fraction sizes -5+40mesh verses -40mesh +100mesh shows a heighten concentration of assay values for antimony, arsenic, gold, nickel and copper by a factor of at least 80% difference. Overall the comparison of the assays with the lithology has added to the glacial dispersion model as presented before in this report. There is a clear relationship of rock clast lithology and fraction size with number of indicator or sulphide bearing clasts. At Station 430N both the ½ and 1.0 inch size fractions contain the most indicator clasts as a percentage of the number of overall clasts viewed. The 430N soil sample site was collected directly adjacent to and down ice from the outcrop and the assays of the coarse size -5 +40mesh fraction and the finer -40 +100mesh fraction correspond to the rock assays Rk430B and somewhat with Rk430A. Clearly the results from station 430N demonstrate the importance of indicator clasts in tracing back to the bedrock source as shown in Figure 7 and Figure 8. From this study, the slope of the indicator clasts or plume angle from the bedrock source at 430N is virtually flat with a slight downward or negative slope bias. An explanation of the negative plume slope could have been created by a pinnacle effect of the outcrop protruding above the surrounding bedrock much like a water fall effect (Figure 7).

The clast lithology and textural study provided further evidence of a nearby bedrock source for the glacial material with the presence of "fresh" or un-weathered sulphides (stibnite/arsenopyrite/pyrite/chalcopyrite) within and on the surface of the rock clasts; however some rock clasts show leached sulphides on their exposed surfaces. However several clasts have shown several specks of bright red pyrite cube boxes, this form of oxidation of pyrite is considered to be of a high pressure, hydrothermal, oxidation processes rather than surficial or weathering processes. The roundness of rock clasts is generally angular to sub-angular and of low spherulity in shape due to the brittle or friable rock conditions, very few were of high spherulity with rounded edges. All C samples were taken from the basal till horizon, pilot or keel rock clasts indicate an up-ice or up-valley source with the direction of glacial movement northwards.

The +40 mesh size fraction was the most difficult in determining the lithology, only a weighed sample of 1.0 gram was viewed in detail for indicator clasts; the rest of the sample population taken from the main collection fraction was scantly viewed for indicator clasts. The overall lithology of the +40 size fraction from all sample collection stations was tentative even with the aid of a bi-ocular microscope but it appears the majority was of a black chert or a dark green andesite or black hornfels environment with very little white quartz fragments. The objective with viewing the smaller clast fractions was focused on identifying intact metal sulphides within the fragments.

The magnetometer survey had inconclusive results due to the high variance of readings between stations being of the order of in some cases +100gamma variance over a 10metre station interval. The magnetometer profile chart shows the inconsistence however when the results are rounded out over a 5 station averaging, there appears to be a magnetic low occurring from 400W/140N to 400W/180N. The purpose of the magnetometer survey was to compare the previous soil geochem results from AR31087 and to determine a relationship between geochem soil anomalies with the magnetic lows.

Conclusions and Recommendations

The exploration methodology used in the current program has yielded some meaningful results and has demonstrated the exploration glacial erratic dispersion model as a useful method in tracing indicator clasts back to the bedrock source, it was meant as a preliminary test for future work programs. The highest arsenic-gold assay was from site 460N (AR 31087) and when compared with the lithology of the rock clasts and assays from the 430N site has indicated a probable nearby bedrock source for the cause of the anomaly at 460N.

The magnetometer survey had limited or almost inconclusive results due to the unstable shift in the Earth’s magnetic field. It is recommended to go over the same traverse as in this program with a magnetometer

Focus on the next portion of the “work-in-progress” program is to continue with the same exploration methodology with further bulk sampling of the basal till at sites closer to the “head” at Station 460N in an up-ice or southerly direction from thereof in order to locate a plume trend and angle of dispersion.

The current program was conducted on a few selected sampling areas as such the data obtained is not sufficient enough to form any definite conclusions. The data collected from the current "work in progress" programme is sufficiently encouraging to justify continuing with the next phase of the soil survey. The recommendations in this report follow the guidelines established by John Kowalchuk in his assessment report on the property in 2005 (AR 28163).

Cost of Current Exploration Survey

Wages: Field	
B. Hemingway B.Sc FGAC 4.0 days @ $500/day	$ 2000.00
S. Hemingway (field assistant) 4.0 days @ $200/day	$ 800.00
Food, Lodging, & Transportation:	
Gold Bridge Motel accommodation (Aug. 3 - 7, 2011)	$ 336.00
Food/meals (5 days @ $20/day/person)	$ 200.00
Transportation; (4x4 vehicle) 750.6kms @ 50cents/km	$ 375.30
Wages: Travel	
B. Hemingway B.Sc FGAC 1.0 days @ $400/day	$ 400.00
S. Hemingway (field assistant) 1.0 days @ $200/day	$ 200.00
Field Expenses:	
Field equipment (flagging, pens, kraft bags, est.)	$ 64.86
Technical Expenses	
SGS Analytical Assaying/Sieving	$ 946.67
Magnetometer rental (SJ Geophysics Delta BC	$ 100.80
Lithological and Textural Analysis	
B. Hemingway 5.0 days @ $400/day	$ 2000.00
Report Costs:	
Reporting writing; 2.5 days @ $400/day	$ 1000.00
Sundry (est., photocopying, binding, office, maps etc)	$ 40.00
Total Cost of Current Exploration Survey	$ 8463.63
Total Technical Cost Portion of Survey	$ 6952.33

References used in MaryMac Report 2008

1. Stephen R. Hicock: Glacial Geology Applied to Drift Prospecting in Buttle Valley, Vancouver Island. Paper 1995-02 Drift Exploration in the Canadian Cordillera MEMPRBC
2. Church, B.N., Bridge River Mining Camp, Geology and Mineral Deposits: Paper 1995-3, BCMEI
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4. Gleeson, C.F. and Sheehan, D.G. 1987. Humus and till geochemistry over the Doyon, Bousquet, and Williams gold deposits; CIMM Bulletin, v. 80, no.898, p. 58-66.
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6. Garrett, R.G. (1991). The management, analysis and display of exploration geochemical data. Geological Survey of Canada, Open File Report, pp 9.1-9.41.
7. Hart, C. J. R. et al 2008, Sulphur Sources for Gold Deposits in the Bridge River-Bralorne Mineral District, Southwestern British Columbia; Geoscience BC Report 2009-1, pages 91-102
8. Millar, J.K. 1984. Model for clastic indicator trains in till; in Prospecting in Areas of Glaciated Terrain -1984, Institution of Mining and Metallurgy, London,
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10. DiLabio, R., (1991) Classification and Interpretation of the Shapes and Surface Textures of Gold Grains from Till; Geological Survey of Canada, 601 Booth Street, Ottawa, Canada, K1A OE8
11. Powers, M.C 1953 Journal of Sedimentary Petrology V. 23 (1953) No 2 June p. 117-119

12. The following references for Assessment Reports relating to MaryMac are from the BC Government website; http://aris.empr.gov.bc.ca/search.asp?mode=find
    a. Gruenwald W B.Sc (1980) Geological and Geochemical Report on the HJ Claims; http://aris.empr.gov.bc.ca/search.asp?mode=repsum&rep_no=08647
    b. Hall G.I. M.Sc (1981) Road Preparation, Geology, Geochemistry. HJ Claims; http://aris.empr.gov.bc.ca/search.asp?mode=repsum&rep_no=09746
    c. Kerr, J.R. P.Eng (1983) Diamond Drill Report on the HJ Claims; http://aris.empr.gov.bc.ca/search.asp?mode=repsum&rep_no=11647
    d. Wynne F.L., P.Eng; (1987) Geochemistry, Geophysical, Trenching, Mapping Report on the HJ Property; http://aris.empr.gov.bc.ca/search.asp?mode=repsum&rep_no=15557
    e. Dewonck B., B.Sc; (1987) Diamond Drill report on the HJ Claims; http://aris.empr.gov.bc.ca/search.asp?mode=repsum&rep_no=16378
    f. Hemingway, B., B.Sc; (2000) Preliminary Magnetometer & Slide Survey Report; http://aris.empr.gov.bc.ca/search.asp?mode=repsum&rep_no=26338
    g. Hemingway, B., B.Sc; (2008) Geochemical Sampling Report on the MaryMac Property http://aris.empr.gov.bc.ca/search.asp?mode=repsum&rep_no=31087
    h. Ostler, J., M.Sc., P.Geo; (2002) Air Photo & Satellite Imagery Interpretation of the Merry Property; http://aris.empr.gov.bc.ca/search.asp?mode=repsum&rep_no=28163
    i. Kowalchuk, J.M., B.Sc., P. Geo; (2006) Assessment Report on the Williams Property; http://aris.empr.gov.bc.ca/search.asp?mode=repsum&rep_no=28163
    j. Walcott, P. E., P.Eng; (2006) A Report on Heliborne Magnetometer & EM Surveying; http://aris.empr.gov.bc.ca/search.asp?mode=repsum&rep_no=28893

Statement of Qualifications

I, Alan Brent Hemingway of the City of Surrey, British Columbia; certify hereby:

1. I am a Geologist residing at #50-1640-162nd Street Surrey BC., V4A 6Y9

2. I am a graduate of UBC with a Bachelor of Science in Geology in 1978

3. I am a Fellow of the Geological Association of Canada

4. I have engaged in the study of Geology after graduation for four years with several major and junior exploration companies in Western Canada and thereafter for twenty five years as a free agent.

5. I personally examined and carried out the current survey in the presence of an assistant on the Mary Mac Property Group of Mineral Tenures from August 3rd to 7th, 2011; the findings are described within this report.

6. This report is reliant on the records from previous operators on the MaryMac Property Group, data in the literature from the British Columbia Ministry of Mines and data from the Canadian Federal Government.

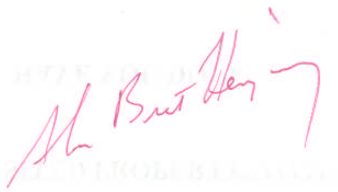
7. I am the author of this report, the composition thereof, and with the planning of the current survey as described herein.

8. The Recommendations and Conclusions in this report are an opinion of the author and should not be construed as a professional viewpoint. The author is not a registered professional geologist.

9. This report is amended from the original report dated November 14th, 2011

Dated this 14th day of November, 2011;

Amended this 6th day of January 2013



Alan Brent Hemingway, B.Sc FGAC

Surrey, B.C

Appendix

First Nations Claim and other Land Restrictions

Mineral Titles Branch
Energy, Mines and Petroleum Resources

BRITISH COLUMBIA
The Best Place on Earth

Report Date: June 26, 2009 10:17 AM

Disclaimer : The information contained in this report is valid from the time the report was executed.

This report will be posted to your bulletin board and emailed to the email address supplied in MTO.

Claim Acquisition details:

Tenure Number:	606665
Event Number:	4290633
Issue Date:	June 26, 2009
Good to Date:	June 26, 2010
Type:	Mineral Claim
Area (ha):	122.432
Mapsheet:	092J

Please follow this link to see a map of your new tenure. For more detailed information please view your tenure in Mineral Titles Online (MTO).

The following is for information purposes:

For more information about the content of this tenure report please visit the Mineral Titles Branch website.
http://www.empr.gov.bc.ca/Titles/MineralTitles/Pages/default.aspx

Your tenure overlaps with the following First Nations interests:

Based on current government information, the following First Nations may have aboriginal interests in your registered mineral tenure area. In the event that you wish to contact First Nations, this information is being provided to assist you in informing First Nations of your activity as part of your planning for a successful project. Go to the Mineral Titles Branch website to develop further understanding of the principles supporting First Nations engagement and to access information, resource materials and useful links. Please note that this is a preliminary First Nations contact list and should not be considered conclusive.

The information in this report is not intended to create, recognize, limit or deny any aboriginal or treaty rights, including title, that First Nations may have, or impose any obligations on the Province or alter the legal status of resources within the Province or the existing legal authority of British Columbia. The Province makes no warranties or representations regarding the accuracy, timeliness, completeness or fitness for use of any or all data provided in this report.

Indian Reserve: None
First Nations Treaty Lands: None
Consultative Areas:

First Nation: Seton Lake
Contact: Seton Lake
Title: Chief and Council
Organization: Seton Lake
Address: PO Box 76 Site 3 Shalalth Drive
Shalalth, BC
V0N 3C0
Phone: 250-259-8227
Fax: 250-259-8384
Email: slib_receptionist_2004@yahoo.ca

First Nation: Tsilhqotin Nation
Contact: Tsilhqotin National Government
Title: Chief and Council
Organization: Tsilhqotin National Government
Address: 102-383 Oliver Street
Williams Lake, BC
V2G 1M4
Phone: (250) 392-3918
Fax: (250) 398-5798
Email: tng-director@wlake.com

First Nation: Tsilhqotin Nation
Contact: Tletinqox (Anaham Indian Band)
Title: Chief and Council
Organization: Tletinqox (Anaham Indian Band)
Address: PO Box 168
Alexis creek, BC
V0L 1A0
Phone: 250-394-4212
Fax: 250-394-4275
Email: None

First Nation: Tsilhqotin Nation
Contact: Woodward and Company
Title: Tsilhqotin Lawyers
Organization: Woodward and Company
Address: 2nd Floor, 844 Courtney Street
Victoria, BC
V8W 1C4
Phone: 250-383-2356
Fax: 250 380-6560
Email: None

First Nation: Tsilhqotin Nation
Contact: Toosey
Title: Chief and Council
Organization: Toosey
Address: PO Box 80
Riske Creek, BC
V0L 1T0
Phone: 250-659-5655
Fax: 250-659-5601
Email: None

First Nation: Tsilhqotin Nation
Contact: Ulkatcho
Title: Chief and Council
Organization: Ulkatcho
Address: PO Box 3430
Anahim Lake, BC
V0L 1C0
Phone: 250-742-3260
Fax: 250-742-3411
Email: None

Landowner Notification requirements specify that a person must not begin a mining activity until eight days after giving notice to the owners of the surface area where the activity will take place. The notice must state when the activity will occur and include the names and addresses of the free miner or recorded holder and of the on-site person responsible for the operations. The notice must also describe the activity that will be conducted, state approximately how many people will be on site and include a map or written description of where the activity will take place. Notices may be mailed, e-mailed, sent by facsimile transmission or hand delivered to the owner.

Your tenure overlaps with the following other resource interests:

Ungulate Winter Range: None
Wildlife Habitat Area: None
Wildlife Management Area: None

Mineral Titles inquires can be made to:

Mineral Titles Branch
1-866-616-4999
Mineral.Titles@gov.bc.ca

300-865 Hornby Street,
Vancouver, BC
V6Z 2G3

For detailed information on tenure maintenance please visit our website and related legislation:
http://www.empr.gov.bc.ca/Titles/MineralTitles/Pages/default.aspx

An approved mineral or placer Notice of Work and Reclamation Program is required prior to conducting surface disturbance by mechanical means. For more information on Notices of Work and the Mineral Exploration & Mining regional office near you please visit our website.
[Mines Act - section 10] and [Notice of Work Form & Schedules]

Mineral Titles Branch appreciates your participation in the mineral development of British Columbia and we look forward to serving you again.

Your tenure overlaps with the following Legal and Administrative interests:

Reserve(s): 329579 - FRASER-BRALORNE DPLA - SCHEDULE F , Placer - Desig. lease
Regional District: SQUAMISH-LILLOOET
Agricultural Land Reserve: None
Parks/Protected Areas: None

Note: Please be aware that Regional and Municipal parks are not listed but may still exist. Ensure you check with the Regional District and Municipality for parks that may exist in the area.

Municipality: None
Land Title District: KAMLOOPS
Forest District: Cascades Forest District

Your tenure overlaps with the following tenures:

Sub-surface (does not include crown grants):
Mineral: None
Placer: None
Coal: None
Surface (does not include Private Land):
Crown Land leases: None

Assay Certificates

SGS

Certificate of Analysis

Work Order: VC111172

To:	**ACCOUNTS PAYABLE** **SGS VANCOUVER INC** 8282 SHERBROOKE ST. VANCOUVER BC V5X 4R6	Date:	Sep 09, 2011

P.O. No.	:	Salient Resources-Rock (430A,430B,430C)
Project No.	:	-
No. Of Samples	:	3
Date Submitted	:	Aug 17, 2011
Report Comprises	:	Pages 1 to 7 (Inclusive of Cover Sheet)

Certified By : ______________________________

SGS Minerals Services Geochemistry, Vancouver, BC is ISO 9001:2008 certified.

Report Footer:	L.N.R.	= Listed not received	I.S.	= Insufficient Sample
	n.a.	= Not applicable	--	= No result
	*INF	= Composition of this sample makes detection impossible by this method		

M after a result denotes ppb to ppm conversion, % denotes ppm to % conversion

Methods marked with an asterisk (e.g. *NAA08V) were subcontracted

Methods marked with the @ symbol (e.g. @AAS21E) denote accredited tests

SGS Canada Inc. | Mineral Services 8282 Sherbrooke Street Vancouver BC t(604) 327-3436 f(604) 327-3423 www.ca.sgs.com

Member of the SGS Group (Société Générale de Surveillance)

SGS

Final : VC111172 Order: Salient Resources-Rock (430A,430B,430C)

Element	WtKg	Au	Al	B	Ba	Ca	Cr	Cu	Fe	K
Method	WGH79	FAA313	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B
Det.Lim.	0.001	5	0.01	10	5	0.01	1	0.5	0.01	0.01
Units	kg	ppb	%	ppm	ppm	%	ppm	ppm	%	%
RK 430A	2.430	6	0.37	50	274	0.13	151	94.7	2.60	0.14
RK 430B	3.715	37	1.10	50	266	0.37	95	141	7.55	0.45
RK 430C	3.175	<5	0.63	50	125	0.12	207	52.3	2.39	0.14

Final : VC111172 Order: Salient Resources-Rock (430A,430B,430C)

Element	Li	Mg	Mn	Na	Ni	P	S	Sr	Ti	V
Method	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B
Det.Lim.	1	0.01	2	0.01	0.5	50	0.01	0.5	0.01	1
Units	ppm	%	ppm	%	ppm	ppm	%	ppm	%	ppm
RK 430A	3	0.23	5580	0.02	28.6	100	0.47	20.4	<0.01	28
RK 430B	9	0.66	2080	0.04	31.1	820	0.16	29.4	0.14	63
RK 430C	6	0.42	2390	0.03	13.9	270	0.29	10.9	0.01	21

Final : VC111172 Order: Salient Resources-Rock (430A,430B,430C)

Element	Zn	Zr	Ag	As	Be	Bi	Cd	Ce	Co	Cs
Method	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B
Det.Lim.	1	0.5	0.01	1	0.1	0.02	0.01	0.05	0.1	0.05
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
RK 430A	260	2.2	0.15	24	0.2	0.55	3.17	8.17	15.1	0.73
RK 430B	198	7.9	0.24	98	0.4	2.11	0.74	22.0	13.8	1.96
RK 430C	76	1.8	0.09	6	0.2	0.78	0.58	14.4	5.8	0.77

Final : VC111172 Order: Salient Resources-Rock (430A,430B,430C)

Element	Ga	Ge	Hf	Hg	In	La	Lu	Mo	Nb	Pb
Method	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B
Det.Lim.	0.1	0.1	0.05	0.01	0.02	0.1	0.01	0.05	0.05	0.2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
RK 430A	2.1	<0.1	<0.05	0.08	0.13	3.9	0.03	3.31	0.14	2.3
RK 430B	5.2	<0.1	0.19	0.16	0.33	10.3	0.05	4.67	1.00	3.4
RK 430C	3.2	<0.1	<0.05	0.03	0.05	5.7	0.03	2.73	0.10	1.6

Final : VC111172 Order: Salient Resources-Rock (430A,430B,430C)

Element	Rb	Sb	Sc	Se	Sn	Ta	Tb	Te	Th	Tl
Method	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B
Det.Lim.	0.2	0.05	0.1	1	0.3	0.05	0.02	0.05	0.1	0.02
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
RK 430A	6.2	3.41	2.4	<1	<0.3	<0.05	0.13	0.18	0.7	0.13
RK 430B	15.4	19.3	6.1	2	0.7	<0.05	0.26	0.99	1.3	0.25
RK 430C	6.0	1.34	3.4	<1	<0.3	<0.05	0.20	0.40	0.6	0.10

Final : VC111172 Order: Salient Resources-Rock (430A,430B,430C)

Element	U	W	Y	Yb
Method	ICM14B	ICM14B	ICM14B	ICM14B
Det.Lim.	0.05	0.1	0.05	0.1
Units	ppm	ppm	ppm	ppm
RK 430A	0.26	0.1	3.11	0.3
RK 430B	0.39	0.3	5.48	0.4
RK 430C	0.13	<0.1	3.36	0.3

SGS

Certificate of Analysis

Work Order: VC111323

To: **ACCOUNTS PAYABLE**
SGS VANCOUVER INC
6282 SHERBROOKE ST.
VANCOUVER BC V5X 4R6

Date: Sep 16, 2011

P.O. No.	:	Salient Resources-Soil (380N,405N,430N)
Project No.	:	-
No. Of Samples	:	6
Date Submitted	:	Aug 17, 2011
Report Comprises	:	Pages 1 to 7 (Inclusive of Cover Sheet)

Comments:

Coming from VC111171, for further analyses.
Boron for information values only.

Certified By : ______________________________
Albert Hung
Senior Chemist & Coordinator

SGS Minerals Services Geochemistry, Vancouver, BC is ISO 9001:2008 certified.

Report Footer:

L.N.R.	= Listed not received	I.S.	= Insufficient Sample
n.a.	= Not applicable	--	= No result

*INF = Composition of this sample makes detection impossible by this method
M after a result denotes ppb to ppm conversion, % denotes ppm to % conversion

Methods marked with an asterisk (e.g. *NAA08V) were subcontracted
Methods marked with the @ symbol (e.g. @AAS21E) denote accredited tests

SGS Canada Inc. | Mineral Services 6282 Sherbrooke Street Vancouver BC t(604) 327-3436 f(604) 327-3423 www.ca.sgs.com

SGS

Final : VC111323 Revision revised Order: Salient Resources-Soil (380N,405

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Element	Au	Al	B	Ba	Ca	Cr	Cu	Fe	K	Li
Method	FAA313	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B
Det.Lim.	5	0.01	10	5	0.01	1	0.5	0.01	0.01	1
Units	ppb	%	ppm	ppm	%	ppm	ppm	%	%	ppm
380N -5+40mesh	22	1.29	70	251	0.47	46	61.1	3.02	0.30	11
380N -40mesh +100mesh	37	1.84	70	274	0.66	72	98.7	4.41	0.37	15
405N -5+40mesh	27	1.33	70	220	0.37	44	60.5	3.17	0.36	11
405N -40mesh +100mesh	68	2.19	80	259	0.66	78	101	5.06	0.46	19
430N -5+40mesh	32	0.90	70	241	0.27	32	83.7	3.01	0.26	7
430N -40mesh +100mesh	70	1.44	60	328	0.48	56	146	4.72	0.35	11

Final : VC111323 Revision revised Order: Salient Resources-Soil (380N,405

Page 3 of 7

Element	Mg	Mn	Na	Ni	P	S	Sr	Ti	V	Zn
Method	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B
Det.Lim.	0.01	2	0.01	0.5	50	0.01	0.5	0.01	1	1
Units	%	ppm	%	ppm	ppm	%	ppm	%	ppm	ppm
380N -5+40mesh	0.82	1100	0.04	46.5	480	0.02	22.9	0.12	56	65
380N -40mesh +100mesh	1.28	1490	0.04	72.8	800	<0.01	30.4	0.17	85	113
405N -5+40mesh	0.90	859	0.04	43.9	500	0.02	21.7	0.11	59	71
405N -40mesh +100mesh	1.56	1480	0.04	92.2	830	0.01	30.8	0.17	98	134
430N -5+40mesh	0.56	2160	0.03	36.2	330	0.07	18.8	0.07	43	189
430N -40mesh +100mesh	0.91	4280	0.04	69.0	610	<0.01	32.0	0.12	71	381

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Element	Zr	Ag	As	Be	Bi	Cd	Ce	Co	Cs	Ga
Method	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B
Det.Lim.	0.5	0.01	1	0.1	0.02	0.01	0.05	0.1	0.05	0.1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
380N -5+40mesh	7.8	0.26	37	0.5	0.22	0.36	20.1	12.5	1.75	5.1
380N -40mesh +100mesh	6.9	0.38	71	0.7	0.31	0.45	31.5	21.2	3.05	7.0
405N -5+40mesh	6.4	0.29	40	0.4	0.22	0.33	22.3	12.6	2.24	5.2
405N -40mesh +100mesh	6.1	0.54	99	0.8	0.37	0.63	34.6	24.3	5.30	7.9
430N -5+40mesh	5.9	0.22	65	0.4	0.42	1.77	17.2	11.4	1.28	3.7
430N -40mesh +100mesh	8.2	0.31	127	0.7	0.68	3.66	31.0	20.4	2.34	5.5

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Element	Ge	Hf	Hg	In	La	Lu	Mo	Nb	Pb	Rb
Method	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B
Det.Lim.	0.1	0.05	0.01	0.02	0.1	0.01	0.05	0.05	0.2	0.2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
380N -5+40mesh	<0.1	0.18	0.07	0.04	10.1	0.07	2.65	0.82	3.9	13.6
380N -40mesh +100mesh	<0.1	0.12	0.14	0.06	15.9	0.11	3.81	1.01	5.5	17.4
405N -5+40mesh	<0.1	0.14	0.06	0.04	11.4	0.07	3.05	0.68	3.6	15.7
405N -40mesh +100mesh	<0.1	0.09	0.14	0.06	18.6	0.14	4.06	1.21	5.9	22.6
430N -5+40mesh	<0.1	0.15	0.07	0.08	8.7	0.05	2.61	0.63	2.4	11.9
430N -40mesh +100mesh	<0.1	0.16	0.16	0.16	15.6	0.10	3.81	0.93	4.3	16.6

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Element	Sb	Sc	Se	Sn	Ta	Tb	Te	Th	Tl	U
Method	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B
Det.Lim.	0.05	0.1	1	0.3	0.05	0.02	0.05	0.1	0.02	0.05
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
380N -5+40mesh	9.43	6.5	<1	0.4	<0.05	0.31	0.10	1.3	0.18	0.24
380N -40mesh +100mesh	18.3	10.4	<1	2.2	<0.05	0.50	0.16	1.8	0.26	0.44
405N -5+40mesh	9.87	6.7	<1	0.3	<0.05	0.34	0.10	1.4	0.18	0.27
405N -40mesh +100mesh	24.6	12.5	1	0.5	<0.05	0.63	0.17	1.9	0.27	0.56
430N -5+40mesh	9.00	4.7	<1	<0.3	<0.05	0.25	0.16	1.2	0.14	0.24
430N -40mesh +100mesh	18.2	7.9	1	0.5	<0.05	0.44	0.27	2.0	0.22	0.44

Element	W	Y	Yb
Method	ICM14B	ICM14B	ICM14B
Det.Lim.	0.1	0.05	0.1
Units	ppm	ppm	ppm
380N -5+40mesh	0.2	6.99	0.5
380N -40mesh +100mesh	0.3	11.7	0.8
405N -5+40mesh	0.2	7.46	0.5
405N -40mesh +100mesh	0.3	15.6	1.1
430N -5+40mesh	0.2	5.20	0.4
430N -40mesh +100mesh	0.3	9.58	0.7

SGS

Certificate of Analysis

Work Order: VC111171

To: **ACCOUNTS PAYABLE**
SGS VANCOUVER INC
8282 SHERBROOKE ST.
VANCOUVER BC V5X 4R6

Date: Nov 07, 2011

P.O. No.	:	Salient Resources-Soil (380N,405N,430N)
Project No.	:	-
No. Of Samples	:	3
Date Submitted	:	Aug 17, 2011
Report Comprises	:	Pages 1 to 2 (Inclusive of Cover Sheet)

Comments:

After preparation, creating Vc111323 for further analyses.

Certified By :

Albert Hung
Senior Chemist & Coordinator

SGS Minerals Services Geochemistry, Vancouver, BC is ISO 9001:2008 certified.

Report Footer:

L.N.R.	= Listed not received	I.S.	= Insufficient Sample
n.a.	= Not applicable	--	= No result

*INF = Composition of this sample makes detection impossible by this method
M after a result denotes ppb to ppm conversion, % denotes ppm to % conversion

Methods marked with an asterisk (e.g. *NAA08V) were subcontracted
Methods marked with the @ symbol (e.g. @AAS21E) denote accredited tests

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Size Fraction Weights

Final : VC111171 Revision revised Order: Salient Resources-Soil (380N,405

Element	WtKg	Wt	+25.0mm	+12.5mm	+425µm	+150µm	-150µm
Method	WGH79	SCR32	SCR32	SCR32	SCR32	SCR32	SCR32
Det.Lim.	0.001	0.01	0.01	0.01	0.01	0.01	0.01
Units	kg	kg	%	%	%	%	%
380N	10.360	10.36	1.33	1.42	5.64	0.63	0.73
405N	10.875	10.88	2.00	1.79	5.90	0.42	0.25
430N	5.605	5.61	0.51	0.85	3.01	0.45	0.45