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

BC Geological Survey
Assessment Report
31087

GEOCHEMICAL
SAMPLING REPORT
ON THE
MARYMAC PROPERTY
GOLDBRIDGE, B.C.

Lillooet Mining Division

Mineral Tenure Numbers

507082, 507139, 507142, 507146

Owner:

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By:

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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 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. Exploration within the Property boundaries has demonstrated the mode of mineralization of at least three and perhaps four deposit styles. 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 2 rock, 3 silt, 1 moss-mat, and 66 soil samples for assaying. The main intent of the current survey was to discover new gold-in-soil anomalies via sampling the soil horizon below the pumice ash layer. The soil sampling survey was designed to traverse several of the many significant structural features uncovered in the Heliborne Geophysics survey in 2006 (AR 28,893). This report is part of a "work in progress programme" entailing four properties: Williams, Merry Mac, no name assigned, and Carpenter claims which are all owned by the author. The results of this initial portion of the "work in progress programme" 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 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. The basis of this report relies upon a compilation of published data, maps, and reports referenced from the B.C. Government geological database.

The author, while in the presence of an assistant, personally examined the geological aspects of the Property and the immediate surrounding area between September 7th and 12th, 2008. The purpose of the survey was to locate new occurrences of gold mineralization and to determine the mode of development, as well as to assess the mineral potential of the Property.

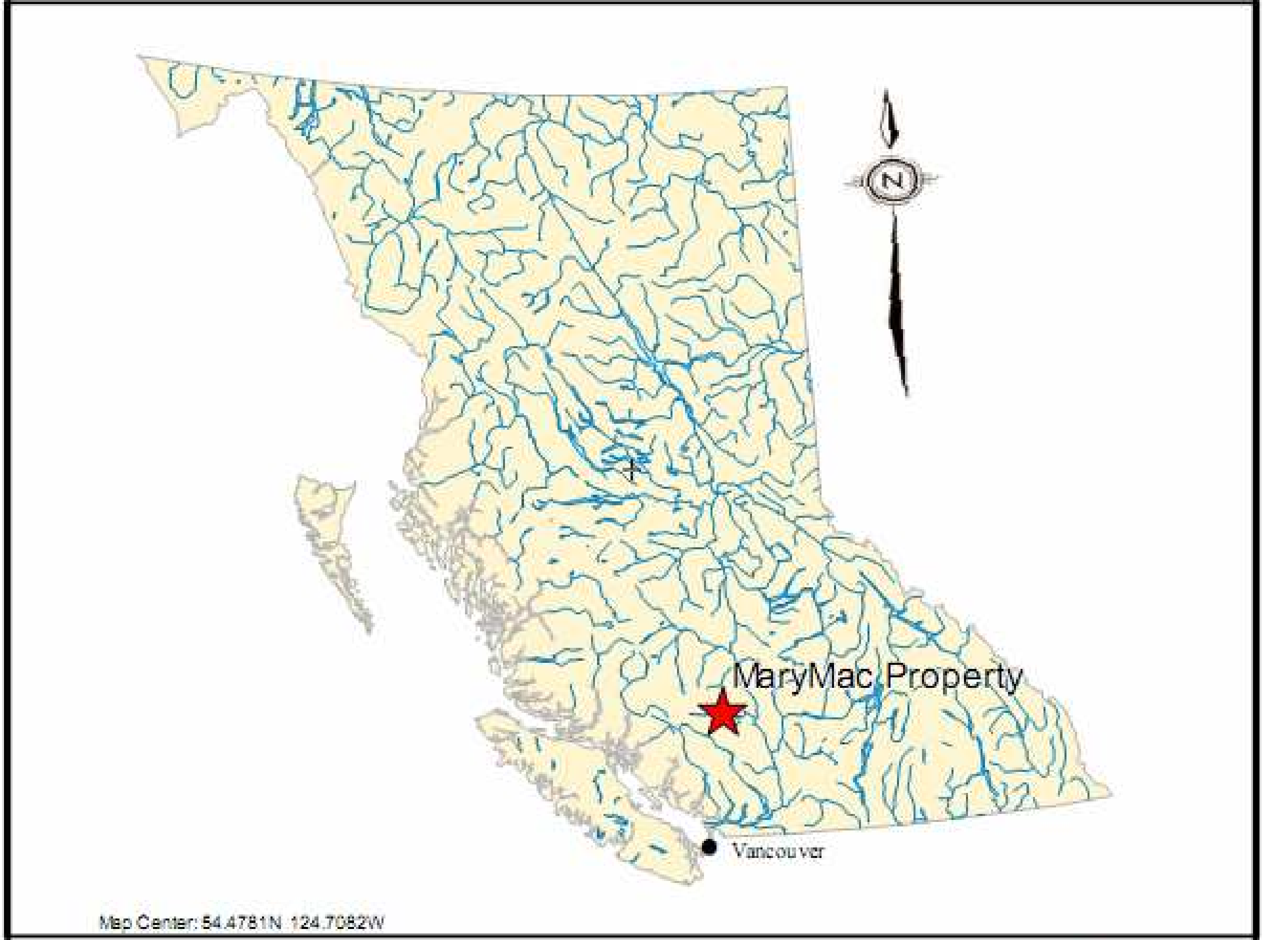
This programme consisted of the collection and assaying of: - two rock samples from different locations on the property; one moss-mat and three silt samples from the creeks in the immediate area of the MaryMac South Prospect as well; sixty-six soil samples were collected primarily to test the suitability of the soil profile in providing reliable results irrespective of glacial dilution factors or disturbance of the solum by prior logging operations. The soil sampling lines were designed to cross two significant structural linears outlined in the 2006 Heliborne Geophysics Survey (AR 28893) and as well, to test areas that have not been sampled by any previous exploration programs.

The author was successful in extending a previously known gold-in-soil anomaly (AR 15777) westerly and upslope in an area that has never been sampled. All samples collected in the field were submitted personally by the author to Acme Analytical Labs in Vancouver, BC for preparation and analysis. 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 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.

Figure 1 **MaryMac Property Location**



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

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.

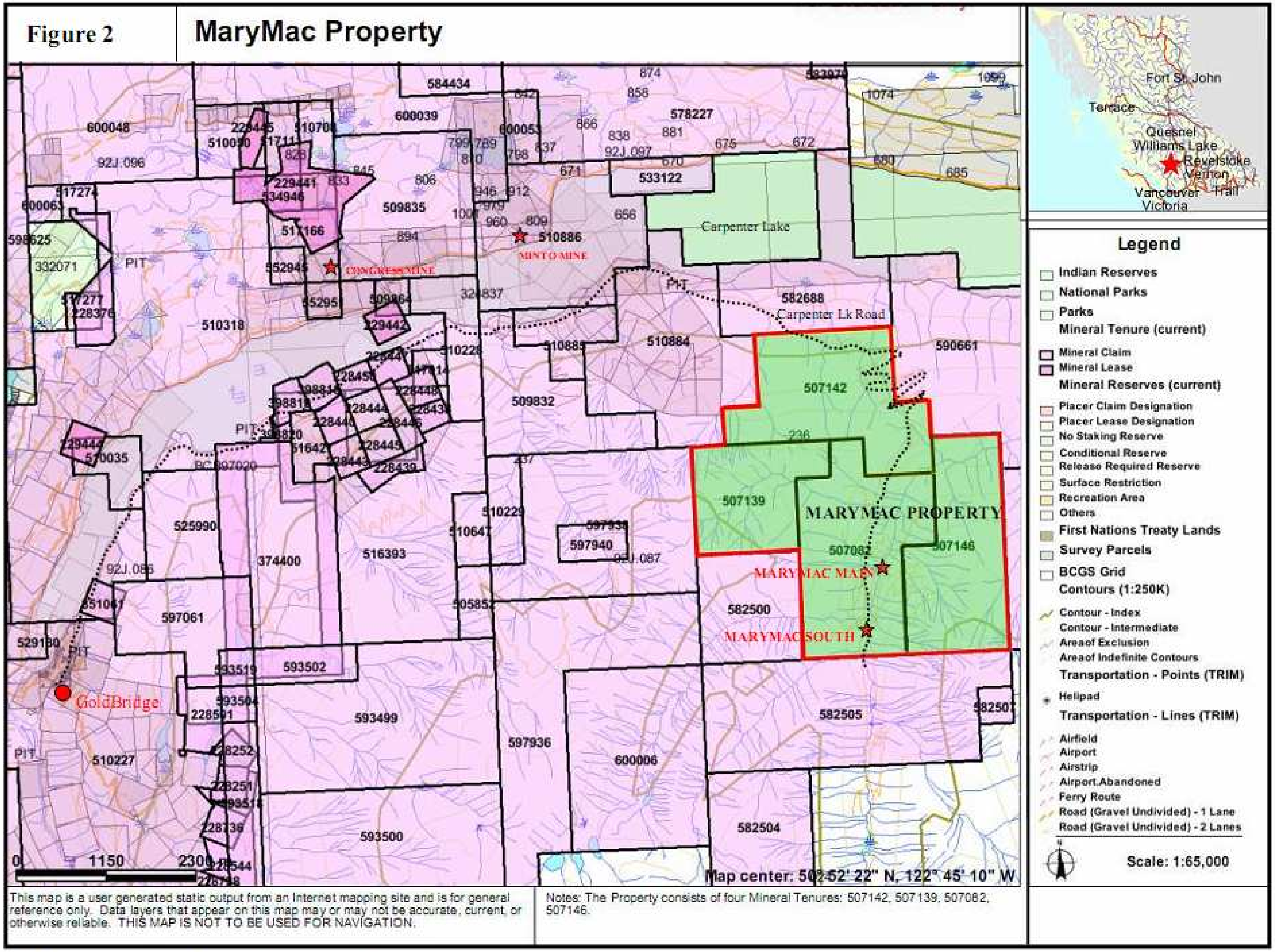


Figure 2 MaryMac Property

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: The Property consists of four Mineral Tenures: 507142, 507139, 507082, 507146.

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

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 for service to the mining industry.

The Property consists of four contiguous claim blocks known as: Carpenter (Mineral Tenure # 507142), Williams (507146), not named (507082), and Merry Mac (507139); 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 1203.458 ha. Table 1 provides the legal description of the claims:

Table 1

Tenure Number	Claim Name	Owner	Tenure Type	Tenure Sub Type	Map Number	Issue Date	Good To Date	Status	Area (ha)
507082		140107 (100%)	Mineral	Claim	092J	2005/feb/14	2010/jan/10	GOOD	367.202
507139	Merry Mac	140107 (100%)	Mineral	Claim	092J	2005/feb/14	2010/jan/10	GOOD	203.971
507142	Carpenter	140107 (100%)	Mineral	Claim	092J	2005/feb/14	2010/jan/10	GOOD	326.286
507146	Williams	140107 (100%)	Mineral	Claim	092J	2005/feb/14	2010/jan/10	GOOD	305.999
								Total Ha	**1203.458**

Reference: http://mtonline.gov.bc.ca

The writer is not aware of any First Nations heritage claim or Treaties covering the Truax Valley and surrounding area. The Property occupies entirely on Crown Land and there are no private surface rights holders. 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 next page). 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
Rain >=25 mm	0	0	0	0	0	0	0	0	0	0	0	0
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
Snow >=10 cm	1	0	0	0	0	0	0	0	0	0	0	0
Snow >=25 cm	0	0	0	0	0	0	0	0	0	0	0	0
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
Precip.>=25 mm	0	0	0	0	0	0	0	0	0	0	0	0
Snow Depth>=1cm	15	9	2	0	0	0	0	0	0	0	4	-
Snow Depth>=5cm	12	6	1	0	0	0	0	0	0	0	2	-
Snow Depth>=10cm	10	4	1	0	0	0	0	0	0	0	2	-
Snow Depth>=20cm	6	1	0	0	0	0	0	0	0	0	2	-

The weather statistics displayed here 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 allowed to lapse 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.

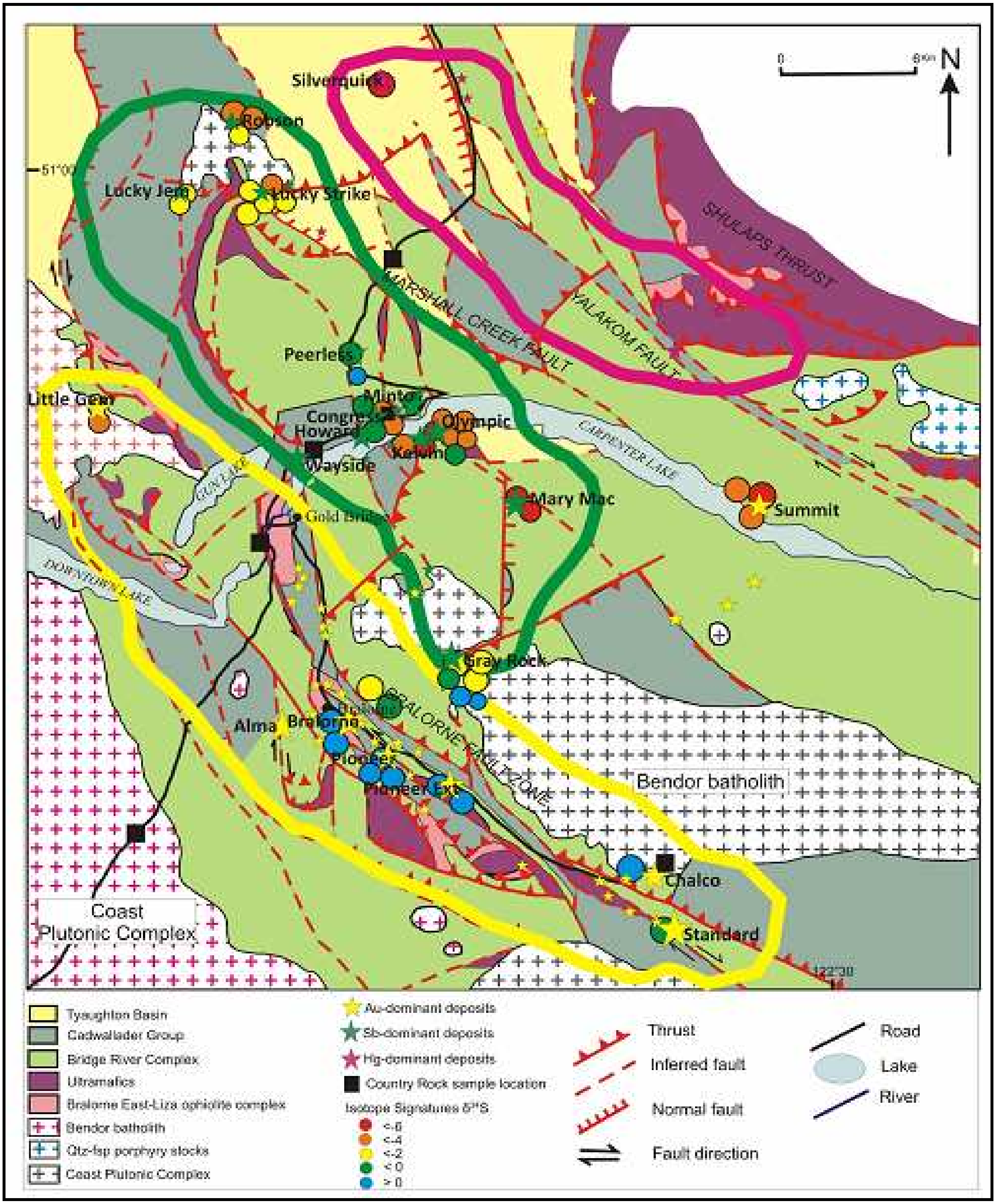
Geological Setting

The following selected information based upon relevance to the geological setting of the Property is adapted from Geoscience BC Report 2009-1, pages 91-102 “Sulphur Sources for Gold Deposits in the Bridge River-Bralorne Mineral District, Southwestern 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 above 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 complex nature in categorizing the various rock groups combined with the limited outcrop exposure at the lower elevations has resulted in a sparse and inconclusive geological data base; hence several conflicting interpretations have been proposed (Figure 5 & 6). 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 “Bridge River Mining Camp” Paper 1995-3 and below is a selected description of the strata:-

Relay Mountain Group (Unit 5)

“The Relay Mountain Group (Unit 5), originally described by Jeletzky and Tipper (1968), is mostly a monotonous sequence of Buchia-bearing shales, siltstones and greywackes of Late Jurassic to Early Cretaceous age. These strata are up to 650 metres thick and occur along the south easterly trending axis of the Tyaughton trough.

The main exposures of the group in the Bridge River camp are west of Spruce Lake, south of the type section, and near Truax Creek where the unit is underlain by the Bridge River Complex (Roddick and Hutchison, 1973; Woodsworth, 1977; Garver, 1992). These widely separated areas suggest that the unit was deposited continuously across the structural quilt of the older terranes. At Spruce Lake the outcrops include steeply dipping Buchiu and ammonite-bearing beds (Photo 2.12a and b) in thick sandstones. In the Truax area, Buchia beds (Photo 2.12) of latest Jurassic or Early Cretaceous age are associated with conglomerate in a down-faulted block (Church and MacLean, 1987a).

At the Truax Creek locality the group consists of several hundred metres of grey shales and siltstones underlain by polymictic conglomerate with accessory granitic clasts. The westerly provenance of the clasts tilts the paleogeographic setting of the deposit. The unit marks the first uplift of the Coast Mountains giving an earlier age for the development of the southwest margin of the Tyaughton basin than the mid-Cretaceous age proposed by Kleinspehn (1984).”

Pioneer Volcanics (Unit 2)

“The Pioneer Formation (Unit 2) occurs in the lower part of the Cadwallader Group and consists primarily of basaltic volcanic rocks and feeder intrusions. The unit is well developed at the California mine on the Hurley River and at the Pioneer mine on Cadwallader Creek. The only sedimentary rocks assigned to the formation are a few small lenses of limestone and thin tephra beds. In the type area along the Cadwallader valley the basalts attain a thickness in excess of 300 metres (Caimes, 1937).

In this study the name Pioneer volcanics refers to significant thicknesses of basalt of Late Triassic and older age in both the Cadwallader Group and the Bridge River Complex. The upper contact of the Pioneer volcanics within the Cadwallader Group is gradational with the Upper Triassic Hurley Formation (Roddick and Hutchison, 1973; Rusmore, 1985). The relationships are less clear at the base of the volcanics. In places the pillow lavas seem to rest on Fergusson cherts but elsewhere similar volcanic rocks are intercalated with Noel argillite, or Tyax argillites and cherts of the Bridge River Complex. A clear understanding of the contact relationships is further complicated by the lack of diagnostic fossils that would help in assigning the units underlying the lavas to either Fergusson Assemblage or Bridge River Complex.

The Pioneer volcanics are characterized by an abundance of pillow lavas, volcanic breccias and massive lava flows and sills. Large thicknesses of basalt occur on both sides of Cadwallader Creek, on the BRX property east of the Hurley River, in the Gwyneth Lake area, south of the Eldorado basin and near the west end, and along the south shore of Carpenter Lake.

Pillow lava sequences are especially well displayed in the Eldorado basin, at McDonald Lake and on the Congress, Reliance and Olympic properties toward the west end of Carpenter Lake. The pillows are grey, green or brown bunlike structures ranging in size from several centimetres to more than a metre in diameter (Photo 2.5). They are commonly flattened or elongated sub parallel to the plane of bedding. Downward-pointing cusps at the base of the pillows point away from flow tops, although single observations of these structures are not always reliable for top determination. The interstices between the pillows may contain aquagene breccia, chlorite from pillow selvages or carbonate minerals. Joints, cracks and amygdules are commonly filled with calcite.

Volcanic breccia occurs throughout the sequence as significant accumulations of basaltic debris or thin layers between lava flows and intercalations in normal sedimentary sequences. In the Eldorado basin the Pioneer pillow lava and volcanic fragmental deposits show every gradation into the overlying Hurley sedimentary rocks. In the areas west of Gwynetb Lake and northeast of Bralome, aquagene breccias are locally well developed (Photo 2.6). Elsewhere, such as on the south shore of Carpenter Lake near Keary Creek, the volcanic breccias form a chaotic mass intermixed locally with limestone blocks derived from submarine slumping (Photo 2.7).

Massive lava flows are exposed throughout the area. Except for differences in grain size and abundance of amygdules, lava flows are not always readily distinguished from sills and feeder dikes. In drill core and underground workings individual lava flows can be seen to range from less than a metre to a few tens of metres thick. The thick flows, dikes and sills are least affected by cataclasis and primary megastructures are generally well preserved.

The Pioneer volcanic assemblage has undergone greenschist and sub-green schist grade regional metamorphism. This has changed the mineralogy although relicts of igneous textures are commonly seen under the microscope. In thin section the lavas consist of randomly oriented or sub parallel laths of feldspar 0.2 to 1.0 millimetres long, with interstitial chlorite and abundant magnetite dust.
In some flows amphibole is also present and may contain pyroxene cores. Amygdules are filled with quartz, calcite and epidote. Calcic feldspar has been largely altered to albite, and chlorite generally replaces the primary ferromagnesian minerals. Primary magnetite grains may have survived the effects of regional metamorphism; however, much of the iron is contained in very fine grained masses of opaque dust associated with decomposition of the original mineral and vitreous components (Photo 2.8)."

Tyax Assemblage (Unit 1x)

"The term 'Tyax assemblage' (Unit 1x) is used informally in this report for the Triassic and Jurassic ocean-floor volcanic and sedimentary facies of the Bridge River Complex. This unit comprises ribbon chert with argillaceous inter-beds, basaltic lavas, sills and dikes and some thin limestones. The unit is weakly to moderately metamorphose but otherwise it is not readily distinguished from Fergusson beds.

Microfossils were obtained by Cameron and Monger (1971) from limestone samples from an outcrop at the mouth of Tyaughton Creek on the north-shore of Carpenter Lake above the highway. The limestone is part of a band of limestone lenses 5 kilometres long, traced northwesterly to Liza Creek. Conodonts from this locality indicate a Ladinian to Camian age.

The extent of the Tyax assemblage includes the area along Carpenter Lake from the Minto mine to the Marshall Creek fault. Nine fossil localities reported by Cordey (1986) from the ribbon cherts of this area contain a rich collection of radiolarians ranging in age from Middle Triassic to Early Jurassic. To the west and north of this belt the Tyax assemblage and older rocks appear to be imbricated in a series of thrust faults that also involve Cadwallader rocks, the Fergusson assemblage, and the Bralome intrusions."

Fergusson Assemblage (Unit 1a)

"In this study 'Fergusson assemblage' (Unit la and 1d) is an adaptation of the term 'Fergusson Group' that was introduced by Caimes (1943) for deformed strata in the Bridge River mining camp, believed to be Paleozoic age. These rocks are mainly ribbon cherts (Photo 2.1) laced with quartz veinlets and intercalated with argillite, greenstone, and thin recrystallized limestone bands. The thin limestone bands are the only known stratigraphic markers in the succession. The antiquity of the Fergusson rocks is established by various lines of evidence including a few microfossil determinations, metamorphism, crosscutting relationships of igneous intrusions and stratigraphic superposition.

The beds are locally intricately folded and in some places cataclasis has reduced bedding laminations to detached cherty lenses in pelitic schist. In some instances these intensely fragmented and milled rocks resemble pebbly conglomerate.

The unit attains a thickness of more than 1000 metres where best developed on Mount Fergusson, although the base is nowhere visible (Caimes, 1937). The beds consist mostly of thin ribbons of light and medium grey metachert, 1 to 4 centimetres thick, interlayered with thin seams of dark grey graphitic pelite (Photo 2.2). The ribbons are criss-crossed by numerous small quartz veinlets normal to the bedding planes. In thin section the rock is a mosaic of re-crystallized deformed quartz grains (0.1 to 1.0 mm across) with occasional subcircular pellet structures or shell remnants and concentrations of micaeous minerals and opaques. Analysis of a sample of moderately pure grey chert from the Lajoie Lake area by Caimes (1937) returned 97.74% silica.

The results of x-ray diffraction analyses of 30 samples of pelitic rocks and schist from localities across the map area (Table 2.4) show a mixture of quartz, albite, chlorite and muscovite accompanied by accessory amounts of amphibole and opaque minerals such as magnetite, pyrite and pyrrhotite in some samples. Biotite, potassium feldspar and carbonates were found in a few samples.

Near the contact of the major granitic intrusions the cherty rocks and pelites are transformed to garnetiferous biotite-quartz gneiss and andalusite-bearing schists (Photos 2.3 and 2.4) and the volcanic rocks metamorphosed to amphibolitic hornfels.

The Fergusson rocks are assumed to be Paleozoic in age because of lithological similarities with Cache Creek and Hozameen assemblages (Caimes, 1937; Haugetud, 1985), some sparse fossil evidence and crosscutting relationships with plutonic rocks such as the Permian Bralome intrusions. The preservation of fossils in Fergusson and Bridge River rocks is rare because of cataclasis and recrystallization. The first microfossils with a Paleozoic range were determined by M.J. Orchard (see Church, 1989; Cordey and Schiarizza, 1993)."

Bridge River Complex (Unit 1)

Undifferentiated ocean floor sediments (Fergusson) with marine basalt volcanics (Pioneer).

Figure 4 Schematic Stratigraphy

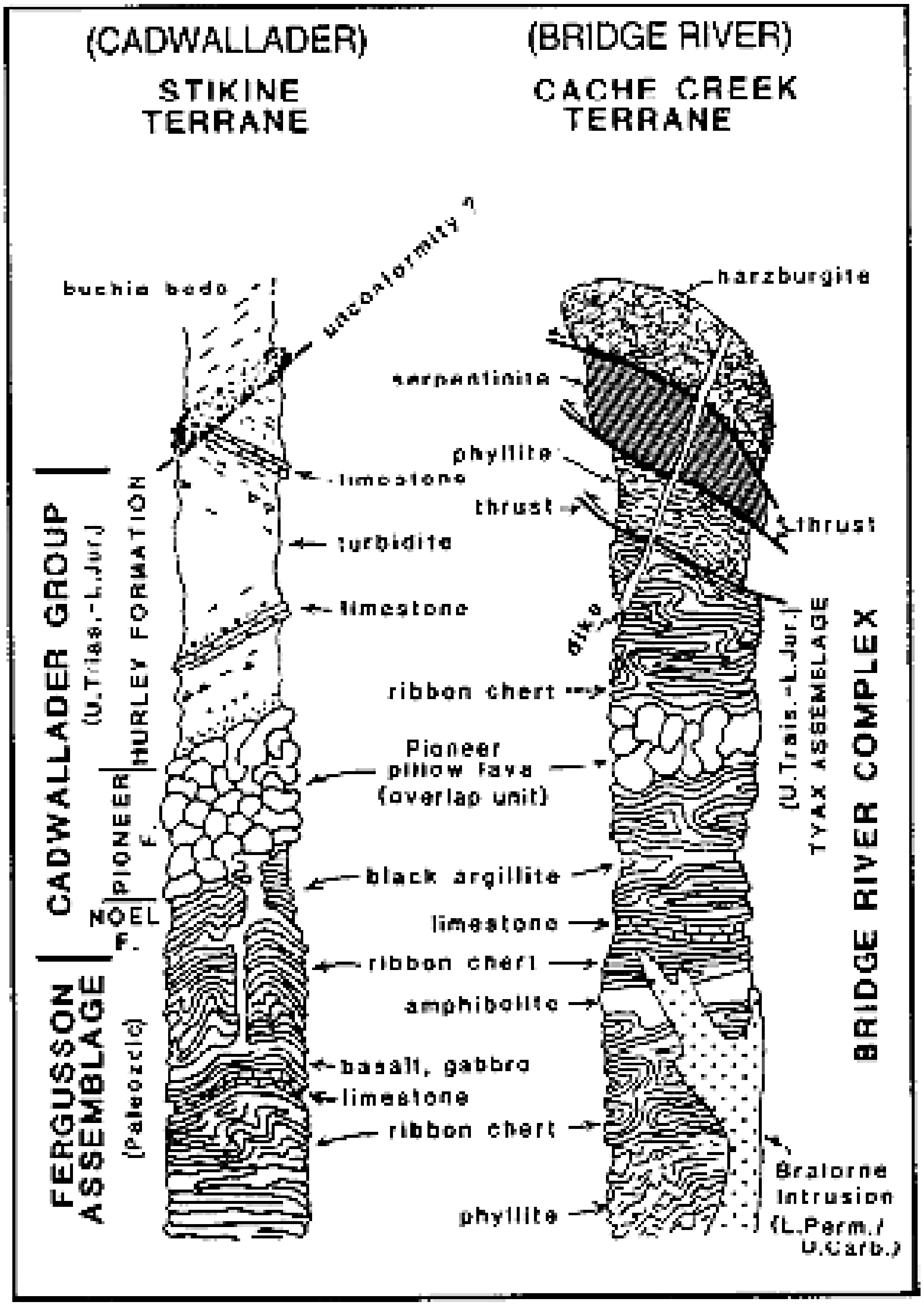
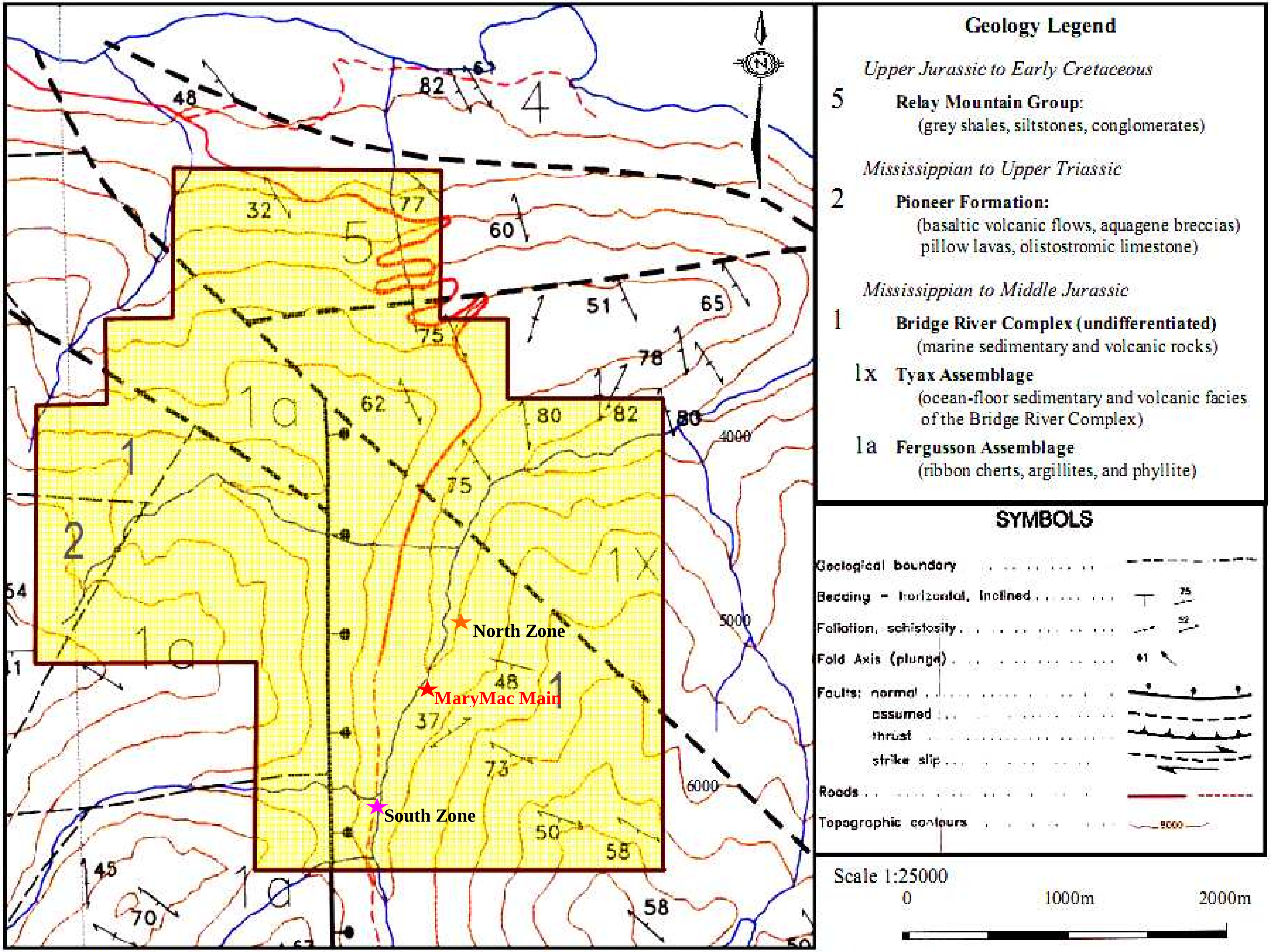


Figure 2.2. Schematic stratigraphy of the Cadwallader and Bridge River terranes in the Bridge River area.

Reference: B.N. Church 1995

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

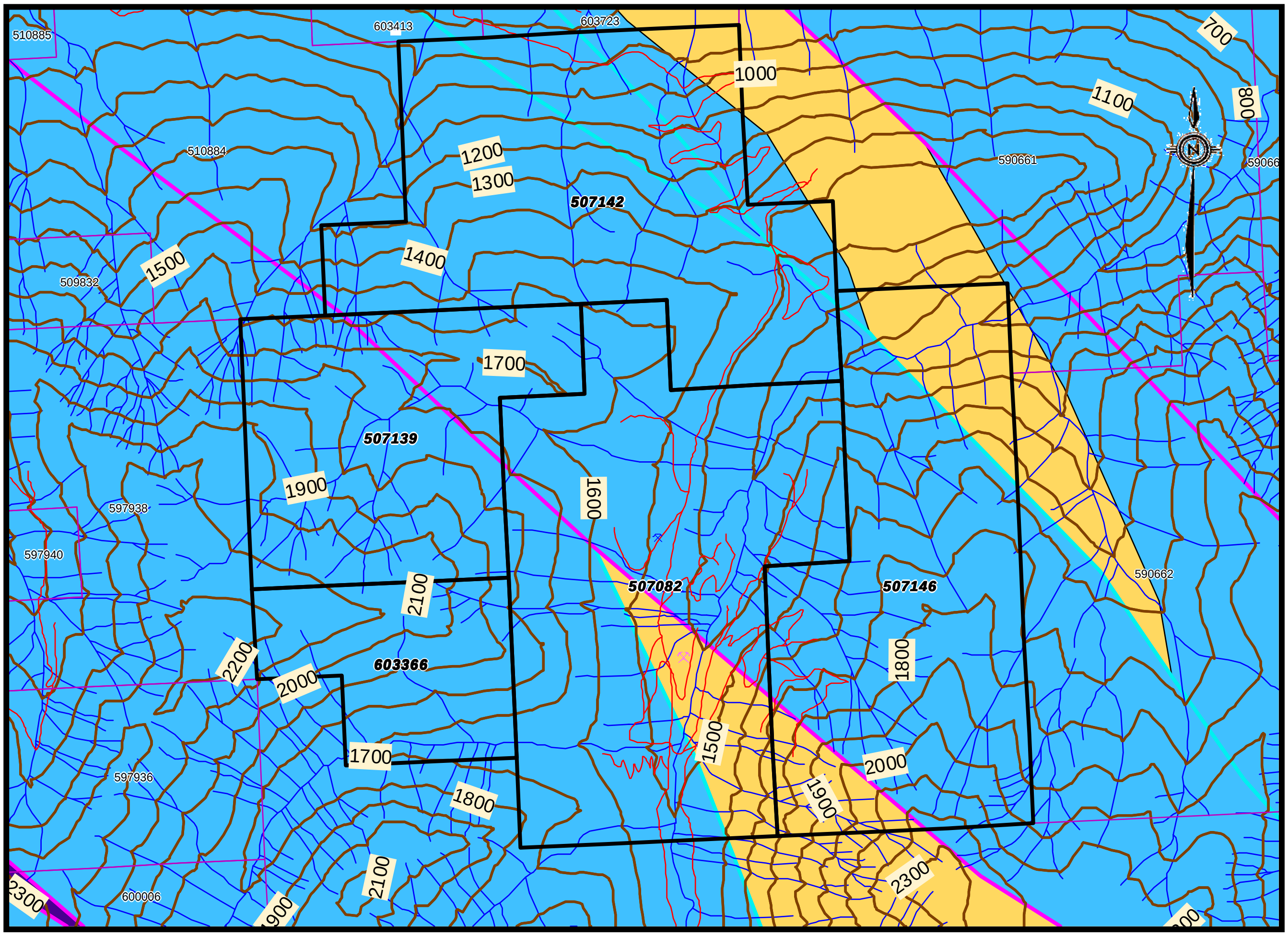


Reference: BCEM Paper 1995-3 Bridge River Mining Camp Paper 1995-3 B.N. Church

Elevation in feet

Another interpretation of the Geology of the Mary Mac area as follows:

Figure 6 Simplified Geology Map



Geology Legend

Jurassic to Cretaceous

Cayoosh Assemblage

🟨 **JKCs** undivided sedimentary rocks

Mississippian to Middle Jurassic

Bridge River Complex

🟦 **MmJBsv** marine sedimentary and volcanic rocks

— Thrust Fault

— Contact

Contour interval in metres Scale 1:30000

Geological Description of Cayoosh Assemblage

"The Cayoosh Assemblage is an upward-coarsening succession of metamorphosed phyllitic argillite, siltstone, and sandstone that conformably overlies oceanic rocks of the Bridge River Complex. The age and regional distribution of these rocks suggest that the Bridge River Ocean was long-lived, and remained open to marine sedimentation until Late Jurassic or Early Cretaceous time. New stratigraphic and paleontological data suggest that outboard terranes, including the Cadwallader and Harrison island arc complexes, may have been linked prior to accretion along the continental margin. Coarsening-upward clastic successions near the top of the Cayoosh Assemblage overlap these outboard terranes and record the final stages of terrane accretion along the ancestral continental margin."
Reference: Journeay & Mahoney 1994

Reference: http://webmap.em.gov.bc.ca/mapplace/minpot/ex_assist.cfm

Economic Geology

Early pioneers in the 1930s arrived on the property by horse back and drove a few short adits on the banks of the Truax Creek near the present day Mary Mac adit searching primary for gold. In later years, Antimony was in demand and a small production rate from a mill processed a rough stibnite concentrate in 1974. A real concerted effort was not seen on the property until the early 1980s when the Hudson Bay Oil and Gas, Keron Holdings, Andaurex Resources, and Pilgrim Holdings Limited applied modern exploration methods. Those programs by the former operators not only enhanced the gold potential and reserves, but also presented evidence pointing towards a much larger and potentially mineralized hydrothermal system occurring just upslope from the three known gold occurrences (Fig. 5) on the east bank of Truax Creek (BC Assessment Reports, 08697, 09746, 11647, 15777, and 18217). The former operators examined only the lower portion of the east hillside above the old Mary Mac workings; the area has not been fully explored nor drilled as the logistics for such a program would be helicopter support.

The property hosts at least three types of mineralization with a fourth being a possibility:-

- The most explored and primary style is the gold hosted in quartz carbonate veins with or without stibnite. This style of mineralization occurs in all three known mineral occurrences and is primarily associated with faulted or sheared-echelon zones. These gold bearing quartz carbonate veins transect all rock types and range from 0.5 to upwards of 5.0 metres, but average between 1.0 and 2.0 metres, as with the majority of the gold veins hosted in the mines throughout the Bralorne Mining District. The gold values within the veins do not correspond to the host rock type, nor are the values proportional to the amount of stibnite content, but a correlation between the intensity of quartz flooding or frequency of veining is apparent, although sub-economic discovered so far to date. Another version of this style of mineralization occurs as quartz-flooded brecciated zones either within the feldspar porphyry dykes or at the contacts of the latter with the Bridge River Group; this style occurs primarily at the Mary Mac Main and North Zones, whereas at the South Zone it is almost non-existent. However, a strong interval of mineralization at the south zone occurs just above an intensive, pervasive footwall of felsic alteration; significant felsic alteration occurs throughout the zone but without economic gold values (AR16378).

- The second style of mineralization was found in a float sample near the South Zone by J. Kowalchuk (AR 28163) in 2005. The sample had massive pyrrhotite mineralization containing greater than 100ppm tungsten and appeared to be intensely altered indicative of a skarn environment.
- The third style is distinctly different occurring at the north and main zones but scantly at the south zone. It is representative of a multi-staged mineralizing event where numerous crosscutting molybdenite bearing quartz veinlets related to an earlier mineralizing event occur within the hornblende-feldspar porphyry dykes (B. N. Church). The dykes appear to be related to a large magnetic copula above the Mary Mac workings (AR 28893). As well, drill logs from this area report molybdenite on many of the fractures that intrude into the Bridge River cherts and volcanics (AR 16378). The large gossan on the flanks of Mount Williams and above the old Mary Mac workings suggests a large hydrothermal event possibly related to a buried intrusive with a potential to host a large molybdenum-gold porphyry system. Of further note, the three known mineral zones North, Main, and South appear to have a strike pattern with a radial orientation at high to moderate angles around the northwest margin of a previous soil-molybdenum anomaly (Ostler, AR 26898). The porphyry molybdenum mineralization on the Mary Mac property is classified as a low fluorine type, a unique occurrence within the area.
- The fourth style of mineralization may occur within the Bridge River Oceanic Volcanics at the south zone. The geological environment at this locale has several hallmarks that identify that the immediate area may host a Cyprus VMS type deposit. 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 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.

Economic Mineral Occurrences in the Vicinity

The Bridge River Mining Camp is considered to be the largest historical lode gold District in the western Canadian Cordillera producing more than 4.1 million ounces of gold from 1897 to 1971. The District with the countless gold occurrences and mines (Fig. 3) all have a common similarity of gold hosted in quartz-carbonate veins associated with fracture and fault zones or at stratigraphic contacts. The following is a brief description of two other past producers having comparable geological characteristics and gold grades with the Mary Mac property. Note the comparison is with the gold deposition and not the molybdenum mineralization:-

Minto Mine

The Minto Mine is located on the north side of Carpenter Lake; the property is on a direct northwest strike-trend with the Mary Mac (Fig 3). Geology Capsule below is adapted from Minfile #092JNE075.

> “The Minto polymetallic veins are on the north side of Carpenter Lake, 1.7 kilometres northeast of the mouth of Gun Creek.
>
> The property is underlain by northwest trending argillites, cherty quartzites, ribbon cherts and volcanics of the Mississippian to Jurassic Bridge River complex. Upper Cretaceous dykes of feldspar porphyry, andesite porphyry, felsite and microdiorite cut north to northwest across the sediments, dipping steeply. Mineralization occurs in shear zones following the intrusive contact of porphyry dykes or the stratigraphic contact between sediments and volcanics. The strata, dykes and veins are offset by late strike-slip faults. The principal ore shoot occurs in cherty quartzites in a strong shear which follows, in part, along the footwall of a 6-metre wide, altered, fine-grained feldspar porphyry dyke (the "Minto dyke"). Veins up to 1.2 metres wide contain lenses and narrow bands of quartz, calcite and ankerite with coarsely crystalline arsenopyrite, pyrite, sphalerite, stibnite, pyrrhotite, galena, chalcopyrite and rare tetrahedrite, jamesonite, bismuth and gold.
>
> Vein material generally has a banded structure defined by alternating metallic mineral concentrations and quartz-carbonate gangue. The vein also contains fragments of altered wallrock. Wallrock alteration is characterized by rare to abundant ankerite and calcite with lesser chlorite, sericite and mariposite.
>
> The fissure, or zone of shearing, continues away from the dyke, but mineralization becomes irregular and weaker. Immediately west of the sediments, the fissure enters greenstone which is leached, carbonatized and slightly mineralized. Northeast and east of the main Minto orebody, within 500 metres, are other zones of mineralization: the Ponderosa zone is a wide area of mineralized cherts carrying small arsenopyrite-pyrite veins and lenses; the Rainbow zone is a 200 metre long narrow shear with stibnite, arsenopyrite and pyrite veins; and the Winter zone where an old (1934) adit explored galena-sphalerite-stibnite-arsenopyrite-pyrite veins in a narrow 200 metres long shear. The best recent assay, obtained from the Rainbow zone, graded 7.78 grams gold per tonne over 1.0 metre and 3.5 grams silver per tonne over 1.5 metres (Assessment Report 14740). The Minto mine was in operation from 1934 to 1940 during which time over 2130 metres of underground work was done, and a total of 80,650 tonnes of ore grading 6.8 grams gold and 19.9 grams silver per tonne was produced. The mine yielded 546 kilograms gold, 1,573 kilograms silver, 9,673 kilograms copper and 56,435 kilograms lead.”

Congress Mine

The Congress Mine, although a minor producer compared to the Minto Mine, is about 4.0 kms to the west thereof and on the same side of Carpenter Lake but is still within the corridor of the northwest structural-stratigraphic trend with the Mary Mac (Fig.3). Geology Capsule below is adapted from Minfile #092JNE029.

> “The Congress mine is underlain by volcanics, cherts and argillites of the Mississippian-Jurassic Bridge River Complex (Group), which are intruded by various Tertiary dykes. Mineralization is in the form of three steeply plunging ore shoots in a northeast trending shear zone traced for 550 metres along strike. The en echelon shear veins splay off the main system in a "herringbone" fashion and fissures widen with a marked decrease in ore grade when passing from greenstones into cherty sediments. Where steeply dipping, northwest striking feldspar porphyry dykes cut the sheared greenstone. A radiometric date of 67.1 Ma +/- 2.2 Ma has been obtained from one of these dykes (Fieldwork 1985).
>
> Veins several centimetres wide contain massive stibnite and fine-grained pyrite and marcasite on the borders with kermesite. Cinnabar is found in fractures and as impregnations between fractures. Wallrock is altered for up to 5 metres on either side of the shear with ankerite, carbonate and dense to finely crystalline quartz. Pyrite, arsenopyrite and rare sphalerite occur as very fine-grained aggregates in the streaked and mottled greenstone. Gold is more closely associated with replacement deposits in the wallrock than with the massive stibnite veins.
>
> Immediately north of the Congress workings, the Congress Extension vein is believed to be a continuation of the main footwall vein. Other showings in the immediate vicinity include the Contact vein about 200 metres east of the Congress mine which is the stibnite-quartz vein referred to in old reports as the North Star-University vein. The vein, although high in antimony, yields low gold values and is narrow and discontinuous.
>
> The Congress mine, consisting of 3 kilometres of underground workings, was operational in 1937 producing 1306 grams of silver, 2582 grams of gold and 38 kilograms of copper from a total of 943 tonnes mined.
>
> Indicated and inferred reserves contained in 2 zones defined by underground sampling and surface and underground drilling are 192,638 tonnes grading 9.24 grams per tonne gold and 1.38 grams per tonne silver (Mine Development Assessment Process - Congress Project, Stage I Report, September 1988).
>
> Probable reserves at Congress are 146,000 tonnes grading 6.85 grams per tonne gold (George Cross News Letter No.56 (March 19), 1996).”

Molybdenum occurrences are rare within the Bridge River area. The Bralorne-Pioneer mines have reported a minor amount of molybdenite whereas the other gold producers in the District, notably the Congress and Minto which are on a direct strike with the Mary Mac, do not have any such occurrence. However, just immediately across from the Congress-Minto Mines on the south shore of Carpenter Lake and just slightly northwest and on trend with of the MaryMac is the BillyO prospect (Minfile # 092JNE107). The BillyO has some similarities to the MaryMac property; both have gold and molybdenum occurring in quartz veins/fractures adjacent to or within felsic dykes. The felsic dykes are interrelated to those that occur extensively throughout the MaryMac property.

Below is a summary of the Molybdenum occurrences in the Bridge River District:-

Table 3

MINFILE Number	Names	Status	Commodities	NTS Maps	Longitude	Latitude	Deposit Types
092JNE014	ROYAL (L.5650), JANA	Prospect	W Mo Cu Zn Au Ag	092J10E	122 38 45 W	50 42 00 N	Porphyry Mo (Climax-type).
092JNE060	TRUAX II, ROCK, ROY	Showing	Au Ag Sb Zn Cu Pb Mo	092J15W	122 46 00 W	50 49 22 N	Porphyry Mo (Climax-type).
092JNE067	MARY MAC (MAIN), MARY MAC (NORTH),	Past Producer Inventory Report	Au Sb Mo Ag Cu	092J15E	122 41 15 W	50 51 30 N	Stibnite veins and disseminations. Porphyry Mo (Low F-type).
092JNE096	MARY MAC (SOUTH ZONE), SOUTH	Developed Prospect Inventory Report	Au Sb Mo Cu	092J15E	122 41 20 W	50 51 50 N	Stibnite veins and disseminations. Porphyry Mo (Low F-type).
092JNE068	LITTLE GEM (L.7567), NORTHERN GEM, GEM, GUN CREEK	Developed Prospect Inventory Report	Co Au U Mo As	092J15W	122 57 12 W	50 53 47 N	Classical U veins. Five-element veins Ni-Co-As-Ag± (Bi, U). Porphyry Cu ± Mo ± Au.
092O 012	ELIZABETH, YALAKOM, YALAKOM NO. 1-4 (L.7408-7411)	Developed Prospect Production Report Inventory Report	Au Ag Pb Zn Cu Mo	092O02E	122 32 58 W	51 01 53 N	Au-quartz veins.
092JNE007	CORONATION (L.539), 77 VEIN (BRALORNE), COUNTLESS (L.1177), BEN D'OR, 53 VEIN (BRALORNE), LITTLE JOE MINE	Past Producer Production Report Inventory Report	Au Ag Zn W Pb Mo Cu	092J15W	122 47 10 W	50 46 00 N	Au-quartz veins.
092JNE015	STANDARD (L.1940), UNICORN, BULLDOG, LION, STANDARD CREEK	Showing	Au Ag Mo As	092J10E	122 36 08 W	50 41 30 N	Au-quartz veins.
092JNE024	ARIZONA (L.3176), BRX	Developed Prospect	Au Ag W Pb Zn Cu Mo	092J15W	122 50 20 W	50 50 30 N	Au-quartz veins.
092JNE038	BEN, AXE	Showing	Au Mo	092J09W 092J10E	122 29 40 W	50 41 30 N	
092JNE153	FOX, OWL	Showing	Ag Cu Pb Mo	092J10E	122 33 53 W	50 41 43 N	Au-quartz veins.
092JNE043	CHALCO 5 (L.7700), LOWER PIEBITER, PIEBITER CREEK, LIME CREEK	Developed Prospect Inventory Report	W Cu Au Ag Mo	092J10E	122 38 35 W	50 43 20 N	W skarn.
092JNE086	OLYMPIC (MANNERS ZONE), MANNERS, ALTA (L.6282)	Prospect	Au Ag Mo Cu	092J15E	122 43 35 W	50 53 40 N	Cu skarn.
092JNE107	OLYMPIC (L.6280) (BILLYO ZONE), OLYMPIC (MOLY ZONE),BILLYO, MOLY	Prospect	Mo Au Ag Cu	092J15E	122 44 00 W	50 53 45 N	Cu skarn.

Reference: (modified) Production and Mineral Occurrences in the Bridge River Mining Camp (MinFile)

Figure 7 Plot of Porphyry and Vein Deposits

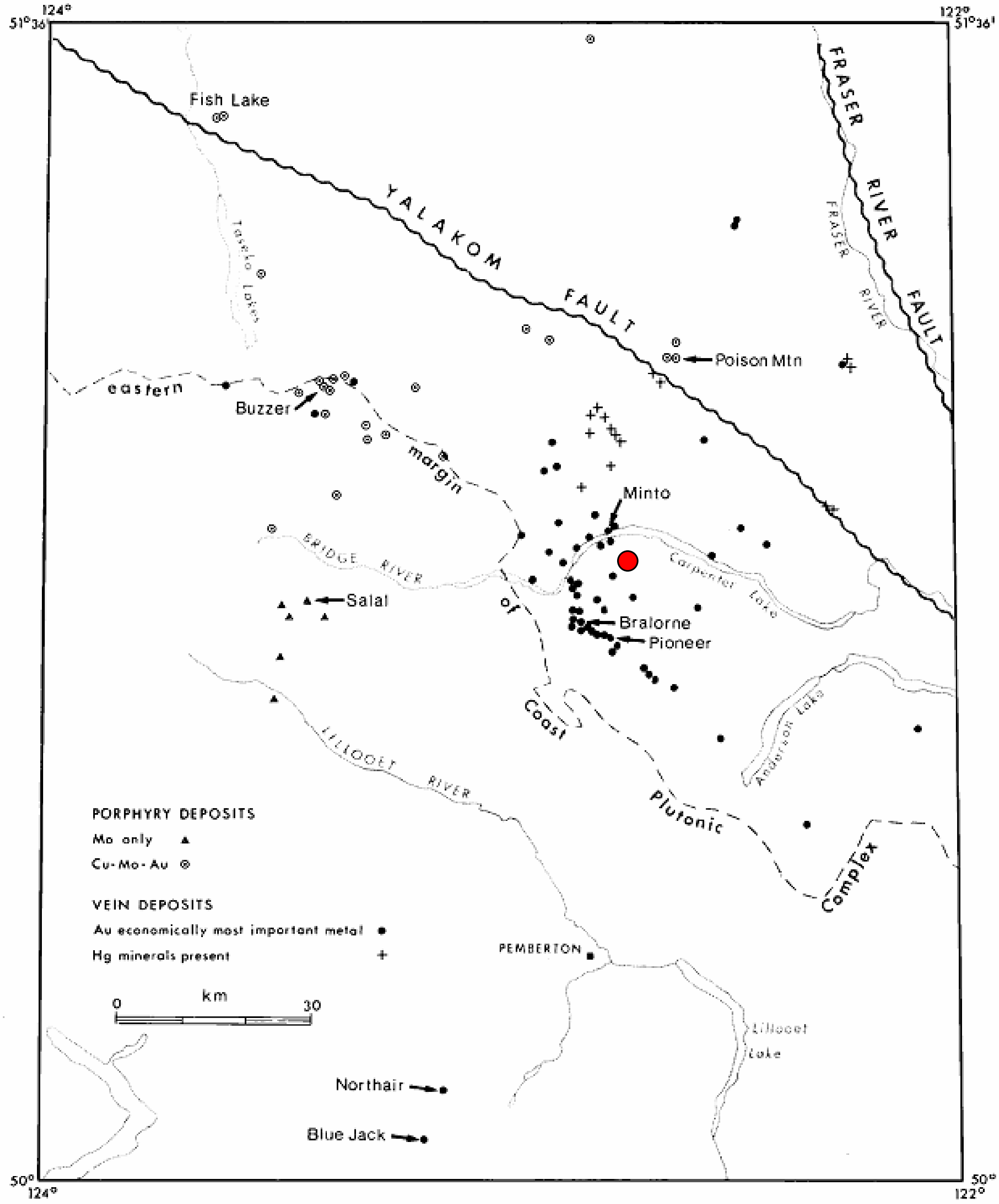


FIG. 5. Redrafted computer-generated plot of all porphyry deposits, and all vein deposits in which Au is the economically most important metal, and all deposits containing Hg minerals.

Reference: Woodsworth et al 1977 (modified); Economic Geology Volume 72 page 176

Red dot is approx., location of Mary Mac Property

The above figure is a plot of the various mineral occurrences categorizing deposit style. The Mary Mac is not plotted in terms of either Au-vein or Cu-Mo-Au porphyry type. However, the nearest Mo-occurrences on trend with the Mary Mac property are approximately 40kms to the northwest in the Taseko Lakes District. The Mo-deposits at Taseko Lakes are classified as a Cu-Mo-Au porphyry style occurring as altered silicified igneous breccia pipes within the Coast Plutonic Complex (CPC) near the contact with the Bridge River Complex. The Salal District 60 kms due west of the Mary Mac contains a collection of high level porphyry Mo-only stocks at the root zones of eroded Miocene volcanic centers confined entirely within the CPC (Woodsworth, 1977). In regards to the Mo-occurrence at the Mary Mac Property, no such evidence exists for an intrusive that has an affinity with the aforementioned districts. Nonetheless, the Mary Mac Mo-occurrence is in an area known to have intense silicification with swarms of quartz veins and extensive fracturing (AR 9746). Below is a brief summary of two Mo-Porphyry occurrences in the GoldBridge area by N. Church; the first located near the former producer Bralorne-Pioneer Gold Mine and the second is on trend to the northwest adjacent the Mary Mac Property:-

ROYAL (MINFILE 92JNE014)

> "The Royal prospect is on the lower southwest slope of Royal Peak, 11 kilometres southeast of the Pioneer mine, on a small tributary of Cadwallader Creek, just west of Standard Creek at latitude 50'42'05" north, longitude 122'38'30" west. Access is by the Cadwallader Creek logging road to Piebiter Creek then 1.5 kilometres on the Standard Creek bush road.
>
> *History*
>
> Most of the early exploration work on this property was done by Cadwallader Gold Mines Limited in 1932 and 1933. It consisted of ground-sluicing, trenching and a short crosscut adit driven about 45 metres below the road. No further work was recorded on the property until 1980 and 1982 when Hillside Energy Corporation completed a geochemical program. In 1984 the property was acquired by Trans Atlantic Resources Inc. This resulted in completion of several geophysical programs (resistivity, VLF-EM and magnetic surveys) and a drilling program by 1986.
>
> *Description*
>
> The property is underlain by Fergusson chert, phyllite and schist, dipping 70" to 80" south and southwest. These metasedimentary rocks are cut by Bralorne gabbro and a narrow zone of peridotite. The original discovery was a southeasterly striking quartz vein, about a metre wide, exposed in the Bralorne intrusion on the tributary creek.
>
> Sampling of vein material in the adit below the discovery showing yielded 0.1 gram per tonne gold, 3.5 to 7.0 grams per tonne silver and 0.01 to 0.25% tungsten-oxides (Ostler, 1980). Diamond drilling intersected vein quartz with pyrite, minor chalcopyrite and molybdenite; gold assays were disappointing (Carpenter and Haynes, 1988)."

OLYMPIC (MINFILE 092JNE062)

> "The BillyO prospect (MINFILE 092JNEl07), located approximately 600 metres to the east and 250 metres above the Leckie portal, and is underlain by fine-grained brown-weathering skarn and greenstone in what appears to be Fergusson assemblage. The mineralized zone, traced for more than 100 metres by trenching on surface, consists of lenses and stringers of pyrite, pyrrhotite, chalcopyrite and magnetite. Precious metal values are low.
>
> Stevenson (1958) has described the BillyO adit as follows: "This adit has been driven south 30" east to the face at 150 feet [46 m]; from here one crosscut was driven 30 feet [9.1 m] northeasterly and another 10 feet [3m] southwesterly. At 23 feet [7 m] from the portal, the adit intersects a 3-inch [8 cm] shear, striking northeasterly and dipping 45˚ southeastward, that now consists principally of limonite. From this shear for a distance of 40 feet [12 m] southeasterly the working intersects a zone of northeasterly striking, southeastward dipping stringers of pyrite and magnetite. This and the limonite shear, appear to be the only mineralization intersected by the adit. The rock in the adit includes green, actinolite-rich lava, light-brown, dense hornfels, probably a tuff, and between 70 and 110 feet [21 and 33.5m] from the portal, light brown garnetite. Patches of light green diopside rich rock are also occasionally seen."
>
> McLeod (1986) reports the following assay of a grab sample from the Billy0 dump: 3.8 grams per tonne gold; 3.4 grams per tonne silver. Another grab sample from a sulphide lens ran 5.9 grams per tonne gold, 5.14 grams per tonne silver and 0.54% copper; an assay of diamond-drill core of massive sulphide, 30 centimetres across, returned 0.27 gram per tonne gold, 3.43 grams per tonne silver and 632ppm copper.
>
> The Moly zone, just west of the BillyO adit on Marquis Creek, comprises fracturing and quartz veining adjacent to and within a broad felsic ("aplite") intrusion surrounded by a pyrite-gypsum halo. Mineralization consists of pyrite, arsenopyrite, pyrrhotite (dendritic), molybdenite, ferri-molybdenite and manganese staining (Price, 1983).
>
> The Manners prospect (MINFILE 092JNE086) is just to the east of Billy0 and may be an extension of the Billy0 zone. The hostrocks are siliceous and fine-grained metasedimentary rocks and volcanic rocks of acid and intermediate composition. Contact metamorphism resulting from felsic and dioritic intrusions has produced a quartz-bearing calcsilicate garnet skarn containing minor amounts of magnetite, chalcopyrite and molybdenite. Assays return 0.15 gram per tonne gold, 1.2 grams per tonne silver, 830 ppm copper and 20 ppm molybdenum."

Below is a description and Map (Fig. 8) of the Cu-Mo zone on the BillyO by B. Price (AR 11139):-

> MOLYBDENITE ZONE:
>
> "After molybdenite was seen on fractures with pyrite, gypsum and chalcopyrite in several sections of the core from both holes, presence of a molybdenite zone was verified by prospecting. A broad gossanous area on Marquis Creek corresponds with fracturing and quartz veining adjacent and possibly within the broad aplite dyke centered on the creek. Molybdenite was seen in two separate outcrops 500 meters apart -- west of the massive sulphide zone and also at the "Mannersu adits. A broad pyrite/gypsum halo surrounds the "center" as defined by Noranda's geochemical survey (Figure 5B)."

The Mary Mac Property is dissimilar in several aspects to the BillyO: - chalcopyrite mineralization occurs sporadically in the Andesite unit at the South Zone but is rarely encountered within or adjacent to the felsic dykes nor identified with fractures and quartz veins containing Molybdenite. Furthermore, the contact zone around most of the felsic dykes is either; faulted, bleached, silicified-mylonized, chlorite-pyrite-argillic altered, or a combination thereof.

Figure 8 **Map of the BillyO and Manners Zone on the Olympic Property** (by B. J. Price)

Survey Description

Preface

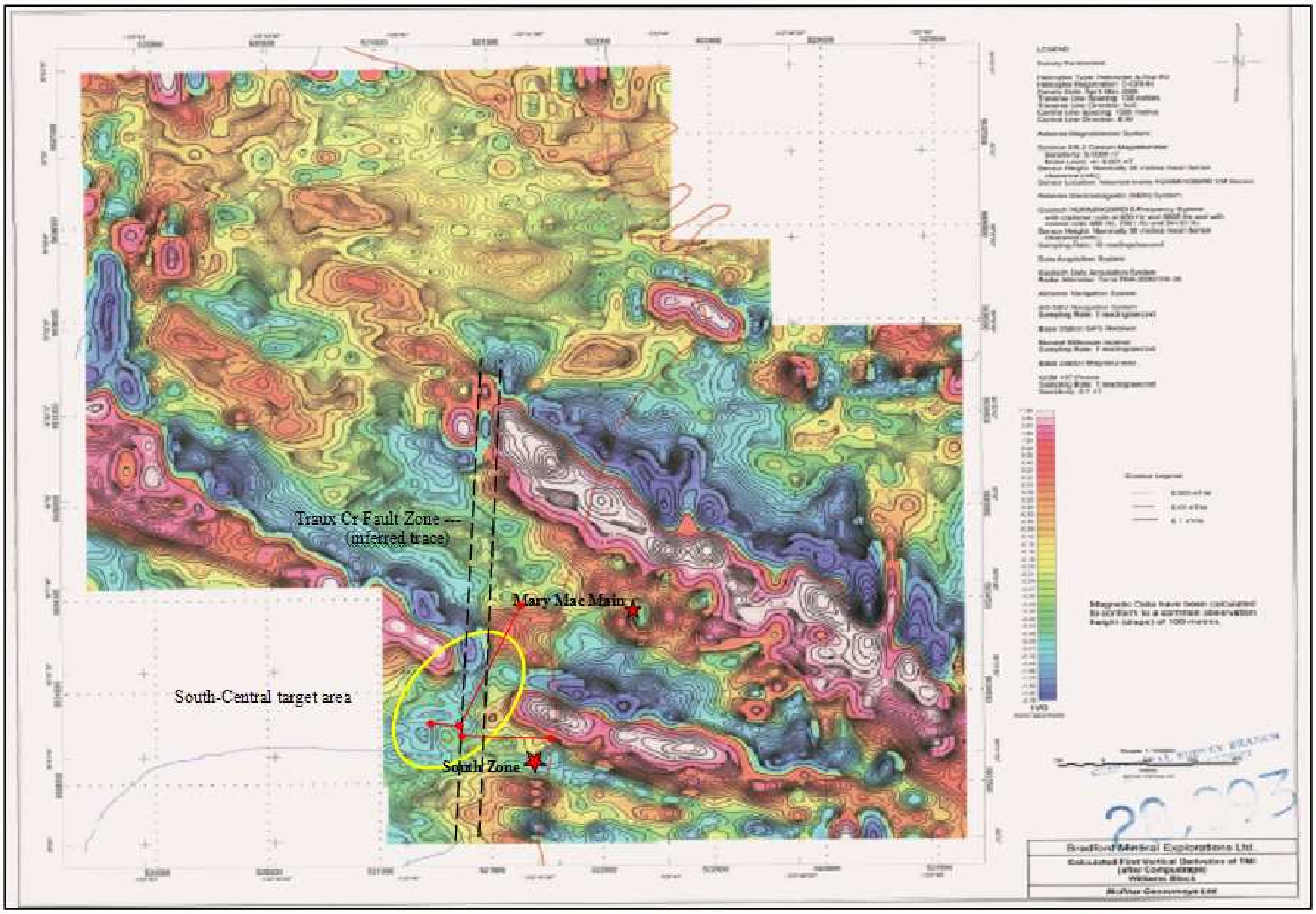
The new work performed on the Property in September 2008 was a preliminary test of the suitability of soil sampling to provide meaningful results that may outline a buried mineral deposit. The difficulty in obtaining creditable data in a soil horizon developed by slide and glacial factors is tenuous 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 soil anomaly associated with the zone appears to have an average northward drift component of about 100- 150 metres comparable to the South Zone soil gold anomaly northward drift of 75-125 metres (AR 15777). Depth to bedrock documented in the drill holes ranges from 2.0 to 5.0 metres at the South Zone and 3.0 to 12.0 metres at Mary Mac Main on the lower hillside slope immediately east of Truax Creek (AR 16378).

In combination with other exploration programs, soil sampling can be useful in targeted areas where geophysics has identified potential mineral anomalies. The Gray Rock Mines property located at the headwaters of Truax Creek near the Bendor Batholith has had a number of geophysics programs over the years by various operators (Westfrob 1976). The results from the geophysics by Westfrob identified a number of drill targets based on EM and Magnetic anomalies. Future drilling found no gold occurring at the EM conductors but only graphite (AR 13992). The recommendations from a later airborne geophysics survey of the Grey Rock Mine suggested a reconnaissance soil sampling across the strike of the magnetic lows associated with the VLF-EM highs (AR 18434).

Exploration Methodology

The current exploration program was focused at the South Zone Area where several magnetic lows were delineated in a previous airborne geophysics program (AR 28893). A comparison of the data from the 2006 Heliborne magnetometer survey to known mineralized zones occurring on the property confirmed the association of gold occurring in magnetic lows, the South Zone trend is within a “trench low” and nearly parallel to and between two northwest trending magnetic highs (Fig. 9). The immediate area to the east of the South Zone has a partial circle of a magnetic low and to the north of the Zone is a visible break in the magnetic high trend that may have been caused by the Truax Creek fault. The South Zone position appears to occur on the north limb of a minor fold just below the fold nose. The design of the current exploration program was to criss cross the magnetic lows near the South Zone area with two east and one north soil sampling lines to test for any metals that may be associated with the geophysics anomalies. Figure 9 below shows the area of interest circled in yellow and marked in red are the soil sampling traverses (approx. positions).

Figure 9 Map of Total Magnetic Intensity (Calc. 1st Derivative) with Target Area



Reference: http://www.em.gov.bc.ca/DL/ArisReports/28893.PDF (Soil sampling lines are marked in Red)

(Approx. plots only of soil line traverses)

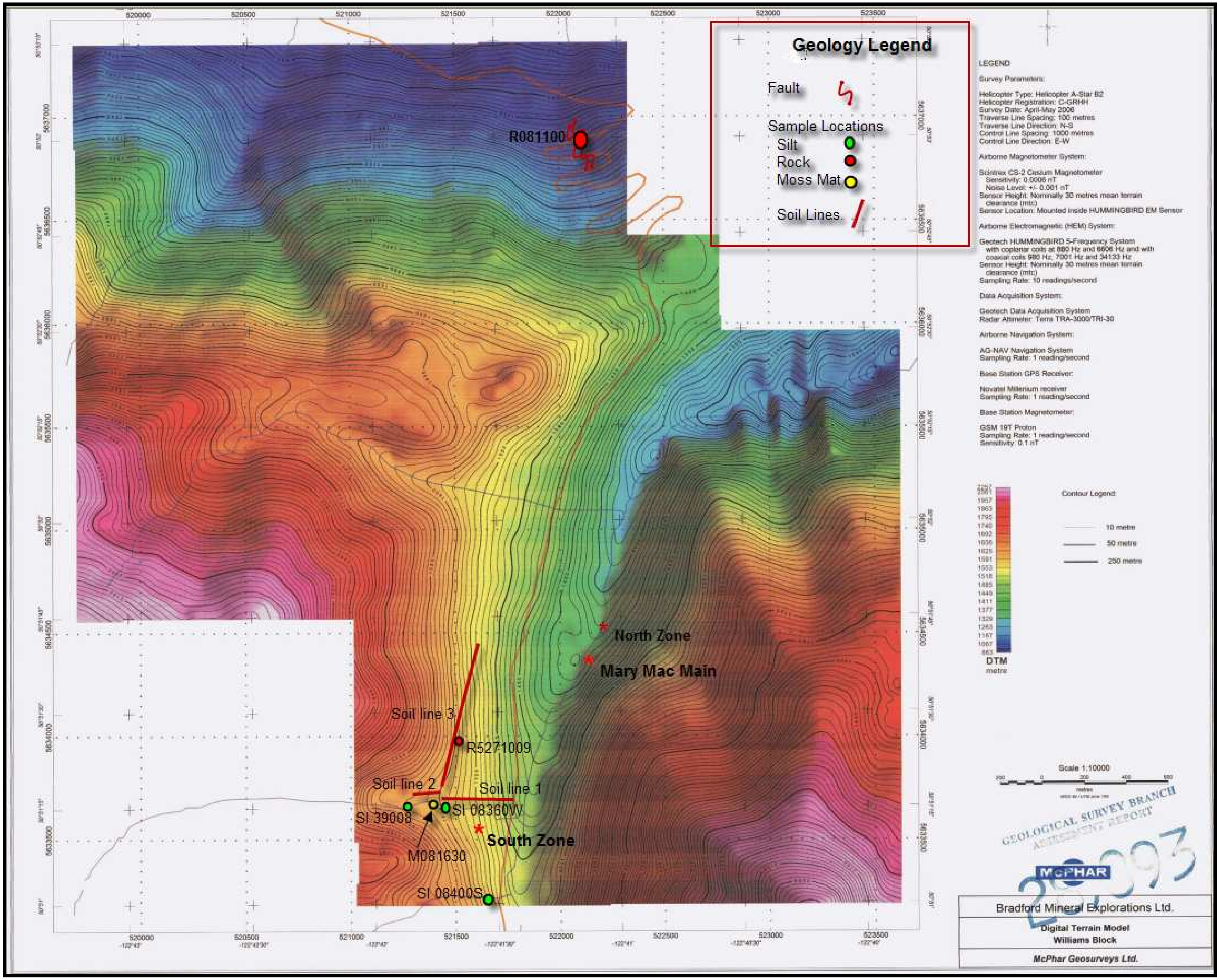
Geochemical Sampling and Analysis Description

The current portion of the “work in progress” program was the initial phase of an on-going sampling survey of the property in targeted areas. Results from this survey will form the exploration parameters of future programs. A total of 72 samples consisting of 1 moss mat, 3 silts, 2 rocks, and 66 soils were collected by the author in the presence of an assistant. Sample collection sites are displayed in Figure 10.

At each silt sample station, the GPS location, a visual estimate of water flow strength, rock float description, and the amount of sample recovery was recorded. To avoid false or misleading results, the silt sample at each station was taken from various points within a 5m range to prevent the “nugget effect” for gold and other heavy elements; the 1 moss mat sample was collected in a similar manner. At each soil sample station an attempt to record the depth of collection, ash layer thickness, the slope direction with gradient, soil texture, soil color, and general observations were noted. A 150+ gram of material from each station was collected and then placed in a kraft paper bag; 6 mil plastic bags were used for the moss mat and rock samples. Each bag was marked with an identifying number to record the location. Every sample was carefully handled to represent an accurate metal content of the collection site without contamination from external sources. No duplicates of soil or silt samples were taken for quality control purposes.

The samples were air dried and submitted by the author to Acme Analytical Labs of Vancouver BC for ICP-Mass spectrometry (Acme category “Group 1DX”) analysis. Acme Labs used their standard procedures for preparation and analyses of the received samples by the following steps:- sifted up to 100 grams of each sample with an -80 mesh screen to obtain 1.0 gram of sieved material of which is split into two 0.5 gram sample portions. Moss-mat sample was prepared by air drying and then shaking the mat to obtain the fines; the organic material was discarded then submitted to Acme Labs for standard analysis procedure as above. Rock samples were prepared by crushing 1.0 kg of material to 10 mesh and then split into 250g portions that were pulverized to -200 mesh. Subsequently a 0.5 gram sample split (rocks 15 grams) were digested with a 2-2-2 acid mixture of $HCL-HNO_3-H_2O$ solution then heated at 95°C for one hour (hot Aqua Regia). Afterwards, the digestion was diluted and analyzed by the ICP/MS machine for 36 elements. No sample preparation was carried out by the field personnel other than air drying. Scanned copies of the Geochemical Analysis Certificates are presented in the appendix as: - Table 1a for soils, Table 2a for rocks, Table 3a for moss-mat, and Table 4a for silts.

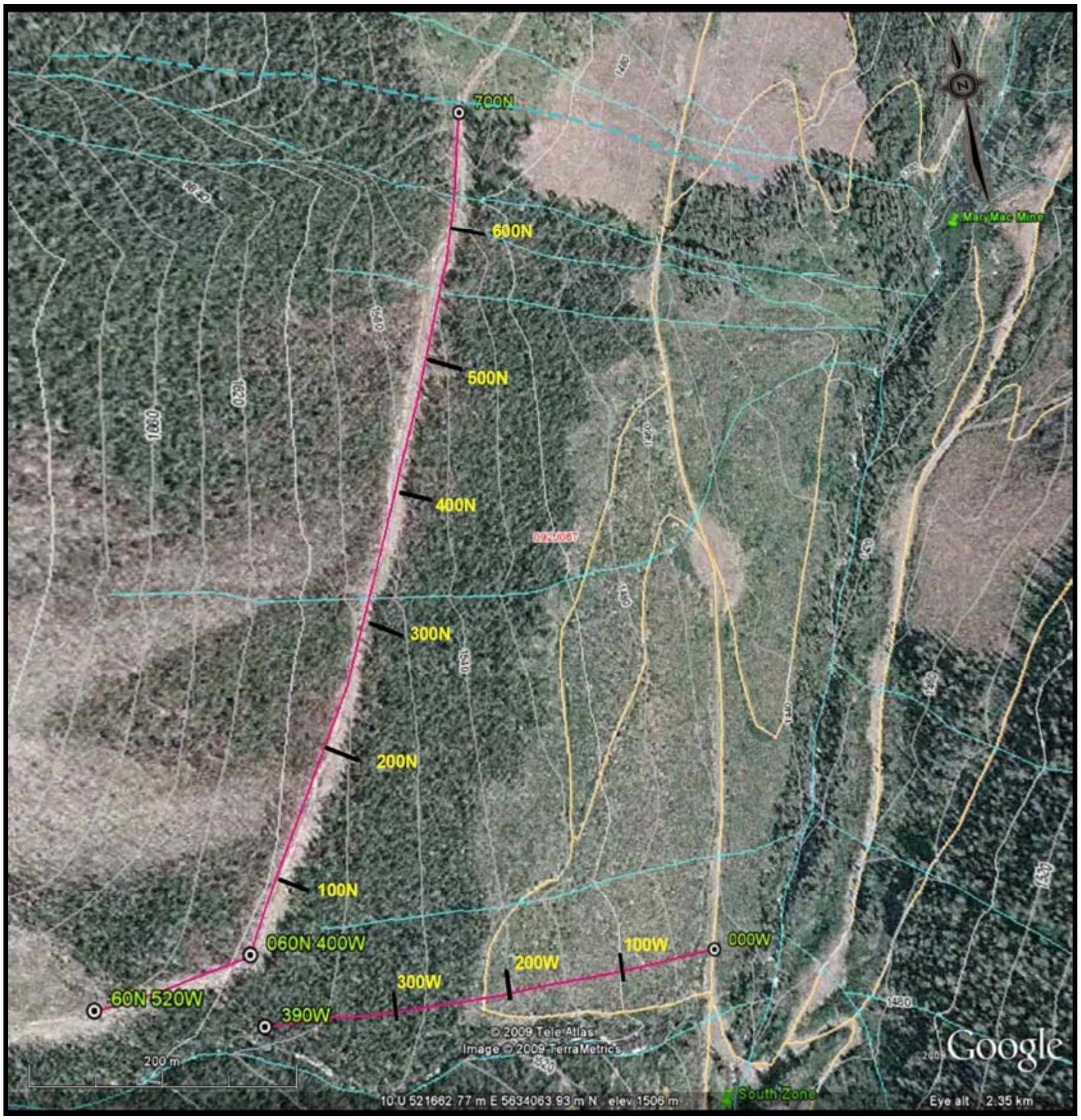
Figure 10 **Sample Locations** (approx.



Soil Sampling Survey

The purpose of the soil survey was to test the magnetic lows occurring near the South Zone Area for possible gold mineralization. The survey also expanded on the historic results of previous operators (AR15557) by sampling an area that has never been soil tested. A total of 66 soil samples were collected from the glacial drift horizon below the ash layer on three separate traverses: - Line 1, 000-390W; Line 2, 060N400W-60N520W; and Line 3, 60N400W-700N (Fig. 11). Initial planning was to collect double the amount, but due to the depth from surface, the thickness of the volcanic ash layer, and compactness of the glacial sampling medium; it proved arduous and time consuming as the majority of the samples had to be either hand augured or pick axed.

Figure 11 **Soil Line Schematic**



The yellow identifiers are distance points along traverse lines marked in red, start and end points of each soil line are in green. Scale bar at bottom left of picture

The reference point of the soil survey is the eastward flowing creek at the South Zone where it crosses the main forest service road immediately west of Truax Creek. To locate the first sampling station 000W on Line 1, start from a position mid-way on the bridge that crosses over the east flowing creek and head northward along the west side of the main forest service road for a distance of 50 metres and the location of 000W is at the base of the road cut. From station 000W, the sampling line direction is due west to station 390W; intermediate sample stations were hip-chained and slope corrected to 15m intervals. Line 2 was started at station (060N 400W) on the upper road bend at approximately 400m distant from 000W station and 60m (slope-corrected) northwards from the east flowing creek center. Line 2 sample stations were at 15m intervals on the north side of the road cut and ended at station 60N 520W; slope correction was not necessary due to the negligible gradient. Line 3 was referenced from 060N 400W station and headed north to station 700N. Line 3 stations were slope corrected at intervals of 20m; sample collection was from the base of the bank cut on the western side of the road. Flags were placed at all stations and inscribed with an identifying number according to the station address. The kraft paper bag containing the soil sample collected at each site was marked with the same number as displayed on the flag identifying the station address.

Soil Sample Descriptions

All soil samples were collected in the glacial medium consisting of lodgement or basal till at the base of the road cuts to supra-englacial till occurring immediately below the bottom of the ash layer. The following tables contain a description of each sampling station within the individual line traverses. Brief explanations of the categories are as follows: - Soil texture is defined as whether compact or loose due to either compression or deposition by glacial factors and generally consists of a sandy to gritty matrix with either of, or a mixture of rounded to sub-rounded to angular rock fragments interspersed through out. General observations are remarks about the amount of rock fragments and angularity together with moisture content of the sample, unusual colour tinge indicating a minor clay component to the soil texture, any surface indications of the type of glacial medium or depth to bedrock, and surface features of shallow to broad slope depressions signifying a wide gulley. The sample description tables also have reference to the assays obtained for copper, cobalt, arsenic, gold, and antimony together with coloured data showing above the "outer limit of background variation." The outer limit of background variation or threshold is calculated at a visually significant break in data from one cluster to another along trend occurring within the mid to top range of the third quartile for the element per line traverse.

Line 1   000W-390W

Sample # S08…	Depth of Sample (cm)	Ash layer thickness (cm)	Slope Gradient (˚→/˚)	Soil texture	Soil colour	General Observations	Assays				
							Cu (ppm)	Co (ppm)	As (ppm)	Au (ppb)	Sb (ppm)
000W	270			compact	Brn	numerous ang rk frags	135.7	39.7	200.0	24.5	12.6
015W	45	25		Loose/sandy	Lt-med brn	occasional ang rk frags	90.3	29.0	115.2	4.9	3.4
030W	70	37		Loose/sandy	Lt-tan brn	occasional	121.0	33.1	142.9	9.0	4.1
045W	70	45		Sandy/gritty	Lt-tan	"	51.9	26.3	105.5	5.1	2.9
060W	45	35	20→260	Sandy/gritty	Lt-tan	occasional	86.5	31.6	141.7	9.6	4.6
075W	50	40		Sandy/gritty	Lt-tan	"	68.6	28.9	216.5	16.7	3.5
090W	70	45		Sandy/gritty	Lt-tan brn	occasional	89.1	28.8	138.6	5.1	2.7
105W	50	40		Compact/gritty	Lt-med tan	" /moist	46.4	19.9	74.4	1.9	1.6
120W	60	35		Sandy/gritty	Lt-tan brn	" /dry	35.2	21.1	47.3	1.8	2.4
135W	45	25		Sandy/gritty	Lt-brn	" / moist	50.9	26.1	115.3	2.4	2.2
150W	60	30		Sandy/gritty	Lt-med brn	Seldom /very dry	64.4	20.2	75.6	26.4	2.7
165W	70	50	18→250	Sandy/gritty	Rusty brn	" /dry	39.8	14.5	42.1	1.1	1.7
180W	60	30	15→260	Sandy/gritty	Brn	" /dry	45.2	19.6	60.0	1.1	1.9
195W	40	30		Sandy/gritty	Brn	argillite float w/qtz	45.0	18.8	61.2	6.2	2.6
210W	15	0		Compact/gritty	Brn	Surf-boulders/wet	27.5	13.7	34.4	2.1	1.9
225W	65	40	06→270	Loose/sandy	Dk-brn	seldom /very wet	80.7	23.9	91.5	8.3	3.0
240W	60	30		Loose/sandy	Dk-brn	" Dry	41.4	19.0	55.2	1.7	8.0
255W	70	60	05→230	Loose/sandy	Med-brn	" Dry	27.9	16.3	51.0	0.8	2.0
270W	70	65		Loose/sandy	Med-brn	" Dry	39.9	21.2	65.2	15.5	2.1
285W	70	25	05→270	Gritty	Med-dk brn	occasional/ pebbles/wet	78.1	28.4	91.8	3.0	3.2
300W	75	60		Gritty	Brn	seldom/dry	30.3	20.0	52.1	152.7	1.7
315W	80	55		Sandy/gritty	Med-brn	seldom rock frags/dry	57.0	23.8	72.4	4.0	3.3
330W	75	60	08→280	Sandy/gritty	Med-dk brn	milky qtz-sand grains /wet	64.4	28.3	93.2	3.1	3.2
345W	90	60		Sandy	Med brn	occasional pebble frags	43.5	21.1	56.6	7.2	1.9
360W	90	50	05→300	Sandy compact	Brn	numerous	Missing assay				
375W	80	50	0	Compact	Med brn	"	52.3	21.2	80.8	4.1	2.0
390W	110	70	30→330	Sandy/gritty	Med brn	occasional	67.0	25.8	79.7	1.8	2.6
Statistics (gold statistics calculated without the highest value for Line 1)				**Line 1 Data**		Mean	60.8	23.9	90.8	6.7	3.2
						Median	52.1	22.5	77.6	8.3	2.6
						StDev	27.3	6.05	46.1	16.9	2.3
						outer limit of background variation (3rd quartile range)	78	28	105	9.0	4.0

Line 2 60N400W-60N520W

Sample # S08… 60N-	**Depth of Sample** (cm)	**Ash layer thickness** (cm)	**Slope Gradient** (˚→/˚)	**Soil Texture**	**Soil colour**	**General Observations** (all samples taken from road cut base) basal till horizon	**Assays**				
							Cu (ppm)	**Co** (ppm)	**As** (ppm)	**Au** (ppb)	**Sb** (ppm)
400W	90	50		gritty/sandy	med brn	occasional rk frags	101.2	32.4	82.7	6.3	5.2
415W	100	40		pebble-like	lt grey brn	20 cm of brn sandy layer then grayish brn sandy w/ ang pebbles layer	122.4	37.0	89.7	6.3	4.4
430W	200	30		gravel-like	brn w/lt grey	grayish tinge to brn soil	162.0	23.3	109.0	17.2	23.4
445W	120	25		" "	lt grey	80cm of dk brn sandy layer followed by grey compact gravel layer	86.6	23.4	63.2	7.7	2.5
460W	110	40	325→24	sandy/rocky	lt grey/rusty	sandy layer followed by greyish compact gravel (ang- sub round) layer	111.0	26.7	88.9	9.3	3.5
475W	100	25	310→16	" "	lt grey-brn	" " "	98.6	35.7	87.9	12.9	3.3
490W	110	25	305→12	" "	" "	" " "	105.4	29.9	189.4	8.7	3.8
505W	120	25	300→8	" "	" "	" " "	102.3	35.6	96.8	11.3	3.3
520W	100	25	330→3	" "	" "	" " "	95.2	32.3	126.5	27.0	4.0
Statistics (Note, high Sb value not included in calculation)					**Line 2 Data**	Mean	109.4	30.7	103.8	11.9	3.8
						Median	102.3	32.3	89.7	9.3	3.7
						StDev	22.1	5.2	36.5	6.7	0.8
						outer limit of background variation (3rd quartile range)	105	32	109	13	5.0

Line 3 60N400W-700N

Sample # **S08…**	**Depth of Sample** (cm)	**Ash layer thickness** (cm)	**Slope Gradient** (˚→/˚)	**Soil Texture**	**Soil colour**	**General Observations** (all samples below were taken from the base of the road cut)	**Assays**				
							Cu (ppm)	**Co** (ppm)	**As** (ppm)	**Au** (ppb)	**Sb** (ppm)
080N	100	60		gritty/gravel	gry-brn	typical soil ang to sub rounded rk frags in a matrix of sandy to gritty particles with lt-gry indicating more clay content (basal till horizon)	110.0	29.2	77.3	7.4	4.3
100N	110	35		"	"	"	114.3	26.7	85.5	7.9	8.9
120N	140	30	24→110	"	"	"	116.7	31.1	106.0	8.2	8.7
140N	120	30		"	"	"	106.3	21.8	39.2	7.1	3.0
160N	125	30			lt-med brn	"	119.8	22.2	61.8	7.2	9.5
180N	120	35		"	"	"	120.1	20.9	61.1	7.3	9.8
200N	150	30	"	"	bluish gry	sample moist w/ greyish tinge, rk frags as above	163.1	48.6	354.0	6.1	42.4
220N	135	30	28→075	gritty/sandy	brn	moist/ "	144.7	20.9	55.4	6.5	20.0
240N	130	20	30→100	sandy/gravel	brn	slightly moist/ "	138.6	25.3	79.6	9.2	22.7
260N	115	75	28→090	"	"	"	134.6	24.2	55.3	5.8	17.2
280N	130	30	26→080	"	"	"	132.9	26.3	75.1	9.7	19.0
300N	130	40	30→075	"	med brn w/ lt gry tinge	moist, rk frags of various sizes and angularity in a gritty sand matrix w/ clay	113.2	24.0	83.1	6.6	13.7
320N	160	25	28→080	very gravel	lt-med brn	slightly moist	129.8	30.0	101.5	24.0	21.5
340N	150	eroded	26→080	gritty-gravel	"	location is in a broad shallow gully	128.5	31.7	79.2	24.0	26.7
360N	125	30	34→080	"	"	soil has lt-gry tinge (clay)	117.3	29.8	89.8	28.7	18.8
380N	150	30	32→080	"	"	"	114.3	24.8	105.6	27.4	20.8
400N	125	25		"	lt brn	typical soil as in 300N	103.0	27.7	93.4	26.7	13.7
420N	120	20	27→090	"	lt-med brn	soil has slight gry tinge	103.4	33.1	105.7	49.2	21.6
440N	100	25	30→060	"	"	lt gry tinge to soil	104.1	36.3	128.6	76.4	15.8
460N	130	20	32→065	sandy/gritty	lt gry brn	occasion rk frags/coarse sandy soil	115.2	28.7	228.4	97.8	19.6
480N	85	30	31→075	"	"	increasing rk frags/less sandy component	107.4	32.9	128.5	47.0	16.5
500N	130	40		"	lt-med brn	slight gry tinge, rk frags component as in 300N	105.6	23.7	107.5	35.6	10.1
520N	100	30		"	"	lt gry tinge to soil, rk frags round to ang <30%	145.1	28.0	81.3	21.1	5.7
540N	150	40		gritty/gravel	"	lt gry tinge to soil, rk frags ≈50%	125.2	27.0	97.8	19.6	5.0
560N	140	25	29→070	sandy/gritty	lt brn	very coarse matrix, rk frags <20%	109.1	25.3	108.7	19.5	8.5

580N	100	40		"	lt med brn	slightly moist, rk frags ≈30%	117.4	29.7	112.6	27.9	6.1
600N	120	-		"	"	rk frags≈40%	107.0	27.3	145.0	19.6	7.7
620N	120	-		"	med brn	shallow gulley, rk frags <30%	86.7	24.3	86.7	10.5	3.5
640N	140	30	24→065	"	brn	slight gry tinge to soil, rk frags≈20%	86.2	23.2	92.8	7.7	3.4
660N	110	35		"	lt gry/brn	very dry, rk frags <20%	69.4	22.2	73.3	12.0	3.8
680N	110	-		"	"	shallow gulley bank, rk frags ≈30%	85.6	26.0	100.8	26.3	5.6
700N	no ash layer				center of weak flowing creek		no sample center of creek				
Statistics (note highlighted gold is a trend break from relatively low background values of 8 ppb)				**Line 3 Data**		Mean	115.3	27.5	103.2	22.3	13.3
						Median	114.3	26.7	92.8	19.5	10.1
						StDev	19.4	5.5	57.5	21.2	8.8
						outer limit of background variation (3rd quartile range)	125	30	107	20	19
				Total Data		Mean	93.0	26.5	98.4	16.9	8.4
						Median	102.7	26.2	89.3	8.5	4.2
						StDev	34.8	6.1	50.5	23.9	8.2
						outer limit of background variation (3rd quartile range)	114	29	105	19	12

Definitions:

rk	rock	lt	light
frags	fragments	med	medium
ang	angular	gry	grey
surf	surface	brn	brown
w/	with	qtz	quartz

The soil sample stations with selected geochemical data as shown above are plotted on Figure 12 following this section.

Figure 12 Soil Survey plot for Cu-Co-As-Au-Sb

	Cu (ppm)	Co (ppm)	As (ppm)	Au (ppb)	Sb (ppm)
S08 680N	85.6	26	100.8	26.3	5.6
S08 660N	69.4	22.2	73.3	12	3.8
S08 640N	86.2	23.2	92.8	7.7	3.4
S08 620N	86.7	24.3	86.7	10.5	3.5
S08 600N	107	27.3	145	19.6	7.7
S08 580N	117.4	29.7	112.6	27.9	6.1
S08 560N	109.1	25.3	108.7	19.5	8.5
S08 540N	125.2	27	97.8	19.6	5
S08 520N	145.1	28	81.3	21.1	5.7
S08 500N	105.6	23.7	107.5	35.6	10.1
S08 480N	107.4	32.9	128.5	47	16.5
S08 460N	115.2	28.7	228.4	97.8	19.6
S08 440N	104.1	36.3	128.6	76.4	15.8
S08 420N	103.4	33.1	105.7	49.2	21.6
S08 400N	103	27.7	93.4	26.7	13.7
S08 380N	114.3	24.8	105.6	27.4	20.8
S08 360N	117.3	29.8	89.8	28.7	18.8
S08 340N	128.5	31.7	79.2	24	26.7
S08 320N	129.8	30	101.5	24	21.5
S08 300N	113.2	24	83.1	6.6	13.7
S08 280N	132.9	26.3	75.1	9.7	19
S08 260N	134.6	24.2	55.3	5.8	17.2
S08 240N	138.6	25.3	79.6	9.2	22.7
S08 220N	144.7	20.9	55.4	6.5	20
S08 200N	163.1	48.6	354	6.1	42.4
S08 180N	120.1	20.9	61.1	7.3	9.8
S08 160N	119.8	22.2	61.8	7.2	9.5
S08 140N	106.3	21.8	39.2	7.1	3
S08 120N	116.7	31.1	106	8.2	8.7
S08 100N	114.3	26.7	85.5	7.9	8.9
S08 80N	110	29.2	77.3	7.4	4.3

	Cu (ppm)	Co (ppm)	As (ppm)	Au (ppb)	Sb (ppm)
S08 60N520W	95.2	32.3	126.5	27	4
S08 60N505W	102.3	35.6	96.8	11.3	3.3
S08 60N490W	105.4	29.9	189.4	8.7	3.8
S08 60N475W	98.6	35.7	87.9	12.9	3.3
S08 60N460W	111	26.7	88.9	9.3	3.5
S08 60N445W	86.6	23.4	63.2	7.7	2.5
S08 60N430W	182	23.3	109	17.2	23.4
S08 60N415W	122.4	37	89.7	6.3	4.4
S08 60N400W	101.2	32.4	82.7	6.3	5.2

	Cu (ppm)	Co (ppm)	As (ppm)	Au (ppb)	Sb (ppm)
S08 000W	135.7	39.7	200	24.5	12.6
S08 015W	90.3	29	115.2	4.9	3.4
S08 030W	121	33.1	142.9	9	4.1
S08 045W	51.9	26.3	105.5	5.1	2.9
S08 060W	86.5	31.8	141.7	9.6	4.6
S08 075W	68.6	28.9	216.5	16.7	3.5
S08 090W	89.1	28.8	138.6	5.1	2.7
S08 105W	46.4	19.9	74.4	1.9	1.6
S08 120W	35.2	21.1	47.3	1.8	2.4
S08 135W	50.9	26.1	115.3	2.4	2.2
S08 150W	64.4	20.2	75.6	26.4	2.7
S08 165W	39.8	14.5	42.1	1.1	1.7
S08 180W	45.2	19.6	60	1.1	1.9
S08 195W	45	18.8	61.2	6.2	2.6
S08 210W	27.5	13.7	34.4	2.1	1.9
S08 225W	80.7	23.9	91.5	8.3	3
S08 240W	41.4	19	55.2	1.7	8
S08 255W	27.9	16.3	51	0.8	2
S08 270W	39.9	21.2	65.2	15.5	2.1
S08 285W	78.1	28.4	91.8	3	3.2
S08 300W	30.3	20	52.1	152.7	1.7
S08 315W	57	23.8	72.4	4	3.3
S08 330W	64.4	28.3	93.2	3.1	3.2
S08 345W	43.5	21.1	56.6	7.2	1.9
S08 375W	52.3	21.2	80.8	4.1	2
S08 390W	67	25.8	79.7	1.8	2.6

Silt-Moss Mat Sample Survey and Descriptions

With so few samples collected within this survey no statistics are provided. The purpose of the survey was to test the creeks draining the area near the South Zone magnetic low for metals. New work consisted of testing a creek near the southern property boundary and the creek just immediately south of the soil lines 000W-390W and 60N400W-60N520W. Figure 10 displays the approximately location of the sampling sites. Geochemical assays are provided in the appendix; no anomalous readings were obtained and as such reflect background values.

- SL 39008 sample was taken from the downstream side of a large boulder from a fast flowing creek. Creek bed contains mixed lithologies from pebble to boulder sizing and shapes from angular to sub-round. The rock types are predominately Fergusson group of cherts and volcanics.
- SL 08360W mixed lithologies and descriptions as above, same creek dynamics as above. Moss Mat sample number M08 1630 taken from this location.
- SL 08400S sample location is just west of the main Truax Creek road at approximately 400m south of the South Zone. Creek dynamics is fast flowing with banks of coarse grained sand with little clay and organic material. Lithologies of the various boulders in creek bed are mixed but predominately black cherts that are generally angular shaped in contrast to the ribbon cherts and meta-volcanics. Occasional milky white quartz inclusions in the black cherts are noticeable.

Rock Survey and Descriptions

The primary objective of this portion of the survey was to assay rocks collected on the basis of a showing potential to host mineralization. The approximate location of the rock samples is indicated in Figure 10.

Geochemical assays are provided in the appendix and no anomalous readings were indicated.

- 52710.09.08 is float of very angular pebbles of bluish tainted milky white, quartz with pyritic and rusty vugs found on the upper logging road at about the 1600m ele.
- R081100m is an 8.0m wide chip sample across a structural zone consisting of a 4.0m wide graphitic shears with several felsic ellipsoids hosted within sheared Fergusson black cherts (?). The total width of the fault zone is about 31m wide and strikes 165˚/75˚S. Photo 2 page 8 of this report shows the zone just to the left of the field assistant where sample was obtained.

Discussion of Survey Results and Methodology

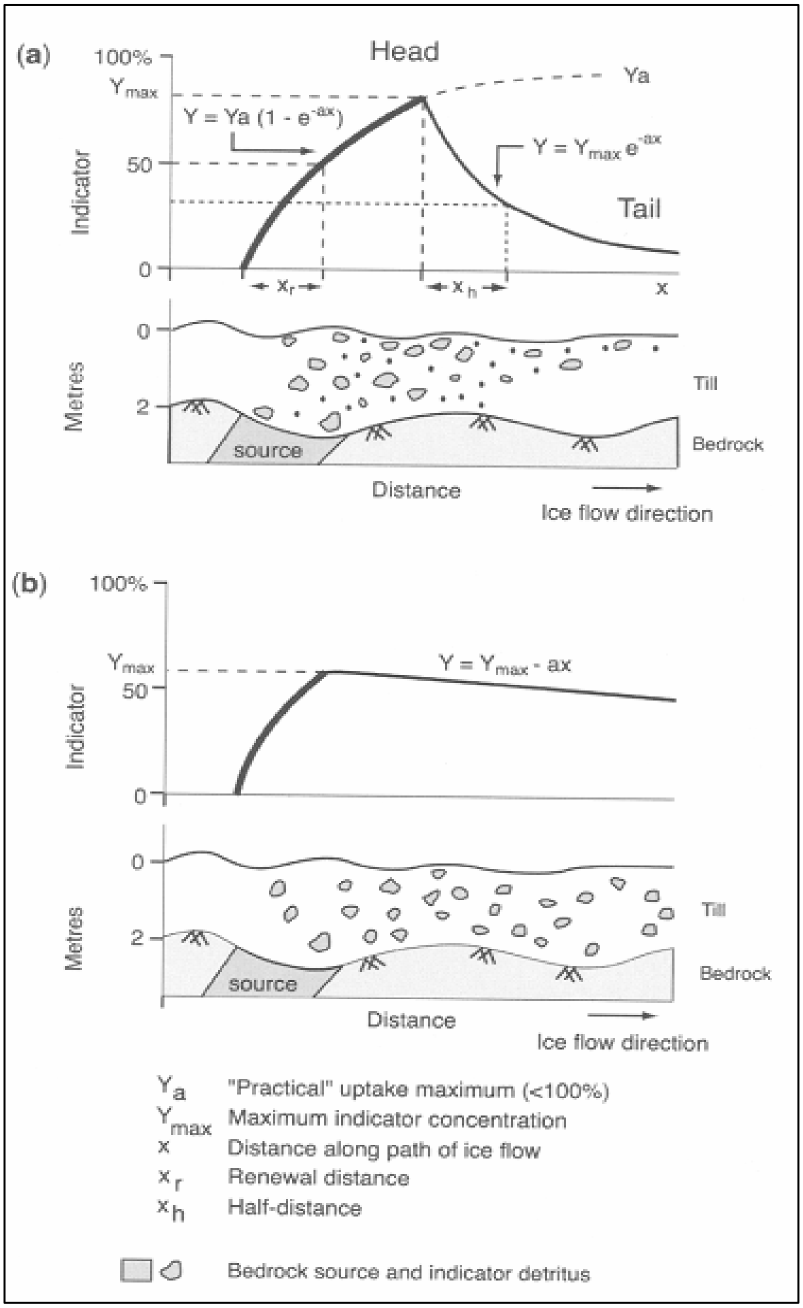
The geochemical analysis of silts and one moss-mat collected from the creeks draining the south zone area yielded no anomalous values. The low assay results obtained reflect background values of the soil sampling analysis; hence the water course within the creeks may cut only through the surface of the glacial facies.

The rock assays did reveal some relevant information: slightly elevated results in copper, nickel, chromium, and antimony from the 8.0m chip sample (R081100M) of a 31.0m wide fault on the north side of the property may have been transported from a distant source area. The fault contains sections of graphitic shears and ellipsoidal shaped felsic intrusive masses enclosed within the black cherts of the Relay Mountain Group (?). The fault strikes slightly to the northeast and upslope from the mineralized North and Main Zones on the property in an area where numerous ultramafic bodies and felsic dykes outcrop (B.N. Church). As well, ultramafic intersections that have been reported from the drill holes at the North Zone (AR 11647) appear to have an affinity for gold. The slightly elevated nickel-chromium results may have been transported along this fault where it cuts through a section of ultramafic intrusions. If gold were present in the fault, a pathway could be established for further prospecting along strike. The second reason for sampling the fault was to substantiate whether the graphitic shear zones had a plausible gold association and thereby calculate the temperature range of the gold deposition (T.P. Mernagh 2008). However, no gold was detected within the section of the fault sampled, but that does not preclude other sections of the fault that may host gold.

The soil geochemistry data presented the most complex and challenging interpretation of the results. Glacial facies are some of the most complicated and overburdened environments for soil geochemical exploration in meticulously calculating the transported distance of crushed mineralization from the insitu bedrock source to the resulting surface anomalies. To compound on the transported mechanism of glacial forces, consideration must account for material deposited by landslides in soil development during and after the last melting of the alpine glacier within the region of the Mary Mac Property. The process of adding slide material to the solum profile is assumed to have occurred through out the time interval of glaciation to melt to present day. The recent time period has provided a marker horizon to the top of the solum profile in most areas with an ash layer deposited circa 2350 years BP. Disruption of the marker layer could indicate the soil formation is of landslide origin; hence any resulting surface soil geochemical anomalies occurring in a slide environment could provide a target direction for future exploration of these areas. Road cuts provide an excellent cross-section of the overburden profile. As such, soil sampling away from these areas either directly upslope or down slope thereof gives the worker an inference as to the type of soil medium most likely to be encountered.

A calculation of threshold or anomalous values by statistical analysis of the total geochemical soil assay data is meaningless, as the thickness of overburden can either dilute or increase the readings. Soil sampling traverses should be designed with a view as to the glacial ice direction and to the depth of overburden. Soil sampling in areas near the Truax valley bottom would yield low values when compared to samples taken from higher elevations. The soil depth recorded in previous drill holes near the old Mary Mine site is considerable when compared to the drill-hole data at the South Zone Prospect. Metal concentrations are usually the highest at the base of the till over the bedrock source and dispersal trains resulting from thereof normally rises in a down ice direction at low inclination angles. The vertical rise of indicator concentrations in dispersal trains is the result of continued erosion of the bedrock source together with an addition of further debris material from the bedrock source, which adds to the base of the ice sheet along the flowpath. Typically, indicator concentrations in till usually decline exponentially, with greater distance of transport from the parent bedrock source in the down-ice direction, provided glacial direction is at a cross angle or perpendicular to the strike of the bedrock source (R. A. Klassen 2001). As such, an anomalous value for gold in soil may only be 6ppb or less in areas of thick overburden and when compared to an area with a thin soil veneer, typically occurring on the upper slopes of a valley, the gold in soil values maybe on the order of 100s ppb. A statistical analysis to obtain a threshold or background variation is more effective when calculated on a traverse by traverse basis; in particular, a more meaningful analysis of the data is to compare each station's geochemical value with each other in the glacial down ice direction. Any significant breaks or sudden increase in geochemical value sets from one sampling station to another followed by a trend of elevated values that taper or "tail" off is more effective than the standard deviation calculation of the total data yielding the anomalous or threshold limits. Analysing data with trend breaks can yield a reasonable estimate of transport distance of the surface overburden anomaly from the original bedrock source provided an approximate depth of the sample to the bedrock horizon is known. The following illustration demonstrates the feasibility of estimating transport distance in glacial soil and gives a pictorial representation of the above discussion.

Figure 13 Soil profile drawing of dispersion trail of indicator erratics from bedrock source



"Schematic profiles illustrating compositional variations of indicator erratics with distance of glacial transport and their expected distribution in till. (a) Exponential uptake and decay curves reflect erosion, modification, and deposition of debris transported at the base of the ice. (b) Linear decay reflects englacial transport with little or no modification of debris during transport. This profile may be characteristic of dispersal by ice streams where flow occurs by deformation in the ice bed."
Reference: R. A. Klassen, Special Publications, V.185 p. 1-17 Geological Society of London

Table 4 below displays relevant data from the Acme Analytical report (Appendix)

Table 4 Selected elements based upon exploration relevance

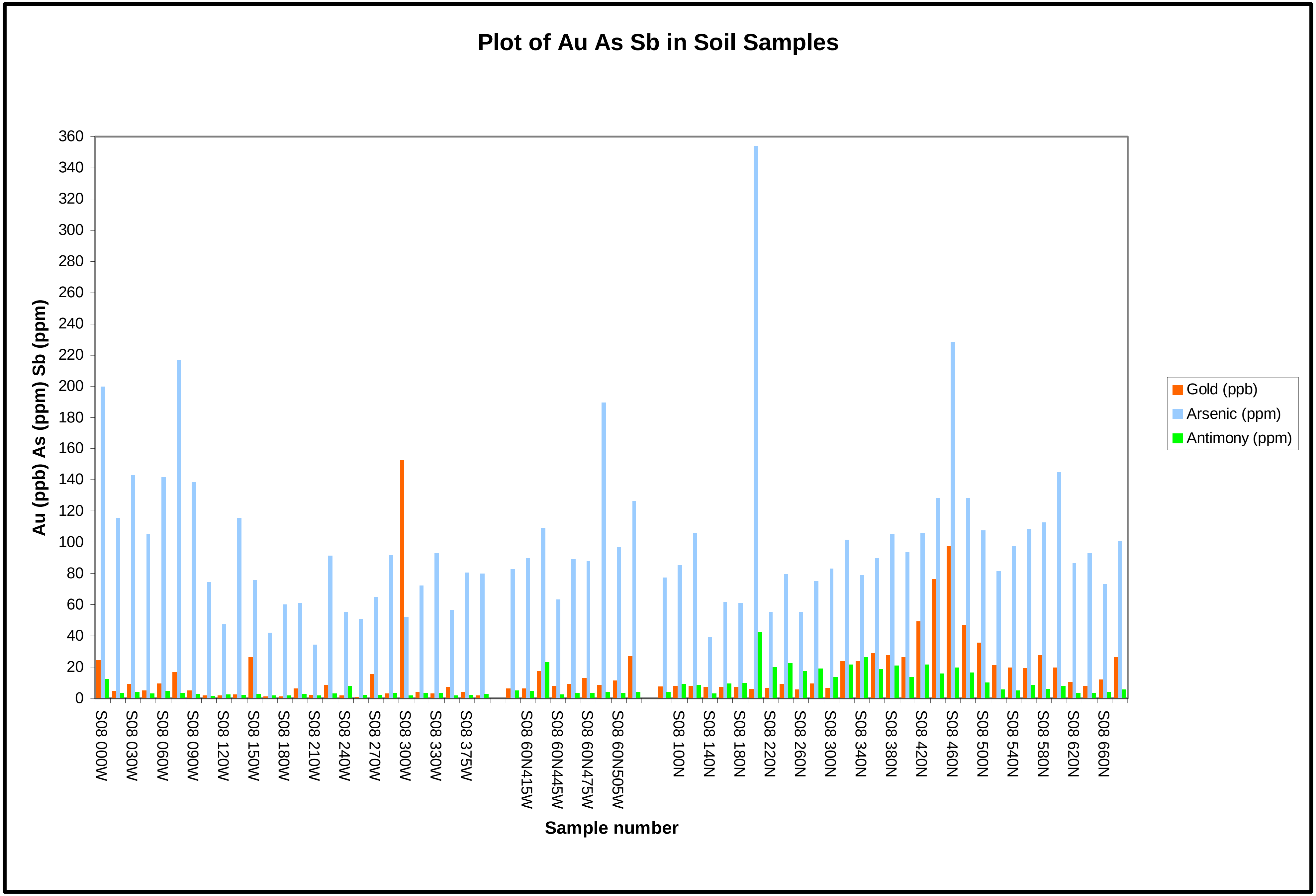
ACME ANALYTICAL LABORATORIES LTD.
Client: Salient Resources
File Created:3/16/2009 VAN09000672
\# of Samples: 66 MaryMac

	Method	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX
	Analyte	**Cu**	**Pb**	**Ag**	**Ni**	**Co**	**Fe**	**As**	**Au**	**Sb**	**K**
	Unit	PPM	PPM	PPM	PPM	PPM	%	PPM	PPB	PPM	%
Sample #	MDL	0.1	0.1	0.1	0.1	0.1	0.01	0.5	0.5	0.1	0.01
	Type										
Line 1											
S08 000W	Soil	135.7	8.9	<0.1	169	39.7	5.64	200	24.5	12.6	0.29
S08 015W	Soil	90.3	7.5	0.2	159	29	5.05	115.2	4.9	3.4	0.11
S08 030W	Soil	121	6.1	<0.1	189.8	33.1	5.52	142.9	9	4.1	0.14
S08 045W	Soil	51.9	7.1	<0.1	118.9	26.3	4.96	105.5	5.1	2.9	0.11
S08 060W	Soil	86.5	6.5	0.2	185.6	31.6	5.52	141.7	9.6	4.6	0.13
S08 075W	Soil	68.6	8.5	<0.1	128.2	28.9	5.18	216.5	16.7	3.5	0.11
S08 090W	Soil	89.1	6.8	<0.1	180	28.8	5.07	138.6	5.1	2.7	0.11
S08 105W	Soil	46.4	7.9	<0.1	112.1	19.9	3.57	74.4	1.9	1.6	0.09
S08 120W	Soil	35.2	9.5	0.2	67.2	21.1	3.55	47.3	1.8	2.4	0.09
S08 135W	Soil	50.9	6.8	0.1	129.9	26.1	4.4	115.3	2.4	2.2	0.09
S08 150W	Soil	64.4	7.8	<0.1	121.1	20.2	3.69	75.6	26.4	2.7	0.12
S08 165W	Soil	39.8	7.9	<0.1	78.7	14.5	2.83	42.1	1.1	1.7	0.08
S08 180W	Soil	45.2	9.1	<0.1	92	19.6	3.63	60	1.1	1.9	0.09
S08 195W	Soil	45	8.1	<0.1	90.4	18.8	3.62	61.2	6.2	2.6	0.1
S08 210W	Soil	27.5	11	<0.1	52.7	13.7	2.8	34.4	2.1	1.9	0.07
S08 225W	Soil	80.7	9	0.2	132	23.9	4.19	91.5	8.3	3	0.14
S08 240W	Soil	41.4	8.9	0.1	77	19	3.85	55.2	1.7	8	0.09
S08 255W	Soil	27.9	7.9	0.1	67.9	16.3	3.34	51	0.8	2	0.09
S08 270W	Soil	39.9	7.3	<0.1	84.3	21.2	3.79	65.2	15.5	2.1	0.1
S08 285W	Soil	78.1	8.2	<0.1	143	28.4	4.63	91.8	3	3.2	0.1
S08 300W	Soil	30.3	11.3	0.3	73.7	20	3.53	52.1	152.7	1.7	0.09
S08 315W	Soil	57	6.3	<0.1	120.9	23.8	4.28	72.4	4	3.3	0.13
S08 330W	Soil	64.4	8.1	<0.1	157.1	28.3	4.68	93.2	3.1	3.2	0.11
S08 345W	Soil	43.5	7	<0.1	95.4	21.1	4.11	56.6	7.2	1.9	0.09
S08 375W	Soil	52.3	8.1	<0.1	87.8	21.2	4.52	80.8	4.1	2	0.07
S08 390W	Soil	67	6.3	<0.1	143.9	25.8	4.46	79.7	1.8	2.6	0.11
Line 2											
S08 60N400W	Soil	101.2	8.8	0.1	158.9	32.4	4.65	82.7	6.3	5.2	0.12
S08 60N415W	Soil	122.4	9.1	<0.1	167	37	5.08	89.7	6.3	4.4	0.15
S08 60N430W	Soil	162	9.7	<0.1	111.9	23.3	5.76	109	17.2	23.4	0.15
S08 60N445W	Soil	86.6	5.3	<0.1	116.1	23.4	3.8	63.2	7.7	2.5	0.15
S08 60N460W	Soil	111	8	0.2	147.9	26.7	4.44	88.9	9.3	3.5	0.15
S08 60N475W	Soil	98.6	8.6	0.2	220.3	35.7	4.32	87.9	12.9	3.3	0.2
S08 60N490W	Soil	105.4	9.4	<0.1	154	29.9	4.74	189.4	8.7	3.8	0.19
S08 60N505W	Soil	102.3	7.3	<0.1	149.4	35.6	5.33	96.8	11.3	3.3	0.26
S08 60N520W	Soil	95.2	9	<0.1	144.9	32.3	4.64	126.5	27	4	0.17

	Method	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX
	Analyte	**Cu**	**Pb**	**Ag**	**Ni**	**Co**	**Fe**	**As**	**Au**	**Sb**	**K**
	Unit	PPM	PPM	PPM	PPM	PPM	%	PPM	PPB	PPM	%
Line 3											
S08 80N	Soil	110	8.3	0.1	161.3	29.2	4.72	77.3	7.4	4.3	0.12
S08 100N	Soil	114.3	9.7	<0.1	125.6	26.7	4.54	85.5	7.9	8.9	0.18
S08 120N	Soil	116.7	8.2	<0.1	132.5	31.1	5.08	106	8.2	8.7	0.22
S08 140N	Soil	106.3	5.7	<0.1	87.9	21.8	3.57	39.2	7.1	3	0.19
S08 160N	Soil	119.8	12.8	<0.1	100.4	22.2	4.47	61.8	7.2	9.5	0.13
S08 180N	Soil	120.1	15	0.2	91	20.9	4.15	61.1	7.3	9.8	0.11
S08 200N	Soil	163.1	16.4	0.2	186.9	48.6	6.43	354	6.1	42.4	0.18
S08 220N	Soil	144.7	12.4	<0.1	81.5	20.9	4.73	55.4	6.5	20	0.11
S08 240N	Soil	138.6	11.6	<0.1	115.9	25.3	4.85	79.6	9.2	22.7	0.11
S08 260N	Soil	134.6	8.9	<0.1	135.4	24.2	4.65	55.3	5.8	17.2	0.11
S08 280N	Soil	132.9	9.7	0.3	135.6	26.3	4.82	75.1	9.7	19	0.12
S08 300N	Soil	113.2	14.4	0.1	74.6	24	5.07	83.1	6.6	13.7	0.09
S08 320N	Soil	129.8	9.4	0.2	130.7	30	5.27	101.5	**24**	21.5	0.16
S08 340N	Soil	128.5	9.4	0.2	142.5	31.7	5.2	79.2	**24**	26.7	0.17
S08 360N	Soil	117.3	8.1	0.2	118.1	29.8	5.25	89.8	**28.7**	18.8	0.27
S08 380N	Soil	114.3	6.9	0.2	91.1	24.8	4.57	105.6	**27.4**	20.8	0.2
S08 400N	Soil	103	6.6	<0.1	135.6	27.7	5.3	93.4	**26.7**	13.7	0.31
S08 420N	Soil	103.4	7.1	0.2	125.4	33.1	5.62	105.7	**49.2**	21.6	0.47
S08 440N	Soil	104.1	7	0.1	124.5	36.3	5.83	128.6	**76.4**	15.8	0.65
S08 460N	Soil	115.2	8	0.2	130.2	28.7	5.3	228.4	**97.8**	19.6	0.28
S08 480N	Soil	107.4	8.1	0.1	136.4	32.9	5.98	128.5	**47**	16.5	0.41
S08 500N	Soil	105.6	5.9	0.3	114.5	23.7	4.43	107.5	**35.6**	10.1	0.22
S08 520N	Soil	145.1	6.3	0.5	166.7	28	4.5	81.3	**21.1**	5.7	0.18
S08 540N	Soil	125.2	8.6	0.1	127.3	27	5.16	97.8	**19.6**	5	0.22
S08 560N	Soil	109.1	8.4	0.2	134.3	25.3	4.58	108.7	**19.5**	8.5	0.13
S08 580N	Soil	117.4	9.8	<0.1	154.9	29.7	5.23	112.6	**27.9**	6.1	0.13
S08 600N	Soil	107	8.7	0.1	172.2	27.3	4.59	145	**19.6**	7.7	0.11
S08 620N	Soil	86.7	6.5	0.1	117	24.3	4.5	86.7	10.5	3.5	0.19
S08 640N	Soil	86.2	5.7	0.1	113.9	23.2	4.51	92.8	7.7	3.4	0.13
S08 660N	Soil	69.4	5.2	<0.1	102.5	22.2	4.09	73.3	12	3.8	0.11
S08 680N	Soil	85.6	7.7	0.1	140.3	26	4.6	100.8	26.3	5.6	0.21
Pulp Duplicates											
S08 240W	Soil	41.4	8.9	0.1	77	19	3.85	55.2	1.7	8	0.09
S08 240W	REP	44.8	9.4	0.2	85.2	19.8	3.93	58.9	<0.5	2.4	0.1
S08 280N	Soil	132.9	9.7	0.3	135.6	26.3	4.82	75.1	9.7	19	0.12
S08 280N	REP	136.2	10.1	0.3	136.4	27.7	5.19	76.9	11.6	18.8	0.12
Reference Materials											
STD DS7	STD	104	67.6	0.8	53.6	9.3	2.34	50.8	52.3	6	0.53
STD DS7	STD	122.7	69.5	0.8	54.5	10.2	2.57	57.4	62.3	5.7	0.59
STD DS7	STD	133.8	68.4	0.8	53.5	10.5	2.54	55.7	48.8	5.3	0.51
STD DS7	STD	119.9	65.4	0.8	57.9	11	2.52	55.7	51.7	5.4	0.51
BLK	BLK	<0.1	<0.1	<0.1	<0.1	<0.1	<0.01	<0.5	<0.5	<0.1	<0.01
BLK	BLK	<0.1	<0.1	<0.1	<0.1	<0.1	<0.01	<0.5	<0.5	<0.1	<0.01

A graphic chart of Au-As-Sb data is displayed in Table 5 below

Table 5


Plot of Au As Sb in Soil Samples
Au (ppb) As (ppm) Sb (ppm)
360
340
320
300
280
260
240
220
200
180
160
140
120
100
80
60
40
20
0
S08 000W
S08 030W
S08 060W
S08 090W
S08 120W
S08 150W
S08 180W
S08 210W
S08 240W
S08 270W
S08 300W
S08 330W
S08 375W
S08 60N415W
S08 60N445W
S08 60N475W
S08 60N505W
S08 100N
S08 140N
S08 180N
S08 220N
S08 260N
S08 300N
S08 340N
S08 380N
S08 420N
S08 460N
S08 500N
S08 540N
S08 580N
S08 620N
S08 660N
Sample number
Gold (ppb)
Arsenic (ppm)
Antimony (ppm)

The results above clearly demonstrate an anomalous trend for gold and a partitioning or shift of elevated anomalous readings for the other elements developing on Line 3. The gold trend starting at sample station SO8 320N and continuing to SO8 600N is remarkably similar to the pattern of glacial dispersion from a bedrock source area as displayed in Figure 13.

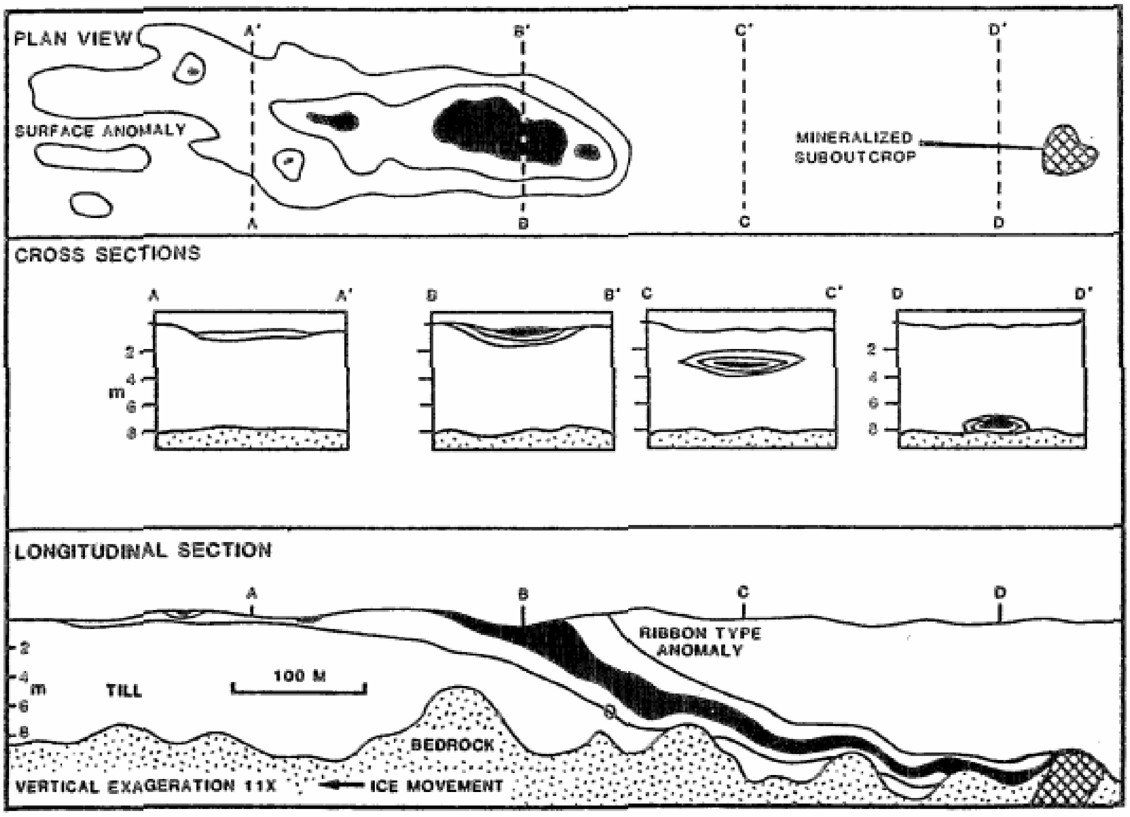
The above discussion focuses on distance and dispersal of indicator elements within the direction of glacial transport. However, other glacial processes influencing the concentration and distribution of indicators is the sizing and partitioning of the rocks and minerals in varying portions among size fractions during glacial abrasion and crushing from the bedrock source (Klassen 2001). From the soil description of the sample stations S08 320N-600N yields a trend of higher gold values with a decrease in rock fragments and a corresponding increase in the smaller grain fractions. The result may be explained by the different bedrock facies being milled and crushed by the ice base of the glacier as it moves over the source area. Faulted or extensively fractured bedrock would yield an increase in the finer grain size with a corresponding decrease in the larger size fractions to the till in a down ice direction from the parent area. There are other factors, such as a facies change from a black chert-argillite, to a basaltic horizon that affects the size fraction of the glacial till and shift in anomalous readings for the various elements.

Scrutiny of the anomalous readings in Table 4 above obviously shows antimony, lead, and copper rising just prior to the gold trend (stations 320N to 600N). The arsenic values increase slightly prior to the gold trend but continues to rise in tandem, then decreases noticeably with the gold (Table 4, 5), hence a possible mineralogical association. Mineralogical partitioning by glacial factors can concentrate metals like copper, lead, and zinc into the clay-sized fraction to levels greater in magnitude than in the coarse grain fractions of the till. These geochemical dispersion trains and partitioning limits the down-ice extent from the parent bedrock source (Klassen, 2001). Subsequently, the anomalous bedrock causing the geochemical dispersion train on line 3 may be in close proximity in the up ice direction from the peak or highest readings (head) within the gold trend anomaly.

Nearly all the soil samples collected had a distinct rusty, light-medium, brown color indicative of surface weathering (Klassen), whereas the un-weathered glacial soil colour is greyish (Photo 2). Some samples notably towards the end of line 3 and within the gold trend had a tinge of grey suggestive of less weathering due to a low porosity caused by more clay content and less coarse grained or rock fragments. Grain size partitioning by glacial processes can cause a geochemical clustering of results but this was not investigated in the current survey.

Even though the soil assays for gold are low, they are significant as such, glacial dispersion tends to dilute the source material down-ice and spread out any surface anomalies along trend. This is positive for drift exploration in glacial soil horizons as any mineralized bedrock source can be traced in an up-ice direction from the "head" of the surface anomaly. The estimated depth of the soil profile based upon drill-hole data at the south zone (AR 16378) indicates a range from 2.1 to 5.0m. Further, the elevation of the gold train on line 3 is nearly at the same contour level as that of the drill-hole collars at the south zone. Hence, the soil geochemical trains on line 3 are assumed to have the same depth as above, minus the sampling depth from surface due to the road cut which yields a range from ≈1.0 m to ≈3.80m or an average of 2.4m. From other research papers on drift exploration, the method does have successes in discovering economic mineral deposits. The figure below illustrates an idealized model with cross-section.

Figure 14 Idealized Model of a glacial dispersal train

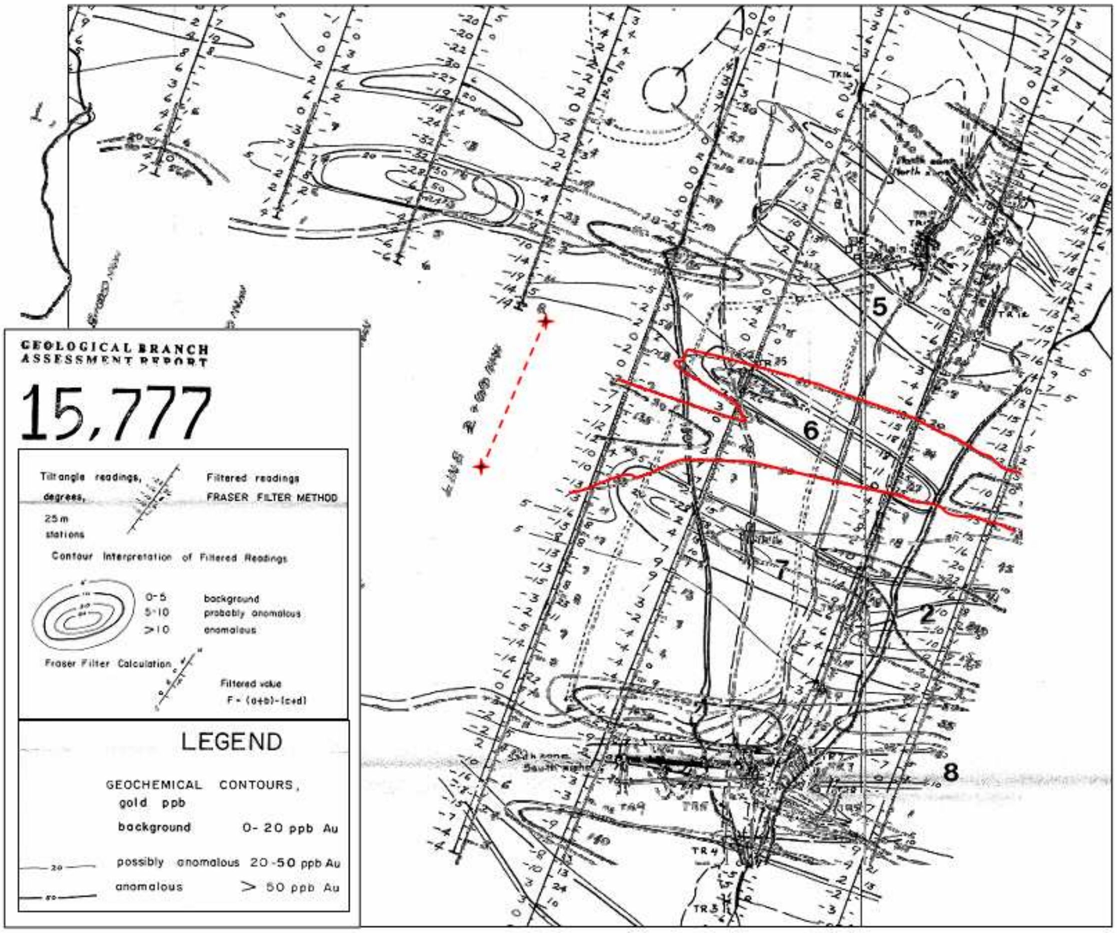


Reference: R.N.W. DiLabio, Geological Survey of Canada

In considering the above parameters of depth and comparing to the calculated theorize average depth of the gold train at the "head" point on line 3 gives an up ice transport distance to bedrock source of about 100m from thereof. A comparable figure was obtained for transport distance at the A-Zone of the Page-Williams gold deposit in Hemlo (DiLabio, 1991), where the ore zone was less than 100m in an up ice direction from the resulting surface gold-in-soil head peak which has a similar till thickness as the calculated value of 2.4m within the gold trend on line 3 above.

The soil sampling on line 3 is in an area never before explored by this method, the gold trend on line 3 has extended upslope by 200m the gold in soil anomaly from a previous program (AR 15777). Figure 15 below is a plot of the gold trend (from line 3) on an overlay consisting of VLF-Mag with a gold in soil outline of >20ppb.

Figure 15 Overlay of ground geophysics with gold in soil anomaly



Note: the dashed red line (approx. location) is the gold anomaly plot on line 3 in the current survey.

Conclusions and Recommendations

The results from the current "work in progress" program has verified a mineralized, soil geochemical dispersal train with partitioning of the anomalous pathfinder elements in the glacial overburden located on line 3. The anomalous gold train on line 3 is in a down-ice direction from the northwest-striking magnetic lows occurring just north of the South Zone prospect, but further exploration is needed to substantiate the correlation between the two surface anomalies. With limited data collected during this preliminary survey, definite conclusions as to the cause of the metal in soil anomalies on line 3 can not be fully ascertained at this time and determining the transport distance to bedrock source. The difficulty interpreting these types of transported soil geochemical anomalies is that most often they turn out to be unreliable or false. However, when integrated with coinciding geophysical ground anomalies the combined results may generate a valid exploration target for either drilling or trenching. For exploration purposes, the horizontal separation between the insitu up ice bedrock source and the first occurrence of mineralized debris at the surface signifies an area or gap that warrants further exploration of the subsurface by either trenching or drilling. The gap or separation distance has a tendency to increase with overburden thickness (Klassen).

The current soil geochemical survey is a preliminary investigation in determining whether the exploration method would create meaningful and congruent results in targeted areas of magnetic lows (Figure 9). As such, the initial study only focused on the geochemical component of drift exploration in glaciated terranes. The data collected from the current "work in progress" programme are sufficiently encouraging to justify continuing with the next phase of the soil survey.

The next exploration phase of the "work in progress" is to collect from each station a set of three 10kg soil samples representing a cross section the soil profile starting immediately below the ash layer, the second from a mid point then last from a pit 1.0m deep from the base of the road cut. The sampling sites selected should represent the gap, foot, and head of the gold train on line 3. The study should then focus on the lithological and mineralogy of the different grain-size components with further sieving and assaying of the various grain fractions. The program should also include mapping of the glacial soil stratigraphy by hand trenching a cross-section of the road cuts at each of the sample stations.

Cost of Current Exploration Survey

Wages: Field		
B. Hemingway B.Sc FGAC	4.5 days @ $300/day	$ 1350.00
T. Hunter (field assistant)	4.5 days @ $200/day	$ 900.00
Travel		
B. Hemingway B.Sc FGAC	1.5 days @ $250/day	$ 375.00
T. Hunter (field assistant)	1.5 days @ $150/day	$ 225.00
Food, Lodging, & Transportation:		
Motel accommodation (Sept. 7 - 12, 2008)		$ 423.75
Food/meals (6 days @ $20/day/person		$ 240.00
Transportation; (4x4 vehicle) 815.9kms @ 48cents/km		$ 391.63
Field Expenses:		
Field equipment (flagging, pens, kraft bags, etc)		$ 47.33
Technical Expenses		
Acme Analytical Assaying		$ 1422.36
Report Costs:		
Reporting writing; 3.0 days @ $300/day		$ 900.00
Sundry (est., photocopying, binding, office, maps etc)		$ 35.00
Total Cost of Current Exploration Survey		$ 6310.07
Total Technical Cost Portion of Survey		$ 5271.11

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
3. Rencz, A.N., Garrett, R.G., Adcock, S.W., and Bonham-Carter G.F.: Geological Survey of Canada, OPEN FILE 5084**,** Geochemical Background in Soil and Till
4. Cayoosh Assemblage: regional correlations and implications for terrane linkages in the southern Coast Belt, British Columbia Journeay, J M; Mahoney, J B
   Geological Survey of Canada, Current Research no. 1994-A, 1994; pages 165-175
5. Woodsworth, G.J., Pearson, D.E., and Sinclair, A.J. (1977): Metal Distribution Across the Eastern Flank of the Coast Plutonic Complex, South-central British Columbia; Economic Geology, Volume 72, pages 170-183.
6. Alain Plouffe, Drift-Prospecting Sampling Methods, Geological Survey of Canada. Paper 1995-02 Drift Exploration in the Canadian Cordillera MEMPRBC
7. T. P. Mernagh, F. P. Bierlein (2008): Gold Transport in Metamorphic Terranes Society of Economic Geologists Vol. 103/Number 6; pages 1613-1640
8. Gleeson, C.F. and Sheehan, D.G. 1987. Humus and till geochemistry over the Doyon, Bousquet, and Williams gold deposits; Canadian Institute of Mining and Metallurgy Bulletin, v. 80, no. 898, p. 58-66.
9. Khatwa, A., Hart, J.K, Payne, A. J., Annals of Glaciology 28 1999 International Glaciological Society: Grain textural analysis across a range of glacial facies
10. 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.
11. 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
12. 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,
13. R. A. Klassen 2001. A Quaternary geological perspective on geochemical exploration in glaciated terrain. Geological Survey of Canada, Special Publications, V.185 p. 1-17 Geological Society of London
14. 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
15. 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. 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

h. 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

i. 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

The following Assessment reports are from other properties near the MaryMac

j. Price, B.J. M.Sc; (1983) Geological Report on the Olympic-Kelvin Property; http://aris.empr.gov.bc.ca/search.asp?mode=repsum&rep_no=11139

k. Friesen, P.S. P.Eng: (1985) Assessment Work Report on the Diamond Drilling Program carried on the Grayrock Mining Property; http://aris.empr.gov.bc.ca/search.asp?mode=repsum&rep_no=13992

l. Brewer, L.C of Columbia Geophysical Services; (1988) Geophysical Report on Airborne Magnetic & VLF-EM Surveys over the Truax Gold, Roy, & Robin Claims; http://aris.empr.gov.bc.ca/search.asp?mode=repsum&rep_no=18434

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 am a member of the Society Economic Geologists
5. 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 years as a free agent.
6. 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 September 7th to 12th, 2008; the findings are described within this report.
7. 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.
8. I am the author of this report, the composition thereof, and with the planning of the current survey as described herein.

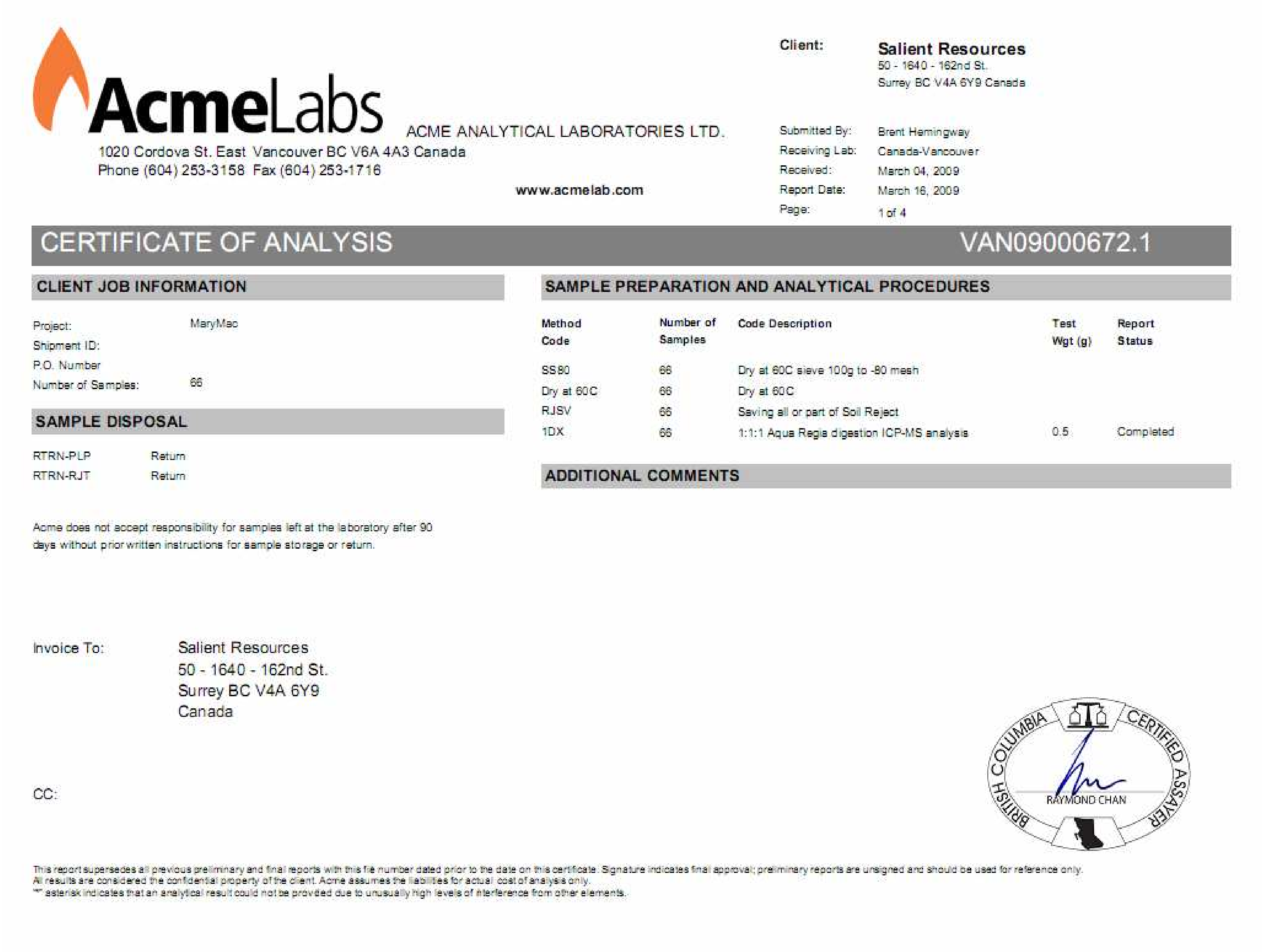
Dated this 3rd day of September, 2009

Alan Brent Hemingway, B.Sc FGAC

Surrey, B.C

Appendix

Table 1a Assay Report for Soils



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Submitted By:	Brent Hemingway
Receiving Lab:	Canada-Vancouver
Received:	March 04, 2009
Report Date:	March 16, 2009
Page:	1 of 4

CERTIFICATE OF ANALYSIS VAN09000672.1

CLIENT JOB INFORMATION

Project:	MaryMac
Shipment ID:	
P.O. Number	
Number of Samples:	66

SAMPLE DISPOSAL

RTRN-PLP	Return
RTRN-RJT	Return

Acme does not accept responsibility for samples left at the laboratory after 90 days without prior written instructions for sample storage or return.

SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Method Code	Number of Samples	Code Description	Test Wgt (g)	Report Status
SS80	66	Dry at 60C sieve 100g to -80 mesh		
Dry at 60C	66	Dry at 60C		
RJSV	66	Saving all or part of Soil Reject		
1DX	66	1:1:1 Aqua Regia digestion ICP-MS analysis	0.5	Completed

ADDITIONAL COMMENTS

Invoice To: Salient Resources
50 - 1640 - 162nd St.
Surrey BC V4A 6Y9
Canada

CC:

BRITISH COLUMBIA CERTIFIED ASSAYER
RAYMOND CHAN

This report supersedes all previous preliminary and final reports with this file number dated prior to the date on this certificate. Signature indicates final approval; preliminary reports are unsigned and should be used for reference only.
All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of analysis only.
"*" asterisk indicates that an analytical result could not be provided due to unusually high levels of interference from other elements.

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Page: 2 of 4 Part 1

CERTIFICATE OF ANALYSIS VAN09000672.1

		Method	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX
		Analyte	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P
		Unit	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%
		MDL	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	0.1	2	0.01	0.001
S08 60N400W	Soil		3.2	101.2	8.8	155	0.1	158.9	32.4	737	4.65	82.7	0.5	6.3	1.4	25	0.5	5.2	0.3	89	0.32	0.045
S08 60N415W	Soil		3.7	122.4	9.1	128	<0.1	167.0	37.0	623	5.08	89.7	0.5	6.3	1.5	19	0.4	4.4	0.4	94	0.25	0.054
S08 60N430W	Soil		3.6	162.0	9.7	439	<0.1	111.9	23.3	655	5.76	109.0	0.6	17.2	2.0	25	1.4	23.4	0.5	76	0.35	0.050
S08 60N445W	Soil		2.0	86.6	5.3	79	<0.1	116.1	23.4	414	3.80	63.2	0.5	7.7	2.0	28	0.3	2.5	0.2	86	0.47	0.048
S08 60N460W	Soil		2.9	111.0	8.0	111	0.2	147.9	26.7	716	4.44	88.9	0.6	9.3	1.6	27	0.4	3.5	0.3	81	0.43	0.039
S08 60N475W	Soil		2.4	98.6	8.6	90	0.2	220.3	35.7	707	4.32	87.9	0.7	12.9	1.9	113	0.4	3.3	0.4	104	1.15	0.090
S08 60N490W	Soil		1.9	105.4	9.4	99	<0.1	154.0	29.9	947	4.74	189.4	0.5	8.7	1.6	35	0.3	3.8	0.6	90	0.69	0.084
S08 60N505W	Soil		2.7	102.3	7.3	121	<0.1	149.4	35.6	1088	5.33	96.8	0.6	11.3	1.9	33	0.3	3.3	0.3	101	0.70	0.087
S08 60N520W	Soil		2.9	95.2	9.0	114	<0.1	144.9	32.3	911	4.64	126.5	0.5	27.0	1.6	27	0.4	4.0	0.4	87	0.52	0.074
S08 80N	Soil		3.2	110.0	8.3	156	0.1	161.3	29.2	619	4.72	77.3	0.5	7.4	1.6	26	0.7	4.3	0.3	84	0.36	0.038
S08 100N	Soil		3.5	114.3	9.7	128	<0.1	125.6	26.7	1320	4.54	85.5	0.5	7.9	2.2	22	0.4	8.9	0.4	71	0.27	0.071
S08 120N	Soil		2.7	116.7	8.2	127	<0.1	132.5	31.1	1233	5.08	106.0	0.5	8.2	2.0	25	0.5	8.7	0.5	95	0.47	0.094
S08 140N	Soil		2.0	106.3	5.7	85	<0.1	87.9	21.8	405	3.57	39.2	0.4	7.1	1.3	23	0.3	3.0	0.2	87	0.36	0.059
S08 160N	Soil		4.7	119.8	12.8	150	<0.1	100.4	22.2	748	4.47	61.8	0.6	7.2	2.1	24	0.7	9.5	0.4	56	0.25	0.057
S08 180N	Soil		4.6	120.1	15.0	131	0.2	91.0	20.9	616	4.15	61.1	0.5	7.3	1.7	23	0.7	9.8	0.4	53	0.30	0.037
S08 200N	Soil		5.6	163.1	16.4	230	0.2	186.9	48.6	1922	6.43	354.0	0.5	6.1	3.5	31	2.2	42.4	0.7	62	0.30	0.076
S08 220N	Soil		4.1	144.7	12.4	129	<0.1	81.5	20.9	812	4.73	55.4	0.4	6.5	1.8	20	0.3	20.0	0.5	42	0.17	0.051
S08 240N	Soil		3.8	138.6	11.6	123	<0.1	115.9	25.3	786	4.85	79.6	0.5	9.2	2.0	18	0.4	22.7	0.4	59	0.19	0.047
S08 260N	Soil		3.4	134.6	8.9	116	<0.1	135.4	24.2	732	4.65	55.3	0.4	5.8	1.8	19	0.3	17.2	0.4	59	0.20	0.042
S08 280N	Soil		3.6	132.9	9.7	121	0.3	135.6	26.3	853	4.82	75.1	0.6	9.7	1.8	24	0.4	19.0	0.4	68	0.33	0.052
S08 300N	Soil		4.1	113.2	14.4	138	0.1	74.6	24.0	747	5.07	83.1	0.5	6.6	2.2	23	0.5	13.7	0.4	52	0.44	0.067
S08 320N	Soil		3.9	129.8	9.4	116	0.2	130.7	30.0	1093	5.27	101.5	0.6	24.0	1.6	35	0.5	21.5	0.4	87	0.52	0.074
S08 340N	Soil		4.1	128.5	9.4	128	0.2	142.5	31.7	1155	5.20	79.2	0.5	24.0	1.6	27	0.5	26.7	0.4	82	0.37	0.074
S08 360N	Soil		3.0	117.3	8.1	122	0.2	118.1	29.8	1254	5.25	89.8	0.6	28.7	1.8	28	0.4	18.8	0.3	94	0.46	0.058
S08 380N	Soil		3.7	114.3	6.9	121	0.2	91.1	24.8	1146	4.57	105.6	0.6	27.4	1.8	31	0.6	20.8	0.4	82	0.57	0.059
S08 400N	Soil		3.1	103.0	6.6	110	<0.1	135.6	27.7	947	5.30	93.4	0.4	26.7	1.7	28	0.4	13.7	0.3	103	0.41	0.049
S08 420N	Soil		3.0	103.4	7.1	114	0.2	125.4	33.1	1283	5.62	105.7	0.7	49.2	1.6	38	0.5	21.6	0.3	115	0.69	0.078
S08 440N	Soil		2.9	104.1	7.0	112	0.1	124.5	36.3	1597	5.83	128.6	0.5	76.4	2.1	49	0.5	15.8	0.4	109	0.90	0.143
S08 460N	Soil		3.5	115.2	8.0	121	0.2	130.2	28.7	1033	5.30	228.4	0.6	97.8	2.0	33	0.6	19.6	0.4	94	0.58	0.061
S08 480N	Soil		3.6	107.4	8.1	128	0.1	136.4	32.9	994	5.98	128.5	0.5	47.0	1.8	31	0.5	16.5	0.3	108	0.52	0.054

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	Method	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX
	Analyte	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se
	Unit	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm
	MDL	1	1	0.01	1	0.001	20	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5
S08 60N400W	Soil	12	125	1.47	227	0.136	<20	2.76	0.015	0.12	0.2	0.04	6.6	0.1	<0.05	8	0.9
S08 60N415W	Soil	13	129	1.69	228	0.151	<20	3.42	0.014	0.15	0.2	0.03	7.0	0.2	<0.05	9	0.8
S08 60N430W	Soil	14	100	1.29	190	0.151	<20	2.05	0.015	0.15	0.2	0.22	8.1	0.2	<0.05	7	2.3
S08 60N445W	Soil	10	126	1.50	190	0.219	<20	2.01	0.023	0.15	0.2	0.04	6.0	0.2	<0.05	7	0.7
S08 60N460W	Soil	12	121	1.53	224	0.170	<20	2.35	0.031	0.15	0.2	0.09	9.2	0.2	<0.05	7	0.9
S08 60N475W	Soil	11	279	2.01	244	0.196	<20	4.07	0.201	0.20	0.1	0.09	9.0	0.2	<0.05	10	1.0
S08 60N490W	Soil	12	121	1.84	271	0.188	<20	2.65	0.044	0.19	0.2	0.08	9.9	0.2	<0.05	8	0.6
S08 60N505W	Soil	13	146	2.07	248	0.212	<20	2.77	0.031	0.26	0.2	0.08	9.1	0.2	<0.05	8	0.9
S08 60N520W	Soil	12	121	1.59	243	0.166	<20	2.62	0.020	0.17	0.2	0.06	7.7	0.1	<0.05	8	0.7
S08 80N	Soil	12	119	1.52	232	0.149	<20	2.36	0.020	0.12	0.1	0.06	7.7	0.1	<0.05	7	1.2
S08 100N	Soil	16	94	1.30	224	0.119	<20	2.34	0.013	0.18	0.2	0.06	7.8	0.2	<0.05	6	1.3
S08 120N	Soil	15	115	1.68	236	0.192	<20	2.66	0.019	0.22	0.2	0.06	9.3	0.2	<0.05	8	1.3
S08 140N	Soil	9	97	1.41	183	0.231	<20	1.99	0.022	0.19	0.1	0.03	4.2	<0.1	<0.05	6	0.9
S08 160N	Soil	15	71	0.88	186	0.077	<20	1.47	0.012	0.13	0.1	0.05	6.8	0.1	<0.05	5	1.9
S08 180N	Soil	14	62	0.87	204	0.082	<20	1.47	0.014	0.11	0.1	0.08	7.1	0.1	<0.05	5	1.5
S08 200N	Soil	23	86	0.98	283	0.069	<20	1.54	0.012	0.18	0.2	0.24	11.7	0.1	<0.05	5	2.0
S08 220N	Soil	16	52	0.60	191	0.033	<20	1.10	0.008	0.11	<0.1	0.05	7.4	<0.1	<0.05	3	1.2
S08 240N	Soil	15	86	0.94	222	0.069	<20	1.48	0.009	0.11	0.1	0.04	8.1	<0.1	<0.05	5	1.3
S08 260N	Soil	16	110	1.16	215	0.049	<20	1.68	0.009	0.11	0.1	0.03	7.8	<0.1	<0.05	5	1.3
S08 280N	Soil	18	114	1.19	245	0.067	<20	1.60	0.017	0.12	0.1	0.09	10.5	0.1	<0.05	5	1.3
S08 300N	Soil	19	53	0.69	181	0.087	<20	1.20	0.017	0.09	0.2	0.07	6.9	0.1	<0.05	4	1.9
S08 320N	Soil	15	114	1.31	252	0.097	<20	1.95	0.060	0.16	0.4	0.08	12.0	0.1	<0.05	6	1.3
S08 340N	Soil	17	121	1.59	239	0.090	<20	1.99	0.015	0.17	0.1	0.10	11.0	0.1	<0.05	7	1.2
S08 360N	Soil	17	94	1.61	284	0.152	<20	2.40	0.022	0.27	0.2	0.11	11.0	0.2	<0.05	8	1.2
S08 380N	Soil	17	72	1.23	252	0.149	<20	1.77	0.024	0.20	0.2	0.07	9.2	0.1	<0.05	6	1.3
S08 400N	Soil	15	114	1.86	191	0.197	<20	2.63	0.015	0.31	0.1	0.03	9.3	0.2	<0.05	8	0.9
S08 420N	Soil	17	114	2.41	230	0.167	<20	2.82	0.043	0.47	0.1	0.10	13.6	0.2	<0.05	9	0.8
S08 440N	Soil	23	120	2.64	286	0.213	<20	3.17	0.083	0.65	0.2	0.08	11.1	0.3	<0.05	11	0.6
S08 460N	Soil	18	106	1.59	256	0.137	<20	2.25	0.043	0.28	0.1	0.08	11.8	0.2	<0.05	8	1.3
S08 480N	Soil	15	115	1.82	235	0.176	<20	2.74	0.044	0.41	0.1	0.06	11.4	0.2	<0.05	9	1.0

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		Method	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX
		Analyte	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P
		Unit	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%
		MDL	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	0.1	2	0.01	0.001
S08 500N	Soil		3.6	105.6	5.9	108	0.3	114.5	23.7	665	4.43	107.5	0.8	35.6	2.5	24	0.4	10.1	0.3	99	0.47	0.052
S08 520N	Soil		2.8	145.1	6.3	118	0.5	166.7	28.0	803	4.50	81.3	0.7	21.1	1.8	21	0.5	5.7	0.3	99	0.45	0.077
S08 540N	Soil		3.6	125.2	8.6	135	0.1	127.3	27.0	861	5.16	97.8	0.5	19.6	1.9	22	0.5	5.0	0.4	95	0.40	0.049
S08 560N	Soil		3.5	109.1	8.4	117	0.2	134.3	25.3	704	4.58	108.7	0.4	19.5	1.7	23	0.4	8.5	0.3	84	0.42	0.032
S08 580N	Soil		4.0	117.4	9.8	145	<0.1	154.9	29.7	718	5.23	112.6	0.4	27.9	1.8	24	0.5	6.1	0.4	89	0.32	0.044
S08 600N	Soil		2.9	107.0	8.7	96	0.1	172.2	27.3	698	4.59	145.0	0.5	19.6	1.6	30	0.3	7.7	0.3	78	0.51	0.041
S08 620N	Soil		1.4	86.7	6.5	82	0.1	117.0	24.3	856	4.50	86.7	0.4	10.5	1.5	30	0.2	3.5	0.3	99	0.79	0.062
S08 640N	Soil		1.3	86.2	5.7	88	0.1	113.9	23.2	901	4.51	92.8	0.3	7.7	1.2	34	0.2	3.4	0.2	94	0.97	0.083
S08 660N	Soil		1.5	69.4	5.2	72	<0.1	102.5	22.2	702	4.09	73.3	0.4	12.0	1.3	29	0.2	3.8	0.2	88	0.88	0.049
S08 680N	Soil		2.2	85.6	7.7	85	0.1	140.3	26.0	925	4.60	100.8	0.5	26.3	1.3	35	0.2	5.6	0.3	95	0.67	0.057
S08 000W	Soil		3.7	135.7	8.9	116	<0.1	169.0	39.7	1873	5.64	200.0	0.7	24.5	2.1	39	0.4	12.6	0.4	103	0.76	0.090
S08 015W	Soil		3.3	90.3	7.5	101	0.2	159.0	29.0	561	5.05	115.2	0.4	4.9	1.3	20	0.2	3.4	0.4	108	0.37	0.066
S08 030W	Soil		3.1	121.0	6.1	106	<0.1	189.8	33.1	666	5.52	142.9	0.4	9.0	1.6	21	0.3	4.1	0.4	103	0.46	0.074
S08 045W	Soil		4.1	51.9	7.1	149	<0.1	118.9	26.3	428	4.96	105.5	0.6	5.1	1.2	15	0.3	2.9	0.4	105	0.25	0.075
S08 060W	Soil		4.0	86.5	6.5	187	0.2	185.6	31.6	495	5.52	141.7	0.4	9.6	1.2	16	0.2	4.6	0.5	112	0.28	0.057
S08 075W	Soil		2.9	68.6	8.5	132	<0.1	128.2	28.9	534	5.18	216.5	0.4	16.7	1.2	22	0.2	3.5	0.4	111	0.33	0.064
S08 090W	Soil		3.3	89.1	6.8	133	<0.1	180.0	28.8	466	5.07	138.6	0.4	5.1	1.3	23	0.3	2.7	0.3	97	0.30	0.059
S08 105W	Soil		2.6	46.4	7.9	95	<0.1	112.1	19.9	445	3.57	74.4	0.4	1.9	1.0	16	0.2	1.6	0.3	78	0.26	0.091
S08 120W	Soil		2.5	35.2	9.5	147	0.2	67.2	21.1	915	3.55	47.3	0.5	1.8	1.1	24	0.4	2.4	0.4	82	0.38	0.080
S08 135W	Soil		3.4	50.9	6.8	183	0.1	129.9	26.1	420	4.40	115.3	0.4	2.4	1.1	16	0.4	2.2	0.7	93	0.28	0.072
S08 150W	Soil		3.3	64.4	7.8	125	<0.1	121.1	20.2	591	3.69	75.6	0.4	26.4	1.3	29	0.4	2.7	0.9	89	0.46	0.043
S08 165W	Soil		2.1	39.8	7.9	79	<0.1	78.7	14.5	319	2.83	42.1	0.4	1.1	0.9	20	0.2	1.7	0.3	66	0.29	0.070
S08 180W	Soil		3.4	45.2	9.1	113	<0.1	92.0	19.6	507	3.63	60.0	0.6	1.1	0.9	21	0.3	1.9	0.4	88	0.29	0.065
S08 195W	Soil		3.0	45.0	8.1	88	<0.1	90.4	18.8	317	3.62	61.2	0.3	6.2	1.1	18	0.2	2.6	0.4	86	0.32	0.038
S08 210W	Soil		2.8	27.5	11.0	104	<0.1	52.7	13.7	478	2.80	34.4	0.4	2.1	1.1	19	0.3	1.9	0.3	67	0.28	0.046
S08 225W	Soil		1.9	80.7	9.0	112	0.2	132.0	23.9	561	4.19	91.5	1.0	8.3	1.0	47	0.3	3.0	0.3	88	0.89	0.046
S08 240W	Soil		2.5	41.4	8.9	142	0.1	77.0	19.0	449	3.85	55.2	0.3	1.7	0.9	22	0.4	8.0	0.3	87	0.33	0.041
S08 255W	Soil		2.3	27.9	7.9	140	0.1	67.9	16.3	303	3.34	51.0	0.3	0.8	1.0	19	0.5	2.0	0.4	85	0.28	0.042
S08 270W	Soil		2.2	39.9	7.3	126	<0.1	84.3	21.2	483	3.79	65.2	0.4	15.5	1.1	20	0.3	2.1	0.3	84	0.31	0.065
S08 285W	Soil		2.8	78.1	8.2	118	<0.1	143.0	28.4	389	4.63	91.8	0.5	3.0	1.7	17	0.2	3.2	0.3	97	0.26	0.064

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Surrey BC V4A 6Y9 Canada

Project: MaryMac
Report Date: March 16, 2009

CERTIFICATE OF ANALYSIS VAN09000672.1

		Method	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX
		Analyte	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se
		Unit	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm
		MDL	1	1	0.01	1	0.001	20	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5
S08 500N	Soil		13	109	1.51	220	0.192	<20	2.05	0.023	0.22	0.2	0.08	10.9	0.2	<0.05	7	1.1
S08 520N	Soil		14	174	1.39	227	0.132	<20	2.44	0.025	0.18	0.2	0.11	10.1	0.2	<0.05	9	1.1
S08 540N	Soil		13	111	1.44	224	0.165	<20	2.40	0.026	0.22	0.1	0.07	10.3	0.1	<0.05	8	1.1
S08 560N	Soil		14	106	1.29	177	0.154	<20	2.02	0.018	0.13	0.1	0.07	9.2	0.1	<0.05	7	1.0
S08 580N	Soil		12	112	1.34	206	0.131	<20	2.55	0.016	0.13	0.1	0.08	8.2	0.1	<0.05	7	1.0
S08 600N	Soil		12	118	1.39	184	0.138	<20	1.77	0.019	0.11	0.1	0.10	9.3	0.1	<0.05	6	1.1
S08 620N	Soil		13	133	1.60	206	0.240	<20	2.45	0.041	0.19	0.3	0.17	11.4	0.2	<0.05	8	0.6
S08 640N	Soil		11	137	1.48	195	0.230	<20	2.44	0.033	0.13	0.2	0.13	10.9	0.1	<0.05	8	<0.5
S08 660N	Soil		11	104	1.44	173	0.238	<20	2.18	0.036	0.11	0.2	0.05	9.1	0.1	<0.05	7	<0.5
S08 680N	Soil		11	113	1.49	230	0.181	<20	2.29	0.038	0.21	0.3	0.09	10.3	0.2	<0.05	8	0.7
S08 000W	Soil		13	124	1.73	205	0.194	<20	2.49	0.053	0.29	0.6	0.16	10.8	0.3	<0.05	8	1.1
S08 015W	Soil		10	140	1.58	195	0.196	<20	3.30	0.022	0.11	0.3	0.03	7.0	0.1	<0.05	10	<0.5
S08 030W	Soil		9	163	1.83	167	0.193	<20	3.18	0.023	0.14	0.3	0.03	9.1	0.1	<0.05	9	0.9
S08 045W	Soil		8	114	1.11	176	0.204	<20	2.89	0.020	0.11	0.3	0.02	5.3	0.1	<0.05	10	<0.5
S08 060W	Soil		8	133	1.40	220	0.209	<20	3.19	0.024	0.13	0.3	0.02	6.1	0.2	<0.05	10	<0.5
S08 075W	Soil		10	118	1.33	184	0.182	<20	2.88	0.024	0.11	0.3	0.02	5.9	0.1	<0.05	9	<0.5
S08 090W	Soil		10	133	1.59	209	0.178	<20	3.01	0.024	0.11	0.2	0.02	6.6	0.1	<0.05	9	<0.5
S08 105W	Soil		7	103	1.08	148	0.152	<20	2.31	0.038	0.09	0.2	0.02	4.3	<0.1	<0.05	7	<0.5
S08 120W	Soil		12	75	0.65	228	0.170	<20	2.12	0.037	0.09	0.2	0.03	3.8	<0.1	<0.05	8	<0.5
S08 135W	Soil		7	113	1.16	169	0.161	<20	2.72	0.017	0.09	0.2	0.03	4.7	<0.1	<0.05	9	<0.5
S08 150W	Soil		11	149	1.54	241	0.161	<20	2.50	0.044	0.12	0.2	0.02	5.4	0.1	<0.05	8	<0.5
S08 165W	Soil		10	70	0.76	186	0.133	<20	1.93	0.033	0.08	0.2	0.02	3.8	<0.1	<0.05	6	<0.5
S08 180W	Soil		8	102	1.06	190	0.168	<20	2.44	0.026	0.09	0.2	0.02	4.2	<0.1	<0.05	8	<0.5
S08 195W	Soil		9	101	0.97	166	0.179	<20	2.12	0.018	0.10	0.2	0.01	4.4	<0.1	<0.05	7	<0.5
S08 210W	Soil		9	62	0.53	140	0.147	<20	1.81	0.020	0.07	0.2	<0.01	3.0	<0.1	<0.05	6	<0.5
S08 225W	Soil		15	112	1.19	274	0.154	<20	3.07	0.039	0.14	0.3	0.07	8.0	0.2	<0.05	8	1.7
S08 240W	Soil		10	91	0.83	183	0.179	<20	1.98	0.022	0.09	0.5	0.01	4.5	<0.1	<0.05	8	<0.5
S08 255W	Soil		8	81	0.74	159	0.177	<20	1.91	0.022	0.09	0.2	0.01	3.8	<0.1	<0.05	8	<0.5
S08 270W	Soil		9	92	0.88	154	0.144	<20	2.32	0.037	0.10	0.2	0.02	4.2	<0.1	<0.05	8	<0.5
S08 285W	Soil		9	121	1.21	190	0.176	<20	3.85	0.021	0.10	0.3	0.04	6.7	0.1	<0.05	10	0.7

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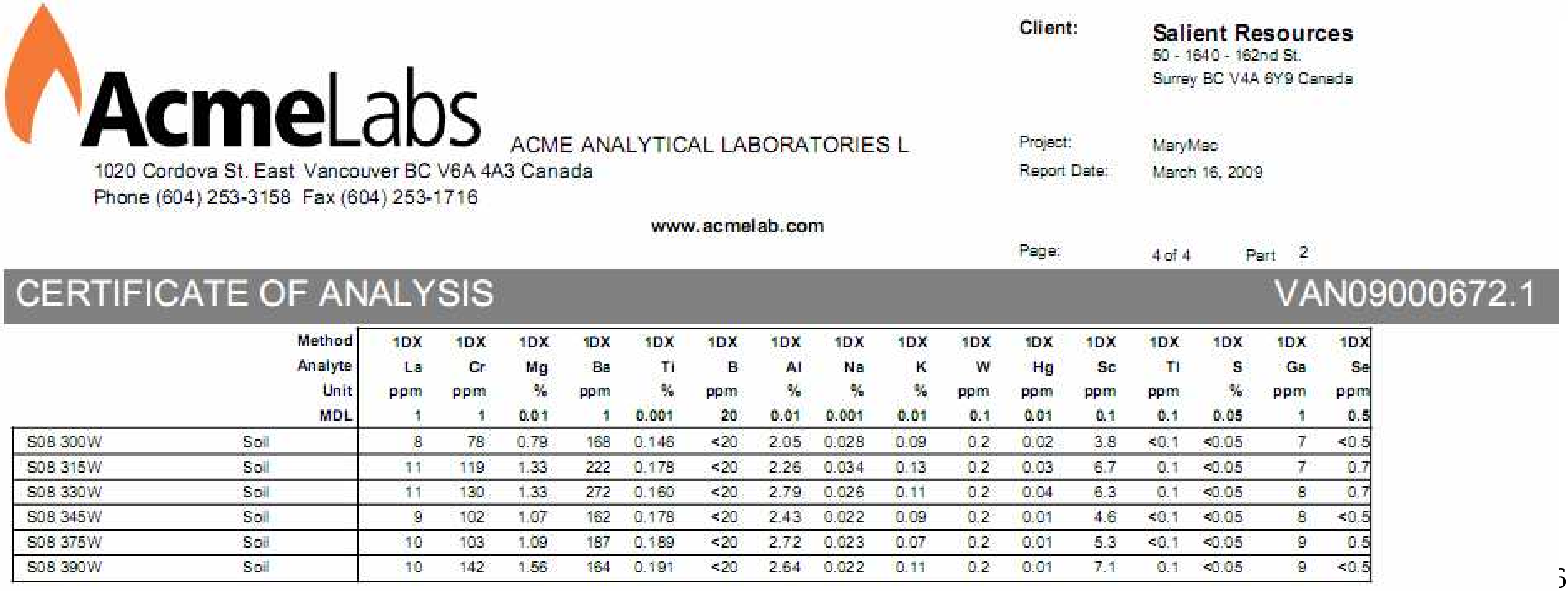
CERTIFICATE OF ANALYSIS VAN09000672.1

	Method	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX
	Analyte	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P
	Unit	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%
	MDL	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	0.1	2	0.01	0.001
S08 300W	Soil	2.6	30.3	11.3	125	0.3	73.7	20.0	668	3.53	52.1	0.4	152.7	1.2	19	0.3	1.7	0.3	85	0.29	0.080
S08 315W	Soil	2.3	57.0	6.3	134	<0.1	120.9	23.8	883	4.28	72.4	0.5	4.0	1.3	28	0.4	3.3	0.3	78	0.56	0.040
S08 330W	Soil	2.5	64.4	8.1	146	<0.1	157.1	28.3	639	4.68	93.2	0.6	3.1	1.2	29	0.3	3.2	0.3	87	0.53	0.038
S08 345W	Soil	3.1	43.5	7.0	134	<0.1	95.4	21.1	332	4.11	56.6	0.3	7.2	0.9	19	0.3	1.9	0.2	92	0.32	0.043
S08 375W	Soil	3.1	52.3	8.1	130	<0.1	87.8	21.2	357	4.52	80.8	0.4	4.1	1.4	19	0.3	2.0	0.3	104	0.34	0.055
S08 390W	Soil	2.5	67.0	6.3	125	<0.1	143.9	25.8	527	4.46	79.7	0.3	1.8	1.3	22	0.3	2.6	0.3	88	0.45	0.044



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CERTIFICATE OF ANALYSIS VAN09000672.1

	Method	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX
	Analyte	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se
	Unit	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm
	MDL	1	1	0.01	1	0.001	20	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5
S08 300W	Soil	8	78	0.79	168	0.146	<20	2.05	0.028	0.09	0.2	0.02	3.8	<0.1	<0.05	7	<0.5
S08 315W	Soil	11	119	1.33	222	0.178	<20	2.26	0.034	0.13	0.2	0.03	6.7	0.1	<0.05	7	0.7
S08 330W	Soil	11	130	1.33	272	0.160	<20	2.79	0.026	0.11	0.2	0.04	6.3	0.1	<0.05	8	0.7
S08 345W	Soil	9	102	1.07	162	0.178	<20	2.43	0.022	0.09	0.2	0.01	4.6	<0.1	<0.05	8	<0.5
S08 375W	Soil	10	103	1.09	187	0.189	<20	2.72	0.023	0.07	0.2	0.01	5.3	<0.1	<0.05	9	0.5
S08 390W	Soil	10	142	1.56	164	0.191	<20	2.64	0.022	0.11	0.2	0.01	7.1	0.1	<0.05	9	<0.5

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QUALITY CONTROL REPORT VAN09000672.1

	Method	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX
	Analyte	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P
	Unit	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%
	MDL	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	0.1	2	0.01	0.001
Pulp Duplicates																					
S08 280N	Soil	3.6	132.9	9.7	121	0.3	135.6	26.3	853	4.82	75.1	0.6	9.7	1.8	24	0.4	19.0	0.4	68	0.33	0.052
REP S08 280N	QC	3.6	136.2	10.1	125	0.3	136.4	27.7	880	5.19	76.9	0.6	11.6	1.8	24	0.4	18.8	0.4	69	0.34	0.052
S08 240W	Soil	2.5	41.4	8.9	142	0.1	77.0	19.0	449	3.85	55.2	0.3	1.7	0.9	22	0.4	8.0	0.3	87	0.33	0.041
REP S08 240W	QC	2.8	44.8	9.4	136	0.2	85.2	19.8	459	3.93	58.9	0.4	<0.5	1.0	22	0.4	2.4	0.3	88	0.35	0.042
Reference Materials																					
STD DS7	Standard	19.9	104.0	67.6	364	0.8	53.6	9.3	629	2.34	50.8	4.5	52.3	3.9	76	6.2	6.0	4.5	79	0.86	0.070
STD DS7	Standard	20.0	122.7	69.5	410	0.8	54.5	10.2	710	2.57	57.4	5.0	62.3	4.6	73	6.8	5.7	4.5	86	0.99	0.074
STD DS7	Standard	21.0	133.8	68.4	405	0.8	53.5	10.5	655	2.54	55.7	4.9	48.8	4.6	72	7.0	5.3	4.8	88	0.89	0.087
STD DS7	Standard	20.6	119.9	65.4	404	0.8	57.9	11.0	679	2.52	55.7	4.8	51.7	4.3	71	7.1	5.4	4.8	90	0.88	0.089
STD DS7 Expected		20.9	109	70.6	411	0.9	56	9.7	627	2.39	48.2	4.9	70	4.4	69	6.4	5.9	4.5	86	0.93	0.08
BLK	Blank	<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.5	<0.1	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<2	<0.01	<0.001
BLK	Blank	<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.5	<0.1	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<2	<0.01	<0.001

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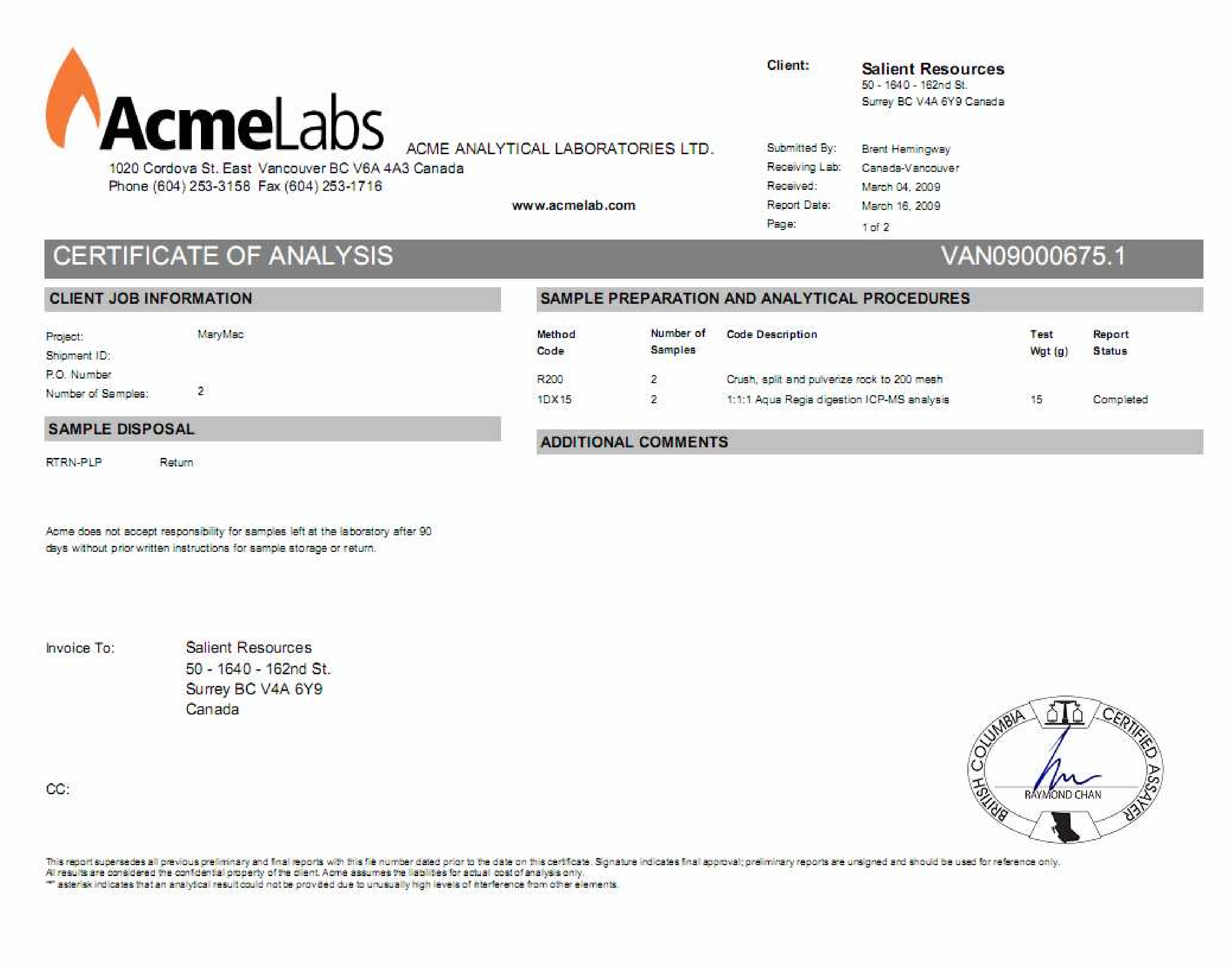
QUALITY CONTROL REPORT VAN09000672.1

	Method	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX
	Analyte	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se
	Unit	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm
	MDL	1	1	0.01	1	0.001	20	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5
Pulp Duplicates																	
S08 280N	Soil	18	114	1.19	245	0.067	<20	1.60	0.017	0.12	0.1	0.09	10.5	0.1	<0.05	5	1.3
REP S08 280N	QC	19	114	1.16	253	0.069	<20	1.62	0.016	0.12	0.1	0.09	10.4	0.1	<0.05	6	1.3
S08 240W	Soil	10	91	0.83	183	0.179	<20	1.98	0.022	0.09	0.5	0.01	4.5	<0.1	<0.05	8	<0.5
REP S08 240W	QC	10	96	0.90	188	0.176	<20	2.07	0.030	0.10	0.2	0.01	4.5	<0.1	<0.05	8	<0.5
Reference Materials																	
STD DS7	Standard	12	178	0.99	438	0.134	33	1.06	0.105	0.53	3.3	0.18	3.1	4.2	0.12	5	3.3
STD DS7	Standard	12	193	1.07	454	0.148	38	1.11	0.107	0.59	3.4	0.18	3.1	4.2	0.14	6	3.5
STD DS7	Standard	13	180	1.08	456	0.152	33	1.13	0.097	0.51	3.3	0.19	2.7	4.0	0.19	5	3.6
STD DS7	Standard	13	177	1.11	455	0.147	29	1.13	0.097	0.51	3.4	0.18	2.8	4.0	0.18	5	3.6
STD DS7 Expected		13	163	1.05	370	0.124	39	0.959	0.073	0.44	3.8	0.2	2.5	4.2	0.21	5	3.5
BLK	Blank	<1	<1	<0.01	<1	<0.001	<20	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5
BLK	Blank	<1	<1	<0.01	<1	<0.001	<20	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5

Table 2a Assay Report for Rocks



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Client: **Salient Resources**
50 - 1640 - 162nd St.
Surrey BC V4A 6Y9 Canada

Submitted By:	Brent Hemingway
Receiving Lab:	Canada-Vancouver
Received:	March 04, 2009
Report Date:	March 16, 2009
Page:	1 of 2

CERTIFICATE OF ANALYSIS VAN09000675.1

CLIENT JOB INFORMATION

Project:	MaryMac
Shipment ID:	
P.O. Number	
Number of Samples:	2

SAMPLE DISPOSAL

RTRN-PLP	Return

Acme does not accept responsibility for samples left at the laboratory after 90 days without prior written instructions for sample storage or return.

SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Method Code	Number of Samples	Code Description	Test Wgt (g)	Report Status
R200	2	Crush, split and pulverize rock to 200 mesh		
1DX15	2	1:1:1 Aqua Regia digestion ICP-MS analysis	15	Completed

ADDITIONAL COMMENTS

Invoice To: Salient Resources
50 - 1640 - 162nd St.
Surrey BC V4A 6Y9
Canada

CC:

BRITISH COLUMBIA CERTIFIED ASSAYER
RAYMOND CHAN

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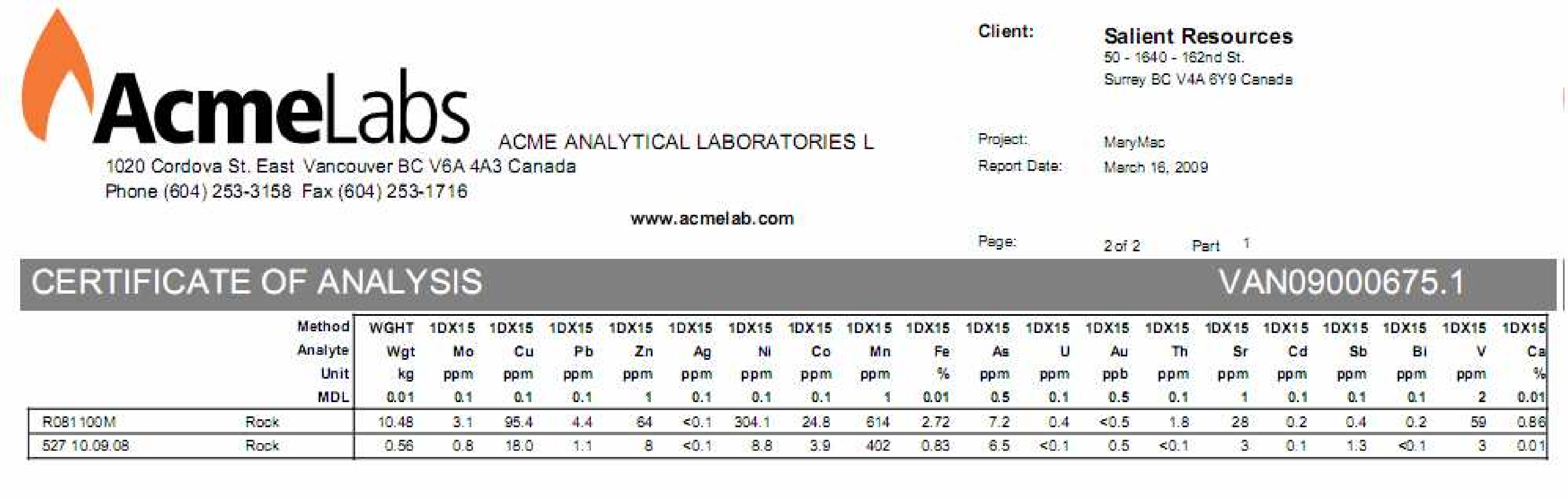
"*" asterisk indicates that an analytical result could not be provided due to unusually high levels of interference from other elements.



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Client: **Salient Resources**
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Surrey BC V4A 6Y9 Canada

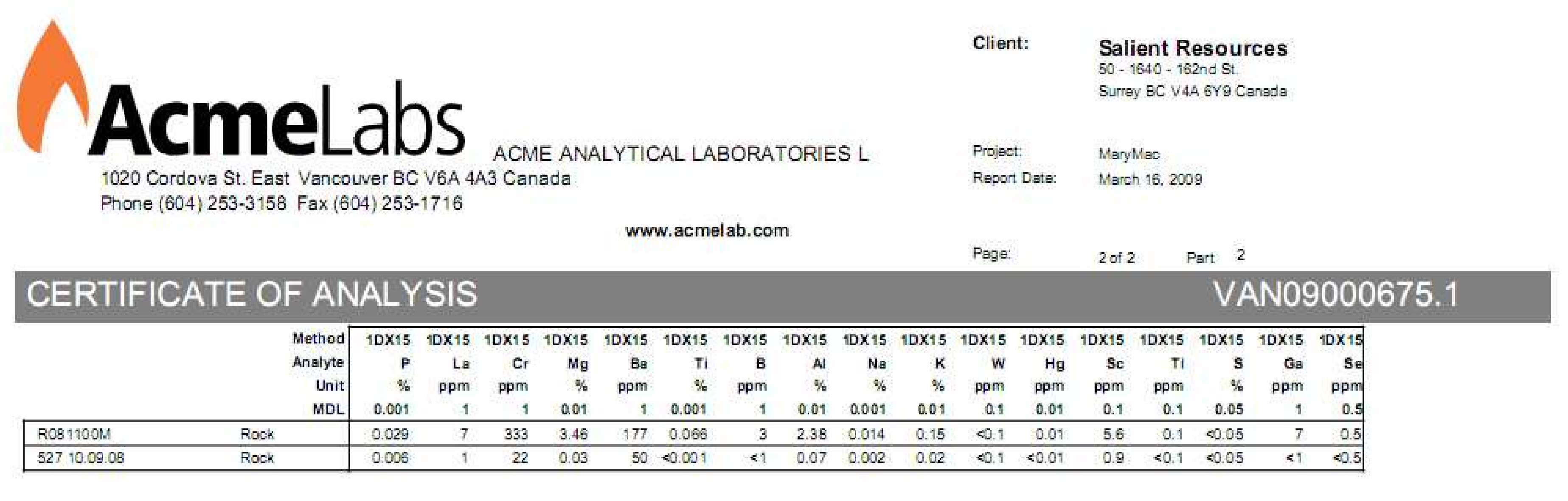
Project: MaryMac
Report Date: March 16, 2009

Page: 2 of 2 Part 1

CERTIFICATE OF ANALYSIS

VAN09000675.1

		Method	WGHT	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15
		Analyte	Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca
		Unit	kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%
		MDL	0.01	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	0.1	2	0.01
R081100M	Rock		10.48	3.1	95.4	4.4	64	<0.1	304.1	24.8	614	2.72	7.2	0.4	<0.5	1.8	28	0.2	0.4	0.2	59	0.86
527 10.09.08	Rock		0.56	0.8	18.0	1.1	8	<0.1	8.8	3.9	402	0.83	6.5	<0.1	0.5	<0.1	3	0.1	1.3	<0.1	3	0.01



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Client: **Salient Resources**
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Surrey BC V4A 6Y9 Canada

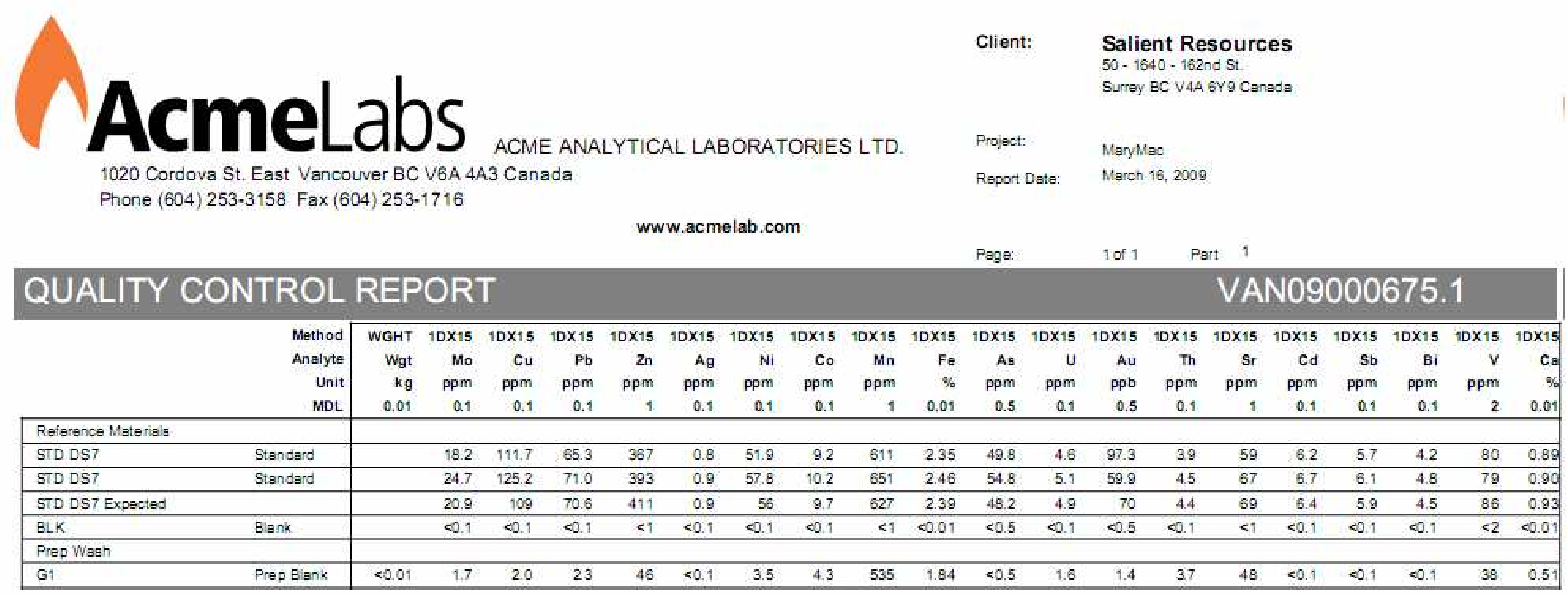
Project: MaryMac
Report Date: March 16, 2009

Page: 2 of 2 Part 2

CERTIFICATE OF ANALYSIS

VAN09000675.1

		Method	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15
		Analyte	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se
		Unit	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm
		MDL	0.001	1	1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5
R081100M	Rock		0.029	7	333	3.46	177	0.066	3	2.38	0.014	0.15	<0.1	0.01	5.6	0.1	<0.05	7	0.5
527 10.09.08	Rock		0.006	1	22	0.03	50	<0.001	<1	0.07	0.002	0.02	<0.1	<0.01	0.9	<0.1	<0.05	<1	<0.5



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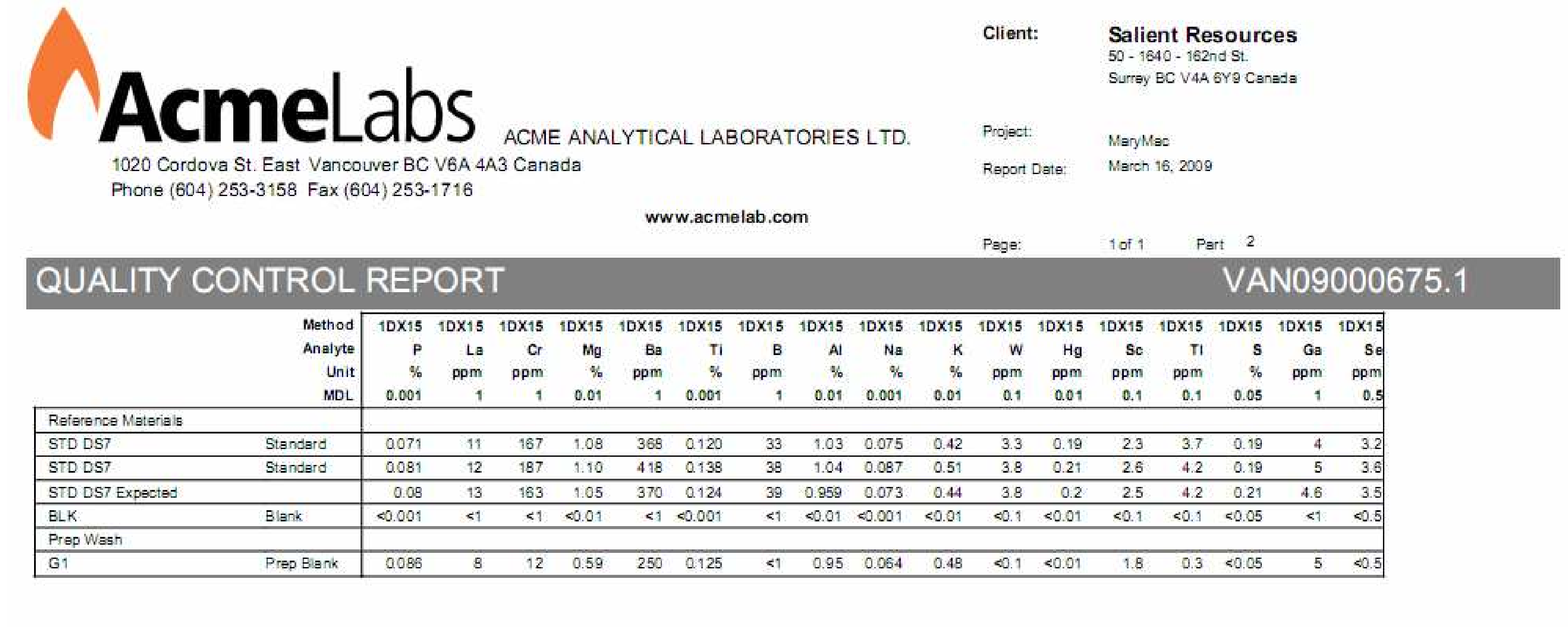
Project: MaryMac

Report Date: March 16, 2009

Page: 1 of 1 Part 1

QUALITY CONTROL REPORT VAN09000675.1

	Method	WGHT	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15
	Analyte	Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca
	Unit	kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%
	MDL	0.01	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	0.1	2	0.01
Reference Materials																					
STD DS7	Standard		18.2	111.7	65.3	367	0.8	51.9	9.2	611	2.35	49.8	4.6	97.3	3.9	59	6.2	5.7	4.2	80	0.89
STD DS7	Standard		24.7	125.2	71.0	393	0.9	57.8	10.2	651	2.46	54.8	5.1	59.9	4.5	67	6.7	6.1	4.8	79	0.90
STD DS7 Expected			20.9	109	70.6	411	0.9	56	9.7	627	2.39	48.2	4.9	70	4.4	69	6.4	5.9	4.5	86	0.93
BLK	Blank		<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.5	<0.1	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<2	<0.01
Prep Wash																					
G1	Prep Blank	<0.01	1.7	2.0	2.3	46	<0.1	3.5	4.3	535	1.84	<0.5	1.6	1.4	3.7	48	<0.1	<0.1	<0.1	38	0.51



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50 - 1640 - 162nd St.
Surrey BC V4A 6Y9 Canada

Project: MaryMac

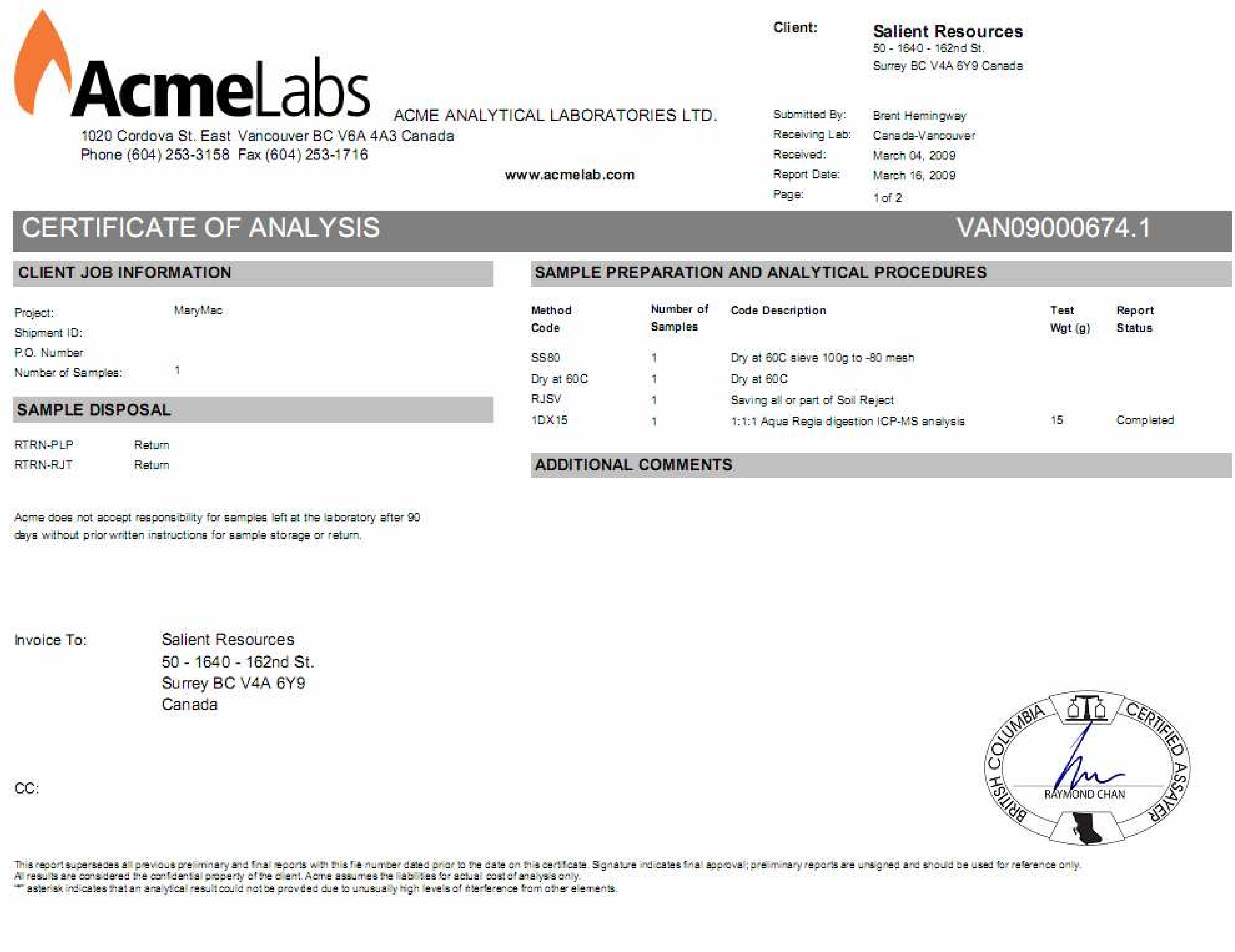
Report Date: March 16, 2009

Page: 1 of 1 Part 2

QUALITY CONTROL REPORT VAN09000675.1

	Method	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15
	Analyte	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se
	Unit	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm
	MDL	0.001	1	1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5
Reference Materials																		
STD DS7	Standard	0.071	11	167	1.08	368	0.120	33	1.03	0.075	0.42	3.3	0.19	2.3	3.7	0.19	4	3.2
STD DS7	Standard	0.081	12	187	1.10	418	0.138	38	1.04	0.087	0.51	3.8	0.21	2.6	4.2	0.19	5	3.6
STD DS7 Expected		0.08	13	163	1.05	370	0.124	39	0.959	0.073	0.44	3.8	0.2	2.5	4.2	0.21	4.6	3.5
BLK	Blank	<0.001	<1	<1	<0.01	<1	<0.001	<1	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5
Prep Wash																		
G1	Prep Blank	0.086	8	12	0.59	250	0.125	<1	0.95	0.064	0.48	<0.1	<0.01	1.8	0.3	<0.05	5	<0.5

Table 3a Assay Report for Moss-Mat



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Client: **Salient Resources**
50 - 1640 - 162nd St.
Surrey BC V4A 6Y9 Canada

Submitted By:	Brent Hemingway
Receiving Lab:	Canada-Vancouver
Received:	March 04, 2009
Report Date:	March 16, 2009
Page:	1 of 2

CERTIFICATE OF ANALYSIS VAN09000674.1

CLIENT JOB INFORMATION

Project:	MaryMac
Shipment ID:	
P.O. Number	
Number of Samples:	1

SAMPLE DISPOSAL

RTRN-PLP	Return
RTRN-RJT	Return

Acme does not accept responsibility for samples left at the laboratory after 90 days without prior written instructions for sample storage or return.

SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Method Code	Number of Samples	Code Description	Test Wgt (g)	Report Status
SS80	1	Dry at 60C sieve 100g to -80 mesh		
Dry at 60C	1	Dry at 60C		
RJSV	1	Saving all or part of Soil Reject		
1DX15	1	1:1:1 Aqua Regia digestion ICP-MS analysis	15	Completed

ADDITIONAL COMMENTS

Invoice To: Salient Resources
50 - 1640 - 162nd St.
Surrey BC V4A 6Y9
Canada

CC:

BRITISH COLUMBIA CERTIFIED ASSAYER
RAYMOND CHAN

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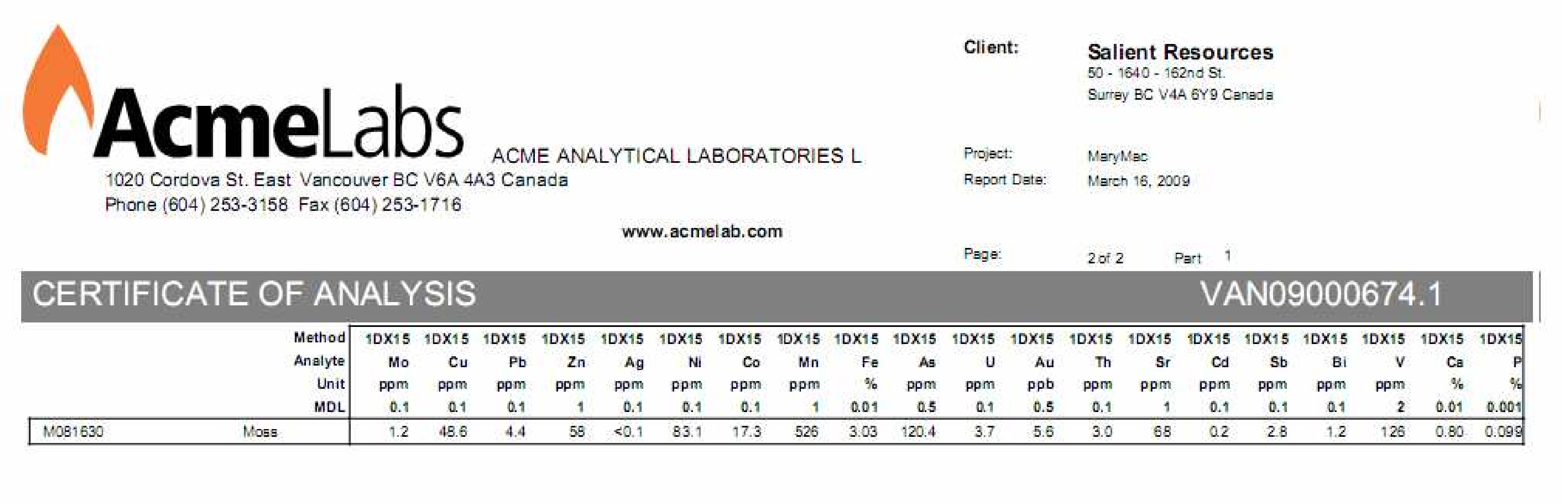
"*" asterisk indicates that an analytical result could not be provided due to unusually high levels of interference from other elements.



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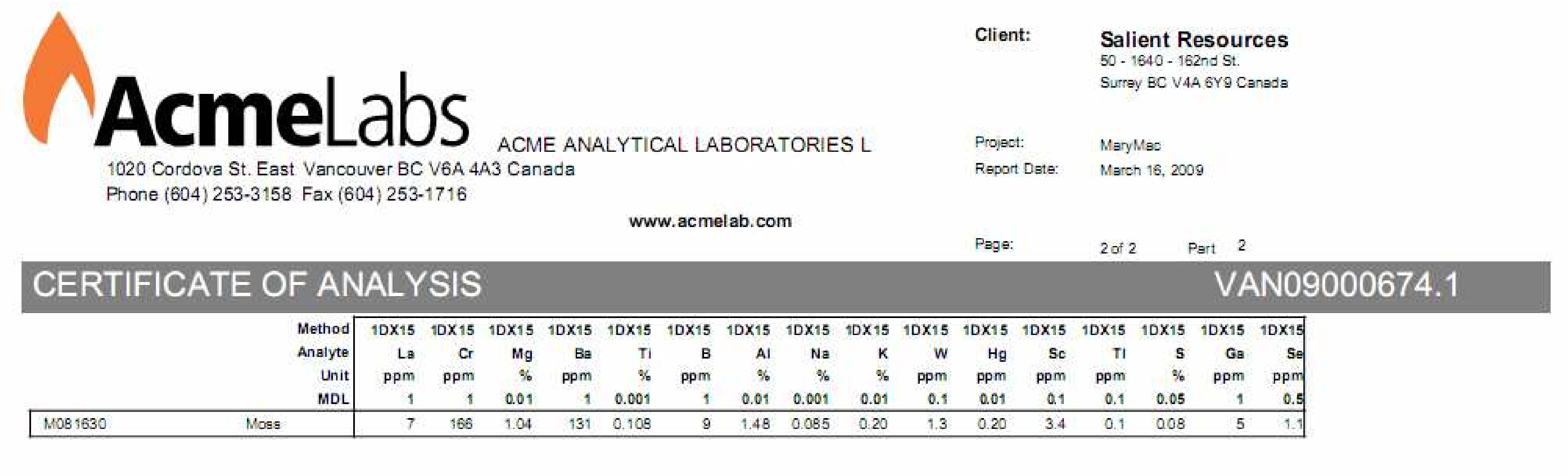
Surrey BC V4A 6Y9 Canada

Project: MaryMac
Report Date: March 16, 2009

Page: 2 of 2 Part 1

CERTIFICATE OF ANALYSIS VAN09000674.1

		Method	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15
		Analyte	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P
		Unit	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%
		MDL	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	0.1	2	0.01	0.001
M081630	Moss		1.2	48.6	4.4	58	<0.1	83.1	17.3	526	3.03	120.4	3.7	5.6	3.0	68	0.2	2.8	1.2	126	0.80	0.099



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Client: **Salient Resources**
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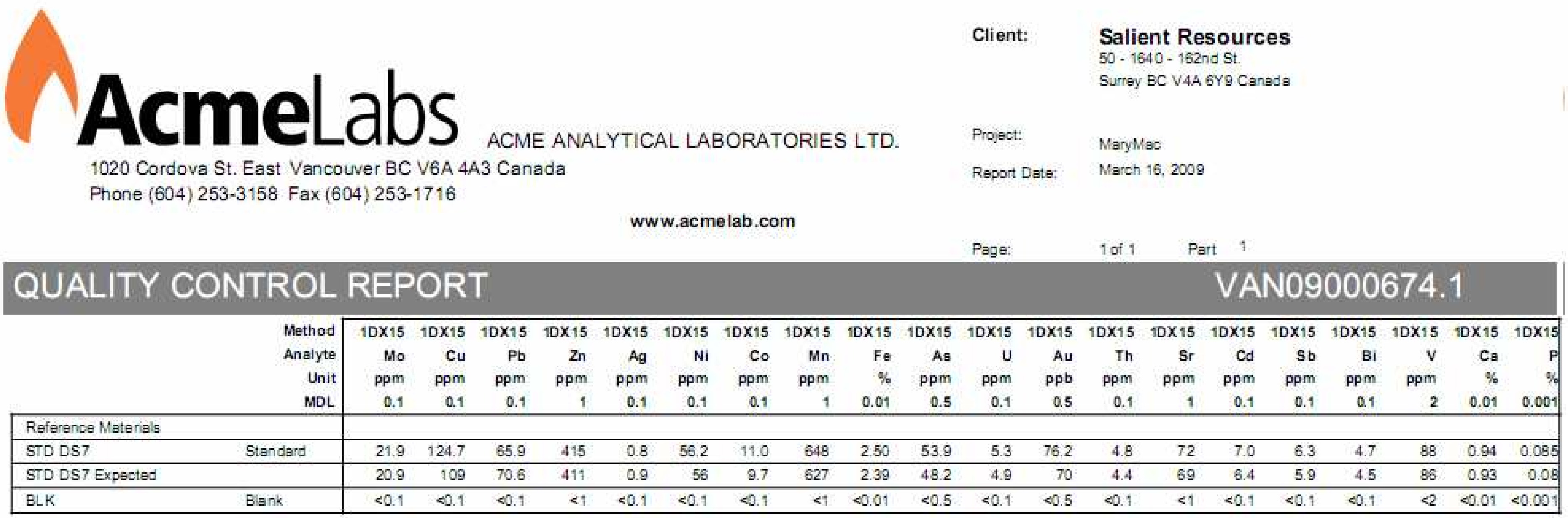
Surrey BC V4A 6Y9 Canada

Project: MaryMac
Report Date: March 16, 2009

Page: 2 of 2 Part 2

CERTIFICATE OF ANALYSIS VAN09000674.1

		Method	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15
		Analyte	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se
		Unit	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm
		MDL	1	1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5
M081630	Moss		7	166	1.04	131	0.108	9	1.48	0.085	0.20	1.3	0.20	3.4	0.1	0.08	5	1.1



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Client: **Salient Resources**
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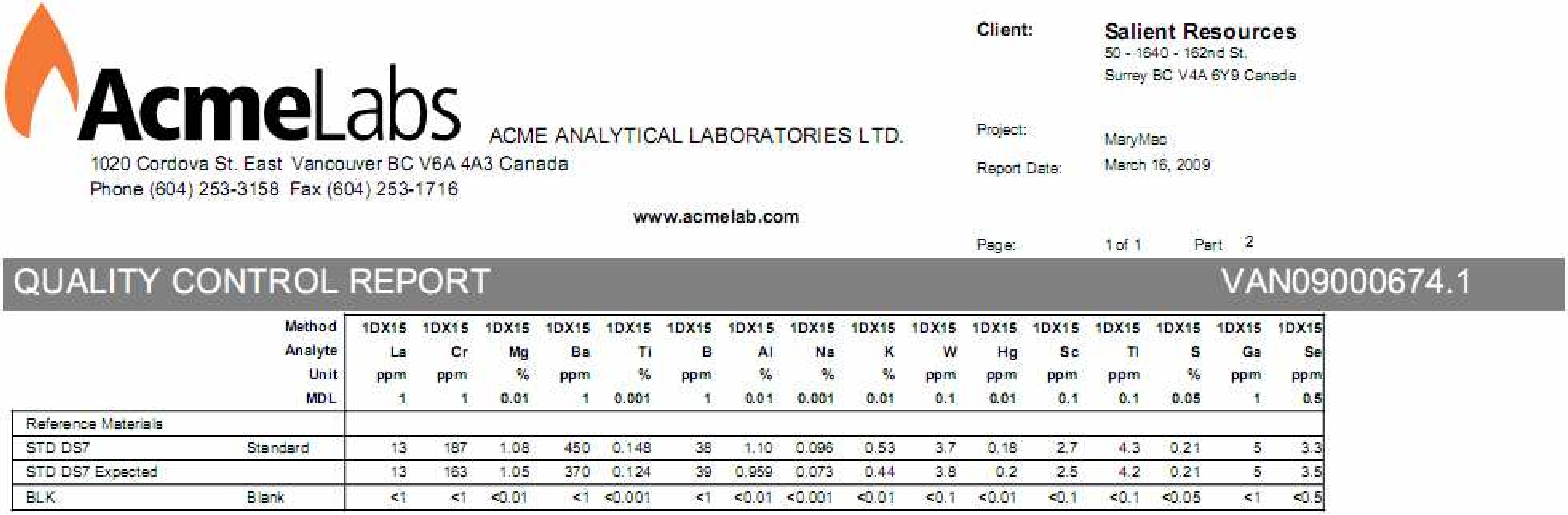
Project: MaryMac
Report Date: March 16, 2009

Page: 1 of 1 Part 1

QUALITY CONTROL REPORT VAN09000674.1

	Method	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15
	Analyte	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P
	Unit	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%
	MDL	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	0.1	2	0.01	0.001
Reference Materials																					
STD DS7	Standard	21.9	124.7	65.9	415	0.8	56.2	11.0	648	2.50	53.9	5.3	76.2	4.8	72	7.0	6.3	4.7	88	0.94	0.085
STD DS7 Expected		20.9	109	70.6	411	0.9	56	9.7	627	2.39	48.2	4.9	70	4.4	69	6.4	5.9	4.5	86	0.93	0.08
BLK	Blank	<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.5	<0.1	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<2	<0.01	<0.001



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Client: **Salient Resources**
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Surrey BC V4A 6Y9 Canada

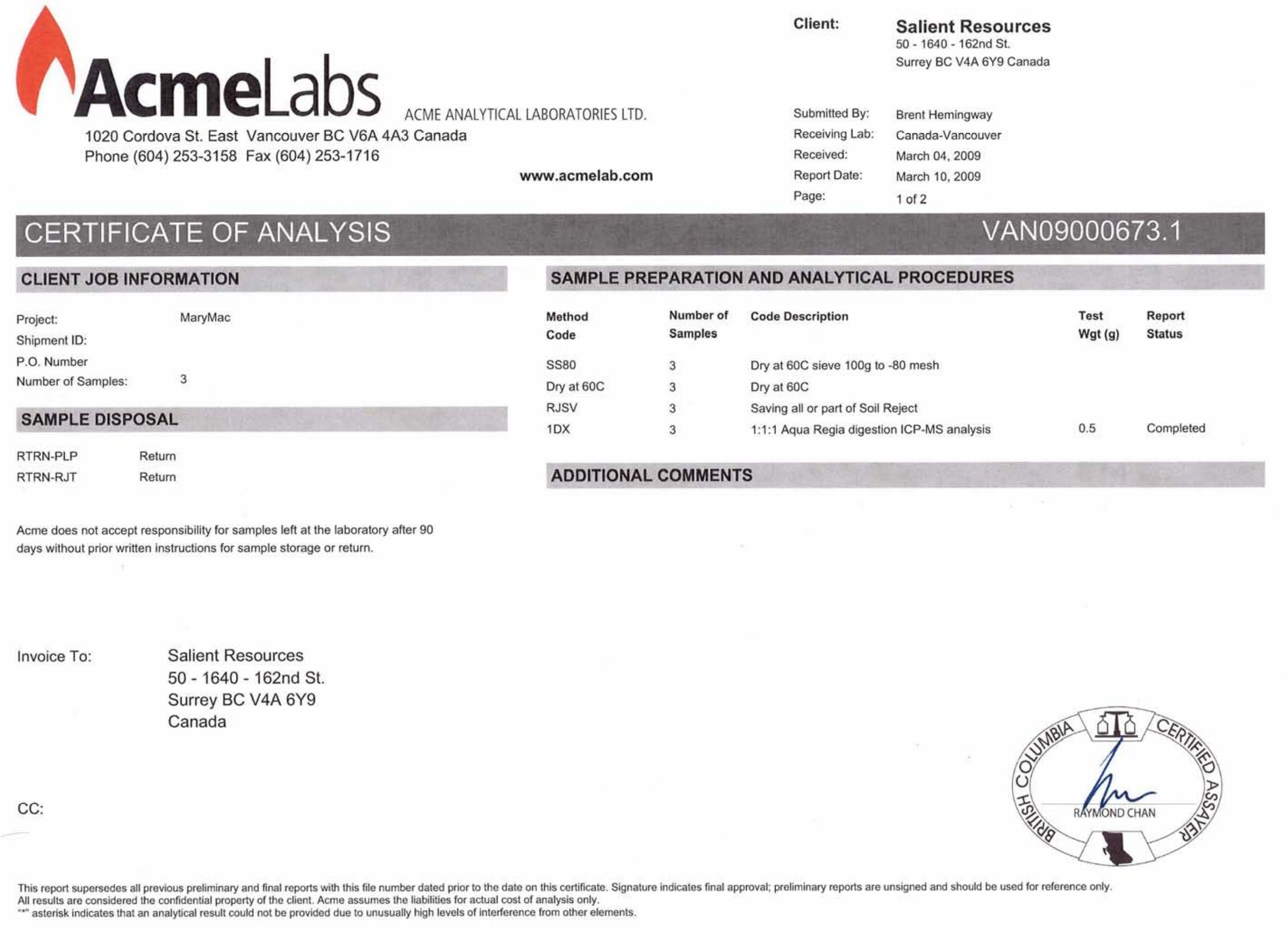
Project: MaryMac
Report Date: March 16, 2009

Page: 1 of 1 Part 2

QUALITY CONTROL REPORT VAN09000674.1

	Method	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15
	Analyte	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se
	Unit	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm
	MDL	1	1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5
Reference Materials																	
STD DS7	Standard	13	187	1.08	450	0.148	38	1.10	0.096	0.53	3.7	0.18	2.7	4.3	0.21	5	3.3
STD DS7 Expected		13	163	1.05	370	0.124	39	0.959	0.073	0.44	3.8	0.2	2.5	4.2	0.21	5	3.5
BLK	Blank	<1	<1	<0.01	<1	<0.001	<1	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5

Table 4a Assay Report for Silts



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Client: **Salient Resources**
50 - 1640 - 162nd St.
Surrey BC V4A 6Y9 Canada

Submitted By:	Brent Hemingway
Receiving Lab:	Canada-Vancouver
Received:	March 04, 2009
Report Date:	March 10, 2009
Page:	1 of 2

CERTIFICATE OF ANALYSIS VAN09000673.1

CLIENT JOB INFORMATION

Project:	MaryMac
Shipment ID:	
P.O. Number	
Number of Samples:	3

SAMPLE DISPOSAL

RTRN-PLP	Return
RTRN-RJT	Return

Acme does not accept responsibility for samples left at the laboratory after 90 days without prior written instructions for sample storage or return.

SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Method Code	Number of Samples	Code Description	Test Wgt (g)	Report Status
SS80	3	Dry at 60C sieve 100g to -80 mesh		
Dry at 60C	3	Dry at 60C		
RJSV	3	Saving all or part of Soil Reject		
1DX	3	1:1:1 Aqua Regia digestion ICP-MS analysis	0.5	Completed

ADDITIONAL COMMENTS

Invoice To: Salient Resources
50 - 1640 - 162nd St.
Surrey BC V4A 6Y9
Canada

CC:

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RAYMOND CHAN

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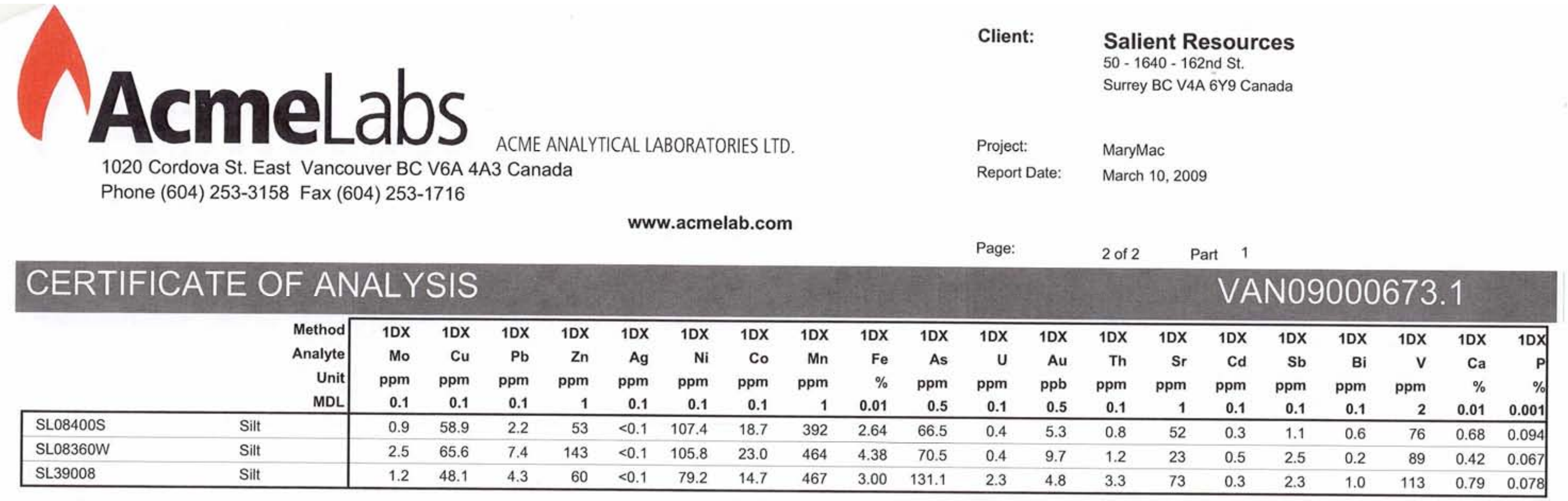
All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of analysis only.
"*" asterisk indicates that an analytical result could not be provided due to unusually high levels of interference from other elements.



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50 - 1640 - 162nd St.
Surrey BC V4A 6Y9 Canada

Project: MaryMac
Report Date: March 10, 2009

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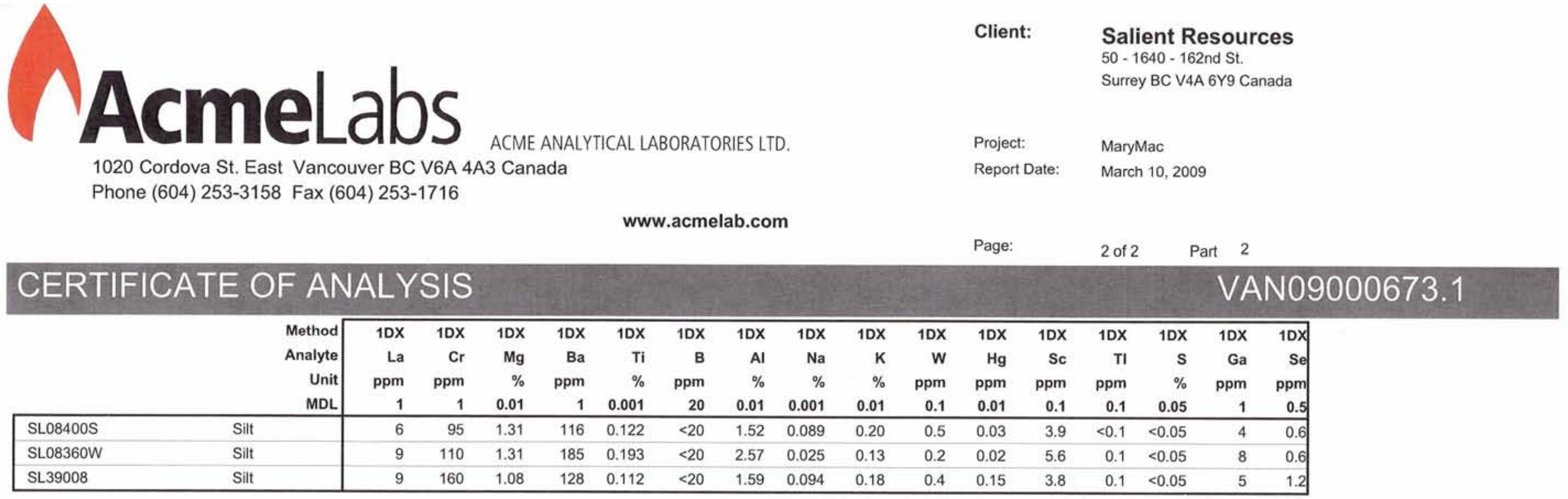
CERTIFICATE OF ANALYSIS VAN09000673.1

	Method	**1DX**	**1DX**	**1DX**	**1DX**	**1DX**	**1DX**	**1DX**	**1DX**	**1DX**	**1DX**	**1DX**	**1DX**	**1DX**	**1DX**	**1DX**	**1DX**	**1DX**	**1DX**	**1DX**	**1DX**
	Analyte	**Mo**	**Cu**	**Pb**	**Zn**	**Ag**	**Ni**	**Co**	**Mn**	**Fe**	**As**	**U**	**Au**	**Th**	**Sr**	**Cd**	**Sb**	**Bi**	**V**	**Ca**	**P**
	Unit	**ppm**	**ppm**	**ppm**	**ppm**	**ppm**	**ppm**	**ppm**	**ppm**	**%**	**ppm**	**ppm**	**ppb**	**ppm**	**ppm**	**ppm**	**ppm**	**ppm**	**ppm**	**%**	**%**
	MDL	**0.1**	**0.1**	**0.1**	**1**	**0.1**	**0.1**	**0.1**	**1**	**0.01**	**0.5**	**0.1**	**0.5**	**0.1**	**1**	**0.1**	**0.1**	**0.1**	**2**	**0.01**	**0.001**
SL08400S	Silt	0.9	58.9	2.2	53	<0.1	107.4	18.7	392	2.64	66.5	0.4	5.3	0.8	52	0.3	1.1	0.6	76	0.68	0.094
SL08360W	Silt	2.5	65.6	7.4	143	<0.1	105.8	23.0	464	4.38	70.5	0.4	9.7	1.2	23	0.5	2.5	0.2	89	0.42	0.067
SL39008	Silt	1.2	48.1	4.3	60	<0.1	79.2	14.7	467	3.00	131.1	2.3	4.8	3.3	73	0.3	2.3	1.0	113	0.79	0.078



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CERTIFICATE OF ANALYSIS VAN09000673.1

	Method	**1DX**	**1DX**	**1DX**	**1DX**	**1DX**	**1DX**	**1DX**	**1DX**	**1DX**	**1DX**	**1DX**	**1DX**	**1DX**	**1DX**	**1DX**	**1DX**
	Analyte	**La**	**Cr**	**Mg**	**Ba**	**Ti**	**B**	**Al**	**Na**	**K**	**W**	**Hg**	**Sc**	**Tl**	**S**	**Ga**	**Se**
	Unit	**ppm**	**ppm**	**%**	**ppm**	**%**	**ppm**	**%**	**%**	**%**	**ppm**	**ppm**	**ppm**	**ppm**	**%**	**ppm**	**ppm**
	MDL	**1**	**1**	**0.01**	**1**	**0.001**	**20**	**0.01**	**0.001**	**0.01**	**0.1**	**0.01**	**0.1**	**0.1**	**0.05**	**1**	**0.5**
SL08400S	Silt	6	95	1.31	116	0.122	<20	1.52	0.089	0.20	0.5	0.03	3.9	<0.1	<0.05	4	0.6
SL08360W	Silt	9	110	1.31	185	0.193	<20	2.57	0.025	0.13	0.2	0.02	5.6	0.1	<0.05	8	0.6
SL39008	Silt	9	160	1.08	128	0.112	<20	1.59	0.094	0.18	0.4	0.15	3.8	0.1	<0.05	5	1.2

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QUALITY CONTROL REPORT VAN09000673.1

	Method	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX
	Analyte	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P
	Unit	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%
	MDL	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	0.1	2	0.01	0.001
Reference Materials																					
STD DS7	Standard	19.9	104.0	67.6	364	0.8	53.6	9.3	629	2.34	50.8	4.5	52.3	3.9	76	6.2	6.0	4.5	79	0.86	0.070
STD DS7	Standard	20.0	122.7	69.5	410	0.8	54.5	10.2	710	2.57	57.4	5.0	62.3	4.6	73	6.8	5.7	4.5	86	0.99	0.074
STD DS7 Expected		20.9	109	70.6	411	0.9	56	9.7	627	2.39	48.2	4.9	70	4.4	69	6.4	5.9	4.5	86	0.93	0.08
BLK	Blank	<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.5	<0.1	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<2	<0.01	<0.001

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QUALITY CONTROL REPORT VAN09000673.1

	Method	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX
	Analyte	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se
	Unit	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm
	MDL	1	1	0.01	1	0.001	20	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5
Reference Materials																	
STD DS7	Standard	12	178	0.99	438	0.134	33	1.06	0.105	0.53	3.3	0.18	3.1	4.2	0.12	5	3.3
STD DS7	Standard	12	193	1.07	454	0.148	38	1.11	0.107	0.59	3.4	0.18	3.1	4.2	0.14	6	3.5
STD DS7 Expected		13	163	1.05	370	0.124	39	0.959	0.073	0.44	3.8	0.2	2.5	4.2	0.21	5	3.5
BLK	Blank	<1	<1	<0.01	<1	<0.001	<20	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5