GEOLOGICAL AND GEOCHEMICAL REPORT
on the
KM PROPERTY

Omineca Mining Division, British Columbia, Canada
NTS MAP 93M.14E
Latitude 55 48 00N
Longitude 127 27 00W

for

CAVAN VENTURES LIMITED
Suite 204 North Tower,
5811 Cooney Road, Richmond, BC, Canada

By
Derrick Strickland, P.Geo.
#1030 - 475 Howe Street
Vancouver, British Columbia
Canada V6C 2B3

Dated: November 1, 2010

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

APPENDIX

1.0 SUMMARY

This report summarizes recent exploration work performed on the group of mineral claims known as the KM Property (KM) of which Cavan Ventures Ltd. of Vancouver, British Columbia owns a 100% interest. The KM Property is situated 60 kilometres northeast of the town of Hazelton, B.C. and consists of seven MTO located mineral claims, covering an area of 1654 hectares. The claim group encompasses numerous polymetallic vein occurrences which host anomalous gold, silver, copper, lead and zinc.

During August of 2010, a three-week program consisting of rock sampling, hand-trenching, and geologic mapping was performed on the Property. Resampling in areas of anomalous results identified in Assessment Report 17542 (Hooper, 1987) has verified anomalous precious and base metals values. Reconnaissance geological mapping classified all feldspar *+1-* quartz porphyritic intrusives into sill-like bodies and one of two dike swarms, one trending E-W, and one trending N-S. The intrusive apophyses were found to host Pb-Zn-Ag+/-Au bearing quartz veins, which comprise the majority of mineralized occurrences. Zones of mineralized phyllic alteration within intrusive rock were identified and observed to outcrop to a greater extent on the previously unexplored North side of the property. A later dioritic stock in the southwest of the map area contains numerous, traceable, polymetallic quartz vein occurrences.

A third-phase program of reconnaissance prospecting, continuous rock chip trench sampling and detailed trench mapping of areas not covered during the phase one and two programs with a goal of establishing a viable economic drill target is recommended. A short hole drill programme may be enacted in the Gully Vein area. Future exploration should concentrate in new areas with high vein density in order to delineate zones with economic widths and strike lengths.

2.0 INTRODUCTION

This technical report highlights information obtained from an August 2010 geological and geochemical exploration program carried out on the KM mineral claims by Rio Minerals Limited on behalf of Cavan Ventures Limited. This exploration program tested previously reported anomalous zones and new areas for precious and base metal values. This report was prepared for assessment credit in the Province of British Columbia.

The property has been staked to cover the known extent of previously identified prospective polymetallic silver-lead-zinc-copper +/- gold vein occurrences (Hooper, 1987). Mineralization typically occurs within quartz veins. The veins for the most part are hosted in Bulkley Dioritic plugs and associated sills and dikes contained within Bowser Lake Group sediments.

The field program consisted of the collection of 75 continuous rock chip samples, 7 grab rock samples from outcrop and 11 float samples for assay. Additional fieldwork consisted of prospecting, geological mapping and continuous chip sampling of newly trenched areas.

Polymetallic vein (silver-lead-zinc+/- gold) occurrences typically occur along faults and fractures in sedimentary basins deformed, metamorphosed and intruded by igneous rocks (Lefebure, D.V. and Church, B.N., 2005). The depositional environment, geochemical signature (zinc, lead, silver, manganese, copper and arsenic) and age (Cretaceous) of the host rock on the KM property are consistent with a polymetallic vein (silver-lead-zinc+/- gold) environment.

The objective of the 2010 exploration program was to define a viable economic drill target (good width/length), compile previous geological work, and validate previously reported exploration work.

3.0 PROPERTY DESCRIPTION AND LOCATION

The KM claims are located 2 kilometres north of Kisgegas Peak, approximately 60 kilometres north of the town of Hazelton, British Columbia (Figure 1 and Figure 2). The nearest major supply center to Hazelton and the project area is the town of Smithers (pop. 5500), located 67 kilometres south of Hazelton, and 130 kilometres from the KM property.

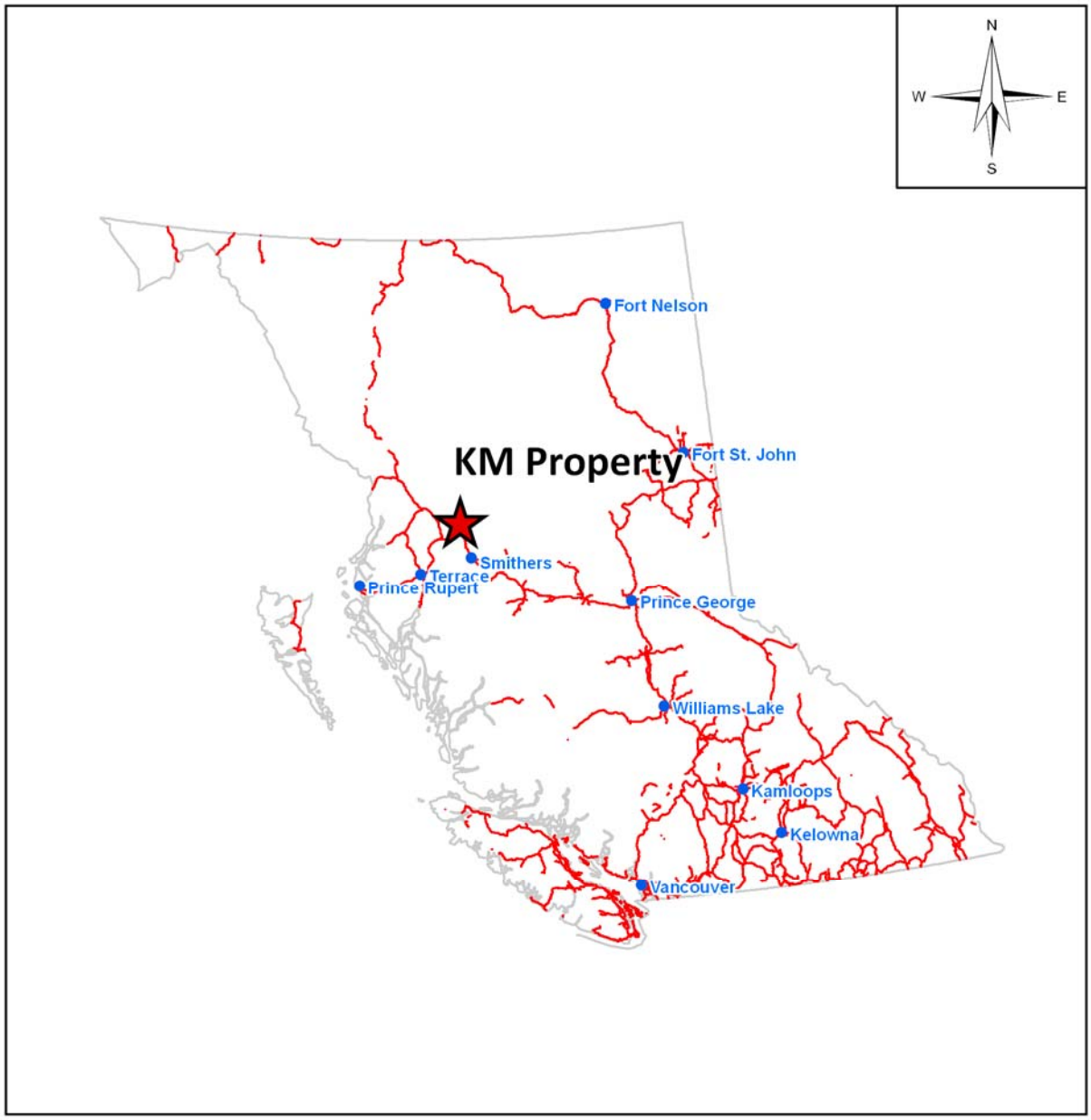
The KM Project is currently accessible by helicopter, although logging roads and a helicopter staging area are located within 7 kilometres of the claim area. The claims can be found on BCGS map sheet 093M1073 and 083 at Latitude 55 48' 00" N and Longitude 127 27' 00" W. The KM claim group consists of six contiguous Mineral Titles (Online) located tenures in the Omineca Mining Division of British Columbia, Canada. The total claim area is 3457 hectares. Cavan ventures Ltd. of Vancouver, BC owns a 100% interest in the tenures. Claim data is summarized in the following table and a map showing the claims is presented in Figure 2.

Table 1: Kisgegas Mineral Tenures

Tenure Number	Tenure Name	Good to Date*	Area in Hectares
653183	KM	2014/aug/31	1654.3561
632803	KM-7	2011/nov/28	436.2868
632804	KM-8	2011/nov/28	454.6709
632823	KM-9	2011/nov/28	436.1062
632824	KM-10	2011/nov/28	436.1715
632825	KM-11	2011/nov/28	36.367

*Pending acceptance of this report.

Figure 1: Regional Location Map of Property



Regional Location Map

Cavan Ventures Limited

KM Property, British Columbia

Scale:	1:12,500,000
Datum:	UTM NAD83 Zone 9
Prepared by:	K. Cupit, Rio Minerals Limited
Date:	October 2010

LEGEND

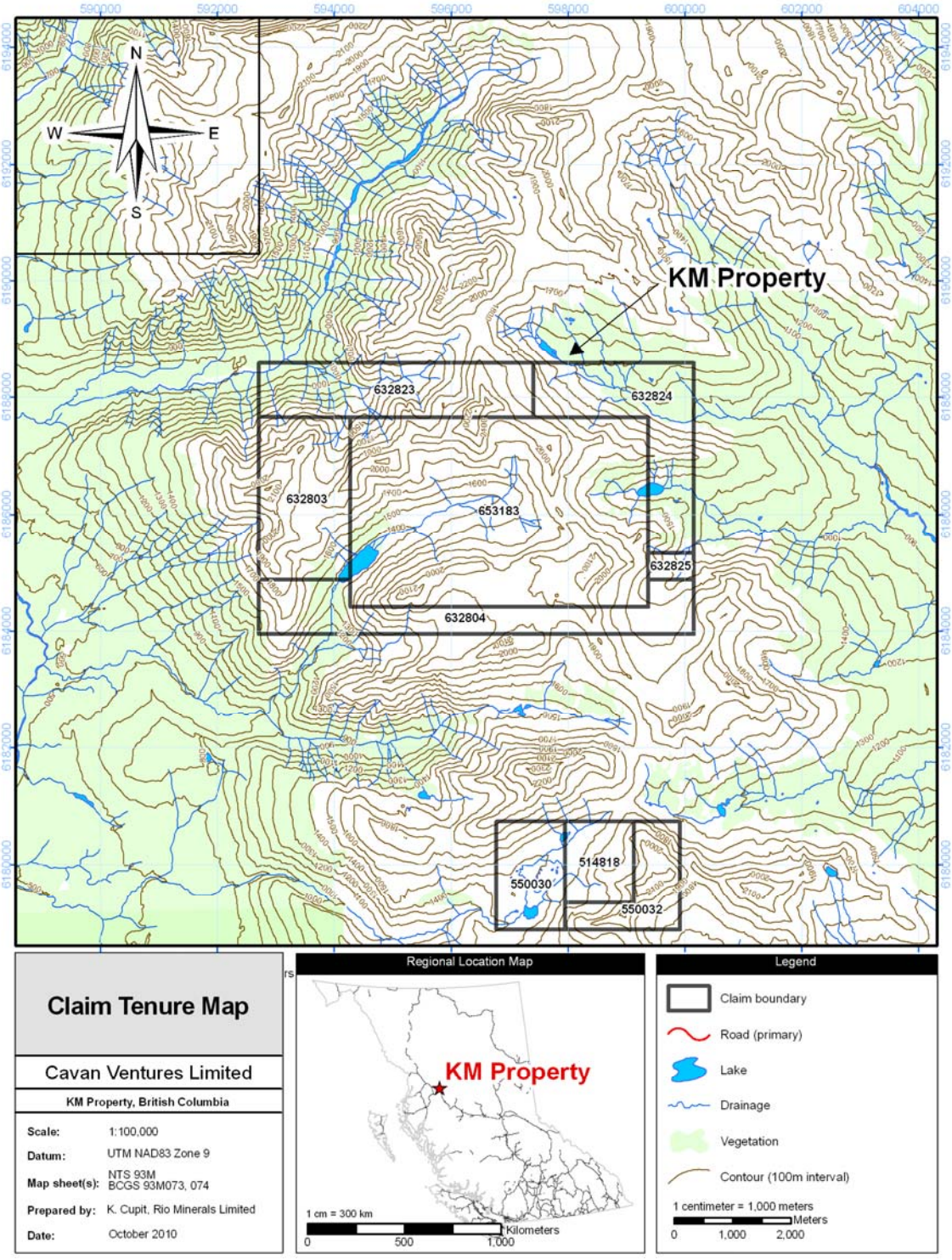
- Kisgegas Property
- City / town
- Paved road
- Province boundary

1 cm = 125 km

Kilometers

0 100 200 400

Figure 2: Claim Map



4.0 ACCESSIBILITY, CLIMATE, INFRASTRUCTURE

The KM property is located 60 kilometres northeast of Hazelton, British Columbia on the eastern boundary of the Skeena Mountains. The property is mostly above the tree-line and is centered over the headwaters of a west-flowing river draining an area of about nine square kilometres. The south side of the valley is composed of two cirques with three glacial lobes extending from the Kisgegas Peak icefield. To the north, the valley holds two alpine cirques whose bottoms exist at an elevation of 1700 metres. Elevations on the property range from 1200 to slightly over 2000 metres.

Local glaciated terrain implies sub-zero temperatures dominate throughout the year and can be expected at any time of year. The exploration season is June to October. Temperatures in August can reach over 20 degrees centigrade. Alpine fir trees persist on south-facing slopes to 1600 meters and do not attain appreciable size above 1400 metres. A mix of alpine mosses, shrubs, and annuals persist to 1700 metres with grasses and lichens surviving above 1900 metres.

5.0 HISTORICAL EXPLORATION

Reconnaissance-style mapping and sampling by D.G. Hooper in 1987 (Minfile Report #17542). Hooper states that five days were spent on the property during which geologic mapping and prospecting were performed. Twenty-nine grab samples of primarily quartz vein material containing galena, sphalerite, chalcopyrite, and pyrite were collected along a 2.4-kilometer strike from the South side of the property. Resulting highlights from the assays include 1840 g/t Ag with 0.4 g/t gold (#51517), 670 g/t Ag with 1.54 g/t Au (#51503), and 112 g/t Ag with 0.6 g/t Au (#51522).

The report concludes that high silver values are in accordance with high base metal values. The report also recommends that future mapping concentrate on location of high vein density, and that sampling of host rock that may carry disseminated sulphides or may be incorporated in densely-veinleted stockworks, should be performed to assess economically-viable zones.

In August of 2009, Rio Minerals Limited, on behalf of Cavan Ventures Limited of Vancouver, BC undertook exploration program of geochemical (rock, soil, silt) sampling and geological mapping which tested previously reported and newly discovered areas of anomalous multi-element precious and base metal values. A total of 72 rock samples, 14 stream-sediment silts, and 4 soils were collected. Rock sampling was focused on widespread mineralized (galena, chalcopyrite, pyrite and sphalerite) quartz and quartz-carbonate veins hosted within Bulkley dykes/sills, Bulkley intrusive stocks/plugs and Bowser Lake group of sediments and meta-sediments. Highlights of the 2009 exploration silt program include a multi-element gold+copper+lead+arsenic silt anomaly in a stream flowing from the East Glacier area. In addition, a multi-element anomaly was discovered in the northeast cirque area of the KM property.

The highest silt sample returned 40.1 ppb gold, 102.7 ppm copper, 85.9 ppm lead and 112.1 ppm arsenic and occur in two adjacent streams in the central portion of the claim group. Resulting highlights from the 2009 rock chip program includes the highest assay (441085) of 10.28 g/t gold, 300 g/t silver and 2.63% copper from a sub-crop quartz boulder immediate northeast end of Kisgegas lake (West end of the property). The widest vein found on the property to date is the Gully Vein (10 cm to 1.2 m) which returned values (441036) of 1.5 g/t gold with 64 g/t silver over 1.1 m. In addition, narrow 5-7 cm wide quartz veinlets return values of 0.85 g/t gold and 139 g/t silver at the North Central Cirque and 2.85 g/t gold and 55.9 g/t silver at the North East Cirque.

6.0 GEOLOGICAL SETTING

An overview of the regional geology provided is reprinted from the B.C. Geological Survey mapping synopsis of the Hazelton Map Sheet 093M, G.S.C. Memoir 223, B.C. Minfile descriptions, B.C. Department of Mines annual reports, and filed assessment reports.

The Hazelton area is underlain primarily by rocks of the Stikinia Terrain and an overlap assemblage. The Stikinia Terrain consists of the Lower to Middle Jurassic Hazelton Group and the Upper Triassic Stuhini (Takla) Group island arc volcanic rocks. The overlap assemblage consists in part of the Middle Jurassic to Upper Cretaceous Bowser Lake Group. These mainly comprise clastic sedimentary and minor volcanic rocks deposited in local fault-bounded successor basins and in the Bowser basin.

Upper Cretaceous calc-alkaline volcanic rocks of the Kasalka Group extruded from several volcanic centers, while coeval plutonic rocks formed the Bulkley Intrusions. During the Cenozoic Era, important igneous activity occurred in the Eocene stage when the Babine intrusions and the Ootsa Lake Group calc-alkaline volcanic suite formed (Figure 3).

Structurally, the area is dominated by block faulting, which has controlled the location of the major mountain valley systems, as well as many of the intrusive rock suites and mineral deposits. Aside from contact effects near intrusive bodies, metamorphism is light, reaching prehnite-pumpellyite facies.

Geological mapping by T.A. Richards in 1980 shows the Kisgegas peak region to be a block fault bounded structure underlain by primarily Lower Bowser Lake Group sediments of Late Jurassic age. The sediments lie generally in a NW-SW attitude with fold axis oriented along a similar azimuth. The sediments are comprised mainly of sandstone, siltstone, and conglomerates. Late Cretaceous Bulkley intrusive stocks, plugs, dikes, and sills of granodioritic composition cut through the sediments and are interpreted by Richards to form the base of an uplifted block carrying the sediments in a roof pendant-type fashion. Later Tertiary age Babine intrusions are mapped to the south of the Kisgegas Prospect, but are possibly correlative with late-stage leucocratic microgranodioritic dikes observed on the claims (Hooper, 1987). (Figure 4)

Figure 3: Regional Geology Map

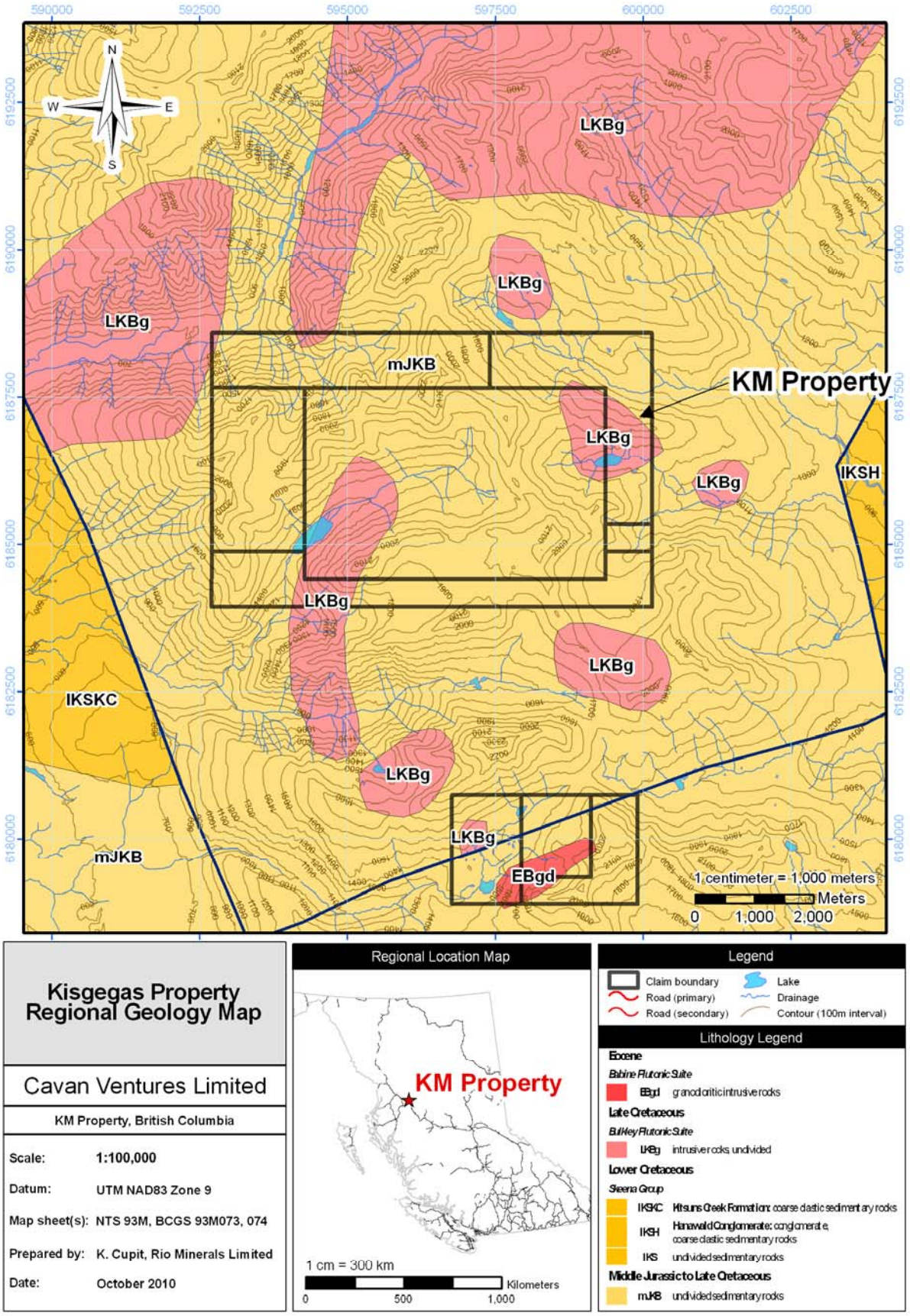
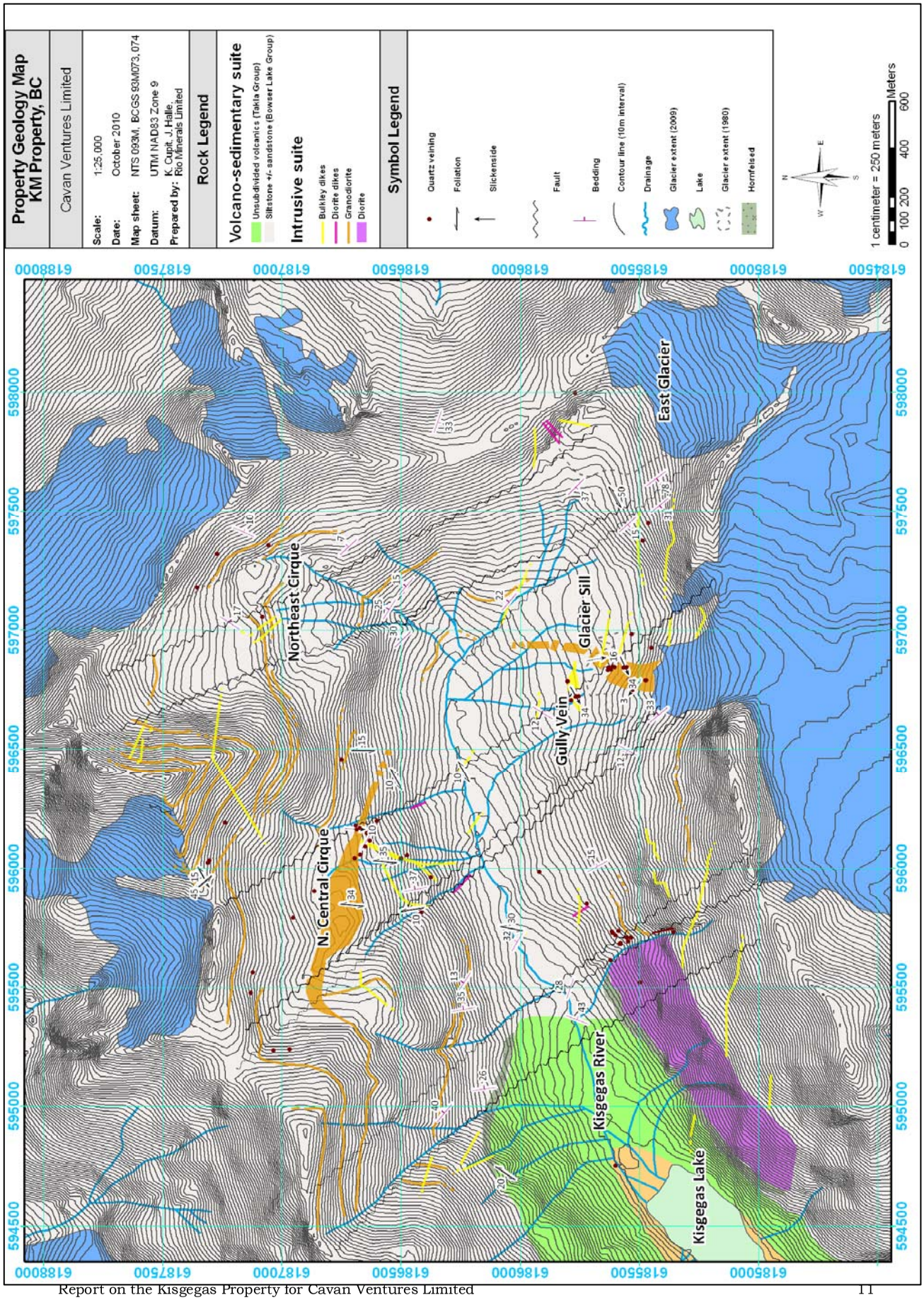


Figure 4: Property Geology Map



7.0 DEPOSIT TYPES

The main type of mineralization found on the KM property may be termed polymetallic veins. The paragraphs below synthesize typical characteristics and features of this deposit type, as well as a current theory of its genesis. The metal-bearing veins of the KM property largely reflect this descriptive model.

Polymetallic veins are silver, lead and zinc-bearing quartz-carbonate veins associated with felsic hypabyssal intrusions. Gangue minerals in the veins are quartz, chlorite, calcite, and possibly ankerite, barite, and/or fluorite. Sulphide minerals include pyrite (FeS_2), sphalerite (ZnS), chalcopyrite (Cu_2FeS_2), galena (PbS), arsenopyrite (FeAsS), and possibly tetrahedrite-tennantite, Ag sulfosalts, and argentite. Native metals such as gold and silver may also be present in the form of electrum. Coarse-grained sulphide minerals occur as patches and pods.

In most cases, polymetallic vein deposition occurs in clastic sedimentary rocks or in intermediate to felsic volcanic rocks. Veins are often compound veins with a complex, multi-phase, paragenetic sequence and may exhibit crustification, colloform, and/or drusy textures. Individual veins vary from centimetres up to more than 3 metres wide and can be followed from a few hundred to more than 1000 metres in length and depth. Veins may widen or grade into broad zones to tens of metres in width in stockwork zones or breccias. Typically, sets of parallel and offset veins are common. Veins postdate deformation and metamorphism.

In a typical polymetallic vein deposit, veins are deposited in areas of high permeability such as intrusive contacts, fault intersections, and breccias marginal to small, near-surface intrusions. The intrusive rocks are geochemically calc-alkaline to alkaline, and when in the form of small intrusions, range from diorite to monzonite to granodioritic in composition. Intrusive rocks may also occur as sub-volcanic necks and dykes of andesitic to rhyolitic composition. Texturally, they are fine to medium-grained, and equigranular to porphyroaphanitic.

A continuum from porphyry copper deposits to polymetallic veins exists. Porphyry copper stockwork vein deposits originate from an initial magmatic phase while polymetallic veins are paragenetically later and are derived from mixed meteoric and magmatic fluids. Each deposit type is typically found in close spatial proximity to strike-slip fault systems. Within these fault systems, extensional and compressional strain features develop that generate magmas at shallow crustal levels. In the case of polymetallic vein systems, brittle extensional and shear fractures allow meteoric waters to mix with magmatic fluids, introducing metals such as lead and zinc into the hydrothermal system. In host rocks of polymetallic vein deposits, alteration is broadly propylitic but argillic, sericitic, or chloritic alteration may be quite extensive as well. Meta-sedimentary rocks that host polymetallic veins typically display sericitization, silicification, and/or pyritization.

Examples of polymetallic vein districts include the Slocan-New Denver-Ainsworth district and the Hazelton district of British Columbia, the Elsa-Mayo-Keno district of the Yukon Territory, the Wallapai District of Arizona, the Marysville District of Montana, and Pachuca (Mexico). Individual vein systems can range from several hundred to several million tons grading from 5 to 1500 g/t silver, 0.5 to 20% lead and 0.5 to 8% zinc. Copper and gold are reported in some of the occurrences with average grades of 0.09% copper and 4 g/t gold.

Polymetallic silver-lead-zinc veins are the most common deposit type in British Columbia, with over 2,000 recorded occurrences. They have provided important sources of silver, lead, and zinc in the past, with larger vein deposits remaining attractive because of their high grades and relative ease of benefaction. They are also potential sources of cadmium and germanium. In British Columbia, these forms of vein deposits generally range in age from Cretaceous to Tertiary. In the Hazelton area, veins originating from Babine and Bulkley Intrusive stocks are hosted by Bowser Group meta-sedimentary or volcanic rocks.

8.0 MINERALIZATION

Mineralization on the KM property occurs in the form of polymetallic vein type mineralization, hosted in four types of veins in order of importance:

1) Quartz Veins
2) Massive Sulphide Veins
3) Quartz +/- ankerite veins
4) Sheeted and stockworked veins and veinlets

Quartz veins located on the property have been seen to comprise local stockworks but more commonly are lone, vuggy, and lacking of internal banding. However, in veins specific to the headwall area, veins are banded owing to thin sericitic/chloritic partings, have masses of earthy black material (possibly tourmaline), and blebby tetrahedrite equaling galena in abundance (5%). The source of these particular veins is assumed to be a dike-like structure in the headwall region whose precipitous location precludes direct observation. However, numerous angular boulders in talus exist to over 30 centimeters directly below the cliff-like outcrop.

Within the Babine dike lithology, quartz veins typically comprise to 2%, range from 1 to 4 centimetres, and have cores of ankerite *+1-* sulphides, occasionally approaching 100% ankerite. Mineralized cores of galena, pyrite, and chalcopyrite may be present; approaching *5%* combined sulphides, although galena-chalcopyrite-rich veins may amount to 30% combined sulphides. Sample 441058 taken from within a Babine dike assayed 6l7ppm Au with >300 g/t Ag.

The quartz veins of the diorite stock are mineralized in similar abundances to those found in the granodiorite sills. However, unlike the veins found in the granodiorite sills and Bulkley dikes, they penetrate the surrounding host rock and are traceable along strike. The largest vein found on the property to date is the Gully Vein which returned values of 1.5 g/t Au with 64 g/t Ag (441036) and 0.798 g/t Au with 97 g/t Ag (441036). Samples taken of veins parallel to the Gully Vein on the margin of the dioritic stock returned 1.76 g/t Au with 109 g/t Ag (441052), and 1.25 g/t Au with 17.5 ppm Ag (441054). Approximately 200 metres northeast of this location, two samples from a previously unsampled quartz vein at the margin of a Bulkley dike assayed 0.75 g/t Au (441056), and 0.21 g/t Au with >300 g/t Ag (441055).

The highest assay reported from the property came from a quartz feldspar porphyry showing located immediately northeast of Kisgegas Lake. A chalcopyrite-rich quartz boulder discovered immediately below a cliff of phyllically-altered sill-like intrusive assayed 10.28 g/t Au, >300 g/t Ag, and 2.63% Cu (441085). Follow-up work in this area is recommended.

9.0 2010 EXPLORATION PROGRAM

During the period August 7 to 31, 2010, Rio Minerals Limited, on behalf of Cavan Ventures Limited, enacted a field program consisting of continuous rock chip sample trenching, prospecting/ rock sampling and geological mapping (Gully Vein/Gully Vein West/detailed mapping of trenches). A temporary fly-camp was installed and acted as a base of operations for the duration of the program. Fieldwork consisted of the collection of at total of 93 rock samples (75 continuous chip, 7 grab from outcrop and 11 float samples) as well as prospecting and mapping trenches in new areas, including the previously unexplored west end of the main valley and the north and south slopes.

The field crew for the 2010 program was supplied by Rio Minerals Limited of Vancouver, BC and North-South American Geoscience (Brian Malahoff P.Geo) of Richmond, BC and consisted of the following personnel: Brian Malahoff P.Geo., Andrew Molnar, Bruce Brownlee, Robert Paeseler and Ted Archibald.

Brian Malahoff P.Geo of North-South American Geoscience, Richmond, BC, conducted geological fieldwork with the assistance of Bruce Brownlee of Rio Minerals Ltd., Vancouver, BC. Goals for the field season were to verify and to compile previous geological work and to outline a viable economic drill target (good width and strike length). Geological work consisted of 1:500 scale mapping of the Gully Vein and selected veins west focusing on structure and 1:100 detailed mapping of all continuous chip sample trenches. Figures 7-12 displays the results of mapping during the 2010 field season and figure 5 is a compilation of the 1987, 2009, 2010 exploration programs.

9.1 GEOLOGICAL MAPPING

Detailed geological investigations were conducted over the KM property during the month of August, 2010. The investigations focused on structure and mapping of bedrock outcroppings in the Gully Vein and west region and detailed mapping of continuous chip sample trenches. Detailed mapping of continuous chip sample trenches was done at 1: 100 scale and the Gully Vein region was mapped at 1:500 scale (Figure 5). Thick lateral and terminal moraines cover much of the shallow slopes on the south side of the valley, whereas debris from outwash fans and talus cover much of the valley bottom. Exposure is excellent in areas where outcrop occurs due to limited vegetation and recent glaciation. Locally, trains of boulders measuring over 1 metre composed of like material have been mapped as "sub crop" which, for the purposes of this report, is defined as outcrop detached and having not moved significantly from source.

Lithology

It is believed that the oldest rocks underlying the KM property are sub aerial to submarine volcanic rocks (andesite, basalt and rhyolite) of the Lower to Middle Jurassic Hazelton Group (Saddle Hill). These rocks are mostly green, maroon and beige and include volcanic flows and tuffs. Halle (2009) describes the volcanic unit as a greater than 200 metres thick sequence of vesicular, feldspar and pyroxene-porphyritic volcanic rocks. The maroon basalts (pervasive hematite content) in part contain up to 1 cm calcite amygdules and thus may be referred to as maroon amygdaloidal basalt. Other volcanic rocks include green andesites, beige rhyolitic flows and related volcaniclastic rocks.

Middle Jurassic to Late Cretaceous Bowser Lake Group sediments+/- meta-sediments lie unconformably over the Lower to Middle Jurassic Hazelton Group (Saddle Hill) volcanic rocks. The sedimentary package is dominated by an ancient shallow marine environment interpreted from fossil evidence such as belemnites and bivalves observed on the property. The thick sequence of well-bedded, moderately east dipping sedimentary rock is comprised of dominantly shale with minor interbedded siltstones, sandstones and rare interbedded slate.

Halle (2009) recognized that higher up in the stratigraphy, well-sorted sandstones, fossiliferous sandstones, carbonaceous shales, and conglomerates exist. The Bowser Lake Group Sediments is over 500 m in true thickness and is upright with rare minor folds in lower level strata, though tight folds in the uppermost strata exist to overturn bedding.

The Middle Jurassic to Late Cretaceous Bowser Lake Group sediments and minor meta-sedimentary package are intruded by numerous dykes and sills of the late Cretaceous Bulkley Plutonic Suite and earlier. Reconnaissance and detailed mapping at the Gully Vein region has recognized two types of dykes and one type of sill: Firstly, a medium-grained feldspar, quartz and quartz eye +/- muscovite (probably fine sericite) porphyry dyke intrudes the sediment package. This dykes is generally 70% feldspar, 15% quartz and 10% to less than 10% muscovite (sericite) and less chlorite after hornblende; Secondly, fine to medium-grained feldspar, quartz sill with approximately 70% feldspar and 15% quartz and less than 10% altered (sericite/muscovite/chlorite) mafics; Thirdly, a felsic dyke which is generally light green and too fine-grained to distinguish between the component crystals. Halle (2009) recognized the fine-grained felsite dykes and suggested that the untectonized and unmineralized nature of the intrusive suggests it is a relatively young rock on the property, possibly related to the dioritic stock. No sulphide mineralization was noted within this lithology. Halle (2009) states that the porphyritic rock intruding the Bowser Lake Group sediments are feldspar+/- quartz porphyritic rocks. These rocks are medium-grey to buff-coloured containing porphyritic plagioclase to 30%, potassic feldspar to 20% and phyric interstitial quartz to 15%. Mafic minerals comprise 10% of the rock consisting of sericite and chlorite after hornblende. An aphanitic matrix is sericite dominated and may be coloured pink through fine-grained iron oxides. The rocks were termed ‘microgranodiorite’by Hooper (BCAR 17542-1987) to encompass a range of massive to porphyritic to aphanitic textures exhibited. Feldspar-quartz porphyry is a more accurate description.

Mapping by Halle in 2009 has classified the porphyritic intrusive into sill-like bodies up to 10 metres wide and cross-cutting dyke swarms trending ESE and up to 3 metres wide. The rocks are widely-spaced throughout the property comprising 10% of exposures. Halle (2009) noted a dyke-like series of rocks cross-cutting the feldspar-quartz porphyry sills. These rocks are light grey and plagioclase feldspar porphyritic. They are difficult to distinguish from porphyritic sills, but tend to have a more dyke-like structure, are usually narrow (1-2.5 m wide), have a lower abundance of quartz veining (5%) and have more quartz content. Hooper (1987) describes this lithology as “Bulkley Dykes”.

A small stock or plug of Late Cretaceous Bulkey Plutonic Suite intrusive rock intrudes the Bowser Lake sediments on the southwest side of the property between 1400 and 1600 metre elevation. It consist of a dioritic to quartz diorite stock, elongated east-west. The stock contains plagioclase feldspar, euhedral hornblende to 30%, biotite to 10% and 2% to 3% quartz, and accessory pyrite. The textures are equigranular, medium-grained, and massive at its core to foliated and fine-grained near its margins.

Numerous sub-parallel quartz veins generally from 10 centimeters to 1.0 metre wide cut the diorite at its eastern end. These veins are late, planar, and can be traced for well over 100 metres each. A 0.5m to 1.2-meter thick milky quartz vein at the eastern edge of this stock is known as the 'Gully Vein'.

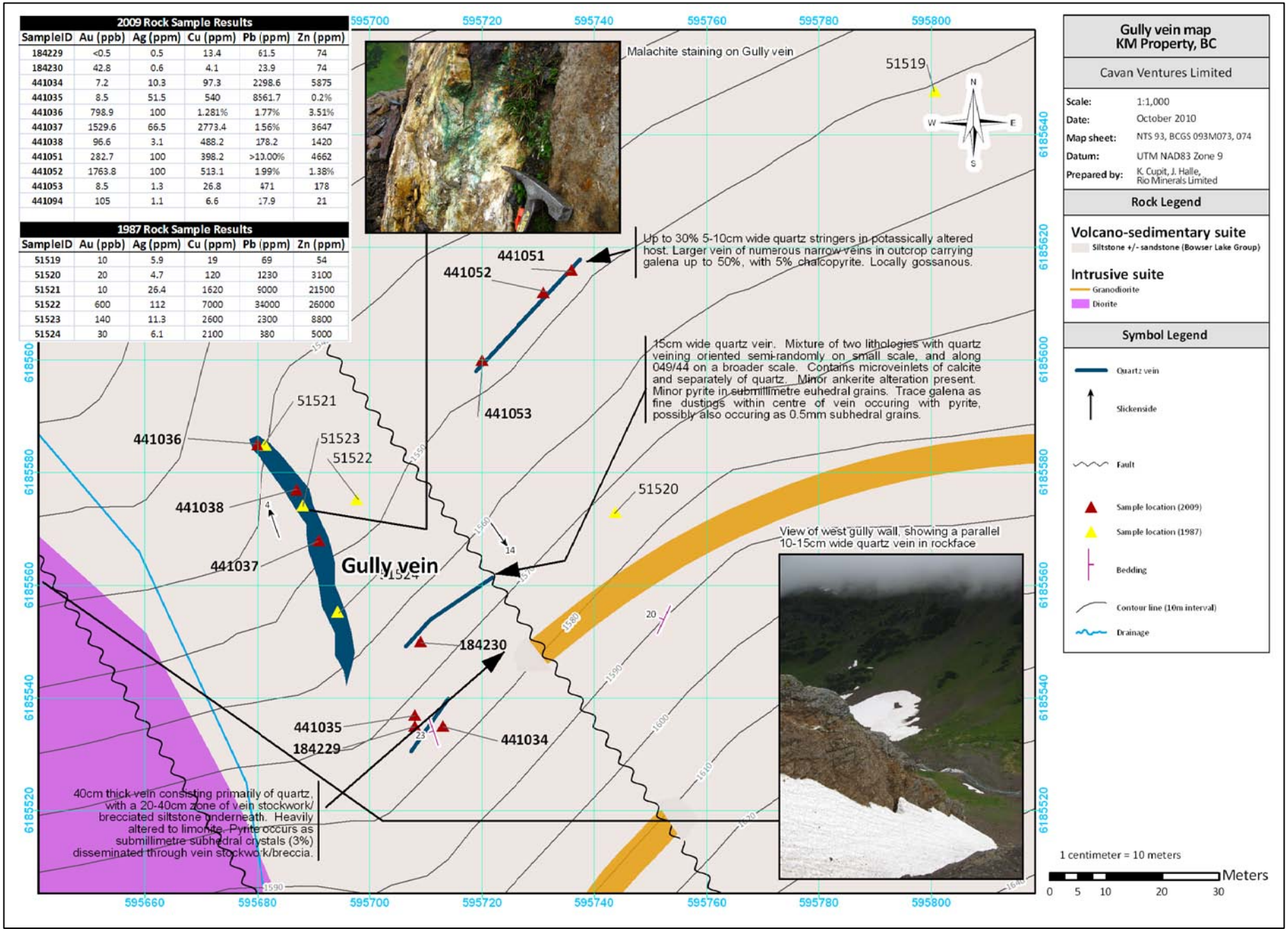


Figure 5: Gully Vein Map

Alteration

Wall rock alteration adjacent to the veins hosted in dioritic intrusive rock is minimal. Weak zones of propylitic (calcite, epidote +/- chlorite) alteration and limonitic zones are common. One exception is the dioritic rocks next to the Gully Vein where moderate and sometimes strong carbonatization (calcite, ankerite, sericite +/- chlorite) occur next to the principle quartz vein.

A quartz vein (hosted in sediments) observed on the north-slope near the west end of the property showed strong sericite alteration adjacent and within the vein.

Three types of alteration zones occur elsewhere on the claims where mapped. These are, in order of abundance:

1) Halle (2009) noted that low grade metamorphism of the sedimentary rocks has re-crystallized coarse-grained pyrite along pre-existing iron-rich layers and local fractures in the shales. Elsewhere, boudined pods of carbonate+pyrite+pyrrhotite also trace original bedding planes.

2) Halle (2009) observed the feldspar-quartz porphyry sills appear as pink to grey, massive, weakly iron-stained and sericitized, homogeneous rock. However, strong phyllic alteration in 20% of the exposures exists resulting in the formation of pyrite, saussuritization of the feldspars, and liberation of quartz. In the most pervasive phyllically-altered feldspar-quartz porphyry, pyrite attains up to 15% of the rock, feldspars are completely altered to sericite, and quartz veins attain 10% of the host. Intense alteration can exist as a pervasive bleaching of the entire rock or can exist as envelopes adjacent to quartz veins, the largest of which extends to 10 centimetres. The original mafic constituents have been all but completely replaced by chlorite/sericite/iron oxides.

3) Bulkley dykes have been phyllically altered. However, saussuritization is weak overall and only a weak green hue and zonation of the feldspars alludes to alteration.

Structure

Many structural elements were mapped on the KM property. These include faults, dykes, sills, veins/veinlets and bedding.

Numerous faults were mapped on the property within the Late Cretaceous Bulkley Plutonic Suite (quartz diorite intrusive), the Bowser Lake Group sediments and the Lower to Middle Jurassic Hazelton Group volcanic. Four types of faulting were recognized and are listed below in order of abundance:

1) Strike-slip faults are most common in all rock types on the property and are typically on the hanging wall of most quartz veins. These faults are caused by shearing forces. The strike-slip faults along veins in the Gully Vein and Gully Vein west region generally trend northwest-southeast dipping moderately and steeply to the southwest. Two strike-slip faults mapped in the Hazelton Group volcanic rocks trend northeast-southwest dipping moderately to steeply to the northwest. One strike-slip fault within the volcanics again trends northwest-southeast but dips shallowly to the northeast. Within the Bowser Lake Group sediments a quartz carbonate vein breccias emplaced along a strike-slip fault trends northwest-southeast dipping shallowly to the northeast.

2) Oblique-slip faults were seen in all rock units mapped on the property but are less common than strike-slip faults and host less quartz veins. These faults result from a combination of shearing and tension produced by compressional forces. At the Gully Vein region the oblique-slip faults generally trend northwest-southeast dipping moderately to steeply southwest and northeast. Slickensides generally pitch steeply to the southeast. Within the Bowser Lake Group sediments oblique–slip faults were mapped trending northwest-southeast dipping moderately and steeply to the southwest. Slickensides pitch steeply to the southeast. In the volcanic rocks oblique-slip faults were mapped trending both northwest-southeast and northeast-southwest dipping rather steeply to the southwest and southeast.

3) Normal faults were mapped at the Gully Vein region and in the Stuhini (Takla) Group volcanic rocks. These faults are caused by tensional forces and result in extension. At the Gully Vein region normal faults generally trend northwest-southeast dipping rather steeply to the northeast. In the volcanic unit normal faults trend northwest-southeast dipping moderately to the southwest.

4) Reverse faults were mapped in the Gully Vein region and the north side of the property. This fault motion is caused by compressional forces and results in shortening. In the Gully Vein region reverse faults trend northwest-southeast dipping moderately to the southwest and northeast. Halle (2009) recognized widely spaced east dipping reverse faults within the sediments on the north side of the property, but with dip slips of less than 5 metres.

Dykes are fairly common on the KM property and range from 30 cm wide to many metres. Dyke contacts are generally sharp in contact with sediments and intrusive rock and have chilled margins. No dykes were mapped in the volcanic units. The most common dyke on the property are feldspar-quartz porphyry dykes and they trend generally northwest-southeast dipping fairly steeply to the southwest. It appears these dykes are filling zones of weakness and previously faulted zones since most of the strike-slip faults trend this direction.

Sills appear to be as common as dykes on the KM property and are generally many metres wide. A sill approximately 2 metres wide, mapped in the Gully Vein region, trends northeast-southwest dipping shallowly to the southeast. Halle (2009) observed sills to be uniform along their exposed length and exhibit true thicknesses of 4 to 10 metres.

Numerous veins and veinlets were observed on the KM property and they generally fall into four modes of occurrence (listed in order of importance or potential for drill target);

1) Fault hosted veins associated with Late Cretaceous Bulkley Plutonic Suite. These veins were studied the most during the 2010 program and appeared to have the best potential for locating a drill target even though they were weak in sulphide composition. The veins generally trend northwest-southeast dipping moderately and steeply to the southwest and include the main Gully vein (Figure 9, 10, 11 and 12). All veins are typically hosted along strike-slip faults with a few veins hosted along oblique-slip fault. These veins are typically the widest on the property and range from 0.10 metres to just over 1.0 metres.

2) Massive sulphide veins and quartz vein breccias are hosted in oblique-slip faults and strike-slip faults. They are associated with and cut across (not conformable to bedding) the Middle Jurassic to Late Cretaceous Bowser Lake sediments. The massive sulphide veins (Figure 12) trend northeast-southwest dipping relatively steeply to the southwest. These veins were located in one area of the property and range in width from 10 cm to 35 cm and trend approximately 15.0 metres but quickly drop to 2-3 cm and disappear (discontinuous). A continuous chip trench across this massive sulphide zone (Figure 12) showed two parallel sheeted massive sulphide veins. One is 35 cm wide and the other is approximately 10 cm wide.

3) Shallowly dipping quartz veins (0.10-0.35 m wide) hosted within strike-slip faults associated with Lower to Middle Jurassic Hazelton Group andesite (green) and related volcaniclastic rocks. The veins, with moderate sulphides (chalcopyrite, bornite, malachite and azurite) trend northwest-southeast and northeast-southwest dipping shallowly to the northeast and northwest.

4) Stockworked and sheeted vein and veinlets hosted within dykes and sills of the Bulkley Plutonic Suite. These vein and veinlets range from a few centimeters to approximately 50 cm in width represent the least economic vein/veinlet system on the property even though they comprise the majority of mineral occurrences. The vein and veinlets are generally narrow and discontinuous and are rarely seen trending outside of the dyke or sill. A sill mapped in the Gully Vein region trends northeast-southwest dipping shallowly to the southeast. Halle (2009) noticed some sills show a gash-fracturing and en echelon quartz veining. This style of veining indicates early brittle-ductile deformation from northeast-directed shears. They are locally common in the largest sills and may be contemporaneous with mineralization.

Bedding in the sedimentary package has an eastward dip throughout the property. The dip is moderately steep on the west side of the property, becoming increasingly shallow further east, and obtaining sub-horizontality on the far eastern side of the property.

Figure 6: Rock Sample Location

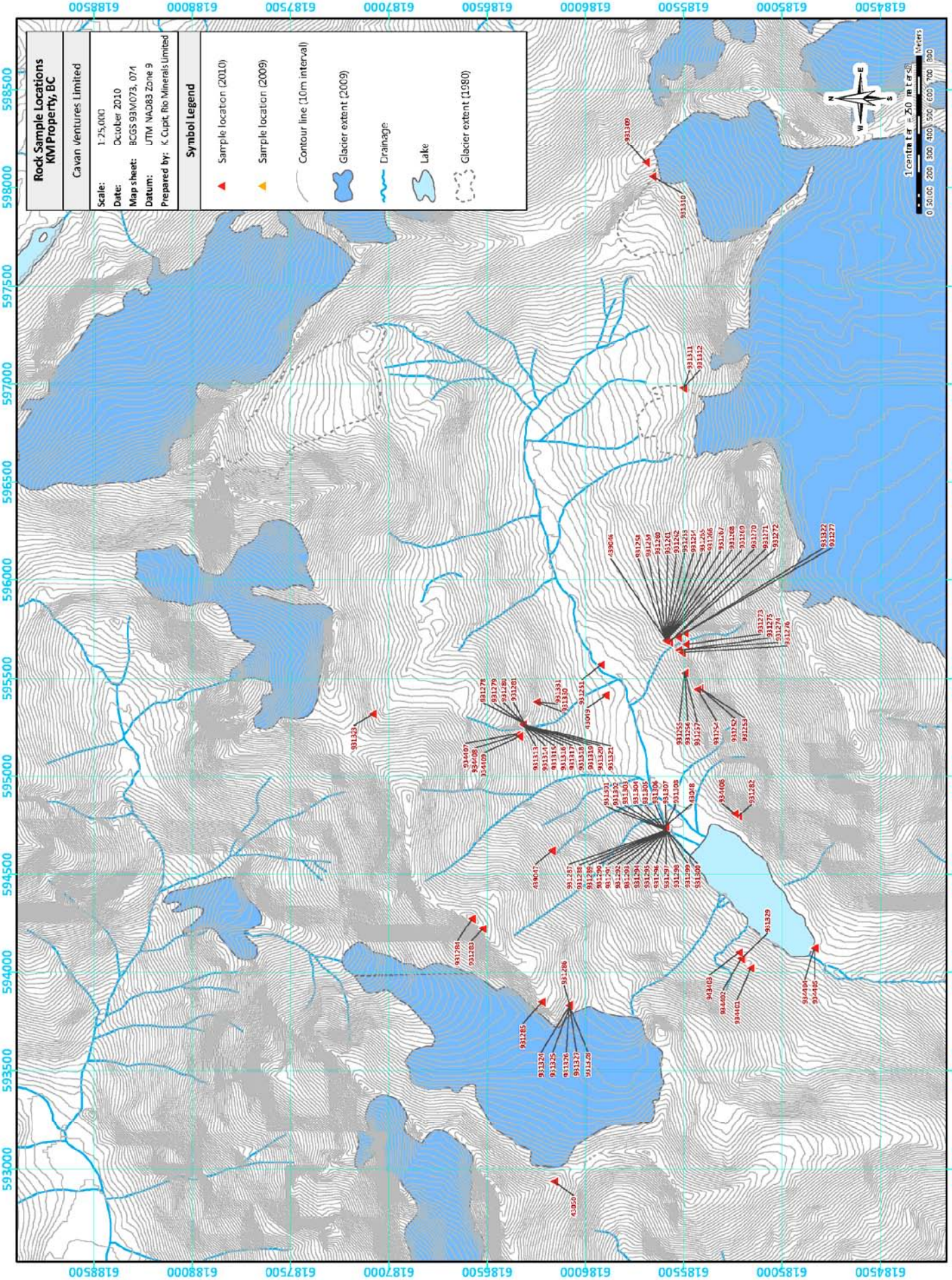


Figure 7: Trench KMTR10-01

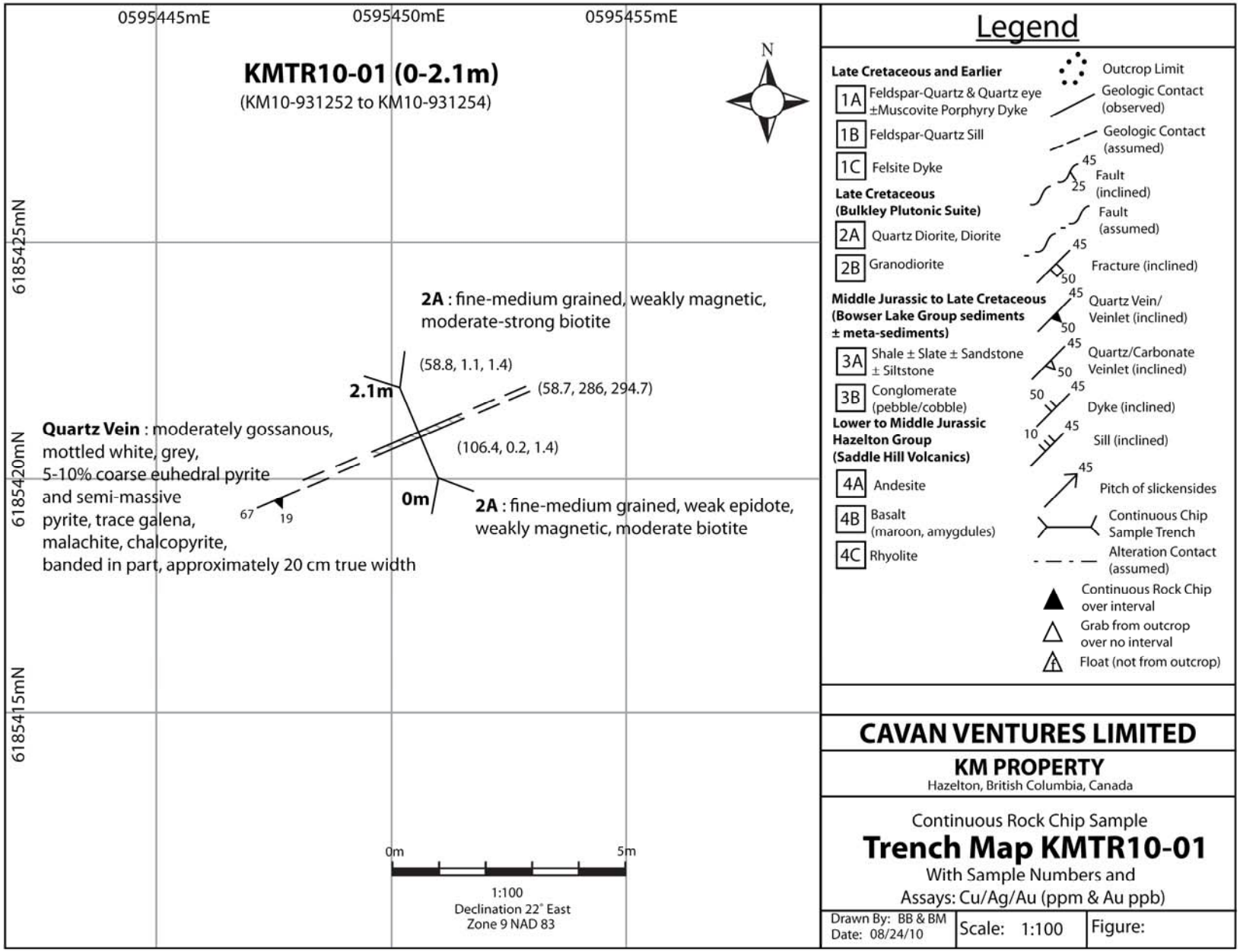


Figure 8: Trench KMTR10-02

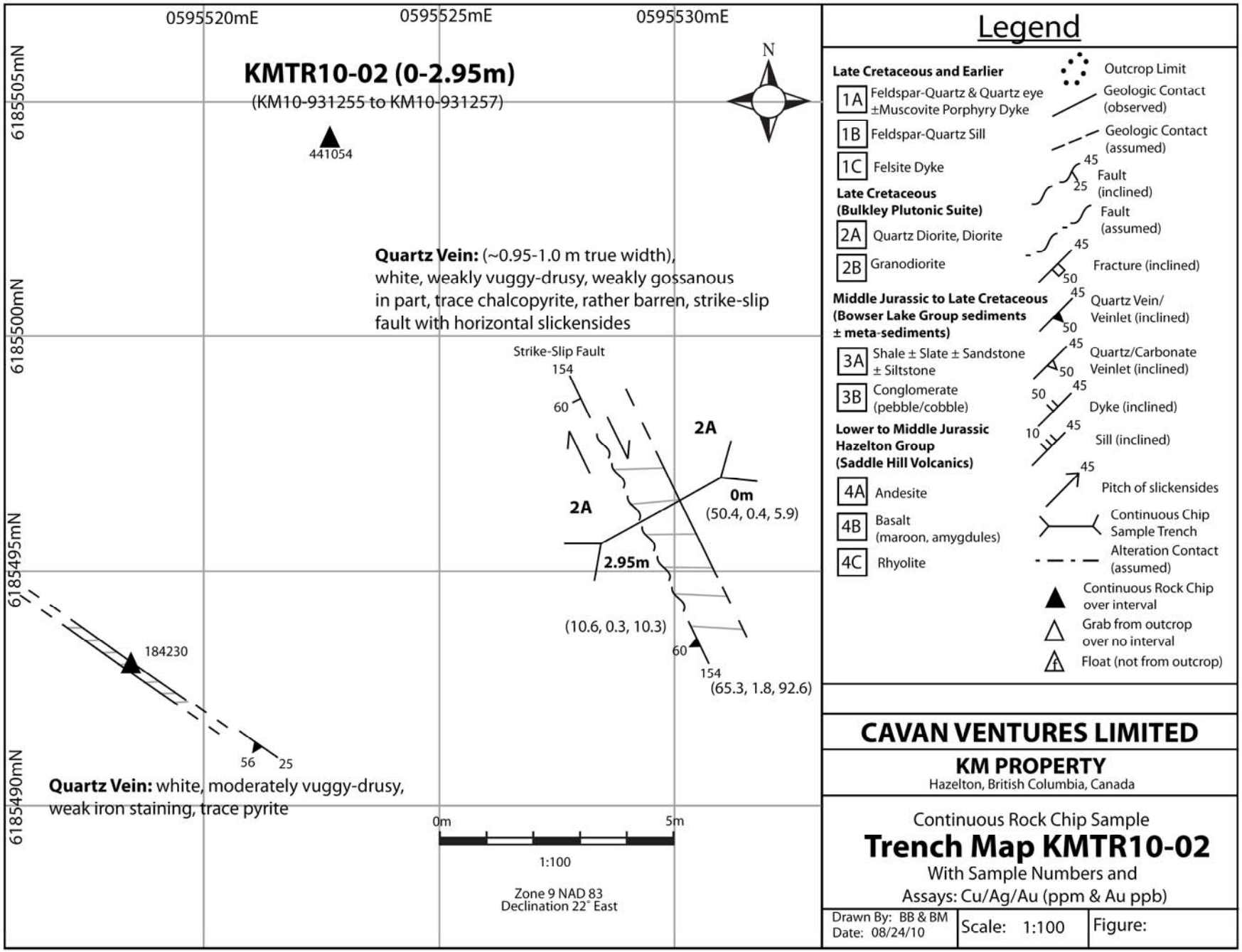


Figure 9: Trench KMTR10-03

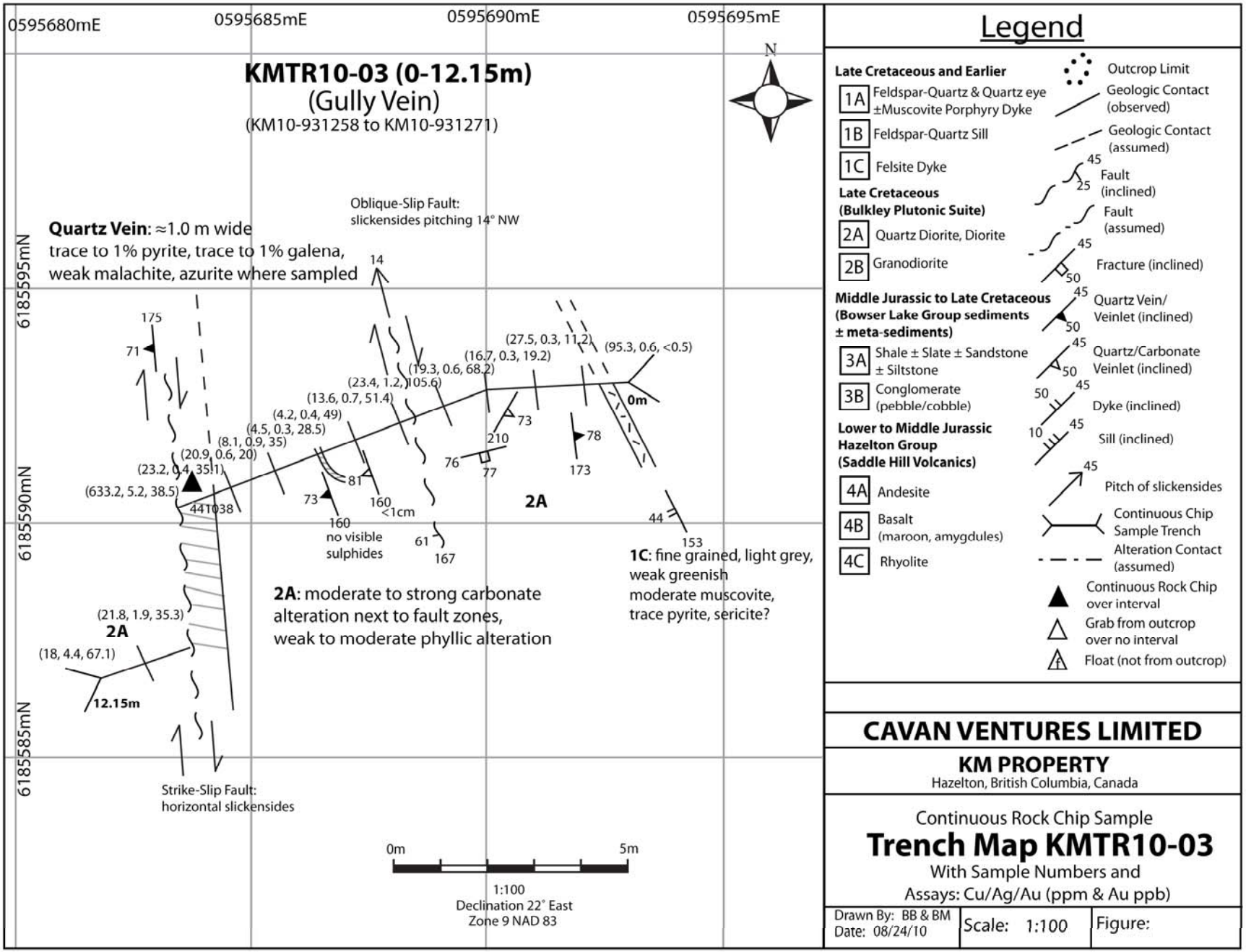


Figure 10: Trench KMTR10-04

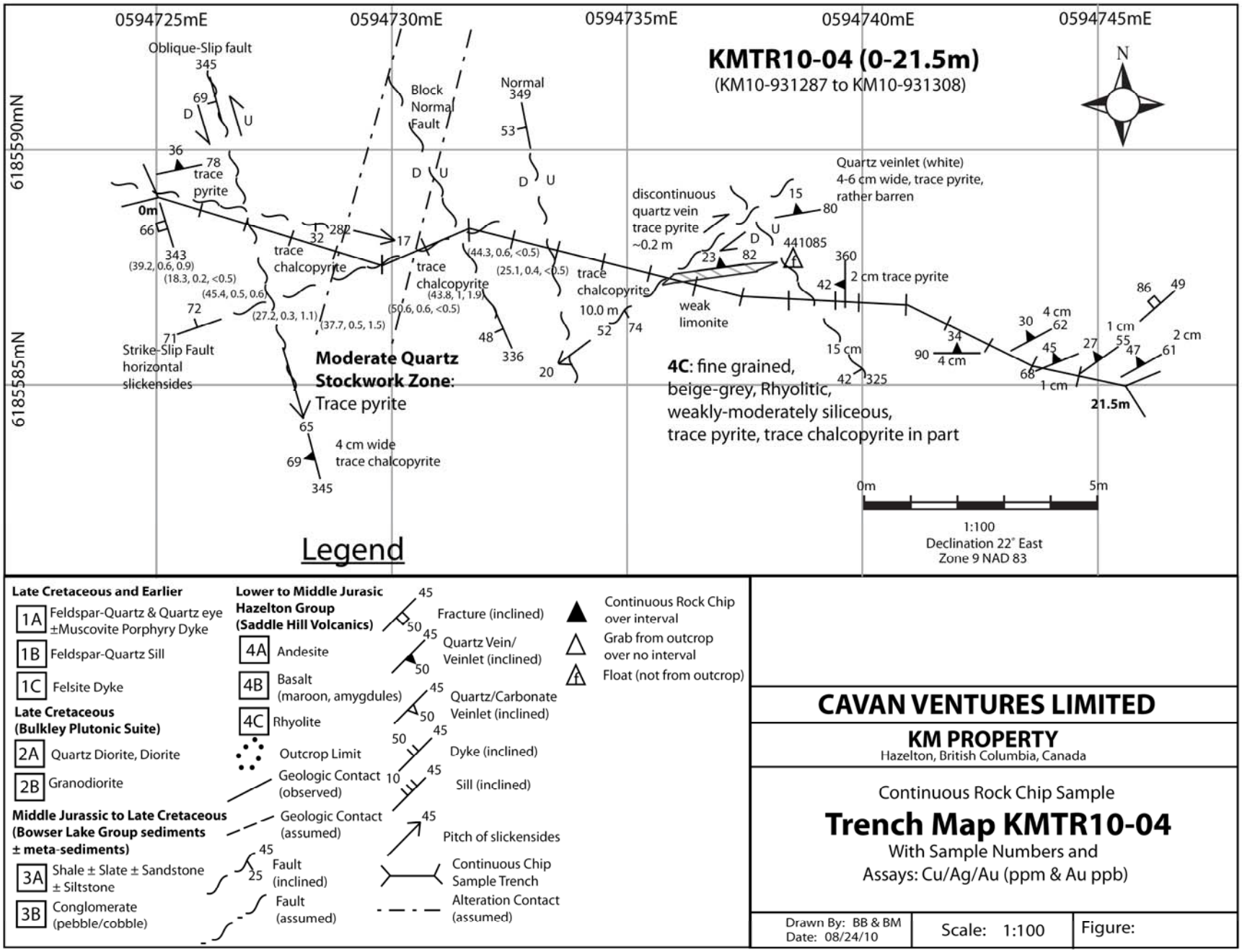


Figure 11: Trench KMTR10-05, KMTR10-06

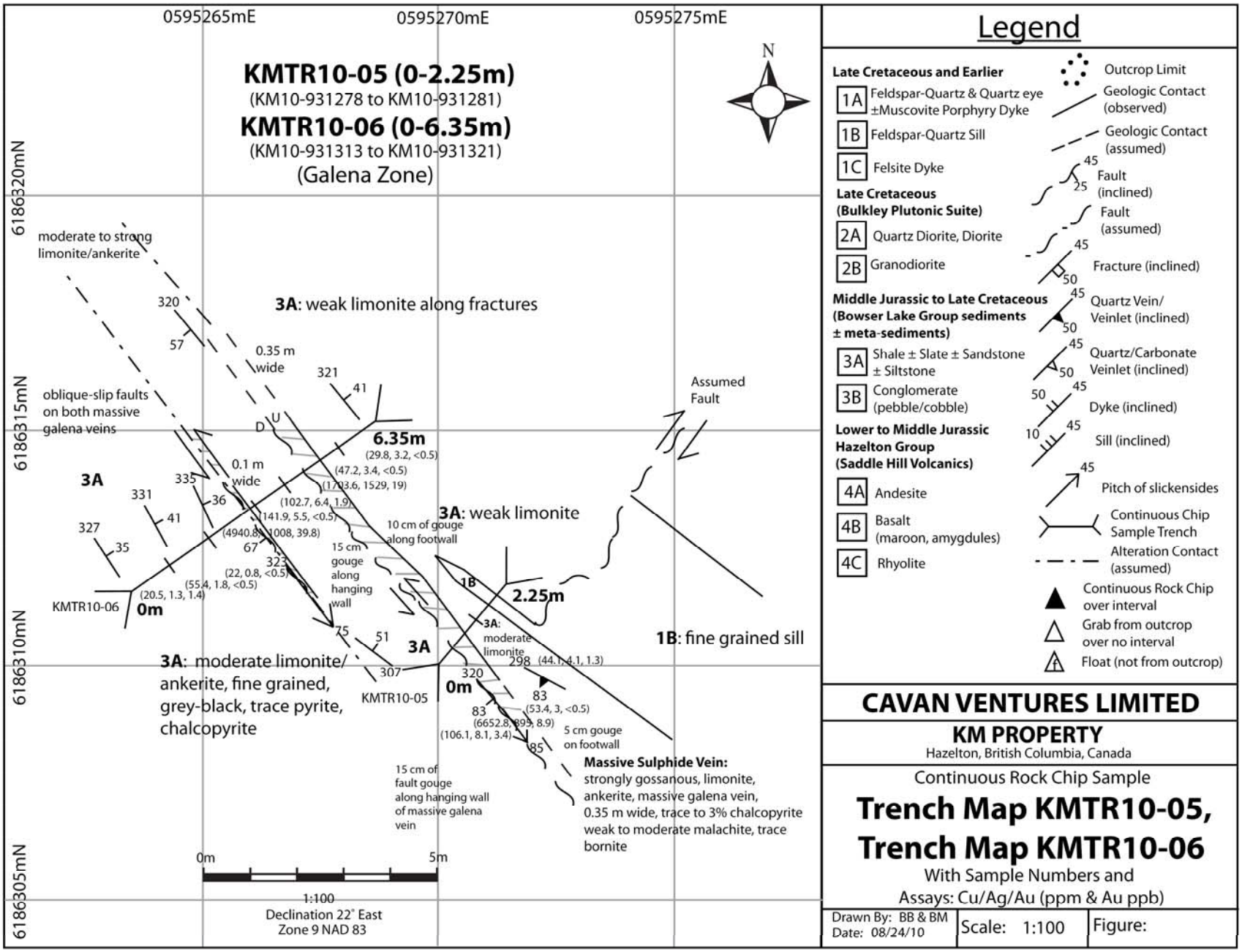
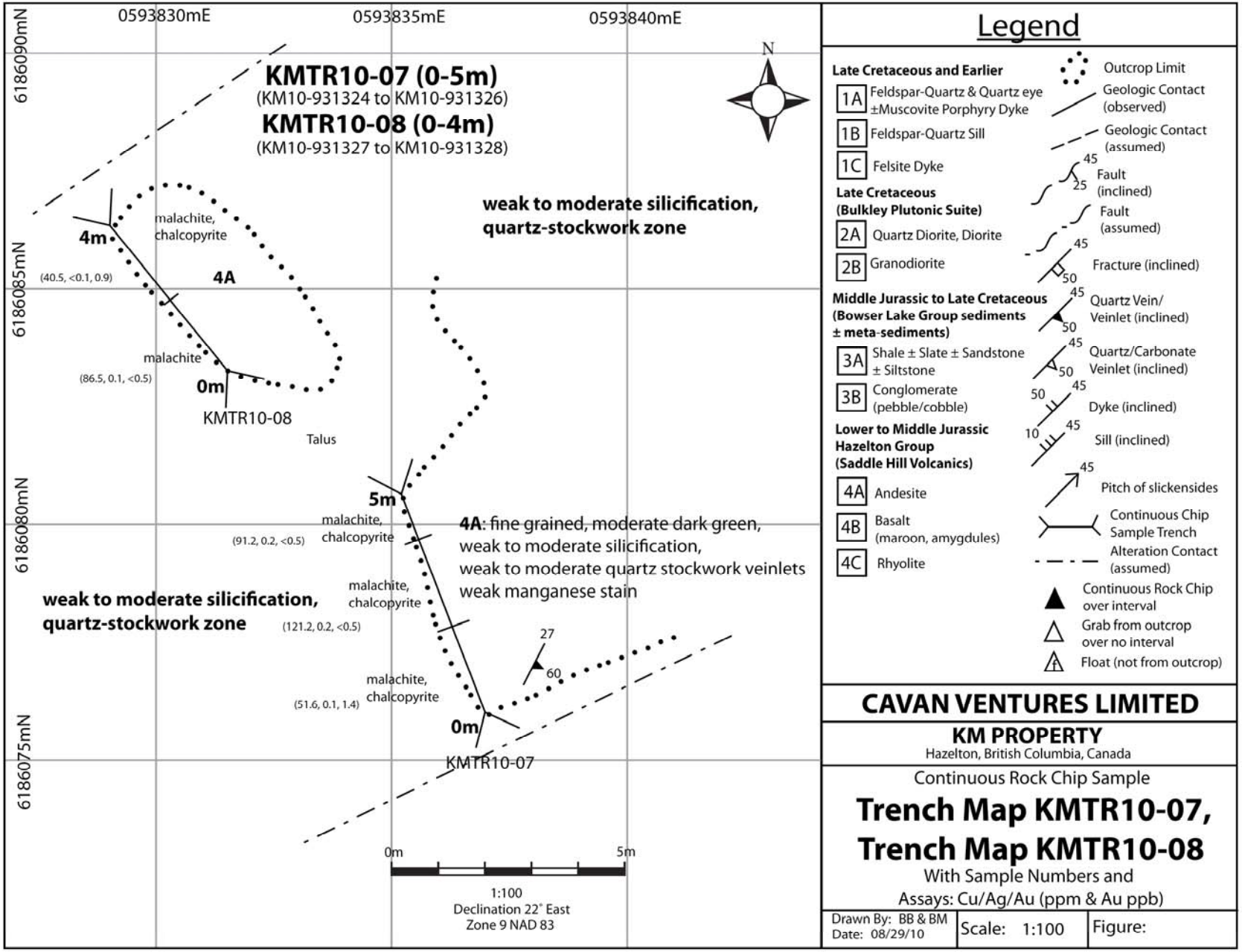


Figure 12: Trench KMTR10-07, KMTR10-08



10.0 SAMPLING METHOD AND APPROACH

Rock samples were collected by Bruce Brownlee, Robert Paeseler, Ted Archibald and Brian Malahoff under supervision of Brian Malahoff P.Geo. Rock sampling consisted of continuous chip sampling across widths of *in situ* veins and host rock, except in the cases where chip grabs from rock outcrop or loose grabs (from subcrop, float) was sampled.

All rock sample sites were marked with labeled metal tags and flagging tape. Samples and tags were placed in poly-ore bags having individual weights of at least 2 kilograms, and zap-strapped. Sample locations were recorded by GPS, given a UTM grid designation using the NAD 83 datum, and photographed. All rock samples were taken directly to Acme Analytical Laboratories in Smithers, BC for homogenization, and then sent by Acme to Vancouver, BC where they were analyzed for 36-element ICP-MS with a Group 1DX2 analysis. See appendix B for details on analytical methods and procedures. A witness sample of each rock sample was retained and is available for viewing. Three blank samples were introduced into the sample stream for approximately every 100 samples. Descriptions of rock samples are displayed in Appendix A.

11.0 INTERPRETATION AND CONCLUSIONS

During the 2010 field season, geologic prospecting discovered numerous new mineralized showings. In addition, a new type of mineralization was shown to exist in metasomatically-altered intrusive host rock.

Geologic mapping has increased the understanding of the property-wide distribution of rock types and the major structures that affect these rock types. Previously-known mineralized quartz vein showings have been reassessed and reclassified into two main types of occurrences: those associated with granodioritic dikes and sills and those associated with the dioritic stock.

Extensive north-trending fault systems seem to be centers for metasomatism. In addition to the central cirque area, the generally unprospected and unmapped area around Kisgegas Lake has shown potential for this style of mineralization.

A number of continuous, undeformed, wide, quartz veins cutting the dioritic stock (which includes the Gully Vein), must be systematically assessed. Numerous veins observed from the air have yet to be assessed and require mapping and sampling.

12.0 RECOMMENDATIONS

It is recommended that further work be conducted on the KM property. The main elements of future exploration on the KM property include the following:

i) The entire property could benefit from a regional structural mapping program. This would develop better understanding of the of the polymetallic veins in the area.

ii) The KM property requires further reconnaissance prospecting, continuous chip sampling, and detailed trench mapping of areas not covered during previous exploration programs with a goal of establishing a viable economic drill target. Future exploration should concentrate in new areas with high vein density in order to delineate zones with economic widths and strike length.

13.0 REFERENCES

BCMEMPR Annual Reports referenced to specific mineral properties/claims, 1908 to present

BCMEMPR Minfile References for specific mineral showings, prospects and past producers

BCMEMPR Open File 1996-13, Vol. 2, pgs. 67-69 Selected British Columbia Mineral Deposit Profiles Description of Polymetallic Veins Ag-Pb-Zn ± Au (105)

BCMEMPR Open File 1998-10 Major Silver Deposits of British Columbia

Armstrong, J.E., (1944) Preliminary Map, Hazelton, British Columbia Geological Survey of Canada, Paper 44-24

Cox, DP (1986) Descriptive Model of Polymetallic Veins; in Mineral Deposit Models, Cox, DP and Singer, DA, Editors, us Geological Survey, Bulletin 1693

Drew, L.J. and Berger, B.R. (2001) Model of the porphyry copper/polymetallic vein kin-deposit system: Application in the Metaliferi Mountains, Romania. Pp. 519-522 in: *Mineral Deposits at the Beginning of the 21st Century* (A. Piestrzynski *et al.*, editors). Swets and Zeitlinger Publishers, Lisse, the Netherlands.

Geological Survey of Canada Summary Reports 1909 (65, 66); 1910 (97, 98); 1911 (98); 1912 (102-107)

Halle, J.R. (2009) Geological Report on the KM Property, Assessment Report

Kindle, E.D., (1954) Mineral Resources, Hazelton and Smithers Areas, Cassiar and Coast Districts, British Columbia, Geological Survey of Canada Memoir 223

Lefebure, D. V. and Church, B. N. (1996) Polymetallic Veins Ag-Pb-Zn+/-Au, in Selected British Columbia Mineral Deposit Profiles, Volume 2 - Metallic Deposits,

Lefebure, D. V. and Ho T. Editors, British Columbia Ministry of Energy of Employment and Investment, Open File 1996-13, pages 67 - 70.

MacIntyre, D. (2001) Geological Survey Branch, Open File 2001-3, Geological Compilation Map, Babine Porphyry Copper District, British Columbia.

O'Neill, J.J., (1919) Preliminary Report on the Economic Geology of the Hazelton District Geological Survey of Canada, Memoir 110

Richards, T.A., (1990) Geology of the Hazelton Map Area Geological Survey of Canada, Open File 2322

Sutherland Brown, A., (1960) Geology of the Rocher Deboule Range BCDMPR, Bulletin No. 43

Hooper, D.G. (1987) Prospecting Report on the Molly 1-4 Claim Group Assessment Report 17542

14.0 STATEMENT OF COSTS

Personnel		Rate	Days	Total
Bruce Brownlee	August 09 – August 31, 2010	$550	23	$ 12650.00
Brian Malahoff P.Geo	August 11 – August 31, 2010	$650	20	$ 13000.00
Ted Archibald	August 09 – August 31, 2010	$450	23	$ 10350.00
Andrew Molnar	August 09 – August 26, 2010	$475	18	$ 8550.00
Robert Paeseler	August 09 - August 31, 2010	$450	23	$ 10350.00
Analytical	ACME Labs: 530 soil – 90 rock – 1DX2	-	-	$ 2867.94
Report	Geological	-	-	$ 12500.00
Sub total				$ 70417.94
Vehicles	45 x 110		$ 4950.00	
Communications			$ 585.68	
Helicopter			$ 42853.35	
Field Supplies			$ 6009.37	
Fuel			$ 1255.39	
Lodging & Meals			$ 16154.04	
Rentals			$ 1358.40	
Shipping			$ 81.61	
Airfare			$ 318.23	
Sub total			$ 73566.07	
Administration	5%		$ 7199.20	
Total:			$151183.21	

16.0 STATEMENT OF QUALIFICATIONS

I, Derrick Strickland, of 1030-475 Howe streeta, in the City of Vancouver in the Province of British Columbia do hereby certify that:

1. I am a Consulting Geologist working in Vancouver, British Columbia.

2. I hold a Bachelor of Science in Geology (1993).

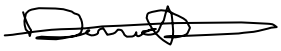
3. I have been employed in the mineral exploration industry since 1987 and have practiced my profession since graduation.

4. The information for this report has been taken from government and old geological reports.

5. I am a member in good standing with Association of Professional Engineers, Geoscientist of British Columbia.

6. The assessment costs presented in this report are true and accurate to the best of my knowledge.

DATED at Vancouver, British Columbia, this day of November 1st , 2010



Derrick Strickland, P.Geo.

APPENDIX A: ROCK SAMPLE LOCATIONS AND DESCRIPTIONS

Canvan Ventures Ltd 2010

Rock Chip Trench Sample Description Sheet and Prospector Chip Samples (KM Project, Hazelton Area, BC, Canada, 2010)

Zone: KM Property General **Zone 09, NAD 83**

Sample Number	East (UTM) m E	North (UTM) m N	Elev. (m)	Rock Code	Text.	Struct. 000/00	Width (m)	% Cpy	% Py	% Gln	% Sph	% QVN	% Lim	Pervasive Alteration scale 1-5 Qtz	Ser	Arg	Carb	Phy
KM10-931251	595570	6185922	1591	Qtz Vn	vuggy/drusy	162/54SW	0.3	tr				100	5	5				
Prospector Chip Sample: Qtz vein, 20-35 cm true width, whitish milky bull quartz, rather barren, tr mal, cpy, wkly vuggy-drusy, wk fe staining along some fracs, the quartz vein is emplaced along a strike-slip fault at 162/54 SW with horizontal slickensides, the quartz vein is barren in some regions and contains tr mal, cpy in other regions, similar to a nugget effect in vein deposits, vein hosted in fe stained diorite, wk ser																		
KM10-931252	595451	6185420	1593	2A			1.0											
KMTR10-01 (0 - 1.0 m): Quartz Diorite stock, f-mg, greenish, grey, dark intrusive, wkly magnetic, 10% coarse biotite, wk ep, hornfels in part or hard to chip (quartz)																		
KM10-931253				Qtz Vn		67/79SE	0.1	tr	8	tr		100	15	5				
KMTR10-01 (1.0 - 1.1 m): Qtz vnl (veinlet - approx 20 cm true width), modly gossanous, mottled white-grey, 5-10% coarse euhedral py and semi-massive py, tr gln, mal, cpy, possible specular hem, banded in part, Qtz vnl trending 67/79 SE,																		
KM10-931254	595445	6185431	1593	2A			1.0											
KMTR10-01 (1.1 - 2.1 m): Quart Diorite stock, f-mg, greenish, grey, dark intrusive, wkly magnetic, 10% bio, trace Qtz/carb vnl., no visible mineralization																		
KM10-931255	595531	6185497	1563	2A,1B		153/61SW	1.0	tr	tr						2			
KMTR10-02 (0-1.0 m): Dioritic, f-mg intrusive, more felsic, possible dyke?, wk-mod ser alteration of feldspar, mod fe staining, tr cpy, py, tr Qtz vnls, < 1 cm wide at 153/61 SW, wkly vuggy-drusy, wkly gossanous, tr cpy, wk cross-cutting Qtz vnls (< 1cm) at 240°, discontinuous																		
KM10-931256				Qtz Vn			0.95	tr				100	5	5				
KMTR10-02 (1.0-1.95 m): Qtz Vn (Vein - 1.0 m true width over approx 10-15 m and then pinches down to 20 cm), rather barren where sampled, tr cpy, white, wk fe staining (lim), variable mineralization, some areas have more sulphides and other areas are rather barren, a type of nugget effect																		
KM10-931257	595527	6185495	1563	2A, 1A			1.0	tr	2				15		2	2		
KMTR10-02 (1.95-2.95 m): Dioritic?, f-mg, mod fe staining, wk-mod ser and py alteration of feldspars, 1-3 % py, tr cpy, tr sheeted vnls with tr py, more felsic intrusion, possible mixed felsic dyke?																		
KM10-931258	595693	6185593	1552	2A, 1A		153/44SW	1.0		tr				15	1	2		4	2
KMTR10-03 (0.0 - 1.0 m): Qtz Diorite and mixed felsic dyke (muscovite and possible fine sericite), Qtz Diorite, dark grey, wk dark																		

Canvan Ventures Ltd 2010

Rock Chip Trench Sample Description Sheet and Prospector Chip Samples (KM Project, Hazelton Area, BC, Canada, 2010)

Zone: KM Property General **Zone 09, NAD 83**

Sample Number	East (UTM) m E	North (UTM) m N	Elev. (m)	Rock Code	Text.	Struct. 000/00	Width (m)	% Cpy	% Py	% Gln	% Sph	% QVN	% Lim	Pervasive Alteration scale 1-5 Qtz	Ser	Arg	Carb	Phy
greenish, mod fe/lim staining along fracs, modly-strly fracd, wk Qtz/Calcite vnls (no visible sulphides, 2 mm wide), tr Qtz vnl approx 2 mm wide, tr py, wk narrow qtz vnl stockwork, non-magnetic, felsic dyke (mod muscovite) trending at 153/44 SW, fg, light grey, possible fine sericite, tr py, mod-str carbonate alteration of both the Qtz Diorite and felsic dyke.																		
KM10-931259				2A		173/78NE	1.0		tr				15	1	2		4	2
KMTR10-03 (1.0 - 2.0 m): Qtz Diorite, modly dark grey, f-mg, modly fracd, mod lim along most fracs, non-magnetic, tr-1% dissem euhedral py, sheared intrusive next to fault zones, Qtz vnl < 0.5 cm (173/78 NE), vuggy-drusy, mod lim, tr py, wk-mod ser, mod-str carb																		
KM10-931260				2A		210/73SE	1.0		tr				15		2		4	2
KMTR10-03 (2.0 - 3.0 m): Qtz Diorite, modly dark grey, f-mg, mod fracd, sheared, as previous, mod lim, tr py, manganese stain along some fracs, wk-mod ser, altered feldspar (ser-cal), Qtz/Carb vnl at 210/73 SE - str lim, tr py, mod-str carb alteration																		
KM10-931261				2A			1.0	tr	tr			5	15		2		4	2
KMTR10-03 (3.0 - 4.0 m): Qtz Diorite, as previous, modly dark grey, f-mg, modly fracd, mod lim, sheared, wk-mod ser, tr-1% py, tr cpy, wk Qtz stockwork in part (<2 mm), mod-str carb alt.																		
KM10-931262				2A			1.0	tr	tr			5		1	2		4	2
KMTR10-03 (4.0 - 5.0 m): Qtz Diorite, as before, increase in fine Qtz vnl (narrow-1 mm) stockwork, mod-str carb alt., tr-1% py, tr cpy, wk mal along fracs																		
KM10-931263				2A			1.0		tr			5	15	1	1		4	1
KMTR10-03 (5.0 - 6.0 m): Qtz Diorite, f-mg, mod-str carb alt., sheared, modly fracd, mod lim, wk ser, increased narrow (1 mm) Qtz + Qtz/Carb vnls, tr-1% py																		
KM10-931264				2A			0.7		tr			5		1	2			2
KMTR10-03 (6.0 - 6.7 m): Qtz Diorite, str Qtz, wk-mod carb alteration, sheared, wk-mod ser, increase in Qtz + Qtz/Carb vnls, modly fracd, tr-1% py																		
KM10-931265				Qtz Vn		160/73SW	0.1					100	5	5				
KMTR10-03 (6.7 - 6.8 m): Qtz vnl (veinlet), white, barren, modly-strly vuggy-drusy, no visible sulphides, wk lim, vnl trending 160/73 SW																		
KM10-931266				2A			1.0		tr			5	5	1	2		4	2
KMTR10-03 (6.8 - 7.8 m): Qtz Diorite, str Qtz, mod-str carb alt., sheared, wk-mod ser, increased narrow Qtz + Qtz/Carb vnls, modly fracd,																		

Canvan Ventures Ltd 2010

Rock Chip Trench Sample Description Sheet and Prospector Chip Samples (KM Project, Hazelton Area, BC, Canada, 2010)

Zone: KM Property General **Zone 09, NAD 83**

Sample Number	East (UTM) m E	North (UTM) m N	Elev. (m)	Rock Code	Text.	Struct. 000/00	Width (m)	% Cpy	% Py	% Gln	% Sph	% QVN	% Lim	Pervasive Alteration scale 1-5 Qtz	Ser	Arg	Carb	Phy
tr-1% py																		
KM10-931267				2A			1.0		1				15	1	2		4	2
KMTR10-03 (7.8 - 8.8 m): as previous, mod-str carb alt., 1-2% dissem py, modly-strly fracd, sheared, wk-mod ser, mod lim																		
KM10-931268				2A			0.35		1			5	15	1	2		4	2
KMTR10-03 (8.8 - 9.15 m): Qtz Diorite, sheared, strly fracd, mod-str carb, mod lim along fracs, 1-2% dissem py, wk Qtz vnls: vuggy-drusy, tr py, wk-mod ser																		
KM10-931269				Qtz Vn		175/71SW	1.0	1		1		100	10	5				
KMTR10-03 (9.15 - 10.15 m): Gully Vein, white, wk-mod fe/lim staining, 1% cpy, gln, wk mal, az, faulted vein zone, along strike-slip fault at 175/71 SW, sheared and faulted region																		
KM10-931270				2A			1.0		tr			5	15	1	3		4	3
KMTR10-03 (10.15 - 11.15 m): Qtz Diorite, sheared, strly fracd, next to strike-slip fault and approx 1.0 m Qtz vein, mod-str carb alt, tr py, mod lim, wk Qtz vnls < 1 cm, mod ser																		
KM10-931271	595684	6185575	1542	2A			1.0		tr				15		3		4	3
KMTR10-03 (11.15 - 12.15 m): Qtz Diorite as previous, mod ser, tr py, mod-str carb alt., strly fracd, sheared																		
KM10-931272				**BLANK**														
BLANK																		
KM10-931273	595674	6185489	1627	Qtz Vnl		165/90	0.15	tr		tr		100		5				
Qtz Veinlet: chip over 0.15 m but veinlet pinches and swells from 2 cm to 30 cm, white, wkly vuggy-drusy, tr gln, cpy, faulted zone with a strike-slip fault at 165/vertical, a nearby oblique-slip fault at 335/41 NE pitching 80° to the SE.																		
KM10-439046	595692	6185590	1530	2A			grab											
Prospector sample: Qtz Diorite: O/C, grab A gossanous glob caught my eye +/- 50 cms. X 25 cm. Other small gossanous areas around. Siliceous, minor cpy, greyish metallic. Saw bits of cpy in the wall rock as well. On east side of what is probably a fault																		
KM10-439047	594621	6186172	1708	Qtz/Carb		360/54E	0.05			tr		80						
Prospector sample: along a contact/fracture there is an infilling of calcite and qtz. Very short, a few specks of galena in one spot.																		

Canvan Ventures Ltd 2010

Rock Chip Trench Sample Description Sheet and Prospector Chip Samples (KM Project, Hazelton Area, BC, Canada, 2010)

Zone: KM Property General **Zone 09, NAD 83**

Sample Number	East (UTM) m E	North (UTM) m N	Elev. (m)	Rock Code	Text.	Struct. 000/00	Width (m)	% Cpy	% Py	% Gln	% Sph	% QVN	% Lim	Pervasive Alteration scale 1-5 Qtz	Ser	Arg	Carb	Phy
KM10-931274	595643	6185525	1585	Qtz Vn		158/53SW	0.7	tr	tr			100	5	5				
Qtz Vein: white (milky), modly vuggy-drusy, wkly banded, wk spotty fe/lim (ankerite), tr cpy, py, xenolith of Feldspar-Qtz porphyry dyke, vein cutting across Feldspar-Qtz porphyry dyke where sampled, typical strike-slip fault with horizontal slickensides at 158/53 SW, true width of veinlet/vein is approx. 10 cm to 1.5 m and averages .4-.5 m, vein cuts across a Feld/Qtz dyke (approx 15 m wide) trending approx 18/55 SE, contact at approx 595640 mE, 6185503 mN.																	
KM10-931275				**BLANK**														
BLANK																		
KM10-931276	595630	6185508	1601	Qtz Vn		162/40SW	0.9	tr		tr		100		5				
Qtz Vein: white, vuggy-drusy, wk lim or ankerite, wkly banded, rather barren, tr cpy, tr gln next to fault plane 162/40 SW, old sample site at this location KM09-441095 below new sample site at coordinate 595622 mE, 6185515 mN, true width of vein is from 18 cm to 90 cm, Vein hosted in Feld/Qtz porphyry dyke and cuts across.																		
KM10-931277	595730	6185495	1600	Qtz Vn		175/73SW	0.12	tr		tr		100	5	5				
Qtz Vein: white, wk lim, tr gln, cpy, wkly banded, trending 175/73 SW, hosted in Qtz Diorite																		
KM10-931278	595273	6186315	1628	3A			0.50						15			2		
KMTR10-05 (0-0.5 m): Chip sampling of galena showing, 50 cm chip across rusty fragment zone adjacent to vein/veinlet, some clay gouge from 40-50 cm, shale																		
KM10-931279				Sulphide Vn			0.35	4		70		20	30	3				
KMTR10-05 (0.50-0.85 m): Chip sampling of galena showing, 35 cm chip across galena vein, massive gln with cpy and ankerite/lim gouge, 4-5% bornite in part																		
KM10-931280				3A			.40											
KMTR10-05 (0.85-1.25 m): Chip sampling of galena showing, 40 cm chip across gouge into shales + narrow (1 cm) py veinlet																		
KM10-931281	595271	6186312	1620	3A, 1B			1.0					20						
KMTR10-05 (1.25-2.25 m): Chip sampling of galena showing,1.0 m chip across mottled Qtz blending into banding and Qtz stockwork, Qtz/Carb veinlet, possible arsenopyrite (As)																		
KM10-931282	594796	6185224	1437	Qtz Vn		135/20NE	0.23	tr				100		5				

Canvan Ventures Ltd 2010

Rock Chip Trench Sample Description Sheet and Prospector Chip Samples (KM Project, Hazelton Area, BC, Canada, 2010)

Zone: KM Property General **Zone 09, NAD 83**

Sample Number	East (UTM) m E	North (UTM) m N	Elev. (m)	Rock Code	Text.	Struct. 000/00	Width (m)	% Cpy	% Py	% Gln	% Sph	% QVN	% Lim	Pervasive Alteration scale 1-5 Qtz	Ser	Arg	Carb	Phy
Qtz Vein: white, strongly mineralized with mal, wk az, 1-3% bornite, specular hem, tr cpy, modly vuggy-drusy, veinlet trending 135/20 NE, width is between 20-23 cm, veinlet hosted in volcanic (light green fresh surface, beige WS, wk carb along fracs, wk-mod carb alt of unit, andesitic, fg, wk feld, ep, quartz)																		
KM10-931283	594220	6186523	2066	3B			Grab						30					
Gossanous Pebble Conglomerate: hosted with sediments (shales), str lim/ankerite, no visible sulphides, str manganese stain along some fracs, wkly sil, grab from subcrop																		
KM10-931284	594273	6186578	2094	Qtz/Carb Vn		165/90	0.30			1		80	25	3			3	
Gossanous Qtz/Carb vein Breccia: faulted (165/90) zone with strike-slip fault (approx horizontal slicks), chip over 30 cm, possibly 60 cm wide in part, zone trending 353/29 SE, hosted in shales (14/26 SE) and nearby Felsic dykes, 1% gln, wk mal, mod car alt, conformable to bedding within shales																		
KM10-931285	593849	6186222	1928	Qtz/Carb Vn			Grab			1		80	25	3			4	
Gossanous Qtz/Carb veinlet Breccia: grab from subcrop, 10-15 cm wide, strly gossanous, mod-str carb alteration, wkly-modly vuggy, sheared, faulted, 1% gln																		
KM10-931286	593824	6186079	1855	4A			Grab	tr				10		2				
Andesitic Volcanic: fg, wk-modly sil, cherty, wk-mod Qtz stockworked andesite, wk mal in veinlets and along fracs and tr cpy within stockwork Qtz veinlets, grab from outcrop, modly light green to forest green, wk manganese stain along fracs, O/C is approx 8 m long and 4 m wide and the rest is hidden in a talus slope.																		
KM10-931287	594725	6185589	1387	4C			1.0		tr				15	3				
KMTR10-04 (0.0 - 1.0 m): fg, beige-grey, sugary in part felsic volcanic (rhyolitic), mod lim along frac, modly sil, essentially quartz, wk manganese stain, cherty in part, tr py, wk 1-3 mm wide Qtz vnl, wk Qtz stockwork																		
KM10-931288				4C			1.0		tr	tr			15	3				
KMTR10-04 (1.0 - 2.0 m): fg, beige to dark grey, cherty rhyolitic volcanics, modly fracd, modly sil, mod lim along fracs, wk manganese stain, tr gln along fracture assoc with narrow Qtz vnl, tr py,																		
KM10-931289				4C			1.0		tr				15	3				
KMTR10-04 (2.0 - 3.0 m): fg, beige-grey felsic volcanic (Rhyolitic), cherty in part, modly sil, mod lim along fracs, tr py along some fracs and wkly dissem																		

Canvan Ventures Ltd 2010

Rock Chip Trench Sample Description Sheet and Prospector Chip Samples (KM Project, Hazelton Area, BC, Canada, 2010)

Zone: KM Property General **Zone 09, NAD 83**

Sample Number	East (UTM) m E	North (UTM) m N	Elev. (m)	Rock Code	Text.	Struct. 000/00	Width (m)	% Cpy	% Py	% Gln	% Sph	% QVN	% Lim	Pervasive Alteration scale 1-5 Qtz	Ser	Arg	Carb	Phy
KM10-931290				4C			1.0	tr	tr				15	3				
KMTR10-04 (3.0 - 4.0 m): as previous, fg, beige-grey, felsic volcanic (Rhyolitic), modly sil, mod lim, tr py, cpy																		
KM10-931291				4C			1.0	tr	tr			20	15	4				
KMTR10-04 (4.0 - 5.0 m): as previous, fg, beige-grey, felsic volcanic (Rhyolitic), modly-strly sil, mod lim, tr py, tr-1%cpy, narrow Qtz stockwork zone.																		
KM10-931292				4C			1.0	tr	tr			20	15	4				
KMTR10-04 (5.0 - 6.0 m): as previous, fg, beige-grey, felsic volcanic (Rhyolitic), modly-strly sil, mod lim, tr py, cpy, narrow Qtz stockwork zone																		
KM10-931293				4C			1.0		tr				15	4				
KMTR10-04 (6.0 - 7.0 m): as previous, fg, beige-grey, felsic volcanic (Rhyolitic), modly-strly sil, mod lim, tr py, sugary texture, sulphides generally wkly dissem and along fracs																		
KM10-931294				4C			1.0		tr				15	3				
KMTR10-04 (7.0 - 8.0 m): as previous, fg, beige-grey, felsic volcanic (Rhyolitic), modly sil, mod lim, tr py																		
KM10-931295				**4C**			1.0		tr				15	3				
KMTR10-04 (8.0 - 9.0 m): as previous, fg, beige-grey, felsic volcanic (Rhyolitic), modly sil, mod lim, tr-1% py																		
KM10-931296				**4C**			1.0		tr				5	2				
KMTR10-04 (9.0 - 10.0 m): fg, beige-grey, felsic volcanic (Rhyolitic), wk-modly sil, wk lim, tr-1% py, rather barren, wk-modly fracd																		
KM10-931297				**4C**			1.0	tr	tr			10	10	2				
KMTR10-04 (10.0 - 11.0 m): fg, light beige-grey felsic volcanic (Rhyolitic), tr py, cpy, wk-mod lim along fracs, increase in narrow Qtz vnls, rather barren, wk-modly fracd																		
KM10-931298				**4C**			1.0		tr				5	2				
KMTR10-04 (11.0 - 12.0 m): fg, beige-grey, felsic volcanic (Rhyolitic), wk-modly sil, wk lim, tr py, rather barren, wk-modly fracd																		
KM10-931299				**4C**			1.0		tr				5	2				
KMTR10-04 (12.0 - 13.0 m): fg, beige-grey, felsic volcanic (Rhyolitic), wk-modly sil, wk lim, tr py, rather barren, wk-modly fracd																		

Canvan Ventures Ltd 2010

Rock Chip Trench Sample Description Sheet and Prospector Chip Samples (KM Project, Hazelton Area, BC, Canada, 2010)

Zone: KM Property General **Zone 09, NAD 83**

Sample Number	East (UTM) m E	North (UTM) m N	Elev. (m)	Rock Code	Text.	Struct. 000/00	Width (m)	% Cpy	% Py	% Gln	% Sph	% QVN	% Lim	Pervasive Alteration scale 1-5 Qtz	Ser	Arg	Carb	Phy
KM10-931300				**4C**			1.0		tr			5	5	1				
KMTR10-04 (13.0 - 14.0 m): fg, light beige-grey, felsic (Rhyolitic), tr py, wk lim along fracs, wk-modly fracd, wk narrow Qtz vnls, tr py, rather barren																		
KM10-931301				**4C**			1.0		tr			5	15	1				
KMTR10-04 (14.0 - 15.0 m): fg, light beige-grey, felsic (Rhyolitic), tr py, mod lim along fracs, wk-modly fracd, wk narrow Qtz vnls, tr py, rather barren																		
KM10-931302				**4C**			0.5		tr				5	1				
KMTR10-04 (15.0 - 15.5 m): fg, light beige-grey, felsic (Rhyolitic), tr py, wk lim along fracs, wk-modly fracd, wk-mod sil																		
KM10-931303				**4C**			1.0		tr				5	1				
KMTR10-04 (15.5 - 16.5 m): fg, light beige-grey, felsic (Rhyolitic), tr py, wk lim along fracs, wk-modly fracd, wk-mod sil																		
KM10-931304				**4C, 1B**			1.0		tr				5	1				
KMTR10-04 (16.5 - 17.5 m): fg, light beige-grey, felsic (Rhyolitic), tr py, wk lim along fracs, wk-modly fracd, wk-mod sil, wk feld pheno?																		
KM10-931305				**4C**	bxwk		1.0		tr			5	10	2				
KMTR10-04 (17.5 - 18.5 m): fg, light beige-grey, felsic (Rhyolitic), tr py, wk-mod lim along fracs, wk-modly fracd, wk-mod sil, wk narrow Qtz vnls, wk boxwork text.																		
KM10-931306				**4C**	bxwk		1.0		tr			5	10	2				
KMTR10-04 (18.5 - 19.5 m): fg, light beige-grey, felsic (Rhyolitic), tr py, wk-mod lim along fracs, wk-modly fracd, wk-mod sil, wk narrow Qtz vnls, wk boxwork text.																		
KM10-931307				**4C**			1.0		tr			10	5	2				
KMTR10-04 (19.5 - 20.5 m): fg, light beige-grey, felsic (Rhyolitic), tr py, wk lim along fracs, wk-modly fracd, wk-mod sil, mod narrow Qtz vnls, rather barren																		
KM10-931308	594747	6185593	1387	**4C, 1B**			1.0		tr			10	5	2				
KMTR10-04 (20.5 - 21.5 m): fg, light beige-grey, felsic (Rhyolitic), tr py, wk lim along fracs, wk-modly fracd, wk-mod sil, wk feld pheno?																		
KM10-43048				BLANK														
BLANK																		

Canvan Ventures Ltd 2010

Rock Chip Trench Sample Description Sheet and Prospector Chip Samples (KM Project, Hazelton Area, BC, Canada, 2010)

Zone: KM Property General **Zone 09, NAD 83**

Sample Number	East (UTM) m E	North (UTM) m N	Elev. (m)	Rock Code	Text.	Struct. 000/00	Width (m)	% Cpy	% Py	% Gln	% Sph	% QVN	% Lim	Pervasive Alteration scale 1-5 Qtz	Ser	Arg	Carb	Phy
KM10-43049	595416	6185898	1431	Qtz			grab	tr		tr		100						
Prospector sample: Talus, grab (float), highgrade Quartz with chalcopyrite, bit of malachite and minor galena.																		
KM10-43049	595416	6185898	1431	Qtz			grab	tr		tr		100						
Prospector sample: Talus, grab (float), highgrade Quartz with chalcopyrite, bit of malachite and minor galena.																		
KM10-43050	592936	6186158	2058	intrusive			grab			tr		10						
Prospector sample: Felsemer, grab (float). Felsic intrusive with qtz. Stringers has (very) minor galena associated with the qtz. Otto and I banged on hundreds of pieces more in area and found nothing.																		
KM-934401	594020	6185160	1493	Qtz			grab	1		tr								
Prospector sample: O/C, grab. Qtz in propylitic volcanics, with chalcopyrite and galena. Possible vein at one time, now is rock face. Approx 3 cm wide X 2m long X 1m deep (before disappears into ground).																		
KM-934402	594068	6185208	1466	Qtz		58/30N	.10-.15	2										
Prospector sample: O/C chip, Some guesswork here as lying on ground. Qtz vein with chalcopyrite and malachite. After about 5m of surface exposure disappears into the grass. Considerable talus in the tiny creek a few meters to the South.																		
KM-943403	594101	6185218	1455	Qtz			grab	tr		tr	tr							
Prospector sample: Talus, grab (float). This is where we first started seeing the talus in the creek. Sample contains chalco., malachite, pyrrhotite, and traces of galena and possibly sphalerite.																		
KM10-931309	598130	6185693	1930	Qtz Vn			.36		2	tr		100						
Qtz Vein: Chip from O/C, banded Qtz vnl dipping 10° to the east running for approx 10 m before disappearing in the talus slope, mod-str lim, wkly-modly vuggy-drusy, str blackish graphitic layers, 1-3% py, tr blebby gln, conformable to bedding																		
KM10-931310	598057	6185660	1876	Qtz Vn			grab	1		1		100	15					
Qtz Vein Float: Grab from float, modly fe stained, modly fracd, wk-mod mal, tr az, 1-2% gln, 1% cpy, specular hem?, vuggy-drusy, wk-mod dark graphitic layers																		
KM10-931311	596980	6185503	1687	1A, 1B			grab	tr	1	tr		15	5	3				
Feld-Qtz Porphyry Sill/Dyke: grab from float, mod qtz stockwork vnls up to 3.5 cm wide, 1-2% euhedral py, tr gln, cpy, wk lim																		
KM10-931312				1A, 1B			0.3	tr	1			10	10	2				

Canvan Ventures Ltd 2010

Rock Chip Trench Sample Description Sheet and Prospector Chip Samples (KM Project, Hazelton Area, BC, Canada, 2010)

Zone: KM Property General **Zone 09, NAD 83**

Sample Number	East (UTM) m E	North (UTM) m N	Elev. (m)	Rock Code	Text.	Struct. 000/00	Width (m)	% Cpy	% Py	% Gln	% Sph	% QVN	% Lim	Pervasive Alteration scale 1-5 Qtz	Ser	Arg	Carb	Phy
Feld-Qtz Porphyry Dyke: chip from O/C, wk-mod qtz stockwork vnls up to 3 cm wide, 1% euhedral py, tr cpy, wk-mod lim along some vnls, wk Qtz bx																		
KM10-931313	595262	6186314	1619	3A			1.0		1				10				1	
KMTR10-06 (0-1.0 m): fg, dark grey to black shales, wk < 1 mm carb to Qtz carb vnls, wk carb alt, wk-mod lim/ankerite along fracs, tr-2% dissem euhedral py																		
KM10-931314				3A			1.0		1				10				1	
KMTR10-06 (1.0-2.0 m): as previous, fg, dark grey to black, wk < 1 mm wide carb to Qtz carb, wk carb alt, wk-mod lim, tr-2% py dissem, euhedral																		
KM10-931315				3A			1.0		1				10				1	
KMTR10-06 (2.0-3.0 m): as previous, fg, mod-dark grey to black shales, wk siltstones, wk < 1 mm wide carb vnl, weak carb alt, wk-mod lim, 1-2 % dissem euhedral py generally concentrated along fracs and bedding																		
KM10-931316				SulphideVn, 3A		323/67SW	0.2	2		70		10	30	4			1	
KMTR10-06 (3.0-3.2 m): 10 cm wide massive galena Vn and wk mixed 3A, 1-3% blebby cpy, tr mal, str lim/ankerite, wk carb, massive sulphide vein trending 323/67 SW and approx 9-10 cm wide, Oblique-slip fault on hanging wall pitching 75 to SE.																		
KM10-931317				3A			0.8		tr				20				1	
KMTR10-06 (3.2-4.0 m): fg, dark shales, mod lim/ankerite along fracs, increase in lim along fracs, tr-1% py, wk carb along fracs																		
KM10-931318				3A			0.5		tr				20				1	
KMTR10-06 (4.0-4.5 m): as previous with 15 cm of fault gouge next to hanging wall of next massive sulphide vein.																		
KM10-931319				Sulphide Vn		320/57SW	0.35	2		70		20	30	3				
KMTR10-06 (4.5-4.85 m): 70% massive galena vein, str lim/ankerite, 1-3% blebby cpy, tr-1% bornite (bn), wk mal, trending 320/57 SW.																		
KM10-931320				3A			0.5		2				5					
KMTR10-06 (4.85-5.35 m): fg, grey-black, unaltered, wk lim/ankerite along fracs, 2-3% dissem euhedral py concentrated along fracs and bedding.																		
KM10-931321	595266	6186318	1619	3A			1.0		2				5					
KMTR10-06 (5.35 - 6.35 m): as previous																		

Canvan Ventures Ltd 2010

Rock Chip Trench Sample Description Sheet and Prospector Chip Samples (KM Project, Hazelton Area, BC, Canada, 2010)

Zone: KM Property General **Zone 09, NAD 83**

Sample Number	East (UTM) m E	North (UTM) m N	Elev. (m)	Rock Code	Text.	Struct. 000/00	Width (m)	% Cpy	% Py	% Gln	% Sph	% QVN	% Lim	Pervasive Alteration scale 1-5 Qtz	Ser	Arg	Carb	Phy
KM10-931322	595710	6185530	1586	Qtz Vn			0.70					100						
Continuous Chip of Qtz Vn: approx 7 m long dipping 10-15° to N, lim staining along fracs, 5% py as blebs and dissem, sample taken 3 m west of KM09-441035																		
KM10-934404	594119	6184837	1369	?			grab											
Prospector sample: Float, grab. Strongly chloritic rock, silicious in places, calcareous in others. Minor malachite																		
KM10-934405	594122	6184833	1374	?			grab											
Prospector sample: Float, grab. Congrats. To Otto! About three meters away from 934404 he found another loose piece of rock or as he says 'from anywhere in the valley'. Qtz. With pyrite and minor galena.																		
KM10-934406	594810	6185240	?	Qtz		190/30E	grab	3				100						
Prospector sample: O/C, grab. Vein, approximately 50 m long and 0.10 m wide. Mostly barren but in one spot good mineralization. Sample shamelessly high-graded. GPS no signal. Near a sample of AM																		
KM10-934407	595215	6186350	1642	Qtz			grab					100						
Prospector sample: O/C, grab. Quartz from a short narrow vein with minor galena.																		
KM10-934408	595209	6186350	1642	ironcarb			grab											
Prospector sample: O/C, grab. Very altered (grungy) iron carbonate with? Looks like a silvery metallic mineral but possibly only mica. Typical Iskut NELite (Not Enough Light) sample.																		
KM10-934409	595204	6186337	1646	Qtz Vn			grab											
Prospector sample: O/C, grab. Qtz with minor sphalerite in iron carbonates.																		
KM10-931323	595319	6187082	1888	1A,1B	BOXWORK		grab		2	1		50	20	4				
Traverse in North Central Cirque: narrow (5-15 cm) Qtz and Qtz carb veinlets with galena and py hosted Feldspar-Qtz dykes generally discontinuous, sample collected was a grab sample from float, Qtz vein hosted in strly gossanous Feld/Qtz Porphyry dyke/sill, Qtz vein 5-8 cm wide, str lim and boxwork textures, modly-strly siliceous, 2-3% py, 1% galena, other sites visited were KM09-441075, 441076, 441077.																		
KM10-931324	593837	6186076	1850	4A			2.0	tr						2				
KMTR10-07 (0-2.0 m): fg, modly dark green, andesitic volc., wk-mod sil, wk-mod Qtz stockwork vnls, wk mal, tr cpy, some sheeted vnls, wk manganese																		
KM10-931325				4A			2.0	tr						2				
KMTR10-07 (2.0-4.0 m): fg, modly dark green, andesitic volc., wk-mod sil, wk-mod Qtz stockwork vnls, wk mal, tr cpy, some sheeted vnls,																		

Rock Chip Trench Sample Description Sheet and Prospector Chip Samples (KM Project, Hazelton Area, BC, Canada, 2010)

Zone: KM Property General **Zone 09, NAD 83**

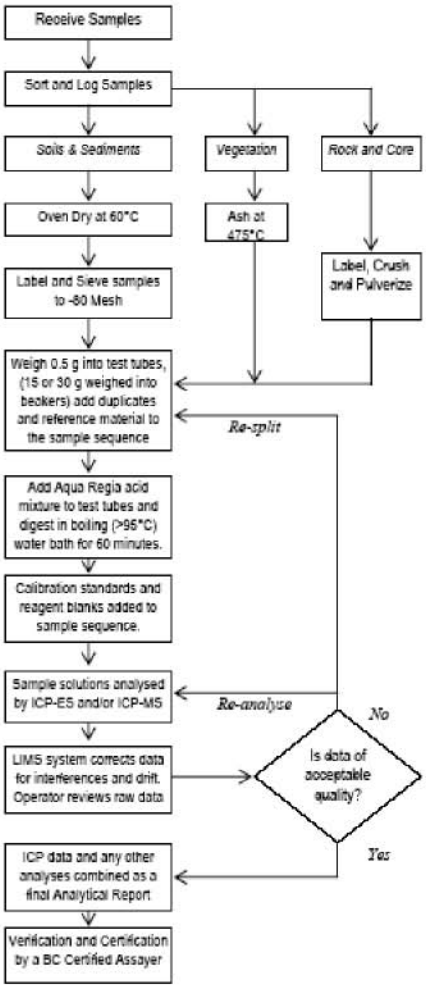
Sample Number	East (UTM) m E	North (UTM) m N	Elev. (m)	Rock Code	Text.	Struct. 000/00	Width (m)	% Cpy	% Py	% Gln	% Sph	% QVN	% Lim	Pervasive Alteration scale 1-5 Qtz	Ser	Arg	Carb	Phy
wk manganese																		
KM10-931326	593835	6186082	1850	4A			1.0	tr						2				
KMTR10-07 (4.0-5.0 m): fg, modly dark green, andesitic volc., wk-mod sil, wk-mod Qtz stockwork vnls, wk mal, tr cpy, some sheeted vnls, wk manganese																		
KM10-931327	593833	6186083	1850	4A			2.0							2				
KMTR10-08 (0-2.0 m): fg, mod dark green, andesitic, wk-mod sil, wk mal, wk stockwork vnls, wk manganese																		
KM10-931328	593832	6186085	1850	4A			2.0							1				
KMTR10-08 (2.0-4.0 m): fg, mod dark green, andesitic, wk sil, no visible mal, wk stockwork vnls, wk manganese																		
KM10-931329	5944073	6185202	1466	Qtz Vn	vuggy-drusy	240/36 NE	0.23	1				100	15					
Qtz Vn: Ted/Otto vein at the northwest side of K. Lake, Qtz Vn is in a gully. The north side of the gully is approx 20.5 m from the vein and has faint striation that are believed to be slickensides, assumed fault at 231/74 SW. The other side of the gully is approx 7 m from the vein and also appears to have faint slickensides at 241°. The trench needs to be dug out more if this sample is high in gold. If very high results in gold a trench should be put in across the gully to pick up parallel veins/veinlets, Qtz Vn trending 240/36 NE and the hanging wall has definite slickensides showing the typical strike-slip faulting (horizontal slicks), Qtz Vn is modly gossanous, mod mal, tr-2% cpy, tr-1% bornite, modly vuggy-drusy, milky white in part, this vein is possible > 30 cm wide in part, needs to be dug out.																	
KM10-931330	595378	6186248	1588	1B		55/61 NW	2.0		tr				15				4	
Continuous Chip over 2.0 m: sheeted and wk stockwork Qtz vnls within a feldspar-quartz porphyry sill, vnls discontinuous and not trending into the sediments, vnls generally trending 55/61 NW, mod lim, ankerite along fracs, mod-str carb alt. (carbonitization), wk ep, wk manganese stain along fracs, tr py																		
KM10-931331	595382	6186247	1588	1B			2.0		tr				15				4	
Continuous Chip over 2.0 m and continuous with last sample: sheeted and wk stockwork Qtz vnls within a feldspar-quartz porphyry sill, vnls discontinuous and not trending into the sediments, vnls generally trending 55/61 NW, mod lim, ankerite along fracs, mod-str carb alt. (carbonitization), wk ep, wk manganese stain along fracs, tr py																		

APPENDIX B: SAMPLE PREPARATION AND ANALYSES

AcmeLabs ACME ANALYTICAL LABORATORIES LTD.

METHODS AND SPECIFICATIONS FOR ANALYTICAL PACKAGE
GROUP 1D & 1DX – ICP & ICP-MS ANALYSIS – AQUA REGIA

Analytical Process



Comments

Sample Preparation

All samples are dried at 60°C. Soil and sediment are sieved to -80 mesh (-180 µm). Moss-mats are disaggregated then sieved to yield -80 mesh sediment. Vegetation is pulverized or ashed (475°C). Rock and drill core is jaw crushed to 70% passing 10 mesh (2 mm), a 250 g riffle split is then pulverized to 85% passing 200 mesh (75 µm) in a mild-steel ring-and-puck mill. Pulp splits of 0.5 g are weighed into test tubes, 15 and 30 g splits are weighed into beakers.

Sample Digestion

A modified Aqua Regia solution of equal parts concentrated ACS grade HCl and HNO_3 and de-mineralised H_2O is added to each sample to leach for one hour in a heating block or hot water bath (>95°C). After cooling the solution is made up to final volume with 5% HCl. Sample weight to solution volume is 1 g per 20 mL.

Sample Analysis

Group 1D: solutions aspirated into a Spectro Ciros Vision or Varian 735 emission spectrometer are analysed for 30 elements: Ag, Al, As, Au, B, Ba, Bi, Ca, Cd, Co, Cr, Cu, Fe, K, La, Mg, Mn, Mo, Na, Ni, P, Pb, Sb, Sr, Th, Ti, U, V, W, Zn.

Group 1DX: solutions aspirated into a Perkin Elmer Elan 6000/9000 ICP mass spectrometer are analysed for 36 elements: Ag, Al, As, Au, B, Ba, Bi, Ca, Cd, Co, Cr, Cu, Fe, *Ga*, *Hg*, K, La, Mg, Mn, Mo, Na, Ni, P, Pb, *S*, Sb, *Sc*, *Se*, *Tl*, Sr, Th, Ti, U, V, W, Zn.

Quality Control and Data Verification

QA/QC protocol incorporates a sample-prep blank (G-1) as the first sample in the job which is carried through all stages of preparation to analysis. An Analytical Batch comprises 36 client samples and incorporates a pulp duplicate to monitor analytical precision, a -10 mesh rejects duplicate to monitor sub-sampling variation (drill core only), a reagent blank to measure background and aliquots of in-house Reference Material like STD DS7. Data undergoes a final verification by a British Columbia Certified Assayer who then validates results before it is released to the client.

1020 Cordova St East, Vancouver BC V6A 4A3
Phone (604) 253 3158 Fax (604) 253 1716 e-mail: acmeinfo@acmelab.com

Group 1D_1DX version1.6 Revision Date: May 6, 2009

APPENDIX C: GEOCHEMICAL RESULTS

Acme Analytical Laboratories (Vancouver) Ltd.
1020 Cordova St. East Vancouver BC V6A 4A3 Canada

www.acmelab.com

Client: **Rio Minerals Ltd.**
1030 - 475 Howe Street
Vancouver BC V6C 2B3 Canada

Submitted By: Andrew Molnar
Receiving Lab: Canada-Smithers
Received: August 19, 2010
Report Date: September 09, 2010
Page: 1 of 3

CERTIFICATE OF ANALYSIS SMI10000442.1

CLIENT JOB INFORMATION

Project: KM-10
Shipment ID:
P.O. Number 10-304
Number of Samples: 36

SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Method Code	Number of Samples	Code Description	Test Wgt (g)	Report Status	Lab
R200-250	36	Crush, split and pulverize 250 g rock to 200 mesh			SMI
1DX2	36	1:1:1 Aqua Regia digestion ICP-MS analysis	15	Completed	VAN

SAMPLE DISPOSAL

STOR-PLP Store After 90 days Invoice for Storage
DISP-RJT Dispose of Reject After 90 days

ADDITIONAL COMMENTS

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

Invoice To: Rio Minerals Ltd.
1030 - 475 Howe Street
Vancouver BC V6C 2B3
Canada

CC:

BRITISH COLUMBIA CERTIFIED ASSAYER
CLARENCE LEONG
GENERAL MANAGER

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.

Acme Analytical Laboratories (Vancouver) Ltd.
1020 Cordova St. East Vancouver BC V6A 4A3 Canada
Phone (604) 253-3158 Fax (604) 253-1716
www.acmelab.com

Client: **Rio Minerals Ltd.**
1030 - 475 Howe Street
Vancouver BC V6C 2B3 Canada

Project: KM-10
Report Date: September 09, 2010

CERTIFICATE OF ANALYSIS SMI10000442.1

	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
KM10-931251	Rock	2.18	0.9	34.3	5.6	6	0.3	0.9	0.8	124	0.49	0.7	<0.1	1.1	0.2	6	<0.1	0.1	<0.1	<2	0.07
KM10-931252	Rock	1.22	1.3	106.4	21.0	98	0.2	15.6	20.6	1239	4.56	2.2	1.5	1.4	3.4	421	0.1	0.3	<0.1	138	4.59
KM10-931253	Rock	0.77	193.3	58.7	>10000	206	>100	0.9	1.6	48	5.09	0.6	<0.1	294.7	0.1	20	5.2	0.4	850.5	<2	0.05
KM10-931254	Rock	1.27	1.4	58.8	87.6	99	1.1	17.2	23.1	1369	5.05	2.2	1.3	1.4	3.0	658	0.2	0.5	3.1	165	5.06
KM10-931255	Rock	0.85	1.1	50.4	24.6	46	0.4	5.7	11.0	936	2.80	3.8	2.0	5.9	9.3	191	0.3	0.6	0.6	11	2.91
KM10-931256	Rock	0.94	1.6	65.3	38.0	7	1.8	1.9	2.6	177	0.68	1.6	0.3	92.6	1.3	7	<0.1	0.2	1.4	<2	0.07
KM10-931257	Rock	0.86	2.1	10.6	9.1	23	0.3	0.9	4.1	918	1.72	4.1	1.5	10.3	7.3	128	0.1	0.3	<0.1	3	1.84
KM10-931258	Rock	2.27	1.2	95.3	46.4	210	0.6	27.0	32.7	1771	7.58	15.8	0.7	<0.5	2.1	670	0.7	2.0	0.1	120	7.39
KM10-931259	Rock	2.65	0.9	27.5	7.1	115	0.3	17.5	27.0	1654	7.36	14.9	0.6	11.2	1.9	477	0.2	0.9	<0.1	101	6.32
KM10-931260	Rock	2.58	1.2	16.7	5.1	89	0.3	38.3	21.5	1597	6.27	23.6	0.9	19.2	2.6	603	<0.1	0.9	0.1	77	5.98
KM10-931261	Rock	2.73	1.5	19.3	5.2	79	0.6	16.8	20.5	1913	5.48	10.6	0.6	68.2	1.5	875	0.4	0.4	0.1	101	6.68
KM10-931262	Rock	2.84	1.4	23.4	5.0	74	1.2	15.1	22.2	1412	5.43	10.5	0.8	105.6	1.5	398	0.3	0.5	0.3	58	4.95
KM10-931263	Rock	2.53	1.9	13.6	10.6	45	0.7	4.8	12.9	1245	3.28	3.5	1.1	51.4	4.0	308	0.4	0.5	0.2	11	3.77
KM10-931264	Rock	1.74	14.1	4.2	10.6	32	0.4	2.8	7.2	654	1.98	2.1	0.7	49.0	5.4	63	0.3	0.2	0.2	6	1.26
KM10-931265	Rock	2.58	6.9	4.5	6.8	13	0.3	1.6	2.1	186	0.62	<0.5	0.2	28.5	0.5	12	0.1	0.4	<0.1	<2	0.13
KM10-931266	Rock	2.75	6.4	8.1	13.1	44	0.9	2.2	6.0	803	2.44	4.5	1.0	35.0	4.2	96	0.5	0.4	0.3	5	2.09
KM10-931267	Rock	2.11	1.8	20.9	13.4	105	0.6	1.8	7.8	1004	3.06	7.6	1.2	20.0	4.5	135	1.4	0.9	0.1	8	2.76
KM10-931268	Rock	1.74	1.9	23.2	18.0	192	0.4	3.7	9.3	1423	3.60	17.1	1.4	35.1	3.5	318	2.9	0.7	0.2	10	5.44
KM10-931269	Rock	2.34	3.3	633.2	1392	759	5.2	2.0	3.4	57	0.59	5.5	<0.1	38.5	0.1	6	6.3	1.9	0.7	<2	0.03
KM10-931270	Rock	1.66	8.3	21.8	25.8	517	1.9	4.0	10.4	1025	3.78	13.2	1.4	35.3	4.5	145	7.6	1.0	1.1	9	3.31
KM10-931271	Rock	2.42	18.1	18.0	22.3	54	4.4	2.7	9.7	1228	3.98	7.8	0.3	67.1	1.1	272	0.4	0.5	10.8	7	4.22
KM10-931272	Rock	1.69	0.5	41.7	5.1	123	0.2	10.5	12.4	721	5.76	9.2	0.2	<0.5	0.6	24	0.2	0.3	0.1	66	0.80
KM10-931273	Rock	2.45	0.2	9.3	20.5	23	0.2	0.7	0.3	54	0.37	0.9	<0.1	0.7	<0.1	2	0.3	0.2	0.3	<2	0.01
KM10-931274	Rock	2.13	4.3	5.9	5.9	33	0.2	1.3	1.8	167	0.60	2.5	0.1	6.4	0.9	10	0.2	0.2	0.3	3	0.13
KM10-931275	Rock	1.44	1.1	15.8	9.5	79	0.1	6.5	5.5	277	2.19	4.6	0.2	<0.5	0.7	29	0.2	0.4	0.2	12	0.62
KM10-931276	Rock	3.70	2.5	3.5	7.6	5	1.4	1.0	0.9	89	0.45	3.9	0.1	42.2	0.6	4	<0.1	0.3	0.5	<2	0.01
KM10-931277	Rock	2.77	3.1	128.6	137.8	26	4.0	2.3	4.3	673	2.00	8.4	0.2	103.7	0.3	103	0.2	1.4	1.5	5	2.06
KM10-931278	Rock	1.99	23.2	106.1	1940	>10000	8.1	24.7	7.2	3305	10.09	210.8	1.6	3.4	0.6	28	66.0	12.3	<0.1	9	0.18
KM10-931279	Rock	2.38	17.7	6653	>10000	>10000	>100	3.9	2.8	2333	7.72	41.8	1.8	8.9	0.1	9	>2000	728.6	0.1	<2	0.06
KM10-931280	Rock	1.50	55.0	53.4	1074	2881	3.0	29.4	6.2	532	3.88	221.9	0.8	<0.5	0.4	25	32.3	3.6	0.1	7	0.30

Acme Analytical Laboratories (Vancouver) Ltd.
1020 Cordova St. East Vancouver BC V6A 4A3 Canada
Phone (604) 253-3158 Fax (604) 253-1716
www.acmelab.com

Client: **Rio Minerals Ltd.**
1030 - 475 Howe Street
Vancouver BC V6C 2B3 Canada

Project: KM-10
Report Date: September 09, 2010

CERTIFICATE OF ANALYSIS SMI10000442.1

	Method	1DX15	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	Te
	Unit	%	ppm	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	0.2
KM10-931251	Rock	0.006	<1	17	<0.01	15	<0.001	2	0.03	0.004	0.01	<0.1	<0.01	0.2	<0.1	<0.05	<1	<0.5	<0.2
KM10-931252	Rock	0.487	24	27	2.20	732	0.177	2	2.20	0.152	1.67	3.7	0.02	10.6	1.2	<0.05	9	<0.5	<0.2
KM10-931253	Rock	0.009	1	12	0.03	14	0.003	1	0.03	0.005	<0.01	>100	*	0.1	0.7	5.67	<1	3.1	114.4
KM10-931254	Rock	0.434	25	28	2.49	781	0.220	<1	2.35	0.049	2.13	2.7	0.02	13.6	1.2	<0.05	9	<0.5	0.4
KM10-931255	Rock	0.236	17	7	0.29	141	0.004	2	0.40	0.057	0.17	1.1	<0.01	4.0	<0.1	0.26	1	<0.5	0.2
KM10-931256	Rock	0.015	6	10	0.01	32	0.001	1	0.08	0.015	0.05	1.0	<0.01	0.4	<0.1	0.08	<1	<0.5	1.0
KM10-931257	Rock	0.063	21	3	0.09	173	<0.001	3	0.35	0.047	0.25	0.4	<0.01	0.8	<0.1	0.26	1	<0.5	<0.2
KM10-931258	Rock	0.531	20	20	2.22	86	0.012	2	2.51	0.018	0.13	0.3	0.01	10.5	<0.1	0.56	9	0.6	0.2
KM10-931259	Rock	0.486	17	11	1.81	58	0.010	3	2.03	0.035	0.15	1.1	<0.01	9.7	<0.1	0.48	8	<0.5	0.6
KM10-931260	Rock	0.330	15	45	1.76	45	0.005	2	1.73	0.020	0.12	0.3	<0.01	7.2	<0.1	0.38	7	<0.5	0.4
KM10-931261	Rock	0.319	13	16	1.47	25	0.007	<1	1.84	0.047	0.05	0.6	0.01	9.1	<0.1	0.60	9	<0.5	0.4
KM10-931262	Rock	0.316	10	6	1.05	41	0.010	3	1.15	0.048	0.15	0.7	<0.01	5.8	<0.1	0.77	5	<0.5	0.9
KM10-931263	Rock	0.170	8	4	0.35	40	0.002	2	0.27	0.070	0.11	0.6	<0.01	3.7	<0.1	0.85	1	0.6	0.5
KM10-931264	Rock	0.064	12	3	0.05	28	0.001	1	0.17	0.076	0.06	0.4	<0.01	1.8	<0.1	0.54	<1	<0.5	0.6
KM10-931265	Rock	0.015	2	20	<0.01	22	<0.001	<1	0.04	0.014	<0.01	0.2	<0.01	0.6	<0.1	0.09	<1	<0.5	<0.2
KM10-931266	Rock	0.078	9	3	0.10	32	<0.001	2	0.22	0.083	0.08	0.3	<0.01	2.2	<0.1	0.71	<1	<0.5	0.5
KM10-931267	Rock	0.105	9	2	0.15	41	0.001	5	0.30	0.078	0.15	0.3	<0.01	2.3	<0.1	0.73	<1	<0.5	0.4
KM10-931268	Rock	0.140	6	2	0.14	73	0.004	6	0.38	0.067	0.20	0.6	<0.01	3.2	<0.1	0.89	1	<0.5	0.7
KM10-931269	Rock	0.013	1	19	<0.01	10	<0.001	<1	0.03	0.002	0.02	0.1	0.05	0.2	<0.1	0.21	<1	1.7	1.0
KM10-931270	Rock	0.164	7	1	0.14	77	0.002	5	0.51	0.050	0.21	0.5	0.01	2.5	<0.1	0.55	1	<0.5	0.6
KM10-931271	Rock	0.189	7	2	0.27	61	0.003	4	0.40	0.055	0.21	0.5	<0.01	3.3	<0.1	0.73	1	<0.5	9.4
KM10-931272	Rock	0.092	4	26	1.18	40	0.239	4	2.29	0.056	0.08	0.2	0.03	4.7	<0.1	0.73	7	0.8	<0.2
KM10-931273	Rock	0.001	<1	17	<0.01	2	<0.001	1	0.01	0.005	<0.01	0.1	<0.01	0.1	<0.1	<0.05	<1	<0.5	<0.2
KM10-931274	Rock	0.014	4	15	0.01	29	0.002	2	0.09	0.014	0.05	0.2	<0.01	0.6	<0.1	0.06	<1	<0.5	<0.2
KM10-931275	Rock	0.068	4	8	0.35	70	0.177	4	0.97	0.038	0.15	0.4	<0.01	2.9	<0.1	0.43	2	<0.5	<0.2
KM10-931276	Rock	0.004	3	21	<0.01	5	<0.001	2	0.04	0.013	<0.01	0.4	<0.01	0.2	<0.1	<0.05	<1	<0.5	0.5
KM10-931277	Rock	0.050	2	15	0.11	33	<0.001	<1	0.08	0.010	0.04	0.2	<0.01	1.7	<0.1	0.20	<1	0.7	2.5
KM10-931278	Rock	0.044	4	4	0.33	75	0.001	2	1.60	0.009	0.20	<0.1	0.12	2.5	0.1	0.50	4	1.8	<0.2
KM10-931279	Rock	0.007	<1	1	0.15	16	0.001	<1	0.17	0.003	0.05	<0.1	6.97	0.6	0.1	9.71	2	23.4	0.2
KM10-931280	Rock	0.042	3	3	0.05	62	<0.001	2	0.45	0.016	0.20	0.3	0.06	1.5	0.1	1.89	<1	8.5	<0.2

Acme Analytical Laboratories (Vancouver) Ltd.
1020 Cordova St. East Vancouver BC V6A 4A3 Canada
Phone (604) 253-3158 Fax (604) 253-1716
www.acmelab.com

Client: **Rio Minerals Ltd.**
1030 - 475 Howe Street
Vancouver BC V6C 2B3 Canada

Project: KM-10
Report Date: September 09, 2010

CERTIFICATE OF ANALYSIS SMI10000442.1

	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
KM10-931281	Rock	2.85	11.9	44.1	812.7	2590	4.1	13.1	4.0	2116	4.02	657.7	0.6	1.3	0.9	988	28.7	5.5	<0.1	13	9.06
KM10-931282	Rock	4.01	6.6	>10000	27.0	30	90.5	5.5	1.6	210	0.67	2.7	<0.1	66.8	<0.1	35	0.7	0.3	5.9	4	0.42
KM10-439046	Rock	2.04	47.6	133.3	49.9	65	0.7	3.6	19.0	1986	5.58	8.8	0.9	2.0	2.9	1043	0.6	0.9	0.9	57	4.84
KM10-439047	Rock	1.56	69.3	428.6	4119	>10000	12.1	3.9	3.8	1664	1.75	136.5	0.8	8.6	0.2	599	122.3	6.9	2.3	4	6.90
KM10-439048	Rock	1.70	0.6	48.3	7.3	110	0.2	10.8	12.2	662	5.29	49.6	0.2	<0.5	0.4	16	0.2	<0.1	<0.1	57	0.70
KM10-439049	Rock	3.88	2.0	>10000	>10000	>10000	>100	16.6	59.6	28	4.97	35.8	<0.1	7509	<0.1	11	746.2	14.2	144.6	<2	0.02

Acme Analytical Laboratories (Vancouver) Ltd.
1020 Cordova St. East Vancouver BC V6A 4A3 Canada
Phone (604) 253-3158 Fax (604) 253-1716
www.acmelab.com

Client: **Rio Minerals Ltd.**
1030 - 475 Howe Street
Vancouver BC V6C 2B3 Canada

Project: KM-10
Report Date: September 09, 2010

CERTIFICATE OF ANALYSIS SMI10000442.1

	Method	1DX15	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	Te
	Unit	%	ppm	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	0.2
KM10-931281	Rock	0.061	6	4	0.28	26	<0.001	<1	0.30	0.031	0.07	0.1	0.15	5.4	<0.1	0.65	<1	3.6	<0.2
KM10-931282	Rock	0.001	<1	27	0.12	428	0.001	1	0.10	0.006	<0.01	0.1	0.17	0.5	<0.1	0.42	<1	3.3	3.3
KM10-439046	Rock	0.231	11	5	1.19	39	0.029	<1	0.62	0.093	0.02	0.8	0.01	6.6	<0.1	1.31	3	2.3	1.0
KM10-439047	Rock	0.032	4	17	0.07	38	0.001	2	0.27	0.028	0.08	0.8	0.63	4.6	<0.1	0.05	1	3.5	0.8
KM10-439048	Rock	0.076	3	26	1.01	73	0.196	2	1.97	0.035	0.06	0.2	0.03	3.1	<0.1	0.85	6	1.3	<0.2
KM10-439049	Rock	0.002	<1	50	<0.01	18	<0.001	<1	0.02	0.002	<0.01	0.7	2.93	<0.1	<0.1	4.14	<1	61.3	89.7

Acme Analytical Laboratories (Vancouver) Ltd.
1020 Cordova St. East Vancouver BC V6A 4A3 Canada
Phone (604) 253-3158 Fax (604) 253-1716
www.acmelab.com

Client: **Rio Minerals Ltd.**
1030 - 475 Howe Street
Vancouver BC V6C 2B3 Canada

Project: KM-10
Report Date: September 09, 2010

QUALITY CONTROL REPORT SMI10000442.1

	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
Pulp Duplicates																					
KM10-931253	Rock	0.77	193.3	58.7	>10000	206	>100	0.9	1.6	48	5.09	0.6	<0.1	294.7	0.1	20	5.2	0.4	850.5	<2	0.05
REP KM10-931253	QC		187.4	59.0	>10000	205	>100	0.9	1.7	48	5.02	<0.5	<0.1	331.8	<0.1	19	5.5	0.4	840.7	<2	0.05
KM10-931270	Rock	1.66	8.3	21.8	25.8	517	1.9	4.0	10.4	1025	3.78	13.2	1.4	35.3	4.5	145	7.6	1.0	1.1	9	3.31
REP KM10-931270	QC		8.6	21.9	26.9	527	1.9	3.9	10.1	1004	3.73	13.3	1.4	46.4	4.6	146	7.7	1.0	1.0	8	3.37
Core Reject Duplicates																					
KM10-931274	Rock	2.13	4.3	5.9	5.9	33	0.2	1.3	1.8	167	0.60	2.5	0.1	6.4	0.9	10	0.2	0.2	0.3	3	0.13
DUP KM10-931274	QC		1.3	15.4	9.1	76	<0.1	6.6	5.5	280	2.17	4.3	0.2	0.5	0.7	30	0.2	0.4	0.1	11	0.62
Reference Materials																					
STD DS7	Standard		19.7	113.0	65.1	384	1.0	54.4	9.2	589	2.27	46.4	4.6	64.4	4.3	62	6.1	5.3	4.4	82	0.84
STD DS7	Standard		21.9	106.8	68.4	384	1.0	55.7	9.4	627	2.33	49.9	5.2	71.2	4.7	68	5.6	5.7	4.6	86	0.93
STD DS7	Standard		19.9	122.1	70.5	404	1.0	57.4	9.2	628	2.34	58.0	5.3	70.7	4.6	68	7.1	6.5	4.8	90	0.87
STD DS7 Expected			20.5	109	70.6	411	0.9	56	9.7	627	2.39	48.2	4.9	70	4.4	69	6.4	4.6	4.5	84	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
BLK	Blank		<0.1	<0.1	1.4	<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
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		1.3	74.5	10.1	47	0.8	3.7	4.5	575	2.00	0.6	1.9	<0.5	5.4	50	<0.1	<0.1	<0.1	40	0.51
G1	Prep Blank		0.6	6.3	25.6	47	0.2	3.0	4.1	538	1.86	0.5	1.8	<0.5	5.4	55	<0.1	0.2	0.4	39	0.53

AcmeLabs Acme Analytical Laboratories (Vancouver) Ltd.
1020 Cordova St. East Vancouver BC V6A 4A3 Canada
Phone (604) 253-3158 Fax (604) 253-1716
www.acmelab.com

Client: **Rio Minerals Ltd.**
1030 - 475 Howe Street
Vancouver BC V6C 2B3 Canada

Project: KM-10
Report Date: September 09, 2010

QUALITY CONTROL REPORT SMI10000442.1

	Method	1DX15	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	Te
	Unit	%	ppm	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	0.2
Pulp Duplicates																			
KM10-931253	Rock	0.009	1	12	0.03	14	0.003	1	0.03	0.005	<0.01	>100	*	0.1	0.7	5.67	<1	3.1	114.4
REP KM10-931253	QC	0.009	1	12	0.03	14	<0.001	1	0.03	0.007	<0.01	>100	*	<0.1	0.7	5.65	<1	3.5	118.1
KM10-931270	Rock	0.164	7	1	0.14	77	0.002	5	0.51	0.050	0.21	0.5	0.01	2.5	<0.1	0.55	1	<0.5	0.6
REP KM10-931270	QC	0.167	8	1	0.15	78	0.002	4	0.49	0.051	0.20	0.5	0.01	2.6	<0.1	0.59	1	0.5	0.4
Core Reject Duplicates																			
KM10-931274	Rock	0.014	4	15	0.01	29	0.002	2	0.09	0.014	0.05	0.2	<0.01	0.6	<0.1	0.06	<1	<0.5	<0.2
DUP KM10-931274	QC	0.065	4	8	0.35	73	0.183	4	1.07	0.045	0.13	0.4	0.01	3.2	<0.1	0.45	2	<0.5	<0.2
Reference Materials																			
STD DS7	Standard	0.070	11	185	0.98	369	0.115	37	0.93	0.084	0.44	3.3	0.20	2.1	3.9	0.19	4	3.3	1.3
STD DS7	Standard	0.076	13	199	1.03	394	0.123	37	1.00	0.101	0.46	3.5	0.21	2.6	4.2	0.18	5	3.4	1.6
STD DS7	Standard	0.081	13	160	1.03	387	0.146	42	1.03	0.104	0.44	3.7	0.21	2.9	3.9	0.18	5	2.7	1.0
STD DS7 Expected		0.08	12	179	1.05	410	0.124	39	0.959	0.089	0.44	3.4	0.2	2.5	4.2	0.19	5	3.5	1.08
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	<0.2
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	<0.2
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	<0.2
Prep Wash																			
G1	Prep Blank	0.078	10	10	0.57	179	0.127	<1	0.97	0.094	0.54	<0.1	<0.01	2.2	0.3	<0.05	5	<0.5	<0.2
G1	Prep Blank	0.078	11	9	0.52	171	0.121	<1	0.99	0.101	0.49	1.2	0.01	2.2	0.3	<0.05	5	<0.5	<0.2

Acme Analytical Laboratories (Vancouver) Ltd.
1020 Cordova St. East Vancouver BC V6A 4A3 Canada

www.acmelab.com

Client: **Rio Minerals Ltd.**
1030 - 475 Howe Street
Vancouver BC V6C 2B3 Canada

Submitted By: Andrew Molnar
Receiving Lab: Canada-Smithers
Received: August 19, 2010
Report Date: September 09, 2010
Page: 1 of 3

CERTIFICATE OF ANALYSIS SMI10000442.2

CLIENT JOB INFORMATION

Project: KM-10
Shipment ID:
P.O. Number 10-304
Number of Samples: 36

SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Method Code	Number of Samples	Code Description	Test Wgt (g)	Report Status	Lab
R200-250	36	Crush, split and pulverize 250 g rock to 200 mesh			SMI
1DX2	36	1:1:1 Aqua Regia digestion ICP-MS analysis	15	Completed	VAN

SAMPLE DISPOSAL

STOR-PLP Store After 90 days Invoice for Storage
DISP-RJT Dispose of Reject After 90 days

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

ADDITIONAL COMMENTS

Version 2: Subject to recheck on Sample IDs KM10-931272, KM10-931273, KM10-931274, KM10-931274 DUP, KM10-931275 & KM10-931276 from rock rejects

Invoice To: Rio Minerals Ltd.
1030 - 475 Howe Street
Vancouver BC V6C 2B3
Canada

CC:

BRITISH COLUMBIA CERTIFIED ASSAYER
CLARENCE LEONG
GENERAL MANAGER

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.

Acme Analytical Laboratories (Vancouver) Ltd.
1020 Cordova St. East Vancouver BC V6A 4A3 Canada
Phone (604) 253-3158 Fax (604) 253-1716
www.acmelab.com

Client: **Rio Minerals Ltd.**
1030 - 475 Howe Street
Vancouver BC V6C 2B3 Canada

Project: KM-10
Report Date: September 09, 2010

CERTIFICATE OF ANALYSIS SMI10000442.2

	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
KM10-931251	Rock	2.18	0.9	34.3	5.6	6	0.3	0.9	0.8	124	0.49	0.7	<0.1	1.1	0.2	6	<0.1	0.1	<0.1	<2	0.07
KM10-931252	Rock	1.22	1.3	106.4	21.0	98	0.2	15.6	20.6	1239	4.56	2.2	1.5	1.4	3.4	421	0.1	0.3	<0.1	138	4.59
KM10-931253	Rock	0.77	193.3	58.7	>10000	206	>100	0.9	1.6	48	5.09	0.6	<0.1	294.7	0.1	20	5.2	0.4	850.5	<2	0.05
KM10-931254	Rock	1.27	1.4	58.8	87.6	99	1.1	17.2	23.1	1369	5.05	2.2	1.3	1.4	3.0	658	0.2	0.5	3.1	165	5.06
KM10-931255	Rock	0.85	1.1	50.4	24.6	46	0.4	5.7	11.0	936	2.80	3.8	2.0	5.9	9.3	191	0.3	0.6	0.6	11	2.91
KM10-931256	Rock	0.94	1.6	65.3	38.0	7	1.8	1.9	2.6	177	0.68	1.6	0.3	92.6	1.3	7	<0.1	0.2	1.4	<2	0.07
KM10-931257	Rock	0.86	2.1	10.6	9.1	23	0.3	0.9	4.1	918	1.72	4.1	1.5	10.3	7.3	128	0.1	0.3	<0.1	3	1.84
KM10-931258	Rock	2.27	1.2	95.3	46.4	210	0.6	27.0	32.7	1771	7.58	15.8	0.7	<0.5	2.1	670	0.7	2.0	0.1	120	7.39
KM10-931259	Rock	2.65	0.9	27.5	7.1	115	0.3	17.5	27.0	1654	7.36	14.9	0.6	11.2	1.9	477	0.2	0.9	<0.1	101	6.32
KM10-931260	Rock	2.58	1.2	16.7	5.1	89	0.3	38.3	21.5	1597	6.27	23.6	0.9	19.2	2.6	603	<0.1	0.9	0.1	77	5.98
KM10-931261	Rock	2.73	1.5	19.3	5.2	79	0.6	16.8	20.5	1913	5.48	10.6	0.6	68.2	1.5	875	0.4	0.4	0.1	101	6.68
KM10-931262	Rock	2.84	1.4	23.4	5.0	74	1.2	15.1	22.2	1412	5.43	10.5	0.8	105.6	1.5	398	0.3	0.5	0.3	58	4.95
KM10-931263	Rock	2.53	1.9	13.6	10.6	45	0.7	4.8	12.9	1245	3.28	3.5	1.1	51.4	4.0	308	0.4	0.5	0.2	11	3.77
KM10-931264	Rock	1.74	14.1	4.2	10.6	32	0.4	2.8	7.2	654	1.98	2.1	0.7	49.0	5.4	63	0.3	0.2	0.2	6	1.26
KM10-931265	Rock	2.58	6.9	4.5	6.8	13	0.3	1.6	2.1	186	0.62	<0.5	0.2	28.5	0.5	12	0.1	0.4	<0.1	<2	0.13
KM10-931266	Rock	2.75	6.4	8.1	13.1	44	0.9	2.2	6.0	803	2.44	4.5	1.0	35.0	4.2	96	0.5	0.4	0.3	5	2.09
KM10-931267	Rock	2.11	1.8	20.9	13.4	105	0.6	1.8	7.8	1004	3.06	7.6	1.2	20.0	4.5	135	1.4	0.9	0.1	8	2.76
KM10-931268	Rock	1.74	1.9	23.2	18.0	192	0.4	3.7	9.3	1423	3.60	17.1	1.4	35.1	3.5	318	2.9	0.7	0.2	10	5.44
KM10-931269	Rock	2.34	3.3	633.2	1392	759	5.2	2.0	3.4	57	0.59	5.5	<0.1	38.5	0.1	6	6.3	1.9	0.7	<2	0.03
KM10-931270	Rock	1.66	8.3	21.8	25.8	517	1.9	4.0	10.4	1025	3.78	13.2	1.4	35.3	4.5	145	7.6	1.0	1.1	9	3.31
KM10-931271	Rock	2.42	18.1	18.0	22.3	54	4.4	2.7	9.7	1228	3.98	7.8	0.3	67.1	1.1	272	0.4	0.5	10.8	7	4.22
KM10-931272	Rock	1.69	0.5	41.7	5.1	123	0.2	10.5	12.4	721	5.76	9.2	0.2	<0.5	0.6	24	0.2	0.3	0.1	66	0.80
KM10-931273	Rock	2.45	0.2	9.3	20.5	23	0.2	0.7	0.3	54	0.37	0.9	<0.1	0.7	<0.1	2	0.3	0.2	0.3	<2	0.01
KM10-931274	Rock	2.13	4.3	5.9	5.9	33	0.2	1.3	1.8	167	0.60	2.5	0.1	6.4	0.9	10	0.2	0.2	0.3	3	0.13
KM10-931275	Rock	1.44	1.1	15.8	9.5	79	0.1	6.5	5.5	277	2.19	4.6	0.2	<0.5	0.7	29	0.2	0.4	0.2	12	0.62
KM10-931276	Rock	3.70	2.5	3.5	7.6	5	1.4	1.0	0.9	89	0.45	3.9	0.1	42.2	0.6	4	<0.1	0.3	0.5	<2	0.01
KM10-931277	Rock	2.77	3.1	128.6	137.8	26	4.0	2.3	4.3	673	2.00	8.4	0.2	103.7	0.3	103	0.2	1.4	1.5	5	2.06
KM10-931278	Rock	1.99	23.2	106.1	1940	>10000	8.1	24.7	7.2	3305	10.09	210.8	1.6	3.4	0.6	28	66.0	12.3	<0.1	9	0.18
KM10-931279	Rock	2.38	17.7	6653	>10000	>10000	>100	3.9	2.8	2333	7.72	41.8	1.8	8.9	0.1	9	>2000	728.6	0.1	<2	0.06
KM10-931280	Rock	1.50	55.0	53.4	1074	2881	3.0	29.4	6.2	532	3.88	221.9	0.8	<0.5	0.4	25	32.3	3.6	0.1	7	0.30

Acme Analytical Laboratories (Vancouver) Ltd.
1020 Cordova St. East Vancouver BC V6A 4A3 Canada
Phone (604) 253-3158 Fax (604) 253-1716
www.acmelab.com

Client: **Rio Minerals Ltd.**
1030 - 475 Howe Street
Vancouver BC V6C 2B3 Canada

Project: KM-10
Report Date: September 09, 2010

CERTIFICATE OF ANALYSIS SMI10000442.2

	Method	1DX15	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	Te
	Unit	%	ppm	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	0.2
KM10-931251	Rock	0.006	<1	17	<0.01	15	<0.001	2	0.03	0.004	0.01	<0.1	<0.01	0.2	<0.1	<0.05	<1	<0.5	<0.2
KM10-931252	Rock	0.487	24	27	2.20	732	0.177	2	2.20	0.152	1.67	3.7	0.02	10.6	1.2	<0.05	9	<0.5	<0.2
KM10-931253	Rock	0.009	1	12	0.03	14	0.003	1	0.03	0.005	<0.01	>100	*	0.1	0.7	5.67	<1	3.1	114.4
KM10-931254	Rock	0.434	25	28	2.49	781	0.220	<1	2.35	0.049	2.13	2.7	0.02	13.6	1.2	<0.05	9	<0.5	0.4
KM10-931255	Rock	0.236	17	7	0.29	141	0.004	2	0.40	0.057	0.17	1.1	<0.01	4.0	<0.1	0.26	1	<0.5	0.2
KM10-931256	Rock	0.015	6	10	0.01	32	0.001	1	0.08	0.015	0.05	1.0	<0.01	0.4	<0.1	0.08	<1	<0.5	1.0
KM10-931257	Rock	0.063	21	3	0.09	173	<0.001	3	0.35	0.047	0.25	0.4	<0.01	0.8	<0.1	0.26	1	<0.5	<0.2
KM10-931258	Rock	0.531	20	20	2.22	86	0.012	2	2.51	0.018	0.13	0.3	0.01	10.5	<0.1	0.56	9	0.6	0.2
KM10-931259	Rock	0.486	17	11	1.81	58	0.010	3	2.03	0.035	0.15	1.1	<0.01	9.7	<0.1	0.48	8	<0.5	0.6
KM10-931260	Rock	0.330	15	45	1.76	45	0.005	2	1.73	0.020	0.12	0.3	<0.01	7.2	<0.1	0.38	7	<0.5	0.4
KM10-931261	Rock	0.319	13	16	1.47	25	0.007	<1	1.84	0.047	0.05	0.6	0.01	9.1	<0.1	0.60	9	<0.5	0.4
KM10-931262	Rock	0.316	10	6	1.05	41	0.010	3	1.15	0.048	0.15	0.7	<0.01	5.8	<0.1	0.77	5	<0.5	0.9
KM10-931263	Rock	0.170	8	4	0.35	40	0.002	2	0.27	0.070	0.11	0.6	<0.01	3.7	<0.1	0.85	1	0.6	0.5
KM10-931264	Rock	0.064	12	3	0.05	28	0.001	1	0.17	0.076	0.06	0.4	<0.01	1.8	<0.1	0.54	<1	<0.5	0.6
KM10-931265	Rock	0.015	2	20	<0.01	22	<0.001	<1	0.04	0.014	<0.01	0.2	<0.01	0.6	<0.1	0.09	<1	<0.5	<0.2
KM10-931266	Rock	0.078	9	3	0.10	32	<0.001	2	0.22	0.083	0.08	0.3	<0.01	2.2	<0.1	0.71	<1	<0.5	0.5
KM10-931267	Rock	0.105	9	2	0.15	41	0.001	5	0.30	0.078	0.15	0.3	<0.01	2.3	<0.1	0.73	<1	<0.5	0.4
KM10-931268	Rock	0.140	6	2	0.14	73	0.004	6	0.38	0.067	0.20	0.6	<0.01	3.2	<0.1	0.89	1	<0.5	0.7
KM10-931269	Rock	0.013	1	19	<0.01	10	<0.001	<1	0.03	0.002	0.02	0.1	0.05	0.2	<0.1	0.21	<1	1.7	1.0
KM10-931270	Rock	0.164	7	1	0.14	77	0.002	5	0.51	0.050	0.21	0.5	0.01	2.5	<0.1	0.55	1	<0.5	0.6
KM10-931271	Rock	0.189	7	2	0.27	61	0.003	4	0.40	0.055	0.21	0.5	<0.01	3.3	<0.1	0.73	1	<0.5	9.4
KM10-931272	Rock	0.092	4	26	1.18	40	0.239	4	2.29	0.056	0.08	0.2	0.03	4.7	<0.1	0.73	7	0.8	<0.2
KM10-931273	Rock	0.001	<1	17	<0.01	2	<0.001	1	0.01	0.005	<0.01	0.1	<0.01	0.1	<0.1	<0.05	<1	<0.5	<0.2
KM10-931274	Rock	0.014	4	15	0.01	29	0.002	2	0.09	0.014	0.05	0.2	<0.01	0.6	<0.1	0.06	<1	<0.5	<0.2
KM10-931275	Rock	0.068	4	8	0.35	70	0.177	4	0.97	0.038	0.15	0.4	<0.01	2.9	<0.1	0.43	2	<0.5	<0.2
KM10-931276	Rock	0.004	3	21	<0.01	5	<0.001	2	0.04	0.013	<0.01	0.4	<0.01	0.2	<0.1	<0.05	<1	<0.5	0.5
KM10-931277	Rock	0.050	2	15	0.11	33	<0.001	<1	0.08	0.010	0.04	0.2	<0.01	1.7	<0.1	0.20	<1	0.7	2.5
KM10-931278	Rock	0.044	4	4	0.33	75	0.001	2	1.60	0.009	0.20	<0.1	0.12	2.5	0.1	0.50	4	1.8	<0.2
KM10-931279	Rock	0.007	<1	1	0.15	16	0.001	<1	0.17	0.003	0.05	<0.1	6.97	0.6	0.1	9.71	2	23.4	0.2
KM10-931280	Rock	0.042	3	3	0.05	62	<0.001	2	0.45	0.016	0.20	0.3	0.06	1.5	0.1	1.89	<1	8.5	<0.2

Acme Analytical Laboratories (Vancouver) Ltd.
1020 Cordova St. East Vancouver BC V6A 4A3 Canada
Phone (604) 253-3158 Fax (604) 253-1716
www.acmelab.com

Client: **Rio Minerals Ltd.**
1030 - 475 Howe Street
Vancouver BC V6C 2B3 Canada

Project: KM-10
Report Date: September 09, 2010

CERTIFICATE OF ANALYSIS SMI10000442.2

	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
KM10-931281	Rock	2.85	11.9	44.1	812.7	2590	4.1	13.1	4.0	2116	4.02	657.7	0.6	1.3	0.9	988	28.7	5.5	<0.1	13	9.06
KM10-931282	Rock	4.01	6.6	>10000	27.0	30	90.5	5.5	1.6	210	0.67	2.7	<0.1	66.8	<0.1	35	0.7	0.3	5.9	4	0.42
KM10-439046	Rock	2.04	47.6	133.3	49.9	65	0.7	3.6	19.0	1986	5.58	8.8	0.9	2.0	2.9	1043	0.6	0.9	0.9	57	4.84
KM10-439047	Rock	1.56	69.3	428.6	4119	>10000	12.1	3.9	3.8	1664	1.75	136.5	0.8	8.6	0.2	599	122.3	6.9	2.3	4	6.90
KM10-439048	Rock	1.70	0.6	48.3	7.3	110	0.2	10.8	12.2	662	5.29	49.6	0.2	<0.5	0.4	16	0.2	<0.1	<0.1	57	0.70
KM10-439049	Rock	3.88	2.0	>10000	>10000	>10000	>100	16.6	59.6	28	4.97	35.8	<0.1	7509	<0.1	11	746.2	14.2	144.6	<2	0.02

Acme Analytical Laboratories (Vancouver) Ltd.
1020 Cordova St. East Vancouver BC V6A 4A3 Canada
Phone (604) 253-3158 Fax (604) 253-1716
www.acmelab.com

Client: **Rio Minerals Ltd.**
1030 - 475 Howe Street
Vancouver BC V6C 2B3 Canada

Project: KM-10
Report Date: September 09, 2010

CERTIFICATE OF ANALYSIS SMI10000442.2

	Method	1DX15	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	Te
	Unit	%	ppm	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	0.2
KM10-931281	Rock	0.061	6	4	0.28	26	<0.001	<1	0.30	0.031	0.07	0.1	0.15	5.4	<0.1	0.65	<1	3.6	<0.2
KM10-931282	Rock	0.001	<1	27	0.12	428	0.001	1	0.10	0.006	<0.01	0.1	0.17	0.5	<0.1	0.42	<1	3.3	3.3
KM10-439046	Rock	0.231	11	5	1.19	39	0.029	<1	0.62	0.093	0.02	0.8	0.01	6.6	<0.1	1.31	3	2.3	1.0
KM10-439047	Rock	0.032	4	17	0.07	38	0.001	2	0.27	0.028	0.08	0.8	0.63	4.6	<0.1	0.05	1	3.5	0.8
KM10-439048	Rock	0.076	3	26	1.01	73	0.196	2	1.97	0.035	0.06	0.2	0.03	3.1	<0.1	0.85	6	1.3	<0.2
KM10-439049	Rock	0.002	<1	50	<0.01	18	<0.001	<1	0.02	0.002	<0.01	0.7	2.93	<0.1	<0.1	4.14	<1	61.3	89.7

Acme Analytical Laboratories (Vancouver) Ltd.
1020 Cordova St. East Vancouver BC V6A 4A3 Canada
Phone (604) 253-3158 Fax (604) 253-1716
www.acmelab.com

Client: **Rio Minerals Ltd.**
1030 - 475 Howe Street
Vancouver BC V6C 2B3 Canada

Project: KM-10
Report Date: September 09, 2010

QUALITY CONTROL REPORT SMI10000442.2

	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
Pulp Duplicates																					
KM10-931253	Rock	0.77	193.3	58.7	>10000	206	>100	0.9	1.6	48	5.09	0.6	<0.1	294.7	0.1	20	5.2	0.4	850.5	<2	0.05
REP KM10-931253	QC		187.4	59.0	>10000	205	>100	0.9	1.7	48	5.02	<0.5	<0.1	331.8	<0.1	19	5.5	0.4	840.7	<2	0.05
KM10-931270	Rock	1.66	8.3	21.8	25.8	517	1.9	4.0	10.4	1025	3.78	13.2	1.4	35.3	4.5	145	7.6	1.0	1.1	9	3.31
REP KM10-931270	QC		8.6	21.9	26.9	527	1.9	3.9	10.1	1004	3.73	13.3	1.4	46.4	4.6	146	7.7	1.0	1.0	8	3.37
Core Reject Duplicates																					
KM10-931274	Rock	2.13	4.3	5.9	5.9	33	0.2	1.3	1.8	167	0.60	2.5	0.1	6.4	0.9	10	0.2	0.2	0.3	3	0.13
DUP KM10-931274	QC		1.3	15.4	9.1	76	<0.1	6.6	5.5	280	2.17	4.3	0.2	0.5	0.7	30	0.2	0.4	0.1	11	0.62
Reference Materials																					
STD DS7	Standard		19.7	113.0	65.1	384	1.0	54.4	9.2	589	2.27	46.4	4.6	64.4	4.3	62	6.1	5.3	4.4	82	0.84
STD DS7	Standard		21.9	106.8	68.4	384	1.0	55.7	9.4	627	2.33	49.9	5.2	71.2	4.7	68	5.6	5.7	4.6	86	0.93
STD DS7	Standard		19.9	122.1	70.5	404	1.0	57.4	9.2	628	2.34	58.0	5.3	70.7	4.6	68	7.1	6.5	4.8	90	0.87
STD DS7 Expected			20.5	109	70.6	411	0.9	56	9.7	627	2.39	48.2	4.9	70	4.4	69	6.4	4.6	4.5	84	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
BLK	Blank		<0.1	<0.1	1.4	<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
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		1.3	74.5	10.1	47	0.8	3.7	4.5	575	2.00	0.6	1.9	<0.5	5.4	50	<0.1	<0.1	<0.1	40	0.51
G1	Prep Blank		0.6	6.3	25.6	47	0.2	3.0	4.1	538	1.86	0.5	1.8	<0.5	5.4	55	<0.1	0.2	0.4	39	0.53

AcmeLabs Acme Analytical Laboratories (Vancouver) Ltd.
1020 Cordova St. East Vancouver BC V6A 4A3 Canada
Phone (604) 253-3158 Fax (604) 253-1716
www.acmelab.com

Client: **Rio Minerals Ltd.**
1030 - 475 Howe Street
Vancouver BC V6C 2B3 Canada

Project: KM-10
Report Date: September 09, 2010

QUALITY CONTROL REPORT SMI10000442.2

	Method	1DX15	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	Te
	Unit	%	ppm	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	0.2
Pulp Duplicates																			
KM10-931253	Rock	0.009	1	12	0.03	14	0.003	1	0.03	0.005	<0.01	>100	*	0.1	0.7	5.67	<1	3.1	114.4
REP KM10-931253	QC	0.009	1	12	0.03	14	<0.001	1	0.03	0.007	<0.01	>100	*	<0.1	0.7	5.65	<1	3.5	118.1
KM10-931270	Rock	0.164	7	1	0.14	77	0.002	5	0.51	0.050	0.21	0.5	0.01	2.5	<0.1	0.55	1	<0.5	0.6
REP KM10-931270	QC	0.167	8	1	0.15	78	0.002	4	0.49	0.051	0.20	0.5	0.01	2.6	<0.1	0.59	1	0.5	0.4
Core Reject Duplicates																			
KM10-931274	Rock	0.014	4	15	0.01	29	0.002	2	0.09	0.014	0.05	0.2	<0.01	0.6	<0.1	0.06	<1	<0.5	<0.2
DUP KM10-931274	QC	0.065	4	8	0.35	73	0.183	4	1.07	0.045	0.13	0.4	0.01	3.2	<0.1	0.45	2	<0.5	<0.2
Reference Materials																			
STD DS7	Standard	0.070	11	185	0.98	369	0.115	37	0.93	0.084	0.44	3.3	0.20	2.1	3.9	0.19	4	3.3	1.3
STD DS7	Standard	0.076	13	199	1.03	394	0.123	37	1.00	0.101	0.46	3.5	0.21	2.6	4.2	0.18	5	3.4	1.6
STD DS7	Standard	0.081	13	160	1.03	387	0.146	42	1.03	0.104	0.44	3.7	0.21	2.9	3.9	0.18	5	2.7	1.0
STD DS7 Expected		0.08	12	179	1.05	410	0.124	39	0.959	0.089	0.44	3.4	0.2	2.5	4.2	0.19	5	3.5	1.08
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	<0.2
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	<0.2
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	<0.2
Prep Wash																			
G1	Prep Blank	0.078	10	10	0.57	179	0.127	<1	0.97	0.094	0.54	<0.1	<0.01	2.2	0.3	<0.05	5	<0.5	<0.2
G1	Prep Blank	0.078	11	9	0.52	171	0.121	<1	0.99	0.101	0.49	1.2	0.01	2.2	0.3	<0.05	5	<0.5	<0.2

APPENDIX D: ABBREVIATIONS

alt. – alteration
ank – ankerite
aspy – arsenopyrite
az –azurite
bas – basalt
bio – biotite
bn – bornite
bx – breccia
calc – calcite
carb – carbonate
cpy – chalcopyrite
chl – chlorite
cgl – conglomerate
D – down
dio – diorite
dissem – disseminated
ep – epidote
FP – fault plane
Feld – feldspar
f.g. – fine grained
fls – felsite
gln – galena
gd – granodiorite
hem – hematite
hb – hornblende
lim – limonite
mal – malachite
mod – moderate
modly – moderately
mus – muscovite
O/C – outcrop
plag – plagioclase
py – pyrite
pyx – pyroxene
po – pyrrhotite
Qtz – quartz
rhy – rhyolite
ss – sandstone
ser – sericite
sh – shale
slst – siltstone
sph – sphalerite
str – strong
tr – trace
U – up
V – very
wk – weak
ze - zeolite