ASSESSMENT REPORT TITLE PAGE AND SUMMARY

TITLE OF REPORT: Geological Report on the KM Property
TOTAL COST: $145,213.94
AUTHOR(S): Jesse Halle, Kerry Cupit
SIGNATURE(S):
NOTICE OF WORK PERMIT NUMBER(S)/DATE(S): N/A
STATEMENT OF WORK EVENT NUMBER(S)/DATE(S):

YEAR OF WORK: 2009
PROPERTY NAME: KM
CLAIM NAME(S) (on which work was done): 571626. 571627, 547641

COMMODITIES SOUGHT: Au, Ag, Cu, Pb, Zn.

MINERAL INVENTORY MINFILE NUMBER(S),IF KNOWN: 093M 126
MINING DIVISION: Omineca
NTS / BCGS: 93M .073, .083
LATITUDE: 55 ° 48 ' 00 "
LONGITUDE: 127 ° 27 ' 00 " (at centre of work)
UTM Zone: 9N EASTING: 0597024 NORTHING: 6185770

OWNER(S): Cadre Capital Inc.
MAILING ADDRESS: 1022-475 Howe Street. Vancouver, BC. V6C 2B3
OPERATOR(S) [who paid for the work]: Cavan Ventures Ltd.
MAILING ADDRESS: 1010-1030 W. Georgia Street. Vancouver, BC. V6E 2Y3

REPORT KEYWORDS (lithology, age, stratigraphy, structure, alteration, mineralization, size and attitude. **Do not use abbreviations or codes**)

A thick sequense of Jurassic sedimentary rocks has been intruded by Late Cretaceous
Granodiorite plugs, dykes, and sills. The intrusives are believed to be responsible for late stage
epithermal quartz veins and stockworks.

REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS:

Hooper DG. AR 17542 (1987)

TYPE OF WORK IN THIS REPORT	EXTENT OF WORK (in metric units)		ON WHICH CLAIMS		PROJECT COSTS APPORTIONED (incl. support)	
GEOLOGICAL (scale, area)	1:500		571626,27	547841		
Ground, mapping	2000m		571626,27	547841		35724.55
Photo interpretation						
GEOPHYSICAL (line-kilometres)						
Ground						
Magnetic						
Electromagnetic						
Induced Polarization						
Radiometric						
Seismic						
Other						
Airborne						
GEOCHEMICAL (number of samples analysed for …)						
Soil	4		571626,27	547841		35724.55
Silt	14		571626,27	547841		
Rock	33		571626,27	547841		
Other						
DRILLING (total metres, number of holes, size, storage location)						
Core						
Non-core						
RELATED TECHNICAL						
Sampling / Assaying			571626,27	547841		2315.74
Petrographic						
Mineralographic						
Metallurgic						
PROSPECTING (scale/area)	1:5000		571626,27	547841		35724.55
PREPATORY / PHYSICAL						
Line/grid (km)						
Topo/Photogrammetric (scale, area)						
Legal Surveys (scale, area)						
Road, local access (km)/trail						
Trench (number/metres)						
Underground development (metres)						
Other						
				TOTAL COST		145213.94

GEOLOGICAL REPORT
on the
KM PROPERTY

Omenica 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 V6X 3M1

By
Jesse R. Hallé, BSc. Geol.
Rio Minerals Limited
#1022 – 475 Howe Street
Vancouver, British Columbia
Canada V6C 2B3

Dated: October 1st, 2009

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1.0 SUMMARY

This report summarizes recent exploration work performed on the group of mineral claims known as the Kisgegas Property (KM) of which Cadre Capital Inc. of Vancouver, British Columbia owns a 100% interest. The Kisgegas 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 silver, lead, and zinc, and associated gold and copper.

During August of 2009, a three-week program consiting of silt, soil, and 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. Reconnaisance geological mapping classified all feldspar +/- 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.

Stream sediment sampling revealed two multi-element anomalies on the slope north of Kisgegas River. Follow-up prospecting of the anomaly to the NE of camp resulted in the dicovery of mineralized boulders, and one pyritic quartz vein was sampled at source. The multi-element anomaly immediately north of the camp uncovered a series of mineralized dikes, two areas of phyllically-altered and mineralized intrusive rock, and one example of a mineralized quartz vein intruding the sedimentary host rock, but did not fully explain the gold anomaly.

A second-phase programme of prospecting and rock sampling of areas not convered during the phase one programme and further detailed mapping and sampling of early structures which are thought to control mineralization is recommended.

A third-phase programme of diamond drilling is recommended based on the results of the Phase 2 programme.

2.0 INTRODUCTION

The Kisgegas Property is located 2 kilometres north of Kisgegas Peak in north-central British Columbia and are approximately 60 kilometres northeast of the town of Hazelton, B.C. 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 granodioritic plugs and associated sills and dikes contained within Bowser Lake Group sediments.

In August of 2009, Rio Minerals Limited, on behalf of Cavan Ventures Ltd. of Vancouver, BC enacted a programme of geochemical and geological sampling and mapping which tested previously reported and newly discovered areas of anomalous multi-element precious and base metal values.

The field programme consisted of the collection of 14 stream-sediment silts and 4 soil samples for geochemistry, and 33 rock samples for assay. Additional fieldwork consisted of prospecting and geological mapping of new areas including the previously unexplored north side of the main valley and eastern cirques.

3.0 PROPERTY DESCRIPTION AND LOCATION

The Kisgegas Property is located 2 kilometres north the Kisgegas Peak, approximately 60 kilometres north of the town of Hazelton, British Columbia (Figure 1). 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 Kisgegas Project is currently accessible by helicopter, although logging roads and a helicopter staging area (Salmon 57) are located within 7 kilometres of the claim area. The claims can be found on BCGS map sheet 093M/073 and 083 at Latitude 55 48’ 00” N and Lon 127 27’ 00” W. The Kisgegas claim group consists of seven contiguous Mineral Titles Online located tenures in the Omenica Mining Division of British Columbia, Canada. The total claim area is 1654 hectares. Cadre Capital Inc. 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 Hectrares
547841	KISGEGAS	2009/nov/30	72.7305
571626	KM-1	2009/dec/11	436.3363
571627	KM-2	2009/dec/11	145.4384
571628	KM-3	2009/dec/11	200.0382
571629	KM-4	2009/dec/11	90.9086
614963	KM-5	2010/aug/04	454.3877
614964	KM-6	2010/aug/04	254.5164
632803	KM-7	2010/sep/11	436.2868
632804	KM-8	2010/sep/11	454.6709
632823	KM-9	2010/sep/11	436.1062
632824	KM-10	2010/sep/11	436.1715
632825	KM-11	2010/sep/11	36.367

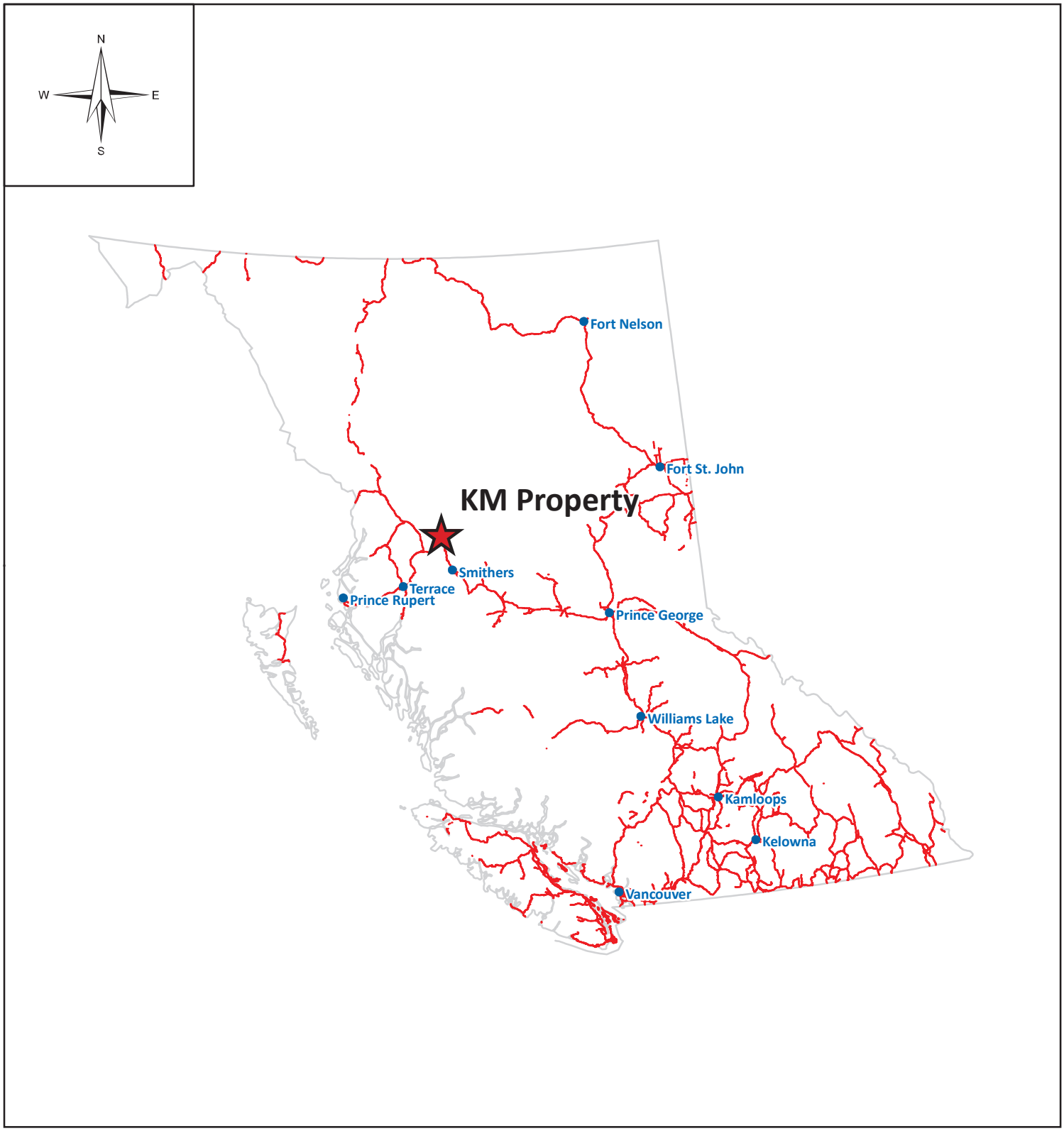


Figure 1
Kisgegas Property
Regional Location Map

Cavan Ventures Limited

KM Property, British Columbia

Scale:	1:10,000,000
Datum:	UTM NAD83 Zone 9
Prepared by:	K. Cupit, Rio Minerals Limited
Date:	October 2009

LEGEND

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

1 cm = 100 km

0 100 200 400 600 Kilometers

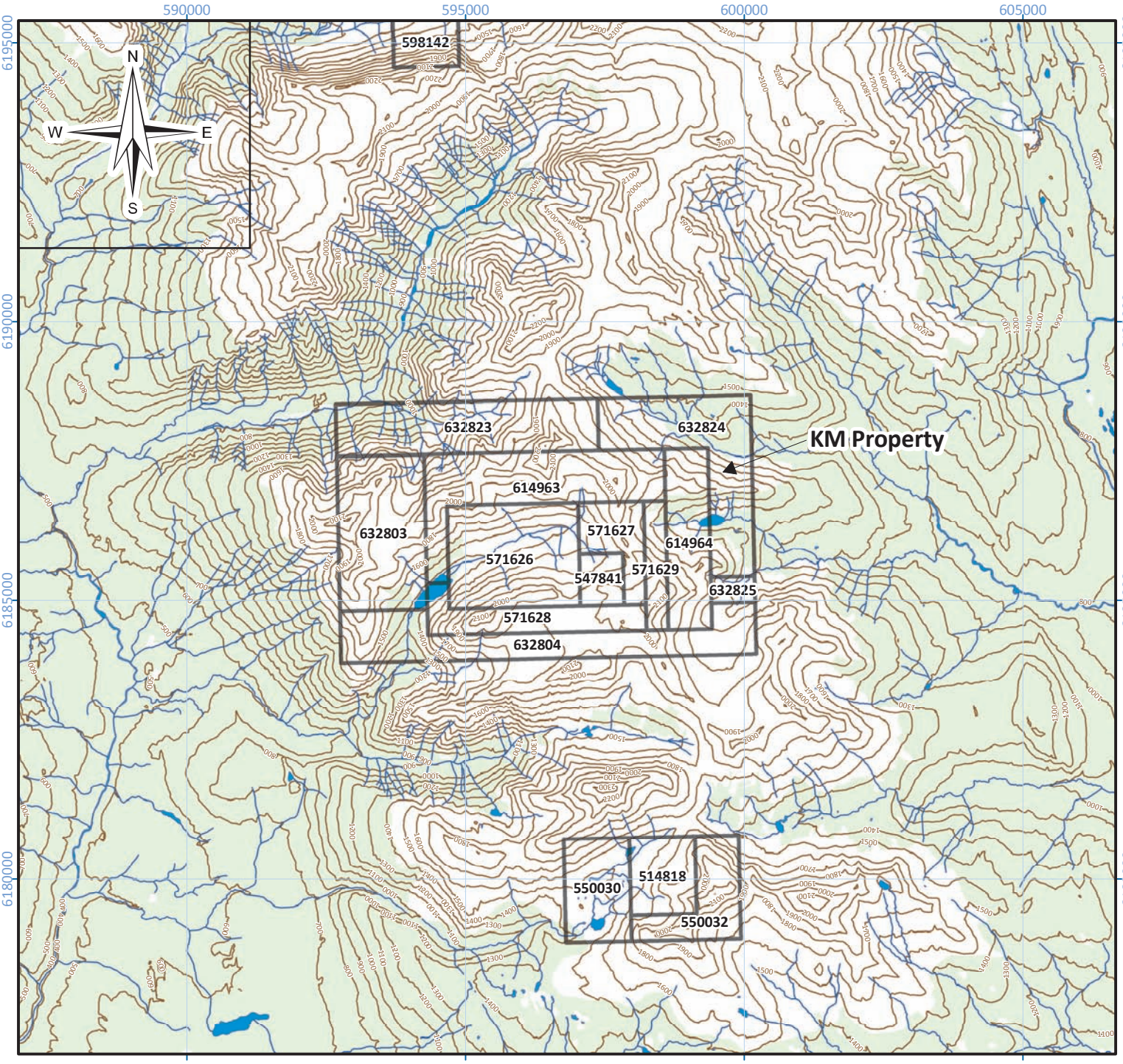


Figure 2
Kisgegas Property
Claim Tenure Map

Cavan Ventures Limited

KM Property, British Columbia

Scale:	1:100,000
Datum:	UTM NAD83 Zone 9
Map sheet(s):	NTS 93M
Prepared by:	K. Cupit, Rio Minerals Limited
Date:	October 2009

Regional Location Map

Legend

- Claim boundary
- Road (primary)
- Road (secondary)
- Lake
- Drainage
- Contour (100m interval)
- Vegetation

1 centimeter = 1,000 meters

Meters

0 1,000 2,000 4,000

4.0 ACCESSIBILITY, CLIMATE, INFRASTRUCTURE

The KM property is located 60 kilometers northeast of Hazelton, British Columbia on the eastern boundary of the Skeena Mountains. The property is mostly above the tree-line and is centred over the headwaters of a west-flowing river draining an area of about nine square kilometers. The south side of the valley is composed of two cirques with three glacial lobes extending from the Kesgegas 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 1371 to 1880 meters.

Local glaciated terrain implies sub-zero temperatures dominate throughout the year and can be expected at any time of year. The exploration season is May to November. Temperatures in August 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

Reconnaisance-style mapping and sampling by D.G. Hooper in 1987 (Minfile Report #17542) is the only reported work known on the KM Claim Group. In his 1987 report, 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.

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.

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 axeis 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 micro-granodioritic dikes observed on the claims (Hooper, 1987).

A regional geology map reprinted from B.C. Geological Survey mapping of the Hazelton Map Sheet 093M is presented as Figure 4.

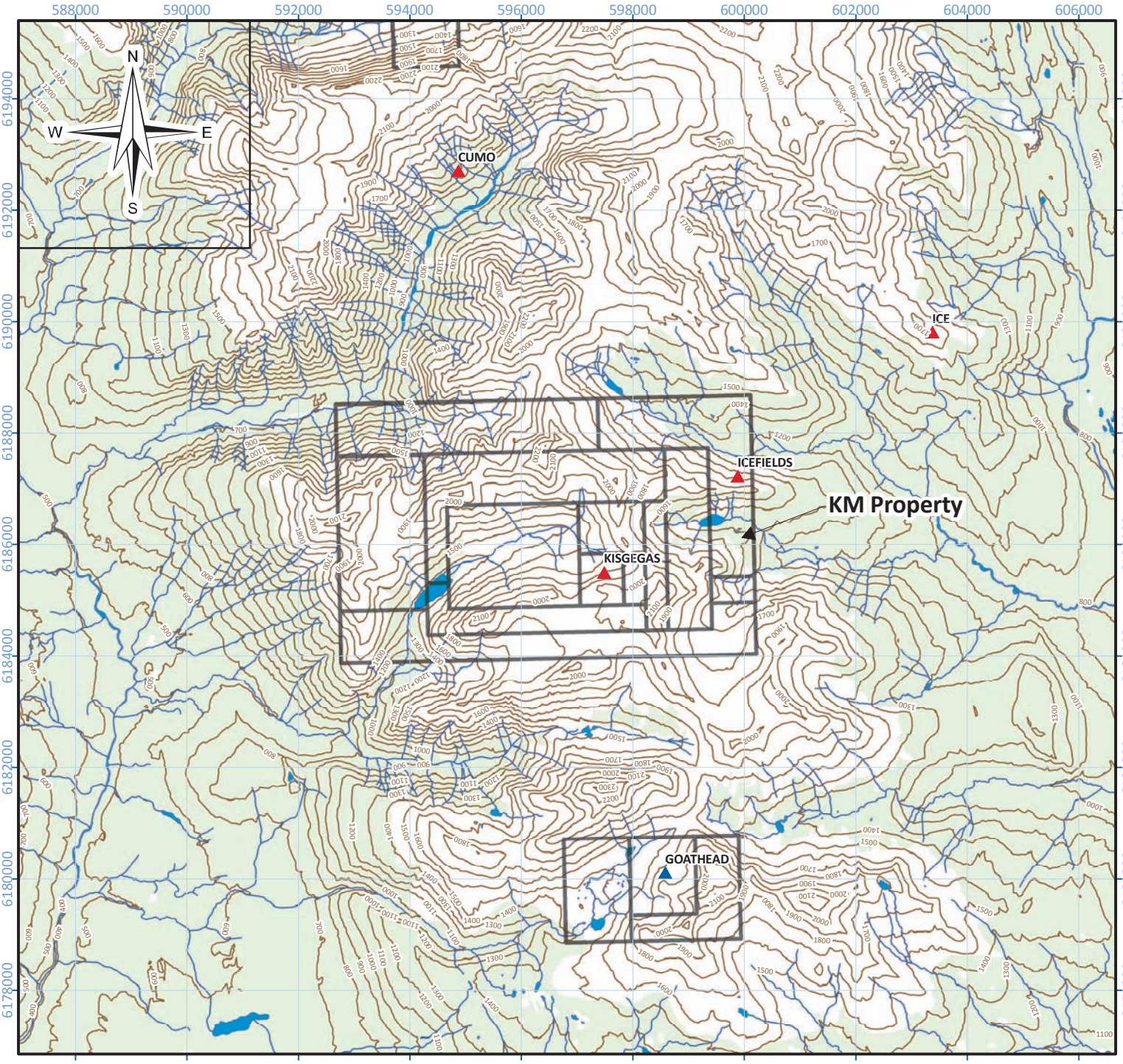


Figure 3
Kisgegas Property
Minfile Map

Cavan Ventures Limited

KM Property, British Columbia

Scale:	1:100,000
Datum:	UTM NAD83 Zone 9
Map sheet(s):	NTS 93M11, 93M12, 93M13, 93M14
Prepared by:	K. Cupit, Rio Minerals Limited
Date:	October 2009

Regional Location Map

Legend

- Claim boundary
- Road (primary)
- Road (secondary)
- Lake
- Drainage
- Contour (100m interval)
- Vegetation

1 centimeter = 1,000 meters

Meters

0 1,000 2,000 4,000

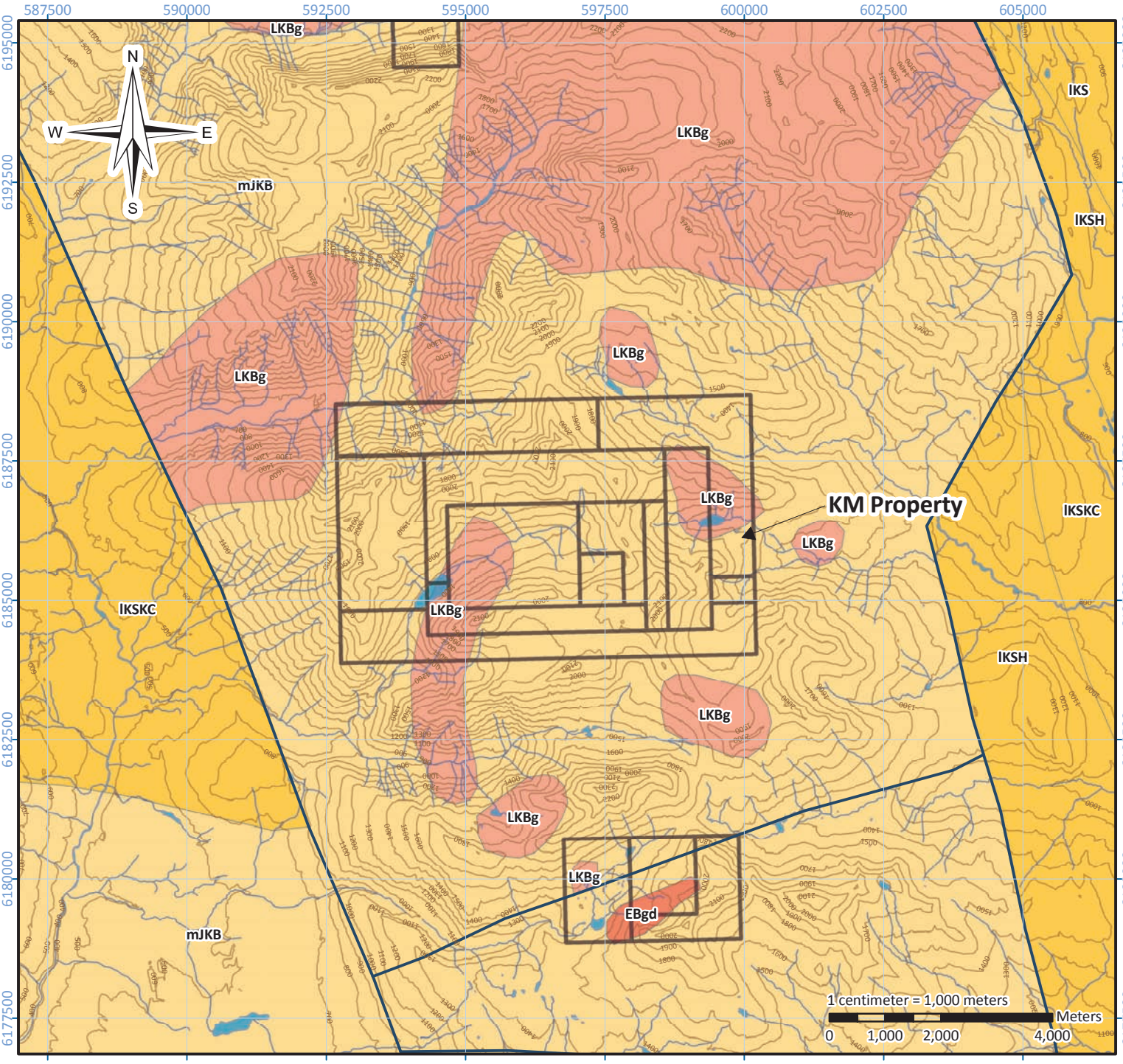


Figure 4
Kisgegas Property
Regional Geology Map

Cavan Ventures Limited

KM Property, British Columbia

Scale:	1:100,000
Datum:	UTM NAD83 Zone 9
Map sheet(s):	NTS 93M11, 93M12, 93M13, 93M14
Prepared by:	K. Cupit, Rio Minerals Limited
Date:	October 2009

Regional Location Map

Legend

- Claim boundary
- Road (primary)
- Road (secondary)
- Lake
- Drainage
- Contour (100m interval)

Lithology Legend

Eocene

Babine Plutonic Suite

EBgd granodioritic intrusive rocks

Late Cretaceous

Bulkley Plutonic Suite

LKBg intrusive rocks, undivided

Lower Cretaceous

Skeena Group

IKSKC **Kitsuns Creek Formation:** coarse clastic sedimentary rocks

IKSH **Hanawald Conglomerate:** conglomerate, coarse clastic sedimentary rocks

IKS undivided sedimentary rocks

Middle Jurassic to Late Cretaceous

mJKB undivided sedimentary rocks

7.0 DEPOSIT TYPES

The main type of mineralization found on the Kisgegas 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. Some veins contain more chalcopyrite and gold at depth, and gold grades are normally low for the amount of sulphide minerals present**.**

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 calcalkaline 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 subvolcanic necks and dikes 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 pollymetallic 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 Pb and Zn 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. Metasedimentary rocks that host polymetallic veins typically display sericitization, silicification, and/or pyritization.

Examples of polymetallic vein deposits 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 Ag, 0.5 to 20% Pb and 0.5 to 8% Zn. Copper and gold are reported in some of the occurrences with average grades of 0.09% Cu and 4 g/t Au.

Polymetallic Ag-Pb-Zn 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 metasedimentary or volcanic rocks.

8.0 MINERALIZATION

On the KM property, pyrite +/- pyrrhotite in shales can reach to 20% of hand specimens. The sulphides contained within the sediments can occur as fine-grained stringers parallel to bedding, fracture infills at angles to bedding, very fine-grained disseminations in shales, or podiform lenses which trace metamorphic planes. Iron-sulphides in sediments are common throughout the property and are considered formational and are without associated sulphides.

The microgranodiorite sill-like intrusives are host to quartz +/- ankerite veining approaching 5% of the total volume of the host. Veins typically range from 3 to 30 centimetres in thickness and have limited extent, rarely traceable over a few metres. The veins are typically composed of milky quartz +/- coarse-grained ankerite (to 30%) and have to 30% combined blebby, coarse-grained sulphides. In decreasing order of abundance, veins typically contain blebby galena and pyrite, and lesser chalcopyrite and sphalerite. Molybdenite is reported to exist in veins but has not been identified in the field. A mineralized quartz vein from a sill-like granodiorite in the north cirque area assayed 0.85 g/t Au and 139 g/t Ag (441076) while a quartz vein paralleling the upper contact of a sill on the north slope assayed 2.85 g/t Au and 55.9 g/t Ag (441091).

Generally, the veins may extend into host rock but were not seen to penetrate to more than 1 metre. In one instance, a 4 centimetre vein continuous over 5 metres occurs parallel to a phyllically-altered microgranodiorite sill, and was observed to extend entirely within the sedimentary host rock. This mass of parallel quartz veinlets hosts galena and sphalerite in equal proportions to 30% and chalcopyrite to 5%. Sample #441064 taken at this location assayed 0.23% Cu, >1% Pb, and >1% Zn.

Quartz veins 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 +/- 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 617ppm 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 viens 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 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 2009 EXPLORATION PROGRAMME

Between August 3-29, 2009, Rio Minerals Limited, on behalf of Cavan Ventures Limited, enacted a field programme consisting of silt, soil, rock sampling, prospecting and geological mapping. A temporary fly-camp was installed and acted as a base of operations for the duration of the programme. Fieldwork consisted of the collection of 14 stream sediment, 4 soil, and 33 rock samples as well as prospecting and mapping of new areas, including the previously unexplored north side of the main valley and eastern cirques.

The field crew for the 2009 programme was supplied by Rio Minerals Limited of Vancouver, BC and Halle Geological Services Limited of Whitehorse, YT and consisted of the following personnel: Jesse Halle, Kerry Cupit, Jared Earl, Andrew Molnar, Robert Paeseler, and Lyle Gregory. Gregory Thomson, P. Geo. of Thomson Geological Consulting Ltd. performed a one-day assessment of the property on August 22, 2009.

Jesse R. Halle of Halle Geological Services, Whitehorse, YT, conducted geological fieldwork with the assistance of Kerry Cupit of Rio Minerals Ltd., Vancouver, BC. Goals for the field season were to verify and to compile previous geological work, add new data after new geological investigation, validate previous reported and new geochemical anomalies in the field, interpret new geochemical and geological information, and identify new targets based on all new data and observations. Geological work consisted of reconnaissance-style mapping of geology and structure, sampling locations to verify historical assays, chip sampling across unsampled vein widths, and examination of anomalous results from geochemical sampling from the present season. Figure 5 displays the results of mapping during the 2009 field season.

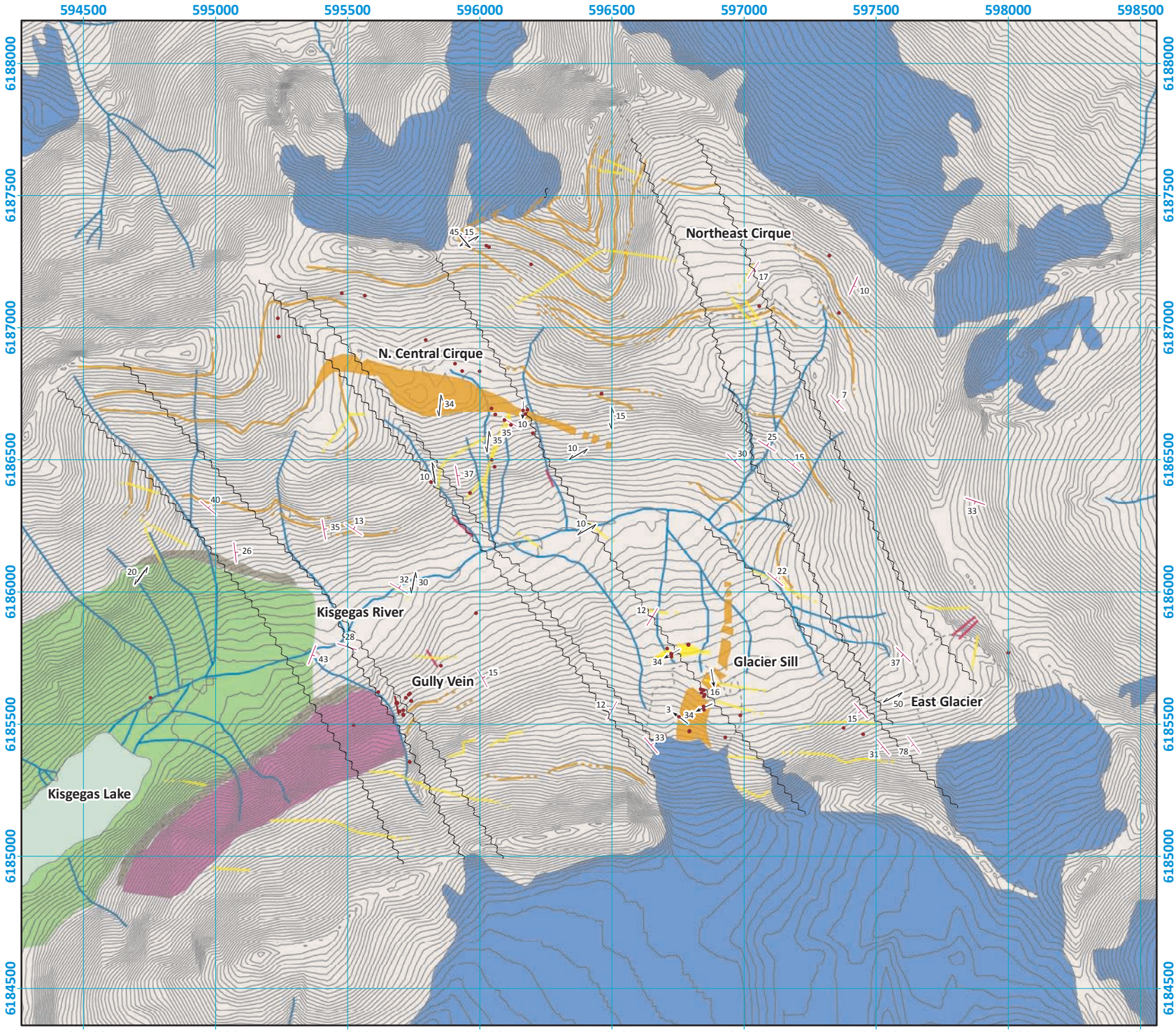


Figure 5: Property Geology Map KM Property, BC

Cavan Ventures Limited

Scale:	1:20,000
Date:	October 2009
Map sheet:	NTS 093M15, BCGS 93M073/83
Datum:	UTM NAD83 Zone 9
Prepared by:	K. Cupit, J. Halle, Rio Minerals Limited

Rock Legend

Volcano-sedimentary suite

- Unsubdivided volcanics (Takla Group)
- Siltstone +/- sandstone (Bowser Lake Group)

Intrusive suite

- Bulkley dikes
- Diorite dikes
- Granodiorite
- Diorite

Symbol Legend

- Quartz veining
- Foliation
- Slickenside
- Fault
- Bedding
- Contour line (10m interval)
- Drainage
- Glacier extent (2009)
- Lake
- Glacier extent (1980)
- Hornfelsed

N
W E
S

1 centimeter = 200 meters

0 50100 200 300 400 Meters

9.1 GEOLOGICAL MAPPING

Detailed geological investigations were conducted over the KM Property during the month of August, 2009. The investigations focused on structure and mapping of bedrock outcroppings. 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 meter composed of like material have been mapped as "subcrop" which, for the purposes of this report, is defined as outcrop detached and having not moved significantly from source.

Lithologic Observations

Detailed geological mapping during the 2009 field season identified a thick sequence of well-bedded, moderately east-dipping sedimentary rock comprised of dominantly shale with minor interbedded siltstones. Higher up in the stratigraphy, well-sorted sandstones, fossiliferous sandstones, carbonaceous shales, and conglomerates exist. The package measures over 500 metres in true thickness and is upright, though tight folds in the uppermost strata exist to overturn bedding.

The thick sequence of sediments known as the Lower Bowser Lake Group lie unconformably above a >200 metre thick sequence of vesicular, feldspar and pyroxene-porphyritic volcanic rocks noted in the west portion of the property below 1500 meters. The volcanic rocks are dull purple to red owing to pervasive hematite content and contain to 1-centimeter calcite amygdules. These rocks may be part of the Topley Lake Sequence.

Intruding the sedimentary package are feldspar +/- quartz porphyritic rocks, which contain the majority of recognized mineralized occurrences. 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 to 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 'microgranodiorites' by Hooper (BCAR 17542-1987) to encompass a range of massive to porphyritic to aphanitic textures exhibiteds. 'Granodiorite' was retained for use in the field but 'quartz-feldspar porphyry' is a more accurate description.

Current mapping classified the porphyritic intrusives into sill-like bodies to 10 meters thick and crosscutting dike swarms trending ESE to 3 meters thick. The rocks are widely-spaced throughout the property comprising to 10% of exposures, the best exposed being the 'glacier sill', which contains to 5% mineralized quartz veins that have yeilded assays of 1.54 g/t Au with 670 g/t Ag (51503) from subcrop, and 0.12 g/t Au with 380 g/t Ag (51509) from outcrop.

The dike-like series of rocks was noted to cross-cut the granodioritic sills. These rocks are light grey and plagioclase feldspar porphyritic. They are diffcult to distinguish from the porphyritic sills, but tend to have more dike-like structure, are usually narrower. from 1 to 2.5 metres in width, have a lower abundance of quartz veining (to 5%), comparably lower alteration, and have more quartz content. Hooper (1987) describes this lithology as "Bulkley Dikes".

A dioritic stock, elongated east-west, outcrops on the southwest side of the property between 1400 and 1600 meters elevation. The stock contains euhedral hornblende to 30%, interstitial plagioclase feldspar, rare quartz, and accessory pyrite. The textures are equigranular, coarse-grained, and massive at its core to foliated and fine-grained near its margins. Numerous parallel quartz veins generally to 50 centimeters wide cut the diorite at its eastern end. These veins are late, planar, and can be traced for well over 100 metres each. A 1.2-meter thick milky quartz vein at the eastern edge of this stock, known as the 'Gully Vein', returned assays of 0.6 g/t Au with 112 g/t Ag (51522).

A late, north-northwest trending series of sub-vertical dikes has been identified. Parallelism of these dikes with observed late fault structures that offset the earliest sills place these dikes as occurring late in the sequence. They are similar in appearance and composition to the Bulkley Dikes, and attain a maximum 2.2 meter thickness. However, in two locations these dykes are fine-grained, blue-grey, felsites that contain very fine grained pyrite to 10% and pyrrhotite to 5%. Very fine, silvery, elongate prisms have been identified as arsenopyrite, attaining abundances to 5% (441056).

An unusual lithology found on the property is thought to be related to the series of north-trending dikes described above. An outcropping of three felsite dikes, each measuring to 30 centimetres across, exists on the eastern side of the property. They are coloured greenish-grey and consist of 70%, concentrically-zoned feldspar phenocrysts in a fine-grained chloritic groundmass. The unusual spheroidal texture may have resulted from calcite and chlorite alteration of a porphyritic intrusive. 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.

Alteration Observations

Lithification and 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. Irregularly-shaped, discontinuous quartz veins occur locally and are parallel to bedding planes within shales and are considered to be metamorphic in origin.

The microgranodiorite sills appear as pink to grey, massive, weakly iron-stained and sericitized, homogenous 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 microgranodiorites, pyrite attains to 15% of the rock, feldspars are completely-altered to sericite, and quartz veins attain to 10% of the host. Intense alteration can exist as a pervasive 'bleaching' of the entire rock or can exist as envelopes adjacent 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.

The Bulkley dikes have been phyllically-altered. However, sausuritization is weak overall and only a weak green hue and zonation of the feldspars alludes to alteration. Mafic and opaque minerals are estimated in these rocks at 10% by volume.

Hornfelsing of the volcano-sedimentary rocks below the dioritic stock is common. A glassy, chloritic appearance to the sedimentary rocks was noted in an aureole extending to 50 metres away. Hornfels above or adjacent the stock was not recognized.

Unique north-trending sub-vertical dikes were found at three locations on the property. These dikes attain to 2.2 meters and are fine-grained, blue-grey felsites that contain very fine grained pyrite to 10% and pyrrhotite to 5%. In one of the locations, very fine, silvery, elongate prisms are arsenopyrite, attaining abundances to 5% (441056). Their north-south orientation is parallel with observed late fault structures that offset the granodioritic sills and may be a swarm originating from the dioritic stock

Structural Observations

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 attaining sub-horizontality on the far eastern side of the property. Widely-spaced east-dipping reverse faults are evidenced in the strata on the north side of the property, but with dip slips of less than 5 metres. A similar reverse movement offsets the microgranodiorite glacier sill by less than 5 metres.

The glacier sill and the 'north-central cirque sill' which represent the two best exposures of microgranodiorite sills are uniform along their exposed lengths and exhibit true thicknesses of 4 to 10 metres. The Glacier sill area is composed of two known sills: a 4 metre sill set stratigraphically roughly 60 metres above the other, thicker sill. The thickest sill appears temporarily dike-like in character at its northernmost outcropping attaining a stratigraphic position some 30 metres upwards in the succession. In the same area, a discrete SE-trending shallow reverse fault offsets the sill by an apparent 5 metres. Slickensides noted within and at the sill contact indicate movement in both dip- and strike-slip directions.

When not massive, the microgranodiorite sill may show a gash-fracturing and *en echelon* quartz veining. When intensely-developed, the veins are tightly-folded into 'S' shapes. 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.

As the laccolith has exploited the unconformity formed between underlying Topley volcanics and overlying Bowser Lake sediments, the dioritic stock on the west end of the property is seen to truncate Bulkley dikes and is the youngest rock type identified.

North-trending faults are the latest structure noted on the Kisgegas property. These faults are seen to offset microgranodiorite sills and Bulkley dikes, and are sub-parallel and conincidental with the latest set of dikes.

2009 Rock Sample Results					
SampleID	Au (ppb)	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
184226	55.8	74.6	41.4	>10000	>10000
184227	<0.5	0.6	13.7	58	85
184228	1.6	7.8	38.2	1210.8	3601
184229	<0.5	0.5	13.4	61.5	74
184230	42.8	0.6	4.1	23.9	74
184231	2.9	0.9	15.1	57.3	59
184232	2	0.7	2.3	1123.2	14
184238	<0.5	0.2	41.8	17.1	188
184239	0.5	0.6	15.7	348.3	114
441024	54	14.5	26.6	3060.4	1043
441025	4.9	3.3	392.2	122.5	840
441026	0.7	1.3	13.4	517.8	49
441027	2.2	1.9	56.5	191.8	927
441028	<0.5	2.3	63.9	58.3	169
441029	<0.5	0.9	3.9	423.1	78
441030	7.9	16.7	218.6	171	2181
441031	19.7	88.1	47.5	1.51%	1.9%
441032	24	62.9	344.4	1.57%	2288
441033	<0.5	0.4	19.1	86.6	81
441034	7.2	10.3	97.3	2298.6	5875
441035	8.5	51.5	540	8561.7	0.2%
441036	798.9	100	1.281%	1.77%	3.51%
441037	1529.6	66.5	2773.4	1.56%	3647
441038	96.6	3.1	488.2	178.2	1420
441039	39.9	100	5296.9	6646.4	6680
441040	1.5	3.2	14	23.9	60
441041	1.4	7.1	23.7	65.7	43
441051	282.7	100	398.2	>10.00%	4662
441052	1763.8	100	513.1	1.99%	1.38%
441053	8.5	1.3	26.8	471	178
441054	1256.9	17.5	121.7	64.9	49
441055	217.8	100	4029	>10.00%	4.29%
441056	750.8	3.3	9.6	586.7	181
441057	9.6	10	21.8	2757.1	443
441058	681.7	100	1.206%	1.18%	6.68%
441059	46.7	72.3	364.2	1660.4	2913
441060	<0.5	100	620.1	1624.4	661
441061	3.1	2.9	9.7	690.9	120
441062	49.9	28.4	458.6	1254.9	2917
441063	57.2	30.5	356.1	4527.6	9078
441064	30.7	82.7	2344.4	1.47%	4.11%
441065	15.9	11.3	40	6390.3	5261
441066	<0.5	0.5	5.7	9.4	32
441067	30	17	13.1	6803	2526
441068	2.4	14.5	3148	30.8	89
441069	163.5	59.4	3871	6866.7	40
441070	74.5	41.7	565.4	>10000.0	159
441071	13.4	6.3	124	1559	2616
441072	42.7	3.9	5.3	63.5	23
441073	29.1	14.9	4.5	984	59
441074	0.8	0.2	11.7	17.4	52
441075	30.1	1.1	7	75.2	278
441076	848.8	139 gm/t	335.1	5.55%	7824
441077	31	44.4	92.7	>10000.0	415
441078	56	18.6	12.4	>10000.0	30
441079	12.5	0.9	126.2	175.1	466
441080	5.3	0.2	21.9	78	99
441081	1557.5	56.2	5740.6	60.4	14
441082	<0.5	<0.1	4.2	18.4	17
441083	59.7	0.5	2.3	129.2	29
441084	<0.5	0.3	3.1	96.1	84
441085	10284.4	>300 gm/t	2.638%	1061.6	1540
441086	129.6	38.5	115.2	9232.8	108
441087	17.9	8.7	91.1	1334.5	923
441088	<0.5	0.6	21.9	45.1	129
441089	6.5	1.2	22.2	105.1	71
441090	2845.5	55.9	352.6	1.16%	1527
441091	8.8	104 gm/t	550	3.44%	524
441092	190.1	6.5	99.5	206.5	23
441093	75.8	3.4	69.4	107.8	51
441094	105	1.1	6.6	17.9	21
441095	19	0.5	38.7	20.7	25

2009 Soil Sample Results					
SampleID	Au (ppb)	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
KS01	1	0.5	94.8	30.4	285
KS02	2.3	0.5	137.8	35.9	221
KS03	2.3	0.7	150.6	70.6	292
KS04	5.1	0.4	56.7	110.7	301

1987 Rock Sample Results					
SampleID	Au (ppb)	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
51501	400	27.8	510	3800	9000
51502	380	38	510	6350	13500
51503	1540	670	1190	62000	18000
51504	40	8.3	26	660	305
51505	20	23.9	380	10000	7000
51506	10	0.2	35	97	138
51507	10	40.4	490	5350	11400
51508	10	6.3	105	1950	3100
51509	120	380	340	45000	44000
51510	50	2.2	24	275	290
51511	210	0.3	10	138	215
51512	10	9.7	38	143	240
51513	260	69	119	13000	1900
51514	10	0.4	12	42	96
51515	370	325	2300	40000	57000
51516	80	8.2	490	118	180
51517	400	1840	3400	19000	680
51518	10	5.6	20	62	98
51519	10	5.9	19	69	54
51520	20	4.7	120	1230	3100
51521	10	26.4	1620	9000	21500
51522	600	112	7000	34000	26000
51523	140	11.3	2600	2300	8800
51524	30	6.1	2100	380	5000
51525	10	0.2	24	32	135
51526	70	0.2	21	39	122
51527	40	0.1	8	16	43
51528	10	0.3	9	21	36
51529	10	2.1	6	8	28

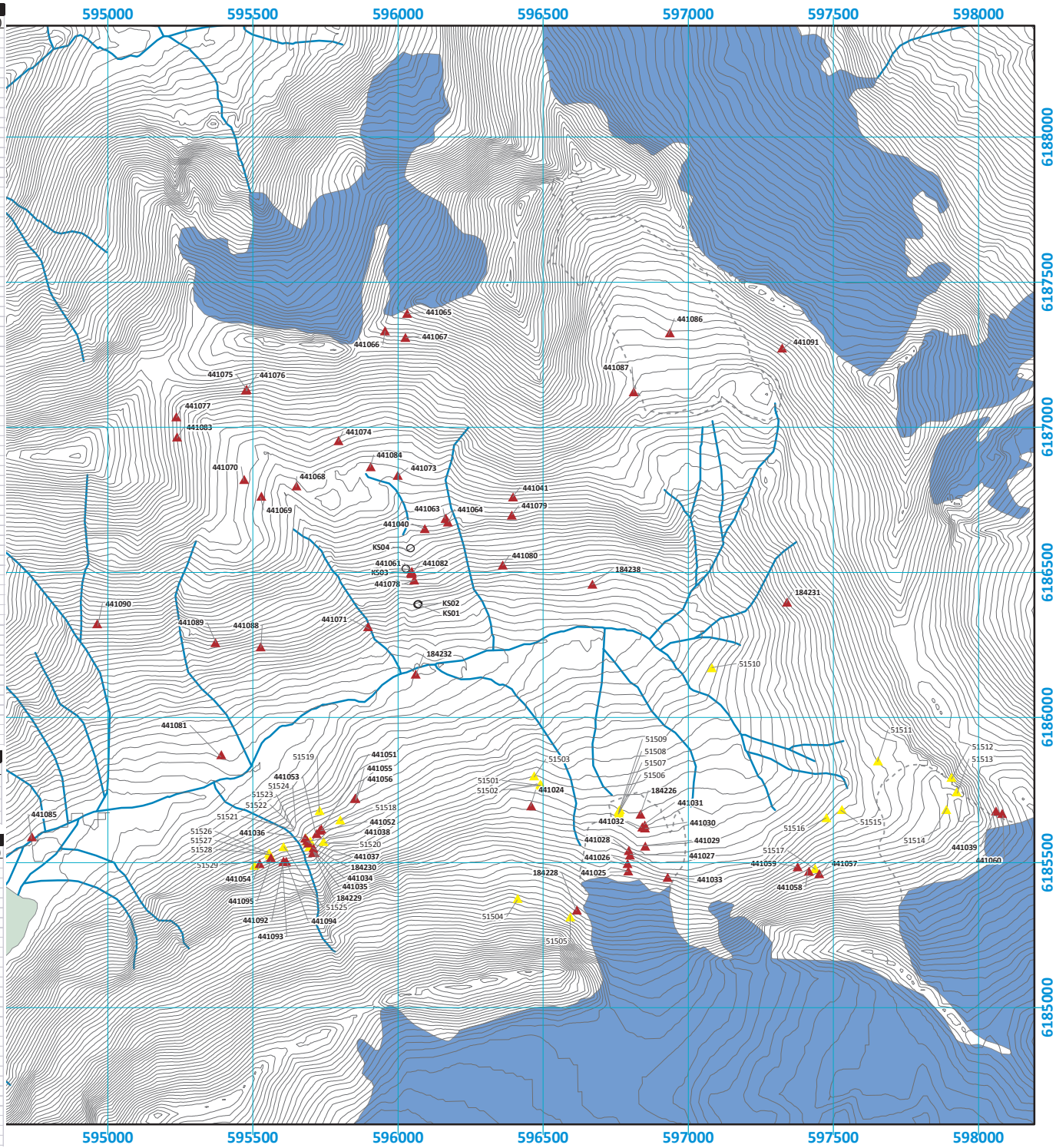


Figure 6: Rock Sample Locations
KM Property, BC

Cavan Ventures Limited

Scale:	1:20,000
Date:	October 2009
Map sheet:	093M15
Datum:	UTM NAD83 Zone 9
Prepared by:	K. Cupit, Rio Minerals Limited

Symbol Legend

- Sample location (2009)
- Sample location, soil (2009)
- Sample location (1987)
- Contour line (10m interval)
- Lake
- Drainage
- Glacier extent (2009)
- Glacier extent (1980)

N
W E
S

1 centimeter = 200 meters

0 50100 200 300 400 Meters

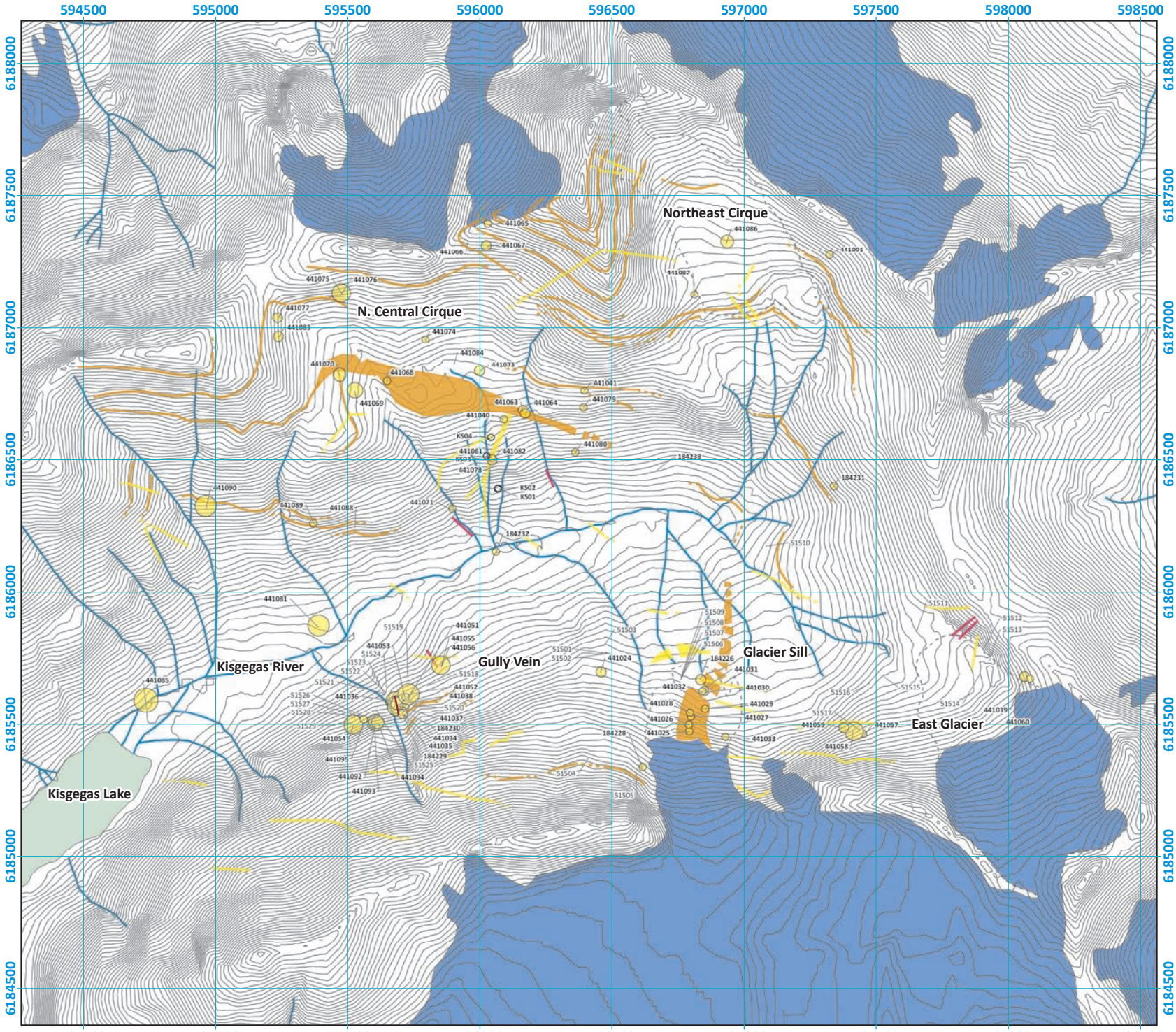


Figure 7A: Sample results (Au)
KM Property, BC

Cavan Ventures Limited

Scale:	1:20,000
Date:	October 2009
Map sheet:	NTS 093M15, BCGS 93M073/83
Datum:	UTM NAD83 Zone 9
Prepared by:	K. Cupit, Rio Minerals Limited

Symbol Legend

Sample location (Au ppb):

- 2845.6 - 10284.4
- 1257.0 - 2845.5
- 282.8 - 1256.9
- 129.7 - 282.7
- 59.8 - 129.6
- 24.1 - 59.7
- 0.3 - 24.0

- Bulkley dikes
- Diorite dikes
- Granodiorite
- Contour line (10m interval)
- Drainage
- Glacier extent (2009)
- Lake
- Glacier extent (1980)

N
W
E
S

1 centimeter = 200 meters

Meters
0 50100 200 300 400

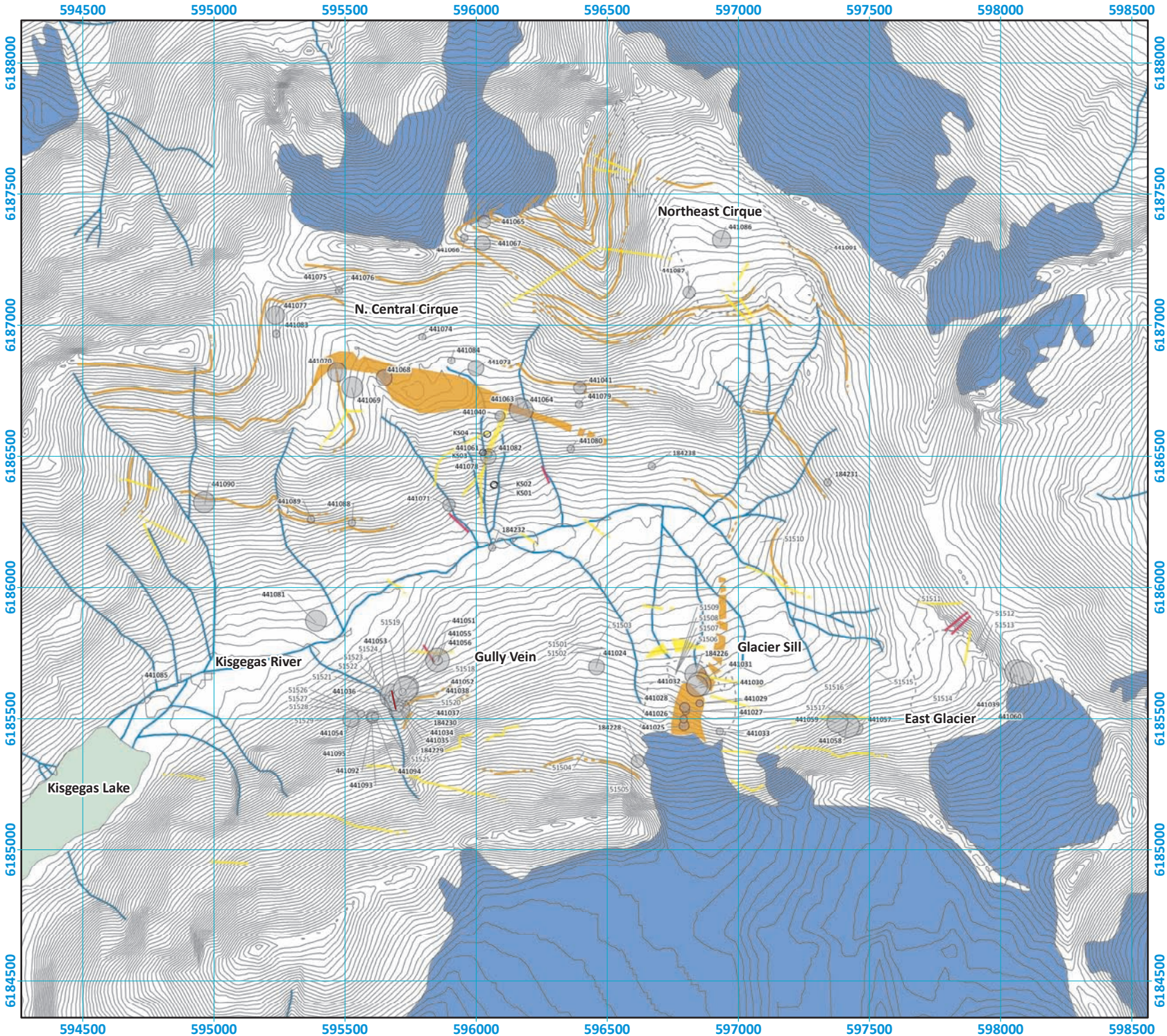


Figure 7B: Sample results (Ag)
KM Property, BC

Cavan Ventures Limited

Scale:	1:20,000
Date:	October 2009
Map sheet:	NTS 093M15, BCGS 93M073/83
Datum:	UTM NAD83 Zone 9
Prepared by:	K. Cupit, Rio Minerals Limited

Symbol Legend

Sample location (Ag ppm):

- 74.7 - 100.0
- 44.5 - 74.6
- 18.7 - 44.4
- 11.4 - 18.6
- 4.0 - 11.3
- 2.0 - 3.9
- 0.2 - 1.9
- Bulkley dikes
- Diorite dikes
- Granodiorite
- Contour line (10m interval)
- Drainage
- Glacier extent (2009)
- Lake
- Glacier extent (1980)

N
W
E
S

1 centimeter = 200 meters

0 50100 200 300 400 Meters

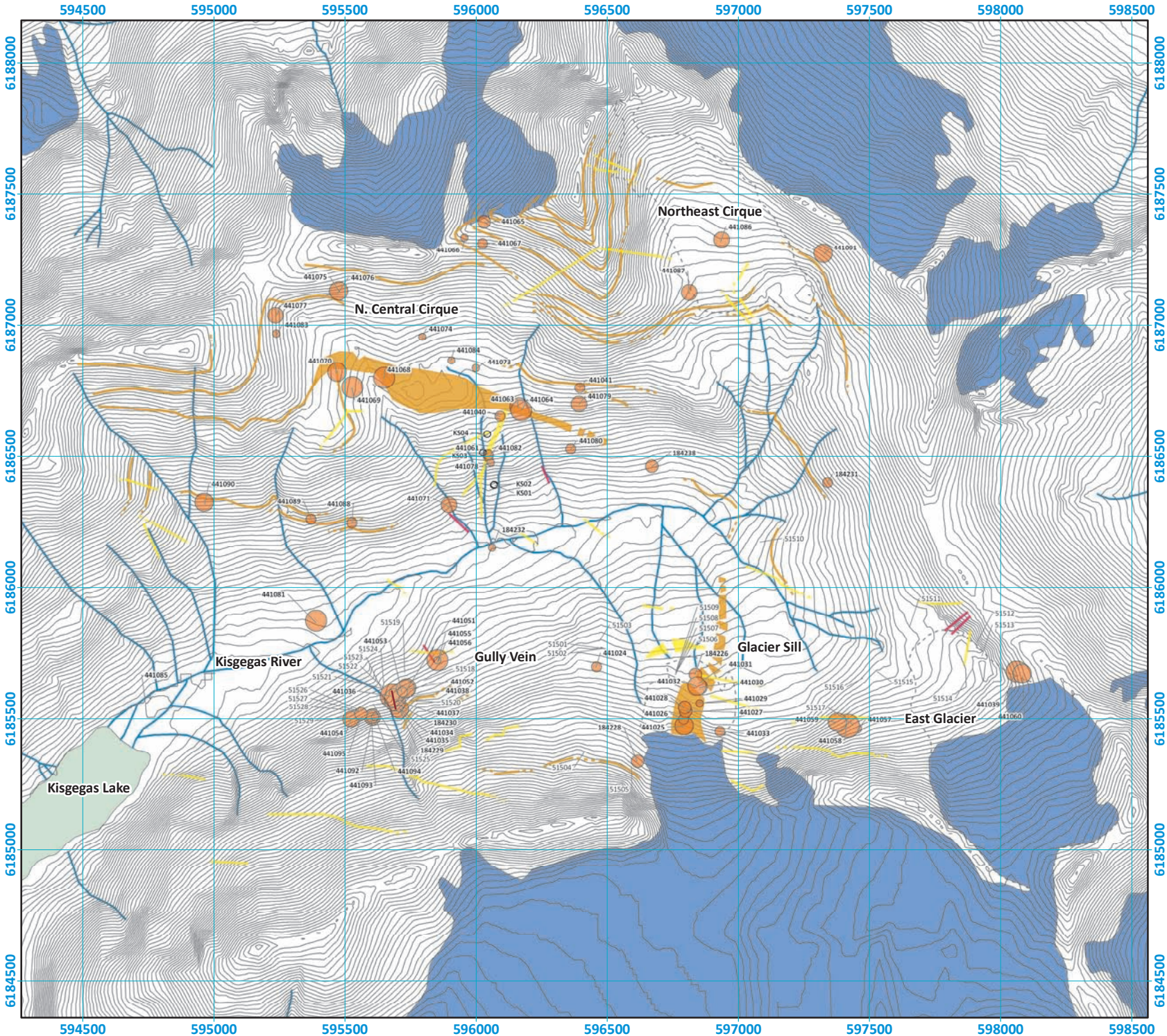


Figure 7C: Sample results (Cu)
KM Property, BC

Cavan Ventures Limited

Scale:	1:20,000
Date:	October 2009
Map sheet:	NTS 093M15, BCGS 93M073/83
Datum:	UTM NAD83 Zone 9
Prepared by:	K. Cupit, Rio Minerals Limited

Symbol Legend

Sample location (Cu ppm):

- 5740.7 - 10000.0
- 620.2 - 5740.6
- 218.7 - 620.1
- 69.5 - 218.6
- 26.9 - 69.4
- 11.8 - 26.8
- 2.3 - 11.7
- Bulkley dikes
- Diorite dikes
- Granodiorite
- Contour line (10m interval)
- Drainage
- Glacier extent (2009)
- Lake
- Glacier extent (1980)

N
W
E
S

1 centimeter = 200 meters

0 50100 200 300 400 Meters

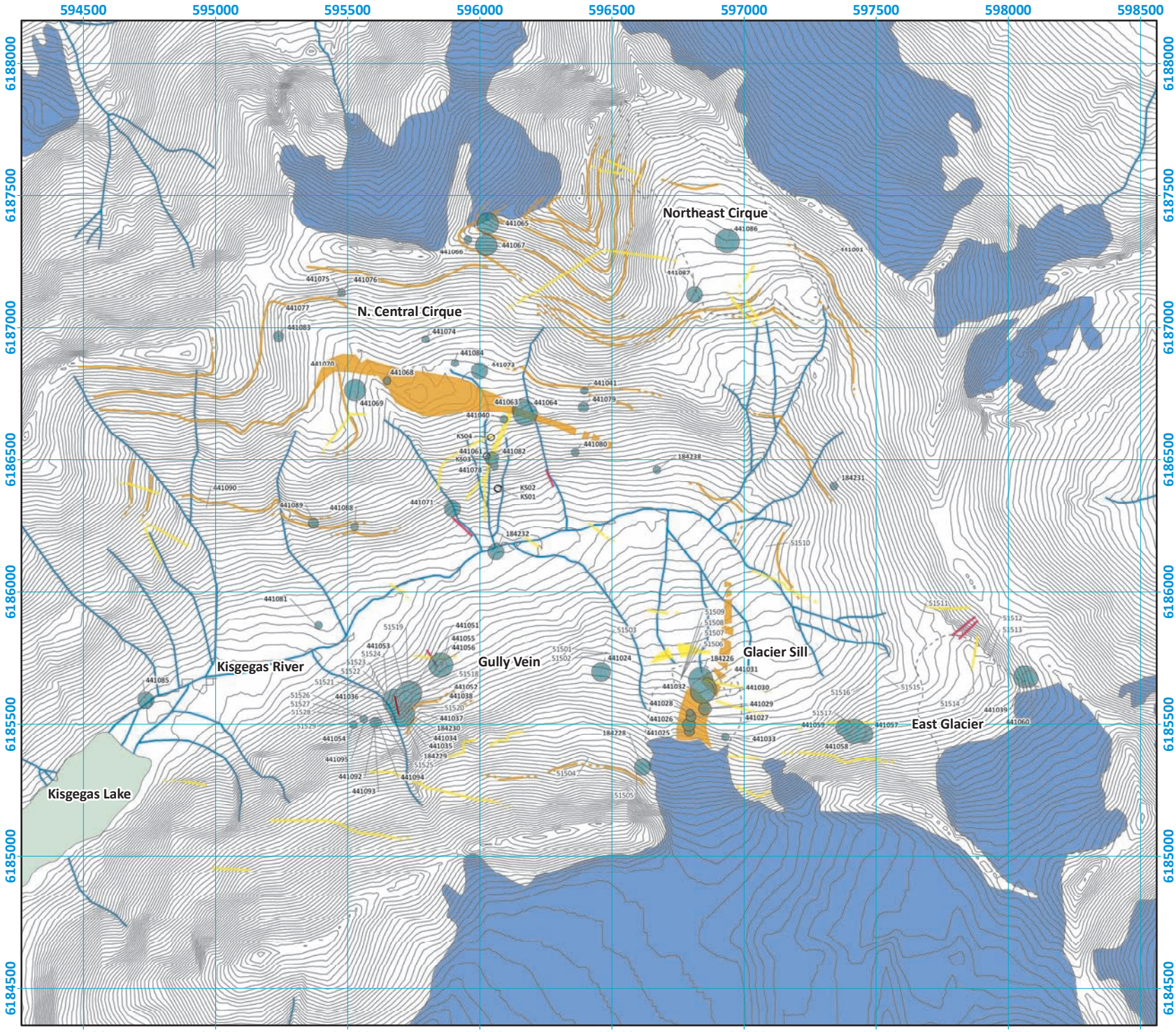


Figure 7D: Sample results (Pb)
KM Property, BC

Cavan Ventures Limited

Scale:	1:20,000
Date:	October 2009
Map sheet:	NTS 093M15, BCGS 93M073/83
Datum:	UTM NAD83 Zone 9
Prepared by:	K. Cupit, Rio Minerals Limited

Symbol Legend

Sample location (Pb ppm):

- 6866.8 - 10000.0
- 3060.5 - 6866.7
- 1660.5 - 3060.4
- 691.0 - 1660.4
- 206.6 - 690.9
- 96.2 - 206.5
- 9.4 - 96.1

- Bulkley dikes
- Diorite dikes
- Granodiorite
- Contour line (10m interval)
- Drainage
- Glacier extent (2009)
- Lake
- Glacier extent (1980)

N
W
E
S

1 centimeter = 200 meters

0 50100 200 300 400 Meters

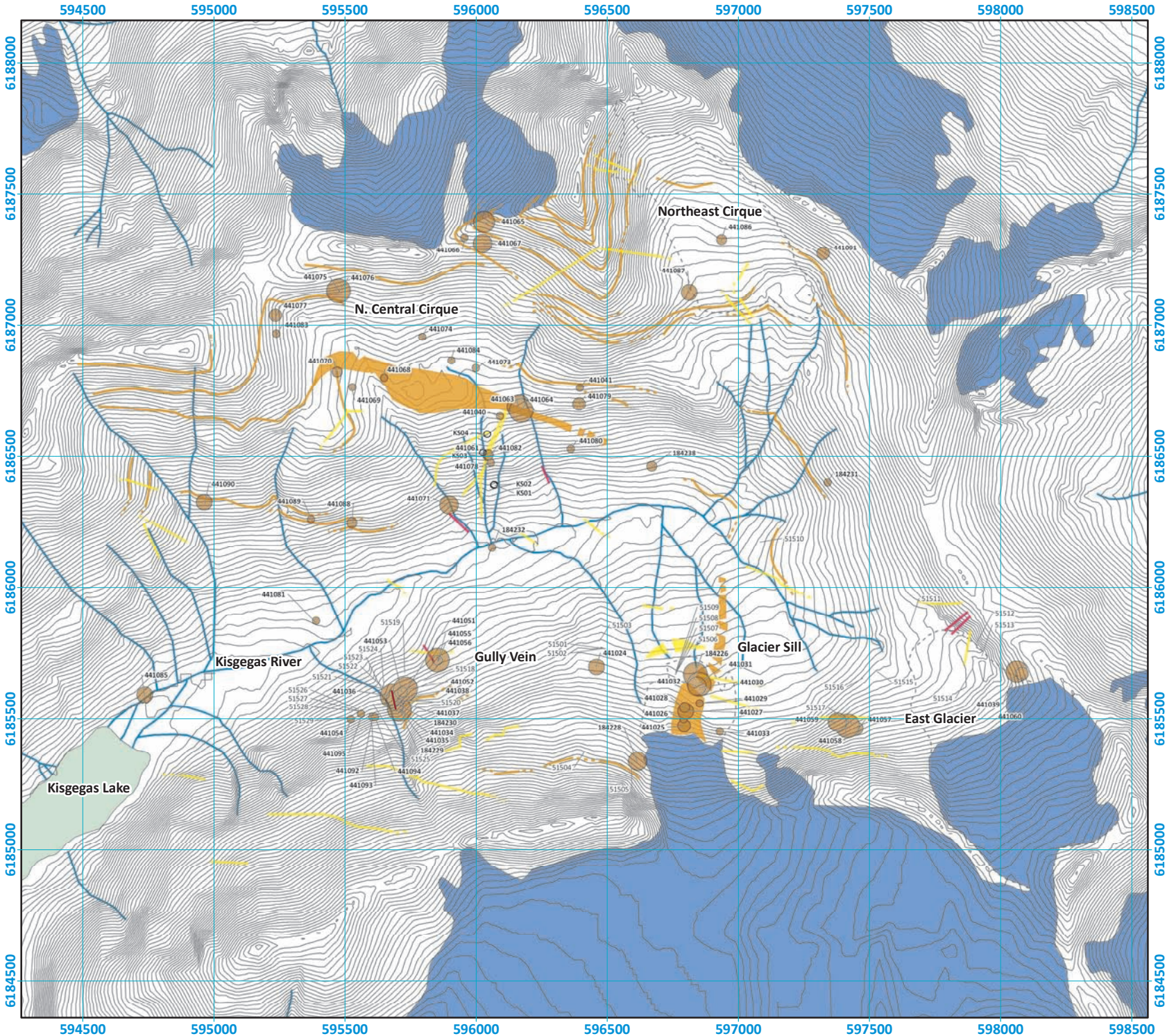


Figure 7E: Sample results (Zn)
KM Property, BC

Cavan Ventures Limited

Scale:	1:20,000
Date:	October 2009
Map sheet:	NTS 093M15, BCGS 93M073/83
Datum:	UTM NAD83 Zone 9
Prepared by:	K. Cupit, Rio Minerals Limited

Symbol Legend

Sample location (Zn ppm):

- 6680.1 - 10000.0
- 3647.1 - 6680.0
- 1540.1 - 3647.0
- 840.1 - 1540.0
- 278.1 - 840.0
- 99.1 - 278.0
- 14.0 - 99.0
- Bulkley dikes
- Diorite dikes
- Granodiorite
- Contour line (10m interval)
- Drainage
- Glacier extent (2009)
- Lake
- Glacier extent (1980)

N
W
E
S

1 centimeter = 200 meters

0 50100 200 300 400 Meters

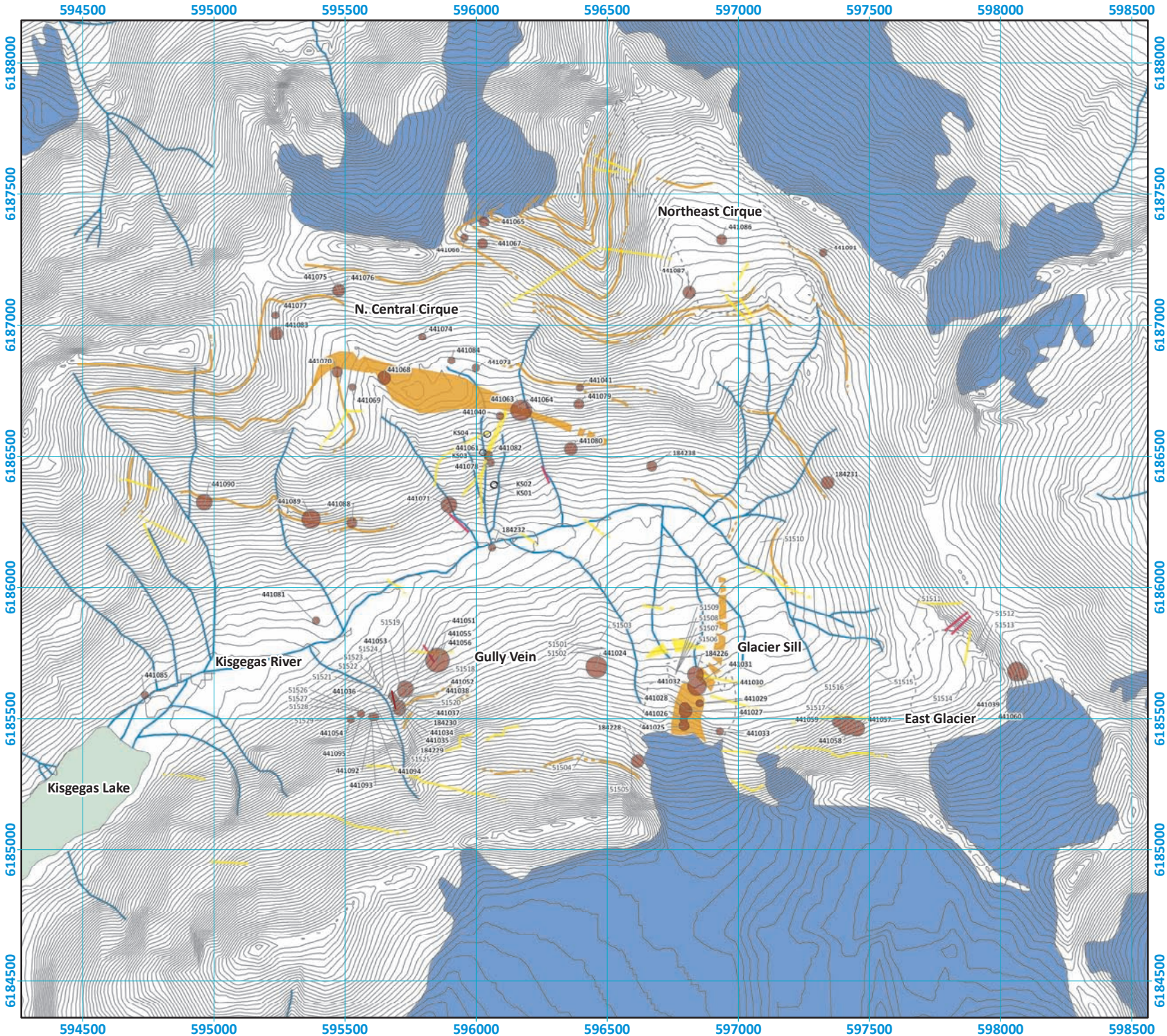


Figure 7F: Sample results (As)
KM Property, BC

Cavan Ventures Limited

Scale:	1:20,000
Date:	October 2009
Map sheet:	NTS 093M15, BCGS 93M073/83
Datum:	UTM NAD83 Zone 9
Prepared by:	K. Cupit, Rio Minerals Limited

Symbol Legend

Sample location (As ppm):

- 861.5 - 10000.0
- 347.2 - 861.4
- 200.1 - 347.1
- 94.8 - 200.0
- 48.3 - 94.7
- 15.2 - 48.2
- 0.3 - 15.1
- Bulkley dikes
- Diorite dikes
- Granodiorite
- Contour line (10m interval)
- Drainage
- Glacier extent (2009)
- Lake
- Glacier extent (1980)

N
W
E
S

1 centimeter = 200 meters

0 50100 200 300 400 Meters

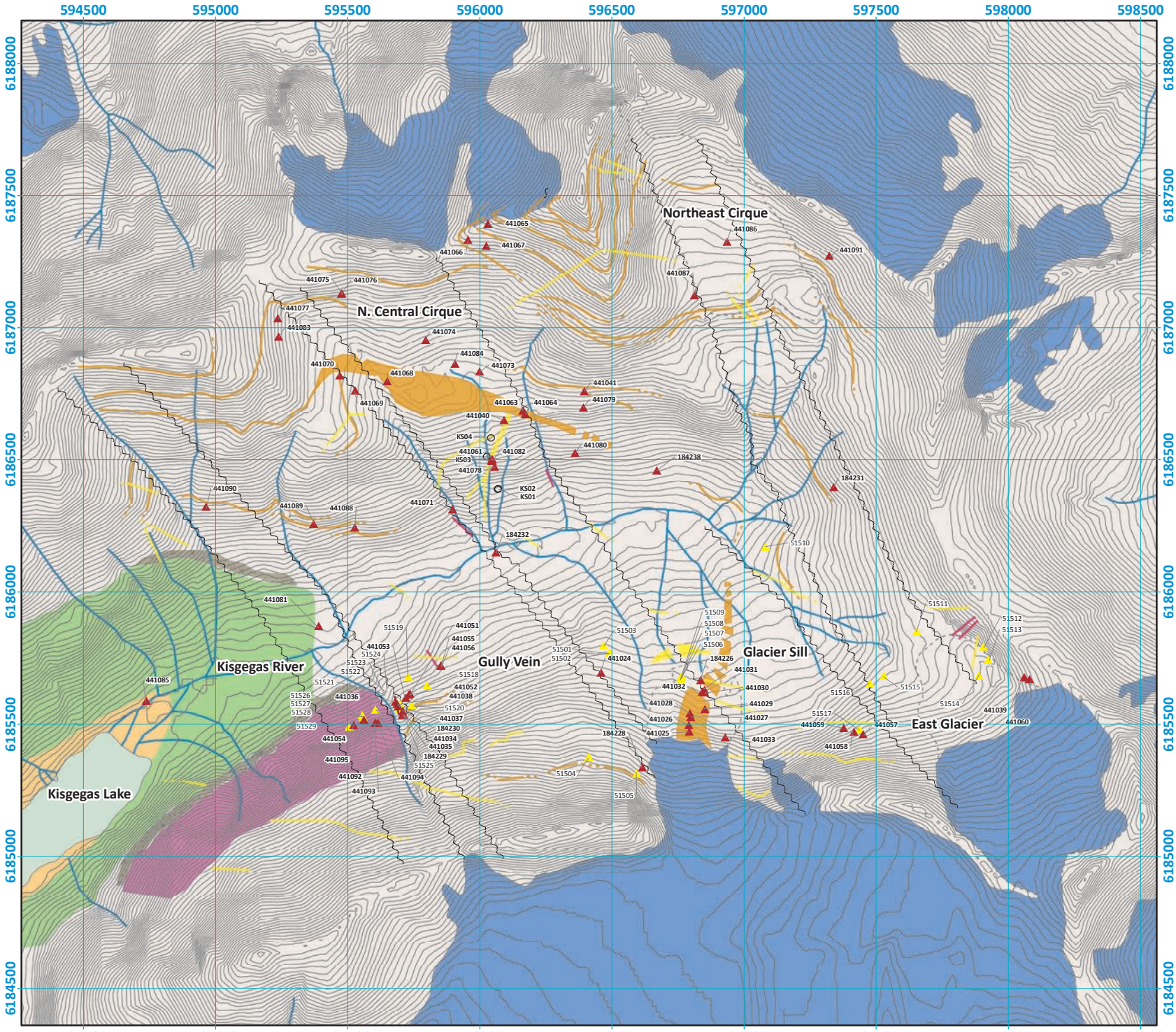


Figure 8: Geology w/ samples KM Property, BC

Cavan Ventures Limited

Scale:	1:20,000
Date:	October 2009
Map sheet:	NTS 093M15, BCGS 93M073/83
Datum:	UTM NAD83 Zone 9
Prepared by:	K. Cupit, J. Halle, Rio Minerals Limited

Rock Legend

Volcano-sedimentary suite

- Unsubdivided volcanics (Takla Group)
- Siltstone +/- sandstone (Bowser Lake Group)

Intrusive suite

- Bulkley dikes
- Diorite dikes
- Granodiorite
- Diorite

Symbol Legend

- Quartz veining
- Foliation
- Slickenside
- Fault
- Bedding
- Contour line (10m interval)
- Drainage
- Glacier extent (2009)
- Lake
- Glacier extent (1980)
- Hornfelsed

N
W
E
S

1 centimeter = 200 meters

0 50100 200 300 400 Meters

2009 Rock Sample Results					
SampleID	Au (ppb)	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
184229	<0.5	0.5	13.4	61.5	74
184230	42.8	0.6	4.1	23.9	74
441034	7.2	10.3	97.3	2298.6	5875
441035	8.5	51.5	540	8561.7	0.2%
441036	798.9	100	1.281%	1.77%	3.51%
441037	1529.6	66.5	2773.4	1.56%	3647
441038	96.6	3.1	488.2	178.2	1420
441051	282.7	100	398.2	>10.00%	4662
441052	1763.8	100	513.1	1.99%	1.38%
441053	8.5	1.3	26.8	471	178
441094	105	1.1	6.6	17.9	21

1987 Rock Sample Results					
SampleID	Au (ppb)	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
51519	10	5.9	19	69	54
51520	20	4.7	120	1230	3100
51521	10	26.4	1620	9000	21500
51522	600	112	7000	34000	26000
51523	140	11.3	2600	2300	8800
51524	30	6.1	2100	380	5000

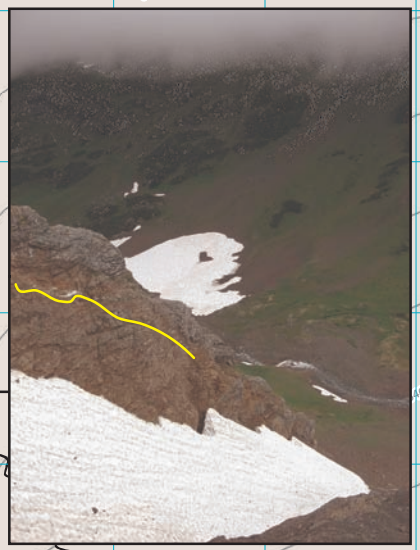
Malachite staining on Gully vein

Up to 30% 5-10cm wide quartz stringers in potassically altered host. Larger vein of numerous narrow veins in outcrop carrying galena up to 50%, with 5% chalcopyrite. Locally gossanous.

15cm wide quartz vein. Mixture of two lithologies with quartz veining oriented semi-randomly on small scale, and along 049/44 on a broader scale. Contains microveinlets of calcite and separately of quartz. Minor ankerite alteration present. Minor pyrite in submillimetre euhedral grains. Trace galena as fine dustings within centre of vein occuring with pyrite, possibly also occuring as 0.5mm subhedral grains.

40cm thick vein consisting primarily of quartz, with a 20-40cm zone of vein stockwork/ brecciated siltstone underneath. Heavily altered to limonite. Pyrite occurs as submillimetre subhedral crystals (3%) disseminated through vein stockwork/breccia.

View of west gully wall, showing a parallel 10-15cm wide quartz vein in rockface



Gully vein

441051 441052 441053 441036 441038 441037 441035 184229 441034 184230 441094

51519 51520 51521 51522 51523 51524

595620 595640 595660 595680 595700 595720 595740 595760 595780 595800 595820

6185500 6185520 6185540 6185560 6185580 6185600 6185620 6185640 6185660

1520 1530 1540 1550 1560 1580 1590 1600 1610

4 14 20 23 40

N E S W

Figure 9: Gully vein map
KM Property, BC

Cavan Ventures Limited

Scale:	1:1,000
Date:	October 2009
Map sheet:	NTS 093M15, BCGS 93M073/83
Datum:	UTM NAD83 Zone 9
Prepared by:	K. Cupit, J. Halle, Rio Minerals Limited

Rock Legend

Volcano-sedimentary suite
Siltstone +/- sandstone (Bowser Lake Group)

Intrusive suite
Granodiorite
Diorite

Symbol Legend

Slickenside
Fault
Sample location (2009)
Sample location (1987)
Bedding
Contour line (10m interval)
Drainage

1 centimeter = 10 meters

Meters
0 5 10 20

9.2 ROCK SAMPLE DESCRIPTIONS

Table 2: Rock Sample Descriptions

Sample Number	Location	Lithology	Sample Characteristics
441024	Camp Vein, in GD near camp	Quartz veining, to 10% of host	Quartz with 15% ankerite, galena to 10%, cpy and sphalerite to 5%, vuggy weathered
441025	Glacier GD veins	Quartz vein	Quartz with 30% ankerite, with 20% py, gal, cpy
441026	Glacier GD veins	Quartz vein	Bull quartz, massive, 1% blebby galena
441027	Glacier GD veins	Quartz vein	1% galena
441028	Glacier GD veins	Quartz vein	1% galena glebs
441029	Glacier GD veins	Quartz vein widening	1% galena
441030	Glacier GD veins	Host granodiorite alteration zone, rusty, 10% CO3	Sample of host granodiorite having trace galena in matrix, py present
441031	Glacier GD veins	Quartz vein with severe albite halo	Bleached host with 5cm quartz vein; to 30% galena, to 20% sphalerite
441032	Glacier GD veins	Gossanous quartz vein and alteration halo	Weathered gossan zone with 1cm massive galena veins
441033	Glacier GD veins	Quartz vein with 20% ankerite	Bull quartz, massive, vuggy, trace cpy
441034	Gully Vein East	Quartz vein, interleaved with siltstone fragments	40cm thick, up to 80% of which is quartz-siltstone vein breccia/stockwork. Galena (<1%), pyrite (3%)
441035	Gully Vein East	Quartz vein, in siltstone	Galena (trace), Malachite staining in blebs on fracture surfaces.
441036	Gully Vein East	Quartz vein	50-60cm wide vein. Pyrite (25%), chalcopyrite (10%), galena (3%)
441037	Gully Vein East	Quartz vein	50-60cm wide vein. Galena (5%, blebs and stringers), pyrite (4%, blebs), chalcopyrite (1-2%, blebs)
441038	Gully Vein East	Quartz vein	Bull quartz, massive, trace chalcopyrite
441039	East Glacier	Quartz vein with banding, rusty, subcrop	5% galena, 5% cpy, 5% tetrahedrite, akin to 441060, Angular float at cliff base
441040	North Central Cirque	Quartz vein	One of 6 parallel 2-14cm wide quartz veins. Ankerite (15%), pyrite (trace), galena (trace), tourmaline (trace)
441041	North Central Cirque	Quartz vein, interleaved with altered siltstone	Bull quartz with chlorite and sericite along vein margins. Vugs (15%), calcite (15%)
441051	Gully Vein East	Quartz carbonate vein	50% galena, 5% cpy, Larger vein of numerous narrow veins
441052	Gully Vein East	Quartz carbonate vein	Quartz/carbonate rich alteration zone, in gd
441053	Gully Vein East	Altered granodiorite	to 30% fine quartz stringers in k-altered host, fine galena stringers, trace cpy
441054	Gully Vein East	Quartz vein with 15% ankerite	Stringers of fg pyrite to 5%, rare calcite, vein attains 1m widths
441055	Gully Vein East	Massive sulphide	Upper contact of gd sill, to 10cm of massive galena and quartz
441056	Gully Vein East	Granodiorite margin; sill becomes dike	Blue-grey felsite with finely disseminated aspy (to 30%) and cpy, trace
441057	East Glacier	Quartz vein with 20% ankerite	Vuggy with cpy and gal to 5% total
441058	East Glacier	Quartz vein from detached boulder	Vuggy with 3% cpy and 10% gal
441059	East Glacier	Quartz vein with 15% host rock in sample	Stockwork of quartz veins at this location, not all mineralized
441060	East Glacier	Massive quartz vein with chloritic partings	5% Pyrite, 5% galena, 1% cpy, 1% tetrahedrite, possible tourmaline?
441061	North Central Cirque	Quartz vein with 30% ankerite	3% galena
441062	North Central Cirque	Quartz-feldspar intrusive granodiorite	5% galena, 1% cpy as disseminations in host rock, 5% py
441063	North Central Cirque	Quartz vein	5% galena, 1% cpy, 1% malachite
441064	North Central Cirque	Banded quartz vein	to 40% sulphide in banded quartz vein; 15% gal, 15% sph, 5% cpy
441065	North Central Cirque	Quartz vein and sheared host rock	Barren quartz veins (to 4cm) and qv's with galena/sph to 2cm
441066	North Central Cirque	Quartz vein with host rock to 25%	Anastomosing quartz vein in qu/calcite veins with ank stringers

441067	North Central Cirque	Quartz vein with granitic fpo	Anastomosing quartz with trem, ank, carb, blebby sph and gal to 5%
441068	North Central Cirque	Quartz veins, one mineralized	Highgrade cpy-bearing vein to 4cm of total
441069	North Central Cirque	Quartz vein, locally vuggy	Quartz vein with 20% galena, local cpy
441070	North Central Cirque	Quartz vein	To 15% galena, cpy+py to 5%
441071	North Central Cirque	Quartz vein	to 3% galena in gossanous QV, locally vuggy
441072	North Central Cirque	Quartz vein	to 5% pyrite
441073	North Central Cirque	Quartz vein	Limonite (25%), calcite (20%), quartz (50%), ankerite (5%)
441074	North Central Cirque	Quartz vein	limonite (35%), quartz (30%), siltstone (25%), tr. sulphides
441075	North Central Cirque	Quartz vein	pyrite to 25% with galena to 1%, numerous 1-4cm veins exist
441076	North Central Cirque	Quartz vein, milky	galena blebs to 7mm
441077	North Central Cirque	Quartz vein, milky, massive	limonite stringer, galena along margins, minor calcite
441078	North Central Cirque	Phyllitic, pyritic qfp	to 15% galena, with 15% pyrite, zone to 10cm across boulder
441079	North Central Cirque	Quartz veins	disseminted, blebby, and veinlet pyrite in vein parallel in sill margin
441080	North Central Cirque	Felsite dike to 2 m in thickness	med blue grey felsite with vfg pyrite and pyrrhotite (+ aspy?)
441081	Kisgegas Lake	Quartz float below gully vein	multiple to 20 cm quartz veins, one mineralized with py + cpy, tr gal
441082	North Central Cirque	Quartz vein	Milky white bullish quartz with minor ankerite
441083	North Central Cirque	Quartz vein	Limonite after pyrite-rich quartz vein with abundant limonite and trace sulphides (pyrite - 5%, galena - trace)
441084	North Central Cirque	Quartz vein	Milky white , semicrystalline quartz vein with 2-4mm vugs.
441085	Kisgegas Lake	Phyllitic, pyritic qfp	to 20% cpy, trace gal, numerous boulders around in place altered host
441086	NE Cirque	Phyllitic, pyritic qfp	gal to 5%, cpy to 3%, py to 10%, eries of float boulders below cliff
441087	NE Cirque	Quartz vein	sph to 1%, gal to 5%, isolated float in lateral moraine
441088	North Side		
441089	North Side	QFP	hem/iron altered pyritic sheared QFP parallel to contact
441090	North Side	Quartz carbonate vein	galena rich vein
441091	NE Cirque	Quartz vein	milky quartz + 10% ankerite with trace py
441092	Gully Vein West	Quartz vein	blebby chalcopyrite (to 3%) in massive milky quartz
441093	Gully Vein West	Pyritic dike	vfg felsite with fg pyrite (to 3%) and cpy (to 1%), blue grey dike?
441094	Gully Vein West	Quartz vein	pyritic and sericitic quart vein with 50% host gd, sampled along 1m
441095	Gully Vein West	Quartz vein	banded to 2 cm quartz veins with 10% ankerite and 3% pyrite
184226	West Glacier	Quartz float	to 25% sulphide; 15% pyrite, 5% spalerite, 5% galena
184227	West Glacier	Quartz Stockwork	stockwork of quartz veins (visible galena) and host GD
184228	West Glacier	Quartz/Carbonate vein	narrow (4cm) vuggy quartz vein with 2% pyrite
184229	Gully Vein East	Quartz vein, interleaved with siltstone fragments/breccia	Pyrite (1%), galena (trace)
184230	Gully Vein East	Quartz vein	Massive quartz vein with 1% pyrite, rusty
184231	Gully Vein East	Quartz vein	Massive quartz vein through GD stock
184232	Gully Vein East	Babine Dike	to 15% cg pyrite in altered BD host, 0.5% galena
184238	North Central Cirque	Brecciated mafic sed	Fe-stained, vuggy, brecciated sediment
184239	North Central Cirque	Host qfp	pervasively sericitized intrusive with 10% py

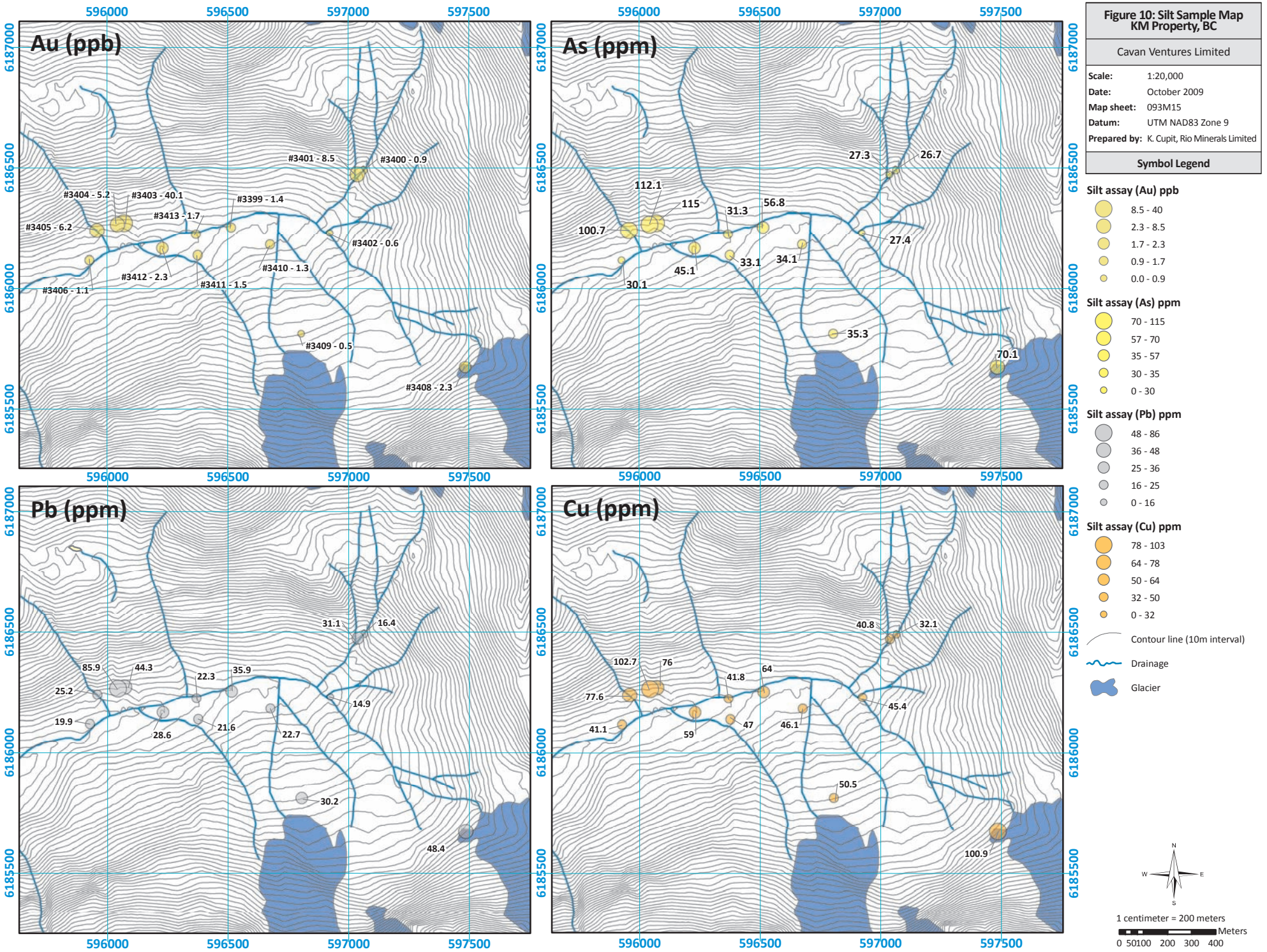
9.3 SILT GEOCHEMISTRY

Geochemical results from the 2009 silt survey revealed a multi-element Au+Cu+Pb+As anomaly in a stream flowing from the East Glacier area. Follow-up prospecting sampled multiple mineralized quartz veins from a southeast-trending feldspar porphyry dike and subcrop from boulder talus below a cliff-like outcropping of feldspar porphyry. Sample 441058 taken from this area during the 2009 programme assayed 0.617 g/t Au with > 300 g/t Ag.

A multi-element anomaly in the northeast cirque area of the Kisgegas Property was discovered during the 2009 programme. Sericitically-altered, quartz+feldspar porphyritic float with 10% galena and chalcopyrite and a quartz vein with 5% combined galena and sphalerite in boulder talus was sampled from the west side of the cirque from the stream above the anomaly. Pyritic quartz veining in a granodioritic sill was also sampled from an outcrop located on the northeast side of the cirque.

The highest gold, copper, lead, and arsenic realized from the silt survey exists in two adjacent streams, located approximately 100 meters apart in the central portion of the claim group. Prospecting revealed numerous possible sources. A 4-centimetre quartz+ankerite vein with 3% galena (441061) as well as parallel sets of quartz+ankerite veins (441040 and 441082) were sampled in outcrop immediately above the anomalies. Directly above the silt anomalies, a subcrop of pervasive, phyllically-altered feldspar porphyry with 15% coarse disseminated pyrite and 15% blebby galena measuring to 10 centimeters was discovered and sampled (441078).

Less than 700 meters upslope from the multi-stream, multi-element silt anomaly, an occurrence of pervasive sericitically-altered feldspar-porphyry was sampled from outcrop (441062). The sample was taken from a 30-centimetre-wide phyllic aureole enveloping a 12-centimetre-wide gossanous quartz vein, which contains 5% galena and 1% chalcopyrite (441063). Ten meters away, a grouping of parallel quartz+ankerite veins with a semi-massive galena+sphalerite horizon was uncovered. Galena and sphalerite each occur to 15% of the vein with chalcopyrite present to 5% (sample 441064). The grouping of veins measures to 5 centimeters in true thickness and was traced for 5 meters. This occurrence is presently unique on the property in that the mineralized vein was emplaced entirely within the sedimentary package that hosts the intrusive suite of rocks. Geochemical results for Au, Cu, Pb, and As are presented in Figure 10.


Au (ppb)
#3404 - 5.2
#3403 - 40.1
#3413 - 1.7
#3405 - 6.2
#3399 - 1.4
#3401 - 8.5
#3400 - 0.9
#3402 - 0.6
#3410 - 1.3
#3412 - 2.3
#3406 - 1.1
#3411 - 1.5
#3409 - 0.5
#3408 - 2.3
As (ppm)
112.1
115
31.3
56.8
27.3
26.7
100.7
27.4
33.1
34.1
45.1
30.1
35.3
70.1
Pb (ppm)
31.1
16.4
85.9
44.3
22.3
35.9
25.2
14.9
19.9
28.6
21.6
22.7
30.2
48.4
Cu (ppm)
40.8
32.1
102.7
76
41.8
64
77.6
45.4
41.1
59
47
46.1
50.5
100.9
596000
596500
597000
597500
6187000
6186500
6186000
6185500
Figure 10: Silt Sample Map
KM Property, BC
Cavan Ventures Limited
Scale: 1:20,000
Date: October 2009
Map sheet: 093M15
Datum: UTM NAD83 Zone 9
Prepared by: K. Cupit, Rio Minerals Limited
Symbol Legend
Silt assay (Au) ppb
8.5 - 40
2.3 - 8.5
1.7 - 2.3
0.9 - 1.7
0.0 - 0.9
Silt assay (As) ppm
70 - 115
57 - 70
35 - 57
30 - 35
0 - 30
Silt assay (Pb) ppm
48 - 86
36 - 48
25 - 36
16 - 25
0 - 16
Silt assay (Cu) ppm
78 - 103
64 - 78
50 - 64
32 - 50
0 - 32
Contour line (10m interval)
Drainage
Glacier
N
W
E
S
1 centimeter = 200 meters
Meters
0 50100 200 300 400

10.0 SAMPLING METHOD AND APPROACH

Rock samples were collected by Kerry Cupit, Robert Paeseler, and Lyle Gregory under supervision of Jesse Halle. Silt samples were collected by Lyle Gregory and Andrew Molnar, and follow-up soil sampling was performed by Kerry Cupit and Robert Paeseler. Rock sampling consisted of continuous chip sampling across widths of *in situ* veins, except in the cases where chip grabs from rock outcrop or loose grabs (from subcrop) 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 A for details on analytical methods and procedures. A witness sample of each rock sample was retained and is available for viewing.

Descriptions of rock samples are displayed in Table 2, (Section 9.1)

Four soil samples were collected in an area of anomalous Au results detected by the stream silt sampling programme.

Soil samples were taken from a depth of 30 to 50 cm with a shovel and spoon. Soil samples were placed in marked paper sample bags, placed in poly ore bags, sealed, and hand-delivered to Acme Analytical Laboratories of Smithers, British Columbia for Group 1DX2 - 31 element ICP analysis. All samples were under the care and control of Jesse Halle. Results of the 2009 soil geochemistry survey are presented in Figures 7A, 7B, 7C, 7D, 7E, and 7F for Au, Ag, Cu, Pb, Zn, and As respectively.

Fourteen silt samples were collected within the Kisgegas River catchment which covers an area of approximately 1600 metres long by 800 metres wide, and represents the entire 4 square kilometre upper catchment for the Kisgegas River. Five silt samples were taken from the main west-flowing river bisecting the Kisgegas Property, and nine silt samples were taken from its tributaries were collected. The Silt samples were taken from a depth of 2 to 6 centimetres with a spoon, placed in marked “Hubco” cloth bags then poly ore bags, zap-strapped, and directly delivered to Acme Analytical Laboratories of Smithers, British Columbia for Group 1DX - 31 element ICP analysis. Results for Au, Cu, Pb, and As are presented in Figure 10.

11.0 INTERPRETATION AND CONCLUSIONS

During the 2009 field season, geologic prospecting discovered numerous new mineralized showings north of the Kisgegas River. 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 centres 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 property. The main elements of future exploration on the Kisgeags Property include the following:

i) The north side of the property requires further reconnaissance prospecting and sampling.

ii) The traceable, numerous, relatively-thick, mineralized quartz veins cutting the diorite stock west of the Gully Vein should be mapped and systematically sampled. The continuity of these mineralized veins will be an important factor in grade estimation.

iii) Further outcrop-scale mapping with a focus on early structures that may control mineralization, especially in the main sill areas, will help predict and find potentially economically-viable intercepts. The veins are structurally-controlled and a comprehensive understanding of these early structures is required.

iv) Hand-trenching should be enacted in anomalous areas, specifically in the lower slopes of the north side of the property.

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

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Open File 1996-13, Vol. 2, pgs. 67-69
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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 21*st *Century* (A. Piestrzynski *et al.*, editors). Swets and Zeitlinger Publishers, Lisse, The Netherlands.

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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 Hoy, T. Editors, British Columbia Ministry of Energy of Employment and Investment, Open File 1996-13, pages 67 – 70.

O'Neill, J.J., (1919)
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Geological Survey of Canada, Memoir 110

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Geological Survey of Canada, Open File 2322

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BCDMPR, Bulletin No. 43

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Prospecting Report on the Molly 1-4 Claim Group
Assessment Report 17542

14.0 STATEMENT OF COSTS – KM PROJECT

Personnel		**Days**	**Rate**	**Total**
Jesse Halle - Geologist	August 9 - 30, 2009	23	625	$ 14375
Kerry Cupit- Geologist	August 9 - 30, 2009	23	625	$ 14375
J. Earl	August 9 - 31, 2009	24	450	$ 10800
L. Gregory	August 9 - 31, 2009	24	450	$ 10800
A. Molnar	August 9 - 31, 2009	24	450	$ 10800
R. Paeseler	August 9 - 31, 2009	24	450	$ 10800
Sub-total		-	-	$ 71950.00
Expenses				
Analytical	ACME Labs – 14 silt, 4 soil, 33 rock samples - IDX2		-	$ 2315.74
Transportation	4x4 Vehicles	32	105	$ 3360.00
Camp	-	-		$ 9213.77
Report	Assessment and 43-101	-	-	$ 25000.00
Communications				$ 235.36
Airfare				$ 1026.85
Shipping				$ 27.31
Field Supplies				$ 4228.65
Fuel				$ 808.17
Helicopter				$ 25730.00
Maps & Publications				$ 292.80
Rentals				$ 945.00
Misc., Consumables				$ 80.29
SubTotal				$ 73263.94
TOTAL EXPENDITURES:				$ 145213.94

15.0 PHASE 2 BUDGET

Description		**Cost**
Time Charges:		
Mob and demob	6 persons - 4 days	$ 9,500
Field	4 persons – 25 days	$ 45,000
Geologist/assistant	2 persons - 25 days	$ 33,750
GST	5%	$ 4,412
	Sub total:	$ 99,662
Helicopter	25 Hours @ $1450/hour	$ 36,250
Expenses:		
Expediting		$ 1,500
Food	6 persons – 150 mandays	$ 11,250
Supplies and Rentals		$ 5,000
Camp		$ 18,500
4 x 4 vehicle rental	2 vehicles– 25 days	$ 5,250
Fuel:		$ 3,500
Communications		$ 2,500
Assays and shipping	200 rock	$ 6,000
Report	Geological	$ 15,000
Rentals		$ 3,500
Consumables	Maps, field supplies, etc.	$ 2,500
	Subtotal:	$ 74,500
Administration	05%	$ 10,520
	Total Phase 2 Budget:	**$220,932**

16.0 STATEMENT OF QUALIFICATIONS

I, *Jesse R. Halle*, hereby certify that:

1. I am the part owner and operator of Halle Geologcial Services Limited located at Unit 3E – 508 Hanson Street, Whitehorse, YT, Y1A 1Z1

2. I am a graduate of the University of Toronto with an Honors B.Sc. (Env. Sci.) and of Lakehead University with an Honors B.Sc. (Geology).

3. I have been employed as a geological assistant intermittently between 1996 – 2000 with the Ontario Geological Survey, and as a geologist with numerous junior, intermediate, and major mining companies from 2001 to the present.

4. I have worked in my chosen field in 6 provinces or territories in Canada and in the United States of America. The majority of my mineral exploration career has been carried out in the province of British Columbia.

5. I am an applicant to the Association of Professional Engineers and Geoscientists of BC ("APEGBC") and am currently under review for membership.

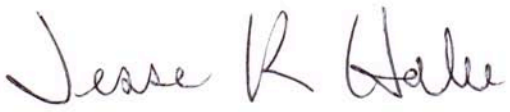
6. I have based this report on the results obtained from work I conducted on the subject property during the month of August, 2009

7. I have no direct or indirect interest in Cavan Ventures Incorporated, nor in any related companies or properties.

8. I am not aware of any material fact or material change, the omission of which would make the technical report misleading.

Respectfully submitted:

Dated at Whitehorse, Yukon, this 1st Day of October, 2009



Jesse R. Halle

APPENDIX A: ROCK SAMPLE LOCATIONS AND DESCRIPITONS

Sample Number	Location	Easting NAD 83	Northing NAD 83	Sample Type	Lithology	Sample Characteristics	Vein Strike	Vein Dip	Sample Width (cm)
441024	Camp Vein, in GD near camp	596459	6185696	Otutcrop - Grab	Quartz veining, to 10% of host	Quartz with 15% ankerite, galena to 10%, cpy and sphalerite to 5%, vuggy weathered	--	--	--
441025	Glacier GD veins	596793	6185472	Outcrop - rx chip	Quartz vein	Quartz with 30% ankerite, with 20% py, gal, cpy	210	85	23
441026	Glacier GD veins	596791	6185497	Outcrop - rx chip	Quartz vein	Bull quartz, massive, 1% blebby galena	15	90	5
441027	Glacier GD veins	596799	6185527	Outcrop - rx chip	Quartz vein	1% galena	7	45	45
441028	Glacier GD veins	596795	6185542	Outcrop - rx chip	Quartz vein	1% galena glebs	94	70	10
441029	Glacier GD veins	596852	6185557	Outcrop - rx chip	Quartz vein widening	1% galena	10	35	12
441030	Glacier GD veins	596851	6185620	Outcrop - rx chip	Host granodiorite alteration zone, rusty, 10% CO3	Sample of host granodiorite having trace galena in matrix, py present	--	--	15
441031	Glacier GD veins	596850	6185630	Outcrop - rx chip	Quartz vein with severe albite halo	Bleached host with 5cm quartz vein; to 30% galena, to 20% sphalerite	--	--	15
441032	Glacier GD veins	596842	6185623	Outcrop - rx chip	Gossanous quartz vein and alteration halo	Weathered gossan zone with 1cm massive galena veins	--	--	5
441033	Glacier GD veins	596929	6185450	Otcp - Grab	Quartz vein with 20% ankerite	Bull quartz, massive, vuggy, trace cpy	170	85	15
441034	Gully Vein East	595713	6185535	Outcrop - rx chip	Quartz vein, interleaved with siltstone fragments	40cm thick, up to 80% of which is quartz-siltstone vein breccia/stockwork. Galena (<1%), pyrite (3%)	19	18	55
441035	Gully Vein East	595708	6185535	Outcrop - rx chip	Quartz vein, in siltstone	Galena (trace), Malachite staining in blebs on fracture surfaces.			
441036	Gully Vein East	595680	6185585	Outcrop - rx chip	Quartz vein	50-60cm wide vein. Pyrite (25%), chalcopyrite (10%), galena (3%)	181	65	110
441037	Gully Vein East	595691	6185568	Outcrop - rx chip	Quartz vein	50-60cm wide vein. Galena (5%, blebs and stringers), pyrite (4%, blebs), chalcopyrite (1-2%, blebs)	181	53	200
441038	Gully Vein East	595687	6185577	Outcrop - rx chip	Quartz vein	Bull quartz, massive, trace chalcopyrite			
441039	East Glacier	598060	6185678	Otcp - Grab	Quartz vein with banding, rusty, subcrop	5% galena, 5% cpy, 5% tetrahedrite, akin to 441060, Angular float at cliff base	--	--	
441040	North Central Cirque	596092	6186651	Outcrop - rx chip	Quartz vein	One of 6 parallel 2-14cm wide quartz veins. Ankerite (15%), pyrite (trace), galena (trace), tourmaline (trace)	230	57	10
441041	North Central Cirque	596396	6186760	Outcrop - rx chip	Quartz vein, interleaved with altered siltstone	Bull quartz with chlorite and sericite along vein margins. Vugs (15%), calcite (15%)	273	23	10
441051	Gully Vein East	595736	6185616	Outcrop - rx chip	Quartz carbonate vein	50% galena, 5% cpy, Larger vein of numerous narrow veins	5	70	10
441052	Gully Vein East	595731	6185612	Outcrop - rx chip	Quartz carbonate vein	Quartz/carbonate rich alteration zone, in gd	112	90	5
441053	Gully Vein East	595720.0	6185600.0	Outcrop - rx chip	Altered granodiorite	to 30% fine quartz stringers in k-altered host, fine galena stringers, trace cpy	--	--	--
441054	Gully Vein East	595523.0	6185497.0	Outcrop - rx chip	Quartz vein with 15% ankerite	Stringers of fg pyrite to 5%, rare calcite, vein attains 1m widths	156	64	18
441055	Gully Vein East	595853.0	6185722.0	Outcrop - rx chip	Massive sulphide	Upper contact of gd sill, to 10cm of massive galena and quartz	340	53	10
441056	Gully Vein East	595853.0	6185721.0	Outcrop - rx chip	Granodiorite margin; sill becomes dike	Blue-grey felsite with finely disseminated aspy (to 30%) and cpy, trace	329	63	10
441057	East Glacier	597451.0	6185462.0	Outcrop - rx chip	Quartz vein with 20% ankerite	Vuggy with cpy and gal to 5% total	235	67	10
441058	East Glacier	597416.0	6185471.0	Outcrop - rx chip	Quartz vein from detached boulder	Vuggy with 3% cpy and 10% gal	--	--	10
441059	East Glacier	597377.0	6185486.0	Outcrop - rx chip	Quartz vein with 15% host rock in sample	Stockwork of quartz veins at this location, not all mineralized	80	42	5
441060	East Glacier	598081.0	6185670.0	Otcp - Grab	Massive quartz vein with chloritic partings	5% Pyrite, 5% galena, 1% cpy, 1% tetrahedrite, possible tourmaline?			25
441061	North Central Cirque	596045	6186500	Outcrop - rx chip	Quartz vein with 30% ankerite	3% galena	225	60	4
441062	North Central Cirque	596164	6186687	Otcp - Grab	Quartz-feldspar intrusive granodiorite	5% galena, 1% cpy as disseminations in host rock, 5% py	--	--	--
441063	North Central Cirque	596164	6186687	Outcrop - rx chip	Quartz vein	5% galena, 1% cpy, 1% malachite	280	83	12
441064	North Central Cirque	596172	6186674	Outcrop - rx chip	Banded quartz vein	to 40% sulphide in banded quartz vein; 15% gal, 15% sph, 5% cpy	293	58	5
441065	North Central Cirque	596031	6187393	Outcrop - rx chip	Quartz vein and sheared host rock	Barren quartz veins (to 4cm) and qv's with galena/sph to 2cm	310	28	10
441066	North Central Cirque	595955	6187333	Outcrop - rx chip	Quartz vein with host rock to 25%	Anastomosing quartz vein in qu/calcite veins with ank stringers			20
441067	North Central Cirque	596025	6187310	Outcrop - rx chip	Quartz vein with granitic fpo	Anastomosing quartz with trem, ank, carb, blebby sph and gal to 5%	215	20	22
441068	North Central Cirque	595650	6186798	Outcrop - rx chip	Quartz veins, one mineralized	Highgrade cpy-bearing vein to 4cm of total	220	70	20
441069	North Central Cirque	595529	6186763	Outcrop - rx chip	Quartz vein, locally vuggy	Quartz vein with 20% galena, local cpy	225	83	3
441070	North Central Cirque	595470	6186820	Outcrop - rx chip	Quartz vein	To 15% galena, cpy+py to 5%	220	70	2
441071	North Central Cirque	595897	6186313	Outcrop - rx chip	Quartz vein	to 3% galena in gossanous QV, locally vuggy	210	45	4
441072	North Central Cirque	596047	6186497	Outcrop - rx chip	Quartz vein	to 5% pyrite	120	80	4
441073	North Central Cirque	595999	6186835	Outcrop - rx chip	Quartz vein	Limonite (25%), calcite (20%), quartz (50%), ankerite (5%)	195	73	8
441074	North Central Cirque	595795	6186954	Outcrop - rx chip	Quartz vein	limonite (35%), quartz (30%), siltstone (25%), tr. sulphides	322	37	to 12

441075	North Central Cirque	595478	6187131	Outcrop - rx chip	Quartz vein	pyrite to 25% with galena to 1%, numerous 1-4cm veins exist	231	85	4
441076	North Central Cirque	595476	6187129	Outcrop - rx chip	Quartz vein, milky	galena blebs to 7mm			5
441077	North Central Cirque	595236	6187036	Outcrop - rx chip	Quartz vein, milky, massive	limonite stringer, galena along margins, minor calcite	264	24	to 15
441078	North Central Cirque	596047	6186497	Subcrop grab	Phyllitic, pyritic qfp	to 15% galena, with 15% pyrite, zone to 10cm across boulder	--	--	10
441079	North Central Cirque	596392	6186698	Outcrop - rx chip	Quartz veins	disseminted, blebby, and veinlet pyrite in vein parallel in sill margin	280	15	10
441080	North Central Cirque	596361	6186526	Outcrop - rx chip	Felsite dike to 2 m in thickness	med blue grey felsite with vfg pyrite and pyrrhotite (+ aspy?)	--	--	10
441081	Kisgegas Lake	595391	6185872	Float	Quartz float below gully vein	multiple to 20 cm quartz veins, one mineralized with py + cpy, tr gal	--	--	15
441082	North Central Cirque	596056	6186474	Outcrop - rx chip	Quartz vein	Milky white bullish quartz with minor ankerite	304	27	10
441083	North Central Cirque	595239	6186967	Outcrop - rx chip	Quartz vein	Limonite after pyrite-rich quartz vein with abundant limonite and trace sulphides (pyrite - 5%, galena - trace)	186	75	14
441084	North Central Cirque	595906	6186864	Outcrop - rx chip	Quartz vein	Milky white , semicrystalline quartz vein with 2-4mm vugs.	79	82	2
441085	Kisgegas Lake	594738	6185589	Subcrop grab	Phyllitic, pyritic qfp	to 20% cpy, trace gal, numerous boulders around in place altered host	--	--	20
441086	NE Cirque	596936	6187326	Float	Phyllitic, pyritic qfp	gal to 5%, cpy to 3%, py to 10%, eries of float boulders below cliff	--	--	--
441087	NE Cirque	596812	6187123	Float	Quartz vein	sph to 1%, gal to 5%, isolated float in lateral moraine	--	--	--
441088	North Side								
441089	North Side	595371	6186258	Outcrop - rx chip	QFP	hem/iron altered pyritic sheared QFP parallel to contact	--	--	--
441090	North Side	594964	6186323	Outcrop - rx chip	Quartz carbonate vein	galena rich vein	310	20	3
441091	NE Cirque	597323	6187273	Outcrop - rx chip	Quartz vein	milky quartz + 10% ankerite with trace py	172	64	7
441092	Gully Vein West	595605	6185505	Outcrop - rx chip	Quartz vein	blebby chalcopyrite (to 3%) in massive milky quartz	144	20	30
441093	Gully Vein West	595605	6185505	Outcrop - rx chip	Pyritic dike	vfg felsite with fg pyrite (to 3%) and cpy (to 1%), blue grey dike?	--	--	40
441094	Gully Vein West	595615	6185505	Outcrop - rx chip	Quartz vein	pyritic and sericitic quart vein with 50% host gd, sampled along 1m	150	10	15
441095	Gully Vein West	595562	6185517	Outcrop - rx chip	Quartz vein	banded to 2 cm quartz veins with 10% ankerite and 3% pyrite	140	60	20
184226	West Glacier	596836	6185667	Otcp - Grab	Quartz float	to 25% sulphide; 15% pyrite, 5% spalerite, 5% galena			
184227	West Glacier	596660	5185311	Otcp - Grab	Quartz Stockwork	stockwork of quartz veins (visible galena) and host GD			
184228	West Glacier	596616	6185337	Outcrop - rx chip	Quartz/Carbonate vein	narrow (4cm) vuggy quartz vein with 2% pyrite			
184229	Gully Vein East	595709	6185550	Outcrop - rx chip	Quartz vein, interleaved with siltstone fragments/breccia	Pyrite (1%), galena (trace)	49	44	60
184230	Gully Vein East	595708	6185537	Outcrop - rx chip	Quartz vein	Massive quartz vein with 1% pyrite, rusty			
184231	Gully Vein East	597340	6186398	Outcrop - rx chip	Quartz vein	Massive quartz vein through GD stock			
184232	Gully Vein East	596061	6186150	Outcrop - rx chip	Babine Dike	to 15% cg pyrite in altered BD host, 0.5% galena			
184238	North Central Cirque	596670	6186460	Outcrop - rx chip	Brecciated mafic sed	Fe-stained, vuggy, brecciated sediment	105	70	15
184239	North Central Cirque	596047	6186504	Outcrop - rx chip	Host qfp	pervasively sericitized intrusive with 10% py	--	--	50

APPENDIX B: SILT SAMPLE LOCATIONS AND DESCRIPTIONS

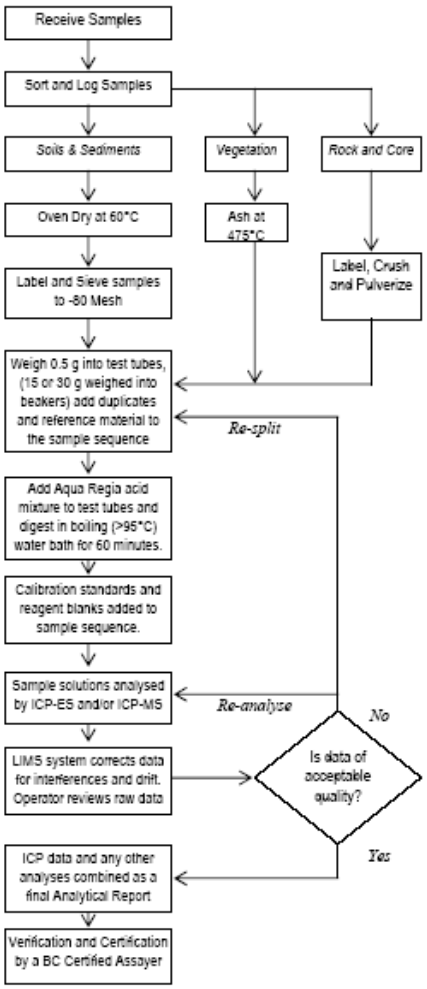
Sample #	Easting	Northing	Direction (°)	Silt %	Sand %	Gravel %	Organics %	Compaction	Depth (cm)	Color	Moisture	Site Rating	Stream Width (m)	Flow	Site Description
3399	596514	6186253	265	75	20		5	loose	4	Grey/ black	wet	good	0.5	medium	running creek in moraine
3400	597064	6186490	210	30	30	30	10	loose	3	brown	wet	medium	1.5	fast	running creek
3401	597037	6186473	190	50	30	20		loose	3	dark brown	wet	medium	4	fast	running creek
3402	596923	6186229	330	60	20	20	10	loose	6	grey/ brown	wet	medium	3	fast	running creek in moraine
3403	596070	6186271	182	50	10		40	medium	3	brown	wet	medium	1.5	fast	running creek
3404	596043	6186265	178	40	5	5	50	medium	3	brown	wet	medium	2	fast	running creek
3405	595958	6186239	154	40	15	15	30	loose	4	brown	wet	medium	3	fast	drains from small lake
3406	595927	6186117	256	70	15	15		loose	3	brown	wet	good	7	fast	main creek
3407															
3408	597484	6185672	300	93		5	2	loose	5	grey	wet	good	0.5	medium	silt in glacial creek
3409	596804	6185810	358	20		75	5	loose	2	brown	wet	poor	0.5	fast	running creek
3410	596675	6186181	348	50		50		loose	4	grey/ brown	wet	medium	3	fast	running creek
3411	596376	6186138	338	30		40	30	loose	2	grey/ brown	wet	medium	1	fast	running creek
3412	596229	6186166	272	20	50	30		loose	3	brown/ black	wet	medium	1.5	medium	running creek
3413	596368	6186224	255	50		50		loose	6	grey	wet	good	7	fast	main creek

APPENDIX C: 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.

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

AcmeLabs ACME ANALYTICAL LABORATORIES LTD.

Group 1D, 1DX ICP-ES & ICP-MS DETECTION LIMITS

	Group 1D Detection	Group 1DX Detection	Upper Limit
Ag	0.3 ppm	0.1 ppm	100 ppm
Al*	0.01 %	0.01 %	10 %
As	2 ppm	0.5 ppm	10000 ppm
Au	2 ppm	0.5 ppb	100 ppm
B*^	20 ppm	20 ppm	2000 ppm
Ba*	1 ppm	1 ppm	10000 ppm
Bi	3 ppm	0.1 ppm	2000 ppm
Ca*	0.01 %	0.01 %	40 %
Cd	0.5 ppm	0.1 ppm	2000 ppm
Co	1 ppm	0.1 ppm	2000 ppm
Cr*	1 ppm	1 ppm	10000 ppm
Cu	1 ppm	0.1 ppm	10000 ppm
Fe*	0.01 %	0.01 %	40 %
Ga*	-	1 ppm	1000 ppm
Hg	1 ppm	0.01 ppm	100 ppm
K*	0.01 %	0.01 %	10 %
La*	1 ppm	1 ppm	10000 ppm
Mg*	0.01 %	0.01 %	30 %
Mn*	2 ppm	1 ppm	10000 ppm
Mo	1 ppm	0.1 ppm	2000 ppm
Na*	0.01 %	0.001 %	10 %
Ni	1 ppm	0.1 ppm	10000 ppm
P*	0.001 %	0.001 %	5 %
Pb	3 ppm	0.1 ppm	10000 ppm
S	-	0.05 %	10 %
Sb	3 ppm	0.1 ppm	2000 ppm
Sc	-	0.1 ppm	100 ppm
Se	-	0.5 ppm	100 ppm
Sr*	1 ppm	1 ppm	10000 ppm
Th*	2 ppm	0.1 ppm	2000 ppm
Ti*	0.01 %	0.001 %	10 %
Tl	5 ppm	0.1 ppm	1000 ppm
U*	8 ppm	0.1 ppm	2000 ppm
V*	1 ppm	2 ppm	10000 ppm
W*	2 ppm	0.1 ppm	100 ppm
Zn	1 ppm	1 ppm	10000 ppm

* Solubility of some elements will be limited by mineral species present.
^Detection limit = 1 ppm for 15g / 30g analysis.

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APPENDIX D: ASSAY RESULTS

AcmeLabs

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Project: KM
Report Date: August 11, 2009

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CERTIFICATE OF ANALYSIS SMI09000098.1

	Method	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15
	Analyte	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P
	Unit	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%
	MDL	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	0.1	2	0.01	0.001
KM-09 S-01	Silt	2.7	64.0	35.9	113	0.5	15.6	21.6	764	4.63	56.8	0.5	1.4	1.1	24	0.6	2.3	0.4	28	0.52	0.114

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.

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CERTIFICATE OF ANALYSIS SMI09000098.1

	Method	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15
	Analyte	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se
	Unit	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm
	MDL	1	1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5
KM-09 S-01	Silt	8	9	0.60	36	0.059	4	1.48	0.021	0.06	0.6	0.01	3.2	<0.1	0.08	4	0.7

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QUALITY CONTROL REPORT SMI09000098.1

	Method	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15
	Analyte	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P
	Unit	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%
	MDL	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	0.1	2	0.01	0.001
Reference Materials																					
STD DS7	Standard	20.7	113.0	70.9	402	0.8	53.8	10.1	620	2.46	51.0	5.0	61.1	4.0	69	5.9	5.7	4.6	87	0.94	0.074
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	0.08
BLK	Blank	<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.5	<0.1	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<2	<0.01	<0.001

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QUALITY CONTROL REPORT SMI09000098.1

	Method	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15
	Analyte	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se
	Unit	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm
	MDL	1	1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5
Reference Materials																	
STD DS7	Standard	12	205	1.03	395	0.113	39	1.00	0.096	0.44	4.1	0.21	2.5	4.5	0.21	4	3.4
STD DS7 Expected		12	179	1.05	370	0.124	39	0.959	0.089	0.44	3.4	0.2	2.5	4.2	0.19	5	3.5
BLK	Blank	<1	<1	<0.01	<1	<0.001	<1	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5

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Project: KM-09
Report Date: August 13, 2009

CERTIFICATE OF ANALYSIS SMI09000109.1

	Method	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15
	Analyte	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P
	Unit	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%
	MDL	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	0.1	2	0.01	0.001
3400	Silt	0.9	32.1	16.4	86	0.1	11.4	13.5	646	3.80	26.7	0.4	0.9	0.8	13	0.2	1.2	0.1	28	0.25	0.090
3401	Silt	1.0	40.8	31.1	102	0.3	12.8	15.7	648	3.93	27.3	0.5	8.5	0.9	14	0.4	1.8	0.1	32	0.25	0.100
3402	Silt	2.8	45.4	14.9	89	0.3	10.1	12.3	563	3.59	27.4	0.3	0.6	0.8	15	0.4	2.1	0.4	27	0.29	0.079
3403	Silt	3.8	76.0	44.3	205	0.4	26.8	27.1	1224	6.76	112.1	6.6	40.1	0.3	24	1.2	2.4	0.2	25	0.51	0.142
3404	Silt	3.6	102.7	85.9	288	0.7	32.2	32.4	1505	8.24	115.0	3.5	5.2	0.6	25	1.9	7.2	0.4	22	0.55	0.182
3405	Silt	2.1	77.6	25.2	178	0.4	23.3	20.8	867	6.32	100.7	1.0	6.2	0.9	19	0.7	4.4	0.3	24	0.27	0.117
3406	Silt	1.6	41.1	19.9	95	0.3	11.6	13.3	521	3.92	30.1	0.3	1.1	0.8	13	0.3	1.5	0.2	25	0.33	0.084
3408	Silt	7.3	100.9	48.4	224	0.5	21.8	26.3	1101	5.66	70.1	0.7	2.3	1.2	22	1.2	7.5	1.2	27	0.33	0.108
3409	Silt	1.9	50.5	30.2	117	0.3	11.6	14.5	531	3.86	35.3	0.3	0.5	0.8	27	0.7	1.8	0.2	25	0.82	0.081
3410	Silt	1.6	46.1	22.7	101	0.3	10.9	14.7	525	3.94	34.1	0.3	1.3	0.7	17	0.4	1.5	0.2	26	0.54	0.083
3411	Silt	1.8	47.0	21.6	108	0.3	11.5	12.6	487	3.94	33.1	0.6	1.5	0.8	22	0.4	1.6	0.2	29	0.40	0.094
3412	Silt	3.0	59.0	28.6	117	0.5	12.1	14.4	469	4.24	45.1	0.3	2.3	0.8	11	0.6	2.2	0.2	25	0.26	0.090
3413	Silt	1.6	41.8	22.3	95	0.3	11.0	13.7	511	3.75	31.3	0.3	1.7	0.8	16	0.4	1.5	0.2	27	0.47	0.085

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Project: KM-09
Report Date: August 13, 2009

CERTIFICATE OF ANALYSIS SMI09000109.1

	Method	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15
	Analyte	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se
	Unit	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm
	MDL	1	1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5
3400	Silt	5	9	0.63	24	0.030	3	1.44	0.010	0.02	0.1	0.01	2.2	<0.1	0.12	4	<0.5
3401	Silt	6	11	0.71	33	0.024	4	1.62	0.007	0.03	0.1	0.02	2.8	<0.1	0.08	4	0.5
3402	Silt	4	9	0.62	28	0.051	2	1.38	0.019	0.05	2.8	<0.01	2.1	<0.1	0.10	3	0.7
3403	Silt	6	14	0.49	36	0.030	2	1.71	0.014	0.03	0.2	0.05	2.2	<0.1	0.15	4	7.4
3404	Silt	7	12	0.48	43	0.026	2	1.66	0.013	0.05	0.4	0.07	2.7	<0.1	0.17	3	4.0
3405	Silt	7	12	0.58	55	0.025	2	1.56	0.010	0.04	0.3	0.03	3.1	<0.1	0.15	4	1.8
3406	Silt	5	9	0.65	18	0.046	3	1.37	0.009	0.02	0.4	0.01	2.3	<0.1	0.09	4	<0.5
3408	Silt	8	10	0.70	62	0.058	2	1.78	0.015	0.07	3.0	0.10	3.3	0.1	0.08	4	1.1
3409	Silt	4	9	0.68	24	0.038	2	1.38	0.014	0.03	0.3	0.01	2.7	<0.1	0.25	3	0.9
3410	Silt	4	9	0.69	19	0.049	3	1.47	0.012	0.03	0.2	<0.01	2.4	<0.1	0.14	3	0.5
3411	Silt	5	11	0.70	43	0.045	3	1.71	0.018	0.07	0.3	0.02	2.9	<0.1	0.06	4	1.6
3412	Silt	5	9	0.61	15	0.028	3	1.34	0.009	0.02	0.4	0.01	2.3	<0.1	0.12	3	1.4
3413	Silt	5	9	0.67	20	0.052	2	1.44	0.016	0.04	0.6	<0.01	2.5	<0.1	0.11	4	<0.5

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Project: KM-09
Report Date: August 13, 2009

QUALITY CONTROL REPORT SMI09000109.1

	Method	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15
	Analyte	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P
	Unit	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%
	MDL	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	0.1	2	0.01	0.001
Pulp Duplicates																					
3408	Silt	7.3	100.9	48.4	224	0.5	21.8	26.3	1101	5.66	70.1	0.7	2.3	1.2	22	1.2	7.5	1.2	27	0.33	0.108
REP 3408	QC	7.4	99.1	47.0	222	0.5	21.1	25.7	1062	5.62	69.3	0.7	2.0	1.2	22	1.3	7.3	1.2	26	0.33	0.107
Reference Materials																					
STD DS7	Standard	21.2	115.2	63.7	406	0.8	57.7	9.7	663	2.50	53.6	4.7	63.5	4.2	82	6.4	6.2	4.4	87	0.99	0.063
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	0.08
BLK	Blank	<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.5	<0.1	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<2	<0.01	<0.001

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Project: KM-09
Report Date: August 13, 2009

QUALITY CONTROL REPORT SMI09000109.1

	Method	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15
	Analyte	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se
	Unit	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm
	MDL	1	1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5
Pulp Duplicates																	
3408	Silt	8	10	0.70	62	0.058	2	1.78	0.015	0.07	3.0	0.10	3.3	0.1	0.08	4	1.1
REP 3408	QC	8	10	0.68	60	0.061	3	1.72	0.014	0.07	3.2	0.10	3.3	0.1	0.09	4	1.3
Reference Materials																	
STD DS7	Standard	14	219	1.03	429	0.143	41	1.05	0.103	0.46	3.9	0.19	2.9	4.2	0.22	5	3.5
STD DS7 Expected		12	179	1.05	370	0.124	39	0.959	0.089	0.44	3.4	0.2	2.5	4.2	0.19	5	3.5
BLK	Blank	<1	<1	<0.01	<1	<0.001	<1	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5

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Project: KM-09
Report Date: August 26, 2009

CERTIFICATE OF ANALYSIS SMI09000110.1

	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
184226	Rock	2.33	507.3	41.4	>10000	>10000	74.6	1.1	6.5	1273	5.14	143.6	1.2	55.8	1.3	405	180.5	8.6	114.3	2	5.80

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.

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Project: KM-09
Report Date: August 26, 2009
Page: 1 of 1 Part 1

QUALITY CONTROL REPORT SMI09000110.1

	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																					
184226	Rock	2.33	507.3	41.4	>10000	>10000	74.6	1.1	6.5	1273	5.14	143.6	1.2	55.8	1.3	405	180.5	8.6	114.3	2	5.80
REP 184226	QC		505.6	41.6	>10000	>10000	73.0	1.6	6.6	1245	5.05	138.0	1.2	54.9	1.3	392	171.6	8.1	107.7	2	5.59
Reference Materials																					
STD DS7	Standard		19.3	100.8	53.6	383	1.0	53.8	8.9	627	2.37	48.0	4.1	65.4	3.8	67	5.6	4.8	4.1	79	0.97
STD DS7	Standard		20.9	108.7	59.1	387	0.7	57.2	9.2	647	2.45	49.8	3.9	66.0	3.9	70	5.8	4.5	4.0	82	1.02
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
Prep Wash																					
G1	Prep Blank		0.1	3.6	2.0	48	<0.1	3.6	4.7	604	2.10	<0.5	1.5	<0.5	3.5	53	<0.1	<0.1	0.2	40	0.60

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Project: KM-09
Report Date: August 26, 2009

CERTIFICATE OF ANALYSIS SMI09000110.1

	Method	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15
	Analyte	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se
	Unit	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm
	MDL	0.001	1	1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5
184226	Rock	0.029	4	4	0.05	45	<0.001	2	0.30	0.030	0.15	0.4	1.00	1.0	<0.1	5.67	1	3.7

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Project: KM-09
Report Date: August 26, 2009

QUALITY CONTROL REPORT SMI09000110.1

	Method	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15
	Analyte	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se
	Unit	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm
	MDL	0.001	1	1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5
Pulp Duplicates																		
184226	Rock	0.029	4	4	0.05	45	<0.001	2	0.30	0.030	0.15	0.4	1.00	1.0	<0.1	5.67	1	3.7
REP 184226	QC	0.029	4	4	0.05	43	<0.001	<1	0.29	0.027	0.14	0.4	0.93	1.1	<0.1	5.50	1	3.9
Reference Materials																		
STD DS7	Standard	0.073	12	215	1.02	408	0.101	39	1.04	0.097	0.43	3.9	0.19	2.2	4.2	0.19	5	3.3
STD DS7	Standard	0.075	13	216	1.09	409	0.105	38	1.09	0.100	0.46	3.5	0.19	2.5	4.1	0.19	5	3.6
STD DS7 Expected		0.08	12	179	1.05	370	0.124	39	0.959	0.089	0.44	3.4	0.2	2.5	4.2	0.19	5	3.5
BLK	Blank	<0.001	<1	<1	<0.01	<1	<0.001	<1	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5
Prep Wash																		
G1	Prep Blank	0.084	8	12	0.65	268	0.125	<1	1.06	0.069	0.59	<0.1	<0.01	2.3	0.4	<0.05	5	<0.5

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Project: KM-09
Report Date: August 31, 2009

CERTIFICATE OF ANALYSIS SMI09000141.1

	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
441024	Rock	2.61	2.1	26.6	3060	1043	14.5	2.0	7.2	383	1.37	703.7	0.6	54.0	1.8	49	11.8	12.1	4.7	<2	0.73
441025	Rock	6.12	3.4	392.2	122.5	840	3.3	2.0	3.9	507	1.29	21.4	0.4	4.9	1.1	145	9.9	3.9	0.2	<2	2.83
441026	Rock	5.05	0.6	13.4	517.8	49	1.3	0.9	3.2	131	0.47	5.2	0.3	0.7	0.9	17	0.4	2.0	1.7	<2	0.31
441027	Rock	5.80	0.4	56.5	191.8	927	1.9	2.2	4.6	123	0.46	56.5	0.2	2.2	0.6	8	5.6	1.9	0.2	<2	0.08
441028	Rock	4.42	0.4	63.9	58.3	169	2.3	3.1	5.1	229	0.59	23.6	0.2	<0.5	0.8	33	1.7	9.9	0.2	<2	0.65
441029	Rock	5.49	12.3	3.9	423.1	78	0.9	1.4	1.3	608	2.12	4.1	<0.1	<0.5	0.1	139	0.7	1.2	0.9	<2	2.80
441030	Rock	3.90	0.1	218.6	171.0	2181	16.7	1.4	2.8	324	1.04	36.0	0.5	7.9	2.0	63	23.5	25.8	0.3	<2	1.01
441031	Rock	5.17	1.6	47.5	>10000	>10000	88.1	1.5	7.2	555	1.59	25.0	1.9	19.7	3.0	1426	220.6	30.4	119.0	<2	5.25
441032	Rock	2.46	6.0	344.4	>10000	2288	62.9	0.7	2.9	94	3.03	285.2	0.3	24.0	1.7	18	20.7	100.6	5.1	<2	0.05
441033	Rock	3.66	0.7	19.1	86.6	81	0.4	2.2	1.5	528	1.37	6.6	0.2	<0.5	0.6	37	0.7	3.3	0.5	<2	1.41
441034	Rock	3.95	12.4	97.3	2299	5875	10.3	8.6	2.3	975	2.04	48.2	0.2	7.2	0.5	146	60.2	11.1	0.2	<2	1.50
441035	Rock	4.10	15.8	540.0	8562	>10000	51.5	13.0	2.2	1426	2.04	69.1	0.2	8.5	0.4	198	132.4	79.6	0.2	4	1.79
441036	Rock	5.13	1.8	>10000	>10000	>10000	>100	6.9	37.6	241	2.82	15.1	0.1	798.9	0.1	43	487.9	16.9	58.2	2	0.75
441037	Rock	4.21	3.3	2773	>10000	3647	66.5	6.6	9.7	483	1.82	3.6	0.3	1530	0.2	75	48.6	18.3	34.7	5	1.39
441038	Rock	4.80	0.6	488.2	178.2	1420	3.1	1.9	3.1	95	0.42	3.1	<0.1	96.6	<0.1	3	13.4	1.3	0.7	<2	0.05
441039	Rock	4.72	1.1	5297	6646	6680	>100	1.3	0.9	36	1.47	318.4	<0.1	39.9	0.2	8	92.2	>2000	0.6	<2	0.01
441040	Rock	3.61	0.8	14.0	23.9	60	3.2	3.1	3.2	618	1.82	1.5	2.4	1.5	0.3	7	0.6	8.0	<0.1	<2	0.22
441041	Rock	2.94	0.4	23.7	65.7	43	7.1	2.2	2.3	1042	2.19	6.4	<0.1	1.4	<0.1	169	0.3	18.0	<0.1	2	10.67
441051	Rock	3.90	4.0	398.2	>10000	4662	>100	4.3	17.4	207	1.22	<0.5	0.5	282.7	0.5	23	83.6	262.7	35.8	2	0.13
441052	Rock	2.84	10.6	513.1	>10000	>10000	>100	5.7	21.8	356	1.49	176.0	0.5	1764	0.5	22	161.7	28.2	22.8	2	0.25
441053	Rock	3.27	2.0	26.8	471.0	178	1.3	7.6	3.7	694	1.67	28.6	1.6	8.5	3.3	248	1.9	1.2	0.3	<2	3.12
441054	Rock	4.40	2.9	121.7	64.9	49	17.5	3.3	9.5	401	1.84	6.1	0.3	1257	0.7	41	0.5	11.8	0.2	2	0.76
441055	Rock	4.18	27.6	4029	>10000	>10000	>100	29.2	4.6	6454	13.72	>10000	1.0	217.8	0.4	41	498.7	1604	1.2	3	0.31
441056	Rock	3.12	3.9	9.6	586.7	181	3.3	37.4	19.1	803	7.11	>10000	1.2	750.8	4.9	42	1.6	72.2	<0.1	<2	0.16
441057	Rock	3.00	10.2	21.8	2757	443	10.0	2.4	3.0	2103	2.66	159.5	2.6	9.6	0.4	124	5.7	13.5	1.3	3	3.36
441058	Rock	3.01	6.1	>10000	>10000	>10000	>100	3.6	3.5	341	3.33	302.2	13.2	681.7	2.2	33	1044	>2000	0.4	<2	0.21
441059	Rock	2.34	9.1	364.2	1660	2913	72.3	2.5	4.8	667	1.86	26.5	1.8	46.7	1.6	117	38.9	121.9	0.2	<2	1.74
441060	Rock	4.50	1.7	620.1	1624	661	>100	1.3	0.6	44	1.22	79.6	0.1	<0.5	0.2	5	10.6	544.2	0.1	<2	<0.01
441061	Rock	2.80	7.0	9.7	690.9	120	2.9	0.6	0.7	33	2.02	8.5	0.3	3.1	1.0	4	0.8	5.7	<0.1	<2	<0.01
441062	Rock	3.09	27.5	458.6	1255	2917	28.4	19.4	13.5	1031	3.24	81.7	0.4	49.9	1.4	72	36.4	70.3	1.1	<2	1.00

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.

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Project: KM-09
Report Date: August 31, 2009

CERTIFICATE OF ANALYSIS SMI09000141.1

	Method	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15
	Analyte	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se
	Unit	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm
	MDL	0.001	1	1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5
441024	Rock	0.035	3	10	0.09	38	<0.001	2	0.16	0.029	0.09	0.1	0.02	0.5	<0.1	0.68	<1	1.4
441025	Rock	0.023	5	14	0.05	72	0.002	3	0.25	0.025	0.12	0.1	0.01	0.7	<0.1	0.12	<1	<0.5
441026	Rock	0.017	2	15	<0.01	32	<0.001	1	0.08	0.008	0.05	<0.1	<0.01	0.1	<0.1	0.07	<1	<0.5
441027	Rock	0.012	3	20	0.01	28	<0.001	2	0.12	0.011	0.05	0.1	0.06	0.2	<0.1	0.08	<1	<0.5
441028	Rock	0.017	3	15	0.01	27	<0.001	2	0.11	0.008	0.04	0.1	<0.01	0.4	<0.1	<0.05	<1	<0.5
441029	Rock	0.014	1	18	0.26	25	<0.001	<1	0.06	0.002	0.03	0.2	<0.01	0.9	<0.1	<0.05	<1	<0.5
441030	Rock	0.036	9	4	0.05	89	<0.001	3	0.26	0.038	0.18	<0.1	0.05	0.5	<0.1	0.32	<1	<0.5
441031	Rock	0.014	2	15	0.06	31	<0.001	<1	0.10	0.034	0.03	<0.1	1.39	0.3	<0.1	2.03	<1	4.8
441032	Rock	0.027	6	5	0.01	47	<0.001	1	0.22	0.023	0.08	0.2	0.48	0.4	<0.1	0.31	<1	4.1
441033	Rock	0.016	2	18	0.05	29	<0.001	2	0.11	0.009	0.05	<0.1	<0.01	0.8	<0.1	<0.05	<1	<0.5
441034	Rock	0.033	2	12	0.04	17	<0.001	3	0.09	0.006	0.06	0.4	0.62	1.0	<0.1	1.04	<1	2.1
441035	Rock	0.034	1	15	0.03	20	<0.001	3	0.13	0.002	0.08	0.6	1.59	1.7	<0.1	0.91	<1	4.5
441036	Rock	0.017	<1	11	0.05	9	<0.001	<1	0.02	<0.001	0.01	0.1	1.25	0.5	<0.1	2.46	<1	51.4
441037	Rock	0.036	3	21	0.10	28	0.001	2	0.09	0.005	0.05	0.2	0.15	1.1	<0.1	0.66	<1	19.8
441038	Rock	0.006	<1	15	<0.01	5	<0.001	<1	0.02	<0.001	<0.01	<0.1	0.05	0.1	<0.1	0.12	<1	0.8
441039	Rock	0.010	<1	25	<0.01	30	<0.001	2	0.10	0.008	0.05	<0.1	3.82	0.3	<0.1	1.01	<1	2.0
441040	Rock	0.010	<1	11	0.03	8	<0.001	<1	0.07	0.007	<0.01	<0.1	0.04	1.4	<0.1	0.05	<1	0.6
441041	Rock	0.024	6	11	0.16	18	<0.001	2	0.10	0.007	0.03	<0.1	0.06	5.3	<0.1	<0.05	<1	<0.5
441051	Rock	0.041	1	9	0.02	28	<0.001	2	0.15	0.008	0.06	<0.1	0.30	0.7	0.1	2.78	<1	>100
441052	Rock	0.043	3	18	0.03	47	0.001	2	0.20	0.007	0.09	0.1	0.47	0.9	<0.1	0.81	<1	55.8
441053	Rock	0.048	6	3	0.05	34	<0.001	2	0.19	0.023	0.09	<0.1	0.01	1.2	<0.1	0.62	<1	2.4
441054	Rock	0.036	2	30	0.06	27	<0.001	1	0.06	0.002	0.04	0.1	0.02	1.0	<0.1	0.50	<1	0.9
441055	Rock	0.007	<1	<1	0.04	27	<0.001	<1	0.10	<0.001	0.06	<0.1	1.19	0.5	0.2	7.72	<1	51.1
441056	Rock	0.050	7	5	0.03	86	<0.001	3	0.40	0.009	0.24	0.1	0.01	0.4	0.2	2.39	<1	1.9
441057	Rock	0.005	1	9	0.07	35	<0.001	<1	0.04	0.003	0.03	0.1	0.08	3.6	<0.1	0.78	<1	0.6
441058	Rock	0.019	3	7	0.02	80	<0.001	1	0.20	0.026	0.10	0.2	12.99	0.6	<0.1	3.77	<1	4.2
441059	Rock	0.016	4	11	0.02	31	<0.001	<1	0.11	0.021	0.03	>100	0.71	1.1	<0.1	0.90	<1	0.9
441060	Rock	0.006	<1	23	<0.01	27	<0.001	1	0.10	0.008	0.05	<0.1	0.41	0.3	<0.1	0.39	<1	0.9
441061	Rock	0.005	<1	10	<0.01	41	<0.001	<1	0.04	0.012	0.01	0.3	0.32	0.1	<0.1	1.15	<1	0.6
441062	Rock	0.022	2	33	0.09	18	<0.001	<1	0.11	0.060	0.02	0.2	0.13	1.5	<0.1	1.52	<1	0.7

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Project: KM-09
Report Date: August 31, 2009

CERTIFICATE OF ANALYSIS SMI09000141.1

	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
441063	Rock	3.42	22.6	356.1	4528	9078	30.5	3.5	5.6	573	2.13	94.7	1.7	57.2	2.3	91	106.0	58.2	0.6	<2	0.97
441064	Rock	2.78	3.4	2344	>10000	>10000	82.7	9.0	4.1	2564	11.22	861.4	0.2	30.7	0.1	32	806.3	60.0	2.0	19	1.93
184227	Rock	2.43	1.4	13.7	58.0	85	0.6	1.0	5.9	273	1.20	11.0	2.1	<0.5	6.9	16	1.1	1.6	0.3	<2	0.21
184228	Rock	2.80	1.0	38.2	1211	3601	7.8	2.4	4.1	632	1.95	87.6	0.7	1.6	2.5	81	42.2	16.8	0.2	<2	2.35
184229	Rock	3.04	7.7	13.4	61.5	74	0.5	10.0	1.8	1060	1.68	21.5	0.3	<0.5	0.4	1297	1.5	1.5	<0.1	5	15.53
184230	Rock	3.34	2.9	4.1	23.9	31	0.6	2.2	7.3	293	1.32	6.3	0.9	42.8	2.5	7	0.4	0.4	<0.1	<2	0.06
184231	Rock	2.52	0.4	15.1	57.3	59	0.9	1.4	1.2	144	0.82	50.9	2.1	2.9	6.5	18	0.6	3.1	<0.1	<2	0.13
184232	Rock	2.71	37.9	2.3	1123	14	0.7	0.2	0.3	10	1.39	2.3	0.5	2.0	3.3	7	0.1	2.2	0.1	<2	<0.01

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Project: KM-09
Report Date: August 31, 2009

CERTIFICATE OF ANALYSIS SMI09000141.1

	Method	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15
	Analyte	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se
	Unit	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm
	MDL	0.001	1	1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5
441063	Rock	0.035	4	7	0.12	28	<0.001	<1	0.15	0.056	0.04	0.1	0.26	1.6	<0.1	1.18	<1	0.9
441064	Rock	0.013	1	4	0.14	21	<0.001	1	0.08	<0.001	0.03	<0.1	4.06	5.8	<0.1	0.88	<1	11.2
184227	Rock	0.032	6	26	0.01	34	<0.001	<1	0.19	0.076	0.06	0.1	<0.01	0.8	<0.1	0.60	<1	<0.5
184228	Rock	0.039	5	3	0.20	55	<0.001	2	0.24	0.021	0.11	<0.1	0.16	0.9	<0.1	0.13	<1	1.3
184229	Rock	0.019	3	13	0.17	57	<0.001	4	0.15	0.011	0.08	<0.1	0.02	1.9	<0.1	0.28	<1	1.1
184230	Rock	0.016	9	13	0.01	39	<0.001	1	0.11	0.019	0.05	0.1	<0.01	0.3	<0.1	0.43	<1	0.7
184231	Rock	0.021	9	26	0.03	73	<0.001	<1	0.32	0.055	0.15	<0.1	<0.01	0.3	<0.1	0.18	1	<0.5
184232	Rock	0.012	3	5	<0.01	80	<0.001	<1	0.08	0.062	0.07	<0.1	<0.01	<0.1	<0.1	0.94	<1	<0.5

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Project: KM-09
Report Date: August 31, 2009
Page: 1 of 1 Part 1

QUALITY CONTROL REPORT SMI09000141.1

	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																					
441039	Rock	4.72	1.1	5297	6646	6680	>100	1.3	0.9	36	1.47	318.4	<0.1	39.9	0.2	8	92.2	>2000	0.6	<2	0.01
REP 441039	QC		1.2	5085	6448	6493	>100	0.9	0.8	35	1.43	308.6	<0.1	34.9	0.2	7	91.9	>2000	0.6	<2	0.01
Reference Materials																					
STD DS7	Standard		19.0	101.7	68.2	388	0.8	55.3	9.0	579	2.34	49.6	4.8	56.5	4.3	68	6.1	5.9	4.5	81	0.94
STD DS7	Standard		19.6	104.1	68.2	388	0.8	53.5	9.3	595	2.33	48.3	4.7	107.7	4.3	69	6.0	5.7	4.5	81	0.96
STD DS7	Standard		19.3	100.6	72.9	388	0.7	54.6	8.7	597	2.33	48.4	5.1	63.9	4.5	70	5.7	5.8	4.8	81	0.94
STD DS7	Standard		19.2	104.1	72.1	384	0.8	53.8	8.8	595	2.37	47.6	5.0	70.5	4.5	72	5.6	5.9	4.8	83	0.97
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	1.2	3.0	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.5	<0.1	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<2	<0.01
Prep Wash																					
G1	Prep Blank		0.1	8.6	1.6	43	<0.1	3.3	4.2	528	1.84	<0.5	1.5	0.7	3.6	44	<0.1	<0.1	<0.1	36	0.46
G1	Prep Blank		0.2	11.0	1.9	43	<0.1	3.9	4.3	558	1.98	<0.5	1.8	<0.5	4.0	58	<0.1	<0.1	<0.1	38	0.51

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Project: KM-09
Report Date: August 31, 2009
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QUALITY CONTROL REPORT SMI09000141.1

	Method	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15
	Analyte	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se
	Unit	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm
	MDL	0.001	1	1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5
Pulp Duplicates																		
441039	Rock	0.010	<1	25	<0.01	30	<0.001	2	0.10	0.008	0.05	<0.1	3.82	0.3	<0.1	1.01	<1	2.0
REP 441039	QC	0.009	<1	23	<0.01	27	<0.001	2	0.09	0.009	0.05	<0.1	3.65	0.3	<0.1	0.98	<1	1.7
Reference Materials																		
STD DS7	Standard	0.072	12	178	1.02	388	0.107	37	1.00	0.084	0.40	3.7	0.19	2.1	4.0	0.19	5	3.3
STD DS7	Standard	0.072	12	182	1.02	391	0.112	39	0.99	0.087	0.41	3.9	0.21	2.3	4.1	0.19	5	3.7
STD DS7	Standard	0.071	12	183	1.01	387	0.112	40	0.98	0.082	0.41	3.6	0.19	2.2	4.2	0.19	4	3.6
STD DS7	Standard	0.070	12	183	1.04	392	0.116	38	1.01	0.083	0.42	3.8	0.19	2.1	4.1	0.19	5	3.5
STD DS7 Expected		0.08	12	179	1.05	370	0.124	39	0.959	0.089	0.44	3.4	0.2	2.5	4.2	0.19	5	3.5
BLK	Blank	<0.001	<1	<1	<0.01	<1	<0.001	<1	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5
BLK	Blank	<0.001	<1	<1	<0.01	<1	<0.001	<1	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5
Prep Wash																		
G1	Prep Blank	0.079	6	12	0.58	238	0.127	<1	0.88	0.044	0.51	<0.1	<0.01	1.6	0.4	<0.05	5	<0.5
G1	Prep Blank	0.083	6	9	0.60	262	0.132	<1	0.94	0.056	0.53	<0.1	<0.01	1.8	0.4	<0.05	5	<0.5

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Client: **Rio Minerals Ltd.**
1022 - 475 Howe Street
Vancouver BC V6C 2B3 Canada

Project: KM-09
Report Date: September 04, 2009

CERTIFICATE OF ANALYSIS SMI09000176.1

	Method	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15
	Analyte	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P
	Unit	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%
	MDL	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	0.1	2	0.01	0.001
KS01	Soil	4.9	94.8	30.4	285	0.5	43.0	46.3	1979	7.56	99.2	4.1	1.0	0.2	18	1.0	2.0	0.2	31	0.37	0.155
KS02	Soil	6.3	137.8	35.9	221	0.5	30.6	47.8	1814	10.35	97.4	3.8	2.3	0.3	6	0.6	2.3	0.3	37	0.08	0.176
KS03	Soil	5.1	150.6	70.6	292	0.7	51.2	64.8	2070	11.62	78.1	2.0	2.3	0.6	8	0.8	2.2	0.3	43	0.10	0.268
KS04	Soil	2.7	56.7	110.7	301	0.4	17.7	27.6	1459	5.20	127.3	5.3	5.1	0.8	33	1.3	2.2	0.4	29	0.54	0.132

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	Method	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15
	Analyte	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se
	Unit	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm
	MDL	1	1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5
KS01	Soil	13	18	0.52	39	0.054	2	2.91	0.007	0.03	0.3	0.08	2.6	<0.1	0.10	5	4.5
KS02	Soil	12	20	0.49	33	0.053	1	3.10	0.006	0.03	0.2	0.08	3.2	<0.1	0.09	4	3.7
KS03	Soil	13	22	0.62	41	0.057	2	3.46	0.006	0.03	0.3	0.04	3.5	<0.1	0.12	5	3.3
KS04	Soil	9	12	0.52	87	0.010	2	1.86	0.008	0.06	0.1	0.03	2.9	<0.1	0.07	5	1.9

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Project: KM-09
Report Date: September 04, 2009
Page: 1 of 1 Part 1

QUALITY CONTROL REPORT SMI09000176.1

	Method	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15
	Analyte	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P
	Unit	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%
	MDL	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	0.1	2	0.01	0.001
Pulp Duplicates																					
KS03	Soil	5.1	150.6	70.6	292	0.7	51.2	64.8	2070	11.62	78.1	2.0	2.3	0.6	8	0.8	2.2	0.3	43	0.10	0.268
REP KS03	QC	5.2	151.5	73.5	299	0.7	51.3	65.3	2115	11.74	80.1	2.0	3.0	0.6	8	0.9	2.2	0.3	42	0.10	0.268
Reference Materials																					
STD DS7	Standard	21.7	107.4	70.0	405	0.8	58.3	10.2	625	2.53	52.2	4.9	63.5	4.3	71	6.5	5.5	4.7	86	0.97	0.077
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	0.08
BLK	Blank	<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<1	0.02	<0.5	<0.1	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<2	<0.01	<0.001

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Report Date: September 04, 2009
Page: 1 of 1 Part 2

QUALITY CONTROL REPORT SMI09000176.1

	Method	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15
	Analyte	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se
	Unit	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm
	MDL	1	1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5
Pulp Duplicates																	
KS03	Soil	13	22	0.62	41	0.057	2	3.46	0.006	0.03	0.3	0.04	3.5	<0.1	0.12	5	3.3
REP KS03	QC	14	22	0.61	41	0.056	1	3.39	0.005	0.03	0.2	0.04	3.6	<0.1	0.13	5	3.6
Reference Materials																	
STD DS7	Standard	13	196	1.03	415	0.120	40	1.01	0.085	0.42	4.1	0.18	2.3	4.4	0.21	5	4.0
STD DS7 Expected		12	179	1.05	370	0.124	39	0.959	0.089	0.44	3.4	0.2	2.5	4.2	0.19	5	3.5
BLK	Blank	<1	<1	<0.01	<1	<0.001	<1	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5