Assessment Report

on the

Volcanic City Claims

NTS: 92G/16W
New Westminster Mining Division
British Columbia

Latitude: 49° 51'
Longitude: 122° 23'

Prepared for:

Volcanic City Resources
4170 Burkehill Place
West Vancouver, British Columbia
V7V 3M7

By:

Doug Smith
2791 West 15th Avenue
Vancouver, British Columbia
V6K 2Z7

December, 2002

VOLCANIC CITY RESOURCES

FIRE LAKE PROJECT
PROPERTY LOCATION

NTS: 92G/16W FIGURE: 1

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF APPENDICES

1.0 INTRODUCTION AND SUMMARY

This report is a summary of the results of exploration programs conducted in the fall of 2002 on the Volcanic City property located in southern British Columbia. It also includes a summary of previous work completed on the property. The report was prepared at the request of Volcanic City Resources, with the intent of being submitted for assessment purposes.

The Volcanic City property is situated about 85 kilometres northeast of Vancouver by floatplane or helicopter, and approximately 200 kilometres by road via Pemberton and the Lillooet River Road. Numerous areas of known mineralization occur on the property and in the immediate vicinity of the claims and represent a number of excellent exploration targets.

The property is underlain by the Fire Lake Group. The Fire Lake Group represents an island arc sequence preserved as a roof pendant within intrusives of the Coast Plutonic Complex. The assemblage has been subjected to thrust faulting, large amplitude folding, and regional metamorphism up to greenschist facies. The Harrison Lake shear zone occurs to the east, in the Lillooet River Valley, which is known regionally to be an important control to mineralization.

Diverse styles of mineralization are found in the Fire Lake Group. These include syngenetic volcanic–exhalative mineralization, granodiorite-related stockworks and breccia zones, high angle thrust-related mesothermal gold-copper veins, and late fault–related epithermal mineralization.

The rocks of the Fire Lake Group have been correlated with those of the Gambier Group, host to the Britannia copper-zinc-silver-gold volcanogenic massive sulfide deposit. The Britannia deposit, situated about 65km to the west-southwest of the property, yielded approximately 47.8 million tonnes of ore grading 1.1% Cu, 0.65% Zn, 6.8 g/t Ag and 0.6 g/t Au between 1905 and 1977.

There is good evidence for exhalative activity in a similar geological setting to the Britannia mine on the property. Several areas of this type are known on the property and require follow-up exploration. These areas include the Lilabet and Snow showings, as well as the Fire Mountain Gypsum occurrence and the occurrence of massive, stratabound jasper near the Money Spinner vein.

Three areas, shown as areas A, B, and C, are the result of recent road-building activity that has exposed wide spread mineralization. These areas contain ductile shear-hosted veins with anomalous copper, zinc, silver, and gold. These occur in highly pyritic schist in proximity to granodiorite. Trace bismuth and tungsten are also present. Initial results from these areas have been favorable.

Numerous gold-copper veins occur on the property, and are associated with a major high-angle, deep-seated thrust fault (the Fire Creek Thrust). In the Fire Mountain area, three significant gold-bearing veins occur in the footwall of the Fire Creek Thrust (the Money Spinner, Barkoola, and Blue Lead veins). Gold grades can be spectacular within these veins, with a bulk sample of ore (90 kg) reported to have returned an average grade of 127 g/t gold. The Fire Creek Thrust fault, which is thought to control these veins, has a strike length of over 25km. There is good potential for additional veins to be discovered along this strike length.

Another area of interest is the Lilabet showing, southwest of Fire Lake, where a breccia body occurs in volcaniclastics close to a granodiorite contact. The breccia fragments consist of white, angular, fine-grained felsic fragments (with disseminated pyrite) in a chlorite-sulphide matrix. Up to 10% combined sulphides (pyrite, chalcopyrite, arsenopyrite) occur within the breccia body. One sample averaged 12.9% Cu, 38.4 g/t Ag and 0.86 g/t Au over approximately 100 metres.

Late northeast striking faults control the emplacement of Tertiary high-level felsic dykes and plugs with which epithermal gold mineralization is associated. In particular, the intersection of the northeast trending faults with early northwest structures seems to be an important control in localizing these intrusions. Regional aeromagnetics may help to delineate these intrusions.

2.0 LOCATION AND ACCESS

The Volcanic City property is situated near the north end of Harrison Lake, approximately 85km northeast of Vancouver, as shown in Figure 1. The property extends from the Lillooet River delta at the north end of Harrison Lake northwesterly to the north slopes of Fire Mountain. The property boundaries are outlined on the west by Garibaldi Provincial Park and on the east by the valley of the Lillooet River. The property includes the Volcanic City 1-8 mineral claims, which are shown on NTS map sheet 92G/16W.

The property is located 85 kilometres northeast of Vancouver by air, and approximately 200 kilometres by road via Pemberton and the Lillooet River Road. Access is also possible northward from Harrison Mills via 4-wheel drive vehicle. A good airstrip exists at the Tipella logging camp, 7 kilometres south. Helicopters are available at Vancouver, Agassiz or Pemberton.

3.0 PHYSIOGRAPHY AND CLIMATE

The area is characterised by a prominent valley, running south-southeast that contains the Lillooet River and is flanked by the rugged peaks of the Coast Range Mountains, which range in elevation to up to 2,400 metres.

The Lillooet River's delta at the north end of Harrison Lake is flat, reaching to a depth of more than 600 metres in some places. In most cases the Lillooet River is entrenched, occupying a bed some 32 metres deep.

The stream drainage pattern is typically dendritic with the Lillooet River flowing south easterly into Harrison Lake. Steep secondary tributaries and feeder creeks are oriented in northeast-south westerly directions.

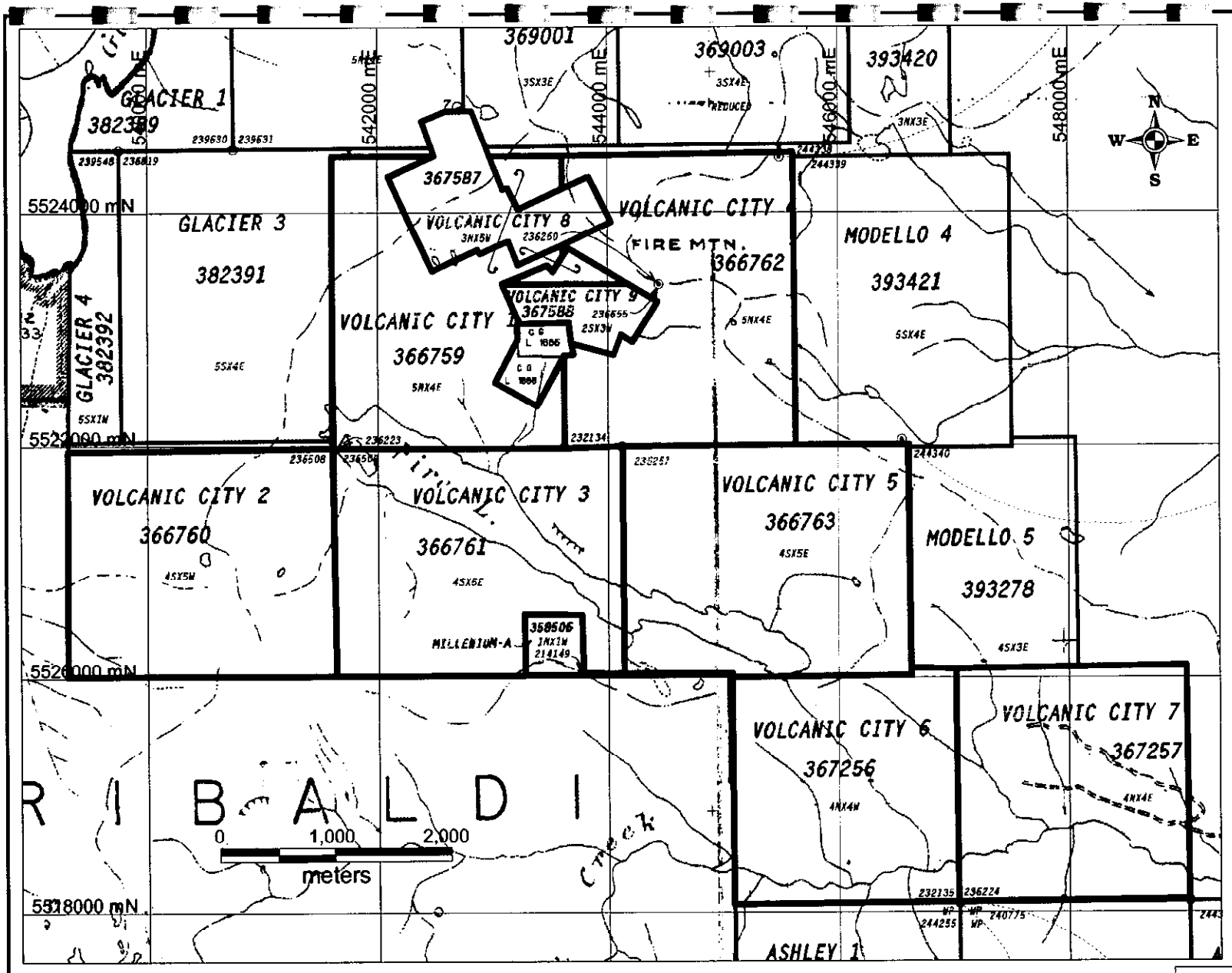
The climate is fairly moderate. The average annual temperature is 10° C ranging from 2°C in January (minimum), to 34° C in July (maximum). Rainfall averages 162.5 centimetres per year, with December typically being the month of highest rainfall.

The main economic activity of the area is logging, and a major logging camp is situated just south of the property, at Tipella. Small-scale placer and lode mining operations also occur. Several small villages are located along the Lillooet River. The town of Skookumchuk is the largest with a population of approximately 85 people.

4.0 PROPERTY AND OWNERSHIP

The property is comprised of nine mineral claims, owned by Mr. Colin Regan of Vancouver, BC. The claims total 153 units, and are shown on Figure 2 and listed below. The claims are situated within the New Westminster Mining Division of British Columbia, Canada. NTS map sheet number 92G/16W.

Claim Name	Tenure Number	Number of Units	Expiry Date
Volcanic City 1	366759	20	2003/10/31
Volcanic City 2	397623	20	2003/11/01
Volcanic City 3	366761	20	2003/10/31
Volcanic City 4	366762	20	2003/11/01
Volcanic City 5	397624	20	2003/11/02
Volcanic City 6	398853	16	2003/11/24
Volcanic City 7	398854	16	2003/11/24
Volcanic City 8	367587	15	2004/01/07
Volcanic City 9	367588	6	2004/01/07



VOLCANIC CITY RESOURCES

Date: Jan. 2003	FIRE LAKE PROJECT CLAIM MAP
Scale: 1:50,000	New Westminster Mining Division, British Columbia

NTS: 92G/16W

Figure: 2

5.0 HISTORY OF EXPLORATION

The general history of the property area is described in numerous previous reports. The following is taken largely from these sources.

The Lillooet River Valley is a well-known mining camp, with the first placer and lode gold discoveries made in the late 1850's. With the discovery of gold in Barkerville, large numbers of miners passed through the area, using a Native Indian trail which started at the head of Harrison Lake and continued northward, connecting Anderson and Seton Lakes to Lillooet. The trail then continued further north to Quesnel and Barkerville. On August 8, 1858, after a government decision to upgrade the trail, volunteers from Victoria started to prepare a landing site at the head of Harrison Lake, named in honour of the sponsor, Governor Douglas. From 1862 to 1864, the Royal Engineers built a wagon road through the Fraser Canyon, which then bypassed this trail.

5.1 Mineral Exploration and Mining

Prospecting and claim staking in 1897 – 1898 were focused on high-grade gold-silver discoveries on Fire Mountain and the west side of Harrison Lake at Providence. About 55 tons of ore of unknown value were produced from the Fire Mountain prospect, and 350 tons with a value of $34/ton in gold and silver were produced from the Providence showing.

The Mayflower claims were staked in 1897. In 1904 an adit was driven 47 metres and a winze sunk 2.4 metres within a rhyolite breccia pipe. Possible reserves were estimated at 250,000 tons of ore. A stamp mill and buildings were also erected. There is no data about mining activity on this claim until 1929, when the property was restaked.

The Harrison Gold Mining and Development Company did further work on the Providence site in 1929. Further exploration work was carried out on the Fire Mountain occurrences, with limited success. During the period 1930–1934, underground exploration work was carried out on the Fire Mountain occurrences (Money Spinner prospect). In 1897, a 90.72-kilogram test shipment was sent to San Francisco, with another 1360 tonnes stockpiled. A Huntington quartz mill was also erected on the property but found to be inadequate to crush the hard rock. In 1938, clean up of the stamp mill resulted in 6,750 grams of gold and 1,524 grams of silver. Apart from minor sampling, there is little record of any work on the Fire Mountain claims since this time.

In the early 1950's exploration interest through the area along the southeast side of Harrison Lake was sparked by the discovery of copper-zinc sulphides. In 1971, Cominco geologists recognized the geological setting as similar to the Kuroko and Noranda type environments that have been exceptionally productive in Japan and Quebec. Noranda, Cominco and Chevron undertook exploration activity.

In the 1960's a Cu-Moly prospect was discovered when the road was pushed northward. Vanguard Minerals conducted considerable trenching on mineralized areas during 1966, and three diamond drill holes were completed. During 1978 and 1979 owner Mr. G. Nagy of Sardis, B.C. established a small concentrating plant and processed high-grade ore from surface open pits. His work yielded approximately 1,500 pounds of good quality concentrate.

In 1972 and 1973, the B.C. Mines Branch completed a mapping project, which contributed to a better understanding of the geological setting.

In 1980, during the course of an exploration program, very rusty pyritic boulders were noted in Fire Creek at a logging road bridge. Results of samples taken before and during staking in 1980 gave strongly anomalous values of gold, copper, lead, and silver. In 1981 a reconnaissance program was undertaken.

A number of very low frequency electromagnetic and high magnetic anomalies were outlined over Fire Mountain in 1982 and Kidd Creek Mines completed regional silt sampling in the area the same year. A number of stream sediment anomalies were outlined, and in 1983 the Lilabet showing was staked in follow-up to this work. Chip sampling was completed on the Lilabet showing, with good results. Work was also done in the Fire Creek area during 1983 and 1984 by Sun God Resources and by Tenquille Resources. This work included airborne geophysical surveys.

In 1979 Cominco staked the Sloquet occurrence, which had been known to company geologists since 1944 after panning for gold in Sloquet creek. During the early 1980's Cominco explored the Sloquet area for volcanogenic massive sulphide deposits. Cominco's claims lapsed in 1986, and the ground was staked and explored by a number of different companies over the next several years (including Adrian Resources, Danbus Resources and Aranlee Resources). In 1990, Noranda optioned the property and completed a comprehensive exploration program including 1250 metres of diamond drilling in 7 holes. Mount Hope Resources completed an additional 1950 metres in 11 holes 1997.

In 1987, Plaskey Development Enterprises conducted a prospecting program over part of the Fire Mountain property and discovered a strongly pyrite-clay-silica-altered gossanous zone which was known as the FM 3-Snow showing. Follow-up work (mapping, trenching and rock sampling) was done by Burmin Resources in 1990-1991.

In 1990. J. Lynch with the Geological Survey of Canada completed regional mapping of the Fire Lake Group, covering most of the area of the current property. This work greatly added to the structural and geological understanding of the area and provides a good basis for more detailed work on the property.

6.0 SUMMARY OF WORK - 2002

Work was completed on the Volcanic City property in two phases from September through to November 2002.

Between 2000 and 2001, a grid was emplaced and a total of 325 soil geochemical samples were taken over areas previously identified as geologically encouraging. This grid was re-established and expanded during the 2002 field season.

In 2002. a 5.4 kilometre flagged and picketed baseline was established on the south side of Fire Lake. This baseline was then continued for 1000m at an azimuth of 210° to the north side of the lake. The south grid was established in areas of interest identified by geology and regional stream geochemistry. The baseline was oriented @ 300° and lines were placed at 100 and 200 metre intervals on an azimuth of 210° with stations located on 50 metre centres along the lines.

Soil sampling was completed on lines 18+00, 28+00, 30+00, 32+00, 34+00, 35+00, 36+00, and 38+00 west. A total of 150 soil samples were collected at 50 metre intervals along these lines.

Two previously delineated gold in soil anomalies occur adjacent to or coincident with zinc, arsenic, copper and molybdenum anomalies. Zinc and arsenic anomalies appear dominant between lines 1000-1600 west, and copper and molybdenum anomalies appear to dominate lines 4000-4600 west, respectively.

Areas "A" and "B" contain gold in soil anomalies with values up to 595 ppb gold and are approximately 1000 X 100-450 metres and 600-1200 X 50-200 metres in dimension, and remain open. Area "A" appears coincident with a northwesterly trending intrusive contact and area "B" occurs in proximity to a north-northwest trending regional structure that may be related to the Money Spinner mine, to the north.

Further exploration of these anomalies has been completed and consisted of extending the existing grid and fill-in geochemistry, as well as geological mapping and prospecting. Ground magnetic and EM surveys are planned for the 2003 field season.

Reconnaissance scale mapping, prospecting, and lithological studies were done over portions of the property. Seven rock samples were collected during the course of prospecting and geological mapping. Geologic mapping and sampling was carried out by Doug Smith and Derrick Strickland, P. Geol.

Seven rock samples were collected from various locations on the property. All sample stations were located by GPS for accurate location control.

The samples were shipped to Acme Analytical Labs in Vancouver and analysed for gold plus 30 element ICP.

7.0 GEOLOGY AND MINERALIZATION

7.1 Regional Geology

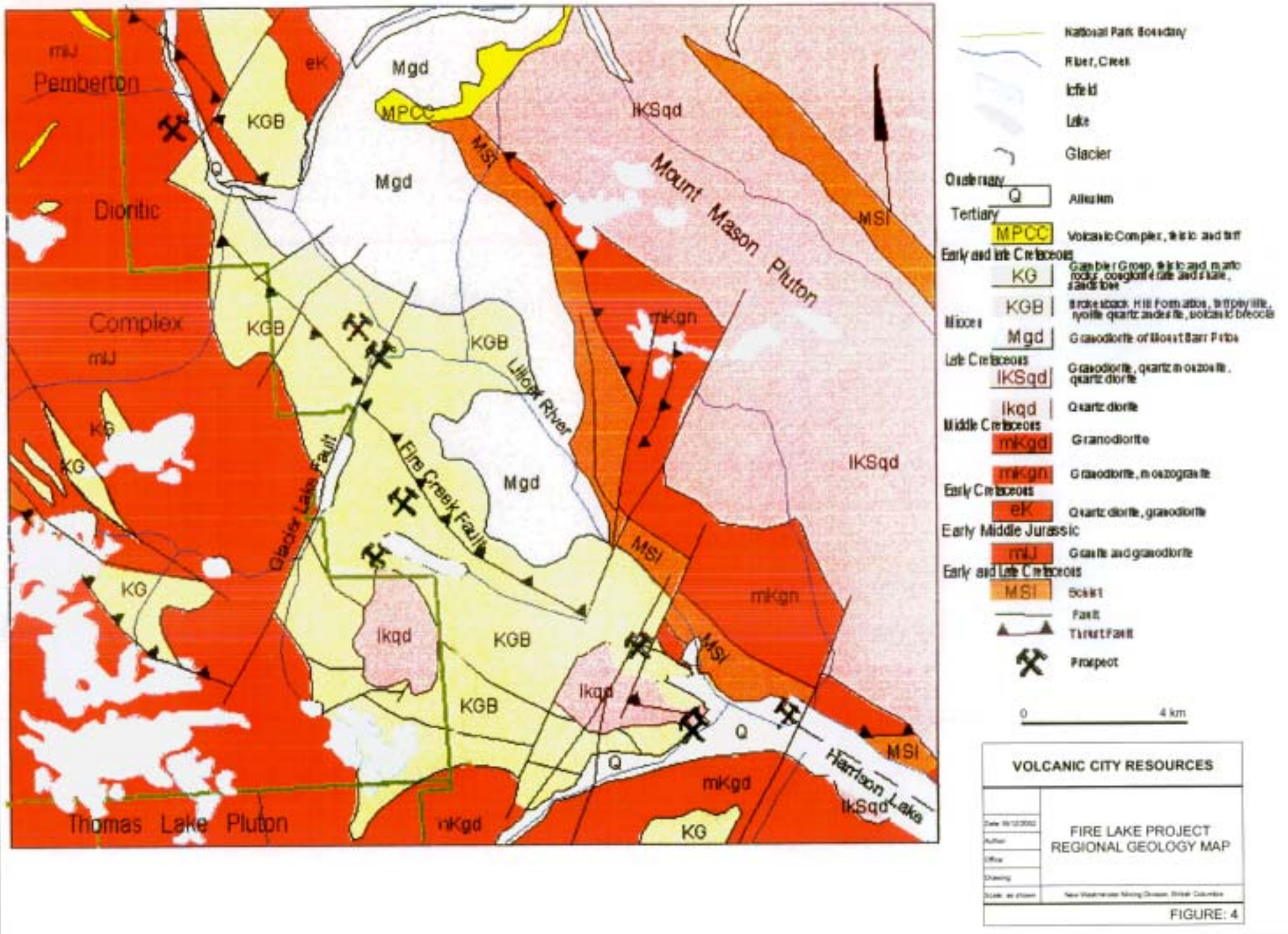
The Volcanic City property covers a large portion of the Fire Lake pendant, one of several scattered Jurassic-Cretaceous pendants located in the southern Coast Mountains (Roddick, 1965). The pendant is surrounded by plutonic rocks of the Coast Plutonic Complex. Rocks within the pendant are termed the Fire Lake Group and are correlated with the Gambier Group, based on lithological similarities (Roddick, 1965). This correlation is important from a mineral potential perspective, since it suggests the potential for volcanogenic massive sulphide mineralization in the Fire Lake Group. The Britannia Mine near Squamish (65km west-southwest of the Volcanic City property) is an example of massive sulphide mineralization within the Gambier Group. The Britannia Mine produced approximately 47.8 million tonnes of ore grading 1.1% Cu, 0.65% Zn, 6.8 g/t Ag and 0.6 g/t Au between 1905 and 1977. At the time of the mine closure, drill indicated reserves were 1.4 million tonnes grading 1.9% Cu.

Lynch (1990b) describes the Fire Lake and Gambier Groups as collectively being included in the Nooksack tectonostratigraphic terrain, regarded as part of a broad Upper Jurassic-Lower Cretaceous overlap assemblage which links Wrangellia in the west with Stikinia to the east by latest Early Cretaceous time.

The Glacier Lake map area (92G/16) that covers most of the Fire Lake pendant was mapped by Lynch (1990a, 1990b). Lynch (1990b) describes the stratigraphy within the Fire Lake Group as follows:

> The Fire Lake Group includes the Lower Cretaceous Peninsula and Brokenback Hill formations. The Peninsula is a fining upwards sequence, with trough cross-stratified fluvial conglomerate and coarse marine beach deposits at the base, succeeded by arkose and slate. The overlying Brokenback Hill Formation is mainly volcanic. It progresses upwards from feldspar crystal tuff, to andesite flows, breccia, and heterolithic volcanic conglomerate, to volcaniclastic sandstone, and is topped by welded pyroclastic deposits.

A number of regional structures are present. The oldest structure, situated southeast of the property, is a shallow angle south-southeast-directed thrust fault which emplaces rocks of the Peninsula Formation onto rocks of the younger Brokenback Hill Formation.



VOLCANIC CITY RESOURCES

Date: 06/12/2002	FIRE LAKE PROJECT REGIONAL GEOLOGY MAP
Author	
Office	
Drawing	
Scale: as shown	New Westminster Mining Division, British Columbia

FIGURE: 4

Cutting the property from southeast to northwest is a major southwest directed, high angle thrust fault, regionally known as the Fire Creek Thrust. This fault has significance to exploration because of the spatial association of gold bearing quartz veins to the thrust.

A major shear zone, the Harrison Lake shear, is situated within the Lillooet River valley. The Harrison Lake shear has been well studied by Ray (1986) and others, and is felt to be an important mineralizing control for Tertiary plutonic activity and related epithermal style mineralization. The final phase of deformation seen in the region of the property consists of Tertiary northeast-striking dextral normal dip-slip block faults. Again, these structures have significance to exploration because they appear to control the emplacement of Tertiary felsic plutons and dykes which are regionally associated with epithermal gold mineralization (Lynch, 1990b).

7.2 Property Geology - Reconnaissance

The geology of the property is shown in Figure 3, modified from Lynch (1990b). As detailed above, the property covers a large portion of the Fire Lake pendant, a sequence of metasediments and metavolcanics hosted within Late Cretaceous intrusives (predominantly granodiorite) of the Coast Mountain Plutonic Complex

The Fire Lake Group is comprised of the sedimentary Peninsula Formation and the overlying, predominantly volcanic, Brokenback Hill Formation.

The Peninsula Formation is best exposed in the southern portion of the property and is described in detail by Lynch (1990b). The base of the formation is not exposed, as it is in fault contact with surrounding rocks. In the southern portion of the Volcanic City claims, a low angle thrust fault emplaces rocks of the Peninsula Formation over younger volcanics of the Brokenback Hill Formation.

Within the Peninsula Formation a general upwards fining cycle is noted and two distinct members are recognized. The lower member (KPc on Figure 3) is comprised of conglomerate, passing upwards into coarse beach deposits. The lower member is up to 1200 metres in thickness. Overlying this is a unit referred to as Kpa on Figure 3. This upper member is about 800 metres in thickness, and consists of interbedded arkose and pyritic slate. Typically the arkose is well bedded, with local cross-stratification, graded bedding, and soft-sediment deformation features. Locally small limestone or calc-silicate beds occur within the upper member.

The lowest member (KBHt on Figure 3) consists of interbedded feldspar crystal tuff, slate and muscovite phyllite. The tuff is dominated by sorted, rounded feldspar in a pelitic matrix and is interpreted as a crystal tuff deposited and reworked under subaqueous conditions. Overlying this is the second member (KBHv) which is comprised of intermediate flows which vary widely in occurrence and texture. Massive andesite flows do occur, but more typically the unit consists of a heterolithic volcanic breccia or conglomerate.

The third member of the Brokenback Hill Formation (KBHg) is a coarse-grained volcaniclastic sandstone (feldspathic greywacke) with lesser slate and chloritic phyllite. Within the third member, to the southeast of Fire Mountain, a conspicuous gypsum-bearing unit occurs within coarse-grained volcaniclastic sandstone. This occurrence is shown on Figure 3 as the Fire Mountain Gypsum, and is described in more detail in the following section. Because of its association with the subaqueous volcanic Brokenback Hill Formation, the unit likely represents a portion of an exhalative deposit. The uppermost member of the Brokenback Hill Formation (KBHl) is a complex array of pyroclastic volcanic rocks. The most common unit is a (welded) lapilli tuff with lesser rhyolite, andesite and volcanic breccia.

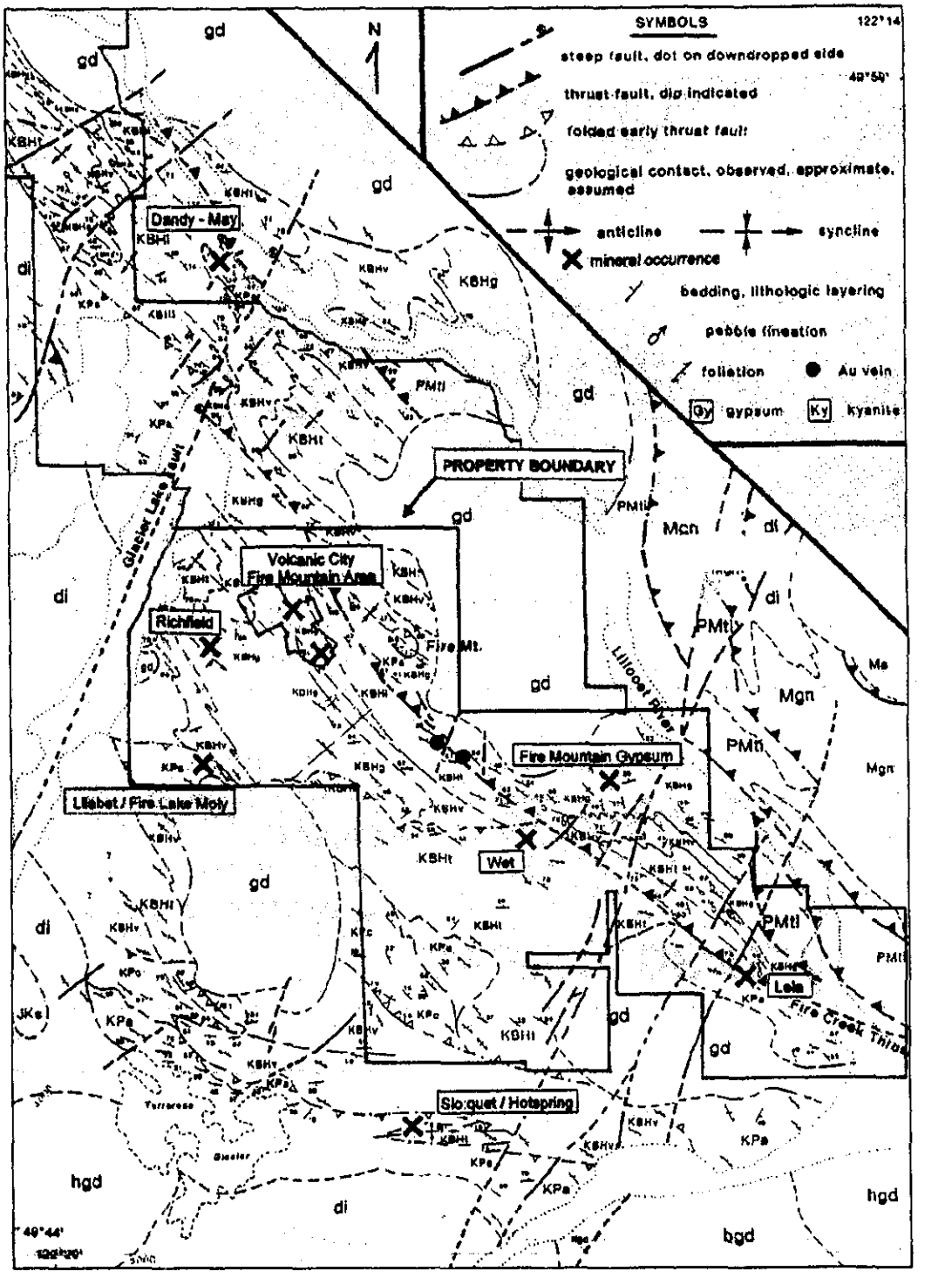
A major steep angle thrust fault, the Fire Creek Thrust, cuts the property from southeast to northwest and juxtaposes lower against the upper Brokenback Hill Formation. The Fire Creek Fault cuts through previously folded and faulted rocks. It extends north westward along Fire Creek and continues on to Snowcap Creek where it is cut by a younger right-lateral oblique-slip fault (the Glacier Lake Fault) and offset to the northeast into the Lillooet River valley. The Fire Creek Thrust is marked by a zone of chaotic deformation, typically in the order of 100 metres wide, in which asymmetric folds and shear zone fabrics record displacement to the southwest. Quartz veins within the shear zone are stretched, boudinaged, detached and back rotated. Movement on the Fire Creek Thrust is estimated to be 8-10 kilometres of apparent reverse-slip displacement.

The thrust is a deep-seated fault which is spatially associated with Au-Cu veins formed during active deformation. A number of such veins are recognized west of Fire Mountain, in the footwall of the thrust (Money Spinner, Barkoola and Blue Lead). The Dandy (Mayflower) occurrence just east of the property some 10km north of the Fire Mountain veins, is also situated in the footwall of the thrust fault. These occurrences are described in more detail in the following section.

A series of prominent, steep dipping, northeast trending Tertiary faults represent the last stage of deformation. The Glacier Lake Fault in the northern portion of the property is an example of one such structure, and offsets the Fire Creek Thrust to the east. Regionally these northeast striking Tertiary faults are important controls on the emplacement of felsic Tertiary dykes and plutons and associated epithermal gold mineralization. Both the Skookumchuk and Sloquet Creek hot springs are also controlled by these northeast trending Tertiary faults. The intersection of the Tertiary faults with the older thrust faults is considered to be favourable for precious metal mineralization.

7.3 Areas of Known Mineralization

A number of diverse styles of mineralization are noted or suggested within the Volcanic City property. High angle thrust-related mesothermal Au-Cu veins such as the Volcanic City (Money Spinner, Barkoola, and Blue Lead) occurrences are perhaps the best known and most widespread type of mineralization on the northern portions of the property.



LEGEND

Late Cretaceous

- gd granodiorite, minor granite
- bgd biotite-rich granodiorite
- hgd hornblende-rich granodiorite
- Mgn Mt. Breckenridge gneiss, hornblende granodiorite, granite

Early Cretaceous

Fire Lake Group

Brokenback Hill Formation

- KBHt feldspar crystal tuff, slate, muscovite phyllite
- KBHv andesite, intermediate flows, heterolithic volcanic conglomerate and breccia
- KBHg volcaniclastic sandstone, feldspathic greywacke, slate, chloritic phyllite
- KBHl lapilli tuff, pyroclastic volcanics, rhyolite, breccia

Peninsula Formation

- KPa interbedded arkose, pebbly arkose, and pyritiferous slate
- KPc conglomerate, fluvial and beach deposits

Latest Jurassic to Early Cretaceous

- di Pemberton Diorite Complex, migmatite
- PMtl Twin Island Group, metavolcanics, pelites, gneiss

Modified from:
Lynch, J.V.G., 1990b. Geology of the Fire Lake Group, southeast Coast Mountains, British Columbia. In: Current Research, Part E, Geological Survey of Canada, paper 90-1E, p.197-204, 1990.

VOLCANIC CITY RESOURCES

Date: 16/12/2002	FIRE LAKE PROJECT PROPERTY GEOLOGY MAP
Author:	
Office:	
Drawing:	
Scale: as shown	New Westminster Mining Division, British Columbia
NTS: 92G/16W	FIGURE: 3

Syngenetic volcanogenic-exhalative mineralization within the subaqueous volcanics of the Brokenback Hill Formation is suggested by the Slo:quet/Hotspring and Lela showings and is further indicated by the occurrences of bedded gypsum and jasper within the volcanics. The Brokenback Hill Formation is correlated on lithological grounds with similar rocks in the Gambier Group which hosts the Britannia Kuroko type massive sulphide deposit, located approximately 65km to the west-southwest.

Granodiorite related stockworks and skarns, such as the Fire Lake Moly prospect also occur. Epithermal mineralization is known regionally to be related to late transcurrent faults and the possibility of similar mineralization on the property exists.

Three main areas of mineralization within the Volcanic City property are identified on Figure 1 and detailed below.

Volcanic City (Fire Mountain Area)

A number of mesothermal Au-Cu quartz veins are associated with the Fire Creek Thrust fault. A clustering of these veins occurs west of Fire Mountain and north of Fire Lake. These include the Money Spinner (Minfile 092GNE002), Barkoola (092GNE003), Blue Lead (092GNE004), and King Number 1 (092GNE005) occurrences. These showings are described in some detail in the Minister of Mines Annual Report, and also by Roddick (1965) and Ray and Coombes (1985). Also included in the description for the Volcanic City area are the FM 3/Snow showing (092GNE041), which consists of disseminated mineralization in pyroclastics and the FM 1 (092GNE042) showing where anomalous Au and Cu values occur in quartz veins and stockworks. These showings are located approx. 2km east of the above mentioned veins,

A number of Crown Grants which cover several of the known showings (i.e. Money Spinner, Barkoola) have reverted to the crown and have been restaked as the Volcanic City 8 claim.

With the exception of the FM 1 showing, all the known Au-Cu veins are hosted within volcaniclastic sandstone and feldspathic greywacke 'porphyritic greenstone' of the third member of Brokenback Hill Formation. Again, with the exception of the FM 1 showing, all are situated in the footwall of the Fire Creek Thrust. Evidence for exhalative type activity is seen in the vicinity of the veins.

The disseminated style of mineralization seen at the FM 3 showing occurs within the uppermost member of the Brokenback Hill Formation.

Money Spinner (Minfile 092GNE002)

The Money Spinner is the most important of a cluster of copper-gold quartz vein mineral occurrences on the southwestern flank of Fire Mountain. A banded fissure vein, 0.9 to 1.3 metres wide, strikes 170° to 182° for at least 300 metres and dips 40-65° west. The vein has been developed on two adits and numerous surface workings.

The Money Spinner vein has a ribboned appearance, consisting of layers of white quartz, 0.5 to 2.5 centimetres wide, separated by thin partings of sheared, blue to black chlorite. The quartz is locally intergrown with calcite and dolomite. Mineralization consists of variable amounts of chalcopyrite with traces of bornite and native gold. Malachite staining is present. The vein and layer margins are strongly slickensided giving the impression that veins and mineralization are fracture/shear controlled.

A 90kg bulk sample was taken from the vein in 1897 and shipped to San Francisco. This shipment returned an average grade of 127 g/t gold. A further 1360 tonnes were stockpiled, and a mill was erected on site but was found to be inadequate to crush the hard rock. A stamp mill was erected the following year and has been located at the end of a 250m 1-yard bucket tram. Several other production attempts were made in the 1930's. A 1934 chip sample taken across a 0.9 metre width assayed 5.5 grams gold per tonne. Clean-up of the stamp mill in 1938 resulted in 6750 grams of gold and 1524 grams of silver.

In the vicinity of the Money Spinner adit highly disrupted layers, lenses and pods of red jasper up to 0.3 metres thick occur close to the contact between two volcanics units, within the third member of the Brokenback Hill Formation (Ray and Coombes, 1984). The jasper is massive to finely banded, is associated with aquagene and volcanic breccias and bedded tuffs, and contains disseminated magnetite and specularite, with traces of chalcopyrite and malachite. Similar float was noted approximately 200 metres to the northwest. The presence of jasper could indicate exhalative activity, further supporting the potential for VMS type mineralization in the Fire Lake Group.

Barkoola (Minfile 092GNE 003)

The Barkoola showing is located about 1.2 km to the northwest of the Money Spinner. A number of parallel fissure veins and lenses, up to 0.6 metres wide, occupy a 7.6 metre wide zone. The zone occurs in volcaniclastic sandstone and feldspathic greywacke (greenstone) of the third member of the Fire Lake Group.

The veins and lenses are composed of white quartz containing traces of chalcopyrite, pyrite, and sporadic native gold.

Several short adits and open cuts explore the vein system. Three channel samples from one working are reported to have averaged 1.4 g/t Au across 0.46 metres.

Blue Lead (Minfile 092GNE004)

Four parallel quartz lenses, about 3 metres apart, occur at the Blue Lead showing located approx. 2km northwest of Fire Mountain. A 10 metre inclined shaft was sunk on the largest of the veins, which measures about 0.6 metres wide and approx.30 metres in length. The veins are banded quartz veins similar to the Money Spinner vein, with copper staining and minor free gold. A grab sample from the dump is reported to have assayed 1.4 g/t Au.

King Number 1 (Minfile 092GNE005)

The King Number 1 showing is located about 400 metres southeast of the Money Spinner. A series of short quartz veins are exposed over a total distance of 15 metres, and vary from 0.15 to 0.61 metres in width. At least fourteen veins are known. A chip sample from the veins reportedly assayed trace gold.

FM 3 / Snow (Minfile 092GNE041)

The Snow showing is situated on the flank of Fire Mountain, in the northeast portion of the Volcanic City 5 claim. Unlike the veins described above, the showing is apparently underlain by the uppermost member of the Brokenback Hill Formation. Samples of brecciated tuff with disseminated pyrite, galena and chalcopyrite yielded up to 3.91 g/t gold and 10.8 g/t silver, 0.16% copper, 1.19 % lead and 3.47% zinc.

Trenching and mapping have revealed a 5-metre wide shear zone with disseminated pyrite, galena, sphalerite and chalcopyrite hosted within a green, fine grained chloritic tuff. The shear is exposed for 2 metres along strike, but a strike length of several hundred metres is suggested by mineralized overburden and sub crop.

FM 1 (Minfile 092GNE042)

The FM 1 showing occurs on the northwest flank of Fire Mountain within the boundaries of the Volcanic City 4 claim, and approximately 2km east of the Barkoola vein.

Anomalous precious and base metal values occur, apparently within the volcanics of the Brokenback Hill Formation (lower two members?). An area of shear related quartz veins and stockworks containing pyrite and chalcopyrite is described, with strong limonite staining and chlorite alteration. Some samples are described as being brecciated in appearance. O'Keefe and Verbruggen (1990) describe the results of sampling from this zone, as follows:

Sample Number	Au (ppb)	Ag (ppm)	Cu (% or ppm)
FDR 125	1710	40.0	1.88 %
FDR 126	1310	65.0	1.86 %
FDR 128	1230	1.7	240 ppm
FDR 132	1670	10.4	90 ppm
FDR 139	2550	34.2	1.10 %
FNF 16	4160	3.9	28 ppm

This showing is situated in the hanging wall of the Fire Creek Thrust, in contrast to the other veins detailed above which are all within the footwall. The widespread nature of the veining and mineralization, and the high copper values suggest that this may be related to a different mineralizing event than the Money Spinner and other veins to the west.

Richfield

The Richfield showing (Minfile 092GNE006) is located to the west of the Money Spinner, some 500 metres northwest of the west end of Fire Lake, near the boundary of the Volcanic City 1 and 2 claims. A quartz vein occurs within volcaniclastic sandstone in the third member of the Brokenback Hill Formation. The vein is narrow on surface, 15 to 36 cm in width, and can be traced for about 30 metres. It trends 090°/26°N and has been explored by a 10 metre deep shaft. The vein appears to pinch out very quickly at depth and contained only weakly anomalous gold values (to 0.69 g/t Au).

Lilabet and Fire Lake Moly Prospects

The Lilabet and Fire Lake Moly Prospects are situated southwest of Fire Lake, near the contact of a granodiorite pluton with sediments and volcanics of the Fire Lake Group.

The Lilabet showing (Minfile 092GNE028) consists of a breccia zone hosted within andesitic flows and volcanic breccias belonging to the second member of the Brokenback Hill Formation. A breccia body measuring 100 metres x 25 metres occurs close to the granodiorite contact.

The breccia fragments consist of white, angular, small (< 10 cm) fine-grained felsic fragments (with disseminated pyrite) in a chlorite-sulphide matrix. The combined sulphide content (pyrite, chalcopyrite, and arsenopyrite) within the breccia body ranges up to 10%.

The breccia zone was mapped and sampled in 1983, as detailed by Bornowski (1984). Rock chip sampling indicated two areas of interest. One is the intrusive-sedimentary contact, especially the paralleling breccia zone, and the other is the volcanic unit. One chip channel and grab sample within and above the breccia zone averaged 12.9% Cu, 38.4 g/t Ag and 0.86 g/t Au from samples taken across approximately 100 metres. A select grab sample from the volcanics contained 0.16 g/t gold.

The Fire Lake Molybdenum showing (Minfile 092GNE030) occurs 2.2 kilometres southwest of Fire Lake, approximately 800 metres southeast of the Lilabet showing. Molybdenum occurs at the north end of a north-trending ellipsoidal granitic body. The mineralization consists of molybdenite in stockworking veinlets hosted in garnet bearing granite.

Wet Prospect

An area of sulphide mineralization (pyritization) with associated quartz veining is described by King (1990) along Fire Creek, about 100 metres east of the bridge across Fire Creek in the southeast portion of the Volcanic City 7 claim. A zone of faulting occurs, with up to ten percent pyrite and with cubes of pyrite up to 1.5 cm in diameter in quartz veins which are intimately associated with a fault gouge zone. The showing appears to be related to the main Fire Creek Thrust fault. Intermediate volcanics belonging to the second member of the Brokenback Hill Formation occur north of Fire Creek, while tuffs of the lowermost member occur to the south. There were no significant values from the fault zone where sampled by King (1990).

Several old crown grants are shown on the topographic map to the northwest of the Wet showing on the nose of Fire Mountain and near the projected trace of the Fire Mountain Thrust Fault. No record has been found of the workings or mineralization on these old claims. Prospecting of this area is strongly recommended to locate and assess the showings.

Fire Mountain Gypsum

Gypsum outcrops on the southeast flank of Fire Mountain, in the southern portion of the Volcanic City 3 and 5 claims. This occurrence is referenced as Minfile 092GNE029, and is described by Lynch (1990b).

The showing is hosted in volcaniclastic sandstone and feldspathic greywacke belonging to the third member of the Brokenback Hill Formation (KBHg on Figure 3. A three to five metre thick bed of crumbly, light coloured rock of exhalative origin occurs which can be traced for 100 metres. The bed contains 40-60% fine to medium grained gypsum, cementing sand. Disseminated pyrite locally makes up 15% of the rock. Breccia textures are also found, with 10–15cm clasts of gypsum cemented by a second phase of gypsum.

The occurrence of a significant bed of gypsum with disseminated pyrite and syngenetic brecciation textures within a subaqueous volcanic sequence is extremely important from an exploration point of view. Typically, in zoned Kuroko type VMS deposits, a marginal facies contains bedded and brecciated gypsum. This, combined with the occurrence of bedded jasper in similar rocks to the west, suggests good potential for VMS type mineralization within the Brokenback Hill Formation.

7.4 Property Geology

Reconnaissance scale geological mapping and sampling was completed in a number of areas on the property to follow up on previous anomalous sample results and to further test areas of structural or geological interest as indicated by regional mapping.

Geological mapping was completed by Douglas Smith and Derrick Strickland, P. Geol. and is detailed below. Lithologies encountered during previous mapping, by L. Gal, P.Geol. and David E. Blann P. Eng. are included in Appendix 1. Descriptions of rock samples collected while mapping are also included in Appendix 1.

The area is underlain by fine grained and medium grained feldspar crystal lithic tuff and flow of predominantly andesite composition. These rocks are cut by regionally extensive northwest trending faults and shear zones imparting a moderate to strong schistosity and are accompanied by chlorite-sericite-quartz-calcite alteration. Subordinate faults and shears trend north-northeast and locally east. Quartz and quartz-carbonate veining of variable size orientation composition, alteration, and mineralization occur within much larger structures that trend predominantly northwest and northeast.

Sheared, schistose and siliceous volcanic rocks 20-30 meters in width and between 200 – 1000 meters in length contain pronounced carbonate alteration; within these structures silicification accompanied by quartz veining and mineralization occurs.

Northwest trending structures contain irregular coarse grained, vuggy, en-echelon chlorite-sericite quartz veins with rolling, pinch and swell dips, and vary between 0.1 to 1.0 meters in width and generally contain no sulphide. These are termed "A" veins. Massive, fine-grained non-vuggy, white-grey quartz veins, 0.5 – 2.0cm in width with chlorite-sericite-epidote are termed "B" veins.

Both "A" and "B" veins appear unreactive with wall rocks. Quartz veins with bleached sericite-clay alteration envelopes, pyrite, and other sulphides are termed "C" veins. To date "C" veins are considered the best target for mesothermal-epithermal style gold and silver mineralization and occur in areas marked 1, 2, and 3.

Where northwest structures are cut by smaller north-northeast and east trending faults, chlorite-sericite-clay alteration and trace to 5% limonite and pyrite occurs. Locally chalcopyrite, sphalerite, arsenopyrite mineralization with associated gold and silver values occur in siliceous zones. Significant mercury occurring in some samples may have been introduced by previous mining activity and recent road blasting.

Fire Lake itself appears to divide two distinct alteration types, which could infer displacement of units north and south of the lake. Rocks of the south Fire Lake area are typically moderately to highly oxidized, are extensively mineralized both structurally along cleavage and homogeneously throughout. Alteration is dominantly sericite over chlorite with a schistose texture which overprints most of the primary fabrics. Extrusive volcanics (volcaniclastic) occur on both sides of Fire Lake, but exposures on the southern area appear higher with carbonate concentrations in the matrix.

Traverses on the northeast side of Fire Lake encountered sequences of 'massive' andesite-dacite flows and feldspar porphyritic volcaniclastics. While no direct contact relationships were observed, bedding trends in an east-west orientation. Alteration on this side of the lake is dominantly chloritic and homogeneous. Cleavage sub parallels bedding and strain appears less, as there is very limited schistosity in the rocks encountered. Mineralization on the northeast area traversed appears to be more discreet and less pervasive than on the southern side where the soil grids are located.

8.0 Results

8.1 Fire Lake Area

Assay results obtained from the November 2002 program are consistent with previously conducted soil sampling. Mineralization is copper-zinc with accessory gold, a common VMS association. Rock samples obtained to the northeast of Fire Lake also illustrate elevated copper- zinc with accompanying gold and nickel values (see Appendix I).

The spatial distribution of elements combined with the previous identification of a gypsum showing and chert beds proximal to the Money Spinner work site is consistent with VMS style deposits. Further sampling on the northern side of Fire Lake and proper lithological and structural interpretation must be completed at a property scale (1:10,000). With the main controlling structures documented. Second and third order controlling systems need to be identified and quantified as to their influence in property mineralization.

Regardless of mineral emplacement models, the entire property has been influenced by deformation to varying degrees, and the influences of such processes have not been adequately addressed to date.

The established elemental associations of copper – zinc with associated gold are more closely related to 'primitive' VMS models (Proterozoic, Precambrian fault bounded trough, or back arc basins). Kuroko style VMS models have been suggested by previous workers for the Volcanic City claims. This model typically is a copper-lead-zinc association, and the presence of a previously reported gypsum deposit in the vicinity of the Money Spinner worksite supports this theory.

Lead depletion, if the Kuroko model is to be pursued, may be indicative of spatial distance from the main ore body. That is to say with increased proximity to the main ore body (Kuroko, black ore) an increase in lead content should be evident in assay. Of the historical work performed to date on the Volcanic City claims, an affinity for VMS style base metal deposit with a strong gold association has been established.

To apply an emplacement model to the mineralization on the claims requires further work and is discussed in the recommendations section.

Area 1

Area 1 contains ductile shear-hosted veins with anomalous copper, zinc, silver, and gold occur in highly pyritic schist in proximity to granodiorite. Trace bismuth and tungsten occur.

Area 2 - Money Spinner

Area 2 contains a .030 – 1.4 meter wide ribboned quartz vein with low total sulphide. A select grab of dump material returned 4248 ppm copper, 12.2 ppm silver and 22.97 g/t gold. Sample 9-3-00-4 is from inside the stamp mill and the high mercury values are probably the result of previous mining activity. Sample 9-3-00-1 is from a float boulder of approximately 1 tonne found on the lower slopes and to the west of the workings. This boulder contains highly anomalous concentrations of copper, zinc, arsenic, silver (10.9ppm), and gold (0.46 g/t).

Area 3

Area 3 contains a strongly sheared white-mica schist with abundant pyrite host, ductile veins of quartz, and silification 0.20 – 0.40 cm wide. Silicified structures are accompanied by significant pyrite and locally chalcopyrite, and returned up to 0.10 g/t gold and 5.3 g/t silver. The zone may trend north-northwest, also in proximity to a regional structure.

8.2 Lower Fire Creek

The logging road on the north side of Fire Creek was previously examined by L. Gal, and is described below.

The Fire Creek valley has been reported to host a large zone of sericite–silica altered rock up to 1km long. Only rather narrow zones of sericite-silica-pyrite alteration were observed in road cuts. There tended to be structural control (fracture zones) to the areas of alteration.

Most of the road cuts were of metavolcanic chlorite schist and rather massive greenstone where apparent foliation was northwest striking and both northeast and southwest dipping. Mineral stretching lineations plunged moderately to the northwest where observed. Malachite (+ azurite) staining was noted on fracture surfaces in a chloritic greenstone exposed north of the main alteration zone. Near the east end of the Fire Creek road in the area of the power lines, are outcrops of fine to medium grained biotite schist, or sub-gneiss. A subgneissic texture was indicated by compositional layering on the scale of 3mm to 6mm.

The banding was parallel to the regional foliation, and may have represented transposed bedding or gneissic segregations. The rock was of a metasedimentary protolith. Further outcrops of the same rock were exposed on a new logging road located approximately 3km north of the Fire Creek Road, at milepost 9 on the west side Lillooet River haul road. Here the biotite schist was locally observed to contain andalusite crystals up to 6mm across. North of the biotite schist, at the end of the new spur road, were outcrops of chlorite-biotite schist. The protolith of the rock could not be determined. This rock also outcropped at the beginning of the spur road where it crossed the power lines. Minor amounts of foliated intrusive rock (dyke) were also observed. The foliation measured here trended north-northeast, with dip reversals indicating folded foliation.

9.0 GEOCHEMISTRY

9.1 Silt Sampling

In 2001, eleven silt samples were collected from streams draining the property as shown in Figure 6. All sample locations were located by GPS for accurate location control.

Samples were dried and shipped to Acme Analytical Labs in Vancouver for preparation and analysis. Samples were analysed for gold by Fire Assay/AAS and for 30 element ICP. The analytical method is described in Appendix 3 and analytical results and statistical data are also included in Appendix 4. Sample results are shown in Figure 8.

It should be noted that different geological units will have differing background levels for the various elements.

541000 mE
542000 mE
543000 mE
544000 mE
545000 mE
5522000 mN
5521000 mN
5520000 mN

LEGEND

SAMPLE NUMBER
Mo (ppm)
Cu (ppm)
Pb (ppm)
Zn (ppm)
Ag (ppm)
Mn (ppm)
As (ppm)
Ba (ppm)
Au (ppb)

N
W E
S

V-00-WS-01
57.1
1019
8
123
0.4
3405
6
73
76.8

9-3-si-004
1
80
21
229
0.3
1251
12
60
94

9-3-si-005
1
61
13
87
<0.3
773
37
52
91

9-2-si-001
3
57
11
138
<0.3
1285
109
49
85

9-3-si-007
1
64
31
159
<0.3
1052
35
46
390

9-3-si-006
1
128
26
1031
<0.3
1923
14
85
146

9-2-si-002
38
708
13
155
0.5
4764
<0.2
123
132

V-00-WS-02
32.7
564
8
94
0.3
1528
9
85
60.5

9-2-si-003
6
181
12
198
0.6
2172
11
86
87

Fire Lake

1300
1200
1100
1000
1400
1900
1800
1700
1600
1500

V-00-WS-03
1.4
29
11
41
0.1
376
9
32
17.2

V-00-WS-04 (500m)
0.5
36
6
149
<0.1
774
17
47
1.5

0 250 500
meters

VOLCANIC CITY RESOURCES

Date: Jan. 2003	FIRE LAKE PROJECT SILT SAMPLE LOCATION & RESULTS
Scale: 1:15,000	New Westminster Mining Division, British Columbia
NTS: 92G/16W	FIGURE: 13

The silt samples collected during this program cover areas underlain by widely different lithologies. Some of the variation noted in analytical results is a reflection of this, and not of mineralization or alteration. That said, a number of highly anomalous samples were returned, as summarised in the following table.

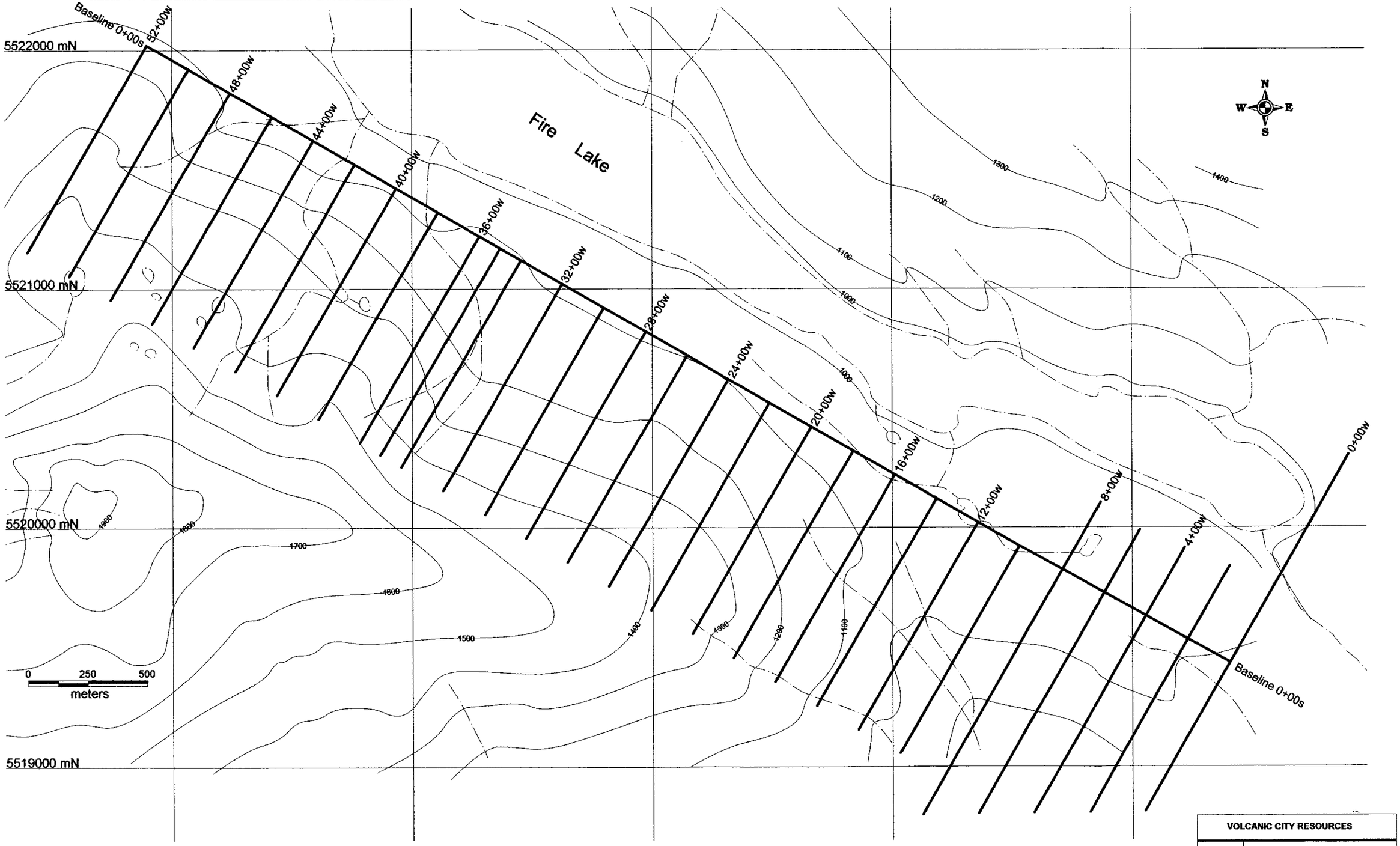
In 2001, silt sampling was completed on the north and south sides of Fire Lake. Results from each of these areas are listed below and in the attached appendix.

Silt Sample Results Volcanic City Claims									
	Mo	Cu	Pb	Zn	Ag	Mn	As	Ba	Au
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppb
V-00 WS 01	57.1	1019	8	123	.4	3405	6	73	76.8
V-00 WS 02	32.7	564	8	94	.3	1528	9	65	60.5
V-00 WS 03	1.4	29	11	41	.1	376	9	32	17.2
V-00 WS 04	.5	39	6	149	<.1	774	17	47	1.5
9-2-SI-001	3	57	11	138	<.3	1285	109	49	85
9-2-SI-002	38	708	13	155	.5	4764	<2	123	132
9-2-SI-003	8	181	12	198	.6	2172	11	66	87
9-3-SI-004	1	80	21	229	.3	1251	12	60	94
9-3-SI-005	1	61	13	87	<.3	773	37	52	91
9-3-SI-006	1	128	26	1031	<.3	1923	14	85	146
9-3-SI-007	1	64	31	159	<.3	1052	35	46	390

9.2 V-02 Grid

The V-02 grid is located on the southern side of Fire Lake, on the Volcanic City 2, 3, and 5 claims, as shown in Figures 2 and 7. The area surrounding the grid is underlain by the third and upper members of the Brokenback Hill Formation. These rocks are prospective for both structurally controlled vein type mineralization as well as volcanogenic massive sulphide mineralization. This particular area was selected for more detailed work because of the recent road building and logging activity in the area which has exposed several kilometres of mineralization, and because silt samples collected from streams draining the area were anomalous in gold, silver, arsenic, lead and zinc.

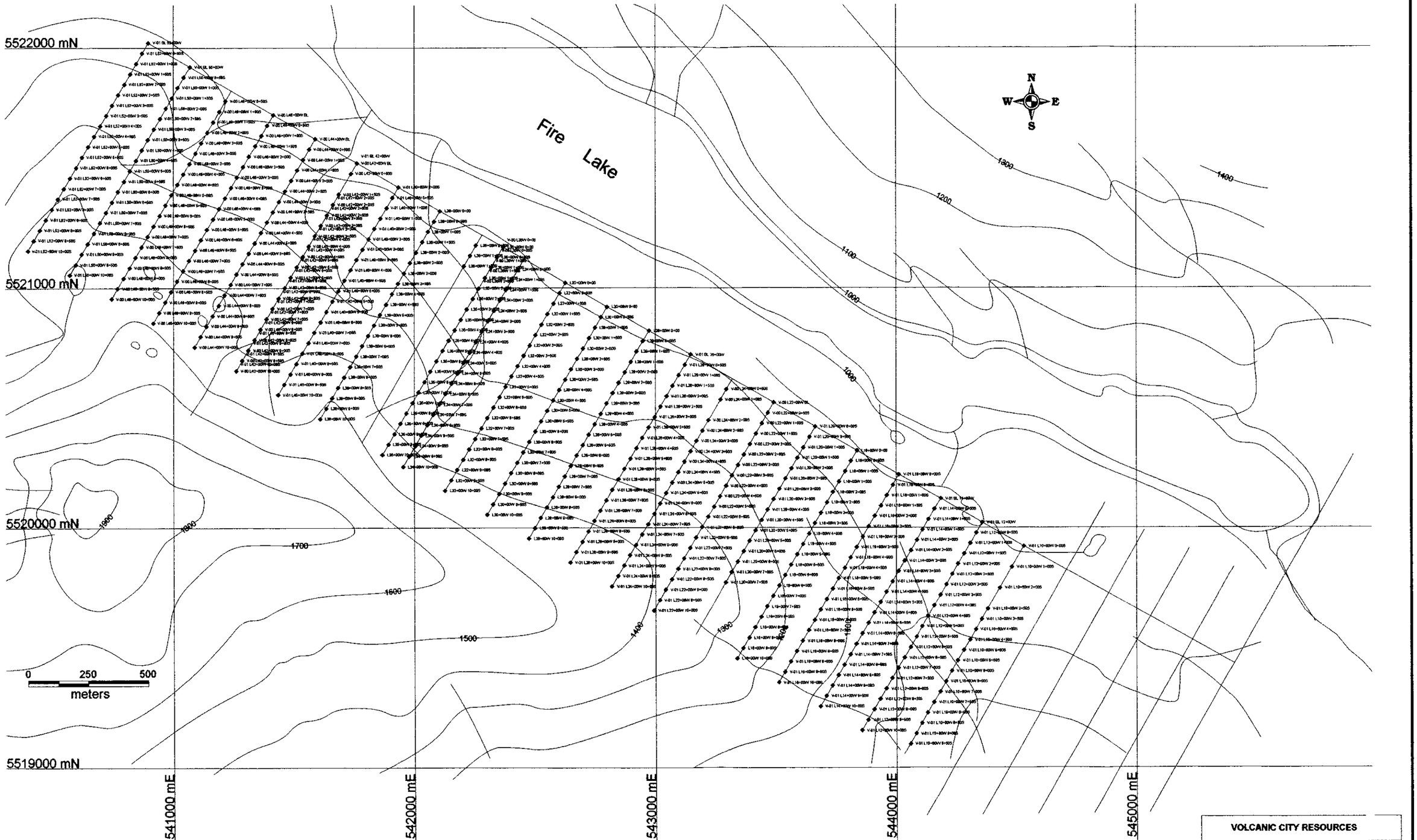
The V-02 grid was re-established with the baseline running @ 300° from L4+40 E to L50+00W, and with cross lines spaced at 100m and 200m @ 210°. Stations were placed at 50 metre intervals. Soil samples were collected from lines 18+00, 28+00, 30+00, 32+00, 34+00, 35+00, 36+00, and 38+00 west. The baseline was also continued for 1 kilometre to the North side of Fire Lake.



VOLCANIC CITY RESOURCES

Date: Jan. 2003	FIRE LAKE PROJECT GRID LOCATION MAP
Scale: 1:15,000	New Westminster Mining Division, British Columbia

NTS: 92G/16W FIGURE: 5



VOLCANIC CITY RESOURCES

Date: Jan. 2003	FIRE LAKE PROJECT SOIL SAMPLE LOCATION MAP
Scale: 1:15,000	New Westminster Mining Division, British Columbia
NTS: 92G/16W	FIGURE: 6

The V-02 grid was re-established with the baseline running @ 300° from L4+40 E to L50+00W, and with cross lines spaced at 100m and 200m @ 210°. Stations were placed at 50 metre intervals. Soil samples were collected from lines 18+00, 28+00, 30+00, 32+00, 34+00, 35+00, 36+00, and 38+00 west. The baseline was also continued for 1 kilometre to the North side of Fire Lake.

9.3 Soil Sampling

Soil sampling was completed during 2002 on selected lines located on the south side of Fire Lake. A total of 150 soil samples were collected at 50 metre intervals along 100 and 200 metre spaced lines.

Samples were dried and shipped to Acme Analytical Labs in Vancouver for preparation and analysis for gold (Fire Assay/AAS) plus 30 element ICP. The analytical method is described in Appendix 3. Analytical results are included in Appendix 4.

A large copper-gold soil anomaly which existed previously and covered a 300 x 800 meter area of the western part of the surveyed grid (lines 42 to 48 west), has been infilled and has expanded the area of soil mineralization throughout the grid area. Silt sample 9-2-SI-002 taken from this area realized values of 107.5 ppb Au, 208 ppm Cu, 155 ppm Zn, and 132 ppb Hg.

9.4 Rock Sampling

Reconnaissance scale mapping and prospecting was done over portions of the property. Rock samples were collected during the course of prospecting and geological mapping on the property as shown on Figure 9. Rock sampling was done by Douglas Smith and Derrick Strickland. Rock sample descriptions are included in Appendix 2.

Samples were analysed for gold plus 30 element ICP. Analytical results are included in Appendix 4.

Rock Samples – V-02 Grid

Sample Number		Cu	Pb	Zn	Ag	Mn	As	Au	
		Ppm	ppm	ppm	ppm	ppm	ppm	ppb	
119651		72	<3	58	0.3	646	>2	111.6	
119652		194	3	54	<.3	840	21	14.9	
119653		51	7	35	<.3	399	7	10.8	

541000 mE
542000 mE
543000 mE
544000 mE
545000 mE
5522000 mN
5521000 mN
5520000 mN

LEGEND

SAMPLE NUMBER
Cu (ppm)
Pb (ppm)
Zn (ppm)
Ag (ppm)
Mn (ppm)
As (ppm)
Au (ppb)
Hg (ppb)

N
W E
S

WR-01
122
3
77
0.2
484
11
0.55
ns

9-2-00-2
203
4
139
1.2
407
11
0.07
25

9-2-00-3
5491
7
180
13.6
779
5
0.33
15

9-2-00-1
122
9
25
<0.3
270
5
0.03
15

RS-04
18
<2
13
<0.1
134
<1
0.09
ns

RS-03
15
<2
22
<0.1
302
5
0.93
ns

RS-01
12
<2
11
<0.1
122
<1
3.2
ns

C119651
72
<3
58
0.3
646
<2
111.6
ns

9-2-00-5
21
6
40
<0.3
706
<2
0.02
110

C119657
39
<3
13
<0.3
310
15
24.6
ns

9-3-00-2
4248
<3
5
12.2
79
4
22.97
40

9-3-00-1
2238
71
506
10.9
113
313
0.46
340

9-3-00-4
205
30
61
3.1
987
13
1.03
99999

9-3-00-3
100
<3
10
<0.3
759
13
0.14
485

9-4-00-1
2587
13
5
5.3
74
29
0.08
5850

9-4-00-2
46
4
2
<0.3
263
12
0.10
320

9-4-00-3
57
3
40
0.3
42
17
0.02
1685

9-4-00-4
139
5
89
<0.3
1158
20
0.01
145

9-2-00-4
42
4
65
<0.3
1179
4
<0.01
90

C119658
95
<3
99
<0.3
1481
45
3.4
ns

RS-05
68
37
145
0.2
811
62
1.79
ns

C119653
51
7
35
<0.3
399
7
10.8
ns

C119656
42
<3
86
<0.3
964
2
<0.2
ns

C119652
194
3
54
<0.3
840
21
14.9
ns

Fire Lake

1900
1800
1700
1600
1500
1400
1300
1200
1100
1000

0 250 500
meters

VOLCANIC CITY RESOURCES

Date: Jan. 2003

FIRE LAKE PROJECT
ROCK SAMPLE
LOCATION & RESULTS

Scale: 1:15,000

New Westminster Mining Division, British Columbia

NTS: 92G/16W

FIGURE: 7

10.0 CONCLUSIONS AND RECOMMENDATIONS

10.1 Conclusions:

Property scale mapping and structural analysis should be carried out at a suggested scale of 1:10,000 in order to provide sufficient detail. Soil and rock sampling can be done concurrently during this with emphasis on the north side of Fire Lake. It is also recommended that beginning the mapping in the vicinity of the Money Spinner site would be a prudent start point as its developed workings would provide a three dimensional view point for structural observation. The gypsum occurrence needs to be mapped in its full extent, especially if the Kuroko model is to be adopted. It is the gypsum cap that is most closely associated with the main ore body in this model, and any displacement of it through deformation will direct exploration efforts.

Completion of an IP survey over the soil grid on the south side of Fire Lake would be beneficial and is recommended. Follow up mapping of the grid will aid in its interpretation and will help identify and quantify structural features identified in the survey. If encouraging targets are generated from the survey on the preexisting soil grid, trenching and sampling would be a feasible next step assessment. Excellent area access from logging road construction will facilitate ease of equipment mobilization to site, and will be a fiscally cheaper method than immediate diamond drilling. A number of high gold in soil values have been replicated by rock sampling, surveying over the grid would help to identify if these higher anomalies are associated with structural features which could represent secondary enrichment conduits.

The Volcanic City property in the Fire Lake area can be considered a high potential area for VMS style base metal and accessory gold. Future work must be a systematic evaluation through soil grid sampling, property mapping in conjunction with rock sampling, geophysics, followed by trenching and drilling. Adequate spatial distribution of geochemical data and a sound interpretation of local lithologies and structural history will reveal which emplacement model is best suited to design future programs.

10.2 Recommendations:

A three-phase program is recommended to further explore the property. Phase One is on-going and consists of data compilation and property scale reconnaissance work, stream sediment sampling, prospecting, grid preparation, soil sampling, ground geophysics and geological mapping. The results of Phase One will prioritize exploration targets for follow-up work.

Phase Two will consist of follow-up work on specific targets identified as high priority targets by the Phase One program. Follow-up work will include Induced Polarization surveys, trenching, fill-in grid work and soil sampling, and geological mapping and sampling. After results of the Phase Two program have been assessed, follow-up trenching and diamond drilling should be done to further test the zones of interest. Phase Three will be contingent on the results of the Phase Two program.

Phase 1

A compilation of available information is being undertaken as work progresses on the property. The compilation includes reviews of assessment reports, government maps (bedrock geology, regional geochemical surveys, geophysics) and other available data (published or private). A compilation of previous airborne geophysical surveys over the property area will be done to help guide future exploration. The result of the compilation will be a series of maps, at 1:20,000 and 1:10,000 scales, with all available geological information plotted, including all traces of faults, rock type, alteration, and geochemistry.

Previous workers have identified numerous areas of interest. These are documented in a variety of reports that will be reviewed in detail during the compilation program. All known showings will be ground located and detailed evaluations (mapping, rock sampling) of these showings will be completed.

The results of the compilation and ground checking of documented showings will direct the course of further work in prioritizing areas to be examined.

Stream sediment sampling has proven useful as a first pass method of indicating areas that should be examined more closely. Stream sediment sampling should be continued for the rest of the property and anomalous drainage basins should be sampled in more detail to further define the areas of interest. Anomalous geochemical values should be followed up with an examination of the boulders (float) found in the stream bed sampled, as well as prospecting of the drainage itself.

Reconnaissance scale prospecting is also recommended for the property. In particular, any new areas of logging should be prospected, as new areas of rock exposure are likely to occur along these new roads.

The results of Phase One will be a prioritized set of exploration targets for follow-up work during Phases Two and Three.

Areas designated for further work include:

- The south slope of the Fire Mountain, in the vicinity of the Fire Mountain Gypsum and Snow Showings, where detailed mapping is recommended to assess the area for volcanogenic massive sulfide mineralization.
- The newly exposed areas along the south side of Fire Lake where mineralization has characteristics of volcanogenic massive sulfide mineralization
- The Lilabet showing which should be examined and additional sampling completed.
- The Fire Creek Thrust Fault, which should be prospected along its strike for structurally controlled mesothermal gold-copper veins.
- Occurrences of Tertiary intrusives as identified by regional aeromagnetics, which may be related to epithermal mineralization.

Phase One Budget:

Phase One will consist of detailed follow-up exploration with the aim of identifying high-priority targets. This work will include line cutting of the established gridlines, and performance of ground geophysics and geological mapping within these areas.

More regional scale mapping and prospecting is recommended on previously defined areas of interest that are not yet sufficiently well defined to justify progressing to grid work.

Line cutting-South side :		
45 km @ $550 per kilometre		$ 24750.00
Grid Survey- North side:		
50km @ $475 per kilometre		$ 23750.00
Geochemistry:		
Soil sampling - collection and analysis- 1395 samples		$ 22,408.00
Rock sampling analysis – say 100 samples @ $ 22 per.		$ 2,200.00
Geophysics :		
Ground Mag/VLF-EM - 40 km @ $385/km Includes report.		$ 15,400.00
Geology:		
Detailed mapping, prospecting, sampling 15 days @ $450.00 per day		$ 6,750.00
Report:		$ 5,000.00
Subtotal:		$100258.00
Contingency	@ 10%	$ 10025.80
GST	@ 7%	$ 7719.87
Total:		$118003.67

Phase Two

After results of the Phase One program have been assessed, follow-up Induced Polarization surveys as well as trenching and detailed geological mapping should be done to further test the zones of interest. Phase Two will be contingent on the results of the Phase One program.

Phase Two Budget

Induced Polarization Surveys:		
	20km @ $1500.00 per kilometer	$ 30000.00
Line Cutting:		
	50km @ $550.00 per kilometer	$ 27500.00
Geochemistry:		
	Soil sampling - collection and analysis- 620 samples	$ 15660.00
	Rock sampling analysis – say 100 samples @ $ 22 per.	$ 2200.00
Trenching:	6 days @ $850.00 per day	$ 5100.00
Geology:		
	Detailed mapping, prospecting, sampling 15 days @ $450.00 per day	$ 6750.00
Report:		$ 5000.00
Subtotal:		$ 92210.00
Contingency	@ 10%	$ 9221.00
GST	@ 7%	$ 7100.17
Total:		$108531.17

Phase Three

Following the completion of Phase two, if warranted, prospective areas should be trenched and areas should be delineated for diamond drilling.

Phase Three Budget

Trenching:		
5 days @ $800.00 per day		$ 4,000.00
Diamond Drilling:		
1500m @ $65.00 per meter		$ 97,500.00
Geology and Geochemistry:		
Trench and drill core sampling mapping and analysis.		$ 45,000.00
Core logging and labour:		
18 days @ $200.00 per day		$ 3,600.00
Report:		$ 5,000.00
Subtotal:		$ 155,100.00
Contingency	@ 10%	$ 15,510.00
GST:	@ 7%	$ 11,942.70
Total:		$ 182,552.70

12.0 REFERENCES

Boronowski, A., 1983.
Geological and Geochemical Report on the Lillabet 1 Claim for Kidd Creek Mines Ltd., Oct 7, 1983, Assessment Report 11,638.

Cardinal, D.G., L. Sookochoff, and G.E. White, 1984.
Geological and Geochemical Assessment Report on the Lode, Skoo, Little, Chuck and Kum Claims, Geological Evaluation Report, and Airborne Magnetometer and VLF-EM Survey, for Sun Gold Resources Ltd., Assessment Report 12,633.

Christie, James S. and D. R. Bennet, 1988.
Fire Creek Prospect Hades, Brimstone, and Fire 1- 6 Claims. Report on the 1987 Fire Creek Drill Program, report for Englefield Resources Ltd., February 10, 1988

Demczuk, Les, D. Wilson and C. Thompson, 1990.
Geological, Geophysical and Geochemical Report on the Dandy – May Group of Mineral Claims for Tyme Resources Ltd., Apr.1990.

Blann-Gal, 2001
Assessment report on the Volcanic City Group of Claims for Dayton Resources.

King, G.R., 1990.
Prospecting Report on the Wet 1-3 and Wet 4-6 Mineral Claims, Fire Creek Area, for Bill Chase and Associates, April 1990. Assessment Report 20,068.

Lynch, J.V.G., 1990a.
Geology of the Glacier Lake Map (92G/16). GSC Open File 2203, 1990.

Lynch, J.V.G., 1990b.
Geology of the Fire Lake Group, southeast Coast Mountains, British Columbia, *in* Current Research, Part E, Geological Survey of Canada, Paper 90-1E, p.197-204, 1990.

McKinley, S, T.J. Barrett and J. Thompson, 1996.
Volcanic Stratigraphy and Lithogeochemistry at the Seneca Zn-Cu-Pb Prospect, Southwestern British Columbia. *In* Exploration and Mining Geology, Vol 5, No. 4, p 399-420, 1996.

Monger, J. W. H. and M. J. Journeay, 1994.
Guide to the Geology Tectonic Evolution the Southern Coast Mountains, Open File 2490, Geological Survey of Canada, 1994.

O' Keeffe, N. and K.M. Verbrugen, 1990.
Geological, Prospecting and Geochemical Assessment Report On the Fire Mountain Claims, Lillooet River – Harrison Lake Area, for Burmin Resources Ltd., Oct 17, 1990. Assessment Report 21,036.

Ray, G. E., 1986.
Gold Associated with a Regionally Developed Mid-Tertiary Plutonic Event in the Harrison Lake Area, Southwestern British Columbia. *In* Geological Fieldwork 1985, BC MEMPR Paper 1986-1, p. 95-97.

Ray, G.E. and S. Coombes., 1984.
Harrison Lake Project (92H/5, 12; 92G/9, 16). *In* Geological Fieldwork 1984, BC MEMPR Paper 1985-1, p. 120-125.

Roberts R. G. and P.A. Shenan, (editors), 1994.
Ore Deposit Models, Reprints Series 3, Geoscience Canada, 1994.

Roddick, J. A., 1965.
Vancouver North, Coquitlam and Pitt Lake map-areas, British Columbia; GSC Memoir 335.

Sivertz, G.W.G., 1984.
Report on Airborne Geophysical and Airphoto Tectonic Surveys on the Brimstone, Hades and Lela Claims, for Tenquille Resources Ltd., Feb 15, 1984.

Way, B. and G. Allen, 1980.
Geology and Rock Sampling of the Cu – Moly Prospect, Dec. 13, 1980.

White, G.E., 1983.
Airborne Magnetometer and VLF-EM Survey, for Goldbrae Developments Ltd. Fire Mineral Claim, North Harrison Lake, December 19, 1983. Assessment Report 11,952.

Young, M.J., 1985.
Precious Metal Mineralization in Southern British Columbia, Geological Soc. America Field Trip 9 Guidebook, 1985.

APPENDIX 1

Lithology

Description of Lithologies

Greenstone, chlorite schist (Metavolcanic):

Highly variable textures, includes metamorphosed flows and tuffs. Massive to strongly schistose, fine to medium grained chlorite rich ash tuffs, crystal and lapilli tuffs, plagioclase phyric flows (?). Bedding not readily apparent. Schists locally contain biotite, such chlorite-biotite schists are gradational to biotite-chlorite schists (see below).

Biotite schist, biotite-chlorite schist, chlorite schist, tuff (Metasediments):

Generally fine-grained schists, foliation weakly to strongly developed. Sericite is common component, garnet locally observed east of the Lillooet River (higher metamorphic grade). Bedding mostly not apparent at outcrop scale. Local thin bedding / compositional layering. Tuff unit is fine to medium grained, granular texture, light grey to buff rock

Conglomerate:

Conglomerate in vicinity of port Douglas grid is heterolithic, widely variable clast size (<1 – 30cm). Mostly rounded volcanic clasts, some intrusive clasts, matrix supported. Clasts are stretched and flattened in the plane of foliation, volcanic clasts more so than intrusive. Matrix is generally chlorite rich. The conglomerate in the lower Snowcap Creek area has almost all volcanic clasts, generally smaller clast size (.5-3cm), matrix supported. Clasts are deformed in foliation plane; deformation is locally extreme, resulting in protomylonitic texture. The matrix is mostly chlorite rich, although locally silica rich (sandy matrix).

Slate, argillite, thin bedded wacke:

Dark grey to black, slate-argillite, often with thin interbeds of light grey medium grained wacke. Outcrops are often rusty coloured, and the slate may host up to 5-8% disseminated and fracture filling pyrite.

Foliated metaintrusive granodiorite:

Light grey, medium grained, plagioclase rich intrusion. Lesser hornblende, biotite and rare quartz eyes apparent. Foliation varies from weak to strong, in places the strain is extreme. Usually forms massive to blocky, rounded outcrops. Probably emplaced originally as dykes or sills, now contacts are transposed parallel to foliation. May contain small xenoliths. May be mis-identified meta-volcanic in certain instances

Dacite/Andesite Dyke:

Light grey to greenish grey, hornblende +/- plagioclase phenocrysts in fine matrix. Weakly vesicular. Dykes up to 3-5m wide, often emplaced parallel to foliation. Country rocks adjacent host disseminated pyrite in many cases, weathering rusty.

Granodiorite – diorite:

Medium grained, grey – white granodiorite (and rarely quartz diorite) of the Coast plutonic Complex intrusions. Unfoliated. Often a zone of hard, compact, blue-grey to dark grey hornfels occurs along contacts of included rafts and pendants.

APPENDIX 2

Rock Sample Descriptions- 2002:

Sample	Location	NAD 83	Description	Cu ppm	Pb ppm	Zn ppm	Ag ppm	As ppm	Au ppb
119651	542250E	5520980N	Outcrop sample, highly oxidized sericite altered intermediate volcanics (Andesite - Dacite). Texture is massive, sulphides +/- 5%, dominantly py.	72	< 3	58	0.3	< 2	111.6
119652	545177E	5519982N	Outcrop sample, sericite-chlorite schist, strong cleavage foliation, sulphides occur as blebs in cleavage plane, up to 5%, py dominant.	194	3	54	< .3	21	14.9
119653	544944E	5520753N	Outcrop sample of sericite-chlorite schist. Sulphides are confined along cleavage, 3-5%, dominantly py.	51	7	35	< .3	7	10.8
119654	544849E	5520638N	Outcrop sample of extrusive, volcaniclastics (intermediate), feldspar porphyritic, lensoid hematite occurances with reddish coronas, malachite noted in assay sample.	140	< 3	75	0.3	6	4.4
119656	545695E	5520255N	Outcrop sample of dominantly chlorite altered volcaniclastics, disseminated sulphides +/- 3%, cleavage may represent primary bedding.	42	< 3	86	< .3	2	< .2
119657	542663E	5520838N	Outcrop sample of highly oxidized sericite schist, very well devoloped cleavage with sulphides parallel, +/- 3%.	39	< 3	13	< .3	15	24.6
119658	544170E	5520199N	Outcrop sample of carbonate rich volcaniclastics, feldspar porphyritic, disseminated sulphides, +/- 3%.	95	< 3	99	< .3	45	3.4

APPENDIX 3

Analytical Method and Results

MDFA30/50/60 : SOIL, SILICATE AND ORE ANALYSIS OF GOLD BY FIRE ASSAY FUSION/AAS ANALYSIS

SCOPE:

This method begins with fire assay fusion using lead as the collecting medium, followed by the delineation of the silver bead within the defined analytical ranges where the limitations of (ASFA, NSFA, and BLST) Au are acceptable. The final gold analysis is conducted by the AAS.

PRINCIPLE:

This method consists of a reducing fusion followed by an oxidizing fusion. Fusing with a litharge-based flux reduces the samples. This will form a complex liquid borosilicate slag and a liquid lead phase. The molten lead collects the precious metals and the gangue elements are separated into the slag. The difference in relative density between the lead and the slag allow easy separation after solidification. The resultant lead button is then cupelled in the furnace (oxidizing fusion). The molten lead containing the gold or silver is oxidized to lead oxide and absorbed into a porous vessel called a cupel. This leaves the precious metal bead separated for analysis by dissolution and AAS.

APPLICABLE ANALYTE RANGES FOR NSFA AU:

Element Code	Unit	Method Detection Limit	Upper Limit
Au	ppb	1	10000
Au10	ppb	5	10000
Au15	G/T	0.01	10.00
Au20	ppb	5	10000
Au30	ppb	5	10000
Au40	ppb	5	10000
Au50	ppb	5	10000
Au60	ppb	5	10000

Higher levels require additional silver for parting.

APPLICABLE ANALYTE RANGES FOR ASFA AU:

Element Code	Unit	Method D... Limit	U...
Au	ppm	0.03	10.00
Au16	ppm	0.005	10.000
Au20	ppm	0.005	10.000
Au30	ppb	5	10 000
Au40	ppm	0.005	10.000
Au50	ppm	0.005	10.000
Au60	ppm	0.005	10.000
AuM1	ppm	0.03	10.000

APPLICABLE ANALYTE RANGES FOR BLST AU:

Element Code	Unit	Method Detection Limit	Upper Limit
AuB1	ppm	0.03	10000

REAGENTS:

1.1 General Requirements - unless otherwise specified, all reagents shall be of analytical grade, and deionized or nanopure water shall be used.
1.2 Hydrochloric Acid 10 mol/L (S.G 1.16g/ml)
1.3 Nitric Acid 15.7mol/L (S.G 1.42g/mL)
1.4 1% Hydrochloric Acid and 300ppm of Magnesium Oxide Solution
1.5 Silica, silicon dioxide, technical
1.6 Flour, plain
1.7 Silver nitrate, AR crystals or Silver Wire, AR
1.8 Iron nails
1.9 Potassium nitrate, technical
1.10 Copper Wire.
1.11 Pre-Mixed Fire Assay Flux

PRECISION:

The tolerance criteria for variation of analytical data results from all stages of the analysis and are subjected to the matrix and the specific technique used.

Expected tolerance criteria at various concentrations for this method are as follows:

		Tolerance
Au - Flame Atomic Absorption Spectroscopy Measurement (ppb)	Method Detection Limit (MDL)	+/- 100%
	2xMDL to 4xMDL	+/- 50%
	5xMDL to 10xMDL	+/-25%
	11xMDL to 20xMDL	+/-20%
	>20xMDL	+/-15%

APPENDIX 4

ANALYTICAL RESULTS

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716
(ISO 9002 Accredited Co.)

GEOCHEMICAL ANALYSIS CERTIFICATE

Volcanic City Resources File # A205432

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Au* ppb
SI	<1	5	5	3	<.3	2	<1	<2	.03	<2	<8	<2	<2	2	<.5	<3	<3	<1	.06	<.001	1	<1	<.01	2	<.01	<3	<.01	.32	<.01	<2	.2
C 119651	2	72	<3	58	.3	6	13	646	7.33	<2	<8	<2	<2	26	<.5	5	<3	38	.26	.052	1	10	1.40	52	.19	7	1.85	.05	.08	2	111.6
C 119652	3	194	3	54	<.3	12	23	840	4.84	21	<8	<2	<2	16	<.5	8	<3	72	.34	.043	1	10	2.00	128	.20	6	2.20	.04	.16	3	14.9
C 119653	1	51	7	35	<.3	5	1	399	5.68	7	<8	<2	<2	11	<.5	5	<3	102	.03	.041	1	12	.88	39	.21	7	1.49	.07	.11	<2	10.8
C 119654	<1	140	<3	75	.3	33	25	1752	6.37	6	9	2	<2	46	<.5	9	<3	115	.66	.044	1	29	2.41	29	.13	5	3.64	.03	.05	3	4.4
C 119656	1	42	<3	86	<.3	26	26	964	4.71	2	<8	<2	<2	98	<.5	8	<3	121	.84	.057	1	27	2.40	13	.26	5	2.77	.05	.04	2	<.2
C 119657	4	39	<3	13	<.3	17	52	310	9.70	15	<8	<2	<2	29	<.5	4	4	23	1.35	.412	4	15	.66	63	.05	7	1.10	.03	.20	4	24.6
C 119658	<1	95	<3	99	<.3	22	26	1481	4.93	45	<8	2	<2	38	<.5	16	<3	124	.69	.056	1	24	3.60	13	.18	4	3.70	.06	.01	4	3.4
STANDARD DS4/AU-R	7	120	32	152	.3	34	12	753	3.09	23	<8	<2	4	26	4.8	7	5	74	.51	.090	16	167	.57	145	.09	7	1.65	.03	.15	5	479.4

GROUP 1D - 0.50 GM SAMPLE LEACHED WITH 3 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 10 ML, ANALYSED BY ICP-ES.
UPPER LIMITS - AG, AU, HG, W = 100 PPM; MO, CO, CD, SB, BI, TH, U & B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM.
ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS > 1%, AG > 30 PPM & AU > 1000 PPB
- SAMPLE TYPE: ROCK R150 60C AU* IGNITED, ACID LEACHED, ANALYZED BY ICP-MS. (10 gm)

DATE RECEIVED: DEC 12 2002 **DATE REPORT MAILED:** Dec 20/02 **SIGNED BY.** D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

Data A FA

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716
(ISO 9002 Accredited Co.)

GEOCHEMICAL ANALYSIS CERTIFICATE

Volcanic City Resources PROJECT VC File # A205006 Page 1

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Au** ppb
G-1	1	2	<3	38	<.3	5	3	521	1.90	<2	<8	<2	4	115	<.5	<3	<3	40	.66	.082	10	12	.54	255	.14	<3	1.24	.21	.60	2	<2
L38+00W 0+00	6	26	6	39	<.3	5	5	341	4.08	4	<8	<2	<2	21	<.5	<3	<3	82	.31	.075	5	10	.65	34	.14	3	1.50	.01	.05	<2	<2
L38+00W 0+50S	1	31	<3	58	.5	10	8	331	3.62	9	<8	<2	2	15	<.5	<3	<3	76	.13	.058	3	17	.80	61	.13	<3	3.76	.01	.06	<2	7
L38+00W 1+00S	5	31	6	20	.6	10	2	154	6.40	2	<8	<2	<2	7	<.5	<3	<3	152	.06	.099	2	61	.60	13	.16	<3	2.97	.01	.02	<2	9
L38+00W 1+50S	2	33	5	30	.5	5	3	367	4.38	4	<8	<2	<2	10	<.5	<3	<3	104	.09	.061	2	13	.63	33	.06	<3	2.92	.01	.03	<2	14
L38+00W 2+00S	3	81	5	86	.5	6	9	371	4.90	8	<8	<2	2	10	.5	<3	<3	99	.13	.144	5	20	.78	50	.11	3	6.20	.01	.05	6	50
L38+00W 2+50S	5	54	10	64	.5	9	15	825	6.13	27	<8	<2	<2	4	<.5	<3	<3	97	.05	.113	7	16	.50	30	.03	3	3.80	.01	.03	<2	49
L38+00W 3+00S	3	18	3	28	.3	3	2	206	5.38	17	<8	<2	<2	9	<.5	<3	<3	135	.08	.053	2	14	.39	24	.19	<3	1.95	.01	.04	<2	<2
L38+00W 3+50S	4	18	9	17	<.3	1	1	99	4.18	13	<8	<2	2	4	<.5	<3	<3	111	.05	.032	3	11	.19	11	.15	<3	2.91	.01	.02	<2	7
L38+00W 4+00S	4	18	6	17	<.3	1	<1	102	4.65	12	<8	<2	2	4	<.5	<3	<3	109	.04	.035	2	12	.19	13	.17	<3	3.23	.01	.02	<2	4
L38+00W 4+50S	5	102	<3	69	.7	8	16	381	4.27	15	<8	<2	<2	10	1.3	<3	<3	57	.12	.091	4	16	.36	45	.10	<3	7.12	.01	.04	2	19
L38+00W 5+00S	4	62	6	51	<.3	8	5	333	4.30	11	<8	<2	2	8	.6	<3	<3	72	.10	.078	4	21	.56	39	.14	<3	6.40	.01	.08	3	12
L38+00W 5+50S	4	29	7	20	<.3	3	<1	141	5.29	6	<8	<2	4	4	.5	<3	<3	76	.06	.067	5	19	.26	29	.15	3	7.15	.01	.03	<2	7
L38+00W 6+00S	4	32	9	20	.3	3	<1	140	6.19	5	<8	<2	5	4	.5	<3	<3	87	.05	.068	5	23	.29	35	.18	3	7.86	.01	.03	<2	7
L38+00W 6+50S	4	41	6	36	<.3	4	2	169	4.23	6	<8	<2	3	7	<.5	<3	<3	89	.08	.073	4	20	.40	42	.13	<3	5.91	.01	.06	4	7
L38+00W 7+00S	5	166	<3	35	1.3	3	<1	224	5.77	<2	<8	<2	2	7	.8	<3	<3	139	.09	.086	4	10	1.13	55	.16	<3	7.87	.01	.08	<2	28
RE L38+00W 7+00S	5	172	<3	36	1.4	4	<1	234	5.87	<2	<8	<2	<2	8	.8	<3	<3	141	.10	.087	4	10	1.15	55	.16	<3	7.98	.01	.08	<2	<2
L38+00W 7+50S	6	48	8	52	.3	5	3	253	4.69	22	<8	<2	2	14	.5	<3	<3	101	.14	.043	5	15	.53	79	.16	3	5.81	.02	.05	2	10
L38+00W 8+00S	8	77	4	35	.3	4	2	281	4.16	10	<8	<2	2	10	<.5	<3	<3	78	.11	.080	3	16	.66	59	.13	<3	5.99	.02	.10	6	15
L38+00W 8+50S	19	109	<3	32	<.3	3	1	269	5.07	4	<8	<2	2	6	.5	<3	<3	106	.08	.087	4	13	.99	80	.15	<3	6.89	.01	.09	<2	16
L38+00W 9+00S	9	57	4	32	.3	6	3	223	5.57	7	<8	<2	<2	10	<.5	<3	<3	114	.09	.093	3	18	.61	37	.15	<3	2.30	.02	.06	<2	5
L38+00W 9+50S	10	48	5	29	.4	5	3	215	5.65	6	<8	<2	2	9	<.5	<3	<3	132	.08	.087	3	16	.59	39	.17	<3	2.20	.02	.06	<2	4
L38+00W 10+00S	4	25	6	13	.4	3	1	93	3.04	4	<8	<2	<2	11	<.5	<3	<3	82	.12	.052	2	6	.25	14	.10	<3	1.45	.02	.03	<2	4
L36+00W 0+00	4	26	7	12	<.3	5	4	77	2.51	4	<8	<2	<2	10	<.5	<3	<3	136	.11	.025	2	10	.20	17	.15	<3	.58	.01	.02	<2	5
L36+00W 0+50S	3	38	<3	30	<.3	6	4	213	3.94	5	<8	<2	3	10	.8	<3	<3	65	.11	.113	3	20	.52	26	.11	<3	7.41	.01	.03	<2	17
L36+00W 1+00S	5	24	7	26	<.3	5	1	162	5.87	9	<8	<2	2	7	<.5	<3	<3	183	.10	.051	4	16	.40	28	.23	<3	3.58	<.01	.03	2	15
L36+00W 1+50S	3	9	6	14	.3	3	2	97	4.06	2	<8	<2	2	10	<.5	<3	<3	160	.09	.053	3	11	.23	11	.14	<3	1.29	.01	.03	<2	8
L35+00W 0+50S	4	30	4	21	.3	7	2	161	6.62	7	<8	<2	2	9	.5	<3	<3	187	.08	.072	2	15	.34	24	.32	<3	2.29	<.01	.03	<2	11
L35+00W 1+00S	4	45	5	25	<.3	6	2	218	7.33	10	<8	<2	3	7	<.5	<3	<3	96	.08	.099	3	17	.51	28	.20	<3	2.69	<.01	.03	<2	10
L35+00W 1+50S	4	37	5	38	.5	8	7	259	4.23	14	<8	<2	3	11	<.5	<3	<3	81	.11	.041	3	13	.63	39	.12	<3	2.80	.01	.04	<2	22
L35+00W 2+00S	2	31	4	26	<.3	6	3	202	3.92	3	<8	<2	2	10	<.5	<3	<3	76	.11	.093	4	17	.64	37	.09	<3	5.17	.01	.04	<2	57
L35+00W 2+50S	2	34	12	36	.3	8	6	275	12.56	11	<8	2	4	10	<.5	<3	<3	224	.10	.115	3	27	.64	31	.28	3	3.89	<.01	.03	2	27
L35+00W 3+00S	4	37	7	51	<.3	5	5	434	6.42	12	<8	<2	2	7	<.5	<3	<3	137	.08	.059	2	11	.64	19	.24	<3	3.64	<.01	.02	<2	13
L35+00W 3+50S	4	13	10	33	<.3	4	4	488	4.10	5	<8	<2	3	6	<.5	<3	3	92	.07	.044	3	11	.31	25	.12	<3	2.62	.01	.02	<2	5
L35+00W 4+00S	4	45	7	86	.4	7	10	1642	4.45	14	<8	<2	2	14	.7	<3	<3	85	.21	.090	7	14	.64	56	.11	<3	3.45	.02	.08	<2	9
STANDARD DS4/AU-S	7	123	29	156	<.3	35	11	799	3.05	22	<8	<2	4	28	5.4	5	5	76	.51	.092	17	172	.58	150	.09	<3	1.66	.03	.17	4	48

GROUP 1D - 0.50 GM SAMPLE LEACHED WITH 3 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 10 ML, ANALYSED BY ICP-ES.
UPPER LIMITS - AG, AU, HG, W = 100 PPM; MO, CO, CD, SB, BI, TH, U & B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM.
- SAMPLE TYPE: SOIL SS80 60C AU** GROUP 3B - 15.00 GM SAMPLE ANALYSIS BY FA/ICP.
Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: NOV 13 2002 **DATE REPORT MAILED:** Nov 25/02 **SIGNED BY** ..... D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

Data FA

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Au** ppb
G-1	1	2	3	37	<.3	5	4	541	1.96	<2	<8	<2	4	101	<.5	<3	<3	39	.61	.079	10	14	.51	233	.14	<3	1.11	.17	.56	<2	<2
L35+00W 4+50S	2	52	4	33	.6	5	16	369	4.28	10	<8	<2	2	7	.8	<3	4	53	.06	.080	6	9	.19	28	.13	<3	5.54	.01	.02	<2	22
L35+00W 5+00S	2	24	8	55	.4	14	27	2472	4.50	23	<8	<2	<2	8	.5	3	<3	80	.08	.055	3	27	.33	51	.12	<3	3.57	.01	.02	<2	40
L35+00W 5+50S	4	40	7	28	.4	5	2	212	6.08	7	<8	<2	2	5	.5	3	3	97	.06	.031	4	14	.35	36	.18	<3	3.79	.01	.04	<2	12
L35+00W 6+00S	2	62	<3	32	<.3	3	23	483	6.08	3	<8	<2	2	5	.7	<3	<3	66	.05	.084	4	12	.25	24	.12	<3	7.08	.01	.02	<2	9
L35+00W 6+50S	6	31	9	22	<.3	4	1	163	7.26	9	<8	<2	3	5	<.5	<3	<3	105	.05	.071	3	12	.29	26	.15	<3	2.24	.01	.04	<2	11
L35+00W 7+00S	8	49	14	33	<.3	6	2	246	6.66	17	<8	<2	3	8	.6	4	<3	107	.08	.080	4	15	.57	70	.17	<3	3.87	.01	.07	<2	14
L35+00W 7+50S	8	38	9	29	<.3	5	1	235	6.79	16	9	<2	2	6	.5	<3	<3	126	.07	.070	4	14	.59	64	.21	<3	3.35	.01	.07	<2	21
L35+00W 8+00S	3	14	5	11	<.3	3	1	106	3.03	5	<8	<2	<2	4	<.5	<3	<3	103	.02	.052	7	14	.25	43	.18	<3	1.17	.01	.09	<2	4
L35+00W 8+50S	4	20	8	14	<.3	4	<1	161	5.83	12	<8	<2	2	7	<.5	4	<3	165	.12	.131	7	22	.43	64	.27	<3	2.10	.01	.11	<2	5
L35+00W 9+00S	4	68	6	20	.3	4	2	168	5.21	7	9	<2	<2	6	.5	<3	<3	95	.06	.110	4	14	.32	50	.14	<3	3.30	.01	.05	<2	5
L35+00W 9+50S	7	172	15	26	.4	4	<1	209	13.53	18	8	<2	3	6	.5	4	<3	96	.06	.099	2	17	.44	30	.14	3	3.59	.01	.03	<2	44
L35+00W 10+00S	11	31	8	12	<.3	2	<1	115	5.98	7	<8	<2	2	3	<.5	3	<3	166	.03	.041	4	11	.21	21	.17	<3	2.23	.01	.03	<2	21
L35+00W 0+00	2	18	5	12	<.3	5	3	117	2.89	6	9	<2	<2	10	<.5	<3	<3	101	.09	.031	4	12	.31	15	.13	<3	1.68	.01	.02	5	35
L34+00W 0+50S	3	15	12	15	<.3	4	2	125	5.39	6	9	<2	2	11	<.5	<3	<3	164	.09	.106	2	14	.27	19	.24	<3	1.16	<.01	.03	<2	6
L34+00W 1+00S	3	35	5	34	<.3	8	4	298	5.94	12	<8	<2	2	10	<.5	3	<3	97	.10	.092	3	20	.79	30	.16	<3	2.70	.01	.06	<2	59
L34+00W 1+50S	3	29	5	17	<.3	4	2	159	6.74	7	<8	<2	2	7	<.5	<3	<3	151	.08	.129	5	15	.31	17	.19	<3	3.38	.01	.03	<2	29
L34+00W 2+00S	2	18	10	18	<.3	5	3	129	4.18	8	<8	<2	<2	9	<.5	<3	<3	119	.08	.078	3	11	.38	14	.10	<3	1.92	.01	.03	<2	15
L34+00W 2+50S	2	39	7	122	<.3	6	12	545	3.95	69	9	<2	2	15	.6	4	<3	62	.23	.048	3	10	.71	44	.08	<3	2.49	.02	.05	<2	13
L34+00W 3+00S	3	12	10	36	<.3	2	2	172	5.00	11	<8	<2	2	7	<.5	3	<3	147	.08	.031	3	11	.34	26	.20	<3	2.21	.01	.03	<2	4
RE L34+00W 3+00S	3	12	9	36	<.3	4	2	175	5.03	10	<8	<2	2	7	<.5	<3	<3	149	.08	.031	3	11	.34	26	.20	<3	2.24	.01	.03	<2	7
L34+00W 3+50S	5	20	9	46	<.3	4	3	298	5.11	17	10	<2	2	8	<.5	<3	<3	145	.12	.030	3	9	.60	31	.26	<3	1.84	.01	.06	<2	12
L34+00W 4+00S	5	35	7	54	<.3	2	3	265	4.53	13	<8	<2	2	12	.5	<3	<3	81	.24	.041	6	16	.53	47	.16	<3	6.05	.02	.06	4	19
L34+00W 4+50S	4	110	4	99	.7	9	47	866	3.81	56	<8	<2	2	14	1.1	<3	<3	54	.17	.087	11	14	.41	38	.09	<3	6.49	.02	.03	<2	13
L34+00W 5+00S	3	21	6	39	<.3	6	7	1363	5.02	18	<8	<2	<2	6	<.5	<3	<3	89	.07	.064	3	14	.41	37	.12	<3	2.14	.01	.03	<2	7
L34+00W 5+50S	5	40	8	47	<.3	8	25	705	5.65	29	8	<2	<2	6	<.5	<3	<3	102	.08	.071	4	17	.34	22	.17	<3	3.21	.01	.02	<2	16
L34+00W 6+00S	4	40	6	32	<.3	2	1	196	5.15	18	<8	<2	<2	6	<.5	<3	<3	90	.10	.060	3	12	.32	34	.14	<3	4.44	.01	.05	<2	19
L34+00W 6+50S	4	80	<3	34	<.3	2	2	230	3.92	11	<8	<2	<2	7	.5	<3	<3	62	.06	.105	3	9	.55	67	.11	<3	7.04	.01	.10	<2	25
L34+00W 7+00S	6	28	9	16	<.3	3	1	96	5.23	10	8	<2	2	6	<.5	<3	<3	141	.04	.074	3	12	.23	31	.19	<3	2.22	.01	.05	<2	5
L34+00W 7+50S	6	33	8	18	<.3	1	<1	105	6.09	9	9	<2	3	6	<.5	<3	<3	117	.05	.066	4	12	.24	42	.13	<3	4.25	.01	.03	<2	7
L34+00W 8+00S	4	16	8	21	<.3	2	2	177	4.16	3	9	<2	2	8	<.5	<3	<3	101	.06	.057	3	7	.32	30	.21	<3	1.61	.01	.07	<2	<2
L34+00W 8+50S	7	34	7	23	<.3	1	1	117	5.41	12	<8	<2	3	5	<.5	<3	<3	121	.05	.052	4	11	.27	44	.17	<3	2.75	.01	.04	<2	10
L34+00W 9+00S	3	98	<3	18	<.3	2	<1	130	6.88	<2	<8	<2	2	6	.6	<3	<3	100	.06	.083	3	17	.38	33	.15	<3	6.02	.01	.04	<2	18
L34+00W 9+50S	8	204	3	28	.5	3	<1	194	12.19	6	9	<2	4	7	.5	<3	4	79	.07	.158	2	16	.40	23	.14	<3	6.63	.01	.04	<2	20
L34+00W 10+00S	4	27	4	17	<.3	<1	<1	164	5.54	3	<8	<2	2	10	<.5	<3	<3	166	.08	.050	3	9	.39	35	.33	<3	2.78	.01	.04	<2	7
STANDARD DS4/AU-S	6	120	32	149	<.3	33	11	790	3.11	20	8	<2	4	27	5.1	5	6	73	.51	.086	17	167	.57	142	.09	<3	1.61	.03	.16	5	53

Sample type: SOIL SS80 60C. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

Data A FA ___

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Au** ppb
G-1	1	3	4	39	<.3	4	3	544	1.89	<2	<8	<2	5	95	<.5	<3	<3	40	.59	.080	10	13	.54	237	.14	<3	1.10	.14	.55	2	<2
L32+00W 0+00	1	9	4	7	<.3	1	1	71	1.87	6	<8	<2	<2	6	<.5	<3	<3	92	.04	.030	1	5	.18	8	.08	<3	.61	<.01	.02	<2	<2
L32+00W 0+50S	2	10	6	8	<.3	3	2	51	2.58	6	<8	<2	<2	7	<.5	<3	<3	147	.04	.054	2	6	.11	7	.15	<3	.50	<.01	.02	<2	23
L32+00W 1+00S	1	9	6	7	<.3	1	2	45	1.51	4	<8	<2	<2	8	<.5	<3	<3	94	.06	.021	2	5	.12	16	.12	<3	.64	<.01	.01	<2	2
L32+00W 1+50S	2	29	<3	13	.3	2	2	113	3.65	<2	<8	<2	<2	8	.5	<3	<3	35	.05	.112	10	17	.36	46	.06	<3	5.67	<.01	.02	<2	14
L32+00W 2+00S	1	9	7	10	<.3	3	1	72	3.18	5	<8	<2	<2	7	<.5	<3	<3	91	.06	.048	2	8	.21	15	.11	<3	1.14	<.01	.02	<2	5
L32+00W 2+50S	5	35	10	27	<.3	2	3	178	2.38	6	<8	<2	<2	8	<.5	<3	<3	83	.08	.024	5	10	.42	22	.13	<3	1.76	<.01	.04	4	15
L32+00W 3+00S	3	29	7	29	<.3	1	4	305	2.91	15	<8	<2	<2	7	<.5	<3	<3	55	.07	.046	2	8	.43	30	.08	<3	2.38	<.01	.03	<2	22
L32+00W 3+50S	4	22	9	22	<.3	1	2	152	4.73	13	<8	<2	2	5	<.5	<3	<3	132	.06	.034	1	12	.39	21	.16	<3	2.10	<.01	.03	<2	25
L32+00W 4+00S	6	33	9	30	.3	2	2	165	4.14	28	<8	<2	2	7	<.5	<3	<3	90	.10	.054	2	8	.33	41	.14	<3	1.59	.01	.05	5	32
L32+00W 4+50S	4	28	4	28	<.3	1	2	191	4.50	27	<8	<2	3	5	.5	<3	<3	75	.06	.031	4	15	.38	37	.16	<3	6.09	<.01	.04	3	8
L32+00W 5+00S	4	44	9	40	<.3	3	6	665	3.01	17	<8	<2	<2	16	<.5	<3	<3	58	.21	.059	3	9	.48	56	.07	<3	2.53	.02	.09	<2	18
L32+00W 5+50S	5	42	9	40	<.3	4	4	447	3.65	13	<8	<2	<2	12	<.5	<3	<3	72	.18	.072	3	10	.50	59	.09	<3	3.76	.01	.08	<2	24
L32+00W 6+00S	4	31	4	40	<.3	3	2	318	4.79	21	<8	<2	2	5	.5	<3	<3	85	.08	.074	3	14	.38	35	.15	<3	6.10	<.01	.04	3	10
L32+00W 6+50S	4	34	<3	34	<.3	4	2	219	5.78	12	<8	<2	3	5	<.5	<3	<3	88	.05	.049	3	16	.40	43	.15	<3	5.92	<.01	.04	3	6
L32+00W 7+00S	5	32	10	28	<.3	3	2	216	4.39	14	<8	<2	2	8	<.5	<3	<3	107	.10	.043	2	11	.49	44	.15	<3	2.89	.01	.05	<2	5
L32+00W 7+50S	8	61	13	34	.8	5	3	240	4.42	13	<8	<2	2	12	.8	<3	<3	72	.11	.095	4	12	.54	65	.09	<3	3.70	<.01	.09	<2	15
L32+00W 8+00S	6	22	8	18	.4	3	1	114	4.31	11	<8	<2	2	7	<.5	<3	<3	110	.08	.035	3	9	.20	33	.16	<3	1.41	<.01	.04	<2	4
RE L32+00W 8+00S	6	20	10	19	.4	2	1	114	4.34	11	<8	<2	2	7	<.5	<3	<3	110	.07	.034	2	8	.20	33	.16	<3	1.39	<.01	.04	<2	17
L32+00W 8+50S	4	35	11	44	.3	3	4	290	4.14	23	<8	<2	3	10	<.5	<3	<3	76	.09	.049	4	13	.59	80	.13	<3	3.49	.01	.09	<2	16
L32+00W 9+00S	6	31	7	30	.3	3	3	224	4.89	18	<8	<2	<2	5	<.5	<3	<3	112	.04	.044	4	10	.31	26	.11	<3	1.63	<.01	.03	<2	10
L32+00W 9+50S	3	15	11	21	.3	1	4	273	3.14	20	<8	<2	<2	5	<.5	<3	<3	76	.05	.057	3	7	.18	20	.05	<3	.90	<.01	.03	<2	4
L32+00W 10+00S	7	48	7	41	.3	6	2	330	5.38	19	<8	<2	2	6	<.5	<3	<3	96	.07	.077	5	14	.41	48	.11	<3	4.43	<.01	.06	<2	21
L30+00W 0+00	<1	43	3	30	<.3	7	8	366	3.36	10	<8	<2	<2	18	<.5	<3	<3	74	.21	.029	3	15	.78	51	.14	<3	2.75	<.01	.04	<2	26
L30+00W 0+50S	2	23	8	22	<.3	5	5	189	3.30	7	<8	<2	<2	15	<.5	<3	<3	111	.16	.055	2	13	.53	30	.20	<3	1.25	.01	.03	<2	34
L30+00W 1+00S	1	8	5	7	<.3	3	3	42	1.43	4	<8	<2	<2	9	<.5	<3	<3	125	.07	.015	2	7	.05	21	.11	<3	.53	<.01	.01	<2	3
L30+00W 1+50S	5	45	4	22	<.3	8	7	133	5.60	13	8	<2	2	24	<.5	<3	<3	62	.46	.104	5	13	.57	41	.08	<3	1.40	.01	.03	2	15
L30+00W 2+00S	1	8	8	25	.7	5	2	76	2.67	8	<8	<2	<2	23	<.5	<3	<3	57	.62	.046	4	8	.11	30	.05	<3	1.27	.01	.02	<2	5
L30+00W 2+50S	2	146	25	102	<.3	21	10	225	1.52	44	<8	<2	<2	75	1.2	<3	<3	48	.87	.114	30	15	.50	62	.06	<3	4.23	.01	.02	<2	18
L30+00W 3+00S	3	65	40	114	1.5	5	4	443	13.05	59	<8	<2	4	4	<.5	<3	<3	68	.04	.128	3	19	.39	26	.19	3	3.74	<.01	.01	<2	101
L30+00W 3+50S	3	35	10	39	<.3	5	4	193	3.27	13	<8	<2	<2	7	<.5	<3	<3	91	.09	.070	5	16	.47	23	.12	<3	3.97	.01	.02	<2	19
L30+00W 4+00S	3	34	6	46	<.3	3	4	318	7.47	18	<8	<2	<2	4	<.5	<3	<3	117	.04	.099	7	12	.48	20	.06	<3	2.35	.01	.02	<2	4
L30+00W 4+50S	5	17	15	53	<.3	3	9	627	5.22	18	<8	<2	2	6	<.5	<3	<3	106	.06	.057	8	9	.70	25	.12	<3	1.85	<.01	.02	<2	45
L30+00W 5+00S	4	52	8	49	<.3	7	3	270	5.58	37	<8	<2	3	7	<.5	<3	<3	89	.08	.065	3	20	.48	38	.15	<3	4.45	.01	.04	<2	13
L30+00W 5+50S	4	37	10	65	<.3	8	4	367	3.96	14	<8	<2	2	12	<.5	<3	<3	92	.15	.051	11	14	.70	65	.14	<3	2.83	.02	.06	<2	6
STANDARD DS4/AU-S	7	122	34	151	<.3	34	12	799	3.00	22	8	<2	4	27	4.7	6	5	74	.50	.089	16	167	.58	144	.08	<3	1.63	.03	.16	5	49

Sample type: SOIL $S80 60C. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

Data FA

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Au** ppb
G-1	1	2	<3	39	<.3	5	3	510	1.89	<2	<8	<2	6	97	<.5	<3	<3	40	.58	.083	10	12	.53	234	.14	<3	1.06	.16	.55	2	4
L30+00W 6+00S	4	27	6	30	<.3	4	1	174	3.97	15	<8	<2	3	8	.5	<3	<3	75	.09	.040	2	13	.38	44	.12	<3	4.23	.02	.03	<2	9
L30+00W 6+50S	5	28	8	29	<.3	3	1	162	4.74	11	<8	<2	3	6	.5	<3	<3	100	.07	.044	4	13	.30	36	.17	<3	3.60	.01	.04	<2	13
L30+00W 7+00S	5	25	4	33	.3	2	1	179	4.65	12	<8	<2	2	13	<.5	<3	<3	126	.45	.037	4	10	.39	52	.20	<3	1.66	.01	.05	<2	12
L30+00W 7+50S	7	22	6	15	<.3	3	<1	81	4.18	15	<8	<2	2	4	.6	3	<3	123	.05	.036	3	8	.13	23	.15	<3	1.64	.01	.03	<2	9
L30+00W 8+00S	4	18	6	20	.3	2	3	144	3.25	17	<8	<2	<2	3	<.5	<3	<3	107	.03	.038	2	6	.20	16	.09	<3	1.62	.01	.02	<2	6
L30+00W 8+50S	5	59	<3	33	<.3	4	3	311	4.63	8	<8	<2	2	8	.6	<3	<3	97	.09	.086	4	14	.67	81	.14	<3	5.46	.02	.12	3	13
L30+00W 9+00S	5	27	7	22	.3	2	2	170	3.82	27	<8	<2	2	4	<.5	<3	<3	98	.06	.053	5	7	.26	24	.11	<3	1.70	.01	.04	<2	13
L30+00W 9+50S	4	37	6	31	1.3	6	2	435	4.78	21	<8	<2	2	7	.6	3	<3	72	.06	.118	3	15	.36	37	.09	<3	3.94	.01	.04	<2	15
L30+00W 10+00S	8	24	71	96	.5	8	10	1342	10.30	1218	<8	<2	2	10	<.5	5	<3	31	.02	.143	5	5	.30	44	.01	3	2.18	<.01	.04	<2	39
L28+00W 0+00	2	10	4	7	<.3	2	2	45	3.21	7	<8	<2	<2	5	<.5	<3	<3	128	.04	.047	3	7	.11	10	.13	<3	.85	.01	<.01	<2	54
L28+00W 0+50S	2	16	8	19	.5	4	<1	119	6.92	11	<8	<2	3	6	.6	3	<3	98	.05	.092	6	22	.30	37	.16	<3	4.52	.01	.03	<2	13
L28+00W 1+00S	3	28	3	56	.3	11	15	3945	.64	<2	<8	<2	<2	138	1.0	<3	<3	4	3.50	.136	4	3	.03	38	.01	4	1.64	.01	.02	<2	<2
L28+00W 1+50S	2	23	5	26	.3	5	3	182	4.97	17	<8	<2	<2	7	<.5	<3	<3	110	.07	.069	4	13	.37	26	.09	<3	2.22	.01	.03	<2	14
L28+00W 2+00S	1	13	4	13	<.3	3	3	82	2.43	9	<8	<2	<2	6	<.5	<3	<3	71	.04	.037	4	6	.16	17	.05	<3	1.17	<.01	.02	<2	14
L28+00W 2+50S	2	42	9	46	<.3	11	9	401	4.33	33	<8	<2	2	9	.5	<3	<3	52	.10	.099	5	17	.75	43	.05	<3	3.90	.01	.04	<2	24
L28+00W 3+00S	4	26	5	21	<.3	6	4	119	4.90	5	<8	<2	3	5	<.5	<3	<3	162	.04	.038	6	15	.19	18	.09	<3	1.46	.01	.02	<2	15
L28+00W 3+50S	2	4	5	21	<.3	3	2	203	1.59	4	<8	<2	<2	4	<.5	<3	<3	46	.03	.028	10	5	.20	16	.02	<3	1.02	<.01	.03	<2	3
L28+00W 4+00S	1	3	6	15	<.3	3	1	111	.99	3	<8	<2	<2	4	<.5	<3	<3	35	.03	.014	10	3	.13	14	.02	<3	.87	<.01	.02	<2	4
L28+00W 4+50S	2	7	7	30	<.3	3	3	246	2.29	7	<8	<2	<2	5	<.5	<3	<3	80	.04	.026	10	6	.25	17	.03	<3	1.05	.01	.03	<2	4
L28+00W 5+00S	4	57	6	68	<.3	8	13	576	4.07	24	<8	<2	2	22	.5	<3	<3	76	.24	.086	5	13	.77	123	.10	<3	3.45	.02	.15	<2	15
RE L18+00W 0+00	1	5	4	8	<.3	3	2	47	1.17	2	<8	<2	<2	9	<.5	<3	<3	110	.08	.010	2	4	.07	7	.09	<3	.47	.01	.01	<2	6
L28+00W 5+50S	3	27	7	44	<.3	5	3	259	3.81	16	<8	<2	2	7	<.5	<3	<3	86	.10	.051	4	12	.50	48	.14	<3	2.72	<.01	.05	<2	17
L28+00W 6+00S	4	11	11	30	<.3	3	1	146	6.91	20	<8	<2	2	5	<.5	<3	<3	178	.07	.022	3	16	.31	25	.26	<3	2.08	.01	.03	<2	5
L28+00W 6+50S	5	28	8	24	<.3	4	1	128	5.38	17	<8	<2	2	4	<.5	<3	<3	146	.05	.035	3	12	.25	26	.18	<3	2.72	.01	.02	<2	3
L28+00W 7+00S	4	41	7	54	<.3	6	2	242	4.27	22	<8	<2	2	8	.7	3	<3	69	.10	.083	3	13	.48	42	.11	<3	5.23	.01	.07	<2	5
L28+00W 7+50S	5	49	<3	37	.3	5	3	252	3.60	15	<8	<2	2	8	.6	<3	<3	53	.08	.120	4	11	.49	96	.09	<3	6.07	.01	.08	<2	15
L28+00W 8+00S	4	37	11	87	1.7	11	9	389	5.06	121	<8	<2	3	13	.6	<3	<3	59	.27	.089	5	11	.34	37	.11	<3	3.88	.01	.04	<2	13
L28+00W 8+50S	4	48	3	53	<.3	7	4	400	5.35	25	<8	<2	2	10	.7	3	<3	119	.15	.100	3	17	.87	52	.13	<3	2.74	.03	.09	<2	2
L28+00W 9+00S	4	36	6	48	.3	6	4	330	4.96	20	<8	<2	2	6	.5	<3	<3	78	.08	.087	4	10	.32	28	.08	<3	2.15	<.01	.04	<2	6
L28+00W 9+50S	4	25	12	217	<.3	5	5	999	6.94	59	<8	<2	<2	7	.8	<3	<3	148	.04	.107	2	19	.56	33	.08	<3	2.25	.01	.02	<2	25
L28+00W 10+00S	4	23	13	23	.7	5	2	118	2.42	8	<8	<2	<2	8	<.5	<3	<3	45	.04	.091	5	7	.16	31	.02	<3	1.27	.01	.05	<2	5
L18+00W 0+00	1	5	6	7	<.3	1	2	41	1.11	<2	<8	<2	<2	8	<.5	<3	<3	104	.08	.009	2	4	.06	6	.08	<3	.43	.01	.01	<2	8
L18+00W 0+50S	2	34	7	26	<.3	7	4	205	5.81	14	<8	<2	2	7	.5	<3	<3	129	.07	.048	3	14	.51	24	.15	<3	2.46	<.01	.03	<2	45
L18+00W 1+00S	2	59	4	22	.3	7	3	181	6.53	20	<8	<2	2	12	.8	4	<3	62	.08	.127	4	23	.34	61	.16	<3	4.20	.01	.04	<2	69
STANDARD DS4/AU-S	7	120	29	157	<.3	33	11	793	2.99	24	8	<2	4	30	5.6	5	6	75	.54	.095	17	157	.59	146	.09	<3	1.59	.04	.17	6	47

Sample type: SOIL SS80 60C. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

Data L FA ___

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Au** ppb
G-1	1	3	3	40	<.3	6	3	541	1.93	<2	<8	<2	5	102	<.5	<3	<3	40	.61	.081	11	12	.53	240	.14	4	1.13	.19	.56	<2	2
L18+00W 1+50S	2	83	4	30	<.3	10	9	456	3.76	26	<8	<2	<2	15	<.5	<3	<3	57	.10	.126	3	22	.72	51	.09	<3	2.07	.01	.05	<2	339
L18+00W 2+00S	1	28	3	24	<.3	11	5	181	4.14	5	<8	<2	<2	12	<.5	<3	<3	97	.10	.032	3	43	.53	28	.12	<3	2.15	.01	.03	<2	5
L18+00W 2+50S	2	24	8	47	<.3	6	7	201	4.22	54	<8	<2	<2	13	<.5	3	<3	119	.20	.039	4	10	.26	42	.11	<3	1.27	.01	.02	<2	8
L18+00W 3+00S	1	45	4	31	<.3	9	14	554	6.48	51	<8	<2	<2	8	<.5	3	<3	253	.10	.050	1	6	.50	13	.60	<3	1.37	.01	.02	<2	<2
L18+00W 3+50S	2	21	8	34	.3	7	4	196	6.66	16	8	<2	2	5	<.5	5	<3	120	.03	.057	4	16	.29	15	.15	<3	2.37	.01	.02	<2	13
L18+00W 4+00S	2	29	4	45	<.3	4	5	402	4.94	14	<8	<2	2	6	<.5	4	<3	72	.06	.055	4	13	.60	56	.13	<3	3.25	.01	.04	<2	22
L18+00W 4+50S	1	43	9	42	.4	5	11	465	5.51	16	<8	<2	<2	3	<.5	3	<3	110	.03	.037	1	7	.62	19	.27	<3	2.65	.01	.01	<2	7
L18+00W 5+00S	1	26	11	49	.4	7	8	564	6.72	4	<8	<2	2	3	<.5	<3	<3	88	.05	.067	3	19	.61	14	.28	<3	3.55	.01	.01	<2	4
L18+00W 5+50S	3	30	7	77	<.3	6	5	321	5.08	112	<8	<2	2	5	<.5	<3	<3	75	.05	.042	8	15	.47	34	.11	<3	4.52	.01	.02	<2	41
L18+00W 6+00S	3	25	6	94	.3	9	12	802	5.49	97	<8	<2	2	4	<.5	5	<3	50	.06	.062	4	18	.56	20	.15	<3	4.11	.01	.03	<2	5
L18+00W 6+50S	2	22	7	44	.4	4	3	339	8.45	13	<8	<2	2	7	<.5	4	<3	70	.05	.061	2	13	.30	25	.20	<3	2.69	.01	.02	<2	<2
L18+00W 7+00S	2	59	7	74	.9	8	86	2767	3.49	51	<8	<2	<2	10	.8	<3	<3	45	.17	.148	10	16	.41	41	.05	<3	5.38	.02	.03	8	10
RE L18+00W 5+50S	3	30	3	77	.3	6	6	326	5.06	115	<8	<2	3	5	<.5	3	<3	75	.06	.044	9	14	.47	34	.12	<3	4.41	.01	.02	<2	4
L18+00W 7+50S	3	58	10	40	.6	22	8	385	5.42	73	<8	<2	<2	5	<.5	4	<3	76	.05	.081	6	57	.84	35	.05	<3	2.50	<.01	.04	<2	7
L18+00W 8+00S	5	46	4	80	.6	6	27	3215	4.72	28	<8	<2	<2	8	<.5	4	<3	75	.09	.085	6	12	.47	36	.10	<3	4.54	.01	.03	<2	11
L18+00W 8+50S	1	12	9	47	.5	2	4	499	5.39	5	<8	<2	<2	10	<.5	3	<3	116	.09	.045	2	12	.71	30	.32	<3	1.93	.01	.04	<2	<2
L18+00W 9+00S	3	19	11	76	.5	5	5	597	7.33	14	<8	<2	3	8	<.5	<3	<3	177	.06	.106	2	21	.71	38	.41	<3	2.81	.01	.07	<2	5
L18+00W 9+50S	1	14	3	45	.4	6	3	638	8.20	13	<8	<2	<2	10	<.5	4	<3	99	.06	.071	2	26	.75	41	.33	<3	2.62	.01	.05	<2	<2
L18+00W 10+00S	1	14	7	87	<.3	10	14	638	6.52	6	<8	<2	<2	20	<.5	<3	<3	108	.24	.067	3	33	1.09	41	.20	<3	2.89	.01	.01	<2	5
STANDARD DS4/AU-S	6	118	30	155	.4	32	11	779	3.01	21	10	<2	4	28	5.2	6	5	73	.49	.091	16	155	.58	146	.09	<3	1.61	.04	.16	7	48

Sample type: SOIL SS80 60C. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

Data A FA ___

APPENDIX 5

Statement of Costs
Volcanic City Project

Item	Description	Billing Method	Cost per	Mandays/km	Total
Linecutting	09 kilometers linecutting w/50m stations, flagged and picketed w/metal tags.	* Per km.	$ 525.00	14 km	$ 7350.00
Geology	Geological reconnaissance work.	Per day	$ 400.00	04 mandays	$ 1600.00
Geological Assistant	Fieldwork with geologist.	Per day	$ 300.00	04 mandays	$ 1200.00
Report	Geological	Per report	$ 850.00	-	$ 2467.96
Geochemical	Geochemical surveys	Per day	$ 357.50	14 mandays	$ 5257.00
Truck Rental	2 – 4x4 trucks	Per day	$ 75.00	16 days	$ 1200.00
Assays	7 rock, 150 soil.	-	-	-	$ 2389.85
Food/Accom.	-	Per day	$ 85.00	22 mandays	$ 1870.00
Subtotal	-	-	-	-	$23334.91
Management	Project management/ misc. costs.	Percentage	5%	-	$ 1166.75
TOTAL	-	-	-	-	$24501.66

APPENDIX 6

STATEMENT OF QUALIFICATIONS

STATEMENT OF QUALIFICATIONS

I, Doug Smith, of Vancouver, B.C., do hereby certify that:

1. I am a practicing geologist, residing at 2791 West 15th Ave, Vancouver, British Columbia, V6K 2Z7.

2. I majored in Geology at the University Of New Brunswick, Fredericton in economic and structural geology.

3. I have been employed in my profession as a geologist with government agencies and industry since 1990.

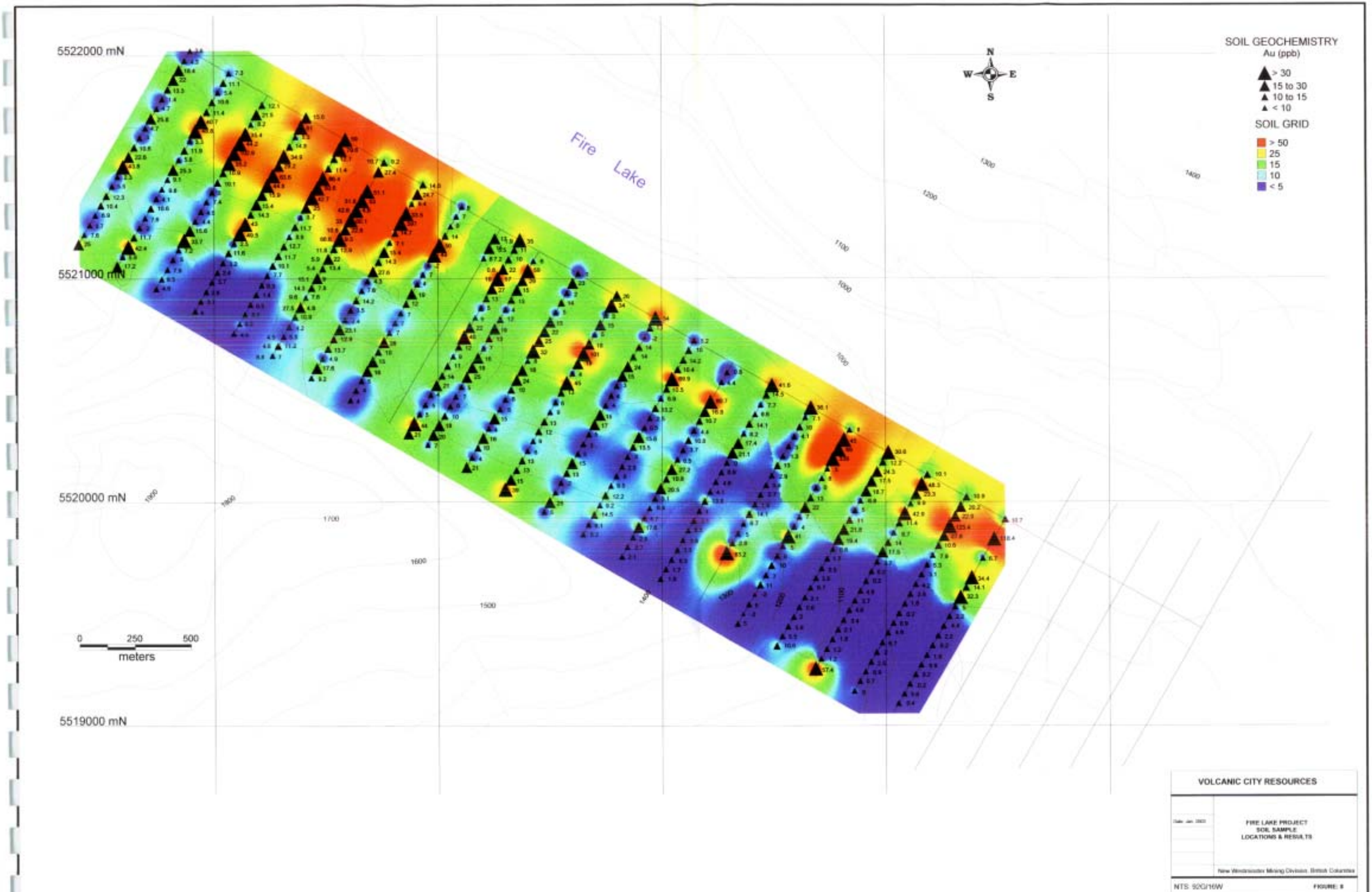
4. I am presently employed by Rio Minerals Ltd. of 595 Burrard Street, Vancouver, B.C. as a Contract Geologist.

5. That the observations, conclusions and recommendations within this report are based on work conducted on the property.

6. I have no direct or indirect interest in the property described herein, nor in the securities of any company associated with the property, nor do I expect to receive any.

Signed at Vancouver, British Columbia, this 11th day of December, 2002.

Doug Smith, Geologist


5522000 mN
5521000 mN
5520000 mN
5519000 mN
Fire Lake
N
W
E
S
SOIL GEOCHEMISTRY
Au (ppb)
> 30
15 to 30
10 to 15
< 10
SOIL GRID
> 50
25
15
10
< 5
1300
1400
1200
1100
1000
1900
1800
1700
1600
1500
0
250
500
meters
VOLCANIC CITY RESOURCES
FIRE LAKE PROJECT
SOIL SAMPLE
LOCATIONS & RESULTS
New Westminster Mining Division, British Columbia
NTS 92G/16W
FIGURE: 8

5522000 mN

5521000 mN

5520000 mN

5519000 mN

Fire Lake

N

W E

S

SOIL GEOCHEMISTRY
Cu (ppm)

- > 100
- 50 to 100
- 30 to 50
- < 30

SOIL GRID

- > 100
- 50
- 30
- 20
- < 10

0 250 500
meters

VOLCANIC CITY RESOURCES

FIRE LAKE PROJECT
SOIL SAMPLE
LOCATIONS & RESULTS

New Westminster Mining Division, British Columbia

NTS: 92G/16W

FIGURE: 9

5522000 mN

5521000 mN

5520000 mN

5519000 mN

Fire Lake

N
W E
S

SOIL GEOCHEMISTRY
Pb (ppm)
> 15
10 to 15
8 to 10
< 8

SOIL GRID
> 20
12
10
8
> 5

1300
1400
1200
1100
1000
900
1800
1600
1700
1600
1500
1400
1300
1200
1100

0 250 500
meters

VOLCANIC CITY RESOURCES

FIRE LAKE PROJECT
SOIL SAMPLE
LOCATIONS & RESULTS

New Westminster Mining Division, British Columbia

NTS 92G/16W

FIGURE: 10

5522000 mN

5521000 mN

5520000 mN

5519000 mN

Fire Lake

N

W E

S

SOIL GEOCHEMISTRY
Zn (ppm)

- > 50
- 35 to 50
- 20 to 35
- < 20

SOIL GRID

- > 50
- 40
- 30
- 20
- < 5

1300

1400

1200

1100

1000

1600

1700

1800

1900

1500

0 250 500
meters

VOLCANIC CITY RESOURCES

Date: Jan. 2003

FIRE LAKE PROJECT
SOIL SAMPLE
LOCATIONS & RESULTS

New Westminster Mining Division, British Columbia

NTS: 92G/16W

FIGURE: 11

5522000 mN

5521000 mN

5520000 mN

5519000 mN

Fire Lake

N

W E

S

SOIL GEOCHEMISTRY
Ag (ppm)

- > 1
- 0.5 to 1
- 0.3 to 0.5
- < 0.3

SOIL GRID

- > 1
- 0.4
- 0.3
- 0.2
- < 0.2

1300
1200
1400
1100
1000
1900
1800
1700
1600
1500
1400
1500
1200
1100

0 250 500
meters

VOLCANIC CITY RESOURCES

FIRE LAKE PROJECT
SOIL SAMPLE
LOCATIONS & RESULTS

New Westminster Mining Division, British Columbia

NTS: 92G/16W

FIGURE: 12