

**ASSESSMENT REPORT  
ON THE  
RB 1-58 CLAIMS  
(YB93186-YB93243)**

**NTS 105 G/7  
Lat. 61°17' N, Long 130° 40' W  
Watson Lake Mining District,  
SOUTH EAST YUKON TERRITORY**

**PREPARED FOR:**

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AZN (TSX-V)**



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**094398**

**December 9, 2002**

This report has been examined by  
the Geological Evaluation Unit  
under Section 53 (4) Yukon Quartz  
Mining Act and is allowed as  
representation work in the amount  
of \$ 17,400.

*M. B.*  
Regional Manager, Exploration and  
Geological Services, Commissioner,  
of Yukon Territory.

Costs associated with this report have been  
approved in the amount of \$ 17,400.00  
for assessment credit under Certificate of  
work No. QL 25602.

*D. P. ...*

Mining Recorder  
Watson Lake Mining District

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FIGURE 1 RB claims LOCATION MAP

FIGURE 2 RB 1-58 claims LOCATION MAP

FIGURE 2A DISTRIBUTION OF WORK AND PRORATED BLOCKS

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FIGURE 4 RB claims

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& RESOURCES LIBRARY  
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Whitehorse, Yukon Y1A 2C6

## 1.0 SUMMARY

**ARCTURUS VENTURES INC., (ARCTURUS)**, is a Vancouver based, TSX-V listed junior exploration company with properties in the Grass Lake area, south east Yukon Territory, Canada.

One of the properties, the RB 1-58 claims, is located some 9 km the north west of Fyre Lake and 8 km south east of Grass Lake. The RB 1-58 claims were staked in <sup>2001</sup>~~1990~~ to cover favourable formations similar to those underlying the Fyre Lake Besshi massive sulphide deposit north of the claims areas. The claims total approximately 1,450 hectares.

Exploration programmes performed in 1997 consisted of geochemical soil surveys on the block., an airborne geophysical survey. A total of 260 soil samples were collected from the BAS and KET claims. The bottom two rows of claims on the KET claims are now a part of the RB claims. Five areas of weakly to moderately elevated copper-lead-zinc geochemical values were found, generally following an east-west trend. On the KET claims three anomalies were outlined with the strongest copper (430 ppm), lead (166 ppm) and zinc (930 ppm) values of the survey.

This exploration work was not successful as no mineral occurrences were found in the area of the BAS and KET (RB claims). The geochemical anomalies on the claim blocks remain unexplained.

In 1998 Emerald bearing mica schists were discovered 600 m east of the RB claims and subsequent to this additional claims were staked by True North Gems Inc., abutting the RB claims on their north east, east and south sides.

The 2002 exploration program consisted of prospecting, geological mapping, soil sampling and the establishment of two parallel base lines at Az. 325°, 1,000 metres apart between August 25 and August 31, 2002. A cross line between the two base lines was established at the north end of the two. The base lines and cross lines were picketed at 100 metre intervals. Six silt samples were taken from creeks on and surrounding the property.

Approximately 1.0 kilometre of the "A" horizon was traced and four samples taken.

Twenty nine geochemical samples were collected along the western base line on 100 metre established points.

A total of five personnel were used during the brief programme, Two men on the grid establishment and soil sampling, two prospectors, one geologist and one supervisor who also helped on the grid.

The cost of this work was CDN \$24,780

In The main thrust of the 2003 exploration programme on the RB claims will be to check the claims for occurrences of emeralds as well as to continue the exploration for base metals started in 1997. An area where there are Permian granite dikes near the centre of the claim block should definitely be checked for emerald bearing mineralization. Please see figure 4.

It is recommended that anomalous geochemical features C and D identified on the RB claims be re-sampled on lines 100 meters apart soil samples taken at 50 meter intervals The rest of the RB claims should be sampled on a 200 x 200 metre grid also oriented at Az. 335°. This spacing

was determined by the area containing emerald mineralization on Regal ridge which is 900 x 400 m.

(The samples should be assayed using a 27 element four acid digestion and a induced coupled plasma- AES assay package. ( ALS Chemex ME-ICP61)

Following this, VLF-EM and magnetometer surveys are recommended for the grids.

Further, it is recommended that the geological mapping on both claim blocks be re-checked and the formations and intrusives renamed in accordance with the mapping done in 1998 by Murphy and Piercey. This could be done at the same time that additional prospecting is done.

These recommendations are estimated to cost CDN\$ 148,335 including a contingency of 10% and the programme is expected to last 35 days. This budget includes the shifting of the camp from the shores of Grass Lake to a more central position on the RB claims and, sample transportation as well as the rehabilitation of minor machinery such as generators, radios and pumps and the purchase of material that was lost during previous programmes.

## 1.0 INTRODUCTION

**ARCTURUS VENTURES INC., (ARCTURUS)**, with offices at Suite 301-1645 West 12<sup>th</sup> Avenue, Vancouver, BC., Canada, V6J 2E3, telephone (604) 688-2000, and facsimile (604) 732-8773, is a TSX Venture Exchange listed junior exploration company with properties in the Grass Lake area, south east Yukon Territory, Canada.

One of the properties, the RB 1-58 claims, is located some 9 km the north west of Fyre Lake and 8 km south east of Grass Lake.

Mr. Blake S. Macdonald President of **ARCTURUS** has requested the writer, Marvin A. Mitchell, P. Eng. of Mitchell Geological Services, Suite 1028-470 Granville St., Vancouver BC. Canada to prepare an assessment report on this block of claims held by **ARCTURUS** for submission to the Mining Recorder, Watson Lake Mining District, YT.

The writer has used in this report many of the maps, reports, documents and assays supplied to him by the management of **ARCTURUS** as well as other sources such as web sites.

The writer has participated in some of the field work for the company in 2002 and is thoroughly familiar with deposits of this type in rocks of different ages in Africa, British Columbia and the Yukon.

The writer made property inspections on the claim blocks on July 5, 2002. and started to map the property from August 25 through August 30, 2002.

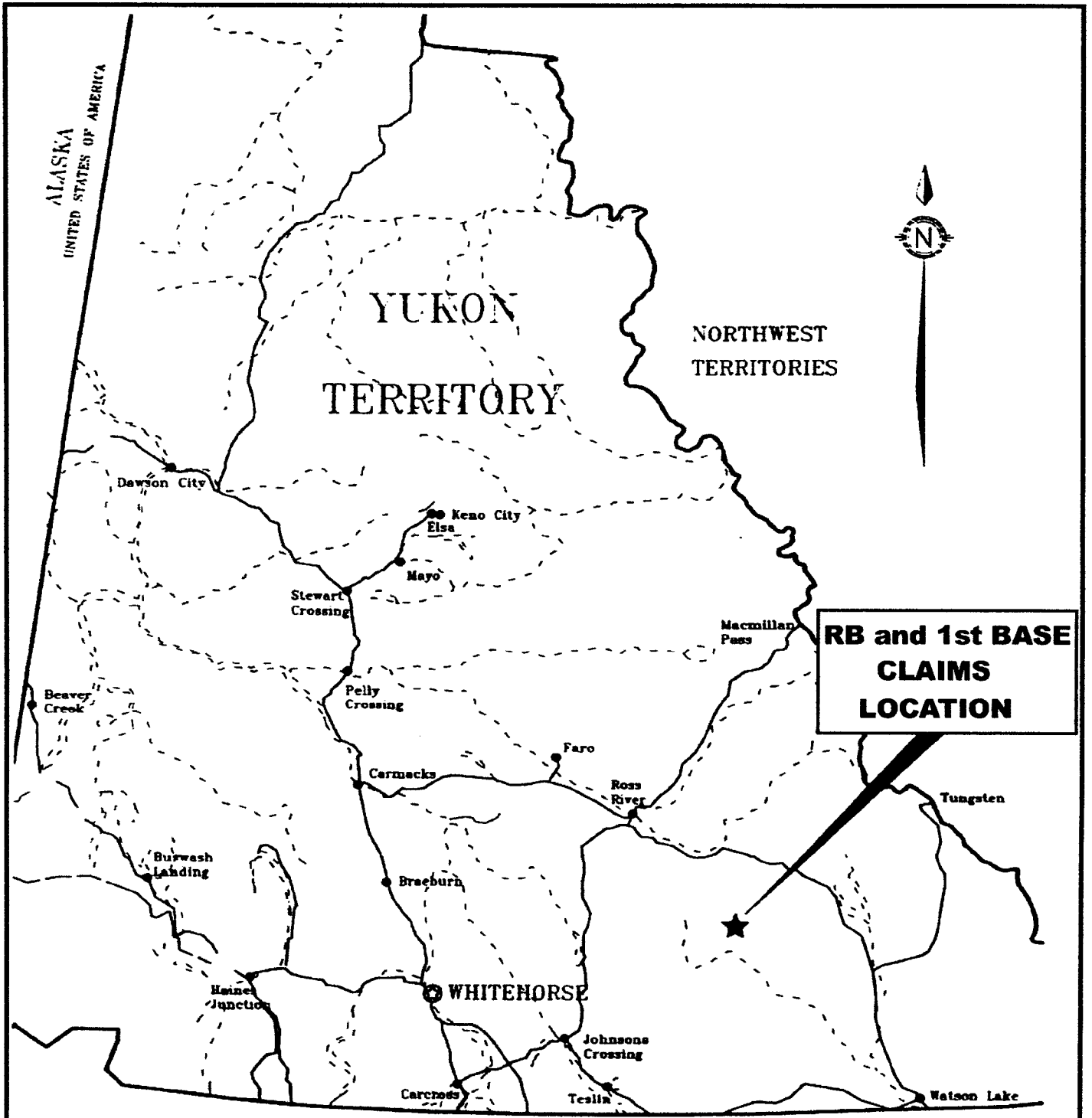
## 3.0 PROPERTY LOCATION AND DESCRIPTION

The RB property comprises 58 contiguous quartz mineral claims totalling approximately 1,450 hectares and is located in the south eastern part of the Yukon Territory approximately 168 kilometres north west of Watson Lake and 120 kilometres south east of Ross River. The property is located in Watson Lake Mining District on NTS map sheet 105 G/7 and the coordinates for the centre of the property are Lat. 61°17' N, Long 130° 40' W. Please see Figure 1.

Access to the property is by helicopter from Ross River or the Ketza Group base camp at Grass Lakes.

Please see Figure 2 for a diagram of these claims.

Table 1 shows the relevant data for these claims.

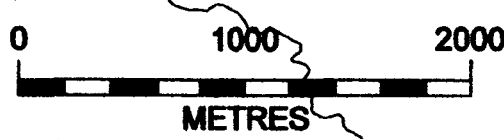
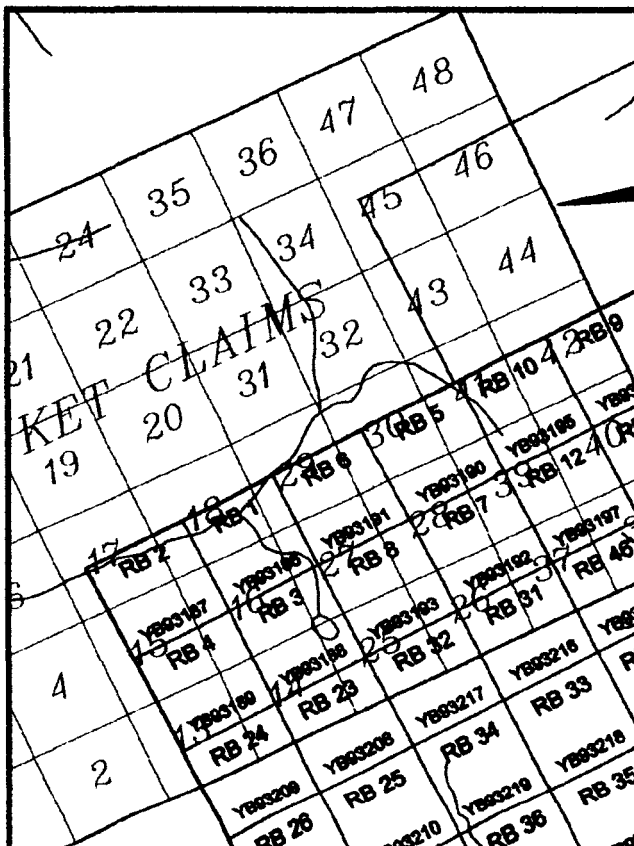
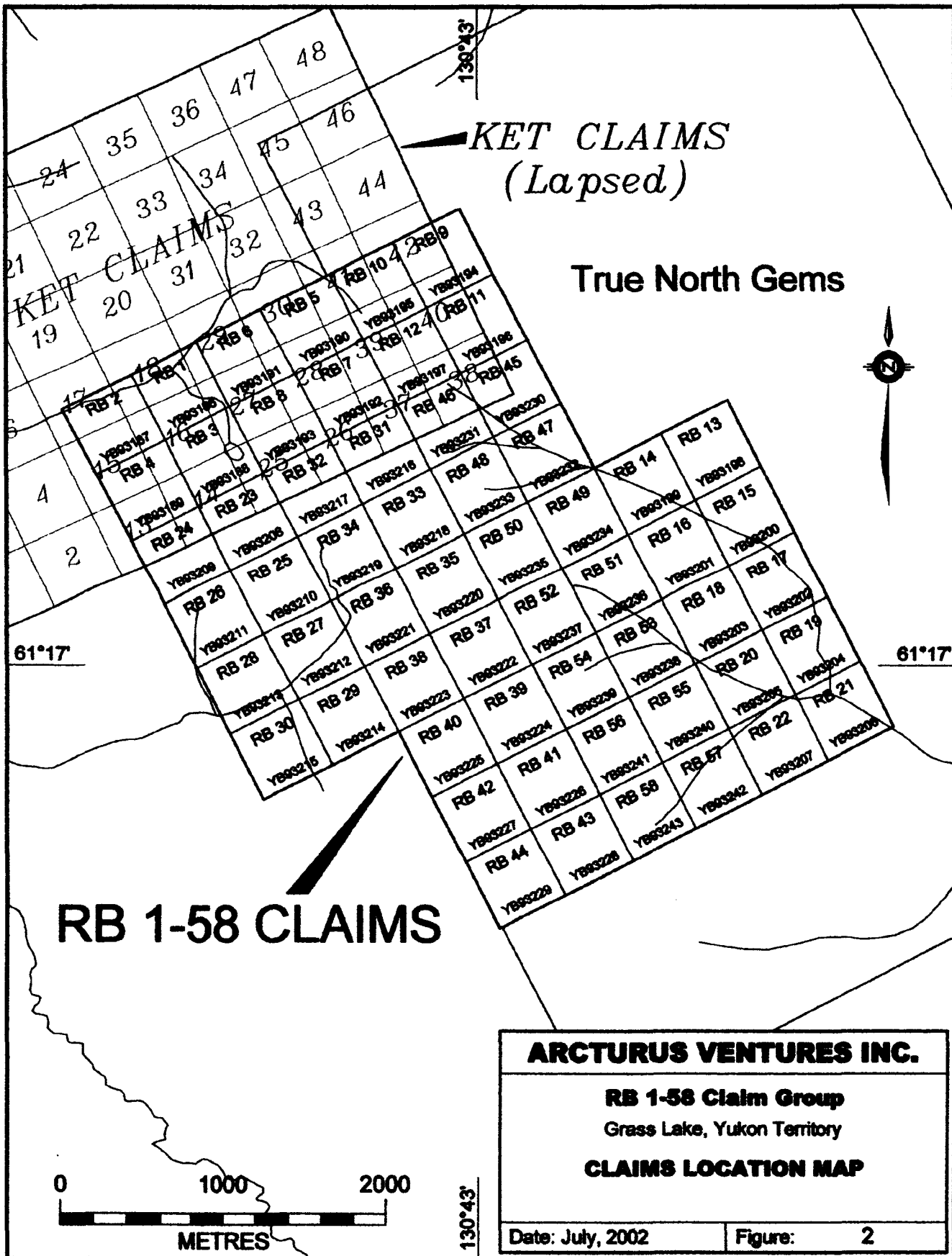


**RB and 1st BASE  
CLAIMS  
LOCATION**

BRITISH COLUMBIA



<i>COMPANY:</i>		<b>ARCTURUS VENTURES INC.</b>	
<i>DRAWING TITLE:</i>			
<b>RB and 1st BASE CLAIMS LOCATION MAP</b>			
<i>LOCATION:</i>		<b>Grass Lakes, Yukon Territory</b>	
<i>DATE:</i>	JULY, 2002	<i>SCALE:</i>	As Shown
<i>DRAWN:</i>		<i>GEOLOGIST:</i>	
<i>DATA:</i>	NTS 105/C7	<i>FIGURE:</i>	1



130°43'



**ARCTURUS VENTURES INC.**

**RB 1-58 Claim Group**  
Grass Lake, Yukon Territory

**CLAIMS LOCATION MAP**

Date: July, 2002      Figure: 2

**TABLE 1**

<b>CLAIM NAME</b>	<b>RECORD No.</b>	<b>EXPIRY DATE</b>	<b>OWNER/% OWNED</b>
RB 1	YB 93186	2002/08/30	ARCTURUS VENTURES INC. 100%
RB 2	YB 93187	2002/08/30	ARCTURUS VENTURES INC. 100%
RB 3	YB 93188	2002/08/30	ARCTURUS VENTURES INC. 100%
RB 4	YB 93189	2002/08/30	ARCTURUS VENTURES INC. 100%
RB 5	YB 93190	2002/08/30	ARCTURUS VENTURES INC. 100%
RB 6	YB 93191	2002/08/30	ARCTURUS VENTURES INC. 100%
RB 7	YB 93192	2002/08/30	ARCTURUS VENTURES INC. 100%
RB 8	YB 93193	2002/08/30	ARCTURUS VENTURES INC. 100%
RB 9	YB 93194	2002/08/30	ARCTURUS VENTURES INC. 100%
RB 10	YB 93195	2002/08/30	ARCTURUS VENTURES INC. 100%
RB 11	YB 93196	2002/08/30	ARCTURUS VENTURES INC. 100%
RB 12	YB 93197	2002/08/30	ARCTURUS VENTURES INC. 100%
RB 13	YB 93198	2002/08/30	ARCTURUS VENTURES INC. 100%
RB 14	YB 93199	2002/08/30	ARCTURUS VENTURES INC. 100%
RB 15	YB 93200	2002/08/30	ARCTURUS VENTURES INC. 100%
RB 16	YB 93201	2002/08/30	ARCTURUS VENTURES INC. 100%
RB 17	YB 93202	2002/08/30	ARCTURUS VENTURES INC. 100%
RB 18	YB 93203	2002/08/30	ARCTURUS VENTURES INC. 100%
RB 19	YB 93204	2002/08/30	ARCTURUS VENTURES INC. 100%
RB 20	YB 93205	2002/08/30	ARCTURUS VENTURES INC. 100%
RB 21	YB 93206	2002/08/30	ARCTURUS VENTURES INC. 100%
RB 22	YB 93207	2002/08/30	ARCTURUS VENTURES INC. 100%
RB 23	YB 93208	2002/08/30	ARCTURUS VENTURES INC. 100%
RB 24	YB 93209	2002/08/30	ARCTURUS VENTURES INC. 100%
RB 25	YB 93210	2002/08/30	ARCTURUS VENTURES INC. 100%
RB 26	YB 93211	2002/08/30	ARCTURUS VENTURES INC. 100%
RB 27	YB 93212	2002/08/30	ARCTURUS VENTURES INC. 100%
RB 28	YB 93213	2002/08/30	ARCTURUS VENTURES INC. 100%
RB 29	YB 93214	2002/08/30	ARCTURUS VENTURES INC. 100%
RB 30	YB 93215	2002/08/30	ARCTURUS VENTURES INC. 100%
RB 31	YB 93216	2002/08/30	ARCTURUS VENTURES INC. 100%
RB 32	YB 93217	2002/08/30	ARCTURUS VENTURES INC. 100%
RB 33	YB 93218	2002/08/30	ARCTURUS VENTURES INC. 100%
RB 34	YB 93219	2002/08/30	ARCTURUS VENTURES INC. 100%
RB 35	YB 93220	2002/08/30	ARCTURUS VENTURES INC. 100%
RB 36	YB 93221	2002/08/30	ARCTURUS VENTURES INC. 100%
RB 37	YB 93222	2002/08/30	ARCTURUS VENTURES INC. 100%
RB 38	YB 93223	2002/08/30	ARCTURUS VENTURES INC. 100%
RB 39	YB 93224	2002/08/30	ARCTURUS VENTURES INC. 100%
RB 40	YB 93225	2002/08/30	ARCTURUS VENTURES INC. 100%
RB 41	YB 93226	2002/08/30	ARCTURUS VENTURES INC. 100%
RB 42	YB 93227	2002/08/30	ARCTURUS VENTURES INC. 100%
RB 43	YB 93228	2002/08/30	ARCTURUS VENTURES INC. 100%
RB 44	YB 93229	2002/08/30	ARCTURUS VENTURES INC. 100%
RB 45	YB 93230	2002/08/30	ARCTURUS VENTURES INC. 100%
RB 46	YB 93231	2002/08/30	ARCTURUS VENTURES INC. 100%
RB 47	YB 93232	2002/08/30	ARCTURUS VENTURES INC. 100%

CLAIM NAME	RECORD No.	EXPIRY DATE	OWNER/% OWNED
RB 48	YB 93233	2002/08/30	ARCTURUS VENTURES INC. 100%
RB 49	YB 93234	2002/08/30	ARCTURUS VENTURES INC. 100%
RB 50	YB 93235	2002/08/30	ARCTURUS VENTURES INC. 100%
RB 51	YB 93236	2002/08/30	ARCTURUS VENTURES INC. 100%
RB 52	YB 93237	2002/08/30	ARCTURUS VENTURES INC. 100%
RB 53	YB 93238	2002/08/30	ARCTURUS VENTURES INC. 100%
RB 54	YB 93239	2002/08/30	ARCTURUS VENTURES INC. 100%
RB 55	YB 93240	2002/08/30	ARCTURUS VENTURES INC. 100%
RB 56	YB 93241	2002/08/30	ARCTURUS VENTURES INC. 100%
RB 57	YB 93242	2002/08/30	ARCTURUS VENTURES INC. 100%
RB 58	YB 93243	2002/08/30	ARCTURUS VENTURES INC. 100%

The claim data for the RB claims is included in Appendix A.

#### **4.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES AND PHYSIOGRAPHY**

The property is located in south eastern Yukon, 42 km south of the Robert Campbell Highway and 230 km northeast of Whitehorse in the Pelly Mountains. There is a private, all weather access road from the Robert Campbell Highway at Finlayson Lake south to the Kudz Ze Kayah Deposit. Figures 1 and 2

The closest centre of population is the town of Ross River 120 kilometres to the northwest, the town of Watson Lake 168 kilometres to the south east, and the mining town of Faro is 184 kilometres to the west north west. The region is limited with respect to transportation infrastructure. In addition to the airstrip at Finlayson Lake, the only other artery for transportation is the Highway #4 (Campbell Highway), which connects the Town of Watson Lake with the town of Carmacks.

Primary access to the RB claims is by helicopter from the Finlayson Lake airstrip or by Helicopter from Ross River. In 2000, in preparation for the 2002 exploration program on the Regal Ridge emerald property near the RB claims, a temporary winter access trail was built to deliver supplies and heavy equipment to the site, This access was intended to be a once-in, once-out access and the operators of the property mobilized to the Regal Ridge property, a wide-track caterpillar 225.

The climate of the general area is classified as sub-arctic.

No established rail or water transport route is present in the vicinity of the claim areas.

Vegetation consists of dense "buckbrush" in the flat, broad river valley bottoms, grading into dense growths of ever more stunted balsam, black spruce and occasional pine on the lower slopes, and eventually dwarf willow, birch, alpine grasses at elevations above 1550 m. The ridge tops only support lichen and very sparse alpine grasses. The bulk of both claim groups are found above 1,400 m tree line where the absence of wildlife and vegetation are an asset. The topographic high point on the RB claim block are 1,763 metres.

Local mining resources are limited and the blocks of claims is inaccessible except by air.

Sufficient water is available from local stream and ponds for drilling and possibly production.

The surface rights for both claim blocks are vested with the Yukon Territory.

At present there are no sources of power close to the claim blocks. Potential sources of power generation consist of wind, solar and hydroelectric.

## 6.0 HISTORY

The Finlayson area was first explored by Robert Campbell of the Hudson's Bay Company (HBC) in 1840. A post was established by the HBC at Francis Lake in the 1850's. Prospectors entered the country via the Liard River system around 1880 looking for placer gold deposits. Minor amounts were found along bars in the Finlayson and Liard Rivers. Lode prospecting began in the 1950's and intensified in the 1960's with the discovery of the Anvil Pb-Zn deposit.

The potential for massive sulphide deposits led to several staking rushes in the Finlayson and Pelly River areas. A few narrow zones of sulphide mineralization were discovered on claims around Wolverine Lake and at the Pelly Banks. In the 1980's the potential for gold mineralization along the Tintina Fault sparked a staking rush spearheaded by companies of the Pezim group. The Grew Creek and Canamax gold deposits formed by Tertiary epithermal activity were found near Ross River.

In 1993 Cominco discovered massive sulphide float in a valley bottom near the North Lakes. Follow-up geochemistry and geophysics identified a promising anomaly that was drilled in 1994 and 1995 delineating the Kudz Ze Kayah massive sulphide deposit. Cominco has staked about 10,000 claims in the district since the discovery of mineralization. Westmin Resources Ltd. entered the picture by optioning Atna Resources Ltd properties around Wolverine Lake in January, 1995. Westmin continued with an aggressive program of claim staking through the district and now holds about 3,000 claims. Westmin announced a massive sulphide discovery at the south end of Wolverine Lake in the summer of 1995. Other major parties in the area are Expatriate Resources exploring about 3,000 claims including the Ice showing and Columbia Gold investigating the Fyre Lake deposit.

In early 1996 **ARCTURUS** staked KET claims. The KET claims are, in part, predecessor to the RB claims, and was staked on the belt of metamorphic rocks that host the Fyre Lake Besshi massive sulphide deposit. The southernmost two rows of the KET claims were re-staked as a part of the RB claims. In August and September of that year, a reconnaissance soil sample survey was performed by a crew based at the Ketza Group camp on Grass Lakes. A total of 260 soil samples were collected. Five areas of weakly to moderately elevated copper-lead-zinc geochemical values were found, generally following an east-west trend. On the KET claims three anomalies were outlined with the strongest copper (430 ppm), lead (166 ppm) and zinc (930 ppm) values of the survey. The anomalies were outlined at 100 meter sample intervals along the claim lines, approximately 900 meters apart. All five anomalies were considered significant responses and were thought to warrant follow-up geochemistry and geology.

In addition to this work, the RB claim blocks was geologically mapped by G.S. Davidson P.Geol.

No mineral occurrences are known in the area of the KET (RB claims). Around the Grass Lakes a few narrow galena bearing quartz-carbonate veins were discovered during regional exploration programs for base metal deposits in the 1970's. No detailed work was performed on these occurrences.

In 1998 Emerald bearing mica schists were discovered 600 metres east of the RB claims and subsequent to this additional claims were staked by True North Gems Inc., abutting the RB claims on their north east and south sides.

## 7.0 GEOLOGICAL SETTING

### 7.1 REGIONAL GEOLOGY

The rocks underlying the Finlayson area are mainly metamorphic and include various types of metasediments of the upper Proterozoic to Mississippian, Selwyn Basin and Paleozoic meta-sedimentary and meta-volcanic rocks of the Slide Mountain and Yukon-Tanana terranes. Conformable lenses and sills of greenstone, probably Triassic in age, occur in profusion in places in the metasediments and a few narrow lamprophyre and quartz porphyry sills, probably Jurassic or younger, are present locally.

Granitic bodies cut the metasediments and greenstones at several places. Near the granitic intrusions, characteristic skarn zones are developed in calcareous rocks. In the late Mesozoic extensive thrust faulting accompanied the emplacement of Carboniferous and Permian dark green aphanitic basalt, dunite, peroxinite, peridotite, serpentinite equivalents and quartz carbonate rock.

The claims lie north of the Tintina Fault, a large trans-current Late Cretaceous to Tertiary fault system that caused at least 450 km of displacement. During the Eocene volcanism and sedimentation deposited sequences of basalt, rhyolite, felsic tuff and conglomerate in the Tintina depression. Late Tertiary uplift and faulting preserved Eocene volcano-clastic rocks in structurally complex grabens. Epithermal style gold and silver mineralization occurs at fault intersections in these grabens. The Grass Lakes area is underlain by Devonian to Mississippian metamorphic rocks of the Yukon-Tanana Terrane. Layered metavolcanic and meta-sedimentary rocks mainly quartz biotite and quartz muscovite schist overlie meta-plutonic rocks primarily the Grass Lakes orthogneiss. A few ultramafic sills outcrop along thrust faults and several bodies of biotite-muscovite granite intrude the metamorphic units.

Geological mapping in the Grass Lakes area in 1996 by DIAND covered the BAS claim block but did not reach the KET claims (Open File 1997-1) Figure 4 shows the area geology and the Table of Formations which accompanies the Figure is presented in Table 1.

The Yukon-Tanana Terrane contains a Paleozoic sequence of metamorphic rocks called the Layered Metamorphic Sequence or Nasina Assemblage. A relatively flat lying package of meta-sedimentary, metavolcanic and meta-plutonic rocks consisting of three sections. Quartz-mica schists with interbedded marble, tuffaceous volcanic units, calc-silicates and calcareous schist make up the lower section. The central unit consists of carbonaceous quartzite, mica-schist, phyllite, minor conglomerate, and inter-bedded felsic and mafic volcanic rocks of Devonian-Mississippian age. The upper units consist of marble and quartzite. The lower and central units are most common around Grass Lakes. Within this sequence, layers and bodies of orthogneiss are widespread. The orthogneiss has been dated at Late Devonian to Mississippian (Mortensen, 1992).

The Slide Mountain Terrane to the north consists of greenstones, cherts, serpentinites and other mafic to ultramafic plutonic rocks of Late Devonian to Late Triassic age. Complex thrust and normal faulting accompanied the emplacement of Carboniferous and Permian dark green

aphanitic basalt, dunite, peroxinite, peridotite, serpentinitid equivalents and quartz carbonate rock. Later movement along these faults caused deposition of Eocene I flow and volcano-clastic rocks in structurally complex grabens. Epithermal style gold and I silver mineralization occurs at fault intersections in these grabens.

Granitic plutons of Cretaceous age intrude the metamorphic rocks of the Yukon-Tanana Terrane northwest of the Grass Lakes. Pyritization, silicification and hornfelic alteration of the surrounding layered rocks is common around the granites.

Government mapping by D. Murphy, 1996-1997 in the Grass Lakes region is published in Open File map 1997-3 (see Figure 4). The Layered Metamorphic Sequence is divided into four generalized rock units (Units 1-4); described in Table 1, the Table Of Formations.

The most recent mapping by Murphy and Piercey in 1998 in part of the Finlayson Lake and Francis Lake areas (including the Grass Lakes region) is published on Open File map 1999-4 and resulted in a change of name for many of the formations. Please see Table 2

## TABLE 2

### TABLE OF FORMATIONS (from Murphy and Piercey, 1999)

#### QUATERNARY

- **Q** Unconsolidated alluvium, colluvium, lacustrine and glacial deposits.
- **Qls** Landslide.

#### INTRUSIVE ROCKS

#### CRETACEOUS

- **Kg** Weakly foliated, medium- to coarse-grained biotite-muscovite granite, generally equigranular

#### PERMIAN

- **Pg** Rare, tan to white foliated granitic dykes.

#### PENNSYLVANIAN to PERMIAN

- **JP Ig** Whitish-green leucogabbro
- **JP um** Brown-weathering, dark green to black, variably serpentinitid ultramafic rock  
Intrusive contacts are locally preserved.

#### **GRASS LAKES PLUTONIC SUITE**

- **MGg** Strongly foliated and lineated medium to coarse-grained granitic to monzonitic; metaplutonic rock. Generally equigranular although augen texture locally present. Locally discordant with earliest foliation.

### DEVONIAN to MISSISSIPPIAN

- **Dmq** Mafic-poor quartz porphyritic granite. Cross-cutting relationships between granite and sub-volcanic feeder dykes to **DMf** basalt flows suggests that and basalt are coeval and that granite is likely coeval with unit **DMFr**. Intruded by **MSg**.
- **Dmum** Brown-weathering, dark green to black, variably serpentinitid ultramafic Gabbro (**DMgo**) and/or pyroxenite locally present. In both **DMgo** hangingwall and footwall of the Money Creek Thrust. the unit is generally spatially associated and inferred to be in intrusive contact, with **DMF**. In the footwall, the unit is locally surrounded by unit **Dq**, also presumably with intrusive contacts. The unit locally occurs as isolated klippe of the Money Creek Thrust sheet and Money Creek Thrust itself as light-coloured fish-scale talc-serpentine schist.
- **Dmd** Foliated coarse-grained hornblende-biotite meta-diorite.

### LAYERED ROCKS

### PENNSYLVANIAN to PERMIAN (and possibly younger)

#### **CAMPBELL RANGE SUCCESSION**

- **JP cb2** Coarse basaltic breccia, pillowed and massive basaltic lavas, gabbro, diabase. maroon and green chert. Foliated and tightly folded at eastern edge of Campbell Range Belt.
- **JP Cs** Carbonaceous argillite, sandstone and grey quartz grit; diamictite; top is marked **JP CI** by several metres of green, possibly tuffaceous chert and cherty argillite. These strata pass to the northeast into varicoloured chert and argillite, chert-pebble conglomerate and Pennsylvanian limestone (**JP CI**), possibly as olistoliths in conglomerate.
- **JP cb1** coarse basaltic breccia, pillowed and massive basaltic lavas, gabbro, diabase maroon and green chert. Foliated and tightly folded at eastern edge of Campbell Range Belt.

### ~~~~~UNCONFORMITY~~~~~

### MISSISSIPPIAN

#### **GRASS LAKES SUCCESSION**

- **Mcp** Carbonaceous phyllite and quartzite, minor quartzofeldspathic psammite.
- **Mm** Biotite-chlorite schist.

- **Mq** Tan, white, mottled quartzite.
- **Mcg** Feldspar-blue quartz pebble conglomerate.
- **Mk** Kudz Ze Kayah felsic metavolcanic unit: undifferentiated feldspar-muscovite - quartz schist, feldspar and less commonly quartz augen schist (**MKq**).
- **MKq** Carbonaceous phyllite (**MKcp**) locally important. Magnetite iron formation which locally **Mkcp** occurs near top of unit in carbonaceous phyllite and thin felsic schist.

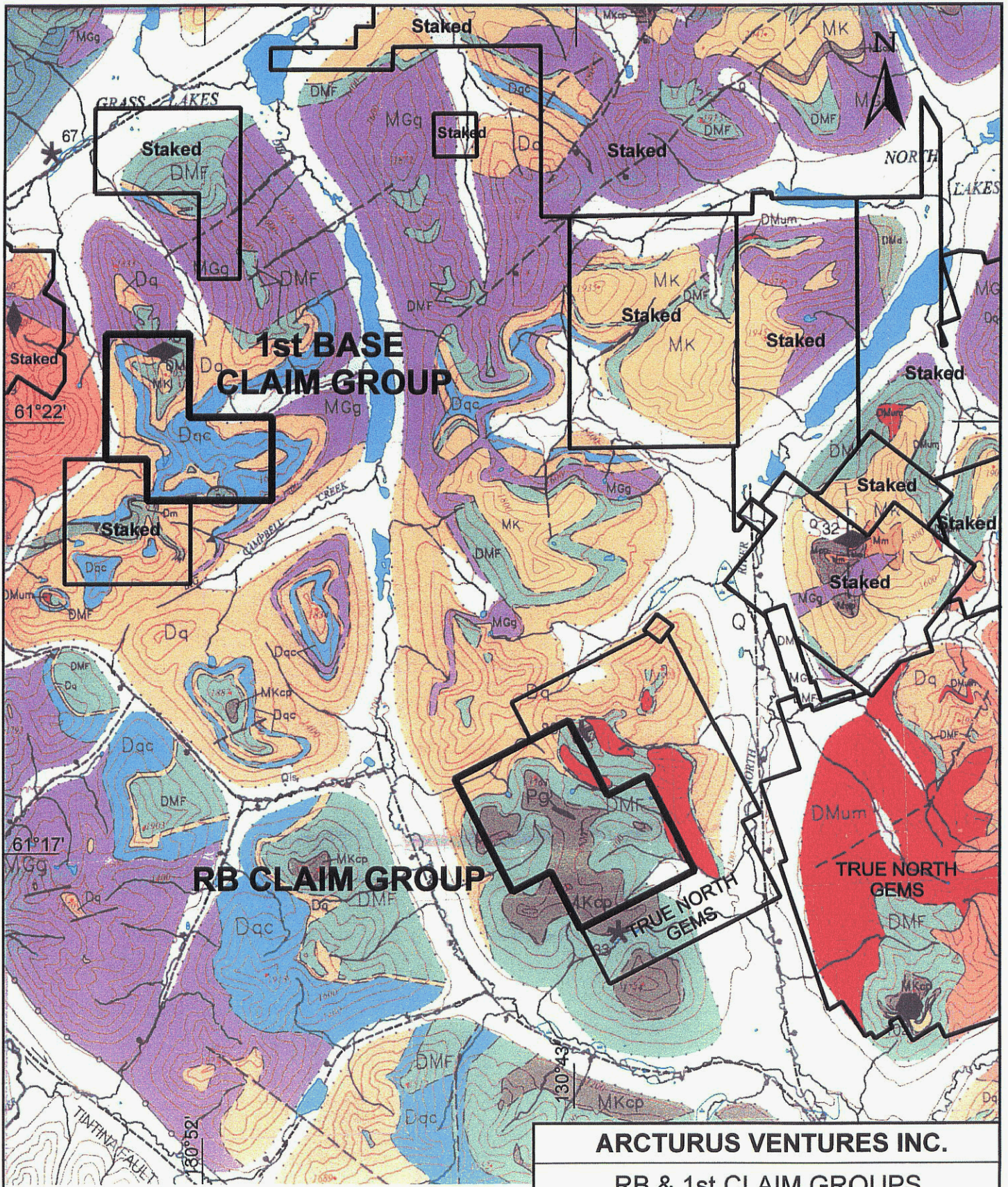
### DEVONIAN to EARLY MISSISSIPPIAN

- **Cl** In Money Creek Thrust sheet, medium grey to white, massive to foliated limestone, locally with crinoid and other fossil fragments
- **DMf** Fyre Lake mafic metavolcanic unit: In the footwall of the Money Creek Thrust The unit comprises massive to subtly layered biotite-plagioclase-actinolite-chlorite schist, and lesser carbonaceous phyllite and quartzite and grey marble.
- **DMFR** Southwest of Fire Lake and in core at the Fyre Lake deposit, the unit contains quartz rich schist of probably volcanic or volcani-clastic protolith **DMFr** .
- **DMFcp** Money Creek Thrust sheet, in a large roof pendant of **Msg** is tilted but essentially un-deformed. In this setting, it comprises maroon and green fragmental basalt, pink and green cherty shale, tan greywacke and a middle member of pink to brown locally known as quartz-porphyrific rhyolite (**DMFr**). Cross-cutting relationships between dykes of **DMq** feeding unit **DMFr** indicate that they are coeval. Outside of the pendant, the unit is foliated and lineated, and contain mappable bands carbonaceous phyllite and quartzite, pale green chert and grey marble.
- **Dq** Biotite-muscovite-feldspar-quartz schist, micaceous quartzite, quartz-biotite-muscovite.
- **Dqc** metapelitic schist, and marble. Marble is locally thick and continuous enough to **Dm** map as a separate member (**Dqc**) Biotite-plagioclase-actinolite-chlorite schist and **Df** feldspar-muscovite quartz schist of probable volcanic protolith occur locally.

Structurally, deformation phases are manifested as foliations, lineations and sediment deformation. Large scale folding is evident and thrust and normal faulting have displaced the stratigraphy. For example, normal faulting has uplifted the RB claim areas relative to the surrounding areas. Regional metamorphic grade ranges from lower green schist to amphibolite facies. Please see Figure 3.

### 8.0 DEPOSIT TYPES

The Yukon-Tanana Terrane hosts volcanogenic massive sulphide mineralization of the Kuroko style Kudz Ze Kayah, Wolverine ), Cominco's Kudz Ze Kayah, found in 1994, has reserves of 11.3 million tonnes of 6% Zn, 1% Cu, 1.3% Pb, 125 g/tonne Ag and 1.3 g Au. Westmin/Atna's Wolverine now has a geological inventory of 5.31 million tonnes of 1.81 g/tonne Au, 359.1 g Ag, 12.96% Zn, 1.41% Cu and 1.53% Pb, with plenty of room for more tonnage. Besshi style (Fyre



For Legend see Table 3 in text.



**ARCTURUS VENTURES INC.**

**RB & 1st CLAIM GROUPS**  
Grass Lakes, Yukon Territory

**REGIONAL GEOLOGY**

DATE: JULY, 2002

FIGURE NO.: 3

Lake) and Cyprus style (Ice Property). The Fyre Lake deposit has 8 million tons 0.11% cobalt, 2.1% copper, 0.7 g/T gold. The two Kuroko deposits are the more economic of the occurrences. <http://www.em.gov.bc.ca/Mining/Opport/Explore/yukon/y-t.htm>, July, 2002. The RB claims have the same Mississippian formations that host the Fyre Lake deposit.

The following is drawn from an assessment report on the 1st Base Claims ( Davidson, 1998).

The Kudz Ze Kayah deposit occurs in the Unit 3 of the Layered Metamorphic Sequence in an overturned package of felsic pyroclastics, massive rhyolites and metasediments. Mineralization consists of sphalerite, chalcopyrite and galena in a gangue of magnetite, barite, pyrrhotite, pyrite and carbonate. The deposit is an elongated lense with a shallow northerly dip, measured at an average of 18 m thick by 700 m strike length and 400 m of depth.

The Wolverine deposit occurs in argillites overlain by a thick pile of meta-rhyolite within the Unit 3 of the Layered Metamorphic Sequence. Mineralization consists of banded pyrite and sphalerite with variable chalcopyrite, galena and tetrahedrite. The deposit is narrow averaging 6 m in thickness, dips at a shallow angle to the north, and has been delineated over a 700 m strike length, and for 450 m down dip.

Other prospects in the district include skarns, polymetallic veins and listwanites. The primary exploration methods useful on the more significant occurrences are electromagnetic and magnetic geophysical surveys and to a lesser extent soil geochemistry. Of note is a band of iron formation located 80 m above the Wolverine deposit which was detected by magnetic surveys. The surface expression of the Wolverine deposit is a patchy kill-zone which is gossanous.

The reader is invited to visit the various websites for the Kudz Ze Kayah and Fyre Lake properties for any mineral resources and reserves. These resources are contained in the HISTORY section.

"In September, 1998, Bill Wengzynowski of Archer Cathro and Associates Ltd. discovered emeralds on Expatriate Resources Ltd.'s Goal Net property, in the Finlayson Lake district of south eastern Yukon. In less than two hours he collected approximately one kilogram of emeralds from float and outcrop on both sides of an E-W trending ridge. Detailed work on the property began Ill July 1999; by late August, numerous emerald-bearing float trains and six main source regions had been discovered in a 900 by 400 m area on both sides of the ridge. (Regal ridge) Washing and hand sorting of approximately 6 m<sup>3</sup> of material from float trains and trenches yielded more than 6 kg of emerald.

The Goal Net property is located in the central part of the Yukon Tanana Terrane, which is largely composed of Paleozoic metasedimentary and metavolcanic rocks. The emeralds occur where quartz veins cut mica-rich layers in a recessive- weathering chlorite-mica schist. The schist is well foliated and dips gently to the north. The quartz veins associated with the emerald mineralization are slightly discordant to the bedding planes. At least eight such veins have been found on the north side of the ridge. In most cases the quartz veins are surrounded by a zone of yellow sulphate mineralization and a much more extensive, overlapping mass of fine tourmaline crystals which locally contains minor amounts of scheelite.

The emeralds occur in both the sulphate and tourmaline zones and (rarely) in the quartz veins. Where quartz veins cut mica-poor chlorite schist there are no sulphate or tourmaline zones and no emeralds (although there may be tourmaline in the quartz veins), implying that mica-poor

strata are un-reactive with respect to the hydrothermal system. All quartz veins seem contemporaneous, and the presence or absence of emeralds is influenced strongly by the geochemistry of the host rock.

The quartz veins seem to be genetically linked to a large granitoid pluton east of, and within 600 m of, the emerald mineralization. U-Pb age determinations of ca. 112 Ma have been reported for this and similar plutons elsewhere in the Pelly Mountains. The pluton is zoned; the outcrop closest to the emerald showing is an apparently marginal muscovite granite that grades (over a surprisingly small distance) to a reddish-weathering, two-mica granite (constituting the main mass of the pluton?). A preliminary geochemical analysis of the granite shows that it is rich in Tungsten (W) and Zirconium (Zr) typical of an evolved S-type granitoid system. Analyses for Be and other light elements are underway by True North Gems Inc.

The emeralds range in size from fractions of a mm to 4 cm in length. Some of the smaller crystals (to approximately one-quarter carat), and sections of larger crystals, are gem-quality, with excellent clarity and colour. Many of the larger crystals show a regular pattern of holes that likely represent growth features. Others appear to have grown across the foliation of the schist, as shown by layers of micaceous inclusions; these create parting planes and increase susceptibility to mechanical weathering. A total of 24 emerald crystals were examined from five of the source regions. One additional crystal was obtained from a quartz vein on the south side of the ridge, at the westernmost extent of the showing. All samples were green in hand specimen and exhibited homogeneous colour distribution when cut and polished for microprobe analysis. Preliminary investigation with a scanning electron microscope (using both backscattered electron and cathode luminescence imaging modes) showed no evidence of compositional zoning. Electron microprobe analysis of the 25 crystals shows an average Cr concentration of 3208 ppm (maximum 7816 ppm)." (<http://www.eos.ubc.ca/groat/emeralds.htm> 6/24/2002) and Groat et al, 2001.

This information has been released by Expatriate Resources Ltd in their website, by the Gemological Institute of America in their May 7, 2002 Issue and in a paper by Lee A. Groat, Gemologist. The writer has no relationship to any company named in this section.

The Goal Net property property, now called the Regal Ridge property, is approximately 600 m due east of the RB Claims. The property is now under option to True North Gems Inc., who have staked additional claims, presumably with favourable geology, abutting the abutting the RB claims on their north east, east and south sides.

There has been no emerald bearing mineralization found on the RB claims as of the date of this report.

## 9.0 2002 EXPLORATION

### 9.1 General Description

The 2002 exploration program consisted of prospecting, geological mapping, soil sampling and the establishment of two parallel base lines at Az. 325°, 1,000 metres apart between August 25 and August 31, 2002. A cross line between the two base lines was established at the north end of the two. The base lines and cross lines were picketed at 100 metre intervals. Six silt samples were taken from creeks on and surrounding the property.

A total of five personnel were used during the brief programme, Two men on the grid establishment and soil sampling, two prospectors, one geologist and one supervisor who also helped on the grid. Please see Figures 2A and 4 for the locations of this work.

### 9.2 Property Geology

#### Lithology

The RB claims are underlain by upper Devonian to early Mississippian sheared sediments of the Grass Lakes succession and earlier rocks.

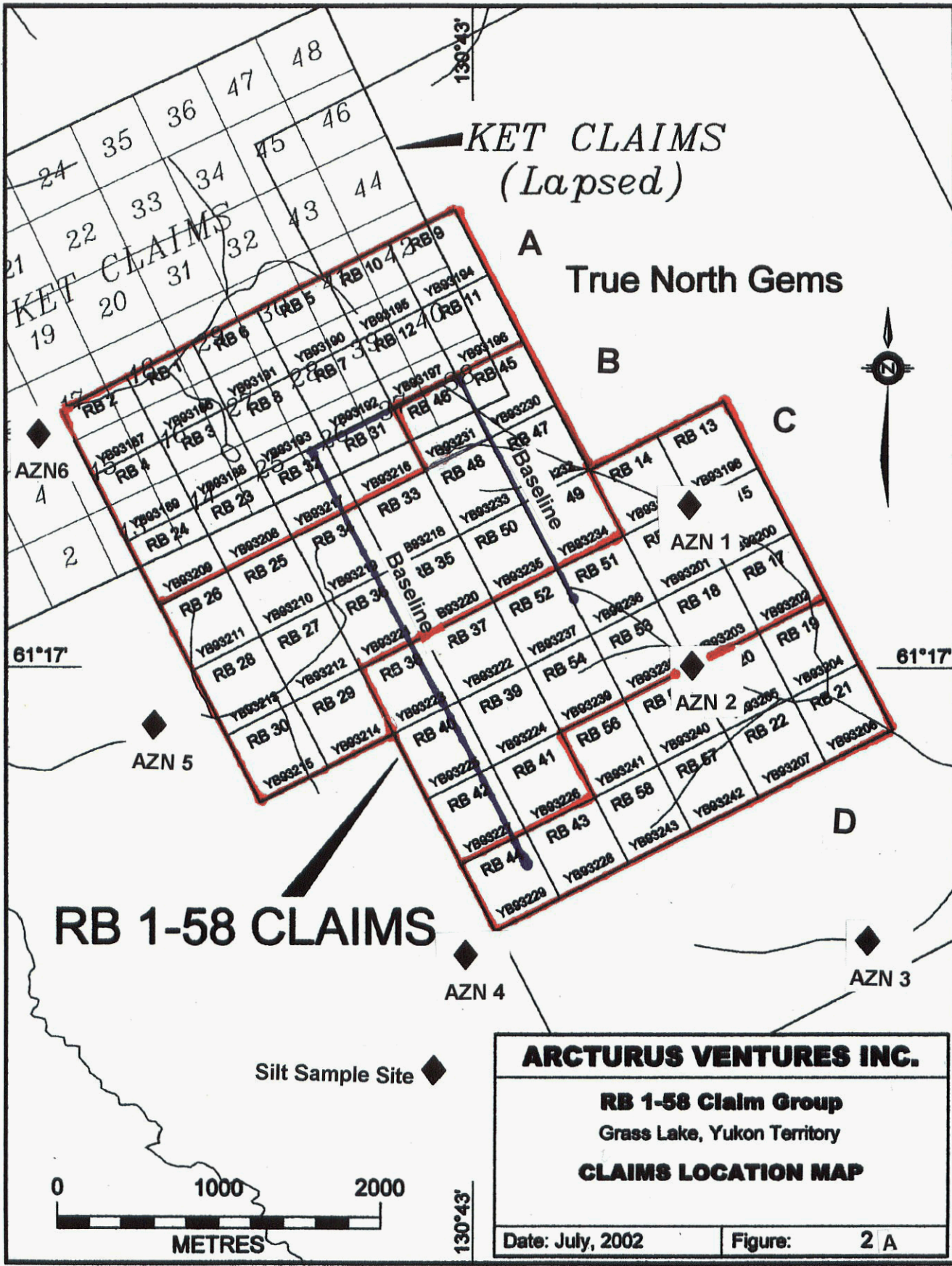
For the readers convenience the descriptions of these rocks that are found on the property are repeated from the general stratigraphic section (Table 2) in the previous section.

- **MKq** **Mkcp** Carbonaceous phyllite (**MKcp**), a part of the Kudz Ze Kayah metavolcanic unit. (**MKq**)
- **DMf** Fyre Lake mafic metavolcanic unit: In the footwall of the Money Creek Thrust The unit comprises massive to subtly layered biotite-plagioclase-actinolite-chlorite schist, and lesser carbonaceous phyllite and quartzite and grey marble
- **Dq** Biotite-muscovite-feldspar-quartz schist, micaceous quartzite, quartz-biotite-muscovite.

These rocks are intruded by Permian and Devonian to Mississippian intrusives.

- **Pg** Rare, tan to white foliated granitic dykes.
- **DMum** Brown-weathering, dark green to black, variably serpentized ultramafic Gabbro (**DMgo**) and/or pyroxenite locally present. In both the hangingwall and footwall of the Money Creek Thrust. the unit is generally spatially associated and inferred to be in intrusive contact, with (**DMF**). In the footwall, the unit is locally surrounded by unit (**Dq**), also presumably with intrusive contacts. The unit locally occurs as isolated klippe of the Money Creek Thrust sheet and Money Creek Thrust itself as light-coloured fish-scale talc-serpentine schist.

About 85% of the RB claims have exposed carbonaceous phyllites, **MKcp**, underlain by the Fyre Lake mafic volcanic unit, **DMf** which is the host rock for the Fyre Lake Besshi deposit. The remainder of the claim block near the north boundary is underlain by biotite-muscovite-feldspar-quartz schist, **Dq**.



*KET CLAIMS  
(Lapsed)*

**A True North Gems**

**B**

**C**

**D**

**RB 1-58 CLAIMS**

**AZN 5**

**AZN 4**

**AZN 3**

**Silt Sample Site**



<b>ARCTURUS VENTURES INC.</b>	
<b>RB 1-58 Claim Group</b>	
Grass Lake, Yukon Territory	
<b>CLAIMS LOCATION MAP</b>	
Date: July, 2002	Figure: 2 A

About 5 to 8% of the claim block is intruded by brown weathering, dark green to black serpentinized ultramafic Gabbro, DMum and about 2% is intruded by a tan to white foliated dike, Pg.

### **Structure**

The rocks that underlie the RB claims are composed of three highly sheared but gently dipping packages. These rocks dip gently to the south east and are drag-folded locally.

These rocks are also cut by two west-northwest lineaments, sub-parallel to the Tintina Fault which are presumed to be faults. The two lineaments cross the claims just to the south of a small tam in the north west part of the RB property. The farthest south lineament has a 250 metre section of Permian sheared granite dike where the lineament crosses the mesa in the north central part of the property.

Please see figures 3 for the distribution of these rocks

### **9.3 Results of Programme**

#### **Mineralization**

The Fyre Lake Besshi "A" horizon had previously been identified on the RB claims at the top of the Fyre Lake mafic metavolcanic unit (DMF) about 100 metres south of the small tam in the north east part of the property. An examination of the mineralized outcrop showed 1/4 centimetre porphyroblasts of magnetite in a highly sheared chlorite and carbonate matrix. Magnetite is generally considered to be found distal to a Besshi deposit. The outcrop is also reported to contain some chalcopyrite and sphalerite near its base. This was not seen by the writer.

The "A" horizon was traced about 400 metres to the west where it widened out to about 3+ metres. The outcrop on the west contained rusty, broken material that was covered with a greenish secondary mineral that at first was thought to be "copper stain". Elevated amounts of nickel in assays proved the secondary mineral to be garnierite ((Ni,Mg) SiO<sub>3</sub>+nH<sub>2</sub>O).

Four samples were taken and the assay returns may be found in Appendix B.

#### **Geochemistry**

The western baseline was soil sampled giving a total of 29 samples 100 metres apart in the carbonaceous phyllites MKcp above the Fyre Lake mafic metavolcanic unit. These samples generally ran background, but three samples BL 110+00W 102+00N, BL 110+00W 101+00N, BL 110+00W 100+00N had elevated values in arsenic of 80.2, 1841.5, 71.6 ppm respectively. The position of these samples is on the west side of the mesa where the west baseline is immediately above the "A" horizon.

The silt samples returned background values. Please see Figure 2A for the location of these silt samples.

The assay returns for all of these samples may be found in Appendix C.

All samples were sent to ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER BC V6A 1R6 PHONE(604)253-3158, FAX(604)253-1716 .

#### 9.4 Statement of Costs

A Schedule of Deferred Exploration Costs covering the 2002 exploration work on the RB claims was prepared by Arcturus' accountant and was supplied to the writer. This schedule is included in APPENDIX D in this report.

The total cost of the exploration work for the year 2002 was CDN \$24,780 or CDN \$427.24/claim unit.

This figure if applied to blocks of no more than 16 claim units would give the following:

BLOCK A	16 units	CDN \$6835.84
BLOCK B	16 units	CDN \$6835.84
BLOCK C	16 units	CDN \$6835.84
BLOCK D	10 units	CDN \$4,272.48

The positions of these blocks are shown on Figure 2A.

#### 10.0 RECOMMENDATIONS

The main thrust of the 2003 exploration on the RB claims will be to check the claims for occurrences of emeralds as well as to continue the exploration for base metals started in 1997. An area where there are Permian granite dikes near the centre of the claim block should definitely be checked for emerald bearing mineralization. Please see figure 3.

It is recommended that anomalous geochemical features C and D identified on the RB claims in previous be re-sampled on lines 100 meters apart soil samples taken at 50 meter intervals (Anomalous areas A and B are in the former BAS claims and anomalous area E is on KET claims that have been dropped). The grid should be oriented at Az.335°. The rest of the RB claims should be sampled on a 200 x 200 metre grid also oriented at Az. 335°. This spacing was determined by the area containing emerald mineralization on Regal ridge which is 900 x 400 m. It is estimated that 600 samples would be needed to complete this programme on the RB claims (assuming 20 % fill in samples should anomalous areas be found) . Included in this total are rock samples.

The samples should be assayed using a 27 element four acid digestion and a induced coupled plasma- AES assay package. ( ALS Chemex ME-ICP61)

Following this, VLF-EM and magnetometer surveys are recommended for the grids.

Further, it is recommended that the geological mapping on both claim blocks be re-checked and the formations and intrusives renamed in accordance with the mapping done in 1998 by Murphy and Piercey. This could be done at the same time that additional prospecting is done.

**11.0 BUDGET**

in CDN \$

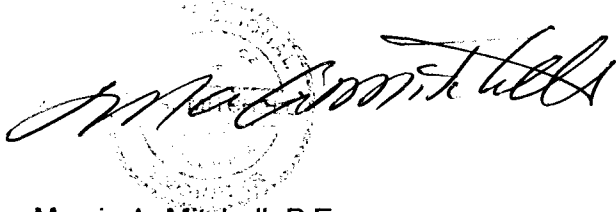
Supervision 1man, 35 days @ \$300/day.....	10,500
Geology and prospecting, 1man 35 days @ \$300/day.....	10,500
Grid establishment and geochemical survey 35 days 2 men @ \$200/day.....	14,000
Assays 600 @ \$ 13.50 \sample.....	8,100
Geophysical surveys 60 km @ 450/km .....	27,000
Camp and support estimated @ 15,000.....	15,000
Helicopter \$950/ hr + fuel estimated @ \$100/hr 35 hrs.....	36,750
Floatplane .....	10,000
Reports 5,500.....	3,000
	<b>Sub-Total</b> 134,850
Contingency @ 10%.....	13,485
	<b>TOTAL</b> 148,335

This budget includes the shifting of the camp from the shores of Grass Lake to a more central position on the RB claims and, sample transportation as well as the rehabilitation of minor machinery such as generators, radios and pumps and the purchase of material that was lost during previous programmes.

This programme is scheduled to last 35 days.

Respectfully Submitted,

December 9, 2002



Marvin A. Mitchell, P.Eng.

**2.0 REFERENCES**

**G.S. Davidson, 1997, ASSESSMENT REPORT ON THE BAS 1-64 CLAIMS (YB83822-YB83885) and KET 1-48 CLAIMS (YB83886-YB83933), NTS 105 G-7, Grass Lakes area Watson Lake Mining District, YT. 20pp + maps**

**G.S. Davidson, 1998, ASSESSMENT REPORT ON THE BAS 1-64 CLAIMS (YB83822-B83885) and KET 1-48 CLAIMS (YB83886-YB83933), NTS 105 G-7, Grass Lakes area, Watson Lake Mining District YT. 25pp + maps**

**Lee A. Groat, et al, 2001, Emeralds: Geology of The Crown Showings of Southeastern Yukon, 4 pp.**

**<http://www.eos.ubc.ca/groat/emeralds.htm> 6/24/2002**

**Murphy, Donald C. and Piercey, Stephen J, 1999, Geological map of parts of Finlayson Lake (IOSG/7 ,8 and parts of 1,2, and 9) and Frances Lake (parts of 10SH/S and 12) map areas, southeastern Yukon ( 1:100, 000 scale) Open File 1999-4**

**<http://www.em.gov.bc.ca/Mining/Ooport/Explore/yukon/y-t.htm>, July 2002**

**13.0 CERTIFICATE OF QUALIFICATIONS AND CONSENT**

I, Marvin Alford Mitchell, of Suite 203-2825 Spruce Street in the city of Vancouver, in the province of British Columbia, Canada. V6H 2R4:

**DO HEREBY CERTIFY:**

- **THAT:** I am a Consulting Geologist with offices at Suite 1028-470 Granville Street, Vancouver BC, Canada V6C 1V5. (Tel. (604) 684-4297, Fax. (604) 684-4297, E-mail. marvingeol@hotmail.com. I have been a consulting geologist since 1985.
- **THAT:** I have been a member of the Association of Professional Engineers and Geoscientists of the province of British Columbia since 1972 (reg. no. 8322) and that I am a member in good standing of that organization.
- **THAT:** I graduated from the Montana College of Mineral Science and Technology in 1968 with a Bachelor of Science in Geological Engineering (mining option), and that I have been practiced my profession continuously since that year.
- **THAT:** I have been involved in mineral exploration for gold, silver and base metals in Canada, the U.S., particularly in the state of Nevada, Mexico, South America, Australia and Africa. I was employed by the Corona Corp., on their Bralorne, BC. project. From 1995 through 1997 I directed a part of an exploration program for copper-cobalt at the Kilembe Mine in Uganda and in 1993 I worked as a contract geologist at the Goldstream mine north of Revelstoke, BC. Both the Kilembe Mine and the Goldstream Mine are Besshi deposits.
- **THAT:** I made the property inspections on the RB and 1 st BASE claims belonging to **ARCTURUS VENTURES INC.** on July 5, 2002 and I participated in the short programme of exploration work carried out from August 24 through August 31 2002.
- **THAT:** This report was prepared by myself. I have relied heavily in the preparation of this report on reports supplied by Blake S. Macdonald., the President of **ARCTURUS VENTURES INC.**,
- **THAT:** In the disclosure of information relating to legal, title and related issues The writer has relied on copies of the CLAIM STATUS REPORTS supplied by the Mining Recorder, Watson Lake Mining District, YT.
- **THAT:** I have no interest, directly or indirectly, in the property examined or in the securities of **ARCTURIS VENTURES INC.**, nor do I expect to receive any such interest in the properties or securities. **THAT:** I have no interest, direct or indirect, in any mining concession within twenty kilometres any of the Yukon claims which are the subject of this report.

- **THAT:** I hereby consent to the use of this report, for an assessment report to be submitted to the Mining Recorder, Watson Lake Mining District, YT

Dated at Vancouver, British Columbia, this 9<sup>th</sup> day of December, 2002

  
Marvin A. Mitchell, P. Eng.

**APPENDIX A**  
**CLAIM DATA**



Indian and Northern  
Affairs Canada

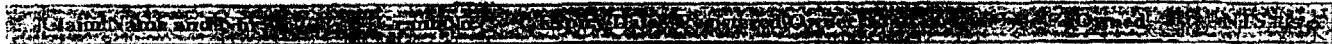
Affaires indiennes  
et du Nord Canada

02 December 2002



Dear Sir/Madam,

We are able to confirm the status of the following claim(s):



RB 1-58	YB93186 - YB93243	2005/08/30 ARCTURUS VENTURES INC.	100.00	10S-G-07
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There is no provision in either the Yukon Quartz Mining Act or the Yukon Placer Mining Act for a Mining Recorder to interpret his/her records to the public. Where information regarding the status of a mineral claim is to be used for title opinions or quasi-legal purposes, we recommend that certified true copies of documents be obtained. All books of record and documents filed are open for public inspection, free of charge, during office hours. An enquiry may employ someone to search the records, or obtain abstracts of record at a cost of \$1.00 for the first entry and \$.10 for each additional entry.

If you have any questions, please do not hesitate to contact this office.  
Yours truly,

Pam McLeod  
Mining Recorder  
Watson Lake Mining District  
P.O. Box 269  
Watson Lake YT Canada  
Y0A-1C0

Ph: (867) 536-7366  
Fax: (867) 536-7842

Left column indicator legend:

- R - Indicates the claim is on one or more pending request(s).
- P - Indicates the claim is pending.

Right column indicator legend:

- L - Indicates the Quartz Lease.

Total claims selected : 58

**APPENDIX B**  
**ROCK SAMPLE ASSAYS**

From ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER BC V6A 1R6 PHC

To Arcturus Ventures Inc.								
Acme file # A203808 Received: SEP 13 2002 * 5 samples in this disk file.								
Analysis: GROUP 1D - 0.50 GM								
AU* IGNITED, ACID LEACHED, ANALYZED BY ICP-MS. (10 gm)								
ELEMENT	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn
SAMPLES	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
RB-02-1	4	51	35	89	< .3	21	18	591
RB-02-2	1	21	23	53	< .3	885	57	885
RB-02-3	< 1	4	9	43	< .3	501	34	489
RB-02-4	9	110	23	75	0.4	29	12	794
STANDARD DS4	6	136	28	158	< .3	35	11	744

ONE(604)253-3158 FAX(604)253-1716 @ CSV TEXT FORMAT								
			Acme file # A203808 Received: SEP 13 2002 * 5 samples in th					
			Analysis: GROUP 1D - 0.50 GM					
			AU* IGNITED, ACID LEACHED, ANALYZED BY ICP-MS. (10					
Fe	As	U	Au	Th	Sr	Cd	Sb	Bi
%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
11.16	3	< 8	< 2	< 2	< 1	< .5	< 3	< 3
2.91	565	< 8	< 2	< 2	143	< .5	< 3	< 3
4.07	46	< 8	< 2	< 2	174	< .5		4 < 3
10.41	3	< 8	< 2	< 2	1	< .5	< 3	< 3
3.28	23	< 8	< 2		3	27	5	5 6

is disk file.								
0 gm)								
V	Ca	P	La	Cr	Mg	Ba	Ti	B
ppm	%	%	ppm	ppm	%	ppm	%	ppm
131	0.02	0.014	< 1	17	1.15	85	0.01	< 3
10	4.69	0.002	< 1	569	9.04	41	< .01	< 3
45	3.61	0.004	< 1	316	8.52	77	< .01	< 3
111	0.03	0.01	< 1	23	1.79	234	0.01	< 3
82	0.55	0.085	17	160	0.57	144	0.1	3

Acme file # A203808 Received: SEP 13 2002 * 5 samples in this disk file.					
Analysis: GROUP 1D - 0.50 GM					
AU* IGNITED, ACID LEACHED, ANALYZED BY ICP-MS. (10 gm)					
Al	Na	K	W	Au*	
%	%	%	ppm	ppb	
1.7	0.01	0.14	4	13.9	
0.19	< .01	0.01	2	3.5	
0.39	< .01	0.07	2	1.6	
2.36	< .01	0.12	16	33.3	
1.79	0.04	0.15	3	24	

**APPENDIX C**  
**GEOCHEMICAL ASSAYS**

From ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716 @ C

To Arcturus Ventures Inc.											
Acme file # A203809 Received: SEP 13 2002 * 29 samples in this disk file.											
Analysis: GROUP 1DX - 0.50 GM											
ELEMENT	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U
SAMPLES	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
G-1	1.7	2	2.5	48	< .1	3.8	3.8	533	2.09	0.5	3.7
BL 110+00W 110+00N	2.6	62.3	14.7	103	0.5	55.2	31.4	1306	4.74	16.8	1.7
BL 110+00W 109+00N	8.6	72.3	15.3	147	0.4	81.1	28.1	862	5.19	21.9	3.5
BL 110+00W 108+00N	5.3	79.2	10.9	137	0.3	87.7	30.2	900	6.59	4	4.2
BL 110+00W 107+00N	4.6	37.6	9	112	0.2	34.6	14	560	5.03	4	2
BL 110+00W 106+00N	11.2	48.2	14.1	122	0.8	40.2	26	1819	4.37	3.6	8.6
BL 110+00W 105+00N	9.7	65.7	11.9	151	0.5	31.7	9.1	400	6.62	3.4	4.5
BL 110+00W 104+00N	19.4	90.1	17	223	0.7	71.4	19.1	542	5.54	48.2	6.2
BL 110+00W 103+00N	9.5	53.5	11.2	85	0.6	45.2	11.1	771	2.85	40.4	2.4
BL 110+00W 102+00N	11.2	62.1	18.7	154	0.3	71.8	17.6	447	4.14	80.2	2.4
BL 110+00W 101+00N	3.9	18.3	168	168	1.7	24.2	8.5	527	2.7	1841.5	3.9
BL 110+00W 100+00N	5.9	19.7	34.5	90	0.3	20.3	5.2	161	2.61	71.6	2.2
BL 110+00W 99+00N	7.5	23.5	14.3	92	0.3	50	10.2	385	3.49	29.4	2.8
BL 110+00W 98+00N	7.7	27.6	6.8	77	0.4	43.9	12.1	232	3.38	8.8	1.3
BL 110+00W 97+00N	6.3	50.7	11.7	128	0.2	52.7	15.5	472	5.04	8.3	2.5
BL 110+00W 96+00N	4.6	61.7	11.9	137	0.3	69.3	23.9	682	6.12	6	3.1
BL 110+00W 95+00N	2.9	29	12.9	84	0.1	32.2	11.6	250	4.07	10.1	1.4
BL 110+00W 94+00N	4.9	71.3	21.2	137	0.5	68.6	28.1	1281	5.81	8.9	3.6
BL 110+00W 93+00N	0.5	3.6	2.1	9	0.1	2.7	1.6	149	0.45	0.6	0.3
BL 110+00W 92+00N	1.2	5.8	6.1	24	0.1	6.6	2.5	76	1	1.4	0.6
BL 110+00W 91+00N	2.4	9.4	5.8	29	0.2	7.6	2.8	154	1.46	2.2	1
BL 110+00W 90+00N	5.5	36.5	7.1	110	0.1	39.8	11.5	275	4.22	6.2	1.6
RE BL 110+00W 90+00N	5	32.9	6.7	109	0.1	37.8	11.5	253	4.1	5.6	1.5
BL 110+00W 89+00N	0.2	2.4	0.8	7	0.2	1	0.9	36	0.36	< .5	0.2
BL 110+00W 88+00N	2.3	9.9	3.7	40	0.1	9.7	3.2	133	1.7	1.4	0.9
BL 110+00W 87+00N	7.5	47.5	16.8	158	0.5	53	20.5	1003	4.78	6.7	2.6
BL 110+00W 86+00N	13.1	102.9	26	271	0.9	130.3	33.2	1613	6.4	41.5	4.4
BL 110+00W 85+00N	17.4	120	45.7	360	0.8	151.6	33.1	1318	6.53	46	4.4
BL 110+00W 84+00N	10.7	48.9	14.7	119	0.2	53.3	19.4	1142	5.15	7.1	2.8
STANDARD DS4	7	122.8	30.8	162	0.3	34.3	11.1	743	3.11	20.9	6.1

CSV TEXT FORMAT

Acme file # A203809 Received: SEP 13 2002 \* 29 samples in this disk file.

Analysis: GROUP 1DX - 0.50 GM

Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba
ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm
< .5	6.3	75	< .1	< .1	0.2	41	0.57	0.109	9	14.9	0.63	233
< .5	8.3	16	1.2	0.1	0.1	55	0.35	0.099	23	71.7	2.57	44
< .5	8.2	23	0.8	0.2	0.2	36	0.6	0.172	26	68.6	1.62	62
1.2	24	9	0.5	0.1	0.3	28	0.18	0.101	73	41.6	1.24	49
< .5	12.4	6	0.1	0.1	0.4	28	0.05	0.101	49	42	1.24	35
1	5.5	18	0.8	0.2	0.4	26	0.22	0.288	38	26	0.62	189
< .5	15.7	22	0.2	0.2	0.3	22	0.01	0.115	51	30	0.97	88
10.3	11.2	20	0.6	0.5	0.4	41	0.18	0.119	52	36.4	0.86	207
5.5	2.4	65	1.3	0.4	0.2	20	1.48	0.158	13	31.6	0.65	167
< .5	6.4	7	0.7	0.1	0.3	21	0.18	0.12	33	34.9	1.07	56
6.6	21.2	8	1.8	0.2	4.8	5	0.15	0.057	38	7.5	0.48	85
< .5	4.9	3	0.2	0.1	0.4	18	0.04	0.069	27	25.9	0.91	56
0.6	1.6	5	0.4	0.1	0.3	49	0.07	0.12	25	61.5	1.14	34
0.6	0.3	4	0.1	0.1	0.2	31	0.02	0.1	20	44.1	0.84	27
2.7	8.5	10	0.3	0.1	0.3	22	0.03	0.086	52	24.8	0.49	54
2.8	22.4	12	0.3	0.1	0.6	20	0.25	0.097	79	26.3	0.6	53
0.8	3.3	6	0.1	0.2	0.4	28	0.03	0.055	44	17.1	0.16	38
7.5	19.8	11	0.6	0.1	0.8	22	0.18	0.118	62	27.5	0.79	42
< .5	< .1	5	0.1	< .1	0.1	6	0.03	0.029	3	3.3	0.05	13
< .5	< .1	5	0.1	0.1	0.1	13	0.03	0.039	7	9.9	0.11	19
0.5	0.1	5	0.1	0.1	0.2	16	0.03	0.097	21	13	0.21	28
0.9	2	9	0.3	0.2	0.3	26	0.08	0.079	39	24.1	0.34	43
1.1	1.9	8	0.2	0.1	0.3	25	0.08	0.08	39	20.7	0.33	42
< .5	< .1	11	< .1	< .1	< .1	10	0.17	0.039	1	1.6	0.05	15
1	0.2	8	0.1	0.1	0.2	15	0.16	0.078	20	10.2	0.22	32
3	8.1	21	1.5	0.1	0.5	19	0.83	0.095	35	28.5	0.77	40
3.3	19.5	15	2.7	0.2	0.5	26	0.28	0.115	66	45.4	0.74	53
2.7	18.9	23	5.1	0.2	0.7	24	0.47	0.143	58	38.3	0.46	46
0.6	5.3	7	0.6	0.2	0.7	24	0.06	0.113	41	29.3	0.68	35
23.1	3.6	30	5.1	4.8	4.7	71	0.52	0.089	16	159.3	0.59	131

Acme file # A203809 Received: SEP 13 2002 \* 29 samples in this disk file.

Analysis: GROUP 1DX - 0.50 GM

Tl	B	Al	Na	K	W	Hg	Sc	Ti	S	Ga
%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm
0.133	1	0.95	0.068	0.5	2.7	<.01	2.2	0.4	0.06	5
0.006	<1	2.77	0.003	0.01	<.1	0.02	6.4	<.1	0.06	7
0.004	<1	1.85	0.005	0.02	0.1	0.02	4.7	<.1	<.05	5
0.003	<1	2.39	0.004	0.01	<.1	0.01	3.3	<.1	<.05	7
0.003	<1	2.38	0.004	0.02	0.1	0.02	2.1	<.1	<.05	7
0.003	<1	1.45	0.007	0.03	0.1	0.04	2.2	0.1	0.12	5
0.001	<1	1.74	0.008	0.03	0.1	0.02	2.2	<.1	<.05	5
0.001	<1	1.72	0.005	0.06	0.2	0.02	2.8	0.1	<.05	5
0.003	<1	0.99	0.009	0.03	0.1	0.07	1.4	0.1	0.2	3
0.004	<1	1.19	0.003	0.02	0.1	0.02	1.9	<.1	<.05	3
0.002	1	0.66	0.005	0.05	<.1	0.03	1	0.1	<.05	2
0.003	<1	1.23	0.003	0.04	0.1	0.02	1.1	0.1	<.05	3
0.005	<1	1.83	0.003	0.02	0.1	0.02	2	0.1	<.05	5
0.003	<1	1.09	0.003	0.02	0.1	0.03	0.6	0.1	<.05	4
0.001	<1	0.71	0.004	0.02	0.1	0.02	2.4	<.1	<.05	3
0.001	<1	1.06	0.006	0.02	<.1	0.02	3.6	<.1	<.05	4
0.009	2	0.58	0.005	0.02	0.1	0.02	1.3	0.1	<.05	4
0.006	<1	1.56	0.006	0.02	<.1	0.02	3.2	<.1	0.06	5
0.005	<1	0.3	0.025	0.02	<.1	0.01	0.1	<.1	<.05	2
0.004	<1	0.42	0.022	0.02	0.1	0.02	0.1	<.1	0.06	2
0.002	<1	0.85	0.019	0.03	0.1	0.03	0.2	0.1	0.07	4
0.007	<1	0.86	0.009	0.02	0.1	0.02	1.1	<.1	<.05	4
0.007	1	0.79	0.01	0.02	0.1	0.01	1	<.1	<.05	4
0.023	<1	0.36	0.032	0.02	<.1	0.01	0.2	<.1	<.05	2
0.004	1	0.79	0.019	0.02	<.1	0.01	0.3	<.1	0.11	3
0.003	1	1.47	0.01	0.03	<.1	0.06	2.1	<.1	0.17	4
0.003	<1	1.29	0.007	0.02	<.1	0.03	3.1	<.1	0.06	4
0.002	<1	0.7	0.005	0.02	0.1	0.01	3	0.1	<.05	3
0.004	<1	1.3	0.005	0.02	0.1	0.04	1.5	<.1	0.1	5
0.064	1	1.73	0.032	0.16	3.7	0.28	3.7	1.1	0.07	5

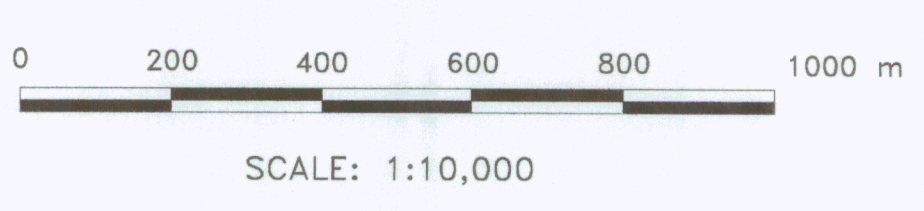
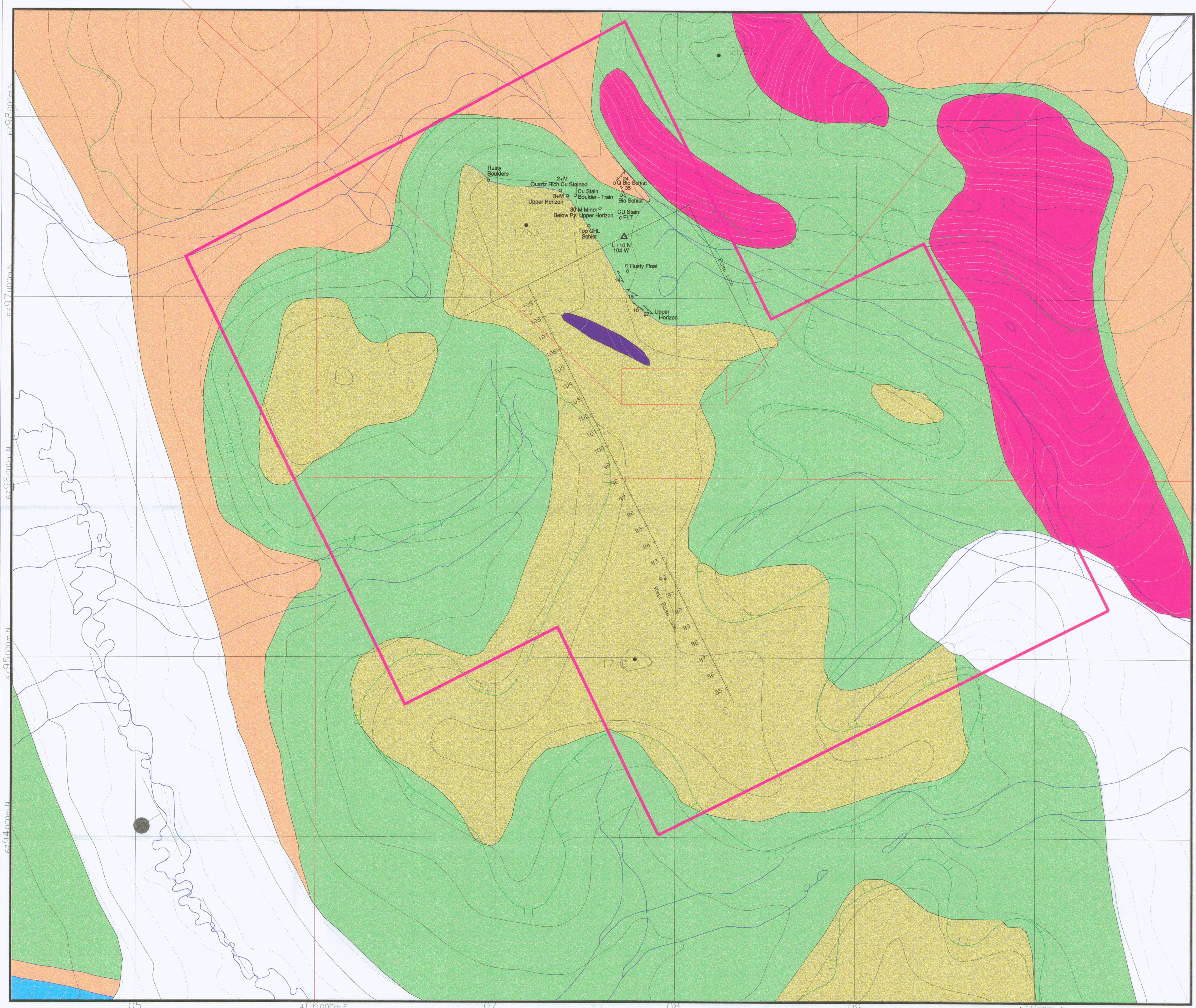
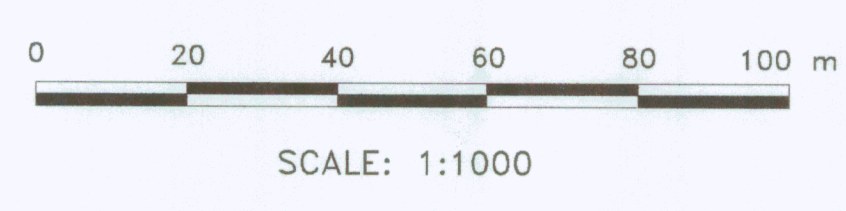
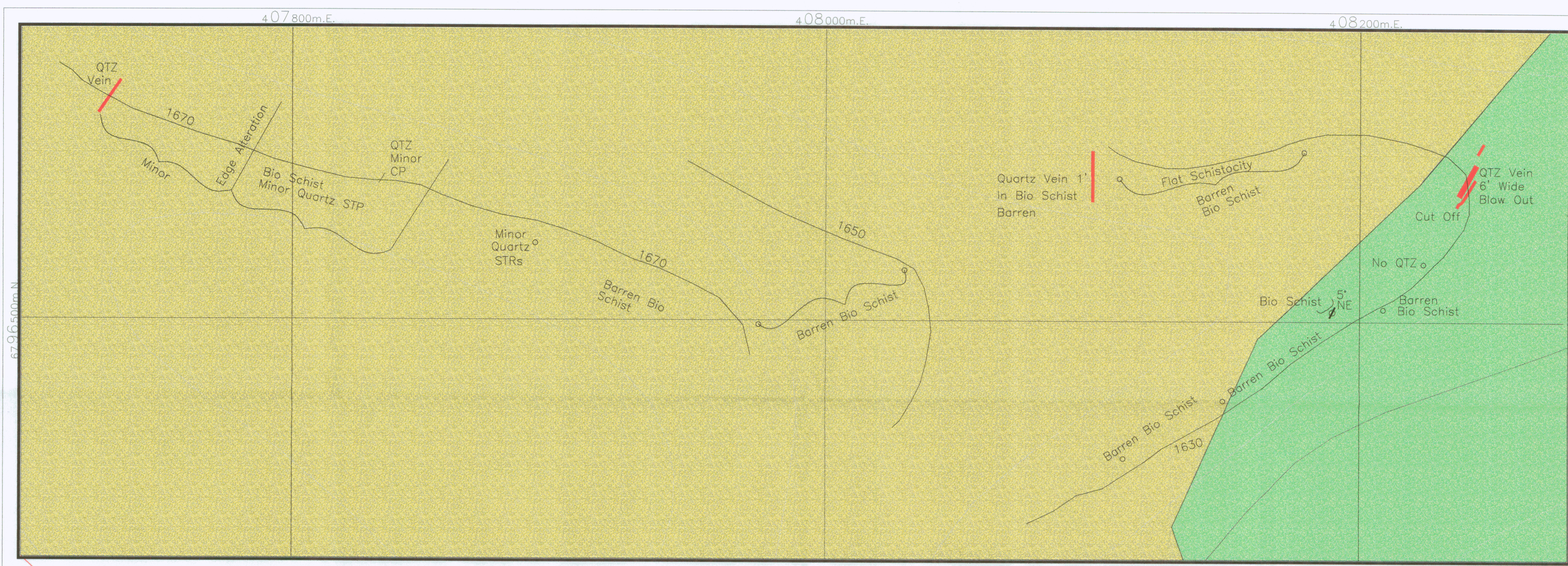
**APPENDIX D**  
**STATEMENT OF COSTS**

**ARCTURUS VENTURES INC.**  
**Schedule of Deferred Exploration Costs**  
**For the period ended August 31, 2002**

	Balance, Beginning of Year \$	Additions During the Period \$	Balance, End of Period \$
<b>RB</b>			
Exploration			
Accommodation and meals	0	1,892	1,892
Consulting -geological and geophysical	0	7,410	7,410
Drafting, maps and printing	0	306	306
Field work and supplies	0	70	70
Project management fees	0	541	541
Salaries and wages	0	2,000	2,000
Transportation -fixed wing, helicopter	0	8,272	8,272
Travel	0	4,289	4,289
<b>Total RB Exploration Expenditures</b>	<b>0</b>	<b>24,780</b>	<b>24,780</b>

*No*  
*70,491.00*

YUKON ENERGY, MINES  
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 Whitehorse, Yukon Y1A 2C6



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COMPANY:	<b>ARCTURUS VENTURES INC.</b>		
DRAWING TITLE:	<b>Detailed Geology Map</b>		
LOCATION:	<b>Grass Lakes, Yukon Territory</b>		
DATE:	DEC. 2002	SCALE:	1 : 10,000
DRAWN:	TerraCAD 2002decgeology1	GEOLOGIST:	
DATA:		DRAWING #:	

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