093844

ASSESSMENT REPORT

ON THE

1st BASE CLAIMS

1st BASE 1-44 YB51866-909

Grass Lakes Area

NTS 105 G-7
Lat. 61^0 21' N, Long. 130^0 50' W
Watson Lake Mining District

For: Arcturus Resources Ltd.
609-475 Howe Street
Vancouver, B.C.
V6C 2B3

By: G.S. Davidson, P. Geol.
February 28, 1998

TABLE OF CONTENTS

LIST OF FIGURES & PLATES

LIST OF TABLES

LIST OF APPENDICES

1.0 SUMMARY

The 1st BASE property consists of 44 claims (921 hectares) located 200 kilometers northwest of Watson Lake in the Finlayson volcanogenic massive sulfide belt. Access is by helicopter from the Campbell Highway, located 35 kilometers to the northwest, or alternately from Whitehorse by float plane to the middle Grass Lake which lies 2 kilometers east of the claim block. This report summarizes a diamond drill program undertaken on geophysical targets on the 1st BASE 32 claim from September 28 to October 5, 1997.

The property is within the Yukon Tanana Terrane in a series of quartz-mica schists and mafic volcanic rocks intruded by ultramafic sills and granitic bodies. The Tintina Fault is located southwest of the property marking the contact between the Cassiar Platform and the Yukon Tanana Terrane. The area is being explored for massive sulfide deposits formed in Paleozoic and Mesozoic sediments and metavolcanic rocks. Since 1993, over 15,000 claims have been staked in the region, centered around Wolverine Lake and North Lakes. Located 15 kilometers northeast of the 1st BASE property, Cominco's Kudz Ze Kayah (KZK) deposit has reserves of 14 million tonnes at 1.1 % Cu, 1.5 % Pb, 6.1 % Zn, 140 g/t Ag and 1.3 g/t Au.

The 1st BASE claims were staked by Mr. Blake Macdonald on a target defined by an airomagnetic anomaly and prospecting knowledge. The target models (Kuroko style VMS) are the Cominco deposit, hosted in Devono-Mississippian metavolcanic and metasedimentary units and the Wolverine Lake deposit, a strataform Pb-Zn-Cu massive sulfide occurring at the base of a felsic volcanic sequence. The model consists of massive to broken sulfides occurring in a carbonaceous metasedimentary to felsic metavolcanic and volcanoclastic horizons overlain by massive subvolcanic domes or sills of mafic to felsic volcanic rock. The sulfide mineralization is in fairly narrow elongated lenses.

In 1996, an airborne geophysical survey (Aerodat Ltd.) over the 1st BASE claims located several broad magnetic highs and EM conductors that were targeted by grid work. Magnetic lows were coincident with areas of quartz carbonate rock. Quartz sericite schist with variable amounts of pyrrhotite underlay magnetic highs. In July-August, 1996, a 66 kilometer picket grid was established and 1,356 soil samples were collected by a five man crew based at the Ketza Group camp on Grass Lake. Four areas of elevated copper-lead-zinc geochemical values were found in the south-central portion of the property. The most significant anomaly features copper values of greater than 250 ppm over a 300 x 400 meter area (Anomaly A) and elevated values in lead and zinc.

The property geology consists of a thick, relatively flat lying, metasedimentary sequence of variable quartz muscovite-biotite schist and orthogneiss, in contact with a granitic batholith to the northwest. The schist horizons are part of Units 1 and 2 of the Layered Metamorphic Complex or Nasina Assemblage, described in recent reports on the Grass Lakes area by D. Murphy of The Canada-Yukon Geoscience office. Within the schists rusty weathering horizons of quartz sericite schist and quartz carbonate alteration zones form gossans on cliff faces and talus slopes. Quartz carbonate veins and silicified layers of sericite schist host minor pyrrhotite, galena and sphalerite. Several moderate to strongly anomalous copper, lead and zinc geochemical anomalies were found on and bellow the gossan zones. Ground geophysical surveys were performed by Llyod Geophysics Ltd. over geochemically anomalous portions of the grid in September, 1996. Two electromagnetic conductors of interest were located by the max-min survey.

In August, 1997, a more detailed max-min survey was run by SJ Geophysics Ltd. over electromagnetic responses in the floor of a cirque along trend from geochemical Anomaly A. A strong electromagnetic response centered at L28+00E 22+00N was targeted for drilling. A 400 meter contract was let to DJ Drilling of Watson Lake and the drill equipment was mobilized to the 1st BASE claims on Sept. 29, 1997. Three drill sites were selected by the writer and G. Macdonald, P.Geol. on the electromagnetic conductors. Geochemical Anomaly A at the top of the cirque ridge was not drilled because of the winter weather conditions. Drilling commenced on Sept. 30 and was completed by Oct. 4, 1997. DJ Drilling proved to be quick and efficient, providing top quality service.

A total of 357 meters of B sized core was drilled in three holes, intersecting variable mafic schist consisting of black to light grey-green biotite-muscovite-quartz schist interbedded with layers of blue-grey marble, and quartzite lenses and bands. Some sections of the core were broken containing graphitic bands or alternately talcy shears. Quartz-calcite veining was common in more siliceous sections. Chlorite is also common and epidote alteration is patchy. Minor disseminated pyrrhotite is generally present in the more mafic sections of core. The rock units intersected by the drilling are mapped as Unit 1, mafic volcanic with interbedded clastic and carbonate rocks (D. Murphy, 1997). No significant mineralization was cut by the three drill holes and the EM anomaly was most likely caused by a graphitic argillite horizon.

Geological mapping by D. Murphy outlined a felsic schist unit (Unit 1f) located at the top of the cirque, coincident with geochemical Anomaly A. This horizon is a meta-rhyolite and is similar to the felsic rocks that host the KZK deposit. Unfortunately this area could not be drill tested due to the wintry conditions that prevailed during the drill program. This is the priority target for future work on the property. Prior to drilling, it is recommended that an electromagnetic and magnetic geophysical surveys be performed over the felsic volcanics. Potential mineralization in the vicinity of Anomaly A should produce an electromagnetic response and a weak magnetic high. An exploration program of diamond drilling and surface exploration at a proposed budget of $200,000 is recommended for the 1st BASE claims.

2.0 INTRODUCTION

The 1st BASE property consists of 44 claims located in the central Yukon near Grass Lakes in the Pelly Mountains and the Watson Lake Mining District, Yukon Territory (NTS 105 G-7). The claims cover a high mountain ridge flanked by steep talus slopes and cliffs. An exploration program of Diamond Drilling was performed from September 29-October 5, 1997. The writer supervised the program in consultation with G. Macdonald P.Geol., president of Arcturus Resources Ltd.. This report reviews the drilling program and recommends a work program. The report is prepared for filing assessment on the claims.

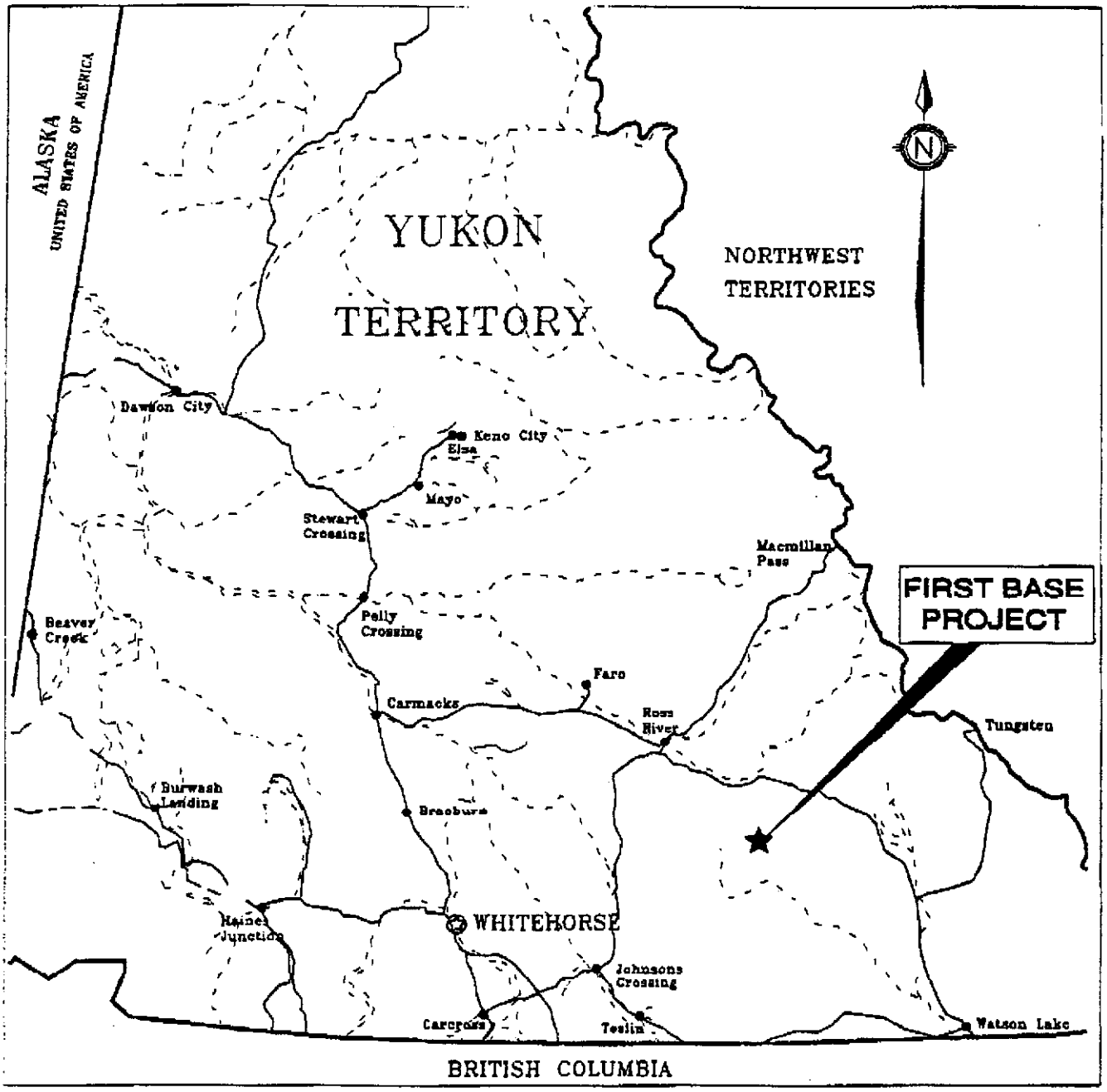
2.1 LOCATION AND ACCESS

The 1st BASE property is located 2 kilometers west of Grass Lake and 200 kilometers northwest of Watson Lake on NTS Map Sheet 105 G-7 at geographical co-ordinates 61^0 21' N and 130^0 50' W. The 1st BASE property was accessed by Trans North Air helicopter from the Ketza Group base camp on Grass Lake. Access to the camp was by charter float planes provided by Black Sheep Aviation of Whitehorse. Figures 1 and 2 show the property location. Logistically, Whitehorse, Ross River and Watson Lake provide supplies, accommodations and government services for the district and there is a government maintained airstrip near Finlayson Lake.

2.2 PHYSIOGRAPHY

The 1st BASE property covers a high L-shaped series of ridges and mountain peaks. A long narrow north-south trending ridge occupies the central and northern portion of the claim block. This ridge is connected to an east-west trending ridge that lies in the southern part of the claim block. The general area features mountainous terrane with several peaks connected by precipitous ridges and flanked by steep talus slopes and cliff areas. The ridge tops are castilated to rounded rubble covered slopes. Elevations range between 1,300-2,099 meters (4,250-6,890 ft) a.s.l. Outcrop is widespread at higher elevations and talus slopes are common. Overburden on south and westerly facing slopes averages 5 meters while north facing slopes have more permafrost with an average of 10 meters.

The district has a northern interior climate marked by long cold winters and low annual precipitation. Exploration on the property can be performed from June until September. The weather conditions during the drill program consisted of light snow, gusty wind and temperature between 0 and -10^0 C.



0 50 100 150 200km

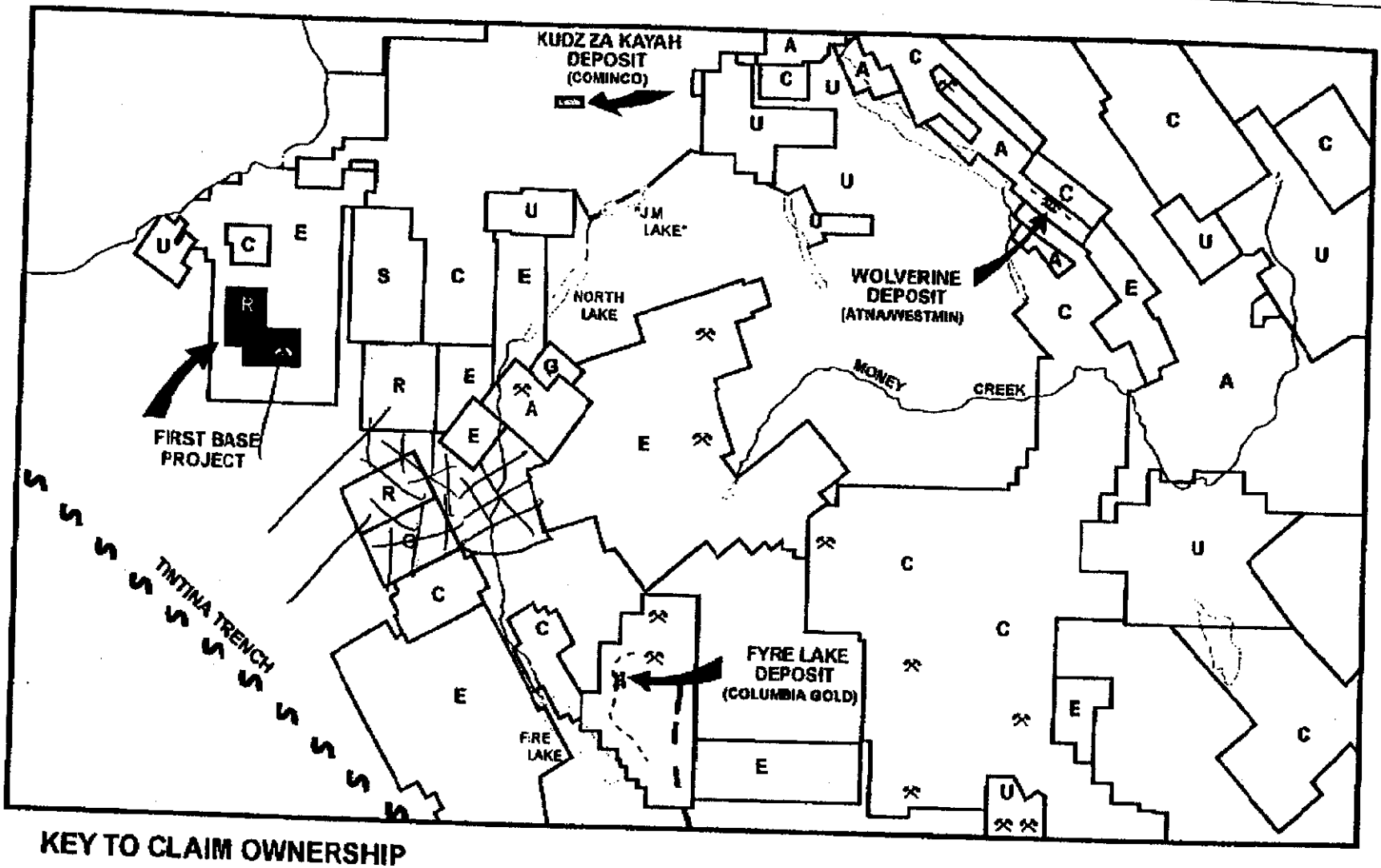
SCALE: 1 : 4,000,000

COMPANY:
ARCTURUS RESOURCES LTD.

DRAWING TITLE:
FIRST BASE PROJECT LOCATION MAP

LOCATION: Grass Lakes, Yukon Territory

DATE:	February 1997	SCALE:	1 : 4,000,000
DRAWN:	TerraCAD 96208	GEOLOGIST:	Graham Davidson
DATA:	NTS 105/07	FIGURE:	1



KEY TO CLAIM OWNERSHIP

R - ARCTURUS RESOURCES
G - CONSOLIDATED SHOSHONI GOLD
C - COMINCO
A - ATNA/WESTMIN J.V.
E - EXPATRIATE RESOURCES
U - UNKNOWN OWNERSHIP
S - SUNSTATE RESOURCES LTD.

SCALE
0 2 4 6 8 10km

N

ARCTURUS RESOURCES LTD.

FIRST BASE PROJECT

Grass Lakes, Yukon Territory

SCALE:	AS SHOWN		
NTS	NTS 105/02	DRAWN:	TurnCAD 9002044

2.3 PROPERTY

The 1st BASE property consists of 44 contiguous mineral claims, as shown in Figure 3 and listed in Table 1. The 1st BASE 1-44 claims were staked in November, 1995 and recorded in the office of the district mining recorder in Watson Lake on Nov. 30, 1995. The claims are registered to Arcturus Resources Ltd.

TABLE 1
Claim Data

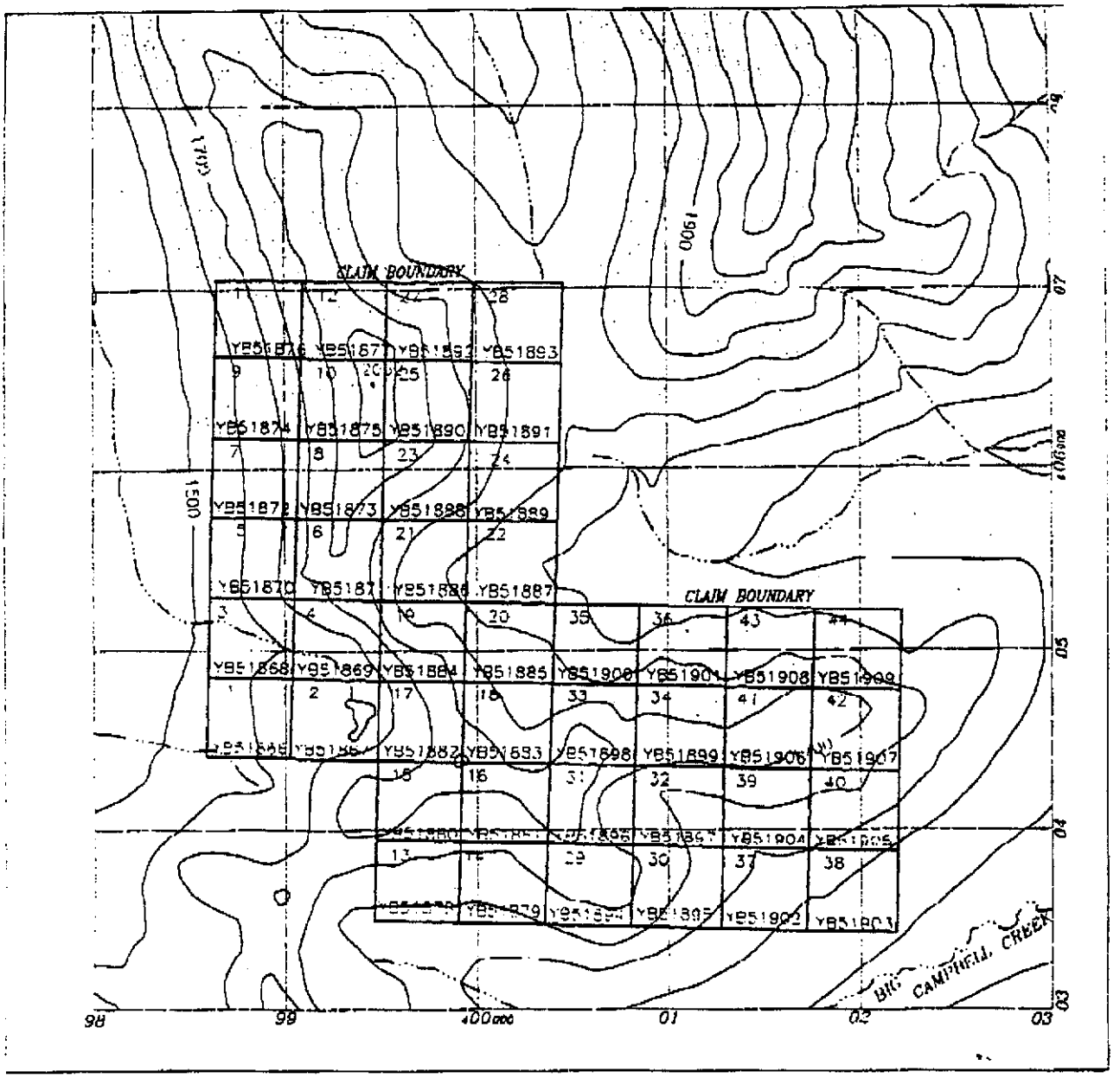
Claim Name	Grant Number	Expiry Date (* applied for)
1st BASE 1-28	YB51866-893	*Nov. 30, 2001
1st BASE 29-44	YB51894-909	*Nov. 30, 2001

2.4 ENVIRONMENT

No special environmental concerns are known for this area. The Department of Indian and Northern Affairs is implementing land use regulations (March 1998?) in the Yukon Quartz Mining Act. Under these regulations, approval of a land use permit may be required prior to commencing exploration on a claim group. It is recommended that Mining Land Use Applications for larger work programs be submitted at least 90 days prior to mobilization.

3.0 REGIONAL GEOLOGY

The rocks underlying the Finlayson area are mainly sedimentary and include various types of argillites, phyllites, slates, schists and quartzites of upper Proterozoic to Mississippian Selwyn Basin and Paleozoic metamorphic and volcanic rocks of the Slide Mountain and Yukon-Tanana Terranes (see Figure 4). These terranes represent the innermost of the accreted terranes of the Cordillera attached to the cratonic rocks of the Selwyn Basin (Mortenson et al, 1985). The claims lie north of the Tintina Fault, a large transcurrent 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.



0 200 400 600 1200 1800 2000m

SCALE: 1 : 31,680

N

COMPANY: ARCTURUS RESOURCES LTD.

DRAWING TITLE:

FIRST BASE CLAIMS 1- 44

LOCATION: Grass Lakes, Yukon Territory

DATE:	February 1997	SCALE:	1 : 31,680
DRAWN:	TerraCAD 85231-A4	GEOLOGIST:	[illegible]
DATA:	NTS 105/C7	FIGURE:	3

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 metasedimentary, 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 interbedded felsic and mafic volcanic rocks of Devono-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).

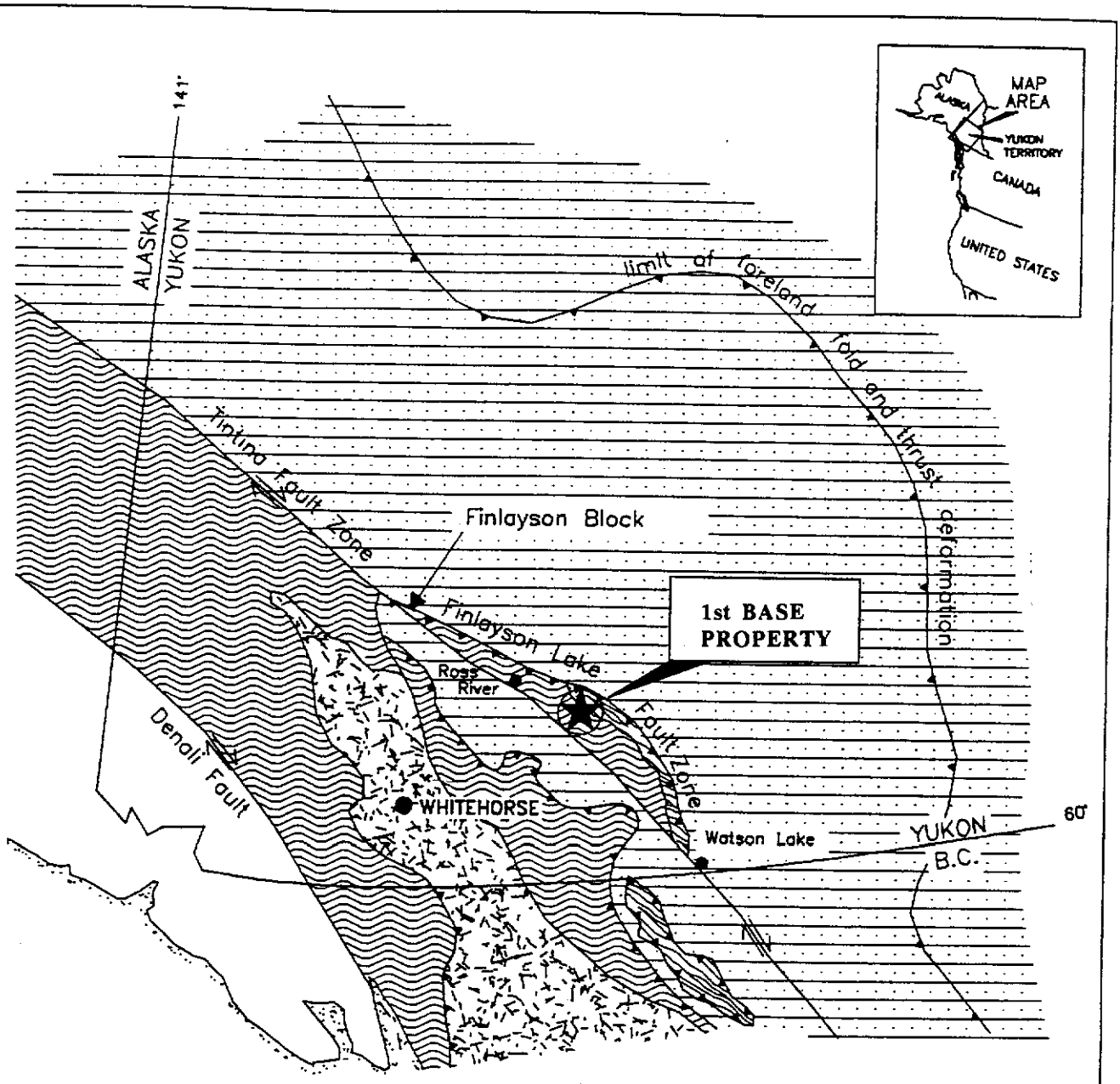
The Slide Mountain Terrane to the north consists of greenstones, cherts, serpentinites and other mafic to ultramafic plutonic rocks of Late Devonian to Late Triassic age. Complex thrust and normal faulting accompanied the emplacement of Carboniferous and Permian dark green aphanitic basalt, dunite, peroxinite, peridotite, serpentinized equivalents and quartz carbonate rock. Later movement along these faults caused deposition of Eocene flow and volcanoclastic rocks in structurally complex grabens. Epithermal style gold and 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 hornfels alteration of the surrounding layered rocks is common around the granites.

Recent government mapping by D. Murphy, 1996-1997 in the Grass Lakes region is published in Open File map 1997-3 (see Figure 5). The Layered Metamorphic Sequence is divided into four generalized rock units (Units1-4); described in Table II, the Table Of Formations.

3.1 STRUCTURE

Structurally, deformation phases are manifested as foliations, lineations and sediment deformation. Large scale folding is evident but thrust and normal faulting have displaced the stratigraphy. Thrust faults are interpreted under the Unit 1f horizon (D. Murphy, 1998). Regional metamorphic grade ranges from lower greenschist to amphibolite facies.



Thrust fault

Steep fault

Yukon–Tanana Terrane

Slide Mountain Terrane

Stikinia and other Terranes

North American Miogeoclinal Strata

Modified after Mortensen and Jilson (1985), Mortensen (1992) and Johnston and Mortensen (1994).

ARCTURUS RESOURCES LTD

Figure 4

TECTONIC MAP

0 100 200 300 400

M

LAYERED METAMORPHIC ROCKS

MISSISSIPPIAN AND MISSISSIPPIAN

Massive calcareous actinolite-plagioclase-chlorite-biotite schist, subtly layered plagioclase-actinolite-chlorite schist, and lesser carbonaceous phyllite and quartzite

Upper quartzose metaclastic unit: biotite-muscovite quartz schist and micaceous quartzite, lesser quartz-pebble conglomerate and chlorite-biotite schist; uncommon grey carbonaceous quartzite. Narrowly transitional upward to Unit 2m

Calcareous quartz psammite, marble, calcareous chlorite-biotite schist and epidote-biotite-calcite-garnet calcsilicate schist; stratigraphically equivalent to Unit 1cls.

Calcareous garnet-biotite-muscovite schist and marble, rare garnet-biotite amphibolite; stratigraphically equivalent to Unit 1clp.

Lower quartzose metaclastic unit: biotite-quartz-muscovite schist and lesser biotite-muscovite quartz schist and plagioclase-quartz-chlorite-biotite schist.

Calcareous plagioclase-chlorite-biotite schist

Quartz-feldspar-muscovite augen schist

s of uncertain stratigraphic position

Discontinous (traceable for up to hundreds of metres) bodies of coarse-grained quartzofeldspathic sandstone and pebble conglomerate and lesser carbonaceous schist or phyllite.

Undifferentiated mafic (plagioclase-biotite-actinolite-chlorite) schist and carbonaceous phyllite and quartzite; see cross-sections B-B' for two interpretations of the stratigraphic position of this unit.

1 ca. 112 Ma U-Pb determinations reported from this and similar bodies elsewhere in the Pelly Mountains (Mortensen, 1992 and personal communication, 1996)

2 Early Mississippian U-Pb age determinations reported from similar bodies elsewhere in Yukon-Tanana Terrane in the Pelly Mountains (Mortensen, 1992 and personal communication, 1996; Grant and Creaser, 1996)

3 Concordant 365 Ma U-Pb age (J. Mortensen, personal communication, 1996)

4 Early Mississippian U-Pb age determinations reported from undeformed rocks thought to be equivalent to these rocks (Grant and Creaser, 1996)

INTRUSIVE ROCKS

TERTIARY

Td — North-northeast trending undeformed, brown, clay-altered feldspar porphyry dykes and light grey aphyric felsite dykes.

CRETACEOUS

Kg — Weakly foliated medium- to coarse-grained biotite-muscovite granite, generally equigranular[1]

MISSISSIPPIAN

Grass Lakes orthogneiss [4]

MGg — Equigranular medium- to coarse -grained granitic to monzonitic orthogneiss.

SYMBOLS

Geological contact (defined, approximate, assumed, covered)

Fault (displacement unknown) (approximate, assumed, covered)

Normal fault (circle on downthrown hangingwall) (approximate, assumed, covered,)

Thrust fault (teeth on upthrown hanging wall) (approximate, assumed, covered)

Recumbent fold axial surface trace (arrow indicates plunge of hinge)

Limit of outcrop

Foliation (main phase, generally parallel to compositional layering)

Line of cross-section — A

Apperent dip of foliation in cross-section

FIGURE 5

GEOLOGY MAP

Scale 1: 50,000

NTS 105 G-7

After, Open File 1997-3

3.2 METALLOGENY

The Yukon-Tanana Terrane hosts volcanogenic massive sulfide mineralization of the Kuroko style (KZK and Wolverine), Besshi style (Fire Lake) and Cyprus style (Ice Property). The two Kuroko deposits are the more economic of the occurrences. The KZK deposit occurs in the Unit 3 of the Layered Metamorphic Sequence (see Figure 6) 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.

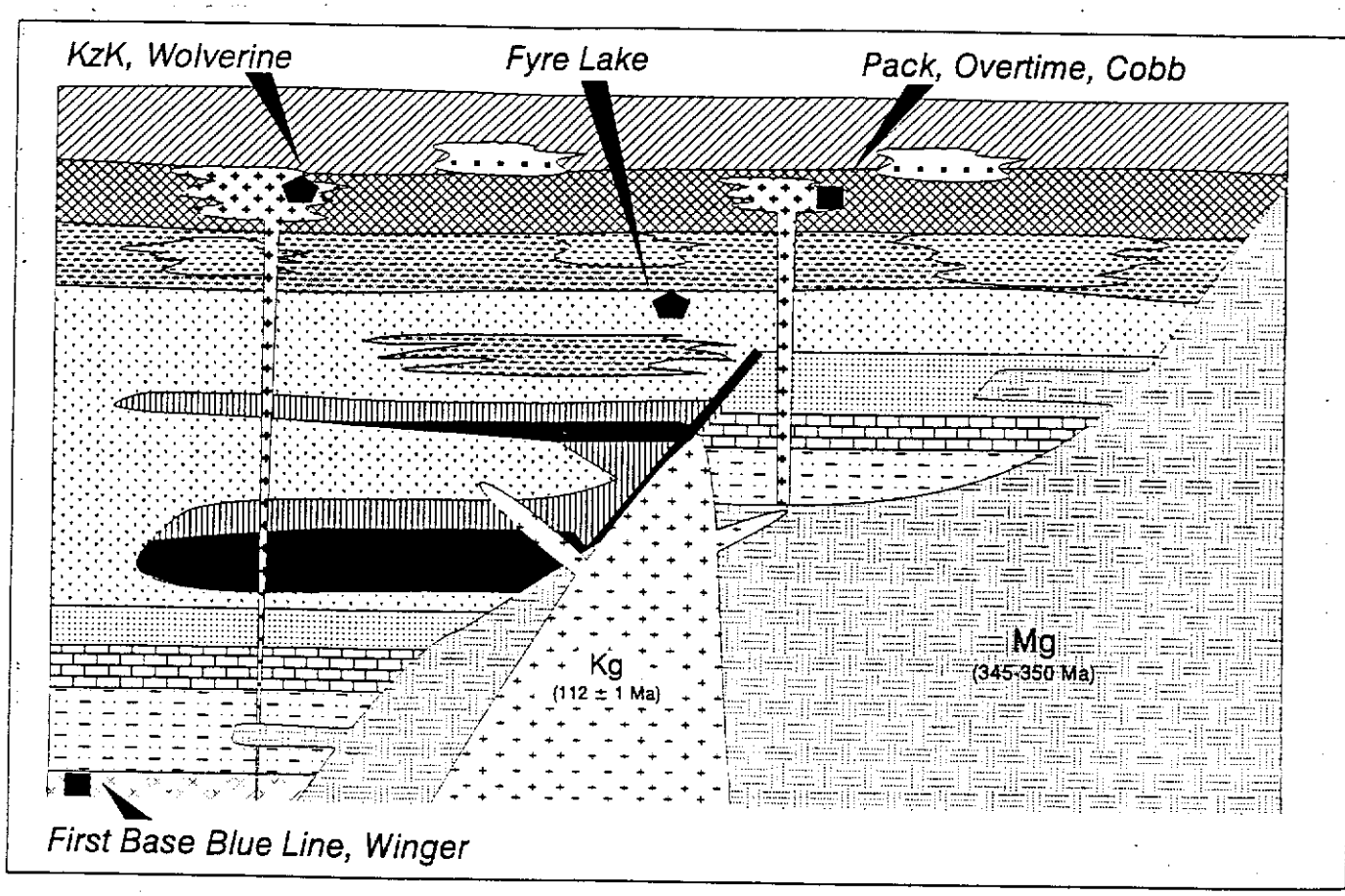
The Wolverine deposit occurs in argillites overlain by a thick pile of meta-rhyolite within the Unit 3 of the Layered Metamorphic Sequence. Mineralization consists of banded pyrite and sphalerite with variable chalcopyrite, galena and tetrahedrite. The deposit is narrow averaging 6 m in thickness, dips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

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.

4.0 HISTORY

The Finlayson area was first explored by Robert Campbell of the Hudsons Bay Company 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 sulfide deposits led to several staking rushes in the Finlayson and Pelly River areas. A few narrow zones of sulfide 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.



Layered Metamorphic Rocks

- Unit 4qf: quartzofeldspathic metaclastic rocks
- Unit 4: carbonaceous phyllite, mafic metavolcanic rocks
- Unit 3f/3r: felsic metavolcanic rocks
- Unit 3q: calcareous qz psammite
- Unit 3cp: carbonaceous phyllite
- Unit 2m: mafic metavolcanic rocks
- Unit 1qsu: upper qz-rich metaclastic rocks
- Unit 1cls, clp: calcareous marker
- Unit 1qsl (lower qz-rich metaclastic rocks) and undifferentiated unit 1
- Unit 1f: felsic metavolcanic rocks

Intrusive or Meta-Intrusive Rocks

- Unit Td: Tertiary felsic dykes
- Unit Kg: Cretaceous granite
- Unit Mg: Mississippian orthogneiss
- Unit 3qfp: quartz-feldspar porphyry
- Unit 2mum: meta-gabbro, meta-pyroxenite
- Unit 2um: meta-ultramafic rocks

Figure 6 *Schematic illustration of stratigraphy and field relationships in Grass Lakes map area. All map units, except for the weakly foliated Cretaceous granite, are strongly foliated and lineated.*

After, Figure 3, D. Murphy, Yukon Exploration and Geology 1997

In 1993 Cominco discovered massive sulfide 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 KZK massive sulfide 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 Jan. 1995. Westmin continued with an aggressive program of claim staking through the district and now holds about 3,000 claims. Westmin announced a massive sulfide 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 Fire Lake deposit.

Prior exploration in the area of the 1st BASE claims is reported in the Yukon Minfile. A few narrow galena bearing quartz-carbonate veins were discovered on a high ridge west of Grass Lakes in the 1970's. No further work was performed on the occurrence.

An airborne geophysical survey by Aerodat Ltd. was flown on behalf of Arcturus in 1996 over the 1st BASE claims. Several broad magnetic highs and EM conductors were outlined and targeted for follow-up exploration. Magnetic lows were coincident with areas of quartz carbonate rock and magnetic highs overlie quartz sericite schist with variable amounts of pyrrhotite.

In July-August, 1996 a 66 kilometer picket grid was established and 1,356 soil samples were collected by a five man crew based at the Ketza Group camp on Grass Lake. Four areas of elevated copper-lead-zinc geochemical values were found in the south-central portion of the property. The most significant anomaly features copper values of greater than 250 ppm over a 300 x 400 meter area (Anomaly A) and elevated values in lead and zinc. The writer examined the metasedimentary-metavolcanic rocks, mainly quartz muscovite and quartz biotite schist and a granodiorite batholith to the northwest. Within the schists rusty weathering horizons of quartz sericite schist and quartz carbonate alteration zones form gossans on cliff faces and talus slopes. Quartz carbonate veins and silicified layers of sericite schist host minor pyrrhotite, galena and sphalerite. Several moderate to strongly anomalous copper, lead and zinc geochemical anomalies were found on and bellow the gossan zones.

Ground geophysical surveys were performed by Llyod Geophysics Ltd. over geochemically anomalous portions of the grid in September, 1996. Two electromagnetic conductors of interest were located by the max-min survey.

Three targets for further evaluation were located by the 1996 work program. 1) Geochemical anomaly A and a moderately conductive EM response obtained over a 400 meter length. The EM response was drilled in the 1997 program. 2) A HLEM conductor located at the east end of the property correlates with anomalous geochemistry and a magnetic high. 3) A magnetic dipole coincides with a strong geochemical anomaly and a small galena sphalerite showing.

TABLE II - TABLE OF FORMATIONS

(adapted from Hunt, J.A., 1997)

Quaternary

Q-Undifferentiated, unconsolidated gravels, sands and clays

Cretaceous

Kg-Buff to grey dykes, sills and small plugs of aplite and granite; locally quartz, feldspar and/or biotite phyric; minor arsenopyrite

Kl-Fine-to coarse-grained, light grey, biotite lamprophyre dykes, locally feldspathic

Triassic

Trd-Fine- to medium-grained greenstone (meta-diorite, meta-gabbro)

Carboniferous & Permian

CPav-Anvil Allocthan, amphibolite, greenstone, basalt, gabbro
CPas-Serpentinite

Mid Permian

PPK-Klondike schist, quartz muscovite and quartz biotite schist and gneissic equivalents.

Devonian-Mississippian

Mcg-Grass Lakes Orthogneiss, potassium feldspar porphyroclasts in quartz-plagioclase-mica matrix

LAYERED METAMORPHIC SEQUENCE

Nasina Assemblage;Unit 4-biotite-plagioclase schist , psammite-carbonaceous quartzite and phyllite-grit-quartzite (4qf)
Unit 3-felsic metavolcanic rocks, quartz muscovite schist (3f), meta-rhyolite (3r), carbonaceous phyllite (3cp)
Unit 2-mafic metavolcanic rocks, biotite-chlorite-plagioclase schist (2m), carbonaceous phyllite-psammite-grit
Unit 1-, quartz-mica schist, psammite and grit (1qsu), marble (1cls), felic schist and meta-rhyolite (1f)

5.0 1997 DRILLING PROGRAM

5.1 INTRODUCTION

A diamond drilling program was tendered to test several geophysical conductors identified by surveys in 1996 and 1997. SJ Geophysics Ltd. completed the surveys over the grid lines. DJ Drilling Ltd of Watson Lake performed the drill program. The drill was mobilized from the KZK camp directly to the initial drill site by helicopter. The camp at Grass Lakes was utilized for accommodations and a Trans North Air Long Ranger helicopter based at Fire Lake performed the drill moves and shift changes. The drill core is stored in core racks at the camp site. Personnel and contractors working on this project are:

Supervision, geological services:
Blake Macdonald, supervisor
Glen Macdonald, consultant
G. Davidson, geologist
T. Macmillan, assistant

Al Echkert, camp manager
Dick Matsen, handy-man
Carol Matsen, cook

Contractors: DJ Drilling Ltd. & Trans North Air Ltd.

5.2 PROPERTY GEOLOGY

The rocks exposed on the 1st BASE are Devono-Mississippian metamorphic rocks and orthogneiss. The most common rock types are quartz muscovite and quartz biotite schists of Unit 1 which outcrops along ridges as massive gray weathering castilated blocks and beds that strike 010° and have variable shallow dip. Marble and quartzite layers or bands are common in the mafic schist. A few horizons of lighter siliceous quartz sericite schist occur in the sequence. The mafic schists are unconformably overlain by a wedge of light colored quartz rich sericite schist. This felsic Unit 1f is a meta-rhyolite which outcrops in the south property area at the top of a cirque. It weathers a tan to rusty red ranging in composition from fresh rhyolite to banded quartz sericite schist and quartz breccia. Narrow bands of pyrite and pyrrhotite are occasionally seen in the meta-rhyolite. Pyrite rich layers are common in the mafic and sericitic schists. These layers weather to a rusty reddish brown stain, visible on the cliff faces.

Early Mississippian Grass Lakes orthogneiss, which is a coarse grained granitic to monzonitic unit containing feldspar porphyroclasts in a quartz-feldspar-biotite matrix outcrops on the south side of the property beneath the felsic schists. Younger intrusive rocks were not mapped on the property but are found to the northwest as a large pluton of granitic rock. Figure 5 shows the property geology and the following units were identified at Grass Lakes (after Murphy, 1998);

Cretaceous
Granite (**Kg**): medium grained grey biotite-muscovite granite

Ultramafic rocks (**UMs**), serpentinized pyroxenite and dunite

Devono-Mississippian
Grass Lakes Orthogneiss (**MGg**)-coarse grained, potassium feldspar augen in quartz biotite matrix

Undifferentiated mafic schist (**Unit 4**), muscovite-biotite-chlorite-actinolite-plagioclase schist, carbonaceous phyllite and quartzite, grit (**Unit 4qf**). Generally appears as dark grey to black mica schist containing minor disseminated pyrite and pyrrohtite, graphitic fracture faces, locally brecciated with minor white quartz and carbonate veining, weak to heavy limonite staining.

Undifferentiated felsic schist (**Unit 3**), quartz-muscovite-feldspar schist (**Unit 3f**), carbonaceous phyllite and quartzite (**Unit 3cp**), massive cream-colored meta-rhyolite (**Unit 3r**). Generally occurs as bedded, rusty weathering, light grey schist containing minor pyrite and pyrrhotite on fractures and minor galena and sphalerite in quartz and calcite bands.

Undifferentiated mafic schist (**Unit 2**), biotite-chlorite-actinolite-plagioclase schist, quartz carbonate layers containing minor galena, mafic metavolcanics (**Unit 2m**).

Psammite, quartz-pebble grit, metapilitic schist (**Unit 1qsu & 1qsl**), and sandy marble and calcsilicate rock (**Unit 1cls**).

5.3 MINERALIZATION

Detailed prospecting of the claims in 1996 found only minor occurrences of galena and sphalerite. Traverses in 1997, across the cirque above the drill holes found a pyritic quartz muscovite-biotite schist horizon (Unit 1) which forms a prominent gossan zone in the cirque wall. The horizon is up to 10 meters thick and contains 5-10% disseminated grains and veinlets of pyrite. Three samples collected from this horizon assayed background metal values. At the top of the cirque the meta-rhyolite contains a few bands of pyrite and arsenopyrite. Two rock samples of meta-rhyolite and a quartz breccia vein returned background values. The strong geochemical feature Anomaly A covers the meta-rhyolite unit but no mineralization was found to explain it.

5.4 GEOCHEMISTRY

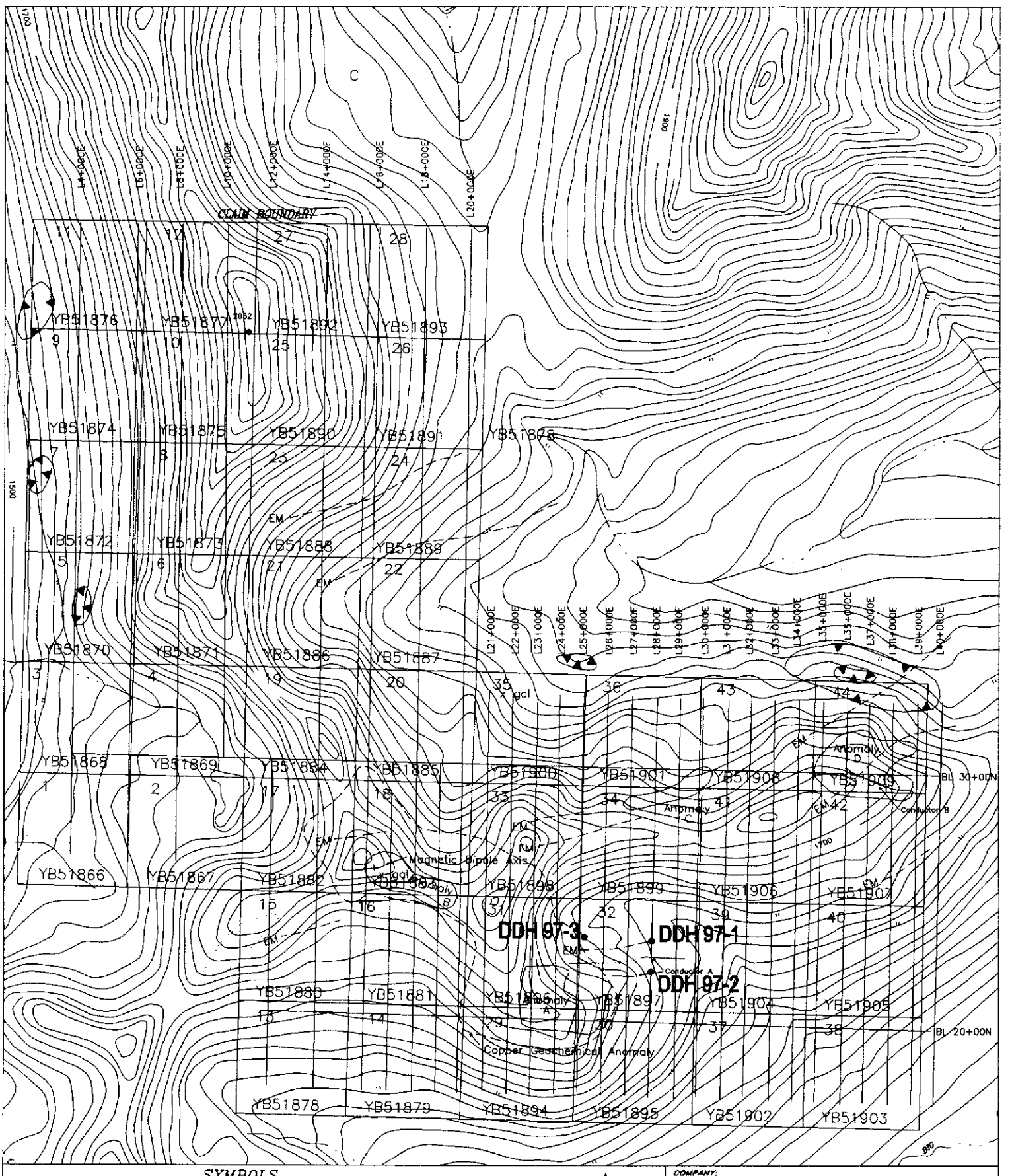
(from 1996 report)

The geochemistry outlined four moderate strength anomalies labeled A-D on the Compilation Map, Figure 7. The response for copper ranges from a minimum of 2ppm to 1430ppm. A moderate anomaly 400 x 1400 meters of > 100ppm copper trends northwest-southeast in the south center area of the claims. This anomaly contains three zones of strongly anomalous copper values. The most significant of these (Anomaly A) is a 300 x 400 meter area of >250ppm copper centered at L24+00E, 21+00N. Anomalous lead and zinc values at Anomaly A are over a smaller area but reach peak values of 930ppm lead and ppm zinc. A second strong zone (Anomaly B) in the broad copper anomaly is centered at L17+00E, 26+00N. Copper values reach a peak of 950ppm while lead and zinc values are strongly anomalous and cover a larger area at Anomaly B. Lead values peak at 2040ppm and zinc reaches a high of ppm.

Anomaly C is a patchy copper response on a north facing slope above Camp Creek. Coincident moderate strength lead and zinc anomalies are centered at L28+00E, 29+00N. Anomaly D at the east end of the grid has a moderate strength copper and zinc response centered at L36+00E, 31+00N.

5.5 GEOPHYSICAL SURVEYS

Electromagnetic surveys completed in 1996 and 1997 are summarized on the compilation map, Figure 7. The Profile Maps for the 1997 surveys by SJ Geophysical Ltd. are included as Plates G-1 to G-4 in Appendix I. A strong EM anomaly at L28+00E 22+00N was the primary target of the drill program. The 1996 geophysical surveys were described in the 1996 report as follows:



SYMBOLS

- EM – Airborne EM Conductor
- Airborne Magnetic Low
- Airborne Magnetic High
- Conductor A – Ground HLEM Conductor
- Anomaly B – Copper, Lead, Zinc Geochemical Anomaly
- x gal – Galena–Sphalerite showing
- Magnetic Dipole

0 200 400 600 800 1000

SCALE: 1:20000

COMPANY: **ARCTURUS RESOURCES LTD.**

DRAWING TITLE:

FIRST BASE CLAIMS COMPILATION MAP

LOCATION:	Grass Lakes, Yukon Territory		
DATE:	April 1998	SCALE:	1 : 20,000
DRAWN:	TerraCAD 98231C	GEOLOGIST:	Graham Davidson
DATA:	NTS 105/G7	FIGURE:	7

The results of the ground geophysical surveys have been evaluated by M. Power, P. Geoph. in a memo. In summary, the magnetic survey outlined a magnetic gradient of 400 nT showing a few spot highs and lows. A magnetic dipole at L16+00E, 25+70N coincides with a galena sphalerite showing and geochemical anomaly B. Overburden is fairly shallow in this area and it may be possible to expose bedrock by blast trenching. Expanded magnetometer coverage is also suggested around the dipole.

The max-min (HLEM) survey located two significant conductive responses. Conductor A from L28+00E, 22+70N to L25+00E, 22+30N appears to be a northerly dipping tabular conductor with footwall alteration on the south side of the conductor axis. The western end of Conductor A coincides with the copper-lead-zinc Anomaly A.

Conductor B extends from L38+00E, 29+50N to L36+00E, 30+00N with a response resembling a northerly dipping tabular feature. A moderate copper-zinc geochemical anomaly correlates with Conductor B.

5.6 DIAMOND DRILLING

A diamond drill contract was let to DJ Diamond Drilling Ltd of Watson Lake for 400 meters of B core drilling. G. Macdonald, P. Geol. and the writer visited the property on Sept. 25 and selected drill sites at the base of a cirque to test an EM anomaly. The crew began set up of the drill on a pad locate 100 meters north of the conductor on September 29, 1997. Drilling started on September 30 with an angle hole (DDH97-1) on a south azimuth to 128 meters (422 ft) of depth. Casing was put down to 5 meters through overburden consisting of angular boulders and a sand seam. This hole did not intersect mineralization and the drill was moved to site 2, located about 150 meters north of site 1. DDH97-2 was a vertical hole drilled to 92 meters (302 ft) of depth. No significant sulfides were seen and the drill was moved about 300 meters west to Site 3. An angle hole (DDH97-3) on a south azimuth was drilled to 136 meters (448 ft) of depth. No sulfide mineralization was found in DDH 97-3 and the drill program was ended on October 4, 1997 at a total of 359 meters (1,178 ft). Drill hole locations are shown on Figure 7 and drill hole sections are presented in Figures 8a and 8b. Drill logs are listed in Appendix II and a detailed description of the drill holes follows:

Drill Hole 97-1, grid 28+00E, 23+00N, angle hole at -60° at 180° azimuth to 128 m (422 ft).

Target: Testing a strong max-min EM anomaly down dip of the conductor axis. The intersection was estimated at 150-200 ft of depth.

Results: Hole 97-1 cut variable mafic schists with bands of marble and quartzite. Bands of graphitic argillite were encountered from 135-155 ft and pyrrhotite content was < 1%. The graphitic section appears to be the cause of the EM conductor.

Drill Hole 97-2, 28+00E, 21+50N, vertical hole to 92 m (302 ft).

Target: Drilling south side of the strong EM conductor to test the possibility of a sulfide zone dipping to the south.

Results: The hole cut variable mafic schist with bands of blue-grey marble and quartzite. Minor disseminated pyrrhotite was common in more mafic sections of schist.

Drill Hole 97-3, grid 25+15E, 23+50N, angle hole at -70° at 180° azimuth to 136 m (448 ft).

Target: Stratigraphy at the base of the cirque wall.

Results: Like holes 1 and 2, variable mafic and felsic schist were cut with bands of marble and quartzite. Only minor amounts of disseminated pyrrhotite are present.

6.0 DISCUSSION AND RECOMMENDATIONS

The drill program failed to intersect mineralization on the EM geophysical targets. The conductor was explained in DDH97-1 by a graphitic argillite section from 135-155 ft. DJ Drilling provided exemplary service performing a quick and cost effective drill program in difficult weather conditions. The drill equipment proved highly portable and produced excellent core recovery. The lithologies drilled are from the Unit 1 (mafic schist) section which underlay the important felsic schist horizon. The meta-rhyolites on the 1st BASE are similar to the felsic units that host the massive sulfide mineralization at KZK. This unit remains the primary target for future work, but two secondary anomalies should also be examined as follows:

Target I: Meta-rhyolite unit and geochemical Anomaly A-copper geochemical values >250ppm over a 400 x 300 meter area, strong lead and zinc geochemical values. This target should be examined by EM and magnetometer surveys to try and pinpoint a conductor or magnetic high prior to diamond drilling. Drill sites are possible along the top rim of the cirque with little site preparation and a water line from a small stream at the base of the cirque would be approximately 750 meters of length with a 200 meter rise. Drill sites in the face of the cirque would require some site preparation which could be accomplished by hand mucking and surface blasting. Preliminary grid co-ordinates for these drill sites are L25+00E, 19+75N and L24+00E, 19+50N with drill hole orientation of -70° on a north azimuth.

Target II: moderately anomalous copper and zinc geochemistry (Anomaly D), and HLEM Conductor B. Geological mapping is recommended to determine if a meta-rhyolite unit is present and evaluation by detailed EM survey.

Target III: copper-lead-zinc geochemical Anomaly B coincides with a magnetic dipole at L16+00E, 25+70N. Similar to Target II geological mapping and ground EM survey are recommended.

7.0 PROPOSED EXPLORATION PROGRAM

Geological mapping and EM-magnetometer geophysical surveys of the targets, followed by diamond drilling of Target 1 is proposed for the 1st BASE property. Camp facilities are available at Grass Lakes and mobilization of drill equipment is best achieved from the KZK camp located 15 kilometers east of the 1st BASE claims.

Diamond drilling, 500m	**50,000**
Geological supervision	**11,250**
Surface exploration	**7,500**
Geophysical surveys	**15,000**
Camp and support	**25,000**
Transportation, helicopter, 75 hours	**50,000**
floatplane	**10,000**
Geochemistry, assays	**2,250**
Report & assessment	**9,000**
Contingency, 10%	**20,000**
TOTAL	**$200,000**

8.0 CERTIFICATE

I, GRAHAM DAVIDSON, of the City of Whitehorse in the Yukon Territory, HEREBY CERTIFY:

1. That I am a consulting geologist and that I supervised the diamond drill program on the 1st BASE property from September 28 to October 5, 1997.

2. That I am a graduate of the University of Western Ontario (H. BSc., Geology, 1981).

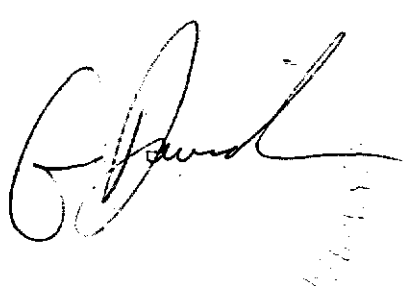
3. That I am registered as a Professional Geologist by the Association of Professional Engineers, Geologists and Geophysicists of Alberta (No.42038).

4. That I have been engaged in mineral exploration for fourteen years in the Yukon, the Northwest Territories and British Columbia.

5. That I have no interest direct or indirect in the properties or securities of Arcturus Resources Ltd. nor do I expect to receive any such interest. This report may be used for purposes normal to the business of Arcturus Resources Ltd. including submittal to the Vancouver Stock Exchange.

SIGNED at Whitehorse, Yukon, this 28th day of February, 1998.

G.S. DAVIDSON, P. Geol.



9.0 REFERENCES

Davidson G.S., January 1997; Assessment Report on the 1st BASE property for Arcturus Resources Ltd.

Hunt J.A. et al, 1997; Massive Sulfide Deposits in the Yukon-Tanana and adjacent Terranes in YEG 1996.

Johnston S. & Mortenson J.,1994; Regional setting of porphyry Cu-Mo deposits, volcanogenic massive sulfide deposits, and mesothermal gold deposits in the Yukon-Tanana Terrane, Yukon

Mortensen J & Jilson G., 1985; Evolution of the Yukon-Tanana Terrane: Geology, v 13, p. 806-810.

Murphy D.C. et al, 1997; Preliminary Geology of the Grass Lakes Map Area in YEG, 1996

Murphy D.C, 1997; Preliminary geological map of the Grass Lakes area, Open File 1997-3

Murphy D.C., 1998; Stratigraphic framework for syngenetic mineral occurrences, Yukon-Tanana Terrane south of Finlayson Lake, YEG 1997

Temple Man Kluit D., 1975, Open File 486

Yukon Minfile, DIAND, 1995

10.0 STATEMENT OF COSTS Period: September 1-Oct. 5, 1997
Drilling performed on 1st BASE claim 32 (YB51897)

Personnel:	
Supervisor	
Blake Macdonald, supervision, 4 days @ $400/day	1,600.00
Geologists	
Glen Macdonald, senior geologist, 2 days @ $400/day	800.00
Graham Davidson, supervision, 10 days @ 300/day	3,000.00
Core splitting and camp maintenance	
Terry Macmillan, 15 days @ $275/day	4,125.00
Al Echkert, 15 days @ $275/day	4,125.00
Dick Matsen, 6 days	1,540.82
Cook	
Carol Matsen, 15days @ $190/day	2,850.00
Total Wages	18,040.82
Transportation: Float planes, Black Sheep Aviation Ltd.	
Helicopter, Trans North Air Ltd.	
Total Transport	57,832.23
Diamond drilling: DJ Drilling	38,040.66
Supplies:	10,738.17
Expediting:	683.55
Total Camp	11,421.72
Accommodations and meals:	4,616.45
Analytical services: NAL, Camtech Labs Inc.	870.72
Geophysical surveys: SJ Geophysical Ltd.	6,682.00
Drafting, maps and printing:	146.00
Project management fee's: 15%	20,950.13
TOTAL PROPERTY EXPENDITURES	**$160,617.68**
Additional costs, Assessment Report	2,700.00
TOTAL COSTS	**$163,317.68**

APPENDIX I

FIGURES 8a & 8b
PLATES G-1 TO G-4

S

N

DDH 97-2

OVERBURDEN

MOTTLED BIOTITE–
QUARTZ SCHIST

BIOTITE–MUSCOVITE–
QUARTZ SCHIST

MUSCOVITE–BIOTITE–
QUARTZ SCHIST

BIOTITE–MUSCOVITE–
QUARTZ SCHIST

MUSCOVITE–QUARTZ SCHIST

BIOTITE–QUARTZ SCHIST

MUSCOVITE–QUARTZ SCHIST

EOH
302'

DDH 97-1

OVERBURDEN

VARIABLE SCHIST

MOTTLED SCHIST

FAULT

BIOTITE–CALORITE SCHIST

GRAPHITIC ARG., MARBLE BRECCIA

BIOTITE–MUSCOVITE–
CHLORITE SCHIST

MUSCOVITE–BIOTITE–
QUARTZ SCHIST

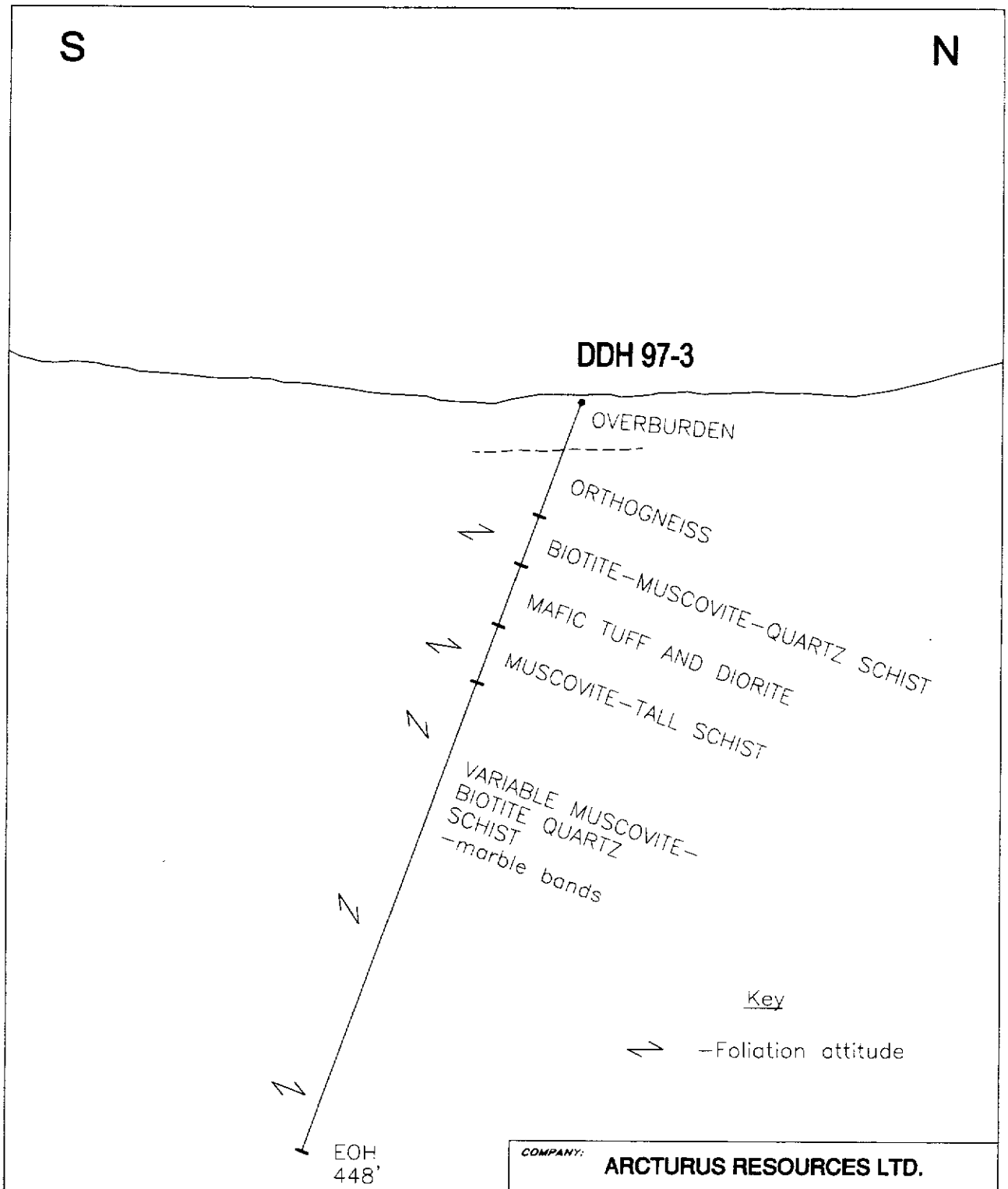
VARIABLE SCHIST W/ MARBLE

EOH
422'

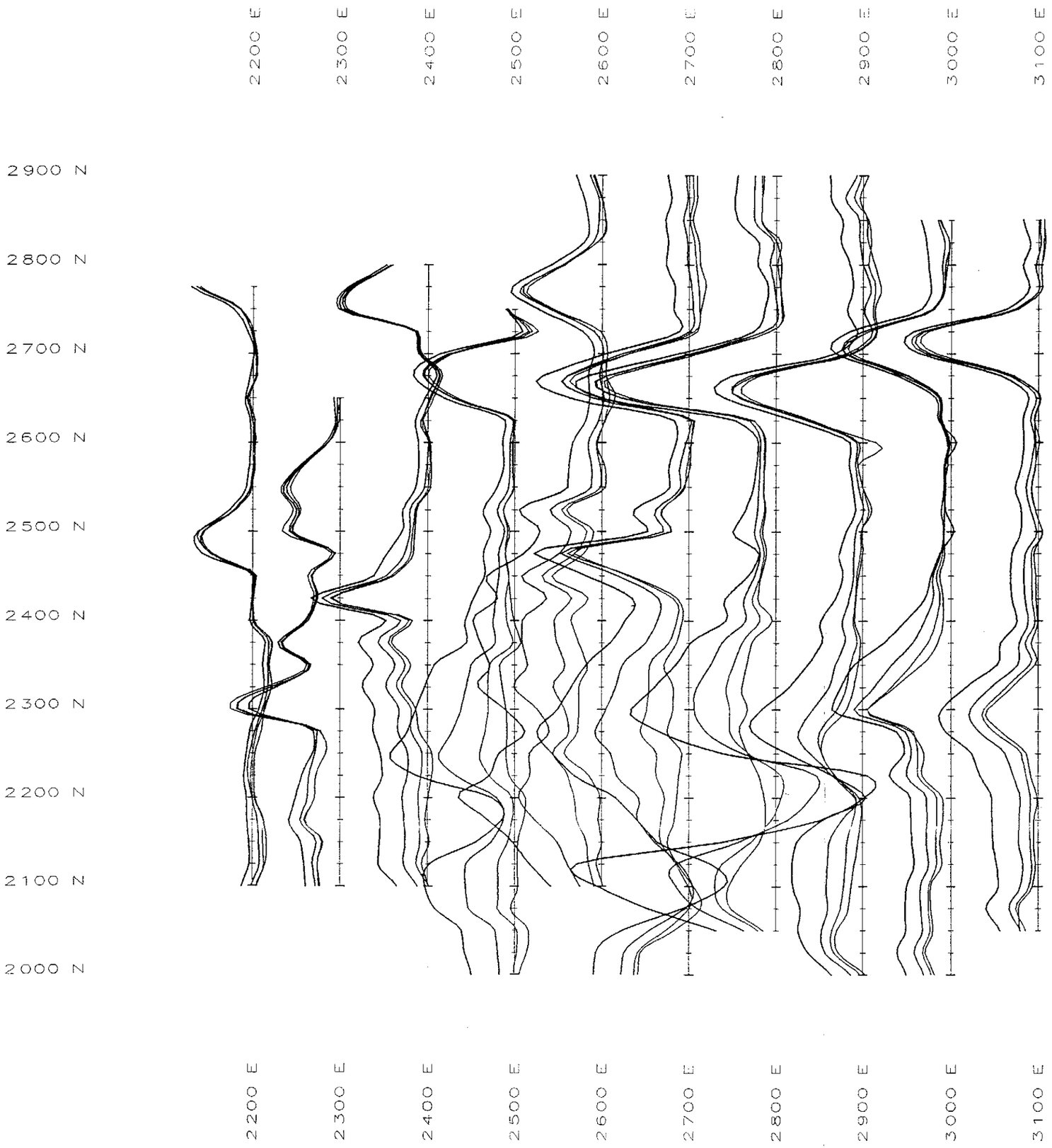
Key

–Foliation attitude

COMPANY:	ARCTURUS RESOURCES LTD.
DRAWING TITLE:	FIRST BASE CLAIMS CROSS SECTION HOLES 97-1 AND 97-2
LOCATION:	Grass Lakes, Yukon Territory
DATE: April 1998	SCALE: 1:1000
DRAWN: TerraCAD 98118	GEOLOGIST:
DATA:	FIGURE: 8a

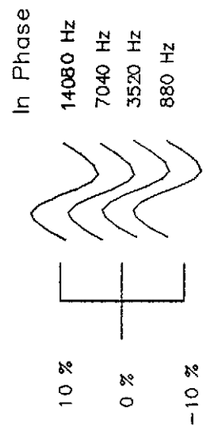


COMPANY:	ARCTURUS RESOURCES LTD.
DRAWING TITLE:	FIRST BASE CLAIMS CROSS SECTION HOLE 97-3
LOCATION:	Grass Lakes, Yukon Territory
DATE: April 1998	SCALE: 1:1000
DRAWN: TerraCAD 98118	GEOLOGIST:
DATA:	FIGURE: 8b



INSTRUMENTATION

Max-Min Equipment: Max-Min I-10
Mode: Max1 (Horizontal Co-planar)
Seperation: 100m



ARCTURUS RESOURCES LTD.

FIRST BASE PROJECT

HLEM SURVEY
STACKED PROFILE MAP
IN-PHASE COMPONENT

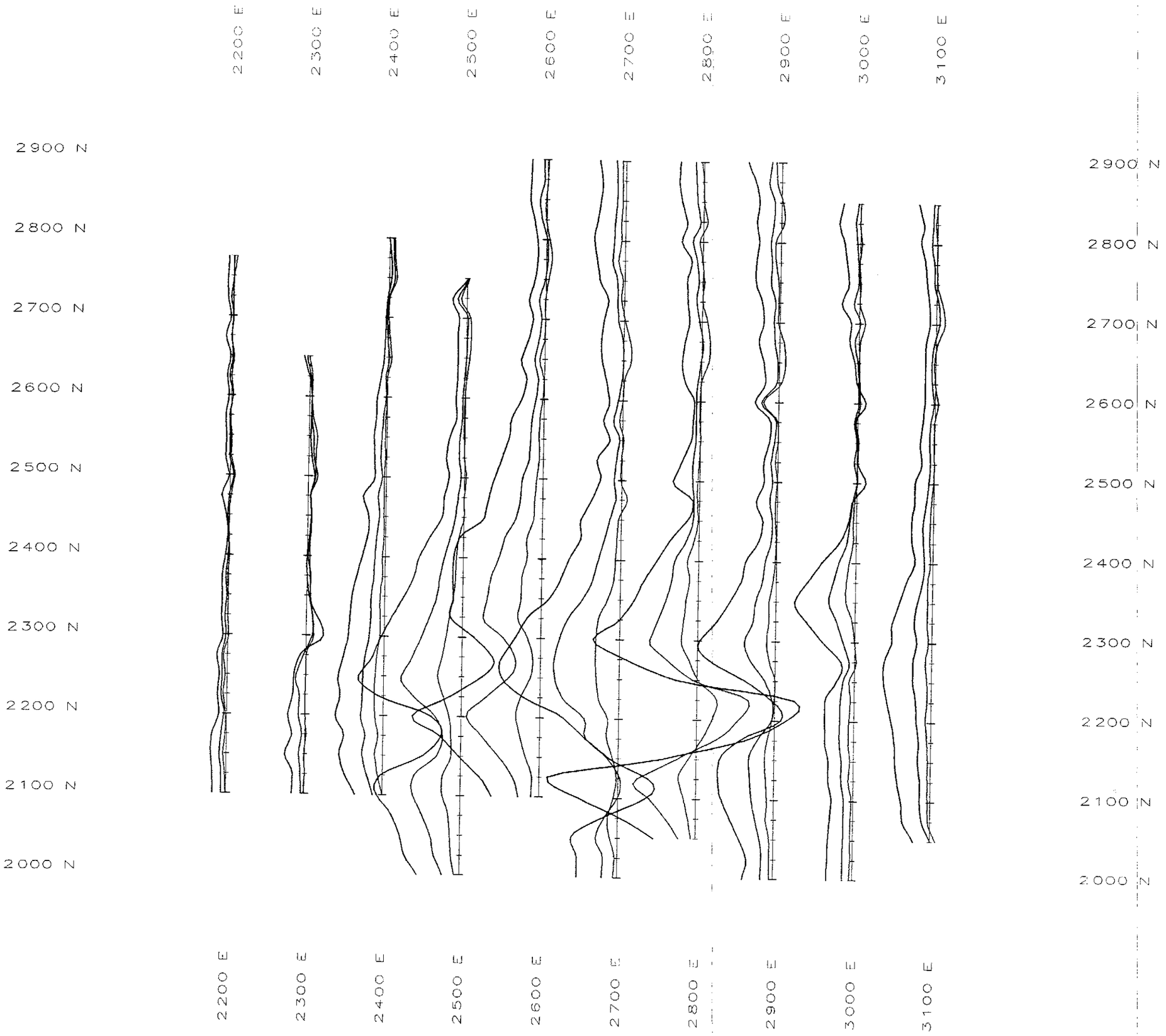
Yukon Territory NTS 105 G-7

meters
50 0 50 100 150

SJ GEOPHYSICS LTD

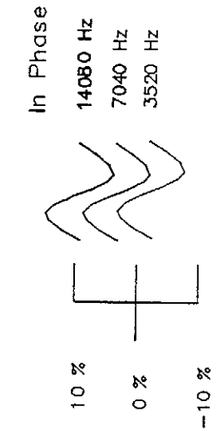
August, 1997

Plate G1



INSTRUMENTATION

Max-Min Equipment: Max-Min I-10
Mode: Max1 (Horizontal Co-planar)
Seperation: 100m



ARCTURUS RESOURCES LTD.

FIRST BASE PROJECT

HLEM SURVEY
STACKED PROFILE MAP
IN-PHASE COMPONENT
(880 Hz. Subtracted)

Yukon Territory NTS 105 G-7

meters
50 0 50 100 150

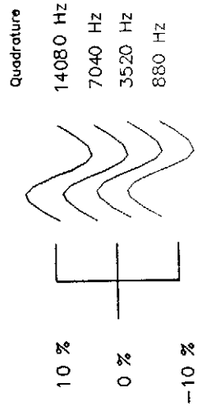
SJ GEOPHYSICS LTD

August, 1997

Plate G2

INSTRUMENTATION

Max-Min Equipment: Max-Min 1-10
Mode: Max1 (Horizontal Co-planar)
Seperation: 100m

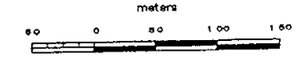


ARCTURUS RESOURCES LTD.

FIRST BASE PROJECT

HLEM SURVEY
STACKED PROFILE MAP
QUADRATURE COMPONENT

Yukon Territory NTS 105 G-7



SJ GEOPHYSICS LTD

August, 1997

Plate G3

2200 E 2300 E 2400 E 2500 E 2600 E 2700 E 2800 E 2900 E 3000 E 3100 E

2900 N
2800 N
2700 N
2600 N
2500 N
2400 N
2300 N
2200 N
2100 N
2000 N

2200 E 2300 E 2400 E 2500 E 2600 E 2700 E 2800 E 2900 E 3000 E 3100 E

INSTRUMENTATION

Max-Min Equipment: Max-Min I-10
Mode: Max1 (Horizontal Co-planar)
Seperation: 100m

LEGEND

- Interpreted Shallow Dipping Conductive Layer
- Interpreted Shallow Moderate Conductor
- Interpreted Weak Conductor
- Elevation Profile (exaggerated vertical scale)

ARCTURUS RESOURCES LTD.

FIRST BASE PROJECT

HLEM SURVEY
COMPILATION MAP

Yukon Territory NTS 105 G-7

meters
80 0 80 100 160

SJ GEOPHYSICS LTD

August, 1997

Plate G4

APPENDIX II

DRILL LOGS

1st BASE DIAMOND DRILL LOG: DDH97-01

Hole#: DDH97-01	Northing: 23+10N	Easting: 27+90E	Altitude: 1500m
	Bearing: 180°	Inclin: -60°	Depth: 422 FT

FROM	TO	DESCRIPTION
(FT)	(FT)	
0.0	**16.0**	**Overburden:** Bldrs schist, meta-rhyolite, quartzite, marble.
16.0	**56.0**	**Variable schist, marble and quartzite beds:** Black, green and grey schist layers of variable width with blue-grey marble and white quartzite bands. Variable amounts of biotite, muscovite, chlorite, quartz and feldspar in the schist. Some calcite veinlets, minor po in darker schist.
56.0	**98.0**	**Mottled schist:** Grey, muscovite-biotite-quartz schist, a few blue-grey marble bands, minor quartz-calcite veining.
98.0	**152.5**	**Biotite chlorite schist:** Black to green schist with graphitic sections. A few white quartzite bands and lenses. 135-152.5 graphitic argillite and schist, minor po
	152.5	**Fault?** Broken graphitic schist, trace disseminated po.
152.5	**166.0**	**Graphitic schist and marble breccia:**
166.0	**263.0**	**Biotite muscovite chlorite schist:** Black to green schist with a few lighter layers, magnetite grains, calcite veinlets, some deformation of bedding, minor disseminated pyrrhotite.
263.0	**297.0**	**Muscovite biotite quartz schist:** Lighter grey schist, white quartzite bands.
297.0	**422.0**	**Variable schist, marble beds:** Dark to light biotite muscovite quartz schist, a few narrow argillaceous layers, sedimentary deformation, minor pyrrhotite.
	EOH	

1st BASE DIAMOND DRILL LOG: DDH97-02

Hole#: DDH97-02	Northing: 21+50N	Easting: 27+95E	Altitude: 1550m
	Bearing:	Inclin: -90°	Depth: 302 FT

FROM (FT)	TO (FT)	DESCRIPTION
0.0	**14.0**	**Overburden:** Bldrs schist, limestone.
14.0	**76.0**	**Mottled biotite quartz schist:** Biotite and hornblende grains in a quartz plagioclase muscovite schist, minor pyrrhotite disseminated in darker schist layers. A few grey marble and white quartzite layers,
76.0	**109.0**	**Biotite muscovite quartz schist:** Black to dark grey fine grained schist, chloritic schist and a few marble bands.
109.0	**158.0**	**Muscovite biotite quartz schist:** Lighter green to grey schist, a few darker bands, a few marble and quartzite layers.
158.0	**200.0**	**Biotite muscovite quartz schist:** Black to green schist, magnetite blebs, minor pyrrhotite in veinlets and disseminations
200.0	**218.0**	**Muscovite biotite quartz schist:** Lighter grey-green schist.
218.0	**239.5**	**Biotite muscovite quartz schist:** Mixed grey and black layered schist, a few marble and quartzite layers, sedimentary deformation.
239.5	**302.0**	**Muscovite biotite quartz schist:** Mainly light grey-green muscovite schist with a few darker biotite schist sections, tuffaceous darker layers, a few marble layers, minor disseminated pyrrhotite. Some calcite veining
	EOH	

□

1st BASE DIAMOND DRILL LOG: DDH97-03

Hole#: DDH97-03	Northing: 23+50N	Easting: 25+15E	Altitude: 1620m
	Bearing: 180°	Inclin: -70°	Depth: 448 FT

FROM (FT)	TO (FT)	DESCRIPTION
0.0	30.0	**Overburden:** Bldrs schist, meta-rhyolite, orthogneiss.
30.0	66.5	**Orthogneiss:** Plagioclase and quartz augens in quartz muscovite biotite groundmass.
66.5	97.0	**Biotite muscovite quartz schist:** Variable dark schist with chloritic layers, a few quartzite bands, minor disseminated pyrrhotite
97.0	101	**Mafic Tuff:** Fine grained black tuff.
101	117	**Diorite:** Medium grained, quartz augens, minor calcite and quartz veining.
117	131	**Mafic tuff:** Fine grained green tuff, a few lighter siliceous bands, minor pyrrhotite, quartzite lenses and calcite veining.
131	168	**Muscovite talc schist:** Light green schist, quartz-carbonate veins and lenses, graphitic faces on shears, broken and fractured core sections.
168	182	**Variable muscovite biotite schist:** Light and dark layers, chloritic and graphitic bands, quartz lenses.
182	221	**Quartz muscovite schist:** Light talcy schist with some darker graphitic layers, quartz-carbonate bands and veins, minor pyrrhotite veinlets and disseminations.
221	240	**Quartz muscovite biotite graphite schist:** Dark banded schist, quartz carbonate veining, epidote alteration, minor pyrrhotite veinlets, broken core sections.
240	293	**Tuffaceous muscovite biotite quartz schist:** Grey green fine grained schist, sediment deformation, a few quartz and calcite veinlets, minor pyrrhotite.
293	329	**Biotite muscovite chlorite schist:** Green fine-grained schist, quartz lenses and bands, calcite veinlets
329	340	**Variable banded quartz muscovite biotite schist:** Dark to light grey schist, a few quartz and calcite veinlets, quartzite bands.

FROM	TO	DESCRIPTION
(FT)	(FT)	
340	**357**	**Variable green schist and marble beds:** Mottled schist, quartz-calcite veins and bands
357	**372**	**Variable banded biotite chlorite schist:** Green schist, a few coarse-grained bands, quartzite and marble bands, epidote alteration.
372	**388**	**Quartz muscovite schist:** Light grey fine-grained schist, a few narrow biotite schist bands otherwise fairly uniform appearance.
388	**393**	**Tuffaceous biotite schist:** Dark grey schist, quartz and marble bands, minor pyrrhotite.
393	**401**	**Marble bands in variable schist:** Mixed quartz biotite and quartz muscovite schist.
401	**428**	**Tuffaceous biotite chlorite schist:** Green schist, quartzite layers, graphitic sections, minor pyrrhotite veinlets.
428	**448**	**Tuffaceous biotite muscovite schist:** Dark grey schist, graphitic sections, minor pyrrhotite.
	EOH	