

**GEOLOGICAL AND GEOCHEMICAL REPORT**

**ON THE**

**NIM PROPERTY  
NIM 1-15 CLAIMS**



**WATSON LAKE MINING DISTRICT  
YUKON TERRITORY, CANADA  
NTS MAP SHEET 105G/11**

**Centred at Latitude: 61° 35' 30"N; Longitude: 131° 17' 30"W  
Work Performed: September 20, 1997**

**FOR:**

**093 859**

**PACIFIC BAY MINERALS LTD.  
#908-700 West Pender Street  
Vancouver, B.C. V6C 1G8**

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**May, 1998**

This report has been examined by the Geological Evaluation Unit under Section 56 (4) Yukon Quartz Mining Act and is allowed as representation work in the amount of \$ ~~1000~~ 1500.00.

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

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**SUMMARY:**

The NIM Property comprises 15 claims located approximately 73 km southeast of Ross River, Yukon in the Watson Lake Mining District. The claims were staked in 1994 to protect an area of potentially favourable stratigraphy similar to that hosting Cominco's Kudz Ze Kayah polymetallic volcanogenic massive sulphide deposit located 40 km to the east-southeast. Access to the NIM property is provided via helicopter from the Mink Creek airstrip on the Robert Campbell Highway 13 km to the north or directly from Ross River.

This report presents the results of a helicopter supported geological and geochemical sampling survey conducted during September, 1997 by personnel from Pacific Bay Minerals Ltd.

The property is located within the Finlayson Lake map area (1059/104G) in the Yukon Plateau physiographic region of the northern Cordillera. The claims cover an area of moderate relief with outcrop exposures occurring along a northeastern trending, broad ridge in the western portion of the property.

The property is underlain by intermediate to mafic metavolcanic rocks with minor intercalated metasedimentary rocks. This mixed sequence probably represents the "Middle Unit" of the Paleozoic Layered Metamorphic Sequence of Yukon-Tanana Terrane.

A review of all available data indicates that the property was previously staked (Minfile #24; God or Bev) by Atlas Exploration in 1966 following an airborne EM and Mag survey. Atlas conducted soil sampling and mapping in 1966. The property was subsequently allowed to lapse. Cominco staked the NIM claims in early 1994 and followed this up with a short geological and geochemical survey over targets delineated by an airborne geophysical survey.

In 1997, Pacific Bay Minerals conducted an exploration program comprised of geological mapping and geochemical sampling with the objective of evaluating the property's economic potential and following up on geophysical and geological work by Cominco's personnel in 1994. A total of 2 rock samples and 8 soil samples were collected.

Geochemical analysis of soil and rock samples returned weak to moderately anomalous values for copper and background values for zinc; negligible values for lead and precious metals are documented. Elevated values are recorded for Ni-Cr-Co reflecting an association with mafic/ultramafic metavolcanic lithologies.

Mapping failed to identify prospective stratigraphy and no potentially economic mineralization was defined. No further work is recommended on the NIM property at this time.

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**INTRODUCTION:**

This report discusses the exploration procedures and results of a helicopter supported geological and geochemical program conducted by Pacific Bay Minerals Ltd. on the NIM property. Field work was performed by a two member crew during the period of September 20, 1997. Personnel operated out of a trailer situated at the Mink Creek airstrip.

The objective of the 1997 program was to evaluate the property's economic potential through follow up geological mapping and sampling. A total of 2 rock samples and 8 soil samples were collected. Geological and geochemical data were compiled on 1:10,000 scale contour maps prepared from 1:50,000 scale NTS topographic maps and all final data were produced on 1:10,000 scale hand drafted maps.

All geochemical samples were shipped to ACME Analytical Labs in Vancouver, B.C. for geochemical analysis utilizing 30-element ICP method and gold analysis by wet extraction followed with analysis by graphite furnace AA finish. Analytical procedures are described in Appendix III and analytical results are presented in Appendix IV.

**Location and Access:**

The NIM property is located in the southeastern Yukon Territory approximately 73 km southeast of Ross River. The claims are situated within NTS map sheet 105G/11 and are centred at 61° 35' 30" North latitude and 131° 17' 30" West longitude. Access to the property is provided via helicopter from the Mink Creek airstrip located 13 km north on the Robert Campbell Highway. The claims may also be directly accessed via helicopter from Ross River (Figure 1).

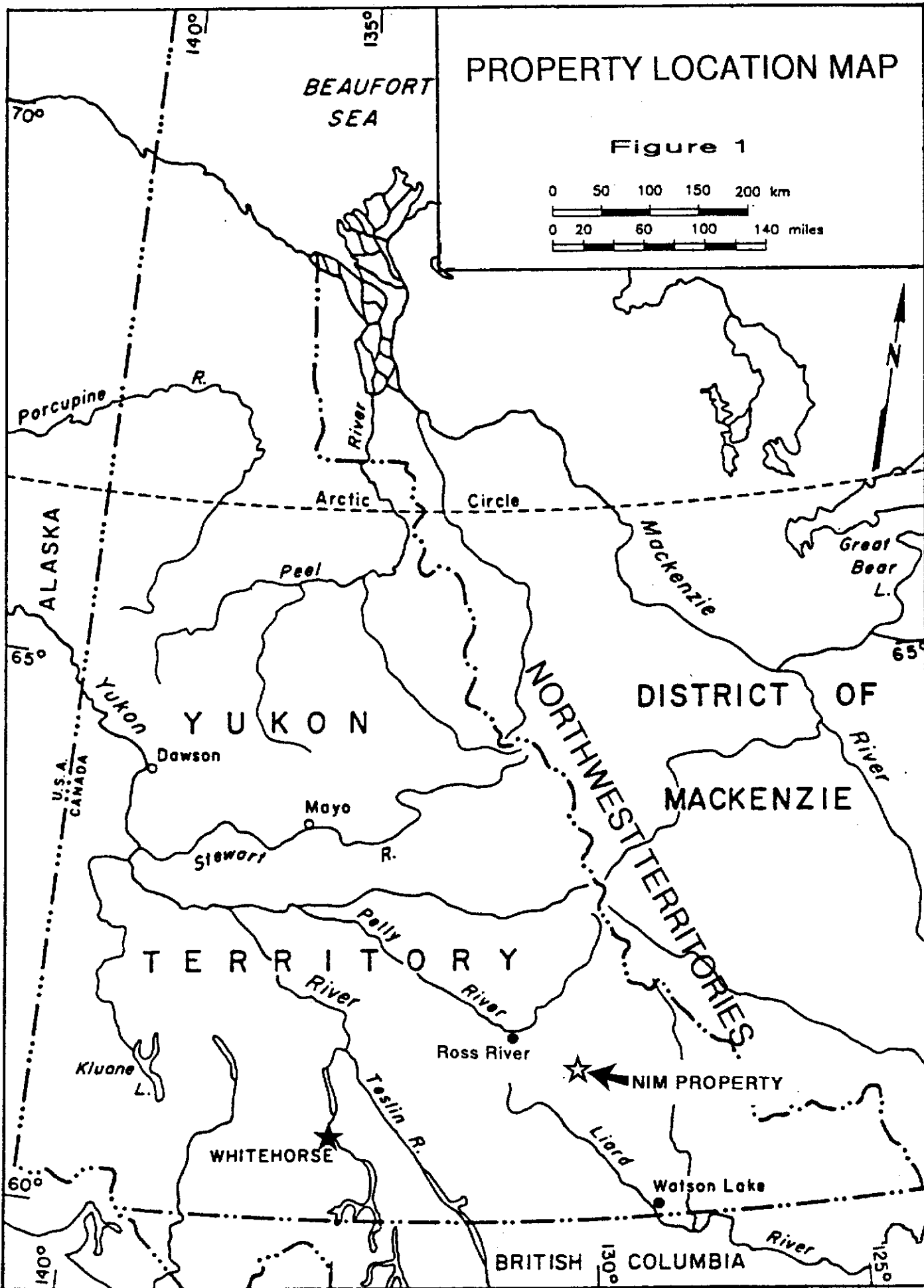
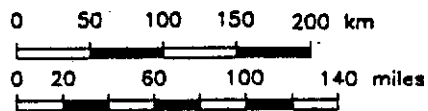
**Physiography and Climate:**

The property is located within the Yukon Plateau physiographic region of the northern Cordillera. Elevations in the claims area range from 1387 metres (4,550') in valley bottoms up to 1595 metres (5,230'). A broad domed ridge underlies the western portion of the property; topography slopes moderately to the east, north and northwest.

During the Pleistocene Epoch, ice covered the entire area except for the tops of the highest peaks. McConnell glaciation covered the area during the period from 26,500 to 10,000 years ago. Glaciation has produced isolated, rounded mountains; valleys are occupied by abundant small lakes connected by a network of streams. Valley bottoms are typically underlain with glaciofluvial sediments exceeding five metres in thickness.

# PROPERTY LOCATION MAP

Figure 1



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The regional terrain is covered with a thick growth of "buckbrush" and alder. Slopes also support scattered black spruce and balsam fir. Tree line occurs at roughly 1400 (4,592') to 1500 metres (4,875'). Outcrop on the property is generally rare and exists only on the northwest trending, broad domed ridge.

Weather records are unavailable for the area; however, general climatic data indicates that precipitation is light, averaging 50cm per annum, and falls mostly as rain during summer months. Snow cover averages approximately 60cm by late winter. The climate is continental type with warm summers and long, cold winters. Annual mean daily temperature is -5°C with ranges from lows of -30° to -50°C in January to 10° to 20°C in July. Permafrost at this latitude is discontinuous but widespread. It is rarely possible to commence surface geological work before the end of June and difficult to continue past September.

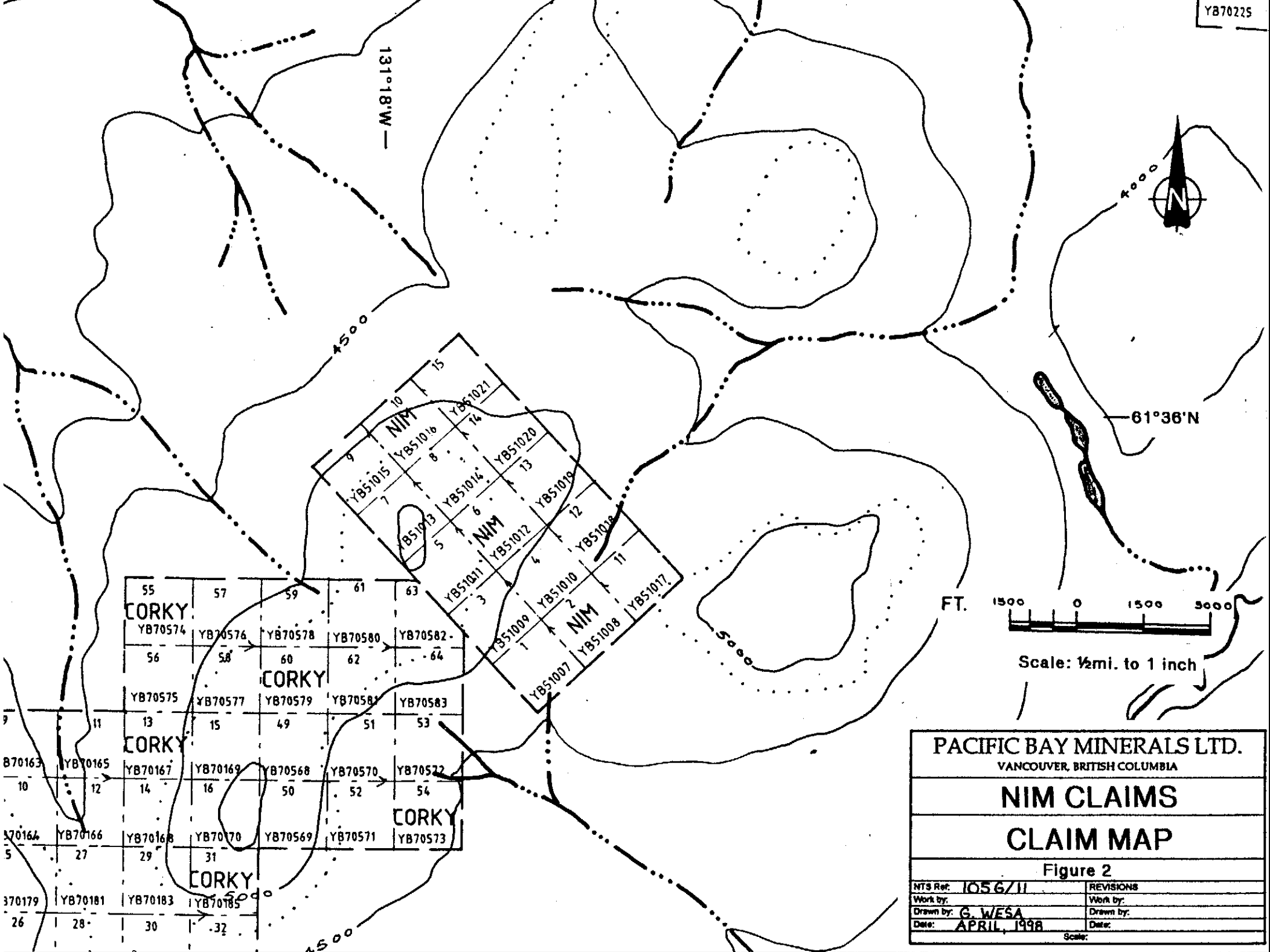
**Property Status and Ownership:**

The NIM property (Figure 2) consists of 15 contiguous claims located within the Watson Lake Mining District. The claims were staked to protect airborne geophysical targets identified during a Cominco survey conducted in early 1994. The claims are currently 100% owned by Cominco; however, an option agreement granted by Cominco to Pacific Bay Minerals permits the latter the right to acquire 60% interest upon completion of a specified work program. Relevant claim data are tabulated in Table 1 below:

**TABLE 1: NIM PROPERTY - CLAIM STATUS**

<b><i>CLAIM NAME</i></b>	<b><i># OF CLAIMS</i></b>	<b><i>GRANT #</i></b>	<b><i>RECORDING DATE</i></b>	<b><i>NEW EXPIRY DATE</i></b>
NIM	15	YB51007- YB51021	1994/06/15	1999/06/15





55	57	59	61	63
CORKY				
YB70574	YB70576	YB70578	YB70580	YB70582
56	58	60	62	64
YB70575	YB70577	YB70579	YB70581	YB70583
11	13	15	49	51
CORKY				
YB70163	YB70165	YB70167	YB70169	YB70568
10	12	14	16	50
YB70164	YB70166	YB70168	YB70170	YB70569
5	27	29	31	52
				54
				CORKY
370179	YB70181	YB70183	YB70185	YB70571
26	28	30	32	YB70573

4	10	15
YB51015	YB51016	YB51021
7	8	14
YB51013	YB51014	YB51020
5	6	13
YB51011	YB51012	YB51019
3	4	12
YB51009	YB51010	YB51018
1	2	11
YB51007	YB51008	YB51017



Scale: 1/2 mi. to 1 inch

<b>PACIFIC BAY MINERALS LTD.</b> VANCOUVER, BRITISH COLUMBIA	
<b>NIM CLAIMS</b>	
<b>CLAIM MAP</b>	
<b>Figure 2</b>	
NTS Ref: 1056/11	REVISIONS
Work by:	Work by:
Drawn by: G. WESA	Drawn by:
Date: APRIL, 1998	Date:
Scale:	

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**HISTORY OF EXPLORATION:**

**Regional History:**

The area was first mapped by Wheeler et al. (1960). Detailed mapping and re-interpretation was subsequently carried out by personnel of the Geological Survey of Canada (Tempelman-Kluit et al, 1975, 1976; Gordey and Tempelman-Kluit, 1976; Tempelman-Kluit, 1977; Gordey, 1977).

Finlayson Lake area has experienced reconnaissance exploration by numerous companies at various times since the mid-1960's following discovery and development of the Faro zinc-lead-silver deposits.

Beginning in the early 1970's up to the early 1980's, several companies conducted exploration programs in the area for SEDEX mineralization (HOO) VMS mineralization (PY, FYRE, FETISH, PAK, BEV) and tungsten-bearing skarns (BOOT). In 1973, the FETISH claims were staked by Finlayson Joint Venture over a target 25 km east of the Kudz Ze Kayah deposit. This target exhibited similar geology to Kudz Ze Kayah and was tested by two shallow drill holes. The PY claims were staked in 1975 by Cyprus Anvil Mining Corporation 40 km southeast of Kudz Ze Kayah.

In 1985, J.K. Mortensen and G.A. Jilson published the results of geological mapping conducted in the late 1970's and early 1980's. Their interpretation forms the basis of current knowledge of the regional geology. Mortensen and Jilson recognized the presence of a thick package of Devonian-Mississippian metamorphosed felsic and mafic volcanic rocks in carbonaceous metasediments in the pericratonic Yukon-Tanana Terrane.

In 1988, the G.S.C. released Open File 1648 causing many claims to be staked over gold and arsenic stream sediment anomalies. Many claims were located over allochthonous ophiolitic rocks that appear associated with thrust sheets that border the ultramafic succession.

Current exploration activity in the Finlayson Lake area commenced in late 1993 when Cominco conducted soil geochemical and geophysical surveys in the headwaters of a drainage in which government regional stream sediment survey results delineated strongly anomalous lead, zinc and copper values. Initial Cominco surveys outlined approximately coincident soil geochemical anomalies, electromagnetic conductors and positive magnetic anomalies. The first hole drilled in April, 1994 immediately intersected the deposit. Cominco followed with regional-scale, helicopter-borne magnetic and electromagnetic surveys, diamond drilling and regional staking programs. Exploration and development continued in 1995 with construction of a 23 km access road connecting the Robert Campbell Highway to the discovery site. Published reserves to the end of 1997 are quoted at 13 million tons grading 5.5% Zn, 1.0% Cu, 1.3% Pb, 12 g/t Ag and 1.2 g/t Au.

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In 1996-97, D.C. Murphy of the Yukon Exploration and Geological Services Division, Department of Indian Affairs and Northern Development conducted detailed 1:50,000 scale geological mapping of the Grass Lakes map sheet (NTS 105 G/7). Cominco's Kudz Ze Kayah massive sulphide deposit occurs in the northeastern corner of this map sheet. Results of this work were released in November, 1997.

**Property History:**

A review of government Assessment Report Archives and Archer, Cathro Mineral Inventory files indicates that the property area was previously staked (Minfile #24; God or Bev) by Atlas Exploration in 1966 following an airborne EM and Mag survey. Atlas conducted soil sampling and mapping in 1966. The property was subsequently allowed to lapse.

**1994 Exploration Program:**

During the period of July 24, 1994, 1:10,000 scale geological mapping and prospecting was completed by Cominco personnel. A total of 45 soil samples were collected concurrent with the geological survey.

**1997 Exploration Program:**

Approximately 75-80% of the property was examined through geochemical sampling, geological mapping and prospecting at a scale of 1:10,000. Approximately 5% outcrop occurs within the claims area as small, scattered exposures along the broad northwest trending ridge.

Float samples of mafic metavolcanics were collected for analysis. Soil samples were collected from a soil line established as a southwestern extension of one of Cominco's soil lines.

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**GEOLOGY:**

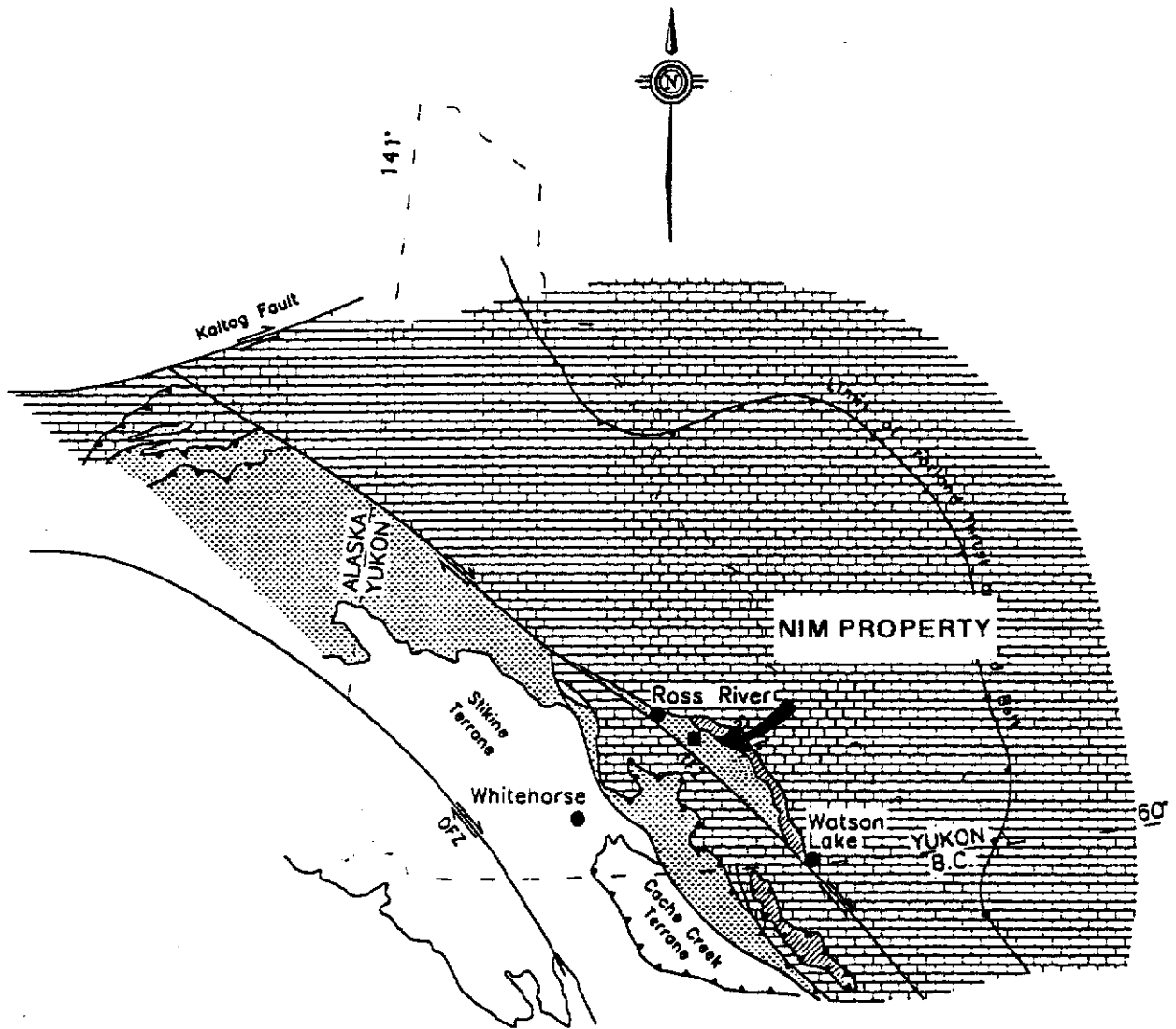
**Regional Geology:**

A large portion of the western to southeastern Yukon, from the Alaska border to British Columbia, is underlain by a geologically complex terrane composed of polydeformed, dynamothermally metamorphosed sedimentary, volcanic and plutonic rocks. These rocks have been grouped within the Yukon-Tanana and Slide Mountain Terranes and are believed to represent a mid-Paleozoic volcanic-plutonic arc assemblage (Yukon-Tanana Terrane) imbricated with middle and upper Paleozoic ophiolitic sheets (Slide Mountain Terrane); these accreted terranes are believed to be thrust northeastward over the North American Continental Margin (Figure 3). This allochthonous assemblage is preserved in klippen above autochthonous, structurally imbricated Paleozoic and lower Mesozoic North American Shelf strata in the central to southeastern Yukon.

The southwestern side of the allochthon is bounded by the Tintina Fault Zone comprising a series of subparallel transcurrent faults which have produced 450 km of dextral displacement during late Cretaceous and/or early Tertiary times. The northeastern boundary traces a broad arc marking the surface expression of the Finlayson Lake Fault Zone which comprises a complex assemblage of thrust and high angle faults that may, in part, represent a transpressive paleosuture. Both faults juxtapose the allochthonous rocks with autochthonous rocks of the North American miogeocline (Figure 4).

Rocks of the Yukon-Tanana and Slide Mountain Terranes are believed to have evolved offshore of North America in Paleozoic and early Mesozoic time and were subsequently deformed and metamorphosed in pre-early Jurassic time in a southwest dipping, right-oblique subduction system. These rocks were derived from a basin which formed outboard of present day western North America. This basin was constructed, in part, on oceanic crust locally preserved as ophiolitic assemblages within the Slide Mountain Terrane.

Yukon-Tanana rocks are generally more metamorphosed and contain more felsic metaplutonic suites whereas Slide Mountain Terrane is characterized by the presence of obducted ophiolitic rocks. These lithologies comprise massive to pillowed greenstones, basalt, chert and variably serpentinized mafic to ultramafic plutonic rocks. This suite of rocks has been interpreted by Tempelman-Kluit (1979) and Mortensen and Jilson (1985) as fragments of a dismembered ophiolite complex. The rocks range in age from late Devonian to early Permian based upon U-Pb zircon dating methods and fossil ages. Fossil collections made in the Anvil district from ophiolitic rocks of the Anvil Range Group (Tempelman-Kluit, 1972) gave latest Pennsylvanian or earliest Permian ages. These ages were recorded from fusilinids and conodonts recovered from a limestone interfingering depositionally with red and green chert and basalt of the Anvil Range assemblage.



Scale: 1:10,000,000

LEGEND



North American Miogeoclinal Strata



Yukon - Tanana Terrane



Slide Mountain Terrane



Thrust Fault



Strike-Slip Fault, with sense of movement

FLZ - Finlayson Lake Fault Zone

TFZ - Tintina Fault Zone

DFZ - Denali Fault Zone

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VANCOUVER, BRITISH COLUMBIA

NIM PROJECT

REGIONAL TECTONIC MAP

Figure 3

NTS Ref: 1056/11	REVISIONS
Work by: G. Wesa	Work by:
Drawn by: G. Wesa	Drawn by:
Date: March, 1998	Date:

Scale

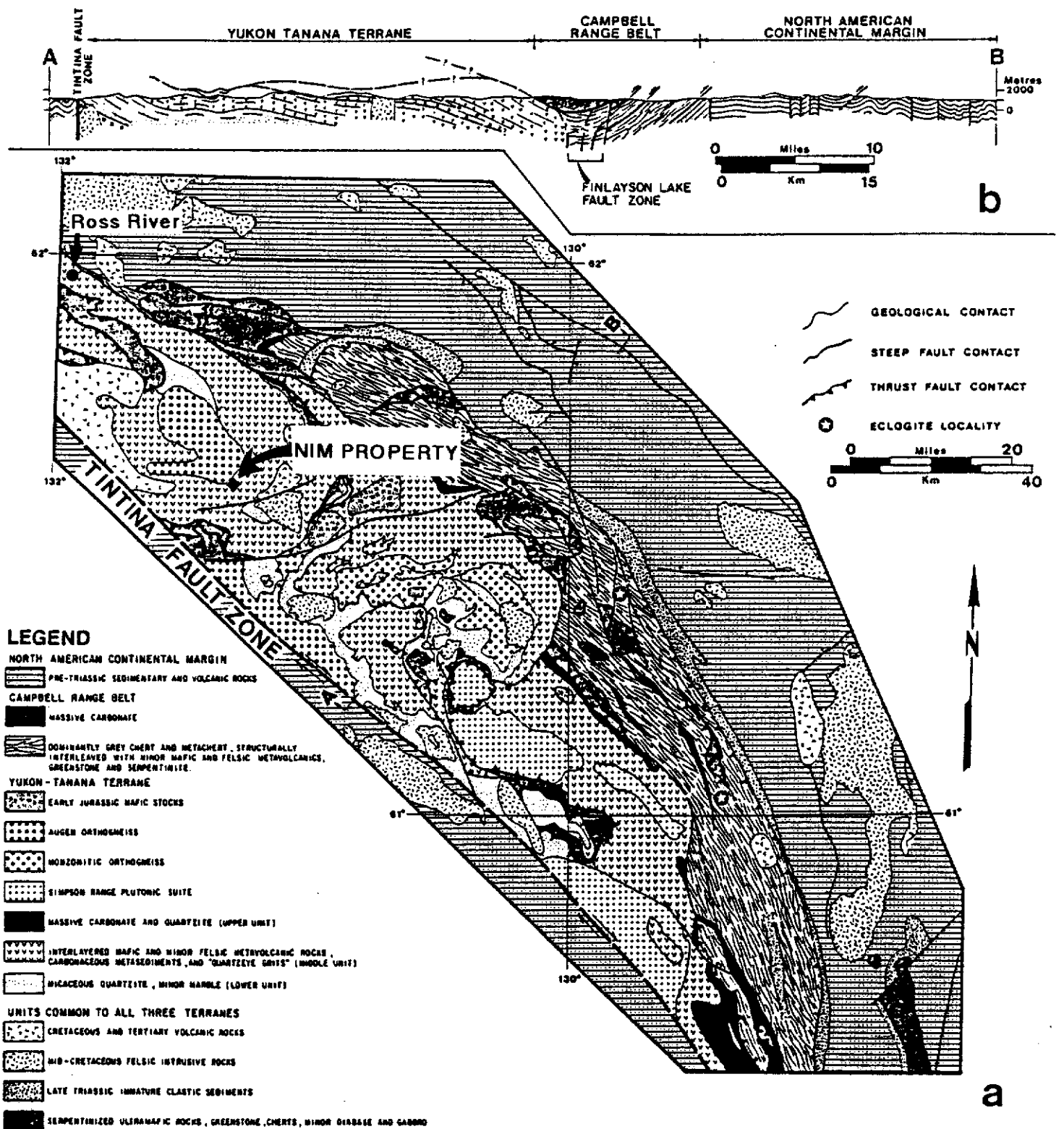


Figure 4: Regional Geology (After Mortensen & Jilson, 1985).

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Six principal lithological packages have been identified within the allochthonous rocks in the Finlayson Lake area (Mortensen and Jilson, 1985). These include two metamorphic assemblages that comprise the bulk of Yukon-Tanana Terrane, a relatively unmetamorphosed package belonging to Slide Mountain Terrane and three younger units that are found in both terranes. Descriptions of these lithologies are presented below:

Paleozoic Layered Metamorphic Sequence is the oldest and most abundant lithological package within Yukon-Tanana Terrane. It consists of three distinct stratigraphic units with a total thickness of approximately 3.0 km. The lowest unit contains pre-late Devonian micaceous feldspathic quartzite with minor marble. The middle unit is late Devonian to mid-Mississippian in age and is the focus of volcanogenic massive sulphide exploration in the Finlayson Lake area. It consists of dark siliceous phyllite that becomes increasingly carbonaceous toward the base of the section where it interfingers with widespread mafic metavolcanic schist. Localized felsic metavolcanic centres are found throughout the section. The uppermost unit contains early Pennsylvanian to early Permian white carbonate and quartzite.

Paleozoic Metaplutonic Rocks are also confined to Yukon-Tanana Terrane. They are subdivided into three suites, all of which are coarse grain and have yielded mid-Mississippian age dates (340 to 359 Ma). The quartz monzonitic to quartz dioritic Simpson Range plutonic suite is slightly older than augen orthogneiss (leucogranite) and monzonitic orthogneiss (quartz monzonite). Most contacts between metaplutonic rocks and the layered metamorphic sequence are foliaform.

Both the layered metamorphic sequence and the metaplutonic rocks underwent intense deformation (F1) during Permian or early Triassic time. This event resulted in pervasive foliation that usually parallels subhorizontal or shallow-dipping compositional layering. The F1 deformation was accompanied by middle greenschist to middle amphibolite facies regional metamorphism. A second phase of deformation (F2) is observed locally but appears to have been a relatively minor event.

Slide Mountain Terrane consists of obducted ophiolitic assemblages that are most abundant within the Campbell Range Belt but also appears as imbricate slices along thrust faults elsewhere in the allochthon. The Campbell Range Belt is up to 25 km wide and forms the northeastern edge of the allochthon. It contains relatively unmetamorphosed but strongly folded and imbricated cherts with mafic and felsic volcanics, massive greenstone and serpentinite. Thrust slices elsewhere in the allochthon are also unmetamorphosed but typically contain a higher proportion of mafic to ultramafic plutonic rocks. Fossils in the cherts have been dated as late Pennsylvanian to early Permian while the mafic and ultramafic rocks are late Devonian. Slide Mountain rocks do not exhibit the F1 foliation characteristic of the Yukon-Tanana layered metamorphic sequence and metaplutonic rocks.

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The remaining three units are all younger and unmetamorphosed. They are found in both Yukon-Tanana and Slide Mountain Terranes. Mesozoic Clastic Rocks are late Triassic immature sediments containing cobbles derived from both Yukon-Tanana and Slide Mountain. Mesozoic Plutonic Rocks include a number of early Jurassic mafic to intermediate plutons plus scattered late Cretaceous quartz monzonite stocks. Major thrust faults in the district post-date the early Jurassic plutons but pre-date the late Cretaceous quartz monzonite. This structural event is believed to have occurred during accretion of the allochthon to the North American craton because the thrusts cut the miogeoclinal rocks as well as the allochthonous rocks. Transcurrent movement on the Tintina Fault Zone occurred soon after the thrust faults. Young Volcanic Rocks unconformably overlie the other units and consist of late Cretaceous to Tertiary felsic volcanic flows and volcanoclastic deposits. They are usually found in close proximity to the Tintina Fault Zone.

**Property Geology:**

**Lithologies:**

Lithologies exposed in large, scattered outcrops on the broad ridge comprise Fe-carbonate altered chloritic phyllite and chlorite-feldspar-quartz phyllite with minor argillite in contact with chloritic phyllitic schists. Chloritic schists appear fissile and well foliated with foliations dipping approximately 20°SE at 040° azimuth. Grey to black argillites appear intercalated with the phyllites and schists. These rocks probably represent intermediate to mafic metavolcanics of the "Middle Unit" of the Paleozoic Layered Metamorphic Sequence (Map 1).

No outcrop exposures were observed in the southeastern half of the property. moderately southeast sloping terrain and a broad valley in the northeastern corner of the property are covered by a veneer of glacial debris of unknown thickness.

**Alteration:**

A subhorizontal to moderately north to northeast dipping, penetrative, ductile deformation fabric associated with middle greenschist facies (chlorite-biotite grade) metamorphism affects all Yukon-Tanana Terrane lithologies. This fabric reflects the first and most significant deformational and metamorphic event resulting from continent-arc collision during the late Permian to early Triassic period.

**Mineralization:**

Weak, disseminated pyrite/pyrrhotite mineralization was detected in float samples, however, geological mapping and prospecting failed to identify any potentially economic sulphide mineralization in the lithologies examined.



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**GEOCHEMISTRY:**

A total of 2 lithochemical samples and 8 soil samples were collected to provide first-pass coverage and delineate targets for follow up investigation.

**Sampling Procedure:**

Seven soil samples were collected from a 300 metre long soil line established at a bearing of roughly 045° and extending northeast from the center of the southern claim boundary. This soil line is a southwestern extension of a Cominco soil line established in 1994. In addition, a single, isolated soil sample was taken, to the north, from soil underlain by Fe-carbonate altered chloritic schist.

Soil samples were collected from 40cm deep pits dug with a long handle mattock. Soil profiles appear fairly well developed; however, in several instances, samples were obtained from frost heaves. Soils are greenish-grey to brown to rusty brown clays and silty clays representative of B-horizon soils.

Float samples of mafic metavolcanics containing minor disseminated pyrite and pyrrhotite were collected from the top of the broad ridge. These samples appear variably silicified and were the only lithology to exhibit visible sulphide mineralization.

Soil samples were placed in numbered, large gusseted kraft paper bags and sample sites were marked with similarly coded fluorescent ribbon. Rock samples were placed in numbered plastic sample bags and sample sites similarly marked.

Ground control for these exploration surveys was provided by compass, altimeter and hip chain. Field crews were supplied with 1:10,000 scale contoured base maps for plotting data and navigation. Analytical results are presented in Appendix IV and geochemical values are plotted on Map 2.

**Geochemical Results:**

Analytical values for base and precious metals are low. Copper-in-soil values are weakly to moderately anomalous with the highest values recorded at 94 ppm Cu. Zinc-in-soil values reflect background levels with the highest being 98 ppm Zn. Lead values are below background. Elevated Ni-Co-Cr values reflect a probable association with mafic/ultramafic lithologies. Analytical results from rock samples documented low values for all elements tested.

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Geochemical background values and anomalous thresholds for Cu, Pb, Zn and Mo mineralization within soil samples collected on the NIM property are presented in Table II. These values were confirmed in a summary report on the Finlayson Lake Properties by M.A. Powers (1996) for Expatriate Resources Ltd. and are valid for geochemical surveys conducted on the NIM property.

**TABLE II - GEOCHEMICAL BACKGROUNDS & ANOMALOUS THRESHOLDS**

	Background (ppm)	Weak (ppm)	Moderate (ppm)	Strong (ppm)	Peak Value (ppm)
Copper	25	50	100	200	1720
Lead	30	50	100	200	>4000
Zinc	80	200	500	1000	>4000
Molybdenum	<1	2	5	10	65

**CONCLUSIONS:**

Geological mapping, prospecting and litho-geochemical and soil sampling, on targets delineated by previous Cominco (1994) surveys, was the focus of exploration activity on the NIM claims during examination by Pacific Bay Minerals personnel in 1997.

A total of 2 rock and 8 soil samples were collected; however, analytical results are not encouraging.

Geological mapping indicates that bedrock in the project area comprises mainly mixed metasedimentary and intermediate to mafic metavolcanic rocks representing the "Middle Unit" of the Paleozoic Layered Metamorphic Sequence of the Yukon-Tanana Terrane.

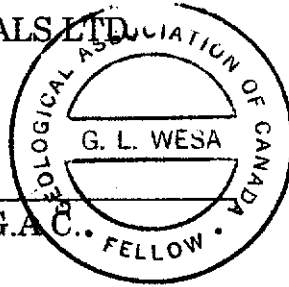
Weak, disseminated pyrite/pyrrhotite mineralization was detected in two float samples of mafic metavolcanic rock; however, geological mapping and prospecting failed to identify potentially economic sulphide mineralization. Furthermore, no felsic metavolcanic rocks or Kudzu Ze Kayah VMS style mineralization was detected.

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**RECOMMENDATIONS:**

A review of the data from Cominco's 1994 exploration program, plus a current evaluation of the property by Pacific Bay Minerals Ltd., indicates that no additional work is recommended on the NIM property at the present time.

Respectively Submitted  
PACIFIC BAY MINERALS LTD.



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**NIM PROPERTY  
ASSESSMENT REPORT 1997  
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**STATEMENT OF QUALIFICATIONS**

I, Gary L. Wesa, of #309 - 6669 Telford Avenue, in the City of Burnaby, B.C., do hereby certify that:

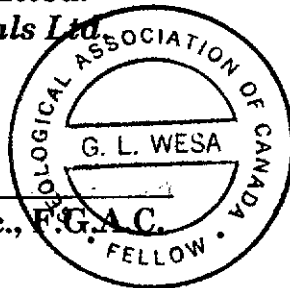
1. I am presently employed as Project Geologist to Pacific Bay Minerals Ltd. with offices at #908-700 West Pender Street, Vancouver, British Columbia.
2. I am a graduate of the University of Saskatchewan with a B.Sc. Degree in Geology (1974) and I have practiced my profession continuously since graduation.
3. I have been employed in mineral exploration in Canada and the U.S.A. since 1970.
4. I am a registered Fellow of the Geological Association of Canada.
5. I am familiar with the regional geology of the Yukon-Tanana and Slide Mountain Terranes and have personally performed work on several properties in this region.
6. I am the author of this report entitled: "Geological and Geochemical Report on the NIM Property", which is based upon researched documents, referenced in this report, and supervision of the 1997 field program.

Dated at Vancouver, British Columbia this \_\_\_\_\_ day of May, 1998

Respectfully submitted:

*Pacific Bay Minerals Ltd.*

\_\_\_\_\_  
Gary L. Wesa, B.Sc., F.G.A.C.



# **APPENDIX I**

## **Itemized Cost Statement**

**NEM CLAIM  
ITEMIZED COST STATEMENT**

**FIELD COSTS**

**Salaries**

F. Moyle	1 day @ \$200 per day	\$200.00
J. Hunt	1 day @ \$125 per day	\$125.00
	<b>Total</b>	<b><u>\$325.00</u></b>

**Field Expenses:**

Helicopter Transport (Trans North Helicopters)	\$ 300.00	
Helicopter Fuel	\$ 50.00	
Truck/Trailer Rental	\$ 200.00	
Trailer Insurance	\$ 25.00	
Generator Rental	\$ 50.00	
Sat. Phone Rental	\$ 40.00	
Gas	\$ 75.00	
Meals	\$ 80.00	
Misc. Supplies	\$ 80.00	
Radio Rental	\$ 15.00	
Travel Airfare	\$ 73.00	
Freight/Shipping	\$ 50.00	
7% GST on Field Expenses	\$ 72.66	
	<b>Total</b>	<b><u>\$1110.66</u></b>

**GEOCHEMICAL ANALYSIS**

Rock Samples	2 @ \$16.00 per sample	\$ 32.00
Soil Samples	8 @ \$13.25 per sample	\$106.00
	<b>Total</b>	<b><u>\$138.00</u></b>

**OFFICE COSTS**

**Salaries**

F. Moyle	2 days @ \$145 per day	\$290.00
	<b>Total</b>	<b><u>\$290.00</u></b>

**TOTAL EXPENDITURES:**



**\$1863.66**



## **APPENDIX II**

### **Summary of Personnel**

## Summary of Personnel

<u>NAME</u>	<u>TITLE</u>	<u>ADDRESS</u>
Gary L. Wesa	Project Geologist	Vancouver, BC
Francis Moyle	Geologist	North Vancouver, BC
John Hunt	Sampler	Watson Lake, BC

# **APPENDIX III**

## **Analytical Procedure**

# ACME ANALYTICAL LABORATORIES LTD.

## Assaying & Trace Analysis

852 E. Hastings St., Vancouver, B.C., Canada V6A 1R6

Telephone: (604) 253-3158 Fax: (604) 253-1716

### METHODS AND SPECIFICATIONS FOR ANALYTICAL PACKAGE GROUP 1D - 30 ELEMENT ICP BY AQUA REGIA

#### Sample Preparation:

Soils and sediments are dried (60°C) and sieved to -80 mesh (-177 microns), rocks and drill core are crushed and pulverized to -100 mesh (-150 microns). Plant samples are dried (60°C) and pulverized or dry ashed (550°C). Moss-mat samples are dried (60°C), pounded to loosen trapped sediment then sieved to -80 mesh. At the clients request, moss mats can be ashed at 550°C then sieved to -80 mesh although this can result in the potential loss by volatilization of Hg, As, Sb, Bi and Cr. A 0.5 g split from each sample is placed in a test tube. A duplicate split is taken from 1 sample in each batch of 34 samples for monitoring precision. A sample standard is added to each batch of samples to monitor accuracy.

#### Sample Digestion:

Aqua Regia is a 3:1:2 mixture of ACS grade conc. HCl, conc. HNO<sub>3</sub> and demineralized H<sub>2</sub>O. Aqua Regia is added to each sample and to the empty reagent blank test tube in each batch of samples. Sample solutions are heated for 1 hour in a boiling hot water bath (95°C).

#### Sample Analysis:

Sample solutions are aspirated into an ICP emission spectrograph (Jarrel Ash Atom Comp model 800 or 975) for the determination of 30 elements comprising: Ag, Al, As, Au, B, Ba, Bi, Ca, Cd, Co, Cr, Cu, Fe, K, La, Mg, Mn, Mo, Na, Ni, P, Pb, Sb, Sr, Th, Ti, U, V, W, Zn.

#### Data Evaluation:

Raw and final data from the ICP-ES undergoes a final verification by a British Columbia Certified Assayer who then signs the Analytical Report before it is released to the client. Chief Assayer is Clarence Leong, other certified assayers are Dean Toye and Jacky Wang.

# ACME ANALYTICAL LABORATORIES LTD.

## Assaying & Trace Analysis

852 E. Hastings St., Vancouver, B.C., Canada V6A 1R6

Telephone: (604) 253-3158 Fax: (604) 253-1716

## METHOD FOR WET GEOCHEM GOLD ANALYSIS

### Sample Preparation:

Soils and sediments are dried (60°C) and sieve to -80 mesh.

Rocks and cores are crushed and pulverized to -100 mesh.

### Sample Digestion

1. 10g samples in 250 ml beaker, ignite at 600°C for four hours.
2. Add 40 ml of 3:1:2 mixture HCL:HNO<sub>3</sub>:H<sub>2</sub>O.
3. Cover beaker with lids.
4. Boil in hot water bath for one hour.
5. Swirl samples 2 to 3 times within the hour.
6. Cool, add 60 ml of distilled water and settle.
7. Pour 50 ml of leached solution using a graduated cylinder into 100 ml volumetric flask.
8. Add 10 ml of MIBK and 25 ml of distilled water.
9. Shake 3 to 4 minutes in shaker.
10. Add additional 25 ml of distilled water to stripe out excess iron.
11. Shake each flask 10 times.
12. Pour MIBK into container for graphite AA finished.

# **APPENDIX IV**

## **Rock and Soil Geochemical Lab Reports**



GEOCHEMICAL ANALYSIS CERTIFICATE



Pacific Bay Minerals Ltd. PROJECT MINK CREEK File # 97-5806

908 - 700 W. Pender St., Vancouver BC V6C 1G8 Submitted by: Frank Moyle

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Au* ppb
B 149951	1	13	38	49	<.3	18	8	293	2.07	<2	<8	<2	6	89	<.2	<.3	<.3	48	1.08	.047	15	40	.63	9	.05	<.3	1.32	.04	<.01	3	<.1
B 149952	2	19	23	69	<.3	28	12	734	3.22	<2	<8	<2	11	54	<.2	<.3	<.3	63	3.91	.092	24	64	1.06	185	.17	<.3	1.95	.08	.82	<.2	1
B 149953	1	17	28	15	<.3	13	7	89	1.41	<2	<8	<2	2	174	<.2	<.3	<.3	15	1.22	.059	5	17	.11	4	.14	<.3	.77	.02	.01	4	<.1
B 149954	1	8	19	36	<.3	5	5	320	2.34	<2	<8	<2	24	46	<.2	<.3	<.3	21	1.12	.033	46	11	.51	41	.01	<.3	1.02	.05	.11	2	<.1
B 149955	3	18	18	58	<.3	11	14	596	4.08	3	<8	<2	22	16	<.2	<.3	<.3	102	.27	.052	34	17	1.25	122	.05	<.3	1.57	.07	.31	<.2	1
B 149956	14	52	21	93	<.3	86	6	386	1.32	3	<8	<2	<2	55	.2	<.3	<.3	408	1.72	.106	16	42	.32	44	<.01	<.3	.65	<.01	.19	9	<.1
B 149957	2	180	16	49	<.3	30	36	324	3.77	5	<8	<2	13	17	<.2	<.3	<.3	92	.72	.062	31	88	1.53	91	.18	<.3	1.89	.04	.36	5	<.1
B 149958	2	59	116	20	<.3	69	14	99	.93	12	<8	<2	<2	86	<.2	<.3	<.3	16	1.36	.079	5	29	.13	18	.27	<.3	.52	.03	.01	3	1
B 149959	1	89	9	79	.3	49	32	1114	5.24	7	<8	<2	2	281	.4	<.3	3	198	12.68	.203	22	10	1.71	54	.06	<.3	1.97	.02	.01	<.2	2
B 149960	1	39	9	37	<.3	81	21	971	2.76	4	<8	<2	<2	220	.2	<.3	<.3	95	8.21	.094	8	197	1.00	191	.03	<.3	1.23	.02	.07	<.2	2
B 149961	1	8	13	74	<.3	9	10	1258	3.28	2	<8	<2	4	111	<.2	<.3	3	54	2.64	.043	18	16	1.16	237	.02	7	2.87	.20	.13	<.2	2
B 149962	4	29	4	124	<.3	17	37	1764	9.70	19	<8	<2	9	292	.2	<.3	<.3	84	4.71	.397	93	5	2.72	29	.02	<.3	3.45	.02	<.01	<.2	2
B 149963	3	51	19	66	<.3	31	30	2738	7.80	15	<8	<2	3	287	.8	<.3	<.3	49	10.20	.204	41	27	2.00	37	.01	<.3	1.15	.02	.01	<.2	1
B 149964	7	62	14	139	<.3	26	8	345	1.98	11	<8	<2	6	50	2.2	<.3	<.3	44	.81	.329	33	19	.51	137	<.01	<.3	.91	.01	.16	4	1
B 149965	1	8	11	46	<.3	17	7	351	1.97	<2	<8	<2	10	35	<.2	<.3	<.3	23	1.45	.490	32	33	.55	71	.06	<.3	1.10	.02	.27	4	1
B 149966	2	20	65	267	<.3	8	30	1339	8.20	5	<8	<2	3	75	.3	<.3	<.3	174	2.19	.197	8	46	2.36	44	.32	<.3	3.27	.02	<.01	<.2	1
B 149967	3	52	9	154	.4	17	19	728	8.21	<2	<8	<2	5	36	<.2	<.3	<.3	187	1.80	.243	38	57	2.18	50	.03	<.3	3.64	.02	<.01	<.2	1
B 149968	2	14	35	180	<.3	23	28	1858	8.12	<2	<8	<2	7	10	<.2	<.3	3	213	.58	.093	16	69	2.16	15	.33	<.3	3.81	.02	<.01	<.2	1
B 149969	1	10	<.3	63	<.3	153	32	879	6.02	<2	<8	<2	3	221	.4	<.3	<.3	74	9.20	.114	19	281	1.81	1787	.03	<.3	2.50	<.01	.05	<.2	1
B 149970	2	10	7	143	<.3	15	38	1161	10.83	<2	<8	<2	3	70	<.2	<.3	<.3	245	2.17	.206	15	30	2.67	538	.18	<.3	3.64	.02	.04	<.2	1
RE B 149970	2	10	11	142	<.3	15	38	1147	10.67	<2	<8	<2	3	70	<.2	<.3	<.3	242	2.14	.204	15	31	2.64	524	.18	4	3.61	.02	.04	<.2	1
B 149971	<.1	3	6	13	<.3	5	2	1112	1.96	2	<8	<2	<2	297	.8	<.3	<.3	11	32.61	.017	1	4	.97	23	<.01	3	.06	<.01	<.01	<.2	<.1
B 149972	<.1	1624	10	51	.9	64	34	3201	3.21	2	<8	<2	3	265	.7	4	<.3	30	16.34	.077	27	41	.77	609	.02	4	.34	.03	.05	2	20
B 149973	<.1	52	13	87	.3	37	28	793	5.56	<2	<8	<2	<2	107	.2	<.3	<.3	152	1.38	.098	8	194	2.42	76	.41	3	2.27	.04	.05	<.2	<.1
B 149974	<.1	76	11	73	<.3	54	27	667	4.86	<2	<8	<2	<2	165	<.2	<.3	<.3	124	2.40	.174	11	179	2.12	268	.31	6	1.98	.03	.18	<.2	7
B 149975	<.1	73	<.3	79	<.3	108	24	793	3.81	<2	<8	<2	2	211	<.2	<.3	<.3	81	2.64	.296	27	192	1.81	246	.32	3	1.99	.03	.36	<.2	<.1
B 149976	1	126	8	104	<.3	125	31	908	5.60	<2	<8	<2	2	105	<.2	<.3	<.3	100	2.45	.287	21	226	3.00	261	.31	8	2.93	.02	.30	<.2	<.1
B 149977	1	12	12	65	<.3	59	29	1508	7.06	4	<8	<2	3	1708	1.3	<.3	<.3	55	10.73	.186	11	28	2.57	100	.01	12	.31	.03	.01	<.2	<.1
B 149978	<.1	17	<.3	26	<.3	2265	103	757	5.47	3	<8	<2	<2	12	1.1	<.3	3	31	.29	.002	<.1	950	19.86	7	.01	8	.65	<.01	<.01	<.2	1
B 149979	1	10	11	46	<.3	36	6	519	3.13	2	<8	<2	4	20	.3	<.3	<.3	7	.13	.025	13	20	.43	213	<.01	<.3	.67	.01	.13	5	<.1
C 27901	1	12	16	33	<.3	22	6	413	1.98	<2	<8	<2	13	22	<.2	<.3	<.3	19	1.30	.020	22	41	.68	61	.04	<.3	.96	.04	.12	4	<.1
STANDARD C3/AU-R	27	67	38	166	5.6	34	12	727	3.37	55	21	<.2	18	30	23.6	13	26	83	.59	.084	18	163	.60	146	.10	15	1.90	.04	.16	23	456
STANDARD G-1	2	4	5	50	<.3	8	4	590	2.21	<2	<8	<2	2	69	<.2	<.3	<.3	45	.65	.078	7	91	.67	254	.16	<.3	1.06	.06	.51	<.2	2

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER. THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL. ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS > 1%, AG > 30 PPM & AU > 1000 PPB. SAMPLE TYPE: ROCK AU\* - IGNITED, AQUA-REGIA/MIBK EXTRACT, GF/AA FINISHED.(10 GM) Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: OCT 3 1997 DATE REPORT MAILED: *Oct 9/97* SIGNED BY: *[Signature]* D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

GEOCHEMICAL ANALYSIS CERTIFICATE

Pacific Bay Minerals Ltd. PROJECT MINK CREEK File # 97-5807 Page 1  
 908 - 700 W. Pender St., Vancouver BC V6C 1G8 Submitted by: Frank Moyle



SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Au*
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppb
CBFS-9701	3	30	18	98	<.3	37	38	2606	11.63	7	<8	<2	4	75	<.2	<3	<3	164	1.49	.080	50	69	1.29	607	.01	<3	2.65	.01	.07	<2	<1
CBFS-9702	1	28	6	58	<.3	62	23	504	4.94	16	<8	<2	3	26	<.2	8	<3	135	.34	.031	16	138	1.52	252	.29	<3	2.26	.01	.07	2	<1
CBFS-9703	1	22	22	59	.3	106	47	1967	9.10	6	<8	<2	3	416	.2	4	<3	77	2.19	.145	37	103	.94	155	<.01	<3	2.02	.01	.05	<2	<1
CBFS-9704	1	56	14	2751	<.3	137	44	1308	5.71	13	<8	<2	9	80	10.8	10	<3	109	1.01	.229	69	233	2.48	301	.10	<3	2.89	.01	.07	5	1
CBFS-9705	1	52	15	84	<.3	65	25	1276	4.53	12	<8	<2	8	31	.3	7	<3	87	.56	.135	45	102	1.71	223	.05	<3	2.50	.01	.07	2	<1
CBFS-9706	1	35	13	71	<.3	51	17	546	3.77	13	<8	<2	8	15	<.2	<3	<3	60	.20	.078	28	80	1.12	192	.03	<3	2.10	<.01	.07	<2	4
NMFS-9701	1	80	5	98	.5	133	71	1996	10.97	32	<8	<2	6	57	.6	12	<3	248	1.59	.263	52	133	4.53	148	.06	<3	4.92	.01	.05	3	1
NMFS-9702	1	68	7	97	.3	113	55	1468	8.31	33	<8	<2	6	40	.4	9	<3	136	1.08	.275	45	134	2.81	152	.04	<3	3.41	.01	.06	<2	1
NMFS-9703	<1	89	5	88	<.3	184	62	1617	8.15	62	<8	<2	6	34	<.2	<3	<3	162	.97	.196	35	249	3.24	200	.07	<3	3.86	<.01	.08	<2	1
NMFS-9704	1	62	8	74	.4	149	45	1564	6.73	126	<8	<2	3	32	.2	9	<3	147	1.06	.146	26	234	2.64	314	.04	<3	3.51	.01	.06	<2	<1
NMFS-9705	1	94	8	94	.4	201	48	1005	7.61	45	<8	<2	5	67	.6	5	<3	156	2.77	.166	27	261	3.29	245	.10	<3	3.79	.01	.11	<2	4
NMFS-9706	1	86	10	73	.3	138	33	937	5.73	29	<8	<2	3	39	.2	4	<3	120	1.20	.129	29	187	2.23	363	.05	<3	3.10	.01	.07	<2	1
NMFS-9707	1	75	7	82	<.3	143	36	797	6.31	32	<8	<2	3	37	.3	8	<3	133	1.22	.135	24	221	2.69	267	.06	<3	3.30	.01	.07	2	<1
NMFS-9708	1	79	7	90	.3	302	60	795	5.92	45	<8	<2	6	62	.3	8	<3	150	2.23	.151	28	665	2.34	157	.04	<3	2.44	.01	.05	<2	<1
BDFS-9701	1	51	9	88	.3	63	31	705	5.69	30	<8	<2	8	32	<.2	8	<3	119	.49	.106	43	60	1.88	370	.01	<3	2.96	.01	.08	<2	1
BDFS-9702	5	36	3	93	<.3	32	39	809	10.39	31	<8	<2	5	72	<.2	3	<3	116	.80	.249	65	15	2.20	100	.01	<3	4.46	.01	.02	<2	<1
BDFS-9703	7	147	24	51	.4	57	76	3199	14.74	21	<8	<2	6	75	<.2	14	<3	68	1.15	.224	139	11	.88	30	.01	<3	1.85	.01	.01	<2	<1
RE BDFS-9703	8	154	26	52	<.3	58	76	3281	14.97	20	<8	<2	5	75	<.2	15	<3	70	1.17	.225	143	11	.90	31	.01	<3	1.89	.01	<.01	2	1
BDFS-9704	6	18	13	63	<.3	19	18	402	5.70	9	<8	<2	5	38	<.2	4	<3	115	.42	.056	41	25	1.37	181	.02	<3	2.98	.01	.02	<2	<1
BDFS-9705	4	33	11	88	.4	49	23	620	4.96	14	<8	<2	7	24	.3	3	<3	97	.29	.087	38	53	1.21	392	.02	<3	2.31	.01	.05	<2	<1
BDFS-9706	1	25	5	144	.3	36	52	1207	11.60	27	<8	<2	3	252	.4	19	<3	29	3.92	.282	17	10	.79	222	<.01	<3	.78	.01	.09	<2	2
BDFS-9707	3	60	16	102	.3	56	18	459	4.21	14	<8	<2	8	30	.3	4	<3	77	.45	.084	46	52	1.00	417	.02	<3	1.93	.01	.06	<2	<1
BDFS-9708	1	23	9	54	<.3	26	8	229	2.20	8	<8	<2	6	28	<.2	<3	<3	46	.41	.111	24	24	.58	344	.02	3	1.08	.01	.05	<2	1
BDFS-9709	1	13	4	63	.4	35	34	879	8.63	5	<8	<2	2	78	<.2	<3	<3	104	2.44	.186	31	10	.60	307	<.01	<3	1.02	.01	.06	<2	<1
BDFS-9710	1	35	8	56	<.3	64	18	347	3.84	16	<8	<2	4	24	<.2	4	<3	84	.44	.033	15	81	.98	181	.02	<3	2.43	.01	.05	<2	<1
NKFS-9701	2	59	14	92	.8	130	15	599	2.78	10	<8	<2	3	41	.6	<3	<3	49	.72	.070	22	47	.46	720	.01	<3	1.06	.02	.07	<2	2
NKFS-9702	1	16	8	76	.4	51	12	437	1.89	5	<8	<2	2	29	.6	<3	<3	34	.57	.052	9	64	.31	309	.01	<3	.71	.02	.07	<2	<1
NKFS-9703	2	44	18	77	.3	153	19	753	3.65	15	<8	<2	4	38	.5	3	<3	54	.63	.038	20	101	.64	440	.02	3	.91	.01	.05	<2	1
NKFS-9704	2	53	12	125	.3	164	12	463	2.84	14	<8	<2	5	65	1.3	3	<3	42	1.75	.105	17	68	1.28	518	.02	3	.66	.02	.08	<2	10
NKFS-9705	1	21	9	46	<.3	450	27	328	2.53	9	<8	<2	3	26	.2	4	<3	39	.45	.035	13	320	3.67	268	.03	3	.82	.02	.04	<2	1
NKFS-9706	2	45	15	125	.5	153	14	311	2.62	13	<8	<2	7	72	1.4	<3	<3	47	2.01	.117	24	67	1.25	742	.03	4	.93	.01	.10	<2	1
NKFS-9707	1	41	10	80	.5	117	14	638	2.68	11	<8	<2	4	28	.3	<3	<3	40	.35	.048	16	65	.66	491	.02	3	.73	.01	.05	<2	3
NKFS-9708	1	46	15	84	<.3	66	9	309	2.89	12	<8	<2	4	19	.2	4	<3	40	.21	.038	19	37	.40	393	.02	<3	.82	.01	.05	<2	3
NKFS-9709	2	40	10	74	.6	68	15	582	3.53	9	<8	<2	4	42	<.2	<3	<3	52	.74	.110	26	37	.81	843	.02	<3	1.30	.03	.08	<2	1
NKFS-9710	2	39	11	101	.4	53	8	410	2.20	9	<8	<2	4	47	.8	<3	<3	39	.86	.098	18	33	.59	643	.02	<3	.69	.01	.08	<2	3
STANDARD C3/AU-S	26	66	38	149	5.8	37	12	776	3.46	57	21	2	20	30	23.8	22	23	86	.60	.089	21	174	.61	152	.10	20	1.91	.04	.16	22	44
STANDARD G-1	1	5	<3	38	<.3	6	4	539	2.08	<2	<8	<2	5	72	<.2	<3	<3	44	.64	.092	10	81	.56	227	.14	3	.94	.09	.48	3	<1

MINK Soil

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.  
 THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL.  
 - SAMPLE TYPE: SOIL AU\* - AQUA-REGIA/MIBK EXTRACT, GF/AA FINISHED.(10 GM)  
 Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: OCT 3 1997 DATE REPORT MAILED: Oct 8/97 SIGNED BY: [Signature] D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of the analysis only.

Data FA



093859

**GEOLOGY**

**FINLAYSON LAKE FAULT ZONE**

- 2a Cretaceous and / or Tertiary volcanics
- 2b Early Mesozoic sediments
- 2c Massive carbonate
- 2d Undifferentiated metamorphic rocks
- 2e Sheared mafic to ultramafic plutonic rocks
- 2f Sheared greenstones and chert
- 2g Two-mica quartz monzonite

**YUKON - TANANA TERRANE**

- 3a Cretaceous and / or Tertiary volcanics
- 3b Early Mesozoic sediments
- 3c Sheared mafic to ultramafic rocks
- 3d Sheared greenstone
- 3e Massive carbonate
- 3f Mainly mafic metavolcanics and associated sediments
- 3g Felsic metavolcanics
- 3h Foliated K feldspar porphyry
- 3i Lower unit micaceous quartzite and marble
- 3j Two-mica quartz monzonite
- 3k Mafic stocks
- 3l Augen orthogneiss
- 3m Monzonitic orthogneiss
- 3n Simpson Range Plutonic Suite

(after Mortensen, 1983)

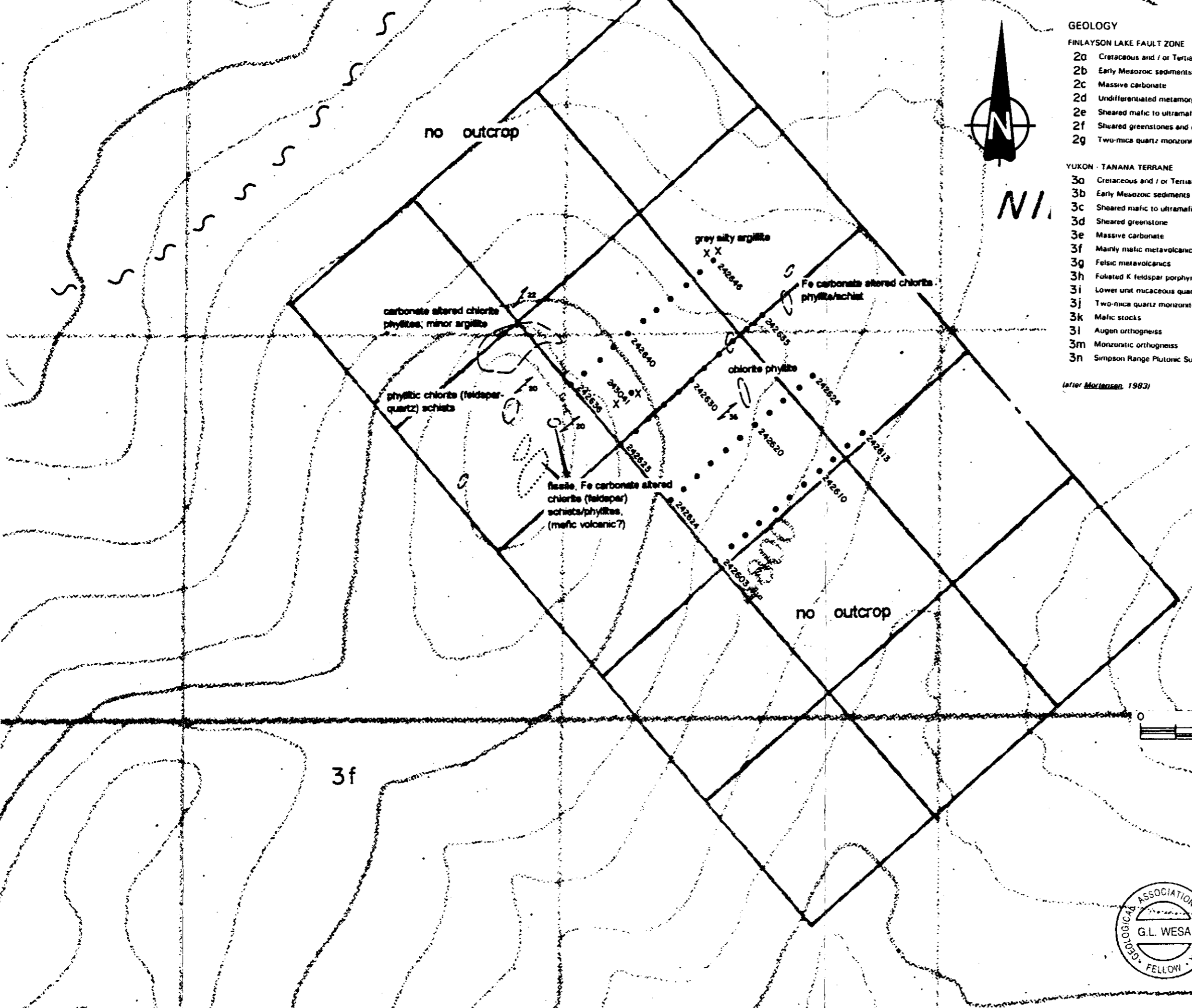
**SYMBOLS**

**FROM REGIONAL MAPPING**

- conformable (?) contact
- intrusive contact
- ~ fault

**FROM DETAILED MAPPING**

- conformable (?) contact
- intrusive contact
- ~ fault
- o outcrop
- x small outcrop
- o talus / subcrop
- + float
- laterite altered zone / goosan
- S, dip
- S, foliation
- S, foliation
- lineation with plunge
- joint surface
- ▲ Cominco rock sample
- o Cominco stream silt sample
- Cominco soil sample
- Cominco litho geochem. sample
- Cominco heavy mineral sample
- o R.G.S. stream silt sample
- 32 Millie showing
- tranch
- D.D.H. collar
- Cominco 1994 geophysical grid

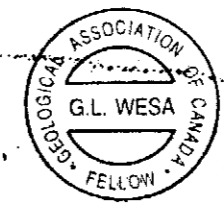


**PACIFIC BAY MINERALS LTD.**  
VANCOUVER, BRITISH COLUMBIA

**NIM CLAIMS**  
**PROPERTY GEOLOGY**

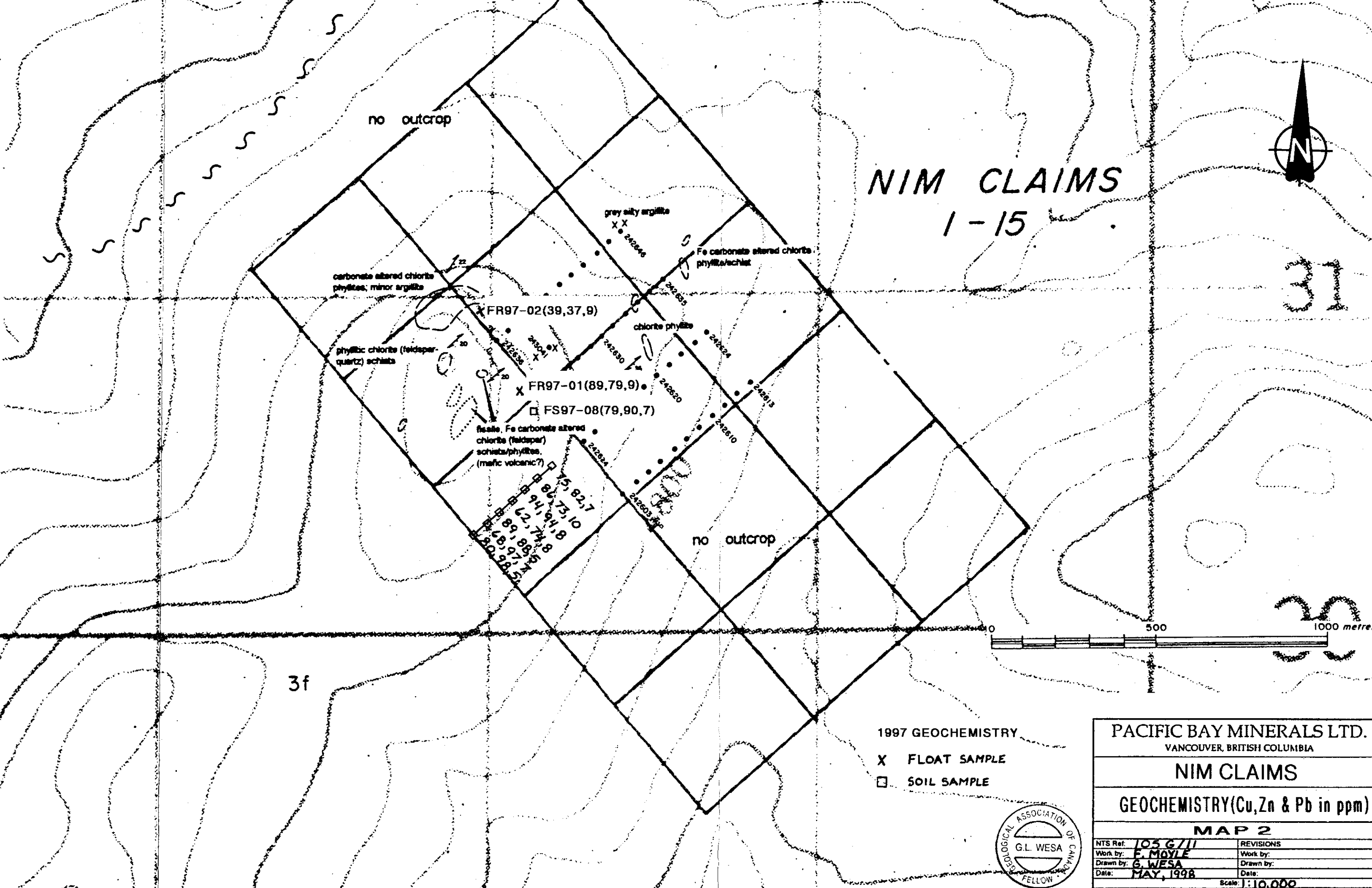
**MAP 1**

NTS Ref: 1056/11	REVISIONS
Work by: E. MOYLE	Work by:
Drawn by: E. MOYLE	Drawn by:
Date: MAY, 1998	Date:
Scale: 1:10,000	





# NIM CLAIMS 1-15



1997 GEOCHEMISTRY

X FLOAT SAMPLE

□ SOIL SAMPLE



PACIFIC BAY MINERALS LTD. VANCOUVER, BRITISH COLUMBIA	
NIM CLAIMS	
GEOCHEMISTRY(Cu,Zn & Pb in ppm)	
MAP 2	
NTS Ref: 105 G/11	REVISIONS
Work by: F. MOYLE	Work by:
Drawn by: G. WESA	Drawn by:
Date: MAY, 1998	Date:
Scale: 1:10,000	