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• ASSOCIATES (1981) LIMITED
CONSULTING GEOLOGICAL ENGINEERS

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ASSESSMENT REPORT

describing

**GEOLOGICAL MAPPING, PROSPECTING AND
SOIL GEOCHEMISTRY**

on the

MASK PROPERTY

Mask 1-38 Claims YB63540-YB63577
39-90 Claims YB77943-YB77994

Latitude 61°13' N; Longitude 130°06' W

NTS 105G/1 and 105G/8

in the

WATSON LAKE MINING DISTRICT

YUKON TERRITORY

Prepared by

Archer, Cathro & Associates (1981) Limited

for

EXPATRIATE RESOURCES LTD.

W.A. Wengzynowski, B.A.Sc.
November, 1997

093 803



DATE DUE

[Empty rectangular box for date due]

the report has been reviewed by
the Geological Evaluation Unit
under Section 53 (A) Yukon Quartz
Mining Act and is allowed as
representation work in the amount
of \$ 3800.00.

M.B.K.
For Regional Manager, Exploration and
Geological Services for Commissioner
of Yukon Territory.

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INTRODUCTION

Expatriate Resources Ltd. has a 100% interest in the Mask property which protects a previously unstaked volcanogenic massive sulphide (VMS) target selected from a data base documenting results of 1973 exploration by a joint venture managed by Archer, Cathro & Associates Limited. Ninety claims were staked in 1995 and spring 1996 over scattered sample sites that had yielded moderately to strongly anomalous copper, lead, zinc and molybdenum values.

During summer 1996 field exploration was conducted by crews working from Expatriate's base camp on Finlayson Lake. The work consisted of geological mapping, reconnaissance and grid soil geochemistry, prospecting and claim surveys.

The 1997 program was limited to one day of field work which involved geological mapping, prospecting and contour soil sampling in the vicinity of previously outlined soil geochemical anomalies. This program was managed by Archer, Cathro & Associates (1981) Limited and compiled by the author. Appendix I contains the Author's Statement of Qualifications.

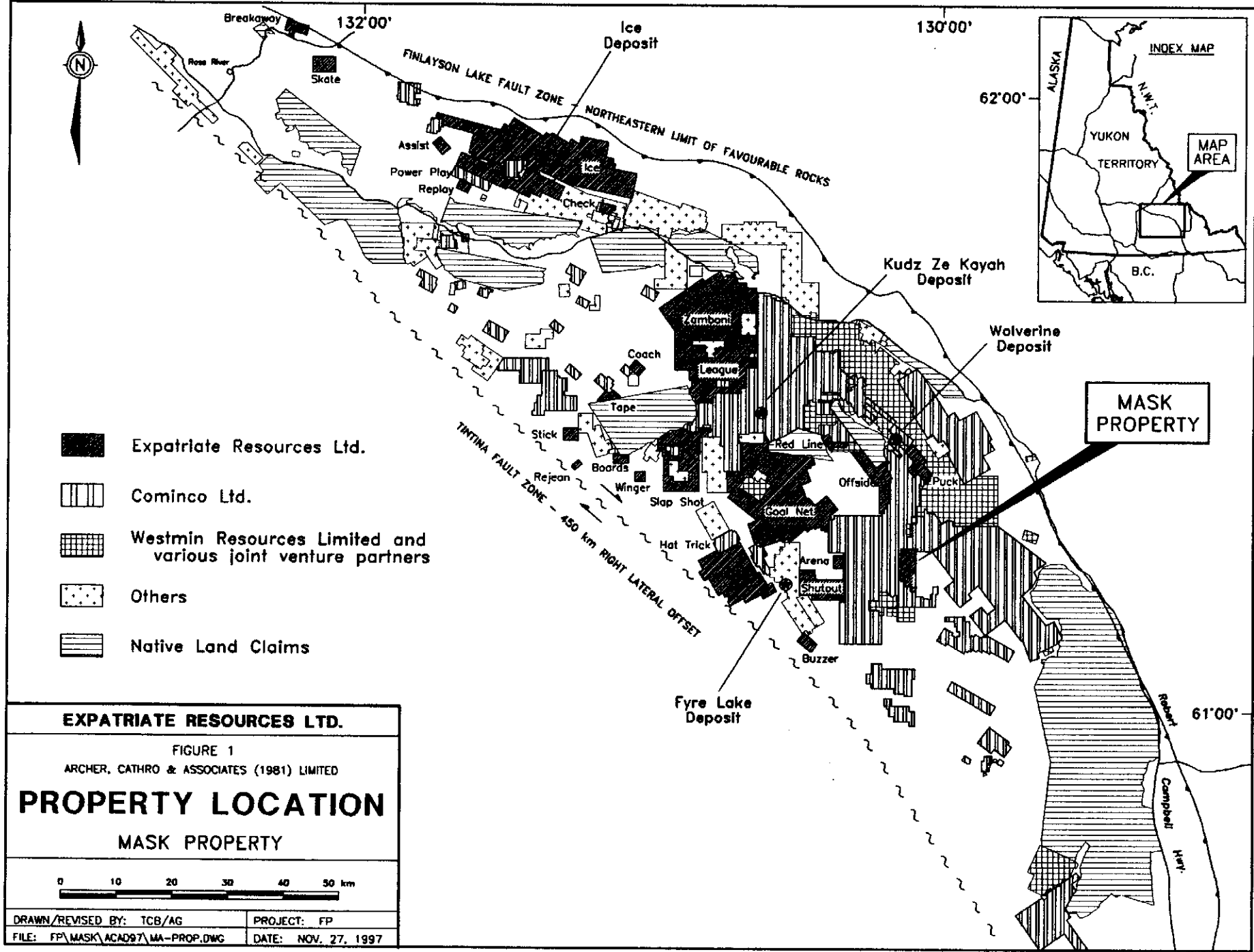
PROPERTY, LOCATION AND ACCESS

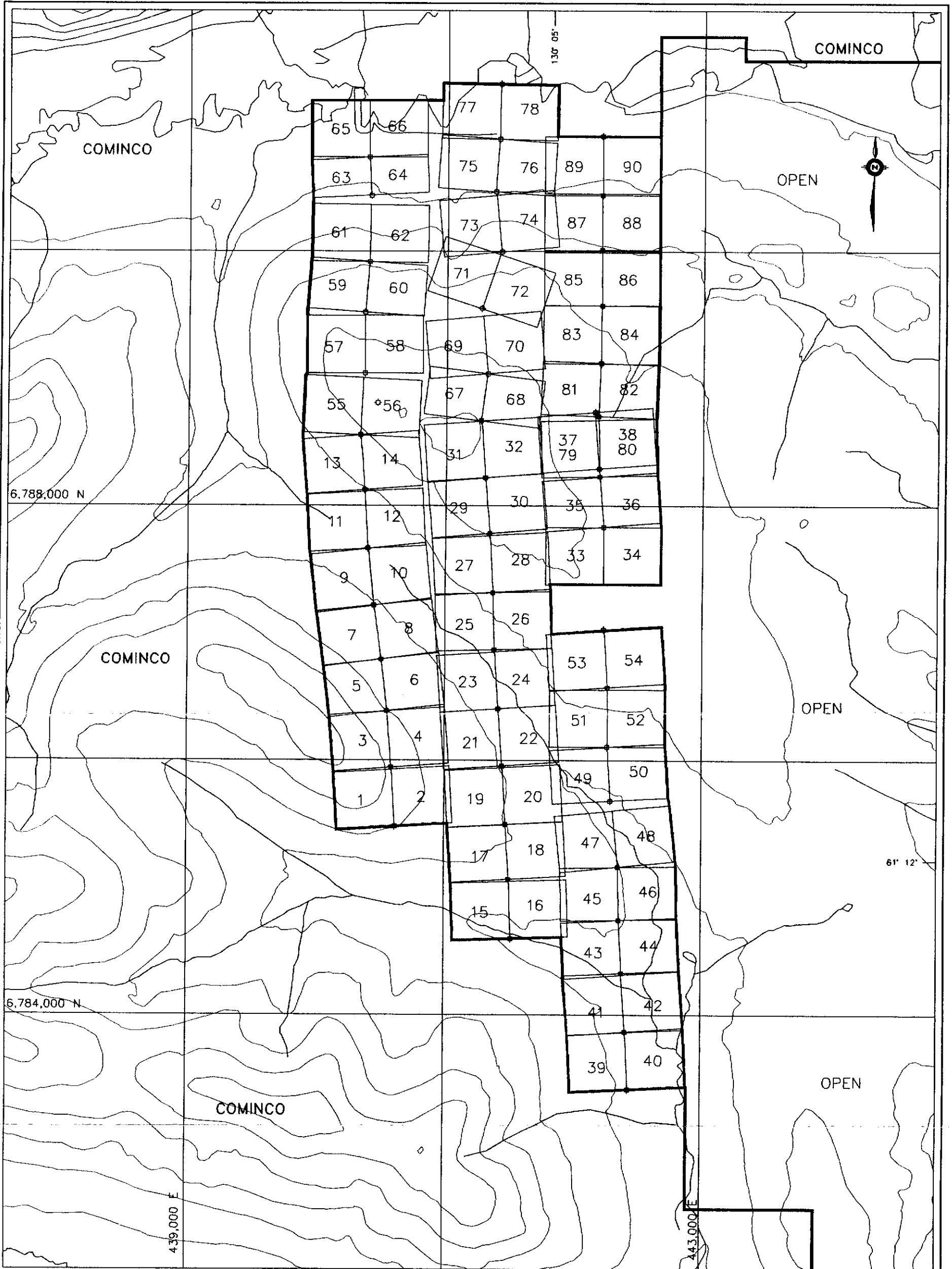
The property is located in southeastern Yukon at latitude 61°13'N and longitude 130°06'W on NTS map sheets 105G/1 and 8 (Figure 1). It is comprised of ninety contiguous mineral claims (Figure 2) registered with the Watson Lake Mining Recorder in the name of Archer, Cathro & Associates (1981) Limited which holds them in trust for Expatriate Resources Ltd. Claim registration data are listed below.

<u>Claim Name</u>	<u>Grant Number</u>	<u>Expiry Date*</u>
Mask 1-38	YB63540-YB63577	March 17, 2001*
39-90	YB77943-YB77994	March 17, 2001

*Expiry date includes 1997 work which has been filed for assessment credit but not yet accepted.

In 1997 the property was accessed by helicopter from Expatriate's drill camp on Finlayson Lake (Km 232 on the Robert Campbell Highway). The property lies 53 km southeast of Finlayson Lake and 275 km east-northeast of Whitehorse. Helicopter support was provided by an Aerospatiale B1 contracted from Kluane Helicopters of Haines Junction, Yukon.





- Claim boundary
- ◆ Post location with standard GPS fix
- ⊕ Post location with poor GPS fix
- ⊙ Post location with no GPS fix

EXPATRIATE RESOURCES LTD.	
FIGURE 2 ARCHER, CATHRO & ASSOCIATES (1981) LIMITED	
CLAIM LOCATION	
MASK PROPERTY	
SCALE 1:30,000	
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FILE: FP\MASK\AC087A\MASK-CL.DWG	DATE: NOV. 27, 1997

GEOMORPHOLOGY

The Mask property is located in the Pelly Mountains about 25 km south of Wolverine Lake. Creeks draining the property flow to the south and east into the Liard River watershed.

The claims cover parts of two northwestern-trending ridges and the surrounding valley bottoms. Elevations range from 1150 m in a valley at the property's northern margin to 1700 m atop a ridge in the southwestern corner. Topographic relief is moderate, typically 15 to 30°. The valley bottoms are covered with Pleistocene glacial till.

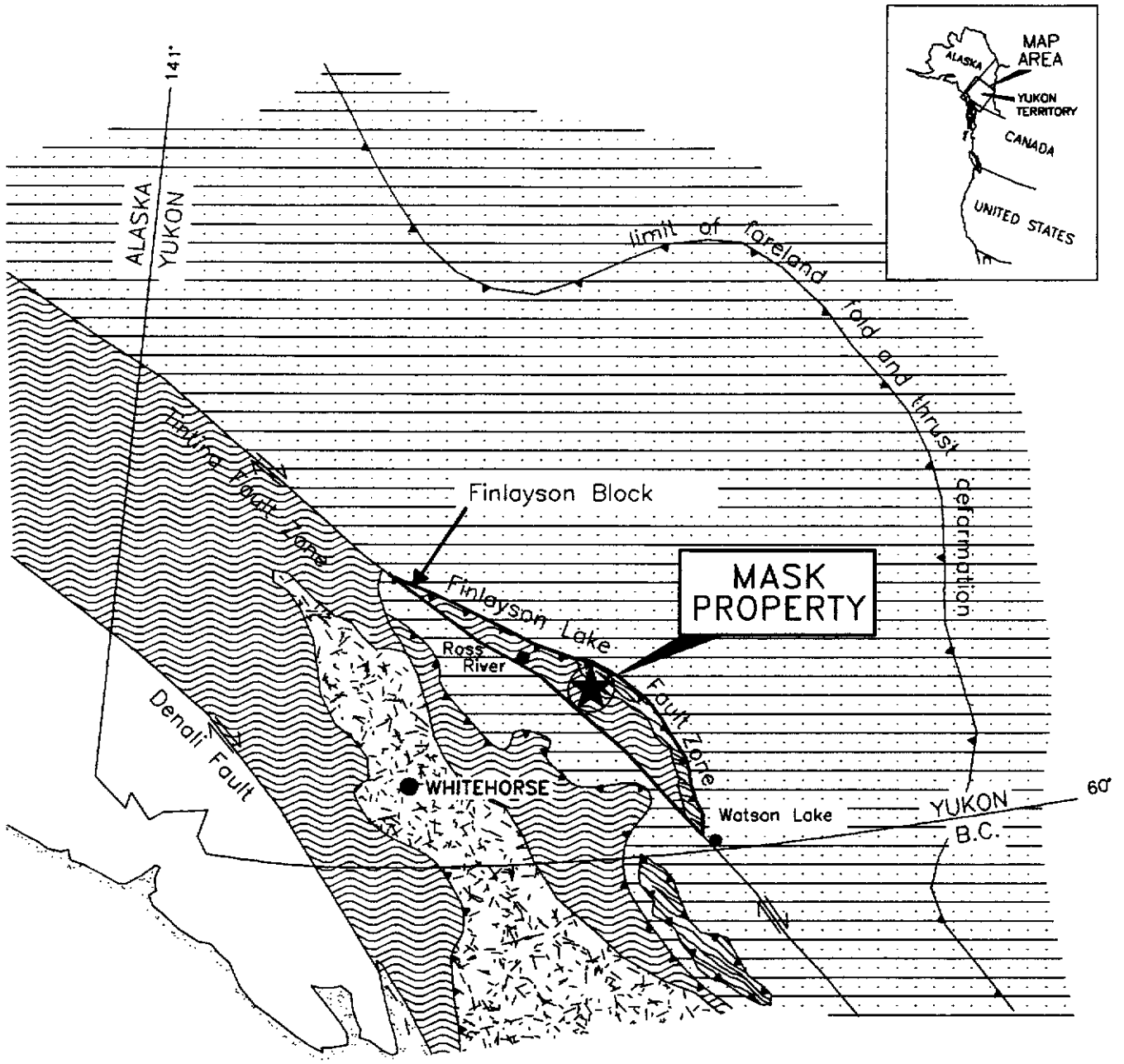
Vegetation consists of dense growths of balsam and black spruce in the valleys, giving way to buckbrush, willow and moss above 1500 m.







REGIONAL GEOLOGY

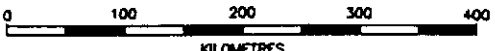
The Mask property is located within the Finlayson Block, a 380 by 60 km area comprised primarily of the Yukon-Tanana and Slide Mountain geologic terranes (Figure 3). These terranes represent the innermost of the accreted or "suspect" terranes in the Canadian Cordillera (Mortensen and Jilson, 1985). The northeastern margin of the block is the Finlayson Lake Fault Zone, a complex zone of steep and shallow faults related to transpressive suturing. The southwestern boundary of the block is the Tintina Fault, a major strike-slip fault with at least 450 km of dextral displacement during Late Cretaceous and/or Early Tertiary time (Tempelman-Kluit et al, 1976).

Regional mapping of the Finlayson Lake area was completed by the Geological Survey of Canada (GSC) in the mid to late 1970's (Tempelman-Kluit, 1977, 1979). More recent regional studies have been published by Mortensen and Jilson (1985) and Mortensen (1992). The following discussion of the regional geology (Figure 4) is based partly on the published work and partly on unpublished mapping completed in 1996 (Tempelman-Kluit, personal communication, 1996).

The Yukon-Tanana Terrane consists largely of Paleozoic continental margin and/or arc stratigraphy deposited on a continental basement of uncertain origin (Mortensen, 1992). The Yukon-Tanana Terrane in the Finlayson Lake area contains three major packages, collectively termed the Layered Metamorphic Sequence. The lowermost unit consists of garnet-mica schist with interbanded marbles, calc-silicates and calcareous schists near the top. The middle unit is a carbonaceous quartzite, schist or phyllite with rare conglomerates and locally extensive felsic and mafic volcanic interbands. Radiometric dating of the felsic metavolcanics in the Finlayson Block has consistently resulted in Late Devonian to Mississippian crystallization ages. Immediately south of Finlayson Lake, large isolated outcrops of marble and quartzite which are poorly dated as Early



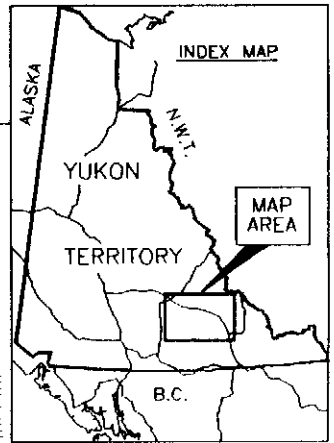
-  Thrust fault
-  Steep fault
-  Yukon-Tanana Terrane
-  Slide Mountain Terrane
-  Stikinia and other Terranes
-  North American Miogeoclinal Strata

EXPATRIATE RESOURCES LTD.	
FIGURE 3	
ARCHER, CATHRO & ASSOCIATES (1981) LIMITED	
TECTONIC SETTING	
MASK PROPERTY	
	
DRAWN/REVISED BY: TCB/AG	PROJECT: FP
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Modified after Mortensen and Jilson (1985), Mortensen (1992) and Johnston and Mortensen (1994).

130°00'


62°00'




North American Miogeocline

 Pre-Triassic sedimentary and volcanic rocks

Slide Mountain Terrane


 Chert, ultramafic, greenstone, metavolcanic and carbonate rocks

Yukon-Tanana Terrane

 Paleozoic metaplutonic rocks

 Paleozoic Layered Metamorphic Sequence

Units common to all three terranes

 Young volcanic rocks

 Mesozoic plutonic rocks

 Mesozoic clastic rocks

450 km RIGHT LATERAL OFFSET

TINTINA FAULT ZONE

FRANKLIN LAKE FAULT ZONE

NORTHEASTERN LIMIT OF FAVORABLE ZONE

Fyre Lake Deposit

MASK PROPERTY

61°00'

EXPATRIATE RESOURCES LTD.





FIGURE 4

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

REGIONAL GEOLOGY

MASK PROPERTY



-  Geological contact
-  Sleep fault
-  Thrust fault
-  Property held by Expatriate Resources Ltd.

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Modified after Mortenson and Jilon (1985)

Pennsylvanian to Early Permian (Tempelman-Kluit, 1979) form the uppermost unit of the Yukon-Tanana Terrane.

This sequence of units is generally correlative with a similar stratigraphic sequence in ancestral North America (Mortensen and Jilson, 1985; Tempelman-Kluit, personal communication, 1996). The lowermost is correlated with the Lower Cambrian Atan Group and the middle carbonaceous assemblage is correlated with the offshore, Silurian-Devonian Nasina quartzite assemblage. The felsic volcanics are most similar to locally extensive Mississippian siliceous volcanics in the North American stratigraphy. Local calcareous phyllites and massive greenstones near the top of the lower unit are lithologically similar to the Kechika Group and Lower Paleozoic alkalic and potassic greenstones, respectively.

Gneiss and augen gneiss invariably occur low in the Yukon-Tanana succession beneath either the lowermost calcareous unit or the middle carbonaceous unit. Mortensen and Jilson (1985) considered the gneisses to be metamorphosed Mid-Paleozoic plutonic rocks. Conversely, Tempelman-Kluit (personal communication, 1996) considers these gneisses to be at least in part recrystallization of earlier stratigraphy. Radiometric dating of the gneisses has consistently resulted in Late Devonian to Mississippian ages (Mortensen, 1992). The gneisses occur in structural culminations with diameters on the order of 10 km and structural relief up to about 1 km.

The Devonian-Mississippian Simpson Suite (Mortensen, 1992) forms thick intervals of hornblende granodiorite and quartz monzonite higher in the Yukon-Tanana stratigraphic sequence. Mortensen and Jilson (1985) interpreted this suite as intrusive. Tempelman-Kluit (1979, personal communication 1996) mapped the suite as an allochthonous slice emplaced on top of the structural pile.

Slide Mountain Terrane consists of Late Devonian to Late Triassic disrupted oceanic crust (Mortensen, 1992). Lithologies include massive and sheared greenstone, chert and mafic to ultramafic plutonic rocks occurring as fault-bounded slices along thrust faults and steep faults. These units are most abundant near the northeastern edge of the Finlayson Block but are also found throughout it.

Younger units unconformably overlie units from Slide Mountain, Yukon-Tanana and North American Terranes. Mesozoic clastic rocks are Late Triassic, immature sediments containing cobbles from both Slide Mountain and Yukon-Tanana Terranes. Young volcanic rocks consist of Late Cretaceous to Tertiary felsic volcanic flows and volcanoclastic deposits. They are usually found in close proximity to the Tintina Fault Zone.

Mesozoic intrusive activity in the Finlayson Block includes two suites. The first is comprised of several unmetamorphosed Early Jurassic mafic and intermediate composition plutons. The second suite consists of Late Cretaceous two-mica quartz monzonite and granite (Mortensen and Jilson, 1985).

Structurally Yukon-Tanana schists and gneisses contain a pervasive, flat- to gently-dipping foliation. Close examination of this fabric indicates that it commonly is a closely spaced crenulation cleavage. Large scale folds related to this fabric can rarely be mapped in the field. In most cases bedding and earlier fabrics are transposed into near parallelism with this dominant fabric. Later crenulation cleavages are present only locally. Some of the Cretaceous intrusions have a mild deformation fabric, others are massive and do not contain a foliation.

Thrust faults within the Finlayson Block juxtapose lithologic sequences with similar deformation fabrics. Thrusting postdates the Late Paleozoic Slide Mountain lithologies and predates the Cretaceous intrusives. Recent mapping also suggests, but does not definitively prove, the presence of major late extensional faults juxtaposing differing sequences (Tempelman-Kluit, personal communication, 1996). East-northeasterly trending, steep normal faults disrupt all earlier deformation fabrics.

Metamorphic grades range from lower greenschist facies to middle amphibolite facies. Contact hornfels around plutonic units occur locally.

Metamorphism and deformation are tentatively correlated with transpressive suturing of these suspect terranes with ancestral North America. Suturing is restricted to the time interval of post-Triassic continuing into the Cretaceous. Whether deformation is continuous or sporadic has not been fully verified at present.

The discovery of the Kudz Ze Kayah and Wolverine Deposits within the Finlayson Block in the last few years (Johnston and Mortensen, 1994) has refocused exploration activities in the area. Both deposits occur within metasedimentary and metavolcanic sequences of the Yukon-Tanana Terrane and are associated with felsic volcanics present in the middle unit of that terrane.

During the 1996 field season regional mapping was done in the vicinity of the Kudz Ze Kayah Deposit by government mappers at 1:50,000 scale (Murphy and Timmerman, 1997). This work confirmed the general stratigraphic position of the Kudz Ze Kayah Deposit and assigned it to an undifferentiated felsic schist unit. Murphy continued mapping to the south and east in 1997 to determine the regional extent of this favourable stratigraphy. Results for this work will not be published until spring 1998.

REGIONAL MINERALIZATION

A total of fifty-one mineral occurrences have been reported within the Finlayson Block (DIAND, 1995). Of these, twenty-one are known or suspected to be volcanogenic in origin while veins, skarns and asbestos occurrences comprise most of the remainder. Although the better known volcanogenic occurrences are Kuroko-type, some Besshi-type mineralization is also present (Morin, 1981; Johnston and Mortensen, 1994) and the recently discovered Ice Deposit is Cyprus-type. Two occurrences have definite economic potential, the Kudz Ze Kayah and Wolverine Deposits (Figure 4). These Kuroko-type occurrences are the main "type-deposits" for Expatriate's exploration at the Mask property and are briefly described below.

The Kudz Ze Kayah (ABM) Deposit lies within Yukon-Tanana Terrane near the centre of the block (Cominco Exploration, 1995; Whiteway, 1995). It is a VMS deposit hosted by an overturned assemblage of felsic pyroclastics, aphanitic massive rhyolites and metasiliclastic rocks belonging to the middle unit of the Layered Metamorphic Sequence. Although both the sulphides and wallrocks are highly strained and exhibit pervasive schistosity, compositional layering in the vicinity of the deposit is relatively undeformed with a consistent, shallow northerly dip. Sphalerite, chalcopyrite and galena are the main economic minerals while the gangue includes various mixtures of magnetite, barite, pyrrhotite, pyrite and carbonate. The deposit averages about 18 m thick and has been traced 700 m along strike and up to 400 m downdip. Open pit mineable ore reserves are reported to be 11 million tonnes grading 5.9% zinc, 0.9% copper, 1.5% lead, 130 g/t silver and 1.3 g/t gold (Schultze, 1996). Preliminary studies suggest that satisfactory lead, zinc and copper concentrates can be produced using conventional flotation processes (Cominco Exploration, 1995). The mineralization

responds well to magnetic and electromagnetic surveys but geochemical response is somewhat erratic because the entire deposit is covered by 2 to 10 m of glacial till.

The Wolverine Deposit is located 25 km east of Kudz Ze Kayah near a contact between Yukon-Tanana and overlying Slide Mountain rocks. It consists of the Wolverine, Lynx and Sable Zones which are hosted by carbonate and muscovite altered rhyolitic metavolcanics and argillites lying within the middle unit of the Layered Metamorphic Sequence. The mineralization consists primarily of semi-massive to massive pyrite and sphalerite with varying amounts of galena, chalcopyrite, tetrahedrite and native gold. The surface expression of the Wolverine Zone is marked by a vegetation kill zone containing weakly malachite-stained argillite while the Lynx and Sable Zones are blanketed by glacial till. Mineralization in the Wolverine and Lynx Zones has been traced 700 m along strike and up to 450 m downdip. It averages 6.1 m thick and dips shallowly to the north. The Sable Zone, which lies about 1500 m to the southeast, was discovered in late 1997 when two holes yielded high grade intersections over narrow widths. All three zones contain significantly more zinc and precious metals than Kudz Ze Kayah. The most recent geological inventory is reported to be 5,311,000 tonnes grading 12.96% zinc, 1.41% copper, 1.53% lead, 359.1 g/t silver and 1.81 g/t gold (Westmin News Release, November 30, 1996). Soil geochemistry outlined weakly to moderately anomalous values along the projected surface trace of the stratigraphy hosting the mineralization while magnetic surveys easily traced a laterally extensive, banded iron formation which occurs about 80 m up-section from the mineralization. Interpretation of electromagnetic results is complicated by an abundance of graphite within the argillite.

REGIONAL GEOCHEMISTRY

Published geochemical data for the Finlayson Lake area are limited to reconnaissance scale stream sediment sampling conducted in the late 1980's by the GSC (Hornbrook and Friske, 1988; Friske et al, 1990). The sampling was done at an approximate density of one sample per 10 sq km. Each sample was analyzed for twenty elements including common indicator elements for VMS deposits such as copper, lead, zinc, silver and arsenic. Anomalous results were obtained from creeks draining some previously known VMS occurrences (DIAND, 1995, Yukon Minfile 105G/32, 34 and 40) but many others, including the streams draining the Wolverine Deposit, produced near background values. Anomalous results were also obtained from several drainages where there were no known mineral occurrences. Follow-up exploration has since located showings in many of the anomalous creeks with the most significant discovery to date being the Kudz Ze Kayah Deposit.

Expatriate was able to supplement the published reports with private data summarizing results of 1973 exploration managed by Archer Cathro on behalf of a joint venture (Cathro, 1973). The reconnaissance prospecting and geochemical sampling program explored for lead-zinc mineralization in the lower unit of the Layered Metamorphic Sequence but because the data provide relatively uniform coverage over the entire region, it is also suitable for evaluating areas underlain by the favourable middle unit. The Archer Cathro samples included approximately 5000 soils and stream sediments collected at a density of approximately one sample per sq km. They were all analyzed for lead, zinc, copper and molybdenum. As might be expected, this closer spaced sampling outlined many more areas of anomalous geochemical response than the

government survey. Almost all of the known volcanogenic occurrences showed up as anomalies on this survey, including Kudz Ze Kayah and Wolverine.

The following table illustrates regional geochemical backgrounds for the metals and anomalous thresholds used for target selection.

GEOCHEMICAL BACKGROUNDS AND ANOMALOUS THRESHOLDS

	<u>Background</u>	<u>Anomalous Thresholds (ppm)</u>			<u>Peak Value</u>
		<u>Weak</u>	<u>Moderate</u>	<u>Strong</u>	
Copper	25	50	100	200	1720
Lead	30	50	100	200	>4000
Zinc	80	200	500	1000	>4000
Molybdenum	<1	2	5	10	65
Cobalt	30	50	80	110	292

The Mask property has peak values from the 1973 sampling of 242 ppm copper, 107 ppm lead, 330 ppm zinc and 39 ppm molybdenum.

Copper, lead and zinc are major metals in most VMS occurrences in the Finlayson Lake area and are obvious indicator elements. Molybdenum is present in anomalous quantities in the banded iron formation overlying the Wolverine Deposit (Meade, personal communication, 1995) and appears to be slightly enriched in the felsic metavolcanic rocks. Based on the geochemical signature in the vicinity of known occurrences its presence can be used to distinguish copper anomalies associated with volcanogenic mineralization from those derived from ultramafic rocks.

REGIONAL GEOPHYSICS

The only published geophysical data for the Finlayson Lake area resulted from airborne magnetic surveys conducted in 1961 by the GSC on behalf of the Department of Mines and Technical Surveys. The surveys were flown with fixed-wing aircraft at a nominal elevation of 300 m above ground level on east-west lines spaced approximately 1.6 km apart. Results are presented on a 1:250,000 scale map (DMTS, 1961) and in more detail on a series of 1:50,000 maps.

The largest, most intense areas of positive magnetic response are associated with obducted ultramafic rocks belonging to the Slide Mountain Terrane. Within the Campbell Range Belt where dips are usually moderate to steep, the anomalies are narrow and elongate while in the remainder of the block where the ultramafic rocks occur along shallowly-dipping thrust faults, they are much broader.

A series of secondary positive anomalies was also recorded over Yukon-Tanana rocks but until recently they had no obvious explanation. Prospecting and mapping have now shown that magnetite occurs locally within schists of the middle unit of the Layered Metamorphic Sequence. The greatest documented concentration of magnetite is found in the hanging wall of the Wolverine Deposit where it forms several thin horizons approximately 80 m up-section from the massive sulphide mineralization. Magnetite is also a significant constituent of the mineralization at Kudz Ze Kayah. The Mask property lies in an area of low aeromagnetic response.

PROPERTY GEOLOGY

Geological mapping in 1997 was restricted to a one day traverse by Lee Pigage who used data from this work to reinterpret the 1996 mapping and correlate the rocks to units recognized in the Kudz Ze Kayah area. The work was hampered by poor weather.

Exposure on the Mask property is limited to rare, rounded outcrops on hillsides and extensive felsenmeer subcrop along ridge crests. The traverse covered parts of a prominent ridge in the northern-central part of the property as illustrated on Figure 5. The following descriptions are based on a company memo (Pigage, 1997).

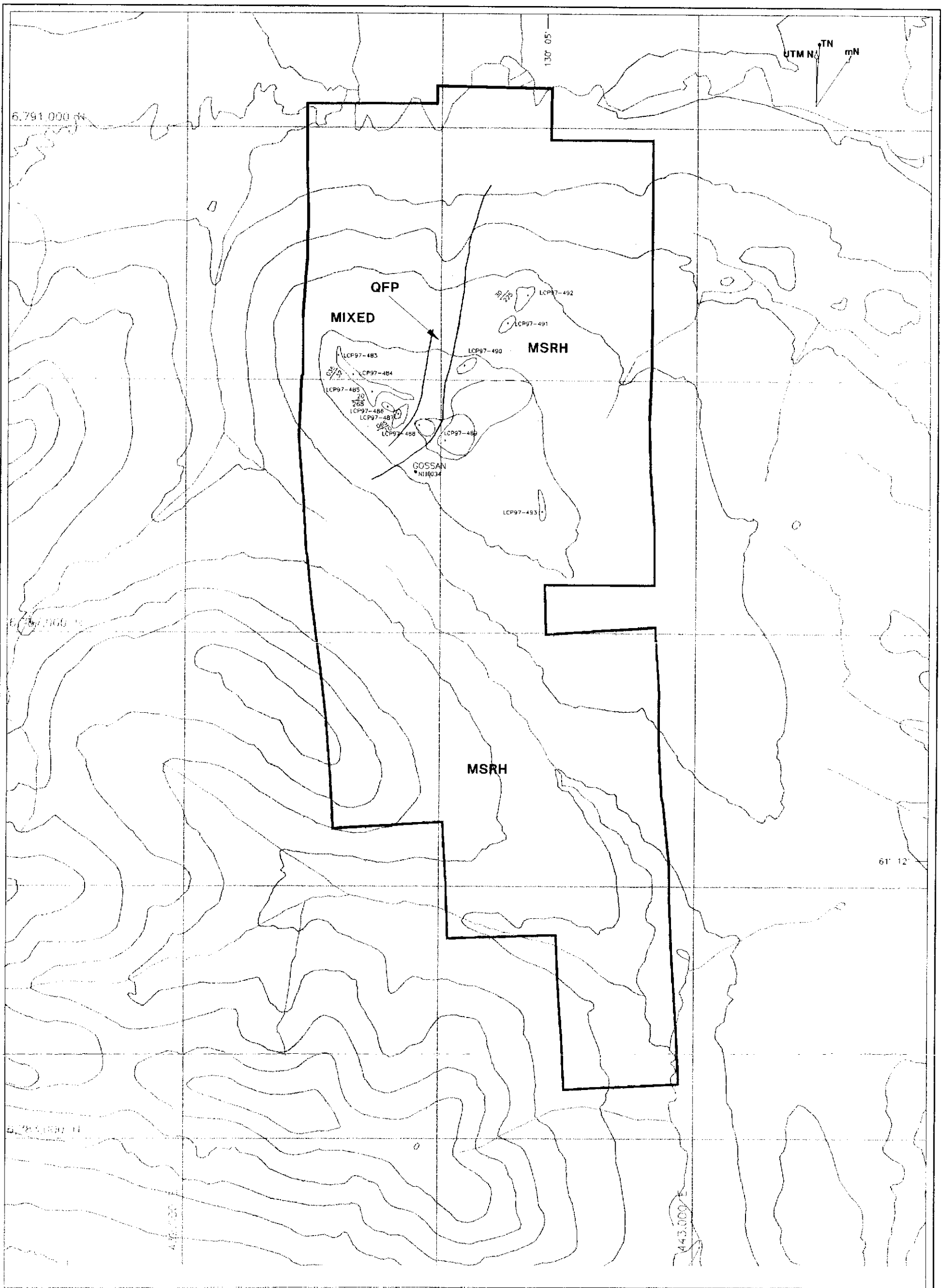
STRATIGRAPHY

Mixed Unit

This unit consists of scattered outcrops and felsenmeer containing carbonaceous phyllite, dark grey to white quartzite, chloritic phyllite, muscovite-chlorite phyllite and muscovite-quartz phyllite. Interbanding of these rock types appears to be on a scale of 1 m or more.

Carbonaceous phyllite is most common toward the northwestern end of the ridge (station LCP97-483). These dark grey phyllites are recessive and form areas of small chips along the ridge crest. Thin interbands of dark green chloritic phyllite within the carbonaceous phyllite are interpreted as greenstone sills or dykes.

To the southeast the carbonaceous phyllite contains interbanded dark grey to white quartzite. The quartzite horizon typically weathers to produce small cliffs on the ridge crest. Some of the quartzites display S0 bedding defined by diffuse colour banding in shades of grey and tan. Locally the quartzites are micaceous. At station LCP97-486 the quartzites contain



MIXED Mixed Unit
QFP Quartz-Feldspar Porphyry
MSRH Metarhyolite

— Claim boundary
 — Geological contact
 ○ Rock outcrop
 20
268 Foliation with dip
 • LCP97-491 Geological station

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FIGURE 5
 ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
PROPERTY GEOLOGY
 MASK PROPERTY

0 100 200 300 400 500m

DRAWN/REVISED BY: AB
 FILE: LCP97/MASK/ARCHER/1981/100.DWG

PROJECT: EP
 DATE: NOV. 19 1987

interbands of silvery green muscovite-chlorite phyllite and tan weathering, fine-grained muscovite-quartz phyllite. The latter rock type has been tentatively interpreted as a metarhyolite.

The Mixed Unit correlates with the chlorite schist mapped previously on the Mask claims (Burgert, 1997). Rock types contained within this unit are similar to those comprising Murphy's Units 2 and 4 (Murphy and Timmerman, 1997).

Quartz-Feldspar Porphyry (OFP)

The porphyry contains tan feldspar and dark grey quartz phenocrysts in a fine grained, dark grey matrix. Phenocrysts range up to 5 mm across and constitute about 50% of the unit. The ratio of feldspar phenocrysts to quartz phenocrysts is about 3:1. Feldspar phenocrysts are strongly weathered to a white clay.

The porphyry occurs as scree in a small saddle along the ridge crest. The strike extent of this unit is unknown and it is uncertain if it is an intrusion or a crystal tuff.

Metarhyolite (MSRH)

This unit is found as felsenmeer and lesser outcrops and consists of pale cream, aphanitic "quartzite". It weathers white to light grey with irregular orange patches and forms massive blocks with sharp angular edges. Minor fine muscovite is visible on foliation surfaces. The rock type is interpreted as a very siliceous, aphanitic metarhyolite on the basis of its overall appearance and weathering characteristics.

This metarhyolite correlates with the quartz-muscovite schist mapped previously (Burgert, 1997). Lithologically it corresponds most closely to Murphy's Unit 3.

STRUCTURE

Rocks on the Mask claims contain one pervasive foliation defined by millimetre spaced laminae rich in biotite and muscovite. Based on regional observations, this planar foliation is assumed to be S2 which is axial planar to folds developed during the phase 2 folding deformation. Regionally, lithological contacts are generally transposed into a parallel orientation with S2. The S2 foliation dips gently to moderately to the southeast and northwest on the Mask claims. The dips appear to define a synformal axis coinciding with station LCP97-488 however, unit contacts are not consistent with this synformal axis which suggests that S0 bedding is not fully coincident with the S2 foliation. If this interpretation is correct, unit MSRH is the structurally lowest unit encountered on the traverse.

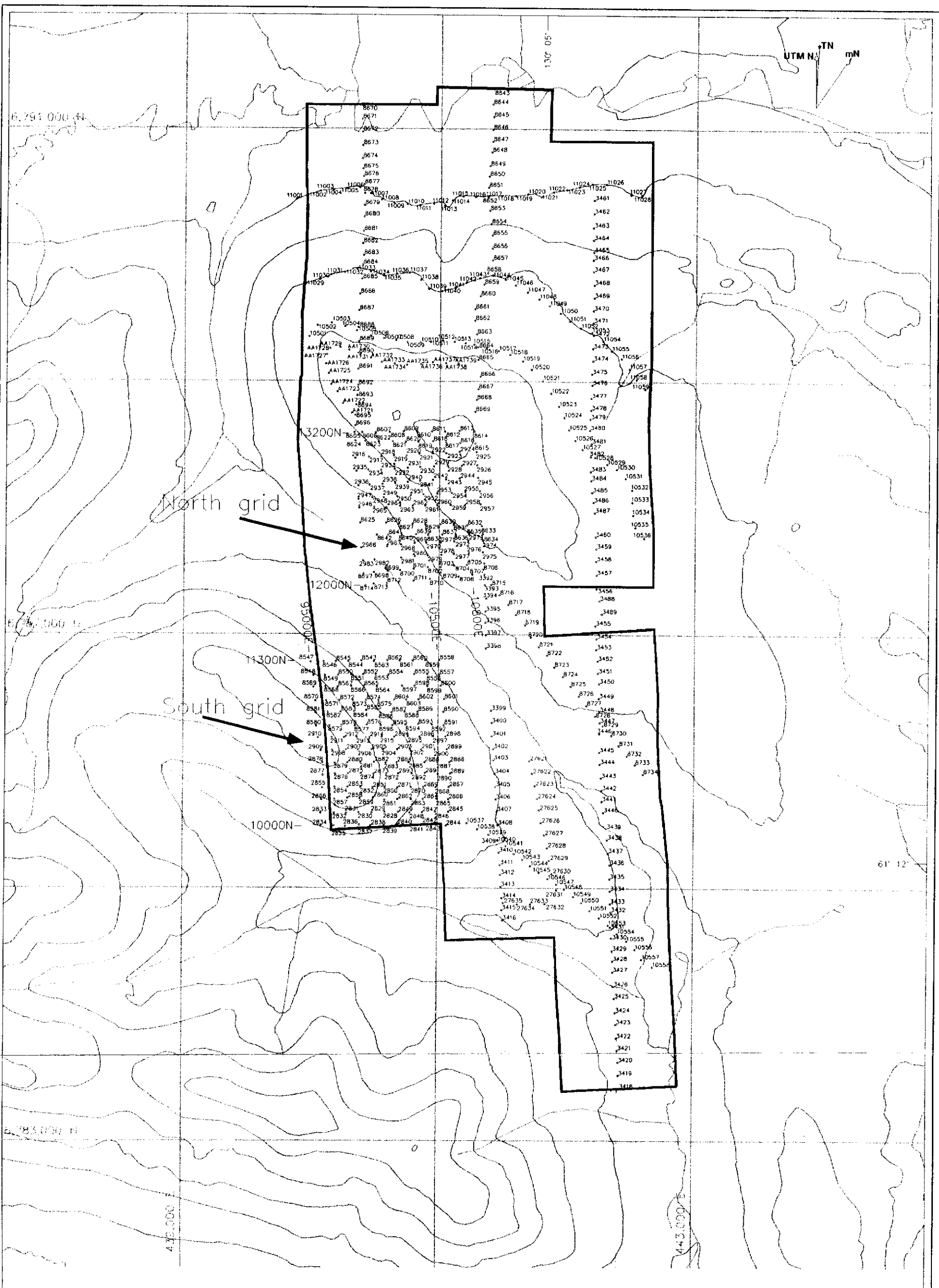
PROPERTY GEOCHEMISTRY AND MINERALIZATION

The 1997 sampling and prospecting were done on two reconnaissance contour lines in the central part of the property. Those lines are in the vicinity of two small grids established in 1996 as part of a larger program that also included sampling along contours and on claim lines. Each of the grids cover an area of about 1.5 sq km and is centred on soil sample sites that had returned anomalous values during the 1973 survey. All sample locations are marked with wooden lath bearing aluminum tags inscribed with sample numbers. Figure 6 illustrates the sample locations from 1996 and 1997.

The 1997 samples were sent to Chemex Labs. Ltd. in North Vancouver, where they were screened to -80 mesh, digested in nitric-aqua regia and geochemically analyzed for 32 elements. Certificates of Analysis are listed in Appendix II. Results for four VMS indicator elements (copper, lead, zinc and molybdenum) are plotted on Figures 7 to 10 while anomalous thresholds and peak values for six pathfinder metals are as follows.

<u>Element</u>	<u>Threshold Values (ppm)</u>				<u>Peak Value</u>
	<u>Weak</u>	<u>Moderate</u>	<u>Strong</u>	<u>Extreme</u>	
Copper	50	100	200	NA*	231
Lead	50	100	200	NA*	362
Zinc	200	500	NA*	NA*	630
Molybdenum	2	5	10	20	29
Silver	1	2	NA*	NA*	2.8
Cobalt	30	50	80	110	200

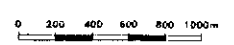
*NA = not applicable because property values did not reach the threshold.



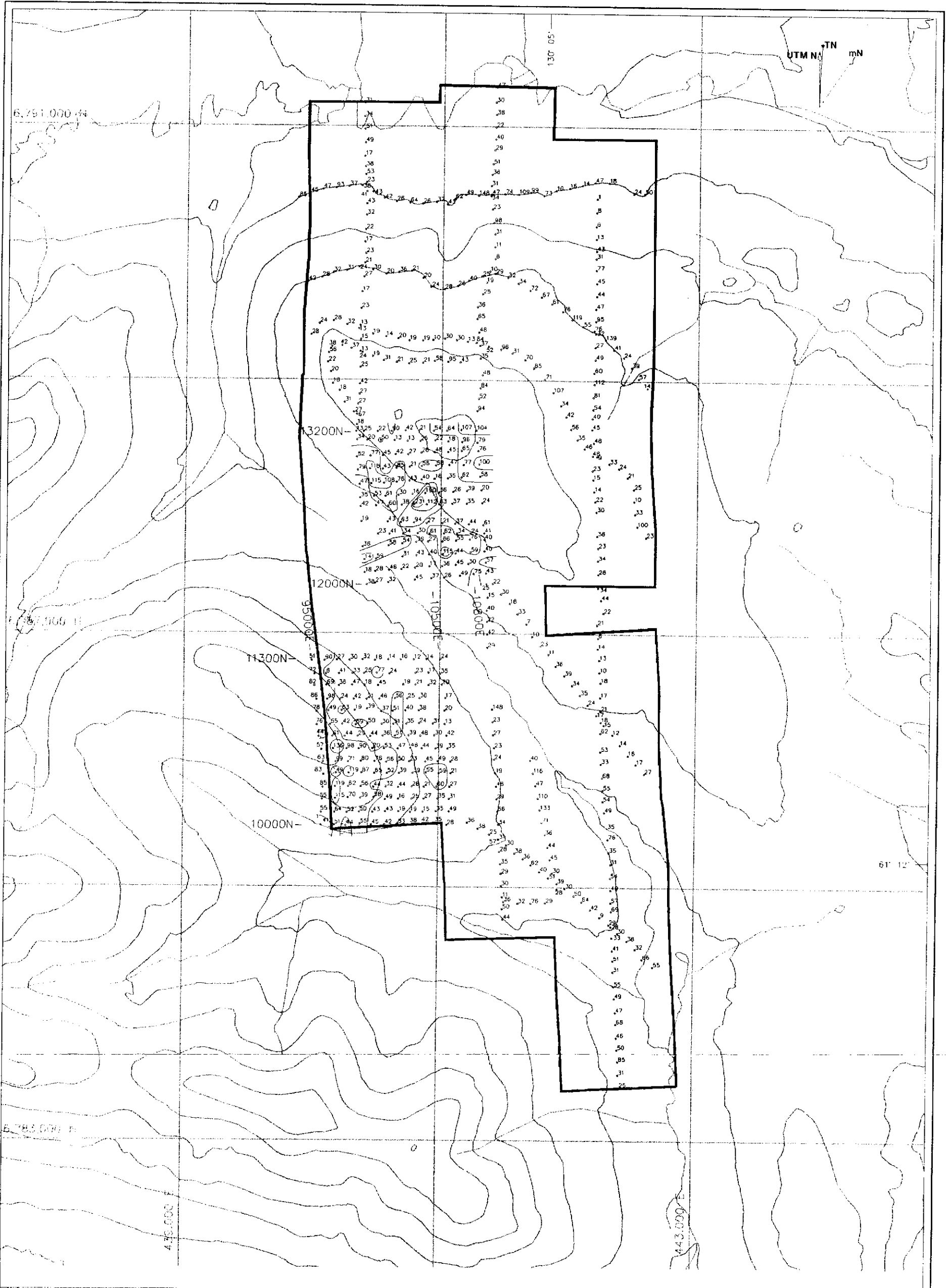
— Claim boundary
 • Sample location with number
 All sample numbers prefixed with BB unless otherwise noted

EXPATRIATE RESOURCES LTD.

FIGURE 6
 ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
SAMPLE LOCATION
 MASK PROPERTY



DRAWN/REVISED BY: AB	SCALE: 1:50,000
FILE: C:\FPA\MASK\ARCHER.DWG	DATE: MAR 19 1992



- Claim boundary
- 25 Sample location with copper value in ppm
- ≥ 200 ppm Cu
- ≥ 100 < 200 ppm Cu
- ≥ 50 < 100 ppm Cu

EXPATRIATE RESOURCES LTD.

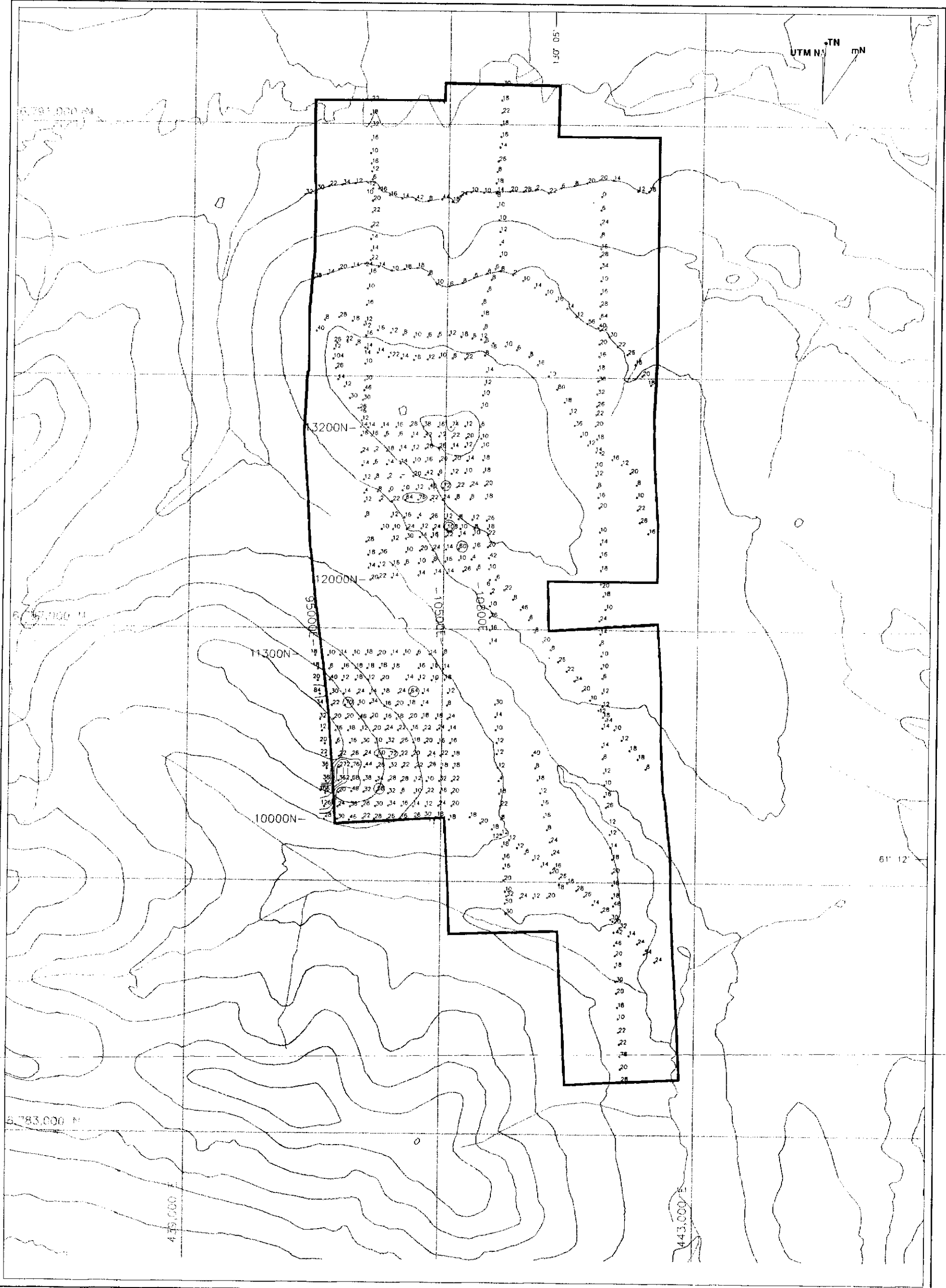
FIGURE 7
ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

COPPER GEOCHEMISTRY

MASK PROPERTY

0 200 400 600 800 1000m

DRAWN/REVISED BY: JB	PROJECT: FP
FILE: C:\P\MASK\ACAD\311A-SNO.DWG	DATE: MAR. 19. 1987



- Claim boundary
- Sample location with lead value in ppm
- ▨ > 200 ppm Pb
- > 100 < 200 ppm Pb
- ▤ > 50 < 100 ppm Pb

EXPATRIATE RESOURCES LTD.

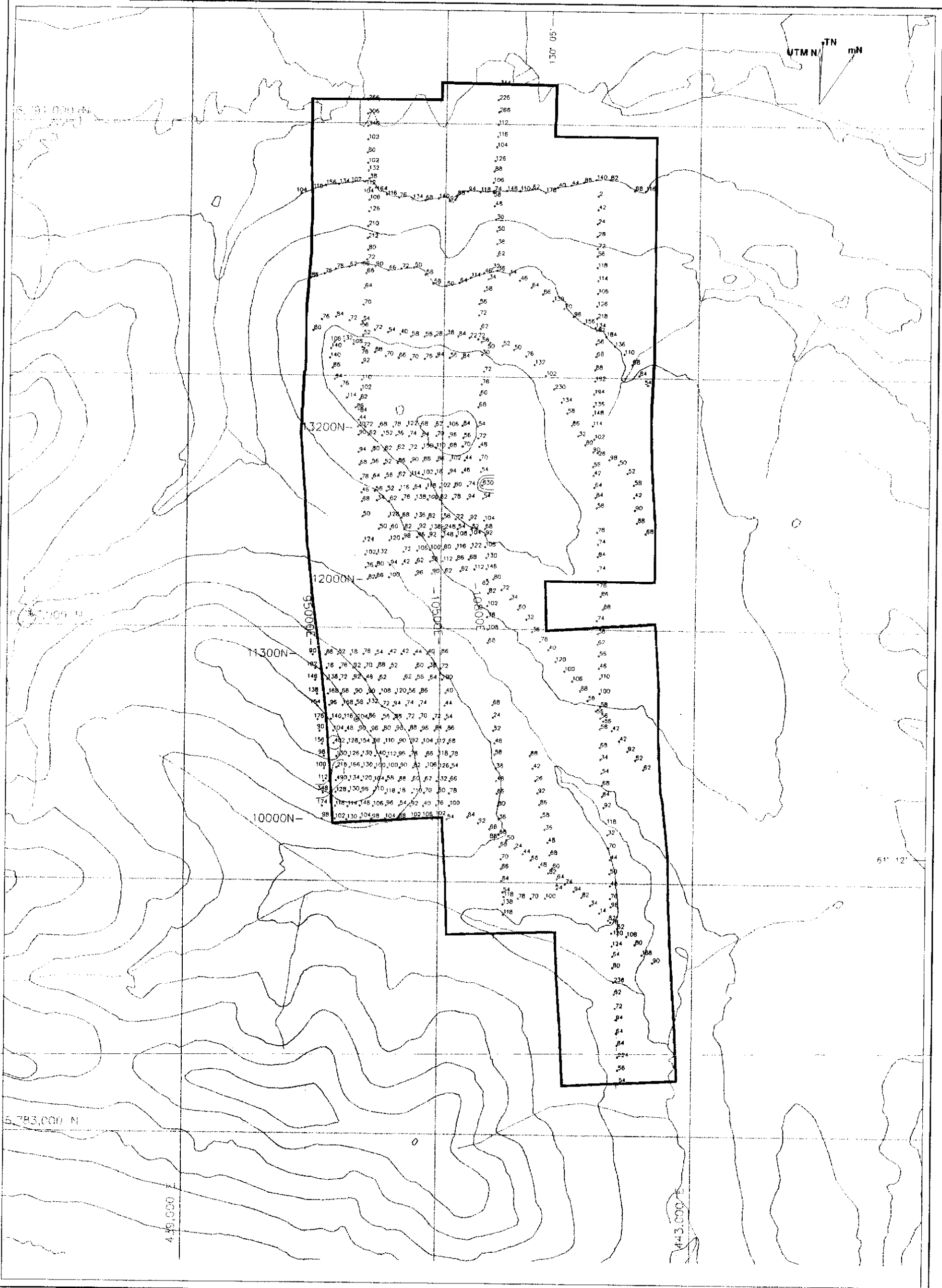
FIGURE 8
ARCHER, CATIRO & ASSOCIATES (1981) LIMITED

LEAD GEOCHEMISTRY

MASK PROPERTY

0 200 400 600 800 1000m

DRAWN/REVISED BY: AR	PROJECT: EP
FILE: C:\P\MASK\ACAD\FIG8.DWG	DATE: APR. 13 1997



- Claim boundary
- Sample location with zinc value in ppm
- ≥ 1000 ppm Zn
- ≥ 500 < 1000 ppm Zn
- ≥ 200 < 500 ppm Zn

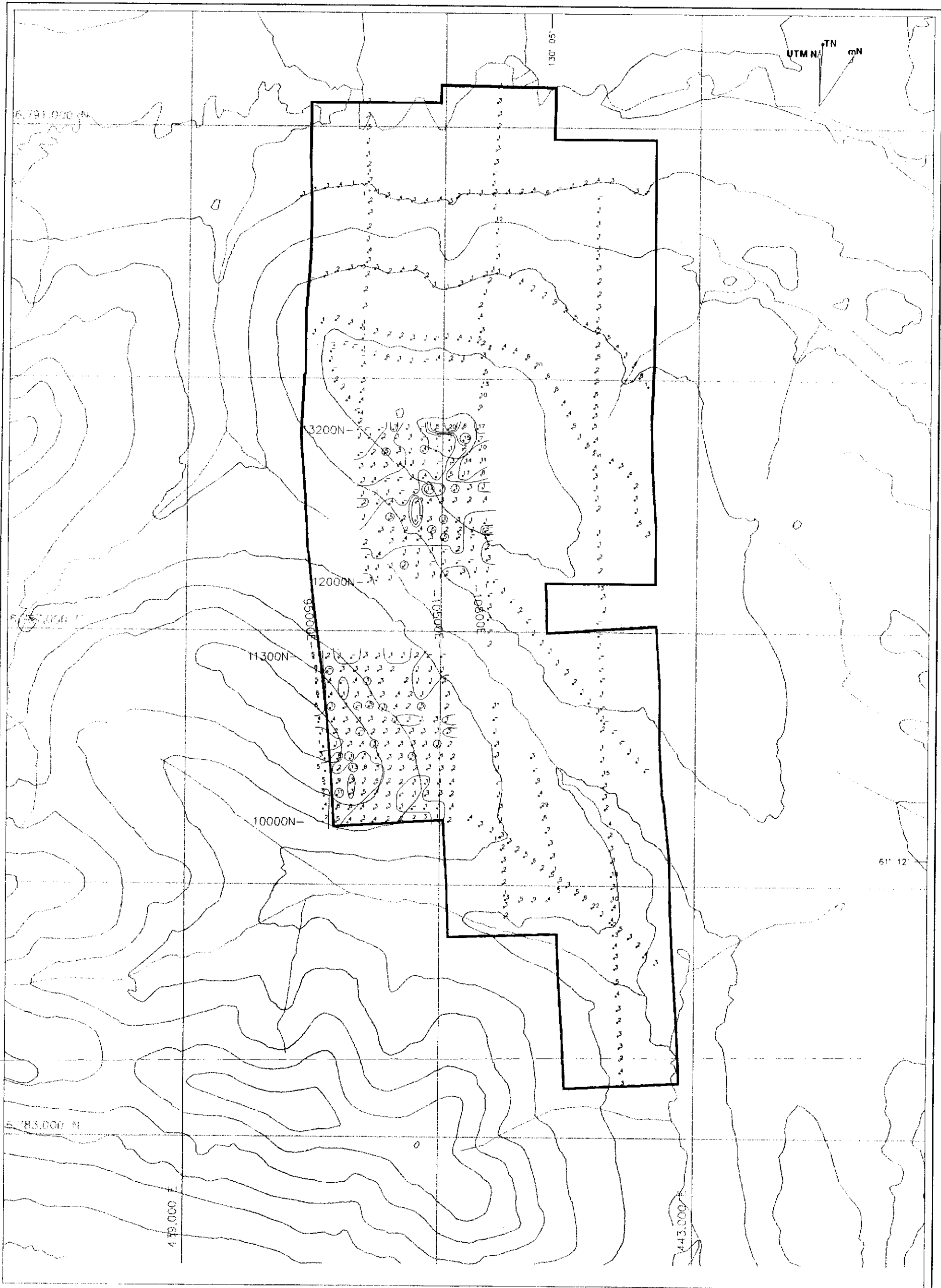
EXPATRIATE RESOURCES LTD.

FIGURE 9
 ARCHEP, CATHPO & ASSOCIATES (1981) LIMITED

ZINC GEOCHEMISTRY

MASK PROPERTY

DRAWN/REVISED BY: AR	PROJECT NO.
FILE: G:\PP\MASK\GEOCHEM\ZINC.MXD	DATE: NOV 13 1981



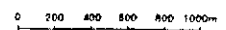
- Claim boundary
- 25 Sample location with molybdenum value in ppm
- ◻ ≥ 10 ppm Mo
- ◻ ≥ 5 < 10 ppm Mo
- ◻ ≥ 2 < 5 ppm Mo

EXPATRIATE RESOURCES LTD.

FIGURE 10
ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

MOLYBDENUM GEOCHEMISTRY

MASK PROPERTY



DRAWN/REVISED BY: AB

FILE: C:\EPL\MASK\MASK31A-SNO2.WR

FORM/REV: EP

DATE: MAR 13 1997

Anomalous values were outlined on both grids, confirming the 1973 results. Sampling along contours and on claim lines returned numerous weakly to moderately anomalous copper, lead and molybdenum values with occasional weak zinc support. Most areas of anomalous response are underlain by metarhyolite.

On the northern grid two anomalous trends were defined, the first is 1200 m long and strikes northwesterly, parallel to topography but crosscutting geological contacts and foliation. It consists of weakly to strongly anomalous copper values with scattered lead and molybdenum support. The other anomaly is 1400 m long and is oriented perpendicular to the first, paralleling foliation and the contact between the quartz-feldspar porphyry and metarhyolite. It contains the same metal suite. The peak values for copper (231 ppm), cobalt (200 ppm) and molybdenum (29 ppm) coincide with a gossan developed where the two trends intersect. A rock sample taken in the vicinity of the gossan in 1996 returned low values for all metals except iron (6.7%).

On the southern grid, a 500 m long linear target is comprised of weakly to strongly anomalous copper, lead, zinc and molybdenum values. This target trends to the northeast which is perpendicular to topography. The apparent source is located along the claim boundary and may extend onto the adjacent Cominco claims.

CONCLUSIONS AND RECOMMENDATIONS

The Mask property covers rocks of the Layered Metamorphic Sequence and in particular rocks that are correlative to Murphy's Unit 3 which hosts the Kudz Ze Kayah Deposit. Soil sampling on two small grids confirmed anomalous geochemical values obtained during a regional program conducted during 1973. Reconnaissance soil sampling along claim and contour lines outlined other areas of similar response.

Additional mapping and prospecting combined with hand trenching are recommended to further explore the geochemical anomalies on the grids. Grid soil sampling should also be done on outlying targets if encouraging mineralization or alteration are discovered in the vicinity of the known anomalies.

Respectfully submitted,

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED


W.A. Wengzynowski, B.A.Sc.

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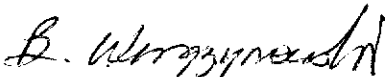
APPENDIX I

AUTHOR'S STATEMENT OF QUALIFICATIONS

STATEMENT OF QUALIFICATIONS

I, William A. Wengzynowski, geological engineer, with business addresses in Whitehorse, Yukon Territory and Vancouver, British Columbia and residential address in North Vancouver, British Columbia, do hereby certify that:

1. I graduated from the University of British Columbia in 1993 with a B.A.Sc. in geological engineering, option 1, mineral and fuel exploration.
2. From 1983 to present, I have been actively engaged in mineral exploration in the Yukon Territory and am presently employed with Archer, Cathro & Associates (1981) Limited.
3. I have personally participated in and supervised the field work reported herein.



W.A. Wengzynowski, B.A.Sc.

APPENDIX II
CERTIFICATES OF ANALYSIS



Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers

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Project: FP MASK
Comments:

Page Number : 1-A
Total Pages : 1
Certificate Date: 25-SEP-97
Invoice No. : 19743314
P.O. Number :
Account : MPO

CERTIFICATE OF ANALYSIS

A9743314

SAMPLE	PREP CODE	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppm	K %	La ppm	Mg %	Mn ppm	Mo ppm
AA1721	201 202	< 0.2	2.46	28	190	0.5	< 2	0.31	1.0	22	43	27	5.94	10	< 1	0.16	10	1.28	875	< 1
AA1722	201 202	0.4	2.15	26	320	0.5	< 2	0.30	0.5	18	28	31	5.42	10	< 1	0.14	30	0.99	1275	4
AA1723	201 202	0.2	1.78	20	290	0.5	< 2	0.10	< 0.5	10	18	18	3.81	< 10	< 1	0.13	20	0.46	815	2
AA1724	201 202	< 0.2	2.28	16	190	< 0.5	< 2	0.20	0.5	10	13	10	4.53	10	1	0.13	10	0.78	395	2
AA1725	201 202	< 0.2	1.50	16	180	< 0.5	< 2	0.23	< 0.5	12	21	20	3.75	10	< 1	0.14	20	0.70	395	< 1
AA1726	201 202	< 0.2	1.42	12	200	< 0.5	< 2	0.54	< 0.5	17	26	22	4.24	< 10	< 1	0.10	20	0.66	830	1
AA1727	201 202	< 0.2	3.51	32	120	< 0.5	< 2	0.40	< 0.5	33	100	56	6.18	10	< 1	0.06	20	2.51	835	< 1
AA1728	201 202	< 0.2	2.44	14	210	< 0.5	< 2	0.19	< 0.5	15	48	38	5.11	10	< 1	0.09	20	1.19	580	< 1
AA1729	201 202	< 0.2	2.58	24	100	0.5	< 2	0.20	< 0.5	21	51	42	6.14	10	< 1	0.07	20	1.35	760	< 1
AA1730	201 202	< 0.2	2.24	18	120	0.5	< 2	0.28	< 0.5	24	52	37	4.81	10	< 1	0.05	20	1.28	655	< 1
AA1731	201 202	< 0.2	1.71	14	120	< 0.5	< 2	0.13	< 0.5	14	24	24	3.59	< 10	< 1	0.06	20	0.70	405	< 1
AA1732	201 202	< 0.2	2.07	16	150	0.5	< 2	0.24	< 0.5	15	23	19	4.04	10	< 1	0.09	30	0.89	545	1
AA1733	201 202	1.2	2.95	86	280	0.5	2	0.23	< 0.5	24	10	31	10.90	10	< 1	0.70	110	1.37	1065	6
AA1734	201 202	0.2	1.79	22	100	< 0.5	< 2	0.09	< 0.5	12	28	21	3.84	< 10	< 1	0.06	10	0.60	485	1
AA1735	201 202	< 0.2	1.62	16	90	< 0.5	< 2	0.09	< 0.5	12	35	25	4.09	< 10	< 1	0.06	10	0.58	460	1
AA1736	201 202	< 0.2	2.30	14	140	< 0.5	< 2	0.16	< 0.5	16	41	21	4.86	10	< 1	0.09	20	1.14	725	< 1
AA1737	201 202	1.2	2.87	20	350	0.5	< 2	0.32	< 0.5	21	122	58	4.52	10	< 1	0.05	40	1.89	645	4
AA1738	201 202	0.2	3.25	18	330	< 0.5	< 2	0.69	0.5	32	226	95	8.84	20	< 1	0.33	10	3.19	875	2
AA1739	201 202	< 0.2	1.54	46	120	< 0.5	< 2	0.10	< 0.5	18	58	43	5.16	< 10	< 1	0.06	30	0.69	615	1
BB27621	201 202	< 0.2	1.45	38	100	< 0.5	< 2	0.21	0.5	22	58	40	5.20	10	< 1	0.04	10	0.97	865	3
BB27622	201 202	< 0.2	1.33	24	200	< 0.5	< 2	0.60	0.5	28	26	116	5.07	< 10	< 1	0.06	50	0.67	2070	< 1
BB27623	201 202	< 0.2	1.45	48	80	< 0.5	< 2	0.01	< 0.5	26	32	47	4.62	10	< 1	0.07	30	0.78	160	9
BB27624	201 202	< 0.2	2.22	64	170	< 0.5	< 2	0.03	< 0.5	19	73	110	7.30	10	< 1	0.09	10	1.70	620	4
BB27625	201 202	0.8	1.13	424	220	< 0.5	4	0.04	< 0.5	11	36	133	6.74	< 10	< 1	0.11	20	0.33	205	29
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BB27628	201 202	< 0.2	1.36	62	70	< 0.5	< 2	0.07	< 0.5	13	43	44	4.90	< 10	< 1	0.04	10	0.73	415	3
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BB27634	201 202	< 0.2	1.41	48	120	< 0.5	< 2	0.07	< 0.5	11	30	32	4.50	< 10	< 1	0.04	10	0.51	455	5
BB27635	201 202	0.4	1.41	66	100	< 0.5	4	0.11	0.5	13	41	36	4.56	< 10	< 1	0.03	10	0.63	500	3

CERTIFICATION:

Hart Bickler



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Project : FP MASK
 Comments:

CERTIFICATE OF ANALYSIS A9743314

SAMPLE	PREP CODE		Na	Ni	P	Pb	Sb	Sc	Sr	Tl	Tl	U	V	W	Zn
			%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
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AA1722	201	202	< 0.01	36	1380	30	< 2	1	24	0.07	< 10	< 10	51	< 10	114
AA1723	201	202	< 0.01	18	1490	12	< 2	< 1	16	0.01	< 10	< 10	33	< 10	76
AA1724	201	202	< 0.01	11	1720	14	< 2	1	24	0.12	< 10	< 10	37	< 10	94
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AA1726	201	202	< 0.01	29	1270	104	< 2	2	43	0.01	< 10	< 10	37	< 10	140
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AA1728	201	202	< 0.01	40	850	26	< 2	2	24	0.02	< 10	< 10	56	< 10	106
AA1729	201	202	< 0.01	54	1510	22	< 2	4	21	0.01	< 10	< 10	60	< 10	132
AA1730	201	202	< 0.01	69	1400	8	< 2	4	24	0.03	< 10	< 10	63	< 10	108
AA1731	201	202	< 0.01	33	1020	14	< 2	< 1	15	0.01	< 10	< 10	41	< 10	76
AA1732	201	202	< 0.01	24	1450	14	< 2	1	25	0.02	< 10	< 10	34	< 10	88
AA1733	201	202	0.03	9	2790	122	< 2	1	266	0.05	< 10	< 10	25	< 10	70
AA1734	201	202	< 0.01	25	810	14	< 2	< 1	13	0.03	< 10	< 10	44	< 10	66
AA1735	201	202	< 0.01	26	620	16	< 2	1	12	0.05	< 10	< 10	45	< 10	70
AA1736	201	202	< 0.01	33	880	12	< 2	3	16	0.13	< 10	< 10	64	< 10	76
AA1737	201	202	< 0.01	96	1290	10	< 2	3	19	0.05	< 10	< 10	55	< 10	94
AA1738	201	202	< 0.01	174	1820	6	< 2	4	41	0.28	< 10	< 10	108	< 10	56
AA1739	201	202	< 0.01	55	940	22	< 2	1	16	0.03	< 10	< 10	44	< 10	84
BB27621	201	202	< 0.01	54	920	40	< 2	1	18	0.10	< 10	< 10	62	< 10	88
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BB27625	201	202	< 0.01	123	2500	16	6	2	100	< 0.01	< 10	< 10	57	< 10	86
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BB27632	201	202	< 0.01	32	1680	20	< 2	2	12	0.05	< 10	< 10	60	< 10	100
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BB27635	201	202	< 0.01	44	1420	32	2	2	13	0.04	< 10	< 10	45	< 10	118

CERTIFICATION:

Handwritten signature