

ARCHER, CATHRO

& ASSOCIATES (1981) LIMITED

CONSULTING GEOLOGICAL ENGINEERS

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ASSESSMENT REPORT

describing

GEOLOGICAL MAPPING, PROSPECTING, SOIL GEOCHEMISTRY AND CLAIM SURVEYS

on the

REPLAY PROPERTY

Replay 1-20 Claims YB77111-YB77130

Latitude 61°50' N; Longitude 131°37' W

NTS 105G/13

in the

WATSON LAKE MINING DISTRICT

YUKON TERRITORY

Prepared by

Archer, Cathro & Associates (1981) Limited

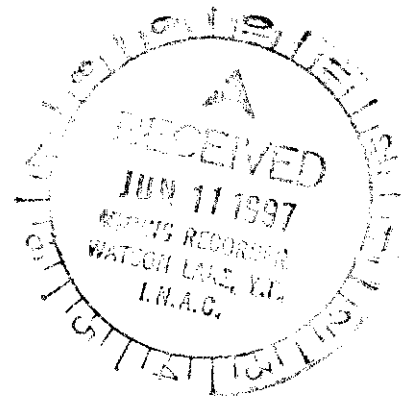
for

EXPATRIATE RESOURCES LTD.

A. Burgert, B.Sc.

April, 1997

093682



This report has been examined by
the Geological Evaluation Unit
under Section 53 (4) Yukon Quartz
Mining Act and is allowed as
representation work in the amount
of \$ 10,000.

M. B. ...
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 Replay property that protects a previously unstaked volcanogenic massive sulphide (VMS) target selected using a regional geochemical data base documenting results of a 1973 joint venture managed by Archer, Cathro & Associates Limited. Twenty claims were staked in early 1996 to cover a low ridge above soil sample sites that had returned anomalous copper, lead, molybdenum and zinc values.

Field exploration was conducted during summer 1996 by crews working from Expatriate's base camp on Finlayson Lake. The program consisted of geological mapping, prospecting, soil geochemistry and claim surveys. The work 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°50'N and longitude 131°37'W on NTS map sheet 105G/13 (Figure 1). It is comprised of twenty 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 is listed below.

<u>Claim Name</u>	<u>Grant Number</u>	<u>Expiry Date*</u>
Replay 1-20	YB77111-YB77130	February 20, 2002

*Expiry date includes 1996 work filed for assessment credit but not yet accepted.

In 1996 the property was accessed by helicopter from Expatriate's base camp on Finlayson Lake (Km 232 on the Robert Campbell Highway). The property lies 61 km west-northwest of the base camp and 225 km northeast of Whitehorse. Helicopter support was provided by a Bell 206B Jet Ranger contracted from Kluane Helicopters of Haines Junction. The helicopter was stationed at Expatriate's base camp for the summer.

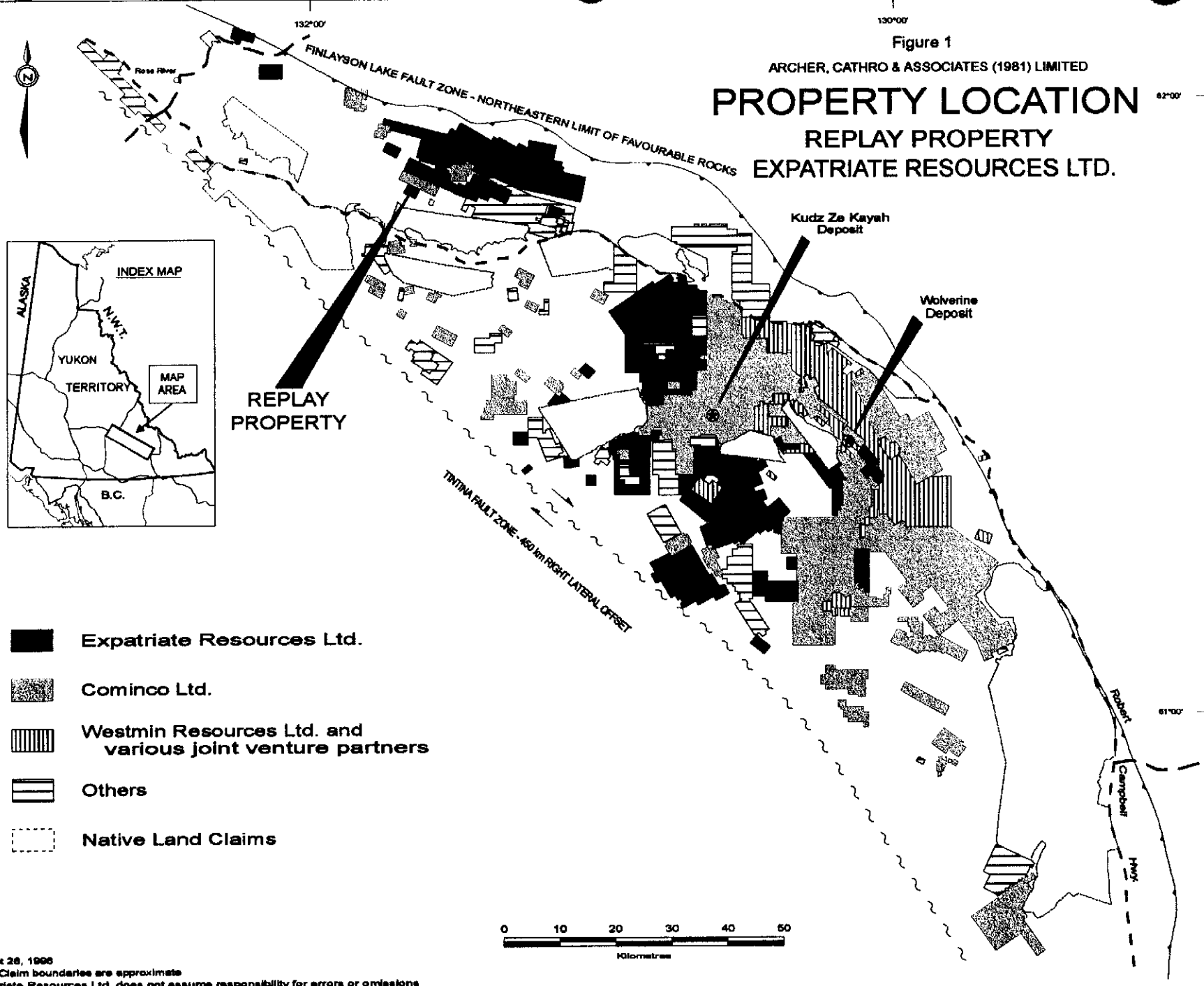
During the 1996 exploration program claim post locations were surveyed using Trimble Geoexplorer GPS units. Field readings were corrected using base station data from Westmin Resources Limited's camp at Wolverine Lake. GPS survey data appears in Appendix II.

Figure 1

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

PROPERTY LOCATION

REPLAY PROPERTY EXPATRIATE RESOURCES LTD.



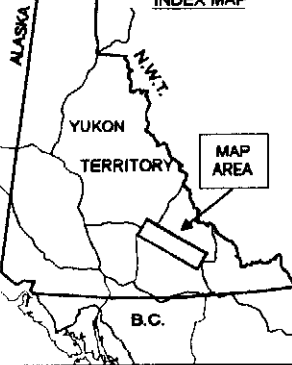
REPLAY
PROPERTY

Kudz Ze Kayah
Deposit

Wolverine
Deposit

TINTINA FAULT ZONE - 450 km RIGHT LATERAL OFFSET

INDEX MAP



Expatriate Resources Ltd.



Cominco Ltd.



Westmin Resources Ltd. and
various joint venture partners



Others



Native Land Claims



August 28, 1996

Note: Claim boundaries are approximate

Expatriate Resources Ltd. does not assume responsibility for errors or omissions

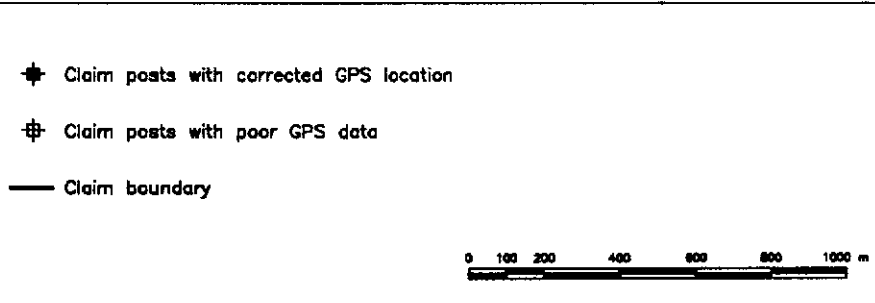
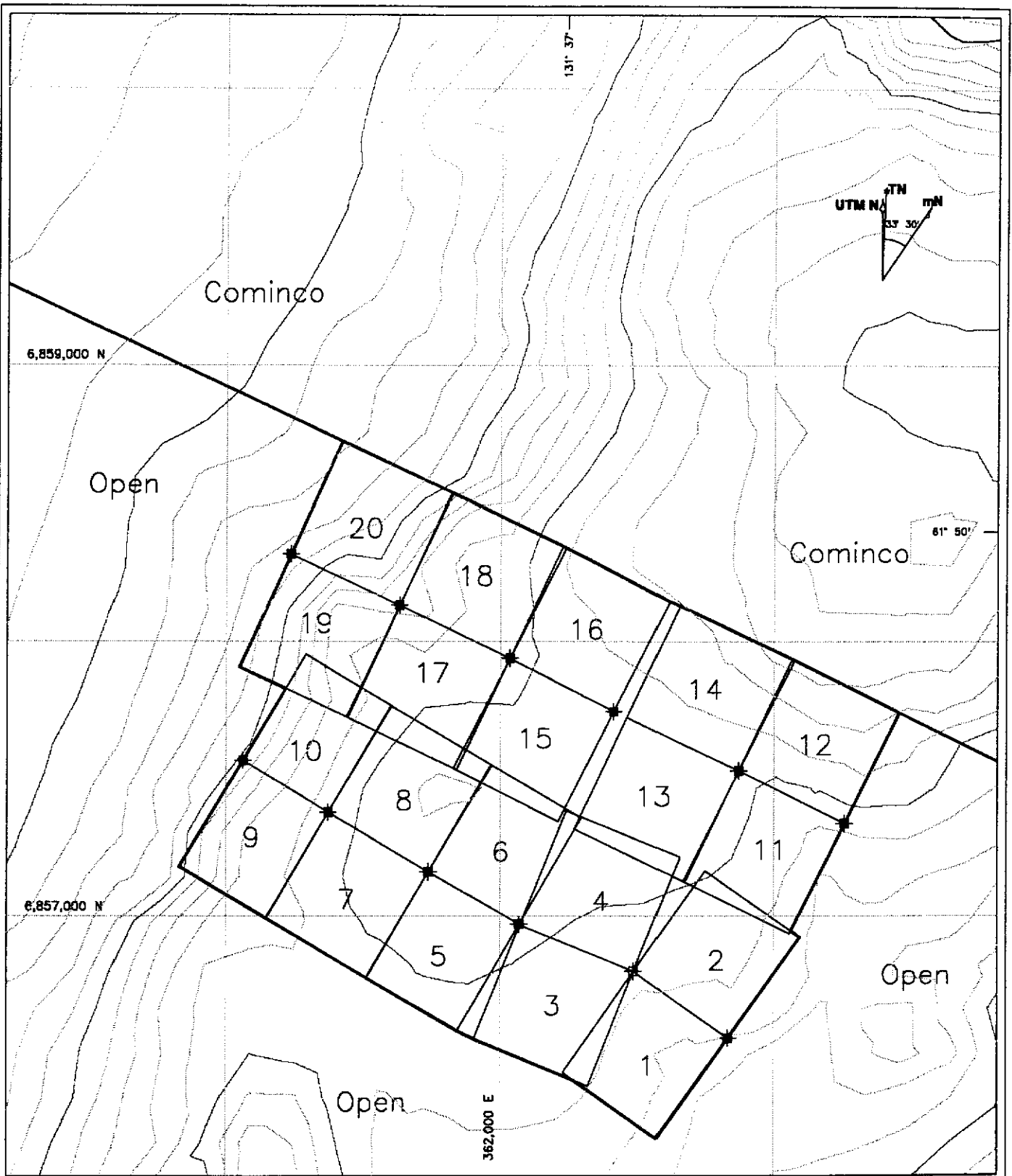


FIGURE 2

Archer, Cathro & Associates (1981) Limited

**CLAIM LOCATION
REPLAY PROPERTY**

EXPATRIATE RESOURCES LTD.

SCALE: 1:20,000	FILE: RP-CLJ.DWG
DRAWN: AB	PROJ: FP
DATE: 18-MAR-87	

GEOMORPHOLOGY

The Replay property is situated on a low ridge 8 km north of the Pelly River and 10 km north of the Robert Campbell Highway. Creeks draining the property flow southerly into the Pelly River.

Elevations range from 1065 m on the southeastern and northwestern flanks of the ridge to 1220 m at its highest point near the centre of the claim block. Topographic relief is gentle to moderate, typically 5 to 20°. Most of the property is blanketed with Pleistocene glacial till deposits.

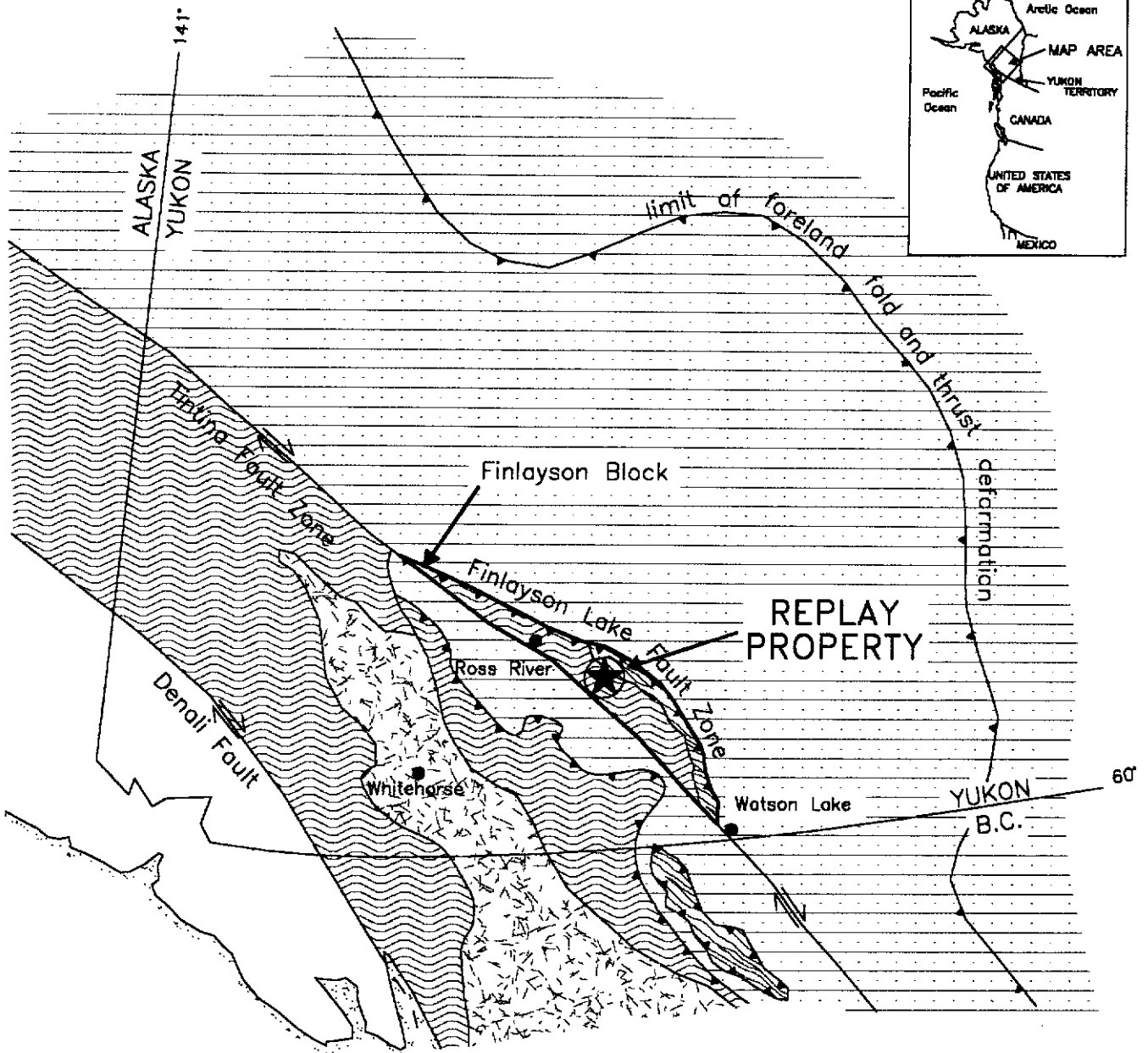
Vegetation consists of moderately dense stands of mature black spruce with occasional tracts of aspen and willow. Patches of thick buckbrush are also common.

REGIONAL GEOLOGY

The Replay 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

FIGURE 3
 ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
TECTONIC SETTING
 REPLAY PROPERTY
 EXPATRIATE RESOURCES LTD.



Modified after Mortensen and Jilon (1985), Mortensen (1992) and Johnston and Mortensen (1984).

130°00'

FIGURE 4

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

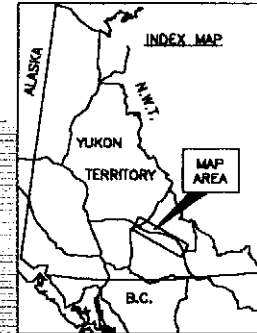
REGIONAL GEOLOGY

REPLAY PROPERTY EXPATRIATE RESOURCES

62°00'



REPLAY PROPERTY



North American Mlogocline

Pre-Triassic sedimentary and volcanic

Silde Mountain Terrane

Chert, ultramafic, greenstones, metavolcanics, 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

Geological contacts

Steep fault

Thrust fault

Properties held by Expatriate Resources Ltd.



61°00'

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 and 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.

WATSON LAKE M.D.

MAP No.

ASSESSMENT REPORT
N. M. E. A. P.
CONFIDENTIAL
OPEN FILETYPE OF
WORK:

DIAMOND DRILLING

105 A 10

REPORT FILED UNDER	CANAMAX RESOURCES INC.	DOCUMENT NO. 091784
DATE PERFORMED	AUGUST-SEPTEMBER 1985	DATE FILED: FEBRUARY 17, 1986
LOCATION - LAT.	60°32'N	AREA: SIMPSON LAKE
LONG.	128°53'W	
CLAIM NO.	CIMA	
	MICA	
VALUE \$		
WORK DONE BY	A.C. Hitchins	
WORK DONE FOR	CANAMAX RESOURCES INC.	

REMARKS

6-HUNDERE

Sulphide mineralization consists of coarse grained sphalerite and galena in an actinolite-diopside-calcite + garnet + quartz skarn developed along several phyllite marble contacts in a slightly domed sequence of foliated Cambrian sedimentary rocks.

A total of thirteen NQ diamond drill holes were sunk on the Mica 5 and 6 claims in 1985. Mineralized intercepts were assayed for Pb, Zn and Ag (for a total of 2019 m of drilling).

091784

4EX-85 p. 52 ✓

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-northeast 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 VMS 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.

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 thought to be of the Kuroko-type, some Besshi-type mineralization is also present (Morin, 1981; Johnston and Mortensen, 1994) and the recently discovered Ice Deposit appears to be 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 in the district 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 the Kudz Ze Kayah property near a contact between Yukon-Tanana and overlying Slide Mountain rocks. It consists of the Wolverine and Lynx Zones which are hosted by 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 Zone is blanketed by glacial till. Westmin has traced the deposit 700 m along strike and up to 450 m downdip and it is still open. The mineralization averages 6.1 m thick and dips shallowly to the north. Both zones contain significantly more zinc and precious metals than Kudz Ze Kayah. The current 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 deposit while magnetic surveys easily traced a laterally extensive, banded iron formation which occurs about 80 m up-section from the massive sulphide horizon. Interpretation of electromagnetic results is complicated by the presence 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 provides 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

Peak values for 1973 samples collected near the southeastern and northwestern margins of the Replay property were 114 ppm copper, 5 ppm molybdenum, 127 ppm lead and 480 ppm zinc.

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 the Kudz Ze Kayah Deposit.

The Replay property covers an area of low magnetic response.

PROPERTY GEOLOGY

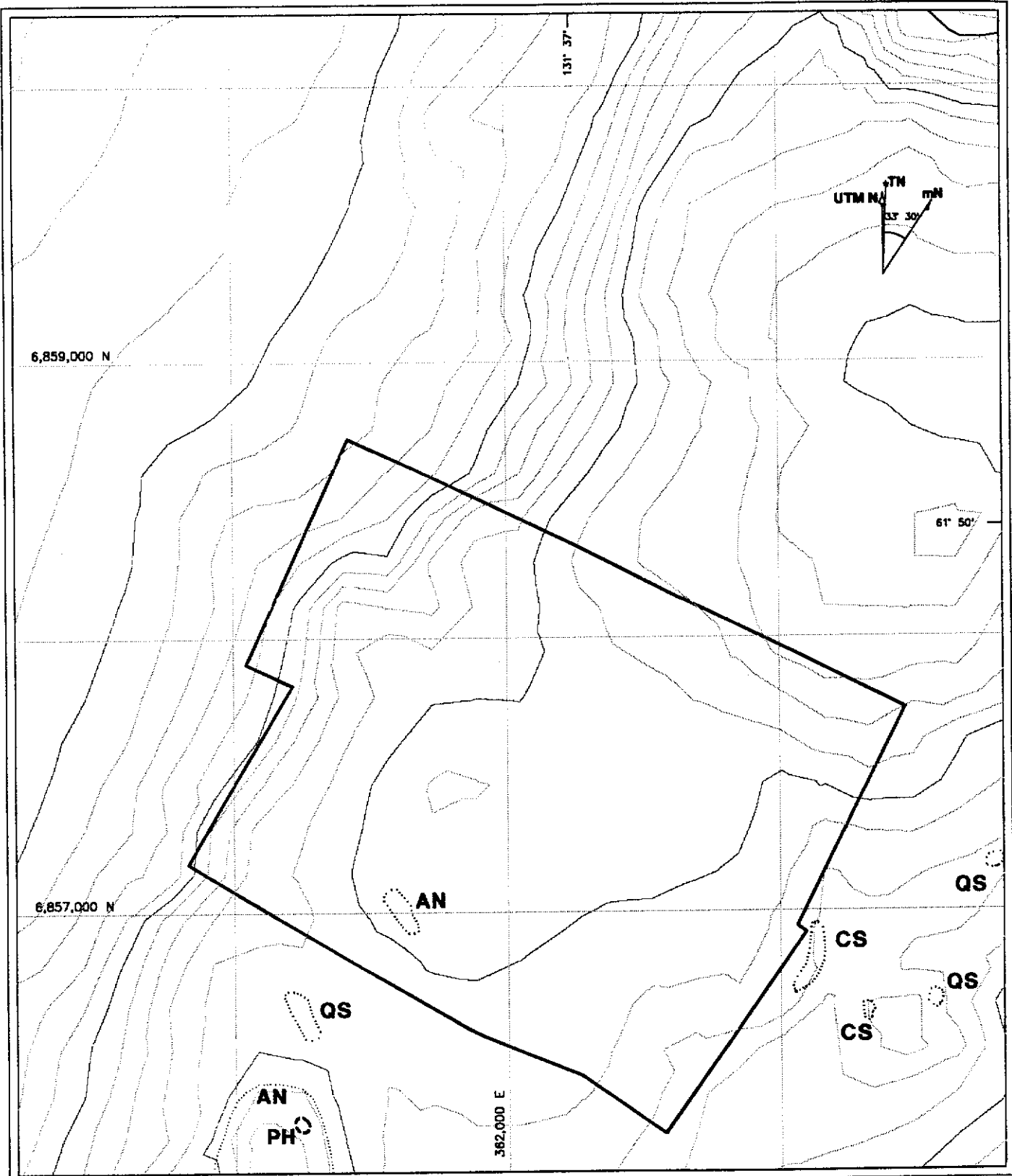
Bedrock exposure is poor over most of the property with the majority of outcrops occurring along the ridge crest and in creek cuts. The four rock types recognized on or near the property are described below while outcrop locations are shown on Figure 5. All units are part of the Layered Metamorphic Sequence.

Shaly phyllite was observed in only one small outcrop about 600 m south of the property. It is dark grey and fine grained.

Andesite is light to medium green, moderately hard and varies from massive to weakly foliated. Grain size is also variable, ranging from aphanitic to medium grained with some relict feldspar crystals. Relative to surrounding rocks, the andesite weathers resistantly and forms several prominent outcrops along the ridge crest.

Quartz-sericite schist is a dark grey, thinly foliated rock containing occasional patches of mariposite on foliation surfaces.

Chlorite schist is green to grey-green, well foliated and variably fissile. Mineralogy consists primarily of chlorite with lesser biotite. The schist is fine to medium grained with occasional larger biotite flakes.



- PH** Shaly phyllite
- AN** Andesite
- QS** Quartz-sericite schist
- CS** Chlorite schist

- Outcrop boundary
- Claim boundary



FIGURE 5

Archer, Cathro & Associates (1981) Limited

**PROPERTY GEOLOGY
REPLAY PROPERTY**

EXPATRIATE RESOURCES LTD.

SCALE: 1:20,000	FILE: RP-GEOL.DWG
DRAWN: AB	PROJ: FP
DATE: 18-MAR-87	

PROPERTY GEOCHEMISTRY

Reconnaissance soil sampling was carried out at 100 m intervals along claim lines and one contour line, except where frozen ground prevented sample collection. Sample locations are marked with 0.5 m wooden lath bearing aluminum tags inscribed with sample numbers. Figure 6 shows sample locations.

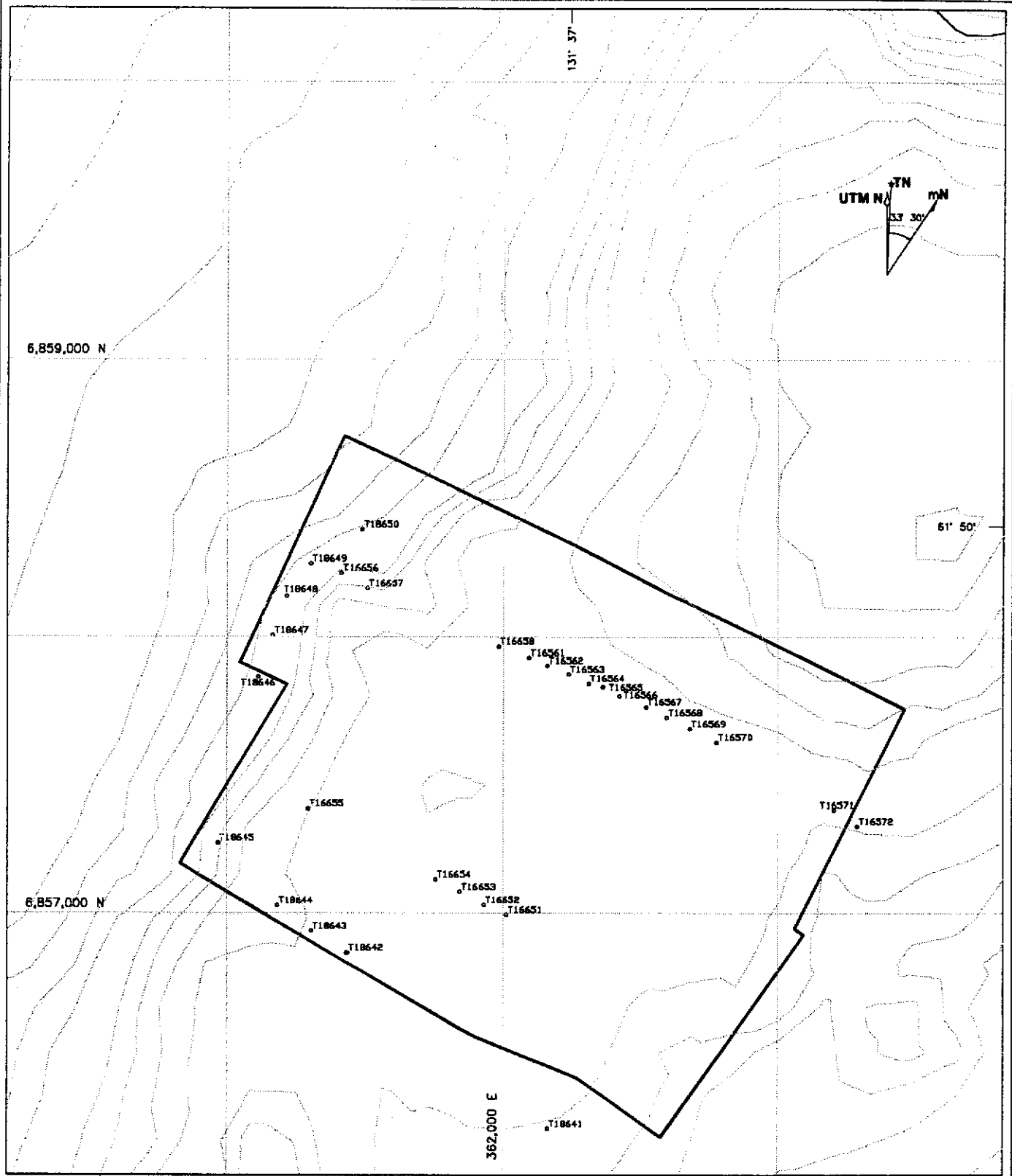
The samples were sent Chemex Labs Ltd. in North Vancouver where they were screened to -80 mesh, digested in nitric-aqua regia and geochemically analyzed for 32 elements using the Induced Coupled Plasma (ICP) technique. Certificates of Analysis appear in Appendix III. Results for copper, zinc and molybdenum are plotted on Figures 7 to 9 while anomalous thresholds and peak values for six VMS indicator elements are as follows.

<u>Element</u>	<u>Threshold Values (ppm)</u>			<u>Peak Value</u>
	<u>Weak</u>	<u>Moderate</u>	<u>Strong</u>	
Copper	50	100	NA*	138
Zinc	200	500	NA*	910
Lead	NA*	NA*	NA*	18
Silver	NA*	NA*	NA*	0.6
Molybdenum	2	5	10	21
Cobalt	NA*	NA*	NA*	25

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

Two areas of moderately anomalous multi-element response were outlined. No outcrops were located in either area.

The first area lies in the north-central portion of the property and consists of a series of copper, zinc and molybdenum values in the weakly to moderately anomalous range.



— Claim boundary
 • T16655 Sample location with number

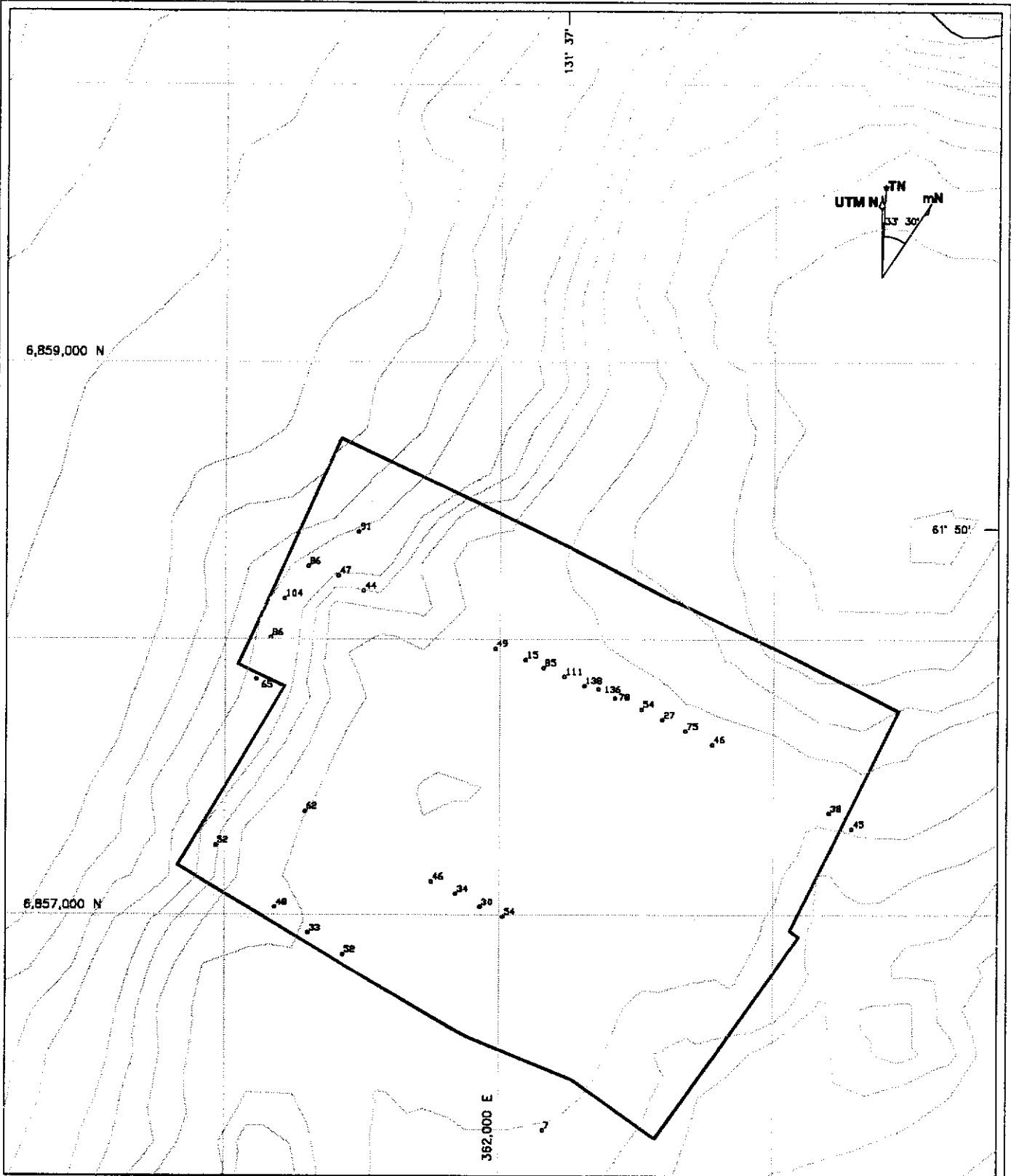
FIGURE 6
 Archer, Cathro & Associates (1981) Limited

SAMPLE LOCATION REPLAY PROPERTY

EXPATRIATE RESOURCES LTD.

SCALE: 1:20,000	FILE: RP-SNO.DWG
DRAWN: AB	PRD: FP
DATE: 18-MAR-87	





- Claim boundary
- ³⁴ Sample location with copper value in ppm

FIGURE 7

Archer, Cathro & Associates (1981) Limited

**COPPER GEOCHEMISTRY
REPLAY PROPERTY**

EXPATRIATE RESOURCES LTD.

SCALE: 1:20,000

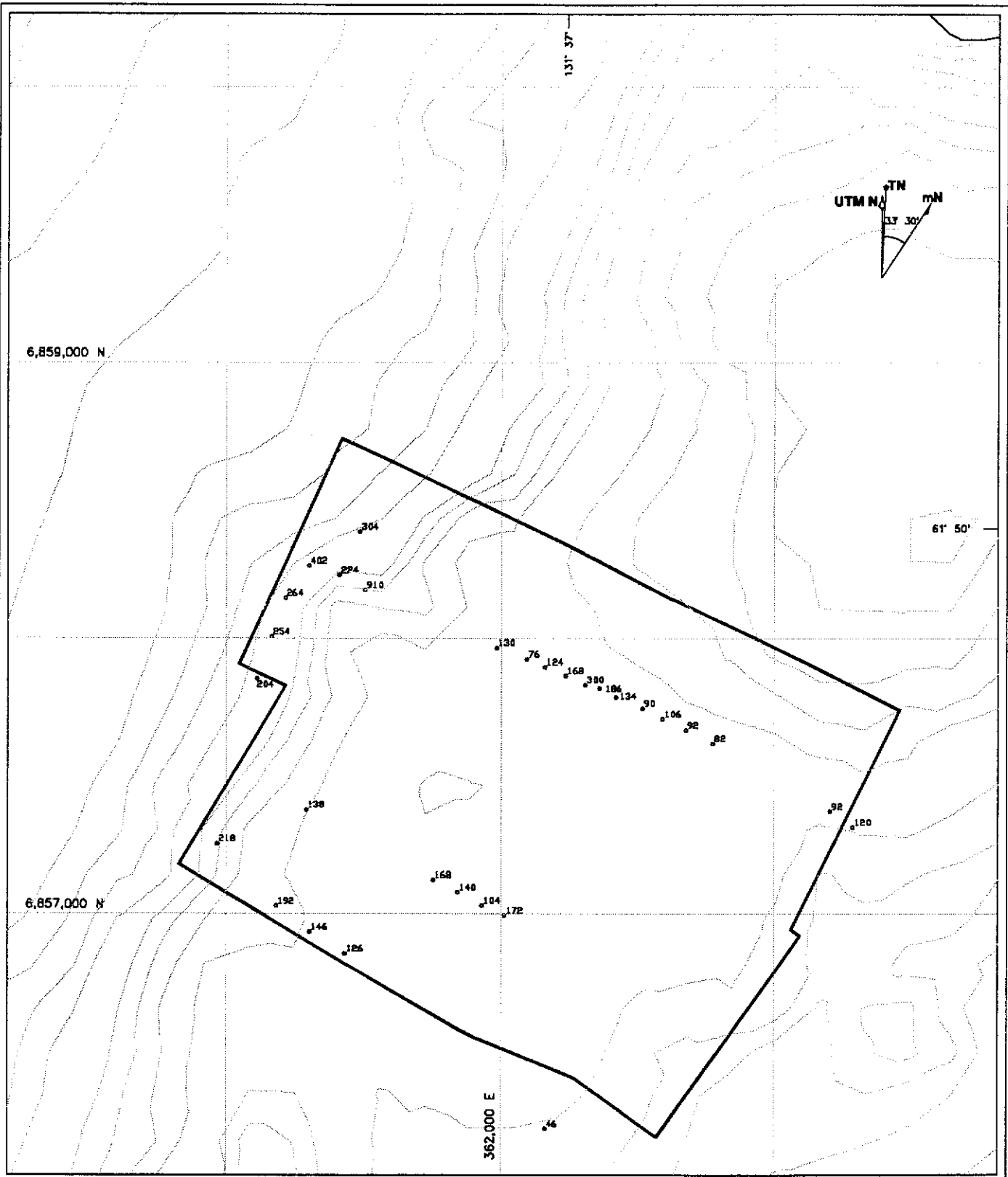
FILE: RP-CU.DWG

DRAWN: AB

PROJ: FP

DATE: 18-MAR-87





— Claim boundary

•²⁴ Sample location with zinc value in ppm



FIGURE 8

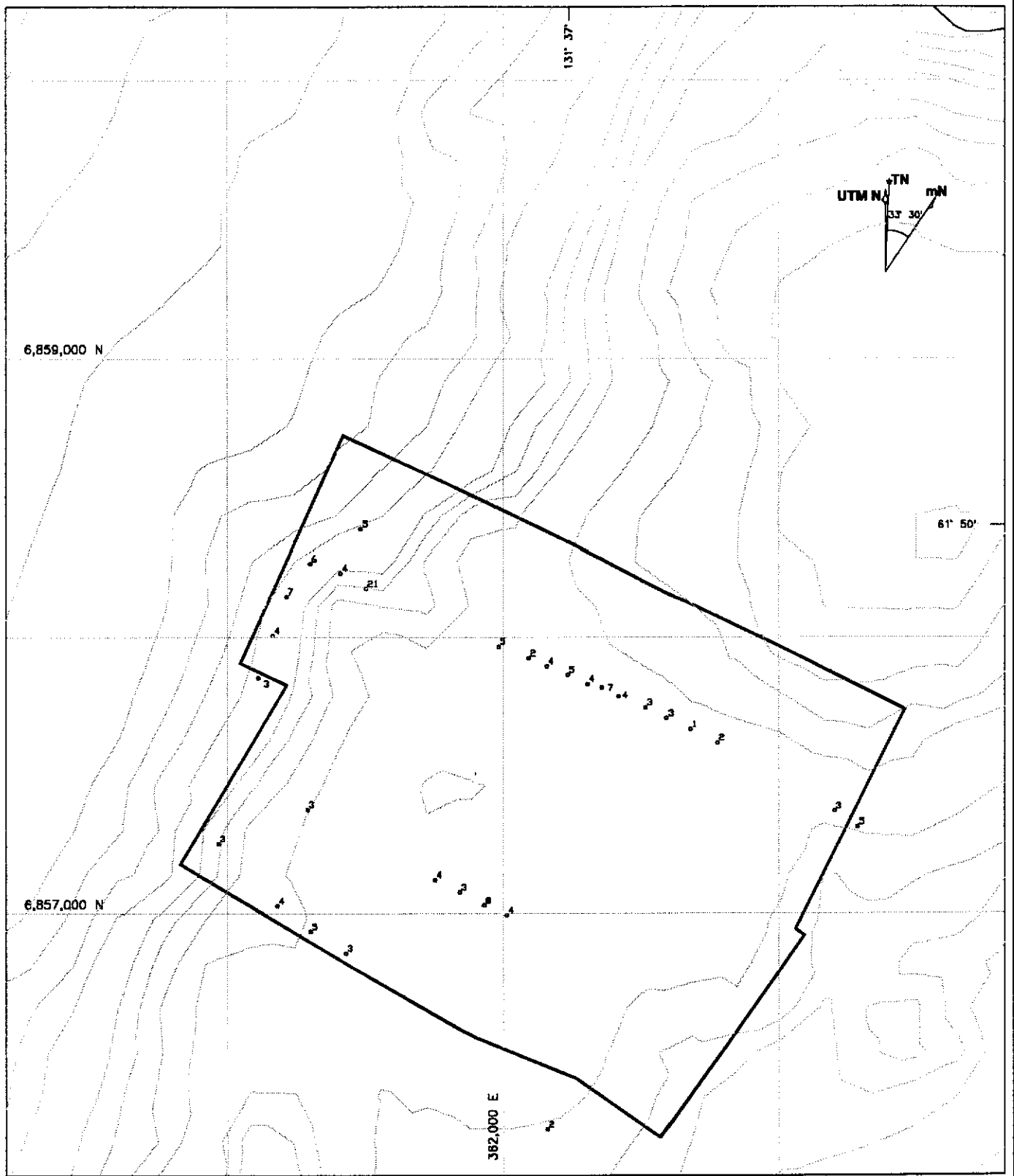
Archer, Cathro & Associates (1981) Limited

ZINC GEOCHEMISTRY

REPLAY PROPERTY

EXPATRIATE RESOURCES LTD.

SCALE: 1:20,000	FILE: RP-ZN.DWG
DRAWN: AB	PROJ: FP
DATE: 18-MAR-87	



- Claim boundary
- ▲ Sample location with molybdenum value in ppm



FIGURE 9
 Archer, Cathro & Associates (1981) Limited
MOLYBDENUM GEOCHEMISTRY
REPLAY PROPERTY
EXPATRIATE RESOURCES LTD.

SCALE: 1:20,000	FILE: RP-MO.DWG	DATE: 19-MAR-87
DRAWN: AB	PROJ: FP	

The second anomaly is situated on a gentle slope in the northwestern part of the property.

Samples collected over a 300 m length along a contour line returned weakly to strongly anomalous molybdenum values with weak to moderate copper and zinc support.

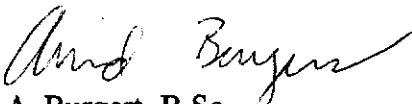
CONCLUSIONS AND RECOMMENDATIONS

The Replay property is underlain by rocks belonging to the favourable middle unit of the Paleozoic Layered Metamorphic Sequence. Reconnaissance soil sampling has defined two areas of moderately anomalous multi-element geochemical response. Current sample density is insufficient to fully define the anomalies.

The next phase of exploration should consist of prospecting to locate possible mineralized float and grid soil sampling to better define the geochemical anomalies. If the geochemical anomaly in the northwestern part of the claim block is extended by further sampling, additional ground should be staked.

Respectfully submitted,

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED


A. Burgert, B.Sc.

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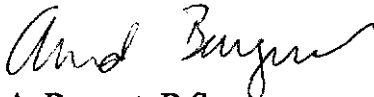
APPENDIX I

AUTHOR'S STATEMENT OF QUALIFICATIONS

STATEMENT OF QUALIFICATIONS

I, Arnd Burgert, geologist, with business addresses in Whitehorse, Yukon Territory and in Vancouver, British Columbia and residential address in White Rock, British Columbia, do hereby certify that:

1. I graduated from the University of British Columbia in 1995 with a B.Sc. in geology.
2. From 1989 to present, I have been actively engaged in mineral exploration in British Columbia, the Northwest Territories and the Yukon Territory and am presently employed with Archer, Cathro & Associates (1981) Limited.
3. I have personally participated in field work in the Finlayson Lake region in 1996 and have compiled the information reported herein.


A. Burgert, B.Sc.

APPENDIX II

GPS DATA

Replay Property GPS Survey Coordinates

Data Quality: Standard = The surveyed positions were recorded in 3D mode and were differentially corrected. The reported UTM coordinates are within 1 to 5 meters of their actual locations; Poor = >25% of the surveyed positions were recorded in 2D mode; Uncorrected = The surveyed positions were not differentially corrected; N/S = No survey data available.

Base Station: W = Westmin Resources Limited base station at Wolverine Lake; WL = Ministry of Environment, Lands and Parks base station at Williams Lake; DL = Ministry of Environment, Lands and Parks base station at Dease Lake; RR = Department of Renewable Resources (Forestry) at Whitehorse.

A. Expatriate Resources Ltd. Claim Posts

Claim	Posts 1	Posts 2	UTM Coordinates		Data Quality	Base Station	Date	
			Northing	Easting				
2257	Replay	1, 2	-	6856556	362834	Standard	W	26-Jun-96
2258		3, 4	1, 2	6856799	362491	Poor	W	26-Jun-96
2259		5, 6	3, 4	6856971	362072	Standard	W	26-Jun-96
2260		7, 8	5, 6	6857163	361741	Standard	W	26-Jun-96
2261		9, 10	7, 8	6857379	361376	Standard	W	26-Jun-96
2262		-	9, 10	6857568	361062	Standard	W	26-Jun-96
2263	Replay	11, 12	-	6857339	363257	Standard	W	26-Jun-96
2264		13, 14	11, 12	6857530	362873	Standard	W	26-Jun-96
2265		15, 16	13, 14	6857745	362418	Standard	W	26-Jun-96
2266		17, 18	15, 16	6857941	362037	Standard	W	26-Jun-96
2267		19, 20	17, 18	6858132	361636	Standard	W	26-Jun-96
2268		-	19, 20	6858319	361236	Standard	W	26-Jun-96

B. Claim Posts From Adjoining Claim Blocks

Claim	Posts 1	Posts 2	UTM Coordinates		Data Quality	Base Station	Date
			Northing	Easting			
Dot	57, 58	55, 56	6858165	363673	Standard	W	26-Jun-96
	55, 56	53, 54	6858397	363289	Standard	W	26-Jun-96

APPENDIX III
CERTIFICATES OF ANALYSIS



Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers

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Page Number : 1-A
Total Pages : 1
Certificate Date: 23-JUN-96
Invoice No. : I9620885
P.O. Number :
Account : MPO

Project : REPLAY
Comments:

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CERTIFICATE OF ANALYSIS A9620885

SAMPLE	PREP CODE		Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	La	Mg	Mn	Mo
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T16561	201	202	0.2	1.71	14	1310	< 0.5	< 2	0.26	< 0.5	6	33	15	2.37	< 10	< 1	0.04	10	0.43	155	2
T16562	201	202	< 0.2	1.92	26	740	0.5	< 2	0.18	< 0.5	12	43	85	3.61	< 10	< 1	0.09	20	0.51	270	4
T16563	201	202	0.6	1.62	36	740	0.5	< 2	0.68	1.5	16	35	111	4.12	< 10	< 1	0.10	10	0.49	780	5
T16564	201	202	0.6	1.35	38	670	0.5	< 2	0.41	2.0	18	34	138	4.23	< 10	< 1	0.13	10	0.43	715	4
T16565	201	202	< 0.2	1.73	64	770	0.5	< 2	0.25	0.5	25	40	136	5.83	< 10	< 1	0.09	20	0.58	935	7
T16566	201	202	< 0.2	2.22	40	550	0.5	< 2	0.20	< 0.5	20	65	78	5.13	< 10	1	0.08	10	0.74	575	4
T16567	201	202	0.2	2.01	34	640	0.5	< 2	0.23	< 0.5	15	57	54	4.32	< 10	< 1	0.10	20	0.63	480	3
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T16570	201	202	< 0.2	1.98	26	550	0.5	< 2	0.40	< 0.5	14	50	46	3.62	< 10	< 1	0.11	20	0.65	370	2
T16571	201	202	0.2	1.08	16	420	< 0.5	< 2	0.91	< 0.5	5	15	38	1.64	< 10	< 1	0.09	< 10	0.27	435	3
T16572	201	202	0.2	1.65	36	640	0.5	< 2	0.60	< 0.5	19	40	45	3.98	< 10	1	0.11	10	0.68	735	5
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T18645	201	202	0.6	1.07	8	390	< 0.5	< 2	1.23	2.5	9	25	52	2.34	< 10	< 1	0.14	10	0.53	405	3
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CERTIFICATION: *Hart Bichler*

* FOR SAMPLE DESCRIPTION



Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers

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CERTIFICATE OF ANALYSIS

A9620885

SAMPLE	PREP CODE	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
T16561	201 202	< 0.01	16	270	16	< 2	3	22	0.03	< 10	< 10	61	< 10	76
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T18650	201 202	0.01	45	2490	14	2	4	91	0.01	< 10	< 10	75	< 10	304

CERTIFICATION:

Hart Bickler

* FOR SAMPLE DESCRIPTION