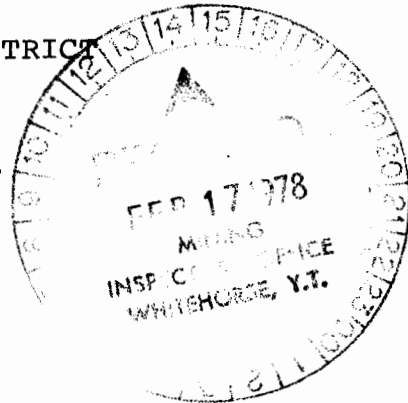




GEOLOGICAL, GEOCHEMICAL AND GEOPHYSICAL REPORT  
ON THE  
TIL 1-24 MINERAL CLAIMS

WATSON LAKE MINING DISTRICT  
YUKON TERRITORY

61°41'N 130°06'W  
N.T.S. 105-G-9



FOR

MOUNTAINEER MINES LTD.

by

- C. K. Ikona - P. Eng., Pamicon Developments Ltd.
- P. P. Nielsen - Geophysicist, Nielsen Geophysics Ltd.
- M. A. Stammers - Geologist, Pamicon Development Ltd.

December, 1977

090282

This report has been examined by the Geological Exploration Unit and is recommended to the Commission to be considered as representative work in the amount of

\$5000.00

*[Handwritten signature]*

~~Assistant Geologist of  
Territorial Geological Survey~~

Considered as reclamation work under Section 53 (4) Yukon Quartz Mining Act.

*[Handwritten signature]*

**B. R. BAXTER**  
Supervising Mining Recorder

*[Handwritten signature]*  
Commissioner of Yukon Territory

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## 1.0 INTRODUCTION

During the period from September 19 to September 28, 1977 a combined geological, geochemical and geophysical program was executed on the TIL claims, McEvoy Lake area, on behalf of Mountaineer Mines Ltd., the present owner of the property. The work was carried out by Pamicon Development Ltd.

The program was initiated to evaluate and extend the work done the previous year described in the assessment report by C.K. Ikona dated December, 1976.

The present work consisted of detailed geology within the area previously explored, as well as linecutting, geochemical soil sampling and a ground electromagnetic survey over the portion of the property lying to the south of the area of previous investigations. This area is predominantly covered by glacial overburden.

The crew consisted of a geophysicist-supervisor, a soil sampler and a geologist. The program took eight days to complete including mobilization-demobilization time.

## 2.0 LIST OF CLAIMS

<u>CLAIM NAME</u>	<u>GRANT NO.</u>	<u>EXPIRY DATE</u>
TIL 1-24 incl.	Y84019-Y84042 incl.	March 13, 1978

## 3.0 LOCATION AND ACCESS

The TIL group is located 80 miles east of the village of Ross River and 125 miles northwest of Watson Lake, just 7 miles north of the Campbell Highway.

MOUNTAINEER MINES LTD.

YUKON LOCATION MAP  
TIL I-24 CLAIM GROUP

SCALE IN MILES

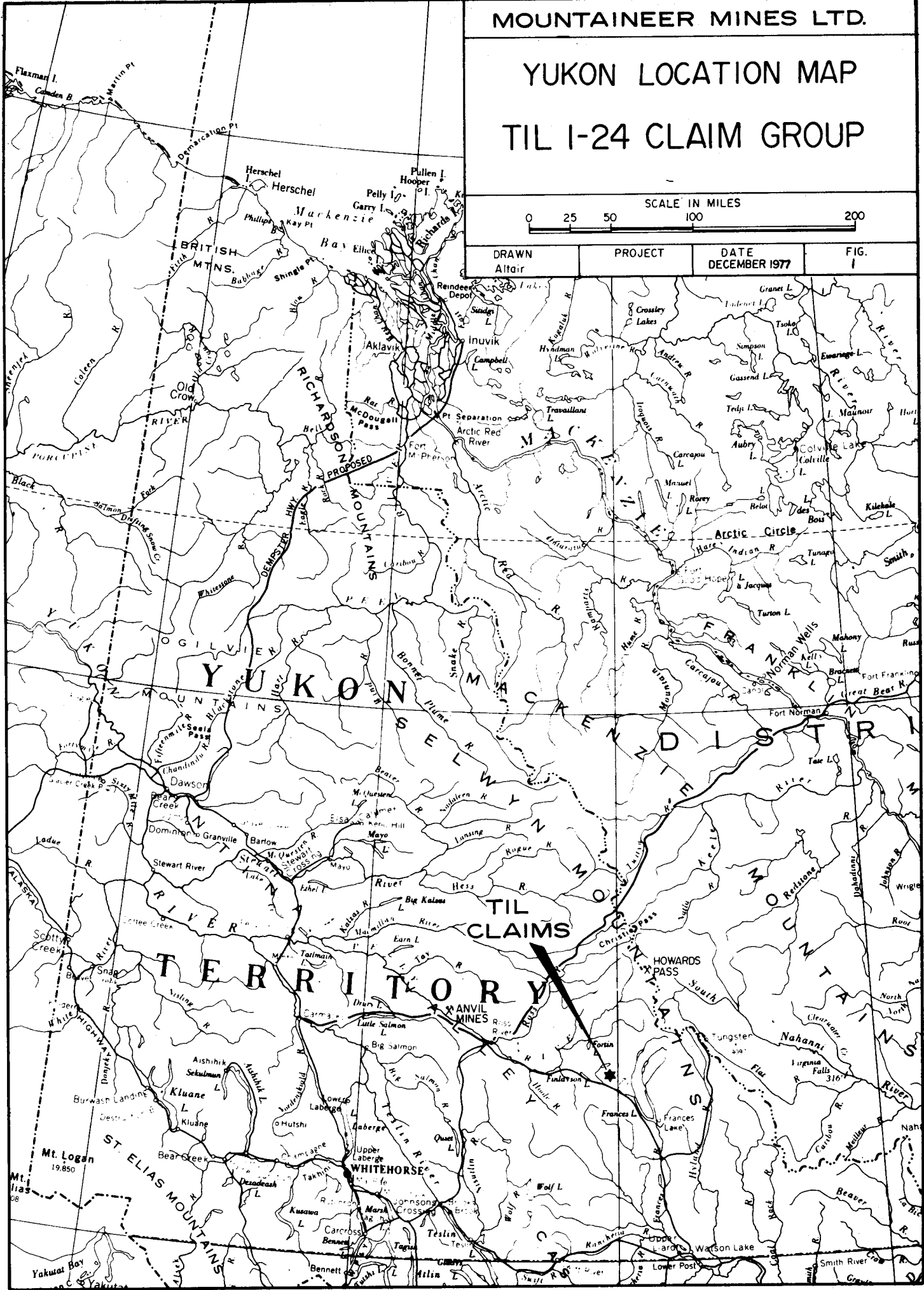


DRAWN  
Altair

PROJECT

DATE  
DECEMBER 1977

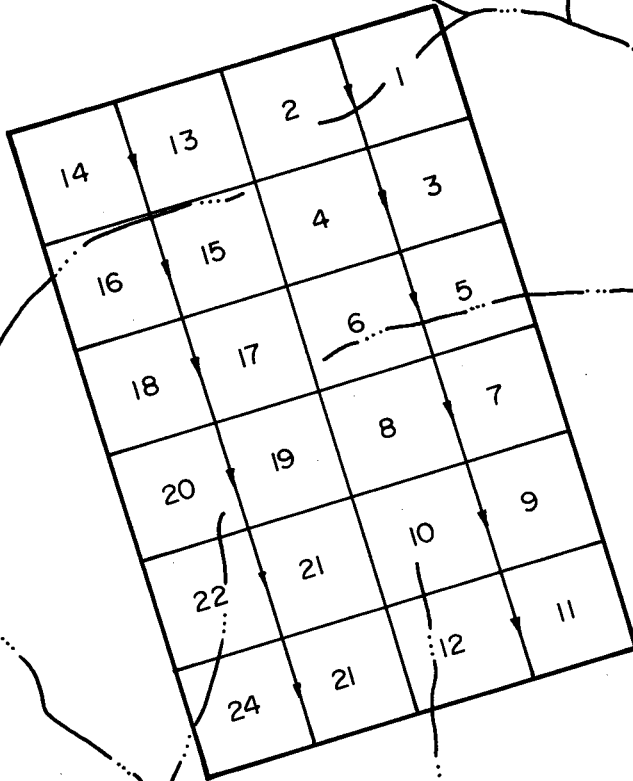
FIG.  
1





130°05' W

61°41' N



MOUNTAINEER MINES LTD.

TIL 1-24 MINERAL CLAIM GROUP

N.T.S. 105-G-9

61°41' N. & 130°5' W.

SCALE: 1" = 1/2 MILE

DECEMBER 1977

Access was by way of truck from Ross River to the southeast end of Finlayson Lake and thence by helicopter about 14 miles to the northeast where a fly-camp was set up at an elevation of 4,800 feet.

Both helicopter and fixed wing aircraft, as well as full expediting services are available in Ross River, Y.T.

#### 4.0 TOPOGRAPHY AND VEGETATION

The claim group straddles a ridge between two creeks which flow south-easterly towards Finlayson Creek. Elevations vary from about 4,500 to 5,700 feet over the claims with the higher ground and rock exposure occupying the northern half of the property.

The geochemical and geophysical work was carried out over the southern portion of the claims. Here the topography was gentle to moderate with steep slopes being encountered at the east & west ends of the survey lines. Vegetation in the form of scrub spruce and willows was quite thick over most of the survey area.

#### 5.0 HISTORY

The property was acquired as the result of regional silt sampling traverses subsequent to the discovery of the Anvil ore body in 1965.

A geological and grid soil sampling program was executed by Mountaineer Mines Ltd. over the northern two-thirds of the property in 1976 and revealed a high coincident Pb-Zn-Ag

anomaly within favourable rock types. This anomaly was in an area predominantly overburden covered and was open to the south.

#### 6.0 GRID INSTALLATION

The present grid lines were installed using the chain and compass technique with flagging tied to trees and bushes to mark the line and sample locations.

Three east-west lines were installed with a line spacing of 800 feet and a station interval of 50 feet. One additional soil sampling line was installed between the two most northerly lines. The total length of lines (including tie-lines) was 3.18 line miles. These lines were tied in to the old grid to the north.

#### 7.0 REGIONAL GEOLOGY

The TIL group lies in an area underlain by a thick succession of clastic and carbonate sediments deposited along the southern margins of the Selwyn sedimentary Basin. Its position in the basin is near the Lower Ordovician hinge line where calcareous shales of the Road River formation give way to deeper water chert-shale assemblages of the basin core. Locally, the geology is complex due to moderate-intense folding coupled with high angle faulting.

To the north and northwest of the TIL group the sedimentary sequences have been intruded by the McEvoy granodiorite stock of Cretaceous age resulting in additional

metamorphism, quartz-vein flooding, and siliceous lensing in the area.

## 8.0 PROPERTY GEOLOGY

The TIL 1-24 mineral claims contain six recognizable sedimentary map units. Exposure is generally limited to above 5,300 feet except for small scattered outcrops along stream banks. Figure 3 presents the latest available geological data at a scale of 1 inch to 400 feet.

Unit A; a black graphitic shale, covers the eastern half of the TIL group. The shale is thinly bedded, limonitic and is locally injected by bull quartz veins. The shale is generally undisturbed, however in some areas it is strongly contorted and invariably approaches the appearance of a graphite schist. The base of the unit was not observed.

Unit B; a light grey weathering, laminarly banded quartzite has an approximate thickness of 275 feet. This thin to medium bedded quartzite contains very thin bands of graphite giving the rock a ribbon-banded appearance. Bull quartz veining, contortion and brecciation characterize the contacts with Unit C.

Unit C; a sequence of interbedded sedimentary rocks is found exposed to the northwest and is terminated to the west by a north-south trending fault. Unit C rocks dip to the northeast and contain fossils that may be Devonian crinoids. Proceeding from southeast to northwest this sedimentary suite contains approximately: 50 feet of light grey-biege shale;

100 feet of beige-grey weathering, mottled dolomitic limestone; 50 feet of light grey weathering siliceous dolomite; 50 feet of slightly graphitic, medium grey weathering shale and at least 1,000 feet of a fossiliferous, graphitic mudstone.

Unit D; a massively bedded, light grey weathering limestone is exposed in the northwest quadrant of the TIL 1-24 mineral claims. The unit is generally undisturbed by structural deformation. However, minor fracturing infilled by calcite was observed.

Unit E; a light grey weathering, massively bedded quartzite with minor shale interbeds was observed in a tiny outcrop to the west of Unit D.

Unit F; a very rusty and strongly contorted quartzite is found at the extreme northern end of the property.

#### 8.1 Structure and Stratigraphy

Units A through F may or may not represent a chronological sequence of deposition. It is a sequence based on the observance of an overall northwest dip of Unit A, the oldest rocks in the southeast and Unit F, the youngest rocks found in the northwest area of the property. Complex structural faulting prevents any simple stratigraphic interpretation.

Unit A shales are conformably overlain by the Unit B quartzite. Also two blocks of Unit A shales have been faulted to a position above Unit B. A simple stratigraphic contact between Units B and C was not observed. Brecciation and the local folding of quartzites suggest a fault contact. A similar north-south trending fault separates Unit C

interbedded sedimentary rocks from Unit D limestones.

The limestone of Unit D dips mainly to the east and several direct fault contacts with Units A, B, C and F are present. Unit D appears to be underlain by Unit E. However, possible overturning of strata rules out any firm conclusion.

The visible extent of the Unit E quartzites is limited by prevailing thick overburden conditions to the west. Contact with Unit F was not observed and is postulated not to occur on the property.

Unit F appears fault emplaced as it is separated from Units A, B and D by a major northeast-southwest trending fault linear. Pervasive folding and fracturing are present.

## 9.0 GEOCHEMICAL SURVEY

### 9.1 Procedures

The geochemical grid established in 1976 was extended to the south to close off the anomaly. Samples were collected at 400 foot intervals, employing a mattock, from the 'B' horizon at a depth of 8 to 16 inches. These were placed in kraft bags, dried and shipped to Chemex Labs. Ltd. in North Vancouver, B.C. for analysis.

The soil samples were analysed using standard Atomic Absorption techniques for lead, silver and zinc. This analysis conformed to that employed for previous samples.

The results of the 53 samples collected were plotted and contoured on Figures 4 and 5 along with the values reported on from the previous season.

## 9.2 Discussion of Geochemical Results

The lead and silver anomaly was effectively closed off at approximately line 45 south by the 1977 work. This anomaly appears to have final dimensions in the order of 2,800 feet by 1,600 feet peaking at 2,464 ppm Pb and 32.0 ppm Ag and centered at approximately 30S, 22+50 E.

The zinc anomaly closely conforms to the lead/silver anomaly but appears to extend to the southeast for some 3,000 feet.

The coincident Pb, Zn, Ag anomaly in the centre of the TIL group has been mapped (Figure 3) as being underlain by graphitic shales(A), interbedded dolomites, limestone, shales and fossiliferous <sup>d</sup>mu<sup>o</sup>stones(C) and limestone (D). Extensive faulting has occurred in this area.

The combination of good geochemical values and interesting geology make the anomaly an attractive target.

## 10.0 ELECTROMAGNETIC SURVEY

An EM-16 survey was started on the property to attempt to define structures and/or horizons which might account for the geochemical anomalies. Unfortunately inclement weather at the end of the field season interrupted the survey after only the southernmost 3 lines had been run. In effect this meant that the survey missed the coincident Pb-Zn-Ag anomaly but did cross the southern extension of the zinc anomaly.

### 10.1 METHOD AND THEORY

The EM-16 (V.L.F.) method uses the military and time standard transmissions as the primary field and measures the vertical components of the secondary fields (in-phase and quadrature) of the polarization ellipsoid of a conductive body. The magnetic field lines from the transmitter station are at right angles to the direction of the station and give maximum response to conductors which are parallel to the direction of the transmitted signal.

### 10.2 FIELD PROCEDURE

The station direction is determined with the EM-16 receiver by obtaining the minimum signal strength (audio null) in the horizontal plane. The instrument is then swung upright so that the reference coil is aligned with the primary magnetic field and then is tilted back and forth and the quadrature dial is turned to obtain a further audio null. The in-phase tilt angle is read from an inclinometer on the side of the instrument and the quadrature component is read off the quadrature dial.

For this survey, the Seattle, Washington naval transmitter station was used (18.6 Khz) with readings being taken at 50 foot intervals facing in one direction at a bearing of 072 degrees.

### 10.3 DATA COMPILATION AND PRESENTATION

The EM-16 data is presented as follows:

- (1) Profiles - In-phase and quadrature values are shown

plotted (in %) at the stations read and then profiled. The in-phase values are plotted as solid lines and the quadrature values as dashed lines along the actual survey lines. Negative % profiles are shown to the south and positive values to the north of the traverse. The vertical scale is 1" = 20% and the horizontal scale is 1" = 400 feet.

(2) Filtered Contour and Interpretation Map -

The in-phase values were filtered and results plotted and contoured. The conductor axes were then interpreted and plotted on the map. The filter used is a technique outlined by D. Fraser ("CONTOURING of V.L.F. E.M. DATA, GEOPHYSICS, VOL.34 No. 6). This procedure has the effect of attenuating topographical effects and phase shifting the results so that real (in-phase) crossovers become contourable values. Normally only positive values are contoured as the negative values represent the flanks of anomalies. For the Ronka EM-16, the application is as follows: Readings are taken at 50 foot intervals, and if four successive values are A, B, C and D in order of transit direction, the filtered value is given by  $V = (A+B) - (C+D)$  and is plotted midway between B and C. Values in excess of +10% are then contoured at intervals of 10%.

10.4 DISCUSSION OF RESULTS AND INTERPRETATION

The ground electromagnetic survey parameters used were of a reconnaissance nature due to the limited time and monies available. These factors resulted in numerous single-line

"cross-overs", relatively noisy data and a grid bias of 16:1. That is, the large ratio of the distance between lines to the distance of the station interval results in elongation of anomalies normal to the survey line.

In an attempt to attenuate this bias as well as effects due to topography, the "Fraser filter" was used. The filtered data is shown in contour form with stations, readings and negative contours suppressed for the sake of clarity. Areas above 30% (in-phase) are considered conductive zones which could be related to sulphide mineralization. Some or possibly all these conductors could be due to graphitic horizons but cannot be discounted or ignored as these formational features have been found both within the district and elsewhere to be genetically related to economically significant Pb-Zn deposits.

Anomalies marked B and D are interpreted as caused by structures coinciding with present creek cuts.

No explanation is given for anomaly C except to mention that a Zn geochemical linear does connect this conductor with a single-line high at Line 53S; Stn. 5E and is across slope.

Because of the geochemical correlation and the relatively flat terrain, anomaly A is given the highest priority for future work. The strike direction of the E.M. conductor does not agree with that of the roughly coincident Pb-Zn anomaly but there is considerable over-lap. Intermediate E.M. survey line coverage might remove some of this ambiguity.

## 11.0 CONCLUSIONS

Interest in the Frances Lake/McEvoy Lake/Pelly Lakes region is increasing as it is becoming evident that geologic environments exist in the area which are similar to those of a number of important lead/zinc/silver deposits and prospects in the southeastern Yukon Territory. The TIL claims appear to lie within one such geologic environment.

A significant lead/zinc/silver soil anomaly has been outlined on the property. The anomaly measures 2,800 feet by 1,600 feet and has peak values of 2,464 ppm Pb, greater than 4,000 ppm Zn, and 32.0 ppm Ag.

The EM-16 survey has many conductors, some of which, no doubt, are not related to sulphides. However, the geophysics has definitely added support to the geochemical anomalies and assists in determining priorities and techniques for further investigations on the property. Within the area surveyed, anomaly A is given the highest priority for follow-up because of good correlation with high lead and zinc values in an area of flat, overburden covered terrain. There does not appear to be any significant downslope migration of the geochemical survey results in this area, in fact, the general trend of the lead/zinc anomaly is across slope and through a creek valley.

It is felt that the results of the reconnaissance work performed to date indicate the property to be an excellent exploration target.

12.0 RECOMMENDATIONS

1. Further geophysical work is recommended and should consist of a detailed "shoot-back" electromagnetic survey in the anomaly A area, along the geochemical highs to the west of anomaly A, and over the other areas of high geochemical response to the north. Survey lines should be run on the present bearing spaced a maximum distance of 200 feet apart with readings taken every 50 feet. Two coil separations and two operating frequencies should be used resulting in an accurate determination of strike, attitude, size, and conductivity of the anomalous features.

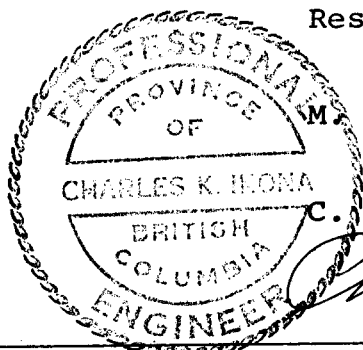
2. A detailed geochemical survey should be carried out over the presently outlined geochemical anomalies to delineate their exact size and intensity and to better interpret any geophysical information gained. The same lines should be used for both the EM and soil sampling, with soil samples taken at 200 foot intervals.

3. Detailed prospecting and geologic mapping should be carried out using the grid stations for control.

4. On completion of this program it should be evident whether or not a diamond drill target exists on the property. Preparations should be made for a drilling program contingent upon favourable results from the above mentioned work.

Respectfully submitted,

M. A. Stammers - Geologist



C. K. Ikona - P. Eng.

A handwritten signature in black ink, appearing to read "Charles K. Ikona", written over the typed name and partially overlapping the professional seal.

ENGINEERS CERTIFICATE

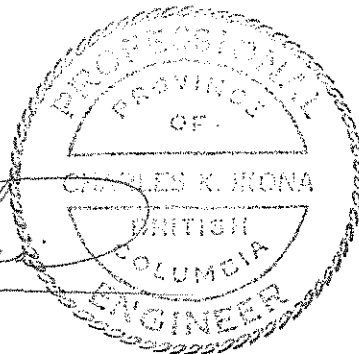
I, CHARLES K. IKONA, of 2614 St. Johns Street, Port Moody, in the Province of British Columbia DO HEREBY CERTIFY that:

1. I am a Consulting Mining Engineer with offices at 610 - 850 West Hastings St., Vancouver, B.C.
2. I am a graduate of the University of British Columbia with a degree in Mining Engineering.
3. I am a member in good standing of the Association of Professional Engineers of the Province of British Columbia.
4. The work reported hereon was conducted during a program under my supervision and under the supervision of geologists with whom I have worked for a period of years and of whom I have every confidence in.

DATED THIS            DAY OF



Charles K. Ikona, P.Eng.



TIL 1-24 MINERAL CLAIMS  
LIST OF PERSONNEL

P. Neilsen, 205 - 2910 - 30th Ave., Vernon, B.C.	Geophysicist	September 19-28, 1977
M. Stammers, c/o 610-850 W Hastings St., Vancouver, B.C.	Geologist	September 19-26, 1977
J. Peel, Ross River, Y.T.	Prospector	September 19-25, 1977

CANADA ) In the matter of a geological and geochemical  
          ) survey and report on the TIL 1-24 Mineral Claims  
          )  
TO WIT: ) on behalf of MOUNTAINEER MINES LTD.

I, R. Darney for Pamicon Developments Ltd., of  
610 - 850 West Hastings St., Vancouver, B.C. do solemnly declare  
that geologic mapping and geochemistry programs were carried out  
on the TIL mineral claims during the period  
September 1-December 1/77

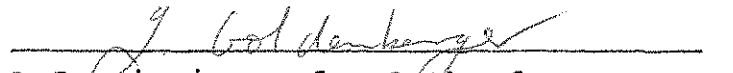
The following expenses were incurred during the course of this  
work and in the compilation and reporting of the results:

Wages	\$ 552.00
Report Preparation	207.00
Nielsen Geophysics	2,132.66
Trans North Turbo Air	1,253.16
Chemex Labs	149.76
Stirling Expediting	415.70
Altair Drafting	317.98
Whitepass & Yukon	19.65
New North Motel	52.00
	<hr/>
	\$5,099.91
	<hr/>

And I make this solemn declaration conscientiously  
believing it to be true and knowing that it is of the same force  
and effect as if made under oath and by virtue of the Canada  
Evidence Act.

Declared before me at Vancouver )  
in the Province of British )  
Columbia this 9<sup>th</sup> day of )  
February, 1978. )

  
\_\_\_\_\_

  
\_\_\_\_\_

A ~~Commissioner for Oaths~~ for  
\_\_\_\_\_ or Notary Public  
for the Province of British Columbia

STATEMENT OF EXPENDITURES  
TIL MINERAL CLAIMS  
FOR THE PERIOD SEPTEMBER 1 - DECEMBER 1, 1977

---

PERSONNEL:

M. Stammers, Geologist	
September 19-26   8 days @ \$60.00	\$ 480.00
Plus 15%	<u>72.00</u>
	\$ 552.00

REPORT PREPARATION:

3 man days @ \$60.00	180.00
Plus 15%	<u>27.00</u>
	\$ 207.00

EXPENSES INCURRED:

Nielsen Geophysics	\$2,132.66
Trans North Turbo Air	1,253.16
Chemex Labs	149.76
Stirling Expediting	415.70
Altair Drafting	317.98
Whitepass & Yukon	19.65
New North Motel	<u>52.00</u>

\$4,840.91

TOTAL EXPENDITURES:

\$5,099.91



# CHEMEX LABS LTD.

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 TELEX: 043-52597

•ANALYTICAL CHEMISTS      •GEOCHEMISTS      •REGISTERED ASSAYERS

## CERTIFICATE OF ANALYSIS

TO: Pamicon Dev. Ltd.,  
 610 - 850 W. Hastings,  
 Vancouver, B.C.

ATTN:

CERTIFICATE NO. 42213  
 INVOICE NO. 22215  
 RECEIVED Sept. 30/77  
 ANALYSED Oct. 6/77

SAMPLE NO. :	PPM Lead	PPM Zinc	PPM Silver
53S 4E	48	500	1.4
8	22	245	0.1
12	10	60	0.1
16	16	100	0.1
20	50	1360	5.0
24	20	315	0.1
28	8	90	0.1
32	6	95	0.1
36	14	120	0.1
40	8	60	0.1
44	30	485	0.1
48	30	420	1.2
52	106	175	0.4
53S 56E	6	65	1.0
57S 20E	8	185	0.1
24	32	1080	0.2
28	26	715	1.0
32	12	770	0.4
36	14	630	0.1
40	12	145	1.6
44	22	265	1.2
48	18	745	1.0
52	32	150	1.4
57S 56E	26	210	0.1
61S 0E	14	175	0.6
4	14	220	0.1
8	12	335	0.4
12	10	150	0.8
16	6	80	0.1
20	18	330	0.1
24	26	145	0.1
28	30	625	0.1
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40	32	230	0.1
44	20	615	2.2
48	18	295	0.6
52	18	145	0.1
61S 56E	30	330	0.2
69S 0E	8	155	0.1
Std.	84	205	7.6



MEMBER  
 CANADIAN TESTING  
 ASSOCIATION

CERTIFIED BY: \_\_\_\_\_





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# Certificate of Geochemical Analyses

-IN ACCOUNT WITH-

Prism Resources Ltd.  
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Attention:

Report No: 77 71 001 Page 1 of 1  
 Samples Arrived: May 9, 1977.  
 Report Completed: May 10, 1977.  
 For Project: --  
 Analyst: E.T.

Invoice # 138 Job # 77028

Sample Marking	Pb ppm	Zn ppm	Ag * ppm	Ba * ppm		
T15E 10N	135	700	3.2	338		
15N	223	1400	4.7	247		
25N	2175	X3000	32.0	183		
30N	335	800	3.6	369		
T15E 40N	775	825	5.6	234		
T22+50E 20S	600	2225	5.4	421		
25S	170	1600	4.0	125		
30S	330	450	2.3	338		
35S	875	1325	4.8	315		
T22+50E 40S	675	1700	3.0	205		
T750E 40N	1950	1000	5.8	150		
T750E 45N	500	1000	2.6	165		

REMARKS: \* No background correction.

Signed:

% Mo x 1.6683 = % MoS<sub>2</sub>      1 Troy oz./ton = 34.28 ppm      1 ppm = 0.0001%      nd = none detected      ppm = parts per million  
 All values are believed to be correct to the best knowledge of the analyst based on the method and instruments used.

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INSTRUMENT SPECIFICATIONS

Accuracy of readings (optimum) ..... 1% resolution

Range of Measurements ..... In-Phase 150%  
Quadrature 40%

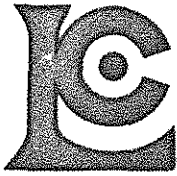
Output Readout ..... Null-detection by ear-  
phone monotocic speaker,  
in-phase and quadrature  
components from  
mechanical dials.

Batteries ..... 6 - size AA penlight cells

Size ..... 16 x 5.5 x 3.5 inches  
(42 x 14 x 12 cm)

Shipping Weight ..... 10 lbs. (4.5 kg.)

Manufacturer ..... Geonics Ltd.



# INVOICE

Tel. (604) 985-0648

Telex 043-52597

CHEMEX LABS LTD. 212 BROOKSBANK AVENUE, NORTH VANCOUVER, B.C. CANADA V7J 2C1

Pamicon Developments Ltd.,

DATE October 8, 1977

610 - 850 W. Hastings St.,

INVOICE NO. 22215

Vancouver, B.C.

CERTIFICATE NO. 42213, 14

ATTN. \_\_\_\_\_

ITEM	DESCRIPTION	SUB-TOTAL	TOTAL
52	Analyzed for Lead, Zinc & Silver @ \$2.85	\$148.20	
52	Prepared @ \$0.35	18.20	
		\$166.40	
	Less 10%	16.64	
			\$149.76

*Til*  
*Pd*  
*Oct 12/77*  
*(1)*

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76-040

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[403] 969-2237

---

November 14th, 1977

## INVOICE

TO: Pamicon Developments Ltd.,  
610 - 850 W. Hastings St.,  
Vancouver, B.C.'

Attention: Phil Nielsen

RE: Expediting services rendered for P. Nielsen

.....	\$150.00
Groceries .....	252.45
Carrying charges .....	5.05
Long distance calls as attached ....	<u>8.20</u>
TOTAL .....	\$415.70

FILE NUMBER: 1103-77

NIELSEN GEOPHYSICS LTD.

#205-2910-30 th Ave.,

Vernon, B.C. V1T 2B7

November 3, 1977  
Invoice #172

Pamicon Development Ltd.  
6th Floor-850 W. Hastings St.  
Vancouver, B.C. V6A 1R6

Re: Mountaineer Mines Ltd. - TIL Claims  
Assessment Work Program  
Period: Sept. 19-Sept. 28, 1977

To Services Rendered

A	P.P. Nielsen, Geophysicist	
	1) Travelling Time 3 days @ \$125/day	\$375.00
	2) Geophysical Survey & Program Supervision 5 days @ \$165/day	825.00
	3) Soil Sampler 6 days @ \$50/day	300.00
B	Mob-Demob (Whitehorse-McEvoy Mtn.-return)	
	1) Gas & Oil	52.96
	2) Food & Accom.	58.70
C	Instrument Rental EM-16 - 8 days @ \$12/day	96.00
D	Administration - Report, telephone, etc.	<u>425.00</u>
	AMOUNT DUE	<u>\$2132.66</u>

2 - 5



**PAMICON DEVELOPMENTS**  
 CHARTERER

5th FLOOR - 850 W. HASTINGS ST. LTD.

BILLING ADDRESS  
 VANCOUVER, B.C.

FUEL & OIL-TNTA FUEL USED HRS.-GALS. FROM  
 ✓ TMTA CUST. 2.0 RR BULK

ACCOUNT NUMBER	2546
21634	
INVOICE DATE	21/09/77
AREA B.C. YUKON NWT ALTA.	
AIRCRAFT REGISTRATION	206-A
DAY MONTH YEAR	25 09 77
PURCHASE ORDER NO.	

FROM	MILES	HOURS	ZONE	REMARKS - NO. OF PASS - FREIGHT LBS.
ROSS RIVER				
TO McEDVOY		.8		
CAM P MOVÉ		.9		
ROSS RIVER		1.0		

SUB	C.L.	AMOUNT
6/165/020		605.00
6/165/110		48.00

TERMS: EIGHTEEN PERCENT INTEREST PER ANNUM WILL BE CHARGED ON ALL INVOICES NOT PAID WITHIN 30 DAYS OF DATE ISSUED.

**PHILIP P. NIELSEN.**  
 CHARTERER'S SIGNATURE

**P.P. Nielsen**  
 PILOT'S SIGNATURE

**E.H.O.**  
 ENGINEER'S NAME

WAITING TIME	@	/HR.	
FUEL: 48 @ 100/GAL.			48.00
FUEL:	@	/GAL.	
MEALS & LODGING			
OTHER			
OTHER			

**TOTAL \$653.00**

**FLIGHT REPORT INVOICE**

**PAMICON DEVELOPMENT LTD**  
 CHARTERER

6th FLOOR - 850 W. HASTINGS ST.

BILLING ADDRESS  
 VANCOUVER, B.C.

FUEL & OIL-TNTA FUEL USED HRS.-GALS. FROM  
 ✓ TMTA CUST. 2.0 G.A.

ACCOUNT NUMBER	2546
21627	
INVOICE DATE	21/09/77
AREA B.C. YUKON NWT ALTA.	
AIRCRAFT REGISTRATION	206-A
DAY MONTH YEAR	20 09 77
PURCHASE ORDER NO.	

FROM	MILES	HOURS	ZONE	REMARKS - NO. OF PASS - FREIGHT LBS.
ROSS RIVER				
TO FINLATSUY LK.		.6		3 pass
LOCAL		.8		"
ROSS RIVER		.6		"

SUB	C.L.	AMOUNT
6/165/020		550.00
6/165/110		50.16

TERMS: EIGHTEEN PERCENT INTEREST PER ANNUM WILL BE CHARGED ON ALL INVOICES NOT PAID WITHIN 30 DAYS OF DATE ISSUED.

**P.P. NIELSEN.**  
 CHARTERER'S SIGNATURE

**P.P. Nielsen**  
 PILOT'S SIGNATURE

**E.H.O.**  
 ENGINEER'S NAME

WAITING TIME	@	/HR.	
FUEL: 44 @ 114/GAL.			50.16
FUEL:	@	/GAL.	
MEALS & LODGING			
OTHER			
OTHER			

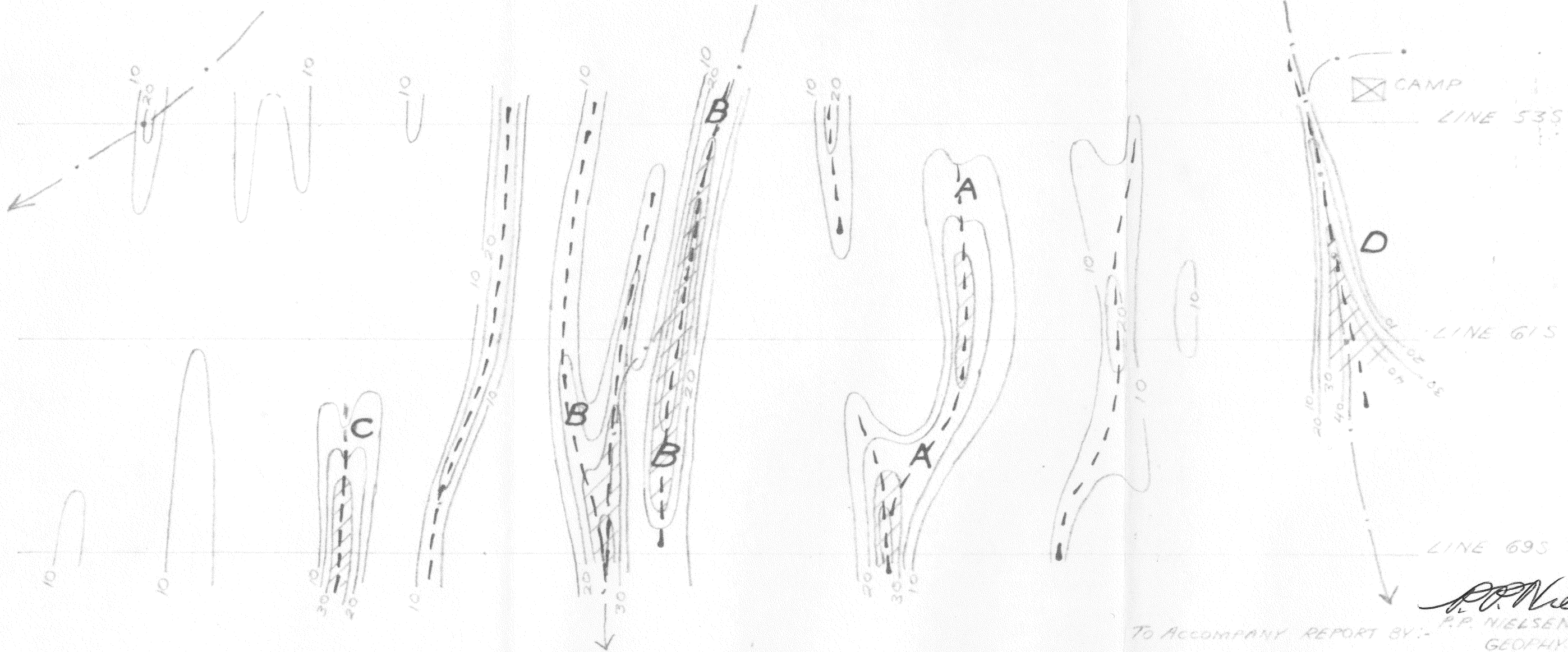
**TOTAL \$600.16**

**FLIGHT REPORT INVOICE**





0 4E 8E 12E 16E 20E 24E 28E 32E 36E 40E 44E 48E 52E



TO T4 STN  
JIM CREEK  
WASH., U.S.A.

LEGEND

- IN PHASE POSITIVE FILTERED DIP ANGLE CONTOURS (IN %) - CONTOURS OVER 30% SHOWN HATCHURED
- CREEK
- CONDUCTOR AXIS

To Accompany Report by: *P.P. Nielsen*  
P.P. NIELSEN, B.Sc.,  
GEOPHYSICIST.

MOUNTAINEER MINES LTD.  
TIL CLAIMS  
McEVROY MTN. AREA, Y.T.  
GROUND ELECTROMAGNETIC SURVEY  
E.M.-16 CONTOURS - "FRASER FILTER" METHOD  
WATSON LAKE M.D. N.T.S.: 1066-16  
NIELSEN GEOPHYSICS LTD.  
VERNON, B.C.

NOV. 1977 BY: P.P.N.  
SCALE IN FEET

To T<sub>x</sub> STN.  
JIM CREEK,  
WASH., U.S.A.



0 4E 8E 12E 16E 20E 24E 28E 32E 36E 40E 44E 48E 52E



NOTE - INTERLINE SPACING  
NOT TO SCALE  
- VERTICAL SCALE 1" = 20%

TO ACCOMPANY REPORT BY:-  
P.P. NIELSEN, B.Sc., GEOPHYSICIST.  
*P.P. Nielsen*

MOUNTAINEER MINES LTD.  
TIL CLAIMS  
McEVOY MTN. AREA, Y.T.  
GROUND ELECTROMAGNETIC SURVEY  
E. M. - 16 PROFILES

WATSON LAKE M.D. N.T.S.: 1066-16

NIELSEN GEOPHYSICS LTD.  
VERNON, B.C.

NOV. 1977 0 400 800 BY: P.P.N.  
SCALE IN FEET



**LEGEND**

**LITHOLOGY**

- F QUARTZITE (Rusty and strongly contorted)
- E QUARTZITE (Light grey and shale interbeds)
- D LIMESTONE (Light grey and massively bedded)
- C INTERBEDDED DOLOMITE, LIMESTONE, SHALE AND FOSSILIFEROUS MUDSTONE
- B QUARTZITE (Light grey and laminarly bedded)
- A GRAPHITIC SHALE (Limonitic and thinly bedded)

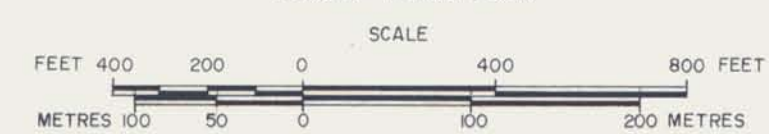
**SYMBOLS**

- GEOLOGIC CONTACT
- FAULT
- BEDDING ATTITUDE
- OUTCROP LIMIT

MOUNTAINEER MINES LTD.

TIL CLAIMS  
**PRELIMINARY GEOLOGY**

105 G 9  
YUKON TERRITORY



PAMICON DEVELOPMENTS LTD.

DRAWN: Allair	PROJECT: McEvoy Lake	DATE: Nov., 1977	FIGURE:
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**LEGEND**

3/2 (1.0) SOIL SAMPLE LOCATION IN PPM LEAD (PPM SILVER)

50 LEAD CONTOURS (INTERVALS - 50,100,200,400)

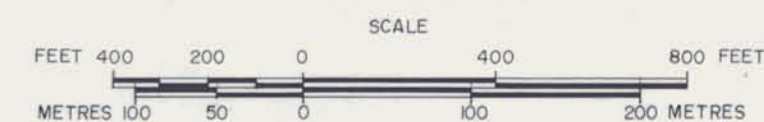
 > 200 PPM LEAD

MOUNTAINEER MINES LTD.

TIL CLAIMS  
LEAD-SILVER SOIL GEOCHEMISTRY

105 G 9

YUKON TERRITORY



PAMICON DEVELOPMENTS LTD.

DRAWN: Allair	PROJECT: McEvoy Lake	DATE: Nov., 1977	FIGURE:
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