3720

Geochemical, Geophysical and Geological Report

on the

S.R.M. Claim Group

Chuchi Lake

55° 14' north latitude
124° 34' east longitude

Omineca Mining Division

N.T.S.
93N/2E

by

Peter F. Tegart

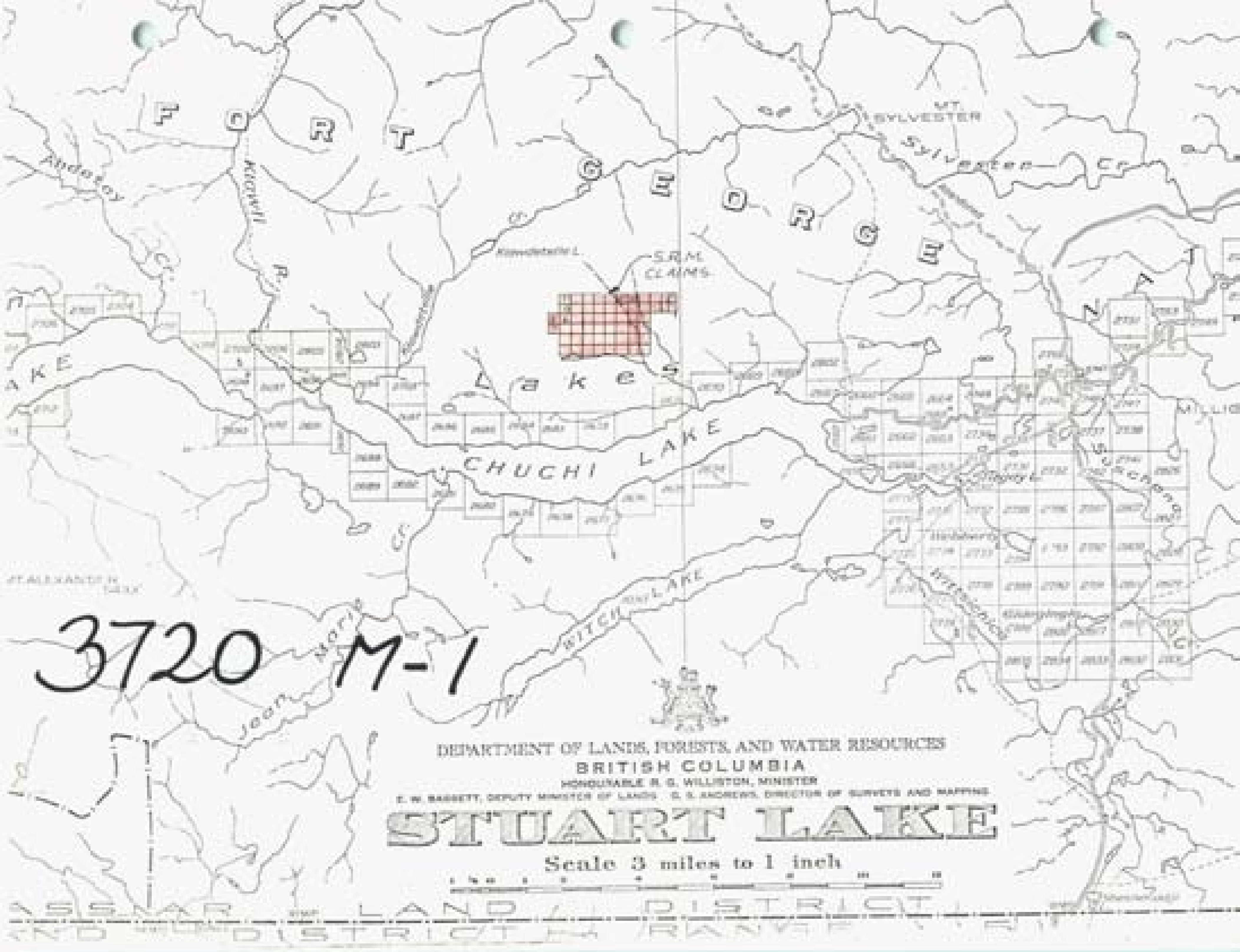
Geologist

claims held by

Serem Ltée.

914 - 850 West Hastings St.
Vancouver 1, B.C.

May 8, 1972



3720 M-1
FORT GEORGE
S.R.M. CLAIMS
Lake
CHUCHI LAKE
MT. SYLVESTER
Sylvester Cr.
Kloch R.
Jean Marie
DEPARTMENT OF LANDS, FORESTS, AND WATER RESOURCES
BRITISH COLUMBIA
HONOURABLE R. G. WILLISTON, MINISTER
E. W. BASSETT, DEPUTY MINISTER OF LANDS   G. S. ANDREWS, DIRECTOR OF SURVEYS AND MAPPING
STUART LAKE
Scale 3 miles to 1 inch
CASSIAR LAND DISTRICT

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 3720 MAP #1

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Introduction

The S.R.M. Claim Group consists of 62 claims located on the southeastern flank of Chuchi mountain approximately 4 miles north of Chuchi Lake. Assessment work will be applied to 15 claims in the center of the group. The register of these claims is as follows:

Name	Record No.	Date of Staking	Date of Record
S.R.M. No. 1-No. 4	100325-100328	June 7, 1971	June 14, 1971
S.R.M. No. 9-No. 15	100333-100339	June 7, 1971	June 14, 1971
S.R.M. No. 17	100341	June 7, 1971	June 14, 1971
S.R.M. No. 44	100364	June 9, 1971	June 14, 1971
S.R.M. No. 46	100366	June 9, 1971	June 14, 1971
S.R.M. No. 48	100368	June 9, 1971	June 14, 1971

Access to the claim group is by heliocopter from Fort St. James 70 miles to the south, or by road to the east end of Chuchi Lake and thence about 6 miles by boat on the lake to a point 4 miles south of the claims.

The staked area is on the boundary between the Hogem mountains to the north and the Nechako plateau to the south. The relief varies from near 3,000 feet in elevation to the south to over 5,500 feet on the northern part of the claim group. Glacial movement has produced parallel drumlins and intervening groovings in a northeasterly direction across the claim area. The drumlins are composed of till and gravels washed from the till. Rock ridges outcrop along the northeasterly trend of the contours and from the map it can be seen that very few outcrops occur.

The vegetation is typified by the presence of lodgepole pine and alpine fir with intermittent areas of heavy underbrush composed mainly of alder and devils club.

Exploration was undertaken to investigate widespread and numerous occurrences of chalcopyrite in the volcanic outcrops and to determine the source of float consisting of massive chalcopyrite in a siliceous gangue. Float of diseminated molybdenite in a syenitic host rock was also found.

Control

A 6,000 foot east-west baseline was cut, chained and pickets put in every 100 feet in the vicinity of the known showings to facilitate later

surveys and provide a control for geologic mapping. North-south cross-lines were put in at 200 foot intervals on the baseline using a Brunton as control to keep the bearing. Stations every 100 feet on the cross-lines were marked with pickets and flagging tape to note the co-ordinates. Maximum length of cross-lines was 1,500 feet on either side of the baseline. This grid came to be known as Grid AB as it combined two known showings"A" and "B".

A second but smaller grid was established on the S.R.M. claims #37 and #38. An east-west baseline 1,600 feet long with 2,000 foot cross-lines every 400 feet on the baseline was put in to locate surveys of this area.

The grids which were used for control of the geochemical and magnetometer surveys are shown on Plate I and Plate II maps.

Geochemical Survey

Method:

Soil samples were collected at 100 foot intervals on the cross-lines and baselines of the grids. The 'B' soil horizon, buff to brown in colour, was sampled where possible and was reached at depths of 8 to 16 inches. Where rock outcrop precluded soil development no sample was taken. Similarly in swamp areas, the proper horizon could not be reached and no samples were taken. Field notes were taken to record the sample environment such as drainage direction, slope, glacial conditions (drumlins etc.) and soil texture - grain size and unusual organic content.

Soil samples were collected in wet strength paper envelopes 3 1/2" x 9" in size. These samples were dried on racks in a tent heated by wood stove. After drying, the samples were sifted through a 40 mesh brass screen supplied by the Tyler Company, St. Catharines, Ontario. Sifted samples were tested in the field for copper by the Rubeanic Acid Method and then forwarded to Vancouver Geochemical Laboratories Ltd. and run for copper, molybdenim and zinc. Their procedure is explained in Appendix I.

Soil sampling was carried out over the claims not covered by Grid AB and Grid 37/38 by running a compass traverse between claim lines at 800 foot spacing and 200 foot sample intervals. The results are shown on the 400 Series S.R.M. Claim Geochemistry Map. This map includes a plot of the Grid 37/38 results.

Results:

Grid AB Copper. Contouring analytical results for copper at and above the threshold values on Grid AB revealed two anomalous areas. The threshold value was found by Lepeltiers (1) method plotting cumulative percent frequently versus the logarithm of the class limits. Figure #1 shows the threshold for copper to be t = 111 p. p. m. copper over Syenite. The two anomalous areas thus located have narrow elongated shapes and are situated end to end relative to one another. On the Grid AB Geochemical Map they are centrally located and are situated between 200 E and 2, 600 W near the baseline. They have a general east-west strike, stretching for 2, 300 feet in length and averaging 150 feet in width. The anomalous areas have an average value of 200 p. p. m. copper which is approximately 15 times the average background value of 13 p. p. m. copper. The logarithmic plot of the copper values was found to be positively skewed indicating a larger percentage of high values in the population. The relative dispersion (s'') was found to be s'' = 100 s/m = 3. 5%. If the geochemical law which states that the dispersion of an element is inversely proportional to its abundance is obeyed, it would mean that the source of copper is high in the bedrock.

The statistical treatment of results revealed that the threshold values differ for samples taken over syenite and samples taken over volcanics. This assumes that rock types continue under the overburden and the soils could be designated as underlain by syenite or volcanics. The threshold value for copper over volcanics is taken from figure #1 as t = 100 p. p. m. This is lower than the threshold value over syenite, but could be within the error limit inherent with the statistical approach. However, it is not unreasonable to assume that different source rocks have dissimilar background copper.

A low value anomaly does persist from the 1, 200 E cross-line on Grid AB eastward off the grid where the continuation was traced by the claim geochemical cross-lines. The anomaly by itself is not very significant because it is only 3 to 4 times background. However, because the strike of the anomaly correlates with the strike of the andestic flows, the dispersion factor s'' - 3. 2% is low and angular chalcopyrite float has been found in the area this anomaly may be significant.

By plotting the zinc and copper geochemical values on a log-log graph it was found that a negative correlation exists over the anomalous copper area. In other words, the ratio of zinc to copper is less in this area than in the surrounding background areas. In the area adjacent to the copper anomalies the zinc to copper ratio was the highest and generally had a positive correlation for all areas outside the copper anomalies. The mathematical correlation between zinc and copper is shown in figure #2 called the Degree of Dependency of zinc on copper. The coefficient

of correlation "ρ" gives a rigorous measure of their degree of dependency. The coefficient "ρ" always falls between -1 and +1. $\rho = 0$ means a complete independence between two elements and $\rho = 1$ indicates a functional relationship, direct or inverse, between them.

The coefficient of correlation $\rho_1 = +.89$ indicates that an almost direct relationship between copper and zinc exists outside the anomalous areas. $\rho_2 = -.87$ indicates a near inverse relationship within the anomalous copper areas. Some error may be inherent with this latter calculation because of the small number of values and the choice of grid location for counting points.

Grid AB Molybdenum. The soil geochemistry for molydenum on Grid AB indicates two areas above threshold values. The threshold for molybdenum was taken as 47 p. p. m. provided the values were taken as being log normally distributed as shown on figure #3. The two anomalous areas roughly coincide with the copper anomalies discussed previously and are plotted on the Grid AB Geochemical map. The size of the anomalies, however, are much smaller than the coppers with only seven values above the threshold level. The average value in the anomalous area is approximately 75 p. p. m. molybdenum or about 18 times the average background value of 4 p. p. m. A high dispersion factor of s" = 13.5% indicates that the molybdenum source for these soil anomalies is low within the bedrock.

Grid 37/38 Copper. Contouring the same threshold values as used on the AB grid revealed six anomalous areas. The anomalies were coincident with low areas between rock ridges and with lenses of ultrabasic rocks containing minor desiminated chalcopyrite. The anomalies did not appear consistent enough to do further work.

S. R. M. Claim Geochemistry. No significantly anomalous copper molybdenum or zinc values were found on the S. R. M. reconnaissance geochemical sampling.

Magnetometer Survey

Purpose:

A magnetometer survey was carried out on Grid AB and Grid 37/38 to provide a second set of data to explain the geochemical anomalies. Also an attempt was made to more closely define the granitic - volcanic contact and possibly determine magnetite zoning within the intrusive.

Method:

A Scintrex fluxgate MF-1 magnetometer was used to take

readings every 100 feet on the cross-lines. Base stations were checked into on a regular hourly basis to eliminate any effects by magnetic storms. Results are plotted on the Grid AB and Grid 37/38 magnetometer survey maps.

Results and Interpretation:

The Grid AB readings varied from slightly less than 800 gammas to over 2,000 gammas. 200 gamma contours were plotted on the Grid AB map. There is no correlation between geochemical anomalies and the magnetic highs or lows. This result could be expected if the suspected copper mineralization were not associated with any magnetite. None of mineralized showings were evident as anomalous conditions on the Grid AB magnetitic map.

The magnetic readings on Grid 37/38 range from less than zero to greater than 7,000 gammas. 1,000 gamma contours on the Grid 37/38 map depict a lenticular high stretching from the "0"-line east to the 600 foot mark north of line 16 east. The magnetic highs generally correlate with the ultrabasics and basic diorite containing pyritite. The geochemical anomalies lie downslope from the magnetic highs and below outcrops of ultrabasic tremolite actinotite and hornblende.

Geology

The Geologic map of the S. R. M. claims show the approximate distribution of outcrop. All of the outcrops within the grids were mapped in detail on a scale of 1 inch = 200 feet. Outcrop areas on the rest of the claim group were located by chain and Brunton survey and mapped on a scale of 400 feet = 1 inch.

The S. R. M. claims straddle the contact between the Chuchi syenite to the north and Takla series of volcanics to the south. The volcanics resemble a roof pendant surrounded on three sides by syenite. Two sets of fault systems having a near east-west strike and the other a north 60 degree west strike chop the roof pendant up into oblique blocks. These faults are noticeable in the air photos as straight depression lineaments and on the ground by 10 foot wide crushed zones. Most mineralization within the volcanics is found in the vicinity of the intersections of these two fault sets.

The volcanics are comprised of andesitic fine to medium grained, green massive flows interbedded with volcanic breccias with fragments one foot or more in diameter. Where flow horizons could be seen they dipped 45 degrees north and had a general east-west strike. Some areas exhibited the porphritic andesite described by

Roots 1954 G. S. C. Memoir 274. The best mineralization was found in the volcanic sequence within crushed zones having the same orientation as the east-west faults.

The volcanic sequence is intruded by the Chuchi syenite as classified by Armstrong 1949 G. S. C. mem .272.[252]The Chuchi syenitic pluton can be divided into two rock types which appear to have been magmatically differentiated oldest to youngest from rim to core. Rock types change gradually from a dioritic composition on the rim to a monzonite and finally a syenite in the core. The term "Syenodiorite" is used to describe the monzonite and diorite phases together as one unit because no exact compositional boundaries could be determined. The other rock type "Syenite" has as much as 25% quartz but is designated a syenite because the quartz is thought to be a much later addition to the rock.

The oldest differentiate of the syenodiorite near the contact with the volcanics has a mesocratic appearance with a dioritic composition and average modal analysis of 50% plagioclase (Anorthite 40) 20% orthoclase and 30% mafic content made up of hornblende, biotite and angite. Up to 4% apatite and 4% magnetite is also found in this phase. The plagioclase is subhedrally shaped and extremely altered by K-spar and sericite throughout the grains. Orthoclase is found as much smaller grains between the plagioclase. The texture can be described as hypidiomorphic granular.

The diorite gradually becomes more leucocratic in appearance towards the core where it has a monzonitic composition of 30% plagioclase 30% orthoclase and the same general mafic content. The angite is almost totally altered to uralite and the plagioclase is almost obliterated by K-spar. Chlorite and biotite are also prevalent in this phase situated along grain boundaries and minuit fractures. A porphritic phase is also prevalent within the monzonite. It is characterized by large phenocrysts 5 m. m. thick and 70 m. m. long in a ground mass of plagioclase and orthoclase.

Syenite occupies the central portion of the pluton on the S. R. M. claims. Megascopically the syenite is almost always orange in colour possibly due to hematite or iron inclusions in the orthoclase lattice structure. The syenite is composed of nothing but euhedrally formed orthoclase and interstial quartz. When the quartz composition reaches 8% or more it occupies minuit fractures 2 m. m. - 5 m. m. in width. The quartz in the fractures is euhedrally formed and most certainly later than the syenite. Up to 2% epidote and chlorite were detected in some samples. A series of east-west striking dikes with a high siliceous content cut the syenite on the western portion of the S. R. M. claims. Galena was found in these dikes where exposed on Chuchi mountain. Although exposure on Grid AB is very limited, float of Chalcopyrite

in a siliceous gangue was found in the area of the geochemical anomaly between lines 200 E and 200 W on the baseline.

Conclusions:

The Grid AB coincident molybdenum and copper geochemical anomaly elongated east-westerly and being very narrow suggests that a possible copper rich molybdenite poor zone exists at bedrock. The massive chalcopyrite, silicic breccia float found in the area could be from this zone. Because the magnetometer survey did not indicate any trend on this geochemical anomaly an electromagnetitic survey able to detect sulphide mineralization could be used to acquire a second source of information.

The geochemical copper anomaly within the volcanic sequence and roughly coincident with the Trench showings indicated on the 400 series geologic map indicates a continuation to the east. The mineralization assayed only 0.1% Cu across 15 feet and is not considered worthy of further work. Similarly the Grid 37/38 geochemical and magnetic data did not reveal very encouraging results.

Thus, from the analysis of data collected to date the best possible area for further exploration on the S. R. M. claims is the copper - molybdenum anomaly detected on Grid AB.

Respectfully submitted,

Peter F Tegart

Peter F. Tegart

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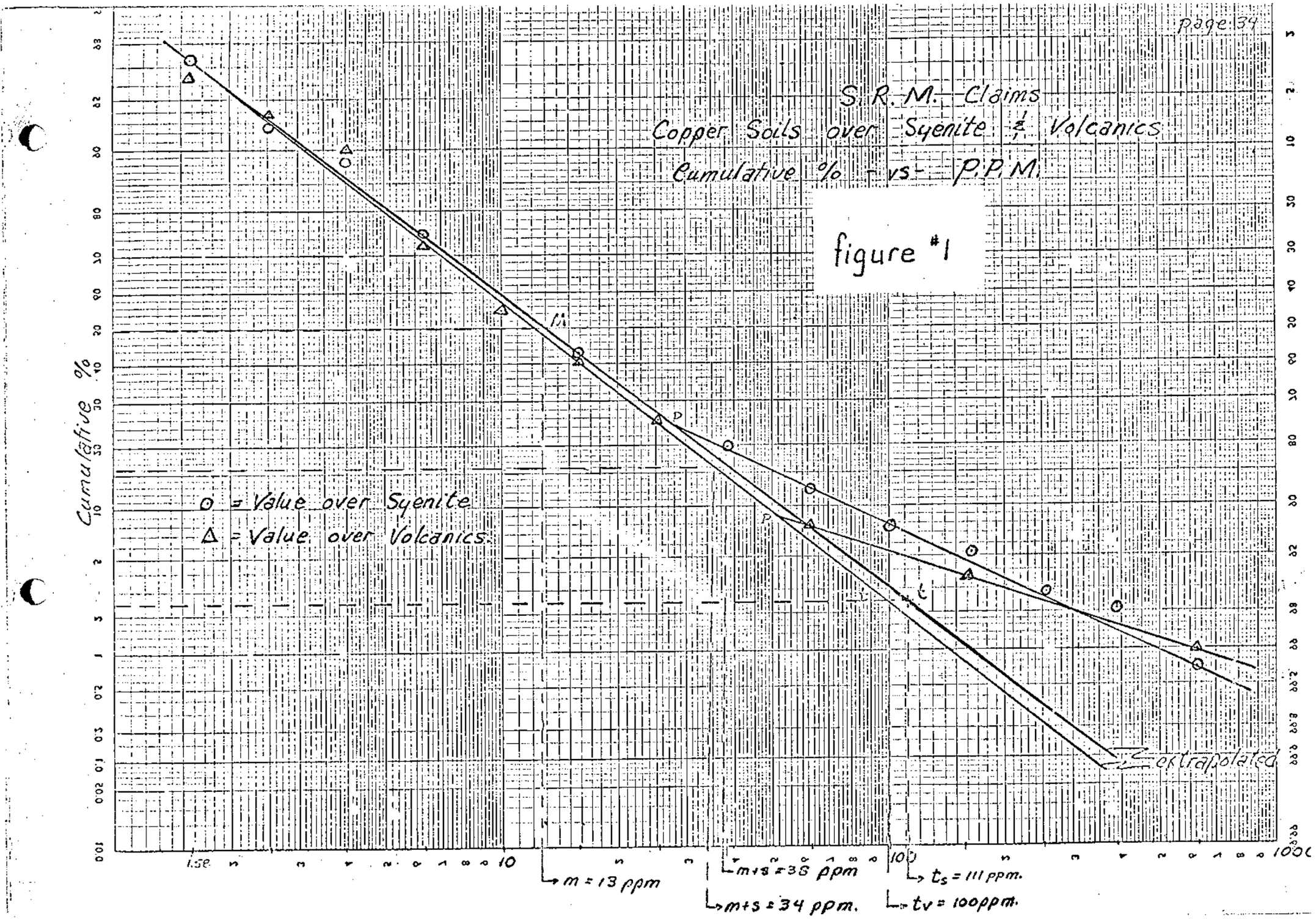
S. R. M. Claims
Copper Soils over Syenite & Volcanics
Cumulative % - vs - P.P.M.
figure #1
Cumulative %
⊙ = Value over Syenite
△ = Value over Volcanics.
m
p
t
Extrapolated
m = 13 ppm
m+s = 34 ppm.
m+s = 38 ppm
t_s = 111 ppm.
t_v = 100 ppm.

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DEGREE OF DEPENDENCY

figure #2

△ Value over high "Cu"

⊙ Value over high "Cu" but in wet area

• Zn/Cu value

"Cu" p.p.m.

Co

← "Zn" → p.p.m

100

1000

ρ_1

ρ_2

$n_1 = 34$, $n_2 = 6$, $n_3 = 50$, $n_4 = 8$

$N_1 = n_1 + n_3 = 84$

$N_2 = n_2 + n_4 = 14$

$\rho_1 = \sin\left[\frac{\pi}{2}\,\frac{N_1 - N_2}{N_1 + N_2}\right] = +1.1 \cong (+.89)$

$n_1 = 3$, $n_2 = 1$, $n_3 = 4$, $n_4 = 7$

$N_1 = n_1 + n_3 = 7$

$N_2 = n_2 + n_4 = 8$

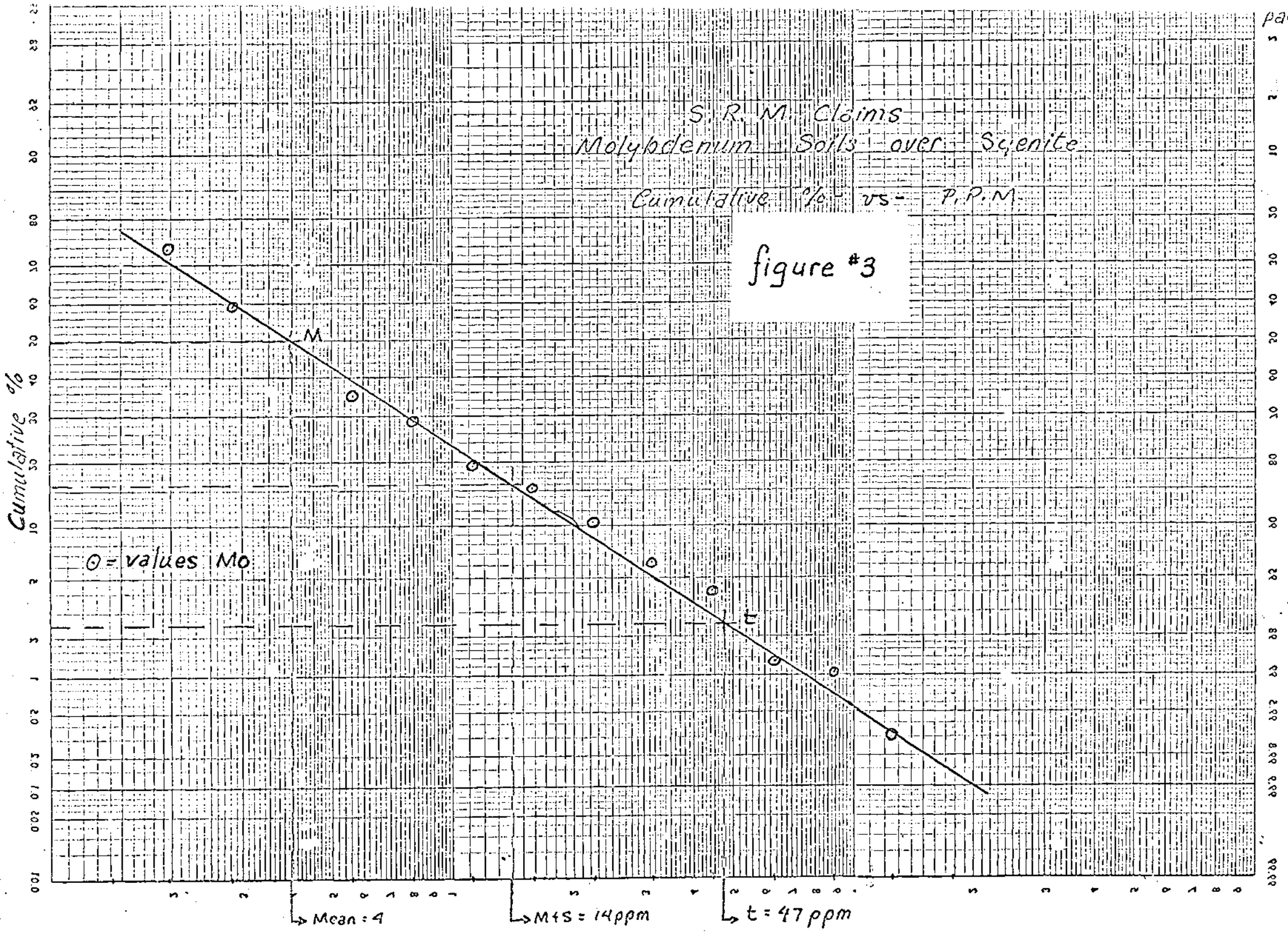
$\rho_2 = \sin\left[\frac{\pi}{2}\,\frac{N_1 - N_2}{N_1 + N_2}\right] = -1.05 \cong (-.87)$

S. R. M. Claims

Molybdenum Soils over Syenite

Cumulative % vs - P.P.M.

figure #3



STATEMENT OF QUALIFICATIONS

I, Peter Tegart, with business address in Vancouver, British Columbia and residential address 3450 Osler Street, Vancouver, British Columbia, HEREBY CERTIFY THAT:

(1) I am a Geologist;

(2) I am a graduate of the University of British Columbia (B.Sc. geol. 1971);

(3) From 1966 until 1971 I have been engaged in mineral exploration in Yukon Territory and British Columbia;

(4) I personally participated in the field work and have assessed and interpreted all the data resulting from this work.

Respectfully submitted,

Peter Tegart

Peter Tegart

CANADA
PROVINCE OF
BRITISH COLUMBIA

TO WIT:

In the Matter of costs incurred in carrying out magnetometer ground survey, geochemical survey, and geological mapping on the S.R.M. Group.

I, PETER F. TEGART, of 3450 Osler Street, in the City of Vancouver,

in the Province of British Columbia

do solemnly declare that the following are the details of the costs incurred in carrying out the exploration program on the S.R.M. Claim Group by Serem Ltd., 914 - 850 West Hastings Street, Vancouver, B. C.:

(A)	Wages		
	(1) Dave Paterson - linecutter, soil sampler 41 days (July 6 - July 29) and (Aug. 4 - Aug. 20) @ $19.00/day		$ 779.00
	(2) Greg Boyle - linecutter, soil sampler 41 days (July 6 - July 29) and (Aug. 4 - Aug. 20) @ $19.00/day		779.00
	(3) Peter Laursen - geological assistant magnetometer operator 29 days (July 6 - July 29) and (Aug. 4 - Aug. 8) @ $21.00/day		609.00
	(4) Peter Tegart - geologist, 30 days (July 6 - July 18) and (Aug. 4 - Aug. 20) @ $25.00/day		750.00
(B)	Transportation		
	(1) 16.40 hours of Bell 47G-3-B1 @ $155.00/hr.		2,542.00
	4:00 hours of Bell 206 @ $250.00/hr.		1,000.00
	3:05 hours of Cesna 185 @ $90.00/hr.		274.50
	(2) 1 month rental 4 wheel drive @ $350.00/mo.		350.00
(C)	Living Expenses		
	141 man, days @ $4.00/day, man		564.00
(D)	Geochemical Analysis		
	analysis 1139 samples @ $1.50/sample	$1,708.50	
	preparation $.10/sample	114.00	
		$1,822.50	1,822.50
(E)	Magnetometer Rental @ $283.00/mo. X 1 month		283.00
			$ 9,752.00

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 19 day of May A.D., 19 72.

Peter Tegart

A Notary Public in and for the Province of British Columbia.
A Commissioner for taking Affidavits for British Columbia.

APPENDIX I

Vancouver Geochemical Laboratories Ltd.
1521 PEMBERTON AVENUE NORTH VANCOUVER, B.C., CANADA TELEPHONE: 604-988-2171

J. R. WOODCOCK
CONWAY CHUN

TO: Serem Ltd.
#914 - 850 West Hastings Street
Vancouver , B. C.

FROM: Mr. Laurie Nicol, Supervisor Chemist
Vancouver Geochemical Laboratories Ltd.
1521 Pemberton Avenue
North Vancouver, B. C.

SUBJECT: Analytical procedure used to process acid soluble molybdenum in geochemical samples received from Serem Ltd.

1. Sample Preparation

(a) Geochemical soil, silt and rock samples were received in the laboratory in wet-strength 3½ x 6½ Kraft paper bags.

(b) The wet samples were dried in a ventilated oven.

(c) The dried soil and silt samples were sifted, using an 80-mesh stainless steel sieve. The plus 80-mesh fraction was rejected and the minus 80-mesh fraction was transferred into a new bag for analysis later.

(d) The dried rock samples were crushed and pulverized to minus 80-mesh. The pulverized sample was then put in a new bag for later analysis.

2. Methods of Digestion

(a) 1.00 gram or 0.50 gram of the minus 80-mesh samples was used. Samples were weighed out by using a top-loading balance.

(b) Samples were heated in a sand bath with nitric and perchloric acids (15% to 85% by volume of the concentrated acids respectively).

Continued . . . .

2. Methods of Digestion (Continued)

(c) The digested samples were diluted with demineralized water to a fixed volume and shaken.

3. Method of Analysis

Molybdenum analyses were determined by using a Techtron Atomic Absorption Spectrophotometer Model AA4 with a molybdenum hollow cathode lamp. The digested samples were aspirated directly into a nitrous oxide acetylene flame. The results were read out on a Photovolt Varicord Model 43 chart recorder. The molybdenum values, in parts per million, were calculated by comparing a set of molybdenum standards.

4. The analyses were supervised or determined by Mr. Conway Chun, or Mr. Laurie Nicol and their laboratory staff.

L.J. Nicol

VANCOUVER GEOCHEMICAL LABORATORIES LTD.

LJN/ati

Vancouver Geochemical Laboratories Ltd.
1521 PEMBERTON AVENUE NORTH VANCOUVER, B.C., CANADA TELEPHONE: 604-988-2171

J. R. WOODCOCK
CONWAY CHUN

TO: Serem Ltd.
#914 - 850 West Hastings Street
Vancouver , B. C.

FROM: Mr. Laurie Nicol, Supervisor Chemist
Vancouver Geochemical Laboratories Ltd.
1521 Pemberton Avenue
North Vancouver, B.C.

SUBJECT: Analytical procedure used to process acid soluble copper & zinc in geochemical samples received from Serem Ltd.

1. Sample Preparation

(a) Geochemical soil, silt and rock samples were received in the laboratory in wet-strength 3½ x 6½ Kraft paper bags.

(b) The wet samples were dried in a ventilated oven.

(c) The dried soil and silt samples were sifted, using an 80-mesh stainless steel sieve. The plus 80-mesh fraction was rejected and the minus 80-mesh fraction was transferred into a new bag for analysis later.

(d) The dried rock samples were crushed and pulverized to minus 80-mesh. The pulverized sample was then put in a new bag for later analysis.

2. Methods of Digestion

(a) 1.00 gram or 0.50 gram of the minus 80-mesh samples was used. Samples were weighed out by using a top-loading balance.

(b) Samples were heated in a sand bath with nitric and perchloric acids (15% to 85% by volume of the concentrated acids respectively).

Continued . . . . .

2. Methods of Digestion (Continued)

(c) The digested samples were diluted with demineralized water to a fixed volume and shaken.

3. Method of Analysis

Cu & Zn analyses were determined by using a Techtron Atomic Absorption Spectrophotometer Model AA4 or Model AA5 with their respective hollow cathode lamp. The digested samples were aspirated directly into an air and acetylene flame. The results, in parts per million, were calculated by comparing a set of standards to calibrate the atomic absorption unit.

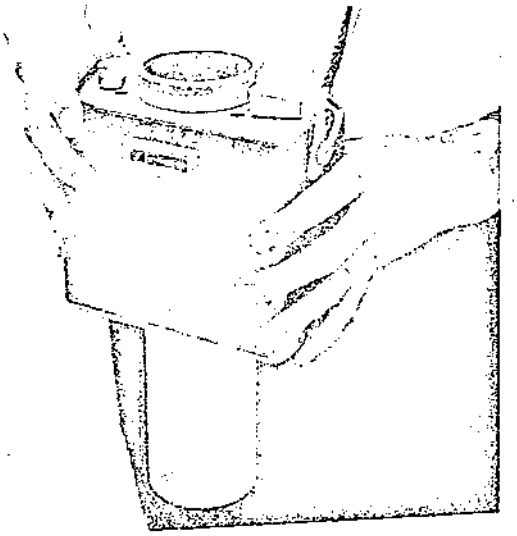
4. The analyses were supervised or determined by Mr. Conway Chun, or Mr. Laurie Nicol and their laboratory staff.

L.J. Nicol

VANCOUVER GEOCHEMICAL LABORATORIES LTD.

LJN/ati

APPENDIX II



SCINTREX

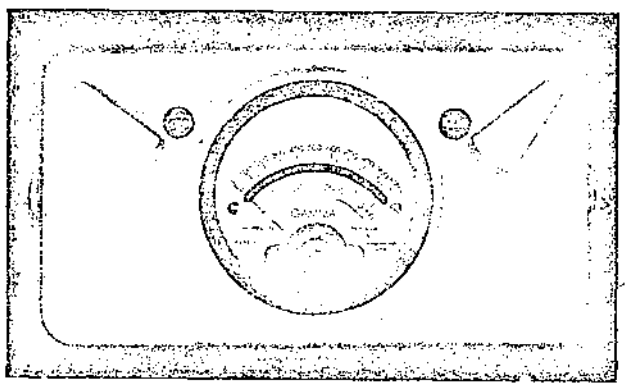
MF-1 FLUXGATE MAGNETOMETER

The MF-1 Fluxgate Magnetometers and their extended sensitivity series, the MF-1-100's are designed primarily for the oil and mineral exploration industries. They incorporate advanced transistorized circuitry and extensive temperature compensation with light weight and a self-levelling mechanism. Although the basic MF-1 and MF-1-100 are intended primarily for accurate ground surveys in the mining industry, modifications are available for base station recording, for vertical gradient measurements, for measuring susceptibilities, determining remanence of rock samples and for storm monitoring on aeromagnetic surveys.

MF-1 SERIES

(a) MF-1

The MF-1 Fluxgate Magnetometer is a vertical component magnetometer designed for accurate ground surveys in the mining industry. Advanced transistorized circuitry and extensive temperature compensation is the core of its accuracy, comparable to precision tripod mounted Schmidt type magnetometers. It is a hand held instrument and needs only coarse levelling and no orientation. Features such as direct reading of gamma values and the possibility of accurate zero settings at base stations ensure simplicity of operation and high field economy. The readability is 5 gammas on the 1000 gamma range.



(b) MF-1-G

The MF-1-G Fluxgate Magnetometer has the same electronics and specifications as the MF-1. The difference lies in that the sensor is detached and enclosed in a small cylindrical tube thus permitting the sensor (geoprobe) to be oriented and tilted in any desired direction. Since a 25 foot connecting cable joins the sensor to the instrument housing, the geoprobe may be placed away from local spurious magnetic disturbances in the vicinity of the electronics housing. Thus this magnetometer may be used for the study of the magnetic properties of rocks, remanence etc.

(c) MF-1-GS

The MF-1-GS Magnetometer again has the same electronics and specifications as the MF-1 but has two sensors, the attached self-levelling sensor of the MF-1 as well as the detached geoprobe of the MF-1-G. Thus this magnetometer may be employed on rapid ground magnetometer surveys and also used for vertical gradient measurements and to measure the magnetic properties of rocks.

SPECIFICATIONS OF FLUXGATE MAGNETOMETER MODEL MF-1

Ranges:	Plus or minus — 1,000 gammas f. sc. 3,000 " 10,000 " 30,000 " 100,000 " Sensitivity 20 gammas/div. 50 " 200 " 500 " 2,000 "
Meter:	Taut-band suspension 1000 gammas scale 1⅞" long — 50 div. 3000 gammas scale 1 11/16" long — 60 div.
Accuracy:	1000 to 10,000 gamma ranges ± 0.5% of full scale 30,000 and 100,0000 gamma ranges ± 1% of full scale
Operating Temperature:	—40°C to +40°C —40°F to +100°F
Temperature Stability:	Less than 2 gammas per °C (1 gamma /°F)
Noise Level:	Total 1 gamma P-P
Long Term Stability:	± 1 gamma for 24 hours at constant temperature
Bucking Adjustments: (Latitude)	10,000 to 75,000 gammas by 9 steps of approximately 8,000 gammas and fine control by 10 turn potentiometer. Convertible for southern hemisphere or ± 30,000 gammas equatorial.
Recording Output:	1.7 ma per oersted for 1000 to 100,000 gamma ranges with maximum termination of 15,000 ohms.
Response:	DC to 5 cps (3db down)
Connector:	Amphenol 91-MC3F1
Batteries:	12 x 1.5V flashlight batteries "C" cell type) (AC Power supply available)
Consumption:	50 milliamperes
Dimensions:	Instrument — 6½" x 3½" x 12½" 165 x 90 x 320 mm Battery pack — 4" x 2" x 7" 100 x 50 x 180 mm Shipping Container — 10" dia x 16" 254 mm dia. x 410 mm
Weights:	Instrument — 5 lbs. 12 oz. 2.6 kg. Battery Pack — 2 lbs. 4 oz. 1.0 kg. Shipping — 13 lbs. 6.0 kg.

SCINTREX LIMITED
79 Martin Ross Avenue. Downsview, Ontario, Canada

SEREM LTEE

PLATE NO. I

GEOCHEMISTRY Cu, Zn, Mo,

GRID "AB"

geochemical value · Cu, Zn, Mo · 56,72,6

copper > 110 ppm

> 40 ppm

mineralized showing

creek

scale: 200 ft = 1 in

Peter Tegart

CAMP

CAMP CREEK

CONTACT CREEK

WEST CREEK

POND

3800W 3600W 3400W 3200W 3000W 2800W 2600W 2400W 2200W 2000W 1800W 1600W 1400W 1200W 1100W 1000W 900W 800W 700W 600W 500W 400W 300W 200W 100W 0 200E 400E 600E 800E 1000E 1200E 1400E 1600E 1800E 2000E 2200E

SEREM LTEE.

PLATE NO. II

MAGNETOMETER SURVEY

GRID "AB"

contour interval 200γ

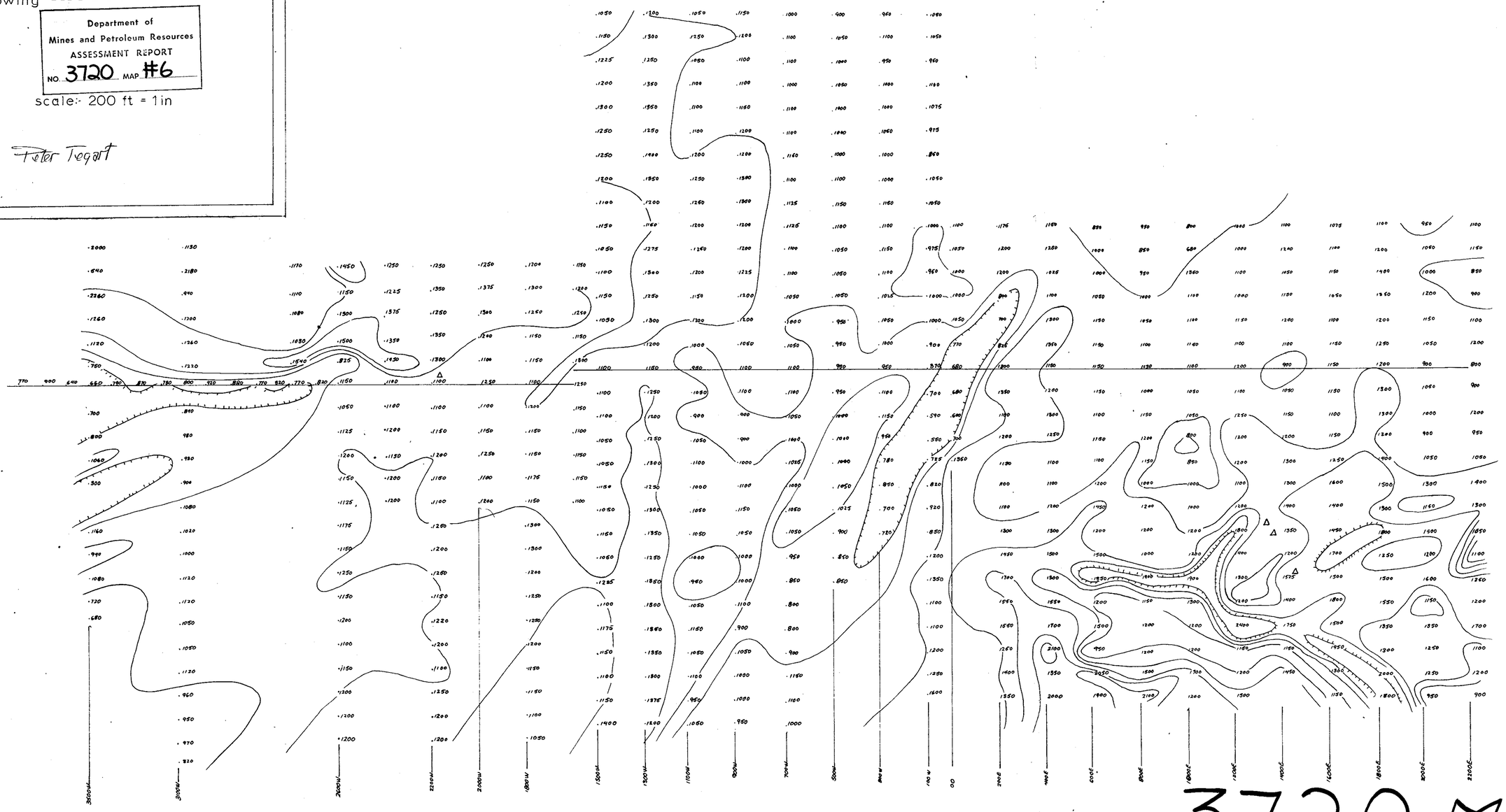
>1600γ

<800γ

showing

scale:- 200 ft = 1 in

Peter Tegart



SEREM LTEE.

400 SERIES

S.R.M. GEOLOGY

"A"

syenite
syenodiorite
andesites
ultrabasics

fault observed
fault inferred
fracture strike dip
showing
creek
claim post
swamp

scale: 400 ft = 1 in

Peter Tegart

BASE LINE

CAMP

20 18 16 43 45 47 49 51 53 55
19 17 15 44 46 48 50 52 54 56
8 6 4 2 9 13 25 27 29
7 5 3 1 10 12 14 26 28 30
66 64 62 31 33 35 37 39 41
65 63 61 32 34 36 38 40 42

3720 M-7

SEREM LTEE

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ASSESSMENT REPORT
NO. 3720 MAP #8

400 SERIES

S.R.M. CLAIM GEOCHEMISTRY

"C"

geochemical soil results · Cu, Zn, Mo.

claim post - - - - - - - - - - - -

creek - - - - - - - - - - - - - - - ↗

scale:- 400 ft. = 1 in.

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GRID (AB)

GRID 37/38

3720 M-8

SEREM LTEE

200 SERIES

GRID 37 38 MAGNETIC

SURVEY

"H"

contour interval - - - 1000γ

showing - - - - - - - - Δ

claim post - - - - - - - ▪

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ASSESSMENT REPORT
NO. 3720 MAP #9

scale: 200 ft = 1 in