

TCHAIKAZAN RIVER PROPERTY

92 0/4E

1978 - 1981 EXPLORATION

ZELON CHEMICALS LTD.

218 - 510 West Hastings Street
Vancouver, B.C.
V6B 1L8



TCHAIKAZAN RIVER PROPERTY

Structural Interpretation

The interpretation of diamond drill logs and assay results which has been correlated with field mapping of the river trenches, is suggestive of block faulting along the Tchaikazan River. Vertical and possibly horizontal movement seems to have taken place in the area of trenching and drilling. The fault system is plotted on map "Proposed Trenching and Drilling" and Figure S1 (attached). As a result of this evaluation, we divided the area into five blocks:

- Blocks one and five, north of the river, composed of basalt and diorite phase rocks (see diamond drill core).
- Blocks two, three and four consist of tuff and basalt units, with minor diorite (tonalite?)

Diamond drill holes 73-2 and 73-4 were used to define the north-northeast trending fault which separates block 4 from blocks 3 and 5. Block 4 consists of alternating tuff and basalt units, similar to blocks 2 and 3 on the southside of the river.

Zelon's current interpretation is that vertical movement along the Tchaikazan River fault (strike 070°) has uplifted the northside and downdropped the southside. Along the Tchaikazan River, a fault is inferred to strike SW-NE with cross faults cutting and trending north-north-

east and northwest; trench mapping of those cross faults indicates dips of approximately 56° to the west and southwest. Movement along the cross fault to the west, (strike 015°) is thought to be right lateral with some vertical component. The cross faults on the east dip 56° west show little horizontal movement and may have only a vertical component.

Encouraging results in DDH 73-4 require further mapping in block four with investigation of the cross fault interpreted from the drill logs. Trenching and sampling is to be expanded along the river bank within block one. Mapping along, and between, cut grid lines will help define the extent, and relative movement of the faults in the area.



Zelon Chemicals Ltd.
January, 1981

John H. Hajek
Exploration Geochemist





123°40'
FISHEM
LAKE

Airfield

COUGAR 8

COUGAR 7

HELENA

LYRA

COUGAR 6

COUGAR 5

WASH
L7831

CLEAN UP
L7832

L7835

GRIN
L7834

BEAR
L7833

HAM
L7836

ECHO 4 ECHO 3 ECHO 2 ECHO 1

ECHO 7

				A1	A2
				A3	A4
				A5	A6
				A7	A8
Onion 2	Beans	Eggs			
Onion 1	Pork	SUGAR			
A19	A20				
A18	A17	A15	A13	A11	A9
A16	A14	A12	A10	A8	

51°10'

COUGAR 1

COUGAR 4

COUGAR 10

ECHO 5

RIVER

COUGAR 3

TCHAIKAZAN

COUGAR 2

TCHAIKAZAN RIVER
920 - 4E

Scale 1:50,000

1000 0 1000 2000 METRES



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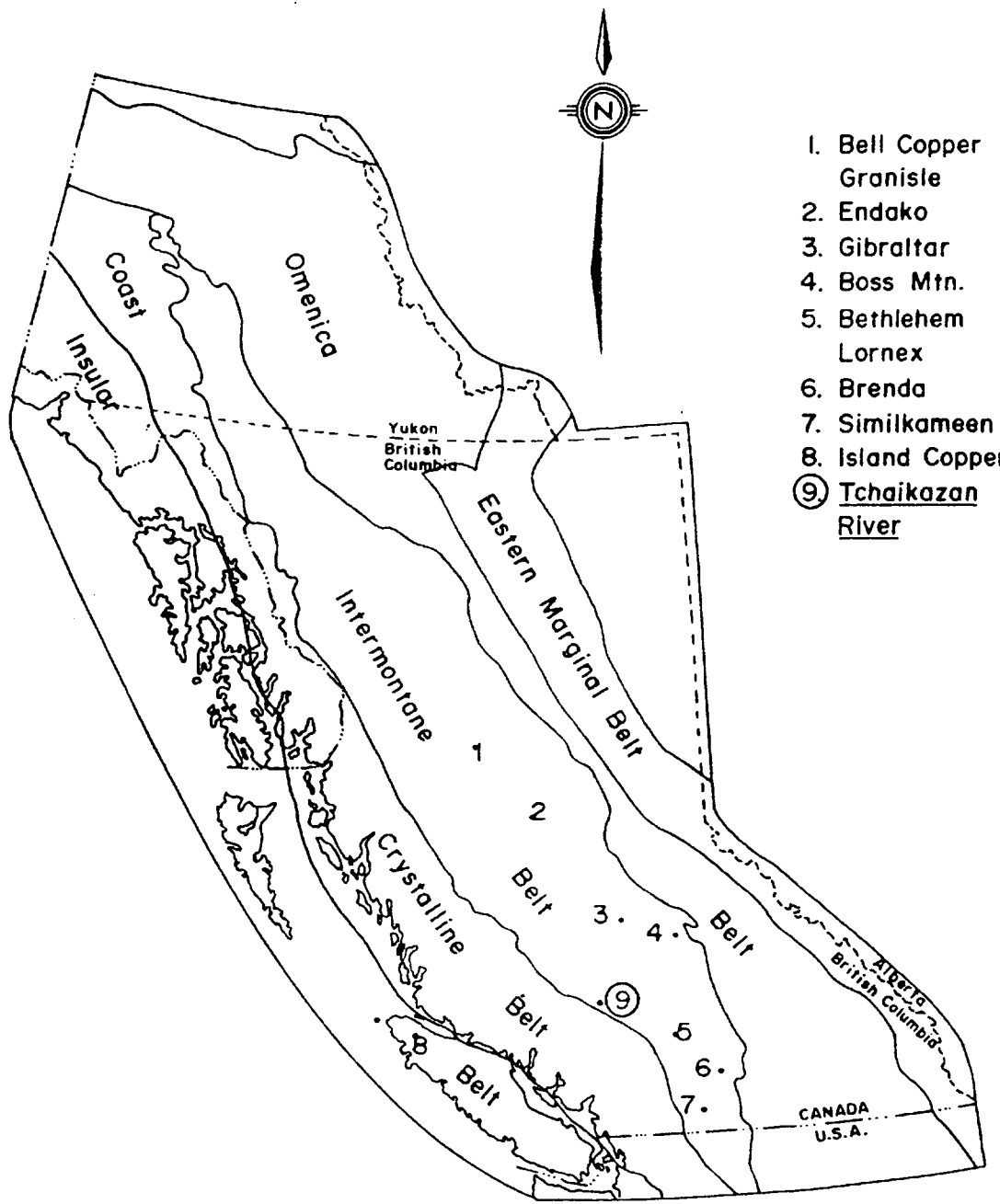


INTRODUCTION

The Tchaikazan River Property is located 156 air km S-W of Williams Lake, west of Taseko Lake in south central B.C. (fig. 1).

The property lies within the Tyaughton Trough of the Intermountain belt adjacent to the eastern margin of the Coast Plutonic complex. It appears to be part of a N-W trending belt of Cretaceous sediments and volcanics, intruded by recent felsic intrusives of late Cretaceous or early Tertiary age.

The centre of the claim block, located along the lower Tchaikazan River, hosts what appears to be a large porphyry system intruding volcanic units (Taylor Group). Copper and molybdenum mineralization occurs in the centre of a concentric I.P. annulus (fig. 2). High grade mineralization is encountered along a complex fracture system often cut by silver-gold-rich polymetallic quartz veins. The focus of the exploration has been located in the vicinity of the river "Hub", neglecting the "old" gold claims. In 1945, on the Charlie group, Dr H. V. Warren discovered high grade gold telluride bearing veins, averaging 0.5 oz./ton gold in fine grained volcanic sediments related to a diorite (tonalite) plug. The relation between the porphyry system at the river level and the Charlie gold occurrences is not certain, since the writer found, during the 1976 exploration saison, similar precious metals host rocks, extending northward on the Lyra and Helena claims. The precious metal occurrences are hosted by volcanic units, extending far beyond the Tchaikazan claims, ie: Pellaire's roof pendant deposit, on the Lord River to the S-E is believed to be part of a similar system.



1. Bell Copper
Granisle
2. Endako
3. Gibraltar
4. Boss Mtn.
5. Bethlehem
Lornex
6. Brenda
7. Similkameen
8. Island Copper
- ⑨ Tchaikazan
River

TECTONIC BELTS AND
PORPHYRY DEPOSITS

Figure : LOCATION MAP

PROPERTY HISTORY

Prospecting in the Taseko Lake area in 1945 led to the discovery of gold and silver mineralization in the vicinity of the Tchaikazan River. This work was carried out under the supervision of Dr. Harry Warren of the University of British Columbia. The showings occur within the Charlie Group of claims which are located along the Tchaikazan River. Limited sampling of these showings was undertaken and native gold, silver and hes-site, were found to occur in quartz veins along a ridge located north of the river. Further investigation were carried on during the winter of 1946-47. The mineralization was described in paper written by Warren in the Royal Society Transaction (Warren, Harry V., 1947). The Charlie Group was optioned to Conwest Exploration for further development.

In 1954 copper and molybdenum mineralization was located along the banks of the Tchaikazan River. Trenching and sampling of the showings was carried out. Dr. Harry Warren conducted biogeochemical studies on the property (Warren, Harry V., 1965). Between 1966 and 1967 Falconbridge carried out soil sampling, a magnetometer survey, and eight drill holes totalling 1250 feet (T1-T8). In 1968 Copper Range Exploration Co. built a road from Fishem Lake to the Cu-Mo River showings and carried out further trenching and a magnetometer survey. In 1969 Rio Tinto Exploration optioned the property and conducted detailed work on the property until 1973. Rio carried out a detailed soil sampling program around the Hub area which revealed a significant Cu-Mo anomaly. Further trenching on this anomaly did not intersect sufficient mineralization to explain the soil anomaly (Troup A.C. and Paterson D.B., 1971). Magnetometer and induced polarization surveys

followed and revealed an extensive area of increased chargeability over the property with a roughly circular chargeability depression in the centre of the grid area (Forminoff P. J., and Peterson D. B., 1971). Rio Tinto drilled some 1500' in seven holes. In 1973 it dropped a two million dollars exploration drilling program due to political uneasiness.

Zelon Chemicals Ltd. optioned in 1976 the property comprised then of 33 claims from Dr. H .V. Warren and conducted an evaluation of newly discovered moly, gold & silver showings. In 1979, regional exploration resulted in the staking of the Lyra and Helena claims (30 units). In 1980, mapping, blasting and trenching of the Tchaikazan River Hub area, resulted in a substantial amount of copper-moly mineralization being found. An ensuing option agreement with Suncor Inc. permitted Zelon to extend the trenching and to add several new roads including the switch back road on "Onion & Beans" claims. In late 1980, a trailer camp was put in place by Zelon to proceed with line cutting, geochemical sampling and mapping until march 1981 when Suncor took over and followed with a regional land acquisition approach.

In 1981 Suncor conducted a program of geological mapping, sampling, prospecting and claims staking. Regional geological mapping was carried out in 1982 on the Sun 1-14 claims along with a magnetometer VLF-EM survey on the Hub grid area. The 1983 field season consisted of geological mapping, soil & rock sampling, prospecting, induced polarization, magnetometer VLF-EM survey and 1000 metres of diamond drilling. This extensive work was centred on the core of a porphyry system outlined by I.P. It lacked a systematic target evaluation and overlooked the numerous gold-silver occurrences.



VANGEOCHEM LAB LTD.

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CANADA V7P 2S3

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AREA CODE: 604

• Specialising in Trace Elements Analyses •

Certificate of Geochemical Analyses

-IN ACCOUNT WITH-

Zelon Chemicals Ltd.
#904 - 510 W. Hastings St.
Vancouver, B.C. V6V 1L8

Attention:

Report No: 81-43-002 Page 1A of 1
Samples Arrived: December 11, 1980
Report Completed: January 13, 1981
For Project: --
Analyst: E.T. & VGC Staff
Invoice: 6020 Job #80-405-4

Sample Marking	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag** ppm	Ag*** ppm	Ni ppm	Cd ppm
TUT 50A	3	30	13	48	0.9	0.7	370	0.6
50B	2	22	10	49	0.9	0.9	60	0.4
51	3	61	9	44	0.9	0.9	260	0.8
51B	25	292	11	58	1.0	0.9	130	1.8
52B	20	115	8	46	0.9	1.0	200	0.8
52C	4	68	7	39	0.8	0.8	240	0.6
53B	11	119	10	53	2.8	0.9	100	0.4
TUT 53C	4	60	7	36	12.0	0.7	280	0.6
JH 40	4	9	16	30	1.2	1.0	500	0.6
41	3	2	13	19	9.0	0.8	800	0.5
42	6	8	18	24	1.3	1.0	400	0.7
43	2	8	14	35	1.3	1.1	250	0.6
44	1	11	9	52	1.2	1.3	120	0.4
45	200	3390	6	33	1.2	1.0	240	0.5
JH 46	6	11	42	65	1.7	1.3	320	1.7
TF 5R	2	78	6	15	1.5	1.1	190	0.5
TF 10R	4	90	3	7	7.0	0.6	800	0.3
CT 31	1	60	34	38	0.8	0.7	300	0.4
32	3000	5320*	5	14	2.3	0.8	600	0.6
33	65	51	71	940	15.0	0.6	1200	17.0
34	7	269	36	4800*	2.4	0.7	1000	50.0
CT 38	16	40	75	201	4.7	1.4	400	1.0

REMARKS: * Estimated values
Ag** = Ag with background
Ag*** = Ag background

Signed:

% Mo x 1.6683 = % MoS₂ 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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Zelon Chemicals Ltd.
 #904 - 510 W. Hastings St.
 Vancouver, B. C. V6V 1L8

Attention:

Report No: 80-43-008 Page 1 A of 1
 Samples Arrived: Dec. 11, 1980
 Report Completed: Dec. 29, 1980
 For Project: ET
 Analyst: ET
 Invoice# 6016 Job# 80 405 3

Sample Marking	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag* ppm	Ag** ppm	Ni ppm
TCH F10	8	590	24	2100	3.4	0.6	1010
TCH F11	70	287	2050	82	240.0	0.5	1540
CT 35	32	114	39	84	3.9	0.6	630
36	36	1930	15500	153	640.0	1.3	1040
37	3	191	144	17300	1.1	0.2	1260
CT 40	2	105	43	161	2.7	0.5	1500
T 5	3	8	24	40	1.0	0.6	650
T 5 B	2	25	16	43	0.9	0.7	600
C 4	2	43	46	91	1.4	0.6	380
T 1	3	21	19	42	1.1	0.6	390
T 2	4	13	20	59	1.3	0.5	59
TUT 1	70	1200	18	44	1.8	1.5	68
2	50	1770	16	45	2.0	1.6	84
5	170	1700	17	54	1.7	1.5	90
8	70	950	10	45	1.1	0.9	91
10	160	1150	9	27	0.9	0.5	84
13	80	1960	12	23	1.4	0.4	94
37	100	1160	15	36	1.9	1.0	75
39	50	780	19	40	1.9	1.2	94
40	37	1290	16	45	1.9	1.4	80
42	70	820	13	34	1.1	0.8	78
43	80	1200	11	35	1.7	1.2	550
TUT 44	60	830	14	40	1.9	1.5	480
58 F	11	3140	16	69	1.6	1.2	137
TBT 64 F	9	195	14	40	1.1	0.4	1360

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REMARKS: Ag* = Ag without background correction; Ag** = Ag background.

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Report No: 81-43-002 Page 1B of 1
 Samples Arrived:
 Report Completed:
 For Project:
 Analyst:

Attention:

Sample Marking	Co ppm	Cr ppm	Mn ppm	Fe %	W ppm	Au ppb
TUT 50A	14	141	385	3.50	10	13
50B	13	114	515	3.50	10	15
51	13	123	335	3.50	10	12
51B	27	115	325	4.50	5	11
52B	16	124	390	3.55	10	11
52C	14	125	515	4.50	35	15
53B	18	111	330	4.50	10	12
TUT 53C	10	118	305	3.25	25	5
JH 40	5	137	655	1.90	10	115
41	4	165	465	1.10	5	90
42	5	140	825	1.90	10	166
43	11	105	585	1.85	10	8
44	16	127	465	4.30	5	20
45	19	105	180	5.00	25	18
JH 46	14	100	940	4.50	10	58
TF 5R	28	97	240	8.00	10	30
TF 10R	4	175	75	1.85	nd	3400*
CT 31	14	145	70	2.10	nd	280
32	12	176	85	1.50	nd	48
33	5	230	70	0.90	5	12500*
CT 34	17	460	190	4.50	600	96
38	24	150	160	16.00	10	50

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REMARKS: * Estimated values

Signed:

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—IN ACCOUNT WITH—
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Samples Arrived:
Report Completed:
For Project:
Analyst:

Attention:

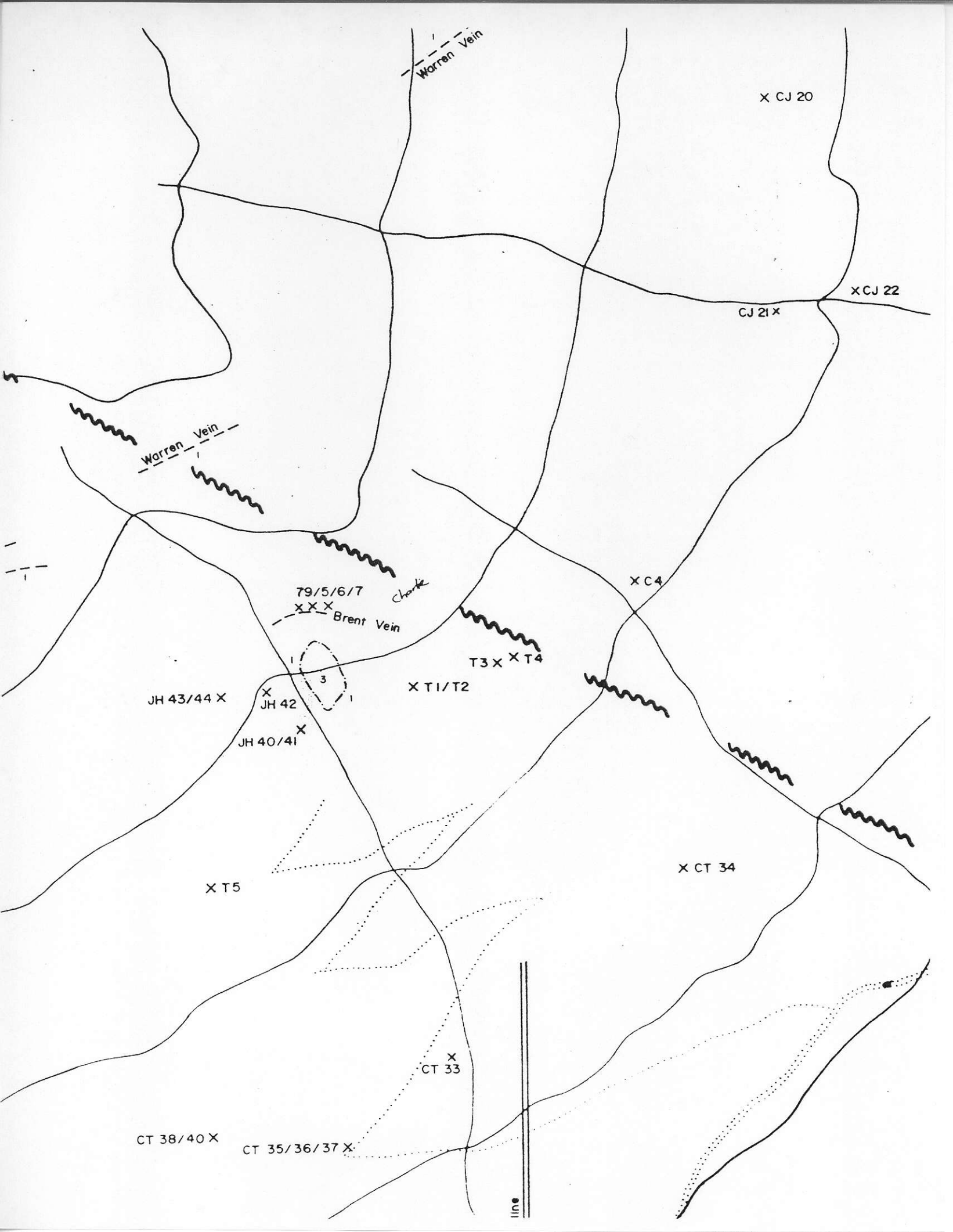
Sample Marking	Co ppm	Cr ppm	Fe %	Mn ppm	W ppm	Au ppb
TCH F10	29	388	3.10	1200	> 600	40
TCH F11	10	730	1.80	110	nd	> 8000
CT35	26	334	11.00	620	5	140
CT36	15	890	4.50	430	30	> 8000
CT37	29	910	4.50	460	20	1500
CT40	22	810	2.85	610	nd	240
T 5	19	272	2.30	1400	nd	110
T 5 B	19	284	3.10	1400	nd	50
C 4	28	268	5.00	590	nd	60
T 1	18	242	2.45	740	nd	110
T 2	27	240	5.00	2400	nd	60
TUT 1	34	240	5.60	330	5	40
2	37	242	5.50	340	5	10
5	35	260	6.10	390	nd	40
8	23	235	3.55	230	nd	140
10	15	214	2.45	220	nd	10
13	13	197	1.70	150	nd	20
37	35	242	5.80	360	nd	10
39	35	245	5.30	360	nd	nd
40	39	244	5.90	370	nd	10
42	25	215	3.20	270	nd	10
43	27	250	3.90	340	5	40
TUT 44	36	267	5.70	370	nd	10
58 F	37	233	3.95	400	nd	10
TBT 64 F	16	269	2.10	220	600	30

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REMARKS: > Greater than.

Signed:

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Warren Vein

X CJ 20

X CJ 22

CJ 21 X

Warren Vein

X C4

79/5/6/7
X X X
Brent Vein

T3 X X T4

X T1/T2

JH 43/44 X

X JH 42

JH 40/41 X

3

X CT 34

X T5

X
CT 33

CT 38/40 X

CT 35/36/37 X

line

GEOLOGICAL DESCRIPTION

KINGSVALE, TAYLOR CREEK, JACKASS MTN. AND RELAY MTN. GROUPS

Unit 1 Rich in hematite, giving the rocks a purple mauve color

The subdivisions of Unit 1, which includes heterolithic and monolithic volcanic breccias (1b), lapilli tuffs (1a), crystal tuff (1c) and volcanic flows (1d) are interlayered together as repetitious cycles. The subdivisions within Unit 1 are the direct result of subaerial explosive cycles.

1a: Lapilli Tuff

The deposition of Lapilli tuffs results from pyroclastic processes involving explosive aerial ejection of fragments from volcanic vent. The tuffs are non-magnetic.

1b: Heterolithic Volcanic Breccia

Characterized by purple to mauve weathering with matrix composed of ash material

1c: Crystal Tuff

Purple-mauve with light green plagioclase grains, indicating alteration to epidote. The matrix is aphanitic and hematite-rich with abundant chlorite.

1d: Andesite/Basalt Flow

The matrix is aphanitic, phenocrysts of pyroxene and hornblende plagioclase are common. The rock is massive, strongly magnetic, non-vesicular with chlorite as the main alteration mineral, hematite occurs in distinct bands and along fractures.

Unit 2 The lithology appears to conformably overlay the hematite-rich volcanoclastics of Unit 1.

2a: Argillite occurs as interbeds with feldspar sandstones (2-9 meters thick) with gradational change to black shale. Clastic deposition of sediments occurred in a submarine environment.

2b: Feldspatic sandstone (orange to brown weathering) with chert pebbles are common similar to the laminated chert of Unit 3b.

2c: Lithic sandstone (arkose) weathering grey-green to orange.

Unit 3

3a: Heterolithic volcanic breccia/conglomerate, volcanic, plutonic or sedimentary origin; distinguished by green-grey, and orange weathering. Chlorite, epidote and hematite alteration is found in the matrix, with minor sericitization. The lahars (epiclastic deposits) are poorly stratified and unsorted.

3b: Laminated siliceous mudstones (chert with green weathering) are deposited in a marine environment representing an underfloor within the lahars sequence.

3c: Tuffaceous sandstone containing a greater proportion of volcanic fragments than Unit 2b.

Unit 4

4a: Andesite, green to grey due to weathering. Chlorite is the main alteration mineral, biotite is common in the Hub trench area. 4a is a dominant volcanic unit with unconformable contacts within surrounding stratigraphy suggesting that they originated as hypabyssal intrusives.

4b: Monolithic Volcanic Breccia/Breccia Flow

The matrix varies from feldspar (pyroclastic) to volcanic fragments (autobrecciation) with chloride alteration. Deposition occurred in close proximity to the volcanic vent.

4c: Basalt and basalt flow breccia are grey-green, dense and strongly magnetic.

Unit 5

5a: Porphyritic feldspar granodiorite and tonalite (light green when weathered)

5b: Porphyritic quartz plagioclase granodiorite (green weathering)

Unit 6

6a: Amygdule andesite (dike)

6b: Porphyritic hornblende plagioclase andesite (dike)

6c: Porphyritic feldspar felsite (dike)

Unit 7 Lamprophyre

PART A: 1981 Suncor's Assessment (9046) Review

SUMMARY	A1
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1. Hub Area	
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TCHAIKAZAN PROPERTY REVIEW

(1981 - Suncor's Assessment Report 9046)

Summary:

Suncor's exploration camp was located on the north side of the Tchaikazan River, 5 km south of Fishem Lake.

- Physical work: lengthen the Fishem airfield to 2700 feet, access roads, etc...
- Reconnaissance geological mapping & prospecting (76 rock sections)
- Geochemical sampling (1435 samples).

I REGIONAL GEOLOGY

A much detailed approach was required, combined with a wider frame of reference for regional geological mapping. The region consists mostly of Cretaceous & Tertiary volcanic and sedimentary units, part of the Taylor creek group, intruded by recent felsic intrusives centres (feldspar porphyry, granodiorite, diorite-tonalite, pegmatite, felsite and lamprophyre dykes).

1. Hub Area

Chalcopyrite and molybdenite have been found along fractures. Narrow veins are often filled with quartz, chlorite and pyrite and follow a multidirectional fracturing system.

2. Haho Area

At the Haho showing malachite and azurite is found within a quartz diorite stockwork.

3. Petrography by L. W. Curtis & Associates

Petrographic work on old drill cores and samples from the Hub trenches has been done in Toronto by L. W.

Curtis. It consists of 22 samples which have been examined for rock classification, alteration and features that may prove useful for field mapping and mineralization search. Several alteration facies are present:

- a. Potassic: Outlined by brown-green biotite, sericite & K-feldspar.
- b. Phyllic: Represented by plagioclase (andesine) variably sericitized and quartz.
- c. Propylitic: Alterations are shown by biotite altered to chlorite, mafics altered to chlorite, clinozoisite and carbonate (ankerite).

Alteration process are marked by flooding of the matrix by biotite, recrystallization of pre-existing biotite and partial replacement of plagioclase by biotite with attendant liberation of silica. This potassic alteration gives rises in the case of basic volcanics to a black rock which is referred to as biotized basalt. At the same time a fine dusting of magnetite is forming, due to replacement of chlorite by biotite during the potassic metasomatism. It is to be noted that spacial distribution of pyrite is controlled by the presence of magetite.

4. Petrographic Conclusions:

- Silicification occurs as a function of both sericitization and biotization.
- Variations from minimal hydrothermal alteration to potassic alteration.
- Sulphidation is controlled by the distribution of magnetite, although pyrite and trace of chalcopyrite occur in late stage quartz-sericite ± chlorite ± gypsum veins.

PART B: 1982 Suncor's Assessment (9174) Review

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	2. Soils and Stream Sediments	
	3. Detailed Soil Geochemistry of the Hub Area	
III	GEOPHYSICS	B3-B4
	1. Magnetic Survey	
	2. VLF-EM	
	3. Time Domain Induced Polarization (I.P.)	
	4. Conclusion	



TCHAIKAZAN PROPERTY REVIEW

(1982 - Suncor's Assesement Report 9174)

Summary:

Suncor's exploration camp was located at Fishem Lake with a crew of eleven.

Preliminary geological mapping on 1:10,000 scale was conducted.

Geochemical sampling of soil, stream & rocks.

Prospecting: discovery of several new copper showings

Geophysics: 64.5 of Mag & VLF-EM, including de-tailed magnetometer 4,4 km in the Hub area.

Claim post survey by Mc.Elhawney & Associates.

I Regional Geology

. The mapping consists of three scale maps: 1:10,000, 1:1000 and 1:500 (Hub). The 1981-82 preliminary mapping outlined the difficulties in defining specific rock units:

- Some intrusives appear to be contemporaneous with similar composition volcanic flows.
- Andesite and basalt flows are difficult to separate due to alteration.
- Pyroclastics units grade into each others

1. Hub Area

Recent trenching exposed porphyry intrusives as plugs, dykes or sills. Copper and mollybdenum mineralization is related to potassic, phyllic and propylitic alteration.

2. Warren's Crown Granted Claims

Surface exposures of the quartz veins is narrow and extends over several hundred feet in ankeritic sediments, suggesting the existence of a large stock work.

- Charlie veins, Au: 0.5 oz/ton, Ag: 4.6 oz/ton
- Big vein, Cu 21%, Ag 140 oz/ton, Au 0.05 oz/ton
- Avalanche valley, Cu 13%, Ag 9 oz, Au 0.3 oz/ton.

II RECONNAISSANCE GEOCHEMISTRY

A total of 1475 samples were collected, analysed and compiled a year later. The sampling consists of:

1. Regional Road Talus Sampling

"B" horizon soils were sampled along access roads on 25 m spacing. Results were erratic and low with the exception of the Tchaikazan River "Hub" copper & moly enrichment. Gold-silver is associated to lead and cadmium all peripheral to the copper moly anomaly.

2. Soils and Stream Sediments

A poor sampling procedure failed to extend the existing dispersion. The alternative of the sampling of organic seeps and concentrates of each drainage system. However, high gold value resulting from erosion and river concentration have been found near the Hub.

3. Detailed Soil Geochemistry of the Hub Area

A copper-rich area, mostly due to mineralization along fractures and veins creeping upward through shallow overburden. Copper-moly high values are concentrated on the north side of the Tchaikazan river, believed to be block faulted upward, whereas the southside is block faulted downward.

III Geophysics

It consists of 64.55 km of VLF-EM and proton magnetometer survey with a small I.P section over the Haho showing. It is unfortunate that the elevation correction was not taken into consideration as it can vary 10 meters for every 25 meters spacing. The altitude ranges from 4900' (1493 m) near 22+50N/19+00E to 6500' at 20+00S/20+00E.

1. Magnetic Survey

A Scintrex MP-10 proton magnetometer and MR-20 base station were used on 25 m stations and 250 metres apart lines. Fishem Lake base level was taken at 57040 gammas. 64.44 km of grid line covered the lower part of the Tchaikazan River area with 4.45 km detailed readings on L7+50N and crossing the river. The total magnetic field in the Hub grid area vary from 56400 to 59100 gammas with most areas having a range of 700 gammas between 56500 and 57200 gammas. The most pronounced positive anomaly occurs in the area of the circular chargeability high from the I.P. survey near the Hub trenches. High magnetics have been found associated with the southern half of an I.P. chargeability high zone. Magnetic low values are associated with the chargeability depression located within the centre of the I.P. high zone.

2. VLF-EM Seattle, Washington station NKL 18.6 KHz

The same grid lines as above were covered by a VLF-EM survey using Geonics EM-16 with advance facing east. Most conductors intensity vary from weak on single line to a seven lines high response along a 1.8 km in length. The anomalies are good inphase and poor outphase or quadrature anomalies. Several good anomalies show inphase response of 30 to 60% with quadrature of 5-15% response. Medium anomalies show inphase

response of 10 to 29% with 5-10% quadrature values. These responses are likely caused by:

- Structural deformation zones such as faults or shear zones.
- Stratigraphic or alteration zones outlined by a mag. high and disseminated pyrite.
- Topographical features such as creeks or swamps which could be controlled by the above.

3. Time Domain Induced Polarization (I.P.)

Lloyd Geophysics Ltd. carried out an I.P. survey on the Tchaikazan property outlining three well defined zones of increased I.P. response (chargeability).

Zone 1: Strong chargeability values (40-60 m.s.) with resistivity values in the 500-2000 Ω /m. Also, signs of possible massive sulphides on 7+50N & 13+00E have been found with resistivity of 100 Ω /m associated to chargeabilities of 80-100 m.s.

Zone 2: Line 5.N to 10 W with 100-130 m.s. chargeability range. The outline is irregular with two lobes extending southward from the main core.

Zone 3: Chargeability of 20-40 m.s. with low resistivity of 200 to 500 Ω /m.

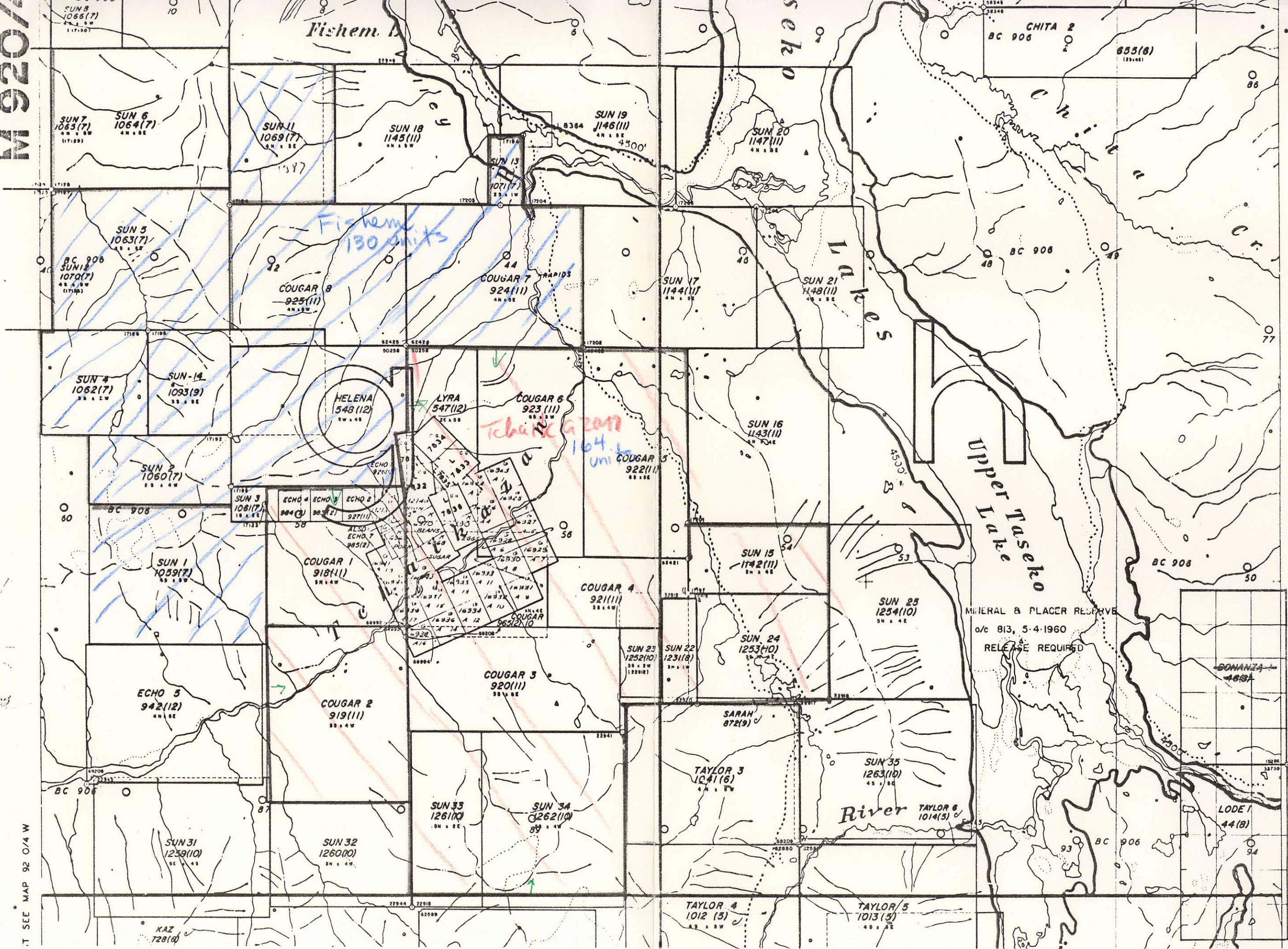
4. Conclusion

A first stage reconnaissance mapping was achieved on 1:10,000 scale with 1:1000 base maps in the Hub area. A number of new copper and silver showings were found outside the claims. The circular I.P. chargeability high, combined with the soil copper-moly-lead anomaly present a high priority porphyry copper-gold drill target.

NOV 15 1982

1026 W

T SEE MAP 92 O/4 W



BC 369 76

BC 369 77

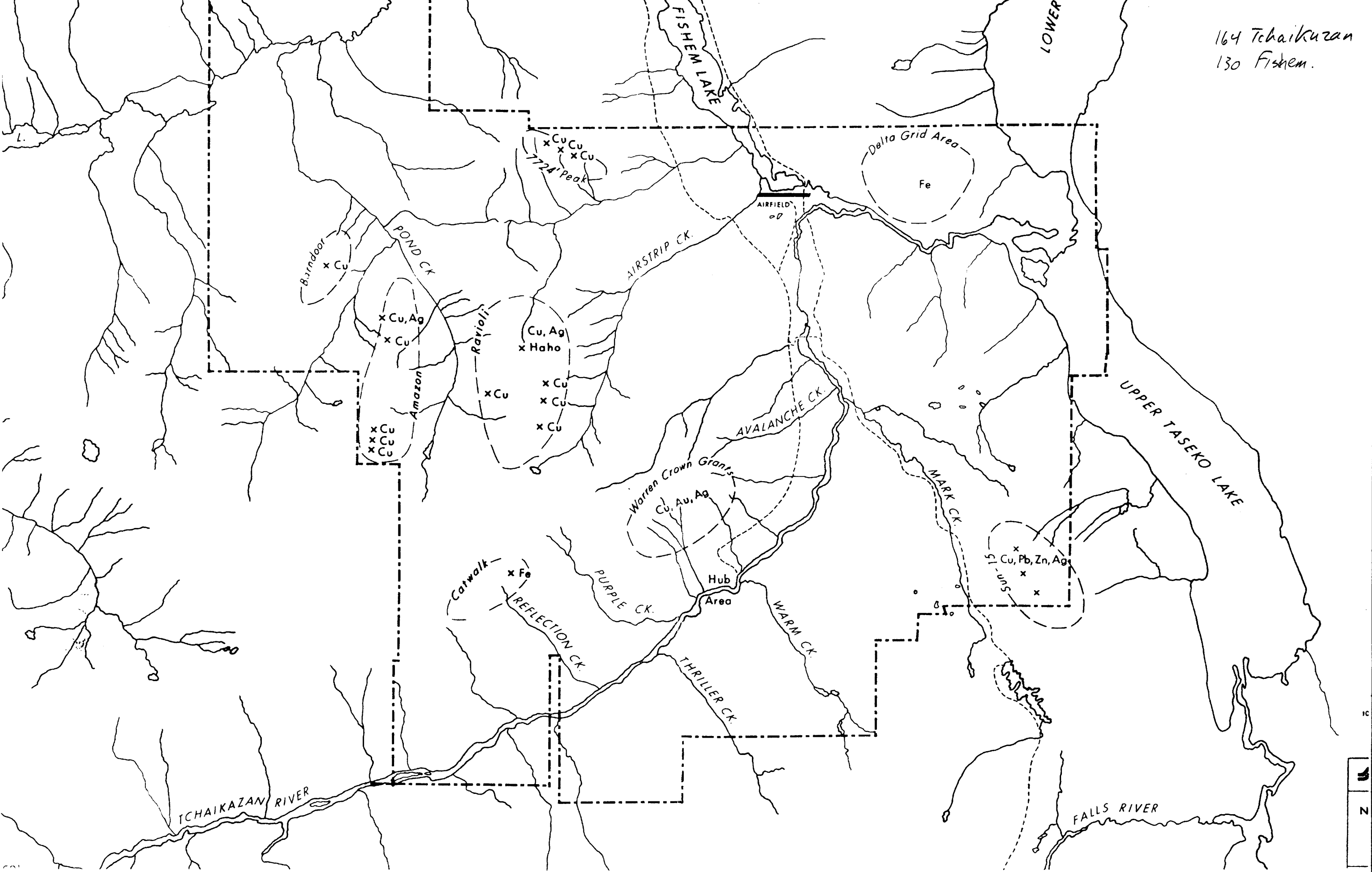
BC 908 50

W/E/O 26 DAW 3ES 15

LEGEND

CROWN-GRANTED
 REVERTED C.G. MIN
 FORFEITED MINERALS
 VERIFIED LEGAL C
 LEGAL SURVEY
 LEGAL CORNER PO

164 Tchaikuzan
130 Fishem.



June 12, 1986
Burnaby, B.C.

Dear John,

With reference to our conversation of earlier this morning regarding the Tchaikazan Property, please find the following information :

An initial budget for detailed trench sampling and initial prospecting.

A general report summarizing the work history of the property, remembering that most of the previous work neglected the gold in favor of the porphyry potential.

A property map showing the probable location of the trenching of the main vein (Charlie Vein).

The complete 1946 assay data, no assay or geology plan of the trench exists.

A copy of the property map showing the location of the gold geochemical anomalies and the location of the Charlie Vein.

R. Tim Henneberry, FGAC

PROPOSED INITIAL BUDGET FOR THE TCHAIKAZAN PROPERTY

PERSONNEL

Geologist 14 days @ 200.00 per day		2800.00
Assistant 14 days @ 150.00 per day		2100.00
(broken down as follows - Travel 2 days		
- Trench work 3 days		
- Prospecting 9 days)		

ANALYSIS

350 samples for Au and Ag @ 12.50 per sample		4375.00
--	--	---------

TRAVEL

By road (~1500 kms @ \$.30 per km)	450.00	
(plus 3 man days @ 350.00 per day)	1050.00	1500.00
By air (helicopter 3 hours @ 550.00)	1550.00	1550.00
Food 14 days @ \$30.00 per man per day		840.00
Supplies - bags, tape, paint etc		100.00

DOCUMENTATION

Geologist 5 days @ 200.00		1000.00
Blueprint, photocopy etc		200.00

SUBTOTAL

12965.00

CONTINGENCY 10 percent

1296.00

TOTAL PHASE I BUDGET

14,261.00

R.Tim Henneberry, FGAC
June 12, 1986

TCHAIKAZAN VALLEY (1946)

I Charlie Vein

a. 500 feet uphill from Charlie Vein

- 8" of massive sulphides	0.2402/Au	250.2 oz Ag	26.1% Cu
- same location, unaltered rock	0.02 Au	7.2 Oz Ag	3.8% Cu
- 12" section of weathered material	0.18 oz Au	47.3 oz Ag	5.8% Cu

b. The vein is 1 to 4 feet wide and 900 feet long of which 300 feet is well mineralized.

c. Conwest Exploration (1947)

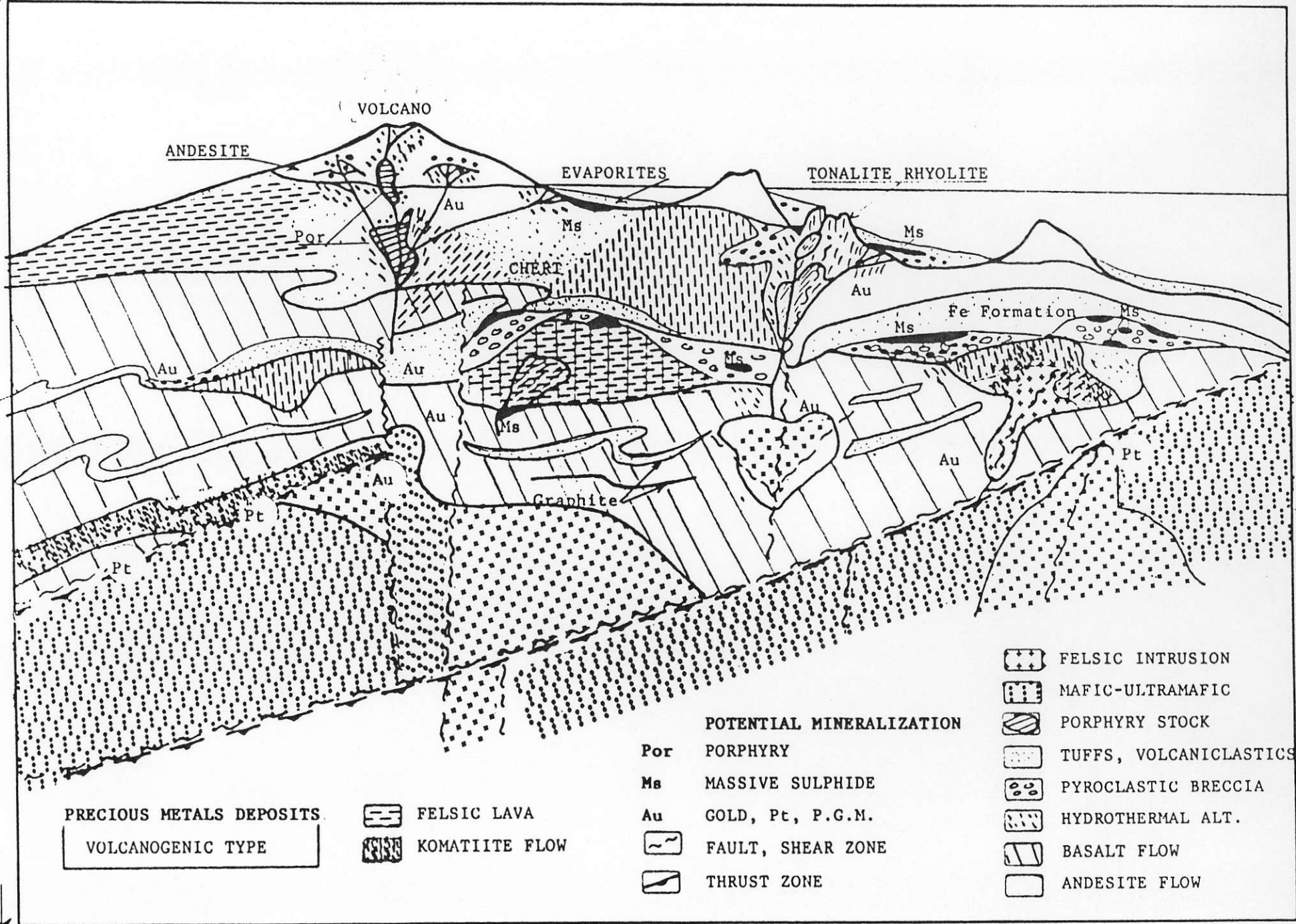
- four cuts on the Charlie with much visible gold

A1 No. 1951	0.83 oz Au	11.5 oz Ag
A2 No. 1952	0.07 oz Au	1.6 oz Ag
A3 No. 1953	0.94 oz Au	10.0 oz Ag

- Tellurides or other visible sulphide being removed.

II Charlie Gold mineralization in Bedrock

	Au Zone/inch	Au/3 feet average	Ag/9"	Ag/3 feet
No. 4	0.24/9"	2.66	3.8	34.2
No. 5	1.0/2"	2.00	11.0	22.0
No. 6	0.44/4½"	1.98	4.0	18.0
No. 7	0.42/6"	2.52	4.8	28.8
No. 8	1.48/4½"	6.66	19.8	89.1
No. 9	1.8/3"	5.4	26.7	80.1
No. 10	0.56/6"	3.36	6.0	36
No. 32	2.0/3½"	7.00	16.8	58.8
No. 11	0.52/6"	3.12	5.1	30.6
No. 17	3.56/5"	12.8	26.5	132.5



PRECIOUS METALS DEPOSITS
VOLCANOGENIC TYPE

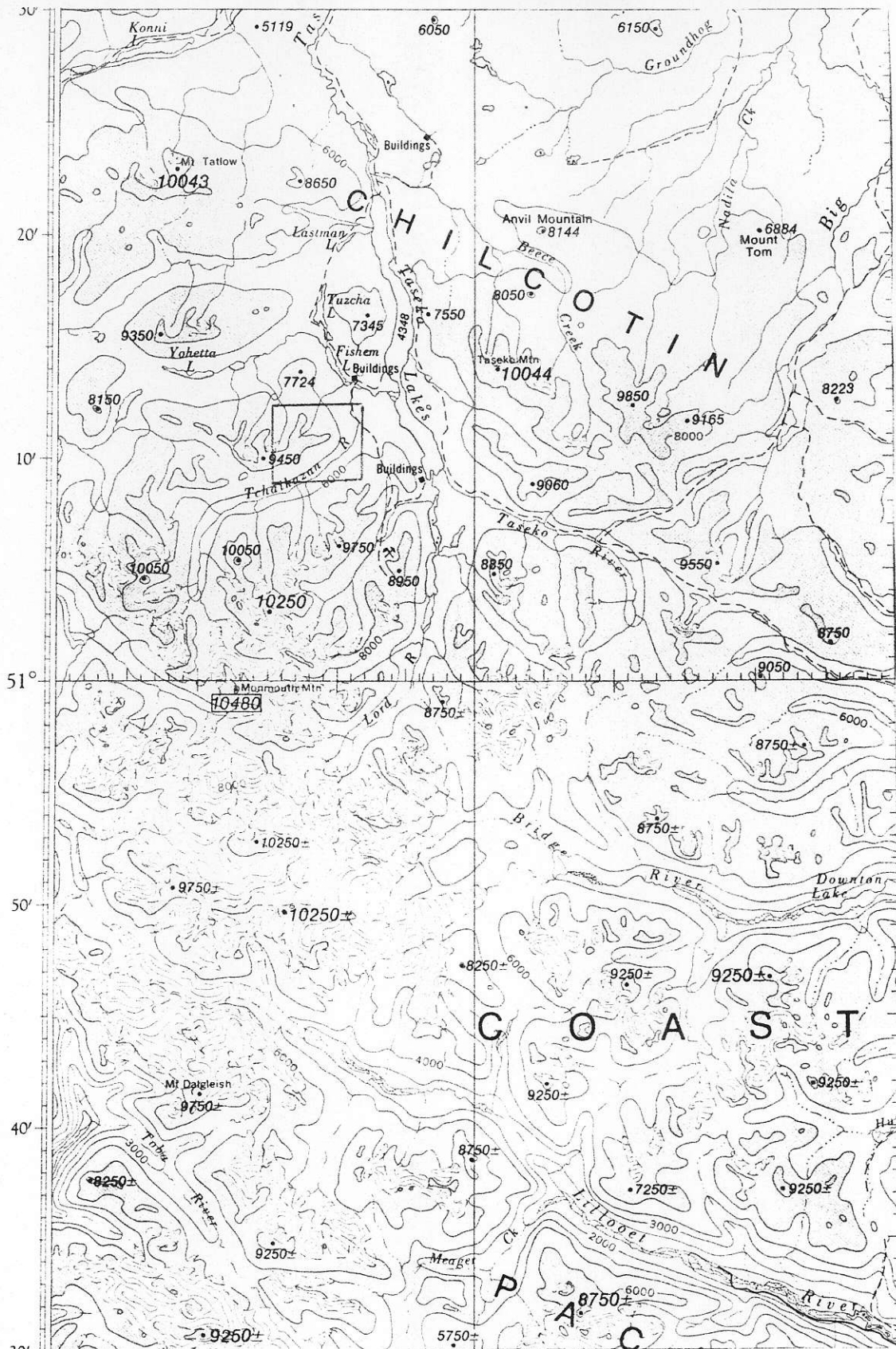
FELSIC LAVA
KOMATIITE FLOW

POTENTIAL MINERALIZATION
 Por PORPHYRY
 Ms MASSIVE SULPHIDE
 Au GOLD, Pt, P.G.M.
 FAULT, SHEAR ZONE
 THRUST ZONE

FELSIC INTRUSION
 MAFIC-ULTRAMAFIC
 PORPHYRY STOCK
 TUFFS, VOLCANICLASTICS
 PYROCLASTIC BRECCIA
 HYDROTHERMAL ALT.
 BASALT FLOW
 ANDESITE FLOW



TCHAIKAZAN RIVER PROPERTY



Scale 1:500,000

FIGURE 1

Zelon Chemicals Ltd.

Exploration Services

TCHAIKAZAN RIVER PROPERTY

920/4E, 123° 39' 51° 11'

The Tchaikazan property is located west of Taseko Lake in the south central B.C, 140 miles north of Vancouver. Zelon Chemicals Ltd. owns the rights to 84 claims covering 30,000 acres (12,000 hectares).

In 1945 Dr. Harry V. Warren discovered several gold-silver tellurides rich veins: Au 0.5-1 oz & Ag 20-400 oz/ton. The Tchaikazan River property hosts what appears to be a large porphyry copper-moly-gold system, intruding subaerial volcanic stratas. Mineralization is mainly fractures controlled, radiating from diorite-tonallite stockworks. Polymetallic gold-silver veins are coincidental with I.P. high chargeability levels, while Cu-Mo seems to be related to the I.P. low core, all suggestive of a large porphyry gold system.

Zelon has planned an exploration program based on precious metal stock-work delineation.

- Anomalous and weathered outcrops are to be drilled (5-10 feet),
- Blasting and trenching of ore grade material,
- Grid extension in high chargeability precious metal zones followed by mapping, sampling and geophysics.

Zelon would like to associate with a senior partner providing the funding to the property development. An evaluation report will assemble the data to start the drilling of all the precious metal zones. In assuring the role of initial operator, Zelon will provide, at competitive contract fees, personnel necessary to ensure quality work and a successful venture.



John H. Hajek
Exploration Manager



1946 ASSAY DATA

These samples have been taken along strike of the Charlie Vein. The sampling was done by Harry Warren. All visible gold was removed from the sample before it was sent for analysis. An assay plan is not known to exist.

The vein is 1 to 4 feet wide and 900 feet long of which 300 feet is well mineralized. Why sample widths are so narrow is a mystery.

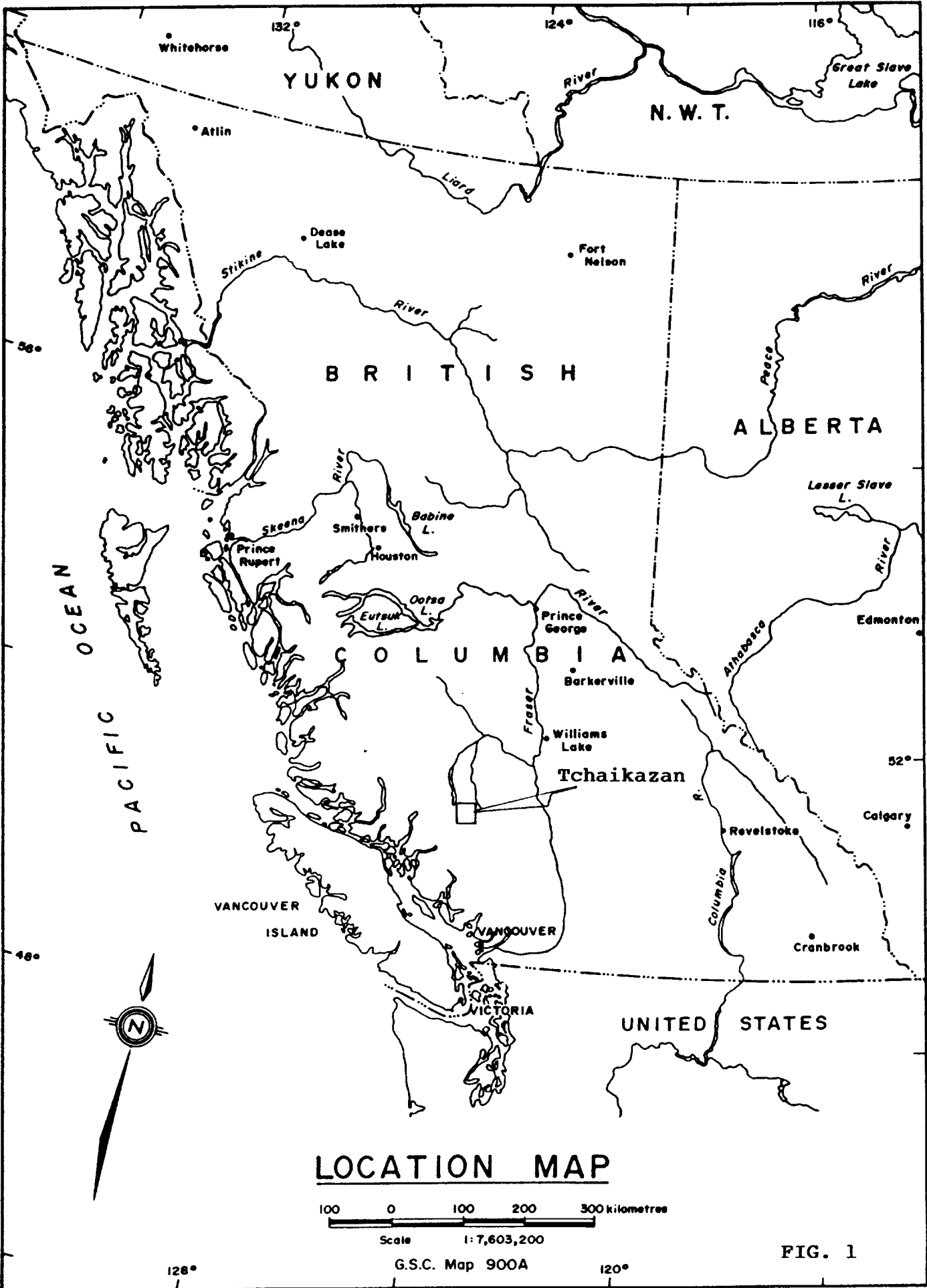
Sample No.	Width(inch)	Au(oz/t)	Au/3 feet	Ag(oz/t)	Ag/3 feet
No. 4	9.0	0.24	0.06	3.80	0.95
No. 5	2.0	1.00	0.06	11.00	0.61
No. 6	4.5	0.44	0.06	4.00	0.50
No. 7	6.0	0.42	0.07	4.80	0.80
No. 8	4.5	1.48	0.19	19.80	2.50
No. 9	3.0	1.80	0.15	26.70	2.22
No.10	6.0	0.56	0.09	6.00	1.00
No.32	3.5	2.00	0.19	16.80	1.63
No.11	6.0	0.52	0.09	5.10	0.85
No.17	5.0	3.56	0.49	26.50	3.68

These three samples have no widths given.

No.1951	0.83	11.50
No.1952	0.07	1.60
No.1953	0.94	10.00

1.	.DATE 25 JAN 83 14:14:02 RIO 12 25 JAN 83 PHAWK									
2.	*CHEMICAL LAB ASSAY REPORT FOR TCHAIKAZAN RIVER PROJECT LAB : LLL (TYPE F)									
3.	*RS.	PRJYR	.ROCK.	SAMPLE.	CU	.PB	.ZN	.V% .MOS2	.AU	.AG
4.	* . 1982 . .NUMBER.ASSAY .ASSAY .ASSAY .ASSAY .ASSAY .ASSAY .ASSAY .ASSAY OZ/TON for AVE AG									
5.	-----									
6.	80	00182L	AS0401	0.01						
7.	80	00182L	AS0402	1.92					0.000	0.64
8.	80	00182L	AS0408	4.69	0.01				0.000	0.02
9.		00182L	AS1001					.020		
10.		00182L	AS1002		.16	0.13				0.00
11.		00182L	AS1003		.16	0.09				0.00
12.		00182L	AS1004		0.05	0.04				0.00
13.		00182L	AS1005						0.000	0.14
14.		00182L	AS1006						0.000	0.10
15.		00182L	AS1007						0.000	0.16
16.		00182L	AS1008						0.002	0.12
17.		00182L	AS1009						0.000	0.12
18.		00182L	AS1010	1.57					0.000	10.22
19.		00182L	AS1011	2.05					0.000	2.05
20.		00182L	AS1012	2.97					0.000	0.52
21.		00182L	AS1015						0.000	0.08
22.		00182L	AS1016	0.00	0.01	0.01			0.000	0.06
23.		00182L	AS1017						0.000	0.12
24.		00182L	AS1020	0.06	0.31	0.09			0.000	1.20
25.		00182L	AS1021						0.000	0.12
26.		00182L	AS1023	0.02	0.14	0.01			0.392	3.23
27.		00182L	AS1026						0.000	0.24
28.		00182L	AS1027		0.01	0.01				0.00
29.		00182L	AS1028		0.01	0.01				0.00
30.		00182L	AS1029		0.01	0.01				0.00
31.		00182L	AS1030		0.01	0.01				0.00
32.		00182L	AS1031		0.02	0.07				0.00
33.		00182L	AS1032	2.05						
34.		00182L	AS1033	0.01					0.000	0.12
35.		00182L	AS1034	0.06					0.000	
36.		00182L	AS1035	0.00				0.000	0.000	0.26
37.		00182L	AS1036	0.23						
38.		00182L	AS1037		0.01	0.01			0.000	
39.		00182L	AS1038	0.00						
40.		00182L	AS1039	0.47						
41.		00182L	AS1040	0.00						
42.		00182L	AS1041	0.04						
43.		00182L	AS1042		0.01	0.01				0.00
44.		00182L	AS1043		0.02	0.01				0.00
45.		00182L	AS1046	0.01	0.01					0.00
46.		00182L	AS1047	0.00	0.01					0.00
47.		00182L	AS1048	0.01	0.01					0.00
48.		00182L	AS1049	0.00	0.01					0.00
49.		00182L	AS1050	0.00	0.01					0.00
50.		00182L	AS1051	0.00					0.000	0.14
51.		00182L	AS1052	21.38					0.054	140.02
52.		00182L	AS1053	1.32					0.000	4.98
53.		00182L	AS1054	0.30					0.000	1.32
54.		00182L	AS1055	0.02					0.000	0.08
55.		00182L	AS1056	0.12					0.006	0.32
56.		00182L	AS1057		0.01	0.01				0.00
57.		00182L	AS1059	0.00	0.01	0.00			0.000	0.22
58.		00182L	AS1059	0.04					0.000	0.02
59.		00182L	AS1060	0.00				0.009	0.000	0.08

1983	TCH	ROCK	ASSAYS	Cu	Pb	Zn	MoS ₂	Au	Ag	oz/ton for Au & Ag
60.	00182L	AS1061	0.C1				0.006	0.006	0.10	
61.	00182L	AS1062	0.C1				0.009	0.000	0.18	
62.	00182L	AS1063	0.C1				0.005	0.000	0.10	
63.	00182L	AS1064	0.C4				0.005	0.000	0.24	
64.	00182L	AS1065	0.D1				0.007	0.000	0.26	
65.	00182L	AS1066	0.25					0.178	1.44	
66.	00182L	AS1067						0.183	1.93	
67.	00182L	AS1068						1.002	0.48	
68.	00182L	AS1069	0.C3					0.000	0.14	
69.	00182L	AS1070	0.C1					0.000	0.36	
70.	00182L	AS1071	0.C1							
71.	00182L	AS1072	0.C1							
72.	00182L	AS1073	0.10				0.026			
73.	00182L	AS1074	0.C7				0.005			
74.	00182L	AS1075	0.C0				0.003			
75.	00182L	AS1076	0.00				0.007	0.000	0.04	
76.	00182L	AS1077	0.C3				0.005	0.000	0.04	
77.	00182L	AS1079	0.C1				0.004	0.000	0.18	
78.	00182L	AS1079	0.C0				0.003	0.000	0.04	
79.	00182L	AS1080	0.C1	0.01	0.01		0.002			
80.	00182L	AS1081	0.C3				0.006	0.000	0.06	
81.	00182L	AS1082	2.89				0.002	0.000	0.04	
82.	00182L	AS1083	0.08				0.002	0.000	0.06	
83.	00182L	AS1084	0.10					0.184	2.12	
84.	00182L	AS1086	0.18					0.060	0.62	
85.	00182L	AS1087	0.C2							
86.	00182L	AS1088	0.C1	0.01	0.01			0.000	0.16	
87.	00182L	AS1089	2.71					0.000	1.12	
88.	00182L	AS1090	0.19							
89.	00182L	AS1091	0.29					0.000	0.34	
90.	00182L	AS1092	3.95					0.000	1.02	
91.	00182L	AS1093	1.32					0.000	1.32	
92.	00182L	AS1094	0.C5					0.000	0.05	
93.	00182L	AS1095	0.29					0.000	0.26	
94.	00182L	AS1096	9.41					0.020	2.34	
95.	00182L	AS1097	3.58					0.000	0.78	
96.	00182L	AS1098	0.31					0.000	0.32	
97.	00182L	AS1099						0.000		
98.	00182L	AS1100	1.26					0.000	0.70	
99.	00182L	AS1201	0.16					0.000	0.04	
100.	00182L	AS1202	0.42					0.044	0.04	
101.	00182L	AS1203	9.40					0.000	2.40	
102.	00182L	AS1204	0.07					0.000	0.02	
103.	00182L	AS1205	13.68					0.342	9.00	
104.	00182L	AS1206	0.C7					0.000	1.52	
105.	00182L	AS1207	0.05					0.000	0.16	
106.	00182L	AS1208	0.C1					0.000	0.31	
107.	00182L	AS1209	1.56					0.146	4.61	
108.	00182L	AS1210	0.C2					0.542	2.74	
109.	00182L	AS1211	1.C4					0.002	2.02	
110.	00182L	AS1212	0.C2					0.044	0.32	
111.	00182L	AS1213	0.C1					0.018	0.52	
112.	00182L	AS1214	0.59					0.020	0.86	
113.	00182L	AS1215	0.49					0.014	0.16	
114.	00182L	AS1216	0.64					0.018	0.12	
115.	00182L	AS1217	12.25					0.024	28.64	
116.	00182L	AS1218	0.C8					0.000	0.14	
117.	00182L	AS1219	0.08					0.000	1.38	
118.	00182L	AS1220	0.43					0.000	10.72	



LOCATION MAP

100 0 100 200 300 kilometres

Scale 1:7,603,200

G.S.C. Map 900A

FIG. 1