ARIS SUMMARY SHEET

District Geologist, Kamloops

Off Confidential: 89.06.15

ASSESSMENT REPORT 17788

MINING DIVISION: Kamloops

PROPERTY: Beaton

LOCATION: LAT 50 40 00 LONG 120 36 30
UTM 10 5615268 669017
NTS 092I10E

CLAIM(S): Beaton 2

OPERATOR(S): Boitard, C.

AUTHOR(S): LaRue, J.P.

REPORT YEAR: 1988, 26 Pages

COMMODITIES SEARCHED FOR: Copper

GEOLOGICAL SUMMARY: The claim area is underlain by Nicola volcanic rocks of Triassic age and Kamloops Group volcanics of Tertiary age. These rocks have potential for copper mineralization.

WORK DONE: Prospecting
LINE 17.0 km
PROS 400.0 ha
Map(s) - 2; Scale(s) - 1:5000

Geophysical Report

on a

Induced Polarization Survey

conducted on the

BEATON CLAIM GROUP

NTS 921/10

Lat. 50° 40' N Long. 120° 37' W

Owned by

Vic Doucet

Operated by

Charles Boitard

Author:

John P. LaRue

August 5, 1988

Lillooet, B.C.

TABLE OF CONTENTS

ILLUSTRATIONS

INTRODUCTION

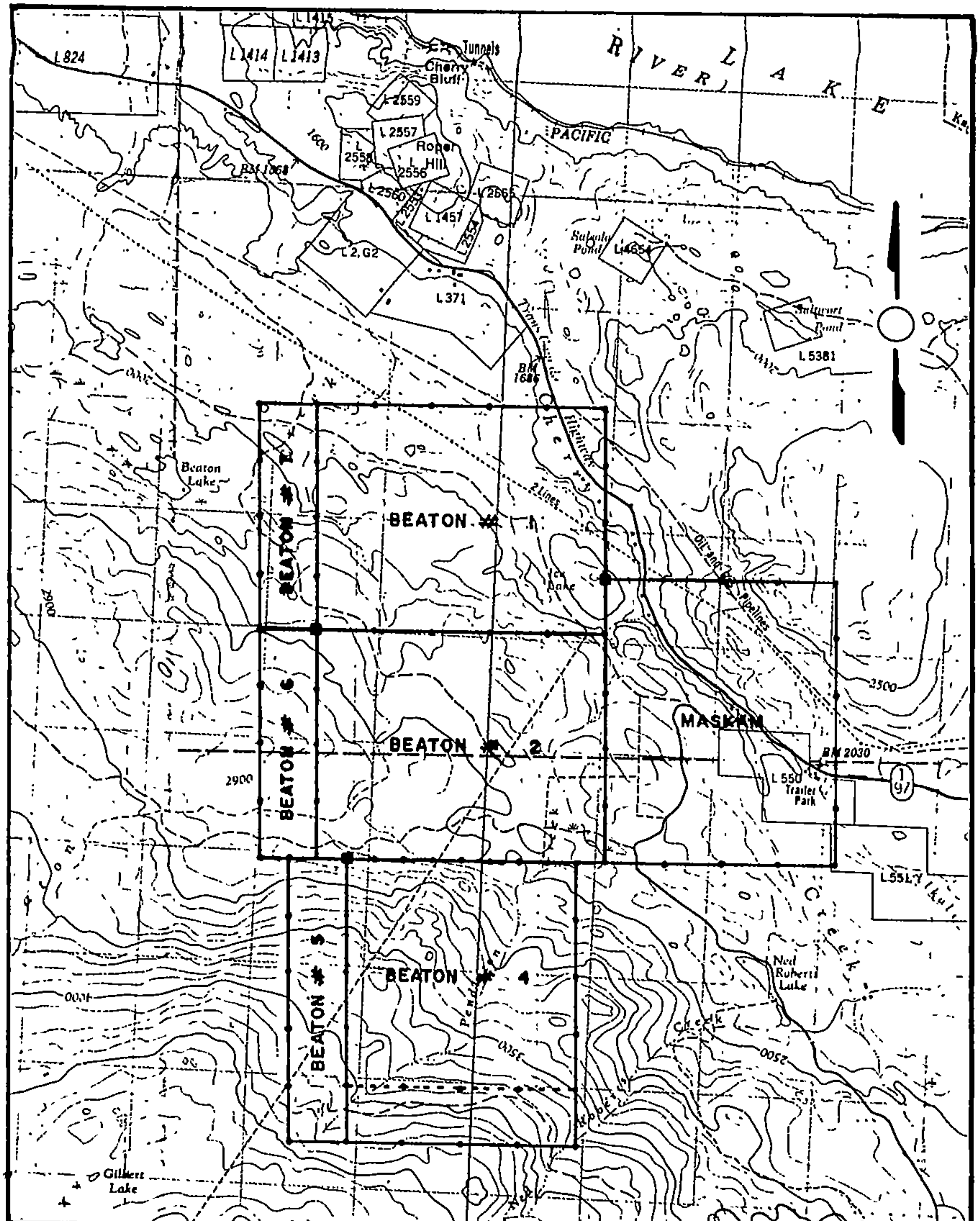
(i) The BEATON, MASKAM Mineral Claims, known as the Beaton Group are located in the Kamloops Mining Division, 50° 40' N. latitude and 120° 37' W. longitude, south of Kamloops Lake, west of Afton Mine (fig. 1 and 2).

The property lies at an elevation of 600 to 1200 meters and about 16 kilometers due west of the town of Kamloops, in central British Columbia, approximately 410 km. from Vancouver.

The northern part of the claims is cross by the Trans Canada Highway. The center of the property is accessable by a network of many good quality dirt roads (fig. 6).

The lower part of the property is covered by open pasture, while a moderate to thin vegetation of jackpine and spruce covers the higher level. A few small lakes exist in the area; the property is drained by Beaton Creek, Pendleton Creek and Cherry Creek, which should provide sufficient water for exploration.

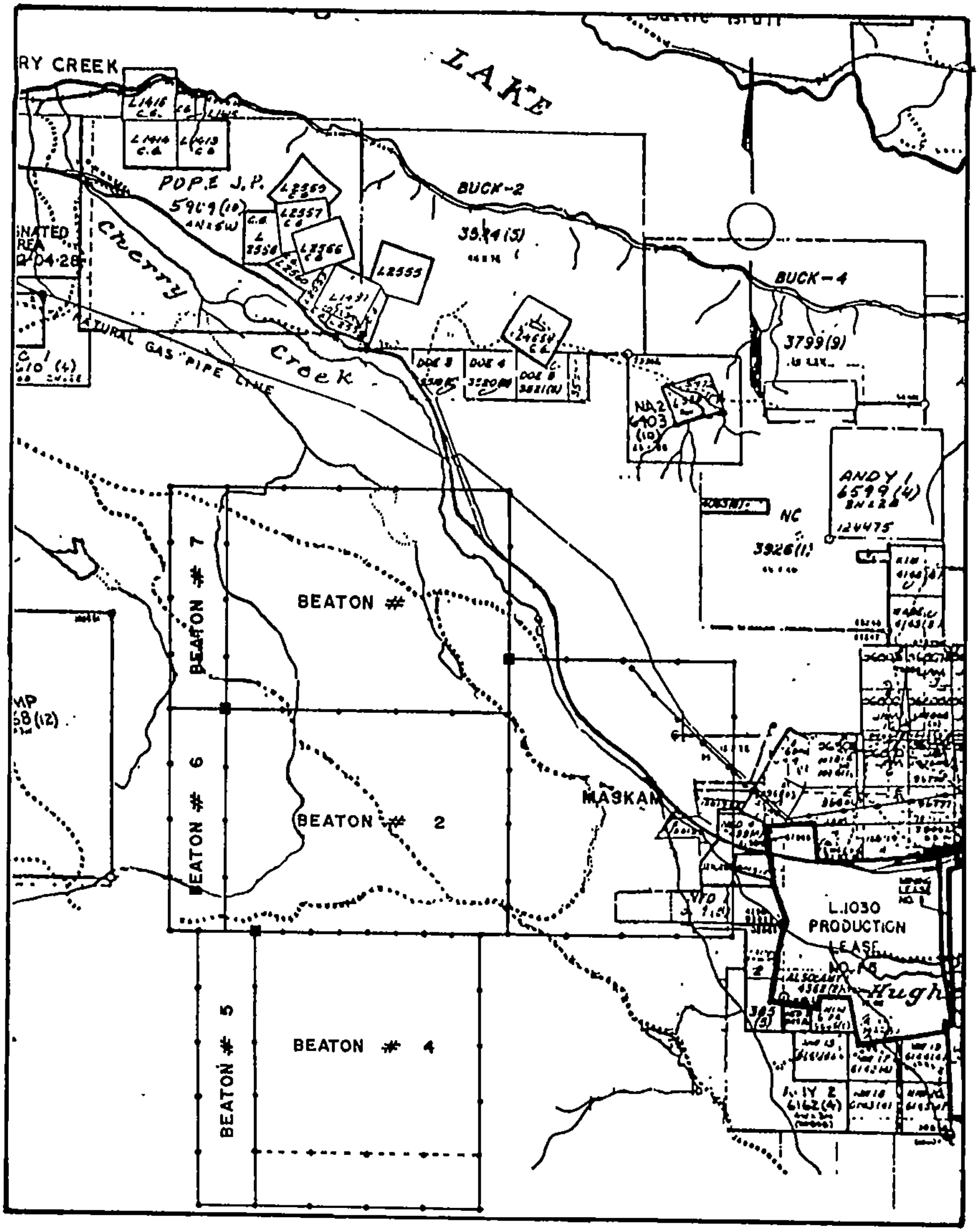
The climate is semi-arid with annual rainfall varying from 20 to 25 cm. Temperatures vary from the highest extreme in the summer of +40°C. to a low temperature in the winter of approximately -30°C.



Location Map

1 = 50 000

0 500 1000 M



Claim Map

Kamloops M. D.

0 500 1000 M

N.T.S. 92 — I/10 Fig. 2

(ii) The BEATON GROUP consists of 7 mineral claims:

Name of Claim	Record #	Units	Expiry Date
Beaton #1	7117	20	June 15/88
Beaton #2	7118	20	June 15/88
Beaton #4	7518	20	Mar. 8/89
Beaton #5	7519	5	Mar. 8/89
Beaton #6	7516	4	Mar. 8/89
Beaton #7	7517	4	Mar. 8/89
Maskam	7515	20	Mar. 8/89
		93	

It is expected that acceptance of this report will extend the expiry date by 3 years.

The BEATON GROUP of claims are owned by Vic Doucet of Kamloops, B.C. and operated by Charles Boitard of Vancouver, B.C.

The following excerpts are taken from the <u>Geological Report by R.W. Phendler, B.Sc. P. Eng. (1972) on the T.T. Claims</u> (approximately the same area covered by the Beaton #1 and Beaton #2)(fig. 4).

"<u>GEOLOGY AND MINERALIZATION</u>

The area in which the TT Claim Groups are located is underlain by Nicola volcanic rocks of Triassic age intruded by a small monzonite porphyry plug of the Coast Intrusions of Jurassic Age. Overlying these formations in part and masking their relationship along the contact areas are relatively fresh agglomerates and porphyrytic basalts and andesites belonging to the Kamloops group of Tertiary age.

The Nicola volcanics vary from fine - grained nearly aphanitic to coarsley porphyrytic. They are predominantly green but also occur in various shades of purple, red, brown or grey. They are chiefly andesites but include basaltic types as well as porphyrytic rhyolites. the more tuffaceous andesites are often chloritized with epidote and calcite. Minor amounts of sedimentary rocks are associated with the volcanic members.

Coart intrusions of Jurassic age, consist of syenite, monzonite, diorite and gabbro and are intrusive into the Nicola volcanics. In the vicinity of Kamloops, plutonic rocks of this type form a small but important body that is referred to as the Iron Mask batholith. The main exposure is 12 miles long and 2½ miles wide, the direction of elongation paralleling the strike of the enclosing rocks (northwest). Several later porphyry stocks intrude the batholith, among these are the Cherry Creek intrusions which are found along the east and north margins of the batholith and are typified by a pinkish to orange cast imparted to it by the widespread introduction of potash feldspar. These rocks range from fine grained phases of latite or monzonite porphyry to angular fragments of plutonic rocks set in a highly altered matrix. It is the former which is believed to exist on the northwest portion of the TT Claims.

A few miles to the west in the vicinity of Sugarloaf Hill is a promontory of microdiorite porphyry.

It has been observed by Dr. J.M. Carr (Minister of Mines, B.C., 1956, pages 47-54) that the Cherry Creek and Sugaroaf intrusive rocks are almost totally restricted to the east and west margins of the Iron Mask batholith and in each locality copper mineralization has been found assiciated with these intrusions.

On the northern part of the TT Claims the Cherry Creek intrusive plug disappears below the later overlying Kamloops group. This formation covers the contact between the intrusive and the Nicola andesites, which is considered to be favourable for the occurrence of copper mineralization.

The volcanic rocks of the Kamloops group are widely distributed in the region but except in the northern part close to Kamloops Lake their areal extent is relatively small. They are comprised of rhyolite, trachyte, andesite and basalt, are usually massive and fine grained but are locally porphyrytic. Occassionally they are so coarse grained as to resemble plutonic rocks. Agglomerates and breccias are also common

In places the distinction between Nicola and Kamloops volcanics is often difficult to determine in the fields, but in general, the Kamloops rocks are fresher, lack alteration and are decidely less magnetic than the Nicola volcanics.

Copper mineralization is found around the periphery of the Iron Mask batholith with minor amounts in the central part. Many deposits are situated in the batholithic rocks and some in the intruded Nicola rocks at the borders of the intrusive complex. They are impregnations, veins stockworks and mineralized shear zones and some of the disseminated impregnations appear to have no solution channels. The principal minerals are chalcopyrite and bornite with some chalcocite, native copper, cuprite, azurite and malachite. Chrysocolla, galena and molybdenite have also been reported in the area. Magnetite and pyrite are both common and occur as lenses, veins or as fine disseminations. Gold and silver values are generally low but a few deposits in the Iron Mask area carry good values.

On the Afton property the preferred host rock for copper mineralization appears to be fine to medium grained syenite and altered dioritic rocks; however, some native copper has been indentified in picrite basalts which are lens-like intrusions that appear to occur mainly on the east and west margins of the batholith along pre-existing lines of weakness at the contacts with the Nicola volcanics.

Alteration is moderate to intense and the rocks are badly shattered and fractured as a result of repeated faulting. Chalcopyrite appears to be the predominant copper mineral, although significant amounts of chalcocite and native copper have been observed in drill core. Secondary copper is very rare. It is reported that the principal mineral zones strike E.W. or slightly north of west.

The area is underlain by Kamloops volcanics between Sugarloaf Hill and Cherry Bluff probably is underlain at depth by intrusive rocks of the Cherry Creek group. These rocks are closely related to copper mineralization and at several localities they are extensively mineralized. They are not known to cut Kamloops volcanics, which contain no copper mineralization of any consequence.

In Carr's discussion of the structural setting of the Iron Mask batholith he pointed out the existence of at least three major zones of recurring fractures, along the northeast, north and southwest margin.

The distribution of the favourable Cherry Creek and

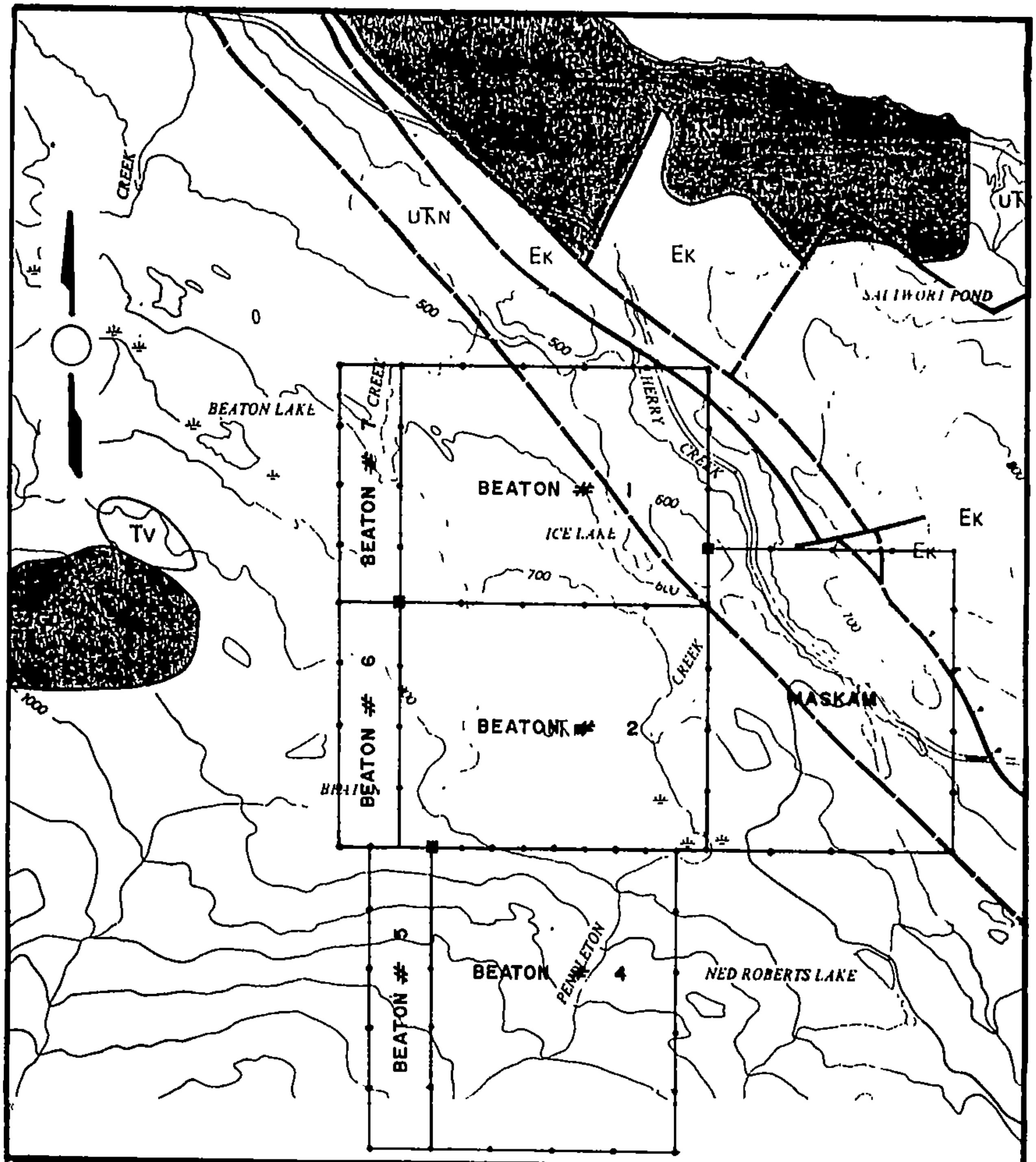
Sugarloaf intrusive rocks is almost totally restricted to these zones and suggests that these zones were the loci of recurring structural and igneous activity.

From this it can be said that the area underlain by Kamloops volcanics along the strike extension of the margins of the Iron Mask batholithic complex has good possibilities of containing copper mineralization".

The Tertiary Volcanics of the Kamloops group are the younger rocks on the property. They occur in the northeast section of the Beaton #1 and Maskam Claims. The geological map compiled by Y.T. Kwong shows a major fault paralleling the Kamloops and the Iron Mask intrusion crossing Beaton #1 and the Maskam Mineral Claims (fig. 3).

HISTORY

The mineral deposits of the Kamloops area include several types and occur at widely scattered points. Deposits of gold, silver, lead, zinc, copper, mercury, tungsten and iron as well as industrial minerals and coal have been discovered. Some of these are among the earliest lode discoveries of British Columbia, having been found as early as 1882.



UPPER TRIASSIC

UTKN — NICOLA GROUP Meta basalt andesite tuff and uncommon argillite

INTRUSIVE ROCKS

JURASSIC

JGD — WILD HORSE BATHOLITH NICOLA BATHOLITH AND SIMILAR GRANITIC ROCKS granodiorite quartz monzonite

UPPER TRIASSIC TO LOWER JURASSIC

TKJGD — Granodiorite similar to rocks of the Guichon Creek batholith

IRON MASK BATHOLITH AND SIMILAR ALKALINE INTRUSIONS

TKJIM5 — CHERRY CREEK UNIT diorite monzonite syenite porphyritic and fine-grained varieties common

TKJIM4 — SUGARLOAF UNIT porphyritic hornblende - augite microdiorite and minor andesitic dykes

TKJIM3 — PICRITE UNIT basaltic dykes and lenses with abundant serpentinized olivine and clinopyroxene probably non batholithic

TKJIM2 — POTHOOK UNIT medium to coarse grained diorite and gabbro

TKJIM1 — IRON MASK HYBRID UNIT agmatite commonly with about eighty per cent by volume of diorite gabbro and hornblendite fragments in a fine-grained dioritic matrix

Geology Of The Iron Mask Batholith

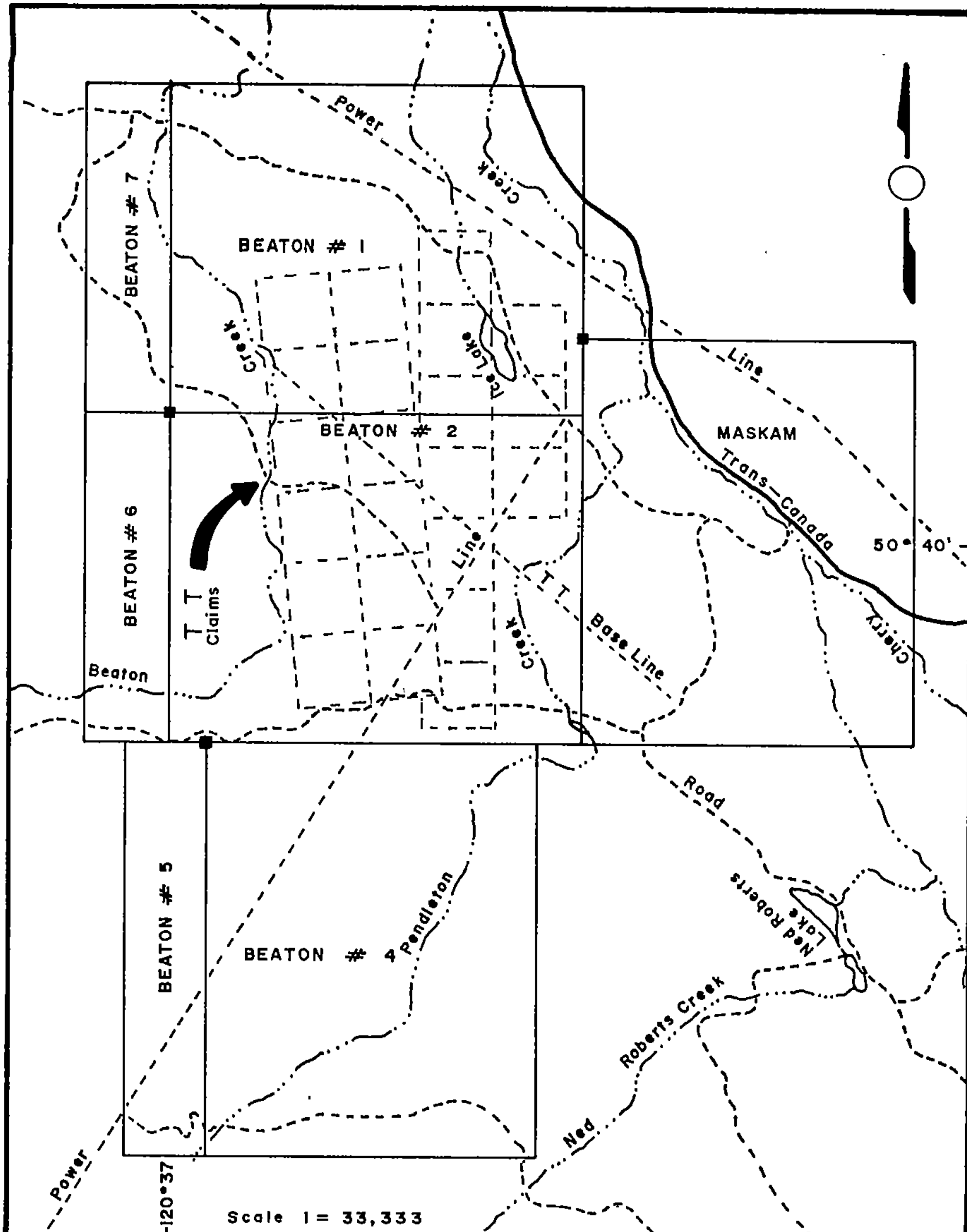
By Y. T. KWONG

Bulletin 77

0 500 1000 M

Scale 1 = 50 000

N. T. S. 92—I/10 Fig. 3



Approximate Location Of The T T Claims

0 500 1000 m

Property East Side; more recently, Afton Mine adjoining the east side of the Maskam Claim had a proven reserve of 36 million tons grading 0.66% CU. Discovered in 1972, the Afton deposit is at present time almost mined out.

Property West Side; the Pothook shaft located approximately 1.5 km. due west of the Beaton #4 and Beaton #5 L.C.P. was sunk the depth of 22 m. in 1899. It is suggested that a small high grading operation yielded a few wagon loads of hand-cobbed copper ore with nominal gold values prior to 1935. In 1983 a diamond drill hole to section a shear zone, spotted by C.T. Pasieka, P. Eng., 10 m. S.W. of the collar of the shaft, striking 340° drilled at minus 50° to the depth of 31 m. returned a one meter quartz vein at 12.72 m., and another three meter quartz vein at 21.6 m., which contained disseminated sulphides of sub-commercial values (CU .02%, AU .001 oz/ton, AG .002 oz/ton).

A Geophysical Report on a Magnetic Survey carried out on the TT Claim Group by Howard A. Larson, and David G. Mark, Geophysicists (1972) stated following conclusions:

"Because of the highly variable results, it is difficult to ascertain whether the magnetometer has reflected any faults or shear zones, unless the Ice Lake Valley is a shear zone. It is possible also that some of the long linear anomalies in the southwestern area are reflecting faults, though, perhaps it would be more correct to say the magnetometer is reflecting terrain caused by faults".

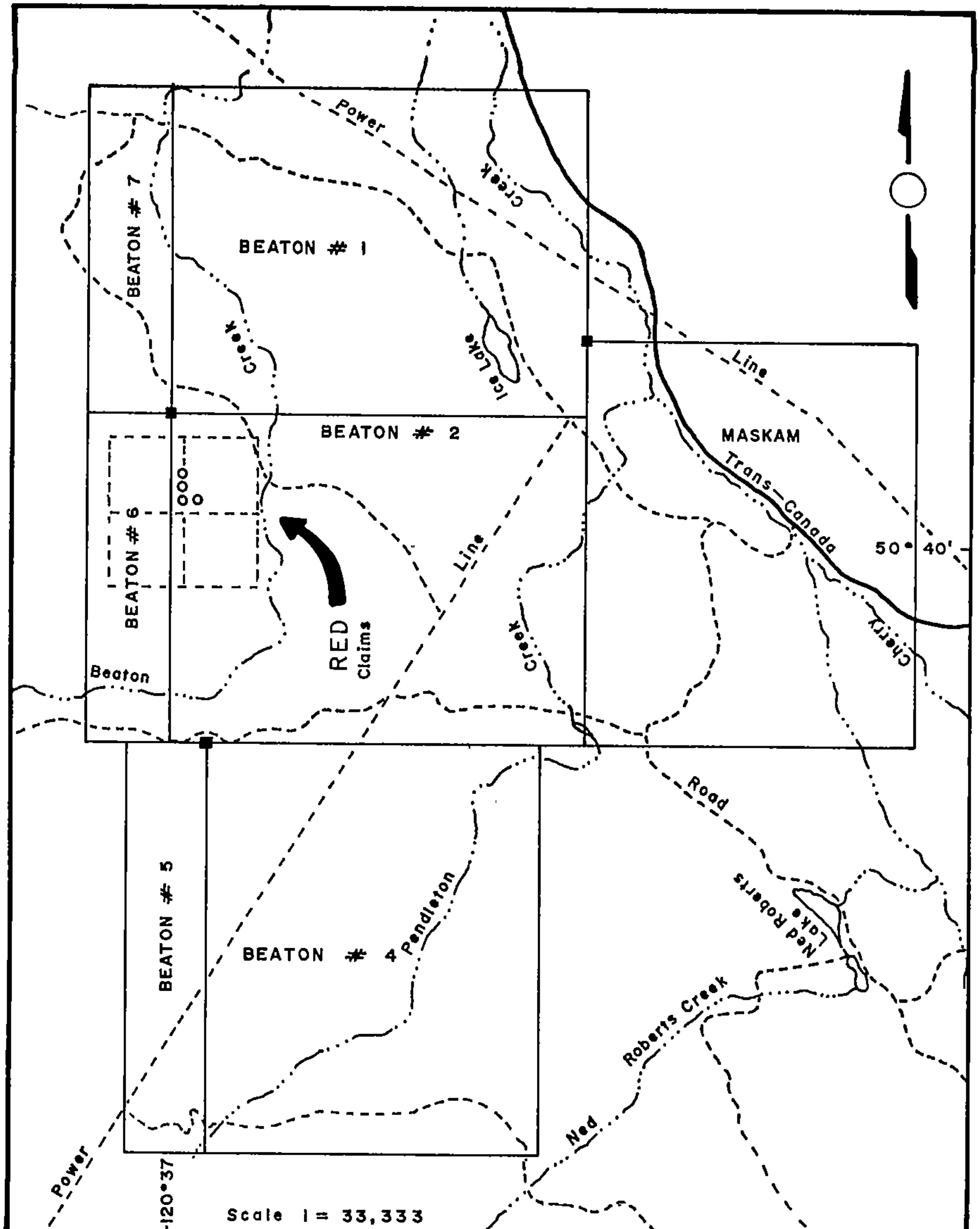
The following excerpt was taken from a report on an I.P. Survey carried out north of the TT Claim Group Base Line, by Glen E. White, B.Sc. Geophysicist (1972) "the induced polarization survey data was then correlated with groubd magnetometer and geological survey and then concluded the following recommendations: It is recommended that the principle induced polarization anomaly delineated by this survey be investigated by diamond drilling. It is felt that a hole collard at 12E - 21+50N and drilled at a steep angle 70 - 80^{o} to the N for a length of some 500 feet, would effectively evaluate the chargeability anomaly". (This anomaly is located northwest of Ice Lake, and to the best of the Author's knowledge, the diamond drill hole was never drilled).

Four percussion holes were drilled in 1981 by C.T. Pasieka, P. Eng. to the depth of 230-350 feet on the Red Claims, which is now the northwest of the Beaton #2 Claim. The chemical analysis of drill cuttings did not reveal any copper values of any economic significance, only minor amounts of magnitite and finely disseminated pyrite, and on occasion chalcopyrite was observed, however in quantities only sufficient for positive identification. (fig. 5)

(iii) A summary of work performed on the Beaton Group for assessment purposes during the period March 8 to July 30, 1988 is as follows:

17 km. of grid and base line was established with a compass and hip chain. The lines were blazed and cut where needed, and flagged at 50 meter intervals.
15 km. of Induced Polarization Survey was carried out on Lines 200S, 400S, 600S, 800S, 1000S, 1200S, 1300S, 1400S, 1500S and 1600S for a total of 193 I.P. readings.

(iv) Work for assessment purposes was completed on the Beaton #2 Mineral Claim (fig. 6).



Approximate Location Of The Red Claims

0 500 1000 M

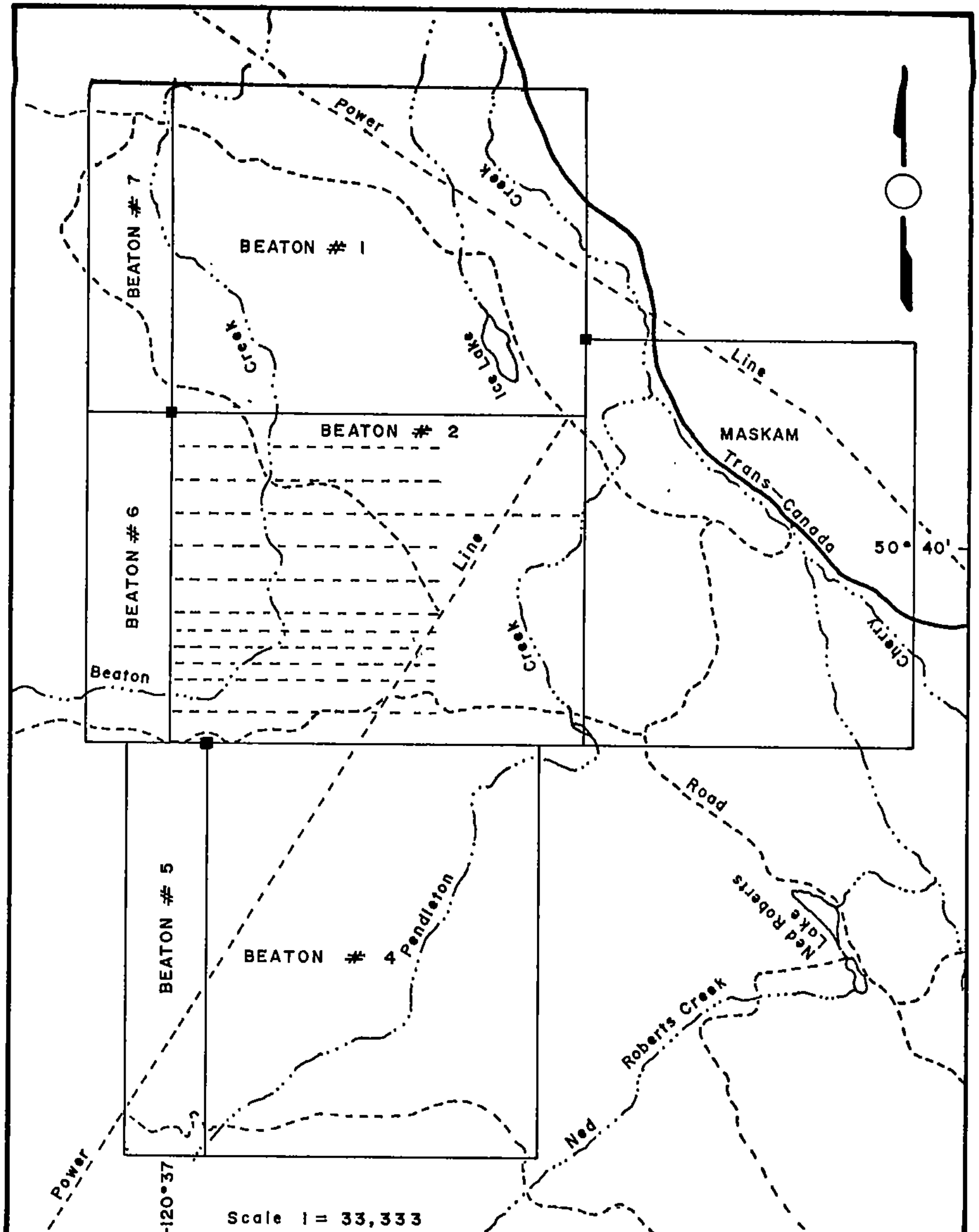
N.T.S. 92—I/10 Fig. 5

DETAILED TECHNICAL DATA AND INTERPRETATION

17 km. of survey lines and base line were established with a hip chain and compass on the Beaton #2 Claim. The base line starts at the Beaton #1,#2,#6, and #7 L.C.P. in the north-south direction. The survey lines are in a perpendicular direction east-west, the lines were cut, blazed and the survey stations flagged at 50 meter intervals.(fig. 6)

A total of 15 km. of Induced Polarization Survey was completed on the Beaton #2 Mineral Claim. 115 readings were taken at 100 meter intervals on Lines 200S, 400S, 600S, 800S, 1000S, 1200S and 1600S. 53 readings were taken between the 100 meter readings on the above line on each side of Beaton Creek (as the creek may be a north-south fault). An additional 25 readings were taken at 50 meter intervals on lines 1300S and 1500S for a total of 193 readings.
All readings were taken with a dipole-dipole array of 100 meter separation between the transmitter and receiver n=1.

The purpose of the Induced Polarization Survey was to locate fracture filling or disseminated sulphides which could mean locating pyritization associated with economic sulphide mineralization (fig. 7 and fig. 8).



Beaton Group

Survey Location

0 500 1000 M

Kamloops M. D.

N. T. S. 92—I/10 Fig. 6

The following notes on the theory and method of field operation for the Induced Polarization method are taken from context of a geophysical report completed for McPhar Geophysics by Phillip G. Hallof, Ph.D. (Geophysics)

"Induced Polarization as a geophysical measurement refers to the blocking action or polarization of metallic or electronic conductors in a medium or ionic solution conduction. This electrochemical phenomenon occurs wherever electrical current is passed through an area which contains metallic minerals such as base metal sulphides. Normally when current is passed through ground, as in resistivity measurements, all of the conductions takes place through ions present in the water content or the rock, or soil, i.e. by ionic conduction. This is because almost all minerals have a much higher specific resistivity than water.

The group of minerals commonly described as 'metallic' however, have specific resistivities much lower than ground waters.

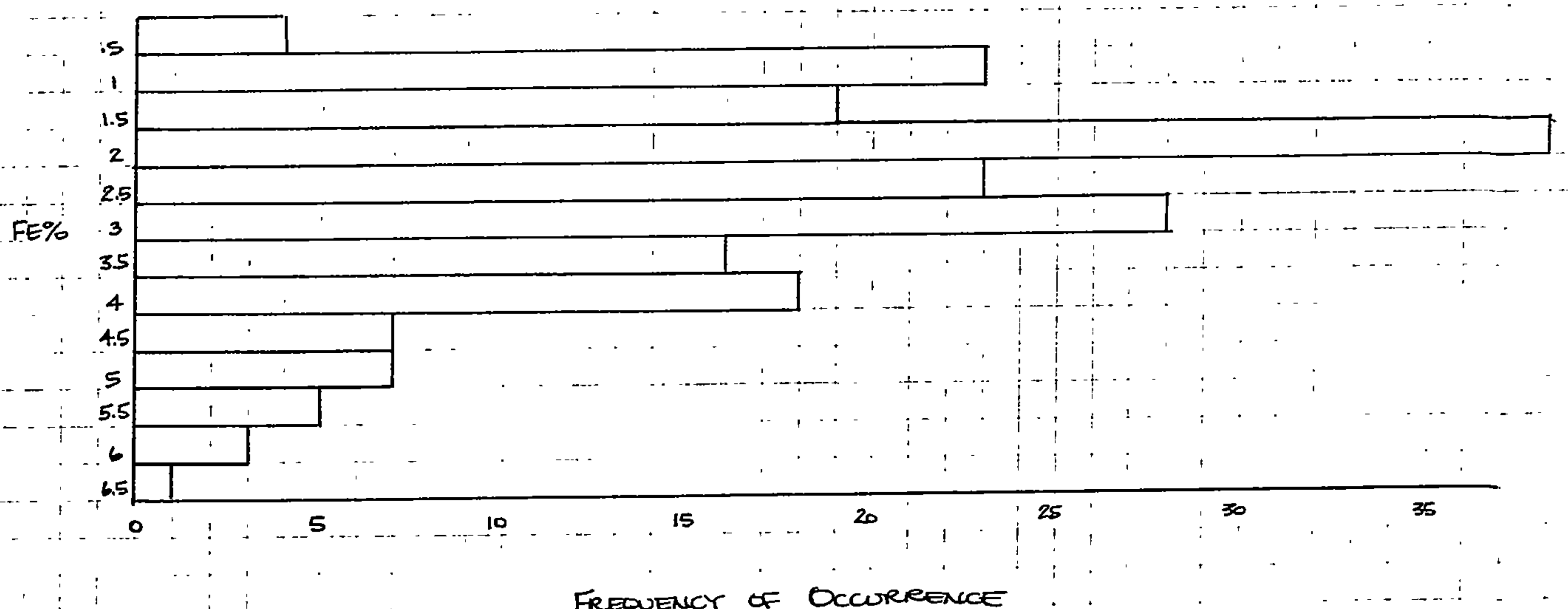
The Induced Polarization effect takes place at those interfaces where the mode of conduction changes from ionic in the solutions filling the interstices of the rock to electronic in the metallic minerals present in the rock. The blocking action or induced polarization mentioned above, which depends upon the chemical energies necessary to allow the ions to give up or receive electrons from the metallic surface, increases with the time that a d.c. current is allowed to flow through the rock; i.e. as ions pile up against the metallic interface the resistance to current flow increases. Eventually, there is enough polarization in the form of excess ions at the interfaces, to appreciably reduce the amount of current flow through the metallic particle. This polarization takes place at each of the infinite number of solution-metal interfaces in a mineralized rock... when the d.c. voltage used to create this d.c. current flow is cut off, the Coulomb forces between the charged ions forming the polarization cause them to return to their normal position.

SUMMARY

A detailed technical interpretation and evaluation of the data generated in the 1987-1988 I.P. Survey would be premature at this time, and would logically preclude additional mapping and surveying.

The data is presented in a contoured form on separate maps; one for FE% and the other for Apparent Resistivity. Several observations may be drawn from the data gathered thus far. A Histogram was prepared for the FE% values, to assist in evaluating the data, as the property has yet to be comprehensively mapped to provide a base with which to compare the I.P. readings. Utilizing the histogram, a cutoff of 4% Frequency Effect would delineate a north-northeasterly anomaly ranging through the survey area from Line 1600S + 500E through Line 200S + 1100E. Several readings of 5-6%FE were obtained within this anomaly. It May be noted that background readings dip as low as .5FE%

BEATON # 2 I.P. SURVEY
HISTOGRAM FOR FE% READINGS
TOTAL 193 READINGS
n = 1 = 100 M. MARCH 1988



with the average 2-3%. It is not possible to relate the resistivity readings to the FE% data at this time. It is interesting to note a possible correlation between the 6.5%FE at Line 600S + 550E and an apparent resistivity low on the same spot.

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Malaspina College

Director / Dean

Registrar

Instructor

Detailed costs and expenses incurred during the year 1988 on the BEATON GROUP, Kamloops Mining Division:

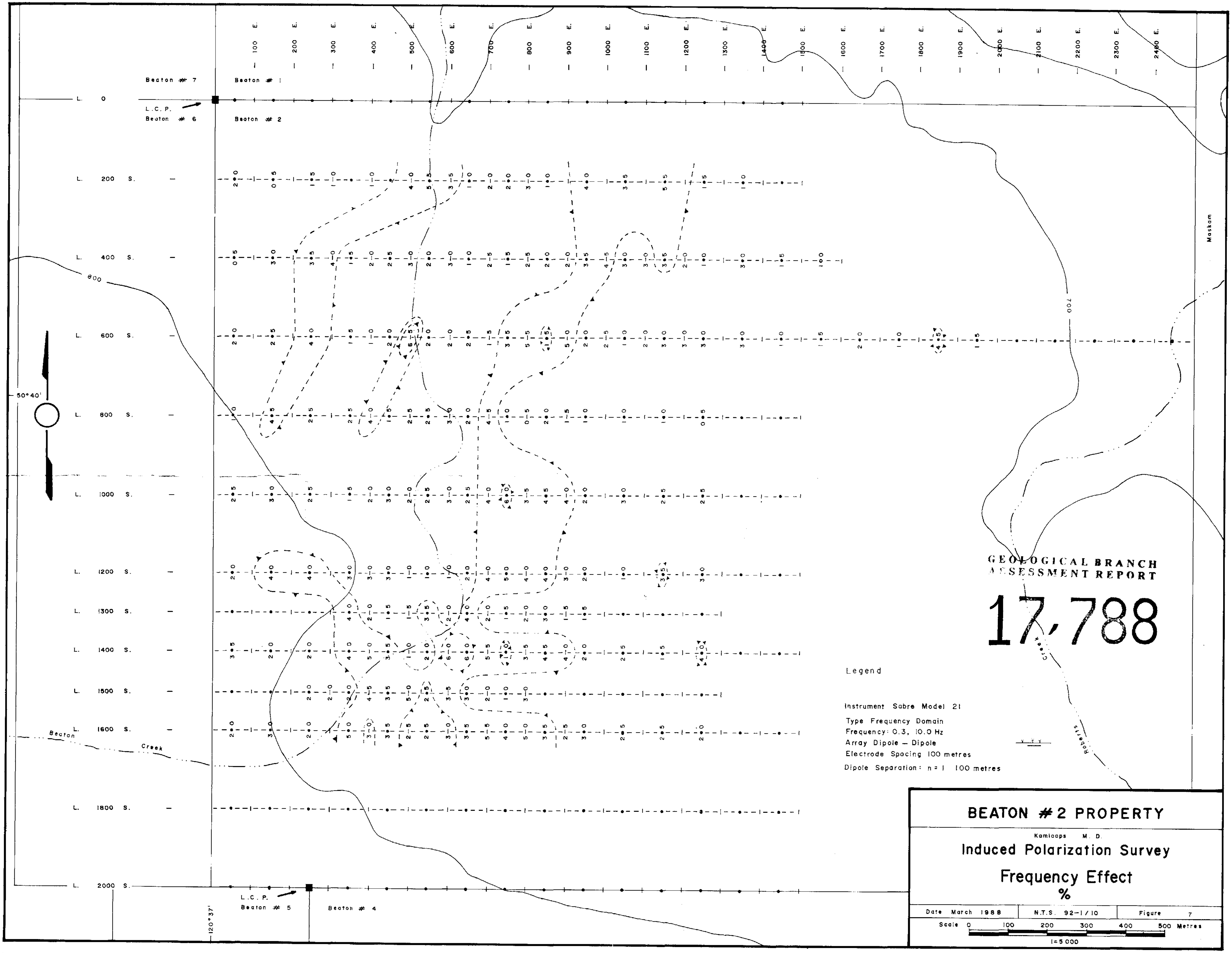
17 km of line cutting 193 I.P. readings, at 50 meter intervals and 100 meter intervals Dipole-dipole array 100 m 15 km of I.P. Survey and line cutting at $18.00 per km. all inclusive	$27,000.00
Drafting and copies	1,900.00
Report and research	1,500.00
Typing	250.00
	$30,650.00

Respectfully submitted,

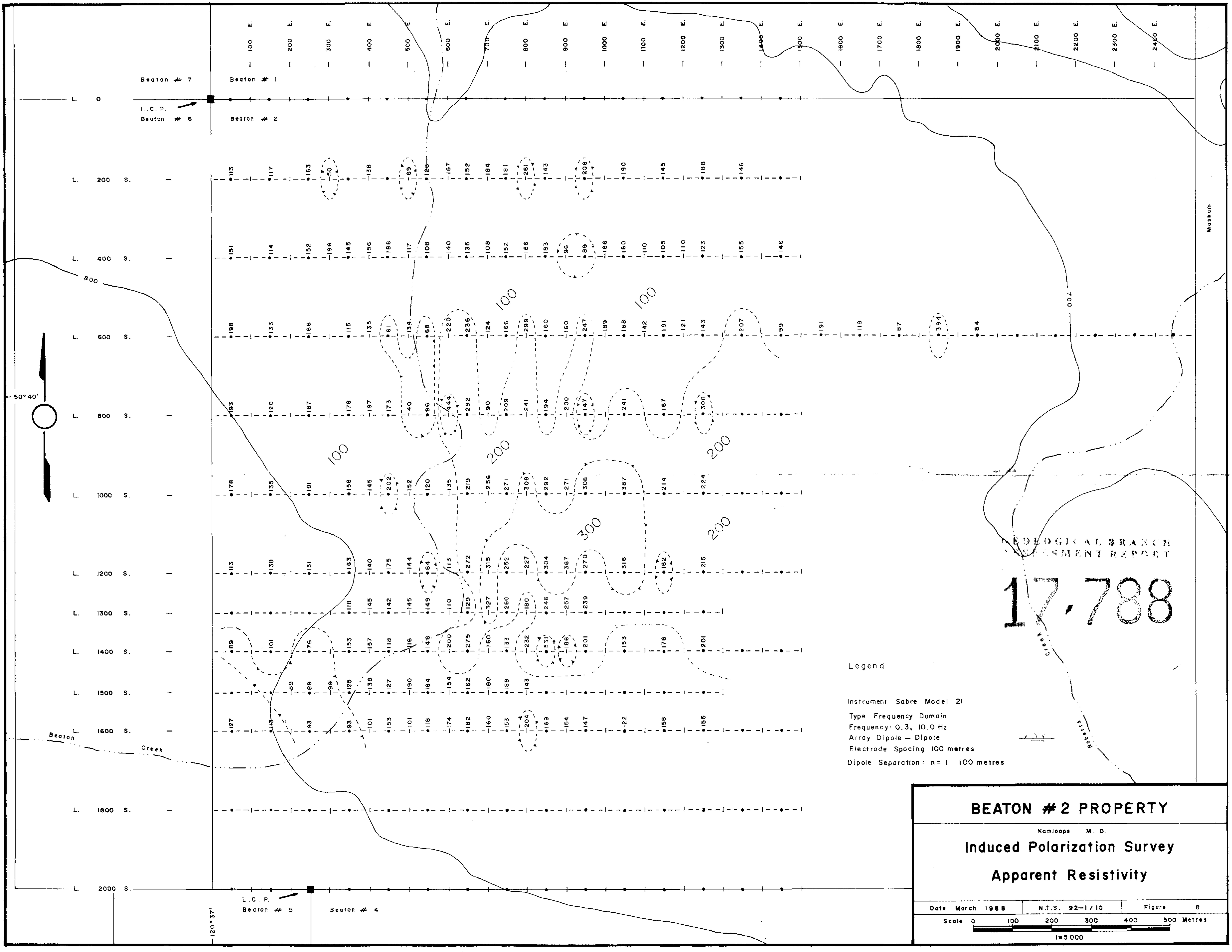
Charles Boitard

REFERENCES

Phendler, R.W.	(1972)	Report on the Jam and TT Claim Groups Kamloops, B.C. for Bow River Resources.
White, G.E.	(1972)	Geophysical Report on an Induced Polarization Survey, for Bow River Resources.
Mark, D.G.	(1972)	Geophysical Report on a Magnetic Survey for Bow River Resources on The TT Claim Group.
Pasieka, C.T.	(1981)	Report on a Percussion Drilling Program on the Red Claims, for Black Mist Resources Inc.
Pasieka, C.T.	(1983)	Report on the Diamond Drilling and Sampling Program on the Akila Claim for De Baca Resources Inc.



BEATON #2 PROPERTY
Kamloops M. D.
Induced Polarization Survey
Frequency Effect
%
Date March 1988
N.T.S. 92-I/10
Figure 7
Scale 0 100 200 300 400 500 Metres
1=5000
Legend
Instrument Sabre Model 21
Type Frequency Domain
Frequency: 0.3, 10.0 Hz
Array Dipole – Dipole
Electrode Spacing 100 metres
Dipole Separation: n = 1 100 metres
GEOLOGICAL BRANCH
ASSESSMENT REPORT
17,788
Beaton # 7
Beaton # 1
Beaton # 6
Beaton # 2
Beaton # 5
Beaton # 4
L.C.P.
Beaton Creek
Roberts Creek
Maskam
50°40'
120°37'
800
700
L. 0
L. 200 S.
L. 400 S.
L. 600 S.
L. 800 S.
L. 1000 S.
L. 1200 S.
L. 1300 S.
L. 1400 S.
L. 1500 S.
L. 1600 S.
L. 1800 S.
L. 2000 S.
100 E. 200 E. 300 E. 400 E. 500 E. 600 E. 700 E. 800 E. 900 E. 1000 E. 1100 E. 1200 E. 1300 E. 1400 E. 1500 E. 1600 E. 1700 E. 1800 E. 1900 E. 2000 E. 2100 E. 2200 E. 2300 E. 2400 E.



Beaton # 7
Beaton # 1
L.C.P.
Beaton # 6
Beaton # 2
L. 0
L. 200 S.
L. 400 S.
L. 600 S.
L. 800 S.
L. 1000 S.
L. 1200 S.
L. 1300 S.
L. 1400 S.
L. 1500 S.
L. 1600 S.
L. 1800 S.
L. 2000 S.
100 E. 200 E. 300 E. 400 E. 500 E. 600 E. 700 E. 800 E. 900 E. 1000 E. 1100 E. 1200 E. 1300 E. 1400 E. 1500 E. 1600 E. 1700 E. 1800 E. 1900 E. 2000 E. 2100 E. 2200 E. 2300 E. 2400 E.
50°40'
120°37'
800
700
Beaton Creek
Roberts Creek
Moskam
100
200
300
L.C.P.
Beaton # 5
Beaton # 4
GEOLOGICAL BRANCH
ASSESSMENT REPORT
17,788
Legend
Instrument Sabre Model 21
Type Frequency Domain
Frequency: 0.3, 10.0 Hz
Array Dipole – Dipole
Electrode Spacing 100 metres
Dipole Separation: n = 1 100 metres
BEATON # 2 PROPERTY
Kamloops M. D.
Induced Polarization Survey
Apparent Resistivity
Date March 1988
N.T.S. 92-I/10
Figure 8
Scale 0 100 200 300 400 500 Metres
1=5000