646

GEOLOGICAL, GEOPHYSICAL & GEOCHEMICAL REPORT
ON THE
B. J. I - IV GROUPS M.C.'s B. J. 1 - 130

52° 121° N. W.
MASTODON-HIGHLAND BELL MINES LTD.

June 30th, 1965

W. R. Bacon, P. Eng.

TABLE OF CONTENTS

LIST OF ILLUSTRATIONS

REPORT ON THE B. J. I - IV CLAIM GROUPS
BOOTJACK LAKE - CARIBOO M. D.

INTRODUCTION AND CONCLUSIONS -

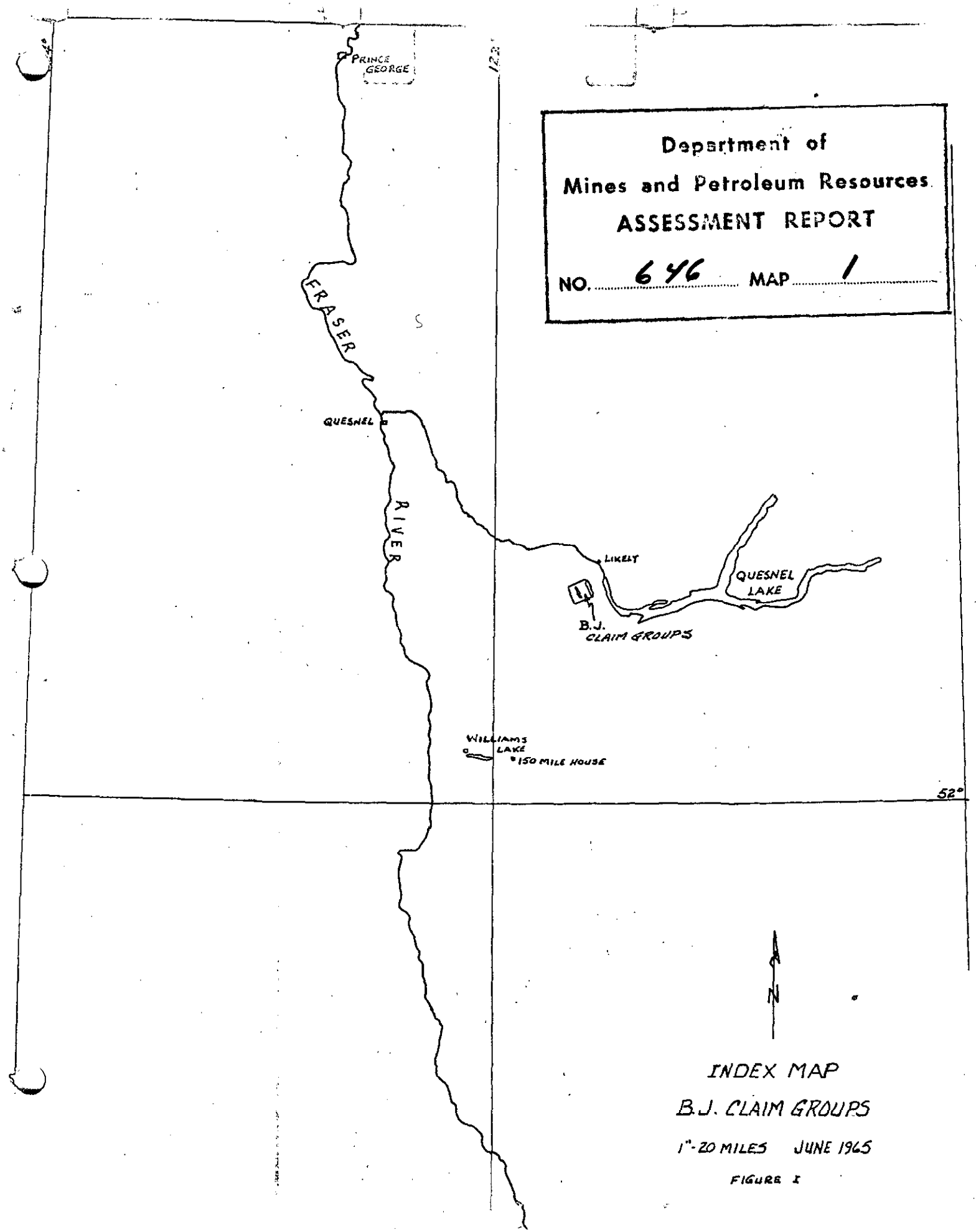
The four B. J. claim groups, consisting in total of 130 claims, are indicated on Figure IX.

The claims were staked to cover a syenitic stock with an associated aeromagnetic anomaly, wherein geochemical tests indicated copper mineralization. Initial prospecting revealed scattered chalcopyrite, pyrite and magnetite mineralization in fractured syenite. Systematic soil sampling and geological mapping outlined an area of primary interest. This area has been further explored by means of a magnetometer survey carried out by Mastodon-Highland Bell personnel and by an I. P. survey done by Huntec Ltd. of Toronto.

The results of the foregoing exploration warrant further investigation by stripping, drilling or both.

LOCATION AND ACCESS -

The property is at latitude 52°33'N; Longitude 121°30'W in the Cariboo District of Central British Columbia. (See Fig. I) It is approximately 35 miles northeast of Williams Lake, surrounding Bootjack Lake and extending east to Polley Lake (See Fig. II). Bootjack Lake can be reached by seven miles of poor jeep road from Morehead on the McLeese Lake-Likely Road; Polley Lake can be reached by four miles of rough jeep road from a point approximately seven miles east of Morehead on the Likely Road.



Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 646 MAP 1

INDEX MAP
B.J. CLAIM GROUPS
1"-20 MILES JUNE 1965
FIGURE I

PHYSIOGRAPHY -

Bootjack Lake lies at an elevation of 3,170 feet and Polley Lake at an elevation of 3,012 feet above sea level. Bootjack Mountain, between Trio Lake and Bootjack Lake, has an elevation of 4,175 feet and Mount Polley, between Bootjack and Polley Lake, reaches an elevation of 4,132 feet.

The area is fairly heavily timbered with spruce, balsam, cedar and fir. Much of the area occupied by Mount Polley can best be described as a cedar swamp and there is relatively little rock outcrop in spite of the fairly steep slopes.

In previous years placer operators have dredged the outlet at the north end of Bootjack Lake and drainage of the lake is now to the north into Morehead Lake. Water level of Bootjack Lake is augmented by the activities of an industrious beaver population.

GEOLOGY - [See Figures II & III]

The regional geology has been mapped by R. B. Campbell and is published by the G. S. C. in Map Sheet 3-1961 "QUESNEL LAKE - West Half". Mapping at a scale of 1" = 1 mile is published in Summary Report 1932, Part 'A' "GEOLOGY & PLACER DEPOSITS OF QUESNEL FORKS AREA" by W. E. Cockfield and J. F. Walker.

The claim group covers nearly the whole area of the Bootjack Lake syenitic stock. Detailed mapping has indicated a number of different types of syenite intrusive, but it appears at present that only one of these contains appreciable copper mineralization.

Areas shown in solid colour on the 1" = 600' scale geology map [Figure III] are actually "outcrop areas" which may have relatively little fresh outcrop available for examination. It is emphasized that most of the area shown is covered, and therefore, a great deal is still unknown regarding the mineralization and structure.

TABLE OF FORMATIONS -

JURASSIC and/or CRETACEOUS

Monzonite

Diorite

Grey Syenite

Grey Syenite Porphyry

LOWER JURASSIC

Pyroxenite

Volcanics

The types of intrusive recognized and mapped are as follows:-

1. SYENITE - a coarsely crystalline pink syenite containing up to 70% orthoclase with minor plagioclase and mafics. In the area between Polley and Bootjack Lakes, where the most detailed work has been done, the pink syenite appears to intrude the monzonite, cutting it with dykes and healing small fractures.

2. MONZONITE - a medium to fine-grained rock with up to 40% mafics and a nearly equal orthoclase - plagioclase ratio.

3. GREY SYENITE - a coarsely crystalline plagioclase - rich rock with minor mafics. The area west of Bootjack Lake is partially underalin by a distinctive porphyritic variety of grey syenite. East of the south end of Bootjack Lake, the grey syenite commonly contains 5 - 10% pyrite.

4. DIORITE - between Bootjack and Polley Lakes small local areas were mapped as diorite. This is probably only a local, more basic phase of the monzonite.

The country rocks invaded by these intrusives have not been mapped in any detail on the property, and the geology shown on Figure II is from reconnaissance work only, except in the area between the two main lakes.

East of the south end of Bootjack Lake, a few widely scattered, small outcrops were mapped as pyroxenite. A number of these occurrences were actually float and the contacts are only tentative. This is probably an alteration phase of some of the volcanics.

Volcanics have been noted on the west, north and south-east margin of the syenite stock. They also occur on the east side of Polley Lake. South of Bootjack Lake, the syenite extends beyond the claim boundaries and the volcanics were not observed. Volcanic exposures within the claim group are limited. The rocks themselves are dark-green to purplish, rather massive agglomerates and breccias indicated to be of Jurassic Age by R. B. Campbell of the G. S. C. (Map 3-1961) "QUESNEL LAKE"). No important mineralization has been found in these rocks to date.

MINERALIZATION -

The pink syenite has been moderately brecciated in certain areas and the fractures healed with epidote, magnetite, and chalcopyrite. Some disseminated chalcopyrite also occurs in apparently massive host rock. Most of the better showings are located close to the monzonite-pink syenite contact. Epidote is restricted to the brecciated zone.

There appears to be some general correlation between the concentration of magnetite and the occurrence of chalcopyrite. However, relatively fine disseminated magnetite occurs through much of the syenite and monzonite which appears devoid of copper mineralization.

Local areas of mineralization also contain minor pyrite and pyrrhotite.

The following is a list of assay determinations made on rock samples:-

Sample No:	Location		ASSAY VALUES Cu	Mo	Ag	Au	Ni
54001	209E	194N (approx.)	0.30	0.01	Tr.	0.01	Tr.
54002	209E	194N "	0.71	0.005	Tr.	0.02	Tr.
54007	209+00E	192+00N	0.34				
54008	209E	192N	0.27				
54009	224E	200N	0.32				
54010	234E	244N	0.20				
54011	226E	203N	0.76				
54012	219E	179N	0.54				
54012	227E	220N	0.32				
54014	234E	184N	1.63				
54015	233N	199N	0.51				
54016	231E	198N	0.35				

These samples are grab samples reasonably representative of mineralization in individual outcrops and are spread erratically over an area extending about 2,500 feet east-west by 6,500 feet north-south.

SOIL SAMPLING: (See Figures II & IV)

A systematic programme of soil sampling was conducted between Polley and Bootjack Lakes, and reconnaissance soil sampling was done over the remainder of the group. Chained lines along the location lines and part of the claim group boundary served as base lines. From these, tape and compass lines were run at 400-foot intervals and soil samples were collected at 200-foot intervals on these lines. In an area east of the north end of Bootjack Lake early sampling was done by the same method, but on a 300-foot grid. All soil samples were collected in small plastic bags marked with the co-ordinates of the sample location.

Samples were obtained by means of a grub hoe, the soil for testing being taken from immediately beneath the humus. Other than drying, where necessary, the samples received no preparation before testing for copper content by the well known rubeanic acid method. They were graded visually as "positive", "indicator", or "negative," according to the density of the colour spot produced on the test paper. This provided a rapid check on the areas deserving attention, but as it is evident from Figure IV, no specific correlation could be made with the geology mapped. Samples from a limited area were then submitted to Coast Eldridge Ltd. for semi-quantitative spectrographic determinations for copper and molybdenum. The copper determinations are plotted on the soil sampling map and contoured with the lowest contour at 50 ppm and each succeeding contour at twice the value of the preceding one.

The geochemical anomalies show good correlation with mapped areas of mineralization. Because of this correlation further samples were submitted and the complete results to date are shown on Figure IV.

Molybdenum values are also plotted, but only two relatively small areas appear to be anomalous, and, since no molybdenite has so far been identified in rock samples, no attempt is made to indicate these as positive anomalies.

MAGNETOMETER SURVEY -

During March 1965 a crew of five men were employed surveying and cutting a grid of picket lines in the area immediately north-east of the north end of Bootjack Lake. See Figure IX.

A magnetometer survey was conducted at this time by S. B. McBeath using a Sharpe MF-1 fluxgate magnetometer. Results are plotted on Figure V "Magnetometer Survey - Bootjack Lake."

Geological mapping had shown that magnetite was widespread in the intrusive, but locally areas of more intense fracturing appeared to have more magnetite mineralization as well as more chalcopyrite mineralization than was normal. This led to the hope that there might be some relatively direct relationship between the magnetite content and the copper content of the rock. At the same time it was realized that disseminated magnetite in the intrusive would be an important consideration in interpretation of induced polarization survey results. It was necessary then to conduct the magnetometer survey at relatively little actual cost in order to gain the most value from the relatively expensive I.P. survey to follow.

A base station for the magnetometer was established near the camp at the north end of Bootjack Lake. Readings were taken here morning and evening to help correct for diurnal change while other repeat readings were taken during the day on established stations along the base line.

In plotting the results an arbitrary 10,000 gammas were added to each reading to avoid having negative values on the plan.

The results are contoured at 1,000 gamma intervals. Except for three small strongly anomalous areas, the anomalies appear relatively weak and amorphous in shape. No distinct correlation was evident, either with observed mineralization in outcrop, or generally with the results of the geochemical survey.

The presence of I. P. anomaly 'A' was not suspected from the magnetometer results, although the main base line ran along or very close to this I. P. anomaly.

The magnetometer survey has not shown any direct benefits in locating mineralization. It has, however, been of considerable value when considered with the later I. P. survey to show that the I. P. results are not attributable to magnetite mineralization.

INDUCED POLARIZATION SURVEY -

The presence of low grade disseminated chalcopyrite mineralization scattered over a large area required some more direct means than soil sampling to define targets for more intensive investigation. Due to the physical setting and type of mineralization an I. P. survey was decided on. A copy of the Huntec Ltd. report on this survey follows.

The I. P. survey has indicated three main anomalies which warrant investigation. In addition the relatively weak anomaly centered at about 20N and 37E occupies an area where strong soil sample results were obtained and copper mineralization is evident in rock exposures.

REPORT ON

INDUCED POLARIZATION SURVEY

NEAR QUESNEL LAKE, BRITISH COLUMBIA

(52°, 121°, ~~S.E.~~ N.W.)

FOR

MASTODON HIGHLAND BELL MINES LIMITED

BY

HUNTEC LIMITED

TORONTO, ONTARIO

MAY, 1965

TABLE OF CONTENTS

I - INTRODUCTION

Between April 12th and April 29th, 1965, an Induced Polarization (I. P.) survey was carried out by Huntec Limited for Mastodon Highland Bell Mines Limited. The survey covered a group of 12 mineral claims (B. J. 5 - 10 inclusive, 19 - 24 inclusive) located on Bootjack Lake, approximately 50 miles northeast of Williams Lake, British Columbia.

The geophysical crew was managed by Mr. A. R. Dodds working in consultation with Mr. S. McBeath of Mastodon Highland Bell, who provided two field assistants. Drafting and typing were done at the Toronto office of Huntec Limited.

The I. P. survey consisted of 6.9 miles of readings taken at 200-foot intervals on lines 800 feet apart, using the electrode configuration known as the "three-electrode array". An electrode spacing of 400 feet was used, with 200 feet between the potential electrodes. In addition, parts of three fill-in lines were surveyed in anomalous areas, and parts of three lines were detailed with electrode spacings of 100 and 200 feet, all using the same array.

The data are presented in the form of profiles using a distance scale of 1 inch to 200 feet. Vertical scales are 1 inch to 5 milliseconds and 2 inches per logarithmic cycle for chargeability and resistivity respectively. Detailed lines are also shown as profiles, using the same scales.

II - SURVEY SPECIFICATIONS

The Huntec pulse-type I. P. instrument is similar in design and operation to that described by R. W. Baldwin in "A Decade of Development in Overvoltage Surveying", A. I. M. E. Transactions, Vol. 214, 1959. Power is obtained from a gasoline motor coupled to a 2.5 kw, 400 cycle three-phase generator, providing a maximum of 2.5 kw d. c. to the ground. The cycling rate is 1.5 seconds "current on" and 0.5 seconds "current off", the pulses reversing continuously in polarity.

The data recorded in the field consist of careful measurements of the current (I) in amperes flowing through electrodes C_1 and C_2, the primary voltage (V_p) appearing between P_1 and P_2 during the "current on" part of the cycle, and the secondary voltage (V_s) appearing between P_1 and P_2 during the "current off" part of the cycle. The apparent chargeability (M_a), in milliseconds, is calculated by dividing the secondary voltage by the primary voltage and multiplying by 400, which is the sampling time in milliseconds of the receiver unit. The apparent resistivity, in ohmmeters, is proportional to the ratio of the primary voltage to the measured current, the proportionality factor depending on the geometry of the array used. The resistivity and chargeability obtained are called apparent as they are values which that portion of the earth sampled

would have if it were homogeneous. As the earth sampled is usually inhomogeneous, the calculated apparent resistivity and chargeability are functions of the actual resistivity and chargeability and of the geometry of the rocks.

The electrode configuration used for this survey was the "three-electrode array". For this array one current electrode, C_1, and the two potential electrodes, P_1 and P_2, are moved in unison along the survey lines. The spacing of these electrodes determines the depth penetrated. The second current electrode, C_2, is placed an "infinite" distance away, which, in practice, is about ten times the distance between C_1 and P_1. The I. P. measurement is plotted halfway between C_1 and P_1.

III - INTERPRETATION

The I. P. survey indicated three main anomalous areas. All three are of considerable intensity and stand out clearly above a relatively flat background. The areas are shown on the map of reconnaissance profiles, and are identified by the letters A, B, and C.

Anomaly A

This anomaly consists of two parts, one on the lake and the other on the promontory which partly bisects the lake. This division is fairly clear on Lines 20N and 24N, but does not show up on the 400-foot electrode spacing on Line 28N. However, this line was detailed with 200 and 100-foot spacings, and these both show the division. On the 400-foot electrode spacing the western part of the anomaly is apparently overshadowed by the deeper and more extensive eastern part.

Detailing on Line 28N indicates that the western part of this anomaly is fairly shallow. The resistivity profiles indicate that the overburden is thin and outcrop was observed in places. The anomaly follows the western slope of this ridge of bedrock. Two near surface, narrow mineralized zones are indicated at 5+50W and 7+50W, probably widening at depth. The causative body may come to surface, and probably extends to some 200 feet below surface. This part of the

anomaly is stronger on Line 24N and indicates more extensive mineralization, possibly at depths of 200 to 400 feet.

The eastern part of this anomaly appears to be deeper and more extensive as evidenced by the weakness of the anomaly on the 100-foot electrode spacing. The lake at this point is 40 to 50 feet deep. Assuming some sediments, the causative body could reach bedrock surface, if this is 90 feet or more below the surface of the lake. It appears to be some 300 feet wide and to extend at least 300 feet below water level. The body is probably near vertical, possibly with a steep easterly dip.

Anomaly B

This anomaly extends at least from Line 16N to Line 24N, and is probably 200 to 300 feet wide. It was detailed on Line 24N, the detailing indicating that it's top is within 50 feet of surface. A fairly steep westerly dip is indicated. The causative body is expected to extend to at least 200 feet below surface, and to contain not less than 2% mineralization of some kind. Since there is no magnetic anomaly associated with it, it would not appear to be caused by magnetite.

Anomaly C

This anomaly occurs at the eastern end of the lines and was not completely covered due to lack of time and to bad weather. However, the anomaly is fairly well outlined and extends from Line 20N

to Line 44N. Detailing on Line 28N indicates that the causative body is fairly narrow here, probably 100 to 150 feet in width, and comes to within 50 to 100 feet of surface. The body may widen at depth. The lack of any magnetic correlation rules out the possibility of it being caused by magnetite.

It was hoped to detail a second line on this anomaly, but the loss of one and a half days to bad weather prevented this. However, the reconnaissance profiles indicate that the detailing on Line 28N is probably representative of the full length of the anomaly.

IV - SUMMARY AND RECOMMENDATIONS

The I. P. survey over this property indicated three strong anomalous areas, all of which are considered worthy of further investigation, from a geophysical point of view.

A magnetometer survey over Anomaly A would assist in deciding whether any part of this anomaly might be caused by magnetite. The western part of this anomaly could be further checked by a study of outcrop in the area, since it appears to be shallow. If diamond drilling is decided upon, a hole collared at 8+00W on Line 28N and plunging easterly at 45° along the line should intersect the causative body within 150 feet. This anomaly could also be drilled on Line 24N, although it is not possible to pick an accurate drill location on this line without detailing.

If magnetometer work fails to show any indication of the cause of the eastern part of Anomaly A, then drilling is suggested. A drill hole on Line 28N, intersecting 150 to 200 feet below Station 2+50W on this line, should identify the causative body.

Anomaly B should be tested on Line 24N, drilling to intersect about 150 feet below Station 26+00E on this line. The hole should plunge in an easterly direction.

Drilling on Anomaly C should start on Line 28N. A fairly shallow hole, to intersect about 100 feet below Station 51+00E, should

identify the causative body here. It is again suggested that this hole should plunge in an easterly direction, although the body appears to be near vertical. Further drilling of this anomaly could be done on other lines, although accurate drill locations cannot be given.

It is also suggested that the geological mapping be tied in with the geophysical survey lines. Although no I. P. anomalies occur over the mineralization in outcrop, Anomalies B and C are both located slightly east of such showings.

The priority of these anomalies, based on extent, amplitude, and the possible size and grade of the causative bodies, is:

1. Anomaly C
2. Anomaly A, eastern part
3. Anomaly B
4. Anomaly A, western part

HUNTEC LIMITED

for A. R. Dodds, B. Sc.,
Geophysicist.

Toronto, Ontario

May, 1965

V - APPENDIX I

(i)

Instrument

The geophysical instrument used was a Huntec pulse-type Induced Polarization unit, with a power output of 2.5 kw.

Miles Surveyed

The survey was divided into two parts; reconnaissance (covering lines 800 feet apart once) and detail (covering fill-in lines and resurveying certain lines with more than one electrode spacing). The three-electrode array was used throughout. Total miles surveyed and stations read are as follows:

	Miles	Stations
Reconnaissance	6.9	181
Detail	2.1	96
	9.0 miles	277 stations

Claims Surveyed

The survey comprised 12 mineral claims as follows:

B. J. 5 to 10 inclusive

and 19 to 24 inclusive.

(ii)

Personnel Employed on Survey

The following personnel were employed on the survey at various times during the periods shown.

Name	Occupation	Address	Dates
A. R. Dodds	Geophysicist	1450 O'Connor Dr., Toronto 16, Ont.	12 - 29 Apr. 1965 3 - 13 May 1965
R. Labonte	Geophysical Operator	"	12 - 29 Apr. 1965
S. McBeath		Mastodon Highland Bell Mines Limited	12 - 29 Apr. 1965
M. Carr	Helper	"	12 - 29 Apr. 1965
N. ~~Otter~~ SAMUSEVICH	"	"	12 - 29 Apr. 1965
J. Wilson (Miss)	Drafting	1450 O'Connor Dr., Toronto 16, Ont.	18, 19 May, 1965
	"		
H. Ricketts (Miss)	"	"	18, 19 May, 1965
L. Brunton (Mrs.)	Typing	"	19 May, 1965

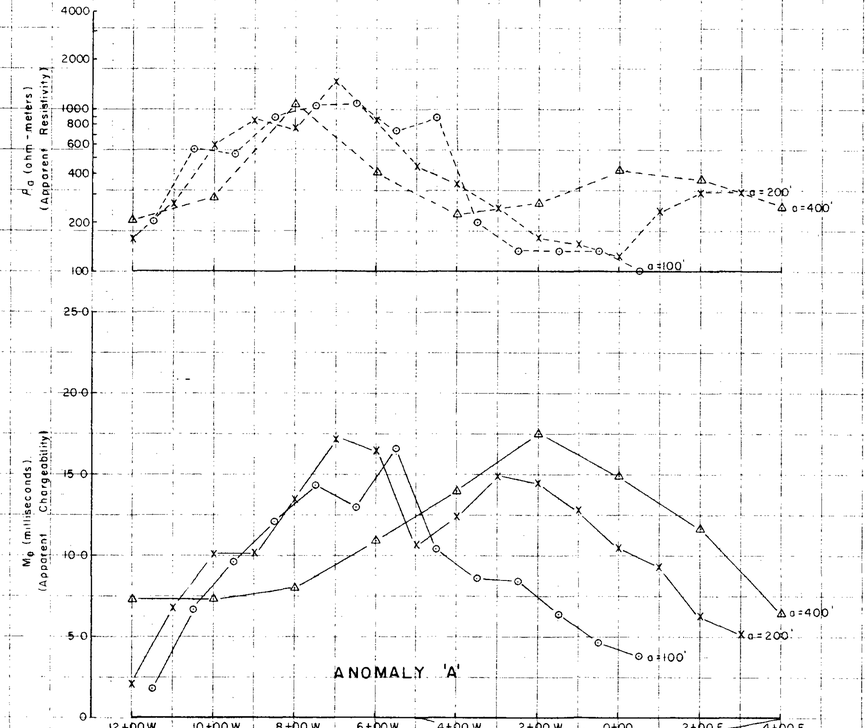
HUNTEC LIMITED

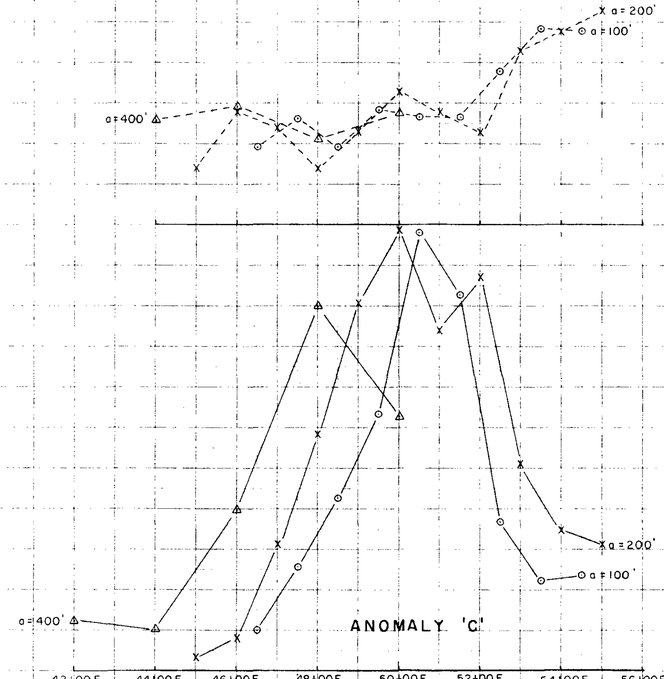
for A. R. Dodds, B. Sc., P. Eng.
Geophysicist.

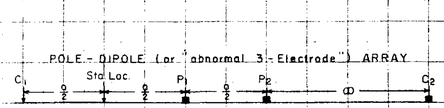
VI - APPENDIX II

I. P. Detail Profiles - A, B and C.

Scale 1" = 200'







KXXXX ..... Probable mineralization

IXXXI ..... Possible mineralization

INDUCED POLARIZATION SURVEY

DETAIL PROFILES WITH INTERPRETATION

LINE 28+00N – ANOMALIES 'A' and 'C'

646

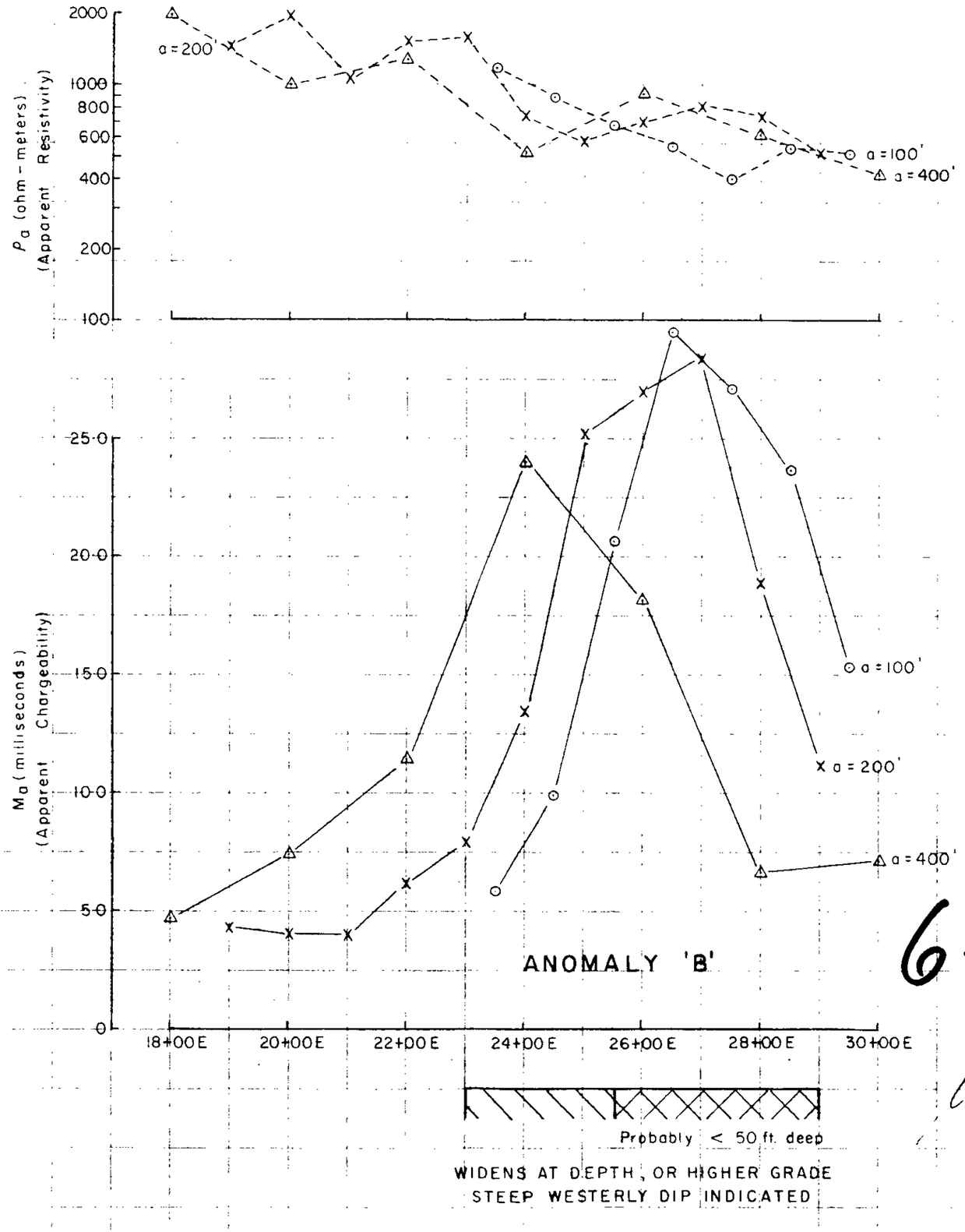
Scale: 1 inch = 200 feet

HUNTEC LIMITED, Toronto, Canada - May, 1965

for A. R. Dodds, B. Sc., Geophysicist

FIGURE VI

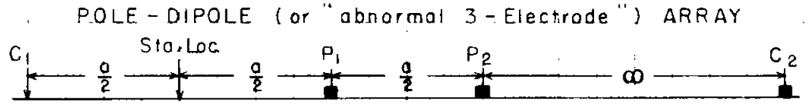
PH 234/65



ANOMALY 'B'

WIDENS AT DEPTH, OR HIGHER GRADE
STEEP WESTERLY DIP INDICATED

POLE - DIPOLE (or "abnormal 3 - Electrode") ARRAY



Probable mineralization

Possible mineralization

INDUCED POLARIZATION SURVEY

DETAIL PROFILES WITH INTERPRETATION

LINE 24+00N - ANOMALY 'B'

646

Scale: 1 inch = 200 feet

W. Allen, P.Eng.,
HUNTEC LIMITED, Toronto, Canada. - May, 1965.

P.Eng.
for A. R. Dodds, B. Sc., Geophysicist

PH 234/65

FIGURE VII

FINANCIAL STATEMENT - 1964

PERSONNEL	PERIOD	MAN DAYS	RATE	WAGE & SALARIES
S. B. McBeath, Geologist	Aug. 3-13; 16-31; Sept. 4-10; 13-30; Oct. 1-15	67	$ 20.00	$ 1,340.00
E. Holt, Geologist	Oct. 1 - Nov. 15	46	23.50	1,081.00
J. C. Stephen, Geologist	Aug. 17, 18, 27; Sept. 16	4	25.00	100.00
LABOUR				
B. Hamilton	Oct. 20 - Nov. 7	19	15.00	285.00
D. Duquesne	Sept. 16 - Nov. 7	53	15.00	795.00
N. Samusevich	Aug. 29 - Nov. 7	71	15.00	1,065.00
H. Carr	Sept. 16 - Oct. 20	35	15.00	525.00
				5,191.00
	Costs directly applicable on property - (includes nominal charge for food-$590. (2 months truck rental $500. - and ($227.82 for geochemical equipment (and supplies.			1,317.82
	Assays ~~and soil~~ determinations			519.75
	TOTAL - 1964			$ 7,028.57

FINANCIAL STATEMENT - 1965

PERSONNEL	PERIOD	MAN DAYS	RATE	WAGES & SALARIES
A. Linecutting and Magnetometer Survey -				
E. R. Wozniak, Geol.	March 1 - April 7	38	$ 24.00	$ 912.00
S. B. McBeath "	March 1 - April 7	38	20.00	760.00
W. Maleck, Labour	March 1 - April 5	38	20.00	760.00
N. Samusevich, Labour	March 1 - April 7	38	15.00	570.00
M. Carr	March 1 - April 7	38	15.00	570.00
B. I. P. Survey Assistance -				
S. B. McBeath, Geol.	April 12 - 29	18	20.00	360.00
N. Samusevich, Labour	April 12 - 29	18	15.00	270.00
M. Carr, Labour	April 12 - 29	18	15.00	270.00
Contract I. P. Survey cost				4,542.50
Cabin rental				420.00
Equipment rental				223.00
Soil determinations				330.00
Cost directly applicable on property - (includes nominal charge for Food - $488. (and part of winter transport costs (which included $1,430. for helicopter (alone.				1,205.96
			TOTAL - 1965	11,193.46
			TOTAL - 1964	7,028.57
			TOTAL COSTS	$ 18,222.03

June 30th, 1965

W. R. Bacon, P. Eng.

DOMINION OF CANADA:

PROVINCE OF BRITISH COLUMBIA. } In the Matter of The B. J. I; B. J. II;

TO WIT: } B. J. III; and B. J. IV CLAIM GROUPS - situate at Bootjack Lake - Cariboo Mining Divisio

SUB-MINING RECORDER
RECEIVED
JUL 23 1965
M.R. #81204D $ 894.00
VANCOUVER, B. C.

I, WILLIAM RUSSELL BACON, P. Eng.

of 502 - 1200 West Pender Street
Vancouver 1, B. C.

in the Province of British Columbia, do solemnly declare that I have caused the following work to be done by the person's noted in the period noted in the years 1964 and 1965.

Geological Survey	-	1,763.00
Geophysical Survey	-	10,732.00
Geochemical Survey	-	5,725.00
	$	18,220.00

(See attached list of personnell and costs)

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 the City of Vancouver, in the Province of British Columbia, this 23 day of July 1965, A.D.

W. R. Bacon.

Jill Turner.

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

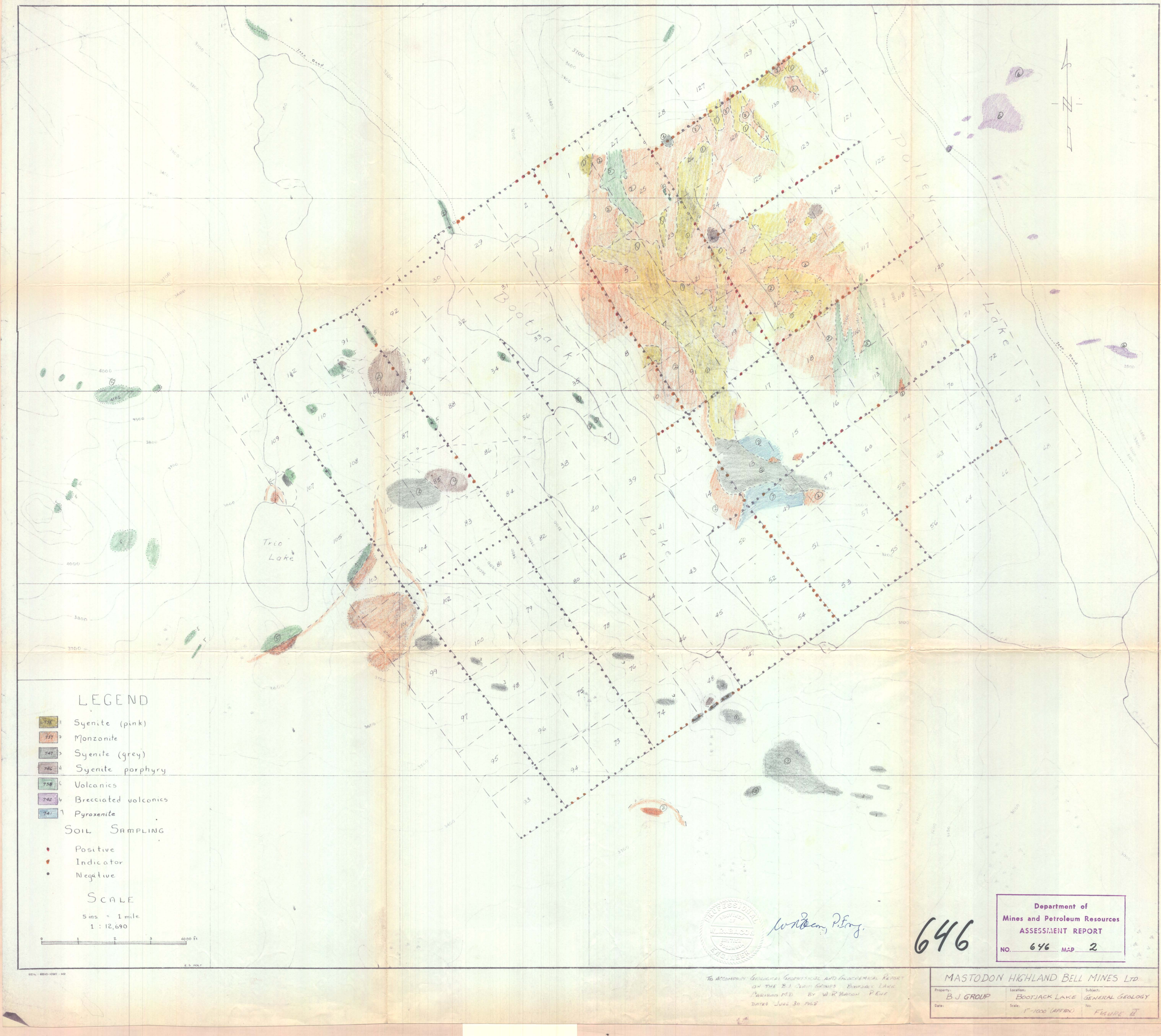
Sub-mining Recorder

FINANCIAL STATEMENT - 1964

PERSONNELL	PERIOD	MAN DAYS	RATE	WAGE & SALARIES
S. B. McBeath, Geologist	Aug. 3-13; 16-31; Sept. 4-10; 13-30; Oct. 1-15	67	$ 20.00	$ 1,340.0
E. Holt, Geologist	Oct. 1 - Nov. 15	46	23.50	1,081.00
J. C. Stephen, Geol.	Aug. 17, 18, 27; Sept. 16	4	25.00	100.00
LABOUR				
B. Hamilton	Oct. 20 - Nov. 7	19	15.00	285.00
D. Duquesne	Sept. 16 - Nov. 7	53	15.00	795.00
N. Samusevich	Aug. 29 - Nov. 7	71	15.00	1,065.00
M. Carr	Sept. 16 - Oct. 20	35	15.00	525.00
				5,191.00
see p 27	Costs directly applicable on property			1,317.82
	Assays and soil determinations			519.75
			TOTAL - 1964	$ 7,028.57

FINANCIAL STATEMENT - 1965

PERSONNELL	PERIOD	MAN DAYS	RATE	WAGES & SALARIES
A. Linecutting and Magnetometer Survey -				
E.R. Wozniak, Geol.	March 1 - April 7	38	$ 24.00	$ 912.00
S.B. McBeath, "	March 1 - April 7	38	20.00	760.00
W. Maleck, Labour	March 1 - April 7	38	20.00	760.00
N. Samusevich, Labour	March 1 - April 7	38	15.00	570.00
M. Carr	March 1 - April 7	38	15.00	570.00
B. I. P. Survey Assistance -				
S.B. McBeath, Geol.	Apr. 12 - 29	18	2000	360.00
N. Samusevich, Labour	Apr. 12 - 29	18	15.00	270.00
M. Carr, Labour	Apr. 12 - 29	18	15.00	270.00
Contract I. P. Survey cost				4,542.50
Cabin rental				420.00
Equipment rental				223.00
Soil determinations				330.00
Cost directly applicable see p 28				1,205.96
		TOTAL - 1965		11,193.46
		TOTAL - 1964		7,028.57
		TOTAL COSTS		$ 18,222.03



Bootjack Lake
Trio Lake
Polley Lake
LEGEND
Syenite (pink)
Monzonite
Syenite (grey)
Syenite porphyry
Volcanics
Brecciated volcanics
Pyroxenite
Soil Sampling
Positive
Indicator
Negative
Scale
5 ins = 1 mile
1 : 12,690
646
Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 646 MAP 2
To accompany Geological Geophysical and Geochemical Report on the B.J Claim Groups Bootjack Lake Cariboo M.D. By W. R. Bacon P. Eng. Dated June 30 1965
MASTODON HIGHLAND BELL MINES LTD.
Property: B J GROUP
Location: BOOTJACK LAKE
Subject: GENERAL GEOLOGY
Date:
Scale: 1"-1000' (APPROX)
No. FIGURE II

B.J. GROUP

Geological Plan

FIGURE III

175E 205E 235E 245E

235N 205N 175N 145N 115N

Bootjack Lake

Polley Lake

LEGEND

- Syenite, (b) contains more mafics, magnetite
- Volcanics
- Monzonite, (a) dioritic phase
- Breccia Zone
- Outcrop Area
- Swampy or wet ground
- × Area of Cu Mineralization
- F Float (thought to represent rocks immediately below)
- Grey Syenite
- Pyroxenite
- Diorite

SCALE

1" = 600'
1 : 7200

0 5 10 1500ft

E. S. Holt

To accompany Geological Geophysical and Geochemical Report on the B.J. Claim Groups Bootjack Lake Cariboo M.D. by W.R. Bacon P.Eng
Dated June 30 1965

PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA W.R. BACON

W.R. Bacon, P.Eng.

646

B.J. GROUP

Detailed Soil Sampling

FIGURE IV

LEGEND

- Positive
- Indicator
- Negative
- Unreliable
- 180 Cu. p.p.m.
- 3 Mo p.p.m.
- Claim Post

SCALE

1" = 600'

1 : 7200

0 5 10 1500 Ft.

E. S. Holt

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT

NO. 646 MAP 4

PROFESSIONAL ENGINEER W.R. BACON BRITISH COLUMBIA

W.R. Bacon, P.Eng.

TO ACCOMPANY GEOLOGICAL GEOPHYSICAL AND GEOCHEMICAL REPORT ON THE B.J. CLAIM GROUPS BOOTJACK LAKE CARIBOO M.D. BY W.R. BACON P.ENG DATED JUNE 30 1965

646

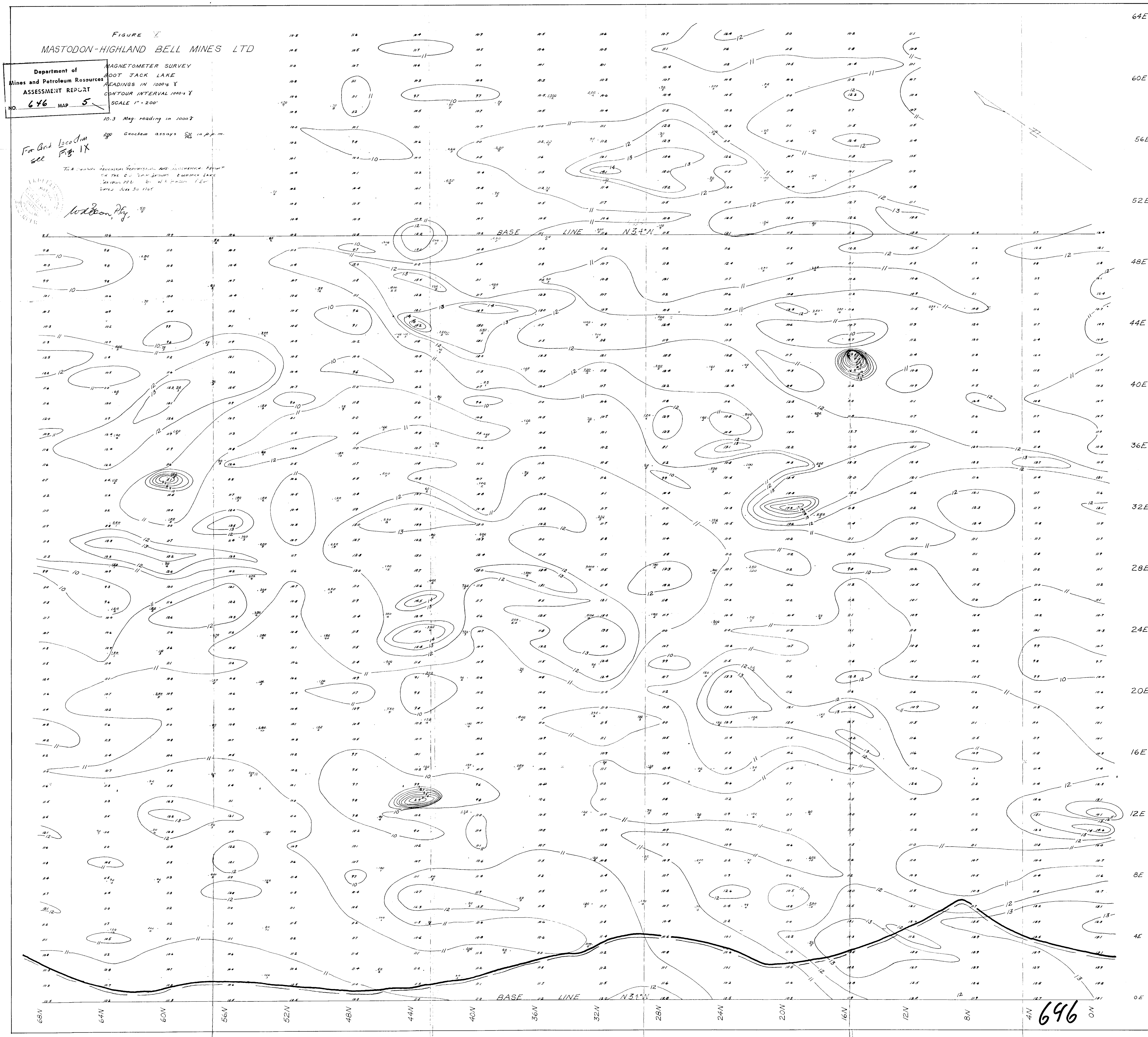
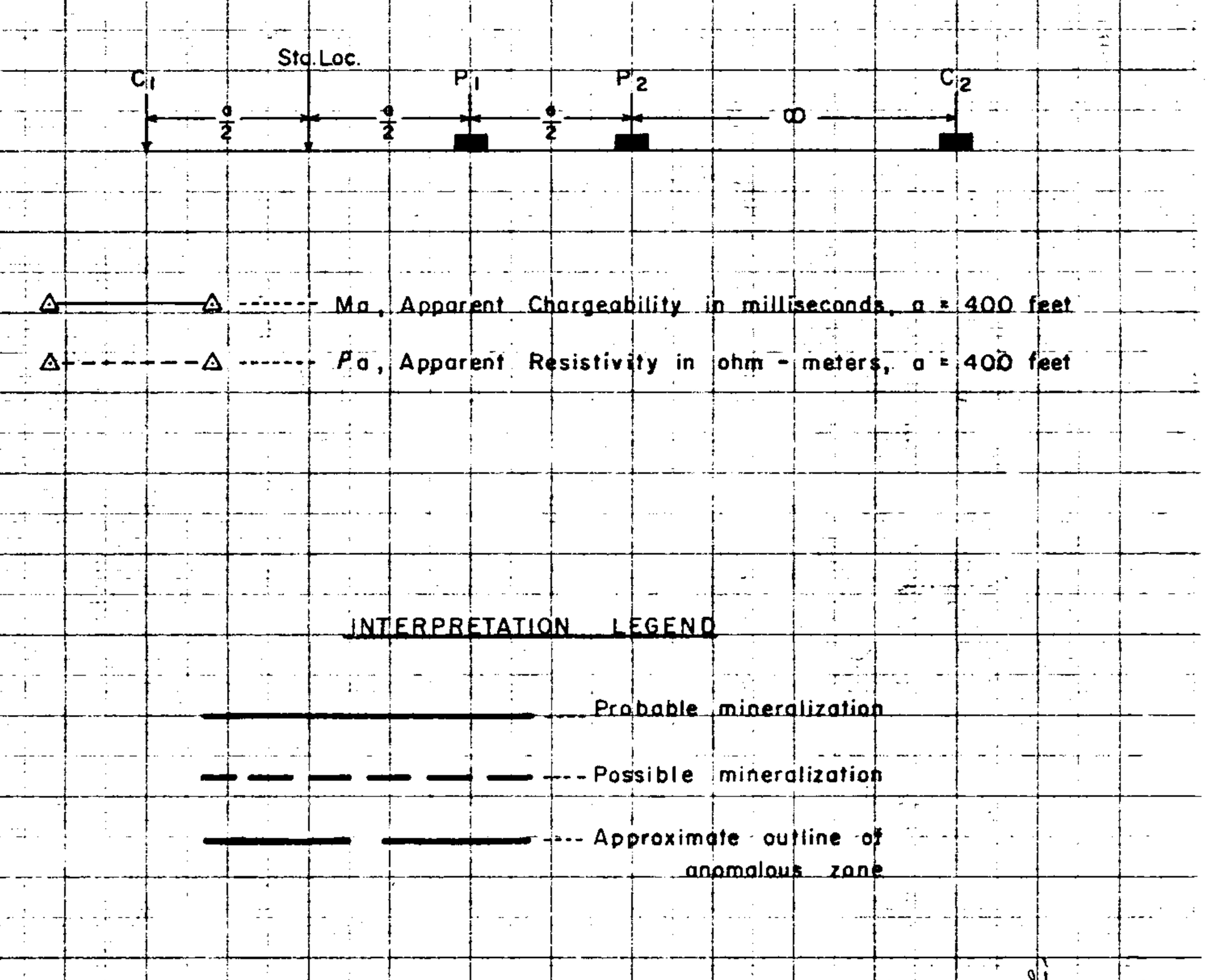


FIGURE V
MASTODON-HIGHLAND BELL MINES LTD
Department of Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 646 MAP 5
MAGNETOMETER SURVEY
BOOT JACK LAKE
READINGS IN 1000's γ
CONTOUR INTERVAL 1000's γ
SCALE 1" = 200'
10.3 Mag. reading in 1000γ
200/5 Geochem assays Cu/Mo in p.p.m.
For Grid Location see Fig. IX
BASE LINE N34°W
BASE LINE N34°W
64E
60E
56E
52E
48E
44E
40E
36E
32E
28E
24E
20E
16E
12E
8E
4E
0E
68N
64N
60N
56N
52N
48N
44N
40N
36N
32N
28N
24N
20N
16N
12N
8N
4N
0N
646



To Accompany Geological Geochemical and Geophysical Report on the B.I. I-IV Groups Bootjack Lake Cariboo M.D. By W.R. Bacon P.Eng. Dated June 30 1965

MASTODON HIGHLAND BELL MINES LIMITED

INDUCED POLARIZATION SURVEY

QUESNEL LAKE
CARIBOO MINING DIVISION, BRITISH COLUMBIA

I.P. RECONNAISSANCE PROFILES WITH INTERPRETATION

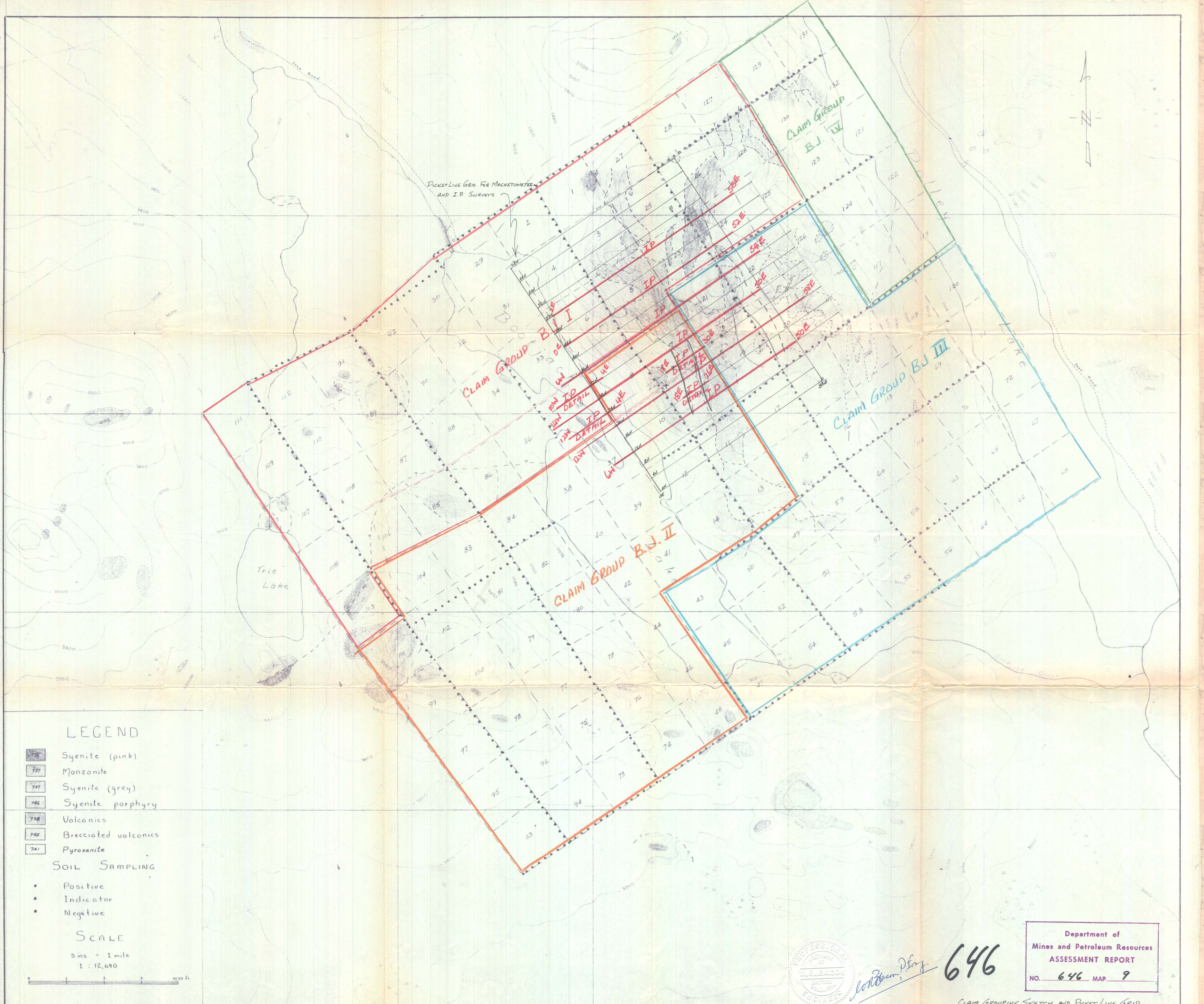
646

Scales:
Distance: 1 inch = 200 feet
Chargeability: 1 inch = 5·0 milliseconds
Resistivity: 2 inches = 1 cycle (logarithmic)

HUNTEC LIMITED, Toronto, Canada – May, 1965

A. R. Dodds, B. Sc. Geophysicist

FIGURE VIII



Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 646 MAP 9

646

CLAIM GROUPING SKETCH AND PICKET LINE GRID.

TO ACCOMPANY GEOLOGICAL GEOPHYSICAL AND GEOCHEMICAL REPORT ON THE B.J. CLAIM GROUPS BOOTJACK LAKE CARIBOO M.D. BY W. R BACON P.ENG DATED JUNE 30 1965

MASTODON HIGHLAND BELL MINES LTD.

Property:	Location:	Subject:
B.J. GROUP	BOOTJACK LAKE	GENERAL GEOLOGY
Date:	Scale: 1"-1000' (APPROX)	No. FIGURE IX