

3624

GEOPHYSICAL REPORT

on
INDUCED POLARIZATION
MAGNETIC AND SELF-
POTENTIAL SURVEYS

on the

92I/10E

BEE CLAIMS

IRON MASK AREA, KAMLOOPS, M.D. B.C.

MAY, 1972

Bee Claims:

8.5 miles S85W of the city of
Kamloops

50° 120° NW

NTS: 92I / 10E

Written for:

EQUATORIAL RESOURCES LIMITED,
#3 - 588 Howe Street,
Vancouver, British Columbia

By:

David G. Mark, Geophysicist,
Howard A. Larson, Geophysicist,
Geotronics Surveys Ltd.,
514 - 602 West Hastings Street,
VANCOUVER 2, B.C.

May 3, 1972.

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT

NO. 3624 MAP

Geotronics Surveys Ltd.

Vancouver, Canada

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SELECTED BIBLIOGRAPHY

GEOPHYSICIST'S CERTIFICATE - David G. Mark
- Howard A. Larson

ENGINEER'S CERTIFICATE - Thomas R. Tough

COST BREAKDOWN

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" Profile, Line 20E, fig. 7	1" = 200'

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Scale

Magnetometer Survey -
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1" = 200'

Induced Polarization -
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Sheet 2.

1" = 200'

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1" = 200'

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1" = 200'

Self-Potential Profiles,
Sheet 5

1" = 200'

SUMMARY

Induced polarization, magnetic, and self-potential surveys were carried out over the Bee 1 and 2 mineral claims, belonging to Equatorial Resources Limited, during April, 1972. The property is located next to the Afton Mines orebody in the Kamloops M.D. of British Columbia. The object of the surveys was to obtain information that may indicate favourable geological conditions extending from the Afton property on to the Bee Claims.

Access to the property is excellent since the Trans-Canada Highway passes through its center. The terrain is that of gently rolling hills with relief being no more than 100 feet.

Most of the property is covered by overburden, but 4 outcrops on and near the property as well as diamond drilling in the area indicate the property is probably underlain by Iron Mask Batholith, Sugarloaf Intrusive, Cherry Creek Intrusive and Kamloops volcanics. The economic mineralization in the immediate area is that of native copper.

The magentics appear to have reflected part of the Iron Mask Batholith. The induced polarization surveys resulted in some low anomalous readings that could well be caused by sulphides. The self-potential work obtained a very high positive anomaly over the alkali swamp.

CONCLUSIONS AND RECOMMENDATIONS

It is felt that the magnetic survey was successful in its objective of supplying structural and lithological information on the property. An intrusive, probably Iron Mask, was indicated and its contact with the volcanic rocks and/or other intrusives was clearly mapped. This intrusive appears to extend into AFTON MINES LTD. holdings adjoining the BEE claim to the east.

Although the response from the induced polarization survey was low, anomalous areas were found to border the alkali swamp and these anomalies could be caused by disseminated mineralization.

A very strong positive self-potential anomaly was obtained over the swamp and as discussed in the text of the report, this could be correlated to the chargeability results.

It is therefore felt that there is a good possibility the alkali swamp is underlain by mineralization of economic interest such as native copper and/or pyrite. Much of the swamp is underlain, according to the magnetic results, by the more favourable Iron Mask intrusive.

Consequently, it is recommended to first drill one or two IP anomalies found around the swamp. Since all of IP line 1 is not on Equatorial ground, this would be limited to the anomaly on IP line 2 and/or the one on IP line 3. Partly depending on these results, a drill hole should then be placed within the swamp, preferably on the peak of an SP anomaly.

May 3, 1972.



Respectfully submitted,
GEOTRONICS SURVEYS LTD.

David G. Mark, Geophysicist,

Howard A. Larson, Geophysicist,

GEOPHYSICAL REPORT

on

INDUCED POLARIZATION,
MAGNETIC, SELF-POTENTIAL
SURVEYS

BEE CLAIMS,

IRON MASK AREA, KAMLOOPS, M.D. B.C.

INTRODUCTION AND GENERAL REMARKS

This report discusses the procedure, compilation, and interpretation of an induced polarization (IP) survey, a fluxgate magnetometer survey, and a self-potential (SP) survey, carried out on the Bee claims during April, 1972.

The field work was carried out by the writers and one assistant. The amount of IP completed was 4,300 feet (about 0.9 line miles), that of the magnetic survey, 12,000 feet (about 2.4 line miles) and that of the SP survey, 4,200 feet (about 0.8 line miles). The survey lines are shown on sheets 1 - 3.

The object of these surveys was to locate any possible areas of sulphide mineralization. Since the property is very close to the Afton Mines orebody, it was hoped that these would show a geological continuity from the orebody area onto the Bee claims.

PROPERTY AND OWNERSHIP

The property consists of 2 contiguous mineral claims named the Bee 1 and Bee 2 claims. They are recorded as full sized claims but because of overstaking are, in reality, only fractions.

<u>NAME</u>	<u>RECORD NO.</u>	<u>EXPIRY DATE</u>
Bee 1, 2	101620/21	Nov. 26, 1972

Both claims are wholly owned by Equatorial Resources Limited of Vancouver, B.C.

LOCATION AND ACCESS

The 2 claims are located about 8.5 miles S 85°W of Kamloops (in a straight line) straddling the Trans-Canada Highway North of Hughes Lake. The distance by the Highway from Kamloops is about 10 miles. Geographical coordinates are 50° 40' N latitude and 120° 31' W longitude.

Access is excellent being that the Trans-Canada Highway runs approximately east-west through the center of the 2 claims.

PHYSIOGRAPHY

The property is found within the physiographic unit known as the Thompson Plateau which forms part of the Interior Plateau system. The terrain in the immediate area of the 2 claims is that of gently rolling hills with the local relief being not more than 100 feet. The claims sit at an elevation of about 2,100 feet.

There are numerous small lakes in the general area of the property. A swamp is found straddling the highway on the western edge of the Bee claims.

The vegetation is that of grass and sagebush with a few pine trees.

Pleistocene ice occupied the Thompson Plateau and thus much of the claims area is probably covered by glacial drift which could become fairly deep over the flatter areas. However, the Afton Mines drilling off of the eastern edge of the Bee Claims has found the overburden depth, so far, to be not more than 90 feet.

The climate is semi-arid with annual precipitation varying from 10 to 11 inches. Temperatures vary from the high extreme in Summer of over 100°F to the low extreme in Winter of around -30°F, though the usual temperatures during a Summer day would be 60°F to 80°F and in Winter, 20°F to 40°F.

GEOLOGY

The Iron Mask Batholith is Jurassic and (?) Lower Cretaceous in age and, therefore, is the oldest rock-type in the area. Four main varieties of this intrusive are; an intermediate type which forms most of the batholith, a more acidic type, a basic type and a hydrothermally-altered type. All types are deficient in quartz. The magnetic content is fairly high relative to the rocks around the batholith.

The Sugarloaf Intrusions, younger than the Iron Mask Batholith, are generally grey-green porphyritic microdiorite often containing conspicuous phenocrysts of hornblende. The matrix and feldspar phenocrysts are commonly altered to sericite, epidote and carbonate.

The Cherry Creek Intrusions, also post-Iron Mask, are composed of the following rock-types; porphyritic microdiorite, latite porphyry, trachyte porphyry and igneous breccia. These intrusions are similar in composition to the Sugarloaf Intrusions but can be distinguished from the latter by a pinkish cast caused by pink potash feldspar.

The 2 outcrops near the southern boundary of the claims were not positively identified to be one of the intrusions. Diamond drilling being done at the time of this writing has apparently intersected the Cherry Creek and Iron Mask intrusions.

The Tertiary volcanics of the Kamloops Group are the youngest rocks and are composed of rhyolites, trachytes, andesites, basalts, and feldspar porphyries.

The many copper occurrences in the general area are found both within the Iron Mask Batholith and the older, intruded Nicola rocks close to the batholith. Generally, they are veins, impregnations, stockworks, and mineralized shear zones in the country rock with the principle copper minerals being chalcopyrite, cuprite, azurite, and malachite. Additional minerals that often occur with the copper are magnetite and pyrite. There have been shipments of ore, though small, from many of the prospects. The largest producer was the Iron Mask Mine which shipped a total of 189,230 tons of ore.

The main developer in the area presently is Afton Mines Ltd which, as reported on February 21, 1972, has blocked out 36 million tons of 0.66% copper. The main mineral form is native copper found within an intrusive breccia at the contact of the Nicola volcanics.

Leemac Mines is also carrying out a drilling program on a very promising prospect. Its main copper mineral is chalcopyrite with some bornite found within a porphyritic diorite.

HISTORY OF PREVIOUS WORK

The Bee Claims were staked November 1971. No work has so far been recorded done on the claims, but at present diamond and percussion drilling is being carried out.

There is, however, two very old, hand-dug trenches and a shallow shaft close to the southern boundary of the property.

INSTRUMENTATION AND THEORY

(1) Induced Polarization

The instrument used was a Geotronics Model A-2 portable time-domain pulse type manufactured by Geotronics Surveys Ltd. of Vancouver, B.C. A 12-volt lead-acid storage battery (rechargeable) was used as a power supply. This unit has a transmitter power output of 300 watts normal and up to 400 watts with fully charged battery. Output voltage is 400, 800 or 1,200 volts (400 used almost exclusively in this survey) with selection by a switch. The time of pulse length is 1 to 12 seconds, variable, delay time is 250 milliseconds and integration time is 1 second. The self-potential buck-out is operated manually by a ten turn precision pot with a range of ± 1 volt.

There are basically two methods of IP surveying, frequency-domain and time domain. Both methods are dependent on a current flowing across an electrolyte-electrode interface or an electrolyte-clay particle interface, the former being called electrode polarization and the latter being called membrane polarization.

In time-domain electrode polarization, a current is caused to flow along electrolyte-filling capillaries within the rock. If the capillaries are blocked by certain mineral particles that transport current by electrons (most sulphides, some oxides, graphite), ionic charges build up at the particle-electrolyte interface, positive ones where the current enters the particle, and negative ones where it leaves. This accumulation of charge creates a voltage that tends to oppose the current flow across the interface. When this current is stopped, the created voltage slowly decreases as the accumulated ions diffuse back into the electrolyte. Thus is produced the induced polarization effect.

In membrane polarization a similar effect occurs. A charged clay particle attracts opposite charged ions from the electrolyte in the capillary around the particle. If a current is forced through the capillary, the charged ions are displaced. When the current is stopped, the ions slowly diffuse back to the same equilibrium state as before the current flow. This explains IP anomalies where no metallic-type minerals exist.

Frequency-domain IP is based on the fact that the resistance produced at the electrolyte-charged particle interface decreases with increasing frequency. Two parameters commonly used for measuring frequency-domain induced polarization are frequency effect and metal factor. The one used for time-domain measurements is chargeability (as in this survey).

In the process of carrying out an IP survey, 2 other geophysical methods are used and measured. These are self-potential (SP) and resistivity. The SP, its phenomenon described in the following paragraph, must be nulled by the IP receiver in order to obtain accurate IP measurements. The resistivity value is calculated from the voltage and current readings obtained while measuring the IP effect and therefore can be utilized to determine how resistive (or conductive) the ground is.

Self-potentials are produced in the crust of the earth from a variety of processes that are chemical, physical and electromagnetic inductive. Sulphide bodies produce a potential from chemical processes that range in magnitude from a few tens of millivolts to several hundred millivolts, and in rare cases, above 1,000 millivolts. The causes of sulphide self-potentials is not fully understood or agreed upon by geophysicists. However, the more accepted theory is that this 'battery action' is caused by a difference in pH in the upper ground water electrolytes (more acidic) and the lower ground water electrolytes (less acidic) and is abetted by the oxidation of sulphides near the surface forming acids that, therefore, increase the contrast. The current caused by the potential flows from the apex of the sulphide body to some point at depth (terminus of deposit or point of minimum acidity), into the wall rock, back to the surface and back into the sulphide apex. A negative pole is thus created at ground surface and, therefore, except for a few rare cases, sulphide bodies are reflected by negative anomalies.

The gradient of the self-potential (millivolts/electrode spacing in feet) is what is measured in an IP survey.

(2) Magnetometer

The magnetic survey was carried out using a portable vertical component, Model G-110 fluxgate magnetometer manufactured by Geotronics Instruments Ltd. of Vancouver, B.C. This is a visual-null type instrument using digital readout with a range of 100,000 gammas and a reading accuracy of 10 gammas. The G-110 has a temperature coefficient of 2 gammas per degree centigrade.

Only two commonly occurring minerals are strongly magnetic; magnetite and pyrrhotite. Hence, magnetic surveys are used to detect the presence of these minerals in varying concentrations. Magnetic data are also useful as a reconnaissance tool for mapping geologic lithology and structure since different rock types have different background amounts of magnetite and/or pyrrhotite.

(3) Self-Potential

The instrument used for this survey was the receiver part of the Geotronics Surveys A-2 time-domain, pulse-type IP instrument. The description and theory are given under (1) Induced Polarization.

SURVEY PROCEDURE

1) Induced Polarization - Three IP survey lines were surveyed in by chain and compass using the initial post for Bill #101 and #102 claims as a base point. As shown on fig. 2, two of these lines generally run in an east-west direction and are separated by a distance of 400 feet. The third line strikes N 15E from the base line at line 0. Since the area is ranch land and is privately owned, the flags used to mark the 100-foot intervals on the south line were removed after completion of the survey. Being the north line is largely on highway allowance its flags were left. (Note: from information available at the time of the survey, IP line 1 was thought to be on Equatorial ground, but as is presently known, it is not.

The Wenner array was used, which has a constant and equal electrode separation. The 2 potential (or probing) electrodes are in the center, and the 2 current electrodes are on the outside. The distance between each electrode was 300 feet and readings were taken every 150 feet. Non-polarizing, unglazed, porous pots with a copper

electrode and copper sulphate electrolyte were used for the potential electrodes. Steel stakes were used for the current electrodes. The charge time for each reading throughout the survey was 6 to 8 seconds and the voltage used to drive the current into the ground was 400 volts. Since the stake resistance varied from about 400 ohms to 1000 ohms, the power pulsed into the ground varied from 400 watts to 160 watts, though it was more usually 250 to 300 watts. Around the alkali swamp, the stake resistance was so low that the instrument could not handle the resulting increase in current. Therefore, no IP readings were obtained around the swamp.

2) Magnetics - The base line was run on the north side of highway #1 and was flagged in. The lines were chained and compassed, during the execution of the survey, in a north-south direction. However, since the survey was run over private land, no flags were left to mark station locations. Corrections for diurnal variations were made by tying on to base stations established along the base line.

3) Self-Potential - In addition to gradient SP measurements made while running the IP lines (the gradient SP measurements on IP lines 3 were extended northwards beyond the IP survey as well, to obtain background), self-potential measurements were made along the baselines, and lines 1E and 2E, as shown in fig. 2. Measurements were made relative to station 0 + 00 on line 1E. The negative SP pot was kept fixed and the positive pot was moved at 100 foot intervals where measurements were made.

DISCUSSION OF RESULTS

1) Magnetometer Survey - The magnetic field data was corrected for diurnal drift and plotted on sheet 1. A group frequency histogram of this data was then plotted (fig.4). It can be seen from this that there is one grouping of the values above 5,400 gammas, one in the 5,200 -5,299 gamma interval, and another in the 5,000 - 5,099 gamma interval. Each of these groupings could correspond to a separate rock-type or structural feature. The values in the 2 lower intervals do not appear to be contourable as separate groupings. However, there is a definite grouping of values above and below the 5,400 gamma level. Thus, this contour should give a good indication of the position of the contact between the two rock-types. The high values probably correspond to intrusive rocks represented by the Iron Mask microdiorite. The lower values probably reflect the Kamloops volcanic rocks such as those found in the road cut between lines 16E and 20E or perhaps the Sugar-loaf and Cherry Creek intrusives which are also less magnetic.

Contours below 5,400 gammas were dashed in to make this contact more apparent.

Profiles were drawn for lines 0, 12E, and 20E (figs. 5-7) in an attempt to determine the depth and the dip of the intrusive. Unfortunately, the survey area was not large enough to provide a detailed background and, therefore, accurate determinations could not be made. However, the curves do suggest that the intrusive probably dips towards the southwest.

The high values in the southwest corner of the survey grid occur on the top of a large hill and probably also reflect a part of the Iron Mask Batholith.

2) Induced Polarization (chargeability) - The chargeability results show a small range with a background of approximately 1.0 milliseconds and a maximum value of 5.0 milliseconds. The generally low values over the property are largely a result of the low surface resistivity which prevents most of the current from penetrating very deeply and thus the results do not necessarily indicate a lack of sulphide mineralization in the area. There are areas where 1 or 2 readings are above background and therefore considering the masking effect of the overburden, do merit further discussion.

On the east end of the IP line 1, there are 2 values that are slightly above background. This probably can be explained by the fact the IP line here approaches the Afton orebody.

Though no readings could be obtained over the swamp, anomalous values did result on its edge on IP lines 1, 2 and 3. This suggests the possibility that the source of the anomaly is sulphide mineralization underlying the swamp. The swamp itself could be a surface expression of part of a shear zone, a zone of intense alteration, or perhaps a gossan. In addition, the anomalous reading at 11E + 50' on IP line 1, as indicated by the magnetics is underlain by the IronMask Batholith and the other readings are at least close to this intrusive. Furthermore, it is understood that a diamond drill hole is presently being drilled between IP line 1 and the highway on the east end of the property and that disseminated pyrite with some native copper was encountered. This therefore lends a strong possibility that this is the cause of the IP anomalies. However, it should also be considered that at least some of the anomalous readings could be a result of membrane polarization caused by clay particles underlying the swamp.

3) Self-Potential - Self-potential gradient measurement taken in conjunction with the IP survey indicated a strong positive S.P. anomaly situated at approximately 4+25E on IP line 1 and at approximately 5+00 on IP line 3. Therefore, self-potential measurements were taken relative to baseline station 1E, along the baseline and lines 1E and 2E, and they confirmed the presence of an extremely strong, positive S.P. anomaly centered over the alkali swamp. The highest measured reading was + 960 mv. at baseline station 9E and the lowest value was 1340 mv. This extreme range of S.P. anomalies could be due to a combination of a positive anomaly associated with the swamp and a negative anomaly possibly caused by sulphide mineralization. The hypothesis is also in agreement with IP highs located on the borders of the swamp.

A strong possibility is that the cause of the anomaly is the electrochemical action caused by the alkali swamp itself. However, only a very small S.P. anomaly was obtained over one of 3 similar swamps about 1 mile west of the Bee claims.

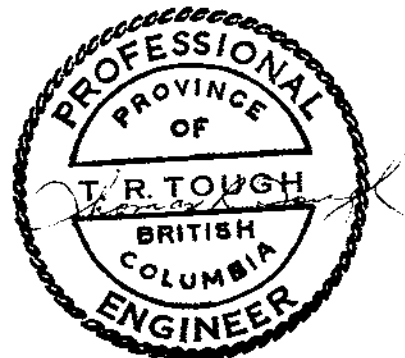
4) Resistivity - The resistivities of the survey area were extremely low having a maximum value of only 640 ohm feet at the southern end of the IP line 3. Over the swampy areas the resistivities were so low that readings could not be made without exceeding the power limits of the instrument.

Respectfully submitted,
GEOTRONICS SURVEYS LTD.

David G. Mark
David G. Mark, Geophysicist

Howard A. Larson
Howard A. Larson, Geophysicist.

May 3, 1972



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Aeromagnetic Map, Cherry Creek, British Columbia, Geol. Surv. of Can., Map 5217G, Sheet 92 I/10, 1968.

Aeromagnetic Map, Kamloops, British Columbia, Geol. Surv. of Can., Map 5216 G, Sheet 92 I/9, 1968.

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Mathews, W.H. Geology of the Iron Mask Batholith; unpublished thesis for the degree of Master of Science, University of British Columbia, about 1942.

Preto, V.A.S. Geology of the Eastern Part of the Iron Mask Batholith, Report of the Minister of Mines and Petroleum Resources, 1967.

GEOPHYSICISTS CERTIFICATE

I, Howard A. Larson, of the City of Vancouver in the Province of British Columbia, do hereby certify:

That I am a Consulting Geophysicist of GEOTRONICS SURVEYS LTD., with offices at 514 - 602 West Hastings Street, Vancouver 2, B.C.

I further certify that:

1) I am a graduate of the University of British Columbia (1971) and hold a B.Sc. degree in Geophysics.

2) I have been practicing in my profession for the past year and have been active in the mining industry for the past four years.

3) This report is compiled from data obtained from induced polarization, magnetometer, and self-potential surveys carried out by David G. Mark, Geophysicist and myself in April 1972, on the Bee claims and pertinent data from published maps and reports as listed under Selected Bibliography.

4) I have no direct or indirect interest in the properties or securities of Equatorial Resources Limited Vancouver, B.C. nor do I expect to receive any interest therein.

Howard A. Larson

Howard A. Larson,
Geophysicist

May 3, 1972

GEOPHYSICISTS CERTIFICATE

I, David G. Mark, of the City of Vancouver, in the Province of British Columbia, do hereby certify:

That I am a Consulting Geophysicist of GEOTRONICS SURVEYS LTD., with offices at 514-602 West Hastings Street, Vancouver 2, B.C.

I further certify that:

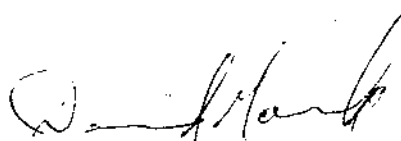
1) I am a graduate of the University of British Columbia (1968) and hold a B.Sc. degree in Geophysics.

2) I have been practicing in my profession for the past four years and have been active in the mining industry for the past seven years.

3) I am an associate member of the Society of Exploration Geophysicists and a member of the European Association of Exploration Geophysicists.

4) This report is compiled from data obtained from induced polarization, magnetometer, and self-potential surveys carried out by Howard A. Larson, Geophysicist, and myself in April 1972, on the Bee 1 and 2 mineral claims and pertinent data from published maps and reports as listed under Selected Bibliography.

5) I have no direct or indirect interest in the properties or securities of Equatorial Resources Limited, Vancouver, B.C. nor do I expect to receive any interest therein.



David G. Mark,
Geophysicist

May 3, 1972.

ENGINEER'S CERTIFICATE

I, Thomas R. Tough of the City of Vancouver, in the Province of British Columbia, do hereby certify:

That I am a Consulting Geologist and an associate with T.R. TOUGH & ASSOCIATES LTD., with offices at 519-602 West Hastings Street, Vancouver 2, B.C.

I further certify that:

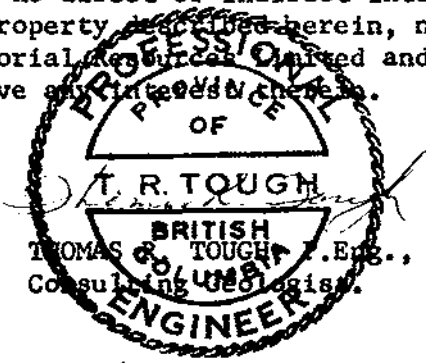
1) I am a graduate of the University of British Columbia (1965) and hold a B.Sc. degree in Geology.

2) I have been practicing in my profession for the past six years and have been active in the mining industry for the past thirteen years.

3) I am registered with the Association of Professional Engineers of British Columbia.

4) I have studied the accompanying report dated May 1972 on induced polarization, magnetometer and self-potential surveys submitted by Geotronics Surveys Ltd., written by David G. Mark, B.Sc., Geophysicist and concur with the findings therein.

5) I have no direct or indirect interest whatsoever in the property ~~described~~ herein, nor the securities of Equatorial Resources Limited and do not expect to receive any dividends thereon.



May 3, 1972

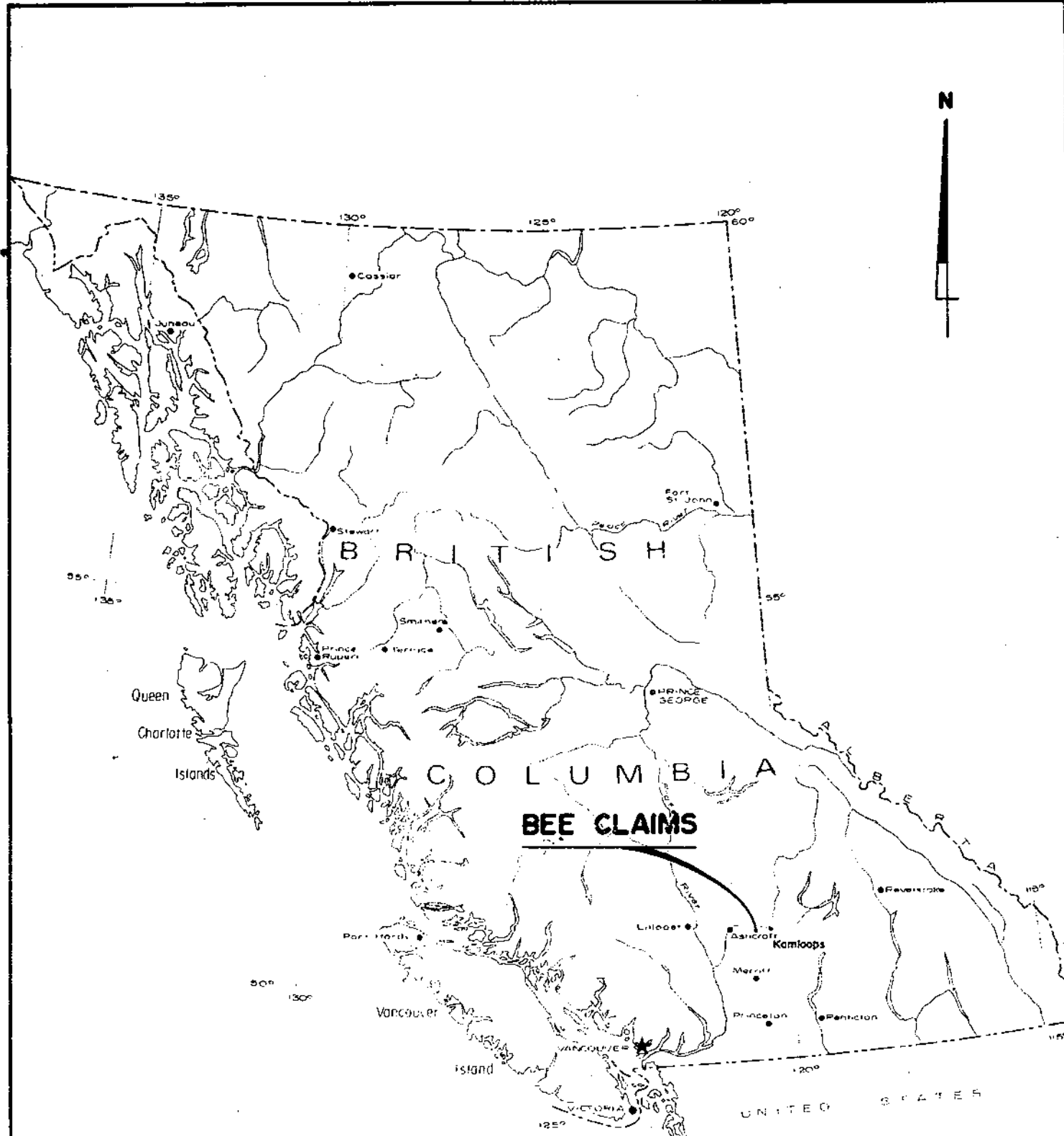
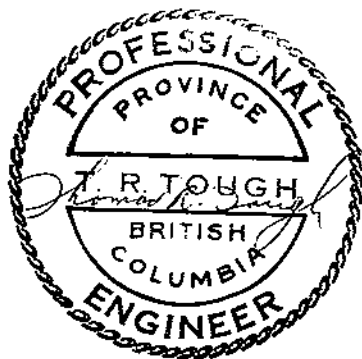


FIG. 1



GEOTRONICS SURVEYS LTD

EQUATORIAL RESOURCES LTD.

BEE CLAIMS

Kamloops M.D., B.C.

LOCATION MAP

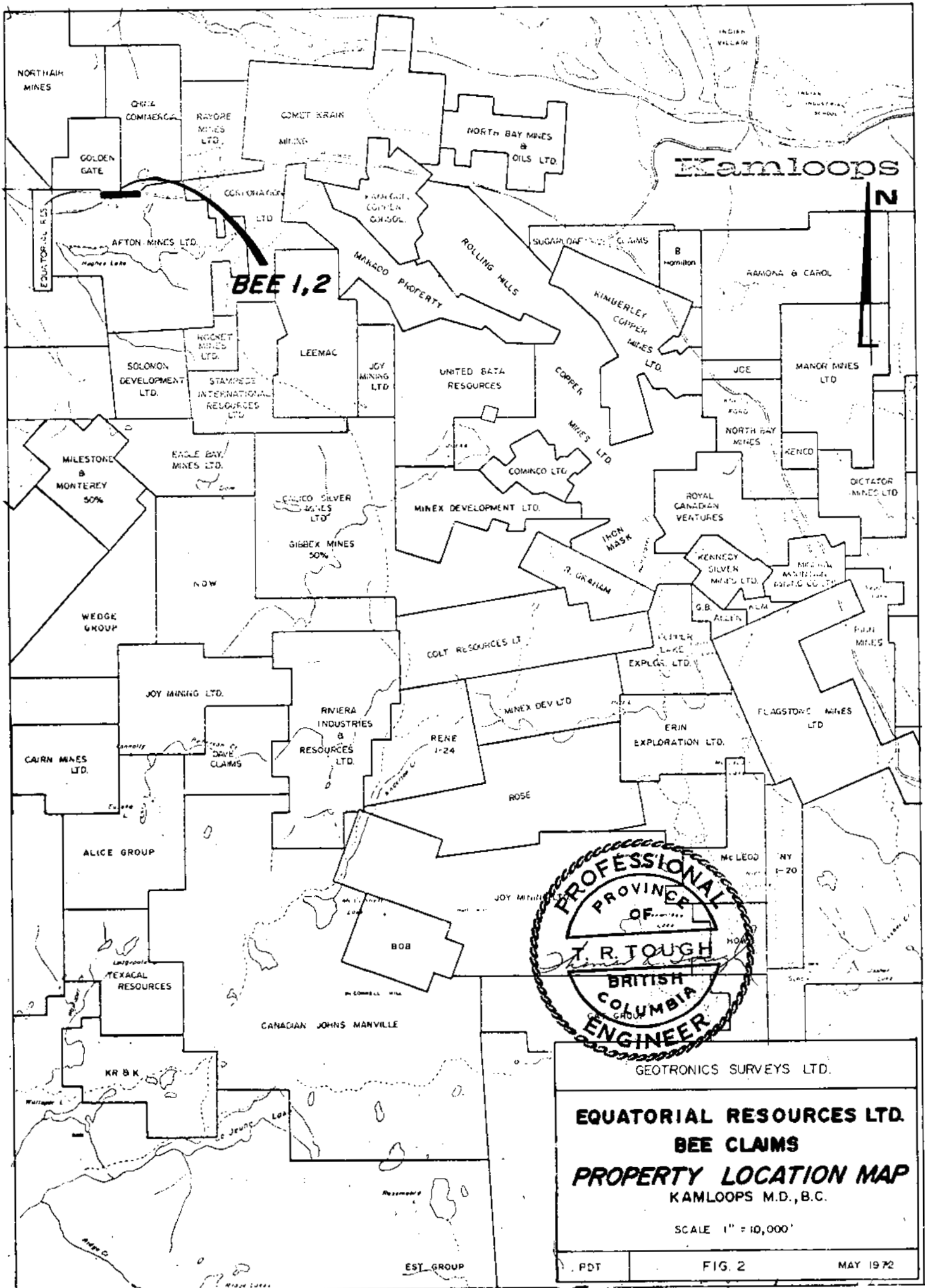
SCALE 1" = 134 mi

DRAWN. PDT	CHECKED.	DATE MAY 72
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Department of
Mines and Petroleum Resources

ASSESSMENT REPORT

no. 3624 MAP # 1



Department of
Mines and Petroleum Resources

ASSESSMENT REPORT

NO. 3624 MAP #2



To Cache Creek

IP L-3

amygdaloidal andesite

microdiarite

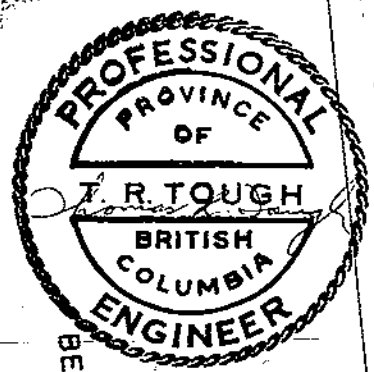
BEE 1

microdiarite
Shaft

IP L-1

IP L-2




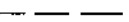

amygdaloidal andesite



BEE 2

TRANS-CANADA HIGHWAY
To Kamloops

LEGEND

-  GROUND OWNED BY EQUATORIAL
-  MAGNETOMETER SURVEY AREA
-  IP LINES
-  SP LINES
-  OUTCROP

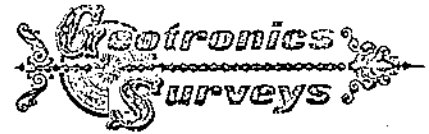
EQUATORIAL RESOURCES LTD.
BEE CLAIMS

KAMLOOPS M.D., B.C.
GEOLOGY MAP

SCALE 1" = 300'

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT

NO. 3624 MAP #3



COST BREAKDOWN

Job No. 72-44
Equatorial Resources Ltd.
BEE 1 & " Fractions
Kamloops Mining Division

Wages:

Geophysicists:

H. Larson,	6 days @ 125.00 / day	\$750.00	
D. Mark,	5 days @ 125.00 / day	625.00	
D. Morral,	6 days @ 75.00 / day	450.00.....	\$1825.00

Instrument & Equipment Rental			
7 days @ \$55.00 / day	385.00.....		385.00

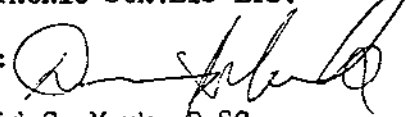
Drafting, Mapping & Geophysicist Report			
\$980.00	980.00.....		980.00

Engineering Fees \$300.00	300.00.....		300.00
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TOTAL COSTS			<u>\$3490.00</u>
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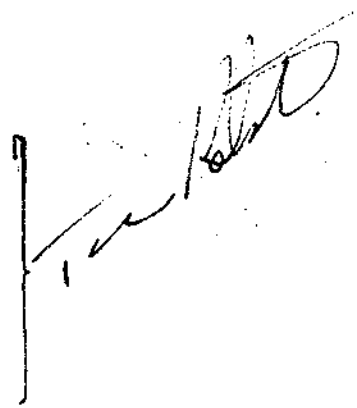
As a representative of GEOTRONIC SURVEYS LTD., Suite 514, 602 West Hastings Street, Vancouver 2, B.C., I hereby declare that I have done, or caused to be done, work on BEE 1 & 2, mineral claims, to the value of three thousand four hundred and ninety dollars (\$3490.00).

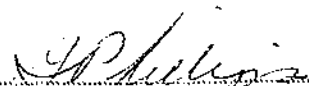
GEOTRONIC SURVEYS LTD.

Per: 

David G. Mark, B.SC.
Geophysicist

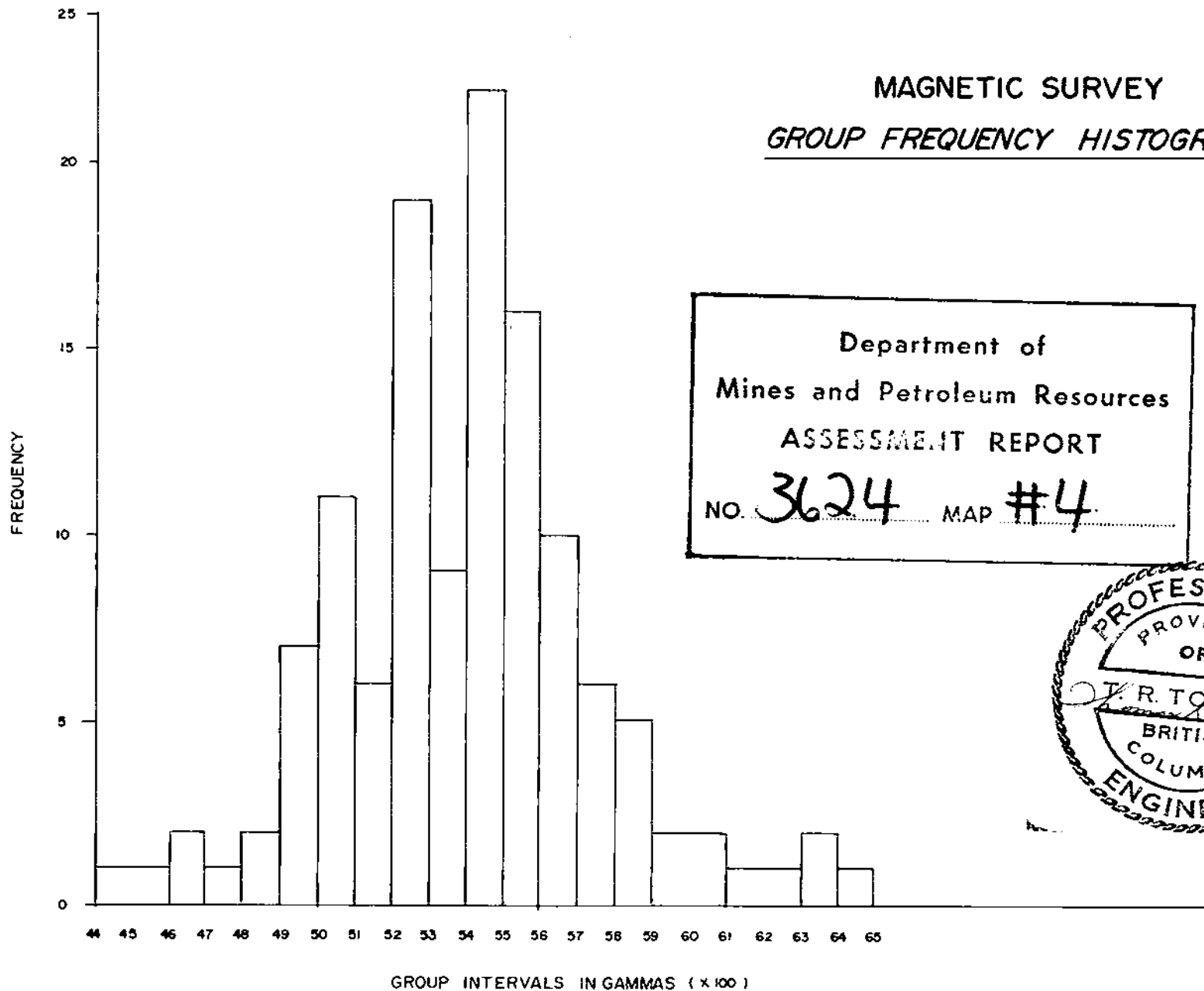
Declared before me at the City
of Vancouver, in the
Province of British Columbia, this 16th
day of May 1972, A.D.




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

SUB-MINING RECORDER

MAGNETIC SURVEY
GROUP FREQUENCY HISTOGRAM



Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 3624 MAP #4

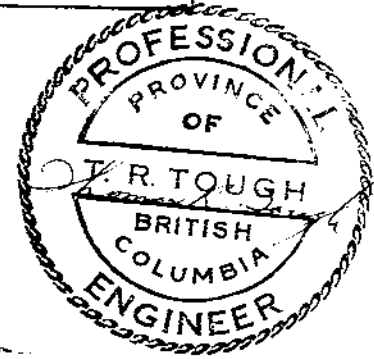


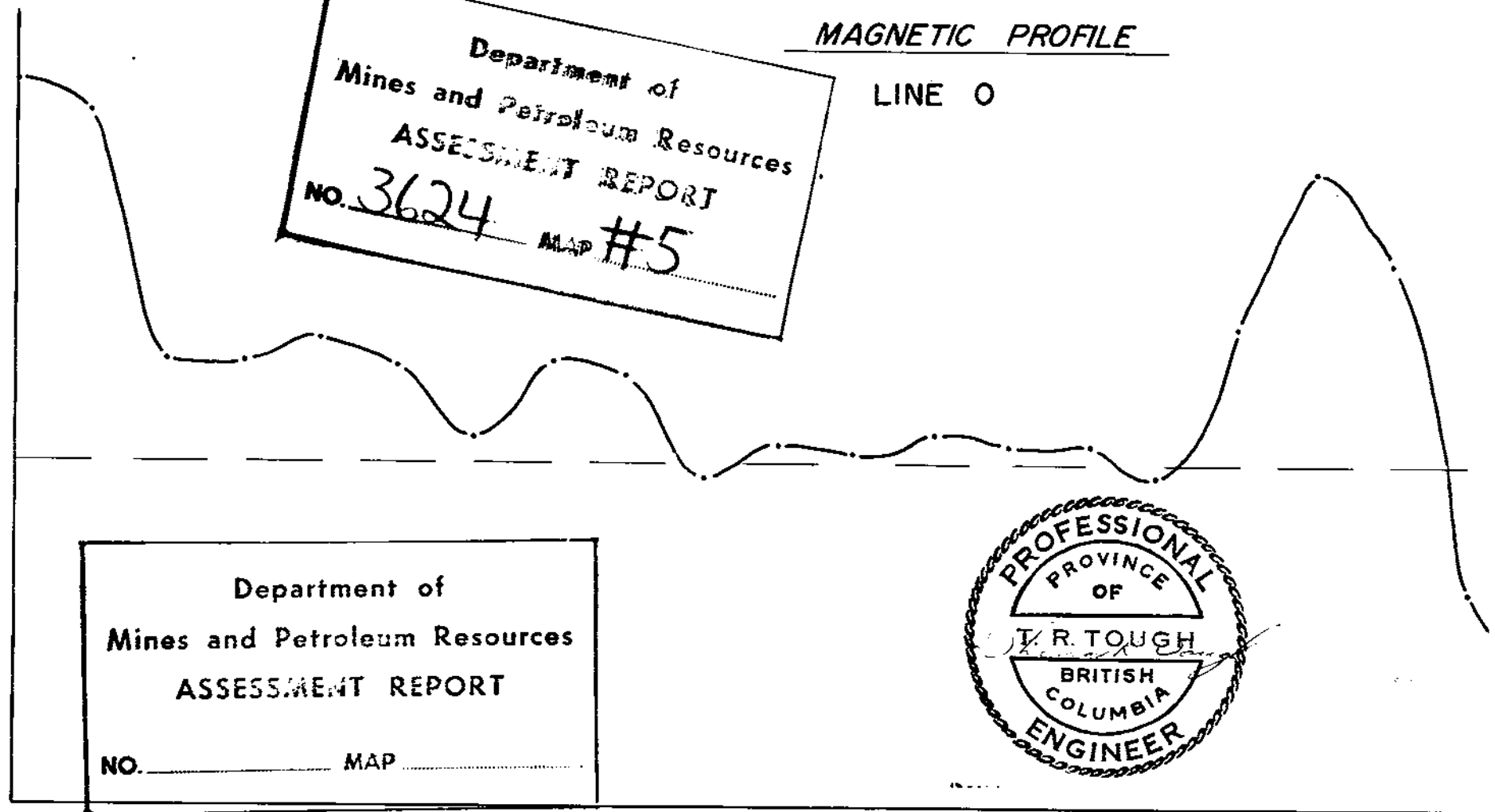
FIG. 4

MAGNETIC PROFILE

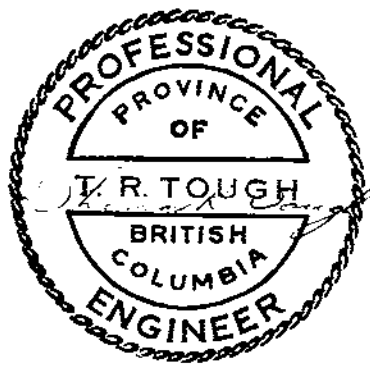
LINE 0

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 3624 MAP #5

VALUES IN GAMMAS



Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. _____ MAP _____



10S 9S 8S 7S 6S 5S 4S 3S 2S 1S 0 1N 2N 3N 4N 5N 6N 7N 8N 9N

STATION

FIG. 5

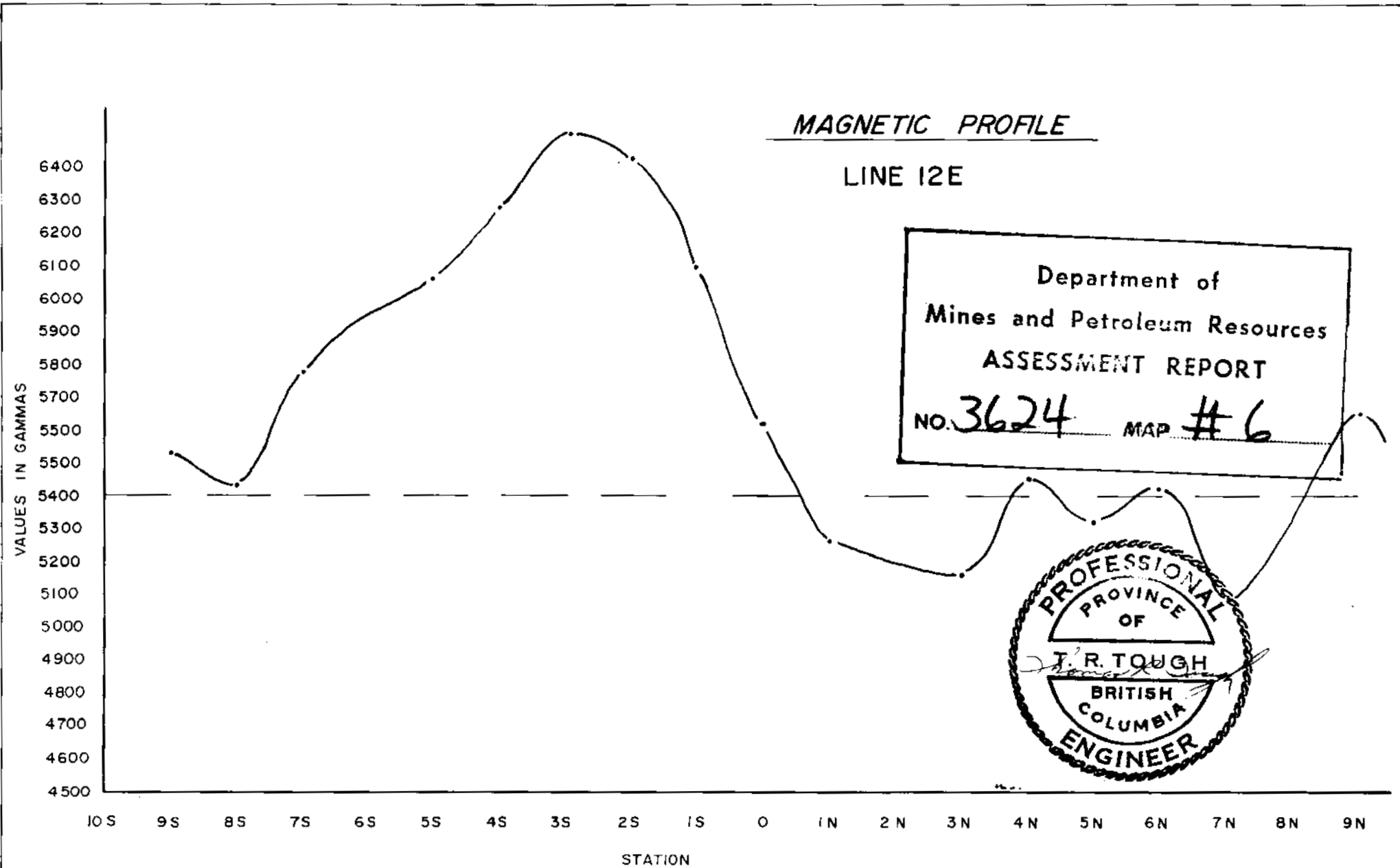


FIG. 6

MAGNETIC PROFILE

LINE 20E

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 3624 MAP #7

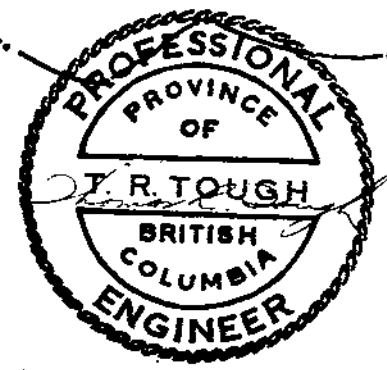
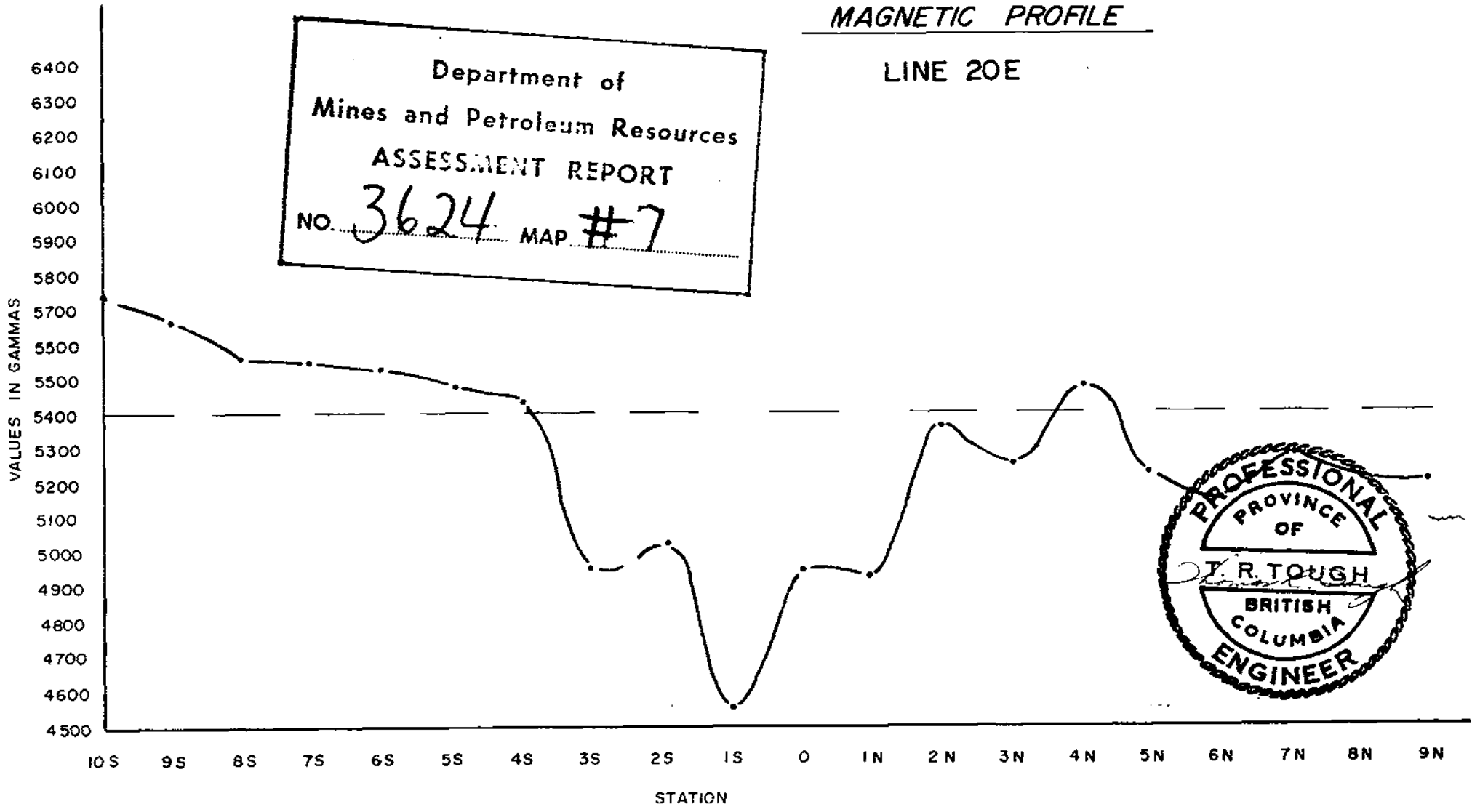
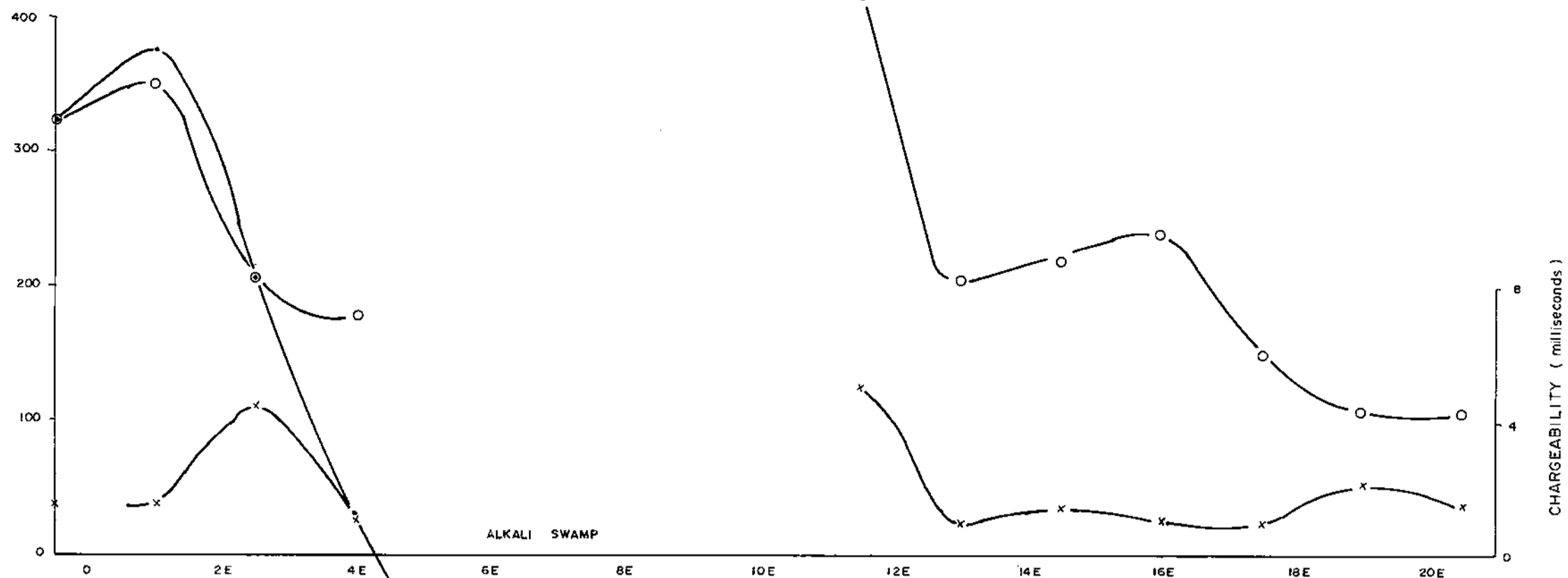


FIG. 7

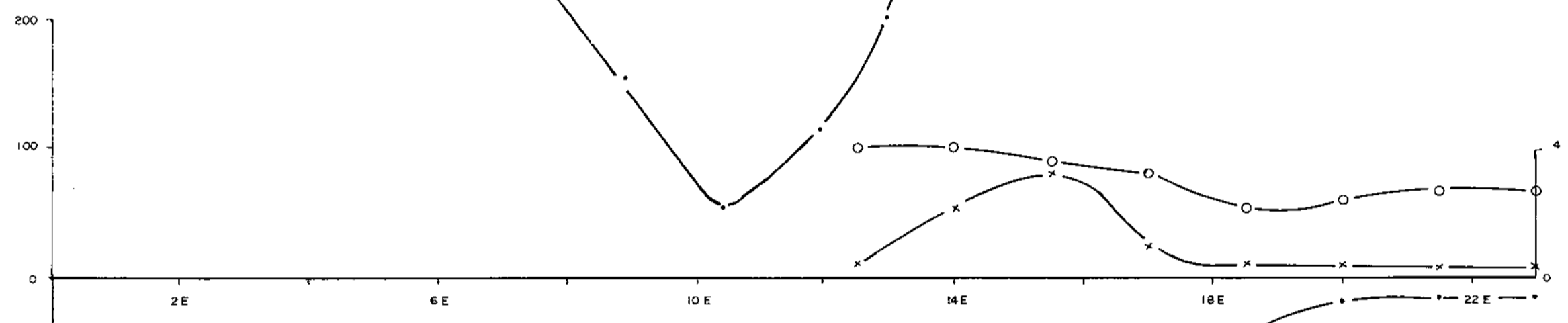
RESISTIVITY (ohm-feet)
SELPOTENTIAL GRADIENT (millivolts)



CHARGEABILITY (milliseconds)

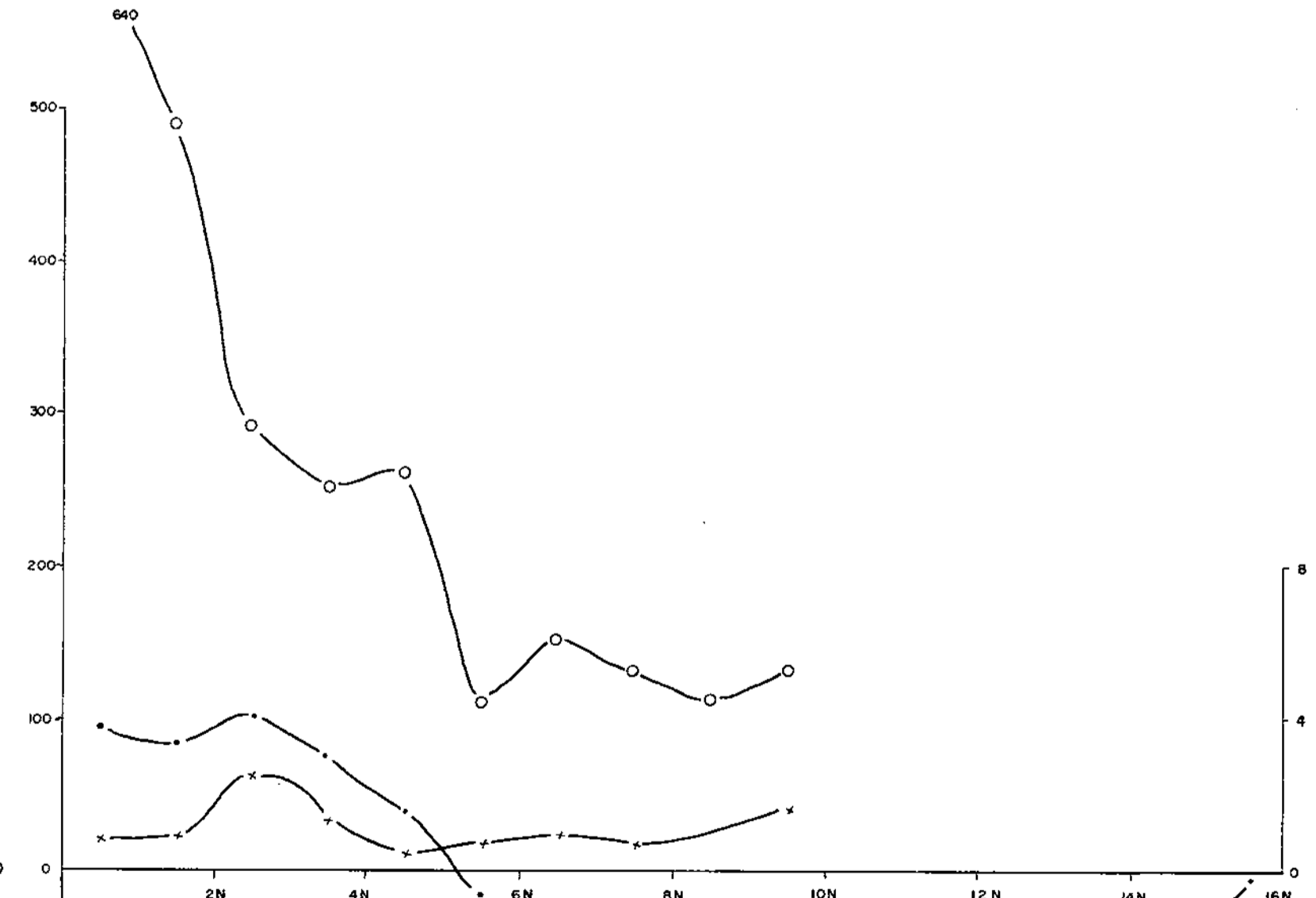
IP L-1

(OHM - FEET, MILLIVOLTS)



(MILLISECONDS)

IP L-2



(OHM - FEET, MILLIVOLTS)

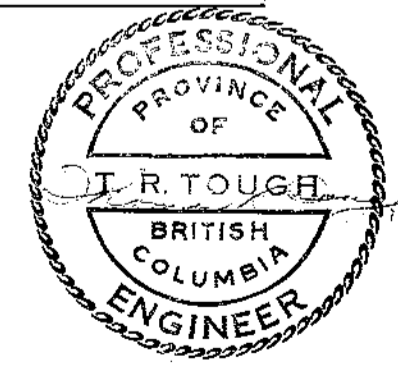


IP L-3

LEGEND

- RESISTIVITY
- SELFPOTENTIAL GRADIENT
- x CHARGEABILITY

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Mines and Petroleum Resources
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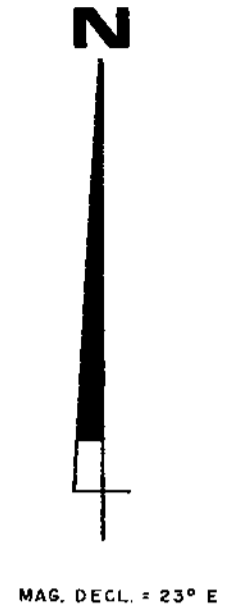
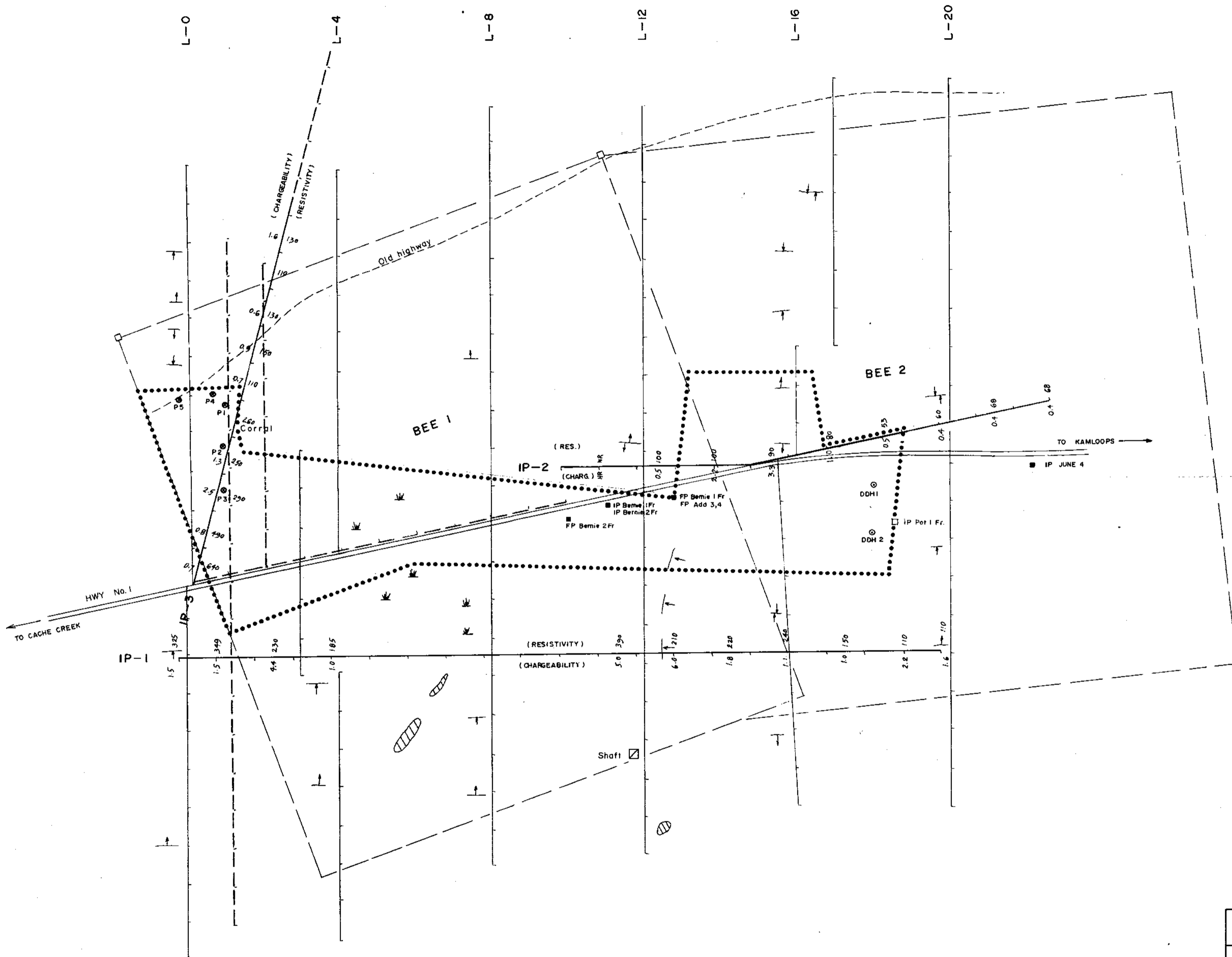
NOTE:
Array — wenner
Electrode spacing — 300 ft.

GEOTRONICS SURVEYS LTD.

EQUATORIAL RESOURCES LIMITED
BEE 1 & 2 CLAIMS
Kamloops M.D., B.C.

CHARGEABILITY, SP GRADIENT & RESISTIVITY PROFILES

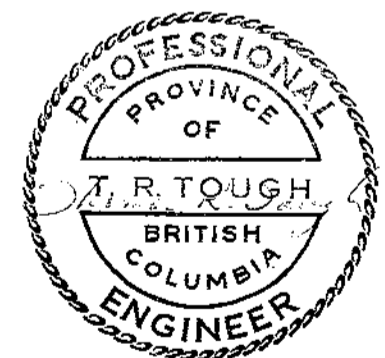
SCALE 1" = 200' HOR.	DATE MAY 1972	JOB No. 72-44	SHEET 4	DRAWN PDT DRAFTING SERV.
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LEGEND

- SURVEY LINE (MAGNETIC SURVEYS)
- □ CLAIM POST (LOCATED, ASSUMED)
- CLAIM LINE
- ↓ Slope down hill
- ⊥ SWAMP
- ⊕ TRENCH
- OUTLINE OF EQUATORIAL HOLDINGS
- IP SURVEY LINE
- SP SURVEY LINE
- P 3 PERCUSSION HOLE

Department of
Mines and Petroleum Resources
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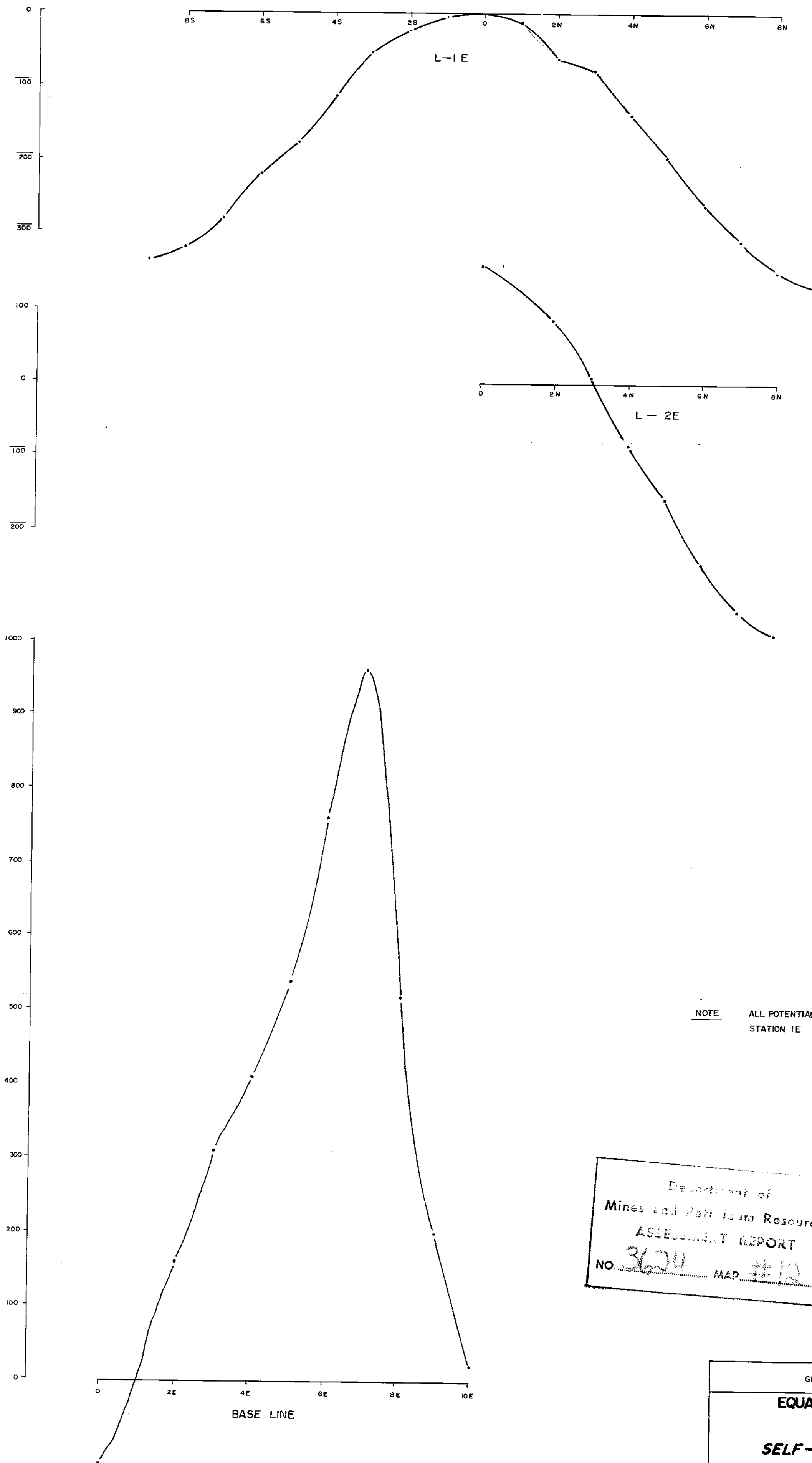


To accompany geophysical report by D. MARK & H. LARSON

NOTE:
Array — wenner
Electrode spacing — 300 ft.
Chargeability units — milliseconds
Resistivity units — ohm-ft

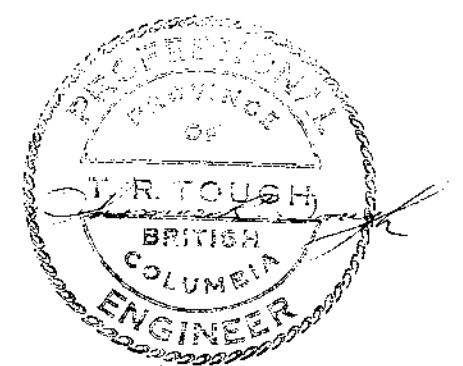
GEOTRONICS SURVEYS LTD.				
EQUATORIAL RESOURCES LTD. BEE CLAIMS Kamloops M.D., B.C.				
CHARGEABILITY & RESISTIVITY Data				
SCALE 1" = 200'	DATE May '72	JOB No. 72-44	SHEET 2	DRAWN PDT

SELF - POTENTIAL IN MILLIVOLTS



NOTE ALL POTENTIALS WERE MEASURED RELATIVE TO BASE LINE STATION 1E

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 3624 MAP #12

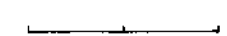











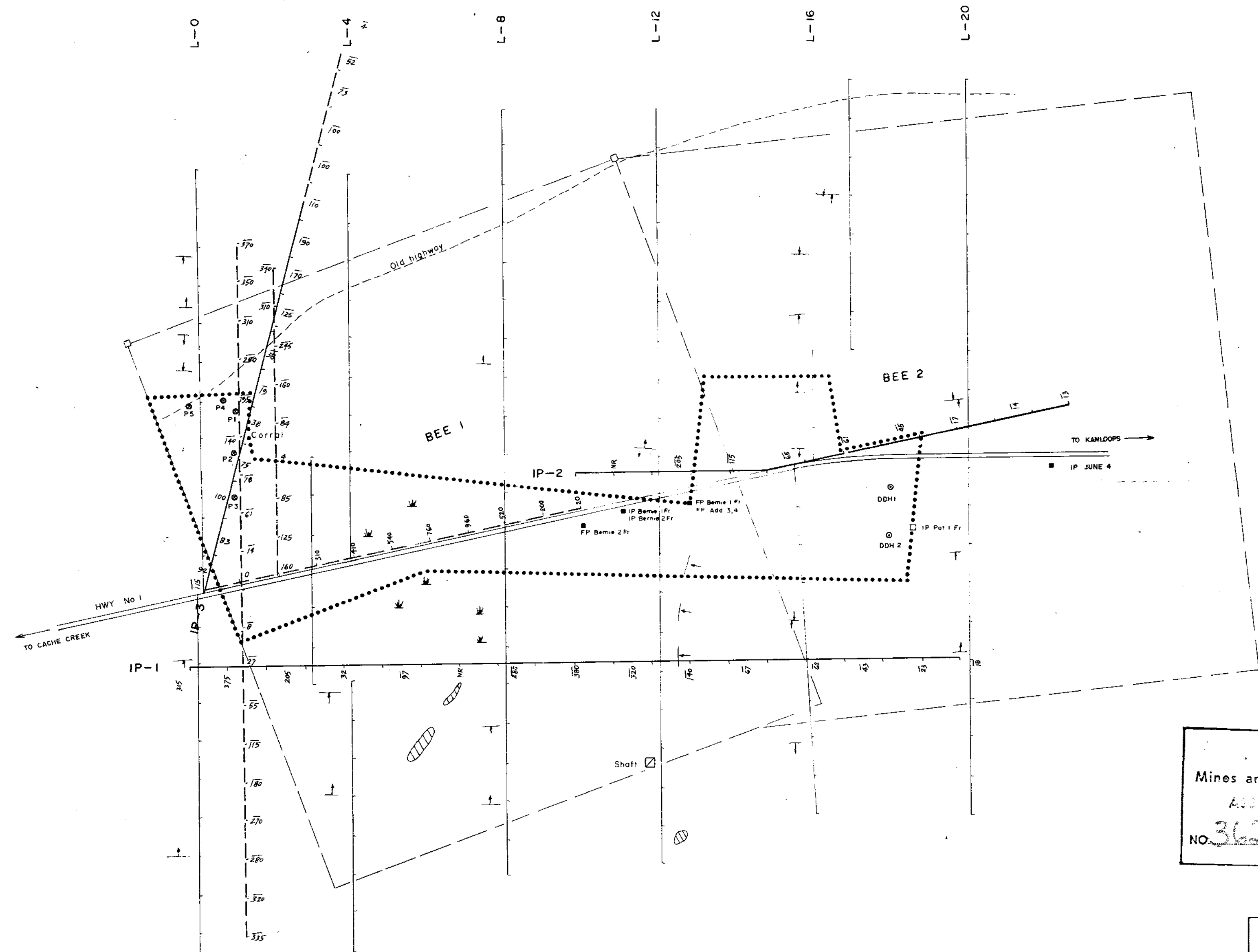
GEOTRONICS SURVEYS LTD.				
EQUATORIAL RESOURCES LTD.				
BEE CLAIMS				
Kamloops M.D., B.C.				
SELF - POTENTIAL PROFILES				
SCALE 1" = 200' HOR.	DATE MAY 1972	JOB No. 72-44	SHEET No. 5	DRAWN PDT



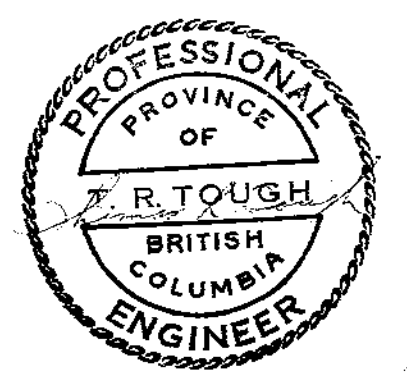
MAG. DECL = 23° E

LEGEND

-  SURVEY LINE (MAGNETIC SURVEYS)
-  CLAIM POST (LOCATED, ASSUMED)
-  CLAIM LINE
-  Slope down hill
-  SWAMP
-  TRENCH
-  OUTLINE OF EQUATORIAL HOLDINGS
-  IP SURVEY LINE
-  SP SURVEY LINE
-  P 5 PERCUSSION HOLE



Department of
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ASSESSMENT REPORT
NO. 3624 MAP #10



To accompany geophysical report by D. MARK & H. LARSON

GEOTRONICS SURVEYS LTD.				
EQUATORIAL RESOURCES LTD. BEE CLAIMS Kamloops M.D., B.C.				
SELF-POTENTIAL AND SELF-POTENTIAL GRADIENT DATA				
SCALE 1" = 200'	DATE May '72	JOB No. 72-44	SHEET 3	DRAWN PDT

NOTE: On lines IP-1, IP-2, and IP-3; self-potential gradient was measured — electrode spacing — 300 ft.
On baseline, L-1, and L-2; self-potential was measured directly
Units — millivolts



MAG. DECL. = 23° E

LEGEND

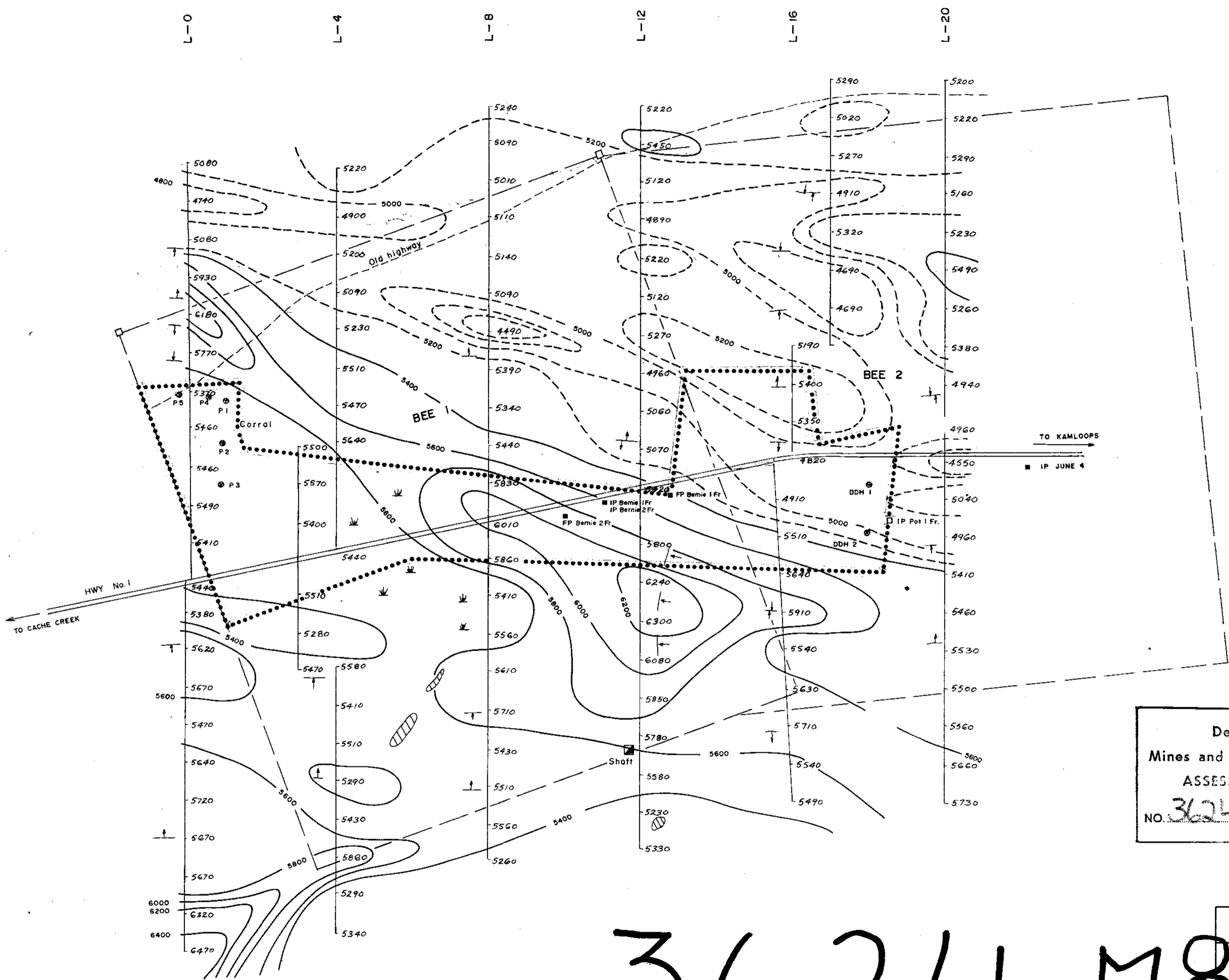
- SURVEY LINE
- CLAIM POST (LOCATED, ASSUMED)
- CLAIM LINE
- Slope down hill
- SWAMP
- TRENCH
- OUTLINE OF EQUATORIAL HOLDINGS
- PERCUSSION HOLE

NOTE

Values are in gammas. These values have been obtained by subtracting 50,000 gammas from the field data.

CONTOURS

- Contour interval is 200 gammas
- - - - - Contours less than 5400 gammas
- Contours greater than or equal to 5400 gammas



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Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 3624 MAP #8



To accompany geophysical report by D. MARK & H. LARSON

GEOTRONICS SURVEYS LTD.				
EQUATORIAL RESOURCES LTD. BEE CLAIMS Kamloops M.D., B.C.				
MAGNETOMETER SURVEY DATA & CONTOURS				
SCALE 1" = 200'	DATE May '72	JOB No. 72-44	SHEET 1	DRAWN PDT

3624 M-8