REPORT ON

INDUCED POLARIZATION

AND RESISTIVITY SURVEYS

ON THE

GIL CLAIMS

KAMLOOPS M. D.

92 I/10E

50° 37' N 120° 39' W

OWNER: BARRIER REEF RESOURCES LTD.

OPERATOR: BARRIER REEF RESOURCES LTD.

By: PHILIP G. HALLOF Dec 1980.

TABLE OF CONTENTS

PHOENIX GEOPHYSICS LIMITED

NOTES ON THE THEORY, METHOD OF FIELD OPERATION, AND PRESENTATION OF DATA FOR THE INDUCED POLARIZATION METHOD

Induced Polarization as a geophysical measurement refers to the blocking action or polarization of metallic or electronic conductors in a medium of ionic solution conduction.

This electro-chemical 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 the ground, as in resistivity measurements, all of the conduction takes place through ions present in the water content of the rock, or soil, i.e. by ionic conduction. This is because almost all minerals have a much higher specific resistivity than ground 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. This movement of charge creates a small current flow which can be measured on the surface of the ground as a decaying potential difference.

From an alternate viewpoint it can be seen that if the direction of the current through the system is reversed repeatedly before the polarization occurs, the effective resistivity of the system as a whole will change as the frequency of the switching is changed. This is a consequence of the fact that the amount of current flowing through each metallic interface depends upon the length of time that current has been passing through it in one direction.

The values of the per cent frequency effect or F.E. are a measurement of the polarization in the rock mass. However, since the measurement of the degree of polarization is related to the apparent resistivity of the rock mass it is found that the metal factor values or M.F. are the most useful values in determining the amount of polarization present in the rock mass. The MF values are obtained by normalizing the F.E. values for varying resistivities.

The induced polarization measurement is perhaps the most powerful geophysical method for the direct detection of metallic sulphide mineralization, even when this mineralization is of very low concentration. The lower limit of volume per cent sulphide necessary to produce a recognizable IP anomaly will vary with the geometry and geologic environment of the source, and the method of executing the survey. However, sulphide mineralization of less than one per cent by volume has been detected by the IP method under proper geological conditions.

The greatest application of the IP method has been in the search for disseminated metallic sulphides of less than 20% by volume. However, it has also been used successfully in the search for massive sulphides in situations where, due to source geometry, depth of source, or low resistivity of surface layer, the EM method cannot be successfully applied. The ability to differentiate ionic conductors, such as water filled shear zones, makes the IP method a useful tool in checking EM

anomalies which are suspected of being due to these causes.

In normal field applications the IP method does not differentiate between the economically important metallic minerals such as chalcopyrite, chalcocite, molybdenite, galena, etc., and the other metallic minerals such as pyrite. The induced polarization effect is due to the total of all electronic conducting minerals in the rock mass. Other electronic conducting materials which can produce an IP response are magnetite, pyrolusite, graphite, and some forms of hematite.

In the field procedure, measurements on the surface are made in a way that allows the effects of lateral changes in the properties of the ground to be separated from the effects of vertical changes in the properties. Current is applied to the ground at two points in distance (X) apart. The potentials are measured at two points (X) feet apart, in line with the current electrodes is an integer number (n) times the basic distance (X).

The measurements are made along a surveyed line, with a constant distance (nX) betwen the nearest current and potential electrodes. In most surveys, several traverses are made with various values of (n); i.e. (n) = 1,2,3,4, etc. The kind of survey required (detailed or reconnaissance) decides the number of values of (n) used.

In plotting the results, the values of apparent resistivity, apparent per cent frequency effect, and the apparent metal factor

measured for each set of electrode positions are plotted at the intersection of grid lines, one from the center point of the current electrodes and the other from the center point of the potential electrodes. (See Figure A.) The resistivity values are plotted at the top of the data profile, above the metal factor values. On a third line, below the metal factor values, are plotted the values of the percent frequency effect. The lateral displacement of a given value is determined by the location along the survey line of the center point between the current and potential electrodes. The distance of the value from the line is determined by the distance (nX) between the current and potential electrodes when the measurement was made.

The separation between sender and receiver electrodes is only one factor which determines the depth to which the ground is being sampled in any particular measurement. The plots then, when contoured, are not section maps of the electrical properties of the ground under the survey line. The interpretation of the results from any given survey must be carried out using the combined experience gained from field results, model study results and the theoretical investigations. The position of the electrodes when anomalous values are measured is important in the interpretation.

In the field procedure, the interval over which the potential differences are measured is the same as the interval over which the electrodes are moved after a series of potential readings has been made.

One of the advantages of the induced polarization method is that the same equipment can be used for both detailed and reconnaissance surveys merely by changing the distance (X) over which the electrodes are moved each time. In the past, intervals have been used ranging from 25 feet to 2000 feet for (X). In each case, the decision as to the distance (X) and the values of (n) to be used is largely determined by the expected size of the mineral deposit being sought, the size of the expected anomaly and the speed with which it is desired to progress.

The diagram in Figure A demonstrates the method used in plotting the results. Each value of the apparent resistivity, apparent metal factor, and apparent per cent frequency effect is plotted and identified by the position of the four electrodes when the measurement was made. It can be seen that the values measured for the larger values of (n) are plotted farther from the line indicating that the thickness of the layer of the earth that is being tested is greater than for the smaller values of (n); i.e. the depth of the measurement is increased.

The IP measurement is basically obtained by measuring the difference in potential or voltage (ΔV) obtained at two operating frequencies. The voltage is the product of the current through the ground and the apparent resistivity of the ground. Therefore in field situations where the current is very low due to poor electrode contact, or the apparent resistivity is very low, or a combination of the two effects; the value of (ΔV) the change in potential will be too small to be measurable. The symbol "TL" on the data plots indicates this situation.

In some situations spurious noise, either man made or natural, will render it impossible to obtain a reading. The symbol "N" on the data plots indicates a station at which it is too noisy to record a reading. If a reading can be obtained, but for reasons of noise there is some doubt as to its accuracy, the reading is bracketed in the data plot ( ).

In certain situations negative values of Apparent Frequency Effect are recorded. This may be due to the geologic environment or spurious electrical effects. The actual negative frequency effect value recorded is indicated on the data plot, however, the symbol "NEG" is indicated for the corresponding value of Apparent Metal Factor. In contouring negative values the contour lines are indicated to the nearest positive value in the immediate vicinity of the negative value.

The symbol "NR" indicates that for some reason the operator did not attempt to record a reading although normal survey procedures would suggest that one was required. This may be due to inaccessible topography or other similar reasons. Any symbol other than those discussed above is unique to a particular situation and is described within the body of the report.

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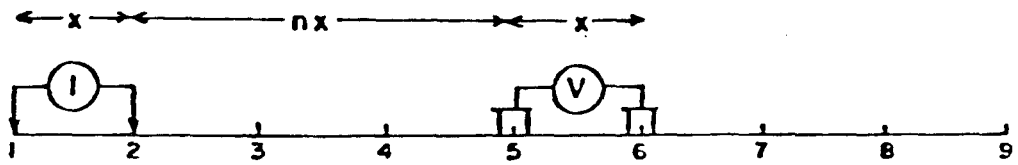
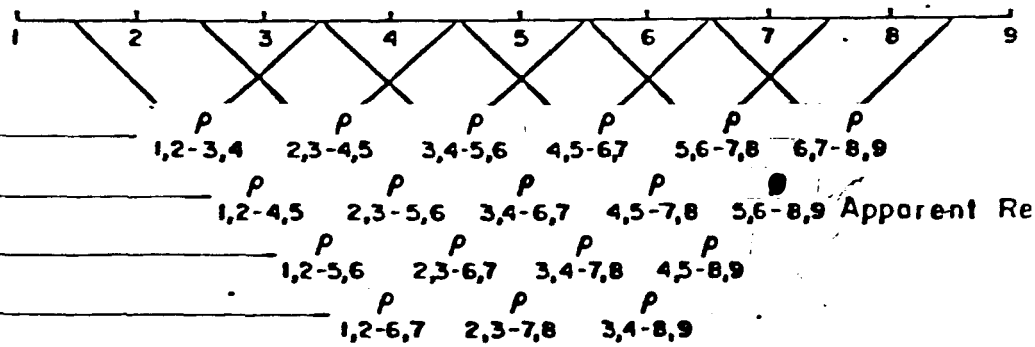
METHOD USED IN PLOTTING DIPOLE-DIPOLE INDUCED POLARIZATION AND RESISTIVITY RESULTS

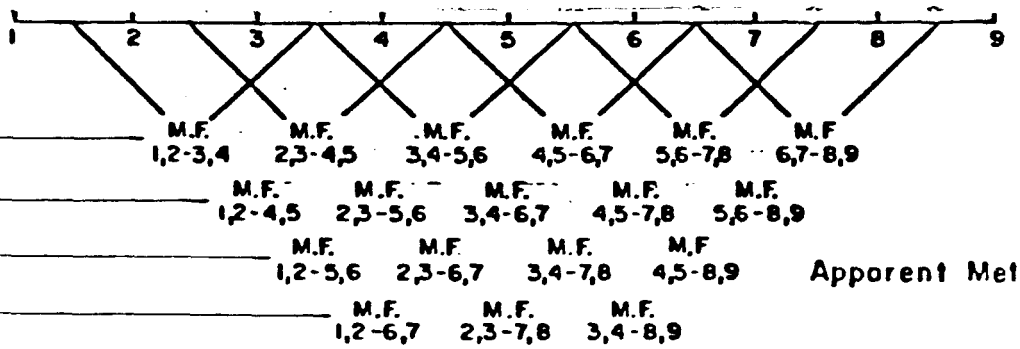


Stations on line

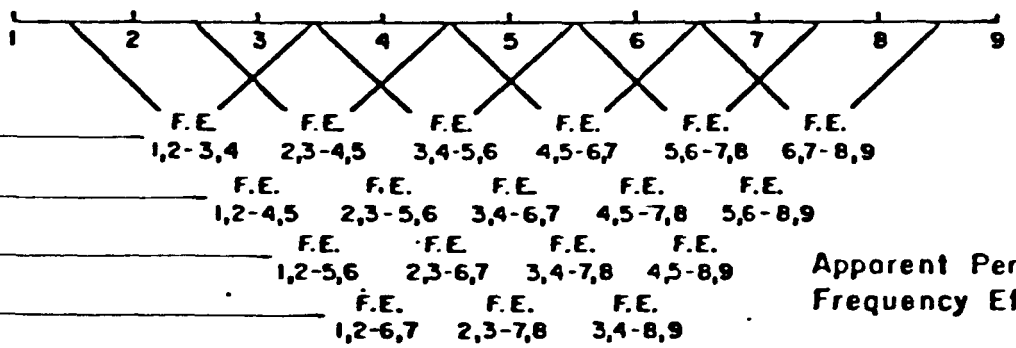
x = Electrode spread length
n = Electrode separation



Apparent Resistivity



Apparent Metal Factor



Apparent Percent Frequency Effect

Fig. A

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REPORT ON THE INDUCED POLARIZATION AND RESISTIVITY SURVEY ON THE GIL CLAIMS, KAMLOOPS M.D., BRITISH COLUMBIA FOR KERR, DAWSON AND ASSOCIATES LTD.

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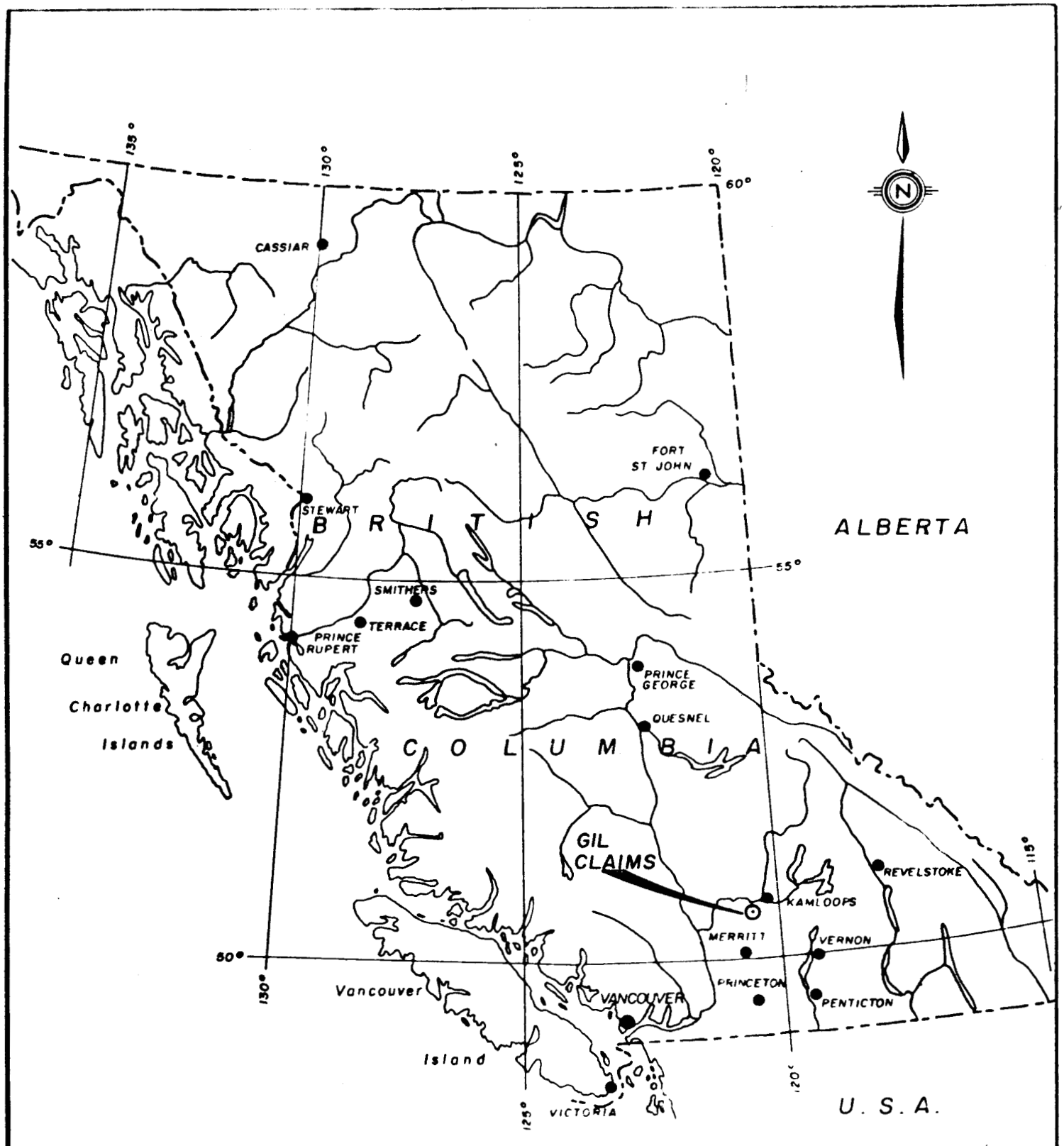
1. INTRODUCTION

An Induced Polarization and Resistivity survey has been carried out on the GIL claims, Kamloops Mining Division, B.C., for Kerr, Dawson and Associates Ltd., property managers on behalf of Barrier Reef Resources Ltd.

The property is located approximately 21 km. southwest of the city of Kamloops, B.C., at approximately $50^{o}37'$ north latitude and approximately $120^{o}38'$ west longitude. Access is via Highway No.1 from Kamloops, and then by the Dominic Lake road which leads south from Cherry Creek to Greenstone mountain.

Volcanic rocks of the Nicola group, which consist mainly of massive, porphyritic andesite flows, underlie the GIL claims. At least three small granitic plugs intrude the volcanics. The largest of these intrusives is



BARRIER REEF RESOURCES LTD.(N.P.L.)

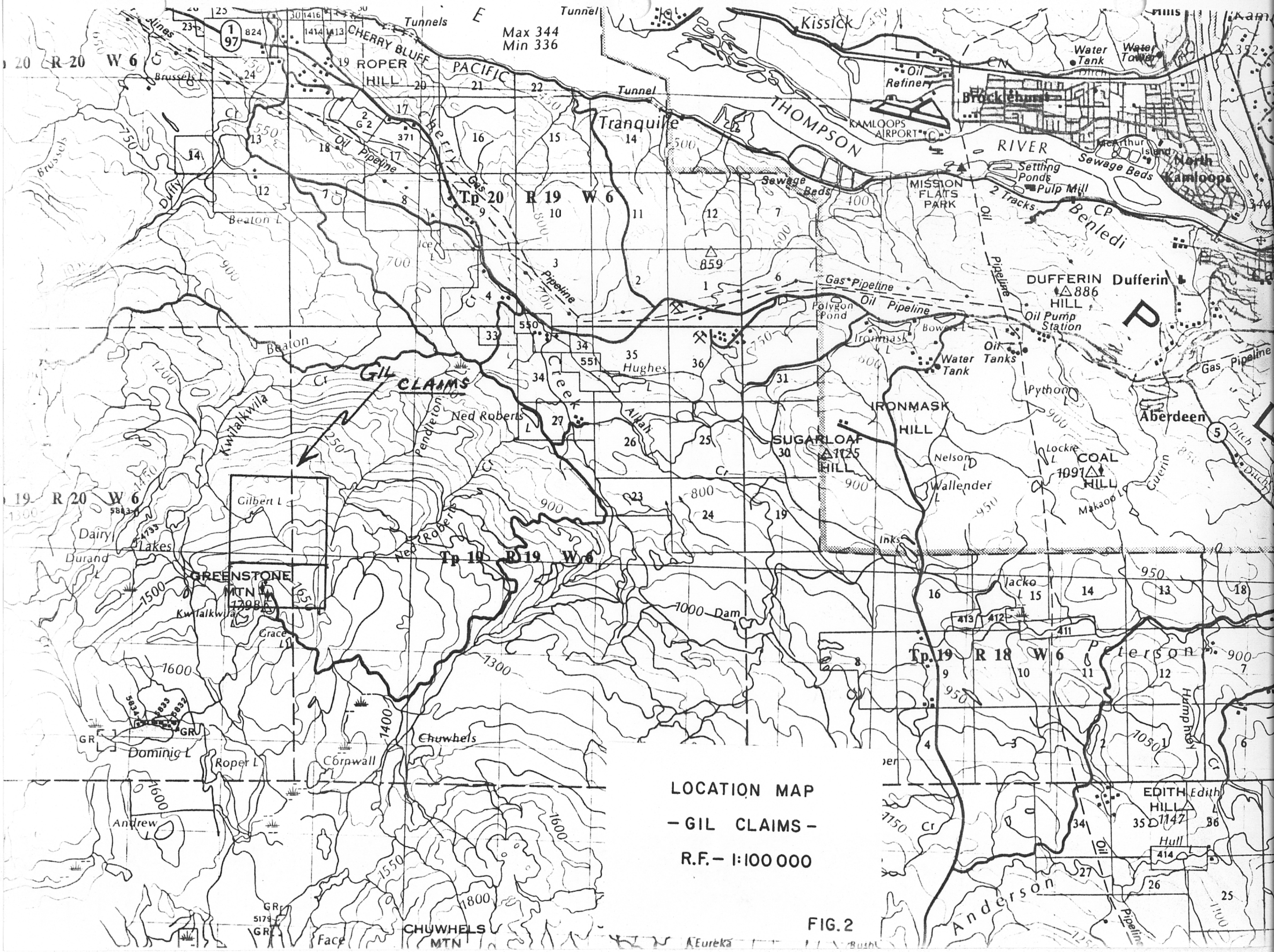
LOCATION MAP

GIL CLAIMS

KAMLOOPS MINING DIVISION, B.C.

Technical Work by: Kerr, Dawson & Assoc. Ltd.	Date : Jan., 1979.
Scale 1cm = 87 km	Dwg No. 150-1

FIG. 1

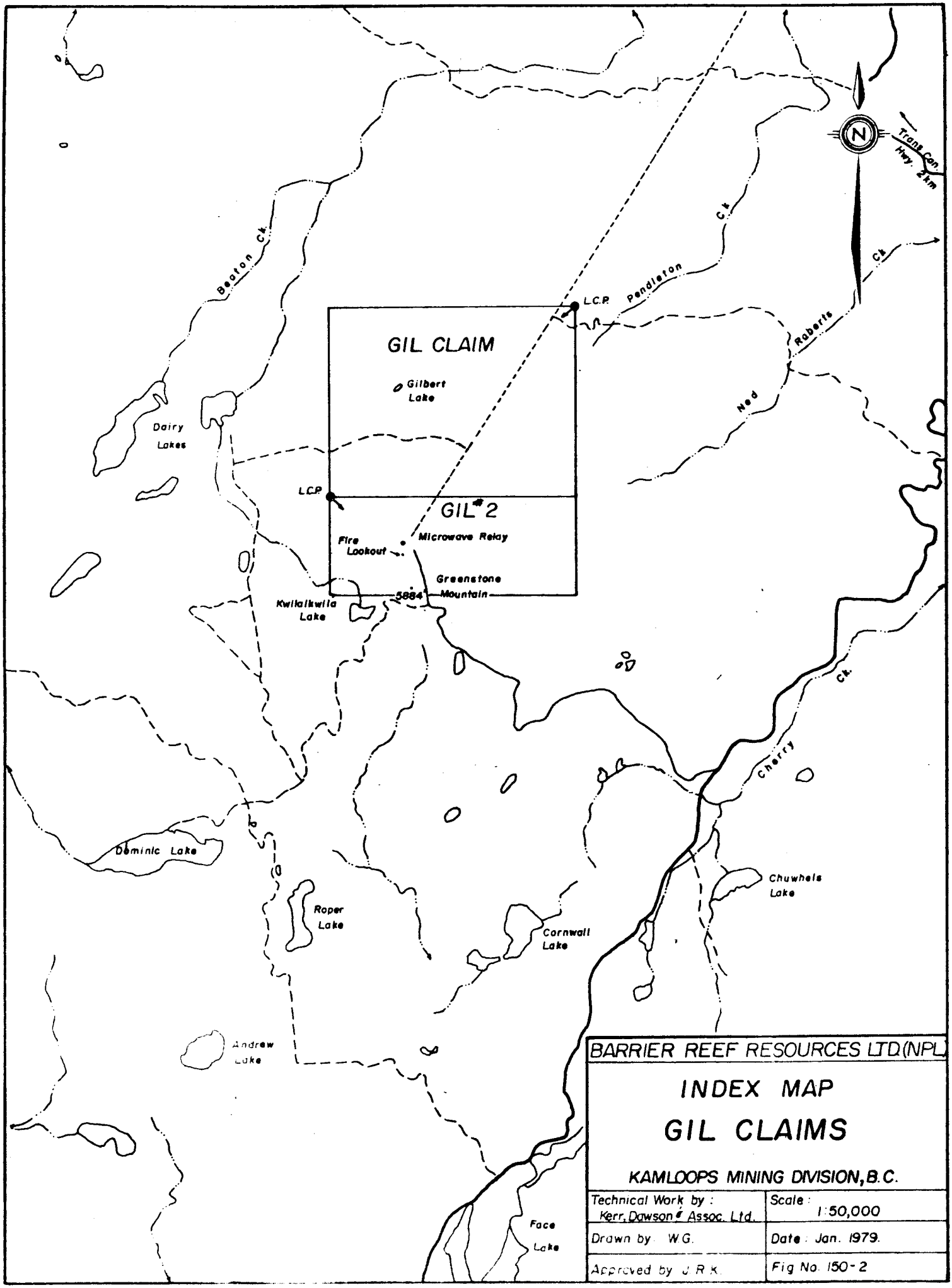


LOCATION MAP

– GIL CLAIMS –

R.F. – 1:100 000

FIG. 2



BARRIER REEF RESOURCES LTD.(NPL)

INDEX MAP

GIL CLAIMS

KAMLOOPS MINING DIVISION, B.C.

Technical Work by : Kerr, Dawson & Assoc. Ltd.	Scale : 1:50,000
Drawn by W.G.	Date : Jan. 1979.
Approved by J.R.K.	Fig No. 150-2

FIG. 3

mapped in the northern part of the grid area, and is reported to contain minor quartz veins carrying traces of chalcopyrite and molybdenite.

Previous work has also outlined a large zone of anomalous molybdenum values in soils. This feature trends roughly north to north-northwest, and appears to link the largest intrusive, mentioned above, to one of the smaller ones.

The present IP and Resistivity survey was planned in order to outline metallic sulphides, possibly associated with porphyry-type molybdenum mineralization.

A Phoenix Model IPV-1 receiver and a Phoenix Model IPT-1 transmitter were used to make the induced polarization measurements. The survey utilized the dipole-dipole array, a 100 meter electrode interval, and frequencies of 5.0 Hz and 0.31 Hz.

Field work was completed during October and November 1980 under the supervision of Mr. Peter Gardner, geophysical crew leader, and Mr. Frank DiSpirito, geophysicist.

2. DESCRIPTION OF CLAIMS

The GIL claims property consists of two contiguous metric claims totalling 30 units as follows:

Claim Name	Record No.	No. of Units	Expiry Date
GIL	670	20	Jan. 10/80
GIL #2	685	10	Jan. 24/81

Figure 3 shows a map of the claims at a scale of 1:50,000.

3. PRESENTATION OF RESULTS

The Induced Polarization and Resistivity results are shown on the following enclosed data plots. The results are plotted in the manner described in the notes preceding this report.

Line	Electrode Interval	Dwg. No.
Base Line	100 meters	IP 5233-1
0	100 meters	IP 5233-2
4S	100 meters	IP 5233-3
8S	100 meters	IP 5233-4
12S	100 meters	IP 5233-5
16S	100 meters	IP 5233-6
20S	100 meters	IP 5233-7

Also enclosed with this report is Dwg. I.P.P. 3086, a plan map of the GIL claims grid at a scale of 1:5,000. The definite, probable and possible Induced Polarization anomalies are indicated by bars, in the manner shown on the legend, on this plan map as well as on the data plots. These bars represent the surface projection of the anomalous zones as interpreted from the location of the transmitter and receiver electrodes when the anomalous values were measured.

Since the Induced Polarization measurement is essentially an averaging process, as are all potential methods, it is frequently difficult to exactly pinpoint the source of an anomaly. Certainly, no anomaly can be located with more accuracy than the electrode interval length; i.e. when using 100M electrode intervals the position of a narrow sulphide body can only be determined to lie between two stations 100M apart. In order to definitely

Locate, and fully evaluate, a narrow, shallow source it is necessary to use shorter electrode intervals. In order to locate sources at some depth, larger electrode intervals must be used, with a corresponding increase in the uncertainties of location. Therefore, while the centre of the indicated anomaly probably corresponds fairly well with source, the length of the indicated anomaly along the line should not be taken to represent the exact edges of the anomalous material.

The grid, claim and topographical information shown on Dwg. I.P.P. 3086 has been taken from maps made available by the staff of Kerr, Dawson and Associates Ltd.

4. DISCUSSION OF RESULTS

A large number of anomalous IP and Resistivity responses are evident in the data from the GIL claims grid. With the exception of Line 0, the most northerly line surveyed, all of the other traverses show anomalies of moderate amplitude or greater.

In a situation such as this it frequently becomes difficult to determine the relationship between individual anomalies, i.e., zoning the different responses becomes somewhat uncertain.

However, a reasonable interpretation of the present data suggests the possible existence of a roughly circular zone of polarizable material, as shown on plan map I.P.P. 3086. Apparent resistivity values recorded within the anomalous IP zone are all only moderately lower than background, which could indicate the mineralization is of a more disseminated nature.

The distinct molybdenum geochemical high defined by previous work, would appear coincident with such a geophysical zone, in the vicinity of Line 4S and Line 16S, and would extend to cover most of the area enclosed

by the same zone on Line 8S, and Line 12S. Again, it should be pointed out that the mineral molybdenum is not a good conductor of electricity, and cannot be detected directly by any geophysical method; however, in this case, it would appear that there is a close association between the mineralization, which is the source of the IP zone, and molybdenum mineralization as outlined by the geochemistry.

Highest priority should be given to the region near the northwestern rim of the interpreted IP trend, where the northern end of the baseline was also evaluated using the IP and Resistivity technique, in addition to the six grid lines. In this area, the source of the IP anomalies detected on the baseline, and on Line 4S just west of the baseline, is definitely established as an east-northeast striking target. This orientation correlates not only with the circular IP zone mentioned above, but with a narrow, westerly striking extension of the main molybdenum geochemical anomaly. Additional IP surveying is required on north-south lines to test the area of this elongated geochemical trend.

The source of the IP response recorded on the baseline is indicated to be less than 100 meters subsurface, less than 100 meters in width, and may be limited in depth extent. The center of the target is approximately station 3+50S on the baseline.

5. SUMMARY AND RECOMMENDATIONS

The Induced Polarization and Resistivity survey of the GIL claims grid has outlined what is interpreted to be a roughly circular zone of anomalous IP response. This zone appears to be closely associated with a previoulsy defined area of anomalous molybdenum geochemical samples, especially along the northwestern edge of the IP feature.

Initially it is recommended that the IP zone be drill-tested in the vicinity of the baseline and Line 4S, as the orientation of the target is most certain here.

A drill hole passing beneath the baseline, station 3+50S, at a depth of 100 meters is suggested.

It is then recommended that the following north-south lines be surveyed with the IP and Resistivity technique, to confirm the presence of the circular IP zone, before more drilling is carried out:

Line 4W
Remainder of the baseline
Line 4E

Further drilling could then be recommended.

PHOENIX GEOPHYSICS LIMITED

Paul A. Cartwright

Paul A. Cartwright, B.Sc.
Geophysicist

P. G. Hallof

Philip G. Hallof, Ph.D., P. Eng.
Geophysicist

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
P. G. HALLOF

Expiry Date: February 25, 1981

Dated: December 10, 1980

ASSESSMENT DETAILS

PROPERTY: Gil Claims

MINING DIVISION: Kamloops

SPONSOR: Kerr, Dawson And Associates Ltd.

PROVINCE: British Columbia

LOCATION: Kamloops

TYPE OF SURVEY: Induced Polarization & Resistivity

DATE STARTED: October 19-27, 1980

OPERATING MAN DAYS:	14	DATE STARTED: November 6, 1980 (1 day)
EQUIVALENT 8 HR. MAN DAYS:	21	DATE FINISHED: November 6, 1980
CONSULTING MAN DAYS:	2	NUMBER OF STATIONS: 116
DRAFTING MAN DAYS:	5	NUMBER OF READINGS: 996
TOTAL MAN DAYS:	28	KM. OF LINE SURVEYED: 10.9 Km

CONSULTANTS:

P.G. Hallof, Suite 3505, 2045 Lake Shore Blvd. West, Toronto, Ontario.
P.A. Cartwright, 4238 West 11th Ave., Vancouver, B.C.

FIELD TECHNICIANS:

F. Dispirito, 2748 Oxford Street, Vancouver, B.C.
G. Ouellette, 502 Taschereau Est., Rouyn, Quebec.
P. Gardner, 393 Connaught Avenue, Willowdale, Ontario.
M. Cornett, 19 Pickering Street, Toronto, Ontario.

CARTOGRAPHERS:

R.C. Norris, 45 - 1204 Sunrise Ave., Toronto, Ontario.
M.W. Reh, 58 Crossbow Crescent, Willowdale, Ontario.

PHOENIX GEOPHYSICS LIMITED

Philip G. Hallof, Ph.D., P.Eng.
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PROVINCE OF BRITISH COLUMBIA
P.G. HALLOF

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STATEMENT OF COST

Kerr Dawson & Associates Ltd. - IP and Resistivity Survey
GIL Claims - Kamloops, B.C.

CREW: F. Dispirito - G. Ouellette

PERIOD: November 6, 1980

CREW: P. Gardner - M. Cornett

PERIOD: October 19 - 27, 1980

7 days Operating	@ $590.00/day	$ 4,130.00
1 day Organization	@ $225.00/day	225.00
2 days Standby	@ $225.00/day	450.00

EXPENSES:

Meals & Accommodation	$179.10	
Telephone	25.00	
Vehicle	53.50	
Fuel	14.00	
	271.60	
+ 15%	40.74	
		312.34

EXTRA LABOUR:

1 Man-day	$ 50.00	
+ 20%	10.00	
		60.00
		$ 5,177.34

PHOENIX GEOPHYSICS LIMITED

Philip G. Hallof, Ph.D., P. Eng.
Geophysicist

PROFESSIONAL ENGINEER
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P. G. HALLOF

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COSTS IN ADDITION TO THOSE ENUMERATED IN PHOENIX REPORT

LABOUR:

J. M. Dawson, P. Eng., 2 days @ $200.00/day	$400.00	
R. Henderson, 6 days @ $115.00/day	690.00	
B. Cross, 6 days @ $115.00/day	690.00	$1,780.00

EXPENSES AND DISBURSEMENTS:

(a).	Truck Rental:		
	7 1/2 days @ $30/day	$225.00	
	600 mi. @ 30¢/mile	180.00	405.00
(b).	Contract Line Cutting by Renegade Exploration Services (as per attached invoice) . . .		3,688.75
(c).	Room and Board (Phoenix Crew) (as attached)		738.49
(d).	Blueprints, maps, xerox, secretarial, phone, etc.		67.40
			4,899.64

TOTAL $6,679.64

CERTIFICATE

I, Paul A. Cartwright, of the City of Vancouver, Province of British Columbia, do hereby certify that:

1. I am a geophysicist residing at 4238 West 11th Avenue, Vancouver, B.C.

2. I am a graduate of the University of British Columbia, B.C. with a B.Sc. Degree.

3. I am a member of the Society of Exploration Geophysicists.

4. I have been practising my profession about 10 years.

5. I have no direct or indirect interest, nor do I expect to receive any interest directly or indirectly, in the property or securities of Kerr, Dawson & Associates Ltd., or any affiliate.

6. The statements made in this report are based on a study of published geological literature and unpublished private reports.

7. Permission is granted to use in whole or in part for assessment and qualification requirements but not for advertising purposes.

Dated at Vancouver

This 10th day of December, 1980

Paul A. Cartwright

Paul A. Cartwright, B.Sc.

CERTIFICATE

I, Philip George Hallof, of the City of Toronto, Province of Ontario, do hereby certify that:

1. I am a geophysicist residing at Suite 3505, 2045 Lake Shore Blvd.W., Toronto, Ontario.

2. I am a graduate of the Massachusetts Institute of Technology with a B.Sc. Degree (1952) in Geology and Geophysics, and a Ph.D. Degree (1957) in Geophysics.

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

4. I am a Professional Geophysicist, registered in the Province of Ontario, the Province of British Columbia and the State of Arizona.

5. I have no direct or indirect interest, nor do I expect to receive any interest directly or indirectly, in the property or securities of Kerr, Dawson & Associates Ltd., or any affiliate.

6. The statements made in this report are based on a study of published geological literature and unpublished private reports.

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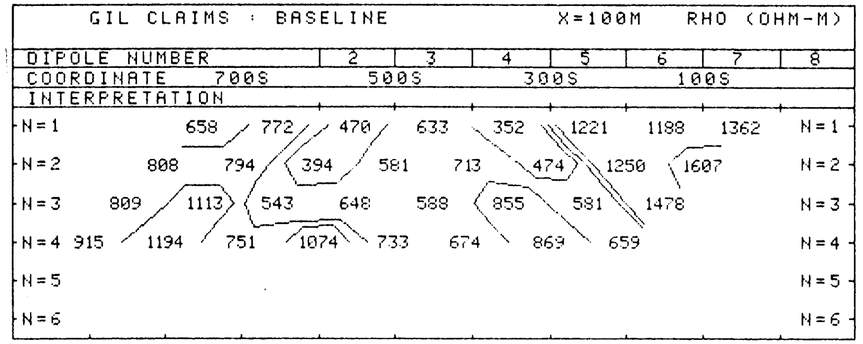
Dated at Toronto

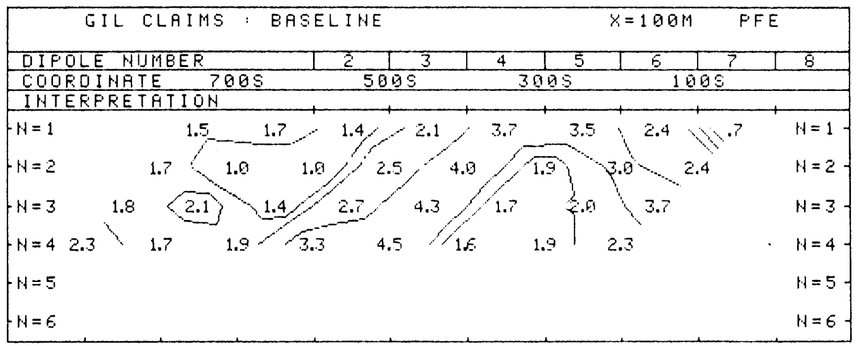
This 10th day of December, 1980

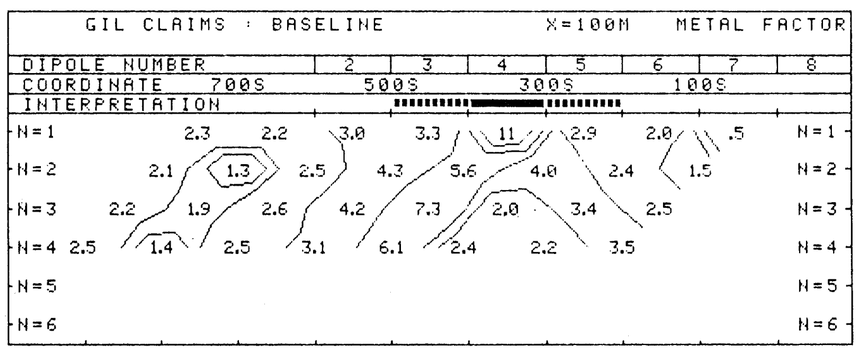
Philip G. Hallof, Ph.D., P.Eng.

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
P. G. HALLOF

Expiry Date: February 25, 1981







DWG. NO. – I.P. – 5233 – I

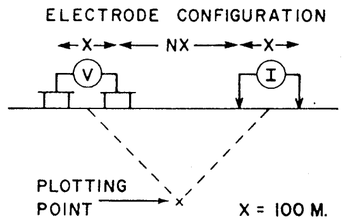
KERR, DAWSON AND ASSOC. LTD.

GIL CLAIMS, KAMLOOPS M.D.

BRITISH COLUMBIA

LINE NO. – B/L

ELECTRODE CONFIGURATION



SURFACE PROJECTION OF ANOMALOUS ZONE

DEFINITE

PROBABLE

POSSIBLE

FREQUENCIES 0·3–5·0 HZ.

DATE SURVEYED NOV. 1980

APPROVED R.G. Dawson

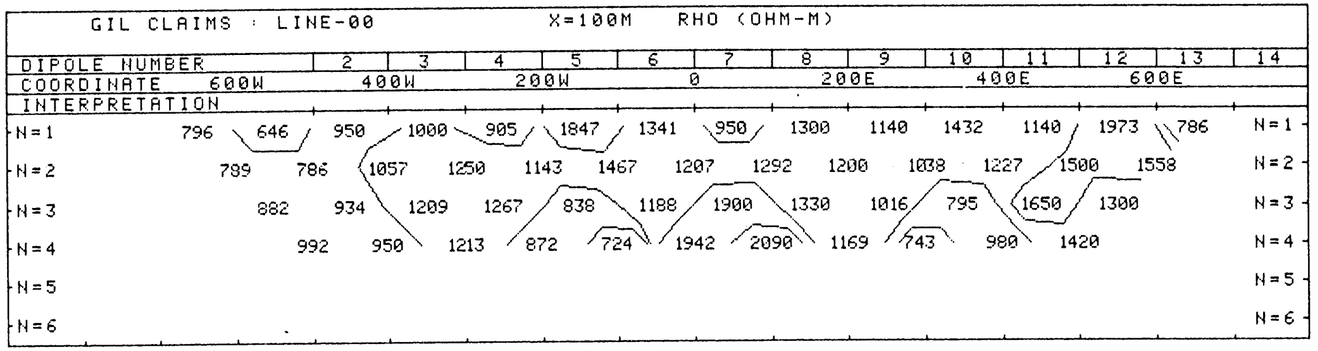
DATE

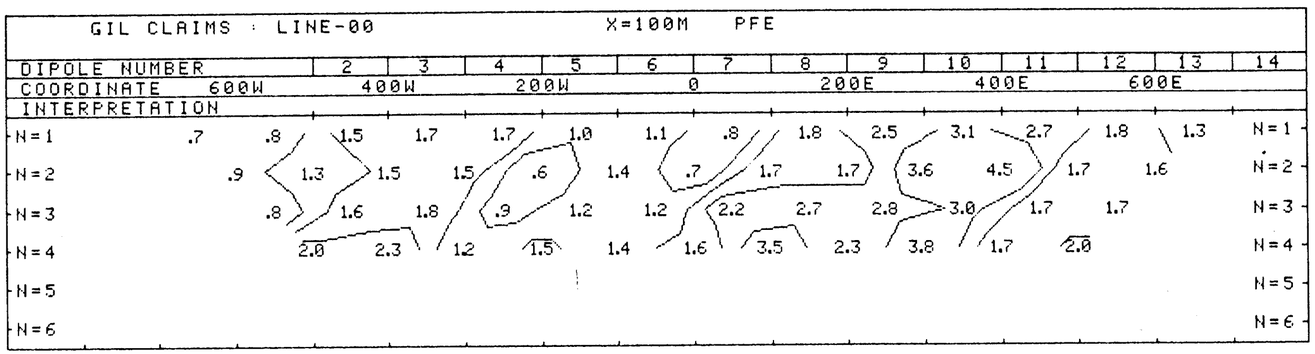
NOTE – CONTOURS AT LOGARITHMIC INTERVALS 1, –1·5, –2, –3, –5, –7·5, –10

Expiry Date: February 25, 1981

PHOENIX GEOPHYSICS LIMITED

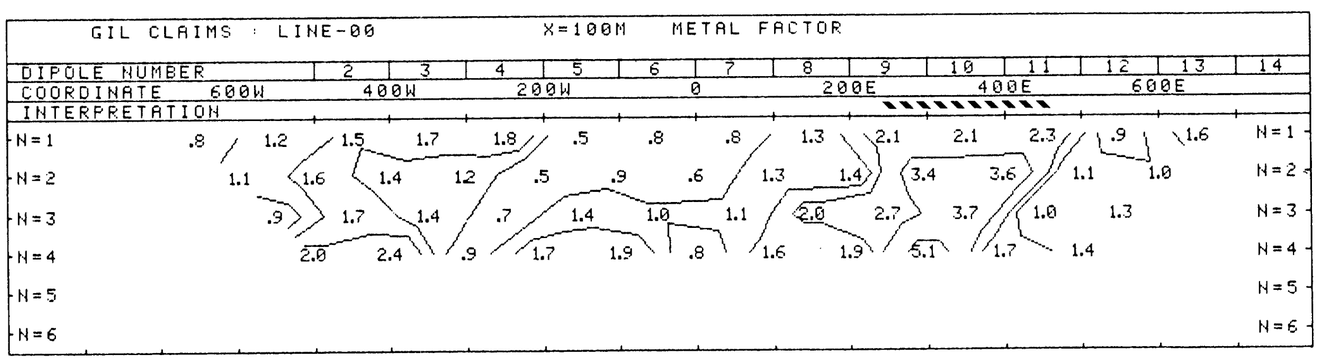
INDUCED POLARIZATION AND RESISTIVITY SURVEY





POWERLINE

TOPOGRAPHY



DWG. NO. - I.P. - 5233-2

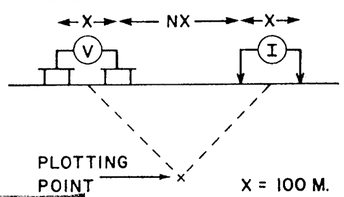
KERR, DAWSON AND ASSOC. LTD.

GIL CLAIMS, KAMLOOPS M.D.

BRITISH COLUMBIA

LINE NO. - 00

ELECTRODE CONFIGURATION



SURFACE PROJECTION OF ANOMALOUS ZONE

DEFINITE

PROBABLE

POSSIBLE

FREQUENCIES 0.3-5.0 HZ.

DATE SURVEYED NOV. 1980

APPROVED P. G. Walker

DATE

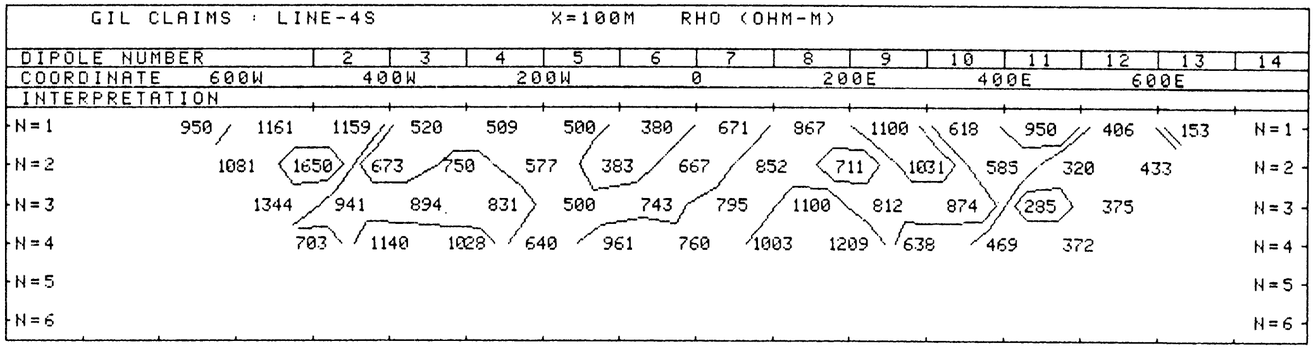
PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA

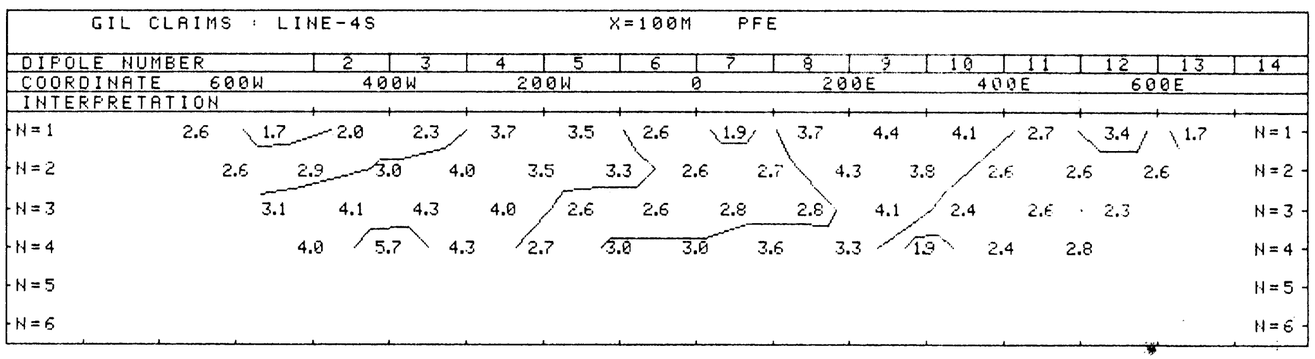
NOTE - CONTOURS AT LOGARITHMIC INTERVALS 1,-1.5,-2,-3,-5,-7.5,-10

Expiry Date: February 25, 1981

PHOENIX GEOPHYSICS LIMITED

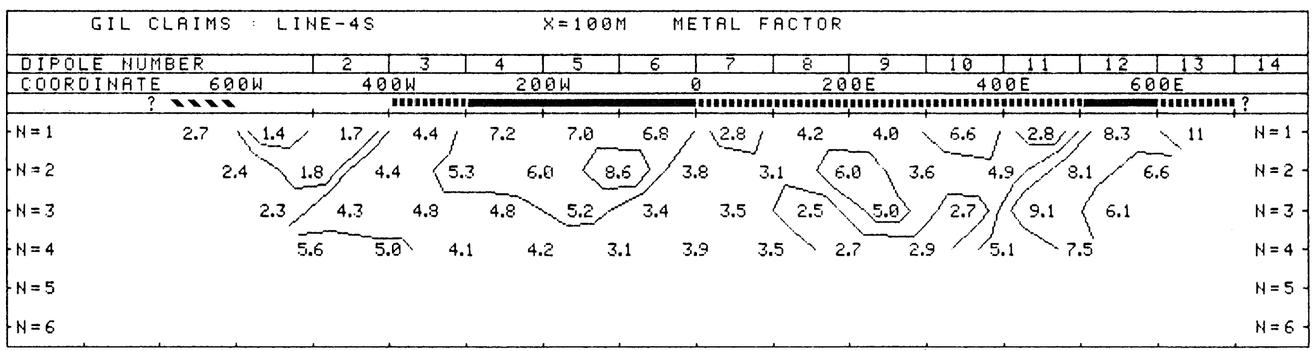
INDUCED POLARIZATION AND RESISTIVITY SURVEY





POWERLINE

TOPOGRAPHY



DWG. NO. - I.P. - 5233-3

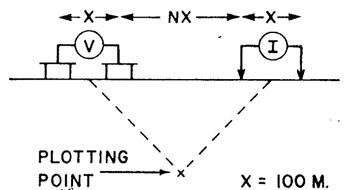
KERR, DAWSON AND ASSOC. LTD.

GIL CLAIMS, KAMLOOPS M.D.

BRITISH COLUMBIA

LINE NO. - 4S

ELECTRODE CONFIGURATION



SURFACE PROJECTION OF ANOMALOUS ZONE

DEFINITE

PROBABLE

POSSIBLE

FREQUENCIES 0.3-5.0 HZ.

DATE SURVEYED NOV. 1980

APPROVED P. G. Walcott

DATE 2/25/80

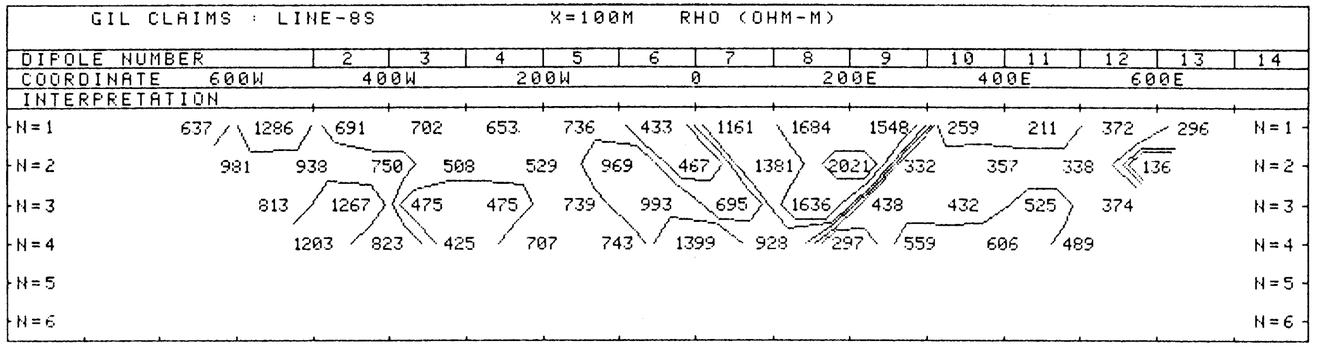
PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA

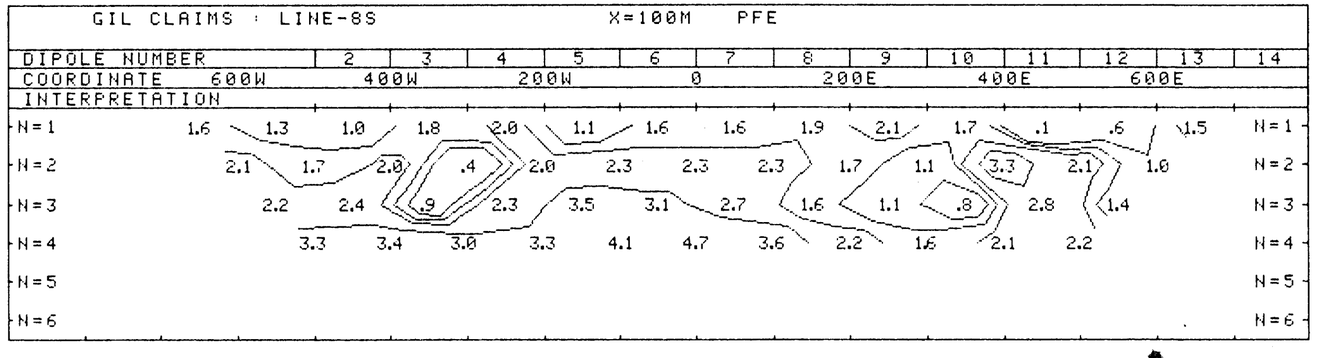
Expiry Date: February 25, 1981

NOTE - CONTOURS AT LOGARITHMIC INTERVALS 1, -1.5, -2, -3, -5, -7.5, -10

PHOENIX GEOPHYSICS LIMITED

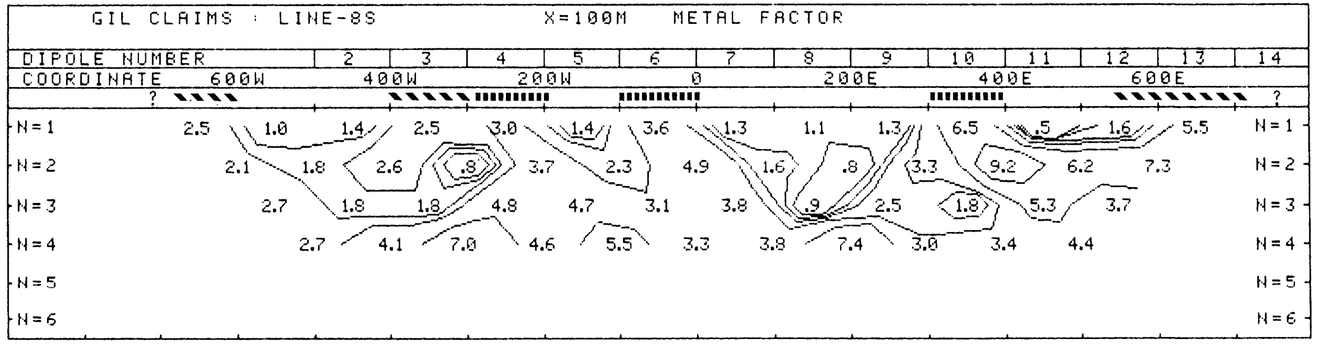
INDUCED POLARIZATION AND RESISTIVITY SURVEY





POWERLINE

TOPOGRAPHY



DWG. NO. - I.P. - 5233-4

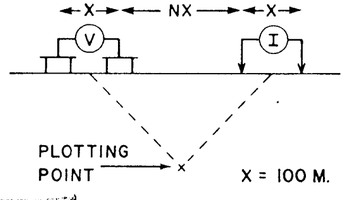
KERR, DAWSON AND ASSOC. LTD.

GIL CLAIMS, KAMLOOPS M.D.

BRITISH COLUMBIA

LINE NO. - 8S

ELECTRODE CONFIGURATION



SURFACE PROJECTION OF ANOMALOUS ZONE

DEFINITE

PROBABLE

POSSIBLE

FREQUENCIES 0.3-5.0 HZ.

DATE SURVEYED NOV. 1980

NOTE - CONTOURS AT LOGARITHMIC INTERVALS 1, -1.5, -2, -3, -5, -7.5, -10

APPROVED P.G. Hallof

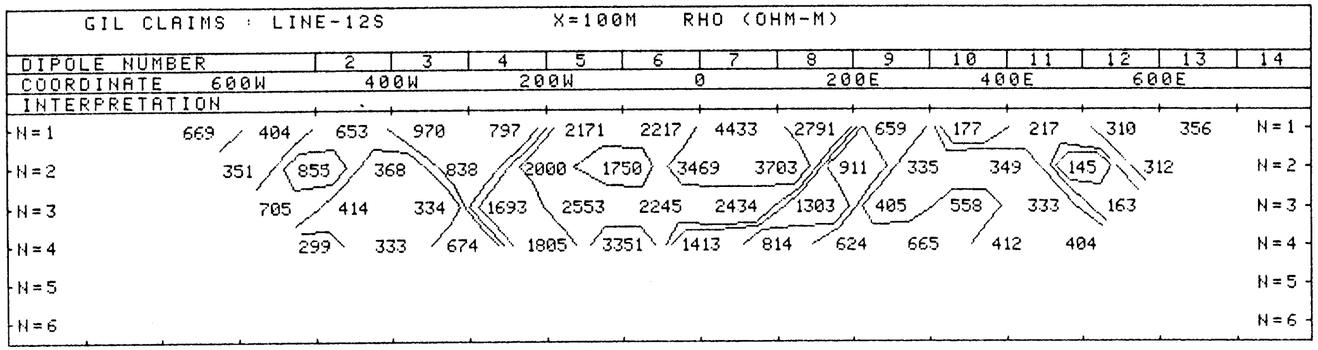
DATE 12/10/82

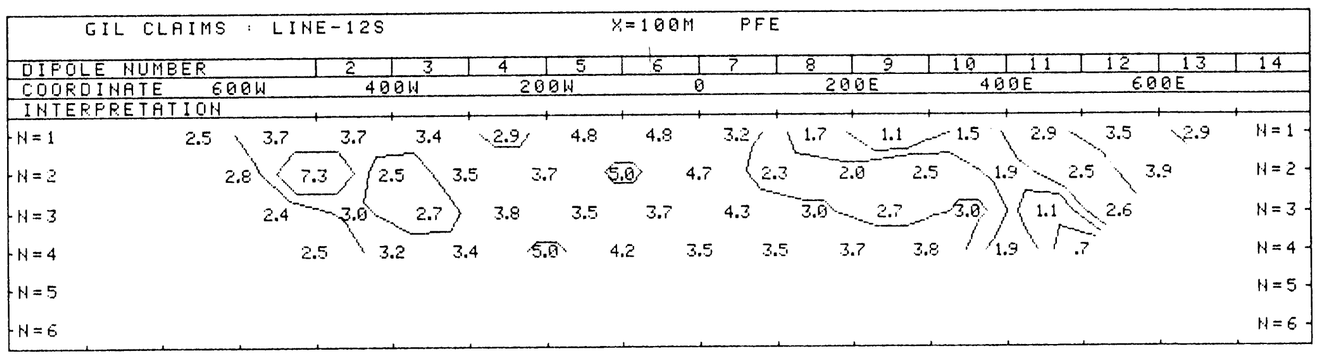
PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA

Expiry Date: February 25, 1981

PHOENIX GEOPHYSICS LIMITED

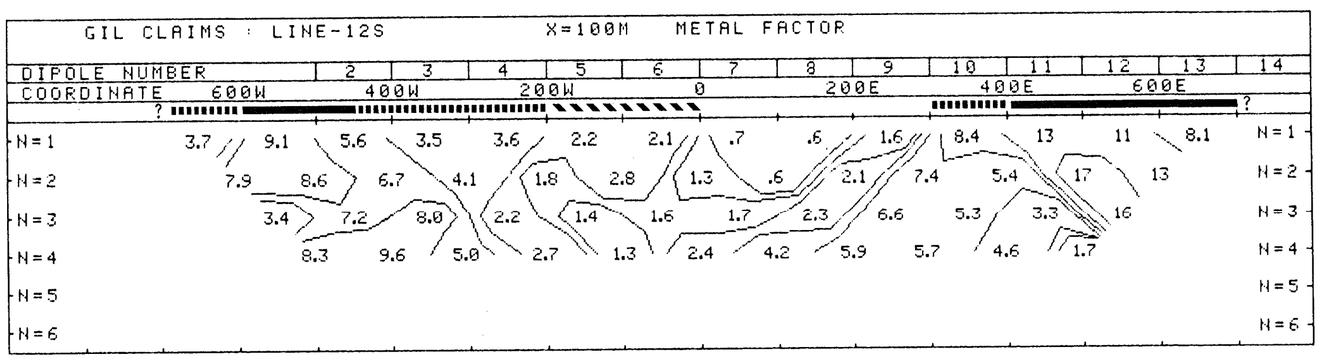
INDUCED POLARIZATION AND RESISTIVITY SURVEY





POWERLINE

TOPOGRAPHY



DWG. NO. - I.P. - 5233-5

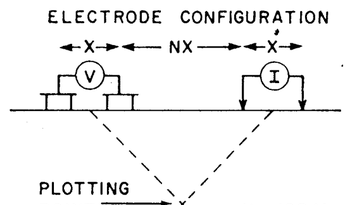
KERR, DAWSON AND ASSOC. LTD.

GIL CLAIMS, KAMLOOPS M.D.

BRITISH COLUMBIA

LINE NO. - 12S

ELECTRODE CONFIGURATION



SURFACE PROJECTION OF ANOMALOUS ZONE

DEFINITE

PROBABLE

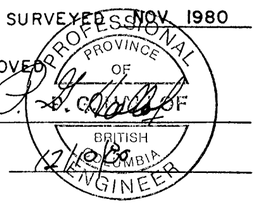
POSSIBLE

FREQUENCIES 0·3-5·0 HZ.

DATE SURVEYED NOV. 1980

NOTE - CONTOURS AT LOGARITHMIC INTERVALS 1,-1·5,-2,-3,-5,-7·5,-10

APPROVED

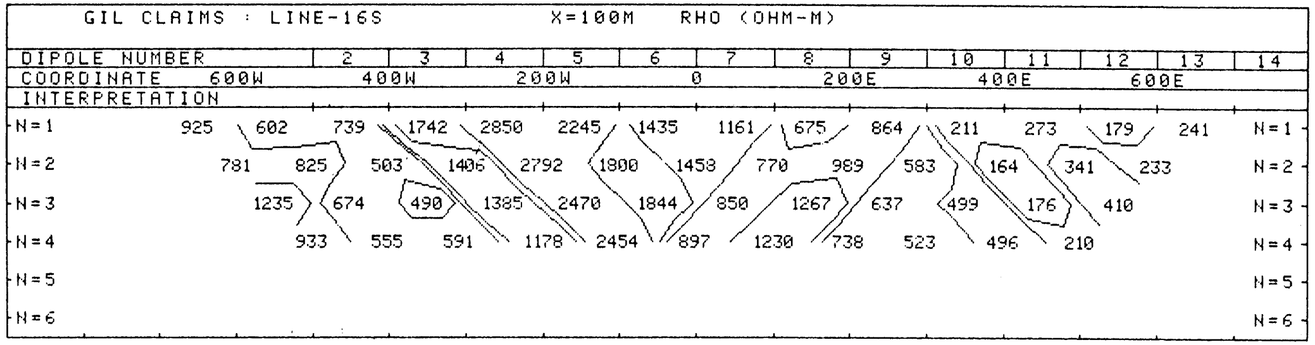


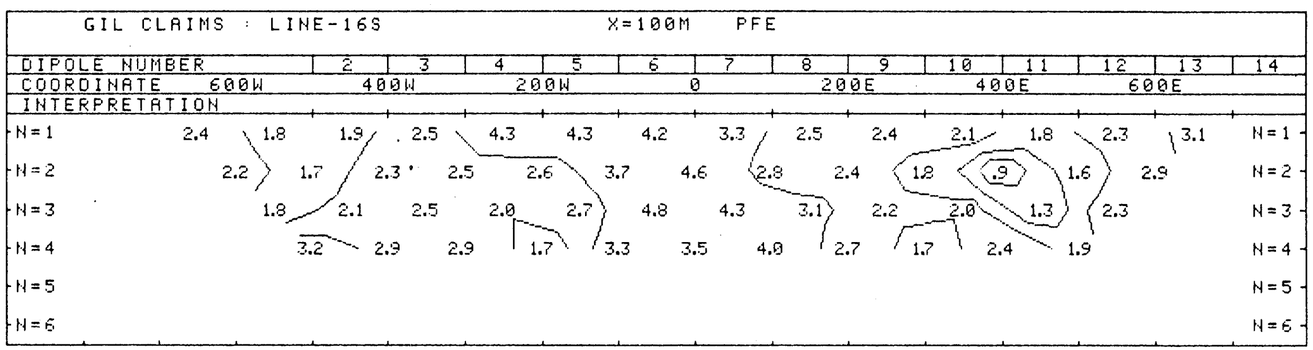
DATE 12/18/80

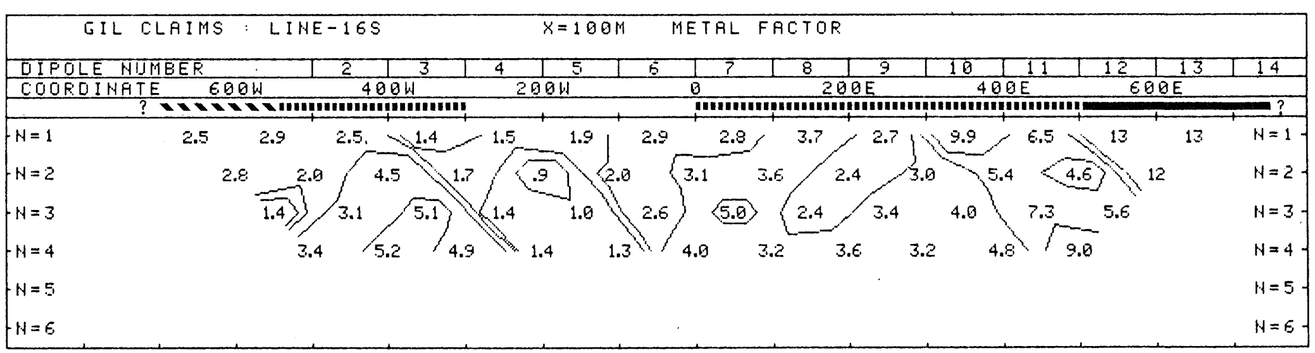
Expiry Date: February 25, 1981

PHOENIX GEOPHYSICS LIMITED

INDUCED POLARIZATION AND RESISTIVITY SURVEY







DWG. NO. – I.P. – 5233-6

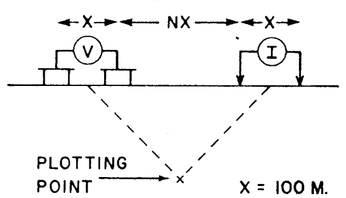
KERR, DAWSON AND ASSOC. LTD.

GIL CLAIMS, KAMLOOPS M.D.

BRITISH COLUMBIA

LINE NO. – 16S

ELECTRODE CONFIGURATION



SURFACE PROJECTION OF ANOMALOUS ZONE

DEFINITE

PROBABLE

POSSIBLE

FREQUENCIES 0.3-5.0 HZ.

DATE SURVEYED NOV. 1980

APPROVED P. G. HALLOF

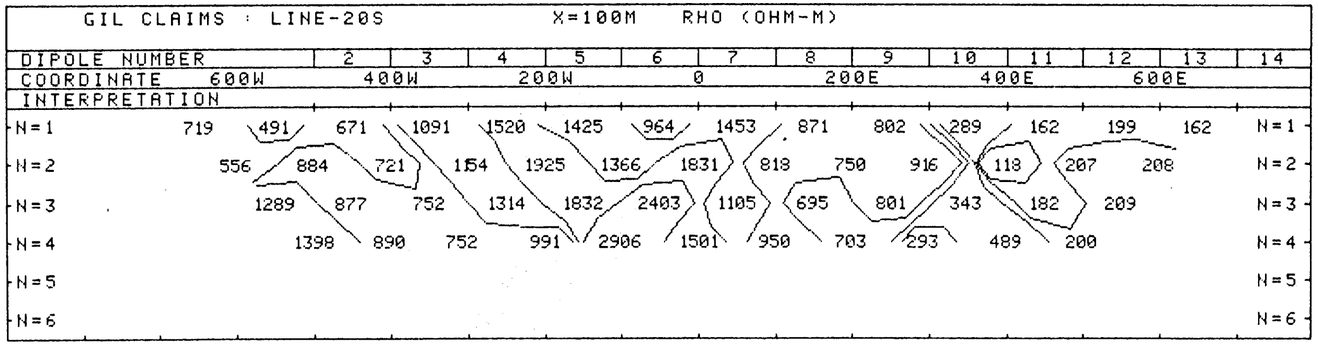
DATE 2/10/82

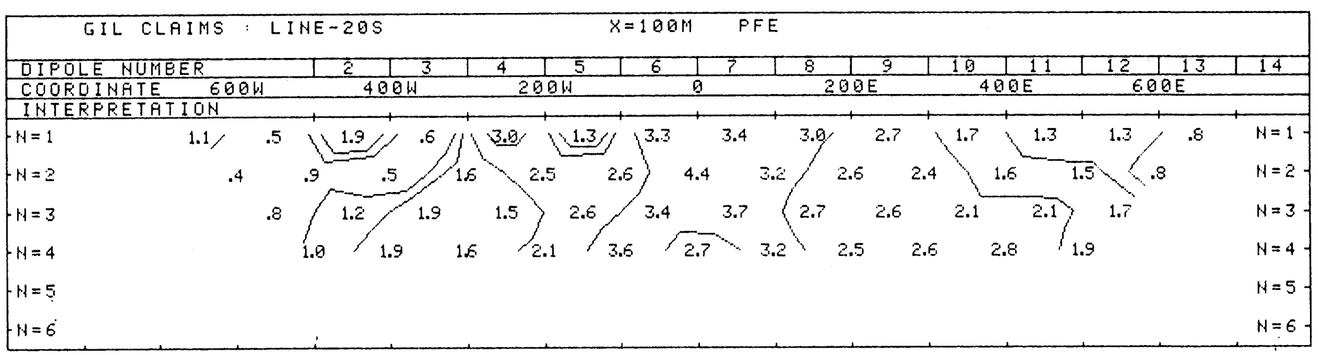
NOTE – CONTOURS AT LOGARITHMIC INTERVALS 1, -1·5, -2, -3, -5, -7·5, -10

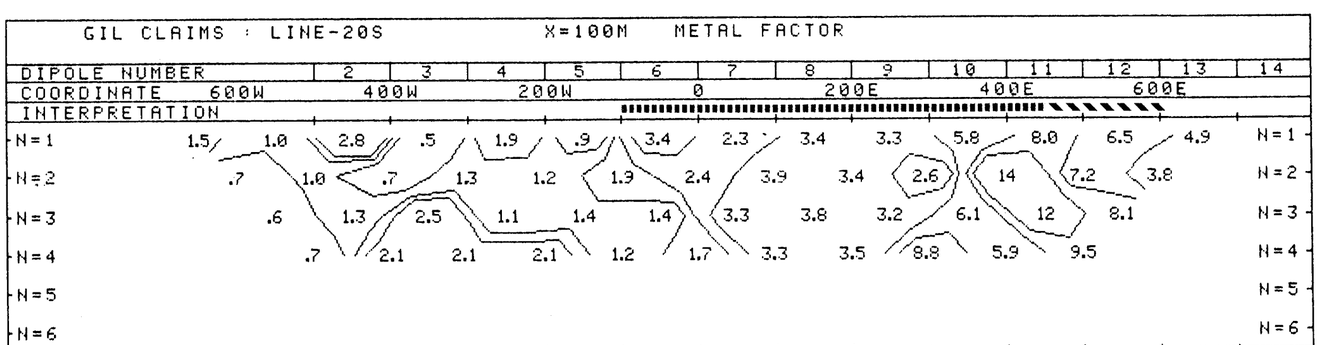
Expiry Date: February 25, 1981

PHOENIX GEOPHYSICS LIMITED

INDUCED POLARIZATION AND RESISTIVITY SURVEY







DWG. NO. - I.P. - 5233-7

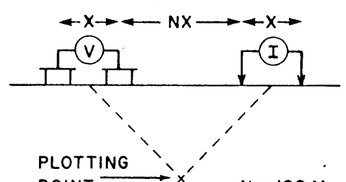
KERR, DAWSON AND ASSOC. LTD.

GIL CLAIMS, KAMLOOPS M.D.

BRITISH COLUMBIA

LINE NO. - 20S

ELECTRODE CONFIGURATION



SURFACE PROJECTION OF ANOMALOUS ZONE

DEFINITE

PROBABLE

POSSIBLE

FREQUENCIES 0.3-5.0 HZ.

DATE SURVEYED NOV. 1980

APPROVED

NOTE - CONTOURS AT LOGARITHMIC INTERVALS 1, -1.5, -2, -3, -5, -7.5, -10

DATE 12/10/80

PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA

Expiry Date: February 25, 1981

PHOENIX GEOPHYSICS LIMITED

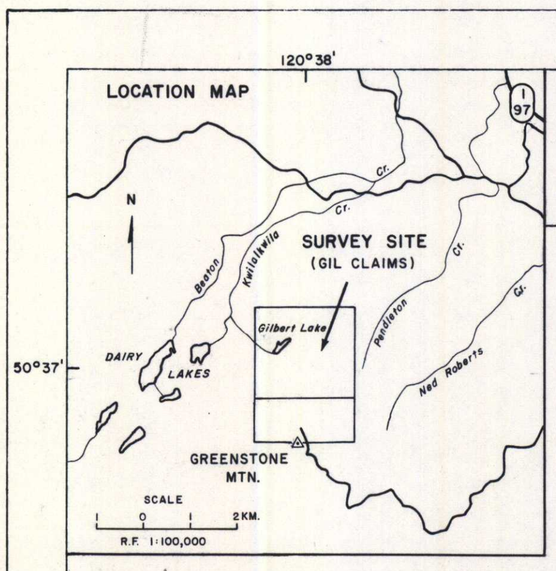
INDUCED POLARIZATION AND RESISTIVITY SURVEY

DWG. NO. - I.P.P. - 3086

PHOENIX GEOPHYSICS LIMITED

INDUCED POLARIZATION AND RESISTIVITY SURVEY

PLAN MAP



L.C.P.
GIL CLAIM

ACCESS ROAD TO
TRANS CANADA HWY.

8W — 8E — LINE - 00 — 100m.

4500

GILBERT LAKE

8W — ? — 8E — LINE - 4S — ? 100m.

8W — ? — 8E — LINE - 8S — ? 100m.

POWER LINE

8W — ? — 8E — LINE - 12S — ? 100m.

8W — ? — 8E — LINE - 16S — ? 100m.

MICROWAVE
RELAY STATION

FIRE LOOKOUT

8W — 8E — LINE - 20S — 100m.

BASELINE

5000

GREENSTONE
MTN. △5884'

5500

5500

N

NOTE -
TO ACCOMPANY GEOPHYSICAL REPORT FOR
KERR, DAWSON AND ASSOCIATES LIMITED
ON GIL CLAIMS, KAMLOOPS M.D., B.C.,
BY PHILIP G. HALLOF, P. ENG. GEOPHYSICIST
AND PAUL A. CARTWRIGHT, B.Sc. GEOPHYSICIST.

DATE: DEC. 10, 1980

KERR, DAWSON AND ASSOCIATES LTD.

GIL CLAIMS, KAMLOOPS M.D.

BRITISH COLUMBIA

SCALE

100 0 100 200 300 400 500 METRES

1:5000

SURFACE PROJECTION
OF ANOMALOUS ZONE

DEFINITE
PROBABLE
POSSIBLE

NUMBER AT END OF ANOMALIES
INDICATE SPREAD USED.

— CENTER OF ANOMALOUS I.P. ZONE

5000 — CONTOURS IN FEET (A.S.L.)

CLAIM BOUNDARY WITH LEGAL CORNER POST (L.C.P.)

DRAWN: M.W.R.
DATE: NOV. 1980
APPROVED:
DATE: 12/10/80

DWG. NO.- I.P.P.-3086