2091

REPORT ON THE 92I/11E?
INDUCED POLARIZATION
AND RESISTIVITY SURVEY
ON THE
CADCO OPTION PROPERTY, SOUTH GROUP
OF
NORANDA EXPLORATION COMPANY, LIMITED
IN THE
HIGHLAND VALLEY AREA
KAMLOOPS M. D., BRITISH COLUMBIA

50° 35' 121° 00'
92I / 10W, 11E

NO DEPOSIT ??
121° 01 → 03'
50° 33 → 34'
4/5/90
all in 92I/11E

BY

DAVID K. FOUNTAIN, P. ENG.

NAME AND LOCATION OF PROPERTY:

CADCO OPTION PROPERTY, SOUTH GROUP, HIGHLAND VALLEY AREA

KAMLOOPS M. D., BRITISH COLUMBIA, 50°N, 121°W, NE

DATE STARTED: June 13, 1969

DATE FINISHED: July 19, 1969

TABLE OF CONTENTS

McPHAR GEOPHYSICS

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 can not 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 other 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) between 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 the 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 above the line as a mirror image of the metal factor values below. On a second line, below the metal factor values, are plotted the values of the per cent frequency effect. In some cases the values of per cent frequency effect are plotted as superscripts of the metal factor value. In this second case the frequency effect values are not contoured. 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 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. When the F. E. values are plotted as superscripts to the MF values the third section of data values is not presented and the F. E. values are not contoured.

The actual data plots included with the report are prepared utilizing an IBM 360/75 Computer and a Calcomp 770/763 Incremental Plotting System. The data values are calculated, plotted, and contoured according to a programme developed by McPhar Geophysics. Certain symbols have been incorporated into the programme to explain various situations in recording the data in the field.

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 noisey 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.

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

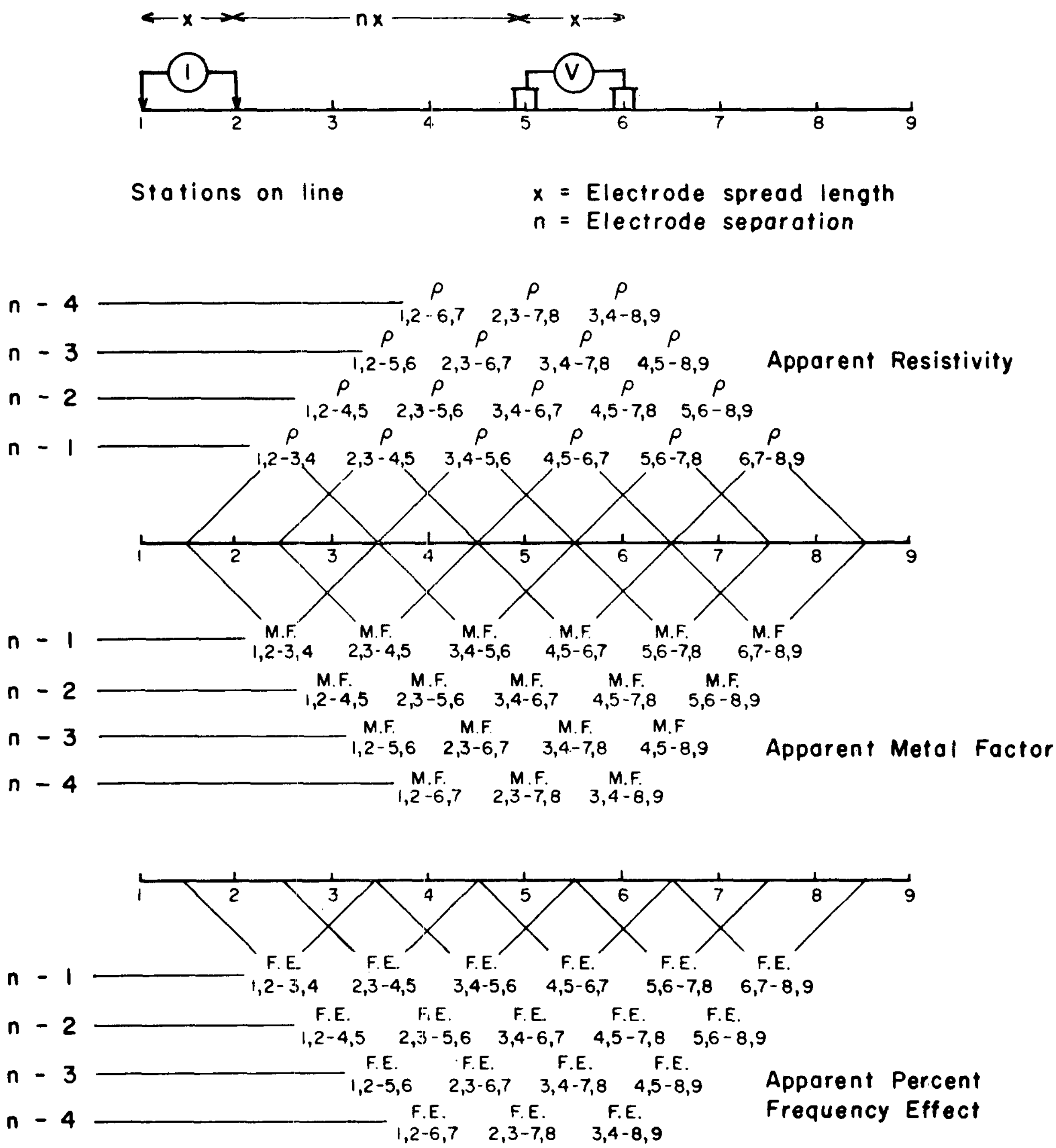


Fig. A

McPHAR GEOPHYSICS LIMITED

REPORT ON THE INDUCED POLARIZATION AND RESISTIVITY SURVEY ON THE CADCO OPTION PROPERTY, SOUTH GROUP OF NORANDA EXPLORATION COMPANY, LIMITED IN THE HIGHLAND VALLEY AREA KAMLOOPS M.D., BRITISH COLUMBIA

1. INTRODUCTION

During the period June 13, 1969 to July 19, 1969 an induced polarization and resistivity survey was carried out on the Cadco Option Property, South Group, of Noranda Exploration Company, Limited in the Highland Valley Area, Kamloops Mining Division, British Columbia. The claim group is located approximately 15 miles southeast from the town of Ashcroft and lies in the northeast quadrant of the one degree quadrilateral whose southeast corner is 50°N latitude and 121°W longitude. Access to the claim group is via road from Ashcroft and the Highland Valley.

The Cadco Option Property, South Group consists of the following claims, all of which are in the Kamloops Mining Division.

GO 19	66260
GO 20	66261
GO 21	66262
GO 22	66263
GO 23	66264
GO 24	66265
GO 25	66266
GO 26	66267
GO 27	66268
GO 28	66269
GO 29	66270
GO 30	66271
GO 31	66262
GO 32	66273

DO 1	66226
DO 10	66235
DO 11	66236
DO 12	66237
DO 13	66238
DO 14	66239
DO 15	66240
DO 16	66241

LE 5	60490
LE 6	60491
LE 7	60492
LE 8	60493
LE 9	60494
LE 10 FR	60495
LE 11 FR	60496
LE 12	60497
LE 13	60498
LE 15	60500
LE 66 FR	60551
LE 67	60552
LE 68 FR	60553
LE 69	60554
LE 70	60555
LE 72	60557

The claims are owned by Cadco Enterprises Limited and are held under option by Thermochem Industries Limited (name recently changed to Brameda Resources Ltd.). The IP survey was authorized and paid for by Noranda Exploration Company, Limited (NPL) which has a working agreement with Thermochem Industries Limited.

The IP survey was carried out employing a McPhar variable frequency induced polarization unit utilizing the dipole-dipole electrode configuration and 400 foot dipoles. Three dipole separations (n = 1, 2, 3) were recorded and the frequencies employed were 0.31 Hz and 5.0 Hz.

2. PRESENTATION OF RESULTS

The induced polarization and resistivity results are shown on the data plots listed below and are summarized on the plan map in the manner described in the notes preceding this report.

Line 44N	400 foot electrode intervals	Dwg. IP 5339-1
Line 52N	400 foot electrode intervals	Dwg. IP 5339-2
Line 60N	400 foot electrode intervals	Dwg. IP 5339-3
Line 68N	400 foot electrode intervals	Dwg. IP 5339-4
Line 76N	400 foot electrode intervals	Dwg. IP 5339-5
Line 84N	400 foot electrode intervals	Dwg. IP 5339-6
Line 92N	400 foot electrode intervals	Dwg. IP 5339-7
Line 100N	400 foot electrode intervals	Dwg. IP 5339-8
Line 108N	400 foot electrode intervals	Dwg. IP 5339-9
Line 116N	400 foot electrode intervals	Dwg. IP 5339-10

Enclosed with this report is Dwg. IPP 4535, a plan map of the area surveyed at a scale of one inch equals four hundred feet. The definite and possible induced polarization anomalies are indicated by solid and broken bars respectively on this plan map as well as 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; i. e. when using 200 foot electrode intervals the position of a narrow sulphide body can only be determined to lie between two stations 200 feet apart. 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 location of survey lines relative to the claim boundaries, and the names and relative position of the claims indicated on the maps and discussed in the report are based upon information supplied by the professional staff of Noranda Exploration Company, Limited, Vancouver, British Columbia.

3. DISCUSSION OF RESULTS

No distinct IP anomalies are indicated from the results of the IP survey. A total of ten lines were surveyed with the survey line interval being 800 feet. The use of 400 foot dipoles would bias against the detection of narrow zones of mineralization.

Line 44N

Above background IP response is indicated between 114+00E and 118+00E which would indicate a narrow, shallow source. A deeper, weak source is indicated centred beneath 106+00E. Detail surveying, employing shorter dipoles, would be required to properly evaluate this anomaly. Slightly above background response is also indicated between 80+00E and 90+00E.

Line 52N

Weak, possible anomalies are indicated between 114+00E and 118+00E and centred at 90+00E. The former pattern suggests a shallow, narrow source and would correlate with the response on the line to the south, while the latter pattern would suggest a source at depth.

Line 60N

Weak, shallow, above background response is indicated centred at 114+00E.

Line 68N

There are no significant anomalous responses on this line although narrow, shallow, above background effects are indicated between 42+00E and 46+00E, between 94+00E and 98+00E and between 110+00E and 114+00E.

Line 76N

The results on this line do not indicate any anomalous response. Above background shallow effects are indicated at 80+00E and between 104+00E and 108+00E.

Line 84N

Narrow, shallow, weak effects are indicated centred between 74+00E and 78+00E and between 106+00E and 110+00E. Lack of significant frequency effect response renders the anomalies questionable, although the source may be shallow and narrow, causing this poor response.

Line 92N

Shallow, weak, possible anomalies are indicated from 80+00E to 86+00E and from 90+00E to 94+00E. The resistivity values are low and the pattern suggests horizontal layering. Consideration should be given to the possible thickness of overburden in this area to determine if the weak effects have their source in the bedrock.

A second weak, possible anomaly is indicated from 102+00E to 110+00E. Although the response is weak, this anomaly may be more significant since the pattern suggests a source at depth.

Line 100N

Broad zones of weakly anomalous effects are indicated from 108+00E to 114+00E, from 92+00E to 104+00E and from 84+00E to at least 74+00E. There is no distinct anomaly pattern and the IP effects are of low magnitude. Information as to the possible thickness of overburden and rock type in the immediate area would be necessary to properly evaluate the significance of these anomalous responses.

Line 108N

Possible anomalies are indicated between 102+00E and

108+00E, and from 74+00E to 80+00E. Low resistivities and very low frequency effect response renders both anomalies questionable. However, the second anomaly (74+00E to 80+00E) pattern suggests a source at depth which would render it more significant.

Line 116N

A narrow, shallow, weak response is indicated between 110+00E and 114+00E on this line.

4. SUMMARY AND CONCLUSIONS

No distinct IP anomalies have been outlined by the results of the survey. Several weak responses have been indicated which do not form well-defined zones. Further work on these would not be warranted unless there was supporting geological or geochemical information.

The low resistivities, especially in the northern portion of the property, would suggest that consideration be given to the thickness of overburden cover to determine if the weak responses here are due to sources in the bedrock.

McPHAR GEOPHYSICS LIMITED

David K. Fountain, P. Eng.
Geophysicist.

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
D. K. FOUNTAIN

Expiry Date: April 25, 1970

Dated: October 10, 1969.

ASSESSMENT DETAILS

PROPERTY: Cadco Option, South Group

MINING DIVISION: Kamloops

SPONSOR: Noranda Exploration Company, Limited

PROVINCE: British Columbia

LOCATION: Highland Valley Area

TYPE OF SURVEY: Induced Polarization

OPERATING MAN DAYS:	92.5	DATE STARTED:	June 13, 1969
EQUIVALENT 8HR. MAN DAYS:	138.5	DATE FINISHED:	July 19, 1969
CONSULTING MAN DAYS:	2	NUMBER OF STATIONS:	233
DRAUGHTING MAN DAYS:	9	NUMBER OF READINGS:	1728
TOTAL MAN DAYS:	149.5	MILES OF LINE SURVEYED:	17.51

CONSULTANTS:
D. K. Fountain, 44 Highgate Road, Toronto 18, Ontario.

FIELD TECHNICIANS:
K. Drobot, c/o 20122 64th Avenue, Langley, British Columbia.
J. Anderson, Box 17, Site 13, R. R. #8, Edmonton, Alberta.

HELPERS:
J. Beenen, 1120 Bentley Place, Kamloops, British Columbia.
E. Drobot, c/o General Delivery, Ashcroft, British Columbia.
C. Baird, P.O. Box 443, Ashcroft, British Columbia.

DRAUGHTSMEN:
D. Holmes, 42 Langborne Place, Don Mills, Ontario.
N. Lade, 1355 Lakefield Crescent, Scarborough, Ontario.
E. Stables, 1065 Don Mills Road, Apt. 403, Don Mills, Ontario.

McPHAR GEOPHYSICS LIMITED,

David K. Fountain

David K. ~~Fountain, P. Eng.~~,
Geophysicist.

PROVINCE OF D. K. FOUNTAIN BRITISH COLUMBIA ENGINEER

Dated: October 10, 1969.

Expiry Date: April 25, 1970

STATEMENT OF COST

Noranda Exploration Company, Limited
Cadco Option, South Group

Crew (2 men)

18-1/2 days Operating	@ $220.00/day	$4,092.00
7 days Bad Weather) 2.6 days Standby)	@ $ 85.00/day	816.00
Extra Labour		1,436.40

Expenses

Transportation - Air	$92.00	
Taxis	8.00	
Freight and Brokerage	55.84	
Meals and Accommodation	82.00	
Supplies	61.74	299.58
		$6,643.98

McPHAR GEOPHYSICS LIMITED

David K. Fountain, P. Eng.,
Geophysicist.

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
D. K. FOUNTAIN

Expiry Date: April 25, 1970

Dated: October 10, 1969.

CERTIFICATE

I, David Kirkman Fountain, of the City of Toronto, Province of Ontario, do certify that:

1. I am a geophysicist residing at 44 Highgate Road, Toronto 18, Ontario.

2. I am a graduate of the University of Toronto with a Bachelor of Applied Science Degree in Engineering Physics (Geophysics).

3. I am a member of the Society of Exploration Geophysicists, the European Association of Exploration Geophysicists and the Canadian Institute of Mining and Metallurgy.

4. I am a registered Professional Engineer in the Provinces of British Columbia and Ontario, and have been practising my profession for eight years.

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

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

Dated at Toronto
This 10th day of October, 1969

David Kirkman Fountain, B.A.Sc. P. Eng.

PROFESSIONAL ENGINEER
PROVINCE
D. K. FOUNTAIN
BRITISH COLUMBIA

Expiry Date: April 25, 1970

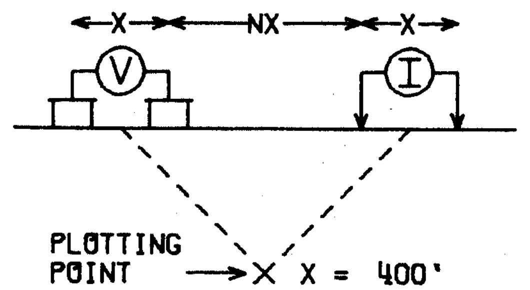
DWG. NO.- I.P.-5339-1

NORANDA EXPLORATION COMPANY LIMITED

CADCO OPTION PROPERTY
SOUTH GROUP
HIGHLAND VALLEY AREA, KAMLOOPS M.D., B.C.

LINE NO.- 44N

ELECTRODE CONFIGURATION



SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE
PROBABLE
POSSIBLE

FREQUENCIES: 0.31-5.0 CPS

DATE SURVEYED: JUN 1969

APPROVED:

DATE:

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
D. K. FOUNTAIN

Expiry Date: Apr. 25, 1970

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

2091

McPHAR GEOPHYSICS

INDUCED POLARIZATION AND RESISTIVITY SURVEY

NOTE: THIS PLOT WAS PRODUCED WITH AN IBM 360/75 COMPUTER AND A CALCOMP PLOTTER

DWG. NO.- I.P.-5339-2

NORANDA EXPLORATION COMPANY LIMITED

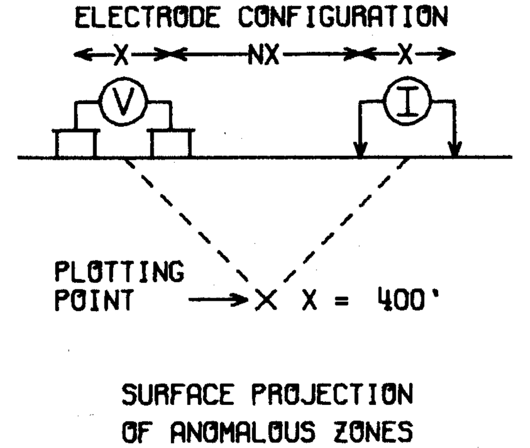
CADCO OPTION PROPERTY

SOUTH GROUP

HIGHLAND VALLEY AREA, KAMLOOPS M.D., B.C.

LINE NO.- 52N

ELECTRODE CONFIGURATION



SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE
PROBABLE
POSSIBLE

FREQUENCIES: 0.31-5.0 CPS

DATE SURVEYED: JUN 1969

APPROVED:

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

DATE:

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
D. K. FOUNTAIN

Expiry Date: April 25, 1970

2091

McPHAR GEOPHYSICS

INDUCED POLARIZATION AND RESISTIVITY SURVEY

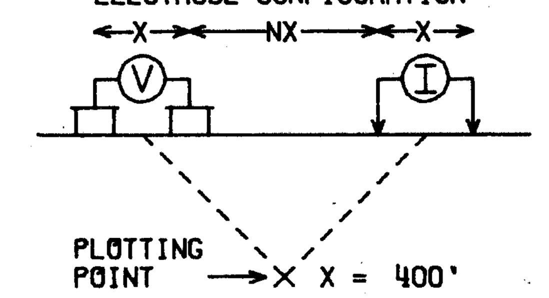
NOTE: THIS PLOT WAS PRODUCED WITH AN IBM 360/75 COMPUTER AND A CALCOMP PLOTTER

DWG. NO.- I.P.-5339-3

NORANDA EXPLORATION COMPANY LIMITED

CADCO OPTION PROPERTY
SOUTH GROUP
HIGHLAND VALLEY AREA, KAMLOOPS M.D., B.C.

LINE NO.- 60N



SURFACE PROJECTION OF ANOMALOUS ZONES
DEFINITE
PROBABLE
POSSIBLE

FREQUENCIES: 0.31-5.0 CPS

DATE SURVEYED: JUN 1969

APPROVED:

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

DATE:

PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA D. K. FOUNTAIN

Expiry Date: April 25, 1970

2091

McPHAR GEOPHYSICS

INDUCED POLARIZATION AND RESISTIVITY SURVEY

NOTE: THIS PLOT WAS PRODUCED WITH AN IBM 360/75 COMPUTER AND A CALCOMP PLOTTER

DWG. NO.- I.P.-5339-4

NORANDA EXPLORATION COMPANY LIMITED

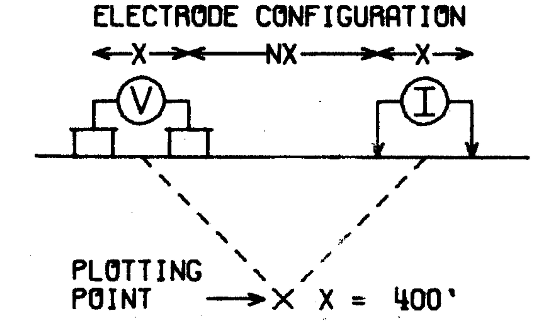
CADCO OPTION PROPERTY

SOUTH GROUP

HIGHLAND VALLEY AREA, KAMLOOPS M.D., B.C.

LINE NO.- 68N

ELECTRODE CONFIGURATION



SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE ▬▬▬

PROBABLE ||||||||||||

POSSIBLE / / / / /

FREQUENCIES: 0.31-5.0 CPS

DATE SURVEYED: JUN 1969

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

APPROVED: David K. Fountain

DATE: Oct. 1969

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
D. K. FOUNTAIN

Expiry Date: April 25, 1970

2091

McPHAR GEOPHYSICS

INDUCED POLARIZATION AND RESISTIVITY SURVEY

NOTE: THIS PLOT WAS PRODUCED WITH AN IBM 360/75 COMPUTER AND A CALCOMP PLOTTER

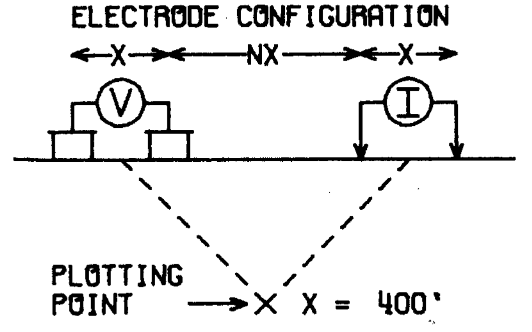
DWG. NO.- I.P.-5339-5

NORANDA EXPLORATION COMPANY LIMITED

CADCO OPTION PROPERTY
SOUTH GROUP
HIGHLAND VALLEY AREA, KAMLOOPS M.D., B.C.

LINE NO.- 76N

ELECTRODE CONFIGURATION



PLOTTING POINT X = 400'

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE
PROBABLE
POSSIBLE

FREQUENCIES: 0.31-5.0 CPS

DATE SURVEYED: JUN 1969

APPROVED:

DATE:

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

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
D. K. FOUNTAIN

2091

Expiry Date: April 25, 1970

McPHAR GEOPHYSICS

INDUCED POLARIZATION AND RESISTIVITY SURVEY

NOTE: THIS PLOT WAS PRODUCED WITH AN IBM 360/75 COMPUTER AND A CALCOMP PLOTTER

DWG. NO.- I.P.-5339-6

NORANDA EXPLORATION COMPANY LIMITED

CADCO OPTION PROPERTY
SOUTH GROUP
HIGHLAND VALLEY AREA, KAMLOOPS M.D., B.C.

LINE NO.- 84N

ELECTRODE CONFIGURATION

PLOTTING POINT X = 400'

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE
PROBABLE
POSSIBLE

FREQUENCIES: 0.31-5.0 CPS

DATE SURVEYED: JUN 1969

APPROVED:

DATE:

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

PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA D.K. FOUNTAIN

Expiry Date: Apr 25, 19

2091

McPHAR GEOPHYSICS

INDUCED POLARIZATION AND RESISTIVITY SURVEY

NOTE: THIS PLOT WAS PRODUCED WITH AN IBM 360/75 COMPUTER AND A CALCOMP PLOTTER

DWG. NO.- I.P.-5339-7

NORANDA EXPLORATION COMPANY LIMITED

CADCO OPTION PROPERTY
SOUTH GROUP
HIGHLAND VALLEY AREA, KAMLOOPS M.D., B.C.

LINE NO.- 92N

ELECTRODE CONFIGURATION

X — NX — X

V I

PLOTTING POINT X = 400'

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE
PROBABLE
POSSIBLE

FREQUENCIES: 0.31-5.0 CPS

DATE SURVEYED: JUL 1969

APPROVED:

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

DATE:

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
D. K. FOUNTAIN

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McPHAR GEOPHYSICS

INDUCED POLARIZATION AND RESISTIVITY SURVEY

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DWG. NO.- I.P.-5339-8

NORANDA EXPLORATION COMPANY LIMITED

CADCO OPTION PROPERTY
SOUTH GROUP
HIGHLAND VALLEY AREA, KAMLOOPS M.D., B.C.

LINE NO.- 100N

ELECTRODE CONFIGURATION

PLOTTING POINT X = 400'

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE
PROBABLE
POSSIBLE

FREQUENCIES: 0.31-5.0 CPS

DATE SURVEYED: JUL 1969

APPROVED:

DATE:

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

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
D. K. FOUNTAIN

Expiry Date: April 25, 1970

2091

McPHAR GEOPHYSICS

INDUCED POLARIZATION AND RESISTIVITY SURVEY

NOTE: THIS PLOT WAS PRODUCED WITH AN IBM 360/75 COMPUTER AND A CALCOMP PLOTTER

DWG. NO.- I.P.-5339-9

NORANDA EXPLORATION COMPANY LIMITED

CADCO OPTION PROPERTY
SOUTH GROUP
HIGHLAND VALLEY AREA, KAMLOOPS M.D., B.C.

LINE NO.- 108N

ELECTRODE CONFIGURATION

PLOTTING POINT X = 400'

SURFACE PROJECTION OF ANOMALOUS ZONES
DEFINITE
PROBABLE
POSSIBLE

FREQUENCIES: 0.31-5.0 CPS

DATE SURVEYED: JUL 1969

APPROVED:

DATE:

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

PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA D. K. FOUNTAIN

Expiry Date. Apr. 25, 1970

2091

McPHAR GEOPHYSICS

INDUCED POLARIZATION AND RESISTIVITY SURVEY

NOTE: THIS PLOT WAS PRODUCED WITH AN IBM 360/75 COMPUTER AND A CALCOMP PLOTTER

DWG. NO.- I.P.-5339-10

NORANDA EXPLORATION COMPANY LIMITED

CADCO OPTION PROPERTY

SOUTH GROUP

HIGHLAND VALLEY AREA, KAMLOOPS M.D., B.C.

LINE NO.- 116N

ELECTRODE CONFIGURATION

X — NX — X

PLOTTING POINT X = 400'

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE

PROBABLE

POSSIBLE

FREQUENCIES: 0.31-5.0 CPS

DATE SURVEYED: JUL 1969

APPROVED:

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

DATE:

PROFESSIONAL ENGINEER · PROVINCE OF BRITISH COLUMBIA · D.K. FOUNTAIN

2091

McPHAR GEOPHYSICS

INDUCED POLARIZATION AND RESISTIVITY SURVEY

NOTE: THIS PLOT WAS PRODUCED WITH AN IBM 360/75 COMPUTER AND A CALCOMP PLOTTER

DWG. I.P.P. 4535

McPHAR GEOPHYSICS

INDUCED POLARIZATION AND RESISTIVITY SURVEY

PLAN MAP

SURFACE PROJECTION
OF ANOMALOUS ZONES

DEFINITE
PROBABLE
POSSIBLE

Number at the end of anomaly indicates spread used

NORANDA EXPLORATION CO. LTD.

CADCO OPTION PROPERTY, SOUTH GROUP,

HIGHLAND VALLEY AREA, KAMLOOPS M.D., B.C.

SCALE

ONE INCH EQUALS FOUR HUNDRED FEET

2091

DRAWN:
DATE:
APPROVED:
PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA D. K. FOUNTAIN
DATE:

DWG. I.P.P. 4535