COMINCO LTD.
TRAIL, B.C.

ADDENDUM TO GEOPHYSICAL REPORT ON INDUCED
RIZATION SURVEY ON THE NO. 2 GRID, C.P.O.C. PROPERTY,
AREA B.C. THAT IS THE YAM-OHM GROUP, VICTORIA, M.D.

RAL

92 C/16E

A Geophysical Report on An

Induced Polarization Survey, Chemainus

River Area, Vancouver Island, B.C.
(48°, 123°, N. W.)

For

Cominco Limited

By

G.D. Tikkanen, M.A.Sc., P. Eng.,
Geophysicist

Claim Covered: Yam 1-10 inclusive
Yam 13-18 inclusive
Yam 21-30 inclusive
Yam 33-36 inclusive
Ohm 1

Survey Period: July 10th - August 10th, 1966

935

935

C O M I N C O L T D.
TRAIL, B.C.

ADDENDUM TO GEOPHYSICAL REPORT ON INDUCED POLARIZATION SURVEY ON THE NO. 2 GRID, C.P.O.G. PROPERTY, DUNCAN AREA B.C. THAT IS THE YAM-OHM GROUP, VICTORIA, M.D.

GENERAL

The accompanying I.P. Survey Report by George D. Tikkanen, P. Eng. of Cominco Limited, covers the technical aspects of an I.P. Survey carried out on the Yam-Ohm group of claims by McPhar Geophysics Ltd.

The purpose of this addendum is the application of this survey for assessment credit - a matter not covered in the a/m report. A statement of the total expenditures incurred on the survey and a Statutory Declaration relating to these expenditures are included here.

Expenditures incurred in the survey and in the preparation of the report include:

(1) Charges of the geophysical contractor. These amounted to a total of $12,242 for a total of 33 line-miles surveyed or $370 per mile. Of these 33 miles, 17 miles were completed on the Yam-Ohm group.

(2) Expenses incurred by Cominco in the preparation of a grid for the I.P. Survey. This work was done on a contract basis by two men at a rate of $90 per mile. Cominco also provided the men with a vehicle, the cost of which was $260 per month rental and approximately $60 per month in gas. The work was done by K.P. LaPointe and T. Johnson.

(3) Expenses incurred by Cominco in interpreting the data and preparing the report. This required the services of a geophysicist for four days and in addition the services of a draughtsman for twenty-two days. The work was done by G.D. Tikkanen, P. Eng. and geophysicist and F. Horvath, draughtsman.

(4) Expenses incurred by Cominco in the supervision of the Grid-preparation. This work occupied Cominco geologist B.K. McKnight for five days.

Assessment credits are requested on 9 claims of the Yam-Ohm group. The distribution of credits requested is shown below:

Yam-Ohm Group

Claim	Distribution		Credit
Yam 22, 24, 26, 28, 30, 34, 36, 38	3 years each claim		24 yrs.
Ohm 1	3 years		3 yrs.
		Total:	27 yrs.

The total requested assessment credit for the I.P. Survey and related work on the above claim group is $2,700. Total expenditures were $9,495.

A Statement of Expenditures and a Statutory Declaration relating to the same is appended. Affidavits on Application for Certificate of Work have been filed with the Mining Recorder at Victoria, B.C.

A.C.N. deVoogd,
Professional Engineer

ACNdeV:sa
Trail Exploration Office, Western District
March 28, 1967

CANADA) STATUTORY DECLARATION RELATING TO EX-
) PENDITURES ON A GEOPHYSICAL SURVEY OF
PROVINCE OF BRITISH COLUMBIA) CERTAIN MINERAL CLAIMS THE PROPERTY OF
) COMINCO LIMITED
TO WIT:)

I, ABRAHAM C.N. deVOOGD, a Professional Engineer, of the City of Trail, in the Province of British Columbia, DO SOLEMNLY DECLARE:

1. That I am employed as a geological engineer by Cominco Limited.

2. That to my knowledge Cominco Limited engaged McPhar Limited, a firm who perform geophysical surveys, to conduct an induced polarization survey on the Yam-Ohm group of claims owned by Cominco Limited.

3. That the coast of the a/m induced polarization survey was paid by Cominco Limited.

4. That in support of said induced polarization survey Cominco hired men and incurred expenses in addition to those incurred by McPhar Limited.

5. That a report on the result of said survey was prepared by G.D. Tikkanen, P. Eng. Cominco geophysicist, and that copies of this report are being filed with the Mining Recorder at Victoria, B.C.

6. That attached hereto and marked with the letter "A", upon which I have signed my name at the time of declaring thereof, is a statement of expenditures incurred by Cominco Limited in connection with said geophysical survey, and showing in addition the dates during which those engaged in said survey performed their work.

AND I MAKE this solemn declaration conscientiously believing it to be true and knowing that it is of the same force and effect as if made under oath and by virtue of the Canada Evidence Act.

DECLARED before me at the Municipality of Tadanac, in the Province of British Columbia this 3rd day of March, A.D. 1967.

A Commissioner for taking Affidavits for British Columbia

Abraham C.N. deVoogd

STATEMENT OF EXPENDITURES

INDUCED POLARIZATION SURVEY
YAM-OHM GROUP OF CLAIMS, VICTORIA M.D.

LINECUTTING AND SURVEYING (June 22 - July 25, 1966)

24 line-miles @ $90/mile	=	$ 2,160
Vehicle rental @ $260/month	=	280
Vehicle Gas @ $60/month	=	65

SUPERVISION, LINE SURVEYING (June 22 - July 25, 1966)

B.K. McKnight 5 days @ $30/day	=	150

MCPHAR LIMITED CHARGES (July 10 - August 10, 1966)

17 miles @ $370/mile	=	6,290

INTERPRETATION OF DATA AND REPORT PREPARATION
(October 1 - 31, 1966)

G.D. Tikkanen, P.Eng. 4 days @ $40/day	=	160
F. Horvath, draughtsman 22 days @ $15/day	=	330
Printing plus Supplies	=	60
TOTAL		$ 9,495

A.C.M. deVoogd
Professional Engineer

Endorsed by:

for G. Hamson
Branch Accountant

This is Exhibit "A" to the Statutory Declaration of A.C.M. deVoogd declared before me the 3rd day of March, A.D. 1967.

A Commissioner for taking Affidavits
for British Columbia

STATEMENT OF QUALIFICATIONS

I, George D. Tikkanen, residing at 58 Grenoble Drive, Apt. 61, Don Mills, Ontario, do certify that:

I attended the University of Saskatchewan, and received the degree of Bachelor of Science in Geological Engineering in 1956;

I attended the University of Western Ontario and undertook post-graduate studies in geophysics from September 1960 to September 1961:

I have practised my profession in mining exploration for ten years;

I am a member of the following technical societies and associations:

1. The Association of Professional Engineers of the Province of Ontario;
2. The Society of Exploration Geophysicists;
3. The European Association of Exploration Geophysicists;
4. The Canadian Exploration Geophysical Society;
5. The Canadian Institute of Mining and Metallurgy.

George D. Tikkanen,
Senior Exploration Geophysicist,
Cominco Ltd.

Toronto, Ontario
March 30, 1967.

Endorsed by: A.C.N. deVoogd

A.C.N. deVoogd, P. Eng.

TABLE OF CONTENTS

COMINCO LTD.

Exploration Division

Western District

N.T.S. 92-B

INDUCED POLARIZATION AND RESISTIVITY SURVEY

CPCG PROPERTY

GRID NO. 2

DUNCAN AREA, B.C.

October 24, 1960

George D. Tikkanen

COMINCO LTD.

APPENDIX 2

INDUCED POLARIZATION AND RESISTIVITY SURVEY PROFILES

SUMMARY

A combined induced polarization and resistivity survey was carried out on the No. 2 grid on the CPOG property, located northwest of Duncan, B.C. In all, about 17 line miles of survey was done.

Nearly 50 indications were obtained, but most are either very weak, or, if very strong can be attributed to known graphite and pyrite.

A few of the better indications, which are still unexplained, should be checked by a geochemical soil sampling survey, to determine their importance.

INTRODUCTION

The CPOG Property is being explored by Cominco, under an agreement with Canadian Pacific Oil and Gas Ltd.

The most probable type or ore occurrence that might be located is a base metal sulphide body, possibly with relatively restricted dimensions.

The property is located about fifteen miles northwest of Duncan, B.C., and is accessible by four wheel drive vehicle.

GEOLOGY

The area of the survey is underlain mainly by the Sicker sediments, consisting of tuff, cherty tuff, and slate. Small bodies of quartz feldspar porphyry andesitic volcanics and gabbro-diorite intrusives also occur. The strike is more or less normal to the grid's picket lines. The bedding dips steeply northerly in most places. The schistosity also dips steeply northerly, except in a few places, expecially near contacts, where some steep southerly dips are found.

The geology will be more fully covered in other reports.

SURVEY

Method:

The survey was performed by McPhar Geophysics Ltd. The crew chief was R. Van Blaircom. The instrument employed was the McPhar frequency domain type IP system, employing frequencies of 0.3 and 5 cycles per second.

Standard survey practice employed 200-foot electrode spreads with n values of 1, 2 and 3. Some anomalous areas were also covered with 100-foot electrode spreads. The line spacing was 800 feet.

Data Presentation:

The following data is presented with this report:

1. Plan of Second Separation Metal Factor Values, with the Surface Projection of Anomalies, Plate 92-B-CPO-P-3.

2. Plan of Second Separation Resistivity Values, Plate 92-B-CPO-P-4.

3. The following data plots:

Line No.	Dipole Length	Plate No.
32+00W	200'	IP - 6 - 1
24+00W	200'	IP - 6 - 2
16+00W	200'	IP - 6 - 3
8+00W	200'	IP - 6 - 4
0+00W	200'	IP - 6 - 5
8+00E	200'	IP - 6 - 6
8+00E	100'	IP - 6 - 7
16+00E	200'	IP - 6 - 8
16+00E	100'	IP - 6 - 9
24+00E	200'	IP - 6 - 10
32+00E	200'	IP - 6 - 11
40+00E	200'	IP - 6 - 12
40+00E	100'	IP - 6 - 13
48+00E	200'	IP - 6 - 14
56+00E	200'	IP - 6 - 15
64+00E	200'	IP - 6 - 16

Discussion:

The metal factor plan (plate 92B-CPO-P-3) shows the surface projection of the IP anomalies which were selected from a study of the data plots, and the plan also shows the second separation (n=2) values for the metal factor, in contoured forms. The second separation has been contoured to show line to line correletion of the results. The anomaly locations will not necessarily coincide with the contoured peaks on the second separation, since the first and third separations, if anomalous, will also have been considered as well in the location of the anomaly. The best use of the contours is as a trend indication.

The anomalies have been classified into three groups: Definite, probable and possible. The grouping was based on the strength of the metal factor, the percent frequency effect, and the pattern of the anomaly. In general, the true metal factor should be related to the volume of chargeable

material, however the survey measures the apparent metal factor, and a large volume with a small percentage of sulphides could show the same metal factor value as a smaller body with a higher percentage of sulphides.

Survey Results:

Comments on individual anomalies follow:

1. Line 32+00W at 18N to 20N:

   Weak zone, definite resistivity low, but very weak I.P. effect. Could be caused by minor pyrite or graphite.

2. Line 32+00W at 36N:

   A broad, wide zone, lying on a contact between higher resistivity rocks to the south and lower resistivity rocks to the north. Could be minor pyrite. Correlates with No. 4

3. Line 24+00W at 4N to 6N:

   The zone is improving with depth, but is still weak.

4. Line 24+00W at 34N to 36N:

   May join with No. 2 Near surface, probably smaller portion of weakly anomalous broad area. Probably caused by minor pyrite.

5. Line 16+00N at 31N:

   Improves with depth, correlates with zones on lines 24W and 32W, but this is a stronger anomaly. Two percent pyrite mapped in area.

6. Line 16+00W at 44N to 46N:

   Poor pattern, mainly a resistivity low, probably restricted in size.

7. Line 16+00W at 52N:

   A possible zone flanking a zone a few hundred feet to the north.

8. Line 16+00N at 54N to 56N:

   Moderate strength, good pattern, best response on first separation, so likely shallow.

9. Line 8+00W at 32N:

   Correlates with zones on adjacent lines. Good pattern, but relatively weak response. Probably caused by minor pyrite.

10. Line 8+00W at 40N:
Weak.

11. Line 8+00W at 44N:
Very weak with a broad pattern, probably caused by a small percentage of sulphides.

12. Line 8+00W at 50N to 52N:
Fair pattern, moderate frequency effect anomaly with a pronounced resistivity low. May correlate with No. 8. Could be a small zone of mineralization.

13. Line 0+00W at 28N to 33N:
A broad zone, perhaps a double zone, improving at depth. Correlates with zones to the west.

14. Line 0+00W at 42N to 44N:
Weak, and at depth.

15. Line 0+00W at 46N:
Weak, near surface, probably of restricted size, poor pattern.

16. Line 0+00W at 49N to 53N:
A broad, weak zone.

17. Line 0+00W at 56N:
Incomplete pattern, looks weak.

18. Line 8+00E at 20+40N to 22+40N:
Weak, single reading at depth.

19. Line 8+00E at 31N to 34N:
Moderate response, improving with depth.

20. Line 8+00E at 54N:
Fair pattern, fair response, improving with depth.

21. Line 8+00E at 56N (100' spreads):
Moderate response.

22. Line 8+00E at 58+50N to 60+75N:
Strong anomaly, very low resistivities. Apparently caused by graphite and pyrite.

23. Line 8+00E at 63N to 64N:
Strong response, low resistivities, apparently graphite and pyrite.

24. Line 16+00E at 24N:
Weak; very minor pyrite has been note along strike.

25. Line 16+00E at 28N:
Weak, but improving with depth.

26. Line 16+00E at 48+50N to 52N:
Weak and broad.

27. Line 16+00E at 54N to 56N:
Very weak, but with a good pattern, improving at depth.

28. Line 16+00E at 63N to 64N (100' spreads):
Strong anomaly, with a pronounced resistivity low.

29. Line 16+00E at 69N to 72N (100' spreads):
Large zone, at depth, perhaps at 200 feet or more.

30. Line 24+00E at 14N to 16N:
Poor pattern, weak, with a marked resistivity low.

31. Line 24+00E at 28N to 30N:
Weak, and at depth, single reading.

32. Line 24+00E at 66N:
Strong anomaly, typical pattern apparently graphite and pyrite.

33. Line 24+00E at 74N to 76N:
Strong anomaly at depth.

34. Line 32+00E at 14+50N to 16+50N:
Correlates with a zone on line 24E, very weak.

35. Line 32+00E at 24N to 26N:
Very weak.

36. Line 32+00E at 28+50 to 30+50N:
Weak, at depth.

37. Line 32+00E at 64N to 66N:
Strong anomaly, typical pattern, apparently graphite and pyrite.

38. Line 32+00E at 7SN:
Strong anomaly, shallow, incomplete pattern.

39. Line 40+00E at 1S to 2S:
Weak, at depth.

40. Line 40+00E at 0+20S to 0+80N:
Improving with depth, moderate strength.

41. Line 40+00E at 2+40N to 3+40N:
Moderate strength, best response on second separation at moderate depth.

42. Line 40+00E at 28N to 30N:
Broad and weak, probably with a low percentage of chargeable material.

43. Line 48+00E at 0 to 2N:
Strong response on one reading only, at depth.

44. Line 48+00E at 3N to 5N:
Weak.

45. Line 48+00E at 26+60N to 28+80N:
Weak, poor patttern, probably correlates on adjacent lines.

46. Line 56+00E at 6N:
Incomplete pattern, weak.

47. Line 56+00E at 24N to 26N:
Weak, but with a closed pattern.

48. Line 64+00E at 4N to 6N:
Incomplete pattern.

49. Line 64+00E at 28N to 30N:
Weak, improving with depth.

CONCLUSIONS

1. A combined induced polarization and resistivity survey was carried out on the No. 2 grid, and covered more than 17 line miles.

2. A number of anomalous indications were located, but most are weak, have poor patterns, or can be related to graphite and pyrite.

The best indications which are apparently unexplained are listed below:

1. Line 16+00W at 54N to 56N.

2. Line 8+00W at 50N to 52N.

3. Line 40+00E at 0N to 1N.

4. Line 40+00E at 2+40N to 3+40N.

RECOMMENDATIONS

1. The four indications which are listed above in part 2 of the "Conclusions", should be further checked by a soil geochemical survey.

Submitted by:

George D. Tikkanen,
Senior Exploration Geophysicist

GDT:jg
October 24, 1966

Distribution:
Montreal Exploration (1)
Chief Geologist, Expl. (1)
Western District (3)
Toronto (1)
GDT (1)

NOTES ON THE INDUCED POLARIZATION METHOD

Theory:

Polarization is the separation of charge, or blocking action of metallic or electronic conductors within a medium of ionic solution conduction. Induced polarization refers to this blocking action when caused by an applied electric field.

In its geological context induced polarization, or I.P., refers to the electro-chemical blocking phenomenon exhibited by metallic minerals such as most sulphides and graphite, under the influence of an applied current. When a current is passed through the ground the conduction is ionic and is dependent upon ions in the water content of the ground, because most minerals have a much higher specific resistivity than ground water. The "metallic" minerals have specific resistivities which are much lower than ground water. The I.P. effect occurs at the interfaces between ionic conductive conditions in the ground waters and the electronic conductive conditions in the metallic minerals.

The blocking action, or I.P. effect, increases with the time during which the current is flowing, hence if the current is periodically reversed, a higher frequency current will show less blocking, or I.P. effect, than will a low frequency, since less time is available for the blocking to occur at the higher frequency. It is therefore possible to measure the I.P. effect by measuring the resistivities at two frequencies. Essentially, this is the basis of the frequency domain I.P. system.

The percent frequency effect is defined as $\frac{\rho_L - \rho_H}{\rho_L} \times 100$, where ρ_L and ρ_H are the resistivities at the low and high frequencies, respectively. The percent frequency effect is the parameter measured to show the I.P. effect, and is the frequency domain equivalent of the chargeability m used in time domain I.P. work.

The resistivity is actually the apparent resistivity, which is an averaged value. It is obtained from the current, potential, and geometry of the electrode system. The resistivity plotted is the low frequency resistivity value and the units are ohm feet/2π. To convert these units to ohm meters, commonly used in some other I.P. systems, the ohm feet/2π values should be multiplied by 1.9.

The metal factor values are obtained by dividing the percent frequency effect by the resistivity and multiplying by a factor of 1000. The metal factor is proportional to the change in conductivity as the frequency of the applied current is varied, and can be shown to be equal to $(\sigma_H - \sigma_L) \times 2\pi \times 10^5$, where σ_H and σ_L are the conductivities at the high and low frequencies, respectively. The metal factor is generally more diagnostic than the frequency effect alone.

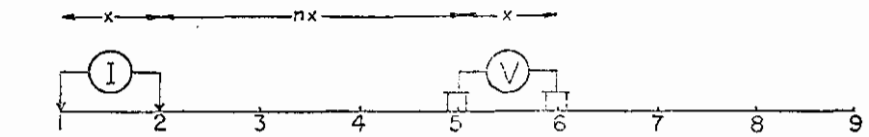
Procedure:

Current is applied to the ground at two current electrodes (C_1 and C_2) spaced a distance x apart. The potential is measured at two potential electrodes (P_1 and P_2) also spaced a distance x apart and in line with the current electrodes. For any given locations of C_1 and C_2, readings are taken when the distance between the nearest current and potential electrodes is equal to nx, and n has values of 1, 2, 3, etc. The electrode spacing x is determined by the requirements of the survey. Larger values of x would be used when the object is greater depth penetration and faster progress, whereas smaller values of x are employed in more detailed surveys and provide more accurate anomaly location, but for the smaller values of x the penetration is less and the survey slower. The penetration is greater for the larger n values.

The values of the resistivity, metal factor and percent frequency effect are plotted on "psuedo-sections", where the plotting point is determined by the intersection of lines drawn at 45° from the horizontal, and originating at the mid-points of the current electrode spread and the potential electrode spread, as shown in the diagram. The resistivities are plotted and contoured above the line and the metal factors plotted and contoured below the line. The percent frequency effect is shown on a superscript at the metal factor value. Depths to causative bodies cannot be scaled from the "psuedo-section", however.

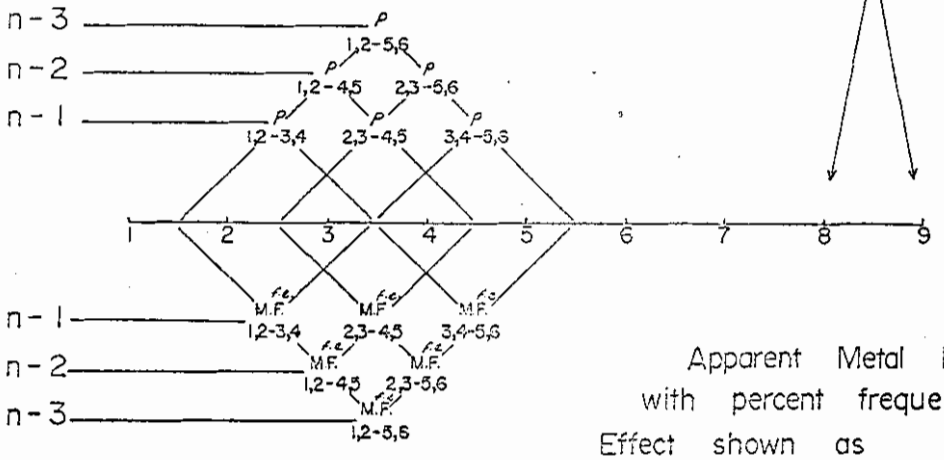
The most favourable type of anomaly would show a frequency effect high with a resistivity low, to provide a marked metal factor high. A frequency effect high, with little or no change in resistivity, to provide a metal factor high, mirroring the frequency effect high, is also favourable. Of lesser interest, but of possible importance, are those anomalies showing no frequency effect change, but a distinct resistivity low, to produce a metal factor anomaly. The type of anomaly, its strength, size and shape should be considered in relation to the geological setting and the target sought.

DIAGRAM SHOWING ELECTRODE ARRAY AND PLOTTING METHOD



X = ELECTRODE SPREAD LENGTH
n = ELECTRODE SEPARATION

STATIONS ON TRAVERSE LINE



Apparent Metal Factor with percent frequency Effect shown as a superscript.

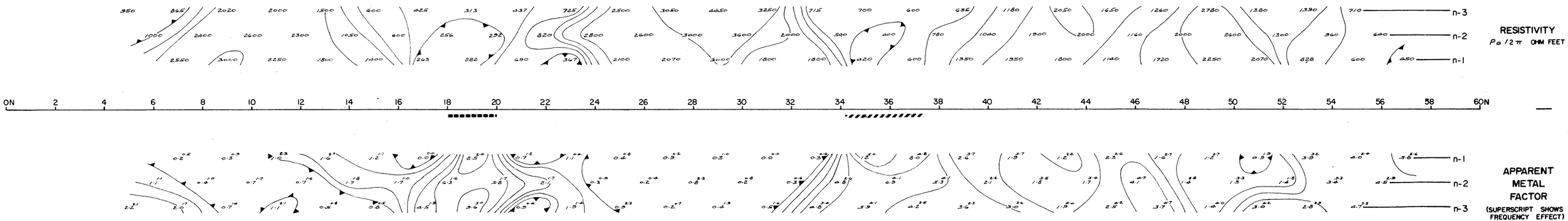
COMINCO LIMITED

INDUCED POLARIZATION AND RESISTIVITY SURVEY

Scale—One Inch = 200 Feet

SURVEYED BY: Mc. Phar Ltd.

I.P.-6-1



LINE NO.-32+00 W

ELECTRODE CONFIGURATION

X — X — n X — X

X — 200'

PLOTTING POINT

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE

PROBABLE

POSSIBLE

NOTE LOGARITHMIC CONTOUR INTERVAL

935

C.P.O.G. South
No. 2 I.P. Grid

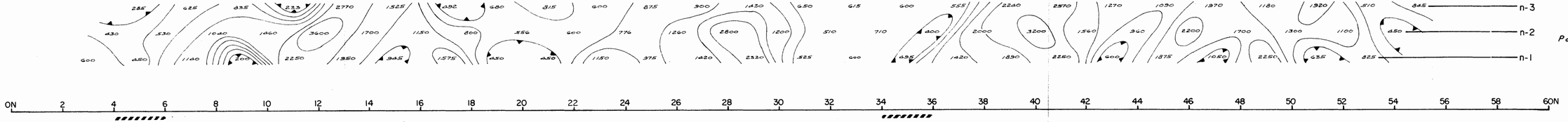
COMINCO LIMITED

INDUCED POLARIZATION AND RESISTIVITY SURVEY

Scale—One Inch = 200 Feet

SURVEYED BY: McPhar Ltd.

I.P.-G-2



LINE NO.-24+00W

ELECTRODE CONFIGURATION

X — X — n X — X — X

V I

X = 200'

PLOTTING POINT

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE

PROBABLE

POSSIBLE

NOTE LOGARITHMIC CONTOUR INTERVAL

935

C.P.O.G. South
No.2 I.P. Grid

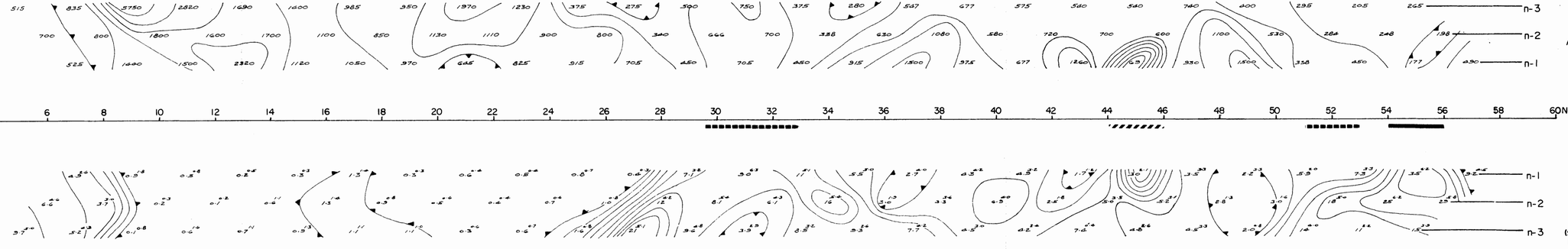
COMINCO LIMITED

INDUCED POLARIZATION AND RESISTIVITY SURVEY

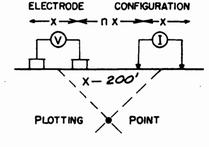
Scale—One Inch = 200 Feet

SURVEYED BY: McPhar Ltd.

I.P.-6-3



LINE NO. 16+00 W



SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE

PROBABLE

POSSIBLE

NOTE LOGARITHMIC CONTOUR INTERVAL

935

C.P.O.G. South
No. 2 I.P. Grid

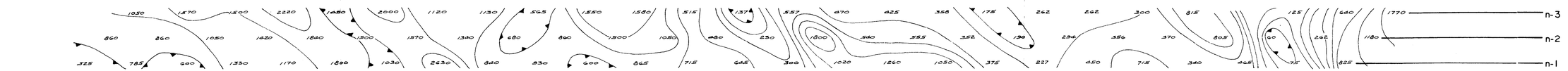
COMINCO LIMITED

INDUCED POLARIZATION AND RESISTIVITY SURVEY

Scale—One Inch = 200 Feet

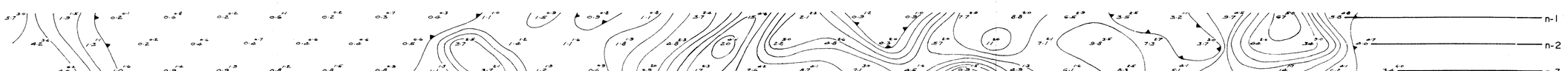
SURVEYED BY: McPhar Ltd.

I.P.-6-4



RESISTIVITY
Pa/2π OHM FEET

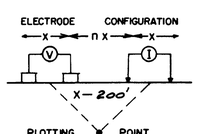
0N 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48 50 52 54 56 58 60 62N



APPARENT METAL FACTOR
(SUPERSCRIPT SHOWS FREQUENCY EFFECT)

LINE NO.-8+00 W

ELECTRODE CONFIGURATION



SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE

PROBABLE

POSSIBLE

NOTE LOGARITHMIC CONTOUR INTERVAL

935

C.P.O.G. South
No. 2 I.P. Grid

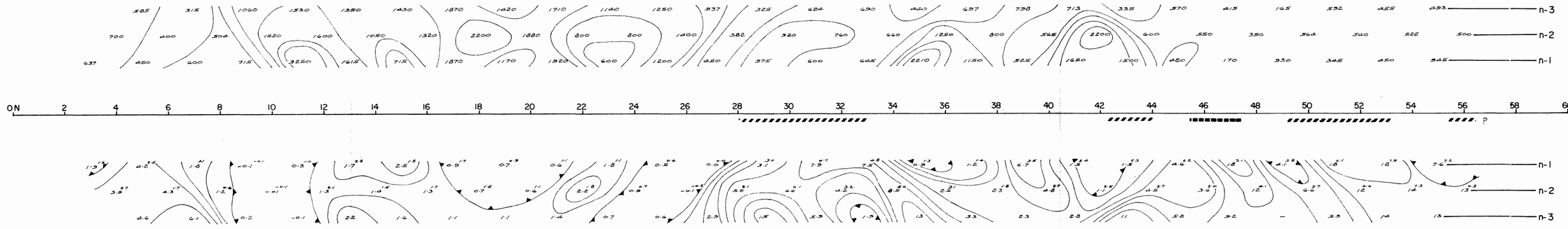
COMINCO LIMITED

INDUCED POLARIZATION AND RESISTIVITY SURVEY

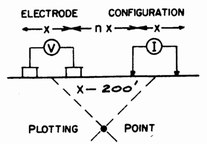
Scale—One Inch = 200 Feet

SURVEYED BY: McPhar Ltd.

I.P.-G-5



LINE NO.-0+00



SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE

PROBABLE

POSSIBLE

NOTE LOGARITHMIC CONTOUR INTERVAL

935

C.P.O.G. South
No.2 I.P. Grid

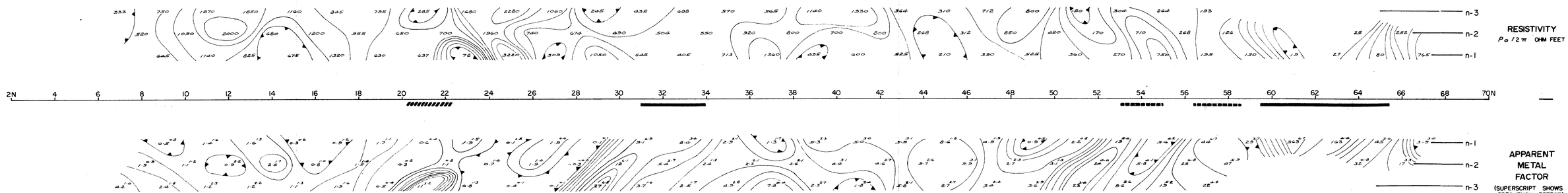
COMINCO LIMITED

INDUCED POLARIZATION AND RESISTIVITY SURVEY

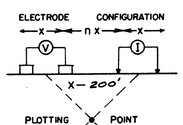
Scale—One Inch = 200 Feet

SURVEYED BY: McPhar Ltd.

I.P.-6-6



LINE NO. - 8+00 E



SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE

PROBABLE

POSSIBLE

NOTE LOGARITHMIC CONTOUR INTERVAL

935

C.P.O.G. South
No. 2 I.P. Grid

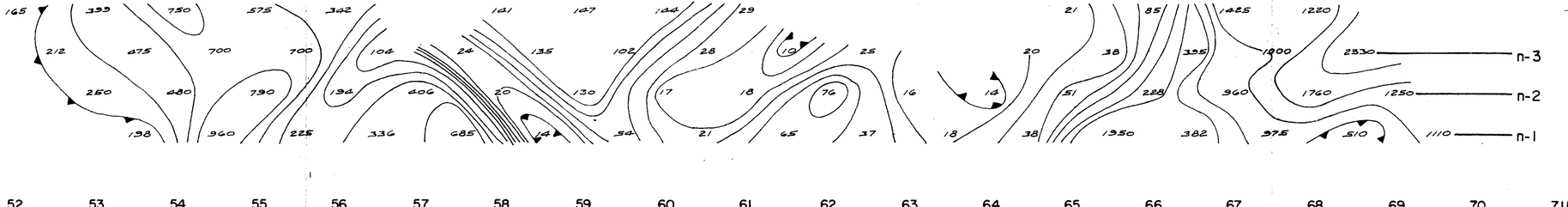
COMINCO LIMITED

INDUCED POLARIZATION AND RESISTIVITY SURVEY

Scale — One Inch = 100 Feet

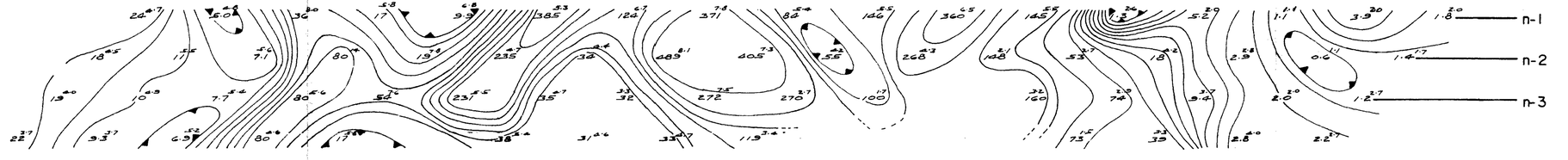
SURVEYED BY: McPhar Ltd.

I.P.-6-7



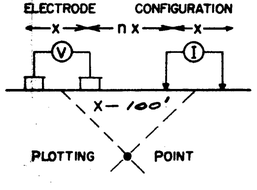
RESISTIVITY
$\rho_a / 2\pi$ OHM FEET

49N 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71N



APPARENT METAL FACTOR
(SUPERSCRIPT SHOWS FREQUENCY EFFECT)

LINE NO. — 8+00E



SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE

PROBABLE

POSSIBLE

NOTE LOGARITHMIC CONTOUR INTERVAL

935

C.P.O.G. South
No. 2 I.P. Grid

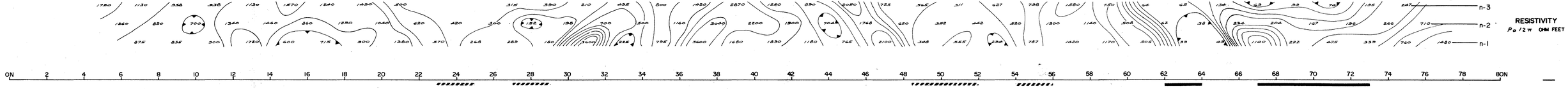
COMINCO LIMITED

INDUCED POLARIZATION AND RESISTIVITY SURVEY

Scale—One Inch = 200 Feet

SURVEYED BY: *Mc Phar Ltd.*

I.P.-G-8



RESISTIVITY
$\rho a / 2\pi$ OHM FEET

APPARENT METAL FACTOR
(SUPERSCRIPT SHOWS FREQUENCY EFFECT)

ELECTRODE CONFIGURATION

X — X — n X — X — X

V I

X = 200'

PLOTTING POINT

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE

PROBABLE

POSSIBLE

NOTE LOGARITHMIC CONTOUR INTERVAL

935

C.P.O.G. South
No. 2 I.P. Grid

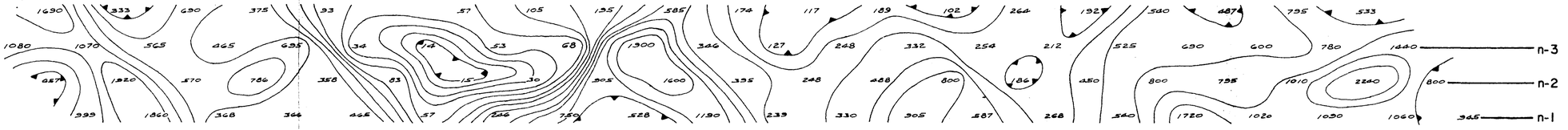
COMINCO LIMITED

INDUCED POLARIZATION AND RESISTIVITY SURVEY

Scale—One Inch = 100 Feet

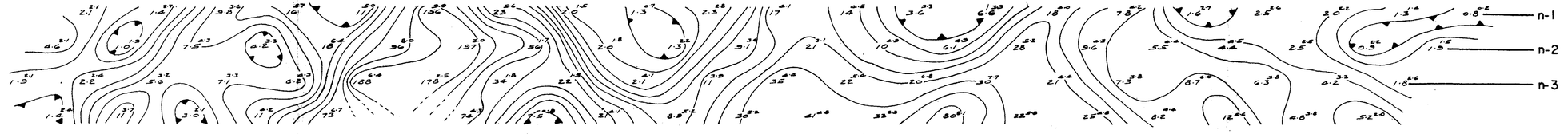
SURVEYED BY: McPhar Ltd.

I.P.-6-9



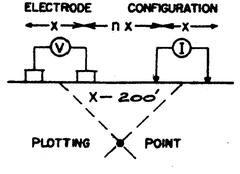
RESISTIVITY
Pa/2π OHM FEET

55N 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80N



APPARENT METAL FACTOR
(SUPERSCRIPT SHOWS FREQUENCY EFFECT)

LINE NO.-16+00E



SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE

PROBABLE

POSSIBLE

NOTE LOGARITHMIC CONTOUR INTERVAL

935

C.P.O.G. South
No.2 I.P. Grid

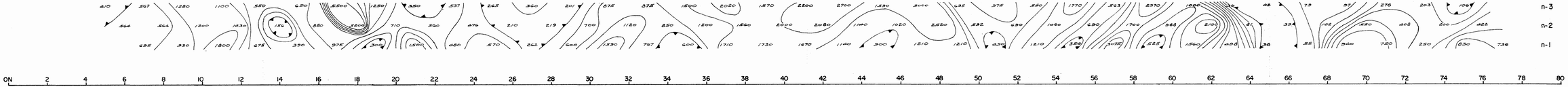
COMINCO LIMITED

INDUCED POLARIZATION AND RESISTIVITY SURVEY

Scale — One Inch = 200 Feet

SURVEYED BY: McPhar Ltd.

I.P.-G-10



LINE NO. - 24+00E

ELECTRODE CONFIGURATION

X — nX — X

V C

X = 200'

PLOTTING POINT

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE

PROBABLE

POSSIBLE

NOTE LOGARITHMIC CONTOUR INTERVAL

935

C.P.O.G. South
No. 2 I.P. Grid

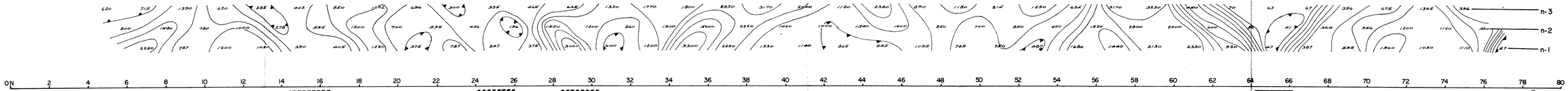
COMINCO LIMITED

INDUCED POLARIZATION AND RESISTIVITY SURVEY

Scale—One Inch = 200 Feet

SURVEYED BY: McPhar Ltd.

I.P.-6-11



LINE NO. 32+00 E

ELECTRODE CONFIGURATION

X — X — n X — X

V I

X — 200'

PLOTTING POINT

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE

PROBABLE

POSSIBLE

NOTE LOGARITHMIC CONTOUR INTERVAL

935

C.P.O.G. South
No. 2 I.P. Grid

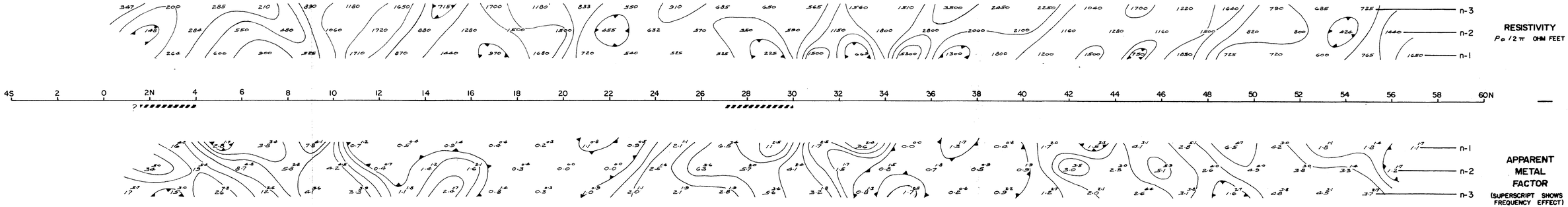
COMINCO LIMITED

INDUCED POLARIZATION AND RESISTIVITY SURVEY

Scale—One Inch = 200 Feet

SURVEYED BY: McPhar Ltd.

I.P.-6-12



LINE NO.-40+00E

ELECTRODE CONFIGURATION

X — X — n X — X

V I

X = 200'

PLOTTING POINT

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE

PROBABLE

POSSIBLE

NOTE LOGARITHMIC CONTOUR INTERVAL

935

C.P.O.G. South
No. 2 I.P. Grid

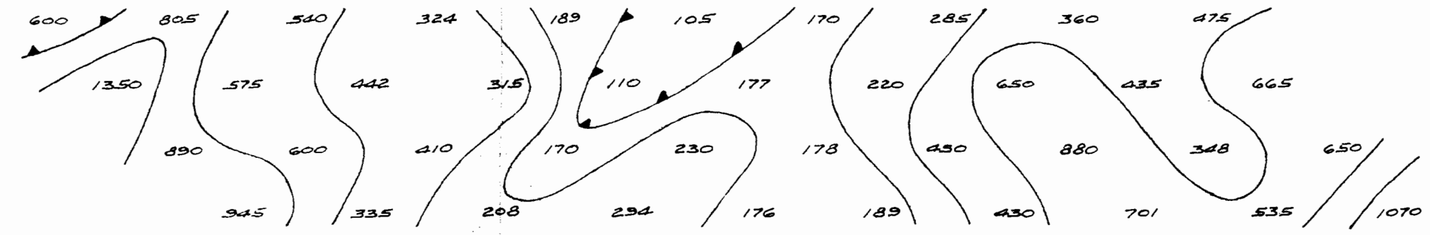
COMINCO LIMITED

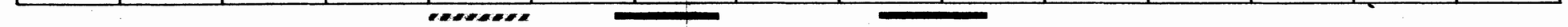
INDUCED POLARIZATION AND RESISTIVITY SURVEY

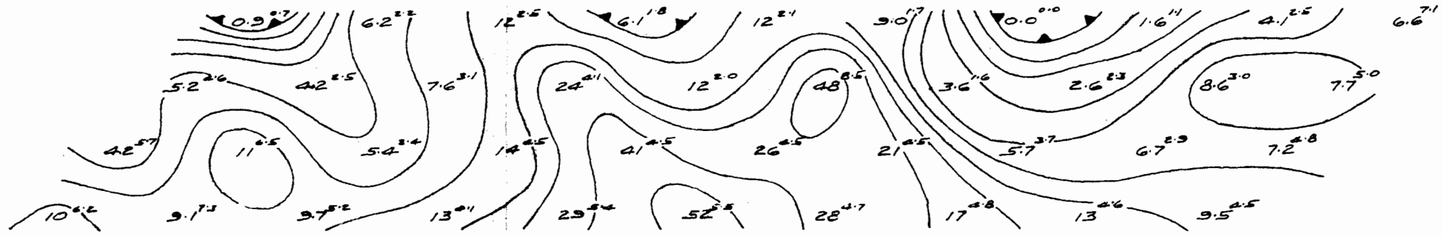
Scale—One Inch = 100 Feet

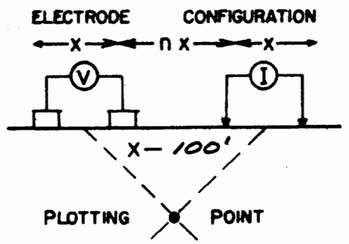
SURVEYED BY: McPhar Ltd.

I.P.-6-13









SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE

PROBABLE

POSSIBLE

NOTE LOGARITHMIC CONTOUR INTERVAL

LINE NO. 40+00E

935

C.P.O.G. South
No. 2 I.P. Grid

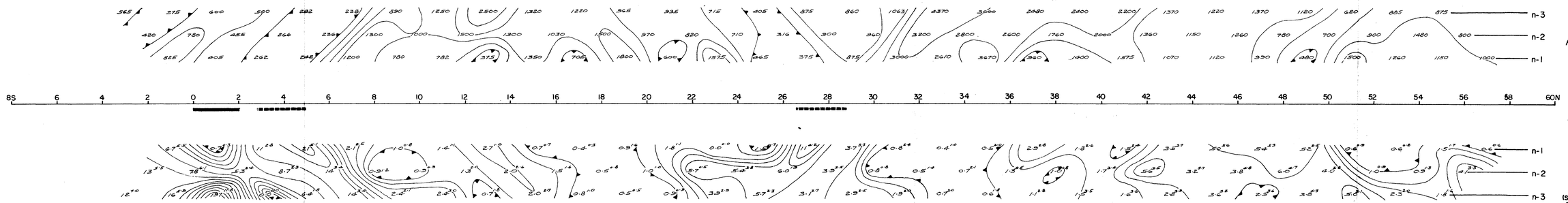
COMINCO LIMITED

INDUCED POLARIZATION AND RESISTIVITY SURVEY

Scale—One Inch = 200 Feet

SURVEYED BY: McPhar Ltd.

I.P.-6-14



LINE NO. 48+00 E

ELECTRODE CONFIGURATION

X — X — n X — X

X = 200'

PLOTTING POINT

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE

PROBABLE

POSSIBLE

NOTE LOGARITHMIC CONTOUR INTERVAL

935

C.P.O.G. South
No. 2 I.P. Grid

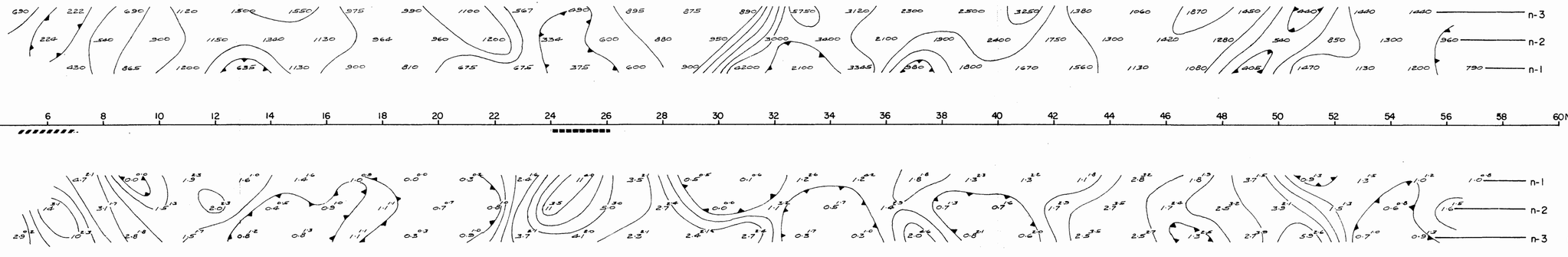
COMINCO LIMITED

INDUCED POLARIZATION AND RESISTIVITY SURVEY

Scale—One Inch = 200 Feet

SURVEYED BY: McPhar Ltd.

I.P.-6-15



LINE NO.-56+00 E

ELECTRODE CONFIGURATION

X — n X — X

X — 200'

PLOTTING POINT

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE

PROBABLE

POSSIBLE

NOTE LOGARITHMIC CONTOUR INTERVAL

935

C.P.O.G. South
No. 2 I.P. Grid

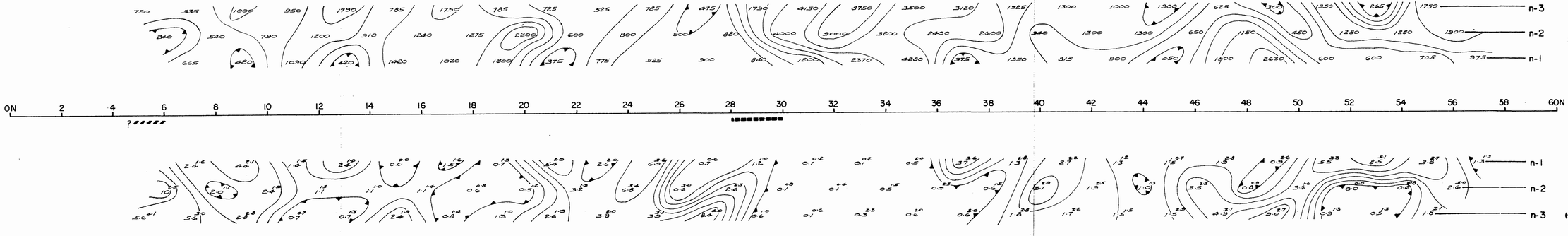
COMINCO LIMITED

INDUCED POLARIZATION AND RESISTIVITY SURVEY

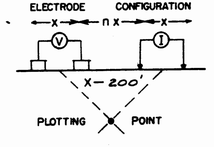
Scale—One Inch = 200 Feet

SURVEYED BY: Mc. Phar Ltd.

I.P-6-16



LINE NO. 64+00E



SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE

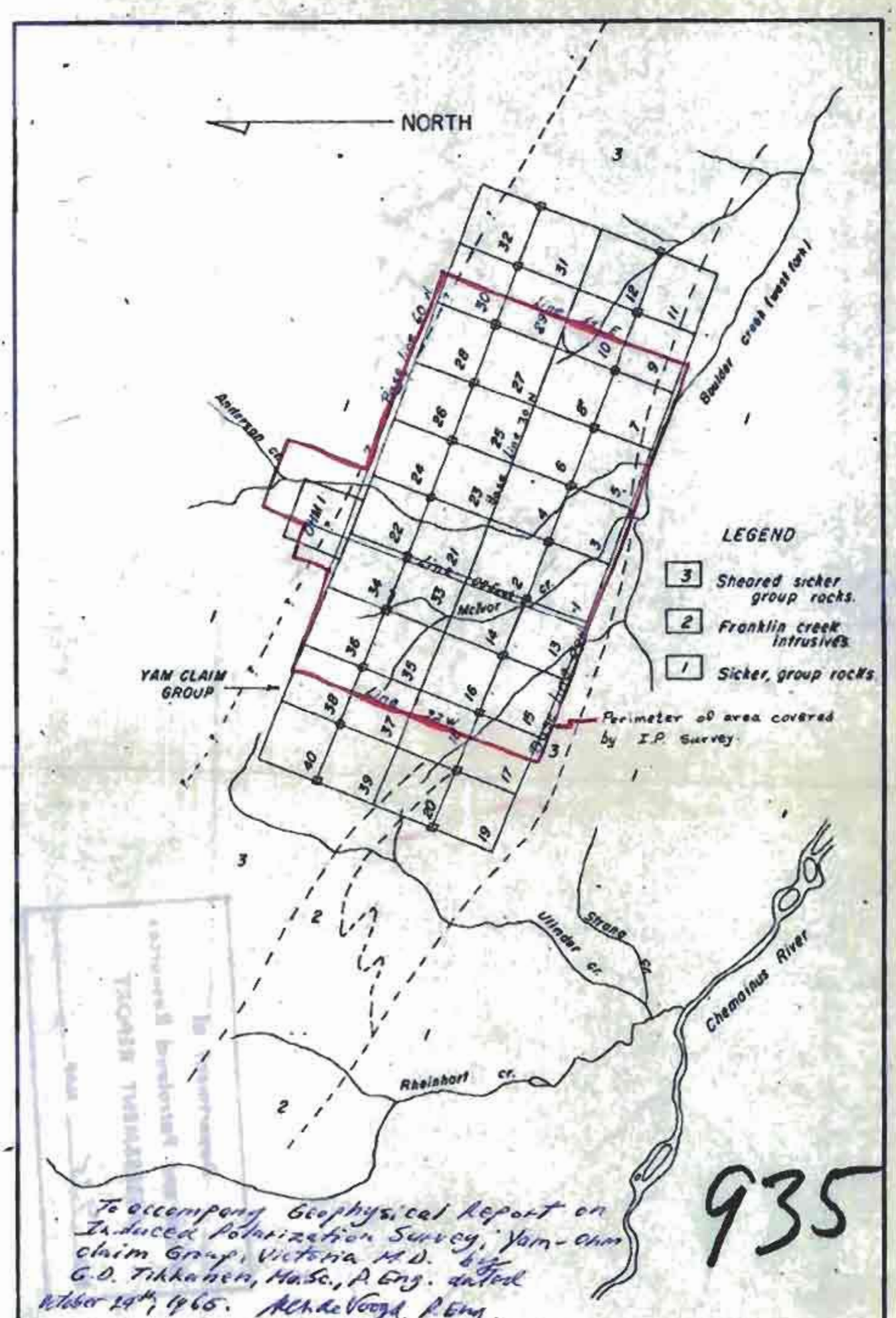
PROBABLE

POSSIBLE

NOTE LOGARITHMIC CONTOUR INTERVAL

935

C.P.O.G. South
No. 2 I.P. Grid



935

To accompany Geophysical Report on Induced Polarization Survey, Yam-Ohm claim Group, Victoria M.D. by G.D. Tikkanen, M.Sc., P.Eng. dated October 24th, 1966. A.C. de Vooys, P.Eng.

The Consolidated Mining and Smelting Company of Canada Limited

DRAWN BY:		TRACED BY:	
REVISED BY	DATE	REVISED BY	DATE

GENERAL GEOLOGY
YAM CLAIM GROUP

SCALE: 1" = 1/2 mi. | DATE: JAN. 11, 1967 | PLATE: 1

COMINCO 210-0610


N
VANCOUVER ISLAND
VANCOUVER
C.P.O.G. PROPERTY
VICTORIA
LOCATION MAP
SCALE : 1 INCH TO 20 MILES
L-40+00W
L-32+00W
L-24+00W
L-16+00W
L-8+00W
L-0+00
L-8+00E
L-16+00E
L-24+00E
L-32+00E
L-40+00E
L-48+00E
L-56+00E
L-64+00E
L-72+00E
L-80+00E
60+00N BASE LINE
30+00N BASE LINE
0+00
ELECTRODE CONFIGURATION
X=200'
PLOTTING POINT
SURFACE PROJECTION OF ANOMALOUS ZONES
DEFINITE
PROBABLE
POSSIBLE
NOTE LOGARITHMIC CONTOUR INTERVAL
935
I.P. Survey Grid No. 2
The Consolidated Mining and Smelting Company of Canada Limited
INDUCED POLARIZATION SURVEY
C.P.O.G. PROPERTY
Plan of
SECOND SEPARATION METAL FACTORS
SCALE: 1" to 400'

N

L-40+00W L-32+00W L-24+00W L-16+00W L-8+00W L-0+00 L-8+00E L-16+00E L-24+00E L-32+00E L-40+00E L-48+00E L-56+00E L-64+00E L-72+00E L-80+00E

60N 58N 56N 54N 52N 50N 48N 46N 44N 42N 40N 38N 36N 34N 32N 30N 28N 26N 24N 22N 20N 18N 16N 14N 12N 10N 8N 6N 4N 2N 0+00

70N 68N 66N 64N 62N 60N 78N 76N 74N 72N

60+00N BASE LINE

30+00N BASE LINE

0+00

VANCOUVER ISLAND

VANCOUVER

PORT ALBERNI

NANAIMO

C.P.O.G. PROPERTY

DUNCAN

VICTORIA

LOCATION MAP

SCALE : 1 INCH TO 20 MILES

ELECTRODE CONFIGURATION

X X X

V 1

X-200'

PLOTTING POINT

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE

PROBABLE

POSSIBLE

935

I.P. Survey Grid No. 2

To accompany Geophysical Report on Induced Polarization Survey, Yam claim group, Victoria M.D. by G.D. Hobson, M.Sc., P.Eng. dated October 24th, 1966. Ivan Weigel, M.E.Sc.

George Hobson P.Eng.

The Consolidated Mining and Smelting Company of Canada Limited

DRAWN BY: E.A. Horvath		TRACED BY:	
REVISED BY:	DATE:	REVISED BY:	DATE:

INDUCED POLARIZATION SURVEY

C.P.O.G. PROPERTY

Plan of

SECOND SEPARATION RESISTIVITIES

SCALE: 1" to 400' DATE: Oct. 22/1966 PLATE:

COMINCO 210-0670