

REDGOLD PROPERTY

1995 INDUCED POLARIZATION SURVEY GEOPHYSICAL ASSESSMENT REPORT

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BRITISH COLUMBIA
CANADA

GEOLOGICAL SURVEY BRANCH ASSESSMENT REPORTS
DATE RECEIVED MAY 15 1996

NTS 94D/ 9
Latitude 56°38' N
Longitude 126°05' W

MINERAL CLAIMS

REDGOLD 1 - 4
REDGOLD 5
REDGOLD 6 - 10
REDGOLD 11 - 16

TENURE NUMBERS

335791 - 335794
339184
340147 - 340151
340158 - 340163

Owner - Operator

Consolidated North Coast Industries Ltd.
1020-800 West Pender St.
Vancouver, B.C.
V6C 2V6

December, 1995

by
R. J. Haslinger, P.Eng.
R. C. DeLong, B. Sc.
C. M. Rebagliati, P.Eng.

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GEOLOGICAL BRANCH
ASSESSMENT REPORT

**REDGOLD PROPERTY
1995 INDUCED POLARIZATION SURVEY
GEOPHYSICAL ASSESSMENT REPORT**

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1.0 SUMMARY

The Redgold Property is located in the Southern Toodoggone mining camp in the Omineca Mining Division in north central British Columbia. The property is composed of 16 mineral claims totaling 188 units owned 100% by Consolidated North Coast Industries Ltd.

The property area is in a favorable geological environment for hosting precious and base metal deposits. The area is underlain by the productive Takla volcanic rocks of the Kemess Porphyry District and lies within a 30 kilometer long northwest geochemical alignment known as the Nik trend.

The 1995 exploration program on the Redgold property included preparing 27.7 line kilometers of cut line and Induced Polarization (IP) survey grid and completing an IP survey on this grid.

The survey outlined two main chargeability anomalies and, likely, a northeast trending fault separating them. The anomaly at the south east edge of the grid coincides with observed quartz veining of the Redgold Deposit and represents a good target for follow-up drill testing.

The over all lower level of chargeabilities of this survey are likely due to the relative lower abundance of pyrite and possibly higher chalcopyrite and bornite abundances.

2.0 INTRODUCTION

The Redgold Property is located in the Southern Toodoggone mining camp in the Omineca Mining Division in north central British Columbia. The property is composed of 16 mineral claims totaling 188 units owned 100% by Consolidated North Coast Industries Ltd. This area is a favorable geological environment for hosting precious and base metal deposits.

Consolidated North Coast Industries Ltd. 1995 exploration program on the Redgold property included preparing 27.7 line kilometers of cut line and Induced Polarization (IP) survey grid and completing an IP survey on this grid.

This work program was undertaken as part of a primary assessment of the property. The results will be used to guide future exploration.

3.0 LOCATION AND ACCESS

The Redgold property is located in north central British Columbia in the Southern Toodoggone mining camp at latitude 56°38' north, longitude 126°05' west. The property lies in the Omineca Mining Division, approximately 215 km north north-east of Smithers and 370 km northwest of Prince George (Figures 1 and 2).

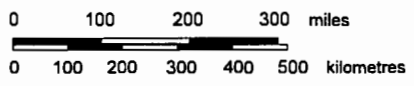
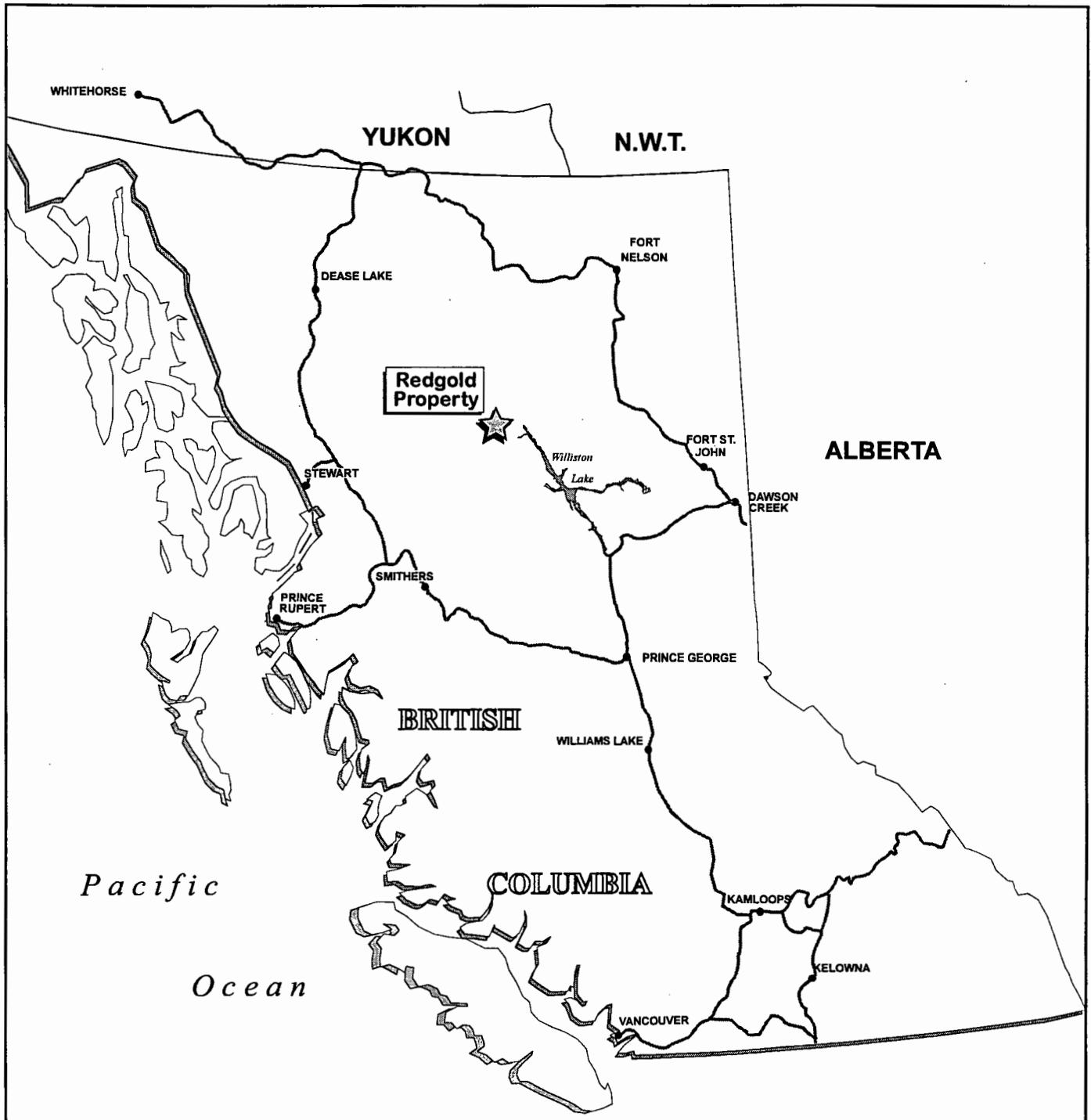
Access to the property is by 10 km of an old exploration road turning off the Omineca Resource Access Road about 350 km north of Fort St. James. Access by fixed wing aircraft is facilitated by Sturdee Valley airfield which is located adjacent to the Omineca Resource Access Road approximately 70 km northwest of the property. This airfield can be used by commuter-type aircraft based in Smithers and Vancouver.

4.0 PHYSIOGRAPHY AND CLIMATE

The property covers an alpine and sub-alpine upland in the Lay Range of the Omineca Mountains. Elevations range from 1,250 metres to 2,200 metres above mean sea level. The treeline is at 1,300 metres with alpine meadows extending up to 1,600 metres. Above this, bare rock, scree, and rare patches of permanent snow are essential elements.

The climate is generally moderate although highly changeable. Temperatures range from +30° to -35° Celsius. Precipitation is usually moderate and more or less uniformly distributed throughout the year. With appropriate planning, drilling and other exploration activities could be carried out year round.

The topography ranges from moderate to very steep.



**CONSOLIDATED NORTH COAST
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REDGOLD PROPERTY

General Location Map

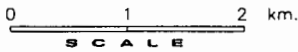
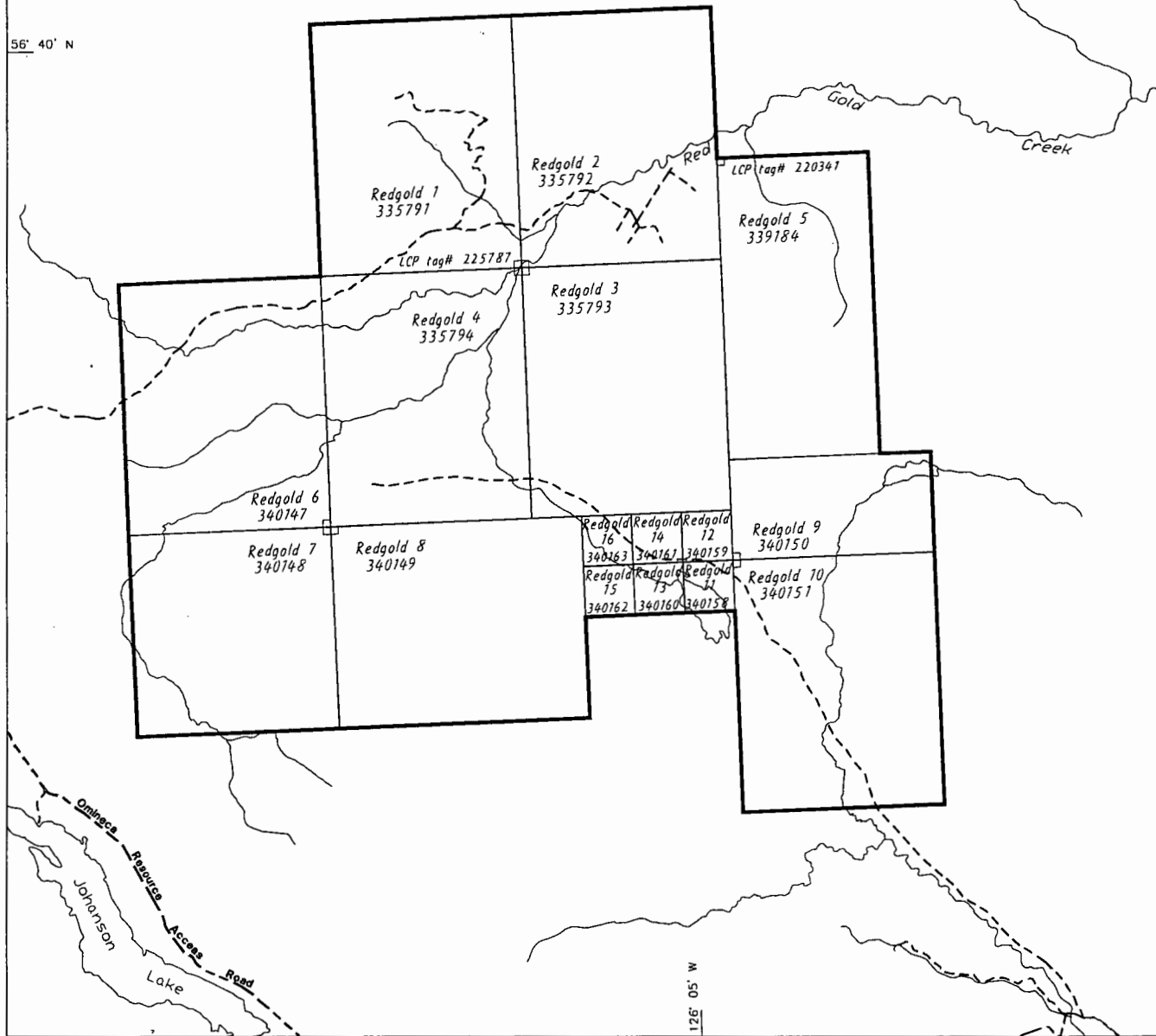
Date	November 1995	Scale	as shown	Figure 1
Drawn by	agb	Dwg. name		



56° 40' N

126° 05' W

56° 40' N



**CONSOLIDATED NORTH COAST
INDUSTRIES LTD.**

REDGOLD PROPERTY

Claim Location Map

Date	November 1995	Scale	1 : 65 000	Figure 2
Drawn by	agb	Geology by		

5.0 CLAIM DATA

The Redgold Property comprises 16 mineral claims totaling 188 units. These claims are owned 100% by Consolidated North Coast Industries Ltd. and are situated in the Omineca Mining Division on NTS map sheet 94D/9 (Figure 2). Claim data are as follows:

Claim Name	Units	Record Number	Completion Date	Expiry Date
REDGOLD 1	20	335791	06-May-95	06-May-99*
REDGOLD 2	20	335792	05-May-95	05-May-99*
REDGOLD 3	20	335793	05-May-95	05-May-99*
REDGOLD 4	20	335794	06-May-95	06-May-99*
REDGOLD 5	18	339184	25-Aug-95	25-Aug-99*
REDGOLD 6	20	340147	13-Sep-95	13-Sep-99*
REDGOLD 7	16	340148	13-Sep-95	13-Sep-99*
REDGOLD 8	20	340149	13-Sep-95	13-Sep-99*
REDGOLD 9	8	340150	14-Sep-95	14-Sep-99*
REDGOLD 10	20	340151	14-Sep-95	14-Sep-99*
REDGOLD 11	1	340158	14-Sep-95	14-Sep-99*
REDGOLD 12	1	340159	14-Sep-95	14-Sep-99*
REDGOLD 13	1	340160	14-Sep-95	14-Sep-99*
REDGOLD 14	1	340161	14-Sep-95	14-Sep-99*
REDGOLD 15	1	340162	14-Sep-95	14-Sep-99*
REDGOLD 16	1	340163	14-Sep-95	14-Sep-99*

* subject to acceptance of this assessment report

6.0 EXPLORATION HISTORY

Exploration for porphyry copper style deposits was initiated in the 1960's with large scale reconnaissance stream sediment surveys by many of the major exploration companies.

BP recognized the potential of the area of the Redgold claims. Exploration in the area is documented in a series of internal and assessment reports by BP Resources between 1976 and 1981.

In the area of the Redgold claims, BP spent \$842,000 on:

1. 50 km of cut-line
2. geochemical sampling
3. geophysical surveying
4. 35 overburden drill holes
5. construction of 10 km of access road
6. 2.55 km trenching
7. 2,700 m of percussion drilling in 81 holes
8. 3,000 m of diamond drilling in 18 holes

In 1990 and 1991, El Condor Resources Ltd. delineated the Kemes South gold-copper deposit, located about 75 kilometers to the northwest (Rebagliati, 1993, Figure 3.0). The deposit is currently being developed for mining by Royal Oak Mines Ltd.

7.0 PROPERTY GEOLOGY

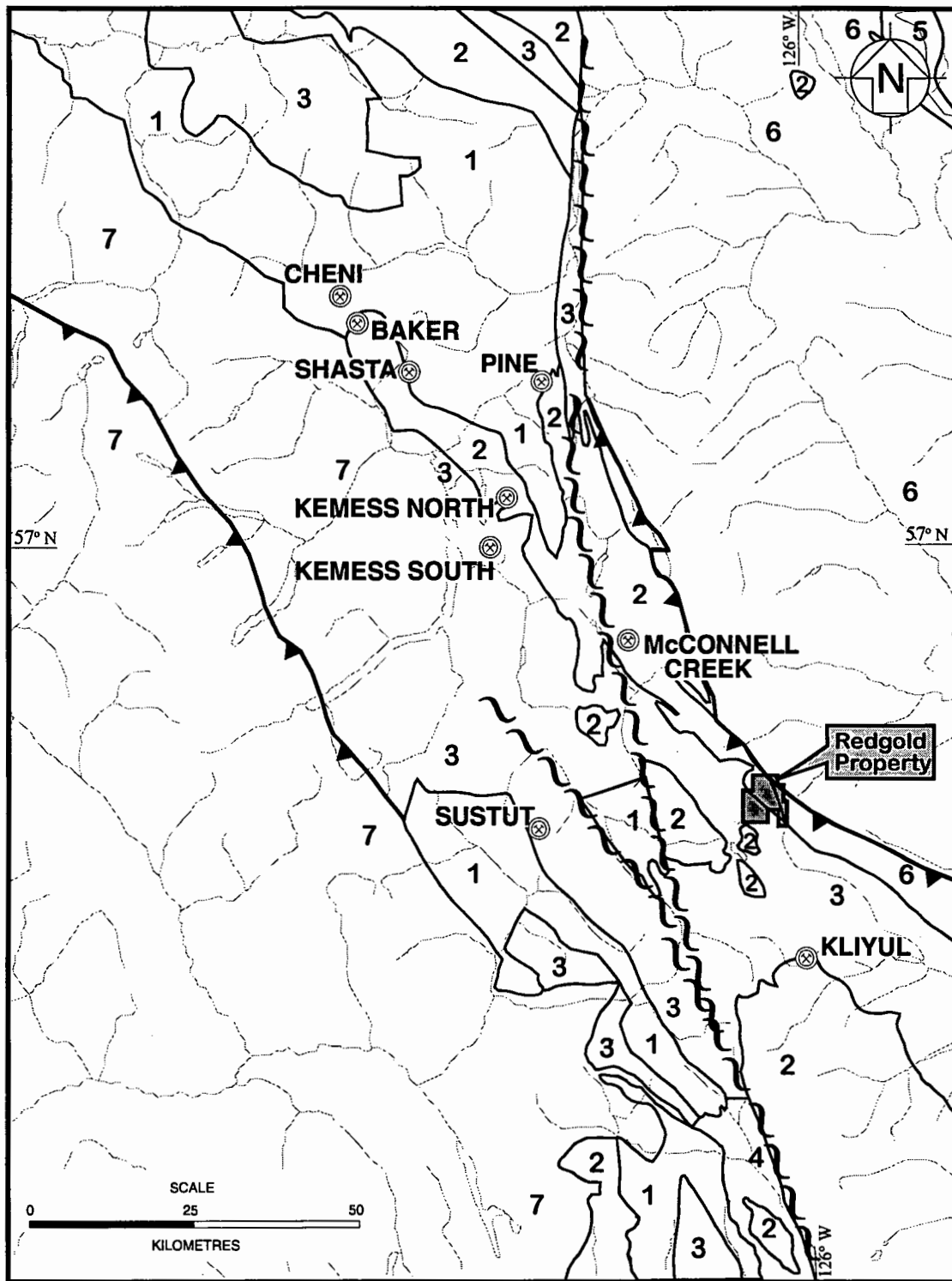
The geology of the property is summarized by Hoffman (1981). The north and central part of the claim block is dominated by the Wrede Creek ultramafic complex, one of several zoned or Alaskan-type ultramafic bodies in the McConnell Creek and Aiken Lake map areas. The complex is approximately 5 km in diameter and was emplaced in andesitic to basaltic volcanic rocks of the Triassic Takla Group (Figure 3).

A contact metamorphic aureole exists at the intrusive contact between the Wrede Creek complex and the Takla Group. The structural trend of this contact and of the major faults tends to be north-northwesterly. The Lay Range Fault trends northwesterly through the center of the property and appears to be a splay or conjugate to the Swannell Fault several kilometers to the east and to the Ingenika Fault some 15 kilometers to the west (Richards, 1975).

An additional northwest feature that the property lies along is an at least 30 kilometer long geochemical alignment of anomalous copper referred to as the Nik trend.

Porphyritic, equigranular, and pegmatitic diorites to granites intrude as dikes up 150 metres thick, cutting both ultramafic and volcanic rocks. A potassium - argon age date of 172 ± 6 Ma was obtained from a diorite phase of these intrusions.

Disseminated and fracture-filling pyrite, chalcopyrite, and rare bornite occur associated with widely distributed dioritic to granitic dikes. Sulphides are generally confined to the dikes but can extend in wallrocks.



LEGEND

- 1 Hazelton Group
- 2 Intrusive
- 3 Takla Group
- 4 Cache Creek Group
- 5 Eam and Road River Groups
- 6 Paleozoic Sediments (Includes Atan, Kechika, Lay Range Assemblage and Undivided Paleozoic Sediments)
- 7 Hazelton Group
- Fault
- Thrust Fault
- Major Mines / Deposits

CONSOLIDATED NORTH COAST INDUSTRIES LTD.

REDGOLD PROPERTY

Regional Setting

Date	November 1995	Scale	as shown	Figure
Drawn by	agb	Dwg name		

A large body of sheeted bornite-chalcopyrite-quartz-orthoclase veins was mapped in the south central portion of the property - the Redgold Deposit. The veins strike 070° and dip about 55° to the north. They are exposed in outcrop across a width of 60 m and over a strike length of 800 m. This body of veins fits within the classic porphyry deposit model and represents a potentially large copper-silver-gold resource.

8.0 INDUCED POLARIZATION SURVEY

In October and November 1995, Consolidated North Coast Industries Ltd. contracted Coureur Des Bois Ltd. of Whitehorse to prepare a grid on the Redgold property and then contracted Lloyd Geophysics Inc. of Vancouver to complete an Induced Polarization (IP) survey of the grid. The location of the IP survey grid with respect to the Redgold claims is shown in Figure 4.

A detailed documentation and explanation of the IP survey and analysis of the survey results are given in Appendix 1.

The survey outlined two main chargeability anomalies and, likely, a northeast trending fault separating them. The anomaly at the south east edge of the grid coincides with observed quartz veining of the Redgold Deposit and represents a good target for follow-up drill testing.

The over all lower level of chargeabilities of this survey are likely due to the relative lower abundance of pyrite and possibly higher chalcopyrite and bornite abundances.

9.0 CONCLUSIONS

The survey outlined two main chargeability anomalies and, likely, a northeast trending fault separating them. The anomaly at the south east edge of the grid coincides with observed quartz veining of the Redgold Deposit and represents a good target for follow-up drill testing.

The over all lower level of chargeabilities of this survey are likely due to the relative lower abundance of pyrite and possibly higher chalcopyrite and bornite abundances.

10.0 STATEMENT OF COSTS

REDGOLD PROPERTY (October to November 1995)

Cut line and grid preparation by Coureur Des Bois line cutters 172 man days at \$250.00 per man day.....	\$ 43,000.00
Lloyd Geophysics IP survey.....	<u>47,980.00</u>
Total	\$ 90,980.00

11.0 REFERENCES

Badley, M. D., Hoffman, S. J., Wine, G., Wong, R. H., 1978; Summary Report of Geological, Geophysical and Geochemical Surveys; Percussion and Diamond Drilling programs, Unpublished Report BPVR 78-9.

Hoffman, S. J., 1981; The Nik Belt; A farm out proposal, Unpublished Report, BP Minerals Limited, BPVR 81-5.

Rebagliati, C. M., 1993; Phase 6, 1993 Exploration Diamond Drilling on the Kemess South Property, Unpublished report, El Condor Resources Ltd. and St. Philips Resources Inc.

Richards, T., 1975; McConnell Creek Map - Area (94D/E), 1:250,000 scale geology, Geological Survey of Canada.

12.0 STATEMENT OF QUALIFICATIONS

I, Richard Josef Haslinger, of 821 West 19th Avenue, Vancouver, B.C., hereby certify that:

1. I am a Geological Engineer employed by Consolidated North Coast Industries Ltd., a mineral exploration company with offices at 1020 - 800 West Pender Street, Vancouver, B.C.
2. I am a graduate of the University of British Columbia (B. Sc., Geological Engineering, 1986).
3. I am a member in good standing of the Association of Professional Engineers and Geoscientists of British Columbia.
4. I have practiced my profession continuously since graduation.
5. The foregoing report is based on:
 - a) A study of available company and government reports.
 - b) My personal knowledge of the area resulting from my direct supervision of and participation in exploration on the property from August to December, 1995.



R. J. Haslinger, P.Eng.
December 22, 1995

APPENDIX 1.0

**A GEOPHYSICAL ASSESSMENT REPORT
ON AN INDUCED POLARIZATION SURVEY
ON THE REDGOLDPROPERTY**

BY

LLOYD GEOPHYSICS INC.

**CONSOLIDATED NORTH COAST
INDUSTRIES LTD.**

**A GEOPHYSICAL ASSESSMENT REPORT
ON A INDUCED POLARIZATION SURVEY ON
THE REDGOLD PROPERTY
IN THE TOODOGGONE AREA
BRITISH COLUMBIA**

OMINECA MINING DIVISION

**NTS 94D/9
LATITUDE 56°38'N
LONGITUDE 126°5'W**

BY

LLOYD GEOPHYSICS INC.

**S. John A. Cornock, B.Sc.
and
John Lloyd, M.Sc., P.Eng.**

DECEMBER, 1995



Lloyd Geophysics

SUMMARY

From November 3 to November 28, 1995, Lloyd Geophysics Inc. carried out an Induced Polarization (IP) survey on the Redgold property near Johanson Lake, British Columbia for Consolidated North Coast Industries Ltd.

The survey outlined 2 main chargeability anomalies which are separated by a northeast trending fault. The much higher chargeabilities found in other porphyry deposits such as Kemess and Mt. Milligan are not found here most likely because of a higher percentage of chalcopyrite and bornite and a lesser amount of pyrite.

Both of these anomalies are exciting targets and are worthy of further exploration by drilling.



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Cost of Survey and Reporting	Appendix B
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1.0 INTRODUCTION

From November 3 to November 28, 1995, Lloyd Geophysics Inc. carried out an Induced Polarization (IP) survey on the Redgold property near Johanson Lake, British Columbia for Consolidated North Coast Industries Ltd.

The purpose of the survey was to identify and locate sulphide zones associated with a copper-gold-silver porphyry system.

2.0 PROPERTY LOCATION AND ACCESS

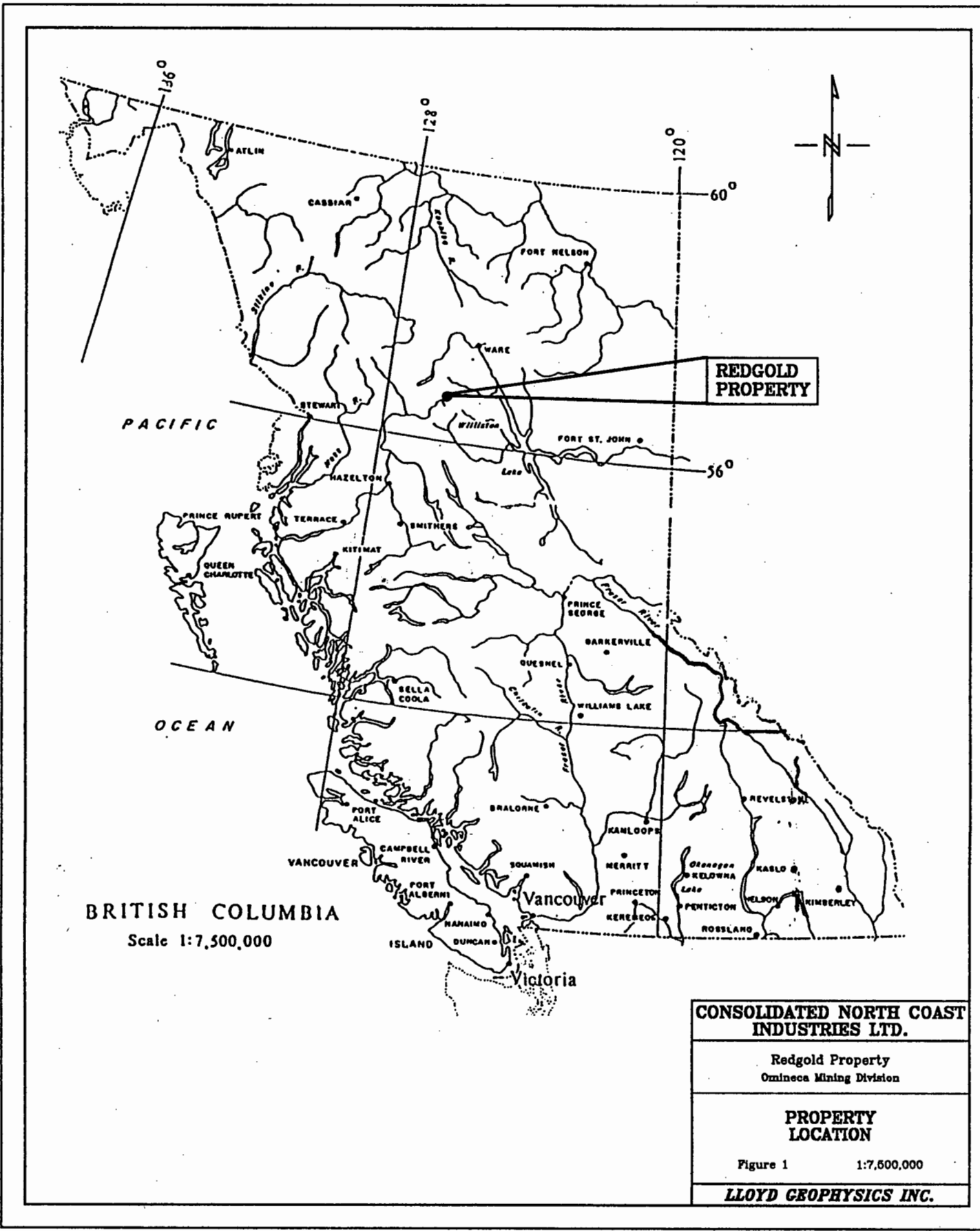
The Redgold property is located approximately 400 kilometres northwest of Prince George in the Toodoggone area of British Columbia (Figure 1). It is situated in the Omineca Mining Division, NTS 94D/9 at 56°38'N latitude and 126°5'W longitude.

Access to the property is by truck along the Omineca Resource Access Road for approximately 350 kilometres or by air to the Sturdee airstrip and then by truck or helicopter 70 kilometres to the southeast.

3.0 PROPERTY STATUS AND CLAIM HOLDINGS

<u>Claim Name</u>	<u>Units</u>	<u>Record Number</u>	<u>Completion Date</u>
REDGOLD 1	20	335791	06-May-95
REDGOLD 2	20	335792	05-May-95
REDGOLD 3	20	335793	05-May-95
REDGOLD 4	20	335794	06-May-95





BRITISH COLUMBIA
Scale 1:7,500,000

CONSOLIDATED NORTH COAST INDUSTRIES LTD.	
Redgold Property Omineca Mining Division	
PROPERTY LOCATION	
Figure 1	1:7,500,000
LLOYD GEOPHYSICS INC.	

REDGOLD 5	18	339184	25-Aug-95
REDGOLD 6	20	340147	13-Sep-95
REDGOLD 7	16	340148	13-Sep-95
REDGOLD 8	20	340149	13-Sep-95
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REDGOLD 11	1	340158	14-Sep-95
REDGOLD 12	1	340159	14-Sep-95
REDGOLD 13	1	340160	14-Sep-95
REDGOLD 14	1	340161	14-Sep-95
REDGOLD 15	1	340162	14-Sep-95
REDGOLD 16	1	340163	14-Sep-95

4.0 GEOLOGY

The geology of the property is summarized by Hoffman (1981). The north and central part of the claim block is dominated by the Wrede Creek ultramafic complex, one of the several zoned or Alaskan-type ultramafic bodies in the McConnell Creek and Aiken Lake map areas. The complex is approximately 5 km in diameter and was emplaced in andesitic and basaltic volcanic rocks of the Triassic Takla Group.

A contact metamorphic aureole exists at the intrusive contact between the Wrede Creek complex and the Talka Group. The structural trend of this contact and of the major faults tends to be north-northwesterly. The Lay Range Fault trends northwesterly through the centre of the property and appears to be a splay or conjugate to the Swannell Fault to the west (Richards, 1975).

An additional northwest trending feature found on the property is a geochemical copper anomaly (the Nik trend) which extends over a distance of some 30 kilometres.

Porphyritic, equigranular, and pegmatitic diorites to granites intrude as dikes up 150 metres thick, cutting both ultramafic and volcanic rocks. A potassium-argon date of 172 ± 6 Ma was obtained from a diorite phase of these intrusions.

Disseminated and fracture-filling pyrite, chalcopyrite, and rare bornite occur associated with widely distributed dioritic to granite dikes. Sulphides are generally contained to the dikes but can extend into the wallrock.

A large body of sheeted bornite-chalcopyrite-quartz-orthoclase veins was mapped in the south central portion of the property - the Tundra Prospect. The veins strike N70°E and dip about 55° to the north. They are exposed in outcrop across a width of 60 m and over a strike length of 800 m. This body of veins fits within the classic porphyry deposit model and represents a potentially large copper-silver-gold resource.

5.0 PREVIOUS WORK

Exploration on the Redgold property was carried out by a number of major exploration companies in the 1960's. More recently, between 1976 and 1981, BP Resources conducted a major exploration program consisting of the following work:

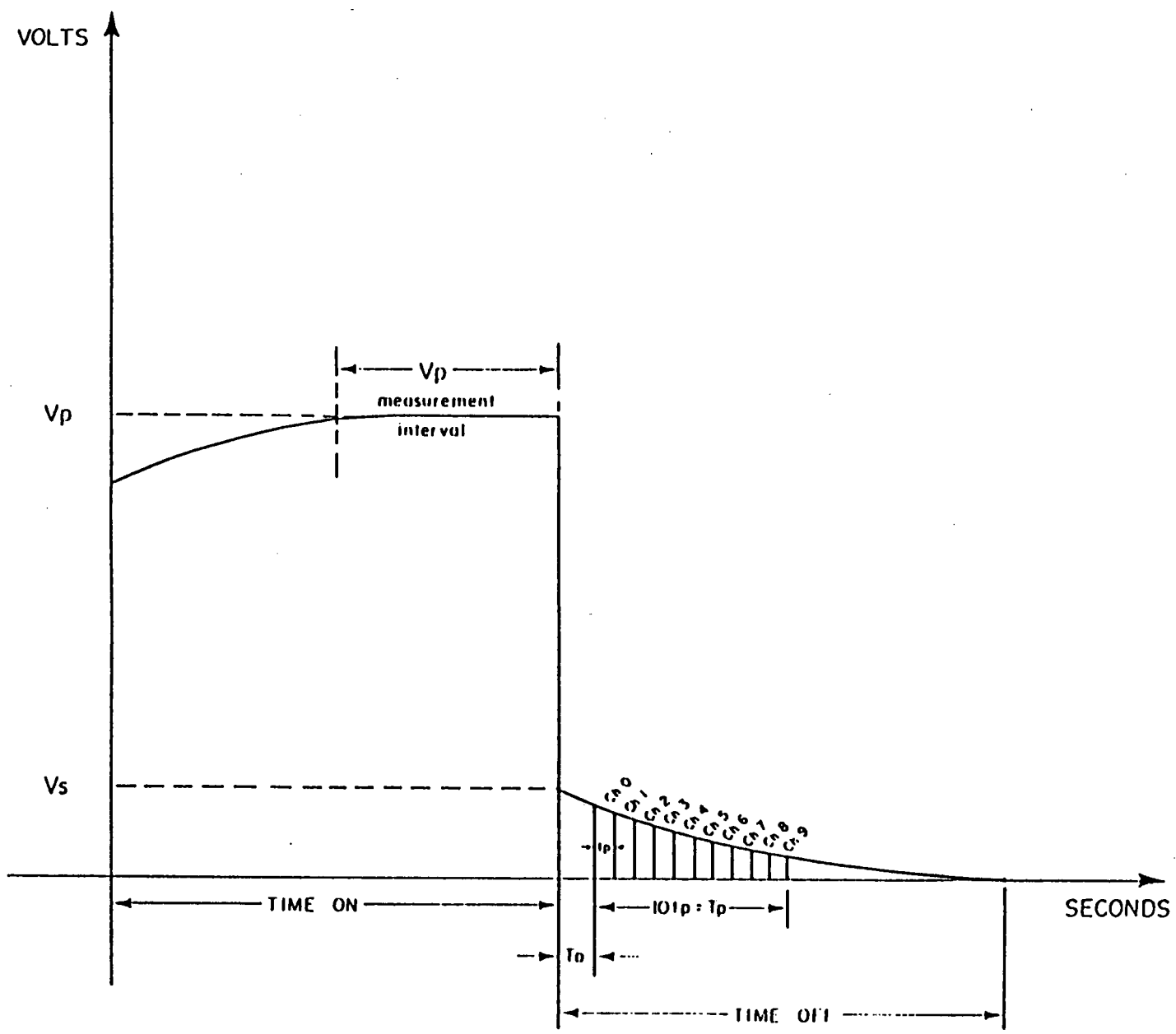
- 50 km line cutting
- geochemical sampling
- geophysical surveying
- 35 overburden drill holes
- construction of 10 km of access road
- 2.55 km trenching
- 2700 m of percussion drilling in 81 holes
- 3000 m of diamond drilling in 18 holes

6.0 INSTRUMENT SPECIFICATIONS

The equipment used to carry out this survey was a time domain measuring system consisting of a Wagner Leland/Onan motor generator set and a Mark II transmitter manufactured by Hunttec Limited, Toronto, Canada and a six channel IP-6 receiver manufactured by BRGM Instruments Orleans, France.

The Wagner Leland/Onan motor generator supplies in excess of 7.5 kilowatts of 3 phase power





BRGM IP-6 RECEIVER PARAMETERS

Figure 2

to the ground at 400 hertz via the Mark II transmitter.

The transmitter was operated with the cycle time of 8 seconds and the duty cycle ratio: [(time on)/(time on + time off)] was 0.5. This means the cycling sequence of the transmitter was 2 seconds current "on" and 2 seconds current "off" with consecutive pulses reversed in polarity.

This IP-6 receiver can measure up to 6 dipoles simultaneously. It is microprocessor controlled, featuring automatic calibration, gain setting, SP cancellation and fault diagnosis. To accommodate a wide range of geological conditions, the delay, the window widths and hence the total integration time is programmable via the keypad. Measurements are calculated automatically every 2 to 4 seconds from the averaged waveform which is accumulated in memory.

The window widths of the IP-6 receiver can be programmed arithmetically or logarithmically. For this particular survey the instrument was programmed arithmetically into 10 equal window widths or channels, Ch₀, Ch₁, Ch₂, Ch₃, Ch₄, Ch₅, Ch₆, Ch₇, Ch₈, Ch₉ (see Figure 3). These may be recorded individually and summed up automatically to obtain the total chargeability. Similarly, the resistivity ρ_a in ohm-metres is also calculated automatically. The instrument parameters chosen for this survey were as follows:

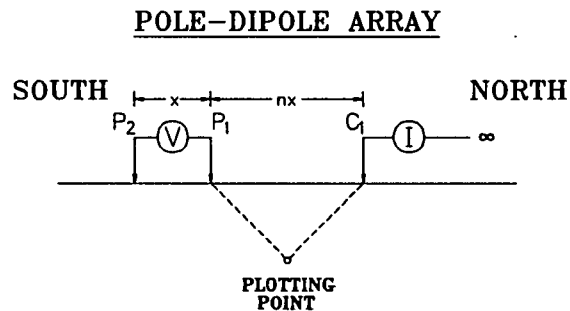
Cycle Time (T _c)	= 8 seconds
Ratio $\frac{\text{Time On}}{\text{Time Out}}$	= 1:1
Duty Cycle Ratio $\frac{(\text{Time On})}{(\text{Time On}) + (\text{Time Off})}$	= 0.5
Delay Time (T _d)	= 120 milliseconds

Window Width (t_p) = 90 milliseconds

Total Integration Time = 900 milliseconds

7.0 SURVEY SPECIFICATIONS

The configuration of the pole-dipole array used for the survey is shown below:



$$x = 50 \text{ metres} \quad n = 1, 2, 3, 4, \text{ and } 5$$

The dipole length (x) is the distance between P_1 and P_2 and determines mainly the sensitivity of the array. The electrode separation (nx) is the distance between C_1 and P_1 and determines mainly the depth of penetration of the array.

The Induced Polarization survey was carried out with the current electrode, C_1 north of the potential measuring dipole P_1P_2 . Here the lines were 200 metres or 400 metres apart and measurements were taken for $x = 50$ metres and $n = 1, 2, 3, 4, \text{ and } 5$.



8.0 DATA PROCESSING

The data collected was processed in the field at the end of each survey day using a portable 486 computer and Fujitsu printer.

The IP pseudo-sections were plotted out in the field and contoured using in-house software based on the mathematical solution known as kriging.

In the office, the data was transferred to mylar using a PENTIUM P90 computer coupled to an HP DesignJet plotter for the preparation of the final maps and pseudo-sections.

9.0 DATA PRESENTATION

The data gathered on this project is presented on 13 pseudo-sections and 2 contour plan maps as outlined below:

Pseudosections (1:2500)

<u>Line No</u>	<u>Dwg No</u>	<u>Line No</u>	<u>Dwg No</u>
9600E	95376-01	11200E	95376-08
10000E	95376-02	11400E	95376-09
10200E	95376-03	11600E	95376-10
10400E	95376-04	11800E	95376-11
10600E	95376-05	12000E	95376-12
10800E	95376-06	12200E	95736-13
11000E	95736-07		

Contour Plan Maps (1:5000)

Chargeability 15 Point Triangular Filter	95376-14
Resistivity 15 Point Triangular Filter	95376-15



10.0 DISCUSSION OF RESULTS

An IP response depends largely on the following factors:

1. The volume content of sulphide minerals
2. The number of pore paths that are blocked by sulphide grains
3. The number of sulphide faces that are available for polarization
4. The absolute size and shape of the sulphide grains and the relationship of their size and shape to the size and shape of the available pore paths
5. The electrode array employed
6. The width, depth, thickness and strike length of the mineralized body and its location relative to the array
7. The resistivity contrast between the mineralized body and the unmineralized host rock

The sulphide content of the underlying rocks is one of the critical factors that we would like to determine from field measurements. Experience has shown that this is both difficult and unreliable because of the large number of variables, described above, which contribute to an IP response. The problem is further complicated by the fact that rocks containing magnetite, graphite, clay minerals and variably altered rocks produce IP response of varying amplitudes.

A detailed study has been made of the pseudo-sections which accompany this report. These pseudo-sections are not sections of the electrical properties of the sub-surface strata and cannot be treated as such when determining the depths, width and thickness of a zone which produces an anomalous pattern. The anomalies are classified into 4 groups; definite, probable, and possible anomalies and anomalies which have a much deeper source. These latter anomalies are mostly related to deeper overburden cover.

This classification is based partly on the relative amplitudes of the chargeability and to a lesser degree on the resistivity response. In addition the overall anomaly pattern and the degree to



which this pattern may be correlated from line to line is of equal importance.

The results of this survey have outlined 2 main chargeability anomalies.

The main area lies in the northwest portion of the property and is comprised of 3 smaller, interconnected anomalies which are arranged in an interesting "doughnut-shape" (see Dwg No. 95376-14) possibly representing a sulphide halo. Chargeabilities within this area range from 12 to 25 milliseconds above a background of about 7 milliseconds and remains open to the north. The much higher chargeabilities found in other porphyry deposits such as Kerness and Mt Milligan are not found here most likely because of a higher percentage of chalcopyrite and bornite and a lesser amount of pyrite. From the analysis of the pseudosections, the anomalous zones quite often extend into rocks of different resistivities, in some cases as much as 200 metres, indicating the presence of additional sulphides in the wall rocks.

To the east of this "doughnut" anomaly lies a second chargeability anomaly with values ranging from 14 to 25 milliseconds and remains open to the south and east (see Dwg No. 95376-14). This anomaly appears to be a series of narrow, confined zones which either flank or coincide with narrow zones of high resistivity. These zones of higher resistivity are most likely a result of an increase in quartz.

In between these two anomalies is an interpreted fault which strikes across the entire grid area at approximately N22°E (see Figure 3). It is characterized by a chargeability low coincident with a resistivity low and appears to cut off the southeast flank of the "doughnut" anomaly.

Although not as evident on the chargeability map as it is on the resistivity map, another fault is interpreted to lie to the north and parallel to the one mentioned above (see Figure 3). It extends off the grid to the west and bisects part of the "doughnut" anomaly to the east.



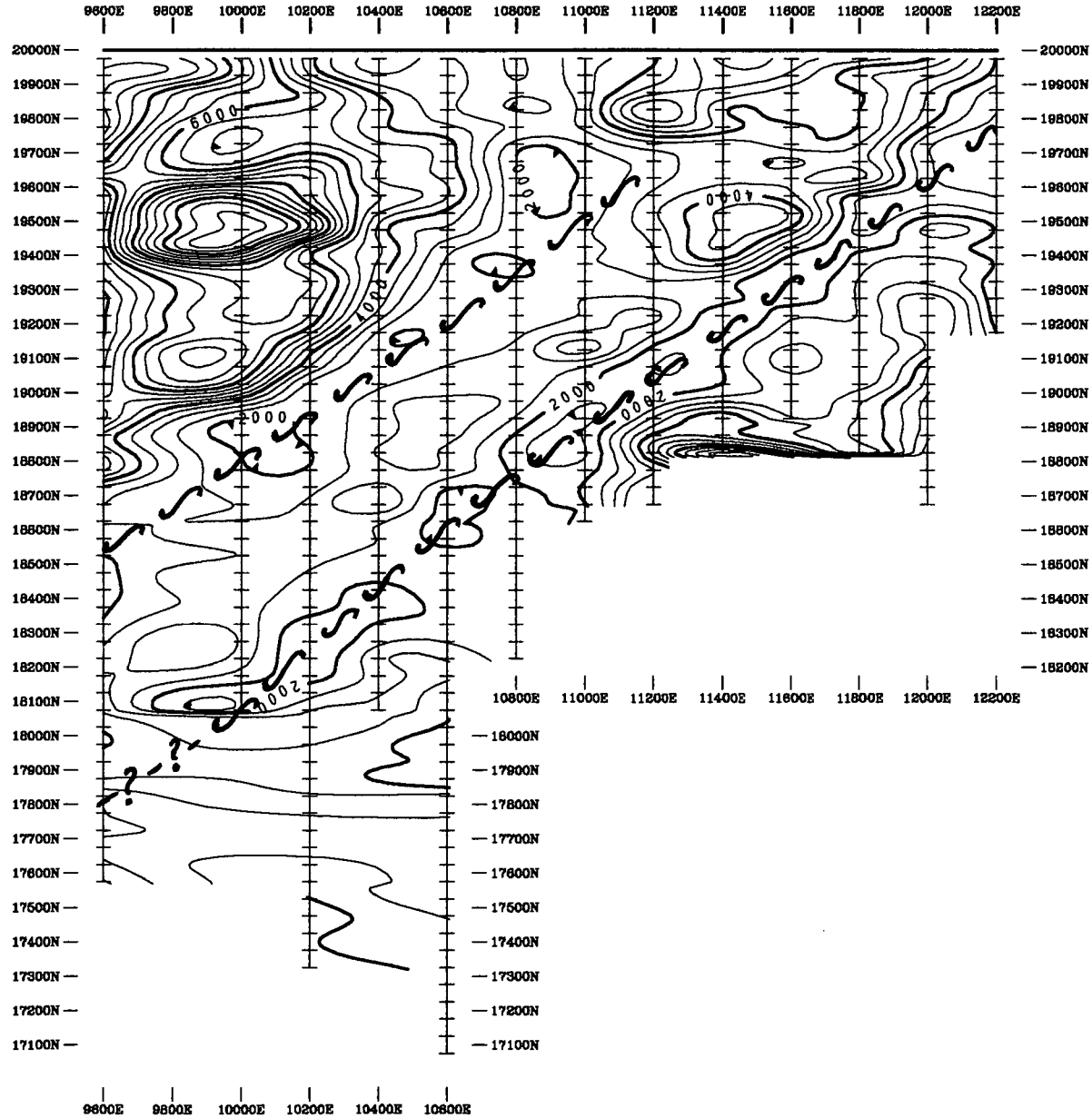
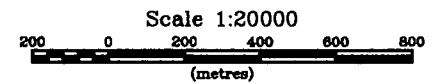


Figure 3



**CONSOLIDATED NORTH COAST
INDUSTRIES LTD.**

Redgold Property
Omineca Mining Division

**INTERPRETED FAULTS
(Resistivity Data)**

Scale 1:20000

NTS 94D/9

LLOYD GEOPHYSICS INC.

11.0 CONCLUSIONS AND RECOMMENDATIONS

In conclusion, the IP survey has been a useful tool in locating the sulphide zones associated with this porphyry style target.

The "doughnut" anomaly is an interesting target worthy of further exploration by drilling.

The second anomaly, to the east, appears to represent a series of narrow, confined zones which contain a higher percentage of quartz. This area is also a good drilling prospect.

Finally, there are 2 interpreted faults on the property which are parallel to each other and strike approximately N22°E. Both faults are characterized by coincident low chargeability and resistivity values from which no displacement can be determined.

Respectfully submitted,
LLOYD GEOPHYSICS INC.



S. John A. Cornock, B.Sc.




John Lloyd, M.Sc., P.Eng.

APPENDIX A

PERSONNEL EMPLOYED ON SURVEY

<u>Name</u>	<u>Occupation</u>	<u>Address</u>	<u>Dates Worked</u>
J. Lloyd	Geophysicist	#455-409 Granville Street Vancouver, B.C. V6C 1T2	Dec 08/95
J. Cornock	Geophysicist	#455-409 Granville Street Vancouver, B.C. V6C 1T2	Nov 03-28/95 Dec 05-07/95
C. Bilquist	Geophysical Technician	#455-409 Granville Street Vancouver, B.C. V6C 1T2	Nov 03-28/95
S. Garrett	Geophysical Technician	#455-409 Granville Street Vancouver, B.C. V6C 1T2	Nov 03-28/95
T. Vanderwart	Helper	#455-409 Granville Street Vancouver, B.C. V6C 1T2	Nov 03-28/95
M. Lapointe	Helper	#455-409 Granville Street Vancouver, B.C. V6C 1T2	Nov 03-28/95

APPENDIX B

COST OF SURVEY AND REPORTING

Lloyd Geophysics Inc. contracted the mobilization/demobilization and the acquisition of the IP data on a per day basis. Truck rental, living and travelling expenses, data processing, computer plotting, map reproduction and interpretation and report writing were additional costs. The breakdown of these costs is as follows:

Mobilization/Demobilization and Data Acquisition	\$39,250.00
Truck	2,575.38
Living and Travelling	637.62
Data Processing and Computer Plotting	520.00
Consumables	409.20
Interpretation and Report Writing	<u>1,450.00</u>
Sub-Total	44,842.20
G.S.T.	<u>3,138.95</u>
Total Cost:	\$47,981.15

APPENDIX C

CERTIFICATION OF AUTHORS

I, John Lloyd, of #455 - 409 Granville Street, in the City of Vancouver, in the Province of British Columbia, do hereby certify that:

1. I graduated from the University of Liverpool, England in 1960 with a B.Sc. in Physics and Geology, Geophysics Option.
2. I obtained the diploma of the Imperial College of Science and Technology and Medicine (D.I.C.), in Applied Geophysics from the Royal School of Mines, London University in 1961.
3. I obtained the degree of M.Sc. in Geophysics from the Royal School of Mines, London University in 1962.
4. I am a member in good standing of the Association of Professional Engineers in the Province of British Columbia, the Society of Exploration Geophysicists of America, the European Association of Exploration Geophysicists and the Canadian Institute of Mining and Metallurgy.
5. I have been practising my profession for over twenty-five years.

I, John A. Cornock, of #455 - 409 Granville Street, in the City of Vancouver, in the Province of British Columbia, do hereby certify that:

1. I graduated from the University of British Columbia in 1986 with a B.Sc. in Geology and a minor in Geophysics.
2. I am a member in good standing of the Society of Exploration Geophysicists of America, British Columbia Geophysical Society, British Columbia and Yukon Chamber of Mines and the Northwest Mining Association.
3. I have practiced my profession continuously since 1987.

Vancouver, B.C.



GEOLOGICAL BRANCH
ASSESSMENT REPORT

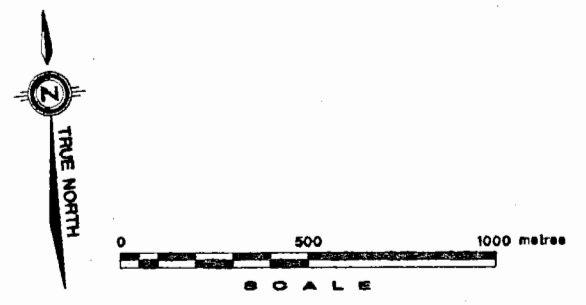
24,408

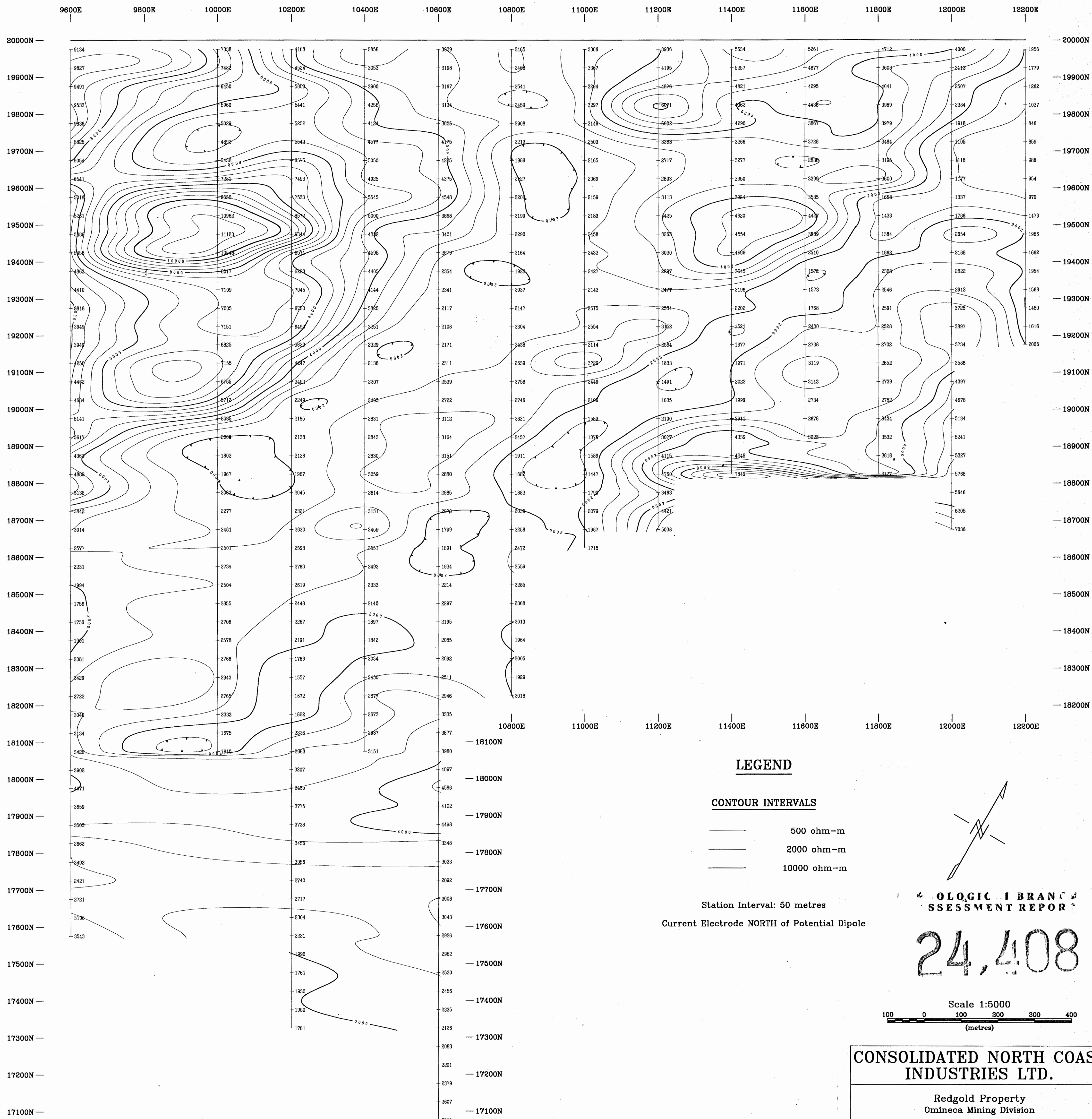
CONSOLIDATED NORTH COAST
INDUSTRIES LTD.

REDGOLD PROPERTY

Cut Line and
I.P. Grid Location

Date: November 1988 Scale: 1:20,000
Drawn by: eph/rjh

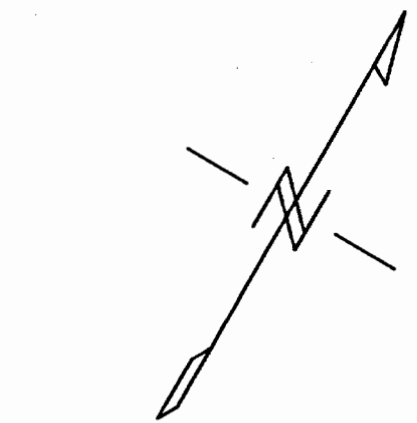




LEGEND

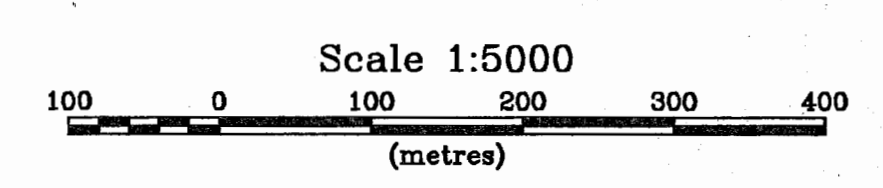
- CONTOUR INTERVALS**
- 500 ohm-m
 - 2000 ohm-m
 - 10000 ohm-m

Station Interval: 50 metres
 Current Electrode NORTH of Potential Dipole



**LOGIC I BRANCH
 ASSESSMENT REPORT**

24,408



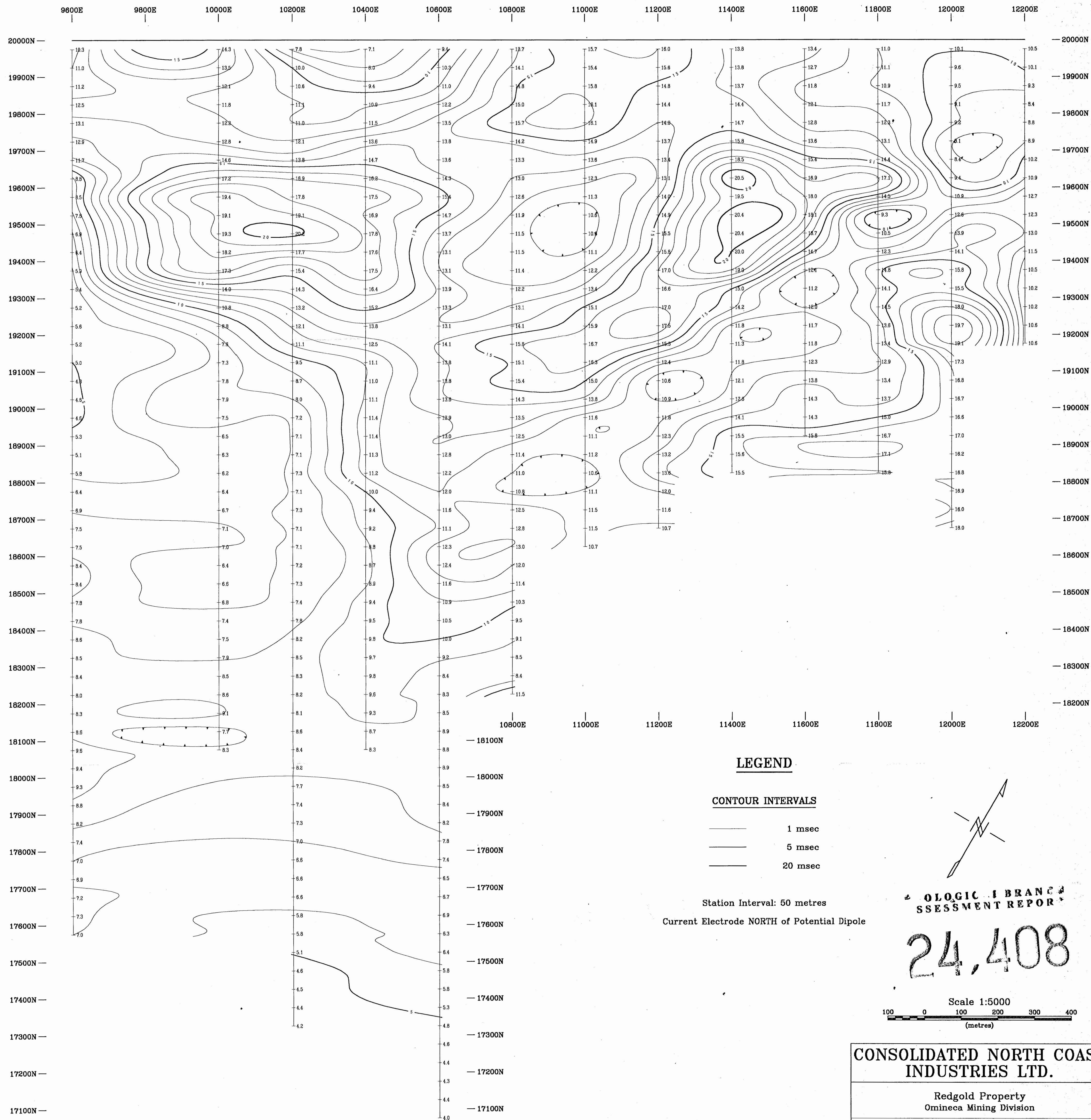
**CONSOLIDATED NORTH COAST
 INDUSTRIES LTD.**

Redgold Property
 Omineca Mining Division

**RESISTIVITY
 15 POINT TRIANGULAR FILTER**

Scale 1:5000 NTS 94D/9 Dwg. No.: 95378-15

LLOYD GEOPHYSICS INC.



LEGEND

CONTOUR INTERVALS

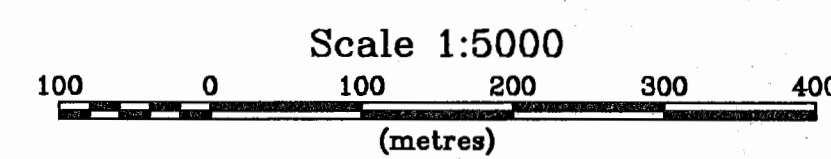
- 1 msec
- 5 msec
- 20 msec

Station Interval: 50 metres

Current Electrode NORTH of Potential Dipole

**GEOLOGIC BRANCH
ASSESSMENT REPORT**

24,408

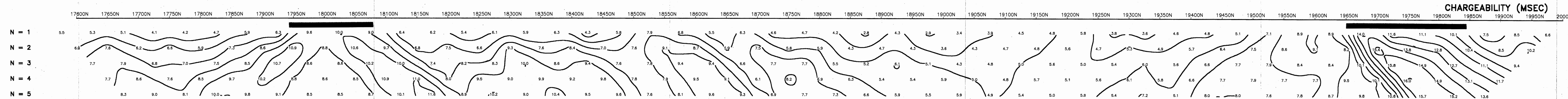
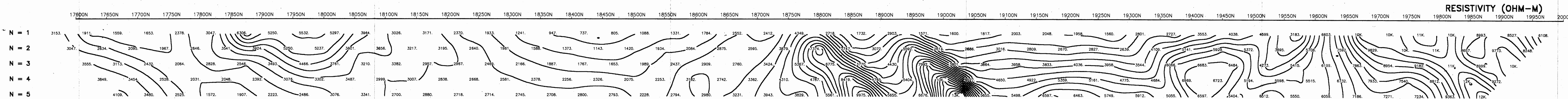


**CONSOLIDATED NORTH COAST
INDUSTRIES LTD.**

Redgold Property
Omineca Mining Division

**CHARGEABILITY
15 POINT TRIANGULAR FILTER**
Scale 1:5000 NTS 94D/9 Dwg. No.: 95378-14

LLOYD GEOPHYSICS INC.

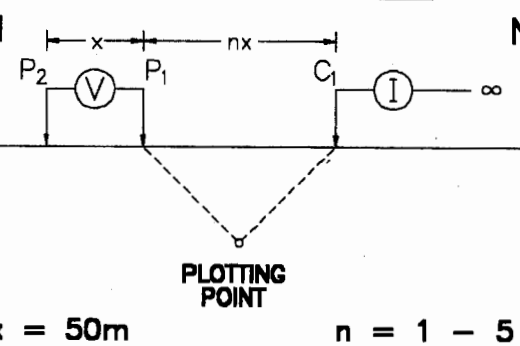


CONSOLIDATED NORTH COAST INDUSTRIES LTD.

Redgold Property
Omneca Mining Division

LINE: 9600E

POLE-DIPOLE ARRAY



CURRENT ELECTRODE C₁ NORTH OF POTENTIAL DIPOLE PP₂

SURFACE PROJECTION OF ANOMALOUS ZONES

- DEFINITE
- PROBABLE
- POSSIBLE
- AT DEPTH

SCALE 1 : 2500

CONTOUR INTERVALS
APP.CHARGEABILITY : 1.0 (msec)
APP.RESISTIVITY : 500 (ohm-m)

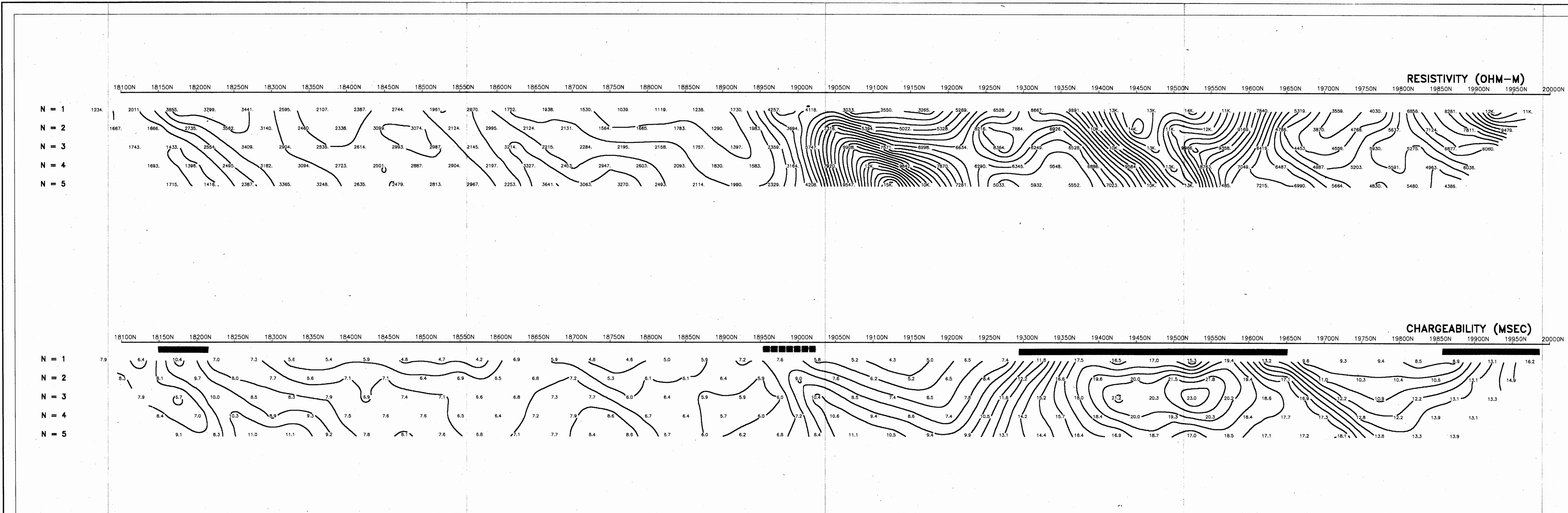
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GEOLOGICAL BRANCH ASSESSMENT REPORT

24,408

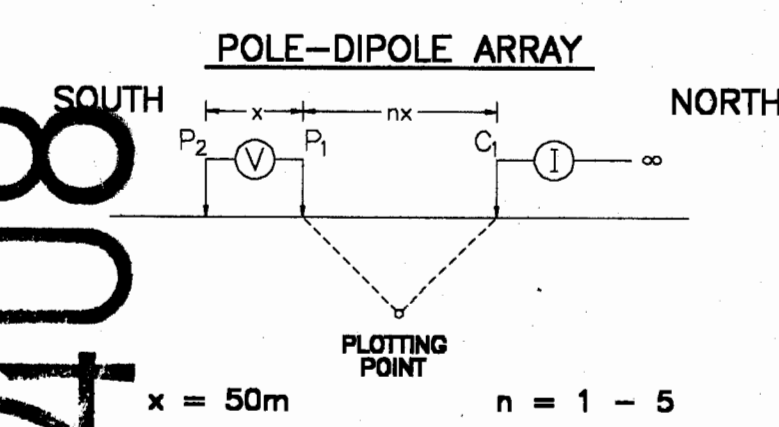
LLOYD GEOPHYSICS INC.

INDUCED POLARIZATION SURVEY
DRAWING NUMBER : 95378-01



CONSOLIDATED NORTH COAST INDUSTRIES LTD.

Redgold Property
Omineca Mining Division
LINE: 10000E



CURRENT ELECTRODE C₁ NORTH OF POTENTIAL DIPOLE P₁P₂

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE ■■■■■
PROBABLE ■■■■■
POSSIBLE ■■■■■
AT DEPTH
SCALE 1 : 2500

CONTOUR INTERVALS
APP.CHARGEABILITY : 1.0 (msec)
APP.RESISTIVITY : 500 (ohm-m)
DATE SURVEYED: Nov. 25, 1995
Tx: Hurtec Mk2 Model 7500
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LLOYD GEOPHYSICS INC.
INDUCED POLARIZATION SURVEY
DRAWING NUMBER : 95376-02

GEOLOGIC I BRAN SSESMENT REPOR

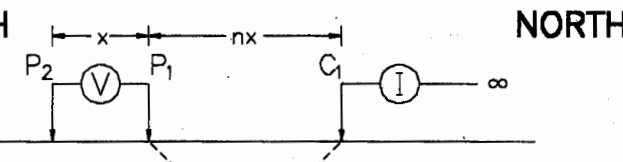
24,408

CONSOLIDATED NORTH COAST INDUSTRIES LTD.

Redgold Property
Omineca Mining Division

LINE: 10200E

POLE-DIPOLE ARRAY



x = 50m
n = 1 - 5

CURRENT ELECTRODE C, NORTH OF POTENTIAL DIPOLE P1P2

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE
PROBABLE
POSSIBLE
AT DEPTH

SCALE 1 : 2500

CONTOUR INTERVALS

APP.CHARGEABILITY : 1.0 (msec)

APP.RESISTIVITY : 500 (ohm-m)

DATE SURVEYED: Nov.23,24 1985

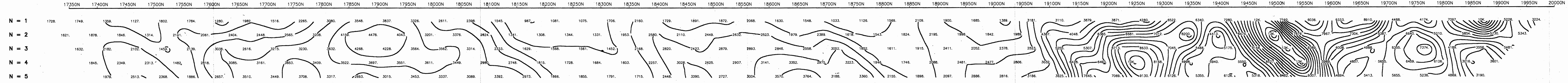
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Rx: EDA IP-8

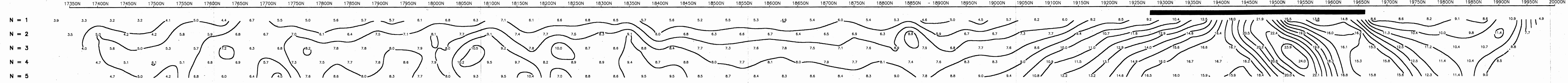


LLOYD GEOPHYSICS INC.
INDUCED POLARIZATION SURVEY
DRAWING NUMBER : 95376-03

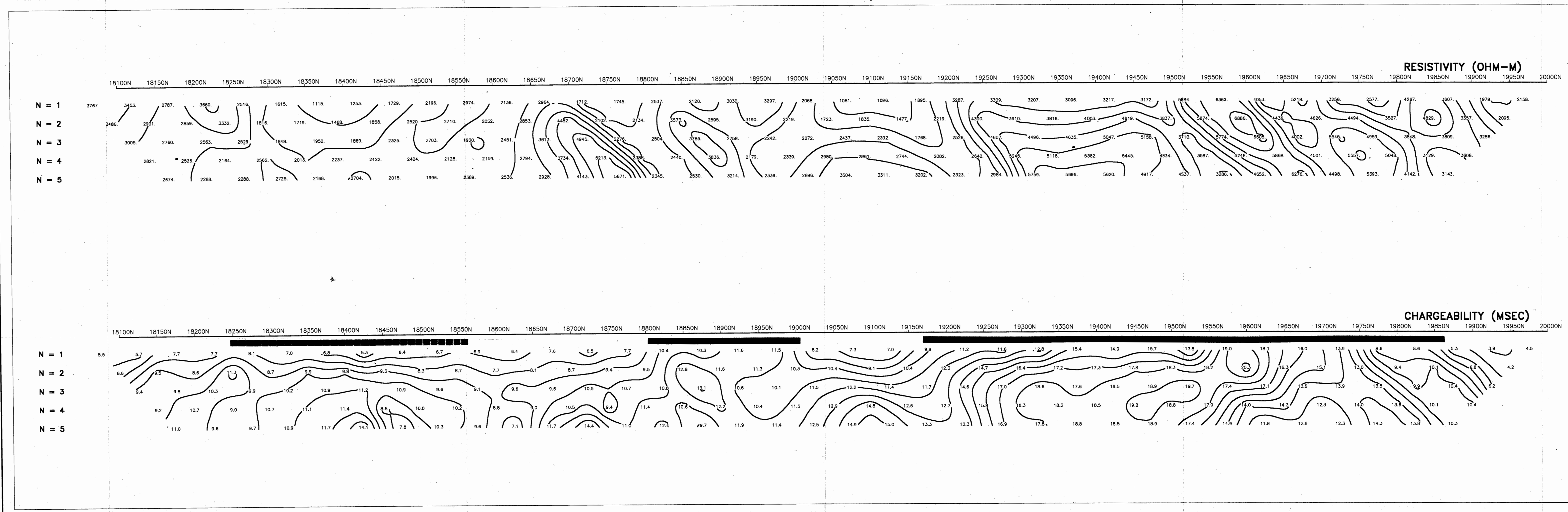
RESISTIVITY (OHM-M)



CHARGEABILITY (MSEC)



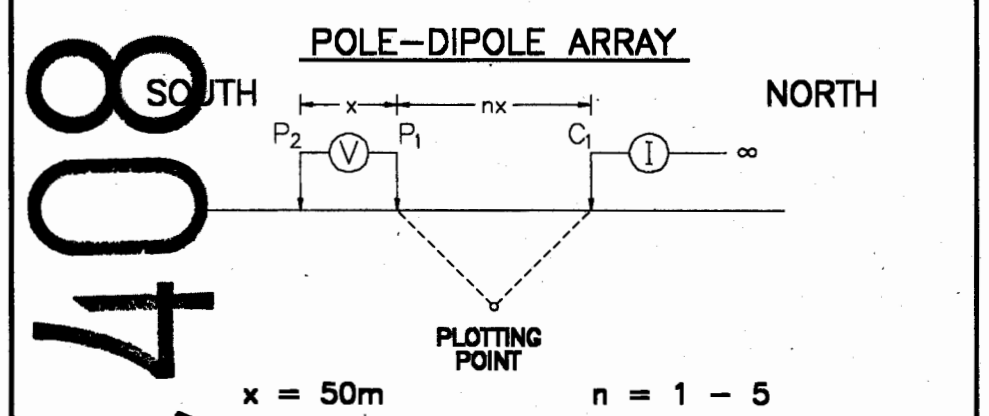
GEOLOGIC APPRAISAL REPORT
 24,408



GEOLOGIC INTERPRETATION REPORT
 24,408
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 N = 4
 N = 5

CONSOLIDATED NORTH COAST INDUSTRIES LTD.

Redgold Property
 Omineca Mining Division
LINE: 10400E



CURRENT ELECTRODE C_1 NORTH OF POTENTIAL DIPOLE PP_2

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE
 PROBABLE
 POSSIBLE
 AT DEPTH

SCALE 1 : 2500

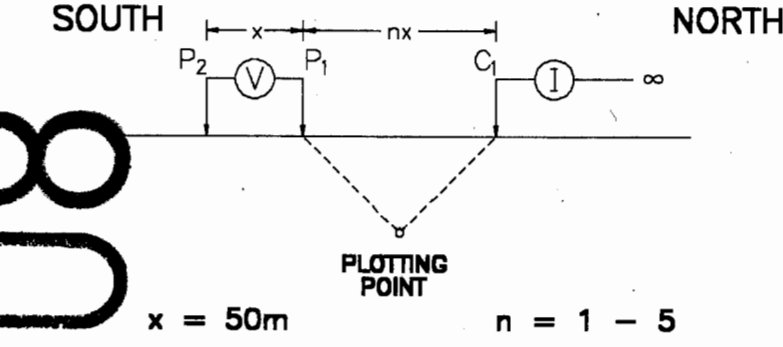
CONTOUR INTERVALS
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 APP. RESISTIVITY : 500 (ohm-m)
 DATE SURVEYED: Nov. 22, 1985
 Tx: Huntco Mk2 Model 7500
 Rx: EDA IP-6

CONSOLIDATED NORTH COAST INDUSTRIES LTD.

Redgold Property
Omineca Mining Division

LINE: 10600E

POLE-DIPOLE ARRAY



CURRENT ELECTRODE C1 NORTH OF POTENTIAL DIPOLE PP2

SURFACE PROJECTION OF ANOMALOUS ZONES

- DEFINITE
- PROBABLE
- POSSIBLE
- AT DEPTH

SCALE 1 : 2500

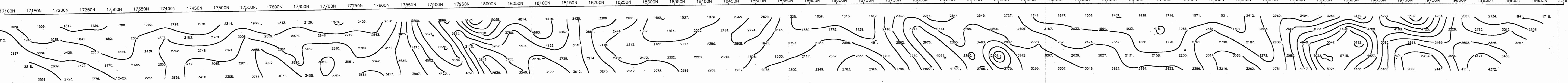
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APP.RESISTIVITY : 500 (ohm-m)
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Rx: EDA IP-6

LLOYD GEOPHYSICS INC.

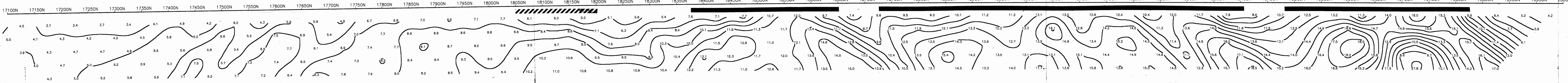
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DRAWING NUMBER : 95376-05

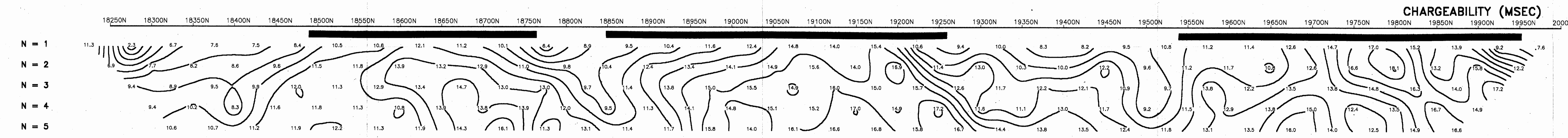
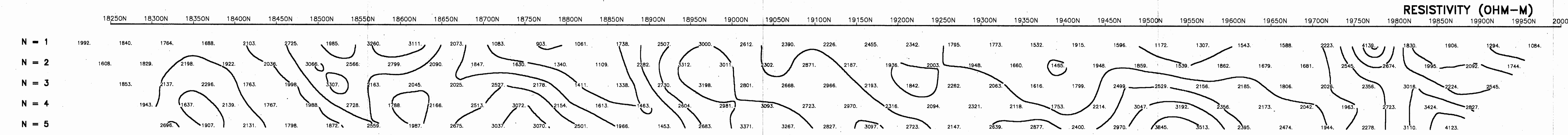
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 N = 2
 N = 3
 N = 4
 N = 5

RESISTIVITY (OHM-M)



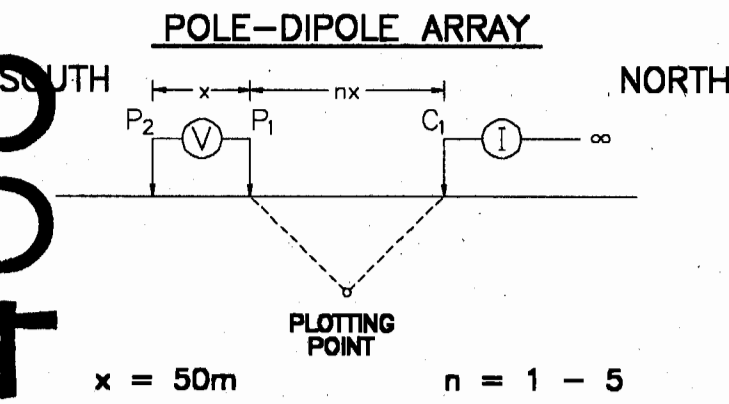
CHARGEABILITY (MSEC)





CONSOLIDATED NORTH COAST INDUSTRIES LTD.

Redgold Property
Omineca Mining Division
LINE: 10800E



CURRENT ELECTRODE C₁ NORTH OF POTENTIAL DIPOLE P₁P₂

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE ██████████
PROBABLE ██████████
POSSIBLE ██████████
AT DEPTH ●●●●●●

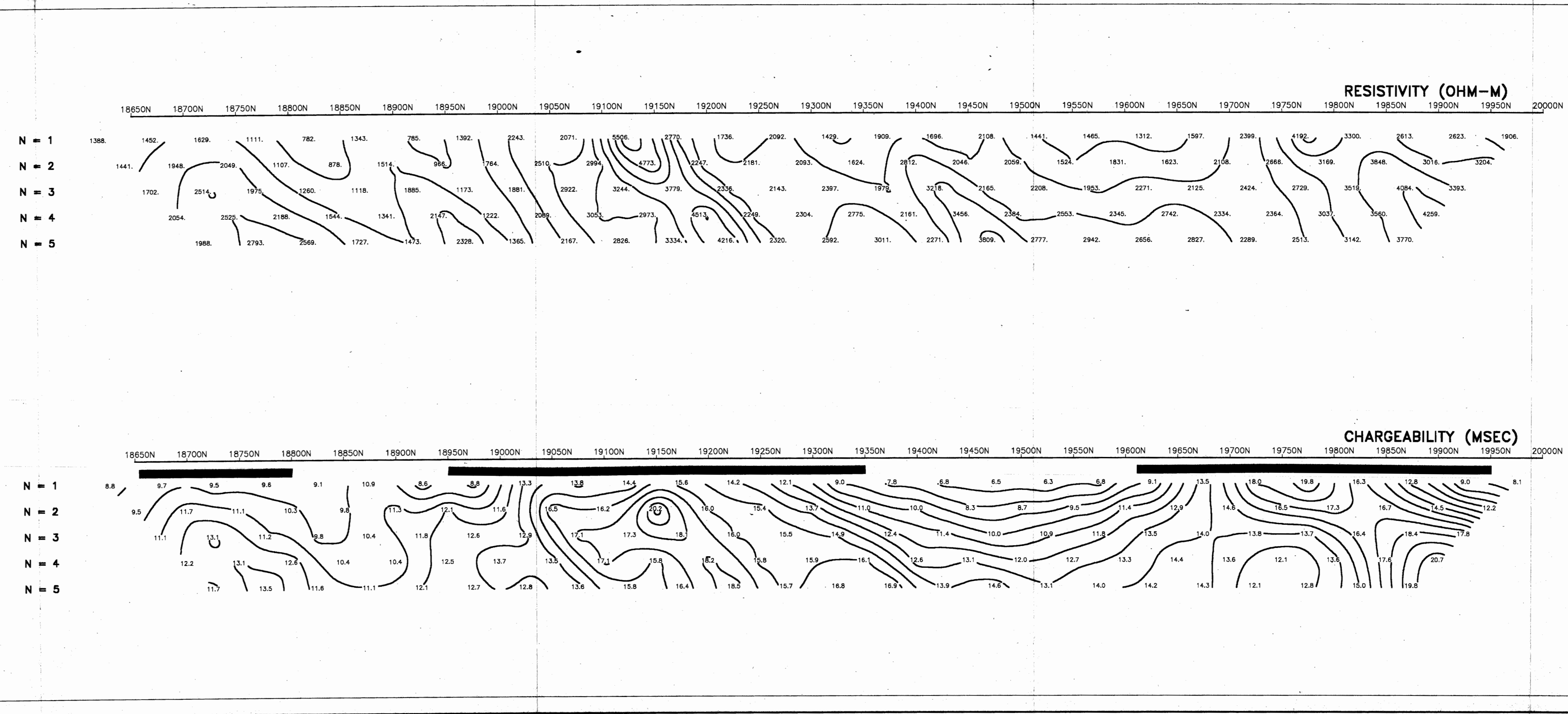
SCALE 1 : 2500

CONTOUR INTERVALS
APP.CHARGEABILITY : 1.0 (msec)
APP.RESISTIVITY : 500 (ohm-m)

DATE SURVEYED: Nov.18, 1985
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Rx: EDA IP-6

GEOLOGIC ASSESSMENT REPORT

24,408

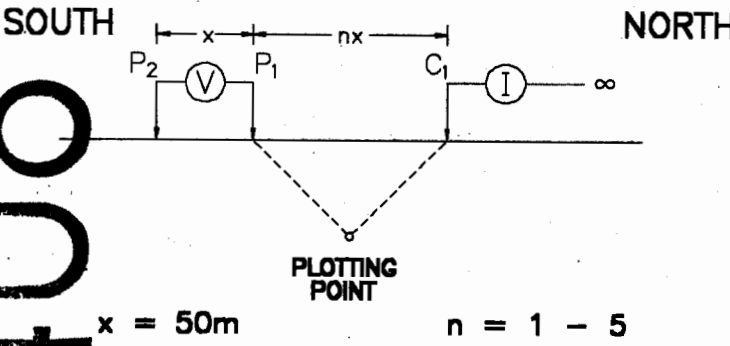


CONSOLIDATED NORTH COAST INDUSTRIES LTD.

Redgold Property
Omineca Mining Division

LINE: 11000E

POLE-DIPOLE ARRAY



CURRENT ELECTRODE C₁ NORTH OF POTENTIAL DIPOLE P₁P₂

24,408

LOGIC BRAND ASSESSMENT REPORT

SCALE 1 : 2500

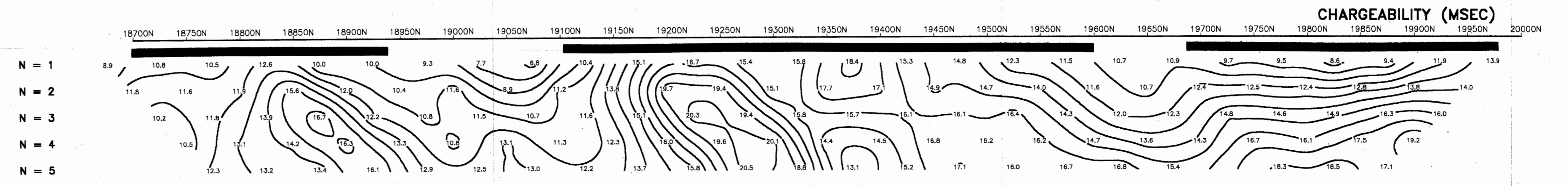
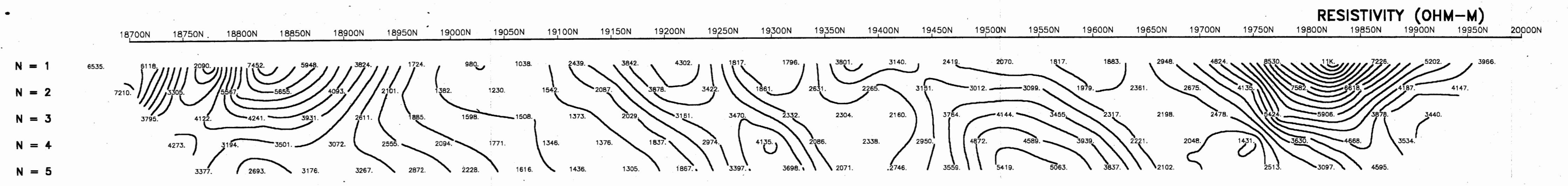
SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE ██████████
 PROBABLE ██████████
 POSSIBLE ██████████
 AT DEPTH ●●●●●●

CONTOUR INTERVALS
 APP.CHARGEABILITY : 1.0 (msec)
 APP.RESISTIVITY : 500 (ohm-m)

DATE SURVEYED: November 6, 1995
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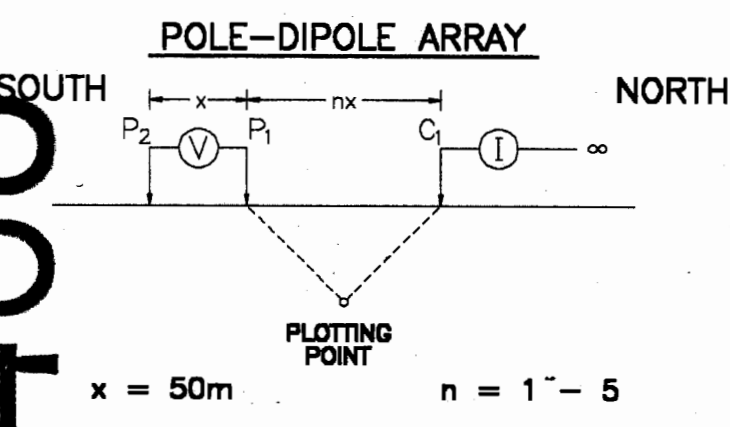
LLOYD GEOPHYSICS INC.
INDUCED POLARIZATION SURVEY
 DRAWING NUMBER : 95376-07



GEOLOGIC APPRAISAL REPORT

CONSOLIDATED NORTH COAST INDUSTRIES LTD.

Redgold Property
Omnica Mining Division
LINE: 11200E



SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE
PROBABLE
POSSIBLE
AT DEPTH

SCALE 1 : 2500

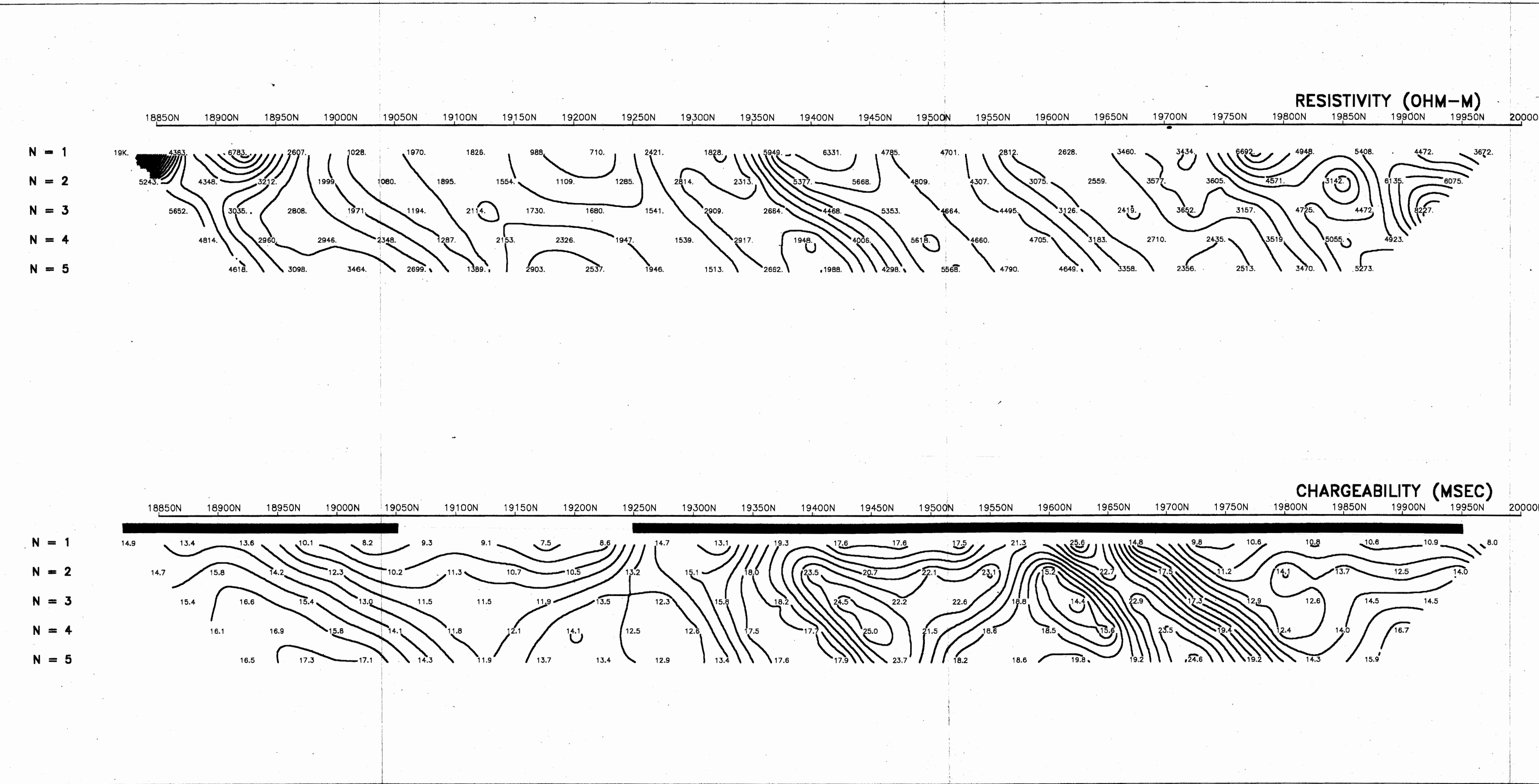
CONTOUR INTERVALS
APP. CHARGEABILITY : 1.0 (msec)
APP. RESISTIVITY : 500 (ohm-m)

DATE SURVEYED: Nov. 7, 1995
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LLOYD GEOPHYSICS INC.

INDUCED POLARIZATION SURVEY
DRAWING NUMBER : 95376-08

24,408

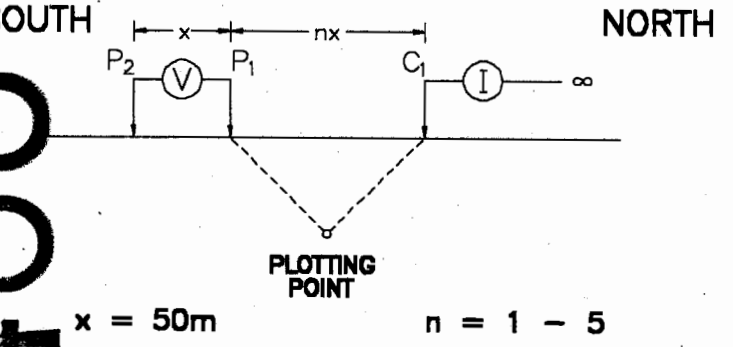


CONSOLIDATED NORTH COAST INDUSTRIES LTD.

Redgold Property
Omineca Mining Division

LINE: 11400E

POLE-DIPOLE ARRAY



CURRENT ELECTRODE C_1 NORTH OF POTENTIAL DIPOLE P_1P_2

- SURFACE PROJECTION OF ANOMALOUS ZONES**
- DEFINITE
 - PROBABLE
 - POSSIBLE
 - AT DEPTH
- SCALE 1 : 2500

CONTOUR INTERVALS
APP.CHARGEABILITY : 1.0 (msec)
APP.RESISTIVITY : 500 (ohm-m)
DATE SURVEYED: Nov. 9, 1995
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Rx: EDA IP-6

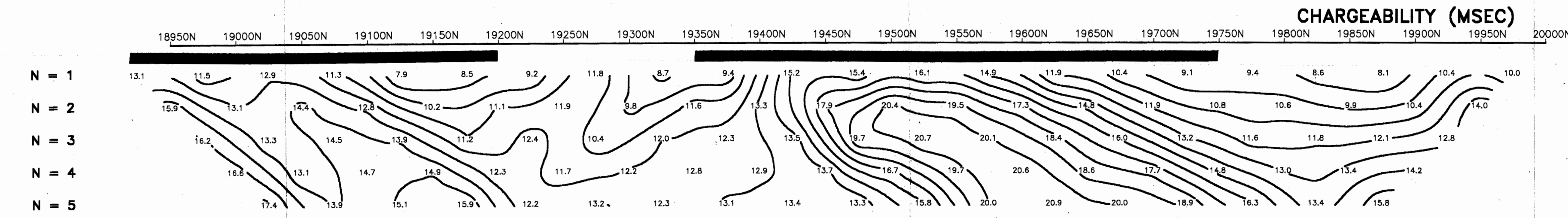
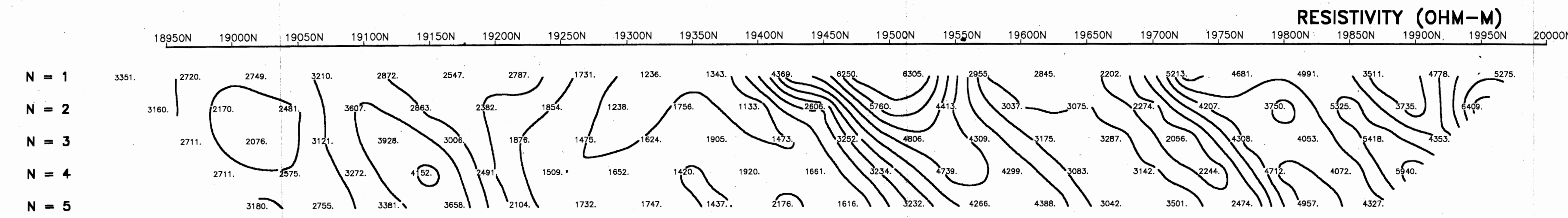
LLOYD GEOPHYSICS INC.

INDUCED POLARIZATION SURVEY

DRAWING NUMBER : 95376-09

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24,408
 LOGIC BRAND ASSESSMENT REPORT

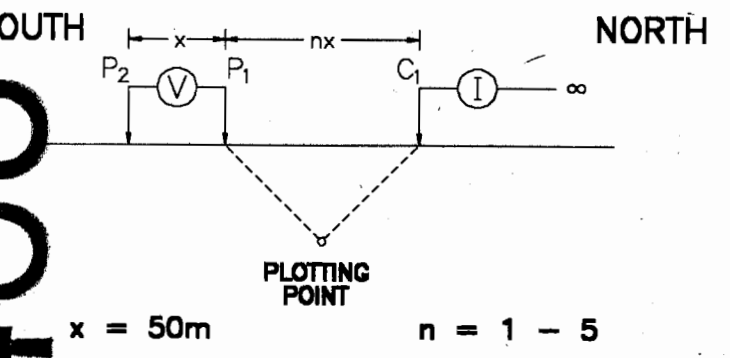


CONSOLIDATED NORTH COAST INDUSTRIES LTD.

Redgold Property
Omineca Mining Division

LINE: 11600E

POLE-DIPOLE ARRAY



CURRENT ELECTRODE C₁ NORTH OF POTENTIAL DIPOLE P₁P₂

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE
 PROBABLE
 POSSIBLE
 AT DEPTH

SCALE 1 : 2500

CONTOUR INTERVALS
 APP.CHARGEABILITY : 1.0 (msec)
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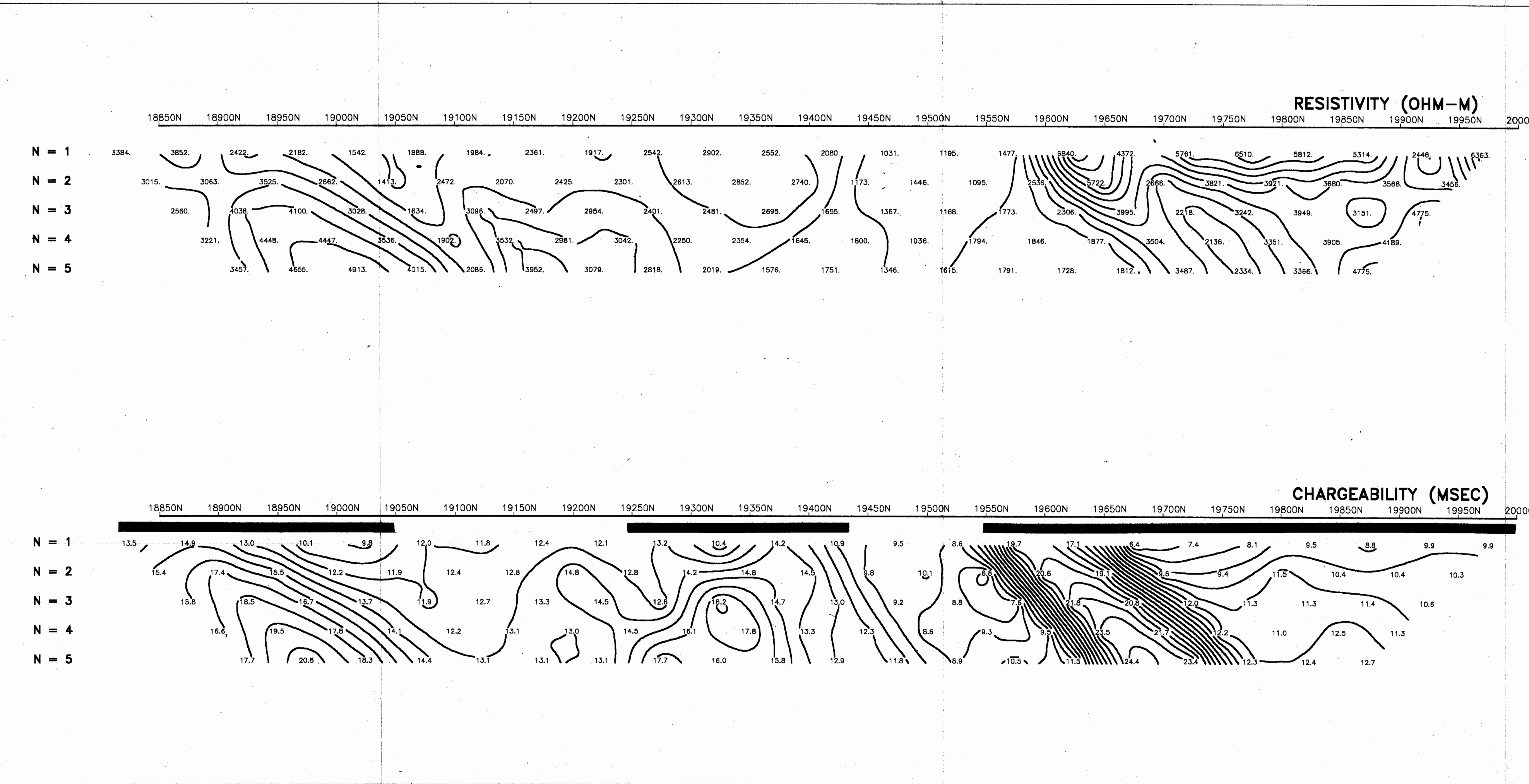
GEOLOGIC APPRAISAL REPORT

24,408

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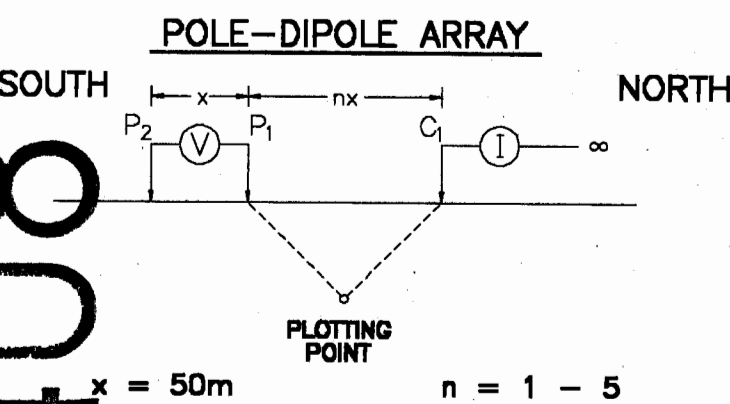
LLOYD GEOPHYSICS INC.

INDUCED POLARIZATION SURVEY
DRAWING NUMBER : 95376-10



CONSOLIDATED NORTH COAST INDUSTRIES LTD.

Redgold Property
Omineca Mining Division
LINE: 11800E



24,408

LOGIC BRANT'S ASSESSMENT REPORT

SCALE 1 : 2500

SURFACE PROJECTION OF ANOMALOUS ZONES

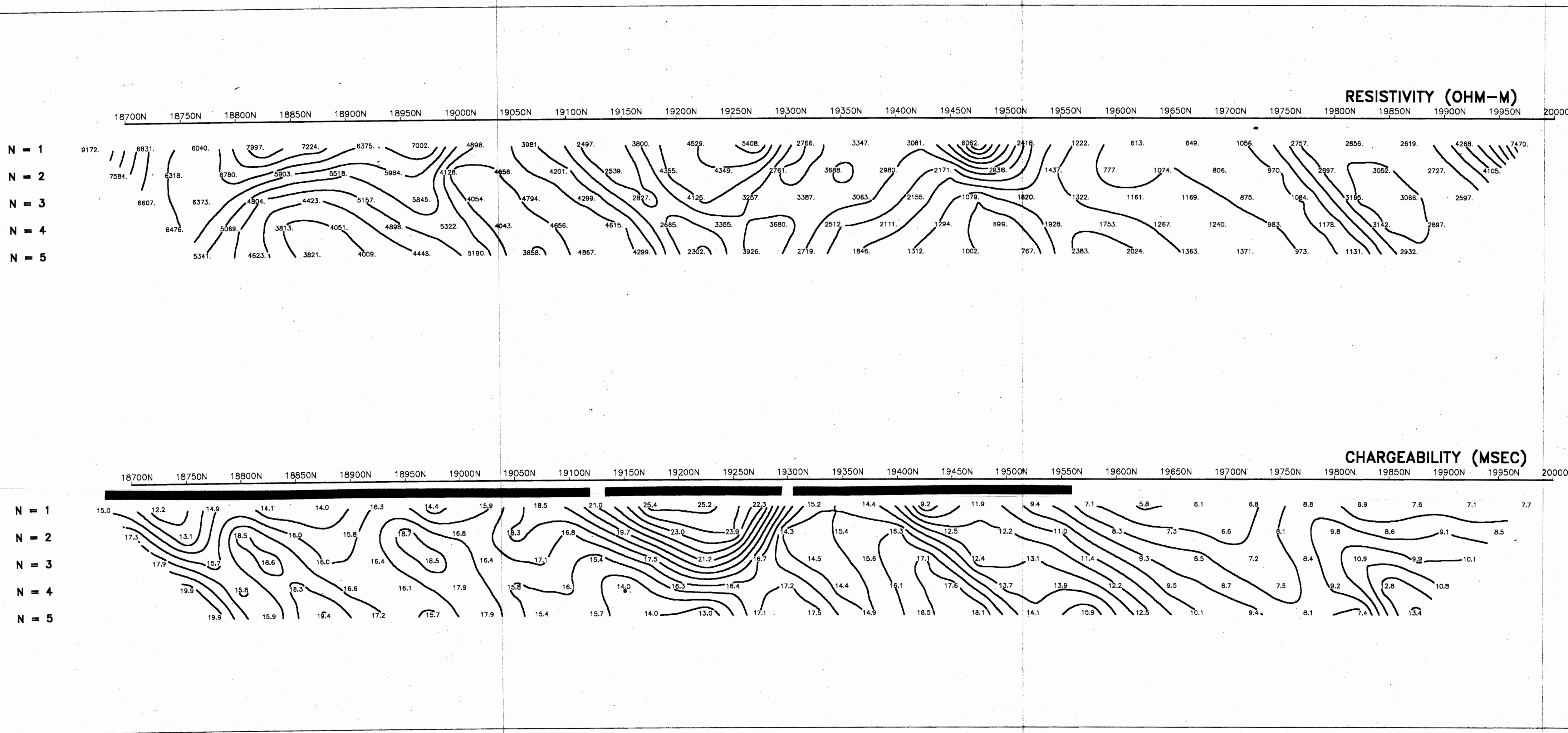
DEFINITE
PROBABLE
POSSIBLE
AT DEPTH

CONTOUR INTERVALS
APP.CHARGEABILITY : 1.0 (msec)
APP.RESISTIVITY : 500 (ohm-m)

DATE SURVEYED: Nov.12,13 1995
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Rx: EDA IP-6

LLOYD GEOPHYSICS INC.

INDUCED POLARIZATION SURVEY
DRAWING NUMBER : 95376-11

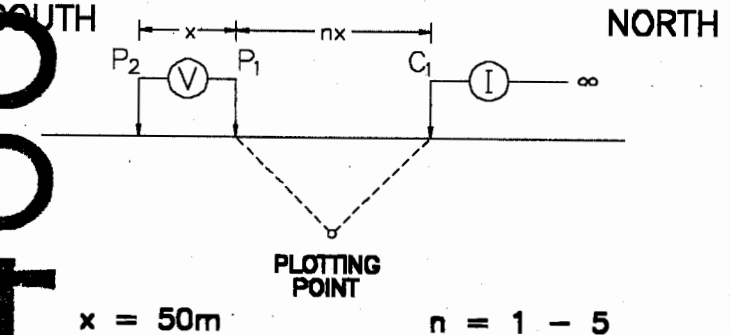


CONSOLIDATED NORTH COAST INDUSTRIES LTD.

Redgold Property
Omineca Mining Division

LINE: 12000E

POLE-DIPOLE ARRAY



CURRENT ELECTRODE C₁ NORTH OF POTENTIAL DIPOLE P₁P₂

- SURFACE PROJECTION OF ANOMALOUS ZONES**
- DEFINITE
 - PROBABLE
 - POSSIBLE
 - AT DEPTH

SCALE 1 : 2500

CONTOUR INTERVALS
APP.CHARGEABILITY : 1.0 (msec)
APP.RESISTIVITY : 500 (ohm-m)

DATE SURVEYED: Nov.13,14 1995
Tx: Huntec Mk2 Model 7500
Rx: EDA IP-6



LLOYD GEOPHYSICS INC.
INDUCED POLARIZATION SURVEY
DRAWING NUMBER : 95376-12

24,408

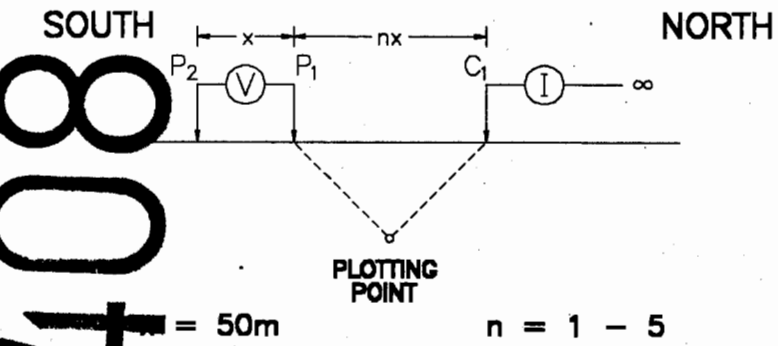
LOGIC BRAND ASSESSMENT REPORT

CONSOLIDATED NORTH COAST INDUSTRIES LTD.

Redgold Property
Omineca Mining Division

LINE: 12200E

POLE-DIPOLE ARRAY



CURRENT ELECTRODE C₁ NORTH OF POTENTIAL DIPOLE PP₂

24,408

LOGIC BRAND ASSESSMENT REPORT

SCALE 1 : 2500

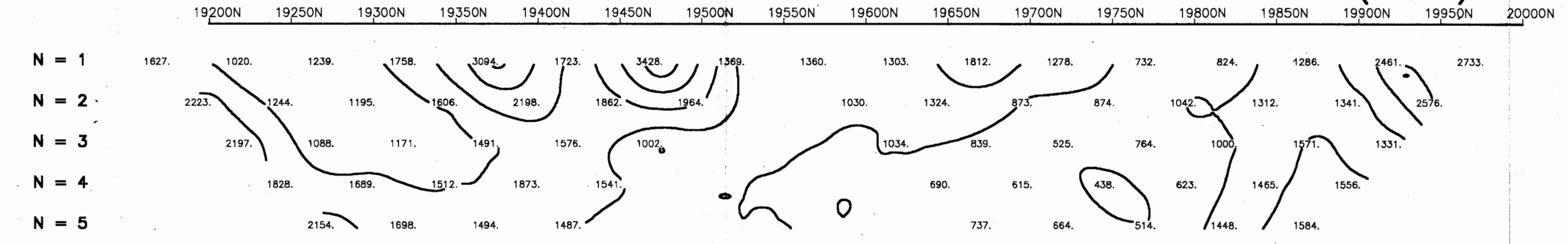
CONTOUR INTERVALS
APP.CHARGEABILITY : 1.0 (msec)
APP.RESISTIVITY : 500 (ohm-m)

DATE SURVEYED: Nov. 15, 1985
Tx: Huntac Mk2 Model 7500
Rx: EDA IP-6

LLOYD GEOPHYSICS INC.

INDUCED POLARIZATION SURVEY
DRAWING NUMBER : 95376-13

RESISTIVITY (OHM-M)



CHARGEABILITY (MSEC)

