

PORCHER ISLAND

INDUCED POLARIZATION SURVEY

SUB-RECORDER
RECEIVED
OCT 5 1988
M.R. # _____ \$ _____
VANCOUVER, B.C.

CLAIMS: Jolt 6253 (07)
Profr 6252 (07)

MINING DIVISION: Skeena

NTS: 103J/2E

LATITUDE: 54° 01' 30" N

LONGITUDE: 130° 35' 30" W

OWNER: Cathedral Gold Corporation

OPERATOR: Cathedral Gold Corporation

AUTHOR: Alan B. Taylor

DATE: September 30, 1988

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

17-861

LOG NO.	1025	RD.
/		
FILE NO.		

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SUMMARY

An induced polarization survey was carried out over the Jolt and ProFr claims to explore for possible anomalies related to gold mineralization in quartz-pyrite veins found at the nearby Surf Point mine.

The dipole electrode array was used on the survey of approximately 6 km over the pertinent claims with an "a" spacing of 25 meters and in separations of 1 to 5.

The results of the survey show weak anomalies probably related to variable pyrrhotite bearing basement rocks which are not auriferous. No further IP work is recommended.

1.0 LOCATION AND ACCESS

The Porcher Island claims are located 40 km southwest of the town of Prince Rupert on the north coast of British Columbia. The property is situated on the northwest corner of Porcher Island, at Edge Pass, and is bordered on two sides by tidewater. There are presently no roads on the property and access is by boat, float plane or helicopter based out of Prince Rupert.

Vegetation is typical of coastal-type settings ranging from wind-blown stunted scrub vegetation in areas of muskeg to tall stands of spruce and cedar on steeper, better drained slopes. Topographically, the property contains rolling hills with moderate slopes and a highest elevation of 1,600 feet on Bell Mountain. Two linear-type bedrock structures trending northeast-southwest are apparent as steep gullies or trenches found in the northwestern part of the property.

2.0 PROPERTY DEFINITION

The property consists of the following claims owned 100% by Cathedral Gold Corporation.

<u>Crown Grants</u>	<u>Lot No.</u>	<u>Units</u>
Western Hope	L6516	1
Pirate	L6953	1
Reward	L6955	1
Jeanie	L7191	1
Nabob	L7192	1
Trixie	L6515	1
Eagle	L6513	1
IXL	L6517	1
IXLfr	L6518	1
HEDfr	L7188	1
Starlight	L7189	1
HSD	L7312	1
Klim	L6519	1

<u>Claims</u>	<u>Record No.</u>	<u>Units</u>	<u>Record Date</u>
Tippy	38573	1	May 01, 1974
Toby 1	38574	1	May 01, 1974
Toby 2	38575	1	May 01, 1974
Kerry	38576	1	May 01, 1974
Edge Pass	210	4	Mar 19, 1974
BR 1	829	12	Nov 14, 1978
BR 2	830	3	Nov 14, 1978
Jolt	6253	6	Jul 07, 1987
Profr	6252	1	Jul 07, 1987

3.0 SUMMARY OF WORK COMPLETED

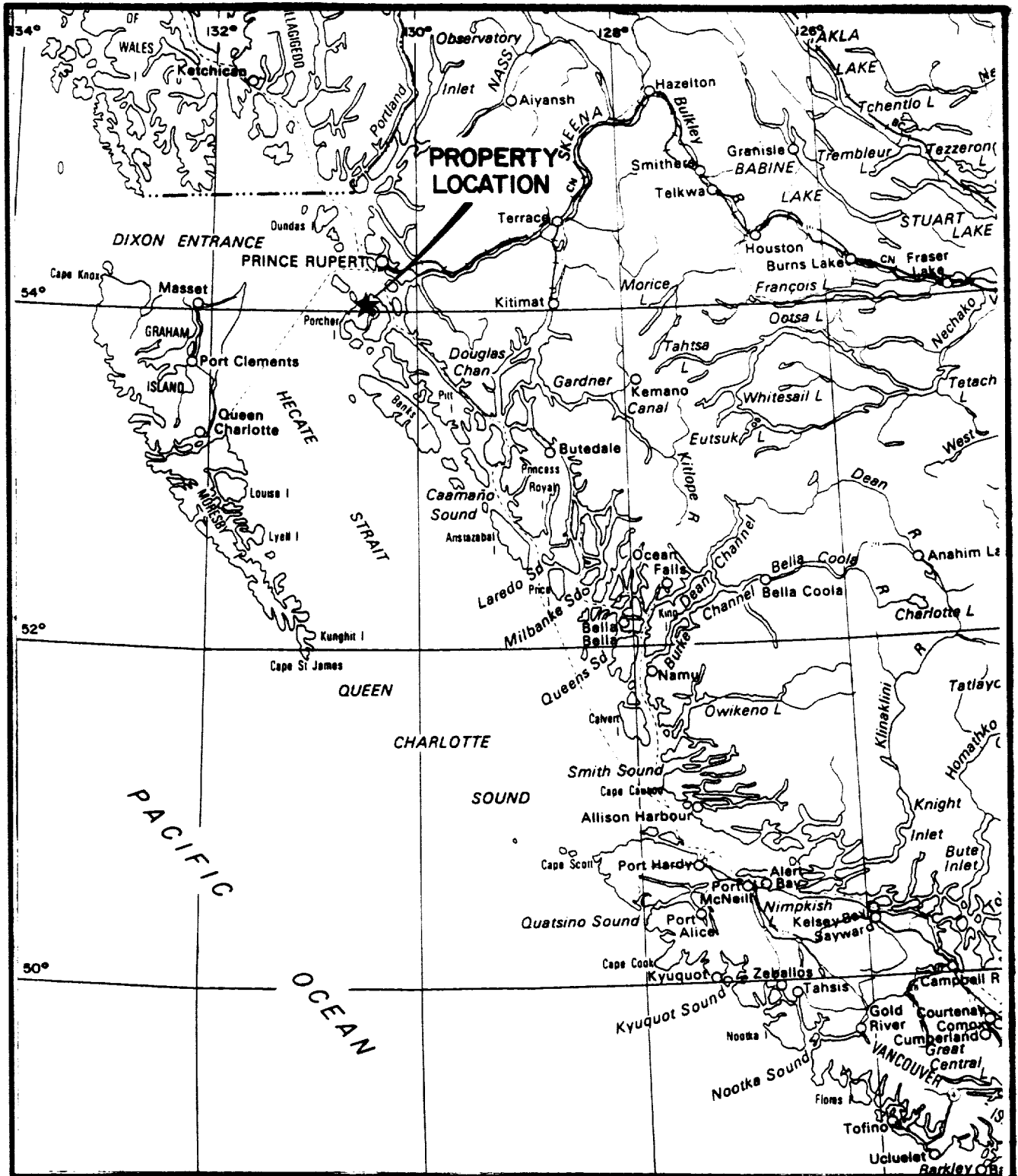
The "mine grid" was established from known survey points at the former Surf Point mine along an east-west baseline at 19250N, (see Figure 3). Grid lines at 50m intervals were established by compass and hip chain, stations flagged every 25 m, and all were cut. On the Jolt and Profr claims this entailed approximately 6 km of lines 3900E to 4200E. A pole-dipole IP survey was carried out on these lines May 6 through May 9, 1988 (for techniques see Appendix 1); for pseudosections see back pocket).

4.0 RESULTS

Results of the IP survey as shown in the pseudosections (in back pocket) show that occasional broad to steep chargeability anomalies occur and are suspected of representing changing lithologies in the basement schists. Pyrrhotite is found to be up to 5% in some amphibolite units nearby and these do not carry anomalous precious metals. Minor resistivity lows probably represent faults or shears within the basement.

5.0 RECOMMENDATIONS

- (1) Geochemical sampling over the IP anomalies may show areas of further interest and limited work is required on the grid lines.



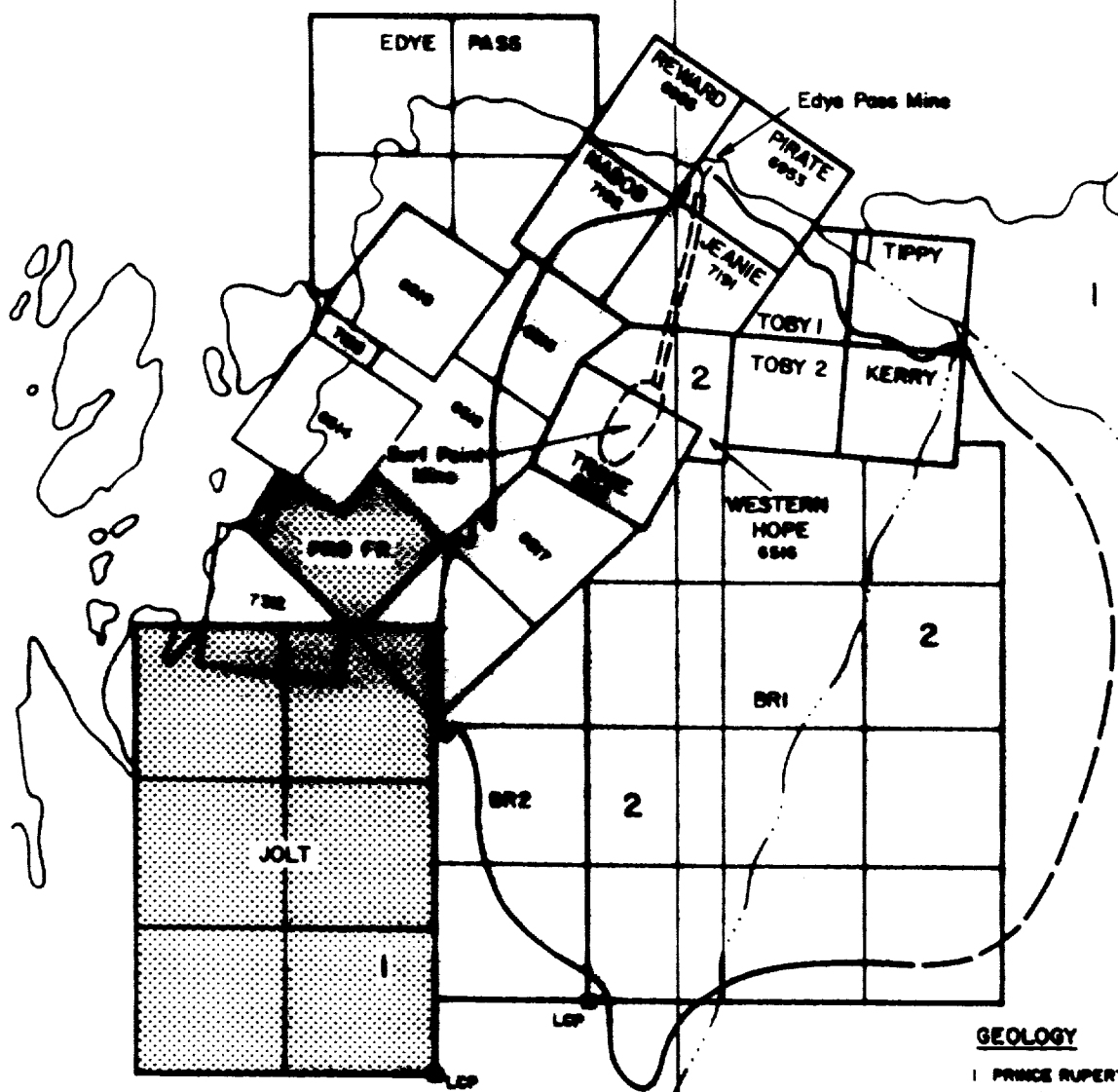
CATHEDRAL GOLD CORPORATION	
PORCHER ISLAND	
FIGURE 1	
LOCATION MAP	
SCALE: 1:3 750 000	GEOLOGIST: A. TAYLOR
DATE: OCTOBER, 1968	DRAWN BY: J. CORREIA

130° 35'

Edye Passage

PRINCE RUPERT
40 km

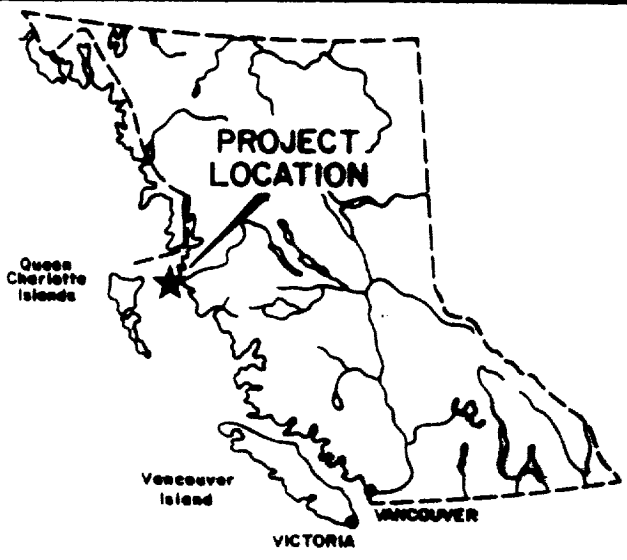
Useless Creek



GEOLOGY

- 1 PRINCE RUPERT SCHISTS
- 2 QUARTZ DIORITE - HOST TO MINERAL DEPOSIT, MAIN EXPLORATION TARGET

54° 00'



CATHEDRAL GOLD CORPORATION
PORCHER ISLAND

FIGURE 2 N.T.S. 103/J2

**CLAIM MAP AND
 GENERAL GEOLOGY**

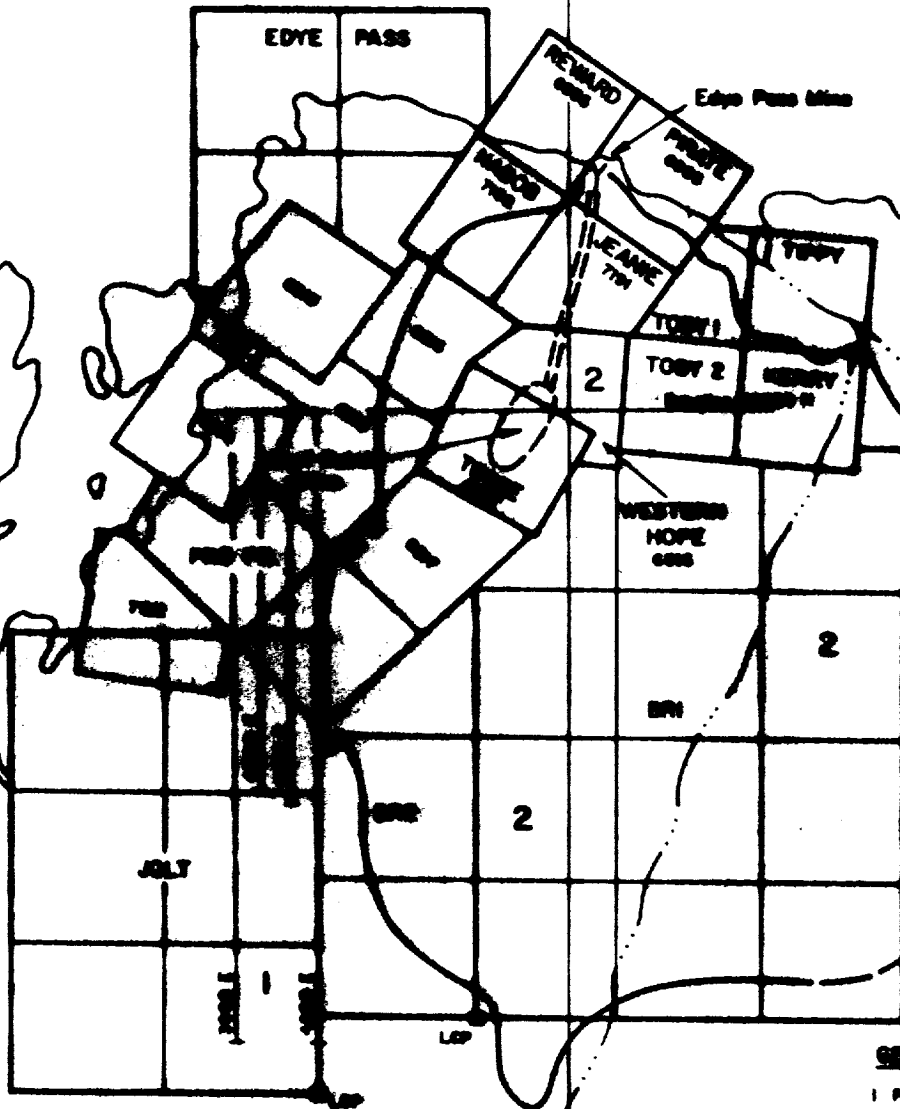


SCALE: 1:25,000 (approx.) GEOLOGIST: A. TAYLOR
 DATE: OCTOBER, 1988 DRAWN BY: J. CORNUM

Edye Passage

130° 35'

PRINCE RUPERT
40 km



GEOLOGY

- 1 PRINCE RUPERT SCHISTS
- 2 GRANITE GNEISS - HOST TO MINERAL DEPOSIT, MAIN EXPLORATION TARGET

54° 00'



CATHEDRAL GOLD CORPORATION
PORCHER ISLAND

FIGURE 3

NTS. 103/J2

MINE GRID LOCATION MAP

0 500 1000 1500m

SCALE: 1:25,000 (approx.) GEOLOGIST: A. TAYLOR
 DATE: OCTOBER, 1988 DRAWN BY: J. CHAPMAN

6.0 COST STATEMENT

PERSONNEL:		\$ 1,000.00
supervision, assistants, room & board		
TRANSPORTATION:		\$ 1,000.00
Helicopter		
LABOUR:		\$ 1,200.00
6 km linecutting @ \$200/km		
GEOPHYSICAL:		\$ 6,600.00
6 km IP @ \$1,100/km		
MISCELLANEOUS:		\$ 1,000.00
Report Writing & Drafting	\$500.00	
Supplies (Flagging, chainsaws, camp)	\$500.00	
		<hr/>
	TOTAL	\$ 10,800.00
		<hr/> <hr/>

7.0 BIBLIOGRAPHY

Bergmann, H.J. 1980: Report on Porcher Island Gold Property of Banwan Gold Mines Ltd., Porcher Island, B.C.

Corvalan, R. 1986: Geochemical Assessment Report on BR1 and BR2 Claims; for Imperial Metals Corporation

Hutchison, W.W. 1982: Geology of Prince Rupert-Skeena Map Area, British Columbia; GSC Mem. 394

Lawrence, R.W. 1984: Gold and Silver Recovery from Ore Supplied by Imperial Metals Corporation (AR 14602)

Roddick, J.A. 1970: Douglas Channel-Hecate Strait Map-area (103H and part of 103G); GSC Paper 70-41, Map 23-1970

Smith, A. 1948: Surf Point and Edye Pass Mines, in Structural Geology of Canadian Ore Deposits, C.I.M. pp.94-99

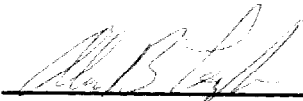
Taylor, A.B. 1988: Geochemical Surveys on the Porcher Island Claims for Cathedral Gold Corporation - Assessment Report.

8.0 CERTIFICATE OF QUALIFICATION

I, ALAN B. TAYLOR, geologist, residing at 15-8720 Maplegrove Crescent in the Municipality of Burnaby, Province of British Columbia, hereby certify that:

- 1) I graduated from Brock University in 1979 with an Honours Bachelor of Science in Geology.
- 2) I graduated from the University of Western Ontario in 1984 with a Master of Science in Geology.
- 3) I have worked for various mining companies and government geological surveys since 1977.
- 4) I am presently a permanent staff geologist with Imperial Metals Corporation of 800-601 West Hastings Street, in the City of Vancouver, Province of British Columbia.
- 5) The work described in this report on the Porcher Island Claims was undertaken under my direct supervision.

DATED at the City of Vancouver this 5 day of Oct 1988
1988.



Alan B. Taylor, Geologist

A P P E N D I X I

**INDUCED POLARIZATION SURVEY
INSTRUMENTATION**

APPENDIX I

PORCHER ISLAND INDUCED POLARIZATION SURVEY - INSTRUMENTATION

Introduction

Induced polarization and resistivity surveys were conducted over portions of the Porcher Island Property, Prince Rupert Area, B.C., within the periods November 6, 7, 1987 and January 8 to 15, 1988. The work was conducted by Scott Geophysics Ltd. on behalf of Cathedral Gold Corporation.

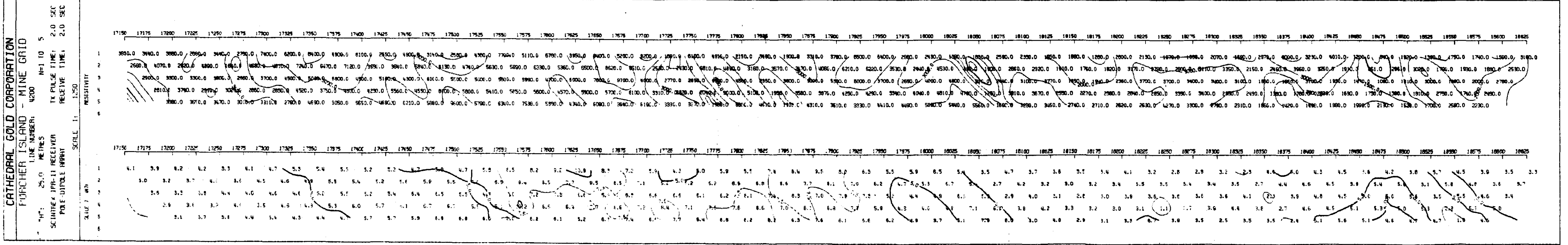
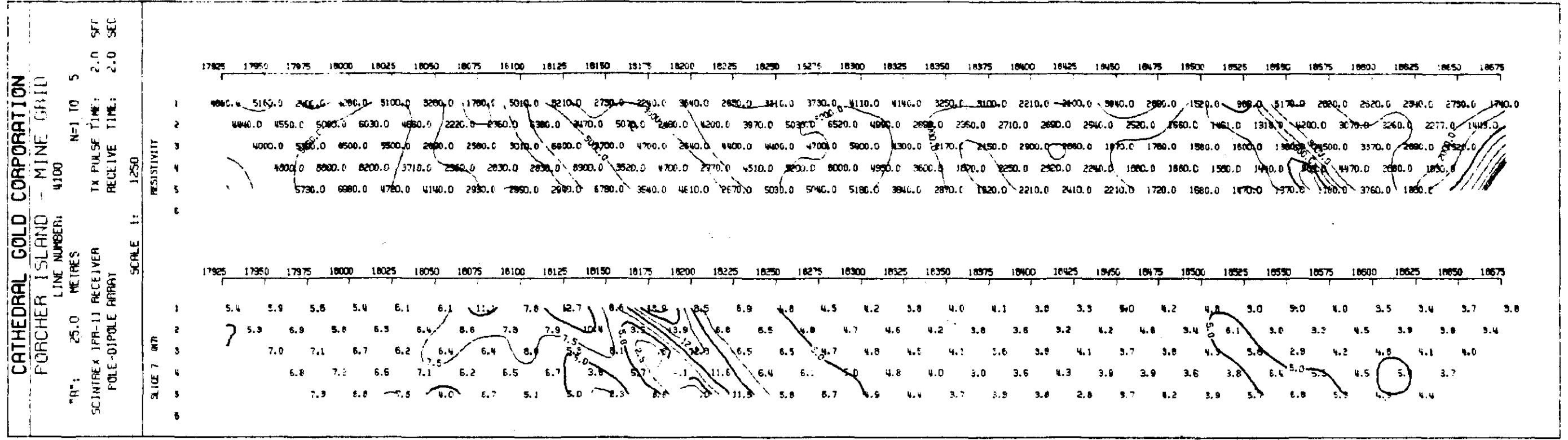
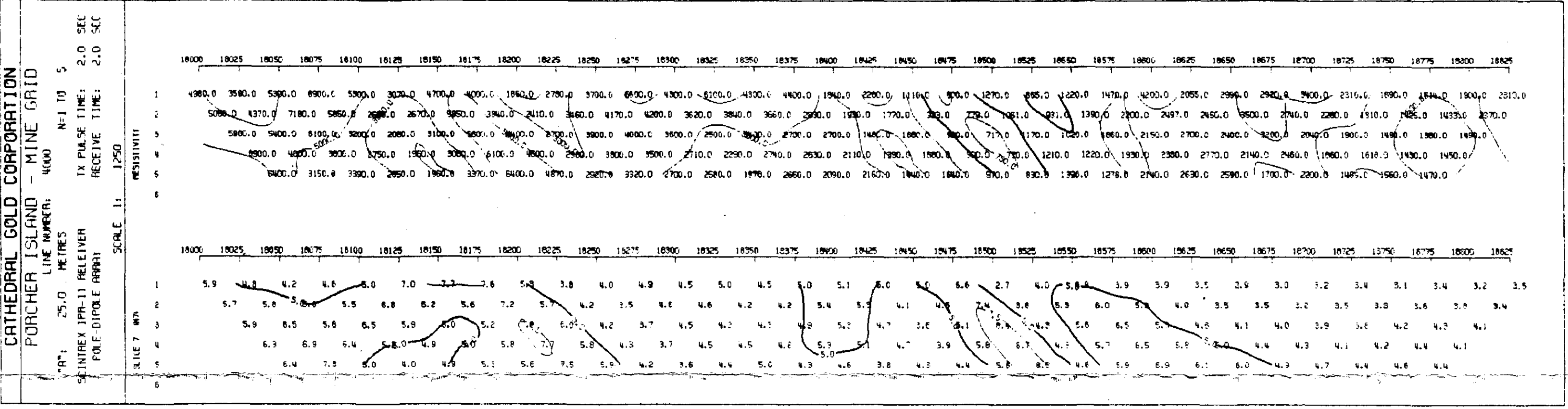
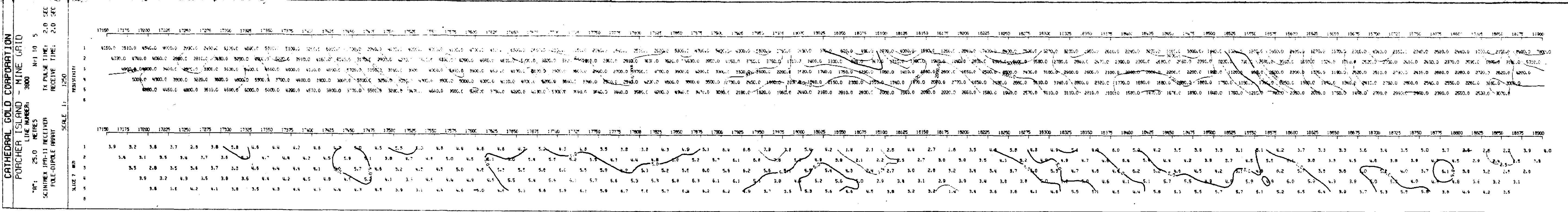
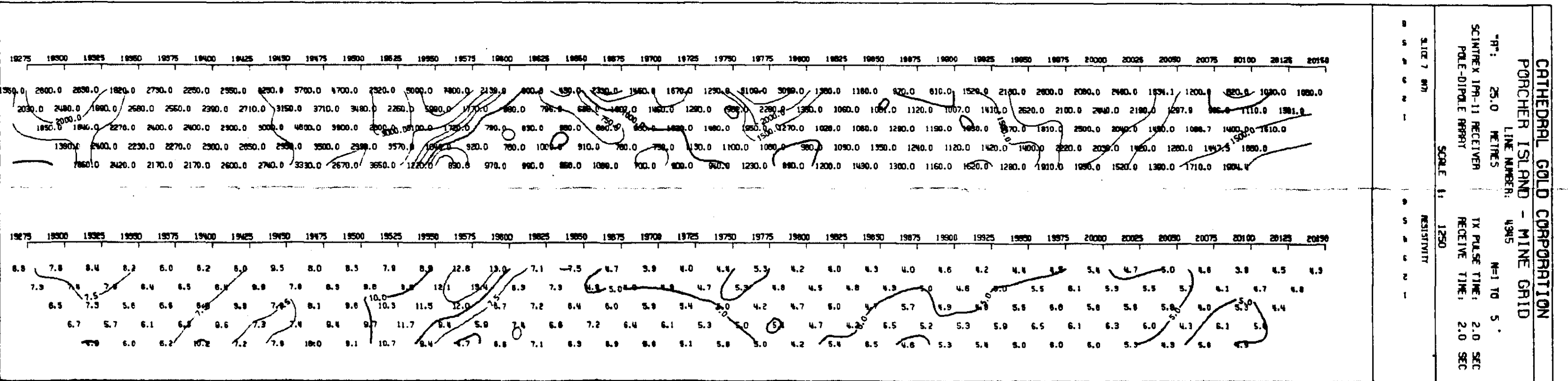
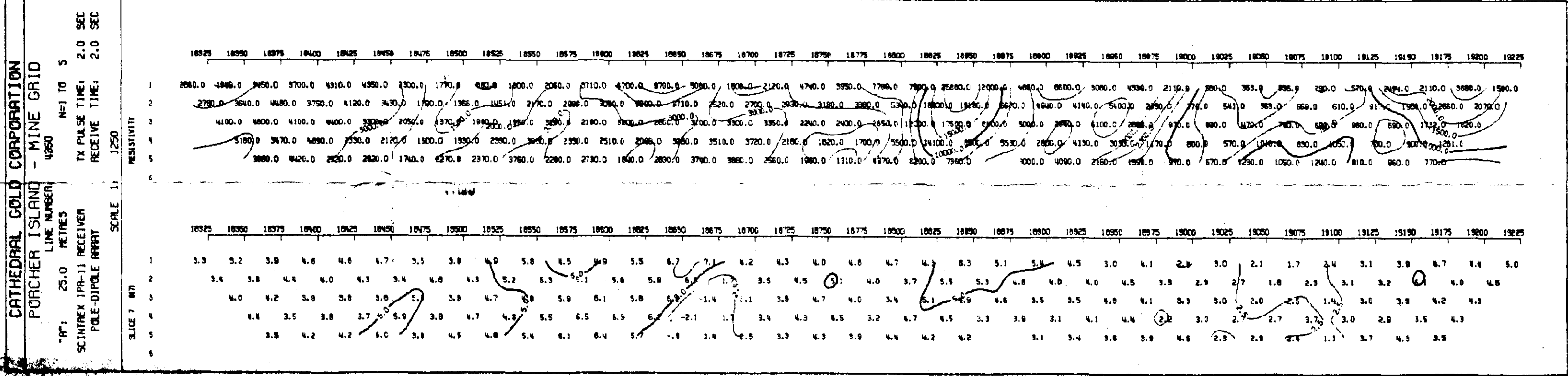
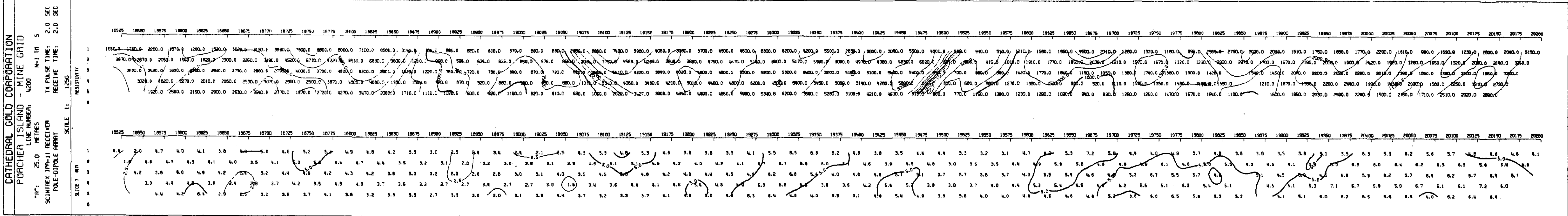
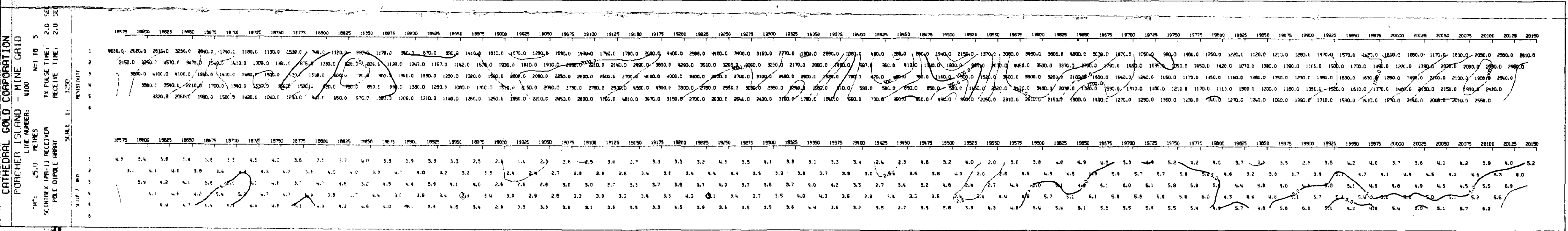
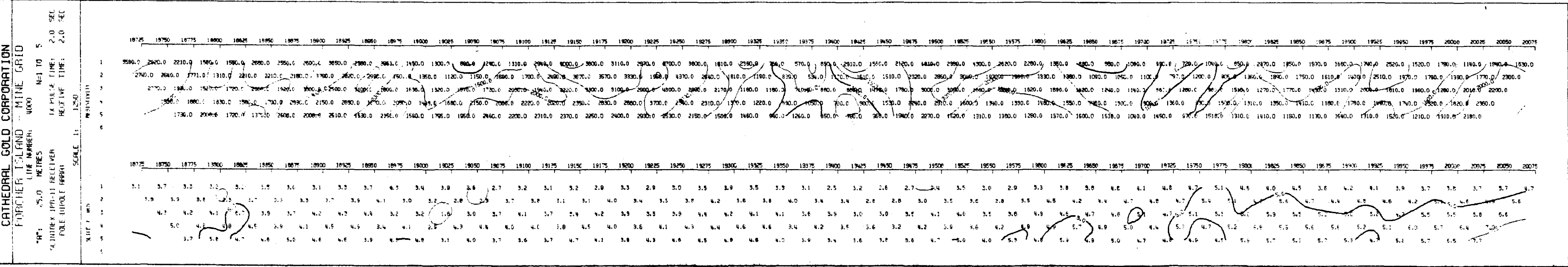
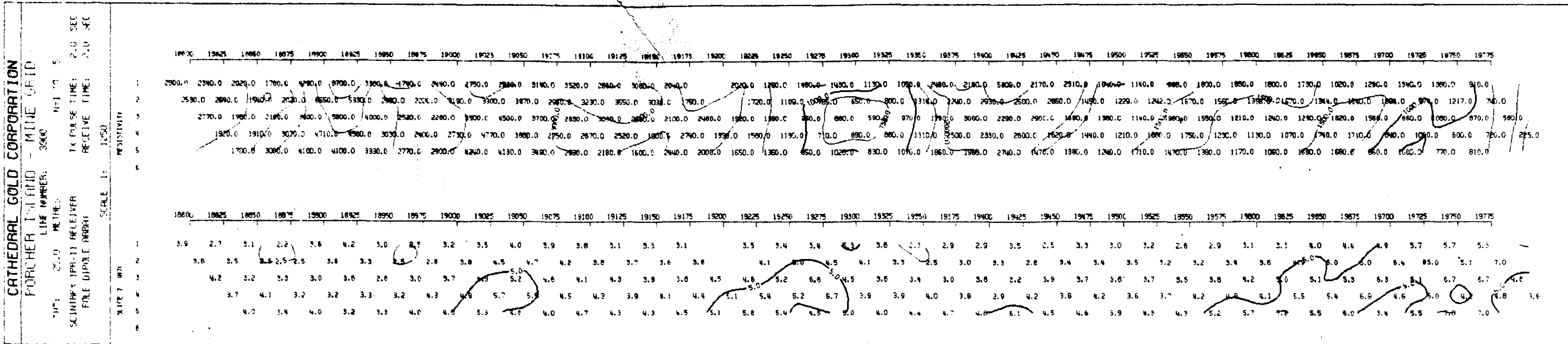
The pole dipole electrode array was used on the survey, with an "a" spacing of 25 meters and "n" separations of 1 to 5. The current electrode was to the south of the receiving electrodes on all survey lines.

Instrumentation and Procedures

A Scintrex IPR11 time domain microprocessor based induced polarization receiver and a Scintrex 2.5kw IPC7 transmitter were used for the survey. Readings were taken using a 2 second alternating square wave. The chargeability for the eighth slice (690 to 1050 milliseconds after shutoff; midpoint at 870 milliseconds) is the value that has been plotted on the accompanying plans and pseudosections.

The survey data was archived, processed, and plotted using a Sharp PC7000 microcomputer running Scintrex Soft II and proprietary software. All chargeability values were analyzed for their spectral characteristics using a curve matching procedure (Soft II).

Alan Scott, Geophysicist
Scott Geophysics Ltd.
4013 West 14th Avenue
Vancouver, B.C. V6R 2X3



GEOLOGICAL BRANCH
ASSESSMENT REPORT

17,861

CATHEDRAL GOLD CORPORATION
PORCHER ISLAND
FIGURE 4
INDUCED POLARIZATION
PSEUDOSECTIONS
m 0 25 50 75 100 125 150
SCALE: 1:1250
DATE: OCTOBER, 1988
GEOLOGIST: A. TAYLOR
DRAWN BY: