COMINCO LTD.

EXPLORATION NTS: 93 A 6 - -----

WESTERN DISTRICT

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ON

ASSESSMENT REPORT

CEPHYSICAL SURVEYS

ON THE

BEEKEEPER 1-4 MINERAL CLAIMS

2055, 3892, 7895, 8503

Cariboo Mining Division

Latitude: 52 deg. 24' N Longitude: 121 deg. 20' W

GEOLOGICAL BRANCH ASSESSMENT REPORT

51 F.P

Work dates: June 13-16, 1990

September 19, 1990

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A.M. Pauwels



ASSESSMENT REPORT

GEOPHYSICAL SURVEYS ON THE BEEKEEPER MINERAL CLAIMS

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EXPLORATION

WESTERN DISTRICT

ASSESSMENT REPORT

GEOPHYSICAL SURVEYS

ON THE

BEEKEEPER PROPERTY

I SUMMARY

Reconnaissance style IP/mag surveys, totalling 10.3 km were completed. No chargeability highs were detected. Magnetic surveys locally found high values.

II INTRODUCTION

The property is situated 60 km northeast of Williams Lake and 10 km northeast of Horsefly. A paved highway connects Horsefly to Williams Lake. Logging roads in fair condition connect the property to Horsefly.

The claims are owned by Eastfield Resources Ltd. Cominco Ltd agreed to execute an IP/mag survey in return for a time limited, first right of refusal on the property. The surveys were carried out from June 13 to 16, 1990 by Scott Geophysics Ltd., a geophysical contractor from Vancouver. Flagged lines were established using a compass by Cominco crews. During the exploration work, crews were lodged at Horsefly and commuted daily by truck to the property. The project was planned and supervised by A.M. Pauwels, B.Sc., Senior Geologist.

III PREVIOUS EXPLORATION

Work on the property dates back to 1973. A that time the area was part of a large claim group covering the Kwun Lake prospect. Imperial Metals Corporation acquired the present claims in 1980 and from 1981 to 1986 completed soil sampling, rock sampling, ground magnetic surveys, VLF surveys and bulldozer trenching. This work found altered, pyritic volcanic rocks with up to 0.765 g/t Au and 0.12% Hg in the western part of the claim group. Eastfield Resources Ltd. obtained the property from Imperial in 1986 and did geological mapping, ground magnetics and IP surveys. An IP high was detected in the area of the trenches. Lornex Mining Corporation optioned the property in 1987 and did soil sampling over the IP high. A broad but weak copper and gold high was found and subsequenttly 3 drill holes were completed. The holes intersected sulphide rich, altered pyroxene porphyries. Only very weak gold and copper mineralization was found.

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IV TENURE

The property consists of 36 units in four claims, Beekeeper 1 to 4; Record No's: 2055, 3892, 7895, 8503. Work was done on all the claims; most of the work was on Beekeeper 1. The claims are owned by Eastfield Resources Ltd. Expenditures totalled \$10,290.18; the details are in Appendix I.

V AREA GEOLOGY

The claims are situated in the Quesnel Trough, a regional belt of Upper Triassic to Lower Jurassic volcanic and sedimentary rocks. Outcrops on the Beekeeper consist of basalts, basalt breccias and pyroxene porphyries. A small stock ranging in composition from syenite to diorite intrudes the basaltic rocks in the area of the trenches and was intersected in the drill holes. This diorite and the pyroxene porphyries are locally altered, alteration minerals being epidote, K-Spar, gypsum and pyrrhotite. The volcanic rocks strike north-northwesterly and dip steeply to the south.

VI GEOPHYSICAL SURVEYS

During the period from June 13 to 16, 1990, induced polarization and magnetometer surveys were conducted over the Beekeeper claims. The work was done by Scott Geophysics Ltd. on behalf of Cominco Ltd. A total of 10.3 kilometers of IP/mag, involving 4 lines with a nominal line spacing of 500 m were completed (see Figure 3). The purpose of the survey was to explore the area east and south of the 1987 IP survey for similar or larger zones of alteration.

Equipment and Procedures

A Scintrex IPR-11 time domain receiver and a Scintrex 2.5kw IPC-7 transmitter were used for the IP survey. A 2-second alternating square wave was output at the transmitter, and the decay of that signal during the off time was measured at the receiver. The receiver recorded chargeabilities for 10 time slices (MO-M9), as well as the primary voltage (Vp) and self potential (SP) for each of 4 potential electrode pairs at each station.

A Geometrics G816 total field proton precession magnetometer was used for the magnetometer survey, with a Geometrics G836 total field proton precession magnetometer as the base station, which was set up at the IP transmitter site. Both magnetometers were read during moves of the IP array, ie. when the transmitter was off.

All survey data was archived, processed, and plotted using a Toshiba 1200 microcomputer, using Scintrex Soft II, IGS, and proprietary software.

The survey was done in a reconnaissance fashion with a pole-dipole array configuration utilized for the IP survey. Readings were taken at an `a' spacing of 25 metres for N=1, 2, and at an `a' spacing of 75 metres for N=1,2.

The station interval was 75 metres.

Total field magnetometer measurements were taken at 25 metre intervals and were corrected for diurnal drift with reference to a fixed base station.

Presentation of Data

The IP data is presented as pseudo-sections (Figure 4) and contour plans of chargeability (Fig. 5) and apparent resistivity (Fig. 6). The pseudosections are presented at a scale of 1:5,000 for each of the survey lines. incorporating the N=1,2 chargeability and calculated resistivity data from both the 25 and 75 metre `a' spacings. The chargeability values plotted on the pseudo-sections and contour plans are those from the eighth slice (M7 -690 to 1050 milliseconds after shutoff, with a midpoint of 870 milliseconds). As indicated on the pseudo-sections, the current electrode positions are north of the receiving electrodes. The contour plan maps of chargeability and apparent resistivity for N=2 a=75m, are plotted at a scale of 1:10,000 with contour intervals of 10 mV/V and 100 ohm-metres respectively. For this property, chargeabilities from 10-20 mV/V are considered weakly anomalous, from 20-30 mV/V are moderately anomalous, and greater than 30 mV/V strongly anomalous.

The corrected total field magnetic data is presented at a scale of 1:10,000 as a contour plan map (Fig. 7), with a contour interval of 500 nT.

Discussion of Results

No anomalous chargeability values were found during the survey. Maximum value was 9 mV/V on Line 400W 600N, most values range from 1 to 4 mV/V. Apparent resistivity values vary from 128 to 740 ohm-m. Resistivity values below 300 ohm-m appear to follow a west-northwesterly trend in he central part of the property. The magnetic measurements show high contrast. Values range from 57100 to 62350 nT. Values over 60,000 nt are confined to a few single readings on lines 1, 6 and 11E and a 300m long segment on Line 4W at 400N. Magnetic contours also indicate a north-northwesterly trend. The lack of high chargeability values indicates that little or no sulphides or graphite are present in the area of the survey. The highly variable magnetic values are probably linked to variable amounts of magnetite often seen in the basic volcanic rocks on the property. VII CONCLUSIONS AND RECOMMENDATIONS

No IP anomalies were found over the grid surveyed on the Beekeeper claims. No further work is recommended for the part of the claims surveyed

Reported by: (A.M.Pauwels

Approved for

Release by:

N. J · ulla

W. J. Wolfe Manager, Exploration Western Canada.

Distribution:

Central Files (1) Mining Recorder (2) Eastfield Resources Ltd (1) REFERENCES

Campbell. R. Preliminary Map 93A West, Quesnel River GSC, Bull. 280, 1961.

Cann, R. Soil Geochemistry and Diamond Drilling 1987, Beekeeper Option, January 1988, Assessment Report.

Durfeld, M Summary Report on the Beekeeper Property foe Eastfield Resources Ltd., March 24, 1987.

Panteleyev, A. Alkalic Volcanic Terrain between Horsefly and Quesnel Lakes, B.C. Ministry of Energy, Mines and Petroleum Resources, Paper 1987-1.

Scott, A. Logistical Report, Induced Polarization and Magnetometer Surveys, Beekeeper claims on Behalf of Cominco Ltd., June, 1990.

APPENDIX I

BEEKEEPER PROPERTY

STATEMENT OF EXPENDITURES

Planning, Report A.M. Pauwels, 2 days @ \$ 401.6	803.20
Lines J. Thomlinson 3 " @ \$ 179.93 I. Stilwell 3 " @ \$ 122.91	539.79 368.73
Accommodation/Food 6 man days @ \$ 50.00/day Truck/gasoline 3 days @ \$ 50.00	300.00 150.00
Induced Polarization/magnetics A. Scott Geophysics as per invoice	7,878.46
Typing, Drafting, Reproduction	250.00
TOTAL	10,290.18

APPENDIX II

STATEMENT OF QUALIFICATIONS

- I, ANDRE M. PAUWELS, 4900 Mariposa Court, Richmond, B.C. hereby declare that I:
- Graduated from State University of Ghent, Belgium with a B.Sc., Geology in July, 1970.
- 2. Have been engaged in mineral exploration as a Geologist:
 - in Ontario from September, 1970 until April, 1972 with Union Miniere Explorations and Mining Corporation Limited.
 - in British Columbia and Yukon Territories since May, 1972 until December, 1980 with Union Miniere Exploration and Mining Corporation Limited.

- with Bethlehem Copper Corporation from January until May 1, 1981.

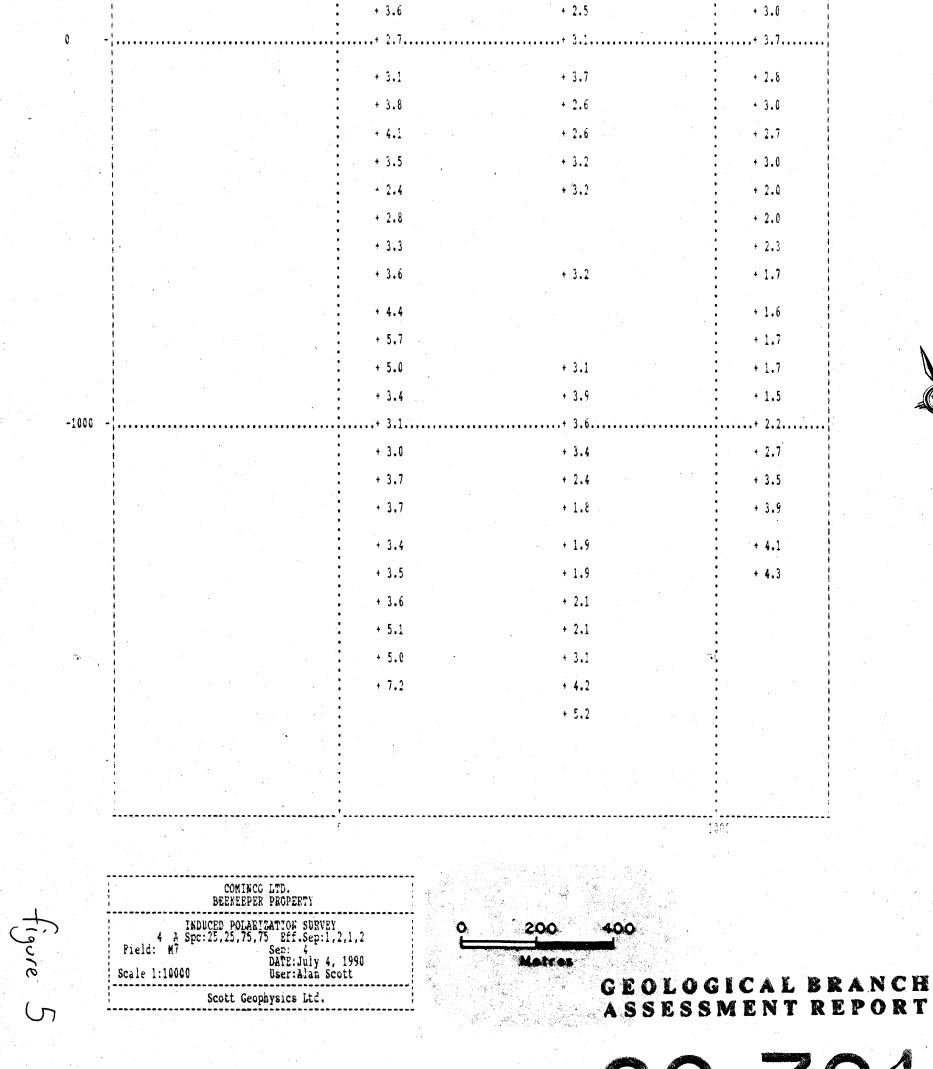
- with Cominco Limited since May 1, 1981.

- 3. Was engaged from 1970 until present in numerous geological, geochemical, geophysical and drilling programmes for mineral exploration in Ontario, British Columbia, the Yukon Territory, Northwest Territories, Arizona and Peru.
- 4. Am a Fellow of the Geological Association of Canada.

DATE: September 19, 1990

A.M. Pauwels Senior Geologist

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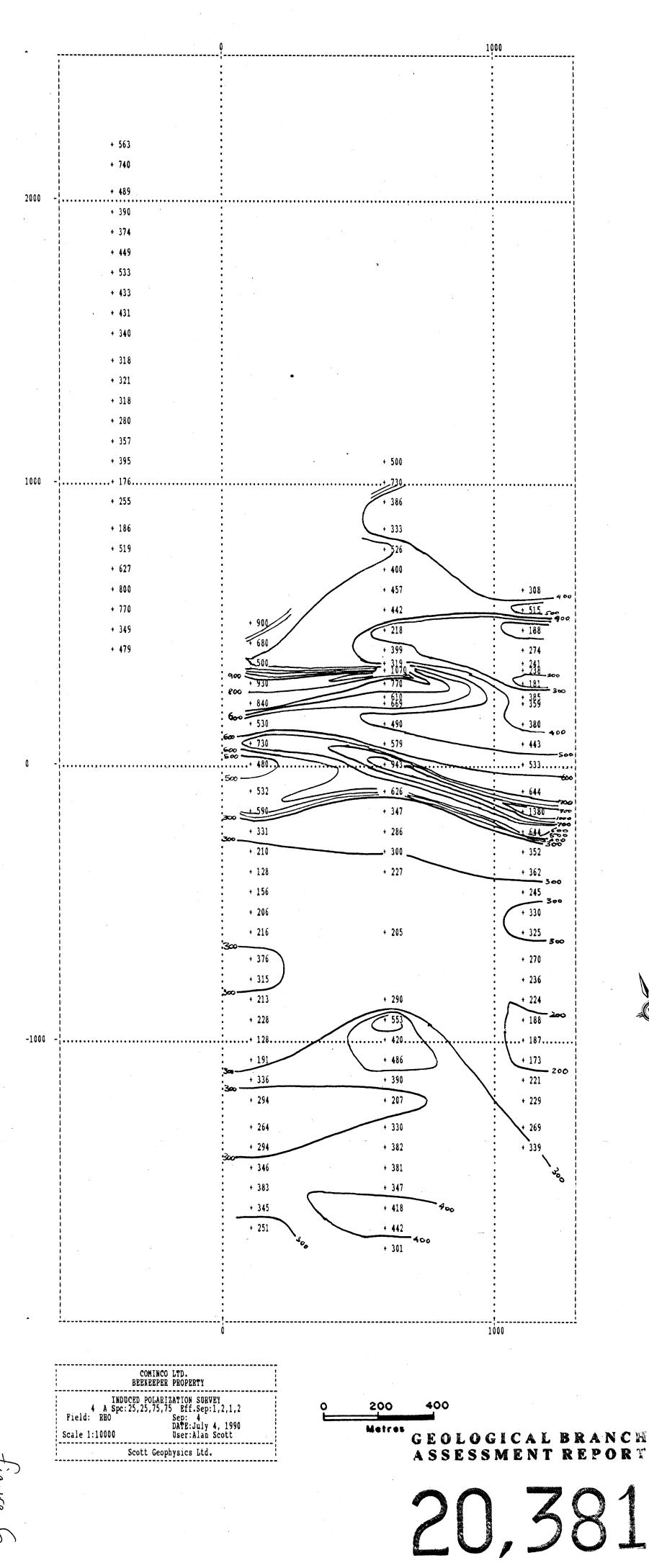
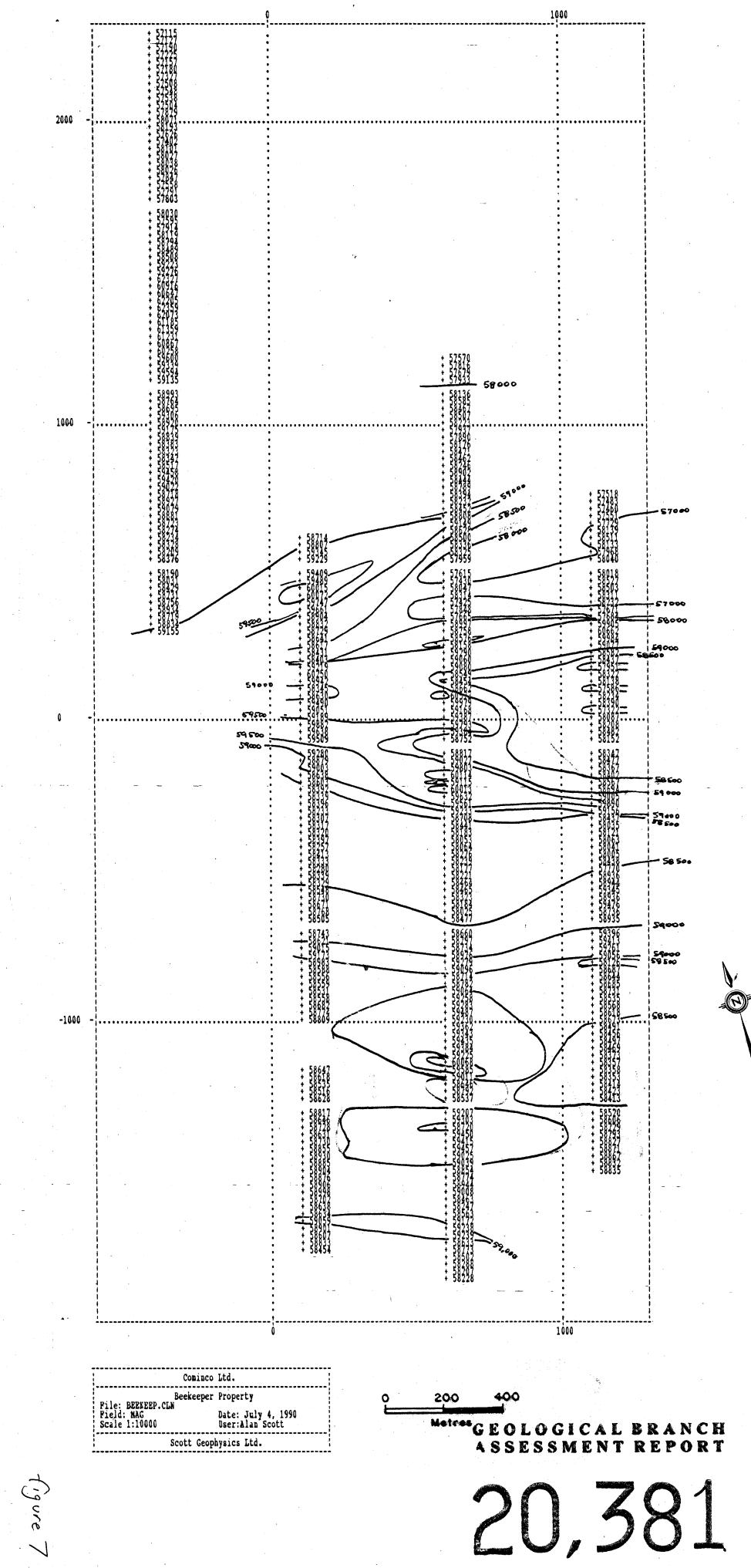
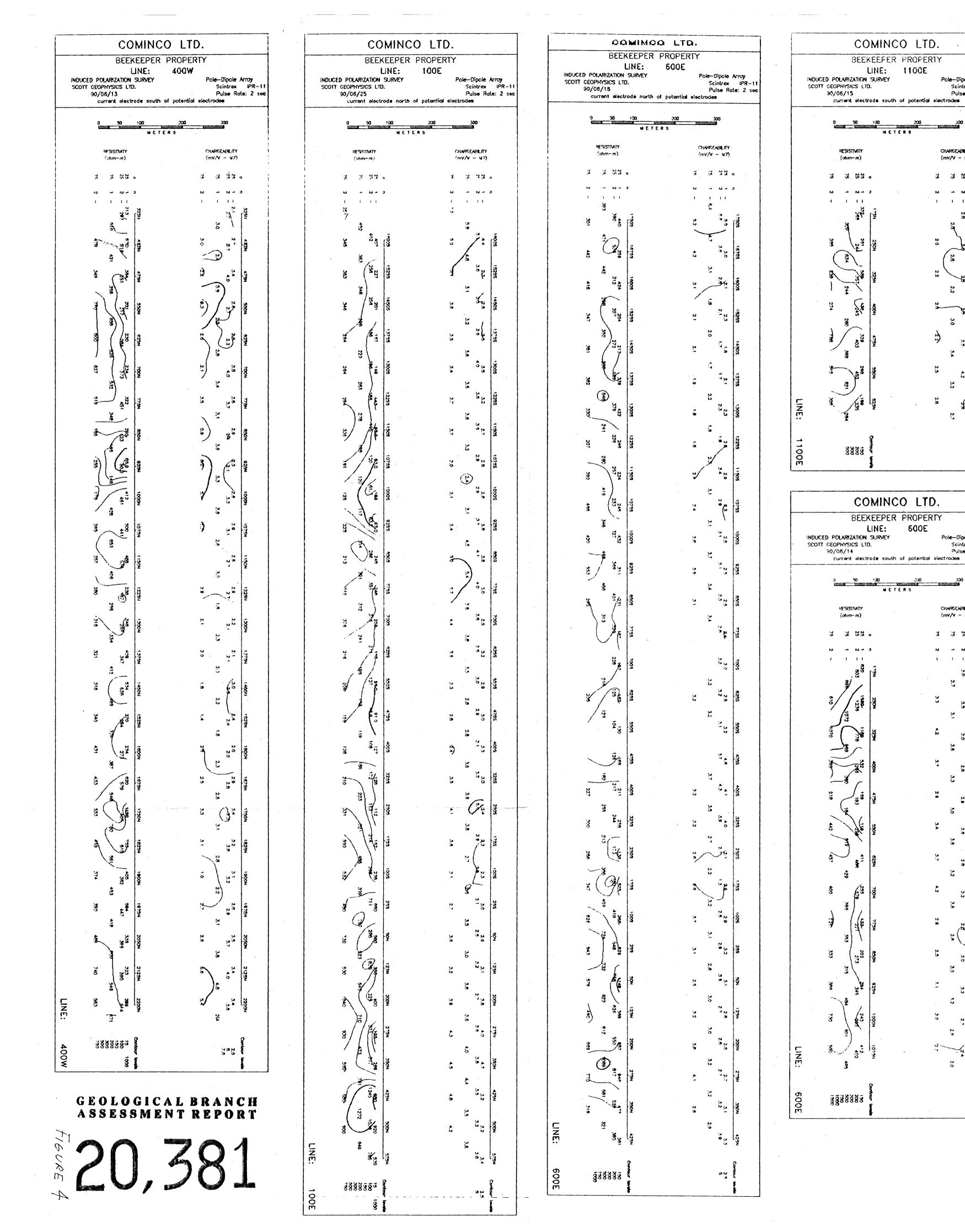


figure 6





COMINCO LTD. BEEKEEPER PROPERTY LINE: 1100E INDUCED POLARIZATION SURVEY Pole-Dipole Array SCOTT GEOPHYSICS LTD. Scintrex IPR-11 90/06/15 Pulse Rate: 2 sec current electrode north of potential electrodes 0 50 100 200 300 NETERS RESISTIMITY CHARGEABILITY (chm-m) (mV/V - ¥7) a 13 K K - K 3 3 NN 5 N - N- 3 N -- N-- J 1 3 1 1 1.1.1.1 28 16 · · · · · 0.9 229 3.5 2.3 20,2 9255 2.4 * 0: 3 117 5 S. 2 1.9 75 .e 9.i FE 3255 2503 1735 3.0 SZOS 3.0 2055 2.9 1705 3.0 ğ 1005 2001 5753 £ 2.6 3,4 2 2.9 14 14 533 3.0 ತೆ 33 y 10 2.9 3.0 È 3.0 2.8 80**4** 125N 2.9 2.9 3 2 J 2 200M 3.1 2.9 2.2 3 29**4** 2.1 00 241 3.0 LINE: 5 3 3 9 3 9 \$ A 1.5 1100E a N I 1900 1900 1900

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Pole-Dipole Array

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J.O

926N 3.5 3.2

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2.5

Scintrex IPR-11

Pulse Rate: 2 sec

(mV/V - N7)

Scintrex IPR-1

Pulse Rate: 2 sec

LINE: 1100E

