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STIKINE EAST GROUP

C O N T E N T S

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ATTACHMENTS

Statement of Qualifications, Ralph D. Falconer.

Evidence of Expenditures

#1 Induced Polarization Map, 1" - 500'

#2 Resistivity Map, 1" - 500'

10 November 1965

GEOPHYSICAL REPORT

(Induced Polarization Survey)

ON

MINERAL CLAIMS BIK 1-86 AND BIK 221-226 (Inclusive)
(herein called the Stikine East Group)

57°N 131°W S.E.

SUMMARY

An Induced Polarization Survey covering 14.5 line miles was carried out on the claims comprising the Stikine East Group during the summer, 1965. Results of this survey are presented on a topographic geologic map, Scale 1" - 500'.

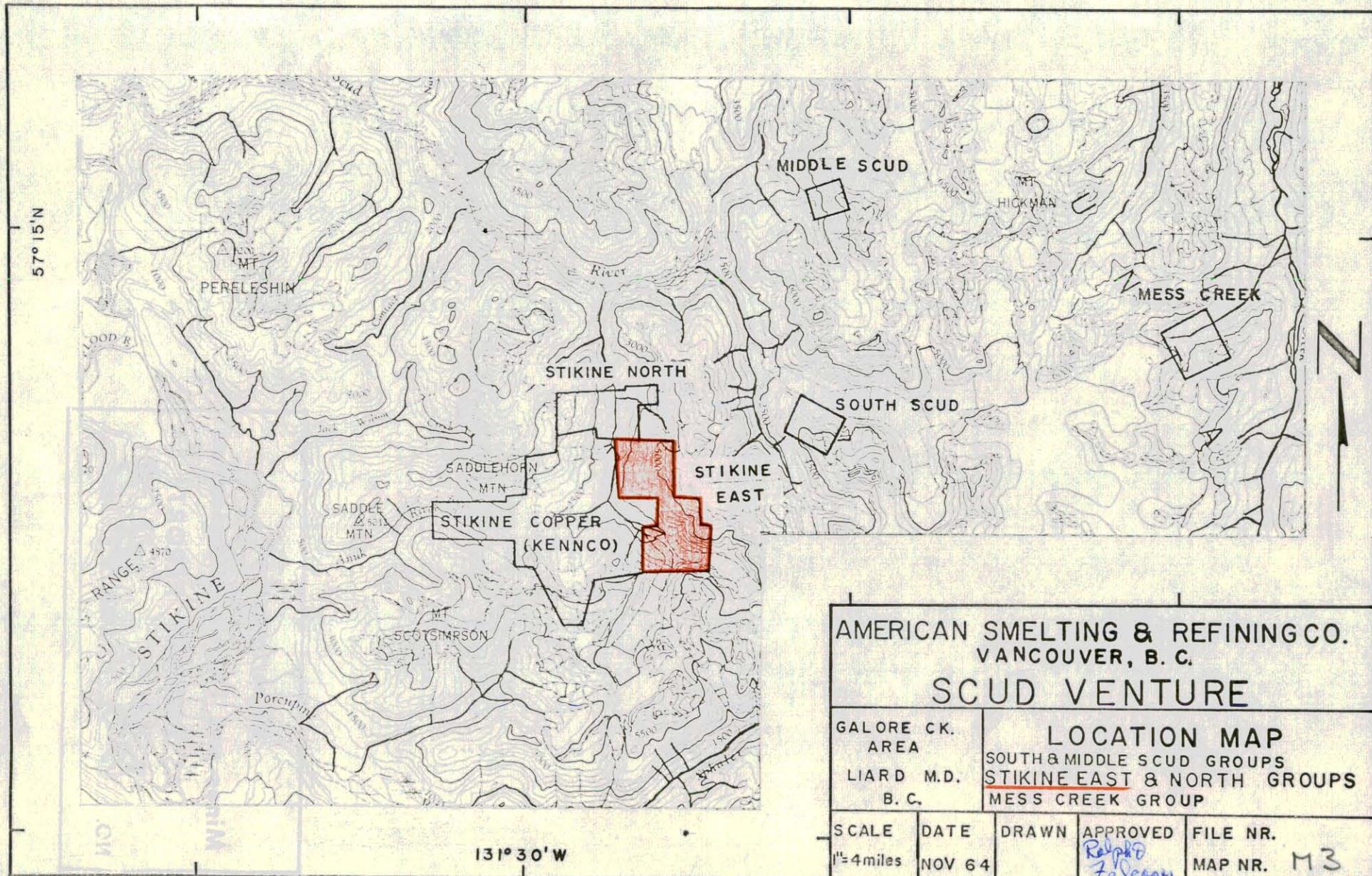
The Induced Polarization results show a large anomalous area, interpreted as containing 3-7% sulfides. Further work will be required to determine the significance of the anomaly.

INTRODUCTION

The claims of the Stikine East Group, located at approximately 131°24'W, 57°09'N, as shown on Map #1, were staked adjacent to the claims of Stikine Copper Company (Kennco) and are in a favorable location for an extension of the Galore Creek Stock.

Line cutting for the Induced Polarization Survey started June 1st, 1965 on the Stikine East Group and adjacent Stikine North Group. The Induced Polarization Survey was carried out during the period June 18-August 21, 1965 on the Stikine East and Stikine North Groups. Helicopter transportation was used extensively to get to and from the survey areas. While the steepness of the area made the survey go slow, no particular difficulties, other than bears molesting the equipment, were encountered. Weather during the survey period was ideal.

..... 2



WORK PERFORMED

The Induced Polarization Survey was carried out using a Wenner electrode configuration, that is, two current and two potential electrodes equally spaced along a line with the current electrodes occupying the outside positions in the array. An electrode spacing of 400' was used throughout the survey.

Several depth profiles were also run on the Stikine East Group. These are done to determine the depth to the source of any anomalous responses. They are done using the Wenner electrode configuration, and varying the electrode spacing from as close as 10', up to 1000'.

EQUIPMENT

The equipment used for the survey was built by the Geophysics Division, American Smelting & Refining Company. As the equipment was built for the company's own use, it is not available commercially. This equipment introduces a pulse of direct current into the ground through the current electrodes. The potential (V) between the potential electrodes, while the current is flowing, is measured in volts. When the current is shut off, an integral of the decay potential is measured in millivolts (IP). Results are presented as IP/V millivolts/Volt. For the design parameters used in the equipment, normal response is a background of about 3 millivolts/Volt, plus approximately 2.5 millivolts/Volt for each 1% sulfide, over disseminated sulfide bodies.

The Induced Polarization results have been contoured at 6, 10, and 16 millivolts/Volt, corresponding to probable sulfide percentages as follows:

<u>Millivolts/Volt</u>	<u>Probable % Sulfide</u>
0- 6	1% or less
6-10	1 - 3%
10-16	3 - 5 %
16 and over	5% plus 1% for each additional 2.5 millivolts/Volt

Apparent resistivity of the ground is also measured while conducting the Induced Polarization survey.

INTERPRETATION

A broad anomaly, with Induced Polarization responses of 10 millivolts/Volt and up, was detected. Within this broad anomaly, there is an area of higher response, 16 millivolts/Volt and higher. These may be two separate but adjacent anomalies, one representing 3-5% sulfides, and the other 5-8% sulfides. There is no particular correlation between the resistivity and Induced Polarization results. The anomaly is open to the south where it goes into ground held by Stikine Copper Company.

Three depth profiles were run on this anomaly and are shown as Figures 1, 2 and 3. Depth Profile #1 (Fig. 1) shows a depth of 70' to the anomaly causing material. Depth Profile #2 (Fig. 2) shows a depth of 50', and Depth Profile #7 (Fig. 3) shows a depth of 50' also.

The anomalous area is largely covered with only a few scattered outcrops of andesite with minor pyrite and chalcopyrite. In the southeast corner of the anomaly, about 500' southeast of Depth Profile #2, and along Camp Fault, andesite and some syenite, with up to 10% pyrite and minor chalcopyrite, is exposed.

CONCLUSIONS

A broad anomalous area was detected by an Induced Polarization Survey. Limited outcrops of andesite with minor pyrite and chalcopyrite do not completely explain the anomaly, and further work will be required.

Respectfully submitted,

Ralph D. Falconer

Ralph D. Falconer.

RDF:sm

10 November 1965

TO ACCOMPANY Geophysical Report (Induced Polarization Survey)
on Mining Claims BIK 1-86 and BIK 221-226
Inclusive, herein called the Stikine East Group, Liard Mining
Division, British Columbia.

BY: Ralph D. Falconer

DATED: 10 November 1965

STATEMENT OF QUALIFICATIONS

RALPH D. FALCONER, GEOPHYSICIST

- (1) Division Geophysicist, American Smelting & Refining Company, two years.
- (2) Geophysicist, Sherritt Gordon Mines Limited, four and one-half years.
- (3) Member, Society of Exploration Geophysicists.
- (4) Graduate Study, Geophysics, Michigan Technological University, one year.
- (5) B.S. (with honor) in Geological Engineering (Geophysics option), Michigan Technological University.

Ralph D. Falconer
Ralph D. Falconer,
Geophysicist.

EVIDENCE OF EXPENDITURES

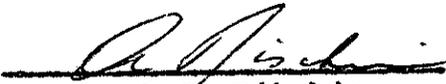
INDUCED POLARIZATION SURVEY
STIKINE EAST AND STIKINE NORTH GROUPS

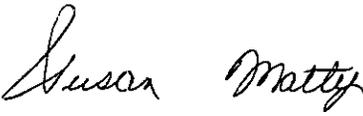
SALARIES

R. Falconer	Supervisor, Geophysicist	55 days	\$ 1,485.00
I. Quock	Line Cutter - Helper	57 days	855.00
R. Quock	Line Cutter - Helper	30 days	450.00
A. Hausch	Line Cutter - Helper	43 days	538.00
A. Dennis	Line Cutter -Helper	75 days	1,125.00
D. McPhee	Line Cutter- Helper	52 days	780.00
R. Klassen	Line Cutter - Helper	75 days	998.00
J. Tickner	Line Cutter - Helper	22 days	293.00
W. White	Line Cutter - Helper	40 days	532.00
Total Salaries			<u>\$ 7,056.00</u>
Equipment Rental - 2 months @ \$190.00/month			380.00
Living Costs - 449 man days @ \$10.00/day			4,490.00
Helicopter Costs - 27½ Hrs. @ \$120.00/hr.			3,300.00
Total Expenditures:			<u>\$ 15,226.00</u>
Line miles of Survey			
Stikine East	14.5		
Stikine North	<u>16.4</u>		
	30.9		
Total Expenditures Claimed - Stikine East Group			
	<u>14.5</u> (15,226)		<u>\$ 7,145.00</u>
	30.9		

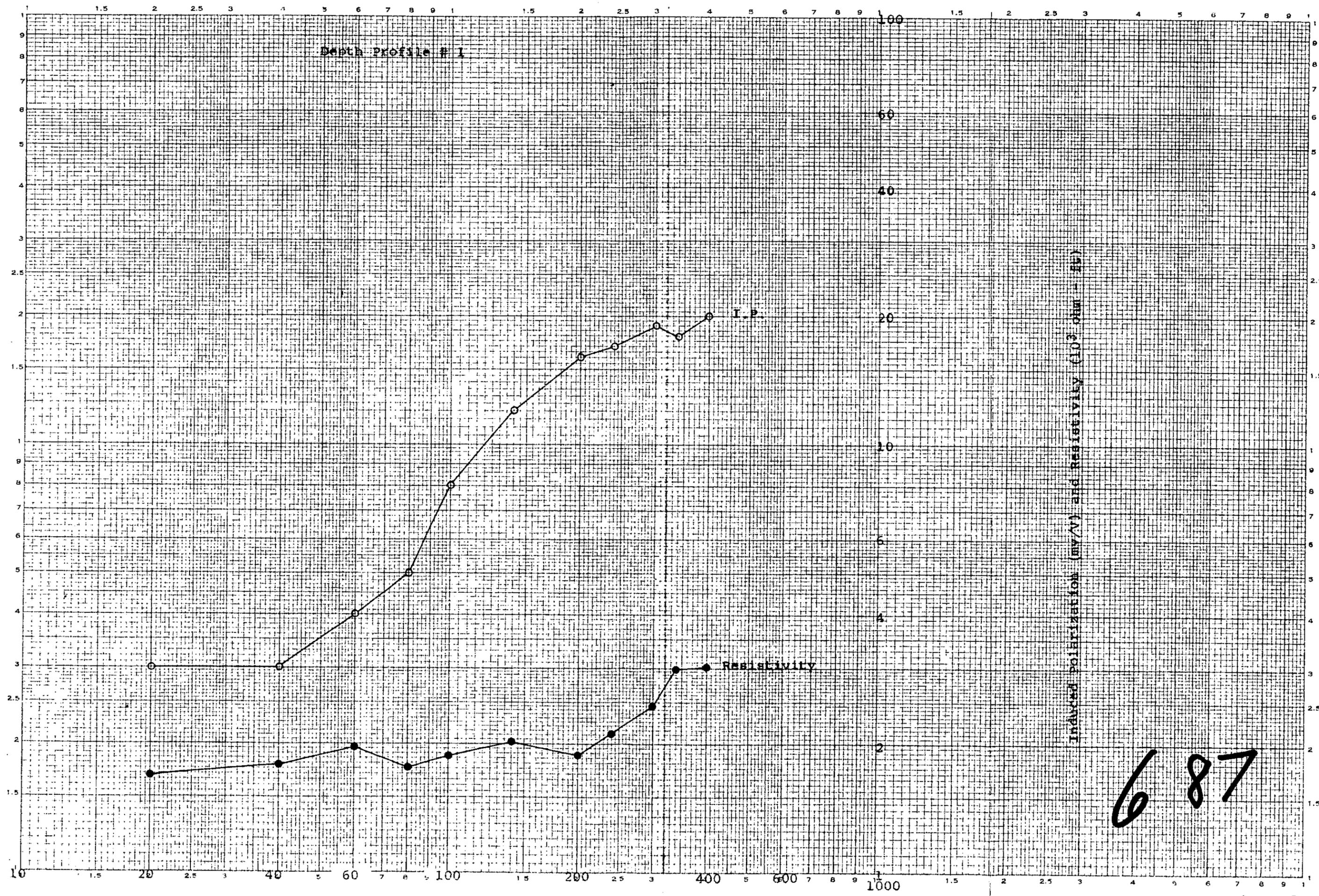
IN THE MATTER OF THIS "Evidence of Expenditures" Sheet,
I make this solemn declaration conscientiously believing it to be
true, and knowing that it is of the same force and effect as if
made under oath and by virtue of the "Canada Evidence Act".

Declared before me at the CITY
of VANCOUVER, in the
Province of British Columbia, this
15 day of Nov. 1965, A.D.


A.C. Ritchie


Sub-mining Recorder

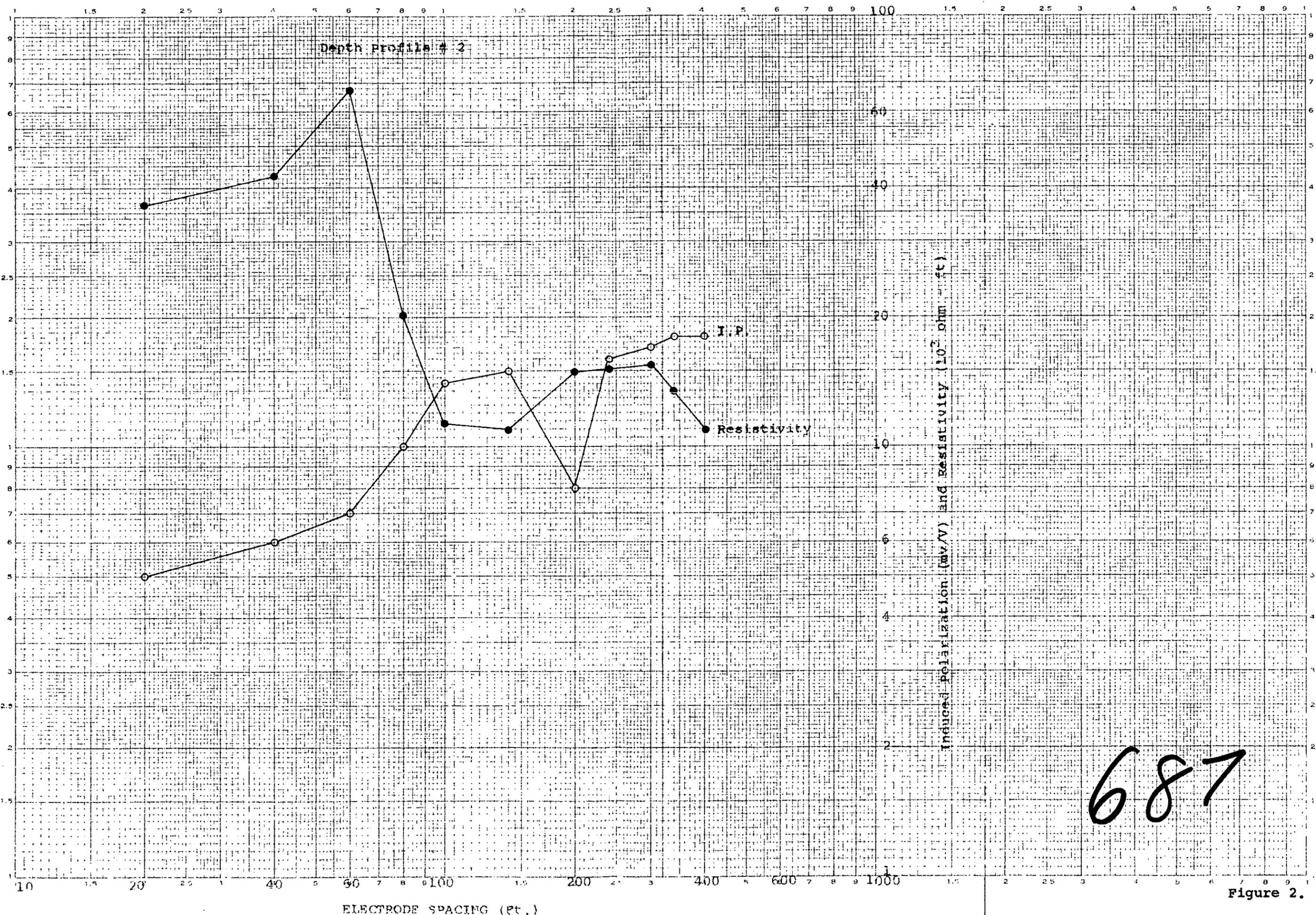
NO. 5400 121 DIETZGEN GRAPH TAPE
LOGARITHMIC
2 CYCLE X 4 CYCLE
EUGENE DIETZGEN CO.
MADE IN U.S.A.



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Figure 1.

NO. 14-20 LF. DIEZIGEN GRAPH PAPER
EUGENE DIEZIGEN CO.
MADE IN U.S.A.
2 1/2" x 3 1/2" (63.5 x 88.9)

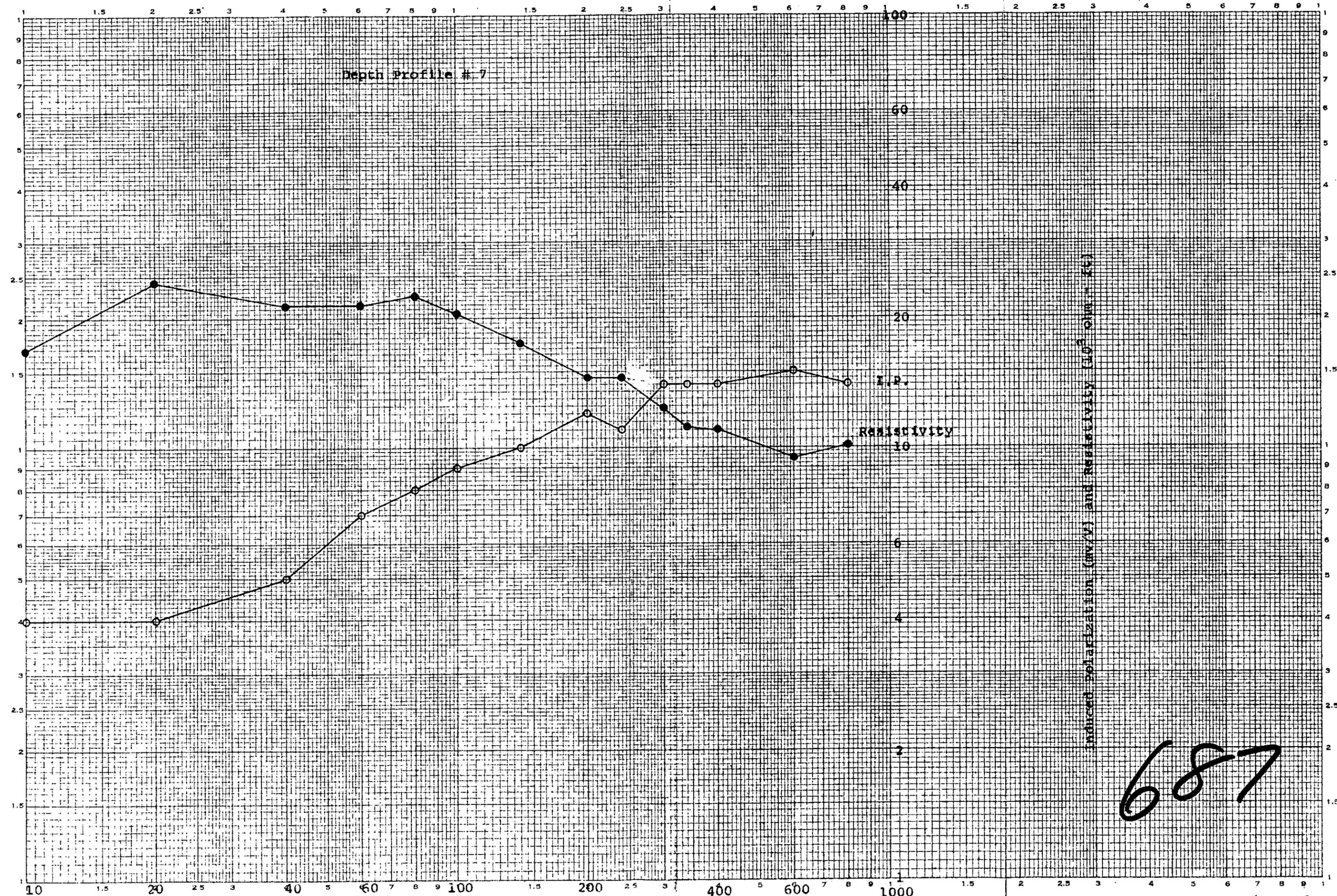


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Figure 2.

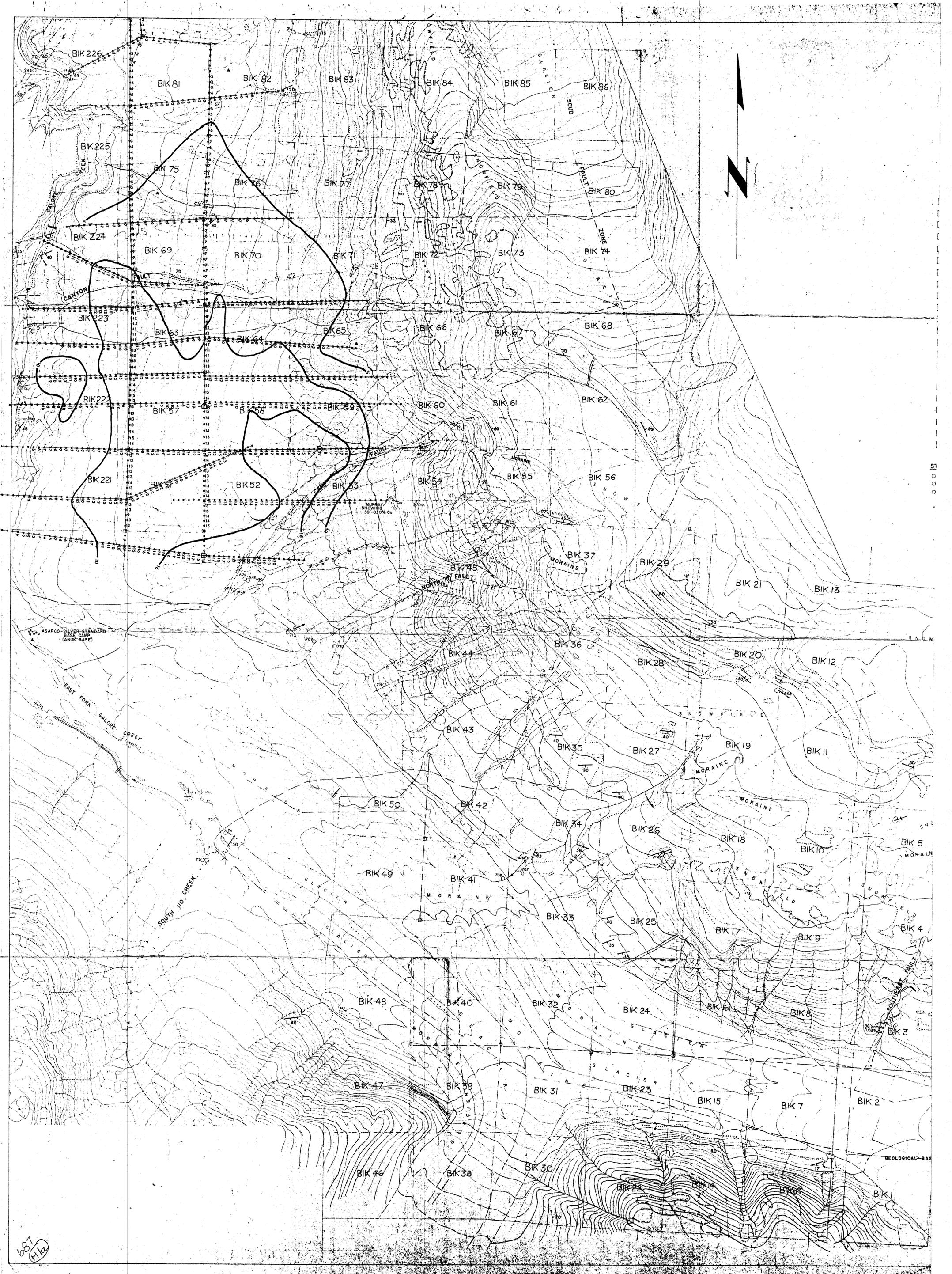
EUGENE DIETZEN CO.
NAGD, N. J. U. S. A.

NO. 3400-123 DIETZEN GRAPH PAPER
LOGARITHMIC
2 CYCLE X 3 CYCLE



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Figure 3.



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1/12

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S. N. G. W.

BIOLOGICAL-BAS



LEGEND

- OVERBURDEN
 - MORaine
 - SYENITE PORPHYRY
 - SYENO-DIORITE
 - LATE-SYENITE PORPHYRY DIKE
 - BASIC DIKE
 - FELSIC DIKE
 - AUGITE PORPHYRY BASALT
 - ANDESITIC VOLCANIC ROCKS
 - UNDIFFERENTIATED SEDIMENTARY ROCK
 - CALCAREOUS SHALE
- TRIASIC
- PROPYLITE
 - FAULT (DASHED-INFERRED)
 - BEDDING
 - ROCK CONTACT (DASHED-INFERRED)
- COPPER OCCURRENCE
- CHALCOPYRITE
 - BORNITE
 - PYRITE
 - MOLYBDENITE
 - MAGNETITE
 - SPHALERITE
- CLAIM POST
 - CLAIM LINE
 - GEOPHYSICAL SURVEY LINE
 - CLAIM BOUNDARY
 - DIAMOND DRILL HOLE COLLAR
 - HELICOPTER PAD

STREAM SEDIMENT SAMPLES - Cu, PPM

- 0-46
- 46-90
- 91-180
- 181-360
- 361-500
- 501-1000
- 1001-5000

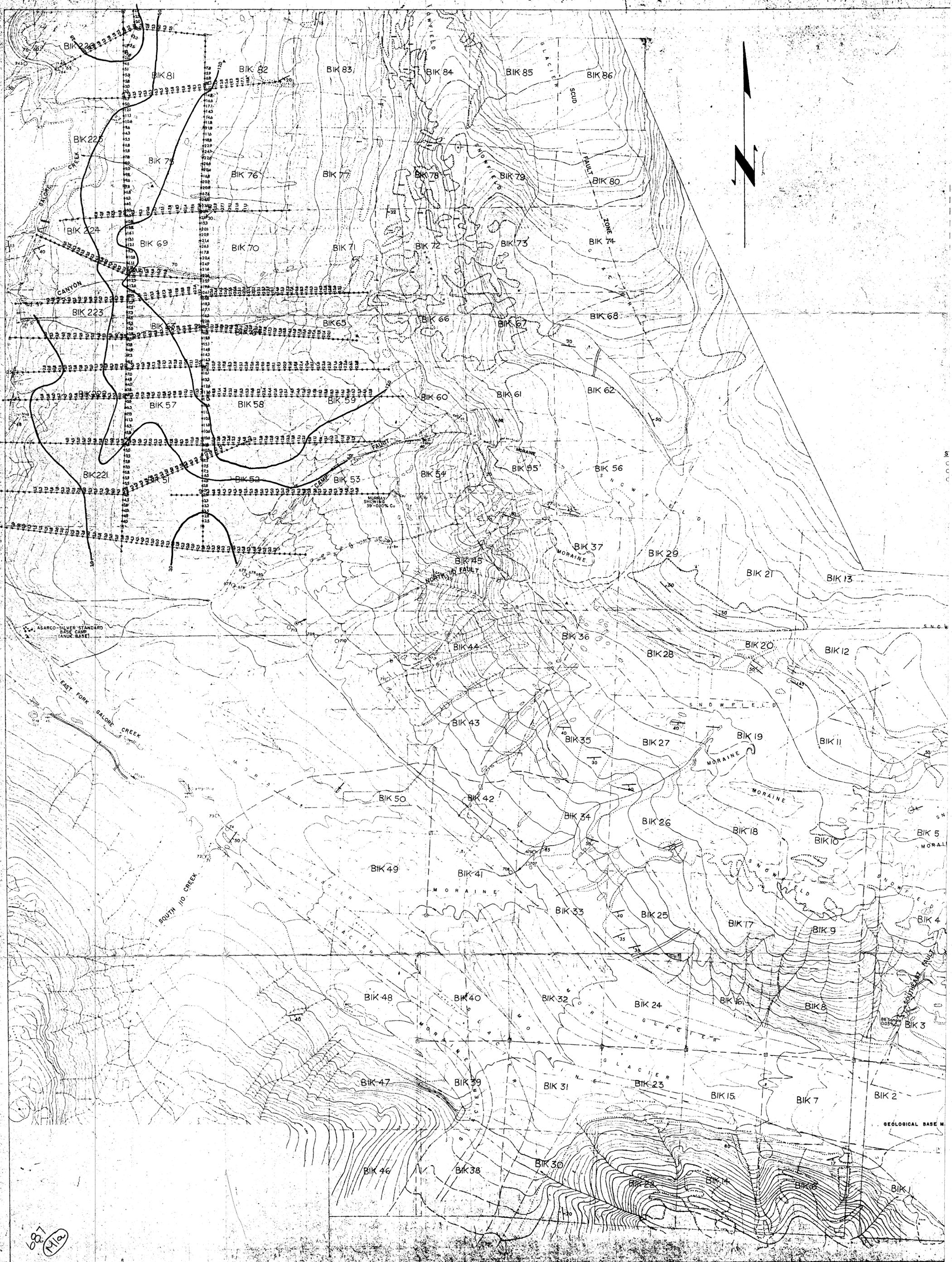
012 INDUCED POLARIZATION READINGS (millivolts/Volt)
 ⊕ DEPTH PROFILE-Location, Number and Direction

Department of
 Mines and Petroleum Resources
 ASSESSMENT REPORT
 NO. 687 MAP #1

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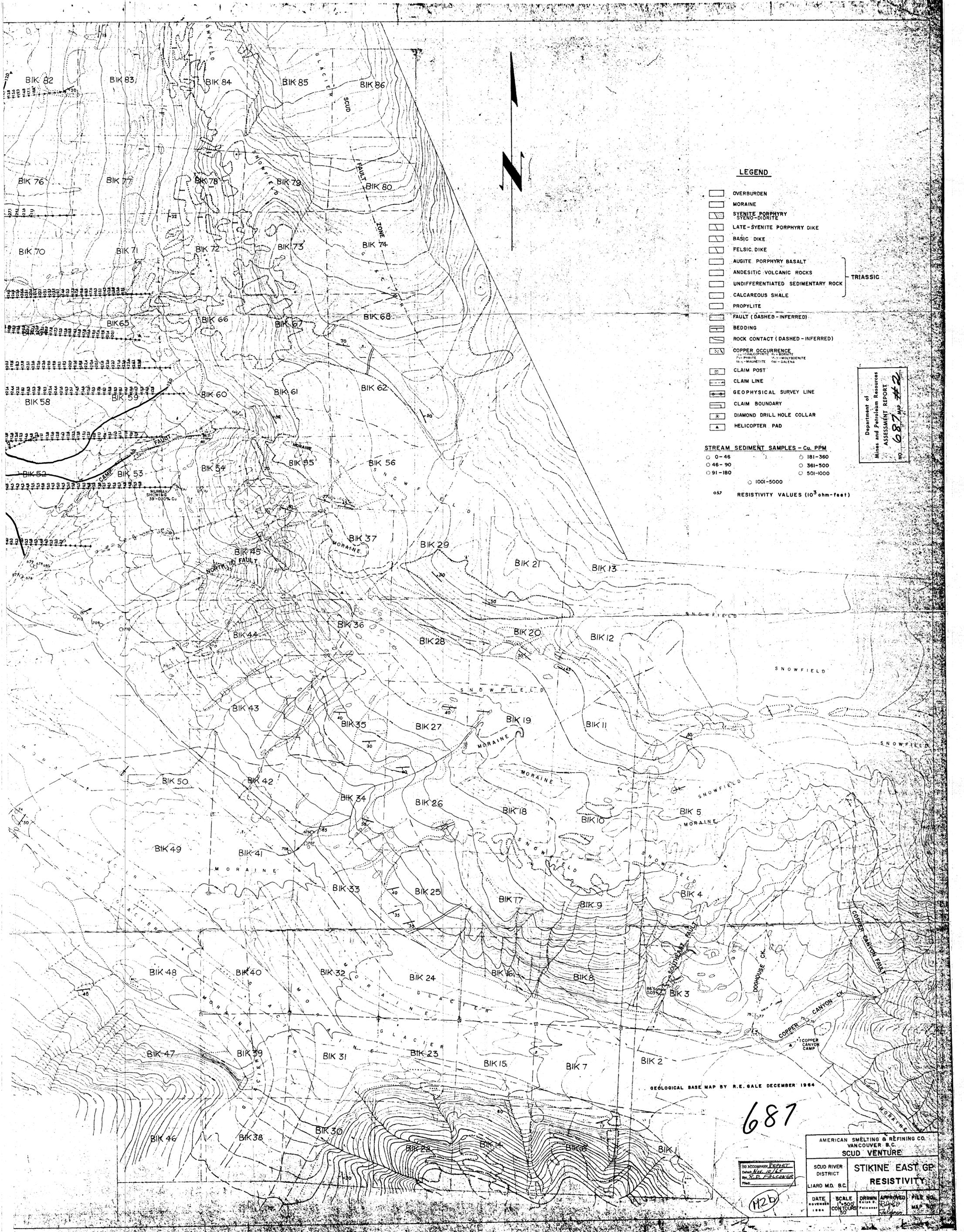
GEOLOGICAL-BASE MAP BY R.E. GALE, DECEMBER 1964

AMERICAN SMELTING & REFINING CO. VANCOUVER B.C.				
SCUD VENTURE				
SCUD RIVER DISTRICT	STIKINE EAST GP INDUCED POLARIZATION			
LIARD M.D. B.C.				
DATE	SCALE	DRAWN	APPROVED	FILE NO.
NOVEMBER 1964	1:50,000 CONTOURS 50'	R. D. FALCONER	R. D. FALCONER	MAP 687



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M12

GEOLOGICAL BASE M



LEGEND

- OVERBURDEN
- MORAINE
- SYENITE PORPHYRY STENO-DIORITE
- LATE-SYENITE PORPHYRY DIKE
- BASIC DIKE
- FELSIC DIKE
- AUGITE PORPHYRY BASALT
- ANDESITIC VOLCANIC ROCKS
- UNDIFFERENTIATED SEDIMENTARY ROCK
- CALCAREOUS SHALE
- PROPYLITE
- FAULT (DASHED-INFERRED)
- BEDDING
- ROCK CONTACT (DASHED-INFERRED)
- COPPER OCCURRENCE
CHALCOPYRITE, BORNEO
 PHOSPHATE, MOLYBDENITE
 MAGNETITE, CALAINE
- CLAIM POST
- CLAIM LINE
- GEOPHYSICAL SURVEY LINE
- CLAIM BOUNDARY
- DIAMOND DRILL HOLE COLLAR
- HELICOPTER PAD

STREAM SEDIMENT SAMPLES - Cu. PPM

- 0-46
- 46-90
- 91-180
- 181-360
- 361-500
- 501-1000
- 1001-5000

RESISTIVITY VALUES (10³ ohm-feet)

Department of
 Mines and Petroleum Resources
 ASSESSMENT REPORT
 NO. 687 MAP # 2

GEOLOGICAL BASE MAP BY R.E. GALE DECEMBER 1984

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AMERICAN SMELTING & REFINING CO. VANCOUVER B.C.				
SCUD VENTURE				
SCUD RIVER DISTRICT	STIKINE EAST GP			
LIARD M.D. B.C.	RESISTIVITY			
DATE	SCALE	DRAWN	APPROVED	FILE NO.
NOVEMBER 1984	1"=500' CONTOURS 50'	R.P. FALEOGAS	R.P. FALEOGAS	MAP #

TO ACCOMPANY REPORT
 Dated Nov 10/84
 by R.P. FALEOGAS
 Plan

M2b