

2779

REPORT ON THE INDUCED POLARIZATION

AND RESISTIVITY SURVEY

ON THE

ARON AND FLY CLAIM GROUP
(Gibbons Creek)

HORSEFLY LAKE AREA B. C.

FOR

SILVER STANDARD MINES LTD.

BY

ROBERT E. CHAPLIN, P. Eng.

RALPH G. CURRIE

LOCATION OF PROPERTY:

ARON AND FLY CLAIM GROUPS
SOUTHEAST QUADRANT OF
LATITUDE 5°N LONGITUDE
121°W QU

CARIBOO MINING DIVISION B. C.

WORK DONE

JULY — JULY 1970

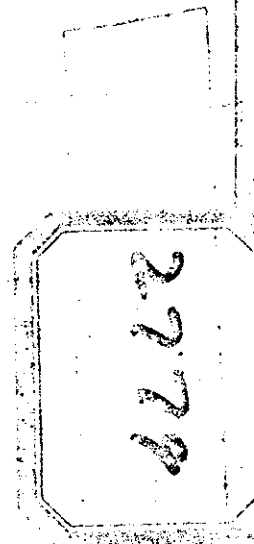


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IN FOLDER AT BACK OF REPORT

- 1 PLAN VIEW - APPARENT RESISTIVITY
- 1 PLAN VIEW - PERCENT FREQUENCY EFFECT
- 2 SHEETS - PROFILES OF LINES 1 to 6
APPARENT RESISTIVITY AND
PERCENT FREQUENCY EFFECT

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO 2777 MAP

LOCATION

The ARON and FLY mineral claims are located approximately six miles east of the Village of Horsefly in the Cariboo Mining Division.

ACCESS

Access to the property is gained by four-wheel drive vehicle over a three mile trail which connects with the Williams Lake-Horsefly Lake all-weather road.

OWNERSHIP

The mineral claims are either held under option agreement with independent prospectors or are held by Silver Standard Mines Ltd. (N.P.L.)

<u>CLAIM NAME & NO.</u>	<u>RECORD NO.</u>	<u>RECORDING DATE</u>	<u>RECORDED OWNER</u>

HISTORY

The immediate environment, which consists of a diorite stock in contact with Jurassic volcanics, was selected for reconnaissance prospecting by Taylor-Helicon British Columbia Explorations in the summer of 1965. Since that time the area has been prospected and soil sampled. It has in part been surveyed by magnetometer, induced polarization techniques

and some bulldozer stripping.

PROCEDURE FOR INDUCED POLARIZATION
RECONNAISSANCE SURVEY

A Geoscience Inc., frequency domain, induced Polarization unit performed 11 line-miles of pole-dipole, 400 foot traverses at approximately 1500 foot intervals.

Stainless steel electrodes were used and field voltages were measured through super-saturated copper sulphate solutions in porous pots. All self potentials were easily bucked. Applied currents commonly ranged between 0.2 and 0.75 amperes.

The percent frequency effect (P.F.E.) was calculated by subtracting both transmitter deviations and a daily receiver-transmitter calibration constant from the obtained receiver deviation.

$$PFE = Rdev - Tdev - Rcal$$

A frequency range of 3.0 to 0.1 cycles per second WGS used.

Transmitter deviations were 1.0 per cent or less, and commonly ranged between 0.1 and 0.5 percent.

Apparent resistivities were calculated and plotted in ohm-meters:

$$\rho_a = 2 \pi L (K) \frac{V}{I}$$

RESULTS

Previous surveys in the area indicate that the background P.F.E.'s at unimineralized diorite and volcanics are in the range 1.0 - 3.0 percent. Resistivities tend to vary from 150 to 1500 ohm-meters with topographically high and rocky ground being the most resistive.

A zone of I.P. response is observed in the northern portion of the survey area. P.F.E. values significantly above background (greater than 4.0 in this case) are observed on

- LINE 1 from 30N to 50N
- LINE 2 from 34N to 56N
- LINE 3 from 42N to 66N
- LINE 4 from 46N to 62N
- LINE 5 from 46N to 50N

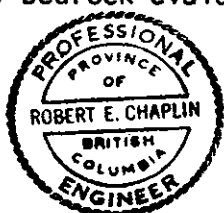
The anomalous area trends east, north-east measuring 1800 feet by 8000 feet and is open to the west. The area has associated resistivities in the 500 to 2000 ohm-meter range. The remainder of the surveyed area shows only normal resistivities and background (P.F.E.'s) of 3.0 percent or less.

CONCLUSIONS

The anomalous feature is most probably associated with bedrock because of the high resistivities and the presence of outcrop in the anomalous region. The feature is on the northern edge of an intrusive complex and is probably associated with a contact phenomena.

RECOMMENDATIONS

The type of sulphides associated with the I.P. feature can be determined by bedrock evaluation and soil sampling.



Robert E. Chaplin P. Eng.

*Ralph G. Currie
July 15/70*

July 15/70

QUALIFICATIONS OF SUPERVISORY PERSONNEL

ROBERT E. CHAPLIN, P. Eng.

Registered Professional Engineer of the Province of British Columbia.

Graduate in Geological Engineering from the University of British Columbia, 1959.

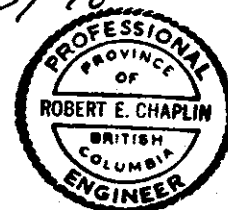
Eighteen years experience in mineral exploration.

Six years experience in owning and operating I.P. unit (used in survey)

Robert E. Chaplin, P.Eng.

Robert E. Chaplin

July 15/70



RALPH G. CURRIE, M.Sc.

B.Sc. (Honours Physics and Geophysics), 1965 and a M.Sc. (Geophysics), 1967, both from the University of British Columbia.

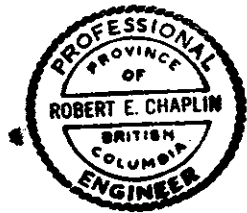
Three years experience as party chief on various types of geophysical exploration surveys.

Ralph G. Currie

July 15/70

COSTS OF I.P. SURVEY

Equipment rental and Party Chief: 7 days @ \$200.00/day	\$1,400.00
28 man-days @ \$20.00/day B. Charlton N. Bullar J. Severin M. Galbraith	560.00
Wire: 11 miles @ \$40.00/mile.	440.00
Preparation of report and drafting	200.00
Truck rental: 7 days @ \$10.00/day	70.00
Room and board: 9 days @ \$10.00/day	90.00
Mobilization-Demobilization	230.00
Miscellaneous supplies	<u>42.57</u>
TOTAL	<u><u>\$3,032.57</u></u>

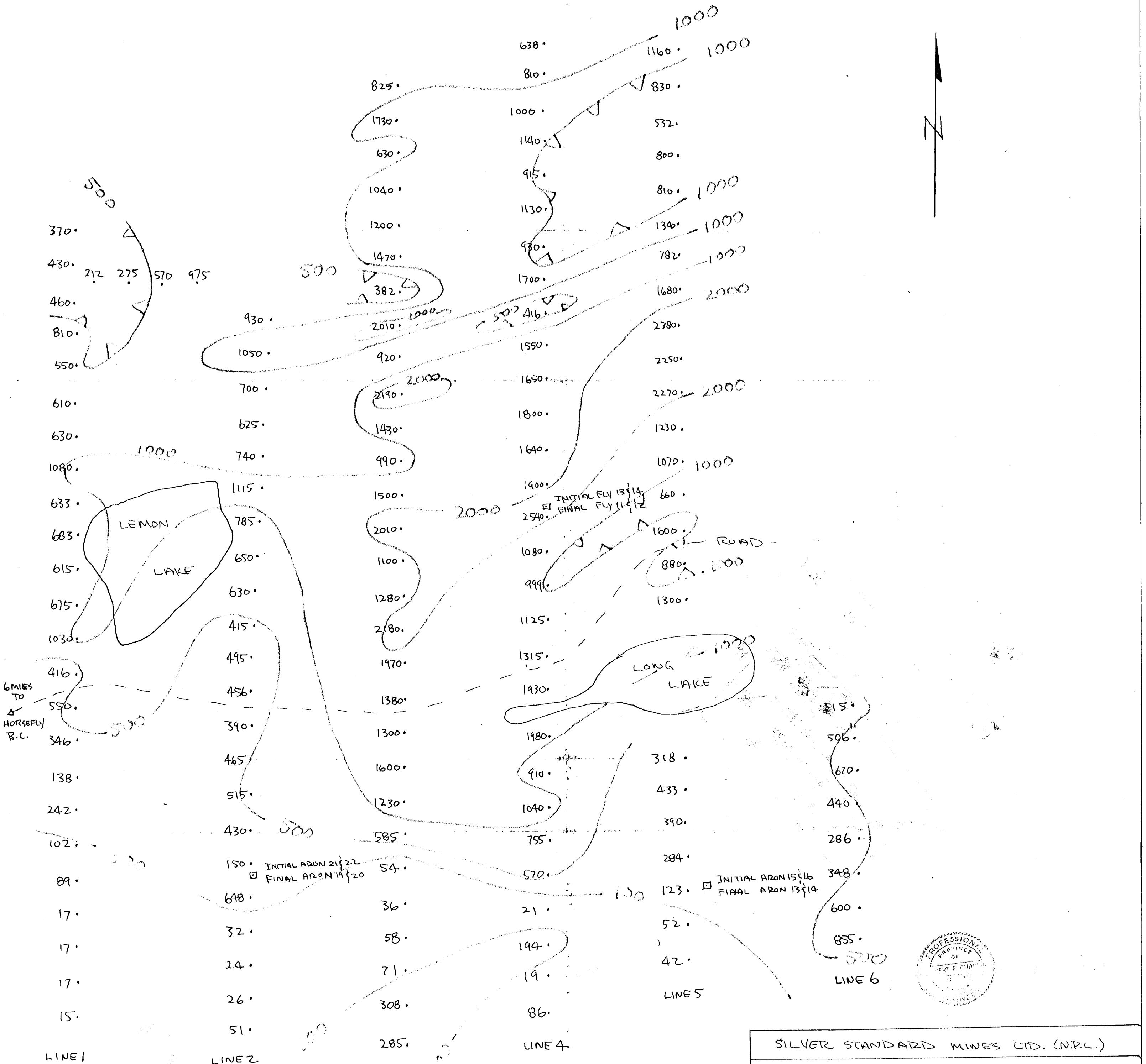


Declared before me at the City
 of Vancouver, in the
 Province of British Columbia, this 27
 day of November 1970, A.D.

[Handwritten Signature]

[Handwritten Signature]
 A Commissioner for taking affidavits within British Columbia
 A Notary Public in and for the Province of British Columbia.

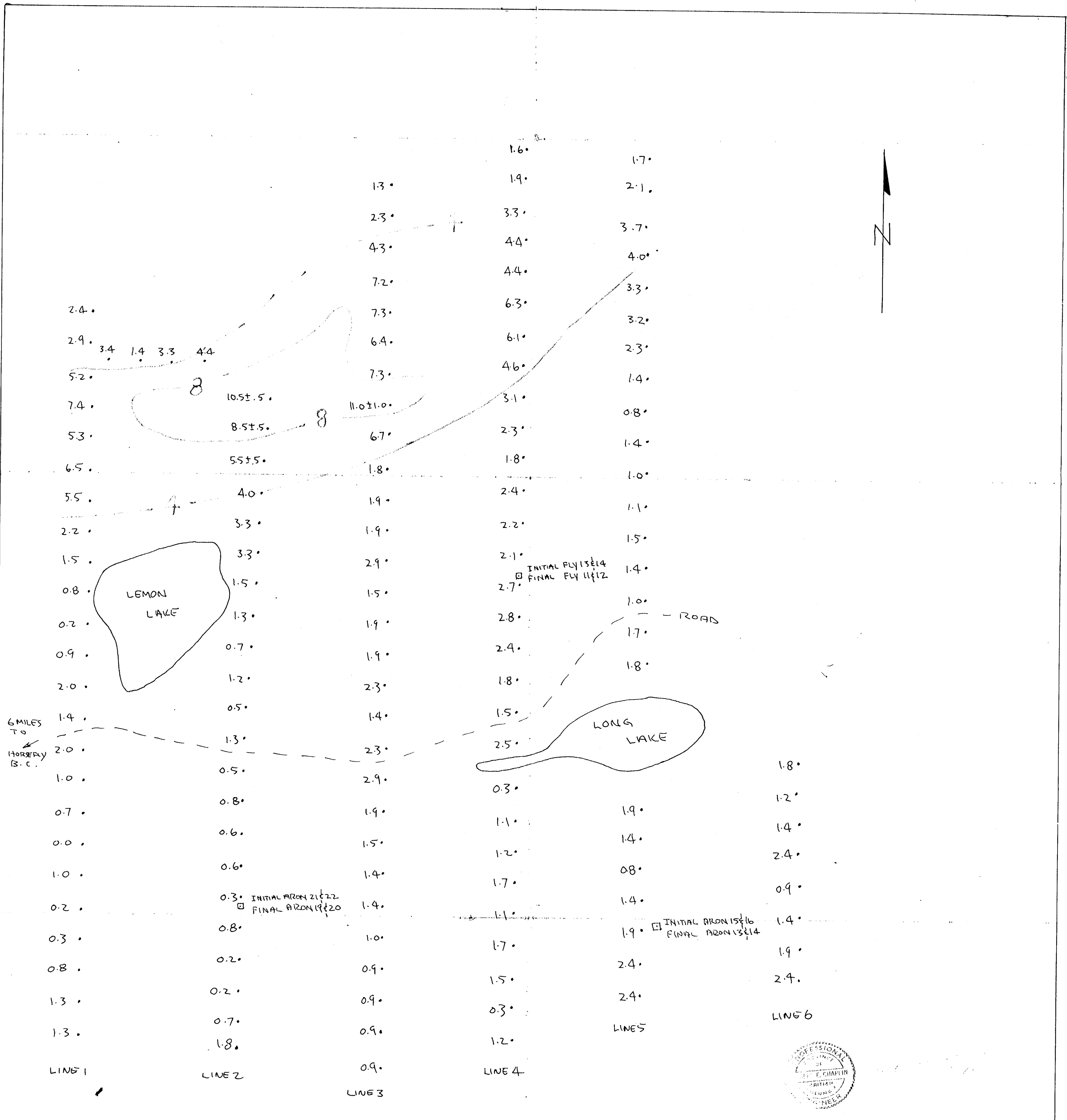
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 Sub-Mining Recorder



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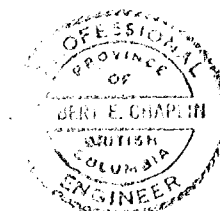
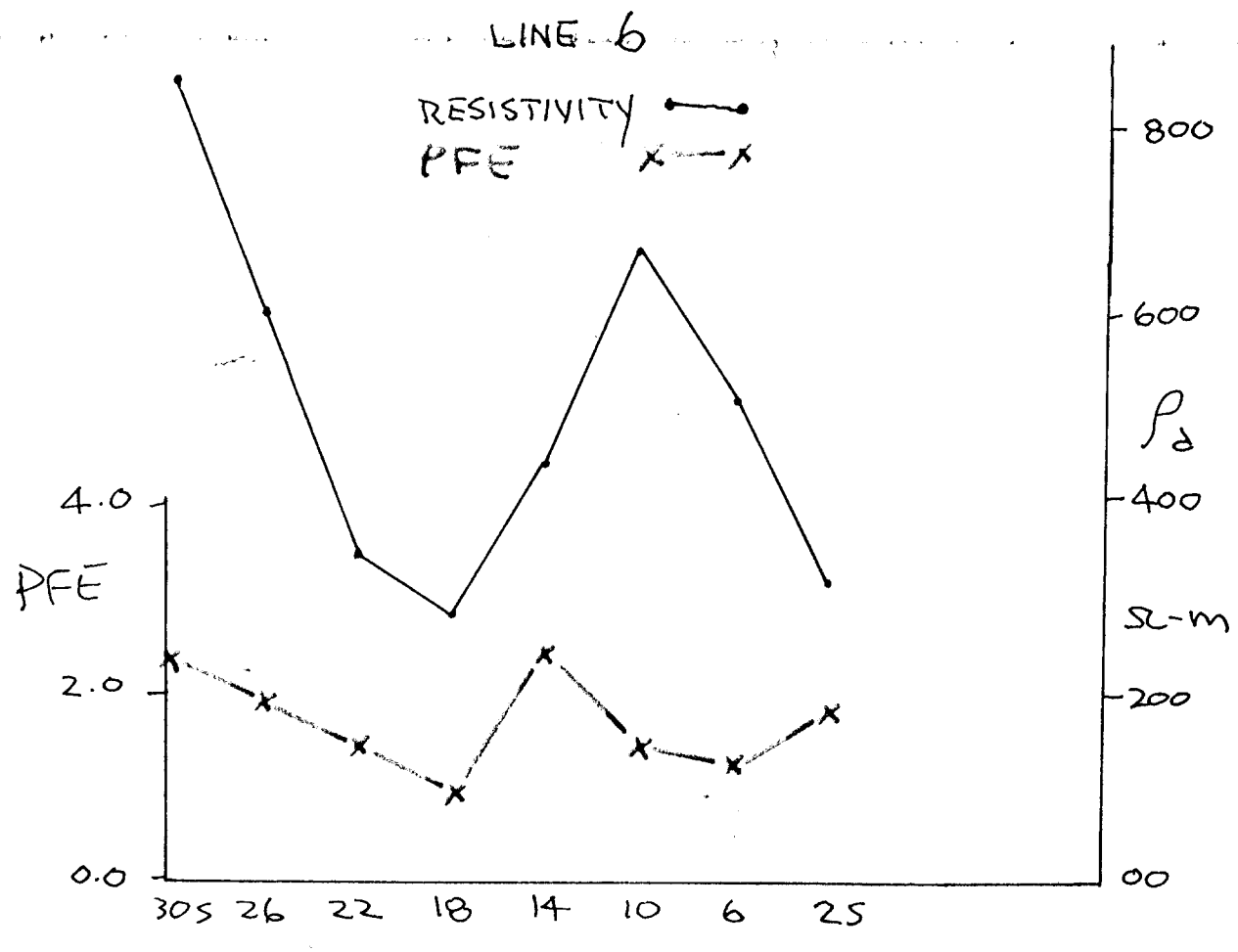
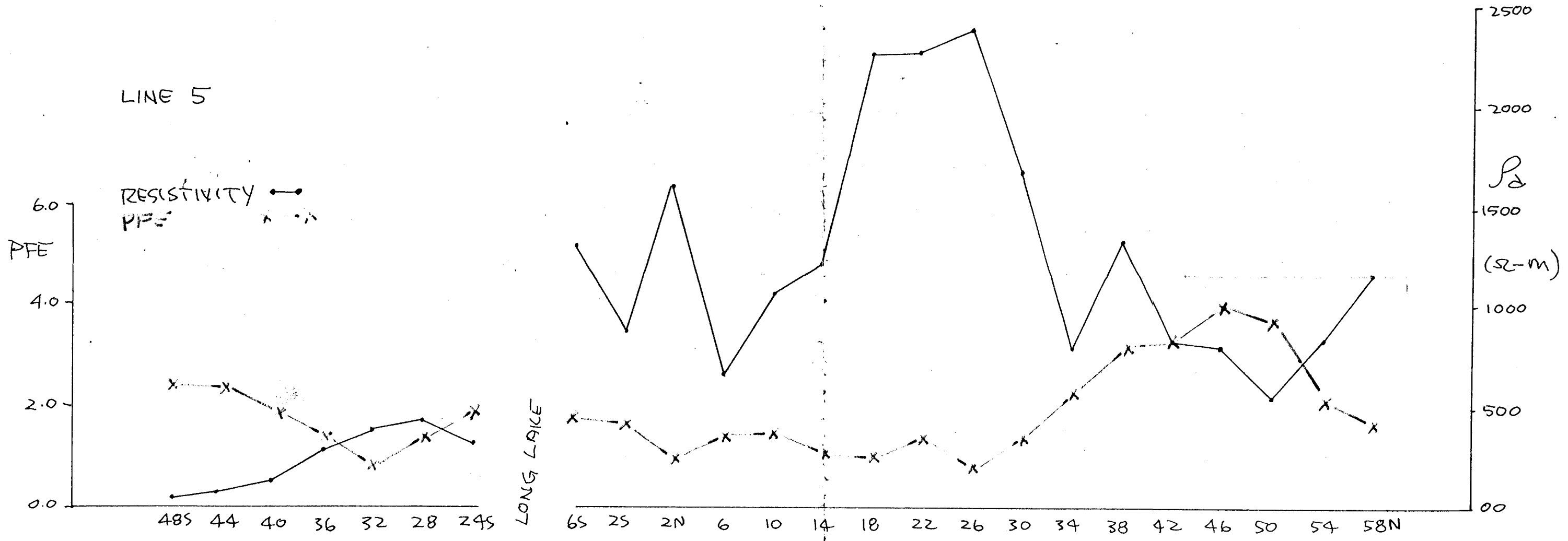
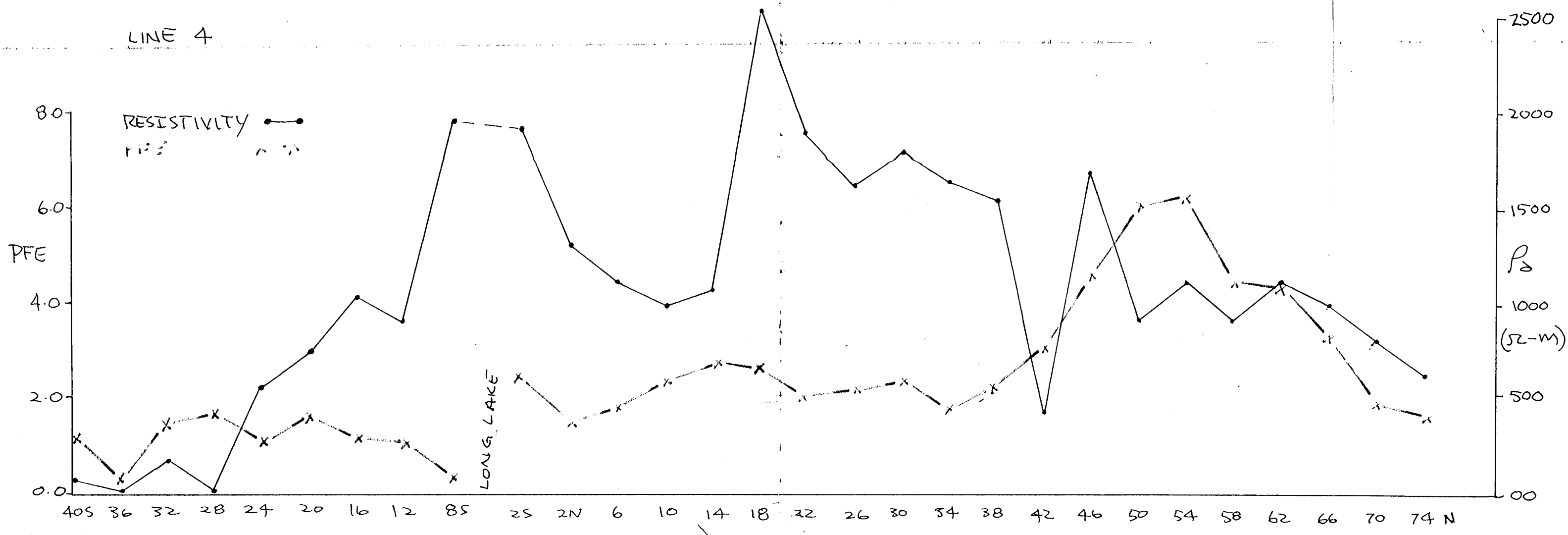
Ralph G. Currie

SILVER STANDARD MINES LTD. (N.P.L.)	
INDUCED POLARIZATION SURVEY GIBBONS CREEK - CARIBOO MINING DIV.	
APPARENT RESISTIVITY (OHM-METERS)	
survey performed by PROFESSIONAL GEOLOGICAL SERVICES LTD.	
1" = 800 feet	drawn by R.G.C. July 19, 1970



2779 M-2 *Ralph G. Currie*

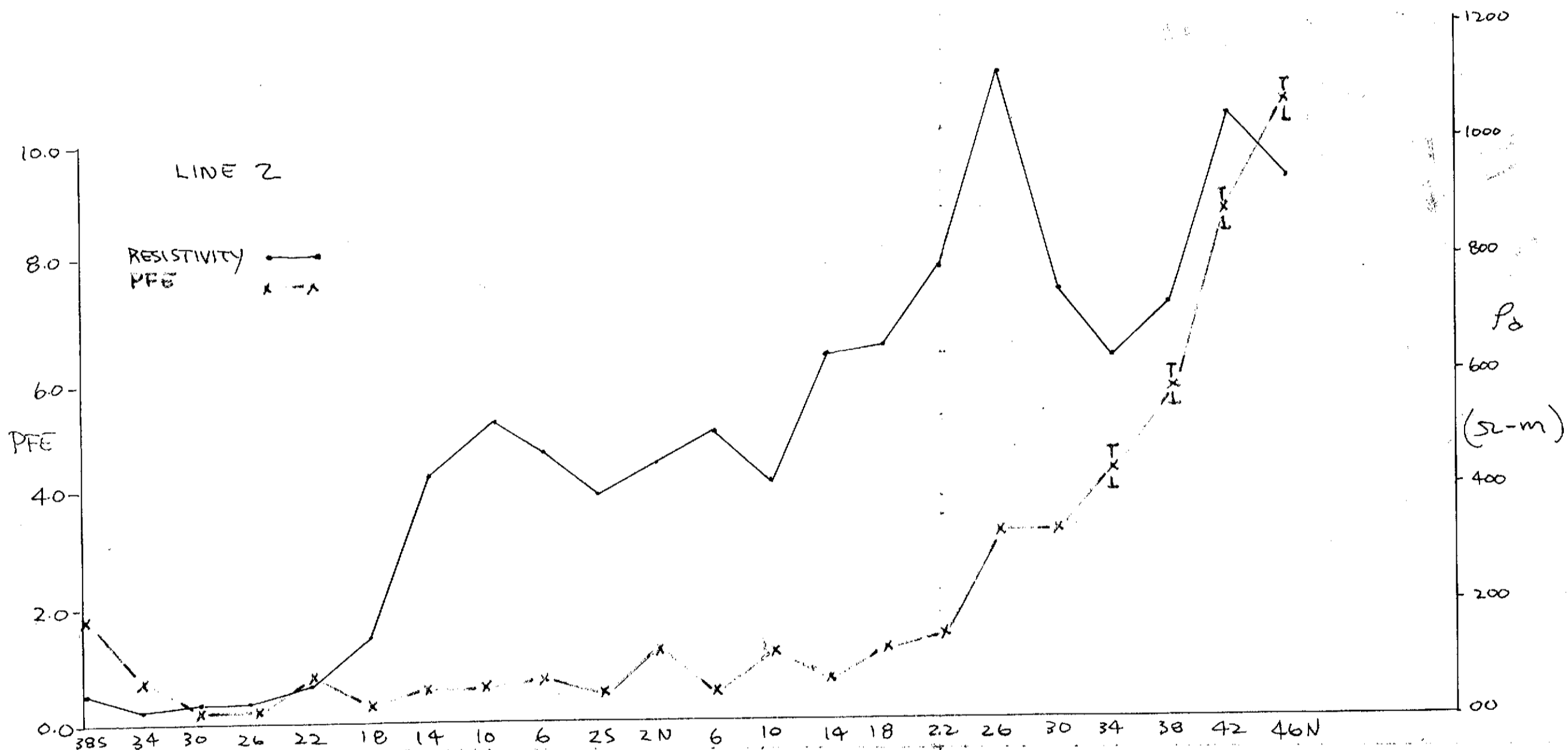
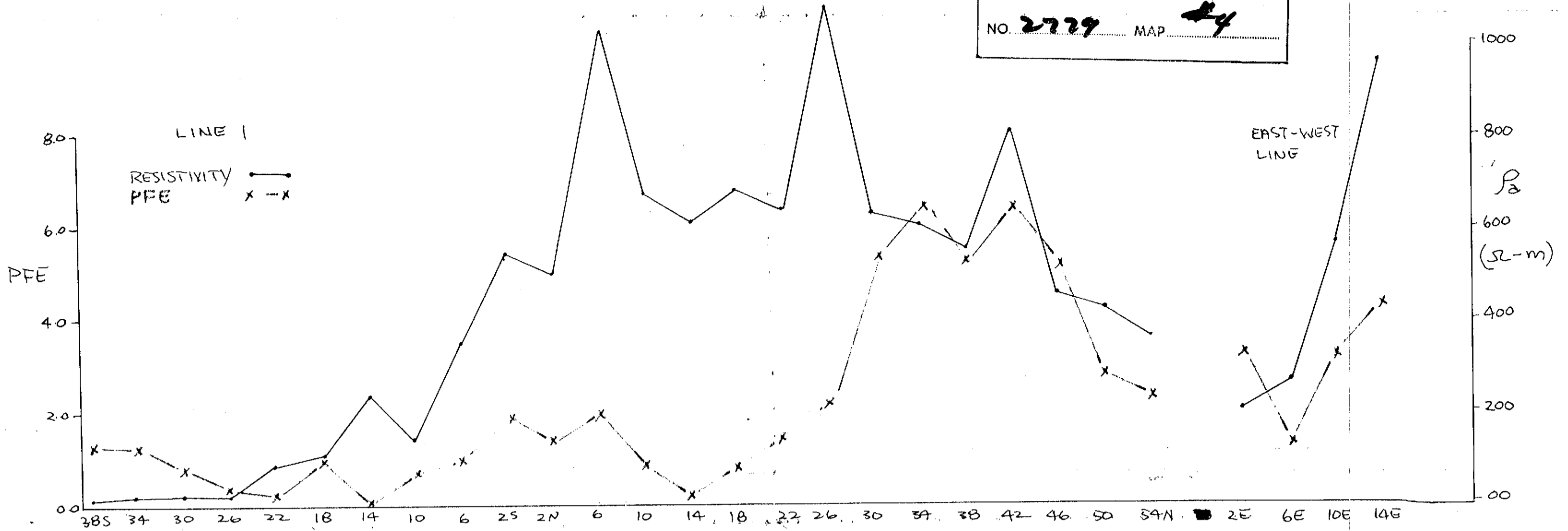
SILVER STANDARD MINES LTD. (N.P.L.)	
INDUCED POLARIZATION SURVEY GIBBONS CREEK - CARIBOO MINING DIVISION	
PERCENT FREQUENCY EFFECT 3.0 - 0.1 CPS	
SURVEY PERFORMED BY PROFESSIONAL GEOLOGICAL SERVICES LTD.	
1" = 800 feet	drawn by R.G.C. July 19, 1970



Ralph G. Currie

SILVER STANDARD MINES LTD. (N.P.L.)	
INDUCED POLARIZATION SURVEY	
GIBBONS CREEK - CARIBOO MINING DIV.	
PROFILES - LINES 4, 5, & 6	
PERCENT FREQUENCY EFFECT (3.0-0.1 cps)	
APPARENT RESISTIVITY (OHM-METERS)	
survey performed by	
PROFESSIONAL GEOLOGICAL SERVICES LTD.	
1" = 800 feet	drawn by R.G.C. July 19, 1970

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SILVER STANDARD
MINES LTD (N.P.L.)

I. P. SURVEY
GIBBONS CREEK
CARIBOO MINING DIV.

PROFILES-LINES 1, 2 & 3
PERCENT FREQUENCY
EFFECT (3.0 - 0.1 CPS)
APPARENT RESISTIVITY
(OHM-METERS)

Survey performed by:
PROFESSIONAL GEOLOGICAL
SERVICES LTD.

1" = 800 feet
drawn by R.G.C.
July 19, 1970

Ralph G. Currie

2779 M.4

