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MINISTRY OF ENERGY, MINES
AND PETROLEUM RESOURCES
MAR 6 1981
MINERAL TITLES FILE ROOM

Mr. Ray Rutherford
CHIEF GOLD COMMISSIONER
Ministry of Mines, Energy,
and Petroleum Resources
Parliament Buildings
VICTORIA, B.C. V8V 1X4

March 4, 1981

Dear Mr. Rutherford:

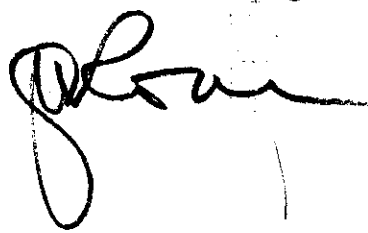
GEOPHYSICAL ASSESSMENT REPORT
on
KATI 1 (728) Mineral Claim
ALBERNI MINING DIVISION
92C15W

MINERAL RESOURCES BRANC.
ASSESSMENT REPORT
8919
NO.

May I take the liberty of mailing your office two copies of my report on geophysical assessment work (EM16) done on the Kati 1 mineral claim. This work was filed in Vancouver office in early February by Mr. D.M. Fahey. I am sending a copy of this letter to Mr. Mundell at Port Alberni office.

Yours truly,

Gerhard von Rosen, P. Eng.



ASSESSMENT

GEOPHYSICAL

REPORT

[EM 16]

ON THE

KATI 1 (728) MINERAL CLAIM

SARITA RIVER AREA

Bamfield, British Columbia

ALBERNI MINING DIVISION

48 55'N & 124 57'W

92C15W

FOR

D. M. FAHEY

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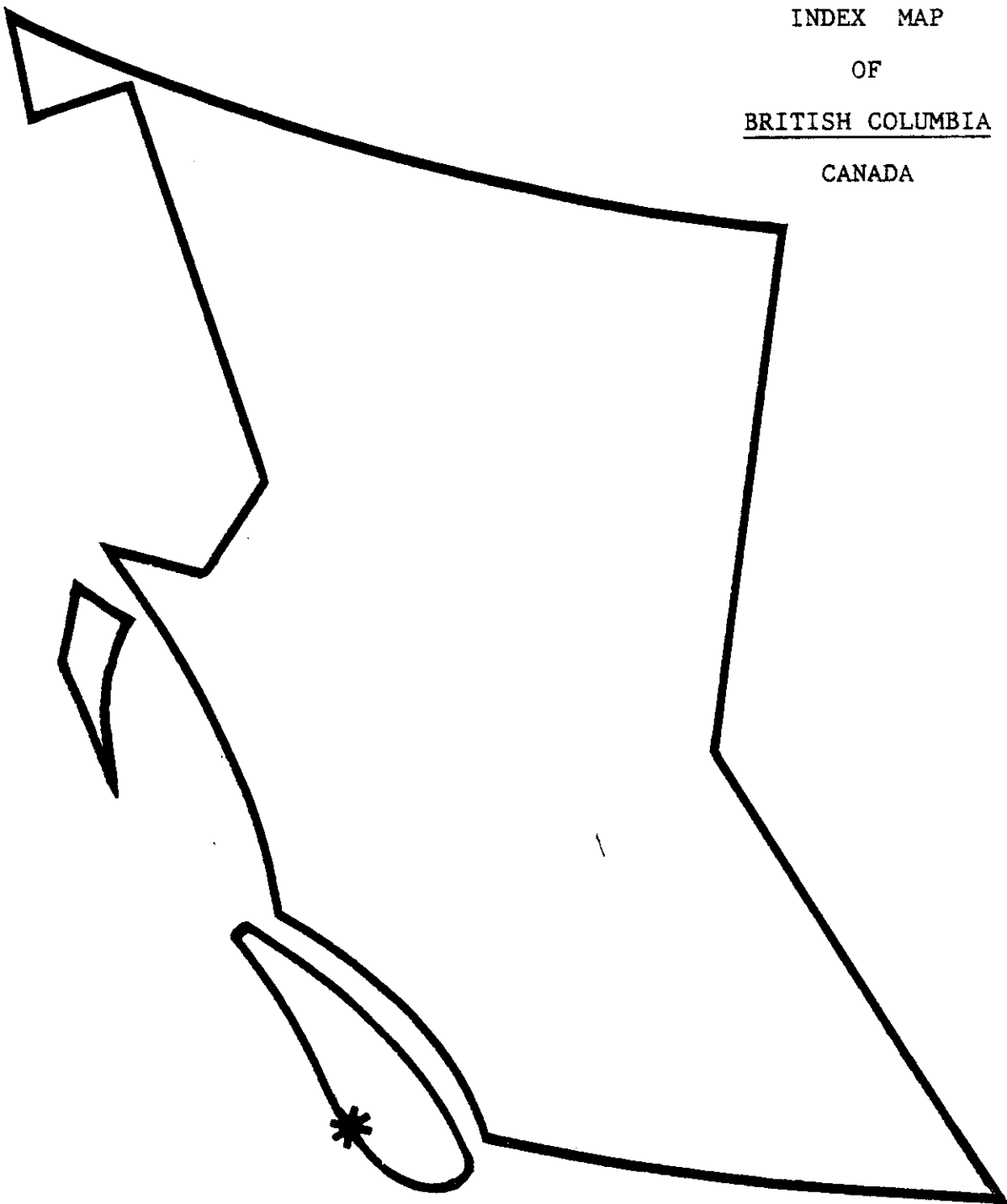
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FIGURE "A"

INDEX MAP
OF
BRITISH COLUMBIA
CANADA



INTRODUCTION

This report describes a ground-electromagnetic survey (VLF-EM) performed over a portion of Kati 1 [728(2)] mineral claim by Ralph A. Nelson between January 29 and February 2, 1981.

LOCATION

The property lies on the southern slopes of Mt. Blenheim, in the Sarita River area, near Bamfield, B.C., near tide-water west of Port Alberni, British Columbia.

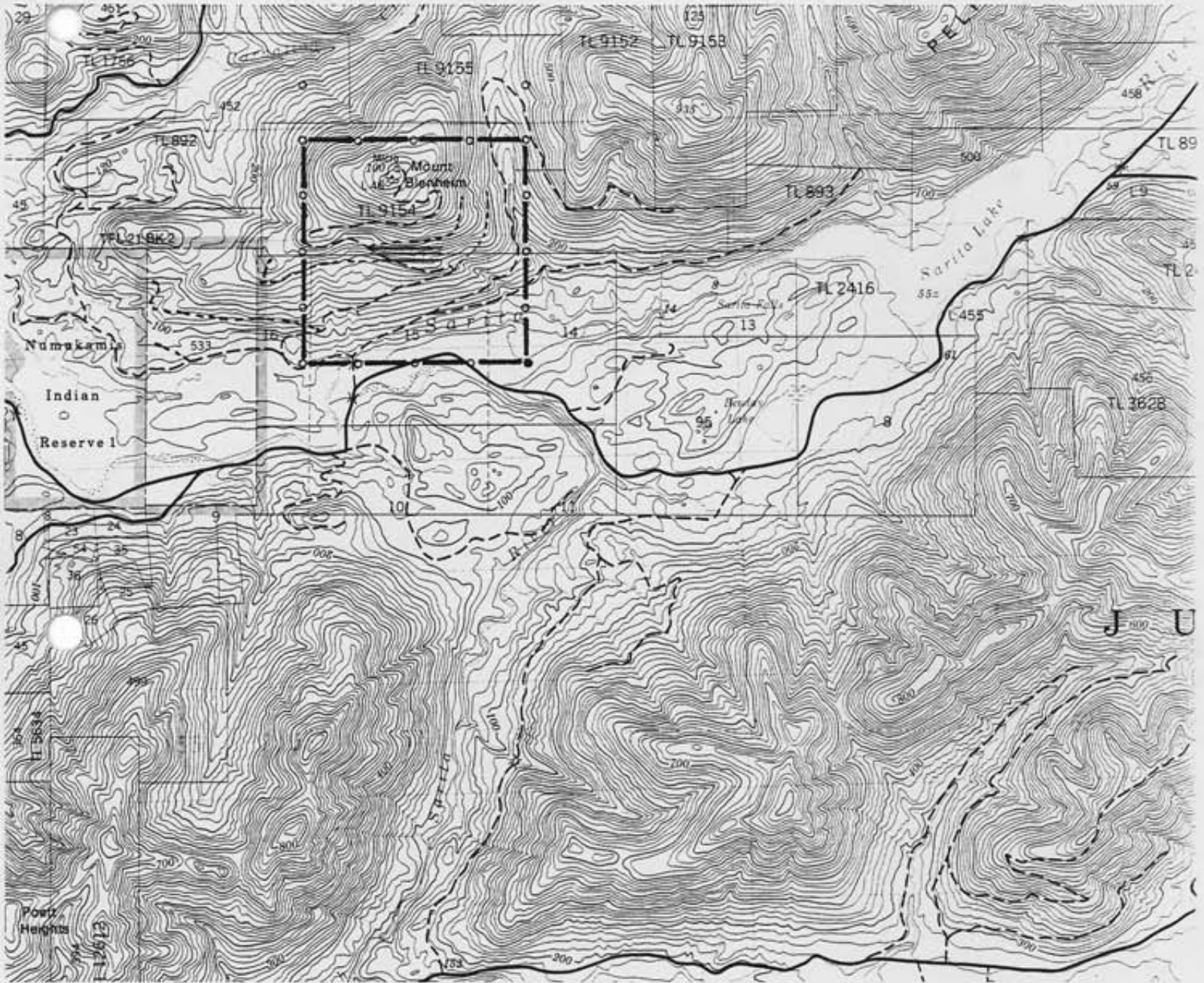
The Sarita River area is reached by traveling on gravel logging company roads westerly from Port Alberni, a distance of about 130 kilometers of graded main-haulage road to within a short distance of Bamfield.

The property either adjoins to the east, or coincides with a block of two-post claims held by Gold Angel Resources Ltd., depending on the source of information.

Several logging roads, as well as a supply road to the micro-wave tower on top of Mt. Blenheim traverse the claims area.

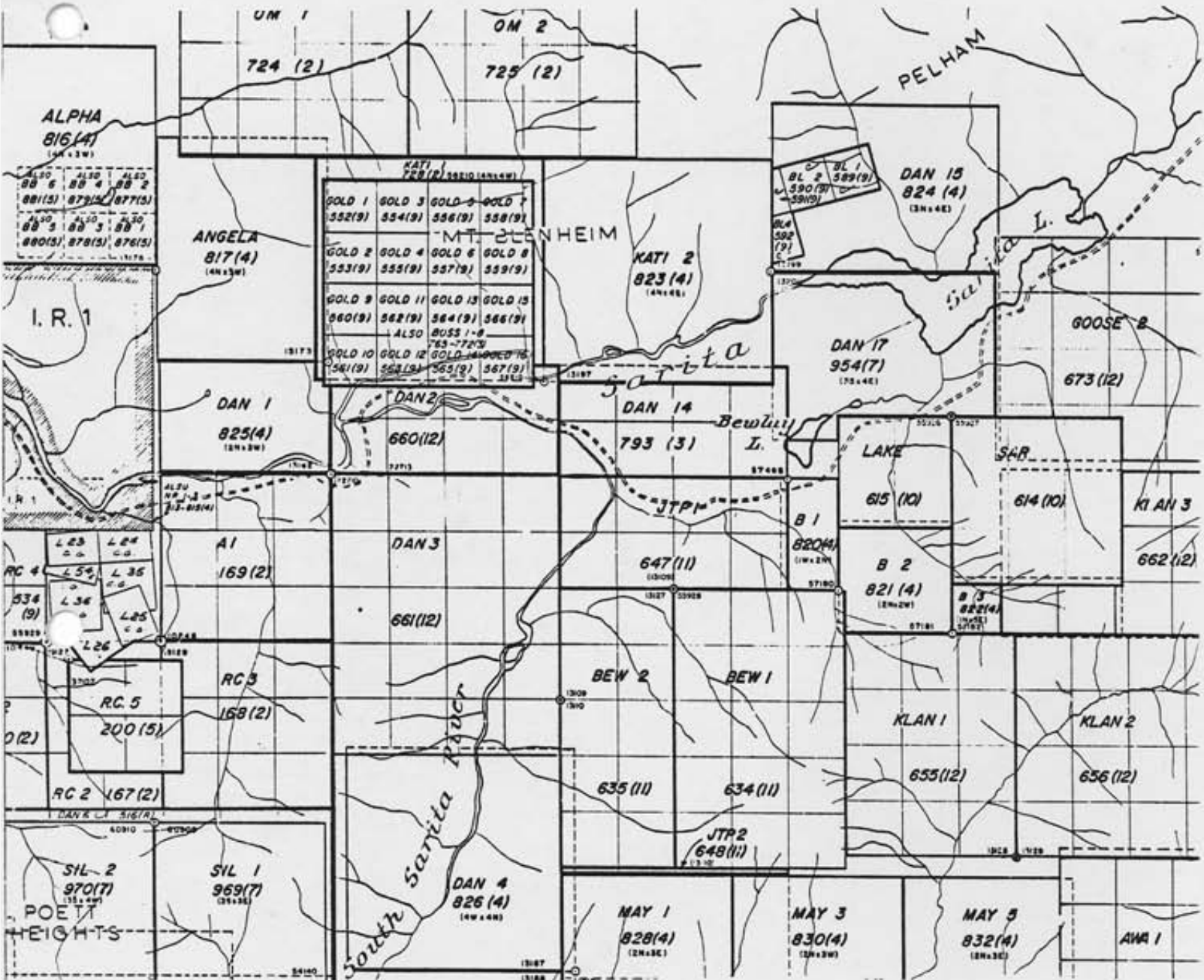
INSTRUMENTATION

A Geonics EM 16 instrument was employed tuning into Jim Creek, Washington (Seattle) station NPG at 18.6 kHz.



GROUND VLF - EM SURVEY
KATI 1 (728) m.c.
SARITA RIVER AREA
Alberni Mining Division
92 C 15 W

FIGURE 1
TOPOGRAPHY
&
ACCESS



GROUND VLF - EM SURVEY
 KATI 1 (728) m.c.
 SARITA RIVER AREA
 Alberni Mining Division
 92 C 15 W

FIGURE 2

MAP
 OF
 CLAIMS

GEOLOGY

The claims area lies about 3 kilometers northeast of the crown grants of **Nomad Mines Ltd.** which have recently caused staking activity in the area due to reported gold values in numerous bore holes. Recently **Gold Angel Resources Ltd.** have announced results of a field program which culminated in the discovery of apparently overlapping copper-geochemical and EM16 anomalies. It has been reported that these anomalies occur geographically in the area claimed by the southern-most units of the Kati 1 claim.

J.E. Muller (1977) in the B.C. Department of Mines Open File #463 maps a contact of Jurassic 'Island Intrusives' [Jg] with Jurassic 'Bonanza volcanics' [I_B] (to the north) transecting the claims area in an east-west direction along the south-slope of Mt. Blenheim.

The present survey was undertaken to delineate, if possible zones of conductivity, such as reportedly found to the south of the present area, which may help pin-point further exploration targets, especially when compared with the work of Gold Angel to the south.

SURVEY METHOD

The survey area was chosen to add-to and not duplicate the region covered by Gold Angel. Yet because structure, as well as contacts appear to run more east-west than north-south, a grid elongated parallel to the previous survey was chosen, especially if it could add to the

information so gained. Mr. Nelson located himself in the field by taking distances from the topographic map and finding proper logging roads.

Survey lines were run east-west by looping method, using compass, thread-measuring device, and hanging flagging for stations.

The line spacing was 20 meters. The station spacing was 10 meters. Jim Creek, Washington (NPG) came in at 103 degrees Azimuth. In-Phase (percent) and Quadrature (percent) readings were taken at 193 degrees Azimuth.

The reading direction enhances discernment of conductors trending east-westerly, because the orientation of the primary radio frequency field is almost east-west. Due to the elongation of the grid in the east-west direction, the optimum Fraser filter direction (north-south) could not be employed.

When Fraser filtering was applied in the east-west direction, one major anomaly was discovered running at about 135 degrees Azimuth.

RESULTS OF SURVEY

One northwesterly-trending zone of higher than average conductivity was discovered as a result of this VLF-EM survey. This survey was intended to add to a reportedly-run VLF-EM program covering a portion of the valley floor, and the hillside, to the south of the presently reported grid. There appears to be a gap between the grids. The southern survey is reported to have discovered a strong anomalous zone trending northeasterly. It appears that the anomaly discovered in this program may be at right angles to that found to the south. Furthermore, the anomaly seems to coincide with the valley

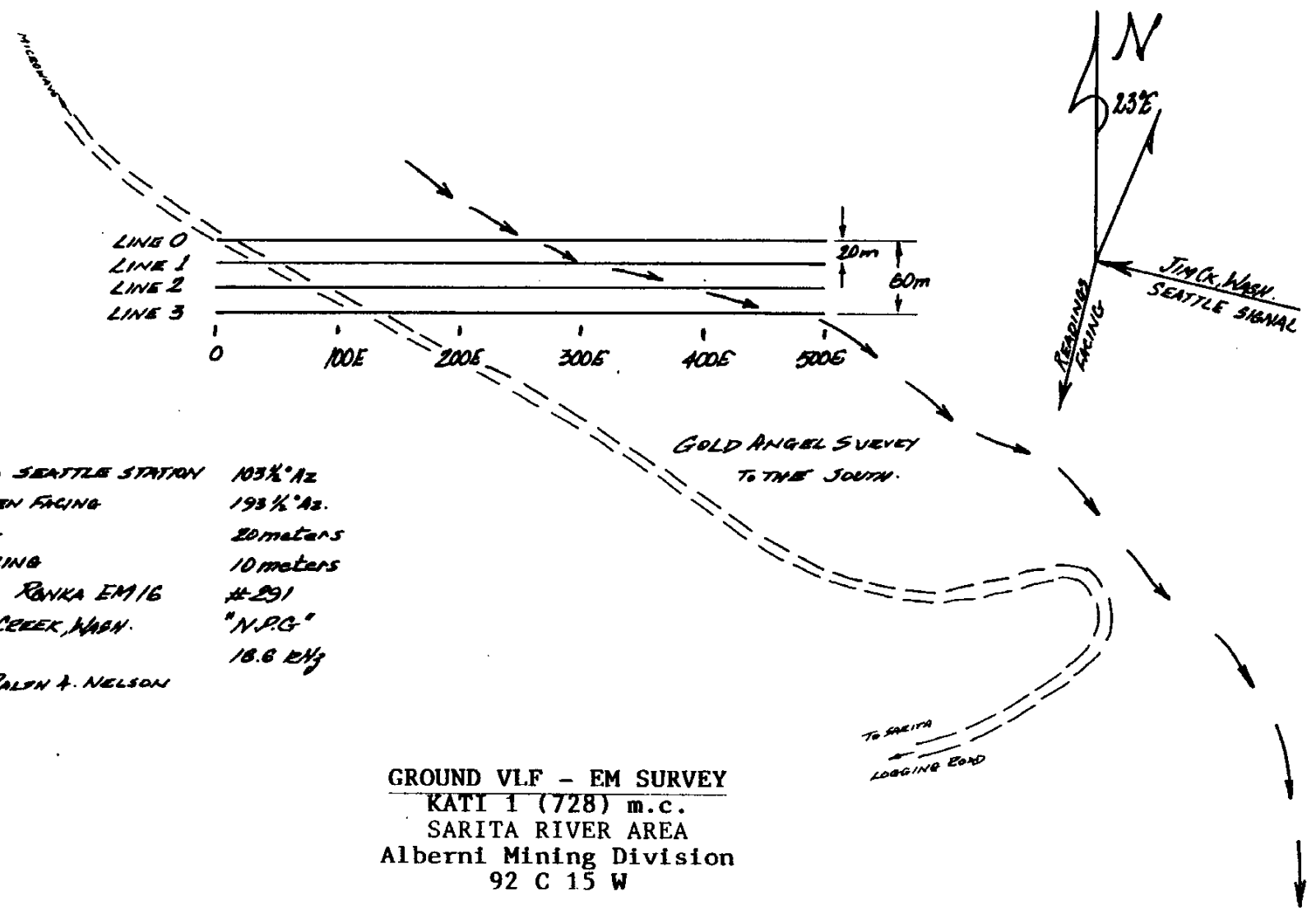
of a southeasterly-running creek. It is likely that the creek represents a fault zone. If this is the case, then the cause of the conductive anomaly is probably related to the water-soaked fault gouge, rather than economic mineralization. The writer did filter the Quadrature values, and did not find a close 90 degree phase shift between it and the In-Phase values. Indicating a not-so clear cut fault conductivity phenomenon.

In-Phase and Quadrature values are changing towards the east end of the survey. This may indicate a change in topography, and/or a change in rock type towards the east.

CONCLUSIONS

The survey discovered a narrow northwesterly trending anomaly which is probably related to presumed fault which is now being followed by a creek. The chance of finding a commercially interesting conductor is meagre, however stream sediment sampling of the fault incision farther down the hill should relieve most doubt in this matter.

There is either a rock type change towards the northeast, or a change in topography. A short traverse in that direction with geochemical sampling and geological mapping would elucidate the matter.



DIRECTION TO SEATTLE STATION 103 1/2° Az
 READINGS TAKEN FACING 198 1/2° Az.
 LINE SPACING 20 meters
 STATION SPACING 10 meters
 INSTRUMENT RONKA EM 16 #291
 STATION: JIM CREEK, WASH. "N.P.G."
 FREQUENCY 18.6 kHz
 OPERATOR: RALPH & NELSON

GROUND VLF - EM SURVEY
 KATI 1 (728) m.c.
 SARITA RIVER AREA
 Alberni Mining Division
 92 C 15 W

FIGURE 3
 LOCATION
 OF
 SURVEY GRID

0E -

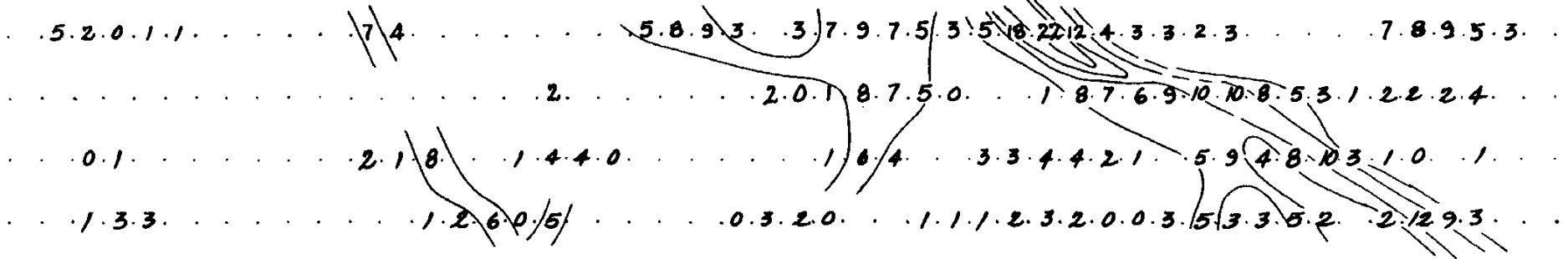
100E -

200E -

300E -

400E -

500E -



GROUND VLF - EM SURVEY
 KATI 1 (728) m.c.
 SARITA RIVER AREA
 Alberni Mining Division
 92 C 15 W

FIGURE 4

INTERPRETATION
 FRASER FILTERED
IN-PHASE ANOMALIES



GROUND VLF - EM SURVEY
 KATI 1 (728) m.c.
 SARITA RIVER AREA
 Alberni Mining Division
 92 C 15 W

FIGURE 5

DATA

IN-PHASE

(x)

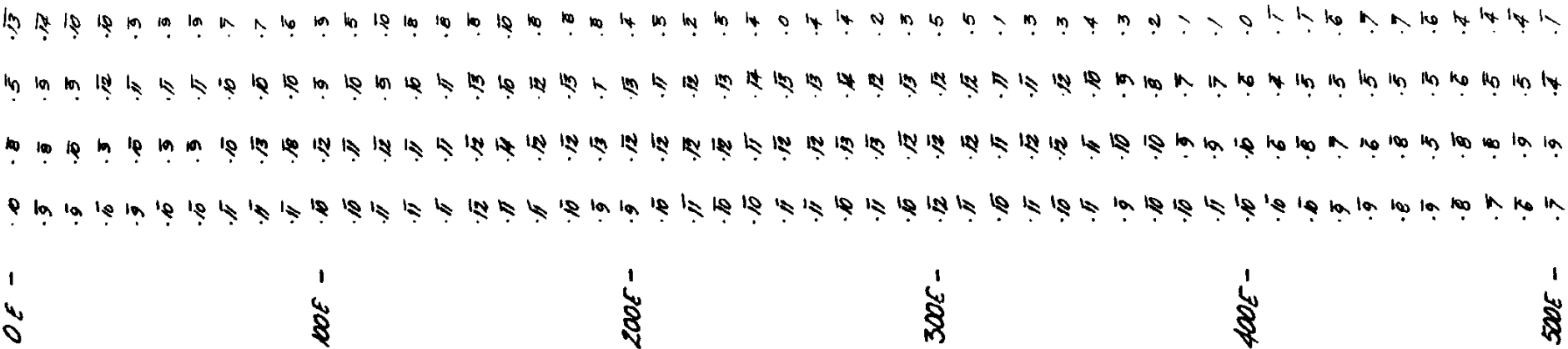
GROUND VLF - EM SURVEY
 KATI 1 (728) m.c.
 SARITA RIVER AREA
 Alberni Mining Division
 92 C 15 W

FIGURE 6

DATA

QUADRATURE

(x)



QUALIFICATIONS

I, Gerhard von Rosen, reside in Mission British Columbia, at 33176 Richards Avenue.

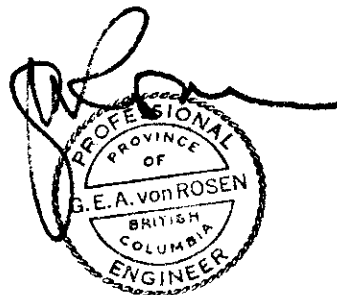
I have been practicing my profession of consulting geologist since my graduation from the University of British Columbia in 1962 with a B.Sc., and in 1966 with an M.Sc. degree in Honours Geology.

I have been involved with this kind of survey many times before, and am qualified to compile and interpret this information.

Respectfully submitted,

Gerhard von Rosen, M.Sc., P.Eng.

March 3, 1981



ITEMIZED COST STATEMENTDURATION

January 29 : mob-in + recon
 January 30 : survey
 January 31 : survey
 February 1 : de-mob

FEES

4 days @ \$75 \$300

MEALS

4 days @ \$12 48

ROOMS

3 days @ \$18 54

VEHICLE

4 days @ \$25 100

GAS & OIL

80

INSTRUMENT

6 days @ \$20 120

STRING & SUPPLIES

50

REPORT COSTS

\$1500

TOTAL COSTS

\$2252

LENGTH OF EM SURVEY: 4 lines @ 500m = 2000 m