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ASSESSMENT

GEOPHYSICAL

REPORT

[EM 16]

ON THE

MUD MOUNTAIN MINERAL CLAIM

BLUE MOUNTAIN AREA

Maple Ridge, British Columbia

NEW WESTMINSTER MINING DIVISION

49 15'N & 122 30'W

92G8W

FOR

G.E.A. von Rosen
E. Zimmerman
T. Radomski
M. Vroom
(owners)

December 14, 1980 G.E.A. von Rosen, P.Eng.

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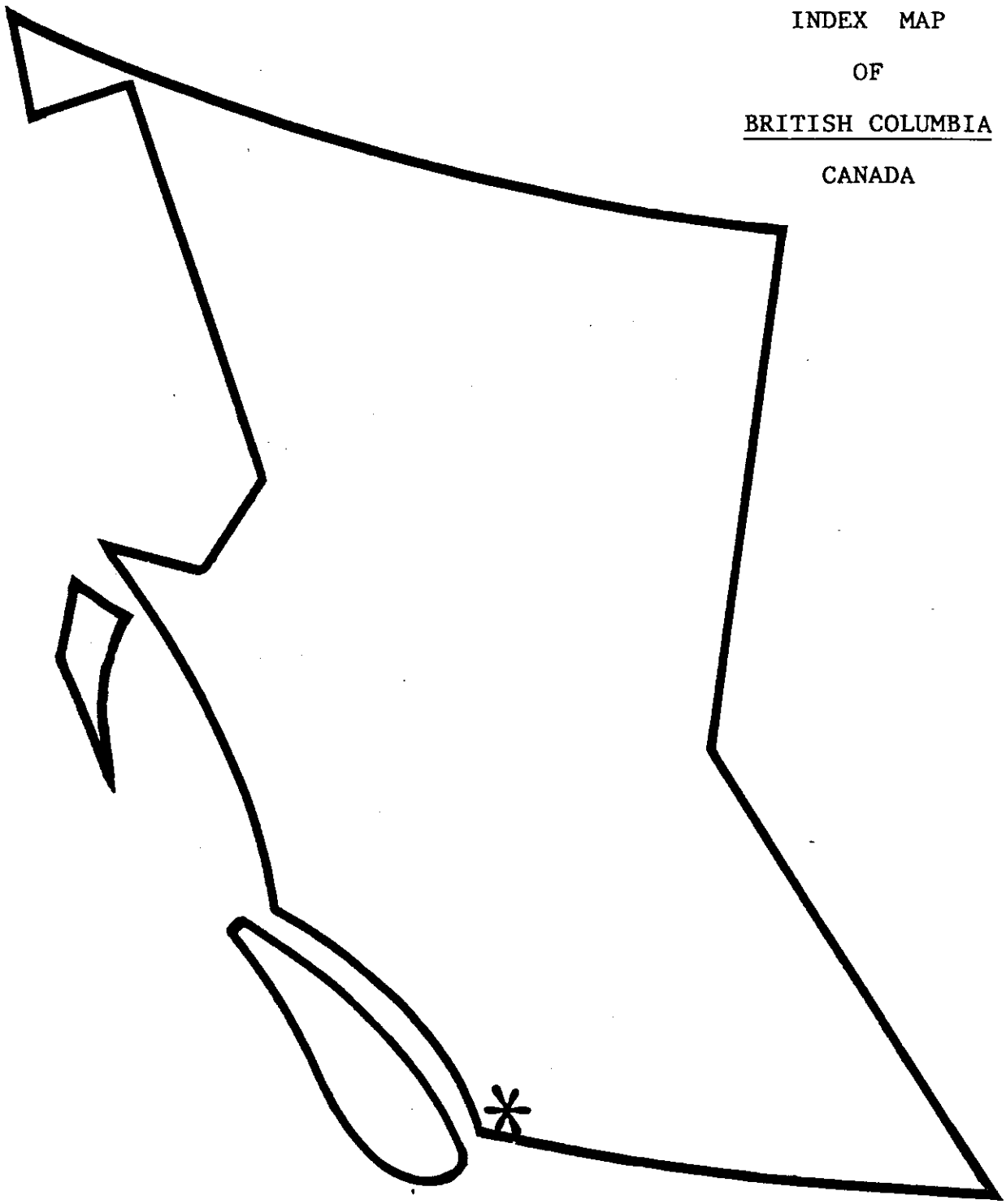
INDEX MAP

OF

BRITISH COLUMBIA

CANADA



INTRODUCTION

This report describes a ground-electromagnetic survey (VLF - EM) performed over a portion of **Mud Mountain** mineral claim by Ralph A. Nelson during December 1980.

LOCATION

The property lies on the southern slopes of Blue Mountain, an area which lies east of the southern portion of Alouette Lake, and north of Dewdney-Trunk road, Websters Corners British Columbia. The survey area is reached by driving east of Haney, B.C. on Dewdney-Trunk road, north up McNutt road, which is passable by car. The claims to which this work applies are **Hope 1**, **Hope 2**, **Hope 3**, **Rudolph**, and the work was done on **Mud Mountain**. These are recorded in the New Westminster Mining Division. They are to be found on map **92G8W** near the coordinates: **49 15N & 123 30W**

INSTRUMENTATION

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

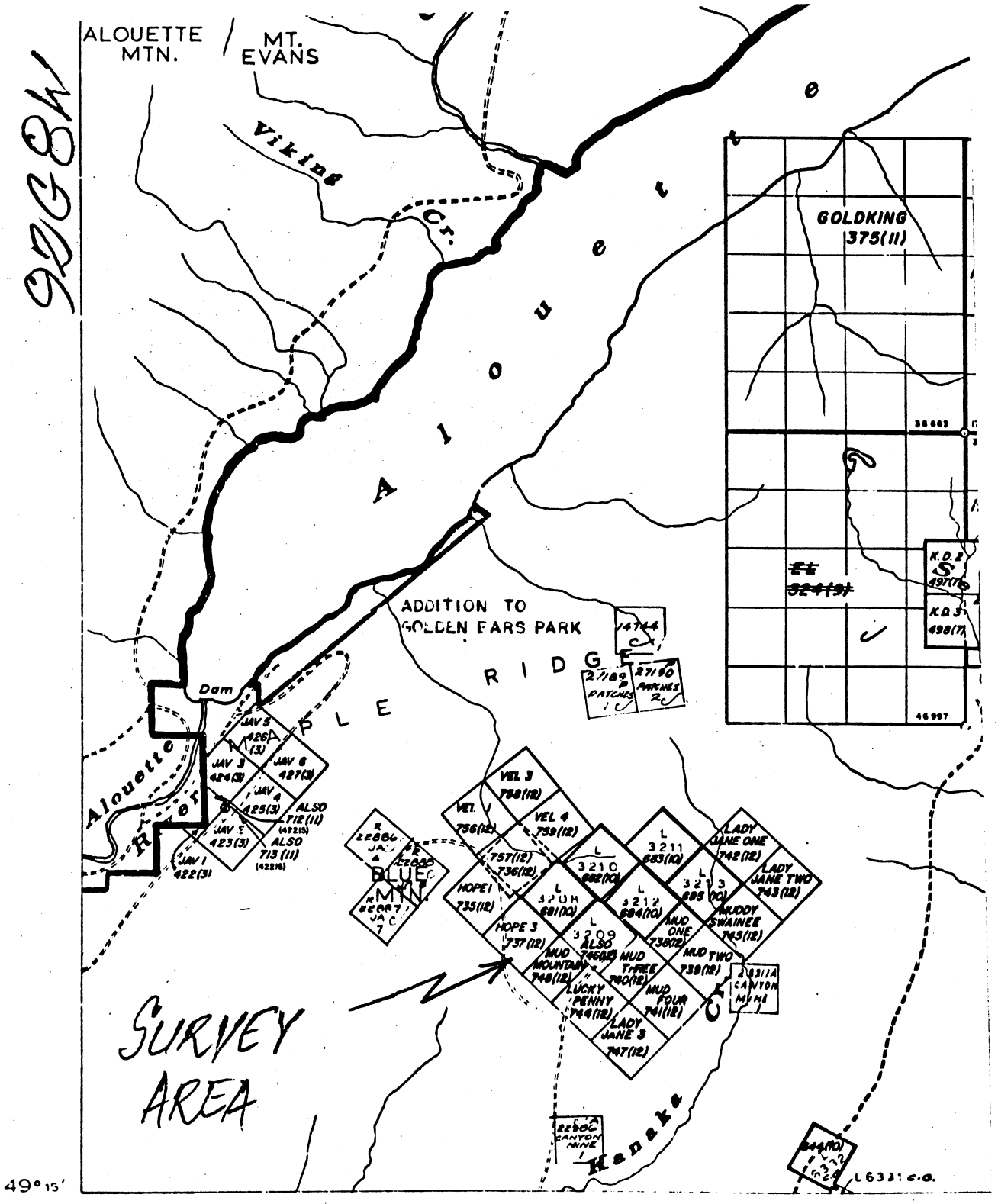


FIGURE B

CLAIM LOCATION MAP

HOPE 1, HOPE 2, HOPE 3, RUDOLPH, MUD MOUNTAIN

MINERAL CLAIMS

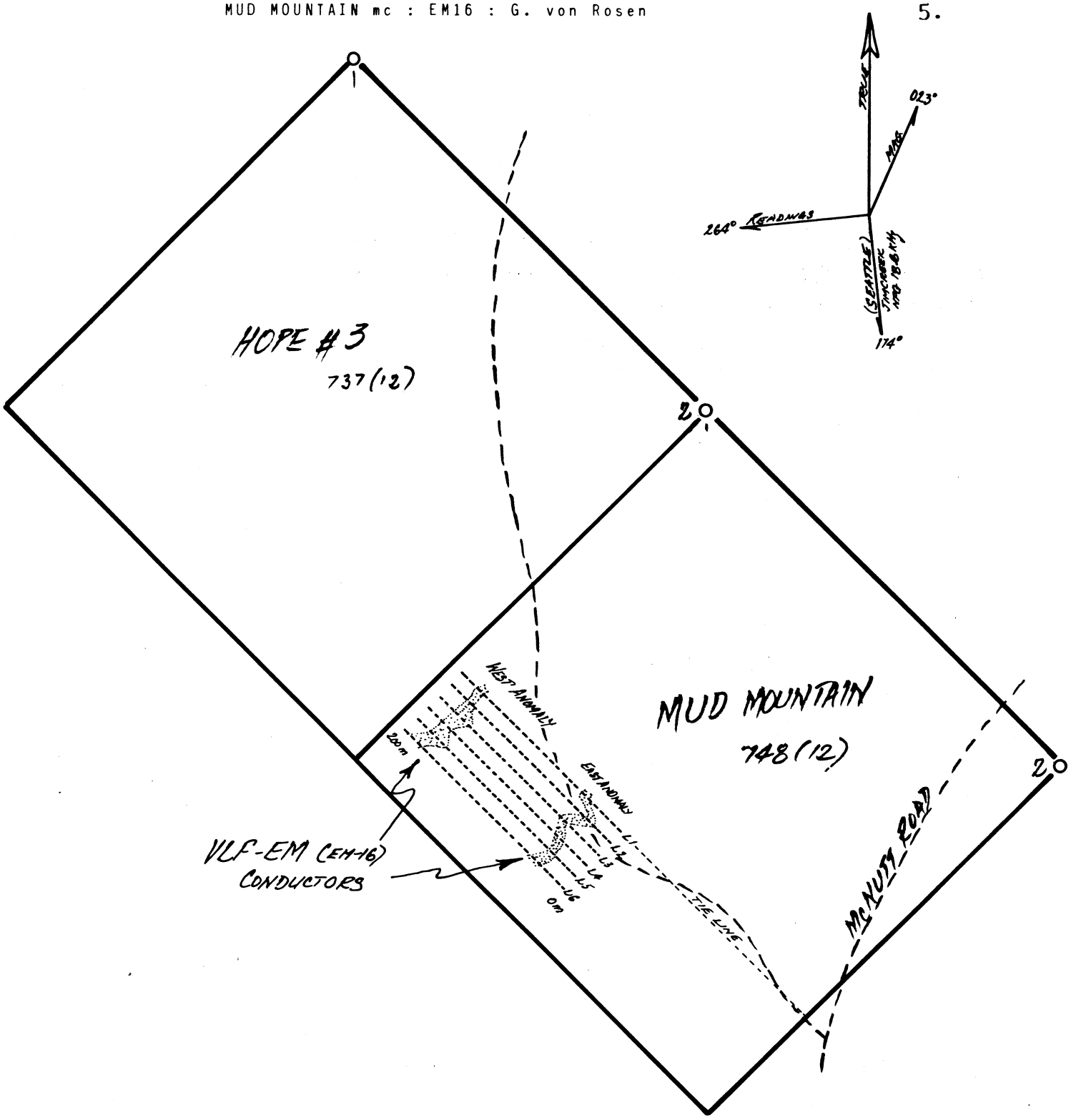


FIGURE C

DETAIL CLAIM MAP

SHOWING LOCATION OF EM16 GRID

GEOLOGY

The claims cover the contact between Tertiary (Eocene) sediments, to the north, overlying Jurassic hornblende diorite. The peak of Blue Mountain is underlain by these sediments which historically have aroused interest because of their commercial quality of clay.
Portions of the claims quite likely cover substantial thicknesses of clay, whereas other portions are definitely underlain by intrusive rocks. The intrusives are reported to contain copper and gold values, and claims have therefor been staked in the area.
The purpose of this survey was to attempt to use EM16 to map a) the contact area, and b) any structure which might show up by using the 18.6 kHz. frequency.

SURVEY METHOD

The eastern boundary of Mud Mountain mineral claim had previously been established and the point where the road leaves McNutt road towards the west, was chosen to start the survey. Previously heavy snow accumulation had melted away considerably from the roads. However the travel in the woods was extremely arduous with snow to the belt. The instrument got soaked after a short time, as it was also raining. So the line was flagged but few valid measurements were taken. The next day of survey extended this line to 240 meters (west). The

work was continued on the third day, with two people. Upon checking the previous work by repeating the last several readings, the decision was made to dis-regard that information as it appeared erratic. In addition because of the time involved, it was decided to survey a more closely spaced grid, which would enable correlation of information between lines. Hence the presently reported survey begins 240 meters west of the road forks, which here is called 0-w, and the lines continued to 20-w.

The lines were run at 135 Azimuth, the direction of the location line of the two-post claims. Stations were read every 10 meters, and lines were looped at 15 meters. This creates an effective 10 by 15 meter grid, which can conveniently be contoured.

To arrive at the proper reading direction, the local signal direction from Seattle transmitter was found by holding holding the instrument horizontally and finding a null in the audible signal (174 Az). Readings were taken at right angles to this, south-westerly at 264 Azimuth.

The information was plotted (see figure D), and Fraser filtered (see figure E). Contours were drawn to include filtered values greater than 10.

Profiles were also prepared, not shown, of both the In Phase and the Quadrature values.

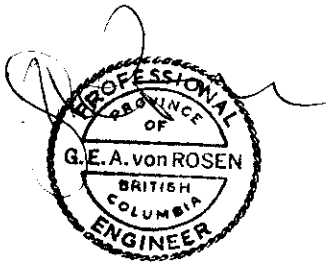
Inflection points were obtained from the profiles, and compared with the filter anomalous areas.

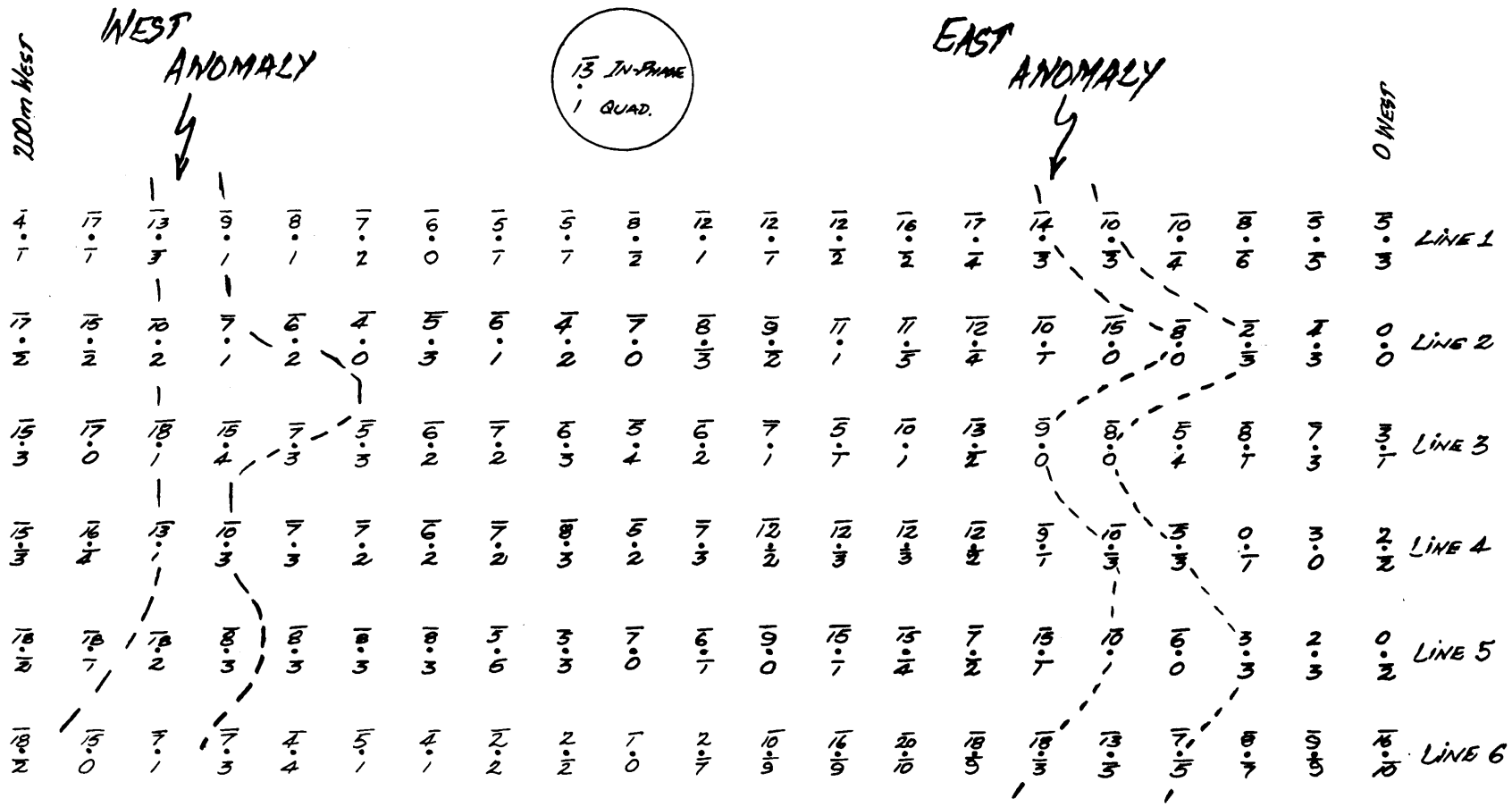
RESULTS OF SURVEY

Two northeasterly-trending zones of higher than average conductivity evidently underly the survey area. Both inflection point "cross-overs" and Fraser filtered data suggest this, although the on-the-ground positioning does not coincide in detail. (differences of up to $1\frac{1}{2}$ stations from center of anomalous zone). These zones have been termed West (northwest) and East (southeast) anomalies.

Judging from the close phase correlation between In-Phase and Quadrature components, it appears that these conductors are likely caused by overburden conductivity effects rather than sulfide vein material. This latter source of conductivity is frequently seen with In-Phase signature which is out of phase with the Quadrature. In the present case there is a general correlation. (curves not shown)

The results are of interest as they point out conductors which may be caused by north-easterly trending fault zones, cutting through the pile of sediments which is said to thicken towards the north. The contact of sediments and underlying intrusive rocks did not show up, either because it lies a bit farther south, or because the orientation of the conductive interface, in relation to the direction of Seattle (NPG) signal is not at the optimum.





SURVEYED BY R.A. NELSON

PLOTTED : G. VON ROSEN.

STATIONS @ 10 m.

LINES @ 15m

0 50

meters

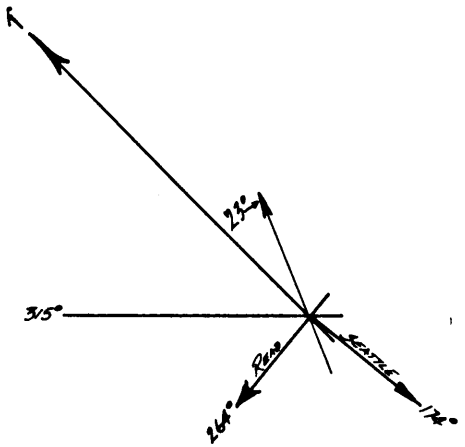
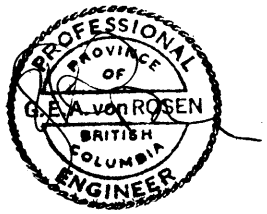


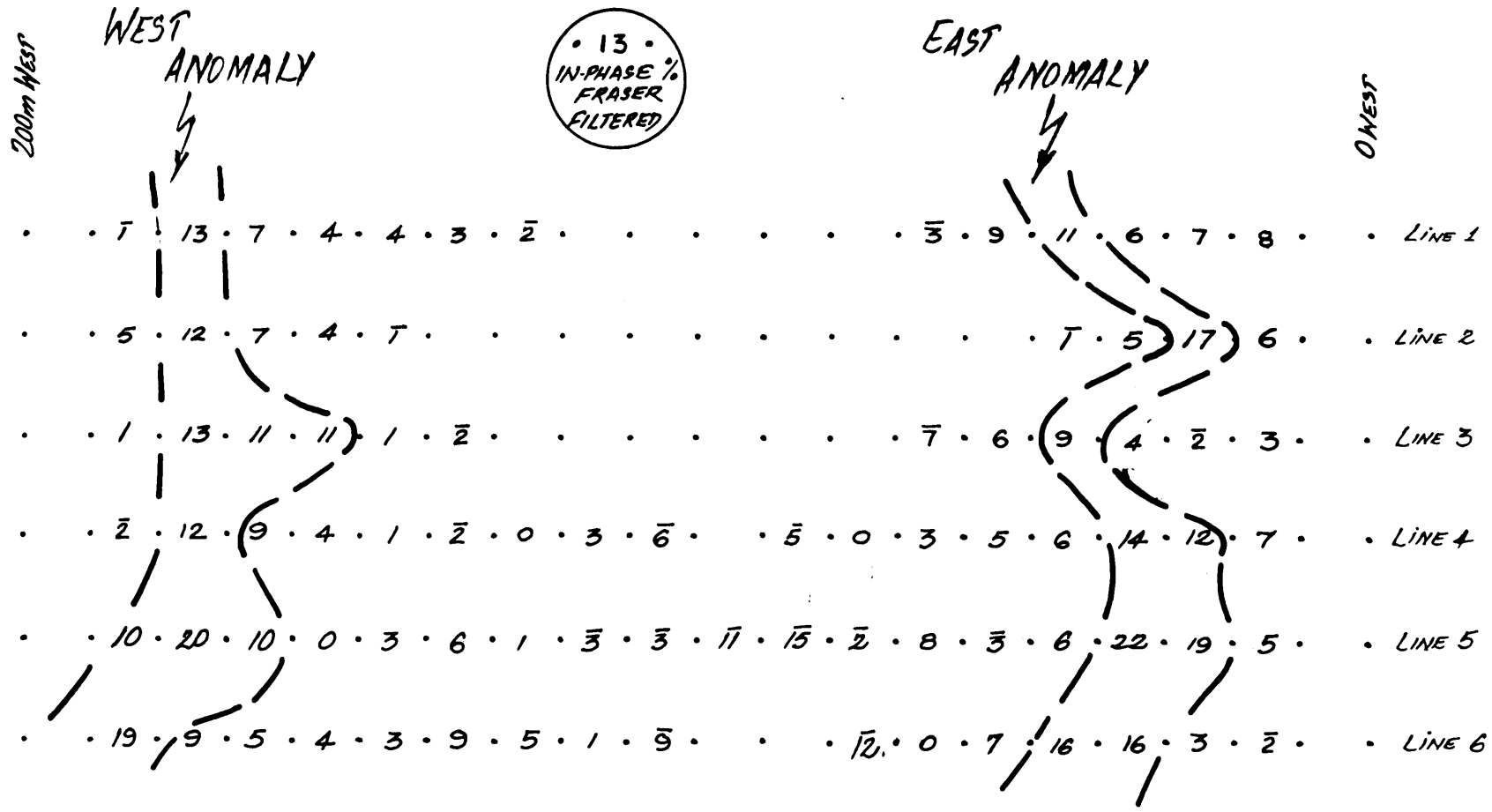
FIGURE D

MUD MOUNTAIN MINERAL CLAIM

Maple Ridge, B.C.

EM 16 DATA PLAN





SURVEYED BY: R.A. NELSON

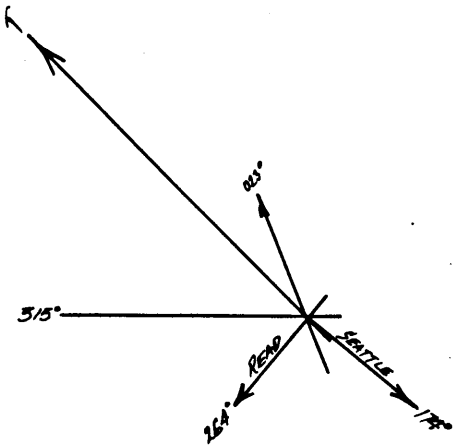
PLOTTED: G. von ROSEN

STATIONS @ 10m

LINES @ 15m

0 50

meters



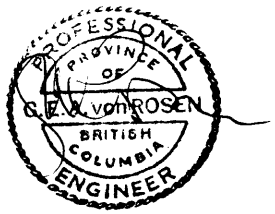
PLAN C

MUD MOUNTAIN MINERAL CLAIM

Maple Ridge, B.C.

PLAN OF

FRASER FILTER EM16 ANOMALIES

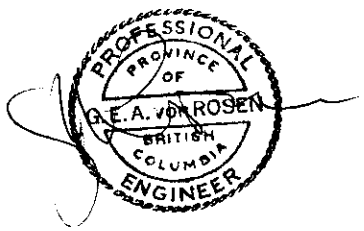


QUALIFICATIONS

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.



ITEMIZED COST STATEMENT

DURATION

December 13 : mob + recon + svy
December 14 : survey
December 15 : survey (2 men)
[previous work did not correlate with this]

FEES	4 days @ $75	$300
	1 day @ $300	$300
MEALS	4 days @ $12	48
VEHICLE	4 days @ $15	60
GAS + OIL		40
INSTRUMENT	5 days @ $20	$100
MISC		25
REPORT FEES		$900
REPORT COSTS		50
TOTAL COSTS		**$1823**

LENGTH OF EM 16 SURVEY: 6 lines @ 200m 1200m