82-144 - 10197

ASSESSMENT

GEOPHYSICAL

REPORT

[EM-16]

ON THE

MUD MOUNTAIN MINERAL CLAIM BLUE MOUNTAIN AREA <u>Maple Ridge, British Columbia</u> NEW WESTMINSTER MINING DIVISION 49 15'W & 122 30'W 92G8W

FOR

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



March 19th, 1982

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G.E.A. von Rosen, P.Eng.

TABLE OF CONTENTS

Title Page	0
Table of Contents	1
Introduction	3
Location	3
Instrumentation	3
Geology	6
Survey Method	6
Results of Survey	8
Qualifications	11
Itemized Cost Statement	12

INDEX OF ILLUSTRATIONS

FIGURE A		INDEX MAP	2
FIGURE B	[1:50,000]	CLAIM MAP	4
FIGURE C	[1:5,000]	CLAIM MAP DETAIL	5
PLAN D	[1:1,000]	EM16 DATA PLAN	9
PLAN E	[1:1,000]	EM16 FILTER ANOMALIES	10



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INTRODUCTION

This report describes a ground-electromagnetic survey (VLF-EM) performed over a portion of <u>Mud Mountain</u> mineral claim by Ralph A. Nelson during December 1981.

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 The survey area is reached by driving British Columbia. 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 New Westminster Mining Division. recorded in the are They are to be found on map 92G8W near the co-ordinates: 49 15N & 123 30W.

INSTRUMENTATION

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



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MINERAL CLAIMS



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 continue to use EM16 to map a) the contact area, and b) any structure which might show up using the 18.6 kHz. frequency.

SURVEY METHOD

The eastern boundary of <u>Mud Mountain</u> mineral claim had previously been established and the point where the road leaves McNutt road towards the west, was chosen to start the survey. The previous year's survey had started 240 meters west of this point. This year's continuation filled in this eastern portion. A part of the first day was lost due to apparently erratic readings. An anomalous zone was picked up towards the north-east sector, and the lines were extended in that direction. continued:

INSTRUMENTATION

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 vector from Seattle transmitter was found by 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 Plan \mathbf{PD}), and Fraser filtered (see Plan \mathbf{E}). Contours were drawn to outline filtered values greater than 10.

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

Inflection points were also ascertained from the profiles, and compared with the filter-anomalous areas.

RESULTS OF SURVEY

Last year's results indicated two anomalies trending northeasterly across the grid. This year's survey, adjoining the 1980 portion to the east, indicates a further anomalous zone at the east termination of the grid, in addition to the increase in dip percent at the west end of the 1981 grid, indicating the presence of the "east"-1980 anomaly.

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 signatures which are out-of-phase with the Quadrature. In the present case there is a general correlation. (curves not shown)

The results are interesting in that they further point to the possible presence of conductors following northeasterly trending fault system cutting through the sedimentary pile of the Blue Mountain clay deposit. It may be possible to interpret 'level changes' of the 18.6 kHz field as suggesting thickness changes of sediments overlying the basically granitic bed-rock. Such interpretations may be useful in delineating the 'apron' effect of the clay layers.

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STATIONS & 10 m LINES & 15 m

24 W

meters



Maple Ridge, B.C. EM 16 DATA PLAN

MUD MOUNTAIN mc : EM16 : G. von Rosen

アコンシン Pinsd LINE 2 LINES LINEG E SWIJ FRASER FILTER EN16 ANOMALIES HUD MOUNTAIN MINERAL CLAIM ž (2 - 11 - 10 - 609 / • 01 - 08 - 10 - 12 • 11 - 05 • , Maple Ridge, B.C. 14 18 64 13 13 00 04 -(1861) KTEWONE PLAN OF PLAN E OWEST · II. II. I4. 63. 61. 64. 62. 01 / 07 . 07 / 66. 68. 03. 07. 06. 09. 01 / 14. 16. 15/ 68. 15 04. I5 . I7 . 04-07 • 06• 07 63 • 10 • 13 • 15 • 13 • 12. 13. 13. 16. 15. 08. 02 408 701 - 06. 01 408 700 - 05 405 403 - 03. 08. 00 405 402 - 04 · 12. 14. 17. 14. 05. 03. 03. 03. 01. 01. 00. 01. 05. 01. 03. 00. 10. 06. 07. 13. 14. 15 • 18• 14• 15• 04• 01• 08• 07• 00• 02• 05• 11• 01• 00• 02• 01• 07• 07• 03 · 11. 17. 18. 18. 02. 400. 00, 03. 13. 03. 05. 13. 41. 14. 17, 00. 11. 12. 07 BARCIC CENSER U-PHASE $\widetilde{\omega}$ 3,5 3 SURVEYED BY: R.A. NELSON PLOTTED: G. VON ROSEN susters 15m STATIONS C 10 M LINES C 24 K

MUD MOUNTAIN mc : EM16 : G. von Rosen

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QUALIFICATIONS

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.



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ITEMIZED COST SUMMARY

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DURATION			
	December 10	: mob + recon	
	December 11	: survey	
	December 12	: survey	
	December 13	: survey	
<u>FEES</u>	3 days @ \$80 1 day @ \$300		\$240 \$300
MEALS	3 days @ \$12	: :	36
VEHICLE	3 days @ \$20	·	60
GAS & OIL			5 5
<u>INSTRUMENT</u>	5 days @ \$20		\$100
MISC			30
REPORT FEES			\$900
REPORT COST	<u>s</u>		70
TOTAL COSTS			<u>\$1791</u>
LENGTH OF E	M 16 SURVEY: (6 lines	1460 m