

# 3826

REPORT ON THE  
ELECTROMAGNETIC SURVEY FOR  
PAVILION MOUNTAIN  
CLINTON-LILLOOET MINING DISTRICTS, B.C.

for

Lone Creek Mines Ltd.  
312 Masters Ave.  
Victoria, B.C.

92 I / 13E, 13W

by

John O. Rud M.Sc.  
July 10, 1972

Department of	
Mines and Petroleum Resources	
ASSESSMENT REPORT	
NO. 3826	MAP

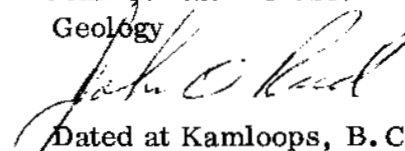
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#1 Location Map	
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I hereby declare that the following expenses occurred during the Electromagnetic Survey on the Nanci Group of Mineral Claims.

4 men @ \$30.00 per day for 7 days-----	\$840.00
Mileage-1246 miles @ 25¢ per mile-----	\$311.50
Meals and Lodging -----	\$436.00
Misc. Expenses (ribbon & equip.)-----	\$121.00
Geologist - 100.00 per day for 10 days-----	\$1000.00
Mileage 2248 miles @ 15¢ per mile-----	\$337.20
Scopas SE-80 Receiver Rental -----	<u>\$175.00</u>
Total Expenses -----	\$3220.50

John O. Rud M. Sc.  
Geology

  
Dated at Kamloops, B. C.  
this 15 day of August, 1972

## NANCI MINERAL CLAIM GROUP

### PAVILION MOUNTAIN

CLINTON-LILLOOET MINING DISTRICTS, B. C.

#### INTRODUCTION

A VLF-Electromagnetic survey was carried out during July, 1972 at the request of Lone Creek Mines Ltd. on the Nanci Claim Group located on Pavilion Mountain, B.C.

Two separate grid systems were created over anomalous geochemical areas. A total of 73,000 feet was run utilizing a Scopas SE-80 Receiver.

#### GENERAL GEOLOGY

The Nanci Group of Mineral Claims are located in the Ashcroft and Bonaparte Map-Areas, B.C. The regional geology has been described by Duffel and McTaggart, 1952 and Campbell and Tipper, 1971. A brief description of the general geology is as follows.

The Nanci property is underlain by a succession of sedimentary rocks of the Pavilion Group. Dark grey to grey limestone comprises most of the rocks in the area. Interbedded cherts, argillites and siltstones with minor limestone interbeds and lenses of tuff beds occur in places. The chert varies from

light grey to greenish grey and in most cases is interlaminated with dark grey argillite. The thin beds of fine greenish grey to dark grey tuff are interlayered with the dark grey argillite.

All rock units within the specified area are deformed into northwest trending folds. Evidence of shearing and fracturing roughly parallel the strike of the rocks was also noted. The jointing patterns predominately strike north 65 degrees east and dips steeply northwest.

The mineralization occurs in fine disseminations in the dark grey limestone associated with quartz and calcite veining. The main sulphide minerals are pyrite and chalcopyrite.

#### ELECTROMAGNETIC SURVEY

The operation and theory of the electromagnetic method is described in the literature. A brief outline of the method will be discussed here.

The VLF-EM method employs as a source the field of VLF transmitters in the 15-25 kHz band. The electromagnetic waves generated by these transmitters propagate through the sub-surface and are subject to local distortion by conductivity

contrasts in this medium. These distortions indicate variations in geo-electrical structure which may be related to many factors, one of which is the presence of an electrical conductor either in or above ground. The presence of this conductor creates local secondary fields which give rise to a vertical component and changes in amplitude, direction and possible phase of the field occur. Measurements of these changes may permit locating the conductor and perhaps determine some of its characteristics.

This type of geophysical survey was selected because of its ability to provide information on the trend and continuity of any conductors present.

The contour map shows a number of elongated conductors, the majority of which trend east-west. These elongated conductors may indicate fractures which could be channeling the induced currents. Alternatively, they may indicate locations of increased amounts of conductive material, namely, sulphides or other geological conductors such as clays or varying depth of conductive overburden.

#### RECOMMENDATIONS

The SE-80 instrument is very sensitive to variations in

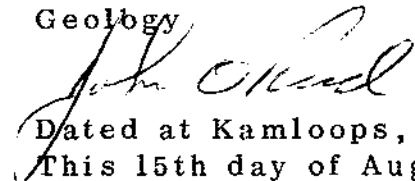
structure, electrical overburden-bedrock contrasts and geology. Thus it is recommended that geological, geochemical and geophysical data be coordinated to select potential percussion drill sites. This physical investigations would then determine the size and grade of potential ore zones within this claim block.

CERTIFICATE

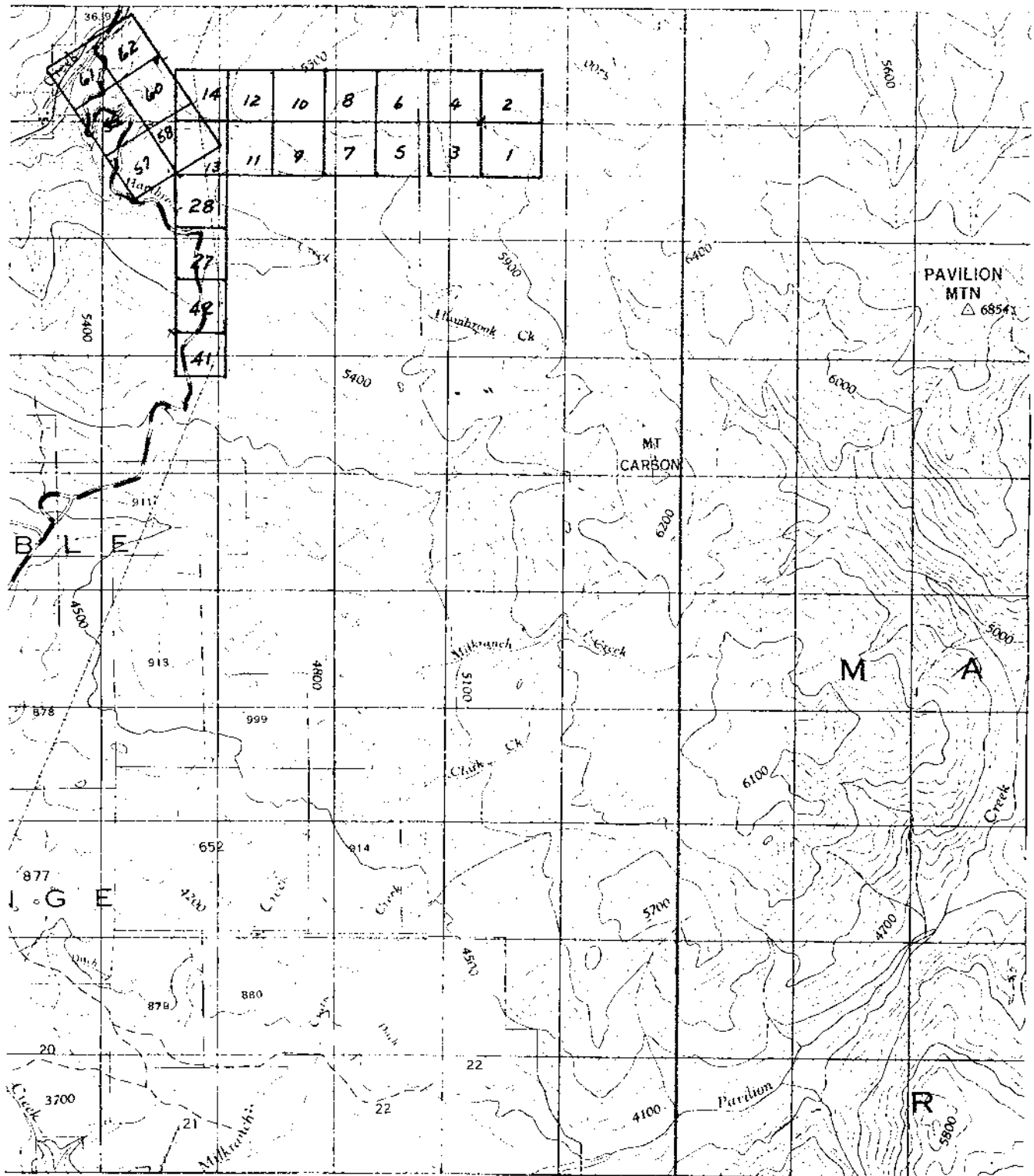
I, John O. Rud, of 135 Redwood Crescent, Kamloops, B.C., do hereby certify that:

- (1) I am a graduate of the University of Oregon, (Master of Science) in Geology, 1971.
- (2) I have practiced my profession with the University of Oregon as an instructor for Summer Field Camp (1970) and Lone Creek Mines Ltd. since 1971.
- (3) Prior to attending the University I have worked underground as a miner.
- (4) I am the owner of 2500 shares of Lone Creek Mines Ltd. purchased at 50¢.
- (5) I have personally examined the property as described in this report.
- (6) I am a member of the Canadian Institute of Mining and Metallurgy.
- (7) I consent to the use of this report in, or in connection with, a prospectus or statement of material facts.

John O. Rud M. Sc.  
Geology

  
Dated at Kamloops, B.C.  
This 15th day of August, 1972





LOCATION MAP FOR NANCI MINERAL CLAIMS

Clinton-Lillooet Mining Districts,

B. C.

CLINTON

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1977

MINING RECORD

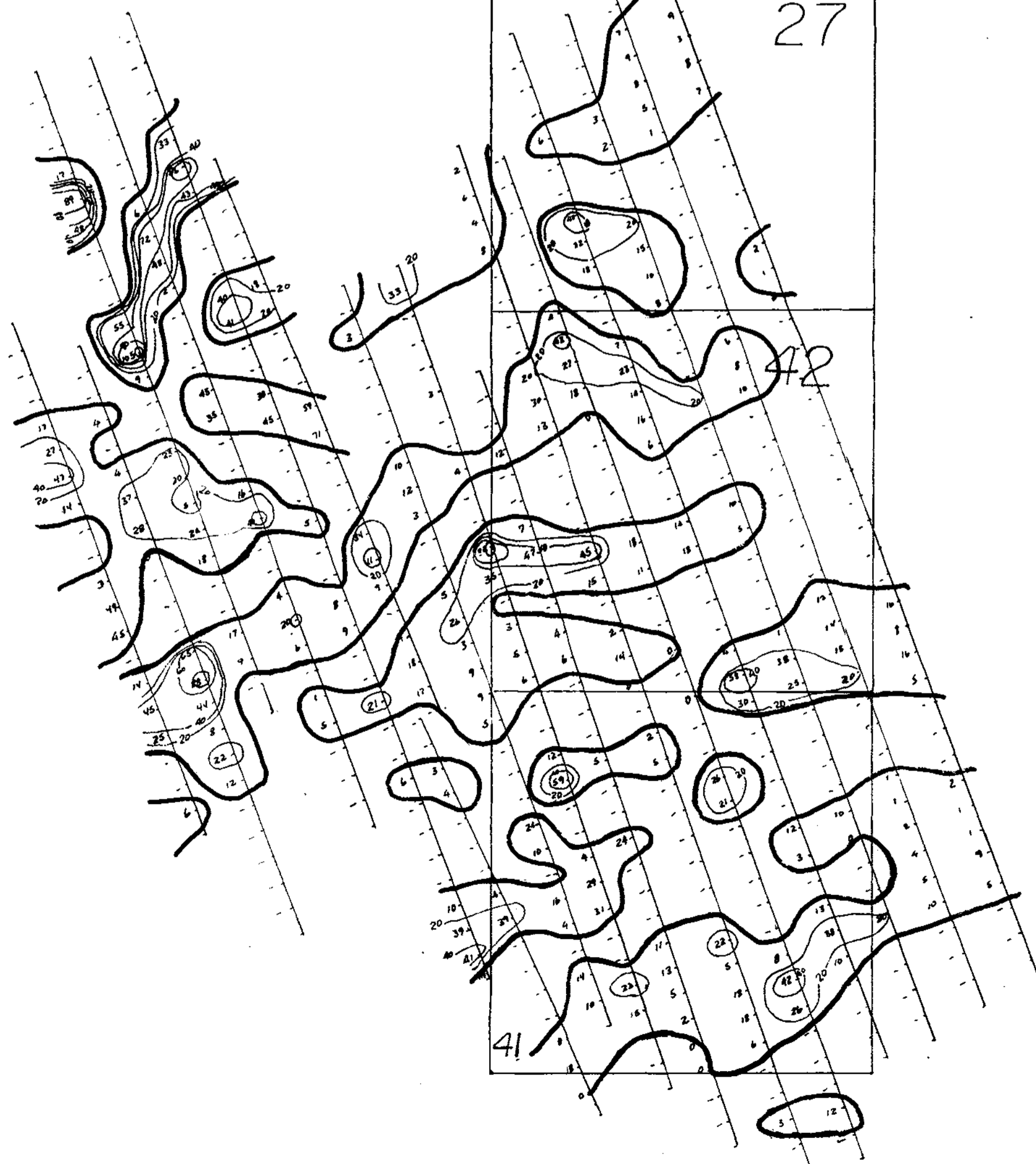
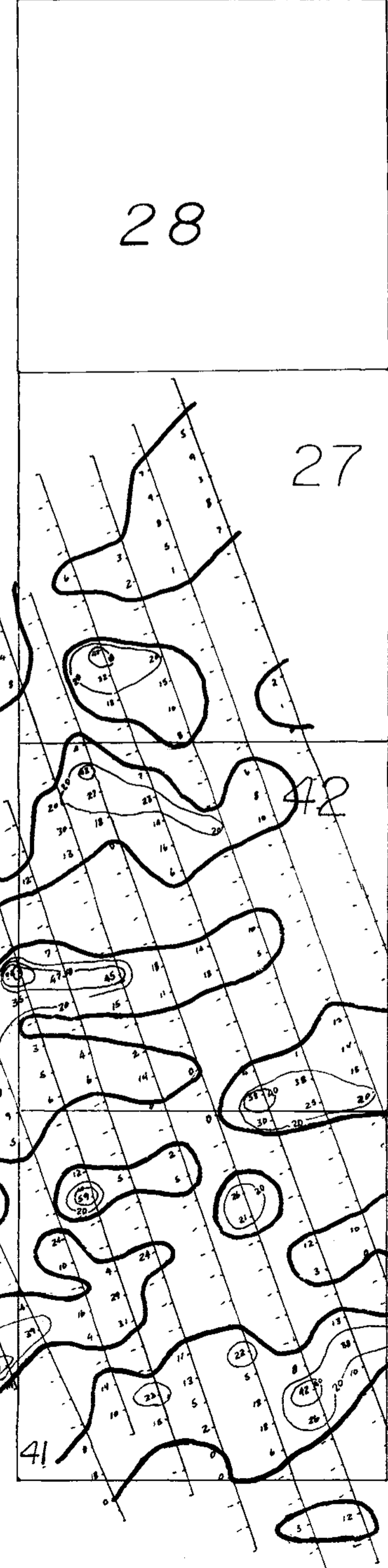
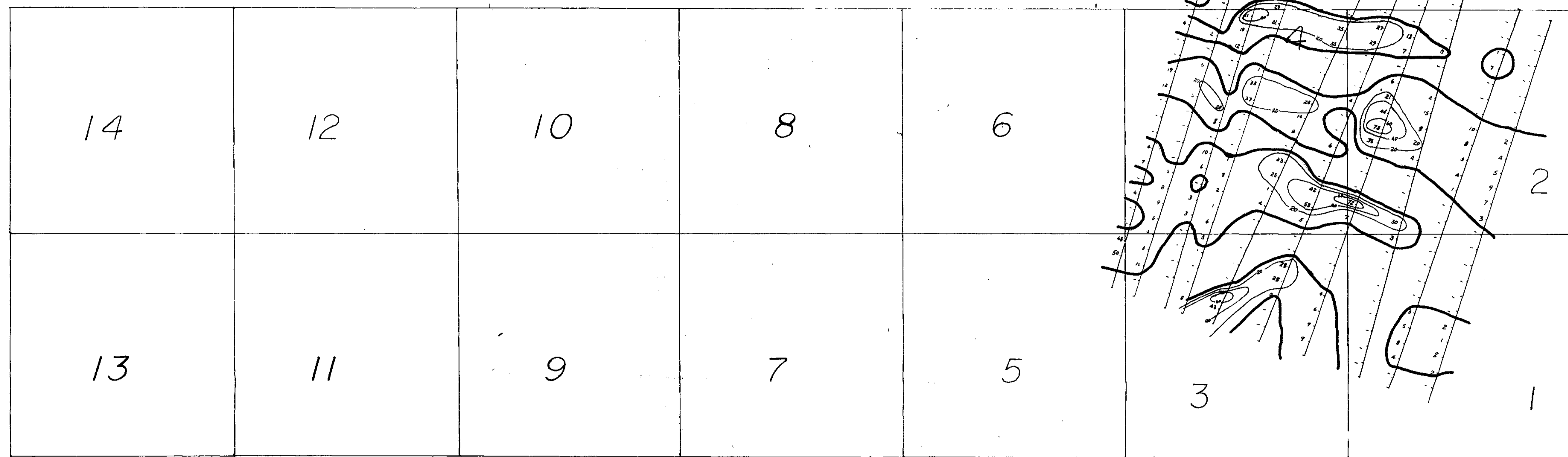
NANCI MINERAL CLAIM GROUP  
 PAVILION MNT.  
 CLINTON-LILLOOET MINING DISTRICTS, B. C.

VLF ELECTROMAGNETIC SURVEY

Department of  
 Mines and Petroleum Resources  
 ASSESSMENT REPORT  
 NO. 38276 MAP #2

SCALE

0 200 400 600 800 1000



3826 M-2

LONE CREEK MINES LTD.

Data Filtered - FRASER METHOD

DATE - July, 1972

Drawn by J. O. RUD

To accompany geophysical report by John O. Rud M.Sc. July 1-10, 1972