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CONSULTING ENGINEER

1666 WEST BROADWAY  
VANCOUVER 9, B.C.  
731-6584

3016

GEOPHYSICAL REPORT

ELN GROUP

49° 120 NE

92 H / 9W

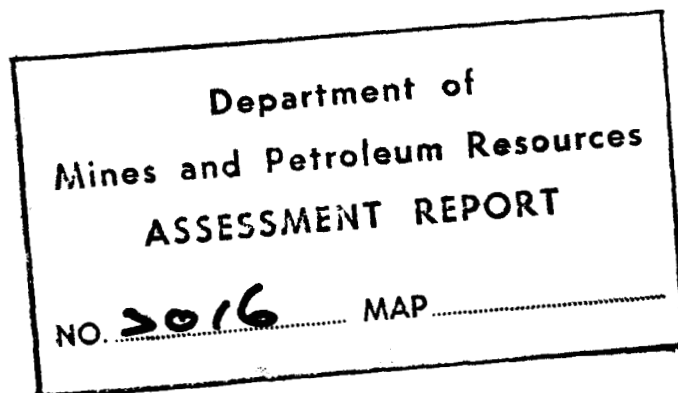
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FIGURES: #1 PLAN

#2 I.P. RESULTS LINE EBL

#3 Eln Group



## INTRODUCTION

An Induced Polarization survey has been carried out on the ELN group. This property is located east of Summers Creek and about 10 miles NNE of Princeton. It is owned by Canwex Explorations Ltd. (N.P.L.). Field work was carried out on October 2, 3 and 4, 1970, by a crew from McPhar Geophysics Limited under the supervision of the author. Work was carried out on claims ELN 1, 2, 3, 4, 5, 6, 7, 8, 9, 10.

## INSTRUMENTATION

A McPhar variable-frequency I.P. unit was used. The sender supplied a preset constant current that is applied to the ground through two electrodes. The voltage between two potential electrodes is passed into the Receiver. A meter is nulled at one frequency and gives a direct reading of the percent frequency effect at a second frequency. From the applied current and received potential, the apparent resistivity of the medium may be calculated. The metal factor is calculated from the percent frequency effect and apparent resistivity.

## FIELD PROCEDURE

The electrodes are in a collinear array, with the current electrodes separated by a distance "a". The

potential electrodes are also separated by a distance "a". The nearest current and potential electrodes are separated by a distance "na" where n = 1, 2 or 3. By varying n, the sender-receiver spacing, one obtains a depth-probing effect, since the effective depth of exploration varies with this spacing. The results are plotted at the intersection between 45 degree diagonal lines drawn from the mid-points of the sender and receiver dipoles. Above the upper reference line are plotted the resistivity values ( $\rho_a / \sqrt{t}$ ), below it the metal factor (M.F.). The row of data nearest the reference line corresponds with n = 1 values, the second row n = 2 and the third n = 3. Below the lower reference line are values of Percent Frequency Effect (F.E.).

#### RESULTS

The results are plotted on the accompanying sectional diagrams for the line EBL. The location of this line is shown on the accompanying Plan of the southern portion of the ELN group. The line was surveyed using an electrode spacing a = 300 ft.. A high frequency of 5 and a low frequency of 0.3 Hz was used. An anomaly

centred at 6-9W correlates with a magnetic transition zone shown in my assessment report dated May 24, 1966. A weaker anomaly occurs at 6-12E.

Respectfully submitted,

A handwritten signature in cursive script, appearing to read "D. W. Smellie".

D. W. SMELLIE, P.Eng.

DWS/sd

December 8, 1970

COST OF I.P. SURVEY - ELN GROUP

OCT. 2 - 4, 1970

McPHAR GEOPHYSICAL CREW - K. Drobot, M. McDonald

2 1/4 days operating -----	\$ 465.82
Travel time -----	64.29
Expenses -----	226.36
	<hr/>
	\$ 756.47

D. W. SMELLIE - Supervision and Interpretation - 1 day -----	250.00
	<hr/>

\$1016.47

*D. W. Smellie*

Declared before me at the *City*  
of *Newcastle*, in the  
Province of British Columbia, this *27*  
day of *April* 1971, A.D.

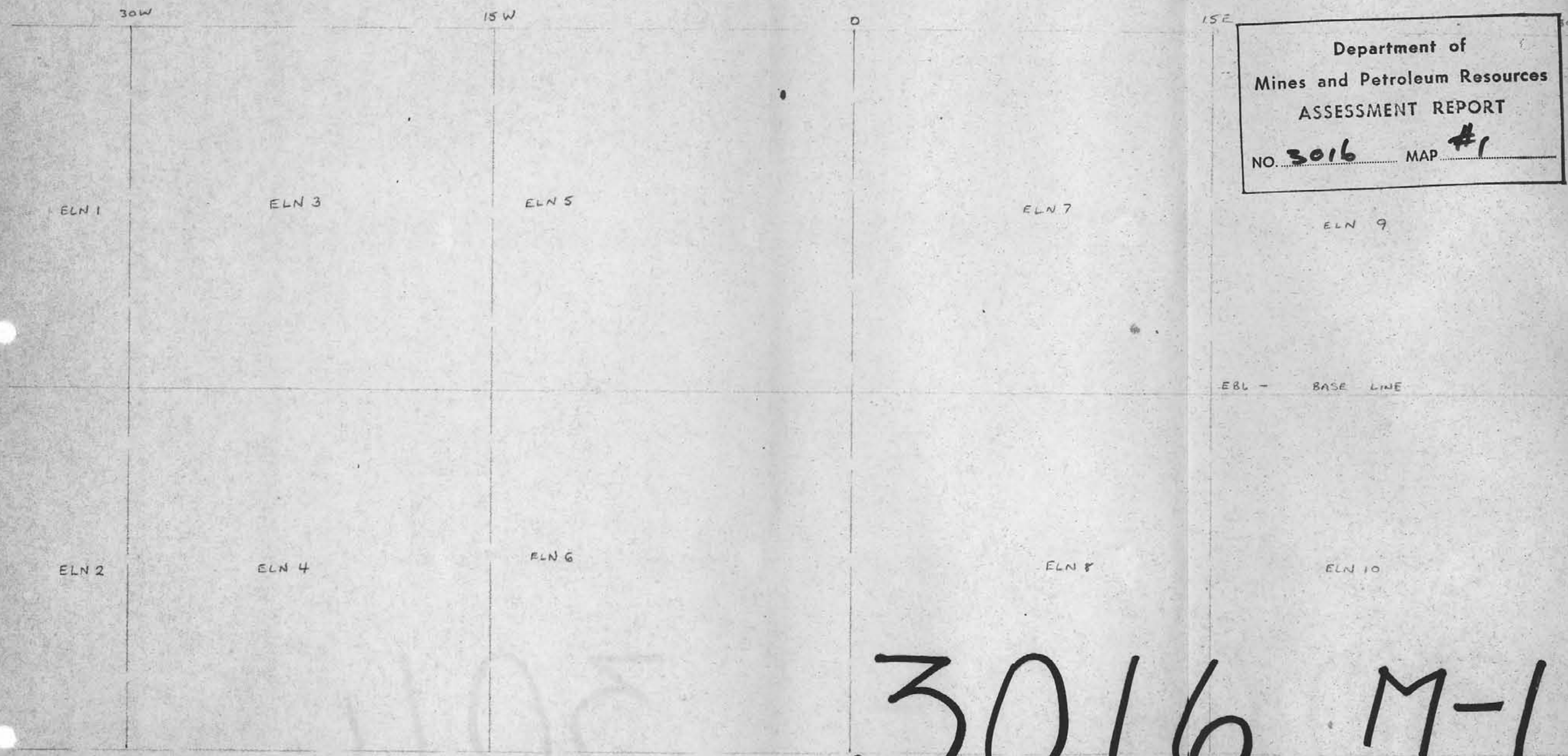
*D. W. Smellie*

*Bill Turner*

A Commissioner for taking Affidavits within British Columbia or  
A Notary Public in and for the Province of British Columbia.

SUB-MINING RECORDER

CANWEX EXPLORATIONS LTD (N.P.L.)  
PLAN  
ELN GROUP  
SIMILKAMEEN MINING DIVISION B.C.  
SCALE 1" = 400 FT OCT 1970

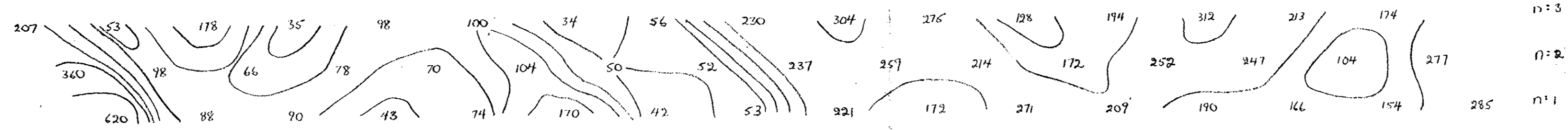


Department of  
Mines and Petroleum Resources  
ASSESSMENT REPORT  
NO. 3016 MAP #1

3016 M-1  
*[Signature]*

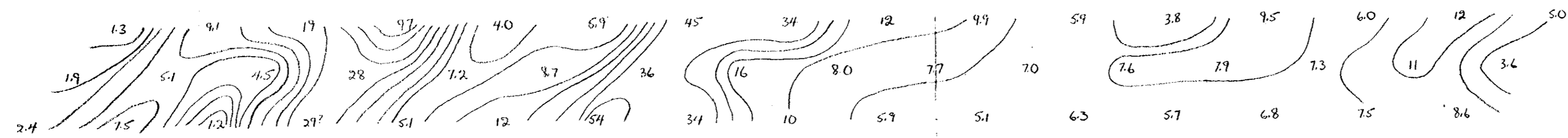
ELN CLAIMS  
 CANWEX EXPLORATIONS LTD  
 STANDARD IP SURVEY  
 FREQ 345 cps  
 Oct. 2, 3, 4 1970  
 SCALE 1" = 300'

Pa/211



n=3  
 n=2  
 n=1

30W 27W 24W 21W 18W 15W 12W 9W 6W 3W 0 3E 6E 9E 12E 15E 18E 21E 24E 27E 30E



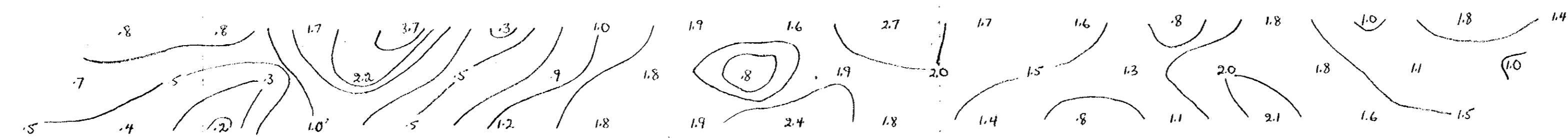
n=1  
 n=2  
 n=3

MF

LINE EBL

Department of  
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 ASSESSMENT REPORT  
 NO. 3016 MAP #2

30W 27W 24W 21W 18W 15W 12W 9W 6W 3W 0 3E 6E 9E 12E 15E 18E 21E 24E 27E 30E



n=1  
 n=2  
 n=3

F.E.

*Handwritten signature*

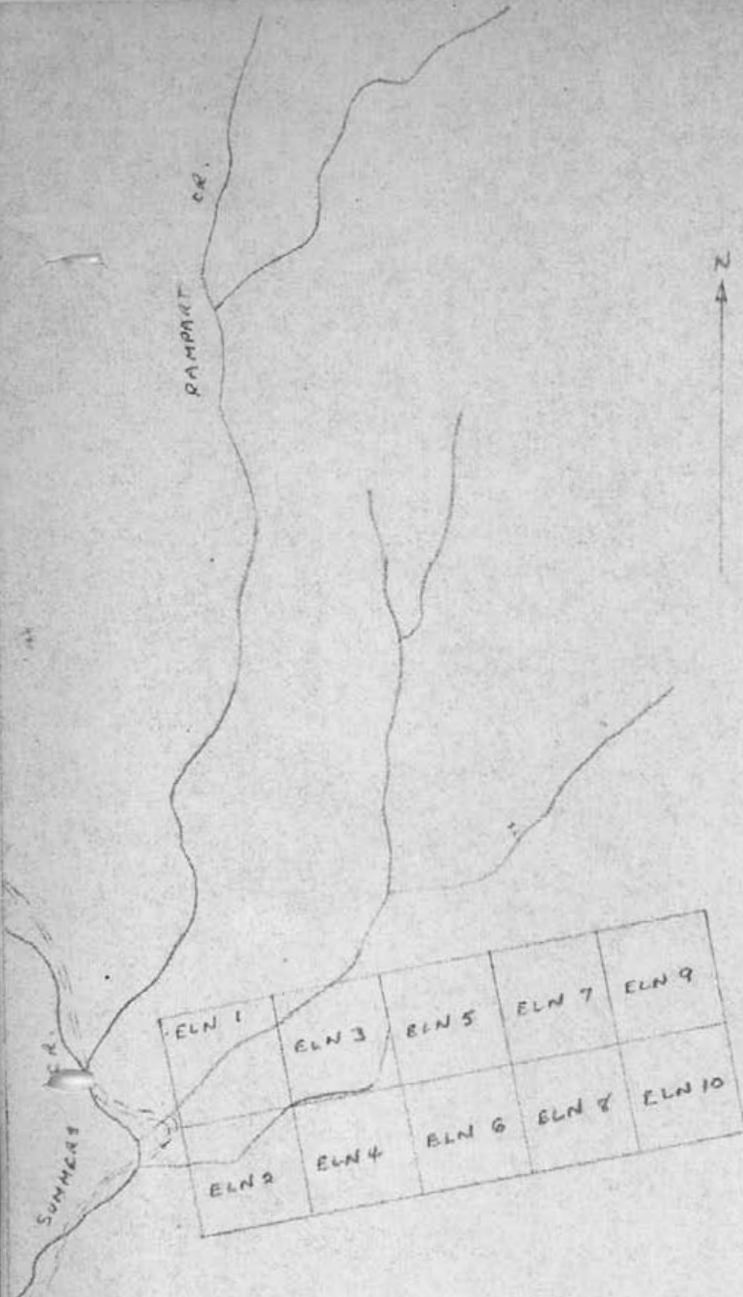
RECEIVED  
 OCT 8 1970  
 Ans'd

CANWEX EXPLORATIONS LTD. (N.P.L.)

ELN GROUP

SIMILKANEEN M.D.

MAY 1971



Department of  
Mines and Petroleum Resources  
ASSESSMENT REPORT  
NO. 5016 MAP #3

1/2 MI = 1"

HAYES CR.