

INTRODUCTION

This report describes a geochemical survey which has been performed over the following eighteen (18) contiguous, unpatented mining claims in Lloyd township, Porcupine Mining Division, Ontario:

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 256313	256319	256327
256314	256320	256328
256315	256321	256329
25 6316	256322	256330
256317	256323	256331
256318	256324	256332
256316 256317	256321 256322 256323	2563 2563 2563

The recorded holder of these claims is the writer of this report; H. D. Carlson of 110 Martin Street, Porcupine, Ontario.

LOCATION AND ACCESS - The subject claim group is located in the southeast corner of Lloyd township, with the township boundaries forming the south and east borders of the property. An all-season gravel road connecting the town of Chapleau and a lumber camp operated by Chapleau Dressing Mills Limited on Makonie Lake passes about one mile west of the claim group. The property is accessible from this road via several logging trails and winter roads.

HISTORY OF EXPLORATION - There is no record of any previous exploration work having been done on this property in the assessment work files of the Ontario Department of Mines Resident Geologist's Office, Timmins, Ontario. In the summer of 1969, Jean-Marie Martel, the proprietor of Chapleau Planing Mills Limited, and several associates, discovered sulphide mineralization on the property during the course of constructing logging roads in the area. Extensive stripping of the sones found and some core drilling were subsequently performed on the ground, none of

when has as yet been submitted for assessment work credit. The writer has seen no evidence of any other prospecting efforts on this ground nor in the general vicinity of it.

TOPOGRAPHY - The topography of the area in which the claim group is located is similar to the regional norm for this part of the Precambrian Shield. Local relief seldom exceeds 100 feet. Rock outcrops are few and far between, though in most localities it is doubtful if the unconsolidated overburden exceeds 50 feet in thickness. The latter consists of thin basal boulder clay tills overlain by outwash sand and gravel deposits of Pleistocene glacial origin.

REGIONAL GEOLOGY - There are as yet no published geological maps which indicate the nature of the bedrock underlying Lloyd township. It is the writer's understanding that in the 1970 field season an Ontario Department of Mines reconnaissance geological party determined that Lloyd and surrounding townships are largely underlain by granitic rocks.

GEOLOGY OF THE PROPERTY - Only a very few small widely scattered outcrops of bedrock were found during the course of the geochemical survey work. These consisted of grey granite gneiss with horizontal to sub-horizontal foliation. At three widely separated places on the property the granite gneiss is heavily impregnated with sulphide minerals mainly pyrrhotite with minor pyrite and trace amounts of chalcopyrite and sphalerite.

GEOCHEMICAL SURVEY OF THE PROPERTY - A geochemical survey was performed over the property in order to outline, if possible, the lateral extent of the sulphide mineralization, and to locate, if possible, any sizeable concentrations of valuable ore minerals in the sulphide zones.

A grid of cut picket lines was established over the property consisting

of two north-south lines spaced 3,000 feet apart, and nine east-west lines spaced 500 feet apart, the whole totalling 12 miles of cut line. North-south survey traverse lines were run at intervals of 100 feet from the cut picket lines using the chain and compass method. Samples were taken at 100 foot intervals along the traverse lines; the sampling tool used was a stainless steel auger capable of taking soil samples to a depth of 6 feet. The soil zone sampled is the "B" zone, that is the zone immediately underlying the humus layer. This zone varied in depth from a few inches to well over six feet. Just under 3,000 samples were collected in the field, and of these just over 2,600 were found to be suitable for analyses. The remainder were black muck samples from the humus layer. The great majority of the samples consisted of fine sandy silt with a sizeable clay-sized fraction present. The samples were placed in individual polyethylene plastic bags for transportation from the field.

The initial analyses were made using a Scintrex Camplab set-up. The samples were first dried then sieved through an 80 mesh aluminum screen. One-tenth of one gram of the fines from each sample were individually digested in hot acid for one hour. One millileter of each solution was then shaken with four ml. of This buffer solution and five ml. of Dithizone solution for one minute, and the mixture allowed to separate. The analysis was then read colorimetrically by comparison with prepared standards. Of the roughly 2,600 samples analysed, some 300 yielded positive results, and these were selected for further snalysis at the Hollinger Assay Office by the Atomic Absorption method. The positive results plotted on the accompanying map are therefore obtained by the latter method, whereas the negative results were obtained by the Camplab colorimetric method.

CONTINUE - A sizeable number of strong positive snalytical results were obtained from various parts of the property, particularly in the northern parts of claims 256319, 256322, and 256323, and the southern parts of claims 256324 and 256321. These areas should be tested for the presence of commercial quantities of base metal mineralization by stripping and trenching operations and/or by core drilling, depending upon the depth of overburden cover there.

H. D. Carlson,

Consulting Geologist.

CERTIFICATE

Concerning this report, I herewith make the following statement:

(1) I have been granted these degrees in the geological sciences:

B.Sc. - 1949 - Queen's University.

M.A.Sc. - 1950 - University of Toronto.

Ph.D. - 1953 - Queen's University.

- (2) I am a Pellow of the Geological Association of Canada, a member of the Untario Association of Professional Engineers, and a member of the Canadian Institute of Mining and Metallurgy.
- (3) I am a Consulting Geologist, resident at 110 Martin Street,
 Porcupine, Ontario.
- (4) I am the recorded holder of the mining claims described in this report.

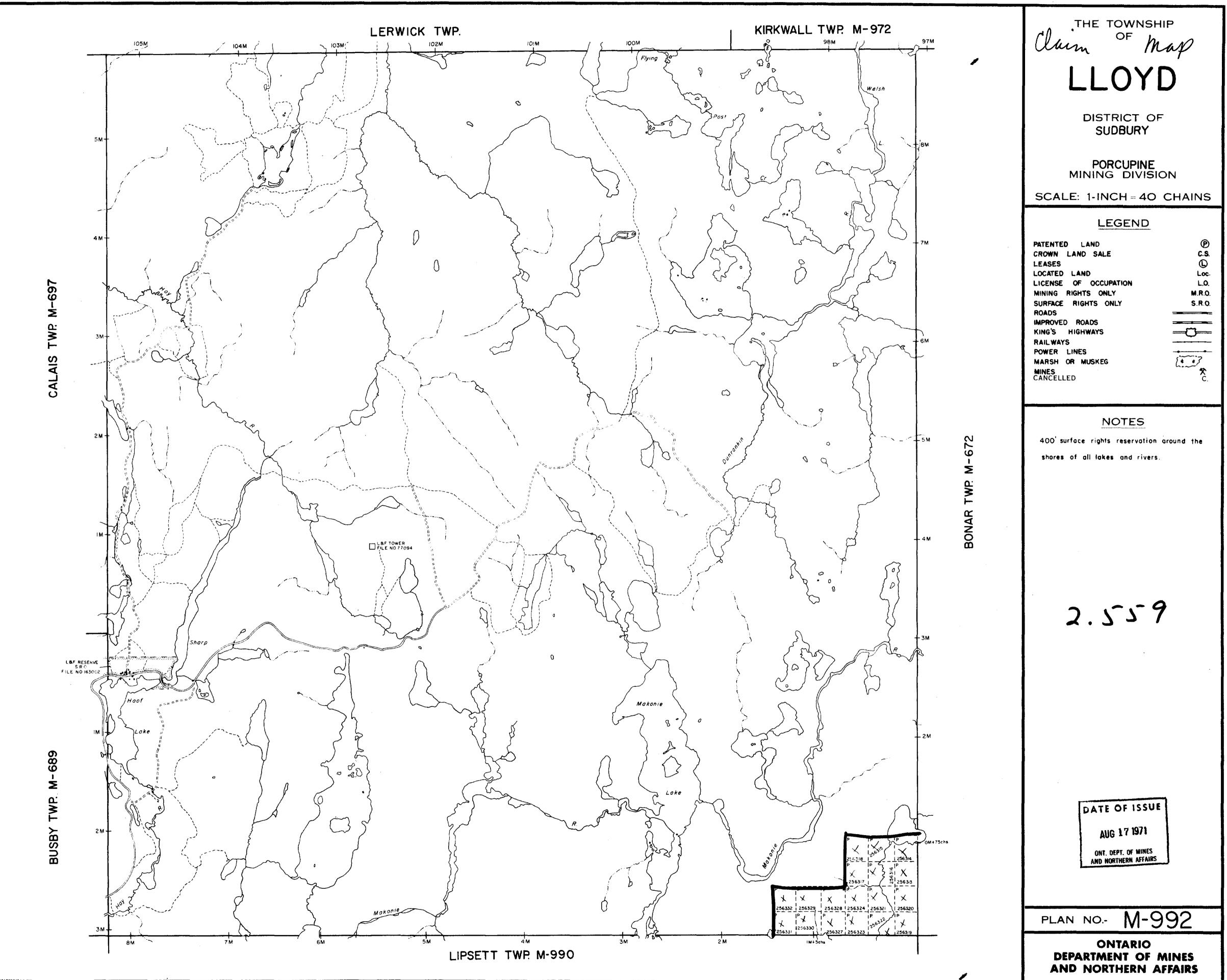
August 10, 1971.

Porcupine, Ontario.

H. D. Carlson,

Ph.D., P. Engineer, Consulting Geologist.





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