

GEOLOGICAL SURVEY REPORT

ON THE

PERRON PROPERTY

CATHARINE TEN GROUP

CATHARINE TOWNSHIP

LARDER LAKE MINING DIVISION

DISTRICT OF TIMISKAMING, ONTARIO

FOR

ALEXANDER H. PERRON

MAY 6, 1985

MARY GREER
GEOLOGICAL TECHNICIAN

RECEIVED

MAY 9 - 1985

MINING LANDS SECTION



TABLE OF CONTENTS

INTRODUCT	ION.	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	٠	•	•	1,	2
PROPERTY	DESC	RIF	ΤI	ON		•	•	•	•	•	•	•	•	•	•	•	•	•	•	2	
LOCATION	AND	ACC	ES	S	•	•	•	•	•	•		•	•	•	•	•	•			2	
PREVIOUS	WORK	٠.	•		•		•	•	•	•	•		•	•	•	•	•			3	
SURVEY PR	OCED	URE		•			•	•	•	•	•	•	•	•		•	•		•	3	
TOPOGRAPH	IY	•		•	•	•	•	•	•		•	•	•	•	•	•	•	•	•	3	
GENERAL G	EOLO	GY	•		•		•	•	•	•		•		•	•	•	•	•	•	3,	4
ECONOMIC	GEOL	.OĞY	.	•	•	•	•	•	•		•	•		,		•	•		•	4,	5
PRESENTAT	ION	0F	FI	EL	D	RE	ΞSΙ	JL 7	ΓS	•	•	•	•					١.		6,	7
CONCLUSIO	NS A	AND.	RE	CO	ΜŅ	1EN	ND/	\T]	101	lS.	•	•	•	•	•	•	•	•		7	
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ILLUSTRATIONS

Location Map	- (Figure 1 a) 2	a)
Location Map	- (Figure 1 b) 2	ь)
Accompanying	Plan Maps In Back Poc	ket
Scale:	1 inch to 200 feet	
Date:	May 1985	

Catharine Ten Group

Geological Survey
West Half
Map No. 85-10W-3
Geological Survey
East Half
Map No. 85-10E-3

GEOLOGICAL SURVEY REPORT

ON THE

PERRON PROPERTY

CATHARINE TEN GROUP

CATHARINE TOWNSHIP

LARDER LAKE MINING DIVISION

DISTRICT OF TIMISKAMING, ONTARIO

INTRODUCTION

The Catharine Ten Group was recorded on April 22, 1983.

A geophysical grid at a 400 foot line spacing was subsequently established by A.H. Perron in January 1984. During the period of March 1984, a geophysical survey (magnetic) was completed over the group.

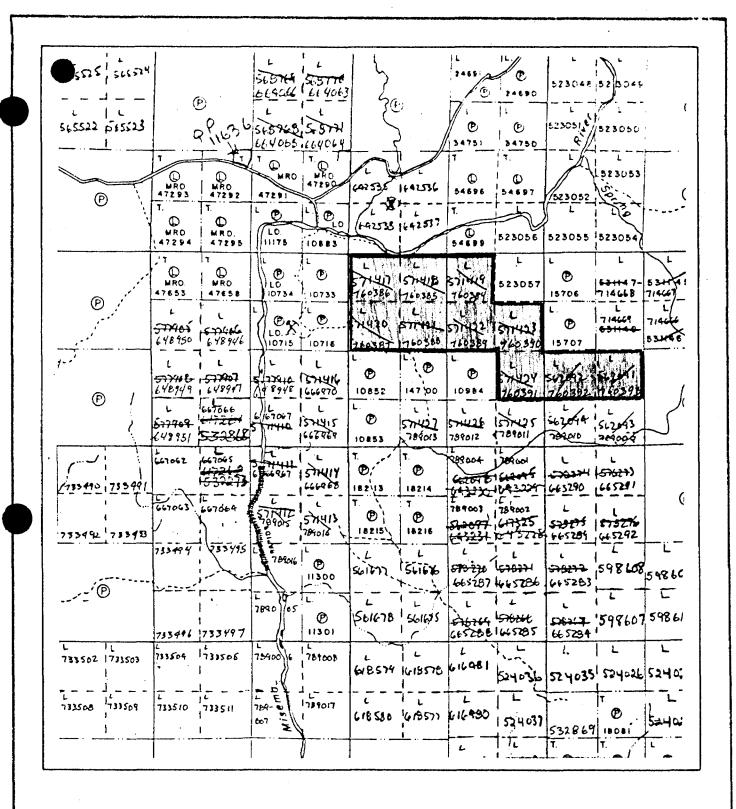
In July - August of 1984, a geological survey was completed describing topography and the visible outcrops.

This work was conducted by Tom Obradovich of Kirkland Lake, Ontario.

All drafting and interpretation was completed by Mary Greer.

The purpose of this report is to briefly describe the results attained in said surveys.

The outcrops detected therefrom are shown on the accompanying plan maps at a scale of one inch to 200 feet, that form an integral part of this



Claim Location Map

Scale: linch to 1/2 mile

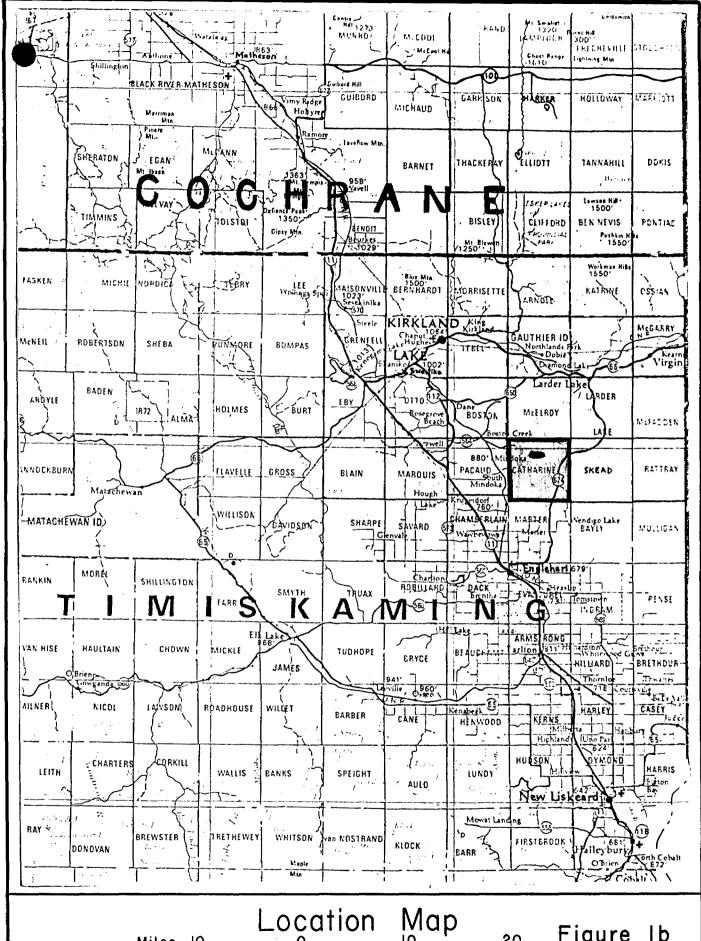


Figure 1b 20 Miles 10

report.

PROPERTY DESCRIPTION

The Catharine Ten Group consists of a contiguous block of ten, 40 acre, unpatented mining claims located in Catharine Township, Larder Lake Mining Division, District of Timiskaming, Ontario, and are further described as follows:

	Claim No.		No. of Claims
L-760384	1 - L-760393 (i	nclusive)	10

Ownership of the aforementioned claims have been attested to by Alexander H. Perron of 103 Government Road East, Kirkland Lake, Ontario, and was not independently ascertained by the writer. (See figure 1a).

LOCATION AND ACCESS

The Catharine Ten Group encompasses Conc. V, Lots 6, 7 and 8, Catharine Township, approximately 12 miles southeast of the town of Kirkland Lake, Ontario.

This property is accessible via a secondary road that extends eastward approximately three miles from the village of Boston Creek to the Misema River which can be crossed by canoe. Boston Creek is located approximately 15 miles southeast of Kirkland Lake and may be reached via highway 112 and 564.

The aforementioned secondary road is easily travelled by standard drive in the summer and snowmobile in the winter. (See Figure 1b).

PREVIOUS WORK

In November 1980, a magnetic survey was carried out for Dome Exploration (Canada) Limited. The magnetic relief and trend was described. Some diamond drilling was also carried out on the property as well as a number of other geophysical surveys. (See Regional Assessment Files).

SURVEY PROCEDURE

A northwest baseline was established from the common post of claims L-760389 and L-760390.

A grid system of picket lines 400 feet apart with stations each 100 feet, was established at right angles to the baseline.

Visible outcrops were noted along the picket lines, and compass and pace lines connected areas between the lines.

TOPOGRAPHY

The general terrain of this property varies from jack pine covered sand ridges to the southeast section of the property, to gently sloping poplar, birch and spruce spotted with small outcrops to the northwest section. The difference in elevation averages 75 feet. The Misema River flows west along the northern boundary.

GENERAL GEOLOGY

0.D.M. Geological Map 2043, covering Catharine and Marter townships, at a scale of one inch to one-half mile, indicates that the bedrock is underlain by Keewatin volcanics. This includes intermediate to acidic volcanics

that are mainly pyroclastic. The local exposed outcrops are classified as a carbonatized fragmented andesite.

ECONOMIC GEOLOGY

Situated to the immediate northwest of the claim group, along the McElroy-Catharine township line, lies the Cathroy-Larder Mine property.

Cathroy-Larder Mines was incorporated in 1943 to succeed Yama Gold Mines. Yama Gold Mines produced 22,250 tons grading 0.14 oz. Au/ton between 1938 to 1942. A new gold zone was discovered by Cathroy-Larder about 1,000 feet south of the shaft. After considerable underground development, including surface and underground diamond drilling, ore reserves were calculated at 280,000 tons grading 0.20 oz Au/ton.

Mirado Nickel optioned the property in 1960 conducting additional surface and underground drilling. In 1980 the property was optioned by Canamax (Amax) and further surface diamond drilling was performed as well as surface stripping over the south ore body.

The rocks within the mine area belong to the Skead-Group which are mainly dacites, andesites, rhyolite flows and pyroclastics. These rocks are cut by small dikes of syenite, lamprophyre and diorite.

The ore is stratabound within pyroclastic units. The shaft ore body is at or near the upper contact of the Skead pyroclastics. The south ore bodies are approximately 1,500 feet from the top of the Skead group.

The upper contact of the Skead group within the mine area strike

about S 70° E and dip steeply north to vertical. The ore zones consist of many narrow quartz-calcite-sulphide and massive sulphide seams. The sulphides are pyrite, chalcopyrite and sphalerite, gold is found in fractures in the pyrite.

PRESENTATION OF FIELD RESULTS

The field data is presented on two map sheets, at a horizontal scale of one inch to 200 feet, Map No. 85-10W-3 and No. 85-10E-3, found in the back pocket of this report.

For the purpose of this presentation, refer to the accompanying plan map for the outcrop locations.

i) Topography:

There was little change in the topography over the whole grid. The grid was covered by mixed forests of spruce, balsam fir and poplar, birch combinations. Some minor low areas were found to have a larger percentage of alder and willow. This was particularly noticed along the banks of the Misema River.

ii) Geology:

Two different rock types, of the Keewatin Series were found on the property. These were a pyroclastic volcanic rock being an agglomerate and aphanitic tuff of a dacite or andesite origin.

The agglomerate had a weathered surface of grey white and was difficult to break with a hammer.

The agglomerate was composed of angular to subrounded pebbles of an assorted materials. The matrix was a grey-green colour which contained visible grains of pyrite.

The aphanitic tuff had the same composition as the agglo-

merate, without the agglomerates.

The tuff weathers a light grey, was not magnetic and easily scratched by a knife.

CONCLUSIONS AND RECOMMENDATIONS

Little outcrop was found on the property. They occurred as small areas sticking out of the glacial overburden.

Due to the larger amount of overburden most of which is related to glacial deposits, a reverse circulation program is proposed. This would help delineate any gold bearing areas for further examination.

Respectfully submitted,

May 6, 1985

Mary Greer Geological Technician

BIBLIOGRAPHY

James A. Grant

1963:

Geological Report No. 18,

Catharine and Marter Townships:

Ontario Department of Mines.

CERTIFICATE

- I, Mary Greer, of Kirkland Lake, Ontario, do hereby certify:
- That I am a Geophysical Technician and reside at:
 49 McKelvie Avenue, Kirkland Lake, Ont. P2N 2K6.
- 2) That I graduated from Sir Sandford Fleming College at Lindsay, Ontario, in 1978, with a diploma as a Geological Technician.
- 3) That I was employed as a Geophysical Technician by H. E. Neal and Associates for 18 months.
- 4) That I have been practising my profession for a period of five (5) years and I am qualified to write this report.
- 5) That I supervised and participated in this survey.

11/00/ 4/0

Mary Green

Geological Technician

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Mining Lands Section

File No 2.80/8

Control Sheet

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Ministry of Natural Resources

GEOPHYSICAL – GEOLOGICAL – GEOCHEMICAL TECHNICAL DATA STATEMENT

TO BE ATTACHED AS AN APPENDIX TO TECHNICAL REPORT FACTS SHOWN HERE NEED NOT BE REPEATED IN REPORT TECHNICAL REPORT MUST CONTAIN INTERPRETATION, CONCLUSIONS ETC.

Type of Survey(s) <u>GEOLOGI</u>	CAL SURVEY	
Township or Area <u>CATHARI</u>	and the second s	MINING CLAIMS TRAVERSED
Claim Holder(s) ALEXAND		List numerically
-	RD. E., KIRKLAND LAKE,ONT	
Survey Company PERRONS		_ L 760384 (prefix) (number)
Author of Report MARY GF		- L 760385
	ELVIE AVE., KIRKLAND LAKE, ON	760396
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OFFICE USE ONLY

GEOPHYSICAL TECHNICAL DATA

GROUND SURVEYS - If more than one survey, specify data for each type of survey Number of Stations 381 ____Number of Readings ____ Station interval 100 FEET Line spacing 400 FEET Profile scale Contour interval Instrument _____ MAGNETIC Accuracy - Scale constant _____ Diurnal correction method _____ Base Station check-in interval (hours)_____ Base Station location and value _____ Instrument _____ ELECTROMAGNETIC Coil configuration ______ Coil separation _____ Accuracy _____ ☐ Fixed transmitter ☐ Shoot back ☐ In line Parallel line Method: Frequency_____ (specify V.L.F. station) Parameters measured _____ Instrument _____ Scale constant _____ Corrections made _____ Base station value and location Elevation accuracy_____ Instrument _____ ☐ Frequency Domain Parameters - On time ______ Frequency _____ - Off time _____ Range ____ - Delay time _____ - Integration time Power ___ Electrode array Electrode spacing Type of electrode _____

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GEOCHEMICAL SURVEY - PROCEDURE RECORD

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103 GOVERNMENT ROAD EAST - KIRKLAND LAKE, ONTARIO - P2N 1A9 - (705) 567-7057

May 6, 1985

Mr. Fred Matthews, Lands Administration Branch. Mining Lands Section, Ministry of Natural Resources, Room 6450, Whitney Block, Queen's Park, Toronto, Ontario M7A IW3

RECEIVED

MAY 9 - 1985

MINING LANDS SECTION Dear Sir:

RE: Geological Survey Report

Catharine Township

Larder Lake Mining Division

Enclosed herewith please find a duplicate copy of the following:

- Report dated May 6, 1985, by Mary Greer entitled:

Geological Survey Report Perron Property Catharine Ten Group Larder Lake Mining Division District of Timiskaming, Ontario

I trust this is the information required to correspond with the Report of Work filed concerning the above noted township.

Yours truly,

PERRONS

Mary Greer, Geological Technician

MG/p

Encls.

