

REPORT

OF

GEOPHYSICAL SURVEYS, REAUME TOWNSHIP GROUP NO. 2

FOR

COULEE LEAD AND ZINC MINES LIMITED 902-55 Yougest

TIMMINS AREA

PORCUPINE MINING DIVISION, ONTARIO

### SUMMARY

Coulee Lead and Zinc Mines Limited hold 24 unpatented contiguous claims in the north central portion of Reaume Township. The northern 18 of these claims were surveyed with magnetometer and electromagnetic equipment. The rocks in this area are generally basic Keewatin voicanics intruded by basic and ultrabasic masses.

The magnetometer survey outlined a broad band of magnetically high readings, within this there are five distinct peaks. There appears to be a north - south striking fault or displacement that crosses the baseline at Line 28 W. Isolated from this main magnetic feature is a magnetic high at 24 + 00 N Line 4 W. Three moderately conductive zones are superimposed on the main magnetic anomaly. These zones are considered as drill targets. Two other conductors were outlined.

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## I INTRODUCTION

The presence of copper intersections were known in Reaume Township as the result of earlier exploration work carried out in search for asbestos, so following the Texas Gulf Sulphur base metal discovery in Kidd Township, to the west, promising ground was acquired.

In order to explore this basemetal situation magnetic and electromagnetic surveys were carried out over an 18 claim portion the Coulee Group No. 2. These claims were located in the north central portion of the Township.

## II PROPERTY, LOCATION AND ACCESS

The northern portion containing the following 18 claims was surveyed.

P - 60815 - 60832 inclusive (18 claims)

The group is located 32 miles northeast of Timmins and about 20 miles northwest of Iroquois Falls. These claims form approximately all of Lots 3 and 4, Concession  $\overline{IV}$  and a portion of Lot 4, Concession  $\overline{V}$ , Resume Township (subdivision annulled).

Access to the property is either from Highway No. 11 which passes approximately 6 miles east of these properties then along a secondary road that comes within a mile or two of the property, or by helicopter from Timmins.

### III GENERAL GEOLOGY

There is a large number of rock outcrops in Reaume

Township and this portion of the Township is underlain by volcanic

rocks basic in composition. These older rocks are intruded by diorites

and gabbros along with some associated ultrabasics, peridotites and

diorites.

Preliminary geologic and reconnaissance magnetic surveys indicate these basic igneous masses are cut and displaced by several north - south striking faults. No outcrops were reported on the claim group.

## IV GEOPHYSICAL SURVEYS

The magnetic and electromagnetic surveys were carried out over a grid that strikes east - west across the property.

North - south traverse lines were cut at 400 foot intervals. The survey results are shown on the two accompanying maps (scale 1" = 200 feet) and are discussed below:

### MAGNETOMETER SURVEY

The magnetic survey results are contoured on the accompanying map. The maximum relief is about 7000 gamma. There are two magnetic features.

There is a broad band of magnetics straddling the baseline from the east to west with a relief of 4000 gamma. Within the
band there are 5 magnetic highs each in excess of 6000 gamma. This
is considered to be made up of basic intrusives. It shows left hand
faulting at Line 24 W, baseline. This north - south fault is likely
related to a similar fault on the Headway Red Lake Gold Mines
Limited property to the north. Termination or dislocation of conductors against this feature tend to confirm its presence.

The second feature is an isolated magnetic closure at 24 + 00 N Line 4 W with a relief of 1400 gamma. This plug-like anomaly is likely a basic intrusive related to the main intrusives in the area.

## ELECTROMAGNETIC SURVEY

A dip-angle survey was run along the traverse lines and the results plotted in profile form. The 1000 cycle per second pro-

files are shown in solid lines. Three moderately conductive zones were located lying within the magnetic (or intrusive) band. An additional conductive zone was located to the north.

### ZONE 'A'

This zone was traced from Line 24 W to Line 40 W. There is some flexure or displacement at the interpreted fault on Line 28 W. The zone appears best on Lines 36 W and 40 W. Line 36 W is a recommended location to drill the zone.

### ZONE 'B'

This conductive zone angles across the magnetic band, it was traced from Line 32 W to Line 56 W. It is best defined on Lines 36 W, 40 W and 44 W. Line 40 W is a recommended location to test the zone.

### ZONE 'C'

This zone is shorter than the previous two. It appears to terminate against the interpreted fault. The recommended location for a test of this zone is Line 16 W. A weak zone parallels this zone about 700 feet to the south.

### ZONE 'D'

This zone is located on Lines 8 W and 12 W. It is best defined on Line 12 W.

## V CONCLUSIONS AND RECOMMENDATIONS

A broad band of magnetics were traced across the property and are interpreted as basic intrusives. Within this band three zones, 'A', 'B' and 'C' were located. An interpreted north - south fault interrupts all of these geophysical features.

In addition, one magnetic anomaly and one electromagnetic zone lie in the northeast portion of the surveyed area.

It is recommended that when a drilling programme is undertaken Zones 'A', 'B' and 'C' be drilled.

An additional hole in the isolated magnetic feature to the northeast is recommended at that time.

Respectfully submitted,

SCOPE MINING AND EXPLORATION CONSULTANTS LIMITED

Tom Glidhiel

Tom Gledhill, P.Eng. Geophysicist.

TORONTO, ONTARIO OCTOBER 9th, 1964.

### APPENDIX

### GROUP NO. 2

### COULEE LEAD AND ZINC MINES LIMITED

## I SUMMARY

Later in October 1964 the six southern most claims were surveyed with a similar type electromagnetic survey. Three conductive zones 'E', 'F' and 'G' were located. Zone 'E' was the most promising of these three zones.

It is recommended that zone 'E' be considered of equal rank to zone 'A', 'B' and 'C' and drilled as part of the same drill program.

## II ELECTROMAGNETIC SURVEY

ZONE 'E' is the eastern portion of a long zone that was traced onto the Headway ground to the west. It has best definition on Line 16 W. It is here it should be tested.

ZONE 'F' is a short zone located on Lines 8 W and 12 W. At present it appears to be of secondary importance.

ZONE 'G' This zone could be the faulted offset of
Zone 'E' and should be evaluated after Zone 'E' has been tested.

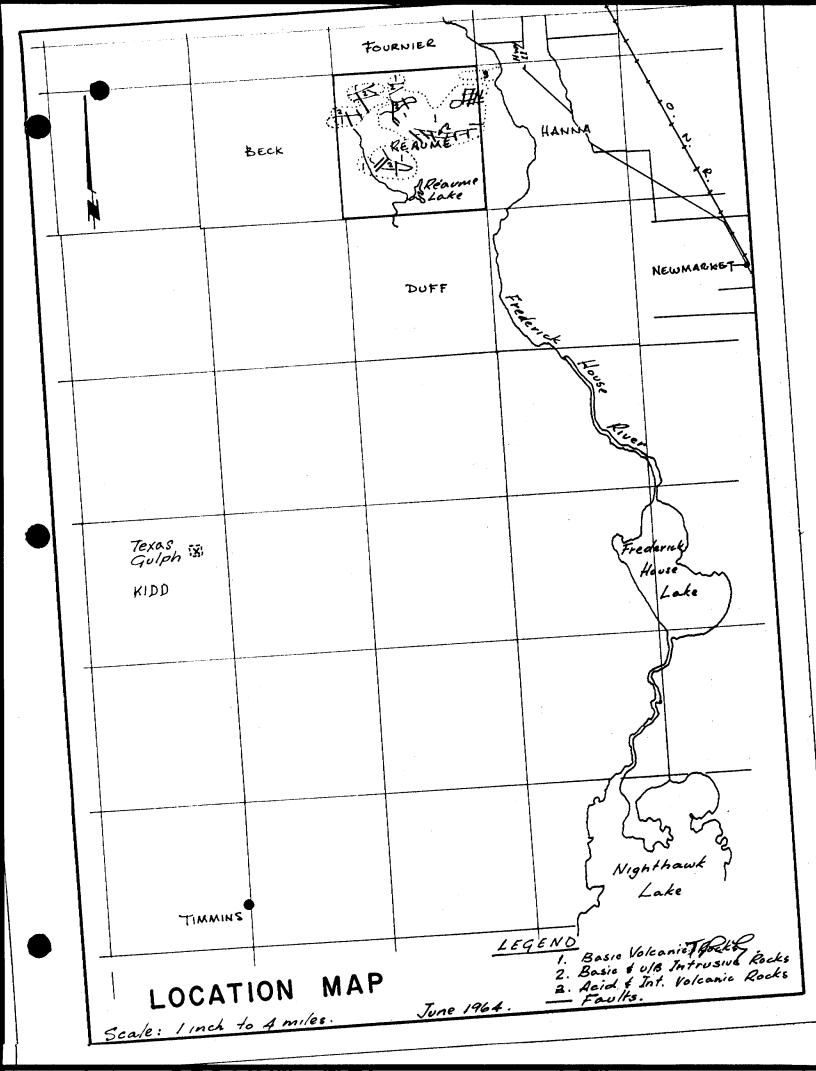
Respectfully submitted,

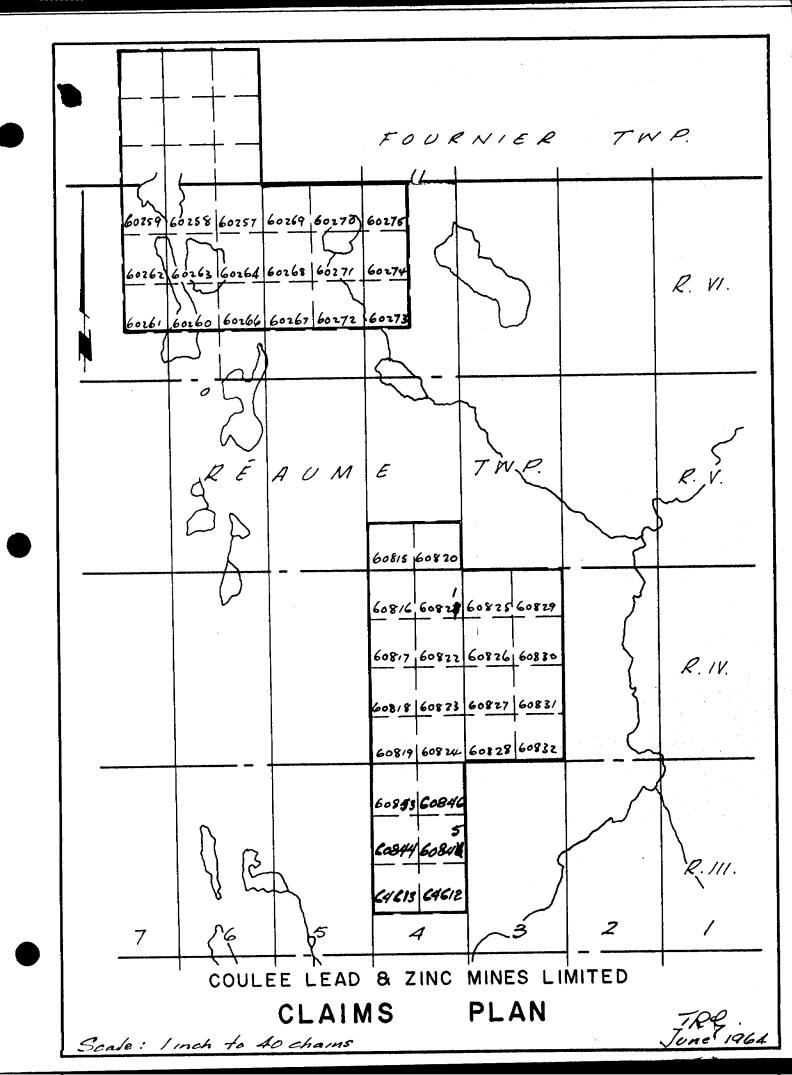
SCOPE MINING AND EXPLORATION CONSULTANTS LIMITED

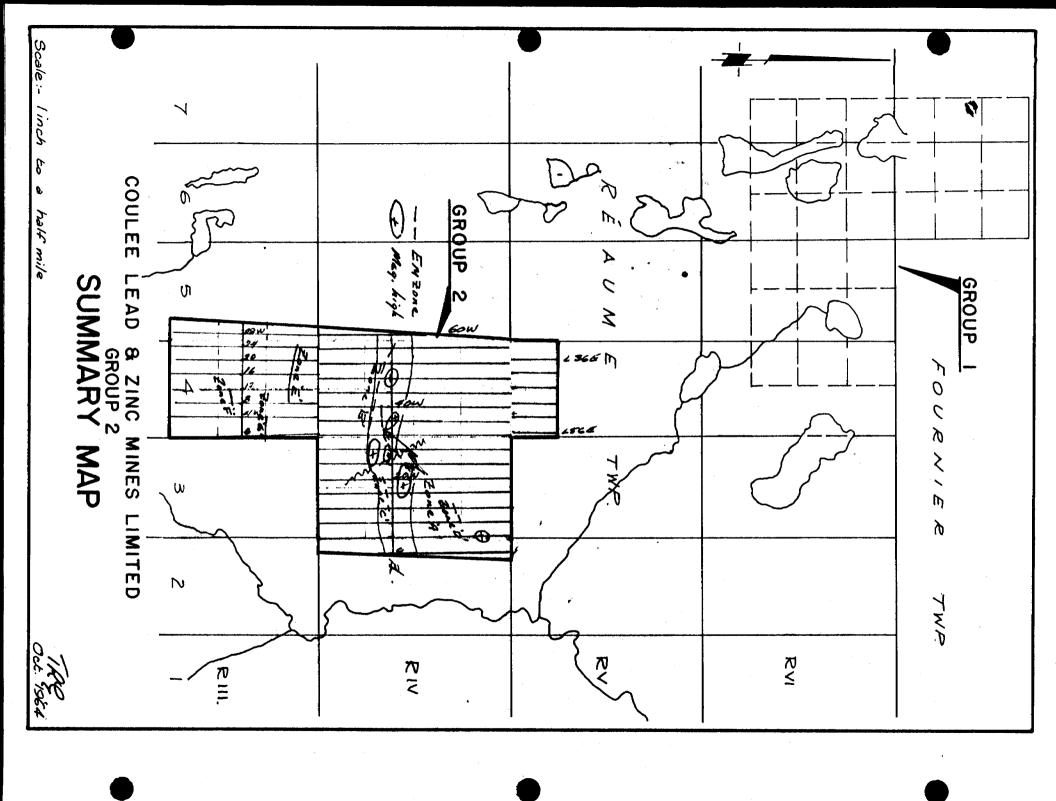
TORONTO, ONTAPIO NOVEMBER 9th, 1964.

Tom Gledhill, P. Eng.

Geophysicist







COULEE # 2



900

All dates 1964	Assessment Work Breakdown
	TOTAL MOIN DIEGROWII

1.	Type of Survey MAGNETIC
2.	Township or Area Reaume Township, Porcupine Mining Division,
3.	Mining claim numbers 18 Claims - P - 60815-32 incl. (18 Electromagnetic and
	Magnetic)
4.	Number of miles of line cut 20.3
5.	Type of instrument used Sharpe MF-1 Fluxgate Magnetometer
6.	Scale constant or sensitivity
7.	Number of stations established Mag 1072
8.	Summary of days worked ( details on reverse side )
	Total technical (include consultants, draughting etc.)
	Total line-cuttingsee_electromagnetic survey
	Total man-days (technical plus line-cutting) 28 x 7 = 196 man days
	Assessment days credit per claim 196/18 = 11 days per claim
	$\mathcal{L}_{\mathcal{L}}}}}}}}}}$

9. Dated Jan. 13, 1965

Signed / com

Tom Gledhill

\* Complete only if applicable

Complete list of names, addresses and dates on reverse side

### Assessment Work Breakdown

## 1. Technical

Type of Work	Name & Addres	s <u>Dates Worked</u>	Hours	Days
Magnetic Survey	(Geo.F.Beier)	c/o Scope _ Sept. 13-18 incl	. 72	9
		Mining & Sept. 13-18 incl		9
	(A. Fleming)	Consultants Sept. 5	12	1.5
	(T. Kerr)	2200 - 372 Bay (Sept. 5 St., Tor.1,Ont.	12	1.5
	. )	St., Tor.1,Ont.		
i,				
		Total	160	21.0

# Consultants

Name & Address	Dates Worked (specify in field or office)	Hours	Days	:
To m Gledhill	(office) 2200 - 372 Bay St., Tor.1 - Oct. 1 & 2	16	2	
T.M. Kerr (	Office) 2200 - 372 Bay St., Tor.1 - Oct. 1 & 2	16	2	
	Totals	32	4	ķ

# Draughtsman, Typing, others (specify)

Name & Address	Type of Work	Dates Worked		Hours	Days	:
M. Thomas)c/o Scope	Mining Drafting	Oct. 3, 4		16	2	
& Explorat M. Waite ) Etd. 2200				8	1	
	onto 1, Ont.					
	γ		Totale	24	3	

## 2. Line-Cutting

Name	Address	Dates Worked	Hours	Days
	<del></del>			
***				
(SEE ELEC	TROMAGNETIC SURVE	7)		<u>.</u>
	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1			
	*	1		
				.,
		Totals		

## COULEE # 2

## All dates 1964

### Assessment Work Breakdown

wnship or Area Reaum	e Township		
Mining claim numbers 24 Cla	im's (P-60844 - 46 in	clusive (3)	
	/ <b>(P-</b> 60853	(1)	6. Claims
	(P-64612-13	(2)	
	(P-60815 - 32 in	clusive (18)	18 Claims
Number of miles of line cut	29.5		24 Claims
	3.5 753		1000 cps
Type of instrument used	McPhar - Vertical	loop - dip and	gie 5000 cps
	McPhar - Vertical		
scale constant or sensitivity		1000cps	<u>)</u>
scale constant or sensitivity	1/2° @ 1000 feet	1000cps	<u>)</u>
Scale constant or sensitivity :  Number of stations established  Summary of days worked ( detail	1/2° @ 1000 feet	1000 cps	<u>)</u>
Scale constant or sensitivity  Number of stations established  Summary of days worked ( detail	1/2° © 1000 feet 1662 stations s on reverse side )	1000 cps	472.5
Scale constant or sensitivity  Number of stations established  Summary of days worked ( detail  Total technical (include consultations)	1/2° © 1000 feet		

9. Dated Jan ... 13/65

Signed / Um

Tom Gledhill

\* Complete only if applicable

Complete list of names, addresses and dates on reverse side

## Assessment Work Breakdown

### 1. <u>Technical</u>

Type of Work	Name & Address	Dates Worked	Hours	Days
Electromagnetic S	urvey - Geo.F.Beier	)c/o Scope_ Sept.19-	30 144	18
		Mining & inc	al.	
	- John Sander	s) Exp. Cons. " "		18
	- A. Fleming	Ltd., )2200-372 Bay - Sept. 6	<b>-</b> 7 24	3
		St Tor 1 ir	icl.	3
	)	Ontario.	77	_
\ 	- Tom Gledhill	_ Oct.16_1	.8 36	4.5
1		in (	el. " 36	4.5
\ \	. )	. )		
	\	То	tals408	51.0

# Consultants

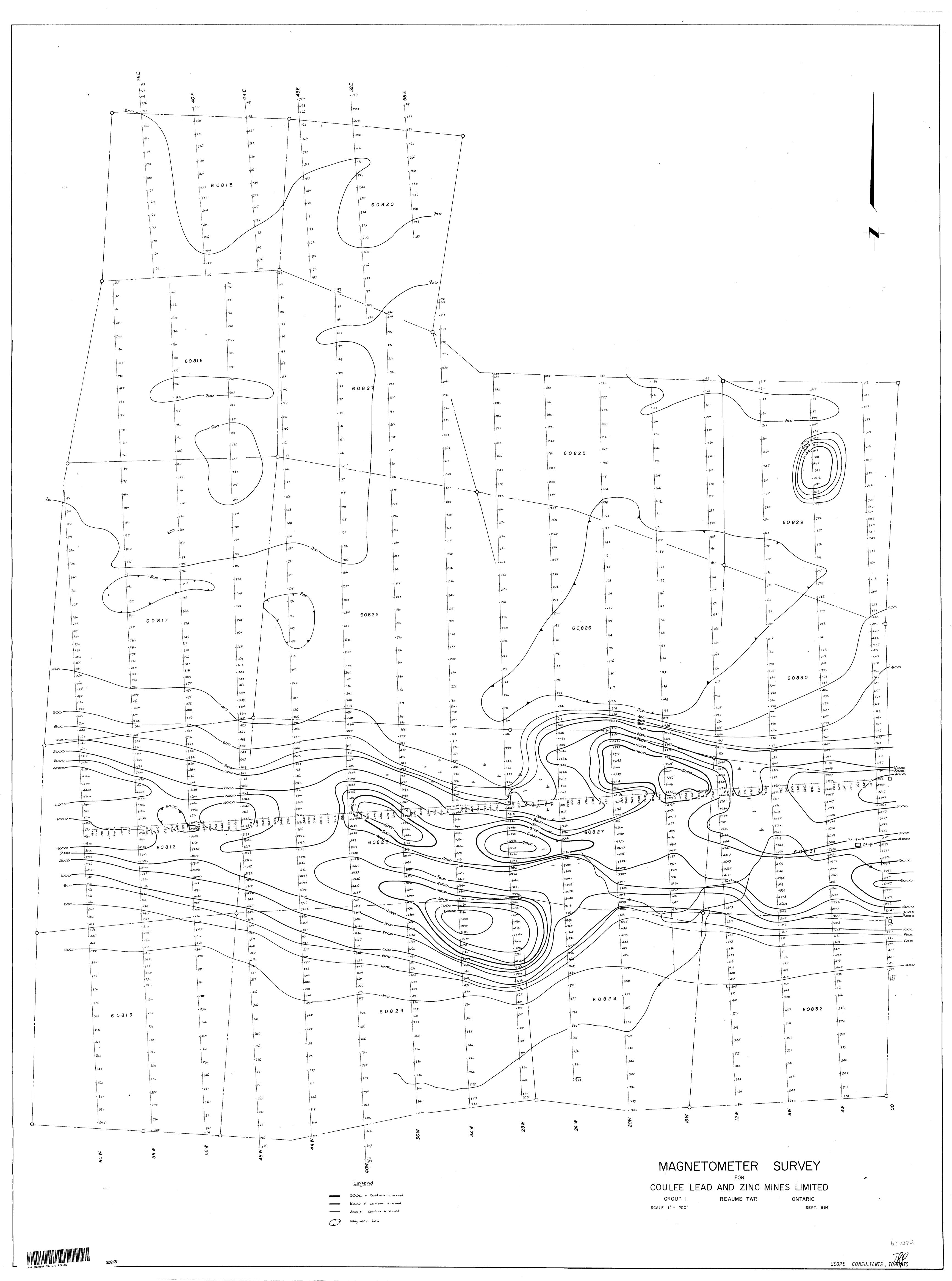
Name & Address	Dates Worked (specify in field or office)	Hours	Days	:
Tom Gledhill (	Office) 2200 - 372 Bay St., - Oct. 5,6,7,8,9,	56	7	
	Nov. 5,6  ffice) TORONTO 1, Ont. \Oct. 5,6	16	2	
	Totals	72	9	

## Draughtsman, Typing, others (specify)

Name & Address	Type of Work	<u>Dates Worked</u>	Hours	<u>Days</u>	:
M. Thomas) c	o Scope Min Drafting	Oct.5,6,7 Nov.7,8,9	36	4.5	
S .T. (	Expl. Cons. td., 2200 _ Typing	Oct. 8,9. Nov.9	24	3	
37	72 Bay <b>S</b> t.,				*******
T	OR. 1, Ont.	Totals	60	7.5	*

# 2. <u>Line-Cutting</u>

Name	Address	Dates Worked	Hours	Days
Shamus Young - S	South Porcupine	Sept. 9 - Oct. 15	444	55.5
Edmund Brierre	11 11	Sept. 9 - Oct. 15	444	55.5
1				
		<b>\</b> =		
			******************	
		Totals	-888	111.0



60815 60820 60816 60827 60825 60829 60822 60817 60826 60830 Heli-port

Camp 60823 60812 60832 60824 6 0 8 1 9 ELECTROMAGNETIC SURVEY COULEE LEAD AND ZINC MINES LIMITED ONTARIO REAUME TWP SEPT. 1964 SCALE | " = 200' 63.1372 SCOPE CONSULTANTS, TORONTO

