42A01SE0116 27 OTTO

DIAMOND DRILLING

TOWNSHIP: OTTO TWP. **REPORT NO:** 27

WORK PERFORMED FOR: Fernand Rivard

RECORDED HOLDER: SAME AS ABOVE (xx)

: OTHER ( )

CLAIM NO.	HOLE NO.	FOOTAGE	DATE	NOTE
982690	1-89	425'	July/89	(1)

NOTES: (1) #W8908.447, filed Mar/90

Ontario

THE MINING ACT – MINISTRY OF NATURAL RESOURCES

DIAMOND DRILLING LOG

Start a new page for every new hole, but fill in top portion of form only on first page for each hole.

FILL IN ON EVERY PAGE ▶ HOLE NO. 1-89 | PAGE NO 1

DRILLING COMPANY	COLLAR ELEVATION	BEARING OF HOLE FROM TRUE NORTH	TOTAL FOOTAGE	DIP OF HOLE AT	LOCATION OF HOLE IN RELATION TO A FIXED POINT ON THE CLAIM	MAP REFERENCE NO.	CLAIM NO.
The CLAIM HOLDERS		N120°E	425 feet	collar -50°	71m SE		982690

DATE HOLE STARTED	DATE COMPLETED	DATE LOGGED	LOGGED BY	LOCATION (Tp., Lot, Con. OR Lot. and Long.)
1989 July 16	1989 Jul 31	1989 Sep 06	Howard LoveLL	OTTO CON VI L 6 5½ NW ¼

EXPLORATION CO., OWNER OR OPTIONEE	DATE SUBMITTED	SUBMITTED BY (Signature)	PROPERTY NAME
Fern + Phil Rivard Lasse Raitanen			Rivard - Raitanen

FOOTAGE FROM	FOOTAGE TO	ROCK TYPE	DESCRIPTION Colour, grain size, texture, minerals, alteration, etc.	PLANAR FEATURE ANGLE *	CORE SPECIMEN FOOTAGE +	YOUR SAMPLE NUMBER	SAMPLE FOOTAGE FROM	SAMPLE FOOTAGE TO	SAMPLE LENGTH	ASSAYS +
0	15 feet	Casing								
15	161	Flow breccia	Mg tholeiitic basalt (not magnetic) to Komatiitic basalt (i.e. a little fibrous to columnar. Talc in small zones, scratched by one's finger nail.							
83	feet	Pale medium	grained spots resemble Nipissing Diabase varied texture ie the phase of tholeiite transitional from basalt to granophyre. Fracture - filling pink and yellowish green epidote stringers are effects of the Otto syenite stock that is one mile south of here (discount the syenite stock a short distance east of here, to where it was offset by a north - south fault)							
112½	feet	Breccia	fragment is spinifex textured.							
148	158	Disseminated	sulfide mineralization mostly associated with white to pink calcite gangue							
158½	190½	Spinifex - textured	Komatiite, probably bladed olivine not stringbeef spinifex pyroxene							
190½	206	Massive flows,	either Komatiitic basalt or Komatiite.							
206	231	Fragmental	flow Komatiitic basalt or Komatiite							
231	237	Disseminated	sulfide in massive talcose rock of Komatiite composition							
237	264	Spinifex	textured flow							
264	287	Fragmental	flow							
287	309	Spinifex								
309	325	Small	spinifex							
325	361	Mg tholeiitic	basalt (harder, and no talc)							
344		Reddish	"granophyric" or syenitized Magnesian tholeiitic basalt							

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* For features such as foliation, bedding, schistosity, measured from the long axis of the core.

+ Additional credit available. See Assessment Work Regulations

Ontario

THE MINING ACT – MINISTRY OF NATURAL RESOURCES

DIAMOND DRILLING LOG

Start a new page for every new hole, but fill in top portion of form only on first page for each hole.

FILL IN ON EVERY PAGE ▶ HOLE NO. 1-89 | PAGE NO. 2

DRILLING COMPANY: The Claimholders	COLLAR ELEVATION: ~~N 120° E~~	BEARING OF HOLE FROM TRUE NORTH: N 120° E	TOTAL FOOTAGE: 425 feet	DIP OF HOLE AT: collar | -50°	LOCATION OF HOLE IN RELATION TO A FIXED POINT ON THE CLAIM
DATE HOLE STARTED: 1989 Jul 16	DATE COMPLETED: 1989 Jul 31	DATE LOGGED: 1989 Sep 06	LOGGED BY: Howard LoveLL	ft |	
EXPLORATION CO., OWNER OR OPTIONEE: Fern + Phil Rivard, Lasse Raitanen	DATE SUBMITTED	SUBMITTED BY (Signature): [signature]		ft |	
				ft |	
				ft |	

MAP REFERENCE NO. | CLAIM NO. 982690

LOCATION (Tp., Lot, Con. OR Lot. and Long.): Otto

PROPERTY NAME: Rivard - Raitanen

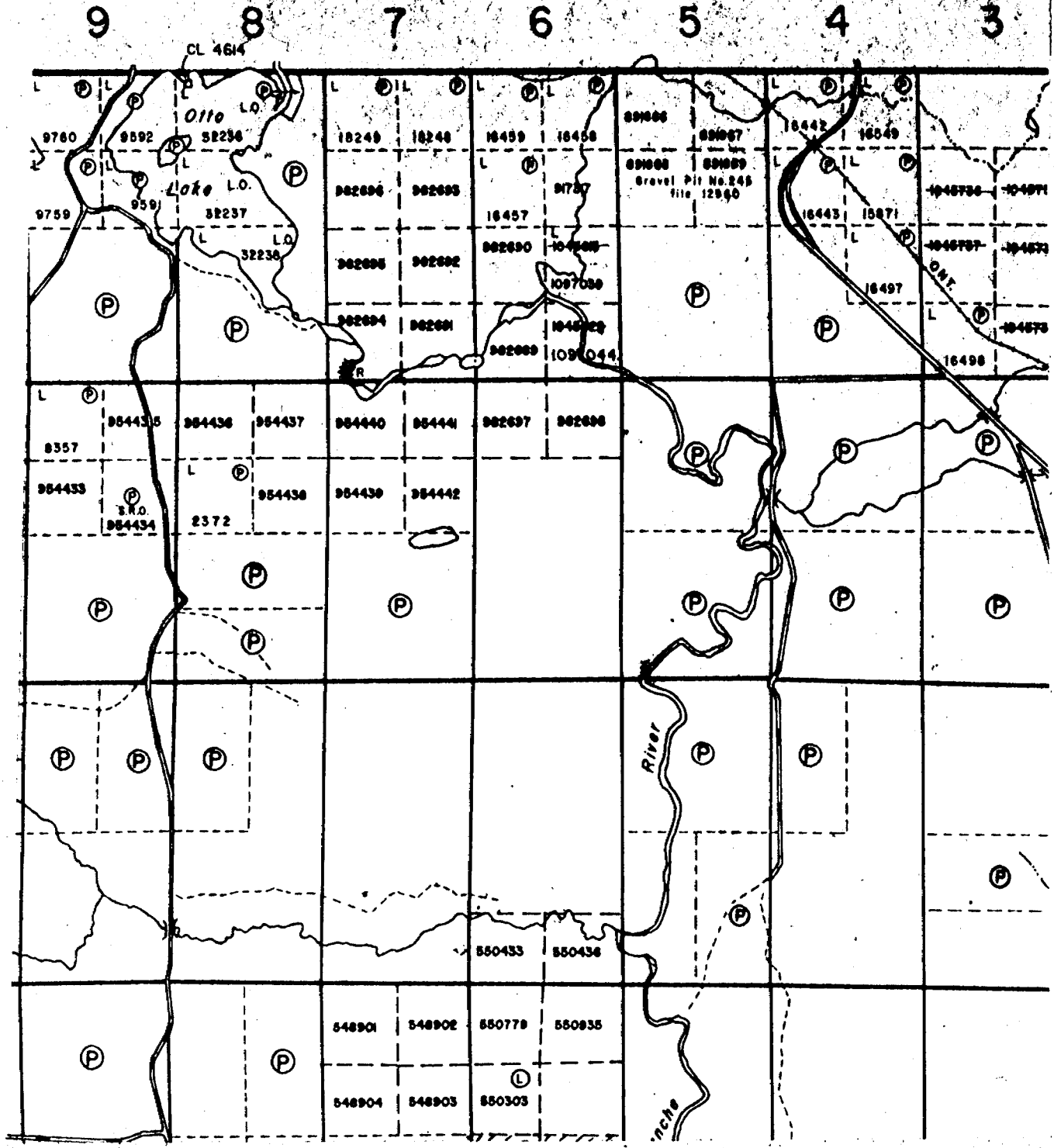
FOOTAGE FROM	FOOTAGE TO	ROCK TYPE	DESCRIPTION Colour, grain size, texture, minerals, alteration, etc.	PLANAR FEATURE ANGLE *	CORE SPECIMEN FOOTAGE +	YOUR SAMPLE NUMBER	SAMPLE FOOTAGE FROM	SAMPLE FOOTAGE TO	SAMPLE LENGTH	ASSAYS +
~~3~~61	~~15 feet~~	~~Casing~~								
361	368	Disseminated and blebby Fe sulfide in a fairly massive rock, fairly hard, not banded, therefore it might be Mg tholeiitic basalt instead of interflow sediment								
368	373	Fragmental	softer (talcose) rock							
373	391	Spinifex								
391	397	Fragmental	flow							
397	403½	Massive medium grained tholeiite (harder)								
403½	404½	Flow top type of breccia								
404½	425	feet End of hole. Flow breccia of Komatiitic composition (softer)								
399	412	feet chips of broken core contained upwards of 0.1 opt Au (Fern Rivard). What remains in core box seems barren.								
Comments		① Contacts tended to be ground core, causing difficulty in determining top direction facings								
		② The core intersects several cycles from flow top breccia to spinifex to massive basalt indicating the hole azimuth is correct, ie perpendicular to flow altitudes, from hanging to foot wall								
		③ The only reason discerned for appreciable Au assays is the presence of quartz stringers that have walls of red and white calcite; pyrite grains are sparse.								
		④ Because the core assayed and found to contain 0.1 opt. Au was chips, perhaps what contains Au is no longer represented in the remaining core available for viewing and check analysis.								

* For features such as foliation, bedding, schistosity, measured from the long axis of the core.

+ Additional credit available. See Assessment Work Regulations.

Otto Twp

TECK TP. - M.392



Ministry of Northern Development and Mines

Ontario

Report of Work

DOCUMENT No. W8908.447 Mining

42A01SE0116 27 OTTO

900

Name and Postal Address of Recorded Holder

FERNAND RIVAR BOX 1091

KIRKLAND LAKE ONT P2N 2C9

Summary of Work Performance and Distribution of Credits

Total Work Days Cr. claimed: 425

for Performance of the following work. (Check one only)

- [ ] Manual Work
- [ ] Shaft Sinking Drifting or other Lateral Work.
- [ ] Compressed Air, other Power driven or mechanical equip.
- [ ] Power Stripping
- [x] Diamond or other Core drilling
- [ ] Land Survey

Mining Claim Prefix	Mining Claim Number	Work Days Cr.	Mining Claim Prefix	Mining Claim Number	Work Days Cr.	Mining Claim Prefix	Mining Claim Number	Work Days Cr.
	[illegible]							
[redacted]	982689	65	[redacted]	982696	40	[redacted]		
	982690	40		982697	40			
	982691	40		982698	40			
	982692	40						
	982693	40						
	982694	40						
	982695	40						

All the work was performed on Mining Claim(s): 982690

Required Information eg: type of equipment, Names, Addresses, etc. (See Table Below)

F. RIVARD - BOX 1091
KIRKLAND LAKE ONT

SPRAG-HENWOOD DIAMOND DRILL - GASPOWERD

CONVENTIONAL DRILL - E RODS - 7/8" CORE

PER DRILL LOG ATTACHED

LARDER LAKE MINING DIV.
RECEIVED
DEC 12 1989
AM 3:15 PM
7 8 9 10 11 12 1 2 3 4 5 6

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Date of Report	Recorded Holder or Agent (Signature)
DEC 11/1989	F. Rivard

Certification Verifying Report of Work

I hereby certify that I have a personal and intimate knowledge of the facts set forth in the Report of Work annexed hereto, having performed the work or witnessed same during and/or after its completion and the annexed report is true.

Name and Postal Address of Person Certifying

FERNAND RIVARD BOX 1091 KIRKLAND LAKE ONT P2N 2C9

Date Certified	Certified by (Signature)
Dec 11 1989	F. Rivard

Table of Information/Attachments Required by the Mining Recorder

Type of Work	Specific Information per type	Other Information (Common to 2 or more types)	Attachments
Manual Work	Nil	Names and addresses of men who performed manual work/operated equipment, together with dates and hours of employment.	Work Sketch: these are required to show the location and extent of work in relation to the nearest claim post.
Shaft Sinking, Drifting or other Lateral Work			
Compressed air, other power driven or mechanical equip.	Type of equipment		
Power Stripping	Type of equipment and amount expended. Note: Proof of actual cost must be submitted within 30 days of recording.	Names and addresses of owner or operator together with dates when drilling/stripping done.	
Diamond or other core drilling	Signed core log showing; footage, diameter of core, number and angles of holes.		Work Sketch (as above) in duplicate

Schistosity measured from the long axis of the core.