42A01SE0114 28 OTTO

DIAMOND DRILLING

TOWNSHIP: OTTO REPORT NO: 28

WORK PERFORMED FOR: FERNAND RIVARD

RECORDED HOLDER: SAME AS ABOVE [X]

: OTHER [ ]

CLAIM NO.	HOLE NO.	FOOTAGE	DATE	NOTE
L-982694	OT-90-1	431.0'	SEPT/90	(1)

NOTES: (1) #W9108.00104, FILED JUNE/91

RECORDING OF FACE DRILLING

DIAMOND DRILL RECORD

Company:	F. Rivard			Hole No.	OT-90-1	
Location:	Otto Township	Date Started:	Sept. 5/90	Page No.	1	
Level:	Surface	Date Finished:	Sept. 30/90	Core Size:	E 7/8"	
Bearing:	330 degrees	Logged:	S. Carmichael	Test-Acid:		Tropari:
Inclination:	-75 degrees	Core Saved?	Yes	Discarded:		Strike Dip
		Casing: Left				
Total Depth:	431.0 feet	Elevation:	N/A	At:		
		Claim No.:	L-982694	At:		
Coords Collar - Lat:	53m S. of #4 Post	Dep:	45m E. of #4 Post	At:		
Drilled by:	F. Rivard	Date Logged:	Nov. 3, 1990			

FOOTAGE From - To	GEOLOGICAL & PHYSICAL DESCRIPTION	SAMPLE NUMBER	FROM - TO	AU PPB	AU GRAMS/TON	AU OZ/TON	LENGTH
0.0 to 3.0 feet	Casing						
3.0 to 219.0 feet	Mafic Volvanics (Basalt)						
	Dark green to grey fine to medium-grained basalt. Moderately to locally highly fractured with quartz veins and stringers +- carbonate. Two ages of veining are present. Early veins are grey/green chloritic and later veins are milky white. Basalt is speckled throughout with leucoxene. Trace pyrite mineralization, locally 5% py in veins/ silicified sections.						
	30.0-34.0' - veined from 30.5' to 31.2' 2% pyrite.	7151	30.0-34.0 ft.			Nil	4.0 ft.
	34.0-37.0' - quartz vein from 35.8' to 34.3' and from 35.6 to 37.0'. Dip 76 deg. to C.A.	7152	34.0-37.0 ft.			Nil	3.0 ft.
	37.0'-41.0' - moderately fractured basalt. 4% quartz stringers. Nil py.	7153	37.0-41.0 ft.			Nil	4.0 ft.
	49.5-53.0' - 10% qtz/calcite veins and flooding, nil pyrite.	7154	49.5-53.0 ft.	10.0		Nil	3.5 ft.
	103.0-107.0' - moderately carbonatized from 104.0-107.0'. 5% py at 105.0'.	7155	103.0-107.0 ft.			Nil	4.0 ft.
	112.0-116.6' - moderately carbonatized with 5% disseminated pyrite from 112.0-113.0'.	7156	112.0-116.5 ft.	114.0		0.003	4.5 ft.
Possible Fault	156.0' - poorly developed clay gouge						
	195.0-197.0' - quartz vein from 106.1-196.4'. Dip 70 deg. to C.A. Trace py.	7157	195.0-197.0 ft.			Nil	2.0 ft.
	196.0-198.0' - basalt becoming finer grained. Possible flow contact.						
	205.0-205.4' - quartz vein, barren.						

	Broken core.						
	206.0' - becomong finer grained						
219.0-221.5 feet	Flow Top Breccia						
		7158	219.0-221.5 ft.			Nil	2.5 ft.
	breccia. 10% quartz flooding.						
221.5-291.0 feet	Mafic Volcanics (Basalt)						
	Fine grained flow unit. Non-magnetic. Local phases of flow top breccia. Unit may be a Mg-tholeiite at top of flow. Moderately fractured with quartz stringers +- calcite. Possible interflow material throughout is carbonate-rich.						
	237.8-242.0' - weakly carbonatized interflow material from 240.0-242.0'. Trace pyrite.	7159	237.8-242.0 ft.	17.0		Nil	4.2 ft.
	242.0-247.0' - fine-grained aphanitic basalt. Weakly fractured with calcite. Trace py.	7160	242.0-247.0 ft.	14.0		Nil	5.0 ft.
	276.0-281.0' - brecciated from 277.8-279.0'. Trace to locally 2% py.	121592	276.0-281.0 ft.			Nil	5.0 ft.
	282.0-286.0' - fine-grained, moderately fractured. Trace to 1% py in fractures.	121593	282.0-286.0 ft.			Nil	4.0 ft.
291.0-294.0 feet	Massive Pyrite						
	Possible interflow section with 80% py. 10% recrystallized py, remainder is nodular.	121594	291.0-294.0 ft.			Nil	3.0 ft.
294.0-431.0 feet	Mafic Volcanics (Basalt)						
	Continuation of unit above massive py.						
	306.0-310.0' - 1% disseminated py.	121595	306.0-310.0 ft.			Nil	4.0 ft.
	315.5-317.0' - flow top breccia, minor hyaloclastite.						
	326.0-329.0' - qtz flooding from 326.5-327.3'. 1-2% py.	121596	326.0-329.0 ft.	13.0		Nil	3.0 ft.
	334.0-337.0' - 8-10% py from 335.0-336.0'.	121597	334.0-337.0 ft.	14.0		Nil	3.0 ft.
	350.0-370.0' - becoming increasingly Mg rich, almost komatiitic.						
	371.0-376.0' - flow top breccia, possible interflow material. Trace to 1% py.	121598	371.0-376.0 ft.			Nil	5.0 ft.
	405.0' - becoming slightly coarser grained.						
431.0 feet	End of Hole						

No Averages Calculated

[redacted] OT-90-1

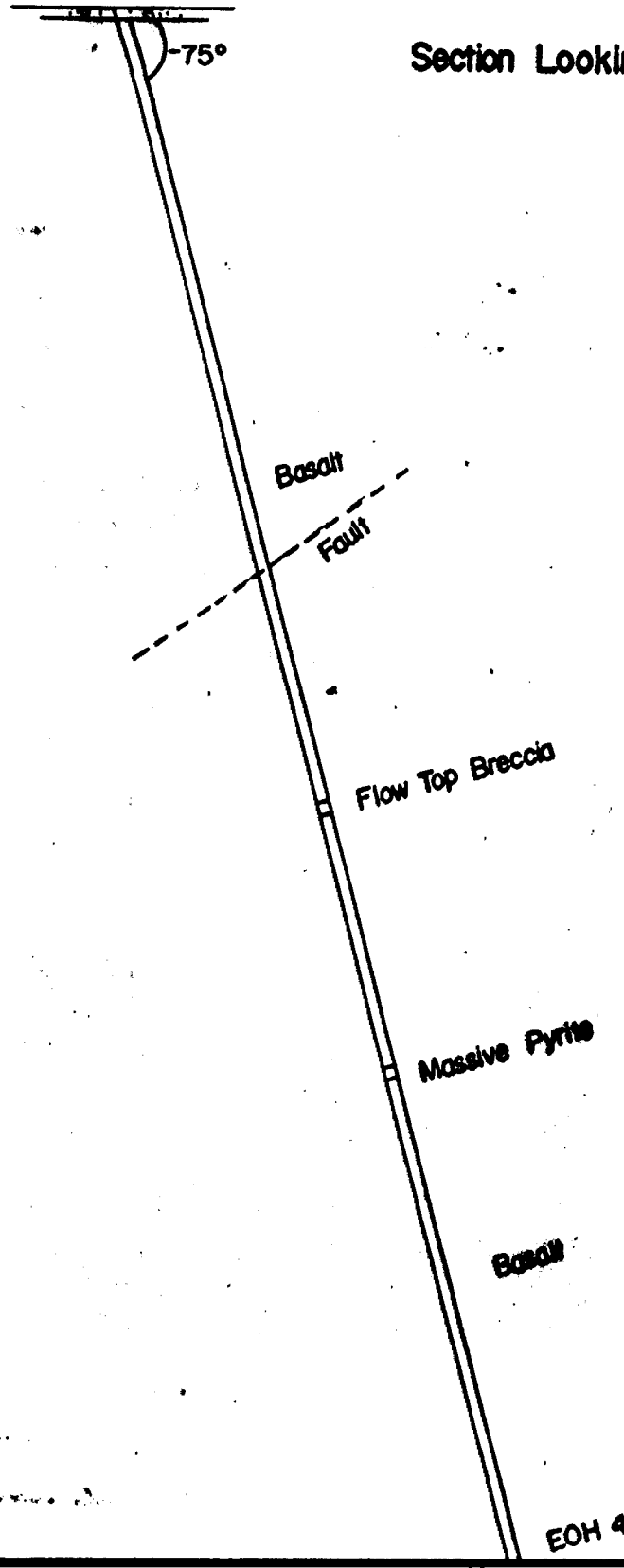
Sludge Assays:

0.0-31.0 ft.	121551	3	ppb	Au		220.0-230.0 ft.	121571	Nil
31.0-40.0 ft.	121552	10	"	"		230.0-240.0 ft.	121572	7
40.0-50.0 ft.	121553	7	"	"		240.0-250.0 ft.	121573	Nil
50.0-60.0 ft.	121554	3	"	"		250.0-260.0 ft.	121574	10
60.0-70.0 ft.	121555	10	"	"		260.0-271.0 ft.	121575	Nil
70.0-80.0 ft.	121556	14	"	"		271.0-280.0 ft.	121576	Nil
80.0-90.0 ft.	121557	Nil	"	"		280.0-290.0 ft.	121577	24
90.0-100.0 ft.	121558	24	"	"		290.0-300.0 ft.	121578	Nil
100.0-110.0 ft.	121559	17	"	"		300.0-310.0 ft.	121579	Nil
110.0 120.0 ft.	121560	Nil	"	"		310.0-320.0 ft.	121580	Nil
120.0-130.0 ft.	121561	Nil	"	"		320.0-330.0 ft.	121581	Nil
130.0-140.0 ft.	121562	Nil	"	"		330.0-340.0 ft.	121582	10
140.0-150.0 ft.	121563	Nil	"	"		340.0-350.0 ft.	121583	24
150.0-160.0 ft.	121564	Nil	"	"		350.0-360.0 ft.	121584	22
160.0-170.0 ft.	121565	Nil	"	"		360.0-370.0 ft.	121585	3
170.0-180.0 ft.	121566	Nil	"	"		370.0-380.0 ft.	121586	22
180.0-190.0 ft.	121567	Nil	"	"		380.0-390.0 ft.	121587	Nil
190.0-200.0 ft.	121568	Nil	"	"		390.0-400.0 ft.	121588	17
200.0-210.0 ft.	121569	Nil	"	"		400.0-410.0 ft.	121589	Nil
210.0-220.0 ft.	121570	Nil	"	"		410.0-420.0 ft.	121590	Nil
						420.0-431.0 ft.	121591	10

Additional Sludge Assays

\# 121570 210.0-220.0 ft. 0.1 ppm Ag
121576 271.0-280.0 ft. 0.1 ppm Ag, 173 ppm Cu, 25 ppm Pb, 205 ppm Zn
<10 ppb Pt, <5 ppb Pd
121577 280.0-290.0 ft. 0.3 ppm Ag, 176 ppm Cu, 11 ppm Pb, 388 ppm Zn
<10 ppb Pt, <5 ppb Pd
121578 290.0-300.0 ft. 0.1 ppm Ag, 142 ppm Cu, 32 ppm Pb, 200 ppm Zn
<10 ppb Pt, <5 ppb Pd
121584 350.0-360.0 ft. 0.2 ppm Ag
121585 360.0-370.0 ft. 0.1 ppm Ag
121586 370.0-380.0 ft. 0.1 ppm Ag
121587 380.0-390.0 ft. 0.1 ppm Ag
121588 390.0-400.0 ft. 0.1 ppm Ag

GEOLOGICAL ASSOCIATION OF CANADA
J. Carmichael
Dec. 1/90
FELLOW



Section Looking 240° (SW)

DDH SECTION GT-90-1

OTTO [redacted]

[redacted] DIVISION

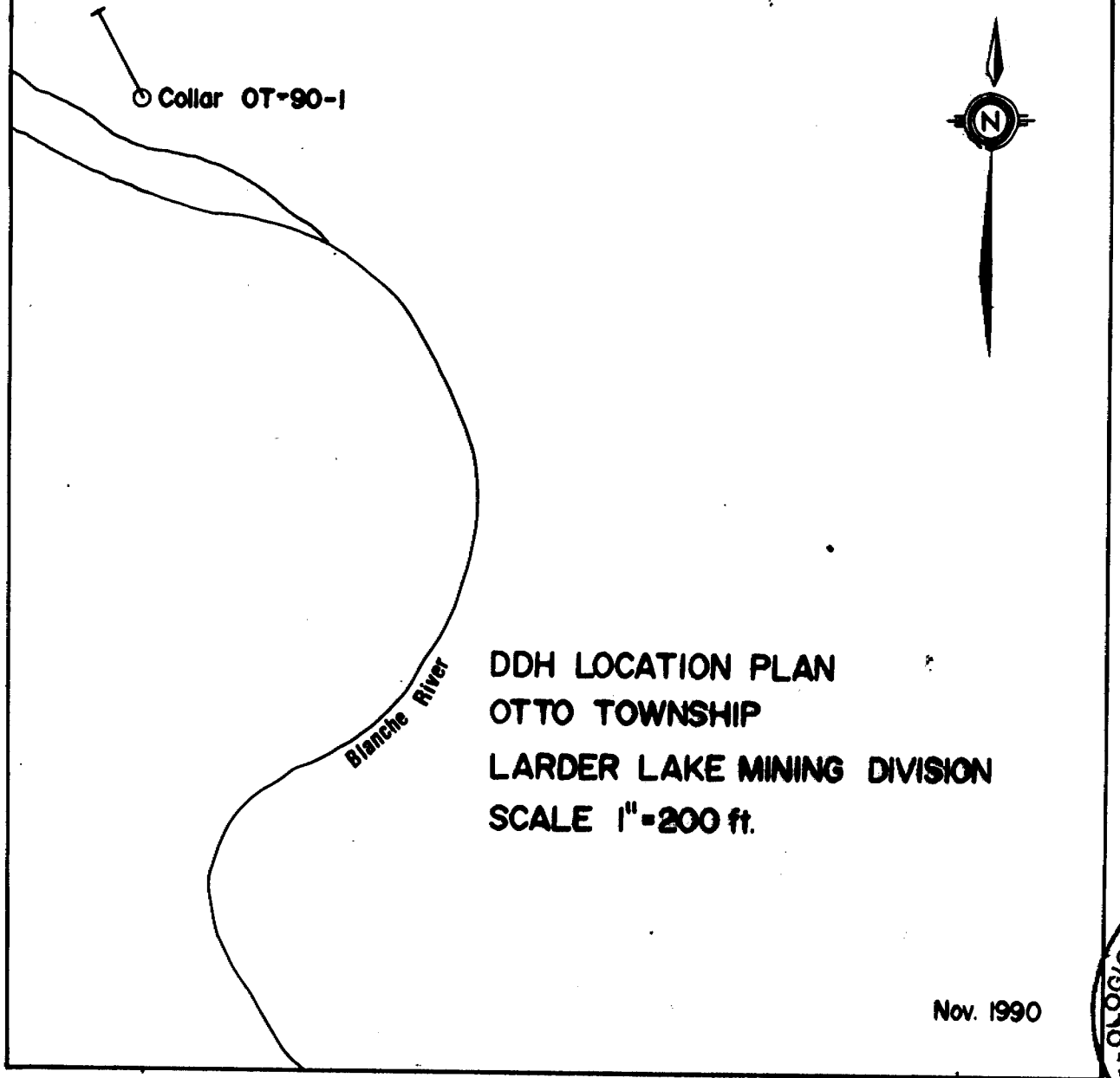
SCALE [redacted]

GEOLOGICAL ASSOCIATION OF CANADA
S. J. Carmichael
Dec. 1/90
FELLOW

Nov. 1990

L-982695

L-982694



L-982691

DDH LOCATION PLAN
OTTO TOWNSHIP
LARDER LAKE MINING DIVISION
SCALE 1"=200 ft.

Nov. 1990

GEOLOGICAL ASSOCIATION OF CANADA
S. J. Carmichael
Dec. 1/90
FELLOW

R. AL.

Ministry of Northern Development and Mines
Ontario

DOCUMENT No. W 9108. 00104

Instructions
- Please type or print.
- For each type of work performed, a separate Report of Work should be completed.
- For Geo-technical work, use form no. 1362 "Report of Work (Geological, Geophysical, Geochemical") and form no. 876 for Expenditures.
- Refer to Sections 76 and 77, the Mining Act for assessment work requirements and the reverse side of this form for table of information.

Mining Act — Report of Work

Name and Address of Recorded Holder	Prospector's Licence No.
FERNAND RIVARD 11 GOV RD WEST	K19102
KIRKLAND LAKE ONT P2N 2C9	Telephone No. 705-567-7344

Summary of Distribution of Credits and Work Performance

Mining Division	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.
LARDER LAKE	L	982689	44						
Township or Area: OTTO TWP	L	982690	40						
Total Assessment Credits Claimed: 431	L	982691	67						
Type of Work Performed (Check one only)	L	982692	40						
☐ Manual Work	L	982693	40						
☐ Shaft Sinking Drifting or other Lateral Work	L	982694	40						
☐ Mechanical equipment	L	982695	40						
☐ Power Stripping other than Manual (maximum credit allowed - 100 days per claim)	L	982696	40						
☒ Diamond or other Core drilling	L	982697	40						
☐ Core Specimens	L	982698	40						

Dates when work was performed	Total No. of Days Performed	Total No. of Days Claimed	Total No. of Days to be Claimed at a Future Date
From: SEPT 5/90 To: SEPT 30/90	431	431	

All the work was performed on Mining Claim(s): Indicate no. of days performed on each claim. * (See note No. 1 on reverse side)

Mining Claim	No. of Days	Mining Claim	No. of Days	Mining Claim	No. of Days	Mining Claim	No. of Days	Mining Claim	No. of Days	Mining Claim	No. of Days
L 982694	431										

Required Information eg. type of equipment, Names, Addresses, etc. (See Table on reverse side)
If space below is insufficient, attach schedules with required information and location sketches

SPRAGUE HENWOOD DIAMOND DRILL ECORE - 7/8"
OWNER - FERNAND RIVARD
11 GOV RD WEST P2N 2C
KIRKLAND LAKE ONT PH 705-567-7344

ONTARIO GEOLOGICAL SURVEY
GIS - ASSESSMENT FILES
MAY 07 1991
RECEIVED

Certification of Beneficial Interest * (See Note No. 2 on reverse side)

I hereby certify that, at the time the work was performed, the claims covered in this report of work were recorded in the current recorded holder's name or held under a beneficial interest by the current recorded holder.	Date	Recorded Holder or Agent (Signature)
	DEC 27/90	

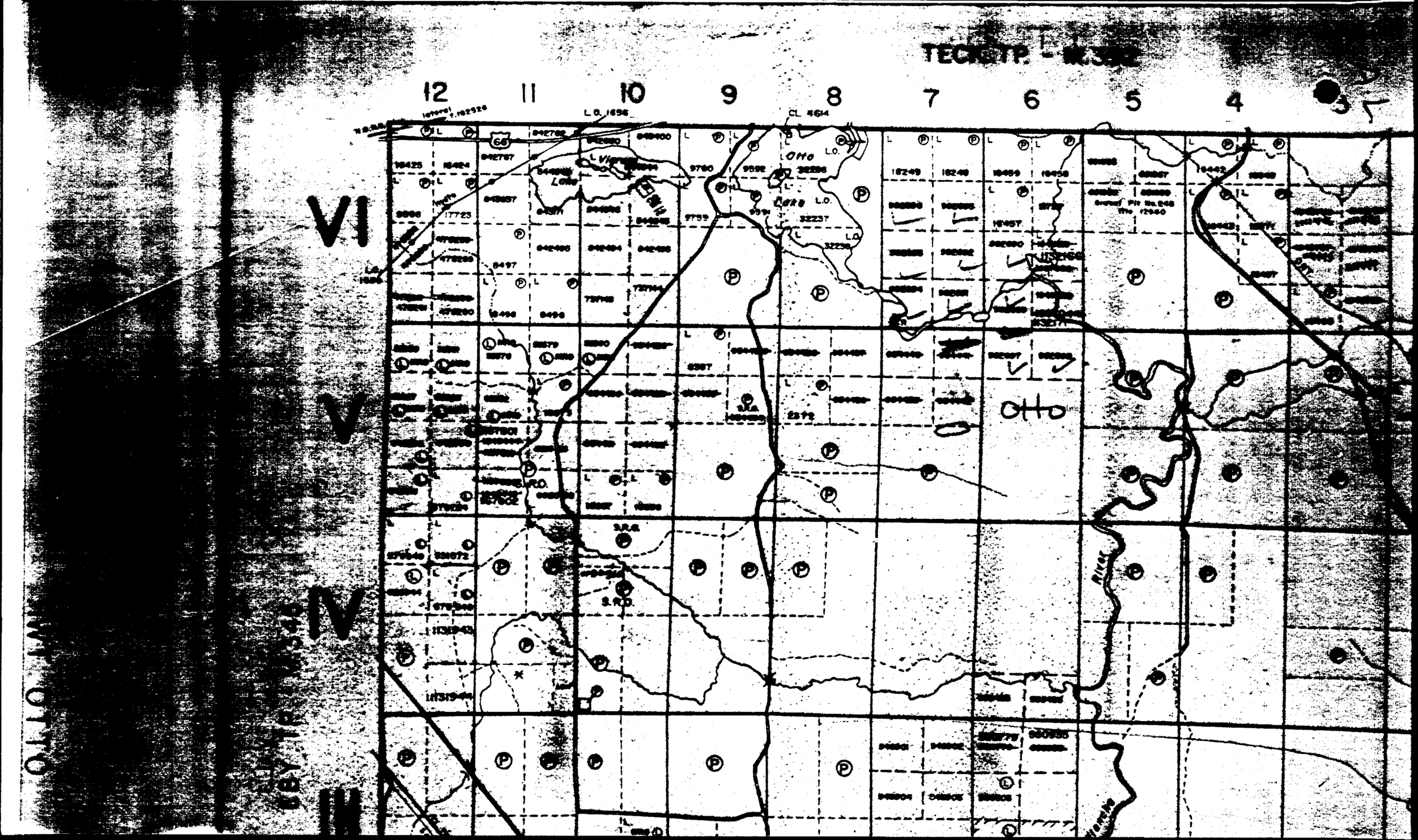
Certification Verifying Report of Work

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 Address of Person Certifying	Telephone No.	Date	Certified By (Signature)
FERNAND RIVARD 11 GOV RD WEST KIRKLAND LAKE ONT	705-567-7344	DEC 27/90	

For Office Use Only

Work Assignments	Received Stamp
L 982694 F. Rivard. 391 3609	LARDER LAKE MINING DIVISION RECEIVED 1991 MAR 5 AM 11 22


TECHNICAL - W.S.
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Ministry of Northern Development and Mines
Ontario

DOCUMENT No. W9108.00104

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...ections 76 and 77, the Mining Act for assessment work requirements and the reverse side of this form for table of information.

Mining Act — Report of Work

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FERNAND RIVARD 11 GOV RD WEST	K19102
KIRKLAND LAKE ONT P2N 2C9	Telephone No. 705-567-7344

Summary of Distribution of Credits and Work Performance

Mining Division: LARDER LAKE
Township or Area: OTTO TWP
Total Assessment Credits Claimed: 431

Type of Work Performed (Check one only)
- ☐ Manual Work
- ☐ Shaft Sinking Drifting or other Lateral Work
- ☐ Mechanical equipment
- ☐ Power Stripping other than Manual (maximum credit allowed - 100 days per claim)
- ☒ Diamond or other Core drilling
- ☐ Core Specimens

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.
L	982689	44						
L	982690	40						
L	982691	67						
L	982692	40						
L	982693	40						
L	982694	40						
L	982695	40						
L	982696	40						
L	982697	40						
L	982698	40						

Dates when work was performed	Total No. of Days Performed	Total No. of Days Claimed	Total No. of Days to be Claimed at a Future Date
From: SEPT 5/90 To: SEPT 30/90	431	431	

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Mining Claim	No. of Days	Mining Claim	No. of Days	Mining Claim	No. of Days	Mining Claim	No. of Days	Mining Claim	No. of Days	Mining Claim	No. of Days
L 982694	431										

Required Information eg. type of equipment, Names, Addresses, etc. (See Table on reverse side)
If space below is insufficient, attach schedules with required information and location sketches

SPRAGUE HENWOOD DIAMOND DRILL ECORE - 7/8"
OWNER - FERNAND RIVARD
11 GOV RD WEST P2N 2C
KIRKLAND LAKE ONT PH 705-

ONTARIO GEOLOGICAL SURVEY
GIS - ASSESSMENT FILES
MAY 07 1991
RECEIVED

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I hereby certify that, at the time the work was performed, the claims covered in this report of work were recorded in the current recorded holder's name or held under a beneficial interest by the current recorded holder.	Date	Recorded Holder or Agent (Signature)
	DEC 27/90	

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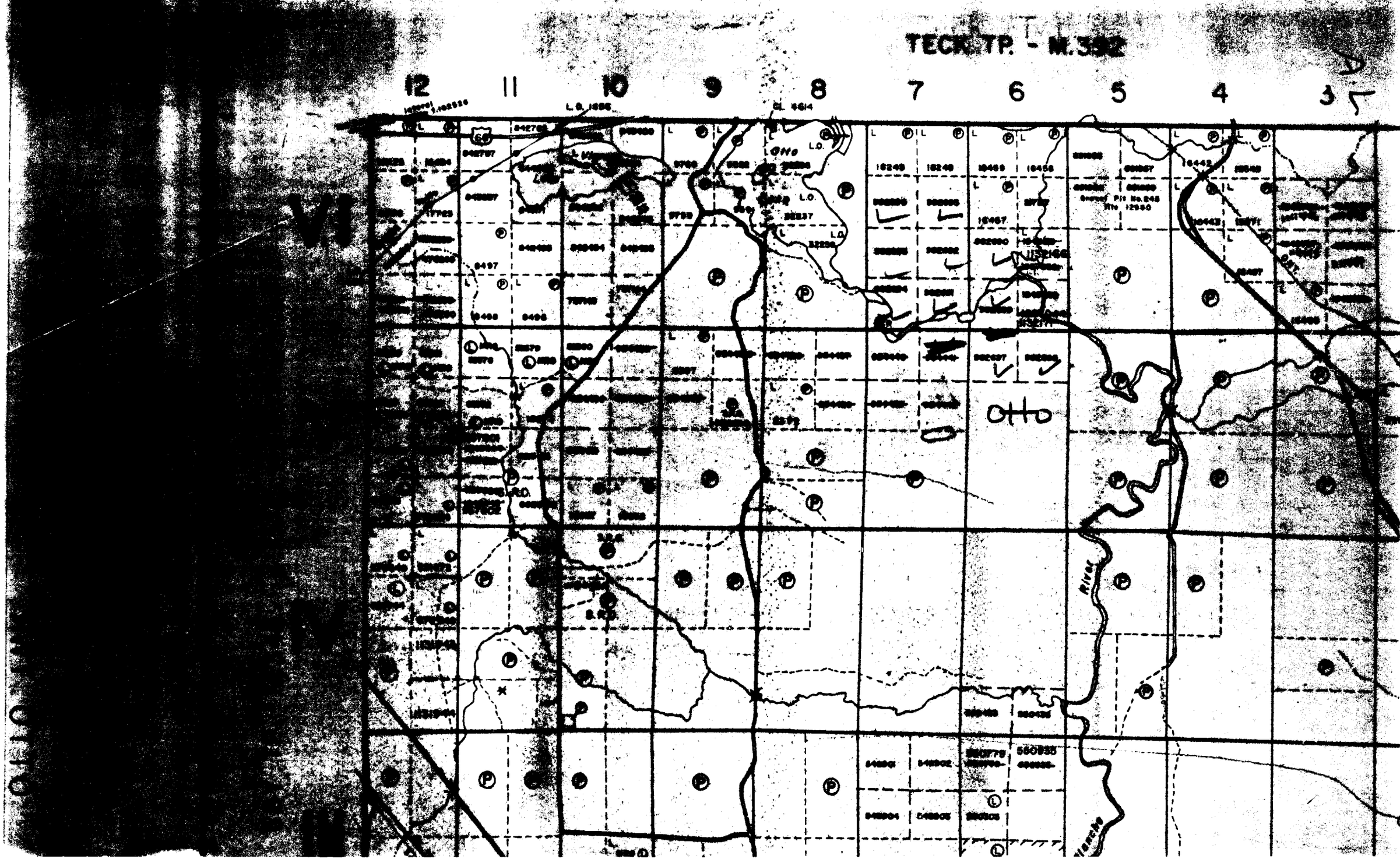
Name and Address of Person Certifying	Telephone No.	Date	Certified By (Signature)
FERNAND RIVARD 11 GOV RD WEST KIRKLAND LAKE ONT	705-567-7344	DEC 27/90	

For Office Use Only

Work Assignments: L 982694 F. Rivard. 391 3609

Received Stamp

LARDER LAKE MINING DIVISION
RECEIVED
91 JAN 5 AM 11 22


TECK TP. - M.392
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Otto
L.O.
RIVER