Diamond Drilling

Area of SIXMILE LAKE

Report Nº 43

Work performed by: Mattagami Lake Mines

Claim Nº	Hole Nº	Footage	Date	Note
PA 212738	SL-23-70-9	723.0'	Nov/70	
	SL-23-70-10	566.0'	Nov-Dec/70	
	SL-23-70-11	490.0'	Dec/70	
	SL-23-70-12	408.0'	Dec/70	
	SL-23-71-13	404.0'	Jan/71	
	SL-23=71-15	350.0'	Jan/71	
	SL-23-71-16	384.0'	Jan/71	
	SL-23-71-18	405.0'	Jan.71	
	SL-23-71-19	618.0'	Jan-Feb/71	
	9 DH	4348 FT		

Notes:

MATTAGAMI LAKE MINES LIMITED – EXPLORATION DIVISION – DIAMOND DRILL HOLE RECORD

				DIP TEST					
PROPERTY STURGEON LAKE GROUP "23"	LATITUDE 108 + 00 NORTH	STARTED November 19[redacted] 1970		Footage	Corrected	Footage	Corrected	Footage	Corrected
HOLE NO. SL-23-70-9	DEPARTURE 94 + 00 EAST	FINISHED November 25, 1970		100.0'	[redacted]49° 00'	400.0'	37° 30'	700.0'	35° 00
BEARING [redacted] GRID SOUTH	ELEVATION SURFACE	LENGTH 723.0'		200.0'	46° 00'	500.0'	37° 00'		
DIP-COLLAR -50°	SECTION 6 + 00 WEST	LOGGED BY HSOKHANDHA YAWNGHWE		300.0'	41° 30'	600.0'	35° 00'		

FOOTAGE From	FOOTAGE To	DESCRIPTION	% Mineralization	SAMPLE NO.	FOOTAGE From	FOOTAGE To	FOOTAGE Length	ASSAYS
0.0	100.0	CASING 0 - 70.0' Fine sand 70.0-100.0 Small boulders and pebbles.						
100.0	188.6	RHYOLITIC TUFF Quartz-metacrysts-porphyritic 1-15mm, fine grained leucocrate felsite; welded; creamy coloured to light grey; hard, siliceous. 105.0-106.5: Creamy pale yellowish tinge, very fine grained welded appearance dense and compact with secondary whitish feldspathic lathe-like growth. From 123.0' the Rhyolitic Tuff became a little more grey in colour 129.0-130.0: Lost core						
188.6	223.0	RHYOLITIC COARSE TUFF Quartz-metacryst porphyritic 1-1-15mm; lapilli 2.4mm, rhyolite lensoid, drawnout, tightly packed and welded giving it a roughly felted appearance; fine grained and greyish in colour; hard, siliceous. 221.0-222.0: Lost core						
223.0	226.0	RHYOLITIC TUFF Quartz-metacryst porphyritic 1-15mm; greyish, fine grained; hard and siliceous, somewhat similar to 188.6-223.0, but only finer in texture.						
226.0	230.0	MIXED ZONE - RHYOLITIC TUFF + ANDESITIC INTERMEDIATE BANDS Scraps and shards. Rhyolitic horizons tuffaceous; fine grained; hard and siliceous; andesitic horizons fine grained, green in colour Quartz metacryst-porphyritic throughout 1-1.15mm.						
230.0	233.5	ANDESITIC Displaying ovoid bodies up to 20mm tightly packed, fine, fine grained. The ovoid bodies have thin darker boundaries and may represent small flow pillows, interbands of minor rhyolitic tuff also occur. Occassional quartz-metacryst porphyrite up to 2mm, and also rounded quartz feldspar aggregates 3-4mm (pumaceous?). Garnets up to 2-5mm, with irregular outlines, also occur, and which give the rock a somewhat spotted appearance. The rock is compact hard and dark green in colour.						

N.L.M. EXPLORATION DIVISION, D.D.H. RECORD

PROPERTY STURGEON LAKE GROUP #23 HOLE NO. SL-23-70-9 Page 2/4

FOOTAGE From	FOOTAGE To	DESCRIPTION	% Mineralization	SAMPLE NO.	FOOTAGE From	FOOTAGE To	FOOTAGE Length	ASSAYS
233.5	250.0	RHYOLITIC TUFF						
233.5		With interbands of agglomerate rhyolite and minor dacitic, fine grained bands the dacite bands could represent ejecta and shards up to up to 32mm of this material. Generally greyish in colour with a greenish tinge, but becoming more dark and mafic with depth, and display quartz-metacrysts 1-2mm. it grade into:-						
250.0	260.0	[redacted] DACITIC (TO RHYO-DACITIC) TUFF						
		Greyish and fine grained; with andesitic sections becoming more pronounced with depth. It displays quartz-metacrysts 1-2mm						
260.0	278.0	ANDESITIC TUFF						
		Predominating; fine grained greenish grey in colour with gradational but minor leucocratic felsite bands. Quartz-metacrysts. Porphyritic 1-2mm. Occasional garnets.						
278.0	288.0	RHYOLITIC MEDIUM COARSE TUFF						
		Fine grained, greyish welded with felted appearance and displaying prominent scraps and shard of mafic, green, andesitic material up to 7 X 25 mm.						
288.0	291.5	DACITIC TUFF						
		Fine grained, greyish colour.						
291.5	303.0	RHYOLITIC MEDIUM COARSE TUFF						
		Similar to footage 278.0-288.0						
303.0	328.0	RHYO-DACITIC TUFF						
		Grey, fine grained, with mafic scraps and shards; similar in appearance to Rhyolitic Tuff but with the difference that it is somewhat finer in texture and softer, and a little shade darker in colour. Lost core = 306.5-307.0						
328.0	346.0	RHYOLITIC TUFF						
		Fine Grained, greyish siliceous and hard, with mafic scraps and shard. These horizons are interbedded with lighter coloured Rhyolitic Coarse Tuff.						
346.0								
346.0	369.0	RHYOLITIC MEDIUM COARSE TUFF						
		Fine grained grey welded and felted appearance and displaying prominent mafic scraps and shard somewhat similar in appearance to footage 278.0-288.0						
		367.0-369.0 RHYOLITIC TUFF, Fine grained grey, siliceous, hard with ashy? (feldspar quartz) scraps						
369.0	447.0	RHYOLITIC TUFF						
		Greyish with greenish tinge, fine grained, hard and siliceous; and from 402.0 grading into a darker coloured Rhyolitic tuffs, still hard and siliceous, but indicating perhaps an increasing mafic content. It is also spotted with garnets, in the order of 1mm. Lost core 399.0-399.6, 419.0-420.0						

FOOTAGE From	FOOTAGE To	DESCRIPTION	% Mineralization	SAMPLE NO.	FOOTAGE From	FOOTAGE To	FOOTAGE Length	ASSAYS Au	Ag	Zn	Cu	Pb
447.0	453.0	ANDESITIC										
447.0	453.0	Fine grained, greenish-grey with finer grained drilled margins distinct contacts about 50° to core angle. Contacts appear to be concordant-perhaps a minor flow or intrusion.										
453.0	456.0	RHYO-DACITIC TUFF										
453.0	456.0	Greyish greenish, medium coarse texture with mafic, andesitic scraps and ejecta up to 40mm.										
456.0												
456.0	464.5	ANDESITIC TUFF										
	464.5	Fine grained dark grey-green in colour with distinctive garnets up to 5mm with irregular outlines; also quartz-metacrysts porphyritic.										
464.5	470.0	[redacted]-DACITIC TUFF										
		Fine grained, greyish, with minor interbands of lighter coloured rhyolitic agglomerate both inclusions and matrix of similar material, packing loose.										
470.0	476.5	DACIPIC AGGLOMERATE										
		First 2.0' macro-agglomeratic up to 70mm in dia, and tight packing Inclusion, lapilli squeezed and drawnout. But from 472.9 inclusions (lapilli) smaller 5-10mm lensoid & moderate packing. Matrix darker and finer grained overall colour. Greyish with brownish tinge, and fine grained rather distintive appearance possible marker horizon.										
476.5			Nil	19806	[redacted]04.0	609.0	5.0	Nil	Nil	Nil	Nil	Nil
			Nil	19807	609.0	614.0	5.0	Nil	Nil	Nil	Nil	Nil
476.5	578.0	RHYO-DACITIC TUFF	Nil	19808	614.0	619.0	5.0	Nil	Nil	Nil	Nil	Nil
476.5	578.0	Fine grained, greyish, hard and siliceous with minor rhyolitic agglomeratic bands & dacitic ash tuff bands as at 476.0-578.0 which is somewhat dacitic-andesitic, fine grained and grey lost core 485.0-489.0 (fault zone)	Nil	19809	619.0	623.0	4.0	Nil	Nil	Nil	Nil	Nil
			Nil	19810	623.0	627.5	4.5	Nil	Nil	Nil	Nil	Nil
			10py, 2po	19811	627.5	629.0	1.5	Nil	Nil	Nil	Nil	Nil
			Nil	19812	629.0	632.0	3.0	Nil	Nil	Nil	Nil	Nil
			25py, 1po	19813	632.0	634.0	2.0	Nil	Nil	Nil	Nil	Nil
578.0	679.0	RHYO-DACITIC MEDIUM COARSE TUFF	Nil	19814	634.0	637.5	3.5	Nil	Nil	Nil	Nil	Nil
		Grey-greenish tinge, medium coarse texture, somewhat hard and siliceous, included are minor rhyolitic tuff and agglomerate (5-6mm) sections; and mafic shards and scraps.	30py+po	19815	637.5	639.0	1.5	Tr.	Nil	Nil	Nil	Nil
			Tr. py	19816	639.0	644.0	5.0	Nil	Nil	Nil	Nil	Nil
			specks py	19817	644.0	650.0	6.0	Nil	Nil	Nil	Nil	Nil
		663.0-665.0 Dacitic Tuff: grey fine grained	blebs py, po	19818	650.0	653.0	3.0	Nil	Nil	Nil	Nil	Nil
			specks py	19819	653.0	658.0	5.0	Nil	Nil	Nil	Nil	Nil
		Mineralization: 627.5-629.0, 10py, 2po	Specks py	19820	658.0	663.0	5.0	Nil	Nil	Nil	Nil	Nil
		632.0-634.0, 25py	tr. < 1py	19821	663.0	668.0	5.0	Nil	Nil	Nil	Nil	Nil
		637.5-639.0, 30-35py+po	specks py	19822	668.0	673.0	5.0	Tr.	Nil	Nil	Nil	Nil
		639.0-644.0, tr. < 1py	Nil-specks py	19823	673.0	678.0	5.0	Nil	Nil	Nil	Nil	Nil
679.0	682.0	RHYOLITIC TUFF										
		Very fine grained, welded light coloured leucrocratic felsite.										
682.0	720.0	RHYO-DACITIC TUFF										
		Fine grained, greyish with minor rhyolite agglomerate section, mafic shard and scraps, hard and siliceous.										
		703.5-[redacted]05.5: Dacitic Tuff, fine grained, grey.										

M.L.M. EXPLORATION DIVISION, D.D.H. RECORD

PROPERTY STURGEON LAKE GROUP "23" HOLE NO SL-23-70-9 Page 4/4

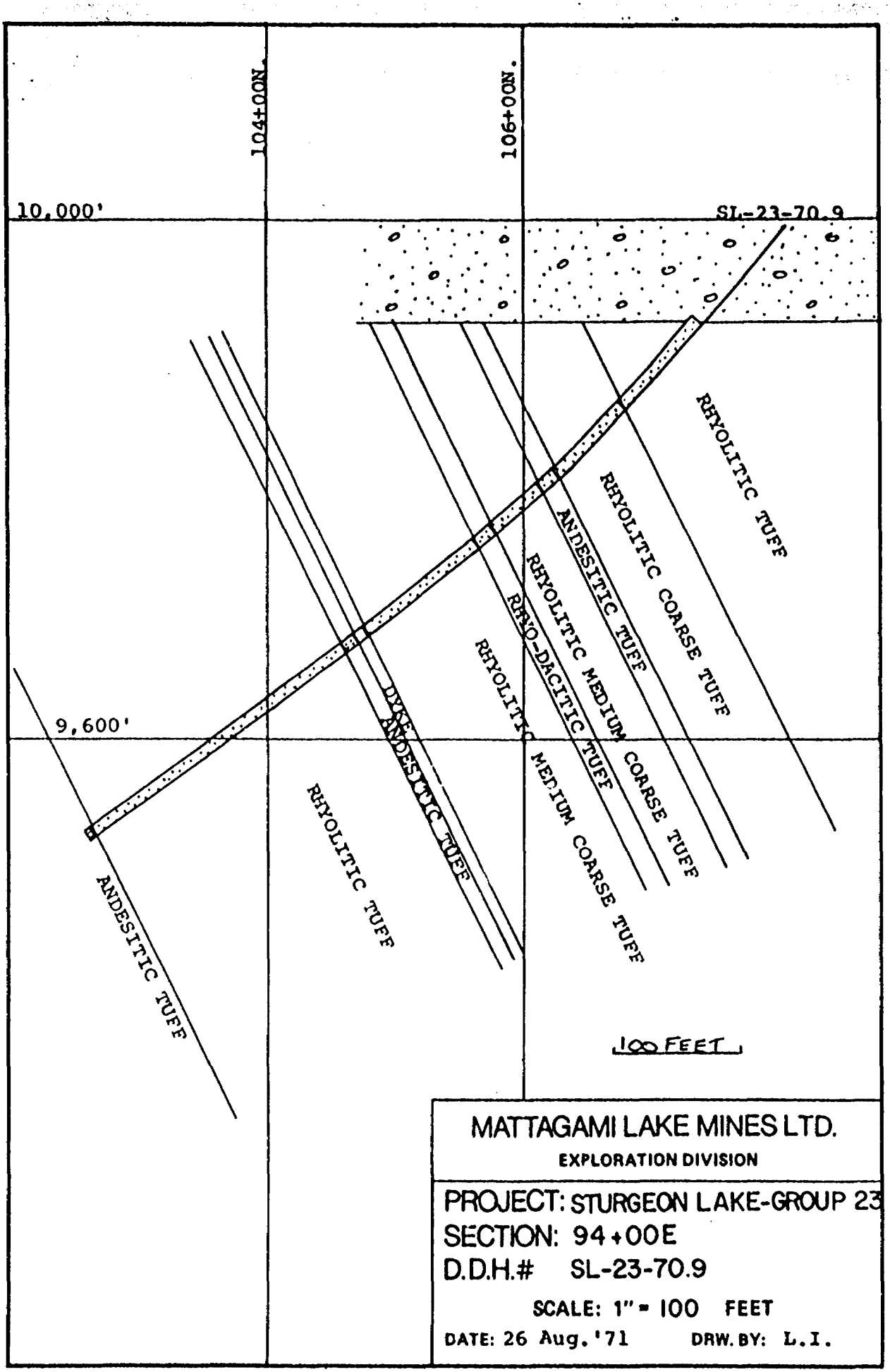
FOOTAGE From	FOOTAGE To	DESCRIPTION	% Mineralization	SAMPLE NO.	FOOTAGE From	FOOTAGE To	FOOTAGE Length	ASSAYS
720.0	723.0	ANDESITIC TUFF Fine grained, grey green colour, with garnets.						
	723.0	END OF HOLE						

N.B. This drill hole was stopped at the boundary between Mattagami Lake Mines claims and those of New Brunswick Uranium.

N. A. [illegible] DIVISION, D.D.H. RECORD

PROPERTY STURGEON LAKE GROUP #23 HOLE NO. S1-23-70[illegible] Page 4/4

FOOTAGE		DESCRIPTION	% Mineralization	SAMPLE NO.	FOOTAGE			ASSAYS
From	To				From	To	Length	
720.0	723.0	ANDESITIC TUFF Fine grained, grey green colour, with garnets.						
723.0		E N D O F H O L E						
		N. B. This drill hole was stopped at the boundary between Mattagami Lake Mines claims and those of New Brunswick Uranium.						



MATTAGAMI LAKE MINES LTD.

EXPLORATION DIVISION

PROJECT: STURGEON LAKE-GROUP 23

SECTION: 94+00E

D.D.H.# SL-23-70.9

SCALE: 1" = 100 FEET

DATE: 26 Aug. '71 DRW. BY: L.I.

RE-LOGGED

MATTAGAMI LAKE MINES LIMITED – EXPLORATION DIVISION – DIAMOND DRILL HOLE RECORD

						DIP TEST					
						Footage	Corrected	Footage	Corrected	Footage	Corrected
PROPERTY	STURGEON LAKE – GROUP "23"	LATITUDE	106 + 50 NORTH	STARTED	November 27, 1970						
HOLE NO.	SL-23-70-10	DEPARTURE	94 + 00 EAST	FINISHED	December 2, 1970	100.0'	49°00'	400.0'	42°00'		
BEARING	GRID SOUTH	ELEVATION	SURFACE	LENGTH	566.0	200.0'	48°00'	500.0'	41°00'		
DIP-COLLAR	-50°	SECTION	6 + 00 WEST	LOGGED BY	HKP. YAWNGHWE, A. ALI	300.0'	45°00'				

FOOTAGE From	FOOTAGE To	DESCRIPTION	% Mineralization	SAMPLE NO.	FOOTAGE From	FOOTAGE To	FOOTAGE Length	ASSAYS Au	Ag	Zn	Cu	Pb
0.0	94.0	CASING SAND, GRAVEL AND BOULDERS										
94.0	324.0	RHYOLITIC TUFF										
		94.0- 99.0 Light grey, fine grained, porphyritic, blue qtz-eyes 1mm, occasionally light grey lapilae 2-4mm										
		99.0-125.0 RHYOLITIC COARSE TUFF with AGGLOMERATIC SECTIONS light grey, cream, fine grained, felsic lapilae lensoid 4-20mm tightly packed.										
		125.0-146.0 RHYOLITIC TUFF, cream fine grained, siliceous, small felsic lapilae 2-3mm, welded tuffaceous texture.										
		146.0-150.6 AGGLOMERATIC SECTION, medium to light grey, silicecus siliceous lapilae 4-20mm lensoid, tightly packed, occasionally appears felted.										
		150.6-324.0 RHYOLITIC TUFF, light grey with greenish tinge, medium coarse texture, schistose occasionally mafic shards and sharps, finely felted appearance.										
324.0	381.0	DACITIC FINE TUFF Light grey-green, fine grained, tuffaceous, grading into darker horizon with depth.										
381.0	407.0	ANDESITIC FLOW Greyish green, fine grained, minor tuffaceous bands and also minor rhyolitic light coloured bands, grades into rhyolite.										
407.0	445.0	RHYOLITIC FINE TUFF Light grey green, fine grained, hard, siliceous tuffaceous.	NIL	19846	430.0	435.0	5.0	[illegible]	NIL	NIL	NIL	NIL
			20py	19847	435.0	436.0	1.0	NIL	NIL	NIL	NIL	NIL
			NIL	19848	436.0	441.0	5.0	NIL	NIL	NIL	NIL	NIL
445.0	455.0	ANDESITIC FLOW Grey green, fine grained, as 381.0-407.0										
455.0	497.[illegible]	RHYOLITIC TUFF Light grey green, fine grained, siliceous, hard	nil	19824	476.0	481.0	5.0	NIL	NIL	NIL	NIL	NIL
			NIL	19825	481.0	486.0	5.0	NIL	NIL	NIL	TR.	NIL
			NIL	19826	486.0	491.0	5.0	NIL	NIL	NIL	NIL	NIL
			NIL	19827	491.0	496.0	5.0	NIL	NIL	NIL	NIL	NIL
497.5	508.0	ANDESITIC TUFF	Tr-<1py	19828	496.0	502.0	6.0	NIL	NIL	NIL	NIL	NIL
		Grey green, fine grained irregular garnets up to 3mm occasional minor siliceous sections	10py	19829	502.0	503.0	1.0	NIL	NIL	NIL	NIL	NIL
			NIL	19830	503.0	505.5	2.5	NIL	NIL	NIL	NIL	NIL
			30py	19831	505.5	508.0	2.5	NIL	NIL	NIL	NIL	NIL

B.L.M. EXPLORATION DIVISION, D.D.H. RECORD

"23"

PROPERTY STURGEON LAKE - GROUP HOLE NO. SL-23-71-10 Page 2/2

FOOTAGE From	FOOTAGE To	DESCRIPTION	% Mineralization	SAMPLE NO.	FOOTAGE From	FOOTAGE To	FOOTAGE Length	ASSAYS Au	ASSAYS Ag	ASSAYS Zn	ASSAYS Cu	ASSAYS Pb
508.0	511.5	LAMPROPHYRE DYKE Grey green, fine grained, sharp upper contact @ 60° to core axis lower contact irregular.	Nil	19832	508.0	511.0	3.0	Nil	Nil	Nil	Nil	Nil
511.5	566.0	RHYO DACITIC TUFF Light grey green, fine grained, siliceous tending toward dacitic in composition. Schistose texture, finely felted appearance, occasional andesitic bands.	Nil	19833	511.0	515.0	4.0	Nil	Nil	Nil	Nil	Nil
			Nil	19834	515.0	520.0	5.0	Nil	Nil	Nil	Nil	Nil
			Nil	19835	520.0	525.0	5.0	Nil	Nil	Nil	Nil	Nil
			Nil	19836	525.0	530.0	5.0	Nil	Nil	Nil	Nil	Nil
			Nil	19837	530.0	535.0	5.0	Nil	Nil	Nil	Nil	Nil
			Nil	19838	535.0	540.0	5.0	Nil	Nil	Nil	Nil	Nil
			Nil	19839	540.0	545.0	5.0	Nil	Nil	Nil	Nil	Nil
			Nil	19840	545.0	550.0	5.0	Nil	Nil	Nil	Nil	Nil
			Nil	19841	550.0	555.0	5.0	Nil	Nil	Nil	Nil	Nil
			Nil	19842	555.0	557.5	2.5	Nil	Nil	Nil	Nil	Nil
			40py	19843	557.5	559.0	1.5	Nil	Nil	Nil	Nil	Nil
			10py	19844	559.0	562.5	3.5	Nil	Nil	Nil	Nil	Nil
			tr.py	19845	562.5	566.0	3.5	Nil	Nil	Nil	Nil	Nil

512.0-513.5: Andesitic bands with irregular garnets up to 5mm.

520.0-522.0: Andesitic band grey-green fine grained upper contact @55° to core axis, lower gradational.

522.0-526.0: RHYO DACITIC TO RHYOLITIC TUFF. Grey green, fine grained siliceous to dacitic composition, mafic shards and sharps.

526.0-528.0: ANDESITIC TUFF, greenish grey, fine grained, irregular garnets up to 6mm, mafic shards and straps.

528.0-566.0: RHYO DACITIC TUFF, light greyish green hard siliceous to dacitic, fine to medium coarse texture. Mafic shards and scraps.

SULPHIDES 557.5-562.5 (5.0')
SEMI MASSIVE, mainly pyrite.

566.0 END OF HOLE

M.L.M. EXPLORATION DIVISION D.D.H. RECORD

FOOTAGE From	FOOTAGE To	DESCRIPTION	% Mineralization	SAMPLE NO.	FOOTAGE From	FOOTAGE To	Length	Au	Ag	Zn	Cu	Pb
508.0	511.5	LAMPROPHYRE DYKE	NIL	19832	508.0	511.0	3.0	NIL	NIL	NIL	NIL	NIL
		Grey green, fine grained, sharp upper contact @ 60° to core axis lower contact irregular.										
511.5	566.0	RHYO DACITIC TUFF										
		Light grey green, fine grained, siliceous tending toward dacitic	NIL	19833	511.0	515.0	4.0	NIL	NIL	NIL	NIL	NIL
		in composition, schistose texture, finely felted appearance,	NIL	19834	515.0	520.0	5.0	NIL	NIL	NIL	NIL	NIL
		occasional andesitic bands.	NIL	19835	520.0	525.0	5.0	NIL	NIL	NIL	NIL	NIL
			NIL	19836	525.0	530.0	5.0	NIL	NIL	NIL	NIL	NIL
		512.0-513.5 Andesitic bands with irregular garnets up to 5mm.	NIL	19837	530.0	535.0	5.0	NIL	NIL	NIL	NIL	NIL
			NIL	19838	535.0	540.0	5.0	NIL	NIL	NIL	NIL	NIL
		520.0-522.0 Andesitic band grey-green fine grained upper contact	NIL	19839	540.0	545.0	5.0	NIL	NIL	NIL	NIL	NIL
		@ 55° to core axis, lower gradational.	NIL	19840	545.0	550.0	5.0	NIL	NIL	NIL	NIL	NIL
			NIL	19841	5[illegible].0	555.0	5.0	NIL	NIL	NIL	NIL	NIL
		[illegible]22.0-526.0 RHYO DACITIC TO RHYOLITIC TUFF. Grey green, fine	NIL	19842	555.0	557.5	2.5	NIL	NIL	NIL	NIL	NIL
		grained, siliceous to dacitic composition, mafic	[illegible]40py	19843	557.5	559.0	1.5	NIL	NIL	NIL	NIL	NIL
		shards and sharps.	10py	19844	559.0	562.5	3.5	NIL	NIL	NIL	NIL	NIL
		526.0-528.0 ANDESITIC TUFF, greenish grey, fine grained, irregular garnets up to 6mm, mafic shards and straps.	tr. py	19845	562.5	566.0	3.5	NIL	NIL	NIL	NIL	NIL
		528.0-566.0 RHYO DACITIC TUFF, light greyish green hard siliceous to dacitic, fine to medium coarse texture. Mafic shards and scraps										
		SULPHIDES 557.5-562.5 (5.0') SEMI MASSIVE, mainly pyrite.										
	566.0	END OF HOLE.										

RE-LOGGED

MATTAGAMI LAKE MINES LIMITED – EXPLORATION DIVISION – DIAMOND DRILL HOLE RECORD

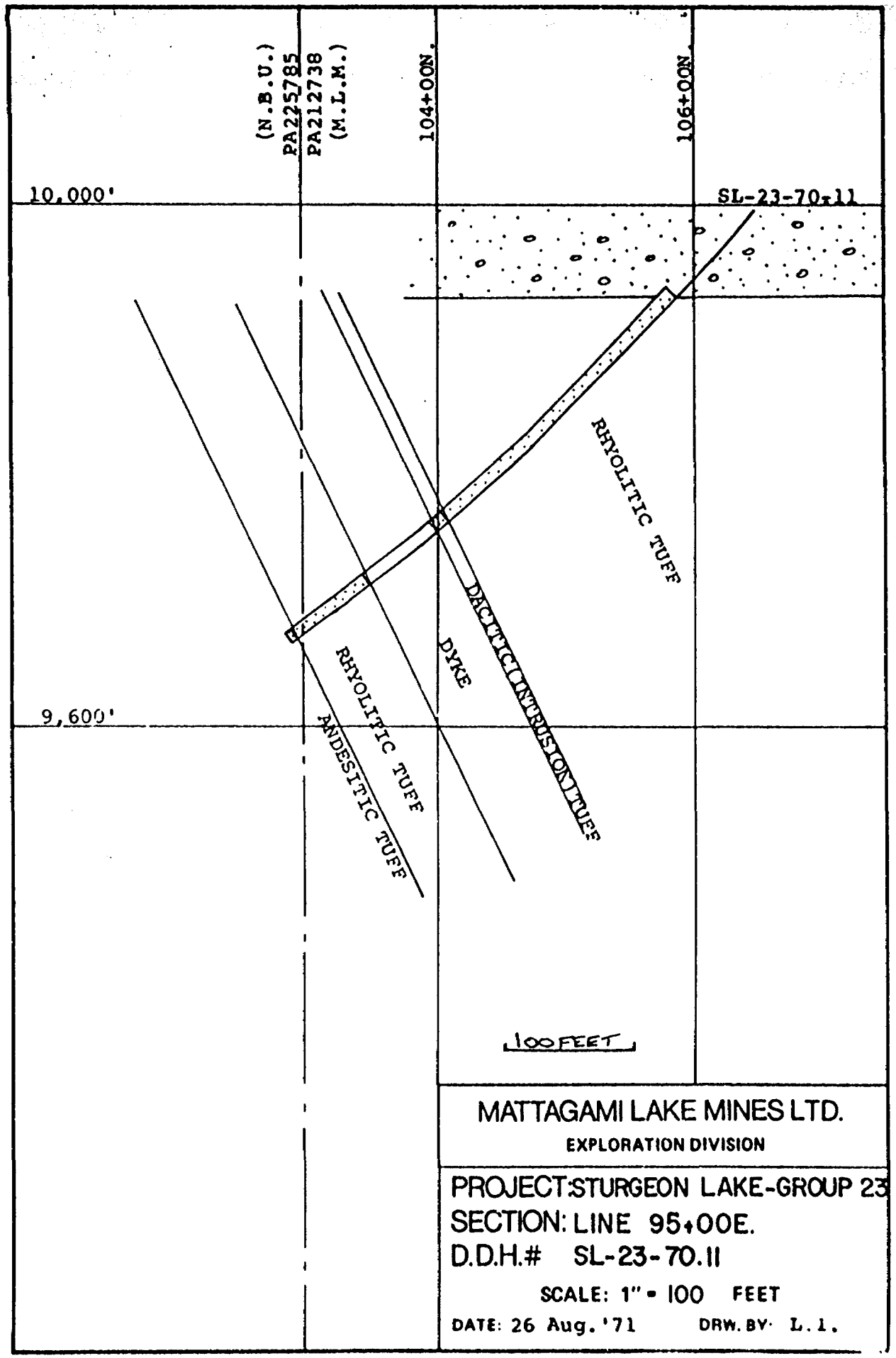
				DIP TEST					
				Footage	Corrected	Footage	Corrected	Footage	Corrected
PROPERTY: STURGEON LAKE - GROUP "23"	LATITUDE: 106 + 50 NORTH	STARTED: December 4, 1970		100.0	46°00'	400.0	38°00'		
HOLE NO.: SL-23-70/11	DEPARTURE: 95 + 00 EAST	FINISHED: December 7, 1970		200.0	45°00'	490.0	[redacted]°00'		
BEARING: GRID SOUTH	ELEVATION: SURFACE	LENGTH: 490.0'		300.0	42°00'				
DIP-COLLAR: -50°	SECTION: 5 + 00 WEST	LOGGED BY: HKP. YAWNGHWE, A. ALI							

FOOTAGE From	FOOTAGE To	DESCRIPTION	% Mineralization	SAMPLE NO.	FOOTAGE From	FOOTAGE To	FOOTAGE Length	ASSAYS Au	Ag	Zn	Cu	Pb
0.0	90.0	C A S I N G SAND, GRAVEL AND BOULDERS.										
90.0	335.0	RHYOLITIC TUFF Light grey with occasional brownish tinge, fine grained, numerous blue qtz-eyes, schistosity prominent, porphyritic, occasional talcy alteration.										
		101.0-102.0 LAMPROPHYRE DYKE Brownish grey, fine grained, finely speckled mafic, upper contact @ 30° to core axis, lower grounded.										
		102.0-103.5 RHYO DACITIC COARSE TUFF Light grey-green, acid lapilae in fine grained greenish mafic matrix. Blue qtz-eyes up to 3mm in size. POSSIBLY CHLORITIZED RHYOLITE TUFF										
		103.5-105.0 LAMPROPHYRE DYKE Same as @ [redacted].0-102.0	LOST CORE		105.0	106.0	1.0					
		106.0-114.5 RHYO DACITIC COARSE TUFF Same as @ [redacted]102.0-103.5										
		114.5-119.5 RHYOLITIC TUFF Light grey, fine grained grades into medium grain.										
		119.5-123.5 RHYOLITIC AGGLOMERATE SECTION Fine grained siliceous matrix, lapilae lenscid up to 5mm, moderate packing, coarser texture with increase in depth.										
		123.5-335.0 RHYOLITIC TUFF Light green, siliceous lightly chloritized. Occasionally loosely packed lapilae, compact looking, occasionally some mafic scraps	LOST CORE LOST CORE LOST CORE		126.5 188.5 198.5	128.0 189.5 199.5	1.5 1.0 1.0					
335.0	348.0	DACITIC (INTRUSION?) TUFF Light greyish green, fine grained										
		335.0-336.0 Upper and lower contacts distinct @ 70° & 20° to core axis respectively.										

B.L.M. EXPLORATION DIVISION, D.D.H. RECORD

PROPERTY STURGEON LAKE GROUP #23 WHOLE NO. SL-23-70-11 Page 2/2

FOOTAGE From	FOOTAGE To	DESCRIPTION	% Mineralization	SAMPLE NO.	FOOTAGE From	FOOTAGE To	FOOTAGE Length	ASSAYS
		336.0-346.0 Light grey-green, fine grained, massive.						
		346.0-348.0 Finer grained upper contact @ 70° lower grounded.						
348.0	416.5	DYKE Light grey, green, fine grained, hard, compact aphinitic, upper and lower contacts grounded. Second opinion Dacitic Flow.	LOST CORE		385.0	387.0	2.0	
		RHYOLITIC TUFF						
416.5	485.0	RHYOLITIC TUFF Light to medium grey, fine grained, siliceous, hard, occasional mafic scraps, occasional schistose sections.						
485.0	490.0	ANDESITIC TUFF Greyish green, fine grained, mafic contents with increase in depth, garnets.						
		NO MINERALIZATION INTERSECTED						
490.0		END OF HOLE						
		HOLE STOPPED AT BOUNDARY.						



MATTAGAMI LAKE MINES LTD.

EXPLORATION DIVISION

PROJECT: STURGEON LAKE-GROUP 23

SECTION: LINE 95+00E.

D.D.H.# SL-23-70.11

SCALE: 1" = 100 FEET

DATE: 26 Aug. '71 DRW. BY: L. I.

RE-LOGGED

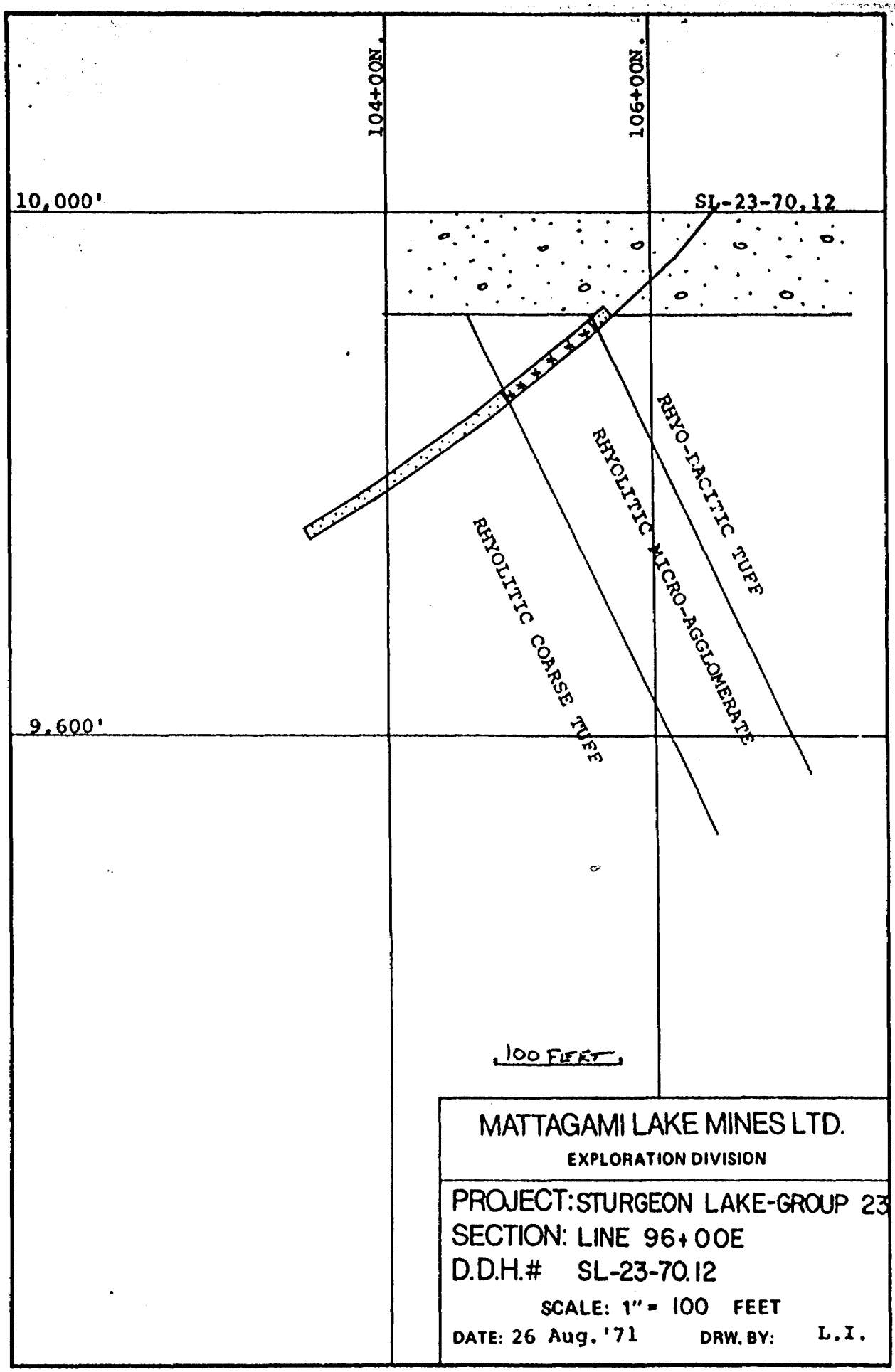
MATTAGAMI LAKE MINES LIMITED - EXPLORATION DIVISION - DIAMOND DRILL HOLE RECORD

PROPERTY	STURGEON LAKE - GROUP "23"	LATITUDE	106 + 50 NORTH	STARTED	December 9, 1970	DIP TEST					
						Footage	Corrected	Footage	Corrected	Footage	Corrected
HOLE NO.	SL-23-70-12	DEPARTURE	96 + 00 EAST	FINISHED	December 11, 1970	100.0	42°00'	400.0'	30°30'		
BEARING	GRID SOUTH	ELEVATION	SURFACE	LENGTH	408.0'	200.0	38°00'	=			
DIP-COLLAR	-50°	SECTION	4 + 00 WEST	LOGGED BY	HKP.YAWNGHWE, A. ALI	300.0	35°00'				

FOOTAGE From	FOOTAGE To	DESCRIPTION	% Mineralization	SAMPLE NO.	FOOTAGE From	FOOTAGE To	FOOTAGE Length	ASSAYS Au	Ag	Zn	Cu	Pb
0.0	114.0	CASING SAND, GRAVEL & BOULDERS.										
114.0	131.0	RHYO DACITIC TUFF Greyish green with occasional andesitic sections, garnets 2mm, fine grained, blue quartz-eyes in abundance, dacitic looking due to [redacted] minerals, siliceous to intermediate matrix.										
		125.5-129.0 D Y K E Grey, fine grained, upper contact @ 80° to core axis and lower @ 30°										
131.0	221.0	RHYOLITIC MICRO AGGLOMERATE 131.0-137.5 Medium grey, fine grained, siliceous matrix, lensoid to sub-rounded 5-10mm moderately packed agglomerates										
		137.5-144.0 RHYOLITIC MEDIUM COARSE TUFF Acid ashy fragments in a fine grained grey green (mafic? chloritized?) matrix blue qtz-eyes, porphyritic.										
		144.0-221.0 RHYOLITIC AGGLOMERATE 5-10mm in size lapilae, fine grained matrix, siliceous occasional mafic matrix, lapilae tightly packed 200.0-211.0 Lighter in colour, siliceous rhyolitic welded agglomerate, Grading into coarse tuff.										
221.0	408.0	RHYOLITIC COARSE TUFF Light to medium grey, fine grained, lapilae 2-4mm lensoid tightly packed.										
		233.0-235.5 D Y K E Grey, fine grained, upper contact irregular @ 90° to core axis, lower contact sharp @ 55° to core axis										
		235.5-359.0 RHYOLITIC COARSE TUFF Medium grey, have a felted appearance fine texture from 271.0-289.0 Medium to coarse 289.0-334.0 Coarse texture 334.0-359.0	LOST CORE		278.0	279.0	1.0	LOST	CORE			

M.L.M. EXPLORATION DIVISION, D.D.H. RECORD — PROPERTY STURGEON LAKE-GROUP "23" — HOLE NO. SL-23-71-12 — Page 2/2

FOOTAGE From	FOOTAGE To	DESCRIPTION	% Mineralization	SAMPLE NO.	FOOTAGE From	FOOTAGE To	FOOTAGE Length	ASSAYS Au	Ag	Zn	Cu	Pb
		RHYOLITIC COARSE TUFF										
		359.0-360.0 D Y K E; Grey green, fine grained, salt and pepper texture, upper and lower contacts @ 70° to core axis.										
		360.0-376.0 RHYOLITIC ASH TUFF, light grey to cream fine grained coarse texture, grey fragments in fine grained matrix.										
		376.0-395.0 Liaght grey, fine grained, finer texture than above little darker in shade.										
		395.0-398.0 AGGLOMERATIC SECTION IN RHYOLITIC TUFF, lapilae lensoid, occasionally appears welded.										
		398.0-408.0 RHYOLITIC TUFF, light to medium grey, fine grained, medium texture with minor ash tuff @ 401-402.0'										
		NO MINERALIZATION INTERSECTED.										
408.0		E N D O F H O L E.										



MATTAGAMI LAKE MINES LTD.

EXPLORATION DIVISION

PROJECT: STURGEON LAKE-GROUP 23

SECTION: LINE 96+00E

D.D.H.# SL-23-70.12

SCALE: 1" = 100 FEET

DATE: 26 Aug. '71 DRW. BY: L.I.

RE - L O G G E D

MATTAGAMI LAKE MINES LIMITED - EXPLORATION DIVISION - DIAMOND DRILL HOLE RECORD Page 1/1

				DIP TEST					
PROPERTY	STURGEON LAKE - GROUP "23"	LATITUDE 107 + 00 NORTH	STARTED January 6, 1971	Footage	Corrected	Footage	Corrected	Footage	Corrected
HOLE NO.	SL-23-71/13	DEPARTURE 98 + 00 EAST	FINISHED January 14, 1971	100	48°00'	400	44°00		
BEARING	195°00 (GRID SOUTH)	ELEVATION SURFACE	LENGTH 404.0'	200	47°00				
DIP-COLLAR	-50°	SECTION 2 + 00 WEST	LOGGED BY LOISELLE, YAWNGHWE, ALI	300	45°00				

FOOTAGE From	FOOTAGE To	DESCRIPTION	% Mineralization	SAMPLE NO.	FOOTAGE From	FOOTAGE To	FOOTAGE Length	ASSAYS				
0.0	98.0	C A S I N G SAND, GRAVEL AND BOULDERS										
98.0	114.0	ANDESITIC TUFF Dark green, fine grained, tuffaceous, quartz-calcite veins and and stringers, minor sections agglomeratic. 112.0-114.0 Agglomeratic, heavily chloritized and altered.										
114.0	142.5	LAMPROPHYRE DYKE	LOST CORE		114.0	116.0	2.0	LOST CORE				
		Green with greyish tinge. Biotite and chlorite aggregates, upper and lower contacts grounded, bleached, (altered Dyke) vuggy	LOST CORE		118.0	133.0	15.0	LOST CORE				
			LOST CORE		136.0	141.0	5.0	LOST CORE				
		118.0-142.5 POSSIBLE FAULT ZONE ??										
142.5												
142.5	177.5	MASSIVE SULPHIDES ZINC AND COPPER ZONE	30py.60sp.3cp.7ga	21001	142.5	147.5	5.0	.054	28.98	26.2	1.41	8.60
		35% pyrite, 40% sphalerite, 3% chalcopyrite and 5% galena	30" .45" .5"7ga	21002	147.5	152.5	5.0	.072	16.15	20.8	2.52	4.80
			40" .25" 2"3"	21003	152.5	157.5	5.0	.011	8.45	9.0	.80	1.30
			30" .30" .2"3"	21004	157.5	162.5	5.0	.032	4.66	12.9	.87	1.75
			20" .40" .2"5"	21005	162.5	167.5	5.0	.010	3.61	15.8	.86	1.78
			30" .45" .5"3"	21006	167.5	172.5	5.0	.020	8.86	14.1	2.06	1.17
177.5			40" .15" .2"3"	21008	172.5	177.5	5.0	.017	4.89	8.3	.98	1.81
177.5	196.0	RHYOLITIC MICRO AGGLOMERATE	" .2" .1"	21009	177.5	185.0	2.0	.020	1.57	1.2	.58	.20
		Dirty grey, fine grained, siliceous matrix, tightly packed 3-10 mm in size agglomerates, blue "quartz-eyes" and white quartz-phenos, chlorite stringers and threads.	LOST CORE		178.0	180.0	2.0	LOST CORE				
			LOST CORE		180.5	184.0	3.5	LOST CORE				
			2py,1sp,<1cp	21010	185.0	189.0	4.0	Nil	.64	.4	.27	.08
			LOST CORE		185.0	187.0	2.0	LOST CORE				
		SULPHIDES: 177.5-193.0' 3%pyrite, 1%sphalerite, 1% chalcopyrite	2py,<1sp,tr.cp	21011	189.0	193.0	4.0	NIL	.12	.3	.03	.05
196.0												
196.0	287.0	RHYOLITIC COARSE TUFF										
		196.0-216.0 QUARTZ-EYE RHYOLITE TUFF Dirty white, fine grained matrix, highly siliceous blue quartz-eyes very distinct, white quartz-phenos porphyritic, feldspathic laths, tuffaceous (formerly porphyritic rhyolite).										
		216.0-287.0 Medium grey, siliceous blue quartz-eyes chlorite stringers, tuffaceous with agglomeratic sections, occasional mafic sections, occasional 1-20 dacitic looking sections.										

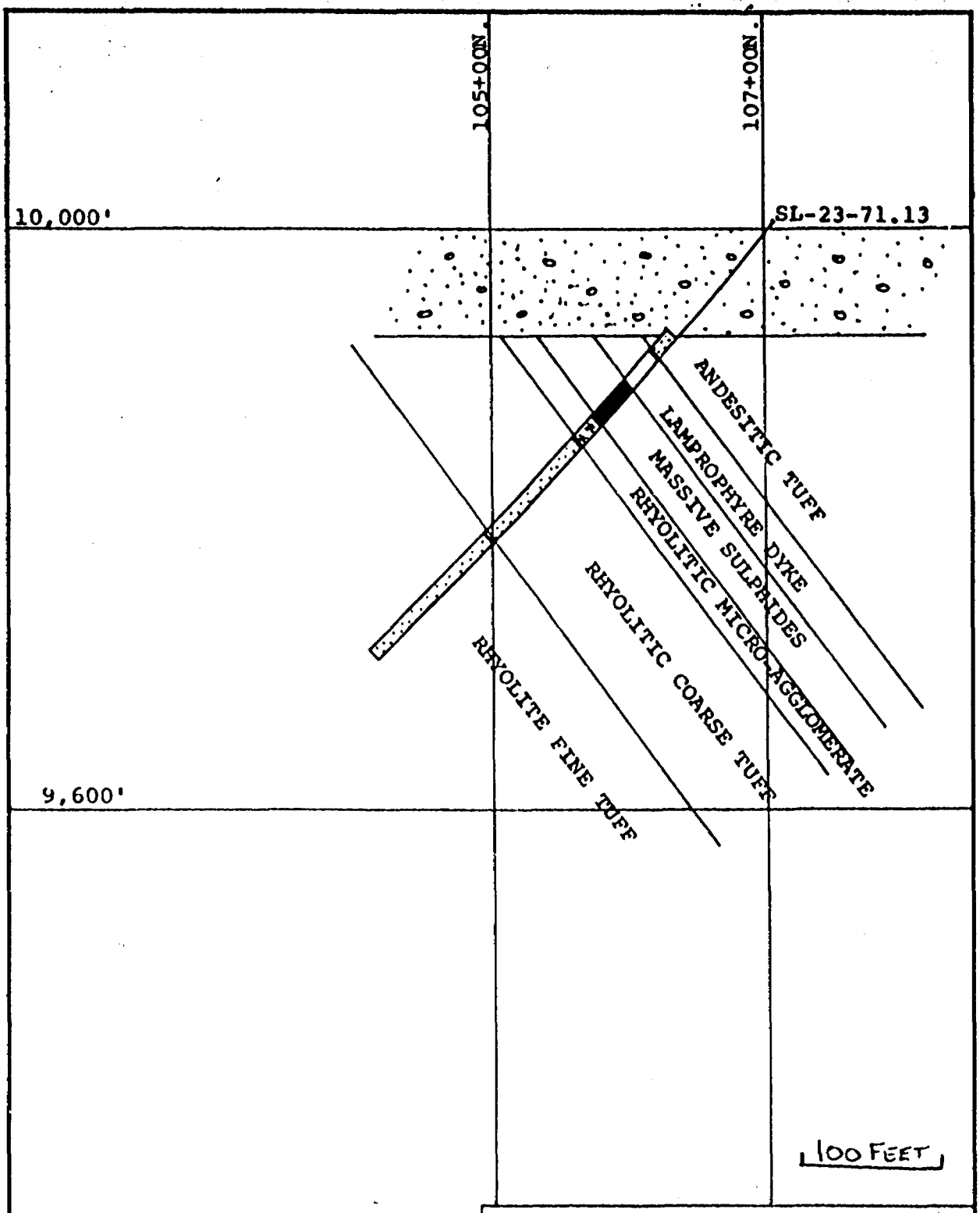
M.L.M. EXPLORATION DIVISION, D.D.H. RECORD

PROPERTY STURGEON LAKE - GROUP "2" FILE NO. SL-23-71-13 Page 2/2

FOOTAGE From	FOOTAGE To	DESCRIPTION	Mineralization	SAMPLE NO.	FOOTAGE From	FOOTAGE To	FOOTAGE Length	ASSAYS
287.0	404.0	RHYOLITE FINE TUFF Medium to dark grey, very fine grained, occasional blue quartz-eyes, tuffaceous, schistosity @ 45° to core axis, occasionally very fine grained compact phonolitic sections, occasionally coarser grain sections rhyolitic to rhyo-dacitic.						
	404.0	E N D O F H O L E.						

M.L.M. EXPLORATION DIVISION, D.D.H. RECORD ADDITIONAL SAMPLING AND RE-DEFINITION — PROPERTY STURGEON LAKE GROUP "23" — HOLE NO. SL-23-71-13 — Page 3

FOOTAGE From	FOOTAGE To	DESCRIPTION	Mineralization	SAMPLE NO.	FOOTAGE From	FOOTAGE To	FOOTAGE Length	ASSAYS				
177.5	196.0	RHYOLITIC MICRO AGGLOMERATE For description please see page 1	NIL	21271	193.0	196.0	3.0	Nil	Nil	.4	Nil	.11
196.0	287.0	RHYOLITIC COARSE TUFF TO AGGLOMERATE	NIL	21272	196.0	201.0	5.0	Nil	Nil	.2	Nil	.03
		196.0-216.0 QUARTZ EYE RHYOLITE TUFF	nil	21273	201.0	216.0	5.0	Nil	Nil	.2	Nil	.01
		Could be called micro agglomerate for description	NIL	21274	206.0	211.0	5.0	Nil	Nil	.2	Nil	.01
		please see page 1.	NIL	21275	211.0	216.0	5.0	Nil	Nil	Tr	Nil	.01
		216.0-287.0 Could be called rhyo-dacitic tuff with agglomeratic sections.										
287.0	404.0	RHYOLITIC FINE TUFF For detail description please see page 2 under the new classification and differenciation between rhyolite and rhyo-dacite. This particular section could be taken as rhyodacitic tuff.										



MATTAGAMI LAKE MINES LTD.

EXPLORATION DIVISION

PROJECT: STURGEON LAKE-GROUP 23

SECTION: LINE 98+00E

D.D.H.# SL-23-71.13

SCALE: 1" = 100 FEET

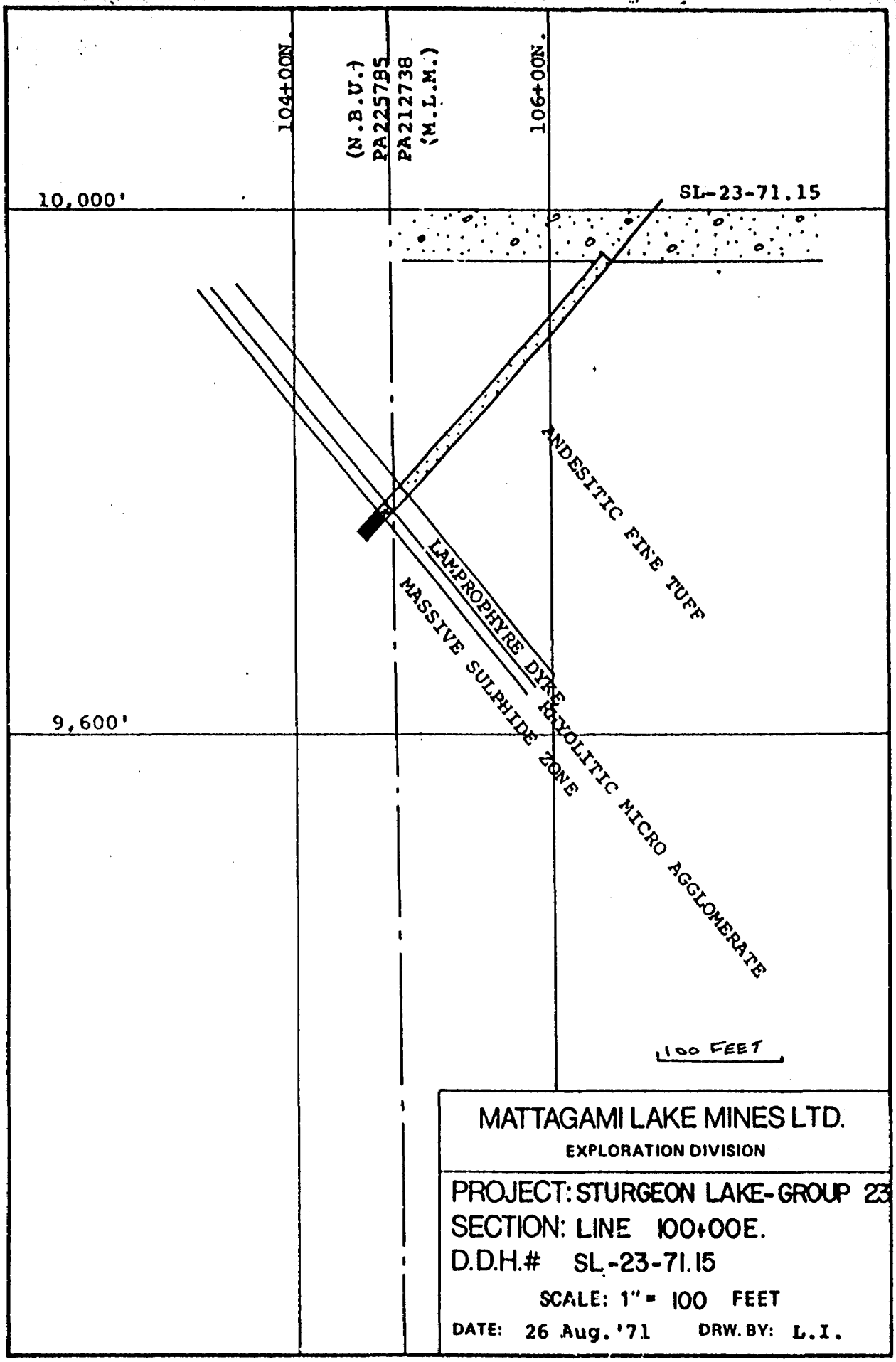
DATE: 26 Aug. '71 DRW. BY: L.I.

RE - LOGGED

MATTAGAMI LAKE MINES LIMITED - EXPLORATION DIVISION - DIAMOND DRILL HOLE RECORD Page 1/1

				DIP TEST					
PROPERTY STURGEON LAKE GROUP "B"	LATITUDE 107 + 00 NORTH	STARTED January 16, 1971		Footage	Corrected	Footage	Corrected	Footage	Corrected
HOLE NO. SL-23-71-15	DEPARTURE 100 + 00 EAST	FINISHED January 19, 1971		100	49° 00'				
BEARING 195° 00 (GRID SOUTH)	ELEVATION SURFACE	LENGTH 350.0'		200	47° 00'				
DIP-COLLAR -50°	SECTION 0 + 00	LOGGED BY LOSELLE, YAWNGHWE, ALI		300	45° 00'				

FOOTAGE From	FOOTAGE To	DESCRIPTION	% Mineralization	SAMPLE NO.	FOOTAGE From	FOOTAGE To	FOOTAGE Length	ASSAYS Au	Ag	Zn	Cu	Pb
0.0	62.0	C A S I N G SAND, GRAVEL AND BOULDERS										
62.0	300.0	ANDESITIC FINE TUFF Greyish green, very fine grained to fine grained massive, compact, numerous quartz-calcite stringers finely bedded, tuffaceous texture, schistosity varies from 45° to 60° to core axis occasionally 1-2 siliceous sections. Occasionally angular to lensoid fragments up to 5mm in size tightly packed, chloritization and carbonitization. 221.5-227.0 Siliceous section, light to medium grey, rhyodacitic to rhyolitic tuff well defined schistosity upper contact with andesitic tuff @ 30° to core axis and loser @45° to core axis.										
300.0	319.0	LAMPROPHYRE DYKE Green, fine to medium grained, speckled or salt and pepper texture, occasional biotite, chlorite and hornblende? aggregates. upper contact irregular @45° - core axis, lower grounded.	NIL	21024	316.8	321.8	5.0	NIL	NIL	.2	UL	NIL
319.0	328.4	RHYOLITIC MICRO AGGLOMERATE Greyish green, chloritized altered matrix, white 5-25 mm acid fragments sheared and altered tightly packed, fragments usually angular with few lapilae, heavily sheared and brecciated. Shearing and brecciation indicate SHEARED ZONE.	<1py 2py,1sp,tr.cp	21025 21026	321.8 323.6	323.6 328.4	1.8 4.8	NIL [illegible]	NIL [illegible]	.1 [illegible]	tr. [illegible]	NIL [illegible]
328.4	350.0	MASSIVE SULPHIDE ZONE 85% massive sulphides in rhyolitic agglomerate 328.4-343.1 ZINC ZONE, 50% py, 45% sph, < 1% cpy. 343.1-350.0 ZINC & COPPER ZONE, 25%py, 35% sph, 15% cpy	40py,30sp,1cp 50py,40sp,1cp 50py,45sp,<1cp 30py,60sp,<1cp 20py,60sp,10cp 30py,30sp,25cp 20py,40sp,20cp	21027 21028 21029 21030 21031 21032 21033	328.4 332.3 337.3 342.1 343.1 345.3 348.3	332.3 337.3 342.1 343.1 345.3 348.3 350.0	4.9 5.0 4.8 1.0 2.2 3.0 1.7	.023 .030 .018 .017 .020 .017 .026	7.52 8.00 9.24 1.92 4.75 8.55 5.77	13.1 19.6 22.4 28.4 22.5 8.7 16.2	.66 .72 .24 .11 3.25 3.58 3.21	2.16 2.44 4.83 1.28 .95 .68 .60
	350.0	E N D O F H O L E HOLE WAS T STOPPED IN MASSIVE SULPHIDES DUE TO CROSSING OUR BOUNDARY.										



MATTAGAMI LAKE MINES LTD.

EXPLORATION DIVISION

PROJECT: STURGEON LAKE-GROUP 23

SECTION: LINE 100+00E.

D.D.H.# SL-23-71.15

SCALE: 1" = 100 FEET

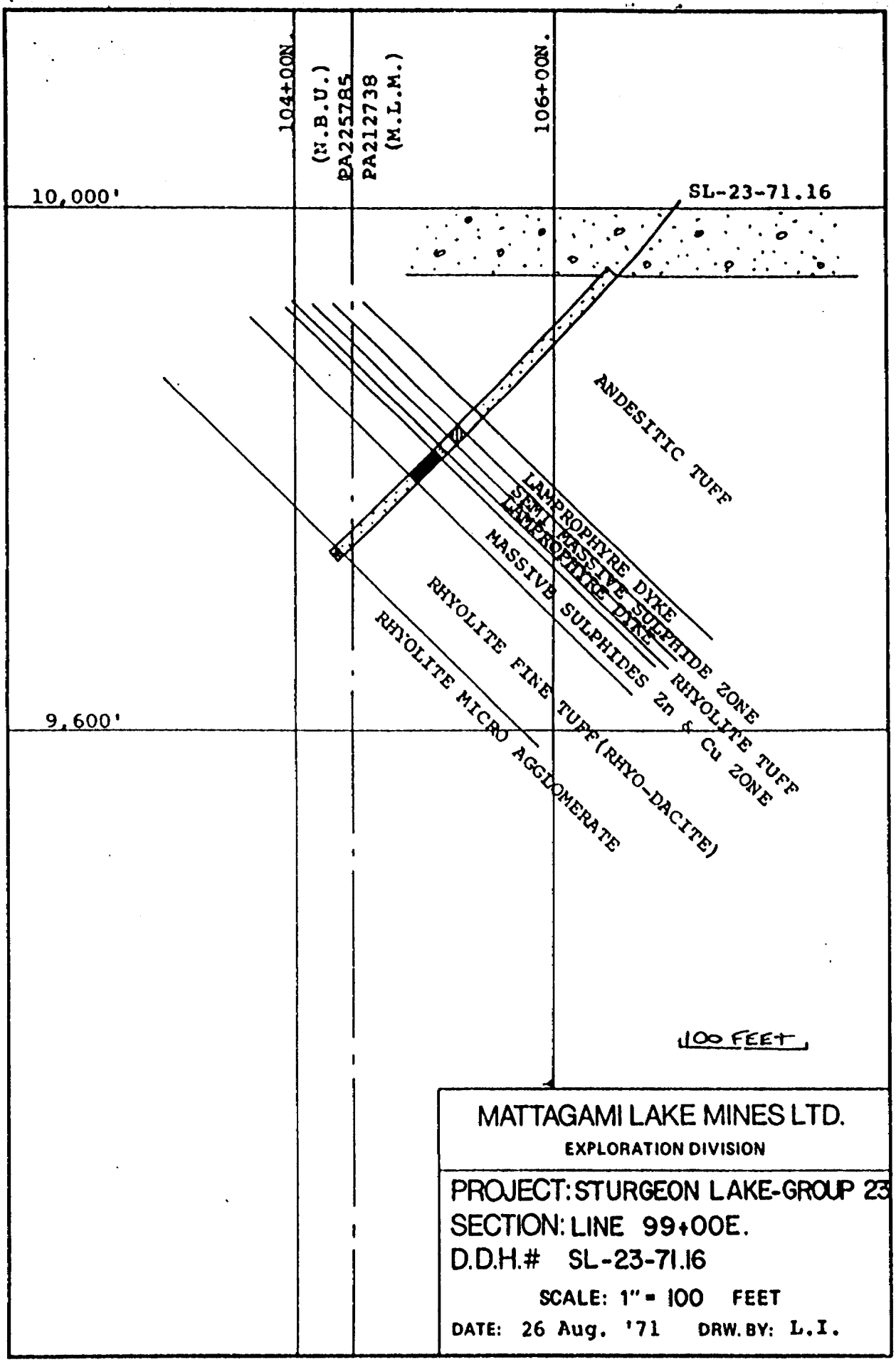
DATE: 26 Aug. '71 DRW. BY: L.I.

R-E - LOGGED

MATTAGAMI LAKE MINES LIMITED - EXPLORATION DIVISION - DIAMOND DRILL HOLE RECORD

PROPERTY	STURGEON LAKE - GROUP "23"	LATITUDE	[redacted]107 + 00 NORTH	STARTED	January 21, 1971	DIP TEST					
						Footage	Corrected	Footage	Corrected	Footage	Corrected
HOLE NO.	SL-23-71-16	DEPARTURE	99 + 00 EAST	FINISHED	January 24, 1971	100.0	47° 00'				
BEARING	195° (GRID SOUTH)	ELEVATION	SURFACE	LENGTH	384.0'	200.0	45° 00'				
DIP-COLLAR	-50°	SECTION	1 + 00 WEST	LOGGED BY	LOISELLE, YAWNGHWE, ALI	300.0	44° 00'				

FOOTAGE From	FOOTAGE To	DESCRIPTION	% Mineralization	SAMPLE NO.	FOOTAGE From	FOOTAGE To	Length	ASSAYS Au	Ag	Zn	Cu	Pb
0.0	74.0	C A S I N G: SAND, GRAVEL & BOULDERS										
74.0	226.0	ANDESITIC TUFF Greyish green to green, numerous qtz-calcite strgrs., and bands, fine grained, tuffaceous, poor schistosity @30° to core axis.										
		98.0-115.0 Ashy texture andesite SULPHIDES: < 1%										
226.0	245.5	LAMPROPHYRE DYKE Medium green, speckled, fine to medium grain upper & lower contact grounded.	< 1py	19859	241.0	246.0	5.0	NIL	.12	.3	.03	.05
245.5	256.0	SEMI MASSIVE SULPHIDE ZONE IN RHYOLITE FINE TUFF Light grey, fine grained, siliceous lithtly chloritized giving light green tinge. Blue "quartz-eyes". 246.0-256.0 LOW ZINC ZONE.	20py.10sph.1cp	19849	246.0	251.0	5.0	.049	4.89	3.5	.41	.80
			20py. 7sph < 1cp	19850	251.0	256.0	5.0	.008	2.16	1.7	.14	.31
256.0	264.0	LAMPROPHYRE DYKE Greenish, medium grained, speckled salt & pepper texture contacts grounded. 259.5-261.0 Unaltered host rock but chloritized.	1py.tr sp	19860	256.0	260.0	4.0	NIL	NIL	1	Tr.	Tr.
			" " "	19861	260.0	265.0	5.0	NIL	NIL	1	Tr.	Tr.
264.0	270.0	RHYOLITE TUFF Same as 245.5-256.0 occasional agglomeratic angular to lensoid' fragments. blue qutz-eyes. qutz-calcite strgrs. poor schistosity @30° to core axis.										
270.0	298.0	MASSIVE SULPHIDES ZINC & COPPER ZONE 30% py, 40% sph, and 3% cpy	40py.50sp.2cp	19852	270.0	275.0	5.0	.054	27.43	38.6	.70	10.70
			30py.50sp.2cp	19853	275.0	280.0	5.0	.018	8.40	31.2	.62	1.05
			20py.30sp.2dp	19854	280.0	285.0	5.0	.014	5.36	22.6	.91	1.97
			20py.30sp.3cp	19855	285.0	290.0	5.0	.012	3.96	13.8	1.54	.83
			25py.30sp.2cp	19856	290.0	295.0	5.0	.017	6.41	14.2	.78	1.22
			20py.25sp.5cp	19857	295.0	298.0	3.0	.011	2 04	13.2	1.00	.31
298.0	377.5	RHYOLITE FINE TUFF (RHYO-DACITE) Light to medium grey to dark grey and then to medium grey very fine to fine grained. very fine blue qtz-eyes < 1mm in size. occ. agglomeratic sections 372.5-373.5 DYKE Upper and lower ctct sharp @45°-CA. lower ctct. cross cutting schistosity in rhyolite tuff.	1py.1sp.<1cp	19858	298.0	303.0	5.0	NIL	.17	.4	.25	.04
377.5	384.0	RHYOLITE MICRO AGGLOMERATE Grey green, fine grained intermediate matrix with siliceous felsic agglomerates, lensoid drawn out 30-40%, 3-15mm in size medium packing.										
	384.0	E N D O F H O L E										


104+00N.
(N.B.U.)
PA225785
PA212738
(M.L.M.)
106+00N.
10,000'
SL-23-71.16
ANDESITIC TUFF
LAMPROPHYRE DYKE
SEMI MASSIVE SULPHIDE ZONE
LAMPROPHYRE DYKE
MASSIVE SULPHIDES Zn & Cu ZONE
RHYOLITE TUFF
RHYOLITE FINE TUFF (RHYO-DACITE)
RHYOLITE MICRO AGGLOMERATE
9,600'
100 FEET
MATTAGAMI LAKE MINES LTD.
EXPLORATION DIVISION
PROJECT: STURGEON LAKE-GROUP 23
SECTION: LINE 99+00E.
D.D.H.# SL-23-71.16
SCALE: 1" = 100 FEET
DATE: 26 Aug. '71 DRW. BY: L.I.

RE-LOGGED

MATTAGAMI LAKE MINES LIMITED – EXPLORATION DIVISION – DIAMOND DRILL HOLE RECORD

PROPERTY	STURGEON LAKE GROUP 23	LATITUDE	108 + 50 NORTH
HOLE NO.	SL-23-71-18 ~~SL-23-71-18~~	DEPARTURE	97 + 00 EAST
BEARING	195° (GRID SOUTH)	ELEVATION	SURFACE
DIP-COLLAR	-50°	SECTION	3 + 00 WEST
STARTED	January 27, 1971		
FINISHED	January 30, 1971		
LENGTH	405.0'		
LOGGED BY	YANGHWE, ALI, LOISELLE		

DIP TEST					
Footage	Corrected	Footage	Corrected	Footage	Corrected
100'	44° 00'	400	40° 00		
200'	44° 00'				
300'	41° 00				

FOOTAGE From	FOOTAGE To	DESCRIPTION	% Mineralization	SAMPLE NO.	FOOTAGE From	FOOTAGE To	Length	ASSAYS Au	Ag	Zn	Cu	Pb
0.0	80.0	CASING SAND, GRAVEL & BOULDERS										
80.0	122.7	MASSIVE SULPHIDES										
		80.0- 96.4 PYRITE, ZINC, ZONE, - average 90%py,5-10%sph	90py.10sp.	19862	80.0	85.0	5.0	.030	14.17	9.9	.31	2.50
		96.4-122.7 ZONC. COPPER. ZONE	90py.10sp	19863	85.0	88.7	3.7	.030	13.56	6.5	.88	1.32
			80py.15sp	19864	88.7	92.7	4.0	.026	13.87	6.7	.91	1.36
			85py.15sp	19865	92.7	96.4	3.7	.018	5.92	5.3	1.05	1.18
			70py.25sp. 5cp	19866	96.4	100.8	4.4	.023	7.58	10.6	.62	2.55
			60py.30sp.10cp	19867	100.8	104.3	3.5	.040	11.23	12.3	.72	3.37
			50py.40sp.10cp	19868	104.3	108.0	3.7	.021	12.36	12.5	.59	3.53
			20py.10sp.10cp	19869	108.0	110.6	2.6	.011	3.96	11.0	.67	2.47
			60py.30sp.10cp	19870	110.6	113.0	2.4	.032	6.62	8.6	1.95	1.29
			25py.10sp. 5cp	19871	113.0	117.0	4.0	.026	7.53	11.4	3.82	2.02
			50py.20sp. 7cp	19872	117.0	119.8	2.8	.015	9.50	13.6	2.84	2.20
			50py.40sp.10cp	19873	119.8	122.7	2.9	.012	7.76	8.4	3.98	1.42
			10py.10sp. 3cp	19874	122.7	125.5	2.8	.015	4.49	3.2	6.10	.49
			5py. 5sp. 2cp	19875	125.5	129.6	4.1	.010	1.81	3.5	1.80	.54
				19876	129.6	133.8	4.2	.009	2.74	7.1	1.18	1.17
122.7	133.8	SULPHIDE ZONE (LOW ZN - CU ZONE)5-10%sph.1-3%cpy. 15% sulphides in Brecciated Rhyolite agglomerate brecciation and shearing due to possible FAULT ZONE Possible FAULT ZONE from 122.7-197.0'.										
133.8	160.0	RHYOLITIC MICRO AGGLOMERATE Green with light coloured rhyolite lapilae, brecciated and sheared, vuggy, talc, carbonate alterations, chloritized, loose to medium packing, scoraceous looking maybe due to alterations on fault zone, leaching. 141.5-144.5 LAMPROPHYRE DYKE? (MAFIC INTRUSION) Green, fine grained, vuggy, altered	5py.	19877	133.8	138.5	2.7	.006	1.46	5.8	1.00	.61
			LOST CORE		134.5	135.5	1.0	LOST	CORE			
			LOST CORE		136.0	137.0	1.0	"	"			
			3py.	19878	138.5	144.8	4.3	Nil	.17	1.4	.06	.10
			LOST CORE		140.5	141.5	1.0	LOST	CORE			
			LOST CORE		142.0	143.0	1.0	LOST	CORE			
160.0	173.5	LAMPROPHYRE DYKE? (MAFIC INTRUSION) Green, fine grained, altered, vuggy and pitted appearance. Appears as this dyke is in above noted FAULT ZONE	2py.	19879	144.8	150.0	5.2	Nil	Nil	.4	.03	.03
			LOST CORE		150.0	160.0	10.0	LOST	CORE			
			1py.	19880	160.0	162.0	2.0	Nil	.17	1.3	.13	.07
			lost CORE		162.0	164.0	2.0	LOST	CORE			
			7py.	19881	164.0	167.0	3.0	Nil	Nil	1.5	.04	.04
			LOST CORE		167.0	172.0	5.0	LOST	CORE			
173.5	175.5	MASSIVE SULPHIDES 70% sulphides. ZINC ZONE 40% sph. 30%py	<1py.	19882	172.0	173.5	1.5	Nil	Nil	1.4	Tr.	.04
			30py.40sp	19883	173.5	175.5	2.0	.059	18.65	16.1	.21	6.40
175.5	178.0	LAMPROPHYRE DYKE? (MAFIC INTRUSION) As described above with occasional acidic remnant bands.	<1py.po	19884	175.5	178.0	2.5	Nil	Nil	.1	.05	Nil
			LOST CORE		178.0	180.0	2.0	LOST	CORE			
			LOST CORE		182.0	186.0	(6.0)	LOST	CORE			
			LOST CORE		195.0	197.0	12.0	LOST	CORE			

M.L.M. EXPLORATION DIVISION. D.D.H. RECORD

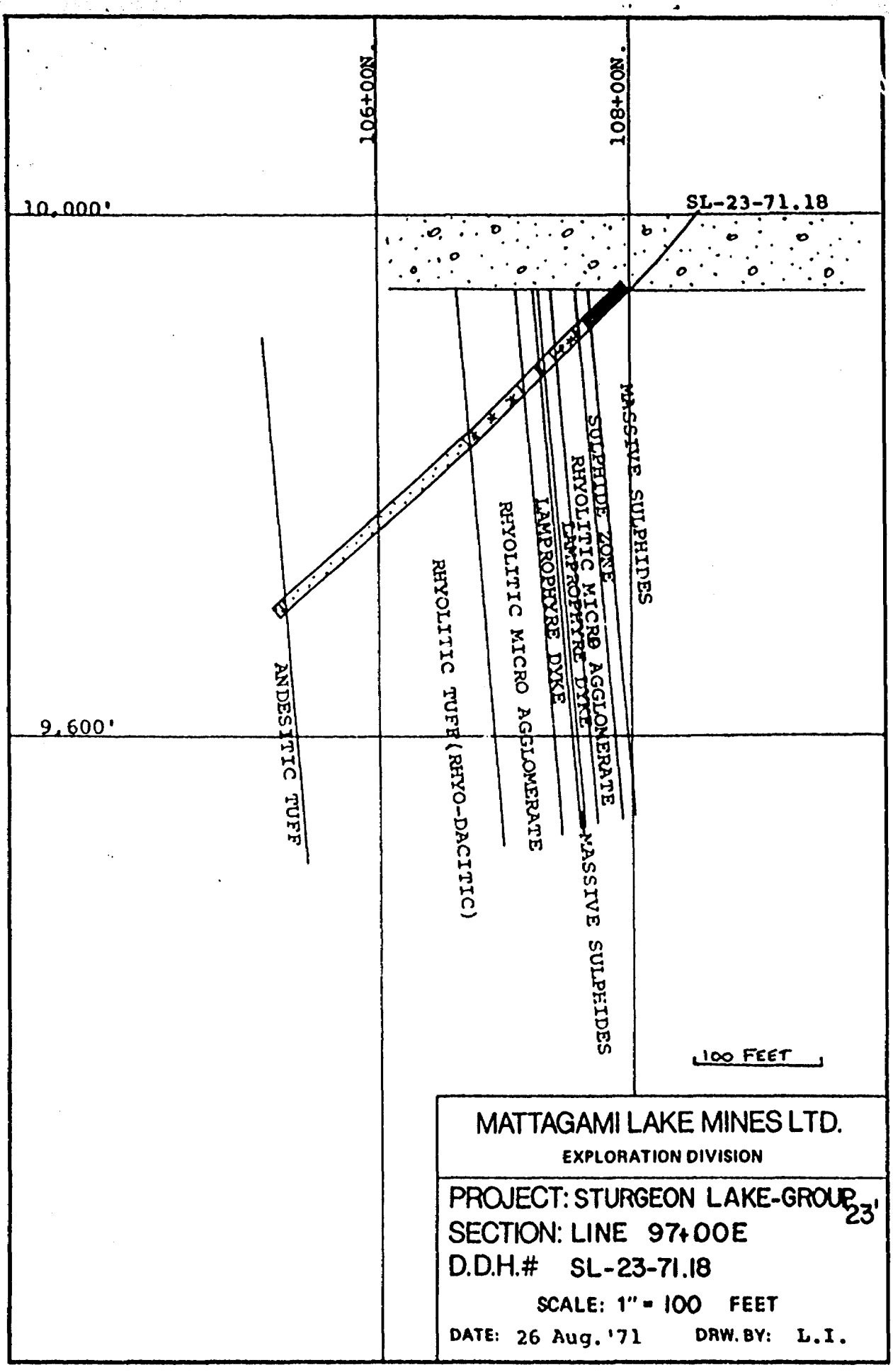
PROPERTY STURGEON LAKE GROUP 23 HOLE NO. SL-23-71-18 Page 2/2

FOOTAGE From	FOOTAGE To	DESCRIPTION	Mineralization	SAMPLE NO.	FOOTAGE From	FOOTAGE To	FOOTAGE Length	ASSAYS Au	Ag	Zn	Cu	Pb
197.0	254.0	RHYOLITIC MICRO AGGLOMERATE (COARSE TUFF)										
		197.0-207.0 Light coloured, fragments lensoid 3-10mm in size, tightly packed, schistose siliceous matrix, distinct blue "quartz-eyes" felsic lapilae.										
		207.0-208.0 Lamprophyre Dyke? (Mafic to Intermediate intrusion) Grey fine grained, contact obscured.										
		209.0-213.5 Lamprophyre Dyke? Same as above.										
		213.5-231.5 Porphyritic, blue "quartz-eyes", lightly packed coarse tuff.										
		231.5-233.0 Lamprophyre Dyke? Grey green, fine grained contact obscured.										
254.0	400.0	RHYOLITIC TUFF (RHYO-DACITIC)										
		Medium grey, fine grained, tuffaceous, quartz-metacrysts. Difference from micro agglomerate in grain size and colour but similar siliceous matrix lightly packed fragments.										
		281.0-287.5 Medium grey, finer grained, siliceous.										
		303.0-322.0 Sericite and carbonate alteerations, quartz-veining.										
		322.0-339.0 RHYO-DACITIC TUFF. Greyish green appears more mafic in composition banded appearance with more siliceous bands, 1"-1½"										
		339.0-400.0 Slight change in colour, greyish green distinct "blue quartz eyes", tuffaceous fine grained, porphyritic, siliceous welded, andesitic interbands weakly bedded to banded with increase in depth.	tr.-<1py, sp?	19885	365.0	370.0	5.0	NIL	NIL	NIL	NIL	NIL
			" " "	19886	370.0	375.0	5.0	NIL	.1.92	1.9	Tr.	.09
			" " "	19887	375.0	380.0	5.0	NIL	NIL	.1	NIL	Nil
400.0	405.0	ANDESITIC TUFF										
		Dark grey green, banded chloritized sections, more mafic contents but still siliceous and hard, quartz-metacryst-porphyritic up to 2mm ., only colour and appearance in suggestive for andesite.										
	405.0	E N D O F H O L E.										

M.L.M. EXPLORATION DIVISION. D.D.H. RECORD ADDITIONAL SAMPLING AND RE - DEFINITION

PROPERTY STURGEON LAKE GROUP "23" HOLE NO. SL-23-71-18 Page

FOOTAGE From	FOOTAGE To	DESCRIPTION	Mineralization	SAMPLE NO.	FOOTAGE From	FOOTAGE To	FOOTAGE Length	ASSAYS				
175.5	197 0	LAMPROPHYRE DYKE See page 1 for descriotion	LOST CORE	[redacted]	178.0	186.0	8.0		LOST	CORE		
			NIL	25882	186.0	191.0	5.0	Nil	Nil	1.7	Nil	.03
			Nil	25883	191.0	195.0	4.0	Nil	Nil	.4	Nil	.02
			LOST COR E		195.0	197.0	2.0		LOST	[redacted]ORE		
			NIL	25884	197.0	201.0	4.0	Nil	Nil	.1	Nil	Tr.
			LOST CORE		201.0	203.0	2.0		LOST	[redacted]ORE		
			NIL	25885	203.0	208.0	5.0	Nil	Nil	.8	Nil	Tr.
			LOST CORE		208.0	210.0	2.0		LOST	CORE		
				25886	210.0	213.0	3.0	Nil	Nil	.2	Tr.	Tr.
				25887	213.0	218.0	5.0	Nil	Nil	.2	Nil	Tr.
			LOST CORE		218.0	219.0	1.0		LOST	CORE		
				25888	219.0	224.0	5.0	Nil	Nil	Nil	Nil	Nil
254.0	400.0	RHYO-DACITIC TUFF Please see page 2 for descriotion.										
400.0	405.0	POSSIBLE DYKE? OR CHLORITIZED PART OF ABOVE RHYO-DACITIC TUFF.										


106+00N
108+00N
10,000'
9,600'
SL-23-71.18
ANDESITIC TUFF
RHYOLITIC TUFF (RHYO-DACITIC)
RHYOLITIC MICRO AGGLOMERATE
LAMPROPHYRE DYKE
RHYOLITIC MICRO AGGLOMERATE
LAMPROPHYRE DYKE
MASSIVE SULPHIDES
SULPHIDE ZONE
MASSIVE SULPHIDES
100 FEET
MATTAGAMI LAKE MINES LTD.
EXPLORATION DIVISION
PROJECT: STURGEON LAKE-GROUP
SECTION: LINE 97+00E
D.D.H.# SL-23-71.18
SCALE: 1" = 100 FEET
DATE: 26 Aug. '71
DRW. BY: L.I.

NATTAGANI LAKE MINES LIMITED – EXPLORATION DIVISION – DIAMOND DRILL HOLE RECORD

PROPERTY	STURGEON LAKE GROUP 23	LATITUDE	110 + 00 NORTH	STARTED	January 31 1971	DIP TEST					
						Footage	Corrected	Footage	Corrected	Footage	Corrected
HOLE NO.	SL-23-71-19	DEPARTURE	97 + 00 EAST	FINISHED	February 7, 1971	100.0'	42°00'	400.0'	39°00'		
BEARING	015°	ELEVATION	SURFACE	LENGTH	618.0'	200.0'	42°00'	500.0'	37°00'		
DIP-COLLAR	-50°	SECTION	3 + 00 WEST	LOGGED BY	LOISELLE, YAWNGHWE, ALI	300.0'	41°00'	600.0'	36°00'		

FOOTAGE From	FOOTAGE To	DESCRIPTION	% Mineralization	SAMPLE NO.	FOOTAGE From	FOOTAGE To	FOOTAGE Length	ASSAYS Au	Ag	Zn	Cu	Pb
0.0	58.0	CASING (SAND, PEBBLES & BOULDERS)										
58.0	97.5	ANDESITIC TUFF										
		Dark greyish green, fine grained bands, siliceous fragments, poorly schistosed.										
	62.6- 67.0	Fine grained intermediate tuff, almost massive	<1py,po< 1mag	21160	65.0	70.0	5.0	NIL	NIL	NIL	NIL	NIL
		looking more greyish in colour	2py,po 3mag	21161	70.0	75.0	5.0	NIL	NIL	NIL	NIL	NIL
	67.0- 83.0	Grey, occasionally white, 1-4mm quartz-feldspathic	<2py,po 3mag	21162	75.0	80.0	5.0	NIL	NIL	TR.	NIL	NIL
		blebs, garnet xtls up to 2mm in size.	<1py,po <1mag	21163	80.0	85.0	5.0	NIL	NIL	TR.	NIL	NIL
	83.0- 85.0	Grey, fine grained massive.	<1py,po <1mag	21164	85.0	90.0	5.0	NIL	NIL	TR.	NIL	NIL
	85.0- 87.0	Green andesitic tuff with distinct garnet xtls up to 5mm in size.	<1py,po< 1mag	21165	92.5	97.5	5.0	NIL	NIL	TR.	NIL	NIL
	87.0- 97.5	Same as described from 83.0-85.0.										
97.5	112.5	SULPHIDE ZONE										
		5-10% sulphides in green andesite tuff with distinct garnet xtls,	3py. 2mag.	21166	97.5	102.5	5.0	.010	NIL	.4	NIL	NIL
		grading into siliceous fragments mineralized zone is highly	7py. 3mag.	21167	102.5	107.5	5.0	.009	NIL	TR.	TR.	NIL
		sheared, fragments contorted and brecciated, highly altered.	8py. 2mag.	21168	107.5	112.5	5.0	.005	.06	.2	tr.	nil
		SULPHIDES Mainly py and magnetite with doubtful traces of sphalerite.										
112.5	117.5	ANDESITIC TUFF										
		Same as described from 58.0-97.5' increase in narrow siliceous	3py. 1mag.	21169	112.5	117.5	5.0	NIL	NIL	.1	NIL	TR
		bands, little coarser grain than above, numerous elongated siliceous fragments [redacted] up to 2mm in size occasionally more siliceous, dacitic in appearance bands. Appears transitional zone towards rhyolite.										
		SULPHIDES 1-3% mainly pyrite										
117.5	137.5	SULPHIDE ZONE IN RHYOLITIC MICRP AGGLOMERATE	15py,1sph	21170	117.5	122.5	5.0	.005	.12	1.2	.02	.08
		Light to medium grey, fine grained matrix with fine grained	15py,1sph	21171	122.5	127.5	5.0	TR.	NIL	NIL	TR.	NIL
		tuffaceous bands, coarse grained siliceous fragments up to 5-10	3py,tr.sph	21172	127.5	132.5	5.0	TR.	NIL	NIL	.02	NIL
		in size, fragments are elongated and lensoid, occasional andesitic matrix bands.	4py.tr.sph	21173	132.5	137.5	5.0	.005	NIL	.2	NIL	NIL
		117.5-127.5 15%py, <1 to 1% sph										
		127.5-137.5 3-4%py, tr sph?										
137.5	142.5	ANDESITIC TUFF										
		Medium to dark greyish green, fine grained, poor schistosity @45° to core axis.	1py. 1mag.	21174	137.5	142.5	5.0	.006	NIL	NIL	TR.	NIL
		SULPHIDES <1 to 2% mainly pyrite.										

M.L.M. EXPLORATION DIVISION, D.D.H. RECORD

PROPERTY STURGEON LAKE GROUP 23 HOLE NO. SL-23-71-19 Page 2/3

FOOTAGE From	FOOTAGE To	DESCRIPTION	Mineralization	SAMPLE NO.	FOOTAGE From	FOOTAGE To	FOOTAGE Length	ASSAYS Au	Ag	Zn	Cu	Pb
[redacted]	219.0	[redacted]										
		RHYOLITIC MICRO AGGLOMERATE										
42.5	42.5	RHYOLITIC MICRO AGGLOMERATE										
		As described above from 117.5-137.5 with occasional andesitic matrix bands.	5py.tr.sph	21175	142.5	147.5	4.0	NIL	NIL	NIL	NIL	NIL
		144.0-145.0 Lost core	3py	21176	147.5	152.5	5.0	NIL	NIL	NIL	TR.	NIL
		142.5-157.5 3-5% sulphides mainly pyrite	5py	21177	152.5	157.5	5.0	NIL	NIL	NIL	NIL	NIL
		167.5-172.5 7% sulphides " "	tr.py	21178	157.5	162.5	5.0	TR.	NIL	TR.	.02	NIL
			tr.py	21179	162.5	167.5	5.0	NIL	NIL	TR.	.05	NIL
		164.0-172.0 Possibly andesitic tuff band	7py	21180	167.5	172.5	5.0	NIL	NIL	TR.	NIL	NIL
			tr.py	21181	172.5	177.5	5.0	NIL	NIL	.1	NIL	NIL
			tr.py	21189	177.5	179.6	2.1	[redacted]	NIL	[redacted]	[redacted]	NIL
		194.6-201.0 Light to medium grey green, highly chloritized and altered lensoid to angular fragments 3-15mm in size medium to tightly packed, blue "quartz-eyes", poor schistosity, occasionally appears andesitic matrix in bands	tr.py	21190	179.6	184.6	5.0	NIL	NIL	[redacted]	[redacted]	NIL
			tr.py	21182	184.6	189.6	5.0	Tr.	NIL	NIL	TR.	NIL
			2py	21183	189.6	194.6	5.0	NIL	NIL	.4	.05	Nil
			?1py	21184	194.6	199.6	5.0	NIL	NIL	.3	NIL	.03
			1py	21191	199.6	201.0	1.4	Nil	NIL	[redacted]	[redacted]	[redacted]
			1py	21192	201.0	206.0	4.0	NIL	NIL	.4	NIL	.02
			1py	21193	206.0	210.0	4.0	NIL	NIL	.3	.06	NIL
			LOST CORE		210.0	211.0	1.0			LOST CORE		
		201.0-210.0 Dirty green, vuggy, comparatively soft, highly altered, tuffaceous bandings @ right angle to core axis. Possibly FAULT ZONE	tr.py	21194	211.0	216.0	5.0	NIL	NIL	.5	.04	NIL
			1py	21195	216.0	221.0	3.0	NIL	NIL	.1	.02	.02
			LOST CORE		216.0	217.0	1.0			LOST CORE		
			LOST CORE		218.0	219.0	1.0			LOST CORE		
		204.0-205.0 LOST CORE										
		210.0-215.0 Altered rhyolite as described above										
		210.0-211.0 LOST CORE										
	241.4											
219.0	241.4	RHYOLITIC TUFF										
		Greyish green, distinct blue "quartz-eyes", matrix appears andesitic weakly interbedded with agglomeratic small bands, occasional lapilae and quartz-stringers.	1py	21196	221.0	226.0	5.0	.005	.23	1.2	.18	TR.
			1py	21185	226.0	230.0	4.0	NIL	.29	.5	.09	.03
			LOST CORE		230.0	234.0	4.0			LOST CORE		
			10py	21186	234.0	237.0	1.0	NIL	.12	.2	.01	.06
					235.0	237.0	2.0					
				21187	237.0	242.0	2.0	NIL	NIL	.2	TR.	TR.
			LOST CORE		238.0	241.0	3.0			LOST CORE		
	252.0											
241.4	252.0	META ANDESITE TUFF - CHLORITESCHIST ?										
		Green, fine grained, chloritic, soft, schistosed appearance speckled due to chlorite flakes.	1py	21188	242.0	247.0	5.0	NIL	NIL	TR.	TR.	NIL
52.0	259.0	RHYOLITIC MICRO AGGLOMERATE										
		Same as described from 142.5-219.0, more distinct white qtz-fragments, very fine blue "quartz-eyes".										
	347.6											
59.0	347.6	RHYOLITIC FINE TUFF										
		Medium to dark grey with greenish tinge, fine grained with mafic shards and scraps, occasional quartz-stringers.										

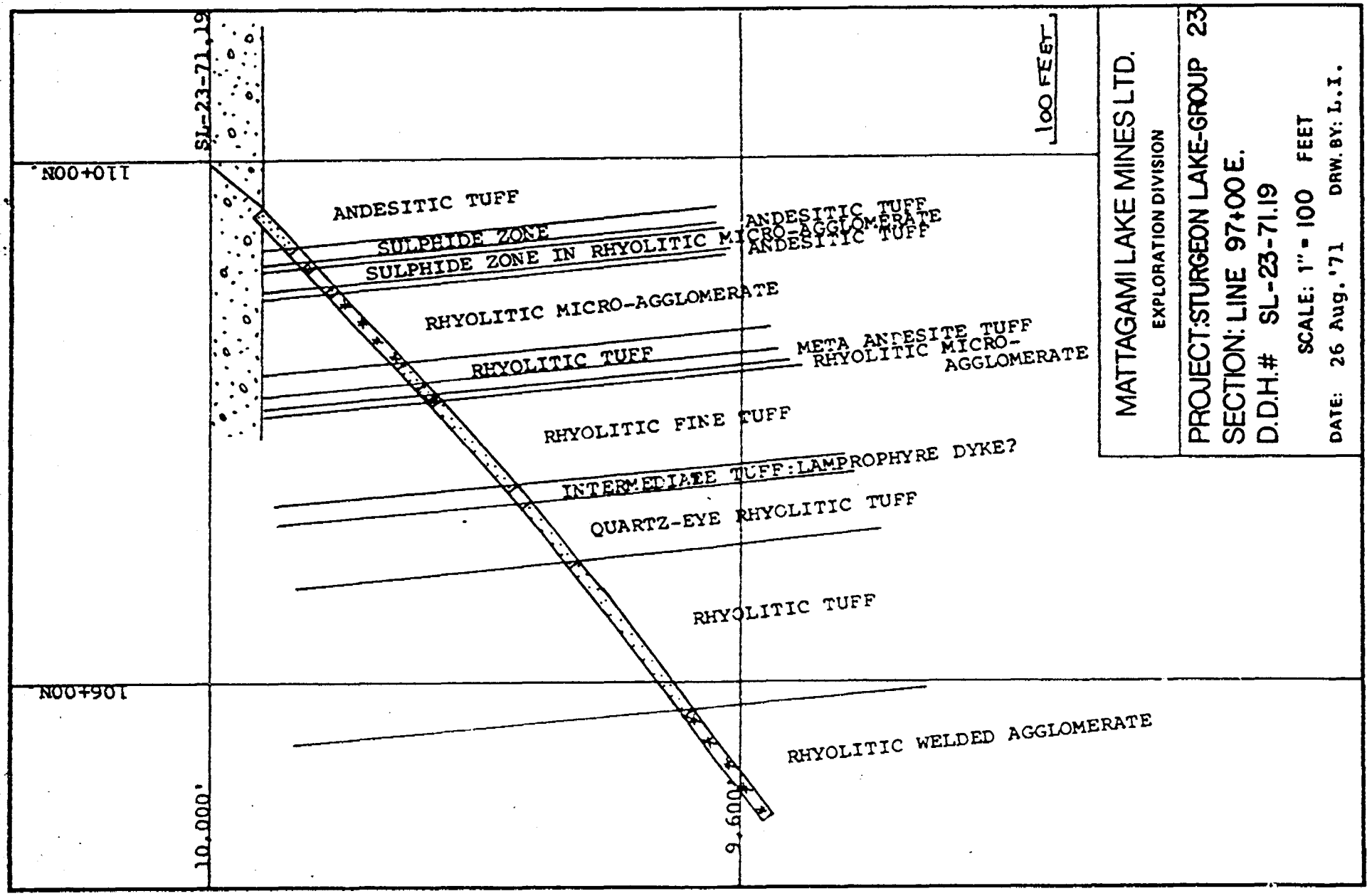
N.L.M. EXPLORATION DIVISION, D.D.H. RECORD

PROPERTY STURGEON LAKE GROUP 23 HOLE NO. SL-23-71-19 Page 3/3

FOOTAGE From	FOOTAGE To	DESCRIPTION	% Mineralization	SAMPLE NO.	FOOTAGE From	FOOTAGE To	FOOTAGE Length	AU ASSAYS Au	AG Ag	ZN Zn	CU Cu	PB Pb
		RHYOLITIC FINE TUFF (Cont'd)										
		274.0-285.0 QTZ-EYE RHYOLITIC TUFF Grey, coarse grained, porphyritic distinct blue "quartz-eyes".										
		285.0-347.6 Light to medium grey very fine to fine grained, porphyritic, fine "qtz-eyes", occasional coarse metacrysts.	<1py	21197	342.6	347.6	5.0	NIL	NIL	NIL	NIL	NIL
347.6	363.5	INTERMEDIATE TUFF: LAMPROPHYRE DYKE?	<1py	21198	347.6	352.6	5.0	NIL	NIL	NIL	NIL	NIL
		Medium to brownish grey green, fine grained matrix, ashy texture	<1py	21199	352.6	357.6	5.0	NIL	NIL	NIL	NIL	NIL
		appearance, tuffaceous section @ 354.0-355.0 and 361.0-362.0	<1py	21200	357.6	362.6	5.0	TR.	NIL	TR.	NIL	NIL
363.5												
363.5	421.0	QTZ-EYE RHYOLITIC TUFF										
		As described from 274.0-285.0	<1py	21201	362.6	367.6	5.0	NIL	NIL	TR.	NIL	NIL
421.0												
421.0	565.5	RHYOLITIC TUFF Gradationally appears to change, becoming more coarse grain, increase in fragments lapilae, irregular quartz bands or edges of quartz-veining, increase in mafic contents										
		471.0-505.5 Suggestively agglomerate in tuff horizon										
		505.5-565.5 Darker in colour, increase in mafic contents, fine grained, very distinct quartz metacrysts, chloritic stringers.	<1py	21202	559.0	564.0	5.0	NIL	NIL	TR.	NIL	NIL
565.5	618.0	RHYOLITIC WELDED AGGLOMERATE Light to medium grey, hard, siliceous, occasional sections with 10-20mm fragments, welded agglomerates usually elongated, lenoid and welded.	<1py	21204	565.5	570.5	5.0	NIL	NIL	NIL	NIL	NIL
	618.0	E N D O F H O L E.										

M.L.N. EXPLORATION DIVISION - D.D.H. RECORD ADDITIONAL SAMPLING AND RE-DEFINITIONS PROPERTY STURGEON LAKE GROUP "23" HOLE NO. SL-23-71-19 Page 4

FOOTAGE From	FOOTAGE To	DESCRIPTION	% Mineralization	SAMPLE NO.	FOOTAGE From	FOOTAGE To	FOOTAGE Length	ASSAYS Au	Ag	Zn	Cu	Pb
241.4	252.0	META ANDESITE TUFF - CHLORITE SCHIST ? DYKE ?										
241.4	252.0	For description please see Page 2 FOR DESCRIPTION SEE PAGE TWO	NIL	19901	247.0	252.0	5.0	Nil	.06	.2	.03	.01
252.0	259.0	RHYOLITIC MICRO AGGLOMERATE RHYOLITIC MICRO AGGLOMERATE	NIL	19902	252.0	257.0	5.0	Nil	Nil	.1	Tr.	Tr.
252.0	259.0	Description on Page. DESCRIPTION ON PAGE.	LOST CORE		257.0	259.0	2.0		LOST	CORE		
259.0	347.6	ARHYOLITIC TO RHYO-DACITIC TUFF	NIL	19903	259.0	264.0	5.0	Nil	Nil	Tr.	Nil	.01
258.0	347.6	Description on page 2 and 3. ARHYOLITIC TO RUYO-DACITIC TUFF	NIL	19904	264.0	269.0	5.0	Nil	Nil	Nil	Nil	Tr.
		DESCRIPTION ON PAGE 2 AND 3	NIL	19905	269.0	274.0	5.0	Nil	Nil	Nil	Nil	Tr.
			NIL	19906	274.0	279.5	5.5	Nil	Nil	Nil	Nil	Nil


SL-23-71.19
100 FEET
N00+011
ANDESITIC TUFF
SULPHIDE ZONE
SULPHIDE ZONE IN RHYOLITIC MICRO-AGGLOMERATE
ANDESITIC TUFF
ANDESITIC TUFF
RHYOLITIC MICRO-AGGLOMERATE
RHYOLITIC TUFF
META ANDESITE TUFF
RHYOLITIC MICRO-AGGLOMERATE
RHYOLITIC FINE TUFF
INTERMEDIATE TUFF: LAMPROPHYRE DYKE?
QUARTZ-EYE RHYOLITIC TUFF
RHYOLITIC TUFF
N00+901
RHYOLITIC WELDED AGGLOMERATE
10,000'
9,600'
MATTAGAMI LAKE MINES LTD.
EXPLORATION DIVISION
PROJECT: STURGEON LAKE-GROUP 23
SECTION: LINE 97+00E.
D.D.H.# SL-23-71.19
SCALE: 1" = 100 FEET
DATE: 26 Aug. '71 DRW. BY: L.I.

52G/15NW

AREA OF SIXMILE LAKE

M-2877

SCALE: 1 inch = 40 chains

40 CHAINS

Bell Lake M.1888

FOR ADDITIONAL INFORMATION SEE MAPS:

52G/15NW-0021 #1

N

PA 212614

PA 212738

PA 212739

SL-23-71.19 (-50°)

SL-23-70.9 (-50°)

678'

SL-23-71.18 (-50°)

667'

SL-23-70.10 (-50°)

SL-23-70.11 (-48°)

620'

SL-23-70.12 (-50°)

530'

SL-23-71.13 (-50°)

340'

SL-23-71.16 (-50°)

238'

SL-23-71.15 (-50°)

140'

723'

566'

618'

403'

360'

502'

318'

490'

294'

HD

273'

408'

384'

235'

350'

196'

MATTAGAMI LAKE MINES
NEW BRUNSWICK URANIUM (FALCONBRIDGE OPTION)

PA 225785

PA 225784

52G/15 NW-0021, #1

MATTAGAMI LAKE MINES LTD.
EXPLORATION DIVISION

PROJECT: STURGEON LAKE-GROUP '23'
SECTION: SURFACE PLAN
D.D.H.# SL-23-70.9,10,11,12 ; 71.13,15,16,18,19.
SCALE: 1" = 100 FEET
DATE: 26/8/'71. DRW. BY: L.I.