52G15NW0100 52G15NW0015 SIXMILE LAKE

010

Diamond Drilling

Area of SIXMILE LAKE **Report Nº** 12

Work performed by: Mattagami Lake Mines

Claim Nº	Hole Nº	Footage	Date	Note
Pa 212616	SL-23-69-1	810.0'	Aug/69	
Pa 212615	SL-23-69-3	510.0'	Aug/69	
	SL-23-71-17	972.0'	Jan-Feb/71	
Pa 212738	SL-23-71-20	1175.0'	Feb/71	
	SL-23-71-24	1304.0'	Feb-Mar/71	
Pa 212739	SL-23-71-36	623.0'	Mar/71	
	SL-23-71-38	924.0'	Apr/71	
	SL-23-71-42	704.0'	Apr/71	
	SL-23-71-44	703.0'	Apr/71	
	SL-23-71-51	549.0'	May/71	
Pa 212614	SL-23-71-14	752.0'	Jan/71	
TOTAL	11 DH	9026 FT		

Notes:

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

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				DIP TEST					
PROPERTY Surgeon Lake – No. 23	LATITUDE 19 + 40' South	STARTED August 11, 1969	Footage	Corrected	Footage	Corrected	Footage	Corrected
HOLE NO. SL-23-69-1	DEPARTURE 1 + 70' East	FINISHED August 19, 1969	200'	41°00'	600'	38°00'		
BEARING 225°00'	ELEVATION Surface	LENGTH 810.0' 810.0'	400'	42°00'	800'	38°00'		
DIP-COLLAR -45°	SECTION	LOGGED BY J.D. Harvey						

FOOTAGE From	FOOTAGE To	DESCRIPTION	% Mineralization	SAMPLE NO.	FOOTAGE From	FOOTAGE To	FOOTAGE Length	ASSAYS Au	Ag	Cu	Pb	Zn
0.0	80.0	CASING										
80.0	244.5	PYROCLASTICS f.g. light grey-green to dark grey acid-intermediate volcanic tuffs; graphitic slightly; light brown carbonate alteration; mineralized po & py. sections; faintly banded garnetiferous; slightly brecciated. 80.0-106.1: DACITIC TUFF medium grey, acid-inter, volc. tuff; f.g.; banding evident 45° to core axis; sparse py., minor po, stgrs.; 10-20% creamy-brown carbonate alteration replacing favourable bands; garnetiferous; slightly brecciated with black instertices; 106.1-114.7: GRAPHITIC TUFF black; f.g.; cherty volcanic tuff; slightly graphitic; banding distinct 60° to core; 3-4% po., minor py. stgrs. 114.7-132.0: RHYOLITIC TUFF light grey, f.g., acid volc. tuff; light creamy-brown carbonate streaks parallel banding at 60° minor diss. po, py. 132.0-153.0: INTERBANDED RHYOLITIC & CHERTY TUFF banding 50° to core axis; moderately brecciated; 3-4% po,py. strgrs. in black, cherty bands. 153.0-177.3: GRAPHITIC TUFF same as 106.1-114.7; only slightly graphitic, mainly black chert; slightly brecciated; banding at 60°; 2-3% po. blebs & stgrs., some qtz, impregnations.											

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

PROPERTY	STURGEON LAKE - No. 23	LATITUDE	19 + 40 ' SOUTH	STARTED	AUGUST 11, 1969.
HOLE NO.	SL - 23 - 69.1	DEPARTURE	1 + 70 ' EAST	FINISHED	AUGUST 19, 1969.
BEARING	225°00'	ELEVATION	SURFACE	LENGTH	819.0'
DIP-COLLAR	-45°	SECTION		LOGGED BY	J. D. HARVEY.

DIP TEST

Footage	Corrected	Footage	Corrected	
200'	41°00'	600'	38°00'	
400'	42°00'	800'	38°00'	

REMARKS

FOOTAGE From	FOOTAGE To	DESCRIPTION	Mineralization	SAMPLE NO.
0.0	80.0	OVERBURDEN gravel, quick sand		
80.0	244.5	PYROCLASTICS f. g., light grey-green to dark grey acid-intermediate volcanic tuffs; graphitic slightly; light brown carbonate alteration; mineralized po. & py. sections; faintly banded, garnetiferous; slightly brecciated.		
		80.0 - 106.1 DACITIC TUFF medium grey, acid-inter. volc. tuff; f. g.; banding evident 45° to core axis; sparse py., minor po. stgrs.; 10-20% creamy-brown carbonate alteration replacing favourable bands; garnetiferous; slightly brecciated with black insterstices;		
		106.1 - 114.7 GRAPHITIC TUFF black; f. g.; cherty volcanic tuff; slightly graphitic; banding distinct 60° to core; 3-5% po., minor py. stgrs.		
		114.7 - 132.0 RHYOLITIC TUFF light grey, f. g., acid volc. tuff; light creamy-brown carbonate streaks parallel banding at 60° minor diss. po, py.		
		132.0 - 153.0 INTERBANDED RHYOLITIC & CHERTY TUFF banding 50° to core axis; moderately brecciated; 3-4% po, py. stgrs. in black, cherty bands.		
		153.0 - 177.3 GRAPHITIC TUFF same as 106.1 - 114.7; only slightly graphitic, mainly black chert; slightly brecciated; banding at 60°; 2-3% po. blebs & stgrs., some qtz. impregnations		

FOOTAGE From	FOOTAGE To	FOOTAGE Length	ASSAYS Au	Ag	Cu	Pb	Zn

FOOTAGE From	FOOTAGE To	DESCRIPTION	SAMPLE No.	FOOTAGE From	FOOTAGE To	Length	ASSAYS Au	Ag	Cu	Pb	Zn	Ni
177.3-213.1		RHYOLITIC TUFF	1-2 po,py	2712	184.6	189.4	4.8	Nil	Nil	.04	Nil	.1	
		same as 114.7-132.0; some dacitic bands; 5-10%	1-2	2713	189.4	194.5	5.1	-	-	Tr.	-	.2	
		po, py with minor cpy. stgrs. and blebs in	1	2714	194.5	199.0	4.5	-	-	Tr.	-	Tr.	
		massive, creamy carbonate altered bands rhyolitic	1-2	2715	199.0	202.7	3.7	-	-	Tr.	-	.1	
		tuff; some distinct banding at 50° to core;	1-2	2716	202.7	207.8	5.1	-	Tr.	Tr.	-	Tr.	
		210.8-212.5: massive 70% po, py minor cpy	40-50	2717	207.8	210.4	2.6	-	Nil	Tr.	-	.2	nil
			1-2	2718	210.4	213.5	3.1	-	-	.04	-	.2	
213.1-227.1		GRAPHITIC TUFF	10-15	2719	213.5	218.8	5.3	-	Tr.	Tr.	-	.2	-
		same as 106.1-114.7; 5-10% po, minor py stgrs.	3-5	2720	218.8	224.0	5.2	-	Nil	Tr.	-	.1	
		& blebs replacing white carbonate; slightly	3.5	2721	224.0	229.1	5.1	-	-	Tr.	-	.3	
		brecciated.											
227.1-244.5		MINERALIZED TUFF											
		same as 177.3-213.1 but more brecciated and											
		altered (carboantes)											
		227.1-228.3: dacitic tuff with 2-3% diss. po.											
		228.3-235.0: massive 60% po,py minor cpy; host	40-50	2722	229.1	233.9	4.8	Nil	Tr.	Tr.	Nil	.2	nil
		rock altered (carbonated);	20-30	2723	233.9	237.6	3.7	-	Nil	Tr.	-	.1	
		moderately brecciated.											
		235.0-242.5: 10-15% po, py; 5% white qtz.	10-15	2724	237.6	242.5	4.9	Nil	Nil	Tr.	Nil	.3	nil
		impregnations.	1-2	2725	242.5	247.8	4.5	-	-	Tr.	-	Tr.	
		242.5-244.5: black, banded cherty-graphitic											
		tuff; po & py mineralization											
		throughout; banding 75° to core											
		axis.											
244.5	246.0	PORPHYRTIC RHYOLITE											
		light grey; f.g., acid volc. matrix with 10% up											
		to 1/16" black qtz. eyes; 2-3% diss. po.											
246.0	298.0	CHLORITIC ANDESITE											
		dark green, f.g. intermediate volc.; fairly massive but	1-2	2726	247.0	249.3	2.3	Nil	Tr.	Tr.	Nil	.1	
		very heavy chlorite alteration; impregnated with 10%	3-5	2727	249.3	250.4	1.1	-	Nil	Tr.	-	Tr.	Nil
		brecciated qtz. stgrs. & veins; much creamy carbonate	<1	2728	250.4	255.0	4.6	-	Tr.	.05	-	.1	-
		alteration; some brecciation.	<1	2729	255.0	259.4	4.4	-	Nil	Tr.	-	.1	-
		246.0-264.5: 2-3% po, py in qtz. stgrs. & veins	<1	2730	259.4	261.3	1.9	-	-	Tr.	-	Tr.	-
		264.5-266.6: PORPHYRITIC RHYOLITE	<1	2731	261.3	263.4	2.1	-	Tr.	Tr.	-	Tr.	
		same as 244.5-246.0	<1	2732	263.4	267.4	4.0	-	Tr.	Tr.	-	Tr.	
		266.6-298.0: heavily brecciated; more qtz, impregnation;	<1	2733	267.4	269.6	2.2	-	Nil	Tr.	-	Tr.	
		3-5% po stgrs. & fracture fillings; minute	1-2	2734	269.6	274.0	4.4	-	-	Tr.	-	.1	Nil
		fractures filled with creamy carbonate.	<1	2735	274.0	276.0	2.0	-	Tr.	Tr.	-	.1	
			<1	2736	276.0	279.0	3.0	-	Tr.	.04	-	Tr	
298.0	324.0	PORPHYRITIC RHYOLITE	<1	2737	279.0	285.1	6.1	-	Tr.	.06	-	Tr.	
		same as 244.5-246.0;	<1	2728	285.1	291.0	5.9	-	Tr.	Tr.	-	.2	
		minor po, mineralization	1-2	2739	291.0	295.8	4.8	-	Nil	Nil	-	Tr.	
			1-2	2740	295.8	298.9	3.1	-	-	Nil	-	Tr.	

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FOOTAGE From	FOOTAGE To	DESCRIPTION	% Mineralization	SAMPLE NO.	FOOTAGE From	FOOTAGE To	FOOTAGE Length	ASSAYS Au	Ag	Cu	Pb	Zn	Ni
		177.3 - 213.1 RHYOLITIC TUFF	1-2 po, py	2712	184.6	189.4	4.8	Nil	Nil	.04	Nil	.1	
		same as 114.7 - 132.0; some dacitic bands;	1-2	2713	189.4	194.5	5.1	-	-	Tr.	-	.2	
		5-10% po, py with minor cpy, stgrs, and blebs in	<1	2714	194.5	199.0	4.5	-	-	Tr.	-	Tr.	
		massive, creamy carbonate altered bands rhyolitic	1-2	2715	199.0	202.7	3.7	-	-	Tr.	-	.1	
		tuff; some distinct banding at 50° to core;	1-2	2716	202.7	207.8	5.1	-	Tr.	Tr.	-	Tr.	
		210.8 - 212.5 massive 70% po, py minor cpy.	40-50	2717	207.8	210.4	2.6	-	Nil	Tr.	-	.2	Nil
			1-2	2718	210.4	213.5	3.1	-	-	.04	-	.2	
		213.1 - 227.1 GRAPHITIC TUFF	10-15	2719	213.5	218.8	5.3	-	Tr.	Tr.	-	.2	-
		same as 106.1 - 114.7;	3-5	2720	218.8	224.0	5.2	-	Nil	Tr.	-	.1	
		5-10% po, minor py stgrs, & blebs replacing	3-5	2721	224.0	229.1	5.1	-	-	Tr.	-	.3	
		white carbonate; slightly brecciated.											
		227.1 - 244.5 MINERALIZED TUFF											
		same as 177.3 - 213.1 but more brecciated											
		and altered (carbonates)											
		227.1 - 228.3 dacitic tuff with 2-3% diss. po.											
		228.3 - 235.0 massive 60% po, py minor cpy;	40-50	2722	229.1	233.9	4.8	Nil	Tr.	Tr.	Nil	.2	Nil
		host rock altered (carbonated);	20-30	2723	233.9	237.6	3.7	-	Nil	Tr.	-	.1	-
		moderately brecciated.											
		235.0 - 242.5 10-15% po, pyi											
		5% white qtz. impregnations.	10-15	2724	237.6	242.5	4.9	Nil	Nil	Tr.	Nil	.3	Nil
		242.5 - 244.5 black, banded chorty-graphitic tuff;	1-2	2725	242.5	247.8	4.8	-	-	Tr.	-	Tr.	
		po & py mineralization throughout;											
		banding 75° to core axis.											
244.5	246.0	PORPHYRITIC RHYOLITE											
		light grey; f.g., acid volc. matrix with 10% up											
		to 1/16" black qtz. eyes; 2-3% diss. po.											
246.0	298.0	CHLORITIC ANDESITE											
		dark green, f.g., intermediate volc.; fairly massive	1-2	2726	247.8	249.3	2.3	Nil	Tr.	Tr.	Nil	.1	
		but very heavy chlorite alteration; impregnated	3-5	2727	249.3	250.4	1.1	-	Nil	Tr.	-	Tr.	Nil
		with 10% brecciated qtz. stgrs. & veins;	<1	2728	250.4	255.0	4.6	-	Tr.	.05	-	.1	-
		much creamy carbonate alteration; some brecciation.	<1	2729	255.0	259.4	4.4	-	Nil	Tr.	-	.1	-
			<1	2730	259.4	261.3	1.9	-	-	Tr.	-	Tr.	-
		246.0 - 264.5 2-3% po, py in qtz. stgrs. & veins	<1	2731	261.3	263.4	2.1	-	Tr.	Tr.	-	Tr.	
			<1	2732	263.4	267.4	4.0	-	Tr.	Tr.	-	Tr.	
		264.5 - 266.6 PORPHYRITIC RHYOLITE	<1	2733	267.4	269.6	2.2	-	Nil	Tr.	-	Tr.	
		same as 244.5 - 246.0	1-2	2734	269.6	274.0	4.4	-	-	Tr.	-	.1	Nil
			<1	2735	274.0	276.0	2.0	-	Tr.	Tr.	-	.1	
		266.6 - 298.0 heavily brecciated; more qtz. impregnation;	<1	2736	276.0	279.0	3.0	-	Tr.	.04	-	Tr.	
		3-5% po stgrs. & fracture fillings;	<1	2737	279.0	285.1	6.1	-	Tr.	.06	-	Tr.	
		minute fractures filled with creamy carbonate.	<1	2738	285.1	291.0	5.9	-	Tr.	Tr.	-	.2	
			1-2	2739	291.0	295.8	4.8	-	Nil	Nil	-	Tr.	
			1-2	2740	295.8	298.9	3.1	-	-	Nil	-	Tr.	
298.0	324.0	PORPHYRITIC RHYOLITE											
		same as 244.5 - 246.0;											
		minor po. mineralization											

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

PROPERTY STURGEON LAKE No. 23 HOLE NO. SL - 23-69.1 Page III/3.

FOOTAGE From	FOOTAGE To	DESCRIPTION	% Mineralization	SAMPLE NO.	FOOTAGE From	FOOTAGE To	FOOTAGE Length	ASSAYS Au	Ag	Cu	Pb	Zn
324.0	368.0	**SHEARED RHYOLITE** mainly light grey; f.g., massive rhyolite; shearing evident with sericite alteration; minor bands porphyritic rhyolite; moderately brecciated throughout; some chloritic sections with massive po, py stgrs. generally 2-3% diss. po, py throughout.										
368.0	494.0	ALTERED RHYOLITE light grey, f.g., acid volcanic mainly interbanded with dark green chlorite-biotite alteration bands; rhyolite slightly brecciated throughout; garnetiferous; 3-5% diss. py, po and stgrs. replacing chlorite-biotite bands; minor sections with massive po, py stgrs. & veins; generally 1-2% diss. po, in unaltered rhyolite bands; some minor magnetite.										
494.0	536.0	RHYOLITE same rock as 368.0 - 494.0 with very little chlorite-biotite alteration; 1-2% diss. po, minor py; occasionally porphyritic with <1/8" black qtz. eyes.										
536.0	810.0	ALTERED RHYOLITE same as 368.0 - 494.0 however alteration and mineralization increasing with depth; rhyolite metamorphosed with biotite along schistose planes at 45° to core axis; garnetiferous; generally 2-3% po, py along schistosity.										
		536.0 - 570.5 2-3% po in chlorite-biotite altered sections; some massive po, py stgrs. up to 1/4".										
		570.5 - 810.0 biotite moderately developed along schistose planes 30° to core axis; 10-20% dark green, garnetiferous, chlorite-biotite alteration bands with 1-2% diss. po.	1-2 po, py	2741	586.6	590.8	4.2	Nil	Tr	Tr	Tr	Nil
			1	2742	626.0	631.0	5.0	Nil	0.10	Tr	Tr	Nil
			1	2743	631.0	635.6	4.6	"	0.10	"	Nil	"
		601.7 - 602.2 light grey aplite dike with 70% massive po, py, qtz.	2-3	2744	661.0	664.0	3.0	Nil	Tr	Tr	Nil	Nil
		665.1 - 665.5 80% massive po, py vein	5-7	2745	664.0	666.0	2.0	"	0.10	0.01	Tr	"
		773.5 - 779.0 5-10% po, py, stgrs, & blebs in green chlorite-biotite bands.	1	2746	768.0	774.5	6.5	Nil	0.20	Tr	Tr	Nil
			3-5	2747	774.5	779.0	4.5	"	0.10	"	Nil	"
			1	2748	795.0	800.0	5.0	Nil	Tr	Nil	Nil	Nil
	810.0	END OF HOLE	1	2749	800.0	805.0	5.0	"	Nil	"	"	"

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

			DIP TEST					
PROPERTY STURGEON LAKE - No. 23	LATITUDE 26 + 20' South	STARTED August 30, 1969	Footage	Corrected	Footage	Corrected	Footage	Corrected
HOLE NO. SL-23-69.3	DEPARTURE 1 + 30' West	FINISHED September 3, 1969	200.0'	39°00'				
BEARING 045°00'	ELEVATION Surface	LENGTH 510.0'	400.0'					
DIP-COLLAR -45°	SECTION 1 + 30 West	LOGGED BY A. Jackson						

FOOTAGE From	FOOTAGE To	DESCRIPTION	% Mineralization	SAMPLE NO.	FOOTAGE From	FOOTAGE To	FOOTAGE Length	ASSAYS Au	Ag	Cu	Pb	Zn
		CASING										
0.0	28.0	OVERBURDEN, sand, gravel										
28.0	175.0	MINERALIZED ALTERED RHYOLITE f.g. med, grey-green, acid volc, interbanded with chlorite-biotite alteration; garnetiferous; mineralized with massive po & py stgrs. & veins throughout with 5% qtz. replacing chlorite-biotite bands & stgrs; grey rhyolite section with diss. po & py mineralization; occasionally prophyritic with grey feldspar & black qtz. eyes. some brecciated sections; general contortion throughout.	10% py,po	2751	33.8	38.0	4.2	Nil	.10	Tr	Nil	Nil
			5-10% py,po	2752	40.6	44.6	4.0	Tr	Nil	Tr	Nil	Nil
		28.0-66.0: moderately chloritic, garnetiferous; 5% po, py, stgrs. & veins replacing chlorite-biotite alteration; minor brecciation.	3-5% py,po	2753	51.0	56.0	5.0	Nil	.10	Tr	Nil	Nil
			20% py,po	2754	56.0	60.0	4.0	Nil	.10	Tr	Nil	Nil
		66.0-71.5: 40% po,py stgrs. with qtz; rock heavily contorted.	60% py,po	2755	66.0	71.6	5.6	.01	.01	Tr	Nil	Nil
		71.5-103.2: mainly massive rhyolite & porph. rhyolite; porph. rhyolite has white feldspar phenocrysts, minor chlorite-biotite alteration; 2-3% py, po stgrs. & disseminated mineralization.										
		103.2-161.5: 30% po, py in stgrs. & veins, moderately chloritic-biotite alteration with garnets, sulfides replacing chlorite-biotite veins, minor qtz. with sulfides; unaltered rhyolite sections min. with diss. po,py; faint banding evident at 30°-40° to core axis; minor brecciation.	30% po,py	2756	102.6	106.6	4.0	Nil	Tr	Nil	Nil	Nil
			20-30% po,py	2757	110.6	115.6	5.0	Nil	Tr	Nil	Nil	Nil
			70% po,py	2758	120.6	124.3	3.7	Nil	Tr	Tr	Nil	Nil
			15% po,py	2759	139.2	143.4	4.2	Nil	Tr	Tr	Nil	Nil
			20% po,py	2760	147.6	149.6	2.0	Nil	Tr	Tr	Nil	Nil
			70-80% po,py	2761	153.0	158.0	5.0	Tr	Tr	Tr	Nil	Nil
			70-80% py,po	2762	158.0	161.0	3.0	Tr	Tr	Tr	Nil	Nil

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

PERTY	STURGEON LAKE - No. 23	LATITUDE	26 + 20' SOUTH	STARTED	AUGUST 30, 1969.
E NO.	SL - 23-69.3	DEPARTURE	1 + 30' WEST	FINISHED	SEPTEMBER 3, 1969.
RING	045°00'	ELEVATION	SURFACE	LENGTH	510.0'
COLLAR	-45°	SECTION	1 + 30 WEST	LOGGED BY	A. JACKSON.

DIP TEST				
Footage	Corrected	Footage	Corrected	
200.0'	39°00'			
400.0'				

REMARKS

FOOTAGE From	FOOTAGE To	DESCRIPTION	Mineralization	SAMPLE NO.	FOOTAGE From	FOOTAGE To	FOOTAGE Length	ASSAYS Au	Ag	Cu	Pb	Zn
0.0	28.0	OVERBURDEN, sand, gravel										
28.0	175.0	MINERALIZED ALTERED RHYOLITE										
		f. g., med. grey-green, acid volc, interbanded with chlorite -biotite alteration; garnetiferous; mineralised with massive po & py stgrs. & veins throughout with 5% qts. replacing chlorite-biotite bands & stgrs.; grey rhyolite section with diss. po & py mineralisation; occasionally porphyritic with grey feldspar & black qts. eyes; some brecciated sections; general contortion throughout.	10% py, po	2751	33.8	38.0	4.2	Nil	0.10	Tr	Nil	Nil
			5-10% py, po	2752	40.6	44.6	4.0	Tr	Nil	"	"	"
28.0	66.0	moderately chloritic, garnetiferous; 5% po, py stgrs. & veins replacing chlorite-biotite alteration; minor brecciation.	3-5% py, po	2753	51.0	56.0	5.0	Nil	0.10	Tr	Nil	Nil
			20% py, po	2754	56.0	60.0	4.0	"	0.10	"	"	"
66.0	71.5	40% po, py stgrs. with qts; rock heavily contorted.	60% py, po	2755	66.0	71.6	5.6	0.01	0.01	Tr	Nil	Nil
71.5	103.2	mainly massive rhyolite & porph. rhyolite; porph. rhyolite has white feldspar phenocrysts, minor chlorite-biotite alteration; 2-3% py, po stgrs. & disseminated mineralisation										
			30% po, py	2756	102.6	106.6	4.0	Nil	Tr	Nil	Nil	Nil
103.2	161.5	30% po, py in stgrs. & veins, moderately chloritic-biotite alteration with garnets, sulfides replacing chlorite-biotite veins; minor qts. with sulfides; unaltered rhyolite sections min. with diss. po, py; faint banding evident at 30°-40° to core axis; minor brecciation	20-30% po, py	2757	110.6	115.6	5.0	Nil	"	"	"	"
			70% po, py	2758	120.6	124.3	3.7	"	"	Tr	"	"
			15% po, py	2759	139.2	143.4	4.2	"	"	"	"	"
			20% po, py	2760	147.6	149.6	2.0	"	"	"	"	"
			70-80% po, py	2761	153.0	158.0	5.0	Tr	"	"	"	"
			70-80% py, po	2762	158.8	161.0	3.0	"	"	"	"	"

FOOTAGE From	FOOTAGE To	DESCRIPTION	% Recovery	SAMPLE NO.	ASSAYS FOOTAGE From	ASSAYS FOOTAGE To	ASSAYS FOOTAGE Length	ASSAYS
		161.5-175.0: f.g. med grey numerous chlorite bands; brecciated; 1-2% py with small amount po, diss. min.						
175.0	217.0	ALTERED RHYOLITE PORPHYRY f.g. med. grey, acid volc; 50% up to ¼" feldspar phenocrysts, elongated parallel to schistosity at 45° to core axis. 1-3% py, po dissem, min; slight chloritic alteration; 20% angular, creamy chert alteration, brecciated, chlorite outlining chert fragments; sulfide min. is replacing chert fragmants						
217.0	488.0	ALTERED RHYOLITE f.g. med grey-green acid volc; up to 20% brecciated chlorite-biotite bands; some sections garnetiferous; some sections slightly proph.; 1-3% po,py in streaks & stgrs. replacing chloritic materials throughout with occ. narrow bands of massive po with minor py. 246.0-254.5: gradational to chlorite-mica schist, schistosity at 30° to core axis. 247.0-254.5: 5-10% po, py in blebs, stgrs., and narrow bands parallel to schistosity 296.0-296.4: narrow qtz. vein, highly chloritic on both sides; 3-5% po,py associated with the qtz. 300.0-300.5: narrow stgr. of massive po with minor py. 310.0-317.0: up to 30% chloritic material with 3-5% po, py in narrow stgrs. & diss. min. 322.0-350.0: occ. angular creamy cherty fragments up to 2" associated with chloritic material; banded slightly at 40° to core axis.						

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M.L.M. EXPLORATION DIVISION, D.D.H. RECORD — PROPERTY STURGEON LAKE - No. 23 — HOLE NO. SL-23-69.3 — Page II/3.

FOOTAGE From	FOOTAGE To	DESCRIPTION	% Mineralization	SAMPLE NO.	FOOTAGE From	FOOTAGE To	FOOTAGE Length	ASSAYS Au	Ag	Cu	Pb	Zn
		161.3 - 172.0 RHYOLITE f.g., med. grey numerous chlorite bands; brecciated; 1-2% py with small amount po, diss. min.										
175.0	217.0	ALTERED RHYOLITE PORPHYRY f.g., med. grey, acid volc.; 50% up to ¼" feldspar phenocrysts, elongated parallel to schistosity at 45° to core axis; 1-3% py, po dissem. min.; slight chloritic alteration; 20% angular, creamy chert alteration, brecciated, chlorite outlining chert fragments; sulfide min. is replacing chert fragments.										
217.0	488.0	ALTERED RHYOLITE f.g., med. grey-green, acid volc.; up to 20% brecciated chlorite-biotite bands; some sections garnetiferous; some sections slightly porph.; 1-3% po, py in streaks & stgrs. replacing chloritic materials throughout with occ. narrow bands of massive po with minor py.	2-3% po, py	2763	224.8	227.6	2.8	Tr	Tr	Tr	Nil	Nil
		246.8 - 254.5 gradational to chlorite-mica schist, schistosity at 30° to core axis;	5% po, py	2764	246.2	249.0	2.8	Nil	Tr	Tr	Nil	Nil
		247.0 - 254.5 5-10% po, py in blebs, stgrs., and narrow bands parallel to schistosity	5-7% po, py	2765	249.0	254.0	5.0	"	"	"	"	"
			1-3% po, py	2766	262.0	267.0	5.0	Tr	Tr	Nil	Nil	Nil
		296.8 - 296.4 narrow qtz. vein, highly chloritic on both sides; 3-5% po, py associated with the qtz.	1-3% po, py	2767	295.7	300.7	5.0	Nil	Tr	Tr	Nil	Nil
		300.0 - 300.5 narrow stgr. of massive po with minor py.										
		310.0 - 317.0 up to 30% chloritic material with 3-5% po, py in narrow stgrs. & diss. min.,	1-2% po, py	2768	310.0	315.0	5.0	Nil	Tr	Tr	Nil	Nil
		322.0 - 350.0 occ. angular creamy cherty fragments up to 2" associated with chloritic material; banded slightly at 40° to core axis.										

M.L.M. EXPLORATION DIVISION, D.D.H. RECORD — PROPERTY STURGEON LAKE-No. 23 — HOLE NO. SL-23-69.3 — Page III/3.

FOOTAGE From	FOOTAGE To	DESCRIPTION	% Mineralization	SAMPLE NO.	FOOTAGE From	FOOTAGE To	FOOTAGE Length	ASSAYS Au	Ag	Cu	Pb	Zn
		350.0 - 355.0 porphyritic section with feldspar phenocrysts up to 1/8" in diam., generally elongated parallel to banding at 40° to core axis; up to 5% brecciated chloritic bands;										
		365.0 - 366.0 narrow band massive po, with minor py; associated with narrow qtz. vein.										
		375.0 - 384.0 porphyritic section; same as 350.0 - 355.0										
		384.0 - 446.0 up to 40% chloritic material associated with blebs, up to 4" in diameter, of light creamy grey material, slightly porphyritic; 1-2% po, py diss. min.;										
		427.0 - 429.5 - band of near massive, 60-70% po with minor py.										
		487.0 - 488.0 narrow band massive po, with minor py.										
488.0	510.0	BRECCIATED RHYOLITE med. grey, f.g., acid volc.; breccia fragments up to 1" in diam.; 4% chloritic material; 1% diss. po, py throughout.										
510.0		END OF HOLE										

PA 2126/2

N-S CLAIM LINE

PA 2126/5

PA 2126/5

E-W CLAIM LINE

PA 2126/6

Surface

SL-23-69.3

SL-23-69.1

Surface

Overburden

DACITIC TUFF

ONEOTA RHYOLITE TUFF

GRAPHITIC TUFF

RHYOLITE TUFF

CHLORITIC ANDESITIC TUFF

SHEARED RHYOLITE

ALTERED

MINERALIZED

ALTERED RHYOLITE

PORPHYRITIC RHYOLITE

ALTERED

RHYOLITE

RHYOLITE

-400'

-400'

BASE LINE (23+00 SOUTH)

18+00 SOUTH

e 100 FT.

MATTAGAMI LAKE MINES LTD.

EXPLORATION DIVISION

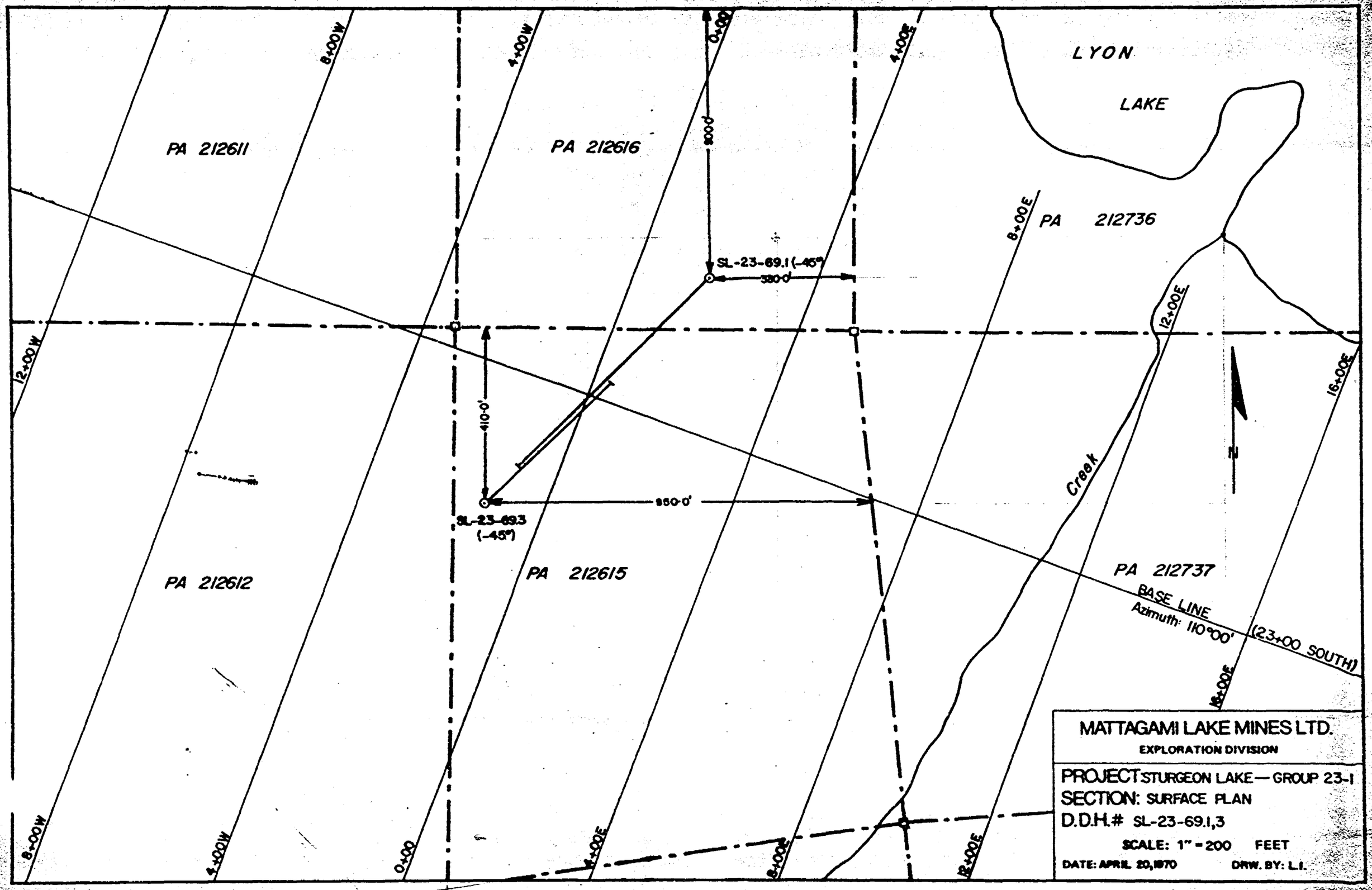
PROJECT: STURGEON LAKE-GROUP 23-1

SECTION: Az: 225°00'

D.D.H.# SL-23-69.1,3

SCALE: 1" = 100 FEET

DATE: APRIL 20, 1970 DRW. BY: L.J.


LYON
LAKE
PA 212611
PA 212616
PA 212736
PA 212612
PA 212615
PA 212737
8+00W
4+00W
0+00
4+00E
8+00E
12+00E
16+00E
12+00W
8+00W
4+00W
0+00
4+00E
8+00E
12+00E
16+00E
800'
SL-23-69.1 (-45°)
380'
410-0'
950-0'
SL-23-69.3
(-45°)
Creek
N
BASE LINE
Azimuth: 110°00'
(23+00 SOUTH)
MATTAGAMI LAKE MINES LTD.
EXPLORATION DIVISION
PROJECT STURGEON LAKE — GROUP 23-1
SECTION: SURFACE PLAN
D.D.H.# SL-23-69.1,3
SCALE: 1" = 200 FEET
DATE: APRIL 20, 1970
DRW. BY: L.I.
200 Ft

RE-LOGGED

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

PROPERTY Sturgeon Lake - Group 23	LATITUDE 105 + 00 North	STARTED January 6, 1971	
HOLE NO. SL-23-71-14	DEPARTURE 82 + 00 East	FINISHED January 19, 1971	
BEARING 195° (Grid South) 015°	ELEVATION Surface	LENGTH 752.0'	
DIP-COLLAR -45°	SECTION 18 + 00 West	LOGGED BY Loiselle, Yawnghwe, Ali	

DIP TEST					
Footage	Corrected	Footage	Corrected	Footage	Corrected
100	42°00	400	37°00	700	34°0
200	42°00	500	37°00	800	
300	38°00	600	36°00		

FOOTAGE From	FOOTAGE To	DESCRIPTION	Mineralization	SAMPLE NO.	FOOTAGE From	FOOTAGE To	Length	ASSAYS Au	Ag	Zn	Cu	Pb
0.0	62.0	CASING SAND, GRAVEL & BOULDERS										
62.0	296.0	DACITIC TUFF Greenish grey to grey, fine grained, finely tuffaceous with occasional andesitic sections. Schistosity @30° to core axis. 65.0-85.0 Green, very fine grained, quartz-calcite stringers fracture filling may be vesicular very distinct section. 198.0-296.0 Very gradational change to more fine grained and mafic, greenish tinge fine tuffaceous banding, occasional garnets and back again in very fine grained dacitic horizon, occasional siliceous sections. 62.0-296.0 This whole section is a kind of mixed zones with gradational changes to and from intermediate to acid.	10py,po,mag 10py,po,mag 10py,po,mag 7py,po,mag	21019 21017 21028 21021	254.0 259.0 260.5 290.9	259.0 260.0 265.5 295.9	5.0 1.5 5.0 5.0	Nil Nil Nil Nil	Nil Nil Nil Nil	Tr. Tr. Tr. Tr.	Nil Nil Nil Nil	Nil Nil Nil Nil
296.0	333.0	ANDESITIC MICRO AGGLOMERATE Greyish green, andesitic matrix, andesitic lapilae, occasional lapilae, garnets 3-10mm in size occasional scattered po blebs.	8py,po,mag 8py,po,mag	21018 21022	295.9 301.2	301.2 306.2	5.3 5.0	Nil Nil	Nil Nil	Tr. Tr.	Nil Nil	Nil Nil
333.0	337.0	RHYOLITE TUFF Light grey, highly siliceous, compact, massive ashy welded fragments, poor schistosity @45° to core axis.										
337.0	357.0	DYKE? Grey, fine to medium grained, finely speckled or salt and pepper texture, contacts obscured.										
357.0	411.0	INTRA FORMATIONAL MIXED TUFF RHYOLITE TUFF ? Greenish grey to dark grey, fine grained, siliceous to intermediate, tuffaceous and agglomeratic mixed zones, Thyo-dacitic to rhyolitic and vise-versa.										
411.0	657.0	RHYOLITE TUFF Grey, siliceous, welded, occasionally felsic lapilae, schistosity @45° to core axis, occasionally ranges from medium to very fine grained to aphinitic to glassy, very compact clinking sound,darker in shade with increase in mafic/ contents. Becoming coarser in texture with the increase in depth (maybe ashy horizon) grades into agglomeratic horizon.										

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TO FOLLOW

RE - LOGGED

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

				DIP TEST					
				Footage	Corrected	Footage	Corrected	Footage	Corrected
PROPERTY STURGEON LAKE - GROUP "23"	LATITUDE 105 + 00 NORTH	STARTED January 6, 1971		199	42°00	400	37°00	700	34°00
HOLE NO. SL-71-14	DEPARTURE 82 + 00 EAST	FINISHED January 19, 1971							
BEARING 195° (GRID SOUTH) 015°	ELEVATION SURFACE	LENGTH 752.0'		200	42°00	500	37°00	800	
DIP-COLLAR -45°	SECTION 18 + 00 WEST	LOGGED BY LOISELLE, YANSCHINE, ALI		300	38°00	600	36°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	**CASING** SAND, GRAVEL & BOULDERS										
62.0	296.0	**DACITIC TUFF** Greenish grey to grey, fine grained, finely tuffaceous with occasional andesitic sections. Schistosity @30° to core axis. 65.0- 85.0 Green, very fine grained, quartz-calcite stringers, fracture filling may be vesicular very distinct section.										
		198.0-296.0 Very gradational change to more fine grained and mafic, greenish tinge fine tuffaceous banding, occasional garnets, and back again in very fine grained dacitic horizon, occasional siliceous sections	10py,po,mag. 10py,po,mag. 10py,po,mag. 7py,po,mag.	21019 21027 21028 21021	254.0 259.0 260.5 290.9	259.0 260.5 265.5 295.9	5.0 1.5 5.0 5.0	NIL NIL NIL NIL	NIL NIL NIL NIL	TR. TR. TR. TR.	NIL NIL NIL NIL	NIL NIL NIL NIL
		62.0-296.0 This whole section is a kind of mixed zones with gradational changes to and from intermediate to acid.										
296.0	338.0	**ANDESITIC MICRO AGGLOMERATE** Greyish green, andesitic matrix, andesitic lapilae, occasional lapilae, garnets 3-10mm in size occasional scattered po blebs.	@py,po,mag. @py,po,mag	21018 21022	295.9 301.2	301.2 306.2	5.3 5.0	NIL NIL	NIL NIL	TR. TR.	NIL NIL	NIL NIL
333.0	337.0	**RHYOLITE TUFF** Light grey, highly siliceous, compact, massive ashy welded fragments, poor schistosity @45° to core axis.										
337.0	357.0	**DYKE ?** Grey, fine to medium grained, finely speckled or salt and pepper texture, contacts obscured.										
357.0-411.0		**INTRA FORMATIONAL MIXED TUFF** **RHYOLITE TUFF ?** Greenish grey to dark grey, fine grained, siliceous to intermediate, tuffaceous and agglomeratic mixed zones, Rhyo-dacitic to rhyolitic and vise-versa.										
411.0	657.0	**RHYOLITE TUFF** Grey, siliceous, welded, occasionally felsic lapilae, schistosity @45° to core axis, occasionally ranges from medium to very fine grained to aphinitic to glassy, very compact clinking sound, darker in shade with increase in mafic? contents, becoming coarser in texture with the increase in depth (maybe ashy horizon) grades into agglomeratic horizon.										

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

PROPERTY STURGEON LAKE GROUP "23" HOLE NO SL-23-71-14 Page 2/2

FOOTAGE From	FOOTAGE To	DESCRIPTION	% Mineralization	SAMPLE NO.	FOOTAGE From	FOOTAGE To	FOOTAGE Length	ASSAYS
657.0	688.5	RHYOLITE MICRO AGGLOMERATE Light grey, very fine grained matrix, highly siliceous, acid lapilae, fragmental looking lapilae up to 25mm in size. Occasional blue quartz-eyes (very rare).						
688.5	731.0	INTRA FORMATIONAL MIXED ZONE RHYO-DACITIC - RHYOLITE TUFF Light grey to greenish, very fine grained tuffs. Ranges from Rhyolitic to dacitic in composition. Rhyolitic matrix is predominant but greenish tinge is probably due to light chloritization or increase in mafic minerals.						
731.0	752.0	RHYOLITE COARSE TUFF Grey, fine grained, some felsic lapilae, occasionally welded similar to agglomerate as described earlier @ 657.0-688.5, but finer in texture.						
	752.0	E N D O F H O L E.						

SEE ABOVE

657.0	688.5	RHYOLITE MICRO AGGLOMERATE Light grey, very fine grained matrix, highly siliceous, acid lapilae, fragmental looking lapilae up to 25mm in size. Occasional blue quartz-eyes (very rare).
688.5	731.0	INTRA FORMATIONAL MIXED ZONE RHYO-DACITIC - RHYOLITE TUFF Light grey to greenish, very fine grained tuffs. Ranges from Rhyolitic to dacitic in composition. Rhyolitic matrix is predominant but greenish tinge is probably due to light chloritization or increase in mafic minerals.
731.0	752.0	RHYOLITE COARSE TUFF Grey, fine grained, some felsic lapilae, occasionally welded similar to agglomerate as described earlier @ 657.0-688.5, but finer in texture.
	752.0	END OF HOLE

E - LOGGED

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

PROPERTY	STURGEON LAKE GROUP 23	LATITUDE	110 + 00 NORTH	STARTED	January 21, 1971
HOLE NO.	SL-23-71-17	DEPARTURE	82 + 00 EAST	FINISHED	February 2, 1971
BEARING	015° ? 334°	ELEVATION	SURFACE	LENGTH	972.0'
DIP-COLLAR	-45°	SECTION	18 + 00 WEST	LOGGED BY	YAMGHWE, ALI, LOISELLE

DIP TEST

Footage	Corrected	Footage	Corrected	Footage	Corrected
100	44°00'	400	42°00	700	39°00
200	44°00	500	40°00	800	37°00
300	43°00	600	40°00	900	36°00

FOOTAGE From	FOOTAGE To	DESCRIPTION	% Mineralization	SAMPLE NO	FOOTAGE From	FOOTAGE To	Length	ASSAYS Au	Ag	Zn	Cu	Pb
0.0	62.0	C A S I N G SAND, GRAVEL & BOULDERS										
62.0	83.0	ANDESITIC FINE TUFF Medium greyish green, fine grained, intermediate in composition, occasional garnets up to 2mm, occasional quartz and calcite veins graditional contact with coarse acidic tuff.										
83.0	171.0	RHYOLITIC COARSE TUFF Light grey, highly siliceous, angular shards and fragments tightly packed ranges from 2mm to 35mm. Becoming finer towards bottom grading into acidic fine tuff. 104.0–108.0 FINE TUFF, medium grey, very fine grained. 108.0–142.0 COARSE TUFF, Same as described above grades into finer tuff with the increase in depth i.e. towards bottom. 142.0–143.0 VERY FINE TUFF 143.0–171.0 Greyish green, siliceous horizons with more mafic contents, chloritized	LOST CORE " " " "		110.0 116.0 124.0 158.0	112.0 117.0 125.0 163.0	2.0 1.0 1.0 5.0	LOST CORE " " " "				
171.0	294.0	ANDESITIC TUFF WITH AGGLOMERATIC BANDS Greenish grey, some acid lapilae in intermediate chloritized matrix, occasional sub-rounded andesitic agglomerates up to 30mm, occasionally fine grained, tuffaceous bands, garnet xtls up to 5mm in size. SULPHIDES 178.0–194.0' 15% py,po 208.0–216.0 RHYOLITIC BAND, light grey, medium to coarse grained siliceous, coarse shards 230.0–235.5 RHYOLITIC BAND Same as above 239.5–247.0 " " " " "	<1py,po 210 15py,po 15py,po LOST CORE 15py,po LOST CORE " " " " " " TR.py 3py,po tr.py,po 3py,po 2py,po 3oy,po tr.py 10py 2oy 2oy 2py	21034 21034 21036 21037 21038 21039 21040 21041 21042 21083 21044 21045 21046 21047 21048 21049	173.5 178.0 182.5 183.0 188.0 194.0 200.0 228.0 232.0 248.0 200.0 205.0 242.0 247.0 252.0 257.0 262.0 267.0 272.0 280.0 285.0	178.5 182.5 188.0 184.0 194.0 200.0 202.0 230.0 234.0 249.0 205.0 211.0 247.0 252.0 257.0 262.0 267.0 272.0 280.0 285.0 290.0	4.5 4.5 4.5 1.0 6.0 6.0 2.0 2.0 2.0 1.0 3.0 6.0 5.0 4.0 5.0 5.0 5.0 5.0 6.0 5.0 5.0	.012 NIL NIL NIL Nil Nil NIL NIL NIL NIL NIL NIL NIL NIL NIL NIL NIL NIL NIL NIL NIL	.29 NIL NIL LOST CORE Nil Nil LOST CORE LOST CORE LOST CORE LOST CORE NIL NIL NIL NIL NIL NIL TR. NIL NIL NIL NIL	.2 .2 .1 Nil Tr. Nil NIL NIL NIL NIL NIL NIL NIL NIL NIL NIL NIL NIL NIL NIL NIL	Tr. NIL NIL Nil Nil Nil NIL NIL NIL NIL NIL NIL NIL NIL NIL NIL NIL NIL NIL NIL NIL	.02 .06 .02 Tr. Nil NIL NIL NIL NIL NIL NIL NIL NIL NIL NIL NIL NIL NIL NIL NIL NIL

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M.L.M. EXPLORATION DIVISION, D.D.H. RECORD — PROPERTY STURGEON LAKE GROUP 23 — HOLE NO. SL-23-71-17 — Page 2/4

FOOTAGE From	FOOTAGE To	DESCRIPTION	% Mineralization	SAMPLE NO.	FOOTAGE From	FOOTAGE To	FOOTAGE Length	ASSAYS Au	Ag	Zn	Cu	Pb
294.0	332.0	DACITIC TUFF	<1py	21050	290.0	295.0	5.0	NIL	NIL	NIL	NIL	NIL
		Light grey, very fine grained to fine grained, massive quartz,	<1py	21051	319.0	326.5	3.5	NIL	NIL	NIL	NIL	NIL
		calcite stringers, occasional siliceous sections.	LOST CORE		323.0	325.0	2.0		LOST	CORE		
			<1py,po	21052	326.5	331.5	5.0	NIL	NIL	NIL	NIL	NIL
		304.0-305.0 Black tourmaline needles										
		319.5-320.0 Associated with quartz-veining										
332.0	683.0	RHYOLITIC MACRO AGGLOMERATE										
		Medium grey, greenish grey, siliceous, fine grained, green ande-	tr.py,po	21053	347.0	352.0	4.5	NIL	NIL	NIL	NIL	NIL
		sitic looking bands, macro agglomerates from 6"-18" in size.	2py,po	21054	352.0	360.0	5.0	nil	nil	nil	nil	nil
			LOST CORE		357.0	360.0	3.0		LOST	CORE		
			3py,po	21055	360.0	365.0	5.0	NIL	NIL	NIL	TR.	
			3py,po	21056	365.0	370.0	5.0	NIL	NIL	NIL	NIL	NIL
		435.0-588.0 More siliceous matrix, very few andesitic sections,	2py,po	21057	370.0	375.0	5.0	NIL	NIL	NIL	NIL	NIL
		becoming more siliceous with the increase in depth.	3py,po	21058	375.0	380.0	5.0	NIL	NIL	NIL	NIL	NIL
			2py	21059	380.0	385.0	5.0	NIL	NIL	NIL	NIL	NIL
		3-5% sulphides.	2-5py,po	21060	385.0	388.0	3.0	NIL	NIL	NIL	TR	NIL
			1-3py,po	21061	388.0	392.5	4.5	NIL	NIL	NIL	TR.	NIL
(SEE ABOVE)			<1 py,po	21062	392.5	397.0	4.5	NIL	NIL	NIL	NIL	NIL
294.0	332.0	DACITIC TUFF	3-5py,po	21063	397.0	402.0	5.0	NIL	NIL	NIL	NIL	NIL
		Light grey, very fine grained to fine grained, massive quartz,	10-15py,po	21064	402.0	407.0	5.0	NIL	NIL	NIL	NIL	NIL
		calcite stringers, occasional siliceous sections.	1-3py,po	21065	407.0	412.0	5.0	NIL	NIL	NIL	NIL	NIL
			10-20py,po	21066	412.0	417.0	5.0	NIL	NIL	NIL	NIL	NIL
		304.0-305.0 Black tourmaline needles	10-15py,po	21067	417.0	422.0	5.0	NIL	NIL	NIL	NIL	NIL
		319.5-320.0 Associated with quartz-veining	1-3py,po	21068	422.0	427.0	5.0	NIL	NIL	NIL	NIL	NIL
			1-2py,po	21069	427.0	432.0	5.0	NIL	NIL	NIL	NIL	NIL
			1-2py,po	21070	432.0	437.0	5.0	NIL	NIL	NIL	NIL	NIL
332.0	683.0	RHYOLITIC MACRO AGGLOMERATE	2-5py,po	21071	437.0	442.0	5.0	TR	NIL	NIL	NIL	NIL
		medium grey, greenish grey, siliceous, fine grained, green andesitic	<1py,po	21072	442.0	447.0	5.0	TR.	NIL	NIL	NIL	NIL
		looking bands, macro agglomerates from 6" to 18" in size.	1-2py,po	21073	447.0	452.0	5.0	NIL	NIL	NIL	NIL	NIL
			<1py,po	21074	452.0	457.0	5.0	NIL	NIL	NIL	NIL	NIL
		435.0-588.0: More siliceous matrix, very few andesitic sections	5-10py,po	21075	457.0	462.0	5.0	NIL	NIL	NIL	NIL	NIL
		becoming more siliceous with the increase in depth.	1-3py,po	21076	462.0	467.0	5.0	NIL	NIL	NIL	NIL	NIL
			2-5py,po	21077	467.0	472.0	5.0	TR.	NIL	NIL	NIL	NIL
		3-5% sulphides.	2-5py,po	21078	472.0	477.0	5.0	NIL	NIL	NIL	NIL	NIL
			1-2py,po	21079	477.0	482.0	5.0	NIL	NIL	NIL	NIL	NIL
			1-2py,po	21080	482.0	487.0	5.0	Tr.	NIL	NIL	NIL	NIL
			5-10py,po	21081	487.0	492.0	5.0	TR.	NIL	NIL	NIL	NIL
			5-10py,po	21082	492.0	497.0	5.0	TR.	NIL	NIL	NIL	NIL
			<1py,po	21083	497.0	502.0	5.0	TR.	NIL	NIL	NIL	NIL
			2-5py,po	21084	502.0	507.0	5.0	NIL	NIL	NIL	NIL	NIL
			<1py,po	21085	507.0	512.0	5.0	NIL	NIL	NIL	NIL	NIL
			1-2py,po	21086	512.0	517.0	5.0	NIL	NIL	NIL	NIL	NIL
			1-3py,po	21087	517.0	522.0	5.0	NIL	NIL	NIL	NIL	NIL
			2-5py,po	21088	522.0	527.0	5.0	NIL	NIL	NIL	NIL	NIL
			1-2py,po	21089	527.0	532.0	5.0	NIL	NIL	NIL	NIL	NIL
			3py,po	21090	532.0	537.0	5.0	TR.	NIL	NIL	NIL	NIL
			1py,po	21091	537.0	542.0	5.0	NIL	NIL	NIL	NIL	NIL
			1py,po	21092	542.0	547.0	5.0	NIL	NIL	NIL	NIL	NIL*
			<1py,po	21093	547.0	552.0	5.0	NIL	NIL	NIL	NIL	NIL
			<1py,po	21094	552.0	557.0	5.0	NIL	NIL	NIL	NIL	NIL
			<1py,po	21095	557.0	562.0	5.0	NIL	NIL	NIL	NIL	NIL
			2py,po	21096	562.0	567.0	5.0	NIL	NIL	NIL	NIL	NIL
			2py,po	21097	567.0	572.0	5.0	NIL	NIL	NIL	NIL	NIL

FOOTAGE From	FOOTAGE To	DESCRIPTION	% Mineralization	SAMPLE NO.	FOOTAGE From	FOOTAGE To	FOOTAGE Length	ASSAYS Au	Ag	Zn	Cu	Pb
		588.0-676.0 SULPHIDE ZONE In rhyolite macro agglomerate 5-10% sulphides, mainly po with pyrite.	2py,po	21098	572.0	577.0	5.0	Nil	Nil	Nil	Nil	Nil
			3py,po	21099	577.0	583.0	6.0	Nil	Nil	Nil	Nil	Nil
			2py,po	21100	583.0	588.0	5.0	Nil	Nil	Nil	Tr.	Nil
			5py,po	21101	588.0	593.0	5.0	Nil	Nil	Nil	Tr.	Nil
			3py,po	21102	593.0	598.0	5.0	Nil	Nil	Nil	Nil	Nil
			2py,po	21103	598.0	603.0	5.0	Nil	Nil	Nil	Nil	Nil
			3py,po	21104	603.0	608.0	5.0	Nil	Nil	Nil	Nil	Nil
			10py,po	21105	608.0	613.0	5.0	Nil	Nil	Nil	Nil	Nil
			10py,po	21106	613.0	618.0	5.0	Nil	Nil	Nil	Nil	Nil
			10py,po	21107	618.0	623.0	5.0	Nil	Nil	Nil	Nil	Nil
			7py,po	21108	623.0	628.0	5.0	Nil	Nil	Nil	Nil	Nil
			10py,po	21109	628.0	633.0	5.0	Nil	Nil	Nil	Nil	Nil
			5-10py,po	21110	633.0	638.0	5.0	Nil	Nil	Nil	Nil	Nil
			2-5py,po	21111	638.0	643.0	5.0	Nil	Nil	Nil	Nil	Nil
			2-5py,po	21112	643.0	648.0	5.0	Nil	Nil	Nil	Nil	Nil
			5-10py,po	21113	648.0	653.0	5.0	Nil	Nil	Nil	Nil	Nil
			2-5py,po	21114	653.0	657.0	4.0	Nil	Nil	Nil	Nil	Nil
			1py,po	21115	657.0	662.0	5.0	Nil	Nil	Nil	Nil	Nil
			1py,po	21116	662.0	667.0	5.0	Nil	Nil	Nil	Nil	Nil
			1py,po	21117	667.0	672.0	5.0	Nil	Nil	Nil	Nil	Nil
			1py,po	21118	672.0	676.0	4.0	Nil	Nil	Nil	Nil	Nil
			1py,po	21119	676.0	681.0	5.0	Nil	Nil	Nil	Nil	Ni
			1py,po	21120	681.0	686.0	5.0	Nil	Nil	Nil	Nil	Ni
683.0	739.0	LAMPROPHYRE ? DYKE Medium greyish green, very finely speckled with occasional sections of (remnant sections) host rock. 707.0-713.0 RHYOLITE MACRO AGGLOMERATE.	Tr.py	21121	736.0	741.0	5.0	Nil	Nil	Nil	Nil	Ni
739.0	972.0	RHYOLITIC MACRO AGGLOMERATE 739.0-929.0 Light coloured rhyolitic macro agglomerate, lunsoid to angular up to 60mm in size fragments medium packing. Occasional quartz-veins, occasionally brecciated. SULPHIDES 5-10% mainly py and po 790.0-793.0 Rhyolite Tuff 883.0-885.0 Rhyolite Tuff 929.0-970.0 Light grey to medium greyish green 20-60mm angular acidic fragments or agglomerates in andesitic matrix poor schistosity, occasional quartz-stringers. 970.0-972.0 Light greenish grey, siliceous matrix, 20-40mm in size gragments, medium packing.	7py	21122	741.0	746.0	5.0	Nil	Nil	Nil	Nil	Ni
			5py	21123	746.0	751.0	5.0	Nil	Nil	Nil	Nil	Ni
			5py	21124	751.0	756.0	5.0	Nil	Nil	Nil	Nil	Ni
			3py	21125	756.0	761.0	5.0	Nil	Nil	Nil	Nil	Ni
			2py	21126	761.0	766.0	5.0	Nil	Nil	Nil	Nil	Ni
			4py	21127	766.0	771.0	5.0	Nil	Nil	Nil	Nil	Ni
			3py	21128	771.0	776.0	5.0	Nil	Nil	Nil	Nil	Ni
			5py	21129	776.0	781.0	5.0	Nil	Nil	Nil	Nil	Ni
			3py	21130	781.0	786.0	5.0	Nil	Nil	Nil	Nil	Ni
			10py	21131	786.0	791.0	5.0	Nil	Nil	Nil	Nil	Ni
			5py,po	21132	791.0	796.0	5.0	Nil	Nil	Nil	Nil	Ni
			5py,po	21133	796.0	801.0	5.0	Nil	Nil	Nil	Nil	Ni
			3py	21134	801.0	806.0	5.0	Nil	Nil	Nil	Nil	Ni
			<1py	21135	806.0	811.0	5.0	Nil	Nil	Nil	Nil	Ni
			2-5py,po	21136	811.0	816.0	5.0	Nil	Nil	Nil	Nil	Ni
			2-5py,po	21137	816.0	821.0	5.0	Tr.	Nil	Nil	Nil	Ni
			5-10py,po	21138	821.0	824.0	3.0	Tr.	Nil	Nil	Nil	Nil
			5-10py,po	21139	824.0	829.0	5.0	Nil	Nil	Nil	Nil	Nil
			7py,po	21140	829.0	834.0	5.0	Nil	Nil	Nil	Nil	Nil
			7py,po	21141	834.0	839.0	5.0	Tr.	Nil	Nil	Nil	Nil
			8py,po	21142	839.0	844.0	5.0	Tr.	Nil	Nil	Nil	Nil
			5py,po	21143	844.0	849.0	5.0	Nil	Nil	Nil	Nil	Nil
			7py,po	21144	849.0	854.0	5.0	Nil	Nil	Nil	Nil	Nil
			10py,po	21145	854.0	859.0	5.0	Tr.	Nil	Nil	Nil	Nil
			3py,po	21146	859.0	864.0	5.0	Tr.	Nil	Nil	Nil	Nil

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M.L.M. EXPLORATION DIVISION, D.D.H. RECORD — PROPERTY STURGEON LAKE, GROUP 23 HOLE NO. SL-23-71-17 Page 3/4

FOOTAGE From	FOOTAGE To	DESCRIPTION	% Mineralization	SAMPLE NO.	FOOTAGE From	FOOTAGE To	FOOTAGE Length	ASSAYS Au	Ag	Zn	Cu	Pb
		588.0-676.0 SULPHIDE ZONE	2py.po	21098	572.0	577.0	5.0	NIL	NIL	NIL	NIL	NIL
		In rhyolite macro agglomerate 5-10% sulphides,	1py.po	21099	577.0	582.0	5.0	NIL	NIL	NIL	NIL	NIL
		mainly po with pyrite.	2py.po	21100	582.0	588.0	5.0	NIL	NIL	NIL	TR.	NIL
			5py.po	21101	588.0	593.0	5.0	NIL	NIL	NIL	TR.	NIL
			3py.po	21102	593.0	598.0	5.0	NIL	NIL	NIL	NIL	NIL
			2py.po	21103	598.0	603.0	5.0	NIL	NIL	NIL	NIL	NIL
			3py.po	21104	603.0	608.0	5.0	NIL	NIL	NIL	NIL	NIL
			10py.po	21105	608.0	613.0	5.0	NIL	NIL	NIL	NIL	NIL
			10py.po	21106	613.0	618.0	5.0	NIL	NIL	NIL	NIL	NIL
			10py.po	21107	618.0	623.0	5.0	NIL	NIL	NIL	NIL	NIL
			7py.po	21108	623.0	628.0	5.0	NIL	NIL	NIL	NIL	NIL
			10py.po	21109	628.0	633.0	5.0	NIL	NIL	NIL	NIL	NIL
			5-10py.po	21110	633.0	638.0	5.0	NIL	NIL	NIL	NIL	NIL
			2-5py.po	21111	638.0	643.0	5.0	NIL	NIL	NIL	NIL	NIL
			2-5 py.po	21112	643.0	648.0	5.0	NIL	NIL	NIL	NIL	NIL
			5-10py.po	21113	648.0	653.0	5.0	NIL	NIL	NIL	NIL	NIL
			2-5 py.po	21114	653.0	657.0	4.0	NIL	NIL	NIL	NIL	NIL
			1py.po	21115	657.0	662.0	5.0	NIL	NIL	NIL	NIL	NIL
			<1py.po	21116	662.0	667.0	5.0	NIL	NIL	NIL	NIL	NIL
			<1py.po	21117	667.0	672.0	5.0	NIL	NIL	NIL	NIL	NIL
			<1py.po	21118	672.0	676.0	4.0	NIL	NIL	NIL	NIL	NIL
			<1py.po	21119	676.0	681.0	5.0	NIL	NIL	NIL	NIL	NIL
			<1py.po	21120	681.0	686.0	5.0	NIL	NIL	NIL	NIL	NIL
683.0	739.0	LAMPROPHYRE ? DYKE										
		Medium greyish green, very finely speckled with occasional sec-										
		tions of (remnant sections) host rock.										
		707.0-713.0 RHYOLITE MACRO AGGLOMERATE.	tr.py	21121	726.0	741.0	5.0	NIL	NIL	NIL	NIL	NIL
739.0	972.0	RHYOLITIC MACRO AGGLOMERATE										
			7py	21122	741.0	746.0	5.0	NIL	NIL	NIL	NIL	NIL
		739.0-929.0 Light coloured rhyolitic macro agglomerate, lenseid	5py	21123	746.0	751.0	5.0	NIL	NIL	NIL	NIL	NIL
		to angular up to 80mm in size fragments medium packing. Occasional quartz-veins, occasionally brecciated.	8py	21124	751.0	756.0	5.0	NIL	NIL	NIL	NIL	NIL
			5py	21125	756.0	761.0	5.0	NIL	NIL	NIL	NIL	NIL
			2py	21126	761.0	766.0	5.0	NIL	NIL	NIL	NIL	NIL
			4py	21127	766.0	771.0	5.0	NIL	NIL	NIL	NIL	NIL
			3py	21128	771.0	776.0	5.0	NIL	NIL	NIL	NIL	NIL
		SULPHIDES 5-10% mainly py and po.	5py	21129	776.0	781.0	5.0	NIL	NIL	NIL	NIL	NIL
			3py	21130	781.0	786.0	5.0	NIL	NIL	NIL	NIL	NIL
		790.0-793.0 Rhyolite Tuff	10py	21131	786.0	791.0	5.0	NIL	NIL	NIL	NIL	NIL
		883.0-885.0 " "	5py.po	21132	791.0	796.0	5.0	NIL	NIL	NIL	NIL	NIL
			5py.po	21133	796.0	801.0	5.0	NIL	NIL	NIL	NIL	NIL
		929.0-970.0 Light grey to medium greyish green 20-60mm angular	3py	21134	801.0	806.0	5.0	NIL	NIL	NIL	NIL	NIL
		acidic fragments or agglomerates in andesitic matrix	<1py	21135	806.0	811.0	5.0	NIL	NIL	NIL	NIL	NIL
		poor schistosity, occasional quartz-stringers.	2-5 py.po	21136	811.0	816.0	5.0	NIL	NIL	NIL	NIL	NIL
			2-5 py.po	21137	816.0	821.0	5.0	TR.	NIL	NIL	NIL	NIL
			5-10py.po	21138	821.0	824.0	3.0	TR.	NIL	NIL	NIL	NIL
			5-10py.po	21139	824.0	829.0	5.0	NIL	NIL	NIL	NIL	NIL
			7py.po	21140	829.0	834.0	5.0	NIL	NIL	NIL	NIL	NIL
		970.0-972.0 Light greenish grey, siliceous matrix, 20-40mm in	7py.po	21141	834.0	839.0	5.0	TR.	NIL	NIL	NIL	NIL
		size fragments, medium packing	8py.po	21142	839.0	844.0	5.0	TR.	NIL	NIL	NIL	NIL
			5py.po	21143	844.0	849.0	5.0	NIL	NIL	NIL	NIL	NIL
			7py.po	21144	849.0	854.0	5.0	NIL	NIL	NIL	NIL	NIL
			10py.po	21145	854.0	859.0	5.0	TR.	NIL	NIL	NIL	NIL
			3py.po	21146	859.0	864.0	5.0	TR.	NIL	NIL	NIL	NIL

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

PROPERTY STURGEON LAKE GROUP 23 HOLE NO. SL-23-71-17

FOOTAGE From	FOOTAGE To	DESCRIPTION	% Mineralization	SAMPLE NO.	FOOTAGE From	FOOTAGE To	FOOTAGE Length	ASSAYS Au	Ag	Zn	Cu	Pb
		SULPHIDES: 741.0-924.8 Average 5-10% mainly py & po.	5py,po	21147	864.0	869.0	5.0	NIL	NIL	NIL	NIL	NIL
			3py,po	21148	869.0	874.0	5.0	NIL	NIL	NIL	NIL	NIL
			5py,po	21149	874.0	879.0	5.0	NIL	NIL	NIL	NIL	NIL
			10py,po	21150	879.0	884.0	5.0	NIL	NIL	NIL	NIL	NIL
			5py,po	21151	884.0	889.0	5.0	NIL	NIL	NIL	NIL	NIL
			4py,po	21152	889.0	894.0	5.0	NIL	NIL	NIL	NIL	NIL
			3py,po	21153	894.0	899.0	5.0	NIL	NIL	NIL	NIL	NIL
			2py,po	21154	899.0	904.0	5.0	NIL	NIL	NIL	NIL	NIL
			6py,po	21155	904.0	909.0	5.0	NIL	NIL	NIL	NIL	NIL
			3py,po	21156	909.0	914.0	5.0	NIL	NIL	NIL	NIL	NIL
			7py,po	21157	914.0	919.0	5.0	NIL	NIL	NIL	NIL	NIL
			2py,po	21158	919.0	924.0	5.0	NIL	NIL	NIL	NIL	NIL
			tr.py,po	21159	924.0	929.0	5.0	NIL	NIL	NIL	NIL	NIL
972.0		END OF HOLE.										

10,000'

SL-23-71.17

112+00N.

114+00N.

9,600'

ANDESITIC PINE TUFF

RHYOLITIC COARSE TUFF

ANDESITIC TUFF WITH AGGLOMERATIC BANDS

DACITIC TUFF

RHYOLITIC MACRO AGGLOMERATE

LAMPROPHYRE ? DYKE

RHYOLITIC MACRO AGGLOMERATE

100 Ft.

808

MATTAGAMI LAKE MINES LTD.

EXPLORATION DIVISION

PROJECT: STURGEON LAKE-GROUP '23'

SECTION: LINE 82+00E

D.D.H.# SL-23-71.17

SCALE: 1" = 100 FEET

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

C

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

PROPERTY	STURGEON LAKE, GROUP 23	LATITUDE	111 + 00 NORTH	STARTED	February 4, 1971
HOLE NO.	SL-23-71-20	DEPARTURE	90 + 00 EAST	FINISHED	February 18, 1971
BEARING	015° (GRID NORTH)	ELEVATION	SURFACE	LENGTH	1175.0'
DIP-COLLAR	-50°	SECTION	10 + 00 WEST	LOGGED BY	YAWNGHWE, ALI, LOISELLE

DIP TEST

Footage	Corrected	Footage	Corrected	Footage	Corrected
				700	44°00'
100	49°00'	400	46°00'	800	44°00'
				900	43°00'
200	48°00'	500	46°00'	1000	43°00'
300	48°00'	600	45°00'	1100	42°00'

Footage From	Footage To	Description	% Mineralization	Sample No.	Footage From	Footage To	Length	Au	Ag	Zn	Cu	Pb
0.0	52.0	CASING										
		SAND, GRAVEL AND BOULDERS										
52.0	220.0	RHYOLITIC FINE TUFF										
		Light to medium grey, very fine to fine grained, aphinitic mas-	LOST CORE		64.0	65.0	1.0					
		sive, very siliceous, hard, occasional lapilae with occasional	" "		76.0	77.0	1.0					
		minor andesitic matrix and agglomerates near bottom contact.										
220.0	263.0	DACITIC TUFF										
		Light to medium grey, very fine grained, massive quartz-carbonate										
		stringers, intermediate to siliceous matrix.										
		247.0-262.0 AMYGDOLOIDAL 1-2mm in diameter.										
263.0	411.0	ANDESITIC MICRO AGGLOMERATE										
		Greenish grey, andesitic agglomerates from 5-32mm in size in ande-	LOST CORE		287.0	29 .0	3.0					
		sitic matrix, occasional white acidic agglomerates 5-15mm in size.										
		Predominant are andesitic agglomerates with andesitic matrix.	< LPY	19888	335.0	340.0	5.0	NIL	NIL	NIL	NIL	NIL
		Increase in siliceous agglomerates with depth and appears grading	"	19889	340.0	345.0	5.0	NIL	NIL	NIL	NIL	NIL
		into rhyolitic section.	"	19890	345.0	350.0	5.0	NIL	NIL	NIL	NIL	NIL
			"	19891	350.0	355.0	5.0	NIL	NIL	NIL	NIL	NIL
		394.0-411.0 Gradational zone between andesitic and Rhyolitic	"	19892	355.0	360.0	5.0	NIL	NIL	NIL	TR.	NIL
		section becoming more siliceous in character.	"	19893	360.0	365.0	5.0	NIL	NIL	NIL	NIL	NIL
411.0	599.0	RHYOLITIC MACRO AGGLOMERATE										
		Greenish grey on top changes to medium grey matrix varies from	<1py,po	19894	411.0	416.0	5.0	NIL	NIL	NIL	NIL	NIL
		intermediate to acidic in composition. Macro acid agglomerates	<1py,po	19895	416.0	421.0	5.0	NIL	NIL	NIL	NIL	NIL
		up to 1.0'-1.5' in size. These macro, acid agglomerates appears	<1py,po	19896	421.0	426.0	5.0	NIL	NIL	NIL	NIL	NIL
		as these are made up of coarse siliceous tuff which includes fel-	<1py,po	19897	437.0	442.0	5.0	NIL	NIL	NIL	NIL	NIL
		sic fragments 2-5mm in size, in a very fine grained to aphinitic	1py	19898	442.0	447.0	5.0	NIL	NIL	NIL	NIL	NIL
		acid matrix, very tightly packed, and these macro agglomerates										
		later on packed in greenish andesitic matrix which in core looks	<1py	21308	500.0	505.0	5.0	NIL	NIL	NIL	NIL	NIL
		like andesitic interband.	<1py	21309	505.0	510.0	5.0	NIL	NIL	NIL	NIL	NIL
			<1py	19300	548.0	553.0	5.0	NIL	NIL	NIL	NIL	NIL
			<1py	21301	553.0	558.0	5.0	NIL	NIL	NIL	NIL	.03
			1py	21302	558.0	563.0	5.0	NIL	NIL	NIL	NIL	TR.
			<1py	21303	563.0	568.0	5.0	NIL	NIL	NIL	NIL	NIL
			2py	21304	568.0	573.0	5.0	NIL	NIL	NIL	NIL	NIL
			2py	21305	573.0	578.0	5.0	NIL	NIL	NIL	NIL	NIL
			2py	21306	578.0	583.0	5.0	NIL	NIL	NIL	NIL	NIL
			2py	21307	583.0	588.0	5.0	NIL	NIL	NIL	NIL	NIL
			2py	21310	588.0	592.5	4.5	NIL	NIL	NIL	NIL	NIL
			<1py	21311	592.5	597.5	5.0	NIL	NIL	NIL	NIL	NIL
			1py	21312	597.5	602.5	5.0	NIL	NIL	NIL	NIL	NIL

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

PROPERTY STURGEON LAKE GROUP 23 HOLE NO. SL-23-71-20 Page 2/3

FOOTAGE From	FOOTAGE To	DESCRIPTION	% Mineralization	SAMPLE NO.	FOOTAGE From	FOOTAGE To	FOOTAGE Length	ASSAYS Au	Ag	Zn	Cu	Pb
599.0	633.0	DACITIC TUFF Greyish green, very fine grained, massive ashy textures no obvious lineations, becoming more mafic with the increase in depth occasional quartz-calcite stringers	<1py	21313	602.5	606.5	4.0	NIL	NIL	NIL	NIL	NIL
			LOST CORE		623.0	625.0	2.0					
633.0	687.0	RHYOLITIC MACRO AGGLOMERATE Same as described earlier from 411.0-599.0 with andesitic matrix and acidic macro agglomerate composition description is similar but could be from a different horizon, the size of macro agglomerates seems to get bigger.	LOST CORE		668.0	670.0	2.0					
687.0	734.0	ANDESITIC MICRO AGGLOMERATE Greenish grey, andesitic matrix, intermediate lapilae 3-32mm in size with occasional acid lapilae. Chlorite stringers and bands. Numerous 2-3mm in size garnets. Garnets diminishing with depth. Distinct characteristics are numerous garnets, greenish matrix and lapilae up to 60%.	<1py	21314	719.0	724.0	5.0	NIL	NIL	NIL	NIL	NIL
			1py	21315	724.0	729.0	5.0	NIL	NIL	NIL	NIL	NIL
			<1py	21316	729.0	734.0	5.0	NIL	NIL	NIL	NIL	NIL
734.0	919.5	RHYOLITIC MACRO AGGLOMERATE Description almost similar to above section from 633.0-687.0 scattered stringers, threads and seems of py and po. <1% sulphides With increase in depth becomes more siliceous, tuffaceous acidic bands or tightly packed with [redacted] acidic macroagglomerates with surrounding bands or cement of andesitic composition. These agglomerates w seems to be made of coarse siliceous tuff very tightly packed.	<1py	21317	734.0	739.0	5.0	NIL	NIL	NIL	NIL	NIL
			1py	21318	739.0	744.0	5.0	NIL	NIL	NIL	NIL	NIL
			<1p[redacted]	21319	790.0	795.0	5.0	NIL	NIL	NIL	NIL	NIL
			<1po	21320	795.0	800.0	5.0	NIL	NIL	NIL	NI L	NIL
			[redacted]	21321	800.0	805.0	5.0	NIL	NIL	NIL	NIL	NIL
			<1po	21322	805.0	810.0	5.0	TR.	NIL	NIL	NIL	NIL
			2py.po	21323	810.0	815.0	5.0	TR.	NIL	NIL	NIL	NIL
			<1po	21324	815.0	820.0	5.0	NIL	NIL	NIL	NIL	NIL
			<1po.py	21325	820.0	825.0	5.0	NIL	NIL	NIL	NIL	NIL
			<1po.py	21326	825.0	8[redacted].0	4.0	NIL	NIL	NIL	NIL	NIL
			LOST CORE		829.0	830.0	1.0			LOST CORE		
			3po.py	21327	830.0	835.0	5.0	NIL	NIL	NIL	NIL	NIL
			3po.py	21328	835.0	839.0	4.0	NIL	NIL	NIL	NIL	NIL
			<1po.py	21329	839.0	843.0	4.0	NIL	NIL	NIL	NIL	NIL
			1py.po	21330	843.0	848.0	5.0	NIL	NIL	NIL	NIL	NIL
			LOST CORE		858.0	859.0	1.0			LOST CORE		
			<1py.po	21331	891.0	896.0	5.0	NIL	NIL	NIL	NIL	NIL
			3py.po	21332	896.0	901.0	5.0	NIL	NIL	NIL	NIL	NIL
			1py.po	21333	901.0	906.0	5.0	NIL	NIL	NIL	NIL	NIL
				21334	906.0	910.0	4.0	NIL	NIL	NIL	NIL	NIL
			LOST CORE		910.0	911.0	1.0			LOST CORE		
			<1py	21335	911.0	916.0	5.0	NIL	NIL	NIL	NIL	NIL
			1py.po	21336	916.0	919.5	3.5	NIL	NIL	NIL	NIL	NIL
919.5	934.5	SEMI MASSIVE SULPHIDES Average 25% sulphides in rhyolitic macro agglomerate with andesitic matrix. Sulphides which are mainly py and po are confined more to andesitic parts. It appears mineralization has replaced andesitic matrix. 20% po, 5% py, tr. to <1sph?	28po.2py	21337	919.5	924.5	5.0	NIL	NIL	NIL	NIL	NIL
			27po.3py.tr.sph	21338	924.5	929.5	5.0	NIL	NIL	NIL	NIL	NIL
			15po.5py." "	21339	929.5	932.0	2.5	NIL	NIL	NIL	NIL	NIL
			10po.7py." "	21340	932.0	934.5	2.5	NIL	NIL	NIL	NIL	NIL
934.5	948.5	RHYOLITIC MACRO AGGLOMERATE Same as described earlier. SULPHIDES 3-5% mainly pyrite.	3py.po	21341	934.5	939.5	5.0	NIL	NIL	NIL	NIL	NIL
			3py.po	21342	939.5	944.0	4.5	NIL	NIL	NIL	NIL	NIL
			3py.2092po	21343	944.0	948.5	4.5	NIL	NIL	NIL	NIL	NIL

PROPERTY STURGEON LAKE GROUP-23 HOLE NO. SL-23-71-20

FOOTAGE From	FOOTAGE To	DESCRIPTION	Mineralization	SAMPLE No.	FOOTAGE From	FOOTAGE To	FOOTAGE Length	ASSAYS Au	Ag	Zn	Cu	Pb
948.5	961.0	SEMI MASSIVE SULPHIDES Approximately 25% sulphides in rhyolitic macro agglomerate as described earlier.	20po,5py	21344	948.5	953.5	5.0	Nil	Nil	Nil	Nil	Nil
			20po,5py	21345	953.5	958.5	5.0	Nil	Nil	Nil	Nil	Nil
		958.5-961.0: ALTERED ZONE, altered rhyolite due to dyke intrusion quartz-veining, chlorite stringers.	1py,po	21346	958.5	961.0	2.5	Nil	Nil	Nil	Nil	Nil
961.0	971.9	INTERMEDIATE DYKE Dirty grey, fine to medium grained, hard, siliceous to intermediate in composition, very finely speckled due to very fine biotite? or hornblende? xtls. upper contact sharp @ 60° to core axis lower @ 35°.										
971.0	1105.0	RHYOLITE TUFF Light grey, fine grained, siliceous,white and grey 2-7mm lapilae schistosity or tuff banding @45° and 60° to core axis, chlorite threads and stringers, occasionally very fine minor blue quartz-eyes occasional sericitic alteration with increase in depth getting coarser and increase in lapilae.										
		971.9-977.0 ALTERED ZONE, due to intrustion highly siliceous, qtz veining sheared and altered, chlorite stringers associated with py and po fine cubes sulphides traces	LOST CORE		977.0	989.0	12.0					
		977.0-989.0 12.0 LOST CORE may be due to grinding or some FAULT??										
		1054.0-1072.0 INTERMEDIATE FINE TUFF, medium to dark grey in colour, very fine to fine grained, mafic, numerous fine garnets.	LOST CORE		1052.0	1054.0	2.0					
		1072.0-1090.0 SILICEOUS FINE TUFF, with occasional agglomerates										
		1090.0-1105.0 Increase in agglomerates.										
1105.0	1118.0	RHOLITE WELDED TUFF Light grey, very fine grained to aphinitic, highly siliceous with sections of welded agglomerates.	LOST CORE		1110.0	1112.0	2.0					
1118.0	1175.0	RHYOLITIC MICRO AGGLOMERATES Medium grey to greyish green, siliceous matrix occasionally chloritized, white quartz-agglomerates from 5-30mm in size hard tightly packed.										
		1128.0-1144.0 PHONOLITIC SECTIONS, Dark grey, glassy sections to 6" to 1.0'. Volcanic glass matrix, clinking sound 1-2% po blebs.	LOST CORE		1171.0	1172.0	1.0					
1175.0	END OF HOLE											

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B.C.D.M. EXPLORATION DIVISION, D.D.H. RECORD — PROPERTY STURGEON LAKE GROUP 23 — HOLE NO. SL-23-71-20 — Page 3.3

FOOTAGE From	FOOTAGE To	DESCRIPTION	% Mineralization	SAMPLE NO.	FOOTAGE From	FOOTAGE To	FOOTAGE Length	ASSAYS Au	Ag	Zn	Cu	Pb
948.5	961.0	SEMI MASSIVE SULPHIDES Approximately 25% sulphides in rhyolitic macro agglomer te as described earlier.	20po,5py	21344	948.5	953.5	5.0	NIL	NIL	NIL	NIL	NIL
			20po,5py	21345	953.5	958.5	5.0	NIL	NIL	NIL	NIL	NIL
		958.5-961.0 ALTERED ZONE, altered rhyolite due to dyke intrusion quartz-veining, chlorite stringers.	1py,po	21346	958.5	961.0	2.5	NIL	NIL	NIL	NIL	NIL
961.0	971.9	INTERMEDIATE DYKE Dirty grey, fine to medium grained, hard, siliceous to intermediate in composition, very finely speckled due to very fine biotite? or hornblende? xtls, upper contact sharp @ 60° to core axis, lower @ 35°.										
971.9	1105.0	RHYOLITE TUFF Light grey, fine grained, siliceous, white and grey 2-7mm lapilae schistosity or tuff banding @45° and 60° to core axis, chlorite threads and stringers, occasionally very fine minor blue quartz-eyes occasional xerfeitic alteration with increase in depth getting coarser and increase in lapilae.										
		971.9-977.0 ALTERED ZONE, due to intrusion highly siliceous, qtz veining sheared and altered, chlorite stringers associated with py and po fine cubes sulphides traces	LOST CORE		977.0	989.0	12.0					
		977.0-989.0 12.0 LOST CORE may be due to grinding or some FAULT??										
		1054.0-1072.0 INTERMEDIATE FINE TUFF, medium to dark grey in colour, very fine to fine grained, mafic, numerous fine garnets	LOST CORE		1052.0	1054.0	2.0					
		1072.0-1090.0 SILICEOUS FINE TUFF, with occasional agglomerates										
		1090.0-1105.0 Increase in agglomerates.										
1105.0	1118.0	RHYOLITE WELDED TUFF Light grey, very fine grained to aphinitic, highly siliceous with sections of welded agglomerates.	LOST CORE		1110.0	1112.0	2.0		LOST CORE			
1118.0	1175.0	RHYOLITIC MICRO AGGLOMERATES Medium grey to greyish green, siliceous matrix occasionally chloritized, white quartz-agglomerates from 5-30mm in size, hard tightly packed.										
		1128.0-1144.0 PHONOLITIC SECTIONS, Dark grey, glassy sections to 6" to 1.0', Volcanic glass matrix, clinking sound 1-2% po blebs.	LOST CORE		1171.0	1172.0	1.0		LOST CORE			
	1175.0	E N D O F H O L E										

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MATTAGAMI LAKE MINES LTD.
EXPLORATION DIVISION

PROJECT: STURGEON LAKE-GROUP 23
SECTION: LINE 90+00E
D.D.H.= SL-23-71.29
SCALE: 1" = 100 FEET
DATE: 26 Aug. '71 DRW. BY: L.I.

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

PROPERTY	STURGEON LAKE – GROUP "23"	LATITUDE	110 + 95 NORTH	STARTED	February 19, 1971	DIP TEST Footage	Corrected	Footage	Corrected	Footage	Corrected
HOLE NO.	SL-23-71/24	DEPARTURE	90 + 00 EAST	FINISHED	March 7, 1971	100	47°00	500	43°30	900	40°00
BEARING	195° (GRID SOUTH)	ELEVATION	S U R F A C E	LENGTH	1,304.0'	200	46°00	600	42°00	1000	40°00
DIP-COLLAR	-50°	SECTION	10 + 00 WEST	LOGGED BY	A.TANGAM, A.ALI, H.YANGGEMX	300	45°30'	700	42°00	1100	37°30
						400	43°30	800	42°00	1200	37°00
										1300	37°00

FOOTAGE From	FOOTAGE To	DESCRIPTION	% Mineralization	SAMPLE NO.	FOOTAGE From	FOOTAGE To	Length	ASSAYS Au	Ag	Zn	Cu	Pb
0.0 0.0	56.0	**C A S I N G** SAND, GRAVEL & BOULDERS										
56.0 56.0	199.5	RHYOLITIC WELDED TUFF (FINE TUFF) Light grey to cream, very fine grained to aphinitic very siliceous welded, hard, (Brecciated Rhyolite) RHYOLITE WELDED TUFF or FINE TUFF ? (BLOCKY drilling most of the core boken and chopped)	LOST LOST "	CORE CORE "	57.0 60.0 62.0 78.0 89.0	58.0 61.0 65.0 80.0 90.0	1.0 1.0 3.0 2.0 1.0		LOST CORE " " " " " " " "			
		153.0–177.0 Greenish grey, hard, siliceous, increase in mafic contents, very fine grained, moderately chloritized Occasional garnets and getting back to grey colour.	"	"	101.0 117.0 158.0 167.0	103.0 118.0 160.0 168.0	2.0 1.0 2.0 1.0		" " " " " " " "			
		177.0–199.5 Grey, fine grained, siliceous, occasional lapilae, occasionally welded.	"	"	171.0 194.0	177.0 195.0	6.0 1.0		" "			
199.5 199.5	226.5	GRAPHITIC TUFF Grey, very fine grained, very hard, compact, very finely graphitic bedding @ 30° to core axis, qts-veining, lower contact sharp @ 30° to core axis (may be a tuffite horizon) very fine pyrite stringers and blebs.	NIL	<1py LOST 2py,po LOST <1py,po LOST <1py,po	21401 CORE 21402 21403 CORE 21404 CORE 21405	199.5 201.0 203.0 208.0 213.0 214.0 218.0 220.0	201.0 203.0 208.0 213.0 214.0 218.0 220.0 226.5	1.5 2.0 5.0 5.0 1.0 4.0 2.0 6.5	NIL NIL NIL NIL NIL	NIL LOST CORE NIL NIL LOST CORE NIL LOST CORE NIL	NIL NIL NIL NIL NIL	NIL NIL NIL NIL NIL	NIL NIL NIL NIL NIL
226.5 226.5	259.0	ANDESITIC TUFF 226.5–230.0 ANDESITIC MICRO AGGLOMERATE Green, fine grained, andesitic green matrix hard, acid fragments and lapilae 40% occasional garnets, pyrite and po stringers and blebs.	NIL NIL	7py,po <1py,po 3py,po 5py,po 3py,po 1py,po	21406 21407 21408 21409 21410 21411 21412 21413	226.5 230.0 233.0 238.0 240.0 245.0 250.0 255.0	230.0 233.0 238.0 240.0 245.0 250.0 255.0 259.0	3.5 3.0 5.0 2.0 5.0 5.0 5.0 4.0	NIL NIL NIL NIL NIL NIL NIL NIL	NIL NIL NIL NIL NIL NIL NIL NIL	NIL NIL NIL NIL NIL NIL TR. NIL	NIL NIL NIL NIL NIL .02 NIL NIL	NIL NIL NIL NIL NIL NIL NIL NIL
		230.0–233.0 ANDESITIC FINE TUFF Green, fine grained, garnets 1–3mm, massive.										
		233.0–259.0 MIXED ZONE OF ANDESITIC & RHYOLITIC TUFF Colour ranges from grey to green, intermediate to acid sections, hard, occasional sections have garnets in cluster, pyrite and po blebs and stringers, graditionally gets into rhyolitic fine tuff.										
259.0 259.0	375.0	RHYOLITIC FINE TUFF Medium to light grey, very fine grained, massive, compact very hard. (This section from 259.0–328.0)										

FOOTAGE From	To	DESCRIPTION	SAMPLE No.	FOOTAGE From	To	Length	ASSAYS
		328.0-275.0 Medium to slaty grey, very fine grained hard and siliceous, lighter and darker shade interbands. tuffaceous banding @40° to core axis, calcite stringer parallel to banding schistosity, occasional biotite stringers, occasional greenish tinge.					
375.0	381.0	DYKE (INTERMEDIATE ?) Grey fine grained, salt-pepper texture, upper contact @40° to core axis, lower @25° to core axis.					
381.0	701.0	ANDESITIC TUFF (FLOW) Dark grey-green, very fine grained; hard, felsic amygdales (1-2mm) finer on tops, getting into clusters toward the lower part; occasional qtz-veining and banding at 45° to core axis, particulary at lower contact, occasional po blebs up to 10%; lower contact @40° to core axis, sulphides <1%. 399.0-404.0 Occasional po blebs associated with fine grained amygdales (amphiboles? garnet ?) 441.0-443.5 DYKE Grey-green, medium grained, speckled, upper contact @75° lower @30° to core axis. 448.0-512.0 Dark grey-green, abundant amygdales, from fine to medium grained, associated with po (magnetite?) blebs and dissemination; py,po <10%. 527.0-529.0 2.0' LOST CORE 558.0-560.0 2.0' " 601.0-602.0 2.0' " 623.0-624.0 1.0' " 634.0-687.5 Medium grey, very fine grained, compact appearance at the top; lower part more siliceous with increase in amygdalar content. 687.5-701.0 Parallel quartz-veining at 40° to core axis; from fine to medium grained tuff with lapillae (2-3mm) from moderately packed to welded.					
701.0	867.0	RHYOLITIC TUFF Light grey, from medium to coarse grained, with occasional very fine grained sections (<1 to 4mm), banded @45° to core axis; blue qtz-eyes from medium to coarse (1-3mm) up to 5%, very fine grained py along the bandings and as patches.					

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Footage From	Footage To	Description	Mineralization	Sample No.	Footage From	Footage To	Length	Au	Ag	Zn	Cu	Pb
		RHYOLITIC FINE TUFF; Cont'd										
		328.0-275.0: Medium to slaty grey, very fine grained hard and siliceous, lighter and darker shade interbands, tuffaceous banding @ 40° to core axis, calcite stringer parallel to banding schistosity, occasional biotite stringers, occasional greenish tinge.										
275.0	381.0	**DYKE (INTERMEDIATE ?)** Grey fine grained, salt-pepper texture, upper contact @ 40° to core axis, lower @ 25° to core axis.										
381.0	701.0	**ANDESITIC TUFF (FLOW)** Dark grey-green, very fine grained; hard; felsic amygdales (1-2mm) finer on tops, getting into clusters toward the lower part; occasional qtz-veining and banding at 45° to core axis, particulary at lower contact; occasional po blebs up to 10%; lower contact @ 40° to core axis; sulphides <1%.										
		399.0-404.0: Occasional po blebs associated with fine grained amygdales (amphiboles?, garnet ?).										
		441.0-443.5: **DYKE** Grey-green, medium grained, speckled; upper contact @ 75° lower @ 30° to core axis.										
		448.0-512.0: Dark grey-green, abundant amygdales, from fine to medium grained, associated with po (magnetite?) blebs and dissemination; py,po<10%.	<10py.po	21414	448.0	453.0	5.0	NIL	NIL	TR.	.02	NIL
			< 3py.po	21415	453.0	458.0	5.0	NTR.	NIL	TR.	.03	NIL
			3-5py.po	21416	458.0	463.0	5.0	.005	NIL	NIL	TR.	NIL
			3-5py.po	21417	463.0	468.0	5.0	NIL	NIL	NIL	.02	NIL
		527.0-529.0: 2.0' LOST CORE	5-7py.po	21418	468.0	473.0	5.0	.010	NIL	NIL	.02	NIL
		558.0-560.0: 2.0' " "	1-2py.po	21419	473.0	478.0	5.0	NIL	NIL	NIL	TR.	NIL
		601.0-602.0: 1.0' " "	1-2py.po	21420	478.0	483.0	5.0	NIL	NIL	NIL	TR.	NIL
		623.0-624.0: 1.0' " "	1-3py.po	21421	483.0	488.0	5.0	NIL	NIL	NIL	TR.	NIL
			1-2py.po	21422	488.0	493.0	5.0	NIL	NIL	NIL	TR.	NIL
			1-2py.po	21423	493.0	498.0	5.0	.011	NIL	NIL	.02	NIL
			< 1py.po	21424	498.0	502.0	4.0	NIL	NIL	NIL	TR.	NIL
			2-3py.po	21425	502.0	507.0	5.0	.010	NIL	NIL	.02	NIL
			2-3py.po	21426	507.0	512.0	5.0	.008	NIL	NIL	TR.	NIL
		634.0-687.5: Medium grey, very fine grained, compact appearance at the top; lower part more siliceous with increase in amygdalar content.										
		687.5-701.0: Parallel quartz-veining at 40° to core axis; from fine to medium grained tuff with lapillae (2-3mm) from moderately packed to welded.										
701.0	867.0	**RHYOLITIC TUFF**	<5py;cpy?	21427	701.0	706.0	5.0	.009	NIL	NIL	.02	NIL
		Light grey, from medium to coarse grained, with occasional very fine grained sections (<1 to 4mm), banded @ 45° to core axis; blue "qtz-eyes" from medium to coarse (1-3mm) up to 5%; very fine grained py along the bandings and as patches.	<5py,cpy"	21428	706.0	711.0	5.0	NIL	NIL	NIL	TR.	NIL
			<5py,cpy"	21429	711.0	716.0	5.0	.007	NIL	NIL	TR.	NIL
			<5py,cpy"	21430	816.0	721.0	5.0	.005	NIL	NIL	TR.	NIL
			<5py,cpy"	21431	721.0	724.0	3.0	.005	NIL	NIL	TR	NIL
			LOST CORE		724.0	727.0	3.0		LOST	CORE		

FOOTAGE From	FOOTAGE To	DESCRIPTION	SAMPLE NO.	FOOTAGE From	FOOTAGE To	FOOTAGE Length	ASSAYS
		724.0-727.0 Lost Core					
		760.0-761.0 "					
		764.0-766.0 Medium grey, very fine grained, intermediate (dacitic ?) intrusion, contacts @35° to core axis.					
		773.0-775.0 Lost Core					
		776.0-778.0 "					
		791.0-794.0 "					
		815.0-818.0 "					
		820.0-824.0 Medium grey, very fine grained, dacitic intrusion upper contact at 80°, lower @ 75°.					
		824.0-867.0 Colour from medium to darker, texture from fine grained to aphanitic toward lower part; lower contact visible @50° to core axis.					
		853.0-855.0 Lost Core					
		862.0-864.0 "					
867.0	996.5	RHYOLITIC MACRO-AGGLOMERATE					
		Light grey, medium to coarse agglomerates, from moderately packed to welded; high siliceous content in welded sections; chloritized in part, occasional buff patches (carbonization feldspatization?)					
		867.7-878.5 LAMPROPHYRE DYKE Grey-green, medium fine grained, upper contact @ 60°, lower @ 50°					
		878.5-918.0 Light grey (creamy) macro-agglomerates, tightly packed and welded; 90% siliceous, lower contact gradational in moderately packed agglomerate, blue "qtz-eyes" (2%), 1-2% pyrite.					
		863.0-884.0: Mafic intrusion, contacts @80° to core axis; very fine grained.					
		887.8-892.5: Very fine grained mafic intrusion upper contact obscure, lower at 80°.					

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FOOTAGE From	FOOTAGE To	DESCRIPTION	% Mineralization	SAMPLE NO.	FOOTAGE From	FOOTAGE To	FOOTAGE Length	ASSAYS Au	Ag	Zn	Cu	Pb
		RHYOLITIC TUFF Cont'd										
		724.0-727.0: LOST CORE										
		760.0-761.0: " "										
		764.0-766.0: Medium grey, very fine grained, intermediate (dacitic ?) intrusion, contacts @ 35° to core axis.	1-2py	21432	727.0	732.0	5.0	NIL	NIL	NIL	.02	NIL
			< 1py	21433	732.0	737.0	5.0	.006	NIL	NIL	TR.	NIL
			< 1py	21434	737.0	742.0	5.0	NIL	NIL	NIL	TR.	NIL
			< 1py	21435	742.0	747.0	5.0	NIL	NIL	NIL	.02	NIL
			< 1py	21436	747.0	752.0	5.0	NIL	NIL	NIL	.02	NIL
			2-5py	21437	752.0	757.0	5.0	NIL	NIL	NIL	TR.	NIL
			< 1py	21438	757.0	760.0	3.0	NIL	NIL	NIL	TR.	NIL
		773.0-775.0: LOST CORE	LOST CORE		760.0	761.0	1.0		LOST	CORE		
		776.0-778.0: " "										
		791.0-794.0: " "										
		815.0-818.0: " "										
		820.0-824.0: Medium grey, very fine grained, dacitic intrusion, upper contact at 80°, lower @ 75°.	< 1py	21439	761.0	764.0	4.0	NIL	NIL	NIL	TR.	NIL
		824.0-867.0: Colour from medium to darker, texture from fine grained to aphanitic toward lower part; lower contact visible @ 50° to core axis.										
		853.0-855.0: LOST CORE										
		862.0-864.0: " "										
867.0	996.5	RHYOLITIC MACRO-AGGLOMERATE Light grey, medium to coarse agglomerates, from moderately packed to welded; high siliceous content in welded sections; chloritised in part; occasional buff patches (carbonization feldspatization?)										
		967.7-978.5: LAMPROPHYRE DYKE Grey-green, medium - fine grained, upper contact @ 60°, lower @ 50°.										
		978.5-918.0: Light grey (creamy) macro-agglomerates, tightly packed and welded; 90% siliceous, lower contact gradational in moderately packed agglomerate; blue "qtz-eyes" (2%), 1-2% pyrite.										
		983.0-984.0: Mafic intrusion, contacts @ 80° to core axis; very fine grained.										
		987.0-992.5: Very fine grained mafic intrusion upper contact obscure, lower at 80°.										

EXPLORATION DIVISION, D.D.H. RECORD

Property: Sturgeon Lake Group 23 — Hole No. SL-23-71-24

Footage From	Footage To	Description
		918.0-944.0 Micro-agglomeratic, lapillae (5-15mm) from loose to moderately packed. Chloritized, blue "qtz-eyes" (2%), buff patches (carbonatic, feldspathic?)
		944.0-996.5 Light grey-white, highly siliceous (95%), tightly packed and welded agglomerate. Pyrite patches and stringers 10-15%.

Mineralization	Sample No.	From	To	Length	Au	Ag	Zn	Cu	Pb
<1py	21440	939.0	944.0	5.0	Nil	Nil	.3	Nil	Nil
1py	21441	944.0	949.0	5.0	Nil	Nil	Nil	Nil	Nil
1-2py	21442	949.0	953.0	4.0	Nil	Nil	Nil	Nil	Nil
LOST CORE		953.0	955.0	2.0	Nil	Nil	Nil	Tr.	Nil
2py	21443	955.0	958.0	3.0	Nil	Nil	Nil	Tr.	Nil
2py	21444	958.0	960.0	2.0	Nil	Nil	Nil	.02	Nil
LOST CORE		960.0	962.0	2.0					
5-10py	21445	962.0	967.0	5.0	Nil	Nil	Nil	Nil	Nil
LOST CORE		967.0	970.0	3.0					
10-15py	21446	970.0	973.0	3.0	Nil	Nil	Nil	Nil	Nil
LOST CORE		973.0	982.0	9.0					
10-15py	21447	982.0	985.0	3.0	Tr.	Nil	Nil	Tr.	Nil
LOST CORE		985.0	988.0	3.0					
10-15py	21448	988.0	993.0	5.0	Nil	Nil	Nil	Nil	Nil
2py	21449	993.0	996.5	3.5	Nil	Nil	Nil	Nil	Nil

From	To	Description
996.5	998.7	ANDESITIC TUFF Dark grey-green, aphanitic matrix; blue "qtz-eyes" and "garnets" as phenocryst; contacts obscured (80°?)
998.7	1004.5	RHYOLITIC TUFF Medium grey, medium fine grained, blue "qtz-eyes" metacrysts (10%); bandings @80° to core axis; lower contact sharp @ 80° to core axis, pyrite 1%
1004.5	1022.5	ANDESITIC TUFF Dark grey-green, aphanitic matrix occasional lapillae (1-10mm) occasional chloritization, "garnet" and blue "qtz-eyes" 3% uppercontact @80° to core axis, occasional magnetite.
1022.5	1029.8	LAMPROPHYRE DYKE Medium grey-green, fine grained, upper contact obscured, lower @80° to core axis. 1025-1027.0: LOST CORE
1029.8	1034.0	RHYOLITIC TUFF (CHLORITIZED) Medium green-grey, fine grained, heavily chloritized occasional banding @45° to core axis, blue "qtz-eyes" 10% pyrite 2%

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PROPERTY STURGEON LAKE GROUP "23" HOLE NO. SL-23-71-24 Page 4/6

FOOTAGE From	FOOTAGE To	DESCRIPTION	% Mineralization	SAMPLE NO.	FOOTAGE From	FOOTAGE To	FOOTAGE Length	ASSAYS Au	Ag	Zn	Cu	Pb
		RHYOLITIC MACRO - AGGLOMERATE Cont'd										
		918.0-944.0: Micro - agglomeratic, lapillic (5-10mm) from locally to moderately pushed. Chloritized, blue "qtz-eyes" (2%), buff patches (carbonatic, feldspathic?)	< 1py	21440	939.0	944.0	5.0	Nil	Nil	.3	Nil	Nil
		944.0-996.5: Light grey-white, highly siliceous (95%), slightly pushed and welded agglomerate. Pyrite patches and stringers 10-15%.	1py	21441	944.0	949.0	5.0	Nil	Nil	Nil	Nil	Nil
			1-2py	21442	949.0	953.0	4.0	Nil	Nil	Nil	Nil	Nil
			LOST	CORE	953.0	955.0	2.0	Nil	Nil	Nil	Tr.	Nil
			2py	21443	955.0	958.0	3.0	Nil	Nil	Nil	Tr.	Nil
			2py	21444	958.0	960.0	2.0	Nil	Nil	Nil	.02	Nil
			LOST	CORE	960.0	962.0	2.0					
			5-10py	21445	962.0	967.0	5.0	Nil	Nil	Nil	Nil	Nil
			LOST	CORE	967.0	970.0	3.0					
			10-15py	21446	970.0	973.0	3.0	Nil	Nil	Nil	Nil	Nil
			LOST	CORE	973.0	982.0	9.0					
			10-15py	21447	982.0	985.0	3.0	Tr.	Nil	Nil	Tr.	Nil
			LOST	CORE	985.0	988.0	3.0					
			10-15py	21448	988.0	993.0	5.0	Nil	Nil	Nil	Nil	Nil
			2py	21449	993.0	996.5	3.5	Nil	Nil	Nil	Nil	Nil
996.5	998.7	ANDESITIC TUFF Dark grey-green, aphanitic matrix; blue "qtz-eyes" and "garnet" as phenocryst; contacts obscured (80°?)										
998.7	1004.5	RHYOLITIC TUFF Medium grey, medium fine grained, blue "qtz-eyes" metacryst (10%); bandings @ 80° to core axis; lower contact sharp @ 80° to core axis, pyrite <1%.										
1004.5	1022.5	ANDESITIC TUFF Dark grey-green, aphanitic matrix, occasional lapillus (1-10mm), occasional chloritization, "garnet" and blue "qtz-eyes" 3%, upper contact @ 80° to core axis; occasional magnetite.										
1022.5	1029.8	LAMPROPHYRE DIKE Medium grey-green, fine grained; upper contact obscured, lower @ 80° to core axis.										
		1025.0-1027.0: LOST CORE.										
1029.8	1034.0	RHYOLITIC TUFF (CHLORITIZED) Medium green-grey, fine grained, heavily chloritized occasional banding @ 45° to core axis, blue "qtz-eyes" 10% pyrite 2%.										

FOOTAGE From	FOOTAGE To	DESCRIPTION	% Mineralization	SAMPLE NO.	FOOTAGE From	FOOTAGE To	Length	ASSAYS Au	Ag	Zn	Cu	Pb
1034.0	1069.0	RHYOLITIC MACRO-AGGLOMERATE Light grey, welded, highly siliceous (95%) dense; pyrite stringers and patches (5-15%); occasionally chloritized.	1py	21450	1034.0	1039.0	5.0	Nil	Nil	Nil	Nil	Nil
			1py	21451	1039.0	1044.0	5.0	Nil	Nil	Nil	Nil	Nil
			<1py	21452	1440.0	1048.0	4.0	Nil	Nil	Nil	Nil	Nil
			LOST CORE		1048.0	1049.0	1.0					
			5py	21453	1049.0	1054.0	5.0	Nil	Nil	Nil	Nil	Nil
			2py	21454	1054.0	1059.0	5.0	Nil	Nil	Nil	Nil	Nil
			10py	21455	1059.0	1064.0	5.0	Nil	Nil	Nil	Nil	Nil
			3py	21456	1064.0	1069.0	5.0	Nil	Nil	Nil	Nil	Nil
1069.0	1093.0	RHYOLITIC FINE TUFF Medium grey, very fine to aphanitic matrix, rare phenocrysts and lapilli, absence of bedding; siliceous, sulphides 2% mainly py	< py	21457	1069.0	1073.0	4.0	Nil	Nil	Nil	Nil	Nil
			LOST CORE		1073.0	1074.0	1.0					
			<2py	21458	1074.0	1079.0	5.0	Nil	Nil	Nil	Nil	Nil
			<2py	21459	1079.0	1080.5	1.5	Nil	Nil	Nil	Nil	Nil
			LOST CORE		1080.5	1086.0	5.5					
			2-3py long	21460	1086.0	1091.0	5.0	Nil	Nil	Nil	Nil	Nil
			2-3py	21461	1091.0	1093.0	2.0	Nil	Nil	Nil	Nil	Nil
1093.0	1098.0	DACITIC INTRUSION Medium grey, fine grained, (salt and pepper texture), contacts obscure.	1py	21462	1093.0	1096.5	3.5	Nil	Nil	Nil	Nil	Nil
			LOST CORE		1096.5	1098.0	1.5					
1098.0	1100.0	ANDESITIC TUFF Dark grey, fine grained matrix, felsic amygdales (203mm) occasionally garnitic <1% sulphides.	1py	21463	1098.0	1100.0	2.0	Nil	Nil	.1	Nil	Nil
1100.0	1119.8	RHYOLITIC FINE TUFF The same as; 1069.0-1093.0; characteristic the presence of black "qtz-eyes" (1mm) up to 5%; occasional blue "qtz-eyes" aphanitic matrix; 1-2% pyrite. 1118.0-1119.8: ANDESITIC TUFF Up to 60% felsic amygdales (<1-2mm) in a dark grey-black aphanitic matrix;<1% pyrite.	5py	21464	1100.0	1102.0	2.0	Nil	Nil	.1	Nil	Nil
			LOST CORE		1102.0	1113.0	11.0					
			1py	21465	1113.0	1118.0	5.0	Nil	Nil	.1	Nil	Nil
1119.8	1129.0	RHYOLITIC TUFF (FINE) The same as 1100.0-1118.0; occasional tuffaceous bedding @30° to core axis.	1py	21466	1118.0	1123.0	5.0	Nil	Nil	Nil	Nil	Nil
			1py	21467	1123.0	1128.0	5.0	Nil	Nil	.1	Nil	Nil
1129.0	1134.8	ANDESITIC INTRUSION Dark grey, occasional banding of medium grained felsic content; generally fine grained; lower part tuffaceous with dark grey-black aphanitic matrix with felsic clusters (amygdales) up to 5%; upper contact very sharp @35° to core axis, lower obscured.	1py	21468	1128.0	1132.0	4.0	Nil	Nil	Nil	Nil	Nil
			1py	21469	1132.0	1137.0	5.0	Nil	Nil	Nil	Nil	Nil
1134.8	1182.0	RHYOLITIC MACRO-AGGLOMERATE Similar to the section from 944.0-996.5 but agglomerates obscured by high siliceous content and dense appearance which may suggest silicitized RHYOLITIC FINE TUFF; shaded from light grey-medium grey, fine grained qtz-eyes (black, occasional blue) as accessory in an aphanitic, 90% siliceous, groundmass, occasional qtz-veining 2" wide occasional chloritization, in part visibly aggl'tic.	2-3py	21470	1137.0	1142.0	5.0	Nil	Nil	Nil	Nil	Nil
			1py	21471	1142.0	1147.0	5.0	Nil	Nil	Nil	Nil	Nil
			1py	21472	1147.0	1152.0	5.0	Nil	Nil	Nil	Nil	Nil
			1py	21473	1152.0	1158.0	6.0	Nil	Nil	Nil	Nil	Nil
			LOST CORE		1158.0	1160.0	2.0	Nil	Nil	Nil	Nil	Nil
			1py	21474	1160.0	1165.0	5.0	Nil	Nil	Nil	Nil	Nil

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FOOTAGE From	FOOTAGE To	DESCRIPTION	Mineralization	SAMPLE NO.	FOOTAGE From	FOOTAGE To	Length	ASSAYS Au	Ag	Zn	Cu	Pb
1034.0	1069.0	**RHYOLITIC MACRO - AGGLOMERATE** Light grey, welded, highly siliceous (95%), dense; pyrite stringers and patches (5-15%); occasionally chloritized.	1py	21450	1034.0	1039.0	5.0	Nil	Nil	Nil	Nil	Nil
			1py	21451	1039.0	1044.0	5.0	Nil	Nil	Nil	Nil	Nil
			1py	21452	1440.1	1048.0	4.0	Nil	Nil	Nil	Nil	Nil
			LOST	CORE	1048.0	1049.0	1.0		LOST	CORE		
			5py	21453	1049.0	1054.0	5.0	Nil	Nil	Nil	Nil	Nil
			2py	21454	1054.0	1059.0	5.0	Nil	Nil	Nil	Nil	Nil
			10py	21455	1059.0	1064.0	5.0	Nil	Nil	Nil	Nil	Nil
			3py	21456	1064.0	1069.0	5.0	Nil	Nil	Nil	Nil	Nil
1069.0	1093.0	**RHYOLITIC FINE TUFF** Medium grey, very fine to aphanitic matrix; rare phenocryste and lapilli; absence of bedding; siliceous; sulphides @% mainly py	py	21457	1069.0	1073.0	4.0	Nil	Nil	Nil	Nil	Nil
			LOST	CORE	1073.0	1074.0	1.0					
			2py	21458	1074.0	1079.0	5.0	Nil	Nil	Nil	Nil	Nil
			2py	21459	1079.0	1080.5	1.5	Nil	Nil	Nil	Nil	Nil
			LOST	CORE	1080.5	1086.0	5.5					
			2-3py, lmag	21460	1086.0	1091.0	5.0	Nil	Nil	Nil	Nil	Nil
			2-3py	21461	1091.0	1093.0	2.0	Nil	Nil	Nil	Nil	Nil
1093.0	1098.0	**DACITIC INTRUSION** Medium grey, fine grained, (salt and pepper texture), contacts obscure.	1py	21462	1093.0	1096.5	3.5	Nil	Nil	Nil	Nil	Nil
			LOST	CORE	1096.5	1098.0	1.5					
1098.0	1100.0	**ANDESITIC TUFF** Dark grey, fine grained matrix; felsic amygdales (2-3mm) occasionally garnitic; < 1% sulphides.	1py	21463	1098.0	1100.0	2.0	Nil	Nil	.1	Nil	Nil
1100.0	1119.8	**RHYOLITIC FINE TUFF** The same as; 1069.0-1093.0; characteristic the presence of black "qtz-eyes" (1mm) up to 5%; occasional blue "qtz-eyes"; aphanitic matrix; 1-2% pyrite.	5py	21464	1100.0	1102.0	2.0	Nil	Nil	.1	Nil	Nil
			LOST	CORE	1102.0	1113.0	11.0					
			1py	21465	1113.0	1118.0	5.0	Nil	Nil	.1	Nil	Nil
		1118.0-1119.8: **ANDESITIC TUFF** Up to 60% felsic amygdales (1-2mm)in a dark - grey-black aphanitic matrix; 1% pyrite.										
1119.8	1129.0	**RHYOLITIC TUFF (FINE)** The same as 1100.0-1118.0; occasional tuffaceous bedding @ 30° to core axis.	1py	21466	1118.0	1123.0	5.0	Nil	Nil	Nil	Nil	Nil
			1py	21467	1123.0	1128.0	5.0	Nil	Nil	.1	Nil	Nil
1129.0	1134.8	**ANDESITIC INTRUSION** Dark grey; occasional banding of medium grained felsic content; generally fine grained; lower part tuffaceous with dark grey-black aphanitic matrix with felsic clusters (amygdales) up to 5%; upper contact very sharp @ 35° to core axis; lower obscured.	1py	21468	1128.0	1132.0	4.0	Nil	Nil	Nil	Nil	Nil
			1py	21469	1132.0	1137.0	5.0	Nil	Nil	Nil	Nil	Nil
1134.8	1182.0	**RHYOLITIC MACRO - AGGLOMERATE** Similar to the section from 946.0-996.5 but agglomerates obscured by high siliceous content and dense appearance which may suggest silicitized RHYOLITIC FINE TUFF; shaded from light grey-medium grey; fine grained qtz-eyes (black, occasional blue) as accessory in an aphanitic, 90% siliceous, groundmass, occasional qtz-veining 2" wide occasional chloritization, in part visibly aggl'tic.	2-3py	21470	1137.0	1142.0	5.0	Nil	Nil	Nil	Nil	Nil
			1py	21471	1142.0	1147.0	5.0	Nil	Nil	Nil	Nil	Nil
			1py	21472	1147.0	1152.0	5.0	Nil	Nil	Nil	Nil	Nil
			1py	21473	1152.0	1158.0	6.0	Nil	Nil	Nil	Nil	Nil
			LOST	CORE	1158.0	1160.0	2.0	Nil	Nil	Nil	Nil	Nil
			1py	21474	1160.0	1165.0	5.0	Nil	Nil	Nil	Nil	Nil

.....6

EXPLORATION DIVISION, D.D.H. RECORD

North Sturgeon Lake - Group 23 — Hole No. SL-23-71-24

Footage From	Footage To	Description	Mineralization	Sample No.	From	To	Length	Au	Ag	Zn	Cu	Pb
		Occasional patches and stringer of pyrite up to 3%	LOST CORE		1165.0	1168.0	3.0					
			1py	21475	1168.0	1173.0	5.0	Nil	Nil	Nil	Nil	Nil
			1py	21476	1173.0	1174.0	1.0	Nil	Nil	Nil	Nil	Nil
			LOST CORE		1174.0	1177.0	3.0					
			1py	21477	1177.0	1182.0	5.0	Nil	Nil	Nil	Nil	Nil
1182.0	1229.0	INTERMEDIATE (RHYO-DACITIC) TUFF Medium grey (shaded from medium to dark grey), fine grained bedded @30° to core axis; partly agglomeratic tightly packed, particulary @ lower contact; occasionally dacitic intrusion 1ft. wide accompanied by 2" wide qtz-veins.	LOST CORE		1200.0	1202.0	2.0					
			LOST CORE		1202.5	1203.0	0.5					
			LOST CORE		1209.0	1210.0	1.0					
			LOST CORE		1227.0	1228.0	1.0					
1229.0	1240.0	ANDESITIC INTRUSION Medium to dark grey-green, generally medium grained, finer grained at the contacts; occasional qtz-veining 2-3" wide, upper contact obscured, lower @ 50° to core axis.										
1240.0	1304.0	ANDESITIC (MIXED) TUFF Generally medium grey, fine grained to aphanitic matrix with 1-3mm felsic amygdals, slightly bedded 60° to core axis, occasional narrow sections with tightly packed felsic lapilli (10mm), partly silisified and altered particulary at the upper contact; occasional loose lapilli (4-10mm) 1243.0-1246.0 LOST CORE 1252.0-1258.0 " 1265.0-1273.0 " 1278.0-1281.0 " 1292.0-1293.0 " 1302.0-1304.0 "										
	1304.0	END OF HOLE										

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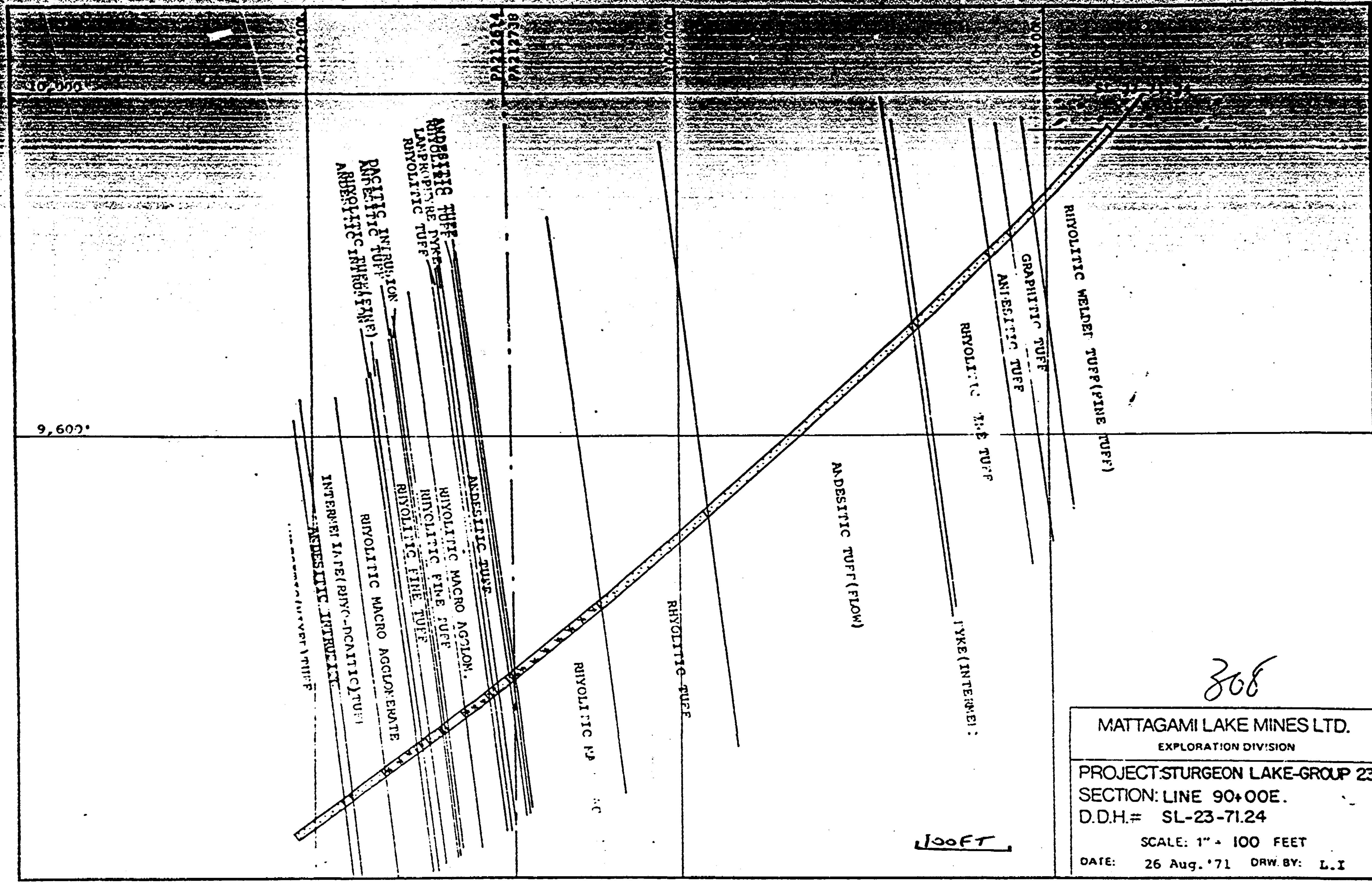
TO FOLLOW

FOOTAGE From	FOOTAGE To	DESCRIPTION	Mineralization	SAMPLE NO.	FOOTAGE From	FOOTAGE To	FOOTAGE Length	ASSAYS Au	Ag	Zn	Cu	
		RHYOLITIC MACRO-AGGLOMERATE Cont'd										
		Occasional patches and stringer of pyrite up to 3%.		LOST CORE	1165.0	1168.0	3.0					
			lpy	21475	1168.0	1173.0	5.0	Nil	Nil	Nil	Nil	tr
			lpy	21476	1173.0	1174.0	1.0	Nil	Nil	Nil	Nil	tr
				LOST CORE	1174.0	1177.0	3.0					
			lpy	21477	1177.0	1182.0	5.0	Nil	Nil	Nil	Nil	tr
1182.0	1229.0	INTERMEDIATE (RHYO-DACITIC) TUFF Medium grey (shaded from medium to dark grey), fine grained bedded @ 30° to core axis; partly agglomeratic tightly packed, particulary @ lower contact; occasionally dacitic intrusions 1ft. wide accompanied by 2" wide qtz-veins.		LOST CORE	1200.0	1202.0	2.0					
				" "	1202.5	1203.0	0.5					
				" "	1209.0	1210.0	1.0					
				" "	1227.0	1228.0	1.0					
1229.0	1260.0	ANDESITIC INTRUSION Medium to dark grey-green, generally medium grained, finer grained at the contacts; occasional qtz-veining 2-3" wide, upper contact obscured, lower @ 50° to core axis.										
1260.0	1304.0	ANDESITIC (MIXED) TUFF Generally medium grey, fine grained to aphanitic matrix with 1-3mm felsic amygdals, slightly bedded @60° to core axis; occasional narrow sections with tightly packed felsic lapilli (10mm), partly silisified and altered particulary at the upper contact; occasional loose lapilli (4-10mm) 1243.0-1246.0: LOST CORE 1252.0-1258.0: " " 1265.0-1273.0: " " 1278.0-1281.0: " " 1292.0-1293.0: " " 1302.0-1304.0: " "										
1304.0		E N D O F H O L E.										



10,000'
9,600'
PA212674
PA212738
ANDESITIC TUFF
RHYOLITIC TUFF
LAMPROPHYRE DYKE
DACITIC INTRUSION
ANDESITIC TUFF
RHYOLITIC TUFF(FINE)
ANDESITIC INTRUSION
RHYOLITIC WELDED TUFF(FINE TUFF)
GRAPHITIC TUFF
ANDESITIC TUFF
ANDESITIC TUFF
RHYOLITIC MACRO AGGLON.
RHYOLITIC FINE TUFF
RHYOLITIC FINE TUFF
RHYOLITIC MACRO AGGLOMERATE
ANDESITIC INTRUSIVE
ANDESITIC TUFF(FLOW)
RHYOLITIC TUFF
308
100FT
MATTAGAMI LAKE MINES LTD.
EXPLORATION DIVISION
PROJECT:STURGEON LAKE-GROUP 23
SECTION: LINE 90+00E.
D.D.H.= SL-23-71.24
SCALE: 1" = 100 FEET
DATE: 26 Aug. '71
DRW. BY: L.I

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

PROPERTY	STURGEON LAKE GROUP "23"	LATITUDE	105 + 50 NORTH	STARTED	March 27, 1971	DIP TEST Footage	Corrected	Footage	Corrected	Footage	Corrected
HOLE NO.	SL-23-71-36	DEPARTURE	102 + 00 EAST	FINISHED	March 31, 1971	100	88° 00	400	80° 00		
BEARING		ELEVATION	SURFACE	LENGTH	623 Feet	200	87° 00	500	80° 00		
DIP-COLLAR	-90°	SECTION	2 + 00 EAST	LOGGED BY	A. TAMMAM	300	83° 00	600	78° 00		

FOOTAGE From	FOOTAGE To	DESCRIPTION	% Mineralization	SAMPLE NO.	FOOTAGE From	FOOTAGE To	Length	ASSAYS Au	Ag	Zn	Cu	Pb	
0.0	60.0	C A S I N G											
		BOULDERS, GRAVEL, SAND											
60.0	348.0	ANDESITIC TUFF Medium grey-green, aphanitic, occasionally fine grained; numerous quartz-veinings, strongly sheared, occasional felsic, loose agglomerates (5-15mm) shearing and schistosity angles as follows: @ 87.0: @35°; @ 111.0: 40°; @ 130.0: 35°; @ 157.0: 35°; " 179.0: 30°; " 202.0: 25°; " 232.0: 30°; " 253.0: 35°; " 263.0: 45°; " 322.0: 45°; " 335.0: 50°; " 345.0: 55° 100.0-101.5: DYKE (LAMPROPHYRE) Fine grained.; heavily rusted and vuggy.											
348.0	363.5	DYKE (LAMPROPHYRE) Dark grey-greenish; from very fine to medium grained, upper contact obscured, lower contact regular and sharp @ 65° to core axis; sheared @ 357.0: 55°; @ 261.0: 45°; occasionally rounded and lensoid felsic individuals 1-2mm in size, associated with fine blue "quartz-eyes".	NIL NIL	21975 21976	353.0 358.0	358.0 363.0	5.0 5.0	Nil Nil	Nil Nil	Nil Nil	Nil Nil	Nil Nil	
363.5	453.0	RHYOLITIC MICRO-AGGLOMERATE											
		363.5-387.0: Light grey, heavily siliceous, dense, welded agglomerates (10-15mm); occasional macro-agglomerates slightly lensoid (2" in size) numerous lensoid blebs (10-mm) of very fine sphalerite associated with pyrite(galena?), average shearing @ 35° to core axis; 10% sphalerite, 2% pyrite(ga.-cpy?)	<1 LOST CORE 2py.10sph 2" .10"t.cpy 2" .10" " " 1" .5" 2" .5"1cpy	21977 21978 21979 21980 21981 21982	363.0 366.5 367.0 372.0 377.0 379.0 382.5	366.5 367.0 372.0 377.0 379.0 382.5 387.5	3.5 0.5 5.0 5.0 2.0 3.5 5.0	Nil Tr. Tr. Nil Nil Nil	.12 LOST .06 12 .64 Nil .06	.2 CORE .5 5.3 8.4 .3 .2	.07 .07 .13 .33 Nil .22	Tr. Tr. .08 .35 Tr. Nil	
		387.0-408.5: Average agglomerates size less than above (7mm) more chloritized and distinctive rounded blue qtz-eyes (2mm) up to 5%; occasional buff patches (4-3mm) with very fine pyrite associated sulphides up to 10% mainly pyrite, trace sphalerite and chalcopyrite.	10"po,tr"=" 10" " <1cpy 10" " <1" 10" "30mag 50" "30sph10cpy 10"3sph,tr."	21983 21984 21985 21986 21987 21988	387.5 392.5 397.5 401.0 402.0 404.5	392.5 397.5 401.0 402.0 404.5 408.5	5.0 5.0 3.5 1.0 2.5 4.0	Tr. Nil Nil .008 .009 Tr.	.36 .12 .17 .29 1.19 .06	.2 .3 .1 .4 8.4 2.3	.54 .25 .46 .75 3.26 .14	.03 Tr. .02 .04 .06 Tr.	
		401.0-402.0: Strongly brecciated with magnetite up to 30%; slightly carbonatic.											
		402.0-404.5: Massive up to 90%: 50py po.30%sph. 10%cpy, slightly magnetic, baraly conductive; occasionally vuggy patches 1" wide; occasionally shearing @40°.											

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

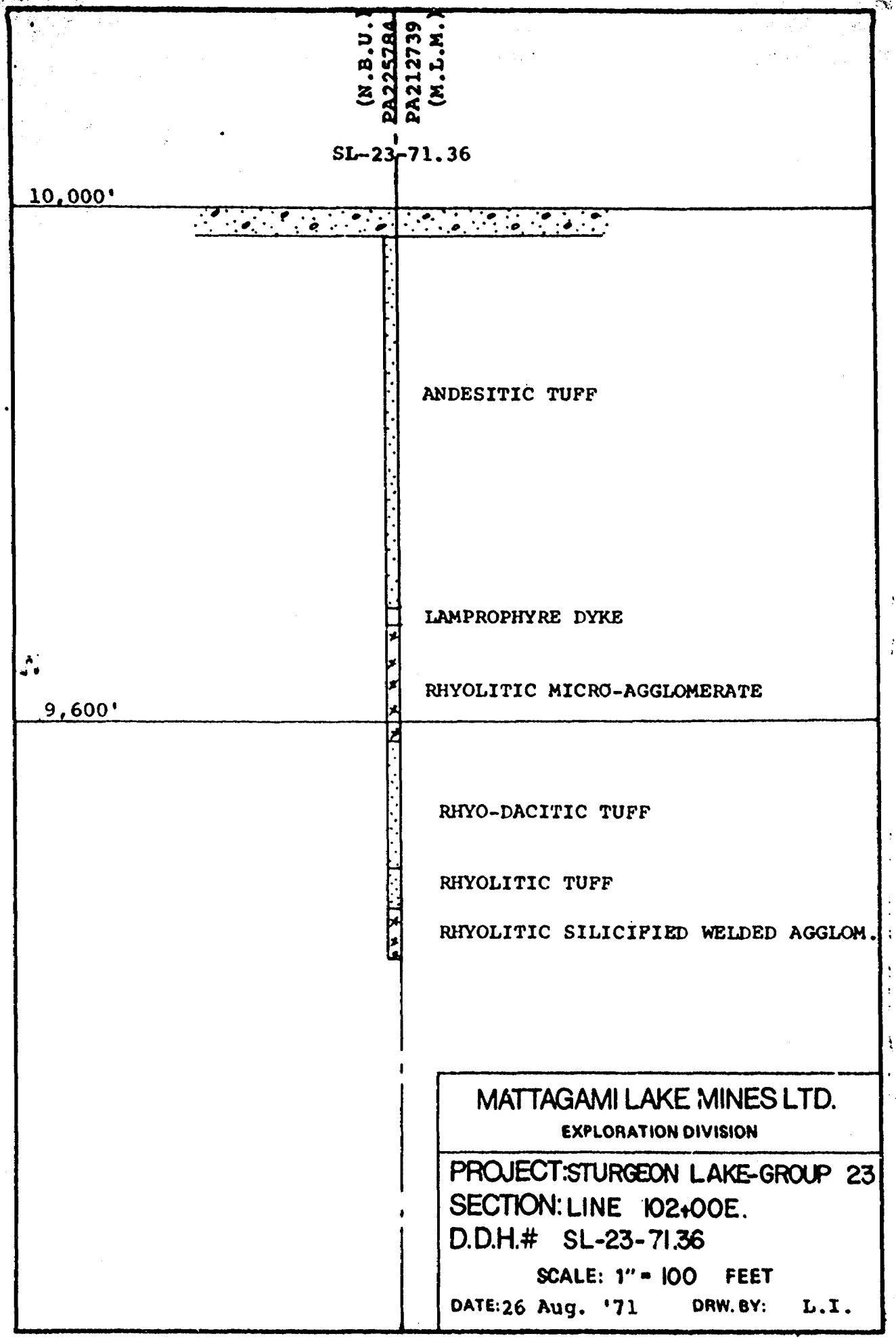
PROPERTY STURGEON LAKE GROUP "23" HOLE NO. SL-23-71-36 Page 2/3

FOOTAGE From	FOOTAGE To	DESCRIPTION	% Mineralization	SAMPLE NO.	FOOTAGE From	FOOTAGE To	FOOTAGE Length	ASSAYS Au	Ag	Zn	Cu	Pb
		RHYOLITIC MICRO - AGGLOMERATE Continued.										
		408.5-413.5: White, massive quartz vein, upper and lower contacts sharp @ 15° to core axis, texture slightly saccharoid; impurities from abscent to rare.	NIL?	21989	408.5	413.5	5.0	Nil	Nil	Nil	Nil	Nil
		413.5-439.5: Siliceous agglomerates (mixed white-greyish) from 4-15mm (mixed coarse tuff?), occasional agglomerates over 15mm in size with visible brecciation; rounded blue "quartz-eyes" as 387.0-403.5; matrix heavily chloritic; dissemination, patches, bleb of py.po, occasional streaks of cpy, traces of sph; generally sulphides <10% mainly py-po with traces of sph and cpy. @ 433.0 sheared @ 40° to core axis.	10py.1sph.t.cpy	21990	413.5	417.5	4.0	Nil	Nil	.6	.08	Nil
		417.5-420.0: Massive up to 85% mainly py-po, 3% cpy, abundant magnetite, vuggy and slightly brittle.	85py.po,3cpy	21991	417.5	420.0	2.5	.010	.69	.5	2.24	Nil
			2py	21992	420.0	425.5	5.5	Nil	.06	.2	.20	Nil
			2 tr.sph	21993	425.5	430.5	5.0	Nil	Nil	.1	.08	Nil
		430.5-432.0: Massive up to 85%, 55% reddish-brown fine grained sphalerite; 20% py 10% galena; 2% cpy, apparent shearing @ 40°	20py55sph10ga2cpy	21994	430.5	432.0	1.5	.0[illegible]	2.72	9.4	1.49	1.72
			3py	21995	432.0	437.0	5.0	Nil	.06	.2[illegible]	.12	.03
			LOST CORE		437.0	437.8	0.8					
			NIL	21996	437.8	443.0	5.2	Nil	Nil	.3	.05	.06
			NIL	21997	443.0	448.0	5.0	Nil	Nil	Nil	Nil	Nil
			NIL	21998	448.0	453.0	5.0	Nil	Nil	Nil	Nil	Nil
		439.5-453.0: Felsic agglomerates as described above, less sheared than above section; pyrite as traces or barren.										
453.0	552.0	RHYO-DACITIC TUFF Medium grey-green, fine grained to very fine grained, abscense slight schistosity: @ 460.0 @ 35° to core axis.										
		477.0-478.5: DYKE (LAMPROPHYRE?) Homogeneous texture, fine grained, contacts obscured.										
		495.0-497.0: D Y K E As above, upper contact obscured, lower @50° to core axis, host rock silicified and bleached at the contacts.										
		530.0-533.5: D Y K E Dark grey-green, very fine grained (as above), homogeneous texture, upper contact @25°, lower 15° to core axis, both sharp and regular.										

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

PROPERTY STURGEON LAKE GROUP "23" HOLE NO. SL-23-71-36 Page 3/3

FOOTAGE From	FOOTAGE To	DESCRIPTION	% Mineralization	SAMPLE NO.	FOOTAGE From	FOOTAGE To	FOOTAGE Length	ASSAYS Au	ASSAYS Ag	ASSAYS Zn	ASSAYS Cu	ASSAYS Pb
552.0	583.0	RHYOLITIC TUFF Medium grey-green, fine grained matrix, numerous rounded porphyroblasts (1-3mm) of blue quartz up to 25%, occasionally felsic lapilli (4mm); generally heavily siliceous; occasional interbands of greenish-black aphanitic matrix with felsic amygdoles (1-2mm) and rounded blue quartz eyes (as above), intruded with the following dykes. 559.5-560.3: D Y K E Dark grey-greenish, very fine grained homogeneous texture, contacts obscured. 576.0-579.0: D Y K E As above. 583.0-585.5: D Y K E " "										
583.0	623.0	RHYOLITIC SILICIFIED WELDED AGGLOMERATE Dense, cherty like, silicified 99%; creamy-white in colour, numerous rounded bluish-greenish quartz eyes (1-3mm) with occasional concentration up to 20%; sugary texture in part; slightly sericitic.	NIL NIL	21999 22000	613.0 618.0	618.0 623.0	5.0 5.0	Nil Nil	Nil Nil	Nil Nil	Nil Nil	Nil Nil
		601.0-603.0: DYKE Medium grey-greenish, medium grained, sheared at 50° to 30° to core axis, gradational contacts.										
	623.0	E N D O F H O L E.										


(N.B.U.) PA225784
PA212739 (M.L.M.)
SL-23-71.36
10,000'
ANDESITIC TUFF
LAMPROPHYRE DYKE
RHYOLITIC MICRO-AGGLOMERATE
9,600'
RHYO-DACITIC TUFF
RHYOLITIC TUFF
RHYOLITIC SILICIFIED WELDED AGGLOM.
MATTAGAMI LAKE MINES LTD.
EXPLORATION DIVISION
PROJECT: STURGEON LAKE-GROUP 23
SECTION: LINE 102+00E.
D.D.H.# SL-23-71.36
SCALE: 1" = 100 FEET
DATE: 26 Aug. '71
DRW. BY: L.I.

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

				DIP TEST					
PROPERTY STURGEON LAKE - GROUP "23"	LATITUDE 105 + 54 NORTH	STARTED April 1, 1971	Footage	Corrected	Footage	Corrected	Footage	Corrected
HOLE NO. SL-23-71-38	DEPARTURE 103 + 00 EAST	FINISHED April 8, 1971	100	87°00	400	84°00	700	80°00
BEARING	ELEVATION SURFACE	LENGTH 924.0'	200	86°00	500	83°00	800	80°00
DIP-COLLAR -90°	SECTION 3 + 00 EAST	LOGGED BY A. TAMMAM, A. ALI	300	85°00	600	80°00	900	80°00

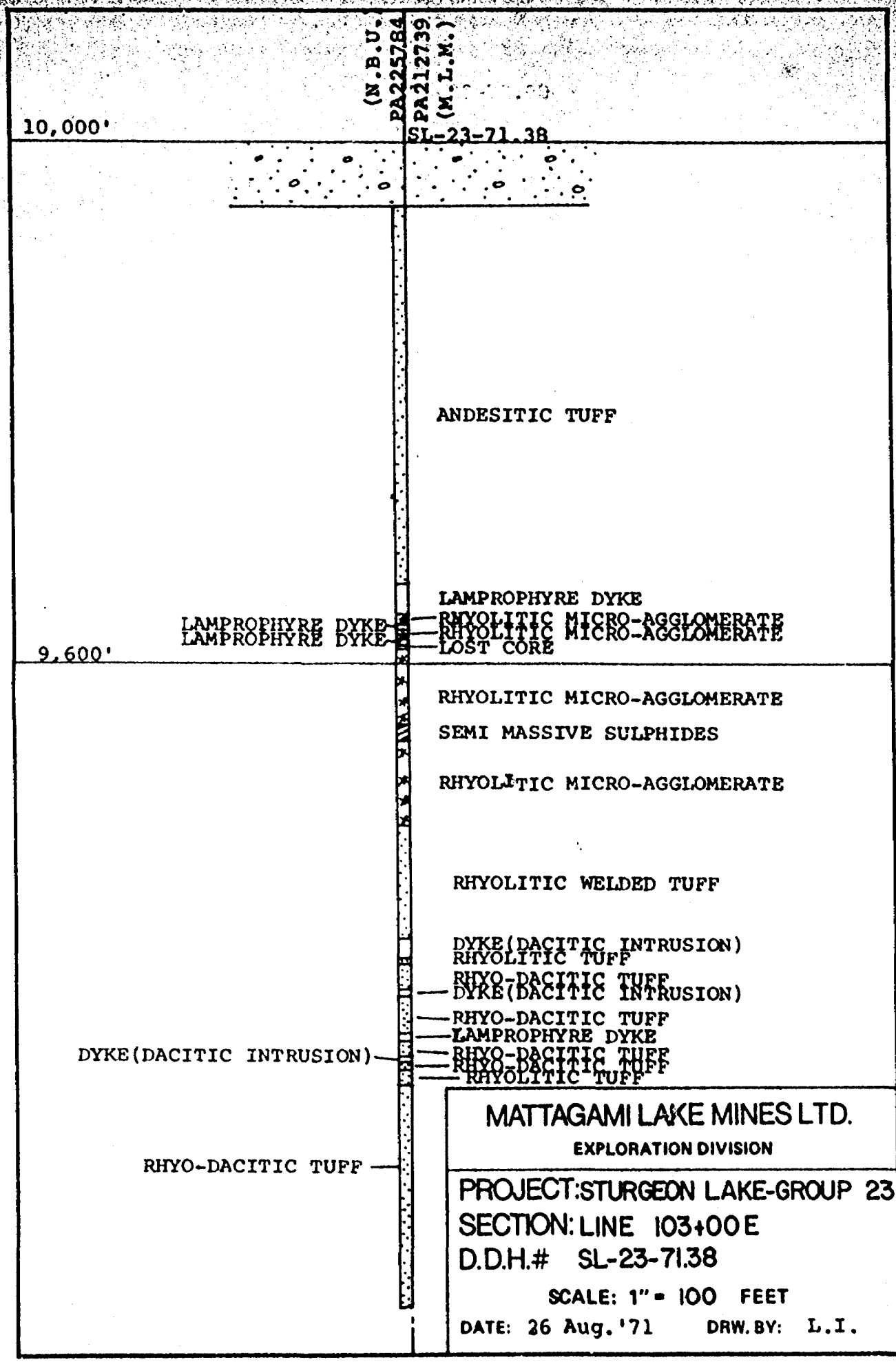
FOOTAGE From	FOOTAGE To	DESCRIPTION	% Mineralization	SAMPLE NO.	FOOTAGE From	FOOTAGE To	Length	ASSAYS Au	Ag	Zn	Cu	Pb
0.0	84.0	C A S I N G BOULDERS, GRAVEL, SAND										
84.0	373.4	ANDESITIC TUFF Medium grey-greenish, from very fine grained to fine grained, numerous quartz veinlets and veins along the schistosity, occasional quartz bands 0.5-1.0 ft. wide, generally strongly sheared with an angle ranging from 35° to 45° to core axis, occasionally loose, felsic agglomeratic intersection. 96.0-101.0: D Y K E Fine grained, upper contact obscured, lower sharp @ 45° to core axis. 134.5-135.0: D Y K E Fine grained, upper contact obscured, lower sharp @ 45°. 177.0-179.5: D Y K E Fine grained, upper contact obscured, lower @ 50°. 262.0-263.0: White quartz-vein (with prismatic tormaline?)										
373.4	397.5	DYKE (LAMPROPHYRE) Medium to dark grey-green, from very fine grained to medium grained, generally sheared @35° to (occasionally @ 40°); from 378.5-388.0 very less sheared with very fine rounded felsic individuals (50%, amygdoles?) in a dark grey, aphanitic texture and occasionally cubic individuals of pyrite (1-2mm); generally traces of pyrite as cubic specks or fine lensoid blebs, contacts not sharp (marked by shearing zone 4" wide).	tr.py 3py,tr.cp?	25845 25846	391.0 396.0	396.0 397.5	5.0 1.5	Nil Nil	Nil Nil	Nil Nil	Nil .03	Nil Nil
397.5	406.8	RHYOLITIC MICRO-AGGLOMERATE Medium grey, quartz agglomerates (5-10mm) from moderately packed at the tops with an "intermediate" matrix, to tightly packed at the bottom, slightly sheared @35° to core axis at the contact with the dyke, rounded blue "quartz-eyes" (1mm) 3%; pyrite <1%-1%. 401.5-403.0: LAMPROPHYRE DYKE Medium grey-green, fine grained, sheared at the contact @35°; upper contact obscured, lower @ 35°	<1py tr.py <1py	25847 25848 25849	397.0 401.5 403.0	401.5 403.0 406.8	4.5 1.5 3.8	Nil Nil Nil	Nil Nil Nil	Nil Nil Nil	Tr. Nil Nil	Nil Nil Nil

FOOTAGE From	FOOTAGE To	DESCRIPTION	% Mineralization	SAMPLE NO.	FOOTAGE From	FOOTAGE To	FOOTAGE Length	ASSAYS Au	Ag	Zn	Cu	Pb
406.8	410.5	LAMPROPHYRE DYKE [redacted] grey-green, medium to fine grained, higher in mafic content (amphiboles?) and coarser than 373.4-397.5, upper contact obscured, lower sharp and regular @ 43° to core axis, fine py specks as traces.	tr.py	25850	406.8	410.5	3.7	Nil	Nil	Nil	Nil	Nil
410.5	417.5	RHYOLITIC MICRO-AGGLOMERATE Medium grey, from lightly packed (at the top) to welded (at the bottom), agglomerates (5-10mm, occasionally 15-20mm) with sericitic interstices, sheared @35° to core axis, trace pyrite	tr.py tr.py	25851 25852	410 5 415.5	415.5 417 5	5.0 2 0	Nil Nil	Nil Nil	Nil Nil	Nil Nil	Nil Nil
417.5	421.0	LAMPROPHYRE DYKE Medium grey-green, medium to fine grained, coarser mafic xtl's (amphiboles?), slightly sheared at the bottom @ 30° to core axis upper contact @45°, lower obscured	tr.py	25853	417.5	421.0	3.5	Nil	Nil	Nil	Nil	Nil
421.0	422.0	L O S T C O R E	LOST CORE		421.0	422.0	1.0		LOST	CORE		
422.0	483.5	Rhyolitic Micro-Agglomerate 422.0-440.0 Felsic lapilae 8-15mm occasionally 35mm in size moderate to light packing occasionally welded, light to moderate chloritization occasionally heavily chloritized bands. Heavy chloritized bands associated with py and cpy mineralization. Generally disseminated py with doubtful traces of cpy. Sulphides 2-5%.	2py 5py,po,tcp 3py,tr.pp 3py	25854 25855 25856 25857	422.0 426.5 431.5 436.0	426.5 431.5 436.0 440.0	4.5 5.0 4.5 5.0	Nil Nil Nil Nil	Nil Nil Nil Nil	Nil .2 .2 Tr.	.05 .12 Tr. .04	Nil Nil Nil Nil
		440.0-453.5 SULPHIDE ZONE 4-8mm occasionally 7-10mm in size felsic lapilae moderately packed, increase in chloritization than above section. Numerous rounded blue "quartz-eyes" Occasionally semi-massive to massive bands of sulphides are associated with heavy chloritized sections 447.0-448.5 (1.5') 90% massive sulphides 65py.po, 20sph, 5cpy, tr.galena.	10py,po,t,cp 10"pot.cp.tsp 30py,po,2cp 65" "20sp.5cp 5py,po,tr.cp 35" "5sp,5cp 25" "t" t.cp	25858 25859 25860 25861 25862 25863 25864	440.0 442.5 446.0 447.0 448.5 450.5 452.0	442.5 446.0 447.0 448.5 450.5 452.0 453.5	2.5 3.5 1.0 1.5 2.0 1.5 1.5	Tr. Tr. .006 .008 Nil Nil Nil	.23 .06 83 .76 .1 .64 2	.1 Nil .5 .4 .1 7 2.80	.77 .14 3.92 3.00 .12 66	[redacted]Tr. Nil .02 .06 Nil .02 Tr.
		SULPHIDES 440.0-453.5 25-30% semi-massive.										
		453.5-483.5 Interbanded sections of fine grained matrix with fine blue quart-eyes with agglomeratic sections. decrease in chloritization.	1py 20py,po,tr.cp LOST CORE 1ph.po <1py <1py <1py NIL 2py	25865 25866 25867 25868 25869 25870 25871 25872	453.5 458.5 461.5 462.0 467.0 472.0 477.0 479.5 481.5	458.5 461.5 462.0 467.0 472.0 477.0 479.5 481.5 483.5	5.0 3.0 0.5 5.0 5.0 5.0 2.5 2.0 2.0	Nil Nil Nil Nil Nil Nil Nil Nil	Nil Nil LOST CORE Nil Nil Nil Nil Nil Tr.	Nil Nil Nil Nil Nil Nil Nil Nil	02 .10 03 Nil Nil Nil Nil .05	Nil Nil Nil Nil Nil Nil Nil Nil
483.5	495.0	SEMI MASSIVE SULPHIDES Average 30% sulphides in Rhyolitic micro agglomerate as described above. Semi massive sulphides are associated with heavily chloritized sections and bands decrease in sulphides in siliceous or less chloritized sections.	25py,5cp tr.sp 40py.po5" .5sp 10" "t "25sp2py 25" "2 "15"	25873 25874 25875 25876	483.5 486.5 491.5 493.5	486.5 491.5 493.5 495.0	3.0 5.0 2.0 1.5	.005 .006 Tr. Tr.	.41 .47 .06 .35	.3 .7 6.4 .4	1.25 1.44 .28 .74	.08 .07 .02 .11

FOOTAGE From	FOOTAGE To	DESCRIPTION	% Mineralization	SAMPLE NO.	FOOTAGE From	FOOTAGE To	Length	ASSAYS Au	Ag	Zn	Cu	Pb
495.0	558.8	RHYOLITIC MICRO AGGLOMERATE										
		495.0-512.0 Same as described earlier, chloritized increase in blue quartz-eyes, decrease in sulphides.	3py,po,t cp,tsp, tr py	25877	495.0	499.0	5.0	Nil	Nil	Nil	.07	Nil
				25878	499.0	502.0	3.0	Nil	Nil	Nil	.08	Nil
		SULPHIDES 1-3% mainly py, po with trace cpy & sp	2py,po, lcp	25879	502.0	507.0	5.0	Nil	Nil	2	32	Nil
			1py,po,tcp,lsp?	25880	507.0	512.0	5.0	Nil	Nil	1.1	.06	Nil
		512.0-536.0 Lighter in colour than above section, decrease in chlorite contents. no sulphides.	Nil	25881	512.0	517.0	5.0	Nil	Nil	Tr	Nil	Nil
		536.0-558.8 Same as described from 495.0-512.0. No sulphides.										
558.8	645.0	RHYOLITIC WELDED TUFF (AGGLOMERATE)										
		Cream to white, highly siliceous approximately 95%, dense compact 1-3mm quartz phenos generally ovoid occasionally angular to cubes porphyritic occasionally 3-7mm white agglomerates, welded, occasionally creamy cherty bands Top contact sharp @50° to Rhyolitic Micro Agglomerate section lower contact with dacitic intrusion @20° to core axis.										
		565.5-566.3 LAMPROPHYRE DYKE upper and lower contacts irregular @ 45° to core axis.										
		589.0-590.0 LAMP.DYKE upper & lower contact @60° to core axis										
		598.0-599.5 LAMP.DYKE upper & lower contact sharp @60° core axis										
		601.5-605.0 AGGL tic SECTION cream coloured siliceous 5-10mm welded siliceous agglomerates.										
		610.0-614.0 MODERATELY CHLORITIZED SECTION										
645.0	660.0	DYKE? (DACITIC INTRUSION)										
		Medium grey, fine grained, massive, compact quartz-vein edges @ 646.0-646.5, and 647.0-647.5 upper contact @20° to core axis (contact 6" wide in core from 644.5-645.0) lower contact @20° to core axis (3" wide)										
660.0	665.5	RHYOLITIC TUFF (MICRO AGGLOMERATE)										
		Light to medium grey, fine to medium grained blue quartz-eyes, cream coloured dense cherty 1-2" bands or agglomerates, occasionally scattered fragments.										
665.5	685.7	RHYO DACITIC TUFF										
		Medium grey, fine grained, siliceous with mafic? contents, numerous blue quartz-eyes, biotite? hornblende or chloritic fine flakes and specks.										
685.7	689.5	DYKE? (DACITIC INTRUSION)										
		Medium grey, fine grained, massive upper contact sharp @45° to core axis, lower @30° to core axis.										
689.5	718.0	RHYO DACITIC TUFF										
		Same as described from 665.5-685.7.										

M.I.M. EXPLORATION DIVISION, D.D.H. RECORD — PROPERTY STURGEON LAKE GROUP "23" — HOLE NO. SL-23-71-38 — Page 4/4

FOOTAGE From	FOOTAGE To	DESCRIPTION	% Mineralization	SAMPLE NO.	FOOTAGE From	FOOTAGE To	FOOTAGE Length	ASSAYS
718.0	724.0	LAMPROPHYRE DYKE Medium grey with occasional brownish tinge altered and bleached biotite flakes, phenos, upper and lower contacts @30° to core axis.						
724.0	735.0	RHYO DACITIC TUFF Same as described earlier, blue quartz-eyes in abundance. 728.5-730.0 LAMPROPHYRE DYKE Upper contact obscured lower @20° to core axis.						
735.0	739.0	DYKE (DACITIC INTRUSION) Upper and lower contacts @ 45° to core axis.						
739.0	746.0	RHYO DACITIC TUFF Same as described earlier.						
746.0	757.0	RHYOLITIC TUFF Different from top and bottom sections in colour and silica contents possibly continuation of same section light grey, siliceous, blue quartz-eyes in abundance hard comparatively from above section. Occasional white oval quartz 3-5mm in size phenos? or fragments?						
757.0	924.0	RHYO DACITIC TUFF Same as described earlier, occasional bands of quartz 2-5mm wide occasionally scattered very minor pyrite and po abundance of blue quartz-eyes from 1-3mm in size generally oval and round but occasionally angular and rare cubic quartz eyes are also present.						
	924.0	END OF HOLE.						


(N.B.U. PA225784 PA212739 (M.L.M.)
SL-23-71.38
10,000'
ANDESITIC TUFF
LAMPROPHYRE DYKE
RHYOLITIC MICRO-AGGLOMERATE
LAMPROPHYRE DYKE
RHYOLITIC MICRO-AGGLOMERATE
LAMPROPHYRE DYKE
LOST CORE
9,600'
RHYOLITIC MICRO-AGGLOMERATE
SEMI MASSIVE SULPHIDES
RHYOLITIC MICRO-AGGLOMERATE
RHYOLITIC WELDED TUFF
DYKE(DACITIC INTRUSION)
RHYOLITIC TUFF
RHYO-DACITIC TUFF
DYKE(DACITIC INTRUSION)
RHYO-DACITIC TUFF
LAMPROPHYRE DYKE
DYKE(DACITIC INTRUSION)
RHYO-DACITIC TUFF
RHYO-DACITIC TUFF
RHYOLITIC TUFF
RHYO-DACITIC TUFF
MATTAGAMI LAKE MINES LTD.
EXPLORATION DIVISION
PROJECT: STURGEON LAKE-GROUP 23
SECTION: LINE 103+00 E
D.D.H.# SL-23-71.38
SCALE: 1" = 100 FEET
DATE: 26 Aug. '71
DRW. BY: L.I.

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

				DIP TEST					
PROPERTY STURGEON LAKE - GROUP "23"	LATITUDE 105 + 66 NORTH	STARTED April 10 1971	Footage	Corrected	Footage	Corrected	Footage	Corrected
HOLE NO. SL-23-71-42	DEPARTURE 104 + 00 EAST	FINISHED April 14, 1971	100	88° 00	400	84° 00		
BEARING	ELEVATION SURFACE	LENGTH 704.0	200	86° 00	500	84° 00		
DIP-COLLAR -90°	SECTION 4 + 00 EAST	LOGGED BY A. ALI	300	85° 00	600	82° 00		

FOOTAGE From	FOOTAGE To	DESCRIPTION	% Mineralization	SAMPLE NO.	FOOTAGE From	FOOTAGE To	Length	ASSAYS Au	Ag	Zn	Cu	Pb
0.0	64.0	CASING SAND, GRAVEL AND BOULDERS										
64.0	371.0	ANDESITIC TUFF Green, greenish grey, very fine to fine grained, numerous quartz-calcite stringers, veinlets and occasional bands, occasional quartz-talc white 3-5mm round amygdules, occasionally dark grey siliceous sections, schistosed, occasionally 6"- 2' zones of quartz-veining										
		160.5-162.0 LAMPROPHYRE DYKE Medium green, upper and lower contacts obscured altered vuggy and bleached near upper contact.										
		264.0-265.0 LAMPROPHYRE DYKE Contacts obscured.										
371.0	390.0	RHYOLITIC MICRO AGGLOMERATE Light grey siliceous to occasional mafic matrix, white siliceous fragments and bands 10-20mm in size, elongated to lenticoid, sheared, shearing @35°-45° to core axis, fragments, shards and quartz bands appears oriented parallel to shearing.										
		386.5-390.0 Medium grey green, increase in mafic contents.										
390.0	431.0	LAMPROPHYRE DYKE Medium grey green with occasional brownish tinge, fine to medium grained speckled, upper and lower contacts @35° to core axis occasionally 6" to 1' sections of andesitic and rhyolitic agglomerates, quartz bands generally 2-5mm wide occasional 1-2"	tr.py	21852	426.0	431.0	5.0	Nil	Nil	Nil	Nil	Nil
431.0	436.0	RHYOLITIC MICRO AGGLOMERATE Greenish grey, siliceous, 3-10mm siliceous fragments, tightly packed.	<1py,po,tcp	21853	431.0	436.0	5.0	Nil	Nil	Nil	Nil	Nil
436.0	442.0	LAMPROPHYRE DYKE Same as described @ 390.0-431.0 contacts obscured.	tr.py	21854	436.0	442.0	6.0	Nil	Nil	Nil	Nil	Nil
442.0	499.0	RHYOLITIC MICRO AGGLOMERATE LOW SULPHIDE ZONE Light to medium grey with greenish tinge, hard, siliceous, 3-10 mm siliceous fragments, occasional 10-20mm, blue quartz-eyes, occasionally lightly chloritized, chlorite stringers and threads occasional garnets, occasionally yellowish carbonate altered py, po and cpy stringers occasional bands.	2py,po	21855	442.0	443.6	1.6	Nil	Nil	Nil	Nil	Nil
			<1py,po,t,cp	21856	443.6	448.6	5.0	Nil	Nil	Nil	Nil	Nil

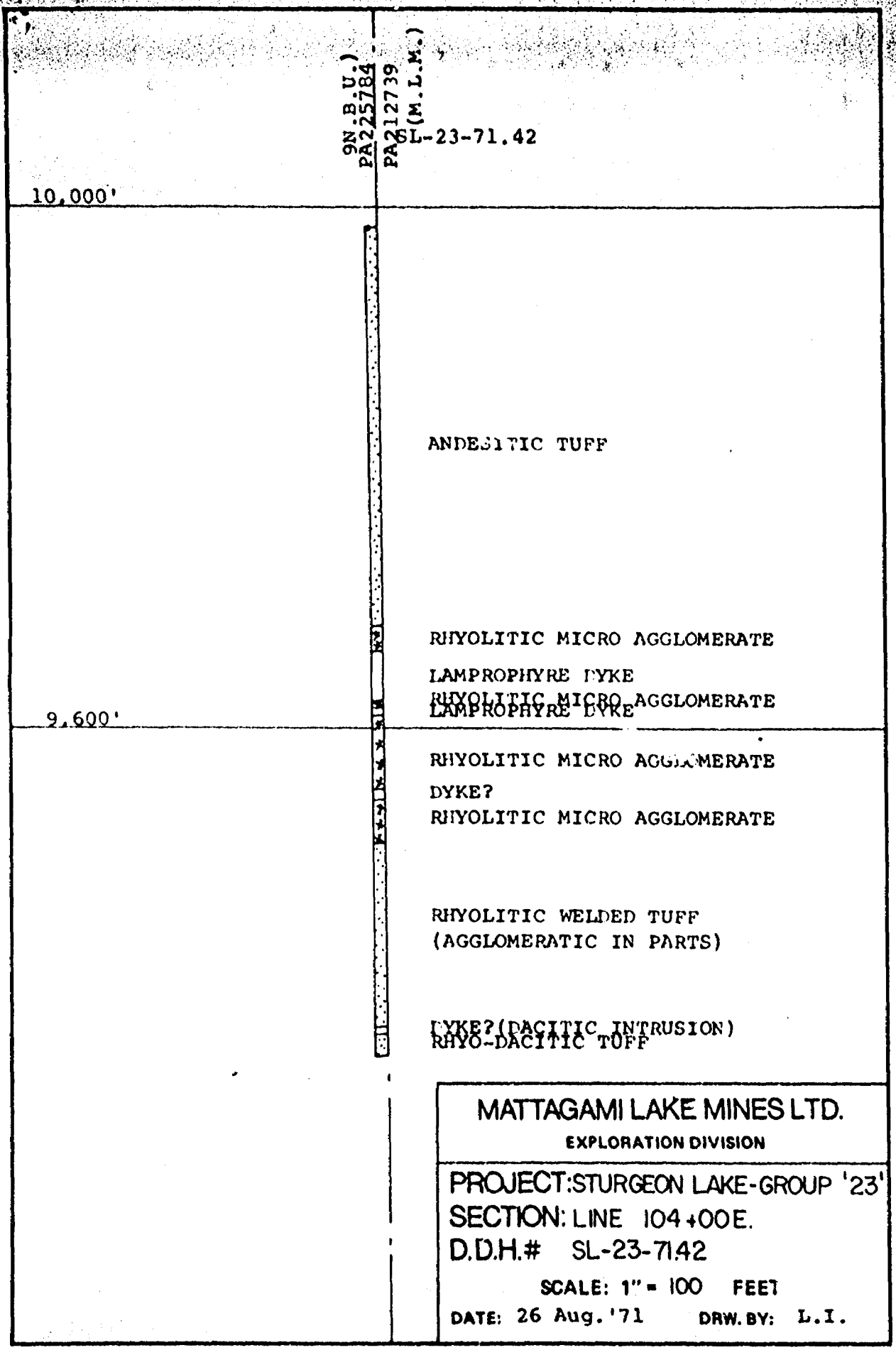
M.L.M. EXPLORATION DIVISION, D.D.H. RECORD — PROPERTY STURGEON LAKE GROUP "23" — HOLE NO SL-23-71-42 — Page 2/3

FOOTAGE From	FOOTAGE To	DESCRIPTION	Mineralization	SAMPLE NO.	FOOTAGE From	FOOTAGE To	FOOTAGE Length	ASSAYS Au	Ag	Zn	Cu	Pb
		RHYOLITIC MICRO AGGLOMERATE CONTINUED.										
		448.6-463.2 LOW LOW COPPER ZONE <1cpy in scattered blebs with pyrite and po	3py,1cp	21857	448.6	451.0	2.4	Nil	1.17	.1	2.46	Nil
			1py,pot,cp	21858	451.0	456.0	5.0	Nil	Nil	Nil	.02	Nil
			tr.py	21859	456.0	459.6	3.6	Nil	Nil	Nil	Tr.	Nil
		463.2-474.2 COPPER ZONE Approximately 6% py,po,<2% cpy	1py,<1cp	21860	459.6	463.2	3.6	Nil	.47	.5	2.52	Nil
			15py,po,5cp	21861	463.2	465.9	2.7	Nil	Nil	.2	.34	Nil
			5py,po,1cp	21862	465.9	469.0	3.1	Nil	.17	.1	.98	Nil
			3py,po,1cp	21863	469.0	471.3	2.3	Nil	Nil	.1	.14	Nil
			3py,po,1cp	21864	471.3	474.2	2.9	Nil	Nil	.2	.08	Nil
		474.2-493.0 Medium greyish green, moderate to heavily chloritized sections decrease in stringers of sulphide	1py,po	21865	474.2	477.0	2.8	Nil	Nil	1.1	.06	Nil
			1py,po	21866	477.0	478.5	1.5	Nil	Nil	Nil	Nil	Nil
		493.0-499.0 Light grey, siliceous, agglomeratic no sulphides	tr.py	21867	478.5	482.0	3.5	Nil	Nil	Tr.	Nil	Nil
			tr.py	21868	482.0	485.0	3.0	Nil	Nil	1.8	Nil	Nil
			2py,po,tr.sp?	21869	485.0	487.0	2.0	Nil	Nil	Nil	Nil	Nil
			NIL	21870	487.0	493.0	6.0	Nil	Nil	Nil	Nil	Nil
			NIL	21871	493.0	495.1	2.1	Nil	Nil	Nil	Nil	Nil
			1py,tr.cp?	21872	495.1	496.3	1.2	Nil	Nil	Nil	Nil	Nil
			NIL	21873	496.3	499.0	2.7	Nil	Nil	Nil	Nil	Nil
499.0	507.3	DYKE? Medium grey with pinkish tinge, fine grained, hard dark green to black biotite, hornblende flakes and phenos giving speckled appearance, matrix appears felsic upper and lower contacts obscured.										
507.3	540.0	RHYOLITIC MICRO AGGLOMERATE Same as described @ 442.0-463.2 511.0-516.0 Cream coloured, dense 98% siliceous, welded agglomerate.										
540.0	683.5	RHYOLITIC WELDED TUFF (AGGLOMERATIC IN PARTS) Cream, light grey, fine to medium grained, 95% siliceous, dense, compact, blue quartz-eyes, white quartz-phenos, porphyritic, occasional 3-7mm welded agglomerates. Blue quartz eyes and white quartz-phenos 1-3mm in size generally 2mm ovoid, angular and sub-rounded. No sulphides. Same as described in SL-23-71/38 @ 558.8-645.0, and SL-23-71/36 @583.0-623.0 559.0-568.0 Light grey with bluish tinge 590.0-629.0 Increase in agglomerates. 629.0-659.0 Light grey with bluish tinge, siliceous, numerous blue quartz-eyes. 659.0-683.5 Light grey, cream, dense, siliceous, welded 95% siliceous. 677.2-679.7 Dacitic Intrusion, grey fine grained massive upper contact obscured lower @ 90° to core axis.										
683.5	687.0	DYKE? (DACITIC INTRUSION) Grey, very fine grained, massive, upper and lower contacts obscured.										

N.T.S. EXPLORATION DIVISION, D.D.H. RECORD

PROPERTY STURGEON LAKE GROUP "23" HOLE NO SL-23-71-42 Page 3/ 3

FOOTAGE From	FOOTAGE To	DESCRIPTION	Mineralization	SAMPLE NO.	FOOTAGE From	FOOTAGE To	FOOTAGE Length	ASSAYS Au	Ag	Zn	Cu	Pb
687.0	704.0	RHYO-DACITIC TUFF										
		687.0-689.0 RHYOLITIC TUFF Light grey to cream, fine grained siliceous, same as described @ 629.0-659.0										
		689.0-704.0 RHYOLITIC TO RHYO-DACITIC TUFF Light to medium grey generally light grey with with bluish tinge, only difference with the section top is change in colour which is slightly darker than the preceeding section, very light chloritization, siliceous with blue quartz eyes. No sulphides.										
	704.0	END OF HOLE.										
		(BOUNDARY HOLE)										


9N.B.U.)
PA225784
PA212739
(M.L.M.)
SL-23-71.42
10,000'
ANDESITIC TUFF
RHYOLITIC MICRO AGGLOMERATE
LAMPROPHYRE DYKE
RHYOLITIC MICRO AGGLOMERATE
LAMPROPHYRE DYKE
9,600'
RHYOLITIC MICRO AGGLOMERATE
DYKE?
RHYOLITIC MICRO AGGLOMERATE
RHYOLITIC WELDED TUFF
(AGGLOMERATIC IN PARTS)
DYKE?(DACITIC INTRUSION)
RHYO-DACITIC TUFF
MATTAGAMI LAKE MINES LTD.
EXPLORATION DIVISION
PROJECT:STURGEON LAKE-GROUP '23'
SECTION: LINE 104+00E.
D.D.H.# SL-23-71.42
SCALE: 1" = 100 FEET
DATE: 26 Aug.'71
DRW. BY: L.I.

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

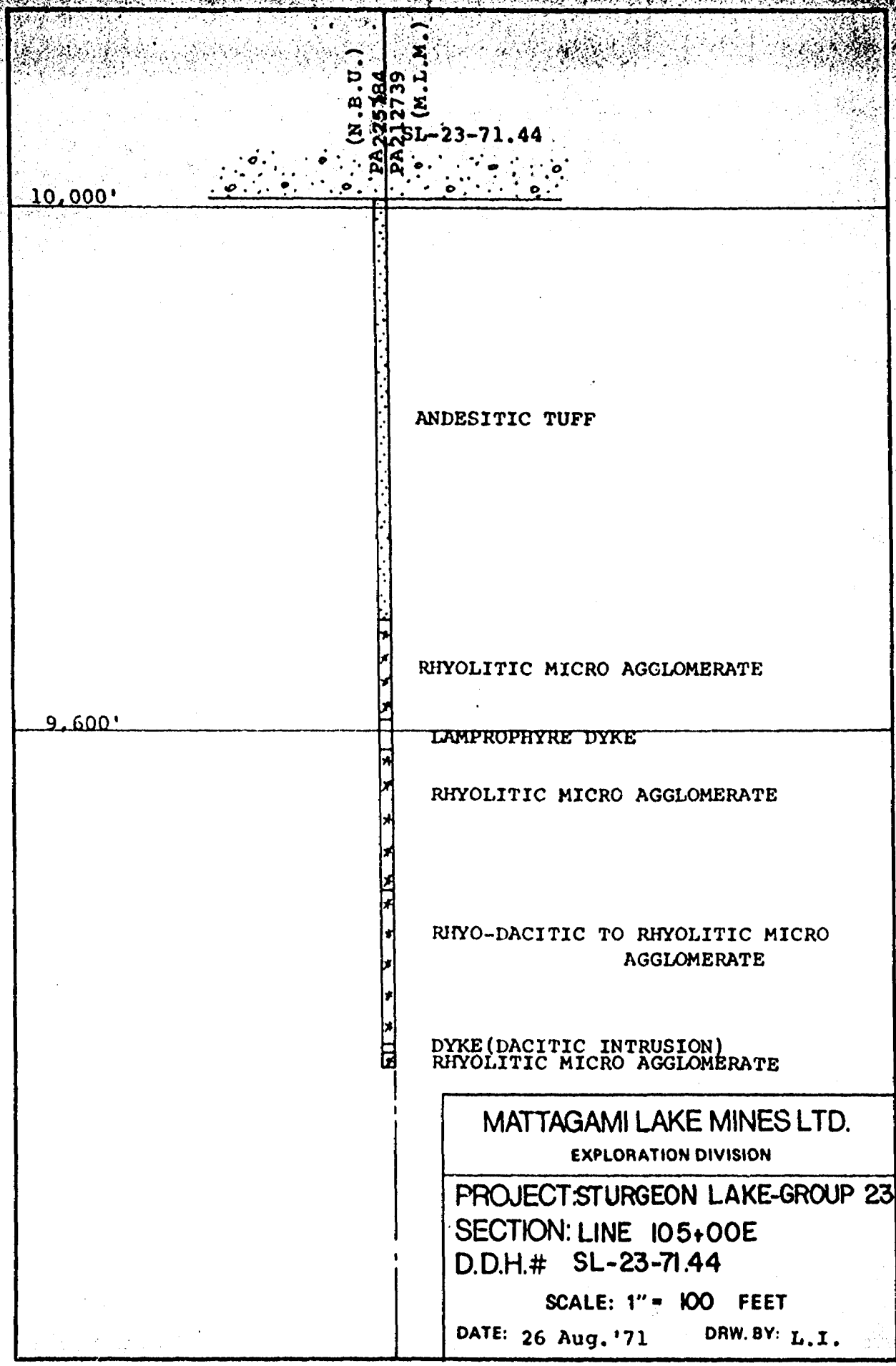
PROPERTY	STURGEON LAKE - GROUP "23"	LATITUDE	105 + 81 NORTH	STARTED	April 16, 1971	DIP TEST					
						Footage	Corrected	Footage	Corrected	Footage	Corrected
HOLE NO.	SL-23-71-44	DEPARTURE	105 + 00 EAST	FINISHED	April 19, 1971	100	88° 00	400	80° 00	700	76° 00
BEARING	VERTICAL	ELEVATION	SURFACE	LENGTH	703.0'	200	86° 00	500	78° 00		
DIP-COLLAR	-90°	SECTION	5 + 00 EAST	LOGGED BY	A. ALI	300	84° 00	600	78° 00		

FOOTAGE From	FOOTAGE To	DESCRIPTION	% Mineralization	SAMPLE NO.	FOOTAGE From	FOOTAGE To	Length	ASSAYS Au	Ag	Zn	Cu	Pb
0.0	44.0	CASING SAND, GRAVEL AND BOULDERS										
44.0	364.8	ANDESITIC TUFF Medium green to greyish green, very fine to fine grained, numerous quartz-calcite? stringers, threads and bands, occasional 1-3" zones of quartz-veining. Occasionally medium grey sections.	LOST CORE		132.0	133.0	1.0					
		153.0-155.0 Medium grey, very fine grained to aphinitic siliceous. Occasional amygdules, occasional quartz fragments, occasional sections of light greenish grey in colour..										
		300.9-304.0 LAMPROPHYRE DYKE Light green, speckled, upper contact sharp @ 60° to core axis, lower obscured.										
		304.0-364.8 Light to medium grey, numerous quartz stringers.										
364.8	441.5	RHYOLITIC MICRO AGGLOMERATE (TUFFACEOUS) Light grey, intermediate to acid matrix, white acid fragments and bands, lensoid and elongated sheared @45° to core axis, tuffaceous 15% fragmental material. Same as described in DDH #SL-23-71/42 @ 371.0' to 390.0'. It appears that it is extension of same horizon encountered in #42, 100.0 west from this hole. There is a slight difference of colour and matrix. This section is slightly darker in colour and matrix is more intermediate than #42, but shearing orientation of fragments and bands and general appearance is very much similar. In DDH # 42 it has been defined as RHYOLITIC due to its lighter colour and siliceous matrix but over here it could be easily called as RHYO-DACITIC due to its colour and contents. Becoming more siliceous with increase in depth.										
		412.5-415.0 LAMP. DYKE, upper contact irregular lower obscured	NIL	26101	415.0	420.0	5.0	Nil	Nil	Nil	Nil	Nil
			"	26102	420.0	425.0	5.0	Nil	Nil	Nil	Nil	Nil
		425.5-441.5 Matrix siliceous, increase in fragmental material, decrease in banding and shearing	<1py	26103	425.0	430.0	5.0	Nil	Nil	Nil	Nil	Nil
			tr.py	26104	430.0	434.0	4.0	Nil	Nil	Nil	Nil	Nil
		437.0-438.0 Lamprophyre Dyke upper & lower contact sharp @45° to core axis.	NIL	26105	434.0	437.0	3.0	Nil	Nil	Nil	Nil	Nil
		438.5-440.5 " " "	NIL	26106	437.0	440.5	3.5	Nil	Nil	Nil	Nil	Nil
		440.5-441.5 STRINGERS SULPHIDES 2% py, po, < lcpy.	2py,po,<1cpy	26107	440.5	441.5	1.5	Nil	Nil	Nil	Nil	Nil

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

PROPERTY STURGEON LAKE-GROUP"23" HOLE NO. SL-23-71-44 Page 2/2

FOOTAGE From	FOOTAGE To	DESCRIPTION	% Mineralization	SAMPLE NO.	FOOTAGE From	FOOTAGE To	FOOTAGE Length	ASSAYS Au	Ag	Zn	Cu	Pb
441.5	464.0	LAMPROPHYRE DYKE	NIL	26108	441.5	447.0	5.0	Nil	Nil	Nil	Nil	Nil
		Light greenish grey to medium grey, speckled, upper contact obscured lower irregular @45° to core axis altered in parts	NIL	26109	447.0	452.0	5.0	Nil	Nil	Nil	Nil	Nil
			NIL	26110	452.0	457.0	5.0	Nil	Nil	Nil	Nil	Nil
		447.0-452.0 Pinkish feldspathic alterations.										
		455.5-457.0 Zone of quartz-veining.										
464.0	570.0	RHYOLITIC MICRO AGGLOMERATE										
		Light grey, hard, siliceous, 3-10mm siliceous, oval, angular and occasional round fragments, occasional 10-15mm, occasional blue quartz-eyes (rare) occasional chloritic stringers.										
		480.0-485.0 Slightly darker in colour, finer grained fragmental material not as distinct as top and bottom sections, 1-3mm quartz phenos more siliceous and hard.	NIL	26111	495.0	500.0	5.0	Nil	Nil	Nil	Nil	Nil
			NIL	26112	500.0	504.0	4.0	Nil	Nil	Nil	Nil	Nil
			4po,<1cpy	26113	504.0	506.0	2.0	Nil	Nil	Nil	.03	Nil
		504.0-506.0 Heavily chloritized section with 4% po,<1cpy	NIL	26114	506.0	509.0	3.0	Nil	Nil	Nil	Nil	Nil
570.0	686.5	RHYO-DACITIC TO RHYOLITIC MICRO AGGLOMERATE										
		Light to medium grey, siliceous fragmental material blue quartz-eyes, only difference with the above section is slight change in colour. Thhis section has a little darker shade than above.										
		634.0-686.5 Lighter in colour than the section above from 570.0 634.0										
		640.0-641.0 DYKE(DACITIC INTRUSION) Grey fine fine grained, massive upper & lower contact sharp @45° to core axis.										
686.5	692.0	DYKE (DACITIC INTRUSION)										
		Light to medium grey fine grained, massive, upper contact obscured, lower sharp @ 20° to core axis.										
692.0	703.0	RHYOLITIC MICRO AGGLOMERATE										
		Light grey, siliceous, agglomeratic, same as described earlier.										
	703.0	E N D O F H O L E.										
		NOTE. MINERALIZED ZONE as encountered in other holes west to this hole is absent in this hole. RHYOLITIC WELDED TUFF (AGGLOMERATIC) 95% siliceous section which was encounterd in DDH #36, 38, and 42 is also absent in this hole.										


(N.B.U.)
PA225184
PA212739
(M.L.M.)
SL-23-71.44
10,000'
ANDESITIC TUFF
RHYOLITIC MICRO AGGLOMERATE
9,600'
LAMPROPHYRE DYKE
RHYOLITIC MICRO AGGLOMERATE
RHYO-DACITIC TO RHYOLITIC MICRO AGGLOMERATE
DYKE(DACITIC INTRUSION)
RHYOLITIC MICRO AGGLOMERATE
MATTAGAMI LAKE MINES LTD.
EXPLORATION DIVISION
PROJECT:STURGEON LAKE-GROUP 23
SECTION: LINE 105+00E
D.D.H.# SL-23-71.44
SCALE: 1" = 100 FEET
DATE: 26 Aug. '71
DRW. BY: L.I.

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

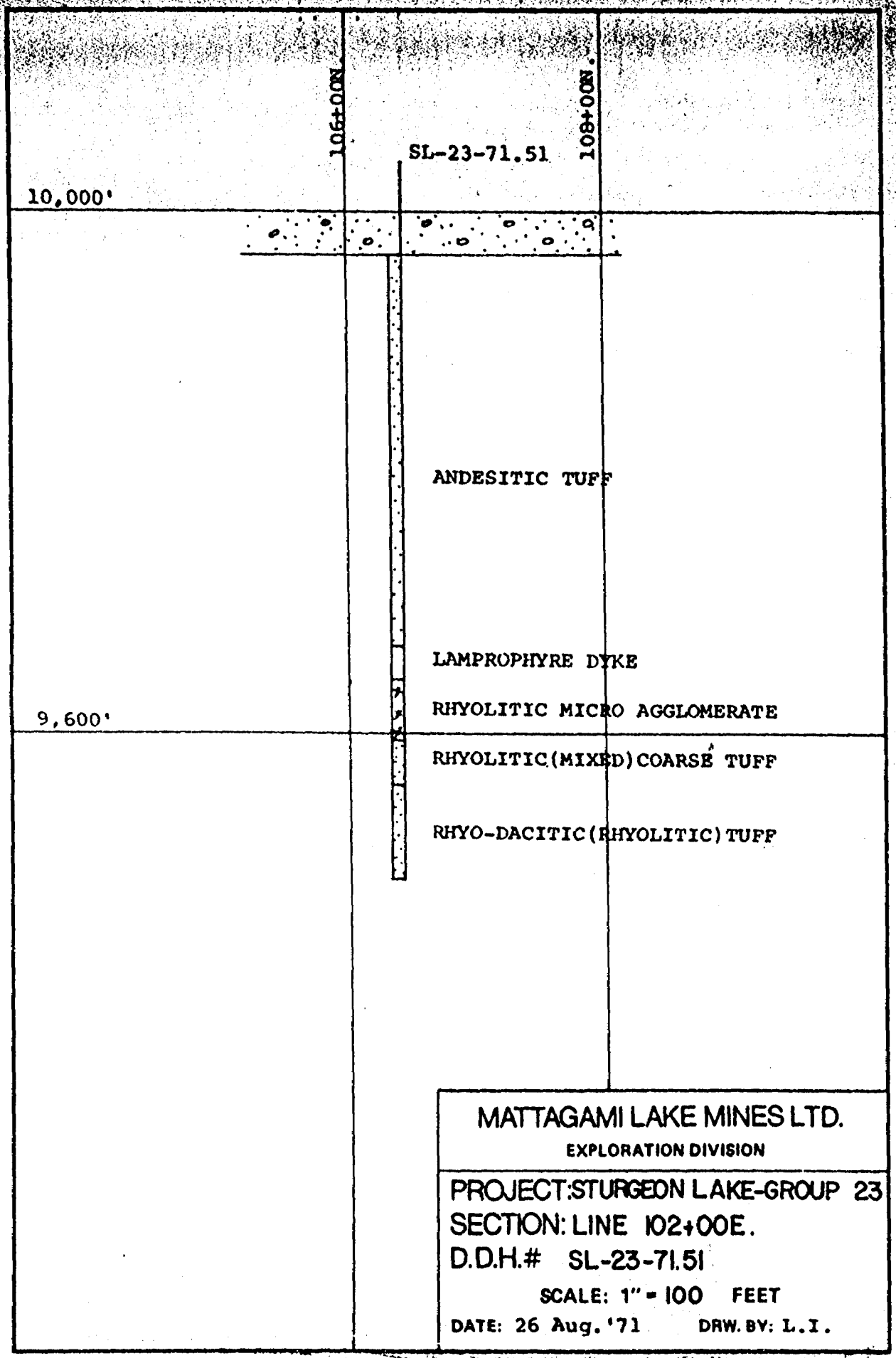
PROPERTY STURGEON LAKE GROUP "23"	LATITUDE 106 + 50 NORTH	STARTED May 2, 1971	
HOLE NO. SL-23-71-51	DEPARTURE 102 + 00 EAST	FINISHED May 5, 1971	
BEARING	ELEVATION SURFACE	LENGTH 549.0ft.	
DIP-COLLAR -90°	SECTION 2 + 00 EAST	LOGGED BY A. TAMMAM	

DIP TEST					
Footage	Corrected	Footage	Corrected	Footage	Corrected
100	89° 00'	400	69° 00		
200	84° 00	500	67° 00		
300	76° 00				

FOOTAGE From	FOOTAGE To	DESCRIPTION	% Mineralization	SAMPLE NO.	FOOTAGE From	FOOTAGE To	FOOTAGE Length	ASSAYS Au	Ag	Zn	Cu	Pb
0.0	70 0	C A S I N G BOULDERS, GRAVEL, SAND										
70.0	369.0	ANDESITIC TUFF Medium grey, fine to very fine grained, numerous quartz veinlets and stringers (occasionally white quartz bands 5" wide), vuggy and rusty in association to quartz stringers, slight shearing with gradual change in angles with depth from 30° to 45° to core axis. 104.0-106.5: LAMPROPHYRE DYKE Medium grey-green, very fine grained, homogeneous texture, obscured contacts.										
369.0	395.0	LAMPROPHYRE DYKE 369.0-383.0: Black to dark grey-green, aphanitic to very fine grained, from strongly sheared @55° to core axis, to massive and homogeneous texture, occasional quartz veinlets and stringers, indistinct contacts. 383 0-395.0: Medium grey-green, fine grained, homogeneous slight shearing @50° to core axis, lower contact sharp and irregular.	tr.py LOST CORE tr.py	26401 26402	384.5 389.5 390.0	389.5 390.0 395 0	5.0 0.5 5.0	Nil Nil	Nil LOST Nil	Ni 1 CORE Nil	Nil Nil	Nil Nil
395.0	441.5	RHYOLITIC MICRO AGGLOMERATE Light to medium grey, heavily siliceous, dense, cherty like from tightly packed to welded agglomerates (7-20mm), tr.-2% py occasional traces of chalcopyrite. 399.0-399.5: LAMPROPHYRE DYKE Medium grey-green, fine grained, sheared @45° to core axis, contacts sharp @45° to core axis 405.0-406.7: LAMPROPHYRE DYKE The same as above, contacts obscured.	2py NIL tr.py LOST CORE tr.py tr.py tr.py tr.py 2py.tr.cpy tr.py tr.py	26403 26404 26405 26406 26407 26408 26409 26410 26411 26412 26413	395.0 399.0 399.5 404.5 405.0 406.7 412.0 417.0 422.0 427.0 432.0 437.0	399.0 399.5 404.5 405.0 406.7 412.0 417.0 422.0 427.0 432.0 437.0 441.5	4.0 0.5 5.0 0.5 1.7 5.3 5.0 5.0 5.0 5.0 5.0 4.0	Nil Nil Nil Nil Nil Nil Nil Nil Nil Nil Nil	Nil Nil Nil LOST Nil Nil Nil Nil Nil Nil Nil Nil	Nil Nil Nil CORE Nil Nil .5 .7 .6 Tr. Tr. Nil	Nil Nil Nil Nil .07 .08 .34 .12 .63 .25 Nil	Nil Nil Nil Nil Nil .01 .04 .02 Nil .01 Nil

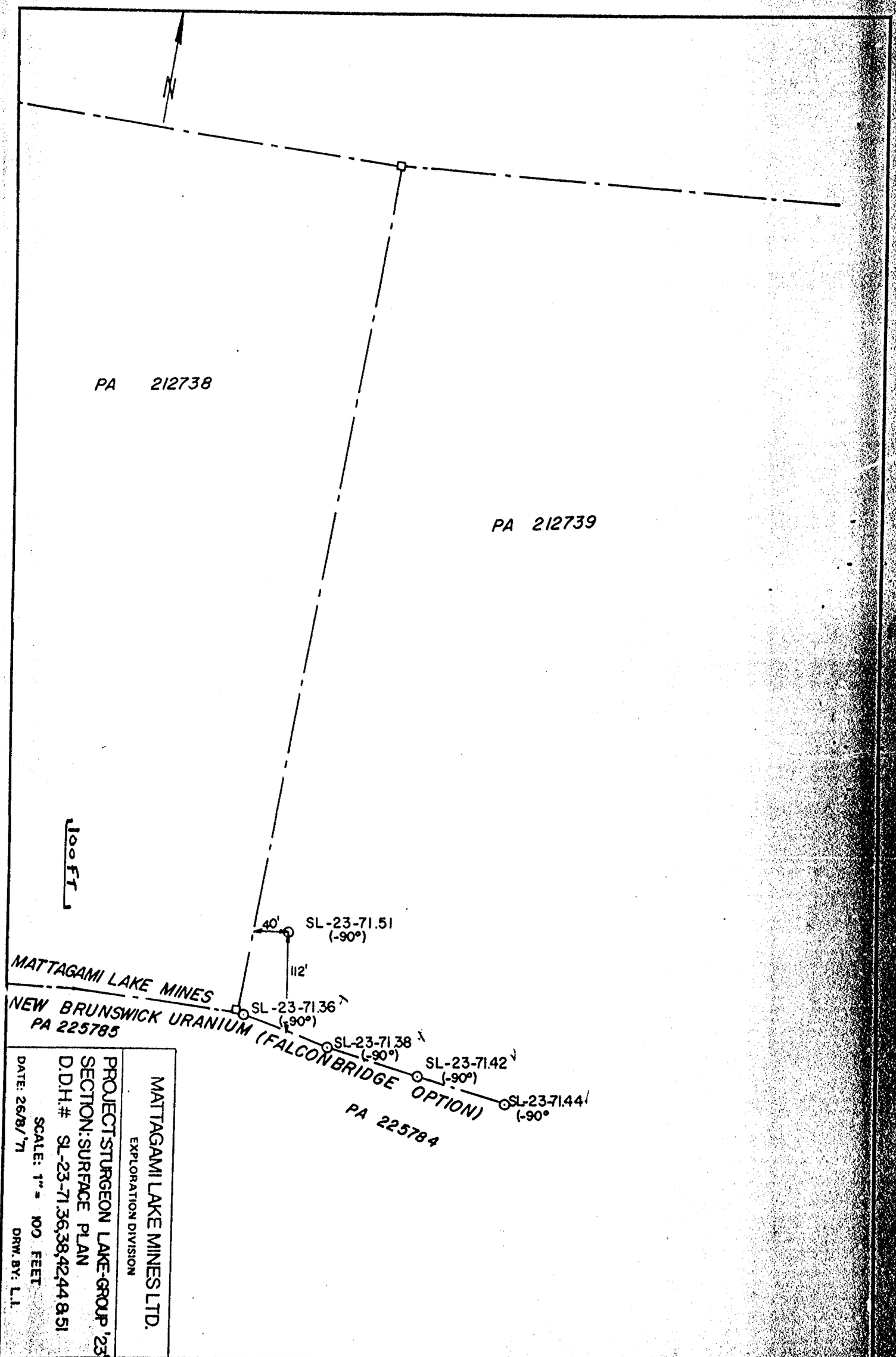
N.L.M. EXPLORATION DIVISION, D.D.H. RECORD — PROPERTY SWURGEON LAKE GROUP "23" — HOLE NO. SL-23-71-51 — Page 2/2

FOOTAGE From	FOOTAGE To	DESCRIPTION	% Mineralization	SAMPLE NO.	FOOTAGE From	FOOTAGE To	FOOTAGE Length	ASSAYS Au	Ag	Zn	Cu	Pb
441.5	468.0	RHYOLITIC (MIXED) COARSE TUFF Dark grey-green, aphanitic chloritized matrix, with loose to moderately packed mixed agglomerates from angular to sub-angular (4-15mm, occasionally >25-< 32) numerous rounded blue quartz-eyes fine grained py-po replacing lapilli in size and shape. Generally 10-20% py-po, 2-3% cpy (not including massive intersections) This rock type corresponds and correlates with the same in hole #36 from 387.0-453.0	20py,po,1cpy	26414	441.5	445.0	3.5	Nil	.23	.3	.74	.01
		445.0-446.8: MASSIVE SULPHIDES 80% sulphides, 65% py,po, 5% sph, traces of galena, 10%cpy, 10% magnetite.	65py,po,5sph,tgaDcpy	26415	445.0	446.8	1.8	.009	1.98	4.0	4.11	.15
			10py,po,1cpy	26416	446.8	448.3	1.5	.008	.80	1.5	1.49	.07
		448.3-449.0: MASSIVE SULPHIDES 70% sulphides, 45% py,po, 15% cpy, 10% magnetite	45py,15cpy	26417	448.3	449.0	0.7	.011	1.00	3.3	3.90	.03
			15py,po,3cpy	26418	449.0	454.0	5.0	.005	.64	.4	2.01	.03
			15py,po,5cpy	26419	454.0	459.0	5.0	Tr.	.35	.8	1.00	.05
			20py,po,5cpy	26420	459.0	464.0	5.0	Tr.	.47	.6	1.38	.03
			15py,po,5cpy	26421	464.0	465.0	1.0	Tr.	.35	.5	1.25	.02
			1py	26422	465.0	468.0	3.0	Nil	Nil	Tr.	.04	Nil
468.0	549.0	RHYO DACITIC (RHYOLITIC) TUFF 468.0-520.0: Grey, greenish tinge, siliceous, dense, tightly Packed and lensoid agglomerates in part, sheared (at the top) @ 35° to core axis.	NIL	26423	468.0	473.0	5.0	Nil	Nil	Nil	Nil	Nil
			NIL	26424	473.0	478.0	5.0	Nil	Nil	Nil	Nil	Nil
			NIL	26425	478.0	483.0	5.0	Nil	Nil	Nil	Nil	Nil
		502.5-503.5: LAMPROPHYRE DYKE Medium grey-green, fine grained, upper contact obscured, lower @40° to core axis.										
		520.0-549.0: Grey with greenish tinge, fine grained very less siliceous and dense than the above intersections, upper part vesicular quartzitic patches.										
	549.0	END OF HOLE:										



MATTAGAMI LAKE MINES LTD.
EXPLORATION DIVISION

PROJECT: STURGEON LAKE-GROUP 23
SECTION: LINE 102+00E.
D.D.H.# SL-23-71.51
SCALE: 1" = 100 FEET
DATE: 26 Aug. '71 DRW. BY: L.I.



MATTAGAMI LAKE MINES LTD.

EXPLORATION DIVISION

PROJECT: STURGEON LAKE GROUP '23

SECTION: SURFACE PLAN

D.D.H.# SL-23-71.36,38,42,44 & 51

SCALE: 1" = 100 FEET

DATE: 26/8/'71

DRW. BY: L.I.

K&E 9-70

52G15NW0100 52G15NW0015 SIXMILE LAKE

900

52G/15NW

AREA OF SIXMILE LAKE

M-2877

SCALE: 1 inch = 40 chains

40 CHAINS

GROUP 23-1

ONTARIO

THE MINING ACT REPORT OF WORK

A separate form is required for each type of work to be recorded.

To the Recorder of PATRICIA Mining Division

I, MATTAGAMI LAKE MINES LTD. T 84
name of Recorded Holder Miner's Licence

Suite 205 - 8 King Street East, TORONTO
Post Office Address

do hereby report the performance of 1320 ✓ days of DIAMOND DRILLING
type of work

not before reported to be applied on the following contiguous claims

Claim No.	Days		Claim No.	Days	Claim No.	Days
PA 212610 ✓	80	PA	212618 ✓	80	PA 212739 ✓	80
" 212611 ✓	80	"	212617 ✓	80	" 212740 ✓	80
" 212612 ✓	80	"	212735 ✓	80	" 212741 ✓	80
" 212613 ✓	~~100~~ 80	"	212736 ✓	80	" 212742	80
" 212614 ✓	~~100~~ 80	"	212737 ✓	80	"	
" 212615 ✓	80	"	212738 ✓	100	212616 ✓	20 - WB

All the work was performed on Mining Claim (s) PA 212616 (235.0); PA 212615 (1,085.0)
(In the case of geological and/or geophysical survey (s) where more than 18 claims are involved attach a schedule)

READ CAREFULLY: THE FOLLOWING INFORMATION IS REQUIRED BY THE MINING RECORDER.

For Manual Work, Stripping or Opening up of Mines, Sinking Shafts or Other Actual Mining Operations - Names and addresses of the men who performed the work and the dates and hours of their employment.
For Diamond and other Core Drilling - Footage, No. and angle of holes and diameter of core. Name and address of owner or operator of drill. Dates when drilling was done. Signed core log and sketch in duplicate.
For Compressed Air or Other Power Driven or Mechanical Equipment
Type of drill or equipment. Names and addresses of men engaged in operating equipment and the dates and hours of their employment.
For Power Stripping - Type of equipment. Name and address of owner or operator. Amount expended. Dates on which work was done. Proof of actual cost must be submitted within 30 days of recording.
With each of the above types of work sketches are required to show the location and extent of the work in relation to the nearest claim post. In the case of diamond or other core drilling the sketch must be submitted in duplicate.
For Geological and Geophysical Survey - The names and addresses of men employed as well as dates. Type of instrument used in the case of geophysical survey. Reports and maps in duplicate must be filed with the Minister within 60 days of recording.
For Land Survey - the name and address of Ontario Land surveyor.

The Required Information is as Follows: (Attach a list if this space is insufficient)

Owner of Drill - Morrissette D. D. Haileybury, Ontario.

HOLE No:	ANGLE	FOOTAGE	CORE DIAM.	DATES
SL-23-69.1	-45°	810.0'	1 5/16"	August 11/69 - August 19/69
SL-23-69.3	-45°	510.0'	1 5/16"	August 30/69 - September 3/69

Date April 20, 1970 JOHN D. HARVEY
Signature of Recorded Holder or Agent

The Mining Act
Certificate Verifying Report of Work

I, JOHN D. HARVEY
Suite 205 - 8 King street East, Toronto, Ontario
(Post Office Address)

hereby certify:

1. 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.
2. That the annexed report is true.

Dated April 20, 1970 Signature

PATRICIA MINING DIV
RECEIVED
APR 24 1970
AM 7 8 9 10 11 12 1 2 3 4 5 6 PM

Pa - 212610.

THE PENALTY FOR MAKING A FALSE STATEMENT IN THIS REPORT AND/OR CERTIFICATE IS $500. OR SIX MONTHS IMPRISONMENT OR BOTH

SIX MILE LAKE
M-2877

P53 526/15NW

ONTARIO

THE MINING ACT REPORT OF WORK

A separate form is required for each type of work to be recorded.

#299

To the Recorder of PATRICIA Mining Division

MATTAGAMI LAKE MINES LIMITED T 84

name of Recorded Holder Miner's Licence

Suite 205, 8 King Street East, Toronto, Ontario

Post Office Address

do hereby report the performance of 2026 days of Diamond Drilling type of work

not before reported to be applied on the following contiguous claims

Claim No.	Days	Claim No.	Days	Claim No.	Days
PA 212739	70	PA 225672	120	PA 225742	65
225522	88	225735	140	225743	120
225662	110	225736	140	225773	120
225665	120	225737	53	225778	120
225666	120	225739	140	225780	120
225667	120	225740	140	225781	120

All the work was performed on Mining Claim (s) PA 212739

(In the case of geological and/or geophysical survey (s) where more than 18 claims are involved attach a schedule)

READ CAREFULLY: THE FOLLOWING INFORMATION IS REQUIRED BY THE MINING RECORDER.

For Manual Work, Stripping or Opening up of Mines, Sinking Shafts or Other Actual Mining Operations – Names and addresses of the men who performed the work and the dates and hours of their employment.
For Diamond and other Core Drilling - Footage, No. and angle of holes and diameter of core. Name and address of owner or operator of drill. Dates when drilling was done. Signed core log and sketch in duplicate.
For Compressed Air or Other Power Driven or Mechanical Equipment
Type of drill or equipment. Names and addresses of men engaged in operating equipment and the dates and hours of their employment.
For Power Stripping - Type of equipment. Name and address of owner or operator. Amount expended. Dates on which work was done. Proof of actual cost must be submitted within 30 days of recording.
With each of the above types of work sketches are required to show the location and extent of the work in relation to the nearest claim post. In the case of diamond or other core drilling the sketch must be submitted in duplicate.
For Geological and Geophysical Survey - The names and addresses of men employed as well as dates. Type of instrument used in the case of geophysical survey. Reports and maps in duplicate must be filed with the Minister within 60 days of recording.
For Land Survey - the name and address of Ontario Land surveyor.

The Required Information is as Follows: (Attach a list if this space is insufficient)

Owner of Drill: N. Morissette Diamond Drilling Limited,
Box 789, Haileybury, Ontario.

Drill Hole Information, as attached

PATRICIA MINING DIV.
RECEIVED
SEP - 2 1971
AM PM

Date Aug. 31/71 Signature of Recorded Holder or Agent

THE PENALTY FOR MAKING A FALSE STATEMENT IN THIS REPORT AND/OR CERTIFICATE IS $500. OR SIX MONTHS IMPRISONMENT OR BOTH

The Mining Act
Certificate Verifying Report of Work

I, JOHN D. HARVEY

Suite 205, 8 King Street, Toronto, Ontario
(Post Office Address)

hereby certify:

1. 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 some during and/or after its completion.
2. That the annexed report is true.

Dated Aug. 31 1971 Signature

Pa. 212735

Diamond Drilling performed on claim PA 212739:

Hole Nos.	Angle	Footage	Core Dia.	Dates
SL23-71-36 ✓	90°	623	1 5/16"	Mar. 27-31, 1971
SL23-71-38 ✓	90°	924	1 5/16"	Apr. 1-8, 1971
SL23-71-42 ✓	90°	704	1 5/16"	Apr. 10-14, 1971
SL23-71-44 ✓	90°	703	1 5/16"	Apr. 12-20, 1971
SL23-71-51 ✓	90°	549	1 5/16"	May 2-5, 1971
		3503		
less 50% boundary holes		1477		
		2026		

Note: Diamond Drill holes SL23-71-36, 38, 42, and 44 were drilled on the boundary of Mattagami Lake claim PA 212739 and New Brunswick Uranium claim PA 225784.

Mattagami Lake applies for assessment work credit for only half the footage of these holes.

SIXMILE LAKE AREA
M-2877

ONTARIO

THE MINING ACT REPORT OF WORK

A separate form is required for each type of work to be recorded.

#301

To the Recorder of PATRICIA Mining Division

I, MATTAGAMI LAKE MINES LIMITED T 84
name of Recorded Holder Miner's Licence

Suite 205, 8 King Street East, Toronto, Ontario
Post Office Address

do hereby report the performance of 1011 days of Diamond Drilling
type of work

not before reported to be applied on the following contiguous claims

Claim No.	Days		Claim No.	Days	Claim No.	Days
PA 212737	80	PA	225661	120		
212740	80		225591	40		
212741	20		225592	120		
212742	20		225593	51		
225511	120		225597	120		
225517	120		225598	120		

All the work was performed on Mining Claim (s) PA 212737, ~~PA 212738~~
(In the case of geological and/or geophysical survey (s) where more than 18 claims are involved attach a schedule)

READ CAREFULLY: THE FOLLOWING INFORMATION IS REQUIRED BY THE MINING RECORDER.

For Manual Work, Stripping or Opening up of Mines, Sinking Shafts or Other Actual Mining Operations – Names and addresses of the men who performed the work and the dates and hours of their employment.
For Diamond and other Core Drilling - Footage, No. and angle of holes and diameter of core. Name and address of owner or operator of drill. Dates when drilling was done. Signed core log and sketch in duplicate.
For Compressed Air or Other Power Driven or Mechanical Equipment
Type of drill or equipment. Names and addresses of men engaged in operating equipment and the dates and hours of their employment.
For Power Stripping - Type of equipment. Name and address of owner or operator. Amount expended. Dates on which work was done. Proof of actual cost must be submitted within 30 days of recording.
With each of the above types of work sketches are required to show the location and extent of the work in relation to the nearest claim post. In the case of diamond or other core drilling the sketch must be submitted in duplicate.
For Geological and Geophysical Survey - The names and addresses of men employed as well as dates. Type of instrument used in the case of geophysical survey. Reports and maps in duplicate must be filed with the Minister within 60 days of recording.
For Land Survey - the name and address of Ontario Land surveyor.

The Required Information is as Follows: (Attach a list if this space is insufficient)

PATRICIA MINING DIV. RECEIVED SEP - 2 1971 AM PM

Owner of Drill: N. Morissette Diamond Drilling Limited,
Box 789, Haileybury, Ontario.

Hole No.	Angle	Footage	Core Dia.	Dates
SL 23-71-20	50°	1175	1 5/16"	Feb. 4-18, 1971

Note: 1011 ft. drilled on PA 212737
164 ft. drilled on PA 212738

Date Aug. 3/71 Signature of Recorded Holder or Agent

THE PENALTY FOR MAKING A FALSE STATEMENT IN THIS REPORT AND/OR CERTIFICATE IS $500. OR SIX MONTHS IMPRISONMENT OR BOTH

The Mining Act
Certificate Verifying Report of Work

I, JOHN D. HARVEY
Suite 205, 8 King Street East, Toronto, Ontario
(Post Office Address)

hereby certify:

1. 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.
2. That the annexed report is true.

Dated Aug. 31, 1971 Signature

Pa. 212735

Diamond Drilling performed on Mining Claim PA 212738:

Hole Nos.	Angle	Footage	Core Dia.	Dates
SL-23-70-9	50°	723	1 5/16"	Nov. 19-25, 1970
SL-23-70-10	50°	566	1 5/16"	Nov. 27-Dec. 2, 1970
SL-23-70-11	50°	490	1 5/16"	Dec. 4-7, 1970
SL-23-70-12	50°	408	1 5/16"	Dec. 9-11, 1970
SL-23-71-13	50°	404	1 5/16"	Jan. 6-14, 1971
SL-23-71-15	50°	350	1 5/16"	Jan. 16-19, 1971
SL-23-71-16	50°	384	1 5/16"	Jan. 21-24, 1971
SL-23-71-18	50°	405	1 5/16"	Jan. 27-30, 1971
SL-23-71-19	50°	618	1 5/16"	Jan. 31-Feb. 7, 1971
		4348		

Note: Holes No. SL-23-70-10 and 11, and SL-23-71-15 and 16 extended into New Brunswick Uranium property by 4 feet, 10 feet, 31 feet and 15 feet respectively. Assessment work credits are not requested for footage drilled on NBU claims.

Work is to be applied on contiguous claims, as follows:

PA 205366	140 days	PA 225706	140 days
212738	60 "	225707	140 "
212739	10 "	225708	140 "
225662	10 "	225709	140 "
225663	120 "	225746	120 "
225664	120 "	225747	120 "
225668	120 "	225748	120 "
225669	120 "	225749	120 "
225670	120 "	225750	120 "
225671	120 "	225751	120 "
225698	120 "	225752	120 "
225699	120 "	225753	120 "
225700	120 "	225774	120 "
225701	120 "	225775	120 "
225702	120 "	225776	120 "
225703	120 "	225777	120 "
225704	120 "	225782	120 "
225705	120 "	225783	40 "
			4,060 days

60 days work is requested in respect of Claim PA 212738 and 4000 days for application on other claims.

Pa 205366

PATRICIA MINING DIV.
RECEIVED
SEP - 8 1971
AM PM

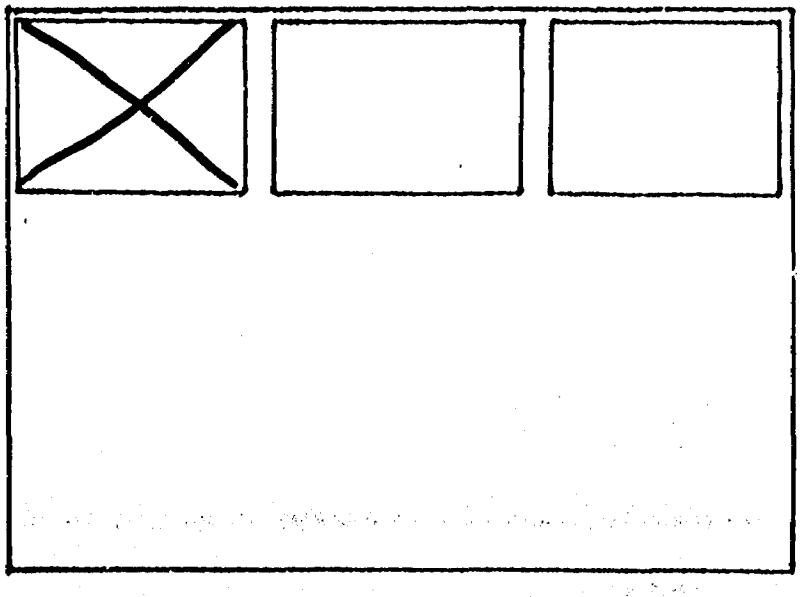
Pa 205364

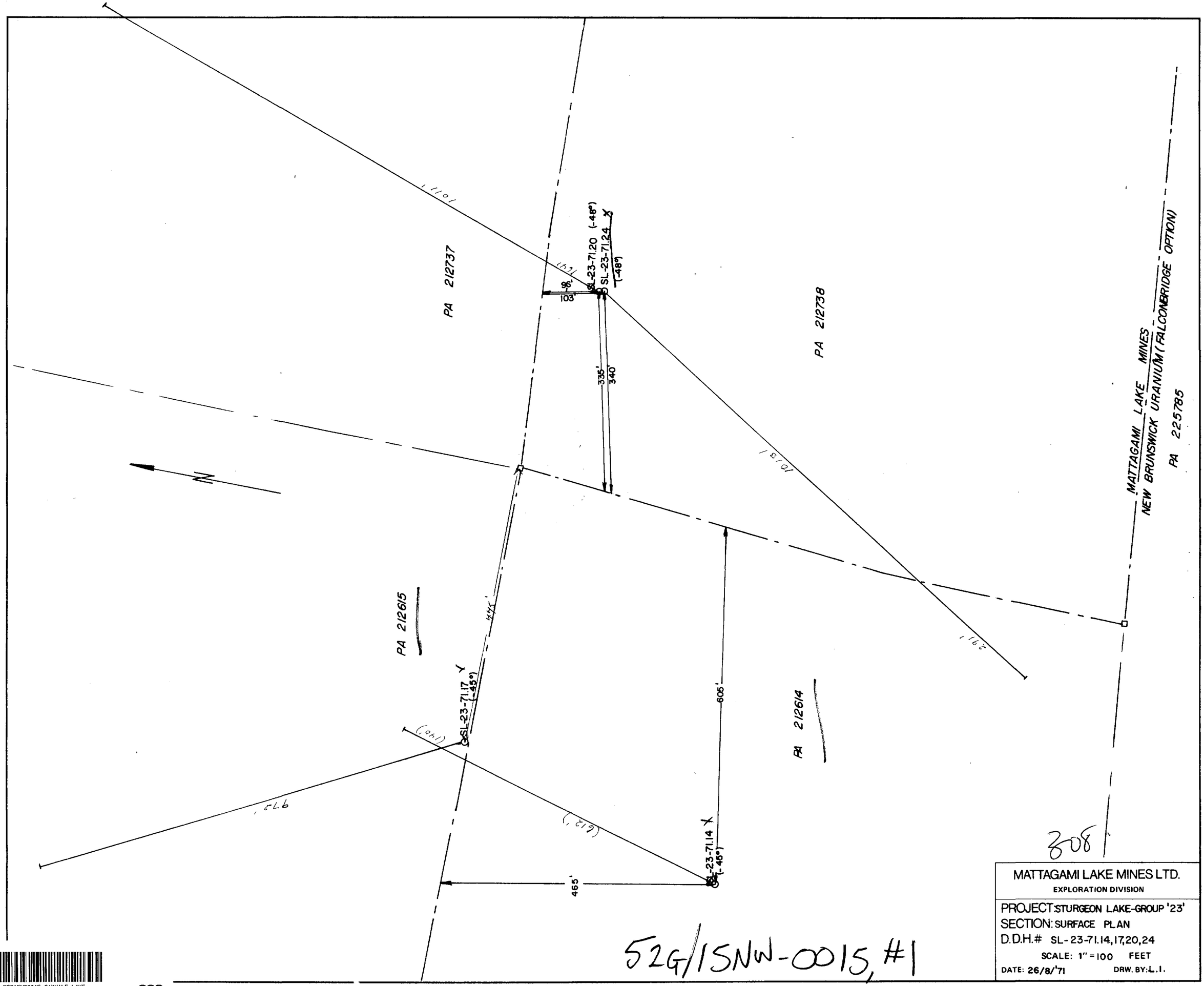
SEE ACCOMPANYING MAP(S) IDENTIFIED AS

52G/15NW-0015 #1

LOCATED IN THE MAP CHANNEL IN THE FOLLOWING SEQUENCE

(X)





MATTAGAMI LAKE MINES LTD.
EXPLORATION DIVISION

PROJECT: STURGEON LAKE-GROUP '23'
SECTION: SURFACE PLAN
D.D.H.# SL-23-71.14,17,20,24
SCALE: 1" = 100 FEET
DATE: 26/8/'71 DRW. BY: L.I.

52G/15NW-0015, #1

52G15NW0100 52G15NW0015 SIXMILE LAKE