



31L13NW9730 34 BRIGGS

010

Diamond Drilling

Township of BRIGGS

Report NO 34

Work performed by: Sturdy Mines

Claim NO	Hole NO	Footage	Date	Note
L 278827	71-S.B.-1	253.0'	May/71	
	71-S.B.-2	272.0'	May/71	
	71-S.B.-3	309.0'	June/71	
L 278821	71-S.B.-4	229.0'	June/71	
L 278825	71-S.B.-5	153.0'	June/71	
L 278822	71-S.B.-6	153.0'	June/71	
	71-S.B.-7	209.0'	June/71	
L 278818	71-S.B.-8	600.0'	June/71	

2178

Notes:

DIAMOND DRILL RECORD

NAME OF PROPERTY STURDY MINES LIMITED (CERRO OPTION)
 HOLE NO. 71-S.B.-1 LENGTH 253'
 LOCATION Claim No. 278827, Briggs Twp., Nipissing Dist., Ontario
 LATITUDE L.20 + 45 S DEPARTURE 16 + 26 W (Grid)
 ELEVATION 1' above swamp AZIMUTH 270° DIP -45°
 STARTED May 26, 1971 FINISHED May 27, 1971

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH
200'	-44°				

HOLE NO. 71-SB-1 SHEET NO. 1

REMARKS Drill hole is located at 50' due east of new showing.

LOGGED BY S. GULMOND
A. G. G. G.

FOOTAGE		DESCRIPTION	SAMPLE				ASSAYS				
FROM	TO		NO.	SULPHIDES	FOOTAGE		%	% Cu	Au OZ/TON	Ag OZ/TON	
					FROM	TO	TOTAL				
0	15	OVERBURDEN (Casing recovered)									
15	97.7	ANDESITE Fine grained, greenish grey and dark grey, epidotized and chloritized, fine needle crystals in parts, small calcareous seams, scattered fine leucoxene, hematite on the slips; mainly patchy pyrite, pyrrhotite and few specks of chalcopryrite. At 57.7' sub-massive chalcopryrite and bornite 1/4" to 1/2" wide in quartz-calcite stringer, c/a 40°. 63.9-64.9' Quartz feldspar porphyry dyke, medium grained greenish grey and pinkish hematized partz, lean, c/o 40° 70.3-74.0' Patchy pyrite, pyrrhotite and chalcopryrite, est. 0.5% sulphides. 79.8-82.2' Quartz feldspar porphyry dyke, similar to above.	416	0.25	21.8	24.8	3'		0.11	0.02	TR
			417	0.5	56.0	59.0	3'		0.12	0.01	TR
			420	0.5	70.3	74.0	3.7				
			418	0.5	80.0	85.0	5'		0.06	TR	TR
			419	1.5-2.0	85.0	89.5	4.5		0.05	0.01	TR
97.7	178.5	GRANODIORITE Medium grained, grey and greenish grey, porphyritic, lean. Andesite sections at 116.8-119', 120.8-122' and 124.5-125.6' with fine pyrite and few specks chalcopryrite, c/a 30-40°.									
178.5	203.3	FAULT BRECCIA Few small streaks of pyrite and pyrrhotite.									
203.3	233.0	ANDESITE Similar to above with quartz calcite stringers 1/8 - 1/2", c/a 30-60°.									
233.0	253.0	GRANODIORITE Similar to above. 227.7-228.2' Fine grained, dark basic diabase dyke, lean.									
253.0		END OF HOLE									

M. 6-1160

M. 6-1160

DIAMOND DRILL RECORD

NAME OF PROPERTY STURDY MINES LIMITED (CERRO OPTION)
 HOLE NO. 71-S.B.-2 LENGTH 272'
 LOCATION Claim No. 278827, Briggs Twp., Nipissing Dist., Ontario
 LATITUDE L.20 + 95 S DEPARTURE 16 + 33 W (Grid)
 ELEVATION 1' above swamp AZIMUTH 335° DIP -45°
 STARTED May 28, 1971 FINISHED May 31, 1971

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH
271'	-45°				

HOLE NO. 71-SB-2 SHEET NO. 1

REMARKS Drill hole is located at 50' on Az. 155° from new showing.

LOGGED BY S. GUIMOND
S. Guimond

FOOTAGE		DESCRIPTION	SAMPLE				ASSAYS				
FROM	TO		NO.	SULPHIDES	FOOTAGE			Cu	%	Au OZ/TON	Ag OZ/TON
					FROM	TO	TOTAL				
0	12.3	OVERBURDEN (Casing was reamed to 19' - recovered)									
12.3	16.8	BASIC DYKE Fine grained, dark grey, small calcareous seams; fine pyrite, pyrrhotite and hematite in fractures.									
16.8	99.0	ANDESITE Fine grained, greenish grey and dark grey, epidotized and chloritized, fine needle crystals in parts, small calcareous seams in sections, scattered fine leucoxene; mainly patchy pyrite, pyrrhotite and few specks of chalcopryite, hematite on the slips. At 20' Calcareous seam 3" wide with pyrite and pyrrhotite, c/o 50°. 23.5' Disseminated pyrite, pyrrhotite and chalcopryite, 2" wide. 23.8' Disseminated pyrite, pyrrhotite and chalcopryite, 1/2" wide. 25.5-26.5' Disseminated pyrite, pyrrhotite and chalcopryite. 48.8-52.0' Disseminated very fine chalcopryite and bornite and small patches. 52.0-71.5' <u>Granodiorite</u> , medium grained, grey and greenish grey, epidotized sections, hematite on slips, porphyritic with quartz and feldspar phonocrysts, scattered fine leucoxene. At 57.5' Patch of disseminated pyrite, pyrrhotite and chalcopryite, 1 1/2" wide. At 62.0' Disseminated chalcopryite & hematite, 1/4" wide. At 71.8' Disseminated fine pyrite, pyrrhotite and chalcopryite, 2" wide. At 76.0' Diss. fine pyrite, pyrrhotite & chalco. 3" wide At 78.5' Submassive pyrrhotite & chalco., 3/4" wide lens. 96.4-98.5' Rose quartz stringers, widest 5", 60% quartz, lean, c/a 40°.									
			421	0.5	48.8	52.0	3.2	0.05		TR	NIL
			422	1.5	78.2	83.4	5.2	0.12		0.01	TR

EM. 6-1163

STURDY MINES LIMITED

DIAMOND DRILL RECORD

NAME OF PROPERTY STURDY MINES LIMITED (CERRO OPTION)
 HOLE NO. _____ LENGTH _____
 LOCATION _____
 LATITUDE _____ DEPARTURE _____
 ELEVATION _____ AZIMUTH _____ DIP _____
 STARTED _____ FINISHED _____

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH

HOLE NO. 71-SB-2 SHEET NO. 2

REMARKS _____

LOGGED BY S. Guinard

FOOTAGE		DESCRIPTION	SAMPLE				ASSAYS				
FROM	TO		NO.	SULPHIDES	FOOTAGE		%	%	OZ/TON	OZ/TON	
					FROM	TO	TOTAL				
99	243	GRANODIORITE Similar to above, scattered fine pyrite, pyrrhotite and few specks of chalcopyrite. 162.5-164.0' Basic dyke, fine grained, dark grey, lean. 170.0-172.8' Basic dyke, fine grained, dark grey, lean. 180.0-190.0' High mafix. At 204.0' Very fine disseminated pyrrhotite and few specks chalcopyrite. 231.1-240.3' Diabase dyke, fine grained, dark grey, laths present but no ophitic texture, scattered fine pyrrhotite.									
243	246	DIABASE DYKE Similar to above, c/a 60°.									
246	250	ANDESITE Similar to above, lean.									
250	261	DIABASE DYKE Similar to above, top c/a 70°, bottom c/a 35-40°.									
261	272	GRANODIORITE Similar to above, lean.									
272		END OF HOLE									

EM. 6-1163

LANCASHIRE LIMITED.

DIAMOND DRILL RECORD

NAME OF PROPERTY STURDY MINES LIMITED (CERRO OPTION)
 HOLE NO. 71-S.B.-3 LENGTH 309'
 LOCATION Claim No. 278827, Briggs Twp., Nipissing Dist., Ontario
 LATITUDE L 22 + 00 S DEPARTURE 15 + 47' W (Grid)
 ELEVATION App. 7' lower than AZIMUTH 292° DIP -45°
holes 1 and 2
 STARTED June 1, 1971 FINISHED June 4, 1971

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH
300'	-38°				

HOLE NO. 71-SB-3 SHEET NO. 1

REMARKS Hole was drilled along Line 22 + 00 S, Azimuth 292°.

LOGGED BY S. GUIMOND

FOOTAGE		DESCRIPTION	SAMPLE				ASSAYS				
FROM	TO		NO.	SULPHIDES	FOOTAGE			Cu	Ni	Au OZ/TON	Ag OZ/TON
					FROM	TO	TOTAL				
0	14	OVERBURDEN (Casing recovered)									
14	158	GRANODIORITE Medium grained, greenish grey epidotized with short pinkish grey hematized sections, other sections are darkish green and grey mottled, chloritized in parts, porphyritic with quartz and feldspar phenocrysts, scattered fine leucoxene, fine calcareous seams. 33-35 Minor pyrite and few specks of chalcopyrite in epidotized parts. 44.5-50' Est. 18% quartz-calcite, fine pyrite and few specks of chalcopyrite. 100-105' Est. 1% pyrite and pyrrhotite and specks of chalcopyrite. 105-108.5' Basic dyke, fine grained, dark grey, lean, c/a 50°. 133-134' Basic dyke, fine grained, dark grey, lean. 110-158' Fine pyrite and pyrrhotite and specks of chalcopyrite.									
158	185	CHILLED CONTACT, QUARTZ-FELDSPAR PORPHYRY Fine grained, grey, est. 1% fine pyrite, pyrrhotite and few fine specks of chalcopyrite. 182-183' Basic dyke, fine grained, dark grey, lean c/a 25-30°.	423	0.25	44.5	50.0	5.5	0.03		TR	NIL
			424	1.0	100	105	5	TR		TR	NIL
			425	0.7	110	115	5	TR		TR	NIL
			426	1.0	120	125	5	TR		TR	NIL
			427	1.5	130	135	5	TR		TR	NIL
			428	1.0	140	145	5	TR		0.01	TR
			429	1.5	153	158	5	TR		TR	NIL
185	231.5	METAGABBRO Medium grained, greenish grey, chloritized and epidotized parts granitized, highly calcareous. 185-195' Est. 1.5 to 2% pyrite, pyrrhotite and chalcopyrite. 195-231.5' Est. 1% pyrite, pyrrhotite and chalcopyrite.	430	1.5	185	190	5	0.06	TR	0.01	TR
			434	1	226	231.5	5.5	0.01		TR	
231.5	264.7	ANDESITE Fine grained, greenish grey, chloritized, highly calcareous c/a 40°. Est. 1% pyrite and pyrrhotite disseminated and few 1/8" to 1/4" streaks.	435	1	231.5	238.5	7	0.02		TR	
			436	1	245	252	7	0.03		TR	

EM. 6-163

LANGRISH LIMITED.

DIAMOND DRILL RECORD

NAME OF PROPERTY STURDY MINES LIMITED (CERRO OPTON)
 HOLE NO. _____ LENGTH _____
 LOCATION _____
 LATITUDE _____ DEPARTURE _____
 ELEVATION _____ AZIMUTH _____ DIP _____
 STARTED _____ FINISHED _____

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH

HOLE NO. 71-SP-3 SHEET NO. 2

REMARKS _____

LOGGED BY A. Guindon

FOOTAGE		DESCRIPTION	SAMPLE				ASSAYS					
FROM	TO		NO.	% SULPHIDES	FOOTAGE			%	%	OZ/TON	OZ/TON	
					FROM	TO	TOTAL					
264.7	309	QUARTZ-FELDSPAR PORPHYRY										
		Fine grained, grey, calcareous, c/a 35-40°, little pyrite, lean.										
309		END OF HOLE										
		Hole had to be cemented twice at 100' - 162.5'.										

EM. 6-1166

LANGRIDGE LIMITED.

DIAMOND DRILL RECORD

NAME OF PROPERTY STURDY MINES LIMITED (CERRO OPTION)
 HOLE NO. 71-S.B.-4 LENGTH 229'
 LOCATION Claim No. 278821, Briggs Twp., Nipissing Dist., Ontario
 LATITUDE L.7 + 98' N DEPARTURE 2+ 00 E (Grid)
 ELEVATION App. 25' above creek swamp AZIMUTH 115° DIP -45°
 STARTED June 7, 1971 FINISHED June 8, 1971

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH
150'	-42°				

HOLE NO. 71-SB-4 SHEET NO. 1

REMARKS Hole was drilled 50' back of old showing.

LOGGED BY S. GILMOND

FOOTAGE		DESCRIPTION	SAMPLE				ASSAYS			
FROM	TO		NO.	SULPHIDES	FOOTAGE		Cu	%	Au	
					FROM	TO			TOTAL	oz/TON
0	5	OVERBURDEN (Casing recovered)								
5	229	GRANODIORITE Medium grained, greenish grey and sections pinkish grey hematized, partly epidotized and some calcareous seams, two altered sections with high chlorite and minor sulphides.								
		58.3-61.0' altered fault section, fine-grained, high mafics and chlorite, est. 1% very fine, patchy, disseminated pyrite, pyrrhotite, chalcopryrite and specks of bornite, c/a 70°.	431	1.0	58.3	61.0	2.7	0.12		0.01
		121.5-131.5' Similar to above, c/a 50°	432	1.0	121.5	126.5	5	TR		TR
			433	0.7	126.5	131.5	5	0.04		TR
229		END OF HOLE								

EM. 6-1168

LANBRIDGE LIMITED.

DIAMOND DRILL RECORD

NAME OF PROPERTY STURDY MINES LIMITED (CERRO OPTION)
 HOLE NO. 71-S.B.-6 LENGTH 153'
 LOCATION Claim No. 278822, Briggs Twp., Nipissing Dist., Ontario
 LATITUDE L. 8 + 98' N DEPARTURE 2 + 00' E
 ELEVATION Same as hole 4 AZIMUTH 115° DIP -45°
 STARTED June 12, 1971 FINISHED June 14, 1971

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH
150'	-43°				

HOLE NO. 71-SB-6 SHEET NO. 1

REMARKS Hole is 100' North (Grid) of Hole 71-SB-4

LOGGED BY S. GUILMONT

FOOTAGE		DESCRIPTION	SAMPLE			ASSAYS					
FROM	TO		NO.	SULPHIDES	FOOTAGE			Cu	%	Au OZ/TON	OZ/TON
					FROM	TO	TOTAL				
0	5	OVERBURDEN (Casing recovered)									
5	153	GRANODIORITE Medium grained, grey and greenish grey chloritized and epidotized, short sections reddish hematized, other sections mottled of above colours. Porphyritic with quartz-feldspar phenocrysts, has narrow calcareous seams and fine grained streaks of high mafix, chloritized epidotised and parts porphyritic. 5 - 9 Small epidotized seam 1/16" wide along the core with pyrrhotite and chalcopryrite and some disseminated. The eye-bolt drill anchor hole at 1' to the west was lean. 11.8- 12 Couple specks of chalcopryrite, the rest of the hole is more lean, having only a few scattered specks of pyrrhotite and chalco. 28.1- 28.5 White quartz-calcite and chlorite. 38.4- 38.6 White quartz and chlorite, c/a 60°. Fine Grained Streaks at: 26.8 - 27.0; c/a 75-80° 45.0 - 45.3; 46.2 - 47.6; c/a 70° 49.0 - 50.7; c/a 50-70° 51.8 - 52.0; 52.2 - 53.0; 53.6 - 53.8; 54.1 - 55.8; 59.0 - 59.1; 60.3 - 60.4; 61.8 - 62.3; 63.3 - 66.6; c/a 80° 77.2 - 77.8; 82.2 - 83.0; 87.8 - 88.0; 88.5 - 89.4; 96.0 - 97.5; 100.8 - 101.6; 104.0 - 104.4; 108.2 - 109.0; 112.0 - 112.7; c/a 40° 113.5 - 114.0; 115.0 - 116.0; 120.8 - 121.9; c/a 70-80° 142.3 - 143.2; c/a 70-80° At 82' fault fractures with quartz-calcite breccia, c/a 20°	437	0.8	5	9	4'	0.12		0.05	
153		END OF HOLE									

EM. 6-1168

LANGRIDGE LIMITED,

DIAMOND DRILL RECORD

NAME OF PROPERTY STURDY MINES LIMITED (CERRO OPTION)
 HOLE NO. 71-S.B.-7 LENGTH 209'
 LOCATION Claim No. 278822, Briggs Twp., Nipissing Dist., Ontario
 LATITUDE L 12 + 00' N DEPARTURE 3 + 50' E
 ELEVATION Approx. 7' above AZIMUTH 295° DIP -45°
holes 4, 5 and 6
 STARTED June 16, 1971 FINISHED June 17, 1971

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH
/ 208'	-44°				

HOLE NO. 71-SB-7 SHEET NO. 1

REMARKS _____

LOGGED BY S. CHUMOND

FOOTAGE		DESCRIPTION	SAMPLE			ASSAYS					
FROM	TO		NO.	SULPHIDES	FOOTAGE			%	%	Au	
					FROM	TO	TOTAL			oz/TON	oz/TON
0	6	OVERBURDEN (Casing recovered)									
6	23.2	HIGH MAFICS, CHLORITIZED & EPIDOTIZED, grey and greenish grey, fine grained, fine scattered pyrite and few specks of chalcopyrite; contact c/a 45°									
23.2	146	GRANODIORITE Medium grained, grey and greenish grey, chloritized and epidotized; reddish hematized short sections and slip planes, few fine grained high chlorite narrow streaks up to 1" wide, c/a 45-60°. 23.2 - 38' Few fine scattered specks pyrite and chalcopyrite and some on the slip planes, c/a 40-45°. 45 - 47' Scattered fine pyrite and chalcopyrite, lean. 50 - 65' Scattered fine pyrite and chalcopyrite, lean. 112 - 125' Scattered fine pyrite and chalcopyrite, lean. 136.5 - 139' Fine grained, chloritized section containing fault breccia with fine pyrite at 137.5-138'.									
146	153	SHEAR ZONE Top schistosity c/a 35°; bottom schistosity c/a 45-50°. 146 - 151' Scattered fine pyrite.	440	0.5	146	151	5			TR	
153	209	GRANODIORITE Similar to above, lean. 188 - 199' Few scattered specks of pyrite and chalcopyrite.									
209		END OF HOLE									

EM. 6-1183

LANGRIDGE LIMITED.

DIAMOND DRILL RECORD

NAME OF PROPERTY STURDY MINES LIMITED (CERRO OPTION)
 HOLE NO. 71-S.B.-8 LENGTH 600'
 LOCATION Claim No. 278818, Briggs Twp., Nipissing Dist., Ontario
 LATITUDE L.20 + 00' N DEPARTURE 7 + 31' W (Grid)
 ELEVATION Approx. 15' above lake AZIMUTH 115° DIP -45°
 STARTED June 22, 1971 FINISHED June 28, 1971

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH
300'	-43°				
570'	-41°				

HOLE NO. 71-SB-8 SHEET NO. 1
 REMARKS Hole lost water circulation around 448' depth.

LOGGED BY S. GUILMOND
S. Guilmond

FOOTAGE		DESCRIPTION	SAMPLE				ASSAYS				
FROM	TO		NO.	SULPHIDES	FOOTAGE			%	Cu	OZ/TON	OZ/TON
					FROM	TO	TOTAL				
0	10	OVERBURDEN (Casing recovered)									
10	600	GRANODIORITE Medium grained, grey and greenish grey, epidotized and chloritized, also reddish hematized sections, porphyritic, fine grained chloritized narrow streaks, fault zones, minor scattered pyrite and chalcopryrite mineralization. 1 to 2 specks chalcopryrite mainly in the fractures, associated with epidote, at the following depths; 17.5' c/a 40°; 24.0'; 31.5'; 39.8'; 44.7'; 53.3'; 54.8'; 56.0' c/a 20°; 62.0'; 78.3' c/a 35°; 97.6-101.1' Fine grained chloritized streaks, patchy fine chalcopryrite, top c/a 15°; bottom c/a 40°. 105.6-106.3' Fine chalcopryrite and pyrite in fracture along with core. 107.0-107.2' Chloritized, disseminated fine chalcopryrite, c/a 40°. 117.4' Few specks pyrite and chalcopryrite in fracture, c/a 45°. 127.0-128.5' White quartz and chlorite, lean, irregular c/a. 156.4-195.0' 1 to 2 specks chalcopryrite at 1 to 5' spacing. 195.0-400.0' Few scattered specks of pyrite and chalcopryrite. FAULT ZONES AT: 337.0-338.5'; 357.5-358.5' c/a 20-35°; 371.5-372.5' c/a 15-20°; 376.5-379.0' c/a 40°.	439	1	97.6	101.1	3.5		0.17	TR	

EM. 6-1168

LANGRIDGE LIMITED,

DIAMOND DRILL RECORD

NAME OF PROPERTY STURDY MINES LIMITED (CERRO OPTION)
 HOLE NO. _____ LENGTH _____
 LOCATION _____
 LATITUDE _____ DEPARTURE _____
 ELEVATION _____ AZIMUTH _____ DIP _____
 STARTED _____ FINISHED _____

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH

HOLE NO. 71-SB-8 SHEET NO. 2

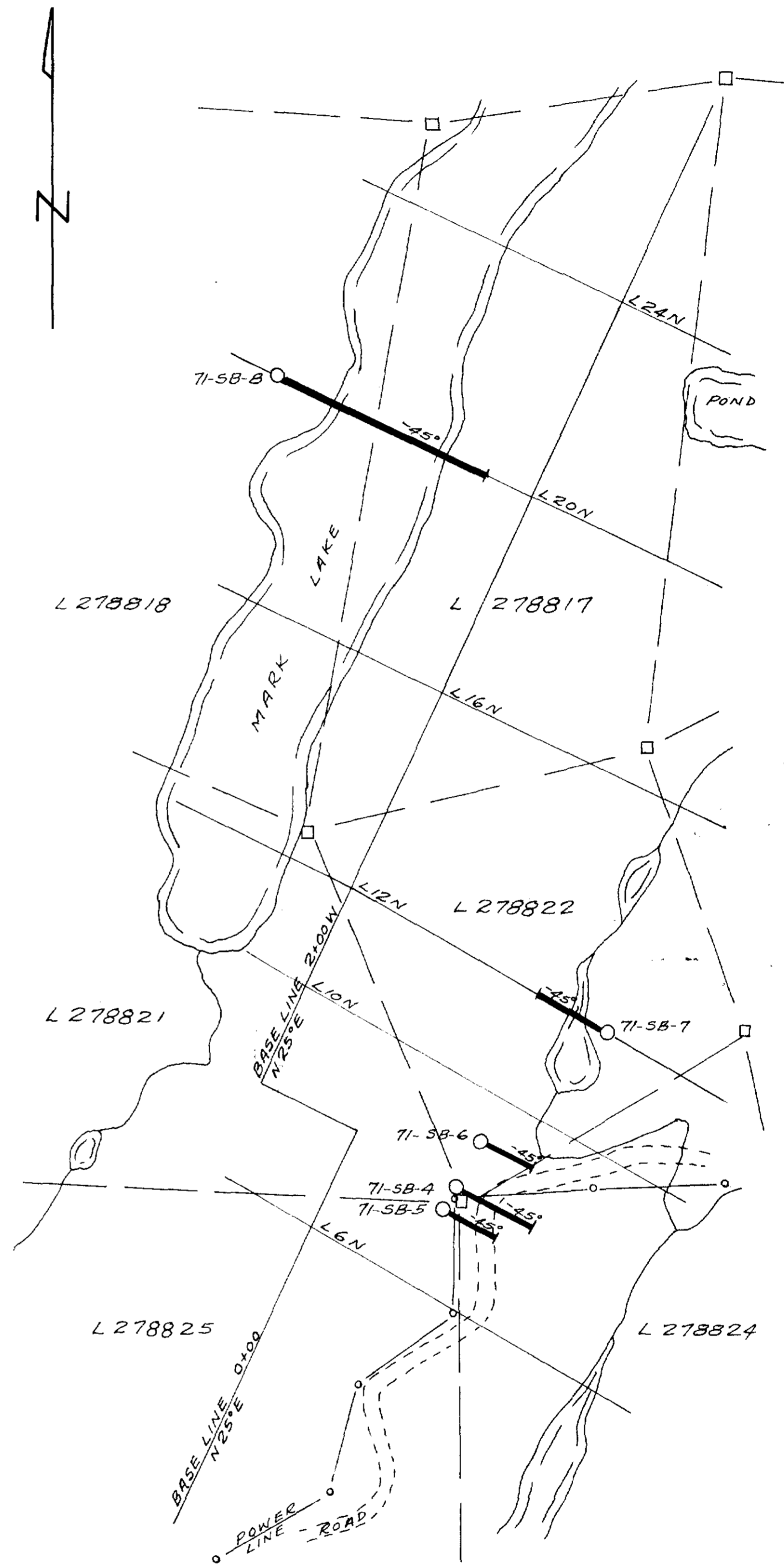
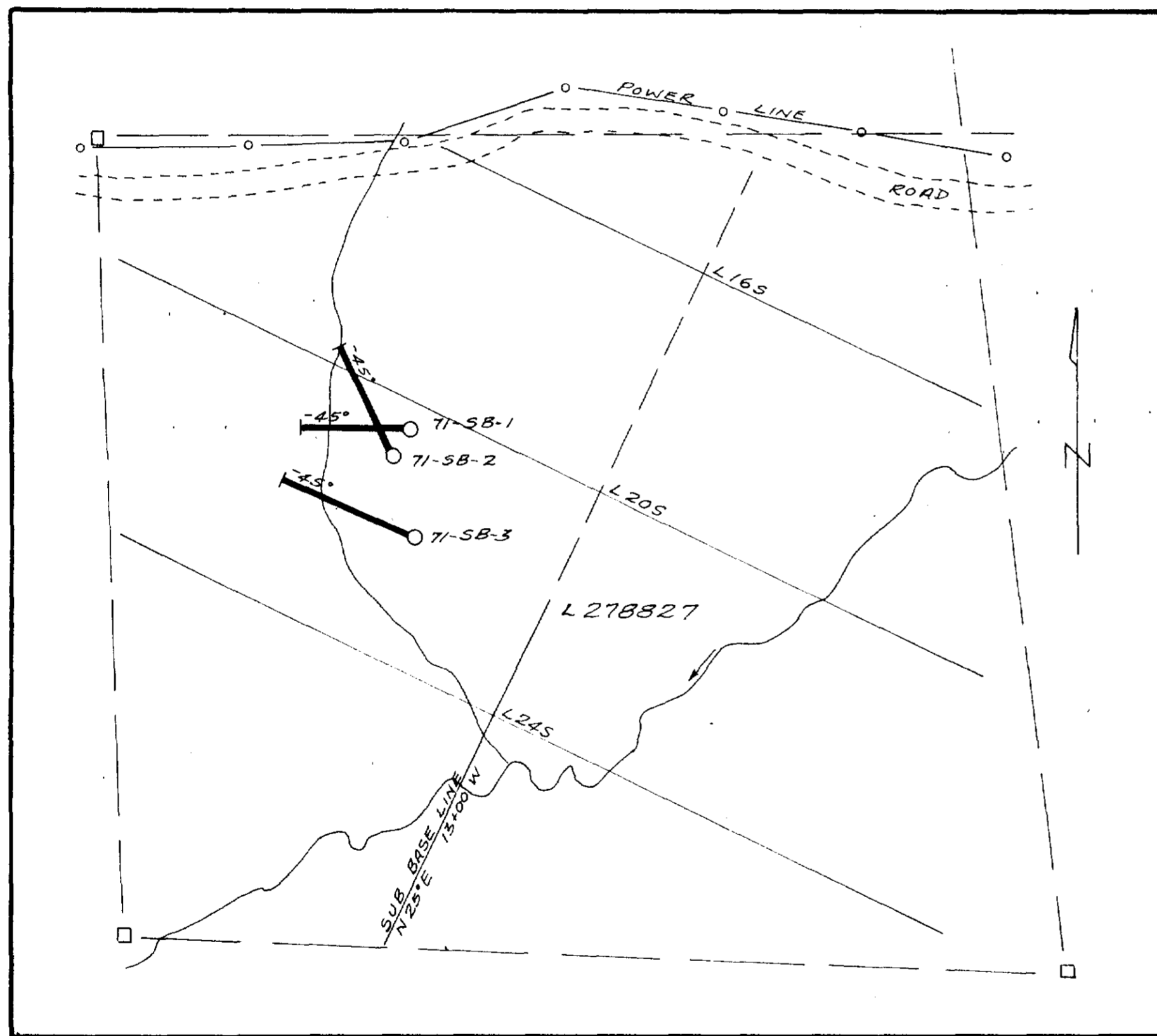
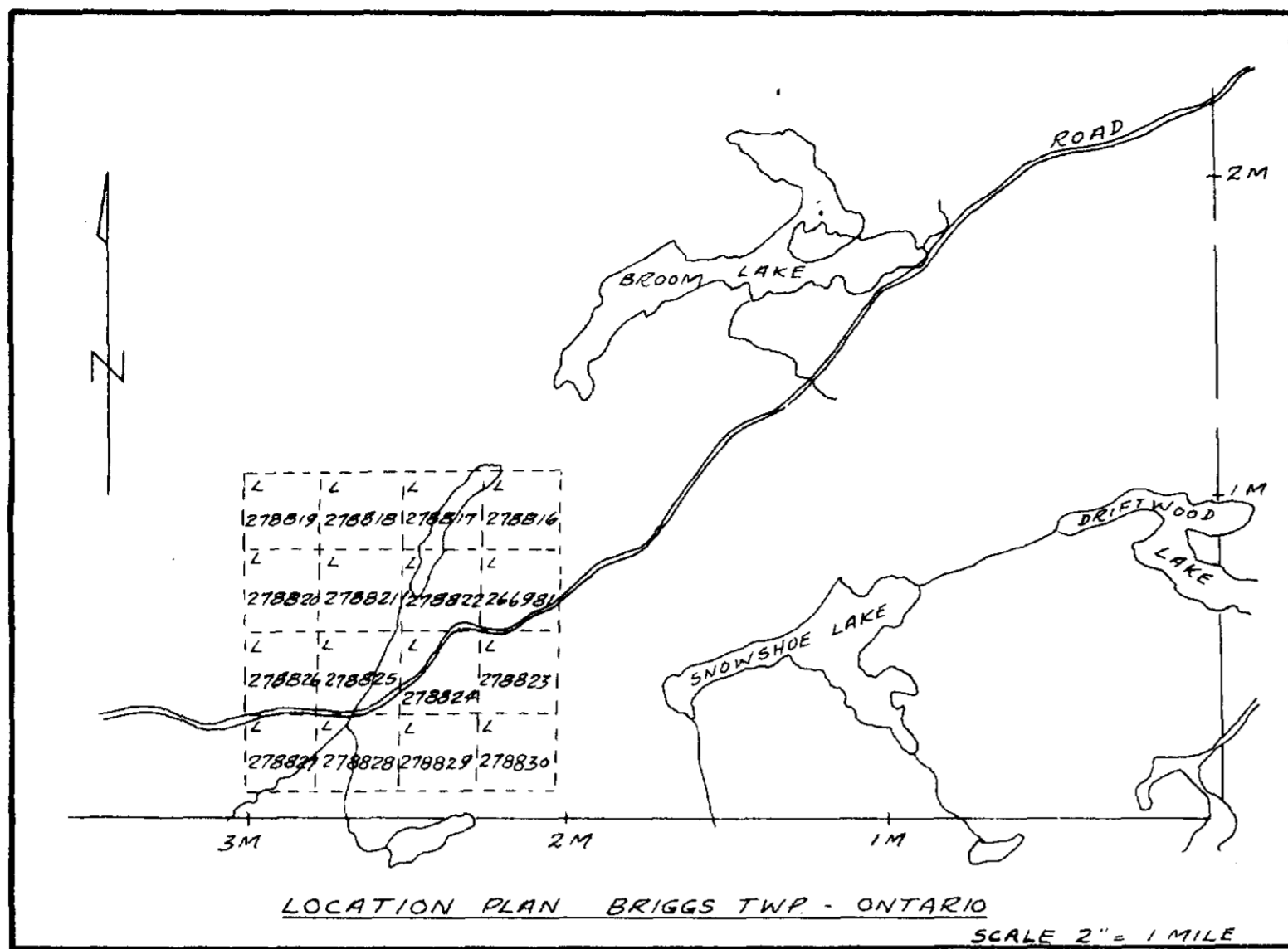
REMARKS _____

LOGGED BY J. Guindal

FOOTAGE		DESCRIPTION	SAMPLE				ASSAYS					
FROM	TO		NO.	SULPH IDES	FOOTAGE			%	%	OZ/TON	OZ/TON	
					FROM	TO	TOTAL					
10	600	GRANODIORITE (Cont.) 388.8-393.3' Porphyritic with quartz-feldspar phenocrysts in high chlorite fine grained matrix, 4 stringers rose calcite mixed with chlorite up to 3" wide, top c/a 75°, bottom c/a 45°. FAULT ZONES AT: 403.5-407.0' c/a 35°; 411.0-414.4'; 442.2' slip plane very fine chalcopryrite, c/a 30°; 447.0-448.0' c/a 40°; 569.0-570.0'; 583.5-584.0'; 585.8' fine disseminated chalcopryrite in fractures, c/a 85°; 590.8' fine specks chalcopryrite in fracture, c/a 80°; 524.0-550.0' very fine scattered pyrite and few specks chalcopryrite; 570.0-585.0' very fine scattered pyrite and few specks chalcopryrite.										
600		END OF HOLE										

EM. 6-1166

LANGRIDGE LIMITED.



STURDY MINES LIMITED

16 CLAIM GROUP
BRIGGS TOWNSHIP ONTARIO
LARDER LAKE MINING DIVISION

DRILL HOLE PLAN

SCALE 1" = 200'

JULY 1971

J. Guinard

