



41P14NW1002 0010A1 BOTHA

010

Diamond Drilling

Township of BOTHA

Report No: 10

Work performed by *OSISKO LAKE MINES LTD.*  
*Holmstrom Mining Company*  
ON *CLAIMS.*

Claim No	Hole No	Footage	Date	Note
S 55249	5	487.0'		(1)
	6	524.0'		(1)
	7	596.0'		(1)
S 32001	2	359.0'		(1)
	3	504.0'		(1)
	8	286.0'		(1)
S 32002	1	416.0'		(1)
	<u>7</u>	<u>3172</u>		

Notes:

(1) no dates given

Botha

OFFICE OF MINING RECORDER



ONTARIO

DEPARTMENT OF MINES

SUDBURY MINING DIVISION

SUDBURY, ONTARIO

December 19, 1951.

Dr. M. E. Hurst,  
Provincial Geologist,  
Dept. of Mines,  
Parliament Buildings,  
TORONTO, Ontario.

RECEIVED

DEC 20 1951

GEOLOGICAL BRANCH  
DEPARTMENT OF MINES

Dear Sir:

I enclose herewith logs, cross-sections and a composite plan of drilling submitted by Osisko Lake Mines Ltd. on the Thure Holstrum Group located in Botha Township.

The Company informs me the core is stored in proper boxes on the property.

The staff and myself extend to you at this time Best Wishes for a Merry Christmas and a Happy New Year.

Yours very truly,

JRM:GA  
Encls.

  
J. R. McGinn  
Mining Recorder.

DIAMOND DRILL RECORD

PROPERTY - Holmstrom Claims, Sudbury District

WELL NO. 1    SHEET 1    SECTION 1

Drilling N 45° E

Angle 40°

LOCATION - 120 ft. SW of 7 + 50 Base Line

Total Depth 416 ft.

Footage	Rock	Description	Sample No	Footage	Core Length	Description	% Pb	% Zn	Oz Ag	% Cu	% Ni
0.0 - 6.0		Casing	1	35- 37	24"	Dissem.py. pyrr.chalcopy, little ZnS					
6.0 - 35.0	Andesite	Dk.green chloritic with blebs of leucoxene.Med, to fine grain.Some sch. at 45° to core. Fine dissem. pyrr.& py.Few str.of qtz-carb. with pyrr.py., chalcopy.&occas. grain of ZnS	2	46- 47	12"	dissem.py. pyrr.chalcopy, 4" qtz. Some ZnS, PbS					
35.0 - 91.0	Altered flow top	At 35' abrupt contact with highly sch. & contorted silic.& carb.material with consid.dissem.pyrr., py. & scattered grains of ZnS. Occas.Qtz. carb.str.with py., pyrr., chalcopy. ZnS.Rock grey to yellow grey, f.gr. well-fract.From 50-85' consid.fine dissem.ZnS with some PbS.85-91' same rock but little or no miner'n.	3	50- 55	60"	Diss. py. pyrr.chalcopy, some ZnS, PbS					
			4	55- 60	60"	Same					
			5	60- 65	60"	Same					
			6	65- 70	60"	Same					
			7	70- 75	60"	Same					
			8	75- 80	60"	Same					
91.0 - 97.0	Lampro?	Dk.green f.gr.sch.chl.basic material with consid.mica in places.Looks like lamprophyre dyke.	9	80- 85	60"	Same					
			10	97-102	60"	Dissem.pyrr ZnS					
			11	102-107	60"	Same					
			12	107-112	60"	Same					
			13	112-118	72"	Same					
97.0 - 196.5	Altered flow top	At 97' sharp contact with same material as 35-91' 97 -118' dissem.ZnS with little PbS 147-148' qtz.with some py.,pyrr. Lampro.dykes at 126.5-127.5 134.0-136.5 155.0-155.5 167.0-167.5 174.0-196.5	9	80- 85	60"	Same					
			10	97-102	60"	Dissem.pyrr ZnS					
			11	102-107	60"	Same					
			12	107-112	60"	Same					
			13	112-118	72"	Same					

DIAMOND DRILL RECORD

WELL NO. 1

SHEET 2

Footage		Sample No	Core Footage	Core Length	Description	% Pb	% Zn	Gr. Ag	% Cu	% Ni
196.5-197.5	Granite				At 196.5 contact with red f.gr.granitic rock, light disse. py., pyrr. chalcopy. At contact 6" open fracture, filled with sand					
197.5-390.0	Andesite				At 197.5 sharp contact with dk. green, f'ly mass. andesite, med. gr. with leucoxene peppered throughout. In places the andesite is altered to grey color, well fractured, with gneissic appearance and light disse. py. pyrr. chalcopy. a little ZnS & PbS at 237'. Altered sections look as if due to proximity of granite tongues. Granitic'n becomes prominent from 300' on, with numerous siliceous pink sections. Consid. magnetite vicinity of 370'.					
390.0-416.0	Granite				At 390' sharp contact with pink f. to med. gr. granite & pegmatite. Some molybdenite.					

END OF HOLE AT 416'

DIAMOND DRILL RECORD

PROPERTY - Robinson Claims, Sulbury District  
 HOLE NO. 2 SHEET 1 SECTION 1  
 Bearing N 45° E Angle 40°

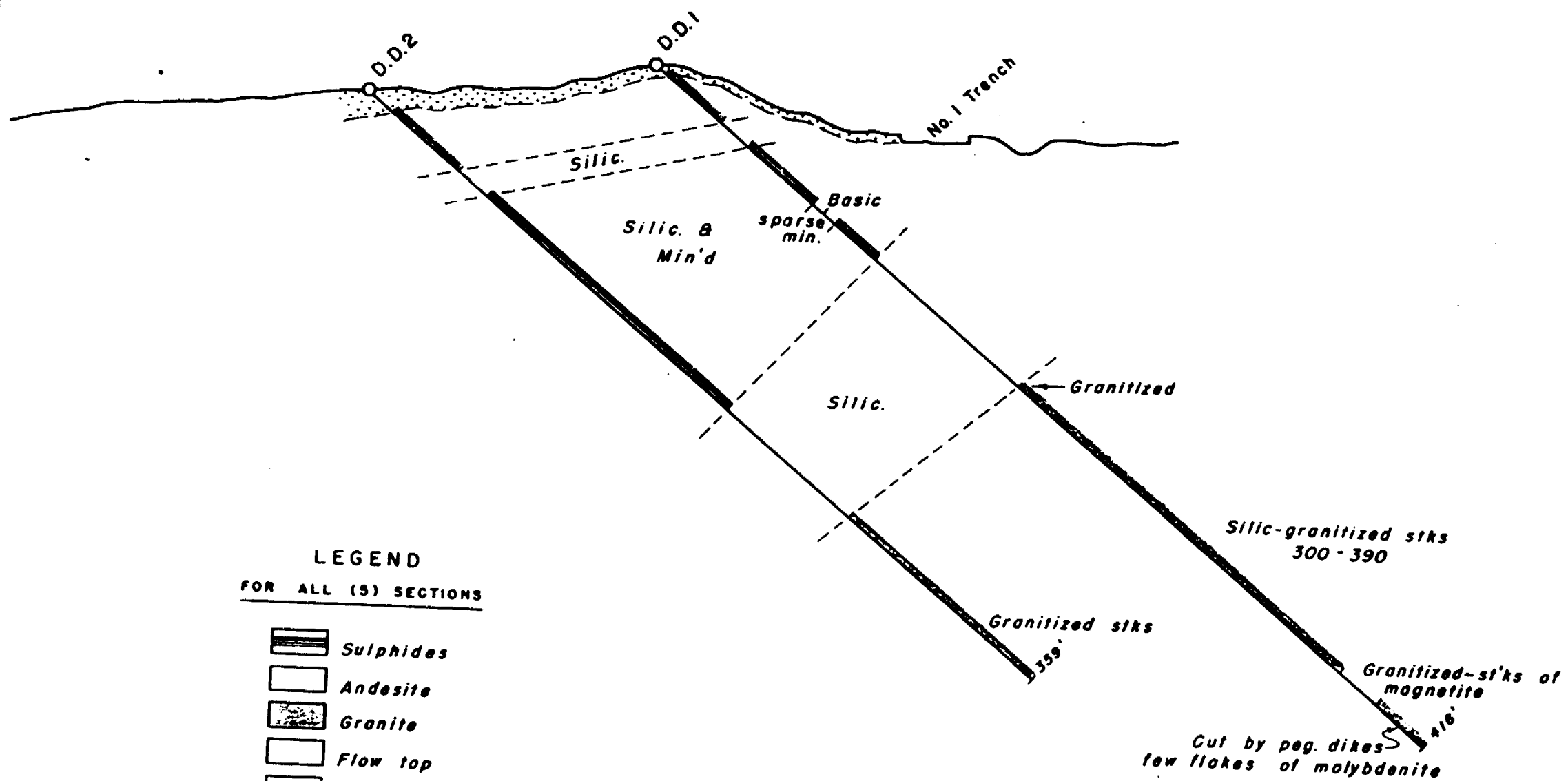
LOCATION - 230 ft. SW of 7 - 50 Base Line  
 Total Depth 359 ft.

Footage	Rock	Description	Sample No.	Footage	Core Length	Description	% Pb	% Zn	% Ag	% Cu	% Ni
0.0- 13.0		Casing	14	64- 69	60"	Dissem. py. pyrr. chalc. py. ZnS & little PbS					
13.0- 48.5	Andesite	F'ly mass. dk. green, chl. med. to f. gr. with specks & wisps of leucoxene									
48.5- 262.0	Altered flow top	At 48.5' sharp contact with dk. grey to yellowish, silic. or carb. highly fractured & contorted rock. Probably fine pyroclastic.	15	69- 74	60"	Same					
		48.5-64' some dissem. pyrr. & py.	16	74- 79	60"	"					
		Occas. qtz. carb. str, widely separated	17	79- 84	60"	"					
		1"-2" stks. with dissem. ZnS, PbS	18	84- 89	60"	"					
		64-194' wkly dissem. ZnS with occas. grain of PbS. Some dissem. py., pyrr. and chalcopy.	19	89- 94	60"	"					
		Lamprophyre tongues at	20	94- 99	60"	"					
		139-146'	21	99-104	60"	"					
		172'6-186	22	104-109	60"	"					
		194-203	23	109-114	60"	"					
		209-231	24	114-119	60"	"					
		194-262' alteration, fracturing, with dissem. py. pyrr. & chalcopy. continues as above, but without visible ZnS or PbS	25	119-124	53"	"					
			26	124-129	60"	"					
			27	129-134	60"	"					
			28	134-139	60"	"					
			29	139-144	60"	"					
	30	144-149	60"	"							
	31	149-154	60"	"							
	32	154-159	60"	"							
	33	159-164	60"	"							
	34	164-169	60"	"							
	35	169-174	60"	"							
262.0-359.0	Andesite	At 262' sharp contact with andesite as above, quite mass.	36	174-179	60"	"					
			37	179-184	60"	"					
			38	184-189	60"	"					
			39	189-194	60"	"					

END OF HOLE 359'

SW

NE



HOLMSTROM CLAIMS

SECTION I

1" = 50'

1" = 50'

OCT./51.

S.

DIAMOND DRILL RECORD

PROPERTY - Holmstrom Claims, Sudbury District

HOLE NO. 3

SECTION 2

SHEET 1

LOCATION - 125 ft. SW of 10 + 00 Base line

Bearing - N 45° E

Angle - 45°

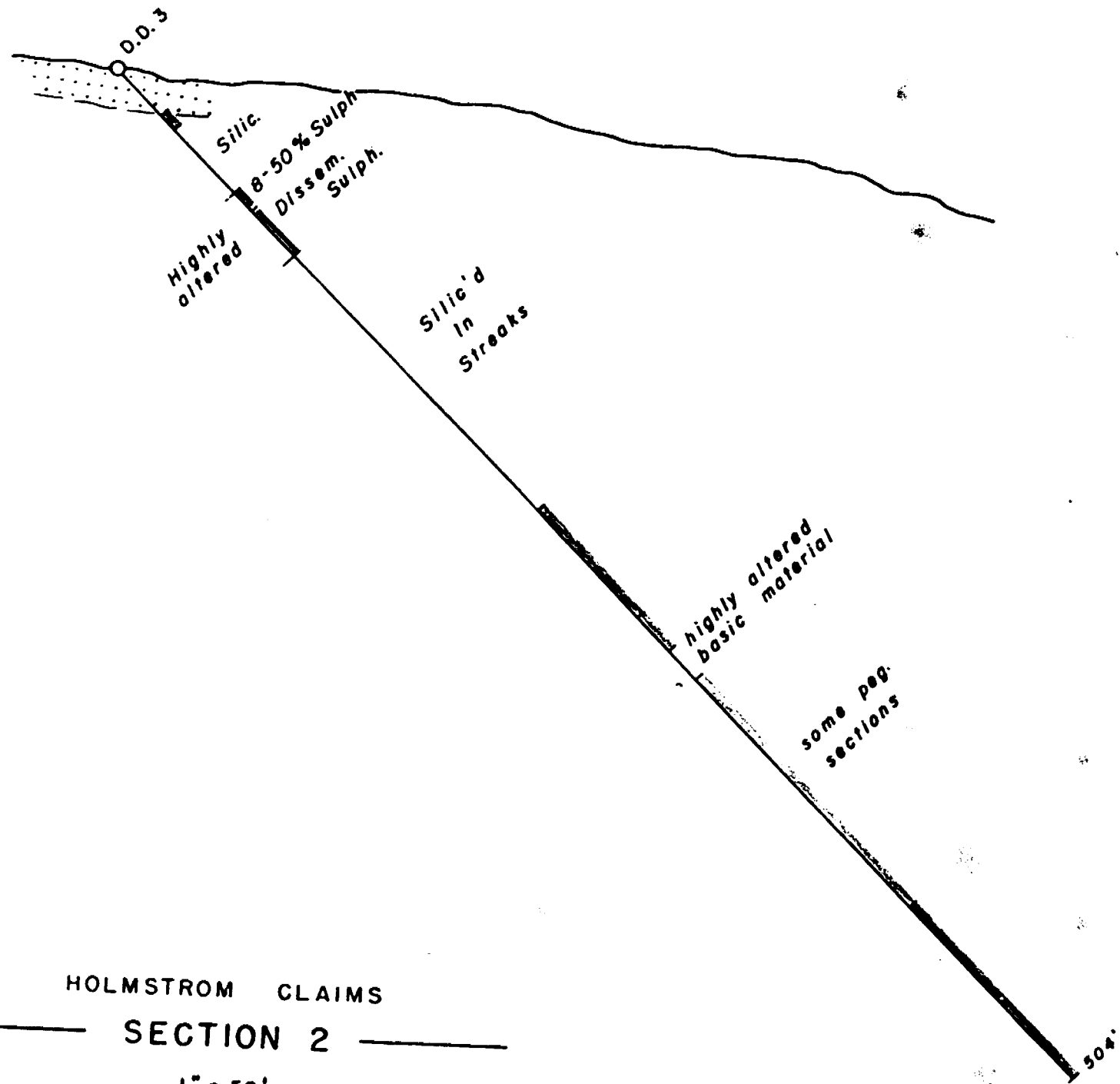
Total Depth - 504 ft.

Footage	Rock	Description	Sample No	Footage	Core Length	Description	% Pb	% Zn	% Cu	% Ni
0.0- 22.0		Casing	40	62-66	48"	50% mass. pyrr. py. chalcopy. some ZnS				
22.0- 28.5	Andesite	Dk. green mass. chl. with blebs of leucoxene throughout.								
28.5-222.0	Altered flow top	Grey silic. f. gr., well fractured contorted pyroclastic, consid. dissem. pyrr. chalcopy, py. occas. grain & stk. of ZnS	41	66-70	48"	Same				
	28.5-62'	50% mass. pyrr., py., chalcopy, some ZnS	42	70-75	60"	Dissem. pyrr., py. chalcopy. ZnS				
	62.0-70'	ZnS dissem. & in stks.								
	70-92.5'	rock type same but altered only in narrow stks, some dissem. sulphides but very little ZnS	43	75-80	60"	Dissem. pyrr. chalcopy, py. ZnS				
	92.5-222'									
222.0-275.0	Andesite	At 222' sharp contact with mass. dk. green chl. med. to f. gr. andesite	44	80-85	60"	Same				
			45	85-90	60"	Same				
275.0-292.0	At 275'	sharp contact with pink f. gr. aplitic material well fract. & lightly min'd by py., pyrr., chalcopy. & occas. flaks of MoS <sub>2</sub>	46	90-92.5	30"	Same				
292.0-306.0	Basic dyke	F'ly. mass. med. to f. gr. dk. green rock, about 50% pyroxene, highly altered by granite								
306.0-420.0		At 306' sharp contact with pinkish white aplitic material with pegmatite patches, grading at 330' to med. gr. mass. pink granite with occas. section of pegmatite 298'-307' some dissem. ZnS								
420.0-496.0	Andesite	At 420' contact with dk. green f. to med. gr. chl. mass. rock - probably andesite								
496.0-504.0	Granite	At 496' sharp contact with med. gr. pale pink mass. granite								

END OF HOLE 504'

SW

NE



HOLMSTROM CLAIMS

SECTION 2

1" = 50'  
1" = 50'





DIAMOND DRILL RECORD

HOLE NO. 5

SHEET 2

Footage	Rock	Description	Sample No	Core Footage	Core Length	Description	¢ Pb	¢ Zn	Oz Ag	¢ Cu	¢ Ni
200'6"-265'	Andesite?	As from 149'5"-182' with stks. of granitic alt'n altered to pinkish white in places with apple green stks, patches of magnetite & blebs of brown garnet. Some dissem. ZnS PbS, occas. flake of MoS <sub>2</sub> . The rock is sugary in appearance and looks like a typical contact metamorphic development in an impure quartzite. It seems to consist mainly of qtz. grains banded by carb.									
265'-297'	Altered flow top	At 265' contact with dk. grey f. gr. sch. highly altered flow top material. Numerous pink stks. of granitic alt'n. Dissem. magnetite.									
297'-449'	Andesite	At 297 sharp contact with mass. dk. green chl. med. gr. andesite. Somewhat altered throughout by narrow tongues of granitic material. Patchy dissem. chalcopy. pyrr. py. and magnetite. Also wisps and grains of powdery red mineral, possibly iron oxide Sample 379-382. Tongues of definite granite at 319'-325' and 336'-359'									
449'-487'	Granite	Sharp contact at 449' with mass. pink granite, fairly well fractured with wk. dissem. chalcopy. and py. Scattered grains of MoS <sub>2</sub> . Some sections show porphyritic texture									

END OF HOLE 487 ft.

DIAMOND DRILL RECORD

PROPERTY - Holmstrom Claims, Sudbury District

BLK. NO. 6

SHEET 1 SECTION 3

LOCATION - 600 ft. SW of 18 + 00 Base line

Bearing - N 45° E

Angle - 40°

Total Depth 524 ft.

Footage	Rock	Description	Sample No	Footage	Core Length	Description	\$ Pb	\$ Zn	Oz Ag	\$ Cu	\$ Ni
0 - 8		Casing	67	17'6"-19'6"	24"	Dissem. ZnS					
8 - 227	Andesite	Dk. green f. to med. gr. fairly mass. with leucocrase throughout. Patchy dissem. py., pyrr. Occas. stky pale green altered section with Qtz. carb. str. & lt. py. chalcopy. ZnS. Some sections show wisps and grains of powdery red mineral.	68 69 70	30' -35' 35' -40' 63'5"-69'6"	60" 60" 72"	Same " Consid. py. pyrr. chalcopy some ZnS					
227 - 229	Granite	F. gr. pink aplitic material	71	72' -74'6"	30"	Same with stks of powdery red mineral					
229 - 242	Flow top	F. gr. grey to grey pink highly fractured flow top material with stks of granitic alt'n. Some dissem. py. pyrr. chalcopy. with occas. PbS coated fracture	72 73 74 75 76	81' -85'6" 85'6"-88'6" 126' -127'6" 133'6"-137'6" 148' -150'6"	54" 36" 18" 48" 30"	" " " " "					
242 - 286	Granite	At 242' contact with fairly mass. grey to pink granite, consid. muscovite & lightly dissem. py., chalcopy.	77 78 79 80	166' -170' 190' -195' 195' -199' 211' -226'	48" 60" 48" 60"	" " " "					
286 - 387	Andesite	At 286' contact with fairly mass. dk. green f. gr. to med. gr. chl. andesite with stks & wisps of pale green alt'n. In altered sections light dissem. py. pyrr. chalcopy. with some ZnS	81 82 83 84	226' -231' 241'6"-246'6" 310' -315' 385' -390'	60" 60" 60" 60"	" " Dissem. py. pyrr. chalcopy. Same with some PbS, ZnS					
387 - 389	Granite	Narrow tongue mass. pink granite. Dissem. py., pyrr., chalcopy.	85 86 87	390' -394'6" 394'6"-401' 401' -406'	54" 78" 56"	" " Dissem. PbS, ZnS					
389 - 401	Flow top	Lightly altered f. gr. grey green pyroclastic	88	406' -411'	60"	Same					
	grading to andesite	grading in few feet to mass. dk. green chl. andesite. altered to pale grey green in stks. Fairly heavy dissem. py. pyrr., chalcopy	89 90 91 92 93	411' -416' 416' -421' 421' -426' 426' -431' 431' -436'	60" 60" 60" 60" 60"	" " " " "					

DIAMOND DRILL RECORD

PROPERTY - Holmstrom Claims, Sudbury District  
 HOLE NO. 6 SHEET 2

Footage	Rock	Description	Sample		Core Length	Description	%	%	Oz	%	%
			No	Footage							
401 - 469	Andesite	abrupt change to fairly mass. white to pale yellow pink green material with blebs of brown garnet in silic'd & carb'd groundmass. This is same as 200-265' in hole 5. Dissem. fine PbS and ZnS through out with consid. magnetite like contact metam. development.	94	436 - 441	60"	Dissem. PbS ZnS					
			95	441 - 446	60"	"					
			96	446 - 451	60"	"					
			97	451 - 456	60"	"					
			98	456 - 461	60"	"					
			99	461 - 466	60"	"					
			100	466 - 469	60"	"					
469 - 474	Andesite	Alt'n ceases at 469 - grading sharply to dk green chl. f.gr. andesite-lightly silic'd and with consid. dissem. py. pyrr. chalcopy.									
474 - 520	Flow top	At 474 grades sharply to f.gr. dk. grey. pink pyroclastic with stks of pink granitic alt'n. Light dissem. py., pyrr., occas. narrow qtz. carb. str. with few grains of Zns. Heavy stks. of magnetite 508-511 Definite granite tongues 498-500, 518-520.									
520 - 524	Andesite	At 520 contact with fairly mass. med. gr. dk. green chl. andesite. Dissem. py. pyrr. chalcopy.									

END OF HOLE 524 ft.

SW

NE

O.D.D. 6

O.D.D. 5

Chl'ic  
narrow st'ks  
cont'g wk.  
ZnS, Pbs

Granitized

Silic. wk. ZnS, Pbs

Granitized  
highly altered  
Garnet in blobs  
wk dissem. ZnS, Pbs  
consid. magnetite

highly altered  
Garnet in blobs  
wk dissem. ZnS, Pbs  
consid. magnetite

highly altered  
v. wk. ZnS, Pbs

Granitized st'ks

Massive

mass. occas. narrow  
granitized st'ks

524'

487'

HOLMSTROM CLAIMS

SECTION 3

1" = 50'

1" = 50'

OCT. / 51 E.

DIAMOND DRILL RECORD

PROPERTY - Robinson Claims, Sudbury District

HOLE NO. 7 SHEET I SECTION 4

LOCATION - 600 ft. SW of 21 + 00 Base line

Bearing - N 45° E Angle - 40°

Total Depth - 596 ft.

Footage	Rock	Description	Sample No	Core Footage	Core Length	Description	\$ Pb	\$ Zn	Oz Ag	\$ Cu	\$ Ni
0	- 41	Casing									
41	- 65	Andesite				Fairly mass. dk.green chl.med.to f.gr.					
65	- 90	Flow top				At 65' abrupt change to mass.to w'kly sch. dk.green f.gr.chl.flow top material.Pale green alt'n in stks and along fractures,Wk. dissem.py.chalcopy.Some ZnS, PbS. along fractures in altered stks.					
90	-129	Andesite				Vicinity of 90' gradually becoming more mass.though still f.gr.Appears to be grading into mass.base of flow.					
129	-385'6"	Diorite				At 129' contact with mass.fairly well (norite?)fractured med.to f.gr.grey green diorite (may be norite) For several feet on either side of contact there is consid. dissem. py.,pyrr.,chalcopy. with occas.grain & stk. of ZnS. Rock is brecciated from 129-142 then grades into mass.even-textured intrusive with occas. qtz. eye 139-149 dissem.podisy red mineral 214-219 qtz.carb.vein with some py.chalcopy. pyrr. PbS. 331-360 fairly well sheared					
385'6"	-386'6"	Granite				12" mass. pink granite					
386'6"	-412'	Diorite				As above but wkly sch. (norite) 401-412 75% white to pink qtz.-carb.barren					
412'	-452'	Altered diorite				At 412' becomes grey pink f.gr. granitized wall-fractured with wk.dissem.py.chalcopy. 425-429'6" Wk.dissem. PbS 429'6"-431'6" PbS dissem. & in seams-possibly 3% Pb.					

MINING DRILL RECORD

PROPERTY - Holmstrom Claims, Sulbury District  
 Map No. 7 SHEET 2

Footage	Rock	Description	Sample No	Footage	Core Length	Description	\$ Pb	\$ Zn	oz Ag	\$ Cu	\$ Ni
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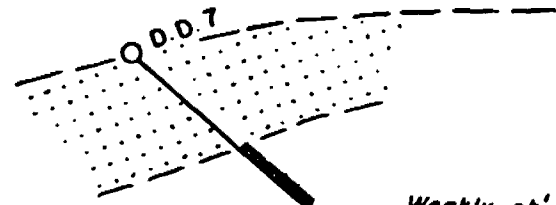
431'6" - 436' Wk. dissem. PbS  
 The section 412' - 432' is probably the extension of  
 the zone encountered in holes to the South.

432 - 596	Granite	At 452' contact with mass. pink pegmatite grading at 470' to mass grey pink med. gr. granite with wk. dissem. py., chalcopy.									
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END OF HOLE 596 ft.

SW

NE



*Weakly sh'd  
Grading to more mass.  
Andesitic flow base*

*(Possibly norite)  
mostly mass.  
Occas. narrow fract. zone  
with wk. Pbs & Zn S*

*12" tongue pink granite  
(Norite ?)  
Highly alt'd 75% Barren qtz carb.  
5' wk Pbs  
2' fairly strong Pbs  
5' wk Pbs*

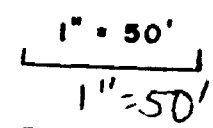
*Granitized*

*Pegmatitic sections*

*596'*

HOLMSTROM CLAIMS

SECTION 4





## DIAMOND DRILL RECORD

PROPERTY - Holmstrom Claims, Sulbury District

HOLE NO. 8

SHEET 1

SECTION 5

LOCATION - 330' SW of 6 + 00 Base line

Bearing - N 45° E

Angle - 45°

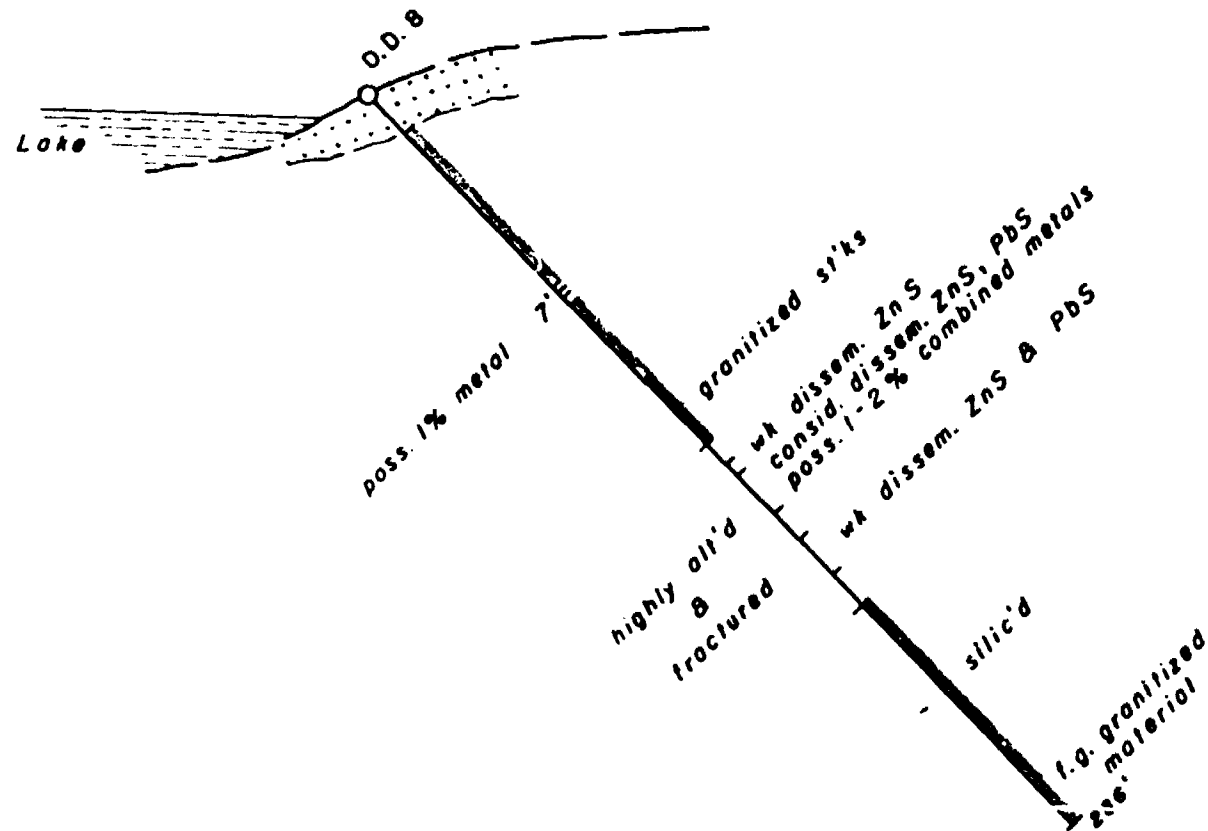
Total Depth 286 ft.

Footage	Rock	Description	Sample No	Footage	Core Length	Description	% Pb	% Zn	Oz Ag	% Cu	% Ni
0 - 15		Casing	101	75 - 82	84"	Dissem. ZnS					
15 - 75	Granite	Grey pink med. to f. gr. mass. w'kly fractured granite. Wk. dissem. py occas. flake of MoS <sub>2</sub>	102	149 - 154	60"	Dissem. py. pyrr. ZnS, PbS					
75 - 82	Altered	At 75' contact with dk. grey stky sch. flow top altered flow top material as in holes 1, 2, & 3. Few narrow qtz. carb. str. Dissem. ZnS, possible 1% Zn.	103	154 - 159	60"	Same					
82 - 112	Granite	At 82' contact with granite as above	104	159 - 164	60"	"					
112 - 137'6"	Andesite	At 112' contact with dk. grey green f. gr. wall-fractured andesite with granitized stks. Occas. grain of ZnS.									
137'6" - 200'	Altered	At 137'6" contact with dk. grey f. gr. silic. flow top pyroclastic material. Dissem. py. pyrr. and occas. stk. of chalcopy. Similar to holes 1, 2, & 3 but not as highly altered 145-149 Wk. dissem. ZnS 149-164 Dissem. ZnS, some PbS. Few qtz. carb. str. Possibly 1% combined metals. 164-174 Consid. dissem. py., pyrr. but only occas. grain of ZnS, PbS. Numerous whitish altered zones similar to holes 5 & 6 but no garnets here. 174-188 Some, PbS in whitish altered zone 188-200 As 164'-174'									
200' - 270'	Andesite	Vicinity of 200' rock grades to med. gr. andesite of basal section of flow silic. in stks. giving gneissic appearance									
270' - 286'	Granite	At 270' becomes pink, f. gr. splitic.									

END OF HOLE 286 ft.

SW

NE



HOLMSTROM CLAIMS

SECTION 5






1" = 50'

1" = 50'

HOLMSTROM CLAIMS  
BOTHIA TWP. - ONT.

SURFACE GEOLOGY & DRILL HOLES






LEGEND

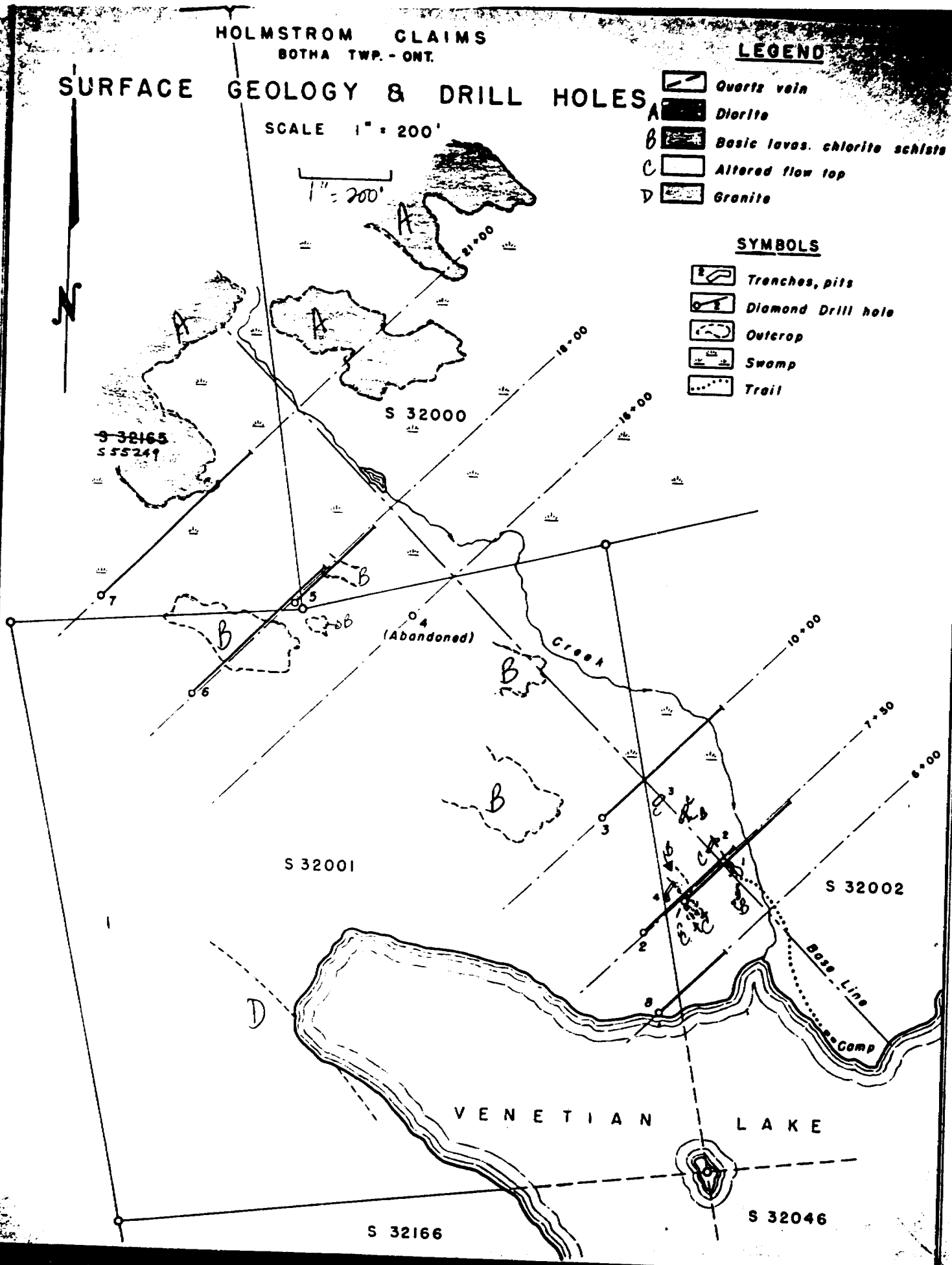
-  Quartz vein
- A**  Diorite
- B**  Basic lavas, chlorite schists
- C**  Altered flow top
- D**  Granite

SCALE 1" = 200'

1" = 200'

SYMBOLS

-  Trenches, pits
-  Diamond Drill hole
-  Outcrop
-  Swamp
-  Trail





HOLSTROM CLAIMS, BOTHA TOWNSHIP

Sudbury Mining Division  
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WORK REPORT

A total of 557 ft. of drilling on claim S32000 in holes #5 and #6 at 60°, 40° respectively.

A total of 742 ft. of drilling on claim S32001 in holes #2 and #3 and #8 at 40°, 45°, 45° respectively.

A total of 1203 ft. of drilling on claim S32002 in holes #1, 2, 3 and 8 at 40°, 40°, 45°, 45° respectively.

A total of 670 ft. of drilling on claim S55249 in holes #5, 6 and 7 at 60°, 40°, 40° respectively.

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The core is stored in proper boxes at the property

Attached in duplicate are

- (1) Core logs
- (2) Geological X-sections of drill holes
- (3) Surface plan of drilling

S 57809	S 55248	S 55247	
days req 200	days req 160	days req 160	
	Group 1 (7 claims)		
S 57808	S 55249	S 32000	S 57810
days req 200	570' DD. done days req 160	557' DD. done days required to bring to patent 0	days req 200

S 57806	S 32001	S 32002	S 57805
days req 200	742' DD. done days req. 0	203' DD. done days req 0	days req 200
	Group 2 (9 claims)		
S 57807	S 55244	S 55245	
days req 200	days req. 160	days req 160	

If grouped as above DD done  
will bring all ground up to  
patent application  
A.G.D.

S 57804	S 57805
days req 200	days req 200