

826658

INTERIM REPORT
ON THE
DIAMOND DRILL PROGRAM
OF
GOLD RIVER MINES LTD. (N.P.L.)
BOULDER MOUNTAIN PROPERTY

April 4, 1973
Vancouver, B.C.

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Consulting Geologist

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INTRODUCTION

The following report deals with the diamond drill program on the Boulder Mountain property of Gold River Mines Ltd. (N.P.L.) which was initiated in November of 1972. The drilling was concentrated on the South Copper Showing where, in addition to the hi-grade chalcopryrite surface exposures, an extensive geophysical anomaly occurs. 13 holes for a total of 3,203 feet were drilled on the zone. 562 feet of drilling in five holes was also completed on the Mid Copper Showing. The program was shifted to the lead-zinc-silver showings on the Cousin Jack Crown-grant where two machines are presently drilling.

PROPERTY

The property is comprised of 76 located and Crown-granted claims and are as follows:

<u>CLAIM NAME</u>	<u>RECORD NUMBER</u>	<u>EXPIRY DATE</u>
Pit 1-2	29014-29025	October 21, 1974
Pit 3-6	33776-33779	June 18, 1974
Hope 1-2	29022-29023	October 21, 1974
Hope 3-24	33754-33775	June 18, 1974
J.M. 1-2	28204-28205	September 1, 1974
Hawk 1-4	29026-29029	October 21, 1974
Rex 1-4	33780-33783	June 18, 1974
Worth 1-8 Fr.	348153M-348160M (Tag No)	November 3, 1973
Mug 1-16	38282-38297	October 24, 1973

<u>Crown Grant Name</u>	<u>Lot No.</u>	<u>Mineral Lease</u>	<u>Expiry Date</u>
Cousin Jack	L263	M-82	February 13, 1974
Ymir	L264	M-83	June 24, 1974
Morning	L265	M-83	June 24, 1974
Oskkosh	L266	M-83	June 24, 1974
Winnibago	L267	M-83	June 24, 1974
Black Bird	L268	M-83	June 24, 1974
Berlin Fraction	L269	M-83	June 24, 1974
Freddie Burn	L270	M-84	June 24, 1974
Constitution	L282	M-87	December 18, 1974
International	L283	M-87	December 18, 1974
Anaconda	L373	M-83	June 24, 1974

The claims are held by location and the Mineral Leases are registered in the name of Gold River Mines Ltd (NPL).

LOCATION AND ACCESS

The claims and Crown Grants are situated on Boulder Mountain four and a half miles northwest of Tulameen and west of Otter Lake.

The property is accessible by a three-mile four-wheel drive road cutting off to the west at Mile 20.5 of an all-weather gravel road originating at Princeton, B.C. Tulameen is at Mile 17 on this secondary road.

HISTORY OF PROPERTY

Since the early 1900's when claims were Crown-granted on the lead-zinc zone and on the present South Copper Showing, the property has been periodically explored and examined for its potential. The original work consisted of pits, open-cut trenches and adits on known mineralized zones. Although considerable mineralization was discovered, including hi-grade zones, the property was proven to be uneconomical at that time.

The following years through to 1970 saw a number of individuals and companies interested in further exploration of the property.

Since 1970, Gold River Mines Ltd. (NPL) acquired the Crown-granted claims, staked a number of claims adjacent to the original property, and initiated an active exploration program of trenching, geophysical surveys and diamond drilling.

REGIONAL GEOLOGY

The Nicola Group of rocks underlying Boulder Mountain and trending in a belt eight to twenty-five miles wide from

the U.S. border to beyond Kamloops Lake is comprised of vari-colored lavas, argillite, tuffs, limestone, chlorite and sericite schists. The Coast Intrusives are usually peripheral to this belt and are also found as stocks or plugs within the Nicola Group. More recent formations of sedimentary rock as well as stocks or plugs of Copper Mountain Intrusives also occur within the Nicola Group.

Large scale north trending faults cut the Nicola rocks and these structures are believed to have provided the means for deposition of the many mineralized zones that are scattered throughout the area.

The Boulder Mountain property is situated adjacent to the Otter Lake Fault which projects through to Copper Mountain nine miles south of Princeton where past and present production has been significant.

LOCAL GEOLOGY

The claim group predominantly covers an area of greenstones (altered andesite flows) of the Nicola Group of rocks. Locally the greenstones are sheared to the degree where they can be described as a chlorite schist.

Variations of an augite porphyry also occur on the property. A Coast Intrusive granodiorite occurs along the eastern portion of the property. Adjacent to the granodiorite and trending north is a shear zone which is upto 500 feet wide and which contains schists ranging from chlorite to talc-sericite. This major shear zone is usually moderately pyritized and locally contains northerly trending quartz veins which may be mineralized.

Other similar narrow shear zones are scattered throughout the property and usually contain narrow random stringers and blebs of quartz. These local shear zones are well pyritized.

Drill holes on the South Copper Showing have revealed the presence of underlying schist zones which are usually well banded and heavily pyritized. Intercalated narrow usually heavily pyritized sections of flow breccia also occur.

Narrow quartz stringers, generally devoid of mineralization other than in the copper zone, are quite common. The quartz stringers are commonly oriented along flow bedding planes, which dip from 10° to 20° to the west, although

random quartz stringers do occur.

Coincident hematite and epidote alteration, occurs as a halo around the pyrite mineralization. This is especially evident in hole 73-12 where pyrite is generally absent although hematite and epidote are ubiquitous. This would suggest a peripheral alteration zone of the heavy pyrite mineralization as outlined by the I.P. anomaly. This effect is also manifest on a minor scale in drill holes within the core of the I.P. anomaly.

MINERALIZATION

The mineralized zone on the South Copper Showing as indicated by the drilling to date varies from one foot to seven feet wide, of chalcopyrite bearing quartz veins. The individual quartz veins within a zone are generally less than six inches wide and contain varying ratios of pyrite and chalcopyrite occurring as patches, veinlets or disseminations. The pyrite and chalcopyrite are intimately associated.

The continuous zone of mineralization dips from 10° to 20° to the west with its surface expression occurring in the trenches 200 feet east of the baseline. The

surface showings contain considerably less quartz than the sub-surface zone which especially in the hi-grade chalcopryrite at L 19 + 50 N 1 + 50 E where quartz is virtually absent. 500 feet west of this exposure in hole 73-14 the zone contains heavy sulphide mineralization, the bulk of which is pyrite.

On the Mid Copper Showing the sub-surface extension of the mineralized zone was traced, however, there was a pronounced decrease in chalcopryrite mineralization. The zone is not as well defined as the South Copper zone.

DRILL HOLE ASSAYS

<u>Drill Hole No.</u>	<u>Footage</u>	<u>Assay</u>
<u>South Copper</u>	<u>(Feet)</u>	<u>% Cu.</u>
72-1	1-110	1.47 >
72-4		0.28
73-1	12-19	1.29 ✓
	145-150	0.15
73-2	32.5-42.5	0.08
	42.5-48.5	0.28
73-3	54-59	1.74 ✓
73-8	8-13	0.70
73-10	14-19	0.30
73-13	68-73	0.43
	101-106	0.11
73-14	117-122	0.11

Mid Copper

73-4	29.5-34.5	0.04
73-5	31-36	0.31
73-6	9-14	0.01
73-7	1-6	0.21

DRILL HOLE RESUMESouth Copper72-1 110'

Narrow chalcopryrite bearing quartz veins and heavy disseminations pyrite in a silicified greenstone.

72-4 452'

Mainly porphyritic greenstone with heavily pyritized schist from 314-335. Light to moderate pyrite in greenstone. Local hematite and epidote. One foot granodiorite dyke; 4" diorite dyke. Quartzitic section 115-125.

73-1 200'

Mainly porphyritic greenstone with local sections of heavy pyrite in flow breccia and schist. 12' - 19' chalcopryrite in quartz carbonate veins.

73-2 163' 167'

Mainly porphyritic greenstone with light and local moderate pyrite. Sections of tuffaceous andesite with moderate pyrite. Quartz-carbonate zone with chalcopryrite at 36-49.

73-3 171'

Porphyritic greenstone with sections of schist and tuffaceous andesite bearing moderate to heavy pyrite. Quartz-carbonate veins with heavy chalcopryrite at 54-59. Quartz-carbonate veins with pyrite at 44-54.

73-8 297'

Mainly porphyritic greenstone with light pyrite and sections of flow and schistose breccia and tuffaceous andesite with moderate pyrite chalcopryrite in quartz-carbonate at nine feet.

73-10 564'

Mainly porphyritic greenstone with occasional light pyrite. Sections of tuffaceous andesite, flow breccia and silicified greenstone with moderate pyrite. Gabbroic dyke at 325-330. Lamprophyre dyke at 365-367. Sections of hematite and epidote. Chalcopryrite in quartz-carbonate veins at 15-17.

73-12 253'

Mainly porphyritic greenstone with intervals good hematite and epidote alteration. Moderate pyrite at 50-52', 83-85'.

73-13 357'

Mainly porphyritic greenstone with occasional light to moderate pyrite. Chalcopyrite in quartz-carbonate veins 68-73.

73-14 366'

Mainly porphyritic greenstone with occasional light to moderate pyrite. Heavy pyrite and light chalcopyrite in quartz-carbonate veins at 117-122.

Mid Copper

73-4 129'

Silicified greenstone, schist and breccia with light pyrite. Aplite dykes. Sulphides in quartz-carbonate veins from 13 to 32'.

73-5 147'

Silicified greenstone, schist and breccia with occasional light pyrite. Aplite dykes. Siliceous zone at 30.5 - 35.5. Light hematite.

73-6 134'

Silicified greenstone, schist and breccia with occasional light pyrite. Light hematite.

73-7 109'

Silicified greenstone and schist. Light hematite and epidote. Chalcopryrite and disseminated pyrite at 1-6'.

CONCLUSIONS

Diamond drilling on the South Copper Showing to date has disclosed a zone of chalcopryrite mineralization up to seven feet wide, dipping from 10° to 20° to the west, over an area of 1100 by 600 feet.

Minor silver values are associated with the chalcopryrite.

Gold values are negligible.

Chalcopryrite mineralization decreases to the south, west and north of the surface exposures.

Hematite and epidote alteration marks a border of the anomolous area to the south with only a localized pyritic expression of the mineralized zone.

A lesser degree of chalcopyrite mineralization occurs in the drill holes to the west and north, although this can be localized.

RECOMMENDATIONS

It is recommended that the diamond drill program be continued on the South Copper Showing to further delineate the copper bearing zone. The program should consist of three or four shallow holes to the west, north, and northeast approximately 300 feet from the fringe of the anomolous zone.

Two deep holes should also be put down within the zone. One deep hole in the centre of the zone to test

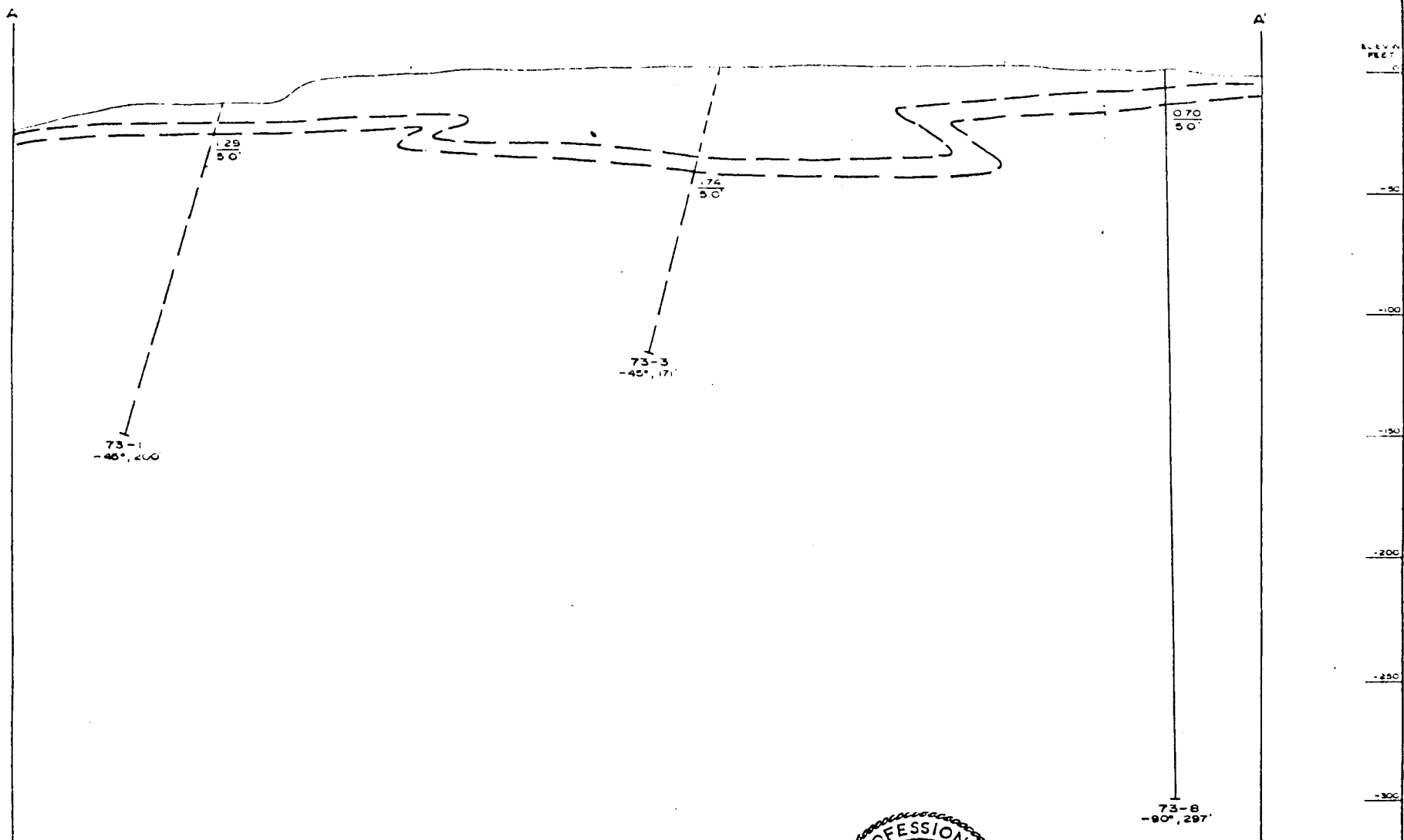
for a possible increase in chalcopyrite content at depth. The second deep hole should be drilled to the west of the I.P. anomaly to test for a possible increase in chalcopyrite content.

Diamond drilling should also be carried out to test other anomalies within the property.

Respectfully submitted,
PROFESSIONAL
OF
LAURENCE SOOKOCHOFF
BRITISH
COLUMBIA
Laurence Sookochoff, P.Eng.
Consulting Geologist

April 4, 1973

VANCOUVER, B.C.

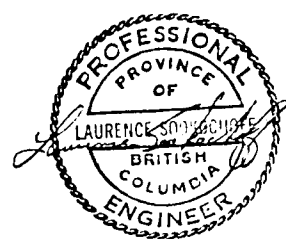


LEGEND

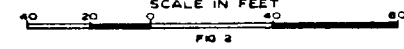
--- Drill Hole
in front of/behind Section

0.31
5.0 % Copper
Width

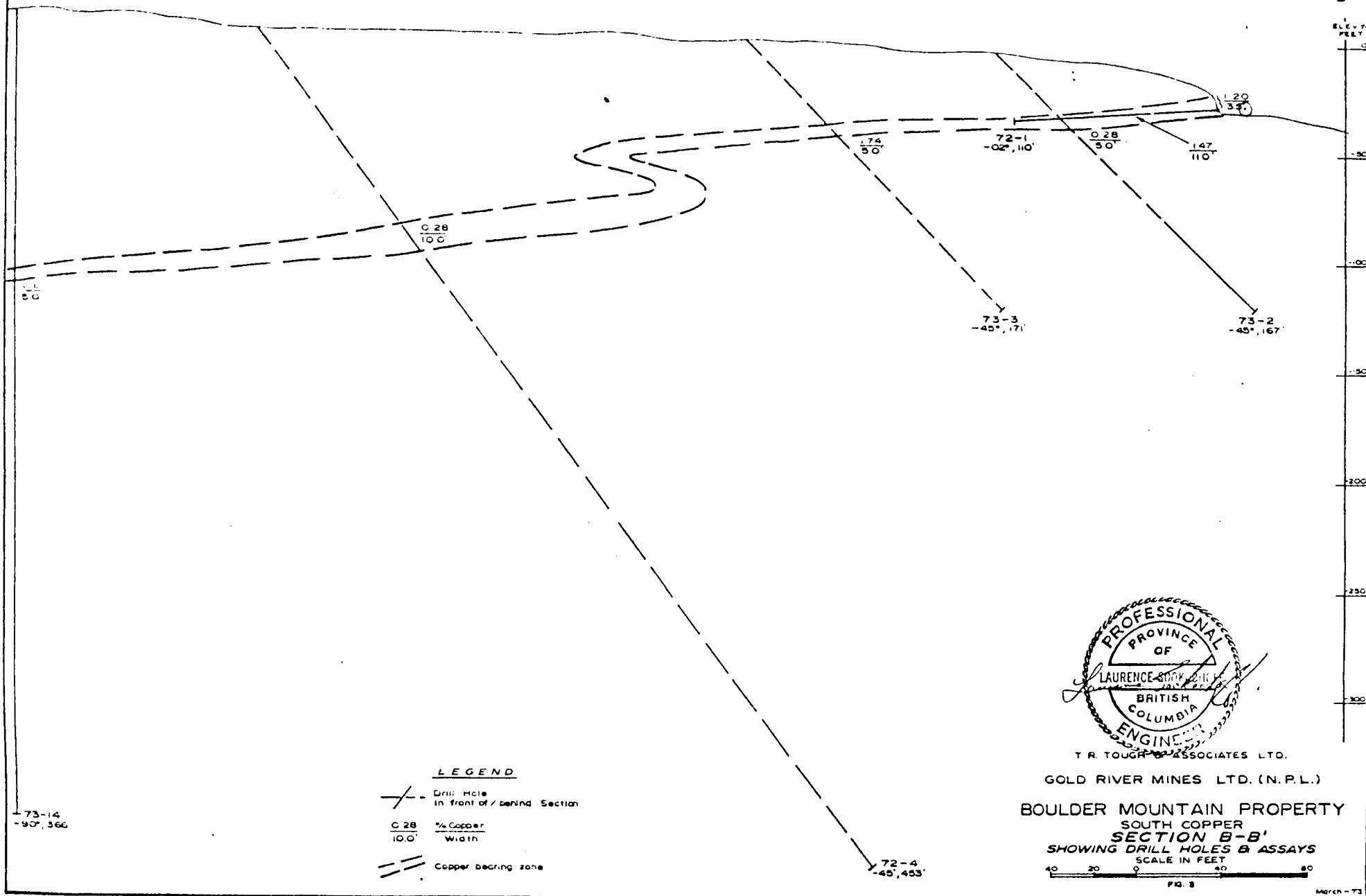
== Copper bearing zone



T.R. TOUGH & ASSOCIATES LTD.
GOLD RIVER MINES LTD. (N.P.L.)
BOULDER MOUNTAIN PROPERTY
SOUTH COPPER
SECTION A-A'
SHOWING DRILL HOLES & ASSAYS
SCALE IN FEET



5



— 9+00F

— 11+00E

— 10+00 N

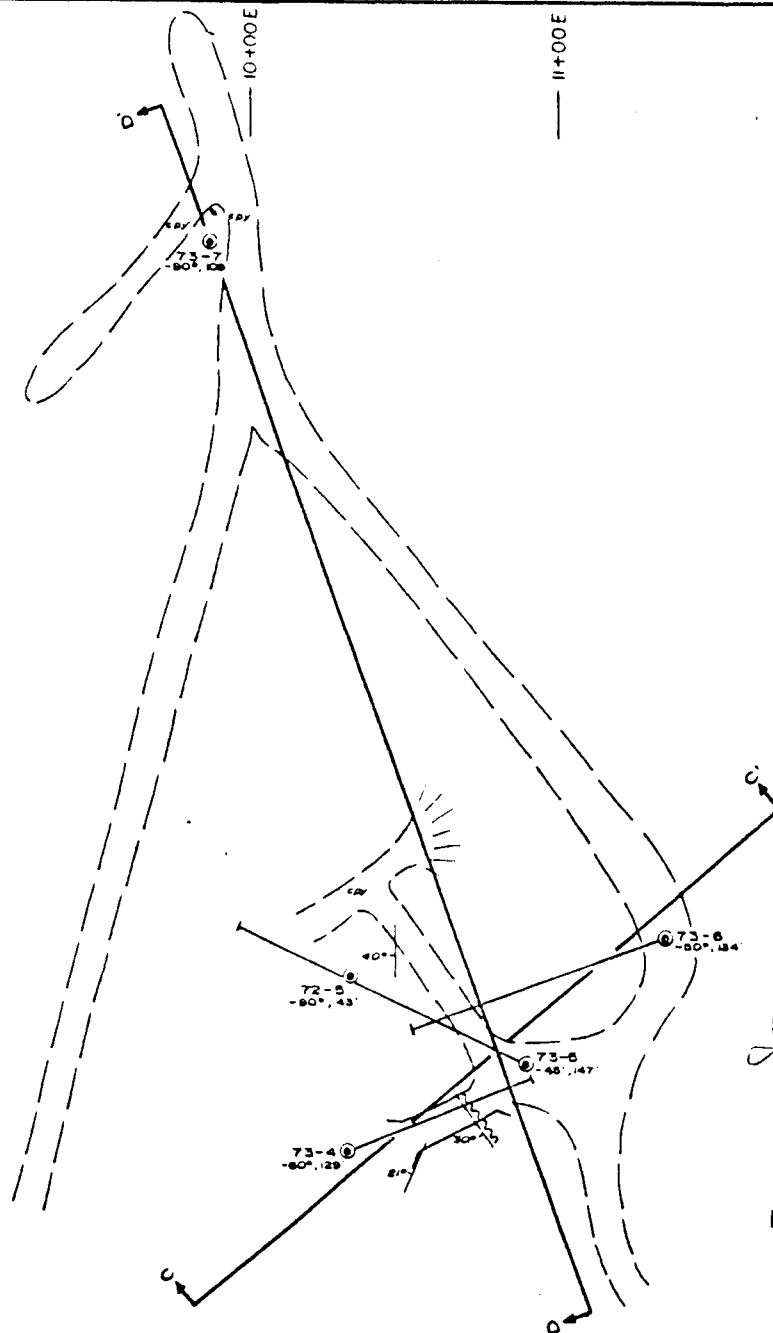
— 69+00 N

— 68+00 N

— 67+00 N

LEGEND

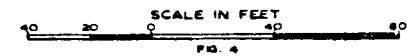
- Surface chalcopryite zone
- Road or trench
- Open cut
- Diamond Drill Hole Collar



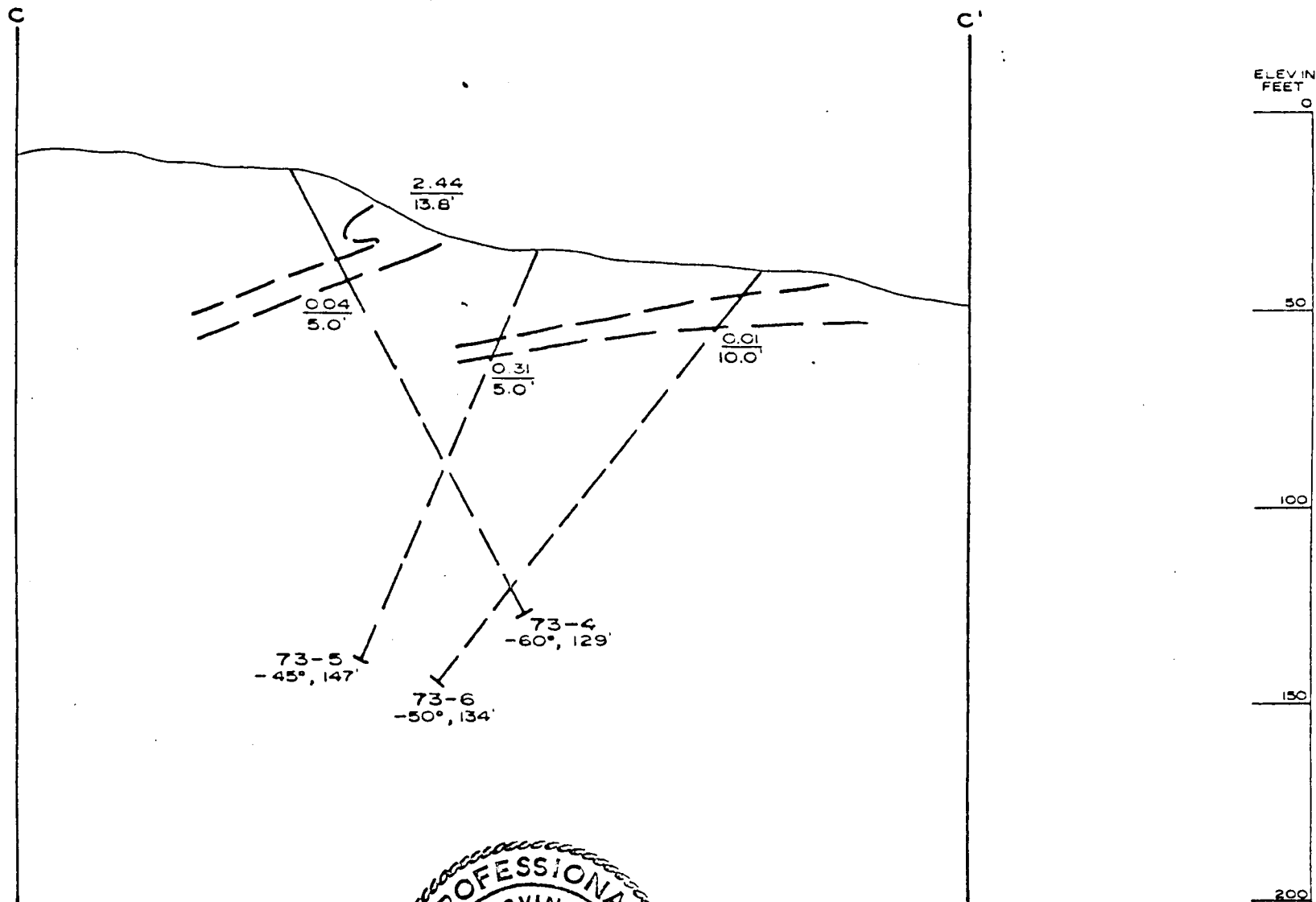
LAURENCE SPURGEON & ASSOCIATES LTD.

GOLD RIVER MINES LTD. (N.P.L.)

BOULDER MOUNTAIN PROPERTY
MID COPPER
DIAMOND DRILL HOLE PLAN



March - 73

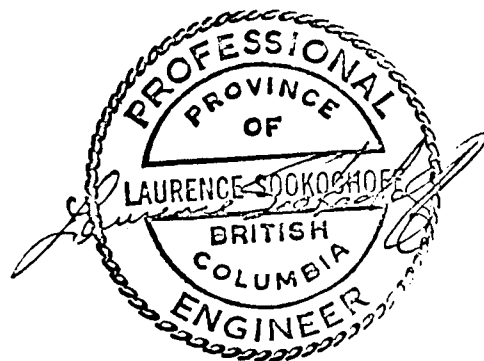


LEGEND

--- Drill Hole
In front of/behind Section

$\frac{0.31}{5.0'}$ % Copper
Width

--- Copper bearing zone



T.R. TOUGH & ASSOCIATES LTD.

GOLD RIVER MINES LTD. (N.P.L.)

BOULDER MOUNTAIN PROPERTY

MID COPPER
SECTION C-C'

SHOWING DRILL HOLES & ASSAYS

SCALE IN FEET

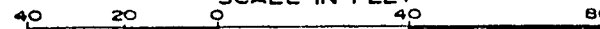
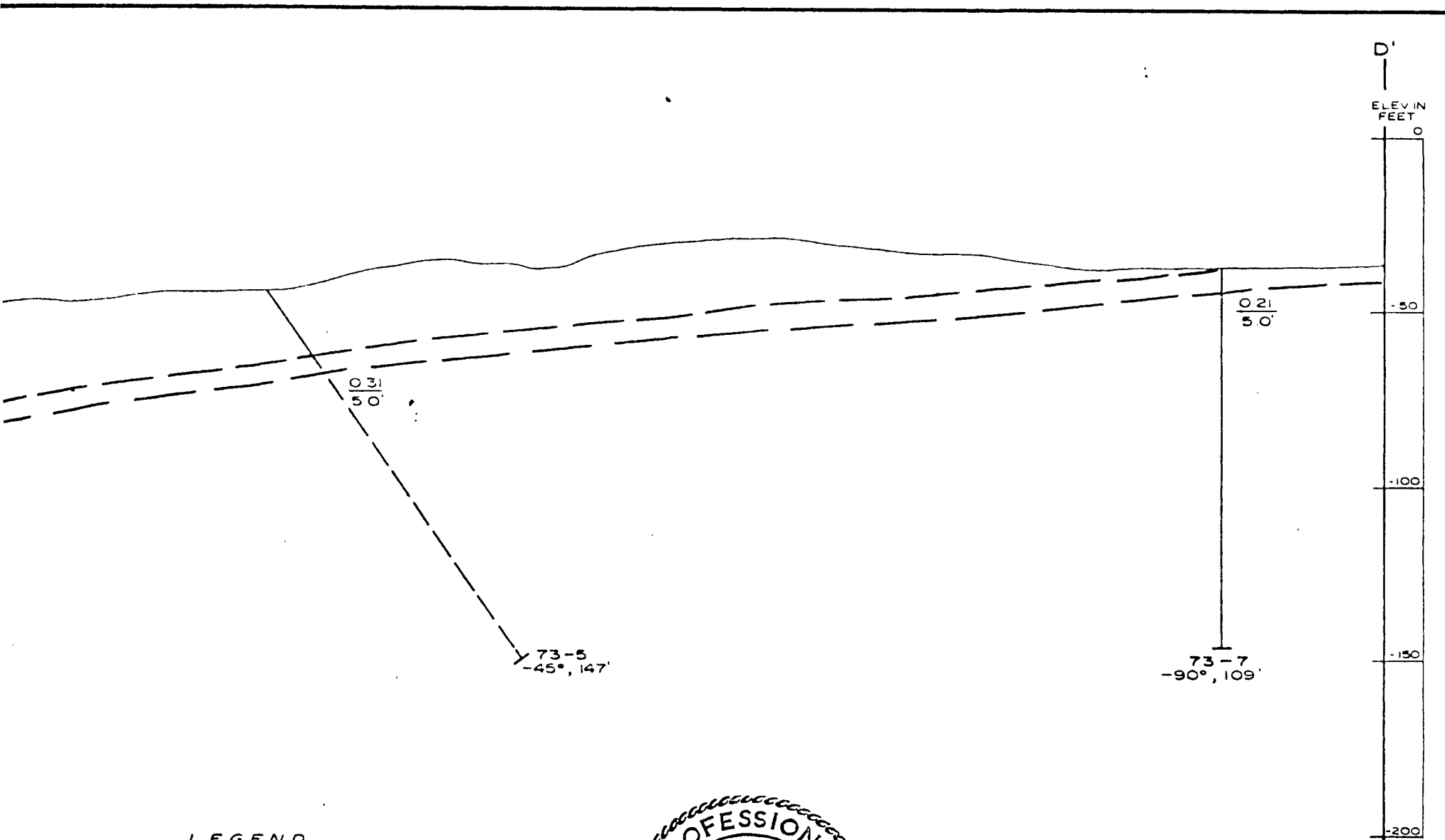


FIG. 5

March - 73

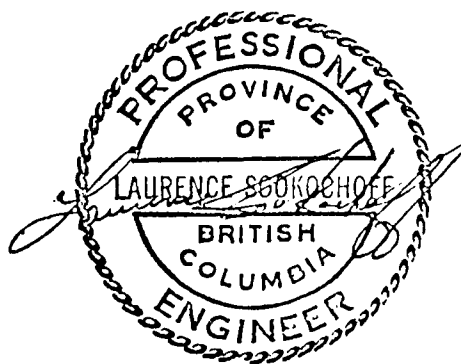


LEGEND

--- Drill Hole
in front of / behind Section

$\frac{0.31}{5.0}$ % Copper
Width

== Copper bearing zone



T.R. TOUGH & ASSOCIATES LTD.

GOLD RIVER MINES LTD. (N.P.L.)

BOULDER MOUNTAIN PROPERTY

MID COPPER
SECTION D-D'
SHOWING DRILL HOLES & ASSAYS

SCALE IN FEET
40 20 0 40 80

FIG. 6

March - 73

CLAIM NO.

DIAMOND DRILL RECORD

PROPERTY Boulder Mountain

HOLE NO. 72-1

LATITUDE 21 + 50 N

ELEVATION

BEARING 250°

DEPTH 110'

STARTED

COMPLETED

DÉPARTURE 2 + 40 E

SECTION

DIP -02⁰

DRILLED BY Gold River Mines

LOGGED BY T.R. Tough

[illegible]

CLAIM NO. DIAMOND DRILL RECORD PROPERTY Cousin Jack HOLE NO. 72.4

LATITUDE 21 + 65 N ELEVATION BEARING 126° DEPTH 452' STARTED Oct 8/72 COMPLETED Oct 26/72

DEPARTURE 2 + 85W SECTION DIP -45° DRILLED BY Cunningham MacNeill LOGGED BY L. Sookochoff

DEPTH FEET	FORMATION	SAMPLE NO.	FROM	TO	WIDTH	ASSAYS			
0 - 2'	Casing								
2'-3.3	Porphyritic greenstone - greyish green aphanitic								
Recovery	chloritized matrix. Feldspar phenocrysts usually < ¼" mostly								
50.5%	euohedral; lightly saussuritized - greenish. Fractures oxidized								
	sooty coating at 42°--59°. Quartz stringers 3/8" at 29°								
	50°, 59°. Barren-rare bleb chalcopryite; epidote patches.								
25'	25' broken 30' pink feldspars 2%								
	35+ distended feldspar phenocrysts - anhedral milky white in								
	a dark green mobitized matrix - yellowish white albitization -								
	5% fine to moderate disseminated sulphides 57' quartz at 70°								
	¼". Pyrite stringers, Pre quartz at 57°. Fr. at 52°, 58°								
	130' quartz at 65° ½" barren								
	115-125 Quartzitic section 70°-90° (quartz) with massive								
	stringers and patches pyrite.								
	125-135 good disseminated sulphides in porphyritic greenstone.								
	95-102 hematite replacing feldspar phenocrysts; quartz and								
	rhemetamorphism at 40-42°. 155-168 Siliceous greenstone								
	with black euohedral augite? Phenocrysts Lineation at 21°.								
	Fragments at 37°. Light disseminated pyrite.								
	171 Quartz at 69° ¼" barren, fragments at 58°. Hematite alteration								

CLAIM NO.

DIAMOND DRILL RECORD

PROPERTY

HOLE NO. 72-4

LATITUDE ELEVATION BEARING DEPTH STARTED COMPLETED
 DEPARTURE SECTION DIP DRILLED BY LOGGED BY

DEPTH FEET	FORMATION	SAMPLE NO.	FROM	TO	WIDTH	ASSAYS			
	189 quartz col. at 50° ¼"								
	188 epidote								
	185 < disseminated sulphides								
	190 augite porphyry < 3/8" quartz stringers 1 to c.a. <<								
	205-210 prolific sulphides								
	224 ¼" quartz stringer 25° with blebs pyrite								
	234 rheomorphism at 55°								
	248 contact with siliceous flow and greenstone at 62°.								
	250-252 - greyish black porphyritic andesite. Aphanitic								
	matrix with calcareous quartz ¼" phenocrysts. General								
	lineation at 32°. Stringers at 57°.								
	Light dissemination and blebs pyrite.								
	303 - fragments at 65°								
	304 - good schist at 49° pyrite								
	313-314 Granodiorite dyke - brownish grey; hy p. granular								
	texture; with pink feldspars; contact at 45°?								
	Fragments at 85° to c.a. with patchy pyrite and bornite								
	Chalcopyrite?								
	314-330 good schistose sections with pyrite and								
	albitization. Schistosity at 25°.								

LATITUDE ELEVATION BEARING DEPTH STARTED COMPLETED

DEPARTURE SECTION DIP DRILLED BY LOGGED BY

DEPTH FEET	FORMATION	SAMPLE NO.	FROM	TO	WIDTH	ASSAYS			
314-355	Schistose - silicified with prolific pyrite; occasional porphyritic, varying stages of schistosity at 25°.								
	335. Ep. band at 40°								
335-386	Silicified porphyritic greenstone light to moderate disseminated pyrite. Some banding at 40°								
	Green to dark green								
	368 fragments at 82° with calcite								
	361-375 loc. sections of greenstone and dacitic porphyry with Hbl x ls and feldspar x ls; epidote patches.								
	379 pyrite stringers at 20-30° and 60°								
386	4" Diorite dyke - 50% mafics - decussate texture - subhedral x ls Hbl in feldspathic matrix. Contact? broken								
386-452	Porphyritic greenstone - silicified								
	386-387 ¼" - ½" bar. quartz at 45° - light								
	396 3/8" quartz at 52° -- becoming friable and talcose in fractures. Pyrite at 05°.								
	401-403 locally brecciated with quartz calcite								
	409-418 schistose banding at 35°								
	418-425 andesitic-greenish grey-aphanitic obscure phenocrysts								
	light fragments at 35° spotty albitization								

HOLE NO. 72.4

COMPLETED

LOGGED BY

[illegible]

DIAMOND DRILL RECORD

PROPERTY Boulder Mountain

HOLE NO. 72-5

LATITUDE 67 ± 35 N

ELEVATION

BEARING

DEPTH 42'

STARTED Nov 2/72

COMPLETED Nov 5/72

DEPARTURE 11 + 00 E

SECTION

DIP

 -90°

DRILLED BY Gold River Mines

LOGGED BY L. Sookochoff

[illegible]

LATITUDE 00 + 60 E ELEVATION BEARING 110° DEPTH 200' STARTED Dec. 15/72 COMPLETED Dec. 18/72
 DEPARTURE 20 + 10 N SECTION DIP -45° DRILLED BY Cunningham MacNeill LOGGED BY L. Sockochoff

DEPTH FEET	FORMATION	SAMPLE NO.	FROM	TO	WIDTH	ASSAYS			
0-8	Casing								
8-200	Porphyritic greenstone - Greyish dark green								
	massive w/ euhedral-subhedral milky								
	white feldspar x/s 1/8". Lt. disseminated py.								
	usual; occ. absent; mod. sections	1751E	8	12	4.0'				
	12' - 19' massive stringers chalcopyrite								
	12' 2-1/4" @ 60°; 15' 1/8"; 15.5' 1.5" @ 44°	1752E	12	19	7.0'				
	w/ q.; 16' 1" w/ qtz @ 55°; 16.5' 1.5" (broken);								
	17' 3/8" @ 64°; 18' 2" @ 48°;	1753E	19	24	5.0'				
	(total 7" cpy)								
	23-24' flow breccia @ 55° sub-rounded	1754E	24	29	5.0'				
	greenish grey frags 1/2" in a greyish								
	black dense matrix (30°)	1755E	46	51	5.0'				
	27 1/4" q @ 50° w/ ep.								
	31 1/4" q @ 60° w/ py lt cpy blebs	1756E	51	56	5.0'				
	36' 1/4" q @ 62° w/ py ep								
	46-55° schistose - banded narrow - disc - w/ py cpy @ 35°								
	52 1-1/2" q. w/ blebs cpy @ 45°								
	62-68 q @ 35° & 65°								

CLAIM NO.

DIAMOND DRILL RECORD

PROPERTY

HOLE NO. 73-1

LATITUDE

ELEVATION

BEARING

DEPTH

STARTED

COMPLETED

DEPARTURE

SECTION

DIP

DRILLED BY

LOGGED BY

DEPTH FEET	FORMATION	SAMPLE NO.	FROM	TO	WIDTH	ASSAYS			
	51-200 siliceous w stringers of qtz @ 30° 45° 60° and								
	random	1757E	111	116	5.0'				
	68-69 pheno's ¼"								
	80-81 broken	1758E	145	150	5.0'				
	82 py. str. ¼" @ 45°								
	92' q. w/ py. @ 48° - 3/8"								
	85-103 occ. local schistosity @ 45° w/ q. str.								
	and very local pyrite								
	108-116 schistose w/ q. banding @ 55° and mod. pyrite								
	lt. cpy								
	127' ½" barren q. @ 65° - other narrow q. str.	1759E	165	170	5.0'				
	from 30° to 65° - siliceous porphyritic								
	greenstone - pheno's usually obscured by silicification								
	145-147 friable zone w/ q. @ 55° mod. py.								
	163' q/ @ 60° crenulated 2"								
	163-171 Schistose banding - disseminated py.								

CLAIM NO.

DIAMOND DRILL RECORD

PROPERTY BOULDER MOUNTAIN

HOLE NO. 73-2

LATITUDE 21 + 70N

ELEVATION

BEARING 110°

DEPTH 167'

STARTED Dec. 19/72

COMPLETED Dec. 21/72

DEPARTURE 01 + 60E

SECTION

DIP -45°

DRILLED BY Cunningham MacNeill LOGGED BY L. Sookchohoff

DEPTH FEET	FORMATION	SAMPLE NO.	FROM	TO	WIDTH	ACTS			
0-11	Casing								
11-52	Greenstone - silicified - aphanitic - greyish green;								
	sections porphyritic greenstone; light disseminated pyrite;								
	ox'n on fr.	1761E	32.5	42.5	10.0'				
	Quartz-carbonate veins or stringers w/ cpy and py @ :	1760E	42.5	48.5	6.0'				
	33' - 0.11' @ 56° blebs & disc. str. epy. py								
	35.9' 0.05' @ 44° lt blebs cpy. py.								
	39.2' 0.02' @ 44° & 76° cpy. & py. blebs								
	42.5' - 0.11' w/ bands of host rock & disc. str. cpy py								
	43.7' - 0.02' @ 43° cpy. py.								
	43.4' - 0.12' @ 43° cpy. py.								
	45.4' - 0.6' @ 44° w/ 0.1' massive cpy & py								
	& 0.5' of splashes and stringers cpy & py								
	48.4' - 0.2' @ 29° cpy; py								
	The veins generally contain lt. amounts of pink feldspar.								
52-102	Porphyritic greenstone - Dark green to green aphanitic								
	matrix w/ euhedral to subhedral ¼" feldspar phenocrysts -								
	greenish white phenocrysts usually saussuritized								

COMPLETED

LOGGED BY

WESTERN MINER PRESS LTD.
STANDARD FORM NO. 502

CLAIM NO.

DIAMOND DRILL RECORD

PROPERTY

HOLE NO. 73-2

LATITUDE

ELEVATION

BEARING

DEPTH

STARTED

COMPLETED

DEPARTURE

SECTION

DIP

DRILLED BY

LOGGED BY

DEPTH FEET	FORMATION	SAMPLE NO.	FROM	TO	WIDTH	ASSAYS			
	114 3/8" barren quartz-carb. @ 46°								
	118 - 122.5 Schistose - lt. green w/ interbedded greenstone								
	125 - 133 intercalated greenstone and tuffaceous andesite								
	w/ mod. disseminated py.								
	bedding cont. @ 35°								
	133 - 167 Trachytic porph. greenstone @ 35°								
	lt. disseminated py. coarse tex; fels. saus.								
	local moderate pyrite								
	144 - 3/8" bar. q. carb. @ 16°								
	146 - 167 epidote patches								
	154 - 155 tuffaceous andesite								
	156 - 3/8" q. carb. @ 45°								
	165 - 165.5' Tuffaceous andesite - trachytic shards								
	lt. - mod. disseminated py.								
	END OF HOLE								

CLAIM NO.....

DIAMOND DRILL RECORD

PROPERTY BOULDER MOUNTAIN.....

HOLE NO. 73-3

LATITUDE 22 + 22 N

ELEVATION

BEARING 110°

DEPTH 171'

STARTED Jan. 5/73

COMPLETED Jan. 10/73

DEPARTURE 00 + 48 E

SECTION

DIP -45°

DRILLED BY Cunningham MacNeill

LOGGED BY L. Sookochoff

DEPTH FEET	FORMATION	SAMPLE NO.	FROM	TO	WIDTH	ASSAYS			
0-8	Casing								
8-124	Porphyritic greenstone - Dark green aphanitic - chloritic matrix w/ euhedral feldspar								
	Phenocrysts ¼" milky white to greenish white w/ lt. to mod. lineation @ 40° - 50° from shearing. Lightly schistose and usually silicified. Gray, banded schistose sections w/ mod. py.								
0-24	fr. @ 26°, 42°;								
24-47	epidote str, patches, and blebs; occ str. pyr.								
28'	¼ - 3/8" q. carb. str. w/ prol. pry.								
	w/ ep. on contact @ 26°	1764E	44	49	5.0'				
36'	1" schistose w/ py. @ 27°								
41'	2" gouge								
41'	3" tuffaceous andesite lt. grey aph. matrix w/ elongated black shards @ 47°								
44	¼" q.-carb. w/ patchy cpy. @ 20° adj. good amoeboid epidote patches								
45'	¼" str. @ 20° py. w/ lt. cpy - ep on cont. feldspars saus.								

CLAIM NO.

DIAMOND DRILL RECORD

PROPERTY

HOLE NO. 73-3

LATITUDE

ELEVATION

BEARING

DEPTH

STARTED

COMPLETED

DEPARTURE

SECTION

DIP

DRILLED BY

LOGGED BY

DEPTH FEET	FORMATION	SAMPLE NO	FROM	TO	WIDTH	ASSAYS			
	46' w/ lt. cpy in 1/4" str. @ 35°								
	46.5' str. py. @ 50°								
	47-65 more schistose @ 47° obscure porph. q.s., grey								
	very siliceous	1765E	49	54	5.0'				
	54 1/4" str. @ 41° w/ py and blebs cpy	1766E	54	59	5.0'				
	54.5 - 56 massive 3" and 4" veins cpy and py. w/ patches	1767E	59	64	5.0'				
	and diss. in q-carb @ 56°; bands of q. c. present								
	58 - 58.2 3/8" q-carb. str. w/ py.	1768E	80	85	5.0'				
	58.2 - 65 mod. str. and disseminated py.								
	73 - 92 Schistose - gray; banded @ 47° mod - heavy diss.								
	and str. py; very siliceous; local breccia sections	1769E	114	119	5.0'				
	82 - 83 friable @ 47° heavy py								
	92 - 97 porph. g.s. w/ saus. fels.								
	97 - 113 Siliceous porph. g.s. w/ mod. py. sections;								
	97' - heavy pyorfr. 1" @ 47°								
	113 - Tuffaceous andesite - banded @ 42°								
	124 - Schistose - gray; banded; very siliceous								
	lt. to mod. str. & disseminated py; ep. str. & patches								
	115.5 py. & lt. cpy in 1" q carb str. @ 47°								

CLAIM NO.

DIAMOND DRILL RECORD

PROPERTY

HOLE NO. 73-3

LATITUDE

ELEVATION

BEARING

DEPTH

STARTED

COMPLETED

DEPARTURE

SECTION

DIP

DRILLED BY

LOGGED BY

DEPTH FEET	FORMATION	SAMPLE NO.	FROM	TO	WIDTH	ASSAYS			
	116' 1/2" py. str. @ 27°								
	117.5 4" schist - q. carb. and q.s. bands @ 40°								
124-137	Tuffaceous andesite - Gray, siliceous, aphanitic; hard matrix w/ black extended shards	1770	149	154	5.0'				
	@ 43°; py. stringers @ 42°								
	137' 3/8" band py. and schist. @ 53°								
137-166	Schist - Lt. gray - gray - colour bands narrow; very siliceous; localized breccia sections w/ frags q.s. 3/4";								
	lt - py								
	142 - 149 mod - heavy py; very siliceous								
	149 - 160 mod str. and disseminated py. @ 46°								
	160 - 166 less schistose and less pyrite								
166-171	Porphyritic greenstone - green matrix w/ saus. obscure feldspar pheno; 3/8" irregular blebs of q-cal. rimmed w/ epidote								
	END OF HOLE								

CLAIM NO. DIAMOND DRILL RECORD PROPERTY BOULDER MOUNTAIN HOLE NO. 73-4

LATITUDE 66 + 70 N ELEVATION BEARING 062 DEPTH 129' STARTED January 16/73 COMPLETED January 18/73

DEPARTURE 10 + 49 E SECTION DIP -60° DRILLED BY Cunningham MacNeill LOGGED BY L. Sookochoff

DEPTH FEET	FORMATION	SAMPLE NO.	FROM	TO	WIDTH	ASSAYS			
0-5	Casing								
5-10	Silicified porphyritic greenstone - green aphanitic lightly trachytic matrix; light obscure feldspar pheno; lt. diss. py. fr. @ 35° Occ. disc. q. carb. str. - web-like @ 28°								
10-49	Schistose greenstone - silicified Occ. band q- carb. 13' cpy & py @ 28° w/ schistosity - over 1" py - 6" - ox'd 18 1/4" q-carb. @ 26° 19 - 20 py silicification 25 - 36 silic. lt. py. 30' 3" ox'd zone w/ py. 32 q-carb @ 75° 34 str. py. & cpy? @ 32°; ox'd over 5"								
49-56	Aplite - brownish white - allotriomorphic Texture medium green, aphanitic 52' - 56' aplitic w/ sch. greenstone @ 34°								

LATITUDE

ELEVATION

BEARING

DEPTH

STARTED

COMPLETED

DEPARTURE

SECTION

DIP

GRILLED BY

LOGGED BY

[illegible]

CLAIM NO.

DIAMOND DRILL RECORD

PROPERTY

HOLE NO. 73-4

LATITUDE

ELEVATION

BEARING

DEPTH

STARTED

COMPLETED

DEPARTURE

SECTION

DIP

DRILLED BY

LOGGED BY

DEPTH FEET	FORMATION	SAMPLE NO.	FROM	TO	WIDTH	ASSAYS			
	80' 4" aplite @ 40°								
108-119	Silicified greenstone - green to dark green								
	aphanitic - chloritic w/ occ. bands @ 37° of carb. w/ lt.								
	red hem; Occ. bleb py w/ cpy? Localized flow breccia -								
	overall chloritic.								
119-129	Porphyritic greenstone - trachytic milky white euhedral								
	fels. pheno's 10% in green aphanitic highly sheared matrix;								
	narrow zones of flow breccia - lt. green to green w/ sub-								
	rounded to sub-angular elongated frags of aplitic, dacitic;								
	rhyolitic and andesitic frags.								
	Flows @ 31°								
	128 - q-carb. str. @ 25° ½"								
	occ. blebs py & cpy?								
	END OF HOLE								

CLAIM NO.

DIAMOND DRILL RECORD

PROPERTY BOULDER MOUNTAIN

HOLE NO. 73-5

LATITUDE 67 + 00 N

ELEVATION

BEARING 295°

DEPTH 147'

STARTED January 20/73 COMPLETED January 23/73

DEPARTURE 11 + 10 E

SECTION

DIP -45°

DRILLED BY Cunningham MacNeill LOGGED BY L. Sookchoff

DEPTH FEET	FORMATION	SAMPLE NO.	FROM	TO	WIDTH	ASSAYS			
0-8	Casing								
8-28	Siliceous greenstone - Green to lt. green								
Recovery	hard - varying in silica content								
97.8%	9-13 oxidized - brown to greenish brown w/ mod. q-carb. veins								
	@ 80° - mod. siliceous								
	13-25 grading to friable siliceous schistose greenstone w/								
	occ. q-carb. str. @ 48° - becoming more siliceous @ 25								
	w/ q. carb. veins @ 40° and random								
	Schistose and bedding @ 55° to c/a								
28-30.5	Aplitic quartz-carbonate - lt. brownish or milky white -								
	Contact @ 40° & 58° talcose on cont.								
30.5-66	Schistose siliceous greenstone - hard foliated								
	lt. banding - lt. to dark green	1774E	31	36	5.0'				
	30.5 - 33.5' lt. disseminated pyrite in hard siliceous								
	greenstone								
	34' 1" heavy disseminated and patches py & cpy @ 47°								
	33.5 - 35.5 disseminated pyrite & cpy. - ½" veinlet cpy & py								
	@ 60-80° warped								

LATITUDE 67 + 55 N

ELEVATION

BEARING 242°

DEPTH 134'

STARTED January 26/73 COMPLETED January 29/73

DEPARTURE 11 + 60 E

SECTION

DIP -50°

DRIILLED BY Cunningham MacNeill LOGGED BY L. Sockochoff

DEPTH FEET	FORMATION	SAMPLE NO.	FROM	TO	WIDTH	ASSAYS			
0-5	Casing								
5-19.5	Siliciceous Greenstone - hard, aphanitic, green,								
	8-12 - silica - siliceous dyke	1775E	9	14	5.0'				
	12-17 Siliceous talc-sericite schist								
	(2' core) lt. py.	1776E	14	19	5.0'				
	17-19 Friable talc sericite schist @ 45°								
	Mod. py.								
	19-19.5 2" aplite @ 30°								
19.5-29	Schistose siliceous greenstone - hard folialed and banded								
	green to light green @ 44°								
29-75	Chlorite-hematitic schist - Mainly hard								
	dark green chloritic bands w/ bands of hematitic								
	carbonate @ 35°								
	30-31 random q-cal. brecc'd								
	45 bands @ 42° w/ foliation - mod - heavy banding - cal.								
	upto 3/8" wide - lt. green								

CLAIM NO.

DIAMOND DRILL RECORD

PROPERTY

HOLE NO. 73-6

LATITUDE

ELEVATION

BEARING

DEPTH

STARTED

COMPLETED

DEPARTURE

SECTION

DIP

DRILLED BY

LOGGED BY

DEPTH FEET	FORMATION	SAMPLE NO.	FROM	TO	WIDTH	ASSAYS			
	rare blebs py and rare pygmatic folding of cal str.								
	53' & 68' py blebs								
	73' banding @ 35°								
75-86	Schistose greenstone w/ occ. q-carb. bands								
	78 - 79 irreg. q-carb. hem on fr.								
	82' 1.5" q-carb. @ 65° banded w/ host rock bedding @ 44°								
86-92	Schistose porphyritic greenstone - hard, aphanitic matrix-green, w/ extended feldspar phenos. q. carb. bands - hem. on fr. planes								
	88' blebs py in lt. green band								
92-109	Greenstone - hard aphanitic - green to lt. green								
	94 q-carb. w/ gouge @ 50°								
	100 - 103.5 siliceous - lt. ep. pyg. felds.								

HOLE NO. 73-6

COMPLETED

LOGGED BY

[illegible]

CLAIM NO.

DIAMOND DRILL RECORD

PROPERTY

HOLE NO. 73-7

LATITUDE 69 + 62 N

ELEVATION

BEARING

DEPTH 109'

STARTED Jan 30/73

COMPLETED Feb 1/73

DEPARTURE 9 + 90 E

SECTION

DIP

-90°

Cunningham MacNeill

L. Sookochoff

DRILLED BY

LOGGED BY

DEPTH FEET	FORMATION	SAMPLE NO.	FROM	TO	WIDTH	ASSAYS			
0 - 109	Siliceous greenstone, grey; hard; obscure feldspar white								
	phenocrysts; H. banding at 29°; oxidized to 15'	1777E	1	6	50'				
	H to moderate pyrite to 24'								
	17-18' aplitic at 35° - lt. brownish white								
	18-32 moderate quartz carbonate bands and blebs in chloritic								
	greenstone. Light to nil pyrite	1778E	6	11	50'				
	32-34 schistose-grey moderate disseminated pyrite								
	43 2" moderate pyrite in greenstone	1779E	11	16	50'				
	48.5-49 good schist w narrow lightly carbonated bands - no								
	pyrite.								
	49-55 flow microbreccia with trachytic thin fragments < flow								
	microbreccia with trachytic thin fragments < ½" long								
	light pyrite								
	70-73 light epidote; convoluted bands and stringers quartz								
	carbonate; hematite on fracture planes.								
	73-97 hematitic bands and moderate quartz carbonate stringers								
	hematite on fracture planes and with calcite								
	91- calcite at 22°								
	97-109 porphyritic greenstone, greenish grey; silicified, hard;								
	thin epidotized stringers; occasional hematite on fracture								

HOLE NO. 73-7

LATITUDE 69 + 62 N

ELEVATION

BEARING

DEPTH 109'

STARTED Jan 30/73

COMPLETED Feb 1/73

DEPARTURE 9 + 90 E

SECTION

DIP

-90°

DRILLED BY Cunningham MacNeill LOGGED BY L. Sookothoff

[illegible]

CLAIM NO.

DIAMOND DRILL RECORD

PROPERTY Boulder Mountain

HOLE NO. 73.8

LATITUDE 24 + 00 N

ELEVATION

BEARING

DEPTH 297'

STARTED Feb 3/73

COMPLETED Feb 13/73

DEPARTURE 1 + 00 E

SECTION

DIP -90°

DRILLED BY Cunningham-MacNeill

LOGGED BY L. Sookochoff

DEPTH FEET	FORMATION	SAMPLE NO.	FROM	TO	WIDTH	ASSAYS			
0 - 7	Overburden								
7 - 42	Porphyritic greenstone - light grey, siliceous; hard; aphanitic matrix; augite-feldspar phenocrysts. Light disseminations pyrite to 18' - heavier 18 + 9' 1.5" massive chalcopyrite pyrite at 34° 15.5' local albitization 24-42 feldspar phenocrysts - epidote patches 25' good sulphides - disseminated and patches 33' ½" quartz carbonate 1 to c/a 34' ½" quartz carbonate at 42° to c/a	1780E 1781E	8 13	13 18'	5.0' 5.0'				
42-46	Breccia-flow-grey to light grey, hard with light green rhyolitic angular fragments 3/8" and dark andesitic fragments 1.5". moderate disseminated pyrite.								
46-49	Tuffaceous andesite - black 1/8" dense hard aphanitic light grey to grey chloritic matrix.								
49-55	Porphyritic greenstone - bedding at 33°. 53' 1.5' pyrite band at 14° (F.)56 6" gouge.								

LATITUDE ELEVATION BEARING DEPTH STARTED COMPLETED

DEPARTURE SECTION DIP DRILLED BY LOGGED BY

DEPTH FEET	FORMATION	SAMPLE NO.	FROM	TO	WIDTH	ASSAYS			
55-77	Breccia - flow - 2" sub angular, grey to greenish extended fragments of porphyritic greenstone in grey aphanitic hard occasional augite porphyritic matrix - locally broken.	1783E	72	77	5.0'				
	60 2" mod. sulphide. at 14° 76' 1" band heavy sulphide at 13°								
77-82.5	Tuffaceous andesite - light - moderate sulphides. 82.5 cont. at 24°								
82.5-197	Porphyritic greenstone - 82.5-85 very coarse sausserite feldspars - epidote								
	85-131 intercalated beds of porphyritic greenstone and tuff andesite - bedding at 21°	1784E	149	154	5.0'				
	131' ½ quartz carbonate stringers with pyrite at 26°								
	132.5 ½" gouge at 26°								
	143 1" gouge 132-136 coarse porphyritic greenstone								
	152-175 flows of porphyritic greenstone at 24° with blebs calcite.								
	Variable textures light pyrite								
	then bands pyrite at 11°								
	153 barren bands quartz carbonate 24° 1/8" -1/4"								
	183' quartz carbonate 34° 3/4" wth moderate pyrite and epidote - siliceous p.g.s.								

CLAIM NO.

DIAMOND DRILL RECORD

PROPERTY

HOLE NO. 73.8

LATITUDE

ELEVATION

BEARING

DEPTH

STARTED

COMPLETED

DEPARTURE

SECTION

DIP

DRILLED BY

LOGGED BY

DEPTH FEET	FORMATION	SAMPLE NO.	FROM	TO	WIDTH	ASSAYS			
	194' ptygmatic ep. bands.								
199-227	Greenstone, light greyish green; friable to hard. obscure feldspar phenocrysts chloritic - talcose quartz carbonate stringers. Light to moderate pyrite								
	206-208 gougy at 34°								
	208-212.5 2' core siliceous with hematitic feldspar phenocrysts.								
	212.5 1.5" bar. quartz at 34°								
	218-223 tuffaceous andesite-broke								
	208-225 localized hematitic fels. phenocrysts.								
227-265	Schistose breccia; hard; dense, obscure breccia texture with elongated fragments. Light to moderate pyrite. discontinuous bands.								
	234-237 gougy and broken at 24°								
	237 silicified tuff and obscure greenish shards trachytic medium blebs and disseminated pyrite.								
	251 - flow breccia - dense hard, blackish grey matrix w/ aug. fragments, up to 2" good dissemination and blebs pyrite.								

HOLE NO. 73.8

LATITUDE	ELEVATION	BEARING	DEPTH	STARTED	COMPLETED
41.44444444444444	1000	0	0	0	0

DEPARTURE _____ SECTION _____ DIP _____ DRILLED BY _____ LOGGED BY _____

[illegible]

CLAIM NO.

DIAMOND DRILL RECORD

PROPERTY BOULDER MOUNTAIN..... HOLE NO. 73-10

LATITUDE 23 + 00 N

ELEVATION

BEARING

DEPTH 564'

STARTED February 13/73 COMPLETED

DEPARTURE 1 + 00 E

SECTION

DIP -90°

DRILLED BY Cunningham MacNeill LOGGED BY L. Sookochoff

DEPTH FEET	FORMATION	SAMPLE NO.	FROM	TO	WIDTH	ASSAYS			
0-4	Casing								
4-325	Porphyritic Greenstone - Grayish green; hard; phenos of euhedral saussuritized feldspar and occ. augite Silicified - intercalated tuff andesite flows 15' - 1" q. carb. w/ patchy cpy & py 17' - 3.5" q. carb. @ 05° w/ patchy cpy & py 24" - 3/8" q. carb. w/ blebs cpy py 21 - 63 - intercalated narrow beds of tuffaceous andesite w/ augite - lt. greenish gray; fels. saus. - blebs & disseminated py. 32.5' 1.5" q. carb. @ 05° w/ patchy cpy 50' loc. stringers py. 63 - 64 - Breccia - Green; ang frags 1/2" of rhyolite andesite; mod. blebs py, occ. patchy ep. 72' Silicified breccia - blebs py, 86' Py stringers @ 24° 90 - 95 Py - heavy disseminated & stringers 105 - 132 Schistose - Py - heavy - mod 135 - 141 Schistose Py - mod 146 - 158 Saus. fels. - lt. diss. & patchy ep. - blebs py	1785E	14	19'	5.0'				
		1786E	28	33	5.0'				
		1787E	90	95	5.0'				

LATITUDE ELEVATION BEARING DEPTH STARTED COMPLETED

DEPARTURE SECTION DIP DRILLED BY LOGGED BY

DEPTH FEET	FORMATION	SAMPLE NO.	FROM	TO	WIDTH	ASSAYS			
	hem on fr. planes @ 70°								
	158 - 170 - <u>Silicified greenstone</u>								
	occ - obscure phenos fels; lt - mod py								
	165' 1" rheemaphism w/ q. carb. @ 26° lt py								
	180 - 183 <u>Augite porphyry</u>								
	183 - 194 <u>Breccia</u> - obscure ½" frags	1788E	189	194	5.0'				
	lt to mod py; lt cpy								
	194 - 237 hem. on fr. planes								
	237 - 259 loc. tuff andesite w/ mod py; hem								
	259 - 273 lt schistose w/ fair sulphides								
	268 pink fels.								
	273 - 295 lt schistose occ lt. breccia								
	loc heavy diss. & blebs py; grayish green - hard								
	295 - 300 Obscure breccia texture - lt grey - hard -	1789E	276	281	5.0'				
	anhedral pink fels - nenzon - itic matrix;								
	mod py; contact @ 42°								

CLAIM NO.

DIAMOND DRILL RECORD

PROPERTY

HOLE NO. 73-10

LATITUDE

ELEVATION

BEARING

DEPTH

STARTED

COMPLETED

DEPARTURE

SECTION

DIP

DRILLED BY

LOGGED BY

DEPTH FEET	FORMATION	SAMPLE NO.	FROM	TO	WIDTH	ASSAYS			
	304 - quartz - carb. @ 38°								
	300 - 304 porph. q.s.								
	310 1' gouge								
	300 - 325 sil'd; gr. gray; blebs py; tuffaceous q.s.								
325-330	Gabbroic dyke - greyish black; m - f.g.								
	allotriomorphic texture; hard; 2% black shards;								
	1% anhedral calcite phenos; magnetic ² ; gougy & broken								
	@ contacts								
330-353	Flow breccia - obscure texture; grey; hard; siliceous;								
	trachytic; tuff and frags and matrix w/ black shards;								
	mod - heavy py								
353-365	Porphyritic greenstone								
365-367	Lamprophyre dyke w/ 1% black shards; 1% calcite phenos;								
	1% euhedral white fels. phenos; aphanitic grayish black								
	matrix. contact @ 18°; rare blebs py								
367-	Flow breccia - gray; frags porph. q.s.; m - f.g. dioritic								
	matrix; mod - lt py. black shards common; trachytic @ 42°								

CLAIM NO.

DIAMOND DRILL RECORD

PROPERTY

HOLE NO. 73-10

LATITUDE

ELEVATION

BEARING

DEPTH

STARTED

COMPLETED

DEPARTURE

SECTION

DIP

DRILLED BY

LOGGED BY

DEPTH FEET	FORMATION	SAMPLE NO.	FROM	TO	WIDTH	ASSAYS			
406 - 411	porph. g.s.								
411 - 417	Monzonitic flow. 10% shards, blebs & stringers py								
417 - 456	Obscure flow breccia - frags porph. q.s.								
	419 - 425 hematized phenos in aphanitic greenish matrix								
438 - 456	mod py in f.g. - aphanitic dioritic matrix alb'n								
456 - 485	Greenstone - grading to porph g.s. - obscure m.g. tex. - no py - sections tuffaceous dacite								
	476 - 480 - good py								
485 - 488	py str. and patches in tuffaceous dacite								
488 - 555	Intercalated flows of porph. g.s., dacitic schist; patchy epidote	1797E	499	504	5.0'				
	504 - q. carb. @ 35° ¼"								
	505 - 527 rare py								
	523 - 528 hem patches and on fr.								
	542 - 548 random q. car. stringers; broken gouges, heavy py.								
564'	END OF HOLE								