Preliminary metallurgical testing was conducted on bulk samples by Britton Research Limited of Vancouver, British Columbia.

10. GEOLOGY:

(A) GENERAL:

The main source of the geological information is Memoir No. 54, A. Sutherland Brown, Geology of the Queen Charlotte Islands, British Columbia, 1968.

The Bendy Claims Group lies within an extensive area of Karmutsen basic volcanics (see Figure: 5). The Karmutsen Formation extending southward from Vancouver Island is an accumulation of Triassic subaqueous lava in excess of 14,000 feet in thickness. The dominant rock types are massive basalt, pillow lava, breccias and tuffs. They are interspersed secondarily with limestone, sandstone and shale.

The Karmutsen flows are fresh in appearance and alteration is limited to weak chloritization. In the vicinity of major intrusions, metamorphism has produced amphibolites and amphibolite migmatites. Its major intrusions into the Karmutsen are noted in the immediate vicinity of the Bendy Claims. The major Jurassic quartz-diorite Coastal Batholith underlies the western coast and outcrops 3 miles west of the Bendy Claims. The copper-magnetite deposit at Tasu, ten miles to the west is related to the Coastal Batholith. A small acid stock Cretaceous or Tertiary in age is exposed 2 miles north of the Bendy Group.

(B) ROCK TYPES:

In the Claim Area three major rock types occur:

(a) Diabase Flows: medium to fine-grained, dense and medium to dark green, mineralized with disseminated chalcopyrite and some bornite.

(b) Diorite: medium to coarse-grained, light greenish gray diorite is exposed in all the workings areas. The diorite is unmineralized.

(c) Diabase Dykes: fine to medium-grained, dark gray to black diabase dykes. The dykes 1 to 30 feet in width are generally steeply dipping and virtually unmineralized; infrequently carry coarse chalcopyrite stains remobilized from the adjacent volcanics.

(C) STRUCTURE:

The volcanics generally trend 330°-350° (magnetic) and dip west at 25° to 30°. A major steeply dipping fault has been interpreted by Sutherland Brown as passing along Anna Inlet. A second similar strong parallel fault has been postulated trending 340° (magnetic) along Salmon Creek. Weak shearing has developed across the peninsula between the two fault systems. No strong structures or faulting are observed but a few chlorite shears are evident in the adits. Areas of weak brecciation and fine fracturing are evident in the diamond drill holes put in by Ann Lake Mining Ltd. Intensive exploration and development of the mineral zone may expose areas of more intense fracturing and brecciation with somewhat greater possibilities of mineral concentration.

Jointing in several directions is moderately developed within the diabase.

(D) MINERALIZATION:

Mineralization is confined to the diabase flows and consists of fine disseminations, blebs, hair-line stringers and stringers of chalcopyrite and bornite. Pyrite is evident in trace amounts unaccompanied by chalcopyrite. The bornite appears to be primary rather than secondary.

The mineralization is found scattered throughout all phases of the diabase indicated by the drill core with no obvious structural control. Disseminated sulphides show some preferential concentration in the fine-grained and epidotized phases and in flows with heavy epidote amygdules. Within the amygdules fine kernels and blebs of chalcopyrite are observed. Fine vein-type mineralization is more commonly encountered in the weakly chloritized and finely fractured volcanics.

Due to erratic distribution of the mineralization representative grades are difficult to obtain without detailed sampling. Present evidence indicates that higher grade sections, i.e. in excess of 1%% copper, although widespread, have limited lateral continuity.

11. POTENTIAL OF THE COPPER MINERALIZATION:

Copper mineralization has been tested over some 300 feet along Anna Inlet and 500 feet on the Salmon Creek side. Both areas fall within the zone of shearing postulated as crossing the peninsula. The full width of the zone of 2,000 feet is largely untested and the unexplored areas must be trenched and diamond drilled to reveal their mineral potential.

Mineralization was not observed in workings above the 800 foot elevation. Weathering has leached the copper to a depth of a few feet and sulphides rarely appear in surface exposures. The zone appears to carry low-grade chalcopyrite mineralization throughout.

It is quite probable that the mineral zone outcrops southerly to the other side of the Bay where a similar mineral zone exists. Structurally, it is possible that other parallel mineral zones may be uncovered by an extensive program of trenching.

The mineral zone has been explored by several open cuts, old and recent. Three adits, of 300 feet, 95 feet and 60 feet in length have been driven. With the exception of minor narrow cross-dykes the adits are mineralized throughout their entire lengths. Samples from the "Bornite" adit, in addition to copper, carry values in Gold, Silver, Platinum and Palladium.

The mineralization is low-grade, but the zone is extensive and may be enlarged materially by further development. Concentrations of higher grade material occur and deeper work may reveal better values across the underlying batholith, which is undoubtedly the source of copper in the diabase. Leaching occurs in the vicinity of the surface and surface samples are of lower grade than the zones of the unleached mineralization.

12. ASSAY RESULTS:

(A) GENERAL:

The result of the sampling of development completed up to 1956 by the various operators is shown graphically on Figure: 3. Assay values range from a trace to 1.82% copper.

The British Columbia Minister of Mines Report for 1929 states: "The zone appears to carry low-grade chalcopyrite mineralization throughout. The general copper content is about 0.6% in which are sections of concentrations varying from 1% to 2% copper."

(B) GRANBY DIAMOND DRILLING, 1916 (See Annex: A-1 this A-4):

Some 1991 feet of diamond drilling was completed in 1916 by Granby. The assay records for all of the holes is incomplete but the presence of chalcopyrite mineralization is noted in most of the footage. Values ranged from trace to 2% copper. Hole No. 1 revealed 31.5 feet grading 0.75% copper and Hole No. 2 - 49 feet at 0.60% copper.

(C) ANN LAKE MINING DIAMOND DRILLING, 1969:

In 1969 Ann Lake Mining completed 21 holes for 3023 feet. The holes were drilled to obtain information on mineralization and structure. None of the core has, as yet, been assayed. The holes indicated the prevalence of fine-grained and coarse-grained disseminations of chalcopyrite in nearly all of the footage, as well as bornite values. Some brecciation and fracturing were noted in the core, which raises the possibility of more intense fracturing and brecciation, with greater copper concentration being revealed when the entire area is thoroughly explored. Results obtained are shown on Figure: 4.

(D) NEW JERSEY ZINC DEVELOPMENT ASSAYS:

Adits and open pits sampled by New Jersey Lead and Zinc in 1956 gave assay values which are superimposed on Figure: 3. Figure: 3 also indicates assay values obtained in previous sampling of the adits and open pits.

(E) FRANKLIN PRICE for COSMIC LODE MINES LTD:

Sampled the three adits and a trench. Values from 0.33% copper up to 2.5% are shown. Three adit samples in addition to copper had values in silver ranging from 0.2 to 0.60 ounces per ton. (see Figure: 3c).

(F) BULK SAMPLING:

Bulk sampling of adits and trenches on the Anna Inlet side cover an area 400 feet wide by 800 feet long. Samples were taken at five foot intervals and averaged about 50 pounds each. Composite assays were taken of each section sampled. The arithmetic average of the samples was about 0.30% copper, together with Gold, Silver and other economic minerals.

Bulk sampling on the Salmon Creek side is indicated by Figure: 8. Salmon Creek No. 400 Cut gave a composite value 0.66% for 18 samples.

(G) METALLURGICAL TESTS:

Metallurgical tests were conducted on bulk samples from the Bendy Mineral Claims workings (see Annex: B – Britton Report, page 1 and 2 of report). Two composite samples gave values of 0.52% copper and 0.61% copper.

"W.E. SELNES"

W.E. Selnes, P.Eng.

Vancouver, British Columbia
December 2, 1970

13. REFERENCES:

(1) British Columbia Minister of Mines Reports: 1970, 1909, 1913, 1929, 1936, 1967 and 1968.
(2) Memoir No. 54, Geology of the Queen Charlotte Islands, British Columbia, by A. Sutherland Brown, 1968.
(3) Report on the Bendy Mineral Claims, Queen Charlotte Islands, by Weymark Engineering Ltd., January 21, 1969.
(4) Preliminary Geological Report on the Bendy Mineral Claims by R.D. Wentzell, P.Eng., September 30, 1969.
(5) Progress Report – Investigation, Bendy Mineral Claims, by Weymark Engineering Ltd., October 14, 1969.
(6) Report to Cosmic Lode Mines, by Franklin Price, P.Eng., April 24, 1967.
(7) Results, Potentialities and Proposed Investigations – Copper Mineral Potentialities, Bendy Mineral Claims, by Weymark Engineering Ltd., June 22, 1970.

14. CERTIFICATE OF QUALIFICATIONS:

I, Walter E. Selnes do declare that:

1. I reside at 2515 McBain Avenue, Vancouver 8, British Columbia.
2. I am a graduate of the University of Alberta with the degree of Bachelor of Arts and Bachelor of Science in Mining Engineering.
3. I am a member of the Associations of Professional Engineers of British Columbia and of Ontario.
4. I have been practising my profession for over thirty years in the capacities of Geologist, Exploration Engineer and Mining Executive.
5. The writer did not examine the property and the information contained in this report is based on a review of several Professional Engineers' Reports and Government Publications.
6. I have no interest in the property or securities of Ann Lake Mining Ltd. (N.P.L.).

"WALTER E. SELNES"

WALTER E. SELNES, P.Eng.

Vancouver, British Columbia
December 2, 1970

APPENDIX: A

Synopsis of Diamond Drilling Completed By
Granby Mining, 1916

Note: For Drill Hole Locations, Refer To
Figure:9 in Weymark Engineering Ltd's
Report of January 21, 1969

GRANBY HOLE No: 1 (1916)

LOCATION: Salmon Creek DIP: -25° DEPTH: 166'

FROM	TO	LENGTH	ASSAYS Cu.%	Au.ozs	Ag.ozs	COMPOSITE GRADES
0'	10.0'	10.0'	0.3	Trace	Trace	
10.0'	15.0'	5.0'	0.3	Trace	Trace	
15.0'	20.0'	5.0'	NIL	NIL	NIL	
20.0'	25.0'	5.0'	0.3	0.3	0.01	0.80% Copper 15.5'
25.0'	30.0'	5.0'	1.5	Trace	0.02	
30.0'	35.0'	5.0'	1.0	Trace	Trace	
35.0'	40.0'	5.0'	0.5	Trace	Trace	
40.0'	45.0'	5.0'	NIL	NIL	NIL	0.75% Copper 31.5'
45.0'	50.0'	5.0'	1.5	0.8	0.04	
50.0'	55.0'	5.0'	NIL	NIL	NIL	
55.0'	60.0'	5.0'	0.2	Trace	Trace	
60.0'	65.0'	5.0'	0.2	NIL	NIL	
65.0'	70.0'	5.0'	NIL	NIL	NIL	
70.0'	75.0'	5.0'	0.2	Trace	Trace	
75.0'	80.0'	5.0'	0.2	NIL	NIL	
80.0'	85.0'	5.0'	NIL	NIL	NIL	

OVERALL GRADE: 0.42% Cu. over 166'

GRANBY HOLE No: 2 (1916)

LOCATION: Salmon Creek At Hole No: 1 but 53' to right DIP: Horizontal DEPTH: 306'

FROM	TO	LENGTH	ASSAYS Cu.%	Au.ozs	Ag.ozs	COMPOSITE GRADES
0'	3.5'	3.5'	1.5	0.6	0.2	
3.5'	11.0'	7.5'	Trace	NIL	NIL	
11.0'	16.0'	5.0'	0.2	NIL	NIL	
16.0'	41.0'	25.0'	NIL	NIL	NIL	
41.0'	46.0'	5.0'	0.5	NIL	NIL	
46.0'	57.0'	11.0'	NIL	NIL	NIL	
57.0'	62.0'	5.0'	0.2	NIL	NIL	
62.0'	89.0'	27.0'	NIL	NIL	NIL	
89.0'	93.0'	4.0'	0.2	NIL	NIL	
93.0'	108.0'	15.0'	NIL	NIL	NIL	
108.0'	113.0'	5.0'	0.3	NIL	NIL	
113.0'	140.0'	27.0'	NIL	NIL	NIL	
140.0'	147.0'	7.0'	0.3	NIL	NIL	1.34% Copper 16.0'
147.0'	153.0'	6.0'	1.4	Trace	Trace	
153.0'	158.0'	5.0'	1.5	Trace	0.01	
158.0'	168.0'	10.0'	NIL	NIL	NIL	
168.0'	173.0'	5.0'	0.5	NIL	NIL	0.80% Copper 69.0'
173.0'	187.0'	14.0'	1.0	Trace	0.04	
187.0'	192.0'	5.0'	NIL	NIL	NIL	
192.0'	205.0'	13.0'	0.7	0.04	Trace	1.08% Copper 27.5'
205.0'	209.0'	4.0'	2.5	0.4	Trace	
209.0'	213.0'	4.0'	0.4	NIL	NIL	
213.0'	218.0'	5.0'	NIL	NIL	NIL	
218.0'	223.0'	5.0'	0.2	NIL	NIL	
223.0'	228.0'	5.0'	0.5	NIL	NIL	
228.0'	233.0'	5.0'	0.1	NIL	NIL	
233.0'	244.0'	11.0'	NIL	NIL	NIL	
244.0'	249.0'	5.0'	0.2	NIL	NIL	
249.0'	254.0'	5.0'	NIL	NIL	NIL	
254.0'	259.0'	5.0'	0.2	Trace	0.02	
259.0'	264.0'	5.0'	NIL	NIL	NIL	
264.0'	269.0'	5.0'	NIL	NIL	NIL	
269.0'	274.0'	5.0'	0.1	NIL	NIL	
274.0'	279.0'	5.0'	0.1	NIL	NIL	
279.0'	284.0'	5.0'	NIL	NIL	NIL	
284.0'	289.0'	5.0'	NIL	NIL	NIL	
289.0'	294.0'	5.0'	0.3	NIL	NIL	
294.0'	299.0'	5.0'	0.3	NIL	NIL	
299.0'	304.0'	5.0'	NIL	NIL	NIL	

OVERALL GRADE: 0.30% Cu. over 306'

GRANBY HOLE No: 3 (1916)

LOCATION: Salmon Creek At Hole No: 1 but 53' to right (beneath Hole No: 2) DIP: -30° DEPTH: 402'

Shows slight mineralization throughout but nothing to exceed 0.5% copper

GRANBY HOLE No: 4 (1916)

LOCATION: Salmon Creek 30' distant from Hole No: 2 and 45° to right DIP: -15° DEPTH: 390'

0 - 7.0'	-	"Ore"
7.0 - 74.0'	-	Slightly Mineralized
74.0 - 258.0'	-	No Values
258.0 - 334.0'	-	Mineralized
334.0 - 390.0'	-	Waste

GRANBY HOLE No: 5 (1916)

LOCATION: Salmon Creek North - 600' north of Hole No: 1 DIP: -15° DEPTH: 362'

0 - 207.0'	-	Very Low Grade
207.0 - 290.0'	-	No Copper
290.0 - 311.0'	-	Slightly Mineralized
311.0 - 362.0'	-	Waste

GRANBY HOLE No: 6 (1916)

LOCATION: Salmon Creek North - 40' to right of Hole No: 5 DIP: -15° DEPTH: 10'

0 - 10.0' - No Ore

GRANBY HOLE No: 7 (1916)

LOCATION: East Channe (east of Salmon Creek) DIP: -25° DEPTH: 102'

0 - 5.0'	- 2% Copper
5.0 - 102.0'	- Slightly Mineralized

GRANBY HOLE No: 8 (1916)

LOCATION: East Channe (east of Salmon Creek) 300' to right of Hole No: 7 DIP: -10° DEPTH: 98'

FROM	TO	LENGTH	ASSAYS Cu.%	Au.ozs	Ag.ozs	COMPOSITE GRADES
0'	17.0'	17.0'	NIL	NIL	NIL	
17.0'	24.0'	7.0'	1.25	Trace	Trace	0.38% Copper 50.0'
24.0'	34.0'	10.0'	NIL	NIL	NIL	
34.0'	54.0'	20.0'	0.75	NIL	NIL	
54.0'	73.0'	19.0'	0.25	NIL	NIL	
73.0'	98.0'	25.0'	0.25	NIL	NIL	

OVERALL GRADE: 0.30% Cu. over 98'

GRANBY HOLE No: 9

LOCATION: Anna Inlet In Face of No: 1 Adit DIP: Horizontal DEPTH: 75'

0 - 75.0' - Practically No Copper Noticeable

INTRODUCTION

76 sacks of assay rejects, number 2001 to 2047 and 2301 to 2329 inclusive, from Ann Lake Mining Company were received from T.S.L. Laboratories on October 22, 1969.

Instructions were received from Mr. W.J. Weymark, Consulting Engineer, to make up a composite of equal weights of each sample and to proceed with concentration tests and assays on the composite sample ("Comp. No. 1"). Results of the tests were discussed with Mr. Weymark on December 2, 1969 and it was decided to make up a new composite (No. 2) consisting of equal weights of samples 2001 to 2031 and 2301 to 2329, i.e. omitting samples 2032 to 2047, which were of low grade (average 0.10% copper) and were more highly oxidized than the remaining samples.

SUMMARY

1. The composite head samples had the following assays:

			Comp. No. 1	Comp. No. 2
Total copper	(Cu)	%	0.52	0.61
Oxide copper	(Cu)	%	0.16 (a)	0.06 (b)
Sulphur	(S)	%	0.46	N.D.
Gold	(Au)	oz/ton	Trace	"
Silver	(Ag)	oz/ton	0.09	"

Note: (a) = 23% of total copper in ore
(b) = 10% of total copper in ore
N.D. Not determined

A spectrographic analysis of composite No. 2 head is given on page 12.

2. Composite No. 1 had a specific gravity of 2.92, equivalent to 11.0 cubic feet per short ton; composite No. 2 had a specific gravity of 3.05, equivalent to 10.5 cubic feet per ton.

3. Both samples were hard to grind; composite No. 1 had a Work Index of 18.8 K.W.H. per short ton for grinding to 55% minus 200 mesh; composite No. 2 had a Work Index of 19.0 K.W.H. per ton for a similar fineness of grind.

4. Three preliminary tests, involving grinding to various degrees of fineness followed by stage rougher flotation, were carried out on composite No. 1 in order to determine the optimum grind, flotation reagents and contact periods. These tests were followed by a complete test (259-4) in which the ore was ground to 55% minus 200 mesh and floated to give a rougher concentrate and three scavenger concentrates. The scavenger tailing was treated in a wet magnetic separator in order to recover any copper which might be associated with magnetite. The rougher flotation concentrate was cleaned 3 times. The overall copper recovery was 66.3%; 15% of the copper lost in the tailing was present as oxide minerals. No copper was recovered in the magnetite concentrate. Only 66.2% of the copper was recovered in the final concentrate and the grade of the concentrate was relatively low (22.8% copper).

5. In test 259-5, which was carried out on the second composite sample, the treatment method was altered to include a regrinding step on the rougher concentrate. The overall copper recovery (88.2%) was similar to that obtained in test 259-4 but the concentrate was of higher grade. The final concentrate assayed 31.1% copper, 0.15 oz/ton gold and 3.42 oz/ton silver; the copper recovery was 71.6%.

6. A spectrographic analysis of the final concentrate from test 259-4 showed traces of cobalt, gallium, lead, molybdenum, nickel, palladium, vanadium and zinc (see page 12) but none of these were present in commercial quantities.

7. Based on the results of test 259-5, it is expected that at least 84% of the copper would be recovered if similar ore is treated in a full-scale mill. The concentrate would assay about 30% copper, 0.15 oz/ton gold and 3 oz/ton silver.

Respectfully submitted,
BRITTON RESEARCH LIMITED

"JOHN W. BRITTON"
John W. Britton, P.Eng. Consulting Metallurgist