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BRANDY MINERAL CLAIMS 521712  
103 F/9

QUEEN CHARLOTTE ISLANDS, B.C.

*Approved*

A. Carlsen

Office- 684-8032

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421-602 WHASTINGS, Vancouver.

V6A 1P2 February 7, 1980

DAVE REES  
937 0729

ANA LAKE MINING LTD. (N.P.L.)

RESULTS, POTENTIALITIES AND PROPOSED INVESTIGATIONS

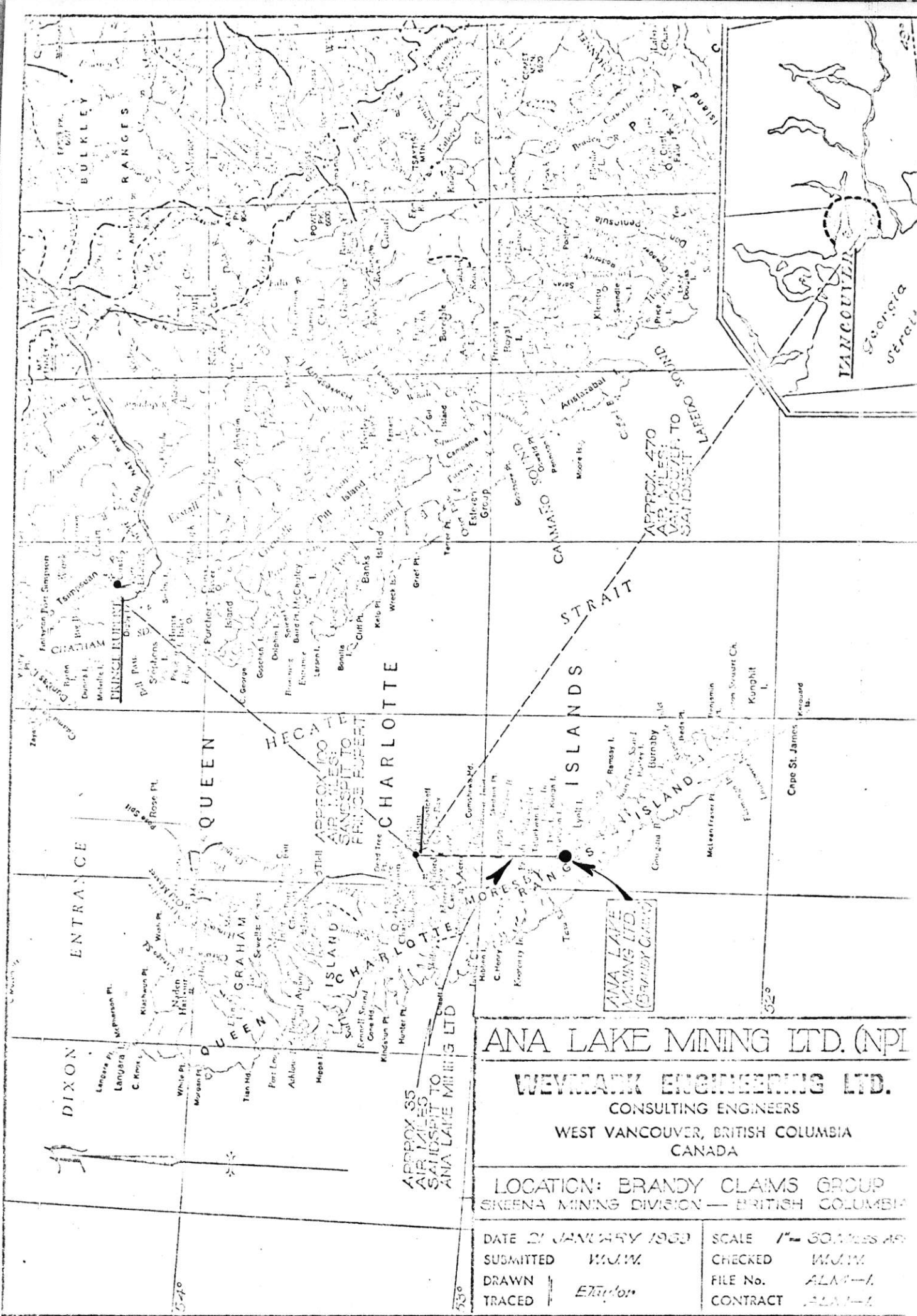
COPPER MINERAL POTENTIALITIES

BRANDY MINERAL CLAIMS

QUEEN CHARLOTTE ISLANDS

BRITISH COLUMBIA

22 JUNE 1970



APPROX. 470  
AIR MILES:  
VANCOUVER TO  
BRANDY CLAIMS

APPROX. 100  
AIR MILES:  
VANCOUVER TO  
PRINCE RUPERT

APPROX. 85  
AIR MILES:  
BRANDY CLAIMS TO  
ANA LAKE MINING LTD.

**ANA LAKE MINING LTD. (NPI)**

**WEYMARK ENGINEERING LTD.**

CONSULTING ENGINEERS

WEST VANCOUVER, BRITISH COLUMBIA  
CANADA

LOCATION: BRANDY CLAIMS GROUP  
SKREENA MINING DIVISION — BRITISH COLUMBIA

DATE: 21 JANUARY 1969

SUBMITTED: W.M.W.

DRAWN: W.M.W.

TRACED: *Extol*

SCALE: 1" = 30 MILES AS SHOWN

CHECKED: W.M.W.

FILE No. ALM-1

CONTRACT ALM-1

WEYMARK ENGINEERING LTD.

*Consulting Engineers*

3310 WESTMOUNT ROAD  
WEST VANCOUVER, B.C.  
CANADA

1.  
TELEPHONE  
922-1526

22 June 1970

Mr Dave Rees, President,  
Ana Lake Mining Ltd. (N.P.L.),  
Suite 1108 - 1111 West Hastings Street,  
VANCOUVER 1, British Columbia.

Dear Mr Rees,

RE: Results, Potentialities and  
Proposed Investigations,  
Copper Mineral Potentialities,  
Brandy Mineral Claims,  
Queen Charlotte Islands,  
British Columbia.

The following report outlines the salient features, results and proposals for future investigation of the copper and other contained mineral potentialities of the Brandy Mineral Claims, Queen Charlotte Islands, Skeena Mining Division, British Columbia.

1. The property consists of 19 recorded claims located on Moresby Island of the Queen Charlotte Island Group, British Columbia. Access is by air - 35 miles southerly from Sandspit, or by boat. Deep harbour possibilities, 35 feet or more depths are available fronting on Swede Peninsula. The nearest operating mine is Westfrob Mines (Tasu), a subsidiary of Falconbridge, currently operating at 8000 tons per day. Westfrob is located about 10 miles northwesterly from the Ana Property and is within the same geological environment.
2. The property was originally staked as the Swede Claims in 1907. During the succeeding years to 1930 various phases of exploratory work was carried out on the readily accessible mineral zones - all of which is recorded in B.C. Minister of Mines' Reports. Recognition was given to the large scale tonnage possibilities but the then below commercial grade (under one per cent copper) limited interest. Intermittently, from 1930 to 1968, cursory examinations and sampling were carried out by various individuals and companies without serious attempt to extend the known mineral zones or interpretation of geological controls. In the fall of 1968 the claims area was staked and subsequently transferred to Ana Lake Mining Ltd.
3. Work carried out by Ana Lake Mining Ltd. during 1969 included bulk sampling of the exposed mineral zones in the adits and deepened trenches, additional trenching in new locations, preliminary geological mapping, an airborne magnetometer survey, control topographical surveys and diamond



Results, Potentialities and Proposed Investigations, Copper Mineral Potentialities, Brandy Mineral Claims, Queen Charlotte Islands, B.C. dtd 22 June/70

drilling to provide base information about geological structural controls, preliminary metallurgical testing and establishment of camp and workshop facilities for the next phase of investigation. Expenditures to date are in the order of \$180,000.00. These finances have been provided by the individuals involved with the initial organization of the company.

4. The results of exploration investigations completed to date indicate:

- i. Geophysically - anomalous conditions exist within the apparent structural controls;
- ii. Geologically - surveys completed indicate no apparent discontinuity within the structural environment of about 4000 feet in length and 500 - 1000 feet in width. Depth dimensions have only partially been tested.
- iii. Metallurgically - tests indicate that 84% of the copper may be recovered by conventional flotation methods to produce a concentrate grading 30% copper, 0.15 ozs. per ton of gold and 3.0 ozs. of silver, plus other economic minerals. The composite average of the ore tested ranged from copper - 0.52% to 0.61%; oxide copper - 0.06% to 0.16%; gold - trace and silver - 0.09 ozs. per ton. Specific gravity ranged from 2.92 to 3.05, equivalent to 10.5 to 11.0 cubic feet per short ton. Grinding to smaller size may improve recovery.
- iv. Bulk Sampling - Anna Inlet Side - a tested area 400 feet wide by 800 feet in length yielded an arithmetic average of 0.30% copper with contained values in gold, silver, gallium, strontium and platinum-palladium.

Salmon Creek Side - an area tested of 600 feet in width by 600 feet in length yielded an arithmetic average of 0.66% copper with contained values in gold, silver and other economic minerals.

Sampling of the intervening sections between Anna Inlet and the Salmon Creek sections could not be carried out because of imposed topographical difficulties, the equipment available and access limitations.

Because of surface leaching and the mode of occurrence of the copper mineralization, deep trench, adits and bulk sampling methods provide the only means of obtaining representative ore samples.

Results, Potentialities and Proposed Investigations, Copper Mineral Potentialities, Brandy Mineral Claims, Queen Charlotte Islands, B.C.  
dtd 22 June/70

- v. **Diamond Drilling** - twenty one drill holes with a total footage of about 3000 feet and small X-ray size confirmed extensions of the geological structure and mineralization. These cores were not assayed because of their small sample nature. They are available for examination and further geological interpretation.
- vi. **Control Surveys** - topographic controls are established on the property providing a basis for future surface and sub-surface work.
- vii. **Resources** - Sufficient resources of timber, water, sand-gravel and a potential of 25-50,000 kw of hydro power are available to support mining operations. Additional supplies, labour and equipment may be obtained by boat service from Pacific rim communities. Japan appears to carry market and supply opportunities.

5. Copper Mineral Potentialities: Opportunities exist within the inferred geological environment for the location of a multi-million tonnage deposit of copper and other economic minerals amenable to low cost mining and concentration. Other economic controls of financial investment, transportation marketing, pollution, social - are most favorable when referenced to currently operating and developing mines in British Columbia. A cost advantage of \$1.00 to \$2.00 per ton is indicated at the present time.

6. Future Programme: Because of the indicated large mining possibilities, the next phases of investigation require progressively considerable sums of money to complete the pre-feasibility and detailed feasibility studies. The pre-feasibility study will require at least \$2,000,000.00 and may be divided into four phases of at least \$500,000.00 each. The feasibility study will require at least an additional \$3,000,000.00. The pre-feasibility study would consist of driving a 4000 foot adit, drifts and cross-cuts, diamond drilling, sampling, geological mapping, surveying, engineering and tests as well as other support studies.

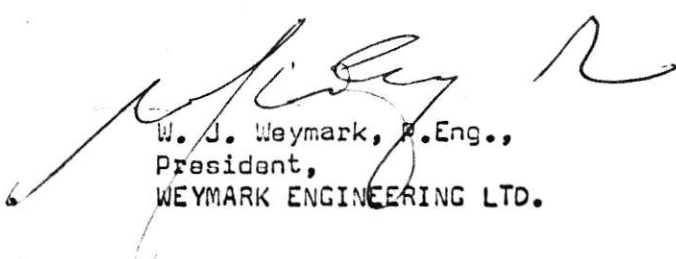
7. The following reports are references:

- (1) Brandy Mineral Claims, Queen Charlotte Islands, Skeena Mining Division, British Columbia, dated 21 January 1969, by Weymark Engineering Ltd.
- (2) Preliminary Geological Report on the Brandy Mineral Claims, Lockport, Queen Charlotte Islands, British Columbia, dated 30 September 1969, by R. D. Westervelt, P.Eng.

Results, Potentialities and Proposed Investigations, Copper Mineral  
Potentialities, Brandy Mineral Claims, Queen Charlotte Islands, B.C.  
dtd 22 June/70

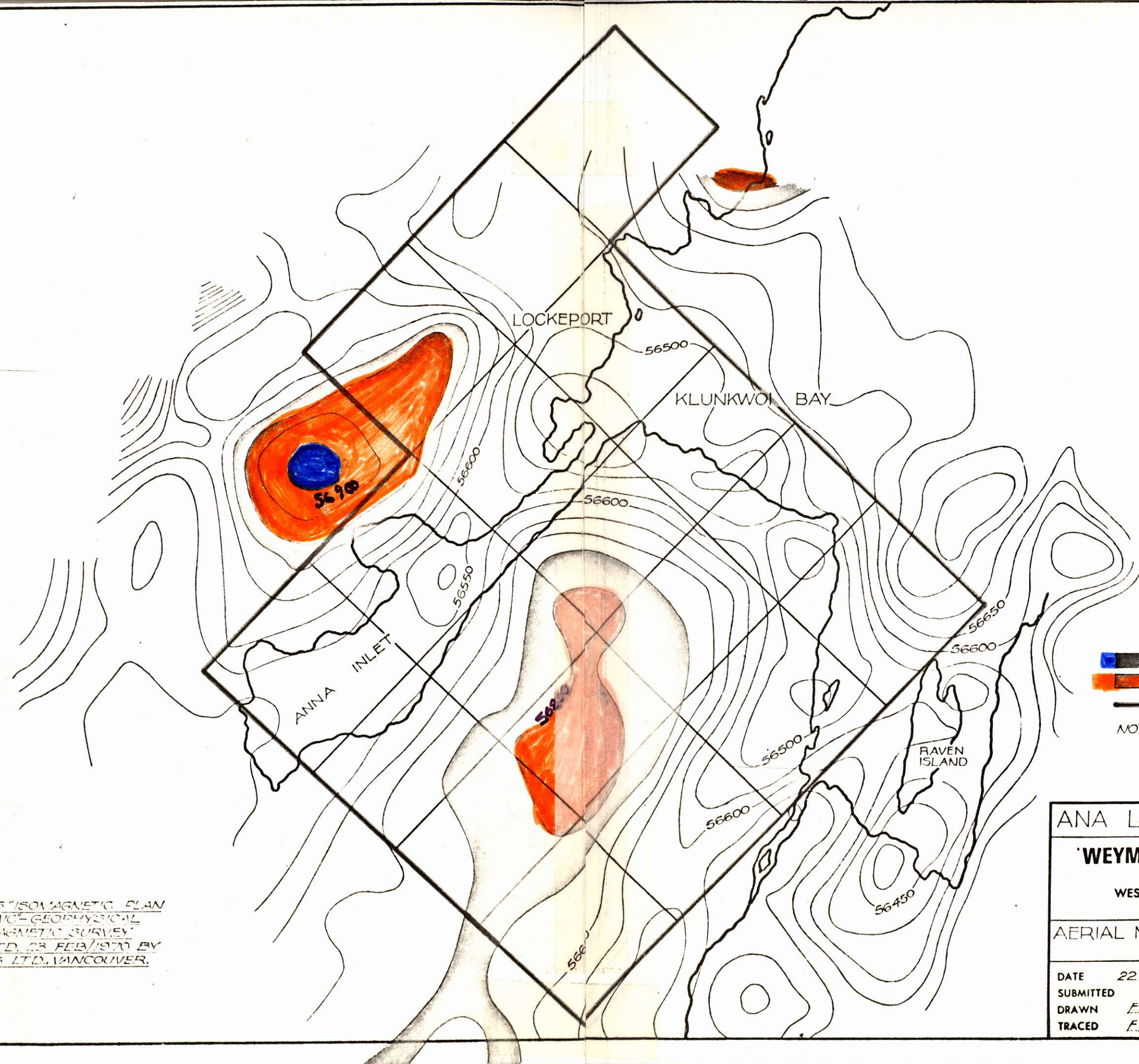
- (3) Progress Report, Investigations, Brandy Mineral Claims, Queen Charlotte Islands, Skeena Mining Division, British Columbia, dated 14 October 1969, by Weymark Engineering Ltd.
- (4) Sub-Surface Exploration Programme, Brandy Mineral Claims, dated 16 January 1970, by Weymark Engineering Ltd.
- (5) Concentration Tests on Samples of Copper Ore, submitted by Ana Lake Mining Company, Progress Report No. 1, dated 22 January 1970, by Britton Research Limited.

Respectfully submitted,

  
W. J. Weymark, P.Eng.,  
President,  
WEYMARK ENGINEERING LTD.

WJW/et  
22 June 1970






  
 ——— APPROX. BOUNDARY OF BRANDY CLAIMS.
   
 NOTE: CONTOUR INTERVALS 50 GAMMAS.

REFERENCE: FIG. 5 "ISOMAGNETIC PLAN  
 ON AERIAL MAGNETIC GEOPHYSICAL  
 REPORT--AEROMAGNETIC SURVEY  
 (03 N6.11204) DTD. 23 FEB/1970 BY  
 GEO-X SURVEYS LTD., VANCOUVER.

ANA LAKE MINING LTD (NPL)	
<b>WEYMARK ENGINEERING LTD.</b>	
CONSULTING ENGINEERS	
WEST VANCOUVER, BRITISH COLUMBIA	
CANADA	
AERIAL MAGNETOMETER SURVEY	
ISOMAGNETICS	
DATE	22 JUNE/70
SUBMITTED	W.J.W.
DRAWN	E. Taylor
TRACED	E. Taylor
SCALE	1" = 1000' APPRX.
CHECKED	W.J.W.
FILE No.	ALM.-1
CONTRACT	ALM.-1.

FIG: 2.



CONCENTRATION TESTS ON SAMPLES

OF COPPER ORE

submitted by

ANA LAKE MINING COMPANY

Progress Report No.1

Project No: B259

Date: January 22, 1970

Investigation by: Britton Research Limited,  
1612 West 3rd Avenue,  
Vancouver 9, B.C.

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## INTRODUCTION

76 sacks of assay rejects, numbered 2001 to 2047 and 2301 to 2329 inclusive, from Ana 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. #1"). Results of the tests were discussed with Mr Weymark on December 2, 1969 and it was decided to make up a new composite (#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 oxidised than the remaining samples.

## SUMMARY

1. The composite head samples had the following assays:

			<u>Comp. #1</u>	<u>Comp. #2</u>
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 #2 head is given on page 12.

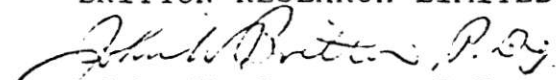
2. Composite #1 had a specific gravity of 2.92, equivalent to 11.0 cubic feet per short ton; composite #2 had a specific gravity of 3.05, equivalent to 10.5 cubic feet per ton.



3. Both samples were hard to grind; composite #1 had a Work Index of 18.8 K.W.H. per short ton for grinding to 55% minus 200 mesh; composite #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 #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 88.3%; 55% 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 31.19% copper, 0.15 oz/ton gold and 3.43 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, P.Eng.  
Consulting Metallurgist

Ana Lake Mining - Composite #1

Test 259-1 to 3 conditions

Table 1

	STAGE						Total reagents
	1	2	3	4	5	6	
Reagents: Lb/ton of ore (all tests)							
Na <sub>2</sub> S (60/62%)	-	-	-	-	0.1	0.1	0.2
Z-200 (Dow)	-	0.02	-	0.02	-	-	0.04
CX-51 (a)	-	0.02	-	0.02	0.02	0.02	0.08
Pine oil	-	0.018	-	0.018	-	-	0.036
Pulp volume - ml (b)	-	4800	4800	4800	4800	4800	-
% solids (all tests)	65	33	33	32	31	31	-
Time - minutes	-	5	4	4	4	4	-
pH (test 259-1)	-	9.1	8.9	8.8	8.7	8.9	-
" ( " 259-2)	-	9.1	8.9	8.8	8.8	8.9	-
" ( " 259-3)	-	9.1	9.1	9.1	9.1	9.2	-
Temperature - °C (test 259-1)	-	18	18	19	20	21	-
" - " ( " 259-2)	-	19	20	20	20	20	-
" - " ( " 259-3)	-	18	19	20	20	20	-

Notes: (a) Potassium amyl xanthate (b) Per 2000 grams of ore

Stages:

1. Grinding
  - Test 259-1: - 20 mins. (46% -200 mesh)
  - " 259-2: - 30 " (55% " " )
  - " 259-3: - 40 " (68% " " )
2. Conditioning
3. Flotation - 1st concentrate
4. " - 2nd "
5. " - 3rd "
6. " - 4th "

Note: A Denver laboratory flotation cell was used in all of the tests.

Ana Lake Mining - Composite #1

Test 259-4 conditions

Table 2

	STAGE											Total reagents
	1	2	3	4	5	6	7	8	9	10	11	
Reagents: Lb/ton of ore												
Na <sub>2</sub> S (60/62%)	-	-	-	-	-	0.1	-	-	-	-	-	0.1
Z-200 (Dow)	-	0.04	-	-	-	-	-	-	-	-	-	0.04
CX-51 (a)	-	0.04	-	0.02	0.02	0.02	-	-	-	-	0.01	0.11
Pine oil	-	0.036	-	-	-	-	-	-	-	-	0.005	0.041
Pulp volume - ml (b)	-	4800	4800	4800	4800	4800	-	1200	1200	1200	1200	-
% solids	65	33	33	31	31	31	-	8	6	4	1.4	-
Time - minutes	30	5	4	4	4	4	-	3	3	3	1	-
pH	-	9.1	9.1	8.9	8.8	8.8	-	8.8	8.7	7.6	7.4	-
Temperature - °C	-	19	19	19	20	20	-	19	18	18	19	-

Notes: (a) Potassium amyl xanthate

(b) Per 2000 grams of ore

- Stages:
1. Grinding (55% -200 mesh)
  2. Conditioning
  3. Rougher flotation
  4. Scavenger flotation - 1st conc.
  5. " " - 2nd "
  6. " " - 3rd "

7. Magnetic separation of scavenger tailing followed by single stage cleaning of concentrate (tailings combined)
8. 1st cleaning (of rougher concentrate)
9. 2nd " "
10. 3rd " - 1st concentrate
11. " " - 2nd "



Ana Lake Mining - Composite #2

Test 259-5 conditions

Table 3

	STAGE													Total
	1	2	3	4	5	6	7	8	9	10	11	12	13	reagents
Reagents: Lb/ton of ore														
Na <sub>2</sub> S (60/62%)	-	-	-	-	0.1	0.1	-	-	0.05	-	-	-	-	0.25
Z-200 (Dow)	-	0.04	-	-	-	-	-	-	-	-	-	-	-	0.04
CX-51 (a)	-	0.04	-	0.04	0.02	0.02	-	-	0.01	-	0.02	-	0.02	0.17
Pine oil	-	0.018	0.018	-	-	-	-	-	-	-	-	-	-	0.036
Pulp volume - ml (b)	-	9000	9000	9000	9000	9000	-	4800	4800	2600	2600	2600	2600	-
% solids	65	34	34	-	-	-	65	6	4	3	1	3	0.4	-
Time - minutes	(c)	5	4	4	4	4	6	6	2	4	2	4	2	-
pH	-	9.2	9.1	9.0	9.0	9.0	-	8.4	8.5	8.0	7.7	7.3	7.1	-
Temperature - °C	-	20	20	20	20	21	-	19	20	19	20	21	21	-

Notes: (a) Potassium amyl xanthate (b) Per 4000 grams of ore (c) 4000 grams of ore ground in two batches of 2000 grams each for 30 minutes

- Stages:
- |  |                                    |
|--|------------------------------------|
| 1. Grinding (54% -200 mesh)                              | 8. 1st cleaning - 1st concentrate  |
| 2. Conditioning  | 9. " " - 2nd "                     |
| 3. Rougher flotation - 1st stage                         | 10. 2nd cleaning - 1st concentrate |
| 4. " " - 2nd "   | 11. " " - 2nd "                    |
| 5. " " - 3rd "   | 12. 3rd cleaning - 1st concentrate |
| 6. " " - 4th "   | 13. " " - 2nd "                    |
| 7. Regrinding of rougher concentrate (to 83% -325 mesh). |                                    |

Ana Lake Mining - Composite #1 - Tests 259-1 to 3

Table 4

Individual results

#	Product	Weight %			Assays % Cu			Distribution % Cu		
		259-1	259-2	259-3	259-1	259-2	259-3	259-1	259-2	259-3
1	1st concentrate	2.31	2.63	3.53	14.16	12.85	10.05	62.8	64.4	69.3
2	2nd "	2.35	3.13	3.50	3.02	2.97	2.19	13.6	17.7	15.0
3	3rd "	1.49	1.54	1.65	1.76	1.48	1.15	5.0	4.3	3.7
4	4th "	0.96	1.17	1.24	0.91	0.76	0.46	1.7	1.7	1.1
5	Tailing	92.89	91.53	90.08	0.095	0.068	0.062	16.9	11.9	10.9
6	Head (calculated)	100.00	100.00	100.00	0.52	0.52	0.51	100.0	100.0	100.0
6	Head (direct assay)				0.52	0.52	0.52			

Additional assays #6 (head): Au trace, 0.09 oz/ton Ag, 0.005% Pb, 0.008% Zn, 0.46% S.

Cumulative results

1	1st concentrate	2.31	2.63	3.53	14.16	12.85	10.05	62.8	64.4	69.3
1 + 2	1st + 2nd concentrates	4.66	5.76	7.03	8.54	7.48	6.14	76.4	82.1	84.3
1 to 3	1st to 3rd concentrates	6.15	7.30	8.68	6.90	6.22	5.19	81.4	86.4	88.0
1 to 4	Total concentrates	7.11	8.47	9.92	6.09	5.46	4.60	83.1	88.1	89.1

Grind Test 259-1: 46% -200 mesh  
 Test 259-2: 55% -200 mesh  
 Test 259-3: 68% -200 mesh

Ana Lake Mining - Composite #2

Table 6

Test 259-5

Individual results

#	Product	Weight %	Assay Cu %	Dist. % Cu
1	3rd cleaning, 1st conc.	1.386	31.19	71.6
2	" " 2nd "	0.084	17.40	2.4
3	" " tailing	0.189	6.21	1.9
4	2nd cleaning, 2nd conc.	0.073	13.47	1.7
5	" " tailing	0.547	2.94	2.6
6	1st cleaning, 2nd conc.	0.155	6.24	1.7
7	" " tailing	5.283	0.73	6.3
8	Rougher tailing	92.283	0.077	11.8
9	Head (calculated)	100.000	0.60	100.0
9	Head (direct assay)		0.61	

Additional assays #9: 0.008% Pb, 0.008% Zn  
 #1: 0.15 oz/ton Au, 3.43 oz/ton Ag,  
 24.82% Fe, 11.4% insol.

Cumulative results

1	3rd cleaning, 1st conc.	1.386	31.19	71.6
1 + 2	" " comb. concs.	1.470	30.40	74.0
1 to 3	2nd cleaning, 1st conc.	1.659	27.64	75.9
1 to 4	" " comb. concs.	1.732	27.05	77.6
1 to 5	1st cleaning, 1st conc.	2.279	21.26	80.2
1 to 6	" " comb. concs.	2.434	20.31	81.9
1 to 7	Rougher concentrate	7.717	6.90	88.2



Table 7 - Screen analyses

Mesh (Tyler)	<u>Composite #1</u> <u>Feed to ball mill</u>			<u>Composite #2</u> <u>Feed to ball mill</u>			<u>Composite #1</u> <u>Flotation feed</u> <u>Test 259-1</u>		
	% retained Ind.	% passing Cum.	% passing Cum.	% retained Ind.	% passing Cum.	% passing Cum.	% retained Ind.	% passing Cum.	% passing Cum.
10	-	-	100.0	-	-	100.0	-	-	100.0
14	18.0	18.0	82.0	18.0	18.0	82.0	0.5	0.5	99.5
20	15.7	33.7	66.3	16.6	34.6	65.4	0.8	1.3	98.7
28	13.3	47.0	53.0	14.3	48.9	51.1	1.7	3.0	97.0
35	8.1	55.1	44.9	8.3	57.2	42.8	2.9	5.9	94.1
48	6.8	61.9	38.1	5.7	62.9	37.1	7.3	13.2	86.2
65	7.1	69.0	31.0	7.9	70.8	29.2	11.3	24.5	75.5
100	4.7	73.7	26.3	4.6	75.4	24.6	10.6	35.1	64.9
150	4.4	78.1	21.9	4.2	79.6	20.4	10.6	45.7	54.3
200	3.6	81.7	18.3	3.4	83.0	17.0	8.6	54.3	45.7
+325	3.8	85.5	14.5	3.7	86.7	13.3	9.2	63.5	36.5
-325	14.5	100.0	-	13.3	100.0	-	36.5	100.0	-
Total	100.0	100.0	-	100.0	100.0	-	100.0	100.0	-

80% passing size: 1110 microns

1110 microns

240 microns

(cont.)

Table 7 (cont.)

(Tyler)	<u>Composite #1</u> <u>Flotation feed</u> <u>Test 259-2 &amp; 4</u>			<u>Composite #1</u> <u>Flotation feed</u> <u>Test 259-3</u>			<u>Composite #2</u> <u>Flotation feed</u> <u>Test 259-5</u>		
	% retained Ind.	% retained Cum.	% passing Cum.	% retained Ind.	% retained Cum.	% passing Cum.	% retained Ind.	% retained Cum.	% passing Cum.
10	-	-	100.0	-	-	100.0	-	-	100.0
14	0.1	0.1	99.9	-	-	100.0	0.1	0.1	99.9
20	0.1	0.2	99.8	-	-	100.0	0.1	0.2	99.8
28	0.1	0.3	99.7	0.1	0.1	99.9	0.1	0.3	99.7
35	0.3	0.6	99.4	-	0.1	99.9	0.3	0.6	99.4
48	0.7	1.3	98.7	0.1	0.2	99.8	0.9	1.5	98.5
65	6.4	7.7	92.3	1.1	1.3	98.7	6.6	8.1	91.9
100	10.7	18.4	81.6	4.8	6.1	93.9	11.1	19.2	80.8
150	14.1	32.5	67.5	12.2	18.3	81.7	14.5	33.7	66.3
200	12.7	45.2	54.8	13.8	32.1	67.9	12.3	46.0	54.0
+325	12.2	57.4	42.6	15.4	47.5	52.5	12.2	58.2	41.8
-325	42.6	100.0	-	52.5	100.0	-	41.8	100.0	-
Total	100.0	100.0	-	100.0	100.0	-	100.0	100.0	-

80% passing size: 144 microns

110 microns

146 microns

Ana Lake Mining - Composite #1 - Test 259-4

Screen analysis of final tailing

Table 8

Individual results

#	Product	Weight %	Assay Cu %	Dist. % Cu
1	+48 mesh	1.70	0.244	6.1
2	-48 +65 "	5.82	0.114	9.7
3	-65 +100 "	10.99	0.072	11.7
4	-100 +150 "	13.87	0.061	12.4
5	-150 +200 "	12.35	0.054	9.8
6	-200 +325 "	12.38	0.047	8.6
7	-325 mesh	42.89	0.066	41.7
8	Head (calculated)	100.00	0.068	100.0
8	Head (direct assay)		0.068	

Cumulative results

1	+48 mesh	1.70	0.244	6.1
1 + 2	+65 "	7.52	0.143	15.8
1 to 3	+100 "	18.51	0.101	27.5
1 to 4	+150 "	32.38	0.084	39.9
1 to 5	+200 "	44.73	0.076	49.7
1 to 6	+325 "	57.11	0.069	58.3
1 to 7	Total tailing	100.00	0.068	100.0

# TECHNICAL SERVICE LABORATORIES

DIVISION OF BURGNER TECHNICAL ENTERPRISES LIMITED  
355 KING ST. W., TORONTO 20, ONT., CANADA

Representing...  
SADTLER RESEARCH  
ULTRA CARBON CORPORATION  
METALS RESEARCH LIMITED

TELEPHONE: 362-4248 - AREA 416  
TELEX: 0229302  
CABLE ADDRESS - TCSERV TORONTO

## CERTIFICATE OF ANALYSIS

Semi-quantitative Spectrographic

SAMPLE(S) FROM Britton Research Limited,  
1612 West Third Avenue,  
Vancouver 9, B.C. Canada.

REPORT NO.  
T-17479

SAMPLE(S) OF PULP

Attn: Mr. J. Britton

	Sample 1339 HEAD (Comp.#2)	Sample 1340 Conc. (Test 259-4)	Sample	Sample 1339 HEAD (Comp.#2)	Sample 1340 CONC. (Test 259-4)	Sample	
Antimony	-	-	Phosphorus	-	-		
Arsenic	-	-	Platinum	-	-		
Barium	.01%	.002%	Rhenium	X	X		
Beryllium (BeO)	-	-	Rhodium	-	-		
Bismuth	-	-	Rubidium	X	X		
Boron	-	-	Ruthenium	-	-		
Cadmium	-	-	Silver	<.1oz:t	3oz:t		
Cerium (CeO <sub>2</sub> )	-	-	Strontium	.07%	.02%		
Caesium	X	X	Tantalum (Ta <sub>2</sub> O <sub>5</sub> )	-	-		
Chromium	.02%	.01%	Tellurium	-	-		
Cobalt	.01%	.04%	Thallium	-	-		
Columbium (Cb <sub>2</sub> O <sub>6</sub> )	-	-	Thorium (ThO <sub>2</sub> )	-	-		
Copper	LM	M	Tin	-	-		
Gallium	.001%	.001%	Titanium	LM	LM		
Germanium	-	-	Tungsten	-	-		
Gold	-	.04oz:t	Uranium (U <sub>2</sub> O <sub>5</sub> )	-	-		
Hafnium	-	-	Vanadium	.05%	.02%		
Indium	-	-	Yttrium (Y <sub>2</sub> O <sub>3</sub> )	-	-		
Indium	-	-	Zinc	-	.1%		
Lanthanum (La <sub>2</sub> O <sub>3</sub> )	-	-	Zirconium (ZrO <sub>2</sub> )	.01%	.02%		
Lead	-	.05%	ROCK FORMING METALS				
Lithium (Li <sub>2</sub> O)	-	-	Aluminum (Al <sub>2</sub> O <sub>3</sub> )	MH	M		
Manganese	.05%	.03%	Calcium (CaO)	M	M		
Mercury	-	-	Iron (Fe)	M	MH		
Molybdenum	-	.005%	Magnesium (MgO)	MH	LM		
Neodymium (Nd <sub>2</sub> O <sub>3</sub> )	-	-	Silica (SiO <sub>2</sub> )	H	H		
Nickel	.01%	.01%	Sodium (Na <sub>2</sub> O)	LM	.5%		
Palladium	<.005oz:t	.005oz:t	Potassium (K <sub>2</sub> O)	.3%	.2%		

Figures are approximate:

### CODE

- H - High - 10 - 100% approx.
- LM - Low Medium - .5 - 5% approx.
- FT - Faint Trace - approx. less than .01%.
- MH - Medium High - 5 - 50% approx.
- L - Low - .1 - 1% approx.
- PT - Possible Trace - Presence not certain.
- M - Medium - 1 - 10% approx.
- TL - Trace Low - .05 - .5% approx.
- : Not Detected - Elements locked for but not found
- T - Trace - .01 - .1% approx.
- X - Not locked for

Samples, Pulps and Rejects discarded after two months

DATE Dec. 17/69

SIGNED *[Signature]*

BRITTON RESEARCH LIMITED  
1612 WEST THIRD AVENUE VANCOUVER - TSL LABORATORIES LTD., 325 HOWE ST., VANCOUVER 1, B.C.  
VANCOUVER 9, B.C.

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