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490001

15-1151 H20/74

LOUISA MINING CORPORATION N.L.

152 BRISBANE STREET, LAUNCESTON, TASMANIA, 7250

*RAAS
Sent.*

RECEIVED	3 - NOV 1975	E & I L
ANSWER: DEPT. OF MINES		
REF. No. <u>5782/75</u>		

REPORT ON EXPLORATION WORK

to

2nd November, 1975.

This contains proposed methods of mining on leases applied for. Recommendations are presented from environmental control etc that can be made. You may be invited to suggest any special conditions based on the proposals.

*Std instructions
See instruction 10/74*

M.C. Forster

POSTAL ADDRESS
P.O. BOX 1172
LAUNCESTON
7250

TELEPHONE 31 5544
TELEGRAMS :
RALGUY LAUNCESTON

MANAGER-HOBART
556 SANDY BAY ROAD,
SANDY BAY, TAS. 7005
TELEPHONE 25 2803

Seymour

Private Rd
Seymour Cottage

Long Point

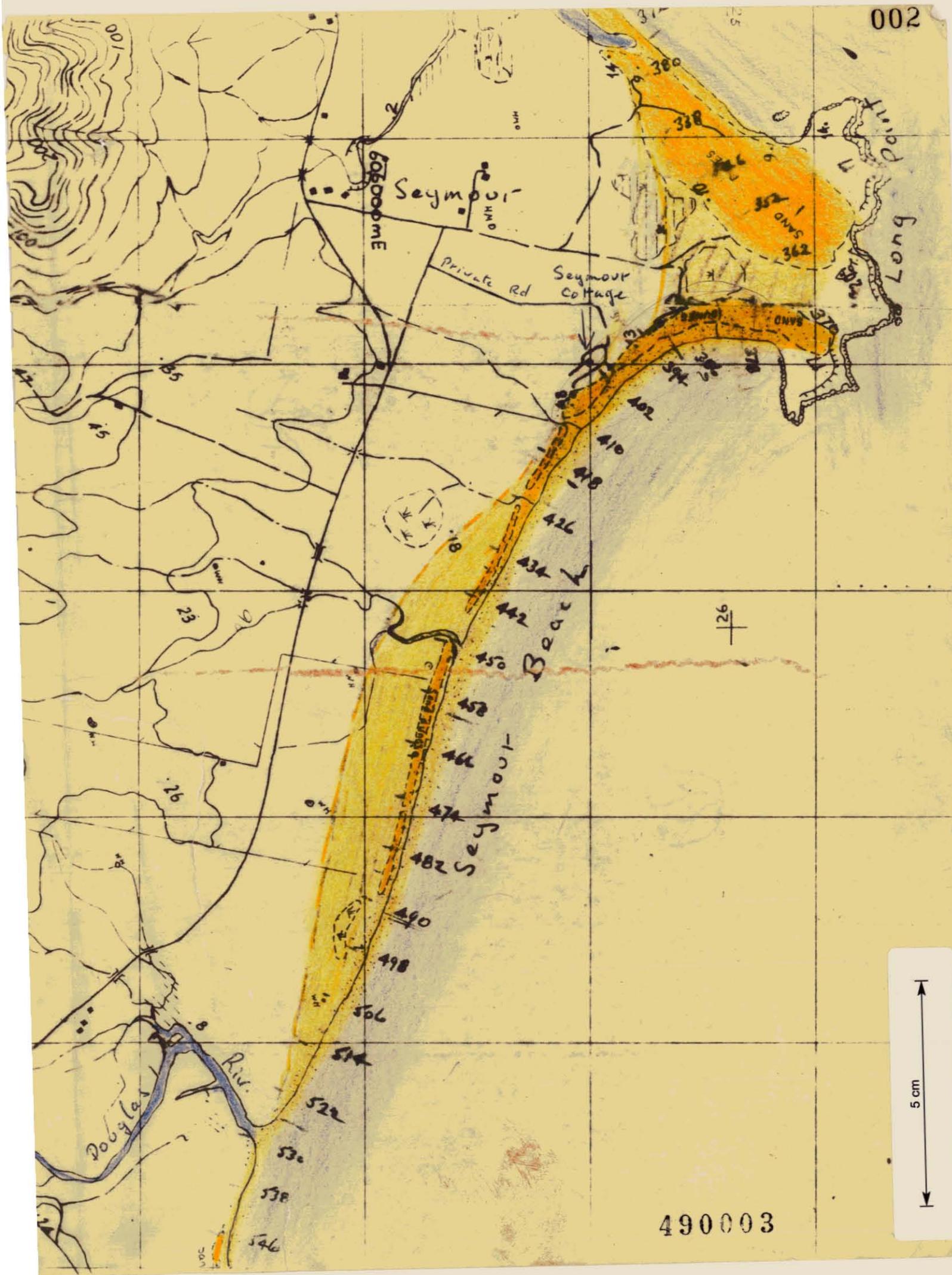
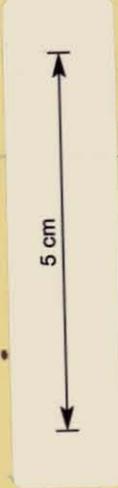


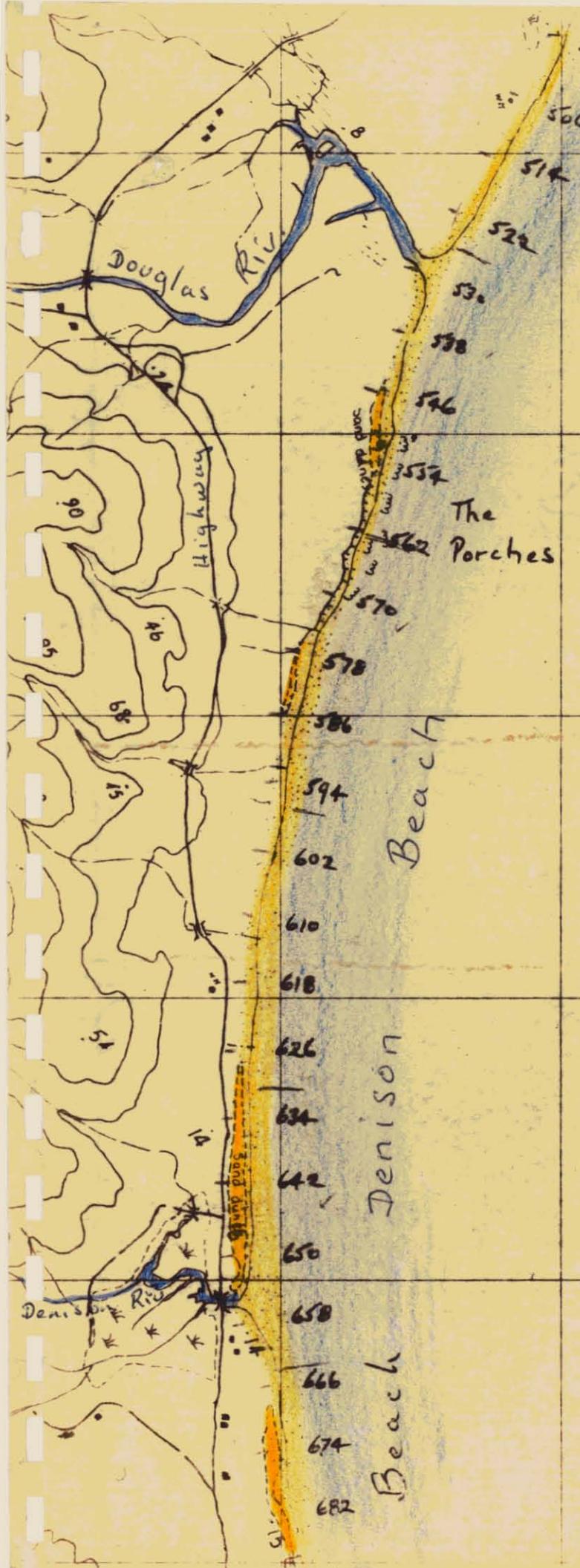
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Seymour

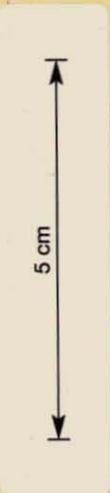
Douglas Riv.

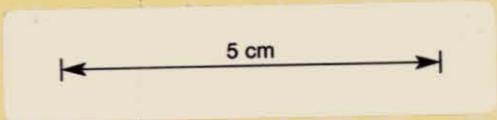
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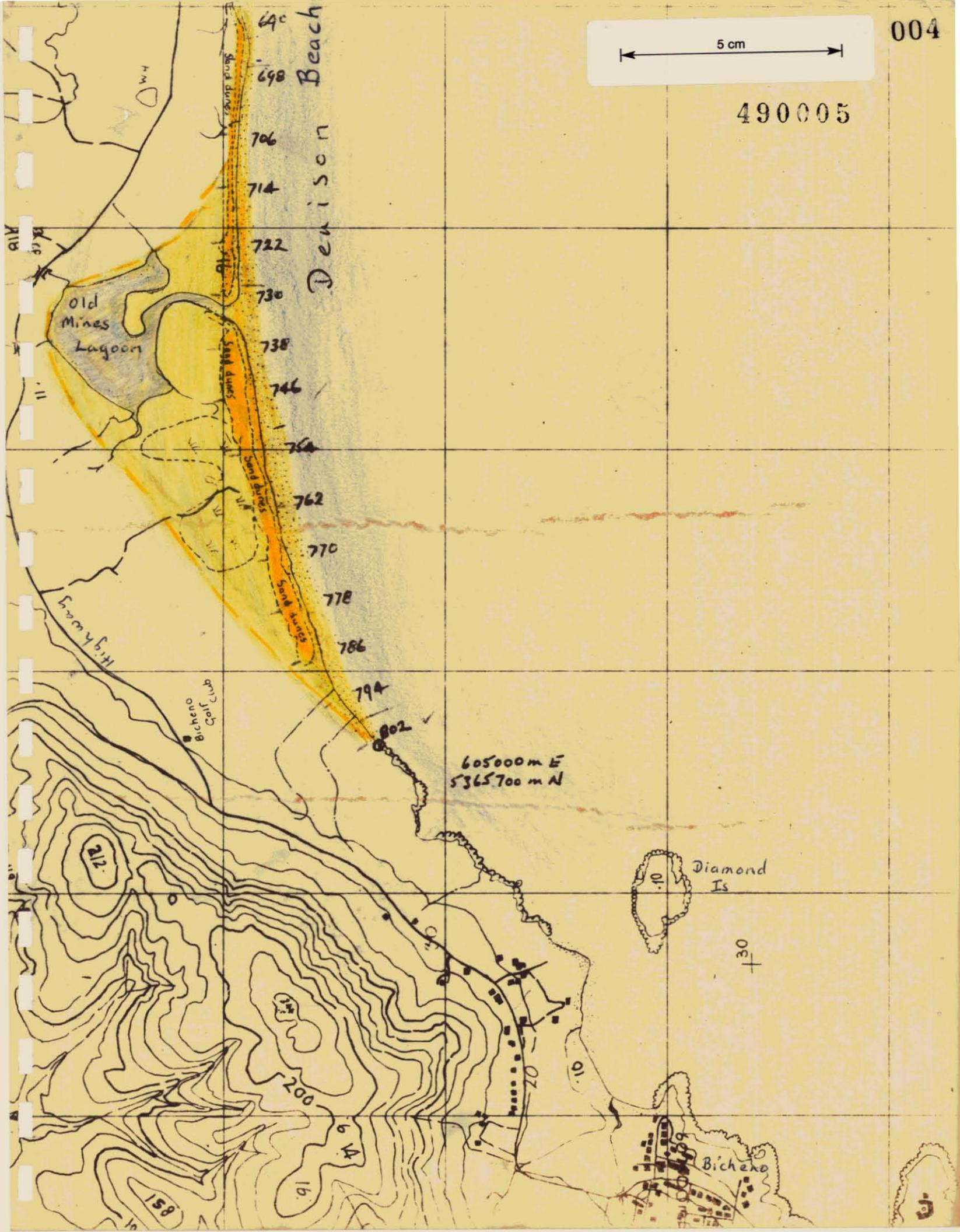


490004





490005



Devision Beach

690
698
706
714
722
730
738
746
754
762
770
778
786
794

Sand dunes
Sand dunes
Sand dunes
Sand dunes
Sand dunes

Old Mines Lagoon

Highway

Camp
Bicheno

605000 m E
5365700 m N

Diamond Is

130

Bicheno

212

200

190

158

10

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10

LOUISA MINING CORPORATION N.L.

Computation of Mineral Reserves- Seymour, Oct. '75.

Line	Footage	No. Holes	Depth Av.	W.	L.	Vol. c/ft mil	Grade %	VxG '000	H.M. tons '000	%Z	Z tons '000	% T	T tons '000
LPN 1	71	9	7.9	300	5280	12.5	4.98	624	29.6	16.3	4.8	8	2.4
LPN 2	85	10	8.5	360	5280	16.1	4.60	740	35.0	16.3	5.7	8	2.8
LPN 3	55	8	6.9	840	5280	30.5	3.15	960	45.5	13.5	6.1	9	4.1
380 S	89	11	8.1	540	5280	23.0	4.17	4180	98.0	28.0	55.5	5	9.9
434 S	46	8	5.7	270	5280	8.1	7.72	625	29.6	10.0	2.9	9	2.7
486 S	50	8	6.3	180	5280	6.0	6.30	378	17.9	10.0	1.8	9	1.6
538 S	18	4	4.5	240	5280	5.7	3.18	181	8.6	10.0	0.9	9	0.8
591 S	11	3	3.7	45	5280	0.9	6.24	56	2.6	12.0	0.3	9	0.2
644 S	65	6	10.8	90	5280	5.1	4.61	235	11.1	14.5	1.6	9	1.0
696 S	124	10	12.4	270	5280	17.6	4.60	810	38.4	12.0	4.6	6	2.3
749 S	82	7	11.7	180	5280	11.1	5.46	606	28.7	14.5	4.2	9	2.6
802 S	101	15	6.7	390	5280	12.0	5.02	602	28.5	14.5	4.1	9	2.6
Total	797'	99				148.6	6.75	9997	474	19.5	<u>92.5</u>	7	<u>33.0</u>

Z = Zircon

T = Topaz

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490008

BORE HOLE DATA AND ANALYSIS RECORD

AREA LPN TASMANIAN (Long Point North)

LINE NO LINE 2 BORES DATE RECORDED 11. 3. 75

BORES (Yards)	DEPTH IN FEET		SAMPLE WT. GRAMS	CONCENTRATE WT. GRAMS	% CONCENTRATE	% CONCENTRATE X THICKNESS	REMARKS
	FROM	TO					
20 W	0	5	57.21	3.91	7.64	38.20	
30S 30W	0	5	50.00	1.35	2.70	13.50	
		10	52.66	.63	1.20	6.00	
		15	51.90	3.27	6.30	31.50	
		17.5	61.98	8.90	14.36	28.72	
40 W	0	5	52.13	3.75	7.19	35.95	
		6x	58.13	12.37	21.28	21.28	
60 W	0	5	57.36	4.50	7.85	39.25	
50 W	0	5x	58.62	3.16	5.39	26.45	
60 W 4	5	10x	49.96	3.23	6.47	32.35	
70 W	0	5	57.94	2.24	3.87	19.35	
		10	49.63	1.63	3.28	16.40	
		13	60.90	1.01	1.66	4.98	
		14x	51.02	.94	1.84	1.84	
80 W	0	5	51.60	2.43	4.71	23.55	
		4x	57.76	1.36	2.35	9.40	
90 W	0	5	57.75	2.15	3.72	18.60	W/L
100 W	0	5x	49.80	1.12	2.25	11.25	
90 W		6x	57.47	1.29	2.24	2.24	
140 W	0	5	57.31	.71	1.38	6.90	
		8x	56.43	.46	.91	2.73	390.92 85' 4.60%

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ASSOCIATED MINERALS CONSOLIDATED LIMITED
 FERRY ROAD, SOUTHPORT, Q. 4215 PHONE 31-3061 (S.T.D. 075)

FORM No. 7/47

490009

BORE HOLE DATA AND ANALYSIS RECORD

AREA L.P.N TASMANIA (Long Point North)

LINE NO Lines 2 & 3 BORES (160W-200W)(40W-360W) DATE RECORDED 11.3.75

BORES (Yards)	DEPTH IN FEET		SAMPLE WT. GRAMS	CONCENTRATE WT. GRAMS	% CONCENTRATE	% CONCENTRATE X THICKNESS	REMARKS
	FROM	TO					
160W	0	5'	44.10	.112	.95	4.75	X
180W	0	5'	42.12	.11	.26	1.30	X
200W	0	5'	15.88	.17	.37	1.85	X
		6'	44.61	.09	.20	.20	X 399.04 101' 95%
			<u>LINE 3</u>		.	.	
40W	0	5'	44.60	1.20	2.69	13.45	
		6'	50.00	3.37	6.74	6.74	W/L
		9'	42.06	5.17	12.29	56.87	
80W	0	4'	46.18	1.52	3.25	13.16	
120W	0	5'	46.29	.95	2.05	10.25	
		7'	52.33	1.90	3.63	7.26	W/L
		10'	45.66	3.11	6.81	20.43	
160W	0	5'	50.04	1.45	2.90	14.50	W/L
200W	0	3.5'	42.78	1.00	2.34	8.23	W/L
		6'	57.98	1.35	2.60	6.50	
240W	0	5'	44.87	1.07	2.38	11.90	
280W	0	5'	49.78	.59	1.19	5.95	
320W	0	5'	50.40	1.10	2.15	17.44	W/L
		11'	44.65	.05	.11	.33	173.01 55' 3.15%
360W	0	5'	48.24	.67	1.39	6.95	X
			X

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490011

ASSOCIATED MINERALS CONSOLIDATED LIMITED

FORM No. 7/147

FERRY ROAD, SOUTHPORT, Q. 4215 PHONE 31-3061 (S.T.D. 075)

BORE HOLE DATA AND ANALYSIS RECORD

AREA

L.P.S.

Tasmania

(Long Point South)

LINE NO

380 South

BORES

60 - 180 W

DATE RECORDED

11-3-75

BORES Yards	DEPTH IN FEET		SAMPLE WT. GRAMS	CONCENTRATE WT. GRAMS	% CONCENTRATE	% CONCENTRATE X THICKNESS	REMARKS
	FROM	TO					
00	0	3	41.72	0.05	0.12	0.36	
20W	0	3	46.52	8.80	18.92	56.76	
30W	0	10	50.00	19.07	38.14	381.40	
		20	59.24	44.77	75.57	755.70	
		30	49.00	6.114	13.4	131.40	
40W	0	2.5	48.00	6.57	13.69	34.23	
60W	0	3	116.23	5.81	12.57	37.71	
80W	0	4	45.73	2.21	4.83	19.32	
100W	0	5	46.17	3.27	7.08	35.40	
		6	116.17	1.87	4.05	4.05	
120W	0	5	46.53	2.86	6.15	30.75	
		7	46.72	3.06	6.55	13.10	w/L
		10	46.46	1.13	2.43	7.29	
140W	0	5	47.38	2.51	5.30	26.50	
		10	49.54	2.29	4.62	23.10	
		15	45.25	2.42	5.35	26.75	
160W	0	5	117.58	1.72	3.61	18.05	
		6.5	46.12	1.28	2.78	4.17	
180W	0	6	214.40	.81	1.3	10.42	1616.96 89'
				.	.	.	
				.	.	.	

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ASSOCIATED MINERALS CONSOLIDATED LIMITED
 FERRY ROAD, SOUTHPORT, Q. 4215 PHONE 31-3061 (S.T.D. 075)

FORM No. 7/147

BORE HOLE DATA AND ANALYSIS RECORD

AREA L.P.S. TASMANIA (Long Point South)
 LINE NO 434 South BORES 20W - 110W DATE RECORDED 11.3.75

BORES Yards	DEPTH IN FEET		SAMPLE WT. GRAMS	CONCENTRATE WT. GRAMS	% CONCENTRATE	% CONCENTRATE X THICKNESS	REMARKS
	FROM	TO					
434 20W	0	2.5x	46.53	1.19	2.56	6.40	
40W	0	2	51.70	5.36	10.37	20.74	w/L
		5x	41.05	3.83	9.33	27.99	
50W	0	5	53.40	8.39	15.71	78.55	
		7x	47.98	2.07	4.31	8.62	
60W	0	5	51.26	3.82	7.45	37.25	
		9x	50.95	11.03	7.91	31.64	
70W	0	5	44.07	1.97	4.47	22.35	
		7x	53.63	3.05	5.69	11.38	
80W	0	5	50.61	4.36	8.61	43.05	
		9x	47.36	3.55	7.50	30.00	
100W	0	1.5x	50.44	5.31	10.53	15.80	
110W.	0	4.5x	43.40	1.68	3.87	17.42	351.19 48.50' 7721

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490014

FORM No. 7/147

ASSOCIATED MINERALS CONSOLIDATED LIMITED
 FERRY ROAD, SOUTHFORT, Q. 4215 PHONE 31-3061 (S.T.D. 075)

BORE HOLE DATA AND ANALYSIS RECORD

AREA L.P.S. Tasmania (Long Point South)
 LINE NO 486 South BORES 20W - 290W DATE RECORDED 11.3.75

BORES (Yards)	DEPTH IN FEET		SAMPLE WT. GRAMS	CONCENTRATE WT. GRAMS	% CONCENTRATE	% CONCENTRATE X THICKNESS	REMARKS
	FROM	TO					
20W	0	2x	50.08	4.40	8.79	17.58	
25W	0	2.5x	47.78	1.62	3.39	5.48	
30W	0	4x	49.98	1.38	2.83	11.28	
40W	0	5	57.66	2.33	4.51	22.55	
		10	45.37	2.01	4.43	22.15	
		11.5x	44.72	2.87	6.43	9.63	
50W	0	5	50.00	3.02	6.04	30.20	
		6x	50.06	2.40	4.79	4.79	
60W	0	5	110.54	2.22	5.45	27.90	
		8.5x	47.49	3.35	7.05	24.68	
70W	0	5	119.95	3.82	7.65	38.25	
		8x	57.66	4.21	7.30	21.90	
80W	0	5	46.28	2.15	4.65	23.25	
		7.5x	46.62	.33	.72	1.80	x 267.90 5/9
90W	0	4	41.58	.53	1.27	5.08	x
120W	0	5	48.02	.18	.37	1.85	x 7' av. 6.3
150W	0	5	43.75	.25	.57	2.85	x
210W	0	5	47.74	.29	.61	3.05	x
270W	0	4	40.50	.30	.74	2.96	x
290W	0	5	46.93	.16	.34	1.70	x
		6	47.55	.53	1.11	1.11	x

490018
FORM No. 7/147

017

ASSOCIATED MINERALS CONSOLIDATED LIMITED
FERRY ROAD, SOUTHPORT, Q. 4215 PHONE 31-3061 (S.T.D. 075)

BORE HOLE DATA AND ANALYSIS RECORD

AREA LPS TASMANIA (Long Point South)
LINE NO 644 SOUTH BORES 10W - 40W DATE RECORDED 11-3-75

BORES Yards	DEPTH IN FEET		SAMPLE WT. GRAMS	CONCENTRATE WT. GRAMS	% CONCENTRATE	% CONCENTRATE X THICKNESS	REMARKS
	FROM	TO					
10W	0	3.5x	44.00	3.89	8.84	30.94	
20W	0	5	54.25	1.26	2.32	11.60	
		8x	43.15	1.77	4.10	12.30	
25W	0	5	48.94	1.42	2.90	11.50	
		10x	46.14	2.33	5.05	25.25	
30W	0	5	45.67	1.70	3.72	15.60	
		10	114.80	1.65	3.68	18.40	
		11x	39.52	1.88	4.76	4.76	
35W	0	5	45.47	2.20	4.84	24.20	
		10	54.54	2.51	4.60	23.00	
		15	40.42	2.71	6.70	33.50	
		19.5x	41.98	2.02	4.81	21.65	
40W	0	5	43.18	1.89	4.38	21.90	
		10	46.33	2.84	6.13	30.65	
		12.5x	39.70	1.00	2.52	6.30	297.55 69.5' 4.61'

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ASSOCIATED MINERALS CONSOLIDATED LIMITED

FORM No. 7/147

FERRY ROAD, SOUTHPORT, Q. 4215 PHONE 31-3061 (S.T.D. 075)

BORE HOLE DATA AND ANALYSIS RECORD

AREA LP S. TASMANIAN (Long Point South)
 LINE NO 696 SOUTH BORES 60W - 100W. DATE RECORDED 11.3.75

BORES	DEPTH IN FEET		SAMPLE WT. GRAMS	CONCENTRATE WT. GRAMS	% CONCENTRATE	% CONCENTRATE X THICKNESS	REMARKS
	FROM	TO					
60W	0	5	41.00	1.39	3.39	16.95	
		10	44.39	1.73	3.90	19.50	
		15	47.10	1.66	3.52	17.60	
		20	45.78	2.40	5.24	26.20	
		25	44.15	2.17	4.92	24.60	
		29	44.00	2.30	5.22	20.88	w/l
		30x	40.34	.20	.50	.50	
70W	0	5	41.27	1.51	3.66	18.30	
		10	39.49	1.44	3.65	18.25	
		15	50.09	2.29	4.57	22.85	
		20x	45.29	1.58	3.49	17.45	
90W	0	4.5x	39.11	1.60	4.09	18.41	
100W	0	2.5x	45.37	2.10	4.63	11.58	573.46 124.5' 4.601

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ASSOCIATED MINERALS CONSOLIDATED LIMITED

FORM No. 7/147

FERRY ROAD, SOUTHPORT, Q. 4215 PHONE 31-3061 (S.T.D. 075)

BORE HOLE DATA AND ANALYSIS RECORD

AREA L.P.S. TASMANIA (Long Point South)

LINE NO 696 South BORES 10W - 50W DATE RECORDED 11-3-75

BORES Yards	DEPTH IN FEET		SAMPLE WT. GRAMS	CONCENTRATE WT. GRAMS	% CONCENTRATE	% CONCENTRATE X THICKNESS	REMARKS
	FROM	TO					
10W	0	5x	46.60	3.09	6.63	33.15	
				.	.	.	
15W	0	5	42.62	1.07	2.51	12.55	
		8x	53.03	7.13	14.01	42.03	
				.	.	.	
20W	0	5	53.00	3.13	5.91	29.55	
		8x	43.92	7.08	16.12	48.36	
				.	.	.	
30W	0	5	45.42	1.48	3.26	16.30	
		10	47.06	1.32	2.80	14.00	
		15	46.60	1.31	2.87	14.35	
		20x	114.70	2.01	4.50	22.50	
				.	.	.	
40W	0	5	50.15	2.26	4.51	22.55	
		10	45.12	1.50	3.32	16.60	
		15	51.20	1.89	3.69	18.45	
		20	44.20	1.90	4.30	21.50	
		21.5x	113.78	3.46	7.90	11.85	
				.	.	.	
50W	0	5x	44.10	1.38	3.13	15.65	
				.	.	.	

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ASSOCIATED MINERALS CONSOLIDATED LIMITED
 FERRY ROAD, SOUTHPORT, O. 4215 PHONE 31-3061 (S.T.D. 075)

FORM No. 7/147

BORE HOLE DATA AND ANALYSIS RECORD

AREA

L.P.S.

TASMANIA (Long Point South)

LINE NO

749 SOUTL

BORES

20W - 40W

DATE RECORDED

11.3.75

BORES Yards	DEPTH IN FEET		SAMPLE WT. GRAMS	CONCENTRATE WT. GRAMS	% CONCENTRATE	% CONCENTRATE X THICKNESS	REMARKS
	FROM	TO					
20W	0	5	64.08	0.85	1.57	7.85	
		6.5 x	40.96	1.56	3.81	5.72	
30W	0	5	40.00	1.13	2.83	14.15	
		10	42.45	2.22	5.23	26.15	
		11 x	62.20	17.22	27.68	27.68	
40W	0	5	47.90	2.36	4.93	24.65	
		10	45.83	2.22	4.84	24.20	
		11.5 x	45.52	3.19	7.01	10.52	
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ASSOCIATED MINERALS CONSOLIDATED LIMITED
 FERRY ROAD, SOUTHPORT, O. 4215 PHONE 31-3061 (S.T.D. 075)

FORM No. 7/147

BORE HOLE DATA AND ANALYSIS RECORD

AREA L.P.S. TASMANIA (Long Point South)
 LINE NO. 749 SootL BORES 50W-80W DATE RECORDED 11.3.75

BORES Yards	DEPTH IN FEET		SAMPLE WT. GRAMS	CONCENTRATE WT. GRAMS	% CONCENTRATE	% CONCENTRATE X THICKNESS	REMARKS
	FROM	TO					
50W	0	5	45.34	2.93	6.46	32.30	
		10	46.15	3.22	6.98	34.90	
		15	41.84	3.63	8.68	43.40	
		19X	44.47	3.26	7.33	29.32	
60W	0	5	48.32	2.37	4.90	24.50	
		10	49.56	2.16	4.36	21.80	
		14Y	52.46	2.91	5.55	22.20	
70W	0	5	42.29	2.09	4.94	24.70	
		10	42.86	1.23	2.87	14.35	
		14Y	42.30	2.62	6.19	24.76	
80W	0	5	63.72	3.26	6.05	30.25	W/L
		6X	42.78	1.81	4.23	4.23	447 63 82' 5.96/

490023

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ASSOCIATED MINERALS CONSOLIDATED LIMITED
 FERRY ROAD, SOUTHPORT, Q. 4215 PHONE 31-3061 (S.T.D. 075)

FORM No. 7/147

BORE HOLE DATA AND ANALYSIS RECORD

AREA L.P.S TASMANIA (Long Point South)
 LINE NO 802 SOUTH BORES 20W - 100W DATE RECORDED 11-3-75

BORES <i>Yards</i>	DEPTH IN FEET		SAMPLE WT. GRAMS	CONCENTRATE WT. GRAMS	% CONCENTRATE	% CONCENTRATE X THICKNESS	REMARKS
	FROM	TO					
20W	0	35X	40.07	2.05	5.12	17.92	
30W	0	5X	46.81	2.46	5.26	26.30	
35W	0	5	45.79	1.87	4.08	20.40	
		10X	67.23	7.65	13.37	66.55	
40W	0	5	50.24	3.76	7.48	37.40	
		7X	50.33	7.51	14.92	29.84	
50W	0	4.5X	55.72	2.15	3.86	17.37	
60W	0	3X	43.86	1.85	4.22	12.66	
70W	0	5X	45.07	1.65	3.44	17.20	
80W	0	5X	43.42	2.07	4.77	23.85	
90W	0	5X	43.35	2.24	5.17	25.85	
100W	0	5	46.98	2.18	4.64	23.20	W/L
AMA 1/71		7X	43.79	1.73	3.95	7.90	

490024

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ASSOCIATED MINERALS CONSOLIDATED LIMITED
 FERRY ROAD, SOUTHPORT, Q. 4215 PHONE 31-3061 (S.T.D. 075)

FORM No. 7/147

BORE HOLE DATA AND ANALYSIS RECORD

AREA L.P.S. TASMANIA (Long Point South)
 LINE NO. 802 South BORES 110W - 150W DATE RECORDED 11-3-75

BORES Yards	DEPTH IN FEET		SAMPLE WT. GRAMS	CONCENTRATE WT. GRAMS	% CONCENTRATE	% CONCENTRATE X THICKNESS	REMARKS
	FROM	TO					
110W	0	5	43.95	1.43	3.25	16.25	
		10	45.48	1.67	3.67	18.35	
120W	0	5	46.13	2.69	5.61	28.05	
		10	44.62	1.41	3.16	15.80	
130W	0	5	47.41	2.16	4.56	22.80	
		10	42.79	1.22	2.85	14.25	
140W	0	5	42.75	1.97	4.61	23.05	W/L
		8	37.29	1.42	3.81	11.93	
150W	0	3	47.24	2.71	5.74	17.22	W/L
		8	38.00	1.03	2.71	13.55	507.49 101' 5.02/

Line No.	x Sec. area. (sq. ft.)	Line interval. (feet)	Volume (cub. ft)	Weight (tons)	Average Grade%	H M. Reserve (tons)
37800'S	5375	800	4,300,000	191,000	6.30%	12,000
38600'S	5750	800	4,600,000	204,000	5.20%	10,600
39400'S	4250	800	3,400,000	151,000	3.56%	5,400
40200'S	3875	800	3,100,000	138,000	3.02%	4,200
41000'S	8000	800	6,400,000	284,000	3.70%	10,500
4000ft	Av. 5450		21,800,000	968,000	Av. 4.42%	42,700

Reserves of heavy mineral contained in sands above the water table and above boulder layers in the first 4000ft of Seymour Beach, South of Long Point., = 42,700 tons . The sand has an average grade of 4.42% h.m.

42,700 tons

all

490026

025

LOUISA MINING CORPORATION N.L.COMPUTATION OF HEAVY MINERAL RESERVESLOCATION : ... Seymour Beach ...DATE Jan. 1975DRILLER ... M. C. F. ...LINE NUMBER ... 37800' S. ...

BORE HOLE DIAM. ... 3" ...

<u>Hole Number</u>	Percentage of heavy mineral in sample of sand							
	<u>Sample interval</u>							
	0'-5'	5'-10'	10'-15'	15'-20'	20'-25'	25'-30'	30'-35'	35'-40'
00'E	3.00							
25'E	2.08							
30'E	2.37							
75'E	2.78							
100'E	3.07	1.17						
125'E	2.94	2.45						
150'E	3.40	2.23						
175'E	4.28	3.67						
200'E	4.00	6.20						
225'E	4.50	4.00						
250'E	3.61	4.50	6.30	3.42				
275'E	4.80	4.60	3.70					
300'E	4.86	3.63						
325'E	2.65							
350'E	4.35							
375'E	4.80	4.60						
400'E	3.80							
425'E	3.92							
450'E	4.55							
475'E	3.60							
500'E	24.40	87.50						
525'E	3.00	1.87						
550'E	5.00	6.50						
575'E	2.80							
600'E	6.50							
625'E	6.00							
650'E	3.00							
		132.92/13	10.0/2	3.42/1				270.40/43
	124.06/25							
	4.60%	10.22%	5.00%	3.42%				

x.sec area 5375 sq.ft. @ 6.30% h.m.

490027

LOUISA MINING CORPORATION N.L.

COMPUTATION OF HEAVY MINERAL RESERVES

LOCATION : Seymour Beach

DATE Jan. 1975

DRILLER M.C.F.

LINE NUMBER 38600!S

BORE HOLE DIAM. 3"

Hole Number	Percentage of heavy mineral in sample of sand							
	Sample interval							
	0'-5'	5'-10'	10'-15'	15'-20'	20'-25'	25'-30'	30'-35'	35'-40'
000'E	0.85							
25'E	1.77							
50'E	1.73	1.53						
75'E	3.06	3.67						
100'E	3.30	4.72	5.52	4.50	4.20			
125'E	1.10	1.58	5.40	5.07	3.90			
150'E	2.00	0.74	4.70	4.74				
175'E	1.01	1.43	1.02	5.26				
200'E	1.10	1.00		1.72				
225'E	1.60	1.72	3.08					
250'E	3.12	3.65						
275'E	1.50							
300'E	1.32							
325'E	1.63							
350'E	18.05							
375'E	30.00							
400'E	8.37	28.00						
425'E	3.00	2.50						
450'E	1.13	8.85						
475'E	28.00							
500'E	11.06							
525'E	6.10							
550'E								
575'E								
600'E								
	130.80/28 5.95%	59.39/12 4.95%	19.70/5 3.94%	21.29/5 4.26%	8.10/2 4.05%			239.28/46 5.20%

x/sec area 5750 sq.ft. @ 5.20 heavy mineral in sand.

490028

027

LOUISA MINING CORPORATION N.L.

COMPUTATION OF HEAVY MINERAL RESERVES

LOCATION : Seymour Beach

DATE Jan. 1975

DRILLER M.C.P.

LINE NUMBER 39400' S

BORE HOLE DIAM. 3"

Hole Number	Percentage of heavy mineral in sample of sand							35'-40'
	0'-5'	5'-10'	10'-15'	Sample interval		25'-30'	30'-35'	
				15'-20'	20'-25'			
000'E	1.22							
25'E	1.17							
50'E	1.90							
75'E	2.50	3.34	3.45					
100'E	1.73	2.70	3.20					
125'E	1.68	2.05	1.95	5.00				
150'E	3.70	4.39	3.97	3.90				
175'E	1.06	1.01	1.23	2.95				
200'E	1.45	1.50	2.00					
225'E	1.49	2.60	8.90					
250'E	1.22	1.35	16.70					
275'E	1.60	1.37 *	15.50 *					
300'E	0.49	1.38	14.00 *					
325'E	1.10	1.48	10.70					
350'E	0.90							
375'E	6.35							
400'E	3.38							
425'E								
	32.94/17 1.94%	23.17/11 2.11%	81.60/11 7.42%	11.85/3 3.95%				149.56/42 3.56%

x/sec. area 42 x 25 x 5 = 4250 sq.ft. @ 3.56% heavy mineral in sand.

490029

LOUISA MINING CORPORATION N.L.

COMPUTATION OF HEAVY MINERAL RESERVES

LOCATION : Seymour Beach.....

DATE Jan. 1975..

DRILLER M.C.F.....

LINE NUMBER 40200' S.....

BORE HOLE DIAM. 3".....

Hole Number	Percentage of heavy mineral in sample of sand							
	Sample interval							
	0'-5'	5'-10'	10'-15'	15'-20'	20'-25'	25'-30'	30'-35'	35'-40'
000'E								
25'E	1.26							
50'E	1.26							
75'E	2.05	2.05						
100'E	1.60							
125'E	2.20							
150'E	3.46	2.10						
175'E	3.80	2.06						
200'E	6.00	4.80	1.05					
225'E	2.75	2.02	2.35					
250'E	4.00	1.60						
275'E	5.83							
300'E	2.10	3.48						
325'E	1.92	2.80	1.07					
350'E	2.20							
375'E	7.00							
400'E	8.13							
425'E	4.90							
450'E	3.17							
475'E	2.00							
500'E	2.00							
	67.63/20	20.91/8	4.97/3					95.51/31
	3.38%	2.61%	1.66%					3.02%

x sec. area 31 x 25 x 5 = 3875sq. ft average grade 3.02% heavy mineral in sand.

490030

029

LOUISA MINING CORPORATION N.L.COMPUTATION OF HEAVY MINERAL RESERVESLOCATION : Seymour BeachDATE Jan. 1975DRILLER M.C.F.LINE NUMBER 41000' S.BORE HOLE DIAM. 3"

Hole Number	Percentage of heavy mineral in sample of sand							
	0'-5'	5'-10'	10'-15'	Sample interval		25'-30'	30'-35'	35'-40'
				15'-20'	20'-25'			
000' E	1.33							
25' E	1.10	1.10						
50' E	1.33	1.33	1.33					
75' E	6.91	6.91	0.71	0.71				
100' E	6.20	6.20	5.80	5.80	1.87	1.87		
125' E	6.70	6.70	2.37	2.37	4.00	4.00	0.50	
150' E	2.95	2.95	4.81	4.81	5.45	5.45	6.20	
175' E	4.50	4.50	4.93	4.93	6.03	6.03	5.60	
200' E	2.67	2.67	4.00	4.00	2.13	2.13		
225' E	6.10	6.10	1.00					
250' E	8.30	8.30						
275' E	4.64	4.64						
300' E	3.10	3.10						
325' E	1.86	1.86	3.57					
350' E	1.10	1.10						
375' E	1.90	1.92						
400' E	4.30							
425' E	3.87							
450' E	3.67							
475' E	1.27							
500' E	0.87							
	74.67/21 3.56%	59.38/15 3.96%	28.52/9 3.17%	22.68/6 3.77%	19.48/5 3.90%	19.48/5 3.90%	12.30/3 4.10%	236.51/64 3.70%

x sec. area 64 x 25 x 5 = 8000 sq. ft. @ average grade 3.70% heavy mineral in sand.

LOUISA MINING CORPORATION N.L.HobartAug. 1975PROPOSED MINING PROJECT -- EAST COAST, TASMANIAOutline of Project.

The proposal is for the mining of some 18 km of beach area below the high water mark between Piccaninny Point and the southern end of Denison Beach, and a 2 km. long section of active dunes at the Friendly Beaches which are some 11 km long, in total.

The Seymour area beach deposits of Heavy Mineral will probably regenerate over a period, and after storms particularly, so that it is considered that the harvesting of minerals could continue for many years. (In other parts of the East Coast of Australia the harvesting of minerals from certain beaches has been in progress for about 40 years.)

The Friendly Beaches dune area would be a 'once only' operation, followed by rehabilitation and improved stabilization of the now live dune area.

The heavy minerals contained in the sand would be extracted by a mobile concentrating plant which would closely follow the mining operation, after which the sand would be returned to the same area, which would then be rehabilitated.

The Heavy Mineral Concentrate extracted from the sands would then be transported to a proposed Separation Mill by truck. The Mill site proposed is close to the Highway about 5 km north of Bicheno near The Old Mines Lagoon. Water for the plant could be obtained from the old underground coal mines by way of pumping from the shafts which are now flooded.

Initially it is proposed to produce only zircon for sale, but other minerals from the stockpile could be produced later, such as topaz, monazite and rutile.

Investigations are in progress to find a use for topaz which is a predominate mineral in the deposit.

There would seem to be few environmental problems associated with the project, which is essentially a 'clean' operation due to the nature of the minerals mined, and the mechanical methods of concentration and separation used.

MINERAL LEASES --- Seymour

Application has been made by Louisa Mining Corporation N.L. for a Mineral Lease of 100ha. covering Templestowe Beach, Seymour Beach and Denison Beach being the area situated from the posted notice at grig ref. 5382400mN, 607000mE thence generally south and 50m wide and seaward from the high water mark to 5365700mN but not extending below the low water mark.

Friendly Beaches

Application has been made by B.R.Forster for 7 Mineral Leases of 9 ha each (300m x 300m) at the Friendly Beaches. The N.W. angle of the northern most Lease being 1500m from Issaacs Point on a true bearing of 210 deg., the boundaries running in a generally N-S, E-W direction and successively joining on the southern boundaries.

PROPOSED OPERATIONS

- (1) MINING of sand containing heavy minerals.
- (2) EXTRACTION of the heavy minerals from the sand.
- (3) RESTORATION of the mined area.
- (4) SEPARATION of the various minerals.
- (5) TRANSPORT of the mierals to the port.

(1) The mining operation would consist simply of mining sand with a front-end loader fitted with rubber tyres and with a bucket capacity of about 4 cub. metres.

The front-end loader would mine the sand and transport it in the bucket to the Concentrating Plant which is mobile and situated close to the mining area.

The sand would be mined at the rate of about 50 - 80 tonnes per hour and about 300,000 tonnes per year, with three 8 hour shifts a day.

(2) The extraction of the heavy minerals from the sand is achieved in the Concentration Mill. This is a land based type, mounted on four mobile trailer units which can be towed by tractors to a position close to the mining area.

The nominal capacity of the Mill would be 80 tonnes of sand per hour when operating on about 5% heavy mineral feed, giving a 90% heavy mineral product.

The four mobile units being:

- (1) Storage Bin and Screens
- (2) Concentration Plant
- (3) Diesel powered electric generator.
- (4) Diesel powered water pumps.

The mined sand is delivered to the Storage Bin by front-end loader by first passing through three vibrating screens of 7/8", 3/4" and 3/16" mesh for the removal of larger waste. The pulp is then fed to the Concentrator unit at about 60% solids.

The concentration process is based on the principle of gravity concentration produced by an intricate system of three banks of cone and spiral concentrators.

The primary "rougher" concentrators are multi-unit types which give concentrations of + 5% heavy mineral in pulp. This pulp is then fed to a further bank of "cleaner" cone concentrators where the heavy mineral content is increased to about 18%.

Finally the pulp is fed to banks of fibreglass spirals, "re-cleaners", where a 90% concentrate of heavy mineral is produced.

At every stage, at least three cuts are made with a complex system of pulp recirculation.

The waste sand is pumped from the Concentration Plant to refill the mining excavation prior to recontouring and restoration.

The heavy mineral concentrate is piped from the plant to a dump where it is placed on trucks by front-end loader, hauled to the Separation Mill and weighed.

The power for the Concentrator would be supplied from a mobile diesel powered generator with a capacity of about 120 kva. The unit would be sited close to the Concentrator.

Water for the Concentrator would be pumped from the sea or from spears in the sand.

The pumps would be capable of delivering 350 gal/min or 1600 litres per minute of water to the plant.

(3) RESTORATION

After the heavy minerals have been extracted from the sand by the Concentration Plant the sand would be returned to the mining excavation by way of a pipe line.

The area is then recontoured to the shape of beach and after one or two high tides there should be no remaining evidence of the mining operation.

In the case of the mining areas which are above the high water mark at the Friendly Beaches the tailings would be returned to the mining excavation and then recontoured in the same way as the beach areas, but more extensive rehabilitation would follow.

After the tailings have been dozed to even contours, brush is spread on the surface in order to stop wind erosion and to allow natural and planted grasses and trees to take hold. A cover crop, such as a cereal with some suitable grasses is sown together with a dressing of complete fertiliser.

This rehabilitation would be designed with the advice of interested parties such as the Lands Department, Agricultural Department and the Forestry Department etc.

To the satisfaction of the D of M

(who may act on advice from Lands Dept
Conservation Officer)

(4) SEPARATION MILL

The heavy mineral concentrates are delivered to the sluicing slab at the Separation Mill and fed into 16 mesh 23 gauge vibrating screens where the oversize is discarded and the undersize collected in a surge bin. Overflow from this bin is recirculated to the sluicing slab and make up water added.

From the surge bin the concentrates are delivered to wet shaking tables where the silica is removed and pumped to the tailings pond and the water recirculated. Make up water would be provided by pumping from the shaft of the old coal mine nearby.

A zircon rich "top cut" is taken from the Primary Tables and sent to No. 1 Mill for drying and separation, while the remainder of the mineral is pumped to a stockpile for future separation.

Conical heaps of the zircon rich concentrate are formed in rotation, allowed to drain on a sloping floor to air dry to approximately 4% moisture content.

Drying is carried out in contra flow rotary kilns, using low sulphur oil as fuel and the mineral is discharged from the driers at approximately 160 deg. C. to facilitate separation. Consideration could be given to using coal for drying the mineral, using indirect heat.

Exhaust gas is then cleaned in a cyclone and discharged to the atmosphere and the dust is returned to the wet table circuit for retreatment.

The hot mineral from the dryer is then treated for final trash removal and screened using 50 mesh stainless steel cloth and the oversize stockpiled for later treatment, whilst undersize is fed to electrostatic and electromagnetic roll separators where the main product of zircon is produced and bagged.

The remaining minerals after the zircon separation would be stockpiled for future separation. These minerals include rutile, topaz, ilmenite, monazite, garnet, tin, tourmaline, and various other ferro-magnesian minerals.

Location of Separation Mill

The proposed site for the Mill is close to the Highway some 5 km north from Bicheno near the Old Mines Lagoon. The site is also close to the old coal mine shafts which are now flooded with fresh water and this would be the source of water for the Mill.

Power supply

Electric power for the Mill would be obtained from the local H.E.C. mains.

Line	Footage	No. Holes	Depth Av.	W.	L.	Vol. c/ft mil	Grade %	VxG '000	H.M. tons '000	%Z	Z tons '000	% T	T tons '000
LPN 1	71	9	7.9	300	5280	12.5	4.98	624	29.6	16.3	4.8	8	2.4
LPN 2	85	10	8.5	360	5280	16.1	4.60	740	35.0	16.3	5.7	8	2.8
LPN 3	55	8	6.9	840	5280	30.5	3.15	960	45.5	13.5	6.1	9	4.1
380 S	89	11	8.1	540	5280	23.0	18.17	4180	198.0	28.0	55.5	5	9.9
434 S	46	8	5.7	270	5280	8.1	7.72	625	29.6	10.0	2.9	9	2.7
486 S	50	8	6.3	180	5280	6.0	6.30	378	17.9	10.0	1.8	9	1.6
538 S	18	4	4.5	240	5280	5.7	3.18	181	8.6	10.0	0.9	9	0.8
591 S	11	3	3.7	45	5280	0.9	6.24	56	2.6	12.0	0.3	9	0.2
644 S	65	6	10.8	90	5280	5.1	4.61	235	11.1	14.5	1.6	9	1.0
696 S	124	10	12.4	270	5280	17.6	4.60	810	38.4	12.0	4.6	6	2.3
749 S	82	7	11.7	180	5280	11.1	5.46	606	28.7	14.5	4.2	9	2.6
802 S	101	15	6.7	390	5280	12.0	5.02	602	28.5	14.5	4.1	9	2.6
Total	797	99				148.6	6.75	9997	474	19.5	<u>92.5</u>	7	<u>33.0</u>

Z = Zircon

T = Topaz

490036 75-1131

036

Line	Foot- age	No. Holes	Depth Av.	W.	L.	Vol. c/ft mil	Grade %	VxG '000	H.M. tons '000	%Z	Z tons '000	% T	T tons '000
LPN 1	71	9	7.9	300	5280	12.5	4.98	624	29.6	16.3	4.8	8	2.4
LPN 2	85	10	8.5	360	5280	16.1	4.60	740	35.0	16.3	5.7	8	2.8
LPN 3	55	8	6.9	840	5280	30.5	3.15	960	45.5	13.5	6.1	9	4.1
380 S	89	11	8.1	540	5280	23.0	18.17	4180	198.0	28.0	55.5	5	9.9
434 S	46	8	5.7	270	5280	8.1	7.72	625	29.6	10.0	2.9	9	2.7
486 S	50	8	6.3	180	5280	6.0	6.30	378	17.9	10.0	1.8	9	1.6
538 S	18	4	4.5	240	5280	5.7	3.18	181	8.6	0.0	0.9	9	0.8
591 S	11	3	3.7	45	5280	0.9	6.24	56	2.6	2.0	0.3	9	0.2
644 S	65	6	10.8	90	5280	5.1	4.61	235	11.1	4.5	1.6	9	1.0
696 S	124	10	12.4	270	5280	17.6	4.60	810	38.4	12.0	4.6	6	2.3
749 S	82	7	11.7	180	5280	11.1	5.46	606	28.7	14.5	4.2	9	2.6
802 S	101	5	6.7	390	5280	12.0	5.02	602	28.5	17.5	4.1	9	2.6
Total	797'	99				148.6	6.75	9997	474	11.5	92.5	7	<u>33.0</u>

Z = Zircon

T = Topaz

490037

LOUISA MINING CORPORATION N.L.

COMPUTATION OF MINERAL RESERVES

SEYMOUR BEACH- East Coast, Tas.

Line No.	x Sec. area. (sq. ft.)	Line interval. (feet)	Volume (cub. ft)	Weight (tons)	Average Grade%	H M. Reserve (tons)
37800'S	5375	800	4,300,000	191,000	6.30%	12,000
38600'S	5750	800	4,600,000	204,000	5.20%	10,600
39400'S	4250	800	3,400,000	151,000	3.56%	5,400
40200'S	3875	800	3,100,000	138,000	3.02%	4,200
41000'S	8000	800	6,400,000	284,000	3.70%	10,500
4000ft	Av. 5450		21,800,000	968,000	Av. 4.42%	42,700

Reserves of heavy mineral contained in sands above the water table and above boulder layers in the first 4000ft of Seymour Beach, South of Long Point., = 42,700 tons . The sand has an average grade of 4.42% h.m.

42,700 tons

037

490038

also relates to EL 1972

1972

21 MAY 1975

1164

JW

RECEIVED
 ANSWERED
 DEPT. OF MINES
 REGISTER
 T.S.L.

D.O.M. A.O.M. C.C.R.M. U.S.M.L.

LOUISA MINING CORPORATION N.L.

COMPUTATION OF HEAVY MINERAL RESERVES

LOCATION : ... Seymour Beach ...

DATE ... Jan. 1975 ...

DRILLER ... M.C.F. ...

LINE NUMBER ... 37800' S ...

BORE HOLE DIAM. ... 3" ...

038

490039

Hole Number	Percentage of heavy mineral in sample of sand							
	Sample interval							
	0'-5'	5'-10'	10'-15'	15'-20'	20'-25'	25'-30'	30'-35'	35'-40'
00'E	3.00							
25'E	2.08							
50'E	2.37							
75'E	2.78							
100'E	3.07	1.17						
125'E	2.94	2.45						
150'E	3.40	2.23						
175'E	4.28	3.67						
200'E	4.00	6.20						
225'E	4.50	4.00						
250'E	3.61	4.50	6.30	3.42				
275'E	4.80	4.60	3.70					
300'E	4.86	3.63						
325'E	2.65							
350'E	4.35							
375'E	4.80	4.60						
400'E	3.80							
425'E	3.92							
450'E	4.55							
475'E	3.66							
500'E	24.40	87.50						
525'E	3.00	1.87						
550'E	5.00	6.50						
575'E	2.80							
600'E	6.50							
625'E	6.00							
650'E	3.00							
		132.92/13	10.0/2	3.42/1				270.40/43

4.60% 10.22% 5.00% 3.42% x.sec area 5375 sq.ft. @ 6.30% h.a.

039
490040

LOUISA MINING CORPORATION N. L.

COMPUTATION OF HEAVY MINERAL RESERVES

LOCATION : ... Seymour Beach ...

DATE Jan. 1975

DRILLER M. C. F.

LINE NUMBER ... 38600'S ...

BORE HOLE DIAM. ... 3" ...

Hole Number	Percentage of heavy mineral in sample of sand							
	Sample interval							
	0'-5'	5'-10'	10'-15'	15'-20'	20'-25'	25'-30'	30'-35'	35'-40'
000'E	0.85							
25'E	1.77							
50'E	1.73	1.53						
75'E	3.06	3.67						
100'E	3.30	4.72	5.52	4.50	4.20			
125'E	1.10	1.58	5.40	5.07	3.90			
150'E	2.00	0.74	4.70	4.74				
175'E	1.01	1.43	1.02	5.26				
200'E	1.10	1.00		1.72				
225'E	1.60	1.72	3.08					
250'E	3.12	3.65						
275'E	1.50							
300'E	1.32							
325'E	1.63							
350'E	18.05							
375'E	30.00							
400'E	8.37	28.00						
425'E	3.00	2.50						
450'E	1.13	8.85						
475'E	28.00							
500'E	11.06							
525'E	6.10							
550'E								
575'E								
600'E								
	130.80/22 5.95%	59.39/12 4.95%	19.70/5 3.94%	21.28/5 4.26%	8.10/2 4.05%			239.28/46 5.20%

x/sec area 5750 sq. ft. @ 5.20 heavy mineral in sand.

LOUISA MINING CORPORATION N.L.

COMPUTATION OF HEAVY MINERAL RESERVES

LOCATION : Seymour Beach

DATE Jan. 1975

DRILLER M.C.F.

LINE NUMBER 39400' S

BORE HOLE DIAM. ... 3"

040.
490041

<u>Hole Number</u>	<u>Percentage of heavy mineral in sample of sand</u>							
	<u>0'-5'</u>	<u>5'-10'</u>	<u>10'-15'</u>	<u>Sample interval</u>		<u>25'-30'</u>	<u>30'-35'</u>	XXXXXX'
000'E	1.22							
25'E	1.17							
50'E	1.90							
75'E	2.50	3.34	3.45					
100'E	1.73	2.70	3.20					
125'E	1.68	2.05	1.95	5.00				
150'E	3.70	4.39	3.97	3.90				
175'E	1.06	1.01	1.23	2.95				
200'E	1.45	1.50	2.00					
225'E	1.49	2.60	8.90					
250'E	1.22	1.35	16.70					
275'E	1.60	1.37 *	15.50 *					
300'E	0.49	1.38	14.00 *					
325'E	1.10	1.48	10.70					
350'E	0.90							
375'E	6.35							
400'E	3.38							
425'E								
	32.94/17 1.94%	23.17/11 2.11%	81.60/11 7.42%	11.85/3 3.95%				149.56/42 3.56%

x/sec. area 42 x 25 x 5 = 4250 sq.ft. @ 3.56% heavy mineral in sand.

041

LOUISA MINING CORPORATION N.L.COMPUTATION OF HEAVY MINERAL RESERVESLOCATION : Seymour Beach.....DATE Jan. 1975..DRILLER M.C.F.....LINE NUMBER 40200' S.....BORE HOLE DIAM. 3".....

A90012

Hole Number	Percentage of heavy mineral in sample of sand							
	0'-5'	5'-10'	10'-15'	Sample interval		25'-30'	30'-35'	35'-40'
000'E								
25'E	1.26							
50'E	1.26							
75'E	2.05	2.05						
100'E	1.60							
125'E	2.20							
150'E	3.46	2.10						
175'E	3.80	2.06						
200'E	6.00	4.80	1.05					
225'E	2.75	2.02	2.85					
250'E	4.00	1.60						
275'E	5.83							
300'E	2.10	3.48						
325'E	1.92	2.80	1.07					
350'E	2.20							
375'E	7.00							
400'E	8.13							
425'E	4.90							
450'E	3.17							
475'E	2.00							
500'E	2.00							
	67.63/20	20.91/8	4.97/3					93.51/31
	3.38%	2.61%	1.66%					<u>3.02%</u>

x sec. area $31 \times 25 \times 5 = 3875$ sq. ft average grade 3.02% heavy mineral in sand.

042

LOUISA MINING CORPORATION N.L.

COMPUTATION OF HEAVY MINERAL RESERVES

LOCATION : Seymour Beach

DATE Jan. 1975

DRILLER M.C.F.

LINE NUMBER 41000' S.

BORE HOLE DIAM. 3"

490043

Hole Number	Percentage of heavy mineral in sample of sand							
	Sample Interval							
	0'-5'	5'-10'	10'-15'	15'-20'	20'-25'	25'-30'	30'-35'	35'-40'
00' E	1.33							
25' E	1.10	1.10						
50' E	1.33	1.33	1.33					
75' E	6.91	6.91	0.71	0.71				
100' E	6.20	6.20	5.80	5.80	1.87	1.87		
125' E	6.70	6.70	2.37	2.37	4.00	4.00	0.50	
150' E	2.95	2.95	4.81	4.81	5.45	5.45	6.20	
175' E	4.50	4.50	4.93	4.93	6.03	6.03	5.60	
200' E	2.67	2.67	4.00	4.00	2.13	2.13		
225' E	6.10	6.10	1.00					
250' E	8.30	8.30						
275' E	4.64	4.64						
300' E	3.10	3.10						
325' E	1.86	1.86	3.57					
350' E	1.10	1.10						
375' E	1.90	1.92						
400' E	4.30							
425' E	3.87							
450' E	3.67							
475' E	1.27							
500' E	0.87							
	74.67/21 3.56%	59.38/15 3.96%	28.52/9 3.17%	22.68/6 3.77%	19.48/5 3.90%	19.48/5 3.90%	12.30/3 4.10%	236.51/64 3.70%

x sec. area 64 x 25 x 5 = 8000 sq. ft. @ average grade 3.70% heavy mineral in sand.