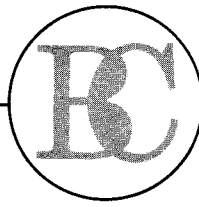


REPORT on *115 0/10.15*  
LEISURE GOLD LTD. - KLONDIKE PROJECT

for: B.E.L. Yukon Establishment

by: J.J. Crowhurst                      March 18/75



**BACON & CROWHURST LTD.**

1720-1055 West Hastings Street  
Vancouver 1, B. C.

REPORT

on

LEISURE GOLD LTD.

KLONDIKE PROJECT

by

J. J. CROWHURST, B.A.Sc., P.Eng.

Vancouver, B.C.

March 18th, 1975

**BACON & CROWHURST LTD.**  
**CONSULTING ENGINEERS**

March 18th, 1975.

B. E. L. Yukon Establishment,  
Rheinstrasse 57,  
7640 Kehl,  
West Germany.

Dear Sirs:

Pursuant to your request, I have examined various maps, records and cost projections supplied by Mr. Rae G. Jury of Alrae Engineering Ltd., Consulting Engineers, North Vancouver, British Columbia, concerning the Klondike area, Yukon Territory, gold placer properties previously owned and optioned by Leisure Gold Ltd. of Vancouver, British Columbia, and now in the process of being transferred to your company. These are spread over about 32 air miles in a north-south direction, in four distinct locations connected by gravel roads with each other and with the City of Dawson. (See Map #1500-6a)

Mr. Jury personally has inspected the various claim groups and supplied engineering services and supervision during 1974.

I have checked the reported ore reserves by making my own detailed calculations, which conform closely to Mr. Jury's estimates. In excess of 6 million cu. yds. of gravel averaging \$2.64 per cu. yd. in recoverable gold values, using a price for gold of \$185 per ounce (current value), are indicated.

I have examined Mr. Jury's projected production plans and cost estimates. For these purposes, I have made several assumptions of necessity (as noted elsewhere in this report) because a personal visit to the site is impractical at the present time. It should be noted, however, that our company is familiar with Yukon conditions and practices and, hence, we feel capable of reviewing the past work and commenting on future plans.

The use of the largest available earth-moving equipment and the fastest possible thawing methods, commensurate with good economics, are being evaluated.

Amounts of gold-bearing gravel to be extracted and sluiced (during the next two years) are estimated as follows:

<u>Creek</u>	<u>Cu. yds.</u>	<u>Gross Revenue @ \$185/oz.</u>
Eureka	410,400	1,214,790
Dominion	336,300	1,457,200
Black Hills	505,880	1,027,900
Dominion H	222,300	711,480
Plus clean-up (1974)	-	<u>10,240</u>
Totals	1,474,800	4,421,610

The average gross revenue, therefore, will be \$3.00 per cu. yd.

Approximately 4.9 million cu. yds. of gravel remaining after 1976, and averaging \$2.55 per cu. yd. (at \$185 per ounce for gold), will provide a further (approximate) three to four years of production at an accelerated rate.

It is understood that your company, B E.L. Yukon Establishment, has made tentative option arrangements concerning a fifth gold-bearing placer claim group known as "Gold Run". Mr. Jury reports that approximately 10 million cu. yds. are present, averaging \$1.26 per cubic yard at a price of \$185 per ounce for gold. No study has been made by Bacon & Crowhurst concerning this group; it represents a plus factor to be evaluated. Sections of the area, containing higher grade values than the average, would be identified for processing.

### CONCLUSIONS

Several attractive features are evident. In view of the intensified program involving large equipment proposed by B.E.L. Yukon Establishment, it is difficult to project exact operating costs of processing but it is expected that this modern approach will greatly reduce the cost per cubic yard experienced by the previous operators.

Mr. Jury states that the overburden quantities, cubic yards of underlying gravel, and its gold content, are based on records obtained from Yukon Consolidated Gold Corporation Ltd. churn drilling programs. Complete detailed maps were supplied, and are attached to this report. These drill holes are spread over all of the claim groups; the figures reported can, in our opinion, be trusted as accurate and, hence, gold recoveries and revenues, as estimated, are felt to be firm.

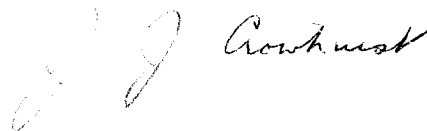
Mr. Jury emphasizes that a skilled experienced crew, gathered during 1974, is available for 1975 work. These men are familiar with procedures used and the local requirements - hence performance estimates should be attained.

Most of the equipment required is on-site and production work can, therefore, be initiated soon after "break-up", i.e. in late May or early June.

In my opinion, the property is an attractive one and is probably one of the best available in the Yukon today.

Respectfully submitted,

BACON & CROWHURST LTD.

A handwritten signature in cursive script, appearing to read "J.J. Crowhurst".

J.J. Crowhurst, P.Eng.

## TABLE OF CONTENTS

	<u>Page</u>
Letter of Transmittal with Conclusions	
Table of Contents	
List of Illustrations	
PROPERTY AND TITLE	1
ACCESS	2
ORE RESERVES	3
Eureka Creek	5
Dominion Creek	6
Black Hills Creek	7
Dominion "H" Creek	8
OVERBURDEN	9
Eureka Creek	10
Dominion Creek	11
Black Hills Creek	12
Dominion "H" Creek	13

## LIST OF ILLUSTRATIONS

<u>Title</u>	<u>Map No.</u>	<u>Scale</u>	
Property Locations	1500-6a	1" = 4 miles	Following Page 1 of report
Dominion Creek	1500-1 1500-2	1" = 200' "	In pocket at back of report
Dominion "H" Creek	1500-3 1500-8	" "	" "
Eureka Creek Drilling	1500-4 1500-5	" "	" "
Black Hills Creek	1500-7	1" = 400'	"

PROPERTY AND TITLE

The placer claims and leases are at four locations in the Klondike area, Yukon Territory, as shown by Map No. 1500-6a (Alrae Engineering Ltd.) on the following page.

The claims cover about 4375' along Dominion Creek, a total of 9580' in four sections on Dominion "H" Creek, 5400' in a north section on Eureka Creek and 4550' in a south section, and about 11,210' along Black Hills Creek.

Details noted in a Progress Report dated February 3rd, 1975, by Alrae Engineering Ltd. are as follows:

"Claims - Placer claims and leases which comprise each of the company's projects are as follows:

Dominion: 16 claims

Work Filing Due

37894, 37895, 37897, 37898, 37910  
37932, 37949, 37950, 38502  
38665  
42650 to 42655

October 1, 1975  
October 1, 1975  
May 8, 1976  
June 27, 1975

Dominion "H": 17 claims, 3 leases

38578, 38580, 42601  
Leases 3191, 3192, 3322,  
38727 to 38731 incl.  
42366 to 42368 incl.  
38706, 42133, 42193  
42145, 42149, 42150

Eureka: 35 claims

42042 to 42073  
42003, 42020, 42021

September 12, 1975

Black Hills: 82 claims

42473 to 42554 inclusive

May 22, 1976"

It is understood that a fifth group of claims, known as the "Gold Run" group, has been offered to B.E.L. Yukon Establishment. This is located on Dominion Creek, approximately one mile downstream from the main Dominion group.

### ACCESS

As shown on Map No. 1500-6a, access is by about 38 to 40 miles of gravel road from Dawson to the Dominion Creek properties. This road passes along the south bank of the Klondike River valley for a short way, and thence up Hunker Creek to its headwaters, over the divide and down Dominion Creek to the placer claims, Dominion Creek proper and the Dominion H property.

A further 16 to 18 miles of road link the Dominion Creek group of claims to the Eureka Creek group.

These roads and the general operations require the use of 4-wheel-drive equipment.

During the last three weeks of the 1974 field season (in October), fourteen miles of similar access road was built to the Black Hills property from the Eureka group location.

ORE RESERVES

At all of the four claim groups - Eureka, Dominion, Black Hills and Dominion H - detailed churn drilling results and maps have been obtained from the Yukon Consolidated Gold Corporation Ltd. records (see maps in folder attached).

This company, from 1923 to 1966, operated as many as 10 large gold recovery dredging units within a 50-mile radius of Dawson City, Y.T., and was the acknowledge expert in placer work in the district.

Mr. Jury recounts that he has seen a comparison of the churn drilling results and the actual gold recoveries from the operations of ten of the dredges over a period of ten years. The gold recovered amounted to six to ten per cent in excess of that indicated by the churn drilling programs.

It is assumed that the gold values shown were obtained by relating the amount of gold, recovered by panning churn drill samples, to the volume of gravel intersected. This was the method used by Yukon Consolidated.

In addition, Mr. Jury states that the gold values shown in cents per cubic yard have been adjusted for the fineness of the gold. It is, therefore, assumed that these can be used directly.

Bacon & Crowhurst have made calculations of cubic yards of overburden, cubic yards of gravel and the gold contained, by assuming the figures shown on the accompanying maps to be correct. These calculations do not include the Gold Run group.

A comparison of the Bacon & Crowhurst results with the Alrae Engineering Ltd. figures follows, using the current price of gold - \$185 per ounce. It can be seen that the Bacon & Crowhurst estimates compare almost exactly with Alrae. It would further be expected that Alrae's estimates of 10,000,000 cubic yards at \$1.26 per cu. yd. (\$185 per ounce for gold) for the Gold Run group can be substantiated in a similar fashion. It is not considered necessary to "cut" high values in view of the previous Yukon Consolidated experience.

	ALRAE			BACON & CROWHURST		
	<u>Cu. yds.</u>	<u>Value \$ per cu. yd.</u>	<u>Amount</u>	<u>Cu. yds.</u>	<u>Value \$ per cu. yd.</u>	<u>Cu. yds. x value</u>
<u>Creek</u>						
Eureka	2,172,300	\$2.71	5,886,930	2,057,810	\$2.76	5,672,000
Dominion	707,200	3.86	2,729,790	624,760	3.86	2,411,520
Black Hills	1,428,000	2.89	4,126,920	1,454,610	3.06	4,659,170
Dominion H	<u>2,322,000</u>	<u>1.97</u>	<u>4,574,340</u>	<u>2,215,650</u>	<u>1.83</u>	<u>4,051,440</u>
Totals	6,629,500	\$2.61	17,317,980	6,352,830	\$2.64	16,794,130
						(97.0% of Alrae)

ORE RESERVES (cont'd.)

EUREKA CREEK

North Portion

<u>Block</u>	<u>Length</u>	<u>Width</u>	<u>Depth</u>	<u>Cu. ft.</u>	<u>Cu. yds.</u>	<u>Avg. Value \$/cu. yd. @ \$185/oz.</u>	<u>Cu. yds. x Value</u>
11	1400'	800'	11'	12,320,000	456,300	\$1.68	\$766,580
7	950	740	12	8,436,000	312,440	\$2.02	631,130
5	900	650	7	4,095,000	151,670	4.66	706,780
3	1000	600	6	3,600,000	133,330	3.07	409,320
1	<u>1150</u>	<u>650</u>	<u>9</u>	<u>6,727,500</u>	<u>249,170</u>	<u>3.07</u>	<u>764,950</u>
Totals	5400			35,178,500	1,302,910	\$2.52	3,278,760

South Portion

27	600	500	9	2,700,000	100,000	\$2.40	\$240,000
23	1000	340	11	3,740,000	138,520	4.86	673,210
21	1050	550	7	4,042,500	149,720	2.22	332,380
19	1000	550	9	4,950,000	183,330	4.00	733,320
17	<u>900</u>	<u>500</u>	<u>11</u>	<u>4,950,000</u>	<u>183,330</u>	<u>2.26</u>	<u>414,330</u>
Totals	4550			20,382,500	754,900	\$3.17	\$2,393,240
<u>Totals</u>				55,561,000	2,057,810	\$2.76	\$5,672,000

ORE RESERVES (cont'd.)

DOMINION CREEK

<u>Block</u>	<u>Length</u>	<u>Width</u>	<u>Depth</u>	<u>Cu. ft.</u>	<u>Cu. yds.</u>	<u>Avge. Value \$/cu. yd. @ \$185/oz.</u>	<u>Cu. yds. x Value</u>
119-120	350'	310'	6'	651,000	24,110	\$4.26	\$102,710
120-121	475	300	13	1,852,500	68,610	\$2.09	126,930
121-122	500	270	14	1,890,000	70,000	2.89	202,300
122-125	500	580	10	2,900,000	107,410	3.66	393,120
125-126	500	610	8	2,440,000	90,370	7.10	641,630
126-127	500	600	8	2,400,000	88,890	4.46	396,450
127-128	500	575	6	1,725,000	63,890	4.98	318,170
128-129	500	475	7	1,662,500	61,570	3.05	187,790
129-130	<u>550</u>	350	7	<u>1,347,500</u>	<u>49,910</u>	<u>0.85</u>	<u>42,420</u>
Totals	4375			16,868,500	624,760	\$3.86	\$2,411,520

ORE RESERVES (cont'd.)

BLACK HILLS CREEK

North to South

<u>Block</u>	<u>Length</u>	<u>Width</u>	<u>Depth</u>	<u>Cu. ft.</u>	<u>Cu. yds.</u>	<u>Avg. Value \$/cu. yd. @ \$185/oz.</u>	<u>Cu. yds. x Value</u>
2-N	1760'	250'	11'	4,840,000	179,260	\$1.46	\$261,720
Lower Discovery	1520	170	12	3,100,800	114,840	1.44	165,370
1-S	1000	310	9	2,790,000	103,330	1.91	197,360
2-S	1080	320	13	4,492,800	166,400	5.14	855,300
4-S	1100	310	11	3,751,000	138,930	3.13	434,850
6-S	1000	370	10	3,700,000	137,040	5.18	707,870
8-S	1000	480	10	4,800,000	177,780	1.61	286,230
10-S	1000	550	7	3,850,000	142,590	7.47	1,065,150
12-S	1000	600	6	3,600,000	133,330	2.24	298,660
14-S	<u>750</u>	<u>580</u>	<u>10</u>	<u>4,350,000</u>	<u>161,110</u>	<u>2.40</u>	<u>386,660</u>
Totals	11,210	(av.) 375	(av.) 10	39,274,600	1,454,610	\$3.06	\$4,659,170

ORE RESERVES (cont'd.)

DOMINION "H" CREEK

<u>Block</u>	<u>Length</u>	<u>Width</u>	<u>Depth</u>	<u>Cu. ft.</u>	<u>Cu. yds.</u>	<u>Avge. Value \$/cu. yd. @ \$185/oz.</u>	<u>Cu. yds. x Value</u>
<u>"A" Section</u>							
138	480'	310'	16'	2,380,800	88,180	\$2.50	\$220,450
139	500	280	10	1,400,000	51,850	4.66	241,620
140	500	330	6	990,000	36,670	1.63	59,770
141	500	250	9	1,125,000	41,670	3.13	130,430
Totals	1980			5,895,800	218,370	2.99	652,270
<u>"B" Section</u>							
146	500	230	13	1,495,000	55,370	1.31	72,530
147	500	460	13	2,990,000	110,740	1.81	200,440
148-149	700	500	8	2,800,000	103,700	1.54	159,700
Totals	1700			7,285,000	269,810	1.60	432,670
<u>"C" Section</u>							
147	430	720	8	2,476,800	91,730	0.96	88,060
148-149	470	500	7	1,645,000	60,930	2.78	169,390
149-150	500	440	7	1,540,000	57,040	1.15	65,600
150	250	450	12	1,350,000	50,000	1.59	79,500
Totals	1650			7,011,800	259,700	1.55	402,550
<u>"D" Section</u>							
175	250	700	9	1,575,000	58,330	3.85	224,570
176	500	630	14	4,410,000	163,334	1.02	166,600
177	500	650	10	3,250,000	120,370	1.35	162,500
179	500	890	9	4,005,000	148,330	2.29	339,680
180	500	990	9	4,455,000	165,000	2.18	359,700
181	500	930	14	6,510,000	241,110	1.63	393,010
183	500	790	11	4,345,000	160,930	1.76	283,240
184	500	700	12	4,200,000	155,560	1.59	247,340
185	500	860	16	6,880,000	254,810	1.52	387,310
Totals	4250			39,630,000	1,467,770	1.75	2,563,950
Grand Totals				59,822,600	2,215,650	\$1.83	\$4,051,440

OVERBURDEN

Bacon & Crowhurst have made calculations as to the overlying quantities of overburden present at the four claim groups, and the strip ratios involved. These are summarized as follows; it will be noted that permafrost is present in all locations.

<u>Creek Group</u>	<u>Cu. yds. Total</u>	<u>Cu. yds. stripped to date (in 1974)</u>	<u>Balance</u>	<u>Cu. yds. Gravel</u>	<u>Value per cu. yd. (uncut)</u>	<u>Strip Ratio</u>
Eureka	6,330,370	231,570	6,098,800	2,057,810	2.24	2.70
Dominion	1,584,300	49,910	1,534,390	624,760	3.15	2.46
Black Hills	1,562,570	24,000	1,538,570	1,454,610	2.34	1.06
Dominion H	<u>3,246,430</u>	<u>-</u>	<u>3,246,430</u>	<u>2,215,650</u>	<u>1.60</u>	<u>1.47</u>
	12,723,670	305,480	12,418,190	6,352,830	2.15	1.95

The individual calculations for blocks of gravel, each about 500' long, within each creek group, are available for study to determine which part of each group is the most attractive.

CUBIC YARDS OF OVERBURDEN

EUREKA CREEK

North Portion

<u>Block</u>	<u>Dimensions - ft.</u>	<u>Overburden Cu. yds.</u>	<u>Stripped now</u>	<u>Balance</u>	<u>Cu. yds. Gravel</u>	<u>Strip Ratio</u>
11	1400 x 800 x 211/11	795,690	-	795,690	456,300	1.74
9	1000 x 675 x 218/6	908,330	-	908,330	200,000	4.54
7	950 x 740 x 195/7	725,320	-	725,320	312,440	2.32
5	900 x 650 x 312/7	965,710	-	965,710	151,670	6.37
3	1000 x 600 x 237/5	1,053,330	-	1,053,330	133,330	7.90
1	1150 x 650 x 23/2	<u>318,380</u>	<u>127,350</u>	<u>191,030</u>	<u>249,170</u>	<u>0.77</u>
Totals		4,766,760	127,350	4,639,410	1,502,910	3.09
Minus Block 9		3,858,430	127,350	3,731,080	1,302,910	2.48

South Portion

27	600 x 500 x 97/6	179,630	-	179,630	100,000	1.80
23	1000 x 340 x 75/3	314,810	-	314,810	138,520	2.27
21	1050 x 550 x 198/6	705,830	-	705,830	149,720	4.71
19	1000 x 550 x 51/5	207,780	-	207,780	183,330	1.13
17	900 x 500 x 28/3	<u>155,560</u>	<u>104,220</u>	<u>51,340</u>	<u>183,330</u>	<u>0.28</u>
Totals		1,563,610	104,220	1,459,390	754,900	1.93
Grand Totals		6,330,370	231,570	6,098,800	2,257,810	2.70
Less Block 9				<u>908,330</u>	<u>200,000</u>	
				5,190,470	2,057,810	2.52

CU. YDS. OF OVERBURDEN (cont'd.)

DOMINION CREEK

<u>Block</u>	<u>Dimensions - ft.</u>	<u>Cu. yds. Overburden</u>	<u>Stripped now</u>	<u>Balance</u>	<u>Cu. yds. Gravel</u>	<u>Strip Ratio</u>
119-120	350 x 310 x 53/3	70,990	-	70,990	24,110	2.94
120-121	475 x 300 x 31/2	81,800	-	81,800	68,610	1.19
121-122	500 x 270 x 39/2	97,500	-	97,500	70,000	1.39
122-125	500 x 580 x 131/4	351,760	-	351,760	107,410	3.27
125-126	500 x 610 x 79/3	297,470	-	297,470	90,370	3.29
126-127	500 x 600 x 65/3	240,740	-	240,740	88,890	2.71
127-128	500 x 575 x 59/3	209,410	-	209,410	63,890	3.27
128-129	500 x 475 x 42/2	184,720	-	184,720	61,570	3.00
129-130	550 x 350 x 14/2	<u>49,910</u>	<u>49,910</u>	<u>-</u>	<u>49,910</u>	-
Totals		1,584,300	49,910	1,534,390	624,760	2.46

CU. YDS. OF OVERBURDEN (cont'd.)

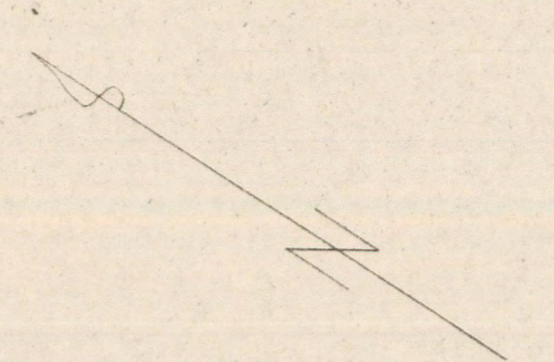
BLACK HILLS CREEK

<u>Block</u>	<u>Dimensions - ft.</u>	<u>Cu. yds. Overburden</u>	<u>Stripped now</u>	<u>Balance</u>	<u>Cu. yds. Gravel</u>	<u>Strip Ratio</u>
2N	1760 x 250 x 60/9	108,640	12,000	96,640	179,260	0.54
Lower Disc.	1520 x 170 x 13/3	41,470	12,000	29,470	114,840	0.26
1S	1000 x 310 x 68/4	195,190	-	195,190	103,330	1.89
2S	1080 x 320 x 20/3	85,330	-	85,330	166,400	0.51
4S	1100 x 310 x 45/3	189,440	-	189,440	138,930	1.36
6S	1000 x 370 x 52/4	178,150	-	178,150	137,040	1.30
8S	1000 x 480 x 47/5	167,110	-	167,110	177,780	0.94
10S	1000 x 550 x 62/6	210,490	-	210,490	142,590	1.48
12S	1000 x 600 x 66/6	244,440	-	244,440	133,330	1.83
14S	750 x 580 x 53/6	<u>142,310</u>	<u>-</u>	<u>142,310</u>	<u>161,110</u>	<u>0.88</u>
Totals		1,562,570	24,000	1,538,570	1,454,610	1.06

CU. YDS. OF OVERBURDEN (cont'd.)

DOMINION 'H' CREEK

<u>Block</u>	<u>Dimensions - ft.</u>	<u>Cu. yds. - Overburden</u>	<u>Cu. yds. - Gravel</u>	<u>Strip Ratio</u>
<u>"A" Section</u>				
138	480 x 310 x 31/2	85,420	88,180	0.97
139	500 x 280 x 25/2	64,810	51,850	1.25
140	500 x 330 x 31/2	94,710	36,670	2.58
141	500 x 250 x 35/2	81,020	41,670	1.94
Totals		325,970	218,370	1.49
<u>"B" Section</u>				
146	500 x 230 x 26/2	55,370	55,370	1.00
147	500 x 460 x 24/2	102,220	110,740	0.92
148-149	700 x 500 x 46/3	198,760	103,700	1.92
Totals		356,350	269,810	1.32
<u>"C" Section</u>				
147	430 x 720 x 78/4	223,600	91,730	2.44
148-149	470 x 500 x 39/2	169,720	60,930	2.79
149-150	500 x 440 x 17	138,520	57,040	2.43
150	250 x 450 x 36/3	50,000	50,000	1.00
Totals		581,840	259,700	2.24
<u>"D" Section</u>				
175	250 x 700 x 77/4	124,770	58,330	2.14
176	500 x 630 x 42/3	163,330	163,330	1.00
177	500 x 650 x 43/3	172,530	120,370	1.43
179	500 x 890 x 81/5	267,000	148,330	1.80
180	500 x 990 x 81/5	297,000	165,000	1.80
181	500 x 930 x 69/4	297,080	241,110	1.23
183	500 x 790 x 63/4	230,420	160,930	1.43
184	500 x 700 x 45/3	194,440	155,560	1.25
185	500 x 860 x 74/5	235,700	254,810	0.92
Totals		1,982,270	1,467,770	1.35
Grand Totals		3,246,430	2,215,650	1.47

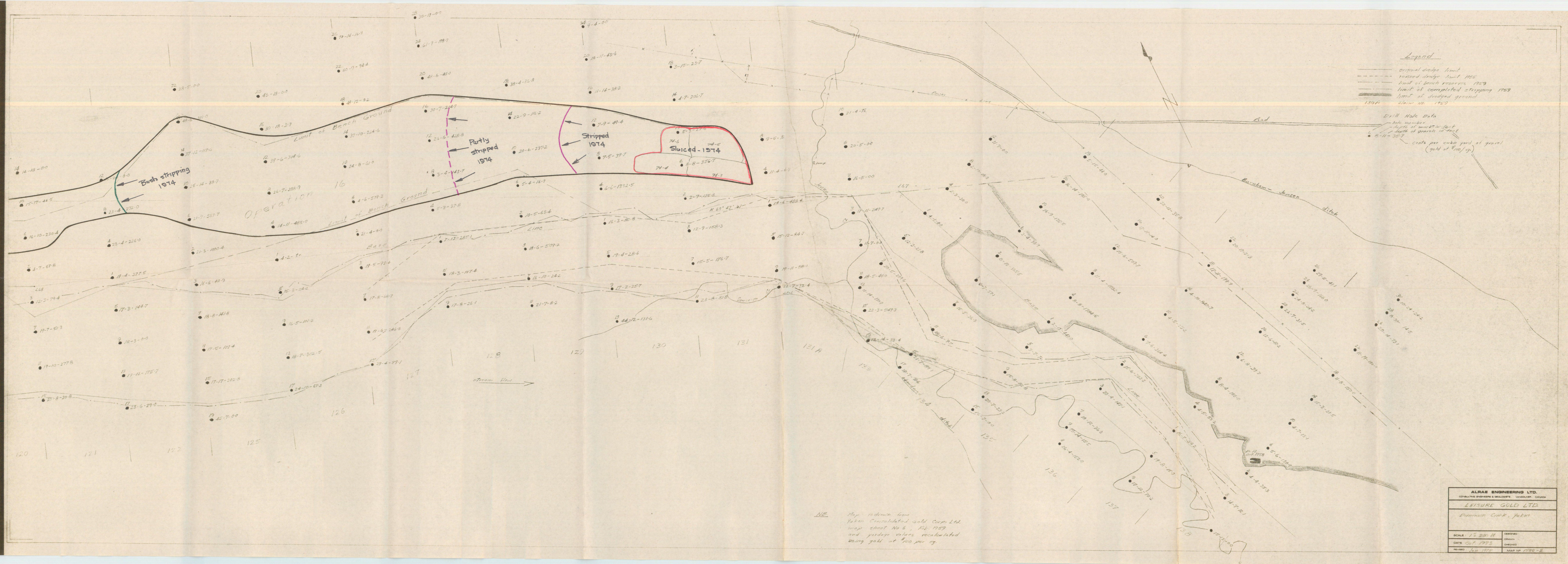


For legend see sheet 1500-2

Hunter Cr  
Laurie Cr  
100

Map redrawn from  
Yukon Consolidated Gold Corp. Ltd  
map sheet No 5, Feb 1957,  
and yardage values recalculated  
using gold at \$100 per oz.

ALRAE ENGINEERING LTD. CONSULTING ENGINEERS & GEOLOGISTS - VANCOUVER, CANADA	
LEISURE GOLD LTD. Dominion Creek, Yukon	
SCALE 1" = 200 FT	DESIGNED
DATE Oct 1995	DRAWN
REVISED	CHECKED
	MAP NO 1500-1



**Legend**

- original dridge limit
- - - revised dridge limit 1957
- limit of bench reserves 1957
- limit of completed stripping 1957
- limit of dredged ground
- 1304 claim no. 1957

**Drill Hole Data**

- hole number
- depth of muck in feet
- depth of gravel in feet
- 6-11-357
- cents per cubic yard of gravel (gold at \$100/oz)

NE  
Map redrawn from  
Yukon Consolidated Gold Corp. Ltd.  
map sheet No 6, Feb. 1957  
and grade values recalculated  
using gold at \$100 per oz.

ALRAE ENGINEERING LTD. CONSULTING ENGINEERS & GEOLOGISTS VANCOUVER CANADA	
LEISURE GOLD LTD. Diamond Creek, Yukon	
SCALE 1" = 200' H.	DRAWN
DATE Oct. 1975	CHECKED
REVISED Jan. 1976	MAP NO. 1500-E