

APPENDIX VI

COMPARISON OF SAMPLES WITH VISIBLE GOLD

Comparison of Assay Results  
With Samples Containing Visible Gold

Assay Procedure

After rolling and homogenizing the whole sample of crushed material, a 500 gram subsample was obtained using a Jones riffle sampler. This subsample was pulverized and screened to -150 mesh and the +150 mesh material was examined for metallics. If no metallics were recovered, a one assay-ton (29.167 grams) portion of the -150 mesh fraction was assayed for gold by conventional gravimetric fire assay.

If metallics were recovered in the +150 mesh fraction, they were weighed and assayed separately for gold. The final gold assay reported was a total of the two values, taking into account the weight of the metallics recovered.

Discussion

Underground diamond drilling resulted in 86 samples from 36 holes which contained visible gold. Quite often it was found that the assay results of these samples (derived by Barringer Magenta Laboratories (Alberta) Ltd.) were lower than that which was to be expected from the amount of visible gold present. Occasionally, the assay was higher than expected. It was assumed that these discrepancies were due to the small sample split (500 grams) which was pulverized and screened to -150 mesh.

For these reasons, it was felt that a more representative result would be obtained if the entire sample was pulverized and screened to -150 mesh; subsequently, the rejects were sent to Chemex Laboratories Ltd. for this treatment.

A simple method of comparison between the two results was devised whereas the grades from each laboratory were summed and the percentage difference calculated using the formula:

$$(\text{Chemex total gold} - \text{Barringer total gold}) / (\text{Barringer total gold})$$

The results, for several populations, are as follows:

Total Samples (86):

$$(44.394 - 38.349) / 38.349 = 15\%$$

Samples between 0.1 oz/ton and 1.0 oz/ton (32):

$$(14.377 - 9.765) / 9.765 = \underline{47\%}$$

Samples above 1.0 oz/ton (10):

$$(25.223 - 26.991) / 26.991 = -6.5\%$$

It is important to note that within the most significant subset, as far as the Gordon Lake Deposit is concerned, the Chemex results are almost 50% higher than those from Barringer. It is therefore recommended that future assay techniques include pulverizing and screening the entire sample in order to obtain a more representative result.

Following is a list of the samples submitted to Chemex:

<u>Sample Number</u>	<u>DDH</u>	<u>Interval</u>	<u>Visible Gold</u>	<u>Barringer Assay</u>	<u>Chemex Assay</u>
40923	U861B-08	4.7-7.6	B1,Z5	.0013	.0060
40949	U861BC-12	55.8-58.3	Z1	.036	.020
40964		93.0-95.5	Z1	L.005	.006
40985	U861C-15	29.3-31.8	Z1	.03	.074
40987		34.3-36.8	Z2	.059	.034
41001		67.5-70.0	B2,Z3	.21	.304
41002		70.0-72.5	Z1	.08	.098
41004		75.0-77.5	Z1	.06	.068
41007		82.5-85.0	Z1	.01	.058
41057	U861CD-20	60.2-62.7	Z1	.27	.022
41061		70.2-72.7	Z1	L.005	.10
41074		102.0-105.2	Z1	.12	.137
41076		107.7-110.2	Z1	.21	.474
20504	U861H-23	22.5-25.0	B6	.058	.041
20512	U861H-25	12.0-14.7	B1	.021	.114
20548	U861GH-28	15.9-17.4	B3,Z5	.005	.006
20584	U861G-31	78.3-79.8	Z3	.599	2.848
20588	U861G-32	12.9-15.4	B6,Z5	3.051	4.980
20623	U861F-35	18.6-21.1	B1,Z3	L.005	.028
20624		21.1-23.6	B1	.304	.025
20646	U861F-36	15.2-17.7	Z1	.12	.090
20648		20.0-22.0	Z1	.036	.050
20661	U861F-37	10.9-13.4	Z3	.01	.046
20690	U861F-38	15.3-17.2	Z2	.049	.098
20698		31.8-34.3	Z11	.783	.208
20700		36.8-39.3	Z1	1.119	1.366
20701		39.3-42.3	Z2	.025	.066
20732	U861E-40	28.9-31.4	B2,Z1	.596	.361
20733		31.4-33.9	B1	.051	.086
20742	U861E-41	32.0-34.5	Z1	1.798	.631
20743		34.5-37.0	Z1	.21	.584
20744		37.0-39.5	B2	.14	.326
20745		39.5-42.0	Z1	.041	.040

<u>Sample Number</u>	<u>DDH</u>	<u>Interval</u>	<u>Visible Gold</u>	<u>Barringer Assay</u>	<u>Chemex Assay</u>
20798	U861DE-45	14.3-16.8	Z8	.739	.490
20799		16.8-19.3	Z3	.33	.200
20801		21.8-24.3	Z1	.022	.050
20807		35.7-37.9	Z $\frac{1}{2}$	.058	.044
20813		50.1-52.6	Z1	.12	.411
20860	U861D-48	7.5-10.0	B1,Z2	.051	.573
20926	U861GH-50	84.2-86.7	Z1	.30	.476
20942	U861GH-51	48.0-50.5	Z1	.03	.020
20945		56.0-58.5	Z1	.045	.208
20966	U861G-52	40.9-43.4	Z4	.085	.044
20985		105.2-108.1	B3,Z4	1.492	2.993
20989	U861G-53	2.0-3.9	B2	.27	.483
21003		48.2-49.9	Z2	.09	.034
21015	U861G-54	34.8-37.3	Z3	1.352	.004
21022		52.3-54.9	Z2	.28	.312
21042	U861F-55	33.7-35.7	Z1	.029	.026
21057		71.2-73.7	Z1	.09	.024
21062		84.7-87.2	B1	.058	.177
21066		94.2-96.1	Z2	.60	.780
21078	U861F-56	23.1-26.0	Z4	.21	.463
21100		77.2-79.6	B1,Z5	1.357	1.380
21111		126.0-128.5	Z2	.065	.118
21138	U861E-57	76.0-78.5	Z4	.13	.182
21142	U861DE-58	11.4-13.9	B1(?)	.19	.056
21162		57.2-59.0	B1	.15	.491
21173		82.0-84.5	Z2	.539	.298
21176		96.7-99.7	B1,Z1	1.3	.830
21199	U861DE-59	50.6-53.1	Z4	1.243	2.847
21200		53.1-55.6	B1,Z1	.416	1.225
21204		62.0-64.5	B1,Z1	.24	.457
21212		79.9-82.3	Z1	.035	.022
21221		101.9-103.3	Z2	.011	1.119

<u>Sample Number</u>	<u>DDH</u>	<u>Interval</u>	<u>Visible Gold</u>	<u>Barringer Assay</u>	<u>Chemex Assay</u>
21253	U861CD-60	91.9-94.4	Z1	.02	.014
21258		105.3-107.8	Z2	.048	.056
21260		110.6-112.9	B1	.026	.084
21261		112.9-115.4	B1	.023	.068
21271	U861CD-61	37.8-40.4	Z3	L.005	.004
21272		40.4-42.6	B4,Z18	12.669	9.577
21273		42.6-45.1	Z7	1.29	1.570
21274		45.1-47.8	Z1	.12	.145
21332	U861CD-62	72.2-74.7	B1,Z3	.13	.560
21348		119.6-121.1	B1	.15	.276
21365	U861C-63	45.5-48.0	Z1	.045	.086
21389		117.0-119.5	Z1	.018	.043
21410	U861C-64	71.2-73.7	Z1	.03	.024
21411		73.7-76.2	Z1	.036	.042
21429	U861BC-65	24.0-24.5	Z2	.14	-
21448	U861BC-66	105.5-107.5	Z1	.22	1.194
21460		136.3-137.8	B1,Z4	.37	.278
21498	U861AB-68	107.1-110.2	Z4	.579	.382
21536	U861A-70	89.5-92.0	Z2	.14	.176
21541		100.9-103.9	Z15-20	.29	.564
21542		103.9-107.2	B2,Z1	1.61	.637