

O T T A W A

August 2nd, 1940.

R E P O R T

of the

ORE DRESSING AND METALLURGICAL LABORATORIES.

Investigation No. 876.

Infrasizing Test on a Sample of Cyanide
Tailings from the Francoeur Gold Mines, Limited,
Arntfield, Quebec.

Bureau of Mines
Division of Metallic
Minerals

CANADA
DEPARTMENT
OF
MINES AND RESOURCES
Mines and Geology Branch

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Tailings from the Francoeur Gold Mines, Limited,
Arntfield, Quebec.

Shipment:

A sample of cyanide tailings, gross weight
8.0 pounds, was received on July 16th, 1940, from R. H.
Farmer, Mill Superintendent, Francoeur Gold Mines,
Limited, Arntfield, Quebec.

Purpose of the Investigation:

The sample of mill tailing was submitted for the purpose of making an infrasizer separation and assaying the fractions for gold.

Sampling and Analysis:

A representative portion was cut out of the shipment and was found to contain:

Gold - 0.1325 oz./ton.

Haultain Infrasizer Test:

A 400-gram sample of the tailing was cut out for the infrasizer test and screened on a 200-mesh screen. The minus 200 mesh material was used as the infrasizer feed. Each fraction was assayed for gold.

Results:

Products	:Weight, : per : cent	: Assay, : Au : oz./ton	: Distribution : of gold, : per cent
Feed	:100.00	0.1244 [⊙]	100.00
+200 mesh	: 2.88	0.13	3.01
-200 mesh +56 microns	: 0.37	0.93	2.77
-56 microns +40 microns	: 7.37	0.24	14.22
-40 " +28 "	: 12.52	0.24	24.16
-28 " +20 "	: 12.73	0.16	16.38
-20 " +14 "	: 12.25	0.12	11.82
-14 " +10 "	: 10.80	0.09	7.82
-10 "	: 41.08	0.06	19.82

[⊙] Feed assay calculated from the products.

Infrasizer Data:

Length of test: 8 hours.
Drops per minute: 63.
Height of drop: 5/16th inch.
Differential pressure: 19 inches of water.
Standard golf balls used in cups.
Humidity: 76 per cent.

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