



Tel: 403/873-6301 • Telex: 034-45514 • Fax No: 403/873-2980

Yellowknife Division

July 4, 1991

Mr. Ed Collins
Environmental Protection Services
N.W.T. District Office
P.O. Box 370
9th Floor Bellanca Building
Yellowknife, N.W.T.
X1A 2N3

Dear Mr. Collins:

Re: Stack Sampling 1991

Please find attached the latest results from stack sampling of our operation. This testing was conducted on June 24, 1991.

Arsenic concentration was 16 mg/cu.m. during the test. *15.2 kg/day*

The sampling verifies the clean emissions we have been able to maintain with ongoing baghouse maintenance and changeout of bag compartments on a rotational basis.

If you have any questions on this testing, please do not hesitate to contact myself or Gary Halverson, Mill Superintendent.

Yours Truly,

GIANT YELLOWKNIFE MINES LIMITED

A handwritten signature in cursive script that reads "Paul O'Hara".

P. O'Hara
Metallurgist

PO/sj
Encl.

c.c. M. Werner
G. Halverson

GIANT YELLOWKNIFE MINES LIMITED
STACK SAMPLING

DATE : June 24, 1991
RUN : 91-1

PARTICULATE LOADING

| | | |
|--------------------------|---------|----------|
| Weight of filter | Final | 0.631 mg |
| | Initial | 0.603 mg |
| | | ----- |
| Total particulate weight | | 0.028 mg |

ARSENIC LOADING

PARTICULATE

| | |
|--------------------------|----------|
| Total particulate weight | 0.028 mg |
| Diluted volume | 100.0 mL |
| Arsenic concentration | 4.7 ppm |
| Total As in particulate | 0.5 mg |

VAPOUR

| | |
|-------------------------|----------|
| Total wash water volume | 1,000 mL |
| Arsenic concentration | 17.5 ppm |
| Total As in vapour | 17.5 mg |

| | | |
|-------------------------------------|----------------|----------------|
| TOTAL ARSENIC LOADING | 18.0 mg | |
| ARSENIC CONCENTRATION | 16.34 mg/m | |
| VOLUMETRIC FLOWRATE | 38,718.3 m /hr | |
| ARSENIC MASS EMISSION RATE | 0.6 kg/hr | or 15.2 kg/day |
| BAGHOUSE EFFICIENCY | 99.89 % | |
| ARSENIC PARTICULATE TO VAPOUR RATIO | 0.03 | :1.0 |