

GIANT YELLOWKNIFE MINKS LIMITED
P.O. Bag 3000
Yellowknife, N.W.T.
X1A 2M2

FAX COVER PAGE

DATE:

June 7/88

TIME:

8:55am

OUR REF. NO:

GT 3073

ATTENTION:

K. Blower

FROM:

K. Morton

NO. OF PAGES TO FOLLOW:

4

(Excluding This Cover Page)

COMMENTS OR INSTRUCTIONS:

If there is a problem with this transmission, or if you wish to
contact us, following are our numbers:

Telephone: 403-873-6301 ext. 128

Fax: 403-873-2980

Telex: 034-45514

MEMORANDUM

TO: S. El-Alfy
 CC: S. McAlpine, K. Blower
 FROM: K. Morton
 DATE: June 7, 1988
 SUBJECT: RPC PILOT PLANT - RECENT RESULTS

After the initial continuous run of approximately 40 hours, accumulated buildup of As₂O₃ on the condenser walls forced a plant shutdown. The high pressure drop across the condenser caused back pressure in the roaster resulting in feed being blown back out the feed pipe.

The plant is now shut down while the condenser is being modified. The only change to the condenser will be repiping. The gas stream will be added axially to the body of the condenser while the cooling air will be introduced tangentially into the annulus. The new layout will be opposite to the existing but whether it will work, any better.....? A sketch of the existing condenser has been attached. Personally I think a simple air mixer such as we have at Giant would be more suitable. In our case, hot gas is mixed with cooling air at the inlet to a large fan; mixing takes place in the fan and the condensed As₂O₃ is carried to the baghouse in the airstream.

Assays of samples collected during the first 31 hours of operation are as follows:

5 pm, June 5

11 pm, June 5

5 am, June 6

Cold baghouse product, wt%

As ₂ O ₃	99.9	99.4	>99.9
Sb	0.11	0.1	0.06
Fe	0.09	0.04	0.08

Fe in feed - 0.8%

Hot baghouse product wt%

Fe	7.77	7.95
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Particle size and bulk density determinations will follow.

The results are quite good though Fe levels may be a problem. The 1979 Falconbridge recommended standards as shown below, indicate a maximum Fe

concentration of 0.02%.

Element

Maximum Impurity Level

As₂O₃

greater than 98.0 wt%

As₂O₅

0.125 wt%

Fe

0.02 wt%

Sb

0.20 wt%

Pb

0.02 - 0.08 wt%

Zn

0.005 wt%

Bi

0.1 - 0.25 wt%

S (Sulfides)

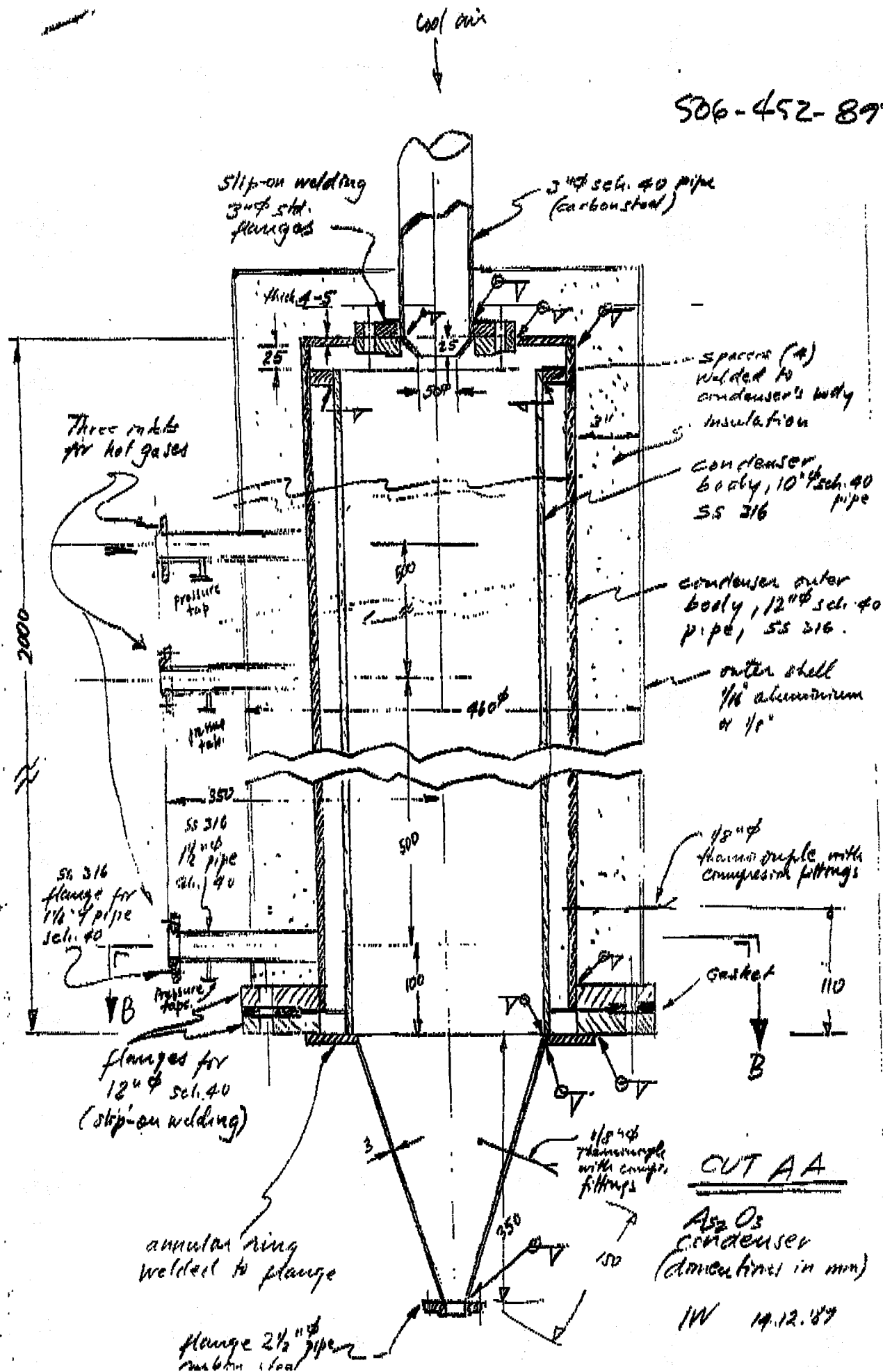
0.05 - 0.1 wt%

Additional assays results will be out this afternoon.



K. Morton

506-452-8994



CUT AA

As₂O₃ condenser
(diameters in mm)

1W 14.12.87

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