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A.S.

CONFIDENTIAL

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GRINDING STUDIES
HF PROCESS

A-IIC-261 AJS-50%
EFK-30%

This represents an informal progress report on the HF Process for the month of December.

|| Samples superior in strength to BT-304-D have been repeatedly made using pulverized NaCl as the grinding medium in a two hour cycle. One attempt to separate the NaCl by dilution and decantation followed by re-use of the acetone-salt mixture in a subsequent grind was moderately successful, except for a rather excessive amount of acetone required for the dilution.

|| A grind of chlorine-free CPC was continued for 7-1/4 hours and, some place between 4 and 7 hours, there was a substantial, but not quite complete, phase change to the beta form. This is the strongest product approximating the hue of BT-297-D that we have seen (+15% strong).

A 3 hour grind of an Orchem crude green gave a product which was yellow and intense versus GT-674-D, Lot 430, but still about 20% weak.

One trial of a draft tube in place of the disc type agitator gave quite poor strength development.

|| The semi-works unit (+13 gal. capacity) was put in operation during the month with two 4 hour grinds of CPC-LB. One of these has been evaluated and gave a very smooth strength development curve, though a little slower than the lab. grinds. The strength of BT-304-D was reached in about 3 hours. There was some trouble with the bearings and belt on this unit and repairs are being made before further runs are started.

Check It is believed that the most important immediate problem in this study is to develop a practical method of separating the grinding medium from the pigment suspension. Efforts are being directed toward this end.

Also costs - installation
+ operating jeb

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