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		E. F. Klenke	- "
		B. T. Anderson	- Edge Moor
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		C. D. Atkinson	- Newport
		D. Mudron (6)	- "
		E. H. Kolb	- "
		A. D. Volk	- "
		J. E. Waller	- "
		H. H. Gyorgy (2)	- "
		J. W. Minnich	- "
		File	

Newport, Delaware
April 12, 1966

"AFFLAIR" - NEWPORT

KOA-6

TITLE: Hydrolysis of NF-128-D

PURPOSE: This batch of improved gold is being prepared for initial sales evaluation of this grade. (CONTROL - 104-65H)

NUMBER OF TEST LOTS: One

STARTING DATE: April 13, 1966

PROCEDURE: The batch size is to be reduced from a normal mica charge of 5,300 lbs. to one of 3,500 lbs. because of availability of the preclassified mica. Batch quantities are adjusted downward to compensate for this reduction. The filter presses must be stumped at a total of 64 frames instead of the normal 96. It is suggested that each press be stumped at 32 frames.

9³⁰ AM — Operation is to follow the attached batch card. Addition of TiO₂ concentrate to hydrolysis should be delayed until approximately 0930 and should be made under the direction of E. F. Klenke. Duration of the boil will be determined by Mr. Klenke. All other operations will proceed as in a normal batch of NF-103.

SAFETY: No unusual operating hazards are involved.

DISPOSITION OF PRODUCT: The wet press cake will be discharged into 55 gallon drums and stored until research tests determine its further processing. Research personnel will sample wet cake as required. Residual 42# of mica rejects should be retained for reference.

RESPONSIBILITY FOR CLOSING REPORT: E. F. Klenke

APPROVALS:

H. H. Gyorgy / PGR
Research Supervisor

D. Mudron
Production Supervisor

Batch No. 1Grade No. NF-128-DDate 4-13-66

Process _____

Step	By		Inches	Pounds	Gallons	Temp.
1		Add water to hydro tank.	43 ³ / ₄		2017	
2		Add mica to water in hydro tank. Stir briefly after each 5 bags.				
		Type	NW No.	No. Bags		
		NF-128 Rejects - Lot II		18 dms.	1795	} 3500 #
		NF-128 Rejects - Lot I		17 full dms	1700	
				+ 5 lbs.	5	
3		Pump Concentrate. Take sample to Lab. at once.				
		% TiO ₂ _____ Sp. Gr. _____ g/l Reduction _____		1952		
		While awaiting analysis heat to 58°C.				
4		Pump 78% H ₂ SO ₄ to Mix Tank.	36"		270	
5		Add Iron Powder To Concentrate in Head Tank. Sift in slowly. Allow No Burning or Welding in Area.		0		
6		Resample Concentrate 30 minutes after treatment g/l Reduction _____				
7		Heat mica slurry to 58°C. Time Ready _____				
8		Add Concentrate from Head Tank to Hydro Tank in <u>10-12</u> minutes. Control temperature of Hydro Tank at 58°C-62°C.		12 min actual		
		Time Start _____				
		Time End _____				
9		Add Sulphuric Acid To Hydro Tank.				
10		Heat Hydro Slurry to boil in <u>1 hr</u> 2 hours . Plot temperature rise.		1 1/4 hr actual		
11		Measure slurry depth.				
		Hold at boil <u>X</u> * Technical to determine _____ Hours. Measure slurry. Add water to maintain level.				
12		Add Sb ₂ O ₃ sift in stir 3-4 minutes.		37		
13		Fill Hydro Tank with water. Record inches.	162			
14		Send to No. 1 Press. Start _____ Full _____				
15		Measure slurry left. Stump No. 2 Press to suit. Send to No. 2 Start _____ Full _____				
16		Wash presses till conductivity is 1500 Ohms or higher on filtrate.				

Comments by Operators: