



E. I. DU PONT DE NEMOURS & COMPANY
INCORPORATED
WILMINGTON, DELAWARE 19898

CHEMICALS AND PIGMENTS DEPARTMENT
CHESTNUT RUN

cc: LEBaenen-C&P, Chicago Sales
RRNorton-C&P, Chicago Sales
DGray-C&P, Newark
REPeavy-C&P, Newark
LWPancoast-C&P, Newark
WRZonin-C&P, Newark
PAWriede-C&P, Jackson Lab.
JALamiet/EWStewart-C&P, C.R.
NJKane-C&P, C.R.
RHZabel-C&P, C.R.
FRHilfiker-C&P, C.R.
WORoberts-C&P, C.R.
PABosin-C&P, C.R.
CUSTOMER FILE

February 17, 1982

TO: B. H. GARTH
C&P, CHESTNUT RUN

FROM: *[Signature]* R. PATRICK
C&P, CHESTNUT RUN

3M COMPANY
CHESTNUT RUN VISIT
February 10, 1982

3M PERSONNEL:

Richard Pinamonti-St. Paul
Cindy Ashton-St. Paul
Larry McAnally-Brownwood, TX
Garland Bailey-Brownwood, TX

DU PONT PERSONNEL:

L. W. Pancoast-Newark
W. R. Zonin-Newark
R. R. Norton-Chicago Sales
G. R. Patrick-Chestnut Run

PROGRAM OBJECTIVE:

To define dispersion tests that will permit 3M to develop color quality parameters for our pigments and permit establishing color specification on our pigments that are acceptable to both 3M and Du Pont. (In many cases, 3M products are a single pigment dispersion and color variability is a major concern. The attached letter states 3M customers' position.)

SUMMARY OF DISCUSSIONS:

Richard Pinamonti and Cindy Ashton reviewed their 3-roll mill dispersion studies of:

Monastral® Red Y RT-759-D

Lots: 97846 (current shipping lot)
31881 (shipment to Brownwood Plant)

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Krolor® Yellow KY-781-D

Lots: TS-97471

806241 (shipment to Brownwood Plant)
817272 (shipment to Brownwood Plant)

Krolor® Orange KO-789-D

Lots: PS-99166

806281 (shipment to Brownwood Plant)

Monastral® Green B GT-674-D

Lots: SL-90999 (ICI Product)

PS-89855

973372 (shipment to Brownwood Plant)
829932165 (shipment to Brownwood Plant)
833324 (shipment to Brownwood Plant)

The 3-roll mill dispersion method was chosen based on this method being used in production at the Brownwood, TX Plant.

The attached instrumental color data summarizes 3M's studies. While reviewing this data, Roy Pancoast and Bill Zonin presented instrumental color data for the same lots dispersed using the Hoover-Muller equipment.

In summary, it appeared that a correlation in color data between Hoover-Muller and 3-roll mill dispersion existed for the inorganic pigments (Krolor®), while major differences were noted for RT-759-D and GT-674-D.

Based on our technical discussions the following was agreed to as a continuation of our cooperative program with 3M. This phase is targeted for completion and review in late May.

• Round-Robin Dispersion - Color Measurements.

- L. W. Pancoast will supply a lot of RT-759-D to Chestnut Run, St. Paul, and Brownwood locations of 3M.
- R. Pinamonti will supply vehicle and formulation for 3-roll mill dispersing RT-759-D at Newark, Chestnut Run and Brownwood 3M Plant.
- Tint color exhibits from St. Paul, Brownwood and Newark will be sent to G. R. Patrick for obtaining DuColor color data (L.a.b. color difference).

• Tentative Proposed Specifications for 3M.

- This cooperative study is targeted to determine whether the following pigment specifications on our products can be agreed to for 3M:

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- $\pm 5\%$ on strength.
- FMC2 Color Difference = 2 units (adjusted for strength).

Color measurements will be made at Chestnut Run in order to obtain DuColor data consistent with the Newark plant's procedure.

R. R. Norton plans to investigate the position of 3M's Traffic Control Materials Division on GT-674-D.

GRP:dm

Attachments

3M Company
Bldg. 209 - 1W
3M Center
St. Paul. Minn.

Attention: Marlin Seifert

Dear Marlin:

As per our conversation, note the enclosed draw-
down of 3991 Magenta side by side. (lot #27 and Lot #28).

As you can imagine, this does make it rather difficult
with our FORMULAS.

Just thought you might be interested.

Best Regards

Tim Moore

DISPERSION STUDY

COLOR	PASSES	DC	DL	DE
KY-781D RM-32138	2	0.0	0.0	0.0
	3	0.3	0.0	0.3
GT-674D 97337-2 RM-6413	2	0.0	0.0	0.0
	3	1.4	-0.4	1.5
KO-789D RM-16866	2	0.0	0.0	0.0
	3	0.8	-0.2	0.8

DUP050146239

N 26985.02

DISPERSION STUDY

COLOR	PASSES	DC	DL	DE	%RTS
RT-759D RM-5133	2	0.0	0.0	0.0	100
	3	0.6	-0.1	0.6	101

REPRODUCIBILITY STUDY

COLOR	LOT#	DC	DL	DE	%RTS
	1	0.0	0.0	0.0	100
KY-781D	2	0.1	0.0	0.1	100
RM-31238					
GT-674D	2	0.3	0.0	0.3	100
RM-6413					
KO-789D	2	1.6	0.5	1.7	98
RM-16866					
RT-759D	2	0.5	-0.3	0.6	101
RM-5133					

DUP050146241

N 26985.03

%

COLOR LOT# RG YB DC DL DE RTS

KY-781D	97471 (CONTROL)	0.0	0.0	0.0	0.0	0.0	100
	806241	1.4	1.9	2.4	-0.1	2.4	106
	817272	2.3	2.7	3.5	-0.7	3.6	111
KO-789D	99166 (CONTROL)	0.0	0.0	0.0	0.0	0.0	100
	806281	-1.4	0.1	1.4	0.7	1.5	99

*X = 2.0478
G = 0.8
11/10/01*

DUP050146242

N 26985.04

send
 1 QT to
 George Patrick
 Sample 1928
 Mike inform
 recent RT-759
 Shipping List

COLOR	LOT #	RG	YB	DC	DL
RT-759D	97846 (CONTROL)	0.0	0.0	0.0	0.0
RM-5133	31881	-12.1	0.2	12.1	4.9
GT-674D	PS89855 DUPONT (CONTROL)	0.0	0.0	0.0	0.0
RM-6413	SL90999 ICI (CONTROL)	-5.1	-1.6	5.3	0.6
	973372	1.1	-0.2	1.1	1.1
	829932165	-.6	0.7	0.7	-2.3
	* 833324	-2.8	-0.1	2.8	-2.9

80.00

XR
PS-89855
833324

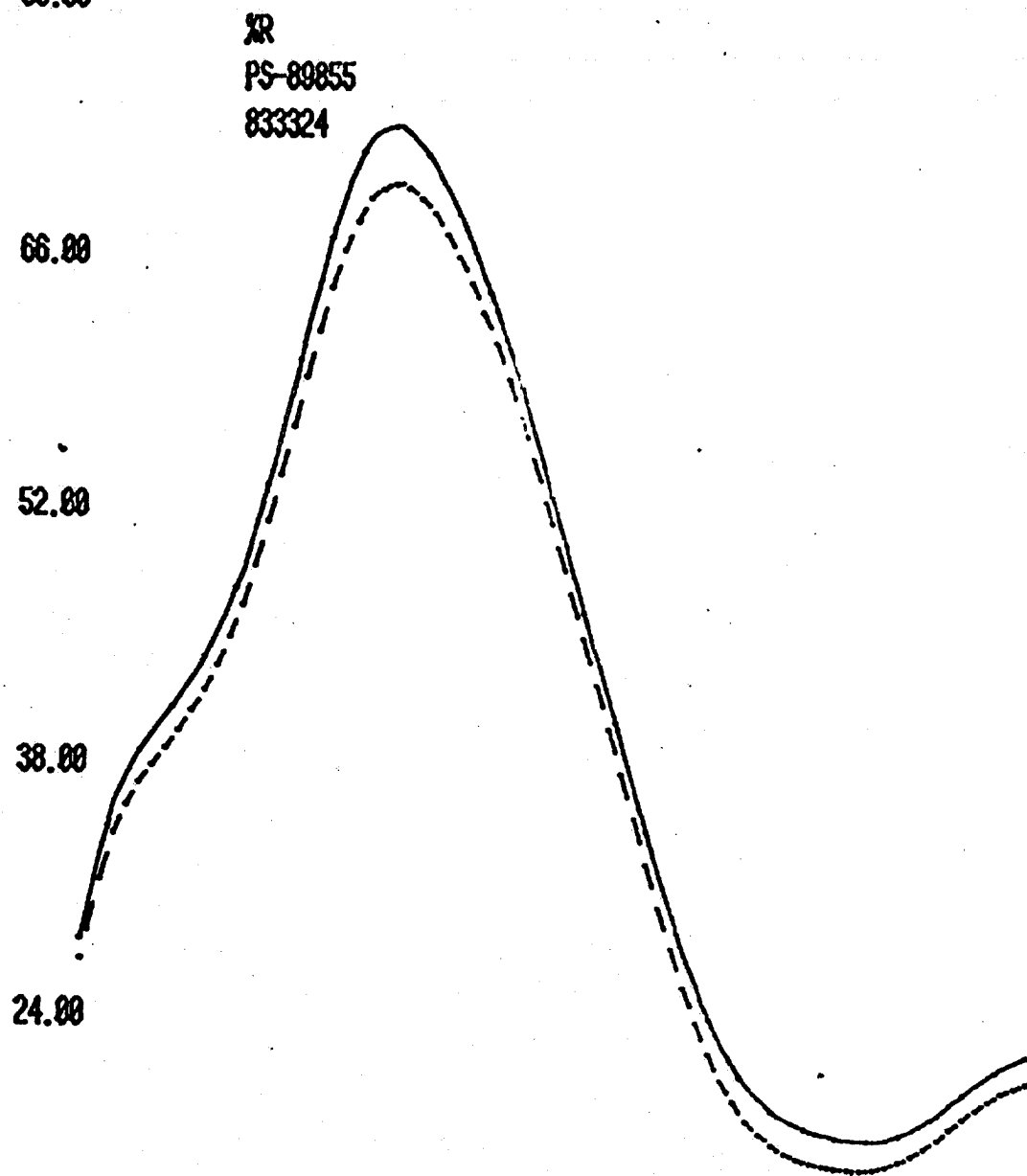
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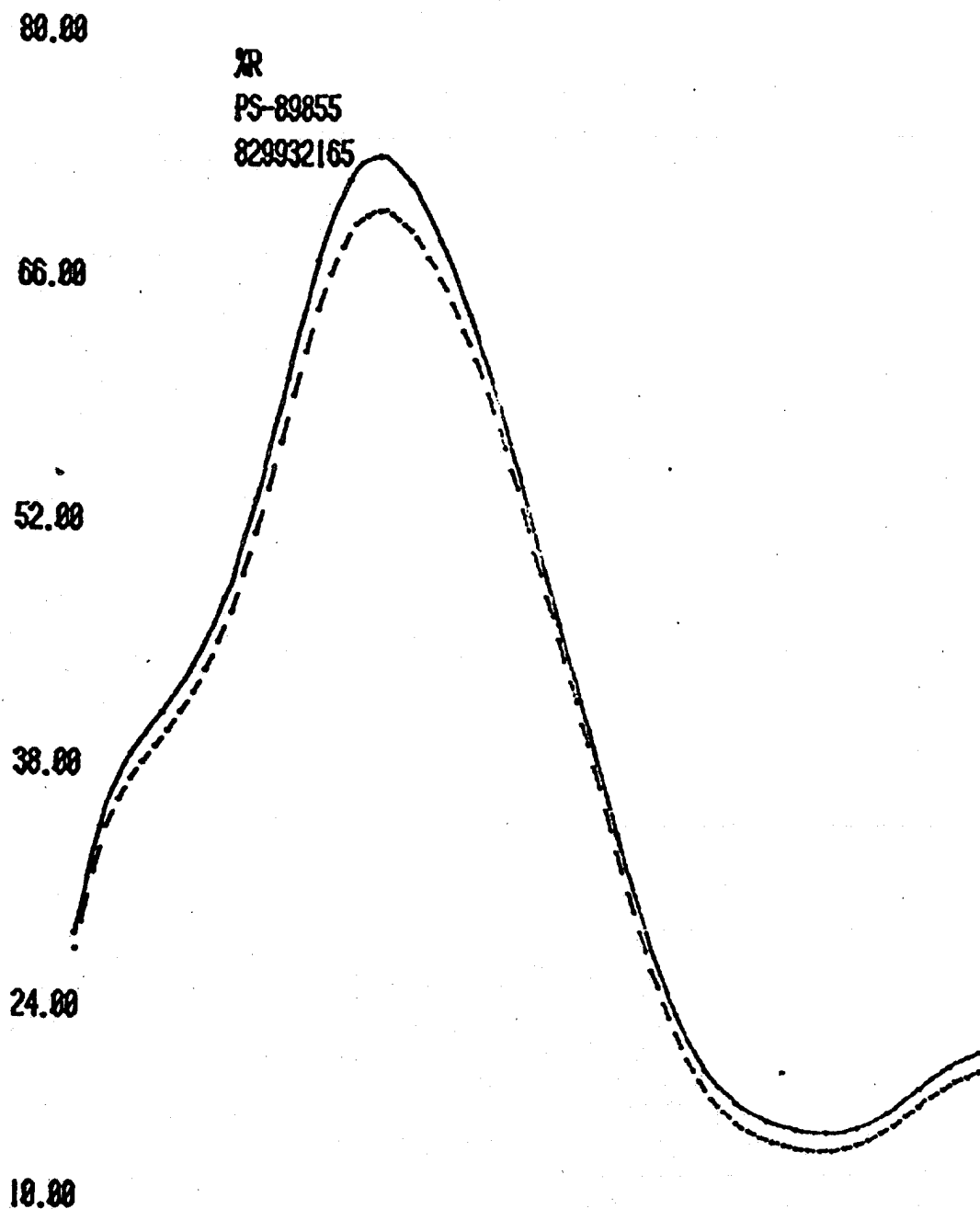
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DUP050146244

N 26985.05



80.00

XR
PS-89855
973372

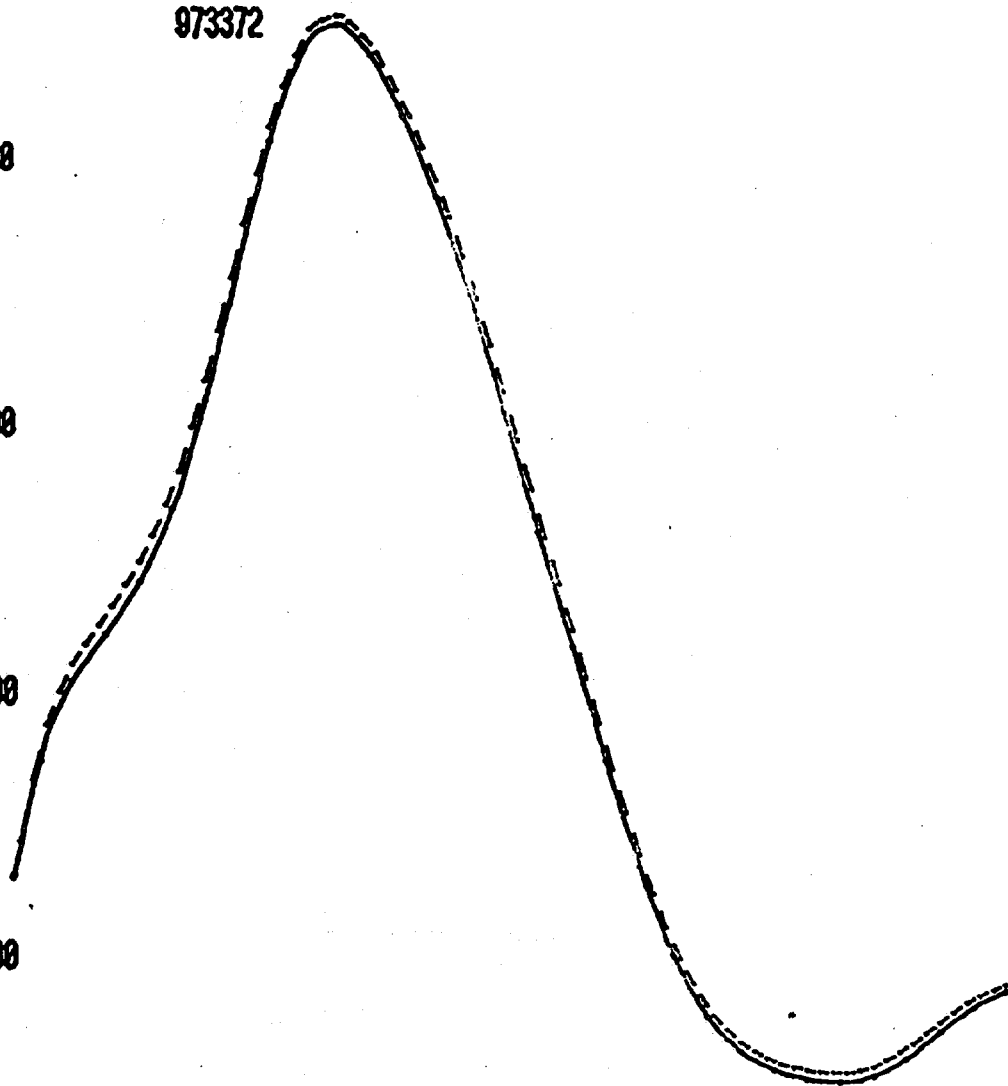
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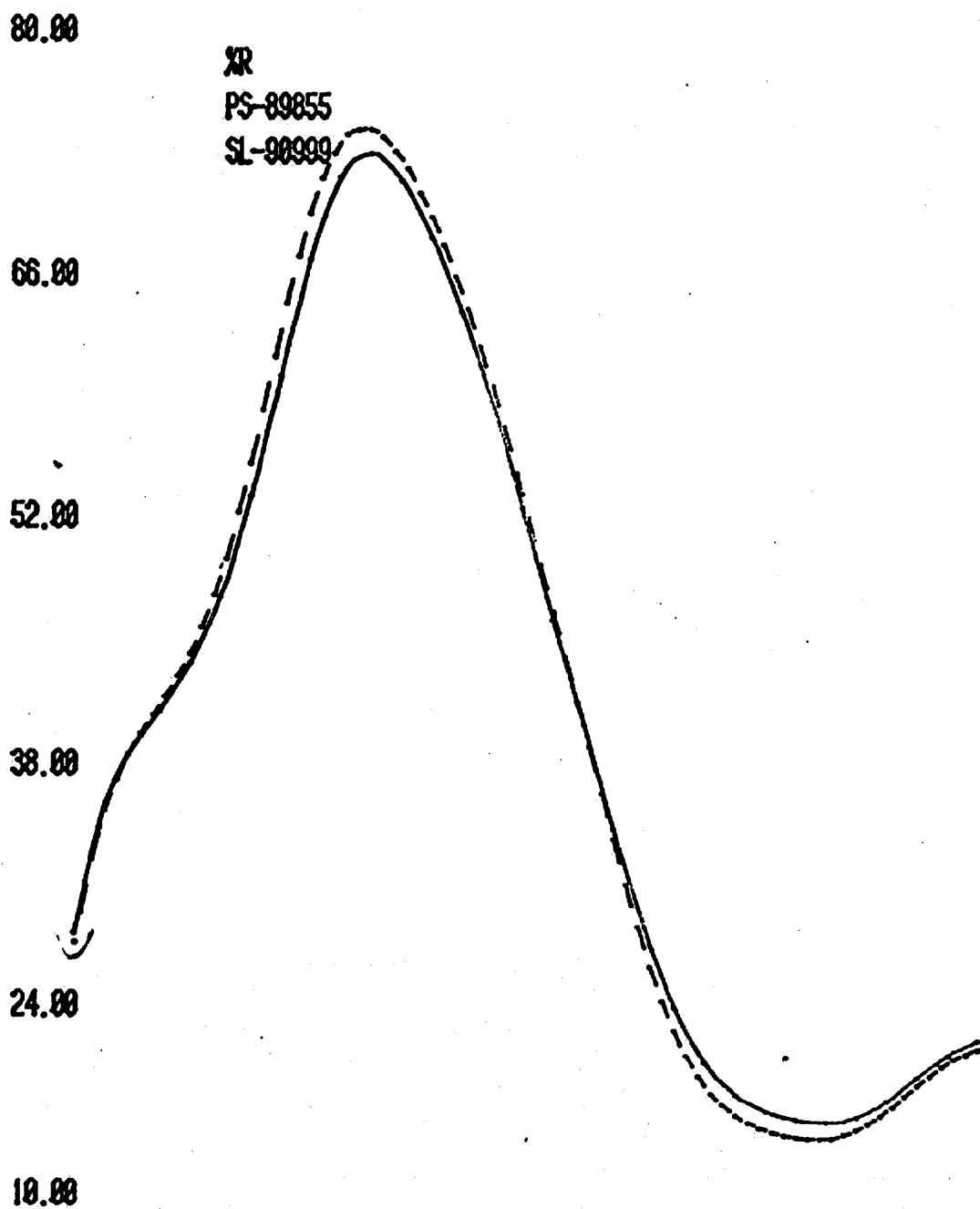
52.00

38.00

24.00

10.00





COLOR		RG	YB	DC	DL
PURPLE HOOVER <i>Good Value</i> MULLER	DUPONT	—	—	—	—
	3M (ACS)	-1.4	0.0	1.4	0.3
	3 ROLL MILL	-3.3	-4.8	5.8	-7.4
BLUE HOOVER MULLER	DUPONT	—	—	—	—
	3M (ACS)	0.0	-0.1	0.1	1.8
	3 ROLL MILL	-0.8	-0.2	-0.8	2.1

DUP050146248