

May 20 1979

MAKING INSTRUCTIONS: BATCH UNIT

243, 244, 246, 247, 262

C.V.

D.V.

CG 03 CODE KY-787-D PKG.

→ DEC-1 33041

EST. WGT. 2230 LBS.

STD. HRS. TIME 5P M

14 YC-2-B 93 4 Lot 23971, 4100#

14 YC-2-B 93 4 Lot 23966, 500#

14 YC-2-B 93 4 Lot 24074, 400#

| PROCESSES     |     | APPROVED BY  |  |
|---------------|-----|--------------|--|
| ( ) KY-787-D  | (S) | EWK 10-19-77 |  |
| ( ) Alternate | ( ) | DCG 10-25-77 |  |
| ( )           | ( ) | MTW 10-26-77 |  |
| ( )           | ( ) | FWP 02-01-79 |  |
| TYPED BY      |     |              |  |
| emw020179     |     |              |  |

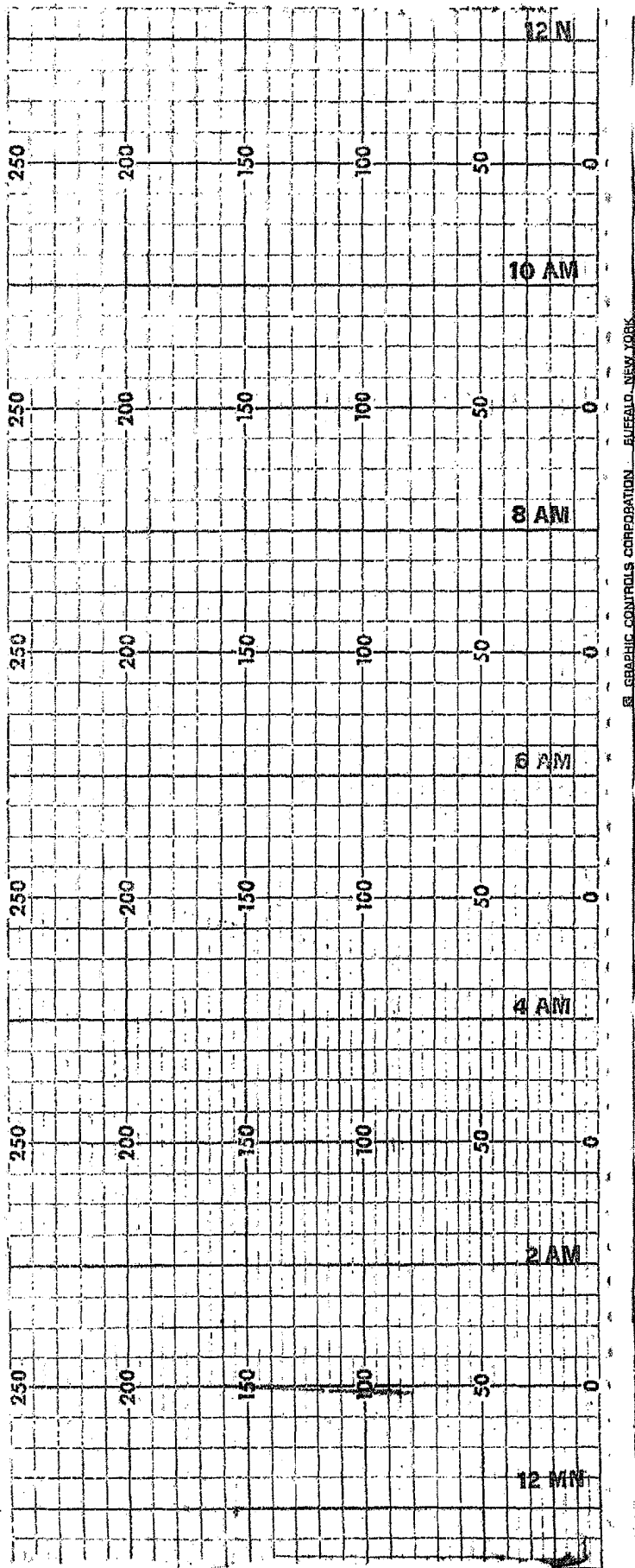
Total Wgt 7230# (REQ)

NON-BLEEDING

| INVENT | NAME: KROLOR® YELLOW MEDIUM                                                                                 | USE LBS.  | N CODE | ACCT. LBS. |
|--------|-------------------------------------------------------------------------------------------------------------|-----------|--------|------------|
| 203    | 1 Run 50" (827 G) water into V-203                                                                          |           |        |            |
| &      | 2 Weigh in drum & pour in                                                                                   | 670       | 32-D   | 670        |
| 205    | 3 Dump in & stir 5 min                                                                                      |           |        |            |
| 1      | Record: Start 11:30 PM                                                                                      | Lot 23971 | 4100   |            |
|        | Fin 1:30 AM                                                                                                 | 23966     | 500    |            |
|        | 75" (1275 G)                                                                                                | 24074     | 400    |            |
|        | 4 Adj to 80" (1360 G)                                                                                       |           |        |            |
|        | 5 Pump V-203 thru Homog at 2400-2600 psi into V-205                                                         |           |        |            |
|        | 6 When V-203 MTY, wash color thru Homog at 1800-2200 psi using minimum water. Use Hot Water                 |           |        |            |
|        | 7 Record: V-205 Vol " & adj to 54" (1900 G)                                                                 |           |        |            |
|        | 8 Inspect Homog strainer & clean if necessary                                                               |           |        |            |
| SV     | 9 Run 5" (200 G) water into V-262 & install temp chart                                                      |           |        |            |
| &      | & start agitator                                                                                            |           |        |            |
| 205    | 10 Pump V-205 thru Homog at 4800-5200 psi into SV-262                                                       |           |        |            |
| 2      | Record: Time Start 7:30 P. Total Min 180                                                                    |           |        |            |
|        | NOTE: If Homog pressure falls below 4800 psi 3-way valve will recirculate slurry to V-205                   |           |        |            |
| ✓      | 11 When V-205 MTY, run in 5" (240 G) water & pump thru Homog at 4800-5200 psi. Rinse in using Hot Water     |           |        |            |
| 349    | 12 While Homog, run 6" (284 G) water into V-349                                                             |           |        |            |
| &      | 13 Run ± 1000# water into V-384 & heat to 110-120°F                                                         |           |        |            |
| 384    | 14 Weigh into V-384 & pump to V-349                                                                         | 3830      | 32-D   | 3830       |
| 3      | 15 Run ± 1000# water into V-384 & pump to V-349                                                             |           |        |            |
|        | 16 Adj V-349 to 25" (1163 G) & stir 15 min or longer                                                        |           |        |            |
|        | 17 Record: OBe 1114 (15.2 ± 0.2) (1113 1117)                                                                |           |        |            |
| SV     | 18 When S 11 Homog complete, adj SV to 26" (2100 G)                                                         |           |        |            |
| 4      | 19 Record: pH 10.6 & adj to 11.1-11.3 using N-7-D diluted to 5% (10 parts water to 1 part N-7-D) Assume 50% | 16        | 7-D    | 8          |
|        | Siphon into SV & Record: pH 11.1                                                                            |           |        |            |
|        | 20 Heat to 190-194°F in 35-45 min (V-262) or in 55-65 min (V-243, 244, 246, 247) &                          |           |        |            |
|        | Record: HT °F & Rec 190 °F                                                                                  |           |        |            |
|        | NOTE: Strike must be started immediately on completion of heating                                           |           |        |            |
| 343    | 21 While heating SV, run 56" (1520 G) water into V-343                                                      |           |        |            |
| &      | 22 Meter in from V-386 M 78, 965 #/Gal 59.4 Gal                                                             |           | 27-D   | 573        |
| 386    | 23 Stir 15 min or longer                                                                                    |           |        |            |
| 5      | 24 Record: OBe 1007 (4.1 ± 0.1) (1007-1008)                                                                 |           |        |            |

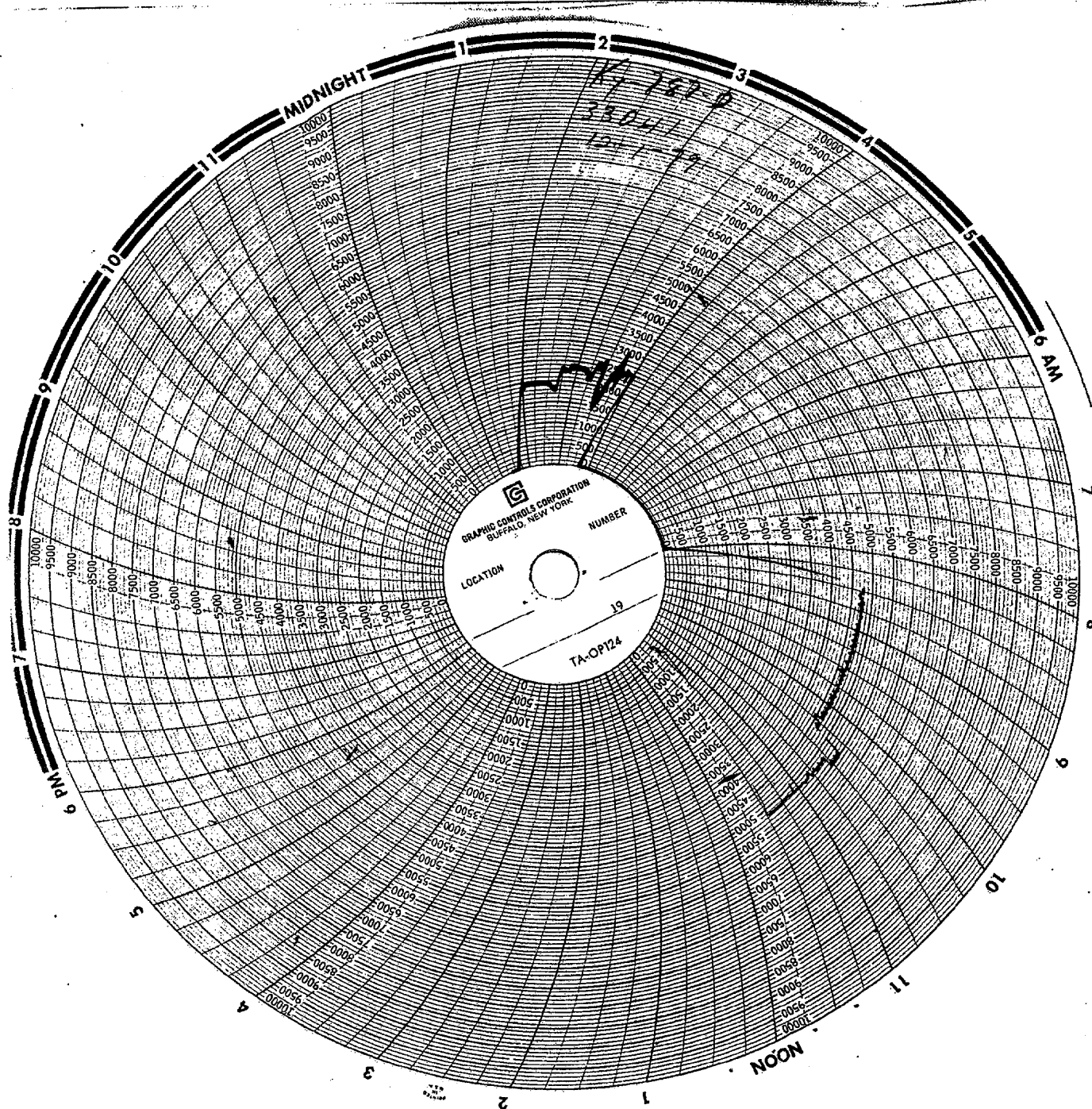
V-262

| QUIPMENT |    | PAGE 2 CG 03 CODE KY-787-D (S) EST. WGT.                                              | 7230 LBS. | USE LBS.             | N CODE  | ACCT LBS.    |
|----------|----|---------------------------------------------------------------------------------------|-----------|----------------------|---------|--------------|
| SV       | 6  | 25 When S 20 heating complete, Record: pH 9.9 (9.6-10.2)                              |           |                      |         |              |
|          |    | 26 Set V-343 acid pump at (69) setting ( $\pm 255$ min)                               |           |                      |         |              |
|          |    | 27 Set V-349 silicate pump at (60) setting ( $\pm 210$ min)                           |           |                      |         |              |
|          |    | 28 Immediately meter in V-343 & 349, maintain SV at 190-194°F during strike           |           |                      |         |              |
|          |    | 29 Record:                                                                            | Start     | Fin                  | Min     |              |
|          |    | V-343                                                                                 | 12:25     | 4:55                 | 270     |              |
|          |    | V-349                                                                                 | 12:25     | 4:25                 | 240     |              |
|          |    | Record:                                                                               | Time      | V-343                | V-349   | SV Normal    |
|          |    |                                                                                       |           | in                   | in      | pH pH        |
|          |    | at 20 min                                                                             | 12:25     | (52) 32              | (22) 22 | 9.9 9.3-10.0 |
|          |    | 40 min                                                                                | 1:05      | (48) 48              | (20) 20 | 9.9 9.3-10.0 |
|          |    | 1 hr                                                                                  | 1:25      | (43) 43              | (18) 18 | 9.9 9.3-10.0 |
|          |    | 2 1/2 hrs                                                                             | 2:40      | (27) 25              | (7) 9   | 9.5 9.3-10.0 |
|          |    | 3 1/2 hrs                                                                             | 3:25      | (10) 12              | (0) 1   | 9.5 9.3-10.0 |
|          |    | Finish                                                                                | 4:40      | (0)                  |         | 7.2 7.5-8.5  |
|          |    | NOTE: (1) If pH not as specified, notify Supervisor & note in log                     |           |                      |         |              |
|          |    | (2) If final pH is above 8.5, adj pH to 7.5-8.5 & Record: pH Assume 78%               |           |                      |         |              |
|          |    |                                                                                       |           |                      |         | 27-D         |
| 330      | 7  | 30 Run 22" (431 G) water into V-330 & heat to 160-170°F                               |           |                      |         |              |
|          |    | 31 Add in 12-13 min                                                                   |           |                      | 700     | 530-A 700    |
|          |    | 32 Stir 5 min & Record: pH 10.1 (9.5-10.5)                                            |           |                      |         |              |
|          |    | 33 Stir 20 min or longer to dissolve for S 46                                         |           |                      |         |              |
| 357      | 8  | 34 Run 29" (210 G) water into V-357 & heat to 135-140°F                               |           |                      |         |              |
|          |    | 35 Dump in & stir to dissolve for S 42                                                |           |                      | 350     | 15-A 350     |
| 302      | 9  | 36 Run 36" (440 G) water into V-302                                                   |           |                      |         |              |
|          |    | 37 Add & stir 2 min for S 44                                                          |           | Assume 50%           | 380     | 7-D 190      |
| SV       | 10 | 38 When V-349 MTY, rinse in with minimum water then set pump to zero setting          |           |                      |         |              |
|          |    | 39 When V-343 MTY, rinse in with minimum water then turn off pump motor               |           |                      |         |              |
|          |    | 40 Turn off steam                                                                     |           |                      |         |              |
|          |    | 41 Sift in                                                                            |           |                      | 250     | 128-A 250    |
|          |    | 42 Run in V-357 from S 35 & stir 5 min                                                |           |                      |         |              |
|          |    | 43 Record: pH 3.4 (3.7-4.2)                                                           |           |                      |         |              |
|          |    | 44 Run in N-7-D from S 37 in 10-12 min & stir 5 min                                   |           |                      |         |              |
|          |    | 45 Record: pH 9.5 (9.0-9.5) & if necessary, adj to pH 9.0-9.5 & Record: pH Assume 78% |           |                      |         | 27-D         |
|          |    | (Dilute 10 parts water to 1 part N-7-D)                                               |           | Assume 50%           |         | 7-D          |
|          |    | Siphon N-7-D into SV                                                                  |           |                      |         |              |
|          |    | 46 Run in V-330 thru 20 mesh screen & stir 20 min                                     |           |                      |         |              |
| 313      | 11 | 47 Run 15" (222 G) water into V-313 & dump in                                         |           |                      | 270     | 20-A 270     |
|          |    | 48 Stir 5 min to dissolve for S 49                                                    |           |                      |         |              |
| SV       | 12 | 49 Run V-313 into SV in 15-20 min                                                     |           |                      |         |              |
|          |    | 50 Stir 15 min                                                                        |           |                      |         |              |
|          |    | 51 Record: pH 9.1 (9.0-10.0)                                                          |           |                      |         |              |
|          |    | 52 Stop agitator (not stop V-343)                                                     |           |                      |         |              |
|          |    | Step V-262 (20 RPM)                                                                   |           | V-243, 244, 246, 247 |         |              |
|          |    | 9 2"                                                                                  |           | 4"                   |         |              |
|          |    | 18 26"                                                                                |           | 50"                  |         |              |
|          |    | START 1:00 A                                                                          |           | FIN 7 A              |         |              |
|          |    | 3:00 PM                                                                               |           | 12:10 PM             |         |              |
|          |    |                                                                                       |           | 409.223              |         |              |



DUP050456374

N32045.01



DUP050456375

N32045.02