(MANUAL) S.V 247 ONLY

DATE PRINTED: 6/17/82
MAKING INSTRUCTIONS: BATCH UNIT

CG 03 CODE KY-907-D

PROCESSES ( ) KY-907-D (G)

APPROVED BY FWP 06/17/82

6/25/82 (DATE) K2L48 (LOT) 6766* (EST WGT F)

COMTYP JOB NAME: 03KY907DMG

| LOCATN | CG | CODE | PQ | LOT | DRY* WEIGHT | DRY CONT | NO. PKG | PKG WGT | TOTAL WEIGHT | ACTUAL USE LBS |
|---|---|---|---|---|---|---|---|---|---|---|
| | 14 | YC-2 | 93 | 14422 | 4450 | | | | | |
| | 14 | YC-2 | 93 | 13489 | 550 | | | | | |
| | 14 | YC-2 | 93 | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |

| EQUIPMENT | | NAME : "KROLOR" YELLOW MEDIUM | USE LBS | N CODE | ACCT LBS |
|---|---|---|---|---|---|
| | | *BEFORE USING SV, MAKE SURE THAT N-28-D LINE IF ANY IS BLANKED OFF.* | | | |
| 203 & 263 | 1 | RUN 60*(990 GAL) WATER INTO V-203 & ADD CAUSTIC | 40 | 7-D | 20 |
| | | RUN AGITATOR ON HIGH SPEED | | | |
| | 2 | WEIGH SODIUM SILICATE INTO DRUM & POUR IN | 500 | 32-D | 500 |
| | 3 | DUMP IN CHROME YELLOW & STIR 5 MIN | 100X50 | YC-2-B | 5000 |
| | | RECORD: START 3PM | | | |
| 1 | | FIN 5PM 13489 | | | 4450 550 |
| | 4 | ADJUST TO 75* (1275 GAL). NOTE: VOLUMES HIGHER THAN 75* MAY CAUSE DUSTING FROM DUMP HOOD. | | | |
| | 5 | WITH AGITATOR ON LOW SPEED PUMP V-203 THRU HOMOG AT 2400-2600 PSI INTO V-~~205~~ 263 | | | |
| | 6 | WHEN V-203 MT, WASH COLOR THRU HOMOG WITH MIN HOT WATER AT 2400-2600 PSI INTO V-205 | | | |
| | 7 | RECORD:V-205 VOL._____* & ADJUST TO 60*(2100 GAL) | | | |
| | 8 | INSPECT HOMOG STRAINER & CLEAN IF NECESSARY | | | |
| ~~200~~ & SV 2 | 9 | RUN 4* (200 GAL) WATER INTO V-247, START AGITATOR & INSTALL TEMP CHART | | | |
| | 10 | PUMP V-205 THRU HOMOG AT ~~4800~~-5200 PSI INTO SV. RECORD: TIME START 1145 TOTAL MINUTES 120 NOTE: IF HOMOG PRESSURE FALLS BELOW 4800 PSI, 3-WAY VALVE WILL RECIRCULATE SLURRY TO V-205 | | | |
| | 11 | WHEN V-205 MT, RUN IN 5*(240 GAL) WATER & PUMP THRU HOMOG AT 4800-5200 PSI INTO SV | | | |
| 349 & 384 3 | 12 | WHILE HOMOG, RUN 6* (284 GAL) WATER INTO V-349 | | | |
| | 13 | RUN 1000# WATER INTO V-384 & HEAT TO 110-120*F | | | |
| | 14 | WEIGH INTO V-384 & PUMP TO V-349 | 2875 | 32-D | 2875 |
| | 15 | RUN 1000# WATER INTO V-384 & PUMP TO V-349 | | | |
| | 16 | ADJ V-349 TO 22*(1041 GAL) & STIR 15 MIN | | | |
| | 17 | RECORD DENSITY: 1.097 G/ML (1.095-1.097) | | | |
| SV 4 | 18 | WHEN S-11 HOMOG COMPLETE, ADJ SV TO 48*(2420 GAL) | | | |
| | 19 | RECORD: PH 10.9 & ADJ TO 11.1-11.3 WITH CAUSTIC AT 5% (10 PARTS WATER TO 1 PART N-7-D) ASSUME 50% | 10 | 7-D | 5 |
| | 20 | SIPHON N-7-D INTO SV & RECORD: PH 11.3 HEAT TO 190-194*F IN 55-65 MIN & REC:HT ____*F & RECORD: ____*F NOTE: STRIKE MUST BE STARTED IMMEDIATELY ON COMPLETION OF HEATING | | | |

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| EQUIPMENT | | PAGE 2 CG 03 KY-907-D 247 | USE LBS | N-CODE | ACCT LBS |
|---|---|---|---|---|---|
| | 21 | WHILE HEATING SV, RUN 39* (1070 GAL) WATER INTO | V-343 | | |
| 343 | 22 | METER IN SULFURIC ACID FROM V-386 | | | |
| & | | MK 19 10719#/GAL, 401 GAL | | 27-D | 430 |
| 386 | 23 | STIR 15 MIN OR LONGER | | | |
| 5 | 24 | RECORD: DENSITY 1.038 G/ML (1.028-1.030) | | | |
| | 25 | WHEN S 20 HEATING COMPLETE, RECORD: PH 10.0 | | | |
| | 26 | SET V-343 ACID PUMP AT 57 SETTING (225 MIN) | | | |
| | 27 | SET V-349 SILICATE PUMP AT 62 SETTING (180 MIN) | | | |
| | 28 | IMMEDIATELY METER IN V-343 & V-349. MAINTAIN SV | | | |
| SV | | AT 190-194*F DURING STRIKE | | | |
| | 29 | RECORD: START FINISH MINUTES | | | |
| | | V-343 430 810 AM 230 | | | |
| | | V-349 430 735 AM 185 | | | |

| | TIME | V-343 INCHES | V-349 INCHES | SV PH | NORMAL PH |
|---|---|---|---|---|---|
| | AT 20 MIN | 450 (36) | (20) | 10.0 | (9.3-10.0) |
| | 40 MIN | 510 (33) | (17) | 10.0 | (9.3-10.0) |
| 6 | 1 HR | 530 (29) | (15) | 10.0 | (9.3-10.0) |
| | 2 HR | 630 (19) | ( 7) | 10.0 | (9.3-10.0) |
| | 3 HR | 930 ( 8) | ( 0) +0 | 10.0 | (9.3-10.0) |
| | FINISH | 815 ( 0) | ( 0) | 7.2 | ( 7.5-8.5) |

| | | | | | |
|---|---|---|---|---|---|
| | | NOTE: IF PH DROPS BELOW 9.3 IN FIRST HOUR, STOP PUMPS & SEE SUPV. IF FINAL PH IS ABOVE 8.5, ADJ TO 7.5-8.5 ASSUME 77% | | 27-D | |
| | 30 | SIFT IN | 220 | 128-A | 220 |
| 385 | 31 | ADD 27* (208 G) WATER TO V-385 | | | |
| 7 | 32 | ADD & STIR FOR 2 MIN FOR S 61 (1D) ASSUME 50% | 120 | 7-D | 60 |
| | 33 | DURING STRIKE CHECK LEVEL IN V-387 | | | |
| 387 | 34 | IF LOW LEVEL LIGHT IS NOT LIT, GO TO S-37 | | | |
| 8 | 35 | IF LOW LEVEL LIGHT IS LIT, VERIFY BY CHECKING | | | |
| | | THAT LOW LEVEL PEG IN VAT IS ABOVE SURFACE | | | |
| | 36 | IF VISUAL CHECK CONFIRMS LOW LEVEL, FOLLOW | | | |
| | | STEARATE MAKE-UP PROCEDURE. | | | |
| | 37 | RUN IN 32* (317 GAL) DO NOT MAKE UP THIS | | | |
| 388 | | SOLUTION MORE THAN 30 MINUTES IN ADVANCE. | | | |
| 9 | | DELAY BETWEEN END OF STEP 43 HEAT-UP AND | | | |
| | | START OF STEP 52 HOMOGENIZAION SHOULD BE | | | |
| | | LESS THAN 30 MINUTES. | | | |
| | 38 | TURN ON STEAM & AGITATOR | | | |
| | 39 | ADJ TO 37* (366 G) AT 178-182*F | | | |
| | 40 | SET BADGER METER FOR 770# | | | |
| | 41 | PUMP IN FROM V-387 THRU UNDERSURFACE | 630 | 169-A | 630 |
| | | DISTRIBUTIORS AS FAST AS POSSIBLE | 70 | 155-A | 70 |
| | 42 | SHUT OFF PUMP | 70 | 160-A | 70 |
| | 43 | STIR 30 MIN AT 178-182*F FOR S 52 | | | |
| | 44 | DO NOT SHUT OFF AGITATOR | | | |
| SV | 45 | WHEN V-349 MT, RINSE IN WITH MINIMUM WATER & | | | |
| 10 | | SET PUMP AT ZERO SETTING | | | |
| | 46 | WHEN V-343 MT, RINSE IN WITH MINIMUM WATER & | | | |
| | | TURN OFF PUMP MOTOR | | | |

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| EQUIP MENT | PAGE 3 CG 03 KY-907-D 247<br>COMTYP JOB NAME: 03KY907DMG | USE LBS | N-CODE | ACCT LBS |
|---|---|---|---|---|
| 47 | HEAT TO 198-200*F IN 5-10 MIN | | | |
| 48 | CLOSE WATER LINE & DISCHARGE VALVES AT STEARATE PUMP | | | |
| 49 | OPEN V-356 DISCHARGE VALVES TO STEARATE PUMP INLET | | | |
| 50 | OPEN WATER VALVE AT STEARATE PUMP & RUN WATER THRU HOMOG AT 2900-3100 PSI TO SEWER | | | |
| 51 | WHILE HOMOG WATER, OPEN HOMOG DISCHARGE VALVE TO SV & CLOSE VALVE TO SEWER | | | |
| 52 | IMMEDIATELY OPEN STEARATE PUMP DISCHARGE VALVE, TURN ON PUMP & HOMOG V-388 TO SV AT 2900-3100 PSI. MAINTAIN SV AT 198-200*F. | | | |
| SV 10 53 | WHILE HOMOG V-388 TO SV, SHUT OFF WATER VALVE AT STEARATE PUMP ASAP | | | |
| CONT 54 | WHEN HOMOG COMPLETE, RINSE IN V-388 WITH HOT WATER FROM HOT WATER MIXER | | | |
| 55 | TURN OFF HOMOG & STEARATE PUMP | | | |
| 56 | STIR 5 MIN AT 198-200*F | | | |
| 57 | SHUT OFF STEAM | | | |
| 58 | RUN IN ALUM USING BADGER METER | 660 | 115-D | 330 |
| 59 | FLUSH ALUM LINE WITH WATER | | | |
| 60 | RECORD: PH 3.1 (3.3-3.7). IF NECESSARY ADJ PH TO 3.3-3.7 (DOWNWARD ONLY) & RECORD PH_____. NOTE: USE LIQUID ALUM, N-115-D. ADD TO SV VIA BADGER METER. STIR 5 MIN AFTER EACH ADDITION. ASSUME 50% | _____ | 115-D | _____ |
| 61 | RUN IN N-7-D FROM S-32 IN 4-6 MIN & STIR 5 MIN | | | |
| 62 | RECORD: PH 3.5 (4.2-4.4) & IF NECESSARY, ADJ TO PH 4.2-4.4 & RECORD PH 4.2 ASSUME 78% | _____ | 27-D | _____ |
| | (DILUTE 10 PARTS TO 1 WITH WATER) ASSUME 50% | 70 | 7-D | 30 |
| | SIPHON N-7-D INTO SV | | | |
| 63 | DO NOT STOP AGITATOR | | | |

| START | FINISH | OPERATOR |
|---|---|---|
| 5:15 PM | 11 PM | 54 |
| 7:00 AM | 11:25 AM | 320 |

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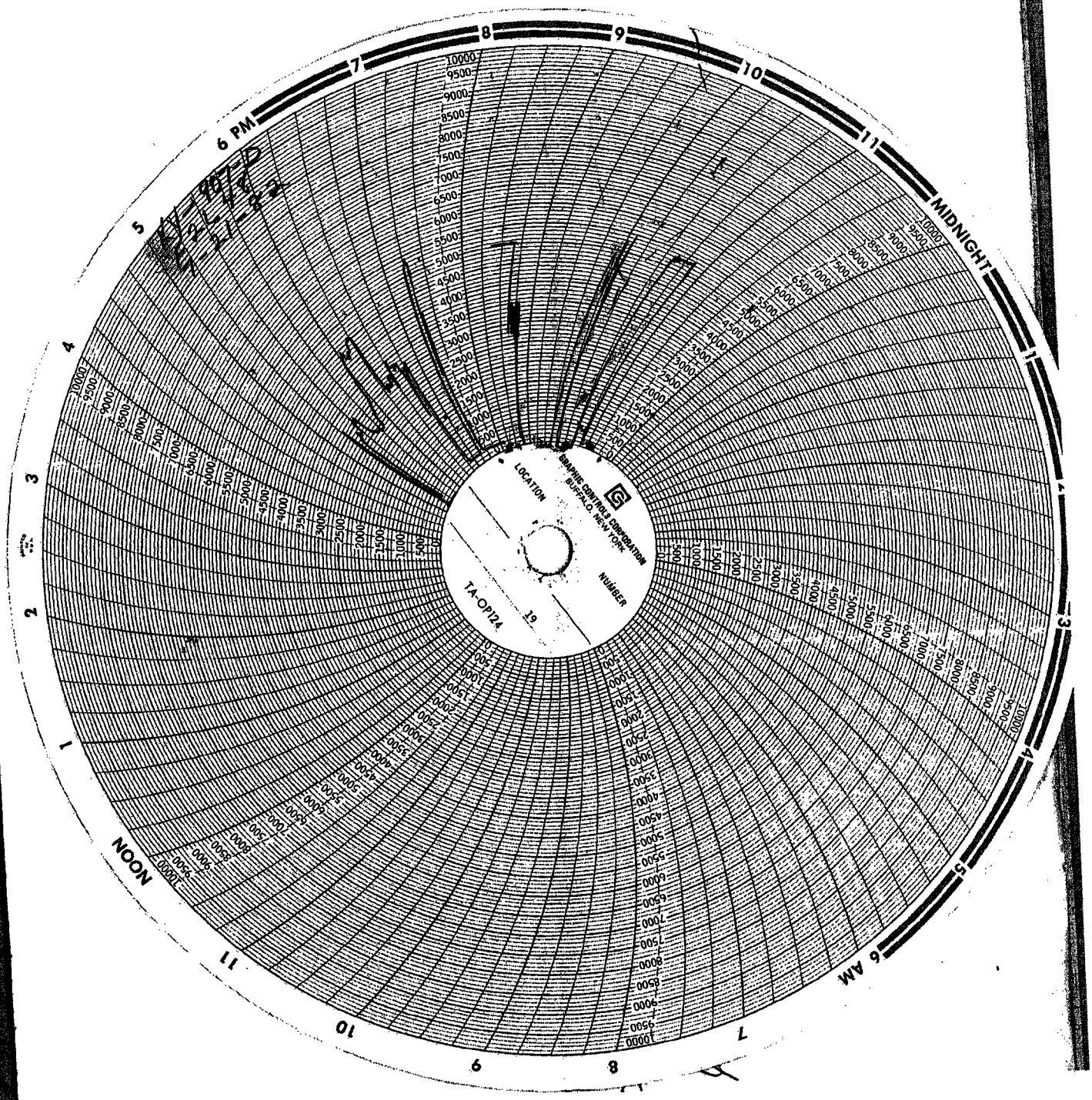


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