CO 16 CODE RC-3-A PKG. _____

→ MAY -0-81- Ξ1290

EST. WGT. 1820 LBS.

STD. HRS. _____ TIME _____ M

PROCESSES		APPROVED BY
(C) RC-3-A	( )	BBK 03-11-77
( )	( )	DCG 05-20-77
( )	( )	MTW 06-06-77
( )	( )	
TYPED BY emw060877		

NON-BLEEDING

EQUIPMENT		NAME: MONASTRAL® RED B	USE LBS.	N CODE	ACCT. LBS.
Prep 1	1	Install Temp & Amp charts			
	2	Weigh ±600# of RC-1/RC-3 Borax Sludge for S 5			
	3	Dip liquid from sludge & add to classifier intake			
	4	Obtain ±200# chopped ice for S 13-B			
HF Mill 2	5	Shovel 600# of Borax Sludge (equivalent to ±300# 100% Borax) into HF Mill NOTE: Total Weight includes liquid removed in S 4			
	6	Add	18	834-B	0
	7	Start cooling water spray			
	8	Stir 3-5 min to uniformity			
	9	Stop agitator & dump in	130	7500-A	0
		NOTE: Record Lot, #100%, & "As Is Lbs" in S 35			
	10	Stir 3-5 min to uniformity			
	11	Add in 5-10 min while agitating	300	972-A	0
	12	Immediately start milling cycle			
	13	Stir 4 hrs, maintaining 38-42 Amps & 110-130°F N-7500-A Lot: any — Milling Hours: 4.0			
		A. After ½ Hr milling add N-972-A or trickle in water to maintain 38-42 Amps. Do not add N-972-A at less than 10 min intervals. Record additional N-972-A used in S 35			
		B. If necessary, add N-57-A to maintain 110-130°F			
		C. If cake forms stop agitator, scrape mill wall to permit heat transfer			
		D. Record necessary data in S's 19, 20, 35, & Pg 4			
Class 3	14	During S 13 stir, hook up lines from Dorr Classifier to V-10 NOTE: Feed valve must be closed			
	15	Obtain two 55 gal drums for S 27			
Shriv 4	16	Set up 20 plates each in No. 1 & No. 2 Shriver Thickeners	MAY 14 1981		
HF Mill 5	17	Add 5-10 gal water to HF Mill. CAUTION: Too much water will cause charge to splash over edge of mill			
	18	Stop agitator & turn off cooling water			

(1981) REV.

EQUIPMENT		PAGE 2 OF 16 CODE (C) RC-3-A EST. WGT. _____ LBS.	USE LBS.	N CODE	ACC LBS.
Misc 6	19	Record:			

Chg No	Date Start	Time Start	Date Fin	Time Fin	Tot Milling Hrs
1	5-7-81	5:30 PM	5-7-81	9:30 PM	4 HRS
2	5-7-81	5:30 PM	5-7-81	9:30 PM	4 HRS
3	5-8-81	9:30 A—	5-8-81	1:30 P—	4 HRS
4	5-8-81	9:30 A—	5-8-81	1:30 P—	4 HRS
5	5-8-81	2 AM	5-9-81	6 AM	4 HRS
6					
7	5-11-81	12 Noon	5-11-81	4 PM	4 HRS
8	5-11-81	12 "	5-11-81	4 PM	
9	5-11-81	7:15 pm	5-11-81	11:15 pm	4 HRS
10					
11	5-11-81	4:30 AM	5-12-81	8:30 AM	4 HRS
12					
13	5/12/81	12:20 pm	5/12/81	4:20 pm	4 HRS
14					

20 Record accuracy once per shift while milling

Date	Time	Chg No	Ammeter Amps	Recorder Amps	HT °F	Record °F
		1+2				
		3+4				
5-8-81	2:30A	5+6	40 - 40	42 - 40		123-129
5-11-81	2:00 P	7+8	40 - 41	42 - 41		123-125
5-11-81	9:45	9+10	41 - 40	43 - 42		124-120
5-12-81	10:30 A	11+12	40 - 41			100-117
5/12/81	2:15P	13+14	41 - 42	42 - 43		119 -127

11 7	21	Add 10" (122 G) water to V-11			
	22	Heat to 140-150°F for S 24			
13/14 8	23	Pump 2 charges from HF Mills to V-13 or V-14			
	24	Wash out HF Mills, with heated water from V-11			
	25	Adj to 24" (408 G) at 140-150°F			
	26	Immediately cool to 75-80°F	6 x 330	57-A	0
	27	Record data on S 35 bottom of Page 3			
Class 9	28	Back wash lines from classifiers to V-13 or V-14			
	29	Place 55 gal drum under sludge discharge & start motor			
	30	Open inlet valve & run V-13 or V-14 thru classifier to V-10 at 2.5-3.0 GPM			
	31	When drum contains ±45 gal of sludge, change drum, weigh & Record in table on bottom of Page 3			
	32	When V-13 or V-14 is MT, close feed valve & backwash line to vat for ½ min			
	33	Open feed valve & drain vat to classifier. Do not wash in vat NOTE: 4 or fewer HF mill charges may be run from V-13 or V-14 without treatment or classification Record: Charge No. 13+14			
Misc 10	34	Repeat S's 1-23 until 14 charges are collected CAUTION: After 9th charge, watch volume in V-10			

K 13930 REV.

DUP050096999

EQUIPMENT		PAGE 3 OF 16 CODE (C) RC-3-A EST. WGT. _____ LBS.										USE LBS.	N CODE	A
Misc	35	Charge unit Raw Materials below												
# 11		Chal Mill No	L-834 No	Rec Sludge #	N-972 #As Is	#100%	#	N-7500-A Lot	#100%	%	#As Is	N-57-A #	Optr No	
		1	1	18	600	300	300	6890	130	99.9	130	2310	105	
		2	2	18	600	300	300	6890	130	99.9	130		105	
		3	1	18	600	300	300	7165	130	99.6	130	2310	27	972-A 16
		4	2	18	600	300	300	7165	130	99.6	130			
		5	1	18	600	300	300	7165	130	99.6	130	2310	88	834-B 25
		6	2	18	600	300	300	7165	130	99.6	130			
		7	1	18	600	300	300	7164	130	99.9	130	2310	348	7500-A 18
		8	2	18	600	300	300	7164	130	99.9	130			
		9	1	18	600	300	300	7164	130	99.9	130	2310	101	57-A 16
		10	2	18	600	300	300	7164	130	99.9	130			
		11	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	130	99.0	131	2310	322	
		12	2	[illegible]	[illegible]	[illegible]	[illegible]	Total	130	99.0	131			
		13	1	18	600	300	300	7021	130	99.0	131	2310	438	
		14	2	18	600	300	300	7147	130	99.9	130			
		Tot		252	8400	4200	4200	—	1820	—	1824	16,170	—	
	36	Enter Raw Material totals in Acc't Lbs column												
10	37	Heat V-10 to 150-160°F												
?	38	Pump V-10 to V-9 CAUTION: Do not overflow V-9												
13	39	Start agitator												
	40	Adj to ±50" maintaining 150-160°F												
	41	Rinse in V-10 & V-10 lines												
	42	Circulate thru Shriver Thickeners to 50" (2220 A) at 150-160°F												
	43	Record: Start Date 5-13-81 Time 10:00 P.M. Vol 50"												
	44	Circulate until effluent reaches 3000 ohms												
	45	Record: Finish Date 5-14-81 Time 2 P.M. Ohms 3000 pH 8.4 (8.4-9.0)												
		NOTE: After 16 hrs washing take ohm reading each four hrs & Record below on chart												
	46	Shut off water												
	47	Circulate thru Thickeners to 23" (1012 G)												
	48	Discharge into 55 gal drums												
	49	While filling drums, take a 1 qt jar sample. Deliver to CIL for D.C.												
	50	Run 10" (450 G) water into V-9												
	51	Heat to 158-162°F												
	52	Recirculate thru Shriver for 15 min or until effluent is clear												
	53	Stop agitator												

START	FIN	OPTR
10 P.M.	4:30 A.M.	114

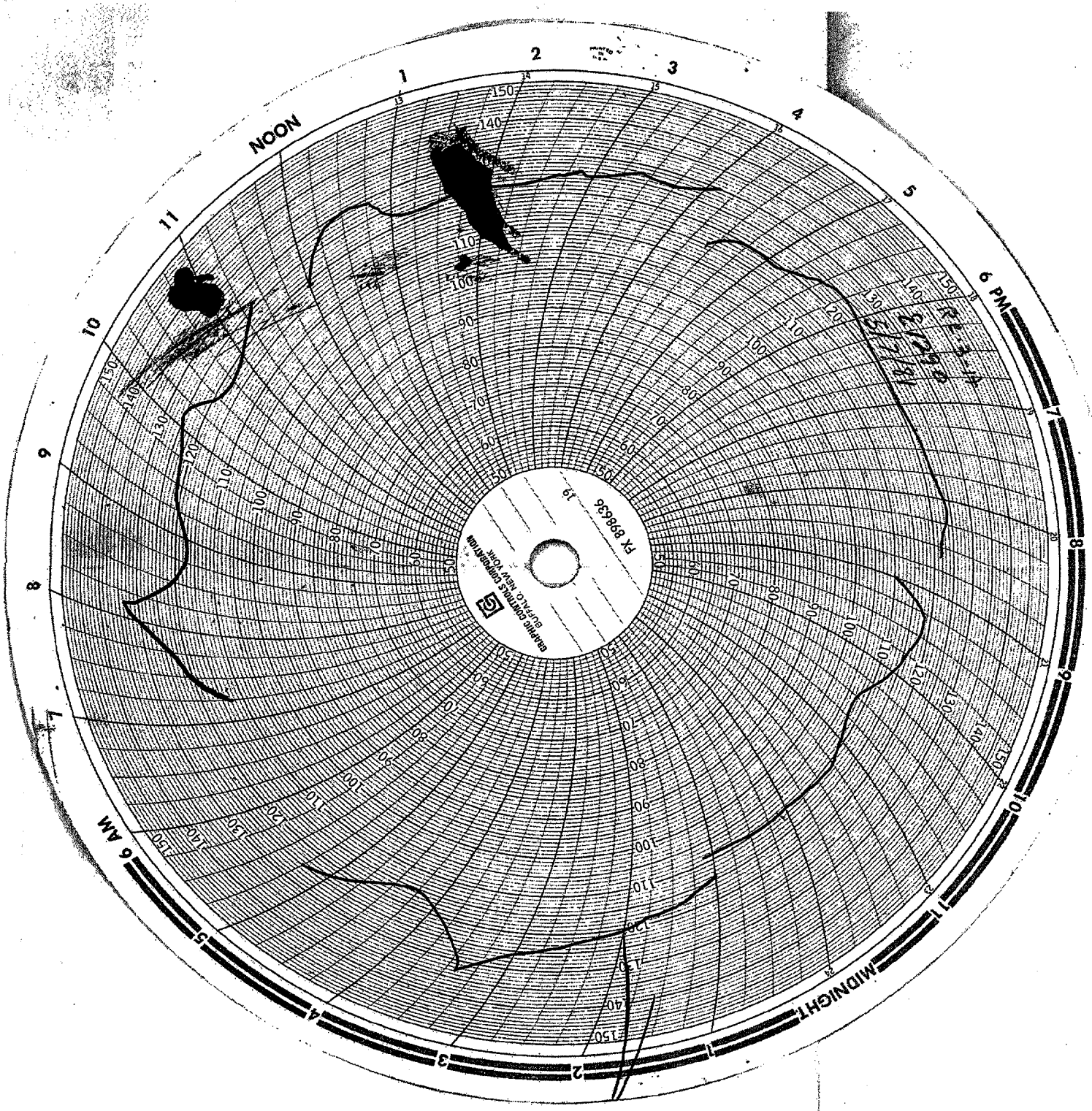
DUP050097000

EQUIPMENT | PAGE 4 OF 16 CODE (C) RC-3-A EST. WGT. _____ LBS. | USE LBS. | N CODE | ACCT LBS.

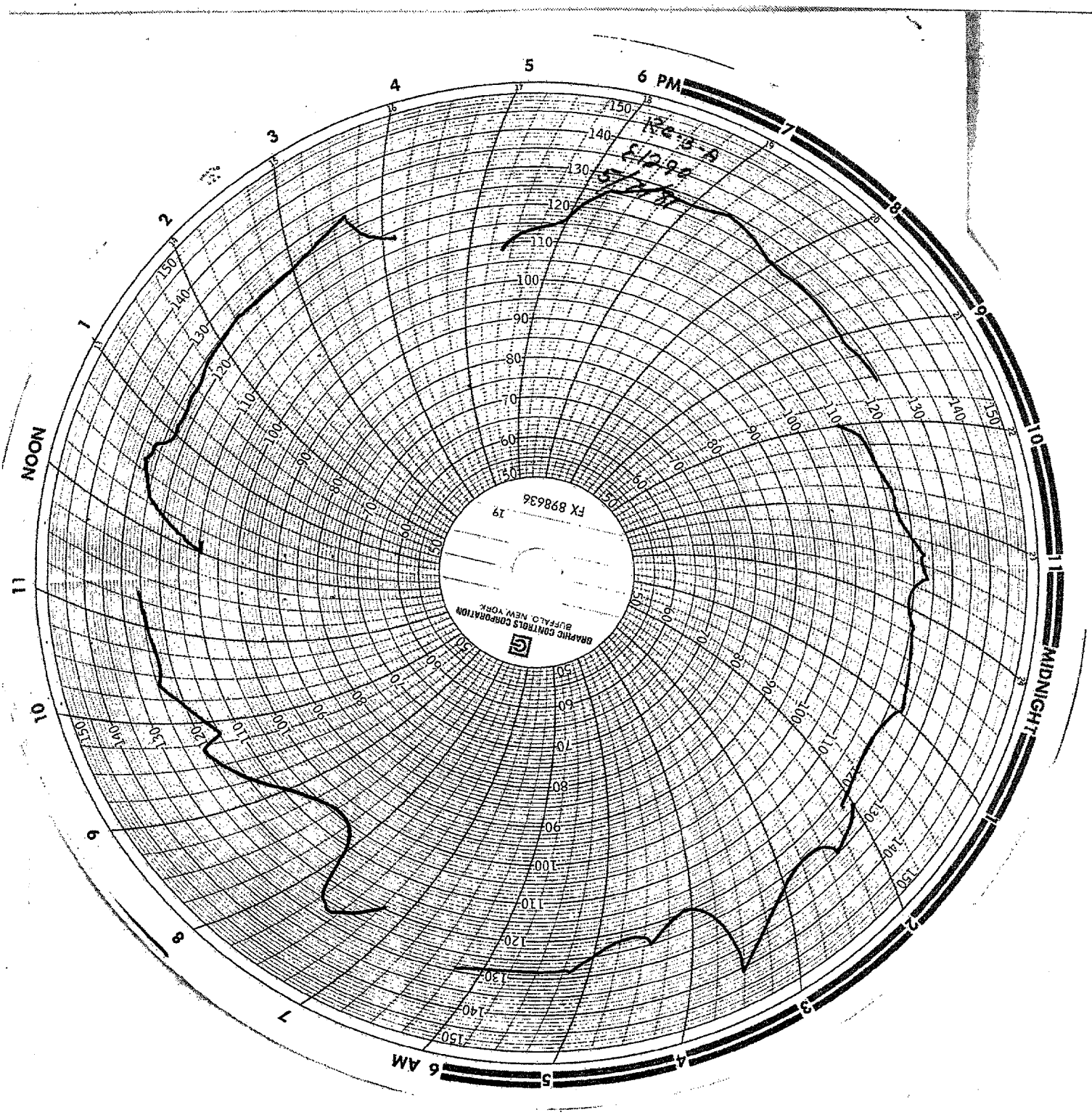
CHG NO	Vat	VOLUME Init	VOLUME Final	FINAL Temp	N-57 Used	SLUDGE Class	Chg No	Vat	VOLUME Init	VOLUME Final	FINAL Temp	N-57 Used	SLUDGE Class
1 & 2													
3 & 4	14	24	43	45	2310	I1200							
5 & 6													
7 & 8													
9 & 10													
11 & 12	14	24	44	48	2310	I1200							
13 & 14													

TIME										
OHMS										
TIME										
OHMS										

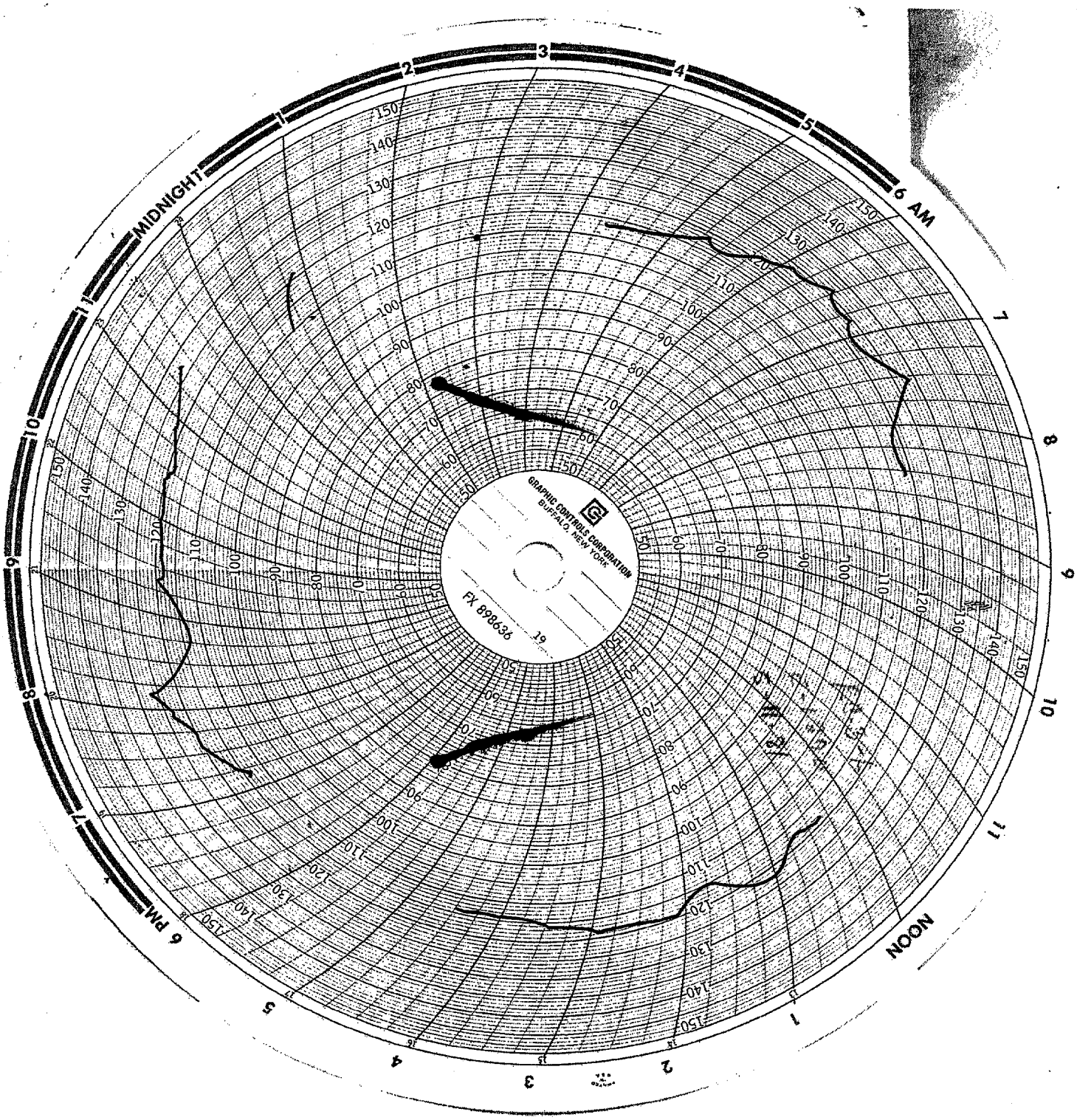
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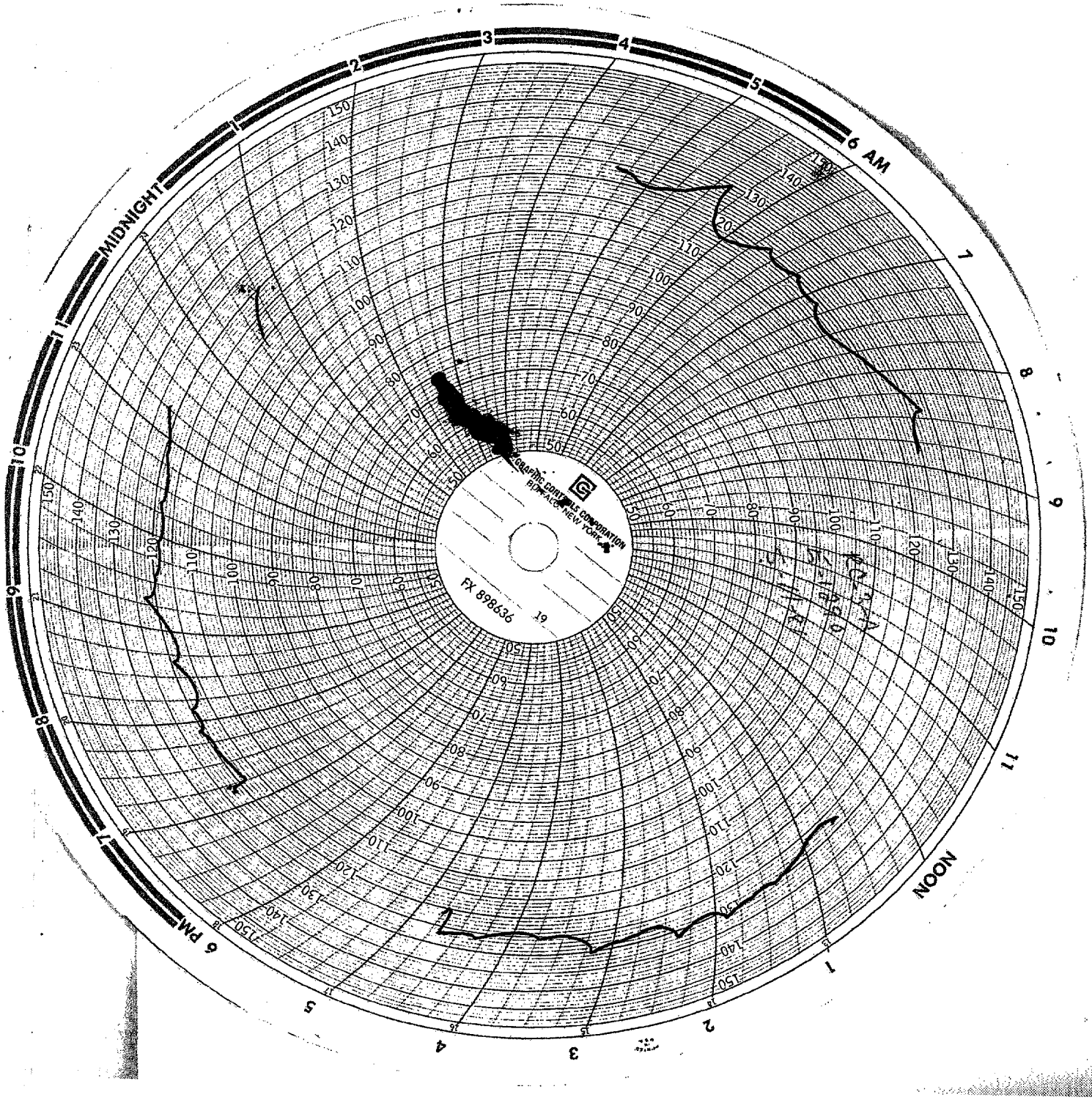
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DUP050097003

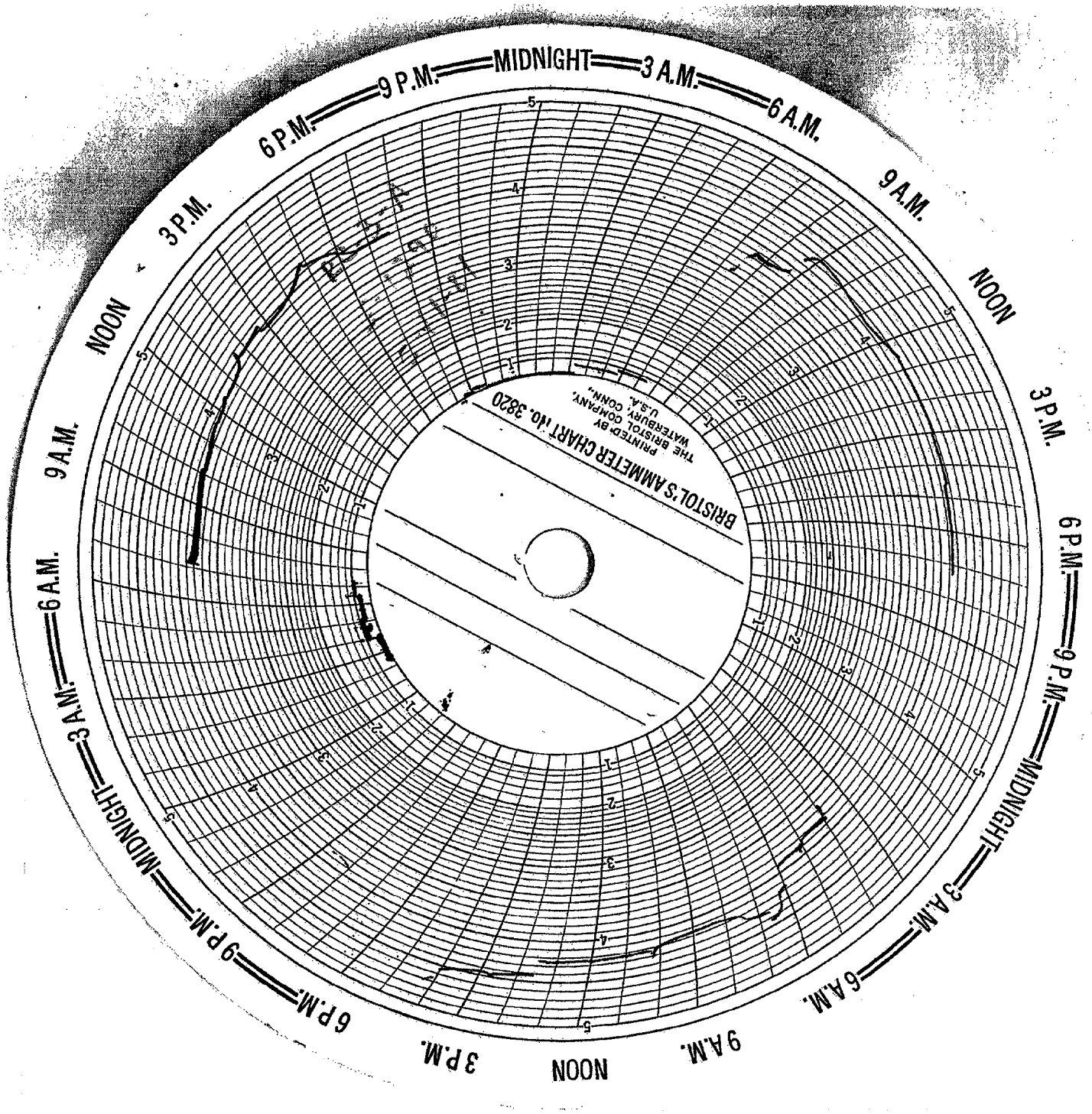


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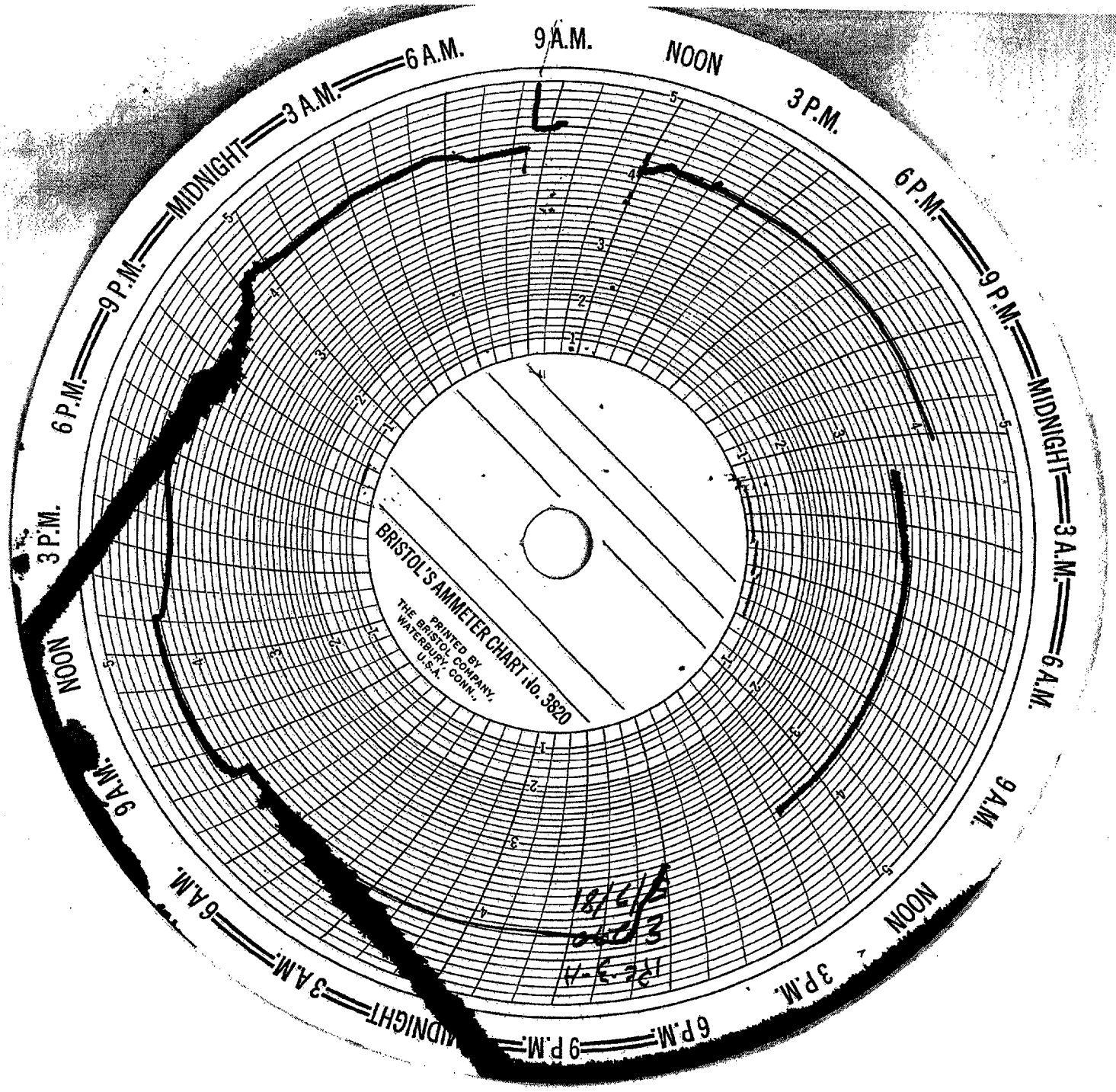
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6 A.M.
9 A.M.
NOON
3 P.M.
6 P.M.
9 P.M.
MIDNIGHT
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9 A.M.
NOON
3 P.M.
6 P.M.
9 P.M.
MIDNIGHT
3 A.M.
BRISTOL'S AMMETER CHART No. 3820
PRINTED BY THE BRISTOL COMPANY, WATERBURY, CONN., U.S.A.



DUP050097007

6 P.M.
9 P.M.
MIDNIGHT
3 A.M.
6 A.M.
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Re-3-A
E1290
5/7/81
BRISTOL'S AMMETER CHART No. 3820
PRINTED BY
THE BRISTOL COMPANY
WATERBURY, CONN.
U.S.A.



DUP050097009