Paper Capacitor 1300 VDC, 85°C life test
Started 12-24-74

Fluid	Failure Times		
MCS1475 + 0.5% anthraquinone	68.75 hrs, 70K		768 hrs
① E.C. impregnated (Aroclor 1016 + Epoxide	72 hrs.	260	
	124	504	
	148	528	
	148	696	
② Aroclor 1016 + 0.5% anthraquinone	44.5 hrs.		
	140.75		
	60K		
③ MCS1588 + 0.01% Amel + 0.5% anthraquinone	718.5 hrs.		
	70K		
MCS1489 + 0.5% anthraquinone	236.75 hrs.		
	308.67		
	645.75		
	50K		

DSW 435390

284992

SUBJECT

2 mfd Paper Capacitor 1320V DC Life Test

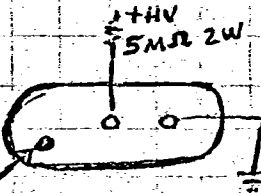
JOB NO.	PREPARED BY (SIGNATURE)	DATE
16-15-0-28	Ray Corp Jr.	12-24-74

Purpose: To life test 2 mfd paper capacitors at 1320V DC and 85°C.

Procedure: 1320V DC and at 85°C, test started @ 11:00 Am 12-24-74.

Capacitors were connected as follows:

1320 V DC @ 85°C
(1000 V/mil)



Discontinued test @ 9:30 Am 1-24-75

32 day 768 hrs

oven Arrangement

Top Rear

Left

1K Elmwood Mill
MCS 1475 (drum #22, 12-10-74)
+0.5% Anthraquinone (Imp. 12-12-74 MIC 284984)

1320V

1	2	3	4	5	6	7	8
			7:45 Am 12-27-74	5266.25 hr Total Capacitor Exposure			
			68.75 hrs	12.5% failed			
				5740 hrs Total possible for 8 Capacitors			

Data failed

Top Front

Aroclor 1016 (lot KD04-743)
+0.5% Anthraquinone (Imp. 11-21-74 MIC 284982)

1320V

1	2	3	4	5	6	7	8
4465.5 hr 7:30 Am 12-16-74	4740.25 hr Total Exposure						
110.75 hr 7:45 Am 12-28-74	25% failed						
	5740 hrs Total possible for 8 Capacitors						

Data failed

Bottom

Aroclor Treated MCS 1588 (drum #5, MIC 284439
+0.01% Ionol
+0.5% Anthraquinone (Imp 12-13-74 MIC 284985)

1320V

1	2	3	4	5	6	7	8
						7:30 Am 1-27-75	5516.0 hr Total Exposure
						718.5 hrs	12.5% failed
							5740 hrs Total possible for 8 Capacitors

Data failed

MCS 1489 (lot KD06-20)
+0.5% Anthraquinone (Imp 11-27-74 MIC 284983)

1320V

1	2	3	4	5	6	7	8
							5278.3 hr Total Exposure
							50% failed
							5740 hrs Total possible for 8 Capacitors

Data failed

Right

E C impregnated Arochlor Epoxide
1300V

1	2	3	4	5	6	7	8
7:45 Am 12-27-74	7:45 Am 12-31-74	7:45 Am 1-22-75	7:45 Am 12-31-74	8:00 Am 1-14-75	9:45 Am 1-16-75	7:45 Am 12-30-74	7:30 Am 1-8-75
68.75 hrs	263 hr Total Exposure						
12.5% failed	100% failed						
5740 hrs Total possible for 8 Capacitors	5740 hrs Total possible for 8 Capacitors						

Data failed

(2681.7 hr 7:40 Am 1-6-75)
(718.5 hr 7:30 Am 1-23-75)
(Cumm) 3115 Am 1-20-25 hr
#5278.3 Total Exposure
50% failed
5740 hrs Total possible for 8 Capacitors

Note: Capacitors were checked each day to see if they had failed, except weekends and holidays

READ AND UNDERSTOOD BY

DATE

DSW 435391

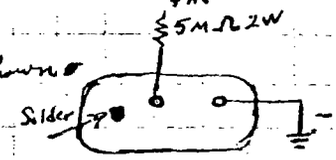
STLCOPCB4088452

2 ufd EC paper, 1320V DC Life test

JOB NO.	PREPARED BY (SIGNATURE)	DATE
16-15-0-28	Raylox Jr.	1-24-75

Purpose: To life test 2 ufd E.C. paper capacitors @ 1320V DC at 85°C.
Procedure: 1320V DC @ 85°C, test started @ 10 40/Am, 1-24-75.

Capacitors were connected as shown



Note! Raised line voltage to 1450VDC @ 9:10 Am, 4-14-75

Raised to 1550 VDC (line) @ 9 10/Am 4-22-75

Raised supply voltage to 1650VDC @ 9 10/Am, 4-29-75

Oven Arrangement

Top Rear

Raised supply voltage To 1750 VDC @ 9 10/Am 5-6-75

Raised supply voltage to 1850 VDC @ 9 10/Am 5-13-75

Raised supply voltage to 1950VDC @ 9 10/Am 5-20-75

Raised supply voltage to 2050 VDC @ 9 10/Am 5-28-75

Left

MCS 1475 + 0.5% Anthraquinone (Imp 1-9-75, MIC 284993)

1	2	3	4	5	6	7	8
Observed time and date of failure							
(24 hrs/1550) 9 10/Am 4-23-75	812.5 hrs. 7 10/Am 2-27-75	(24 hrs/1550) 9 10/Am 4-23-75	(48 hrs/1750) 9 10/Am 5-8-75	(24 hrs/1650) 9 10/Am 4-30-75	1271 hrs. 9 40/Am 3-18-75	1440 hrs. 7 40/Am 3-25-75	1580 hrs. 7 40/Am 3-31-75

Right

MCS 1475 + 0.5% Anthraquinone + 0.3% Unox 221 (Imp. 1-10-75, MIC 284995)

1	2	3	4	5	6	7	8
Observed time and date of failure							
(960 hrs/2050V) 9 10/Am 7-7-75	(1032 hrs/2050V) 9 10/Am 7-10-75				(144 hrs/1950V) 9 10/Am 5-27-75		(168 hrs/2050V) 9 10/Am 6-4-75

Top Front

MCS 1475 + 0.3% Unox 221 (Imp. 1-14-75, MIC 284996)

1	2	3	4	5	6	7	8
Observed time and date of failure							
		(960 hrs/2050V) 9 10/Am 7-7-75		(648 hrs/2050V) 10:40 Am 6-24-75	(2400 hrs/2050V) 9 10/Am 9-5-75		(2400 hrs/2050V) 9 10/Am 9-5-75

MCS 1588 + 0.01% Ionol + 0.3% Unox 221 (Imp. 1-15-75, MIC 284998)

1	2	3	4	5	6	7	8
Observed time and date of failure							
(168 hrs/1850V) 9 10/Am 5-20-75	(144 hrs/1950V) 9 10/Am 5-27-75	(120 hrs/2050V) 9 10/Am 6-2-75	(48 hrs/1950V) 9 10/Am 5-23-75	(144 hrs/2050V) 9 10/Am 6-3-75	(192 hrs/2050V) 9 10/Am 6-5-75	(792 hrs/2050V) 9:10 Am 6-30-75	(120 hrs/2050V) 9 10/Am 6-2-75

Bottom Rear

MCS 1588 + 0.01% Ionol + 0.5% Anthraquinone (Imp 1-17-75, MIC 28500)

1	2	3	4	5	6	7	8
Observed time and date of failure							
977 hrs. 10 40/Am 3-10-75	670.34 hrs 9:00 Am 2-21-75	(24 hrs/1650V) 9 10/Am 4-30-75	(48 hrs/1550V) 9 10/Am 4-24-75	857 hrs. 7 40/Am 3-5-75	(94.5 hrs/1650V) 9 10/Am 4-18-75	(144 hrs/1750V) 9 10/Am 5-12-75	(24 hrs/1650V) 9 10/Am 4-30-75

MCS 1588 + 0.01% Ionol + 0.5% Anthraquinone + 0.3% Unox 221 (Imp 1-21-75, MIC 296415)

1	2	3	4	5	6	7	8
Observed time and date of failure							
		(2808 hrs/2050V) 9 10/Am 9-22-75		(2640 hrs/2050V) 9 10/Am 9-15-75			

(Note: Capacitors checked daily except weekends and holidays)

READ AND UNDERSTOOD BY	DATE

DSW 435392

STLCOPCB4088453