PROGRESS REPORT
TECHNICAL SERVICES DEPT. – W.G. KRUMMRICH PLANT

JOB NO.	REPORT NO.	DATE
91370:3198	5	1/21/66

W.G. KRUMMRICH PLANT		RESEARCH	GENERAL OFFICE	OTHERS
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TITLE: Aroclor - Improve Electrical Grade Quality

PERSONNEL: D. R. Middleton, W. G. Kramper (J. R. Savage)

PROBLEM: Report isomer analysis of Aroclor 1242 chlorinated without catalyst basket.

SUMMARY:

During October 1965, Aroclor 1242 and 1260 was made in one of the WGK chlorinators with the catalyst basket removed. The details of this test were reported in Progress Report No. 4.

Some additional Aroclor 1242 was made in the chlorinator without a basket during December 1965. 20 drums of this material was shipped to Electrical Utilities at La Salle, Illinois for customer evaluation. The analysis of the material shipped is reported in Appendix A.

Samples of Aroclor 1242 made during both plant tests were sent to Anniston for isomer analyses. The results are reported in Appendix B, where they are compared to normal WGK and Anniston production material. No definite conclusions can be made about any differences of WGK material made with or without the basket due to the limited data but it appears there might be a slight shift of the middle and higher chlorinated isomers. The material made without a basket has a slightly more peaked isomer distribution. All of the WGK material analyzed differs significantly from Anniston material, in that it has a more peaked distribution with a higher percentage of middle isomers, and less low and high isomers.

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Acknowledgement

The assistance of J. A. Liddle, Anniston, in providing isomer analyses is appreciated.

Future Work

If the Aroclor made without a basket is accepted by customers, it is recommended the baskets be removed from all the chlorinators.

W. G. Kramper

W. G. Kramper
Technical Services Department

WGK:gg

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LOT KE - 474 ANALYSIS

SHIPPERS NO. 574427

Property	Analysis
Appearance	W. W. Liq.
Turb.	None
Res.	None
Color	10 APHA
Acid No.	0.001 mg KOH/gr.
Water	0.0015%
Cl	0.02 ppm
Ref. Index at 25°C	1.6248
Sp. Gr. at 25/15.5	1.381
Visc. at 100°F	84.3 SUS
Pour Pt.	- 16°C
Dielectric Strength at 25°C	49 KV
PF at 60	3.51
PF at 1000	0.22
DC at 60	4.89
DC at 1000	4.88
Resistivity at 100°C	$1,280 \times 10^9$
Dist Range	
10%	334°C
90%	355°C
Unstable Chlorides	0.20 ppm
Monsanto Stability	0.24 ppm
West. Stability	0.30 ppm
Ther-Chem. Stability	0.34 ppm

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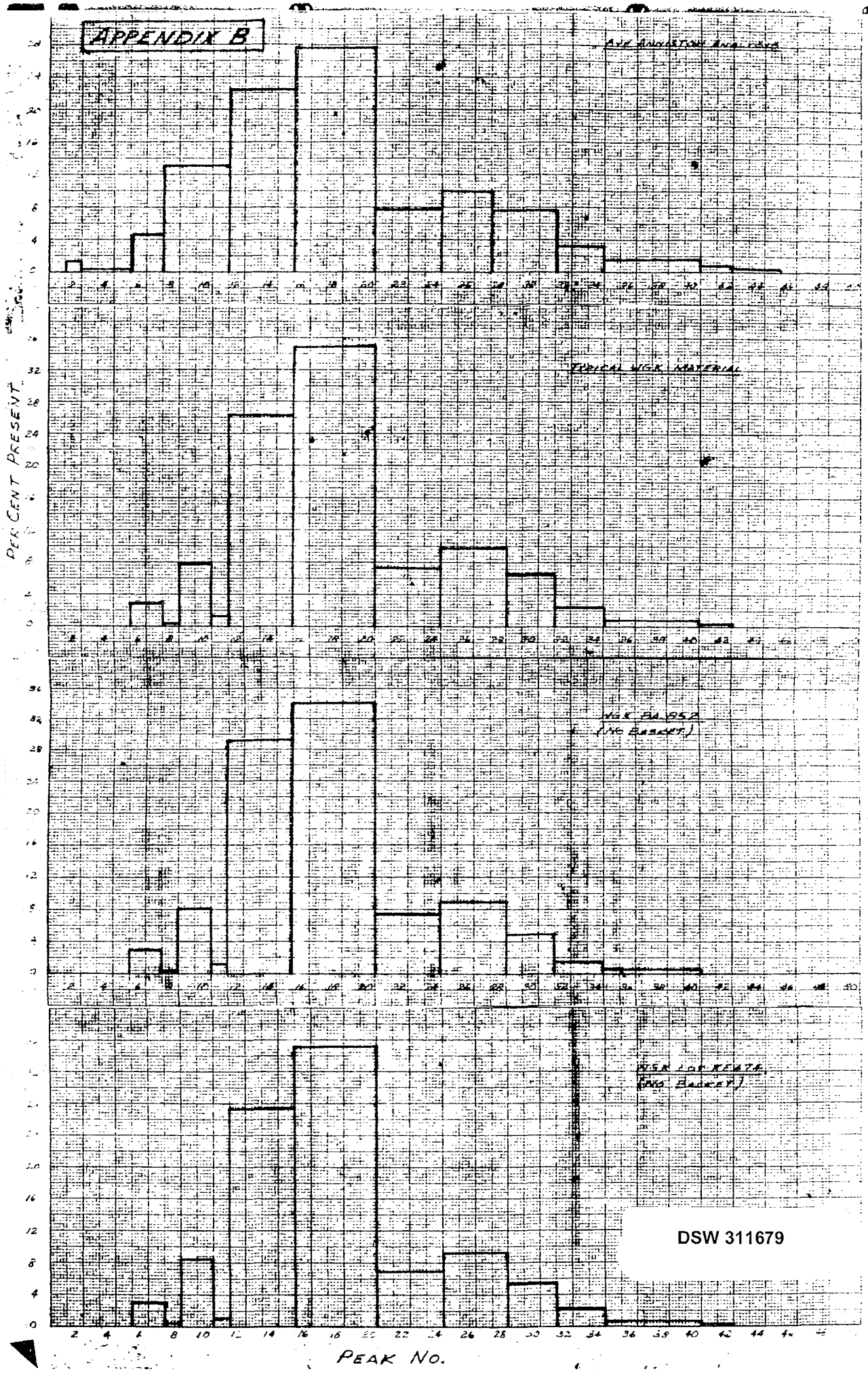
APPENDIX B



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