

Monsanto INDUSTRIAL CHEMICALS CO.

FROM (NAME & LOCATION) E. S. Tucker - South Second Street Laboratories - St. Louis

DATE January 13, 1972

cc: R. E. Keller - GO

SUBJECT PRELIMINARY PCB TEST ERROR STUDY

W. B. Papageorge - GO

W. R. Richard - GO

R. H. Munch - Res. 2

REFERENCE

G. L. Bratsch - WGK

W. C. Engman - WGK

TO :H. J. Horner/H. L. Campbell - WGK
J. T. Bell/M. D. Turner - Anniston

A. E. Leisy - WGK

E. E. Stewart - WGK

P. E. Heisler - GO

E. G. Wright - Anniston

J. C. Landwehr - Anniston

J. F. Nemeth/A. E. Peterson - JI

The levels and types of PCB's found by each laboratory in the PCB fortified water samples are shown in the following tables.

AROCLOR 1242

PPM Added	PPM Found		
	A/S	WGK	Ann.
1 0.00	ND	ND	ND
2 0.57	0.74	1.04	0.78
2 0.57	NA	NA	0.40
3 0.57	0.86	0.57	0.45
3 0.57	0.92	NA	NA
4 5.68	1.07	6.70	5.40
4 5.68	NA	8.80	NA
5 5.68	5.25	6.55	9.90
5 5.68	NA	NA	8.40
6 0.00	ND	ND	ND

AROCLOR 1254

PPM Added	PPM Found		
	A/S	WGK	Ann.
1 0.00	ND	ND	ND
2 1.04	0.92	1.05	0.75
2 1.04	NA	NA	0.20
3 0.10	0.07	0.15	ND
3 0.10	0.06	NA	NA
4 1.04	ND	ND	2.95
4 1.04	NA	ND	NA
5 0.52	0.52	1.20	ND
5 0.52	NA	NA	ND
6 0.10	0.06	0.07	0.03

AROCLOR 1260

1 0.00	ND	ND	ND
2 0.00	ND	ND	ND
2 0.00	NA	NA	ND
3 0.00	ND	ND	ND
3 0.00	ND	NA	NA
4 1.27	ND	2.84	2.18
4 1.27	NA	4.16	NA
5 0.00	ND	ND	ND
5 0.00	NA	NA	ND
6 0.00	ND	ND	ND

TOTAL PCB

1 0.00	ND	ND	ND
2 1.61	1.66	2.09	1.53
2 1.61	NA	NA	0.60
3 0.67	0.93	0.72	0.45
3 0.67	0.98	NA	NA
4 7.99	1.07	7.54	10.53
4 7.99	NA	12.96	NA
5 6.10	5.77	7.75	9.9
5 6.10	NA	NA	8.4
6 0.10	0.06	0.07	0.03

ND - None detected
NA - Not analyzed

DSW 296282

STLCOPCB4066226

PRELIMINARY PCB TEST ERROR STUDY

January 13, 1972

Page 2

SUMMARY OF STATISTICAL ANALYSIS - PCB TEST ERROR STUDY

A. Aroclor 1242

95% Confidence Limits, % of Amount Present

1. Based on all data: $116.9 \pm 109.8\%$
2. Omitting stray point: $125.9 \pm 100.2\%$
3. Bias = 25.9%
4. 95% Limits, repeat results on same sample = $+78.9\%$

B. Aroclor 1254

95% Confidence Limits, % of Amount Present

1. Based on all data: $82.3\% \pm 181.46\%$ (limits not symmetrical)
2. Bias = 17.7%

Note: In four cases, No. 1254 was detected; in two cases more than twice the amount present was picked up.

C. Aroclor 1260 - Data not analyzed.

D. Total PCB

95% Confidence Limits, % of Amount Present

1. Based on data omitting stray point: $113.8 \pm 58.7\%$
2. Bias = 13.8%

E. Comments

1. No Significant Differences Among Laboratories were Detected.
2. No Significant Differences Among Samples were Detected.
3. Confidence Limits of Laboratory Means, Aroclor 1242.

A/S = $99.3 \pm 48.8\%$

WCK = $133.6 \pm 48.8\%$

Anniston = $118.0 \pm 48.8\%$

E. S. Tucker

J. D. Hinchey

db

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