Monsanto

FROM (NAME & LOCATION): E. S. Tucker - Technology Department - S. Second Street

DATE: December 3, 1970

SUBJECT: PCB CONTENT OF PENSACOLA WHITE OR BAY SHRIMP

REFERENCE:

cc: R. E. Keller - Res. 1
E. P. Wheeler - GO
P. B. Hodges - GO
A. J. Zabinski - Pensacola

TO: W. B. Papageorge
General Offices

Approximately 2-3 pounds of white or bay shrimp were submitted by Pensacola Plant personnel for PCB analysis. The shrimp were caught 9-30-70, shipped 10-5-70, and analyzed as soon as possible thereafter. The sampling site was described as follows, "East side of Escambia Bay starting at the I-10 bridge and continuing dredge to south of Indian Cayou (1.5 mi. diag.)". (See map.)

Prior to extraction, the shrimp were divided into four groups; two which were analyzed whole after washing with distilled water and two which were decapitated, shelled, and de-veined prior to analysis. The estimated PCB content of each group was as follows:

OR Log No. 458

Sample No.	Sample Description	Shrimp/ Group	Estimated+ ppm PCB's*	
			Wet wt.	Lipid wt.
1	Whole	6	0.5	31.5
2	Whole	7	0.6	65.4
3	Shelled	7	0.1	12.5
4	Shelled	7	0.2	25.4

+Isomer distribution altered with respect to standard.

*Calculated as Aroclor 1254.

Although the presence of PCB's was established with a fair degree of certainty by comparison of retention times (see attached table) we were unable to verify this by GC/MS analysis because of interference from higher levels of non-EC active organic interferences in the concentrated extracts.

If it is important enough that we make an unequivocal identification, another sample will have to be collected and a second attempt made.

E. S. Tucker

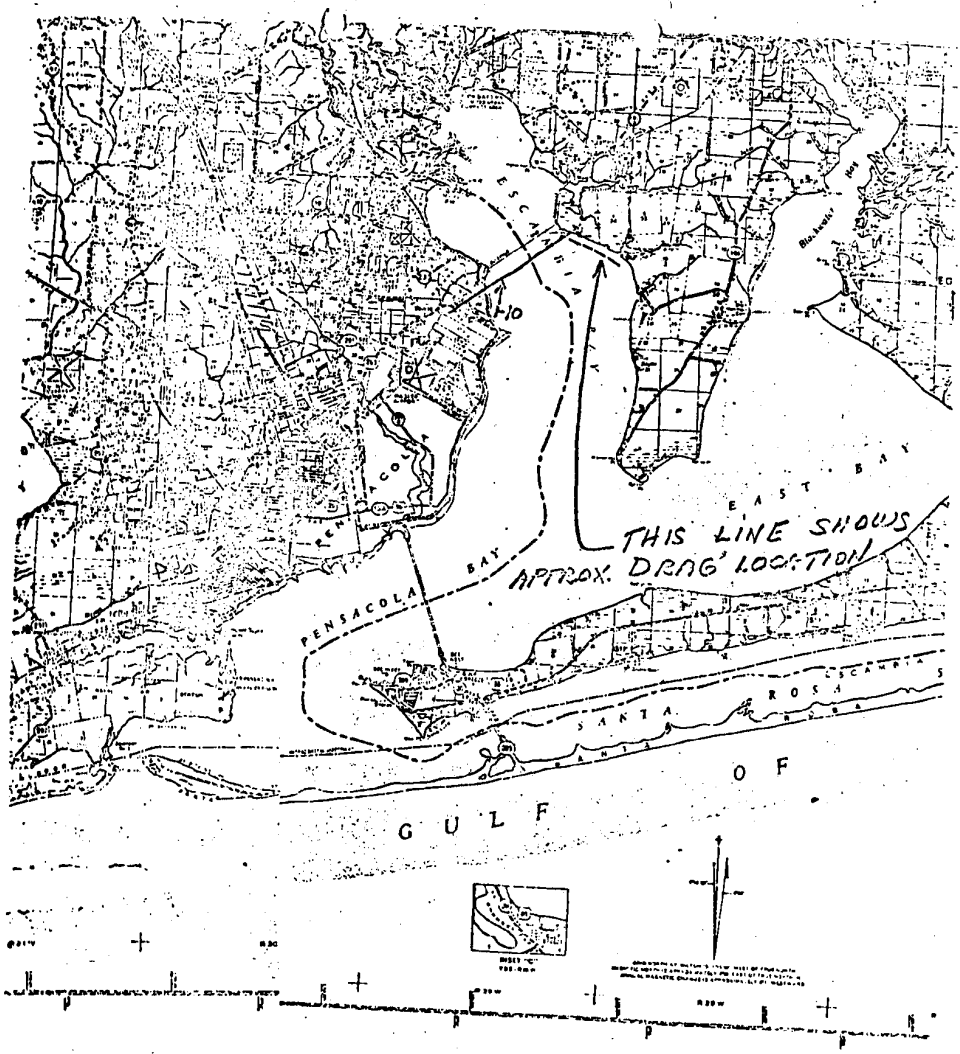
db
Attach.

MONS 099200

IN 10 REV 11-69

RETENTION TIMES OF EC PEAKS FOR UNKNOWNS AND AROCLOR 1254

Peak No.	Aroclor 1254 Std.	Sple 1	2	3	4
1	2.1	2.1	2.1	2.1	2.1
2	2.6	2.6	2.6	2.6	2.6
3	3.1	3.1	3.1	3.1	3.1
4	3.7	3.7	3.7	3.7	3.7
5	4.0	4.0	4.0	4.0	4.0
6	4.3	4.3	4.3	4.3	4.2
7	4.9	-	-	-	-
8	5.3	5.1	5.2	5.3	5.0
9	5.7	5.7	5.6	5.6	5.7
10	6.3	6.2	6.1	6.2	6.1
11	7.3	7.3	7.3	7.3	7.2
12	8.7	8.6	8.6	8.7	8.6
13	9.9	9.8	9.7	9.8	9.8
14	13.2	13.1	13.0	13.1	13.1
15	15.5	15.3	15.3	15.3	15.3
16	20.3	20.3	20.3	20.3	20.4


ESCAMBIA BAY
I-10
PENSACOLA
PENSACOLA BAY
EAST BAY
THIS LINE SHOWS
APPROX. DRAG LOCATION
SANTA ROSA
ESCAMBIA
GULF
OF

MONS 099202