



**MEMORANDUM**

**Date:** 06 Jun 02

**To:** Dave Sawicki, Project Manager, Tetra Tech EM Inc. (Tetra Tech)  
Superfund Technical Assessment and Response Team (START) for Region 5

**From:** Nancy McDonald, Chemist, Tetra Tech START for Region 5

**Subject:** Data Validation for  
St. Clair Shores Site  
St. Clair Shores, Michigan  
Analytical Technical Direction Document (TDD) No. S05-0203-003  
Project TDD No. S05-0203-002

Laboratory: AAC Trinity (AACT), Farmington Hills, Michigan  
Work Order No. 02-0865  
Polychlorinated Biphenyl (PCB) Congener Analysis of One Sediment Sample and One Water Sample

This is an addendum to the previous memorandum regarding data validation for the St. Clair Shores site dated 03 Jun 02. Sediment sample M-4335-S and water sample M-4335-SW were also analyzed by AACT using U.S. Environmental Protection Agency SW-846 Method 8270C for PCB congener analysis. PCB congeners were requested for qualitative purposes only and were reported as tentatively identified compounds (TIC). Aroclors are composed of isomers or congeners which may be analyzed individually. A number of TICs were reported for sediment sample M-4335-S and most were reported as PCB congeners. One TIC, a hydrocarbon, was reported for water sample M-4335-SW. The TIC concentrations reported on the summary forms in the attachment are concentrations in the sample extract, and cannot be used and interpreted as water or sediment concentrations.

**ATTACHMENT**

**AACT SUMMARY OF SAMPLE ANALYTICAL RESULTS**

(Two Sheets)

## Tentatively Identified Compound (LSC) summary

Operator ID: BECKY Date Acquired: 29 Mar 2002 4:55 pm  
 Data File: D:\HPCHEM\DATA\032902\SAMP06.D  
 Name: 02-0865-12B M-4335-9  
 Misc: SAMP EPA\_8270/S  
 Method: C:\HPCHEM\1\METHODS\BNA0321.M (RTE Integrator)  
 Title: BNA Multi-Point Calibration  
 Library Searched: C:\DATABASE\NBS75K.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc
1,1'-Biphenyl, 2-chl	16.81	48.6	ug/ml	14337000	ISTD03	16.59	5895020	20.0
1,1'-Biphenyl, 2,2'	18.27	216.7	ug/ml	63867700	ISTD03	16.59	5895020	20.0
1,1'-Biphenyl, 2,4,4	23.50	225.1	ug/ml	24271900	ISTD05	26.36	2156650	20.0
1,1'-Biphenyl, 2,2',	23.72	109.0	ug/ml	11748700	ISTD05	26.36	2156650	20.0
1,1'-Biphenyl, 2,2',	23.84	33.4	ug/ml	3597470	ISTD05	26.36	2156650	20.0
1,1'-Biphenyl, 2,3,4	23.95	118.5	ug/ml	12782400	ISTD05	26.36	2156650	20.0
1,1'-Biphenyl, 2,2',	24.04	116.7	ug/ml	12588700	ISTD05	26.36	2156650	20.0
1,1'-Biphenyl, 2,2',	24.13	89.3	ug/ml	9634650	ISTD05	26.36	2156650	20.0
1,1'-Biphenyl, 2,3,3	24.25	221.9	ug/ml	23928900	ISTD05	26.36	2156650	20.0
1,1'-Biphenyl, 2,2',	24.42	85.8	ug/ml	9256210	ISTD05	26.36	2156650	20.0
1,1'-Biphenyl, 2,3,3	24.48	23.0	ug/ml	2481020	ISTD05	26.36	2156650	20.0
1,1'-Biphenyl, 2,3,3	24.60	104.1	ug/ml	11228900	ISTD05	26.36	2156650	20.0
1,1'-Biphenyl, 2,3',	24.69	151.7	ug/ml	16355900	ISTD05	26.36	2156650	20.0
1,1'-Biphenyl, 2,3',	25.05	88.5	ug/ml	9542010	ISTD05	26.36	2156650	20.0
1,1'-Biphenyl, 2,2',	25.15	126.3	ug/ml	13624000	ISTD05	26.36	2156650	20.0
1,1'-Biphenyl, 2,3',	25.26	30.2	ug/ml	3257170	ISTD05	26.36	2156650	20.0
1,1'-Biphenyl, hexac	25.53	101.6	ug/ml	10957300	ISTD05	26.36	2156650	20.0
1,1'-Biphenyl, 2,2',	25.65	13.2	ug/ml	1427210	ISTD05	26.36	2156650	20.0
1,1'-Biphenyl, 2,2',	25.78	23.7	ug/ml	2555140	ISTD05	26.36	2156650	20.0
1,1'-Biphenyl, 2,2',	25.87	12.4	ug/ml	1338550	ISTD05	26.36	2156650	20.0
1,1'-Biphenyl, hexac	25.99	27.9	ug/ml	3009070	ISTD05	26.36	2156650	20.0
1,1'-Biphenyl, 2,2',	26.21	21.4	ug/ml	2312440	ISTD05	26.36	2156650	20.0
1,1'-Biphenyl, 2,3,3	26.68	42.8	ug/ml	4616710	ISTD05	26.36	2156650	20.0
1,1'-Biphenyl, 2,2',	27.20	25.9	ug/ml	2796550	ISTD05	26.36	2156650	20.0
1,1'-Biphenyl, 2,2',	27.42	13.1	ug/ml	1409400	ISTD05	26.36	2156650	20.0
Phosphoric acid, tri	27.63	18.8	ug/ml	2024450	ISTD05	26.36	2156650	20.0
Phosphoric acid, tri	27.84	16.6	ug/ml	1792420	ISTD05	26.36	2156650	20.0
Phosphoric acid, tri	28.05	14.3	ug/ml	1480710	ISTD06	29.46	2066930	20.0
Benzoxazole, 2-pheny	28.17	12.0	ug/ml	1241420	ISTD06	29.46	2066930	20.0
1,1'-Biphenyl, 2,2',	28.27	12.2	ug/ml	1256920	ISTD06	29.46	2066930	20.0

SAMP06.D BNA0604.M

Wed Jun 05 12:59:38 2002

SEMIVOL1

Tentatively Identified Compound (LSC) summary

Operator ID: BECKY      Date Acquired: 29 Mar 2002    2:38 pm  
 Data File: D:\HPCHEM\DATA\032902\SAMP03.D  
 Name: 02-0865-11B  
 Misc: SAMP EPA\_8270/A      *M-4335-SW*  
 Method: C:\HPCHEM\1\METHODS\BNA0321.M (RTE Integrator)  
 Title: BNA Multi-Point Calibration  
 Library Searched: C:\DATABASE\NBS75K.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc
2-Propanone, 1-cyclo	28.43	2.0	ug/ml	251347	ISTD06	29.42	2454610	20.0
SAMP03.D BNA0604.M		Wed Jun 05 12:58:32 2002						SEMIVOL1