

**Polychlorinated Biphenyl (PCB) Residues in Water, Stream Sediments  
and Floodplain Soils Collected September 8-10, 2003  
from the Bayou Creek System**

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## INTRODUCTION

Water, sediments and floodplain soil samples were taken from Big and Little Bayou Creeks on September 8-10, 2003 for PCB analyses. A total of 11 sites were sampled from Big Bayou Creek (stations BB1A through BB9) and 5 sites from Little Bayou Creek (stations LB1 through LB4). In addition, Massac Creek (MC) was sampled (*i.e.* West Fork) and served as a reference station. Samples also were collected and analyzed for effluents 001, 006, 008, and the combined effluents 010 and 011. Water and sediment samples were collected in duplicate at every station. Duplicate floodplain samples also were taken at each station, except for single collections at MC, BB1A, BB2, and LB1. Three Aroclors (*i.e.* 1248, 1254, 1260) were determined for all samples.

## METHODS

Water samples for PCB analyses were collected in chemically cleaned, 1-L amber glass jars with Teflon-lined caps. New jars were obtained from I-Chem®. Samples were placed on ice until delivery to the laboratory and maintained under refrigeration (4°C) until extraction. Sediment samples were restricted to the upper 5-10 cm of sediment soil, including depositional areas when found. Floodplain soils were collected within 10 m of the shoreline (5-10 cm deep) in areas where flood debris was present. Any surface vegetation was removed prior to sampling floodplain soils. All sediment and floodplain samples were collected in acetone-rinsed 0.47 L glass jars with Teflon-lined lids. Stainless steel spoons and scoops used for collections were acetone-rinsed between sampling stations.

### PCB Extraction and Analysis

Extraction and cleanup of water samples followed procedures described by Birge

and Price (2002), and were completed within 7 days of collection. Wet sediment or floodplain soil extractions of PCB and sample cleanup were performed following U.S. EPA SW-846 Method 3540C (U.S. EPA, 1997; Erickson, 1997) as described previously by Birge and Price (2002). Samples were analyzed for Aroclors 1248, 1254, and 1260 according to SW-846 Method 8082 (U.S. EPA, 1997). Analyses were performed as described by Birge and Price (2002).

### **Quality Assurance**

Permanent bench records were kept of all assays and annotated as required under Good Laboratory Practices (*Federal Register*, 40 CFR, Part 160, August 17, 1989). All printouts and graphic recordings were filed and are open for inspection. These bench records will be archived within two years after the close of the project but retrievable upon request. Chain of Custody was maintained for all samples collected.

## **RESULTS**

Results for PCB analyses of water samples are given in Tables 1 and 2 for Big and Little Bayou Creeks, respectively. No PCBs were quantifiable, observing a detection limit of 0.08 µg PCB/L in the water samples collected except for station LB2A with a detected value of 0.09 µg/L. PCB concentrations for individual wet-extracted sediments for Massac Creek and Big Bayou Creek are given in Table 3. Mean values for PCB in sediments are given in Table 5 and Figure 1. No PCBs were detected at the reference station on Massac Creek. BB7 was the only station on Big Bayou Creek with detectable Aroclors 1254 and 1260 (mean values of 8.22 and 8.82 µg/Kg, respectively). Aroclor 1260 was detected in effluents 006 and 008, with mean values of 6.36 and 17.98 µg/Kg,

respectively.

PCB concentrations for Little Bayou Creek sediments are presented in Table 4 and mean sediment values are presented in Table 5 and Figure 2. As in previous observations, PCBs were not detected at reference station LB1, situated upstream of PGDP. At the downstream stations LB2A through LB4, Aroclor 1248 was not detected at any of the stations; Aroclor 1254 ranged from 7.96 to 30.69  $\mu\text{g}/\text{Kg}$ ; and Aroclor 1260 ranged from 9.29 to 32.80  $\mu\text{g}/\text{Kg}$ . These values are somewhat lower than those determined during the March 2003 collection (Birge and Price 2004). During this previous collections at the downstream stations LB2A through LB4, Aroclor 1248 ranged from 9.01 to 100.16  $\mu\text{g}/\text{Kg}$ ; 1254 ranged from 4.29 to 69.69  $\mu\text{g}/\text{Kg}$ ; and 1260 ranged from 3.09 to 44.27  $\mu\text{g}/\text{Kg}$ . The highest mean concentrations were observed at station LB2, with values of 8.22  $\mu\text{g}/\text{Kg}$  for 1254 and 8.82  $\mu\text{g}/\text{Kg}$  for 1260 (Table 5).

Results for PCBs in individual floodplain soils from Massac Creek and Big Bayou Creek are presented in Table 6 and Figure 3. Mean Aroclor concentrations are given in Table 8. Aroclor 1248 was only detected at station BB3 (6.18  $\mu\text{g}/\text{Kg}$  or 0.006 ppm). Of the 26 samples collected from the stream stations and effluents, Aroclor 1254 was detected in 13 of the samples (50%) and Aroclor 1260 was detected in 18 of the samples (69%). As observed in the past, the majority of Aroclor 1254 and 1260 were detected at and downstream of BB4. The highest concentration of floodplain Aroclors 1254 and 1260 (136.38 and 275.13  $\mu\text{g}/\text{Kg}$ , respectively), were found in the vicinity of effluent 001 (Table 7).

Results for individual floodplain soils from Little Bayou Creek are summarized in Figure 4 and mean Aroclor values are given in Table 7. As with the sediments, no PCBs

were detected upstream at station LB1. Out of 10 samples taken from stream stations and areas proximal to effluent 010+011, Aroclor 1248 was detected in 2 samples and Aroclors 1254 and 1260 were detected in all samples. All three Aroclor concentrations were highest at station LB2 and this was followed by a downstream decrease in PCB concentrations (Figure 4). Total PCBs ranged from 56.52 to 1141.97 µg/Kg for floodplain soils taken at stations LB2A through LB4.

### **SUMMARY**

PCBs were not detected in any water or effluent samples (001, 006, 008) taken from Big Bayou Creek, except possibly for one sample taken at stream station BB7 (0.04 µg/L, detected but below quantitation limit). For Little Bayou Creek, the only detection of PCBs occurred in water samples taken from LB2A (0.087 µg/L).

Concerning stream sediments taken from Big Bayou Creek, there were no detections at and above station BB3. However, Aroclors were observed in samples taken near effluents 008 and 006. The high values were 17 to 19 µg/Kg at 008. Sediments sampled at the downstream station BB7 also contained Aroclors 1254 and 1260 (total was 17.04 µg/Kg). There were no detections at stations BB8 and BB9.

Results for Little Bayou Creek sediment samples were in contrast to the above. While no detections were observed at the upstream station LB1, significant PCB concentrations were detected at all downstream stations except at LB4. The highest values were found at station LB2, which included 1254 at 34.6 µg/Kg and 1260 at 36.8 µg/Kg (highest total was 71.36 µg/Kg). There was no 1248. The shorter environmental half-life of this Aroclor mixture may indicate that PCB contamination is on the decline

from the previous study (March 2003, Birge and Price, 2004). Aroclor 1248 was prominent in earlier studies.

Results for PCBs in the “near” floodplain soils revealed more PCB contamination. For the Big Bayou Creek system, greatest concern rests with the high PCB values observed in floodplain soils sampled in the vicinity of effluent 001. Concentrations of 1254 and 1260 ranged up to 157 and 278 µg/Kg, respectively. The highest total value was 430 µg/Kg. However there was no Aroclor 1248.

Concerning the three environmental media sampled (*i.e.* water, sediments, floodplain soils), the overall trend was significant, with more PCBs in floodplain soils, less in sediments and virtually none in water samples. This may well indicate that for Big Bayou Creek, the results noted above may originate from plant soils rather than from the active effluents. Nevertheless, problems regarding Little Bayou Creek have, over the past years, come largely from outfall 010/011. The major concern involves the high concentrations of 1254 and 1260 that have accumulated at stream station LB2 where total values ranged from 314 to 1970 µg/Kg in the near floodplain soils.

## REFERENCES

Birge, W.J. and D.J. Price. 2004. Polychlorinated Biphenyl (PCB) Residues in Stream Sediments and Floodplain Soils Collected March 26-28, 2003 from the Bayou Creek System. Report submitted April 29, 2004 to Jon Maybriar, Division of Waste Management, Kentucky Department for Environmental Protection.

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Erickson, M.D. 1997. *Analytical Chemistry of PCBs*, 2<sup>nd</sup> edition. CRC Press, Boca Raton, FL. pp.667.

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Table 1. PCBs in water samples from Big Bayou Creek collected September 8-10, 2003.

Station	Date	Sample	Aroclor Concentration ( $\mu\text{g/L}$ )		
			1248	1254	1260
MC	09/9/03	PWS1	<0.081	<0.081	<0.081
MC	09/9/03	PWS2	<0.082	<0.082	<0.082
BB1A	09/8/03	PWS1	<0.082	<0.082	<0.082
BB1A	09/8/03	PWS2	<0.084	<0.084	<0.084
BB1	09/8/03	PWS1	<0.080	<0.080	<0.080
BB2	09/9/03	PWS1	<0.083	<0.083	<0.083
BB2	09/9/03	PWS2	<0.083	<0.083	<0.083
BB2A	09/9/03	PWS1	<0.081	<0.081	<0.081
BB2A	09/9/03	PWS2	<0.081	<0.081	<0.081
BB3	09/8/03	PWS1	<0.081	<0.081	<0.081
BB3	09/8/03	PWS2	<0.081	<0.081	<0.081
008	09/8/03	PWS1	<0.086	<0.086	<0.086
008	09/8/03	PWS2	<0.082	<0.082	<0.082
BB4	09/8/03	PWS1	<0.081	<0.081	<0.081
BB4	09/8/03	PWS2	<0.081	<0.081	<0.081
006	09/8/03	PWS1	<0.081	<0.081	<0.081
006	09/8/03	PWS2	<0.082	<0.082	<0.082
BB5	09/8/03	PWS1	<0.084	<0.084	<0.084
BB5	09/8/03	PWS2	<0.081	<0.081	<0.081
001	09/8/03	PWS1	<0.081	<0.081	<0.081
001	09/8/03	PWS2	<0.083	<0.083	<0.083
BB6	09/9/03	PWS1	<0.082	<0.082	<0.082
BB6	09/9/03	PWS2	<0.082	<0.082	<0.082
BB7	09/9/03	PWS1	<0.085	<0.085	<0.085
BB7	09/9/03	PWS2	0.040*	<0.084	<0.084
BB8	09/9/03	PWS1	<0.081	<0.081	<0.081
BB8	09/9/03	PWS2	<0.081	<0.081	<0.081
BB9	09/10/03	PWS1	<0.081	<0.081	<0.081
BB9	09/10/03	PWS2	<0.080	<0.080	<0.080

\* PCBs detected, however values were below the Minimum Quantitation Level (MQL).



Table 2. PCB results for water samples from Little Bayou Creek collected March 26-28, 2003.

Station	Date	Sample	Aroclor Concentration ( $\mu\text{g/L}$ )		
			1248	1254	1260
LB1	09/10/03	PWS1	<0.083	<0.083	<0.083
LB1	09/10/03	PWS2	<0.082	<0.082	<0.082
010+011	09/9/03	PWS1	<0.080	<0.080	<0.080
010+011	09/9/03	PWS2	<0.082	<0.082	<0.082
LB2A	09/9/03	PWS1	0.066*	<0.084	<0.084
LB2A	09/9/03	PWS2	0.087	<0.082	<0.082
LB2	09/9/03	PWS1	<0.082	<0.082	<0.082
LB3	09/9/03	PWS1	<0.082	<0.082	<0.082
LB3	09/9/03	PWS2	<0.081	<0.081	<0.081
LB4	09/10/03	PWS1	<0.081	<0.081	<0.081
LB4	09/10/03	PWS2	<0.081	<0.081	<0.081

\* PCBs detected, however values were below the Minimum Quantitation Level (MQL).

Table 3. PCB results for stream sediment samples from Massac Creek and Big Bayou Creek, collected September 8-10, 2003.

Station	Date	Sample <sup>1</sup>	Sample			Aroclor Conc. (µg/Kg)			
			Wet Wt. (g)	Dry Wt. (g)	% Moisture	1248	1254	1260	Total
MC	09/9/03	PSED1	49.48	39.65	19.9	<5.04	<5.04	<5.04	<5.04
MC	09/9/03	PSED2	49.72	40.12	19.3	<4.98	<4.98	<4.98	<4.98
BB1A	09/8/03	PSED1	48.49	38.68	20.2	<5.17	<5.17	<5.17	<5.17
BB1A	09/8/03	PSED2	50.45	40.45	19.8	<4.94	<4.94	<4.94	<4.94
BB1	09/8/03	PSED1	50.67	40.89	19.3	<4.89	<4.89	<4.89	<4.89
BB1	09/8/03	PSED2	51.96	41.97	19.2	<4.77	<4.77	<4.77	<4.77
BB2	09/9/03	PSED1	52.10	39.83	23.6	<5.02	<5.02	<5.02	<5.02
BB2	09/9/03	PSED2	49.59	38.78	21.8	<5.16	<5.16	<5.16	<5.16
BB2A	09/8/03	PSED1	50.07	38.97	22.2	<5.13	<5.13	<5.13	<5.13
BB2A	09/8/03	PSED2	51.60	40.33	21.8	<4.96	<4.96	<4.96	<4.96
BB3	09/8/03	PSED1	50.51	40.84	19.1	<4.90	<4.90	<4.90	<4.90
BB3	09/8/03	PSED2	50.11	40.45	19.3	<4.94	<4.94	<4.94	<4.94
008	09/8/03	PSED1	49.96	38.47	23.0	<5.20	<5.20	18.97	18.97
008	09/8/03	PSED2	51.24	40.47	21.0	<4.94	<4.94	16.98	16.98
BB4	09/8/03	PSED1	52.52	41.67	20.7	<4.80	<4.80	<4.80	<4.80
BB4	09/8/03	PSED2	50.78	40.71	19.8	<4.91	<4.91	<4.91	<4.91

<sup>1</sup> PSED1 and PSED2 are separate samples from the station.

Table 3, continued. PCB results for stream sediment samples from Massac Creek and Big Bayou Creek, collected September 8-10, 2003.

Station	Date	Sample <sup>1</sup>	Sample			Aroclor Conc. (µg/Kg)			
			Wet Wt. (g)	Dry Wt. (g)	% Moisture	1248	1254	1260	Total
006	09/8/03	PSED1	49.80	42.13	15.4	<4.75	<4.75	7.43	7.43
006	09/8/03	PSED2	49.60	41.16	17.0	<4.86	<4.86	5.30	5.30
BB5	09/8/03	PSED1	50.22	40.22	19.9	<4.97	<4.97	<4.97	<4.97
BB5	09/8/03	PSED2	50.37	40.73	19.1	<4.91	<4.91	<4.91	<4.91
001	09/8/03	PSED1	50.76	32.89	35.2	<6.08	<6.08	<6.08	<6.08
001	09/8/03	PSED2	49.13	30.32	38.3	<6.60	<6.60	<6.60	<6.60
BB6	09/9/03	PSED1	49.97	40.21	19.5	<4.97	<4.97	<4.97	<4.97
BB6	09/9/03	PSED2	50.99	40.88	19.8	<4.89	<4.89	<4.89	<4.89
BB7	09/9/03	PSED1	51.84	42.74	17.6	<4.68	<4.68	<4.68	<4.68
BB7	09/9/03	PSED2	51.93	43.46	16.3	<4.60	8.22	8.82	17.04
BB8	09/9/03	PSED1	50.82	40.92	19.5	<4.89	<4.89	<4.89	<4.89
BB8	09/9/03	PSED2	51.50	39.52	23.3	<5.06	<5.06	<5.06	<5.06
BB9	09/10/03	PSED1	51.00	41.09	19.4	<4.87	<4.87	<4.87	<4.87
BB9	09/10/03	PSED2	49.36	40.15	18.7	<4.98	<4.98	<4.98	<4.98

<sup>1</sup> PSED1 and PSED2 are separate samples from the station.

Table 4. PCB results for stream sediment samples from Little Bayou Creek, collected September 8-10, 2003.

Station	Date	Sample <sup>1</sup>	Sample			Aroclor Conc. (µg/Kg)			
			Wet Wt. (g)	Dry Wt. (g)	% Moisture	1248	1254	1260	Total
LB1	09/10/03	PSED1	50.91	38.35	24.7	<5.22	<5.22	<5.22	<5.22
LB1	09/10/03	PSED2	49.31	35.24	28.5	<5.68	<5.68	<5.68	<5.68
010+011	09/8/03	PSED1	49.45	38.13	22.9	<5.24	11.14	18.02	29.16
010+011	09/8/03	PSED2	50.12	38.96	22.3	<5.13	8.91	11.68	20.59
LB2A	09/8/03	PSED1	49.76	38.28	23.1	<5.22	12.05	14.73	26.78
LB2A	09/8/03	PSED2	50.97	39.51	22.5	<5.06	9.13	12.83	21.96
LB2	09/8/03	PSED1	51.14	36.48	28.7	<5.48	26.78	28.84	55.62
LB2	09/8/03	PSED2	50.74	38.80	23.5	<5.15	34.60	36.76	71.36
LB3	09/8/03	PSED1	51.29	39.03	23.9	<5.12	7.37	9.71	17.08
LB3	09/8/03	PSED2	49.64	39.52	20.4	<5.06	8.55	8.87	17.42
LB4	09/10/03	PSED1	50.48	41.78	17.2	<4.79	<4.79	<4.79	<4.79
LB4	09/10/03	PSED2	51.66	42.93	16.9	<4.66	<4.66	<4.66	<4.66

<sup>1</sup> PSED1 and PSED2 are separate samples from the station.

Table 5. Mean PCB results for stream sediment samples from Massac Creek (MC) and Bayou Creek system collected September 8-10, 2003.

Station	Aroclor Conc. ( $\mu\text{g}/\text{Kg}$ )			
	1248	1254	1260	Total
MC	N.D.	N.D.	N.D.	N.D.
BB1A	N.D.	N.D.	N.D.	N.D.
BB1	N.D.	N.D.	N.D.	N.D.
BB2	N.D.	N.D.	N.D.	N.D.
BB2A	N.D.	N.D.	N.D.	N.D.
BB3	N.D.	N.D.	N.D.	N.D.
008	N.D.	N.D.	17.98	17.98
BB4	N.D.	N.D.	N.D.	N.D.
006	N.D.	N.D.	6.36	6.36
BB5	N.D.	N.D.	N.D.	N.D.
001	N.D.	N.D.	N.D.	N.D.
BB6	N.D.	N.D.	N.D.	N.D.
BB7	N.D.	8.22	8.82	17.04
BB8	N.D.	N.D.	N.D.	N.D.
BB9	N.D.	N.D.	N.D.	N.D.
LB1	N.D.	N.D.	N.D.	N.D.
010+011	N.D.	10.02	14.85	24.87
LB2A	N.D.	10.59	13.78	24.37
LB2	N.D.	30.69	32.80	63.49
LB3	N.D.	7.96	9.29	17.25
LB4	N.D.	N.D.	N.D.	N.D.

Table 6. PCB results for floodplain soils from Massac Creek and Big Bayou Creek, collected September 8-10, 2003.

Station	Date	Sample	Sample			Aroclor Conc. (µg/Kg)			
			Wet Wt. (g)	Dry Wt. (g)	% Moisture	1248	1254	1260	Total
MC	09/9/03	PFP1	49.92	42.69	14.5	<4.68	<4.68	<4.68	<4.68
BB1A	09/8/03	PFP1	49.71	41.88	15.8	<4.78	<4.78	<4.78	<4.78
BB1	09/8/03	PFP1	50.65	41.77	17.5	<4.79	5.01	5.18	10.19
BB1	09/8/03	PFP2	50.65	41.77	17.5	<4.79	<4.79	5.06	5.06
BB2	09/9/03	PFP1	50.08	40.44	19.2	<4.95	<4.95	<4.95	<4.95
BB2A	09/8/03	PFP1	50.42	43.11	14.5	<4.64	<4.64	<4.64	<4.64
BB2A	09/8/03	PFP2	50.26	43.75	13.0	<4.57	<4.57	<4.57	<4.57
BB3	09/8/03	PFP1	49.40	44.57	9.8	6.18	<4.49	<4.49	6.18
BB3	09/8/03	PFP2	50.21	45.25	9.9	<4.42	<4.42	<4.42	<4.42
008	09/8/03	PFP1	49.78	38.49	22.7	<5.20	<5.20	11.24	11.24
008	09/8/03	PFP2	50.27	38.46	23.5	<5.20	5.25	10.75	16.00
BB4	09/8/03	PFP1	50.12	45.56	9.1	<4.39	<4.39	<4.39	<4.39
BB4	09/8/03	PFP2	49.09	43.59	11.2	<4.59	4.38	6.39	10.77

Table 6, continued. PCB results for floodplain soils from Massac Creek and Big Bayou Creek, collected September 8-10, 2003.

Station	Date	Sample	Sample			Aroclor Conc. ( $\mu\text{g}/\text{Kg}$ )			
			Wet Wt. (g)	Dry Wt. (g)	% Moisture	1248	1254	1260	Total
006	09/8/03	PFP1	51.10	42.71	16.4	<4.68	<4.68	7.77	7.77
006	09/8/03	PFP2	50.61	41.89	17.2	<4.77	7.57	8.84	16.41
BB5	09/8/03	PFP1	50.32	44.50	11.6	<4.49	<4.49	4.75	4.75
BB5	09/8/03	PFP2	49.70	43.90	11.7	<4.56	<4.56	<4.56	<4.56
001	09/8/03	PFP1	50.55	44.09	12.8	<4.54	115.38	277.87	393.24
001	09/8/03	PFP2	50.37	43.68	13.3	<4.58	157.39	272.40	429.79
BB6	09/9/03	PFP1	50.06	44.83	10.4	<4.46	98.57	34.27	132.83
BB6	09/9/03	PFP2	50.76	45.54	10.3	<4.39	79.15	21.73	100.88
BB7	09/9/03	PFP1	49.89	45.06	9.7	<4.44	<4.44	6.29	6.29
BB7	09/9/03	PFP2	50.71	45.36	10.5	<4.41	5.31	8.86	14.17
BB8	09/9/03	PFP1	50.53	42.56	15.8	<4.70	7.05	10.78	17.83
BB8	09/9/03	PFP2	50.22	43.38	13.6	<4.61	8.91	10.46	19.36
BB9	09/10/03	PFP1	51.13	42.97	16.0	<4.65	5.08	6.48	11.56
BB9	09/10/03	PFP2	50.41	40.97	18.7	<4.88	9.99	8.43	18.42

Table 7. Mean PCB results for floodplain soil samples from Massac Creek (MC) and Bayou Creek system collected September 8-10, 2003.

Station	Aroclor Conc. ( $\mu\text{g}/\text{Kg}$ )			
	1248	1254	1260	Total
MC	N.D.	N.D.	N.D.	N.D.
BB1A	N.D.	N.D.	N.D.	N.D.
BB1	N.D.	5.01	5.12	7.62
BB2	N.D.	N.D.	N.D.	N.D.
BB2A	N.D.	N.D.	N.D.	N.D.
BB3	6.18	N.D.	N.D.	6.18
008	N.D.	5.25	11.00	13.62
BB4	N.D.	4.38	6.39	10.77
006	N.D.	7.57	8.30	12.09
BB5	N.D.	N.D.	4.75	4.75
001	N.D.	136.38	275.13	411.52
BB6	N.D.	88.86	28.00	116.86
BB7	N.D.	5.31	7.58	10.23
BB8	N.D.	7.98	10.62	18.60
BB9	N.D.	7.53	7.45	14.99
LB1	N.D.	N.D.	N.D.	N.D.
010+011	N.D.	32.59	37.28	69.87
LB2A	N.D.	84.90	91.36	176.26
LB2	335.25	193.76	612.96	1141.97
LB3	N.D.	50.53	50.01	100.54
LB4	N.D.	28.26	28.26	56.52



Table 8. PCB results for floodplain soils from Little Bayou Creek, collected September 8-10, 2003.

Station	Date	Sample	Sample			Aroclor Conc. ( $\mu\text{g}/\text{Kg}$ )			
			Wet Wt. (g)	Dry Wt. (g)	% Moisture	1248	1254	1260	Total
LB1	09/10/03	PFP1	50.47	44.71	11.4	<4.47	<4.47	<4.47	<4.47
010+011	09/8/03	PFP1	49.44	36.72	25.7	<5.45	32.29	38.23	70.52
010+011	09/8/03	PFP2	49.59	37.28	24.8	<5.36	32.88	36.33	69.21
LB2A	09/8/03	PFP1	50.05	41.93	16.2	<4.77	84.62	90.16	174.78
LB2A	09/8/03	PFP2	49.62	40.55	18.3	<4.93	85.18	92.56	177.73
LB2	09/8/03	PFP1	49.64	43.37	12.6	519.17	306.89	1143.87	1969.93
LB2	09/8/03	PFP2	49.46	43.29	12.5	151.34	80.62	82.05	314.01
LB3	09/8/03	PFP1	50.47	40.35	20.1	<4.96	39.20	37.41	76.61
LB3	09/8/03	PFP2	49.37	38.86	21.3	<5.15	61.86	62.60	124.46
LB4	09/10/03	PFP1	49.54	43.10	13.0	<4.64	29.89	28.89	58.78
LB4	09/10/03	PFP2	50.58	43.33	14.3	<4.62	26.63	27.63	54.26

Figure 1. Mean PCB concentrations in sediments from Massac Creek and Big Bayou Creek collected September 8-10, 2003.

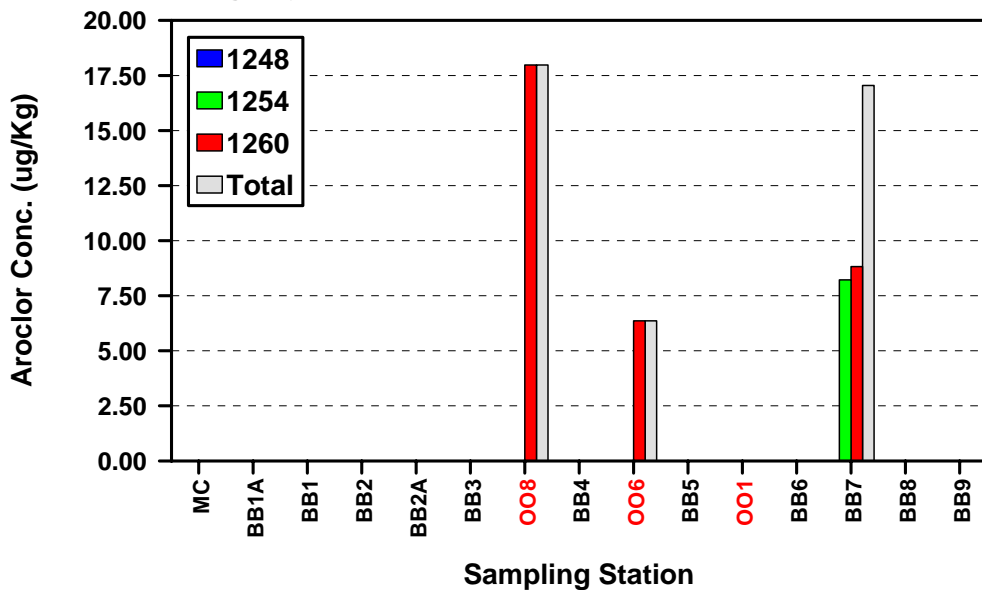


Figure 2. Mean PCB concentrations in sediments from Little Bayou Creek collected September 8-10, 2003.

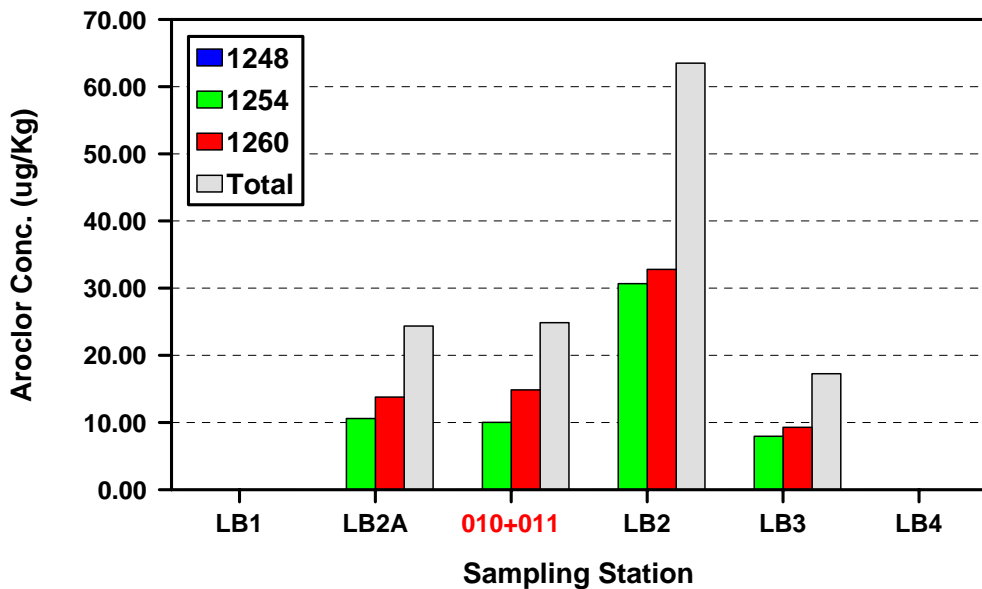


Figure 3. Mean PCB concentrations in floodplain soils from Massac Creek and Big Bayou Creek collected September 8-10, 2003.

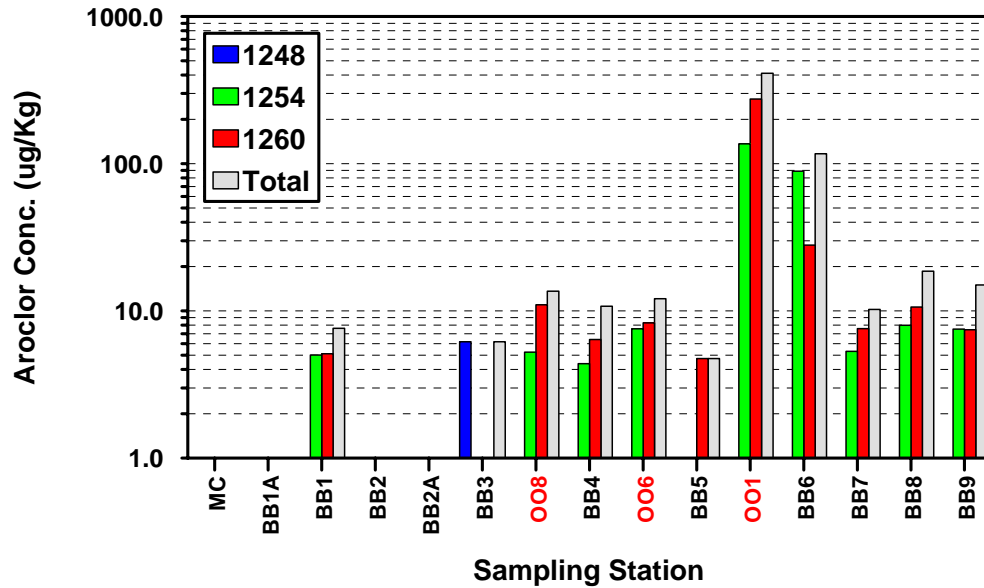


Figure 4. Mean PCB concentrations in floodplain soils from Little Bayou Creek collected September 8-10, 2003.

