Event 1 data summary.xls Field Meas. (W)

Event 1 (Water) August 8 - 11, 2005								AR SWQS			
Field Measurements	**Unit**		**Reference Site**	**Coffee Creek**	**Mossy Lake**	**Ouachita (upstream)**	**Ouachita (downstream)**	**Reference Site**	**Coffee Creek**	**Mossy Lake**	**Ouachita River**
pH	s.u.	**Low**	7.2	7.8	7.9	6.6	6.6	6 to 9*	6 to 9*	6 to 9*	6 to 9
		High	7.3	7.9	8.7	6.9	7.0				
DO	mg/L	**Low**	**0.1**	**0.0**	**0.2**	5.0	3.8	2*	3*	3*	4.5
		High	**0.7**	**0.1**	17.4	6.9	6.3				
DO Saturation	%	**Low**	1.4	0.0	3.2	NR	NR				
		High	8.1	1.3	273.3	NR	NR				
Conductivity	umhos/cm	**Low**	246	2,636	2,259	108	106				
		High	259	2,860	2,821	116	187				
Temperature ºC	± 1°C	**Low**	25.6	**30.7**	27.9	31.3	31.4	30*	30*	32*	32
		high	26.9	**34.5**	**38.4**	**32.8**	**33.1**				
Turbidity	NTU		9.0	**64.4**	**117.0**	7.0	7.5	21/32*	21/32*	21/32*	21/32

Notes:
*Exempt from Chapter 5 Specific Standards and the color standard (Gulf Coast Eco-region SWQS applied).
NR = Not Reported
Bold text/shaded cells indicate instances where reported parameter concentrations exceed their applicable water quality criteria/sediment benchmark values.

Event 1 August 9, 2005								
Conventional (W)	**Unit**	**Reference Site**	**Coffee Creek**	**Mossy Lake**	**Ouachita (upstream)**	**Ouachita (downstream)**	**Ouachita River Limit**	**Coffee Ck \ Mossy Lake SWQS**
Alkalinity	mg/L	110	390	380	20	28		
Ammonia-N	mg/L	0.13	4.96	1.01	0.10	0.08	pH dependent	pH dependent*
Chloride	mg/L	10	**194**	**203**	11	15	160	14*
Chlorophyll-a	µg/L	43.4	<10	983	<10	14.7		
Hardness	mg/L	104	260	300	28	32		
Nitrate-N	mg/L	<0.02	<0.02	<0.02	<0.02	<0.02		
Nitrite-N	mg/L	<0.02	0.06	0.07	<0.02	<0.02		
Pheophytin-a	µg/L	9.41	<5	137.00	<5	5.87		
Salinity	mg/L	0.00	0.00	0.00	0.00	0.00		
Sulfate	mg/L	2.0	**461**	**384**	8.0	16.0	40	31*
TDS	mg/L	**165**	**1900**	**1580**	59	103	350	123*
TOC	mg/L	12	110	101	3	5		
Total Ammonia	mg/L	0.13	4.96	1.01	0.10	0.08		
Total Chlorine	mg/L	0.3	1.1	1.2	0.3	0.3		
Total Kjeldahl N (TKN)	mg/L	1.31	10.60	8.80	NR	NR		
Total Phosphorus	mg/L	0.26	1.26	1.18	<0.05	<0.05		
TSS	mg/L	30	26	74	6	7		

NR = Not Reported

*Exempt from Chapter 5 Specific Standards and the color standard (Gulf Coast Ecoregion criteria applied).

pH	7.3	7.9	8.7	6.9	7.0
Ammonia Regs (mg/L)	26.2	10.1	2.2	39.1	36.1

Notes:

NR = Not Reported

Bold text/shaded cells indicate instances where reported parameter concentrations exceed their applicable water quality criteria/sediment benchmark values.

Event 1 August, 9 2005						
Special Parameters (W)	**Unit**	**Reference Site**	**Coffee Creek**	**Mossy Lake**	**Ouachita (upstream)**	**Ouachita (downstream)**
Color (True)	units	49.4	853.0	700.0	21.9	38.6
Color (Apparent)	units	227.1	1483.0	1306.0	58.7	85.2
E. Coli	#/100 ml	NA	NA	NA	90.0	68.0
E. Coli criteria	#/100 ml	2050	410	298	410	410

Notes:
NA = Not Applicable
Bold text/shaded cells indicate instances where reported parameter concentrations exceed their applicable water quality criteria/sediment benchmark values.

Event 1 August 9, 2005						
Ultra Clean Metals (W)	**Unit**	**Reference Site**	**Coffee Creek***	**Mossy Lake***	**Ouachita (upstream)**	**Ouachita (downstream)**
Cadmium, dissolved	µg/L	< 0.10	0.48	0.22	< 0.10	< 0.10
Chromium, total dissolved**	µg/L	1.30	6.64	5.10	< 1.0	< 1.0
Copper, dissolved	µg/L	< 0.30	4.01	2.28	0.60	0.63
Lead, dissolved	µg/L	< 0.10	2.15	1.26	< 0.10	< 0.10
Mercury, total	µg/L	0.011	**0.016**	0.005	0.001	0.001
Nickel, dissolved	µg/L	1.17	6.7	5.01	< 1.0	< 1.0
Selenium, total	µg/L	0.152	0.524	0.397	0.138	0.165
Silver, dissolved	µg/L	< 0.10	<0.10	< 0.10	< 0.10	< 0.10
Zinc, dissolved	µg/L	1.54	88.1	41.8	< 0.50	0.99

Notes:
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*Exempt from Chapter 5 Specific Standards and the color standard (Gulf Coast Eco-region SWQS applied).
** Total dissolved chromium results compared to the summation of Cr-III and Cr-VI SWQSs

Hardness	mg/L	104	260	300	28	32

The Chronic and Acute Surface Water Quality Standards for Metals (based on hardness) are shown below.

		Calculated Chronic Toxicity from Hardness				
		Reference Site	**Coffee Creek**	**Mossy Lake**	**Ouachita (upstream)**	**Ouachita (downstream)**
Cadmium, dissolved	µg/L	1.061	2.087	2.319	0.402	0.444
Chromium, total dissolved**	µg/L	194.4	399.9	448.3	73.3	80.6
Copper, dissolved	µg/L	11.738	25.682	29.022	3.825	4.287
Lead, dissolved	µg/L	2.626	6.998	8.128	0.615	0.714
Mercury, total	µg/L	0.012	0.012	0.012	0.012	0.012
Nickel, dissolved	µg/L	162.658	353.129	398.576	53.600	60.010
Selenium, total	µg/L	5.000	5.000	5.000	5.000	5.000
Silver, dissolved	µg/L					
Zinc, dissolved	µg/L	108.039	234.831	265.102	35.541	39.798
		Calculated Acute Toxicity from Hardness				
		Coffee Creek (reference - Up)	**Coffee Creek (downstream)**	**Mossy Lake**	**Ouachita (upstream)**	**Ouachita (downstream)**
Cadmium, dissolved	µg/L	3.863	10.418	12.162	0.931	1.076
Chromium, total dissolved**	µg/L	582.4	1,215.8	1,365.1	209.2	231.5
Copper, dissolved	µg/L	17.657	41.865	47.908	5.128	5.816
Lead, dissolved	µg/L	67.397	179.592	208.584	15.770	18.319
Mercury, total	µg/L	2.4	2.4	2.4	2.4	2.4
Nickel, dissolved	µg/L	1463.158	3176.498	3585.302	482.144	539.806
Selenium, total	µg/L	20.000	20.000	20.000	20.000	20.000
Silver, dissolved	µg/L	3.691	17.847	22.828	0.386	0.486
Zinc, dissolved	µg/L	118.315	257.166	290.316	38.921	43.583

Notes:
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Event 1 August 9, 2005							
Toxicity (W)		**Unit**	**Reference Site**	**Coffee Creek**	**Mossy Lake**	**Ouachita (upstream)**	**Ouachita (downstream)**
Ceriodaphnia	**Young Per Female (MEAN)**	NA	15.3*	15.2	13.6	16.2	15.3
Ceriodaphnia	**YPF Test Failure**	NA	NO	NO	NO	NO	NO
Ceriodaphnia	**Mortality (%)**	NA	0.0	0	20.0	0.0	0.0
Ceriodaphnia	**Mort Test Failure**	NA	NO	NO	NO	NO	NO
Pimephales	**Organisms Affected (%)**	NA	17**	20	10	7	23
Pimephales	**Org Aff Test Failure**	NA	**YES**	NO	NO	NO	**YES**

Notes:
NA = Not Applicable
* Both field blanks (Coffee Creek & Ouachita River) failed the C. dubia reproduction tests. See Appendix D for results
** Both field blanks (Coffee Creek up & Ouachita River down) failed the fathead minnow reproduction tests. See Appendix D for results
Bold text/shaded cells indicate instances where reported parameter concentrations exceed their applicable water quality criteria/sediment benchmark values.

Event 1 August 9, 2005							
Pest-Herb-PCBs (W)*	**Unit**	**Reference Site**	**Coffee Creek**	**Mossy Lake**	**Ouachita (upstream)**	**Ouachita (downstream)**	**Ouachita Chronic SWQS (ng/L)**
4,4´-DDD	ng/L	<5.8	<5.8	<5.8	<5.8	<5.8	
4,4´-DDE	ng/L	<9.6	<9.6	<9.7	<9.6	<9.6	
4,4´-DDT	ng/L	<1	<1	<1	<1	<1	1
Aldrin	ng/L	<9.6	<9.6	<9.7	<9.6	<9.6	300
alpha-BHC[1]	ng/L	<9.6	<9.6	<9.7	<9.6	<9.6	80 (total isomers)
Aroclor-1016[1]	ng/L	<19.2	<19.2	<19.4	<19.2	<19.2	
Aroclor-1221[1]	ng/L	<38.5	<38.5	<38.8	<38.4	<38.5	
Aroclor-1232[1]	ng/L	<19.2	<19.2	<19.4	<19.2	<19.2	
Aroclor-1242[1]	ng/L	<19.2	<19.2	<19.4	<19.2	<19.2	
Aroclor-1248[1]	ng/L	<19.2	<19.2	<19.4	<19.2	<19.2	
Aroclor-1254[1]	ng/L	<19.2	<19.2	<19.4	<19.2	<19.2	
Aroclor-1260[1]	ng/L	<19.2	<19.2	<19.4	<19.2	<19.2	
Atrazine	ng/L	<19.3	<19.1	20.1**	<19.2	<19.4	
beta-BHC[1]	ng/L	<9.6	<9.6	<9.7	<9.6	<9.6	80 (total isomers)
Carbofuran	ng/L	<28.9	<28.7	<28.9	<28.9	<29	
Chlordane (tech)	ng/L	<9.6	<9.6	<9.7	<9.6	<9.6	4.3
Cyfluthrin	ng/L	<1.10	<1.9	<1.9	<1.9	<1.9	
delta-BHC[1]	ng/L	<9.6	<9.6	<9.7	<9.6	<9.6	80 (total isomers)
Diazinon	ng/L	<9.6	<9.6	<9.7	<9.6	<9.6	
Dichlorobiphenyls	µg/L	<0.2	<0.1	<0.1	<0.1	<0.1	
Dieldrin	ng/L	<9.6	<9.6	<9.7	<9.6	<9.6	1.9
Endosulfan I[1]	ng/L	<9.6	<9.6	<9.7	<9.6	<9.6	56 (total isomers)
Endosulfan II[1]	ng/L	<9.6	<9.6	<9.7	<9.6	<9.6	"
Endosulfan sulfate[1]	ng/L	<9.6	<9.6	<9.7	<9.6	<9.6	
Endrin [1]	ng/L	<9.6	<9.6	<9.7	<9.6	<9.6	2.3 (total isomers)
Endrin aldehyde[1]	ng/L	<9.6	<9.6	<9.7	<9.6	<9.6	"
Endrin ketone[1]	ng/L	<9.6	<9.6	<9.7	<9.6	<9.6	"
Esfenvalerate	ng/L	<9.6	<9.6	<9.7	<9.6	<9.6	
gamma-BHC[1] (Lindane)	ng/L	<9.6	<9.6	<9.7	<9.6	<9.6	80 (total isomers)
Heptachlor	ng/L	<2.9	<2.9	<2.9	<2.9	<2.9	3.8
Heptachlor epoxide	ng/L	<9.6	<9.6	<2.9	<2.9	<2.9	
Heptachlorobiphenyls	ng/L	<0.3	<0.3	<0.3	<0.3	<0.3	
Hexachlorobiphenyls	ng/L	<0.2	<0.2	<0.2	<0.2	<0.2	
lambda-Cyhalothrin	ng/L	<1.0	<14.4	<1.0	<1.0	<1.0	
Methoxychlor	ng/L	<9.6	<9.6	<9.7	<9.6	<9.6	
Methyl parathion	ng/L	<9.6	<9.6	<9.7	<9.6	<9.6	
Molinate	ng/L	<96.1	<96.1	<96.4	<96.2	<96.8	
Monochlorobiphenyls	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	
Nonachlorobiphenyls	µg/L	<0.4	<0.4	<0.4	<0.4	<0.4	
Octachlorobiphenyls	µg/L	<0.3	<0.3	<0.3	<0.3	<0.3	
Pendimethalin	µg/L	<482	<480	<485	<480	<481	
Pentachlorobiphenyls	µg/L	<0.2	<0.2	<0.2	<0.2	<0.2	
Tetrachlorobiphenyls	µg/L	<0.2	<0.2	<0.2	<0.2	<0.2	
Total PCBs	µg/L	U	U	U	U	U	14
Toxaphene	ng/L	<57.7	<57.7	<58.3	<57.6	<57.7	0.2
Trichlorobiphenyls	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	
Trifluralin	ng/L	<48.1	<48.1	<48.5	<48	<48.1	

Notes:
* See note in EPA Houston Laboratory
** There is presumptive evidence that the analyte is present; the analyte is reported as a tentative identification. The reported value is an estimate.
NR = Not Reported
U = Not detected
Bold text/shaded cells indicate instances where reported parameter concentrations exceed their applicable water quality criteria/sediment benchmark values.

Event 1 August 9, 2005						
Conventional (Sed)	**Unit**	**Reference Site**	**Coffee Creek**	**Mossy Lake**	**Ouachita (upstream)**	**Ouachita (downstream)**
% Solids	%	80.63	71.28	48.96	76.98	78.54
Alkalinity	mg/L	150	390	220	33	56
Conductivity	umhos/cm	780	970	995	545	560
Hardness	mg/L	250	360	200	120	140
NPOC (TOC)	mg/L	11100	16000	51400	<4000	<4000
Percent Total Solids	%	72.32	53.23	26.89	72.27	51.61
pH	s.u.	8.00	8.20	8.20	7.60	6.90
Salinity	mg/L	0.00	0.00	0.00	0.00	0.00
Sediment Particles, Clay	%	28.95	9.75	31.27	1.59	3.53
Sediment Particles, Gravel	%	<0.01	<0.01	<0.01	<0.01	<0.01
Sediment Particles, Sand	%	25.68	85.78	8.96	94.03	80.25
Sediment Particles, Silt	%	45.37	4.47	59.77	4.38	14.22
Total Ammonia	mg/L	2.7	21.0	19.0	2.4	4.0
Total Chlorine	mg/L	1.40	3.90	4.00	0.40	0.60

Notes:
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Event 1 August 9, 2005								
Metals (Sed)	**Unit**	**Reference Site**	**Coffee Creek**	**Mossy Lake**	**Ouachita (upstream)**	**Ouachita (downstream)**	**Bench Mark**	**Ref.**
Aluminum	mg/kg	3,140	1,460	4,480	480	583	58,030	1
Antimony	mg/kg	<2.3*	<2.8*	<4.5*	<1.4*	<1.7*		
Arsenic	mg/kg	<3.8	<4.6	<7.5	<2.3	<2.8	12.1	1
Barium	mg/kg	52.2	56.3	102.0	12.1	12.4*		
Beryllium	mg/kg	0.3	<0.2	0.5	0.1	0.1		
Cadmium	mg/kg	0.3	0.3	**1.0**	0.2	0.2	0.592	1
Calcium	mg/kg	11300**	2,270**	3,570**	150	187		
Chromium	mg/kg	5.7	2.8	7.0	0.9	1.0	56	1
Cobalt	mg/kg	1.2	1.1	4.3	1.2	1.3		
Copper	mg/kg	4.5	5.7	10.1	0.8	1.0	28	1
Iron	mg/kg	3,380**	1,560**	5,820**	1,770	1,970		
Lead	mg/kg	6.7	3.1	7.8	2.5	7.1	34.2	1
Magnesium	mg/kg	156.0	211	483.0	51.2	67.8		
Manganese	mg/kg	106.0	128	292.0	43.3	51.3	1,673	1
Mercury	mg/kg	0.3	<0.01	0.070	0.005	0.006	0.2	1
Nickel	mg/kg	1.7	2.2	5.4	0.6	0.6	37.9	1
Potassium	mg/kg	88.3	126.0	457.0	37.5	44.9		
Selenium	mg/kg	<3.8	<4.6	<7.5	<2.3	<2.8		
Silver	mg/kg	<0.4	<0.5	<0.8	<0.2	<0.3		
Sodium	mg/kg	201.0	405.0	814.0	12.0	20.7		
Thallium	mg/kg	<3.8	<4.6	<7.5	<2.3	<2.8		
Vanadium	mg/kg	9.6	4.6	11.5	5.0	4.7		
Zinc	mg/kg	6.4	48.3	158	5.2	6.1	159	1

Notes:
* Bias low
** Bias high
1 - Toxicological Benchmarks for Screening Contaminants of Potential Concern for Effects on Sediment-Associated Biota: 1997 Revision
Bold text/shaded cells indicate instances where reported parameter concentrations exceed their applicable water quality criteria/sediment benchmark values.

Event 1 August 9, 2005								
Pesticides, Herbicides, and PCBs (Sed)	**Unit**	**Reference Site**	**Coffee Creek**	**Mossy Lake**	**Ouachita (upstream)**	**Ouachita (downstream)**	**Bench Mark**	**Ref.**
4,4´-DDD	µg/kg	<0.4	<0.4	<0.6	<0.4	<0.4	10	2
4,4´-DDE	µg/kg	<0.4	<0.4	<0.6	<0.4	<0.4	10	2
4,4´-DDT	µg/kg	<0.4	<0.4	<0.6	<0.4	<0.4	4	2
Aldrin	µg/kg	<0.8	<1.6	<6.4	<0.8	<1.6		
alpha-BHC	µg/kg	<0.4	<0.4	<0.6	<0.4	<0.4		
Aroclor-1016	µg/kg	<3.8	<4.1	<6.4	<4.2	<4		
Aroclor-1221	µg/kg	<7.7	<8.1	<12.8	<8.5	<7.9		
Aroclor-1232	µg/kg	<3.8	<4.1	<6.4	<4.2	<4		
Aroclor-1242	µg/kg	<3.8	<4.1	<6.4	<4.2	<4		
Aroclor-1248	µg/kg	<3.8	<4.1	<6.4	<4.2	<4		
Aroclor-1254	µg/kg	<3.8	<4.1	<6.4	<4.2	<4		
Aroclor-1260	µg/kg	**6.50**	<4.1	<6.4	<4.2	<4		
Atrazine	µg/kg	<3.8	<4.1	<6.4	<4.2	<4		
beta-BHC	µg/kg	<0.4	<0.4	<0.6	<0.4	<0.4		
Carbofuran	µg/kg	<5.8	<6.1	<9.6	<6.4	<5.9		
Chlordane (tech)	µg/kg	<1.9	<2	<3.2	<2.1	<2		
Cyfluthrin	µg/kg	<0.4	<0.4	<0.6	<0.4	<0.4		
Decachlorobiphenyls	µg/kg	<38.5	<46.5	<63.3	<40.8	<38.2		
delta-BHC	µg/kg	<0.4	<0.4	<0.6	<0.4	<0.4	13000	2
Diazinon	µg/kg	<1.9	<2	<3.2	<2.1	<2	190	2
Dichlorobiphenyls	µg/kg	<7.7	<9.3	<12.7	<8.2	<7.6		
Dieldrin	µg/kg	<0.6	<1	<0.6	<0.4	<0.4	1.0	2
Endosulfan I	µg/kg	<0.4	<0.4	<0.6	<0.4	<0.4	290	2
Endosulfan II	µg/kg	<1	<0.4	<6.4	<0.4	<0.4	1400	2
Endosulfan sulfate	µg/kg	<0.4	<0.4	<6.4	<0.4	<0.4		
Endrin	µg/kg	<0.4	<0.4	<0.6	<0.4	<0.4	5500	2
Endrin aldehyde	µg/kg	<0.4	<0.4	<0.6	<0.4	<0.4		
Endrin ketone	µg/kg	<0.4	<1.2	<6.4	<0.4	<0.4		
Esfenvalerate	µg/kg	<0.4	<0.4	<6.4	<0.4	<0.4		
gamma-BHC (Lindane)	µg/kg	<0.4	<0.4	<0.6	<0.4	<0.4	370	2
Heptachlor	µg/kg	<0.4	<0.4	<0.6	<0.4	<0.4		
Heptachlor epoxide	µg/kg	<0.6	<0.4	<0.6	<0.4	<0.4		
Heptachlorobiphenyls	µg/kg	<23.1	<27.9	<38	<24.5	<22.9		
Hexachlorobiphenyls	µg/kg	<15.4	<18.6	<25.4	<16.3	<15.3		
lambda-Cyhalothrin	µg/kg	<0.4	<0.4	<0.6	<0.4	<0.4		
Methoxychlor	µg/kg	<7.7	<8.1	<12.7	<8.5	<7.9	1900	2
Methyl parathion	µg/kg	<3.8	<4.1	<6.4	<4.2	<4		
Molinate	µg/kg	<19.2	<20.3	<31.9	<21.2	<19.8		
Monochlorobiphenyls	µg/kg	<7.7	<9.3	<12.7	<8.2	<7.6		
Nonachlorobiphenyls	µg/kg	<30.8	<37.1	<50.6	<32.6	<30.5		
Octachlorobiphenyls	µg/kg	<23.1	<27.9	<38	<24.5	<22.9		
Pendimethalin	µg/kg	<95.7	<101	<159	<106	<98.4		
Pentachlorobiphenyls	µg/kg	<15.4	<18.6	<25.4	<16.3	<15.3		
Tetrachlorobiphenyls	µg/kg	<15.4	<18.6	<25.4	<16.3	<15.3		
Total PCBs	µg/kg	U	U	U	U	U	31.62	1
Toxaphene	µg/kg	<11.5	<12.2	<19.1	<12.7	<11.9		
Trichlorobiphenyls	µg/kg	<7.7	<9.3	<12.7	<8.2	<7.6		
Trifluralin	µg/kg	<9.6	<10.1	<15.9	<10.6	<9.8		

Notes:
1 Toxicological Benchmarks for Screening Contaminants of Potential Concern for Effects on Sediment-Associated Biota: 1997 Revision
2 National Sediment Quality Survey 2004 (original units are µg/g)
U = undetected
Bold text/shaded cells indicate instances where reported parameter concentrations exceed their applicable water quality criteria/sediment benchmark values.

Event 1 August 9, 2005								
Semivolatiles (Sed)	**Unit**	**Reference Site**	**Coffee Creek**	**Mossy Lake**	**Ouachita (upstream)**	**Ouachita (downstream)**	**Bench Mark**	**Ref.**
1,1'-Biphenyl	µg/kg	<154	<186	<254	<163	<153		
1,2,4-Trichlorobenzene	µg/kg	<15.4	<18.6	<25.4	<16.3	<15.3	6.1	2
1,2-Dichlorobenzene	µg/kg	<38.6	<46.5	<63.4	<40.8	<38.2	34000	2
1,2-Diphenylhydrazine	µg/kg	<15.4	<18.6	<25.4	<16.3	<15.3		
1,3-Dichlorobenzene	µg/kg	<38.6	<46.5	<63.4	<40.8	<38.2	170000	2
1,4-Dichlorobenzene	µg/kg	<38.6	<46.5	<63.4	<40.8	<38.2	35000	2
2,4,5-Trichlorophenol	µg/kg	<154	<186	<254	<163	<153		
2,4,6-Trichlorophenol	µg/kg	<154	<186	<254	<163	<153		
2,4-Dichlorophenol	µg/kg	<154	<186	<254	<163	<153		
2,4-Dimethylphenol	µg/kg	<38.6	<46.5	<63.4	<40.8	<38.2		
2,4-Dinitrophenol	µg/kg	<771	<930	<1270	<817	<764		
2,4-Dinitrotoluene	µg/kg	<154	<186	<254	<163	<153		
2,6-Dinitrotoluene	µg/kg	<154	<186	<254	<163	<153		
2-Chloronaphthalene	µg/kg	<154	<186	<254	<163	<153		
2-Chlorophenol	µg/kg	<154	<186	<254	<163	<153		
2-Methylnaphthalene	µg/kg	<38.6	<46.5	<63.4	<40.8	<38.2		
2-Methylphenol	µg/kg	<77.1	<93	<127	<81.7	<76.4		
2-Nitroaniline	µg/kg	<308	<372	<507	<327	<305		
2-Nitrophenol	µg/kg	<154	<186	<254	<163	<153		
3 &/or 4-Methylphenol	µg/kg	<154	<186	<254	<163	<153		
3,3´-Dichlorobenzidine	µg/kg	<154	<186	<254	<163	<153		
3-Nitroaniline	µg/kg	<308	<372	<507	<327	<305		
4,6-Dinitro-2-methylphenol	µg/kg	<771	<930	<1270	<817	<764		
4-Bromophenyl phenyl ether	µg/kg	<154	<186	<254	<163	<153	130000	2
4-Chloro-3-methylphenol	µg/kg	<154	<186	<254	<163	<153		
4-Chloroaniline	µg/kg	<154	<186	<254	<163	<153		
4-Chlorophenyl phenyl ether	µg/kg	<154	<186	<254	<163	<153		
4-Nitroaniline	µg/kg	<308	<372	<254	<327	<305		
4-Nitrophenol	µg/kg	<463	<558	<507	<490	<458		
Acenaphthene	µg/kg	<38.6	<46.5	<63.4	<40.8	<38.2		
Acenaphthylene	µg/kg	<38.6	<46.5	<63.4	<40.8	<38.2		
Acetophenone	µg/kg	<154	<186	<254	<163	<153		
Anthracene	µg/kg	<38.6	**371**	<63.4	<40.8	<38.2	31.62	1
Atrazine	µg/kg	<154	<186	<254	<163	<153		
Benzaldehyde	µg/kg	<154	<186	<254	<163	<153		
Benzo (a) anthracene	µg/kg	<38.6	<46.5	<63.4	<40.8	<38.2	260	1
Benzo (a) pyrene	µg/kg	<38.6	<46.5	<63.4	<40.8	<38.2	350	1
Benzo (b) fluoranthene	µg/kg	<38.6	<46.5	<63.4	<40.8	<38.2	27.2	1
Benzo (g,h,i) perylene	µg/kg	<38.6	<46.5	<63.4	<40.8	<38.2	290	1
Benzo (k) fluoranthene	µg/kg	<38.6	<46.5	<63.4	<40.8	<38.2	27.2	1
Benzoic acid	µg/kg	176	240*	326*	184	201*		
Benzyl alcohol	µg/kg	<77.1	<93	<127	<81.7	<76.4		
Bis(2-chloroethoxy)methane	µg/kg	<154	<186	<254	<163	<153		
Bis(2-chloroethyl)ether	µg/kg	<154	<186	<254	<163	<153		
Bis(2-chloroisopropyl)ether	µg/kg	<154	<186	<254	<163	<153		
Bis(2-ethylhexyl)phthalate	µg/kg	<77.1	<93	<254	<81.7	<76.4		
Butyl benzyl phthalate	µg/kg	<77.1	<93	<127	<81.7	<76.4	1100000	2
C29H50O isomer	µg/kg	NR	1800	NR	NR	NR		
C29H52O isomer	µg/kg	NR	3400	NR	500	NR		
Caprolactam	µg/kg	<154	<186	<254	<163	<153		
Carbazole	µg/kg	<154	<186	<63.4	<163	<153		
Cholest-5-en-3-ol (3.beta.)-	µg/kg	350	160	NR	NR	NR		
Chrysene	µg/kg	<38.6	80	<254	<40.8	<38.2	500	1
D-Friedoolean-14-ene, 3-methoxy-, (3.beta.)-	µg/kg	270	NR	NR	NR	NR		
Dibenz (a,h) anthracene	µg/kg	<154	<46.5	<127	<40.8	<38.2	28.2	1

Event 1 August 9, 2005								
Semivolatiles (Sed)	**Unit**	**Reference Site**	**Coffee Creek**	**Mossy Lake**	**Ouachita (upstream)**	**Ouachita (downstream)**	**Bench Mark**	**Ref.**
Dibenzofuran	µg/kg	<77.1	<186	<127	<163	<153		
Diethyl phthalate	µg/kg	<77.1	<93	<127	<81.7	<76.4	63000	2
Dimethyl phthalate	µg/kg	<77.1	<93	<63.4	<81.7	<76.4		
Di-n-butyl phthalate	µg/kg	<77.1	<93	<63.4	300	<76.4	1100000	2
Di-n-octyl phthalate	µg/kg	<38.6	<93	<127	<81.7	<76.4		
Fluoranthene	µg/kg	<38.6	**150**	<63.4	<40.8	<38.2	64.23	1
Fluorene	µg/kg	<38.8	<46.5	<63.4	<40.8	<38.2	34.64	1
Friedelin	µg/kg	1,600	NR	NR	270	NR		
Hentriacontane	µg/kg	280	NR	NR	NR	140		
Hexachlorobenzene	µg/kg	<15.4	<18.6	<25.4	<16.3	<15.3		
Hexachlorobutadiene	µg/kg	<38.6	<46.5	<63.4	<40.8	<38.2		
Hexachlorocyclopentadiene	µg/kg	<154	<186	<254	<163	<153		
Hexachloroethane	µg/kg	<154	<186	<254	<160	<153	100000	2
Hexadecanoic acid	µg/kg	230	3200	NR	NR	160		
Indeno (1,2,3-cd) pyrene	µg/kg	<38.6	<46.5	<63.4	<40.8	<38.2	78	1
Isophorone	µg/kg	<38.6	<18.6	<25.4	<16.3	<15.3		
Naphthalene	µg/kg	<15.4	<46.5	<63.4	<40.8	<38.2	32.75	1
Nitrobenzene	µg/kg	<38.6	<186	<254	<163	<153		
N-Nitrosodi-n-propylamine	µg/kg	<154	<186	<254	<163	<153		
N-Nitrosodiphenylamine	µg/kg	<154	<46.5	<63.4	<40.8	<38.2		
Nonacosane	µg/kg	270	NR	NR	440	210		
Pentachlorophenol	µg/kg	<154	<186	<254	<163	<153		
Phenanthrene	µg/kg	<38.6	53.9	<63.4	<40.8	<38.2	350	1
Phenol	µg/kg	<154	<186	<254	<163	<153		
Podocarpa-8,11,13-trien-15-oic acid, 13-isopropyl	µg/kg	NR	2100	NR	NR	NR		
Pyrene	µg/kg	<38.6	122	<63.4	<40.8	<38.2	570	1
Simonellite Isomer	µg/kg	260	NR	100,000	250	130		
Sitosterol Isomer	µg/kg	NR	6000	5200	1000	270		
Stigmast-4-en-3-one	µg/kg	NR	1800	NR	NR	NR		
Stigmasterol	µg/kg	NR	2500	NR	NR	140		
Unknown ester	µg/kg	NR	3200	NR	NR	NR		
Unknown PAH	µg/kg	NR	2500	NR	NR	NR		
Highest Unknown@12.95 - 17.19	µg/kg	NR	2000	19,000	490	120		

Notes:

* The identification of the analyte is acceptable; the reported value is an estimate.

NR = Not reported

1 Toxicological Benchmarks for Screening Contaminants of Potential Concern for Effects on Sediment-Associated Biota: 1997 Revision

2 National Sediment Quality Survey 2004

Bold text/shaded cells indicate instances where reported parameter concentrations exceed their applicable water quality criteria/sediment benchmark values.

Event 1 data summary.xls Toxicity (S)

Toxicity (Sed)		Unit	Reference Site	Coffee Creek	Mossy Lake	Ouachita (upstream)	Ouachita (downstream)
Ceriodaphnia	**Young Per Female (MEAN)**	NA	13.6	6.7	14.6	9.8	12.2
Ceriodaphnia	**YPF Test Failure**	NA	NO	YES	NO	YES	YES
Ceriodaphnia	**Mortality (%)***	NA	0.0	0.0	0.0	0.0	0.0
Ceriodaphnia	**Mort Test Failure**	NA	NO	NO	NO	NO	NO
Pimephales	**Organisms Affected (%)**	NA	30.0	13.0	60.0	23.0	17.0
Pimephales	**Org Aff Test Failure**	NA	NO	NO	NO	NO	NO

Notes:
NA = Not Applicable
Field duplicate had 40% mortality
Bold text/shaded cells indicate instances where reported parameter concentrations exceed their applicable water quality criteria/sediment benchmark values.

Event 2 data summary.xls Field Meas. (W)

Event 2 (Water) October 17 - 20, 2005								AR SWQS			
Field Measurements	**Unit**		**Reference Site**	**Coffee Creek**	**Mossy Lake**	**Ouachita (upstream)**	**Ouachita (downstream)**	**Reference Site**	**Coffee Creek**	**Mossy Lake**	**Ouachita River**
pH	**s.u.**	**Low**	7.40	7.82	7.94	7.10	7.15	6 to 9*	6 to 9*	6 to 9*	6 to 9
		High	7.54	8.93	8.18	7.54	7.50				
DO	mg/L	**Low**	**0.29**	**0.05**	**0.00**	7.51	7.21	5*	3*	3*	5
		High	**3.49**	**1.86**	**2.84**	8.99	8.79				
DO Saturation	%	**Low**	3	NR	0	89	85				
		High	36	NR	37	110	107				
Conductivity	umhos/cm	**Low**	374	2015	2176	149	157				
		High	377	2065	2304	159	284				
Temperature ºC	± 1°C	**Low**	14.7	23.8	19.9	23.6	23.5	30*	30*	32*	32
		high	17.5	26.9	30.4	26.2	25.5				
Turbidity	**NTU**		6.0	**56.0**	**84.5**	8.8	9.9	21/32*	21/32*	21/32*	21/32

Notes:
NR = Not Reported
*Exempt from Chapter 5 Specific Standards and the color standard (Gulf Coast Eco-region SWQS applied).
Bold text/shaded cells indicate instances where reported parameter concentrations exceed their applicable water quality criteria/sediment benchmark values.

Event 2 October 18, 2005								
Conventional (W)	**Unit**	**Reference Site**	**Coffee Creek**	**Mossy Lake**	**Ouachita (upstream)**	**Ouachita (downstream)**	Ouachita River Limit	Coffee Ck \ Mossy Lake SWQS
Alkalinity	mg/L	147	436	523	21	37		
Ammonia-N	mg/L	0.14	**4.62**	3.18	<0.05	0.17	pH dependent	pH dependent*
Chloride	mg/L	**16**	**199**	**198**	26	39	160	14*
Chlorophyll-a	µg/l	39.4	<10	42.7	<10	<10		
Pheophytin-a	µg/l	11.1	<5	7.74	<5	<5		
Hardness	mg/L	153	320	110	30	35		
Nitrate-N	mg/L	<0.02	0.02	<0.02	0.18	0.18		
Nitrite-N	mg/L	0.5	0.04	0.05	<0.02	<0.02		
Salinity	mg/L	0.0	0.0	0.0	0.0	0.0		
Sulfate	mg/L	22	**345**	**400**	13	27	40	31*
TDS	mg/L	**242**	**1,460**	**1,720**	92	153	350	123*
TOC	mg/L	11	117	105	<1	7		
Total Ammonia	mg/L	0.8	**3.6**	3.4	0.5	0.7		
Total Chlorine	mg/L	0.4	1.2	1.2	0.3	0.3		
Total Kjeldahl N (TKN)	mg/L	1.2	11.9	7.55	0.31	0.66		
Total Phosphorus	mg/L	0.1	1.61	1.37	<0.06	0.08		
TSS	mg/L	33	47	59	4	5		
VSS	mg/L	9	37	22	2	3		

pH		7.54	8.93	8.18	7.54	7.50
Ammonia Regs (mg/L)		19.9	1.56	5.72	19.9	19.9

Notes:
Bold text/shaded cells indicate instances where reported parameter concentrations exceed their applicable water quality criteria/sediment benchmark values.

Event 2 data summary.xls Special (W)

Event 2 October 18, 2005						
Special Parameters (W)	**Unit**	**Reference Site**	**Coffee Creek**	**Mossy Lake**	**Ouachita (upstream)**	**Ouachita (downstream)**
Color (True)	units	112	796	726	19.4	41.1
Color (Apparent)	units	187	1440	1457	36.6	88.6
E. Coli	#/100ml	NA	NA	NA	<10.0	<10.0
E. Coli Criteria	#/100ml	2050	2050	1490	2050	2050

Notes:
Bold text/shaded cells indicate instances where reported parameter concentrations exceed their applicable water quality criteria/sediment benchmark values.
NA = Not Applicable

Event 2 October 18, 2005						
Ultra Clean Metals (W)	**Unit**	**Reference Site****	**Coffee Creek****	**Mossy Lake****	**Ouachita (upstream)**	**Ouachita (downstream)**
Cadmium, dissolved	µg/L	< 0.10	0.482	0.332	< 0.10	< 0.10
Chromium, total dissolved***	µg/L	1.30	7.85	7.37	< 1.0	< 1.0
Copper, dissolved	µg/L	< 0.30	4.17	2.78	0.68	0.74
Lead, dissolved	µg/L	< 0.10	2.18	1.49	0.105	0.157
Mercury, total	µg/L	0.00432	0.0059	0.004	0.00105	0.0012
Nickel, dissolved	µg/L	1.38	9.28	7.82	0.69	< 1.0
Selenium, total	µg/L	< 0.10	0.441	0.419	0.120	0.127
Silver, dissolved	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Zinc, dissolved	µg/L	1.33	153	96.0	0.56	4.04

Notes:
Bold text/shaded cells indicate instances where reported parameter concentrations exceed their applicable water quality criteria/sediment benchmark values.
* field blank contained 2.3 µg/L. See lab report in Appendix E.
** Exempt from Chapter 5 Specific Standards and the color standard (Gulf Coast Eco-region SWQS applied).
*** Total dissolved chromium results compared to the summation of Cr-III and Cr-VI SWQSs

Hardness	mg/L	153	320	110	30	35

The Chronic and Acute Surface Water Quality Standards for Metals (based on hardness) are shown below.					
	Calculated Chronic Toxicity from Hardness				
	Reference Site	**Coffee Creek**	**Mossy Lake**	**Ouachita (upstream)**	**Ouachita (downstream)**
Cadmium, dissolved	1.412	2.432	1.106	0.423	0.474
Chromium, total dissolved***	262.8	472.1	203.0	77.0	85.9
Copper, dissolved	16.325	30.668	12.314	4.057	4.628
Lead, dissolved	3.986	8.693	2.791	0.664	0.789
Mercury, total	0.012	0.012	0.012	0.012	0.012
Nickel, dissolved	225.484	420.943	170.563	56.821	64.736
Selenium, total	5.000	5.000	5.000	5.000	5.000
Silver, dissolved					
Zinc, dissolved	149.843	280.003	113.298	37.680	42.938
	Calculated Acute Toxicity from Hardness				
	Coffee Creek (reference Up)	**Coffee Creek (downstream)**	**Mossy Lake**	**Ouachita (upstream)**	**Ouachita (downstream)**
Cadmium, dissolved	5.869	13.041	4.105	1.003	1.186
Chromium, total dissolved***	793.1	1438.3	609.0	220.4	248.0
Copper, dissolved	25.403	50.912	18.615	5.473	6.328
Lead, dissolved	102.3	223.1	71.6	17.0	20.3
Mercury, total	2.400	2.400	2.400	2.400	2.400
Nickel, dissolved	2028	3787	1534	511	582
Selenium, total	20.0	20.0	20.0	20.0	20.0
Silver, dissolved	7.169	25.508	4.065	0.435	0.567
Zinc, dissolved	164.1	306.6	124.1	41.3	47.0

Notes:
Bold text/shaded cells indicate instances where reported parameter concentrations exceed their applicable water quality criteria/sediment benchmark values.

Event 2 October 18, 2005							
Toxicity (W)		**Unit**	**Reference Site**	**Coffee Creek**	**Mossy Lake**	**Ouachita (upstream)**	**Ouachita (downstream)**
Ceriodaphnia	**Young Per Female (MEAN)***	larvae	13.6	11.0	14.8	8.5	8.4
Ceriodaphnia	**YPF Test Failure**	-	NO	NO	NO	**YES**	**YES**
Ceriodaphnia	**Mortality (%)***	%	10.0	0.0	0.0	0.0	0.0
Ceriodaphnia	**Mort Test Failure**	-	NO	NO	NO	NO	NO
Pimephales	**Organisms Affected (%)***	%	27	50	37	3	17
Pimephales	**Org Aff Test Failure***	-	**YES**	**YES**	NO	NO	**YES**

Notes:
* The field blank failed both the reproductive and mortality toxicity tests. See lab report in Appendix E.
Bold text/shaded cells indicate instances where reported parameter concentrations exceed their applicable water quality criteria/sediment benchmark values.

Event 2 October 18, 2005							
Pest-Herb-PCBs (W)	**Unit**	**Reference Site**	**Coffee Creek**	**Mossy Lake**	**Ouachita (upstream)**	**Ouachita (downstream)**	Ouachita Chronic SWQS (ng/L)
4,4´-DDD	ng/L	<5.8	<5.7	<5.8	<5.7	<5.7	
4,4´-DDE	ng/L	<9.6	<9.6	<9.6	<9.6	<9.5	
4,4´-DDT	ng/L	<1	<1	<1	<1	<1	1
Aldrin	ng/L	<9.6	<9.6	<9.6	<9.6	<9.5	300
alpha-BHC[1]	ng/L	<9.6	<9.6	<9.6	<9.6	<9.5	80 (total of all isomers)
Aroclor-1016[1]	ng/L	<19.2	<19.1	<19.3	<19.2	<19.1	
Aroclor-1221[1]	ng/L	<38.5	<38.2	<38.5	<38.5	<38.2	
Aroclor-1232[1]	ng/L	<19.2	<19.1	<19.3	<19.2	<19.1	
Aroclor-1242[1]	ng/L	<19.2	<19.1	<19.3	<19.2	<19.1	
Aroclor-1248[1]	ng/L	<19.2	<19.1	<19.3	<19.2	<19.1	
Aroclor-1254[1]	ng/L	<19.2	<19.1	<19.3	<19.2	<19.1	
Aroclor-1260[1]	ng/L	<19.2	<19.1	<19.3	<19.2	<19.1	
Atrazine	ng/L	<9.6	<9.7	<10.2	<9.6	<9.6	
beta-BHC[1]	ng/L	<9.6	<9.6	<9.6	<9.6	<9.5	80 (total of all isomers)
Carbofuran	ng/L	<9.6	<9.7	<10.2	<9.6	<9.6	
Chlordane (tech)	ng/L	<9.6	<9.6	<9.6	<9.6	<9.5	4.3
Cyfluthrin	ng/L	<1.9	<1.9	<1.9	<1.9	<1.9	
delta-BHC[1]	ng/L	<9.6	<9.6	<0.5	<9.6	<9.5	80 (total of all isomers)
Diazinon	ng/L	<9.6	<9.7	<9.6	<9.6	<9.6	
Dichlorobiphenyls	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	
Dieldrin	ng/L	<9.6	<9.6	<9.6	<9.6	<9.5	1.9
Endosulfan I[1]	ng/L	<9.6	<9.6	<9.6	<9.6	<9.5	56 (total of all isomers)
Endosulfan II[1]	ng/L	<9.6	<9.6	<9.6	<9.6	<9.5	"
Endosulfan sulfate[1]	ng/L	<9.6	<9.6	<9.6	<9.6	<9.5	
Endrin [1]	ng/L	<9.6	<9.6	<9.6	<9.6	<9.5	2.3 (total of all isomers)
Endrin aldehyde[1]	ng/L	<9.6	<9.6	<9.6	<9.6	<9.5	"
Endrin ketone[1]	ng/L	<9.6	<9.6	<9.6	<9.6	<9.5	"
Esfenvalerate	ng/L	<9.6	<9.6	<9.6	<9.6	<9.5	
gamma-BHC[1] (Lindane)	ng/L	<9.6	<9.6	<9.6	<9.6	<9.5	80 (total of all isomers)
Heptachlor	ng/L	<2.9	<2.9	<2.9	<2.9	<2.9	3.8
Heptachlor epoxide	ng/L	<9.6	<9.6	<9.6	<9.6	<9.5	
Heptachlorobiphenyls	ng/L	<0.3	<0.3	<0.3	<0.3	<0.3	
Hexachlorobiphenyls	ng/L	<0.2	<0.2	<0.2	<0.2	<0.2	
lambda-Cyhalothrin	ng/L	<1	<1	<11.6*	<1	<1	
Methoxychlor	ng/L	<9.6	<9.6	<9.6	<9.6	<9.5	
Methyl parathion	ng/L	<9.6	<9.7	<10.2	<9.6	<9.6	
Molinate	ng/L	<96.1	<96.5	<102	<95.5	<95.9	
Monochlorobiphenyls	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	
Nonachlorobiphenyls	µg/L	<0.4	<0.4	<0.4	<0.4	<0.4	
Octachlorobiphenyls	µg/L	<0.3	<0.3	<0.3	<0.3	<0.3	
Pendimethalin	µg/L	<481	<478	<482	<479	<477	
Pentachlorobiphenyls	µg/L	<0.2	<0.2	<0.2	<0.2	<0.2	
Tetrachlorobiphenyls	µg/L	<0.2	<0.2	<0.2	<0.2	<0.2	
Total PCBs	µg/L	U	U	U	U	U	14
Toxaphene	ng/L	<57.7	<57.4	<57.8	<57.5	<57.3	0.2
Trichlorobiphenyls	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	
Trifluralin	ng/L	<48.1	<62.1*	<57.8	<47.9	<47.7	

Notes:
NR = Not Reported
U = Not Detected
* The reporting limit was raised because absence or presence at the routine value could not be verified.
Bold text/shaded cells indicate instances where reported parameter concentrations exceed their applicable water quality criteria/sediment benchmark values.

Event 3 data summary.xls Field Meas. (W)

Event 3 December 13-14, 2005								AR SWQS			
Field Measurements (W)	**Unit**		**Reference Site**	**Coffee Creek**	**Mossy Lake**	**Ouachita (upstream)**	**Ouachita (downstream)**	**Reference Site**	**Coffee Creek**	**Mossy Lake**	**Ouachita River**
pH	**s.u.**	**Low**	7.13	7.44	7.71	7.56	7.6	6 to 9*	6 to 9*	6 to 9*	6 to 9
		High	8.14	7.85	7.78	8.39	8.69				
DO	mg/L	**Low**	**1.69**	**0.15**	**0.01**	10.68	9.88	5*	5*	5*	5
		High	12.33	**2.68**	**2.44**	11.57	11.24				
DO Saturation	%	**Low**	14.2	NR	0.01	95.8	87.9				
		High	109.7	NR	21.9	104.9	102.6				
Conductivity	µmhos/cm	**Low**	500	1902	1950	148	173				
		High	523	2000	2047	192	350				
Temperature ºC	± 1°C	**Low**	5.9	13.81	8.23	10.37	10.05	30*	30*	32*	32
		high	10.13	15.98	10.4	11.19	11.51				
Turbidity	NTU		7.2	**73**	**88**	NR	NR	21/32*	21/32*	21/32*	21/32

Notes:
NR = Not Reported
*Exempt from Chapter 5 Specific Standards and the color standard (Gulf Coast Ecoregion criteria applied).
Bold text/shaded cells indicate instances where reported parameter concentrations exceed their applicable water quality criteria/sediment benchmark values.

Event 3 December 13-14, 2005								
Conventional (W)	**Unit**	**Reference Site**	**Coffee Creek**	**Mossy Lake**	**Ouachita (upstream)**	**Ouachita (downstream)**	**Ouachita River Limit**	**Coffee Ck \ Mossy Lake SWQS**
Alkalinity	mg/L	125	366	364	35	35		
Ammonia-N	mg/L	0.17	0.57	5.07	<0.05	0.08	pH dependent	pH dependent*
Chloride	mg/L	**16**	**167**	**184**	14	17	160	14*
Chlorophyll-a	µg/L	29.40	<10	48.10	20.30	20.80		
Hardness	mg/L	193	279	344	33	35		
Nitrate-N	mg/L	<0.02	<0.02	<0.02	0.08	0.08		
Nitrite-N	mg/L	<0.02	0.06	0.04	<0.02	<0.02		
Pheophytin-a	µg/L	5.67	<5	8.01	<5	<5		
Salinity	mg/L	0.0	0.0	0.0	0.0	0.0		
Sulfate	mg/L	**79**	**413**	**381**	20	25	40	31*
TDS	mg/L	**358**	**1650**	**1640**	126	149	350	123*
TOC	mg/L	13	116	107	3	5		
Total Ammonia	mg/L	0.2	2.9	3.6	0.2	0.2		
Total Chlorine	mg/L	0.3	0.9	1.1	0.3	0.3		
Total Kjeldahl N (TKN)	mg/L	1.14	NR	NR	0.51	NR		
Total Phosphorus	mg/L	0.21	1.55	1.95	<0.06	<0.06		
TSS	mg/L	99	52	49	5	4		

NR = Not Reported

*Exempt from Chapter 5 Specific Standards and the color standard (Gulf Coast Ecoregion criteria applied).

pH		8.14	7.85	7.78	8.39	8.69
Ammonia Regs (mg/L)		6.95	10.1	12.1	3.88	2.2

Notes:

NR = Not Reported

*Exempt from Chapter 5 Specific Standards and the color standard (Gulf Coast Ecoregion criteria applied).

Bold text/shaded cells indicate instances where reported parameter concentrations exceed their applicable water quality criteria/sediment benchmark values.

Event 3 December 13-14, 2005						
Special Parameters (W)	**Unit**	**Reference Site**	**Coffee Creek**	**Mossy Lake**	**Ouachita (upstream)**	**Ouachita (downstream)**
Color (True)	units	91	825	690	15.6	21.5
Color (Apparent)	units	136	1220	1318	41	55.4
E. Coli	#/100mL	NA	NA	NA	<10	<10
E. Coli Criteria	#/100mL	2050	2050	1490	2050	2050

Notes:
NA = Not Applicable
Bold text/shaded cells indicate instances where reported parameter concentrations exceed their applicable water quality criteria/sediment benchmark values.

Event 3 data summary.xls Ultra Clean Metals (W)

Event 3 December 13-14, 2005						
Ultra Clean Metals (W)	**Unit**	**Reference Site***	**Coffee Creek***	**Mossy Lake***	**Ouachita (upstream)**	**Ouachita (downstream)**
Cadmium, dissolved	µg/L	< 0.10	0.9	0.657	< 0.10	< 0.10
Chromium, T. dis.**	µg/L	<1.0	5.78	5.97	< 1.0	< 1.0
Copper, dissolved	µg/L	0.731	6.640	5.030	0.652	0.637
Lead, dissolved	µg/L	< 0.10	2.69	2.16	<0.10	<0.10
Mercury, total[2]	ng/L	0.0061	**0.0169**	0.0101	0.0102	0.0102
Nickel, dissolved	µg/L	2.20	10.00	10.10	<1.0	< 1.0
Selenium, total	µg/L	0.116	0.397	0.450	0.140	0.126
Silver, dissolved	µg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Zinc, dissolved	µg/L	4.79	238	164.0	0.67	1.63

Notes:
Bold text/shaded cells indicate instances where reported parameter concentrations exceed their applicable water quality criteria/sediment benchmark values.
*Exempt from Chapter 5 Specific Standards and the color standard (Gulf Coast Eco-region SWQS applied).
** Total dissolved chromium results compared to the summation of Cr-III and Cr-VI SWQSs

Hardness	mg/L	193	279	344	33	35

The Chronic and Acute Surface Water Quality Standards for Metals (based on hardness) are shown below.						
		Calculated Chronic Toxicity from Hardness				
		Reference Site	**Coffee Creek**	**Mossy Lake**	**Ouachita (upstream)**	**Ouachita (downstream)**
Cadmium, dissolved	µg/L	1.676	2.199	2.565	0.454	0.474
Chromium, T. dis.**	µg/L	316	423	500	82	86
Copper, dissolved	µg/L	19.908	27.277	32.623	4.401	4.628
Lead, dissolved	µg/L	5.108	7.535	9.369	0.739	0.789
Mercury, total[2]	ng/L	0.012	0.012	0.012	0.012	0.012
Nickel, dissolved	µg/L	274.440	374.841	447.502	61.593	64.736
Selenium, total	µg/L	5.000	5.000	5.000	5.000	5.000
Silver, dissolved	µg/L					
Zinc, dissolved	µg/L	182.432	249.292	297.697	40.849	42.938
		Calculated Acute Toxicity from Hardness				
		Coffee Creek (reference - Up)	**Coffee Creek (downstream)**	**Mossy Lake**	**Ouachita (upstream)**	**Ouachita (downstream)**
Cadmium, dissolved	µg/L	7.547	11.244	14.102	1.112	1.186
Chromium, T. dis.**	µg/L	956	1287	1525	237	248
Copper, dissolved	µg/L	31.617	44.742	54.502	5.987	6.328
Lead, dissolved	µg/L	131.084	193.365	240.433	18.962	20.253
Mercury, total[2]	ng/L	2.400	2.400	2.400	2.400	2.400
Nickel, dissolved	µg/L	2468.668	3371.804	4025.405	554.044	582.321
Selenium, total	µg/L	20.000	20.000	20.000	20.000	20.000
Silver, dissolved	µg/L	10.690	20.149	28.887	0.512	0.567
Zinc, dissolved	µg/L	199.783	273.002	326.011	44.735	47.021

Notes:
Bold text/shaded cells indicate instances where reported parameter concentrations exceed their applicable water quality criteria/sediment benchmark values.

Event 3 December 13-14, 2005							
Toxicity (W)**		**Unit**	**Reference Site**	**Coffee Creek**	**Mossy Lake**	**Ouachita (upstream)**	**Ouachita (downstream)**
Ceriodaphnia	**Young Per Female (MEAN)**	larva	14.2	12.3	8.6	8.7	12.1
Ceriodaphnia	**YPF Test Failure**	-	NO	**YES**	**YES**	**YES**	NO
Ceriodaphnia	**Mortality (%)**	%	0.0	0.0	0.0	10	20
Ceriodaphnia	**Mort Test Failure**	-	NO	NO	NO	NO	NO
Pimephales	**Organisms Affected (%)**	%	23	53*	87	17	27
Pimephales	**Org Aff Test Failure**	-	NO	**YES**	**YES**	**YES**	NO

Notes:
Bold text/shaded cells indicate instances where reported parameter concentrations exceed their applicable water quality criteria/sediment benchmark values.
* Dissolved oxygen at 57% at end of test.
** Field blank had 100% mortality due to the use of inappropriate lab water

Event 3 December 13-14, 2005							
Pest-Herb-PCBs (W)	**Unit**	**Reference Site**	**Coffee Creek**	**Mossy Lake**	**Ouachita (upstream)**	**Ouachita (downstream)**	**Ouachita Chronic SWQS (ng/L)**
4,4´-DDD	ng/L	<5.7	<5.7	<5.7	<5.7	<5.8	
4,4´-DDE	ng/L	<9.5	<9.4	<9.4	<9.6	<9.7	
4,4´-DDT	ng/L	<0.9	<0.9	<0.9	<1.0	<1.0	1
Aldrin	ng/L	<9.5	<9.4	<9.4	<9.6	<9.7	300
alpha-BHC[1]	ng/L	<9.5	<9.4	<9.4	<9.6	<9.7	80 (total of all isomers)
Aroclor-1016[1]	ng/L	<18.9	<18.9	<18.9	<19.2	<19.4	
Aroclor-1221[1]	ng/L	<37.8	<37.7	<37.7	<38.3	<38.8	
Aroclor-1232[1]	ng/L	<18.9	<18.9	<18.9	<19.2	<19.4	
Aroclor-1242[1]	ng/L	<18.9	<18.9	<18.9	<19.2	<19.4	
Aroclor-1248[1]	ng/L	<18.9	<18.9	<18.9	<19.2	<19.4	
Aroclor-1254[1]	ng/L	<18.9	<18.9	<18.9	<19.2	<19.4	
Aroclor-1260[1]	ng/L	<18.9	<18.9	<18.9	<19.2	<19.4	
Atrazine	ng/L	<9.8	<9.4	<9.4	<9.9	<9.9	
beta-BHC[1]	ng/L	<9.5	<9.4	<9.4	<9.6	<9.7	80 (total of all isomers)
Carbofuran	ng/L	<9.8	<9.4	<9.4	<9.9	<9.9	
Chlordane (tech)	ng/L	<9.5	<9.4	<9.4	<9.6	<9.7	4.3
Cyfluthrin	ng/L	<1.9	<1.9	<1.9	<1.9	<1.9	
delta-BHC[1]	ng/L	<9.5	<9.4	<9.4	<9.6	<9.7	80 (total of all isomers)
Decachlorobiphenyls	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5	
Diazinon	ng/L	<9.8	<9.4	<9.4	<9.6	<9.7	
Dichlorobiphenyls	µg/L	<0.1	<0.09	<0.09	<0.1	<0.1	
Dieldrin	ng/L	<9.5	<9.4	<9.4	<9.6	<9.7	1.9
Endosulfan I[1]	ng/L	<9.5	<9.4	<9.4	<9.6	<9.7	56 (total of all isomers)
Endosulfan II[1]	ng/L	<9.5	<9.4	<9.4	<9.6	<9.7	"
Endosulfan sulfate[1]	ng/L	<9.5	<9.4	<9.4	<9.6	<9.7	
Endrin [1]	ng/L	<9.5	<9.4	<9.4	<9.6	<9.7	2.3 (total of all isomers)
Endrin aldehyde[1]	ng/L	<9.5	<9.4	<9.4	<9.6	<9.7	"
Endrin ketone[1]	ng/L	<9.5	<9.4	<9.4	<9.6	<9.7	"
Esfenvalerate	ng/L	<9.5	<9.4	<9.4	<9.6	<9.7	
gamma-BHC[1] (Lindane)	ng/L	<9.5	<9.4	<9.4	<9.6	<9.7	80 (total of all isomers)
Heptachlor	ng/L	<2.8	<2.8	<2.8	<2.9	<2.9	3.8
Heptachlor epoxide	ng/L	<9.5	<9.4	<9.4	<9.6	<9.7	
Heptachlorobiphenyls	ng/L	<0.3	<0.3	<0.3	<0.3	<0.3	
Hexachlorobiphenyls	ng/L	<0.2	<0.2	<0.2	<0.2	<0.2	
lambda-Cyhalothrin	ng/L	<0.9	<47.2*	<0.9	<1.0	<1.0	
Methoxychlor	ng/L	<9.5	<9.4	<9.4	<9.6	<9.7	
Methyl parathion	ng/L	<9.8	<9.4	<9.4	<9.9	<9.9	
Molinate	ng/L	<98.0	<93.8	<94.3	<98.5	<99.2	
Monochlorobiphenyls	µg/L	<0.1	<0.09	<0.09	<0.1	<0.1	
Nonachlorobiphenyls	µg/L	<0.4	<0.4	<0.4	<0.4	<0.4	
Octachlorobiphenyls	µg/L	<0.3	<0.3	<0.3	<0.3	<0.3	
Pendimethalin	µg/L	<473	<472	<472	<479	<485	
Pentachlorobiphenyls	µg/L	<0.2	<0.2	<0.2	<0.2	<0.2	
entachlorophenol (pH 7.4)	µg/L	NR	NR	NR	NR	NR	
Tetrachlorobiphenyls	µg/L	<0.2	<0.2	<0.2	<0.2	<0.2	
Total PCBs	µg/L	U	U	U	U	U	14
Toxaphene	ng/L	<56.8	<56.6	<56.6	<57.5	<58.3	0.2
Trichlorobiphenyls	µg/L	<0.1	<0.09	<0.09	<0.1	<0.1	
Trifluralin	ng/L	<47.3	<94.3*	<80.2*	<47.9	<48.5	

Notes:
Bold text/shaded cells indicate instances where reported parameter concentrations exceed their applicable water quality criteria/sediment benchmark values.
* The reporting limit for this analyte was raised because absence or presence at the routine or lower value could not be verified.
U = Not detected.
NR = Not reported.

Event 4 May 15-16, 2006								AR SWQS			
Field Measurements (W)	**Unit**		**Reference Site**	**Coffee Creek**	**Mossy Lake**	**Ouachita (upstream)**	**Ouachita (downstream)**	**Reference Site**	**Coffee Creek**	**Mossy Lake**	**Ouachita River**
pH	S.U.	**Low**	7.12	7.76	7.78	6.58	NR	6 to 9*	6 to 9*	6 to 9*	6 to 9
		High	7.69	8.26	8.04	7.94	NR				
DO	mg/L	**Low**	**1.50**	**0.13**	**0.08**	5.97	NR	2*	3*	3*	5
		High	3.95	**0.83**	4.19	6.24	NR				
DO Saturation	%	**Low**	16.2	NR	1.0	67.7	NR				
		High	45.3	NR	53.9	70.2	NR				
Conductivity	umhos/cm	**Low**	304	2087	1838	79	NR				
		High	474	2187	1877	86	NR				
Temperature ºC	± 1°C	**Low**	16.32	23.03	24.16	21.13	NR	30*	30*	32*	32
		high	22.45	26.93	28.09	21.70	NR				
Turbidity	NTU		19.3	**65.0**	**45.5**	21.0	**24.0**	21/32*	21/32*	21/32*	21/32

Notes:
NR = Not Reported (Sonde was lost or stolen)
*Exempt from Chapter 5 Specific Standards and the color standard (Gulf Coast Eco-region SWQS applied).
Bold text/shaded cells indicate instances where reported parameter concentrations exceed their applicable water quality criteria/sediment benchmark values.

Event 4 May 15-16, 2006								
Conventional (W)	**Unit**	**Reference Site***	**Coffee Creek***	**Mossy Lake***	**Ouachita (upstream)**	**Ouachita (downstream)**	**Ouachita River Limit**	**Coffee Ck \ Mossy Lake SWQS**
Alkalinity	mg/L	140	476	389	18	20		
Ammonia-N	mg/L	0.2	**6.55**	5.59	<0.05	0.07	pH dependent	pH dependent*
Chloride	mg/L	**55**	**161**	**154**	9	9	160	14*
Chlorophyll-a	µg/L	<10	10	1,110	<10	<10		
Hardness	mg/L	112	294	199	30	28		
Nitrate-N	mg/L	0.03	<0.02	<0.02	0.08	0.08		
Nitrite-N	mg/L	0.03	0.06	0.05	<0.02	<0.02		
Pheophytin-a	µg/L	7.61	<5	44	6.41	5.61		
Total Phosphorus	mg/L	0.21	1.31	1.49	0.11	0.12		
Salinity	mg/L	0	0	0	0	0		
Sulfate	mg/L	7	**348**	**284**	12	12	40	31*
TDS	mg/L	**332**	**1,600**	**1,330**	91	91	350	123*
TOC	mg/L	13	125	98	12	13		
Total Ammonia	mg/L	0.7	7.2	6.2	0.6	0.6		
Total Chlorine	mg/L	<0.1	<0.1	<0.1	0.1	<0.1		
Total Kjeldahl N (TKN)	mg/L	1.09	15.2	19.1	0.7	0.76		
TSS	mg/L	44	58	74	22	18		
Volatile Suspended Solids	mg/L	6	28	42	3	3		

*Exempt from Chapter 5 Specific Standards and the color standard (Gulf Coast Ecoregion criteria applied).

pH		7.69	8.26	8.04	7.94	7.0
Ammonia Regs (mg/L)		14.4	5.114	8.4	8.4	36

Notes:
Bold text/shaded cells indicate instances where reported parameter concentrations exceed their applicable water quality criteria/sediment benchmark values.

Event 4 May 15-16, 2006						
Special Parameters (W)	**Unit**	**Reference Site**	**Coffee Creek**	**Mossy Lake**	**Ouachita (upstream)**	**Ouachita (downstream)**
Color (True)	units	82	1031.9	822.6	99.1	108.1
Color (Apparent)	units	193.7	1160.3	882.6	148.6	136.5
E. Coli	CFU	NA	NA	NA	32	27
E. Coli Criteria	CFU	2050.0	410.0	298.0	410	410

Notes:
Bold text/shaded cells indicate instances where reported parameter concentrations exceed their applicable water quality criteria/sediment benchmark values.
NA = Not Applicable

Event 4 May 15-16, 2006						
Ultra Clean Metals (W)	**Unit**	**Reference Site**	**Coffee Creek**	**Mossy Lake**	**Ouachita (upstream)**	**Ouachita (downstream)**
Cadmium, dissolved	µg/L	<0.05	0.805	0.424	<0.05	<0.05
Chromium, total dissolved	µg/L	0.58	6.10	5.24	0.85	0.93
Copper, dissolved	µg/L	0.62	6.51	3.64	1.47	1.46
Lead, dissolved	µg/L	0.607	3.50	1.73	0.411	0.424
Mercury, total	µg/L	**0.0189**	0.0102	0.0075	0.0082	0.0085
Nickel, dissolved	µg/L	2.56	11.00	8.62	2.18	2.30
Selenium, total	µg/L	0.184	0.506	0.454	0.166	0.202
Silver, dissolved	µg/L	<0.05	0.063	<0.05	<0.05	<0.05
Zinc, dissolved	µg/L	1.41	211	85.6	2.40	3.71

Notes:
Bold text/shaded cells indicate instances where reported parameter concentrations exceed their applicable water quality criteria/sediment benchmark values.
*Exempt from Chapter 5 Specific Standards and the color standard (Gulf Coast Eco-region SWQS applied).
** Total dissolved chromium results compared to the summation of Cr-III and Cr-VI SWQSs

Hardness	mg/L	112	294	199	30	28

The Chronic and Acute Surface Water Quality Standards for Metals (based on hardness) are shown below.						
		Calculated Chronic Toxicity from Hardness				
		Reference Site	**Coffee Creek**	**Mossy Lake**	**Ouachita (upstream)**	**Ouachita (downstream)**
Cadmium, dissolved	µg/L	1.121	2.285	1.714	0.423	0.402
Chromium, total dissolved	µg/L	206	441	323	77	73
Copper, dissolved	µg/L	12.5	28.5	20.4	4.1	3.8
Lead, dissolved	µg/L	2.8	8.0	5.3	0.7	0.6
Mercury, total	µg/L	0.012	0.012	0.012	0.012	0.012
Nickel, dissolved	µg/L	173	392	282	57	54
Selenium, total	µg/L	5	5	5	5	5
Silver, dissolved	µg/L					
Zinc, dissolved	µg/L	115	261	187	38	36
		Calculated Acute Toxicity from Hardness				
		Coffee Creek (reference - Up)	**Coffee Creek (downstream)**	**Mossy Lake**	**Ouachita (upstream)**	**Ouachita (downstream)**
Cadmium, dissolved	µg/L	4.19	11.90	7.80	1.00	0.93
Chromium, total dissolved	µg/L	618	1343	980	220	209
Copper, dissolved	µg/L	18.9	47.0	32.5	5.5	5.1
Lead, dissolved	µg/L	73.0	204.2	135.4	17.0	15.8
Mercury, total	µg/L	2.4	2.4	2.4	2.4	2.4
Nickel, dissolved	µg/L	1558	3525	2533	511	482
Selenium, total	µg/L	20	20	20	20	20
Silver, dissolved	µg/L	4.2	22.0	11.3	0.435	0.386
Zinc, dissolved	µg/L	126	285	205	41	39

Notes:
Bold text/shaded cells indicate instances where reported parameter concentrations exceed their applicable water quality criteria/sediment benchmark values.

Event 4 May 15-16, 2006							
Toxicity (W)		**Unit**	**Reference Site**	**Coffee Creek**	**Mossy Lake**	**Ouachita (upstream)**	**Ouachita (downstream)**
Ceriodaphnia	**Young Per Female (MEAN)**	larva	5.3	12.1	9.5	13.5	13.9
Ceriodaphnia	**YPF Test Failure**	-	**YES**	#	**YES**	#	#
Ceriodaphnia	**Mortality (%)**	%	30	0	10	0	0
Ceriodaphnia	**Mort Test Failure**	-	NO	NO	NO	NO	NO
Pimephales	**Organisms Affected (%)**	%	20	70	93	13	13
Pimephales	**Org Aff Test Failure**	-	NO	**YES**	**YES**	#	NO

Notes:
Bold text/shaded cells indicate instances where reported parameter concentrations exceed their applicable water quality criteria/sediment benchmark values.
The EPA Houston Lab determined the sample was toxic. The data was re-analyzed using ToxStat 3.5 that found the sample to be non-toxic. Therefore, the result is reported as inconclusive.

Event 4 May 15-16, 2006							
Pest-Herb-PCBs (W)	**Unit**	**Reference Site**	**Coffee Creek**	**Mossy Lake**	**Ouachita (upstream)**	**Ouachita (downstream)**	**Ouachita Chronic SWQS (ng/L)**
4,4´-DDD	ng/L	<5.8	<5.7	<5.7	<5.8	<5.7	
4,4´-DDE	ng/L	<9.6	<9.5	<9.6	<9.6	<9.5	
4,4´-DDT	ng/L	<1.0	<0.9	<1.0	<1.0	<1.0	1
Aldrin	ng/L	<9.6	<9.5	<9.6	<9.6	<9.5	300
alpha-BHC	ng/L	<9.6	<9.5	<9.6	<9.6	<9.5	80 (total isomers)
Aroclor-1016	ng/L	<19.2	<19.0	<19.1	<19.2	<19.0	
Aroclor-1221	ng/L	<38.4	<37.9	<38.2	<38.5	<38.1	
Aroclor-1232	ng/L	<19.2	<19.0	<19.1	<19.2	<19.0	
Aroclor-1242	ng/L	<19.2	<19.0	<19.1	<19.2	<19.0	
Aroclor-1248	ng/L	<19.2	<19.0	<19.1	<19.2	<19.0	
Aroclor-1254	ng/L	<19.2	<19.0	<19.1	<19.2	<19.0	
Aroclor-1260	ng/L	<19.2	<19.0	<19.1	<19.2	<19.0	
Atrazine	ng/L	20.9	15.4**	16.8**	15.6**	20.2	
beta-BHC	ng/L	<9.6	<9.5	<9.6	<9.6	<9.5	80 (total isomers)
Carbofuran	ng/L	<9.7	<9.5	<9.7	<9.7	<9.9	
Chlordane (tech)	ng/L	<9.6	<9.5	<9.6	<9.6	<9.5	4.3
Cyfluthrin	ng/L	<1.9	<19.0*	<1.9	<1.9	<1.9	
Decachlorobiphenyls	ng/L	<0.5	<0.5	<0.5	<0.5	<0.5	
delta-BHC	ng/L	<9.6	<9.5	<9.6	<9.6	<9.5	80 (total isomers)
Diazinon	ng/L	<9.7	<9.5	<9.7	<9.7	<9.9	
Dichlorobiphenyls	ng/L	<0.1	<0.1	<0.1	<0.1	<0.1	
Dieldrin	ng/L	<9.6	<9.5	<9.6	<9.6	<9.5	1.9
Endosulfan I	ng/L	<9.6	<9.5	<9.6	<9.6	<9.5	56 (total isomers)
Endosulfan II	ng/L	<9.6	<9.5	<9.6	<9.6	<9.5	"
Endosulfan sulfate	ng/L	<9.6	<9.5	<9.6	<9.6	<9.5	
Endrin	ng/L	<9.6	<9.5	<9.6	<9.6	<9.5	2.3 (total isomers)
Endrin aldehyde	ng/L	<9.6	<9.5	<9.6	<9.6	<9.5	"
Endrin ketone	ng/L	<9.6	<9.5	<9.6	<9.6	<9.5	"
Esfenvalerate	ng/L	<9.6	<9.5	<9.6	<9.6	<9.5	
gamma-BHC[1] (Lindane)	ng/L	<9.6	<9.5	<9.6	<9.6	<9.5	80 (total isomers)
Heptachlor	ng/L	<2.9	<2.8	<2.9	<2.9	<2.9	3.8
Heptachlor epoxide	ng/L	<9.6	<9.5	<9.6	<9.6	<9.5	
Heptachlorobiphenyls	ng/L	<0.3	<0.3	<0.3	<0.3	<0.3	
Hexachlorobiphenyls	ng/L	<0.2	<0.2	<0.2	<0.2	<0.2	
lambda-Cyhalothrin	ng/L	<1.0	<0.9	<1.0	<1.0	<1.0	
Methoxychlor	ng/L	<9.6	<9.5	<9.6	<9.6	<9.5	
Methyl parathion	ng/L	<9.7	<9.5	<9.7	<9.7	<9.9	
Molinate	ng/L	<96.5	<95.1	<96.8	<97.1	<98.5	
Monochlorobiphenyls	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	
Nonachlorobiphenyls	µg/L	<0.4	<0.4	<0.4	<0.4	<0.4	
Octachlorobiphenyls	µg/L	<0.4	<0.3	<0.3	<0.3	<0.3	
Pendimethalin	µg/L	<480	<474	<478	<481	<476	
Pentachlorobiphenyls	µg/L	<0.2	<0.2	<0.2	<0.2	<0.2	
Pentachlorophenol (pH 7.4)	ng/L	NR	<0.2	NR	NR	NR	
Tetrachlorobiphenyls	µg/L	<0.2	<0.2	<0.2	<0.2	<0.2	
Total PCBs	µg/L	U	U	U	U	U	14
Toxaphene	ng/L	<57.6	<56.9	<57.3	<57.7	<57.1	0.2
Trichlorobiphenyls	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	
Trifluralin	ng/L	<48.0	<47.4	<47.8	<48.1	<47.6	

Notes:
Bold text/shaded cells indicate instances where reported parameter concentrations exceed their applicable water quality criteria/sediment benchmark values.
* The reporting limit was raised because absence or presence at the routine value could not be verified.
** There is presumptive evidence that the analyte is present; the analyte is reported as a tentative identification. The reported value is an estimate
NR = Not Reported

Event 4 May 16-17, 2006						
Conventional (Sed)	**Unit**	**Reference Site**	**Coffee Creek**	**Mossy Lake**	**Ouachita (upstream)**	**Ouachita (downstream)**
Alkalinity	mg/L	161	235	177	46	52
Conductivity	umhos/cm	653	961	894	550	563
Hardness	mg/L	184	216	136	120	138
Total Organic Carbon	mg/kg	27,100	32,100	31,900	8,480	5,940
Percent Total Solids	%	54.70	39.54	33.53	55.68	64.79
Salinity	mg/L	0	0	0	0	0
Sediment Particles, Clay	%	18.78	11.61	19.84	21.41	10.83
Sediment Particles, Gravel	%	0	0	0	0	0
Sediment Particles, Sand	%	38.88	77.21	50.18	57.59	74.72
Sediment Particles, Silt	%	42.35	11.18	29.97	21.00	14.45
Total Ammonia	mg/L	1.1	7.2	6.9	2.3	1.7
Total Chlorine	mg/L	<0.1	<0.1	<0.1	<0.1	<0.1

Notes:
Bold text/shaded cells indicate instances where reported parameter concentrations exceed their applicable water quality criteria/sediment benchmark values.

Event 4 May 16-17, 2006								
Metals (Sed)	**Unit**	**Reference Site**	**Coffee Creek**	**Mossy Lake**	**Ouachita (upstream)*** **	**Ouachita (downstream)*** **	**Bench Mark**	**Ref.**
Aluminum	mg/kg	**3,890**	**2,340**	**3,700**	**2,890**	**1,890**	58,030	1
Antimony	mg/kg	<0.3	<0.4	<0.5	<0.3	<0.3		
Arsenic	mg/kg	**1.2**	**0.9**	**1.5**	**2.1**	**1.1**	12.1	1
Barium	mg/kg	**83.9**	**106**	**130**	**64.4**	**36.4**		
Beryllium	mg/kg	<0.7	<1.0	<1.3	<0.8	<0.7		
Cadmium	mg/kg	**0.9**	**1.0**	**1.4**	**1.0**	<0.7	0.592	1
Calcium	mg/kg	**8,960**	**6,160**	**6,350**	**948**	**497**		
Chromium	mg/kg	**11.9**	**4.7**	**6.3**	**4.6**	**2.7**	56	1
Cobalt	mg/kg	<3.0	<3.9	<5.2	**6.5**	**3.5**		
Copper	mg/kg	**13.5***	**15.2***	**9***	**3.4***	<2.6	28	1
Iron	mg/kg	**6160****	**2,080****	**6660****	**8460****	**4,830**		
Lead	mg/kg	**14.0**	**5.9**	**8**	**6.7**	**4.7**	34.2	1
Magnesium	mg/kg	**286**	**486**	**475**	**418**	**230**		
Manganese	mg/kg	**334**	**301**	**369**	**666**	**238**	1,673	1
Mercury	mg/kg	**0.8**	<0.1	<0.2	<0.1	<0.09	0.2	1
Nickel	mg/kg	**4.0**	**4.4**	<5.2	**3.8**	<2.6	37.9	1
Potassium	mg/kg	**156**	**234**	**441**	**199**	**146**		
Selenium	mg/kg	**3.2**	**1.0**	**2.0**	**2.4**	**1.4**		
Silver	mg/kg	<1.5**	<2.0**	<2.6**	<1.6**	<1.3		
Sodium	mg/kg	**145**	**617**	**860**	<82.0	<13.2		
Thallium	mg/kg	<0.3	<0.4	<0.5	<0.3	<0.3		
Vanadium	mg/kg	**12.7**	**7.2**	**12.6**	**29.9**	**13.6**		
Zinc	mg/kg	**28.4****	**152****	**96.1****	**25.6****	**15.4**	159	1

Notes:
Bold text/shaded cells indicate instances where reported parameter concentrations exceed their applicable water quality criteria/sediment benchmark values.
* Blank related - The concentration found in the sample was less than 10X the concentration found in the associated extraction, digestion and/or analysis blank. Presence in the sample is therefore suspect.
** The identification of the analyte is acceptable; the reported value may be biased low. The actual value is expected to be greater than the reported value.
***Note: the pollutants in Ouachita DN are lower than Ouchita UP. Samples may have been mislabeled or misreported.

Event 4 May 16-17, 2006								
Pesticides, Herbicides, and PCB s (Sed)	**Unit**	**Reference Site**	**Coffee Creek**	**Mossy Lake**	**Ouachita (upstream)**	**Ouachita (downstream)**	**Bench Mark**	**Ref.**
4,4´-DDD	ng/L	<0.5	<0.7	<0.9	<0.5	<0.4	10	2
4,4´-DDE	ng/L	<0.5	<0.7	<0.9	<0.5	<0.4	10	2
4,4´-DDT	ng/L	<0.5	<0.7	<0.9	<0.5	<0.4	4	2
Aldrin	ng/L	<0.5	<0.7	<0.9	<0.5	<0.4		
alpha-BHC	ng/L	<0.5	<0.7	<0.9	<0.5	<0.4		
Aroclor-1016	ng/L	<5.0	<6.6	<8.8	<5.4	<4.5		
Aroclor-1221	ng/L	<10.0	<13.2	<1.75	<10.9	<8.9		
Aroclor-1232	ng/L	<5.0	<6.6	<8.8	<5.4	<4.5		
Aroclor-1242	ng/L	<5.0	<6.6	<8.8	<5.4	<4.5		
Aroclor-1248	ng/L	<5.0	<6.6	<8.8	<5.4	<4.5		
Aroclor-1254	ng/L	**7.8***	<6.6	<8.8	<5.4	<4.5		
Aroclor-1260	ng/L	**20.8**	<6.6	<8.8	<5.4	<4.5		
Atrazine	ng/L	<2.5	<3.3	<4.4	<2.7	<2.2		
beta-BHC	ng/L	<0.5	<0.7	<0.9	<0.5	<0.4		
Carbofuran	ng/L	<2.5	<3.3	<4.4	<2.7	<2.2		
Chlordane (tech)	ng/L	<2.5	<3.3	<4.4	<2.7	<2.2		
Cyfluthrin	µg/kg	<0.5	<0.7	<0.9	<0.5	<0.4		
Decachlorobiphenyls	µg/kg	<50.6	<67.4	<87.2	<54.8	<44.9		
delta-BHC	µg/kg	<0.5	<0.7	<0.9	<0.5	<0.4	13000	2
Diazinon	µg/kg	<2.5	<3.3	<4.4	<2.7	<2.2	190	2
Dichlorobiphenyls	µg/kg	<10.1	<13.5	<17.4	<11.0	<9.0		
Dieldrin	µg/kg	<0.5	<0.7	<0.9	<0.5	<0.4	1.0	2
Endosulfan I	µg/kg	<0.5	<0.7	<0.9	<0.5	<0.4	290	2
Endosulfan II	µg/kg	<0.5	<0.7	<4.8**	<0.5	<0.4	1400	2
Endosulfan sulfate	µg/kg	<0.5	<0.7	<0.9	<0.5	<0.4		
Endrin	µg/kg	<0.5	<1.0**	<0.9	<0.5	<0.4	5500	2
Endrin aldehyde	µg/kg	<0.5	<1.0**	<0.9	<0.5	<0.4		
Endrin ketone	µg/kg	<2.0**	<2.7**	<3.5**	<2.2**	<1.8**		
Esfenvalerate	µg/kg	<0.5	<0.7	<0.9	<0.5	<0.4		
gamma-BHC (Lindane)	µg/kg	<0.5	<0.7	<0.9	<0.5	<0.4	370	2
Heptachlor	µg/kg	<0.5	<0.7	<0.9	<0.5	<0.4		
Heptachlor epoxide	µg/kg	<0.5	<7.0**	<7.8**	<0.5	<0.4		
Heptachlorobiphenyls	µg/kg	<30.3	<40.4	<52.3	<32.9	<27.0		
Hexachlorobiphenyls	µg/kg	<20.3	<27.0	<34.9	<21.9	<18.0		
lambda-Cyhalothrin	µg/kg	<0.5	<0.7	<0.9	<0.5	<0.4		
Methoxychlor	µg/kg	<0.5***	<0.7***	<0.9***	<0.5***	<0.4***	1900	2
Methyl parathion	µg/kg	<2.5	<3.3	<4.4	<2.7	<2.2		
Molinate	µg/kg	<24.9	<32.9	<43.8	<27.2	<22.3		
Monochlorobiphenyls	µg/kg	<10.1	<13.5	<17.4	<11.0	<9.0		
Nonachlorobiphenyls	µg/kg	<40.4	<53.8	<69.7	<43.8	<35.9		
Octachlorobiphenyls	µg/kg	<30.3	<40.4	<52.3	<32.9	<27.0		
Pendimethalin	µg/kg	<125	<167	<216	<136	<111		
Pentachlorobiphenyls	µg/kg	<20.3	<27.0	<34.9	<21.9	<18.0		
Tetrachlorobiphenyls	µg/kg	<20.3	<27.0	<34.9	<21.9	<18.0		
Total PCBs	µg/kg	U	U	U	U	U	31.62	1
Toxaphene	µg/kg	<14.9	<19.7	<26.3	<16.3	<13.4		
Trichlorobiphenyls	µg/kg	<10.1	<13.5	<17.4	<11.0	<9.0		
Trifluralin	µg/kg	<12.5	<16.7	<21.6	<13.6	<11.1		

Notes:

Bold text/shaded cells indicate instances where reported parameter concentrations exceed their applicable water quality criteria/sediment benchmark values.

* There is presumptive evidence that the analyte is present; the analyte is reported as a tentative identification. The reported value is an estimate

** The reporting limit was raised because absence or presence at the routine value could not be verified.

*** The presence or absence of the analyte cannot be determined from the data due to severe quality control problems. The data are rejected and considered unusable.

Event 4 May 16-17, 2006								
Semivolatiles (Sed)	**Unit**	**Reference Site**	**Coffee Creek**	**Mossy Lake**	**Ouachita (upstream)**	**Ouachita (downstream)**	**Bench Mark**	**Ref.**
1,1'-Biphenyl	µg/kg	<203	<270	<349	<219	<180		
1,1'-Biphenyl, bix(1-methylethyl)	µg/kg	NR	4,500	NR	NR	NR		
1,2,4-Trichlorobenzene	µg/kg	<20.3	<27.0	<34.9	<21.9	<18.0	6.1	2
1,2-Dichlorobenzene	µg/kg	<50.6	<67.4	<87.3	<54.8	<45.0	34000	2
1,2-Diphenylhydrazine	µg/kg	<20.3	<27.0	<34.9	<21.9	<18.0		
1,3-Dichlorobenzene	µg/kg	<50.6	<67.4	<87.3	<54.8	<45.0	170000	2
1,4-Dichlorobenzene	µg/kg	<50.6	<67.4	<87.3	<54.8	<45.0	35000	2
2,4,5-Trichlorophenol	µg/kg	<203	<270	<349	<219	<180		
2,4,6-Trichlorophenol	µg/kg	<203	<270	<349	<219	<180		
2,4-Dichlorophenol	µg/kg	<203	<270	<349	<219	<180		
2,4-Dimethylphenol	µg/kg	<50.6	<67.4	<87.3	<54.8	<45.0		
2,4-Dinitrophenol	µg/kg	<1,010	<1,350	<1,750	<1,100	<899		
2,4-Dinitrotoluene	µg/kg	<203	<270	<349	<219	<180		
2,6-Dinitrotoluene	µg/kg	<203	<270	<349	<219	<180		
2-Chloronaphthalene	µg/kg	<203	<270	<349	<219	<180		
2-Chlorophenol	µg/kg	<203	<270	<349	<219	<180		
2-Methylnaphthalene	µg/kg	<50.6	<67.4	<87.3	<54.8	<45.0		
2-Methylphenol	µg/kg	<101	<135	<175	<110	<89.9		
2-Nitroaniline	µg/kg	<405	<539	<698	<439	<360		
2-Nitrophenol	µg/kg	<203	<270	<349	<219	<180		
3 &/or 4-Methylphenol	µg/kg	<203	<270	<349	<219	<180		
3,3´-Dichlorobenzidine	µg/kg	<203*	<270*	<349*	<219	<180		
3-Nitroaniline	µg/kg	<405*	<539*	<698*	<439	<360		
4,6-Dinitro-2-methylphenol	µg/kg	<1,010	<1,350	<1,750	<1,100	<899		
4-Bromophenyl phenyl ether	µg/kg	<203	<270	<349	<219	<180	130000	2
4-Chloro-3-methylphenol	µg/kg	<203	<270	<349	<219	<180		
4-Chloroaniline	µg/kg	<203*	<270*	<349	<219	<180		
4-Chlorophenyl phenyl ether	µg/kg	<203	<270	<349	<219	<180		
9-Octadecenoic acid isomer (NA)	µg/kg	NR	17,000	9,000	1,300	NR		
4-Nitroaniline	µg/kg	<405*	<539*	<698*	<439	<360		
4-Nitrophenol	µg/kg	<608	<809	<1,050	<658	<540		
Acenaphthene	µg/kg	<50.6	<67.4	<87.3	<54.8	<45.0		
Acenaphthylene	µg/kg	<50.6	<67.4	<87.3	<54.8	<45.0		
Acetophenone	µg/kg	<203	<270	<349	<219	<180		
Anthracene	µg/kg	<50.6	976	<87.3	<54.8	<45.0	31.62	1
Atrazine	µg/kg	<203	<270	<349	<219	<180		
Benzaldehyde	µg/kg	<203	<67.4	<349	<219	<180		
Benzo (a) anthracene	µg/kg	<50.6	<67.4	<87.3	<54.8	<45.0	260	1
Benzo (a) pyrene	µg/kg	<50.6	<67.4	<87.3	<54.8	<45.0	350	1

Event 4 May 16-17, 2006								
Semivolatiles (Sed)	**Unit**	**Reference Site**	**Coffee Creek**	**Mossy Lake**	**Ouachita (upstream)**	**Ouachita (downstream)**	**Bench Mark**	**Ref.**
Benzo (b) fluoranthene	µg/kg	<50.6	<67.4	<87.3	<54.8	<45.0	27.2	1
Benzo (g,h,i) perylene	µg/kg	<50.6	<67.4	<87.3	<54.8	<45.0	290	1
Benzo (k) fluoranthene	µg/kg	<50.6	<67.4	<87.3	<54.8	<45.0	27.2	1
Benzoic acid	µg/kg	<203	546**	487**	224**	<180		
Benzyl alcohol	µg/kg	<101	<135	<175	<110	<89.9		
Bis(2-chloroethoxy)methane	µg/kg	<203	<270	<349	<219	<180		
Bis(2-chloroethyl)ether	µg/kg	<203	<270	<349	<219	<180		
Bis(2-chloroisopropyl)ether	µg/kg	<203	<270	<349	<219	<180		
Bis(2-ethylhexyl)phthalate	µg/kg	<101	<135	<175	<110	<89.9		
Butyl benzyl phthalate	µg/kg	<101	<135	<175	<110	<89.9	1100000	2
C27H46O isomer	µg/kg	NR	NR	NR	1,100	700		
C30H40O3 isomer	µg/kg	NR	5,700	10,000	NR	NR		
C30H52O isomer	µg/kg	1,500	NR	NR	NR	NR		
Caprolactam	µg/kg	<203	<270	<349	<219	<180		
Carbazole	µg/kg	<203	<270	<349	<219	<180		
Carboxylic acid @11.73	µg/kg	NR	5,300	NR	NR	NR		
Carboxylic acid @11.84	µg/kg	NR	4,900	NR	NR	NR		
Chrysene	µg/kg	<50.6	<67.4	<87.3	<54.8	<45.0	500	1
Dibenz (a,h) anthracene	µg/kg	<50.6	<67.4	<87.3	<54.8	<45.0		
Dibenzofuran	µg/kg	<203	<270	<349	<219	<180	28.2	1
Diethyl phthalate	µg/kg	<101	<135	<175	<110	<89.9		
Dimethyl phthalate	µg/kg	<101	<135	<175	<110	<89.9	63000	2
Di-n-butyl phthalate	µg/kg	<101	<135	<175	<110	<89.9		
Di-n-octyl phthalate	µg/kg	<101	<135	<175	<110	<89.9	1100000	2
Ferruginol (514-62-5)	µg/kg	NR	NR	56,000	NR	NR		
Fluoranthene	µg/kg	<50.6	76.9	<87.3	<54.8	<45.0	64.23	1
Fluorene	µg/kg	<50.6	<67.4	<87.3	<54.8	<45.0	34.64	1
Friedelin	µg/kg	3,300	NR	NR	NR	NR		
gamma-Sitosterol (83-47-6)	µg/kg	2,900	6,900	10,000	2,100	1,800		
Hentriacontane	µg/kg	1,600	NR	NR	1,100	1,200		
Heptacosane	µg/kg	1,300	NR	NR	NR	NR		
Hexachlorobenzene	µg/kg	<20.3	<27.0	<34.9	<21.9	<18.0		
Hexachlorobutadiene	µg/kg	<50.6	<67.4	<87.3	<54.8	<45.0		
Hexachlorocyclopentadiene	µg/kg	<203*	<270*	<349	<219	<180		
Hexachloroethane	µg/kg	<203	<270	<349	<219	<180	100000	2
Hexadecanoic acid (Z-11)	µg/kg	1,700	7,400	NR	1,900	810		
n-Hexadecanoic acid	µg/kg	1,300	5,300	NR	1,300	1,000		
Indeno (1,2,3-cd) pyrene	µg/kg	<50.6	<67.4	<87.3	<54.8	<45.0	78	1
Isophorone	µg/kg	<50.6	<67.4	<87.3	<54.8	<45.0		
Lupeol	µg/kg	NR	NR	NR	NR	910		

Event 4 May 16-17, 2006								
Semivolatiles (Sed)	**Unit**	**Reference Site**	**Coffee Creek**	**Mossy Lake**	**Ouachita (upstream)**	**Ouachita (downstream)**	**Bench Mark**	**Ref.**
Methyl methylethyl benzene isomer	µg/kg	NR	NR	27,000	NR	NR		
Naphthalene	µg/kg	<50.6	<67.4	<87.3	<54.8	<45.0	32.75	1
Nitrobenzene	µg/kg	<203	<270	<349	<219	<180		
N-Nitrosodi-n-propylamine	µg/kg	<203	<270	<349	<54.8	<45.0		
N-Nitrosodiphenylamine	µg/kg	<50.6	<67.4	<87.3	<219	<180		
Nonacosane	µg/kg	1,900	NR	NR	2,100	1,400		
Octadecanoic acid (57-11-4)	µg/kg	NR	4,300	NR	NR	NR		
Pentachlorophenol	µg/kg	<203	<270	<349	<219	<180		
Phenanthrene	µg/kg	<50.6	98.5	<87.3	<54.8	<45.0	350	1
Phenol	µg/kg	<203	<270	<349	<219	<180		
Pyrene	µg/kg	<50.6	87.7	<87.3	<54.8	<45.0	570	1
Phytol	µg/kg	NR	NR	NR	940	NR		
Simonellite Isomer	µg/kg	NR	NR	59,000	NR	NR		
Stigmasterol	µg/kg	NR	NR	NR	970	730		
Sugiol (5111-05-7)	µg/kg	NR	NR	11,000	NR	NR		
Unknown@13.58	µg/kg	1,700	6,700	NR	NR	NR		
Unknown@13.62	µg/kg	NR	NR	NR	NR	NR		
Unknown@13.69	µg/kg	4,200	NR	NR	NR	NR		
Unknown@13.74	µg/kg	NR	NR	22,000	NR	NR		
Unknown@13.87	µg/kg	NR	NR	32,000	NR	NR		
Unknown@14.28	µg/kg	NR	NR	8,500	NR	NR		
Unknown carboxylic acid@17.63	µg/kg	NR	5,300	NR	NR	680		
Unknown straight chain paraffin	µg/kg	NR	NR	NR	870	670		

Notes:
Bold text/shaded cells indicate instances where reported parameter concentrations exceed their applicable water quality criteria/sediment benchmark values.
NR = Not Reported
* The presence or absence of the analyte cannot be determined from the data due to severe quality control problems. The data are rejected and considered unusable.
** The identification of the analyte is acceptable; the reported value is an estimate and Blank related - The concentration found in the sample was less than 10X the concentration found in the associated extraction, digestion and/or analysis blank. Presence in the sample is therefore suspect.

Event 4 May 16-17, 2006							
Toxicity (Sed)		**Unit**	**Reference Site**	**Coffee Creek**	**Mossy Lake**	**Ouachita (upstream)**	**Ouachita (downstream)**
Ceriodaphnia	**Young Per Female (MEAN)***	larva	5.3	0	2.1	0	1.4
Ceriodaphnia	**YPF Test Failure**	-	**YES**	**YES**	**YES**	**YES**	**YES**
Ceriodaphnia	**Mortality (%)**	%	40	100	70	100	80
Ceriodaphnia	**Mort Test Failure**	-	NO	**YES**	**YES**	**YES**	**YES**
Pimephales	**Organisms Affected (%)**	%	10	50	13	10	13
Pimephales	**Org Aff Test Failure***	-	NO	**YES**	**YES**	NO	**YES**

Notes:
Bold text/shaded cells indicate instances where reported parameter concentrations exceed their applicable water quality criteria/sediment benchmark values.

Event 5 June 6, 2006								AR SWQS			
Field Measurements (W)*	**Unit**		**Reference Site**	**Coffee Creek**	**Mossy Lake**	**Ouachita (upstream)**	**Ouachita (downstream)**	**Reference Site**	**Coffee Creek**	**Mossy Lake**	**Ouachita River**
pH	S.U.	**Low**	7.39	7.60	8.07	MF	7.35*	6 to 9*	6 to 9*	6 to 9*	6 to 9
		High	7.71	7.85	8.38	MF	**10.58***				
DO	mg/l	**Low**	**0.0**	**0.0**	**0.23**	5.80	**1.91***	2*	3*	3*	3
		High	8.64	**2.07**	7.61	7.98	6.6*				
DO Saturation	%	**Low**	0.0	0.0	2.9	NR	NR				
		High	105.9	26.9	118.4	NR	NR				
Conductivity	umhos/cm	**Low**	484	2239	2443	95	117.82				
		High	502	2347	2529	103	157.46				
Temperature ºC	± 1°C	**Low**	21.10	28.50	25.71	28.27	28.38	30*	30*	32*	32
		high	26.87	**32.49**	**39.44**	29.39	29.47				
Turbidity	NTU		**24.0**	**40.0**	**49.7**	13.8	14.2	21/32*	21/32*	21/32*	21/32

Notes:
Bold text/shaded cells indicate instances where reported parameter concentrations exceed their applicable water quality criteria/sediment benchmark values.
MF = pH meter malfunctioned
NR = Not reported
* Data suspect. See Section 2.4 of Report
**Exempt from Chapter 5 Specific Standards and the color standard (Gulf Coast Eco-region SWQS applied).

Event 5 June 6, 2006								
Conventional (W)	**Unit**	**Reference Site**	**Coffee Creek**	**Mossy Lake**	**Ouachita (upstream)**	**Ouachita (downstream)**	**Ouachita River Limit**	**Coffee Ck \ Mossy Lake SWQS**
Alkalinity	mg/L	146	479	478	24	24		
Ammonia-N	mg/L	0.07	8.57	**5.73**	<0.05	0.11	pH dependent	pH dependent*
Chloride	mg/L	**50**	**160**	**147**	7	11	160	14*
Chlorophyll-a	µg/L	42.7	<10	134	18.7	19.2		
Hardness	mg/L	180	242	214	52	40		
Nitrate-N	mg/L	<0.02	<0.02	<0.02	<0.02	<0.02		
Nitrite-N	mg/L	<0.02	0.35	0.06	<0.02	<0.02		
Pheophytin-a	µg/L	5.87	<5	31.9	7.48	<5		
Salinity	mg/L	0	0	0	0	0		
Sulfate	mg/L	**7**	**442**	**584**	9	20	40	31*
TDS	mg/L	**320**	**1,640**	**1,840**	69	97	350	123*
TOC	mg/L	15	108	92	4	6		
Total Ammonia	mg/L	0.4	3	3	0.4	0.5		
Total Chlorine	mg/L	0.4	1.1	1.1	0.4	0.3		
Total Kjeldahl N (TKN)	mg/L	1.09	15.3	12.6	0.39	0.56		
Total Phosphorus	mg/L	0.29	1.07	0.99	<0.06	0.07		
TSS	mg/L	61	111	38	9	10		
VSS	mg/L	11	38	19	2	3		

pH		7.71	7.85	8.38	7*	7*
Ammonia Regs (mg/L)		14.4	10.1	3.88	36.1	36.1

Notes:
Bold text/shaded cells indicate instances where reported parameter concentrations exceed their applicable water quality criteria/sediment benchmark values.
*Exempt from Chapter 5 Specific Standards and the color standard (Gulf Coast Eco-region SWQS applied).

Event 5 June 6, 2006						
Special Parameters (W)	**Unit**	**Reference Site**	**Coffee Creek**	**Mossy Lake**	**Ouachita (upstream)**	**Ouachita (downstream)**
Color (True)	units	156.3	1,075	1,273	64.9	106.2
Color (Apparent)	units	131.3	922	932	48.7	64.9
E. Coli	cfu/100 mL	NA	NA	NA	3	4
E. Coli Criteria	cfu/100 mL	2050	410	298	410	410

Notes:
Bold text/shaded cells indicate instances where reported parameter concentrations exceed their applicable water quality criteria/sediment benchmark values.
NA = Not applicable

Event 5 June 6, 2006						
Ultra Clean Metals (W)	**Unit**	**Reference Site***	**Coffee Creek***	**Mossy Lake***	**Ouachita (upstream)**	**Ouachita (downstream)**
Cadmium, dissolved	µg/L	<0.05	0.597	0.471	<0.05	<0.05
Chromium, total dissolved**	µg/L	0.748	5.200	5.090	<0.50	<0.50
Copper, dissolved	µg/L	0.647	6.180	4.650	0.736	0.784
Lead, dissolved	µg/L	0.355	2.96	2.35	0.129	0.156
Mercury, total	ng/L	**0.0407**	0.0107	0.0119	0.0063	0.0067
Nickel, dissolved	µg/L	2.60	7.91	7.77	0.806	0.917
Selenium, total	µg/L	0.252	0.475	0.343	0.127	0.185
Silver, dissolved	µg/L	<0.050	0.069	<0.05	<0.05	<0.05
Zinc, dissolved	µg/L	0.864	**263**	151	0.502	3.990

Notes:
Bold text/shaded cells indicate instances where reported parameter concentrations exceed their applicable water quality criteria/sediment benchmark values.
*Exempt from Chapter 5 Specific Standards and the color standard (Gulf Coast Eco-region SWQS applied).
** Total dissolved chromium results compared to the summation of Cr-III and Cr-VI SWQSs

Hardness	mg/L	180	242	214	52	40
Calculated Chronic Toxicity from Hardness						
		Reference Site	**Coffee Creek**	**Mossy Lake**	**Ouachita (upstream)**	**Ouachita (downstream)**
Cadmium, dissolved	µg/L	1.591	1.980	1.808	0.636	0.523
Chromium, total dissolved**	µg/L	299	378	343	115	95
Copper, dissolved	µg/L	18.757	24.155	21.745	6.492	5.188
Lead, dissolved	µg/L	4.743	6.490	5.700	1.227	0.916
Mercury, total	ng/L	0.012	0.012	0.012	0.012	0.012
Nickel, dissolved	µg/L	258.718	332.334	299.500	90.491	72.479
Selenium, total	µg/L	5.000	5.000	5.000	5.000	5.000
Silver, dissolved	µg/L					
Zinc, dissolved	µg/L	171.965	220.981	199.117	60.051	48.081
Calculated Acute Toxicity from Hardness						
		Reference Site	**Coffee Creek**	**Mossy Lake**	**Ouachita (upstream)**	**Ouachita (downstream)**
Cadmium, dissolved	µg/L	6.998	9.640	8.439	1.822	1.371
Chromium, total dissolved**	µg/L	904	1147	1039	337	275
Copper, dissolved	µg/L	29.606	39.129	34.848	9.189	7.177
Lead, dissolved	µg/L	121.702	166.546	146.267	31.476	23.511
Mercury, total	ng/L	2.400	2.400	2.400	2.400	2.400
Nickel, dissolved	µg/L	2327.243	2989.434	2694.084	813.992	651.964
Selenium, total	µg/L	20.000	20.000	20.000	20.000	20.000
Silver, dissolved	µg/L	9.482	15.775	12.768	1.120	0.713
Zinc, dissolved	µg/L	188.321	241.998	218.055	65.762	52.654

Notes:
Bold text/shaded cells indicate instances where reported parameter concentrations exceed their applicable water quality criteria/sediment benchmark values.

Event 5 June 6, 2006							
Pest-Herb-PCBs (W)	**Unit**	**Reference Site**	**Coffee Creek**	**Mossy Lake**	**Ouachita (upstream)**	**Ouachita (downstream)**	**Ouachita Chronic SWQS (ng/L)**
4,4´-DDD	ng/L	<5.7	<5.7	<6.0	<5.8	<5.9	
4,4´-DDE	ng/L	<9.5	<9.6	<9.9	<9.6	<9.9	
4,4´-DDT	ng/L	<1.0	<1.0	<1.0	<1.0	<1.0	1
Aldrin	ng/L	<9.5	<9.6	<9.9	<9.6	<9.9	300
alpha-BHC[1]	ng/L	<9.5	<9.6	<9.9	<9.6	<9.9	80 (total isomers)
Aroclor-1016[1]	ng/L	<19.1	<19.1	<19.9	<19.2	<19.7	
Aroclor-1221[1]	ng/L	<38.2	<38.2	<39.7	<38.4	<39.4	
Aroclor-1232[1]	ng/L	<19.1	<19.1	<19.9	<19.2	<19.7	
Aroclor-1242[1]	ng/L	<19.1	<19.1	<19.9	<19.2	<19.7	
Aroclor-1248[1]	ng/L	<19.1	<19.1	<19.9	<19.2	<19.7	
Aroclor-1254[1]	ng/L	<19.1	<19.1	<19.9	<19.2	<19.7	
Aroclor-1260[1]	ng/L	<19.1	<19.1	<19.9	<19.2	<19.7	
Atrazine	ng/L	<9.6	11.3*	<10.1	<9.8	<9.8	
beta-BHC[1]	ng/L	<9.5	<9.6	<9.9	<9.6	<9.9	80 (total isomers)
Carbofuran	ng/L	<9.6	<9.6	<10.1	<9.8	<9.8	
Chlordane (tech)	ng/L	<9.5	<9.6	<9.9	<9.6	<9.9	4.3
Cyfluthrin	ng/L	<1.9	<1.9	<2.0	<1.9	<2.0	
Decachlorobiphenyls	ng/L	<0.5	<0.5	<0.5	<0.5	<0.5	
delta-BHC[1]	ng/L	<9.5	<9.6	<9.9	<9.6	<9.9	80 (total isomers)
Diazinon	ng/L	<9.6	<9.6	<10.1	<9.8	<9.8	
Dichlorobiphenyls	ng/L	<0.1	<0.1	<0.1	<0.1	<0.1	
Dieldrin	ng/L	<9.5	<9.6	<9.9	<9.6	<9.9	1.9
Endosulfan I[1]	ng/L	<9.5	<9.6	<9.9	<9.6	<9.9	56 (total isomers)
Endosulfan II[1]	ng/L	<9.5	<9.6	<9.9	<9.6	<9.9	"
Endosulfan sulfate[1]	ng/L	<9.5	<9.6	<9.9	<9.6	<9.9	
Endrin[1]	ng/L	<9.5	<9.6	<9.9	<9.6	<9.9	2.3 (total isomers)
Endrin aldehyde[1]	ng/L	<9.5	<9.6	<9.9	<9.6	<9.9	"
Endrin ketone[1]	ng/L	<9.5	<9.6	<9.9	<9.6	<9.9	"
Esfenvalerate	ng/L	<9.5	<9.6	<9.9	<9.6	<9.9	
gamma-BHC[1] (Lindane)	ng/L	<9.5	<9.6	<9.9	<9.6	<9.9	80 (total isomers)
Heptachlor	ng/L	<2.9	<2.9	<3.0	<2.9	<3.0	3.8
Heptachlor epoxide	ng/L	<9.5	<9.6	<9.9	<9.6	<9.9	
Heptachlorobiphenyls	ng/L	<0.3	<0.3	<0.3	<0.3	<0.3	
Hexachlorobiphenyls	ng/L	<0.2	<0.2	<0.2	<0.2	<0.2	
lambda-Cyhalothrin	ng/L	<1.0	<1.0	<1.0	<1.0	<1.0	
Methoxychlor	ng/L	<9.5	<9.6	<9.9	<9.6	<9.9	
Methyl parathion	ng/L	<9.6	<9.6	<10.1	<9.8	<9.8	
Molinate	ng/L	<95.7	<96.3	<101	<97.9	<97.6	
Monochlorobiphenyls	ng/L	<0.1	<0.1	<0.1	<0.1	<0.1	
Nonachlorobiphenyls	ng/L	<0.4	<0.4	<0.4	<0.4	<0.4	
Octachlorobiphenyls	ng/L	<0.3	<0.3	<0.3	<0.3	<0.3	
Pendimethalin	ng/L	<477	<478	<497	<480	<493	
Pentachlorobiphenyls	ng/L	<0.2	<0.2	<0.2	<0.2	<0.2	
Tetrachlorobiphenyls	ng/L	<0.2	<0.2	<0.2	<0.2	<0.2	
Total PCBs	µg/L	U	U	U	U	U	14
Toxaphene	ng/L	<57.3	<57.3	<59.6	<57.6	<59.1	0.2
Trichlorobiphenyls	ng/L	<0.1	<0.1	<0.1	<0.1	<0.1	
Trifluralin	ng/L	<47.7	<47.8	<49.7	<48.0	<49.3	

Notes:
Bold text/shaded cells indicate instances where reported parameter concentrations exceed their applicable water quality criteria/sediment benchmark values.
* There is presumptive evidence that the analyte is present; the analyte is reported as a tentative identification. The reported value is an estimate.

Event 5 June 6, 2006							
Toxicity (W)		**Unit**	**Reference Site**	**Coffee Creek**	**Mossy Lake**	**Ouachita (upstream)**	**Ouachita (downstream)**
Ceriodaphnia	**Young Per Female (MEAN)***	larva	14.4	4	14.9	18.1	21.4
Ceriodaphnia	**YPF Test Failure**	-	NO	**YES**	NO	NO	NO
Ceriodaphnia	**Mortality (%)***	%	0	60	0	0	0
Ceriodaphnia	**Mort Test Failure**	-	NO	**YES**	NO	NO	NO
Pimephales	**Organisms Affected (%)***	%	0	87	63	7	7
Pimephales	**Org Aff Test Failure***	-	NO	**YES**	**YES**	NO	NO

Notes:
Bold text/shaded cells indicate instances where reported parameter concentrations exceed their applicable water quality criteria/sediment benchmark values.
* Field blank failed toxicity tests