

# Water Quality Study of Bays in Coastal Mississippi Water Quality Report

Project #05-0926



Science and Ecosystem Support Division  
United States Environmental Protection Agency – Region 4  
Athens, GA 30605

Mississippi Department of Environmental Quality  
2380 Highway 80 West  
Jackson, Mississippi 39204

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## **Executive Summary**

EPA's Region 4 Science & Ecosystem Support Division (SESD), in cooperation with the Mississippi Department of Environmental Quality (MDEQ), conducted a water quality study in the rivers and bays along the Mississippi coast following Hurricanes Katrina and Rita. The study was completed during the period September 26-30, 2005. The study area encompassed major bay systems on the Mississippi coast including Bangs Lake, Bayou Casotte, the Pascagoula and West Pascagoula River systems, the Back Bay of Biloxi, St. Louis Bay, and the Pearl River. The objective of this study was to provide sediment and water quality data in each major bay system along the Mississippi Sound. Flow was also measured at the seaward boundary of each system for estimating both conventional and toxic pollutant loadings entering the Mississippi Sound at the time of the study. This study was not designed to identify specific pollutant sources within each system or provide definitive information on the potential long term effects of the hurricanes on human or ecological health.

Findings from the EPA and MDEQ joint survey of coastal Mississippi following Hurricanes Katrina and Rita showed few detectable priority pollutant type compounds in the studied bays and rivers. In general, the pollutants present were detected in favorable concentrations when compared to EPA's National Ambient Water Quality Criteria for surface waters and the National Oceanic and Atmospheric Administration (NOAA) published effect levels for sediment. Dissolved oxygen concentrations were determined to be above the State's adopted minimum criteria at all but two of the thirty-nine surface water locations. Bacteriological densities at the study locations were less than EPA's promulgated enterococci criteria for coastal waters. Overall, the data collected by EPA shows that few water quality criteria were exceeded during the study. An exception was algal growth results in Back Bay of Biloxi and Bayou Casotte that exceeded 5 mg/l (dry weight). Dioxin results for the five sediment samples collected were all well below the EPA screening value for residential soils. The results of this study may be used as the basis for future targeted water quality studies by MDEQ and/or the EPA.

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## **1.0 Introduction**

Hurricane Katrina struck the U.S. Gulf Coast on August 29, 2005. USGS real-time instruments in Gautier, MS recorded wind speeds as high as 140 miles per hour and rainfall of approximately 2 feet. Several agencies including EPA, the Mississippi Department of Environmental Quality (MDEQ), United States Geological Survey (USGS), United States Corps of Engineers (USCOE), and Federal Emergency Management Agency (FEMA) have conducted extensive investigations into all aspects of the storm damage. Water quality in the major bay systems of the Mississippi Sound is currently of particular concern to MDEQ and US EPA, Region 4.

The EPA Office of Research and Development has conducted a comprehensive water quality monitoring/sampling of the Mississippi Sound. To complement that effort, the Region 4 Science & Ecosystem Support Division (SESD) conducted water quality monitoring and sampling at the major bay outlets to the Mississippi Sound. Additionally, MDEQ requested that this sampling include historic SESD/MDEQ sampling stations within each bay.

## **2.0 Objectives**

The primary objective of this survey was to provide water quality and flow data during a mid-ebb tide in each major bay system feeding Mississippi Sound for estimating both conventional and toxic pollutant loadings entering the Sound at the time of the study. In concert with this effort, water quality sampling, in-situ monitoring, and sediment sampling was conducted at selected stations within each bay or riverine system to provide an estimate of pollutant concentrations at the time of the study. The scope of this study was determined by scientists and engineers with the MDEQ and EPA to provide preliminary data on these systems within a reasonable timeframe. The detection limits for the analysis of water and sediments for this study are included in Appendix A.

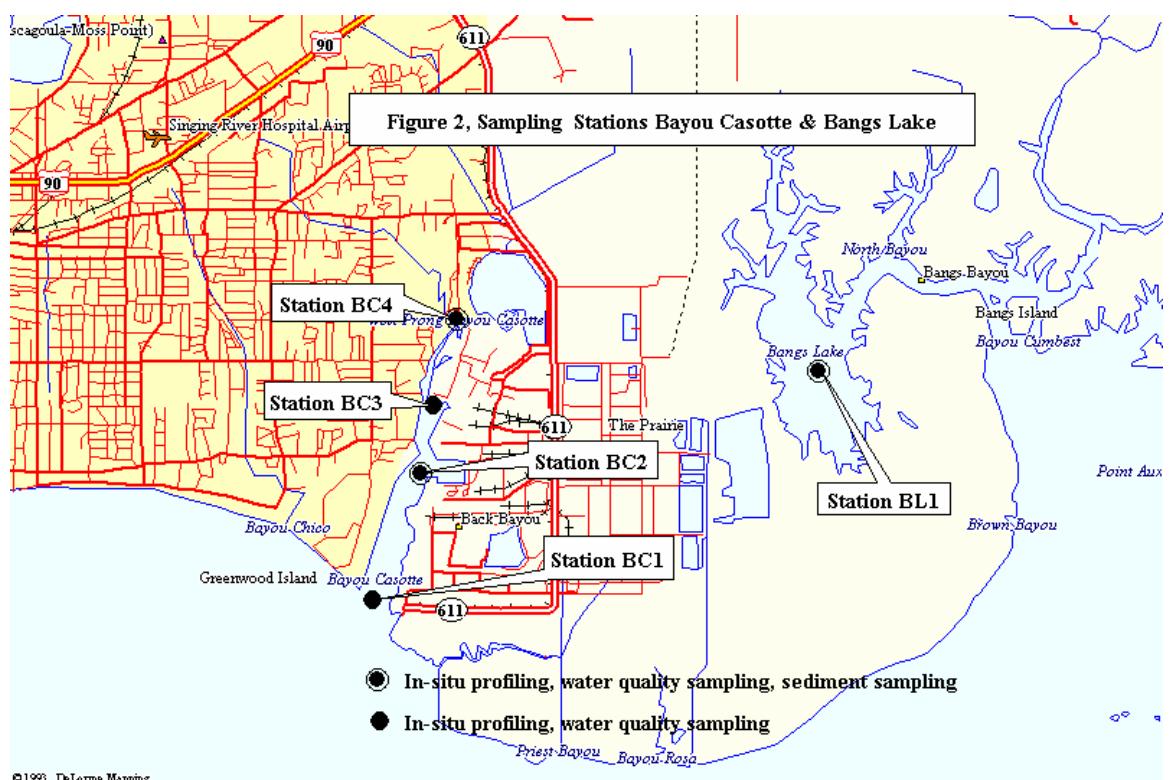
The sampling locations were selected based on the hydrodynamic characteristics of the water bodies, the location of historic water quality sampling locations, and the general location of potential releases from industrial/municipal sources. The data generated from this study presents a preliminary picture of the levels of targeted pollutants in the systems, and will be useful to the State of Mississippi and EPA as additional studies are planned to assess water, sediment and fish/shellfish conditions in each of the four major bay systems included in the study. The results of this study may be used to develop a targeted water quality monitoring study. However, the study was not designed to identify specific pollutant sources within each system or provide definitive information on the potential long term effects on water quality from Hurricane Katrina.

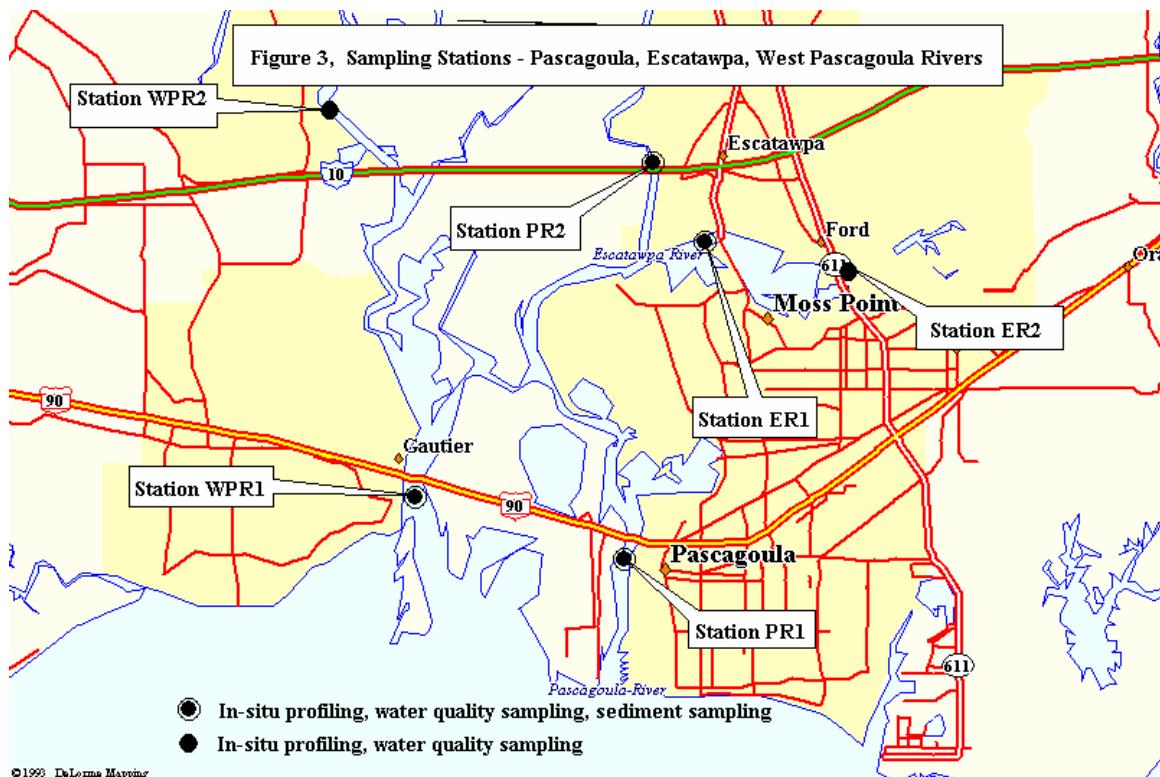
## **3.0 Study Area**

The study area (see Figure 1) encompassed four major bay systems on the Mississippi coast including Bayou Casotte (including Bangs Lake), the Pascagoula/West Pascagoula River systems, the Back Bay of Biloxi, and St. Louis Bay (including Bayou Caddy, and the Pearl River). Table 1 and Figures 2-5 show the water and sediment sampling locations within each major bay system. Figures 6-10 show pictures taken of Bayou Casotte, Escatawpa River, Back Bay of Biloxi, Industrial Canal, and St. Louis Bay taken during the survey.

Table 1  
 Sampling Station Locations and Descriptions  
 Water Quality Study of Bays in Coastal Mississippi

Station	Description	Location		Sample	
		Latitude	Longitude	Date	Time
BL1-SW	Bangs Lake - Water @ 1.5 ft depth	30° 21.234	88° 28.000	9/27/2005	1315
BL1-SD	Bangs Lake - Sediment - bottom @ 3 ft depth	30° 21.234	88° 28.000	9/27/2005	1415
BC1-SW	Bayou Casotte - water @ 22.75 ft depth	30° 19.980	88° 30.797	9/27/2005	1134
BC1-SW-D	Bayou Casotte - water @ 22.75 ft depth (duplicate)	30° 19.980	88° 30.797	9/27/2005	1205
BC2-SW	Bayou Casotte - water @ 21.75 ft depth	30° 20.681	88° 30.508	9/27/2005	1333
BC2-SD	Bayou Casotte - Sediment - bottom @ 43.5 ft depth	30° 20.641	88° 30.547	9/27/2005	1130
BC3-SW	Bayou Casotte - water @ 22.5 ft depth	30° 21.001	88° 30.412	9/27/2005	1410
BC4-SW	Bayou Casotte - water @ 1 ft depth	30° 21.521	88° 30.268	9/27/2005	1450
BC4-SD	Bayou Casotte - Sediment - bottom @ 2.1 ft depth	30° 21.506	88° 30.275	9/27/2005	1240
WPR1-SW	West Pascagoula River - Water @ 13 ft depth	30° 22.751	88° 36.509	9/28/2005	1115
WPR1-SD	West Pascagoula River - Sediment -bottom 26 ft depth	30° 22.751	88° 36.509	9/28/2005	1150
PR1-SW	Pascagoula River - Water @ 20 ft depth	30° 22.047	88° 33.882	9/28/2005	1240
PR1-SD	Pascagoula River - Sediment-bottom 40 ft depth	30° 22.047	88° 33.882	9/28/2005	1320
PR2-SW	Pascagoula River - Water Composited from 5 & 15 ft depths	30° 26.387	88° 33.471	9/28/2005	1557
PR2-SD	Pascagoula River - Sediment-bottom 23 ft depth	30° 26.387	88° 33.471	9/28/2005	1545
ER1-SW	Escatawpa River - Water Composited from 5 & 15 ft depths	30° 25.516	88° 32.861	9/28/2005	1420
ER1-SW-D	Escatawpa River - Water Composited from 5 & 15 ft depths (duplicate)	30° 25.516	88° 32.861	9/28/2005	1425
ER1-SD	Escatawpa River - Sediment- bottom 23 ft depth	30° 25.517	88° 32.862	9/28/2005	1400
ER1-SD-D	Escatawpa River - Sediment- bottom 23 ft depth (duplicate)	30° 25.517	88° 32.862	9/28/2005	1430
ER2-SW	Escatawpa River - Water @ 10 ft depth	30° 25.312	88° 30.971	9/28/2005	1135
WPR2-SW	West Pascagoula River - Water @ 15 ft depth	30° 26.971	88° 37.573	9/28/2005	1420
BBB1-SW	Back Bay of Biloxi - Water @ 5.5 ft depth	30° 24.438	88° 50.816	9/29/2005	1312
BBB1-SW-D	Back Bay of Biloxi - Water @ 5.5 ft depth (duplicate)	30° 24.438	88° 50.816	9/29/2005	1340
BBB2-SW	Back Bay of Biloxi - Water @ 5.75 ft depth	30° 25.317	88° 53.760	9/29/2005	1032
BBB3-SW	Back Bay of Biloxi - Water @ 3.55 ft depth	30° 25.197	88° 55.868	9/29/2005	935
BBB3-SD	Back Bay of Biloxi - Sediment-bottom 7.1 ft depth	30° 25.195	88° 55.848	9/29/2005	945
BBB3-SD-D	Back Bay of Biloxi - Sediment-bottom 7.1 ft depth (duplicate)	30° 25.195	88° 55.848	9/29/2005	1005
BBB4-SW	Back Bay of Biloxi - Water @ 5 ft depth	30° 24.730	89° 00.665	9/29/2005	1300
BBB5-SW	Back Bay of Biloxi - Water @ 5 ft depth	30° 25.080	89° 00.416	9/29/2005	1140
BBB6-SW	Back Bay of Biloxi - Water @ 7 ft depth	30° 25.555	89° 03.461	9/29/2005	1025
BBB6-SD	Back Bay of Biloxi - Sediment-bottom 15 ft depth	30° 25.556	89° 03.448	9/29/2005	1120
BLC1-SW	Bayou Lacroix - water @ 4.5 ft depth	30° 20.467	89° 24.493	9/30/2005	1000
JR1-SW	Jordan River - water @ 4.6 ft depth	30° 20.439	89° 21.649	9/30/2005	1047
WR1-SW	Wolf River - water @ 2 ft depth	30° 21.476	89° 16.398	9/30/2005	1445
BCD1-SW	Bayou Caddy - water @ 5 ft depth	30° 14.275	89° 25.841	9/30/2005	1015
SLB1-SW	St. Louis Bay - water @ 5.9 ft depth	30° 19.177	89° 18.407	9/30/2005	1230
SLB2-SW	St. Louis Bay - water @ 2.75 ft depth	30° 20.586	89° 17.588	9/30/2005	1430
SLB2-SD	St. Louis Bay - Sediment- bottom 5.7 ft depth	30° 20.586	89° 17.588	9/30/2005	1520
SLB3-SW	St. Louis Bay - water @ 3.75 ft depth	30° 20.593	89° 19.384	9/30/2005	1155
SLB3-SD	St. Louis Bay - Sediment- bottom 7.6 ft depth	30° 20.593	89° 19.384	9/30/2005	1230
SLB4-SW	St. Louis Bay - Water @ 2 ft depth	30° 21.345	89° 18.190	9/30/2005	1320
SLB5-SW	St. Louis Bay - Water @ 3 ft depth	30° 21.045	89° 20.400	9/30/2005	1240
SLB6-SW	St. Louis Bay - Water @ 3.4 ft depth	30° 21.733	89° 19.564	9/30/2005	1010
SLB6-SD	St. Louis Bay - Sediment- bottom 6.8 ft depth	30° 21.733	89° 19.564	9/30/2005	1040
SLB6-SD-D	St. Louis Bay - Sediment- bottom 6.8 ft depth (duplicate)	30° 21.733	89° 19.564	9/30/2005	1100
SLB7-SW	St. Louis Bay - Water @ 3 ft depth	30° 21.574	89° 21.221	9/30/2005	1126
PEARL1-SW	Pearl River - water composited from 3 and 9.5 ft depth	30° 14.140	89° 36.974	9/30/2005	1615
PEARL1-SD	Pearl River -Sediment - bottom @ 17 ft depth	30° 14.312	89° 36.860	9/29/2005	1645





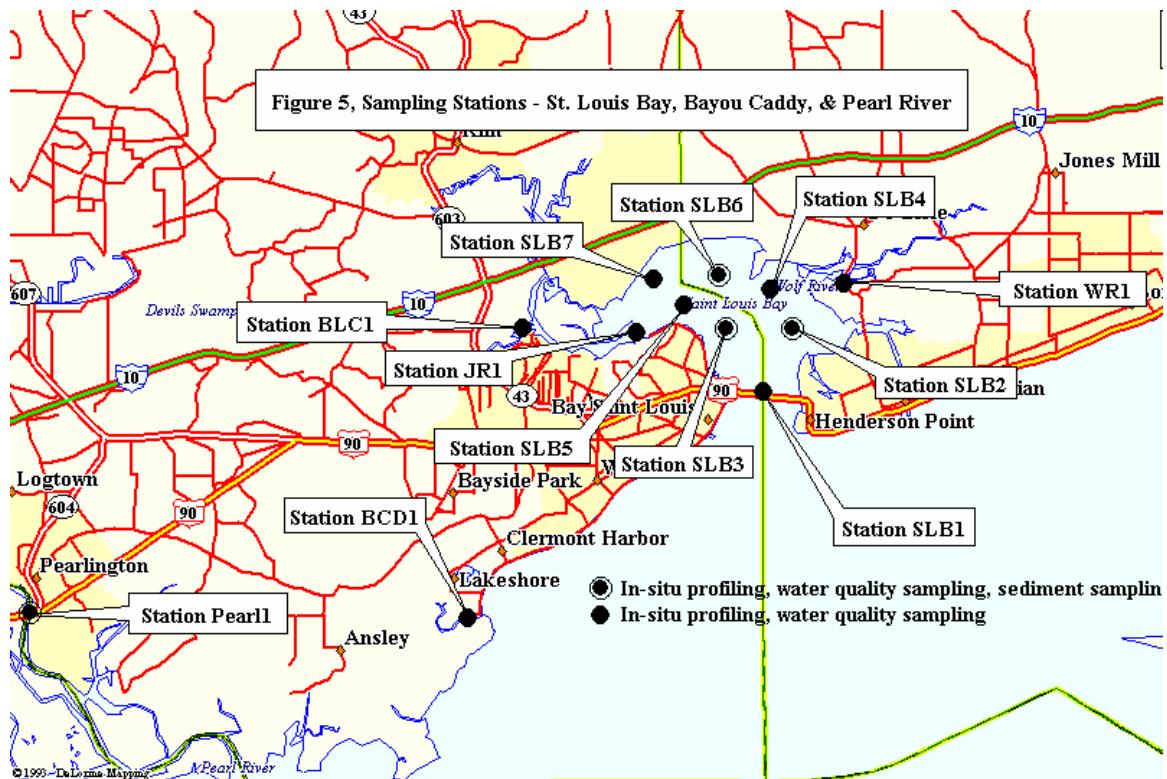


Figure 6, Mississippi Phosphate's NPDES discharge



**Figure 7, Escatawpa River near Shipyard**



**Figure 8, Back Bay of Biloxi @ Highway 90**



**Figure 9, Back Bay of Biloxi @ Industrial Canal**



**Figure 10, St. Louis Bay near outlet**



## **4.0 Summary**

Results from the EPA and MDEQ joint survey of coastal Mississippi following Hurricane Katrina and Rita showed few detectable priority pollutant compounds in the studied bays and rivers. In general, the compounds present in surface waters were low in concentration compared to EPA's National Ambient Water Quality Criteria (NAWQC) for priority toxic pollutants. The compounds present in the sediment were generally lower than the levels which would be expected to have adverse effects, based on values published by NOAA. Only two surface water stations had dissolved oxygen concentrations below the minimum water quality criteria adopted by the state of Mississippi. Bacteriological densities at the study locations were less than EPA's promulgated enterococci criteria for coastal waters. Overall, the data collected by EPA shows that few water quality criteria were exceeded during the study. An exception was high algal growth results in the Back Bay of Biloxi and Bayou Casotte. Dioxin results for the five sediment samples collected were all well below the EPA screening value for residential soils. The results of this study may be used as the basis for future targeted water quality studies by MDEQ and/or the EPA.

## **5.0 Methods**

### **5.1 Chemical Water Quality Sampling**

All surface water samples were collected according to the procedures described in the Ecological Assessment Standard Operation Procedures and Quality Assurance Manual, January 2002 (EASOPQAM) and the Environmental Investigations Standard Operating Procedures and Quality Assurance Manual, November, 2001 (EISOPQAM) (EPA 2002(a), EPA 2001). Water quality samples were collected at each station shown on Table 1 and on Figures 2 – 5. Analyses conducted on these samples included enterococci, Total Organic Carbon (TOC) and nutrients scan, metals scan, routine volatile scan, routine semi-volatile scan, pesticide and PCB scan. Appendix A contains a series of tables that list individual analytes for each of these scans. All samples were collected after the completion of the in-situ profiling at each station. If the station was stratified based on salinity, dissolved oxygen or temperature then the collection was composited from the mid-depth point of each stratified layer as noted in Table 1. If stratification was present, volatile organic compound (VOA) samples were collected from the upper layer. The data that were critical to meeting the data quality objectives included flow measurements, dissolved oxygen (DO), conductivity, enterococci, and the metals/organics scans.

Table 2 shows the required sample containers, preservation, and holding times for these water quality samples. Containers were provided by SESD's Analytical Support Branch (ASB) or obtained from the SESD Field Equipment Center. A second sample was collected each day at a location selected by the project leader for volatile, semi-volatile and pesticide/PCB matrix spike analyses. Following collection, samples were preserved as described in Table 2 and placed in an iced cooler. Samples were transported to the command center at Keesler Air Force Base (AFB) for processing. Samples were transported daily by MDEQ or EPA courier to the SESD laboratory in Athens, Georgia.

**Table 2**  
**Water Quality Sample Preservation Requirements**

Analytical Group	Volume/Container	Preservative	Holding Time
TOC/nutrients	1 liter polyethylene	H <sub>2</sub> SO <sub>4</sub> to pH < 2, Ice to 4° C	28 days
Metals	1 liter polyethylene	HNO <sub>3</sub> to pH < 2, Ice to 4° C	6 months Hg is 28 days
Volatiles	40 ml glass vials (3) with septum seal	HCl to pH < 2, Ice to 4° C	14 days
Semi-volatiles	1 liter amber glass (2 bottles per station)	Ice to 4° C	7 days
Pesticides/PCBs	1 liter amber glass (2 bottles per station)	Ice to 4° C	7 days
Enterococci	250 ml plastic	Ice to 4° C	6 hours

## 5.2 Bacteriological Water Quality Sampling

Bacteriological samples were collected for enterococcus analyses. Samples were collected at each station as shown in Table 1 and Figures 2 – 5. Samples were collected by hand dipping 100 ml or 250 ml wide mouth plastic bottles from the surface per EASOPQAM. Sample collection personnel wore latex gloves and shoulder length plastic gloves during sample collection and bottles remained capped prior to collection to avoid contamination. Following sample collection, the bottles were recapped and sealed in whirl packs then placed on ice for preservation. The samples were delivered by EPA personnel to the Ecological Assessment Branch (EAB) Mobile Lab, located in Gulfport, MS within the 6 hour holding time.

## 5.3 Analytical Methods

All samples were analyzed by the SESD laboratory in Athens, Georgia with the exception for dioxin/furan. Dioxin samples were analyzed by Paradigm Laboratories. All analyses conducted by the SESD laboratory were in accordance with the Analytical Support Branch Laboratory Operations and Quality Assurance Manual, dated November 17, 2004 which can be accessed at: <http://www.epa.gov/region4/sesd/asbsop/asbsop.html> (EPA 2004). Refer to Appendix A for a list of analytes, methods and minimum quantitation limits (MQLs) that were used for this study. It should be noted that MQLs were matrix dependent and vary from sample to sample depending on background material and other analyte concentrations. The MQLs presented in these tables are those which can be achieved the majority of time in the matrix listed. ASBs Standard Operating Procedures (SOPs) for the listed methods include quality control procedures equal to or greater than the method specified levels.

Validation of the dioxin/furan data was conducted using the National Functional Guidelines for Dioxin Data Review, OSWER540-R-02-003 (August 2002) and Region 4's Data Validation Standard Operating Procedures for Dioxin Data Version 3.0 (May 2002) documents (EPA 2002(c) and (d)). The dioxin/furan data consisted of a Level 4 - CLP type data package that contains the C-O-Cs, instrument raw data, initial and/or continuing calibration data/curves,

bench sheets/sample preparation information, QA/QC data/information, and case narrative detailing any problems associated with these data.

#### 5.4 In-Situ Monitoring

In-situ monitoring was conducted at all stations shown in Figures 2-5. Dissolved oxygen, salinity, pH and temperature profiles were obtained using a manually deployed multi-parameter water quality monitor. All monitoring equipment was calibrated in accordance with the EASOPQAM and the manufacturer's specifications daily and end checked at the end of each day. Data were recorded in designated data sheets. Calibration standards were obtained from EAB stocks that are traceable and new reagents and buffers were used during the study. Parameter measurements were obtained from surface to bottom at one foot increments in waters up to 12 feet deep and at two foot increments in waters greater than 12 feet deep. In order to maintain consistency, measurements made at two foot increments were taken at odd-numbered depths. The results from the profiling were used to guide the water quality sampling effort (see section 4.1 for discussion of stratified conditions).

Exact profiling locations were determined by Global Positioning System (GPS) instrumentation by the profiling crew in the field. The latitude/longitude, date and time of each profile were recorded in the field data book. Table 3 shows the analytical methods used for the in-situ monitoring.

**Table 3**  
**Field Parameter Analytical Methods**

In-situ and Field Parameters	Units	Analytical Method	Accuracy of Primary Equipment
Dissolved Oxygen	mg/l	Membrane-electrode	$\pm 0.2 \text{ mg/l}$ (up to 20 mg/l)
Temperature	°C	Thermistor	$\pm 0.15 \text{ }^{\circ}\text{C}$
Salinity	ppt	Conductivity probe	greater of $\pm 1\%$ of reading or 0.1 ppt
pH	SU	pH electrode	$\pm 0.2 \text{ SU}$
Latitude/Longitude	decimal degrees	DGPS/GPS based on NAD83	$\pm 10 \text{ m}$ (w/ selective availability disabled)

#### 5.5 Sediment Sampling

Sediment samples were collected at the stations shown in Table 1 and Figures 2-5 according to the procedures in the EASOPQAM and the EISOPQAM (EPA 2002(a) and EPA 2001). Sediment samples were collected using a Petite Ponar Dredge, then transferred into a Pyrex pan for homogenization and distribution using stainless steel spoon into the appropriate sample containers (Table 4). Samples for VOA analysis were collected prior to homogenization using an Encore device. SESD lab analyses of sediment samples included enterococci, nutrient series scan, metals scan, volatiles scan, semi-volatiles scan, pesticide and PCB scan. A contract

laboratory (Paradigm) analyzed the sediment samples selected for dioxin. The specific analytes included in these scans are included in Appendix A (excluding dioxin). Samples were transported daily by MDEQ or EPA couriers to the SESD laboratory in Athens, Georgia. Multiple dredges were utilized to minimize the need to decontaminate sampling equipment between stations. As required, between stations and at the end of each sampling day, sampling equipment was decontaminated in the field according to the procedures in the EASOPQAM.

**Table 4**  
**Sediment Sample Preservation Requirements**

<b>Analytical Group</b>	<b>Volume/Container</b>	<b>Preservative</b>	<b>Holding Time</b>
Nutrients	8 oz. glass	Ice to 4° C	Not specified
Metals	8 oz. glass	Ice to 4° C	6 months
Volatiles	Encore Sampler + 2 oz. glass for % moisture	Ice to 4° C	48 hours
Semi-volatiles	8 oz. glass	Ice to 4° C	7 days
Pesticides/PCBs	8 oz. glass	Ice to 4° C	7 days
Dioxin	8 oz. Glass	Ice to 4° C	365 days
Enterococci	WhirlPak	Ice to 4° C	24 hours

## **5.6 Bay Outlet Loading to MS Sound**

In order to estimate maximum pollutant loadings entering Mississippi Sound at the time of the study, tidal flow measurement and water quality sampling were conducted at each major bay outlet during a mid-ebb tide. As shown on Figures 2-5, major bay outlets include Bayou Casotte, Pascagoula River, West Pascagoula River, Bay St. Louis, Back Bay of Biloxi, and the Pearl River.

Flow was measured in the cross-section via boat-mounted RD Instruments Rio Grande Acoustic Doppler Current Profiler (ADCP). The ADCP was towed by boat across the measurement transect acquiring depth, width, and velocity. The resulting data was fed in real time to a laptop computer for flow calculation using the manufacturer's software. Resulting flows are recorded in the field. A QA review of the data is performed prior to reporting of the final results. The meter is factory calibrated and has a sensitivity of 0.003 fps.

Due to the tidal nature of the water bodies sampled, flow varied during the sampling period. Therefore, two to four measurements were made during the sampling effort to provide an average flow condition. In addition, flow measurements in Bayou Casotte were complicated by southerly winds causing bi-directional flow. This wind effect was addressed during the QA review of the data using United States Geological Survey (USGS) recommendations.

Concurrent with flow measurement, water quality samples were collected and analyzed as described in Section 4.1. These samples were collected at mid point and mid depth of the main hydraulic section. Time constraints associated with the sampling effort mandated the change from the original plan to use quarter point sampling. In addition, a grab sample for Algal

Growth Potential Test (AGPT) and enterococci analysis were collected in their appropriate containers. The AGPT samples were immediately placed on ice, and transported to the SESD laboratory in Athens, Georgia. The bacteriological samples were placed on ice and delivered by EPA personnel to the EPA Mobile Lab, located in Gulfport, MS within the 6 hour holding time

In order to identify the sampling period associated with the tidal cycle, a Stevens Axsys water level recorder was installed at the Keesler AFB boat ramp on Back Bay of Biloxi, (Figure 11).

## 6.0 Results

### 6.1 Chemical Water Quality Sampling

All contaminants detected in surface water are presented in Tables 5-9. All data, detect and non-detect, are presented in Appendices B and C. Corresponding minimum quantitation limits (MQLs) for these data based on background salt interferences can be found in Appendices E and F. Appendix D contains the in-situ profiling results.

All surface water data was compared to “criteria maximum concentration” (CMC) values and the “criteria continuous concentration” (CCC) values established in the 2002 National Ambient Water Quality Criteria (NAWQC) for priority toxic pollutants (EPA 2002(b)). The CMC values are estimates of the highest concentration of a contaminant in surface water to which an aquatic community can be exposed to briefly without resulting in an unacceptable effect. The CCC values are estimates of the highest concentration of a contaminant in surface water to which an aquatic community can be exposed to indefinitely without resulting in an unacceptable effect. CMC and CCC values are not available for all contaminants analyzed in this investigation. Only those contaminants that have published CMC and CCC values were evaluated for this assessment. Additional literature review is required to evaluate all other detected contaminants.

Tables 5 through 9 show the concentrations of toxic pollutants in surface waters measured during the study. There were no detected concentrations of these pollutants that exceeded the CMC levels published in EPA's NAWQC. As shown in Tables 5, 6, and 7, samples collected from several stations detected concentrations of selenium and arsenic that exceeded the CCC levels published in EPA's NAWQC. The analysis of arsenic (As) and selenium (Se) in saline matrices is problematic because of the combination of low analytical sensitivity of As and Se and the large interferences produced by the background salts in the matrix. While the technique used for these analyses (ICP-MS) is the most sensitive available for the analysis of As and Se, these two analytes are in the analytical region of the ICP-MS that is most prone to interferences from saline matrices and are the most difficult to correct, resulting in analytical results with an elevated level of uncertainty. As shown in Table 9, there was one sample collected from Bayou Casotte at station BC4 which exceeded the national recommended CCC for ammonia.

Table 5  
Chemical Water Quality Data-Detected Concentrations - Bangs Lake & Bayou Casotte  
September 27-30, 2005

Metals Scan	2002 NAWQC		CMC	CCC	BC1SW	BC2SW	BC3SW	BC4SW	BL1SW					
					9/27/2005	9/27/2005	9/27/2005	9/27/2005	9/27/2005					
					1134	1333	1410	1450	1315					
Arsenic	7440-38-2	UG/L	69	36	45	J	42	J	41	J	48	AJ	36	J
Calcium	7440-70-2	MG/L			350		360		350		340	A	270	
Magnesium	7439-95-4	MG/L			1100		1100		1100		1000	A	820	
Manganese	7439-96-5	UG/L			U		U		U		U		120	
Potassium	7440-09-7	MG/L			360		380		360		320	A	270	
Selenium	7782-49-2	UG/L	290	71	150	J	140	J	130	J	150	AJ	110	J
Sodium	7440-23-5	MG/L			9200		9500		9200		8400	A	6800	
Strontium	7440-24-6	UG/L			6100		6300		6100		5500	A	4600	
<b>PCB Scan</b>	None detected													
<b>Pesticides Scan</b>	None detected													
<b>Volatiles Scan</b>	None detected													
<b>Extractables Scan</b>	None detected													
<b>Classical Nutrients</b>														
Ammonia	7664-41-7	MG/L			0.075		0.072		0.064		1.5		U	
Nitrate-Nitrite Nitrogen		MG/L			0.06		0.066		0.095		0.055		U	
Total Kjeldahl Nitrogen		MG/L			0.25		0.2		0.22		1.9		0.76	
Total Organic Carbon		MG/L			1.4		12		1.4		2.2		17	
Total Phosphorus	7723-14-0	MG/L			0.22		0.27		0.38		17		0.18	

Shaded areas identify analyte detected is above the ambient water quality criteria

Data Qualifiers

U-Analyte not detected at or above reporting limit.

J-Identification of analyte is acceptable; reported value is an estimate.

JJ-Analyte not detected at or above reporting limit. Reporting limit is an estimate.

N-Presumptive evidence analyte is present; analyte reported as tentative identification.

NJ-Presumptive evidence analyte is present; analyte reported as tentative identification. Reported value is an estimate.

K-Identification of analyte is acceptable; reported value may be biased high. Actual value expected to be less than the reported value.

L-Identification of analyte is acceptable; reported value may be biased low. Actual value expected to be greater than reported value.

NA-Not Analyzed. | NAI-Not Analyzed due to Interferences. | A-Analyte analyzed in replicate. Reported value is 'average' of replicates.

R-Presence or absence of analyte can not be determined from data due to severe quality control problems. Data are rejected and considered unusable.

C-confirmed by GCMS | /1-when no value is reported, see chlordane constituents | /2-constituents or metabolites of technical chlordane

NR-Not Reported

Table 6

Chemical Water quality Data- Detectable Concentrations - Pascagoula River, Escatawpa River, and West Pascagoula River  
September 27-30, 2005

Metals Scan	2002 NAWQC		CMC CCC	ER1DSW 9/28/2005		ER1SW 9/28/2005		ER2SW 9/28/2005		PR1SW 9/28/2005		PR2SW 9/28/2005		WPR1SW 9/28/2005		WPR2SW 9/28/2005		
	UG/L	69		1425	1420	1135	1240	1557	1115	1420	U	U	U	U	U	U	U	
	UG/L	36		23	AJ	24	J	28	J	46	J	23	J	34	J	47	U	
Arsenic	7440-38-2	UG/L			U	U	U	U	U	U	U	U	U	U	U	U	U	
Barium	7440-39-3	UG/L			170	A	180	190	330	160	260	28						
Calcium	7440-70-2	MG/L			520	A	560	590	1000	470	840	74						
Magnesium	7439-95-4	MG/L			160	AJ	140	240	U	270	98	340						
Manganese	7439-96-5	UG/L			170	A	180	200	340	150	260	26						
Potassium	7440-09-7	MG/L			77	AJ	80	J	89	J	150	J	72	J	110	J	U	
Selenium	7782-49-2	UG/L	290	71	4400	A	4700	5000	8700	4000	6900	650						
Sodium	7440-23-5	MG/L			2900	A	3100	3300	5600	2700	5200	450						
Strontium	7440-24-6	UG/L																
<b>PCB Scan</b>					None Detected													
<b>Pesticides Scan</b>					None Detected													
<b>Volatiles Scan</b>																		
Toluene	108-88-3	UG/L			0.064	J	0.072	J	U	U	U	U	U	U	U	U	U	
<b>Extractables Scan</b>					None Detected													
<b>Miscellaneous Extractables</b>																		
Benzenedicarboxylic Acid, Dihexyl Ester		UG/L			NR		NR	10	NJ	NR	NR	NR	NR	NR	NR	NR	NR	NR
<b>Classical Nutrients</b>																		
Ammonia	7664-41-7	MG/L			0.087		0.093		0.17	0.072	0.12	0.083	0.056					
Nitrate-Nitrite Nitrogen		MG/L			U		U		U	0.056	0.062	U	0.079					
Total Kjeldahl Nitrogen		MG/L			0.38		0.41		0.49	0.29	0.47	0.45	0.51					
Total Organic Carbon		MG/L			4.2		4.2		4.1	1.6	4.2	2.5	7					
Total Phosphorus	7723-14-0	MG/L			0.05		0.048		0.036	0.087	0.052	0.063	0.041					

Shaded areas identify analyte detected is above the ambient water quality criteria

Data Qualifiers

U-Analyte not detected at or above reporting limit.

J-Identification of analyte is acceptable; reported value is an estimate.

N-Presumptive evidence analyte is present; analyte reported as tentative identification.

NJ-Presumptive evidence analyte is present; analyte reported as tentative identification. Reported value is an estimate.

A-Analyte analyzed in replicate. Reported value is 'average' of replicates.

R-Presence or absence of analyte can not be determined from data due to severe quality control problems. Data are rejected and considered unusable.

NR-Not Reported

Table 7  
Chemical Water Quality Data- Detectable Concentrations- Back Bay of Biloxi  
September 27-30, 2005

Metals Scan	2002 NAWQC				BBB1DSW	BBB1SW	BBB2SW	BBB3SW	BBB4SW	BBB5SW	BBB6SW							
			CMC	CCC	9/29/2005	9/29/2005	9/29/2005	9/29/2005	9/29/2005	9/29/2005	9/29/2005							
			1340	1312	1032	935	1300	1140	1025									
Arsenic	7440-38-2	UG/L	69	36	26	AJ	25	J	19	J	8	J	9.1	J	6.4	J		
Barium	7440-39-3	UG/L			U		U		U	46	44		46		40			
Calcium	7440-70-2	MG/L			160	A	160		130	90	51		58		40			
Iron	7439-89-6	MG/L	1000		U		U		U		0.55		0.56		0.56			
Magnesium	7439-95-4	MG/L			480	A	500		390	270	140		170		98			
Manganese	7439-96-5	UG/L			67	A	62		110	190	260		290		190			
Potassium	7440-09-7	MG/L			160	A	160		120	88	46		55		33			
Selenium	7782-49-2	UG/L	290	71	78	AJ	77	J	56	J	38	J	20	J	25	J	14	J
Sodium	7440-23-5	MG/L			3900	A	4000		3100	2200	1100		1400		800			
Strontium	7440-24-6	UG/L			2800	A	2900		2300	1600	840		990		610			
<b>PCB Scan</b>					None Detected													
<b>Pesticides Scan</b>					None Detected													
<b>Volatiles Scan</b>																		
(m- and/or p-)Xylene		UG/L			U		U	0.068	J		U		U		U			
Bromodichloromethane	75-27-4	UG/L			U		U		U		U		U		0.074	J		
Chloroform	67-66-3	UG/L			U		U		U		U		U		0.092	J		
Toluene	108-88-3	UG/L			U	0.13	J	0.2	J		U		U	0.09	J		U	
<b>Extractables Scan</b>					None Detected													
<b>Classical Nutrients</b>																		
Ammonia	7664-41-7	MG/L			U		U	0.12		0.15		0.13		0.18		0.39		
Nitrate-Nitrite Nitrogen		MG/L			U		U		U		U	0.1		0.071		0.54		
Total Kjeldahl Nitrogen		MG/L			0.68		0.68		0.72		1.2		0.77		0.97		0.97	
Total Organic Carbon		MG/L			11		5.2		6		12		10		9.1		11	
Total Phosphorus	7723-14-0	MG/L			0.04		0.04		0.041		0.046		0.049		0.033		0.14	

Shaded areas identify analyte detected is above the ambient water quality criteria

Data Qualifiers

U-Analyte not detected at or above reporting limit.

J-Identification of analyte is acceptable; reported value is an estimate.

UJ-Analyte not detected at or above reporting limit. Reporting limit is an estimate.

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L-Identification of analyte is acceptable; reported value may be biased low. Actual value expected to be greater than reported value.

NA-Not Analyzed. | NAI-Not Analyzed due to Interferences. | A-Analyte analyzed in replicate. Reported value is 'average' of replicates.

R-Presence or absence of analyte can not be determined from data due to severe quality control problems. Data are rejected and considered unusable.

C-confirmed by GCMS | /1-when no value is reported, see chlordane constituents | /2-constituents or metabolites of technical chlordane

NR-Not Reported

Table 8  
Chemical Water Quality Data- Detectable Concentrations- St. Louis Bay, Bayou Caddy, and Pearl River  
September 27-30, 2005

			2002 NAWQC	BCD1DSW 9/30/2005	BLC1SW 9/30/2005	JR1SW 9/30/2005	PEARL1SW 9/30/2005	SLB1SW 9/30/2005	SLB2SW 9/30/2005	SLB3SW 9/30/2005	SLB4SW 9/30/2005	SLB5SW 9/30/2005	SLB6SW 9/30/2005	SLB7SW 9/30/2005	WR1SW 9/30/2005
Metals Scan			CMC CCC	1015	945	1047	1615	1230	1430	1155	1320	1240	1010	1126	1445
Aluminum	7429-90-5	UG/L		1200	A	U	U	U	U	U	U	U	U	U	U
Arsenic	7440-38-2	UG/L	69 36	20	AJ	9.6	J	14	J	22	J	21	J	18	AJ
Barium	7440-39-3	UG/L		66	AJ	65	67	61	61	62	61	61	AJ	62	64
Calcium	7440-70-2	MG/L		160	A	70	110	40	180	160	170	140	A	140	130
Iron	7439-89-6	MG/L	1000	1.2	A	1		U	0.76		U	U	U	U	U
Magnesium	7439-95-4	MG/L		520	A	210	330	110	550	500	520	450	A	430	410
Manganese	7439-96-5	UG/L		130	AJ	880	480	870		U	300	72	240	AJ	210
Potassium	7440-09-7	MG/L		160	A	66	100	38	170	160	160	140	A	130	120
Selenium	7782-49-2	UG/L	290 71	60	AJ	25	J	39	J	64	J	63	J	52	AJ
Sodium	7440-23-5	MG/L		4200	A	1700	2700	930	4500	4100	4200	3600	A	3500	3400
Strontium	7440-24-6	UG/L		2800	A	1100	1800	640	3000	2800	2800	2500	A	2400	2300
<b>PCB Scan</b>				None Detected											
<b>Pesticides Scan</b>				None Detected											
<b>Volatiles Scan</b>															
(m- and/or p-)Xylene		UG/L		U	U	U	0.32	J	U	U	U	U	U	U	U
1,2,4-Trimethylbenzene	95-63-6	UG/L		U	U	U	0.11	J	U	U	U	U	U	U	U
Benzene	71-43-2	UG/L		U	U	U	0.11	J	U	U	U	U	U	U	U
Ethyl Benzene	100-41-4	UG/L		U	U	U	0.1	J	U	U	U	U	U	U	U
o-Xylene	95-47-6	UG/L		U	U	U	0.12	J	U	U	U	U	U	U	U
Toluene	108-88-3	UG/L		U	0.16	J	U	0.74	J	U	U	U	U	0.057	J
<b>Extractables Scan</b>				None Detected											
<b>Miscellaneous Extractables</b>															
Benzenedicarboxylic Acid, Dihexyl Ester		UG/L		NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	10	NJ
<b>Classical Nutrients</b>															
Ammonia	7664-41-7	MG/L		U	0.16		U	0.07		U	U	U	U	U	U
Total Kjeldahl Nitrogen		MG/L		0.81	0.99	0.99	0.73	0.55	0.68	0.71	0.67	0.65	0.76	0.72	0.71
Total Organic Carbon		MG/L		3.9	13	9.8	7.8	4.5	6.4	5.6	6.6	7.5	7.7	8.4	8.6
Total Phosphorus	7723-14-0	MG/L		0.059	0.032	0.033	0.062	0.03	0.036	0.026	0.031	0.026	0.026	0.025	0.029

Shaded areas identify analyte detected is above the ambient water quality criteria

Data Qualifiers

U-Analyte not detected at or above reporting limit.

J-Identification of analyte is acceptable; reported value is an estimate.

UJ-Analyte not detected at or above reporting limit. Reporting limit is an estimate.

N-Presumptive evidence analyte is present; analyte reported as tentative identification.

NJ-Presumptive evidence analyte is present; analyte reported as tentative identification. Reported value is an estimate.

K-Identification of analyte is acceptable; reported value may be biased high. Actual value expected to be less than the reported value.

L-Identification of analyte is acceptable; reported value may be biased low. Actual value expected to be greater than reported value.

NA-Not Analyzed. | NAI-Not Analyzed due to Interferences. | A-Analyte analyzed in replicate. Reported value is 'average' of replicates.

R-Presence or absence of analyte can not be determined from data due to severe quality control problems. Data are rejected and considered unusable.

C-confirmed by GCMS | /1-when no value is reported, see chlordane constituents | /2-constituents or metabolites of technical chlordane

NR-Not Reported

Table 9  
 Unionized Ammonia Data  
 Water Quality Study of Bays in Coastal Mississippi  
 September 27-30, 2005

Station	Date	Time	Temp Deg C	Salinity ppt	pH su	Sample Depth -ft	NH3 mg/l	NO2-NO3 mg/l	TKN mg/l	TN mg/l	TP mg/l	TN:TP	UIA fraction	UIA mg/l
BL1	9/27/2005	1315	29.57	23.54	7.47	1.5	0.05 u	0.05 u	0.76	0.81	0.18	4.5	0.021	0.001
BC1	9/27/2005	1134	28.36	29.2	7.86	22.5	0.075	0.06	0.25	0.31	0.21	1.5	0.044	0.003
BC2	9/27/2005	1333	28.34	29.1	7.78	22	0.072	0.066	0.2	0.266	0.54	0.5	0.037	0.003
BC3	9/27/2005	1410	28.38	29.4	7.77	23	0.064	0.095	0.22	0.315	0.38	0.8	0.036	0.002
BC4	9/28/2005	1450	30.35	25	7.81	1	1.5	0.055	1.9	1.955	17	0.1	0.046	0.069
ER1*	9/28/2005	1425	29.12	4.07	7.48		0.09	0.05 u	0.39	0.44	0.05	8.8	0.023	0.002
ER2	9/28/2005	1135	28.72	10.43	6.47	10	0.17	0.05 u	0.49	0.54	0.036	15.0	0.002	0.000
PR1	9/28/2005	1240	28.51	28.53	7.8	20	0.072	0.056	0.29	0.346	0.087	4.0	0.039	0.003
PR2*	9/28/2005	1557	28.94	2.86	7.02		0.12	0.062	0.47	0.532	0.052	10.2	0.008	0.001
WPR1	9/28/2005	1115	28.56	24.1	7.69	13	0.083	0.05 u	0.45	0.5	0.063	7.9	0.031	0.003
WPR2	9/29/2005	1420	28.99	7.2	6.66	15	0.056	0.079	0.51	0.589	0.041	14.4	0.003	0.000
BBB1	9/29/2005	1340	28.52	15.07	7.88	5	0.05 u	0.05 u	0.68	0.73	0.04	18.3	0.050	0.002
BBB2	9/29/2005	1032	28.04	12.76	7.49	6	0.12	0.05 u	0.72	0.77	0.041	18.8	0.020	0.002
BBB3	9/29/2005	1030	28.39	8.66	7.33	5	0.15	0.05 u	1.2	1.25	0.046	27.2	0.015	0.002
BBB4	9/29/2005	1300	28.49	4.32	7.03	5	0.13	0.1	0.77	0.87	0.049	17.8	0.008	0.001
BBB5	9/29/2005	1140	28.37	5.01	6.94	5	0.18	0.071	0.97	1.041	0.033	31.5	0.006	0.001
BBB6	9/30/2005	1025	28.9	3.2	6.9	7	0.39	0.54	0.97	1.51	0.14	10.8	0.006	0.002
SLB1	9/30/2005	1230	28.18	15.24	7.8	6	0.05 u	0.05 u	0.55	0.6	0.03	20.0	0.041	0.002
SLB2	9/30/2005	1430	28.98	13.82	7.87	3	0.05 u	0.05 u	0.68	0.73	0.036	20.3	0.051	0.003
SLB3	9/30/2005	1155	28.48	14.34	7.8	4	0.05 u	0.05 u	0.71	0.76	0.54	1.4	0.042	0.002
SLB4	9/30/2005	1320	28.62	12.55	7.67	2	0.05 u	0.05 u	0.67	0.72	0.031	23.2	0.032	0.002
SLB5	9/30/2005	1240	28.6	12.02	7.84	3	0.05 u	0.05 u	0.65	0.7	0.026	26.9	0.047	0.002
SLB6	9/30/2005	1010	27.97	11.57	7.63	3	0.05 u	0.05 u	0.76	0.81	0.026	31.2	0.028	0.001
SLB7	9/30/2005	1126	28.12	10.55	7.78	3	0.05 u	0.05 u	0.72	0.77	0.025	30.8	0.040	0.002
BCD1	9/30/2005	1015	28.84	14.27	7.35	5	0.05 u	0.05 u	0.72	0.77	0.061	12.6	0.016	0.001
BLC1	9/30/2005	945	28.75	6.5	6.88	5	0.16	0.05 u	0.99	1.04	0.032	32.5	0.006	0.001
WR1	9/30/2005	1445	29.7	7.41	7.11	2	0.05 u	0.05 u	0.71	0.76	0.029	26.2	0.010	0.001
JR1	9/30/2005	1047	27.81	9.15	7.49	5	0.05 u	0.05 u	0.99	1.04	0.093	11.2	0.020	0.001
Pearl1*	9/30/2005	1615	30.15	2.22	6.91		0.07	0.05 u	0.73	0.78	0.062	12.6	0.007	0.000

\* Sample was composited

EPA's recommended CCC ammonia criteria for saltwater set at 0.035 mg/l

u - analyte not detected at or above reporting limit

j - identification of analyte is acceptable; reported value is an estimate

uj - analyte not detected at or above reporting limit. Reporting limit is an estimate

a - analyte analyzed in replicate. Reported value is an "average" of replicates

## 6.2 Bacteriological Water Quality Sampling

The Federal Register Part 131-Water Quality Standards for bacteriological criteria sets the designated bathing beach single sample maximum allowable density for marine waters at 104. This criteria is the most restrictive of the use classification criteria. None of the water samples collected for Enterococci analysis exceeded this density during the study, table 10.

Table 10, Microbiological Analyses of Coastal Waters in Mississippi

Project # 05-0926

Water Quality Indicator: Enterococcus

ASTM Method using Enterolert

MDL: 10 cfu/100 ml for marine waters

Results derived from the **MPN**

Sample ID	Date/Time	(most probable number)
<b>Bayou Casotte &amp; Bangs Lake</b>		
BC1 water	9/27/05 12:30	10
BC1 water (duplicate)	9/27/05 12:30	10
BC2 water	9/27/05 12:50	<10
BC3 water	9/27/05 13:00	<10
BC4 water	9/27/05 13:15	30
BL1 water	9/27/05 14:45	<10
BC2 sediment	9/27/05 11:30	1000
BC4 sediment	9/27/05 12:40	2000
BC4 sediment (duplicate)	9/27/05 13:00	2000
BL1 sediment	9/27/05 14:45	1000
<b>Pascagoula, Escatawpa, West Pascagoula Rivers</b>		
PR1 water	9/28/05 13:15	96
WPR2 water	9/28/05 14:20	41
ER2 water	9/28/05 14:30	<10
ER1 water	9/28/05 14:00	10
WPR1 water	9/28/05 16:00	51
WPR1 sediment	9/28/05 11:50	5100
PR1 sediment	9/28/05 13:20	1000
ER1 sediment	9/28/05 14:00	1000
ER1 sediment (duplicate)	9/28/05 14:30	1000
PR2 sediment	9/28/05 15:30	4100
<b>Back Bay of Biloxi</b>		
BBB6 water	9/29/05 10:05	<10
BBB5 water	9/29/05 10:20	10
BBB4 water	9/29/05 10:30	10
BBB3 water	9/29/05 10:45	<10
BBB2 water	9/29/05 11:00	<10
BBB1 water	9/29/05 11:15	<10
BBB1 water (duplicate)	9/29/05 11:15	<10
BBB3 sediment	9/29/05 09:45	13,000

Table 10, Microbiological Analyses of Coastal Waters in Mississippi

Project # 05-0926

Water Quality Indicator: Enterococcus

ASTM Method using Enterolert

MDL: 10 cfu/100 ml for marine waters

Results derived from the **MPN**

Sample ID	Date/Time	(most probable number)
BBB3 sediment (duplicate)	9/29/05 10:05	11,900
BBB6 sediment	9/29/05 11:20	3000
<b>St. Louis Bay, Bayou Caddy, Pearl River</b>		
BLC1 water	9/30/05 8:20	41
JR1 water	9/30/05 8:35	20
SLB7 water	9/30/05 8:42	20
SLB5 water	9/30/05 8:50	10
SLB6 water	9/30/05 8:58	<10
SLB3 water	9/30/05 9:03	10
SLB4 water	9/30/05 9:11	<10
SLB2 water	9/30/05 9:20	20
SLB1 water	9/30/05 9:28	<10
WR1 water	9/30/05 9:44	52
BC1 water	9/30/05 11:15	10
Pearl1 water	9/30/05 16:50	10
Pearl1 sediment	9/29/05 16:45	<1000
SLB6 sediment	9/30/05 10:40	13,000
SLB6 sediment (duplicate)	9/30/05 11:00	10,800
SLB3 sediment	9/30/05 12:30	7300
SLB2 sediment	9/30/05 15:20	3100

### 6.3 In-Situ Monitoring

The two parameters that have associative water quality criteria for the in-situ profiling are dissolved oxygen and temperature. The MDEQ criteria for dissolved oxygen states that in thermally stratified waters, such as lakes, estuaries, and impounded streams, dissolved oxygen concentrations shall be maintained with an instantaneous minimum of not less than 4.0 mg/l with the exception of a portion of Escatawpa which is set at 3 mg/l (MDEQ, 2003). State ambient water quality criteria were met at all study stations with the exception of two noted in the profiles in Appendix stations. Of these exceptions, one was station ER2 in Escatawpa River. This station is located near the fish processing plant and the now closed IP pulp and paper mill. The second station was station BLC1 described as at Bayou LaCroix, a tributary to St Louis Bay. None of the study stations exceeded the criteria for temperature. All temperatures were less than the maximum allowable temperature of 32.2 ° C. The specific profiles for this monitoring can be found in Appendix D

The in-situ data showed that Bangs Lake, Bayou Casotte, Pascagoula River, Escatawpa River, and West Pascagoula River systems were the most saline and lowest in dissolved oxygen,

Table 11. In contrast, less salinity and higher average dissolved oxygen were observed within the Back Bay of Biloxi and St. Louis Bay systems.

Table 11 Summary of In-Situ Profiles Water Quality Study of Bays in Coastal Mississippi													
System	Station	Date	Time	Depth (ft)	Dissolved Oxygen (mg/l)			Salinity (ppt)			Temperature (degree C)		
					Max	Avg	Min	Max	Avg	Min	Max	Avg	Min
Bangs Lake	BL1	9/27/2005	1245	3	6.82	6.38	5.71	23.59	23.56	23.54	29.67	29.36	28.84
Bayou Casotte	BC1	9/27/2005	1110	43	5.64	4.61	3.69	30	28.97	27.2	28.74	28.42	28.33
Bayou Casotte	BC2	9/27/2005	1310	43	6.25	4.54	3.91	29.8	28.76	26.4	29.44	28.51	28.3
Bayou Casotte	BC3	9/27/2005	1505	43	6.79	4.32	3.25	29.8	28.91	25.7	29.55	28.49	28.3
Bayou Casotte	BC4	9/27/2005	1435	2	12.82	11.46	9.25				31.27	30.33	30.75
West Pascagoula River	WPR1	9/28/2005	-1045	26	6.77	5.35	4.81	25	20.45	5.63	28.77	28.55	28.22
West Pascagoula River	WPR2	9/28/2005	-1350	28	8.22	4.48	3.23	11.81	5.96	0.72	29.13	28.95	29.13
Pascagoula River	PR1	9/28/2005	-1210	40	7.56	4.94	4.12	30.28	26.86	15.2	28.53	28.46	28.28
Pascagoula River	PR2	9/28/2005	-1530	23	6.33	4.1	2.94	26.46	14.26	2.21	28.97	28.65	28.06
Escatawpa River	ER1	9/28/2005	-1350	23	5.3	4.12	3.31	28.02	18.81	3.69	29.2	28.72	28.44
Escatawpa River	ER2	9/28/2005	-1105	19	3.35	2.54	2.25	21.45	13.62	1.8	28.84	28.63	28.32
Back Bay of Biloxi	BBB1	9/29/2005	1312	12	8.95	6.33	3.25	21.52	16.83	13.34	29.06	28.66	28.25
Back Bay of Biloxi	BBB2	9/29/2005	1025	11	7.35	6.25	5.27	15.28	12.25	8.59	28.58	28.15	27.99
Back Bay of Biloxi	BBB3	9/29/2005	935	7	6.92	6.24	4.97	11.59	8.83	7.8	28.78	27.31	20.1
Back Bay of Biloxi	BBB4	9/29/2005	1250	10	7.62	6.03	3.95	6.75	4.5	4.07	29.17	28.69	28.45
Back Bay of Biloxi	BBB5	9/29/2005	1130	9	7.33	5.46	3.75	8.83	5.7	4.13	29	28.58	28.36
Back Bay of Biloxi	BBB6	9/29/2005	1000	15	7.58	3.32	0.54	4.53	3.38	2.43	28.9	28.49	28.74
St. Louis Bay	SLB1	9/30/2005	1225	11	7.74	7.09	6.47	15.29	15.24	15.21	29.06	28.3	27.85
St. Louis Bay	SLB2	9/30/2005	-1400	6	8.9	8.03	6.77	14.65	14.04	13.77	29.06	28.73	27.98
St. Louis Bay	SLB3	9/30/2005	-1125	8	8.68	7.59	6.94	14.51	14.15	13.25	28.62	28.44	28.35
St. Louis Bay	SLB4	9/30/2005	1315	4	8.32	7.21	5.51	13.07	12.72	12.5	28.68	28.47	28.09
St. Louis Bay	SLB5	9/30/2005	1230	5	7.98	7.73	7.28	12.26	12.11	12.02	28.8	28.37	27.88
St. Louis Bay	SLB6	9/30/2005	-0940	7	6.56	5.91	3.06	12.83	11.9	11.55	28.24	28.04	27.97
St. Louis Bay	SLB7	9/30/2005	1125	5	7.71	7.34	6.38	11.15	10.74	10.53	28.45	28.07	27.76
Wolf River	WR1	9/30/2005	1435	4	7.75	7.49	7.21	9.02	8.03	7.06	29.7	29.4	29.07
Jordan River	Jr1	9/30/2005	1045	9	6.93	6.74	6.55	9.28	8.82	7.49	27.86	27.71	27.64
Bayou La Croix	BLC1	9/30/2005	945	9	5.03	4.04	3.63	7.72	6.31	5.12	28.83	28.58	28.24
Bayou Caddy	BCD1	9/30/2005	945	9	6.18	6.16	6.15	14.27	14.26	14.27	28.86	28.84	28.83
Pearl River	Pearl1	9/30/2005	1545	17	7.01	3.9	1.88	4.26	3.34	2.15	30.32	29.46	29.01

## 6.4 Sediment Sampling

All sediment results were compared to Threshold Effects Levels (TEL) and Probable Effect Levels (PEL) summarized in the NOAA Screening Quick References Tables (SQuIRT's) [MacDonald (1994), Long (1991), Long (1995)]. The TELs represent concentrations below which adverse effects are expected to rarely occur. PELs are concentrations above which adverse effects are frequently expected. TELs and PELs are not available for every contaminant analyzed in this study. Only those contaminants that have published TELs and PELs were evaluated in this assessment. Additional literature reviews are required to evaluate all other detected contaminants.

Only two sampling areas had sediment concentrations above the TELs, Bayou Casotte and St. Louis Bay (Tables 12-15). Both sediment sampling locations in Bayou Casotte had cadmium concentrations above the TEL of 0.68 ppm. Locations BC2SD and BC4SD had cadmium concentrations of 1.1 and 1.8 ppm, respectively. One location, BC2SD, had zinc (140 ppm), lead (36 ppm) and copper (20 ppm) concentrations that exceeded their respective TELs. Although these concentrations exceed the TELs, they do not exceed their respective PELs.

Bay St. Louis only had one exceedence of the TELs. Location SLB6SD had an arsenic concentration of 9 ppm, which exceeds the arsenic TEL of 7.24 ppm. The arsenic PEL is 41.6 ppm. Although arsenic exceeds the TEL, it is well below the PEL.

Five sediment samples were also collected from the Pascagoula/Escatawpa system (three locations) and St Louis Bay (two locations) for dioxin analysis. The locations were based on recommendations made by MDEQ. The analyses were conducted by an EPA contract laboratory. The results for each sample collected are reported for individual compounds and summarized into a toxic equivalent value (TEQ). The toxic equivalent value is computed for birds, fish and mammals. A comparison was then made against the World Health Organization (WHO) low and high risk screening values. Of the five stations sampled, four were found to have toxic equivalent values higher than the low risk mammalian wildlife value as shown in Table 16. However, none of the values exceeded the “effects value” of 25 ng/kg (TEQ) (EPA, 1993). All of the concentrations measured were well below the EPA screening value for residential soils (1,000 ng/kg); additionally, there are no known human health effects associated with this level of dioxin in sediment (Personal Communication with Scott Sudweeks, Chief, Technical Services Section, Region 4 Waste Management Division).

Table 12  
Chemical Sediment Data- Detectable Concentrations- Bangs Lake & Bayou Casotte  
September 27-30, 2005

Metals Scan	TEL*	PEL**	BC2SD	BC4DSD	BC4SD	BL1SD
			9/27/2005	9/27/2005	9/27/2005	9/27/2005
% Moisture	%		60	41	49	A 39
Aluminum	7429-90-5	MG/KG	8200	2600	3000	1800 A
Arsenic	7440-38-2	MG/KG	7.24	41.6	6.4 1.2	0.87 2.4 A
Barium	7440-39-3	MG/KG		130	27	57 6.6 A
Beryllium	7440-41-7	MG/KG		0.82	0.3	0.3 U
Cadmium	7440-43-9	MG/KG	0.68	4.2	1.1 1.5	1.8 U
Calcium	7440-70-2	MG/KG		7400	4900	4700 1000 A
Chromium	7440-47-3	MG/KG	52.3	81	21 7.2	9.7 4.5 A
Cobalt	7440-48-4	MG/KG			4.6 0.59	0.66 1.1 A
Copper	7440-50-8	MG/KG	18.7	108.2	20 4.7	5.5 1.9 A
Iron	7439-89-6	MG/KG			17000 3400	3200 4900 A
Lead	7439-92-1	MG/KG	30.2	112.2	36 4.8	5.9 4.1 A
Magnesium	7439-95-4	MG/KG			5100 1800	1700 1400 A
Manganese	7439-96-5	MG/KG			450 26	26 46 A
Nickel	7440-02-0	MG/KG	15.9	42.8	8.4 2.4	2.7 2 A
Potassium	7440-09-7	MG/KG			2300 510	450 630 A
Sodium	7440-23-5	MG/KG		18000	8500	5900 5300 AJ
Strontium	7440-24-6	MG/KG			57 59	66 10 A
Titanium	7440-32-6	MG/KG			17 12	14 7.6 AJ
Total Mercury	7439-97-6	MG/KG	0.13	0.7	0.078 U	U U
Vanadium	7440-62-2	MG/KG			24 6.1	7.3 9.5 A
Yttrium	7440-65-5	MG/KG			12 2.7	2.5 2.4 A
Zinc	7440-66-6	MG/KG	124	271	140 48	55 14 A
<b>PCB Scan</b>			None Detected			
<b>Pesticides Scan</b>			None Detected			
<b>Volatiles Scan</b>						
% Moisture	%		60	41	50	39
1,2,3-Trichlorobenzene	87-61-6	UG/KG	1.8	J	U	U U
Benzene	71-43-2	UG/KG	0.23	J	U	U U
Carbon Disulfide	75-15-0	UG/KG	4.7	J	3.2 4.4	0.73 J
Isopropylbenzene	98-82-8	UG/KG	14		U	U U
n-Butylbenzene	104-51-8	UG/KG	50	J	U	U U
n-Propylbenzene	103-65-1	UG/KG	51	J	U	U U
p-Isopropyltoluene	99-87-6	UG/KG	43	J	U	U U
sec-Butylbenzene	135-98-8	UG/KG	30	J	U	U U
<b>Miscellaneous Volatiles</b>						
Petroleum Products	UG/KG		N	NR	NR	NR
Thiobismethane	UG/KG		NR	200	NJ	30 NJ
<b>Extractables Scan</b>						
% Moisture	%		63.61	29.58	33.67	35.82
Fluoranthene	206-44-0	UG/KG	112.8	1493.5	U 66 J	U U U
Pyrene	129-00-0	UG/KG	152.7	1397.6	U 63 J	U U U
<b>Classical Nutrients</b>						
Ammonia	7664-41-7	MG/KG		55	15	13 5.5
Total Kjeldahl Nitrogen		MG/KG		1400	430	330 450
Total Organic Carbon		MG/KG		17000		U U U
Total Phosphorus	7723-14-0	MG/KG		1200	1800	2400 61

Shaded areas identify analyte detected is above sediment quality criteria

Data Qualifiers

U-Analyte not detected at or above reporting limit.

J-Identification of analyte is acceptable; reported value is an estimate.

UJ-Analyte not detected at or above reporting limit. Reporting limit is an estimate.

N-Presumptive evidence analyte is present; analyte reported as tentative identification.

NJ-Presumptive evidence analyte is present; analyte reported as tentative identification. Reported value is an estimate.

K-Identification of analyte is acceptable; reported value may be biased high. Actual value expected to be less than the reported value.

L-Identification of analyte is acceptable; reported value may be biased low. Actual value expected to be greater than reported value.

NA-Not Analyzed. | NAI-Not Analyzed due to Interferences. | A-Analyte analyzed in replicate. Reported value is 'average' of replicates.

R-Presence or absence of analyte can not be determined from data due to severe quality control problems. Data are rejected and considered unusable.

C-confirmed by GCMS | /1-when no value is reported, see chlordane constituents | /2-constituents or metabolites of technical chlordane

NR-Not Reported

Table 13  
Chemical Sediment Data- Detectable Concentrations-Pascagoula River, Escatawpa River, and West Pascagoula River  
September 27-30, 2005

Metals Scan	TEL	PEL	ER1DSD	ER1SD	PR1SD	PR2SD	WPR1SD
			9/28/2005	9/28/2005	9/28/2005	9/28/2005	9/28/2005
% Moisture	%		23	20	69	16	34
Aluminum	7429-90-5	MG/KG	180	A	210	5600	3700
Arsenic	7440-38-2	MG/KG	7.24	41.6	U	6.6	3.3
Barium	7440-39-3	MG/KG		1.7	A	1	24
Beryllium	7440-41-7	MG/KG			U	0.88	0.68
Cadmium	7440-43-9	MG/KG	0.68	4.2	U	0.38	0.28
Calcium	7440-70-2	MG/KG		71	A	50	2600
Chromium	7440-47-3	MG/KG	52.3	160.4	U	12	6.5
Cobalt	7440-48-4	MG/KG			U	5.6	7.7
Copper	7440-50-8	MG/KG	18.7	108.2	UJ	UU	12
Iron	7439-89-6	MG/KG		270	A	370	16000
Lead	7439-92-1	MG/KG	30.24	112.8	2.1	A	1.3
Magnesium	7439-95-4	MG/KG		200	A	120	4500
Manganese	7439-96-5	MG/KG		1.7	A	2.5	270
Nickel	7440-02-0	MG/KG	15.9	42.8	U	U	6.1
Potassium	7440-09-7	MG/KG			U	1600	900
Selenium	7782-49-2	MG/KG			U	0.73	U
Sodium	7440-23-5	MG/KG		1300	A	540	20000
Strontium	7440-24-6	MG/KG		1.5	A	1.1	39
Titanium	7440-32-6	MG/KG		2.6	AJ	2.8	J
Total Mercury	7439-97-6	MG/KG	0.13	0.7	U	U	0.055
Vanadium	7440-62-2	MG/KG			UU	UU	25
Yttrium	7440-65-5	MG/KG			U	U	11
Zinc	7440-66-6	MG/KG	124	271	1.6	A	1.9
<b>PCB Scan</b>			None Detected				
<b>Pesticides Scan</b>			None Detected				
<b>Volatiles Scan</b>							
% Moisture	%		23	20	69	55	34
Benzene	71-43-2	UG/KG		U	U	U	0.18
Carbon Disulfide	75-15-0	UG/KG		U	U	J	1.4
<b>Extractables Scan</b>			None Detected				
<b>Classical Nutrients</b>							
Ammonia	7664-41-7	MG/KG		3.4	U	78	41
Total Kjeldahl Nitrogen		MG/KG		57	57	2200	1200
Total Organic Carbon		MG/KG		U	U	U	15000
Total Phosphorus	7723-14-0	MG/KG		U	U	330	180
							86

Shaded areas identify analyte detected is above sediment quality criteria

Data Qualifiers

U-Analyte not detected at or above reporting limit.

J-Identification of analyte is acceptable; reported value is an estimate.

UJ-Analyte not detected at or above reporting limit. Reporting limit is an estimate.

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NJ-Presumptive evidence analyte is present; analyte reported as tentative identification. Reported value is an estimate.

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L-Identification of analyte is acceptable; reported value may be biased low. Actual value expected to be greater than reported value.

NA-Not Analyzed. | NAI-Not Analyzed due to Interferences. | A-Analyte analyzed in replicate. Reported value is 'average' of replicates.

R-Presence or absence of analyte can not be determined from data due to severe quality control problems. Data are rejected and considered unusable.

C-confirmed by GCMS | /1-when no value is reported, see chlordane constituents | /2-constituents or metabolites of technical chlordane

NR-Not Reported

Table 14  
Chemical Sediment Data - Detectable Concentrations- Back Bay of Biloxi  
September 27-30, 2005

Metals Scan	TEL	PEL	BBB3DSD	BBB3SD	BBB6SD
			9/29/2005	9/29/2005	9/29/2005
% Moisture			69	66	62
Aluminum	7429-90-5	MG/KG		7000	7800
Arsenic	7440-38-2	MG/KG	7.24	41.6	4.7 A
Barium	7440-39-3	MG/KG		14	16
Beryllium	7440-41-7	MG/KG		0.99	1.1
Cadmium	7440-43-9	MG/KG	0.68	4.2	0.31 A
Calcium	7440-70-2	MG/KG		1400	1400
Chromium	7440-47-3	MG/KG	52.3	370	12
Cobalt	7440-48-4	MG/KG			5.9
Copper	7440-50-8	MG/KG	18.7	108.2	14 J
Iron	7439-89-6	MG/KG			14000 J
Lead	7439-92-1	MG/KG	30.24	112.18	18
Magnesium	7439-95-4	MG/KG			20
Manganese	7439-96-5	MG/KG			16 A
Molybdenum	7439-98-7	MG/KG			3200
Nickel	7440-02-0	MG/KG	15.9	42.8	U
Potassium	7440-09-7	MG/KG			0.61
Selenium	7782-49-2	MG/KG			0.72 A
Sodium	7440-23-5	MG/KG			5.9 J
Strontium	7440-24-6	MG/KG			6.2 J
Titanium	7440-32-6	MG/KG			UJ
Total Mercury	7439-97-6	MG/KG	0.13	0.7	1200
Vanadium	7440-62-2	MG/KG			1300
Yttrium	7440-65-5	MG/KG			1.2
Zinc	7440-66-6	MG/KG	124	271	140
					140
<b>PCB Scan</b>					15 J
<b>Pesticides Scan</b>					15000 J
					15000 J
<b>Volatiles Scan</b>					12 A
% Moisture					16 A
1,3,5-Trimethylbenzene	108-67-8	UG/KG			24 A
Isopropylbenzene	98-82-8	UG/KG			24 A
Methyl Ethyl Ketone	78-93-3	UG/KG			9 AJ
n-Butylbenzene	104-51-8	UG/KG			U
n-Propylbenzene	103-65-1	UG/KG			840 A
o-Xylene	95-47-6	UG/KG			0.57 A
p-Isopropyltoluene	99-87-6	UG/KG			0.57 A
sec-Butylbenzene	135-98-8	UG/KG			5600 A
					12 A
<b>Extractables Scan</b>					16 A
% Moisture					16 A
Fluoranthene	206-44-0	UG/KG	112	1493	12 A
Pyrene	129-00-0	UG/KG	152.7	1397.6	120 J
					150 J
<b>Classical Nutrients</b>					150 J
Ammonia	7664-41-7	MG/KG			62.62
Total Kjeldahl Nitrogen		MG/KG			120 J
Total Organic Carbon		MG/KG			150 J
Total Phosphorus	7723-14-0	MG/KG			150 J
					150 J

Shaded areas identify analyte detected is above sediment quality criteria

Data Qualifiers

U-Analyte not detected at or above reporting limit.

J-Identification of analyte is acceptable; reported value is an estimate.

UJ-Analyte not detected at or above reporting limit. Reporting limit is an estimate.

N-Presumptive evidence analyte is present; analyte reported as tentative identification.

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L-Identification of analyte is acceptable; reported value may be biased low. Actual value expected to be greater than reported value.

NA-Not Analyzed. | NAI-Not Analyzed due to Interferences. | A-Analyte analyzed in replicate. Reported value is 'average' of replicates.

R-Presence or absence of analyte can not be determined from data due to severe quality control problems. Data are rejected and considered unusable.

G-confirmed by GCMS | 1/1-when no value is reported see chlordane constituents | 2/2-constituents or metabolites of technical chlordane

Table 15  
Chemical Sediment Data - Detectable Concentrations- St Louis Bay, Bayou Caddy, and Pearl River  
September 27-30, 2005

			TEL	PEL	PEARL1SD 9/29/2005	SLB2SD 9/30/2005	SLB3SD 9/30/2005	SLB6DSD 9/30/2005	SLB6SD 9/30/2005
					1645	1520	1230	1100	1040
<b>Metals Scan</b>									
% Moisture		%			65	23	52	56	57
Aluminum	7429-90-5	MG/KG			5600	1200	A	4600	6600
Arsenic	7440-38-2	MG/KG	7.24	41.6	3.4	1.5	A	4.4	8.9
Barium	7440-39-3	MG/KG			37	6.7	A	18	19
Beryllium	7440-41-7	MG/KG			0.86		U	0.51	0.77
Cadmium	7440-43-9	MG/KG	1.2	4.2	0.2		U	0.17	0.24
Calcium	7440-70-2	MG/KG			1800	1400	A	2600	4400
Chromium	7440-47-3	MG/KG	52.3	160.4	10	2	A	6.6	10
Cobalt	7440-48-4	MG/KG			4.2	1.6	A	4.8	7.7
Copper	7440-50-8	MG/KG	18.7	108.2	9.6	J	1.5	A	5.2
Iron	7439-89-6	MG/KG			8800	J	3000	A	10000
Lead	7439-92-1	MG/KG	30.2	112.2	17	3.2	A	9.8	15
Magnesium	7439-95-4	MG/KG			3000	700	A	2600	3500
Manganese	7439-96-5	MG/KG			160	78	A	210	260
Molybdenum	7439-98-7	MG/KG			0.99		U		U
Nickel	7440-02-0	MG/KG	15.9	42.8	8.3	J	1.5	A	5.4
Potassium	7440-09-7	MG/KG			1000	340	A	1200	1600
Selenium	7782-49-2	MG/KG			0.66		U		U
Sodium	7440-23-5	MG/KG			3100	1600	A	5600	5900
Strontium	7440-24-6	MG/KG			31	10	A	26	37
Titanium	7440-32-6	MG/KG			16	12	AJ	17	J
Vanadium	7440-62-2	MG/KG			17	3.5	A	13	19
Yttrium	7440-65-5	MG/KG			14	2.6	A	7.9	11
Zinc	7440-66-6	MG/KG	124	270	22	9.7	A	32	42
<b>PCB Scan</b>					None Detected				
<b>Pesticides Scan</b>					None Detected				
<b>Volatiles Scan</b>									
% Moisture		%			66	23	52	56	57
1,3,5-Trimethylbenzene	108-67-8	UG/KG			0.25	J	U	U	U
o-Xylene	95-47-6	UG/KG			0.21	J	U	U	U
p-Isopropyltoluene	99-87-6	UG/KG			3.4	J	U	U	U
<b>Extractables Scan</b>									
% Moisture		%			67.8	23.22	54.05	55.91	57.75
Benzo(a)Anthracene	56-55-3	UG/KG	74.83	1600	U	58	J	U	U
Benzo(b)Fluoranthene	205-99-2	UG/KG			U	130	J	U	U
Benzo(ghi)Perylene	191-24-2	UG/KG			U	74	J	U	U
Benzo(k)Fluoranthene	207-08-9	UG/KG			U	120	J	U	U
Benzo-a-Pyrene	50-32-8	UG/KG	88	1600	U	130	J	U	U
Chrysene	218-01-9	UG/KG	107.8	2800	U	82	J	U	U
Dibenzo(a,h)Anthracene	53-70-3	UG/KG	6.22	134.61	U	47	J	U	U
Fluoranthene	206-44-0	UG/KG	112.8	1493.5	U	98	J	U	U
Indeno (1,2,3-cd) Pyrene	193-39-5	UG/KG			U	84	J	U	U
Pyrene	129-00-0	UG/KG	152.7	1397.6	U	170	J	U	U
<b>Classical Nutrients</b>									
Ammonia	7664-41-7	MG/KG			22		U	17	16
Total Kjeldahl Nitrogen		MG/KG			2500	270	940	1300	1200
Total Organic Carbon		MG/KG			58000		U	16000	14000
Total Phosphorus	7723-14-0	MG/KG			100	65	160	170	160

Shaded areas identify analyte detected is above sediment quality criteria

Data Qualifiers

U-Analyte not detected at or above reporting limit.

J-Identification of analyte is acceptable; reported value is an estimate.

UJ-Analyte not detected at or above reporting limit. Reporting limit is an estimate.

N-Presumptive evidence analyte is present; analyte reported as tentative identification.

NJ-Presumptive evidence analyte is present; analyte reported as tentative identification. Reported value is an estimate.

K-Identification of analyte is acceptable; reported value may be biased high. Actual value expected to be less than the reported value.

L-Identification of analyte is acceptable; reported value may be biased low. Actual value expected to be greater than reported value.

NA-Not Analyzed | NAI-Not Analyzed due to Interferences | A-Analyte analyzed in replicate. Reported value is 'average' of replicates

Table 16  
Sediment Dioxin Results  
Pascagoula, Escatawpa, and St. Louis Bays  
September 28&30, 2005

Dioxin Scan		ER1DSD 9/28/2005	ER1SD 9/28/2005	PR1SD 9/28/2005	PR2SD 9/28/2005	SLB2SD 9/30/2005	SLB6SD 9/30/2005
		1430	1400	1320	1545	1520	1040
% Moisture	%	21	19	51	52	23	55
1,2,3,4,6,7,8-Heptachlorodibenzodioxin	35822-46-9	NG/KG	7	11	220	290	50
1,2,3,4,6,7,8-Heptachlorodibenzofuran	67562-39-4	NG/KG	8.4 U	0.47 U	8.9	9	1.4 J
1,2,3,4,7,8,9-Heptachlorodibenzofuran	55673-89-7	NG/KG	1.1 J	0.15 U	0.8 J	0.7 U	0.15 J
1,2,3,4,7,8-Hexachlorodibenzodioxin	39227-28-6	NG/KG	1.9 U	0.24 J	2 J	1.9 J	0.56 J
1,2,3,4,7,8-Hexachlorodibenzofuran	70648-26-9	NG/KG	2.2 U	0.15 U	1.2 U	0.78 U	0.17 U
1,2,3,6,7,8-Hexachlorodibenzodioxin	57653-85-7	NG/KG	1.9 U	0.39 J	4.7	6.2	1.1 J
1,2,3,6,7,8-Hexachlorodibenzofuran	57117-44-9	NG/KG	11 U	0.14 U	0.58 U	0.56 U	0.17 U
1,2,3,7,8,9-Hexachlorodibenzodioxin	19408-74-3	NG/KG	2 U	0.72 J	8.9	12	2.3
1,2,3,7,8,9-Hexachlorodibenzofuran	72918-21-9	NG/KG	0.68 J	0.15 U	0.37 U	0.35 U	0.089 U
1,2,3,7,8-Pentachlorodibenzodioxin	40321-76-4	NG/KG	1.5 U	0.14 U	0.67 J	0.74 J	0.22 J
1,2,3,7,8-Pentachlorodibenzofuran	57117-41-6	NG/KG	1.5 U	0.16 U	0.4 U	0.25 U	0.1 U
2,3,4,6,7,8-Hexachlorodibenzofuran	60851-34-5	NG/KG	1.1 J	0.17 U	0.77 U	0.71 U	0.17 U
2,3,4,7,8-Pentachlorodibenzofuran	57117-31-4	NG/KG	1.4 U	0.2 U	0.77 U	0.43 U	0.15 U
2,3,7,8-Tetrachlorodibenzodioxin	1746-01-6	NG/KG	0.21 U	0.19 U	1.1	0.81 J	0.1 U
2,3,7,8-Tetrachlorodibenzofuran	51207-31-9	NG/KG	1.1 U	1.6 U	12	2.4	0.16 U
Heptachlorodibenzodioxin (Total)		NG/KG	19 J	30 J	870 J	840 J	180 J
Heptachlorodibenzofuran (Total)	38998-75-3	NG/KG	1.1 J	0.37 J	30 J	28 J	3.4 J
Hexachlorodibenzodioxin (Total)	34465-46-8	NG/KG	1.9 UJ	11 J	270 J	250 J	75 J
Hexachlorodibenzofuran (Total)	55684-94-1	NG/KG	22 J	0.33 J	13 J	11 J	1.6 J
Octachlorodibenzodioxin	3268-87-9	NG/KG	170	300	5000 J	10000 J	1100
Octachlorodibenzofuran	39001-02-0	NG/KG	5.9	0.8 J	18	20	3.2 J
Pentachlorodibenzodioxin (Total)	36088-22-9	NG/KG	1.5 UJ	1.4 J	38 J	33 J	11 J
Pentachlorodibenzofuran (Total)	30402-15-4	NG/KG	9.1 J	0.21 J	4 J	4.1 J	0.57 J
Tetrachlorodibenzodioxin (Total)	41903-57-5	NG/KG	0.54 J	0.63 J	28 J	25 J	5.5 J
Tetrachlorodibenzofuran (Total)	55722-27-5	NG/KG	12 J	2.9 J	28 J	7.5 J	0.74 J
TEQ (Avian Toxic. Equiv. Value, From WHO TEQ (1998))	NG/KG	6.2 J	2.3 J	17 J	7.4 J	1.2 J	5.8 J
TEQ (Fish Toxic. Equiv. Value, From WHO TEQ (1998))	NG/KG	5.1 J	0.75 J	5 J	4.7 J	1 J	5.3 J
TEQ (Mammalian Toxic. Equiv. Value, From WHO TEQ (1998))	NG/KG	4.8 J	0.93 J	8 J	8.3 J	1.5 J	8.9 J

Shaded entries indicate exceedence of EPA screening values (below)

EPA Sediment Screening Values (USEPA 1993)	TEQ (NG/KG)	Low Risk	High Risk
	Fish	60	100
	Mammalian Wildlife	2.5*	25
	Avian Wildlife	21	210

\* The 2.5 mammalian screening value is based on effect value of 25 ng/kg (EPA (1993) with an applied safety factor of 10.

Data Qualifiers

U-Analyte not detected at or above reporting limit. The number is the minimum quantitation limit.

J-Identification of analyte is acceptable; reported value is an estimate.

UJ-Analyte not detected at or above reporting limit. Reporting limit is an estimate.

## 6.5 Bay Outlet Loading to MS Sound

Loading measurements were made for the outlets from Bayou Casotte, Pascagoula River, West Pascagoula River, Back Bay of Biloxi, St. Louis Bay and Pearl River (Tables 16-19). Flow was measured using a boat mounted Doppler current meter. Every attempt was made to make the loading measurements at mid-ebb tide. Samples for the respective water columns were collected and analyzed from mid depth of the center of the main hydraulic conveyance outlet. A tide chart recorder located at Keesler AFB on Back Bay of Biloxi depicts the estimated point of sampling and flow measurement at each outlet, Figure 11. As such, the only outlet system that accurately reflects the timing relative to the tidal stage is for Back Bay of Biloxi. The timing for the other loading outlet measurements were estimates based on the tidal lag irrespective to the effect of the wind, Figure 12.

The results for the algal growth potential test (AGPT) at the bay & river outlets are found in Table 19 and Figure 13. The AGPT numbers for all of the bay & river systems were low with the exception of Bayou Casotte and Back Bay of Biloxi. The algal growth potential within Bayou Casotte was exceptionally high. This result was likely tied to the nutrient enriched discharge from Mississippi Phosphates to Bayou Casotte.

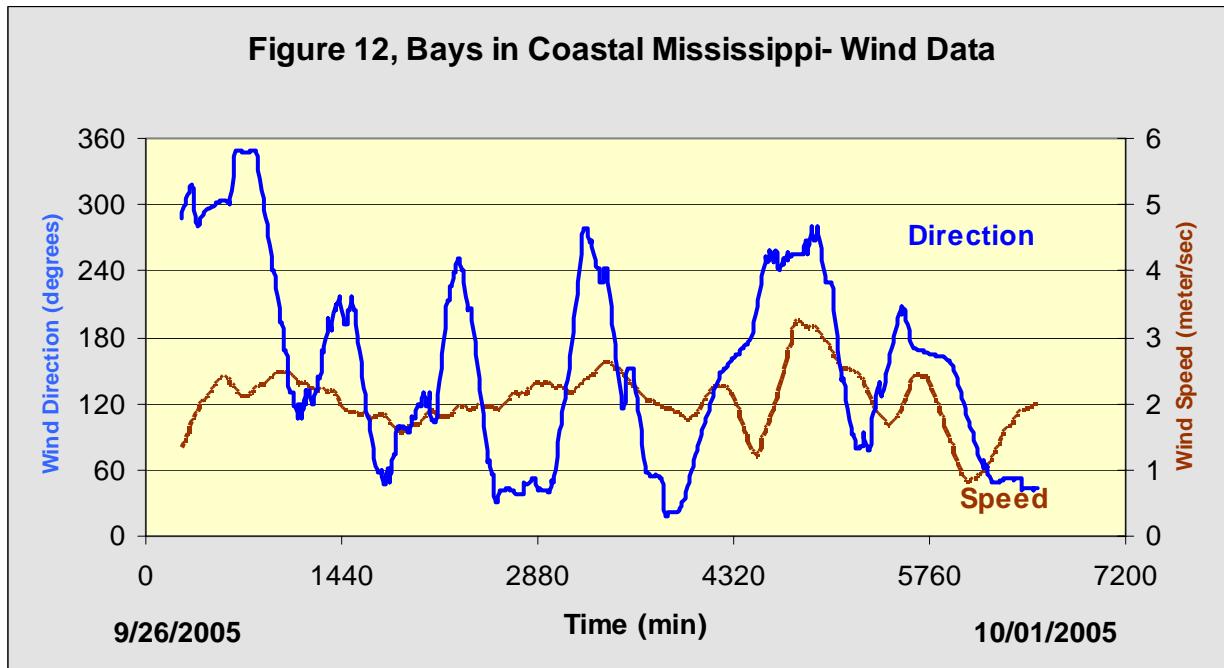
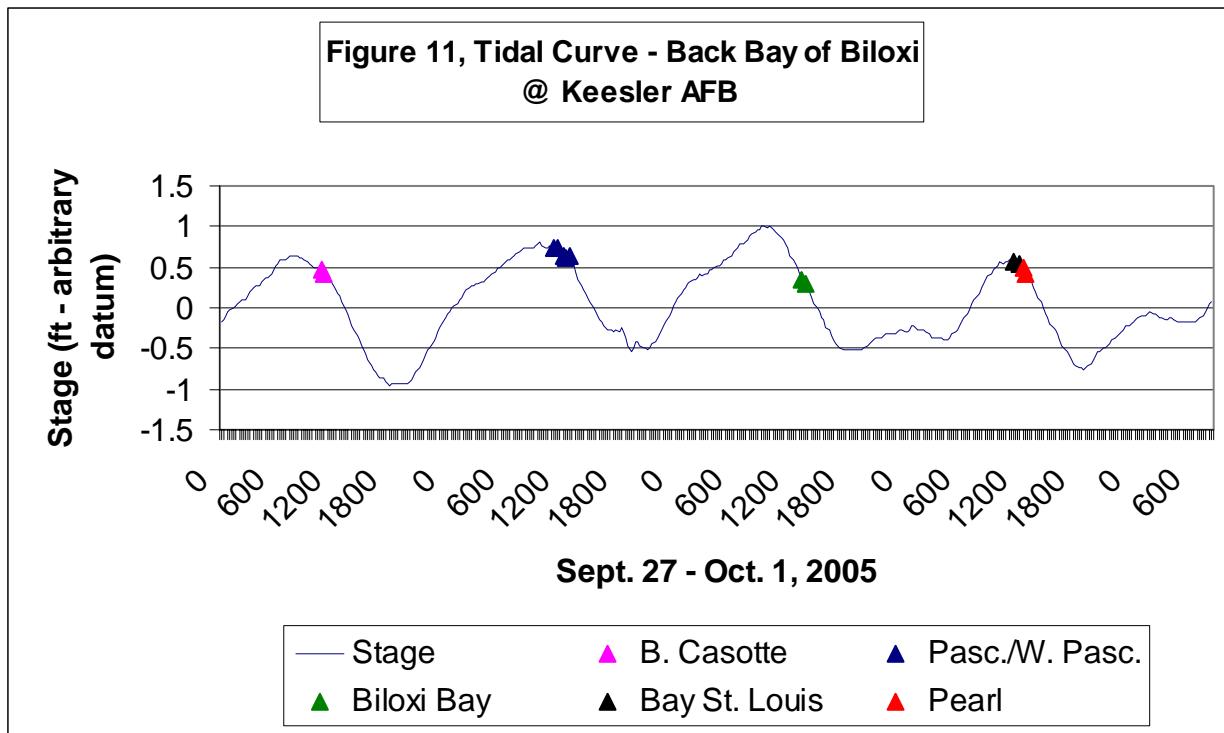


Table 17  
Bay Outlet Metal Loading  
Water Quality Study of Bays in Coastal Mississippi  
September 27-30, 2005

Detectable Metals scan (mg/l) compounds												
System	Station	Flow cfs	Date	Time	Calcium mg/l	Iron ton/day	Magnesium mg/l	Potassium ton/day	Sodium mg/l	Sodium ton/day		
West Pascagoula River	Bayou Casotte BC1	1591	9/27/2005	1134	350	1501		1100	4717	360	1544	9200
	Pascagoula River PR1	17968	9/28/2005	1240	330	15982		1000	48432	340	16467	8700
	WPR1	17618	9/28/2005	1115	260	12347		840	39890	260	12347	6900
	Back Bay of Biloxi BBB1	36514	9/29/2005	1312	160	15747		490	48226	160	15747	3950
	St Louis Bay SLB1	44835	9/30/2005	1230	180	21753		550	66467	170	20544	4500
	Pearl River Pearl1	6500	9/30/2005	1615	40	701	0.76	13	110	1927	38	666

Detectable Metals scan (ug/l) compounds												
System	Station	Flow cfs	Date	Time	Arsenic ug/l	Barium ton/day	Manganese ug/l	Selenium ton/day	Strontium ug/l	Strontium ton/day		
West Pascagoula River	Bayou Casotte BC1	1591	9/27/2005	1134	45 J	0.2			150 J	0.6	6100	26.2
	Pascagoula River PR1	17968	9/28/2005	1240	46 J	2.2			150 J	7.3	5600	271.2
	WPR1	17618	9/28/2005	1115	34 J	1.6		98	4.7	110 J	5.2	5200
	Back Bay of Biloxi BBB1	36514	9/29/2005	1312	25 J	2.5		64	6.3	77 J	7.6	2850
	St Louis Bay SLB1	44835	9/30/2005	1230	22 J	2.7	61	7.4		64 J	7.7	3000
	Pearl River Pearl1	6500	9/30/2005	1615	4.6 J	0.1	61	1.1	870	15.2	11 J	0.2

J - Identification of analyte is acceptable; reported value is an estimate

Table 18  
Bay Outlet Nutrient Loading  
Water Quality Study of Bays in Coastal Mississippi  
September 27-30, 2005

Detectable Nutrient Compounds												
System	Station	Flow cfs	Date	Time	TOC mg/l	NH3 ton/day	NO2-NO3 mg/l	TKN ton/day	Total N mg/l	Total N ton/day	Total P mg/l	Total P ton/day
West Pascagoula River	Bayou Casotte BC1	1591	9/27/2005	1205	1.40	6.0	0.08	0.3	0.06	0.2	0.25	1.1
	Pascagoula River PR1	17968	9/28/2005	1240	1.60	77.5	0.07	3.5	0.06	2.7	0.29	14.0
	WPR1	17618	9/28/2005	1115	2.50	118.7	0.08	3.9	0.05 u	2.4	0.45	21.4
	Back Bay of Biloxi BBB1	36514	9/29/2005	1340	8.10	797.2	0.05 u	4.9	0.05 u	4.9	0.68	66.9
	St Louis Bay SLB1	44835	9/30/2005	1230	4.50	543.8	0.05 u	6.0	0.05 u	6.0	0.55	66.5
	Pearl River Pearl1	6500	9/30/2005	1615	7.80	136.7	0.07	1.2	0.05 u	0.9	0.73	12.8

Table 19  
Bay Outlet Volatile Organic Load  
Water Quality Study of Bays in Coastal Mississippi  
September 27-30, 2005

PCB scan																
No Detectable Compounds																
Pesticide Scan																
No Detectable Compounds																
Extractables Scan																
No Detectable Compounds																
Volatile Scan																
System	Station	Flow cfs	Date	Time	(m-and/or p-)Xylene ug/l	(m-and/or p-)Xylene tons/day	1,2,4-Trimethylbenzene ug/l	1,2,4-Trimethylbenzene tons/day	Benzene ug/l	Benzene tons/day	Ethyl Benzene ug/l	Ethyl Benzene tons/day	O-Xylene ug/l	O-Xylene tons/day	Toluene ug/l	Toluene tons/day
West Pascagoula River	Bayou Casotte BC1	1591	9/27/2005	1205												
	Pascagoula River PR1	17968	9/28/2005	1240												
	WPR1	17618	9/28/2005	1115												
	Back Bay of Biloxi BBB1	36514	9/29/2005	1340												
	St Louis Bay SLB1	44835	9/30/2005	1230												
	Pearl River Pearl1	6500	9/30/2005	1615	0.32 J	0.006	0.11 J	0.002	0.11 J	0.002	0.10 J	0.002	0.12 J	0.002	0.74 J	0.013

J - Identification of Analyte is acceptable; reported value is an estimate.

Table 20  
Algal Growth Potential Test - Mississippi Bay Outlet Results  
September 27-30, 2005

AGPT- MSC, mg/L (Dry Weight)

	Station	Control	C+N	C+P	C+N+P	Limiting Nutrient
Marine Test Dunaliella	BC1	55.1	107	56.3		N
	BL1	3.9	57.5	2.5		N
	PR1	3.8	5.5	4.1		N
	WPR1	4.1	6.9	4.8		N
	BBB1	7.5	5.8	6.9		ND
	SLB1	4.0	4.6	3.4		ND
FW Test Selenastrum	Pearl-1	0.80	7.1	1.1		N

Excessive growth for marine waters is considered 5 mg/l (dry weight)

AGPT - Algal Growth Potential Test

MSC - Maximum Standing Crop

C+N - Control + 1.0 mg/L Nitrate-N

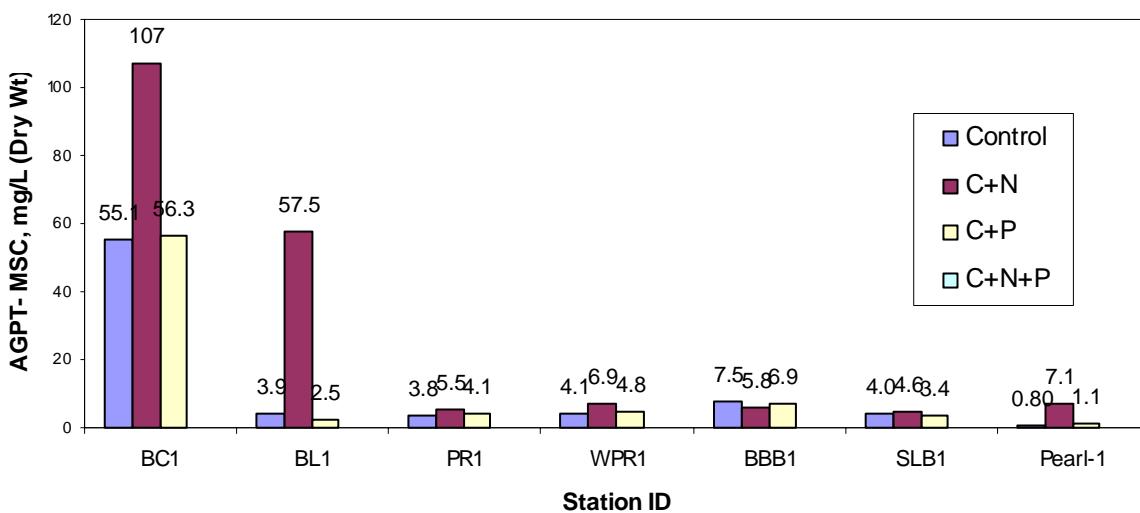
C+P - Control + 0.05 mg/L Phosphate-P

C+N+P - Control + 1.0 mg/L Nitrate-N + 0.05 mg/L Phosphate-P

FW - Freshwater AGPT using Selenastrum as test alga

ND - Not Determined

Fig. 13 MS Gulf Coast AGPT  
September 27 - 30, 2005



## **7.0 Data Management**

ASB performed data review and data verification. **Data review** is the in-house examination process to ensure that the data were recorded, transmitted, and processed correctly. ASB's data review procedures included review by the analyst generating the data (primary analyst) and a second review by an analyst who was not directly responsible for performing the analysis (secondary analysts). A final review was performed by the organic or inorganic supervisor prior to reporting the data. ASB's detailed data review procedures are covered in Section 5.5.7.7 of ASB's Quality Assurance Manual. Any departures from QAPP, method or SOP specifications were noted in a narrative report sent to the data user/decision maker who then evaluated the departures as to the overall effects on the project objectives. Limitations on the use of the data were a result of the data validation process addressed in the project report.

### **7.1 Documentation and Records**

Field log books were maintained according to the procedures in the EASOPQAM by each sampling team for the duration of the field survey. Following completion of the field surveys, the log books were placed in the project file by the project leader. Upon completion of the final report, the log books and associated project records will be stored in the SESD Records Center. Copies of the final report will be provided to MDEQ and EPA Region 4 Water Management Division – Standards, Monitoring and TMDL Branch. A copy of the final report will also be maintained in the SESD Records Center.

### **7.2 Quality Assurance and Quality Control**

Sample handling variability can be a major source of error in sample collection investigations. Some of that error was controlled by requiring that field investigators strictly adhere to an approved sampling methodology, thereby helping ensure that samples are collected correctly. However, other sources of error, such as cross contamination and storage and transport conditions, do exist and cannot always be mitigated by using proper collection methods. These other sources of error can be evaluated and monitored by collecting specific quality control samples designed to detect positive or negative biases associated with sample handling, storage, transport and spatial variability.

During this study, sampling activities were conducted according to strict protocols as outlined in the methods section. In addition, field investigators collected specific quality control samples for evaluating variability associated with sample handling and external contamination.

The following quality control samples were utilized during the study to assess the sampling procedures used during field operations:

#### **1. Water VOA Trip Blanks (VOA vials)**

Water VOA trip blanks were utilized to determine if the water VOA samples were contaminated during storage or transport while in the field. The trip blanks were prepared in the laboratory prior to the sampling event. The trip blanks consisted of three 40 mL VOA vials. One trip blank was included with each shipment of VOA samples.

**2. Sediment VOA Trip Blanks (En Core® samplers)**

Sediment VOA trip blanks were utilized to determine if the sediment VOA samples were contaminated during storage or transport while in the field. Blank EnCore samplers were prepared in the laboratory prior to the sampling event. One sediment trip blank was included with each shipment of sediment samples.

**3. Equipment Rinse Blanks**

Equipment rinse blanks were used to assess the adequacy of field decontamination procedures. The equipment decontaminated while in the field included the petite Ponar sediment samplers and the vacuum head caps. One equipment rinse blank was collected each day that decontamination of equipment occurred. The equipment rinse blank was collected by capturing the analyte-free water which had been poured over/through the sampling equipment as part of the decontamination process. The equipment rinse blank was analyzed for the same suite of parameters as the sediment samples.

**4. Preservative Blanks**

Post study preservative blanks were collected to determine if contamination of preservatives occurred during the sampling event. One preservative blank was collected for each bottle of preservative used during the sampling event. One liter polyethylene bottles filled with analyte-free water were provided by the laboratory prior to the sampling event. At the completion of the sampling event, the preservative blanks were prepared by preserving the bottles provided by the laboratory. The preservative blanks were analyzed for the appropriate analytes based on the preservative used.

**5. Temperature Blanks**

Temperature blanks were prepared by filling containers with water and sealing. A temperature blank was shipped with each cooler of samples requiring preservation by cooling with ice to 4°C. The temperature blanks were measured at the time of receipt by the laboratory.

**6. Organic/Analyte Free Water System Blank**

A blank water sample was prepared by collecting a water sample from the field organic/analyte free water generating system at the end of the study. The purpose of this sample was to measure positive bias associated with localized contamination of the water generating system.

**7. Duplicate Samples**

Duplicate samples were collected at selected surface water and sediment sampling locations as outlined in Table 1 to provide an initial estimate of the spatial variability of pollutants in the water column and sediments.

The results from the quality control sampling can be found in Appendix G. The only detectable concentrations were a low level of zinc and TOC in an equipment rinse blank, and a negligible amount of toluene in the de-ionized water. All other quality control samples were clean from any detectable compounds.

The project leader was responsible for all corrective actions that became necessary during the field investigation.

## **7.3 Data Validation/Verification**

**Data verification** is the process for evaluating the completeness, correctness, and compliance of a specific data set against the method, procedural, or contractual specifications. ASB's analytical data is verified by the primary and secondary analyst against the procedural and quality assurance requirements of the analytical methods which are utilized, and the ASB internal standard operating procedure for the methods. Any data which did not meet the method or QC requirements was either re-analyzed, or qualified to denote that method or QC criteria were not met during the analysis. ASB's data verification procedures are described in detail in Sections 5.7 – 5.10 of ASB's Quality Assurance Manual.

**Data validation** is an analyte- and sample-specific process that extends the evaluation of data beyond data verification to determine the quality of a specific data set relative to the end use. It focuses on the project's specifications, the needs of the decision makers/data users and should note potentially unacceptable departures from the QA Project Plan. The data validation for this project was performed by Region 4 SESD Quality Assurance Section (QAS) with assistance from the Environmental Services Assistance Team (ESAT) data validators. Both QAS and ESAT personnel are independent of the data generation process. In order to perform the data review QAS/ESAT personnel was provided with copies of data packages generated during the analytical process. The data packages included chain of custody reports, instrument calibration curves, instrument raw data, sample preparation records, and quality control information. The QAS/ESAT staff validated project data against the data quality objectives and specifications described in the QAPP, the method requirements and ASB Standard Operating Procedures.

## **8.0 Project Management**

Data collection was managed through the Ecological Assessment Branch with guidance from the Mississippi Department of Environmental Quality and Region 4 Water Management Division. The project leader for EAB was Mark Koenig. Technical direction from MDEQ was provided by Henry Folmar. Technical direction from EPA WMD was provided by Andrew Bartlett, Chief of the Standards, Monitoring and TMDL Branch. The appropriate use of historical EPA or MDEQ data for comparison to data generated from this study will be the responsibility of the data user. The QAPP has undergone internal peer review by branch scientists and the Quality Assurance Section. An external peer review by EPA's Science Advisory Board was also completed. No oversight or audits in the field were scheduled for this study. The data quality assessment (DQA) phase of this study consisted of a review of log books and field data by the project leader to reconcile any problems with sample locations or sampling/sample handling procedures. A review of the data and any associated data qualifiers was part of the DQA process.

## **9.0 Project Schedule**

Field work for this project was completed from Monday, September 26, 2005 through Friday, September 30, 2005. Each geographic area (Figures 1-4) was sampled on separate days, beginning with Bayou Casotte and moving westward through the study period. Sampling on the Pearl River and Bayou Caddy system was conducted on the same day as the Bay St. Louis sampling.

Lab analyses were scheduled for completion within 14 days following receipt by the Analytical Support Branch, or in the case of dioxin by the contract laboratory by October 21st. The SESD laboratory needed only 11 days to complete the analytical work. The analytical data were then subject to validation which was scheduled to add an additional 14 days before the final data package was available to the Project Leader. The validated data was released before the target date, (Table 21).

**Table 21**  
**Critical Project Deliverables**

<b>Deliverable</b>	<b>Assigned</b>	<b>Date Due</b>	<b>Date Completed</b>
Produce Water Quality Plan of Study	September 15, 2005	September 20, 2005	September 19, 2005
Water Quality Field Study	September 26, 2005	October 3, 2005	October 1, 2005
Final Sample Shipment	—	October 3, 2005	October 1, 2005
Sample Analysis	October 1, 2005	October 15, 2005	October 14, 2005
QA Data Review	October 14, 2005	October 28, 2005	October 21, 2005
Water Quality Data Report	September 25, 2005	November 4, 2005	October 21, 2005
Final Report to SESD Web Site			October 28, 2005

## **10.0 References**

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- EPA 2001. Environmental Investigation Standard Operating Procedures and Quality Assurance Manual, November 2001. Environmental Protection Agency, Region 4, Science and Ecosystem Support Division, Environmental Investigation Branch, Athens, Georgia
- EPA 2004. Analytical Support Standard Operating Procedures and Quality Assurance Manual, November 2004. Environmental Protection Agency, Region 4, Science and Ecosystem Support Division, Analytical Support Branch, Athens, Georgia
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# **Appendix A**

## **ASB Analytical Detection Limit Tables**

## Appendix A ASB Analytical Tables

<b>Table A1</b> <b>Nutrients and Classicals Analyte List</b> <b>Minimum Quantitation Limits by Matrices and Analytical Methods</b>			
<b>ANALYTE</b>	<b>Water mg/L (ppm)<sup>1</sup></b>	<b>Soil/Sed mg/kg (ppm)</b>	<b>Reference Analytical Method</b>
Ammonia	0.05	2.5 <sup>2</sup>	780-86-T (Equivalent to EPA 350.1)
Nitrate+Nitrite	0.05	5	EPA 353.2
Phosphorus, Total	0.01	25 <sup>3</sup>	EPA 365.1
Kjeldahl Nitrogen	0.05	12.5 <sup>3</sup>	786-86T (Equivalent to EPA 351.2)
Total Org. Carbon	1.0	10,000	EPA 415.1-water ASB 107C-soils
<b>MQLs may increase due to variability of interferences that make dilutions of sample necessary. Sample sizes required for achieving the routine quantitation limits listed above:</b>			
<b>1</b>	Units as specified unless otherwise noted		
<b>2</b>	Calculated using 1.0 grams of sample (dry weight basis, % moisture will increase MQLs).		
<b>3</b>	Calculated using 0.2 grams of sample (dry weight basis, % moisture will increase MQLs).		

**Table A2**  
**Metals Analyte List, Analytical Methods and**  
**Minimum Quantitation Limits by Matrices**

ANALYTE	Water Fg/L (ppb) <sup>3</sup>	Saline Water Fg/L (ppb) <sup>3</sup>	Soil/Sed mg/kg (ppm) <sup>1, 3</sup>	Reference Analytical Method
Antimony	2.0	20	2.0	EPA 200.8
Arsenic	2.0	20	1.0	EPA 200.8
Aluminum	500	500	50	EPA 6010B
Barium	10	100	1.0	EPA 6010B
Beryllium	5.0	50	0.5	EPA 6010B
Cadmium	1.0	10	0.5	EPA 200.8
Calcium	500	5000	50	EPA 6010B
Cobalt	10	100	1.0	EPA 6010B
Chromium	10	100	1.0	EPA 6010B
Copper	10	100	1.0	EPA 6010B
Iron	250	2500	25	EPA 6010B
Lead	2.0	20	0.5	EPA 200.8
Magnesium	250	2500	25	EPA 6010B
Manganese	10	100	1.0	EPA 6010B
Mercury	0.2	0.4	0.05	EPA 245.1
Molybdenum	10	100	1.0	EPA 6010B
Nickel	20	200	2.0	EPA 6010B
Potassium	2000	20000	200	EPA 6010B
Selenium	5.0	50	4.0	EPA 200.8
Sodium	2000	20000	200	EPA 6010B
Strontium	10	100	1.0	EPA 6010B
Silver	10	100	1.0	EPA 6010B
Tin	25	250	2.5	EPA 6010B
Titanium	10	100	1.0	EPA 6010B
Thallium	1.0	10	0.5	EPA 200.8
Vanadium	10	100	1.0	EPA 6010B
Yttrium	10	100	1.0	EPA 6010B

**Table A2**  
**Metals Analyte List, Analytical Methods and**  
**Minimum Quantitation Limits by Matrices**

ANALYTE	Water Fg/L (ppb) <sup>3</sup>	Saline Water Fg/L (ppb) <sup>3</sup>	Soil/Sed mg/kg (ppm) <sup>1, 3</sup>	Reference Analytical Method
Zinc	10	100	1.0	EPA 6010B
<b>1</b> Detection limits are based on 1.0 grams of sample (on dry weight basis, % moisture will increase MQLs).				
<b>2</b> Detection limits are based on 5.0 grams of sample.				
<b>3</b> Units as specified unless otherwise noted				

**Table A3**  
**Volatile Organics (VOAs) Target Analyte List, Analytical Methods and**  
**Minimum Quantitation Limits by Matrices**

	Water <sup>1</sup> Fg/L (ppb)	Soil/Sed <sup>2</sup> Fg/kg (ppb)	
ANALYTE	Routine Level	Routine Level (Encore® or Tared Vial)	Reference Analytical Method
acetone	25	25	EPA 8260B
acrylonitrile	NA	NA	EPA 8260B
benzene	1	1	EPA 8260B
bromobenzene	1	1	EPA 8260B
bromochloromethane	1	1	EPA 8260B
bromodichloromethane	1	1	EPA 8260B
bromoform	1	1	EPA 8260B
bromomethane	1	1	EPA 8260B
1,3-butadiene	NA	NA	EPA 8260B
butyl acrylate	NA	NA	EPA 8260B
n-butylbenzene	1	1	EPA 8260B

**Table A3**  
**Volatile Organics (VOAs) Target Analyte List, Analytical Methods and**  
**Minimum Quantitation Limits by Matrices**

	Water <sup>1</sup> Fg/L (ppb)	Soil/Sed <sup>2</sup> Fg/kg (ppb)	
ANALYTE	Routine Level	Routine Level (Encore® or Tared Vial)	Reference Analytical Method
sec-butylbenzene	1	1	EPA 8260B
tert-butylbenzene	1	1	EPA 8260B
carbon tetrachloride	1	1	EPA 8260B
chlorodifluoromethane(R22)	NA	NA	EPA 8260B
carbon disulfide	2.5	1	EPA 8260B
chlorobenzene	1	1	EPA 8260B
chloroethane	1	1	EPA 8260B
chloroform	1	1	EPA 8260B
chloromethane	1	1	EPA 8260B
2-chloro-1,3-butadiene (chloroprene)	NA	NA	EPA 8260B
o-chlorotoluene	1	1	EPA 8260B
p-chlorotoluene	1	1	EPA 8260B
cyclohexane	1	1	EPA 8260B
dibromochloromethane	1	1	EPA 8260B
1,2-dibromo-3-chloropropane	1	1	EPA 8260B
1,2-dibromoethane	1	1	EPA 8260B
dibromomethane	1	1	EPA 8260B
1,2-dichlorobenzene	1	1	EPA 8260B
1,3-dichlorobenzene	1	1	EPA 8260B
1,4-dichlorobenzene	1	1	EPA 8260B
dichlorodifluoromethane(R12)	1	1	EPA 8260B
1,1-dichloroethene	1	1	EPA 8260B
cis-1,2-dichloroethene	1	1	EPA 8260B
trans-1,2-dichloroethene	1	1	EPA 8260B
1,1-dichloroethane	1	1	EPA 8260B

**Table A3**  
**Volatile Organics (VOAs) Target Analyte List, Analytical Methods and**  
**Minimum Quantitation Limits by Matrices**

	Water <sup>1</sup> Fg/L (ppb)	Soil/Sed <sup>2</sup> Fg/kg (ppb)	
ANALYTE	Routine Level	Routine Level (Encore® or Tared Vial)	Reference Analytical Method
1,2-dichloroethane	1	1	EPA 8260B
1,2-dichloropropane	1	1	EPA 8260B
1,3-dichloropropane	1	1	EPA 8260B
2,2-dichloropropane	1	1	EPA 8260B
1,1-dichloropropene	1	1	EPA 8260B
cis-1,3-dichloropropene	1	1	EPA 8260B
dichlorotetrafluoroethane(R114)	NA	NA	EPA 8260B
trans-1,3-dichloropropene	1	5	EPA 8260B
ethyl acrylate	NA	NA	EPA 8260B
ethyl benzene	1	1	EPA 8260B
hexachlorobutadiene	1	1	EPA 8260B
hexane	NA	NA	EPA 8260B
isopropylbenzene	1	1	EPA 8260B
p-isopropyltoluene	1	1	EPA 8260B
methyl acetate	5	1	EPA 8260B
methyl cyclohexane	1	1	EPA 8260B
methyl methacrylate	NA	NA	EPA 8260B
methylene chloride	1	1	EPA 8260B
methyl butyl ketone	2.5	2.5	EPA 8260B
methyl ethyl ketone	12	2.5	EPA 8260B
methyl isobutyl ketone	2.5	2.5	EPA 8260B
methyl-t-butyl ether	1	1	EPA 8260B
n-propylbenzene	1	1	EPA 8260B
1,1,1,2-tetrachloroethane	1	1	EPA 8260B
1,1,2,2-tetrachloroethane	1	1	EPA 8260B
tetrachloroethene	1	1	EPA 8260B

**Table A3**  
**Volatile Organics (VOAs) Target Analyte List, Analytical Methods and**  
**Minimum Quantitation Limits by Matrices**

	Water <sup>1</sup> Fg/L (ppb)	Soil/Sed <sup>2</sup> Fg/kg (ppb)	
ANALYTE	Routine Level	Routine Level (Encore® or Tared Vial)	Reference Analytical Method
toluene	1	1	EPA 8260B
1,2,3-trichlorobenzene	1	1	EPA 8260B
1,2,4-trichlorobenzene	1	1	EPA 8260B
1,1,1-trichloroethane	1	1	EPA 8260B
1,1,2-trichloroethane	1	1	EPA 8260B
trichloroethene	1	1	EPA 8260B
trichlorofluoromethane(R11)	1	1	EPA 8260B
1,2,3-trichloropropane	1	1	EPA 8260B
trichlorotrifluoroethane(R113)	1	1	EPA 8260B
1,2,4-trimethylbenzene	1	1	EPA 8260B
1,3,5-trimethylbenzene	1	1	EPA 8260B
styrene	1	1	EPA 8260B
o-xylene	1	1	EPA 8260B
(m- and/or p-)xylene	2	2	EPA 8260B
vinyl chloride	1	1	EPA 8260B
<b>MQLs may increase due to variability of interferences that make dilutions of sample necessary. Sample sizes required for achieving the routine quantitation limits listed above:</b>			
<b>1 - Water- 5 mL from septum sealed vial.</b>			
<b>2 - Routine Level Soil - 5 gram sample preserved with water or acid (dry weight basis, % moisture will increase MQLs).</b>			

**Table A4**  
**Semivolatile Organics (SemiVOAs) Target Analyte List, Analytical Methods and  
 Minimum Quantitation Limits Guidelines by Matrices**

	Water <sup>1</sup> Fg/L (ppb)	Soil/Sed <sup>2</sup> Fg/kg (ppb)	
ANALYTE	Routine Level	Routine Level	Reference Analytical Method
(3- and/or 4-)Methylphenol	10.	330	EPA 8270D
1,1'-biphenyl	10.	330	EPA 8270D
1,2,4-Trichlorobenzene	10.	330	EPA 8270D
2-Nitrophenol	10.	330	EPA 8270D
2-Methyl-4,6-dinitrophenol	20.	670	EPA 8270D
2,3,4,6-Tetrachlorophenol	10	330	EPA 8270D
2,4-Dimethylphenol	10.	330	EPA 8270D
2,4-Dinitrotoluene	10.	330	EPA 8270D
2,4-Dinitrophenol	20.	670	EPA 8270D
2-Methylphenol	10.	330	EPA 8270D
2-Nitroaniline	10.	330	EPA 8270D
2-Chlorophenol	10.	330	EPA 8270D
2-Methylnaphthalene	10.	330	EPA 8270D
2,4,5-Trichlorophenol	10.	330	EPA 8270D
2-Chloronaphthalene	10.	330	EPA 8270D
2,6-Dinitrotoluene	10.	330	EPA 8270D
2,4-Dichlorophenol	10.	330	EPA 8270D
2,4,6-Trichlorophenol	10.	330	EPA 8270D
3,3'-Dichlorobenzidine	10.	330	EPA 8270D
3-Nitroaniline	10.	330	EPA 8270D
4-Chlorophenylphenylether	10.	330	EPA 8270D
4-Chloroaniline	10.	330	EPA 8270D
4-Nitroaniline	10.	330	EPA 8270D
4-Nitrophenol	20.	670	EPA 8270D
4-Chloro-3-methylphenol	10.	330	EPA 8270D
4-Bromophenylphenylether	10.	330	EPA 8270D
Acenaphthene	10.	330	EPA 8270D

**Table A4**  
**Semivolatile Organics (SemiVOAs) Target Analyte List, Analytical Methods and  
 Minimum Quantitation Limits Guidelines by Matrices**

	Water <sup>1</sup> Fg/L (ppb)	Soil/Sed <sup>2</sup> Fg/kg (ppb)	
ANALYTE	Routine Level	Routine Level	Reference Analytical Method
Acenaphthylene	10.	330	EPA 8270D
Acetophenone	10.	330	EPA 8270D
Anthracene	10.	330	EPA 8270D
Atrazine	10.	330	EPA 8270D
Benzo(a)anthracene	10.	330	EPA 8270D
Benzo(a)pyrene	10.	330	EPA 8270D
Benzo(b)fluoranthene	10.	330	EPA 8270D
Benzo(k)fluoranthene	10.	330	EPA 8270D
Benzo(g,h,i)perylene	10.	330	EPA 8270D
Benzaldehyde	10.	330	EPA 8270D
Benzyl Butyl Phthalate	10.	330	EPA 8270D
Bis(2-ethylhexyl)phthalate	10.	330	EPA 8270D
Bis(2-chloroethyl)ether	10.	330	EPA 8270D
Bis(chloroethoxy)methane	10.	330	EPA 8270D
Bis(chloroisopropyl)ether	10.	330	EPA 8270D
Caprolactam	10.	330	EPA 8270D
Carbazole	10.	330	EPA 8270D
Chrysene	10.	330	EPA 8270D
Di-n-butylphthalate	10.	330	EPA 8270D
Di-n-octylphthalate	10.	330	EPA 8270D
Dibenz(a,h)anthracene	10.	330	EPA 8270D
Dibenzofuran	10.	330	EPA 8270D
Diethyl phthalate	10.	330	EPA 8270D
Dimethyl Phthalate	10.	330	EPA 8270D
Fluoranthene	10.	330	EPA 8270D
Fluorene	10.	330	EPA 8270D
Hexachlorobenzene	10.	330	EPA 8270D

**Table A4**  
**Semivolatile Organics (SemiVOAs) Target Analyte List, Analytical Methods and  
 Minimum Quantitation Limits Guidelines by Matrices**

	Water <sup>1</sup> Fg/L (ppb)	Soil/Sed <sup>2</sup> Fg/kg (ppb)	
ANALYTE	Routine Level	Routine Level	Reference Analytical Method
Hexachlorobutadiene	10.	330	EPA 8270D
Hexachlorocyclopentadiene	10.	330	EPA 8270D
Hexachloroethane	10.	330	EPA 8270D
Indeno(1,2,3,c,d)pyrene	10.	330	EPA 8270D
Isophorone	10.	330	EPA 8270D
N-Nitrosodiphenylamine	10.	330	EPA 8270D
Naphthalene	10.	330	EPA 8270D
Nitrobenzene	10.	330	EPA 8270D
Nitroso-di-N-propylamine	10.	330	EPA 8270D
Pentachlorophenol	20.	670	EPA 8270D
Phenanthrene	10.	330	EPA 8270D
Phenol	10.	330	EPA 8270D
Pyrene	10.	330	EPA 8270D

**MQLs may increase due to variability of interferences that make dilutions of sample necessary. Sample sizes required for achieving the routine quantitation limits listed above:**

**1 - All water - 1000 ml, final extract volume 1 ml.**

**2 - Routine Level Soil - 30 grams: If the final volume is 1 ml the above limits apply. If split with pesticide, and a final volume of 2 mls, the above detection levels are doubled to 670/1300 Fg/kg (dry weight basis, % moisture will increase MQLs).**

**Table A5**  
**Pesticide/PCB Target Analyte List**  
**Minimum Quantitation Limits Guidelines by Matrices**  
**Revised 06/26/03**

	Water <sup>1</sup> Fg/L (ppb)	Soil/Sed <sup>2</sup> Fg/kg (ppb)	
ANALYTE	Routine Level	Routine Level	Reference Analytical Method
Aldrin	0.50	20	EPA 8081A
Heptachlor	0.50	20	EPA 8081A
Hept. Epoxide	0.50	20	EPA 8081A
alpha-BHC	0.50	20	EPA 8081A
beta-BHC	0.50	20	EPA 8081A
gamma-BHC	0.50	20	EPA 8081A
delta-BHC	0.50	20	EPA 8081A
Endosulfan- I	0.50	20	EPA 8081A
Dieldrin	0.50	20	EPA 8081A
p,p'-DDT	0.50	20	EPA 8081A
p,p'-DDE	0.50	20	EPA 8081A
p,p'-DDD	0.50	20	EPA 8081A
Endrin	0.50	20	EPA 8081A
Endosulfan -II	0.50	20	EPA 8081A
Endosulfan- SO4	0.50	20	EPA 8081A
Endrin Ketone	0.50	20	EPA 8081A
Methoxychlor	1.0	50	EPA 8081A
Tech. Chlordane	1.5	50	EPA 8081A
b-chlordene	0.50	20	EPA 8081A
g-chlordane	0.50	20	EPA 8081A
a-chlordane	0.50	20	EPA 8081A
chlordene	0.50	20	EPA 8081A
a-chlordan	0.50	20	EPA 8081A
oxychlordan	0.50	20	EPA 8081A
trans-nonachlor	0.50	20	EPA 8081A
cis-nonachlor	0.50	20	EPA 8081A
PCB(as Aroclors)	2.5	100	EPA 8082

**Table A5**  
**Pesticide/PCB Target Analyte List**  
**Minimum Quantitation Limits Guidelines by Matrices**  
**Revised 06/26/03**

	Water <sup>1</sup> Fg/L (ppb)	Soil/Sed <sup>2</sup> Fg/kg (ppb)	
ANALYTE	Routine Level	Routine Level	Reference Analytical Method
Toxaphene	20	1000	EPA 8081A
<b>MQLs may increase due to variability of interferences that make dilutions of sample necessary. Sample sizes required for achieving the routine quantitation limits listed above:</b>			
<b>1 - All water - 1000 ml, final extract volume 1 ml.</b>  <b>2 - Routine Level Soil - 30 grams: final extract volume 1 mls (dry weight basis - % moisture will increase MQLs).</b>			

# **Appendix B**

## **Chemical Surface Water Quality Data**

## Bayou Casotte Surfacewater All Data

		BC1D 9/27/2005	BC1SW 9/27/2005	BC2SW 9/27/2005	BC3SW 9/27/2005	BC4SW 9/27/2005	BL1SW 9/27/2005
		1205	1134	1333	1410	1450	1315
<b>Metals Scan</b>							
Aluminum	7429-90-5	UG/L	2000 U	2000 U	2000 U	2000 U	2000 U
Antimony	7440-36-0	UG/L	5 U	5 U	5 U	5 U	5 U
Arsenic	7440-38-2	UG/L	46 J	45 J	42 J	41 J	48 AJ
Barium	7440-39-3	UG/L	100 U	100 U	100 U	100 U	75 U
Beryllium	7440-41-7	UG/L	60 U	60 U	60 U	60 U	45 U
Cadmium	7440-43-9	UG/L	37 U	37 U	37 U	37 UJ	37 U
Calcium	7440-70-2	MG/L	350	350	360	350	340 A
Chromium	7440-47-3	UG/L	100 U	100 U	100 U	100 U	75 U
Cobalt	7440-48-4	UG/L	100 U	100 U	100 U	100 U	75 U
Copper	7440-50-8	UG/L	400 U	400 U	400 U	400 U	300 U
Iron	7439-89-6	MG/L	2 U	2 U	2 U	2 U	2 U
Lead	7439-92-1	UG/L	5 U	5 U	5 U	5 U	5 U
Magnesium	7439-95-4	MG/L	1100	1100	1100	1000 A	820
Manganese	7439-96-5	UG/L	100 U	100 U	100 U	100 U	120
Molybdenum	7439-98-7	UG/L	100 U	100 U	100 U	100 U	75 U
Nickel	7440-02-0	UG/L	200 U	200 U	200 U	200 U	150 U
Potassium	7440-09-7	MG/L	350	360	380	360	320 A
Selenium	7782-49-2	UG/L	150 J	150 J	140 J	130 J	150 AJ
Silver	7440-22-4	UG/L	100 U	100 U	100 U	100 U	75 U
Sodium	7440-23-5	MG/L	9000	9200	9500	9200	8400 A
Strontium	7440-24-6	UG/L	5900	6100	6300	6100	5500 A
Thallium	7440-28-0	UG/L	5 U	5 U	5 U	5 U	5 U
Tin	7440-31-5	UG/L	NA	NA	NA	NA	NA
Titanium	7440-32-6	UG/L	100 U	100 U	100 U	100 U	75 U
Total Mercury	7439-97-6	UG/L	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Vanadium	7440-62-2	UG/L	100 U	100 U	100 U	100 U	75 U
Yttrium	7440-65-5	UG/L	60 U	60 U	60 U	60 U	45 U
Zinc	7440-66-6	UG/L	200 U	200 U	200 U	200 U	150 U
<b>PCB Scan</b>							
PCB-1016 (Aroclor 1016)	12674-11-2	UG/L	2 U	2 U	2 U	2 U	2 U
PCB-1221 (Aroclor 1221)	11104-28-2	UG/L	2 U	2 U	2 U	2 U	2 U
PCB-1232 (Aroclor 1232)	11141-16-5	UG/L	2 U	2 U	2 U	2 U	2 U
PCB-1242 (Aroclor 1242)	53469-21-9	UG/L	2 U	2 U	2 U	2 U	2 U
PCB-1248 (Aroclor 1248)	12672-29-6	UG/L	2 U	2 U	2 U	2 U	2 U
PCB-1254 (Aroclor 1254)	11097-69-1	UG/L	2 U	2 U	2 U	2 U	2 U
PCB-1260 (Aroclor 1260)	11096-82-5	UG/L	2 U	2 U	2 U	2 U	2 U
<b>Pesticides Scan</b>							
4,4'-DDD (p,p'-DDD)	72-54-8	UG/L	0.25 U	0.26 U	0.25 U	0.26 U	0.25 U
4,4'-DDE (p,p'-DDE)	72-55-9	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
4,4'-DDT (p,p'-DDT)	50-29-3	UG/L	0.25 U	0.26 U	0.25 U	0.26 U	0.25 U
Aldrin	309-00-2	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
alpha-BHC	319-84-6	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
alpha-Chlordane /2	5103-71-9	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
beta-BHC	319-85-7	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Chlordene /2	3734-48-3	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
cis-Nonachlor /2	5103-73-1	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
delta-BHC	319-86-8	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Dieldrin	60-57-1	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Endosulfan I (alpha)	959-98-8	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Endosulfan II (beta)	33213-65-9	UG/L	0.25 U	0.26 U	0.25 U	0.26 U	0.25 U
Endosulfan Sulfate	1031-07-8	UG/L	0.25 U	0.26 U	0.5 U	0.26 U	0.25 U
Endrin	72-20-8	UG/L	0.25 U	0.26 U	0.25 U	0.26 U	0.25 U
Endrin Ketone	53494-70-5	UG/L	0.25 U	0.25 U	0.5 U	0.26 U	0.25 U
gamma-BHC (Lindane)	58-89-9	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
gamma-Chlordane /2	5566-34-7	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Heptachlor	76-44-8	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Heptachlor Epoxide	1024-57-3	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Methoxychlor	72-43-5	UG/L	0.51 U	0.51 U	0.5 U	0.51 U	0.5 U
Toxaphene	8001-35-2	UG/L	10 U	10 U	10 U	10 U	10 U
trans-Nonachlor /2	39765-80-5	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U

## Bayou Casotte Surfacewater All Data

			BC1D 9/27/2005	BC1SW 9/27/2005	BC2SW 9/27/2005	BC3SW 9/27/2005	BC4SW 9/27/2005	BL1SW 9/27/2005
			1205	1134	1333	1410	1450	1315
1,1,2-Trichloroethane	79-00-5	UG/L	1 U	1 U	1 U	1 U	1 U	1
1,1-Dichloroethane	75-34-3	UG/L	1 U	1 U	1 U	1 U	1 U	1
1,1-Dichloroethene (1,1-Dichloroethylene)	75-35-4	UG/L	1 U	1 U	1 U	1 U	1 U	1
1,1-Dichloropropene	563-58-6	UG/L	1 U	1 U	1 U	1 U	1 U	1
1,2,3-Trichlorobenzene	87-61-6	UG/L	1 U	1 U	1 U	1 U	1 U	1
1,2,3-Trichloropropane	96-18-4	UG/L	1 U	1 U	1 U	1 U	1 U	1
1,2,4-Trichlorobenzene	120-82-1	UG/L	1 U	1 U	1 U	1 U	1 U	1
1,2,4-Trimethylbenzene	95-63-6	UG/L	1 U	1 U	1 U	1 U	1 U	1
1,2-Dibromo-3-Chloropropane (DBCP)	96-12-8	UG/L	2 U	2 U	2 U	2 U	2 U	2
1,2-Dibromoethane (EDB)	106-93-4	UG/L	1 U	1 U	1 U	1 U	1 U	1
1,2-Dichlorobenzene	95-50-1	UG/L	1 U	1 U	1 U	1 U	1 U	1
1,2-Dichloroethane	107-06-2	UG/L	1 U	1 U	1 U	1 U	1 U	1
1,2-Dichloropropane	78-87-5	UG/L	1 U	1 U	1 U	1 U	1 U	1
1,3,5-Trimethylbenzene	108-67-8	UG/L	1 U	1 U	1 U	1 U	1 U	1
1,3-Dichlorobenzene	541-73-1	UG/L	1 U	1 U	1 U	1 U	1 U	1
1,3-Dichloropropane	142-28-9	UG/L	1 U	1 U	1 U	1 U	1 U	1
1,4-Dichlorobenzene	106-46-7	UG/L	1 U	1 U	1 U	1 U	1 U	1
2,2-Dichloropropane	590-20-7	UG/L	1 U	1 U	1 U	1 U	1 U	1
Acetone	67-64-1	UG/L	2 U	2 U	2 U	2 U	2 U	2
Benzene	71-43-2	UG/L	1 U	1 U	1 U	1 U	1 U	1
Bromobenzene	108-86-1	UG/L	1 U	1 U	1 U	1 U	1 U	1
Bromochloromethane	74-97-5	UG/L	1 U	1 U	1 U	1 U	1 U	1
Bromodichloromethane	75-27-4	UG/L	1 U	1 U	1 U	1 U	1 U	1
Bromoform	75-25-2	UG/L	1 U	1 U	1 U	1 U	1 U	1
Bromomethane	74-83-9	UG/L	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1
Carbon Disulfide	75-15-0	UG/L	1 U	1 U	1 U	1 U	1 U	1
Carbon Tetrachloride	56-23-5	UG/L	1 U	1 U	1 U	1 U	1 U	1
Chlorobenzene	108-90-7	UG/L	1 U	1 U	1 U	1 U	1 U	1
Chloroethane	75-00-3	UG/L	1 U	1 U	1 U	1 U	1 U	1
Chloroform	67-66-3	UG/L	1 U	1 U	1 U	1 U	1 U	1
Chloromethane	74-87-3	UG/L	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1
cis-1,2-Dichloroethene	156-59-2	UG/L	1 U	1 U	1 U	1 U	1 U	1
cis-1,3-Dichloropropene	10061-01-5	UG/L	1 U	1 U	1 U	1 U	1 U	1
Cyclohexane	110-82-7	UG/L	1 U	1 U	1 U	1 U	1 U	1
Dibromochloromethane	124-48-1	UG/L	1 U	1 U	1 U	1 U	1 U	1
Dibromomethane	74-95-3	UG/L	1 U	1 U	1 U	1 U	1 U	1
Dichlorodifluoromethane	75-71-8	UG/L	1 U	1 U	1 U	1 U	1 U	1
Ethyl Benzene	100-41-4	UG/L	1 U	1 U	1 U	1 U	1 U	1
Hexachloro-1,3-Butadiene	87-68-3	UG/L	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1
Isopropylbenzene	98-82-8	UG/L	1 U	1 U	1 U	1 U	1 U	1
Methyl Acetate	79-20-9	UG/L	1 U	1 U	1 U	1 U	1 U	1
Methyl Butyl Ketone	591-78-6	UG/L	2 U	2 U	2 U	2 U	2 U	2
Methyl Ethyl Ketone	78-93-3	UG/L	5 U	5 U	5 U	5 U	5 U	5
Methyl Isobutyl Ketone	108-10-1	UG/L	1 U	1 U	1 U	1 U	1 U	1
Methyl T-Butyl Ether (MTBE)	1634-04-4	UG/L	1 U	1 U	1 U	1 U	1 U	1
Methylcyclohexane	108-87-2	UG/L	1 U	1 U	1 U	1 U	1 U	1
Methylene Chloride	75-09-2	UG/L	1 U	1 U	1 U	1 U	1 U	1
n-Butylbenzene	104-51-8	UG/L	1 U	1 U	1 U	1 U	1 U	1
n-Propylbenzene	103-65-1	UG/L	1 U	1 U	1 U	1 U	1 U	1
o-Chlorotoluene	95-49-8	UG/L	1 U	1 U	1 U	1 U	1 U	1
o-Xylene	95-47-6	UG/L	1 U	1 U	1 U	1 U	1 U	1
p-Chlorotoluene	106-43-4	UG/L	1 U	1 U	1 U	1 U	1 U	1
p-Isopropyltoluene	99-87-6	UG/L	1 U	1 U	1 U	1 U	1 U	1
sec-Butylbenzene	135-98-8	UG/L	1 U	1 U	1 U	1 U	1 U	1
Styrene	100-42-5	UG/L	1 U	1 U	1 U	1 U	1 U	1
tert-Butylbenzene	98-06-6	UG/L	1 U	1 U	1 U	1 U	1 U	1
Tetrachloroethene (Tetrachloroethylene)	127-18-4	UG/L	1 U	1 U	1 U	1 U	1 U	1
Toluene	108-88-3	UG/L	1 U	1 U	1 U	1 U	1 U	1

Bayou Casotte Surfacewater All Data

		BC1D 9/27/2005 1205	BC1SW 9/27/2005 1134	BC2SW 9/27/2005 1333	BC3SW 9/27/2005 1410	BC4SW 9/27/2005 1450	BL1SW 9/27/2005 1315
<b>Extractables Scan</b>							
(3-and/or 4-)Methylphenol		UG/L	11 U	10 U	10 U	9.9 U	10 U
1,1-Biphenyl	92-52-4	UG/L	11 U	10 U	10 U	9.9 U	10 U
1,2,4-Trichlorobenzene	120-82-1	UG/L	11 U	10 U	10 U	9.9 U	10 U
2,3,4,6-Tetrachlorophenol	58-90-2	UG/L	11 U	10 U	10 U	9.9 U	10 U
2,4,5-Trichlorophenol	95-95-4	UG/L	11 U	10 U	10 U	9.9 U	10 U
2,4,6-Trichlorophenol	88-06-2	UG/L	11 U	10 U	10 U	9.9 U	10 U
2,4-Dichlorophenol	120-83-2	UG/L	11 U	10 U	10 U	9.9 U	10 U
2,4-Dimethylphenol	105-67-9	UG/L	11 U	10 U	10 U	9.9 U	10 U
2,4-Dinitrophenol	51-28-5	UG/L	23 U	20 U	20 U	20 U	20 U
2,4-Dinitrotoluene	121-14-2	UG/L	11 U	10 U	10 U	9.9 U	10 U
2,6-Dinitrotoluene	606-20-2	UG/L	11 U	10 U	10 U	9.9 U	10 U
2-Chloronaphthalene	91-58-7	UG/L	11 U	10 U	10 U	9.9 U	10 U
2-Chlorophenol	95-57-8	UG/L	11 U	10 U	10 U	9.9 U	10 U
2-Methyl-4,6-Dinitrophenol	534-52-1	UG/L	23 U	20 U	20 U	20 U	20 U
2-Methylnaphthalene	91-57-6	UG/L	11 U	10 U	10 U	9.9 U	10 U
2-Methylphenol	95-48-7	UG/L	11 U	10 U	10 U	9.9 U	10 U
2-Nitroaniline	88-74-4	UG/L	11 U	10 U	10 U	9.9 U	10 U
2-Nitrophenol	88-75-5	UG/L	11 U	10 U	10 U	9.9 U	10 U
3,3'-Dichlorobenzidine	91-94-1	UG/L	11 U	10 U	10 U	9.9 U	10 U
3-Nitroaniline	99-09-2	UG/L	11 U	10 U	10 U	9.9 U	10 U
4-Bromophenyl Phenyl Ether	101-55-3	UG/L	11 U	10 U	10 U	9.9 U	10 U
4-Chloro-3-Methylphenol	59-50-7	UG/L	11 U	10 U	10 U	9.9 U	10 U
4-Chloroaniline	106-47-8	UG/L	11 U	10 U	10 U	9.9 U	10 U
4-Chlorophenyl Phenyl Ether	7005-72-3	UG/L	11 U	10 U	10 U	9.9 U	10 U
4-Nitroaniline	100-01-6	UG/L	11 U	10 U	10 U	9.9 U	10 U
4-Nitrophenol	100-02-7	UG/L	23 U	20 U	20 U	20 U	20 U
Acenaphthene	83-32-9	UG/L	11 U	10 U	10 U	9.9 U	10 U
Acenaphthylene	208-96-8	UG/L	11 U	10 U	10 U	9.9 U	10 U
Acetophenone	98-86-2	UG/L	11 U	10 U	10 U	9.9 U	10 U
Anthracene	120-12-7	UG/L	11 U	10 U	10 U	9.9 U	10 U
Atrazine	1912-24-9	UG/L	11 U	10 U	10 U	9.9 U	10 U
Benzaldehyde	100-52-7	UG/L	11 UJ	10 UJ	10 UJ	9.9 UJ	10 UJ
Benzo(a)Anthracene	56-55-3	UG/L	11 U	10 U	10 U	9.9 U	10 U
Benzo(b)Fluoranthene	205-99-2	UG/L	11 U	10 U	10 U	9.9 U	10 U
Benzo(ghi)Perylene	191-24-2	UG/L	11 U	10 U	10 U	9.9 U	10 U
Benzo(k)Fluoranthene	207-08-9	UG/L	11 U	10 U	10 U	9.9 U	10 U
Benzo-a-Pyrene	50-32-8	UG/L	11 U	10 U	10 U	9.9 U	10 U
Benzyl Butyl Phthalate	85-68-7	UG/L	11 U	10 U	10 U	9.9 U	10 U
bis(2-Chloroethoxy)Methane	111-91-1	UG/L	11 U	10 U	10 U	9.9 U	10 U
bis(2-Chloroethyl) Ether	111-44-4	UG/L	11 U	10 U	10 U	9.9 U	10 U
bis(2-Chloroisopropyl) Ether	108-60-1	UG/L	11 U	10 U	10 U	9.9 U	10 U
bis(2-Ethylhexyl) Phthalate	117-81-7	UG/L	11 U	10 U	10 U	9.9 U	10 U
Caprolactam	105-60-2	UG/L	11 U	10 U	10 U	9.9 U	10 U
Carbazole	86-74-8	UG/L	11 U	10 U	10 U	9.9 U	10 U
Chrysene	218-01-9	UG/L	11 U	10 U	10 U	9.9 U	10 U
Dibenzo(a,h)Anthracene	53-70-3	UG/L	11 U	10 U	10 U	9.9 U	10 U
Dibenzofuran	132-64-9	UG/L	11 U	10 U	10 U	9.9 U	10 U
Diethyl Phthalate	84-66-2	UG/L	11 U	10 U	10 U	9.9 U	10 U
Dimethyl Phthalate	131-11-3	UG/L	11 U	10 U	10 U	9.9 U	10 U
Di-n-Butylphthalate	84-74-2	UG/L	11 U	10 U	10 U	9.9 U	10 U
Di-n-Octylphthalate	117-84-0	UG/L	11 U	10 U	10 U	9.9 U	10 U
Fluoranthene	206-44-0	UG/L	11 U	10 U	10 U	9.9 U	10 U
Fluorene	86-73-7	UG/L	11 U	10 U	10 U	9.9 U	10 U
Hexachlorobenzene (HCB)	118-74-1	UG/L	11 U	10 U	10 U	9.9 U	10 U
Hexachlorobutadiene	87-68-3	UG/L	11 U	10 U	10 U	9.9 U	10 U
Hexachlorocyclopentadiene (HCCP)	77-47-4	UG/L	11 U	10 U	10 U	9.9 U	10 U
Hexachloroethane	67-72-1	UG/L	11 U	10 U	10 U	9.9 U	10 U

## Bayou Casotte Surfacewater All Data

			BC1D 9/27/2005	BC1SW 9/27/2005	BC2SW 9/27/2005	BC3SW 9/27/2005	BC4SW 9/27/2005	BL1SW 9/27/2005
			1205	1134	1333	1410	1450	1315
Pentachlorophenol	87-86-5	UG/L	23 U	20 U	20 U	20 U	20 U	20 U
Phenanthrene	85-01-8	UG/L	11 U	10 U	10 U	10 U	9.9 U	10 U
Phenol	108-95-2	UG/L	11 U	10 U	10 U	10 U	9.9 U	10 U
Pyrene	129-00-0	UG/L	11 U	10 U	10 U	10 U	9.9 U	10 U
<b>Classical Nutrients</b>								
Ammonia	7664-41-7	MG/L	0.05 U	0.075	0.072	0.064	1.5	0.05 U
Nitrate-Nitrite Nitrogen		MG/L	0.055	0.06	0.066	0.095	0.055	0.05 U
Total Kjeldahl Nitrogen		MG/L	0.25	0.25	0.2	0.22	1.9	0.76
Total Organic Carbon		MG/L	1.4	1.4	12	1.4	2.2	17
Total Phosphorus	7723-14-0	MG/L	0.23	0.22	0.27	0.38	17	0.18

### Data Qualifiers

U-Analyte not detected at or above reporting limit. The number is the minimum quantitation limit.

J-Identification of analyte is acceptable; reported value is an estimate.

UJ-Analyte not detected at or above reporting limit. Reporting limit is an estimate.

N-Presumptive evidence analyte is present; analyte reported as tentative identification.

NJ-Presumptive evidence analyte is present; analyte reported as tentative identification. Reported value is an estimate.

K-Identification of analyte is acceptable; reported value may be biased high. Actual value expected to be less than the reported value.

L-Identification of analyte is acceptable; reported value may be biased low. Actual value expected to be greater than reported value.

NA-Not Analyzed. | NAI-Not Analyzed due to Interferences. | A-Analyte analyzed in replicate. Reported value is 'average' of replicates.

R-Presence or absence of analyte can not be determined from data due to severe quality control problems. Data are rejected and considered unusable.

C-confirmed by GCMS | /1-when no value is reported, see chlordane constituents | /2-constituents or metabolites of technical chlordane

NR-Not Reported

Pascagoula River, West Pascagoula River, Escatawpa River Surface Water All Data

	ER1DSW 9/28/2005 1425	ER1SW 9/28/2005 1420	ER2SW 9/28/2005 1135	PR1SW 9/28/2005 1240	PR2SW 9/28/2005 1557	WPR1SW 9/28/2005 1115	WPR2SW 9/28/2005 1420
<b>Metals Scan</b>							
Aluminum	7429-90-5 UG/L	2000 U	2000 U	2000 U	2000 U	750 U	2000 U
Antimony	7440-36-0 UG/L	5 U	5 U	5 U	5 U	5 U	5 U
Arsenic	7440-38-2 UG/L	23 AJ	24 J	28 J	46 J	23 J	34 J
Barium	7440-39-3 UG/L	50 U	50 U	50 U	100 U	50 U	75 U
Beryllium	7440-41-7 UG/L	30 U	30 U	30 U	60 U	30 U	45 U
Cadmium	7440-43-9 UG/L	38 U	38 U	38 U	38 U	38 U	38 U
Calcium	7440-70-2 MG/L	170 A	180	190	330	160	260
Chromium	7440-47-3 UG/L	50 U	50 U	50 U	100 U	50 U	75 U
Cobalt	7440-48-4 UG/L	50 U	50 U	50 U	100 U	50 U	75 U
Copper	7440-50-8 UG/L	200 U	200 U	200 U	400 U	200 U	300 U
Iron	7439-89-6 MG/L	2 U	2 U	2 U	2 U	1.5 U	2 U
Lead	7439-92-1 UG/L	5 U	5 U	5 U	5 U	5 U	5 U
Magnesium	7439-95-4 MG/L	520 A	560	590	1000	470	840
Manganese	7439-96-5 UG/L	160 AJ	140	240	100 U	270	98
Molybdenum	7439-98-7 UG/L	50 U	50 U	50 U	100 U	50 U	75 U
Nickel	7440-02-0 UG/L	100 U	100 U	100 U	200 U	100 U	150 U
Potassium	7440-09-7 MG/L	170 A	180	200	340	150	260
Selenium	7782-49-2 UG/L	77 AJ	80 J	89 J	150 J	72 J	110 J
Silver	7440-22-4 UG/L	50 U	50 U	50 U	100 U	50 U	75 U
Sodium	7440-23-5 MG/L	4400 A	4700	5000	8700	4000	6900
Strontium	7440-24-6 UG/L	2900 A	3100	3300	5600	2700	5200
Thallium	7440-28-0 UG/L	5 U	5 U	5 U	5 U	5 U	5 U
Tin	7440-31-5 UG/L	NA	NA	NA	NA	NA	NA
Titanium	7440-32-6 UG/L	50 U	50 U	50 U	100 U	50 U	75 U
Total Mercury	7439-97-6 UG/L	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Vanadium	7440-62-2 UG/L	50 U	50 U	50 U	100 U	50 U	75 U
Yttrium	7440-65-5 UG/L	30 U	30 U	30 U	60 U	30 U	45 U
Zinc	7440-66-6 UG/L	100 U	100 U	100 U	200 U	100 U	150 U
<b>PCB Scan</b>							
PCB-1016 (Aroclor 1016)	12674-11-2 UG/L	2 U	2 U	2 U	2 U	2 U	2 U
PCB-1221 (Aroclor 1221)	11104-28-2 UG/L	2 U	2 U	2 U	2 U	2 U	2 U
PCB-1232 (Aroclor 1232)	11141-16-5 UG/L	2 U	2 U	2 U	2 U	2 U	2 U
PCB-1242 (Aroclor 1242)	53469-21-9 UG/L	2 U	2 U	2 U	2 U	2 U	2 U
PCB-1248 (Aroclor 1248)	12672-29-6 UG/L	2 U	2 U	2 U	2 U	2 U	2 U
PCB-1254 (Aroclor 1254)	11097-69-1 UG/L	2 U	2 U	2 U	2 U	2 U	2 U
PCB-1260 (Aroclor 1260)	11096-82-5 UG/L	2 U	2 U	2 U	2 U	2 U	2 U
<b>Pesticides Scan</b>							
4,4'-DDD (p,p'-DDD)	72-54-8 UG/L	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
4,4'-DDE (p,p'-DDE)	72-55-9 UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
4,4'-DDT (p,p'-DDT)	50-29-3 UG/L	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
Aldrin	309-00-2 UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
alpha-BHC	319-84-6 UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
alpha-Chlordane /2	5103-71-9 UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
beta-BHC	319-85-7 UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Chlordene /2	3734-48-3 UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
cis-Nonachlor /2	5103-73-1 UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
delta-BHC	319-86-8 UG/L	0.1 U	0.19 U	0.1 U	0.21 U	0.1 U	0.1 U
Dieldrin	60-57-1 UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Endosulfan I (alpha)	959-98-8 UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Endosulfan II (beta)	33213-65-9 UG/L	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
Endosulfan Sulfate	1031-07-8 UG/L	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
Endrin	72-20-8 UG/L	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
Endrin Ketone	53494-70-5 UG/L	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
gamma-BHC (Lindane)	58-89-9 UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
gamma-Chlordane /2	5566-34-7 UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U
Heptachlor	76-44-8 UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Heptachlor Epoxide	1024-57-3 UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Methoxychlor	72-43-5 UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Toxaphene	8001-35-2 UG/L	10 U	10 U	10 U	10 U	10 U	10 U
trans-Nonachlor /2	39765-80-5 UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
<b>Volatiles Scan</b>							
(m- and/or p-)Xylene	UG/L	2 U	2 U	2 U	2 U	2 U	2 U
1,1,1,2-Tetrachloroethane	630-20-6 UG/L	1 U	1 U	1 U	1 U	1 U	1 U
1,1,1-Trichloroethane	71-55-6 UG/L	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	79-34-5 UG/L	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1 UG/L	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	79-00-5 UG/L	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	75-34-3 UG/L	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	75-35-4 UG/L	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloropropene	563-58-6 UG/L	1 U	1 U	1 U	1 U	1 U	1 U
1,2,3-Trichlorobenzene	87-61-6 UG/L	1 U	1 U	1 U	1 U	1 U	1 U
1,2,3-Trichloropropane	96-18-4 UG/L	1 U	1 U	1 U	1 U	1 U	1 U

Pascagoula River, West Pascagoula River, Escatawpa River Surface Water All Data

		ER1DSW 9/28/2005	ER1SW 9/28/2005	ER2SW 9/28/2005	PR1SW 9/28/2005	PR2SW 9/28/2005	WPR1SW 9/28/2005	WPR2SW 9/28/2005
		1425	1420	1135	1240	1557	1115	1420
1,2-Dichloropropane	78-87-5	UG/L	1 U	1 U	1 U	1 U	1 U	1 UU
1,3,5-Trimethylbenzene	108-67-8	UG/L	1 U	1 U	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	541-73-1	UG/L	1 U	1 U	1 U	1 U	1 U	1 U
1,3-Dichloropropane	142-28-9	UG/L	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	106-46-7	UG/L	1 U	1 U	1 U	1 U	1 U	1 U
2,2-Dichloropropane	590-20-7	UG/L	1 U	1 U	1 U	1 U	1 U	1 U
Acetone	67-64-1	UG/L	2 U	2 U	2 U	2 U	2 U	2 U
Benzene	71-43-2	UG/L	1 U	1 U	1 U	1 U	1 U	1 U
Bromobenzene	108-86-1	UG/L	1 U	1 U	1 U	1 U	1 U	1 U
Bromo-chloromethane	74-97-5	UG/L	1 U	1 U	1 U	1 U	1 U	1 U
Bromodichloromethane	75-27-4	UG/L	1 U	1 U	1 U	1 U	1 U	1 U
Bromoform	75-25-2	UG/L	1 U	1 U	1 U	1 U	1 U	1 U
Bromomethane	74-83-9	UG/L	1 U	1 U	1 U	1 U	1 U	1 U
Carbon Disulfide	75-15-0	UG/L	1 U	1 U	1 U	1 U	1 U	1 U
Carbon Tetrachloride	56-23-5	UG/L	1 U	1 U	1 U	1 U	1 U	1 U
Chlorobenzene	108-90-7	UG/L	1 U	1 U	1 U	1 U	1 U	1 U
Chloroethane	75-00-3	UG/L	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	67-66-3	UG/L	1 U	1 U	1 U	1 U	1 U	1 U
Chloromethane	74-87-3	UG/L	1 U	1 U	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	156-59-2	UG/L	1 U	1 U	1 U	1 U	1 U	1 U
cis-1,3-Dichloropropene	10061-01-5	UG/L	1 U	1 U	1 U	1 U	1 U	1 U
Cyclohexane	110-82-7	UG/L	1 U	1 U	1 U	1 U	1 U	1 U
Dibromo-chloromethane	124-48-1	UG/L	1 U	1 U	1 U	1 U	1 U	1 U
Dibromomethane	74-95-3	UG/L	1 U	1 U	1 U	1 U	1 U	1 U
Dichlorodifluoromethane	75-71-8	UG/L	1 U	1 U	1 U	1 U	1 U	1 U
Ethyl Benzene	100-41-4	UG/L	1 U	1 U	1 U	1 U	1 U	1 U
Hexachloro-1,3-Butadiene	87-68-3	UG/L	1 UU	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
Isopropylbenzene	98-82-8	UG/L	1 U	1 U	1 U	1 U	1 U	1 U
Methyl Acetate	79-20-9	UG/L	1 U	1 U	1 U	1 U	1 U	1 U
Methyl Butyl Ketone	591-78-6	UG/L	2 U	2 U	2 U	2 U	2 U	2 U
Methyl Ethyl Ketone	78-93-3	UG/L	5 U	5 U	5 U	5 U	5 U	5 U
Methyl Isobutyl Ketone	108-10-1	UG/L	1 U	1 U	1 U	1 U	1 U	1 U
Methyl T-Butyl Ether (MTBE)	1634-04-4	UG/L	1 U	1 U	1 U	1 U	1 U	1 U
Methylcyclohexane	108-87-2	UG/L	1 U	1 U	1 U	1 U	1 U	1 U
Methylene Chloride	75-09-2	UG/L	1 U	1 U	1 U	1 U	1 U	1 U
n-Butylbenzene	104-51-8	UG/L	1 U	1 U	1 U	1 U	1 U	1 U
n-Propylbenzene	103-65-1	UG/L	1 U	1 U	1 U	1 U	1 U	1 U
o-Chlorotoluene	95-49-8	UG/L	1 U	1 U	1 U	1 U	1 U	1 U
o-Xylene	95-47-6	UG/L	1 U	1 U	1 U	1 U	1 U	1 U
p-Chlorotoluene	106-43-4	UG/L	1 U	1 U	1 U	1 U	1 U	1 U
p-Isopropyltoluene	99-87-6	UG/L	1 U	1 U	1 U	1 U	1 U	1 U
sec-Butylbenzene	135-98-8	UG/L	1 U	1 U	1 U	1 U	1 U	1 U
Styrene	100-42-5	UG/L	1 U	1 U	1 U	1 U	1 U	1 U
tert-Butylbenzene	98-06-6	UG/L	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene (Tetrachloroethylene)	127-18-4	UG/L	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	108-88-3	UG/L	0.064 J	0.072 J	1 U	1 U	1 U	1 U
trans-1,2-Dichloroethene	156-60-5	UG/L	1 U	1 U	1 U	1 U	1 U	1 U
trans-1,3-Dichloropropene	10061-02-6	UG/L	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethene (Trichloroethylene)	79-01-6	UG/L	1 U	1 U	1 U	1 U	1 U	1 U
Trichlorofluoromethane (Freon 11)	75-69-4	UG/L	1 U	1 U	1 U	1 U	1 U	1 U
Vinyl Chloride	75-01-4	UG/L	1 U	1 U	1 U	1 U	1 U	1 U
<b>Extractables Scan</b>								
(3-and/or 4-)Methylphenol		UG/L	10 U	10 U				
1,1-Biphenyl	92-52-4	UG/L	10 U	10 U				
1,2,4-Trichlorobenzene	120-82-1	UG/L	10 U	10 U				
2,3,4,6-Tetrachlorophenol	58-90-2	UG/L	10 U	10 U	10 U	10 U	10 U	10 U
2,4,5-Trichlorophenol	95-95-4	UG/L	10 U	10 U	10 U	10 U	10 U	10 U
2,4,6-Trichlorophenol	88-06-2	UG/L	10 U	10 U	10 U	10 U	10 U	10 U
2,4-Dichlorophenol	120-83-2	UG/L	10 U	10 U	10 U	10 U	10 U	10 U
2,4-Dimethylphenol	105-67-9	UG/L	10 U	10 U	10 U	10 U	10 U	10 U
2,4-Dinitrophenol	51-28-5	UG/L	20 U	20 U				
2,4-Dinitrotoluene	121-14-2	UG/L	10 U	10 U				
2,6-Dinitrotoluene	606-20-2	UG/L	10 U	10 U	10 U	10 U	10 U	10 U
2-Chloronaphthalene	91-58-7	UG/L	10 U	10 U	10 U	10 U	10 U	10 U
2-Chlorophenol	95-57-8	UG/L	10 U	10 U	10 U	10 U	10 U	10 U
2-Methyl-4,6-Dinitrophenol	534-52-1	UG/L	20 U	20 U				
2-Methylnaphthalene	91-57-6	UG/L	10 U	10 U				
2-Methylphenol	95-48-7	UG/L	10 U	10 U	10 U	10 U	10 U	10 U
2-Nitroaniline	88-74-4	UG/L	10 U	10 U	10 U	10 U	10 U	10 U
2-Nitrophenol	88-75-5	UG/L	10 U	10 U	10 U	10 U	10 U	10 U
3,3'-Dichlorobenzidine	91-94-1	UG/L	10 U	10 U	10 U	10 U	10 U	10 U
3-Nitroaniline	99-09-2	UG/L	10 U	10 U	10 U	10 U	10 U	10 U

Pascagoula River, West Pascagoula River, Escatawpa River Surface Water All Data

		ER1DSW 9/28/2005	ER1SW 9/28/2005	ER2SW 9/28/2005	PR1SW 9/28/2005	PR2SW 9/28/2005	WPR1SW 9/28/2005	WPR2SW 9/28/2005
		1425	1420	1135	1240	1557	1115	1420
Acenaphthene	83-32-9	UG/L	10 U	10 U				
Acenaphthylene	208-96-8	UG/L	10 U	10 U				
Acetophenone	98-86-2	UG/L	10 U	10 U				
Anthracene	120-12-7	UG/L	10 U	10 U				
Atrazine	1912-24-9	UG/L	10 U	10 U				
Benzaldehyde	100-52-7	UG/L	10 UJ	10 UU				
Benzo(a)Anthracene	56-55-3	UG/L	10 U	10 U				
Benzo(b)Fluoranthene	205-99-2	UG/L	10 U	10 U				
Benzo(ghi)Perylene	191-24-2	UG/L	10 U	10 U				
Benzo(k)Fluoranthene	207-08-9	UG/L	10 U	10 U				
Benzo-a-Pyrene	50-32-8	UG/L	10 U	10 U				
Benzyl Butyl Phthalate	85-68-7	UG/L	10 U	10 U				
bis(2-Chloroethoxy)Methane	111-91-1	UG/L	10 U	10 U				
bis(2-Chloroethyl) Ether	111-44-4	UG/L	10 U	10 U				
bis(2-Chloroisopropyl) Ether	108-60-1	UG/L	10 U	10 U				
bis(2-Ethylhexyl) Phthalate	117-81-7	UG/L	10 U	10 U				
Caprolactam	105-60-2	UG/L	10 U	10 U				
Carbazole	86-74-8	UG/L	10 U	10 U				
Chrysene	218-01-9	UG/L	10 U	10 U				
Dibenzo(a,h)Anthracene	53-70-3	UG/L	10 U	10 U				
Dibenzofuran	132-64-9	UG/L	10 U	10 U				
Diethyl Phthalate	84-66-2	UG/L	10 U	10 U				
Dimethyl Phthalate	131-11-3	UG/L	10 U	10 U				
Di-n-Butylphthalate	84-74-2	UG/L	10 U	10 U				
Di-n-Octylphthalate	117-84-0	UG/L	10 U	10 U				
Fluoranthene	206-44-0	UG/L	10 U	10 U				
Fluorene	86-73-7	UG/L	10 U	10 U				
Hexachlorobenzene (HCB)	118-74-1	UG/L	10 U	10 U				
Hexachlorobutadiene	87-68-3	UG/L	10 UJ	10 UJ				
Hexachlorocyclopentadiene (HCCP)	77-47-4	UG/L	10 U	10 U				
Hexachloroethane	67-72-1	UG/L	10 UJ	10 UU				
Indeno (1,2,3-cd) Pyrene	193-39-5	UG/L	10 U	10 U				
Isophorone	78-59-1	UG/L	10 U	10 U				
Naphthalene	91-20-3	UG/L	10 U	10 U				
Nitrobenzene	98-95-3	UG/L	10 U	10 U				
n-Nitroso di-n-Propylamine	621-64-7	UG/L	10 U	10 U				
n-Nitrosodiphenylamine/Diphenylamine	122-39-4	UG/L	10 U	10 U				
Pentachlorophenol	87-86-5	UG/L	20 U	20 U				
Phenanthrene	85-01-8	UG/L	10 U	10 U				
Phenol	108-95-2	UG/L	10 U	10 U				
Pyrene	129-00-0	UG/L	10 U	10 U				

**Miscellaneous Extractables**

Benzenedicarboxylic Acid, Dihexyl Ester		UG/L	NR	NR	10 NJ	NR	NR	NR
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**Classical Nutrients**

Ammonia	7664-41-7	MG/L	0.087	0.093	0.17	0.072	0.12	0.083	0.056
Nitrate-Nitrite Nitrogen		MG/L	0.05 U	0.05 U	0.05 U	0.056	0.062	0.05 U	0.079
Total Kjeldahl Nitrogen		MG/L	0.38	0.41	0.49	0.29	0.47	0.45	0.51
Total Organic Carbon		MG/L	4.2	4.2	4.1	1.6	4.2	2.5	7
Total Phosphorus	7723-14-0	MG/L	0.05	0.048	0.036	0.087	0.052	0.063	0.041

Data Qualifiers

U-Analyte not detected at or above reporting limit. The number is the minimum quantitation limit.

J-Identification of analyte is acceptable; reported value is an estimate.

UJ-Analyte not detected at or above reporting limit. Reporting limit is an estimate.

N-Presumptive evidence analyte is present; analyte reported as tentative identification.

NJ-Presumptive evidence analyte is present; analyte reported as tentative identification. Reported value is an estimate.

K-Identification of analyte is acceptable; reported value may be biased high. Actual value expected to be less than the reported value.

L-Identification of analyte is acceptable; reported value may be biased low. Actual value expected to be greater than reported value.

NA-Not Analyzed. | NAI-Not Analyzed due to Interferences. | A-Analyte analyzed in replicate. Reported value is 'average' of replicates.

R-Presence or absence of analyte can not be determined from data due to severe quality control problems. Data are rejected and considered unusable.

C-confirmed by GCMS | /1-when no value is reported, see chlordane constituents | /2-constituents or metabolites of technical chlordane

NR-Not Reported

## Back Bay Biloxi All Data

		BBB1DSW 9/29/2005	BBB1SW 9/29/2005	BBB2SW 9/29/2005	BBB3SW 9/29/2005	BBB4SW 9/29/2005	BBB5SW 9/29/2005	BBB6SW 9/29/2005
		1340	1312	1032	935	1300	1140	1025
<b>Metals Scan</b>								
Aluminum	7429-90-5	UG/L	500 U	1200 U	1200 U	600 U	360 U	360 U
Antimony	7440-36-0	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Arsenic	7440-38-2	UG/L	26 AJ	25 J	19 J	14 J	8 J	9.1 J
Barium	7440-39-3	UG/L	50 U	50 U	50 U	46	44	46
Beryllium	7440-41-7	UG/L	30 U	30 U	30 U	15 U	9 U	9 U
Cadmium	7440-43-9	UG/L	14 U	14 U	14 U	14 U	14 U	14 U
Calcium	7440-70-2	MG/L	160 A	160	130	90	51	58
Chromium	7440-47-3	UG/L	50 U	50 U	50 U	25 U	15 U	10 U
Cobalt	7440-48-4	UG/L	50 U	50 U	50 U	25 U	15 U	10 U
Copper	7440-50-8	UG/L	50 U	50 U	50 U	25 U	15 U	10 U
Iron	7439-89-6	MG/L	1 U	1 U	1 U	0.5 U	0.55	0.56
Lead	7439-92-1	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Magnesium	7439-95-4	MG/L	480 A	500	390	270	140	170
Manganese	7439-96-5	UG/L	67 A	62	110	190	260	290
Molybdenum	7439-98-7	UG/L	200 U	200 U	200 U	100 U	60 U	60 U
Nickel	7440-02-0	UG/L	100 U	100 U	100 U	50 U	30 U	30 U
Potassium	7440-09-7	MG/L	160 A	160	120	88	46	55
Selenium	7782-49-2	UG/L	78 AJ	77 J	56 J	38 J	20 J	25 J
Silver	7440-22-4	UG/L	50 U	50 U	50 U	25 U	15 U	10 U
Sodium	7440-23-5	MG/L	3900 A	4000	3100	2200	1100	1400
Strontium	7440-24-6	UG/L	2800 A	2900	2300	1600	840	990
Thallium	7440-28-0	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Tin	7440-31-5	UG/L	NA	NA	NA	NA	NA	NA
Titanium	7440-32-6	UG/L	50 U	50 U	50 U	25 U	15 U	10 U
Total Mercury	7439-97-6	UG/L	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Vanadium	7440-62-2	UG/L	50 U	50 U	50 U	25 U	15 U	10 U
Yttrium	7440-65-5	UG/L	30 U	30 U	30 U	15 U	9 U	6 U
Zinc	7440-66-6	UG/L	100 U	100 U	100 U	50 U	30 U	20 U
<b>PCB Scan</b>								
PCB-1016 (Aroclor 1016)	12674-11-2	UG/L	2 U	2 U	2 U	2 U	2 U	2 U
PCB-1221 (Aroclor 1221)	11104-28-2	UG/L	2 U	2 U	2 U	2 U	2 U	2 U
PCB-1232 (Aroclor 1232)	11141-16-5	UG/L	2 U	2 U	2 U	2 U	2 U	2 U
PCB-1242 (Aroclor 1242)	53469-21-9	UG/L	2 U	2 U	2 U	2 U	2 U	2 U
PCB-1248 (Aroclor 1248)	12672-29-6	UG/L	2 U	2 U	2 U	2 U	2 U	2 U
PCB-1254 (Aroclor 1254)	11097-69-1	UG/L	2 U	2 U	2 U	2 U	2 U	2 U
PCB-1260 (Aroclor 1260)	11096-82-5	UG/L	2 U	2 U	2 U	2 U	2 U	2 U
<b>Pesticides Scan</b>								
4,4'-DDD (p,p'-DDD)	72-54-8	UG/L	0.25 U	0.25 U	0.26 U	0.26 U	0.25 U	0.5 UJ
4,4'-DDE (p,p'-DDE)	72-55-9	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.097 U
4,4'-DDT (p,p'-DDT)	50-29-3	UG/L	0.25 U	0.25 U	0.26 U	0.26 U	0.25 U	0.5 UJ
Aldrin	309-00-2	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.097 U
alpha-BHC	319-84-6	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.097 U
alpha-Chlordane /2	5103-71-9	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.097 U
beta-BHC	319-85-7	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.097 U
Chlordene /2	3734-48-3	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.097 U
cis-Nonachlor /2	5103-73-1	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.097 U
delta-BHC	319-86-8	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.097 U
Dieldrin	60-57-1	UG/L	0.1 U	0.097 U				
Endosulfan I (alpha)	959-98-8	UG/L	0.1 U	0.097 U				
Endosulfan II (beta)	33213-65-9	UG/L	0.25 U	0.25 U	0.26 U	0.26 U	0.25 U	0.5 UJ
Endosulfan Sulfate	1031-07-8	UG/L	0.25 U	0.25 U	0.26 U	0.26 U	0.25 U	0.24 U
Endrin	72-20-8	UG/L	0.25 U	0.25 U	0.26 U	0.26 U	0.25 U	0.5 UJ
Endrin Ketone	53494-70-5	UG/L	0.25 U	0.25 U	0.26 U	0.26 U	0.25 U	0.24 U
gamma-BHC (Lindane)	58-89-9	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.097 U
gamma-Chlordane /2	5566-34-7	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.097 U
Heptachlor	76-44-8	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.097 U
Heptachlor Epoxide	1024-57-3	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.097 U
Methoxychlor	72-43-5	UG/L	0.5 U	0.5 U	0.51 U	0.51 U	0.5 U	0.5 UJ
Toxaphene	8001-35-2	UG/L	10 U	10 U	10 U	10 U	10 U	10 UR
trans-Nonachlor /2	39765-80-5	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.097 U
<b>Volatiles Scan</b>								
(m- and/or p-)Xylene		UG/L	2 U	2 U	0.068 J	2 U	2 U	2 U
1,1,1,2-Tetrachloroethane	630-20-6	UG/L	1 U	1 U	1 U	1 U	1 U	1 U
1,1,1-Trichloroethane	71-55-6	UG/L	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	79-34-5	UG/L	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	UG/L	1 U	1 U	1 U	1 U	1 U	1 U

## Back Bay Biloxi All Data

		BBB1DSW 9/29/2005	BBB1SW 9/29/2005	BBB2SW 9/29/2005	BBB3SW 9/29/2005	BBB4SW 9/29/2005	BBB5SW 9/29/2005	BBB6SW 9/29/2005
		1340	1312	1032	935	1300	1140	1025
1,2,4-Trichlorobenzene	120-82-1	UG/L	1 U	1 U	1 U	1 U	1 U	1 U
1,2,4-Trimethylbenzene	95-63-6	UG/L	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dibromo-3-Chloropropane (DBCP)	96-12-8	UG/L	2 U	2 U	2 U	2 U	2 U	2 U
1,2-Dibromoethane (EDB)	106-93-4	UG/L	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	95-50-1	UG/L	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	107-06-2	UG/L	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloropropane	78-87-5	UG/L	1 U	1 U	1 U	1 U	1 U	1 U
1,3,5-Trimethylbenzene	108-67-8	UG/L	1 U	1 U	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	541-73-1	UG/L	1 U	1 U	1 U	1 U	1 U	1 U
1,3-Dichloropropane	142-28-9	UG/L	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	106-46-7	UG/L	1 U	1 U	1 U	1 U	1 U	1 U
2,2-Dichloropropane	590-20-7	UG/L	1 U	1 U	1 U	1 U	1 UJ	1 U
Acetone	67-64-1	UG/L	2 U	2 U	2 U	2 U	2 U	2 U
Benzene	71-43-2	UG/L	1 U	1 U	1 U	1 U	1 U	1 U
Bromobenzene	108-86-1	UG/L	1 U	1 U	1 U	1 U	1 U	1 U
Bromochloromethane	74-97-5	UG/L	1 U	1 U	1 U	1 U	1 U	1 U
Bromodichloromethane	75-27-4	UG/L	1 U	1 U	1 U	1 U	1 U	0.074 J
Bromoform	75-25-2	UG/L	1 U	1 U	1 U	1 U	1 U	1 U
Bromomethane	74-83-9	UG/L	1 U	1 U	1 U	1 U	1 U	1 U
Carbon Disulfide	75-15-0	UG/L	1 U	1 U	1 U	1 U	1 U	1 U
Carbon Tetrachloride	56-23-5	UG/L	1 U	1 U	1 U	1 U	1 U	1 U
Chlorobenzene	108-90-7	UG/L	1 U	1 U	1 U	1 U	1 U	1 U
Chloroethane	75-00-3	UG/L	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	67-66-3	UG/L	1 U	1 U	1 U	1 U	1 U	0.092 J
Chloromethane	74-87-3	UG/L	1 U	1 U	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	156-59-2	UG/L	1 U	1 U	1 U	1 U	1 U	1 U
cis-1,3-Dichloropropene	10061-01-5	UG/L	1 U	1 U	1 U	1 U	1 U	1 U
Cyclohexane	110-82-7	UG/L	1 U	1 U	1 U	1 U	1 U	1 U
Dibromochloromethane	124-48-1	UG/L	1 U	1 U	1 U	1 U	1 U	1 U
Dibromomethane	74-95-3	UG/L	1 U	1 U	1 U	1 U	1 U	1 U
Dichlorodifluoromethane	75-71-8	UG/L	1 U	1 U	1 U	1 U	1 U	1 U
Ethyl Benzene	100-41-4	UG/L	1 U	1 U	1 U	1 U	1 U	1 U
Hexachloro-1,3-Butadiene	87-68-3	UG/L	1 UU	1 UU	1 UU	1 UU	1 UU	1 UU
Isopropylbenzene	98-82-8	UG/L	1 U	1 U	1 U	1 U	1 U	1 U
Methyl Acetate	79-20-9	UG/L	1 U	1 U	1 U	1 U	1 U	1 U
Methyl Butyl Ketone	591-78-6	UG/L	2 U	2 U	2 U	2 U	2 U	2 U
Methyl Ethyl Ketone	78-93-3	UG/L	5 U	5 U	5 U	5 U	5 U	5 U
Methyl Isobutyl Ketone	108-10-1	UG/L	1 U	1 U	1 U	1 U	1 U	1 U
Methyl T-Butyl Ether (MTBE)	1634-04-4	UG/L	1 U	1 U	1 U	1 U	1 UJ	1 U
Methylcyclohexane	108-87-2	UG/L	1 U	1 U	1 U	1 U	1 U	1 U
Methylene Chloride	75-09-2	UG/L	1 U	1 U	1 U	1 U	1 U	1 U
n-Butylbenzene	104-51-8	UG/L	1 U	1 U	1 U	1 U	1 U	1 U
n-Propylbenzene	103-65-1	UG/L	1 U	1 U	1 U	1 U	1 U	1 U
o-Chlorotoluene	95-49-8	UG/L	1 U	1 U	1 U	1 U	1 U	1 U
o-Xylene	95-47-6	UG/L	1 U	1 U	1 U	1 U	1 U	1 U
p-Chlorotoluene	106-43-4	UG/L	1 U	1 U	1 U	1 U	1 U	1 U
p-Isopropyltoluene	99-87-6	UG/L	1 U	1 U	1 U	1 U	1 U	1 U
sec-Butylbenzene	135-98-8	UG/L	1 U	1 U	1 U	1 U	1 U	1 U
Styrene	100-42-5	UG/L	1 U	1 U	1 U	1 U	1 U	1 U
tert-Butylbenzene	98-06-6	UG/L	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene (Tetrachloroethylene)	127-18-4	UG/L	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	108-88-3	UG/L	1 U	0.13 J	0.2 J	1 U	1 U	0.09 J
trans-1,2-Dichloroethene	156-60-5	UG/L	1 U	1 U	1 U	1 U	1 U	1 U
trans-1,3-Dichloropropene	10061-02-6	UG/L	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethene (Trichloroethylene)	79-01-6	UG/L	1 U	1 U	1 U	1 U	1 U	1 U
Trichlorofluoromethane (Freon 11)	75-69-4	UG/L	1 U	1 U	1 U	1 U	1 U	1 U
Vinyl Chloride	75-01-4	UG/L	1 U	1 U	1 U	1 U	1 U	1 U
<b>Extractables Scan</b>								
(3-and/or 4)-Methylphenol		UG/L	10 U	9.6 U	10 U	10 U	9.7 U	9.6 U
1,1-Biphenyl	92-52-4	UG/L	10 U	9.6 U	10 U	10 U	9.7 U	9.6 U
1,2,4-Trichlorobenzene	120-82-1	UG/L	10 U	9.6 U	10 U	10 U	9.7 U	9.6 U
2,3,4,6-Tetrachlorophenol	58-90-2	UG/L	10 U	9.6 U	10 U	10 U	9.7 U	9.6 U
2,4,5-Trichlorophenol	95-95-4	UG/L	10 U	9.6 U	10 U	10 U	9.7 U	9.6 U
2,4,6-Trichlorophenol	88-06-2	UG/L	10 U	9.6 U	10 U	10 U	9.7 U	9.6 U
2,4-Dichlorophenol	120-83-2	UG/L	10 U	9.6 U	10 U	10 U	9.7 U	9.6 U
2,4-Dimethylphenol	105-67-9	UG/L	10 U	9.6 U	10 U	10 U	9.7 U	9.7 U

## Back Bay Biloxi All Data

		BBB1DSW 9/29/2005	BBB1SW 9/29/2005	BBB2SW 9/29/2005	BBB3SW 9/29/2005	BBB4SW 9/29/2005	BBB5SW 9/29/2005	BBB6SW 9/29/2005
		1340	1312	1032	935	1300	1140	1025
2-Methylnaphthalene	91-57-6	UG/L	10 U	9.6 U	10 U	9.7 U	9.6 U	9.7 U
2-Methylphenol	95-48-7	UG/L	10 U	9.6 U	10 U	9.7 U	9.6 U	9.7 U
2-Nitroaniline	88-74-4	UG/L	10 U	9.6 U	10 U	10 U	9.7 U	9.7 U
2-Nitrophenol	88-75-5	UG/L	10 U	9.6 U	10 U	10 U	9.7 U	9.7 U
3,3'-Dichlorobenzidine	91-94-1	UG/L	10 U	9.6 U	10 U	10 U	9.7 U	9.6 UR
3-Nitroaniline	99-09-2	UG/L	10 U	9.6 U	10 U	10 U	9.7 U	9.7 U
4-Bromophenyl Phenyl Ether	101-55-3	UG/L	10 U	9.6 U	10 U	10 U	9.7 U	9.6 U
4-Chloro-3-Methylphenol	59-50-7	UG/L	10 U	9.6 U	10 U	10 U	9.7 U	9.6 U
4-Chloroaniline	106-47-8	UG/L	10 U	9.6 U	10 U	10 U	9.7 U	9.6 U
4-Chlorophenyl Phenyl Ether	7005-72-3	UG/L	10 U	9.6 U	10 U	10 U	9.7 U	9.6 U
4-Nitroaniline	100-01-6	UG/L	10 U	9.6 U	10 U	10 U	9.7 U	9.7 U
4-Nitrophenol	100-02-7	UG/L	10 U	9.6 U	10 U	10 U	9.7 U	9.7 U
Acenaphthene	83-32-9	UG/L	10 U	9.6 U	10 U	10 U	9.7 U	9.6 U
Acenaphthylene	208-96-8	UG/L	10 U	9.6 U	10 U	10 U	9.7 U	9.6 U
Acetophenone	98-86-2	UG/L	10 U	9.6 U	10 U	10 U	9.7 U	9.6 U
Anthracene	120-12-7	UG/L	10 U	9.6 U	10 U	10 U	9.7 U	9.6 U
Atrazine	1912-24-9	UG/L	10 U	9.6 U	10 U	10 U	9.7 U	9.7 U
Benzaldehyde	100-52-7	UG/L	10 UJ	9.6 UJ	10 UJ	10 UJ	9.7 UJ	9.6 UJ
Benzo(a)Anthracene	56-55-3	UG/L	10 U	9.6 U	10 U	10 U	9.7 U	9.6 U
Benzo(b)Fluoranthene	205-99-2	UG/L	10 U	9.6 U	10 U	10 U	9.7 U	9.6 U
Benzo(ghi)Perylene	191-24-2	UG/L	10 U	9.6 U	10 U	10 U	9.7 U	9.6 U
Benzo(k)Fluoranthene	207-08-9	UG/L	10 U	9.6 U	10 U	10 U	9.7 U	9.6 U
Benzo-a-Pyrene	50-32-8	UG/L	10 U	9.6 U	10 U	10 U	9.7 U	9.6 U
Benzyl Butyl Phthalate	85-68-7	UG/L	10 U	9.6 U	10 U	10 U	9.7 U	9.6 U
bis(2-Chloroethoxy)Methane	111-91-1	UG/L	10 U	9.6 U	10 U	10 U	9.7 U	9.6 U
bis(2-Choroethyl) Ether	111-44-4	UG/L	10 U	9.6 U	10 U	10 U	9.7 U	9.6 U
bis(2-Chloroisopropyl) Ether	108-60-1	UG/L	10 U	9.6 U	10 U	10 U	9.7 U	9.6 U
bis(2-Ethylhexyl) Phthalate	117-81-7	UG/L	10 U	9.6 U	10 U	10 U	9.7 U	9.6 U
Caprolactam	105-60-2	UG/L	10 U	9.6 U	10 U	10 U	9.7 U	9.6 U
Carbazole	86-74-8	UG/L	10 U	9.6 U	10 U	10 U	9.7 U	9.6 U
Chrysene	218-01-9	UG/L	10 U	9.6 U	10 U	10 U	9.7 U	9.6 U
Dibenzo(a,h)Anthracene	53-70-3	UG/L	10 U	9.6 U	10 U	10 U	9.7 U	9.6 U
Dibenzofuran	132-64-9	UG/L	10 U	9.6 U	10 U	10 U	9.7 U	9.6 U
Diethyl Phthalate	84-66-2	UG/L	10 U	9.6 U	10 U	10 U	9.7 U	9.6 U
Dimethyl Phthalate	131-11-3	UG/L	10 U	9.6 U	10 U	10 U	9.7 U	9.6 U
Di-n-Butylphthalate	84-74-2	UG/L	10 U	9.6 U	10 U	10 U	9.7 U	9.6 U
Di-n-Octylphthalate	117-84-0	UG/L	10 U	9.6 U	10 U	10 U	9.7 U	9.6 U
Fluoranthene	206-44-0	UG/L	10 U	9.6 U	10 U	10 U	9.7 U	9.6 U
Fluorene	86-73-7	UG/L	10 U	9.6 U	10 U	10 U	9.7 U	9.6 U
Hexachlorobenzene (HCB)	118-74-1	UG/L	10 U	9.6 U	10 U	10 U	9.7 U	9.6 U
Hexachlorobutadiene	87-68-3	UG/L	10 UJ	9.6 UJ	10 UJ	10 UJ	9.7 UJ	9.6 UJ
Hexachlorocyclopentadiene (HCCP)	77-47-4	UG/L	10 U	9.6 U	10 U	10 U	9.7 U	9.7 U
Hexachloroethane	67-72-1	UG/L	10 UJ	9.6 UJ	10 UJ	10 UJ	9.7 UJ	9.6 UJ
Indeno (1,2,3-cd) Pyrene	193-39-5	UG/L	10 U	9.6 U	10 U	10 U	9.7 U	9.6 U
Isophorone	78-59-1	UG/L	10 U	9.6 U	10 U	10 U	9.7 U	9.6 U
Naphthalene	91-20-3	UG/L	10 U	9.6 U	10 U	10 U	9.7 U	9.6 U
Nitrobenzene	98-95-3	UG/L	10 U	9.6 U	10 U	10 U	9.7 U	9.7 U
n-Nitroso di-n-Propylamine	621-64-7	UG/L	10 U	9.6 U	10 U	10 U	9.7 U	9.6 U
n-Nitrosodiphenylamine/Diphenylamine	122-39-4	UG/L	10 U	9.6 U	10 U	10 U	9.7 U	9.6 U
Pentachlorophenol	87-86-5	UG/L	20 U	19 U	21 U	21 U	19 U	19 U
Phenanthrene	85-01-8	UG/L	10 U	9.6 U	10 U	10 U	9.7 U	9.6 U
Phenol	108-95-2	UG/L	10 U	9.6 U	10 U	10 U	9.7 U	9.6 U
Pyrene	129-00-0	UG/L	10 U	9.6 U	10 U	10 U	9.7 U	9.7 U
<b>Classical Nutrients</b>								
Ammonia	7664-41-7	MG/L	0.05 U	0.05 U	0.12	0.15	0.13	0.18
Nitrate-Nitrite Nitrogen		MG/L	0.05 U	0.05 U	0.05 U	0.05 U	0.1	0.071
Total Kjeldahl Nitrogen		MG/L	0.68	0.68	0.72	1.2	0.77	0.97
Total Organic Carbon		MG/L	11	5.2	6	12	10	9.1
Total Phosphorus	7723-14-0	MG/L	0.04	0.04	0.041	0.046	0.049	0.033
<b>Data Qualifiers</b>								
U-Analyte not detected at or above reporting limit. The number is the minimum quantitation limit.								
J-Identification of analyte is acceptable; reported value is an estimate.								
UJ-Analyte not detected at or above reporting limit. Reporting limit is an estimate.								
N-Presumptive evidence analyte is present; analyte reported as tentative identification.								
NJ-Presumptive evidence analyte is present; analyte reported as tentative identification. Reported value is an estimate.								
K-Identification of analyte is acceptable; reported value may be biased high. Actual value expected to be less than the reported value.								
L-Identification of analyte is acceptable; reported value may be biased low. Actual value expected to be greater than reported value.								
NA-Not Analyzed. | NAI-Not Analyzed due to Interferences. | A-Analyte analyzed in replicate. Reported value is 'average' of replicates.								
R-Presence or absence of analyte can not be determined from data due to severe quality control problems. Data are rejected and considered unusable.								
C-confirmed by GCMS | /1-when no value is reported, see chlordane constituents | /2-constituents or metabolites of technical chlordane								

Bay St Louis Surface Water All Data

	BCD1SW 9/30/2005	BLC1SW 9/30/2005	JR1SW 9/30/2005	PEARL1SW 9/30/2005	SLB1SW 9/30/2005	SLB2SW 9/30/2005	SLB3SW 9/30/2005	SLB4SW 9/30/2005	SLB5SW 9/30/2005	SLB6SW 9/30/2005	SLB7SW 9/30/2005	WR1SW 9/30/2005
	1015	945	1047	1615	1230	1430	1155	1320	1240	1010	1126	1445
<b>Metals Scan</b>												
Aluminum	7429-90-5 U/G/L	1100	1000 U	200 U	1000 U	1000 U	1000 U	1000 U	1000 U	1000 U	1000 U	1000 U
Antimony	7440-36-0 U/G/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Arsenic	7440-38-2 U/G/L	20 J	9.6 J	14 J	4.6 J	22 J	21 J	20 J	18 AJ	17 J	18 J	16 J
Barium	7440-39-3 U/G/L	67	65	67	61	61	62	61	61 AJ	62	64	64
Beryllium	7440-41-7 U/G/L	30 U	30 U	30 U	6 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U
Cadmium	7440-43-9 U/G/L	12 U	12 U	12 U	12 U	12 U	12 U	12 U	12 U	12 U	12 U	12 U
Calcium	7440-70-2 MG/L	160	70	110	40	180	160	170	140 A	140	130	160
Chromium	7440-47-3 U/G/L	50 U	50 U	50 U	10 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Cobalt	7440-48-4 U/G/L	50 U	50 U	50 U	10 U	50 U						
Copper	7440-50-8 U/G/L	50 U	50 U	50 U	10 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Iron	7439-89-6 MG/L	1.2	1	1 U	0.76	1 U	1 U	1 U	1 U	1 U	1 U	1.6
Lead	7439-92-1 U/G/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Magnesium	7439-95-4 MG/L	520	210	330	110	550	500	520	450 A	430	410	380
Manganese	7439-96-5 U/G/L	130	880	480	870	300	72	240 AJ	210	260	300	650
Molybdenum	7439-98-7 U/G/L	50 U	50 U	50 U	10 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Nickel	7440-02-0 U/G/L	100 U	100 U	100 U	20 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U
Potassium	7440-09-7 MG/L	160	66	100	38	170	160	160	140 A	130	130	160
Selenium	7782-49-2 U/G/L	61 J	25 J	39 J	11 J	64 J	63 J	62 J	52 AJ	51 J	52 J	31 J
Silver	7440-22-4 U/G/L	50 U	50 U	50 U	10 U	50 U						
Sodium	7440-23-5 MG/L	4300	1700	2700	930	4500	4100	4200	3600 A	3500	3400	3100
Strontium	7440-24-6 U/G/L	2800	1100	1800	640	3000	2800	2800	2500 A	2400	2300	2100
Thallium	7440-28-0 U/G/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Tin	7440-31-5 U/G/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Titanium	7440-32-6 U/G/L	50 U	50 U	50 U	10 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Total Mercury	7439-97-6 U/G/L	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Vanadium	7440-62-2 U/G/L	50 U	50 U	50 U	10 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Yttrium	7440-65-5 U/G/L	30 U	30 U	30 U	6 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U
Zinc	7440-66-6 U/G/L	100 U	100 U	100 U	20 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U
<b>PCB Scan</b>												
PCB-1016 (Aroclor 1016)	12674-11-2 U/G/L	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
PCB-1221 (Aroclor 1221)	11104-28-2 U/G/L	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
PCB-1232 (Aroclor 1232)	11141-16-5 U/G/L	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
PCB-1242 (Aroclor 1242)	53469-21-9 U/G/L	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
PCB-1248 (Aroclor 1248)	12672-29-6 U/G/L	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
PCB-1254 (Aroclor 1254)	11097-69-1 U/G/L	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
PCB-1260 (Aroclor 1260)	11096-82-5 U/G/L	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
<b>Pesticides Scan</b>												
4,4'-DDD (p,p-DDD)	72-54-8 U/G/L	0.24 U	0.25 U	0.26 U	0.25 U	0.25 U	0.25 U	0.25 U	0.24 U	0.24 U	0.25 U	0.25 U
4,4'-DDE (p,p-DDE)	72-55-9 U/G/L	0.097 U	0.1 U	0.1 U	0.1 U	0.098 U	0.099 U	0.1 U	0.098 U	0.098 U	0.1 U	0.099 U
4,4'-DDT (p,p-DDT)	50-29-3 U/G/L	0.24 U	0.25 U	0.26 U	0.25 U	0.25 U	0.25 U	0.25 U	0.24 U	0.24 U	0.25 U	0.25 U
Aldrin	309-00-2 U/G/L	0.097 U	0.1 U	0.1 U	0.1 U	0.098 U	0.099 U	0.1 U	0.098 U	0.098 U	0.1 U	0.099 U
alpha-BHC	319-84-6 U/G/L	0.097 U	0.1 U	0.1 U	0.1 U	0.098 U	0.099 U	0.1 U	0.098 U	0.098 U	0.1 U	0.099 U
alpha-Chlordane /2	5103-71-9 U/G/L	0.097 U	0.1 U	0.1 U	0.1 U	0.098 U	0.099 U	0.1 U	0.098 U	0.098 U	0.1 U	0.099 U
beta-BHC	319-85-7 U/G/L	0.097 U	0.1 U	0.1 U	0.1 U	0.098 U	0.099 U	0.1 U	0.098 U	0.098 U	0.1 U	0.099 U
Chlordene /2	3734-48-3 U/G/L	0.097 U	0.1 U	0.1 U	0.1 U	0.098 U	0.099 U	0.1 U	0.098 U	0.098 U	0.1 U	0.099 U
cis-Nonachlor /2	5103-73-1 U/G/L	0.097 U	0.1 U	0.1 U	0.1 U	0.098 U	0.099 U	0.1 U	0.098 U	0.098 U	0.1 U	0.099 U
delta-BHC	319-86-8 U/G/L	0.097 U	0.1 U	0.1 U	0.1 U	0.098 U	0.099 U	0.1 U	0.098 U	0.098 U	0.1 U	0.099 U
Dieldrin	60-57-1 U/G/L	0.097 U	0.1 U	0.1 U	0.1 U	0.098 U	0.099 U	0.1 U	0.098 U	0.098 U	0.1 U	0.099 U
Endosulfan I (alpha)	959-98-8 U/G/L	0.097 U	0.1 U	0.1 U	0.1 U	0.098 U	0.099 U	0.1 U	0.098 U	0.098 U	0.11 U	0.099 U
Endosulfan I (beta)	33213-65-9 U/G/L	0.24 U	0.25 U	0.26 U	0.25 U	0.25 U	0.25 U	0.25 U	0.24 U	0.24 U	0.25 U	0.25 U
Endosulfan Sulfate	1031-07-8 U/G/L	0.24 U	0.25 U	0.26 U	0.25 U	0.25 U	0.25 U	0.25 U	0.24 U	0.24 U	0.25 U	0.25 U
Endrin	72-20-8 U/G/L	0.24 U	0.25 U	0.26 U	0.25 U	0.25 U	0.25 U	0.25 U	0.24 U	0.24 U	0.25 U	0.25 U
Endrin Ketone	53494-70-5 U/G/L	0.24 U	0.25 U	0.26 U	0.25 U	0.25 U	0.25 U	0.25 U	0.24 U	0.24 U	0.25 U	0.25 U
gamma-BHC (Lindane)	58-89-9 U/G/L	0.097 U	0.1 U	0.1 U	0.1 U	0.098 U	0.099 U	0.1 U	0.098 U	0.098 U	0.1 U	0.099 U
gamma-Chlordane /2	5566-34-7 U/G/L	0.097 U	0.1 U	0.1 U	0.1 U	0.098 U	0.099 U	0.1 U	0.098 U	0.098 U	0.1 U	0.099 U
Heptachlor	76-44-8 U/G/L	0.097 U	0.1 U	0.1 U	0.1 U	0.098 U	0.099 U	0.1 U	0.098 U	0.098 U	0.1 U	0.099 U
Heptachlor Epoxide	1024-57-3 U/G/L	0.097 U	0.1 U	0.1 U	0.1 U	0.098 U	0.099 U	0.1 U	0.098 U	0.098 U	0.1 U	0.099 U
Methoxychlor	72-43-5 U/G/L	0.48 U	0.5 U	0.52 U	0.5 U	0.51 U	0.49 U	0.49 U	0.5 U	0.49 U	0.49 U	0.5 U
Toxaphene	8001-35-2 U/G/L	9.7 U	10 U	10 U	10 U	9.8 U	9.9 U	10 U	9.8 U	9.8 U	10 U	9.9 U
trans-Nonachlor /2	39765-80-5 U/G/L	0.097 U	0.1 U	0.1 U	0.1 U	0.098 U	0.099 U	0.1 U	0.098 U	0.098 U	0.1 U	0.099 U
<b>Volatiles Scan</b>												
(m- and/or p-)Xylene	UG/L	2 U	2 U	2 U	0.32 J	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,1,2-Tetrachloroethane	630-20-6 U/G/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,1-Trichloroethane	71-55-6 U/G/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Tetrachloroethane	79-34-5 U/G/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1 U/G/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	79-00-5 U/G/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	75-34-3 U/G/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethylene	75-35-4 U/G/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloropropene	563-58-6 U/G/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,3-Trichlorobenzene	87-61-6 U/G/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,3-Trichloropropane	96-18-4 U/G/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,4-Trichlorobenzene	120-82-1 U/G/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,4,Trimethylbenzene	95-63-6 U/G/L	1 U	1 U	1 U	0.11 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dibromo-3-Chloropropane (DBCP)	96-12-8 U/G/L	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,2-Dibromoethane (EDB)	106-93-4 U/G/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	95-50-1 U/G/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	107-06-2 U/G/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloropropane	78-87-5 U/G/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3,5-Trimethylbenzene	108-67-8 U/G/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	541-73-1 U/G/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3-Dichloropropene	142-28-9 U/G/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	106-46-7 U/G/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2,2-Dichloropropane	590-20-7 U/G/L	1 U	1 U	1 U	1 U	1						

	BCD1SW 9/30/2005	BLC1SW 9/30/2005	JR1SW 9/30/2005	PEARL1SW 9/30/2005	SLB1SW 9/30/2005	SLB2SW 9/30/2005	SLB3SW 9/30/2005	SLB4SW 9/30/2005	SLB5SW 9/30/2005	SLB6SW 9/30/2005	SLB7SW 9/30/2005	WR1SW 9/30/2005
	1015	945	1047	1615	1230	1430	1155	1320	1240	1010	1126	1445
Dibromomethane	74-95-3 U/G/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dichlorodifluoromethane	75-71-8 U/G/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Ethyl Benzene	100-41-4 U/G/L	1 U	1 U	0.1 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Hexachloro-1,3-Diadiene	87-68-3 U/G/L	1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
Isopropylbenzene	98-82-8 U/G/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methyl Acetate	79-20-9 U/G/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methyl Butyl Ketone	591-78-6 U/G/L	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Methyl Ethyl Ketone	78-93-3 U/G/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Methyl Isobutyl Ketone	108-10-1 U/G/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methyl T-Butyl Ether (MTBE)	1634-04-4 U/G/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methylcyclohexane	108-87-2 U/G/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methylene Chloride	75-09-2 U/G/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
n-Butylbenzene	104-51-8 U/G/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
n-Propylbenzene	103-65-1 U/G/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
o-Chlorotoluene	95-49-8 U/G/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
o-Xylene	9547-6 U/G/L	1 U	1 U	1 U	0.12 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U
p-Chlorotoluene	106-43-4 U/G/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
p-Isopropyltoluene	99-87-6 U/G/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
sec-Butylbenzene	135-98-8 U/G/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Styrene	100-42-5 U/G/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
tert-Butylbenzene	98-06-6 U/G/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene (Tetrachloroethylene)	127-18-4 U/G/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	108-88-3 U/G/L	1 U	0.16 J	1 U	0.74 J	1 U	1 U	1 U	1 U	0.057 J	1 U	1 U
trans-1,2-Dichloroethene	156-60-5 U/G/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
trans-1,3-Dichloropropene	10061-02-6 U/G/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethene (Trichloroethylene)	79-01-6 U/G/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichlorofluoromethane (Freon 11)	75-69-4 U/G/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Vinyl Chloride	75-01-4 U/G/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
<b>Extractables Scan</b>												
(3-and/or 4-)Methylphenol	UG/L	9.7 U	9.8 U	10 U	9.8 U	9.9 U	9.8 U	10 U	9.5 U	9.6 U	9.6 U	9.6 U
1,1-Biphenyl	92-52-4 U/G/L	9.7 U	9.8 U	10 U	9.8 U	9.9 U	9.8 U	10 U	9.5 U	9.6 U	9.6 U	9.6 U
1,2,4-Trichlorobenzene	120-82-1 U/G/L	9.7 U	9.8 U	10 U	9.8 U	9.9 U	9.8 U	10 U	9.5 U	9.6 U	9.6 U	9.6 U
2,3,4,6-Tetrachlorophenol	58-90-2 U/G/L	9.7 U	9.8 U	10 U	9.8 U	9.9 U	9.8 U	10 U	9.5 U	9.6 U	9.6 U	9.6 U
2,4,5-Trichlorophenol	95-95-4 U/G/L	9.7 U	9.8 U	10 U	9.8 U	9.9 U	9.8 U	10 U	9.5 U	9.6 U	9.6 U	9.6 U
2,4,6-Trichlorophenol	88-06-2 U/G/L	9.7 U	9.8 U	10 U	9.8 U	9.9 U	9.8 U	10 U	9.5 U	9.6 U	9.6 U	9.6 U
2,4-Dichlorophenol	120-83-2 U/G/L	9.7 U	9.8 U	10 U	9.8 U	9.9 U	9.8 U	10 U	9.5 U	9.6 U	9.6 U	9.6 U
2,4-Dimethylphenol	105-67-9 U/G/L	9.7 U	9.8 U	10 U	9.8 U	9.9 U	9.8 U	10 U	9.5 U	9.6 U	9.6 U	9.6 U
2,4-Dinitrophenol	51-28-5 U/G/L	19 U	20 U	20 U	20 U	20 U	20 U	20 U	19 U	19 U	20 U	19 U
2,4-Dinitrotoluene	121-14-2 U/G/L	9.7 U	9.8 U	10 U	9.8 U	9.9 U	9.8 U	10 U	9.5 U	9.6 U	9.6 U	9.6 U
2,6-Dinitrotoluene	606-30-2 U/G/L	9.7 U	9.8 U	10 U	9.8 U	9.9 U	9.8 U	10 U	9.5 U	9.6 U	9.6 U	9.6 U
2-Chloronaphthalene	91-58-7 U/G/L	9.7 U	9.8 U	10 U	9.8 U	9.9 U	9.8 U	10 U	9.5 U	9.6 U	9.6 U	9.6 U
2-Chlorophenol	95-57-8 U/G/L	9.7 U	9.8 U	10 U	9.8 U	9.9 U	9.8 U	10 U	9.5 U	9.6 U	9.6 U	9.6 U
2-Methyl-4,6-Dinitrophenol	534-52-1 U/G/L	19 U	20 U	20 U	20 U	20 U	20 U	20 U	19 U	19 U	20 U	19 U
2-Methylnaphthalene	91-57-6 U/G/L	9.7 U	9.8 U	10 U	9.8 U	9.9 U	9.8 U	10 U	9.5 U	9.6 U	9.6 U	9.6 U
2-Methylphenol	95-48-7 U/G/L	9.7 U	9.8 U	10 U	9.8 U	9.9 U	9.8 U	10 U	9.5 U	9.6 U	9.6 U	9.6 U
2-Nitroaniline	88-74-4 U/G/L	9.7 U	9.8 U	10 U	9.8 U	9.9 U	9.8 U	10 U	9.5 U	9.6 U	9.6 U	9.6 U
2-Nitrophenol	88-75-5 U/G/L	9.7 U	9.8 U	10 U	9.8 U	9.9 U	9.8 U	10 U	9.5 U	9.6 U	9.6 U	9.6 U
3,3'-Dichlorobenzidine	91-94-1 U/G/L	9.7 U	9.8 U	10 U	9.8 U	9.9 U	9.8 U	10 U	9.5 U	9.6 U	9.6 U	9.6 U
3-Nitroaniline	99-09-2 U/G/L	9.7 U	9.8 U	10 U	9.8 U	9.9 U	9.8 U	10 U	9.5 U	9.6 U	9.6 U	9.6 U
4-Bromophenyl Phenyl Ether	101-55-3 U/G/L	9.7 U	9.8 U	10 U	9.8 U	9.9 U	9.8 U	10 U	9.5 U	9.6 U	9.6 U	9.6 U
4-Chloro-3-Methylphenol	97-50-7 U/G/L	9.7 U	9.8 U	10 U	9.8 U	9.9 U	9.8 U	10 U	9.5 U	9.6 U	9.6 U	9.6 U
4-Chloroaniline	106-47-8 U/G/L	9.7 U	9.8 U	10 U	9.8 U	9.9 U	9.8 U	10 U	9.5 U	9.6 U	9.6 U	9.6 U
4-Chlorophenyl Phenyl Ether	7005-72-3 U/G/L	9.7 U	9.8 U	10 U	9.8 U	9.9 U	9.8 U	10 U	9.5 U	9.6 U	9.6 U	9.6 U
4-Nitroaniline	100-01-6 U/G/L	9.7 U	9.8 U	10 U	9.8 U	9.9 U	9.8 U	10 U	9.5 U	9.6 U	9.6 U	9.6 U
4-Nitrophenol	100-02-7 U/G/L	9.7 U	9.8 U	10 U	9.8 U	9.9 U	9.8 U	10 U	9.5 U	9.6 U	9.6 U	9.6 U
Acenaphthene	83-32-9 U/G/L	9.7 U	9.8 U	10 U	9.8 U	9.9 U	9.8 U	10 U	9.5 U	9.6 U	9.6 U	9.6 U
Acenaphthylene	208-96-8 U/G/L	9.7 U	9.8 U	10 U	9.8 U	9.9 U	9.8 U	10 U	9.5 U	9.6 U	9.6 U	9.6 U
Acetophenone	98-86-2 U/G/L	9.7 U	9.8 U	10 U	9.8 U	9.9 U	9.8 U	10 U	9.5 U	9.6 U	9.6 U	9.6 U
Anthracene	120-12-7 U/G/L	9.7 U	9.8 U	10 U	9.8 U	9.9 U	9.8 U	10 U	9.5 U	9.6 U	9.6 U	9.6 U
Atrazine	1912-34-9 U/G/L	9.7 U	9.8 U	10 U	9.8 U	9.9 U	9.8 U	10 U	9.5 U	9.6 U	9.6 U	9.6 U
Benzaldehyde	100-52-7 U/G/L	9.7 UU	9.8 U	10 U	9.8 UU	9.9 UJ	9.8 UJ	10 UJ	9.5 UU	9.6 UU	9.6 UU	9.6 UU
Benz(a)Anthracene	56-55-3 U/G/L	9.7 U	9.8 U	10 U	9.8 U	9.9 U	9.8 U	10 U	9.5 U	9.6 U	9.6 U	9.6 U
Benz(b)Fluoranthene	205-99-2 U/G/L	9.7 U	9.8 U	10 U	9.8 U	9.9 U	9.8 U	10 U	9.5 U	9.6 U	9.6 U	9.6 U
Benz(ghi)Perylene	191-24-2 U/G/L	9.7 U	9.8 U	10 U	9.8 U	9.9 U	9.8 U	10 U	9.5 U	9.6 U	9.6 U	9.6 U
Benz(kl)Fluoranthene	207-08-9 U/G/L	9.7 U	9.8 U	10 U	9.8 U	9.9 U	9.8 U	10 U	9.5 U	9.6 U	9.6 U	9.6 U
Benz-a-Pyrene	50-32-8 U/G/L	9.7 U	9.8 U	10 U	9.8 U	9.9 U	9.8 U	10 U	9.5 U	9.6 U	9.6 U	9.6 U
Benzyl Butyl Phthalate	85-68-7 U/G/L	9.7 U	9.8 U	10 U	9.8 U	9.9 U	9.8 U	10 U	9.5 U	9.6 U	9.6 U	9.6 U
bis(2-Chloroethyl)Methane	111-91-1 U/G/L	9.7 U	9.8 U	10 U	9.8 U	9.9 U	9.8 U	10 U	9.5 U	9.6 U	9.6 U	9.6 U
bis(2-Chloroethyl) Ether	111-44-4 U/G/L	9.7 U	9.8 U	10 U	9.8 U	9.9 U	9.8 U	10 U	9.5 U	9.6 U	9.6 U	9.6 U
bis(2-Chloroisopropyl) Ether	108-60-1 U/G/L	9.7 U	9.8 U	10 U	9.8 U	9.9 U	9.8 U	10 U	9.5 U	9.6 U	9.6 U	9.6 U
bis(2-Ethylhexyl) Phthalate	117-81-7 U/G/L	9.7 U	9.8 U	10 U	9.8 U	9.9 U	9.8 U	10 U	9.5 U	9.6 U	9.6 U	9.6 U
Caprolactam	105-60-2 U/G/L	9.7 U	9.8 U	10 U	9.8 U	9.9 U	9.8 U	10 U	9.5 U	9.6 U	9.6 U	9.6 U
Carbazole	86-74-8 U/G/L	9.7 U	9.8 U	10 U	9.8 U	9.9 U	9.8 U	10 U	9.5 U	9.6 U	9.6 U	9.6 U
Chrysene	216-01-9 U/G/L	9.7 U	9.8 U	10 U	9.8 U	9.9 U	9.8 U	10 U	9.5 U	9.6 U	9.6 U	9.6 U
Dibenzo(a,h)Anthracene	53-70-3 U/G/L	9.7 U	9.8 U	10 U	9.8 U	9.9 U	9.8 U	10 U	9.5 U	9.6 U	9.6 U	9.6 U
Dibenzo[ur]uran	132-04-9 U/G/L	9.7 U	9.8 U	10 U	9.8 U	9.9 U	9.8 U	10 U	9.5 U	9.6 U	9.6 U	9.6 U
Diethyl Phthalate	84-66-2 U/G/L	9.7 U	9.8 U	10 U	9.8 U	9.9 U	9.8 U	10 U	9.5 U	9.6 U	9.6 U	9.6 U
Dimethyl Phthalate	131-11-3 U/G/L	9.7 U	9.8 U	10 U	9.8 U	9.9 U	9.8 U	10 U	9.5 U	9.6 U	9.6 U	9.6 U
Di-n-Butylphthalate	84-74-2 U/G/L	9.7 U	9.8 U	10 U	9.8 U	9.9 U	9.8 U	10 U	9.5 U	9.6 U	9.6 U	9.6 U
Di-n-Octylphthalate	117-84-0 U/G/L	9.7 U	9.8 U	10 U	9.8 U	9.9 U	9.8 U	10 U	9.5 U	9.6 U	9.6 U	9.6 U
Fluoranthene	206-04-0 U/G/L	9.7 U	9.8 U	10 U	9.8 U	9.9 U	9.8 U	10 U	9.5 U	9.6 U	9.6 U	9.6 U
Fluorene	86-73-7 U/G/L	9.7 U	9.8 U	10 U	9.8 U	9.9 U	9.8 U	10 U	9.5 U	9.6 U	9.6 U	9.6 U
Hexachlorobenzene (HCB)	118-74-1 U/G/L	9.7 U	9.8 U	10 U	9.8 U	9.9 U	9.8 U	10 U	9.5 U	9.6 U	9.6 U	9.6 U
Hexachlorobutadiene	87-68-3 U/G/L	9.7 U	9.8 U	10 U	9.8 U	9.9 U	9.8 U	10 U	9.5 U	9.6 U	9.6 U	9.6 U
Hexachlorocyclopentadiene (HCCP)	77-47-4 U/G/L	9.7 U	9.8 U	10 U	9.8 U	9.9 U	9.8 U	10 U	9.5 U	9.6 U	9.6 U	9.6 U
Hexachloroethane	67-											

# **Appendix C**

## **Chemical Sediment Data**

		BC2SD 9/27/2005	BC4DSD 9/27/2005	BC4SD 9/27/2005	BL1SD 9/27/2005
Metals Scan		1130	1300	1240	1415
% Moisture	%	60	41	49 A	39
Aluminum	7429-90-5 MG/KG	8200	2600	3000	1800 A
Antimony	7440-36-0 MG/KG	0.5 U	0.5 U	0.5 U	0.5 UJ
Arsenic	7440-38-2 MG/KG	6.4	1.2	0.87	2.4 A
Barium	7440-39-3 MG/KG	130	27	57	6.6 A
Beryllium	7440-41-7 MG/KG	0.82	0.3	0.3	0.3 U
Cadmium	7440-43-9 MG/KG	1.1	1.5	1.8	0.25 U
Calcium	7440-70-2 MG/KG	7400	4900	4700	1000 A
Chromium	7440-47-3 MG/KG	21	7.2	9.7	4.5 A
Cobalt	7440-48-4 MG/KG	4.6	0.59	0.66	1.1 A
Copper	7440-50-8 MG/KG	20	4.7	5.5	1.9 A
Iron	7439-89-6 MG/KG	17000	3400	3200	4900 A
Lead	7439-92-1 MG/KG	36	4.8	5.9	4.1 A
Magnesium	7439-95-4 MG/KG	5100	1800	1700	1400 A
Manganese	7439-96-5 MG/KG	450	26	26	46 A
Molybdenum	7439-98-7 MG/KG	1.6 U	1.6 U	1.6 U	1.6 U
Nickel	7440-02-0 MG/KG	8.4	2.4	2.7	2 A
Potassium	7440-09-7 MG/KG	2300	510	450	630 A
Selenium	7782-49-2 MG/KG	1 U	1 U	1 U	1 U
Silver	7440-22-4 MG/KG	0.5 U	0.5 U	0.5 U	0.5 U
Sodium	7440-23-5 MG/KG	18000	8500	5900	5300 AJ
Strontium	7440-24-6 MG/KG	57	59	66	10 A
Thallium	7440-28-0 MG/KG	0.5 U	0.5 U	0.5 U	0.5 U
Tin	7440-31-5 MG/KG	NA	NA	NA	NA
Titanium	7440-32-6 MG/KG	17	12	14	7.6 AJ
Total Mercury	7439-97-6 MG/KG	0.078	0.044 U	0.044 U	0.044 U
Vanadium	7440-62-2 MG/KG	24	6.1	7.3	9.5 A
Yttrium	7440-65-5 MG/KG	12	2.7	2.5	2.4 A
Zinc	7440-66-6 MG/KG	140	48	55	14 A
PCB Scan					
% Moisture	%	64	30	34	36
PCB-1016 (Aroclor 1016)	12674-11-2 UG/KG	100 UJ	100 U	100 U	100 U
PCB-1221 (Aroclor 1221)	11104-28-2 UG/KG	100 UJ	100 U	100 U	100 U
PCB-1232 (Aroclor 1232)	11141-16-5 UG/KG	100 UJ	100 U	100 U	100 U
PCB-1242 (Aroclor 1242)	53469-21-9 UG/KG	100 UJ	100 U	100 U	100 U
PCB-1248 (Aroclor 1248)	12672-29-6 UG/KG	100 UJ	100 U	100 U	100 U
PCB-1254 (Aroclor 1254)	11097-69-1 UG/KG	100 UJ	100 U	100 U	100 U
PCB-1260 (Aroclor 1260)	11096-82-5 UG/KG	100 UJ	100 U	100 U	100 U
Pesticides Scan					
% Moisture	%	64	30	34	36
4,4'-DDD (p,p'-DDD)	72-54-8 UG/KG	27 U	14 U	15 U	15 U
4,4'-DDE (p,p'-DDE)	72-55-9 UG/KG	11 U	5.7 U	6 U	6.1 U
4,4'-DDT (p,p'-DDT)	50-29-3 UG/KG	41 U	14 U	15 U	15 U
Aldrin	309-00-2 UG/KG	11 U	5.7 U	6 U	6.1 U
alpha-BHC	319-84-6 UG/KG	11 U	5.7 U	6 U	6.1 U
alpha-Chlordane /2	5103-71-9 UG/KG	11 U	5.7 U	6 U	6.1 U
beta-BHC	319-85-7 UG/KG	28 U	5.7 U	6 U	6.1 U
Chlordene /2	3734-48-3 UG/KG	11 U	5.7 U	6 U	6.1 U
cis-Nonachlor /2	5103-73-1 UG/KG	11 U	5.7 U	6 U	6.1 U
delta-BHC	319-86-8 UG/KG	11 U	5.7 U	6 U	6.1 U
Dieldrin	60-57-1 UG/KG	11 U	5.7 U	6 U	6.1 U
Endosulfan I (alpha)	959-98-8 UG/KG	11 U	5.7 U	6 U	6.1 U
Endosulfan II (beta)	33213-65-9 UG/KG	27 U	14 U	15 U	15 U
Endosulfan Sulfate	1031-07-8 UG/KG	27 U	14 U	15 U	15 U
Endrin	72-20-8 UG/KG	27 U	14 U	15 U	15 U
Endrin Ketone	53494-70-5 UG/KG	35 U	18 U	19 U	15 U
gamma-BHC (Lindane)	58-89-9 UG/KG	11 U	5.7 U	6 U	6.1 U
gamma-Chlordane /2	5566-34-7 UG/KG	11 U	5.7 U	6 U	6.1 U
Heptachlor	76-44-8 UG/KG	11 U	6.8 U	6.8 U	8.8 U
Heptachlor Epoxide	1024-57-3 UG/KG	11 U	5.7 U	6 U	6.1 U
Methoxychlor	72-43-5 UG/KG	54 U	28 U	30 U	30 U
Toxaphene	8001-35-2 UG/KG	1080 U	570 U	600 U	610 U

<b>Metals Scan</b>		BC2SD 9/27/2005	BC4DSD 9/27/2005	BC4SD 9/27/2005	BL1SD 9/27/2005	
			1130	1300	1240	1415
1,1,1-Trichloroethane	71-55-6	UG/KG	3.9 U	2.3 U	3.3 U	1.9 U
1,1,2,2-Tetrachloroethane	79-34-5	UG/KG	3.9 U	2.3 U	3.3 U	1.9 U
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)	76-13-1	UG/KG	3.9 U	2.3 U	3.3 U	1.9 U
1,1,2-Trichloroethane	79-00-5	UG/KG	3.9 U	2.3 U	3.3 U	1.9 U
1,1-Dichloroethane	75-34-3	UG/KG	3.9 U	2.3 U	3.3 U	1.9 U
1,1-Dichloroethene (1,1-Dichloroethylene)	75-35-4	UG/KG	3.9 U	2.3 U	3.3 U	1.9 U
1,1-Dichloropropene	563-58-6	UG/KG	3.9 U	2.3 U	3.3 U	1.9 U
1,2,3-Trichlorobenzene	87-61-6	UG/KG	1.8 J	4.6 U	6.5 U	3.7 U
1,2,3-Trichloropropane	96-18-4	UG/KG	7.7 U	4.6 U	6.5 U	3.7 U
1,2,4-Trichlorobenzene	120-82-1	UG/KG	7.7 U	4.6 U	6.5 U	3.7 U
1,2,4-Trimethylbenzene	95-63-6	UG/KG	3.9 U	2.3 U	3.3 U	1.9 U
1,2-Dibromo-3-Chloropropane (DBCP)	96-12-8	UG/KG	19 U	11 U	16 U	9.3 U
1,2-Dibromoethane (EDB)	106-93-4	UG/KG	3.9 U	2.3 U	3.3 U	1.9 U
1,2-Dichlorobenzene	95-50-1	UG/KG	3.9 U	2.3 U	3.3 U	1.9 U
1,2-Dichloroethane	107-06-2	UG/KG	3.9 U	2.3 U	3.3 U	1.9 U
1,2-Dichloropropene	78-87-5	UG/KG	3.9 U	2.3 U	3.3 U	1.9 U
1,3,5-Trimethylbenzene	108-67-8	UG/KG	3.9 U	2.3 U	3.3 U	1.9 U
1,3-Dichlorobenzene	541-73-1	UG/KG	7.7 U	4.6 U	6.5 U	3.7 U
1,3-Dichloropropane	142-28-9	UG/KG	3.9 U	2.3 U	3.3 U	1.9 U
1,4-Dichlorobenzene	106-46-7	UG/KG	7.7 U	4.6 U	6.5 U	3.7 U
2,2-Dichloropropane	590-20-7	UG/KG	3.9 U	2.3 U	3.3 U	1.9 U
Acetone	67-64-1	UG/KG	39 U	23 U	33 U	19 U
Benzene	71-43-2	UG/KG	0.23 J	2.3 U	3.3 U	1.9 U
Bromobenzene	108-86-1	UG/KG	3.9 U	2.3 U	3.3 U	1.9 U
Bromochloromethane	74-97-5	UG/KG	3.9 U	2.3 U	3.3 U	1.9 U
Bromodichloromethane	75-27-4	UG/KG	3.9 U	2.3 U	3.3 U	1.9 U
Bromoform	75-25-2	UG/KG	19 U	11 U	16 U	9.3 U
Bromomethane	74-83-9	UG/KG	3.9 U	2.3 U	3.3 U	1.9 U
Carbon Disulfide	75-15-0	UG/KG	4.7 J	3.2	4.4	0.73 J
Carbon Tetrachloride	56-23-5	UG/KG	3.9 U	2.3 U	3.3 U	1.9 U
Chlorobenzene	108-90-7	UG/KG	3.9 U	2.3 U	3.3 U	1.9 U
Chloroethane	75-00-3	UG/KG	3.9 U	2.3 U	3.3 U	1.9 U
Chloroform	67-66-3	UG/KG	3.9 U	2.3 U	3.3 U	1.9 U
Chloromethane	74-87-3	UG/KG	3.9 U	2.3 U	3.3 U	1.9 U
cis-1,2-Dichloroethene	156-59-2	UG/KG	3.9 U	2.3 U	3.3 U	1.9 U
cis-1,3-Dichloropropene	10061-01-5	UG/KG	3.9 U	2.3 U	3.3 U	1.9 U
Cyclohexane	110-82-7	UG/KG	3.9 U	2.3 U	3.3 U	1.9 U
Dibromochloromethane	124-48-1	UG/KG	3.9 U	2.3 U	3.3 U	1.9 U
Dibromomethane	74-95-3	UG/KG	3.9 U	2.3 U	3.3 U	1.9 U
Dichlorodifluoromethane	75-71-8	UG/KG	3.9 U	2.3 U	3.3 U	1.9 U
Ethyl Benzene	100-41-4	UG/KG	3.9 U	2.3 U	3.3 U	1.9 U
Hexachloro-1,3-Butadiene	87-68-3	UG/KG	3.9 U	2.3 U	3.3 U	1.9 U
Isopropylbenzene	98-82-8	UG/KG	14	2.3 U	3.3 U	1.9 U
Methyl Acetate	79-20-9	UG/KG	3.9 U	2.3 U	3.3 U	1.9 U
Methyl Butyl Ketone	591-78-6	UG/KG	3.9 U	2.3 U	3.3 U	1.9 U
Methyl Ethyl Ketone	78-93-3	UG/KG	7.7 U	4.6 U	6.5 U	3.7 U
Methyl Isobutyl Ketone	108-10-1	UG/KG	3.9 U	2.3 U	3.3 U	1.9 U
Methyl T-Butyl Ether (MTBE)	1634-04-4	UG/KG	3.9 U	2.3 U	3.3 U	1.9 U
Methylcyclohexane	108-87-2	UG/KG	3.9 U	2.3 U	3.3 U	1.9 U
Methylene Chloride	75-09-2	UG/KG	3.9 U	2.3 U	3.3 U	1.9 U
n-Butylbenzene	104-51-8	UG/KG	50 J	4.6 U	6.5 U	3.7 U
n-Propylbenzene	103-65-1	UG/KG	51 J	2.3 U	3.3 U	1.9 U
o-Chlorotoluene	95-49-8	UG/KG	3.9 U	2.3 U	3.3 U	1.9 U
o-Xylene	95-47-6	UG/KG	3.9 U	2.3 U	3.3 U	1.9 U
p-Chlorotoluene	106-43-4	UG/KG	7.7 U	4.6 U	6.5 U	3.7 U
p-Isopropyltoluene	99-87-6	UG/KG	43 J	2.3 U	3.3 U	1.9 U
sec-Butylbenzene	135-98-8	UG/KG	30 J	2.3 U	3.3 U	1.9 U
Styrene	100-42-5	UG/KG	3.9 U	2.3 U	3.3 U	1.9 U
tert-Butylbenzene	98-06-6	UG/KG	3.9 U	2.3 U	3.3 U	1.9 U
Tetrachloroethene (Tetrachloroethylene)	127-18-4	UG/KG	3.9 U	2.3 U	3.3 U	1.9 U
Toluene	108-88-3	UG/KG	3.9 U	2.3 U	3.3 U	1.9 U
trans-1,2-Dichloroethene	156-60-5	UG/KG	19 U	11 U	16 U	9.3 U
trans-1,3-Dichloropropene	10061-02-6	UG/KG	3.9 U	2.3 U	3.3 U	1.9 U
Trichloroethene (Trichloroethylene)	79-01-6	UG/KG	3.9 U	2.3 U	3.3 U	1.9 U

Metals Scan		BC2SD 9/27/2005	BC4DSD 9/27/2005	BC4SD 9/27/2005	BL1SD 9/27/2005
		1130	1300	1240	1415
<b>Extractables Scan</b>					
% Moisture	%	63.61	29.58	33.67	35.82
(3-and/or 4-)Methylphenol	UG/KG	900 U	460 U	500 U	510 U
1,1-Biphenyl	92-52-4	UG/KG	900 U	460 U	500 U
1,2,4-Trichlorobenzene	120-82-1	UG/KG	900 U	460 U	500 U
2,3,4,6-Tetrachlorophenol	58-90-2	UG/KG	900 U	460 U	500 U
2,4,5-Trichlorophenol	95-95-4	UG/KG	900 U	460 U	500 U
2,4,6-Trichlorophenol	88-06-2	UG/KG	900 U	460 U	500 U
2,4-Dichlorophenol	120-83-2	UG/KG	900 U	460 U	500 U
2,4-Dimethylphenol	105-67-9	UG/KG	900 U	460 U	500 U
2,4-Dinitrophenol	51-28-5	UG/KG	1800 UJ	930 UJ	990 UJ
2,4-Dinitrotoluene	121-14-2	UG/KG	900 U	460 U	500 U
2,6-Dinitrotoluene	606-20-2	UG/KG	900 U	460 U	500 U
2-Chloronaphthalene	91-58-7	UG/KG	900 U	460 U	500 U
2-Chlorophenol	95-57-8	UG/KG	900 U	460 U	500 U
2-Methyl-4,6-Dinitrophenol	534-52-1	UG/KG	1800 U	930 U	990 U
2-Methylnaphthalene	91-57-6	UG/KG	900 U	460 U	500 U
2-Methylphenol	95-48-7	UG/KG	900 U	460 U	500 U
2-Nitroaniline	88-74-4	UG/KG	900 U	460 U	500 U
2-Nitrophenol	88-75-5	UG/KG	900 U	460 U	500 U
3,3'-Dichlorobenzidine	91-94-1	UG/KG	900 U	460 U	500 U
3-Nitroaniline	99-09-2	UG/KG	900 U	460 U	500 U
4-Bromophenyl Phenyl Ether	101-55-3	UG/KG	900 U	460 U	500 U
4-Chloro-3-Methylphenol	59-50-7	UG/KG	900 U	460 U	500 U
4-Chloroaniline	106-47-8	UG/KG	900 U	460 U	500 U
4-Chlorophenyl Phenyl Ether	7005-72-3	UG/KG	900 U	460 U	500 U
4-Nitroaniline	100-01-6	UG/KG	900 U	460 U	500 U
4-Nitrophenol	100-02-7	UG/KG	1800 U	930 U	990 U
Acenaphthene	83-32-9	UG/KG	900 U	460 U	500 U
Acenaphthylene	208-96-8	UG/KG	900 U	460 U	500 U
Acetophenone	98-86-2	UG/KG	900 U	460 U	500 U
Anthracene	120-12-7	UG/KG	900 U	460 U	500 U
Atrazine	1912-24-9	UG/KG	900 U	460 U	500 U
Benzaldehyde	100-52-7	UG/KG	900 UJ	460 UJ	500 UJ
Benzo(a)Anthracene	56-55-3	UG/KG	900 U	460 U	500 U
Benzo(b)Fluoranthene	205-99-2	UG/KG	900 U	460 U	500 U
Benzo(ghi)Perylene	191-24-2	UG/KG	900 U	460 U	500 U
Benzo(k)Fluoranthene	207-08-9	UG/KG	900 U	460 U	500 U
Benzo-a-Pyrene	50-32-8	UG/KG	900 U	460 U	500 U
Benzyl Butyl Phthalate	85-68-7	UG/KG	900 U	460 U	500 U
bis(2-Chloroethoxy)Methane	111-91-1	UG/KG	900 U	460 U	500 U
bis(2-Chloroethyl) Ether	111-44-4	UG/KG	900 U	460 U	500 U
bis(2-Chloroisopropyl) Ether	108-60-1	UG/KG	900 U	460 U	500 U
bis(2-Ethylhexyl) Phthalate	117-81-7	UG/KG	900 U	460 U	500 U
Caprolactam	105-60-2	UG/KG	900 U	460 U	500 U
Carbazole	86-74-8	UG/KG	900 U	460 U	500 U
Chrysene	218-01-9	UG/KG	900 U	460 U	500 U
Dibenzo(a,h)Anthracene	53-70-3	UG/KG	900 U	460 U	500 U
Dibenzofuran	132-64-9	UG/KG	900 U	460 U	500 U
Diethyl Phthalate	84-66-2	UG/KG	900 U	460 U	500 U
Dimethyl Phthalate	131-11-3	UG/KG	900 U	460 U	500 U
Di-n-Butylphthalate	84-74-2	UG/KG	900 U	460 U	500 U
Di-n-Octylphthalate	117-84-0	UG/KG	900 U	460 U	500 U
Fluoranthene	206-44-0	UG/KG	900 U	66 J	500 U
Fluorene	86-73-7	UG/KG	900 U	460 U	500 U
Hexachlorobenzene (HCB)	118-74-1	UG/KG	900 U	460 U	500 U
Hexachlorobutadiene	87-68-3	UG/KG	900 U	460 U	500 U
Hexachlorocyclopentadiene (HCCP)	77-47-4	UG/KG	900 U	460 U	500 U
Hexachloroethane	67-72-1	UG/KG	900 U	460 U	500 U
Indeno (1,2,3-cd) Pyrene	193-39-5	UG/KG	900 U	460 U	500 U
Isophorone	78-59-1	UG/KG	900 U	460 U	500 U
Naphthalene	91-20-3	UG/KG	900 U	460 U	500 U
Nitrobenzene	98-95-3	UG/KG	900 U	460 U	500 U

Bayou Casotte Sediment All Data

		BC2SD 9/27/2005	BC4DSD 9/27/2005	BC4SD 9/27/2005	BL1SD 9/27/2005
<b>Metals Scan</b>		1130	1300	1240	1415

**Classical Nutrients**

Ammonia	7664-41-7	MG/KG	55	15	13	5.5
Nitrate-Nitrite Nitrogen		MG/KG	2.5 UJ	1.6 UJ	1.9 UJ	1.6 UJ
Total Kjeldahl Nitrogen		MG/KG	1400	430	330	450
Total Organic Carbon		MG/KG	17000	9800 U	9800 U	9400 U
Total Phosphorus	7723-14-0	MG/KG	1200	1800	2400	61

Data Qualifiers

U-Analyte not detected at or above reporting limit. The number is the minimum quantitation limit.

J-Identification of analyte is acceptable; reported value is an estimate.

UJ-Analyte not detected at or above reporting limit. Reporting limit is an estimate.

N-Presumptive evidence analyte is present; analyte reported as tentative identification.

NJ-Presumptive evidence analyte is present; analyte reported as tentative identification. Reported value is an estimate.

K-Identification of analyte is acceptable; reported value may be biased high. Actual value expected to be less than the reported value.

L-Identification of analyte is acceptable; reported value may be biased low. Actual value expected to be greater than reported value.

NA-Not Analyzed. | NAI-Not Analyzed due to Interferences. | A-Analyte analyzed in replicate. Reported value is 'average' of replicates.

R-Presence or absence of analyte can not be determined from data due to severe quality control problems. Data are rejected and considered unusable.

C-confirmed by GCMS | /1-when no value is reported, see chlordane constituents | /2-constituents or metabolites of technical chlordane

NR-Not Reported

		ER1DSD 9/28/2005	ER1SD 9/28/2005	PR1SD 9/28/2005	PR2SD 9/28/2005	WPR1SD 9/28/2005
Metals Scan		1430	1400	1320	1545	1150
% Moisture	%	23	20	69	16	34
Aluminum	7429-90-5 MG/KG	180 A	210	5600	3700	1800
Antimony	7440-36-0 MG/KG	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
Arsenic	7440-38-2 MG/KG	0.25 U	0.25 U	6.6	3.3	1.7
Barium	7440-39-3 MG/KG	1.7 A	1	24	19	5.4
Beryllium	7440-41-7 MG/KG	0.3 U	0.3 U	0.88	0.68	0.3 U
Cadmium	7440-43-9 MG/KG	0.12 U	0.12 U	0.38	0.28	0.12 U
Calcium	7440-70-2 MG/KG	71 A	50	2600	960	410
Chromium	7440-47-3 MG/KG	0.5 U	0.5 U	12	6.5	3.4
Cobalt	7440-48-4 MG/KG	0.5 U	0.5 U	5.6	7.7	2
Copper	7440-50-8 MG/KG	2 UJ	2 UJ	12	5.9	2.5
Iron	7439-89-6 MG/KG	270 A	370	16000	9900	4300
Lead	7439-92-1 MG/KG	2.1 A	1.3	16	8.1	3.8
Magnesium	7439-95-4 MG/KG	200 A	120	4500	2000	1200
Manganese	7439-96-5 MG/KG	1.7 A	2.5	270	130	38
Molybdenum	7439-98-7 MG/KG	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U
Nickel	7440-02-0 MG/KG	0.99 U	1 U	6.1	3.9	1.9
Potassium	7440-09-7 MG/KG	99 U	100 U	1600	900	510
Selenium	7782-49-2 MG/KG	0.5 U	0.5 U	0.73	0.5 U	0.5 U
Silver	7440-22-4 MG/KG	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Sodium	7440-23-5 MG/KG	1300 A	540	20000	7300	5400
Strontium	7440-24-6 MG/KG	1.5 A	1.1	39	19	8.1
Thallium	7440-28-0 MG/KG	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
Tin	7440-31-5 MG/KG	NA	NA	NA	NA	NA
Titanium	7440-32-6 MG/KG	2.6 AJ	2.8 J	22 J	13 J	11 J
Total Mercury	7439-97-6 MG/KG	0.045 U	0.044 U	0.055	0.043 U	0.042 U
Vanadium	7440-62-2 MG/KG	2 UJ	2 UJ	25	14	6.3
Yttrium	7440-65-5 MG/KG	0.3 U	0.3 U	11	8	3.6
Zinc	7440-66-6 MG/KG	1.6 A	1.9	71	30	15
PCB Scan						
% Moisture	%	21	20	31	54	30
PCB-1016 (Aroclor 1016)	12674-11-2 UG/KG	100 U	100 U	100 UJ	100 UJ	100 U
PCB-1221 (Aroclor 1221)	11104-28-2 UG/KG	100 U	100 U	100 UJ	100 UJ	100 U
PCB-1232 (Aroclor 1232)	11141-16-5 UG/KG	100 U	100 U	100 UJ	100 UJ	100 U
PCB-1242 (Aroclor 1242)	53469-21-9 UG/KG	100 U	100 U	100 UJ	100 UJ	100 U
PCB-1248 (Aroclor 1248)	12672-29-6 UG/KG	100 U	100 U	100 UJ	100 UJ	100 U
PCB-1254 (Aroclor 1254)	11097-69-1 UG/KG	100 U	100 U	100 UJ	100 UJ	100 U
PCB-1260 (Aroclor 1260)	11096-82-5 UG/KG	100 U	100 U	100 UJ	100 UJ	100 U
Pesticides Scan						
% Moisture	%	21	20	31	54	30
4,4'-DDD (p,p'-DDD)	72-54-8 UG/KG	10 U	10 U	12 U	18 U	12 U
4,4'-DDE (p,p'-DDE)	72-55-9 UG/KG	4.1 U	4.1 U	4.8 U	7.1 U	4.6 U
4,4'-DDT (p,p'-DDT)	50-29-3 UG/KG	10 U	10 U	12 U	18 U	12 U
Aldrin	309-00-2 UG/KG	4.1 U	4.1 U	4.8 U	9.8 U	6 U
alpha-BHC	319-84-6 UG/KG	4.1 U	4.1 U	4.8 U	7.1 U	4.6 U
alpha-Chlordane /2	5103-71-9 UG/KG	4.1 U	4.1 U	4.8 U	7.1 U	4.6 U
beta-BHC	319-85-7 UG/KG	4.1 U	4.1 U	4.8 U	23 U	8.7 U
Chlordanne /2	3734-48-3 UG/KG	4.1 U	4.1 U	4.8 U	7.1 U	4.6 U
cis-Nonachlor /2	5103-73-1 UG/KG	4.1 U	4.1 U	4.8 U	7.1 U	4.6 U
delta-BHC	319-86-8 UG/KG	4.1 U	4.1 U	8.1 U	12 U	7.6 U
Dieldrin	60-57-1 UG/KG	4.1 U	4.1 U	4.8 U	7.1 U	4.6 U
Endosulfan I (alpha)	959-98-8 UG/KG	4.1 U	4.1 U	5.4 U	8.3 U	5.4 U
Endosulfan II (beta)	33213-65-9 UG/KG	10 U	10 U	12 U	18 U	12 U
Endosulfan Sulfate	1031-07-8 UG/KG	10 U	10 U	12 U	18 U	12 U
Endrin	72-20-8 UG/KG	10 U	10 U	12 U	18 U	12 U
Endrin Ketone	53494-70-5 UG/KG	10 U	10 U	12 U	18 U	15 U
gamma-BHC (Lindane)	58-89-9 UG/KG	4.1 U	4.1 U	4.8 U	7.1 U	4.6 U
gamma-Chlordane /2	5566-34-7 UG/KG	4.1 U	4.1 U	4.8 U	7.1 U	4.6 U
Heptachlor	76-44-8 UG/KG	4.1 U	4.1 U	6.2 U	7.3 U	5 U
Heptachlor Epoxide	1024-57-3 UG/KG	4.1 U	4.1 U	4.8 U	7.1 U	4.6 U
Methoxychlor	72-43-5 UG/KG	23 U	21 U	24 U	36 U	23 U
Toxaphene	8001-35-2 UG/KG	410 U	410 U	480 U	710 U	460 U

Metals Scan		ER1DSD 9/28/2005	ER1SD	PR1SD	PR2SD	WPR1SD	
			9/28/2005	9/28/2005	9/28/2005	9/28/2005	
		1430	1400	1320	1545	1150	
1,1,1-Trichloroethane	71-55-6	UG/KG	1.2 U	1.2 U	5.3 U	3 U	1.7 U
1,1,2,2-Tetrachloroethane	79-34-5	UG/KG	1.2 U	1.2 U	5.3 U	3 U	1.7 U
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)	76-13-1	UG/KG	1.2 U	1.2 U	5.3 U	3 U	1.7 U
1,1,2-Trichloroethane	79-00-5	UG/KG	1.2 U	1.2 U	5.3 U	3 U	1.7 U
1,1-Dichloroethane	75-34-3	UG/KG	1.2 U	1.2 U	5.3 U	3 U	1.7 U
1,1-Dichloroethene (1,1-Dichloroethylene)	75-35-4	UG/KG	1.2 U	1.2 U	5.3 U	3 U	1.7 U
1,1-Dichloropropene	563-58-6	UG/KG	1.2 U	1.2 U	5.3 U	3 U	1.7 U
1,2,3-Trichlorobenzene	87-61-6	UG/KG	2.4 U	2.5 U	10 U	6 U	3.4 U
1,2,3-Trichloropropane	96-18-4	UG/KG	2.4 U	2.5 U	10 U	6 U	3.4 U
1,2,4-Trichlorobenzene	120-82-1	UG/KG	2.4 U	2.5 U	10 U	6 U	3.4 U
1,2,4-Trimethylbenzene	95-63-6	UG/KG	1.2 U	1.2 U	5.3 U	3 U	1.7 U
1,2-Dibromo-3-Chloropropane (DBCP)	96-12-8	UG/KG	5.9 U	6.3 U	26 U	15 U	8.6 U
1,2-Dibromoethane (EDB)	106-93-4	UG/KG	1.2 U	1.2 U	5.3 U	3 U	1.7 U
1,2-Dichlorobenzene	95-50-1	UG/KG	1.2 U	1.2 U	5.3 U	3 U	1.7 U
1,2-Dichloroethane	107-06-2	UG/KG	1.2 U	1.2 U	5.3 U	3 U	1.7 U
1,2-Dichloropropane	78-87-5	UG/KG	1.2 U	1.2 U	5.3 U	3 U	1.7 U
1,3,5-Trimethylbenzene	108-67-8	UG/KG	1.2 U	1.2 U	5.3 U	3 U	1.7 U
1,3-Dichlorobenzene	541-73-1	UG/KG	2.4 U	2.5 U	10 U	6 U	3.4 U
1,3-Dichloropropane	142-28-9	UG/KG	1.2 U	1.2 U	5.3 U	3 U	1.7 U
1,4-Dichlorobenzene	106-46-7	UG/KG	2.4 U	2.5 U	10 U	6 U	3.4 U
2,2-Dichloropropane	590-20-7	UG/KG	1.2 U	1.2 U	5.3 U	3 U	1.7 U
Acetone	67-64-1	UG/KG	12 U	12 U	70 U	30 U	17 U
Benzene	71-43-2	UG/KG	1.2 U	1.2 U	5.3 U	0.18 J	1.7 U
Bromobenzene	108-86-1	UG/KG	1.2 U	1.2 U	5.3 U	3 U	1.7 U
Bromochloromethane	74-97-5	UG/KG	1.2 U	1.2 U	5.3 U	3 U	1.7 U
Bromodichloromethane	75-27-4	UG/KG	1.2 U	1.2 U	5.3 U	3 U	1.7 U
Bromoform	75-25-2	UG/KG	5.9 U	6.3 U	26 U	15 U	8.6 U
Bromomethane	74-83-9	UG/KG	1.2 U	1.2 U	5.3 U	3 U	1.7 UJ
Carbon Disulfide	75-15-0	UG/KG	1.2 U	1.2 U	4.4 J	1.4 J	1.7 UJ
Carbon Tetrachloride	56-23-5	UG/KG	1.2 U	1.2 U	5.3 U	3 U	1.7 U
Chlorobenzene	108-90-7	UG/KG	1.2 U	1.2 U	5.3 U	3 U	1.7 U
Chloroethane	75-00-3	UG/KG	1.2 U	1.2 U	5.3 U	3 U	1.7 U
Chloroform	67-66-3	UG/KG	1.2 U	1.2 U	5.3 U	3 U	1.7 U
Chloromethane	74-87-3	UG/KG	1.2 U	1.2 U	5.3 U	3 U	1.7 U
cis-1,2-Dichloroethene	156-59-2	UG/KG	1.2 U	1.2 U	5.3 U	3 U	1.7 U
cis-1,3-Dichloropropene	10061-01-5	UG/KG	1.2 U	1.2 U	5.3 U	3 U	1.7 U
Cyclohexane	110-82-7	UG/KG	1.2 U	1.2 U	5.3 U	3 U	1.7 U
Dibromochloromethane	124-48-1	UG/KG	1.2 U	1.2 U	5.3 U	3 U	1.7 U
Dibromomethane	74-95-3	UG/KG	1.2 U	1.2 U	5.3 U	3 U	1.7 U
Dichlorodifluoromethane	75-71-8	UG/KG	1.2 U	1.2 U	5.3 U	3 U	1.7 UJ
Ethyl Benzene	100-41-4	UG/KG	1.2 U	1.2 U	5.3 U	3 U	1.7 U
Hexachloro-1,3-Butadiene	87-68-3	UG/KG	1.2 U	1.2 U	5.3 U	3 U	1.7 U
Isopropylbenzene	98-82-8	UG/KG	1.2 U	1.2 U	5.3 U	3 U	1.7 U
Methyl Acetate	79-20-9	UG/KG	1.2 U	1.2 U	5.3 U	3 U	1.7 UJ
Methyl Butyl Ketone	591-78-6	UG/KG	1.2 U	1.2 U	5.3 U	3 U	1.7 U
Methyl Ethyl Ketone	78-93-3	UG/KG	2.4 U	2.5 U	21 U	6 U	3.8 UJ
Methyl Isobutyl Ketone	108-10-1	UG/KG	1.2 U	1.2 U	5.3 U	3 U	1.7 U
Methyl T-Butyl Ether (MTBE)	1634-04-4	UG/KG	1.2 U	1.2 U	5.3 U	3 U	1.7 U
Methylcyclohexane	108-87-2	UG/KG	1.2 U	1.2 U	5.3 U	3 U	1.7 U
Methylene Chloride	75-09-2	UG/KG	1.2 U	1.2 U	5.3 U	3 U	1.7 U
n-Butylbenzene	104-51-8	UG/KG	2.4 U	2.5 U	10 U	6 U	3.4 U
n-Propylbenzene	103-65-1	UG/KG	1.2 U	1.2 U	5.3 U	3 U	1.7 U
o-Chlorotoluene	95-49-8	UG/KG	1.2 U	1.2 U	5.3 U	3 U	1.7 U
o-Xylene	95-47-6	UG/KG	1.2 U	1.2 U	5.3 U	3 U	1.7 U
p-Chlorotoluene	106-43-4	UG/KG	2.4 U	2.5 U	10 U	6 U	3.4 U
p-Isopropyltoluene	99-87-6	UG/KG	1.2 U	1.2 U	5.3 U	3 U	1.7 U
sec-Butylbenzene	135-98-8	UG/KG	1.2 U	1.2 U	5.3 U	3 U	1.7 U
Styrene	100-42-5	UG/KG	1.2 U	1.2 U	5.3 U	3 U	1.7 U
tert-Butylbenzene	98-06-6	UG/KG	1.2 U	1.2 U	5.3 U	3 U	1.7 U
Tetrachloroethene (Tetrachloroethylene)	127-18-4	UG/KG	1.2 U	1.2 U	5.3 U	3 U	1.7 U
Toluene	108-88-3	UG/KG	1.2 U	1.2 U	5.3 U	3 U	1.7 U
trans-1,2-Dichloroethene	156-60-5	UG/KG	5.9 U	6.3 U	26 U	15 U	8.6 U
trans-1,3-Dichloropropene	10061-02-6	UG/KG	1.2 U	1.2 U	5.3 U	3 U	1.7 U
Trichloroethene (Trichloroethylene)	79-01-6	UG/KG	1.2 U	1.2 U	5.3 U	3 U	1.7 U

Metals Scan		ER1DSD	ER1SD	PR1SD	PR2SD	WPR1SD	
		9/28/2005	9/28/2005	9/28/2005	9/28/2005	9/28/2005	
1,1-Biphenyl	92-52-4	UG/KG	400 U	410 U	440 U	710 U	450 U
1,2,4-Trichlorobenzene	120-82-1	UG/KG	400 U	410 U	440 U	710 U	450 U
2,3,4,6-Tetrachlorophenol	58-90-2	UG/KG	400 U	410 U	440 U	710 U	450 U
2,4,5-Trichlorophenol	95-95-4	UG/KG	400 U	410 U	440 U	710 U	450 U
2,4,6-Trichlorophenol	88-06-2	UG/KG	400 U	410 U	440 U	710 U	450 U
2,4-Dichlorophenol	120-83-2	UG/KG	400 U	410 U	440 U	710 U	450 U
2,4-Dimethylphenol	105-67-9	UG/KG	400 U	410 U	440 U	710 U	450 U
2,4-Dinitrophenol	51-28-5	UG/KG	790 UJ	820 UJ	890 UJ	1400 UJ	900 UJ
2,4-Dinitrotoluene	121-14-2	UG/KG	400 U	410 U	440 U	710 U	450 U
2,6-Dinitrotoluene	606-20-2	UG/KG	400 U	410 U	440 U	710 U	450 U
2-Chloronaphthalene	91-58-7	UG/KG	400 U	410 U	440 U	710 U	450 U
2-Chlorophenol	95-57-8	UG/KG	400 U	410 U	440 U	710 U	450 U
2-Methyl-4,6-Dinitrophenol	534-52-1	UG/KG	790 U	820 U	890 U	1400 UJ	900 U
2-Methylnaphthalene	91-57-6	UG/KG	400 U	410 U	440 U	710 U	450 U
2-Methylphenol	95-48-7	UG/KG	400 U	410 U	440 U	710 U	450 U
2-Nitroaniline	88-74-4	UG/KG	400 U	410 U	440 U	710 U	450 U
2-Nitrophenol	88-75-5	UG/KG	400 U	410 U	440 U	710 UJ	450 U
3,3'-Dichlorobenzidine	91-94-1	UG/KG	400 U	410 U	440 U	710 U	450 U
3-Nitroaniline	99-09-2	UG/KG	400 U	410 U	440 U	710 U	450 U
4-Bromophenyl Phenyl Ether	101-55-3	UG/KG	400 U	410 U	440 U	710 U	450 U
4-Chloro-3-Methylphenol	59-50-7	UG/KG	400 U	410 U	440 U	710 U	450 U
4-Chloroaniline	106-47-8	UG/KG	400 U	410 U	440 U	710 U	450 U
4-Chlorophenyl Phenyl Ether	7005-72-3	UG/KG	400 U	410 U	440 U	710 U	450 U
4-Nitroaniline	100-01-6	UG/KG	400 U	410 U	440 U	710 U	450 U
4-Nitrophenol	100-02-7	UG/KG	790 U	820 U	890 U	1400 U	900 U
Acenaphthene	83-32-9	UG/KG	400 U	410 U	440 U	710 U	450 U
Acenaphthylene	208-96-8	UG/KG	400 U	410 U	440 U	710 U	450 U
Acetophenone	98-86-2	UG/KG	400 U	410 U	440 U	710 U	450 U
Anthracene	120-12-7	UG/KG	400 U	410 U	440 U	710 U	450 U
Atrazine	1912-24-9	UG/KG	400 UJ	410 UJ	440 UJ	710 UJ	450 UJ
Benzaldehyde	100-52-7	UG/KG	400 U	410 U	440 U	710 U	450 U
Benzo(a)Anthracene	56-55-3	UG/KG	400 U	410 U	440 U	710 U	450 U
Benzo(b)Fluoranthene	205-99-2	UG/KG	400 U	410 U	440 U	710 U	450 U
Benzo(ghi)Perylene	191-24-2	UG/KG	400 U	410 U	440 U	710 U	450 U
Benzo(k)Fluoranthene	207-08-9	UG/KG	400 U	410 U	440 U	710 U	450 U
Benzo-a-Pyrene	50-32-8	UG/KG	400 U	410 U	440 U	710 U	450 U
Benzyl Butyl Phthalate	85-68-7	UG/KG	400 U	410 U	440 U	710 U	450 U
bis(2-Chloroethoxy)Methane	111-91-1	UG/KG	400 U	410 U	440 U	710 U	450 U
bis(2-Chloroethyl) Ether	111-44-4	UG/KG	400 U	410 U	440 U	710 U	450 U
bis(2-Chloroisopropyl) Ether	108-60-1	UG/KG	400 U	410 U	440 U	710 U	450 U
bis(2-Ethylhexyl) Phthalate	117-81-7	UG/KG	400 U	410 U	440 U	710 U	450 U
Caprolactam	105-60-2	UG/KG	400 U	410 U	440 U	710 U	450 U
Carbazole	86-74-8	UG/KG	400 UJ	410 UJ	440 UJ	710 UJ	450 UJ
Chrysene	218-01-9	UG/KG	400 U	410 U	440 U	710 U	450 U
Dibenzo(a,h)Anthracene	53-70-3	UG/KG	400 U	410 U	440 U	710 U	450 U
Dibenzofuran	132-64-9	UG/KG	400 U	410 U	440 U	710 U	450 U
Diethyl Phthalate	84-66-2	UG/KG	400 U	410 U	440 U	710 U	450 U
Dimethyl Phthalate	131-11-3	UG/KG	400 UJ	410 UJ	440 UJ	710 UJ	450 UJ
Di-n-Butylphthalate	84-74-2	UG/KG	400 U	410 U	440 U	710 U	450 U
Di-n-Octylphthalate	117-84-0	UG/KG	400 U	410 U	440 U	710 U	450 U
Fluoranthene	206-44-0	UG/KG	400 U	410 U	440 U	710 U	450 U
Fluorene	86-73-7	UG/KG	400 U	410 U	440 U	710 U	450 U
Hexachlorobenzene (HCB)	118-74-1	UG/KG	400 U	410 U	440 U	710 U	450 U
Hexachlorobutadiene	87-68-3	UG/KG	400 U	410 U	440 U	710 U	450 U
Hexachlorocyclopentadiene (HCCP)	77-47-4	UG/KG	400 U	410 U	440 U	710 UJ	450 U
Hexachloroethane	67-72-1	UG/KG	400 U	410 U	440 U	710 U	450 U
Indeno (1,2,3-cd) Pyrene	193-39-5	UG/KG	400 U	410 U	440 U	710 U	450 U
Isophorone	78-59-1	UG/KG	400 U	410 U	440 U	710 U	450 U
Naphthalene	91-20-3	UG/KG	400 U	410 U	440 U	710 U	450 U
Nitrobenzene	98-95-3	UG/KG	400 U	410 U	440 U	710 U	450 U
n-Nitroso di-n-Propylamine	621-64-7	UG/KG	400 U	410 U	440 U	710 U	450 U
n-Nitrosodiphenylamine/Diphenylamine	122-39-4	UG/KG	400 U	410 U	440 U	710 U	450 U
Pentachlorophenol	87-86-5	UG/KG	790 U	820 U	890 U	1400 U	900 U
Phenanthrene	85-01-8	UG/KG	400 U	410 U	440 U	710 U	450 U

Pascagoula Sediment All Data

<b>Metals Scan</b>		ER1DSD	ER1SD	PR1SD	PR2SD	WPR1SD
		9/28/2005	9/28/2005	9/28/2005	9/28/2005	9/28/2005
Total Kjeldahl Nitrogen		1430	1400	1320	1545	1150
Total Organic Carbon		MG/KG	57	2200	1200	430
Total Phosphorus	7723-14-0	MG/KG	8700 U	8600 U	39000 U	15000
			26 U	26 U	330	180
						86

Data Qualifiers

U-Analyte not detected at or above reporting limit. The number is the minimum quantitation limit.

J-Identification of analyte is acceptable; reported value is an estimate.

UJ-Analyte not detected at or above reporting limit. Reporting limit is an estimate.

N-Presumptive evidence analyte is present; analyte reported as tentative identification.

NJ-Presumptive evidence analyte is present; analyte reported as tentative identification. Reported value is an estimate.

K-Identification of analyte is acceptable; reported value may be biased high. Actual value expected to be less than the reported value.

L-Identification of analyte is acceptable; reported value may be biased low. Actual value expected to be greater than reported value.

NA-Not Analyzed. | NAI-Not Analyzed due to Interferences. | A-Analyte analyzed in replicate. Reported value is 'average' of replicates.

R-Presence or absence of analyte can not be determined from data due to severe quality control problems. Data are rejected and considered unusable.

C-confirmed by GCMS | /1-when no value is reported, see chlordane constituents | /2-constituents or metabolites of technical chlordane

NR-Not Reported

<b>Metals Scan</b>		BBB3DSD		BBB3SD	BBB6SD
		9/29/2005	1005	9/29/2005	9/29/2005
% Moisture	%	69	66	62	
Aluminum	7429-90-5	MG/KG	7000	7800	5800 A
Antimony	7440-36-0	MG/KG	0.25 U	0.25 U	0.25 UJ
Arsenic	7440-38-2	MG/KG	5.2	5.5	4.7 A
Barium	7440-39-3	MG/KG	14	16	22 A
Beryllium	7440-41-7	MG/KG	0.99	1.1	0.57 A
Cadmium	7440-43-9	MG/KG	0.42	0.46	0.31 A
Calcium	7440-70-2	MG/KG	1400	1400	1700 A
Chromium	7440-47-3	MG/KG	12	12	11 A
Cobalt	7440-48-4	MG/KG	5.9	6	3.4 A
Copper	7440-50-8	MG/KG	14 J	15 J	13 AJ
Iron	7439-89-6	MG/KG	14000 J	15000 J	12000 AJ
Lead	7439-92-1	MG/KG	18	20	16 A
Magnesium	7439-95-4	MG/KG	3200	3200	2200 A
Manganese	7439-96-5	MG/KG	140	140	93 A
Molybdenum	7439-98-7	MG/KG	0.5 U	0.61	0.72 A
Nickel	7440-02-0	MG/KG	5.9 J	6.2 J	4 UJ
Potassium	7440-09-7	MG/KG	1200	1300	840 A
Selenium	7782-49-2	MG/KG	1	1.2	0.57 A
Silver	7440-22-4	MG/KG	0.5 U	0.5 U	0.5 U
Sodium	7440-23-5	MG/KG	6800	6000	5600 A
Strontium	7440-24-6	MG/KG	27	28	24 A
Thallium	7440-28-0	MG/KG	0.25 U	0.25 U	0.25 U
Tin	7440-31-5	MG/KG	NA	NA	NA
Titanium	7440-32-6	MG/KG	12	11	9 AJ
Total Mercury	7439-97-6	MG/KG	0.069	0.07 A	0.045 U
Vanadium	7440-62-2	MG/KG	16	17	16 A
Yttrium	7440-65-5	MG/KG	12	13	7.2 A
Zinc	7440-66-6	MG/KG	63	66	82 A
<b>PCB Scan</b>					
% Moisture	%	70	68	63	
PCB-1016 (Aroclor 1016)	12674-11-2	UG/KG	100 UJ	100 UJ	100 UJ
PCB-1221 (Aroclor 1221)	11104-28-2	UG/KG	100 UJ	100 UJ	100 UJ
PCB-1232 (Aroclor 1232)	11141-16-5	UG/KG	100 UJ	100 UJ	100 UJ
PCB-1242 (Aroclor 1242)	53469-21-9	UG/KG	100 UJ	100 UJ	100 UJ
PCB-1248 (Aroclor 1248)	12672-29-6	UG/KG	100 UJ	100 UJ	100 UJ
PCB-1254 (Aroclor 1254)	11097-69-1	UG/KG	100 UJ	100 UJ	100 UJ
PCB-1260 (Aroclor 1260)	11096-82-5	UG/KG	100 UJ	100 UJ	100 UJ
<b>Pesticides Scan</b>					
% Moisture	%	70	68	63	
4,4'-DDD (p,p'-DDD)	72-54-8	UG/KG	28 U	26 UJ	20 UJ
4,4'-DDE (p,p'-DDE)	72-55-9	UG/KG	11 U	10 UJ	7.9 UJ
4,4'-DDT (p,p'-DDT)	50-29-3	UG/KG	40 U	37 UJ	20 UJ
Aldrin	309-00-2	UG/KG	15 U	14 UJ	10 UJ
alpha-BHC	319-84-6	UG/KG	11 U	10 UJ	7.9 UJ
alpha-Chlordane /2	5103-71-9	UG/KG	11 U	10 UJ	7.9 UJ
beta-BHC	319-85-7	UG/KG	11 U	26 UJ	24 UJ
Chlordene /2	3734-48-3	UG/KG	11 U	10 UJ	7.9 UJ
cis-Nonachlor /2	5103-73-1	UG/KG	11 U	10 UJ	7.9 UJ
delta-BHC	319-86-8	UG/KG	20 U	18 UJ	13 UJ
Dieldrin	60-57-1	UG/KG	12 U	10 UJ	7.9 UJ
Endosulfan I (alpha)	959-98-8	UG/KG	18 U	10 UJ	8.3 UJ
Endosulfan II (beta)	33213-65-9	UG/KG	28 U	26 UJ	20 UJ
Endosulfan Sulfate	1031-07-8	UG/KG	28 U	26 UJ	20 UJ
Endrin	72-20-8	UG/KG	28 U	26 UJ	20 UJ
Endrin Ketone	53494-70-5	UG/KG	28 U	26 UJ	20 UJ
gamma-BHC (Lindane)	58-89-9	UG/KG	11 U	10 UJ	7.9 UJ

Metals Scan	BBB3DSD	BBB3SD	BBB6SD
	9/29/2005	9/29/2005	9/29/2005
1005	945	1120	
<b>Volatiles Scan</b>			
% Moisture	%	69	66
(m- and/or p-)Xylene	UG/KG	14 U	8.7 U
1,1,1,2-Tetrachloroethane	630-20-6	UG/KG	6.8 U
1,1,1-Trichloroethane	71-55-6	UG/KG	6.8 U
1,1,2-Tetrachloroethane	79-34-5	UG/KG	6.8 U
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)	76-13-1	UG/KG	6.8 U
1,1,2-Trichloroethane	79-00-5	UG/KG	6.8 U
1,1-Dichloroethane	75-34-3	UG/KG	6.8 U
1,1-Dichloroethene (1,1-Dichloroethylene)	75-35-4	UG/KG	6.8 U
1,1-Dichloropropene	563-58-6	UG/KG	6.8 U
1,2,3-Trichlorobenzene	87-61-6	UG/KG	14 U
1,2,3-Trichloropropane	96-18-4	UG/KG	14 U
1,2,4-Trichlorobenzene	120-82-1	UG/KG	14 U
1,2,4-Trimethylbenzene	95-63-6	UG/KG	6.8 U
1,2-Dibromo-3-Chloropropane (DBCP)	96-12-8	UG/KG	34 U
1,2-Dibromoethane (EDB)	106-93-4	UG/KG	6.8 U
1,2-Dichlorobenzene	95-50-1	UG/KG	6.8 U
1,2-Dichloroethane	107-06-2	UG/KG	6.8 U
1,2-Dichloropropane	78-87-5	UG/KG	6.8 U
1,3,5-Trimethylbenzene	108-67-8	UG/KG	6.8 U
1,3-Dichlorobenzene	541-73-1	UG/KG	14 U
1,3-Dichloropropane	142-28-9	UG/KG	6.8 U
1,4-Dichlorobenzene	106-46-7	UG/KG	14 U
2,2-Dichloropropane	590-20-7	UG/KG	6.8 U
Acetone	67-64-1	UG/KG	68 U
Benzene	71-43-2	UG/KG	6.8 U
Bromobenzene	108-86-1	UG/KG	6.8 U
Bromochloromethane	74-97-5	UG/KG	6.8 U
Bromodichloromethane	75-27-4	UG/KG	6.8 U
Bromoform	75-25-2	UG/KG	34 U
Bromomethane	74-83-9	UG/KG	6.8 UJ
Carbon Disulfide	75-15-0	UG/KG	6.8 U
Carbon Tetrachloride	56-23-5	UG/KG	6.8 U
Chlorobenzene	108-90-7	UG/KG	6.8 U
Chloroethane	75-00-3	UG/KG	6.8 U
Chloroform	67-66-3	UG/KG	6.8 U
Chloromethane	74-87-3	UG/KG	6.8 U
cis-1,2-Dichloroethene	156-59-2	UG/KG	6.8 U
cis-1,3-Dichloropropene	10061-01-5	UG/KG	6.8 U
Cyclohexane	110-82-7	UG/KG	6.8 U
Dibromochloromethane	124-48-1	UG/KG	6.8 U
Dibromomethane	74-95-3	UG/KG	6.8 U
Dichlorodifluoromethane	75-71-8	UG/KG	6.8 UJ
Ethyl Benzene	100-41-4	UG/KG	6.8 U
Hexachloro-1,3-Butadiene	87-68-3	UG/KG	6.8 U
Isopropylbenzene	98-82-8	UG/KG	6.8 U
Methyl Acetate	79-20-9	UG/KG	6.8 UJ
Methyl Butyl Ketone	591-78-6	UG/KG	6.8 U
Methyl Ethyl Ketone	78-93-3	UG/KG	11 J
Methyl Isobutyl Ketone	108-10-1	UG/KG	6.8 U
Methyl T-Butyl Ether (MTBE)	1634-04-4	UG/KG	6.8 U
Methylcyclohexane	108-87-2	UG/KG	6.8 U
Methylene Chloride	75-09-2	UG/KG	6.8 U
n-Butylbenzene	104-51-8	UG/KG	14 U
n-Propylbenzene	103-65-1	UG/KG	6.8 U
o-Chlorotoluene	95-49-8	UG/KG	6.8 U
o-Xylene	95-47-6	UG/KG	6.8 U
			0.39 J

<b>Metals Scan</b>		UG/KG	<b>BBB3DSD</b>	<b>BBB3SD</b>	<b>BBB6SD</b>
			9/29/2005	9/29/2005	9/29/2005
			1005	945	1120
Toluene	108-88-3	UG/KG	6.8 U	4.3 U	4.3 U
trans-1,2-Dichloroethene	156-60-5	UG/KG	34 U	22 U	22 U
trans-1,3-Dichloropropene	10061-02-6	UG/KG	6.8 U	4.3 U	4.3 U
Trichloroethene (Trichloroethylene)	79-01-6	UG/KG	6.8 U	4.3 U	4.3 U
Trichlorofluoromethane (Freon 11)	75-69-4	UG/KG	6.8 U	4.3 U	4.3 U
Vinyl Chloride	75-01-4	UG/KG	6.8 U	4.3 U	4.3 U
<b>Extractables Scan</b>					
% Moisture		%	70	68.22	62.62
(3-and/or 4-)Methylphenol		UG/KG	1100 U	1000 U	850 U
1,1-Biphenyl	92-52-4	UG/KG	1100 U	1000 U	850 U
1,2,4-Trichlorobenzene	120-82-1	UG/KG	1100 U	1000 U	850 U
2,3,4,6-Tetrachlorophenol	58-90-2	UG/KG	1100 U	1000 U	850 U
2,4,5-Trichlorophenol	95-95-4	UG/KG	1100 U	1000 U	850 U
2,4,6-Trichlorophenol	88-06-2	UG/KG	1100 U	1000 U	850 U
2,4-Dichlorophenol	120-83-2	UG/KG	1100 U	1000 U	850 U
2,4-Dimethylphenol	105-67-9	UG/KG	1100 U	1000 U	850 U
2,4-Dinitrophenol	51-28-5	UG/KG	2200 UJ	2000 UJ	1700 UJ
2,4-Dinitrotoluene	121-14-2	UG/KG	1100 U	1000 U	850 U
2,6-Dinitrotoluene	606-20-2	UG/KG	1100 U	1000 U	850 U
2-Chloronaphthalene	91-58-7	UG/KG	1100 U	1000 U	850 U
2-Chlorophenol	95-57-8	UG/KG	1100 U	1000 U	850 U
2-Methyl-4,6-Dinitrophenol	534-52-1	UG/KG	2200 U	2000 U	1700 U
2-Methylnaphthalene	91-57-6	UG/KG	1100 U	1000 U	850 U
2-Methylphenol	95-48-7	UG/KG	1100 U	1000 U	850 U
2-Nitroaniline	88-74-4	UG/KG	1100 U	1000 U	850 U
2-Nitrophenol	88-75-5	UG/KG	1100 U	1000 U	850 U
3,3'-Dichlorobenzidine	91-94-1	UG/KG	1100 U	1000 U	850 U
3-Nitroaniline	99-09-2	UG/KG	1100 U	1000 U	850 U
4-Bromophenyl Phenyl Ether	101-55-3	UG/KG	1100 U	1000 U	850 U
4-Chloro-3-Methylphenol	59-50-7	UG/KG	1100 U	1000 U	850 U
4-Chloroaniline	106-47-8	UG/KG	1100 U	1000 U	850 U
4-Chlorophenyl Phenyl Ether	7005-72-3	UG/KG	1100 U	1000 U	850 U
4-Nitroaniline	100-01-6	UG/KG	1100 U	1000 U	850 U
4-Nitrophenol	100-02-7	UG/KG	2200 U	2000 U	1700 U
Acenaphthene	83-32-9	UG/KG	1100 U	1000 U	850 U
Acenaphthylene	208-96-8	UG/KG	1100 U	1000 U	850 U
Acetophenone	98-86-2	UG/KG	1100 U	1000 U	850 U
Anthracene	120-12-7	UG/KG	1100 U	1000 U	850 U
Atrazine	1912-24-9	UG/KG	1100 UJ	1000 UJ	850 UJ
Benzaldehyde	100-52-7	UG/KG	1100 U	1000 U	850 U
Benzo(a)Anthracene	56-55-3	UG/KG	1100 U	1000 U	850 U
Benzo(b)Fluoranthene	205-99-2	UG/KG	1100 U	1000 U	850 U
Benzo(ghi)Perylene	191-24-2	UG/KG	1100 U	1000 U	850 U
Benzo(k)Fluoranthene	207-08-9	UG/KG	1100 U	1000 U	850 U
Benzo-a-Pyrene	50-32-8	UG/KG	1100 U	1000 U	850 U
Benzyl Butyl Phthalate	85-68-7	UG/KG	1100 U	1000 U	850 U
bis(2-Chloroethoxy)Methane	111-91-1	UG/KG	1100 U	1000 U	850 U
bis(2-Chloroethyl) Ether	111-44-4	UG/KG	1100 U	1000 U	850 U
bis(2-Chloroisopropyl) Ether	108-60-1	UG/KG	1100 U	1000 U	850 U
bis(2-Ethylhexyl) Phthalate	117-81-7	UG/KG	1100 U	1000 U	850 U
Caprolactam	105-60-2	UG/KG	1100 U	1000 U	850 U
Carbazole	86-74-8	UG/KG	1100 UJ	1000 UJ	850 UJ
Chrysene	218-01-9	UG/KG	1100 U	1000 U	850 U
Dibenzo(a,h)Anthracene	53-70-3	UG/KG	1100 U	1000 U	850 U
Dibenzofuran	132-64-9	UG/KG	1100 U	1000 U	850 U
Diethyl Phthalate	84-66-2	UG/KG	1100 U	1000 U	850 U
Dimethyl Phthalate	131-11-3	UG/KG	1100 UJ	1000 UJ	850 UJ
Di-n-Butylphthalate	84-74-2	UG/KG	1100 U	1000 U	850 U

<b>Metals Scan</b>		UG/KG	<b>BBB3DSD</b>	<b>BBB3SD</b>	<b>BBB6SD</b>
			9/29/2005	9/29/2005	9/29/2005
Hexachloroethane	67-72-1	UG/KG	1100 U	1000 U	850 U
Indeno (1,2,3-cd) Pyrene	193-39-5	UG/KG	1100 U	1000 U	850 U
Isophorone	78-59-1	UG/KG	1100 U	1000 U	850 U
Naphthalene	91-20-3	UG/KG	1100 U	1000 U	850 U
Nitrobenzene	98-95-3	UG/KG	1100 U	1000 U	850 U
n-Nitroso di-n-Propylamine	621-64-7	UG/KG	1100 U	1000 U	850 U
n-Nitrosodiphenylamine/Diphenylamine	122-39-4	UG/KG	1100 U	1000 U	850 U
Pentachlorophenol	87-86-5	UG/KG	2200 U	2000 U	1700 U
Phenanthrene	85-01-8	UG/KG	1100 U	1000 U	850 U
Phenol	108-95-2	UG/KG	1100 U	1000 U	850 U
Pyrene	129-00-0	UG/KG	1100 U	1000 U	120 J
<b>Classical Nutrients</b>					
Ammonia	7664-41-7	MG/KG	52	77	91
Nitrate-Nitrite Nitrogen		MG/KG	3.1 UJ	2.8 UJ	5.1 UJ
Total Kjeldahl Nitrogen		MG/KG	2300	2400	1700
Total Organic Carbon		MG/KG	26000	28000	20000
Total Phosphorus	7723-14-0	MG/KG	300	330	430

## Data Qualifiers

U-Analyte not detected at or above reporting limit. The number is the minimum quantitation limit.

J-Identification of analyte is acceptable; reported value is an estimate.

UJ-Analyte not detected at or above reporting limit. Reporting limit is an estimate.

N-Presumptive evidence analyte is present; analyte reported as tentative identification.

NJ-Presumptive evidence analyte is present; analyte reported as tentative identification. Reported value is an estimate.

K-Identification of analyte is acceptable; reported value may be biased high. Actual value expected to be less than the reported value.

L-Identification of analyte is acceptable; reported value may be biased low. Actual value expected to be greater than reported value.

NA-Not Analyzed. | NAI-Not Analyzed due to Interferences. | A-Analyte analyzed in replicate. Reported value is 'average' of replicates.

R-Presence or absence of analyte can not be determined from data due to severe quality control problems. Data are rejected and considered unusable.

C-confirmed by GCMS | /1-when no value is reported, see chlordane constituents | /2-constituents or metabolites of technical chlordane

NR-Not Reported

		PEARL1SD 9/29/2005	SLB2SD 9/30/2005	SLB3SD 9/30/2005	SLB6DSD 9/30/2005	SLB6SD 9/30/2005
<b>Metals Scan</b>		1645	1520	1230	1100	1040
% Moisture	%	65	23	52	56	57
Aluminum	7429-90-5 MG/KG	5600	1200 A	4600	6600	6100
Antimony	7440-36-0 MG/KG	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
Arsenic	7440-38-2 MG/KG	3.4	1.5 A	4.4	8.9	9
Barium	7440-39-3 MG/KG	37	6.7 A	18	19	18
Beryllium	7440-41-7 MG/KG	0.86	0.3 U	0.51	0.77	0.72
Cadmium	7440-43-9 MG/KG	0.2	0.12 U	0.17	0.24	0.21
Calcium	7440-70-2 MG/KG	1800	1400 A	2600	4400	1700
Chromium	7440-47-3 MG/KG	10	2 A	6.6	10	9.4
Cobalt	7440-48-4 MG/KG	4.2	1.6 A	4.8	7.7	7.5
Copper	7440-50-8 MG/KG	9.6 J	1.5 A	5.2	6.7	6.2
Iron	7439-89-6 MG/KG	8800 J	3000 A	10000	16000	16000
Lead	7439-92-1 MG/KG	17	3.2 A	9.8	15	14
Magnesium	7439-95-4 MG/KG	3000	700 A	2600	3500	3300
Manganese	7439-96-5 MG/KG	160	78 A	210	260	240
Molybdenum	7439-98-7 MG/KG	0.99	0.5 U	0.5 U	0.5 U	0.5 U
Nickel	7440-02-0 MG/KG	8.3 J	1.5 A	5.4	8	7.6
Potassium	7440-09-7 MG/KG	1000	340 A	1200	1600	1500
Selenium	7782-49-2 MG/KG	0.66	0.5 U	0.5 U	0.5 U	0.5 U
Silver	7440-22-4 MG/KG	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Sodium	7440-23-5 MG/KG	3100	1600 A	5600	5900	5900
Strontium	7440-24-6 MG/KG	31	10 A	26	37	22
Thallium	7440-28-0 MG/KG	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
Tin	7440-31-5 MG/KG	NA	NA	NA	NA	NA
Titanium	7440-32-6 MG/KG	16	12 AJ	17 J	20 J	19 J
Total Mercury	7439-97-6 MG/KG	0.046 U	0.046 U	0.046 U	0.047 U	0.049 U
Vanadium	7440-62-2 MG/KG	17	3.5 A	13	19	18
Yttrium	7440-65-5 MG/KG	14	2.6 A	7.9	11	10
Zinc	7440-66-6 MG/KG	22	9.7 A	32	42	41
<b>PCB Scan</b>						
% Moisture	%	68	23	54	36	58
PCB-1016 (Aroclor 1016)	12674-11-2 UG/KG	100 UJ	100 U	100 UJ	100 UJ	100 UJ
PCB-1221 (Aroclor 1221)	11104-28-2 UG/KG	100 UJ	100 U	100 UJ	100 UJ	100 UJ
PCB-1232 (Aroclor 1232)	11141-16-5 UG/KG	100 UJ	100 U	100 UJ	100 UJ	100 UJ
PCB-1242 (Aroclor 1242)	53469-21-9 UG/KG	100 UJ	100 U	100 UJ	100 UJ	100 UJ
PCB-1248 (Aroclor 1248)	12672-29-6 UG/KG	100 UJ	100 U	100 UJ	100 UJ	100 UJ
PCB-1254 (Aroclor 1254)	11097-69-1 UG/KG	100 UJ	100 U	100 UJ	100 UJ	100 UJ
PCB-1260 (Aroclor 1260)	11096-82-5 UG/KG	100 UJ	100 U	100 UJ	100 UJ	100 UJ
<b>Pesticides Scan</b>						
% Moisture	%	68	23	54	56	58
4,4'-DDD (p,p'-DDD)	72-54-8 UG/KG	24 UJ	9.9 U	18 U	18 U	19 U
4,4'-DDE (p,p'-DDE)	72-55-9 UG/KG	9.7 UJ	4 U	7 U	7.2 U	7.8 U
4,4'-DDT (p,p'-DDT)	50-29-3 UG/KG	34 UJ	9.9 U	18 U	18 U	19 U
Aldrin	309-00-2 UG/KG	9.7 UJ	4 U	7 U	9.3 U	9.7 U
alpha-BHC	319-84-6 UG/KG	9.7 UJ	4 U	7 U	7.2 U	7.8 U
alpha-Chlordane /2	5103-71-9 UG/KG	9.7 UJ	4 U	7 U	7.2 U	7.8 U
beta-BHC	319-85-7 UG/KG	9.7 UJ	4 U	7 U	7.2 U	7.8 U
Chlordene /2	3734-48-3 UG/KG	9.7 UJ	4 U	7 U	7.2 U	7.8 U
cis-Nonachlor /2	5103-73-1 UG/KG	9.7 UJ	4 U	7 U	7.2 U	7.8 U
delta-BHC	319-86-8 UG/KG	14 UJ	6.4 U	11 U	11 U	7.8 U
Dieldrin	60-57-1 UG/KG	9.7 UJ	4 U	7.9 U	7.2 U	7.8 U
Endosulfan I (alpha)	959-98-8 UG/KG	9.7 UJ	4 U	7.9 U	8.2 U	7.8 U
Endosulfan II (beta)	33213-65-9 UG/KG	24 UJ	9.9 U	18 U	18 U	19 U
Endosulfan Sulfate	1031-07-8 UG/KG	24 UJ	9.9 U	18 U	18 U	19 U
Endrin	72-20-8 UG/KG	24 UJ	9.9 U	18 U	18 U	19 U
Endrin Ketone	53494-70-5 UG/KG	24 UJ	9.9 U	18 U	18 U	25 U
gamma-BHC (Lindane)	58-89-9 UG/KG	9.7 UJ	4 U	7 U	7.2 U	7.8 U
gamma-Chlordane /2	5566-34-7 UG/KG	9.7 UJ	4 U	7 U	7.2 U	7.8 U
Heptachlor	76-44-8 UG/KG	10 UJ	4 U	7 U	7.2 U	7.8 U
Heptachlor Epoxide	1024-57-3 UG/KG	9.7 UJ	4 U	7 U	7.2 U	7.8 U
Methoxychlor	72-43-5 UG/KG	49 UJ	20 U	35 U	36 U	39 U
Toxaphene	8001-35-2 UG/KG	970 UJ	400 U	700 U	720 U	780 U
trans-Nonachlor /2	39765-80-5 UG/KG	9.7 UJ	4 U	7 U	7.2 U	7.8 U

## Bay St Louis Sediment All Data

Metals Scan		PEARL1SD	SLB2SD	SLB3SD	SLB6DSD	SLB6SD
		9/29/2005	9/30/2005	9/30/2005	9/30/2005	9/30/2005
1,1,1-Trichloroethane	71-55-6 UG/KG	4.2 U	1.4 U	2.7 U	3.2 U	3.4 U
1,1,2,2-Tetrachloroethane	79-34-5 UG/KG	4.2 U	1.4 U	2.7 U	3.2 U	3.4 U
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)	76-13-1 UG/KG	4.2 U	1.4 U	2.7 U	3.2 U	3.4 U
1,1,2-Trichloroethane	79-00-5 UG/KG	4.2 U	1.4 U	2.7 U	3.2 U	3.4 U
1,1-Dichloroethane	75-34-3 UG/KG	4.2 U	1.4 U	2.7 U	3.2 U	3.4 U
1,1-Dichloroethylene (1,1-Dichloroethylene)	75-35-4 UG/KG	4.2 U	1.4 U	2.7 U	3.2 U	3.4 U
1,1-Dichloropropene	563-58-6 UG/KG	4.2 U	1.4 U	2.7 U	3.2 U	3.4 U
1,2,3-Trichlorobenzene	87-61-6 UG/KG	8.3 U	2.8 U	5.4 U	6.5 U	6.8 U
1,2,3-Trichloropropane	96-18-4 UG/KG	8.3 U	2.8 U	5.4 U	6.5 U	6.8 U
1,2,4-Trichlorobenzene	120-82-1 UG/KG	8.3 U	2.8 U	5.4 U	6.5 U	6.8 U
1,2,4-Trimethylbenzene	95-63-6 UG/KG	4.2 U	1.4 U	2.7 U	3.2 U	3.4 U
1,2-Dibromo-3-Chloropropane (DBCP)	96-12-8 UG/KG	21 U	7 U	14 U	16 U	17 U
1,2-Dibromoethane (EDB)	106-93-4 UG/KG	4.2 U	1.4 U	2.7 U	3.2 U	3.4 U
1,2-Dichlorobenzene	95-50-1 UG/KG	4.2 U	1.4 U	2.7 U	3.2 U	3.4 U
1,2-Dichloroethane	107-06-2 UG/KG	4.2 U	1.4 U	2.7 U	3.2 U	3.4 U
1,2-Dichloropropene	78-87-5 UG/KG	4.2 U	1.4 U	2.7 U	3.2 U	3.4 U
1,3,5-Trimethylbenzene	108-67-8 UG/KG	0.25 J	1.4 U	2.7 U	3.2 U	3.4 U
1,3-Dichlorobenzene	541-73-1 UG/KG	8.3 U	2.8 U	5.4 U	6.5 U	6.8 U
1,3-Dichloropropane	142-28-9 UG/KG	4.2 U	1.4 U	2.7 U	3.2 U	3.4 U
1,4-Dichlorobenzene	106-46-7 UG/KG	8.3 U	2.8 U	5.4 U	6.5 U	6.8 U
2,2-Dichloropropane	590-20-7 UG/KG	4.2 U	1.4 U	2.7 U	3.2 U	3.4 U
Acetone	67-64-1 UG/KG	42 U	14 U	27 U	32 U	34 U
Benzene	71-43-2 UG/KG	4.2 U	1.4 U	2.7 U	3.2 U	3.4 U
Bromobenzene	108-86-1 UG/KG	4.2 U	1.4 U	2.7 U	3.2 U	3.4 U
Bromochloromethane	74-97-5 UG/KG	4.2 U	1.4 U	2.7 U	3.2 U	3.4 U
Bromodichloromethane	75-27-4 UG/KG	4.2 U	1.4 U	2.7 U	3.2 U	3.4 U
Bromform	75-25-2 UG/KG	21 U	7 U	14 U	16 U	17 U
Bromomethane	74-83-9 UG/KG	4.2 UJ	1.4 UJ	2.7 UJ	3.2 UJ	3.4 UJ
Carbon Disulfide	75-15-0 UG/KG	5 UJ	1.4 UJ	2.7 UJ	3.2 UJ	3.4 UJ
Carbon Tetrachloride	56-23-5 UG/KG	4.2 U	1.4 U	2.7 U	3.2 U	3.4 U
Chlorobenzene	108-90-7 UG/KG	4.2 U	1.4 U	2.7 U	3.2 U	3.4 U
Chloroethane	75-00-3 UG/KG	4.2 U	1.4 U	2.7 U	3.2 U	3.4 U
Chloroform	67-66-3 UG/KG	4.2 U	1.4 U	2.7 U	3.2 U	3.4 U
Chlormethane	74-87-3 UG/KG	4.2 U	1.4 UJ	2.7 U	3.2 U	3.4 U
cis-1,2-Dichloroethene	156-59-2 UG/KG	4.2 U	1.4 U	2.7 U	3.2 U	3.4 U
cis-1,3-Dichloropropene	10061-01-5 UG/KG	4.2 U	1.4 U	2.7 U	3.2 U	3.4 U
Cyclohexane	110-82-7 UG/KG	4.2 U	1.4 U	2.7 U	3.2 U	3.4 U
Dibromochloromethane	124-48-1 UG/KG	4.2 U	1.4 U	2.7 U	3.2 U	3.4 U
Dibromomethane	74-95-3 UG/KG	4.2 U	1.4 U	2.7 U	3.2 U	3.4 U
Dichlorodifluoromethane	75-71-8 UG/KG	4.2 UJ	1.4 UJ	2.7 UJ	3.2 UJ	3.4 UJ
Ethyl Benzene	100-41-4 UG/KG	4.2 U	1.4 U	2.7 U	3.2 U	3.4 U
Hexachloro-1,3-Butadiene	87-68-3 UG/KG	4.2 U	1.4 U	2.7 U	3.2 U	3.4 U
Isopropylbenzene	98-82-8 UG/KG	4.2 U	1.4 U	2.7 U	3.2 U	3.4 U
Methyl Acetate	79-20-9 UG/KG	4.2 UJ	1.4 UJ	2.7 UJ	3.2 UJ	3.4 UJ
Methyl Butyl Ketone	591-78-6 UG/KG	4.2 U	1.4 U	2.7 U	3.2 U	3.4 U
Methyl Ethyl Ketone	78-93-3 UG/KG	8.3 UJ	2.8 UJ	5.4 UJ	6.5 UJ	6.8 UJ
Methyl Isobutyl Ketone	108-10-1 UG/KG	4.2 U	1.4 U	2.7 U	3.2 U	3.4 U
Methyl T-Butyl Ether (MTBE)	1634-04-4 UG/KG	4.2 U	1.4 U	2.7 U	3.2 U	3.4 U
Methylcyclohexane	108-87-2 UG/KG	4.2 U	1.4 U	2.7 U	3.2 U	3.4 U
Methylene Chloride	75-09-2 UG/KG	4.2 U	1.4 U	2.7 U	3.2 U	3.4 U
n-Butylbenzene	104-51-8 UG/KG	8.3 U	2.8 U	5.4 U	6.5 U	6.8 U
n-Propylbenzene	103-65-1 UG/KG	4.2 U	1.4 U	2.7 U	3.2 U	3.4 U
o-Chlorotoluene	95-49-8 UG/KG	4.2 U	1.4 U	2.7 U	3.2 U	3.4 U
o-Xylene	95-47-6 UG/KG	0.21 J	1.4 U	2.7 U	3.2 U	3.4 U
p-Chlorotoluene	106-43-4 UG/KG	8.3 U	2.8 U	5.4 U	6.5 U	6.8 U
p-Isopropyltoluene	99-87-6 UG/KG	3.4 J	1.4 U	2.7 U	3.2 U	3.4 U
sec-Butylbenzene	135-98-8 UG/KG	4.2 U	1.4 U	2.7 U	3.2 U	3.4 U
Styrene	100-42-5 UG/KG	4.2 U	1.4 U	2.7 U	3.2 U	3.4 U
tert-Butylbenzene	98-06-6 UG/KG	4.2 U	1.4 U	2.7 U	3.2 U	3.4 U
Tetrachloroethene (Tetrachloroethylene)	127-18-4 UG/KG	4.2 U	1.4 U	2.7 U	3.2 U	3.4 U
Toluene	108-88-3 UG/KG	4.2 U	1.4 U	2.7 U	3.2 U	3.4 U
trans-1,2-Dichloroethene	156-60-5 UG/KG	21 U	7 U	14 U	16 U	17 U
trans-1,3-Dichloropropene	10061-02-6 UG/KG	4.2 U	1.4 U	2.7 U	3.2 U	3.4 U
Trichloroethylene (Trichloroethylene)	79-01-6 UG/KG	4.2 U	1.4 U	2.7 U	3.2 U	3.4 U
Trichlorofluoromethane (Freon 11)	75-69-4 UG/KG	4.2 U	1.4 U	2.7 U	3.2 U	3.4 U

Metals Scan	PEARL1SD		SLB2SD	SLB3SD	SLB6DSD	SLB6SD	
		9/29/2005	9/30/2005	9/30/2005	9/30/2005	9/30/2005	
1,1-Biphenyl	92-52-4	UG/KG	980 U	430 U	700 U	740 U	740 U
1,2,4-Trichlorobenzene	120-82-1	UG/KG	980 U	430 U	700 U	740 U	740 U
2,3,4,6-Tetrachlorophenol	58-90-2	UG/KG	980 U	430 U	700 U	740 U	740 U
2,4,5-Trichlorophenol	95-95-4	UG/KG	980 U	430 U	700 U	740 U	740 U
2,4,6-Trichlorophenol	88-06-2	UG/KG	980 U	430 U	700 U	740 U	740 U
2,4-Dichlorophenol	120-83-2	UG/KG	980 U	430 U	700 U	740 U	740 U
2,4-Dimethylphenol	105-67-9	UG/KG	980 U	430 U	700 U	740 U	740 U
2,4-Dinitrophenol	51-28-5	UG/KG	2000 UJ	860 UJ	1400 UJ	1500 UJ	1500 UJ
2,4-Dinitrotoluene	121-14-2	UG/KG	980 U	430 U	700 U	740 U	740 U
2,6-Dinitrotoluene	606-20-2	UG/KG	980 U	430 U	700 U	740 U	740 U
2-Chloronaphthalene	91-58-7	UG/KG	980 U	430 U	700 U	740 U	740 U
2-Chlorophenol	95-57-8	UG/KG	980 U	430 U	700 U	740 U	740 U
2-Methyl-4,6-Dinitrophenol	534-52-1	UG/KG	2000 U	860 U	1400 U	1500 U	1500 U
2-Methylnaphthalene	91-57-6	UG/KG	980 U	430 U	700 U	740 U	740 U
2-Methylphenol	95-48-7	UG/KG	980 U	430 U	700 U	740 U	740 U
2-Nitroaniline	88-74-4	UG/KG	980 U	430 U	700 U	740 U	740 U
2-Nitrophenol	88-75-5	UG/KG	980 U	430 U	700 U	740 U	740 U
3,3'-Dichlorobenzidine	91-94-1	UG/KG	980 U	430 U	700 U	740 U	740 U
3-Nitroaniline	99-09-2	UG/KG	980 U	430 U	700 U	740 U	740 U
4-Bromophenyl Phenyl Ether	101-55-3	UG/KG	980 U	430 U	700 U	740 U	740 U
4-Chloro-3-Methylphenol	59-50-7	UG/KG	980 U	430 U	700 U	740 U	740 U
4-Chloroaniline	106-47-8	UG/KG	980 U	430 U	700 U	740 U	740 U
4-Chlorophenyl Phenyl Ether	7005-72-3	UG/KG	980 U	430 U	700 U	740 U	740 U
4-Nitroaniline	100-01-6	UG/KG	980 U	430 U	700 U	740 U	740 U
4-Nitrophenol	100-02-7	UG/KG	2000 U	860 U	1400 U	1500 U	1500 U
Acenaphthene	83-32-9	UG/KG	980 U	430 U	700 U	740 U	740 U
Acenaphthylene	208-96-8	UG/KG	980 U	430 U	700 U	740 U	740 U
Acetophenone	98-86-2	UG/KG	980 U	430 U	700 U	740 U	740 U
Anthracene	120-12-7	UG/KG	980 U	430 U	700 U	740 U	740 U
Atrazine	1912-24-9	UG/KG	980 UJ	430 U	700 U	740 U	740 U
Benzaldehyde	100-52-7	UG/KG	980 U	430 UJ	700 UJ	740 UJ	740 UJ
Benzo(a)Anthracene	56-55-3	UG/KG	980 U	58 J	700 U	740 U	740 U
Benzo(b)Fluoranthene	205-99-2	UG/KG	980 U	130 J	700 U	740 U	740 U
Benzo(ghi)Perylene	191-24-2	UG/KG	980 U	74 J	700 U	740 U	740 U
Benzo(k)Fluoranthene	207-08-9	UG/KG	980 U	120 J	700 U	740 U	740 U
Benzo-a-Pyrene	50-32-8	UG/KG	980 U	130 J	700 U	740 U	740 U
Benzyl Butyl Phthalate	85-68-7	UG/KG	980 U	430 U	700 U	740 U	740 U
bis(2-Chloroethoxy)Methane	111-91-1	UG/KG	980 U	430 U	700 U	740 U	740 U
bis(2-Chloroethyl) Ether	111-44-4	UG/KG	980 U	430 U	700 U	740 U	740 U
bis(2-Chloroisopropyl) Ether	108-60-1	UG/KG	980 U	430 U	700 U	740 U	740 U
bis(2-Ethylhexyl) Phthalate	117-81-7	UG/KG	980 U	430 U	700 U	740 U	740 U
Caprolactam	105-60-2	UG/KG	980 U	430 U	700 U	740 U	740 U
Carbazole	86-74-8	UG/KG	980 UJ	430 U	700 U	740 U	740 U
Chrysene	218-01-9	UG/KG	980 U	82 J	700 U	740 U	740 U
Dibenzo(a,h)Anthracene	53-70-3	UG/KG	980 U	47 J	700 U	740 U	740 U
Dibenzofuran	132-64-9	UG/KG	980 U	430 U	700 U	740 U	740 U
Diethyl Phthalate	84-66-2	UG/KG	980 U	430 U	700 U	740 U	740 U
Dimethyl Phthalate	131-11-3	UG/KG	980 UJ	430 U	700 U	740 U	740 U
Di-n-Butylphthalate	84-74-2	UG/KG	980 U	430 U	700 U	740 U	740 U
Di-n-Octylphthalate	117-84-0	UG/KG	980 U	430 U	700 U	740 U	740 U
Fluoranthene	206-44-0	UG/KG	980 U	98 J	700 U	740 U	740 U
Fluorene	86-73-7	UG/KG	980 U	430 U	700 U	740 U	740 U
Hexachlorobenzene (HCB)	118-74-1	UG/KG	980 U	430 U	700 U	740 U	740 U
Hexachlorobutadiene	87-68-3	UG/KG	980 U	430 U	700 U	740 U	740 U
Hexachlorocyclopentadiene (HCCP)	77-47-4	UG/KG	980 U	430 U	700 U	740 U	740 U
Hexachloroethane	67-72-1	UG/KG	980 U	430 U	700 U	740 U	740 U
Indeno (1,2,3-cd) Pyrene	193-39-5	UG/KG	980 U	84 J	700 U	740 U	740 U
Isophorone	78-59-1	UG/KG	980 U	430 U	700 U	740 U	740 U
Naphthalene	91-20-3	UG/KG	980 U	430 U	700 U	740 U	740 U
Nitrobenzene	98-95-3	UG/KG	980 U	430 U	700 U	740 U	740 U
n-Nitroso di-n-Propylamine	621-64-7	UG/KG	980 U	430 U	700 U	740 U	740 U
n-Nitrosodiphenylamine/Diphenylamine	122-39-4	UG/KG	980 U	430 U	700 U	740 U	740 U
Pentachlorophenol	87-86-5	UG/KG	2000 U	860 U	1400 U	1500 U	1500 U
Phenanthrene	85-01-8	UG/KG	980 U	430 U	700 U	740 U	740 U
Phenol	108-95-2	UG/KG	980 U	430 U	700 U	740 U	740 U

Bay St Louis Sediment All Data

	PEARL1SD 9/29/2005	SLB2SD 9/30/2005	SLB3SD 9/30/2005	SLB6DSD 9/30/2005	SLB6SD 9/30/2005
<b>Metals Scan</b>	1645	1520	1230	1100	1040
Total Kjeldahl Nitrogen	MG/KG	2500	270	940	1300
Total Organic Carbon	MG/KG	58000	9500 U	16000	14000
Total Phosphorus	7723-14-0 MG/KG	100	65	160	170
					160

Data Qualifiers

U-Analyte not detected at or above reporting limit. The number is the minimum quantitation limit.

J-Identification of analyte is acceptable; reported value is an estimate.

UJ-Analyte not detected at or above reporting limit. Reporting limit is an estimate.

N-Presumptive evidence analyte is present; analyte reported as tentative identification.

NJ-Presumptive evidence analyte is present; analyte reported as tentative identification. Reported value is an estimate.

K-Identification of analyte is acceptable; reported value may be biased high. Actual value expected to be less than the reported value.

L-Identification of analyte is acceptable; reported value may be biased low. Actual value expected to be greater than reported value.

NA-Not Analyzed. | NAI-Not Analyzed due to Interferences. | A-Analyte analyzed in replicate. Reported value is 'average' of replicates.

R-Presence or absence of analyte can not be determined from data due to severe quality control problems. Data are rejected and considered unusable.

C-confirmed by GCMS | /1-when no value is reported, see chlordane constituents | /2-constituents or metabolites of technical chlordane

NR-Not Reported

Table 16  
Sediment Dioxin Results  
Pascagoula, Escatawpa, and St. Louis Bays  
September 28&30, 2005

Dioxin Scan		ER1DSD 9/28/2005	ER1SD 9/28/2005	PR1SD 9/28/2005	PR2SD 9/28/2005	SLB2SD 9/30/2005	SLB6SD 9/30/2005
		1430	1400	1320	1545	1520	1040
% Moisture	%	21	19	51	52	23	55
1,2,3,4,6,7,8-Heptachlorodibenzodioxin	35822-46-9	NG/KG	7	11	220	290	50
1,2,3,4,6,7,8-Heptachlorodibenzofuran	67562-39-4	NG/KG	8.4 U	0.47 U	8.9	9	1.4 J
1,2,3,4,7,8,9-Heptachlorodibenzofuran	55673-89-7	NG/KG	1.1 J	0.15 U	0.8 J	0.7 U	0.15 J
1,2,3,4,7,8-Hexachlorodibenzodioxin	39227-28-6	NG/KG	1.9 U	0.24 J	2 J	1.9 J	0.56 J
1,2,3,4,7,8-Hexachlorodibenzofuran	70648-26-9	NG/KG	2.2 U	0.15 U	1.2 U	0.78 U	0.17 U
1,2,3,6,7,8-Hexachlorodibenzodioxin	57653-85-7	NG/KG	1.9 U	0.39 J	4.7	6.2	1.1 J
1,2,3,6,7,8-Hexachlorodibenzofuran	57117-44-9	NG/KG	11 U	0.14 U	0.58 U	0.56 U	0.17 U
1,2,3,7,8,9-Hexachlorodibenzodioxin	19408-74-3	NG/KG	2 U	0.72 J	8.9	12	2.3
1,2,3,7,8,9-Hexachlorodibenzofuran	72918-21-9	NG/KG	0.68 J	0.15 U	0.37 U	0.35 U	0.089 U
1,2,3,7,8-Pentachlorodibenzodioxin	40321-76-4	NG/KG	1.5 U	0.14 U	0.67 J	0.74 J	0.22 J
1,2,3,7,8-Pentachlorodibenzofuran	57117-41-6	NG/KG	1.5 U	0.16 U	0.4 U	0.25 U	0.1 U
2,3,4,6,7,8-Hexachlorodibenzofuran	60851-34-5	NG/KG	1.1 J	0.17 U	0.77 U	0.71 U	0.17 U
2,3,4,7,8-Pentachlorodibenzofuran	57117-31-4	NG/KG	1.4 U	0.2 U	0.77 U	0.43 U	0.15 U
2,3,7,8-Tetrachlorodibenzodioxin	1746-01-6	NG/KG	0.21 U	0.19 U	1.1	0.81 J	0.1 U
2,3,7,8-Tetrachlorodibenzofuran	51207-31-9	NG/KG	1.1 U	1.6 U	12	2.4	0.16 U
Heptachlorodibenzodioxin (Total)		NG/KG	19 J	30 J	870 J	840 J	180 J
Heptachlorodibenzofuran (Total)	38998-75-3	NG/KG	1.1 J	0.37 J	30 J	28 J	3.4 J
Hexachlorodibenzodioxin (Total)	34465-46-8	NG/KG	1.9 UJ	11 J	270 J	250 J	75 J
Hexachlorodibenzofuran (Total)	55684-94-1	NG/KG	22 J	0.33 J	13 J	11 J	1.6 J
Octachlorodibenzodioxin	3268-87-9	NG/KG	170	300	5000 J	10000 J	1100
Octachlorodibenzofuran	39001-02-0	NG/KG	5.9	0.8 J	18	20	3.2 J
Pentachlorodibenzodioxin (Total)	36088-22-9	NG/KG	1.5 UJ	1.4 J	38 J	33 J	11 J
Pentachlorodibenzofuran (Total)	30402-15-4	NG/KG	9.1 J	0.21 J	4 J	4.1 J	0.57 J
Tetrachlorodibenzodioxin (Total)	41903-57-5	NG/KG	0.54 J	0.63 J	28 J	25 J	5.5 J
Tetrachlorodibenzofuran (Total)	55722-27-5	NG/KG	12 J	2.9 J	28 J	7.5 J	0.74 J
TEQ (Avian Toxic. Equiv. Value, From WHO TEQ-98)		NG/KG	6.2 J	2.3 J	17 J	7.4 J	1.2 J
TEQ (Fish Toxic. Equiv. Value, From WHO TEQ-98)		NG/KG	5.1 J	0.75 J	5 J	4.7 J	1 J
TEQ (Mammalian Toxic. Equiv. Value, From WHO TEQ-98)		NG/KG	4.8 J	0.93 J	8 J	8.3 J	1.5 J
							8.9 J

Shaded entries indicate exceedence of EPA screening values (below)

EPA Sediment Screening Values	Low Risk	High Risk
Fish	60	100
Mammalian Wildlife	2.5	25
Avian Wildlife	21	210

#### Data Qualifiers

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J-Identification of analyte is acceptable; reported value is an estimate.

UJ-Analyte not detected at or above reporting limit. Reporting limit is an estimate.

# **Appendix D**

## **In-Situ Water Quality Profiles**

**Bangs Lake & Bayou Casotte**

Table  
Bangs Lake - Station BL1  
Water Quality Study of Bays in Coastal Mississippi

DATE	TIME	DEPTH (ft)	D.O. (mg/l)	pH	CONDUCTIVITY ( $\mu$ s/cm)	SALINITY (ppt)	TEMPERATURE (°C)
9/27/2005	1245	1	6.82	7.47	37344	23.54	29.67
		2	6.62	7.47	37345	23.56	29.57
		3	5.71	7.31	37385	23.59	28.84
<b>MAX</b>			6.82	7.47	37385	23.59	29.67
<b>MIN</b>			5.71	7.31	37344	23.54	28.84
<b>Avg</b>			6.38	7.42	37358	23.56	29.36

Instantaneous minimum dissolved oxygen concentration less than 4.0 mg

DATE	TIME	DEPTH (ft)	D.O. (mg/l)	pH	CONDUCTIVITY ( $\mu$ s/cm)	SALINITY* (ppt)	TEMPERATURE (°C)
9/27/2005	1110	Surf	5.64	7.73	45478	27.2	28.74
		1	5.49	7.76	45545	27.2	28.72
		3	5.11	7.81	46549	28.1	28.43
		5	5.01	7.83	46764	28.2	28.40
		7	4.93	7.84	47007	28.4	28.37
		9	4.82	7.84	47388	28.7	28.34
		11	4.82	7.85	47499	28.8	28.33
		13	4.75	7.85	47581	28.8	28.33
		15	4.75	7.85	47689	28.9	28.33
		17	4.68	7.85	47831	29.0	28.33
		19	4.59	7.85	47978	29.1	28.34
		21	4.58	7.85	48035	29.1	28.35
		23	4.58	7.85	48173	29.2	28.36
		25	4.58	7.86	48193	29.2	28.36
		27	4.57	7.85	48214	29.2	28.37
		29	4.55	7.85	48226	29.2	28.37
		31	4.47	7.85	48307	29.3	28.37
		33	4.37	7.85	48542	29.4	28.40
		35	4.36	7.85	48604	29.5	28.42
		37	4.01	7.82	48898	29.6	28.44
		39	3.69	7.81	49201	29.2	28.47
		41	3.90	7.84	49302	29.9	28.49
		43	4.14	7.88	49479	30.0	28.50
		45	4.29	7.90	49554	30.0	28.51
<b>MAX</b>			5.64	7.90	49554	30.00	28.74
<b>MIN</b>			3.69	7.73	45478	27.20	28.33
<b>AVG</b>			4.61	7.84	47918	28.97	28.42

\* Note: Salinity was calculated post-field study using conductivity and temperature measurem

Instantaneous minimum dissolved oxygen concentration less than 4.0 mg/l

Table  
 Bayou Casotte - Station BC2  
 Water Quality Study of Bays in Coastal Mississippi

DATE	TIME	DEPTH (ft)	D.O. (mg/l)	pH	CONDUCTIVITY ( $\mu$ s/cm)	SALINITY (ppt)	TEMPERATURE (°C)
9/27/2005	1310	Surf	6.25	7.09	44877	26.4	29.44
		1	6.03	7.14	45009	26.5	29.4
		3	5.74	7.46	45625	27.1	28.97
		5	5.31	7.73	46254	27.8	28.62
		7	5.11	7.75	46670	28.1	28.52
		9	4.61	7.77	46907	28.4	28.3
		11	4.31	7.74	47369	28.7	28.32
		13	4.23	7.75	47359	28.7	28.32
		15	4.16	7.75	47816	29.0	28.34
		17	4.23	7.77	47892	29.0	28.34
		19	4.27	7.77	47908	29.0	28.34
		21	4.32	7.78	47950	29.1	28.34
		23	4.34	7.79	47996	29.1	28.35
		25	4.37	7.79	48053	29.1	28.35
		27	4.37	7.80	48133	29.2	28.36
		29	4.41	7.81	48269	29.3	28.38
		31	4.27	7.79	48360	29.3	28.38
		33	4.25	7.81	48649	29.5	28.42
		35	4.10	7.80	48687	29.5	28.42
		37	3.95	7.79	48775	29.6	28.43
		39	3.91	7.79	48796	29.6	28.44
		41	3.93	7.80	48884	29.6	28.45
		43	3.97	7.83	49199	29.8	28.46
<b>MAX</b>			6.25	7.83	49199	29.80	29.44
<b>MIN</b>			3.91	7.09	44877	26.40	28.30
<b>AVG</b>			4.54	7.71	47628	28.76	28.51

Instantaneous minimum dissolved oxygen concentration less than 4.0 mg

Table  
 Bayou Casotte - Station BC3  
 Water Quality Study of Bays in Coastal Mississippi

DATE	TIME	DEPTH (ft)	D.O. (mg/l)	pH	CONDUCTIVITY ( $\mu$ s/cm)	SALINITY (ppt)	TEMPERATURE (°C)
9/28/2005	1505	Surf	6.64	7.04	43938	25.7	29.55
		1	6.79	7.24	44843	26.5	29.20
		3	5.44	7.71	46499	28.0	28.55
		5	5.06	7.79	46631	28.1	28.41
		7	4.77	7.75	46781	28.2	28.40
		9	4.56	7.78	47283	28.6	28.30
		11	4.49	7.79	47597	28.8	28.31
		13	4.47	7.79	47754	28.9	28.32
		15	4.08	7.76	48005	29.1	28.35
		17	4.06	7.76	48165	29.2	28.36
		19	3.98	7.76	48303	29.3	28.37
		21	3.98	7.77	48367	29.3	28.37
		23	4.00	7.77	48416	29.4	28.38
		25	4.01	7.78	48428	29.4	28.38
		27	4.01	7.78	48430	29.4	28.39
		29	4.02	7.78	48430	29.4	28.39
		31	4.03	7.79	48433	29.4	28.39
		33	3.61	7.74	48694	29.5	28.42
		35	3.25	7.73	48866	29.6	28.44
		37	3.39	7.77	48989	29.7	28.46
		39	3.60	7.79	49102	29.8	28.47
		41	3.70	7.79	49145	29.8	28.48
		43	3.32	7.75	49204	29.8	28.49
<b>MAX</b>			6.79	7.79	49204	29.80	29.55
<b>MIN</b>			3.25	7.04	43938	25.70	28.30
<b>AVG</b>			4.32	7.71	47839	28.91	28.49

Instantaneous minimum dissolved oxygen concentration less than 4.0 mg/l

Bayou Casotte - Station BC4  
 Water Quality Study of Bays in Coastal Mississippi

DATE	TIME	DEPTH (ft)	D.O. (mg/l)	pH	CONDUCTIVITY ( $\mu$ s/cm)	SALINITY (ppt)	TEMPERATURE (°C)
9/27/2005	1435	Surf	12.30	7.81	39913		31.27
		1	12.82	7.80	40189		30.65
		2	9.25	7.78	41304		30.33
<b>MAX</b>			12.82	7.81	41304		31.27
<b>MIN</b>			9.25	7.78	39913		30.33
<b>AVG</b>			11.46	7.80	40469		30.75

Instantaneous minimum dissolved oxygen concentration less than 4.0 mg/l.

*Pascagoula, Escatawpa & West Pascagoula Rivers*

Table  
West Pascagoula River - Station WPR1  
Water Quality Study of Bays in Coastal Mississippi

DATE	TIME	DEPTH	D.O. (mg/l)	pH	CONDUCTIVITY ( $\mu$ s/cm)	SALINITY (ppt)	TEMPERATURE (°C)
		(ft)					
9/28/2005	~1045	SURF	6.77	7.00	10153	5.63	28.22
		1	6.51	6.97	10476	5.84	28.25
		3	5.92	7.16	20347	12.28	28.77
		5	5.26	7.52	31242	19.35	28.71
		7	5.47	7.64	33896	21.15	28.77
		9	4.94	7.64	35729	22.40	28.57
		11	4.81	7.67	37732	23.85	28.55
		13	4.82	7.69	38102	24.10	28.56
		15	4.96	7.71	38100	24.10	28.54
		17	5.38	7.76	38353	24.28	28.71
		19	5.26	7.76	38608	24.46	28.69
		21	5.08	7.74	38662	24.49	28.50
		23	5.03	7.74	39098	24.81	28.46
		25	5.03	7.75	39336	24.97	28.47
		Bottom	5.03	7.75	39375	25.00	28.47
<b>MAX</b>			6.77	7.76	39375	25.00	28.77
<b>MIN</b>			4.81	6.97	10153	5.63	28.22
<b>AVG</b>			5.35	7.57	32614	20.45	28.55

Instantaneous minimum dissolved oxygen concentration less than 4.0 mg/l.

Table  
 West Pascagoula River - Station WPR2  
 Water Quality Study of Bays in Coastal Mississippi

DATE	TIME	DEPTH	D.O.	pH	CONDUCTIVITY ( $\mu\text{s}/\text{cm}$ )	SALINITY (ppt)	TEMPERATURE (°C)
		(ft)	(mg/l)				
9/28/2005	~1350	SURF	8.22	7.35	1430	0.72	28.74
		1	6.01	6.89	1531	0.77	28.80
		3	5.85	6.80	1588	0.79	28.77
		5	5.69	6.74	1674	0.84	28.75
		7	5.58	6.72	1763	0.87	28.79
		9	5.40	6.71	2319	1.58	28.85
		11	4.33	6.69	5517	3.04	28.84
		13	3.70	6.61	7417	6.45	29.03
		15	3.51	6.66	13280	7.20	28.99
		17	3.45	6.74	14165	9.09	29.06
		19	3.39	6.74	16280	9.55	29.08
		21	3.38	6.74	16979	9.99	29.09
		23	3.36	6.75	17780	10.32	29.09
		25	3.35	6.76	17866	10.56	29.11
		27	3.26	6.79	20119	11.81	29.13
		BOTTOM	3.23	6.82	19837	11.73	29.13
<b>MAX</b>			8.22	7.35	20119	11.81	29.13
<b>MIN</b>			3.23	6.61	1430	0.72	28.74
<b>AVG</b>			4.48	6.78	9972	5.96	28.95

Instantaneous minimum dissolved oxygen concentration less than 4.0 mg/l

Table  
 Pascagoula River - Station PR1  
 Water Quality Study of Bays in Coastal Mississippi

DATE	TIME	DEPTH	D.O.	pH	CONDUCTIVITY	SALINITY	TEMPERATURE
		(ft)	(mg/l)		( $\mu$ s/cm)	(ppt)	(°C)
9/28/2005	~1210	Surf	7.56	7.61	24965	15.20	28.28
		1	7.31	7.64	26584	16.50	28.28
		3	7.19	7.71	29431	18.03	28.31
		5	5.94	7.77	38226	23.78	28.40
		7	5.27	7.78	39988	25.51	28.44
		9	4.87	7.78	42443	27.25	28.49
		11	4.57	7.79	43171	27.65	28.50
		13	4.51	7.79	43774	28.15	28.50
		15	4.50	7.81	44027	28.29	28.50
		17	4.47	7.80	44265	28.50	28.53
		19	4.41	7.80	44541	28.64	28.50
		21	4.40	7.80	44353	28.53	28.51
		23	4.39	7.81	44800	28.86	28.50
		25	4.35	7.82	44830	28.86	28.49
		27	4.46	7.82	44864	28.89	28.49
		29	4.37	7.82	44891	28.90	28.50
		31	4.39	7.82	45136	29.05	28.48
		33	4.47	7.84	45874	29.70	28.48
		35	4.46	7.85	46229	29.91	28.48
		37	4.42	7.85	46570	30.11	28.48
		39	4.28	7.85	46707	30.25	28.49
		BOTTOM	4.12	7.83	46778	30.28	28.49
<b>MAX</b>			7.56	7.85	46778	30.28	28.53
<b>MIN</b>			4.12	7.61	24965	15.20	28.28
<b>AVG</b>			4.94	7.79	41929	26.86	28.46

Instantaneous minimum dissolved oxygen concentration less than 4.0 mg/l

Table  
 Pascagoula River - Station PR2  
 Water Quality Study of Bays in Coastal Mississippi

DATE	TIME	DEPTH (ft)	D.O. (mg/l)	pH	CONDUCTIVITY ( $\mu$ s/cm)	SALINITY (ppt)	TEMPERATURE (°C)
9/28/2005	~1530	1	6.33	6.82	4024	2.21	28.06
		3	5.92	6.67	4697	2.58	28.97
		5	5.70	6.59	5152	2.86	28.94
		7	5.11	6.52	6641	3.81	28.87
		9	4.99	6.53	7683	4.53	28.88
		11	3.13	6.52	20642	12.25	28.75
		13	2.94	6.84	34559	21.99	28.67
		15	2.97	7.02	35910	22.59	28.58
		17	2.95	7.09	36329	22.88	28.58
		19	2.99	7.14	37239	23.47	28.57
		21	3.16	7.27	40147	25.52	28.51
		23	3.01	7.33	41553	26.46	28.47
<b>MAX</b>			6.33	7.33	41553	26.46	28.97
<b>MIN</b>			2.94	6.52	4024	2.21	28.06
<b>AVG</b>			4.10	6.86	22881	14.26	28.65

Instantaneous minimum dissolved oxygen concentration less than 4.0 mg/l

Table  
 Escatawpa River - Station ER1  
 Water Quality Study of Bays in Coastal Mississippi

DATE	TIME	DEPTH (ft)	D.O. (mg/l)	pH	CONDUCTIVITY ( $\mu$ s/cm)	SALINITY (ppt)	TEMPERATURE (°C)
9/28/2005	~1350	1	5.30	6.28	6774	3.69	29.20
		3	5.06	6.22	6921	3.74	29.15
		5	4.93	6.21	7644	4.07	29.12
		7	4.04	6.26	10302	5.85	29.03
		9	3.31	6.80	28466	18.51	28.75
		11	3.39	7.18	37473	23.66	28.58
		13	3.84	7.41	42149	27.01	28.52
		15	3.90	7.48	42660	27.34	28.47
		17	3.94	7.52	43356	27.88	28.45
		19	3.94	7.54	43609	28.00	28.44
		21	3.92	7.55	43556	27.97	28.44
		23	3.89	7.55	43627	28.02	28.44
<b>MAX</b>			5.30	7.55	43627	28.02	29.20
<b>MIN</b>			3.31	6.21	6774	3.69	28.44
<b>AVG</b>			4.12	7.00	29711	18.81	28.72

Instantaneous minimum dissolved oxygen concentration less than 3.0 mg/l

**Table**  
**Escatawpa River - Station ER2**  
**Water Quality Study of Bays in Coastal Mississippi**

DATE	TIME	DEPTH (ft)	D.O. (mg/l)	pH	CONDUCTIVITY ( $\mu$ s/cm)	SALINITY (ppt)	TEMPERATURE (°C)
9/28/2005	~1105	1	3.35	5.85	3560	1.80	28.32
		3	3.01	5.89	5662	3.12	28.51
		5	2.35	6.09	12342	6.78	28.83
		7	2.39	6.20	17742	10.43	28.84
		9	2.25	6.47	23367	14.29	28.77
		11	2.36	6.60	27184	16.83	28.69
		13	2.32	6.71	31549	19.62	28.62
		15	2.39	6.83	32866	20.44	28.59
		17	2.48	6.93	34314	21.45	28.57
		19	2.45	6.96	34271	21.42	28.57
<b>MAX</b>			3.35	6.96	34314	21.45	28.84
<b>MIN</b>			2.25	5.85	3560	1.80	28.32
<b>AVG</b>			2.54	6.45	22286	13.62	28.63

Instantaneous minimum dissolved oxygen concentration less than 3.0 mg/l.

***Back Bay of Biloxi***

Table  
Back Bay of Biloxi - Station BBB1  
Water Quality Study of Bays in Coastal Mississippi

DATE	TIME	DEPTH (ft)	D.O. (mg/l)	pH	CONDUCTIVITY ( $\mu$ s/cm)	SALINITY (ppt)	TEMPERATURE (°C)
9/29/2005	1312	SURF	8.95	8.08	23790	13.34	28.96
		1	8.74	8.05	23919	14.47	28.82
		2	8.59	8.03	23965	14.46	29.06
		3	8.51	8.01	24072	14.52	28.97
		4	8.34	7.99	24205	14.62	28.81
		5	7.53	7.88	24980	15.07	28.52
		6	6.52	7.75	26154	15.95	28.25
		7	5.67	7.65	27829	16.76	28.41
		8	4.54	7.50	30069	18.64	28.53
		9	4.26	7.47	30700	18.96	28.55
		10	4.01	7.45	30813	19.05	28.55
		11	3.40	7.42	34376	21.47	28.60
		BOTTOM	3.25	7.43	34376	21.52	28.61
<b>MAX</b>			8.95	8.08	34376	21.52	29.06
<b>MIN</b>			3.25	7.42	23790	13.34	28.25
<b>AVG</b>			6.33	7.75	27634	16.83	28.66

Instantaneous minimum dissolved oxygen concentration less than 4.0 mg/l

Table  
 Back Bay of Biloxi - Station BBB2  
 Water Quality Study of Bays in Coastal Mississippi

DATE	TIME	DEPTH (ft)	D.O. (mg/l)	pH	CONDUCTIVITY ( $\mu$ s/cm)	SALINITY (ppt)	TEMPERATURE (°C)
9/29/2005	1025	SURF	7.35	7.61	14860	8.59	28.58
		1	7.34	7.60	15909	9.21	28.27
		2	7.30	7.62	17292	10.15	28.17
		3	6.66	7.53	18792	11.1	28.01
		4	6.28	7.47	19517	11.53	28.09
		5	6.21	7.49	20057	11.93	28.08
		6	6.06	7.49	21590	12.76	28.04
		7	5.84	7.50	22650	13.61	27.99
		8	5.65	7.51	23097	13.91	28.08
		9	5.60	7.52	23316	14.07	28.12
		10	5.43	7.52	24553	14.85	28.17
		11	5.27	7.52	25079	15.28	28.25
<b>MAX</b>			7.35	7.62	25079	15.28	28.58
<b>MIN</b>			5.27	7.47	14860	8.59	27.99
<b>AVG</b>			6.25	7.53	20559	12.25	28.15

Instantaneous minimum dissolved oxygen concentration less than 4.0 mg/l.

Table  
 Back Bay of Biloxi - Station BBB3  
 Water Quality Study of Bays in Coastal Mississippi

DATE	TIME	DEPTH	D.O.	pH	CONDUCTIVITY	SALINITY	TEMPERATURE
		(ft)	(mg/l)		( $\mu\text{s}/\text{cm}$ )	(ppt)	(°C)
9/29/2005	935	SURF	6.92	7.46	13602	7.81	28.14
		1	6.88	7.46	13585	7.80	28.14
		2	6.87	7.46	13617	7.82	28.11
		3	6.74	7.44	13697	7.87	20.10
		4	6.28	7.37	14320	8.26	28.09
		5	6.03	7.33	14697	8.66	28.39
		6	5.19	7.25	18916	10.86	28.73
		7	4.97	7.26	19604	11.59	28.78
<b>MAX</b>			6.92	7.46	19604	11.59	28.78
<b>MIN</b>			4.97	7.25	13585	7.80	20.10
<b>AVG</b>			6.24	7.38	15255	8.83	27.31

Instantaneous minimum dissolved oxygen concentration less than 4.0 mg/l

Table  
 Back Bay of Biloxi - Station BBB4  
 Water Quality Study of Bays in Coastal Mississippi

DATE	TIME	DEPTH (ft)	D.O. (mg/l)	pH	CONDUCTIVITY ( $\mu$ s/cm)	SALINITY (ppt)	TEMPERATURE (°C)
9/29/2005	1250	1	7.62	7.24	7429	4.07	29.17
		2	7.18	7.19	7447	4.08	28.94
		3	7.04	7.16	7494	4.11	28.92
		4	6.79	7.11	7512	4.12	28.83
		5	5.82	7.03	7825	4.32	28.49
		6	5.61	7.00	7889	4.35	28.48
		7	5.53	6.99	7937	4.37	28.46
		8	5.46	6.98	7962	4.38	28.45
		9	5.30	6.96	8054	4.45	28.46
		10	3.95	6.81	11839	6.75	28.68
<b>MAX</b>			7.62	7.24	11839	6.75	29.17
<b>MIN</b>			3.95	6.81	7429	4.07	28.45
<b>AVG</b>			6.03	7.05	8139	4.50	28.69

Instantaneous minimum dissolved oxygen concentration less than 4.0 mg/l

**Table**  
**Back Bay of Biloxi - Station BBB5**  
**Water Quality Study of Bays in Coastal Mississippi**

DATE	TIME	DEPTH (ft)	D.O. (mg/l)	pH	CONDUCTIVITY ( $\mu$ s/cm)	SALINITY (ppt)	TEMPERATURE (°C)
9/29/2005	1130	1	7.33	7.16	7535	4.13	29.00
		2	6.46	7.08	7652	4.20	28.51
		3	5.98	7.01	8093	4.43	28.41
		4	5.61	6.95	8647	4.81	28.36
		5	5.44	6.94	8964	5.01	28.37
		6	5.31	6.91	9482	5.30	28.36
		7	4.95	6.87	10936	6.18	28.48
		8	4.30	6.84	13967	8.37	28.81
		9	3.75	6.86	15217	8.83	28.93
<b>MAX</b>			7.33	7.16	15217	8.83	29.00
<b>MIN</b>			3.75	6.84	7535	4.13	28.36
<b>AVG</b>			5.46	6.96	10055	5.70	28.58

Instantaneous minimum dissolved oxygen concentration less than 4.0 mg/l

**Table**  
**Back Bay of Biloxi - Station BBB6**  
**Water Quality Study of Bays in Coastal Mississippi**

DATE	TIME	DEPTH (ft)	D.O. (mg/l)	pH	CONDUCTIVITY ( $\mu$ s/cm)	SALINITY (ppt)	TEMPERATURE (°C)
9/29/2005	1000	1	7.58	7.52	4565	2.43	28.77
		3	6.11	7.30	4664	2.46	28.49
		5	4.06	7.08	5392	2.87	28.76
		7	2.63	6.90	5927	3.20	28.90
		9	2.23	6.84	6515	3.53	28.88
		11	1.98	6.77	7096	3.87	28.83
		13	1.41	6.74	7512	4.11	28.74
		15	0.54	6.67	7830	4.58	28.51
<b>MAX</b>			7.58	7.52	7830	4.58	28.90
<b>MIN</b>			0.54	6.67	4565	2.43	28.49
<b>AVG</b>			3.32	6.98	6188	3.38	28.74

Instantaneous minimum dissolved oxygen concentration less than 4.0 mg/l

Table  
 Bayou Lacroix - Station BLC1  
 Water Quality Study of Bays in Coastal Mississippi

DATE	TIME	DEPTH (ft)	D.O. (mg/l)	pH	CONDUCTIVITY ( $\mu$ s/cm)	SALINITY (ppt)	TEMPERATURE (°C)
9/30/2005	945	SURF	5.03	7.02	9190	5.12	28.29
		1	4.52	6.93	9195	5.12	28.24
		2	4.41	6.90	9930	5.22	28.27
		3	4.07	6.88	9568	5.36	28.38
		4	3.84	6.91	10416	5.85	28.54
		5	3.83	6.88	11466	6.50	28.75
		6	3.78	6.91	12567	7.15	28.83
		7	3.73	6.92	12456	7.41	28.83
		8	3.64	6.93	13265	7.60	28.81
		9	3.56	6.93	13457	7.72	28.81
<b>MAX</b>			5.03	7.02	13457	7.72	28.83
<b>MIN</b>			3.56	6.88	9190	5.12	28.24
<b>AVG</b>			4.04	6.92	11151	6.31	28.58

Instantaneous minimum dissolved oxygen concentration less than 4.0 mg/l

*St. Louis Bay, Bayou Caddy, & Pearl River*

Table  
Bayou Caddy - Station BCD1  
Water Quality Study of Bays in Coastal Mississippi

DATE	TIME	DEPTH (ft)	D.O. (mg/l)	pH	CONDUCTIVITY (µs/cm)	SALINITY (ppt)	TEMPERATURE (°C)
9/30/2005	~0945	1	6.15	7.35	23684	14.27	28.83
		2	6.18	7.34	23689	14.27	28.84
		3	6.16	7.35	23691	14.27	28.84
		4	6.15	7.36	23688	14.27	28.84
		5	6.16	7.35	23693	14.27	28.84
		6	6.16	7.35	23682	14.27	28.84
		7	6.16	7.36	23684	14.27	28.85
		8	6.17	7.36	23679	14.27	28.86
		9	6.15	7.36	23672	14.26	28.86
<b>MAX</b>			6.18	7.36	23693	14.27	28.86
<b>MIN</b>			6.15	7.34	23672	14.26	28.83
<b>AVG</b>			6.16	7.35	23685	14.27	28.84

Instantaneous minimum dissolved oxygen concentration less than 4.0 mg/l

Table  
 Jordan River - Station JR1  
 Water Quality Study of Bays in Coastal Mississippi

DATE	TIME	DEPTH	D.O.	pH	CONDUCTIVITY	SALINITY	TEMPERATURE
		(ft)	(mg/l)		( $\mu\text{s}/\text{cm}$ )	(ppt)	(°C)
9/30/2005	1045	SURF	6.93	7.44	14454	8.35	27.64
		1	6.70	7.43	14564	8.40	27.67
		2	6.80	7.44	15138	8.77	27.65
		3	6.81	7.46	15332	8.91	27.77
		4	6.84	7.49	15540	7.49	27.86
		5	6.83	7.49	15728	9.15	27.81
		6	6.69	7.47	15892	9.25	27.72
		7	6.66	7.47	15954	9.28	27.66
		8	6.59	7.46	15931	9.28	27.65
		9	6.55	7.46	15932	9.28	27.65
<b>MAX</b>			6.93	7.49	15954	9.28	27.86
<b>MIN</b>			6.55	7.43	14454	7.49	27.64
<b>AVG</b>			6.74	7.46	15447	8.82	27.71

Instantaneous minimum dissolved oxygen concentration less than 4.0 mg/l

Table  
 St. Louis Bay - Station SLB1  
 Water Quality Study of Bays in Coastal Mississippi

DATE	TIME	DEPTH (ft)	D.O. (mg/l)	pH	CONDUCTIVITY ( $\mu$ s/cm)	SALINITY (ppt)	TEMPERATURE (°C)
9/30/2005	1225	SURF	7.73	7.95	25194	15.27	29.05
		1	7.74	7.95	25199	15.27	29.06
		2	7.74	7.95	25211	15.29	28.94
		3	7.40	7.87	25117	15.23	28.31
		4	7.19	7.84	25118	15.23	28.30
		5	7.10	7.82	25127	15.24	28.22
		6	6.96	7.80	25136	15.24	28.18
		7	6.90	7.78	25112	15.23	28.01
		8	6.78	7.75	25098	15.22	27.92
		9	6.57	7.71	25082	15.21	27.86
		10	6.47	7.70	25080	15.21	27.85
		11	6.47	7.70	25080	15.21	27.85
<b>MAX</b>			7.74	7.95	25211	15.29	29.06
<b>MIN</b>			6.47	7.70	25080	15.21	27.85
<b>AVG</b>			7.09	7.82	25130	15.24	28.30

Instantaneous minimum dissolved oxygen concentration less than 4.0 mg/l

**Table**  
**St. Louis Bay - Station SLB2**  
**Water Quality Study of Bays in Coastal Mississippi**

DATE	TIME	DEPTH (ft)	D.O. (mg/l)	pH	CONDUCTIVITY ( $\mu$ s/cm)	SALINITY (ppt)	TEMPERATURE (°C)
9/30/2005	~1400	SURF	8.90	7.87	22931	13.77	29.03
		1	8.58	7.88	22949	13.78	29.03
		2	8.43	7.88	22953	13.78	29.06
		3	8.40	7.87	22994	13.82	28.98
		4	8.32	7.86	23034	13.82	28.99
		5	6.79	7.57	24234	14.64	28.01
		BOTTOM	6.77	7.55	24240	14.65	27.98
<b>MAX</b>			8.90	7.88	24240	14.65	29.06
<b>MIN</b>			6.77	7.55	22931	13.77	27.98
<b>AVG</b>			8.03	7.78	23334	14.04	28.73

Instantaneous minimum dissolved oxygen concentration less than 4.0 mg/l

Table  
St. Louis Bay - Station SLB3  
Water Quality Study of Bays in Coastal Mississippi

DATE	TIME	DEPTH	D.O.	pH	CONDUCTIVITY	SALINITY	TEMPERATURE
		(ft)	(mg/l)		( $\mu\text{s}/\text{cm}$ )	(ppt)	(°C)
9/30/2005	~1125	SURF	8.68	7.90	22115	13.25	28.62
		1	8.18	7.89	22562	13.58	28.42
		2	7.87	7.85	23442	14.05	28.43
		3	7.77	7.83	23709	14.30	28.49
		4	7.57	7.80	23785	14.34	28.48
		5	7.23	7.75	23853	14.39	28.44
		6	7.13	7.74	23898	14.42	28.35
		7	6.98	7.72	24035	14.51	28.35
		BOTTOM	6.94	7.72	24038	14.51	28.35
<b>MAX</b>			8.68	7.9	24038	14.51	28.62
<b>MIN</b>			6.94	7.72	22115	13.25	28.35
<b>AVG</b>			7.59	7.80	23493	14.15	28.44

Instantaneous minimum dissolved oxygen concentration less than 4.0 mg

Table  
St. Louis Bay - Station SLB4  
Water Quality Study of Bays in Coastal Mississippi

DATE	TIME	DEPTH	D.O.	pH	CONDUCTIVITY	SALINITY	TEMPERATURE
		(ft)	(mg/l)		( $\mu\text{s}/\text{cm}$ )	(ppt)	(°C)
9/30/2005	1315	1	8.32	7.69	20978	12.50	28.68
		2	7.97	7.67	21019	12.55	28.62
		3	7.05	7.52	21407	12.77	28.48
		4	5.51	7.33	21814	13.07	28.09
<b>MAX</b>			8.32	7.69	21814	13.07	28.68
<b>MIN</b>			5.51	7.33	20978	12.50	28.09
<b>AVG</b>			7.21	7.55	21305	12.72	28.47

Instantaneous minimum dissolved oxygen concentration less than 4.0 mg

**Table**  
**St. Louis Bay - Station SLB5**  
**Water Quality Study of Bays in Coastal Mississippi**

DATE	TIME	DEPTH (ft)	D.O. (mg/l)	pH	CONDUCTIVITY ( $\mu$ s/cm)	SALINITY (ppt)	TEMPERATURE (°C)
9/30/2005	1230	1	7.98	7.86	20344	12.09	28.80
		2	7.94	7.86	20297	12.06	28.61
		3	7.86	7.84	20243	12.02	28.60
		4	7.58	7.81	20326	12.10	27.95
		5	7.28	7.75	20593	12.26	27.88
<b>MAX</b>			7.98	7.86	20593	12.26	28.80
<b>MIN</b>			7.28	7.75	20243	12.02	27.88
<b>AVG</b>			7.73	7.82	20361	12.11	28.37

Instantaneous minimum dissolved oxygen concentration less than 4.0 mg/l

**Table**  
**St. Louis Bay - Station SLB6**  
**Water Quality Study of Bays in Coastal Mississippi**

DATE	TIME	DEPTH (ft)	D.O. (mg/l)	pH	CONDUCTIVITY ( $\mu$ s/cm)	SALINITY (ppt)	TEMPERATURE (°C)
9/30/2005	~0940	SURF	6.56	7.61	19505	11.55	28.00
		1	6.54	7.62	19519	11.56	27.99
		2	6.55	7.63	19511	11.56	27.98
		3	6.50	7.62	19532	11.57	27.97
		4	6.39	7.59	19596	11.63	27.98
		5	6.11	7.50	19978	11.88	27.99
		6	4.79	7.32	21082	12.59	28.19
		BOTTOM	3.86	7.20	21482	12.83	28.24
<b>MAX</b>			6.56	7.63	21482	12.83	28.24
<b>MIN</b>			3.86	7.20	19505	11.55	27.97
<b>AVG</b>			5.91	7.51	20026	11.90	28.04

Instantaneous minimum dissolved oxygen concentration less than 4.0 mg/l

Table  
St. Louis Bay - Station SLB7  
Water Quality Study of Bays in Coastal Mississippi

DATE	TIME	DEPTH (ft)	D.O. (mg/l)	pH	CONDUCTIVITY ( $\mu$ s/cm)	SALINITY (ppt)	TEMPERATURE (°C)
9/30/2005	1125	SURF	7.69	7.86	17914	10.53	28.45
		1	7.71	7.86	17924	10.54	28.42
		2	7.66	7.85	17928	10.55	28.12
		3	7.39	7.78	18169	10.68	27.83
		4	7.20	7.74	18629	11.01	27.81
		5	6.38	7.58	18860	11.15	27.76
<b>MAX</b>			7.71	7.86	18860	11.15	28.45
<b>MIN</b>			6.38	7.58	17914	10.53	27.76
<b>AVG</b>			7.34	7.78	18237	10.74	28.07

Instantaneous minimum dissolved oxygen concentration less than 4.0 mg/l

Table  
Wolf River - Station WR1  
Water Quality Study of Bays in Coastal Mississippi

DATE	TIME	DEPTH (ft)	D.O. (mg/l)	pH	CONDUCTIVITY ( $\mu$ s/cm)	SALINITY (ppt)	TEMPERATURE (°C)
9/30/2005	1435	1	7.65	7.14	12172	7.06	29.58
		2	7.75	7.11	12875	7.41	29.70
		3	7.36	7.08	14160	8.63	29.26
		4	7.21	7.12	15848	9.02	29.07
<b>MAX</b>			7.49	7.11	13764	8.03	29.40
<b>MIN</b>			7.21	7.08	12172	7.06	29.07
<b>AVG</b>			7.49	7.11	13764	8.03	29.40

Instantaneous minimum dissolved oxygen concentration less than 4.0 mg/l

**Table**  
**Pearl River - Station Pearl1**  
**Water Quality Study of Bays in Coastal Mississippi**

DATE	TIME	DEPTH (ft)	D.O. (mg/l)	pH	CONDUCTIVITY ( $\mu$ s/cm)	SALINITY (ppt)	TEMPERATURE (°C)
9/30/2005	1545	SURF	7.01	6.96	4096	2.15	30.32
		1	6.91	6.95	4118	2.17	30.27
		3	6.40	6.91	4265	2.22	30.15
		5	5.95	6.79	5108	2.70	29.16
		7	2.45	6.56	6715	3.65	29.01
		9	2.26	6.57	6809	3.74	29.04
		11	2.14	6.57	7445	4.07	29.14
		13	2.00	6.57	7680	4.21	29.17
		15	1.95	6.57	7739	4.25	29.18
		17	1.88	6.57	7759	4.26	29.18
<b>MAX</b>			7.01	6.96	7759	4.26	30.32
<b>MIN</b>			1.88	6.56	4096	2.15	29.01
<b>AVG</b>			3.90	6.70	6173	3.34	29.46

Instantaneous minimum dissolved oxygen concentration less than 4.0 mg/l.

## **Appendix E**

# **Minimum Quantitation Limits and National Ambient Water Quality Criteria**

Minimum Quantitation Limits and National Ambient Water Quality Criteria

	ASB Method MQL	Analytical MQL		2002 NAWQC	
		MQL Range Min	Max	CMC (acute)	CCC (Chronic)
Endosulfan II (beta)	33213-65-9 UG/L	0.5	0.24	0.5	0.034
Endosulfan Sulfate	1031-07-8 UG/L	0.5	0.24	0.5	
Endrin	72-20-8 UG/L	0.5	0.24	0.5	0.037
Endrin Ketone	53494-70-5 UG/L	0.5	0.24	0.5	0.0023
gamma-BHC (Lindane)	58-89-9 UG/L	0.5	0.097	0.5	0.16
gamma-Chlordane /2	5566-34-7 UG/L	0.5	0.097	0.5	
Heptachlor	76-44-8 UG/L	0.5	0.097	0.5	0.053
Heptachlor Epoxide	1024-57-3 UG/L	0.5	0.097	0.5	0.053
Methoxychlor	72-43-5 UG/L	1	0.48	0.52	
Toxaphene	8001-35-2 UG/L	20	9.7	10	0.21
trans-Nonachlor /2	39765-80-5 UG/L	0.5	0.097	0.5	0.0002
<b>Volatiles Scan</b>					
(m- and/or p-)Xylene	UG/L		0.068	2	
1,1,1,2-Tetrachloroethane	630-20-6 UG/L	1	1	1	
1,1,1-Trichloroethane	71-55-6 UG/L	1	1	1	
1,1,2,2-Tetrachloroethane	79-34-5 UG/L	1	1	1	
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1 UG/L	1	1	1	
1,1,2-Trichloroethane	79-00-5 UG/L	1	1	1	
1,1-Dichloroethane	75-34-3 UG/L	1	1	1	
1,1-Dichloroethene	75-35-4 UG/L	1	1	1	
1,1-Dichloropropene	563-58-6 UG/L	1	1	1	
1,2,3-Trichlorobenzene	87-61-6 UG/L	1	1	1	
1,2,3-Trichloropropane	96-18-4 UG/L	1	1	1	
1,2,4-Trichlorobenzene	120-82-1 UG/L	1	1	1	
1,2,4-Trimethylbenzene	95-63-6 UG/L	1	0.11	1	
1,2-Dibromo-3-Chloropropane (DBCP)	96-12-8 UG/L	1	2	2	
1,2-Dibromoethane (EDB)	106-93-4 UG/L	1	1	1	
1,2-Dichlorobenzene	95-50-1 UG/L	1	1	1	
1,2-Dichloroethane	107-06-2 UG/L	1	1	1	
1,2-Dichloropropane	78-87-5 UG/L	1	1	1	
1,3,5-Trimethylbenzene	108-67-8 UG/L	1	1	1	
1,3-Dichlorobenzene	541-73-1 UG/L	1	1	1	
1,3-Dichloropropane	142-28-9 UG/L	1	1	1	
1,4-Dichlorobenzene	106-46-7 UG/L	1	1	1	
2,2-Dichloropropane	590-20-7 UG/L	1	1	1	
Acetone	67-64-1 UG/L	25	2	2	
Benzene	71-43-2 UG/L	1	0.11	1	
Bromobenzene	108-86-1 UG/L	1	1	1	
Bromochloromethane	74-97-5 UG/L	1	1	1	
Bromodichloromethane	75-27-4 UG/L	1	0.074	1	
Bromoform	75-25-2 UG/L	1	1	1	
Bromomethane	74-83-9 UG/L	1	1	1	
Carbon Disulfide	75-15-0 UG/L	2.5	1	1	

## Minimum Quantitation Limits and National Ambient Water Quality Criteria

	ASB Method MQL	Analytical MQL		2002 NAWQC	
		MQL Range Min	Max	CMC (acute)	CCC (Chronic)
cis-1,2-Dichloroethene	156-59-2 UG/L	1	1	1	
cis-1,3-Dichloropropene	10061-01-5 UG/L	1	1	1	
Cyclohexane	110-82-7 UG/L	1	1	1	
Dibromochloromethane	124-48-1 UG/L	1	1	1	
Dibromomethane	74-95-3 UG/L	1	1	1	
Dichlorodifluoromethane	75-71-8 UG/L	1	1	1	
Ethyl Benzene	100-41-4 UG/L	1	0.1	1	
Hexachloro-1,3-Butadiene	87-68-3 UG/L	1	1	1	
Isopropylbenzene	98-82-8 UG/L	1	1	1	
Methyl Acetate	79-20-9 UG/L	5	1	1	
Methyl Butyl Ketone	591-78-6 UG/L	2.5	2	2	
Methyl Ethyl Ketone	78-93-3 UG/L	12	5	5	
Methyl Isobutyl Ketone	108-10-1 UG/L	2.2	1	1	
Methyl T-Butyl Ether (MTBE)	1634-04-4 UG/L	1	1	1	
Methylcyclohexane	108-87-2 UG/L	1	1	1	
Methylene Chloride	75-09-2 UG/L	1	1	1	
n-Butylbenzene	104-51-8 UG/L	1	1	1	
n-Propylbenzene	103-65-1 UG/L	1	1	1	
o-Chlorotoluene	95-49-8 UG/L	1	1	1	
o-Xylene	95-47-6 UG/L	2	0.12	1	
p-Chlorotoluene	106-43-4 UG/L	1	1	1	
p-Isopropyltoluene	99-87-6 UG/L	1	1	1	
sec-Butylbenzene	135-98-8 UG/L	1	1	1	
Styrene	100-42-5 UG/L	1	1	1	
tert-Butylbenzene	98-06-6 UG/L	1	1	1	
Tetrachloroethene (Tetrachloroethylene)	127-18-4 UG/L	1	1	1	
Toluene	108-88-3 UG/L	1	0.057	1	
trans-1,2-Dichloroethene	156-60-5 UG/L	1	1	1	
trans-1,3-Dichloropropene	10061-02-6 UG/L	1	1	1	
Trichloroethene (Trichloroethylene)	79-01-6 UG/L	1	1	1	
Trichlorofluoromethane (Freon 11)	75-69-4 UG/L	1	1	1	
Vinyl Chloride	75-01-4 UG/L	1	1	1	

**Extractables Scan**

(3-and/or 4-)Methylphenol	UG/L	10	9.5	11
1,1-Biphenyl	92-52-4 UG/L	10	9.5	11
1,2,4-Trichlorobenzene	120-82-1 UG/L	10	9.5	11
2,3,4,6-Tetrachlorophenol	58-90-2 UG/L	10	9.5	11
2,4,5-Trichlorophenol	95-95-4 UG/L	10	9.5	11
2,4,6-Trichlorophenol	88-06-2 UG/L	10	9.5	11
2,4-Dichlorophenol	120-83-2 UG/L	10	9.5	11
2,4-Dimethylphenol	105-67-9 UG/L	10	9.5	11
2,4-Dinitrophenol	51-28-5 UG/L	20	19	23
2,4-Dinitrotoluene	121-14-2 UG/L	10	9.5	11

## Minimum Quantitation Limits and National Ambient Water Quality Criteria

	ASB Method MQL	Analytical MQL		2002 NAWQC	
		MQL Range	Min	Max	CMC (acute)
2-Methylphenol	95-48-7 UG/L	10	9.5	11	
2-Nitroaniline	88-74-4 UG/L	10	9.5	11	
2-Nitrophenol	88-75-5 UG/L	10	9.5	11	
3,3'-Dichlorobenzidine	91-94-1 UG/L	10	9.5	11	
3-Nitroaniline	99-09-2 UG/L	10	9.5	11	
4-Bromophenyl Phenyl Ether	101-55-3 UG/L	10	9.5	11	
4-Chloro-3-Methylphenol	59-50-7 UG/L	10	9.5	11	
4-Chloroaniline	106-47-8 UG/L	10	9.5	11	
4-Chlorophenyl Phenyl Ether	7005-72-3 UG/L	10	9.5	11	
4-Nitroaniline	100-01-6 UG/L	10	9.5	11	
4-Nitrophenol	100-02-7 UG/L	20	9.5	23	
Acenaphthene	83-32-9 UG/L	10	9.5	11	
Acenaphthylene	208-96-8 UG/L	10	9.5	11	
Acetophenone	98-86-2 UG/L	10	9.5	11	
Anthracene	120-12-7 UG/L	10	9.5	11	
Atrazine	1912-24-9 UG/L	10	9.5	11	
Benzaldehyde	100-52-7 UG/L	10	9.5	11	
Benzo(a)Anthracene	56-55-3 UG/L	10	9.5	11	
Benzo(b)Fluoranthene	205-99-2 UG/L	10	9.5	11	
Benzo(ghi)Perylene	191-24-2 UG/L	10	9.5	11	
Benzo(k)Fluoranthene	207-08-9 UG/L	10	9.5	11	
Benzo-a-Pyrene	50-32-8 UG/L	10	9.5	11	
Benzyl Butyl Phthalate	85-68-7 UG/L	10	9.5	11	
bis(2-Chloroethoxy)Methane	111-91-1 UG/L	10	9.5	11	
bis(2-Chloroethyl) Ether	111-44-4 UG/L	10	9.5	11	
bis(2-Chloroisopropyl) Ether	108-60-1 UG/L	10	9.5	11	
bis(2-Ethylhexyl) Phthalate	117-81-7 UG/L	10	9.5	11	
Caprolactam	105-60-2 UG/L	10	9.5	11	
Carbazole	86-74-8 UG/L	10	9.5	11	
Chrysene	218-01-9 UG/L	10	9.5	11	
Dibenzo(a,h)Anthracene	53-70-3 UG/L	10	9.5	11	
Dibenzofuran	132-64-9 UG/L	10	9.5	11	
Diethyl Phthalate	84-66-2 UG/L	10	9.5	11	
Dimethyl Phthalate	131-11-3 UG/L	10	9.5	11	
Di-n-Butylphthalate	84-74-2 UG/L	10	9.5	11	
Di-n-Octylphthalate	117-84-0 UG/L	10	9.5	11	
Fluoranthene	206-44-0 UG/L	10	9.5	11	
Fluorene	86-73-7 UG/L	10	9.5	11	
Hexachlorobenzene (HCB)	118-74-1 UG/L	10	9.5	11	
Hexachlorobutadiene	87-68-3 UG/L	10	9.5	11	
Hexachlorocyclopentadiene (HCCP)	77-47-4 UG/L	10	9.5	11	
Hexachloroethane	67-72-1 UG/L	10	9.5	11	
Indeno (1,2,3-cd) Pyrene	193-39-5 UG/L	10	9.5	11	
Isophorone	78-59-1 UG/L	10	9.5	11	

Minimum Quantitation Limits and National Ambient Water Quality Criteria

	ASB Method MQL	Analytical MQL		2002 NAWQC	
		MQL Range Min	Max	CMC (acute)	CCC (Chronic)
Phenanthrene	85-01-8 UG/L	10	9.5	11	
Phenol	108-95-2 UG/L	10	9.5	11	
Pyrene	129-00-0 UG/L	10	9.5	11	
<b>Classical Nutrients</b>					
Ammonia	7664-41-7 MG/L	0.05	0.05		
Nitrate-Nitrite Nitrogen	MG/L	0.05	0.05		
Total Kjeldahl Nitrogen	MG/L	0.05			
Total Organic Carbon	MG/L	1			
Total Phosphorus	7723-14-0 MG/L	0.01			

CMC - Criteria Maximum Concentration,

CCC - Criterion Continuous Concentration

## **Appendix F**

# **Sediment Minimum Quantitation Limits**

Sediment MQLs

Metals Scan		ASB Method	Analytical MQL			TEL	PEL
			MQL	Min	Max		
Aluminum	7429-90-5 MG/KG	50	180	8200			
Antimony	7440-36-0 MG/KG	2	0.25	0.5			
Arsenic	7440-38-2 MG/KG	1	0.25			7.24	41.6
Barium	7440-39-3 MG/KG	1	1				
Beryllium	7440-41-7 MG/KG	0.5	0.3				
Cadmium	7440-43-9 MG/KG	0.5	0.12	0.25	0.68		4.2
Calcium	7440-70-2 MG/KG	50					
Chromium	7440-47-3 MG/KG	1	0.5			52.3	160.4
Cobalt	7440-48-4 MG/KG	1	0.5				
Copper	7440-50-8 MG/KG	1	2			18.7	108.2
Iron	7439-89-6 MG/KG	25					
Lead	7439-92-1 MG/KG	0.5				30.2	112.2
Magnesium	7439-95-4 MG/KG	25					
Manganese	7439-96-5 MG/KG	1					
Molybdenum	7439-98-7 MG/KG	1	0.5	5.2			
Nickel	7440-02-0 MG/KG	2	0.99	4		15.9	42.8
Potassium	7440-09-7 MG/KG	200	99	100			
Selenium	7782-49-2 MG/KG	4	0.5	1			
Silver	7440-22-4 MG/KG	1	0.5	0.5		0.7	1.7
Sodium	7440-23-5 MG/KG	200					
Strontium	7440-24-6 MG/KG	1					
Thallium	7440-28-0 MG/KG	0.5	0.25	0.5			
Tin	7440-31-5 MG/KG	2.5	0	0			
Titanium	7440-32-6 MG/KG	1	2.6	22			
Total Mercury	7439-97-6 MG/KG	0.05	0.042	0.049		0.13	0.7
Vanadium	7440-62-2 MG/KG	1	2				
Yttrium	7440-65-5 MG/KG	1	0.3	14			
Zinc	7440-66-6 MG/KG	1				124	271

PCB Scan

PCB-1016 (Aroclor 1016)	12674-11-2 UG/KG	100	100	100	21.6	188.8
PCB-1221 (Aroclor 1221)	11104-28-2 UG/KG	100	100	100	21.6	188.8
PCB-1232 (Aroclor 1232)	11141-16-5 UG/KG	100	100	100	21.6	188.8
PCB-1242 (Aroclor 1242)	53469-21-9 UG/KG	100	100	100	21.6	188.8
PCB-1248 (Aroclor 1248)	12672-29-6 UG/KG	100	100	100	21.6	188.8
PCB-1254 (Aroclor 1254)	11097-69-1 UG/KG	100	100	100	21.6	188.8
PCB-1260 (Aroclor 1260)	11096-82-5 UG/KG	100	100	100	21.6	188.8

Pesticides Scan

4,4'-DDD (p,p'-DDD)	72-54-8 UG/KG	20	9.9	28	1.2	7.8
4,4'-DDE (p,p'-DDE)	72-55-9 UG/KG	20	4	11	2.1	374.2
4,4'-DDT (p,p'-DDT)	50-29-3 UG/KG	20	9.9	41	1.2	4.8
Aldrin	309-00-2 UG/KG	20	4	15		
alpha-BHC	319-84-6 UG/KG	20	4	11		
alpha-Chlordane /2	5103-71-9 UG/KG	20	4	11	2.3	4.8
beta-BHC	319-85-7 UG/KG	20	4	28		
Chlordene /2	3734-48-3 UG/KG	20	4	11		
cis-Nonachlor /2	5103-73-1 UG/KG	20	4	11		
delta-BHC	319-86-8 UG/KG	20	4.1	20		
Dieldrin	60-57-1 UG/KG	20	4	12	0.7	4.3
Endosulfan I (alpha)	959-98-8 UG/KG	20	4	18		
Endosulfan II (beta)	33213-65-9 UG/KG	20	9.9	28		
Endosulfan Sulfate	1031-07-8 UG/KG	20	9.9	28		

## Sediment MQLs

Metals Scan		ASB Method	Analytical MQL			TEL	PEL
			MQL	Min	Max		
Heptachlor	76-44-8 UG/KG	20	4	22			
Heptachlor Epoxide	1024-57-3 UG/KG	20	4	13			
Methoxychlor	72-43-5 UG/KG	50	20	55			
Toxaphene	8001-35-2 UG/KG	20	400	1110			
trans-Nonachlor /2	39765-80-5 UG/KG	20	4	11			
<b>Volatiles Scan</b>							
(m- and/or p-)Xylene	UG/KG	2	2.4	14			
1,1,1,2-Tetrachloroethane	630-20-6 UG/KG	1	1.2	6.8			
1,1,1-Trichloroethane	71-55-6 UG/KG	1	1.2	6.8			
1,1,2,2-Tetrachloroethane	79-34-5 UG/KG	1	1.2	6.8			
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1 UG/KG	1	1.2	6.8			
1,1,2-Trichloroethane	79-00-5 UG/KG	1	1.2	6.8			
1,1-Dichloroethane	75-34-3 UG/KG	1	1.2	6.8			
1,1-Dichloroethene	75-35-4 UG/KG	1	1.2	6.8			
1,1-Dichloropropene	563-58-6 UG/KG	1	1.2	6.8			
1,2,3-Trichlorobenzene	87-61-6 UG/KG	1	1.8	14			
1,2,3-Trichloropropane	96-18-4 UG/KG	1	2.4	14			
1,2,4-Trichlorobenzene	120-82-1 UG/KG	1	2.4	14			
1,2,4-Trimethylbenzene	95-63-6 UG/KG	1	1.2	6.8			
1,2-Dibromo-3-Chloropropane (DBCP)	96-12-8 UG/KG	1	5.9	34			
1,2-Dibromoethane (EDB)	106-93-4 UG/KG	1	1.2	6.8			
1,2-Dichlorobenzene	95-50-1 UG/KG	1	1.2	6.8			
1,2-Dichloroethane	107-06-2 UG/KG	1	1.2	6.8			
1,2-Dichloropropene	78-87-5 UG/KG	1	1.2	6.8			
1,3,5-Trimethylbenzene	108-67-8 UG/KG	1	0.25	6.8			
1,3-Dichlorobenzene	541-73-1 UG/KG	1	2.4	14			
1,3-Dichloropropane	142-28-9 UG/KG	1	1.2	6.8			
1,4-Dichlorobenzene	106-46-7 UG/KG	1	2.4	14			
2,2-Dichloropropene	590-20-7 UG/KG	1	1.2	6.8			
Acetone	67-64-1 UG/KG	1	12	70			
Benzene	71-43-2 UG/KG	1	1.2	6.8			
Bromobenzene	108-86-1 UG/KG	1	1.2	6.8			
Bromochloromethane	74-97-5 UG/KG	1	1.2	6.8			
Bromodichloromethane	75-27-4 UG/KG	1	1.2	6.8			
Bromoform	75-25-2 UG/KG	1	5.9	34			
Bromomethane	74-83-9 UG/KG	1	1.2	6.8			
Carbon Disulfide	75-15-0 UG/KG	2.5	1.2	6.8			
Carbon Tetrachloride	56-23-5 UG/KG	1	1.2	6.8			
Chlorobenzene	108-90-7 UG/KG	1	1.2	6.8			
Chloroethane	75-00-3 UG/KG	1	1.2	6.8			
Chloroform	67-66-3 UG/KG	1	1.2	6.8			
Chloromethane	74-87-3 UG/KG	1	1.2	6.8			
cis-1,2-Dichloroethene	156-59-2 UG/KG	1	1.2	6.8			
cis-1,3-Dichloropropene	10061-01-5 UG/KG	1	1.2	6.8			
Cyclohexane	110-82-7 UG/KG	1	1.2	6.8			
Dibromochloromethane	124-48-1 UG/KG	1	1.2	6.8			
Dibromomethane	74-95-3 UG/KG	1	1.2	6.8			
Dichlorodifluoromethane	75-71-8 UG/KG	1	1.2	6.8			
Ethyl Benzene	100-41-4 UG/KG	1	1.2	6.8			
Hexachloro-1,3-Butadiene	87-68-3 UG/KG	1	1.2	6.8			
Isopropylbenzene	98-82-8 UG/KG	1	1.2	14			
Methyl Acetate	79-20-9 UG/KG	1	1.2	6.8			

Sediment MQLs

Metals Scan	ASB		Analytical MQL		TEL	PEL
	Method	MQL	Min	Max		
Methylcyclohexane	108-87-2 UG/KG	1	1.2	6.8		
Methylene Chloride	75-09-2 UG/KG	1	1.2	6.8		
n-Butylbenzene	104-51-8 UG/KG	1	2.4	14		
n-Propylbenzene	103-65-1 UG/KG	1	1.2	6.8		
o-Chlorotoluene	95-49-8 UG/KG	1	1.2	6.8		
o-Xylene	95-47-6 UG/KG	1	0.21	6.8		
p-Chlorotoluene	106-43-4 UG/KG	1	2.4	14		
p-Isopropyltoluene	99-87-6 UG/KG	1	1.2	43		
sec-Butylbenzene	135-98-8 UG/KG	1	1.2	6.8		
Styrene	100-42-5 UG/KG	1	1.2	6.8		
tert-Butylbenzene	98-06-6 UG/KG	1	1.2	6.8		
Tetrachloroethene (Tetrachloroethylene)	127-18-4 UG/KG	1	1.2	6.8		
Toluene	108-88-3 UG/KG	1	1.2	6.8		
trans-1,2-Dichloroethene	156-60-5 UG/KG	1	5.9	34		
trans-1,3-Dichloropropene	10061-02-6 UG/KG	1	1.2	6.8		
Trichloroethene (Trichloroethylene)	79-01-6 UG/KG	1	1.2	6.8		
Trichlorofluoromethane (Freon 11)	75-69-4 UG/KG	1	1.2	6.8		
Vinyl Chloride	75-01-4 UG/KG	1	1.2	6.8		
<b>Extractables Scan</b>						
(3-and/or 4-)Methylphenol	UG/KG	330	400	1100		
1,1-Biphenyl	92-52-4 UG/KG	330	400	1100		
1,2,4-Trichlorobenzene	120-82-1 UG/KG	330	400	1100		
2,3,4,6-Tetrachlorophenol	58-90-2 UG/KG	330	400	1100		
2,4,5-Trichlorophenol	95-95-4 UG/KG	330	400	1100		
2,4,6-Trichlorophenol	88-06-2 UG/KG	330	400	1100		
2,4-Dichlorophenol	120-83-2 UG/KG	330	400	1100		
2,4-Dimethylphenol	105-67-9 UG/KG	330	400	1100		
2,4-Dinitrophenol	51-28-5 UG/KG	670	790	2200		
2,4-Dinitrotoluene	121-14-2 UG/KG	330	400	1100		
2,6-Dinitrotoluene	606-20-2 UG/KG	330	400	1100		
2-Chloronaphthalene	91-58-7 UG/KG	330	400	1100		
2-Chlorophenol	95-57-8 UG/KG	330	400	1100		
2-Methyl-4,6-Dinitrophenol	534-52-1 UG/KG	670	790	2200		
2-Methylnaphthalene	91-57-6 UG/KG	330	400	1100		
2-Methylphenol	95-48-7 UG/KG	330	400	1100		
2-Nitroaniline	88-74-4 UG/KG	330	400	1100		
2-Nitrophenol	88-75-5 UG/KG	330	400	1100		
3,3'-Dichlorobenzidine	91-94-1 UG/KG	330	400	1100		
3-Nitroaniline	99-09-2 UG/KG	330	400	1100		
4-Bromophenyl Phenyl Ether	101-55-3 UG/KG	330	400	1100		
4-Chloro-3-Methylphenol	59-50-7 UG/KG	330	400	1100		
4-Chloroaniline	106-47-8 UG/KG	330	400	1100		
4-Chlorophenyl Phenyl Ether	7005-72-3 UG/KG	330	400	1100		
4-Nitroaniline	100-01-6 UG/KG	330	400	1100		
4-Nitrophenol	100-02-7 UG/KG	670	790	2200		
Acenaphthene	83-32-9 UG/KG	330	400	1100	6.71	88.9
Acenaphthylene	208-96-8 UG/KG	330	400	1100	5.87	127.9
Acetophenone	98-86-2 UG/KG	330	400	1100		
Anthracene	120-12-7 UG/KG	330	400	1100	46.8	245
Atrazine	1912-24-9 UG/KG	330	400	1100		
Benzaldehyde	100-52-7 UG/KG	330	400	1100		
Benzo(a)Anthracene	56-55-3 UG/KG	330	400	1100	74.8	692.5

Sediment MQLs

Metals Scan		ASB Method	Analytical MQL			TEL	PEL
			MQL	Min	Max		
Benzyl Butyl Phthalate	85-68-7 UG/KG	330	400	1100			
bis(2-Chloroethoxy)Methane	111-91-1 UG/KG	330	400	1100			
bis(2-Chloroethyl) Ether	111-44-4 UG/KG	330	400	1100			
bis(2-Chloroisopropyl) Ether	108-60-1 UG/KG	330	400	1100			
bis(2-Ethylhexyl) Phthalate	117-81-7 UG/KG	330	400	1100			
Caprolactam	105-60-2 UG/KG	330	400	1100			
Carbazole	86-74-8 UG/KG	330	400	1100			
Chrysene	218-01-9 UG/KG	330	400	1100	107.8	846	
Dibenzo(a,h)Anthracene	53-70-3 UG/KG	330	400	1100	6.2	134.6	
Dibenzofuran	132-64-9 UG/KG	330	400	1100			
Diethyl Phthalate	84-66-2 UG/KG	330	400	1100			
Dimethyl Phthalate	131-11-3 UG/KG	330	400	1100			
Di-n-Butylphthalate	84-74-2 UG/KG	330	400	1100			
Di-n-Octylphthalate	117-84-0 UG/KG	330	400	1100			
Fluoranthene	206-44-0 UG/KG	330	400	1100	112.8	1493.5	
Fluorene	86-73-7 UG/KG	330	400	1100	21.2	144.4	
Hexachlorobenzene (HCB)	118-74-1 UG/KG	330	400	1100			
Hexachlorobutadiene	87-68-3 UG/KG	330	400	1100			
Hexachlorocyclopentadiene (HCCP)	77-47-4 UG/KG	330	400	1100			
Hexachloroethane	67-72-1 UG/KG	330	400	1100			
Indeno (1,2,3-cd) Pyrene	193-39-5 UG/KG	330	400	1100			
Isophorone	78-59-1 UG/KG	330	400	1100			
Naphthalene	91-20-3 UG/KG	330	400	1100	34.6	390.6	
Nitrobenzene	98-95-3 UG/KG	330	400	1100			
n-Nitroso di-n-Propylamine	621-64-7 UG/KG	330	400	1100			
n-Nitrosodiphenylamine/Diphenylamine	122-39-4 UG/KG	330	400	1100			
Pentachlorophenol	87-86-5 UG/KG	670	790	2200			
Phenanthrene	85-01-8 UG/KG	330	400	1100	86.7	543.5	
Phenol	108-95-2 UG/KG	330	400	1100			
Pyrene	129-00-0 UG/KG	330	400	1100	152.7	1397.6	
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Classical Nutrients							
Ammonia	7664-41-7 MG/KG	2.5	3	91			
Nitrate-Nitrite Nitrogen	MG/KG	12.5	1.2	6.4			
Total Kjeldahl Nitrogen	MG/KG	12.5					
Total Organic Carbon	MG/KG		8600	39000			
Total Phosphorus	7723-14-0 MG/KG	25	26				

TEL - Threshold Effects Level

PEL - Probable Effects Level

# **Appendix G**

## **Quality Assurance/Quality Control Results**

Quality Control Sample Results

	QCDI1 Deionized H2O Blank	QCPB1SW Preservative Blank	QCPB2SW Preservative Blank	QCRB1WSW Equipment Rinse Blank	QCRB2WSW Equipment Rinse Blank	QCTB2WSW Trip Blank	QCTB3WSW Trip Blank	QCTB4SW Trip Blank	QCTRIPBLK Trip Blank
	9/28/2005 1849	9/30/2005 1730	9/30/2005 1845	9/28/2005 1841	9/29/2005 1600	9/28/2005 1805	9/29/2005 1450	9/30/2005 1645	9/27/2005
<b>Metals Scan</b>	Zinc	7440-66-6	UG/L	U	U	U	18	24	NR
<b>PCB Scan</b>				None Detected					
<b>Pesticides Scan</b>				None Detected					
<b>Volatiles Scan</b>	Toluene	108-88-3	UG/L	0.16 J	NR	NR	NR	U	U
<b>Extractables Scan</b>				None Detected					
<b>Classical Nutrients</b>	Total Organic Carbon	MG/L		U	U	U	2.4	2.4	NR
									NR

Data Qualifiers

U-Analyte not detected at or above reporting limit.

J-Identification of analyte is acceptable; reported value is an estimate.

UJ-Analyte not detected at or above reporting limit. Reporting limit is an estimate.

N-Presumptive evidence analyte is present; analyte reported as tentative identification.

NJ-Presumptive evidence analyte is present; analyte reported as tentative identification. Reported value is an estimate.

K-Identification of analyte is acceptable; reported value may be biased high. Actual value expected to be less than the reported value.

L-Identification of analyte is acceptable; reported value may be biased low. Actual value expected to be greater than reported value.

NA-Not Analyzed. | NAI-Not Analyzed due to Interferences. | A-Analyte analyzed in replicate. Reported value is 'average' of replicates.

R-Presence or absence of analyte can not be determined from data due to severe quality control problems. Data are rejected and considered unusable.

C-confirmed by GCMS | /1-when no value is reported, see chlordane constituents | /2-constituents or metabolites of technical chlordane

NR-Not Reported

Table 19  
Quality Control/Quality Assurance Duplicate Sample Results  
Water Quality Study of Bays in Coastal Mississippi  
September 27-30, 2005

Results of Duplicate Sampling

	Duplicate BBB3DSD 9/29/2005	Sample BBB3SD 9/29/2005	Duplicate BC4DSD 9/27/2005	Sample BC4SD 9/27/2005	Duplicate ER1DSD 9/28/2005	Sample ER1SD 9/28/2005	Duplicate SLB6DSD 9/30/2005	Sample SLB6SD 9/30/2005
Metals Scan	1005	945	1300	1240	1430	1400	1100	1040
% Moisture	%	69	66	41	49 A	23	20	56
Aluminum	7429-90-5 MG/KG	7000	7800	2600	3000	180 A	210	6600
Antimony	7440-36-0 MG/KG	0.25 U	0.25 U	0.5 U	0.5 U	0.25 U	0.25 U	0.25 U
Arsenic	7440-38-2 MG/KG	5.2	5.5	1.2	0.87	0.25 U	0.25 U	8.9
Barium	7440-39-3 MG/KG	14	16	27	57	1.7 A	1	19
Beryllium	7440-41-7 MG/KG	0.99	1.1	0.3	0.3	0.3 U	0.3 U	0.72
Cadmium	7440-43-9 MG/KG	0.42	0.46	1.5	1.8	0.12 U	0.12 U	0.24
Calcium	7440-70-2 MG/KG	1400	1400	4900	4700	71 A	50	4400
Chromium	7440-47-3 MG/KG	12	12	7.2	9.7	0.5 U	0.5 U	10
Cobalt	7440-48-4 MG/KG	5.9	6	0.59	0.66	0.5 U	0.5 U	7.7
Copper	7440-50-8 MG/KG	14 J	15 J	4.7	5.5	2 UJ	2 UJ	6.2
Iron	7439-89-6 MG/KG	14000 J	15000 J	3400	3200	270 A	370	16000
Lead	7439-92-1 MG/KG	18	20	4.8	5.9	2.1 A	1.3	15
Magnesium	7439-95-4 MG/KG	3200	3200	1800	1700	200 A	120	3500
Manganese	7439-96-5 MG/KG	140	140	26	26	1.7 A	2.5	260
Molybdenum	7439-98-7 MG/KG	0.5 U	0.61	1.6 U	1.6 U	5.2 U	5.2 U	0.5 U
Nickel	7440-02-0 MG/KG	5.9 J	6.2 J	2.4	2.7	0.99 U	1 U	8
Potassium	7440-09-7 MG/KG	1200	1300	510	450	99 U	100 U	1600
Selenium	7782-49-2 MG/KG	1	1.2	1 U	1 U	0.5 U	0.5 U	0.5 U
Silver	7440-22-4 MG/KG	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Sodium	7440-23-5 MG/KG	6800	6000	8500	5900	1300 A	540	5900
Strontium	7440-24-6 MG/KG	27	28	59	66	1.5 A	1.1	37
Thallium	7440-28-0 MG/KG	0.25 U	0.25 U	0.5 U	0.5 U	0.25 U	0.25 U	0.25 U
Tin	7440-31-5 MG/KG	NA	NA	NA	NA	NA	NA	NA
Titanium	7440-32-6 MG/KG	12	11	12	14	2.6 AJ	2.8 J	20 J
Total Mercury	7439-97-6 MG/KG	0.069	0.07 A	0.044 U	0.044 U	0.045 U	0.044 U	0.047 U
Vanadium	7440-62-2 MG/KG	16	17	6.1	7.3	2 UJ	2 UJ	19
Yttrium	7440-65-5 MG/KG	12	13	2.7	2.5	0.3 U	0.3 U	11
Zinc	7440-66-6 MG/KG	63	66	48	55	1.6 A	1.9	42
<b>PCB Scan</b>								
% Moisture	%	70	68	30	34	21	20	36
PCB-1016 (Aroclor 1016)	12674-11-2 UG/KG	100 UJ	100 UJ	100 U	100 U	100 U	100 U	100 UJ
PCB-1221 (Aroclor 1221)	11104-28-2 UG/KG	100 UJ	100 UJ	100 U	100 U	100 U	100 U	100 UJ
PCB-1232 (Aroclor 1232)	11141-16-5 UG/KG	100 UJ	100 UJ	100 U	100 U	100 U	100 U	100 UJ
PCB-1242 (Aroclor 1242)	53469-21-9 UG/KG	100 UJ	100 UJ	100 U	100 U	100 U	100 U	100 UJ
PCB-1248 (Aroclor 1248)	12672-29-6 UG/KG	100 UJ	100 UJ	100 U	100 U	100 U	100 U	100 UJ
PCB-1254 (Aroclor 1254)	11097-69-1 UG/KG	100 UJ	100 UJ	100 U	100 U	100 U	100 U	100 UJ
PCB-1260 (Aroclor 1260)	11096-82-5 UG/KG	100 UJ	100 UJ	100 U	100 U	100 U	100 U	100 UJ
<b>Pesticides Scan</b>								
% Moisture	%	70	68	30	34	21	20	56
4,4'-DDD (p,p'-DDD)	72-54-8 UG/KG	28 U	26 UJ	14 U	15 U	10 U	10 U	18 U
4,4'-DDE (p,p'-DDE)	72-55-9 UG/KG	11 U	10 UJ	5.7 U	6 U	4.1 U	4.1 U	7.2 U
4,4'-DDT (p,p'-DDT)	50-29-3 UG/KG	40 U	37 UJ	14 U	15 U	10 U	10 U	19 U
Aldrin	309-00-2 UG/KG	15 U	14 UJ	5.7 U	6 U	4.1 U	4.1 U	9.3 U
alpha-BHC	319-84-6 UG/KG	11 U	10 UJ	5.7 U	6 U	4.1 U	4.1 U	7.2 U
alpha-Chlordane /2	5103-71-9 UG/KG	11 U	10 UJ	5.7 U	6 U	4.1 U	4.1 U	7.8 U
beta-BHC	319-85-7 UG/KG	11 U	26 UJ	5.7 U	6 U	4.1 U	4.1 U	7.2 U
Chlordene /2	3734-48-3 UG/KG	11 U	10 UJ	5.7 U	6 U	4.1 U	4.1 U	7.8 U
cis-Nonachlor /2	5103-73-1 UG/KG	11 U	10 UJ	5.7 U	6 U	4.1 U	4.1 U	7.2 U
delta-BHC	319-86-8 UG/KG	20 U	18 UJ	5.7 U	6 U	4.1 U	4.1 U	11 U
Dieldrin	60-57-1 UG/KG	12 U	10 UJ	5.7 U	6 U	4.1 U	4.1 U	7.8 U
Endosulfan I (alpha)	959-98-8 UG/KG	18 U	10 UJ	5.7 U	6 U	4.1 U	4.1 U	8.2 U
Endosulfan II (beta)	33213-65-9 UG/KG	28 U	26 UJ	14 U	15 U	10 U	10 U	18 U
Endosulfan Sulfate	1031-07-8 UG/KG	28 U	26 UJ	14 U	15 U	10 U	10 U	18 U
Endrin	72-20-8 UG/KG	28 U	26 UJ	14 U	15 U	10 U	10 U	18 U
Endrin Ketone	53494-70-5 UG/KG	28 U	26 UJ	18 U	19 U	10 U	10 U	18 U
gamma-BHC (Lindane)	58-89-9 UG/KG	11 U	10 UJ	5.7 U	6 U	4.1 U	4.1 U	7.2 U
gamma-Chlordane /2	5566-34-7 UG/KG	11 U	11 UJ	5.7 U	6 U	4.1 U	4.1 U	7.8 U
Heptachlor	76-44-8 UG/KG	22 U	11 UJ	6.8 U	6.8 U	4.1 U	4.1 U	7.8 U
Heptachlor Epoxide	1024-57-3 UG/KG	13 U	10 UJ	5.7 U	6 U	4.1 U	4.1 U	7.8 U
Methoxychlor	72-43-5 UG/KG	55 U	52 UJ	28 U	30 U	23 U	21 U	36 U
Toxaphene	8001-35-2 UG/KG	1110 U	1000 UJ	570 U	600 U	410 U	410 U	720 U
trans-Nonachlor /2	39765-80-5 UG/KG	11 U	10 UJ	5.7 U	6 U	4.1 U	4.1 U	7.8 U
<b>Volatiles Scan</b>								
% Moisture	%	69	66	41	50	23	20	56
(m- and/or p-)Xylene	UG/KG	14 U	8.7 U	4.6 U	6.5 U	2.4 U	2.5 U	6.5 U
1,1,1,2-Tetrachloroethane	630-20-6 UG/KG	6.8 U	4.3 U	2.3 U	3.3 U	1.2 U	1.2 U	3.4 U
1,1,1-Trichloroethane	71-55-6 UG/KG	6.8 U	4.3 U	2.3 U	3.3 U	1.2 U	1.2 U	3.4 U
1,1,2,2-Tetrachloroethane	79-34-5 UG/KG	6.8 U	4.3 U	2.3 U	3.3 U	1.2 U	1.2 U	3.4 U
1,1,2-Trichloro-1,2-Trifluoroethane (Freon 113)	76-13-1 UG/KG	6.8 U	4.3 U	2.3 U	3.3 U	1.2 U	1.2 U	3.4 U
1,1,2-Trichloroethane	79-00-5 UG/KG	6.8 U	4.3 U	2.3 U	3.3 U	1.2 U	1.2 U	3.4 U
1,1-Dichloroethane	75-34-3 UG/KG	6.8 U	4.3 U	2.3 U	3.3 U	1.2 U	1.2 U	3.4 U
1,1-Dichloroethene (1,1-Dichloroethylene)	75-35-4 UG/KG	6.8 U	4.3 U	2.3 U	3.3 U	1.2 U	1.2 U	3.4 U
1,1-Dichloropropene	563-58-6 UG/KG	6.8 U	4.3 U	2.3 U	3.3 U	1.2 U	1.2 U	3.4 U
1,2,3-Trichlorobenzene	87-61-6 UG/KG	14 U	8.7 U	4.6 U	6.5 U	2.4 U	2.5 U	6.5 U
1,2,3-Trichloropropane	96-18-4 UG/KG	14 U	8.7 U	4.6 U	6.5 U	2.4 U	2.5 U	6.8 U
1,2,4-Trichlorobenzene	120-82-1 UG/KG	14 U	8.7 U	4.6 U	6.5 U	2.4 U	2.5 U	6.5 U
1,2,4-Trimethylbenzene	95-63-6 UG/KG	6.8 U	4.3 U	2.3 U	3.3 U	1.2 U	1.2 U	3.4 U
1,2-Dibromo-3-Chloropropane (DBCP)	96-12-8 UG/KG	34 U	22 U	11 U	16 U	5.9 U	6.3 U	16 U
1,2-Dibromoethane (EDB)	106-93-4 UG/KG	6.8 U	4.3 U	2.3 U	3.3 U	1.2 U	1.2 U	3.4 U

Table 19  
Quality Control/Quality Assurance Duplicate Sample Results  
Water Quality Study of Bays in Coastal Mississippi  
September 27-30, 2005

Results of Duplicate Sampling

Metals Scan		Duplicate	Sample	Duplicate	Sample	Duplicate	Sample	Duplicate	Sample
		BBB3DSD 9/29/2005	BBB3SD 9/29/2005	BC4DSD 9/27/2005	BC4SD 9/27/2005	ER1DSD 9/28/2005	ER1SD 9/28/2005	SLB6DSD 9/30/2005	SLB6SD 9/30/2005
Bromochloromethane	74-97-5	UG/KG	6.8 U	4.3 U	2.3 U	3.3 U	1.2 U	1.2 U	3.2 U
Bromodichloromethane	75-27-4	UG/KG	6.8 U	4.3 U	2.3 U	3.3 U	1.2 U	1.2 U	3.2 U
Bromoform	75-25-2	UG/KG	34 U	22 U	11 U	16 U	5.9 U	6.3 U	16 U
Bromomethane	74-83-9	UG/KG	6.8 UU	4.3 UU	2.3 U	3.3 U	1.2 U	1.2 U	3.2 UU
Carbon Disulfide	75-15-0	UG/KG	6.8 U	4.3 UU	3.2	4.4	1.2 U	1.2 U	3.2 UU
Carbon Tetrachloride	56-23-5	UG/KG	6.8 U	4.3 U	2.3 U	3.3 U	1.2 U	1.2 U	3.2 U
Chlorobenzene	108-90-7	UG/KG	6.8 U	4.3 U	2.3 U	3.3 U	1.2 U	1.2 U	3.2 U
Chloroethane	75-00-4	UG/KG	6.8 U	4.3 U	2.3 U	3.3 U	1.2 U	1.2 U	3.2 U
Chloroform	67-66-3	UG/KG	6.8 U	4.3 U	2.3 U	3.3 U	1.2 U	1.2 U	3.2 U
Chloromethane	74-87-3	UG/KG	6.8 U	4.3 U	2.3 U	3.3 U	1.2 U	1.2 U	3.2 U
cis-1,2-Dichloroethene	156-59-2	UG/KG	6.8 U	4.3 U	2.3 U	3.3 U	1.2 U	1.2 U	3.2 U
cis-1,3-Dichloropropene	10061-01-5	UG/KG	6.8 U	4.3 U	2.3 U	3.3 U	1.2 U	1.2 U	3.2 U
Cyclohexane	110-82-7	UG/KG	6.8 U	4.3 U	2.3 U	3.3 U	1.2 U	1.2 U	3.2 U
Dibromo-chloromethane	124-48-1	UG/KG	6.8 U	4.3 U	2.3 U	3.3 U	1.2 U	1.2 U	3.2 U
Dibromomethane	74-95-3	UG/KG	6.8 U	4.3 U	2.3 U	3.3 U	1.2 U	1.2 U	3.2 U
Dichlorodifluoromethane	75-71-8	UG/KG	6.8 UU	4.3 UU	2.3 U	3.3 U	1.2 U	1.2 U	3.2 UU
Ethyl Benzene	100-41-4	UG/KG	6.8 U	4.3 U	2.3 U	3.3 U	1.2 U	1.2 U	3.2 U
Hexachloro-1,3-Butadiene	87-68-3	UG/KG	6.8 U	4.3 U	2.3 U	3.3 U	1.2 U	1.2 U	3.2 U
Isopropylbenzene	98-82-8	UG/KG	6.8 U	4.3 U	2.3 U	3.3 U	1.2 U	1.2 U	3.2 U
Methyl Acetate	79-20-9	UG/KG	6.8 UJ	4.3 UU	2.3 U	3.3 U	1.2 U	1.2 U	3.2 UU
Methyl Butyl Ketone	591-78-6	UG/KG	6.8 U	4.3 U	2.3 U	3.3 U	1.2 U	1.2 U	3.2 U
Methyl Ethyl Ketone	78-93-3	UG/KG	11 J	9.7 UU	4.6 U	6.5 U	2.4 U	2.5 U	6.5 UU
Methyl Isobutyl Ketone	108-10-1	UG/KG	6.8 U	4.3 U	2.3 U	3.3 U	1.2 U	1.2 U	3.2 U
Methyl T-Butyl Ether (MTBE)	1634-04-4	UG/KG	6.8 U	4.3 U	2.3 U	3.3 U	1.2 U	1.2 U	3.2 U
Methylcyclohexane	108-87-2	UG/KG	6.8 U	4.3 U	2.3 U	3.3 U	1.2 U	1.2 U	3.2 U
Methylene Chloride	75-09-2	UG/KG	6.8 U	4.3 U	2.3 U	3.3 U	1.2 U	1.2 U	3.2 U
n-Butylbenzene	104-51-8	UG/KG	14 U	8.7 U	4.6 U	6.5 U	2.4 U	2.5 U	6.5 U
n-Propylbenzene	103-65-1	UG/KG	6.8 U	4.3 U	2.3 U	3.3 U	1.2 U	1.2 U	3.2 U
o-Chlorotoluene	95-49-8	UG/KG	6.8 U	4.3 U	2.3 U	3.3 U	1.2 U	1.2 U	3.2 U
o-Xylene	95-47-6	UG/KG	6.8 U	4.3 U	2.3 U	3.3 U	1.2 U	1.2 U	3.2 U
p-Chlorotoluene	106-43-4	UG/KG	14 U	8.7 U	4.6 U	6.5 U	2.4 U	2.5 U	6.5 U
p-Isopropyltoluene	99-87-6	UG/KG	6.8 U	4.3 U	2.3 U	3.3 U	1.2 U	1.2 U	3.2 U
sec-Butylbenzene	135-98-8	UG/KG	6.8 U	4.3 U	2.3 U	3.3 U	1.2 U	1.2 U	3.2 U
Styrene	100-42-5	UG/KG	6.8 U	4.3 U	2.3 U	3.3 U	1.2 U	1.2 U	3.2 U
tert-Butylbenzene	98-06-6	UG/KG	6.8 U	4.3 U	2.3 U	3.3 U	1.2 U	1.2 U	3.2 U
Tetrachloroethene (Tetrachloroethylene)	127-18-4	UG/KG	6.8 U	4.3 U	2.3 U	3.3 U	1.2 U	1.2 U	3.2 U
Toluene	108-88-3	UG/KG	6.8 U	4.3 U	2.3 U	3.3 U	1.2 U	1.2 U	3.2 U
trans-1,2-Dichloroethene	156-60-5	UG/KG	34 U	22 U	11 U	16 U	5.9 U	6.3 U	16 U
trans-1,3-Dichloropropene	10061-02-6	UG/KG	6.8 U	4.3 U	2.3 U	3.3 U	1.2 U	1.2 U	3.2 U
Trichloroethene (Trichloroethylene)	79-01-6	UG/KG	6.8 U	4.3 U	2.3 U	3.3 U	1.2 U	1.2 U	3.2 U
Trichlorofluoromethane (Freon 11)	75-69-4	UG/KG	6.8 U	4.3 U	2.3 U	3.3 U	1.2 U	1.2 U	3.2 U
Vinyl Chloride	75-01-4	UG/KG	6.8 U	4.3 U	2.3 U	3.3 U	1.2 U	1.2 U	3.2 U
<b>Miscellaneous Volatiles</b>									
Thiobismethane		UG/KG	NR	NR	200 NJ	NR	NR	NR	NR
<b>Extractables Scan</b>									
% Moisture	%	70	68.22	29.58	33.67	20.62	19.98	55.91	57.75
(3-and/or 4)-Methylphenol		UG/KG	1100 U	1000 U	460 U	500 U	400 U	410 U	740 U
1,1-Biphenyl	92-52-4	UG/KG	1100 U	1000 U	460 U	500 U	400 U	410 U	740 U
1,2,4-Trichlorobenzene	120-82-1	UG/KG	1100 U	1000 U	460 U	500 U	400 U	410 U	740 U
2,3,4,6-Tetrachlorophenol	58-90-2	UG/KG	1100 U	1000 U	460 U	500 U	400 U	410 U	740 U
2,4,5-Trichlorophenol	95-95-4	UG/KG	1100 U	1000 U	460 U	500 U	400 U	410 U	740 U
2,4,6-Trichlorophenol	88-06-2	UG/KG	1100 U	1000 U	460 U	500 U	400 U	410 U	740 U
2,4-Dichlorophenol	120-83-2	UG/KG	1100 U	1000 U	460 U	500 U	400 U	410 U	740 U
2,4-Dimethylphenol	105-67-9	UG/KG	1100 U	1000 U	460 U	500 U	400 U	410 U	740 U
2,4-Dinitrophenol	51-28-5	UG/KG	2200 UU	2000 UU	930 UU	990 UU	790 UU	820 UU	1500 UU
2,4-Dinitrotoluene	121-14-2	UG/KG	1100 U	1000 U	460 U	500 U	400 U	410 U	740 U
2,6-Dinitrotoluene	606-20-2	UG/KG	1100 U	1000 U	460 U	500 U	400 U	410 U	740 U
2-Chloronaphthalene	91-58-7	UG/KG	1100 U	1000 U	460 U	500 U	400 U	410 U	740 U
2-Chlorophenol	95-57-8	UG/KG	1100 U	1000 U	460 U	500 U	400 U	410 U	740 U
2-Methyl-4,6-Dinitrophenol	534-52-1	UG/KG	2200 U	2000 U	930 U	990 U	790 U	820 U	1500 U
2-Methylnaphthalene	91-57-6	UG/KG	1100 U	1000 U	460 U	500 U	400 U	410 U	740 U
2-Methylphenol	95-48-7	UG/KG	1100 U	1000 U	460 U	500 U	400 U	410 U	740 U
2-Nitroaniline	88-74-4	UG/KG	1100 U	1000 U	460 U	500 U	400 U	410 U	740 U
2-Nitrophenol	88-75-5	UG/KG	1100 U	1000 U	460 U	500 U	400 U	410 U	740 U
3,3'-Dichlorobenzidine	91-94-1	UG/KG	1100 U	1000 U	460 U	500 U	400 U	410 U	740 U
3-Nitroaniline	99-09-2	UG/KG	1100 U	1000 U	460 U	500 U	400 U	410 U	740 U
4-Bromophenyl Phenyl Ether	101-55-3	UG/KG	1100 U	1000 U	460 U	500 U	400 U	410 U	740 U
4-Chloro-3-Methylphenol	59-50-7	UG/KG	1100 U	1000 U	460 U	500 U	400 U	410 U	740 U
4-Chloraniline	106-47-8	UG/KG	1100 U	1000 U	460 U	500 U	400 U	410 U	740 U
4-Chlorophenyl Phenyl Ether	7005-72-3	UG/KG	1100 U	1000 U	460 U	500 U	400 U	410 U	740 U
4-Nitroaniline	100-01-6	UG/KG	1100 U	1000 U	460 U	500 U	400 U	410 U	740 U
4-Nitrophenol	100-02-7	UG/KG	2200 U	2000 U	930 U	990 U	790 U	820 U	1500 U
Acenaphthene	83-32-9	UG/KG	1100 U	1000 U	460 U	500 U	400 U	410 U	740 U
Acenaphthylene	208-96-8	UG/KG	1100 U	1000 U	460 U	500 U	400 U	410 U	740 U
Acetophenone	98-86-2	UG/KG	1100 U	1000 U	460 U	500 U	400 U	410 U	740 U
Anthracene	120-12-7	UG/KG	1100 U	1000 U	460 U	500 U	400 U	410 U	740 U
Atrazine	1912-24-9	UG/KG	1100 UU	1000 UU	460 U	500 U	400 UU	410 UU	740 U
Benzaldehyde	100-52-7	UG/KG	1100 U	1000 U	460 UU	500 UU	400 U	410 U	740 UU
Benzo(a)Anthracene	56-55-3	UG/KG	1100 U	1000 U	460 U	500 U	400 U	410 U	740 U
Benzo(b)Fluoranthene	205-99-2	UG/KG	1100 U	1000 U	460 U	500 U	400 U	410 U	740 U
Benzo(ghi)Perylene	191-24-2	UG/KG	1100 U	1000 U	460 U	500 U	400 U	410 U	740 U

Table 19  
 Quality Control/Quality Assurance Duplicate Sample Results  
 Water Quality Study of Bays in Coastal Mississippi  
 September 27-30, 2005

Results of Duplicate Sampling

Metals Scan	Duplicate	Sample	Duplicate	Sample	Duplicate	Sample	Duplicate	Sample
	BBB3DSD	BBB3SD	BC4DSD	BC4SD	ER1DSD	ER1SD	SLB6DSD	SLB6SD
	9/29/2005	9/29/2005	9/27/2005	9/27/2005	9/28/2005	9/28/2005	9/30/2005	9/30/2005
	1005	945	1300	1240	1430	1400	1100	1040
Dibenzofuran	132-64-9	UG/KG	1100 U	1000 U	460 U	500 U	400 U	410 U
Diethyl Phthalate	84-66-2	UG/KG	1100 U	1000 U	460 U	500 U	400 U	410 U
Dimethyl Phthalate	131-11-3	UG/KG	1100 UU	1000 UU	460 U	500 U	400 UU	410 UU
Di-n-Butylphthalate	84-74-2	UG/KG	1100 U	1000 U	460 U	500 U	400 U	410 U
Di-n-Octylphthalate	117-84-0	UG/KG	1100 U	1000 U	460 U	500 U	400 U	410 U
Fluoranthene	206-44-0	UG/KG	1100 U	1000 U	66 J	500 U	400 U	410 U
Fluorene	86-73-7	UG/KG	1100 U	1000 U	460 U	500 U	400 U	410 U
Hexachlorobenzene (HCB)	118-74-1	UG/KG	1100 U	1000 U	460 U	500 U	400 U	410 U
Hexachlorobutadiene	87-68-3	UG/KG	1100 U	1000 U	460 U	500 U	400 U	410 U
Hexachlorocyclopentadiene (HCCP)	77-47-4	UG/KG	1100 U	1000 U	460 U	500 U	400 U	410 U
Hexachloroethane	67-72-1	UG/KG	1100 U	1000 U	460 U	500 U	400 U	410 U
Indeno (1,2,3-cd) Pyrene	193-39-5	UG/KG	1100 U	1000 U	460 U	500 U	400 U	410 U
Isophorone	78-59-1	UG/KG	1100 U	1000 U	460 U	500 U	400 U	410 U
Naphthalene	91-20-3	UG/KG	1100 U	1000 U	460 U	500 U	400 U	410 U
Nitrobenzene	98-95-3	UG/KG	1100 U	1000 U	460 U	500 U	400 U	410 U
n-Nitroso di-n-Propylamine	621-64-7	UG/KG	1100 U	1000 U	460 U	500 U	400 U	410 U
n-Nitrosodiphenylamine/Diphenylamine	122-39-4	UG/KG	1100 U	1000 U	460 U	500 U	400 U	410 U
Pentachlorophenol	87-86-5	UG/KG	2200 U	2000 U	930 U	990 U	790 U	820 U
Phenanthrene	85-01-8	UG/KG	1100 U	1000 U	460 U	500 U	400 U	410 U
Phenol	108-95-2	UG/KG	1100 U	1000 U	460 U	500 U	400 U	410 U
Pyrene	129-00-0	UG/KG	1100 U	1000 U	63 J	500 U	400 U	410 U
<b>Classical Nutrients</b>								
Ammonia	7664-41-7	MG/KG	52	77	15	13	3.4	3 U
Nitrate-Nitrite Nitrogen		MG/KG	3.1 UJ	2.8 UJ	1.6 UJ	1.9 UJ	1.3 UJ	1.2 UJ
Total Kjeldahl Nitrogen		MG/KG	2300	2400	430	330	57	57
Total Organic Carbon		MG/KG	26000	28000	9800 U	9800 U	8700 U	8600 U
Total Phosphorus	7723-14-0	MG/KG	300	330	1800	2400	26 U	26 U
							170	160

Data Qualifiers

U-Analyte not detected at or above reporting limit. The number is the minimum quantitation limit.

J-Identification of analyte is acceptable; reported value is an estimate.

UJ-Analyte not detected at or above reporting limit. Reporting limit is an estimate.

N-Presumptive evidence analyte is present; analyte reported as tentative identification.

NJ-Presumptive evidence analyte is present; analyte reported as tentative identification. Reported value is an estimate.

K-Identification of analyte is acceptable; reported value may be biased high. Actual value expected to be less than the reported value.

L-Identification of analyte is acceptable; reported value may be biased low. Actual value expected to be greater than reported value.

NA-Not Analyzed. | NAI-Not Analyzed due to Interferences. | A-Analyte analyzed in replicate. Reported value is 'average' of replicates.

R-Presence or absence of analyte can not be determined from data due to severe quality control problems. Data are rejected and considered unusable.

C-confirmed by GCMS | /1-when no value is reported, see chlordane constituents | /2-constituents or metabolites of technical chlordane

NR-Not Reported