



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region 4 Science and Ecosystem Support Division  
980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 11-0480

Project: 11-0480, Ogeechee River Fish Kill 2011 - Reported by Jenny Scifres

**May 27, 2011**

**MEMORANDUM**

**SUBJECT:** FINAL Analytical Report  
Project: 11-0480, Ogeechee River Fish Kill 2011  
Superfund Emergency Response and Removal

**FROM:** Jenny Scifres  
Analytical Support Branch, Acting Chief

**TO:** Jose Negron

Attached are the final results for the analytical groups listed below. These analyses were performed in accordance with the Analytical Support Branch's (ASB) Laboratory Operations and Quality Assurance Manual (ASB LOQAM) found at [www.epa.gov/region4/sesd/asbsop](http://www.epa.gov/region4/sesd/asbsop). Any unique project data quality objectives specified in writing by the data requestor have also been incorporated into the data unless otherwise noted in the Report Narrative. Chemistry data have been verified based on the ASB LOQAM specifications and may have been qualified if the applicable quality control criteria were not met. For a listing of specific data qualifiers and explanations, please refer to the Data Qualifier Definitions included in this report. The reported results are representative only of the samples as received by the laboratory.

Analyses Included in this report:

Method Used:

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**Total Metals (TMTL)**

Total Mercury  
Total Metals  
Total Metals

EPA 245.6  
EPA 200.8  
EPA 6010



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**Report Narrative** for Work Order E112205, Project: 11-0480

Samples were processed according to the Ecological Assessment Branch's standard operating procedure. Routine tissue sample preparation and analyses for metals were performed by the Inorganic Chemistry Section of the Analytical Support Branch.

**Sample Disposal Policy**

Because of the laboratory's limited space for long term sample storage, our policy is to dispose of samples on a periodic schedule. Please note that within 60 days of this memo, the original samples and all sample extracts and/or sample digestates will be disposed of in accordance with applicable regulations. The 60-day sample disposal policy does not apply to criminal samples which are held until the laboratory is notified by the criminal investigators that case development and litigation are complete.

These samples may be held in the laboratory's custody for a longer period of time if you have a special project need. If you wish for the laboratory to hold samples beyond the 60-day period, please contact our Sample Control Coordinator, Debbie Colquitt, by e-mail at [Colquitt.Debbie@epa.gov](mailto:Colquitt.Debbie@epa.gov), and provide a reason for holding samples beyond 60 days

cc: Nardina Turner



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### SAMPLES INCLUDED IN THIS REPORT

#### Project: 11-0480, Ogeechee River Fish Kill 2011

Sample ID	Laboratory ID	Matrix	Date Collected	Date Received
STA02	E112204-01	Fish	5/22/11 11:00	5/23/11 10:56
STA02	E112204-02	Fish	5/22/11 11:05	5/23/11 10:56
STA02	E112204-03	Fish	5/22/11 11:10	5/23/11 10:56
STA02	E112204-04	Fish	5/22/11 11:15	5/23/11 10:56
STA05	E112204-05	Fish	5/22/11 18:10	5/23/11 10:56
STA06	E112205-01	Fish	5/23/11 00:00	5/24/11 10:51



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### DATA QUALIFIER DEFINITIONS

U	The analyte was not detected at or above the reporting limit.
CR	Se could be biased high due to presence of Bromine in samples.
J	The identification of the analyte is acceptable; the reported value is an estimate.
QM-1	Matrix Spike Recovery less than method control limits
QM-2	Matrix Spike Recovery greater than method control limits
QM-3	Matrix Spike Precision outside method control limits
QR-2	MRL verification recovery greater than upper control limits.

### ACRONYMS AND ABBREVIATIONS

CAS	Chemical Abstracts Service  Note: Analytes with no known CAS identifiers have been assigned codes beginning with "E", the EPA ID as assigned by the EPA Substance Registry System ( <a href="http://www.epa.gov/srs">www.epa.gov/srs</a> ), or beginning with "R4-", a unique identifier assigned by the EPA Region 4 laboratory.
MDL	Method Detection Limit - The minimum concentration of a substance (an analyte) that can be measured and reported with a 99% confidence that the analyte concentration is greater than zero.
MRL	Minimum Reporting Limit - Analyte concentration that corresponds to the lowest demonstrated level of acceptable quantitation. The MRL is sample-specific and accounts for preparation weights and volumes, dilutions, and moisture content of soil/sediments.
TIC	Tentatively Identified Compound - An analyte identified based on a match with the instrument software's mass spectral library. A calibration standard has not been analyzed to confirm the compound's identification or the estimated concentration reported.



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Project: 11-0480, Ogeechee River Fish Kill 2011 - Reported by Jenny Scifres

### Total Metals

Project: 11-0480, Ogeechee River Fish Kill 2011

Sample ID: STA02

Lab ID: E112204-01

Station ID: OR-02-FI-01

Matrix: Fish

Date Collected: 5/22/11 11:00

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
7439-97-6	Mercury	0.57		mg/kg	0.089	5/25/11 14:58	5/26/11 13:05	EPA 245.6
7429-90-5	Aluminum	22		mg/kg	3.0	5/25/11 14:51	5/26/11 17:40	EPA 6010
7440-36-0	Antimony	0.074	U	mg/kg	0.074	5/25/11 14:57	5/26/11 17:10	EPA 200.8
7440-38-2	Arsenic	0.18		mg/kg	0.074	5/25/11 14:57	5/26/11 17:10	EPA 200.8
7440-39-3	Barium	1.9		mg/kg	0.15	5/25/11 14:51	5/26/11 17:40	EPA 6010
7440-41-7	Beryllium	0.089	U	mg/kg	0.089	5/25/11 14:51	5/26/11 17:40	EPA 6010
7440-43-9	Cadmium	0.037	U	mg/kg	0.037	5/25/11 14:57	5/26/11 17:10	EPA 200.8
7440-70-2	Calcium	14000		mg/kg	7.4	5/25/11 14:51	5/26/11 17:40	EPA 6010
7440-47-3	Chromium	0.48		mg/kg	0.15	5/25/11 14:51	5/26/11 17:40	EPA 6010
7440-48-4	Cobalt	0.15	U	mg/kg	0.15	5/25/11 14:51	5/26/11 17:40	EPA 6010
7440-50-8	Copper	1.1		mg/kg	0.30	5/25/11 14:51	5/26/11 17:40	EPA 6010
7439-89-6	Iron	22		mg/kg	1.5	5/25/11 14:51	5/26/11 17:40	EPA 6010
7439-92-1	Lead	0.074	U	mg/kg	0.074	5/25/11 14:57	5/26/11 17:10	EPA 200.8
7439-95-4	Magnesium	460		mg/kg	7.4	5/25/11 14:51	5/26/11 17:40	EPA 6010
7439-96-5	Manganese	3.5		mg/kg	1.5	5/25/11 14:51	5/26/11 17:40	EPA 6010
7439-98-7	Molybdenum	0.30	U	mg/kg	0.30	5/25/11 14:51	5/26/11 17:40	EPA 6010
7440-02-0	Nickel	0.51		mg/kg	0.30	5/25/11 14:51	5/26/11 17:40	EPA 6010
7440-09-7	Potassium	2400	J, QM-2	mg/kg	30	5/25/11 14:51	5/26/11 17:40	EPA 6010
7782-49-2	Selenium	0.92	J, CR	mg/kg	0.15	5/25/11 14:57	5/26/11 17:10	EPA 200.8
7440-22-4	Silver	0.15	U, J, QM-1, QM-3	mg/kg	0.15	5/25/11 14:51	5/26/11 17:40	EPA 6010
7440-23-5	Sodium	640	J, QM-1	mg/kg	30	5/25/11 14:51	5/26/11 17:40	EPA 6010
7440-24-6	Strontium	13		mg/kg	0.15	5/25/11 14:51	5/26/11 17:40	EPA 6010
7440-28-0	Thallium	0.074	U	mg/kg	0.074	5/25/11 14:57	5/26/11 17:10	EPA 200.8
7440-32-6	Titanium	0.15	U	mg/kg	0.15	5/25/11 14:51	5/26/11 17:40	EPA 6010
7440-62-2	Vanadium	0.15	U	mg/kg	0.15	5/25/11 14:51	5/26/11 17:40	EPA 6010
7440-65-5	Yttrium	0.089	U	mg/kg	0.089	5/25/11 14:51	5/26/11 17:40	EPA 6010
7440-66-6	Zinc	15		mg/kg	0.30	5/25/11 14:51	5/26/11 17:40	EPA 6010



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### Total Metals

Project: 11-0480, Ogeechee River Fish Kill 2011

Sample ID: STA02

Lab ID: E112204-02

Station ID: OR-02-FI-02

Matrix: Fish

Date Collected: 5/22/11 11:05

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
7439-97-6	Mercury	0.17		mg/kg	0.090	5/25/11 14:58	5/26/11 13:11	EPA 245.6
7429-90-5	Aluminum	4.3	U	mg/kg	4.3	5/25/11 14:51	5/26/11 19:45	EPA 6010
7440-36-0	Antimony	0.054	U	mg/kg	0.054	5/25/11 14:57	5/26/11 17:31	EPA 200.8
7440-38-2	Arsenic	0.070		mg/kg	0.054	5/25/11 14:57	5/26/11 17:31	EPA 200.8
7440-39-3	Barium	0.95		mg/kg	0.22	5/25/11 14:51	5/26/11 19:45	EPA 6010
7440-41-7	Beryllium	0.13	U	mg/kg	0.13	5/25/11 14:51	5/26/11 19:45	EPA 6010
7440-43-9	Cadmium	0.027	U	mg/kg	0.027	5/25/11 14:57	5/26/11 17:31	EPA 200.8
7440-70-2	Calcium	10000		mg/kg	11	5/25/11 14:51	5/26/11 19:45	EPA 6010
7440-47-3	Chromium	0.75		mg/kg	0.22	5/25/11 14:51	5/26/11 19:45	EPA 6010
7440-48-4	Cobalt	0.22	U	mg/kg	0.22	5/25/11 14:51	5/26/11 19:45	EPA 6010
7440-50-8	Copper	67		mg/kg	0.43	5/25/11 14:51	5/26/11 19:45	EPA 6010
7439-89-6	Iron	16		mg/kg	2.2	5/25/11 14:51	5/26/11 19:45	EPA 6010
7439-92-1	Lead	3.2		mg/kg	0.054	5/25/11 14:57	5/26/11 17:31	EPA 200.8
7439-95-4	Magnesium	400		mg/kg	11	5/25/11 14:51	5/26/11 19:45	EPA 6010
7439-96-5	Manganese	11		mg/kg	2.2	5/25/11 14:51	5/26/11 19:45	EPA 6010
7439-98-7	Molybdenum	0.43	U	mg/kg	0.43	5/25/11 14:51	5/26/11 19:45	EPA 6010
7440-02-0	Nickel	21		mg/kg	0.43	5/25/11 14:51	5/26/11 19:45	EPA 6010
7440-09-7	Potassium	2500		mg/kg	43	5/25/11 14:51	5/26/11 19:45	EPA 6010
7782-49-2	Selenium	0.49	J, CR	mg/kg	0.11	5/25/11 14:57	5/26/11 17:31	EPA 200.8
7440-22-4	Silver	0.22	U	mg/kg	0.22	5/25/11 14:51	5/26/11 19:45	EPA 6010
7440-23-5	Sodium	630		mg/kg	43	5/25/11 14:51	5/26/11 19:45	EPA 6010
7440-24-6	Strontium	8.4		mg/kg	0.22	5/25/11 14:51	5/26/11 19:45	EPA 6010
7440-28-0	Thallium	0.054	U	mg/kg	0.054	5/25/11 14:57	5/26/11 17:31	EPA 200.8
7440-32-6	Titanium	0.22	U	mg/kg	0.22	5/25/11 14:51	5/26/11 19:45	EPA 6010
7440-62-2	Vanadium	0.22	U	mg/kg	0.22	5/25/11 14:51	5/26/11 19:45	EPA 6010
7440-65-5	Yttrium	0.13	U	mg/kg	0.13	5/25/11 14:51	5/26/11 19:45	EPA 6010
7440-66-6	Zinc	59		mg/kg	0.43	5/25/11 14:51	5/26/11 19:45	EPA 6010



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### Total Metals

Project: 11-0480, Ogeechee River Fish Kill 2011

Sample ID: STA02

Lab ID: E112204-03

Station ID: OR-02-FI-03

Matrix: Fish

Date Collected: 5/22/11 11:10

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
7439-97-6	Mercury	0.65		mg/kg	0.082	5/25/11 14:58	5/26/11 13:13	EPA 245.6
7429-90-5	Aluminum	3.2	J, QR-2	mg/kg	2.2	5/25/11 14:51	5/26/11 19:59	EPA 6010
7440-36-0	Antimony	0.055	U	mg/kg	0.055	5/25/11 14:57	5/26/11 17:36	EPA 200.8
7440-38-2	Arsenic	0.22		mg/kg	0.055	5/25/11 14:57	5/26/11 17:36	EPA 200.8
7440-39-3	Barium	1.2		mg/kg	0.11	5/25/11 14:51	5/26/11 19:59	EPA 6010
7440-41-7	Beryllium	0.066	U	mg/kg	0.066	5/25/11 14:51	5/26/11 19:59	EPA 6010
7440-43-9	Cadmium	0.027	U	mg/kg	0.027	5/25/11 14:57	5/26/11 17:36	EPA 200.8
7440-70-2	Calcium	4900		mg/kg	5.5	5/25/11 14:51	5/26/11 19:59	EPA 6010
7440-47-3	Chromium	0.41		mg/kg	0.11	5/25/11 14:51	5/26/11 19:59	EPA 6010
7440-48-4	Cobalt	0.11	U	mg/kg	0.11	5/25/11 14:51	5/26/11 19:59	EPA 6010
7440-50-8	Copper	3.6		mg/kg	0.22	5/25/11 14:51	5/26/11 19:59	EPA 6010
7439-89-6	Iron	35		mg/kg	1.1	5/25/11 14:51	5/26/11 19:59	EPA 6010
7439-92-1	Lead	0.055	U	mg/kg	0.055	5/25/11 14:57	5/26/11 17:36	EPA 200.8
7439-95-4	Magnesium	290		mg/kg	5.5	5/25/11 14:51	5/26/11 19:59	EPA 6010
7439-96-5	Manganese	4.3		mg/kg	1.1	5/25/11 14:51	5/26/11 19:59	EPA 6010
7439-98-7	Molybdenum	0.22	U	mg/kg	0.22	5/25/11 14:51	5/26/11 19:59	EPA 6010
7440-02-0	Nickel	0.29		mg/kg	0.22	5/25/11 14:51	5/26/11 19:59	EPA 6010
7440-09-7	Potassium	2600		mg/kg	22	5/25/11 14:51	5/26/11 19:59	EPA 6010
7782-49-2	Selenium	1.0	J, CR	mg/kg	0.11	5/25/11 14:57	5/26/11 17:36	EPA 200.8
7440-22-4	Silver	0.11	U	mg/kg	0.11	5/25/11 14:51	5/26/11 19:59	EPA 6010
7440-23-5	Sodium	360		mg/kg	22	5/25/11 14:51	5/26/11 19:59	EPA 6010
7440-24-6	Strontium	4.2		mg/kg	0.11	5/25/11 14:51	5/26/11 19:59	EPA 6010
7440-28-0	Thallium	0.055	U	mg/kg	0.055	5/25/11 14:57	5/26/11 17:36	EPA 200.8
7440-32-6	Titanium	0.11	U	mg/kg	0.11	5/25/11 14:51	5/26/11 19:59	EPA 6010
7440-62-2	Vanadium	0.11	U	mg/kg	0.11	5/25/11 14:51	5/26/11 19:59	EPA 6010
7440-65-5	Yttrium	0.066	U	mg/kg	0.066	5/25/11 14:51	5/26/11 19:59	EPA 6010
7440-66-6	Zinc	8.5		mg/kg	0.22	5/25/11 14:51	5/26/11 19:59	EPA 6010



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Project: 11-0480, Ogeechee River Fish Kill 2011 - Reported by Jenny Scifres

## Total Metals

Project: 11-0480, Ogeechee River Fish Kill 2011

Sample ID: STA02

Lab ID: E112204-04

Station ID: OR-02-FI-04

Matrix: Fish

Date Collected: 5/22/11 11:15

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
7439-97-6	Mercury	0.19		mg/kg	0.082	5/25/11 14:58	5/26/11 13:14	EPA 245.6
7429-90-5	Aluminum	6.5	J, QR-2	mg/kg	3.7	5/25/11 14:51	5/26/11 20:06	EPA 6010
7440-36-0	Antimony	0.046	U	mg/kg	0.046	5/25/11 14:57	5/26/11 17:40	EPA 200.8
7440-38-2	Arsenic	0.084		mg/kg	0.046	5/25/11 14:57	5/26/11 17:40	EPA 200.8
7440-39-3	Barium	2.2		mg/kg	0.18	5/25/11 14:51	5/26/11 20:06	EPA 6010
7440-41-7	Beryllium	0.11	U	mg/kg	0.11	5/25/11 14:51	5/26/11 20:06	EPA 6010
7440-43-9	Cadmium	0.023	U	mg/kg	0.023	5/25/11 14:57	5/26/11 17:40	EPA 200.8
7440-70-2	Calcium	13000		mg/kg	9.2	5/25/11 14:51	5/26/11 20:06	EPA 6010
7440-47-3	Chromium	0.18	U	mg/kg	0.18	5/25/11 14:51	5/26/11 20:06	EPA 6010
7440-48-4	Cobalt	0.18	U	mg/kg	0.18	5/25/11 14:51	5/26/11 20:06	EPA 6010
7440-50-8	Copper	0.37	U	mg/kg	0.37	5/25/11 14:51	5/26/11 20:06	EPA 6010
7439-89-6	Iron	15		mg/kg	1.8	5/25/11 14:51	5/26/11 20:06	EPA 6010
7439-92-1	Lead	0.056		mg/kg	0.046	5/25/11 14:57	5/26/11 17:40	EPA 200.8
7439-95-4	Magnesium	390		mg/kg	9.2	5/25/11 14:51	5/26/11 20:06	EPA 6010
7439-96-5	Manganese	14		mg/kg	1.8	5/25/11 14:51	5/26/11 20:06	EPA 6010
7439-98-7	Molybdenum	0.37	U	mg/kg	0.37	5/25/11 14:51	5/26/11 20:06	EPA 6010
7440-02-0	Nickel	0.37	U	mg/kg	0.37	5/25/11 14:51	5/26/11 20:06	EPA 6010
7440-09-7	Potassium	2300		mg/kg	37	5/25/11 14:51	5/26/11 20:06	EPA 6010
7782-49-2	Selenium	0.75	J, CR	mg/kg	0.092	5/25/11 14:57	5/26/11 17:40	EPA 200.8
7440-22-4	Silver	0.18	U	mg/kg	0.18	5/25/11 14:51	5/26/11 20:06	EPA 6010
7440-23-5	Sodium	520		mg/kg	37	5/25/11 14:51	5/26/11 20:06	EPA 6010
7440-24-6	Strontium	11		mg/kg	0.18	5/25/11 14:51	5/26/11 20:06	EPA 6010
7440-28-0	Thallium	0.046	U	mg/kg	0.046	5/25/11 14:57	5/26/11 17:40	EPA 200.8
7440-32-6	Titanium	0.18	U	mg/kg	0.18	5/25/11 14:51	5/26/11 20:06	EPA 6010
7440-62-2	Vanadium	0.18	U	mg/kg	0.18	5/25/11 14:51	5/26/11 20:06	EPA 6010
7440-65-5	Yttrium	0.11	U	mg/kg	0.11	5/25/11 14:51	5/26/11 20:06	EPA 6010
7440-66-6	Zinc	17		mg/kg	0.37	5/25/11 14:51	5/26/11 20:06	EPA 6010



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D.A.R.T. Id: 11-0480

Project: 11-0480, Ogeechee River Fish Kill 2011 - Reported by Jenny Scifres

### Total Metals

Project: 11-0480, Ogeechee River Fish Kill 2011

Sample ID: STA05

Lab ID: E112204-05

Station ID: OR-05-FI-05

Matrix: Fish

Date Collected: 5/22/11 18:10

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
7439-97-6	Mercury	0.23		mg/kg	0.079	5/25/11 14:58	5/26/11 13:19	EPA 245.6
7429-90-5	Aluminum	15	J, QR-2	mg/kg	3.9	5/25/11 14:51	5/26/11 20:14	EPA 6010
7440-36-0	Antimony	0.049	U	mg/kg	0.049	5/25/11 14:57	5/26/11 17:44	EPA 200.8
7440-38-2	Arsenic	0.058		mg/kg	0.049	5/25/11 14:57	5/26/11 17:44	EPA 200.8
7440-39-3	Barium	1.7		mg/kg	0.20	5/25/11 14:51	5/26/11 20:14	EPA 6010
7440-41-7	Beryllium	0.12	U	mg/kg	0.12	5/25/11 14:51	5/26/11 20:14	EPA 6010
7440-43-9	Cadmium	0.024	U	mg/kg	0.024	5/25/11 14:57	5/26/11 17:44	EPA 200.8
7440-70-2	Calcium	13000		mg/kg	9.8	5/25/11 14:51	5/26/11 20:14	EPA 6010
7440-47-3	Chromium	0.20	U	mg/kg	0.20	5/25/11 14:51	5/26/11 20:14	EPA 6010
7440-48-4	Cobalt	0.20	U	mg/kg	0.20	5/25/11 14:51	5/26/11 20:14	EPA 6010
7440-50-8	Copper	0.39	U	mg/kg	0.39	5/25/11 14:51	5/26/11 20:14	EPA 6010
7439-89-6	Iron	14		mg/kg	2.0	5/25/11 14:51	5/26/11 20:14	EPA 6010
7439-92-1	Lead	0.060		mg/kg	0.049	5/25/11 14:57	5/26/11 17:44	EPA 200.8
7439-95-4	Magnesium	400		mg/kg	9.8	5/25/11 14:51	5/26/11 20:14	EPA 6010
7439-96-5	Manganese	11		mg/kg	2.0	5/25/11 14:51	5/26/11 20:14	EPA 6010
7439-98-7	Molybdenum	0.39	U	mg/kg	0.39	5/25/11 14:51	5/26/11 20:14	EPA 6010
7440-02-0	Nickel	0.39	U	mg/kg	0.39	5/25/11 14:51	5/26/11 20:14	EPA 6010
7440-09-7	Potassium	2500		mg/kg	39	5/25/11 14:51	5/26/11 20:14	EPA 6010
7782-49-2	Selenium	0.49	J, CR	mg/kg	0.098	5/25/11 14:57	5/26/11 17:44	EPA 200.8
7440-22-4	Silver	0.20	U	mg/kg	0.20	5/25/11 14:51	5/26/11 20:14	EPA 6010
7440-23-5	Sodium	650		mg/kg	39	5/25/11 14:51	5/26/11 20:14	EPA 6010
7440-24-6	Strontium	12		mg/kg	0.20	5/25/11 14:51	5/26/11 20:14	EPA 6010
7440-28-0	Thallium	0.049	U	mg/kg	0.049	5/25/11 14:57	5/26/11 17:44	EPA 200.8
7440-32-6	Titanium	0.20	U	mg/kg	0.20	5/25/11 14:51	5/26/11 20:14	EPA 6010
7440-62-2	Vanadium	0.20	U	mg/kg	0.20	5/25/11 14:51	5/26/11 20:14	EPA 6010
7440-65-5	Yttrium	0.12	U	mg/kg	0.12	5/25/11 14:51	5/26/11 20:14	EPA 6010
7440-66-6	Zinc	23		mg/kg	0.39	5/25/11 14:51	5/26/11 20:14	EPA 6010



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
 Region 4 Science and Ecosystem Support Division  
 980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 11-0480

Project: 11-0480, Ogeechee River Fish Kill 2011 - Reported by Jenny Scifres

### Total Metals

Project: 11-0480, Ogeechee River Fish Kill 2011

Sample ID: STA06

Lab ID: E112205-01

Station ID: OR-06-FI-06

Matrix: Fish

Date Collected: 5/23/11 0:00

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
7439-97-6	Mercury	0.25		mg/kg	0.078	5/25/11 14:58	5/26/11 13:20	EPA 245.6
7429-90-5	Aluminum	6.8	J, QR-2	mg/kg	3.7	5/25/11 14:51	5/26/11 20:21	EPA 6010
7440-36-0	Antimony	0.047	U	mg/kg	0.047	5/25/11 14:57	5/26/11 17:49	EPA 200.8
7440-38-2	Arsenic	0.064		mg/kg	0.047	5/25/11 14:57	5/26/11 17:49	EPA 200.8
7440-39-3	Barium	3.5		mg/kg	0.19	5/25/11 14:51	5/26/11 20:21	EPA 6010
7440-41-7	Beryllium	0.11	U	mg/kg	0.11	5/25/11 14:51	5/26/11 20:21	EPA 6010
7440-43-9	Cadmium	0.023	U	mg/kg	0.023	5/25/11 14:57	5/26/11 17:49	EPA 200.8
7440-70-2	Calcium	14000		mg/kg	9.3	5/25/11 14:51	5/26/11 20:21	EPA 6010
7440-47-3	Chromium	0.21		mg/kg	0.19	5/25/11 14:51	5/26/11 20:21	EPA 6010
7440-48-4	Cobalt	0.19	U	mg/kg	0.19	5/25/11 14:51	5/26/11 20:21	EPA 6010
7440-50-8	Copper	0.37	U	mg/kg	0.37	5/25/11 14:51	5/26/11 20:21	EPA 6010
7439-89-6	Iron	16		mg/kg	1.9	5/25/11 14:51	5/26/11 20:21	EPA 6010
7439-92-1	Lead	0.11		mg/kg	0.047	5/25/11 14:57	5/26/11 17:49	EPA 200.8
7439-95-4	Magnesium	420		mg/kg	9.3	5/25/11 14:51	5/26/11 20:21	EPA 6010
7439-96-5	Manganese	10		mg/kg	1.9	5/25/11 14:51	5/26/11 20:21	EPA 6010
7439-98-7	Molybdenum	0.37	U	mg/kg	0.37	5/25/11 14:51	5/26/11 20:21	EPA 6010
7440-02-0	Nickel	0.50		mg/kg	0.37	5/25/11 14:51	5/26/11 20:21	EPA 6010
7440-09-7	Potassium	2400		mg/kg	37	5/25/11 14:51	5/26/11 20:21	EPA 6010
7782-49-2	Selenium	0.38	J, CR	mg/kg	0.093	5/25/11 14:57	5/26/11 17:49	EPA 200.8
7440-22-4	Silver	0.19	U	mg/kg	0.19	5/25/11 14:51	5/26/11 20:21	EPA 6010
7440-23-5	Sodium	610		mg/kg	37	5/25/11 14:51	5/26/11 20:21	EPA 6010
7440-24-6	Strontium	14		mg/kg	0.19	5/25/11 14:51	5/26/11 20:21	EPA 6010
7440-28-0	Thallium	0.047	U	mg/kg	0.047	5/25/11 14:57	5/26/11 17:49	EPA 200.8
7440-32-6	Titanium	0.19	U	mg/kg	0.19	5/25/11 14:51	5/26/11 20:21	EPA 6010
7440-62-2	Vanadium	0.19	U	mg/kg	0.19	5/25/11 14:51	5/26/11 20:21	EPA 6010
7440-65-5	Yttrium	0.11	U	mg/kg	0.11	5/25/11 14:51	5/26/11 20:21	EPA 6010
7440-66-6	Zinc	16		mg/kg	0.37	5/25/11 14:51	5/26/11 20:21	EPA 6010