



**STATE OF TENNESSEE  
DEPARTMENT OF HEALTH  
ENVIRONMENTAL LABORATORIES**

TDH: Lab Services JRL  
Lab Services - Jackson Regional Lab  
Jackson, TN 38301  
731-426-0686

TDH: Lab Services KRL  
Lab Services - Knoxville Regional Lab  
Knoxville, TN 37920  
865-549-5201

TDH: Lab Services NCL  
Lab Services - Nashville Central Lab  
Nashville, TN 37243  
615-262-6300

**Sent To:** Greg Denton  
TDEC-WPC  
6th Floor, L & C Tower Annex  
401 Church Street  
Nashville, TN 37243-1534

Michael Atchley  
TDEC-WPC  
Knoxville FO  
3711 Middlebrook Pike  
Knoxville, TN 37921

**Lab ID:** K00002262  
Knoxville Regional Laboratory

**Sampling Agency:** TDEC: Division of Water Pollution Control

**Billing Code:** 327.34-20

This is to certify that the following results were determined using good laboratory practices and in accordance with federal or state approved methodologies.

  
Analytical Supervisor

**Lab-Sample Number:** K00002262001  
**Project Name:** TVA-Ash Spill  
**Sample Description:** Emory River mile 2.1  
**Sampler Project Name:** TVA Ash Spill  
**Project Site No.:** 2  
**Station No.:** EMORY002.1RO  
**Date/Time Collected:** 04/02/2009 10:21  
**Sampler's Name:** Geoff Klein  
**County:** ROANE - 73  
**Sample Matrix:** Water  
**EFO:** Knoxville  
**Sampling Agency:** TDEC-WPC  
**Billing Code:** 327.34-20  
**Send Report To:** TDEC-WPC  
**Agency Invoiced:** TDEC-WPC  
**Priority Date:**  
**Date/Time Received:** 04/02/2009 14:25  
**Received By:** Ken Hitchman

**Field Determinations**  
**pH:** 7.34 pH Units  
**Chlorine, residual:**  
**Conductivity:** 45 uMHO  
**Temperature:** 11.76  
**Dissolved Oxygen:** 11.59 mg/L  
**Other:**  
**Flow:** CFS

| TEST: Alkalinity, Total |        | METHOD: EPA 310.2 |     |     |              |          |
|-------------------------|--------|-------------------|-----|-----|--------------|----------|
| ANALYTE                 | RESULT | UNITS             | MDL | MQL | ANALYZED BY: | DATE     |
| Total Alkalinity        | 9.8J   | mg/L              | 3.8 | 10  | M Chen       | 4/3/2009 |

| TEST: Hardness, Calcium |        | METHOD: SM 3500-Ca D |     |     |              |          |
|-------------------------|--------|----------------------|-----|-----|--------------|----------|
| ANALYTE                 | RESULT | UNITS                | MDL | MQL | ANALYZED BY: | DATE     |
| Calcium hardness        | 15     | mg/L                 | 0.7 | 1   | M Chen       | 4/3/2009 |

| TEST: Residue, Settleable |        | METHOD: SM 2540F |      |      |              |          |
|---------------------------|--------|------------------|------|------|--------------|----------|
| ANALYTE                   | RESULT | UNITS            | MDL  | MQL  | ANALYZED BY: | DATE     |
| Settleable Residue        | U      | ml/L             | 0.10 | 0.10 | P Leathers   | 4/3/2009 |

| TEST: Residue, Suspended |        | METHOD: SM 2540D |     |     |              |          |
|--------------------------|--------|------------------|-----|-----|--------------|----------|
| ANALYTE                  | RESULT | UNITS            | MDL | MQL | ANALYZED BY: | DATE     |
| Total Suspended Solids   | U      | mg/L             | 10  | 10  | A Peebles    | 4/3/2009 |

**J - Estimated value between MDL and MQL**  
**MDL - Method Detection Limit**  
**MQL - Method Quantitation Limit**  
**U - Undetected**

**Lab-Sample Number:** K00002262002  
**Project Name:** TVA-Ash Spill  
**Sample Description:** 100' downriver from dredge 150' from shore 10'  
**Sampler Project Name:** TVA Ash Spill  
**Project Site No.:** 2A  
**Station No.:**  
**Date/Time Collected:** 04/02/2009 10:33  
**Sampler's Name:** Geoff Klein  
**County:** ROANE - 73  
**Sample Matrix:** Water  
**EFO:** Knoxville  
**Sampling Agency:** TDEC-WPC  
**Billing Code:** 327.34-20  
**Send Report To:** TDEC-WPC  
**Agency Invoiced:** TDEC-WPC  
**Priority Date:**  
**Date/Time Received:** 04/02/2009 14:25  
**Received By:** Ken Hitchman

**Field Determinations**  
**pH:** 7.03 pH Units  
**Chlorine, residual:**  
**Conductivity:** 44 uMHO  
**Temperature:** 11.33  
**Dissolved Oxygen:** 11.79 mg/L  
**Other:**  
**Flow:** CFS

| TEST: Alkalinity, Total |        | METHOD: EPA 310.2 |     |     |              |          |
|-------------------------|--------|-------------------|-----|-----|--------------|----------|
| ANALYTE                 | RESULT | UNITS             | MDL | MQL | ANALYZED BY: | DATE     |
| Total Alkalinity        | 12     | mg/L              | 3.8 | 10  | M Chen       | 4/3/2009 |

| TEST: Hardness, Calcium |        | METHOD: SM 3500-Ca D |     |     |              |          |
|-------------------------|--------|----------------------|-----|-----|--------------|----------|
| ANALYTE                 | RESULT | UNITS                | MDL | MQL | ANALYZED BY: | DATE     |
| Calcium hardness        | 12     | mg/L                 | 0.7 | 1   | M Chen       | 4/3/2009 |

| TEST: Residue, Settleable |        | METHOD: SM 2540F |      |      |              |          |
|---------------------------|--------|------------------|------|------|--------------|----------|
| ANALYTE                   | RESULT | UNITS            | MDL  | MQL  | ANALYZED BY: | DATE     |
| Settleable Residue        | U      | m/L              | 0.10 | 0.10 | P Leathers   | 4/3/2009 |

| TEST: Residue, Suspended |        | METHOD: SM 2540D |     |     |              |          |
|--------------------------|--------|------------------|-----|-----|--------------|----------|
| ANALYTE                  | RESULT | UNITS            | MDL | MQL | ANALYZED BY: | DATE     |
| Total Suspended Solids   | U      | mg/L             | 10  | 10  | A Peebles    | 4/3/2009 |

**J - Estimated value between MDL and MQL**  
**MDL - Method Detection Limit**  
**MQL - Method Quantitation Limit**  
**U - Undetected**

Lab-Sample Number: K00002262003

Project Name: TVA-Ash Spill

Sample Description: 200' upstream from weir 150' from shore 10' lak

Sampler Project Name: TVA Ash Spill

Project Site No.: 2B

Station No.:

Date/Time Collected: 04/02/2009 10:42

Sampler's Name: Geoff Klein

County: ROANE - 73

Sample Matrix: Water

EFO: Knoxville

Sampling Agency: TDEC-WPC

Billing Code: 327.34-20

Send Report To: TDEC-WPC

Agency Invoiced: TDEC-WPC

Priority Date:

Date/Time Received: 04/02/2009 14:25

Received By: Ken Hitchman

Field Determinations

pH: 6.97 pH Units

Chlorine, residual:

Conductivity: 44 uMHO

Temperature: 11.31

Dissolved Oxygen: 11.75 mg/L

Other:

Flow: CFS

| TEST: Alkalinity, Total |        | METHOD: EPA 310.2 |     |     |              |          |
|-------------------------|--------|-------------------|-----|-----|--------------|----------|
| ANALYTE                 | RESULT | UNITS             | MDL | MQL | ANALYZED BY: | DATE     |
| Total Alkalinity        | 12     | mg/L              | 3.8 | 10  | M Chen       | 4/3/2009 |

| TEST: Hardness, Calcium |        | METHOD: SM 3500-Ca D |     |     |              |          |
|-------------------------|--------|----------------------|-----|-----|--------------|----------|
| ANALYTE                 | RESULT | UNITS                | MDL | MQL | ANALYZED BY: | DATE     |
| Calcium hardness        | 14     | mg/L                 | 0.7 | 1   | M Chen       | 4/3/2009 |

| TEST: Residue, Settleable |        | METHOD: SM 2540F |      |      |              |          |
|---------------------------|--------|------------------|------|------|--------------|----------|
| ANALYTE                   | RESULT | UNITS            | MDL  | MQL  | ANALYZED BY: | DATE     |
| Settleable Residue        | U      | m/L              | 0.10 | 0.10 | P Leathers   | 4/3/2009 |

| TEST: Residue, Suspended |        | METHOD: SM 2540D |     |     |              |          |
|--------------------------|--------|------------------|-----|-----|--------------|----------|
| ANALYTE                  | RESULT | UNITS            | MDL | MQL | ANALYZED BY: | DATE     |
| Total Suspended Solids   | 10     | mg/L             | 10  | 10  | A Peebles    | 4/3/2009 |

J - Estimated value between MDL and MQL

MDL - Method Detection Limit

MQL - Method Quantitation Limit

U - Undetected

**Lab-Sample Number:** K00002262004  
**Project Name:** TVA-Ash Spill  
**Sample Description:** Emory River mile 1.7  
**Sampler Project Name:** TVA Ash Spill  
**Project Site No.:** 3  
**Station No.:** EMORY001.7RO  
**Date/Time Collected:** 04/02/2009 10:57  
**Sampler's Name:** Geoff Klein  
**County:** ROANE - 73  
**Sample Matrix:** Water  
**EFO:** Knoxville  
**Sampling Agency:** TDEC-WPC  
**Billing Code:** 327.34-20  
**Send Report To:** TDEC-WPC  
**Agency Invoiced:** TDEC-WPC  
**Priority Date:**  
**Date/Time Received:** 04/02/2009 14:25  
**Received By:** Ken Hitchman

**Field Determinations**  
**pH:** 7.01 pH Units  
**Chlorine, residual:**  
**Conductivity:** 45 uMHO  
**Temperature:** 11.22  
**Dissolved Oxygen:** 11.68 mg/L  
**Other:**  
**Flow:** CFS

| TEST: Alkalinity, Total |        | METHOD: EPA 310.2 |     |     |              |          |
|-------------------------|--------|-------------------|-----|-----|--------------|----------|
| ANALYTE                 | RESULT | UNITS             | MDL | MQL | ANALYZED BY: | DATE     |
| Total Alkalinity        | 13     | mg/L              | 3.8 | 10  | M Chen       | 4/3/2009 |

| TEST: Hardness, Calcium |        | METHOD: SM 3500-Ca D |     |     |              |          |
|-------------------------|--------|----------------------|-----|-----|--------------|----------|
| ANALYTE                 | RESULT | UNITS                | MDL | MQL | ANALYZED BY: | DATE     |
| Calcium hardness        | 12     | mg/L                 | 0.7 | 1   | M Chen       | 4/3/2009 |

| TEST: Residue, Settleable |        | METHOD: SM 2540F |      |      |              |          |
|---------------------------|--------|------------------|------|------|--------------|----------|
| ANALYTE                   | RESULT | UNITS            | MDL  | MQL  | ANALYZED BY: | DATE     |
| Settleable Residue        | U      | m/L              | 0.10 | 0.10 | P Leathers   | 4/3/2009 |

| TEST: Residue, Suspended |        | METHOD: SM 2540D |     |     |              |          |
|--------------------------|--------|------------------|-----|-----|--------------|----------|
| ANALYTE                  | RESULT | UNITS            | MDL | MQL | ANALYZED BY: | DATE     |
| Total Suspended Solids   | U      | mg/L             | 10  | 10  | A Peebles    | 4/3/2009 |

**J - Estimated value between MDL and MQL**  
**MDL - Method Detection Limit**  
**MQL - Method Quantitation Limit**  
**U - Undetected**

**Lab-Sample Number:** K00002262005  
**Project Name:** TVA-Ash Spill  
**Sample Description:** Emory River mile 0.1  
**Sampler Project Name:** TVA Ash Spill  
**Project Site No.:** 4  
**Station No.:** EMORY000.1RO  
**Date/Time Collected:** 04/02/2009 11:10  
**Sampler's Name:** Geoff Klein  
**County:** ROANE - 73  
**Sample Matrix:** Water  
**EFO:** Knoxville  
**Sampling Agency:** TDEC-WPC  
**Billing Code:** 327.34-20  
**Send Report To:** TDEC-WPC  
**Agency Invoiced:** TDEC-WPC  
**Priority Date:**  
**Date/Time Received:** 04/02/2009 14:25  
**Received By:** Ken Hitchman

**Field Determinations**  
**pH:** 7.03 pH Units  
**Chlorine, residual:**  
**Conductivity:** 46 uMHO  
**Temperature:** 12.56  
**Dissolved Oxygen:** 11.79 mg/L  
**Other:**  
**Flow:** CFS

| TEST: Alkalinity, Total |        | METHOD: EPA 310.2 |     |     |              |          |
|-------------------------|--------|-------------------|-----|-----|--------------|----------|
| ANALYTE                 | RESULT | UNITS             | MDL | MQL | ANALYZED BY: | DATE     |
| Total Alkalinity        | 87     | mg/L              | 3.8 | 10  | M Chen       | 4/3/2009 |

| TEST: Hardness, Calcium |        | METHOD: SM 3500-Ca D |     |     |              |          |
|-------------------------|--------|----------------------|-----|-----|--------------|----------|
| ANALYTE                 | RESULT | UNITS                | MDL | MQL | ANALYZED BY: | DATE     |
| Calcium hardness        | 14     | mg/L                 | 0.7 | 1   | M Chen       | 4/3/2009 |

| TEST: Residue, Settleable |        | METHOD: SM 2540F |      |      |              |          |
|---------------------------|--------|------------------|------|------|--------------|----------|
| ANALYTE                   | RESULT | UNITS            | MDL  | MQL  | ANALYZED BY: | DATE     |
| Settleable Residue        | U      | ml/L             | 0.10 | 0.10 | P Leathers   | 4/3/2009 |

| TEST: Residue, Suspended |        | METHOD: SM 2540D |     |     |              |          |
|--------------------------|--------|------------------|-----|-----|--------------|----------|
| ANALYTE                  | RESULT | UNITS            | MDL | MQL | ANALYZED BY: | DATE     |
| Total Suspended Solids   | U      | mg/L             | 10  | 10  | A Peoples    | 4/3/2009 |

**J - Estimated value between MDL and MQL**  
**MDL - Method Detection Limit**  
**MQL - Method Quantitation Limit**  
**U - Undetected**

**Lab-Sample Number:** K00002262006  
**Project Name:** TVA-Ash Spill  
**Sample Description:** Clinch River mile 2.3 near Hwy 70 bridge  
**Sampler Project Name:** TVA Ash Spill  
**Project Site No.:** 5  
**Station No.:** CLINC002.3RO  
**Date/Time Collected:** 04/02/2009 11:24  
**Sampler's Name:** Geoff Klein  
**County:** ROANE - 73  
**Sample Matrix:** Water  
**EFO:** Knoxville  
**Sampling Agency:** TDEC-WPC  
**Billing Code:** 327.34-20  
**Send Report To:** TDEC-WPC  
**Agency Invoiced:** TDEC-WPC  
**Priority Date:**  
**Date/Time Received:** 04/02/2009 14:25  
**Received By:** Ken Hitchman

**Field Determinations**  
**pH:** 7.59 pH Units  
**Chlorine, residual:**  
**Conductivity:** 122 uMHO  
**Temperature:** 12.97  
**Dissolved Oxygen:** 11.87 mg/L  
**Other:**  
**Flow:** CFS

| TEST: Alkalinity, Total |        | METHOD: EPA 310.2 |     |     |              |          |
|-------------------------|--------|-------------------|-----|-----|--------------|----------|
| ANALYTE                 | RESULT | UNITS             | MDL | MQL | ANALYZED BY: | DATE     |
| Total Alkalinity        | 66     | mg/L              | 3.8 | 10  | M Chen       | 4/3/2009 |

| TEST: Hardness, Calcium |        | METHOD: SM 3500-Ca D |     |     |              |          |
|-------------------------|--------|----------------------|-----|-----|--------------|----------|
| ANALYTE                 | RESULT | UNITS                | MDL | MQL | ANALYZED BY: | DATE     |
| Calcium hardness        | 53     | mg/L                 | 0.7 | 1   | M Chen       | 4/3/2009 |

| TEST: Residue, Settleable |        | METHOD: SM 2540F |      |      |              |          |
|---------------------------|--------|------------------|------|------|--------------|----------|
| ANALYTE                   | RESULT | UNITS            | MDL  | MQL  | ANALYZED BY: | DATE     |
| Settleable Residue        | U      | ml/L             | 0.10 | 0.10 | P Leathers   | 4/3/2009 |

| TEST: Residue, Suspended |        | METHOD: SM 2540D |     |     |              |          |
|--------------------------|--------|------------------|-----|-----|--------------|----------|
| ANALYTE                  | RESULT | UNITS            | MDL | MQL | ANALYZED BY: | DATE     |
| Total Suspended Solids   | U      | mg/L             | 10  | 10  | A Peebles    | 4/3/2009 |

**J - Estimated value between MDL and MQL**  
**MDL - Method Detection Limit**  
**MQL - Method Quantitation Limit**  
**U - Undetected**

**Lab-Sample Number:** K00002262007  
**Project Name:** TVA-Ash Spill  
**Sample Description:** Clinch River mile 4.5 near Sugar Grove Valley R  
**Sampler Project Name:** TVA Ash Spill  
**Project Site No.:** 6  
**Station No.:** CLINC004.5RO  
**Date/Time Collected:** 04/02/2009 11:38  
**Sampler's Name:** Geoff Klein  
**County:** ROANE - 73  
**Sample Matrix:** Water  
**EFO:** Knoxville  
**Sampling Agency:** TDEC-WPC  
**Billing Code:** 327.34-20  
**Send Report To:** TDEC-WPC  
**Agency Invoiced:** TDEC-WPC  
**Priority Date:**  
**Date/Time Received:** 04/02/2009 14:25  
**Received By:** Ken Hitchman

**Field Determinations**  
**pH:** 7.84 pH Units  
**Chlorine, residual:**  
**Conductivity:** 215 uMHO  
**Temperature:** 12.68  
**Dissolved Oxygen:** 11.73 mg/L  
**Other:**  
**Flow:** CFS

| TEST: Alkalinity, Total |        | METHOD: EPA 310.2 |     |     |              |          |
|-------------------------|--------|-------------------|-----|-----|--------------|----------|
| ANALYTE                 | RESULT | UNITS             | MDL | MQL | ANALYZED BY: | DATE     |
| Total Alkalinity        | 110    | mg/L              | 3.8 | 10  | M Chen       | 4/3/2009 |

| TEST: Hardness, Calcium |        | METHOD: SM 3500-Ca D |     |     |              |          |
|-------------------------|--------|----------------------|-----|-----|--------------|----------|
| ANALYTE                 | RESULT | UNITS                | MDL | MQL | ANALYZED BY: | DATE     |
| Calcium hardness        | 83     | mg/L                 | 0.7 | 1   | M Chen       | 4/3/2009 |

| TEST: Residue, Settleable |        | METHOD: SM 2540F |      |      |              |          |
|---------------------------|--------|------------------|------|------|--------------|----------|
| ANALYTE                   | RESULT | UNITS            | MDL  | MQL  | ANALYZED BY: | DATE     |
| Settleable Residue        | U      | ml/L             | 0.10 | 0.10 | P Leathers   | 4/3/2009 |

| TEST: Residue, Suspended |        | METHOD: SM 2540D |     |     |              |          |
|--------------------------|--------|------------------|-----|-----|--------------|----------|
| ANALYTE                  | RESULT | UNITS            | MDL | MQL | ANALYZED BY: | DATE     |
| Total Suspended Solids   | U      | mg/L             | 10  | 10  | A Peoples    | 4/3/2009 |

**J - Estimated value between MDL and MQL**  
**MDL - Method Detection Limit**  
**MQL - Method Quantitation Limit**  
**U - Undetected**

**Lab-Sample Number:** K00002262008  
**Project Name:** TVA-Ash Spill  
**Sample Description:** Emory River mile 12.1  
**Sampler Project Name:** TVA Ash Spill  
**Project Site No.:** 1  
**Station No.:** EMORY012.1RO  
**Date/Time Collected:** 04/02/2009 12:32  
**Sampler's Name:** Geoff Klein  
**County:** ROANE - 73  
**Sample Matrix:** Water  
**EFO:** Knoxville  
**Sampling Agency:** TDEC-WPC  
**Billing Code:** 327.34-20  
**Send Report To:** TDEC-WPC  
**Agency Invoiced:** TDEC-WPC  
**Priority Date:**  
**Date/Time Received:** 04/02/2009 14:25  
**Received By:** Ken Hitchman

**Field Determinations**  
**pH:** 7.8 pH Units  
**Chlorine, residual:**  
**Conductivity:** 49 uMHO  
**Temperature:** 13.25  
**Dissolved Oxygen:** 11.17 mg/L  
**Other:**  
**Flow:** CFS

| TEST: Alkalinity, Total |        | METHOD: EPA 310.2 |     |     |              |          |
|-------------------------|--------|-------------------|-----|-----|--------------|----------|
| ANALYTE                 | RESULT | UNITS             | MDL | MQL | ANALYZED BY: | DATE     |
| Total Alkalinity        | 11     | mg/L              | 3.8 | 10  | M Chen       | 4/3/2009 |

| TEST: Hardness, Calcium |        | METHOD: SM 3500-Ca D |     |     |              |          |
|-------------------------|--------|----------------------|-----|-----|--------------|----------|
| ANALYTE                 | RESULT | UNITS                | MDL | MQL | ANALYZED BY: | DATE     |
| Calcium hardness        | 12     | mg/L                 | 0.7 | 1   | M Chen       | 4/3/2009 |

| TEST: Residue, Settleable |        | METHOD: SM 2540F |      |      |              |          |
|---------------------------|--------|------------------|------|------|--------------|----------|
| ANALYTE                   | RESULT | UNITS            | MDL  | MQL  | ANALYZED BY: | DATE     |
| Settleable Residue        | U      | ml/L             | 0.10 | 0.10 | P Leathers   | 4/3/2009 |

| TEST: Residue, Suspended |        | METHOD: SM 2540D |     |     |              |          |
|--------------------------|--------|------------------|-----|-----|--------------|----------|
| ANALYTE                  | RESULT | UNITS            | MDL | MQL | ANALYZED BY: | DATE     |
| Total Suspended Solids   | U      | mg/L             | 10  | 10  | A Peebles    | 4/3/2009 |

**J - Estimated value between MDL and MQL**  
**MDL - Method Detection Limit**  
**MQL - Method Quantitation Limit**  
**U - Undetected**



**STATE OF TENNESSEE  
DEPARTMENT OF HEALTH  
ENVIRONMENTAL LABORATORIES**

TDH: Lab Services JRL  
Lab Services - Jackson Regional Lab  
Jackson, TN 38301  
731-426-0686

TDH: Lab Services KRL  
Lab Services - Knoxville Regional Lab  
Knoxville, TN 37920  
865-549-5201

TDH: Lab Services NCL  
Lab Services - Nashville Central Lab  
Nashville, TN 37243  
615-262-6300

**Sent To:** Greg Denton  
TDEC-WPC  
6th Floor, L & C Tower Annex  
401 Church Street  
Nashville, TN 37243-1534

Michael Atchley  
TDEC-WPC  
Knoxville FO  
3711 Middlebrook Pike  
Knoxville, TN 37921

**Lab ID:** K00002262  
Knoxville Regional Laboratory

**Sampling Agency:** TDEC: Division of Water Pollution Control

**Billing Code:** 327.34-20

## **Preliminary Report**

Results on this report should only be considered preliminary, and the lab should be contacted for Actual Final Results.

# Preliminary Report

Results on this report should only be considered preliminary, and the lab should be contacted for Actual Final Results.

|   |  |
|---|--|
| <b>Lab-Sample Number:</b> K00002262001          | <b>Field Determinations</b>              |
| <b>Project Name:</b> TVA-Ash Spill              | <b>pH:</b> 7.34      pH Units            |
| <b>Sample Description:</b> Emory River mile 2.1 | <b>Chlorine, residual:</b>               |
| <b>Sampler Project Name:</b> TVA Ash Spill      | <b>Conductivity:</b> 45      uMHO        |
| <b>Project Site No.:</b> 2                      | <b>Temperature:</b> 11.76                |
| <b>Station No.:</b> EMORY002.1RO                | <b>Dissolved Oxygen:</b> 11.59      mg/L |
| <b>Date/Time Collected:</b> 04/02/2009 10:21    | <b>Other:</b>                            |
| <b>Sampler's Name:</b> Geoff Klein              | <b>Flow:</b> CFS                         |
| <b>County:</b> ROANE - 73                       |  |
| <b>Sample Matrix:</b> Water                     |  |
| <b>EFO:</b> Knoxville                           |  |
| <b>Sampling Agency:</b> TDEC-WPC                |  |
| <b>Billing Code:</b> 327.34-20                  |  |
| <b>Send Report To:</b> TDEC-WPC                 |  |
| <b>Agency Invoiced:</b> TDEC-WPC                |  |
| <b>Priority Date:</b>                           |  |
| <b>Date/Time Received:</b> 04/02/2009 14:25     |  |
| <b>Received By:</b> Ken Hitchman                |  |

| TEST: Digestion Metals |            | METHOD: EPA 200.2 |     |     |              |          |
|------------------------|------------|-------------------|-----|-----|--------------|----------|
| ANALYTE                | RESULT     | UNITS             | MDL | MQL | ANALYZED BY: | DATE     |
| Digestion Metals       | 04/07/2009 |                   |     |     | A Bass       | 4/7/2009 |

| TEST: ICP |        | METHOD: EPA 200.7 |     |     |              |          |
|-----------|--------|-------------------|-----|-----|--------------|----------|
| ANALYTE   | RESULT | UNITS             | MDL | MQL | ANALYZED BY: | DATE     |
| Iron      | 380    | µg/L              | 2.9 | 10  | A Wilson     | 4/8/2009 |

| TEST: ICP-MS |        | METHOD: EPA 200.8 |      |      |              |          |
|--------------|--------|-------------------|------|------|--------------|----------|
| ANALYTE      | RESULT | UNITS             | MDL  | MQL  | ANALYZED BY: | DATE     |
| Aluminum     | 290    | µg/L              | 12.8 | 20   | M Pattanayek | 4/8/2009 |
| Antimony     | 3.6    | µg/L              | 0.33 | 1    | M Pattanayek | 4/7/2009 |
| Arsenic      | 0.94J  | µg/L              | 0.93 | 5    | M Pattanayek | 4/7/2009 |
| Barium       | 28     | µg/L              | 2.5  | 5    | M Pattanayek | 4/7/2009 |
| Beryllium    | U      | µg/L              | 0.11 | 1    | M Pattanayek | 4/7/2009 |
| Cadmium      | U      | µg/L              | 0.41 | 1    | M Pattanayek | 4/7/2009 |
| Chromium     | U      | µg/L              | 2.0  | 5    | M Pattanayek | 4/7/2009 |
| Cobalt       | 0.43J  | µg/L              | 0.04 | 1    | M Pattanayek | 4/7/2009 |
| Copper       | 0.79J  | µg/L              | 0.38 | 1    | M Pattanayek | 4/7/2009 |
| Lead         | 0.31J  | µg/L              | 0.10 | 1    | M Pattanayek | 4/7/2009 |
| Manganese    | 43     | µg/L              | 0.42 | 1    | M Pattanayek | 4/7/2009 |
| Nickel       | 1.6    | µg/L              | 0.25 | 1    | M Pattanayek | 4/7/2009 |
| Selenium     | U      | µg/L              | 1.3  | 5    | M Pattanayek | 4/7/2009 |
| Silver       | 0.03J  | µg/L              | 0.03 | 0.25 | M Pattanayek | 4/8/2009 |
| Thallium     | 0.33J  | µg/L              | 0.03 | 1    | M Pattanayek | 4/7/2009 |
| Vanadium     | 14     | µg/L              | 3.4  | 5    | M Pattanayek | 4/7/2009 |
| Zinc         | 3.7J   | µg/L              | 1.9  | 5    | M Pattanayek | 4/7/2009 |

# Preliminary Report

Results on this report should only be considered preliminary, and the lab should be contacted for Actual Final Results.

|                              |                      |                             |       |          |
|------------------------------|----------------------|-----------------------------|-------|----------|
| <b>Lab-Sample Number:</b>    | K00002262001         | <b>Field Determinations</b> |       |          |
| <b>Project Name:</b>         | TVA-Ash Spill        | <b>pH:</b>                  | 7.34  | pH Units |
| <b>Sample Description:</b>   | Emory River mile 2.1 | <b>Chlorine, residual:</b>  |       |          |
| <b>Sampler Project Name:</b> | TVA Ash Spill        | <b>Conductivity:</b>        | 45    | uMHO     |
| <b>Project Site No.:</b>     | 2                    | <b>Temperature:</b>         | 11.76 |          |
| <b>Station No.:</b>          | EMORY002.1RO         | <b>Dissolved Oxygen:</b>    | 11.59 | mg/L     |
| <b>Date/Time Collected:</b>  | 04/02/2009 10:21     | <b>Other:</b>               |       |          |
| <b>Sampler's Name:</b>       | Geoff Klein          | <b>Flow:</b>                |       | CFS      |
| <b>County:</b>               | ROANE - 73           |                             |       |          |
| <b>Sample Matrix:</b>        | Water                |                             |       |          |
| <b>EFO:</b>                  | Knoxville            |                             |       |          |
| <b>Sampling Agency:</b>      | TDEC-WPC             |                             |       |          |
| <b>Billing Code:</b>         | 327.34-20            |                             |       |          |
| <b>Send Report To:</b>       | TDEC-WPC             |                             |       |          |
| <b>Agency Invoiced:</b>      | TDEC-WPC             |                             |       |          |
| <b>Priority Date:</b>        |                      |                             |       |          |
| <b>Date/Time Received:</b>   | 04/02/2009 14:25     |                             |       |          |
| <b>Received By:</b>          | Ken Hitchman         |                             |       |          |

| TEST: Mercury |         | METHOD: EPA 245.1 |      |     |              |      |
|---------------|---------|-------------------|------|-----|--------------|------|
| ANALYTE       | RESULT  | UNITS             | MDL  | MQL | ANALYZED BY: | DATE |
| Mercury       | PENDING | µg/L              | 0.13 |     | NOT REPORTED | / /  |

J - Estimated value between MDL and MQL  
MDL - Method Detection Limit  
MQL - Method Quantitation Limit  
U - Undetected

# Preliminary Report

Results on this report should only be considered preliminary, and the lab should be contacted for Actual Final Results.

|   |  |
|---|--|
| <b>Lab-Sample Number:</b> K00002262002<br><b>Project Name:</b> TVA-Ash Spill<br><b>Sample Description:</b> 100' downriver from dredge 150' from shore 10'<br><b>Sampler Project Name:</b> TVA Ash Spill<br><b>Project Site No.:</b> 2A<br><b>Station No.:</b><br><b>Date/Time Collected:</b> 04/02/2009 10:33<br><b>Sampler's Name:</b> Geoff Klein<br><b>County:</b> ROANE - 73<br><b>Sample Matrix:</b> Water<br><b>EFO:</b> Knoxville<br><b>Sampling Agency:</b> TDEC-WPC<br><b>Billing Code:</b> 327.34-20<br><b>Send Report To:</b> TDEC-WPC<br><b>Agency Invoiced:</b> TDEC-WPC<br><b>Priority Date:</b><br><b>Date/Time Received:</b> 04/02/2009 14:25<br><b>Received By:</b> Ken Hitchman | <b>Field Determinations</b><br><b>pH:</b> 7.03 pH Units<br><b>Chlorine, residual:</b><br><b>Conductivity:</b> 44 uMHO<br><b>Temperature:</b> 11.33<br><b>Dissolved Oxygen:</b> 11.79 mg/L<br><b>Other:</b><br><b>Flow:</b> CFS |
|---|--|

| TEST: Digestion Metals |            | METHOD: EPA 200.2 |     |     |              |          |
|------------------------|------------|-------------------|-----|-----|--------------|----------|
| ANALYTE                | RESULT     | UNITS             | MDL | MQL | ANALYZED BY: | DATE     |
| Digestion Metals       | 04/07/2009 |                   |     |     | A Bass       | 4/7/2009 |

| TEST: ICP |        | METHOD: EPA 200.7 |     |     |              |          |
|-----------|--------|-------------------|-----|-----|--------------|----------|
| ANALYTE   | RESULT | UNITS             | MDL | MQL | ANALYZED BY: | DATE     |
| Iron      | 790    | µg/L              | 2.9 | 10  | A Wilson     | 4/8/2009 |

| TEST: ICP-MS |        | METHOD: EPA 200.8 |      |      |              |          |
|--------------|--------|-------------------|------|------|--------------|----------|
| ANALYTE      | RESULT | UNITS             | MDL  | MQL  | ANALYZED BY: | DATE     |
| Aluminum     | 1400   | µg/L              | 64.0 | 100  | M Pattanayek | 4/8/2009 |
| Antimony     | 3.4    | µg/L              | 0.33 | 1    | M Pattanayek | 4/7/2009 |
| Arsenic      | 3.0J   | µg/L              | 0.93 | 5    | M Pattanayek | 4/7/2009 |
| Barium       | 46     | µg/L              | 2.5  | 5    | M Pattanayek | 4/7/2009 |
| Beryllium    | 0.21J  | µg/L              | 0.11 | 1    | M Pattanayek | 4/7/2009 |
| Cadmium      | U      | µg/L              | 0.41 | 1    | M Pattanayek | 4/7/2009 |
| Chromium     | U      | µg/L              | 2.0  | 5    | M Pattanayek | 4/7/2009 |
| Cobalt       | 1.0    | µg/L              | 0.04 | 1    | M Pattanayek | 4/7/2009 |
| Copper       | 5.0    | µg/L              | 0.38 | 1    | M Pattanayek | 4/7/2009 |
| Lead         | 1.8    | µg/L              | 0.10 | 1    | M Pattanayek | 4/7/2009 |
| Manganese    | 42     | µg/L              | 0.42 | 1    | M Pattanayek | 4/7/2009 |
| Nickel       | 3.0    | µg/L              | 0.25 | 1    | M Pattanayek | 4/7/2009 |
| Selenium     | U      | µg/L              | 1.3  | 5    | M Pattanayek | 4/7/2009 |
| Silver       | 0.03J  | µg/L              | 0.03 | 0.25 | M Pattanayek | 4/7/2009 |
| Thallium     | 0.14J  | µg/L              | 0.03 | 1    | M Pattanayek | 4/7/2009 |
| Vanadium     | 19     | µg/L              | 3.4  | 5    | M Pattanayek | 4/7/2009 |
| Zinc         | 6.7    | µg/L              | 1.9  | 5    | M Pattanayek | 4/7/2009 |

# Preliminary Report

Results on this report should only be considered preliminary, and the lab should be contacted for Actual Final Results.

|   |   |
|---|---|
| <b>Lab-Sample Number:</b> K00002262002<br><b>Project Name:</b> TVA-Ash Spill<br><b>Sample Description:</b> 100' downriver from dredge 150' from shore 10'<br><b>Sampler Project Name:</b> TVA Ash Spill<br><b>Project Site No.:</b> 2A<br><b>Station No.:</b><br><b>Date/Time Collected:</b> 04/02/2009 10:33<br><b>Sampler's Name:</b> Geoff Klein<br><b>County:</b> ROANE - 73<br><b>Sample Matrix:</b> Water<br><b>EFO:</b> Knoxville<br><b>Sampling Agency:</b> TDEC-WPC<br><b>Billing Code:</b> 327.34-20<br><b>Send Report To:</b> TDEC-WPC<br><b>Agency Invoiced:</b> TDEC-WPC<br><b>Priority Date:</b><br><b>Date/Time Received:</b> 04/02/2009 14:25<br><b>Received By:</b> Ken Hitchman | <b>Field Determinations</b><br><b>pH:</b> 7.03      pH Units<br><b>Chlorine, residual:</b><br><b>Conductivity:</b> 44      uMHO<br><b>Temperature:</b> 11.33<br><b>Dissolved Oxygen:</b> 11.79      mg/L<br><b>Other:</b><br><b>Flow:</b> CFS |
|---|---|

| <b>TEST: Mercury</b> |         | <b>METHOD: EPA 245.1</b> |      |     |              |      |
|----------------------|---------|--------------------------|------|-----|--------------|------|
| ANALYTE              | RESULT  | UNITS                    | MDL  | MQL | ANALYZED BY: | DATE |
| Mercury              | PENDING | µg/L                     | 0.13 |     | NOT REPORTED | / /  |

J - Estimated value between MDL and MQL  
 MDL - Method Detection Limit  
 MQL - Method Quantitation Limit  
 U - Undetected

# Preliminary Report

Results on this report should only be considered preliminary, and the lab should be contacted for Actual Final Results.

|  |  |
|--|--|
| <b>Lab-Sample Number:</b> K00002262003<br><b>Project Name:</b> TVA-Ash Spill<br><b>Sample Description:</b> 200' upstream from weir 150' from shore 10' lak<br><b>Sampler Project Name:</b> TVA Ash Spill<br><b>Project Site No.:</b> 2B<br><b>Station No.:</b><br><b>Date/Time Collected:</b> 04/02/2009 10:42<br><b>Sampler's Name:</b> Geoff Klein<br><b>County:</b> ROANE - 73<br><b>Sample Matrix:</b> Water<br><b>EFO:</b> Knoxville<br><b>Sampling Agency:</b> TDEC-WPC<br><b>Billing Code:</b> 327.34-20<br><b>Send Report To:</b> TDEC-WPC<br><b>Agency Invoiced:</b> TDEC-WPC<br><b>Priority Date:</b><br><b>Date/Time Received:</b> 04/02/2009 14:25<br><b>Received By:</b> Ken Hitchman | <b>Field Determinations</b><br><b>pH:</b> 6.97 pH Units<br><b>Chlorine, residual:</b><br><b>Conductivity:</b> 44 uMHO<br><b>Temperature:</b> 11.31<br><b>Dissolved Oxygen:</b> 11.75 mg/L<br><b>Other:</b><br><b>Flow:</b> CFS |
|--|--|

| TEST: Digestion Metals |            | METHOD: EPA 200.2 |     |     |              |          |
|------------------------|------------|-------------------|-----|-----|--------------|----------|
| ANALYTE                | RESULT     | UNITS             | MDL | MQL | ANALYZED BY: | DATE     |
| Digestion Metals       | 04/07/2009 |                   |     |     | A Bass       | 4/7/2009 |

| TEST: ICP |        | METHOD: EPA 200.7 |     |     |              |          |
|-----------|--------|-------------------|-----|-----|--------------|----------|
| ANALYTE   | RESULT | UNITS             | MDL | MQL | ANALYZED BY: | DATE     |
| Iron      | 440    | µg/L              | 2.9 | 10  | A Wilson     | 4/8/2009 |

| TEST: ICP-MS |        | METHOD: EPA 200.8 |      |      |              |          |
|--------------|--------|-------------------|------|------|--------------|----------|
| ANALYTE      | RESULT | UNITS             | MDL  | MQL  | ANALYZED BY: | DATE     |
| Aluminum     | 600    | µg/L              | 32.0 | 50   | M Pattanayek | 4/8/2009 |
| Antimony     | 3.2    | µg/L              | 0.33 | 1    | M Pattanayek | 4/7/2009 |
| Arsenic      | 1.9J   | µg/L              | 0.93 | 5    | M Pattanayek | 4/7/2009 |
| Barium       | 32     | µg/L              | 2.5  | 5    | M Pattanayek | 4/7/2009 |
| Beryllium    | U      | µg/L              | 0.11 | 1    | M Pattanayek | 4/7/2009 |
| Cadmium      | U      | µg/L              | 0.41 | 1    | M Pattanayek | 4/7/2009 |
| Chromium     | U      | µg/L              | 2.0  | 5    | M Pattanayek | 4/7/2009 |
| Cobalt       | 0.58J  | µg/L              | 0.04 | 1    | M Pattanayek | 4/7/2009 |
| Copper       | 1.8    | µg/L              | 0.38 | 1    | M Pattanayek | 4/7/2009 |
| Lead         | 0.67J  | µg/L              | 0.10 | 1    | M Pattanayek | 4/7/2009 |
| Manganese    | 43     | µg/L              | 0.42 | 1    | M Pattanayek | 4/7/2009 |
| Nickel       | 2.0    | µg/L              | 0.25 | 1    | M Pattanayek | 4/7/2009 |
| Selenium     | U      | µg/L              | 1.3  | 5    | M Pattanayek | 4/7/2009 |
| Silver       | U      | µg/L              | 0.03 | 0.25 | M Pattanayek | 4/8/2009 |
| Thallium     | 0.03J  | µg/L              | 0.03 | 1    | M Pattanayek | 4/7/2009 |
| Vanadium     | 16     | µg/L              | 3.4  | 5    | M Pattanayek | 4/7/2009 |
| Zinc         | 4.7J   | µg/L              | 1.9  | 5    | M Pattanayek | 4/7/2009 |

# Preliminary Report

Results on this report should only be considered preliminary, and the lab should be contacted for Actual Final Results.

|                              |   |                             |       |          |
|------------------------------|---|-----------------------------|-------|----------|
| <b>Lab-Sample Number:</b>    | K00002262003                                    | <b>Field Determinations</b> |       |          |
| <b>Project Name:</b>         | TVA-Ash Spill                                   | <b>pH:</b>                  | 6.97  | pH Units |
| <b>Sample Description:</b>   | 200' upstream from weir 150' from shore 10' lak | <b>Chlorine, residual:</b>  |       |          |
| <b>Sampler Project Name:</b> | TVA Ash Spill                                   | <b>Conductivity:</b>        | 44    | uMHO     |
| <b>Project Site No.:</b>     | 2B  | <b>Temperature:</b>         | 11.31 |          |
| <b>Station No.:</b>          |   | <b>Dissolved Oxygen:</b>    | 11.75 | mg/L     |
| <b>Date/Time Collected:</b>  | 04/02/2009 10:42                                | <b>Other:</b>               |       |          |
| <b>Sampler's Name:</b>       | Geoff Klein                                     | <b>Flow:</b>                |       | CFS      |
| <b>County:</b>               | ROANE - 73                                      |                             |       |          |
| <b>Sample Matrix:</b>        | Water   |                             |       |          |
| <b>EFO:</b>                  | Knoxville                                       |                             |       |          |
| <b>Sampling Agency:</b>      | TDEC-WPC  |                             |       |          |
| <b>Billing Code:</b>         | 327.34-20                                       |                             |       |          |
| <b>Send Report To:</b>       | TDEC-WPC  |                             |       |          |
| <b>Agency Invoiced:</b>      | TDEC-WPC  |                             |       |          |
| <b>Priority Date:</b>        |   |                             |       |          |
| <b>Date/Time Received:</b>   | 04/02/2009 14:25                                |                             |       |          |
| <b>Received By:</b>          | Ken Hitchman                                    |                             |       |          |

| TEST: Mercury |         | METHOD: EPA 245.1 |      |     |              |      |
|---------------|---------|-------------------|------|-----|--------------|------|
| ANALYTE       | RESULT  | UNITS             | MDL  | MQL | ANALYZED BY: | DATE |
| Mercury       | PENDING | µg/L              | 0.13 |     | NOT REPORTED | / /  |

J - Estimated value between MDL and MQL  
MDL - Method Detection Limit  
MQL - Method Quantitation Limit  
U - Undetected

# Preliminary Report

Results on this report should only be considered preliminary, and the lab should be contacted for Actual Final Results.

|   |  |
|---|--|
| <b>Lab-Sample Number:</b> K00002262004          | <b>Field Determinations</b>              |
| <b>Project Name:</b> TVA-Ash Spill              | <b>pH:</b> 7.01      pH Units            |
| <b>Sample Description:</b> Emory River mile 1.7 | <b>Chlorine, residual:</b>               |
| <b>Sampler Project Name:</b> TVA Ash Spill      | <b>Conductivity:</b> 45      uMHO        |
| <b>Project Site No.:</b> 3                      | <b>Temperature:</b> 11.22                |
| <b>Station No.:</b> EMORY001.7RO                | <b>Dissolved Oxygen:</b> 11.68      mg/L |
| <b>Date/Time Collected:</b> 04/02/2009 10:57    | <b>Other:</b>                            |
| <b>Sampler's Name:</b> Geoff Klein              | <b>Flow:</b> CFS                         |
| <b>County:</b> ROANE - 73                       |  |
| <b>Sample Matrix:</b> Water                     |  |
| <b>EFO:</b> Knoxville                           |  |
| <b>Sampling Agency:</b> TDEC-WPC                |  |
| <b>Billing Code:</b> 327.34-20                  |  |
| <b>Send Report To:</b> TDEC-WPC                 |  |
| <b>Agency Invoiced:</b> TDEC-WPC                |  |
| <b>Priority Date:</b>                           |  |
| <b>Date/Time Received:</b> 04/02/2009 14:25     |  |
| <b>Received By:</b> Ken Hitchman                |  |

| TEST: Digestion Metals |            | METHOD: EPA 200.2 |     |     |              |          |
|------------------------|------------|-------------------|-----|-----|--------------|----------|
| ANALYTE                | RESULT     | UNITS             | MDL | MQL | ANALYZED BY: | DATE     |
| Digestion Metals       | 04/07/2009 |                   |     |     | A Bass       | 4/7/2009 |

| TEST: ICP |        | METHOD: EPA 200.7 |     |     |              |          |
|-----------|--------|-------------------|-----|-----|--------------|----------|
| ANALYTE   | RESULT | UNITS             | MDL | MQL | ANALYZED BY: | DATE     |
| Iron      | 330    | µg/L              | 2.9 | 10  | A Wilson     | 4/8/2009 |

| TEST: ICP-MS |        | METHOD: EPA 200.8 |      |      |              |          |
|--------------|--------|-------------------|------|------|--------------|----------|
| ANALYTE      | RESULT | UNITS             | MDL  | MQL  | ANALYZED BY: | DATE     |
| Aluminum     | 320    | µg/L              | 12.8 | 20   | M Pattanayek | 4/8/2009 |
| Antimony     | 3.1    | µg/L              | 0.33 | 1    | M Pattanayek | 4/7/2009 |
| Arsenic      | U      | µg/L              | 0.93 | 5    | M Pattanayek | 4/7/2009 |
| Barium       | 28     | µg/L              | 2.5  | 5    | M Pattanayek | 4/7/2009 |
| Beryllium    | U      | µg/L              | 0.11 | 1    | M Pattanayek | 4/7/2009 |
| Cadmium      | U      | µg/L              | 0.41 | 1    | M Pattanayek | 4/7/2009 |
| Chromium     | U      | µg/L              | 2.0  | 5    | M Pattanayek | 4/7/2009 |
| Cobalt       | 0.37J  | µg/L              | 0.04 | 1    | M Pattanayek | 4/7/2009 |
| Copper       | 0.75J  | µg/L              | 0.38 | 1    | M Pattanayek | 4/7/2009 |
| Lead         | 0.27J  | µg/L              | 0.10 | 1    | M Pattanayek | 4/7/2009 |
| Manganese    | 41     | µg/L              | 0.42 | 1    | M Pattanayek | 4/7/2009 |
| Nickel       | 1.5    | µg/L              | 0.25 | 1    | M Pattanayek | 4/7/2009 |
| Selenium     | U      | µg/L              | 1.3  | 5    | M Pattanayek | 4/7/2009 |
| Silver       | U      | µg/L              | 0.03 | 0.25 | M Pattanayek | 4/8/2009 |
| Thallium     | U      | µg/L              | 0.03 | 1    | M Pattanayek | 4/7/2009 |
| Vanadium     | 17     | µg/L              | 3.4  | 5    | M Pattanayek | 4/7/2009 |
| Zinc         | 3.4J   | µg/L              | 1.9  | 5    | M Pattanayek | 4/7/2009 |

# Preliminary Report

Results on this report should only be considered preliminary, and the lab should be contacted for Actual Final Results.

|                              |                      |                             |       |          |
|------------------------------|----------------------|-----------------------------|-------|----------|
| <b>Lab-Sample Number:</b>    | K00002262004         | <b>Field Determinations</b> |       |          |
| <b>Project Name:</b>         | TVA-Ash Spill        | <b>pH:</b>                  | 7.01  | pH Units |
| <b>Sample Description:</b>   | Emory River mile 1.7 | <b>Chlorine, residual:</b>  |       |          |
| <b>Sampler Project Name:</b> | TVA Ash Spill        | <b>Conductivity:</b>        | 45    | uMHO     |
| <b>Project Site No.:</b>     | 3                    | <b>Temperature:</b>         | 11.22 |          |
| <b>Station No.:</b>          | EMORY001.7RO         | <b>Dissolved Oxygen:</b>    | 11.68 | mg/L     |
| <b>Date/Time Collected:</b>  | 04/02/2009 10:57     | <b>Other:</b>               |       |          |
| <b>Sampler's Name:</b>       | Geoff Klein          | <b>Flow:</b>                |       | CFS      |
| <b>County:</b>               | ROANE - 73           |                             |       |          |
| <b>Sample Matrix:</b>        | Water                |                             |       |          |
| <b>EFO:</b>                  | Knoxville            |                             |       |          |
| <b>Sampling Agency:</b>      | TDEC-WPC             |                             |       |          |
| <b>Billing Code:</b>         | 327.34-20            |                             |       |          |
| <b>Send Report To:</b>       | TDEC-WPC             |                             |       |          |
| <b>Agency Invoiced:</b>      | TDEC-WPC             |                             |       |          |
| <b>Priority Date:</b>        |                      |                             |       |          |
| <b>Date/Time Received:</b>   | 04/02/2009 14:25     |                             |       |          |
| <b>Received By:</b>          | Ken Hitchman         |                             |       |          |

| TEST: Mercury |         | METHOD: EPA 245.1 |      |     |              |      |
|---------------|---------|-------------------|------|-----|--------------|------|
| ANALYTE       | RESULT  | UNITS             | MDL  | MQL | ANALYZED BY: | DATE |
| Mercury       | PENDING | µg/L              | 0.13 |     | NOT REPORTED | / /  |

J - Estimated value between MDL and MQL  
MDL - Method Detection Limit  
MQL - Method Quantitation Limit  
U - Undetected

# Preliminary Report

Results on this report should only be considered preliminary, and the lab should be contacted for Actual Final Results.

|   |  |
|---|--|
| <b>Lab-Sample Number:</b> K00002262005          | <b>Field Determinations</b>              |
| <b>Project Name:</b> TVA-Ash Spill              | <b>pH:</b> 7.03      pH Units            |
| <b>Sample Description:</b> Emory River mile 0.1 | <b>Chlorine, residual:</b>               |
| <b>Sampler Project Name:</b> TVA Ash Spill      | <b>Conductivity:</b> 46      uMHO        |
| <b>Project Site No.:</b> 4                      | <b>Temperature:</b> 12.56                |
| <b>Station No.:</b> EMORY000.1RO                | <b>Dissolved Oxygen:</b> 11.79      mg/L |
| <b>Date/Time Collected:</b> 04/02/2009 11:10    | <b>Other:</b>                            |
| <b>Sampler's Name:</b> Geoff Klein              | <b>Flow:</b> CFS                         |
| <b>County:</b> ROANE - 73                       |  |
| <b>Sample Matrix:</b> Water                     |  |
| <b>EFO:</b> Knoxville                           |  |
| <b>Sampling Agency:</b> TDEC-WPC                |  |
| <b>Billing Code:</b> 327.34-20                  |  |
| <b>Send Report To:</b> TDEC-WPC                 |  |
| <b>Agency Invoiced:</b> TDEC-WPC                |  |
| <b>Priority Date:</b>                           |  |
| <b>Date/Time Received:</b> 04/02/2009 14:25     |  |
| <b>Received By:</b> Ken Hitchman                |  |

| TEST: Digestion Metals |            | METHOD: EPA 200.2 |     |     |              |          |  |
|------------------------|------------|-------------------|-----|-----|--------------|----------|--|
| ANALYTE                | RESULT     | UNITS             | MDL | MQL | ANALYZED BY: | DATE     |  |
| Digestion Metals       | 04/07/2009 |                   |     |     | A Bass       | 4/7/2009 |  |

| TEST: ICP |        | METHOD: EPA 200.7 |     |     |              |          |  |
|-----------|--------|-------------------|-----|-----|--------------|----------|--|
| ANALYTE   | RESULT | UNITS             | MDL | MQL | ANALYZED BY: | DATE     |  |
| Iron      | 360    | µg/L              | 2.9 | 10  | A Wilson     | 4/8/2009 |  |

| TEST: ICP-MS |        | METHOD: EPA 200.8 |      |      |              |          |  |
|--------------|--------|-------------------|------|------|--------------|----------|--|
| ANALYTE      | RESULT | UNITS             | MDL  | MQL  | ANALYZED BY: | DATE     |  |
| Aluminum     | 300    | µg/L              | 32.0 | 50   | M Pattanayek | 4/8/2009 |  |
| Antimony     | 3.1    | µg/L              | 0.33 | 1    | M Pattanayek | 4/7/2009 |  |
| Arsenic      | 1.5J   | µg/L              | 0.93 | 5    | M Pattanayek | 4/7/2009 |  |
| Barium       | 30     | µg/L              | 2.5  | 5    | M Pattanayek | 4/7/2009 |  |
| Beryllium    | U      | µg/L              | 0.11 | 1    | M Pattanayek | 4/7/2009 |  |
| Cadmium      | U      | µg/L              | 0.41 | 1    | M Pattanayek | 4/7/2009 |  |
| Chromium     | U      | µg/L              | 2.0  | 5    | M Pattanayek | 4/7/2009 |  |
| Cobalt       | 0.37J  | µg/L              | 0.04 | 1    | M Pattanayek | 4/7/2009 |  |
| Copper       | 1.2    | µg/L              | 0.38 | 1    | M Pattanayek | 4/7/2009 |  |
| Lead         | 0.32J  | µg/L              | 0.10 | 1    | M Pattanayek | 4/7/2009 |  |
| Manganese    | 37     | µg/L              | 0.42 | 1    | M Pattanayek | 4/7/2009 |  |
| Nickel       | 1.6    | µg/L              | 0.25 | 1    | M Pattanayek | 4/7/2009 |  |
| Selenium     | 1.4J   | µg/L              | 1.3  | 5    | M Pattanayek | 4/7/2009 |  |
| Silver       | U      | µg/L              | 0.03 | 0.25 | M Pattanayek | 4/8/2009 |  |
| Thallium     | U      | µg/L              | 0.03 | 1    | M Pattanayek | 4/7/2009 |  |
| Vanadium     | 14     | µg/L              | 3.4  | 5    | M Pattanayek | 4/7/2009 |  |
| Zinc         | 4.3J   | µg/L              | 1.9  | 5    | M Pattanayek | 4/7/2009 |  |

# Preliminary Report

Results on this report should only be considered preliminary, and the lab should be contacted for Actual Final Results.

|   |  |
|---|--|
| <b>Lab-Sample Number:</b> K00002262005          | <b>Field Determinations</b>              |
| <b>Project Name:</b> TVA-Ash Spill              | <b>pH:</b> 7.03      pH Units            |
| <b>Sample Description:</b> Emory River mile 0.1 | <b>Chlorine, residual:</b>               |
| <b>Sampler Project Name:</b> TVA Ash Spill      | <b>Conductivity:</b> 46      uMHO        |
| <b>Project Site No.:</b> 4                      | <b>Temperature:</b> 12.56                |
| <b>Station No.:</b> EMORY000.1RO                | <b>Dissolved Oxygen:</b> 11.79      mg/L |
| <b>Date/Time Collected:</b> 04/02/2009 11:10    | <b>Other:</b>                            |
| <b>Sampler's Name:</b> Geoff Klein              | <b>Flow:</b> CFS                         |
| <b>County:</b> ROANE - 73                       |  |
| <b>Sample Matrix:</b> Water                     |  |
| <b>EFO:</b> Knoxville                           |  |
| <b>Sampling Agency:</b> TDEC-WPC                |  |
| <b>Billing Code:</b> 327.34-20                  |  |
| <b>Send Report To:</b> TDEC-WPC                 |  |
| <b>Agency Invoiced:</b> TDEC-WPC                |  |
| <b>Priority Date:</b>                           |  |
| <b>Date/Time Received:</b> 04/02/2009 14:25     |  |
| <b>Received By:</b> Ken Hitchman                |  |

| TEST: Mercury |         | METHOD: EPA 245.1 |      |     |              |      |
|---------------|---------|-------------------|------|-----|--------------|------|
| ANALYTE       | RESULT  | UNITS             | MDL  | MQL | ANALYZED BY: | DATE |
| Mercury       | PENDING | µg/L              | 0.13 |     | NOT REPORTED | //   |

J - Estimated value between MDL and MQL  
 MDL - Method Detection Limit  
 MQL - Method Quantitation Limit  
 U - Undetected

# Preliminary Report

Results on this report should only be considered preliminary, and the lab should be contacted for Actual Final Results.

|   |  |
|---|--|
| <b>Lab-Sample Number:</b> K00002262006                              | <b>Field Determinations</b>              |
| <b>Project Name:</b> TVA-Ash Spill                                  | <b>pH:</b> 7.59      pH Units            |
| <b>Sample Description:</b> Clinch River mile 2.3 near Hwy 70 bridge | <b>Chlorine, residual:</b>               |
| <b>Sampler Project Name:</b> TVA Ash Spill                          | <b>Conductivity:</b> 122      uMHO       |
| <b>Project Site No.:</b> 5  | <b>Temperature:</b> 12.97                |
| <b>Station No.:</b> CLINC002.3RO                                    | <b>Dissolved Oxygen:</b> 11.87      mg/L |
| <b>Date/Time Collected:</b> 04/02/2009 11:24                        | <b>Other:</b>                            |
| <b>Sampler's Name:</b> Geoff Klein                                  | <b>Flow:</b> CFS                         |
| <b>County:</b> ROANE - 73   |  |
| <b>Sample Matrix:</b> Water   |  |
| <b>EFO:</b> Knoxville   |  |
| <b>Sampling Agency:</b> TDEC-WPC                                    |  |
| <b>Billing Code:</b> 327.34-20                                      |  |
| <b>Send Report To:</b> TDEC-WPC                                     |  |
| <b>Agency Invoiced:</b> TDEC-WPC                                    |  |
| <b>Priority Date:</b>   |  |
| <b>Date/Time Received:</b> 04/02/2009 14:25                         |  |
| <b>Received By:</b> Ken Hitchman                                    |  |

| TEST: Digestion Metals |            | METHOD: EPA 200.2 |     |     |              |          |
|------------------------|------------|-------------------|-----|-----|--------------|----------|
| ANALYTE                | RESULT     | UNITS             | MDL | MQL | ANALYZED BY: | DATE     |
| Digestion Metals       | 04/07/2009 |                   |     |     | A Bass       | 4/7/2009 |

| TEST: ICP |        | METHOD: EPA 200.7 |     |     |              |          |
|-----------|--------|-------------------|-----|-----|--------------|----------|
| ANALYTE   | RESULT | UNITS             | MDL | MQL | ANALYZED BY: | DATE     |
| Iron      | 340    | µg/L              | 2.9 | 10  | A Wilson     | 4/8/2009 |

| TEST: ICP-MS |        | METHOD: EPA 200.8 |      |      |              |          |
|--------------|--------|-------------------|------|------|--------------|----------|
| ANALYTE      | RESULT | UNITS             | MDL  | MQL  | ANALYZED BY: | DATE     |
| Aluminum     | 350    | µg/L              | 32.0 | 50   | M Pattanayek | 4/8/2009 |
| Antimony     | 3.1    | µg/L              | 0.33 | 1    | M Pattanayek | 4/7/2009 |
| Arsenic      | 1.5J   | µg/L              | 0.93 | 5    | M Pattanayek | 4/7/2009 |
| Barium       | 35     | µg/L              | 2.5  | 5    | M Pattanayek | 4/7/2009 |
| Beryllium    | U      | µg/L              | 0.11 | 1    | M Pattanayek | 4/7/2009 |
| Cadmium      | U      | µg/L              | 0.41 | 1    | M Pattanayek | 4/7/2009 |
| Chromium     | U      | µg/L              | 2.0  | 5    | M Pattanayek | 4/7/2009 |
| Cobalt       | 0.35J  | µg/L              | 0.04 | 1    | M Pattanayek | 4/7/2009 |
| Lead         | 0.37J  | µg/L              | 0.10 | 1    | M Pattanayek | 4/7/2009 |
| Manganese    | 32     | µg/L              | 0.42 | 1    | M Pattanayek | 4/7/2009 |
| Nickel       | 1.8    | µg/L              | 0.25 | 1    | M Pattanayek | 4/7/2009 |
| Selenium     | U      | µg/L              | 1.3  | 5    | M Pattanayek | 4/7/2009 |
| Silver       | U      | µg/L              | 0.03 | 0.25 | M Pattanayek | 4/8/2009 |
| Thallium     | U      | µg/L              | 0.03 | 1    | M Pattanayek | 4/7/2009 |
| Vanadium     | 14     | µg/L              | 3.4  | 5    | M Pattanayek | 4/7/2009 |
| Zinc         | 3.9J   | µg/L              | 1.9  | 5    | M Pattanayek | 4/7/2009 |

# Preliminary Report

Results on this report should only be considered preliminary, and the lab should be contacted for Actual Final Results.

|   |  |
|---|--|
| <b>Lab-Sample Number:</b> K00002262006                              | <b>Field Determinations</b>              |
| <b>Project Name:</b> TVA-Ash Spill                                  | <b>pH:</b> 7.59      pH Units            |
| <b>Sample Description:</b> Clinch River mile 2.3 near Hwy 70 bridge | <b>Chlorine, residual:</b>               |
| <b>Sampler Project Name:</b> TVA Ash Spill                          | <b>Conductivity:</b> 122      uMHO       |
| <b>Project Site No.:</b> 5  | <b>Temperature:</b> 12.97                |
| <b>Station No.:</b> CLINC002.3RO                                    | <b>Dissolved Oxygen:</b> 11.87      mg/L |
| <b>Date/Time Collected:</b> 04/02/2009 11:24                        | <b>Other:</b>                            |
| <b>Sampler's Name:</b> Geoff Klein                                  | <b>Flow:</b> CFS                         |
| <b>County:</b> ROANE - 73   |  |
| <b>Sample Matrix:</b> Water   |  |
| <b>EFO:</b> Knoxville   |  |
| <b>Sampling Agency:</b> TDEC-WPC                                    |  |
| <b>Billing Code:</b> 327.34-20                                      |  |
| <b>Send Report To:</b> TDEC-WPC                                     |  |
| <b>Agency Invoiced:</b> TDEC-WPC                                    |  |
| <b>Priority Date:</b>   |  |
| <b>Date/Time Received:</b> 04/02/2009 14:25                         |  |
| <b>Received By:</b> Ken Hitchman                                    |  |

| <b>TEST: Mercury</b> | <b>METHOD: EPA 245.1</b> |       |      |     |              |      |
|----------------------|--------------------------|-------|------|-----|--------------|------|
| ANALYTE              | RESULT                   | UNITS | MDL  | MQL | ANALYZED BY: | DATE |
| Mercury              | PENDING                  | µg/L  | 0.13 |     | NOT REPORTED | //   |

J - Estimated value between MDL and MQL  
 MDL - Method Detection Limit  
 MQL - Method Quantitation Limit  
 U - Undetected

# Preliminary Report

Results on this report should only be considered preliminary, and the lab should be contacted for Actual Final Results.

|  |  |
|--|--|
| <b>Lab-Sample Number:</b> K00002262007                                     | <b>Field Determinations</b>              |
| <b>Project Name:</b> TVA-Ash Spill   | <b>pH:</b> 7.84      pH Units            |
| <b>Sample Description:</b> Clinch River mile 4.5 near Sugar Grove Valley R | <b>Chlorine, residual:</b>               |
| <b>Sampler Project Name:</b> TVA Ash Spill                                 | <b>Conductivity:</b> 215      uMHO       |
| <b>Project Site No.:</b> 6   | <b>Temperature:</b> 12.68                |
| <b>Station No.:</b> CLINC004.5RO   | <b>Dissolved Oxygen:</b> 11.73      mg/L |
| <b>Date/Time Collected:</b> 04/02/2009 11:38                               | <b>Other:</b>                            |
| <b>Sampler's Name:</b> Geoff Klein   | <b>Flow:</b> CFS                         |
| <b>County:</b> ROANE - 73  |  |
| <b>Sample Matrix:</b> Water  |  |
| <b>EFO:</b> Knoxville  |  |
| <b>Sampling Agency:</b> TDEC-WPC   |  |
| <b>Billing Code:</b> 327.34-20   |  |
| <b>Send Report To:</b> TDEC-WPC  |  |
| <b>Agency Invoiced:</b> TDEC-WPC   |  |
| <b>Priority Date:</b>  |  |
| <b>Date/Time Received:</b> 04/02/2009 14:25                                |  |
| <b>Received By:</b> Ken Hitchman   |  |

| TEST: Digestion Metals |            | METHOD: EPA 200.2 |     |     |              |          |  |
|------------------------|------------|-------------------|-----|-----|--------------|----------|--|
| ANALYTE                | RESULT     | UNITS             | MDL | MQL | ANALYZED BY: | DATE     |  |
| Digestion Metals       | 04/07/2009 |                   |     |     | A Bass       | 4/7/2009 |  |

| TEST: ICP |        | METHOD: EPA 200.7 |     |     |              |          |  |
|-----------|--------|-------------------|-----|-----|--------------|----------|--|
| ANALYTE   | RESULT | UNITS             | MDL | MQL | ANALYZED BY: | DATE     |  |
| Iron      | 290    | µg/L              | 2.9 | 10  | A Wilson     | 4/8/2009 |  |

| TEST: ICP-MS |        | METHOD: EPA 200.8 |      |      |              |          |  |
|--------------|--------|-------------------|------|------|--------------|----------|--|
| ANALYTE      | RESULT | UNITS             | MDL  | MQL  | ANALYZED BY: | DATE     |  |
| Aluminum     | 220    | µg/L              | 12.8 | 20   | M Pattanayek | 4/8/2009 |  |
| Antimony     | 3.1    | µg/L              | 0.33 | 1    | M Pattanayek | 4/7/2009 |  |
| Arsenic      | 0.97J  | µg/L              | 0.93 | 5    | M Pattanayek | 4/7/2009 |  |
| Barium       | 35     | µg/L              | 2.5  | 5    | M Pattanayek | 4/7/2009 |  |
| Beryllium    | U      | µg/L              | 0.11 | 1    | M Pattanayek | 4/7/2009 |  |
| Cadmium      | U      | µg/L              | 0.41 | 1    | M Pattanayek | 4/7/2009 |  |
| Chromium     | U      | µg/L              | 2.0  | 5    | M Pattanayek | 4/7/2009 |  |
| Cobalt       | 0.25J  | µg/L              | 0.04 | 1    | M Pattanayek | 4/7/2009 |  |
| Copper       | 1.2    | µg/L              | 0.38 | 1    | M Pattanayek | 4/7/2009 |  |
| Lead         | 0.26J  | µg/L              | 0.10 | 1    | M Pattanayek | 4/7/2009 |  |
| Manganese    | 33     | µg/L              | 0.42 | 1    | M Pattanayek | 4/7/2009 |  |
| Nickel       | 1.9    | µg/L              | 0.25 | 1    | M Pattanayek | 4/7/2009 |  |
| Selenium     | U      | µg/L              | 1.3  | 5    | M Pattanayek | 4/7/2009 |  |
| Silver       | U      | µg/L              | 0.03 | 0.25 | M Pattanayek | 4/8/2009 |  |
| Thallium     | U      | µg/L              | 0.03 | 1    | M Pattanayek | 4/7/2009 |  |
| Vanadium     | 13     | µg/L              | 3.4  | 5    | M Pattanayek | 4/7/2009 |  |
| Zinc         | 3.0J   | µg/L              | 1.9  | 5    | M Pattanayek | 4/7/2009 |  |

# Preliminary Report

Results on this report should only be considered preliminary, and the lab should be contacted for Actual Final Results.

|                              |   |                             |       |          |
|------------------------------|---|-----------------------------|-------|----------|
| <b>Lab-Sample Number:</b>    | K00002262007                                    | <b>Field Determinations</b> |       |          |
| <b>Project Name:</b>         | TVA-Ash Spill                                   | <b>pH:</b>                  | 7.84  | pH Units |
| <b>Sample Description:</b>   | Clinch River mile 4.5 near Sugar Grove Valley R | <b>Chlorine, residual:</b>  |       |          |
| <b>Sampler Project Name:</b> | TVA Ash Spill                                   | <b>Conductivity:</b>        | 215   | uMHO     |
| <b>Project Site No.:</b>     | 6   | <b>Temperature:</b>         | 12.68 |          |
| <b>Station No.:</b>          | CLINC004.5RO                                    | <b>Dissolved Oxygen:</b>    | 11.73 | mg/L     |
| <b>Date/Time Collected:</b>  | 04/02/2009 11:38                                | <b>Other:</b>               |       |          |
| <b>Sampler's Name:</b>       | Geoff Klein                                     | <b>Flow:</b>                |       | CFS      |
| <b>County:</b>               | ROANE - 73                                      |                             |       |          |
| <b>Sample Matrix:</b>        | Water   |                             |       |          |
| <b>EFO:</b>                  | Knoxville                                       |                             |       |          |
| <b>Sampling Agency:</b>      | TDEC-WPC  |                             |       |          |
| <b>Billing Code:</b>         | 327.34-20                                       |                             |       |          |
| <b>Send Report To:</b>       | TDEC-WPC  |                             |       |          |
| <b>Agency Invoiced:</b>      | TDEC-WPC  |                             |       |          |
| <b>Priority Date:</b>        |   |                             |       |          |
| <b>Date/Time Received:</b>   | 04/02/2009 14:25                                |                             |       |          |
| <b>Received By:</b>          | Ken Hitchman                                    |                             |       |          |

| TEST: Mercury |         | METHOD: EPA 245.1 |      |     |              |      |
|---------------|---------|-------------------|------|-----|--------------|------|
| ANALYTE       | RESULT  | UNITS             | MDL  | MLQ | ANALYZED BY: | DATE |
| Mercury       | PENDING | µg/L              | 0.13 |     | NOT REPORTED | / /  |

J - Estimated value between MDL and MQL  
MDL - Method Detection Limit  
MQL - Method Quantitation Limit  
U - Undetected

# Preliminary Report

Results on this report should only be considered preliminary, and the lab should be contacted for Actual Final Results.

|  |  |
|--|--|
| <b>Lab-Sample Number:</b> K00002262008           | <b>Field Determinations</b>              |
| <b>Project Name:</b> TVA-Ash Spill               | <b>pH:</b> 7.8      pH Units             |
| <b>Sample Description:</b> Emory River mile 12.1 | <b>Chlorine, residual:</b>               |
| <b>Sampler Project Name:</b> TVA Ash Spill       | <b>Conductivity:</b> 49      uMHO        |
| <b>Project Site No.:</b> 1                       | <b>Temperature:</b> 13.25                |
| <b>Station No.:</b> EMORY012.1RO                 | <b>Dissolved Oxygen:</b> 11.17      mg/L |
| <b>Date/Time Collected:</b> 04/02/2009 12:32     | <b>Other:</b>                            |
| <b>Sampler's Name:</b> Geoff Klein               | <b>Flow:</b> CFS                         |
| <b>County:</b> ROANE - 73                        |  |
| <b>Sample Matrix:</b> Water                      |  |
| <b>EFO:</b> Knoxville                            |  |
| <b>Sampling Agency:</b> TDEC-WPC                 |  |
| <b>Billing Code:</b> 327.34-20                   |  |
| <b>Send Report To:</b> TDEC-WPC                  |  |
| <b>Agency Invoiced:</b> TDEC-WPC                 |  |
| <b>Priority Date:</b>                            |  |
| <b>Date/Time Received:</b> 04/02/2009 14:25      |  |
| <b>Received By:</b> Ken Hitchman                 |  |

| TEST: Digestion Metals |            | METHOD: EPA 200.2 |     |     |              |          |  |
|------------------------|------------|-------------------|-----|-----|--------------|----------|--|
| ANALYTE                | RESULT     | UNITS             | MDL | MQL | ANALYZED BY: | DATE     |  |
| Digestion Metals       | 04/07/2009 |                   |     |     | A Bass       | 4/7/2009 |  |

| TEST: ICP |        | METHOD: EPA 200.7 |     |     |              |          |  |
|-----------|--------|-------------------|-----|-----|--------------|----------|--|
| ANALYTE   | RESULT | UNITS             | MDL | MQL | ANALYZED BY: | DATE     |  |
| Iron      | 160    | µg/L              | 2.9 | 10  | A Wilson     | 4/8/2009 |  |

| TEST: ICP-MS |        | METHOD: EPA 200.8 |      |      |              |          |  |
|--------------|--------|-------------------|------|------|--------------|----------|--|
| ANALYTE      | RESULT | UNITS             | MDL  | MQL  | ANALYZED BY: | DATE     |  |
| Aluminum     | 150    | µg/L              | 6.4  | 10   | M Pattanayek | 4/7/2009 |  |
| Antimony     | 3.1    | µg/L              | 0.33 | 1    | M Pattanayek | 4/7/2009 |  |
| Arsenic      | U      | µg/L              | 0.93 | 5    | M Pattanayek | 4/7/2009 |  |
| Barium       | 25     | µg/L              | 2.5  | 5    | M Pattanayek | 4/7/2009 |  |
| Beryllium    | U      | µg/L              | 0.11 | 1    | M Pattanayek | 4/7/2009 |  |
| Cadmium      | U      | µg/L              | 0.41 | 1    | M Pattanayek | 4/7/2009 |  |
| Chromium     | U      | µg/L              | 2.0  | 5    | M Pattanayek | 4/7/2009 |  |
| Cobalt       | 0.33J  | µg/L              | 0.04 | 1    | M Pattanayek | 4/7/2009 |  |
| Copper       | 0.84J  | µg/L              | 0.38 | 1    | M Pattanayek | 4/7/2009 |  |
| Manganese    | 32     | µg/L              | 0.42 | 1    | M Pattanayek | 4/7/2009 |  |
| Nickel       | 1.5    | µg/L              | 0.25 | 1    | M Pattanayek | 4/7/2009 |  |
| Selenium     | U      | µg/L              | 1.3  | 5    | M Pattanayek | 4/7/2009 |  |
| Silver       | U      | µg/L              | 0.03 | 0.25 | M Pattanayek | 4/8/2009 |  |
| Thallium     | U      | µg/L              | 0.03 | 1    | M Pattanayek | 4/7/2009 |  |
| Vanadium     | 13     | µg/L              | 3.4  | 5    | M Pattanayek | 4/7/2009 |  |
| Zinc         | 4.4J   | µg/L              | 1.9  | 5    | M Pattanayek | 4/7/2009 |  |

# Preliminary Report

Results on this report should only be considered preliminary, and the lab should be contacted for Actual Final Results.

|                              |                       |                             |       |          |
|------------------------------|-----------------------|-----------------------------|-------|----------|
| <b>Lab-Sample Number:</b>    | K00002262008          | <b>Field Determinations</b> |       |          |
| <b>Project Name:</b>         | TVA-Ash Spill         | <b>pH:</b>                  | 7.8   | pH Units |
| <b>Sample Description:</b>   | Emory River mile 12.1 | <b>Chlorine, residual:</b>  |       |          |
| <b>Sampler Project Name:</b> | TVA Ash Spill         | <b>Conductivity:</b>        | 49    | uMHO     |
| <b>Project Site No.:</b>     | 1                     | <b>Temperature:</b>         | 13.25 |          |
| <b>Station No.:</b>          | EMORY012.1RO          | <b>Dissolved Oxygen:</b>    | 11.17 | mg/L     |
| <b>Date/Time Collected:</b>  | 04/02/2009 12:32      | <b>Other:</b>               |       |          |
| <b>Sampler's Name:</b>       | Geoff Klein           | <b>Flow:</b>                |       | CFS      |
| <b>County:</b>               | ROANE - 73            |                             |       |          |
| <b>Sample Matrix:</b>        | Water                 |                             |       |          |
| <b>EFO:</b>                  | Knoxville             |                             |       |          |
| <b>Sampling Agency:</b>      | TDEC-WPC              |                             |       |          |
| <b>Billing Code:</b>         | 327.34-20             |                             |       |          |
| <b>Send Report To:</b>       | TDEC-WPC              |                             |       |          |
| <b>Agency Invoiced:</b>      | TDEC-WPC              |                             |       |          |
| <b>Priority Date:</b>        |                       |                             |       |          |
| <b>Date/Time Received:</b>   | 04/02/2009 14:25      |                             |       |          |
| <b>Received By:</b>          | Ken Hitchman          |                             |       |          |

TEST: Mercury

METHOD: EPA 245.1

| ANALYTE | RESULT  | UNITS | MDL  | MQL | ANALYZED BY: | DATE |
|---------|---------|-------|------|-----|--------------|------|
| Mercury | PENDING | µg/L  | 0.13 |     | NOT REPORTED | / /  |

J - Estimated value between MDL and MQL

MDL - Method Detection Limit

MQL - Method Quantitation Limit

U - Undetected