



**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: K00002397
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: K00002397001
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: 05/21/2009 09:50
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: 05/21/2009 13:50
Received By: Ken Hitchman

Field Determinations
pH: 8.14 pH Units
Chlorine, residual:
Conductivity: 76 uMHO
Temperature: 17.63
Dissolved Oxygen: 9.67 mg/L
Other:
Flow: CFS

TEST: Alkalinity, Total		METHOD: EPA 310.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Alkalinity	17	mg/L	3.8	10	M Chen	5/27/2009

TEST: Hardness, Calcium		METHOD: SM 3500-Ca D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Calcium hardness	21	mg/L	0.7	1	P Leathers	5/27/2009

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	5/22/2009

TEST: Residue, Suspended		METHOD: SM 2540D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Suspended Solids	U	mg/L	10	10	A Peebles	5/22/2009

J - Estimated value between MDL and MQL

MDL - Method Detection Limit

MQL - Method Quantitation Limit

U - Undetected

Lab-Sample Number: K00002397002
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: 05/21/2009 10:43
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: 05/21/2009 13:50
Received By: Ken Hitchman

Field Determinations
pH: 7.37 pH Units
Chlorine, residual:
Conductivity: 67 uMHO
Temperature: 19.27
Dissolved Oxygen: 8.68 mg/L
Other:
Flow: CFS

TEST: Alkalinity, Total		METHOD: EPA 310.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Alkalinity	21	mg/L	3.8	10	M Chen	5/27/2009

TEST: Hardness, Calcium		METHOD: SM 3500-Ca D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Calcium hardness	23	mg/L	0.7	1	P Leathers	5/27/2009

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	5/22/2009

TEST: Residue, Suspended		METHOD: SM 2540D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Suspended Solids	20	mg/L	10	10	A Peebles	5/22/2009

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

Lab-Sample Number: K00002397003
Project Name: TVA-Ash Spill
Sample Description: Approx 100' downstream from middle dredge pc
Sampler Project Name: TVA ash spill
Project Site No.: 2A
Station No.: Dredge Plume
Date/Time Collected: 05/21/2009 10:50
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: 05/21/2009 13:50
Received By: Ken Hitchman

Field Determinations
pH: 7.41 pH Units
Chlorine, residual:
Conductivity: 92 uMHO
Temperature: 19.65
Dissolved Oxygen: 8.70 mg/L
Other:
Flow: CFS

TEST: Alkalinity, Total		METHOD: EPA 310.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Alkalinity	32	mg/L	3.8	10	M Chen	5/27/2009

TEST: Hardness, Calcium		METHOD: SM 3500-Ca D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Calcium hardness	29	mg/L	0.7	1	P Leathers	5/27/2009

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	5/22/2009

TEST: Residue, Suspended		METHOD: SM 2540D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Suspended Solids	41	mg/L	10	10	A Peoples	5/22/2009

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

Lab-Sample Number: K00002397004
Project Name: TVA-Ash Spill
Sample Description: Emory River mile 1.9 at underwater weir
Sampler Project Name: TVA ash spill
Project Site No.: 2B
Station No.: EMORY001.9RO
Date/Time Collected: 05/21/2009 11:00
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: 05/21/2009 13:50
Received By: Ken Hitchman

Field Determinations
pH: 7.45 pH Units
Chlorine, residual:
Conductivity: 107 uMHO
Temperature: 18.60
Dissolved Oxygen: 9.09 mg/L
Other:
Flow: CFS

TEST: Alkalinity, Total		METHOD: EPA 310.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Alkalinity	69	mg/L	3.8	10	M Chen	5/27/2009

TEST: Hardness, Calcium		METHOD: SM 3500-Ca D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Calcium hardness	61	mg/L	0.7	1	P Leathers	5/27/2009

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	5/22/2009

TEST: Residue, Suspended		METHOD: SM 2540D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Suspended Solids	U	mg/L	10	10	A Peoples	5/22/2009

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

Lab-Sample Number: K00002397005
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: 05/21/2009 11:11
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: 05/21/2009 13:50
Received By: Ken Hitchman

Field Determinations
pH: 7.39 pH Units
Chlorine, residual:
Conductivity: 97 uMHO
Temperature: 18.61
Dissolved Oxygen: 9.09 mg/L
Other:
Flow: CFS

TEST: Alkalinity, Total		METHOD: EPA 310.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Alkalinity	97	mg/L	3.8	10	M Chen	5/27/2009

TEST: Hardness, Calcium		METHOD: SM 3500-Ca D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Calcium hardness	75	mg/L	0.7	1	P Leathers	5/27/2009

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	5/22/2009

TEST: Residue, Suspended		METHOD: SM 2540D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Suspended Solids	U	mg/L	10	10	A Peebles	5/22/2009

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

Lab-Sample Number: K00002397006
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: 05/21/2009 11:20
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: 05/21/2009 13:50
Received By: Ken Hitchman

Field Determinations
pH: 7.69 pH Units
Chlorine, residual:
Conductivity: 164 uMHO
Temperature: 17.42
Dissolved Oxygen: 10.36 mg/L
Other:
Flow: CFS

TEST: Alkalinity, Total		METHOD: EPA 310.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Alkalinity	100	mg/L	3.8	10	M Chen	5/27/2009

TEST: Hardness, Calcium		METHOD: SM 3500-Ca D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Calcium hardness	87	mg/L	0.7	1	P Leathers	5/27/2009

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	5/22/2009

TEST: Residue, Suspended		METHOD: SM 2540D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Suspended Solids	10	mg/L	10	10	A Peoples	5/22/2009

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

Lab-Sample Number: K00002397007
Project Name: TVA-Ash Spill
Sample Description: Clinch River mile 2.3
Sampler Project Name: TVA ash spill
Project Site No.: 5
Station No.: CLINC002.3RO
Date/Time Collected: 05/21/2009 11:30
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: 05/21/2009 13:50
Received By: Ken Hitchman

Field Determinations
pH: 7.79 pH Units
Chlorine, residual:
Conductivity: 217 uMHO
Temperature: 16.71
Dissolved Oxygen: 10.19 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	5/27/2009

TEST: Hardness, Calcium		METHOD: SM 3500-Ca D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Calcium hardness	86	mg/L	0.7	1	P Leathers	5/27/2009

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	5/22/2009

TEST: Residue, Suspended		METHOD: SM 2540D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Suspended Solids	12	mg/L	10	10	A Peoples	5/22/2009

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

Lab-Sample Number: K00002397008
Project Name: TVA-Ash Spill
Sample Description: Clinch River TVA discharge point
Sampler Project Name: TVA ash spill
Project Site No.: 5A
Station No.: KingAshOutF2
Date/Time Collected: 05/21/2009 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: 05/21/2009 13:50
Received By: Ken Hitchman

Field Determinations
pH: 7.67 pH Units
Chlorine, residual:
Conductivity: 173 uMHO
Temperature: 19.49
Dissolved Oxygen: 9.45 mg/L
Other:
Flow: CFS

TEST: Alkalinity, Total		METHOD: EPA 310.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Alkalinity	68	mg/L	3.8	10	M Chen	5/27/2009

TEST: Hardness, Calcium		METHOD: SM 3500-Ca D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Calcium hardness	59	mg/L	0.7	1	P Leathers	5/27/2009

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	5/22/2009

TEST: Residue, Suspended		METHOD: SM 2540D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Suspended Solids	12	mg/L	10	10	A Peebles	5/22/2009

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

Lab-Sample Number:	K00002397009	Field Determinations	
Project Name:	TVA-Ash Spill	pH:	7.94 pH Units
Sample Description:	Clinch River mile 4.5 near Sugar Grove Valley R	Chlorine, residual:	
Sampler Project Name:	TVA ash spill	Conductivity:	232 uMHO
Project Site No.:	6	Temperature:	15.61
Station No.:	CLINC004.5RO	Dissolved Oxygen:	10.92 mg/L
Date/Time Collected:	05/21/2009 11:48	Other:	
Sampler's Name:	Geoff Klein	Flow:	CFS
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:	05/21/2009 13:50		
Received By:	Ken Hitchman		

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	5/27/2009

TEST: Hardness, Calcium		METHOD: SM 3500-Ca D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Calcium hardness	73	mg/L	0.7	1	P Leathers	5/27/2009

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	5/22/2009

TEST: Residue, Suspended		METHOD: SM 2540D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Suspended Solids	12	mg/L	10	10	A Peoples	5/22/2009

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**

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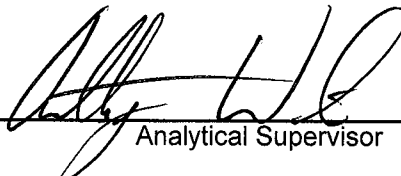
Michael Atchley
TDEC-WPC
Knoxville FO
3711 Middlebrook Pike
Knoxville, TN 37921

Lab ID: K00002397
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: K00002397001
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: 05/21/2009 09:50
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: 05/21/2009 13:50
Received By: Ken Hitchman

Field Determinations
pH: 8.14 pH Units
Chlorine, residual:
Conductivity: 76 uMHO
Temperature: 17.63
Dissolved Oxygen: 9.67 mg/L
Other:
Flow: CFS

TEST: Digestion Metals		METHOD: EPA 200.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Digestion Metals	05/26/2009				S Ufegbu	5/26/2009

TEST: ICP		METHOD: EPA 200.7				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Iron	170	µg/L	2.9	10	A Bass	5/29/2009

TEST: ICP-MS		METHOD: EPA 200.8				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Aluminum	140	µg/L	6.4	10	A Wilson	6/2/2009
Antimony	U	µg/L	0.33	1	A Wilson	6/2/2009
Arsenic	U	µg/L	0.93	5	A Wilson	6/2/2009
Barium	29	µg/L	2.5	5	A Wilson	6/2/2009
Beryllium	U	µg/L	0.11	1	A Wilson	6/2/2009
Cadmium	U	µg/L	0.41	1	A Wilson	6/2/2009
Chromium	U	µg/L	2.0	5	A Wilson	6/2/2009
Cobalt	0.25J	µg/L	0.04	1	A Wilson	6/2/2009
Copper	2.1	µg/L	0.38	1	A Wilson	6/2/2009
Lead	0.28J	µg/L	0.10	1	A Wilson	6/2/2009
Manganese	37	µg/L	0.42	1	A Wilson	6/2/2009
Nickel	1.3	µg/L	0.25	1	A Wilson	6/2/2009
Selenium	U	µg/L	1.3	5	A Wilson	6/2/2009
Silver	U	µg/L	0.03	0.25	A Wilson	6/2/2009
Thallium	0.23J	µg/L	0.03	1	A Wilson	6/2/2009
Vanadium	U	µg/L	3.4	5	A Wilson	6/2/2009
Zinc	2.9J	µg/L	1.9	5	A Wilson	6/2/2009

Lab-Sample Number: K00002397001
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: 05/21/2009 09:50
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: 05/21/2009 13:50
Received By: Ken Hitchman

Field Determinations
pH: 8.14 pH Units
Chlorine, residual:
Conductivity: 76 uMHO
Temperature: 17.63
Dissolved Oxygen: 9.67 mg/L
Other:
Flow: CFS

TEST: Mercury		METHOD: EPA 245.1				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Mercury	0.04J	µg/L	0.029	0.2	A Bass	5/27/2009

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

Lab-Sample Number: K00002397002
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: 05/21/2009 10:43
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: 05/21/2009 13:50
Received By: Ken Hitchman

Field Determinations
pH: 7.37 pH Units
Chlorine, residual:
Conductivity: 67 uMHO
Temperature: 19.27
Dissolved Oxygen: 8.68 mg/L
Other:
Flow: CFS

TEST: Digestion Metals		METHOD: EPA 200.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Digestion Metals	05/26/2009				S Ufegbu	5/26/2009

TEST: ICP		METHOD: EPA 200.7				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Iron	470	µg/L	2.9	10	A Bass	5/29/2009

TEST: ICP-MS		METHOD: EPA 200.8				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Aluminum	770	µg/L	64.0	100	A Wilson	6/2/2009
Antimony	U	µg/L	0.33	1	A Wilson	6/2/2009
Arsenic	4.3J	µg/L	0.93	5	A Wilson	6/2/2009
Barium	51	µg/L	2.5	5	A Wilson	6/2/2009
Beryllium	0.13J	µg/L	0.11	1	A Wilson	6/2/2009
Cadmium	U	µg/L	0.41	1	A Wilson	6/2/2009
Chromium	U	µg/L	2.0	5	A Wilson	6/2/2009
Cobalt	0.68J	µg/L	0.04	1	A Wilson	6/2/2009
Copper	2.9	µg/L	0.38	1	A Wilson	6/2/2009
Lead	1.3	µg/L	0.10	1	A Wilson	6/2/2009
Manganese	100	µg/L	0.42	1	A Wilson	6/2/2009
Nickel	2.4	µg/L	0.25	1	A Wilson	6/2/2009
Selenium	U	µg/L	1.3	5	A Wilson	6/2/2009
Silver	U	µg/L	0.03	0.25	A Wilson	6/2/2009
Thallium	0.18J	µg/L	0.03	1	A Wilson	6/2/2009
Vanadium	3.8J	µg/L	3.4	5	A Wilson	6/2/2009
Zinc	6.8	µg/L	1.9	5	A Wilson	6/2/2009

Lab-Sample Number: K00002397002
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: 05/21/2009 10:43
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: 05/21/2009 13:50
Received By: Ken Hitchman

Field Determinations
pH: 7.37 pH Units
Chlorine, residual:
Conductivity: 67 uMHO
Temperature: 19.27
Dissolved Oxygen: 8.68 mg/L
Other:
Flow: CFS

TEST: Mercury		METHOD: EPA 245.1					
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE	
Mercury	U	µg/L	0.029	0.2	A Bass	5/27/2009	

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

Lab-Sample Number: K00002397003
Project Name: TVA-Ash Spill
Sample Description: Approx 100' downstream from middle dredge pc
Sampler Project Name: TVA ash spill
Project Site No.: 2A
Station No.: Dredge Plume
Date/Time Collected: 05/21/2009 10:50
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: 05/21/2009 13:50
Received By: Ken Hitchman

Field Determinations
pH: 7.41 pH Units
Chlorine, residual:
Conductivity: 92 uMHO
Temperature: 19.65
Dissolved Oxygen: 8.70 mg/L
Other:
Flow: CFS

TEST: Digestion Metals		METHOD: EPA 200.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Digestion Metals	05/26/2009				S Ufegbu	5/26/2009

TEST: ICP		METHOD: EPA 200.7				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Iron	850	µg/L	2.9	10	A Bass	5/29/2009

TEST: ICP-MS		METHOD: EPA 200.8				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Aluminum	1800	µg/L	64.0	100	A Wilson	6/2/2009
Antimony	0.39J	µg/L	0.33	1	A Wilson	6/2/2009
Arsenic	12.0	µg/L	0.93	5	A Wilson	6/2/2009
Barium	82	µg/L	2.5	5	A Wilson	6/2/2009
Beryllium	0.29J	µg/L	0.11	1	A Wilson	6/2/2009
Cadmium	U	µg/L	0.41	1	A Wilson	6/2/2009
Chromium	U	µg/L	2.0	5	A Wilson	6/2/2009
Cobalt	1.2	µg/L	0.04	1	A Wilson	6/2/2009
Copper	4.5	µg/L	0.38	1	A Wilson	6/2/2009
Lead	2.4	µg/L	0.10	1	A Wilson	6/2/2009
Manganese	140	µg/L	0.42	1	A Wilson	6/2/2009
Nickel	3.0	µg/L	0.25	1	A Wilson	6/2/2009
Selenium	U	µg/L	1.3	5	A Wilson	6/2/2009
Silver	U	µg/L	0.03	0.25	A Wilson	6/2/2009
Thallium	0.29J	µg/L	0.03	1	A Wilson	6/2/2009
Vanadium	9.7	µg/L	3.4	5	A Wilson	6/2/2009
Zinc	3.5J	µg/L	1.9	5	A Wilson	6/2/2009

Lab-Sample Number: K00002397003
Project Name: TVA-Ash Spill
Sample Description: Approx 100' downstream from middle dredge pc
Sampler Project Name: TVA ash spill
Project Site No.: 2A
Station No.: Dredge Plume
Date/Time Collected: 05/21/2009 10:50
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: 05/21/2009 13:50
Received By: Ken Hitchman

Field Determinations
pH: 7.41 pH Units
Chlorine, residual:
Conductivity: 92 uMHO
Temperature: 19.65
Dissolved Oxygen: 8.70 mg/L
Other:
Flow: CFS

TEST: Mercury		METHOD: EPA 245.1				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Mercury	U	µg/L	0.029	0.2	A Bass	5/27/2009

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

Lab-Sample Number: K00002397004
Project Name: TVA-Ash Spill
Sample Description: Emory River mile 1.9 at underwater weir
Sampler Project Name: TVA ash spill
Project Site No.: 2B
Station No.: EMORY001.9RO
Date/Time Collected: 05/21/2009 11:00
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: 05/21/2009 13:50
Received By: Ken Hitchman

Field Determinations
pH: 7.45 pH Units
Chlorine, residual:
Conductivity: 107 uMHO
Temperature: 18.60
Dissolved Oxygen: 9.09 mg/L
Other:
Flow: CFS

TEST: Digestion Metals		METHOD: EPA 200.2				
ANALYTE	RESULT	UNITS	MDL	SQL	ANALYZED BY:	DATE
Digestion Metals	05/26/2009				S Ufegbu	5/26/2009

TEST: ICP		METHOD: EPA 200.7				
ANALYTE	RESULT	UNITS	MDL	SQL	ANALYZED BY:	DATE
Iron	260	µg/L	2.9	10	A Bass	5/29/2009

TEST: ICP-MS		METHOD: EPA 200.8				
ANALYTE	RESULT	UNITS	MDL	SQL	ANALYZED BY:	DATE
Aluminum	360	µg/L	64.0	100	A Wilson	6/2/2009
Antimony	0.95J	µg/L	0.33	1	A Wilson	6/2/2009
Arsenic	1.9J	µg/L	0.93	5	A Wilson	6/2/2009
Barium	40	µg/L	2.5	5	A Wilson	6/2/2009
Beryllium	U	µg/L	0.11	1	A Wilson	6/2/2009
Cadmium	U	µg/L	0.41	1	A Wilson	6/2/2009
Chromium	U	µg/L	2.0	5	A Wilson	6/2/2009
Cobalt	0.40J	µg/L	0.04	1	A Wilson	6/2/2009
Copper	3.1	µg/L	0.38	1	A Wilson	6/2/2009
Lead	0.37J	µg/L	0.10	1	A Wilson	6/4/2009
Manganese	62	µg/L	0.42	1	A Wilson	6/2/2009
Nickel	1.8	µg/L	0.25	1	A Wilson	6/2/2009
Selenium	U	µg/L	1.3	5	A Wilson	6/2/2009
Silver	0.059J	µg/L	0.03	0.25	A Wilson	6/2/2009
Thallium	0.19J	µg/L	0.03	1	A Wilson	6/2/2009
Vanadium	U	µg/L	3.4	5	A Wilson	6/2/2009
Zinc	U	µg/L	1.9	5	A Wilson	6/4/2009

Lab-Sample Number: K00002397004
Project Name: TVA-Ash Spill
Sample Description: Emory River mile 1.9 at underwater weir
Sampler Project Name: TVA ash spill
Project Site No.: 2B
Station No.: EMORY001.9RO
Date/Time Collected: 05/21/2009 11:00
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: 05/21/2009 13:50
Received By: Ken Hitchman

Field Determinations
pH: 7.45 pH Units
Chlorine, residual:
Conductivity: 107 uMHO
Temperature: 18.60
Dissolved Oxygen: 9.09 mg/L
Other:
Flow: CFS

TEST: Mercury		METHOD: EPA 245.1				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Mercury	0.05J	µg/L	0.029	0.2	A Bass	5/27/2009

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

Lab-Sample Number: K00002397005
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: 05/21/2009 11:11
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: 05/21/2009 13:50
Received By: Ken Hitchman

Field Determinations
pH: 7.39 pH Units
Chlorine, residual:
Conductivity: 97 uMHO
Temperature: 18.61
Dissolved Oxygen: 9.09 mg/L
Other:
Flow: CFS

TEST: Digestion Metals		METHOD: EPA 200.2					
ANALYTE	RESULT	UNITS	MDL	ML	ANALYZED BY:	DATE	
Digestion Metals	05/26/2009				S Ufegbu	5/26/2009	

TEST: ICP		METHOD: EPA 200.7					
ANALYTE	RESULT	UNITS	MDL	ML	ANALYZED BY:	DATE	
Iron	180	µg/L	2.9	10	A Bass	5/29/2009	

TEST: ICP-MS		METHOD: EPA 200.8					
ANALYTE	RESULT	UNITS	MDL	ML	ANALYZED BY:	DATE	
Aluminum	290	µg/L	64.0	100	A Wilson	6/4/2009	
Antimony	U	µg/L	0.33	1	A Wilson	6/2/2009	
Arsenic	U	µg/L	0.93	5	A Wilson	6/2/2009	
Barium	41	µg/L	2.5	5	A Wilson	6/2/2009	
Beryllium	U	µg/L	0.11	1	A Wilson	6/2/2009	
Cadmium	U	µg/L	0.41	1	A Wilson	6/2/2009	
Chromium	U	µg/L	2.0	5	A Wilson	6/2/2009	
Cobalt	0.29J	µg/L	0.04	1	A Wilson	6/2/2009	
Copper	2.9	µg/L	0.38	1	A Wilson	6/2/2009	
Lead	0.31J	µg/L	0.10	1	A Wilson	6/4/2009	
Manganese	49	µg/L	0.42	1	A Wilson	6/2/2009	
Nickel	2.0	µg/L	0.25	1	A Wilson	6/2/2009	
Selenium	1.3J	µg/L	1.3	5	A Wilson	6/2/2009	
Silver	U	µg/L	0.03	0.25	A Wilson	6/2/2009	
Thallium	0.042J	µg/L	0.03	1	A Wilson	6/2/2009	
Vanadium	U	µg/L	3.4	5	A Wilson	6/2/2009	
Zinc	3.6J	µg/L	1.9	5	A Wilson	6/4/2009	

Lab-Sample Number: K00002397005
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: 05/21/2009 11:11
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: 05/21/2009 13:50
Received By: Ken Hitchman

Field Determinations
pH: 7.39 pH Units
Chlorine, residual:
Conductivity: 97 uMHO
Temperature: 18.61
Dissolved Oxygen: 9.09 mg/L
Other:
Flow: CFS

TEST: Mercury		METHOD: EPA 245.1				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Mercury	0.03J	µg/L	0.029	0.2	A Bass	5/27/2009

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

Lab-Sample Number: K00002397006
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: 05/21/2009 11:20
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: 05/21/2009 13:50
Received By: Ken Hitchman

Field Determinations
pH: 7.69 pH Units
Chlorine, residual:
Conductivity: 164 uMHO
Temperature: 17.42
Dissolved Oxygen: 10.36 mg/L
Other:
Flow: CFS

TEST: Digestion Metals		METHOD: EPA 200.2				
ANALYTE	RESULT	UNITS	MDL	MLQ	ANALYZED BY:	DATE
Digestion Metals	05/26/2009				S Ufegbu	5/26/2009

TEST: ICP		METHOD: EPA 200.7				
ANALYTE	RESULT	UNITS	MDL	MLQ	ANALYZED BY:	DATE
Iron	160	µg/L	2.9	10	A Bass	5/29/2009

TEST: ICP-MS		METHOD: EPA 200.8				
ANALYTE	RESULT	UNITS	MDL	MLQ	ANALYZED BY:	DATE
Aluminum	210	µg/L	64.0	100	A Wilson	6/4/2009
Antimony	U	µg/L	0.33	1	A Wilson	6/2/2009
Arsenic	U	µg/L	0.93	5	A Wilson	6/2/2009
Barium	38	µg/L	2.5	5	A Wilson	6/2/2009
Beryllium	U	µg/L	0.11	1	A Wilson	6/2/2009
Cadmium	U	µg/L	0.41	1	A Wilson	6/2/2009
Chromium	U	µg/L	2.0	5	A Wilson	6/2/2009
Cobalt	0.23J	µg/L	0.04	1	A Wilson	6/2/2009
Copper	3.2	µg/L	0.38	1	A Wilson	6/2/2009
Lead	0.36J	µg/L	0.10	1	A Wilson	6/4/2009
Manganese	38	µg/L	0.42	1	A Wilson	6/2/2009
Nickel	1.7	µg/L	0.25	1	A Wilson	6/2/2009
Selenium	U	µg/L	1.3	5	A Wilson	6/2/2009
Silver	U	µg/L	0.03	0.25	A Wilson	6/2/2009
Thallium	U	µg/L	0.03	1	A Wilson	6/2/2009
Vanadium	U	µg/L	3.4	5	A Wilson	6/2/2009
Zinc	3.6J	µg/L	1.9	5	A Wilson	6/4/2009

Lab-Sample Number: K00002397006
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: 05/21/2009 11:20
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: 05/21/2009 13:50
Received By: Ken Hitchman

Field Determinations
pH: 7.69 pH Units
Chlorine, residual:
Conductivity: 164 uMHO
Temperature: 17.42
Dissolved Oxygen: 10.36 mg/L
Other:
Flow: CFS

TEST: Mercury		METHOD: EPA 245.1				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Mercury	0.03J	µg/L	0.029	0.2	A Bass	5/27/2009

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

Lab-Sample Number: K00002397007
Project Name: TVA-Ash Spill
Sample Description: Clinch River mile 2.3
Sampler Project Name: TVA ash spill
Project Site No.: 5
Station No.: CLINC002.3RO
Date/Time Collected: 05/21/2009 11:30
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: 05/21/2009 13:50
Received By: Ken Hitchman

Field Determinations
pH: 7.79 pH Units
Chlorine, residual:
Conductivity: 217 uMHO
Temperature: 16.71
Dissolved Oxygen: 10.19 mg/L
Other:
Flow: CFS

TEST: Digestion Metals		METHOD: EPA 200.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Digestion Metals	05/26/2009				S Ufegbu	5/26/2009

TEST: ICP		METHOD: EPA 200.7				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Iron	200	µg/L	2.9	10	A Bass	5/29/2009

TEST: ICP-MS		METHOD: EPA 200.8				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Aluminum	270	µg/L	64.0	100	A Wilson	6/4/2009
Antimony	U	µg/L	0.33	1	A Wilson	6/2/2009
Arsenic	U	µg/L	0.93	5	A Wilson	6/2/2009
Barium	39	µg/L	2.5	5	A Wilson	6/2/2009
Beryllium	U	µg/L	0.11	1	A Wilson	6/2/2009
Cadmium	U	µg/L	0.41	1	A Wilson	6/2/2009
Chromium	U	µg/L	2.0	5	A Wilson	6/2/2009
Cobalt	0.28J	µg/L	0.04	1	A Wilson	6/2/2009
Copper	1.7	µg/L	0.38	1	A Wilson	6/2/2009
Lead	0.31J	µg/L	0.10	1	A Wilson	6/4/2009
Manganese	40	µg/L	0.42	1	A Wilson	6/2/2009
Nickel	1.6	µg/L	0.25	1	A Wilson	6/2/2009
Selenium	U	µg/L	1.3	5	A Wilson	6/2/2009
Silver	U	µg/L	0.03	0.25	A Wilson	6/2/2009
Thallium	U	µg/L	0.03	1	A Wilson	6/2/2009
Vanadium	U	µg/L	3.4	5	A Wilson	6/2/2009
Zinc	U	µg/L	1.9	5	A Wilson	6/4/2009

Lab-Sample Number: K00002397007
Project Name: TVA-Ash Spill
Sample Description: Clinch River mile 2.3
Sampler Project Name: TVA ash spill
Project Site No.: 5
Station No.: CLINC002.3RO
Date/Time Collected: 05/21/2009 11:30
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: 05/21/2009 13:50
Received By: Ken Hitchman

Field Determinations
pH: 7.79 pH Units
Chlorine, residual:
Conductivity: 217 uMHO
Temperature: 16.71
Dissolved Oxygen: 10.19 mg/L
Other:
Flow: CFS

TEST: Mercury		METHOD: EPA 245.1				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Mercury	U	µg/L	0.029	0.2	A Bass	5/27/2009

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

Lab-Sample Number: K00002397008
Project Name: TVA-Ash Spill
Sample Description: Clinch River TVA discharge point
Sampler Project Name: TVA ash spill
Project Site No.: 5A
Station No.: KingAshOutF2
Date/Time Collected: 05/21/2009 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: 05/21/2009 13:50
Received By: Ken Hitchman

Field Determinations
pH: 7.67 pH Units
Chlorine, residual:
Conductivity: 173 uMHO
Temperature: 19.49
Dissolved Oxygen: 9.45 mg/L
Other:
Flow: CFS

TEST: Digestion Metals		METHOD: EPA 200.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Digestion Metals	05/26/2009				S Ufegbu	5/26/2009

TEST: ICP		METHOD: EPA 200.7				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Iron	360	µg/L	2.9	10	A Bass	5/29/2009

TEST: ICP-MS		METHOD: EPA 200.8				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Aluminum	550	µg/L	64.0	100	A Wilson	6/4/2009
Antimony	U	µg/L	0.33	1	A Wilson	6/2/2009
Arsenic	2.2J	µg/L	0.93	5	A Wilson	6/2/2009
Barium	47	µg/L	2.5	5	A Wilson	6/2/2009
Beryllium	U	µg/L	0.11	1	A Wilson	6/2/2009
Cadmium	U	µg/L	0.41	1	A Wilson	6/2/2009
Chromium	U	µg/L	2.0	5	A Wilson	6/2/2009
Cobalt	0.46J	µg/L	0.04	1	A Wilson	6/2/2009
Copper	4.7	µg/L	0.38	1	A Wilson	6/2/2009
Lead	0.53J	µg/L	0.10	1	A Wilson	6/4/2009
Manganese	57	µg/L	0.42	1	A Wilson	6/2/2009
Nickel	1.8	µg/L	0.25	1	A Wilson	6/2/2009
Selenium	U	µg/L	1.3	5	A Wilson	6/2/2009
Silver	U	µg/L	0.03	0.25	A Wilson	6/2/2009
Thallium	0.051J	µg/L	0.03	1	A Wilson	6/2/2009
Vanadium	U	µg/L	3.4	5	A Wilson	6/4/2009
Zinc	2.5J	µg/L	1.9	5	A Wilson	6/4/2009

Lab-Sample Number: K00002397008
Project Name: TVA-Ash Spill
Sample Description: Clinch River TVA discharge point
Sampler Project Name: TVA ash spill
Project Site No.: 5A
Station No.: KingAshOutF2
Date/Time Collected: 05/21/2009 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: 05/21/2009 13:50
Received By: Ken Hitchman

Field Determinations
pH: 7.67 pH Units
Chlorine, residual:
Conductivity: 173 uMHO
Temperature: 19.49
Dissolved Oxygen: 9.45 mg/L
Other:
Flow: CFS

TEST: Mercury		METHOD: EPA 245.1				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Mercury	U	µg/L	0.029	0.2	A Bass	5/27/2009

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

Lab-Sample Number:	K00002397009	Field Determinations	
Project Name:	TVA-Ash Spill	pH:	7.94 pH Units
Sample Description:	Clinch River mile 4.5 near Sugar Grove Valley R	Chlorine, residual:	
Sampler Project Name:	TVA ash spill	Conductivity:	232 uMHO
Project Site No.:	6	Temperature:	15.61
Station No.:	CLINC004.5RO	Dissolved Oxygen:	10.92 mg/L
Date/Time Collected:	05/21/2009 11:48	Other:	
Sampler's Name:	Geoff Klein	Flow:	CFS
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:	05/21/2009 13:50		
Received By:	Ken Hitchman		

TEST: Digestion Metals		METHOD: EPA 200.2				
ANALYTE	RESULT	UNITS	MDL	MLQ	ANALYZED BY:	DATE
Digestion Metals	05/26/2009				S Ufegbu	5/26/2009

TEST: ICP		METHOD: EPA 200.7				
ANALYTE	RESULT	UNITS	MDL	MLQ	ANALYZED BY:	DATE
Iron	300	µg/L	2.9	10	A Bass	5/29/2009

TEST: ICP-MS		METHOD: EPA 200.8				
ANALYTE	RESULT	UNITS	MDL	MLQ	ANALYZED BY:	DATE
Aluminum	440	µg/L	64.0	100	A Wilson	6/4/2009
Antimony	1.1	µg/L	0.33	1	A Wilson	6/2/2009
Arsenic	U	µg/L	0.93	5	A Wilson	6/2/2009
Barium	35	µg/L	2.5	5	A Wilson	6/2/2009
Beryllium	U	µg/L	0.11	1	A Wilson	6/2/2009
Cadmium	U	µg/L	0.41	1	A Wilson	6/2/2009
Chromium	3.1J	µg/L	2.0	5	A Wilson	6/2/2009
Cobalt	0.33J	µg/L	0.04	1	A Wilson	6/2/2009
Copper	1.9	µg/L	0.38	1	A Wilson	6/2/2009
Lead	0.61J	µg/L	0.10	1	A Wilson	6/4/2009
Manganese	46	µg/L	0.42	1	A Wilson	6/2/2009
Nickel	1.7	µg/L	0.25	1	A Wilson	6/2/2009
Selenium	U	µg/L	1.3	5	A Wilson	6/2/2009
Silver	U	µg/L	0.03	0.25	A Wilson	6/2/2009
Thallium	0.15J	µg/L	0.03	1	A Wilson	6/2/2009
Vanadium	5.8	µg/L	3.4	5	A Wilson	6/4/2009
Zinc	4.8J	µg/L	1.9	5	A Wilson	6/4/2009

Lab-Sample Number:	K00002397009	Field Determinations	
Project Name:	TVA-Ash Spill	pH:	7.94 pH Units
Sample Description:	Clinch River mile 4.5 near Sugar Grove Valley R	Chlorine, residual:	
Sampler Project Name:	TVA ash spill	Conductivity:	232 uMHO
Project Site No.:	6	Temperature:	15.61
Station No.:	CLINC004.5RO	Dissolved Oxygen:	10.92 mg/L
Date/Time Collected:	05/21/2009 11:48	Other:	
Sampler's Name:	Geoff Klein	Flow:	CFS
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:	05/21/2009 13:50		
Received By:	Ken Hitchman		

TEST: Mercury		METHOD: EPA 245.1				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Mercury	0.03J	µg/L	0.029	0.2	A Bass	5/27/2009

J - Estimated value between MDL and MQL

MDL - Method Detection Limit

MQL - Method Quantitation Limit

U - Undetected