



**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

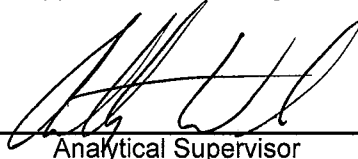
Michael Atchley
TDEC-WPC
Knoxville FO
3711 Middlebrook Pike
Knoxville, TN 37921

Lab ID: K00003417
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: K00003417001
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: 02/23/2010 11:25
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: 03/05/2010
Date/Time Received: 02/23/2010 13:10
Received By: E McCrary

Field Determinations
pH: 7.81 pH Units
Chlorine, residual:
Conductivity: 45 uMHO
Temperature: 5.55
Dissolved Oxygen: 14.79 mg/L
Other:
Flow: CFS

TEST: Digestion Metals		METHOD: EPA 200.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Digestion Metals	02/24/2010				A Wilson	2/24/2010

TEST: ICP		METHOD: EPA 200.7				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Iron	240	µg/L	2.9	10	A Bass	2/25/2010

TEST: ICP-MS		METHOD: EPA 200.8				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Aluminum	150	µg/L	6.4	10	M Pattanayek	2/24/2010
Antimony	U	µg/L	0.33	1	M Pattanayek	2/24/2010
Arsenic	U	µg/L	0.93	5	M Pattanayek	2/24/2010
Barium	21	µg/L	2.5	5	M Pattanayek	2/24/2010
Beryllium	U	µg/L	0.11	1	M Pattanayek	2/24/2010
Cadmium	U	µg/L	0.41	1	M Pattanayek	2/24/2010
Chromium	U	µg/L	2.0	5	M Pattanayek	2/24/2010
Cobalt	0.45J	µg/L	0.04	1	M Pattanayek	2/24/2010
Copper	U	µg/L	0.38	1	M Pattanayek	2/24/2010
Lead	0.17J	µg/L	0.10	1	M Pattanayek	2/24/2010
Manganese	67	µg/L	0.42	1	M Pattanayek	2/24/2010
Nickel	0.46J	µg/L	0.25	1	M Pattanayek	2/24/2010
Selenium	U	µg/L	1.3	5	M Pattanayek	2/24/2010
Silver	U	µg/L	0.03	0.25	M Pattanayek	2/24/2010
Thallium	U	µg/L	0.03	1	M Pattanayek	2/24/2010
Vanadium	U	µg/L	3.4	5	M Pattanayek	2/24/2010
Zinc	U	µg/L	1.9	5	M Pattanayek	2/24/2010

Lab-Sample Number: K00003417001
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: 02/23/2010 11:25
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: 03/05/2010
Date/Time Received: 02/23/2010 13:10
Received By: E McCrary

Field Determinations
pH: 7.81 pH Units
Chlorine, residual:
Conductivity: 45 uMHO
Temperature: 5.55
Dissolved Oxygen: 14.79 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 Wilson	2/25/2010

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

Lab-Sample Number: K00003417002
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: 02/23/2010 09:47
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: 03/05/2010
Date/Time Received: 02/23/2010 13:10
Received By: E McCrary

Field Determinations
pH: 8.11 pH Units
Chlorine, residual:
Conductivity: 45 uMHO
Temperature: 4.33
Dissolved Oxygen: 14.29 mg/L
Other:
Flow: CFS

TEST: Digestion Metals		METHOD: EPA 200.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Digestion Metals	02/24/2010				A Wilson	2/24/2010

TEST: ICP		METHOD: EPA 200.7				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Iron	350	µg/L	2.9	10	A Bass	2/25/2010

TEST: ICP-MS		METHOD: EPA 200.8				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Aluminum	410	µg/L	6.4	10	M Pattanayek	2/24/2010
Antimony	U	µg/L	0.33	1	M Pattanayek	2/24/2010
Arsenic	U	µg/L	0.93	5	M Pattanayek	2/24/2010
Barium	29	µg/L	2.5	5	M Pattanayek	2/24/2010
Beryllium	U	µg/L	0.11	1	M Pattanayek	2/24/2010
Cadmium	U	µg/L	0.41	1	M Pattanayek	2/24/2010
Chromium	U	µg/L	2.0	5	M Pattanayek	2/24/2010
Cobalt	0.59J	µg/L	0.04	1	M Pattanayek	2/24/2010
Copper	1.1	µg/L	0.38	1	M Pattanayek	2/24/2010
Lead	0.66J	µg/L	0.10	1	M Pattanayek	2/24/2010
Manganese	58	µg/L	0.42	1	M Pattanayek	2/24/2010
Nickel	0.72J	µg/L	0.25	1	M Pattanayek	2/24/2010
Selenium	U	µg/L	1.3	5	M Pattanayek	2/24/2010
Silver	U	µg/L	0.03	0.25	M Pattanayek	2/24/2010
Thallium	0.054J	µg/L	0.03	1	M Pattanayek	2/24/2010
Vanadium	U	µg/L	3.4	5	M Pattanayek	2/24/2010
Zinc	U	µg/L	1.9	5	M Pattanayek	2/24/2010

Lab-Sample Number: K00003417002
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: 02/23/2010 09:47
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: 03/05/2010
Date/Time Received: 02/23/2010 13:10
Received By: E McCrary

Field Determinations

pH: 8.11 pH Units
Chlorine, residual:
Conductivity: 45 uMHO
Temperature: 4.33
Dissolved Oxygen: 14.29 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 Wilson	2/25/2010

J - Estimated value between MDL and MQL

MDL - Method Detection Limit

MQL - Method Quantitation Limit

U - Undetected

Lab-Sample Number: K00003417003
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: 02/23/2010 09:57
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: 03/05/2010
Date/Time Received: 02/23/2010 13:10
Received By: E McCrary

Field Determinations
pH: 7.63 pH Units
Chlorine, residual:
Conductivity: 44 uMHO
Temperature: 4.38
Dissolved Oxygen: 15.74 mg/L
Other:
Flow: CFS

TEST: Digestion Metals		METHOD: EPA 200.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Digestion Metals	02/24/2010				A Wilson	2/24/2010

TEST: ICP		METHOD: EPA 200.7				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Iron	360	µg/L	2.9	10	A Bass	2/25/2010

TEST: ICP-MS		METHOD: EPA 200.8				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Aluminum	420	µg/L	6.4	10	M Pattanayek	2/24/2010
Antimony	U	µg/L	0.33	1	M Pattanayek	2/24/2010
Arsenic	2.1J	µg/L	0.93	5	M Pattanayek	2/24/2010
Barium	27	µg/L	2.5	5	M Pattanayek	2/24/2010
Beryllium	U	µg/L	0.11	1	M Pattanayek	2/24/2010
Cadmium	U	µg/L	0.41	1	M Pattanayek	2/24/2010
Chromium	U	µg/L	2.0	5	M Pattanayek	2/24/2010
Cobalt	0.57J	µg/L	0.04	1	M Pattanayek	2/24/2010
Copper	1.1	µg/L	0.38	1	M Pattanayek	2/24/2010
Lead	0.65J	µg/L	0.10	1	M Pattanayek	2/24/2010
Manganese	59	µg/L	0.42	1	M Pattanayek	2/24/2010
Nickel	0.72J	µg/L	0.25	1	M Pattanayek	2/24/2010
Selenium	U	µg/L	1.3	5	M Pattanayek	2/24/2010
Silver	U	µg/L	0.03	0.25	M Pattanayek	2/24/2010
Thallium	0.056J	µg/L	0.03	1	M Pattanayek	2/24/2010
Vanadium	U	µg/L	3.4	5	M Pattanayek	2/24/2010
Zinc	U	µg/L	1.9	5	M Pattanayek	2/24/2010

Lab-Sample Number: K00003417003
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: 02/23/2010 09:57
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: 03/05/2010
Date/Time Received: 02/23/2010 13:10
Received By: E McCrary

Field Determinations
pH: 7.63 pH Units
Chlorine, residual:
Conductivity: 44 uMHO
Temperature: 4.38
Dissolved Oxygen: 15.74 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 Wilson	2/25/2010

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

Lab-Sample Number: K00003417004
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: 02/23/2010 10:07
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: 03/05/2010
Date/Time Received: 02/23/2010 13:10
Received By: E McCrary

Field Determinations
pH: 7.61 pH Units
Chlorine, residual:
Conductivity: 47 uMHO
Temperature: 4.53
Dissolved Oxygen: 15.53 mg/L
Other:
Flow: CFS

TEST: Digestion Metals		METHOD: EPA 200.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Digestion Metals	02/24/2010				A Wilson	2/24/2010

TEST: ICP		METHOD: EPA 200.7				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Iron	310	µg/L	2.9	10	A Bass	2/25/2010

TEST: ICP-MS		METHOD: EPA 200.8				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Aluminum	240	µg/L	6.4	10	M Pattanayek	2/24/2010
Antimony	U	µg/L	0.33	1	M Pattanayek	2/24/2010
Arsenic	U	µg/L	0.93	5	M Pattanayek	2/24/2010
Barium	23	µg/L	2.5	5	M Pattanayek	2/24/2010
Beryllium	U	µg/L	0.11	1	M Pattanayek	2/24/2010
Cadmium	U	µg/L	0.41	1	M Pattanayek	2/24/2010
Chromium	U	µg/L	2.0	5	M Pattanayek	2/24/2010
Cobalt	0.42J	µg/L	0.04	1	M Pattanayek	2/24/2010
Copper	0.58J	µg/L	0.38	1	M Pattanayek	2/24/2010
Lead	0.34J	µg/L	0.10	1	M Pattanayek	2/24/2010
Manganese	61	µg/L	0.42	1	M Pattanayek	2/24/2010
Nickel	0.36J	µg/L	0.25	1	M Pattanayek	2/24/2010
Selenium	U	µg/L	1.3	5	M Pattanayek	2/24/2010
Silver	U	µg/L	0.03	0.25	M Pattanayek	2/24/2010
Thallium	0.034J	µg/L	0.03	1	M Pattanayek	2/24/2010
Vanadium	U	µg/L	3.4	5	M Pattanayek	2/24/2010
Zinc	U	µg/L	1.9	5	M Pattanayek	2/24/2010

Lab-Sample Number: K00003417004
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: 02/23/2010 10:07
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: 03/05/2010
Date/Time Received: 02/23/2010 13:10
Received By: E McCrary

Field Determinations
pH: 7.61 pH Units
Chlorine, residual:
Conductivity: 47 uMHO
Temperature: 4.53
Dissolved Oxygen: 15.53 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 Wilson	2/25/2010

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

Lab-Sample Number: K00003417005
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: 02/23/2010 10:28
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: 03/05/2010
Date/Time Received: 02/23/2010 13:10
Received By: E McCrary

Field Determinations
pH: 7.83 pH Units
Chlorine, residual:
Conductivity: 185 uMHO
Temperature: 6.66
Dissolved Oxygen: 14.77 mg/L
Other:
Flow: CFS

TEST: Digestion Metals		METHOD: EPA 200.2				
ANALYTE	RESULT	UNITS	MDL	ML	ANALYZED BY:	DATE
Digestion Metals	02/24/2010				A Wilson	2/24/2010

TEST: ICP		METHOD: EPA 200.7				
ANALYTE	RESULT	UNITS	MDL	ML	ANALYZED BY:	DATE
Iron	230	µg/L	2.9	10	A Bass	2/25/2010

TEST: ICP-MS		METHOD: EPA 200.8				
ANALYTE	RESULT	UNITS	MDL	ML	ANALYZED BY:	DATE
Aluminum	140	µg/L	6.4	10	M Pattanayek	2/24/2010
Antimony	U	µg/L	0.33	1	M Pattanayek	2/24/2010
Arsenic	U	µg/L	0.93	5	M Pattanayek	2/24/2010
Barium	29	µg/L	2.5	5	M Pattanayek	2/24/2010
Beryllium	U	µg/L	0.11	1	M Pattanayek	2/24/2010
Cadmium	U	µg/L	0.41	1	M Pattanayek	2/24/2010
Chromium	U	µg/L	2.0	5	M Pattanayek	2/24/2010
Cobalt	0.20J	µg/L	0.04	1	M Pattanayek	2/24/2010
Copper	0.59J	µg/L	0.38	1	M Pattanayek	2/24/2010
Lead	0.28J	µg/L	0.10	1	M Pattanayek	2/24/2010
Manganese	39	µg/L	0.42	1	M Pattanayek	2/24/2010
Nickel	U	µg/L	0.25	1	M Pattanayek	2/24/2010
Selenium	U	µg/L	1.3	5	M Pattanayek	2/24/2010
Silver	U	µg/L	0.03	0.25	M Pattanayek	2/24/2010
Thallium	U	µg/L	0.03	1	M Pattanayek	2/24/2010
Vanadium	U	µg/L	3.4	5	M Pattanayek	2/24/2010
Zinc	U	µg/L	1.9	5	M Pattanayek	2/24/2010

Lab-Sample Number: K00003417005
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: 02/23/2010 10:28
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: 03/05/2010
Date/Time Received: 02/23/2010 13:10
Received By: E McCrary

Field Determinations
pH: 7.83 pH Units
Chlorine, residual:
Conductivity: 185 uMHO
Temperature: 6.66
Dissolved Oxygen: 14.77 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 Wilson	2/25/2010

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

Lab-Sample Number: K00003417006
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: 02/23/2010 10:36
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: 03/05/2010
Date/Time Received: 02/23/2010 13:10
Received By: E McCrary

Field Determinations
pH: 7.83 pH Units
Chlorine, residual:
Conductivity: 69 uMHO
Temperature: 5.52
Dissolved Oxygen: 15.27 mg/L
Other:
Flow: CFS

TEST: Digestion Metals		METHOD: EPA 200.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Digestion Metals	02/24/2010				A Wilson	2/24/2010

TEST: ICP		METHOD: EPA 200.7				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Iron	220	µg/L	2.9	10	A Bass	2/25/2010

TEST: ICP-MS		METHOD: EPA 200.8				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Aluminum	220	µg/L	6.4	10	M Pattanayek	2/24/2010
Antimony	0.86J	µg/L	0.33	1	M Pattanayek	2/24/2010
Arsenic	8.2	µg/L	0.93	5	M Pattanayek	2/24/2010
Barium	32	µg/L	2.5	5	M Pattanayek	2/24/2010
Beryllium	U	µg/L	0.11	1	M Pattanayek	2/24/2010
Cadmium	U	µg/L	0.41	1	M Pattanayek	2/24/2010
Chromium	U	µg/L	2.0	5	M Pattanayek	2/24/2010
Cobalt	0.34J	µg/L	0.04	1	M Pattanayek	2/24/2010
Copper	0.88J	µg/L	0.38	1	M Pattanayek	2/24/2010
Lead	0.24J	µg/L	0.10	1	M Pattanayek	2/24/2010
Manganese	64	µg/L	0.42	1	M Pattanayek	2/24/2010
Nickel	U	µg/L	0.25	1	M Pattanayek	2/24/2010
Selenium	U	µg/L	1.3	5	M Pattanayek	2/24/2010
Silver	U	µg/L	0.03	0.25	M Pattanayek	2/24/2010
Thallium	0.087J	µg/L	0.03	1	M Pattanayek	2/24/2010
Vanadium	5.9	µg/L	3.4	5	M Pattanayek	2/24/2010
Zinc	U	µg/L	1.9	5	M Pattanayek	2/24/2010

Lab-Sample Number: K00003417006
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: 02/23/2010 10:36
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: 03/05/2010
Date/Time Received: 02/23/2010 13:10
Received By: E McCrary

Field Determinations
pH: 7.83 pH Units
Chlorine, residual:
Conductivity: 69 uMHO
Temperature: 5.52
Dissolved Oxygen: 15.27 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 Wilson	2/25/2010

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

Lab-Sample Number: K00003417007
Project Name: TVA-Ash Spill
Sample Description: Clinch River TVA Discharge Point
Sampler Project Name: TVA Ash Spill
Project Site No.: 5A FD
Station No.: KingAshOutF2
Date/Time Collected: 02/23/2010 10:40
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: 03/05/2010
Date/Time Received: 02/23/2010 13:10
Received By: E McCrary

Field Determinations
pH: 7.83 pH Units
Chlorine, residual:
Conductivity: 69 uMHO
Temperature: 5.52
Dissolved Oxygen: 15.27 mg/L
Other:
Flow: CFS

TEST: Digestion Metals		METHOD: EPA 200.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Digestion Metals	02/24/2010				A Wilson	2/24/2010

TEST: ICP		METHOD: EPA 200.7				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Iron	220	µg/L	2.9	10	A Bass	2/25/2010

TEST: ICP-MS		METHOD: EPA 200.8				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Aluminum	220	µg/L	6.4	10	M Pattanayek	2/24/2010
Antimony	0.91J	µg/L	0.33	1	M Pattanayek	2/24/2010
Arsenic	8.5	µg/L	0.93	5	M Pattanayek	2/24/2010
Barium	34	µg/L	2.5	5	M Pattanayek	2/24/2010
Beryllium	U	µg/L	0.11	1	M Pattanayek	2/24/2010
Cadmium	U	µg/L	0.41	1	M Pattanayek	2/24/2010
Chromium	U	µg/L	2.0	5	M Pattanayek	2/24/2010
Cobalt	0.37J	µg/L	0.04	1	M Pattanayek	2/24/2010
Copper	0.89J	µg/L	0.38	1	M Pattanayek	2/24/2010
Lead	0.25J	µg/L	0.10	1	M Pattanayek	2/24/2010
Manganese	66	µg/L	0.42	1	M Pattanayek	2/24/2010
Nickel	U	µg/L	0.25	1	M Pattanayek	2/24/2010
Selenium	U	µg/L	1.3	5	M Pattanayek	2/24/2010
Silver	U	µg/L	0.03	0.25	M Pattanayek	2/24/2010
Thallium	0.097J	µg/L	0.03	1	M Pattanayek	2/24/2010
Vanadium	6.3	µg/L	3.4	5	M Pattanayek	2/24/2010
Zinc	U	µg/L	1.9	5	M Pattanayek	2/24/2010

Lab-Sample Number: K00003417007
Project Name: TVA-Ash Spill
Sample Description: Clinch River TVA Discharge Point
Sampler Project Name: TVA Ash Spill
Project Site No.: 5A FD
Station No.: KingAshOutF2
Date/Time Collected: 02/23/2010 10:40
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: 03/05/2010
Date/Time Received: 02/23/2010 13:10
Received By: E McCrary

Field Determinations
pH: 7.83 pH Units
Chlorine, residual:
Conductivity: 69 uMHO
Temperature: 5.52
Dissolved Oxygen: 15.27 mg/L
Other:
Flow: CFS

TEST: Mercury		METHOD: EPA 245.1				
ANALYTE	RESULT	UNITS	MDL	MLQ	ANALYZED BY:	DATE
Mercury	U	µg/L	0.029	0.2	A Wilson	2/25/2010

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

Lab-Sample Number: K00003417008
Project Name: TVA-Ash Spill
Sample Description: Clinch River TVA Discharge Point
Sampler Project Name: TVA Ash Spill
Project Site No.: 5A FB
Station No.: KingAshOutF2
Date/Time Collected: 02/23/2010 10:40
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: 03/05/2010
Date/Time Received: 02/23/2010 13:10
Received By: E McCrary

Field Determinations

pH:
Chlorine, residual:
Conductivity:
Temperature:
Dissolved Oxygen:
Other:
Flow: CFS

TEST: Digestion Metals		METHOD: EPA 200.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Digestion Metals	02/24/2010				A Wilson	2/24/2010

TEST: ICP		METHOD: EPA 200.7				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Iron	U	µg/L	2.9	10	A Bass	2/25/2010

TEST: ICP-MS		METHOD: EPA 200.8				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Aluminum	U	µg/L	6.4	10	M Pattanayek	2/24/2010
Antimony	U	µg/L	0.33	1	M Pattanayek	2/24/2010
Arsenic	U	µg/L	0.93	5	M Pattanayek	2/24/2010
Barium	U	µg/L	2.5	5	M Pattanayek	2/24/2010
Beryllium	U	µg/L	0.11	1	M Pattanayek	2/24/2010
Cadmium	U	µg/L	0.41	1	M Pattanayek	2/24/2010
Chromium	U	µg/L	2.0	5	M Pattanayek	2/24/2010
Cobalt	U	µg/L	0.04	1	M Pattanayek	2/24/2010
Copper	U	µg/L	0.38	1	M Pattanayek	2/24/2010
Lead	U	µg/L	0.10	1	M Pattanayek	2/24/2010
Manganese	U	µg/L	0.42	1	M Pattanayek	2/24/2010
Nickel	U	µg/L	0.25	1	M Pattanayek	2/24/2010
Selenium	U	µg/L	1.3	5	M Pattanayek	2/24/2010
Silver	U	µg/L	0.03	0.25	M Pattanayek	2/24/2010
Thallium	U	µg/L	0.03	1	M Pattanayek	2/24/2010
Vanadium	U	µg/L	3.4	5	M Pattanayek	2/24/2010
Zinc	U	µg/L	1.9	5	M Pattanayek	2/24/2010

Lab-Sample Number: K00003417008
Project Name: TVA-Ash Spill
Sample Description: Clinch River TVA Discharge Point
Sampler Project Name: TVA Ash Spill
Project Site No.: 5A FB
Station No.: KingAshOutF2
Date/Time Collected: 02/23/2010 10:40
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: 03/05/2010
Date/Time Received: 02/23/2010 13:10
Received By: E McCrary

Field Determinations

pH:

Chlorine, residual:

Conductivity:

Temperature:

Dissolved Oxygen:

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 Wilson	2/25/2010	

J - Estimated value between MDL and MQL

MDL - Method Detection Limit

MQL - Method Quantitation Limit

U - Undetected

Lab-Sample Number:	K00003417009	Field Determinations	
Project Name:	TVA-Ash Spill	pH:	7.80 pH Units
Sample Description:	Clinch River mile 4.5 near Sugar Grove Valley R	Chlorine, residual:	
Sampler Project Name:	TVA Ash Spill	Conductivity:	188 uMHO
Project Site No.:	6	Temperature:	6.71
Station No.:	CLINC004.5RO	Dissolved Oxygen:	14.99 mg/L
Date/Time Collected:	02/23/2010 10:15	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:	03/05/2010		
Date/Time Received:	02/23/2010 13:10		
Received By:	E McCrary		

TEST: Digestion Metals		METHOD: EPA 200.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Digestion Metals	02/24/2010				A Wilson	2/24/2010

TEST: ICP		METHOD: EPA 200.7				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Iron	230	µg/L	2.9	10	A Bass	2/25/2010

TEST: ICP-MS		METHOD: EPA 200.8				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Aluminum	120	µg/L	6.4	10	M Pattanayek	2/24/2010
Antimony	U	µg/L	0.33	1	M Pattanayek	2/24/2010
Arsenic	U	µg/L	0.93	5	M Pattanayek	2/24/2010
Barium	29	µg/L	2.5	5	M Pattanayek	2/24/2010
Beryllium	U	µg/L	0.11	1	M Pattanayek	2/24/2010
Cadmium	U	µg/L	0.41	1	M Pattanayek	2/24/2010
Chromium	U	µg/L	2.0	5	M Pattanayek	2/24/2010
Cobalt	0.18J	µg/L	0.04	1	M Pattanayek	2/24/2010
Copper	0.49J	µg/L	0.38	1	M Pattanayek	2/24/2010
Lead	0.26J	µg/L	0.10	1	M Pattanayek	2/24/2010
Manganese	39	µg/L	0.42	1	M Pattanayek	2/24/2010
Nickel	U	µg/L	0.25	1	M Pattanayek	2/24/2010
Selenium	U	µg/L	1.3	5	M Pattanayek	2/24/2010
Silver	U	µg/L	0.03	0.25	M Pattanayek	2/24/2010
Thallium	U	µg/L	0.03	1	M Pattanayek	2/24/2010
Vanadium	U	µg/L	3.4	5	M Pattanayek	2/24/2010
Zinc	U	µg/L	1.9	5	M Pattanayek	2/24/2010

Lab-Sample Number:	K00003417009	Field Determinations	
Project Name:	TVA-Ash Spill	pH:	7.80 pH Units
Sample Description:	Clinch River mile 4.5 near Sugar Grove Valley R	Chlorine, residual:	
Sampler Project Name:	TVA Ash Spill	Conductivity:	188 uMHO
Project Site No.:	6	Temperature:	6.71
Station No.:	CLINC004.5RO	Dissolved Oxygen:	14.99 mg/L
Date/Time Collected:	02/23/2010 10:15	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:	03/05/2010		
Date/Time Received:	02/23/2010 13:10		
Received By:	E McCrary		

TEST: Mercury		METHOD: EPA 245.1				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Mercury	U	µg/L	0.029	0.2	A Wilson	2/25/2010

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: K00003417
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: K00003417001
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: 02/23/2010 11:25
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: 03/05/2010
Date/Time Received: 02/23/2010 13:10
Received By: E McCrary

Field Determinations
pH: 7.81 pH Units
Chlorine, residual:
Conductivity: 45 uMHO
Temperature: 5.55
Dissolved Oxygen: 14.79 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	2/25/2010

TEST: Hardness, Calcium		METHOD: SM 3500-Ca D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Calcium hardness	21	mg/L	0.7	1	M Chen	2/24/2010

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	2/24/2010

TEST: Residue, Suspended		METHOD: SM 2540D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Suspended Solids	U	mg/L	10	10	A Peeples	2/26/2010

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

Lab-Sample Number: K00003417002
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: 02/23/2010 09:47
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: 03/05/2010
Date/Time Received: 02/23/2010 13:10
Received By: E McCrary

Field Determinations
pH: 8.11 pH Units
Chlorine, residual:
Conductivity: 45 uMHO
Temperature: 4.33
Dissolved Oxygen: 14.29 mg/L
Other:
Flow: CFS

TEST: Alkalinity, Total		METHOD: EPA 310.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Alkalinity	16	mg/L	3.8	10	M Chen	2/25/2010

TEST: Hardness, Calcium		METHOD: SM 3500-Ca D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Calcium hardness	17	mg/L	0.7	1	M Chen	2/24/2010

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	2/24/2010

TEST: Residue, Suspended		METHOD: SM 2540D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Suspended Solids	18	mg/L	10	10	A Peeples	2/26/2010

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

Lab-Sample Number: K00003417003
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: 02/23/2010 09:57
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: 03/05/2010
Date/Time Received: 02/23/2010 13:10
Received By: E McCrary

Field Determinations
pH: 7.63 pH Units
Chlorine, residual:
Conductivity: 44 uMHO
Temperature: 4.38
Dissolved Oxygen: 15.74 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	2/25/2010

TEST: Hardness, Calcium		METHOD: SM 3500-Ca D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Calcium hardness	17	mg/L	0.7	1	M Chen	2/24/2010

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	2/24/2010

TEST: Residue, Suspended		METHOD: SM 2540D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Suspended Solids	29	mg/L	10	10	A Peebles	2/26/2010

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

Lab-Sample Number: K00003417004
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: 02/23/2010 10:07
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: 03/05/2010
Date/Time Received: 02/23/2010 13:10
Received By: E McCrary

Field Determinations
pH: 7.61 pH Units
Chlorine, residual:
Conductivity: 47 uMHO
Temperature: 4.53
Dissolved Oxygen: 15.53 mg/L
Other:
Flow: CFS

TEST: Alkalinity, Total		METHOD: EPA 310.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Alkalinity	19	mg/L	3.8	10	M Chen	2/25/2010

TEST: Hardness, Calcium		METHOD: SM 3500-Ca D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Calcium hardness	19	mg/L	0.7	1	M Chen	2/24/2010

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	2/24/2010

TEST: Residue, Suspended		METHOD: SM 2540D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Suspended Solids	12	mg/L	10	10	A Peebles	2/26/2010

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

Lab-Sample Number: K00003417005
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: 02/23/2010 10:28
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: 03/05/2010
Date/Time Received: 02/23/2010 13:10
Received By: E McCrary

Field Determinations
pH: 7.83 pH Units
Chlorine, residual:
Conductivity: 185 uMHO
Temperature: 6.66
Dissolved Oxygen: 14.77 mg/L
Other:
Flow: CFS

TEST: Alkalinity, Total		METHOD: EPA 310.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Alkalinity	120	mg/L	3.8	10	M Chen	2/25/2010

TEST: Hardness, Calcium		METHOD: SM 3500-Ca D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Calcium hardness	88	mg/L	0.7	1	M Chen	2/24/2010

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	2/24/2010

TEST: Residue, Suspended		METHOD: SM 2540D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Suspended Solids	16	mg/L	10	10	A Peebles	2/26/2010

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

Lab-Sample Number: K00003417006
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: 02/23/2010 10:36
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: 03/05/2010
Date/Time Received: 02/23/2010 13:10
Received By: E McCrary

Field Determinations
pH: 7.83 pH Units
Chlorine, residual:
Conductivity: 69 uMHO
Temperature: 5.52
Dissolved Oxygen: 15.27 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	2/25/2010

TEST: Hardness, Calcium		METHOD: SM 3500-Ca D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Calcium hardness	31	mg/L	0.7	1	M Chen	2/24/2010

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	2/24/2010

TEST: Residue, Suspended		METHOD: SM 2540D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Suspended Solids	U	mg/L	10	10	A Peeples	2/26/2010

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

Lab-Sample Number: K00003417007
Project Name: TVA-Ash Spill
Sample Description: Clinch River TVA Discharge Point
Sampler Project Name: TVA Ash Spill
Project Site No.: 5A FD
Station No.: KingAshOutF2
Date/Time Collected: 02/23/2010 10:40
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: 03/05/2010
Date/Time Received: 02/23/2010 13:10
Received By: E McCrary

Field Determinations
pH: 7.83 pH Units
Chlorine, residual:
Conductivity: 69 uMHO
Temperature: 5.52
Dissolved Oxygen: 15.27 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	2/25/2010

TEST: Hardness, Calcium		METHOD: SM 3500-Ca D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Calcium hardness	29	mg/L	0.7	1	M Chen	2/24/2010

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	2/24/2010

TEST: Residue, Suspended		METHOD: SM 2540D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Suspended Solids	U	mg/L	10	10	A Peebles	2/26/2010

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

Lab-Sample Number: K00003417008
Project Name: TVA-Ash Spill
Sample Description: Clinch River TVA Discharge Point
Sampler Project Name: TVA Ash Spill
Project Site No.: 5A FB
Station No.: KingAshOutF2
Date/Time Collected: 02/23/2010 10:40
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: 03/05/2010
Date/Time Received: 02/23/2010 13:10
Received By: E McCrary

Field Determinations

pH:
Chlorine, residual:
Conductivity:
Temperature:
Dissolved Oxygen:
Other:
Flow: CFS

TEST: Alkalinity, Total		METHOD: EPA 310.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Alkalinity	U	mg/L	3.8	10	M Chen	2/25/2010

TEST: Hardness, Calcium		METHOD: SM 3500-Ca D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Calcium hardness	U	mg/L	0.7	1	M Chen	2/24/2010

TEST: Residue, Suspended		METHOD: SM 2540D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Suspended Solids	U	mg/L	10	10	A Peebles	2/26/2010

J - Estimated value between MDL and MQL

MDL - Method Detection Limit

MQL - Method Quantitation Limit

U - Undetected

Lab-Sample Number:	K00003417009	Field Determinations	
Project Name:	TVA-Ash Spill	pH:	7.80 pH Units
Sample Description:	Clinch River mile 4.5 near Sugar Grove Valley F	Chlorine, residual:	
Sampler Project Name:	TVA Ash Spill	Conductivity:	188 uMHO
Project Site No.:	6	Temperature:	6.71
Station No.:	CLINC004.5RO	Dissolved Oxygen:	14.99 mg/L
Date/Time Collected:	02/23/2010 10:15	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:	03/05/2010		
Date/Time Received:	02/23/2010 13:10		
Received By:	E McCrary		

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	2/25/2010

TEST: Hardness, Calcium		METHOD: SM 3500-Ca D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Calcium hardness	88	mg/L	0.7	1	M Chen	2/24/2010

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	2/24/2010

TEST: Residue, Suspended		METHOD: SM 2540D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Suspended Solids	U	mg/L	10	10	A Peeples	2/26/2010

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