



ENVIRONMENTAL  
SCIENCE CORP.

12065 Lebanon Rd.  
Mt. Juliet, TN 37122  
(615) 758-5858  
1-800-767-5859  
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Mr. Stanley Bramlett  
TVA-Widows Creek Fossil Plant  
2800 Steamplant Rd.

Stevenson, AL 35772

Report Summary

Tuesday February 03, 2009

Report Number: L385676

Samples Received: 01/29/09

Client Project: TVAWCF GYPSUM SPILL

Description: TVAWCF GYPSUM POND SPILL

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By:

  
Roberto Celis, ESC Representative

*Laboratory Certification Numbers*

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT - PH-0197, FL - E87487  
GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375, DW21704, ND - R-140  
NJ - TN002, SC - 84004, TN - 2006, VA - 00109, WV - 233  
AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910

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Where applicable, sampling conducted by ESC is performed per guidance provided  
in laboratory standard operating procedures: 060302, 060303, and 060304.

9 Samples Reported: 02/03/09 09:10 Printed: 02/03/09 11:26

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REPORT OF ANALYSIS

Mr. Stanley Bramlett  
TVA-Widows Creek Fossil Plant  
2800 Steamplant Rd.  
Stevenson, AL 35772

February 03, 2009

Date Received : 01/29/09 16:00  
Description : TVAWCF GYPSUM POND SPILL  
Sample ID : MDB-SW-183DUP-20090129  
Collected By : Gamble/Russell  
Collection Date : 01/29/09 10:19

ESC Sample # : L385676-01

Site ID :

Project # : TVAWCF GYPSUM SPILL

Parameter	Result	Det. Limit	Units	Method	Prep	PID	Analyzed	AID
Nitrate	0.46	0.10	mg/l	300.0	01/29/09 1723	245	01/30/09 1211	RBS
Sulfate	23.	5.0	mg/l	300.0	01/29/09 1723	245	01/30/09 1211	RBS
Alkalinity	96.	20.	mg/l	2320B	01/30/09 0707	234	01/30/09 1530	LLJ
COD	BDL	20.	mg/l	410.4	01/29/09 1530	234	01/30/09 1559	BSD
Ammonia Nitrogen	0.17	0.10	mg/l	350.1	01/30/09 1151	234	01/30/09 1437	LEM
pH	8.0		su	4500H-B	01/30/09 0832	397	01/30/09 1526	TWF
Nitrate-Nitrite	0.39	0.10	mg/l	353.2	02/02/09 0826	165	02/02/09 1404	LEM
Oil & Grease (Hexane Extr)	BDL	5.0	mg/l	1664A	01/30/09 0344	78	01/31/09 1230	TLB
Phosphorus, Total	BDL	0.10	mg/l	365.1	01/30/09 0714	234	02/02/09 1006	LEM
Kjeldahl Nitrogen, TKN	0.26	0.10	mg/l	351.2	01/30/09 1533	234	02/02/09 1532	DTH
TOC (Total Organic Carbon)	1.7	1.0	mg/l	5310B	01/29/09 1851	162	01/30/09 1855	ADH
Dissolved Solids	140	10.	mg/l	2540C	01/29/09 1710	193	01/31/09 1212	AMS
Suspended Solids	3.0	1.0	mg/l	2540D	01/29/09 1711	193	01/30/09 0812	AMS
Antimony	BDL	0.0010	mg/l	200.8	01/29/09 1647	388	02/02/09 1008	LRL
Arsenic	BDL	0.0010	mg/l	200.8	01/29/09 1647	388	02/02/09 1008	LRL
Cadmium	BDL	0.00050	mg/l	200.8	01/29/09 1647	388	02/02/09 1008	LRL
Beryllium	BDL	0.0010	mg/l	200.8	01/29/09 1647	388	02/02/09 1008	LRL
Chromium	BDL	0.0010	mg/l	200.8	01/29/09 1647	388	02/02/09 1008	LRL
Cobalt	BDL	0.0010	mg/l	200.8	01/29/09 1647	388	02/02/09 1008	LRL
Copper	0.0019	0.0010	mg/l	200.8	02/02/09 1403	388	02/02/09 2124	LRL
Lead	BDL	0.0010	mg/l	200.8	01/29/09 1647	388	02/02/09 1008	LRL
Nickel	0.0024	0.0010	mg/l	200.8	01/29/09 1647	388	02/02/09 1008	LRL
Selenium	BDL	0.0010	mg/l	200.8	01/29/09 1647	388	02/02/09 1008	LRL
Silver	BDL	0.00050	mg/l	200.8	01/29/09 1647	388	02/02/09 1008	LRL
Thallium	BDL	0.0010	mg/l	200.8	01/29/09 1647	388	02/02/09 1008	LRL
Zinc	BDL	0.010	mg/l	200.8	01/29/09 1647	388	02/02/09 1008	LRL
Mercury	BDL	0.00020	mg/l	245.1	01/29/09 1730	261	01/30/09 1034	ARF

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Laboratory Certification Numbers:

AIHA - 09227, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01  
KY - 90010, NC - ENV375, DW21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233  
AZ -0612, MN - 047-999-395, NY - 11742, NJ - TN002, WI - 998093910

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L385676-01 (PH) - 8.0@19.1c



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2800 Steamplant Rd.  
Stevenson, AL 35772

February 03, 2009

Date Received : 01/29/09 16:00  
Description : TVAWCF GYPSUM POND SPILL  
Sample ID : MDB-SW-183DUP-20090129  
Collected By : Gamble/Russell  
Collection Date : 01/29/09 10:19

ESC Sample # : L385676-01

Site ID :

Project # : TVAWCF GYPSUM SPILL

Parameter	Result	Det. Limit	Units	Method	Prep	PID	Analyzed	AID
Aluminum	0.22	0.10	mg/l	200.7	01/29/09 1925	428	01/31/09 1217	LAT
Barium	0.027	0.0050	mg/l	200.7	01/29/09 1925	428	01/31/09 1217	LAT
Calcium	39.	0.50	mg/l	200.7	01/29/09 1925	428	01/31/09 1217	LAT
Iron	0.38	0.10	mg/l	200.7	01/29/09 1925	428	01/31/09 1217	LAT
Magnesium	5.2	0.10	mg/l	200.7	01/29/09 1925	428	01/31/09 1217	LAT
Manganese	0.077	0.010	mg/l	200.7	01/29/09 1925	428	01/31/09 1217	LAT
Potassium	0.94	0.50	mg/l	200.7	01/29/09 1925	428	01/31/09 1217	LAT
Sodium	1.6	0.50	mg/l	200.7	01/29/09 1925	428	01/31/09 1217	LAT
Vanadium	BDL	0.010	mg/l	200.7	01/29/09 1925	428	01/31/09 1217	LAT

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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Stevenson, AL 35772

February 03, 2009

Date Received : 01/29/09 16:00  
Description : TVAWCF GYPSUM POND SPILL

ESC Sample # : L385676-02

Sample ID : CRB-SW-182-MG-20090129

Site ID :

Collected By :  
Collection Date : 01/29/09 09:01

Project # : TVAWCF GYPSUM SPILL

Parameter	Result	Det. Limit	Units	Method	Prep	PID	Analyzed	AID
Nitrate	0.52	0.10	mg/l	300.0	01/29/09 1723	245	01/30/09 1251	RBS
Sulfate	9.1	5.0	mg/l	300.0	01/29/09 1723	245	01/30/09 1251	RBS
Alkalinity	88.	20.	mg/l	2320B	01/30/09 0707	234	01/30/09 1530	LLJ
COD	BDL	20.	mg/l	410.4	01/29/09 1530	234	01/30/09 1559	BSD
Ammonia Nitrogen	BDL	0.10	mg/l	350.1	01/30/09 1151	234	01/30/09 1438	LEM
pH	7.6		su	4500H-B	01/30/09 0832	397	01/30/09 1526	TWF
Nitrate-Nitrite	0.46	0.10	mg/l	353.2	02/02/09 0826	165	02/02/09 1408	LEM
Oil & Grease (Hexane Extr)	BDL	5.0	mg/l	1664A	01/30/09 0344	78	01/31/09 1225	TLB
Phosphorus, Total	BDL	0.10	mg/l	365.1	01/30/09 0714	234	02/02/09 1007	LEM
Kjeldahl Nitrogen, TKN	0.29	0.10	mg/l	351.2	01/30/09 1533	234	02/02/09 1533	DTH
TOC (Total Organic Carbon)	1.7	1.0	mg/l	5310B	01/29/09 1851	162	01/30/09 1920	ADH
Dissolved Solids	120	10.	mg/l	2540C	01/29/09 1710	193	01/31/09 1212	AMS
Suspended Solids	1.4	1.0	mg/l	2540D	01/29/09 1711	193	01/30/09 0812	AMS
Antimony	BDL	0.0010	mg/l	200.8	01/29/09 1647	388	02/02/09 1012	LRL
Arsenic	BDL	0.0010	mg/l	200.8	01/29/09 1647	388	02/02/09 1012	LRL
Cadmium	BDL	0.00050	mg/l	200.8	01/29/09 1647	388	02/02/09 1012	LRL
Beryllium	BDL	0.0010	mg/l	200.8	01/29/09 1647	388	02/02/09 1012	LRL
Chromium	0.0016	0.0010	mg/l	200.8	01/29/09 1647	388	02/02/09 1012	LRL
Cobalt	BDL	0.0010	mg/l	200.8	01/29/09 1647	388	02/02/09 1012	LRL
Copper	BDL	0.0010	mg/l	200.8	02/02/09 1403	388	02/02/09 2127	LRL
Lead	BDL	0.0010	mg/l	200.8	01/29/09 1647	388	02/02/09 1012	LRL
Nickel	0.0021	0.0010	mg/l	200.8	01/29/09 1647	388	02/02/09 1012	LRL
Selenium	BDL	0.0010	mg/l	200.8	01/29/09 1647	388	02/02/09 1012	LRL
Silver	BDL	0.00050	mg/l	200.8	01/29/09 1647	388	02/02/09 1012	LRL
Thallium	BDL	0.0010	mg/l	200.8	01/29/09 1647	388	02/02/09 1012	LRL
Zinc	BDL	0.010	mg/l	200.8	01/29/09 1647	388	02/02/09 1012	LRL
Mercury	BDL	0.00020	mg/l	245.1	01/29/09 1730	261	01/30/09 1037	ARF

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Laboratory Certification Numbers:

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AZ -0612, MN - 047-999-395, NY - 11742, NJ - TN002, WI - 998093910

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L385676-02 (PH) - 7.6@18.7c



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2800 Steamplant Rd.  
Stevenson, AL 35772

February 03, 2009

Date Received : 01/29/09 16:00  
Description : TVAWCF GYPSUM POND SPILL  
Sample ID : CRB-SW-182-MG-20090129  
Collected By :  
Collection Date : 01/29/09 09:01

ESC Sample # : L385676-02

Site ID :

Project # : TVAWCF GYPSUM SPILL

Parameter	Result	Det. Limit	Units	Method	Prep	PID	Analyzed	AID
Aluminum	0.15	0.10	mg/l	200.7	01/29/09 1925	428	01/31/09 1221	LAT
Barium	0.021	0.0050	mg/l	200.7	01/29/09 1925	428	01/31/09 1221	LAT
Calcium	31.	0.50	mg/l	200.7	01/29/09 1925	428	01/31/09 1221	LAT
Iron	0.32	0.10	mg/l	200.7	01/29/09 1925	428	01/31/09 1221	LAT
Magnesium	4.5	0.10	mg/l	200.7	01/29/09 1925	428	01/31/09 1221	LAT
Manganese	0.048	0.010	mg/l	200.7	01/29/09 1925	428	01/31/09 1221	LAT
Potassium	0.87	0.50	mg/l	200.7	01/29/09 1925	428	01/31/09 1221	LAT
Sodium	1.5	0.50	mg/l	200.7	01/29/09 1925	428	01/31/09 1221	LAT
Vanadium	BDL	0.010	mg/l	200.7	01/29/09 1925	428	01/31/09 1221	LAT

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Laboratory Certification Numbers:

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AZ -0612, MN - 047-999-395, NY - 11742, NJ - TN002, WI - 998093910

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L385676-02 (PH) - 7.6@18.7c



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Stevenson, AL 35772

February 03, 2009

Date Received : 01/29/09 16:00  
Description : TVAWCF GYPSUM POND SPILL  
Sample ID : MDB-SW-183-20090129  
Collected By :  
Collection Date : 01/29/09 09:59

ESC Sample # : L385676-03

Site ID :

Project # : TVAWCF GYPSUM SPILL

Parameter	Result	Det. Limit	Units	Method	Prep	PID	Analyzed	AID
Nitrate	0.47	0.10	mg/l	300.0	01/29/09	1723	245 01/30/09 1351	RBS
Sulfate	22.	5.0	mg/l	300.0	01/29/09	1723	245 01/30/09 1351	RBS
Alkalinity	91.	20.	mg/l	2320B	01/30/09	0707	234 01/30/09 1530	LLJ
COD	BDL	20.	mg/l	410.4	01/29/09	1530	234 01/30/09 1600	BSD
Ammonia Nitrogen	BDL	0.10	mg/l	350.1	01/30/09	1151	234 01/30/09 1439	LEM
pH	7.7		su	4500H-B	01/30/09	0832	397 01/30/09 1526	TWF
Nitrate-Nitrite	0.41	0.10	mg/l	353.2	02/02/09	0826	165 02/02/09 1409	LEM
Oil & Grease (Hexane Extr)	BDL	5.0	mg/l	1664A	01/30/09	0344	78 01/31/09 1224	TLB
Phosphorus, Total	BDL	0.10	mg/l	365.1	01/30/09	0714	234 02/02/09 1008	LEM
Kjeldahl Nitrogen, TKN	BDL	0.10	mg/l	351.2	01/30/09	1533	234 02/02/09 1535	DTH
TOC (Total Organic Carbon)	1.4	1.0	mg/l	5310B	01/29/09	1851	162 01/30/09 1932	ADH
Dissolved Solids	140	10.	mg/l	2540C	01/29/09	1710	193 01/31/09 1212	AMS
Suspended Solids	3.2	1.0	mg/l	2540D	01/29/09	1711	193 01/30/09 0812	AMS
Antimony	BDL	0.0010	mg/l	200.8	01/29/09	1647	388 02/02/09 1015	LRL
Arsenic	BDL	0.0010	mg/l	200.8	01/29/09	1647	388 02/02/09 1015	LRL
Cadmium	BDL	0.00050	mg/l	200.8	01/29/09	1647	388 02/02/09 1015	LRL
Beryllium	BDL	0.0010	mg/l	200.8	01/29/09	1647	388 02/02/09 1015	LRL
Chromium	BDL	0.0010	mg/l	200.8	01/29/09	1647	388 02/02/09 1015	LRL
Cobalt	BDL	0.0010	mg/l	200.8	01/29/09	1647	388 02/02/09 1015	LRL
Copper	0.0019	0.0010	mg/l	200.8	02/02/09	1403	388 02/02/09 2131	LRL
Lead	BDL	0.0010	mg/l	200.8	01/29/09	1647	388 02/02/09 1015	LRL
Nickel	0.0027	0.0010	mg/l	200.8	01/29/09	1647	388 02/02/09 1015	LRL
Selenium	BDL	0.0010	mg/l	200.8	01/29/09	1647	388 02/02/09 1015	LRL
Silver	BDL	0.00050	mg/l	200.8	01/29/09	1647	388 02/02/09 1015	LRL
Thallium	BDL	0.0010	mg/l	200.8	01/29/09	1647	388 02/02/09 1015	LRL
Zinc	BDL	0.010	mg/l	200.8	01/29/09	1647	388 02/02/09 1015	LRL
Mercury	BDL	0.00020	mg/l	245.1	01/29/09	1730	261 01/30/09 1040	ARF

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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L385676-03 (PH) - 7.7@18.3c



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Stevenson, AL 35772

February 03, 2009

Date Received : 01/29/09 16:00  
Description : TVAWCF GYPSUM POND SPILL  
Sample ID : MDB-SW-183-20090129  
Collected By :  
Collection Date : 01/29/09 09:59

ESC Sample # : L385676-03

Site ID :

Project # : TVAWCF GYPSUM SPILL

Parameter	Result	Det. Limit	Units	Method	Prep	PID	Analyzed	AID
Aluminum	0.20	0.10	mg/l	200.7	01/29/09 1925	428	01/31/09 1224	LAT
Barium	0.024	0.0050	mg/l	200.7	01/29/09 1925	428	01/31/09 1224	LAT
Calcium	38.	0.50	mg/l	200.7	01/29/09 1925	428	01/31/09 1224	LAT
Iron	0.37	0.10	mg/l	200.7	01/29/09 1925	428	01/31/09 1224	LAT
Magnesium	5.0	0.10	mg/l	200.7	01/29/09 1925	428	01/31/09 1224	LAT
Manganese	0.072	0.010	mg/l	200.7	01/29/09 1925	428	01/31/09 1224	LAT
Potassium	0.85	0.50	mg/l	200.7	01/29/09 1925	428	01/31/09 1224	LAT
Sodium	1.5	0.50	mg/l	200.7	01/29/09 1925	428	01/31/09 1224	LAT
Vanadium	BDL	0.010	mg/l	200.7	01/29/09 1925	428	01/31/09 1224	LAT

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Laboratory Certification Numbers:

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KY - 90010, NC - ENV375,DW21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233  
AZ -0612, MN - 047-999-395, NY - 11742, NJ - TN002, WI - 998093910

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Mr. Stanley Bramlett  
TVA-Widows Creek Fossil Plant  
2800 Steamplant Rd.  
Stevenson, AL 35772

February 03, 2009

Date Received : 01/29/09 16:00  
Description : TVAWCF GYPSUM POND SPILL  
Sample ID : TNUP-SW-184-20090129  
Collected By :  
Collection Date : 01/29/09 09:55

ESC Sample # : L385676-04

Site ID :

Project # : TVAWCF GYPSUM SPILL

Parameter	Result	Det. Limit	Units	Method	Prep	PID	Analyzed	AID
Nitrate	0.44	0.10	mg/l	300.0	01/29/09	1723	245 01/30/09 1410	RBS
Sulfate	13.	5.0	mg/l	300.0	01/29/09	1723	245 01/30/09 1410	RBS
Alkalinity	120	20.	mg/l	2320B	01/30/09	0707	234 01/30/09 1530	LLJ
COD	BDL	20.	mg/l	410.4	01/29/09	1530	234 01/30/09 1600	BSD
Ammonia Nitrogen	BDL	0.10	mg/l	350.1	01/30/09	1151	234 01/30/09 1440	LEM
pH	7.7		su	4500H-B	01/30/09	0832	397 01/30/09 1526	TWF
Nitrate-Nitrite	0.40	0.10	mg/l	353.2	02/02/09	0826	165 02/02/09 1410	LEM
Oil & Grease (Hexane Extr)	BDL	5.6	mg/l	1664A	01/30/09	0344	78 01/31/09 1224	TLB
Phosphorus, Total	BDL	0.10	mg/l	365.1	01/30/09	0714	234 02/02/09 1009	LEM
Kjeldahl Nitrogen, TKN	0.38	0.10	mg/l	351.2	01/30/09	1533	234 02/02/09 1536	DTH
TOC (Total Organic Carbon)	2.7	1.0	mg/l	5310B	01/29/09	1851	162 01/30/09 1946	ADH
Dissolved Solids	100	10.	mg/l	2540C	01/29/09	1710	193 01/31/09 1211	AMS
Suspended Solids	3.5	1.0	mg/l	2540D	01/29/09	1711	193 01/30/09 0812	AMS
Antimony	BDL	0.0010	mg/l	200.8	01/29/09	1647	388 02/02/09 1018	LRL
Arsenic	BDL	0.0010	mg/l	200.8	01/29/09	1647	388 02/02/09 1018	LRL
Cadmium	BDL	0.00050	mg/l	200.8	01/29/09	1647	388 02/02/09 1018	LRL
Beryllium	BDL	0.0010	mg/l	200.8	01/29/09	1647	388 02/02/09 1018	LRL
Chromium	BDL	0.0010	mg/l	200.8	01/29/09	1647	388 02/02/09 1018	LRL
Cobalt	BDL	0.0010	mg/l	200.8	01/29/09	1647	388 02/02/09 1018	LRL
Copper	0.0025	0.0010	mg/l	200.8	02/02/09	1403	388 02/02/09 2134	LRL
Lead	BDL	0.0010	mg/l	200.8	01/29/09	1647	388 02/02/09 1018	LRL
Nickel	0.0014	0.0010	mg/l	200.8	01/29/09	1647	388 02/02/09 1018	LRL
Selenium	BDL	0.0010	mg/l	200.8	01/29/09	1647	388 02/02/09 1018	LRL
Silver	BDL	0.00050	mg/l	200.8	01/29/09	1647	388 02/02/09 1018	LRL
Thallium	BDL	0.0010	mg/l	200.8	01/29/09	1647	388 02/02/09 1018	LRL
Zinc	BDL	0.010	mg/l	200.8	01/29/09	1647	388 02/02/09 1018	LRL
Mercury	BDL	0.00020	mg/l	245.1	01/29/09	1730	261 01/30/09 1043	ARF

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Laboratory Certification Numbers:

AIHA - 09227, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01  
KY - 90010, NC - ENV375, DW21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233  
AZ -0612, MN - 047-999-395, NY - 11742, NJ - TN002, WI - 998093910

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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Mr. Stanley Bramlett  
TVA-Widows Creek Fossil Plant  
2800 Steamplant Rd.  
Stevenson, AL 35772

February 03, 2009

Date Received : 01/29/09 16:00  
Description : TVAWCF GYPSUM POND SPILL  
Sample ID : TNUP-SW-184-20090129  
Collected By :  
Collection Date : 01/29/09 09:55

ESC Sample # : L385676-04

Site ID :

Project # : TVAWCF GYPSUM SPILL

Parameter	Result	Det. Limit	Units	Method	Prep	PID	Analyzed	AID
Aluminum	0.31	0.10	mg/l	200.7	01/29/09 1925	428	01/31/09 1227	LAT
Barium	0.024	0.0050	mg/l	200.7	01/29/09 1925	428	01/31/09 1227	LAT
Calcium	19.	0.50	mg/l	200.7	01/29/09 1925	428	01/31/09 1227	LAT
Iron	0.36	0.10	mg/l	200.7	01/29/09 1925	428	01/31/09 1227	LAT
Magnesium	4.6	0.10	mg/l	200.7	01/29/09 1925	428	01/31/09 1227	LAT
Manganese	0.035	0.010	mg/l	200.7	01/29/09 1925	428	01/31/09 1227	LAT
Potassium	1.8	0.50	mg/l	200.7	01/29/09 1925	428	01/31/09 1227	LAT
Sodium	7.2	0.50	mg/l	200.7	01/29/09 1925	428	01/31/09 1227	LAT
Vanadium	BDL	0.010	mg/l	200.7	01/29/09 1925	428	01/31/09 1227	LAT

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Laboratory Certification Numbers:

AIHA - 09227, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01  
KY - 90010, NC - ENV375,DW21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233  
AZ -0612, MN - 047-999-395, NY - 11742, NJ - TN002, WI - 998093910

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REPORT OF ANALYSIS

Mr. Stanley Bramlett  
TVA-Widows Creek Fossil Plant  
2800 Steamplant Rd.  
Stevenson, AL 35772

February 03, 2009

Date Received : 01/29/09 16:00  
Description : TVAWCF GYPSUM POND SPILL

ESC Sample # : L385676-05

Sample ID : TNDN-SW-185-20090129

Site ID :

Collected By :  
Collection Date : 01/29/09 09:17

Project # : TVAWCF GYPSUM SPILL

Parameter	Result	Det. Limit	Units	Method	Prep	PID	Analyzed	AID
Nitrate	0.45	0.10	mg/l	300.0	01/29/09 1723	245	01/30/09 1430	RBS
Sulfate	13.	5.0	mg/l	300.0	01/29/09 1723	245	01/30/09 1430	RBS
Alkalinity	58.	20.	mg/l	2320B	01/30/09 0707	234	01/30/09 1530	LLJ
COD	BDL	20.	mg/l	410.4	01/29/09 1530	234	01/30/09 1600	BSD
Ammonia Nitrogen	BDL	0.10	mg/l	350.1	01/30/09 1151	234	01/30/09 1441	LEM
pH	7.8		su	4500H-B	01/30/09 0832	397	01/30/09 1526	TWF
Nitrate-Nitrite	0.40	0.10	mg/l	353.2	02/02/09 0826	165	02/02/09 1411	LEM
Oil & Grease (Hexane Extr)	BDL	5.6	mg/l	1664A	01/30/09 0344	78	01/31/09 1224	TLB
Phosphorus, Total	BDL	0.10	mg/l	365.1	01/30/09 0714	234	02/02/09 1010	LEM
Kjeldahl Nitrogen, TKN	0.40	0.10	mg/l	351.2	01/30/09 1533	234	02/02/09 1537	DTH
TOC (Total Organic Carbon)	2.1	1.0	mg/l	5310B	01/29/09 1851	162	01/30/09 1957	ADH
Dissolved Solids	100	10.	mg/l	2540C	01/29/09 1710	193	01/31/09 1211	AMS
Suspended Solids	3.4	1.0	mg/l	2540D	01/29/09 1711	193	01/30/09 0812	AMS
Antimony	BDL	0.0010	mg/l	200.8	01/29/09 1647	388	02/02/09 1021	LRL
Arsenic	BDL	0.0010	mg/l	200.8	01/29/09 1647	388	02/02/09 1021	LRL
Cadmium	BDL	0.00050	mg/l	200.8	01/29/09 1647	388	02/02/09 1021	LRL
Beryllium	BDL	0.0010	mg/l	200.8	01/29/09 1647	388	02/02/09 1021	LRL
Chromium	BDL	0.0010	mg/l	200.8	01/29/09 1647	388	02/02/09 1021	LRL
Cobalt	BDL	0.0010	mg/l	200.8	01/29/09 1647	388	02/02/09 1021	LRL
Copper	0.0020	0.0010	mg/l	200.8	02/02/09 1403	388	02/02/09 2137	LRL
Lead	BDL	0.0010	mg/l	200.8	01/29/09 1647	388	02/02/09 1021	LRL
Nickel	0.0033	0.0010	mg/l	200.8	01/29/09 1647	388	02/02/09 1021	LRL
Selenium	BDL	0.0010	mg/l	200.8	01/29/09 1647	388	02/02/09 1021	LRL
Silver	BDL	0.00050	mg/l	200.8	01/29/09 1647	388	02/02/09 1021	LRL
Thallium	BDL	0.0010	mg/l	200.8	01/29/09 1647	388	02/02/09 1021	LRL
Zinc	BDL	0.010	mg/l	200.8	01/29/09 1647	388	02/02/09 1021	LRL
Mercury	BDL	0.00020	mg/l	245.1	01/29/09 1730	261	01/30/09 1051	ARF

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Laboratory Certification Numbers:

AIHA - 09227, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01  
KY - 90010, NC - ENV375, DW21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233  
AZ -0612, MN - 047-999-395, NY - 11742, NJ - TN002, WI - 998093910

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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Mr. Stanley Bramlett  
TVA-Widows Creek Fossil Plant  
2800 Steamplant Rd.  
Stevenson, AL 35772

February 03, 2009

Date Received : 01/29/09 16:00  
Description : TVAWCF GYPSUM POND SPILL  
Sample ID : TNDN-SW-185-20090129  
Collected By :  
Collection Date : 01/29/09 09:17

ESC Sample # : L385676-05

Site ID :

Project # : TVAWCF GYPSUM SPILL

Parameter	Result	Det. Limit	Units	Method	Prep	PID	Analyzed	AID
Aluminum	0.27	0.10	mg/l	200.7	01/29/09 1925	428	01/31/09 1230	LAT
Barium	0.023	0.0050	mg/l	200.7	01/29/09 1925	428	01/31/09 1230	LAT
Calcium	18.	0.50	mg/l	200.7	01/29/09 1925	428	01/31/09 1230	LAT
Iron	0.33	0.10	mg/l	200.7	01/29/09 1925	428	01/31/09 1230	LAT
Magnesium	4.5	0.10	mg/l	200.7	01/29/09 1925	428	01/31/09 1230	LAT
Manganese	0.032	0.010	mg/l	200.7	01/29/09 1925	428	01/31/09 1230	LAT
Potassium	1.6	0.50	mg/l	200.7	01/29/09 1925	428	01/31/09 1230	LAT
Sodium	6.7	0.50	mg/l	200.7	01/29/09 1925	428	01/31/09 1230	LAT
Vanadium	BDL	0.010	mg/l	200.7	01/29/09 1925	428	01/31/09 1230	LAT

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Laboratory Certification Numbers:

AIHA - 09227, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01  
KY - 90010, NC - ENV375,DW21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233  
AZ -0612, MN - 047-999-395, NY - 11742, NJ - TN002, WI - 998093910

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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Mr. Stanley Bramlett  
TVA-Widows Creek Fossil Plant  
2800 Steamplant Rd.  
Stevenson, AL 35772

February 03, 2009

Date Received : 01/29/09 16:00  
Description : TVAWCF GYPSUM POND SPILL  
Sample ID : TN 117-SW-186-20090129  
Collected By :  
Collection Date : 01/29/09 08:53

ESC Sample # : L385676-06

Site ID :

Project # : TVAWCF GYPSUM SPILL

Parameter	Result	Det. Limit	Units	Method	Prep	PID	Analyzed	AID
Nitrate	0.45	0.10	mg/l	300.0	01/29/09	1723	245 01/30/09 1450	RBS
Sulfate	15.	5.0	mg/l	300.0	01/29/09	1723	245 01/30/09 1450	RBS
Alkalinity	58.	20.	mg/l	2320B	01/30/09	0707	234 01/30/09 1530	LLJ
COD	BDL	20.	mg/l	410.4	01/29/09	1530	234 01/30/09 1600	BSD
Ammonia Nitrogen	BDL	0.10	mg/l	350.1	01/30/09	1151	234 01/30/09 1443	LEM
pH	7.7		su	4500H-B	01/30/09	0832	397 01/30/09 1526	TWF
Nitrate-Nitrite	0.40	0.10	mg/l	353.2	02/02/09	0826	165 02/02/09 1412	LEM
Oil & Grease (Hexane Extr)	BDL	5.6	mg/l	1664A	01/30/09	0344	78 01/31/09 1224	TLB
Phosphorus, Total	BDL	0.10	mg/l	365.1	01/30/09	0714	234 02/02/09 1011	LEM
Kjeldahl Nitrogen, TKN	0.43	0.10	mg/l	351.2	01/30/09	1533	234 02/02/09 1538	DTH
TOC (Total Organic Carbon)	2.6	1.0	mg/l	5310B	01/29/09	1851	162 01/30/09 2012	ADH
Dissolved Solids	100	10.	mg/l	2540C	01/29/09	1710	193 01/31/09 1213	AMS
Suspended Solids	3.6	1.0	mg/l	2540D	01/29/09	1711	193 01/30/09 0812	AMS
Antimony	BDL	0.0010	mg/l	200.8	01/29/09	1647	388 02/02/09 1024	LRL
Arsenic	BDL	0.0010	mg/l	200.8	01/29/09	1647	388 02/02/09 1024	LRL
Cadmium	BDL	0.00050	mg/l	200.8	01/29/09	1647	388 02/02/09 1024	LRL
Beryllium	BDL	0.0010	mg/l	200.8	01/29/09	1647	388 02/02/09 1024	LRL
Chromium	BDL	0.0010	mg/l	200.8	01/29/09	1647	388 02/02/09 1024	LRL
Cobalt	BDL	0.0010	mg/l	200.8	01/29/09	1647	388 02/02/09 1024	LRL
Copper	0.0034	0.0010	mg/l	200.8	02/02/09	1403	388 02/02/09 2222	LRL
Lead	BDL	0.0010	mg/l	200.8	01/29/09	1647	388 02/02/09 1024	LRL
Nickel	0.0014	0.0010	mg/l	200.8	01/29/09	1647	388 02/02/09 1024	LRL
Selenium	BDL	0.0010	mg/l	200.8	01/29/09	1647	388 02/02/09 1024	LRL
Silver	BDL	0.00050	mg/l	200.8	01/29/09	1647	388 02/02/09 1024	LRL
Thallium	BDL	0.0010	mg/l	200.8	01/29/09	1647	388 02/02/09 1024	LRL
Zinc	BDL	0.010	mg/l	200.8	01/29/09	1647	388 02/02/09 1024	LRL
Mercury	BDL	0.00020	mg/l	245.1	01/29/09	1730	261 01/30/09 1054	ARF

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Laboratory Certification Numbers:

AIHA - 09227, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01  
KY - 90010, NC - ENV375, DW21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233  
AZ -0612, MN - 047-999-395, NY - 11742, NJ - TN002, WI - 998093910

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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Mr. Stanley Bramlett  
TVA-Widows Creek Fossil Plant  
2800 Steamplant Rd.  
Stevenson, AL 35772

February 03, 2009

Date Received : 01/29/09 16:00  
Description : TVAWCF GYPSUM POND SPILL  
Sample ID : TN 117-SW-186-20090129  
Collected By :  
Collection Date : 01/29/09 08:53

ESC Sample # : L385676-06

Site ID :

Project # : TVAWCF GYPSUM SPILL

Parameter	Result	Det. Limit	Units	Method	Prep	PID	Analyzed	AID
Aluminum	0.25	0.10	mg/l	200.7	01/29/09 1925	428	01/31/09 1233	LAT
Barium	0.023	0.0050	mg/l	200.7	01/29/09 1925	428	01/31/09 1233	LAT
Calcium	18.	0.50	mg/l	200.7	01/29/09 1925	428	01/31/09 1233	LAT
Iron	0.32	0.10	mg/l	200.7	01/29/09 1925	428	01/31/09 1233	LAT
Magnesium	4.5	0.10	mg/l	200.7	01/29/09 1925	428	01/31/09 1233	LAT
Manganese	0.031	0.010	mg/l	200.7	01/29/09 1925	428	01/31/09 1233	LAT
Potassium	1.6	0.50	mg/l	200.7	01/29/09 1925	428	01/31/09 1233	LAT
Sodium	6.9	0.50	mg/l	200.7	01/29/09 1925	428	01/31/09 1233	LAT
Vanadium	BDL	0.010	mg/l	200.7	01/29/09 1925	428	01/31/09 1233	LAT

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Laboratory Certification Numbers:

AIHA - 09227, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01  
KY - 90010, NC - ENV375,DW21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233  
AZ -0612, MN - 047-999-395, NY - 11742, NJ - TN002, WI - 998093910

Notes:

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Est. 1970

REPORT OF ANALYSIS

Mr. Stanley Bramlett  
TVA-Widows Creek Fossil Plant  
2800 Steamplant Rd.  
Stevenson, AL 35772

February 03, 2009

Date Received : 01/29/09 16:00  
Description : TVAWCF GYPSUM POND SPILL  
Sample ID : TNSL-MD-187-20090129  
Collected By :  
Collection Date : 01/29/09 09:34

ESC Sample # : L385676-07

Site ID :

Project # : TVAWCF GYPSUM SPILL

Parameter	Result	Det. Limit	Units	Method	Prep	PID	Analyzed	AID
Nitrate	0.47	0.10	mg/l	300.0	01/29/09	1723	245 01/30/09 1849	RBS
Sulfate	23.	5.0	mg/l	300.0	01/29/09	1723	245 01/30/09 1849	RBS
Alkalinity	62.	20.	mg/l	2320B	01/30/09	0707	234 01/30/09 1530	LLJ
COD	22.	20.	mg/l	410.4	01/29/09	1530	234 01/30/09 1601	BSD
Ammonia Nitrogen	BDL	0.10	mg/l	350.1	01/30/09	1151	234 01/30/09 1444	LEM
pH	7.8		su	4500H-B	01/30/09	0832	397 01/30/09 1526	TWF
Nitrate-Nitrite	0.41	0.10	mg/l	353.2	02/02/09	0826	165 02/02/09 1415	LEM
Oil & Grease (Hexane Extr)	BDL	5.3	mg/l	1664A	01/30/09	0344	78 01/31/09 1222	TLB
Phosphorus, Total	BDL	0.10	mg/l	365.1	01/30/09	0714	234 02/02/09 1013	LEM
Kjeldahl Nitrogen, TKN	0.43	0.10	mg/l	351.2	01/30/09	1533	234 02/02/09 1539	DTH
TOC (Total Organic Carbon)	2.2	1.0	mg/l	5310B	01/29/09	1851	162 01/30/09 2027	ADH
Dissolved Solids	100	10.	mg/l	2540C	01/29/09	1710	193 01/31/09 1213	AMS
Suspended Solids	7.0	1.0	mg/l	2540D	01/29/09	1711	193 01/30/09 0812	AMS
Antimony	BDL	0.0010	mg/l	200.8	01/29/09	1647	388 02/02/09 1027	LRL
Arsenic	0.0013	0.0010	mg/l	200.8	01/29/09	1647	388 02/02/09 1027	LRL
Cadmium	BDL	0.00050	mg/l	200.8	01/29/09	1647	388 02/02/09 1027	LRL
Beryllium	BDL	0.0010	mg/l	200.8	01/29/09	1647	388 02/02/09 1027	LRL
Chromium	BDL	0.0010	mg/l	200.8	01/29/09	1647	388 02/02/09 1027	LRL
Cobalt	BDL	0.0010	mg/l	200.8	01/29/09	1647	388 02/02/09 1027	LRL
Copper	0.0018	0.0010	mg/l	200.8	02/02/09	1403	388 02/02/09 2041	LRL
Lead	BDL	0.0010	mg/l	200.8	01/29/09	1647	388 02/02/09 1027	LRL
Nickel	0.0023	0.0010	mg/l	200.8	01/29/09	1647	388 02/02/09 1027	LRL
Selenium	0.0015	0.0010	mg/l	200.8	01/29/09	1647	388 02/02/09 1027	LRL
Silver	BDL	0.00050	mg/l	200.8	01/29/09	1647	388 02/02/09 1027	LRL
Thallium	BDL	0.0010	mg/l	200.8	01/29/09	1647	388 02/02/09 1027	LRL
Zinc	BDL	0.010	mg/l	200.8	01/29/09	1647	388 02/02/09 1027	LRL
Mercury	BDL	0.00020	mg/l	245.1	01/29/09	1730	261 01/30/09 1057	ARF

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Laboratory Certification Numbers:

AIHA - 09227, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01  
KY - 90010, NC - ENV375, DW21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233  
AZ -0612, MN - 047-999-395, NY - 11742, NJ - TN002, WI - 998093910

Notes:

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L385676-07 (PH) - 7.8@18.2c



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12065 Lebanon Rd.  
Mt. Juliet, TN 37122  
(615) 758-5858  
1-800-767-5859  
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Mr. Stanley Bramlett  
TVA-Widows Creek Fossil Plant  
2800 Steamplant Rd.  
Stevenson, AL 35772

February 03, 2009

Date Received : 01/29/09 16:00  
Description : TVAWCF GYPSUM POND SPILL  
Sample ID : TNSL-MD-187-20090129  
Collected By :  
Collection Date : 01/29/09 09:34

ESC Sample # : L385676-07

Site ID :

Project # : TVAWCF GYPSUM SPILL

Parameter	Result	Det. Limit	Units	Method	Prep	PID	Analyzed	AID
Aluminum	0.32	0.10	mg/l	200.7	01/29/09 1925	428	01/31/09 1310	LAT
Barium	0.028	0.0050	mg/l	200.7	01/29/09 1925	428	01/31/09 1310	LAT
Calcium	24.	0.50	mg/l	200.7	01/29/09 1925	428	01/31/09 1310	LAT
Iron	0.41	0.10	mg/l	200.7	01/29/09 1925	428	01/31/09 1310	LAT
Magnesium	4.9	0.10	mg/l	200.7	01/29/09 1925	428	01/31/09 1310	LAT
Manganese	0.048	0.010	mg/l	200.7	01/29/09 1925	428	01/31/09 1310	LAT
Potassium	1.7	0.50	mg/l	200.7	01/29/09 1925	428	01/31/09 1310	LAT
Sodium	6.2	0.50	mg/l	200.7	01/29/09 1925	428	01/31/09 1310	LAT
Vanadium	BDL	0.010	mg/l	200.7	01/29/09 1925	428	01/31/09 1310	LAT

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Laboratory Certification Numbers:

AIHA - 09227, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01  
KY - 90010, NC - ENV375,DW21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233  
AZ -0612, MN - 047-999-395, NY - 11742, NJ - TN002, WI - 998093910

Notes:

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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Mr. Stanley Bramlett  
TVA-Widows Creek Fossil Plant  
2800 Steamplant Rd.  
Stevenson, AL 35772

February 03, 2009

Date Received : 01/29/09 16:00  
Description : TVAWCF GYPSUM POND SPILL  
Sample ID : TNSL-SW-188-20090129  
Collected By :  
Collection Date : 01/29/09 09:29

ESC Sample # : L385676-08

Site ID :

Project # : TVAWCF GYPSUM SPILL

Parameter	Result	Det. Limit	Units	Method	Prep	PID	Analyzed	AID
Nitrate	0.47	0.10	mg/l	300.0	01/30/09 0851	245	01/30/09 1418	RBS
Sulfate	22.	5.0	mg/l	300.0	01/30/09 0851	245	01/30/09 1418	RBS
Alkalinity	62.	20.	mg/l	2320B	01/30/09 0707	234	01/30/09 1530	LLJ
COD	BDL	20.	mg/l	410.4	01/29/09 1530	234	01/30/09 1602	BSD
Ammonia Nitrogen	BDL	0.10	mg/l	350.1	01/30/09 1151	234	01/30/09 1445	LEM
pH	7.8		su	4500H-B	01/30/09 0832	397	01/30/09 1526	TWF
Nitrate-Nitrite	0.42	0.10	mg/l	353.2	02/02/09 0826	165	02/02/09 1416	LEM
Oil & Grease (Hexane Extr)	BDL	5.6	mg/l	1664A	01/30/09 0344	78	01/31/09 1228	TLB
Phosphorus, Total	BDL	0.10	mg/l	365.1	01/30/09 0714	234	02/02/09 1014	LEM
Kjeldahl Nitrogen, TKN	0.47	0.10	mg/l	351.2	01/30/09 1533	234	02/02/09 1540	DTH
TOC (Total Organic Carbon)	2.2	1.0	mg/l	5310B	01/29/09 1851	162	01/30/09 2039	ADH
Dissolved Solids	110	10.	mg/l	2540C	01/29/09 1710	193	01/31/09 1212	AMS
Suspended Solids	5.9	1.0	mg/l	2540D	01/29/09 1711	193	01/30/09 0812	AMS
Antimony	BDL	0.0010	mg/l	200.8	01/29/09 1647	388	02/02/09 1034	LRL
Arsenic	BDL	0.0010	mg/l	200.8	01/29/09 1647	388	02/02/09 1034	LRL
Cadmium	BDL	0.00050	mg/l	200.8	01/29/09 1647	388	02/02/09 1034	LRL
Beryllium	BDL	0.0010	mg/l	200.8	01/29/09 1647	388	02/02/09 1034	LRL
Chromium	BDL	0.0010	mg/l	200.8	01/29/09 1647	388	02/02/09 1034	LRL
Cobalt	BDL	0.0010	mg/l	200.8	01/29/09 1647	388	02/02/09 1034	LRL
Copper	0.0024	0.0010	mg/l	200.8	02/02/09 1403	388	02/02/09 2225	LRL
Lead	BDL	0.0010	mg/l	200.8	01/29/09 1647	388	02/02/09 1034	LRL
Nickel	0.0016	0.0010	mg/l	200.8	01/29/09 1647	388	02/02/09 1034	LRL
Selenium	BDL	0.0010	mg/l	200.8	01/29/09 1647	388	02/02/09 1034	LRL
Silver	BDL	0.00050	mg/l	200.8	01/29/09 1647	388	02/02/09 1034	LRL
Thallium	BDL	0.0010	mg/l	200.8	01/29/09 1647	388	02/02/09 1034	LRL
Zinc	BDL	0.010	mg/l	200.8	01/29/09 1647	388	02/02/09 1034	LRL
Mercury	BDL	0.00020	mg/l	245.1	01/29/09 1730	261	01/30/09 1059	ARF

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Laboratory Certification Numbers:

AIHA - 09227, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01  
KY - 90010, NC - ENV375, DW21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233  
AZ -0612, MN - 047-999-395, NY - 11742, NJ - TN002, WI - 998093910

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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Mr. Stanley Bramlett  
TVA-Widows Creek Fossil Plant  
2800 Steamplant Rd.  
Stevenson, AL 35772

February 03, 2009

Date Received : 01/29/09 16:00  
Description : TVAWCF GYPSUM POND SPILL  
Sample ID : TNSL-SW-188-20090129  
Collected By :  
Collection Date : 01/29/09 09:29

ESC Sample # : L385676-08

Site ID :

Project # : TVAWCF GYPSUM SPILL

Parameter	Result	Det. Limit	Units	Method	Prep	PID	Analyzed	AID
Aluminum	0.31	0.10	mg/l	200.7	01/29/09 1925	428	01/31/09 1314	LAT
Barium	0.025	0.0050	mg/l	200.7	01/29/09 1925	428	01/31/09 1314	LAT
Calcium	21.	0.50	mg/l	200.7	01/29/09 1925	428	01/31/09 1314	LAT
Iron	0.43	0.10	mg/l	200.7	01/29/09 1925	428	01/31/09 1314	LAT
Magnesium	4.6	0.10	mg/l	200.7	01/29/09 1925	428	01/31/09 1314	LAT
Manganese	0.040	0.010	mg/l	200.7	01/29/09 1925	428	01/31/09 1314	LAT
Potassium	1.6	0.50	mg/l	200.7	01/29/09 1925	428	01/31/09 1314	LAT
Sodium	6.0	0.50	mg/l	200.7	01/29/09 1925	428	01/31/09 1314	LAT
Vanadium	BDL	0.010	mg/l	200.7	01/29/09 1925	428	01/31/09 1314	LAT

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Laboratory Certification Numbers:

AIHA - 09227, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01  
KY - 90010, NC - ENV375,DW21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233  
AZ -0612, MN - 047-999-395, NY - 11742, NJ - TN002, WI - 998093910

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Est. 1970

REPORT OF ANALYSIS

Mr. Stanley Bramlett  
TVA-Widows Creek Fossil Plant  
2800 Steamplant Rd.  
Stevenson, AL 35772

February 03, 2009

Date Received : 01/29/09 16:00  
Description : TVAWCF GYPSUM POND SPILL  
Sample ID : TNSL-MD-187DUP-20090129  
Collected By :  
Collection Date : 01/29/09 09:34

ESC Sample # : L385676-09

Site ID :

Project # : TVAWCF GYPSUM SPILL

Parameter	Result	Det. Limit	Units	Method	Prep	PID	Analyzed	AID
Nitrate	0.46	0.10	mg/l	300.0	01/30/09	0851	245 01/30/09	1608 RBS
Sulfate	20.	5.0	mg/l	300.0	01/30/09	0851	245 01/30/09	1608 RBS
Alkalinity	62.	20.	mg/l	2320B	01/30/09	0707	234 01/30/09	1530 LLJ
COD	BDL	20.	mg/l	410.4	01/29/09	1530	234 01/30/09	1602 BSD
Ammonia Nitrogen	BDL	0.10	mg/l	350.1	01/30/09	1151	234 01/30/09	1446 LEM
pH	7.8		su	4500H-B	01/30/09	0832	397 01/30/09	1526 TWF
Nitrate-Nitrite	0.41	0.10	mg/l	353.2	02/02/09	0826	165 02/02/09	1417 LEM
Oil & Grease (Hexane Extr)	BDL	5.0	mg/l	1664A	01/30/09	0344	78 01/31/09	1230 TLB
Phosphorus, Total	BDL	0.10	mg/l	365.1	01/30/09	0714	234 02/02/09	1015 LEM
Kjeldahl Nitrogen, TKN	0.49	0.10	mg/l	351.2	01/30/09	1533	234 02/02/09	1541 DTH
TOC (Total Organic Carbon)	2.2	1.0	mg/l	5310B	01/29/09	1851	162 01/30/09	2050 ADH
Dissolved Solids	87.	10.	mg/l	2540C	01/29/09	1710	193 01/31/09	1213 AMS
Suspended Solids	6.2	1.0	mg/l	2540D	01/29/09	1711	193 01/30/09	0812 AMS
Antimony	BDL	0.0010	mg/l	200.8	01/29/09	1647	388 02/02/09	1030 LRL
Arsenic	0.0012	0.0010	mg/l	200.8	01/29/09	1647	388 02/02/09	1030 LRL
Cadmium	BDL	0.00050	mg/l	200.8	01/29/09	1647	388 02/02/09	1030 LRL
Beryllium	BDL	0.0010	mg/l	200.8	01/29/09	1647	388 02/02/09	1030 LRL
Chromium	BDL	0.0010	mg/l	200.8	01/29/09	1647	388 02/02/09	1030 LRL
Cobalt	BDL	0.0010	mg/l	200.8	01/29/09	1647	388 02/02/09	1030 LRL
Copper	0.0013	0.0010	mg/l	200.8	02/02/09	1403	388 02/02/09	2229 LRL
Lead	BDL	0.0010	mg/l	200.8	01/29/09	1647	388 02/02/09	1030 LRL
Nickel	0.0018	0.0010	mg/l	200.8	01/29/09	1647	388 02/02/09	1030 LRL
Selenium	BDL	0.0010	mg/l	200.8	01/29/09	1647	388 02/02/09	1030 LRL
Silver	BDL	0.00050	mg/l	200.8	01/29/09	1647	388 02/02/09	1030 LRL
Thallium	BDL	0.0010	mg/l	200.8	01/29/09	1647	388 02/02/09	1030 LRL
Zinc	BDL	0.010	mg/l	200.8	01/29/09	1647	388 02/02/09	1030 LRL
Mercury	BDL	0.00020	mg/l	245.1	01/29/09	1406	429 01/30/09	0950 ARF

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Laboratory Certification Numbers:

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Est. 1970

REPORT OF ANALYSIS

Mr. Stanley Bramlett  
TVA-Widows Creek Fossil Plant  
2800 Steamplant Rd.  
Stevenson, AL 35772

February 03, 2009

Date Received : 01/29/09 16:00  
Description : TVAWCF GYPSUM POND SPILL  
Sample ID : TNSL-MD-187DUP-20090129  
Collected By :  
Collection Date : 01/29/09 09:34

ESC Sample # : L385676-09

Site ID :

Project # : TVAWCF GYPSUM SPILL

Parameter	Result	Det. Limit	Units	Method	Prep	PID	Analyzed	AID
Aluminum	0.33	0.10	mg/l	200.7	01/29/09 1925	428	01/31/09 1108	LAT
Barium	0.027	0.0050	mg/l	200.7	01/29/09 1925	428	01/31/09 1108	LAT
Calcium	24.	0.50	mg/l	200.7	01/29/09 1925	428	01/31/09 1108	LAT
Iron	0.44	0.10	mg/l	200.7	01/29/09 1925	428	01/31/09 1108	LAT
Magnesium	4.7	0.10	mg/l	200.7	01/29/09 1925	428	01/31/09 1108	LAT
Manganese	0.046	0.010	mg/l	200.7	01/29/09 1925	428	01/31/09 1108	LAT
Potassium	1.7	0.50	mg/l	200.7	01/29/09 1925	428	01/31/09 1108	LAT
Sodium	6.8	0.50	mg/l	200.7	01/29/09 1925	428	01/31/09 1108	LAT
Vanadium	BDL	0.010	mg/l	200.7	01/29/09 1925	428	01/31/09 1108	LAT

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Laboratory Certification Numbers:

AIHA - 09227, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01  
KY - 90010, NC - ENV375,DW21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233  
AZ -0612, MN - 047-999-395, NY - 11742, NJ - TN002, WI - 998093910

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L385676-09 (PH) - 7.8@18.0c

Attachment A  
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L385676-01	WG404950	SAMP	pH	R611627	T8
L385676-02	WG404950	SAMP	pH	R611627	T8
L385676-03	WG404950	SAMP	pH	R611627	T8
L385676-04	WG404950	SAMP	pH	R611627	T8
L385676-05	WG404950	SAMP	pH	R611627	T8
L385676-06	WG404950	SAMP	pH	R611627	T8
L385676-07	WG404950	SAMP	pH	R611627	T8
L385676-08	WG404950	SAMP	pH	R611627	T8
L385676-09	WG404950	SAMP	pH	R611627	T8

Attachment B  
Explanation of QC Qualifier Codes

Qualifier	Meaning
T8	(ESC) - Additional method/sample information: Sample(s) received past/too close to holding time expiration.

Qualifier Report Information

ESC utilizes sample and result qualifiers as set forth by the EPA Contract Laboratory Program and as required by most certifying bodies including NELAC. In addition to the EPA qualifiers adopted by ESC, we have implemented ESC qualifiers to provide more information pertaining to our analytical results. Each qualifier is designated in the qualifier explanation as either EPA or ESC. Data qualifiers are intended to provide the ESC client with more detailed information concerning the potential bias of reported data. Because of the wide range of constituents and variety of matrices incorporated by most EPA methods, it is common for some compounds to fall outside of established ranges. These exceptions are evaluated and all reported data is valid and useable unless qualified as 'R' (Rejected).

Definitions

- Accuracy - The relationship of the observed value of a known sample to the true value of a known sample. Represented by percent recovery and relevant to samples such as: control samples, matrix spike recoveries, surrogate recoveries, etc.
- Precision - The agreement between a set of samples or between duplicate samples. Relates to how close together the results are and is represented by Relative Percent Difference.
- Surrogate - Organic compounds that are similar in chemical composition, extraction, and chromatography to analytes of interest. The surrogates are used to determine the probable response of the group of analytes that are chemically related to the surrogate compound. Surrogates are added to the sample and carried through all stages of preparation and analyses.
- TIC - Tentatively Identified Compound: Compounds detected in samples that are not target compounds, internal standards, system monitoring compounds, or surrogates.

Summary of Remarks For Samples Printed  
02/03/09 at 11:27:17

TSR Signing Reports: 400  
RX - Priority Rush

Must have cooler receipt form-LC

Sample: L385676-01 Account: TVAWCF Received: 01/29/09 16:00 Due Date: 02/03/09 00:00 RPT Date: 02/03/09 09:10  
Sample: L385676-02 Account: TVAWCF Received: 01/29/09 16:00 Due Date: 02/03/09 00:00 RPT Date: 02/03/09 09:10  
Sample: L385676-03 Account: TVAWCF Received: 01/29/09 16:00 Due Date: 02/03/09 00:00 RPT Date: 02/03/09 09:10  
Sample: L385676-04 Account: TVAWCF Received: 01/29/09 16:00 Due Date: 02/03/09 00:00 RPT Date: 02/03/09 09:10  
Sample: L385676-05 Account: TVAWCF Received: 01/29/09 16:00 Due Date: 02/03/09 00:00 RPT Date: 02/03/09 09:10  
Sample: L385676-06 Account: TVAWCF Received: 01/29/09 16:00 Due Date: 02/03/09 00:00 RPT Date: 02/03/09 09:10  
Sample: L385676-07 Account: TVAWCF Received: 01/29/09 16:00 Due Date: 02/03/09 00:00 RPT Date: 02/03/09 09:10  
Sample: L385676-08 Account: TVAWCF Received: 01/29/09 16:00 Due Date: 02/03/09 00:00 RPT Date: 02/03/09 09:10  
Sample: L385676-09 Account: TVAWCF Received: 01/29/09 16:00 Due Date: 02/03/09 00:00 RPT Date: 02/03/09 09:10