



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

Thursday January 29, 2009

Report Number: L385123

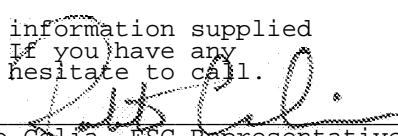
Samples Received: 01/26/09

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

This report may not be reproduced, except in full, without written approval from Environmental Science Corp.  
Where applicable, sampling conducted by ESC is performed per guidance provided  
in laboratory standard operating procedures: 060302, 060303, and 060304.



**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

REPORT OF ANALYSIS

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

January 29, 2009

Date Received : 01/26/09 15:30  
Description : TVAWCF GYPSUM POND SPILL  
Sample ID : CRB-SW-160-20090126  
Collected By : MG/RW  
Collection Date : 01/26/09 08:30

ESC Sample # : L385123-01

Site ID :

Project # : TVAWCF GYPSUM SPILL

Parameter	Result	Det. Limit	Units	Method	Prep	PID	Analyzed	AID
Nitrate	0.57	0.10	mg/l	300.0	01/27/09 0729	159	01/27/09 1324	RBS
Sulfate	8.9	5.0	mg/l	300.0	01/27/09 0729	159	01/27/09 1324	RBS
Alkalinity	84.	20.	mg/l	2320B	01/27/09 1352	236	01/27/09 1530	NJM
COD	BDL	20.	mg/l	410.4	01/26/09 1549	234	01/27/09 1706	BSD
Ammonia Nitrogen	BDL	0.10	mg/l	350.1	01/27/09 1709	236	01/28/09 1649	LEM
pH	7.5		su	4500H-B	01/27/09 0749	183	01/27/09 1015	TWF
Nitrate-Nitrite	0.54	0.10	mg/l	353.2	01/28/09 1015	165	01/28/09 1444	LEM
Oil & Grease (Hexane Extr)	BDL	5.0	mg/l	1664A	01/27/09 0345	78	01/27/09 1116	TLB
Phosphorus, Total	BDL	0.10	mg/l	365.1	01/26/09 1525	236	01/28/09 0951	LEM
Kjeldahl Nitrogen, TKN	0.26	0.10	mg/l	351.2	01/27/09 0728	236	01/27/09 1242	DTH
TOC (Total Organic Carbon)	1.0	1.0	mg/l	5310B	01/27/09 0925	162	01/27/09 1844	ADH
Dissolved Solids	110	10.	mg/l	2540C	01/27/09 0700	36	01/28/09 1659	MF
Suspended Solids	1.4	1.0	mg/l	2540D	01/27/09 0659	36	01/27/09 0756	MF
Antimony	BDL	0.0010	mg/l	200.8	01/26/09 1937	117	01/28/09 0327	LAT
Arsenic	BDL	0.0010	mg/l	200.8	01/26/09 1937	117	01/28/09 0327	LAT
Cadmium	BDL	0.00050	mg/l	200.8	01/26/09 1937	117	01/28/09 0327	LAT
Beryllium	BDL	0.0010	mg/l	200.8	01/26/09 1937	117	01/28/09 0327	LAT
Chromium	BDL	0.0010	mg/l	200.8	01/26/09 1937	117	01/28/09 0327	LAT
Cobalt	BDL	0.0010	mg/l	200.8	01/26/09 1937	117	01/28/09 0327	LAT
Copper	0.0010	0.0010	mg/l	200.8	01/26/09 1937	117	01/28/09 0327	LAT
Lead	BDL	0.0010	mg/l	200.8	01/26/09 1937	117	01/28/09 0327	LAT
Nickel	0.0015	0.0010	mg/l	200.8	01/26/09 1937	117	01/28/09 0327	LAT
Selenium	BDL	0.0010	mg/l	200.8	01/26/09 1937	117	01/28/09 0327	LAT
Silver	0.00079	0.00050	mg/l	200.8	01/26/09 1937	117	01/28/09 0327	LAT
Thallium	BDL	0.0010	mg/l	200.8	01/26/09 1937	117	01/28/09 0327	LAT
Zinc	BDL	0.010	mg/l	200.8	01/26/09 1937	117	01/28/09 0327	LAT
Mercury	BDL	0.00020	mg/l	245.1	01/26/09 1950	261	01/27/09 2144	CLF

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:

The reported analytical results relate only to the sample submitted  
This report shall not be reproduced, except in full, without the written approval from ESC.  
L385123-01 (PH) - 7.5@17.8c



**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

REPORT OF ANALYSIS

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

January 29, 2009

Date Received : 01/26/09 15:30  
Description : TVAWCF GYPSUM POND SPILL  
Sample ID : CRB-SW-160-20090126  
Collected By : MG/RW  
Collection Date : 01/26/09 08:30

ESC Sample # : L385123-01

Site ID :

Project # : TVAWCF GYPSUM SPILL

Parameter	Result	Det. Limit	Units	Method	Prep	PID	Analyzed	AID
Aluminum	BDL	0.10	mg/l	200.7	01/26/09 1936	117	01/28/09 0853	JBC
Barium	0.021	0.0050	mg/l	200.7	01/26/09 1936	117	01/28/09 0853	JBC
Calcium	32.	0.50	mg/l	200.7	01/26/09 1936	117	01/28/09 0853	JBC
Iron	0.29	0.10	mg/l	200.7	01/26/09 1936	117	01/28/09 0853	JBC
Magnesium	4.9	0.10	mg/l	200.7	01/26/09 1936	117	01/28/09 0853	JBC
Manganese	0.052	0.010	mg/l	200.7	01/26/09 1936	117	01/28/09 0853	JBC
Potassium	0.71	0.50	mg/l	200.7	01/26/09 1936	117	01/28/09 0853	JBC
Sodium	1.2	0.50	mg/l	200.7	01/26/09 1936	117	01/28/09 0853	JBC
Vanadium	BDL	0.010	mg/l	200.7	01/26/09 1936	117	01/28/09 0853	JBC

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:

The reported analytical results relate only to the sample submitted  
This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 01/28/09 17:19 Revised: 01/29/09 13:30

L385123-01 (PH) - 7.5@17.8c



**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

REPORT OF ANALYSIS

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

January 29, 2009

Date Received : 01/26/09 15:30  
Description : TVAWCF GYPSUM POND SPILL  
Sample ID : MDB-SW-161-20090126  
Collected By : MG/RW  
Collection Date : 01/26/09 09:23

ESC Sample # : L385123-02

Site ID :

Project # : TVAWCF GYPSUM SPILL

Parameter	Result	Det. Limit	Units	Method	Prep	PID	Analyzed	AID
Nitrate	0.50	0.10	mg/l	300.0	01/27/09 0729	159	01/27/09 1344	RBS
Sulfate	20.	5.0	mg/l	300.0	01/27/09 0729	159	01/27/09 1344	RBS
Alkalinity	90.	20.	mg/l	2320B	01/27/09 1352	236	01/27/09 1530	NUM
COD	BDL	20.	mg/l	410.4	01/26/09 1549	234	01/27/09 1707	BSD
Ammonia Nitrogen	BDL	0.10	mg/l	350.1	01/27/09 1709	236	01/28/09 1651	LEM
pH	7.6		su	4500H-B	01/27/09 0750	183	01/27/09 1141	TWF
Nitrate-Nitrite	0.47	0.10	mg/l	353.2	01/28/09 1015	165	01/28/09 1445	LEM
Oil & Grease (Hexane Extr)	BDL	5.0	mg/l	1664A	01/27/09 0345	78	01/27/09 1116	TLB
Phosphorus, Total	BDL	0.10	mg/l	365.1	01/26/09 1525	236	01/28/09 0952	LEM
Kjeldahl Nitrogen, TKN	0.30	0.10	mg/l	351.2	01/27/09 0728	236	01/27/09 1243	DTH
TOC (Total Organic Carbon)	1.0	1.0	mg/l	5310B	01/27/09 0925	162	01/27/09 1856	ADH
Dissolved Solids	140	10.	mg/l	2540C	01/27/09 0700	36	01/28/09 1659	MF
Suspended Solids	5.8	1.0	mg/l	2540D	01/27/09 0659	36	01/27/09 0756	MF
Antimony	BDL	0.0010	mg/l	200.8	01/26/09 1937	117	01/28/09 0330	LAT
Arsenic	BDL	0.0010	mg/l	200.8	01/26/09 1937	117	01/28/09 0330	LAT
Cadmium	BDL	0.00050	mg/l	200.8	01/26/09 1937	117	01/28/09 0330	LAT
Beryllium	BDL	0.0010	mg/l	200.8	01/26/09 1937	117	01/28/09 0330	LAT
Chromium	BDL	0.0010	mg/l	200.8	01/26/09 1937	117	01/28/09 0330	LAT
Cobalt	BDL	0.0010	mg/l	200.8	01/26/09 1937	117	01/28/09 0330	LAT
Copper	0.0012	0.0010	mg/l	200.8	01/26/09 1937	117	01/28/09 0330	LAT
Lead	BDL	0.0010	mg/l	200.8	01/26/09 1937	117	01/28/09 0330	LAT
Nickel	0.0018	0.0010	mg/l	200.8	01/26/09 1937	117	01/28/09 0330	LAT
Selenium	BDL	0.0010	mg/l	200.8	01/26/09 1937	117	01/28/09 0330	LAT
Silver	BDL	0.00050	mg/l	200.8	01/26/09 1937	117	01/28/09 0330	LAT
Thallium	BDL	0.0010	mg/l	200.8	01/26/09 1937	117	01/28/09 0330	LAT
Zinc	BDL	0.010	mg/l	200.8	01/26/09 1937	117	01/28/09 0330	LAT
Mercury	BDL	0.00020	mg/l	245.1	01/26/09 1950	261	01/27/09 2151	CLF

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:

The reported analytical results relate only to the sample submitted  
This report shall not be reproduced, except in full, without the written approval from ESC.  
L385123-02 (PH) - 7.6@18.1c



**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

REPORT OF ANALYSIS

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

January 29, 2009

Date Received : 01/26/09 15:30  
Description : TVAWCF GYPSUM POND SPILL  
Sample ID : MDB-SW-161-20090126  
Collected By : MG/RW  
Collection Date : 01/26/09 09:23

ESC Sample # : L385123-02

Site ID :

Project # : TVAWCF GYPSUM SPILL

Parameter	Result	Det. Limit	Units	Method	Prep	PID	Analyzed	AID
Aluminum	0.16	0.10	mg/l	200.7	01/26/09	1936	117 01/28/09 0857	JBC
Barium	0.023	0.0050	mg/l	200.7	01/26/09	1936	117 01/28/09 0857	JBC
Calcium	38.	0.50	mg/l	200.7	01/26/09	1936	117 01/28/09 0857	JBC
Iron	0.38	0.10	mg/l	200.7	01/26/09	1936	117 01/28/09 0857	JBC
Magnesium	5.3	0.10	mg/l	200.7	01/26/09	1936	117 01/28/09 0857	JBC
Manganese	0.080	0.010	mg/l	200.7	01/26/09	1936	117 01/28/09 0857	JBC
Potassium	0.90	0.50	mg/l	200.7	01/26/09	1936	117 01/28/09 0857	JBC
Sodium	1.2	0.50	mg/l	200.7	01/26/09	1936	117 01/28/09 0857	JBC
Vanadium	BDL	0.010	mg/l	200.7	01/26/09	1936	117 01/28/09 0857	JBC

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:

The reported analytical results relate only to the sample submitted  
This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 01/28/09 17:19 Revised: 01/29/09 13:30

L385123-02 (PH) - 7.6@18.1c



**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

REPORT OF ANALYSIS

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

January 29, 2009

Date Received : 01/26/09 15:30  
Description : TVAWCF GYPSUM POND SPILL  
Sample ID : TNUP-SW-162-20090126  
Collected By : MG/RW  
Collection Date : 01/26/09 09:37

ESC Sample # : L385123-03

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	01/27/09 0729	159	01/27/09 1403	RBS
Sulfate	13.	5.0	mg/l	300.0	01/27/09 0729	159	01/27/09 1403	RBS
Alkalinity	54.	20.	mg/l	2320B	01/27/09 1352	236	01/27/09 1530	NJM
COD	BDL	20.	mg/l	410.4	01/26/09 1549	234	01/27/09 1707	BSD
Ammonia Nitrogen	BDL	0.10	mg/l	350.1	01/27/09 1709	236	01/28/09 1652	LEM
pH	7.7		su	4500H-B	01/27/09 0750	183	01/27/09 1141	TWF
Nitrate-Nitrite	0.39	0.10	mg/l	353.2	01/28/09 1015	165	01/28/09 1446	LEM
Oil & Grease (Hexane Extr)	BDL	5.0	mg/l	1664A	01/27/09 0345	78	01/27/09 1113	TLB
Phosphorus, Total	BDL	0.10	mg/l	365.1	01/26/09 1525	236	01/28/09 0954	LEM
Kjeldahl Nitrogen, TKN	0.47	0.10	mg/l	351.2	01/27/09 0728	236	01/27/09 1244	DTH
TOC (Total Organic Carbon)	2.2	1.0	mg/l	5310B	01/27/09 0925	162	01/27/09 1907	ADH
Dissolved Solids	95.	10.	mg/l	2540C	01/27/09 0700	36	01/28/09 1658	MF
Suspended Solids	3.8	1.0	mg/l	2540D	01/27/09 0659	36	01/27/09 0756	MF
Antimony	BDL	0.0010	mg/l	200.8	01/26/09 1937	117	01/28/09 0333	LAT
Arsenic	BDL	0.0010	mg/l	200.8	01/26/09 1937	117	01/28/09 0333	LAT
Cadmium	BDL	0.00050	mg/l	200.8	01/26/09 1937	117	01/28/09 0333	LAT
Beryllium	BDL	0.0010	mg/l	200.8	01/26/09 1937	117	01/28/09 0333	LAT
Chromium	BDL	0.0010	mg/l	200.8	01/26/09 1937	117	01/28/09 0333	LAT
Cobalt	BDL	0.0010	mg/l	200.8	01/26/09 1937	117	01/28/09 0333	LAT
Copper	0.0019	0.0010	mg/l	200.8	01/26/09 1937	117	01/28/09 0333	LAT
Lead	BDL	0.0010	mg/l	200.8	01/26/09 1937	117	01/28/09 0333	LAT
Nickel	0.0012	0.0010	mg/l	200.8	01/26/09 1937	117	01/28/09 0333	LAT
Selenium	BDL	0.0010	mg/l	200.8	01/26/09 1937	117	01/28/09 0333	LAT
Silver	BDL	0.00050	mg/l	200.8	01/26/09 1937	117	01/28/09 0333	LAT
Thallium	BDL	0.0010	mg/l	200.8	01/26/09 1937	117	01/28/09 0333	LAT
Zinc	BDL	0.010	mg/l	200.8	01/26/09 1937	117	01/28/09 0333	LAT
Mercury	BDL	0.00020	mg/l	245.1	01/26/09 1950	261	01/27/09 2154	CLF

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:

The reported analytical results relate only to the sample submitted  
This report shall not be reproduced, except in full, without the written approval from ESC.  
L385123-03 (PH) - 7.7@17.9C



**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

REPORT OF ANALYSIS

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

January 29, 2009

Date Received : 01/26/09 15:30  
Description : TVAWCF GYPSUM POND SPILL  
Sample ID : TNUP-SW-162-20090126  
Collected By : MG/RW  
Collection Date : 01/26/09 09:37

ESC Sample # : L385123-03

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	01/26/09 1936	117	01/28/09 0900	JBC
Barium	0.024	0.0050	mg/l	200.7	01/26/09 1936	117	01/28/09 0900	JBC
Calcium	18.	0.50	mg/l	200.7	01/26/09 1936	117	01/28/09 0900	JBC
Iron	0.28	0.10	mg/l	200.7	01/26/09 1936	117	01/28/09 0900	JBC
Magnesium	4.8	0.10	mg/l	200.7	01/26/09 1936	117	01/28/09 0900	JBC
Manganese	0.027	0.010	mg/l	200.7	01/26/09 1936	117	01/28/09 0900	JBC
Potassium	1.8	0.50	mg/l	200.7	01/26/09 1936	117	01/28/09 0900	JBC
Sodium	6.7	0.50	mg/l	200.7	01/26/09 1936	117	01/28/09 0900	JBC
Vanadium	BDL	0.010	mg/l	200.7	01/26/09 1936	117	01/28/09 0900	JBC

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:

The reported analytical results relate only to the sample submitted  
This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 01/28/09 17:19 Revised: 01/29/09 13:30

L385123-03 (PH) - 7.7@17.9C



**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

REPORT OF ANALYSIS

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

January 29, 2009

Date Received : 01/26/09 15:30  
Description : TVAWCF GYPSUM POND SPILL  
Sample ID : TNDN-SW-163-20090126  
Collected By : MG/RW  
Collection Date : 01/26/09 08:59

ESC Sample # : L385123-04

Site ID :

Project # : TVAWCF GYPSUM SPILL

Parameter	Result	Det. Limit	Units	Method	Prep	PID	Analyzed	AID
Nitrate	0.42	0.10	mg/l	300.0	01/27/09 0729	159	01/27/09 1442	RBS
Sulfate	13.	5.0	mg/l	300.0	01/27/09 0729	159	01/27/09 1442	RBS
Alkalinity	54.	20.	mg/l	2320B	01/27/09 1352	236	01/27/09 1530	NJM
COD	BDL	20.	mg/l	410.4	01/26/09 1549	234	01/27/09 1708	BSD
Ammonia Nitrogen	BDL	0.10	mg/l	350.1	01/27/09 1709	236	01/28/09 1653	LEM
pH	7.7		su	4500H-B	01/27/09 0750	183	01/27/09 1141	TWF
Nitrate-Nitrite	0.40	0.10	mg/l	353.2	01/28/09 1015	165	01/28/09 1447	LEM
Oil & Grease (Hexane Extr)	BDL	5.6	mg/l	1664A	01/27/09 0345	78	01/27/09 1113	TLB
Phosphorus, Total	BDL	0.10	mg/l	365.1	01/26/09 1525	236	01/28/09 0955	LEM
Kjeldahl Nitrogen, TKN	0.49	0.10	mg/l	351.2	01/27/09 0728	236	01/27/09 1245	DTH
TOC (Total Organic Carbon)	2.1	1.0	mg/l	5310B	01/27/09 0925	162	01/27/09 1918	ADH
Dissolved Solids	87.	10.	mg/l	2540C	01/27/09 0700	36	01/28/09 1659	MF
Suspended Solids	4.0	1.0	mg/l	2540D	01/27/09 0659	36	01/27/09 0756	MF
Antimony	BDL	0.0010	mg/l	200.8	01/26/09 1937	117	01/28/09 0336	LAT
Arsenic	BDL	0.0010	mg/l	200.8	01/26/09 1937	117	01/28/09 0336	LAT
Cadmium	BDL	0.00050	mg/l	200.8	01/26/09 1937	117	01/28/09 0336	LAT
Beryllium	BDL	0.0010	mg/l	200.8	01/26/09 1937	117	01/28/09 0336	LAT
Chromium	BDL	0.0010	mg/l	200.8	01/26/09 1937	117	01/28/09 0336	LAT
Cobalt	BDL	0.0010	mg/l	200.8	01/26/09 1937	117	01/28/09 0336	LAT
Copper	0.0039	0.0010	mg/l	200.8	01/26/09 1937	117	01/28/09 0336	LAT
Lead	0.0013	0.0010	mg/l	200.8	01/26/09 1937	117	01/28/09 0336	LAT
Nickel	0.0013	0.0010	mg/l	200.8	01/26/09 1937	117	01/28/09 0336	LAT
Selenium	BDL	0.0010	mg/l	200.8	01/26/09 1937	117	01/28/09 0336	LAT
Silver	BDL	0.00050	mg/l	200.8	01/26/09 1937	117	01/28/09 0336	LAT
Thallium	BDL	0.0010	mg/l	200.8	01/26/09 1937	117	01/28/09 0336	LAT
Zinc	BDL	0.010	mg/l	200.8	01/26/09 1937	117	01/28/09 0336	LAT
Mercury	BDL	0.00020	mg/l	245.1	01/26/09 1950	261	01/27/09 2156	CLF

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:

The reported analytical results relate only to the sample submitted  
This report shall not be reproduced, except in full, without the written approval from ESC.  
L385123-04 (PH) - 7.7@17.9C



**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

REPORT OF ANALYSIS

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

January 29, 2009

Date Received : 01/26/09 15:30  
Description : TVAWCF GYPSUM POND SPILL  
Sample ID : TNDN-SW-163-20090126  
Collected By : MG/RW  
Collection Date : 01/26/09 08:59

ESC Sample # : L385123-04

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	01/26/09 1936	117	01/28/09 0903	JBC
Barium	0.024	0.0050	mg/l	200.7	01/26/09 1936	117	01/28/09 0903	JBC
Calcium	18.	0.50	mg/l	200.7	01/26/09 1936	117	01/28/09 0903	JBC
Iron	0.35	0.10	mg/l	200.7	01/26/09 1936	117	01/28/09 0903	JBC
Magnesium	4.7	0.10	mg/l	200.7	01/26/09 1936	117	01/28/09 0903	JBC
Manganese	0.029	0.010	mg/l	200.7	01/26/09 1936	117	01/28/09 0903	JBC
Potassium	1.7	0.50	mg/l	200.7	01/26/09 1936	117	01/28/09 0903	JBC
Sodium	6.7	0.50	mg/l	200.7	01/26/09 1936	117	01/28/09 0903	JBC
Vanadium	BDL	0.010	mg/l	200.7	01/26/09 1936	117	01/28/09 0903	JBC

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:

The reported analytical results relate only to the sample submitted  
This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 01/28/09 17:19 Revised: 01/29/09 13:30

L385123-04 (PH) - 7.7@17.9C



**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

REPORT OF ANALYSIS

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

January 29, 2009

Date Received : 01/26/09 15:30  
Description : TVAWCF GYPSUM POND SPILL  
Sample ID : TN 117-SW-164-20090126  
Collected By : MG/RW  
Collection Date : 01/26/09 08:39

ESC Sample # : L385123-05

Site ID :

Project # : TVAWCF GYPSUM SPILL

Parameter	Result	Det. Limit	Units	Method	Prep	PID	Analyzed	AID
Nitrate	0.43	0.10	mg/l	300.0	01/27/09 0729	159	01/27/09 1540	RBS
Sulfate	15.	5.0	mg/l	300.0	01/27/09 0729	159	01/27/09 1540	RBS
Alkalinity	55.	20.	mg/l	2320B	01/27/09 1352	236	01/27/09 1530	NUM
COD	BDL	20.	mg/l	410.4	01/26/09 1549	234	01/27/09 1708	BSD
Ammonia Nitrogen	BDL	0.10	mg/l	350.1	01/27/09 1709	236	01/28/09 1654	LEM
pH	7.6		su	4500H-B	01/27/09 0749	183	01/27/09 1015	TWF
Nitrate-Nitrite	0.39	0.10	mg/l	353.2	01/28/09 1015	165	01/28/09 1448	LEM
Oil & Grease (Hexane Extr)	BDL	5.0	mg/l	1664A	01/27/09 0345	78	01/27/09 1112	TLB
Phosphorus, Total	BDL	0.10	mg/l	365.1	01/26/09 1525	236	01/28/09 0956	LEM
Kjeldahl Nitrogen, TKN	0.46	0.10	mg/l	351.2	01/27/09 0728	236	01/27/09 1246	DTH
TOC (Total Organic Carbon)	2.6	1.0	mg/l	5310B	01/27/09 0925	162	01/27/09 1934	ADH
Dissolved Solids	100	10.	mg/l	2540C	01/27/09 0700	36	01/28/09 1700	MF
Suspended Solids	3.4	1.0	mg/l	2540D	01/27/09 0659	36	01/27/09 0756	MF
Antimony	BDL	0.0010	mg/l	200.8	01/26/09 1937	117	01/28/09 0339	LAT
Arsenic	BDL	0.0010	mg/l	200.8	01/26/09 1937	117	01/28/09 0339	LAT
Cadmium	BDL	0.00050	mg/l	200.8	01/26/09 1937	117	01/28/09 0339	LAT
Beryllium	BDL	0.0010	mg/l	200.8	01/26/09 1937	117	01/28/09 0339	LAT
Chromium	BDL	0.0010	mg/l	200.8	01/26/09 1937	117	01/28/09 0339	LAT
Cobalt	BDL	0.0010	mg/l	200.8	01/26/09 1937	117	01/28/09 0339	LAT
Copper	0.0021	0.0010	mg/l	200.8	01/26/09 1937	117	01/28/09 0339	LAT
Lead	BDL	0.0010	mg/l	200.8	01/26/09 1937	117	01/28/09 0339	LAT
Nickel	0.0017	0.0010	mg/l	200.8	01/26/09 1937	117	01/28/09 0339	LAT
Selenium	BDL	0.0010	mg/l	200.8	01/26/09 1937	117	01/28/09 0339	LAT
Silver	BDL	0.00050	mg/l	200.8	01/26/09 1937	117	01/28/09 0339	LAT
Thallium	BDL	0.0010	mg/l	200.8	01/26/09 1937	117	01/28/09 0339	LAT
Zinc	0.019	0.010	mg/l	200.8	01/26/09 1937	117	01/28/09 0339	LAT
Mercury	BDL	0.00020	mg/l	245.1	01/26/09 1950	261	01/27/09 2159	CLF

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:

The reported analytical results relate only to the sample submitted  
This report shall not be reproduced, except in full, without the written approval from ESC.  
L385123-05 (PH) - 7.6@17.8c



**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

REPORT OF ANALYSIS

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

January 29, 2009

Date Received : 01/26/09 15:30  
Description : TVAWCF GYPSUM POND SPILL  
Sample ID : TN 117-SW-164-20090126  
Collected By : MG/RW  
Collection Date : 01/26/09 08:39

ESC Sample # : L385123-05

Site ID :

Project # : TVAWCF GYPSUM SPILL

Parameter	Result	Det. Limit	Units	Method	Prep	PID	Analyzed	AID
Aluminum	0.16	0.10	mg/l	200.7	01/26/09 1936	117	01/28/09 0907	JBC
Barium	0.025	0.0050	mg/l	200.7	01/26/09 1936	117	01/28/09 0907	JBC
Calcium	19.	0.50	mg/l	200.7	01/26/09 1936	117	01/28/09 0907	JBC
Iron	0.26	0.10	mg/l	200.7	01/26/09 1936	117	01/28/09 0907	JBC
Magnesium	4.8	0.10	mg/l	200.7	01/26/09 1936	117	01/28/09 0907	JBC
Manganese	0.031	0.010	mg/l	200.7	01/26/09 1936	117	01/28/09 0907	JBC
Potassium	1.8	0.50	mg/l	200.7	01/26/09 1936	117	01/28/09 0907	JBC
Sodium	7.7	0.50	mg/l	200.7	01/26/09 1936	117	01/28/09 0907	JBC
Vanadium	BDL	0.010	mg/l	200.7	01/26/09 1936	117	01/28/09 0907	JBC

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:

The reported analytical results relate only to the sample submitted  
This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 01/28/09 17:19 Revised: 01/29/09 13:30

L385123-05 (PH) - 7.6@17.8c



**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

REPORT OF ANALYSIS

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

January 29, 2009

Date Received : 01/26/09 15:30  
Description : TVAWCF GYPSUM POND SPILL  
Sample ID : TNSL-MD-165-20090126  
Collected By : MG/RW  
Collection Date : 01/26/09 09:18

ESC Sample # : L385123-06

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	01/27/09 0729	159	01/27/09 1559	RBS
Sulfate	23.	5.0	mg/l	300.0	01/27/09 0729	159	01/27/09 1559	RBS
Alkalinity	56.	20.	mg/l	2320B	01/27/09 1352	236	01/27/09 1530	NUM
COD	BDL	20.	mg/l	410.4	01/26/09 1549	234	01/27/09 1708	BSD
Ammonia Nitrogen	BDL	0.10	mg/l	350.1	01/27/09 1709	236	01/28/09 1655	LEM
pH	7.6		su	4500H-B	01/27/09 0750	183	01/27/09 1141	TWF
Nitrate-Nitrite	0.42	0.10	mg/l	353.2	01/28/09 1015	165	01/28/09 1449	LEM
Oil & Grease (Hexane Extr)	BDL	5.6	mg/l	1664A	01/27/09 0345	78	01/27/09 1113	TLB
Phosphorus, Total	BDL	0.10	mg/l	365.1	01/26/09 1525	236	01/28/09 0957	LEM
Kjeldahl Nitrogen, TKN	0.47	0.10	mg/l	351.2	01/27/09 0728	236	01/27/09 1247	DTH
TOC (Total Organic Carbon)	2.0	1.0	mg/l	5310B	01/27/09 0925	162	01/27/09 1945	ADH
Dissolved Solids	130	10.	mg/l	2540C	01/27/09 0700	36	01/28/09 1700	MF
Suspended Solids	4.6	1.0	mg/l	2540D	01/27/09 0659	36	01/27/09 0756	MF
Antimony	BDL	0.0010	mg/l	200.8	01/26/09 1937	117	01/28/09 0400	LAT
Arsenic	0.0017	0.0010	mg/l	200.8	01/26/09 1937	117	01/28/09 0400	LAT
Cadmium	BDL	0.00050	mg/l	200.8	01/26/09 1937	117	01/28/09 0400	LAT
Beryllium	BDL	0.0010	mg/l	200.8	01/26/09 1937	117	01/28/09 1157	LAT
Chromium	BDL	0.0010	mg/l	200.8	01/26/09 1937	117	01/28/09 0400	LAT
Cobalt	BDL	0.0010	mg/l	200.8	01/26/09 1937	117	01/28/09 0400	LAT
Copper	0.0041	0.0010	mg/l	200.8	01/26/09 1937	117	01/28/09 0400	LAT
Lead	BDL	0.0010	mg/l	200.8	01/26/09 1937	117	01/28/09 0400	LAT
Nickel	0.0018	0.0010	mg/l	200.8	01/26/09 1937	117	01/28/09 0400	LAT
Selenium	0.0021	0.0010	mg/l	200.8	01/26/09 1937	117	01/28/09 0400	LAT
Silver	BDL	0.00050	mg/l	200.8	01/26/09 1937	117	01/28/09 0400	LAT
Thallium	BDL	0.0010	mg/l	200.8	01/26/09 1937	117	01/28/09 0400	LAT
Zinc	BDL	0.010	mg/l	200.8	01/26/09 1937	117	01/28/09 0400	LAT
Mercury	BDL	0.00020	mg/l	245.1	01/26/09 1950	261	01/27/09 2201	CLF

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:

The reported analytical results relate only to the sample submitted  
This report shall not be reproduced, except in full, without the written approval from ESC.  
L385123-06 (PH) - 7.6@17.7C



**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

REPORT OF ANALYSIS

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

January 29, 2009

Date Received : 01/26/09 15:30  
Description : TVAWCF GYPSUM POND SPILL  
Sample ID : TNSL-MD-165-20090126  
Collected By : MG/RW  
Collection Date : 01/26/09 09:18

ESC Sample # : L385123-06

Site ID :

Project # : TVAWCF GYPSUM SPILL

Parameter	Result	Det. Limit	Units	Method	Prep	PID	Analyzed	AID
Aluminum	0.26	0.10	mg/l	200.7	01/26/09	1936	117 01/28/09 0119	JBC
Barium	0.029	0.0050	mg/l	200.7	01/26/09	1936	117 01/28/09 0119	JBC
Calcium	23.	0.50	mg/l	200.7	01/26/09	1936	117 01/28/09 0119	JBC
Iron	0.28	0.10	mg/l	200.7	01/26/09	1936	117 01/28/09 0119	JBC
Magnesium	4.8	0.10	mg/l	200.7	01/26/09	1936	117 01/28/09 0119	JBC
Manganese	0.034	0.010	mg/l	200.7	01/26/09	1936	117 01/28/09 0119	JBC
Potassium	2.3	0.50	mg/l	200.7	01/26/09	1936	117 01/28/09 0119	JBC
Sodium	7.0	0.50	mg/l	200.7	01/26/09	1936	117 01/28/09 0119	JBC
Vanadium	BDL	0.010	mg/l	200.7	01/26/09	1936	117 01/28/09 0119	JBC

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:

The reported analytical results relate only to the sample submitted  
This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 01/28/09 17:19 Revised: 01/29/09 13:30

L385123-06 (PH) - 7.6@17.7C



**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

REPORT OF ANALYSIS

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

January 29, 2009

Date Received : 01/26/09 15:30  
Description : TVAWCF GYPSUM POND SPILL  
Sample ID : TNSL-SW-166-20090126  
Collected By : MG/RW  
Collection Date : 01/26/09 09:10

ESC Sample # : L385123-07

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	01/27/09 0729	159	01/27/09 1619	RBS
Sulfate	26.	5.0	mg/l	300.0	01/27/09 0729	159	01/27/09 1619	RBS
Alkalinity	60.	20.	mg/l	2320B	01/27/09 1352	236	01/27/09 1530	NJM
COD	BDL	20.	mg/l	410.4	01/26/09 1549	234	01/27/09 1708	BSD
Ammonia Nitrogen	BDL	0.10	mg/l	350.1	01/27/09 1709	236	01/28/09 1656	LEM
pH	7.7		su	4500H-B	01/27/09 0750	183	01/27/09 1141	TWF
Nitrate-Nitrite	0.42	0.10	mg/l	353.2	01/28/09 1015	165	01/28/09 1453	LEM
Oil & Grease (Hexane Extr)	BDL	5.6	mg/l	1664A	01/27/09 0345	78	01/27/09 1112	TLB
Phosphorus, Total	BDL	0.10	mg/l	365.1	01/26/09 1525	236	01/28/09 0958	LEM
Kjeldahl Nitrogen, TKN	0.44	0.10	mg/l	351.2	01/27/09 0728	236	01/27/09 1248	DTH
TOC (Total Organic Carbon)	1.9	1.0	mg/l	5310B	01/27/09 0925	162	01/27/09 1956	ADH
Dissolved Solids	140	10.	mg/l	2540C	01/27/09 0700	36	01/28/09 1700	MF
Suspended Solids	5.0	1.0	mg/l	2540D	01/27/09 0659	36	01/27/09 0756	MF
Antimony	BDL	0.0010	mg/l	200.8	01/26/09 1937	117	01/28/09 0112	LAT
Arsenic	0.0021	0.0010	mg/l	200.8	01/26/09 1937	117	01/28/09 0112	LAT
Cadmium	BDL	0.00050	mg/l	200.8	01/26/09 1937	117	01/28/09 0112	LAT
Beryllium	BDL	0.0010	mg/l	200.8	01/26/09 1937	117	01/28/09 0112	LAT
Chromium	0.0011	0.0010	mg/l	200.8	01/26/09 1937	117	01/28/09 0112	LAT
Cobalt	BDL	0.0010	mg/l	200.8	01/26/09 1937	117	01/28/09 0112	LAT
Copper	0.0013	0.0010	mg/l	200.8	01/26/09 1937	117	01/28/09 0112	LAT
Lead	BDL	0.0010	mg/l	200.8	01/26/09 1937	117	01/28/09 0112	LAT
Nickel	0.0016	0.0010	mg/l	200.8	01/26/09 1937	117	01/28/09 0112	LAT
Selenium	0.0022	0.0010	mg/l	200.8	01/26/09 1937	117	01/28/09 0112	LAT
Silver	0.00065	0.00050	mg/l	200.8	01/26/09 1937	117	01/28/09 0112	LAT
Thallium	BDL	0.0010	mg/l	200.8	01/26/09 1937	117	01/28/09 0112	LAT
Zinc	BDL	0.010	mg/l	200.8	01/26/09 1937	117	01/28/09 0112	LAT
Mercury	BDL	0.00020	mg/l	245.1	01/26/09 1950	261	01/27/09 2204	CLF

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:

The reported analytical results relate only to the sample submitted  
This report shall not be reproduced, except in full, without the written approval from ESC.  
L385123-07 (PH) - 7.7@17.9C



**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

REPORT OF ANALYSIS

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

January 29, 2009

Date Received : 01/26/09 15:30  
Description : TVAWCF GYPSUM POND SPILL  
Sample ID : TNSL-SW-166-20090126  
Collected By : MG/RW  
Collection Date : 01/26/09 09:10

ESC Sample # : L385123-07

Site ID :

Project # : TVAWCF GYPSUM SPILL

Parameter	Result	Det. Limit	Units	Method	Prep	PID	Analyzed	AID
Aluminum	0.23	0.10	mg/l	200.7	01/26/09 1936	117	01/28/09 0910	JBC
Barium	0.032	0.0050	mg/l	200.7	01/26/09 1936	117	01/28/09 0910	JBC
Calcium	25.	0.50	mg/l	200.7	01/26/09 1936	117	01/28/09 0910	JBC
Iron	0.36	0.10	mg/l	200.7	01/26/09 1936	117	01/28/09 0910	JBC
Magnesium	5.1	0.10	mg/l	200.7	01/26/09 1936	117	01/28/09 0910	JBC
Manganese	0.036	0.010	mg/l	200.7	01/26/09 1936	117	01/28/09 0910	JBC
Potassium	1.8	0.50	mg/l	200.7	01/26/09 1936	117	01/28/09 0910	JBC
Sodium	6.7	0.50	mg/l	200.7	01/26/09 1936	117	01/28/09 0910	JBC
Vanadium	BDL	0.010	mg/l	200.7	01/26/09 1936	117	01/28/09 0910	JBC

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:

The reported analytical results relate only to the sample submitted  
This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 01/28/09 17:19 Revised: 01/29/09 13:30

L385123-07 (PH) - 7.7@17.9C

Attachment A  
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L385123-01	WG404291	SAMP	Ammonia Nitrogen	R608865	P1
	WG404335	SAMP	pH	R606965	T8
L385123-02	WG404336	SAMP	pH	R606785	T8
L385123-03	WG404328	SAMP	Dissolved Solids	R608845	J3
	WG404336	SAMP	pH	R606785	T8
L385123-04	WG404336	SAMP	pH	R606785	T8
L385123-05	WG404335	SAMP	pH	R606965	T8
L385123-06	WG404336	SAMP	pH	R606785	T8
L385123-07	WG404327	SAMP	Suspended Solids	R608225	T4,J3
	WG404336	SAMP	pH	R606785	T8
	WG404312	SAMP	Silver	R607645	P1

Attachment B  
Explanation of QC Qualifier Codes

Qualifier	Meaning
J3	The associated batch QC was outside the established quality control range for precision.
P1	RPD value not applicable for sample concentrations less than 5 times the reporting limit.
T4	(ESC) - Additional method/sample information: QNS - Quantity Not Sufficient
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  
01/29/09 at 13:30:38

TSR Signing Reports: 400  
RX - Priority Rush

Must have cooler receipt form-LC

Sample: L385123-01 Account: TVAWCF Received: 01/26/09 15:30 Due Date: 01/28/09 00:00 RPT Date: 01/28/09 17:19

Sample: L385123-02 Account: TVAWCF Received: 01/26/09 15:30 Due Date: 01/28/09 00:00 RPT Date: 01/28/09 17:19

Sample: L385123-03 Account: TVAWCF Received: 01/26/09 15:30 Due Date: 01/28/09 00:00 RPT Date: 01/28/09 17:19

Sample: L385123-04 Account: TVAWCF Received: 01/26/09 15:30 Due Date: 01/28/09 00:00 RPT Date: 01/28/09 17:19

Sample: L385123-05 Account: TVAWCF Received: 01/26/09 15:30 Due Date: 01/28/09 00:00 RPT Date: 01/28/09 17:19

Sample: L385123-06 Account: TVAWCF Received: 01/26/09 15:30 Due Date: 01/28/09 00:00 RPT Date: 01/28/09 17:19

Sample: L385123-07 Account: TVAWCF Received: 01/26/09 15:30 Due Date: 01/28/09 00:00 RPT Date: 01/28/09 17:19