

ANALYTICAL REPORT

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238
Tel: (412)963-7058

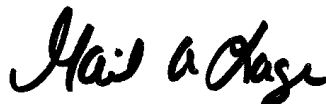
Laboratory Job ID: 180-100617-1

Laboratory Sample Delivery Group: Kingston Fossil Plant
Client Project/Site: 2020 Stormwater Partial

For:

Tennessee Valley Authority
714 Swan Pond Road
Harriman, Tennessee 37748

Attn: Adele Dennison



Authorized for release by:
1/13/2020 4:37:53 PM

Gail Lage, Senior Project Manager
(615)301-5741
gail.lage@testamericainc.com

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Results relate only to the items tested and the sample(s) as received by the laboratory.

PA Lab ID: 02-00416

Case Narrative

Client: Tennessee Valley Authority
Project/Site: 2020 Stormwater Partial

Job ID: 180-100617-1
SDG: Kingston Fossil Plant

Job ID: 180-100617-1

Laboratory: Eurofins TestAmerica, Pittsburgh

Narrative

Job Narrative
180-100617-1

Comments

No additional comments.

Receipt

The samples were received on 1/4/2020 10:15 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.0° C.

Receipt Exceptions

The container label for the following sample did not match the information listed on the Chain-of-Custody (COC): F17C (180-100617-1). The container labels list 17C, while the COC lists F17C. The id on the COC was used.

The container label for the following sample did not match the information listed on the Chain-of-Custody (COC): F17A (180-100617-2). The container labels list 17A, while the COC lists F17A. The id on the COC was used.

The container label for the following sample did not match the information listed on the Chain-of-Custody (COC): F21 (180-100617-6). The container labels list F21, while the COC lists F24. The id on the COC was used until the PM can confirm with the client.

Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Sample Summary

Client: Tennessee Valley Authority
Project/Site: 2020 Stormwater Partial

Job ID: 180-100617-1
SDG: Kingston Fossil Plant

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
180-100617-1	F17C	Water	01/02/20 11:20	01/04/20 10:15	
180-100617-2	F17A	Water	01/02/20 11:25	01/04/20 10:15	
180-100617-3	F6A	Water	01/02/20 11:30	01/04/20 10:15	
180-100617-4	F7	Water	01/02/20 11:36	01/04/20 10:15	
180-100617-5	F23	Water	01/02/20 11:45	01/04/20 10:15	
180-100617-6	F21	Water	01/02/20 12:00	01/04/20 10:15	

Client Sample Results

Client: Tennessee Valley Authority
Project/Site: 2020 Stormwater Partial

Job ID: 180-100617-1
SDG: Kingston Fossil Plant

Client Sample ID: F17C

Date Collected: 01/02/20 11:20

Date Received: 01/04/20 10:15

Lab Sample ID: 180-100617-1

Matrix: Water

Method: EPA 200.7 Rev 4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Analyzed	Dil Fac	Analyst
Iron	0.118		0.100		mg/L		01/13/20 09:53	1	RJG

Client Sample ID: F17A

Date Collected: 01/02/20 11:25

Date Received: 01/04/20 10:15

Lab Sample ID: 180-100617-2

Matrix: Water

Method: EPA 200.7 Rev 4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Analyzed	Dil Fac	Analyst
Iron	ND		0.100		mg/L		01/13/20 11:01	1	RJG

Client Sample ID: F6A

Date Collected: 01/02/20 11:30

Date Received: 01/04/20 10:15

Lab Sample ID: 180-100617-3

Matrix: Water

Method: EPA 200.7 Rev 4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Analyzed	Dil Fac	Analyst
Iron	3.45		0.100		mg/L		01/13/20 10:29	1	RJG

Client Sample ID: F7

Date Collected: 01/02/20 11:36

Date Received: 01/04/20 10:15

Lab Sample ID: 180-100617-4

Matrix: Water

Method: EPA 200.7 Rev 4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Analyzed	Dil Fac	Analyst
Iron	0.149		0.100		mg/L		01/13/20 10:45	1	RJG

Client Sample ID: F23

Date Collected: 01/02/20 11:45

Date Received: 01/04/20 10:15

Lab Sample ID: 180-100617-5

Matrix: Water

Method: EPA 200.7 Rev 4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Analyzed	Dil Fac	Analyst
Iron	0.136		0.100		mg/L		01/13/20 10:51	1	RJG

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Analyzed	Dil Fac	Analyst
Total Suspended Solids	9.80		1.00		mg/L		01/07/20 09:53	1	AGP

Client Sample ID: F21

Date Collected: 01/02/20 12:00

Date Received: 01/04/20 10:15

Lab Sample ID: 180-100617-6

Matrix: Water

Method: EPA 200.7 Rev 4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Analyzed	Dil Fac	Analyst
Iron	ND		0.100		mg/L		01/13/20 10:56	1	RJG

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Analyzed	Dil Fac	Analyst
Total Suspended Solids	0.900		0.500		mg/L		01/07/20 09:53	1	AGP

Eurofins TestAmerica, Pittsburgh

Accreditation/Certification and Definitions Summary

Client: Tennessee Valley Authority
Project/Site: 2020 Stormwater Partial

Job ID: 180-100617-1
SDG: Kingston Fossil Plant

Laboratory: Eurofins TestAmerica, Pittsburgh

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	19-033-0	06-27-20
California	State	2891	04-30-20
Connecticut	State	PH-0688	09-30-20
Florida	NELAP	E871008	06-30-20
Georgia	State	PA 02-00416	04-30-20
Illinois	NELAP	004375	06-30-20
Kansas	NELAP	E-10350	03-31-20
Kentucky (UST)	State	162013	04-30-20
Kentucky (WW)	State	KY98043	12-31-20
Louisiana	NELAP	04041	06-30-20
Minnesota	NELAP	042-999-482	12-31-20
Nevada	State	PA00164	07-31-20
New Hampshire	NELAP	2030	04-04-20
New Jersey	NELAP	PA005	06-30-20
New York	NELAP	11182	04-01-20
North Carolina (WW/SW)	State	434	01-01-21
North Dakota	State	R-227	04-30-20
Oregon	NELAP	PA-2151	02-06-20
Pennsylvania	NELAP	02-00416	04-30-20
Rhode Island	State	LAO00362	12-31-20
South Carolina	State	89014	04-30-20
Texas	NELAP	T104704528	03-31-20
US Fish & Wildlife	US Federal Programs	058448	07-31-20
USDA	Federal	P-Soil-01	06-26-22
USDA	US Federal Programs	P330-16-00211	06-26-22
Utah	NELAP	PA001462019-8	05-31-20
Virginia	NELAP	10043	09-15-20
West Virginia DEP	State	142	01-31-20
Wisconsin	State	998027800	08-31-20

Laboratory: Eurofins TestAmerica, Nashville

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arizona	State Program	AZ0473	05-05-14 *

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification and Definitions Summary

Client: Tennessee Valley Authority
Project/Site: 2020 Stormwater Partial

Job ID: 180-100617-1
SDG: Kingston Fossil Plant

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: Tennessee Valley Authority
Project/Site: 2020 Stormwater Partial

Job ID: 180-100617-1
SDG: Kingston Fossil Plant

Method	Method Description	Protocol	Laboratory
EPA 200.7 Rev 4	Metals (ICP)	EPA	TAL PIT
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL PIT
200.7	Preparation, Total Recoverable Metals	EPA	TAL PIT

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

Laboratory References:

TAL PIT = Eurofins TestAmerica, Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

TestAmerica Nashville

2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-0954

Chain of Custody Record



Client Information		Sampler Adele Dennison		Lab P/N Lage, Gail		Carrier Tracking No(s)		COC No	
Client Contact Adele Dennison		Phone 865-717-2531		E-Mail gail.lage@testamericainc.com				Page	
Company TVA - Kingston Fossil Plant		Due Date Requested:		Analysis Requested		Job #		Preservation Codes:	
Address 714 Swan Pond Road		TAT Requested (days):						A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecylhydrate U - Acetone V - MCAA W - pH 4.5 Z - other (specify)	
City Harriman		State Zip TN 37748		PO # 4785770		WO #		Project #	
Phone 865-717-2531		Email adennison@tva.gov		Project Name 2020 Stormwater Partial		Site KINGSTON FOSSIL PLANT		SSOW#	
Sample Identification		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)		Matrix (Water, Sediment, Other)	
F17C		1/2/20		1120		G		W	
F17A		1/2/20		1125		G		W	
F6A		1/2/20		1130		G		W	
F7		1/2/20		1136		G		W	
F23		1/2/20		1145		G		W	
F21 AND 1-6-2020		1/2/20		1200		G		W	
Possible Hazard Identification		Non-Hazard		Flammable		Skin Irritant		Poison B	
Deliverable Requested: I, II, III, IV, Other (specify)		Unknown		Radiological					
Empty Kit Relinquished by:		Date		Time		Method of Shipment		Special Instructions/QC Requirements:	
Relinquished by: Adele Dennison		1-3-20		930		TVA-KINGSTON		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	
Relinquished by:		Date/Time:		Company		Date/Time:		Company	
Relinquished by:		Date/Time:		Company		Date/Time:		Company	
Custody Seal Intact		Custody Seal No.:		Date/Time:		Company		Date/Time:	
Δ Yes Δ No									

