



Tennessee Valley Authority, Post Office Box 2000, Soddy-Daisy, Tennessee 37384-2000

November 28, 2007

Mr. Vojin Janjic
State of Tennessee
Department of Environment and Conservation
Division of Water Pollution Control
Enforcement & Compliance Section
6th Floor, L&C Annex
401 Church Street
Nashville, Tennessee 37243-1534

Mr. Janjic:

2007 DISCHARGE MONITORING REPORT – QUALITY ASSURANCE (DMR-QA) STUDY 27.
PROVIDER-GRADED TEST RESULTS - FINAL REPORT

Please find enclosed the provider-graded test results of the 2007 DMR-QA Study 27 Laboratory Performance Evaluation obtained by TVA Sequoyah Nuclear Plant (SQN) and supporting Laboratories as required by NPDES Permit TN0026450.

Please contact me at (423) 843-6700 if you have any questions or comments.

Sincerely,

Stephanie A. Howard
Principal Environmental Engineer
Signatory Authority for
Timothy P. Cleary
Site Vice President
Sequoyah Nuclear Plant

Enclosure
cc (Enclosure)

Mr. Wayne Turnbull
EPA Region IV
SESD/MTSB/QAS
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Division of Water Pollution Control
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U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D.C. 20555

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October 24, 2007

Stephanie A Howard
TVA - Sequoyah Nuclear Plant
PO Box 2000
Mailstop: SB-2A-SQN
Soddy-Daisy, TN 37384-2000

Enclosed is your final report for ERA's DMR-QA 27 Proficiency Testing study. Your final report includes an evaluation of every result submitted by your facility to ERA. Please note that reports were sent on your behalf to both the USEPA DMR-QA office and your state or regional DMR-QA Coordinator.

If you have any "Not Acceptable" evaluations for the DMR-QA 27 study, a letter of corrective action and an order form for the required remedial samples are attached for your convenience. If you have a "Not Acceptable" evaluation, but there is not an order form or a list of standards for your in-house or outside laboratories, ERA recommends that you contact your DMR-QA Coordinator for their corrective action requirements, if any.

Thank you for your participation in ERA's DMR-QA 27 Proficiency Testing study. If you have any questions, please contact myself or Curtis Wood, Quality Assurance Director, at 1-800-372-0122.

Sincerely,

Handwritten signature of Shawn Kassner in black ink.

Shawn Kassner
Proficiency Testing Manager

Handwritten signature of Curtis J. Wood in black ink.

Curtis J. Wood
Quality Assurance Director

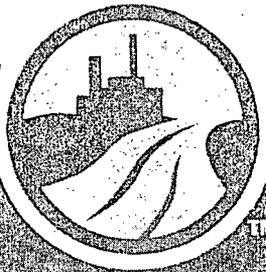
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DMR-QA 27



Final Report

DMR-QA Proficiency Testing

DMR-QA Study

Open Date: 06/04/07

Close Date: 08/31/07

Report Issued Date: 10/22/07



DMRQA-27 Definitions & Study Discussion

Study Dates: 06/04/07 - 08/31/07

Report Issued: 10/22/07

DMRQA Study Definitions

The Reported Value is the value that the laboratory reported to ERA.

The ERA Assigned Values are compliant with the most current USEPA/NELAC FoPT tables. A parameter not added to the standard is given an Assigned Value of "0" per the guidelines contained in the USEPA's Criteria Document and NELAC standards.

The Acceptance Limits are established per the criteria contained in the most current USEPA/NELAC FoPT tables, or ERA's SOP for the Generation of Performance Acceptance Limits™ as applicable.

The Performance Evaluation:

- Acceptable = Reported Value falls within the Acceptance Limits.
- Not Acceptable = Reported Value falls outside the Acceptance Limits.
- No Evaluation = Reported Value cannot be evaluated.
- Not Reported = No Value reported.

The Method Description is the method the laboratory reported to ERA.

DMRQA Study Discussion

ERA's DMR-QA 27 Proficiency Testing study has been reviewed by ERA Senior Management and certified compliant with the requirements of the USEPA's National Standards for Water Proficiency Testing Studies Criteria Document (December 1998), and the criteria contained in the most current NELAC FoPT tables.

ERA's DMR-QA 27 study standards were examined for any anomalies. A full review of all homogeneity, stability and accuracy verification data was completed. All analytical verification data for all analytes met the acceptance criteria contained in the USEPA's National Criteria Document for Water Proficiency Testing Studies, December 1998, and the criteria contained in the most current NELAC FoPT tables.

The data submitted by participating laboratories was also examined for study anomalies. There were no anomalies observed during the statistical review of the data.

ERA's DMR-QA 27 study reports shall not be reproduced except in their entirety and not without the permission of the participating laboratories. The report must not be used by the participating laboratories to claim product endorsement by any agency of the U. S. government.

If you have any questions regarding ERA's DMR-QA Proficiency Testing program, please contact Shawn Kassner, Proficiency Testing Manager, or Curtis Wood, Quality Assurance Director, at 1-800-372-0122.





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Study: **DMRQA-27**

NPDES Permit #: **TN0026450**

Laboratory Name: **TVA - Sequoyah Nuclear
Plant**

Inorganic Results





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 Permit Holder: Stephanie A Howard
 Principal Environmental Engineer
 TVA - Sequoyah Nuclear Plant
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 Soddy-Daisy, TN 37384-2000
 423-843-6700

ERA Laboratory Code: T203302
 Report Issued: 10/22/07
 Study Dates: 06/04/07 - 08/31/07

Analyte	Performance Evaluation	Reported Value	Assigned Value	Acceptance Limits	Units	Method Description	USEPA Lab Code	Study
pH								
pH	Acceptable	5.77	5.70	5.50 - 5.90	S.U.	EPA 150.1	TN00999	DMRQA27
Hardness								
Non-Filterable Residue (TSS)	Acceptable	76.0	83.8	68.6 - 93.2	mg/L	EPA 160.2	TN00003	WP150
Complex Nutrients								
Total phosphorus as P	Acceptable	4.02	4.01	3.28 - 4.80	mg/L	EPA 365.2	TN00003	WP150
Oil & Grease								
Oil & Grease (Gravimetric)	Acceptable	22.	30.0	16.6 - 38.9	mg/L	EPA 1664A SPE	TN00003	WP150
Total Residual Chlorine								
Total Residual Chlorine	Acceptable	1.24	1.32	0.948 - 1.64	mg/L	EPA 330.4	TN00999	DMRQA27
Trace Metals								
Boron	Acceptable	1450.	1360	1110 - 1580	µg/L	EPA 200.7	TN00003	WP150
Copper	Acceptable	117.	109	95.8 - 123	µg/L	EPA 200.8	TN00003	WP150
Iron	Acceptable	515.	489	430 - 556	µg/L	EPA 200.7	TN00003	WP150





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Study: **DMRQA-27**

NPDES Permit #: **TN0026450**

Laboratory Name: **TVA - Sequoyah Nuclear
Plant**

WET Results





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Test End Point	Performance Evaluation	Reported Value %	Assigned Value %	Acceptance Limits %	Method Description	USEPA Lab Code	Study
Fathead minnow (Test Code 15)							
7-day Short term Chronic, Daily Renewal, MHSF							
Potassium chloride							
IC25 (ON) Growth	Acceptable	30.4	29.9	22.0 - 37.7	EPA 1000	NC01230	DMRQA27
Ceriodaphnia dubia (Test Code 21)							
7-day Short term Chronic, Daily Renewal, MHSF							
Potassium chloride							
IC25 Reproduction	Acceptable	30.6	31.5	13.3 - 49.8	EPA 1002	NC01230	DMRQA27



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Ruth Ann Hurt
TVA
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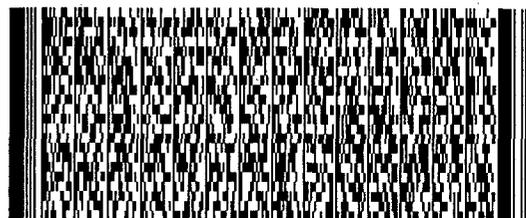
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