



A Waters Company

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WS-178



Final Report

WatR™ Supply Proficiency Testing

WatR™ Supply Study

Open Date: 05/09/11

Close Date: 06/23/11

Report Issued Date: 07/08/11



July 8, 2011

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Enclosed is your final report for ERA's WS-178 WatR™ Supply Proficiency Testing (PT) study. Your final report includes an evaluation of all results submitted by your laboratory to ERA.

Data Evaluation Protocols: All analytes in ERA's WS-178 WatR™ Supply Proficiency Testing (PT) study have been evaluated using the following tiered approach. If the analyte is listed in the most current National Environmental Laboratory Accreditation Conference (NELAC) PT Field of Testing tables, the evaluation was completed by comparing the reported result to the acceptance limits generated using the criteria contained in the NELAC FoPT tables. If the analyte is not included in the NELAC FoPT tables, the reported result has been evaluated using the procedures outlined in ERA's Standard Operating Procedure for the Generation of Performance Acceptance Limits (SOP 0260).

Corrective Action Help: As part of your accreditation(s), you may be required to identify the root cause of any "Not Acceptable" results, implement the necessary corrective actions, and then satisfy your PT requirements by participating in a Supplemental (QuiK™ Response) or future ERA PT study. ERA's technical staff is available to help your laboratory resolve any technical issues that may be impairing your PT performance and possibly affecting your routine data quality. Our laboratory and technical staff have well over three hundred years of collective experience in performing the full range of environmental analyses. As part of our technical support, ERA offers QC samples that can be helpful in helping you work through your technical issues.

Thank you for your participation in ERA's WS-178 WatR™ Supply Proficiency Testing study. If you have any questions, please contact the proficiency testing department, or myself, at 1-800-372-0122.

Sincerely,

Jay R. McBurney
Quality Program Manager

attachments
jrm



A Waters Company

Report Recipient	Contact/Phone Number	Reporting Type
California	Fred Choske / 510-620-3175	All Analytes

WS-178 Definitions & Study Discussion

Study Dates: 05/09/11 - 06/23/11

Report Issued: 07/08/11

WS 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 assigned values are directly traceable to the commercially prepared starting materials used to manufacture the PT 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.

WS Study Discussion

ERA's WS-178 WatR™ Supply 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 WS-178 WatR™ Supply 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 in the standards 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 WS-178 WatR™ Supply 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.

The data contained herein are confidential and intended for your use only.

If you have any questions or concerns regarding your assessment in ERA's WatR™ Supply Proficiency Testing program, please contact Jay McBurney, Quality Program Manager, or the proficiency testing department at 1-800-372-0122.



Study: **WS-178**

ERA Customer Number: **O460853**

Laboratory Name: **Oilfield Environmental & Compliance**

Inorganic Results





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WS-178 Final Complete Report

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EPA ID:
ERA Customer Number:
Report Issued:
Study Dates:

CA01480
O460853
07/08/11
05/09/11 - 06/23/11

Anal. No.	Analyte	Units	Reported Value	Assigned Value	Acceptance Limits	Performance Evaluation	Method Description
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WS Inorganics (cat# 591)

0027	Alkalinity as CaCO3	mg/L		57.3	51.6 - 63.0	Not Reported	
1575	Chloride	mg/L	20.4	24.1	21.2 - 27.2	Not Acceptable	EPA 300.0
1610	Conductivity at 25°C	µmhos/cm		273	246 - 301	Not Reported	
0010	Fluoride	mg/L		1.55	1.40 - 1.70	Not Reported	
1820	Nitrate + Nitrite as N	mg/L		6.04	5.41 - 6.64	Not Reported	
0009	Nitrate as N	mg/L		6.04	5.44 - 6.64	Not Reported	
1125	Potassium	mg/L		20.0	17.2 - 23.2	Not Reported	
0145	Sulfate	mg/L		10.0	7.57 - 11.9	Not Reported	
0024	Total Dissolved Solids at 180°C	mg/L		225	150 - 299	Not Reported	

WS Metals (cat# 590)

1000	Aluminum	µg/L		1090	935 - 1220	Not Reported	
0140	Antimony	µg/L		26.5	18.6 - 34.4	Not Reported	
0001	Arsenic	µg/L		45.8	32.1 - 59.5	Not Reported	
0002	Barium	µg/L		1360	1160 - 1560	Not Reported	
0141	Beryllium	µg/L	3.07	3.31	2.81 - 3.81	Acceptable	EPA 200.8
0226	Boron	µg/L		1320	1160 - 1460	Not Reported	
0003	Cadmium	µg/L		46.8	37.4 - 56.2	Not Reported	
0004	Chromium	µg/L		158	134 - 182	Not Reported	
0091	Copper	µg/L		348	313 - 383	Not Reported	
1070	Iron	µg/L		839	744 - 923	Not Reported	
0005	Lead	µg/L		78.3	54.8 - 102	Not Reported	
0236	Manganese	µg/L		59.7	52.8 - 68.0	Not Reported	
0237	Molybdenum	µg/L		43.8	37.4 - 49.3	Not Reported	
0142	Nickel	µg/L		39.7	33.7 - 45.6	Not Reported	
0007	Selenium	µg/L		58.0	46.4 - 69.6	Not Reported	
1150	Silver	µg/L		140	123 - 155	Not Reported	
0143	Thallium	µg/L		8.84	6.19 - 11.5	Not Reported	
1185	Vanadium	µg/L		726	653 - 799	Not Reported	
0239	Zinc	µg/L		1160	1040 - 1280	Not Reported	

WS Nitrite (cat# 594)

0092	Nitrite as N	mg/L	0.424	0.522	0.444 - 0.600	Not Acceptable	EPA 300.0
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