



A Waters Company

Larry Lem
Calscience Environmental Laboratories
7440 Lincoln Way
Garden Grove, CA 92841-1427

DMR-QA 31  *Final Report*

DMR-QA Proficiency Testing

DMR-QA Study

Open Date: 03/14/11

Close Date: 07/01/11

Report Issued Date: 07/22/11



A Waters Company

July 22, 2011

Larry Lem
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Enclosed is your final report for ERA's DMR-QA 31 Proficiency Testing study. Your final report includes an evaluation of every result submitted by your facility to ERA. If there are any discrepancies between your final report and what your facility reported to your permit holders please contact your permit holders. To the best of ERA's ability we have attempted to resolve any data reporting discrepancies.

If you have any "Not Acceptable" evaluations for the DMR-QA 31 study, and these results have been reported by your permittees, a letter of corrective action and order form are attached for your convenience. If you have a "Not Acceptable" evaluation, but no letter of corrective action or order form, ERA recommends that you contact your permittees for the corrective action requirements that their state or regional DMR-QA Coordinator may require.

Thank you for your participation in ERA's DMR-QA 31 Proficiency Testing study. If you have any questions, please contact the proficiency testing department, or me, at 1-800-372-0122.

Sincerely,

A handwritten signature in black ink that reads "Jay R. McBurney". The signature is written in a cursive, flowing style.

Jay R. McBurney
Quality Program Manager

attachments
jrm



A Waters Company

Report Recipient	Contact/Phone Number	Reporting Type
No Recipients Selected		



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DMRQA-31 Definitions & Study Discussion

Study Dates: 03/14/11 - 07/01/11

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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. The assigned values are directly traceable to the commercially prepared starting materials used to manufacture the PT standards. 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 31 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 31 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 31 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 DMRQA Proficiency Testing program, please contact Jay McBurney, Quality Program Manager, or the proficiency testing department at 1-800-372-0122.



Study: **DMR-QA 31**

ERA Customer Number: **C052701**

Laboratory Name: **Calscience
Environmental
Laboratories**

Inorganic Results





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DMR-QA 31 Final Complete Report

Larry Lem
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7440 Lincoln Way
Garden Grove, CA 92841-1427
(714) 895-5494

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

CA00111
C052701
07/22/11
03/14/11 - 07/01/11

Anal. No.	Analyte	Units	Reported Value	Assigned Value	Acceptance Limits	Performance Evaluation	Method Description
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DMRQA Oil & Grease (cat# 582)

0104	Oil & Grease (Gravimetric)	mg/L	46.5	44.0	27.5 - 54.4	Acceptable	EPA 1664A
1860	Oil & Grease (Infrared)	mg/L		54.1	35.4 - 65.5	Not Reported	

DMRQA Oil & Grease (cat# 582)

0104	Oil & Grease (Gravimetric)	mg/L	46.5	44.0	27.5 - 54.4	Acceptable	SM5520B
1860	Oil & Grease (Infrared)	mg/L		54.1	35.4 - 65.5	Not Reported	

DMRQA Trace Metals (cat# 586)

0001	Aluminum	µg/L	751	737	585 - 886	Acceptable	EPA 6010B
0016	Antimony	µg/L	317	346	238 - 419	Acceptable	EPA 6010B
0002	Arsenic	µg/L	663	681	572 - 797	Acceptable	EPA 6010B
1015	Barium	µg/L	1110	1070	929 - 1210	Acceptable	EPA 6010B
0003	Beryllium	µg/L	759	790	672 - 892	Acceptable	EPA 6010B
1025	Boron	µg/L	1430	1460	1190 - 1700	Acceptable	EPA 6010B
0004	Cadmium	µg/L	346	346	295 - 393	Acceptable	EPA 6010B
0006	Chromium	µg/L	166	164	141 - 187	Acceptable	EPA 6010B
0005	Cobalt	µg/L	583	541	475 - 606	Acceptable	EPA 6010B
0007	Copper	µg/L	284	266	239 - 294	Acceptable	EPA 6010B
0008	Iron	µg/L	538	519	456 - 590	Acceptable	EPA 6010B
0012	Lead	µg/L	974	911	798 - 1020	Acceptable	EPA 6010B
0010	Manganese	µg/L	705	691	620 - 768	Acceptable	EPA 6010B
0074	Molybdenum	µg/L	343	349	294 - 400	Acceptable	EPA 6010B
0011	Nickel	µg/L	386	359	320 - 404	Acceptable	EPA 6010B
0013	Selenium	µg/L	656	669	530 - 775	Acceptable	EPA 6010B
0017	Silver	µg/L	587	546	469 - 625	Acceptable	EPA 6010B
0075	Strontium	µg/L	207	210	182 - 238	Acceptable	EPA 6010B
0018	Thallium	µg/L	841	779	642 - 925	Acceptable	EPA 6010B
0014	Vanadium	µg/L	471	484	424 - 542	Acceptable	EPA 6010B
0015	Zinc	µg/L	203	201	171 - 236	Acceptable	EPA 6010B





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Anal. No.	Analyte	Units	Reported Value	Assigned Value	Acceptance Limits	Performance Evaluation	Method Description
DMRQA Trace Metals (cat# 586)							
0001	Aluminum	µg/L	751	737	585 - 886	Acceptable	EPA 200.7
0016	Antimony	µg/L	317	346	238 - 419	Acceptable	EPA 200.7
0002	Arsenic	µg/L	663	681	572 - 797	Acceptable	EPA 200.7
1015	Barium	µg/L	1110	1070	929 - 1210	Acceptable	EPA 200.7
0003	Beryllium	µg/L	759	790	672 - 892	Acceptable	EPA 200.7
1025	Boron	µg/L	1430	1460	1190 - 1700	Acceptable	EPA 200.7
0004	Cadmium	µg/L	346	346	295 - 393	Acceptable	EPA 200.7
0006	Chromium	µg/L	166	164	141 - 187	Acceptable	EPA 200.7
0005	Cobalt	µg/L	583	541	475 - 606	Acceptable	EPA 200.7
0007	Copper	µg/L	284	266	239 - 294	Acceptable	EPA 200.7
0008	Iron	µg/L	538	519	456 - 590	Acceptable	EPA 200.7
0012	Lead	µg/L	974	911	798 - 1020	Acceptable	EPA 200.7
0010	Manganese	µg/L	705	691	620 - 768	Acceptable	EPA 200.7
0074	Molybdenum	µg/L	343	349	294 - 400	Acceptable	EPA 200.7
0011	Nickel	µg/L	386	359	320 - 404	Acceptable	EPA 200.7
0013	Selenium	µg/L	656	669	530 - 775	Acceptable	EPA 200.7
0017	Silver	µg/L	587	546	469 - 625	Acceptable	EPA 200.7
0075	Strontium	µg/L	207	210	182 - 238	Acceptable	EPA 200.7
0018	Thallium	µg/L	841	779	642 - 925	Acceptable	EPA 200.7
0014	Vanadium	µg/L	471	484	424 - 542	Acceptable	EPA 200.7
0015	Zinc	µg/L	203	201	171 - 236	Acceptable	EPA 200.7





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Anal. No.	Analyte	Units	Reported Value	Assigned Value	Acceptance Limits	Performance Evaluation	Method Description
DMRQA Trace Metals (cat# 586)							
0001	Aluminum	µg/L	728	737	585 - 886	Acceptable	EPA 1640
0016	Antimony	µg/L	333	346	238 - 419	Acceptable	EPA 1640
0002	Arsenic	µg/L	621	681	572 - 797	Acceptable	EPA 1640
1015	Barium	µg/L	1020	1070	929 - 1210	Acceptable	EPA 1640
0003	Beryllium	µg/L	805	790	672 - 892	Acceptable	EPA 1640
1025	Boron	µg/L		1460	1190 - 1700	Not Reported	
0004	Cadmium	µg/L	336	346	295 - 393	Acceptable	EPA 1640
0006	Chromium	µg/L	173	164	141 - 187	Acceptable	EPA 1640
0005	Cobalt	µg/L	527	541	475 - 606	Acceptable	EPA 1640
0007	Copper	µg/L	261	266	239 - 294	Acceptable	EPA 1640
0008	Iron	µg/L	500	519	456 - 590	Acceptable	EPA 1640
0012	Lead	µg/L	932	911	798 - 1020	Acceptable	EPA 1640
0010	Manganese	µg/L	697	691	620 - 768	Acceptable	EPA 1640
0074	Molybdenum	µg/L	354	349	294 - 400	Acceptable	EPA 1640
0011	Nickel	µg/L	345	359	320 - 404	Acceptable	EPA 1640
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0017	Silver	µg/L	525	546	469 - 625	Acceptable	EPA 1640
0075	Strontium	µg/L		210	182 - 238	Not Reported	
0018	Thallium	µg/L	793	779	642 - 925	Acceptable	EPA 1640
0014	Vanadium	µg/L	533	484	424 - 542	Acceptable	EPA 1640
0015	Zinc	µg/L	214	201	171 - 236	Acceptable	EPA 1640

