

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

REPORT OF THE U.S. GEOLOGICAL SURVEY'S ANALYTICAL EVALUATION
PROGRAM--STANDARD REFERENCE WATER SAMPLES M2 (MAJOR CONSTITUENTS),
T3 (TRACE CONSTITUENTS), and N14 (NUTRIENTS).

Denver, Colorado

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ABSTRACT

The U.S. Geological Survey began an interlaboratory testing program of reference water samples in 1962. Program objectives then were and now are to provide a means for participating water laboratories to: (1) Identify analytical problem areas; (2) ascertain the accuracy and precision of common water analyses and analytical methods; and (3) provide reference samples for quality-assurance testing. Participation in this continuing quality-assurance program is mandatory for all domestic laboratories providing water-analysis data for U.S. Geological Survey use.

This report presents analytical data submitted by the laboratories that analyzed the reference samples distributed in April 1985. Relative performance ratings achieved by the laboratories for each determination, statistical evaluation of the data, and data summaries are given in 10 tables. A summary table also compares NBS certified constituent concentration values and the U.S. Geological Survey statistically determined values in equivalent samples, SRM 1643b and SRWS T3.

INTRODUCTION

The U.S. Geological Survey began an interlaboratory testing program of reference water samples in 1962 with a single major-constituent reference sample prepared from distilled water and reagent grade chemicals. Principal objectives of this continuing program are to provide a means for participating water laboratories to: (1) Identify analytical problem areas; (2) ascertain the accuracy and precision of analytical methods for determining various constituents and physical properties of water; and (3) provide reference samples for continuing quality-assurance testing of U.S. Geological Survey and various cooperator and contract laboratories. Twenty-three U.S. Geological Survey laboratories participated in the 1962 effort to determine 6 constituents in a single major-constituent Standard Reference Water Sample (SRWS). Today, more than 120 domestic laboratories, both Survey and non-Survey, participate in the program, which currently uses nine SRWS types: (1) Major constituents; (2) trace constituents; (3) nutrients; (4) herbicides; (5) insecticides; (6) water and suspended-sediment mixture for trace metals; (7) precipitation snowmelt; (8) priority pollutants; (9) acid mine drainage; and a sediment (bed material) for trace metals.

Participation in this continuing quality-assurance program is mandatory for all laboratories providing water-analysis data for U.S. Geological Survey use. Major constituent, trace-constituent, and nutrient SRWS are prepared and distributed to participating laboratories twice each year. One or more of the other SRS types also may be included. This report presents analytical data submitted by the laboratories that analyzed the reference samples distributed to them in April 1985. Samples were analyzed during May, and data were requested to be submitted by June. Data received through August 7, 1985 have been included in this report. Relative performance ratings achieved by the laboratories for each determination, and statistical evaluations of the data are given in 10 tables. A summary table also compares NBS certified constituent concentration values and the U.S. Geological Survey statistically determined values in equivalent samples, SRM 1643b and SRWS T3.

PURPOSE AND PLAN

Periodic participation in reference sample analysis provides the means to alert participating laboratories to deficiencies in their analytical operations, and provides reference solutions for quality assurance testing. Standard Reference Water Samples are prepared and distributed every 6 months for analysis by U.S. Geological Survey and other cooperating laboratories. These analyses provide independent and objective evaluations of water-quality data provided by some of these laboratories for Survey use and publication. Non-U.S. Geological Survey laboratories participating in this study are identified in this report only by a confidential code number. U.S. Geological Survey laboratories participating in this study are identified by location, name and code number.

This report summarizes the analytical results submitted by 95 of the 101 laboratories that requested and were shipped test samples in April 1985. The original date of June 1, 1985 that was specified as a deadline for data return was extended several times.

Samples which were distributed during April 1985 included SRWS M2 (major constituents), SRWS T3 (trace constituents), and SRWS N14 (nutrients). Not all samples are requested nor necessarily analyzed by all laboratories, nor do all laboratories participate in each round of analyses. Each participating laboratory was asked to perform at least those determinations that it makes routinely and to indicate the analytical methods used for each constituent. When method information was provided, it has been included in the respective data tables.

PREPARATION OF SAMPLES

SRWS M2 (major constituents) and SRWS N14 (nutrients) were prepared from untreated natural surface waters. Samples were sequentially filtered through a 10- μm (micrometer) nominal-size prefilter, a 5- μm nominal-size intermediate and a 0.45- μm membrane final filter, into a large polyethylene drum. Thymol [1.25 mg/L (milligrams per liter)], was added to inhibit fungal growth, and boron, bromine, iodine, and vanadium salts were added to SRWS M2. It was then mixed overnight with a motor-driven Teflon^{1/}-coated stirrer, after which it was filtered again through a 0.45- μm membrane filter, then passed through a flow-through ultraviolet [254-nm (nanometer)] sterilizer and packaged under ultraviolet radiation, in dry-heat sterilized 1-L (liter) Teflon bottles.

The test sample distributed as SRWS T3 was actually the National Bureau of Standards Certified Standard Reference Material (SRM) 1643b, Trace Elements in Water. It was prepared from deionized water and reagent grade chemicals as described on the certificate for SRM 1643b, a copy of which is included as an appendix in this report. It was bottled in a linear polyethylene bottle and then heat sealed in an aluminized plastic bag. Before SRM 1643b was distributed to laboratories participating in the USGS SRWS round-robin testing program, it was relabeled as Standard Reference Water Sample Trace Metals T-3. Both the protective aluminized plastic bag and the enclosed linear polyethylene bottle were relabeled and included the notation "Please retain unused sample."

If any sample remained after analyses were completed, and it was retained as requested, it should still be useable as the standard. Ideally any remaining sample should have been stored by replacing the bottle in the plastic bag and then rolling and securing the top of the bag to minimize evaporative moisture losses from the bottle. Additional supplies of SRM 1643b are available from the National Bureau of Standards at a cost of \$160.00 per 950 ml sample.

Raw surface water used to prepare SRWS N14 was filtered as described above for preparing SRWS M2. The filtrate was then supplemented by the addition of ammonium, nitrate, nitrite, organic nitrogen and phosphorous and orthophosphate salts. Mercuric chloride (50 mg/L) as a preservative, and sodium chloride (450 mg/L) were then added. This is equivalent to the U.S. Geological Survey technique for field preservation of nutrient samples, using mercuric chloride-sodium chloride tablets. The sample was then mixed overnight with a motor-driven, Teflon-coated stirrer, packaged without sterilization, and stored in the dark at 4°C (Celsius). The samples were shipped in iced coolers.

^{1/}The use of the trade name in this report is for identification purposes only and does not constitute endorsement by the U.S. Geological Survey.

DETERMINATIONS

Determinations for each of the SRWS and their abbreviations are listed below.

Standard Reference Water Sample M2 (major constituents) (results in milligrams per liter^{1/})

ALK(CACO ₃)	= Alkalinity (as CaCO ₃)	NA	= Sodium
B	= Boron	NO ₂ -N	= Nitrite as nitrogen
BR	= Bromide	NO ₃ -N	= Nitrate as nitrogen
CA	= Calcium	PH	= pH
CL	= Chloride	P, TOTAL	= Phosphorus, Total as phosphorus
DSRD 180	= Dissolved solids	SIO ₂	= Silica
F	= Fluoride	SO ₄	= Sulfate
I	= Iodide	SP. COND.	= Specific conductance
K	= Potassium	SR	= Strontium
MG	= Magnesium	V	= Vanadium

Standard Reference Water Sample T3 (trace constituents) (results in micrograms per liter^{2/})

ACID@CACO ₃	= Acidity (as CaCO ₃)	K	= Potassium
AG	= Silver	MG	= Magnesium
AS	= Arsenic	MN	= Manganese
B	= Boron	MO	= Molybdenum
BA	= Barium	NA	= Sodium
BE	= Beryllium	NI	= Nickel
CA	= Calcium	PB	= Lead
CD	= Cadmium	SE	= Selenium
CO	= Cobalt	SR	= Strontium
CR TOT	= Chromium, total	TL	= Thallium
CU	= Copper	V	= Vanadium
FE	= Iron	ZN	= Zinc

Standard Reference Water Sample N14 (nutrients) (results in milligrams per liter)

NH ₃ -N	= Ammonia as nitrogen	ORG-N	= Organic nitrogen as nitrogen
NO ₂ -N	= Nitrite as nitrogen	PO ₄ -P	= Orthophosphate as phosphorus
NO ₃ -N	= Nitrate as nitrogen	P, TOTAL	= Phosphorous, total as phosphorus

^{1/} Except specific conductance (microsiemens or micromhos per centimeter at 25 °C); pH (units); boron, bromide, iodide, strontium, and vanadium (micrograms per liter).

^{2/} Except acidity, calcium, magnesium, potassium and sodium (milligrams per liter).

STATISTICAL EVALUATION

Statistical evaluations of the data were made to estimate the most probable value (MPV) for each of the constituents determined. Reported values of "less than" were considered as "not determined" and were not used (ignored) in the computation of the means, standard deviations, and so forth.

Outlying values for the remaining data were rejected on the basis of statistical tests as outlined in American Society for Testing and Materials (1981). After rejection of the outliers, the data remaining for each constituent were used to calculate the means, standard deviations, and percent deviation from the mean for each value. Outliers are not recalculated when determining the means and standard deviations for each determination listed by "method". The total range for each constituent included those values rejected as outliers. Confidence limits about the mean also were calculated; these limits define the range within which the true value may be expected to occur with a confidence level of 95 percent.

The mean, standard deviation, and confidence limits about the mean usually are reported to one more significant figure than the reported value. Statistical information is tabulated for each method used by three or more laboratories to determine a specific constituent. Tables 6, 8, and 10, listing the mean and standard deviation for the constituent determined by each method, and the number of laboratories that used it, follow the analytical-data tables for each SRWS.

LABORATORY PERFORMANCE AND REPORTED VALUES

To facilitate interlaboratory performance comparisons, ratings based on the analyses reported for each SRWS are included as tables 2-4 in this report. Laboratory performance for each constituent is rated on an arbitrary scale of 0 to 4 based on the number of "standard deviations" from the mean as indicated below:

4 (Excellent)	-----0.00 to 0.50 standard deviation
3 (Good)	-----0.51 to 1.00 standard deviation
2 (Satisfactory)	-----1.01 to 1.50 standard deviations
1 (Questionable)	-----1.51 to 2.00 standard deviations
0 (Poor)	-----Greater than 2.00 standard deviations

Averages of the constituent ratings for each Standard Reference Water Sample are given for each laboratory in the tables of overall laboratory performance (tables 2-4).

Laboratories were requested to identify the method used for each determination. The references for these methods are included with the analytical data and are identified in the following listing:

1. American Public Health Association and others, 1980, Standard methods for the examination of water and wastewater [15th ed.]: Washington, D.C., 1134 p.
2. American Society for Testing and Materials, 1982, Annual book of ASTM standards, Part 31: Philadelphia, PA, U.S.A., 1554 p.

3. Kopp, J. F., and McKee, G. F., 1978, Methods for chemical analysis of water and wastes: Cincinnati, Ohio, U.S. Environmental Protection Agency, 460 p.
4. Skoustad, M. W., Fishman, M. J., Friedman, L. C., Erdmann, D. E., and Duncan, S. S., eds., 1979, Methods for determination of inorganic substances in water and fluvial sediments: U.S. Geological Survey Techniques of Water-Resources Investigations, Book 5, Chapter A1, 626 p.
5. Fishman, M. J., and Bradford, W. L., eds., 1982, A supplement to methods for the determinations of inorganic substances in water and fluvial sediments: (Supplement to U.S. Geological Survey Techniques of Water-Resources Investigations, Book 5, Chapter A1), U.S. Geological Survey Open-File Report 82-272, 136 p.
6. Fishman, M. J., and Pyen, Grace, 1979, Determination of selected anions in water by ion chromatography: U.S. Geological Survey Water-Resources Investigations 79-101, 30 p.

In many instances, virtually the same method is given in several references. In those cases, all references describing that method are listed. If the analytical method used was not included in any of the listed references, analysts were requested to indicate "Other". Reference columns are left blank, if no method or an "other" method was indicated.

Values reported for all constituents determined in each SRWS are listed in tables 5, 7, and 9. Each value has been rounded off, when necessary, to conform to U.S. Geological Survey policy on reporting analytical data as given by Bishop and others (1978).

Analytical results, obtained by analysis of "SRWS T-3" through round-robin analyses and the NBS certified values for SRM 1643b, are summarized in Table 11. The USGS mean and 95 percent confidence interval concentration values for each constituent in SRWS T3 were determined by statistics described elsewhere in this report. Concentrations are given in micrograms per liter ($\mu\text{g}/\text{ml}$), for the trace constituents and in milligrams per liter (mg/L) for the major constituents. Concentrations for the trace constituents as reported for SRM 1643b are in terms of nanograms per gram. These values are essentially equivalent to the $\mu\text{g}/\text{ml}$ concentration values given for the respective constituents in SRWS T3. Major constituent concentrations in SRM 1643b, given in $\mu\text{g}/\text{ml}$ are equivalent to the mg/L values in T3.

Comparison of the SRM 1643b certified concentration values with the SRWS T3 statistically determined means and 95 percent confidence intervals, for the respective constituent pairs, show excellent agreement. All 17 of the values certified for 1643b and statistically determined for T3, form closely overlapping data pairs if the uncertainty associated with each constituent is considered. The statistical analysis of the round-robin data yielded concentration means very comparable to the certified values for this sample. The NBS approximate concentration values of 35 and 8 $\mu\text{g}/\text{ml}$ given for calcium and sodium respectively, agree quite well with the USGS means of 32.5 and 8.23 mg/L. However, the NBS approximate values of 15 and 3 $\mu\text{g}/\text{ml}$ for magnesium and potassium do not agree as well with the respective USGS means of 8.3 and 1.8 mg/L. Results of the round-robin analyses on SRWS T3 indicate some revision of the "approximate concentrations" for magnesium and potassium in SRM 1643b may be needed.

Comments or suggestions regarding this program may be made by calling (303) 236-3612 (FTS 776-3612), or writing to Victor J. Janzer, U.S. Geological Survey, 5293 Ward Road, Arvada, CO 80002.

REFERENCES

American Society for Testing and Materials, 1981, Annual book of ASTM standards, Part 41, Philadelphia, Pa., 1390 p.

Bishop, E. E., Eckel, E. B., and others, 1978, Suggestions to Authors of the reports of the, U.S. Geological Survey: Washington, D. C., U.S. Government Printing Office, 6th edition, p. 198.

PARTICIPATING LABORATORIES

U.S. Geological Survey

CALIFORNIA, Menlo Park: Barnes 047
COLORADO, Denver: Duncan 068
 Schoen 001

FLORIDA, Ocala: Kirkland 063
GEORGIA, Doraville: Shampine 040
LOUISIANA, Baton Rouge: Stallworth 083

Cooperator

ALABAMA, Montgomery: ADEM Environmental Laboratory
ALABAMA, Tuscaloosa: Geological Survey of Alabama

ALASKA, Anchorage: Anchorage Water and Wastewater Utility Laboratory
ALASKA, Fairbanks: Alaska Division of Geological and Geophysical Surveys

ARKANSAS, Little Rock: Ark. Department of Pollution Control and Ecology

CALIFORNIA, Bryte: California Department of Water Resources Chemical Laboratory
CALIFORNIA, Castaic: Department of Water Resources Chemical Laboratory
CALIFORNIA, La Mesa: San Diego Water Utilities Laboratory
CALIFORNIA, La Verne: The Metropolitan Water District of Southern California
CALIFORNIA, Los Gatos: Santa Clara Valley Water District
CALIFORNIA, Palm Desert: California Regional Water Quality Control Board
CALIFORNIA, Riverside: Univ. of Calif. Dept. of Soils and Environmental Science

COLORADO, Aurora: Core Laboratories Inc.
COLORADO, Denver: Denver Water Department - Quality Control Laboratory
COLORADO, Denver: Metropolitan Denver Sewage Disposal District #1
COLORADO, Denver: Colorado Department of Health
COLORADO, Fort Collins: Environmental Services/Water Utilities
COLORADO, Golden: Rockwell International General Laboratories
COLORADO, Parachute: Union Oil Company, Upgrade Laboratory
COLORADO, Pueblo: Board of Water Works

FLORIDA, Palatka: St. John's River Water Management District
FLORIDA, Tallahassee: City of Tallahassee Water Quality Laboratory
FLORIDA, Tampa: Hillsborough County Environmental Protection Commission
FLORIDA, West Palm Beach: South Florida Water Management District

GEORGIA, Albany: Water, Gas and Light Commission
GEORGIA, Athens: Univ. of Ga. Department of Horticulture
GEORGIA, Athens: Soil Testing and Plant Analysis Lab
GEORGIA, Atlanta: Georgia Department of Natural Resources
GEORGIA, Tifton: U.S. Department of Agriculture, SE Watershed Laboratory

ILLINOIS, Champaign: Illinois State Water Survey
ILLINOIS, Champaign: Illinois Environmental Protection Agency
ILLINOIS, Chicago: Illinois Environmental Protection Agency

INDIANA, Indianapolis: Marion County Public Health Laboratory
INDIANA, Indianapolis: Indianapolis Department of Public Works

Cooperator--continued

IOWA, Des Moines: University Hygienic Laboratory - Des Moines Branch

KANSAS, Lawrence: Kansas Geological Survey

KANSAS, Topeka: Kansas Department of Health and Environment

LOUISIANA, Lake Charles: Core Laboratories, Inc.

MAINE, Augusta: Maine Department of Environmental Protection

MARYLAND, Baltimore: Martel Laboratory Services, Inc.

MASSACHUSETTS, Wellesley: Massachusetts Department of Public Works

MINNESOTA, Minneapolis: Minnesota Public Health Department

MINNESOTA, St. Paul: Metropolitan Waste Control Commission

MISSOURI, Columbia: Environmental Trace Substances Research Center

MISSOURI, Jefferson City: Missouri Department of Natural Resources

MONTANA, Butte: Montana Bureau of Mines and Geology

NEVADA, Boulder City: U.S. Bureau of Reclamation, Lower Colorado Regional Laboratory

NEVADA, Reno: Water Analysis Laboratory, Desert Research Institute

NEVADA, Reno: Nevada State Health Laboratory

NEW JERSEY, Tom's River: Ocean County Health Department

NEW JERSEY, Trenton: N.J. Department of Health Environmental and Chemical Laboratory

NEW MEXICO, Albuquerque: City of Albuquerque Water Resources Laboratory

NEW MEXICO, Gallup: Bureau of Indian Affairs - Natural Resources and Engineering Laboratory

NEW YORK, Buffalo: Erie County Public Health Laboratory

NEW YORK, Central Islip: Suffolk County Health Services Department

NEW YORK, Hempstead: Nassau County Department of Health

NEW YORK, New York: New York City Department of Health Laboratories

NEW YORK, North Babylon: EcoTest Laboratories, Inc.

NEW YORK, Oakdale: Suffolk County Water Authority

NEW YORK, Rochester: Monroe County Environmental Health Laboratory

NEW YORK, Rochester: FEV Wastewater Treatment Facility Laboratory

NEW YORK, Syracuse: Syracuse Univ., Department of Geology, Heroy Laboratory

NEW YORK, Syracuse: Syracuse Univ., Department of Civil Engineering

NEW YORK, Syracuse: Onondaga County Department of Drainage and Sanitation

NEW YORK, Westbury: Nytest Environmental, Inc.

NORTH CAROLINA, Charlotte: Mecklenburg County Environmental Health Department

NORTH DAKOTA, Bismarck: North Dakota State Water Commission

NORTH DAKOTA, Bismarck: North Dakota State Health Department Laboratory

Cooperator--continued

OHIO, Columbus: Ohio Environmental Protection Agency Water Quality Laboratory
OHIO, Columbus: Stilson Laboratories, Inc.

OHIO, Medina: Medina County Sanitary Engineering Department

OKLAHOMA, Norman: Oklahoma Geological Survey

OKLAHOMA, Oklahoma City: Oklahoma Agriculture Department Laboratory

OREGON, Corvallis: U.S. Department of Agriculture, Forestry Sciences Laboratory

PENNSYLVANIA, Harrisburg: Pennsylvania DER, Bureau of Laboratories

SOUTH DAKOTA, Brookings: South Dakota State University, Water Quality Laboratory

SOUTH DAKOTA, Vermillion: South Dakota Geological Survey

TENNESSEE, Chattanooga: Tennessee Valley Authority, Laboratory Branch

TEXAS, Corpus Christi: Core Laboratories, Inc.

UTAH, Logan: Ecosystem Research Institute

VIRGINIA, Culpeper: Environmental System Service

WASHINGTON, Richland: Rockwell Hanford Operations

WEST VIRGINIA, Morgantown: West Virginia Geologic and Economic Survey

WISCONSIN, Madison: State Laboratory of Hygiene

WISCONSIN, Milwaukee: Milwaukee Metropolitan Sewerage District

WYOMING, Casper: Core Laboratories

WYOMING, Cheyenne: Department of Environmental Quality, Water Quality Division

WYOMING, Laramie: Wyoming Department of Agriculture

PUERTO RICO, San Juan: Department of Natural Resources, Laboratory Division

The following laboratories requested test samples, which were shipped to them, but no data were received:

CALIFORNIA, Oakland: East Bay Municipal Utility District - SD 1

CALIFORNIA, Sacramento: U.S. Bureau of Reclamation

MASSACHUSETTS, Barnstable: Barnstable County Health Department

NEW YORK, Bayport: Volumetric Tech., LTD

OHIO, Dayton, The Miami Conservancy District

SOUTH CAROLINA, Columbia: South Carolina Water Resources Commission

Table 1--Explanation of abbreviations and symbols used in computer printout sections

APDC - ammonium pyrrolidine dithiocarbamate
AUTO - automated
AVG - average
BLK - block
CHCL₃ - chloroform
CO'METRIC - colorimetric
DC - direct current
DEV - deviation
DIG - digestion
EDTA - ethylenediaminetetraacetic acid
H₂SO₄ - sulfuric acid
IC - inductively coupled
IGNORED - valued reported as less than detection level and not used in statistical analyses
K & HG SO₄ - potassium & mercuric sulfate
MIBK - methyl isobutyl ketone
NABH₄ - sodium borohydride
ND - not determined
NR - not rated
PCT - percent
PDCA - pyrrolidine dithiocarbamic acid
PERSULF - persulfate
PHOSPHOMOLYBD - phosphomolybdate
REJECT - values identified as an outlier and not used in statistical analyses
SPADNS - sodium 2-(parasulfophenylazo)-1,8-dihydroxy-3,6-naphthalene disulfonate
STD - standard
% - percent
< - less than
> - greater than

Table 2 Standard Reference Water Sample No. M2
Overall Laboratory Performance

RATING	4 (Excellent) 0.00 to 0.50 Std. Dev.	3 (Good) 0.51 to 1.00 Std. Dev.	2 (Satisfactory) 1.01 to 1.50 Std. Dev.	1 (Questionable) 1.51 to 2.00 Std. Dev.	0 (Poor)	ND	Not determined	> 2.00 Std. Dev.	Not rated		
LAB	ALK(CACO ₃)	B	BR	CA	CL	DSRD	180	F	I	K	MG
1	ND	ND	ND	4	ND	ND	ND	ND	ND	ND	4
2	1	4	ND	4	1	4	4	ND	ND	2	3
3	3	4	4	4	4	3	3	2	4	4	3
4	NO	ND	ND	NO	3	ND	ND	ND	ND	ND	ND
5	3	ND	NR	4	4	ND	ND	ND	ND	NO	4
6	3	1	ND	4	3	3	0	ND	ND	4	3
8	NO	ND	ND	0	ND	0	3	ND	ND	3	ND
9	4	4	ND	4	ND	4	2	ND	ND	3	3
10	4	ND	ND	3	2	4	1	ND	ND	2	3
11	3	2	4	3	2	2	0	ND	ND	4	ND
12	3	ND	ND	2	0	4	3	ND	ND	3	2
13	1	ND	ND	0	0	4	3	ND	ND	ND	4
14	ND	4	ND	3	ND	ND	ND	ND	ND	2	2
15	1	NR	ND	3	1	4	4	ND	ND	4	2
16	2	4	4	0	3	3	0	ND	ND	3	4
17	3	ND	ND	4	4	4	0	ND	ND	0	4
18	1	ND	ND	4	0	1	3	ND	ND	3	2
19	3	ND	3	ND	4	1	2	ND	ND	ND	ND
20	3	3	ND	4	3	4	3	ND	ND	4	4
21	ND	4	ND	1	ND	ND	ND	ND	ND	3	2
22	3	ND	NO	3	0	2	4	ND	ND	4	4
23	4	ND	NO	4	3	1	ND	ND	ND	4	4
24	3	3	NO	3	ND	3	ND	ND	ND	4	4
25	ND	ND	ND	ND	3	ND	3	ND	ND	0	0
27	3	ND	ND	1	4	2	2	ND	ND	4	3
28	4	4	ND	3	4	3	3	ND	ND	4	4
29	4	3	ND	3	3	1	3	ND	ND	4	4
30	4	4	ND	4	4	2	4	ND	ND	4	4
31	4	ND	ND	ND	4	4	4	ND	ND	ND	ND
32	0	1	ND	1	0	0	ND	ND	ND	0	1
33	4	3	ND	4	2	ND	ND	ND	ND	ND	3
34	4	ND	NO	3	2	3	3	ND	ND	2	2
35	4	NR	ND	3	4	3	4	ND	ND	4	3
36	3	ND	ND	3	4	4	4	ND	ND	ND	ND
37	4	ND	ND	3	3	2	2	ND	ND	2	3
38	2	ND	ND	0	4	4	2	ND	ND	4	2
40	4	4	ND	3	4	4	4	4	ND	3	4
41	4	ND	ND	4	4	ND	2	ND	ND	4	4
42	4	ND	ND	4	4	0	3	ND	ND	0	4
43	ND	ND	ND	3	4	0	4	ND	ND	4	4
44	3	1	ND	4	4	2	4	ND	ND	1	3

Table 2 Standard Reference Water Sample No. M2
Overall Laboratory Performance

RATING	4 (Excellent)	0.00 to 0.50 Std. Dev.	O (Poor)	> 2.00 Std. Dev.
3 (Good)	0.51 to 1.00 Std. Dev.	ND	Not determined	
2 (Satisfactory)	1.01 to 1.50 Std. Dev.	NR	Not rated	
1 (Questionable)	1.51 to 2.00 Std. Dev.			

LAB	ALK(CACO ₃)	B	BR	CA	CL	DSRD	180	F	I	K	MG
45	1	0	ND	4	4	4	4	ND	4	4	
46	3	3	ND	0	0	3	ND	ND	3	ND	
47	ND	ND	ND	3	4	ND	ND	ND	4	4	
48	3	4	ND	4	4	4	3	ND	3	3	
50	4	ND	ND	0	2	ND	ND	ND	ND	0	
51	ND	ND	ND	2	ND	ND	ND	ND	0	0	
52	3	ND	ND	0	ND	1	ND	ND	4	2	
53	3	ND	ND	0	4	3	3	ND	3	0	
54	1	4	ND	0	ND	ND	ND	ND	4	2	
56	3	ND	ND	3	ND	ND	ND	ND	0	0	
57	ND	ND	ND	ND	4	0	4	ND	ND	ND	
58	0	ND	ND	ND	3	ND	0	ND	ND	ND	
59	3	ND	ND	3	4	3	ND	ND	4	2	
60	3	3	ND	4	4	4	2	ND	3	3	
61	4	4	ND	4	0	4	4	ND	4	3	
62	1	ND	ND	3	ND	ND	4	ND	0	4	
63	2	ND	ND	4	4	0	4	ND	4	4	
65	3	ND	ND	3	4	3	0	ND	4	4	
66	0	ND	ND	3	4	ND	ND	ND	3	4	
67	4	ND	ND	3	4	ND	3	ND	1	4	
68	4	4	4	1	4	4	3	3	4	2	
69	ND	ND	ND	ND	4	ND	ND	ND	ND	ND	
70	4	2	ND	3	3	ND	2	ND	3	1	
71	ND	0	ND	ND	3	4	ND	ND	ND	ND	
73	0	ND	ND	4	ND	2	ND	ND	ND	4	
74	2	4	ND	3	ND	ND	4	ND	2	0	
75	1	ND	1	0	ND	4	3	ND	ND	4	
76	3	4	ND	4	4	ND	3	ND	4	3	
77	4	4	ND	4	3	4	ND	ND	4	4	
78	1	3	ND	3	4	3	4	ND	4	2	
79	3	ND	ND	3	4	ND	ND	ND	0	4	
80	0	ND	ND	3	4	3	4	ND	ND	2	
81	0	ND	ND	0	4	ND	ND	ND	3	2	
82	3	ND	ND	4	4	3	2	ND	4	4	
83	4	ND	ND	3	4	3	4	ND	1	1	
84	2	0	ND	3	4	ND	ND	ND	2	2	
86	0	ND	ND	0	4	ND	3	ND	4	4	
87	4	ND	ND	ND	ND	ND	ND	ND	ND	ND	
88	1	ND	ND	3	4	2	4	ND	3	0	
89	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
90	ND	ND	ND	3	ND	ND	ND	ND	2	3	

Table 2 Standard Reference Water Sample No. M2
Overall Laboratory Performance

RATING	4 (Excellent)	0.00 to 0.50 Std. Dev.	0 (Poor)	> 2.00 Std. Dev.
3 (Good)	0.51 to 1.00 Std. Dev.	ND	Not determined	
2 (Satisfactory)	1.01 to 1.50 Std. Dev.	NR	Not rated	
1 (Questionable)	1.51 to 2.00 Std. Dev.			

LAB	ALK(CACO ₃)	B	BR	CA	CL	DSRD	I30	F	I	K	MG
91	4	ND	ND	4	1	1	ND	ND	3	2	
92	3	ND	1	3	4	2	ND	ND	4	2	
93	0	0	ND	0	0	ND	1	ND	4	3	
94	4	ND	ND	2	4	4	3	NO	4	3	
95	ND	4	ND	2	40	ND	ND	ND	ND	3	
96	4	4	ND	3	3	4	0	ND	4	4	
97	ND	4	ND	0	4	ND	2	ND	1	2	
98	4	1	ND	3	4	3	4	ND	4	3	
99	3	ND	ND	0	ND	4	2	ND	2	0	
100	2	ND	ND	ND	0	ND	ND	ND	ND	ND	
101	2	ND	ND	3	4	2	4	NO	4	1	
102	4	ND	ND	2	4	4	2	ND	3	4	

Table 2 Standard Reference Water Sample No. M2
Overall Laboratory Performance

RATING	4 (Excellent)	0.00 to 0.50 Std. Dev.	0 (Poor)	> 2.00 Std. Dev.								
	3 (Good)	0.51 to 1.00 Std. Dev.	ND	Not determined								
	2 (Satisfactory)	1.01 to 1.50 Std. Dev.	NR	Not rated								
	1 (Questionable)	1.51 to 2.00 Std. Dev.										
LAB	NA	NO2-N	NO3-N	P, TOTAL	PH	SiO2	SO4	SP, COND.	SR	V	N	Avg.
1	1	ND	ND	ND	3	4	ND	3	4	3	8	3.25
2	4	4	2	3	3	4	0	0	4	2	18	2.72
3	4	NR	4	ND	4	2	4	4	4	ND	17	3.53
4	ND	ND	ND	2	3	ND	2	3	ND	ND	5	2.60
5	ND	NR	4	3	4	4	3	ND	ND	ND	9	3.67
6	2	ND	4	ND	2	3	0	4	ND	ND	14	2.57
8	3	2	0	4	0	ND	2	0	ND	ND	11	1.55
9	4	3	4	4	3	ND	2	3	ND	ND	14	3.36
10	4	NR	0	3	2	ND	4	3	0	NR	14	2.50
11	4	NR	1	4	3	4	2	3	1	ND	16	2.63
12	4	3	3	0	4	4	2	4	ND	ND	15	2.73
13	4	ND	4	ND	2	ND	0	4	ND	ND	11	2.36
14	4	ND	ND	3	3	ND	ND	4	ND	ND	8	3.13
15	4	NR	4	2	2	4	4	2	ND	NR	14	2.93
16	4	NR	4	4	3	3	2	3	ND	NR	16	2.75
17	1	NR	0	4	3	ND	4	3	ND	ND	13	2.62
18	4	3	2	4	3	4	2	3	ND	ND	15	2.60
19	ND	4	2	2	4	4	2	3	ND	ND	12	2.83
20	4	ND	4	4	3	4	4	4	4	NR	16	3.69
21	1	ND	ND	4	3	4	ND	3	4	3	11	2.91
22	3	NR	4	4	4	ND	2	3	ND	ND	13	3.08
23	4	3	4	4	1	ND	3	3	ND	ND	13	3.23
24	4	ND	ND	ND	ND	4	4	ND	ND	ND	9	3.56
25	4	ND	4	ND	4	ND	ND	0	ND	ND	7	3.14
27	4	1	4	0	3	ND	0	4	ND	ND	14	2.00
28	4	NR	4	4	2	4	4	4	4	ND	16	3.63
29	4	3	4	3	3	4	2	4	ND	ND	16	3.25
30	4	ND	4	4	3	4	0	4	4	3	17	3.53
31	4	NR	3	4	0	4	4	4	ND	ND	11	3.55
32	4	2	2	4	3	4	0	0	ND	1	16	1.44
33	3	NR	4	4	4	4	ND	4	4	3	13	3.54
34	3	ND	4	ND	3	ND	4	4	ND	ND	12	3.08
35	0	2	4	4	4	0	2	4	0	4	17	2.88
36	3	4	3	ND	3	ND	ND	2	ND	ND	10	3.30
37	4	2	4	ND	3	4	4	4	ND	ND	14	3.14
38	4	4	3	3	4	2	4	4	ND	ND	15	3.07
40	3	NR	1	3	0	3	2	4	3	3	18	3.11
41	2	3	4	4	ND	2	2	3	3	ND	14	3.21
42	3	2	4	2	3	2	2	4	ND	ND	15	2.73
43	4	3	4	0	ND	ND	4	4	ND	ND	12	3.17
44	1	4	4	3	3	3	2	4	ND	ND	16	2.88

Table 2 Standard Reference Water Sample No. M2
Overall Laboratory Performance

RATING	4 (Excellent)	0.00 to 0.50 Std. Dev.	0 (Poor)	> 2.00 Std. Dev.								
	3 (Good)	0.51 to 1.00 Std. Dev.	ND	Not determined								
	2 (Satisfactory)	1.01 to 1.50 Std. Dev.	NR	Not rated								
	1 (Questionable)	1.51 to 2.00 Std. Dev.										
LAB	NA	NO2-N	NO3-N	P, TOTAL	PH	SiO2	SO4	SP. COND.	SR	V	N	Avg.
45	4	3	0	ND	4	ND	4	ND	ND	ND	13	3.08
46	3	2	4	3	3	ND	4	4	NO	ND	13	2.69
47	4	ND	ND	ND	ND	ND	4	ND	NO	ND	6	3.83
48	1	NR	3	4	3	3	4	4	0	ND	3	3.12
50	4	2	2	3	3	4	4	0	NO	ND	13	2.38
51	0	ND	ND	ND	ND	4	ND	NO	ND	4	6	1.67
52	0	3	4	3	0	0	ND	2	ND	ND	12	1.83
53	3	NR	3	4	0	ND	4	1	ND	ND	13	2.38
54	2	ND	ND	ND	3	3	0	4	4	NR	11	2.45
56	4	3	0	2	4	ND	2	4	ND	ND	11	2.27
57	ND	ND	4	ND	3	ND	0	1	ND	ND	7	2.29
58	ND	ND	ND	ND	3	ND	ND	4	ND	ND	5	2.00
59	0	ND	ND	ND	ND	ND	ND	0	ND	ND	9	2.33
60	4	ND	1	1	0	3	4	1	0	0	17	2.35
61	3	NO	ND	3	4	3	0	3	2	3	16	3.00
62	0	NR	0	1	3	ND	0	4	1	NR	12	1.75
63	4	NR	4	2	3	4	4	3	4	ND	15	3.33
65	4	NR	4	ND	0	ND	2	0	ND	ND	12	2.58
66	4	NR	4	4	ND	ND	ND	ND	ND	ND	8	3.25
67	2	4	3	3	4	ND	4	2	ND	NO	13	3.15
68	2	NR	4	4	2	3	4	3	4	NR	18	3.28
69	ND	ND	0	0	ND	ND	ND	ND	ND	ND	3	1.33
70	4	0	0	ND	ND	ND	3	ND	ND	ND	11	2.27
71	ND	NR	0	ND	ND	4	2	3	ND	ND	7	2.29
73	2	2	0	4	4	ND	1	3	ND	ND	11	2.36
74	ND	NR	3	ND	0	4	ND	4	4	3	12	2.75
75	0	ND	1	0	0	ND	4	0	ND	ND	12	1.50
76	3	ND	4	4	2	4	3	1	ND	ND	14	3.29
77	4	NR	4	ND	4	3	4	4	NO	ND	13	3.85
78	0	3	4	3	3	3	4	3	ND	ND	16	2.94
79	3	ND	ND	ND	4	ND	4	ND	ND	ND	8	3.13
80	0	ND	1	ND	4	ND	4	2	ND	ND	11	2.45
81	0	NR	4	4	0	ND	0	4	4	ND	12	2.08
82	3	1	4	4	3	ND	4	3	ND	ND	14	3.29
83	3	ND	ND	ND	4	3	4	0	ND	ND	12	2.83
84	2	3	4	ND	3	ND	3	4	0	4	14	2.57
86	2	NO	3	4	3	0	0	1	ND	ND	13	2.15
87	ND	ND	ND	ND	3	ND	ND	3	ND	ND	3	3.33
88	0	ND	4	4	4	ND	0	0	ND	ND	13	2.23
89	ND	4	4	4	4	ND	ND	ND	ND	ND	4	4.00
90	3	ND	ND	ND	ND	0	4	1	0	ND	8	2.00

Table 2 Standard Reference Water Sample No. M2
Overall Laboratory Performance

RATING	4 (Excellent)	0.00 to 0.50 Std. Dev.	0 (Poor)	> 2.00 Std. Dev.
3 (Good)	0.51 to 1.00 Std. Dev.	ND	Not determined	
2 (Satisfactory)	1.01 to 1.50 Std. Dev.	NR	Not rated	
1 (Questionable)	1.51 to 2.00 Std. Dev.			

LAB	NA	NO2-N	NO3-N	P, TOTAL	PH	SIO2	SO4	SP. COND.	SR	V	N	Avg.
91	3	ND	4	2	ND	ND	4	4	4	ND	12	3.00
92	4	NR	4	4	ND	ND	ND	ND	ND	ND	10	3.10
93	1	NR	0	0	3	3	2	1	4	4	16	1.63
94	3	ND	4	3	3	4	2	1	ND	ND	14	3.14
95	0	ND	ND	ND	ND	3	ND	ND	2	ND	6	2.33
96	4	3	3	4	3	0	4	4	0	ND	17	3.00
97	4	ND	0	ND	2	ND	ND	2	4	NR	11	2.27
98	4	ND	4	ND	4	0	2	3	ND	ND	14	3.07
99	0	1	4	3	ND	ND	0	3	ND	ND	12	1.83
100	ND	NR	4	3	4	ND	ND	2	ND	ND	6	2.50
101	4	NR	4	2	3	4	4	4	ND	ND	14	3.21
102	4	ND	4	2	2	ND	4	3	ND	ND	13	3.23

Table 3 Standard Reference Water Sample No. T3
Overall Laboratory Performance

RATING	4 (Excellent)				3.00 to 0.50 Std.				0 (Poor)				> 2.00 Std. Dev.			
	3 (Good)	3 (Satisfactory)	2 (Questionable)	1 (Poor)	0.51 to 1.00 Std.	1.01 to 1.50 Std.	1.51 to 2.00 Std.	Std. Dev.	ND	ND	ND	ND	Not determined	Not rated		
LAB	ACIDOPACOS AG	AS	B	BA	BE	CA	CD	CO	CR	TOT						
1	4	ND	ND	ND	NR	3	3	2	4	4	4	4	4	4	4	4
2	4	NR	ND	4	4	4	4	4	5	4	4	4	4	4	4	4
3	ND	3	2	ND	ND	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	3
4	ND	3	ND	ND	ND	ND	ND	ND	ND	4	ND	ND	ND	ND	ND	1
5	ND	2	ND	ND	ND	ND	ND	ND	ND	4	ND	ND	ND	ND	ND	ND
6	ND	4	ND	ND	NR	ND	ND	ND	1	4	4	4	4	NR	NR	ND
7	ND	3	4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0
8	ND	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
9	ND	4	4	ND	ND	ND	ND	ND	0	4	4	4	4	ND	ND	4
10	ND	3	ND	ND	ND	NR	ND	ND	1	4	4	4	4	NR	NR	ND
11	ND	NC	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0
12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
13	ND	4	4	ND	ND	0	ND	ND	0	4	4	4	4	ND	ND	4
14	ND	ND	ND	4	NR	ND	ND	ND	4	4	4	4	4	ND	ND	4
15	2	NR	4	NR	NR	NR	NR	NR	3	4	4	4	4	2	2	3
16	4	3	2	4	4	4	4	4	3	3	3	3	3	ND	ND	2
17	ND	ND	0	ND	ND	ND	ND	ND	0	4	4	4	4	ND	ND	4
18	ND	ND	3	ND	ND	ND	ND	ND	1	4	4	4	4	ND	ND	2
19	2	ND	NR	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4
20	3	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4
21	ND	0	2	ND	4	4	4	ND	3	4	4	4	3	1	4	4
22	ND	1	4	ND	ND	NR	ND	ND	2	3	3	3	3	ND	ND	4
23	ND	3	4	ND	4	ND	4	4	4	3	3	3	3	ND	ND	4
24	ND	ND	0	ND	0	4	ND	4	4	4	4	4	4	ND	ND	4
25	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
26	ND	ND	ND	ND	ND	ND	ND	ND	0	4	4	4	4	0	0	1
27	ND	ND	ND	ND	ND	ND	ND	ND	0	4	4	4	2	2	4	4
28	ND	4	2	ND	ND	0	ND	4	3	4	4	4	3	ND	ND	2
29	ND	4	4	4	3	4	4	ND	4	4	4	4	4	ND	ND	4
30	ND	3	4	1	1	4	ND	4	4	4	4	4	4	ND	ND	4
31	4	NR	1	ND	3	4	1	0	0	0	0	0	0	ND	ND	4
32	ND	4	ND	ND	ND	ND	4	4	4	4	4	4	4	ND	ND	4
33	ND	4	ND	ND	ND	ND	ND	ND	4	4	4	4	4	ND	ND	4
34	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
35	ND	2	4	NR	4	ND	4	3	4	4	4	4	4	2	2	4
36	ND	ND	0	ND	ND	4	ND	4	4	4	4	4	4	ND	2	1
37	ND	ND	ND	ND	ND	ND	ND	ND	ND	4	ND	4	4	ND	ND	ND
38	1	0	4	ND	4	4	ND	4	4	4	4	4	0	ND	ND	3
39	ND	4	4	ND	4	4	ND	4	2	4	4	4	4	ND	ND	4
40	ND	ND	ND	ND	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND
41	ND	ND	ND	ND	ND	ND	ND	ND	3	ND	ND	ND	ND	ND	ND	1
42	ND	4	ND	4	ND	ND	ND	ND	3	ND	ND	ND	ND	ND	ND	4
43	ND	4	4	ND	4	ND	4	3	3	ND	0	0	0	ND	ND	4
44	ND	4	4	ND	4	ND	4	ND	4	4	4	4	4	ND	ND	3
45	ND	3	4	ND	0	ND	ND	ND	0	ND	ND	ND	ND	ND	ND	3
46	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4
47	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Table 3 Standard Reference Water Sample No. T3
Overall Laboratory Performance

RATING	4 (Excellent)	0.00 to 0.50 Std. Dev.	0 (Poor)	> 2.00 Std. Dev.
	3 (Good)	0.51 to 1.00 Std. Dev.	ND	Not determined
	2 (Satisfactory)	1.01 to 1.50 Std. Dev.	NR	Not rated
	1 (Questionable)	1.51 to 2.00 Std. Dev.		

LAB	ACIDICACO ₃	AG	AS	B	BA	BE	CA	CD	CO	CR TOT
48	1	1	4	4	4	2	3	4	0	3
50	ND	4	ND	ND	0	ND	0	4	ND	4
51	ND	ND	ND	ND	ND	ND	ND	ND	ND	4
53	2	4	ND	ND	ND	ND	0	0	4	ND
54	ND	ND	ND	3	4	4	4	4	4	ND
56	ND	ND	ND	ND	ND	ND	ND	3	0	0
57	ND	0	4	ND	3	4	ND	3	0	3
58	ND	3	4	ND	0	ND	ND	2	ND	3
59	ND	ND	ND	ND	ND	ND	3	4	ND	4
60	4	1	4	ND	NR	0	4	4	4	4
61	ND	4	4	4	4	4	4	4	4	4
62	ND	4	4	ND	NR	3	4	4	2	4
65	ND	4	0	ND	4	ND	0	3	ND	4
66	ND	3	ND	ND	ND	ND	0	4	ND	4
67	ND	ND	ND	ND	ND	ND	4	0	ND	ND
68	ND	0	3	4	4	4	3	4	4	3
73	0	4	ND	ND	3	2	1	4	4	0
74	ND	4	3	0	4	3	3	3	2	4
75	1	1	ND	ND	ND	ND	3	3	ND	2
76	ND	0	4	ND	0	3	4	3	ND	4
77	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
79	ND	ND	ND	ND	ND	ND	3	ND	ND	ND
80	ND	3	ND	ND	ND	ND	2	2	ND	0
81	ND	3	4	ND	NR	ND	2	4	ND	NR
82	ND	ND	ND	ND	1	ND	ND	4	ND	ND
83	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
84	ND	3	0	ND	NR	3	3	4	ND	2
86	ND	ND	ND	ND	ND	ND	0	ND	ND	ND
88	ND	2	4	ND	NR	ND	4	4	ND	3
89	ND	ND	ND	ND	ND	ND	ND	0	ND	1
92	ND	ND	0	ND	1	ND	1	4	ND	3
93	ND	2	2	0	3	3	4	4	3	4
94	ND	4	4	ND	NR	ND	3	3	ND	4
95	ND	4	ND	ND	4	3	4	4	4	4
97	ND	4	0	2	4	4	1	4	0	4
98	ND	ND	0	ND	ND	ND	3	ND	ND	ND
99	ND	2	0	ND	0	ND	3	0	ND	3
100	ND	4	ND	ND	ND	ND	ND	4	ND	4
101	4	3	4	ND	0	ND	4	3	2	4

Table 3 Standard Reference Water Sample No. T3
Overall Laboratory Performance

RATING	4 (Excellent)	0.00 to 0.50 Std. Dev.	0 (Poor)	> 2.00 Std. Dev.						
	3 (Good)	0.51 to 1.00 Std. Dev.	ND	Not determined						
	2 (Satisfactory)	1.01 to 1.50 Std. Dev.	NR	Not rated						
	1 (Questionable)	1.51 to 2.00 Std. Dev.								
LAB	CU	FE	K	MG	MN	MO	NA	NI	PB	SE
1	4	4	ND	4	4	3	2	4	4	ND
2	4	4	3	3	4	4	4	4	NR	ND
3	4	4	0	3	4	4	3	4	2	1
4	4	ND	ND	ND	ND	ND	ND	ND	4	
5	4	2	4	ND	2	ND	3	3	NR	ND
9	ND	ND	4	4	ND	ND	3	ND	ND	ND
10	4	4	4	4	4	NR	4	3	NR	4
11	ND	3	ND	ND	ND	ND	ND	ND	ND	0
12	ND	ND	ND	2	ND	ND	0	ND	ND	ND
13	1	4	ND	4	4	NO	4	4	4	4
14	0	NR	3	4	1	4	3	3	ND	ND
15	2	4	4	2	1	ND	4	3	3	NR
16	3	4	4	4	1	4	4	4	2	2
17	2	4	2	3	4	NR	3	1	3	NR
18	0	4	4	1	3	ND	2	ND	4	4
19	3	3	ND	ND	ND	NO	ND	ND	ND	ND
20	4	3	4	4	4	ND	3	4	3	4
21	0	4	0	4	3	3	2	4	1	0
22	ND	NR	4	0	NR	0	4	NR	4	4
23	4	2	0	2	4	ND	4	3	4	4
24	4	4	1	3	4	ND	4	ND	NR	ND
25	3	0	0	ND	ND	ND	0	ND	0	ND
27	2	4	0	0	2	ND	4	2	3	ND
28	4	4	4	3	4	3	4	4	ND	0
29	4	4	3	2	4	ND	0	4	4	3
30	3	4	4	3	4	4	3	4	ND	4
32	NR	3	1	0	2	0	2	0	NR	3
33	2	4	ND	4	4	4	3	4	3	4
34	ND	4	ND	ND	2	ND	ND	ND	ND	ND
35	4	0	4	4	2	1	1	2	0	2
36	4	4	2	0	4	3	4	NR	ND	4
37	ND	ND	ND	3	NO	ND	2	ND	ND	ND
38	2	2	4	4	0	ND	1	ND	3	3
40	0	4	4	4	3	ND	4	2	ND	0
41	ND	ND	4	3	ND	ND	2	ND	ND	ND
42	3	4	ND	ND	3	ND	ND	ND	1	ND
43	4	0	4	4	1	ND	1	1	4	4
44	4	3	4	4	4	ND	4	4	4	4
45	ND	ND	ND	ND	ND	ND	ND	ND	4	4
46	3	0	3	NO	4	ND	1	ND	ND	ND
47	ND	4	ND	ND	ND	ND	ND	ND	ND	ND

Table 3 Standard Reference Water Sample No. T3
Overall Laboratory Performance

RATING	4 (Excellent)	0.00 to 0.50 Std. Dev.	0 (Poor)	> 2.00 Std. Dev.
3 (Good)	0.51 to 1.00 Std. Dev.	ND	Not determined	
2 (Satisfactory)	1.01 to 1.50 Std. Dev.	NR	Not rated	
1 (Questionable)	1.51 to 2.00 Std. Dev.			

LAB	CU	FE	K	MG	MN	MO	NA	NI	PB	SE
48	0	4	2	0	2	3	4	2	3	4
50	4	3	ND	0	4	ND	4	4	4	ND
51	ND	3	ND	ND	ND	ND	ND	4	ND	ND
53	ND	4	4	3	2	ND	4	0	4	ND
54	4	4	4	4	4	4	4	3	ND	ND
56	4	0	ND	ND	0	ND	ND	4	0	ND
57	4	4	2	ND	4	2	0	3	3	4
58	2	4	ND	ND	4	ND	ND	4	3	3
59	3	4	4	3	4	ND	2	4	1	ND
60	4	4	3	3	2	4	4	4	4	2
61	4	4	3	4	4	4	3	4	4	4
62	3	3	0	0	2	2	1	3	1	4
65	3	3	3	3	4	ND	4	ND	4	4
66	3	4	4	4	3	ND	4	3	0	ND
67	ND	4	2	3	ND	ND	4	3	1	ND
68	2	4	3	2	3	4	4	4	4	0
73	4	4	ND	2	2	ND	4	4	0	ND
74	3	3	4	1	4	ND	4	4	4	4
75	2	2	ND	0	ND	ND	0	1	ND	ND
76	2	4	4	3	4	ND	2	0	0	0
77	ND	4								
79	ND	ND	0	3	ND	ND	4	ND	ND	ND
80	4	4	ND	4	4	ND	3	3	2	ND
81	4	4	4	1	3	ND	4	3	4	4
82	4	4	4	4	1	ND	4	ND	ND	ND
83	ND	0	ND	ND	3	ND	ND	ND	ND	ND
84	3	4	3	0	4	ND	2	3	3	1
86	ND	4	4	0	4	ND	0	ND	ND	ND
88	4	0	4	0	4	ND	2	3	1	4
89	0	ND	ND	ND	ND	ND	ND	0	2	ND
92	4	4	4	4	4	ND	3	4	4	4
93	1	1	2	3	4	4	4	0	4	4
94	4	4	3	2	1	ND	4	4	4	4
95	4	4	ND	4	4	4	0	4	ND	ND
97	0	4	4	3	1	1	4	4	4	0
98	ND	4	4	3	4	ND	2	ND	4	ND
99	4	1	1	4	2	ND	4	3	0	3
100	3	3	ND	ND	ND	ND	ND	2	3	ND
101	0	0	4	0	4	ND	4	3	4	2

Table 3 Standard Reference Water Sample No. T3
Overall Laboratory Performance

RATING	4 (Excellent)	0.00 to 0.50 Std. Dev.	0 (Poor)	> 2.00 Std. Dev.
3 (Good)	0.51 to 1.00 Std. Dev.	ND	Not determined	
2 (Satisfactory)	1.01 to 1.50 Std. Dev.	NR	Not rated	
1 (Questionable)	1.51 to 2.00 Std. Dev.			

LAB	SR	TL	V	ZN	N	Avg.
1	4	ND	ND	3	15	3.47
2	4	ND	0	2	19	3.58
3	3	ND	4	4	21	3.24
4	NO	ND	ND	0	7	2.86
8	NO	ND	ND	3	11	2.91
9	NO	ND	ND	ND	5	3.80
10	0	NR	NR	4	15	3.40
11	1	ND	ND	4	6	1.83
12	ND	ND	ND	ND	2	1.00
13	ND	ND	ND	2	15	3.13
14	ND	ND	ND	3	12	3.08
15	ND	NR	NR	3	15	2.93
16	ND	ND	4	3	21	3.24
17	ND	ND	ND	4	14	2.71
18	ND	ND	ND	ND	13	2.77
19	ND	ND	ND	4	5	3.20
20	4	ND	4	3	22	3.73
21	3	1	4	4	23	2.48
22	NO	ND	ND	2	12	2.67
23	ND	3	ND	3	18	3.28
24	NO	ND	ND	4	11	3.27
25	NO	ND	ND	ND	5	0.60
27	NO	ND	ND	1	13	1.77
28	1	NO	ND	4	19	3.05
29	NO	ND	ND	4	17	3.29
30	4	ND	3	4	19	3.58
32	ND	NR	1	3	18	1.67
33	4	ND	4	4	20	3.75
34	ND	ND	ND	ND	2	3.00
35	0	4	3	2	22	2.55
36	NO	ND	0	3	16	2.69
37	NO	ND	ND	ND	3	3.00
38	NO	NO	ND	4	16	2.44
40	3	ND	ND	3	17	3.12
41	0	ND	ND	ND	5	2.20
42	NO	ND	ND	3	9	2.89
43	NO	ND	ND	3	17	2.59
44	NO	ND	ND	3	16	3.81
45	NO	ND	ND	ND	7	2.86
46	NO	ND	ND	0	8	2.00
47	ND	ND	ND	ND	1	4.00

Table 3 Standard Reference Water Sample No. T3
Overall Laboratory Performance

RATING	4 (Excellent)	0.00 to 0.50 Std. Dev.	0 (Poor)	> 2.00 Std. Dev.
	3 (Good)	0.51 to 1.00 Std. Dev.	ND	Not determined
	2 (Satisfactory)	1.01 to 1.50 Std. Dev.	NR	Not rated
	1 (Questionable)	1.51 to 2.00 Std. Dev.		

LAB	SR	TL	V	ZN	N	Avg.
48	1	3	2	2	24	2.42
50	ND	ND	ND	4	13	3.00
51	ND	ND	3	1	5	3.00
53	ND	ND	ND	4	13	2.69
54	4	ND	3	3	17	3.76
56	ND	ND	ND	0	9	1.22
57	3	3	2	4	20	2.75
58	ND	ND	ND	2	12	2.83
59	ND	ND	ND	3	12	3.25
60	1	4	4	2	22	3.18
61	4	NR	4	4	22	3.91
62	0	NR	NR	3	19	2.47
65	ND	ND	ND	4	15	3.13
66	ND	ND	ND	3	13	3.00
67	ND	ND	ND	0	9	2.33
68	3	4	4	4	23	3.22
73	ND	ND	ND	4	16	2.63
74	3	ND	4	4	21	3.24
75	ND	ND	ND	0	11	1.36
76	ND	ND	ND	4	17	2.41
77	ND	ND	ND	ND	1	4.00
79	ND	ND	ND	ND	4	2.50
80	ND	ND	ND	3	12	2.83
81	1	NC	ND	3	15	3.20
82	ND	ND	ND	3	9	3.22
83	ND	ND	ND	ND	2	1.50
84	0	0	4	4	19	2.42
86	ND	ND	ND	0	7	1.71
88	ND	ND	ND	3	15	2.80
89	ND	ND	ND	0	6	0.50
92	ND	ND	ND	4	15	3.20
93	3	3	1	0	23	2.57
94	ND	ND	ND	3	15	3.40
95	3	ND	4	3	17	3.59
97	3	ND	0	4	22	2.50
98	3	ND	ND	ND	9	3.00
99	ND	ND	ND	4	16	2.13
100	ND	ND	ND	3	8	3.25
101	0	ND	ND	0	19	2.37

Table 4 Standard Reference Water Sample No. N14
Overall Laboratory Performance

RATING	4 (Excellent)	0.00 to 0.50 Std. Dev.	0 (Poor)	> 2.00 Std. Dev.
3 (Good)	0.51 to 1.00 Std. Dev.	ND	Not determined	
2 (Satisfactory)	1.01 to 1.50 Std. Dev.	NR	Not rated	
1 (Questionable)	1.51 to 2.00 Std. Dev.			

LAB	NH3-N	NO2-N	NO3-N	ORG-N	P, TOTAL	PO4-P	N	Avg.
2	4	3	0	ND	4	4	5	3.00
4	4	ND	4	4	4	1	5	3.40
5	1	0	ND	ND	2	4	4	1.75
6	3	ND	0	ND	ND	3	3	2.00
8	4	3	0	4	ND	ND	5	2.80
9	3	3	2	4	2	4	6	3.00
10	ND	0	0	ND	0	4	4	1.00
11	2	ND	3	ND	3	ND	3	2.67
12	4	0	4	3	4	3	6	3.00
15	2	3	3	0	4	4	6	2.67
16	4	3	4	0	3	4	6	3.00
17	4	0	0	4	4	2	6	2.33
18	3	3	4	4	3	4	6	3.50
19	1	3	3	ND	3	3	5	2.60
22	3	3	4	3	4	4	6	3.50
23	1	3	4	3	4	4	6	3.17
25	ND	ND	3	ND	ND	ND	1	3.00
27	4	0	4	3	4	4	6	3.17
28	4	3	4	3	4	4	6	3.67
29	4	3	4	2	3	3	6	3.17
30	ND	ND	3	ND	3	4	3	3.33
31	4	0	3	3	3	4	6	2.83
32	2	NR	4	2	3	2	5	2.60
33	4	ND	ND	2	2	ND	3	2.67
35	4	0	3	4	4	4	6	3.17
36	3	NR	3	2	ND	ND	3	2.67
37	4	3	3	ND	ND	4	4	3.50
38	4	3	0	4	4	4	6	3.17
40	4	3	3	4	4	4	6	3.67
41	3	3	2	4	ND	4	5	3.20
42	4	3	4	3	0	NR	5	2.80
43	4	3	3	4	3	ND	5	3.40
44	0	0	4	0	2	4	6	1.67
45	ND	3	0	ND	ND	4	3	2.33
46	3	ND	4	ND	4	ND	3	3.67
50	0	3	3	1	4	4	6	2.50
53	3	3	4	ND	3	4	5	3.40
55	2	ND	3	ND	ND	4	3	3.00
56	3	3	3	2	4	4	6	3.17
57	ND	0	2	ND	0	1	4	0.75
60	2	ND	0	ND	0	2	4	1.00

Table 4 Standard Reference Water Sample No. N14
Overall Laboratory Performance

RATING	4 (Excellent)	0.00 to 0.50 Std. Dev.	0 (Poor)	> 2.00 Std. Dev.
3 (Good)	0.51 to 1.00 Std. Dev.	ND	Not determined	
2 (Satisfactory)	1.01 to 1.50 Std. Dev.	NR	Not rated	
1 (Questionable)	1.51 to 2.00 Std. Dev.			

LAB	NH3-N	NO2-N	NO3-N	ORG-N	P, TOTAL	PO4-P	N	Avg.
62	2	NR	0	3	NR	ND	3	1.67
63	4	3	4	3	3	4	6	3.50
65	3	3	3	ND	ND	ND	3	3.00
66	4	3	4	ND	3	4	5	3.60
67	2	3	3	ND	4	4	5	3.20
68	4	3	4	4	4	4	6	3.83
69	ND	ND	2	ND	1	1	3	1.33
70	0	ND	4	ND	ND	ND	2	2.00
71	4	ND	ND	ND	ND	0	2	2.00
73	4	3	2	ND	0	4	5	2.60
74	ND	3	4	ND	ND	2	3	3.00
75	1	ND	2	ND	1	4	4	2.00
78	1	3	3	3	4	3	6	2.83
79	ND	ND	0	ND	ND	ND	1	0.00
80	ND	ND	4	ND	ND	ND	1	4.00
81	0	0	3	2	4	ND	5	1.80
82	4	3	2	2	3	4	6	3.00
86	4	ND	3	ND	0	4	4	2.75
88	0	ND	1	3	3	0	5	1.40
89	3	0	4	ND	1	0	5	1.60
91	4	ND	0	2	4	0	5	2.00
92	3	3	4	ND	4	ND	4	3.50
93	0	0	0	ND	3	1	5	0.80
97	4	ND	0	ND	3	4	4	2.75
99	4	0	2	3	4	4	6	2.83
100	2	3	4	4	3	2	6	3.00
101	4	3	4	3	2	4	6	3.33

Table 5 Standard Reference Water Sample M2 Report for ALK(CACO₃)

Code Number	Reported value	% dev. from mean	Methods	References
2	150	5.3	TITRATION, COLORIMETRIC, MANUAL	1,2
3	139	-2.5	TITRATION, ELECTROMETRIC, AUTOMATED	4
5	145	1.7	OTHER	
6	146	2.4	TITRATION, COLORIMETRIC, AUTOMATED	3
9	143	0.3	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
10	143	0.3	TITRATION, COLORIMETRIC, AUTOMATED	3
11	146	2.4	TITRATION, COLORIMETRIC, MANUAL	1,2
12	139	-2.5	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
13	151	6.0	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
15	150	5.3	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
16	136	-4.6	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
17	145	1.7	TITRATION, ELECTROMETRIC, AUTOMATED	4
18	134	-6.0	TITRATION, COLORIMETRIC, MANUAL	1,2
19	140	-1.5	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
20	139	-2.5	OTHER	
22	140	-1.8	TITRATION, COLORIMETRIC, MANUAL	1,2
23	144	1.0	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
24	147	3.1	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
27	146	2.4	TITRATION, COLORIMETRIC, MANUAL	1,2
28	142	-0.4	TITRATION, ELECTROMETRIC, AUTOMATED	4
29	142	-0.4	TITRATION, COLORIMETRIC, MANUAL	1,2
30	142	-0.4	TITRATION, COLORIMETRIC, MANUAL	1,2
31	142	-0.4	NOT REPORTED	
32	200	40.3	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
33	141	-1.1	TITRATION, COLORIMETRIC, AUTOMATED	3
34	143	0.3	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
35	141	-1.1	TITRATION, ELECTROMETRIC, AUTOMATED	4
36	146	2.4	TITRATION, COLORIMETRIC, MANUAL	1,2
37	142	-0.4	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
38	136	-4.6	TITRATION, COLORIMETRIC, MANUAL	1,2
40	142	-0.4	TITRATION, ELECTROMETRIC, AUTOMATED	4
41	141	-1.1	TITRATION, COLORIMETRIC, AUTOMATED	3
42	143	0.3	TITRATION, ELECTROMETRIC, AUTOMATED	4
44	147	3.1	TITRATION, COLORIMETRIC, MANUAL	1,2
45	133	-6.7	TITRATION, COLORIMETRIC, AUTOMATED	3
46	146	2.4	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
48	140	-1.8	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
50	144	1.0	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
52	147	3.1	TITRATION, COLORIMETRIC, AUTOMATED	3
53	140	-1.8	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
54	133	-6.7	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
56	140	-1.8	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
58	128	-10.2	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
59	139	-2.5	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
60	147	3.1	TITRATION, COLORIMETRIC, MANUAL	1,2

Table 5 Standard Reference Water Sample H2 Report for ALK(CACO3)

Code Number	Reported value	% dev. from mean	Methods	References
2	150	5.3	TITRATION, COLORIMETRIC, MANUAL	1,2
3	139	-2.5	TITRATION, ELECTROMETRIC, AUTOMATED	4
5	145	1.7	OTHER	
6	146	2.4	TITRATION, COLORIMETRIC, AUTOMATED	3
9	143	0.3	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
10	143	0.3	TITRATION, COLORIMETRIC, AUTOMATED	3
11	146	2.4	TITRATION, COLORIMETRIC, MANUAL	1,2
12	139	-2.5	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
13	151	6.0	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
15	150	5.3	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
16	136	-4.6	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
17	145	1.7	TITRATION, ELECTROMETRIC, AUTOMATED	4
18	134	-6.0	TITRATION, COLORIMETRIC, MANUAL	1,2
19	140	-1.8	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
20	139	-2.5	OTHER	
22	140	+1.8	TITRATION, COLORIMETRIC, MANUAL	1,2
23	144	1.0	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
24	147	3.1	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
27	146	2.4	TITRATION, COLORIMETRIC, MANUAL	1,2
28	142	-0.4	TITRATION, ELECTROMETRIC, AUTOMATED	4
29	142	-0.4	TITRATION, COLORIMETRIC, MANUAL	1,2
30	142	-0.4	TITRATION, COLORIMETRIC, MANUAL	1,2
31	142	-0.4	NOT REPORTED	
32	200	40.3	REJECT	
33	141	-1.1	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
34	143	0.3	TITRATION, COLORIMETRIC, AUTOMATED	3
35	141	-1.1	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
36	146	2.4	TITRATION, ELECTROMETRIC, AUTOMATED	4
37	142	-0.4	TITRATION, COLORIMETRIC, MANUAL	1,2
38	136	-4.6	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
40	142	-0.4	TITRATION, ELECTROMETRIC, AUTOMATED	1,2
41	141	-1.1	TITRATION, COLORIMETRIC, AUTOMATED	4
42	143	0.3	TITRATION, ELECTROMETRIC, AUTOMATED	3
44	147	3.1	TITRATION, COLORIMETRIC, MANUAL	4
45	133	-6.7	TITRATION, COLORIMETRIC, AUTOMATED	1,2
46	146	2.4	TITRATION, ELECTROMETRIC, MANUAL	3
48	140	-1.8	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
50	164	1.0	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
52	147	3.1	TITRATION, COLORIMETRIC, AUTOMATED	1,2
53	140	-1.8	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
54	133	-6.7	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
56	140	-1.8	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
58	128	-10.2	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
59	139	-2.5	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
60	147	3.1	TITRATION, COLORIMETRIC, MANUAL	1,2

Table 5 Standard Reference Water Sample M2 Report for ALK(CACO₃)

Code Number	Reported value	% dev. from mean	Methods	References
2	150	5.3	TITRATION, COLORIMETRIC, MANUAL	1,2
3	139	-2.5	TITRATION, ELECTROMETRIC, AUTOMATED	4
5	145	1.7	OTHER	
6	146	2.4	TITRATION, COLORIMETRIC, AUTOMATED	3
9	143	0.3	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
10	143	0.3	TITRATION, COLORIMETRIC, AUTOMATED	3
11	146	2.4	TITRATION, COLORIMETRIC, MANUAL	1,2
12	139	-2.5	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
13	151	6.0	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
15	150	5.3	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
16	136	-4.6	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
17	145	1.7	TITRATION, ELECTROMETRIC, AUTOMATED	4
18	134	-5.0	TITRATION, COLORIMETRIC, MANUAL	1,2
19	140	-1.8	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
20	139	-2.5	OTHER	
22	140	-1.8	TITRATION, COLORIMETRIC, MANUAL	1,2
23	144	1.0	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
24	147	3.1	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
27	146	2.4	TITRATION, COLORIMETRIC, MANUAL	1,2
28	142	-0.4	TITRATION, ELECTROMETRIC, AUTOMATED	4
29	142	-0.4	TITRATION, COLORIMETRIC, MANUAL	1,2
30	142	-0.4	TITRATION, COLORIMETRIC, MANUAL	1,2
31	142	-0.4	TITRATION, COLORIMETRIC, MANUAL	1,2
32	200	40.3	NOT REPORTED	
33	141	-1.1	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
34	143	0.3	TITRATION, COLORIMETRIC, AUTOMATED	3
35	141	-1.1	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
36	146	2.4	TITRATION, ELECTROMETRIC, AUTOMATED	4
37	142	-0.4	TITRATION, COLORIMETRIC, MANUAL	1,2
38	136	-4.6	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
40	142	-0.4	TITRATION, COLORIMETRIC, MANUAL	1,2
41	141	-1.1	TITRATION, ELECTROMETRIC, AUTOMATED	4
42	143	0.3	TITRATION, COLORIMETRIC, AUTOMATED	3
44	147	3.1	TITRATION, COLORIMETRIC, MANUAL	4
45	133	-6.7	TITRATION, COLORIMETRIC, AUTOMATED	1,2
46	146	2.4	TITRATION, ELECTROMETRIC, MANUAL	3
48	140	-1.8	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
50	144	1.0	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
52	147	3.1	TITRATION, COLORIMETRIC, AUTOMATED	1,2,3,4
53	140	-1.8	TITRATION, ELECTROMETRIC, MANUAL	3
54	133	-6.7	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
56	140	-1.8	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
58	128	-10.2	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
59	139	-2.5	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
60	147	3.1	TITRATION, COLORIMETRIC, MANUAL	1,2

Table 5 Standard Reference Water Sample M2 Report for ALK(CACO₃)

Code Number	Reported value	% dev. from mean	Methods	References	
61	142	-0.4	TITRATION, COLORIMETRIC, MANUAL	1,2	
62	134	-6.0	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4	
63	148	3.8	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4	
65	145	1.7	TITRATION, COLORIMETRIC, MANUAL	1,2	
66	290	103.5	REJECT	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
67	143	0.3	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4	
68	141	-1.1	TITRATION, ELECTROMETRIC, AUTOMATED	4	
70	142	-0.4	NOT REPORTED		
73	130	-8.8	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4	
74	148	3.8	TITRATION, COLORIMETRIC, MANUAL	1,2	
75	151	6.0	TITRATION, COLORIMETRIC, MANUAL	1,2	
76	138	-3.2	OTHER		
77	143	0.3	TITRATION, ELECTROMETRIC, AUTOMATED	4	
78	152	6.7	TITRATION, COLORIMETRIC, MANUAL	1,2	
79	145	1.7	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4	
80	90	-36.8	REJECT	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
81	100	-29.8	REJECT	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
82	145	1.7	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4	
83	142	-0.4	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4	
84	137	-3.9	TITRATION, ELECTROMETRIC, AUTOMATED	4	
86	105	-26.3	REJECT	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
87	143	0.3	TITRATION, COLORIMETRIC, AUTOMATED	3	
88	151	6.0	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4	
91	144	1.0	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4	
92	138	-3.2	NOT REPORTED		
93	167	17.2	REJECT	TITRATION, COLORIMETRIC, MANUAL	1,2
94	144	1.0	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4	
96	141	-1.1	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4	
98	144	1.0	TITRATION, ELECTROMETRIC, AUTOMATED	4	
99	140	-1.8	TITRATION, COLORIMETRIC, MANUAL	1,2	
100	148	3.8	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4	
101	148	3.8	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4	
102	144	1.0	TITRATION, COLORIMETRIC, MANUAL	1,2	

78 Labs had a total range of 90 to 290 and a mean of 142.5
 with a standard deviation of 4.9 and a 95% confidence interval of the mean +/- 1.1.

Table 5 Standard Reference Water Sample M2 Report for 8

Code Number	Reported value	% dev. from mean	Methods	References
2	160	-13.1	EMISSION, IC PLASMA	
3	210	14.1	NOT REPORTED	
6	300	62.9	COLORIMETRIC, AZOMETHINE, AUTOMATED	5
9	190	3.2	COLORIMETRIC, CURCUMIN	1,2,3,4
11	260	41.2	COLORIMETRIC, CURCUMIN	1,2,3,4
14	170	-7.7	EMISSION, IC PLASMA	
15	< 1000		IGNORED OTHER	
16	160	-13.1	EMISSION, IC PLASMA	
20	140	-24.0	EMISSION, IC PLASMA	
21	180	-2.2	EMISSION, IC PLASMA	
24	120	-34.8	EMISSION, IC PLASMA	
28	180	-2.2	COLORIMETRIC, CURCUMIN	1,2,3,4
29	150	-18.5	EMISSION, IC PLASMA	
30	190	3.2	NOT REPORTED	
32	60	-67.4	EMISSION, IC PLASMA	
33	130	-29.4	EMISSION, IC PLASMA	
35	< 250		IGNORED COLORIMETRIC, CURCUMIN	1,2,3,4
40	190	3.2	COLORIMETRIC, DIANTHRIMIDE	4
44	60	-67.4	NOT REPORTED	
45	500	171.6	REJECT NOT REPORTED	
46	230	24.9	COLORIMETRIC, CURCUMIN	1,2,3,4
48	170	-7.7	EMISSION, IC PLASMA	
54	160	-13.1	EMISSION, IC PLASMA	
60	250	35.8	NOT REPORTED	
61	190	3.2	EMISSION, IC PLASMA	
68	180	-2.2	EMISSION, DC PLASMA	
70	110	-40.3	NOT REPORTED	
71	370	101.0	COLORIMETRIC, CURCUMIN	1,2,3,4
74	160	-13.1	COLORIMETRIC, CURCUMIN	1,2,3,4
76	200	8.6	COLORIMETRIC, CURCUMIN	1,2,3,4
77	210	14.1	COLORIMETRIC, AZOMETHINE, AUTOMATED	5
78	220	19.5	NOT REPORTED	
84	330	79.2	NOT REPORTED	
93	550	198.7	REJECT OTHER	
95	160	-13.1	EMISSION, IC PLASMA	
96	200	8.6	NOT REPORTED	
97	190	3.2	EMISSION, IC PLASMA	
98	80	-56.5	COLORIMETRIC, CARMINE (CARMINIC ACID)	2,4

38 Labs had a total range of 60 to 550 and a mean of 184
 with a standard deviation of 66 and a 95% confidence interval of the mean +/- 23.

Table 5 Standard Reference Water Sample M2 Report for BR

Code Number	Reported value	% dev. from mean	Methods	References
3	320	4.7	NOT REPORTED	
5	< 600		IGNORED TITRIMETRIC, REDOX	2,4
11	320	4.7	OTHER	
16	270	-11.7	OTHER	
19	380	24.3	OTHER	
68	260	-15.0	OTHER	
75	510	66.8	NOT REPORTED	
92	80	-73.8	COLORIMETRIC, CHLORAMINE-T	1

8 Labs had a total range of 80 to 510 and a mean of 306
 with a standard deviation of 130 and a 95% confidence interval of the mean +/- 121.

Table 5 Standard Reference Water Sample M2 Report for CA

Code Number	Reported value	% dev. from mean	Methods	References	
1	62	-0.7	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
2	63	0.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
3	63	0.9	NOT REPORTED		
5	63	0.9	TITRATION, EDTA	1,3	
6	63	0.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
8	44	-29.6	REJECT	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
9	62	-0.7	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
10	61	-2.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
11	60	-3.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
12	59	-5.5	OTHER		
13	80	28.1	REJECT	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
14	61	-2.3	EMISSION, IC PLASMA	5	
15	61	-2.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
16	73	16.9	REJECT	EMISSION, IC PLASMA	5
17	62	-0.7	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
18	63	0.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
20	62	-0.7	EMISSION, IC PLASMA	5	
21	58	-7.1	EMISSION, IC PLASMA	5	
22	60	-3.9	OTHER		
23	63	0.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
24	64	2.5	EMISSION, IC PLASMA	5	
27	67	7.3	TITRATION, EDTA	1,3	
28	61	-2.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
29	64	2.5	EMISSION, IC PLASMA	5	
30	53	0.9	NOT REPORTED		
32	67	7.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
33	62	-0.7	EMISSION, IC PLASMA	5	
34	61	-2.3	NOT REPORTED		
35	65	4.1	EMISSION, IC PLASMA	5	
36	61	-2.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
37	64	2.5	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
38	56	-10.4	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
40	60	-3.9	EMISSION, IC PLASMA	5	
41	62	-0.7	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
42	63	0.9	TITRATION, EDTA	1,3	
43	61	-2.3	NOT REPORTED		
44	62	-0.7	NOT REPORTED		
45	63	0.9	NOT REPORTED		
46	156	149.7	REJECT	TITRATION, EDTA	1,3
47	64	2.5	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
48	62	-0.7	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
50	55	-12.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
51	59	-5.5	OTHER		
52	50	-20.0	REJECT	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
53	68	8.9		ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4

Table 5 Standard Reference Water Sample M2 Report for CA

Code Number	Reported value	% dev. from mean	Methods	References
54	68	8.9	EMISSION, IC PLASMA	5
56	61	-2.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
59	65	4.1	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
60	62	-0.7	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
61	63	0.9	EMISSION, IC PLASMA	5
62	61	-2.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
63	63	0.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
65	65	4.1	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
66	61	-2.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
67	65	4.1	NOT REPORTED	
68	67	7.3	EMISSION, IC PLASMA	5
70	61	-2.3	NOT REPORTED	
73	62	-0.7	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
74	60	-3.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
75	112	79.3	REJECT NOT REPORTED	
76	63	0.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
77	62	-0.7	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
78	60	-3.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
79	65	4.1	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
80	61	-2.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
81	70	12.1	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
82	62	-0.7	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
83	61	-2.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
84	64	2.5	NOT REPORTED	
86	49	-21.6	REJECT ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
88	64	2.5	NOT REPORTED	
90	61	-2.3	OTHER	
91	62	-0.7	NOT REPORTED	
92	60	-3.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
93	50	-20.0	REJECT ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
94	66	5.7	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
95	65	5.7	EMISSION, IC PLASMA	5
96	65	4.1	NOT REPORTED	
97	110	76.1	REJECT ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
98	64	2.5	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
99	53	-15.2	REJECT ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
101	61	-2.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
102	59	-5.5	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4

83 Labs had a total range of 44 to 156 and a mean of 62.5
 with a standard deviation of 2.6 and a 95% confidence interval of the mean +/- 0.6.

Table 5 Standard Reference Water Sample M2 Report for CL

Code Number	Reported value	% dev. from mean	Methods	References
2	35	11.2	COLORIMETRIC, FERRIC THIOCYANATE, AUTOMATED	1,3,4
3	32	-1.1	NOT REPORTED	
4	31	-4.2	NOT REPORTED	
5	32	-1.1	TITRATION, SILVER NITRATE	1,2,4
6	31	-4.2	TITRATION, SILVER NITRATE	1,2,4
10	35	8.1	COLORIMETRIC, FERRIC THIOCYANATE, AUTOMATED	1,3,4
11	30	-7.3	ION CHROMATOGRAPHY	2,6
12	25	-22.8	REJECT ION SELECTIVE ELECTRODE	2
13	73	125.5	REJECT TITRATION, SILVER NITRATE	1,2,4
15	36	11.2	TITRATION, SILVER NITRATE	1,2,4
16	31	-4.2	ION CHROMATOGRAPHY	2,6
17	32	-1.1	OTHER	
18	28	-13.5	COLORIMETRIC, FERRIC THIOCYANATE, AUTOMATED	1,3,4
19	32	-1.1	TITRATION, SILVER NITRATE	1,2,4
20	31	-4.2	COLORIMETRIC, FERRIC THIOCYANATE, AUTOMATED	1,3,4
22	27	-16.6	TITRATION, SILVER NITRATE	1,2,4
23	31	-4.2	TITRATION, MERCURIC NITRATE	1,2,3,4
25	34	5.0	ION SELECTIVE ELECTRODE	2
27	32	-1.1	TITRATION, SILVER NITRATE	1,2,4
28	32	-1.1	COLORIMETRIC, FERRIC THIOCYANATE, AUTOMATED	1,3,4
29	31	-4.2	TITRATION, SILVER NITRATE	1,2,4
30	32	-1.1	NOT REPORTED	
31	32	-1.1	NOT REPORTED	
32	48	48.3	REJECT TITRATION, SILVER NITRATE	1,2,4
33	30	-7.3	COLORIMETRIC, FERRIC THIOCYANATE, AUTOMATED	1,3,4
34	35	8.1	NOT REPORTED	
35	32	-1.1	COLORIMETRIC, FERRIC THIOCYANATE, AUTOMATED	1,3,4
36	33	2.0	TITRATION, SILVER NITRATE	1,2,4
37	31	-4.2	TITRATION, SILVER NITRATE	1,2,4
38	33	2.0	COLORIMETRIC, FERRIC THIOCYANATE, AUTOMATED	1,3,4
40	33	2.0	COLORIMETRIC, FERRIC THIOCYANATE, AUTOMATED	1,3,4
41	33	2.0	COLORIMETRIC, FERRIC THIOCYANATE, AUTOMATED	1,3,4
42	33	2.0	TITRATION, SILVER NITRATE	1,2,4
43	33	2.0	NOT REPORTED	
44	32	-1.1	NOT REPORTED	
45	33	2.0	NOT REPORTED	
46	37	14.3	TITRATION, MERCURIC NITRATE	1,2,3,4
47	32	-1.1	ION CHROMATOGRAPHY	2,6
48	32	-1.1	TITRATION, MERCURIC NITRATE	1,2,3,4
50	34	5.0	COLORIMETRIC, FERRIC THIOCYANATE, AUTOMATED	1,3,4
53	32	-1.1	COLORIMETRIC, FERRIC THIOCYANATE, AUTOMATED	1,3,4
57	32	-1.1	ION CHROMATOGRAPHY	2,6
58	31	-4.2	NOT REPORTED	
59	32	-1.1	TITRATION, MERCURIC NITRATE	1,2,3,4
60	32	-1.1	NOT REPORTED	

Table 5 Standard Reference Water Sample M2 Report for CL

Code Number	Reported value	% dev. from mean	Methods	References	
61	39	20.5	REJECT	TITRATION, MERCURIC NITRATE TITRATION, MERCURIC NITRATE	1,2,3,4
63	32	-1.1		TITRATION, SILVER NITRATE	1,2,3,4
65	33	2.0		TITRATION, SILVER NITRATE	1,2,4
66	32	-1.1		NOT REPORTED	1,2,4
67	33	2.0		OTHER	
68	32	-1.1		NOT REPORTED	
69	33	2.0		NOT REPORTED	
70	34	5.0		TITRATION, MERCURIC NITRATE	1,2,3,4
71	31	+4.2		COLORIMETRIC, FERRIC THIOCYANATE, AUTOMATED	1,3,4
76	33	2.0		COLORIMETRIC, FERRIC THIOCYANATE, AUTOMATED	1,3,4
77	31	+4.2		TITRATION, MERCURIC NITRATE	1,2,3,4
78	32	-1.1		TITRATION, SILVER NITRATE	1,2,4
79	32	-1.1		TITRATION, MERCURIC NITRATE	1,2,3,4
80	32	-1.1		COLORIMETRIC, FERRIC THIOCYANATE, AUTOMATED	1,3,4
81	33	2.0		COLORIMETRIC, FERRIC THIOCYANATE, AUTOMATED	1,3,4
82	32	-1.1		TITRATION, SILVER NITRATE	1,2,4
83	32	-1.1		NOT REPORTED	1,2,4
84	33	2.0		ION CHROMATOGRAPHY	2,6
86	33	2.0		NOT REPORTED	
88	32	-1.1		NOT REPORTED	
91	36	11.2		TITRATION, SILVER NITRATE	1,2,4
92	33	2.0		ION CHROMATOGRAPHY	2,6
93	38	17.4		COLORIMETRIC, FERRIC THIOCYANATE, AUTOMATED	1,3,4
94	32	-1.1		NOT REPORTED	
96	34	5.0		OTHER	
97	33	2.0		TITRATION, SILVER NITRATE	1,2,4
98	32	-1.1		COLORIMETRIC, FERRIC THIOCYANATE, AUTOMATED	1,3,4
100	27	-16.6		TITRATION, MERCURIC NITRATE	1,2,3,4
101	32	-1.1		COLORIMETRIC, FERRIC THIOCYANATE, AUTOMATED	1,3,4
102	33	2.0			

75 Labs had a total range of 25 to 73 and a mean of 32.4
 with a standard deviation of 1.8 and a 95% confidence interval of the mean +/- 0.4.

Table 5 Standard Reference Water Sample M2 Report for DSRD 180

Code Number	Reported value	% dev. from mean	Methods	References
2	530	0.5	RESIDUE, FILTRABLE	1
3	510	-3.3	NOT REPORTED	3
6	540	2.4	RESIDUE ON EVAPORATION	4
8	610	15.7	REJECT	REJECT
9	535	1.4	RESIDUE, FILTRABLE	3
10	520	-1.4	RESIDUE, FILTRABLE	1
11	505	-4.2	RESIDUE ON EVAPORATION	2
12	520	-1.4	RESIDUE, FILTRABLE	1
13	520	-1.4	RESIDUE, FILTRABLE	1
15	520	-1.4	RESIDUE, FILTRABLE	1
16	515	-2.4	RESIDUE, FILTRABLE	3
17	530	0.5	RESIDUE, FILTRABLE	1
18	565	7.1	RESIDUE ON EVAPORATION	4
19	490	-7.1	RESIDUE, FILTRABLE	1
20	525	+0.5	RESIDUE ON EVAPORATION	2
22	500	-5.2	RESIDUE, FILTRABLE	1
23	560	6.2	RESIDUE ON EVAPORATION	4
24	515	-2.4	RESIDUE ON EVAPORATION	4
27	500	-5.2	RESIDUE, FILTRABLE	3
28	515	-2.4	RESIDUE, FILTRABLE	1
29	490	-7.1	RESIDUE, FILTRABLE	3
30	550	4.3	RESIDUE ON EVAPORATION	4
31	530	0.5	NOT REPORTED	4
32	575	9.0	RESIDUE, FILTRABLE	1
34	515	-2.4	RESIDUE, FILTRABLE	1
35	545	3.3	RESIDUE, FILTRABLE	3
36	520	-1.4	RESIDUE, FILTRABLE	1
37	550	4.3	RESIDUE, FILTRABLE	1
38	530	0.5	RESIDUE, FILTRABLE	1
40	525	-0.5	RESIDUE ON EVAPORATION	4
42	390	-26.1	REJECT	REJECT
43	925	75.4	NOT REPORTED	2
44	555	5.2	RESIDUE ON EVAPORATION	4
45	520	-1.4	RESIDUE, FILTRABLE	1
46	515	-2.4	RESIDUE, FILTRABLE	1
48	520	-1.4	RESIDUE, FILTRABLE	1
50	550	4.3	RESIDUE, FILTRABLE	1
52	560	6.2	RESIDUE ON EVAPORATION	2
53	540	2.4	RESIDUE ON EVAPORATION	4
57	645	22.3	REJECT	REJECT
59	510	-3.3	RESIDUE, FILTRABLE	3
60	535	1.4	RESIDUE, FILTRABLE	1
61	520	-1.4	RESIDUE, FILTRABLE	1
63	450	-14.7	REJECT	REJECT
65	510	-3.3	RESIDUE ON EVAPORATION	4
			RESIDUE ON EVAPORATION	4

Table 5 Standard Reference Water Sample M2 Report for DSRD 180

Code Number	Reported value	% dev. from mean	Methods	References
68	520	-1.4	RESIDUE ON EVAPORATION	2
71	520	-1.4	NOT REPORTED	
73	505	-4.2	RESIDUE ON EVAPORATION	4
75	520	-1.4	RESIDUE, FILTRABLE	1
77	530	0.5	RESIDUE, FILTRABLE	1
78	545	3.3	RESIDUE, FILTRABLE	1
80	545	3.3	RESIDUE, FILTRABLE	1
82	515	-2.4	RESIDUE, FILTRABLE	3
83	510	-3.3	RESIDUE ON EVAPORATION	4
88	550	4.3	RESIDUE ON EVAPORATION	2
91	560	6.2	RESIDUE, FILTRABLE	1
92	505	-4.2	RESIDUE, FILTRABLE	1
94	520	-1.4	RESIDUE, FILTRABLE	1
96	535	1.4	RESIDUE, FILTRABLE	1
98	515	-2.4	RESIDUE ON EVAPORATION	4
99	535	1.4	RESIDUE, FILTRABLE	3
101	550	4.3	RESIDUE, FILTRABLE	1
102	530	0.5		

63 Labs had a total range of 390 to 925 and a mean of 527.4
 with a standard deviation of 18.9 and a 95% confidence interval of the mean +/- 5.0.

Table 5 Standard Reference Water Sample M2 Report for F

Code Number	Reported value	% dev. from mean	Methods	References	
2	0.9	1.5	ION SELECTIVE ELECTRODE, MANUAL	1,2,3,4	
3	0.8	-9.7	ION SELECTIVE ELECTRODE, MANUAL	1,2,3,4	
6	0.2	-77.4	REJECT	ION SELECTIVE ELECTRODE, MANUAL	1,2,3,4
8	0.8	-9.7	ION SELECTIVE ELECTRODE, MANUAL	1,2,3,4	
9	1.0	12.8	COLORIMETRIC, CERDUS ALIZARIN "COMPLEXONE", AUTOMATED	3	
10	0.7	-21.0	ION SELECTIVE ELECTRODE, AUTOMATED	4	
11	1.3	45.7	REJECT	ION CHROMATOGRAPHY	2,6
12	0.8	-9.7	ION SELECTIVE ELECTRODE, MANUAL	1,2,3,4	
13	0.8	-9.7	ION SELECTIVE ELECTRODE, MANUAL	1,2,3,4	
15	0.9	1.5	ION SELECTIVE ELECTRODE, MANUAL	1,2,3,4	
16	1.5	59.2	REJECT	ION CHROMATOGRAPHY	2,6
17	1.1	24.1	ION SELECTIVE ELECTRODE, MANUAL	1,2,3,4	
18	0.8	-9.7	ION SELECTIVE ELECTRODE, AUTOMATED	4	
19	1.0	12.8	COLORIMETRIC, SPAONS	1,2,3	
20	0.8	-9.7	ION SELECTIVE ELECTRODE, AUTOMATED	4	
22	0.9	1.5	ION SELECTIVE ELECTRODE, MANUAL	1,2,3,4	
25	0.8	-9.7	ION SELECTIVE ELECTRODE, MANUAL	1,2,3,4	
27	1.0	12.8	ION SELECTIVE ELECTRODE, MANUAL	1,2,3,4	
28	0.8	-9.7	ION SELECTIVE ELECTRODE, MANUAL	1,2,3,4	
29	0.3	-9.7	ION SELECTIVE ELECTRODE, MANUAL	1,2,3,4	
30	0.9	1.5	ION CHROMATOGRAPHY	2,6	
31	0.9	1.5	NOT REPORTED		
34	0.8	-9.7	ION SELECTIVE ELECTRODE, MANUAL	1,2,3,4	
35	0.9	1.5	ION SELECTIVE ELECTRODE, AUTOMATED	4	
36	0.9	1.5	ION SELECTIVE ELECTRODE, MANUAL	1,2,3,4	
37	1.0	12.8	ION SELECTIVE ELECTRODE, MANUAL	1,2,3,4	
38	1.0	12.8	ION SELECTIVE ELECTRODE, MANUAL	1,2,3,4	
40	0.9	1.5	ION SELECTIVE ELECTRODE, AUTOMATED	4	
41	1.0	12.8	COLORIMETRIC, SPAONS	1,2,3	
42	0.8	-9.7	ION SELECTIVE ELECTRODE, MANUAL	1,2,3,4	
43	0.9	1.5	NOT REPORTED		
44	0.9	1.5	ION SELECTIVE ELECTRODE, MANUAL	1,2,3,4	
45	0.9	1.5	ION SELECTIVE ELECTRODE, MANUAL	1,2,3,4	
48	0.8	-9.7	ION SELECTIVE ELECTRODE, AUTOMATED	4	
53	0.8	-9.7	NOT REPORTED		
57	0.9	1.5	ION CHROMATOGRAPHY	2,6	
58	1.1	24.1	ION SELECTIVE ELECTRODE, MANUAL	1,2,3,4	
60	1.0	12.8	ION SELECTIVE ELECTRODE, MANUAL	1,2,3,4	
61	0.9	1.5	COLORIMETRIC, LANTHANUM ALIZARIN "COMPLEXONE", AUTOMATED	1	
62	0.9	1.5	ION SELECTIVE ELECTRODE, MANUAL	1,2,3,4	
63	0.9	1.5	COLORIMETRIC, ZIRCONIUM ERIOCHROME	4	
65	0.6	-32.3	ION SELECTIVE ELECTRODE, MANUAL	1,2,3,4	
67	0.8	-9.7	ION SELECTIVE ELECTRODE, MANUAL	1,2,3,4	
68	0.8	-9.7	ION SELECTIVE ELECTRODE, AUTOMATED	4	
70	1.0	12.8	NOT REPORTED		

Table 5 Standard Reference Water Sample M2 Report for F

Code Number	Reported value	% dev. from mean	Methods	References
74	0.9	1.5	ION SELECTIVE ELECTRODE, AUTOMATED	4
75	0.8	-9.7	ION SELECTIVE ELECTRODE, MANUAL	1,2,3,4
76	0.8	-9.7	ION SELECTIVE ELECTRODE, MANUAL	1,2,3,4
78	0.9	1.5	ION SELECTIVE ELECTRODE, MANUAL	1,2,3,4
80	0.9	1.5	COLORIMETRIC, SPAONS	1,2,3
82	1.0	12.8	ION SELECTIVE ELECTRODE, MANUAL	1,2,3,4
83	0.9	1.5	COLORIMETRIC, ZIRCONIUM ERIOCHROME	4
86	0.8	-9.7	ION SELECTIVE ELECTRODE, MANUAL	1,2,3,4
88	0.9	1.5	COLORIMETRIC, CEROUS ALIZARIN "COMPLEXONE", AUTOMATED	3
93	0.7	-21.0	ION CHROMATOGRAPHY	2,6
94	0.8	-9.7	ION SELECTIVE ELECTRODE, AUTOMATED	4
96	1.1	24.1	COLORIMETRIC, SPAONS	1,2,3
97	1.0	12.8	ION SELECTIVE ELECTRODE, MANUAL	1,2,3,4
98	0.9	1.5	ION SELECTIVE ELECTRODE, MANUAL	1,2,3,4
99	1.0	12.8	ION SELECTIVE ELECTRODE, MANUAL	1,2,3,4
101	0.9	1.5	ION SELECTIVE ELECTRODE, AUTOMATED	4
102	1.0	12.8	COLORIMETRIC, LANTHANUM ALIZARIN "COMPLEXONE", AUTOMATED	1

62 Labs had a total range of 0.2 to 1.5 and a mean of 0.89
 with a standard deviation of 0.10 and a 95% confidence interval of the mean +/- 0.03.

Table 5 Standard Reference Water Sample M2 Report for I

Code Number	Reported value	% dev. from mean	Methods	References
3	15.0	39.9	COLORIMETRIC, CERIC ARSENIOUS OXIDATION, AUTOMATED	4
40	10.0	-12.5	COLORIMETRIC, CERIC ARSENIOUS OXIDATION, MANUAL	2,4
68	3.3	-27.4	COLORIMETRIC, CERIC ARSENIOUS OXIDATION, AUTOMATED	4

3 Labs had a total range of 8.3 to 16.0 and a mean of 11.43
 with a standard deviation of 4.05 and a 95% confidence interval of the mean +/- 10.05.

Table 5 Standard Reference Water Sample M2 Report for K

Code Number	Reported value	% dev. from mean	Methods	References
2	3.0	-19.4	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
3	3.7	-0.7	OTHER	1,2,3,4
6	3.9	4.7	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
8	3.4	-3.7	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
9	3.3	-11.4	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
10	4.5	20.8	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
11	3.7	-0.7	FLAME, EMISSION, PHOTOMETRIC	1,2
12	3.4	-8.7	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
14	4.6	23.5	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
15	3.6	-3.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
16	4.3	15.5	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
17	5.5	47.7	OTHER	1,2,3,4
18	3.4	-3.7	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
20	3.8	2.0	OTHER	
21	3.4	-8.7	OTHER	
22	3.8	2.0	FLAME, EMISSION, PHOTOMETRIC	1,2
23	4.0	7.4	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
24	3.8	2.0	OTHER	
25	3.3	2.0	OTHER	
27	6.8	82.6	REJECT ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
28	3.6	-3.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
29	3.6	-3.3	OTHER	
30	3.7	-0.7	OTHER	
32	1.9	-49.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
34	3.0	-19.4	FLAME, EMISSION, PHOTOMETRIC	1,2
35	3.5	-6.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
37	3.0	-19.4	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
38	3.5	-6.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
40	3.4	-8.7	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
41	3.5	-6.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
42	5.3	42.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
43	3.6	-3.3	NOT REPORTED	
44	2.8	-24.8	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
45	3.5	-6.0	NOT REPORTED	
46	4.1	10.1	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
47	3.5	-3.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
48	4.2	12.8	FLAME, EMISSION, PHOTOMETRIC	1,2
51	8.9	139.0	REJECT OTHER	
52	3.6	-3.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
53	3.4	-8.7	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
54	3.3	2.0	OTHER	
56	2.2	-40.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
59	3.8	2.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
60	4.2	12.8	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
61	3.7	-0.7	OTHER	

Table 5 Standard Reference Water Sample M2 Report for K

Code Number	Reported value	% dev. from mean	Methods	References
62	7.4	98.7	REJECT	1,2,3,4
63	3.8	2.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
65	4.0	7.4	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
66	3.3	-11.4	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
67	4.7	26.2	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
68	3.7	-0.7	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
70	3.4	-8.7	ATOMIC ABSORPTION, DIRECT, AIR NOT REPORTED	1,2,3,4
74	4.4	18.1	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
76	3.5	-6.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
77	3.5	-6.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
78	3.5	-3.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
79	8.5	128.2	REJECT	1,2,3,4
81	4.1	10.1	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
82	3.5	-6.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
83	4.7	26.2	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
84	3.1	-16.8	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
86	3.8	2.0	FLAME, EMISSION, PHOTOMETRIC	1,2
88	4.3	15.5	FLAME, EMISSION, PHOTOMETRIC	1,2
90	4.4	18.1	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
91	3.3	-11.4	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
92	3.6	-3.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
93	3.9	6.7	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
94	4.0	7.4	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
96	3.9	4.7	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
97	4.8	23.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
98	3.8	2.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
99	2.9	-22.1	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
101	3.9	4.7	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
102	3.4	-8.7	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4

74 Labs had a total range of 1.9 to 8.9 and a mean of 3.72
 with a standard deviation of 0.59 and a 95% confidence interval of the mean +/- 0.14.

Table 5 Standard Reference Water Sample M2 Report for MG

Code Number	Reported value	% dev. from mean	Methods	References
1	28	0.2	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
2	27	-3.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
3	29	3.3	NOT REPORTED	
5	28	0.2	TITRATION, EDTA	2
5	27	-3.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
7	27	-3.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
10	27	-3.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
12	30	7.4	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
13	28	0.2	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
14	26	-6.9	EMISSION, IC PLASMA	5
15	30	7.4	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
16	30	7.4	EMISSION, IC PLASMA	5
17	28	0.2	OTHER	
18	30	7.4	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
20	28	0.2	EMISSION, IC PLASMA	5
21	26	-6.9	EMISSION, IC PLASMA	5
22	28	0.2	OTHER	
23	28	0.2	NOT REPORTED	
24	28	0.2	EMISSION, IC PLASMA	5
27	22	-21.2	REJECT TITRATION, EDTA	2
28	27	-3.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
29	28	0.2	EMISSION, IC PLASMA	5
30	28	0.2	NOT REPORTED	
32	31	11.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
33	27	-3.3	EMISSION, IC PLASMA	5
34	26	-6.9	NOT REPORTED	
35	29	3.8	EMISSION, IC PLASMA	5
37	27	-3.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
38	26	-6.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
40	28	0.2	EMISSION, IC PLASMA	5
41	28	0.2	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
42	28	0.2	TITRATION, EDTA	2
43	28	0.2	NOT REPORTED	
44	29	3.8	NOT REPORTED	
45	28	0.2	NOT REPORTED	
47	28	0.2	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
48	29	3.8	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
50	42	50.4	REJECT ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
51	24	-14.1	OTHER	
52	30	7.4	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
53	32	14.6	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
54	30	7.4	OTHER	
56	24	-14.1	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
59	26	-6.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
60	29	3.8	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4

Table 5 Standard Reference Water Sample M2 Report for MG

Code Number	Reported value	% dev. from mean	Methods	References
61	29	3.3	EMISSION, IC PLASMA	5
62	28	0.2	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
63	28	0.2	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
65	28	0.2	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
66	23	0.2	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
67	23	0.2	NOT REPORTED	1,2,3,4
68	30	7.4	EMISSION, IC PLASMA	5
70	25	-10.5	NOT REPORTED	
73	28	0.2	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
74	24	-14.1	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
75	23	0.2	NOT REPORTED	1,2,3,4
76	29	3.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
77	28	0.2	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
78	26	-6.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
79	23	0.2	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
80	26	-6.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
81	30	7.4	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
82	28	0.2	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
83	25	-10.5	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
84	25	-5.9	NOT REPORTED	
86	28	0.2	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
88	36	28.9	REJECT NOT REPORTED	1,2,3,4
90	29	3.8	OTHER	
91	26	-6.9	NOT REPORTED	
92	26	-6.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
93	29	3.8	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
94	29	3.8	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
95	29	3.8	EMISSION, IC PLASMA	5
96	23	0.2	NOT REPORTED	
97	30	7.4	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
98	29	3.8	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
99	37	32.5	REJECT ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
101	31	11.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
102	23	0.2	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4

79 Labs had a total range of 22 to 42 and a mean of 27.9
 with a standard deviation of 1.6 and a 95% confidence interval of the mean +/- 0.4.

Table 5 Standard Reference Water Sample M2 Report for NA

Code Number	Reported value	% dev. from mean	Methods	References	
1	71	8.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
2	65	-0.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
3	67	2.7	NOT REPORTED		
6	61	-6.5	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
8	63	-3.4	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
9	66	1.2	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
10	67	2.7	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
11	65	1.2	PLASMA, INDUCTIVELY COUPLED	5	
12	65	1.2	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
13	55	1.2	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
14	65	1.2	PLASMA, INDUCTIVELY COUPLED	5	
15	64	-1.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
16	67	2.7	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
17	72	10.4	FLAME EMISSION, PHOTOMETRIC	1,2	
18	66	1.2	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
20	65	-0.3	PLASMA, INDUCTIVELY COUPLED	5	
21	59	-9.5	PLASMA, INDUCTIVELY COUPLED	5	
22	53	-3.4	FLAME EMISSION, PHOTOMETRIC	1,2	
23	66	1.2	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
24	65	-0.3	PLASMA, INDUCTIVELY COUPLED	5	
25	64	-1.9	OTHER		
27	65	-0.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
28	65	-0.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
29	67	2.7	PLASMA, INDUCTIVELY COUPLED	5	
30	65	-0.3	NOT REPORTED		
31	64	-1.9	NOT REPORTED		
32	66	1.2	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
33	63	4.3	PLASMA, INDUCTIVELY COUPLED	5	
34	69	5.6	NOT REPORTED		
35	50	-23.3	REJECT	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
36	68	4.3	FLAME EMISSION, PHOTOMETRIC	1,2	
37	66	1.2	NOT REPORTED		
38	64	-1.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
40	53	-3.4	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
41	61	-6.5	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
42	68	4.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
43	65	-0.3	NOT REPORTED		
44	71	8.9	NOT REPORTED		
45	67	2.7	NOT REPORTED		
46	63	-3.4	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
47	65	-0.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
48	71	8.9	FLAME EMISSION, PHOTOMETRIC	1,2	
50	66	1.2	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
51	13	-30.1	REJECT	FLAME EMISSION, PHOTOMETRIC	1,2
52	56	-14.1	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	

Table 5 Standard Reference Water Sample M2 Report for NA

Code Number	Reported value	% dev. from mean	Methods	References
53	62	-4.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
54	70	7.3	PLASMA, INDUCTIVELY COUPLED	5
56	65	-0.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
59	56	-14.1	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
60	67	2.7	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
61	68	4.3	PLASMA, INDUCTIVELY COUPLED	5
62	79	21.1	REJECT ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
63	67	2.7	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
65	67	2.7	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
66	55	-0.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
67	70	7.3	NOT REPORTED	
68	70	7.3	PLASMA, INDUCTIVELY COUPLED	5
70	64	-1.9	NOT REPORTED	
73	60	-8.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
75	91	39.5	REJECT NOT REPORTED	
76	63	-3.4	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
77	65	-0.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
78	81	24.2	REJECT ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
79	62	-4.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
80	44	-32.5	REJECT ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
81	73	11.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
82	63	-3.4	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
83	68	4.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
84	60	-3.0	NOT REPORTED	
86	61	-6.5	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
88	54	-17.2	NOT REPORTED	
90	68	4.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
91	63	4.3	NOT REPORTED	
92	64	-1.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
93	58	-11.1	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
94	68	4.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
95	74	13.5	PLASMA, INDUCTIVELY COUPLED	5
96	66	1.2	NOT REPORTED	
97	65	1.2	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
98	65	-0.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
99	56	-14.1	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
101	66	1.2	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
102	65	-0.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4

83 Labs had a total range of 13 to 91 and a mean of 65.2
 with a standard deviation of 3.8 and a 95% confidence interval of the mean +/- 0.9.

Table 5 Standard Reference Water Sample M2 Report for NO₂-N

Code Number	Reported value	% dev. from mean	Methods	References
2	0.010	-28.6	COLORIMETRIC, DIAZOTIZATION	1,3,4
3	<0.010		IGNORED COLORIMETRIC, DIAZOTIZATION	1,3,4
5	<0.020		IGNORED COLORIMETRIC, DIAZOTIZATION	1,3,4
8	0.002	-85.7	COLORIMETRIC, DIAZOTIZATION	1,3,4
9	0.020	42.9	COLORIMETRIC, DIAZOTIZATION	1,3,4
10	<0.010		IGNORED OTHER	1,3,4
11	<0.050		IGNORED ION CHROMATOGRAPHY	2,6
12	0.020	42.9	COLORIMETRIC, DIAZOTIZATION	1,3,4
15	<0.050		IGNORED COLORIMETRIC, DIAZOTIZATION	1,3,4
16	<0.010		IGNORED COLORIMETRIC, DIAZOTIZATION	1,3,4
17	<0.010		IGNORED COLORIMETRIC, DIAZOTIZATION	1,3,4
18	0.020	42.9	COLORIMETRIC, DIAZOTIZATION	1,3,4
19	0.014	0.0	COLORIMETRIC, DIAZOTIZATION	1,3,4
22	<0.001		IGNORED COLORIMETRIC, DIAZOTIZATION	1,3,4
23	0.020	42.9	COLORIMETRIC, DIAZOTIZATION	1,3,4
27	0.030	114.3	COLORIMETRIC, DIAZOTIZATION	1,3,4
28	<0.002		IGNORED COLORIMETRIC, DIAZOTIZATION	1,3,4
29	0.020	42.9	COLORIMETRIC, DIAZOTIZATION	1,3,4
31	<0.001		IGNORED NOT REPORTED	1,3,4
32	0.002	-35.7	COLORIMETRIC, DIAZOTIZATION	1,3,4
33	<0.010		IGNORED COLORIMETRIC, DIAZOTIZATION	1,3,4
35	0.004	-71.4	COLORIMETRIC, DIAZOTIZATION	1,3,4
36	0.015	7.1	COLORIMETRIC, DIAZOTIZATION	1,3,4
37	0.001	-92.9	COLORIMETRIC, DIAZOTIZATION	1,3,4
38	0.010	-28.6	COLORIMETRIC, DIAZOTIZATION	1,3,4
40	<0.010		IGNORED COLORIMETRIC, DIAZOTIZATION	1,3,4
41	0.020	42.9	COLORIMETRIC, DIAZOTIZATION	1,3,4
42	0.002	-85.7	COLORIMETRIC, DIAZOTIZATION	1,3,4
43	0.020	42.9	COLORIMETRIC, DIAZOTIZATION	1,3,4
44	0.010	-28.6	OTHER	1,3,4
45	0.020	42.9	COLORIMETRIC, DIAZOTIZATION	1,3,4
46	0.001	-92.9	COLORIMETRIC, DIAZOTIZATION	1,3,4
48	<0.001		IGNORED COLORIMETRIC, DIAZOTIZATION	1,3,4
50	0.002	-85.7	COLORIMETRIC, DIAZOTIZATION	1,3,4
52	0.020	42.9	COLORIMETRIC, DIAZOTIZATION	1,3,4
53	<0.050		IGNORED NOT REPORTED	1,3,4
56	0.020	42.9	COLORIMETRIC, DIAZOTIZATION	1,3,4
62	<0.020		IGNORED COLORIMETRIC, DIAZOTIZATION	1,3,4
63	<0.001		IGNORED COLORIMETRIC, DIAZOTIZATION	1,3,4
65	<0.010		IGNORED COLORIMETRIC, DIAZOTIZATION	1,3,4
66	<0.010		IGNORED COLORIMETRIC, DIAZOTIZATION	1,3,4
67	0.010	-28.6	COLORIMETRIC, DIAZOTIZATION	1,3,4
68	<0.010		IGNORED COLORIMETRIC, DIAZOTIZATION	1,3,4
70	3.000		REJECT NOT REPORTED	1,3,4
71	<0.001		IGNORED ION CHROMATOGRAPHY	2,6

Table 5 Standard Reference Water Sample M2 Report for NO₂-N

Code Number	Reported value	% dev. from mean	Methods	References
73	0.005	+64.3	COLORIMETRIC, DIAZOTIZATION	1,3,4
74	<0.010		IGNORED COLORIMETRIC, DIAZOTIZATION	1,3,4
77	<0.001		IGNORED COLORIMETRIC, DIAZOTIZATION	1,3,4
78	0.007	+50.0	COLORIMETRIC, DIAZOTIZATION	1,3,4
81	<0.020		IGNORED COLORIMETRIC, DIAZOTIZATION	1,3,4
82	0.030	114.3	COLORIMETRIC, DIAZOTIZATION	1,3,4
84	0.020	42.9	COLORIMETRIC, DIAZOTIZATION	1,3,4
89	0.010	+28.6	COLORIMETRIC, DIAZOTIZATION	1,3,4
92	<0.001		IGNORED OTHER	
93	<1.000		IGNORED ION CHROMATOGRAPHY	2,6
96	0.020	42.9	COLORIMETRIC, DIAZOTIZATION	1,3,4
99	0.030	114.3	COLORIMETRIC, DIAZOTIZATION	1,3,4
100	<0.050		IGNORED COLORIMETRIC, DIAZOTIZATION	1,3,4
101	<0.001		IGNORED COLORIMETRIC, DIAZOTIZATION	1,3,4

59 Labs had a total range of 0.001 to 3.000 and a mean of .0140
 with a standard deviation of .0090 and a 95% confidence interval of the mean +/- .0033.

Table 5 Standard Reference Water Sample M2 Report for NO₃-N

Code Number	Reported value	% dev. from mean	Methods	References
2	2.9	11.9	COLORIMETRIC, BRUCINE	1,2,3,4
3	2.7	4.2	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
5	2.6	0.3	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
6	2.7	4.2	OTHER	
8	1.4	-46.0	REJECT OTHER	
9	2.5	-3.5	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
10	2.0	-22.8	COLORIMETRIC, BRUCINE	1,2,3,4
11	2.2	-15.1	ION CHROMATOGRAPHY	2,6
12	2.3	8.0	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
13	2.7	4.2	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
15	2.7	4.2	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
16	2.5	-3.5	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
17	3.5	38.9	REJECT COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
18	2.3	-11.3	COLORIMETRIC, BRUCINE	1,2,3,4
19	2.9	11.9	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
20	2.6	0.3	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
22	2.6	0.3	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
23	2.6	0.3	COLORIMETRIC, HYDRAZINE REDUCTION, DIAZOTIZATION	3
25	2.7	4.2	OTHER	
27	2.7	4.2	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
28	2.6	0.3	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
29	2.6	0.3	COLORIMETRIC, BRUCINE	1,2,3,4
30	2.6	0.3	ION CHROMATOGRAPHY	2,6
31	2.4	-7.4	NOT REPORTED	
32	2.3	-11.3	COLORIMETRIC, BRUCINE	1,2,3,4
33	2.5	-3.5	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
34	2.6	0.3	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
35	2.7	4.2	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
36	2.8	8.0	COLORIMETRIC, BRUCINE	1,2,3,4
37	2.6	0.3	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
38	2.8	8.0	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
40	3.0	15.7	COLORIMETRIC, HYDRAZINE REDUCTION, DIAZOTIZATION	3
41	2.5	-3.5	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
42	2.6	0.3	COLORIMETRIC, BRUCINE	1,2,3,4
43	2.5	-3.5	COLORIMETRIC, HYDRAZINE REDUCTION, DIAZOTIZATION	3
44	2.7	4.2	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
45	2.0	-22.8	COLORIMETRIC, BRUCINE	1,2,3,4
46	2.6	0.3	COLORIMETRIC, BRUCINE	1,2,3,4
48	2.4	-7.4	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
50	2.3	-11.3	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
52	2.5	-3.5	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
53	2.4	-7.4	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
56	2.0	-22.8	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
57	2.7	4.2	ION CHROMATOGRAPHY	2,6
60	2.1	-19.0	COLORIMETRIC, BRUCINE	1,2,3,4

Table 5 Standard Reference Water Sample M2 Report for NO3-N

Code Number	Reported value	% dev. from mean	Methods	References
62	0.3	-69.1	REJECT	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION
63	2.6	0.3		COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION
65	2.5	-3.5		COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION
66	2.7	4.2		COLORIMETRIC, HYDRAZINE REDUCTION, DIAZOTIZATION
67	2.4	-7.4		COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION
68	2.5	-3.5		COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION
69	0.1	-95.1	REJECT	COLORIMETRIC, HYDRAZINE REDUCTION, DIAZOTIZATION
70	3.2	23.5		NOT REPORTED
71	3.1	19.6		COLORIMETRIC, BRUCINE
73	1.7	-34.4	REJECT	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION
74	2.4	-7.4		COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION
75	2.1	-19.0		COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION
76	2.6	0.3		COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION
77	2.5	-3.5		COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION
78	2.5	-3.5		COLORIMETRIC, BRUCINE
80	3.0	15.7		COLORIMETRIC, BRUCINE
81	2.6	0.3		COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION
82	2.5	-3.5		COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION
84	2.5	-3.5		NOT REPORTED
86	2.3	3.0		ION CHROMATOGRAPHY
88	2.5	-3.5		COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION
89	2.7	4.2		COLORIMETRIC, BRUCINE
91	2.5	-3.5		COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION
92	2.6	0.3		COLORIMETRIC, DEVARDA'S ALLOY REDUCTION, DIAZOTIZATION
93	3.2	23.5		COLORIMETRIC, BRUCINE
94	2.6	0.3		COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION
96	2.8	3.0		COLORIMETRIC, BRUCINE
97	3.3	27.3		COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION
98	2.5	-3.5		OTHER
99	2.7	4.2		COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION
100	2.6	0.3		COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION
101	2.6	0.3		COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION
102	2.6	0.3		COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION

78 Labs had a total range of 0.1 to 3.6 and a mean of 2.59
 with a standard deviation of 0.25 and a 95% confidence interval of the mean +/- 0.06.

Table 5 Standard Reference Water Sample M2 Report for P, TOTAL

Code Number	Reported value	% dev. from mean	Methods	References
2	0.52	6.0	COLORIMETRIC, H ₂ SO ₄ /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
4	0.55	12.1	COLORIMETRIC, H ₂ SO ₄ /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
5	0.44	-10.3	COLORIMETRIC, H ₂ SO ₄ /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
8	0.48	-2.2	COLORIMETRIC, H ₂ SO ₄ /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
9	0.47	-4.2	COLORIMETRIC, H ₂ SO ₄ /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
10	0.54	10.1	COLORIMETRIC, BLK DIG, H ₂ SO ₄ , K&HG SO ₄ , PHOSPHOMOLYBDATE	4
11	0.48	-2.2	COLORIMETRIC, H ₂ SO ₄ /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
12	0.38	-22.5	COLORIMETRIC, H ₂ SO ₄ /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
14	0.52	5.0	EMISSION, IC PLASMA	
15	0.56	14.1	COLORIMETRIC, H ₂ SO ₄ /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
16	0.50	1.9	COLORIMETRIC, BLK DIG, H ₂ SO ₄ , K&HG SO ₄ , PHOSPHOMOLYBDATE	4
17	0.49	-0.1	OTHER	
18	0.48	-2.2	COLORIMETRIC, BLK DIG, H ₂ SO ₄ , K&HG SO ₄ , PHOSPHOMOLYBDATE	4
19	0.43	-12.4	COLORIMETRIC, H ₂ SO ₄ /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
20	0.47	-4.2	COLORIMETRIC, H ₂ SO ₄ /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
21	0.51	4.0	EMISSION, IC PLASMA	
22	0.51	4.0	COLORIMETRIC, H ₂ SO ₄ /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
23	0.48	-2.2	COLORIMETRIC, BLK DIG/H ₂ SO ₄ , K&HG SO ₄ , PHOSPHOMOLYBDATE	4
27	0.38	-22.5	COLORIMETRIC, H ₂ SO ₄ /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
28	0.49	-0.1	COLORIMETRIC, H ₂ SO ₄ /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
29	0.45	-3.3	COLORIMETRIC, H ₂ SO ₄ /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
30	0.47	-4.2	COLORIMETRIC, H ₂ SO ₄ /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
31	0.48	-2.2	COLORIMETRIC, H ₂ SO ₄ /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
32	0.48	-2.2	NOT REPORTED	
33	0.47	-4.2	EMISSION, IC PLASMA	
35	0.50	1.9	COLORIMETRIC, H ₂ SO ₄ /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
38	0.45	-6.2	COLORIMETRIC, H ₂ SO ₄ /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
40	0.52	6.0	COLORIMETRIC, H ₂ SO ₄ /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
41	0.47	-4.2	COLORIMETRIC, H ₂ SO ₄ /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
42	0.55	12.1	COLORIMETRIC, BLK DIG, H ₂ SO ₄ , K&HG SO ₄ , PHOSPHOMOLYBDATE	4
43	0.34	-30.7	COLORIMETRIC, H ₂ SO ₄ /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
44	0.45	-6.2	COLORIMETRIC, H ₂ SO ₄ /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
46	0.45	-3.3	COLORIMETRIC, H ₂ SO ₄ /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
48	0.51	4.0	COLORIMETRIC, BLK DIG, H ₂ SO ₄ , K&HG SO ₄ , PHOSPHOMOLYBDATE	4
50	0.44	-10.3	COLORIMETRIC, H ₂ SO ₄ /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
52	0.52	6.0	COLORIMETRIC, H ₂ SO ₄ /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
53	0.50	1.9	COLORIMETRIC, H ₂ SO ₄ /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
56	0.56	14.1	COLORIMETRIC, H ₂ SO ₄ /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
60	0.59	20.3	COLORIMETRIC, H ₂ SO ₄ /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
61	0.53	8.0	COLORIMETRIC, H ₂ SO ₄ /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
62	0.40	-18.5	COLORIMETRIC, BLK DIG, H ₂ SO ₄ , K&HG SO ₄ , PHOSPHOMOLYBDATE	4
63	0.57	16.2	COLORIMETRIC, H ₂ SO ₄ /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
66	0.49	-0.1	COLORIMETRIC, H ₂ SO ₄ /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
67	0.46	-6.2	COLORIMETRIC, H ₂ SO ₄ /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
68	0.51	4.0	COLORIMETRIC, H ₂ SO ₄ /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4

Table 5 Standard Reference Water Sample M2 Report for P, TOTAL

Code Number	Reported value	% dev. from mean	Methods	References
69	0.63	26.4	COLORIMETRIC, H ₂ S ₀ 4/PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
73	0.51	4.0	COLORIMETRIC, H ₂ S ₀ 4/PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
75	0.70	42.7	REJECT COLORIMETRIC, BLK DIG, H ₂ S ₀ 4, K&HG S ₀ 4, PHOSPHOMOLYBDATE	4
76	0.47	-4.2	COLORIMETRIC, H ₂ S ₀ 4/PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
78	0.46	-5.2	COLORIMETRIC, H ₂ S ₀ 4/PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
81	0.50	1.9	COLORIMETRIC, BLK DIG, H ₂ S ₀ 4, K&HG S ₀ 4, PHOSPHOMOLYBDATE	4
82	0.48	-2.2	COLORIMETRIC, H ₂ S ₀ 4/PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
86	0.51	4.0	COLORIMETRIC, H ₂ S ₀ 4/PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
88	0.50	1.9	COLORIMETRIC, H ₂ S ₀ 4/PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
89	0.49	-0.1	OTHER	
91	0.57	16.2	COLORIMETRIC, BLK DIG, H ₂ S ₀ 4, K&HG S ₀ 4, PHOSPHOMOLYBDATE	4
92	0.50	1.9	COLORIMETRIC, H ₂ S ₀ 4/PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
93	0.66	34.5	COLORIMETRIC, H ₂ S ₀ 4/PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
94	0.46	-5.2	OTHER	
96	0.50	1.9	COLORIMETRIC, H ₂ S ₀ 4/PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
99	0.52	6.0	COLORIMETRIC, H ₂ S ₀ 4/PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
100	0.45	-8.3	COLORIMETRIC, H ₂ S ₀ 4/PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
101	0.42	-14.4	COLORIMETRIC, H ₂ S ₀ 4/PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
102	0.42	-14.4	COLORIMETRIC, H ₂ S ₀ 4/PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4

64 Labs had a total range of 0.34 to 0.70 and a mean of 0.491
 with a standard deviation of 0.055 and a 95% confidence interval of the mean +/- 0.014.

Table 5 Standard Reference Water Sample M2 Report for PH

Code Number	Reported value	% dev. from mean	Methods	References
1	8.4	1.0	ELECTROMETRIC	1,2,3,4
2	3.4	1.0	ELECTROMETRIC	1,2,3,4
3	3.3	-0.2	ELECTROMETRIC	1,2,3,4
4	3.2	-1.4	ELECTROMETRIC	1,2,3,4
5	3.3	-0.2	ELECTROMETRIC	1,2,3,4
6	3.1	-2.6	ELECTROMETRIC	1,2,3,4
8	7.3	-6.2	REJECT ELECTROMETRIC	1,2,3,4
9	8.4	1.0	ELECTROMETRIC	1,2,3,4
10	3.5	2.2	ELECTROMETRIC	1,2,3,4
11	3.4	1.0	ELECTROMETRIC	1,2,3,4
12	3.3	-0.2	ELECTROMETRIC	1,2,3,4
13	3.1	-2.6	ELECTROMETRIC	1,2,3,4
14	3.4	1.0	ELECTROMETRIC	1,2,3,4
15	8.5	2.2	ELECTROMETRIC	1,2,3,4
16	8.4	1.0	ELECTROMETRIC	1,2,3,4
17	8.2	-1.4	ELECTROMETRIC	1,2,3,4
18	8.2	-1.4	ELECTROMETRIC	1,2,3,4
19	3.3	-0.2	ELECTROMETRIC	1,2,3,4
20	3.2	-1.4	ELECTROMETRIC	1,2,3,4
21	3.4	1.0	NOT REPORTED	
22	8.3	-0.2	ELECTROMETRIC	1,2,3,4
23	3.6	3.4	ELECTROMETRIC	1,2,3,4
25	3.3	-0.2	ELECTROMETRIC	1,2,3,4
27	8.2	-1.4	ELECTROMETRIC	1,2,3,4
28	8.5	2.2	ELECTROMETRIC	1,2,3,4
29	8.2	-1.4	ELECTROMETRIC	1,2,3,4
30	3.4	1.0	ELECTROMETRIC	1,2,3,4
31	7.7	-7.4	REJECT NOT REPORTED	
32	8.2	-1.4	ELECTROMETRIC	1,2,3,4
33	8.3	-0.2	ELECTROMETRIC	1,2,3,4
34	8.4	1.0	ELECTROMETRIC	1,2,3,4
35	8.3	-0.2	ELECTROMETRIC	1,2,3,4
36	8.2	-1.4	ELECTROMETRIC	1,2,3,4
37	8.4	1.0	ELECTROMETRIC	1,2,3,4
38	8.3	-0.2	ELECTROMETRIC	1,2,3,4
40	8.0	-3.8	ELECTROMETRIC	1,2,3,4
42	8.4	1.0	ELECTROMETRIC	1,2,3,4
44	8.4	1.0	ELECTROMETRIC	1,2,3,4
45	8.3	-0.2	ELECTROMETRIC	1,2,3,4
46	8.2	-1.4	ELECTROMETRIC	1,2,3,4
48	8.4	1.0	ELECTROMETRIC	1,2,3,4
50	3.4	1.0	ELECTROMETRIC	1,2,3,4
52	3.7	4.6	ELECTROMETRIC	1,2,3,4
53	3.0	-3.8	ELECTROMETRIC	1,2,3,4
54	8.2	-1.4	ELECTROMETRIC	1,2,3,4

Table 5 Standard Reference Water Sample M2 Report for PH

Code Number	Reported value	% dev. from mean	Methods	References	
56	8.3	-0.2	ELECTROMETRIC	1,2,3,4	
57	8.2	-1.4	ELECTROMETRIC	1,2,3,4	
58	3.4	1.0	ELECTROMETRIC	1,2,3,4	
59	3.1	-2.6	ELECTROMETRIC	1,2,3,4	
60	7.9	-5.0	ELECTROMETRIC	1,2,3,4	
61	8.3	-0.2	OTHER		
62	8.4	1.0	ELECTROMETRIC	1,2,3,4	
63	3.4	1.0	ELECTROMETRIC	1,2,3,4	
65	3.0	-3.8	ELECTROMETRIC	1,2,3,4	
67	8.3	-0.2	ELECTROMETRIC	1,2,3,4	
68	8.5	2.2	ELECTROMETRIC	1,2,3,4	
73	8.3	-0.2	ELECTROMETRIC	1,2,3,4	
74	8.7	4.6	ELECTROMETRIC	1,2,3,4	
75	7.5	-9.8	REJECT	ELECTROMETRIC	1,2,3,4
76	3.5	2.2	ELECTROMETRIC	1,2,3,4	
77	3.3	-0.2	ELECTROMETRIC	1,2,3,4	
78	8.4	1.0	ELECTROMETRIC	1,2,3,4	
79	3.3	-0.2	ELECTROMETRIC	1,2,3,4	
80	8.3	-0.2	ELECTROMETRIC	1,2,3,4	
81	8.0	-3.8	ELECTROMETRIC	1,2,3,4	
82	3.2	-1.4	ELECTROMETRIC	1,2,3,4	
83	8.3	-0.2	ELECTROMETRIC	1,2,3,4	
84	8.4	1.0	ELECTROMETRIC	1,2,3,4	
86	8.4	1.0	ELECTROMETRIC	1,2,3,4	
87	8.4	1.0	ELECTROMETRIC	1,2,3,4	
88	8.3	-0.2	ELECTROMETRIC	1,2,3,4	
89	3.3	-0.2	ELECTROMETRIC	1,2,3,4	
93	8.4	1.0	ELECTROMETRIC	1,2,3,4	
94	8.4	1.0	ELECTROMETRIC	1,2,3,4	
95	3.2	-1.4	ELECTROMETRIC	1,2,3,4	
97	8.5	2.2	ELECTROMETRIC	1,2,3,4	
98	8.3	-0.2	ELECTROMETRIC	1,2,3,4	
100	3.3	-0.2	ELECTROMETRIC	1,2,3,4	
101	3.2	-1.4	ELECTROMETRIC	1,2,3,4	
102	8.5	2.2	ELECTROMETRIC	1,2,3,4	

80 Labs had a total range of 7.5 to 8.7 and a mean of 8.32
 with a standard deviation of 0.15 and a 95% confidence interval of the mean +/- 0.03.

Table 5 Standard Reference Water Sample M2 Report for SiO₂

Code Number	Reported value	% dev. from mean	Methods	References
1	9.5	7.8	COLORIMETRIC, ASCORBIC ACID REDUCTION TO MOLYBDATE BLUE, AUTO.	4
2	8.9	1.0	EMISSION, IC PLASMA	5
3	10.5	19.1	NOT REPORTED	
5	9.2	4.4	COLORIMETRIC, ASCORBIC ACID REDUCTION TO MOLYBDATE BLUE, AUTO.	4
6	10.0	13.5	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	4
11	8.3	-5.8	COLORIMETRIC, MOYBOSILICIC ACID	1,2,3
12	9.4	6.6	COLORIMETRIC, MOYBOSILICIC ACID	1,2,3
15	9.5	7.8	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	4
16	10.0	13.5	EMISSION, IC PLASMA	5
18	9.1	3.2	COLORIMETRIC, MOYBOSILICIC ACID	1,2,3
19	9.3	5.5	COLORIMETRIC, SODIUM SULFITE REDUCTION TO MOLYBDATE BLUE	4
20	8.5	-3.6	COLORIMETRIC, ASCORBIC ACID REDUCTION TO MOLYBDATE BLUE, AUTO.	4
21	8.5	-3.6	EMISSION, IC PLASMA	5
24	9.2	4.4	EMISSION, IC PLASMA	5
28	9.1	3.2	CO'METRIC, AMINO-NAPTHOL SULFONIC ACID REDUCE-HETEROPOLY BLUE	3
29	9.4	6.5	EMISSION, IC PLASMA	5
30	9.0	2.1	NOT REPORTED	
31	9.4	6.6	NOT REPORTED	
32	8.9	1.0	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	4
33	9.5	7.8	COLORIMETRIC, ASCORBIC ACID REDUCTION TO MOLYBDATE BLUE, AUTO.	4
35	3.3	-52.6	REJECT	
37	8.9	1.0	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	4
38	6.9	-21.7	COLORIMETRIC, ASCORBIC ACID REDUCTION TO MOLYBDATE BLUE, AUTO.	4
40	9.8	11.2	COLORIMETRIC, ASCORBIC ACID REDUCTION TO MOLYBDATE BLUE, AUTO.	4
41	7.2	-18.3	COLORIMETRIC, ASCORBIC ACID REDUCTION TO MOLYBDATE BLUE, AUTO.	4
42	6.9	-21.7	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	4
44	7.9	-10.4	NOT REPORTED	
48	10.0	13.5	COLORIMETRIC, MOYBOSILICIC ACID	1,2,3
50	9.2	4.4	COLORIMETRIC, MOYBOSILICIC ACID	1,2,3
51	9.5	-3.6	OTHER	
52	5.4	-38.7	COLORIMETRIC, ASCORBIC ACID REDUCTION TO MOLYBDATE BLUE, AUTO.	4
54	9.8	11.2	EMISSION, IC PLASMA	5
60	7.8	-11.5	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	4
61	9.8	11.2	EMISSION, IC PLASMA	5
63	9.0	2.1	COLORIMETRIC, ASCORBIC ACID REDUCTION TO MOLYBDATE BLUE, AUTO.	4
68	9.3	11.2	EMISSION, IC PLASMA	5
71	9.2	4.4	COLORIMETRIC, MOYBOSILICIC ACID	1,2,3
74	9.3	5.5	COLORIMETRIC, MOYBOSILICIC ACID	1,2,3
76	9.2	4.4	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	4
77	8.0	-9.2	COLORIMETRIC, SODIUM SULFITE REDUCTION TO MOLYBDATE BLUE	4
78	9.8	11.2	COLORIMETRIC, MOYBOSILICIC ACID	1,2,3
83	10.0	13.5	COLORIMETRIC, SODIUM SULFITE REDUCTION TO MOLYBDATE BLUE	4
86	11.8	33.9	CO'METRIC, AMINO-NAPTHOL SULFONIC ACID REDUCE-HETEROPOLY BLUE	3
90	5.0	-43.3	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	4
93	9.8	11.2	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	4

Table 5 Standard Reference Water Sample M2 Report for SiO₂

Code Number	Reported value	% dev. from mean	Methods	References
94	8.8	-0.2	COLORIMETRIC, ASCORBIC ACID REDUCTION TO MOLYBDATE BLUE,AUTO.	4
95	9.3	11.2	EMISSION, IC PLASMA	5
96	5.0	-43.3	NOT REPORTED	
98	+0.9	-44.4	COLORIMETRIC, MOLYBDOSILICIC ACID	1,2,3
101	9.2	4.4	CO'METRIC,AMINO-NAPTHOL SULFONIC ACID REDUCE-HETEROPOLY BLUE	3

50 Labs had a total range of 3.3 to 11.8 and a mean of 8.81
 with a standard deviation of 1.42 and a 95% confidence interval of the mean +/- 0.41.

Table 5 Standard Reference Water Sample M2 Report for SO4

Code Number	Reported value	% dev. from mean	Methods	References	
2	230	9.1	TURBIDIMETRIC, BARIUM SULFATE	1,2,3	
3	215	2.0	NOT REPORTED		
4	200	-5.1	COLORIMETRIC, METHYL THYMOL BLUE, AUTOMATED	1,3,4	
5	205	-2.8	COLORIMETRIC, METHYL THYMOL BLUE, AUTOMATED	1,3,4	
6	190	-9.9	THORIN TITRATION	2,4	
8	200	-5.1	GRAVIMETRIC, BARIUM SULFATE	1,2,3	
9	220	4.4	OTHER		
10	210	-0.4	COLORIMETRIC, CHLORANILATE, AUTOMATED	3	
11	220	4.4	ION CHROMATOGRAPHY	2,6	
12	220	4.4	TURBIDIMETRIC, BARIUM SULFATE	1,2,3	
13	190	-9.9	GRAVIMETRIC, BARIUM SULFATE	1,2,3	
15	210	-0.4	GRAVIMETRIC, BARIUM SULFATE	1,2,3	
16	200	-5.1	TURBIDIMETRIC, BARIUM SULFATE	1,2,3	
17	210	-0.4	OTHER		
18	200	-5.1	COLORIMETRIC, CHLORANILATE, AUTOMATED	3	
19	220	4.4	TURBIDIMETRIC, BARIUM SULFATE	1,2,3	
20	210	-0.4	COLORIMETRIC, METHYL THYMOL BLUE, AUTOMATED	1,3,4	
22	220	4.4	GRAVIMETRIC, BARIUM SULFATE	1,2,3	
23	205	-2.8	TURBIDIMETRIC, BARIUM SULFATE	1,2,3	
24	210	-0.4	GRAVIMETRIC, BARIUM SULFATE	1,2,3	
27	245	16.2	REJECT	TURBIDIMETRIC, BARIUM SULFATE	1,2,3
28	210	-0.4	TURBIDIMETRIC, BARIUM SULFATE	1,2,3	
29	220	4.4	TURBIDIMETRIC, BARIUM SULFATE	1,2,3	
30	190	-9.9	NOT REPORTED		
31	215	2.0	NOT REPORTED		
32	270	28.1	REJECT	GRAVIMETRIC, BARIUM SULFATE	1,2,3
34	210	-0.4	NOT REPORTED		
35	220	4.4	COLORIMETRIC, METHYL THYMOL BLUE, AUTOMATED	1,3,4	
37	215	2.0	COLORIMETRIC, METHYL THYMOL BLUE, AUTOMATED	1,3,4	
38	210	-0.4	COLORIMETRIC, METHYL THYMOL BLUE, AUTOMATED	1,3,4	
40	220	4.4	TURBIDIMETRIC, BARIUM SULFATE	1,2,3	
41	200	-5.1	COLORIMETRIC, METHYL THYMOL BLUE, AUTOMATED	1,3,4	
42	220	4.4	TURBIDIMETRIC, BARIUM SULFATE	1,2,3	
43	210	-0.4	NOT REPORTED		
44	220	4.4	NOT REPORTED		
45	215	2.0	NOT REPORTED		
46	210	-0.4	TURBIDIMETRIC, BARIUM SULFATE	1,2,3	
47	210	-0.4	ION CHROMATOGRAPHY	2,6	
48	210	-0.4	TURBIDIMETRIC, BARIUM SULFATE	1,2,3	
50	215	2.0	GRAVIMETRIC, BARIUM SULFATE	1,2,3	
53	210	-0.4	COLORIMETRIC, METHYL THYMOL BLUE, AUTOMATED	1,3,4	
54	230	9.1	OTHER		
56	220	4.4	NOT REPORTED		
57	130	-38.3	REJECT	ION CHROMATOGRAPHY	2,6
60	210	-0.4	NOT REPORTED		

Table 5 Standard Reference Water Sample M2 Report for SO4

Code Number	Reported value	% dev. from mean	Methods	References
61	135	-12.2	TURBIDIMETRIC, BARIUM SULFATE	1,2,3
62	100	-52.6	REJECT COLORIMETRIC, METHYL THYMOL BLUE, AUTOMATED	1,3,4
63	210	-0.4	THORIN TITRATION	2,4
65	220	4.4	COLORIMETRIC, METHYL THYMOL BLUE, AUTOMATED	1,3,4
67	210	-0.4	NOT REPORTED	
68	210	-0.4	OTHER	
70	205	-2.8	NOT REPORTED	
71	220	4.4	GRAVIMETRIC, BARIUM SULFATE	1,2,3
73	225	5.7	TURBIDIMETRIC, BARIUM SULFATE	1,2,3
75	215	2.0	NOT REPORTED	
76	205	-2.8	COLORIMETRIC, METHYL THYMOL BLUE, AUTOMATED	1,3,4
77	210	-0.4	COLORIMETRIC, METHYL THYMOL BLUE, AUTOMATED	1,3,4
78	215	2.0	TURBIDIMETRIC, BARIUM SULFATE	1,2,3
79	210	-0.4	THORIN TITRATION	2,4
80	210	-0.4	TURBIDIMETRIC, BARIUM SULFATE	1,2,3
81	150	-23.8	REJECT COLORIMETRIC, METHYL THYMOL BLUE, AUTOMATED	1,3,4
82	210	-0.4	COLORIMETRIC, METHYL THYMOL BLUE, AUTOMATED	1,3,4
83	210	-0.4	THORIN TITRATION	2,4
84	205	-2.8	NOT REPORTED	
86	125	-40.7	REJECT ION CHROMATOGRAPHY	2,6
88	165	-21.7	REJECT NOT REPORTED	
90	210	-0.4	TURBIDIMETRIC, BARIUM SULFATE	1,2,3
91	210	-0.4	NOT REPORTED	
93	200	-5.1	ION CHROMATOGRAPHY	2,6
94	200	-5.1	COLORIMETRIC, METHYL THYMOL BLUE, AUTOMATED	1,3,4
96	215	2.0	NOT REPORTED	
98	220	4.4	GRAVIMETRIC, BARIUM SULFATE	1,2,3
99	270	28.1	REJECT OTHER	
101	210	-0.4	TURBIDIMETRIC, BARIUM SULFATE	1,2,3
102	210	-0.4	COLORIMETRIC, METHYL THYMOL BLUE, AUTOMATED	1,3,4

75 Labs had a total range of 100 to 270 and a mean of 210.8
 with a standard deviation of 8.9 and a 95% confidence interval of the mean +/- 2.2.

Table 5 Standard Reference Water Sample M2 Report for SP. COND.

Code Number	Reported value	% dev. from mean	Methods	References
1	809	2.9	NOT REPORTED	
2	704	-10.4	DIRECT READING INSTRUMENT	4
3	797	1.4	NOT REPORTED	
4	816	3.8	DIRECT READING INSTRUMENT	4
6	799	1.7	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1,2,3,4
8	893	13.6	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1,2,3,4
9	810	3.1	OTHER	
10	822	4.6	DIRECT READING INSTRUMENT	4
11	764	-2.8	DIRECT READING INSTRUMENT	4
12	792	0.8	DIRECT READING INSTRUMENT	4
13	780	-0.8	DIRECT READING INSTRUMENT	4
14	784	-0.2	DIRECT READING INSTRUMENT	4
15	732	-6.9	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1,2,3,4
16	811	3.2	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1,2,3,4
17	815	3.7	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1,2,3,4
18	760	-3.3	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1,2,3,4
19	810	3.1	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1,2,3,4
20	805	2.4	DIRECT READING INSTRUMENT	4
21	820	4.3	NOT REPORTED	
22	820	4.3	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1,2,3,4
23	749	-4.7	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1,2,3,4
25	635	-19.2	REJECT WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1,2,3,4
27	780	-0.8	DIRECT READING INSTRUMENT	4
28	790	0.5	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1,2,3,4
29	780	-0.8	DIRECT READING INSTRUMENT	4
30	790	0.5	NOT REPORTED	
31	790	0.5	NOT REPORTED	
32	600	-23.7	REJECT DIRECT READING INSTRUMENT	4
33	801	1.9	NOT REPORTED	
34	804	2.3	NOT REPORTED	
35	785	-0.1	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1,2,3,4
36	746	-5.1	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1,2,3,4
37	792	0.8	DIRECT READING INSTRUMENT	4
38	780	-0.8	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1,2,3,4
40	778	-1.0	OTHER	
41	810	3.1	DIRECT READING INSTRUMENT	4
42	770	-2.0	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1,2,3,4
43	768	-2.3	NOT REPORTED	
44	796	1.3	NOT REPORTED	
46	775	-1.4	DIRECT READING INSTRUMENT	4
48	780	-0.8	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1,2,3,4
50	704	-10.4	DIRECT READING INSTRUMENT	4
52	833	6.0	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1,2,3,4
53	725	-7.8	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1,2,3,4
54	769	-2.2	OTHER	

Table 5 Standard Reference Water Sample M2 Report for SP. COND.

Code Number	Reported value	% dev. from mean	Methods	References
56	300	1.3	NOT REPORTED	
57	720	-3.4	NOT REPORTED	
58	305	2.4	NOT REPORTED	
59	870	10.7	DIRECT READING INSTRUMENT	4
60	845	7.5	NOT REPORTED	
61	765	-2.7	DIRECT READING INSTRUMENT	4
62	300	1.8	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1,2,3,4
63	305	2.6	DIRECT READING INSTRUMENT	4
65	540	+18.6	REJECT DIRECT READING INSTRUMENT	4
67	735	-6.5	NOT REPORTED	
68	814	3.6	NOT REPORTED	
71	808	2.8	NOT REPORTED	
73	750	-4.5	DIRECT READING INSTRUMENT	4
74	802	2.0	DIRECT READING INSTRUMENT	4
75	2500	213.1	REJECT NOT REPORTED	
76	722	-3.1	DIRECT READING INSTRUMENT	4
77	796	1.3	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1,2,3,4
78	757	-3.7	DIRECT READING INSTRUMENT	4
80	840	6.9	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1,2,3,4
81	796	1.3	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1,2,3,4
82	753	-4.2	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1,2,3,4
83	1	-99.9	REJECT WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1,2,3,4
84	786	0.0	NOT REPORTED	
86	723	-8.0	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1,2,3,4
87	763	-2.9	NOT REPORTED	
88	700	-10.9	NOT REPORTED	
90	860	9.4	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1,2,3,4
91	735	-0.1	NOT REPORTED	
93	711	-2.5	ELECTRODELESS, INDUCTIVE CELL-TYPE	2
94	720	-8.4	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1,2,3,4
96	797	1.4	NOT REPORTED	
97	843	7.3	NOT REPORTED	
98	808	2.8	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1,2,3,4
99	753	-4.2	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1,2,3,4
100	831	5.7	DIRECT READING INSTRUMENT	4
101	794	1.0	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1,2,3,4
102	822	4.6	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1,2,3,4

82 Labs had a total range of 1 to 2500 and a mean of 785.9
 with a standard deviation of 39.0 and a 95% confidence interval of the mean +/- 3.9.

Table 5 Standard Reference Water Sample M2 Report for SR

Code Number	Reported value	% dev. from mean	Methods	References
1	740	2.7	ATOMIC ABSORPTION, DIRECT, AIR	1,2,4
2	720	-0.1	EMISSION, IC PLASMA	5
3	720	-0.1	NOT REPORTED	
10	1350	87.3	REJECT ATOMIC ABSORPTION, DIRECT, AIR	1,2,4
11	800	11.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,4
20	710	-1.5	EMISSION, IC PLASMA	5
21	700	-2.9	EMISSION, IC PLASMA	5
28	700	-2.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,4
30	730	1.3	NOT REPORTED	
33	720	-0.1	EMISSION, IC PLASMA	5
35	70	-90.3	REJECT ATOMIC ABSORPTION, DIRECT, AIR	1,2,4
40	680	-5.7	EMISSION, IC PLASMA	5
41	690	-4.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,4
48	620	-14.0	OTHER	
54	740	2.7	EMISSION, IC PLASMA	5
60	1000	38.7	REJECT ATOMIC ABSORPTION, DIRECT, AIR	1,2,4
61	770	6.8	EMISSION, IC PLASMA	5
62	810	12.4	ATOMIC ABSORPTION, DIRECT, AIR	1,2,4
63	740	2.7	ATOMIC ABSORPTION, DIRECT, AIR	1,2,4
68	740	2.7	EMISSION, IC PLASMA	5
74	720	-0.1	OTHER	
81	720	-0.1	ATOMIC ABSORPTION, DIRECT, AIR	1,2,4
84	1200	66.5	REJECT NOT REPORTED	
90	500	-30.6	REJECT OTHER	
91	700	-2.9	NOT REPORTED	
93	700	-2.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,4
95	790	9.6	EMISSION, IC PLASMA	5
96	600	-16.8	NOT REPORTED	
97	740	2.7	EMISSION, IC PLASMA	5

29 Labs had a total range of 70 to 1350 and a mean of 721
 with a standard deviation of 48 and a 95% confidence interval of the mean +/- 20.

Table 5 Standard Reference Water Sample M2 Report for V

Code Number	Reported value	% dev. from mean	Methods	References
1	3	-87.6	COLORIMETRIC, CATALYTIC OXIDATION	4
2	59	143.1	EMISSION, IC PLASMA	5
10	< 250		IGNORED ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1,3
15	< 100		IGNORED ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1,3
16	< 10		IGNORED OTHER	
20	< 10		IGNORED EMISSION, IC PLASMA	5
21	5	-79.4	EMISSION, IC PLASMA	5
30	5	-79.4	OTHER	
32	80	229.7	EMISSION, IC PLASMA	5
33	5	-79.4	EMISSION, IC PLASMA	5
35	13	-46.4	EMISSION, IC PLASMA	5
40	2	-91.8	COLORIMETRIC, CATALYTIC OXIDATION	4
48	2	-91.8	ATOMIC ABSORPTION, FLAMELESS	3
51	31	27.7	OTHER	
54	< 8		IGNORED OTHER	
60	100	312.1	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1,3
61	6	-75.3	EMISSION, IC PLASMA	5
62	< 20		IGNORED ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1,3
63	< 6		IGNORED EMISSION, IC PLASMA	5
74	3	-87.6	ATOMIC ABSORPTION, FLAMELESS	3
84	40	64.8	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1,3
93	10	-53.8	ATOMIC ABSORPTION, FLAMELESS	3
97	< 10		IGNORED EMISSION, IC PLASMA	5

23 Labs had a total range of 2 to 100 and a mean of 24.3
 with a standard deviation of 31.6 and a 95% confidence interval of the mean +/- 17.5.

Table 6 . Statistics by method for standard reference sample M2

Determination	Method	Range: from	to	Mean	Standard Deviation	N
ALK(CACO3)	NOT REPORTED	138.000-	142.000	142.000	0.000	2
	OTHER	138.000-	145.000	140.667	3.786	3
	TITRATION, COLORIMETRIC, AUTOMATED	133.000-	147.000	142.000	4.583	7
	TITRATION, COLORIMETRIC, MANUAL	134.000-	167.000	144.333	4.863	18
	TITRATION, ELECTROMETRIC, AUTOMATED	137.000-	145.000	141.700	2.359	10
	TITRATION, ELECTROMETRIC, MANUAL	90.000-	290.000	142.194	5.677	31
	OVER-ALL	90.000-	290.000	142.514	4.859	72
B	COLORIMETRIC, CURCUMIN	160.000-	370.000	227.143	71.114	7
	EMISSION, IC PLASMA	60.000-	190.000	160.000	21.213	13
	NOT REPORTED	60.000-	500.000	230.000	127.279	9
	OVER-ALL	60.000-	550.000	184.118	66.384	34
BR	OTHER	260.000-	380.000	307.500	55.000	4
	OVER-ALL	80.000-	510.000	305.714	130.366	7
CA	ATOMIC ABSORPTION, DIRECT, AIR	44.000-	110.000	61.217	4.258	46
	EMISSION, IC PLASMA	58.000-	73.000	64.077	3.883	13
	NOT REPORTED	61.000-	112.000	62.833	1.467	12
	OTHER	59.000-	61.000	59.750	0.957	4
	TITRATION, EDTA	63.000-	156.000	63.000	2.309	2
	OVER-ALL	44.000-	156.000	62.466	2.604	73
CL	COLORIMETRIC, FERRIC THIOCYANATE, AUTOMATED	27.000-	36.000	32.105	2.132	19
	ION CHROMATOGRAPHY	30.000-	38.000	31.600	1.140	5
	NOT REPORTED	31.000-	36.000	32.824	1.334	17
	OTHER	32.000-	33.000	32.000	0.000	2
	TITRATION, MERCURIC NITRATE	31.000-	39.000	33.000	2.708	10
	TITRATION, SILVER NITRATE	27.000-	73.000	32.071	0.730	14
	OVER-ALL	25.000-	73.000	32.366	1.830	71
OSRD 180	NOT REPORTED	510.000-	925.000	520.000	10.000	3
	RESIDUE ON EVAPORATION	390.000-	645.000	527.857	76.205	7
	RESIDUE ON EVAPORATION	450.000-	565.000	532.500	21.690	12
	RESIDUE, FILTRABLE	490.000-	575.000	528.000	17.937	30
	OVER-ALL	390.000-	925.000	527.414	18.947	58
F	COLORIMETRIC, SPADNS	0.900-	1.100	1.000	0.082	4
	ION CHROMATOGRAPHY	0.700-	1.500	1.060	0.329	5
	ION SELECTIVE ELECTRODE, AUTOMATED	0.700-	0.900	0.830	0.067	10
	ION SELECTIVE ELECTRODE, MANUAL	0.200-	1.100	0.884	0.108	32
	NOT REPORTED	0.800-	1.000	0.900	0.082	4
	OVER-ALL	0.200-	1.500	0.886	0.101	59
K	ATOMIC ABSORPTION, DIRECT, AIR	1.900-	8.500	3.698	0.620	51
	FLAME, EMISSION, PHOTOMETRIC	3.000-	4.300	3.800	0.460	6
	NOT REPORTED	3.400-	3.600	3.500	0.100	3
	OTHER	3.400-	8.900	3.738	0.074	8
	OVER-ALL	1.900-	8.900	3.724	0.587	70
MG	ATOMIC ABSORPTION, DIRECT, AIR	24.000-	42.000	28.023	1.766	43
	EMISSION, IC PLASMA	26.000-	30.000	28.167	1.337	12

Table 6 . Statistics by method for standard reference sample M2

Determin- ation	Method	Range: from	to	Mean	Standard Deviation	N
MG	NOT REPORTED	25.000-	36.000	27.462	1.266	13
	OTHER	24.000-	30.000	27.800	2.280	5
	TITRATION, EDTA	22.000-	28.000	28.000	0.000	2
	OVER-ALL	22.000-	42.000	27.933	1.622	75
NA	ATOMIC ABSORPTION, DIRECT, AIR	44.000-	81.000	64.468	3.482	47
	FLAME EMISSION, PHOTOMETRIC	13.000-	72.000	68.500	4.041	4
	NOT REPORTED	54.000-	91.000	66.308	2.898	13
	PLASMA, INDUCTIVELY COUPLED	59.000-	74.000	67.091	3.780	11
	OVER-ALL	13.000-	91.000	65.221	3.807	77
NO2-N	COLORIMETRIC, DIAZOTIZATION	0.001-	0.030	0.014	0.009	30
	OVER-ALL	0.001-	3.000	0.014	0.009	31
NO3-N	COLORIMETRIC, BRUCINE	2.000-	3.200	2.594	0.375	16
	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	0.800-	3.600	2.579	0.124	39
	COLORIMETRIC, HYDRAZINE REDUCTION, DIAZOTIZATION	0.100-	3.000	2.700	0.216	4
	ION CHROMATOGRAPHY	2.200-	2.800	2.575	0.263	4
	NOT REPORTED	2.400-	3.200	2.700	0.436	3
	OTHER	1.400-	2.700	2.700	0.000	2
	OVER-ALL	0.100-	3.600	2.592	0.254	73
P, TOTAL	COLORIMETRIC, H ₂ SO ₄ /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	0.340-	0.660	0.488	0.059	47
	COLORIMETRIC, BLK DIG, H ₂ SO ₄ , K&HG SO ₄ , PHOSPHOMOLYDATE	0.400-	0.700	0.523	0.078	10
	EMISSION, IC PLASMA	0.460-	0.520	0.503	0.021	3
	OTHER	0.460-	0.490	0.490	0.000	2
	OVER-ALL	0.340-	0.700	0.491	0.055	63
PH	ELECTROMETRIC	7.500-	8.700	8.315	0.150	75
	OVER-ALL	7.500-	8.700	8.316	0.149	77
SI02	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	3.300-	10.000	7.822	2.340	9
	COLORIMETRIC, MOLYBDO-SILICIC ACID	4.900-	10.000	9.288	0.508	8
	COLORIMETRIC, SODIUM SULFITE REDUCTION TO MOLYBDATE BLUE	8.000-	10.000	9.100	1.015	3
	COLORIMETRIC, ASCORBIC ACID REDUCTION TO MOLYBDATE BLUE, AUTO.	5.400-	9.800	8.427	1.359	11
	EMISSION, IC PLASMA	8.500-	10.000	9.467	0.507	9
	NOT REPORTED	5.000-	10.500	8.360	2.096	5
	OVER-ALL	3.300-	11.800	8.814	1.424	49
S04	COLORIMETRIC, METHYL THYMOL BLUE, AUTOMATED	100.000-	220.000	208.929	6.557	14
	GRAVIMETRIC, BARIUM SULFATE	190.000-	270.000	210.625	10.836	8
	ION CHROMATOGRAPHY	125.000-	220.000	177.000	45.771	5
	NOT REPORTED	165.000-	220.000	212.500	4.703	14
	OTHER	210.000-	270.000	228.000	24.900	5
	TURBIDIMETRIC, BARIUM SULFATE	185.000-	245.000	214.722	12.653	18
	OVER-ALL	100.000-	270.000	210.821	8.902	67
SP. COND.	DIRECT READING INSTRUMENT	600.000-	870.000	776.130	49.016	23
	NOT REPORTED	700.000-	2500.000	789.818	35.220	22
	OTHER	769.000-	810.000	785.667	21.548	3
	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1.000-	893.000	788.379	41.672	29
	OVER-ALL	1.000-	2500.000	785.948	38.982	77

Table 6 . Statistics by method for standard reference sample M2

Determination	Method	Range:		Mean	Standard Deviation	N
		from	to			
SR	ATOMIC ABSORPTION, DIRECT, AIR	70.000-	1350.000	756.364	300.042	11
	EMISSION, IC PLASMA	680.000-	790.000	731.000	32.472	10
	NOT REPORTED	600.000-	1200.000	687.500	59.652	4
	OTHER	500.000-	720.000	613.333	110.151	3
	OVER-ALL	70.000-	1350.000	720.833	47.815	24
V	ATOMIC ABSORPTION, FLAMELESS	2.000-	10.000	5.000	4.359	3
	EMISSION, IC PLASMA	5.000-	80.000	28.000	32.961	6
	OVER-ALL	2.000-	100.000	24.267	31.640	15

Table 7 Standard Reference Water Sample T3 Report for ACIDICACO₃

Code Number	Reported value	% dev. from mean	Methods	References	
1	24200	1.6	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4	
2	23800	-0.1	TITRATION, COLORIMETRIC, MANUAL	1,2,3	
9	24000	0.7	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4	
15	23000	-3.4	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4	
16	24000	0.7	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4	
19	23000	-3.4	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4	
20	24500	2.8	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4	
32	23300	-0.1	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4	
38	25000	4.9	TITRATION, COLORIMETRIC, MANUAL	1,2,3	
48	25000	4.9	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4	
53	23000	-3.4	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4	
60	23800	-0.1	TITRATION, COLORIMETRIC, MANUAL	1,2,3	
73	300	-98.7	REJECT	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
75	22400	-5.0	TITRATION, COLORIMETRIC, MANUAL	1,2,3	
101	24000	0.7	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4	

15 Labs had a total range of 300 to 25000 and a mean of 23821
 with a standard deviation of 751 and a 95% confidence interval of the mean +/- 439.

Table 7 Standard Reference Water Sample T3 Report for AG

Code Number	Reported value	% dev. from mean	Methods	References
2	< 20		IGNORED OTHER	
3	14	27.3	NOT REPORTED	
8	15	45.5	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3
10	13	18.2	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3
13	10	-9.1	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3
15	< 20		IGNORED ATOMIC ABSORPTION, DIRECT, AIR	1,2,3
16	14	27.3	ATOMIC ABSORPTION, FLAMELESS	3
20	13	18.2	OTHER	
21	3	-72.7	OTHER	
22	17	54.5	NOT REPORTED	
23	14	27.3	ATOMIC ABSORPTION, FLAMELESS	3
28	10	-9.1	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3
29	10	-9.1	ATOMIC ABSORPTION, FLAMELESS	3
30	8	-27.3	NOT REPORTED	
32	< 10		IGNORED ATOMIC ABSORPTION, DIRECT, AIR	1,2,3
33	12	9.1	OTHER	
35	16	45.5	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3
38	2	-81.8	ATOMIC ABSORPTION, FLAMELESS	3
40	10	-9.1	ATOMIC ABSORPTION, EXTRACTION (APDC/MIBK)	1,2,4
42	12	9.1	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3
43	12	9.1	NOT REPORTED	
44	12	9.1	NOT REPORTED	
45	9	-18.2	ATOMIC ABSORPTION, FLAMELESS	3
48	4	-63.6	ATOMIC ABSORPTION, FLAMELESS	3
50	10	-9.1	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3
53	11	0.0	ATOMIC ABSORPTION, FLAMELESS	3
57	2	-81.8	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3
58	8	-27.3	NOT REPORTED	
60	5	-54.5	ATOMIC ABSORPTION, EXTRACTION (APDC/MIBK)	1,2,4
61	11	0.0	OTHER	
62	10	-9.1	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3
65	10	-9.1	ATOMIC ABSORPTION, FLAMELESS	3
66	13	18.2	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3
68	27	145.5	REJECT ATOMIC ABSORPTION, EXTRACTION (APDC/MIBK)	1,2,4
73	11	0.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3
74	10	-9.1	ATOMIC ABSORPTION, FLAMELESS	3
75	17	54.5	NOT REPORTED	
76	20	81.8	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3
80	9	-18.2	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3
81	13	18.2	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3
84	13	18.2	NOT REPORTED	
88	7	-36.4	NOT REPORTED	
93	16	45.5	ATOMIC ABSORPTION, FLAMELESS	3
94	11	0.0	ATOMIC ABSORPTION, FLAMELESS	3
95	12	9.1	OTHER	

Table 7 Standard Reference Water Sample T3 Report for AG

Code Number	Reported value	% dev. from mean	Methods	References
97	10	+9.1	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3
99	15	36.4	OTHER	
100	11	0.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3
101	9	-18.2	ATOMIC ABSORPTION, FLAMELESS	3

49 Labs had a total range of 2 to 27 and a mean of 11.0
 with a standard deviation of 3.9 and a 95% confidence interval of the mean +/- 1.2.

Table 7 Standard Reference Water Sample T3 Report for AS

Code Number	Reported value	% dev. from mean	Methods	References
3	45	-18.4	ATOMIC ABSORPTION, HYDRIDE,(NABH4),AUTOMATED	4
4	51	10.7	ATOMIC ABSORPTION, FLAMELESS	3
10	59	7.0	ATOMIC ABSORPTION, HYDRIDE,(NASH4),MANUAL	1
11	50	-9.3	ATOMIC ABSORPTION, FLAMELESS	3
13	59	7.0	ATOMIC ABSORPTION, HYDRIDE,(NABH4),AUTOMATED	4
15	60	8.3	ATOMIC ABSORPTION, FLAMELESS	3
16	67	21.5	ATOMIC ABSORPTION, FLAMELESS	3
17	4	-92.7	REJECT ATOMIC ABSORPTION, HYDRIDE,(NABH4),MANUAL	1
18	65	17.9	NOT REPORTED	
19	< 10		IGNORED SPECTROPHOTOMETRIC,SILVER DIETHYL DITHIOCARBAMATE	2,3,4
20	53	-3.9	OTHER	
21	66	19.7	OTHER	
22	55	-0.2	SPECTROPHOTOMETRIC,SILVER DIETHYL DITHIOCARBAMATE	2,3,4
23	59	7.0	ATOMIC ABSORPTION, FLAMELESS	3
28	44	-20.2	ATOMIC ABSORPTION, HYDRIDE,(NABH4),MANUAL	1
29	57	3.4	ATOMIC ABSORPTION, HYDRIDE,(NABH4),MANUAL	1
30	53	-3.9	ATOMIC ABSORPTION, HYDRIDE,(NABH4),AUTOMATED	4
32	39	-29.3	ATOMIC ABSORPTION, HYDRIDE,(NABH4),MANUAL	1
35	57	3.4	ATOMIC ABSORPTION, FLAMELESS	3
36	170	208.4	REJECT ATOMIC ABSORPTION, FLAMELESS	3
38	56	1.6	ATOMIC ABSORPTION, FLAMELESS	3
40	59	7.0	ATOMIC ABSORPTION, HYDRIDE,(NABH4),AUTOMATED	4
43	58	5.2	ATOMIC ABSORPTION, FLAMELESS	3
44	57	3.4	ATOMIC ABSORPTION, HYDRIDE,(NABH4),MANUAL	1
45	53	-3.9	ATOMIC ABSORPTION, FLAMELESS	3
48	55	-0.2	ATOMIC ABSORPTION, FLAMELESS	3
57	56	1.6	ATOMIC ABSORPTION, FLAMELESS	3
58	52	-5.7	ATOMIC ABSORPTION, FLAMELESS	3
60	58	5.2	ATOMIC ABSORPTION, HYDRIDE,(NABH4),MANUAL	1
61	54	-2.0	ATOMIC ABSORPTION, FLAMELESS	3
62	52	-5.7	ATOMIC ABSORPTION, FLAMELESS	3
65	13	-76.4	REJECT ATOMIC ABSORPTION, FLAMELESS	3
68	50	-9.3	ATOMIC ABSORPTION, HYDRIDE,(NABH4),AUTOMATED	4
74	47	-14.7	ATOMIC ABSORPTION, FLAMELESS	3
76	60	8.8	ATOMIC ABSORPTION, FLAMELESS	3
81	55	-0.2	ATOMIC ABSORPTION, FLAMELESS	3
84	120	117.7	REJECT ATOMIC ABSORPTION, HYDRIDE,(NABH4),MANUAL	1
88	60	3.8	ATOMIC ABSORPTION, FLAMELESS	3
92	33	-40.1	SPECTROPHOTOMETRIC,SILVER DIETHYL DITHIOCARBAMATE	2,3,4
93	45	-13.4	ATOMIC ABSORPTION, FLAMELESS	3
94	55	-0.2	ATOMIC ABSORPTION, FLAMELESS	3
97	73	41.5	ATOMIC ABSORPTION, HYDRIDE,(NABH4),MANUAL	1
98	81	46.9	ATOMIC ABSORPTION, FLAMELESS	3
99	26	-52.8	ATOMIC ABSORPTION, HYDRIDE,(NABH4),MANUAL	1
101	56	1.6	ATOMIC ABSORPTION, HYDRIDE,(NABH4),MANUAL	1

45 Labs had a total range of 4 to 170 and a mean of 55.1
 with a standard deviation of 9.9 and a 95% confidence interval of the mean +/- 3.2.

Table 7 Standard Reference Water Sample T3 Report for B

Code Number	Reported value	% dev. from mean	Methods	References
2	97	-0.8	EMISSION, IC PLASMA	
3	95	-2.9	NOT REPORTED	
9	< 50		IGNORED COLORIMETRIC, CURCUMIN	1,2,3,4
14	90	-8.0	EMISSION, IC PLASMA	
15	< 1000		IGNORED OTHER	
16	79	-19.2	EMISSION, IC PLASMA	
20	85	-13.1	NOT REPORTED	
21	94	-3.9	EMISSION, IC PLASMA	
24	190	94.2	EMISSION, IC PLASMA	
29	60	-33.7	EMISSION, IC PLASMA	
30	163	55.6	NOT REPORTED	
32	40	-59.1	EMISSION, IC PLASMA	
33	66	-32.5	EMISSION, IC PLASMA	
35	< 250		IGNORED COLORIMETRIC, CURCUMIN	1,2,3,4
48	90	-8.0	EMISSION, IC PLASMA	
54	72	-26.4	EMISSION, IC PLASMA	
61	110	12.5	EMISSION, IC PLASMA	
68	94	-3.9	EMISSION, DC PLASMA	
74	2800	2762.6	REJECT COLORIMETRIC, CURCUMIN	1,2,3,4
93	1100	1024.6	REJECT OTHER	
97	140	43.1	EMISSION, IC PLASMA	

21 Labs had a total range of 40 to 2800 and a mean of 97.8
 with a standard deviation of 38.1 and a 95% confidence interval of the mean +/- 20.3.

Table 7 Standard Reference Water Sample T3 Report for BA

Code Number	Reported value	% dev. from mean	Methods	References
2	43	-1.8	PLASMA, INDUCTIVELY COUPLED	5
3	42	-4.0	PLASMA, INDUCTIVELY COUPLED	5
10	< 50		IGNORED ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1,2,3,4
13	70	59.9	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1,2,3,4
15	< 500		IGNORED ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1,2,3,4
16	40	-8.6	PLASMA, INDUCTIVELY COUPLED	5
20	38	-13.2	PLASMA, INDUCTIVELY COUPLED	5
21	50	14.2	PLASMA, INDUCTIVELY COUPLED	5
22	< 500		IGNORED ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1,2,3,4
23	45	5.1	ATOMIC ABSORPTION, FLAMELESS	3
24	40	-8.6	PLASMA, INDUCTIVELY COUPLED	5
28	70	59.9	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1,2,3,4
29	>0	-8.6	PLASMA, INDUCTIVELY COUPLED	5
30	43	-1.8	PLASMA, INDUCTIVELY COUPLED	5
32	25	-42.9	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1,2,3,4
33	41	-5.3	GRAVIMETRIC, SULFATE	4
35	40	-8.6	PLASMA, INDUCTIVELY COUPLED	5
36	40	-8.6	PLASMA, DIRECT CURRENT	2
38	40	-8.6	ATOMIC ABSORPTION, FLAMELESS	3
40	38	-13.2	PLASMA, INDUCTIVELY COUPLED	5
42	50	14.2	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1,2,3,4
43	50	14.2	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1,2,3,4
44	43	-1.8	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1,2,3,4
45	100	128.5	REJECT ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1,2,3,4
48	40	-8.6	GRAVIMETRIC, SULFATE	4
50	220	402.6	REJECT ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1,2,3,4
54	42	-4.0	PLASMA, INDUCTIVELY COUPLED	5
57	50	14.2	ATOMIC ABSORPTION, FLAMELESS	3
58	69	57.6	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1,2,3,4
60	< 100		IGNORED ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1,2,3,4
61	40	-8.6	PLASMA, INDUCTIVELY COUPLED	5
62	< 200		IGNORED ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1,2,3,4
65	40	-8.6	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1,2,3,4
68	42	-4.0	PLASMA, INDUCTIVELY COUPLED	5
73	50	14.2	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1,2,3,4
74	40	-8.6	ATOMIC ABSORPTION, FLAMELESS	3
76	100	123.5	REJECT ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1,2,3,4
81	< 200		IGNORED ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1,2,3,4
82	20	-54.3	PLASMA, INDUCTIVELY COUPLED	5
84	< 10		IGNORED ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1,2,3,4
88	< 500		IGNORED NOT REPORTED	
92	20	-54.3	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1,2,3,4
93	35	-20.0	ATOMIC ABSORPTION, FLAMELESS	3
94	< 400		IGNORED ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1,2,3,4
95	40	-8.6	GRAVIMETRIC, SULFATE	4

Table 7 Standard Reference Water Sample T3 Report for BA

Code Number	Reported value	% dev. from mean	Methods	References
97	40	-3.6	PLASMA, INDUCTIVELY COUPLED	5
99	290	562.5	REJECT PLASMA, INDUCTIVELY COUPLED	5
101	75	71.3	ATOMIC ABSORPTION, FLAMELESS	3

48 Labs had a total range of 20 to 290 and a mean of 43.8
 with a standard deviation of 12.1 and a 95% confidence interval of the mean +/- 4.2.

Table 7 Standard Reference Water Sample T3 Report for BE

Code Number	Reported value	% dev. from mean	Methods	References
1	< 10		IGNORED	1,2,3,4
2	19	4.1	PLASMA, INDUCTIVELY COUPLED	5
10	24	31.4	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1,2,3,4
15	< 20		ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1,2,3,4
16	18	-1.4	PLASMA, INDUCTIVELY COUPLED	5
17	10	-45.2	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1,2,3,4
20	17	-6.9	PLASMA, INDUCTIVELY COUPLED	5
21	20	9.5	PLASMA, INDUCTIVELY COUPLED	5
23	13	-1.4	ATOMIC ABSORPTION, FLAMELESS	3
28	19	4.1	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1,2,3,4
32	10	-45.2	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1,2,3,4
33	19	4.1	OTHER	
35	20	9.5	PLASMA, INDUCTIVELY COUPLED	5
36	18	-1.4	COLORIMETRIC, ALUMINON	1
40	14	-23.3	PLASMA, INDUCTIVELY COUPLED	5
43	20	9.5	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1,2,3,4
48	22	20.5	ATOMIC ABSORPTION, FLAMELESS	3
54	19	4.1	PLASMA, INDUCTIVELY COUPLED	5
57	13	-1.4	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1,2,3,4
60	1	-94.5	OTHER	
61	13	-1.4	PLASMA, INDUCTIVELY COUPLED	5
62	20	9.5	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1,2,3,4
68	17	-6.9	PLASMA, INDUCTIVELY COUPLED	5
73	22	20.5	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1,2,3,4
74	16	-12.4	ATOMIC ABSORPTION, FLAMELESS	3
76	20	9.5	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1,2,3,4
84	20	9.5	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1,2,3,4
93	16	-12.4	ATOMIC ABSORPTION, FLAMELESS	3
95	20	9.5	PLASMA, INDUCTIVELY COUPLED	5
97	19	4.1	PLASMA, INDUCTIVELY COUPLED	5

30 Labs had a total range of 1 to 24 and a mean of 18.3
 with a standard deviation of 3.1 and a 95% confidence interval of the mean +/- 1.2.

Table 7 Standard Reference Water Sample T3 Report for CA

Code Number	Reported value	% dev. from mean	Methods	References
1	30	-8.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
2	33	0.8	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
3	34	3.9	NOT REPORTED	
3	31	-5.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
9	35	6.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
10	34	3.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
13	21	-35.8	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
14	33	0.8	EMISSION, IC PLASMA	5
15	36	10.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
16	36	10.0	EMISSION, IC PLASMA	5
17	35	6.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
18	25	-23.6	NOT REPORTED	
20	34	3.9	NOT REPORTED	
21	34	3.9	EMISSION, IC PLASMA	5
22	39	19.1	OTHER	
23	35	6.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
24	33	0.8	EMISSION, IC PLASMA	5
27	53	61.9	REJECT TITRATION, EDTA	1,3
28	37	13.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
29	33	0.8	EMISSION, IC PLASMA	5
30	34	3.9	NOT REPORTED	
32	34	3.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
33	35	6.9	EMISSION, IC PLASMA	5
35	33	0.8	EMISSION, IC PLASMA	5
36	33	0.8	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
37	31	-5.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
38	35	6.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
40	32	-2.2	OTHER	
41	26	-20.6	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
44	35	5.9	NOT REPORTED	
48	30	-8.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
50	3	-90.8	REJECT ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
53	19	-42.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
54	35	6.9	OTHER	
59	37	13.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
60	34	3.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
61	33	0.8	EMISSION, IC PLASMA	5
62	35	6.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
65	83	153.6	REJECT ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
66	21	-35.8	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
67	33	0.8	NOT REPORTED	
68	37	13.0	EMISSION, IC PLASMA	5
73	25	-23.6	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
74	36	10.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
75	29	-11.4	NOT REPORTED	

Table 7 Standard Reference Water Sample T3 Report for CA

Code Number	Reported value	% dev. from mean	Methods	References
76	34	3.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
79	36	10.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
80	38	16.1	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
81	26	-20.6	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
84	36	10.0	NOT REPORTED	1,2,3,4
86	73	123.0	REJECT NOT REPORTED	
88	33	0.8	NOT REPORTED	
92	24	-26.7	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
93	35	5.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
94	37	13.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
95	34	3.9	EMISSION, IC PLASMA	5
97	41	25.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
98	36	10.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
99	29	-11.4	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
101	34	3.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4

60 Labs had a total range of 3 to 33 and a mean of 32.7
 with a standard deviation of 4.5 and a 95% confidence interval of the mean +/- 1.2.

Table 7 Standard Reference Water Sample T3 Report for Cd

Code Number	Reported value	% dev. from mean	Methods	References
1	23	15.4	ATOMIC ABSORPTION, EXTRACTION,(APDC/MIBK)	1,4
2	13	-9.7	PLASMA, INDUCTIVELY COUPLED	5
3	24	20.4	NOT REPORTED	
4	15	-24.8	ANODIC STRIPPING VOLTAMMETRY, DIFFERENTIAL PULSE	2
8	20	0.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
10	20	0.3	ANODIC STRIPPING VOLTAMMETRY, DIFFERENTIAL PULSE	2
13	22	10.4	ATOMIC ABSORPTION, FLAMELESS	3
14	20	0.3	PLASMA, INDUCTIVELY COUPLED	5
15	22	10.4	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
16	23	15.4	ATOMIC ABSORPTION, FLAMELESS	3
17	22	10.4	OTHER	
18	22	10.4	NOT REPORTED	
20	19	-4.7	NOT REPORTED	
21	17	-14.7	PLASMA, INDUCTIVELY COUPLED	5
22	24	20.4	ATOMIC ABSORPTION, FLAMELESS	3
23	24	20.4	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
24	22	10.4	PLASMA, INDUCTIVELY COUPLED	5
27	20	0.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
28	22	10.4	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
29	15	-19.7	ATOMIC ABSORPTION, FLAMELESS	3
30	18	-9.7	NOT REPORTED	
32	10	-49.8	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
33	20	0.3	PLASMA, INDUCTIVELY COUPLED	5
35	19	-4.7	PLASMA, INDUCTIVELY COUPLED	5
38	8	-59.9	ATOMIC ABSORPTION, FLAMELESS	3
40	22	10.4	ATOMIC ABSORPTION, EXTRACTION,(APDC/MIBK)	1,4
42	20	0.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
43	5	-74.9	REJECT	
44	20	0.3	NOT REPORTED	
45	14	-29.8	NOT REPORTED	
46	13	-34.8	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
48	22	10.4	ATOMIC ABSORPTION, FLAMELESS	3
50	20	0.3	ATOMIC ABSORPTION, FLAMELESS	3
53	33	65.5	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
54	20	0.3	ATOMIC ABSORPTION, FLAMELESS	3
56	23	15.4	ATOMIC ABSORPTION, FLAMELESS	3
57	23	15.4	ANODIC STRIPPING VOLTAMMETRY, DIFFERENTIAL PULSE	2
58	15	-24.8	ANODIC STRIPPING VOLTAMMETRY, DIFFERENTIAL PULSE	2
59	20	0.3	NOT REPORTED	
60	20	0.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
61	20	0.3	ATOMIC ABSORPTION, EXTRACTION,(POCA/CHCL3)	2,3
62	20	0.3	PLASMA, INDUCTIVELY COUPLED	5
65	16	-19.7	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
66	21	5.3	ATOMIC ABSORPTION, FLAMELESS	3
67	10	-49.6	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
			NOT REPORTED	

Table 7 Standard Reference Water Sample T3 Report for CR TOT

Code Number	Reported value	% dev. from mean	Methods	References	
1	20	2.1	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
2	21	7.2	NOT REPORTED		
3	20	2.1	NOT REPORTED		
4	15	-18.3	NOT REPORTED		
8	7	-64.3	NOT REPORTED		
10	< 15		IGNORED	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
11	35	78.7		ATOMIC ABSORPTION, FLAMELESS	3
13	21	7.2		ATOMIC ABSORPTION, FLAMELESS	3
14	20	2.1		PLASMA, INDUCTIVELY COUPLED	
15	23	17.4		ATOMIC ABSORPTION, FLAMELESS	3
16	26	32.8		ATOMIC ABSORPTION, FLAMELESS	3
17	20	2.1		OTHER	
18	18	-8.1		NOT REPORTED	
19	20	2.1		ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
20	18	-8.1		NOT REPORTED	
21	20	2.1		PLASMA, INDUCTIVELY COUPLED	
22	22	12.3		ATOMIC ABSORPTION, FLAMELESS	3
23	19	-3.0		ATOMIC ABSORPTION, FLAMELESS	3
24	< 14		IGNORED	PLASMA, INDUCTIVELY COUPLED	1,2,3,4
27	30	53.2		ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
25	20	2.1		ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
29	13	-33.6		NOT REPORTED	
30	13	-8.1		NOT REPORTED	
32	20	2.1		ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
33	18	-8.1		PLASMA, INDUCTIVELY COUPLED	
35	20	2.1		ATOMIC ABSORPTION, FLAMELESS	3
36	9	-54.0		ATOMIC ABSORPTION, FLAMELESS	3
38	15	-23.4		ATOMIC ABSORPTION, FLAMELESS	3
42	10	-48.9		ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
43	19	-3.0		NOT REPORTED	
44	14	-28.5		NOT REPORTED	
45	15	-23.4		ATOMIC ABSORPTION, FLAMELESS	3
46	20	2.1		ATOMIC ABSORPTION, FLAMELESS	3
48	16	-18.3		ATOMIC ABSORPTION, FLAMELESS	3
50	22	12.3		ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
51	18	-8.1		PLASMA, INDUCTIVELY COUPLED	
56	39	99.1		NOT REPORTED	
57	14	-28.5		ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
58	14	-28.5		NOT REPORTED	
59	20	2.1		ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
60	19	-3.0		ATOMIC ABSORPTION, EXTRACTION (APDC/MIBK)	1,3,4
61	18	-8.1		PLASMA, INDUCTIVELY COUPLED	
62	18	-8.1		ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
65	18	-3.1		ATOMIC ABSORPTION, FLAMELESS	3
66	20	2.1		ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4

Table 7 Standard Reference Water Sample T3 Report for CO

Code Number	Reported value	% dev. from mean	Methods	References
1	22	-16.9	ATOMIC ABSORPTION, EXTRACTION (APDC/MIBK)	1,4
2	26	-1.7	PLASMA, INDUCTIVELY COUPLED	5
3	25	-1.7	PLASMA, INDUCTIVELY COUPLED	5
10	< 50		IGNORED	1,2,3,4
15	30	13.4	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
18	30	13.4	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
20	27	2.0	NOT REPORTED	
21	21	-20.6	PLASMA, INDUCTIVELY COUPLED	5
27	40	51.2	PLASMA, INDUCTIVELY COUPLED	5
28	22	-16.9	REJECT ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
33	26	-1.7	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
35	23	-13.1	PLASMA, INDUCTIVELY COUPLED	5
36	22	-16.9	PLASMA, INDUCTIVELY COUPLED	5
40	25	-5.5	ATOMIC ABSORPTION, FLAMELESS	3
43	72	172.1	ATOMIC ABSORPTION, EXTRACTION (APDC/MIBK)	1,4
48	4	-84.9	REJECT ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
53	26	-1.7	ATOMIC ABSORPTION, FLAMELESS	3
54	26	-1.7	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
56	5	-31.1	PLASMA, INDUCTIVELY COUPLED	5
57	33	24.7	REJECT ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
60	26	-1.7	ATOMIC ABSORPTION, EXTRACTION (PDCA/CHCL3)	2,3
61	26	-1.7	PLASMA, INDUCTIVELY COUPLED	5
62	30	13.4	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
68	26	-1.7	PLASMA, INDUCTIVELY COUPLED	5
73	27	2.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
74	30	13.4	ATOMIC ABSORPTION, FLAMELESS	3
93	29	9.6	ATOMIC ABSORPTION, FLAMELESS	3
95	25	-5.5	PLASMA, INDUCTIVELY COUPLED	5
97	42	58.7	REJECT PLASMA, INDUCTIVELY COUPLED	5
101	31	17.2	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4

30 Labs had a total range of 4 to 72 and a mean of 26.5
 with a standard deviation of 3.1 and a 95% confidence interval of the mean +/- 1.3.

Table 7 Standard Reference Water Sample T3 Report for Cd

Code Number	Reported value	% dev. from mean	Methods	References
68	19	-4.7	PLASMA, INDUCTIVELY COUPLED	5
73	21	5.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
74	16	-19.7	ATOMIC ABSORPTION, FLAMELESS	3
75	16	-19.7	NOT REPORTED	
76	16	-19.7	ATOMIC ABSORPTION, FLAMELESS	3
80	25	25.4	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
81	20	0.3	ATOMIC ABSORPTION, FLAMELESS	3
82	22	10.4	ATOMIC ABSORPTION, FLAMELESS	3
84	20	0.3	NOT REPORTED	
88	21	5.3	NOT REPORTED	
89	41	105.7	REJECT ATOMIC ABSORPTION, FLAMELESS	3
92	19	-4.7	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
93	20	0.3	ATOMIC ABSORPTION, FLAMELESS	3
94	23	15.4	ATOMIC ABSORPTION, FLAMELESS	3
95	20	0.3	PLASMA, INDUCTIVELY COUPLED	5
97	21	5.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
99	33	65.5	ATOMIC ABSORPTION, EXTRACTION,(PDCA/CHCL3)	2,3
100	18	-9.7	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
101	24	20.4	ATOMIC ABSORPTION, FLAMELESS	3

64 Labs had a total range of 5 to 41 and a mean of 19.9
 with a standard deviation of 4.2 and a 95% confidence interval of the mean +/- 1.1.

Table 7 Standard Reference Water Sample T3 Report for CR TOT

Code Number	Reported value	% dev. from mean	Methods	References
68	25	27.7	ATOMIC ABSORPTION, EXTRACTION (APDC/MIBK)	1,3,4
73	34	73.6	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
74	18	-8.1	ATOMIC ABSORPTION, FLAMELESS	3
75	11	-43.8	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
76	20	2.1	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
80	37	88.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
81	< 30	IGNORED	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
84	29	48.1	NOT REPORTED	
88	14	-28.5	NOT REPORTED	
89	7	-64.3	ATOMIC ABSORPTION, FLAMELESS	3
92	15	-23.4	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
93	13	-8.1	ATOMIC ABSORPTION, FLAMELESS	3
94	20	2.1	ATOMIC ABSORPTION, FLAMELESS	3
95	20	2.1	NOT REPORTED	
97	19	-3.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
99	25	27.7	PLASMA, INDUCTIVELY COUPLED	
100	22	12.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
101	13	-5.1	ATOMIC ABSORPTION, FLAMELESS	3

63 Labs had a total range of 7 to 39 and a mean of 19.6
 with a standard deviation of 6.3 and a 95% confidence interval of the mean +/- 1.6.

Table 7 Standard Reference Water Sample T3 Report for CU

Code Number	Reported value	% dev. from mean	Methods	References
1	26	11.0	ATOMIC ABSORPTION, EXTRACTION (APDC/MIBK)	1,4
2	26	11.0	PLASMA, INDUCTIVELY COUPLED	5
3	26	11.0	PLASMA, INDUCTIVELY COUPLED	5
4	23	-1.8	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
8	25	11.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
10	23	-1.8	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
13	33	40.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
14	39	66.5	PLASMA, INDUCTIVELY COUPLED	5
15	30	28.1	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
16	20	-14.6	PLASMA, INDUCTIVELY COUPLED	5
17	30	28.1	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
18	48	105.0	REJECT NOT REPORTED	1,2,3,4
19	23	-14.6	ATOMIC ABSORPTION, DIRECT, AIR	5
20	21	-10.3	PLASMA, INDUCTIVELY COUPLED	5
21	10	-57.3	PLASMA, INDUCTIVELY COUPLED	5
23	23	-1.8	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
24	24	2.5	PLASMA, INDUCTIVELY COUPLED	5
25	23	19.6	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
27	30	28.1	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
28	22	-6.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
29	23	-1.8	PLASMA, INDUCTIVELY COUPLED	5
30	18	-23.1	PLASMA, INDUCTIVELY COUPLED	5
32	< 10	IGNORED	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
33	15	-31.7	PLASMA, INDUCTIVELY COUPLED	5
35	23	-1.8	PLASMA, INDUCTIVELY COUPLED	5
36	25	6.8	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
38	30	28.1	ATOMIC ABSORPTION, FLAMELESS	3
40	66	181.9	REJECT PLASMA, INDUCTIVELY COUPLED	5
42	19	-18.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
43	24	2.5	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
44	23	-1.8	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
46	19	-18.9	ATOMIC ABSORPTION, FLAMELESS	3
48	52	122.1	REJECT ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
50	23	-1.8	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
54	22	-6.0	PLASMA, INDUCTIVELY COUPLED	5
56	25	6.8	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
57	21	-10.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
58	16	-31.7	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
59	29	23.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
60	23	-1.8	ATOMIC ABSORPTION, EXTRACTION (PDCA/CHCL3)	2,3
61	24	2.5	ATOMIC ABSORPTION, FLAMELESS	3
62	20	-14.6	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
65	27	15.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
66	20	-14.6	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
68	31	32.4	PLASMA, INDUCTIVELY COUPLED	5

Table 7 Standard Reference Water Sample T3 Report for CU

Code Number	Reported value	% dev. from mean	Methods	References
73	21	-10.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
74	20	-14.6	ATOMIC ABSORPTION, FLAMELESS	3
75	17	-27.4	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
76	30	28.1	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
80	22	-6.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
81	26	11.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
82	21	-10.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
84	20	-14.6	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
88	23	-1.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
89	9	-61.6	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
92	24	2.5	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
93	14	-40.2	ATOMIC ABSORPTION, FLAMELESS	3
94	23	-1.3	ATOMIC ABSORPTION, FLAMELESS	3
95	25	6.3	PLASMA, INDUCTIVELY COUPLED	5
97	54	130.6	REJECT PLASMA, INDUCTIVELY COUPLED	5
99	22	-6.0	ATOMIC ABSORPTION, FLAMELESS	3
100	20	-14.6	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
101	40	70.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4

63 Labs had a total range of 9 to 66 and a mean of 23.4
 with a standard deviation of 5.6 and a 95% confidence interval of the mean +/- 1.5.

Table 7 Standard Reference Water Sample T3 Report for FE

Code Number	Reported value	% dev. from mean	Methods	References
1	113	5.6	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
2	99	-6.6	PLASMA, INDUCTIVELY COUPLED	5
3	100	-5.6	PLASMA, INDUCTIVELY COUPLED	5
8	60	-43.4	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
10	104	-1.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
11	130	22.7	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
13	120	13.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
14	< 1		PLASMA, INDUCTIVELY COUPLED	5
15	110	3.8	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
16	90	-15.1	PLASMA, INDUCTIVELY COUPLED	5
17	120	13.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
18	120	13.3	NOT REPORTED	
19	125	18.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
20	124	17.0	PLASMA, INDUCTIVELY COUPLED	5
21	100	-5.6	PLASMA, INDUCTIVELY COUPLED	5
22	< 100		ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
23	60	-43.4	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
24	100	-5.6	PLASMA, INDUCTIVELY COUPLED	5
25	200	88.8	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
27	100	-5.6	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
28	110	3.8	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
29	90	-15.1	PLASMA, INDUCTIVELY COUPLED	5
30	93	-12.2	PLASMA, INDUCTIVELY COUPLED	5
32	80	-24.5	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
33	110	3.8	PLASMA, INDUCTIVELY COUPLED	5
34	100	-5.6	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
35	10	-90.0	PLASMA, INDUCTIVELY COUPLED	5
36	110	3.8	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
38	150	41.6	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
40	95	-9.4	PLASMA, INDUCTIVELY COUPLED	5
42	109	2.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
43	200	88.8	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
44	73	-25.4	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
46	280	104.3	REJECT ATOMIC ABSORPTION, FLAMELESS	3
47	120	13.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
48	100	-5.6	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
50	135	27.4	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
51	75	-29.2	ATOMIC ABSORPTION, FLAMELESS	3
53	110	3.8	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
54	99	-6.6	PLASMA, INDUCTIVELY COUPLED	5
56	390	268.1	REJECT ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
57	120	13.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
58	120	13.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
59	100	-5.6	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
60	100	-5.6	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4

Table 7 Standard Reference Water Sample T3 Report for FE

Code Number	Reported value	% dev. from mean	Methods	References
61	100	-5.6	PLASMA, INDUCTIVELY COUPLED	5
62	85	-19.8	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
65	130	22.7	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
66	110	3.8	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
67	100	-5.6	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
68	100	-5.6	PLASMA, INDUCTIVELY COUPLED	5
73	110	3.8	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
74	80	-24.5	ATOMIC ABSORPTION, FLAMELESS	3
75	150	41.6	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
76	110	3.8	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
80	90	-15.1	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
81	90	-15.1	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
82	120	13.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
83	21	-80.2	OTHER	
84	100	-5.6	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
86	107	1.0	ATOMIC ABSORPTION, FLAMELESS	3
88	10	-90.6	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
92	110	3.8	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
93	170	60.4	ATOMIC ABSORPTION, FLAMELESS	3
94	100	-5.6	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
95	110	3.8	PLASMA, INDUCTIVELY COUPLED	5
97	110	3.8	PLASMA, INDUCTIVELY COUPLED	5
98	90	-15.1	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
99	170	60.4	ATOMIC ABSORPTION, FLAMELESS	3
100	130	22.7	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
101	430	305.8	REJECT ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4

71 Labs had a total range of 10 to 430 and a mean of 105.0
 with a standard deviation of 32.9 and a 95% confidence interval of the mean +/- 8.1.

Table 7 Standard Reference Water Sample T3 Report for K

Code Number	Reported value	% dev. from mean	Methods	References
2	2.0	12.2	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
3	1.1	-38.3	OTHER	
8	1.7	-4.6	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
9	1.7	-4.6	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
10	1.8	1.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
14	2.0	12.2	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
15	1.8	1.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
16	1.8	1.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
17	2.2	23.4	OTHER	
18	1.7	-4.6	NOT REPORTED	
20	1.7	-4.6	OTHER	
21	1.2	-32.7	OTHER	
22	1.9	6.5	OTHER	
23	2.4	34.6	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
24	1.3	-27.1	OTHER	
25	1.0	-43.9	OTHER	
27	3.8	113.2	REJECT ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
28	1.8	1.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
29	2.0	12.2	OTHER	
30	1.7	-4.6	OTHER	
32	1.3	-27.1	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
35	1.7	-4.6	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
36	2.2	23.4	FLAME, EMISSION, PHOTOMETRIC	1,2
38	1.9	6.6	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
40	1.7	-4.6	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
41	1.7	-4.6	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
43	1.9	6.6	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
44	1.7	-4.6	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
46	1.6	-10.2	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
48	2.2	23.4	FLAME, EMISSION, PHOTOMETRIC	1,2
53	1.7	-4.6	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
54	1.8	1.0	OTHER	
57	2.1	17.3	FLAME, EMISSION, PHOTOMETRIC	1,2
59	1.8	1.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
60	2.0	12.2	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
61	1.6	-10.2	OTHER	
62	46.0	2480.4	REJECT ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
65	2.0	12.2	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
66	1.7	-4.6	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
67	2.2	23.4	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
68	2.0	12.2	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
74	1.8	1.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
76	1.7	-4.6	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
79	4.0	124.4	REJECT ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
81	1.7	-4.6	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4

Table 7 Standard Reference Water Sample T3 Report for K

Code Number	Reported value	% dev. from mean	Methods	References
82	1.8	1.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
84	1.5	-10.2	NOT REPORTED	1,2
86	1.8	1.0	FLAME, EMISSION, PHOTOMETRIC	1,2
88	1.3	1.0	FLAME, EMISSION, PHOTOMETRIC	1,2
92	1.7	-4.0	REJECT ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
93	2.2	23.4	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
94	2.0	12.2	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
97	1.8	1.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
98	1.9	5.6	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
99	1.3	-27.1	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
101	1.3	1.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4

56 Labs had a total range of 1.0 to 46.0 and a mean of 1.78
 with a standard deviation of 0.23 and a 95% confidence interval of the mean +/- 0.08.

Table 7 Standard Reference Water Sample T3 Report for MG

Code Number	Reported value	% dev. from mean	Methods	References
1	8.3	0.8	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
2	8.0	-2.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
3	7.9	-4.1	NOT REPORTED	
9	8.2	-0.4	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
10	8.4	2.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
12	7.7	-5.5	NOT REPORTED	
13	8.1	-1.7	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
14	8.1	-1.7	EMISSION, IC PLASMA	5
15	8.3	5.8	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
16	8.1	-1.7	EMISSION, IC PLASMA	5
17	8.5	3.2	EMISSION, IC PLASMA	5
18	8.9	8.0	NOT REPORTED	
20	8.4	2.0	NOT REPORTED	
21	8.2	-0.4	EMISSION, IC PLASMA	5
22	9.2	11.7	OTHER	
23	7.8	-5.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
24	8.0	-2.9	EMISSION, IC PLASMA	5
27	17.0	105.4	REJECT TITRATION, EDTA	2
28	3.5	3.2	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
29	7.7	-5.5	EMISSION, IC PLASMA	5
30	7.9	-4.1	NOT REPORTED	
32	7.2	-12.6	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
33	8.3	0.8	EMISSION, IC PLASMA	5
35	8.3	0.8	EMISSION, IC PLASMA	5
36	26.5	221.7	REJECT ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
37	8.0	-2.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
38	8.3	0.8	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
40	8.3	0.8	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
41	7.9	-4.1	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
43	8.4	2.0	NOT REPORTED	
44	8.2	-0.4	NOT REPORTED	
48	9.9	20.2	REJECT ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
50	0.9	-39.1	REJECT ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
53	8.0	-2.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
54	8.4	2.0	OTHER	
59	8.6	4.4	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
60	8.5	3.2	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
61	8.3	0.8	EMISSION, IC PLASMA	5
62	0.3	-90.3	REJECT ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
65	8.0	-2.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
66	8.2	-0.4	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
67	8.0	-2.9	NOT REPORTED	
68	8.7	5.6	EMISSION, IC PLASMA	5
73	3.8	5.8	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
74	7.5	-3.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4

Table 7 Standard Reference Water Sample T3 Report for MG

Code Number	Reported value	% dev. from mean	Methods	References
75	13.0	57.8	REJECT NOT REPORTED	
76	8.0	-2.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
79	3.0	-2.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
90	8.2	-0.4	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
81	9.0	9.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
82	8.4	2.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
84	7.0	-15.0	NOT REPORTED	
85	20.0	142.8	REJECT NOT REPORTED	
83	11.0	33.5	REJECT NOT REPORTED	
92	8.1	-1.7	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
93	8.0	4.4	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
94	7.3	-5.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
95	8.2	-0.4	EMISSION, IC PLASMA	5
97	8.5	4.4	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
98	8.5	3.2	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
99	8.4	2.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
101	9.4	14.1	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4

62 Labs had a total range of 0.8 to 26.5 and a mean of 8.24
 with a standard deviation of 0.43 and a 95% confidence interval of the mean +/- 0.12.

Table 7 Standard Reference Water Sample T3 Report for MN

Code Number	Reported value	% dev. from mean	Methods	References
1	29	-1.2	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
2	27	-3.0	PLASMA, INDUCTIVELY COUPLED	5
3	30	2.2	NOT REPORTED	
8	20	-31.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
10	29	-1.2	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
13	30	2.2	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
14	40	30.3	PLASMA, INDUCTIVELY COUPLED	5
15	40	36.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
16	40	36.3	PLASMA, INDUCTIVELY COUPLED	5
17	30	2.2	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
18	23	-21.6	NOT REPORTED	
20	31	5.6	NOT REPORTED	
21	26	-11.4	PLASMA, INDUCTIVELY COUPLED	5
22	< 50	IGNORED	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
23	30	2.2	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
24	30	2.2	PLASMA, INDUCTIVELY COUPLED	5
27	20	-31.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
28	29	-1.2	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
29	30	2.2	PLASMA, INDUCTIVELY COUPLED	5
30	31	5.6	NOT REPORTED	
32	20	-31.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
33	31	5.6	PLASMA, INDUCTIVELY COUPLED	5
34	20	-31.9	NOT REPORTED	
35	20	-31.9	PLASMA, INDUCTIVELY COUPLED	5
36	30	2.2	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
38	10	-65.9	ATOMIC ABSORPTION, FLAMELESS	3
40	26	-11.4	PLASMA, INDUCTIVELY COUPLED	5
42	33	12.4	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
43	40	36.3	NOT REPORTED	
44	30	2.2	NOT REPORTED	
46	29	-1.2	ATOMIC ABSORPTION, EXTRACTION (APDC/MIBK)	1,4
48	20	-31.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
50	27	-8.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
53	20	-31.9	ATOMIC ABSORPTION, FLAMELESS	3
54	31	5.6	PLASMA, INDUCTIVELY COUPLED	5
56	49	66.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
57	30	2.2	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
58	32	9.0	NOT REPORTED	
59	30	2.2	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
60	20	-31.9	ATOMIC ABSORPTION, EXTRACTION (PDDA/CHCL3)	2,3
61	30	2.2	PLASMA, INDUCTIVELY COUPLED	5
62	20	-31.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
65	30	2.2	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
66	33	12.4	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
68	33	12.4	PLASMA, INDUCTIVELY COUPLED	5

Table 7 Standard Reference Water Sample T3 Report for MN

Code Number	Reported value	% dev. from mean	Methods	References
73	20	-31.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
74	30	2.2	ATOMIC ABSORPTION, FLAMELESS	3
75	30	2.2	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
80	30	2.2	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
81	36	22.6	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
82	40	35.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
83	33	12.4	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
84	30	2.2	NOT REPORTED	
86	30	2.2	OTHER	
88	30	2.2	NOT REPORTED	
92	30	2.2	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
93	32	9.0	ATOMIC ABSORPTION, FLAMELESS	3
94	40	36.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
95	30	2.2	PLASMA, INDUCTIVELY COUPLED	5
97	40	36.3	PLASMA, INDUCTIVELY COUPLED	5
98	30	2.2	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
99	20	-31.9	ATOMIC ABSORPTION, FLAMELESS	3
101	30	2.2	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4

63 Labs had a total range of 10 to 49 and a mean of 29.4
 with a standard deviation of 6.7 and a 95% confidence interval of the mean +/- 1.7.

Table 7 Standard Reference Water Sample T3 Report for MO

Code Number	Reported value	% dev. from mean	Methods	References
1	102	11.1	ATOMIC ABS, EXTRACTION, 8 HYDROXYQUINOLINE/MIBK, NITROUS OXIDE	4
2	82	+10.6	PLASMA, INDUCTIVELY COUPLED	5
3	98	6.8	NOT REPORTED	
10	< 100		IGNORED	1,2,3
14	87	-5.2	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	5
16	90	-1.9	PLASMA, INDUCTIVELY COUPLED	5
17	< 100		IGNORED	1,2,3
21	104	13.3	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	5
22	53	-58.6	PLASMA, INDUCTIVELY COUPLED	4
28	73	-15.0	ATOMIC ABS, EXTRACTION, 8 HYDROXYQUINOLINE/MIBK, NITROUS OXIDE	4
30	90	-1.9	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1,2,3
32	410	346.8	NOT REPORTED	
33	93	1.3	REJECT	1,2,3
35	130	41.7	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	5
36	80	-12.8	ATOMIC ABSORPTION, FLAMELESS	3
48	80	-12.8	ATOMIC ABSORPTION, FLAMELESS	3
54	84	-8.5	PLASMA, INDUCTIVELY COUPLED	5
57	64	-30.3	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1,2,3
60	69	-3.0	ATOMIC ABS, EXTRACTION, 8 HYDROXYQUINOLINE/MIBK, NITROUS OXIDE	4
61	93	1.3	PLASMA, INDUCTIVELY COUPLED	5
62	120	30.8	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1,2,3
68	93	1.3	PLASMA, INDUCTIVELY COUPLED	5
93	96	4.6	ATOMIC ABSORPTION, FLAMELESS	3
95	93	6.8	PLASMA, INDUCTIVELY COUPLED	5
97	130	41.7	PLASMA, INDUCTIVELY COUPLED	5

25 Labs had a total range of 38 to 410 and a mean of 91.8
 with a standard deviation of 20.0 and a 95% confidence interval of the mean +/- 8.9.

Table 7 Standard Reference Water Sample T3 Report for NA

Code Number	Reported value	% dev. from mean	Methods	References
1	8.8	+3.6	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
2	8.0	-1.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
3	7.7	-5.0	NOT REPORTED	
8	7.7	-5.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
9	7.7	-5.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
10	8.3	+2.4	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
12	58.0	+615.9	REJECT NOT REPORTED	1,2,3,4
13	7.9	-2.5	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
14	7.7	-5.0	PLASMA, INDUCTIVELY COUPLED	5
15	8.3	+2.4	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
16	8.0	-1.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
17	8.5	+4.9	PLASMA, INDUCTIVELY COUPLED	5
18	8.8	+8.6	NOT REPORTED	
20	7.6	-6.2	NOT REPORTED	
21	7.3	-9.9	PLASMA, INDUCTIVELY COUPLED	5
22	8.0	-1.3	FLAME EMISSION, PHOTOMETRIC	1,2
23	8.4	+3.7	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
24	7.8	-3.7	PLASMA, INDUCTIVELY COUPLED	5
25	1.3	-84.0	REJECT FLAME EMISSION, PHOTOMETRIC	1,2
27	8.0	-1.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
28	8.1	-0.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
29	10.0	+23.4	PLASMA, INDUCTIVELY COUPLED	5
30	7.5	-7.4	NOT REPORTED	
32	7.4	-8.7	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
33	8.5	+6.2	PLASMA, INDUCTIVELY COUPLED	5
35	6.3	-16.1	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
36	3.0	-1.3	FLAME EMISSION, PHOTOMETRIC	1,2
37	9.0	+11.1	NOT REPORTED	
38	7.0	-13.6	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
40	8.0	-1.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
41	7.2	-11.1	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
43	9.2	+13.6	NOT REPORTED	
44	7.3	-3.7	NOT REPORTED	
46	6.9	-14.8	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
48	8.0	-1.3	FLAME EMISSION, PHOTOMETRIC	1,2
50	8.2	+1.2	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
53	7.8	-3.7	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
54	8.0	-1.3	PLASMA, INDUCTIVELY COUPLED	5
57	10.0	+23.4	PLASMA, INDUCTIVELY COUPLED	5
59	9.0	+11.1	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
60	8.3	+2.4	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
61	7.7	-5.0	PLASMA, INDUCTIVELY COUPLED	5
62	9.2	+13.6	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
65	8.0	-1.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
66	8.1	-0.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4

Table 7 Standard Reference Water Sample T3 Report for NA

Code Number	Reported value	% dev. from mean	Methods	References
67	3.2	1.2	NOT REPORTED	
68	3.4	3.7	PLASMA, INDUCTIVELY COUPLED	5
73	3.0	-1.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
74	3.2	1.2	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
75	11.0	35.8	REJECT	NOT REPORTED
76	7.3	-2.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
79	7.3	-3.7	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
80	6.5	4.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
81	3.0	-1.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
82	3.0	-1.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
84	7.4	-3.7	NOT REPORTED	
86	21.0	159.2	REJECT	NOT REPORTED
88	7.2	-11.1	NOT REPORTED	
92	7.5	-7.4	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
93	7.9	-2.5	NOT REPORTED	
94	8.0	-1.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
95	10.0	23.4	PLASMA, INDUCTIVELY COUPLED	5
97	3.3	2.4	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
98	9.1	12.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
99	7.9	-2.5	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
101	3.3	2.4	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4

66 Labs had a total range of 1.3 to 58.0 and a mean of 8.10
 with a standard deviation of 0.68 and a 95% confidence interval of the mean +/- 0.17.

Table 7 Standard Reference Water Sample T3 Report for NI

Code Number	Reported value	% dev. from mean	Methods	References
1	4.3	-5.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
2	4.3	-5.3	OTHER	
3	4.6	-9.8	NOT REPORTED	
8	6.0	17.7	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
10	6.0	17.7	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
13	5.0	-1.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
14	4.3	-15.7	OTHER	
15	4.1	-19.6	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
16	4.9	-3.9	ATOMIC ABSORPTION, FLAMELESS	3
17	3.0	-41.2	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
20	4.8	-5.3	NOT REPORTED	
21	5.1	3.0	OTHER	
22	< 100	IGNORED	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
23	6.0	17.7	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
27	7.0	37.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
28	5.7	11.8	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
29	5.3	4.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
30	4.8	-5.3	NOT REPORTED	
32	1.0	-80.4	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
33	4.9	-3.9	OTHER	
35	7.0	37.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
36	< 1	IGNORED	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
40	6.9	35.3	ATOMIC ABSORPTION, EXTRACTION (APDC/MIBK)	1,4
43	7.2	41.2	NOT REPORTED	
44	5.0	-1.9	NOT REPORTED	
48	3.3	-35.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
50	4.8	-5.8	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
51	5.0	-1.9	ATOMIC ABSORPTION, FLAMELESS	3
53	8.0	56.9	ATOMIC ABSORPTION, FLAMELESS	3
54	4.4	-13.7	OTHER	
56	5.0	-1.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
57	4.0	-21.5	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
58	4.3	-5.8	NOT REPORTED	
59	5.3	4.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
60	4.7	-7.8	ATOMIC ABSORPTION, EXTRACTION (PDCA/CHCL3)	2,3
61	4.5	-9.8	OTHER	
62	4.0	-21.5	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
66	6.0	17.7	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
67	6.4	25.5	NOT REPORTED	
68	5.4	5.9	OTHER	
73	5.0	-1.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
74	5.5	9.8	ATOMIC ABSORPTION, FLAMELESS	3
75	7.5	47.1	NOT REPORTED	
76	2.0	-60.8	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
80	3.8	-25.5	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4

Table 7 Standard Reference Water Sample T3 Report for NI

Code Number	Reported value	% dev. from mean	Methods	References	
81	64	25.5	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
84	40	-21.5	NOT REPORTED		
88	60	17.7	NOT REPORTED		
89	7	-86.3	REJECT	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
92	48	-5.8		ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
93	83	62.8		ATOMIC ABSORPTION, FLAMELESS	3
94	43	-5.8		ATOMIC ABSORPTION, FLAMELESS	3
95	49	-3.9		OTHER	
97	47	-7.8		OTHER	
99	60	17.7		ATOMIC ABSORPTION, FLAMELESS	3
100	37	-27.4		ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
101	39	-23.5		ATOMIC ABSORPTION, FLAMELESS	3

57 Labs had a total range of 7 to 83 and a mean of 51.0
 with a standard deviation of 13.4 and a 95% confidence interval of the mean +/- 3.6.

Table 7 Standard Reference Water Sample T3 Report for Pb

Code Number	Reported value	% dev. from mean	Methods	References
1	24	-4.0	ANODIC STRIPPING VOLTAMMETRY, DIFFERENTIAL PULSE	2
2	< 50		PLASMA, INDUCTIVELY COUPLED	5
3	37	48.0	NOT REPORTED	
4	27	8.0	ATOMIC ABSORPTION, FLAMELESS	3
8	< 10		ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
10	< 25		ANODIC STRIPPING VOLTAMMETRY, DIFFERENTIAL PULSE	2
13	27	8.0	ATOMIC ABSORPTION, FLAMELESS	3
15	20	-20.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
16	36	44.0	ATOMIC ABSORPTION, FLAMELESS	3
17	20	-20.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
18	22	-12.0	NOT REPORTED	
20	20	-20.0	NOT REPORTED	
21	12	-52.0	PLASMA, INDUCTIVELY COUPLED	5
22	25	0.0	ATOMIC ABSORPTION, FLAMELESS	3
23	27	8.0	ATOMIC ABSORPTION, FLAMELESS	3
24	< 99		PLASMA, INDUCTIVELY COUPLED	5
25	58	172.0	ANODIC STRIPPING VOLTAMMETRY, DIFFERENTIAL PULSE	2
27	30	20.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
29	21	-15.0	ATOMIC ABSORPTION, FLAMELESS	3
32	< 30		ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
33	13	-28.0	PLASMA, INDUCTIVELY COUPLED	5
35	56	124.0	PLASMA, INDUCTIVELY COUPLED	5
38	20	-20.0	ATOMIC ABSORPTION, FLAMELESS	3
42	40	60.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
43	28	12.0	NOT REPORTED	
44	24	-4.0	NOT REPORTED	
45	28	12.0	ATOMIC ABSORPTION, FLAMELESS	3
48	19	-24.0	ATOMIC ABSORPTION, FLAMELESS	3
50	27	8.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
53	27	8.0	ATOMIC ABSORPTION, FLAMELESS	3
56	150	500.0	ATOMIC ABSORPTION, EXTRACTION (PDCA/CHCL3)	2,3
57	17	-32.0	ANODIC STRIPPING VOLTAMMETRY, DIFFERENTIAL PULSE	2
58	17	-32.0	NOT REPORTED	
59	40	60.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
60	24	-4.0	ATOMIC ABSORPTION, EXTRACTION (PDCA/CHCL3)	2,3
61	22	-12.0	ATOMIC ABSORPTION, FLAMELESS	3
52	40	60.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
65	22	-12.0	ATOMIC ABSORPTION, FLAMELESS	3
66	60	140.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
67	11	-56.0	NOT REPORTED	
68	28	12.0	PLASMA, INDUCTIVELY COUPLED	5
73	59	135.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
74	24	-4.0	ATOMIC ABSORPTION, FLAMELESS	3
76	1	-96.0	ATOMIC ABSORPTION, FLAMELESS	3
80	34	36.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4

Table 7 Standard Reference Water Sample T3 Report for PB

Code Number	Reported value	% dev. from mean	Methods	References
81	24	-4.0	ATOMIC ABSORPTION, FLAMELESS	3
84	32	23.0	NOT REPORTED	
88	40	60.0	NOT REPORTED	
89	13	-48.0	ATOMIC ABSORPTION, FLAMELESS	3
92	26	4.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
93	24	-4.0	ATOMIC ABSORPTION, FLAMELESS	3
94	23	-3.0	ATOMIC ABSORPTION, FLAMELESS	3
97	24	-4.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
98	21	-15.0	ATOMIC ABSORPTION, FLAMELESS	3
99	42	68.0	ATOMIC ABSORPTION, EXTRACTION (PCCA/CHCL3)	2,3
100	20	-20.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
101	27	8.0	ATOMIC ABSORPTION, FLAMELESS	3

57 Labs had a total range of 1 to 150 and a mean of 25.0
 with a standard deviation of 8.3 and a 95% confidence interval of the mean +/- 2.4.

Table 7 Standard Reference Water Sample T3 Report for SE

Code Number	Reported value	% dev. from mean	Methods	References
3	3	-65.4	ATOMIC ABSORPTION, HYDRIDE	1,2,3,4
4	8	-7.7	ATOMIC ABSORPTION, FLAMELESS	3
10	10	15.4	OTHER	
11	16	84.6	ATOMIC ABSORPTION, FLAMELESS	3
13	9	3.8	ATOMIC ABSORPTION, HYDRIDE	1,2,3,4
15	< 20		IGNORED ATOMIC ABSORPTION, FLAMELESS	3
16	12	38.5	ATOMIC ABSORPTION, FLAMELESS	3
17	< 1		IGNORED ATOMIC ABSORPTION, HYDRIDE	1,2,3,4
18	8	-7.7	NOT REPORTED	
20	9	3.8	OTHER	
21	36	315.4	REJECT OTHER	
22	9	3.8	OTHER	
23	9	3.8	ATOMIC ABSORPTION, FLAMELESS	3
28	100	1053.8	REJECT ATOMIC ABSORPTION, HYDRIDE	1,2,3,4
29	7	-19.2	ATOMIC ABSORPTION, FLAMELESS	3
30	9	3.8	ATOMIC ABSORPTION, HYDRIDE	1,2,3,4
32	11	26.9	ATOMIC ABSORPTION, HYDRIDE	1,2,3,4
33	9	3.8	OTHER	
35	12	36.5	ATOMIC ABSORPTION, FLAMELESS	3
35	3	-7.7	ATOMIC ABSORPTION, FLAMELESS	3
38	11	26.9	ATOMIC ABSORPTION, FLAMELESS	3
40	2	-75.9	OTHER	
43	9	3.8	ATOMIC ABSORPTION, FLAMELESS	3
44	9	3.8	ATOMIC ABSORPTION, HYDRIDE	1,2,3,4
45	10	15.4	ATOMIC ABSORPTION, FLAMELESS	3
48	9	3.8	ATOMIC ABSORPTION, FLAMELESS	3
57	10	15.4	ATOMIC ABSORPTION, FLAMELESS	3
58	6	-30.8	ATOMIC ABSORPTION, FLAMELESS	3
60	5	-42.3	ATOMIC ABSORPTION, HYDRIDE	1,2,3,4
61	9	3.8	ATOMIC ABSORPTION, FLAMELESS	3
62	10	15.4	ATOMIC ABSORPTION, FLAMELESS	3
65	8	-7.7	ATOMIC ABSORPTION, FLAMELESS	3
68	1	-88.5	ATOMIC ABSORPTION, HYDRIDE	1,2,3,4
74	10	15.4	ATOMIC ABSORPTION, FLAMELESS	3
76	19	119.2	REJECT ATOMIC ABSORPTION, FLAMELESS	3
77	10	15.4	ATOMIC ABSORPTION, HYDRIDE	1,2,3,4
81	10	15.4	ATOMIC ABSORPTION, FLAMELESS	3
84	4	-53.8	ATOMIC ABSORPTION, HYDRIDE	1,2,3,4
88	10	15.4	ATOMIC ABSORPTION, FLAMELESS	3
92	10	15.4	ATOMIC ABSORPTION, HYDRIDE	1,2,3,4
93	10	15.4	ATOMIC ABSORPTION, FLAMELESS	3
94	8	-7.7	ATOMIC ABSORPTION, FLAMELESS	3
97	47	442.3	REJECT ATOMIC ABSORPTION, HYDRIDE	1,2,3,4
99	6	-30.8	OTHER	
101	12	38.5	ATOMIC ABSORPTION, HYDRIDE	1,2,3,4

45 Labs had a total range of 1 to 100 and a mean of 8.7
 with a standard deviation of 2.8 and a 95% confidence interval of the mean +/- 0.9.

Table 7 Standard Reference Water Sample Y3 Report for SR

Code Number	Reported value	% dev. from mean	Methods	References
1	220	-0.4		
2	220	-0.4	ATOMIC ABSORPTION, DIRECT, AIR	1,2,4
3	230	4.1	EMISSION, IC PLASMA	5
			NOT REPORTED	
10	330	49.4	REJECT ATOMIC ABSORPTION, DIRECT, AIR	1,2,4
11	200	-9.5	ATOMIC ABSORPTION, DIRECT, AIR	1,2,4
20	220	-0.4	NOT REPORTED	
21	230	4.1	EMISSION, IC PLASMA	5
28	240	8.6	ATOMIC ABSORPTION, DIRECT, AIR	1,2,4
30	220	-0.4	NOT REPORTED	
33	220	-0.4	EMISSION, IC PLASMA	5
35	20	-90.9	REJECT ATOMIC ABSORPTION, DIRECT, AIR	1,2,4
40	210	-4.9	EMISSION, IC PLASMA	5
41	570	155.0	REJECT OTHER	
48	200	-9.5	OTHER	
54	220	-0.4	EMISSION, IC PLASMA	5
57	210	-4.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,4
60	200	-9.5	ATOMIC ABSORPTION, DIRECT, AIR	1,2,4
61	220	-0.4	EMISSION, IC PLASMA	5
62	170	-23.0	REJECT ATOMIC ABSORPTION, DIRECT, AIR	1,2,4
68	230	4.1	EMISSION, IC PLASMA	5
74	230	4.1	OTHER	
81	240	8.6	ATOMIC ABSORPTION, DIRECT, AIR	1,2,4
84	300	35.3	REJECT NOT REPORTED	
93	230	4.1	ATOMIC ABSORPTION, DIRECT, AIR	1,2,4
95	230	4.1	EMISSION, IC PLASMA	5
97	210	-4.9	EMISSION, IC PLASMA	5
98	230	4.1	ATOMIC ABSORPTION, DIRECT, AIR	1,2,4
101	150	-32.1	REJECT ATOMIC ABSORPTION, DIRECT, AIR	1,2,4

28 Labs had a total range of 20 to 570 and a mean of 221
 with a standard deviation of 12 and a 95% confidence interval of the mean +/- 5.

Table 7 Standard Reference Water Sample T3 Report for TL

Code Number	Reported value	% dev. from mean	Methods	References
10	< 50		IGNORED	ANODIC STRIPPING VOLTAMMETRY, DIFFERENTIAL PULSE. GIVE REF.
15	< 50		IGNORED	ATOMIC ABSORPTION, DIRECT, AIR
21	2	-70.9	OTHER	1,3
23	9	30.9	ATOMIC ABSORPTION, FLAMELESS	3
32	< 60		IGNORED	ATOMIC ABSORPTION, DIRECT, AIR
35	5	-12.7	ATOMIC ABSORPTION, FLAMELESS	3
48	5	-27.3	ATOMIC ABSORPTION, FLAMELESS	3
57	9	30.9	ATOMIC ABSORPTION, DIRECT, AIR	1,3
60	7	1.8	OTHER	
61	< 30		IGNORED	OTHER
62	< 100		IGNORED	OTHER
68	3	16.4	ATOMIC ABSORPTION, DIRECT, AIR	1,3
84	40	+31.8	REJECT	NOT REPORTED
93	9	30.9		ATOMIC ABSORPTION, FLAMELESS

14 Labs had a total range of 2 to 40 and a mean of 6.9
 with a standard deviation of 2.5 and a 95% confidence interval of the mean +/- 2.1.

Table 7 Standard Reference Water Sample T3 Report for V

Code Number	Reported value	% dev. from mean	Methods	References
2	68	45.6	OTHER	5
3	45	-3.6	EMISSION, IC PLASMA	1,3
10	< 250		IGNORED ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1,3
15	< 100		IGNORED ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1,3
16	43	-7.9	EMISSION, IC PLASMA	5
20	43	-7.9	EMISSION, IC PLASMA	5
21	45	-3.6	EMISSION, IC PLASMA	5
30	42	-10.1	OTHER	5
32	60	28.5	EMISSION, IC PLASMA	5
33	45	-3.6	EMISSION, IC PLASMA	5
35	54	15.6	EMISSION, IC PLASMA	5
36	100	114.1	REJECT ATOMIC ABSORPTION, FLAMELESS	3
48	38	-18.6	ATOMIC ABSORPTION, FLAMELESS	3
51	42	-10.1	EMISSION, IC PLASMA	5
54	41	-12.2	EMISSION, IC PLASMA	5
57	35	-25.1	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1,3
60	43	-7.9	OTHER	5
61	45	-3.6	EMISSION, IC PLASMA	5
62	< 20		IGNORED ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1,3
68	43	-7.9	EMISSION, IC PLASMA	5
74	43	-7.9	ATOMIC ABSORPTION, FLAMELESS	3
84	50	7.1	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1,3
93	63	34.9	ATOMIC ABSORPTION, FLAMELESS	3
95	45	-1.5	EMISSION, IC PLASMA	5
97	120	157.0	REJECT EMISSION, IC PLASMA	5

25 Labs had a total range of 35 to 120 and a mean of 46.7
 with a standard deviation of 8.4 and a 95% confidence interval of the mean +/- 3.9.

Table 7 Standard Reference Water Sample T3 Report for ZN

Code Number	Reported value	% dev. from mean	Methods	References
1	78	13.4	ATOMIC ABSORPTION, DIRECT, AIR	2,3,4
2	55	-20.0	PLASMA, INDUCTIVELY COUPLED	5
3	67	+2.6	PLASMA, INDUCTIVELY COUPLED	5
4	92	32.7	ATOMIC ABSORPTION, DIRECT, AIR	2,3,4
8	78	13.4	ATOMIC ABSORPTION, DIRECT, AIR	2,3,4
10	64	-7.0	ANODIC STRIPPING VOLTAMMETRY, DIFFERENTIAL PULSE	
11	68	-1.1	ATOMIC ABSORPTION, DIRECT, AIR	2,3,4
13	84	22.1	ATOMIC ABSORPTION, DIRECT, AIR	2,3,4
14	61	-11.3	PLASMA, INDUCTIVELY COUPLED	5
15	75	9.0	ATOMIC ABSORPTION, DIRECT, AIR	2,3,4
16	62	-9.9	PLASMA, INDUCTIVELY COUPLED	5
17	70	1.8	ATOMIC ABSORPTION, DIRECT, AIR	2,3,4
19	70	1.8	ANODIC STRIPPING VOLTAMMETRY, DIFFERENTIAL PULSE	
20	63	-8.4	PLASMA, INDUCTIVELY COUPLED	5
21	72	4.7	ATOMIC ABSORPTION, FLAMELESS	3
22	57	-17.1	ATOMIC ABSORPTION, DIRECT, AIR	2,3,4
23	80	16.3	ATOMIC ABSORPTION, DIRECT, AIR	2,3,4
24	72	4.7	PLASMA, INDUCTIVELY COUPLED	5
27	90	30.8	ATOMIC ABSORPTION, DIRECT, AIR	2,3,4
28	65	-5.5	ATOMIC ABSORPTION, DIRECT, AIR	2,3,4
29	71	3.2	PLASMA, INDUCTIVELY COUPLED	5
30	64	-7.0	PLASMA, INDUCTIVELY COUPLED	5
32	60	-12.8	ATOMIC ABSORPTION, DIRECT, AIR	2,3,4
33	65	-5.5	PLASMA, INDUCTIVELY COUPLED	5
35	85	23.6	PLASMA, INDUCTIVELY COUPLED	5
36	80	16.3	ATOMIC ABSORPTION, DIRECT, AIR	2,3,4
38	70	1.8	ATOMIC ABSORPTION, DIRECT, AIR	2,3,4
40	60	-12.8	PLASMA, INDUCTIVELY COUPLED	5
42	62	-9.9	ATOMIC ABSORPTION, DIRECT, AIR	2,3,4
43	79	14.8	ATOMIC ABSORPTION, DIRECT, AIR	2,3,4
44	62	-9.9	ATOMIC ABSORPTION, DIRECT, AIR	2,3,4
46	120	74.4	REJECT ATOMIC ABSORPTION, DIRECT, AIR	2,3,4
48	81	17.7	ATOMIC ABSORPTION, DIRECT, AIR	2,3,4
50	64	-7.0	ATOMIC ABSORPTION, DIRECT, AIR	2,3,4
51	50	-27.3	ATOMIC ABSORPTION, FLAMELESS	3
53	69	0.3	ATOMIC ABSORPTION, DIRECT, AIR	2,3,4
54	63	-8.4	PLASMA, INDUCTIVELY COUPLED	5
56	143	103.5	REJECT ANODIC STRIPPING VOLTAMMETRY, DIFFERENTIAL PULSE	
57	65	-5.5	ATOMIC ABSORPTION, DIRECT, AIR	2,3,4
58	83	20.7	ATOMIC ABSORPTION, DIRECT, AIR	2,3,4
59	80	16.3	ATOMIC ABSORPTION, DIRECT, AIR	2,3,4
60	55	-20.0	ATOMIC ABSORPTION, EXTRACTION (PDDA/CHCl ₃)	2
61	65	-5.5	PLASMA, INDUCTIVELY COUPLED	5
62	60	-12.8	ATOMIC ABSORPTION, DIRECT, AIR	2,3,4
65	72	4.7	ATOMIC ABSORPTION, DIRECT, AIR	2,3,4

Table 7 Standard Reference Water Sample T3 Report for ZN

Code Number	Reported value	% dev. from mean	Methods	References
66	75	9.0	ATOMIC ABSORPTION, DIRECT, AIR	2,3,4
67	100	45.4	ATOMIC ABSORPTION, DIRECT, AIR	2,3,4
68	73	6.1	PLASMA, INDUCTIVELY COUPLED	5
73	65	-5.5	ATOMIC ABSORPTION, DIRECT, AIR	2,3,4
74	66	-4.1	ATOMIC ABSORPTION, DIRECT, AIR	2,3,4
75	35	-49.1	ATOMIC ABSORPTION, DIRECT, AIR	2,3,4
76	70	1.8	ATOMIC ABSORPTION, DIRECT, AIR	2,3,4
80	78	13.4	ATOMIC ABSORPTION, DIRECT, AIR	2,3,4
81	63	-8.4	ATOMIC ABSORPTION, DIRECT, AIR	2,3,4
82	59	-14.2	ATOMIC ABSORPTION, DIRECT, AIR	2,3,4
84	70	1.8	ATOMIC ABSORPTION, DIRECT, AIR	2,3,4
86	139	102.1	REJECT ATOMIC ABSORPTION, FLAMELESS	3
88	80	16.3	ATOMIC ABSORPTION, DIRECT, AIR	2,3,4
89	37	-46.2	ATOMIC ABSORPTION, DIRECT, AIR	2,3,4
92	72	4.7	ATOMIC ABSORPTION, DIRECT, AIR	2,3,4
93	140	103.5	REJECT ATOMIC ABSORPTION, FLAMELESS	3
94	80	16.3	ATOMIC ABSORPTION, DIRECT, AIR	2,3,4
95	58	-15.7	PLASMA, INDUCTIVELY COUPLED	5
97	66	-4.1	PLASMA, INDUCTIVELY COUPLED	5
99	70	1.8	ATOMIC ABSORPTION, FLAMELESS	3
100	60	-12.8	ATOMIC ABSORPTION, DIRECT, AIR	2,3,4
101	200	190.7	REJECT ATOMIC ABSORPTION, DIRECT, AIR	2,3,4

67 Labs had a total range of 35 to 200 and a mean of 68.8
 with a standard deviation of 11.4 and a 95% confidence interval of the mean +/- 2.9.

Table 8 . Statistics by method for standard reference sample T3

Determin- ation	Method	Range: from	to	Mean	Standard Deviation	N
ACID@CACO3	TITRATION, COLORIMETRIC, MANUAL	22400.000	25000.000	23750.000	1063.015	4
	TITRATION, ELECTROMETRIC, MANUAL	300.000	25000.000	23850.000	675.360	10
	OVER-ALL	300.000	25000.000	23821.429	760.747	14
AG	ATOMIC ABSORPTION, DIRECT, AIR	2.000	20.000	11.625	3.897	16
	ATOMIC ABSORPTION, EXTRACTION (APDC/MIBK)	5.000	27.000	14.000	11.533	3
	ATOMIC ABSORPTION, FLAMELESS	2.000	16.000	10.000	3.954	12
	NOT REPORTED	7.000	17.000	12.000	3.742	9
	OVER-ALL	2.000	27.000	11.000	3.879	45
AS	ATOMIC ABSORPTION, FLAMELESS	13.000	170.000	55.600	5.082	20
	ATOMIC ABSORPTION, HYDRIDE,(NABH4),AUTOMATED	45.000	59.000	53.200	6.017	5
	ATOMIC ABSORPTION, HYDRIDE,(NABH4),MANUAL	4.000	120.000	54.364	29.330	11
	OVER-ALL	4.000	170.000	55.125	9.903	40
B	EMISSION, IC PLASMA	40.000	190.000	85.273	26.721	11
	NOT REPORTED	85.000	163.000	114.333	42.442	3
	OVER-ALL	40.000	2800.000	97.813	38.127	16
BA	ATOMIC ABSORPTION, FLAMELESS	35.000	75.000	42.200	5.848	5
	PLASMA, INDUCTIVELY COUPLED	20.000	290.000	40.615	1.660	13
	OVER-ALL	20.000	290.000	43.771	12.129	35
BE	ATOMIC ABSORPTION, FLAMELESS	16.000	22.000	18.000	2.828	4
	PLASMA, INDUCTIVELY COUPLED	14.000	20.000	18.700	1.160	10
	OVER-ALL	1.000	24.000	18.259	3.121	27
CA	ATOMIC ABSORPTION, DIRECT, AIR	3.000	83.000	32.147	5.355	34
	EMISSION, IC PLASMA	33.000	37.000	34.100	1.449	10
	NOT REPORTED	25.000	73.000	32.556	3.432	9
	OTHER	32.000	39.000	35.333	3.512	3
	OVER-ALL	3.000	83.000	32.732	4.543	56
CD	ANODIC STRIPPING VOLTAMMETRY, DIFFERENTIAL PULSE	15.000	23.000	20.250	3.775	4
	ATOMIC ABSORPTION, DIRECT, AIR	10.000	25.000	20.867	1.807	15
	ATOMIC ABSORPTION, FLAMELESS	8.000	41.000	19.882	5.521	17
	NOT REPORTED	5.000	24.000	17.273	5.569	11
	PLASMA, INDUCTIVELY COUPLED	17.000	22.000	19.444	1.424	9
	OVER-ALL	5.000	41.000	19.936	4.238	62
CO	ATOMIC ABSORPTION, FLAMELESS	4.000	30.000	27.000	4.359	3
	PLASMA, INDUCTIVELY COUPLED	21.000	42.000	26.000	0.535	8
	OVER-ALL	4.000	72.000	26.458	3.148	24
CR TOT	ATOMIC ABSORPTION, DIRECT, AIR	10.000	37.000	20.667	6.996	18
	NOT REPORTED	7.000	39.000	17.214	5.026	14
	PLASMA, INDUCTIVELY COUPLED	18.000	25.000	18.800	1.095	5
	OVER-ALL	7.000	39.000	19.583	6.296	60
CU	ATOMIC ABSORPTION, DIRECT, AIR	9.000	52.000	23.800	5.487	35
	ATOMIC ABSORPTION, FLAMELESS	14.000	30.000	21.714	4.923	7
	PLASMA, INDUCTIVELY COUPLED	10.000	66.000	23.143	6.792	14

Table 8 . Statistics by method for standard reference sample T3

Determination	Method	Range: from	to	Mean	Standard Deviation	N
CU	_OVER-ALL_	9.000-	66.000	23.414	5.623	58
FE	ATOMIC ABSORPTION, DIRECT, AIR	10.000-	430.000	107.725	19.767	40
	ATOMIC ABSORPTION, FLAMELESS	75.000-	280.000	147.000	77.485	6
	PLASMA, INDUCTIVELY COUPLED	10.000-	124.000	101.400	8.919	15
	OVER-ALL	10.000-	430.000	105.955	32.850	66
K	ATOMIC ABSORPTION, DIRECT, AIR	1.300-	46.000	1.817	0.216	35
	FLAME, EMISSION, PHOTOMETRIC	1.800-	2.200	2.075	0.189	4
	OTHER	1.000-	2.200	1.591	0.391	11
	OVER-ALL	1.000-	46.000	1.783	0.282	52
MG	ATOMIC ABSORPTION, DIRECT, AIR	0.800-	26.500	8.263	0.430	32
	EMISSION, IC PLASMA	7.700-	8.700	8.218	0.260	11
	NOT REPORTED	7.000-	20.000	8.044	0.532	9
	OVER-ALL	0.800-	26.500	8.237	0.434	54
MN	ATOMIC ABSORPTION, DIRECT, AIR	20.000-	49.000	29.933	6.787	30
	ATOMIC ABSORPTION, FLAMELESS	10.000-	32.000	22.400	8.877	5
	NOT REPORTED	20.000-	40.000	29.700	5.314	10
	PLASMA, INDUCTIVELY COUPLED	20.000-	40.000	31.000	5.805	14
	OVER-ALL	10.000-	49.000	29.355	6.680	62
MO	ATOMIC ABS/EXTRACTION, 8 HYDROXYQUINOLINE/MIBK, NITROUS OXIDE	38.000-	102.000	76.333	33.828	3
	ATOMIC ABSORPTION, FLAMELESS	80.000-	96.000	80.000	0.000	2
	PLASMA, INDUCTIVELY COUPLED	82.000-	130.000	91.556	6.839	9
	OVER-ALL	38.000-	410.000	91.773	19.995	22
NA	ATOMIC ABSORPTION, DIRECT, AIR	6.800-	9.200	8.000	0.551	37
	FLAME EMISSION, PHOTOMETRIC	1.300-	8.000	8.000	0.000	3
	NOT REPORTED	7.200-	58.000	8.027	0.683	11
	PLASMA, INDUCTIVELY COUPLED	7.300-	10.000	8.545	1.010	11
	OVER-ALL	1.300-	58.000	8.102	0.683	62
NI	ATOMIC ABSORPTION, DIRECT, AIR	7.000-	70.000	47.600	14.597	25
	ATOMIC ABSORPTION, FLAMELESS	39.000-	83.000	58.125	15.688	8
	NOT REPORTED	40.000-	75.000	55.100	11.893	10
	OTHER	43.000-	54.000	47.889	3.408	9
	OVER-ALL	7.000-	83.000	50.982	13.383	54
PB	ANODIC STRIPPING VOLTAMMETRY, DIFFERENTIAL PULSE	17.000-	68.000	36.333	27.647	3
	ATOMIC ABSORPTION, EXTRACTION (PDCA/CHCL3)	24.000-	150.000	72.000	68.147	3
	ATOMIC ABSORPTION, FLAMELESS	1.000-	36.000	24.053	4.684	19
	NOT REPORTED	11.000-	40.000	25.667	9.474	9
	OVER-ALL	1.000-	150.000	25.000	8.280	47
SE	ATOMIC ABSORPTION, FLAMELESS	6.000-	19.000	9.300	1.525	20
	ATOMIC ABSORPTION, HYDRIDE	1.000-	100.000	7.545	3.643	11
	OTHER	2.000-	36.000	7.500	3.017	6
	OVER-ALL	1.000-	100.000	8.667	2.841	39
SR	ATOMIC ABSORPTION, DIRECT, AIR	20.000-	330.000	209.000	29.981	10

Table 8 . Statistics by method for standard reference sample T3

Determin- ation	Method	Range: from	to	Mean	Standard Deviation	N
SR	EMISSION, IC PLASMA <u>_OVER-ALL_</u>	210.000-	230.000	221.111	7.817	9
		20.000-	570.000	220.909	11.916	22
TL	ATOMIC ABSORPTION, FLAMELESS <u>_OVER-ALL_</u>	5.000-	9.000	7.250	2.062	4
		2.000-	40.000	6.875	2.475	8
V	ATOMIC ABSORPTION, FLAMELESS EMISSION, IC PLASMA <u>_OVER-ALL_</u>	38.000-	100.000	61.000	28.154	4
		41.000-	120.000	43.800	1.619	10
		35.000-	120.000	46.700	8.367	20
ZN	ATOMIC ABSORPTION, DIRECT, AIR ATOMIC ABSORPTION, FLAMELESS PLASMA, INDUCTIVELY COUPLED <u>_OVER-ALL_</u>	35.000-	200.000	70.850	12.695	40
		50.000-	140.000	94.200	42.240	5
		55.000-	85.000	64.333	5.038	15
		35.000-	200.000	68.790	11.416	62

Table 9 Standard Reference Water Sample N14 Report for NH₃-N

Code Number	Reported value	% dev. from mean	Methods	References
2	0.66	-6.2	OTHER	
4	0.65	-7.6	COLORIMETRIC, PHENATE, AUTOMATED	1,2,3
5	0.95	35.0	COLORIMETRIC, INDOPHENOL, AUTOMATED	4
6	0.58	-17.6	COLORIMETRIC, DISTILLATION, NESSLERIZATION	1,4
8	0.68	-3.4	ION SELECTIVE ELECTRODE	1,2,3,4
9	0.62	-11.9	OTHER	
11	0.88	25.1	ION SELECTIVE ELECTRODE	1,2,3,4
12	0.69	-1.9	COLORIMETRIC, PHENATE, MANUAL	1
15	0.84	19.4	OTHER	
16	0.67	-4.8	COLORIMETRIC, PHENATE, AUTOMATED	1,2,3
17	0.73	3.6	COLORIMETRIC, PHENATE, AUTOMATED	1,2,3
18	0.83	18.0	OTHER	
19	0.50	-28.9	COLORIMETRIC, PHENATE, MANUAL	1
22	0.78	10.9	COLORIMETRIC, PHENATE, AUTOMATED	1,2,3
23	0.48	-31.8	COLORIMETRIC, PHENATE, AUTOMATED	1,2,3
27	0.72	2.3	OTHER	
28	0.64	-9.0	COLORIMETRIC, PHENATE, AUTOMATED	1,2,3
29	0.66	-6.2	ION SELECTIVE ELECTRODE	1,2,3,4
31	0.64	-9.0	NOT REPORTED	
32	0.55	-21.8	COLORIMETRIC, DISTILLATION, NESSLERIZATION	1,4
33	0.66	-6.2	COLORIMETRIC, PHENATE, AUTOMATED	1,2,3
35	0.64	-9.0	COLORIMETRIC, PHENATE, AUTOMATED	1,2,3
36	0.61	-13.3	ION SELECTIVE ELECTRODE	1,2,3,4
37	0.66	-6.2	ION SELECTIVE ELECTRODE	1,2,3,4
38	0.63	-3.4	COLORIMETRIC, PHENATE, AUTOMATED	1,2,3
40	0.66	-6.2	NOT REPORTED	
41	0.60	-14.7	COLORIMETRIC, PHENATE, AUTOMATED	1,2,3
42	0.64	-9.0	ION SELECTIVE ELECTRODE	1,2,3,4
43	0.68	-3.4	NOT REPORTED	
44	2.00	184.3	REJECT	
46	0.82	16.5	NOT REPORTED	
50	1.10	56.3	ION SELECTIVE ELECTRODE	1,2,3,4
53	0.60	-14.7	COLORIMETRIC, PHENATE, AUTOMATED	1,2,3
55	0.56	-20.4	NOT REPORTED	
56	0.60	-14.7	COLORIMETRIC, PHENATE, AUTOMATED	1,2,3
60	0.87	23.6	NOT REPORTED	
62	0.86	22.2	COLORIMETRIC, PHENATE, MANUAL	1
63	0.66	-6.2	COLORIMETRIC, INDOPHENOL, AUTOMATED	4
65	0.59	-16.1	COLORIMETRIC, INDOPHENOL, AUTOMATED	4
66	0.68	-3.4	COLORIMETRIC, PHENATE, AUTOMATED	1,2,3
67	0.88	25.1	NOT REPORTED	
68	0.64	-9.0	COLORIMETRIC, DISTILLATION, NESSLERIZATION	1,4
70	1.21	72.0	REJECT	
71	0.68	-3.4	NOT REPORTED	
73	0.73	3.8	COLORIMETRIC, DISTILLATION, NESSLERIZATION	1,4
			COLORIMETRIC, DISTILLATION, NESSLERIZATION	1,4

Table 9 Standard Reference Water Sample N14 Report for NH₃-N

Code Number	Reported value	% dev. from mean	Methods	References
75	0.96	35.4	NOT REPORTED	
78	0.90	27.9	NOT REPORTED	
81	1.04	47.8	COLORIMETRIC, PHENATE, AUTOMATED	1,2,3
82	0.70	-0.5	COLORIMETRIC, PHENATE, AUTOMATED	1,2,3
86	0.67	-4.8	OTHER	
88	0.10	-85.8	REJECT NOT REPORTED	
89	0.60	-14.7	ION SELECTIVE ELECTRODE	1,2,3,4
91	0.65	-7.6	COLORIMETRIC, DISTILLATION, NESSLERIZATION	1,4
92	0.80	13.7	ION SELECTIVE ELECTRODE	1,2,3,4
93	23.00	3168.9	REJECT OTHER	
97	0.68	-3.4	OTHER	
99	0.65	-7.6	ION SELECTIVE ELECTRODE	1,2,3,4
100	0.53	-24.7	COLORIMETRIC, DISTILLATION, NESSLERIZATION	1,4
101	0.67	-4.8	COLORIMETRIC, INDOPHENOL, AUTOMATED	4

59 Labs had a total range of 0.10 to 23.00 and a mean of 0.704
 with a standard deviation of 0.130 and a 95% confidence interval of the mean +/- 0.035.

Table 2 Standard Reference Water Sample N14 Report for NO2-N

Code Number	Reported value	% dev. from mean	Methods	References
2	0.06	-8.7	COLORIMETRIC, DIAZOTIZATION	1,3,4
5	0.03	21.8	COLORIMETRIC, DIAZOTIZATION	1,3,4
8	0.07	6.5	COLORIMETRIC, DIAZOTIZATION	1,3,4
9	0.06	-8.7	COLORIMETRIC, DIAZOTIZATION	1,3,4
10	0.10	52.2	REJECT COLORIMETRIC, DIAZOTIZATION	1,3,4
12	0.05	-23.9	COLORIMETRIC, DIAZOTIZATION	1,3,4
15	0.06	-8.7	COLORIMETRIC, DIAZOTIZATION	1,3,4
16	0.07	6.5	COLORIMETRIC, DIAZOTIZATION	1,3,4
17	0.05	-23.9	COLORIMETRIC, DIAZOTIZATION	1,3,4
18	0.07	6.5	COLORIMETRIC, DIAZOTIZATION	1,3,4
19	0.06	-8.7	COLORIMETRIC, DIAZOTIZATION	1,3,4
22	0.05	-8.7	COLORIMETRIC, DIAZOTIZATION	1,3,4
23	0.07	6.5	COLORIMETRIC, DIAZOTIZATION	1,3,4
27	0.12	82.6	REJECT COLORIMETRIC, DIAZOTIZATION	1,3,4
28	0.06	-8.7	COLORIMETRIC, DIAZOTIZATION	1,3,4
29	0.07	6.5	COLORIMETRIC, DIAZOTIZATION	1,3,4
31	0.17	158.8	REJECT NOT REPORTED	
32	< 0.01		IGNORED COLORIMETRIC, DIAZOTIZATION	1,3,4
35	0.12	82.6	REJECT COLORIMETRIC, DIAZOTIZATION	1,3,4
36	< 0.01		IGNORED COLORIMETRIC, DIAZOTIZATION	1,3,4
37	0.06	-8.7	COLORIMETRIC, DIAZOTIZATION	1,3,4
38	0.07	6.5	COLORIMETRIC, DIAZOTIZATION	1,3,4
40	0.07	6.5	COLORIMETRIC, DIAZOTIZATION	1,3,4
41	0.07	6.5	COLORIMETRIC, DIAZOTIZATION	1,3,4
42	0.06	-8.7	COLORIMETRIC, DIAZOTIZATION	1,3,4
43	0.07	6.5	COLORIMETRIC, DIAZOTIZATION	1,3,4
44	0.19	189.2	REJECT COLORIMETRIC, DIAZOTIZATION	1,3,4
45	0.07	6.5	COLORIMETRIC, DIAZOTIZATION	1,3,4
50	0.07	6.5	COLORIMETRIC, DIAZOTIZATION	1,3,4
53	0.07	6.5	COLORIMETRIC, DIAZOTIZATION	1,3,4
56	0.07	6.5	COLORIMETRIC, DIAZOTIZATION	1,3,4
57	0.09	37.0	REJECT ION CHROMATOGRAPHY	2,6
62	< 0.02		IGNORED COLORIMETRIC, DIAZOTIZATION	1,3,4
63	0.05	-8.7	COLORIMETRIC, DIAZOTIZATION	1,3,4
65	0.07	6.5	COLORIMETRIC, DIAZOTIZATION	1,3,4
66	0.07	6.5	COLORIMETRIC, DIAZOTIZATION	1,3,4
67	0.07	6.5	COLORIMETRIC, DIAZOTIZATION	1,3,4
68	0.06	-8.7	COLORIMETRIC, DIAZOTIZATION	1,3,4
73	0.07	6.5	COLORIMETRIC, DIAZOTIZATION	1,3,4
74	0.06	-8.7	COLORIMETRIC, DIAZOTIZATION	1,3,4
75	0.06	-8.7	NOT REPORTED	
81	0.08	21.8	COLORIMETRIC, DIAZOTIZATION	1,3,4
82	0.07	6.5	COLORIMETRIC, DIAZOTIZATION	1,3,4
89	0.11	67.4	REJECT COLORIMETRIC, DIAZOTIZATION	1,3,4
92	0.07	6.5		

Table 9 Standard Reference Water Sample N14 Report for NO₂-N

Code Number	Reported value	% dev. from mean	Methods	References
93	1.00	1422.1	REJECT ION CHROMATOGRAPHY	2,6
99	0.25	280.5	REJECT COLORIMETRIC, DIAZOTIZATION	1,3,4
100	0.05	+8.7	COLORIMETRIC, DIAZOTIZATION	1,3,4
101	0.05	+8.7	COLORIMETRIC, DIAZOTIZATION	1,3,4

49 Labs had a total range of 0.05 to 1.00 and a mean of 0.066
 with a standard deviation of 0.007 and a 95% confidence interval of the mean +/- 0.002.

Table 9 Standard Reference Water Sample N14 Report for NO3-N

Code Number	Reported value	% dev. from mean	Methods	References
2	0.61	-46.3	REJECT COLORIMETRIC, BRUCINE	1,2,3,4
4	1.12	-1.5	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
6	0.88	-22.6	OTHER	
8	0.53	-53.4	REJECT OTHER	1,2,3,4
9	1.30	14.4	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
10	1.39	22.3	COLORIMETRIC, HYDRAZINE REDUCTION, DIAZOTIZATION	3
11	1.20	5.6	ION CHROMATOGRAPHY	2,6
12	1.10	-3.2	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
15	1.20	5.6	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
16	1.10	-3.2	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
17	1.40	23.2	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
18	1.10	-3.2	COLORIMETRIC, BRUCINE	1,2,3,4
19	1.20	5.6	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
22	1.10	-3.2	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
23	1.15	1.2	COLORIMETRIC, HYDRAZINE REDUCTION, DIAZOTIZATION	3
25	1.20	5.6	OTHER	
27	1.18	3.8	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
28	1.10	-3.2	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
29	1.10	-3.2	COLORIMETRIC, BRUCINE	1,2,3,4
30	1.05	-7.6	ION CHROMATOGRAPHY	2,6
31	1.05	-7.6	NOT REPORTED	
32	1.12	-1.5	COLORIMETRIC, BRUCINE	1,2,3,4
35	1.20	5.6	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
36	1.20	5.6	COLORIMETRIC, BRUCINE	1,2,3,4
37	1.20	5.6	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
38	0.90	-20.8	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
40	1.20	5.6	COLORIMETRIC, HYDRAZINE REDUCTION, DIAZOTIZATION	3
41	1.00	-12.0	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
42	1.13	-0.6	COLORIMETRIC, BRUCINE	1,2,3,4
43	1.20	5.6	COLORIMETRIC, HYDRAZINE REDUCTION, DIAZOTIZATION	3
44	1.10	-3.2	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
45	0.90	-20.8	COLORIMETRIC, BRUCINE	1,2,3,4
46	1.10	-3.2	COLORIMETRIC, BRUCINE	1,2,3,4
50	1.03	-9.4	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
53	1.11	-2.3	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
55	1.21	6.4	NOT REPORTED	
56	1.21	6.4	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
57	1.00	-12.0	ION CHROMATOGRAPHY	2,6
60	0.51	-55.1	REJECT COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
62	0.36	-68.3	REJECT COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
63	1.14	0.3	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
65	1.20	5.6	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
66	1.13	-0.6	COLORIMETRIC, HYDRAZINE REDUCTION, DIAZOTIZATION	3
67	1.20	5.6	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
68	1.10	-3.2	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4

Table 9 Standard Reference Water Sample N14 Report for NO3-N

Code Number	Reported value	% dev. from mean	Methods	References
69	1.03	-12.0	COLORIMETRIC, HYDRAZINE REDUCTION, DIAZOTIZATION	3
70	1.17	2.9	NOT REPORTED	
73	1.02	-10.3	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
74	1.10	-3.2	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
75	1.27	11.7	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
78	1.22	7.3	NOT REPORTED	
79	4.20	269.5	REJECT COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
80	1.10	-3.2	COLORIMETRIC, BRUCINE	1,2,3,4
81	1.23	8.2	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
82	1.00	-12.0	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
86	1.20	5.6	ION CHROMATOGRAPHY	2,6
88	1.32	15.1	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
89	1.10	-3.2	COLORIMETRIC, BRUCINE	1,2,3,4
91	0.60	-47.2	REJECT COLORIMETRIC, BRUCINE	1,2,3,4
92	1.10	-3.2	COLORIMETRIC, DEVARDA'S ALLOY REDUCTION, DIAZOTIZATION	1
93	1.40	23.2	COLORIMETRIC, BRUCINE	1,2,3,4
97	1.60	40.8	REJECT COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
99	1.00	-12.0	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
100	1.10	-3.2	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
101	1.10	-3.2	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4

65 Labs had a total range of 0.36 to 4.20 and a mean of 1.137
 with a standard deviation of 0.110 and a 95% confidence interval of the mean +/- 0.029.

Table 9 Standard Reference Water Sample N14 Report for ORG-N

Code Number	Reported value	% dev. from mean	Methods	References
4	0.80	19.7	COLORIMETRIC, DIGESTION, DISTILLATION, PHENATE	3
8	0.70	4.7	DIGESTION, DISTILLATION, ION SELECTIVE ELECTRODE	1,2,3
9	0.49	-26.7	COLORIMETRIC, DIGESTION, DISTILLATION, NESSLERIZATION	2,3,4
12	0.48	-28.2	COLORIMETRIC, DIGESTION, DISTILLATION, PHENATE	3
15	2.00	199.1	DIGESTION, DISTILLATION, TITRATION	2,3,4
16	1.60	139.3	COLORIMETRIC, BLOCK DIGESTION, SALICYLATE HYPOCHLORITE	3,4
17	0.67	0.2	OTHER	
18	0.60	-10.3	COLORIMETRIC, BLOCK DIGESTION, SALICYLATE HYPOCHLORITE	3,4
22	0.92	37.6	COLORIMETRIC, BLOCK DIGESTION, SALICYLATE HYPOCHLORITE	3,4
23	1.02	52.6	COLORIMETRIC, BLOCK DIGESTION, SALICYLATE HYPOCHLORITE	3,4
27	0.35	-47.7	OTHER	
28	0.46	-31.2	COLORIMETRIC, DIGESTION, DISTILLATION, NESSLERIZATION	2,3,4
29	0.29	-56.6	DIGESTION, DISTILLATION, ION SELECTIVE ELECTRODE	1,2,3
31	0.36	-46.2	NOT REPORTED	
32	0.21	-68.6	COLORIMETRIC, DIGESTION, DISTILLATION, NESSLERIZATION	2,3,4
33	0.14	-79.1	COLORIMETRIC, BLOCK DIGESTION, SALICYLATE HYPOCHLORITE	3,4
35	0.72	7.7	COLORIMETRIC, BLOCK DIGESTION, SALICYLATE HYPOCHLORITE	3,4
36	0.28	-58.1	DIGESTION, DISTILLATION, ION SELECTIVE ELECTRODE	1,2,3
38	0.83	24.1	OTHER	
40	0.68	1.7	COLORIMETRIC, BLOCK DIGESTION, SALICYLATE HYPOCHLORITE	3,4
41	0.75	12.2	COLORIMETRIC, BLOCK DIGESTION, SALICYLATE HYPOCHLORITE	3,4
42	0.88	31.6	DIGESTION, DISTILLATION, ION SELECTIVE ELECTRODE	1,2,3
43	0.65	-1.3	COLORIMETRIC, DIGESTION, DISTILLATION, PHENATE	3
44	1.60	139.3	DIGESTION, DISTILLATION, TITRATION	2,3,4
50	0.10	-85.0	COLORIMETRIC, DIGESTION, DISTILLATION, PHENATE	3
56	1.10	64.5	COLORIMETRIC, DIGESTION, DISTILLATION, NESSLERIZATION	2,3,4
62	0.39	-41.7	COLORIMETRIC, BLOCK DIGESTION, SALICYLATE HYPOCHLORITE	3,4
63	0.37	-44.7	COLORIMETRIC, BLOCK DIGESTION, SALICYLATE HYPOCHLORITE	3,4
68	0.71	6.2	COLORIMETRIC, BLOCK DIGESTION, SALICYLATE HYPOCHLORITE	3,4
78	0.90	34.6	NOT REPORTED	
81	1.10	64.5	COLORIMETRIC, BLOCK DIGESTION, SALICYLATE HYPOCHLORITE	3,4
82	1.10	64.5	COLORIMETRIC, BLOCK DIGESTION, SALICYLATE HYPOCHLORITE	3,4
88	1.00	49.6	COLORIMETRIC, BLOCK DIGESTION, SALICYLATE HYPOCHLORITE	3,4
91	0.29	-56.6	COLORIMETRIC, BLOCK DIGESTION, SALICYLATE HYPOCHLORITE	3,4
99	0.37	-44.7	COLORIMETRIC, DIGESTION, DISTILLATION, NESSLERIZATION	2,3,4
100	0.77	15.2	COLORIMETRIC, BLOCK DIGESTION, SALICYLATE HYPOCHLORITE	3,4
101	0.38	-43.2	COLORIMETRIC, BLOCK DIGESTION, SALICYLATE HYPOCHLORITE	3,4

37 Labs had a total range of 0.10 to 2.00 and a mean of 0.669
 with a standard deviation of 0.365 and a 95% confidence interval of the mean +/- 0.123.

Table 9 Standard Reference Water Sample N14 Report for P, TOTAL

Code Number	Reported value	% dev. from mean	Methods	References
2	0.63	-1.7	COLORIMETRIC, H ₂ SO ₄ /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
4	0.68	6.2	COLORIMETRIC, H ₂ SO ₄ /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
5	0.54	-15.7	COLORIMETRIC, H ₂ SO ₄ /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
8	0.58	-9.5	COLORIMETRIC, H ₂ SO ₄ /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
9	0.74	15.5	COLORIMETRIC, H ₂ SO ₄ /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
10	1.60	149.8	REJECT COLORIMETRIC, BLK DIG, H ₂ SO ₄ , K&HG SO ₄ , PHOSPHOMOLYBDATE	4
11	0.60	-6.3	COLORIMETRIC, H ₂ SO ₄ /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
12	0.64	-0.1	COLORIMETRIC, H ₂ SO ₄ /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
15	0.68	6.2	COLORIMETRIC, H ₂ SO ₄ /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
16	0.60	-6.3	COLORIMETRIC, BLK DIG, H ₂ SO ₄ , K&HG SO ₄ , PHOSPHOMOLYBDATE	4
17	0.64	-0.1	OTHER	
18	0.57	-11.0	COLORIMETRIC, BLK DIG, H ₂ SO ₄ , K&HG SO ₄ , PHOSPHOMOLYBDATE	4
19	0.57	-11.0	COLORIMETRIC, H ₂ SO ₄ /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
22	0.63	-1.7	COLORIMETRIC, H ₂ SO ₄ /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
23	0.65	1.5	COLORIMETRIC, BLK DIG, H ₂ SO ₄ , K&HG SO ₄ , PHOSPHOMOLYBDATE	4
27	0.61	-4.8	COLORIMETRIC, H ₂ SO ₄ /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
28	0.61	-4.8	COLORIMETRIC, H ₂ SO ₄ /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
29	0.59	-7.9	COLORIMETRIC, H ₂ SO ₄ /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
30	0.57	-11.0	COLORIMETRIC, H ₂ SO ₄ /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
31	0.59	-7.9	NOT REPORTED	
32	0.57	-11.0	EMISSION, IC PLASMA	
33	0.74	15.5	COLORIMETRIC, H ₂ SO ₄ /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
35	0.63	-1.7	COLORIMETRIC, H ₂ SO ₄ /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
38	0.64	-0.1	COLORIMETRIC, H ₂ SO ₄ /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
40	0.64	-0.1	COLORIMETRIC, H ₂ SO ₄ /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
42	0.03	-95.3	REJECT COLORIMETRIC, BLK DIG, H ₂ SO ₄ , K&HG SO ₄ , PHOSPHOMOLYBDATE	4
43	0.60	-6.3	COLORIMETRIC, H ₂ SO ₄ /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
44	0.54	-15.7	COLORIMETRIC, H ₂ SO ₄ /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
46	0.62	-3.2	COLORIMETRIC, H ₂ SO ₄ /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
50	0.61	-4.8	COLORIMETRIC, H ₂ SO ₄ /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
53	0.59	-7.9	COLORIMETRIC, H ₂ SO ₄ /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
56	0.63	-1.7	COLORIMETRIC, H ₂ SO ₄ /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
57	0.20	-68.8	REJECT COLORIMETRIC, H ₂ SO ₄ /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
60	0.41	-36.0	COLORIMETRIC, H ₂ SO ₄ /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
62	< 0.02		IGNORED COLORIMETRIC, BLK DIG, H ₂ SO ₄ , K&HG SO ₄ , PHOSPHOMOLYBDATE	4
63	0.70	9.3	COLORIMETRIC, H ₂ SO ₄ /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
66	0.71	10.8	COLORIMETRIC, H ₂ SO ₄ /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
67	0.65	1.5	COLORIMETRIC, H ₂ SO ₄ /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
68	0.64	-0.1	COLORIMETRIC, H ₂ SO ₄ /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
69	0.79	23.3	COLORIMETRIC, H ₂ SO ₄ /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
73	0.85	32.7	COLORIMETRIC, H ₂ SO ₄ /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
75	0.80	24.9	COLORIMETRIC, BLK DIG, H ₂ SO ₄ , K&HG SO ₄ , PHOSPHOMOLYBDATE	4
78	0.68	6.2	NOT REPORTED	
81	0.63	-1.7	COLORIMETRIC, BLK DIG, H ₂ SO ₄ , K&HG SO ₄ , PHOSPHOMOLYBDATE	4
82	0.60	-6.3	COLORIMETRIC, H ₂ SO ₄ /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4

Table 9 Standard Reference Water Sample N14 Report for P, TOTAL

Code Number	Reported value	% dev. from mean	Methods	References
86	0.83	29.6	COLORIMETRIC, H ₂ SO ₄ /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
88	0.69	7.7	COLORIMETRIC, H ₂ SO ₄ /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
89	0.77	20.2	OTHER	
91	0.66	3.0	COLORIMETRIC, BLK DIG, H ₂ SO ₄ , K&HG SO ₄ , PHOSPHOMOLYBDATE	4
92	0.67	4.6	COLORIMETRIC, H ₂ SO ₄ /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
93	0.71	10.8	COLORIMETRIC, H ₂ SO ₄ /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
97	0.57	-11.0	EMISSION, IC PLASMA	
99	0.66	3.0	COLORIMETRIC, H ₂ SO ₄ /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
100	0.59	-7.9	COLORIMETRIC, H ₂ SO ₄ /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
101	0.53	-17.3	COLORIMETRIC, H ₂ SO ₄ /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4

55 Labs had a total range of 0.03 to 1.60 and a mean of 0.641
 with a standard deviation of 0.080 and a 95% confidence interval of the mean +/- 0.023.

Table 9 Standard Reference Water Sample N14 Report for P04-P

Code Number	Reported value	% dev. from mean	Methods	References
2	0.27	-10.4	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE, MANUAL	1,2,3,4
4	0.48	59.3	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE, AUTOMATED	3,4
5	0.31	2.9	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE, MANUAL	1,2,3,4
6	0.38	26.1	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE, MANUAL	1,2,3,4
9	0.28	-7.1	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE, MANUAL	1,2,3,4
10	0.30	-0.4	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE, AUTOMATED	3,4
12	0.25	-17.0	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE, AUTOMATED	3,4
15	0.27	-10.4	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE, MANUAL	1,2,3,4
16	0.30	-0.4	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE, AUTOMATED	3,4
17	0.16	-46.9	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE, AUTOMATED	3,4
18	0.27	-10.4	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE, AUTOMATED	3,4
19	0.25	-17.0	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE, MANUAL	1,2,3,4
22	0.27	-10.4	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE, MANUAL	1,2,3,4
23	0.26	-13.7	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE, MANUAL	1,2,3,4
27	0.28	-7.1	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE, AUTOMATED	3,4
28	0.29	-3.8	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE, AUTOMATED	3,4
29	0.25	-17.0	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE, MANUAL	1,2,3,4
30	0.27	-10.4	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE, MANUAL	1,2,3,4
31	0.26	-13.7	NOT REPORTED	
32	0.44	46.0	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE, MANUAL	1,2,3,4
35	0.26	-13.7	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE, AUTOMATED	3,4
37	0.27	-10.4	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE, AUTOMATED	3,4
38	0.26	-13.7	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE, AUTOMATED	3,4
40	0.28	-7.1	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE, AUTOMATED	3,4
41	0.31	2.9	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE, AUTOMATED	3,4
42	< 0.01		IGNORED	
44	0.27	-10.4	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE, MANUAL	1,2,3,4
45	0.31	2.9	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE, AUTOMATED	3,4
50	0.31	2.9	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE, MANUAL	1,2,3,4
53	0.27	-10.4	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE, AUTOMATED	3,4
55	0.28	-7.1	NOT REPORTED	
56	0.23	-7.1	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE, MANUAL	1,2,3,4
57	0.15	-50.2	ION CHROMATOGRAPHY	2,6
60	0.40	32.8	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE, MANUAL	1,2,3,4
63	0.27	-10.4	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE, AUTOMATED	3,4
66	0.32	6.2	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE, AUTOMATED	3,4
67	0.30	-0.4	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE, AUTOMATED	3,4
68	0.26	-13.7	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE, AUTOMATED	3,4
69	0.45	49.4	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE, MANUAL	1,2,3,4
71	0.70	132.3	REJECT	
73	0.30	-0.4	NOT REPORTED	
74	0.16	-46.9	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE, MANUAL	1,2,3,4
75	0.27	-10.4	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE, MANUAL	1,2,3,4
78	0.38	26.1	NOT REPORTED	
82	0.27	-10.4	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE, AUTOMATED	3,4

Table 9 Standard Reference Water Sample N14 Report for PO₄-P

Code Number	Reported value	% dev. from mean	Methods	References
86	0.27	-10.4	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE, MANUAL	1,2,3,4
88	0.55	82.5	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE, AUTOMATED	3,4
89	0.58	92.5	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE, MANUAL	1,2,3,4
91	0.02	-93.4	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE, AUTOMATED	3,4
93	0.49	62.6	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE, MANUAL	1,2,3,4
97	0.30	-0.4	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE, AUTOMATED	3,4
99	0.33	9.5	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE, MANUAL	1,2,3,4
100	0.40	32.8	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE, AUTOMATED	1,2,3,4
101	0.26	-13.7	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE, MANUAL	1,2,3,4

54 Labs had a total range of 0.02 to 0.70 and a mean of 0.301
 with a standard deviation of 0.095 and a 95% confidence interval of the mean +/- 0.026.

Table 10. Statistics by method for standard reference sample N14.

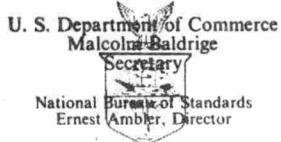
Determination	Method	Range: from	to	Mean	Standard Deviation	N
NH3-N	COLORIMETRIC, DISTILLATION, NESSLERIZATION	0.530-	0.730	0.623	0.073	7
	COLORIMETRIC, INDOPHENOL, AUTOMATED	0.590-	0.950	0.718	0.159	4
	COLORIMETRIC, PHENATE, AUTOMATED	0.480-	1.040	0.651	0.071	14
	COLORIMETRIC, PHENATE, MANUAL	0.500-	0.860	0.683	0.180	3
	ION SELECTIVE ELECTRODE	0.600-	1.100	0.700	0.097	10
	NOT REPORTED	0.100-	2.000	0.746	0.297	10
	OTHER	0.620-	23.000	0.717	0.086	7
NO2-N	_OVER-ALL_	0.100-	23.000	0.704	0.130	55
	COLORIMETRIC, DIAZOTIZATION	0.050-	0.250	0.066	0.007	35
	OVER-ALL	0.050-	1.000	0.066	0.007	37
NO3-N	COLORIMETRIC, BRUCINE	0.600-	1.400	1.038	0.231	12
	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	0.360-	4.200	1.140	0.106	31
	COLORIMETRIC, HYDRAZINE REDUCTION, DIAZOTIZATION	1.000-	1.390	1.178	0.127	6
	ION CHROMATOGRAPHY	1.000-	1.200	1.113	0.103	4
	NOT REPORTED	1.050-	1.220	1.163	0.078	4
	OTHER	0.530-	1.200	0.870	0.335	3
	OVER-ALL	0.360-	4.200	1.137	0.110	58
ORG-N	COLORIMETRIC, BLOCK DIGESTION, SALICYLATE HYPOCHLORITE	0.140-	1.600	0.738	0.367	17
	COLORIMETRIC, DIGESTION, DISTILLATION, NESSLERIZATION	0.210-	1.100	0.526	0.339	5
	COLORIMETRIC, DIGESTION, DISTILLATION, PHENATE	0.100-	0.800	0.510	0.303	4
	DIGESTION, DISTILLATION, ION SELECTIVE ELECTRODE	0.280-	0.880	0.538	0.301	4
	OTHER	0.350-	0.830	0.617	0.244	3
	OVER-ALL	0.100-	2.000	0.669	0.365	36
	P, TOTAL	0.200-	0.850	0.639	0.082	39
PO4-P	COLORIMETRIC, H ₂ SO ₄ /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	0.030-	1.600	0.693	0.432	8
	COLORIMETRIC, BLK DIG, H ₂ SO ₄ , K&HG SO ₄ , PHOSPHOMOLYBDATE	0.030-	1.600	0.641	0.080	51
	OVER-ALL	0.160-	0.580	0.320	0.095	23
PO4-P	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE, MANUAL	0.260-	0.700	0.405	0.204	4
	NOT REPORTED	0.020-	0.700	0.301	0.095	52
PO4-P	_OVER-ALL_	0.260-	0.700	0.405	0.204	4

Table 11.— Comparison of NBS SRM 1643b certified constituent concentration values and the USGS SRWS T3 statistically determined means.

Constituent	NBS SRM 1643b values and estimated uncertainty (nanograms per gram)			"USGS T3" mean and 95% confidence interval (micrograms per liter)		
Arsenic	(49) ^{1/}			55.1	±	3.2
Barium	44	+	2	43.8	±	4.2
Beryllium	19	+	2	18.3	±	1.2
Bismuth	(11)			--	--	--
Boron	(94)			97.8	±	20.3
Cadmium	20	+	1	19.9	±	1.1
Chromium	18.6	+	0.4	19.6	±	1.6
Cobalt	26	+	1	26.5	±	1.3
Copper	21.9	+	.4	23.4	±	1.5
Iron	99	+	8	106.	±	8
Lead	23.7	+	.7	25.0	±	2.4
Manganese	28	+	2	29.4	±	1.7
Molybdenum	85	+	3	91.8	±	8.9
Nickel	49	+	3	51.0	±	3.6
Selenium	9.7	±	0.5	8.7	±	0.9
Silver	9.8	+	0.8	11.0	±	1.2
Strontium	227	+	6	221.	±	5
Thallium	8	+	0.2	6.9	±	2.1
Vanadium	45.2	+	0.4	46.8	±	3.9
Zinc	66	+	2	68.8	±	2.9
Calcium ^{2/}	(35)			32.7	±	1.2
Magnesium ^{2/}	(15)			8.2	±	.1
Potassium ^{2/}	(3)			1.8	±	.1
Sodium ^{2/}	(8)			8.1	±	.2

^{1/} Values in parentheses not certified

^{2/} Concentrations in milligrams per liter



APPENDIX

National Bureau of Standards

Certificate

Standard Reference Material 1643b

Trace Elements in Water

This Standard Reference Material (SRM) is intended primarily for use in evaluating the accuracy of trace element determinations in filtered and acidified fresh water and for calibrating instrumentation used in these determinations. SRM 1643b consists of approximately 950 mL of water in a polyethylene bottle, which is sealed in an aluminized bag to maintain stability. SRM 1643b simulates the elemental composition of fresh water. Nitric acid is present at a concentration of 0.5 moles per liter to stabilize the trace elements.

Concentrations of Constituent Elements: The concentrations of the trace elements that were determined are shown in Table 1. The certified values are based on results obtained either by reference methods of known accuracy or by two or more independent, reliable analytical methods. Noncertified values, which are given for information only, appear in parentheses.

Notice and Warnings to Users:

Expiration of Certification: This certification is invalid two years after the shipping date.

Precautions: The bottle should be shaken before use because of possible water vapor condensation. To prevent possible contamination of the SRM, do not insert pipets into the bottle. After use, the bottle should be capped tightly and placed inside the aluminized bag, which should be folded and sealed with sealing tape. This safeguard will protect the SRM from possible environmental contamination and long-term loss of water.

Elemental determinations of ng/g levels are limited by contamination. Apparatus should be scrupulously cleaned and only the purest grade reagents employed. Sampling and manipulations, such as evaporation, should be done in a clean environment, for example, a Class 100 clean hood.

The overall direction and coordination of the technical measurements leading to this certification were performed under the direction of E. Garner, Chief of the Inorganic Analytical Research Division.

The technical and support aspects involved in the preparation, certification, and issuance of this Standard Reference Material were coordinated through the Office of Standard Reference Materials by R. Alvarez.

Washington, DC 20234
May 18, 1984

Stanley D. Rasberry, Chief
Office of Standard Reference Materials

(over)

(Table 1)
Concentrations of Constituent Elements

Element	Concentration,* ng/g	Element	Concentration,* ng/g
Arsenic ^{1,5}	(49)**	Lead ^{3,4b}	23.7 ± 0.7
Barium ^{2a,2b,5}	44 ± 2	Manganese ^{1,2a,3}	28 ± 2
Beryllium ^{1,2a}	19 ± 2	Molybdenum ^{2a,5}	85 ± 3
Bismuth ¹	(11)	Nickel ^{2a,3}	49 ± 3
Boron ^{2a}	(94)	Selenium ^{1,5}	9.7 ± 0.5
Cadmium ^{2b,3,5}	20 ± 1	Silver ^{1,5}	9.8 ± 0.8
Chromium ^{4b}	18.6 ± 0.4	Strontium ^{2a,5}	227 ± 6
Cobalt ^{1,5}	26 ± 1	Thallium ^{4b}	8.0 ± 0.2
Copper ^{3,4b}	21.9 ± 0.4	Vanadium ^{4b}	45.2 ± 0.4
Iron ^{2a,4a,5}	99 ± 8	Zinc ^{2a,5}	66 ± 2

* The estimated uncertainty is based on judgment and represents an evaluation of the combined effects of method imprecision and possible systematic errors among methods. To convert to nanograms per milliliter, multiply by the density of the SRM. The density at 23 °C is 1.017 grams per milliliter.

** Values in parentheses are not certified.

- 1. Atomic absorption spectrometry, electrothermal
- 2. Atomic emission spectrometry,
 - a. dc plasma
 - b. flame
- 3. Laser enhanced ionization flame spectrometry
- 4. Isotopic dilution mass spectrometry,
 - a. resonance ionization
 - b. thermal ionization
- 5. Neutron activation,
instrumental

Source and Preparation of Material: SRM 1643b was prepared at the U.S. Geological Survey, National Water Quality Laboratory, Arvada, Colorado, under the direction of V.J. Janzer of that laboratory and J.R. Moody of the NBS Center for Analytical Chemistry. Only high-purity reagents were used and the containers were acid-cleaned and sterilized before use. In the preparation, a polyethylene cylindrical tank was filled with distilled water and sufficient nitric acid to make the solution approximately 0.5 moles HNO₃ per liter. Solutions containing known amounts of calcium, sodium, magnesium, potassium, and the elements to be determined were added to the acidified water solution with constant stirring. After thoroughly mixing, the solution was filtered, sterilized, and then transferred to one-liter polyethylene bottles. The approximate concentrations, in µg/mL, of Ca, Na, Mg, and K are respectively 35, 8, 15, and 3.

Analysts:

Center for Analytical Chemistry, National Bureau of Standards

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