

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

REPORT OF THE U.S. GEOLOGICAL SURVEY'S ANALYTICAL EVALUATION  
PROGRAM--STANDARD REFERENCE WATER SAMPLES T101 (TRACE  
CONSTITUENTS), M102 (MAJOR CONSTITUENTS), N19 (NUTRIENTS), AND HG2  
(MERCURY).

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

## ABSTRACT

The U.S. Geological Survey Water Resources Division's (WRD) Standard Reference Sample project conducts an interlaboratory testing program twice yearly. A series of natural matrix water and sediment reference samples are prepared and distributed to Survey and non-Survey laboratories that provide water quality data for WRD use. Since 1962, when this program began, objectives have been to provide a means for: (1) evaluating and improving the performance of Survey and other participating laboratories; (2) identifying analytical problem areas; (3) identifying water analysis QA needs and developing new reference materials to meet those needs; (4) ascertaining the accuracy and precision of analytical methods; and (5) providing adequate supplies of a variety of reference samples to enable continuing quality assurance testing of laboratories, as necessary. Participation in this program is mandatory for all laboratories providing water quality data for WRD use and storage in the Survey's WATSTORE data storage system.

This report presents analytical data submitted by the laboratories that analyzed up to 4 reference sample types which were distributed during the last week of October 1987. Test samples included one each for trace, major, nutrients, and mercury. Relative performance ratings achieved by the laboratories for each determination, statistical evaluation of the data and data summaries are presented in 15 tables.

## INTRODUCTION

The U.S. Geological Survey Water Resources Division's (WRD) Standard Reference Sample project conducts an interlaboratory testing program twice yearly. A series of natural matrix water and sediment reference samples are prepared and distributed to Survey and non-Survey laboratories that provide water quality data for WRD use. This interlaboratory testing program utilizing natural matrix reference materials began in 1962 with a single major-constituent reference sample prepared from distilled water and reagent grade chemicals. 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). Since that time, objectives of the program have been to provide a means for: (1) evaluating and improving the performance of Survey and other participating laboratories; (2) identifying analytical problem areas; (3) identifying water analysis QA needs and developing new reference materials to meet those needs; (4) ascertaining the accuracy and precision of analytical methods; and (5) providing adequate supplies of a variety of reference samples to enable continuing quality assurance testing of laboratories, as necessary. Today, more than 160 laboratories, both Survey and non-Survey, participate in the program, which currently uses up to eight SRS types: (1) major constituents; (2) trace constituents; (3) nutrients; (4) water and suspended-sediment mixture for trace metals; (5) precipitation snowmelt; (6) acid mine drainage; and (7) sediment (bed material) for major, minor and trace elements and (8) mercury (preserved with nitric acid and dichromate ion). Other reference water samples containing pesticides or priority pollutants have also been prepared and distributed from time to time.

When sufficient data are available, "most probable values" (MPV), are statistically determined for each constituent in the reference samples. Only results from those laboratories with an overall performance rating of 2.6 or better are used to determine each MPV. Limited quantities of most of these defined reference samples are available to participating laboratories for further testing and continuing quality assurance efforts. Questions or comments regarding the program or requests for samples should be directed to: Victor J. Janzer (303) 236-3612 or FTS 776-3612.

## PURPOSE AND PLAN

Participation in this continuing quality-assurance program is mandatory for all laboratories providing water-analysis data for U.S. Geological Survey use. Other Federal, state, municipal, and university laboratories may also participate. 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. Periodic analysis of these reference samples provides the means to alert participating laboratories to possible deficiencies in their analytical operations, and also provides reference solutions for continuing quality assurance testing. These analyses provide independent and objective evaluations of water-quality data provided by some of these laboratories for Survey use and publication. Participating non-U.S. Geological Survey laboratories in these studies are identified only by a confidential code number whereas U.S. Geological Survey laboratories are identified by location, name and code number.

This report summarizes the analytical results submitted by 121 of the 137 laboratories that requested and were shipped samples for this round of testing. Not all samples are requested nor necessarily analyzed by all laboratories, nor do all laboratories enrolled in the program participate in each round of analyses. Samples which were distributed during October 1987, for analysis in November, included SRWS T101 (trace constituents), SRWS M102 (major constituents), SRWS N19 (nutrients), and HG2 (mercury). It was requested that data be submitted for evaluation by December 1. Prompt return of the data greatly facilitates timely preparation, distribution and, hopefully, utilization of the final administrative evaluation report. Each participating laboratory was asked to perform at least those determinations that it makes routinely on the respective sample type, and to indicate the analytical methods used for each constituent. When method information was provided, it has been included in the respective data tables. **Relative performance ratings achieved by the laboratories for each determination, statistical evaluations of the data and a summary of the "most probable values" are given in 15 tables.**

#### PREPARATION OF SAMPLES

Natural surface water was collected and used to prepare SRWS T101, M102 and N19. Sample HG2 (mercury) was prepared from tap water. Samples T101, M102 and N19 were prepared by first allowing suspended sediment to settle for several days in the collection drums. Sufficient quantities of partly clarified raw water to prepare each sample were then filtered sequentially through a 10  $\mu\text{m}$  (micrometer) nominal size prefilter, then a 5  $\mu\text{m}$  nominal size intermediate filter and finally, through a 0.45  $\mu\text{m}$  membrane filter, into large clean polyethylene drums. Due to persistent problems of bacterial and fungal growths, in some previous samples, free chlorine was used as a preservative in samples T101 and M102. Approximately 24 hours before bottling those samples, sodium hypochlorite was added to achieve initial concentrations of several parts per million free chlorine.

The filtered raw water for sample T101 was acidified to a pH of 1.5-2 with nitric acid and then supplemented by the addition of Ag, As, B, Ba, Be, Cd, Co, Cr, Cu, Fe, Li, Mn, Mo, Ni, Pb, Sb, Se,  $\text{SiO}_2$ , V and Zn solutions prepared from reagent grade salts. Filtered raw water for sample M102 was diluted by the addition of tap water to reduce the specific conductance (SC) from about 1600 to about 1200 microsiemens/cm ( $\mu\text{S}/\text{cm}$ ). It was supplemented by the addition of B, Br, Cl, F, I, Na, P,  $\text{SiO}_2$  and V. Final solutions for both samples were mixed for several hours and allowed to stand overnight to equilibrate. Bottling of each sample was then performed by again filtering the prepared solution through a 0.45  $\mu\text{m}$  membrane filter, followed by a 0.2  $\mu\text{m}$  membrane "final filter", then through a flow-through 254 nm(nanometer) UV(ultraviolet) sterilizer and finally bottled under UV radiation, in autoclave sterilized 1-L Teflon<sup>1/</sup> or polypropylene bottles.

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<sup>1/</sup>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.

Natural nutrient concentration levels in N19 were supplemented by the addition of nitrogen and phosphorous species as dissolved reagent grade chemicals. The sample was preserved by the addition of mercuric chloride (50 mg/L). Sodium chloride (450 mg/L) was also added. This is equivalent to the U.S. Geological Survey technique for field preservation of nutrient samples, using mercuric chloride and sodium chloride. The sample was then mixed for several hours with a motor-driven Teflon-coated stirrer, filtered, packaged in polyethylene bottles without sterilization, and stored in the dark at 4°C (Celsius), until needed.

Sample HG2 was prepared in a large glass carboy using tap water. A solution containing mercuric ion was added to obtain a mercury concentration of approximately 4 µg/L. Nitric acid (5 percent v/v) and dichromate ion (0.04 percent w/v) were added to preserve the samples which were then bottled in new acid leached 250 ml glass bottles with Teflon-lined plastic caps. With the exception of the nutrient samples, which were shipped in iced coolers, the samples for this round-robin testing were shipped at ambient temperatures.

## DETERMINATIONS

Abbreviations or symbols used in Tables 3-15 are listed in Table 1 for each determination made on the various SRWS. Additional abbreviations and symbols used in tables 3-15 are explained in Table 2. Standard Reference Samples in this listing include: T101 (trace constituents), M102 (major constituents), N19 (nutrients), and HG2 (mercury).

Table 1.--Determinations Requested on Reference Samples

Abbreviation/Symbol	T101 (µg/L)	M102 (mg/L)	N19 (mg/L)	HG2 (µg/L)
	<u>1/</u>	<u>2/</u>		
ALK(CACO <sub>3</sub> ) = Alkalinity (as CaCO <sub>3</sub> )			x	
AG = Silver			x	
AL = Aluminum			x	
AS = Arsenic			x	
B = Boron		x	x	
BA = Barium			x	
BE = Beryllium			x	
BR = Bromide		x	x	
CA = Calcium		x	x	
CD = Cadmium			x	
CL = Chloride			x	
CO = Cobalt			x	

Table 1.--continued

Standard Reference Water Samples in this listing include: M102 (major constituents), T101 (trace constituents), N19 (nutrients), and HG2 (mercury), (continued).

Abbreviation/Symbol		T101	M102	N19	HG2
		( $\mu\text{g/L}$ )	( $\text{mg/L}$ )	( $\text{mg/L}$ )	( $\mu\text{g/L}$ )
	<u>1/</u>	<u>2/</u>			
CR TOT	= Chromium, total		x		
CU	= Copper		x		
DSRD 180	= Dissolved solids, 180°C		x		
F	= Fluoride		x		
FE	= Iron		x		
HG	= Mercury			x	
I	= Iodide		x		
K	= Potassium	x	x		
LI	= Lithium	x			
MG	= Magnesium	x	x		
MN	= Manganese	x			
MO	= Molybdenum	x			
NA	= Sodium	x	x		
NH3-N	= Ammonia as nitrogen		x		
NH3-N plus Org-N	= Ammonia plus organic nitrogen			x	
NI	= Nickel	x			
NO2-N	= Nitrite as nitrogen		x		
NO3-N	= Nitrate as nitrogen		x		
PB	= Lead	x			
PH	= pH	x			
PO4-P	= Orthophosphate as phosphorus	x <sup>3/</sup>	x		
P, TOTAL	= Phosphorus, Total as phosphorus	x	x		

Table 1.--continued

Standard Reference Water Samples in this listing include: M102 (major constituents), T101 (trace constituents), N19 (nutrients), and HG2 (mercury), (continued).

Abbreviation/Symbol	T101 ( $\mu\text{g/L}$ )	M102 ( $\text{mg/L}$ )	N19 ( $\text{mg/L}$ )	HG2 ( $\mu\text{g/L}$ )
	<u>1/</u>	<u>2/</u>		
SB	= Antimony		x	
SE	= Selenium		x	
SIO <sub>2</sub>	= Silica		x x	
SO <sub>4</sub>	= Sulfate		x	
SP.COND.	= Specific conductance		x	
SR	= Strontium	x	x	
V	= Vanadium	x	x	
ZN	= Zinc	x		

1/ Results in  $\mu\text{g/L}$  except calcium, magnesium, and sodium (milligrams per liter).

2/ Results in  $\text{mg/L}$  except pH (units); specific conductance (microsiemens or micromhos per centimeter at 25°C); boron, bromide, iodide, strontium, and vanadium (micrograms per liter).

3/ Unpreserved constituent/parameter.

#### 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 (1985). 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, and 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. Tables 3, 5, 7 and 9 list Overall Laboratory Performance for each SRWS. Statistical information is tabulated for each method used by three or more laboratories to determine a specific constituent. Tables 4, 6, 8 and 10 list the range, the mean and standard deviation for each constituent determined by each method, and the number of laboratories that used it. Values reported for all constituents determined in each SRWS are listed in Tables 11, 12, 13 and 14. 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). The mean, standard deviation, and confidence limits about the mean usually are reported to one more significant figure than the reported value.

Summaries of several statistical listings, including the MPV and standard deviations, for most constituents in this series of reference samples are given in Table 15. Considerable differences for some constituents are evident, if the listed MPVs are compared with the corresponding means and standard deviations given for each parameter at the end of each analytical data table. These differences result because only data from those labs with a rating of 2.6 or better on that sample are used to determine the MPV in Table 15. Unless noted otherwise, the MPV listings in Table 15 should be used for evaluating future analyses of any of these reference samples.

## LABORATORY PERFORMANCE AND REPORTED VALUES

To facilitate interlaboratory performance comparisons, laboratory ratings based on the analyses reported for each SRWS are included in Tables 3, 5, 7 and 9 in this report. Averages of the constituent ratings for each SRWS are also given for each laboratory. Laboratory performance for each constituent and the overall averages are 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

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, Standard methods for the examination of water and wastewater, Washington, D.C. American Public Health Association.
2. American Society for Testing and Materials, Annual book of ASTM standards, Volume 11.01 and 11.02: Philadelphia, PA.
3. Kopp, J. F., and McKee, G. F., 1979, Methods for chemical analysis of water and wastes: Cincinnati, Ohio, U.S. Environmental Protection Agency, EPA 600/4-79-020, rev. 1983, 460 p.
4. Fishman, M. J., and Friedman, L. C., eds., 1985, Methods for determination of inorganic substances in water and fluvial sediments: U.S. Geological Survey Techniques of Water-Resources Investigations, Book 5, Chapter A1, Open-File Report 85-495, 709 p.
5. Miscellaneous manufacturer's instrument manuals or other references.

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.

## DISCUSSION

Determination of the unpreserved and relatively unstable PO<sub>4</sub>-P was requested in SRWS M102. While the stated MPV for this parameter may represent the best value in the SRWS, at or near the time of the analysis, the MPV will probably not remain constant. The stated MPV for the PO<sub>4</sub>-P parameter in M102 should only be considered as having been valid near the time of the analyses (November 1987).

**It is suggested that users of this report review the Statistics by Method for each parameter. These figures give indications of the method and instrumentation precision and may provide additional evidence as to the desirability of obtaining upgraded methods and/or equipment.**

## REFERENCES

American Society for Testing and Materials, 1985, Annual book of ASTM standards, Volume 14.02, Philadelphia, Pa., 1292p.

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, Sacramento: Makita 043  
COLORADO, Denver: Fishman 127  
Kimball 071

FLORIDA, Ocala: Kirkland 091  
GEORGIA, Doraville: Piette 065  
LOUISIANA, Baton Rouge: Garrison 099  
VIRGINIA, Reston: Kennedy 123

### Cooperator

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

ALASKA, Soldotna: Alaska Department of Fish and Game

ARIZONA, Yuma: Burns and Roe Services Corp.

ARKANSAS, Arkadelphia: Ouachita Baptist University  
ARKANSAS, Little Rock: Ark. Department of Pollution Control and Ecology

CALIFORNIA, Berkeley: California Department of Health Services  
CALIFORNIA, Bryte: California Department of Water Resources Chemical Laboratory  
CALIFORNIA, Castaic: Department of Water Resources Chemical Laboratory  
CALIFORNIA, Fresno: Binnie California, Inc.  
CALIFORNIA, La Mesa: San Diego Water Utilities Laboratory  
CALIFORNIA, La Verne: The Metropolitan Water District of Southern California  
CALIFORNIA, Lakeside: Helix Water District  
CALIFORNIA, Livermore: BEEM Laboratory  
CALIFORNIA, Los Gatos: Santa Clara Valley Water District  
CALIFORNIA, Mammoth Lakes: Sierra Nevada Aquatic Research Lab  
CALIFORNIA, Martinez: Central Contra Costa Sanitary District  
CALIFORNIA, Oakland: East Bay Municipal Utility District  
CALIFORNIA, Palm Desert: California Regional Water Quality Control Board  
CALIFORNIA, Riverside: Univ. of California, Riverside  
CALIFORNIA, Sacramento: Bureau of Reclamation/USGS, Yates  
CALIFORNIA, Santa Fe Springs: West Coast Analytical Service, Inc.

COLORADO, Alamosa: Bureau of Reclamation  
COLORADO, Aurora: Core Laboratories Incorporated  
COLORADO, Denver: Bureau of Reclamation  
COLORADO, Denver: Colorado Department of Health  
COLORADO, Denver: Metropolitan Denver Sewage Disposal District #1  
COLORADO, Fort Collins: Environmental Services/Water Utilities  
COLORADO, Golden: Rockwell International General Laboratories  
COLORADO, Parachute: Union Oil Company, Upgrade Laboratory  
COLORADO, Pueblo: Pueblo Board of Water Works  
COLORADO, Steamboat Springs: ACZ Inc/Bookcliffs Laboratory Division

Cooperator--continued

FLORIDA, Clearwater: City of Clearwater, Water Pollution Control Division  
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, W. Palm Beach: S. Florida Water Management District

GEORGIA, Athens: Soil Testing and Plant Analysis Laboratory  
GEORGIA, Athens: Univ. of Georgia Department of Horticulture  
GEORGIA, Atlanta: Georgia Department of Natural Resources  
GEORGIA, Tifton: U.S. Department of Agriculture, SE Watershed Laboratory

IDAHO, Boise: U.S. Bureau of Reclamation

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

INDIANA, Indianapolis: Indianapolis Department of Public Works  
INDIANA, Indianapolis: Marion County Public Health Laboratory  
INDIANA, Valparaiso: Northern Laboratories and Engineering, Inc.

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

KANSAS, Lawrence: Kansas Geological Survey  
KANSAS, Topeka: Kansas Department of Health and Environment

KENTUCKY, Frankfort: Kentucky Natural Resources and Environmental Protection

MAINE, Augusta: Maine Department of Environmental Protection

MARYLAND, Baltimore: Martel Laboratory Services, Inc.

MASSACHUSETTS, Barnstable: Barnstable County Health and Environmental Lab  
MASSACHUSETTS, Wellesley Hills: Massachusetts Department of Public Works

MINNESOTA, Minneapolis: Braun Eng. and Testing Inc.  
MINNESOTA, Minneapolis: Minnesota Public Health Department  
MINNESOTA, St. Paul: Metropolitan Waste Control Commission

MISSOURI, Columbia: Environmental Trace Substances Research Center

MONTANA, Butte: Montana Bureau of Mines and Geology  
MONTANA, Helena: Montana Dept. of Health and Environmental Sciences

NEBRASKA, Lincoln: Environmental Control Labs

Cooperator--continued

NEVADA, Boulder City: BOR, Lower Colorado Regional Lab

NEVADA, Las Vegas: Clark County Sanitation District

NEVADA, Reno: Nevada State Health Laboratory

NEVADA, Reno: Water Analysis Laboratory, Desert Research Institute

NEVADA, Sutcliffe: Pyramid Lake Fisheries

NEW MEXICO, Albuquerque: City of Albuquerque Water Resources Laboratory

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

NEW YORK, Central Islip: Suffolk County Health Services Department

NEW YORK, Hempstead: Nassau County Department of Health

NEW YORK, Millbrook: Institute of Ecosystem Studies

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

NEW YORK, North Babylon: EcoTest Laboratories, Inc.

NEW YORK, Oakdale: Suffolk County Water Authority

NEW YORK, Port Washington: Nytest Environmental, Inc.

NEW YORK, Rochester: Monroe County Environmental Health Laboratory

NEW YORK, Rochester: Monroe County Pure Waters Lab

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

NEW YORK, Valhalla: NYC Dept. of Environmental Protection

NEW YORK, Wantagh: Cedar Creek Advanced Wastewater Treatment Lab

NORTH CAROLINA, Charlotte: Mecklenburg County Environmental Health Department

NORTH CAROLINA, Greensboro: City of Greensboro, Osborne Plant

NORTH DAKOTA, Bismarck: North Dakota State Water Commission

OHIO, Columbus: Columbus Surveillance Lab

OHIO, Columbus: Ohio Environmental Protection Agency, Water Quality Lab

OHIO, Franklin: The Miami Conservancy District

OHIO, Medina: Medina County Sanitary Engineering Department

OHIO, Tiffin: Heidelberg College, Water Quality Laboratory

OHIO, Xenia: Green County Sanitation Engineering Dept.

OKLAHOMA, Norman: Oklahoma Geological Survey

OKLAHOMA, Oklahoma City: Oklahoma Dept. of Agriculture Laboratory

OKLAHOMA, Oklahoma City: Oklahoma State Dept. of Health

OKLAHOMA, Tulsa: Tulsa City County Health Department

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

PENNSYLVANIA, Harrisburg: Pennsylvania DER, Bureau of Laboratories

Cooperator--continued

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 Incorporated  
TEXAS, Tyler: Core Laboratories Incorporated

VIRGINIA, Culpeper: Environmental Systems Service  
VIRGINIA, Manassas: Occoquan Watershed Monitoring Lab  
VIRGINIA, Richmond: Commonwealth of VA DGS, Div. of Consolidated Labs

WASHINGTON, Port Orchard: Washington Department of Ecology  
WASHINGTON, Richland: Battelle, Pacific NW Lab  
WASHINGTON, Richland: Westinghouse Hanford Company

WEST VIRGINIA, Morgantown: West Virginia Geologic and Economic Survey

WISCONSIN, Madison: State Laboratory of Hygiene  
WISCONSIN, Milwaukee: Milwaukee Metropolitan Sewerage District

WYOMING, Cheyenne: Dept. 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:

ALASKA, Fairbanks: Alaska Dept. of Natural Resources, Geol. and Geophys. Surveys  
ARKANSAS, Fayetteville: Univ. of Arkansas, Dept. of Civil Engineering  
COLORADO, Arvada: Rocky Mountain Analytical Labs  
COLORADO, Denver: U.S. Geological Survey, Reddy  
COLORADO, Fort Collins: Stewart Environmental  
FLORIDA, Ft. Myers: Lee County Environmental Lab  
GEORGIA, Albany: Albany Water, Gas and Light Commission  
MAINE, Orono: University of Maine  
NEW JERSEY, Tom's River: Ocean County Health Department  
NEW MEXICO, Santa Fe: NM Environmental Improvement Division  
NEW YORK, Albany: U.S. Geological Survey, Stevenson  
NEW YORK, Buffalo: Erie County Public Health Laboratory  
NEW YORK, Plattsburgh: State University of New York  
NORTH CAROLINA, Browns Summit: Lake Townsend Water Filtration Plant  
VIRGINIA, Hampton: The Bionetics Corporation  
WYOMING, Laramie: Univ. of Wyoming, Wyoming Water Research Center

**Table 2.—Explanation of abbreviations and symbols used in computer printout sections**

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APDC - ammonium pyrrolidine dithiocarbamate  
AUTO - automated  
AVG - average  
BLK - block  
CHCL<sub>3</sub> - chloroform  
CO'METRIC - colorimetric  
DC - direct current  
DEV - deviation  
DIG - digestion  
EDTA - ethylenediaminetetraacetic acid  
H<sub>2</sub>SO<sub>4</sub> - sulfuric acid  
IC - inductively coupled  
IGNORED - valued reported as less than detection level and not used in statistical analyses  
K and HG SO<sub>4</sub> - potassium and mercuric sulfate  
MIBK - methyl isobutyl ketone  
N - number of values submitted or used to determine means, etc.  
NABH<sub>4</sub> - sodium borohydride  
ND - not determined  
NR - not rated  
PCT - percent  
PDCA - pyrrolidine dithiocarbamic acid  
PERSULF - persulfate  
PHOSPHOMOL YBD - 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  
--- - dashes in values columns of Statistics by Methods indicate methods used but without sufficient data to calculate meaningful means and standard deviations

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Table 3 Standard Reference Water Sample No. T101  
Overall Laboratory Performance

(TRACE CONSTITUENTS)

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) > 2.00 Std. Dev.  
ND Not determined  
NR Not rated

LAB	AG	AL	AS	B	BA	BE	BR	CA	CD	CO
1	4	3	3	4	4	3	3	3	3	3
2	4	3	3	ND	0	ND	ND	0	4	0
4	3	4	4	ND	3	4	ND	4	4	4
5	4	4	2	ND	4	2	ND	ND	0	ND
6	ND									
7	ND	0	2	ND	ND	ND	2	0	ND	4
8	ND	ND	0	ND	ND	ND	ND	2	ND	ND
10	ND	ND	NR	ND	ND	ND	ND	ND	2	ND
11	1	NR	NR	ND	ND	ND	ND	4	ND	ND
12	3	4	NR	2	3	4	2	ND	4	4
13	ND									
14	3	NR	3	ND	ND	NR	ND	2	3	ND
15	ND									
16	4	NR	3	ND	3	4	ND	4	3	0
17	4	4	4	2	4	4	ND	4	3	3
19	ND	ND	ND	0	3	2	ND	ND	ND	ND
21	2	2	ND	ND	ND	ND	ND	ND	3	ND
22	ND	NR	ND	ND	4	ND	4	ND	3	ND
23	ND	3								
24	ND	4	ND	0	ND	4	3	1	ND	3
25	3	4	3	3	4	ND	ND	4	3	ND
26	ND	3	2	1	1	ND	3	1	4	4
29	NR	NR	NR	NR	4	3	ND	3	2	NR
30	4	0	0	4	4	1	ND	1	2	NR
32	ND	0	0	ND	ND	ND	ND	2	1	ND
34	0	2	0	ND	ND	ND	ND	2	1	ND
35	NR	NR	2	ND	ND	NR	ND	3	4	ND
36	ND	ND	4	ND	ND	ND	ND	3	4	ND
38	ND	4	ND	ND	ND	ND	ND	3	ND	ND
39	ND	3	ND	ND						
40	ND	ND	3	0	3	ND	ND	4	2	ND
41	4	ND	NR	ND						
42	ND	3	3	ND	ND	ND	ND	4	ND	ND
43	ND	NR	ND							
44	NR	4	4	4	4	1	ND	ND	ND	NR
45	ND	ND	4	ND	ND	ND	ND	3	4	ND
46	NR	3	4	4	3	4	ND	3	0	ND
47	ND	4	0	4	4	2	ND	ND	0	3
48	NR	0	3	4	4	2	ND	0	0	1
49	4	3	4	ND	3	2	ND	ND	3	ND
50	NR	4	NR	3	3	3	0	ND	1	2
51	4	3	3	3	4	3	ND	4	4	ND
52	ND	ND	ND	ND	3	4	ND	4	ND	ND
53	4	3	3	ND	ND	4	ND	4	4	ND
55	ND	3	3	ND	3	4	ND	ND	4	ND
57	4	ND	3	3	4	3	ND	4	4	ND
58	4	0	3	4	3	4	ND	4	4	ND
60	NR	NR	NR	NR	NR	NR	ND	ND	NR	NR
61	1	0	1	ND	0	0	ND	3	4	4
62	4	3	1	4	4	0	ND	3	4	4
63	0	ND	4	ND	2	1	ND	4	4	4
64	2	ND								
66	ND									
67	1	ND	2	ND	ND	2	ND	ND	3	ND
68	2	ND	4	4	NR	ND	ND	ND	3	ND
69	NR	0	0	ND	4	ND	ND	ND	ND	ND
70	ND	4	4	4	ND	ND	ND	ND	ND	ND
71	ND									
73	ND									
74	4	ND	3	ND	ND	3	ND	ND	ND	ND
75	3	4	4	ND	2	1	ND	3	4	ND
76	ND	ND	3	ND	ND	ND	ND	4	4	ND
77	0	ND	4	ND	3	3	ND	2	4	ND
78	4	ND	1	ND	ND	ND	ND	3	3	ND
79	0	ND	4	ND	ND	ND	ND	ND	4	ND
81	ND	ND	NR	4	ND	4	ND	0	0	3
83	4	4	ND	ND	ND	ND	ND	2	0	ND
84	ND	1	0	NR						
85	ND	0	0							
86	ND	0	4	0						
87	NR	1	4	1	0	3	ND	0	0	0
88	ND	ND	3	ND	0	ND	ND	1	4	ND
91	ND	ND	ND	ND	2	ND	ND	4	4	ND
94	ND	ND	ND	ND	3	ND	ND	0	ND	ND
97	4	ND	4	ND						
99	ND	0	ND							
101	3	ND	2	ND	4	ND	ND	4	ND	ND
103	ND	ND	ND	ND	4	ND	ND	ND	0	ND
106	ND	2	ND							
107	ND	ND	ND	0	ND	ND	ND	4	ND	ND
108	2	ND	2	0	0	ND	ND	0	2	ND
110	NR	ND	3	1	ND	3	ND	2	3	ND
111	ND	4	ND							
112	ND	4	ND							
113	4	4	NR	ND	ND	4	ND	ND	4	ND
116	4	3	NR	ND	ND	3	ND	ND	4	ND
117	4	4	3	0	3	3	ND	3	4	ND
118	ND	1	ND							
120	ND	2	ND							
122	ND	4	ND							
124	4	3	NR	4	4	4	3	4	3	2
127	3	4	3	1	ND	0	3	4	1	ND
128	ND	4	4	4	4	0	3	0	4	4
132	NR	4	ND	2	ND	ND	ND	ND	4	ND
133	ND	ND	ND	2	ND	ND	ND	ND	3	ND
137	4	ND	4	ND						

Table 3 Standard Reference Water Sample No. T101  
Overall Laboratory Performance

(TRACE CONSTITUENTS)

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) &gt; 2.00 Std. Dev.

ND Not determined

NR Not rated

LAB	CR	TOT	CU	FE	K	LI	MG	MN	MO	NA	NI
1	4	0	4	3	4	ND	3	3	3	4	4
2	3	3	4	4	4	ND	4	4	ND	0	3
4	2	4	4	3	ND	ND	ND	1	ND	ND	0
5	3	2	3	0	ND	ND	ND	3	2	ND	ND
6	0	0	0	4	0	ND	ND	0	ND	1	ND
7	0	0	0	4	0	ND	0	0	3	1	1
8	2	2	3	3	4	ND	3	3	4	3	3
10	NR	3	1	1	ND	ND	ND	3	ND	2	3
11	4	4	4	ND	ND	2	ND	3	4	ND	4
12	4	4	ND	ND	ND	ND	ND	3	4	ND	0
13	ND	ND	4	ND	ND	ND	ND	3	ND	3	ND
14	NR	4	4	3	ND	ND	4	1	NR	4	NR
15	ND	ND	4	4	4	ND	ND	ND	ND	ND	ND
16	0	4	4	4	4	3	4	4	3	2	0
17	3	4	4	4	4	4	3	4	NR	3	4
19	ND	ND	4	4	ND						
21	4	2	2	ND	ND	ND	ND	3	ND	ND	ND
22	3	3	4	4	4	ND	ND	4	ND	ND	ND
23	ND	ND	0	4	ND	ND	0	ND	ND	0	ND
24	0	0	4	0	0	2	ND	0	0	0	0
25	4	0	4	1	1	ND	ND	4	ND	4	2
26	4	2	4	4	0	ND	2	0	0	3	3
29	4	3	4	4	3	ND	3	3	NR	2	NR
30	ND	ND	1	4	3	ND	1	3	NR	3	ND
32	3	3	3	0	0	ND	3	0	ND	0	3
34	4	3	3	3	2	ND	4	1	ND	3	NR
35	4	3	0	2	3	ND	4	4	ND	4	1
36	ND	ND	4	4	2	ND	4	4	ND	4	ND
38	ND	ND	3	4	3	ND	3	4	ND	3	ND
39	ND	ND	3	4	3	ND	4	4	ND	3	ND
40	4	4	3	0	1	ND	4	3	4	2	4
41	2	3	0	2	ND	ND	ND	3	ND	ND	1
42	4	3	3	2	ND	ND	3	4	ND	3	4
43	ND	ND	4	4	ND	ND	ND	ND	ND	ND	4
44	4	4	4	4	4	ND	3	ND	ND	3	ND
45	ND	ND	4	4	3	ND	ND	ND	ND	4	ND
46	4	4	4	4	3	ND	4	4	ND	4	4
47	4	4	4	4	3	ND	4	4	ND	4	3
48	2	0	2	4	4	4	4	1	0	4	0
49	4	4	4	4	4	2	2	4	4	4	2
50	3	2	4	4	2	0	2	4	4	3	3
51	4	4	4	4	4	ND	4	4	ND	4	3
52	4	4	4	4	4	ND	4	4	ND	4	3
53	4	3	4	2	ND	ND	3	4	ND	4	2
55	3	3	4	4	4	ND	4	4	ND	3	4
57	4	3	3	4	4	ND	4	4	ND	3	4
58	4	3	4	4	1	ND	3	3	ND	3	4
60	ND	3	2	4	4	ND	3	4	0	3	NR
61	1	2	0	0	3	ND	2	1	0	1	4
62	4	2	4	4	4	4	2	4	4	4	4
63	ND	ND	4	4	4	ND	0	0	ND	4	ND
64	4	1	3	3	3	ND	4	4	3	3	3
66	NR	0	4	4	0	ND	4	4	ND	4	4
67	4	3	3	3	4	ND	4	3	ND	4	4
68	4	4	3	3	3	ND	3	3	ND	0	0
69	4	0	4	4	3	ND	3	3	ND	4	0
70	0	0	4	4	3	ND	3	3	0	2	4
71	ND	ND	2	2	ND						
73	4	4	4	1	1	ND	ND	4	ND	ND	3
74	4	3	1	1	1	ND	0	2	ND	4	ND
75	4	2	3	4	4	ND	1	4	ND	4	4
76	3	ND	ND	4	2	ND	0	0	ND	4	ND
77	4	3	3	3	3	ND	4	4	ND	4	2
78	4	2	ND	ND	3	ND	3	4	ND	4	2
79	ND	3	3	4	4	ND	ND	ND	ND	ND	4
81	4	3	2	4	4	ND	1	3	ND	4	3
83	4	2	2	ND	4	ND	4	4	ND	3	3
84	4	2	4	4	4	ND	3	3	ND	1	3
85	1	4	4	4	4	ND	3	3	ND	2	3
86	0	3	ND	4	4	ND	4	3	ND	3	0
87	0	0	3	3	ND	4	4	4	0	2	4
88	NR	2	3	3	4	ND	1	1	ND	4	3
91	ND	ND	0	2	ND	ND	4	4	ND	3	ND
94	ND	ND	2	ND	ND	ND	4	4	ND	3	ND
97	4	2	ND	4							
99	ND	ND	3	ND							
101	4	ND	ND	ND	ND	ND	0	3	ND	ND	ND
103	ND	ND	2	ND	ND	ND	ND	3	ND	ND	3
106	2	1	ND	3							
107	ND	ND	4	4	ND	ND	4	4	ND	3	ND
108	2	ND	ND	4	4	ND	3	2	ND	4	4
110	NR	4	4	4	4	ND	0	2	ND	4	4
111	3	4	4	4	0	ND	0	4	ND	4	4
112	ND	ND	ND	ND	2	ND	0	0	ND	4	ND
113	4	3	4	4	2	ND	3	4	ND	4	4
116	4	3	3	4	4	ND	0	4	ND	4	3
117	4	3	4	4	3	ND	0	4	0	0	4
118	2	4	4	4	1	ND	0	0	ND	0	2
120	0	3	3	4	4	ND	ND	ND	ND	0	ND
122	3	3	ND								
124	4	4	4	4	2	ND	2	4	ND	4	4
127	4	4	4	3	4	ND	0	4	ND	2	4
128	3	3	4	4	4	ND	1	4	ND	3	2
132	4	3	4	3	3	ND	0	4	ND	3	2
133	2	4	3	3	1	ND	0	ND	ND	ND	4
137	3	4	ND	4							

Table 3 Standard Reference Water Sample No. T101  
Overall Laboratory Performance

(TRACE CONSTITUENTS)

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) > 2.00 Std. Dev.  
 ND Not determined  
 NR Not rated

LAB	PB	SB	SE	SIO2	SR	V	ZN	N	Avg.
1	2	2	4	4	4	2	3	27	3.19
2	3	ND	3	2	ND	ND	4	18	2.78
4	4	ND	NR	ND	ND	ND	1	14	2.71
5	4	ND	4	ND	0	ND	2	17	3.12
6	4	ND	2	ND	ND	ND	0	10	1.20
7	4	ND	3	0	4	0	22	20	1.45
8	3	ND	ND	ND	ND	ND	17	17	2.82
10	4	ND	ND	ND	ND	ND	24	8	2.50
11	2	ND	4	ND	ND	ND	0	13	2.62
12	4	4	0	ND	0	4	3	20	3.10
13	ND	ND	ND	ND	ND	ND	ND	3	3.33
14	NR	NR	4	ND	ND	ND	3	12	3.17
15	ND	ND	4	ND	ND	ND	ND	1	4.00
16	NR	NR	4	ND	1	NR	4	20	2.90
17	4	2	3	4	3	NR	3	25	3.44
19	ND	ND	ND	ND	ND	ND	ND	4	2.75
21	2	ND	ND	ND	ND	ND	0	10	2.30
22	NR	ND	ND	ND	ND	ND	3	14	3.71
23	ND	ND	ND	ND	ND	ND	ND	1	4.00
24	2	ND	0	1	3	2	4	24	1.79
25	4	ND	4	4	ND	ND	3	19	3.42
26	ND	3	NR	ND	1	4	3	21	2.19
29	3	NR	NR	NR	4	0	3	17	2.88
30	NR	NR	NR	ND	4	NR	3	16	2.88
32	ND	ND	ND	3	3	ND	ND	10	3.30
34	3	ND	0	4	ND	ND	0	18	1.56
35	3	ND	2	4	ND	ND	4	14	2.36
36	3	ND	ND	4	0	ND	3	15	2.87
38	ND	ND	ND	ND	ND	ND	ND	7	3.57
39	ND	ND	ND	ND	ND	ND	4	8	3.50
40	4	ND	4	ND	ND	ND	4	17	3.12
41	2	ND	ND	4	ND	ND	3	8	2.25
42	4	ND	ND	4	ND	ND	2	14	3.43
43	ND	ND	3	ND	ND	ND	1	3.00	
44	NR	ND	3	4	ND	ND	3	18	3.50
45	ND	ND	ND	0	ND	ND	ND	1	0.00
46	4	ND	4	ND	4	ND	3	20	3.70
47	ND	ND	ND	4	4	4	4	21	3.33
48	3	ND	0	2	0	0	0	24	1.54
49	4	3	4	0	3	4	2	25	3.12
50	0	0	1	4	2	3	4	24	2.42
51	4	0	NR	4	4	4	4	24	3.50
52	ND	2	ND	3	4	4	4	19	3.84
53	2	ND	3	ND	4	ND	4	11	3.36
55	4	ND	ND	ND	4	ND	4	16	3.50
57	NR	4	4	4	4	ND	4	20	3.80
58	4	4	4	4	ND	4	4	23	3.39
60	2	ND	2	NR	2	ND	3	11	2.82
61	2	ND	1	0	0	ND	0	23	1.52
62	4	NR	0	4	2	2	4	25	3.32
63	4	ND	0	0	3	ND	2	16	2.44
64	4	ND	1	4	ND	ND	3	18	2.94
66	4	ND	ND	ND	ND	ND	3	11	3.00
67	4	ND	4	ND	ND	ND	4	15	3.27
68	4	ND	3	3	ND	ND	3	19	2.84
69	3	ND	2	4	ND	ND	3	16	2.56
70	4	ND	ND	ND	ND	ND	ND	16	2.81
71	ND	ND	ND	ND	ND	ND	ND	1	2.00
73	1	ND	ND	ND	ND	ND	4	6	3.33
74	3	ND	0	2	ND	ND	3	16	2.50
75	4	1	NR	ND	ND	ND	3	18	3.06
76	4	ND	3	4	ND	ND	4	11	3.73
77	NR	ND	ND	3	3	ND	4	14	2.43
78	0	ND	1	4	ND	ND	ND	16	2.88
79	0	ND	4	ND	ND	ND	7	1	1.86
81	NR	ND	2	ND	4	ND	4	9	2.56
83	4	2	ND	4	4	ND	3	24	3.50
84	ND	2	ND	ND	3	ND	4	11	2.73
85	2	ND	ND	ND	0	ND	3	13	2.38
86	0	ND	ND	ND	0	ND	0	13	1.62
87	2	NR	0	4	1	4	3	23	1.91
88	4	ND	ND	3	4	ND	0	15	1.53
91	3	ND	ND	4	4	ND	3	17	3.35
93	ND	ND	3	ND	ND	ND	5	2.20	
94	ND	ND	ND	0	ND	ND	8	2.50	
97	4	ND	ND	ND	ND	ND	7	3.14	
99	ND	ND	ND	ND	ND	ND	1	3.00	
101	0	ND	ND	ND	ND	ND	10	2.00	
103	ND	ND	ND	ND	4	ND	3	3.67	
106	ND	ND	ND	ND	ND	ND	0	6	1.67
107	ND	ND	ND	4	ND	ND	ND	8	3.38
108	2	ND	3	ND	2	ND	7	15	1.57
110	3	ND	4	ND	2	ND	0	20	2.67
111	4	0	4	ND	ND	NR	ND	2	2.60
112	ND	ND	ND	ND	ND	ND	ND	2	0.00
113	3	ND	ND	NR	ND	ND	4	16	3.44
116	4	ND	ND	ND	ND	ND	ND	13	3.54
117	4	4	4	0	3	4	3	26	2.69
118	0	ND	ND	ND	ND	ND	0	12	1.25
120	ND	ND	ND	ND	ND	ND	ND	5	2.00
122	4	ND	ND	ND	ND	ND	1	5	3.00
124	NR	0	NR	ND	4	ND	3	16	3.06
127	3	ND	4	ND	4	ND	4	26	3.62
128	4	ND	2	ND	1	ND	3	17	2.47
132	NR	NR	ND	ND	1	3	4	22	3.27
133	2	ND	ND	ND	ND	ND	4	12	2.83
137	4	2	2	4	ND	ND	4	11	3.27

Table 4 . Statistics by method for standard reference sample T101

Determination	Method		Range: from	to	Mean	Standard Deviation	N
AG	ATOMIC ABSORPTION, DIRECT, AIR ATOMIC ABSORPTION, FLAMELESS EMISSION, IC PLASMA _OVER-ALL_		4.500	- 20.000	5.250	0.612	6
			2.400	- 50.000	5.272	1.819	29
			1.000	- 10.000	5.275	0.914	4
			1.000	- 50.000	5.258	1.693	43
AL	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE ATOMIC ABSORPTION,DIRECT,FLAMELESS EMISSION, IC PLASMA _OVER-ALL_		70.000	- 1000.000	130.125	55.704	8
			51.000	- 232.000	120.500	58.350	10
			30.000	- 300.000	85.625	23.292	16
			30.000	- 2000.000	103.868	45.347	38
AS	ATOMIC ABSORPTION, FLAMELESS ATOMIC ABSORPTION, HYDRIDE, (ZINC) ATOMIC ABSORPTION, HYDRIDE, (NABH4) _OVER-ALL_		1.000	- 24.000	7.132	1.872	28
			4.200	- 5.400	4.933	0.643	3
			1.000	- 22.400	7.205	1.109	19
			1.000	- 90.000	7.081	1.633	52
B	COLORIMETRIC, AZOMETHINE EMISSION, IC PLASMA _OVER-ALL_		320.000	- 500.000	400.000	91.652	3
			270.000	- 400.000	350.000	29.907	19
			140.000	- 1400.000	365.536	51.771	28
BA	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE ATOMIC ABSORPTION, FLAMELESS EMISSION, IC PLASMA _OVER-ALL_		19.000	- 1670.000	68.091	28.836	11
			49.000	- 200.000	85.692	25.895	13
			53.000	- 110.000	59.739	2.942	23
			19.000	- 1670.000	69.000	21.787	52
BE	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE ATOMIC ABSORPTION, FLAMELESS EMISSION, IC PLASMA _OVER-ALL_		10.000	- 30.000	14.286	2.563	7
			15.000	- 35.000	16.000	1.732	3
			10.000	- 155.000	14.000	2.104	15
			10.000	- 155.000	14.423	2.230	26
BR	_OVER-ALL_		10.000	- 275.000	146.000	114.532	5
CA	ATOMIC ABSORPTION, DIRECT, AIR ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE EMISSION, IC PLASMA TITRATION, EDTA _OVER-ALL_		8.000	- 101.000	71.464	3.168	28
			51.000	- 74.000	67.667	5.508	3
			69.000	- 82.000	73.731	3.606	26
			71.000	- 75.000	72.667	2.082	3
			8.000	- 101.000	72.355	3.644	62
CD	ATOMIC ABSORPTION, DIRECT, AIR ATOMIC ABSORPTION, EXTRACTION,(APDC/MIBK) ATOMIC ABSORPTION, FLAMELESS EMISSION, IC PLASMA _OVER-ALL_		6.000	- 18.000	9.843	2.070	14
			9.800	- 10.700	10.225	0.403	4
			4.400	- 34.000	9.430	1.882	37
			6.500	- 17.000	10.155	2.025	11
			4.400	- 34.000	9.723	1.888	69
CO	ATOMIC ABSORPTION, DIRECT, AIR ATOMIC ABSORPTION, FLAMELESS EMISSION, IC PLASMA _OVER-ALL_		16.000	- 50.000	18.000	2.000	3
			9.000	- 51.000	11.800	2.514	8
			8.000	- 100.000	10.145	1.333	11
			7.000	- 100.000	12.111	3.665	28
CR TOT	ATOMIC ABSORPTION, DIRECT, AIR ATOMIC ABSORPTION, FLAMELESS EMISSION, IC PLASMA _OVER-ALL_		8.000	- 2700.000	15.909	6.992	11
			5.000	- 29.000	18.486	4.566	35
			14.000	- 50.000	17.867	2.326	15
			5.000	- 2700.000	18.514	5.702	70
CU	ATOMIC ABSORPTION, DIRECT, AIR ATOMIC ABSORPTION, FLAMELESS EMISSION, IC PLASMA _OVER-ALL_		40.000	- 120.000	49.808	5.083	26
			16.000	- 80.000	48.500	5.416	16
			12.000	- 75.000	46.941	3.112	17
			12.000	- 120.000	49.600	6.743	70
FE	ATOMIC ABSORPTION, DIRECT, AIR ATOMIC ABSORPTION, FLAMELESS EMISSION, IC PLASMA OTHER _OVER-ALL_		105.000	- 300.000	192.361	36.557	36
			120.000	- 220.000	163.571	37.496	7
			165.000	- 245.000	191.200	12.852	25
			195.000	- 290.000	240.000	35.637	6
			90.000	- 300.000	192.722	35.552	79
K	ATOMIC ABSORPTION, DIRECT, AIR EMISSION, FLAME, PHOTOMETRIC EMISSION, IC PLASMA _OVER-ALL_		2500.000	- 6000.000	3428.571	550.071	42
			3000.000	- 4900.000	3980.000	697.854	5
			100.000	- 3800.000	3231.250	284.532	16
			100.000	- 6000.000	3434.848	566.634	66
LI	ATOMIC ABSORPTION, DIRECT, AIR EMISSION, IC PLASMA _OVER-ALL_		63.000	- 70.000	66.667	2.875	6
			38.000	- 100.000	68.600	6.484	10
			38.000	- 100.000	68.294	5.486	17
MG	ATOMIC ABSORPTION, DIRECT, AIR EMISSION, IC PLASMA TITRATION, EDTA _OVER-ALL_		6.000	- 106.000	51.968	2.562	31
			50.000	- 60.000	53.577	2.352	26
			24.000	- 58.000	53.333	4.163	3
			6.000	- 106.000	52.774	2.602	62
MN	ATOMIC ABSORPTION, DIRECT, AIR ATOMIC ABSORPTION, FLAMELESS EMISSION, IC PLASMA _OVER-ALL_		24.000	- 66.000	48.030	7.699	33
			45.000	- 58.000	51.500	3.866	10
			40.000	- 55.000	49.852	2.597	27
			24.000	- 74.000	49.790	6.405	76
MO	ATOMIC ABSORPTION, FLAMELESS EMISSION, IC PLASMA _OVER-ALL_		36.000	- 115.000	51.000	8.602	8
			45.000	- 186.000	48.556	1.810	9
			36.000	- 200.000	50.087	6.259	23
NA	ATOMIC ABSORPTION, DIRECT, AIR EMISSION, FLAME EMISSION, IC PLASMA _OVER-ALL_		3.000	- 162.000	94.595	4.573	37
			90.000	- 102.000	96.800	4.604	5
			34.000	- 103.000	97.550	3.000	20
			3.000	- 162.000	96.258	4.770	66
NI	ATOMIC ABSORPTION, DIRECT, AIR ATOMIC ABSORPTION, FLAMELESS EMISSION, IC PLASMA _OVER-ALL_		12.000	- 100.000	34.438	11.087	16
			21.000	- 70.000	32.389	5.942	18
			20.000	- 295.000	30.167	4.805	18
			12.000	- 295.000	32.121	7.678	58

Table 4 . Statistics by method for standard reference sample T101

Determin- ation	Method		Range: from	to	Mean	Standard Deviation	N
PB	ATOMIC ABSORPTION, DIRECT, AIR		10.000	- 57.000	31.833	16.409	12
	ATOMIC ABSORPTION, EXTRACTION (APDC/MIBK)		13.000	- 32.000	21.333	9.713	3
	ATOMIC ABSORPTION, FLAMELESS		1.000	- 56.000	16.081	5.809	37
	EMISSION, IC PLASMA		10.000	- 250.000	31.250	9.845	4
<u>_OVER-ALL_</u>			1.000	- 250.000	21.953	12.597	64
SB	ATOMIC ABSORPTION, FLAMELESS		8.200	- 25.000	10.433	1.458	9
	<u>_OVER-ALL_</u>		0.900	- 350.000	10.390	1.381	10
SE	ATOMIC ABSORPTION, FLAMELESS		0.100	- 500.000	6.758	2.627	19
	ATOMIC ABSORPTION, HYDRIDE		0.100	- 10.000	6.996	2.846	23
	<u>_OVER-ALL_</u>		0.100	- 500.000	6.964	2.948	45
SiO2	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE		5000.000	- 8000.000	6685.000	1218.191	6
	COLORIMETRIC, ASCORBIC ACID REDUCTION TO MOLYBDATE BLUE		6820.000	- 7240.000	7020.000	210.713	3
	COLORIMETRIC, MOLYBDO-SILICIC ACID		2780.000	- 17000.000	7172.500	761.028	8
	COLORIMETRIC, AMINO-NAPHTHOL SULFONIC ACID REDUCE-HETEROPOLY BLUE		5930.000	- 10000.000	7008.000	1008.350	5
	EMISSION, IC PLASMA		5900.000	- 8240.000	7028.333	464.090	18
<u>_OVER-ALL_</u>			2780.000	- 17000.000	6995.122	711.158	41
SR	ATOMIC ABSORPTION, DIRECT, AIR		1050.000	- 4080.000	1212.857	99.283	7
	EMISSION, IC PLASMA		990.000	- 1350.000	1179.500	77.898	20
	<u>_OVER-ALL_</u>		990.000	- 4080.000	1196.452	91.307	31
V	EMISSION, IC PLASMA		10.000	- 100.000	17.706	5.871	17
	<u>_OVER-ALL_</u>		10.000	- 200.000	19.455	7.720	22
ZN	ATOMIC ABSORPTION, DIRECT, AIR		4.000	- 150.000	65.941	8.499	34
	ATOMIC ABSORPTION, FLAMELESS		29.000	- 91.000	64.500	20.632	4
	EMISSION, IC PLASMA		48.000	- 75.000	64.852	6.106	27
	<u>_OVER-ALL_</u>		4.000	- 150.000	65.671	8.440	70

Table 5 Standard Reference Water Sample No. M102  
 Overall Laboratory Performance (MAJOR CONSTITUENTS)

LAB	ALK(CACO <sub>3</sub> )	B	BR	CA	CL	DSRD	180	F	I	K	MG
1	4	4	NR	3	2	3	3	2	2	2	2
2	ND	ND	ND	ND	ND	0	3	ND	ND	ND	ND
3	4	4	ND	3	4	4	4	ND	2	4	4
4	1	3	ND	4	3	ND	4	ND	ND	4	4
5	2	4	ND	3	3	4	4	ND	3	4	4
6	2	ND	ND	0	3	4	ND	ND	ND	0	0
7	ND	ND	ND	4	0	ND	ND	ND	2	2	2
8	4	ND	ND	3	3	ND	3	ND	2	4	4
9	4	ND	ND	4	4	3	4	ND	4	4	4
10	ND	ND	ND	ND	0	3	ND	ND	ND	ND	ND
11	2	ND	ND	4	3	4	ND	ND	ND	ND	4
12	ND	ND	ND	4	3	ND	0	ND	4	3	3
13	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
14	1	ND	ND	4	4	4	ND	ND	3	4	4
15	3	ND	ND	0	3	2	0	ND	ND	4	4
16	3	3	3	3	4	3	4	ND	ND	4	4
17	4	1	3	3	3	4	3	ND	3	4	4
18	3	0	ND	ND	1	ND	3	ND	ND	ND	ND
19	ND	ND	ND	4	1	ND	ND	ND	4	4	4
20	2	ND	ND	4	1	ND	ND	ND	3	3	3
21	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
22	3	4	3	3	4	4	3	ND	ND	2	4
23	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	1
24	ND	4	ND	1	ND	ND	ND	ND	ND	4	2
25	1	4	ND	4	0	4	4	ND	ND	4	4
26	3	0	3	2	0	3	3	ND	ND	0	2
27	3	4	ND	4	4	4	4	ND	ND	4	4
28	3	4	ND	3	3	3	3	ND	ND	0	4
29	3	3	3	2	0	3	4	ND	ND	3	4
30	2	3	NR	2	0	4	4	ND	ND	3	2
31	4	3	ND	4	4	3	4	ND	ND	2	3
32	ND	0	ND	2	3	4	0	ND	ND	2	3
33	0	ND	ND	ND	ND	4	4	1	ND	ND	ND
34	0	ND	ND	4	2	3	0	ND	ND	0	3
35	3	ND	ND	3	0	0	3	ND	ND	1	4
36	4	ND	ND	4	4	4	4	ND	ND	4	4
37	4	ND	ND	4	ND	ND	ND	ND	ND	2	3
38	4	ND	ND	3	0	4	ND	ND	ND	2	3
39	ND	ND	ND	4	4	3	3	ND	ND	3	4
40	4	2	ND	4	4	3	3	ND	ND	0	4
41	ND	ND	ND	4	4	4	3	ND	ND	ND	4
42	3	ND	ND	2	0	4	4	ND	ND	3	2
43	ND	ND	ND	ND	4	3	ND	ND	ND	4	4
44	3	4	ND	ND	3	1	3	ND	ND	ND	2
45	1	ND	ND	ND	ND	4	2	ND	ND	ND	4
46	2	4	ND	ND	3	3	2	ND	ND	4	4
47	2	0	ND	ND	0	3	3	ND	ND	2	4
48	4	0	ND	ND	3	0	2	ND	ND	4	4
49	4	ND	ND	3	3	3	2	ND	ND	4	4
50	ND	3	ND	4	ND	2	2	ND	ND	0	4
51	ND	4	ND	4	ND	1	ND	ND	ND	4	3
52	4	ND	ND	3	4	1	ND	ND	ND	3	3
53	3	ND	ND	ND	ND	4	ND	ND	ND	ND	ND
54	3	ND	ND	3	4	4	4	ND	ND	4	4
55	2	3	ND	4	4	4	ND	ND	ND	3	3
56	4	ND	ND	4	3	4	0	ND	ND	ND	ND
57	ND	ND	ND	ND	ND	4	0	ND	ND	2	3
58	4	ND	ND	4	4	4	4	ND	ND	4	4
59	ND	ND	NR	ND	ND	4	4	ND	ND	ND	ND
60	4	ND	ND	ND	3	3	4	ND	ND	2	3
61	3	ND	ND	3	3	2	2	ND	ND	3	2
62	4	3	ND	ND	4	4	3	ND	ND	4	4
63	4	ND	ND	4	4	4	ND	ND	ND	4	4
64	3	ND	ND	3	4	4	4	ND	ND	3	4
65	ND	ND	ND	ND	0	0	ND	ND	ND	0	3
66	ND	ND	ND	ND	2	0	1	ND	ND	0	3
67	4	ND	ND	0	4	4	ND	ND	ND	4	4
68	3	4	ND	ND	0	3	1	ND	ND	4	4
69	3	ND	ND	2	3	3	1	ND	ND	3	4
70	ND	3	ND	ND	3	4	1	ND	ND	0	3
71	0	ND	ND	ND	ND	3	3	ND	ND	ND	0
72	4	ND	ND	ND	0	3	3	ND	ND	1	0
73	3	ND	ND	ND	3	4	3	ND	ND	3	4
74	3	ND	ND	ND	3	4	3	ND	ND	1	0
75	3	ND	ND	ND	4	3	4	ND	ND	3	4
76	3	ND	NR	ND	1	4	4	ND	ND	4	3
77	3	ND	ND	3	2	ND	4	ND	ND	2	1
78	4	0	ND	ND	1	ND	4	ND	ND	ND	ND
79	3	ND	ND	3	1	4	ND	ND	3	3	0
80	4	4	ND	ND	3	4	2	ND	ND	4	3
81	3	ND	ND	3	1	4	4	ND	ND	4	3
82	3	ND	ND	3	3	0	4	ND	ND	4	3
83	2	ND	ND	ND	4	4	4	ND	ND	4	4
84	2	ND	ND	ND	3	4	4	ND	ND	4	4
85	3	ND	ND	ND	4	3	4	ND	ND	2	0
86	3	0	ND	ND	1	4	3	ND	ND	4	4
87	3	0	ND	ND	1	4	3	ND	ND	4	4
88	3	ND	ND	4	3	0	3	4	ND	4	0
89	3	ND	ND	ND	3	3	4	3	ND	4	3

Table 5 Standard Reference Water Sample No. M102  
Overall Laboratory Performance

(MAJOR CONSTITUENTS)

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) > 2.00 Std. Dev.  
ND Not determined  
NR Not rated

LAB	ALK(CACO <sub>3</sub> )	B	BR	CA	CL	DSRD	180	F	I	K	MG
93	0	NR	ND	3	0	ND	ND	ND	ND	ND	4
94	3	2	ND	ND	3	3	4	ND	ND	3	3
96	4	ND	ND	4	4	ND	ND	ND	ND	3	3
98	0	ND	ND	3	4	4	ND	ND	ND	4	4
99	3	ND	ND	0	3	3	3	ND	ND	4	3
100	4	ND	ND	0	ND	1	ND	ND	ND	3	2
101	2	ND	ND	4	ND	ND	ND	ND	ND	ND	0
102	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND
103	ND	ND	ND	4	3	ND	ND	ND	ND	3	4
104	ND	ND	ND	ND	ND	ND	4	ND	ND	ND	ND
105	ND	ND	ND	4	3	ND	ND	ND	ND	2	3
106	ND	ND	ND	ND	4	ND	ND	ND	ND	ND	ND
107	0	4	ND	4	4	3	3	ND	ND	4	4
108	1	0	ND	1	3	3	4	ND	ND	4	2
109	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
110	3	3	ND	3	4	4	4	ND	ND	4	4
111	4	1	NR	4	4	4	3	ND	ND	0	0
112	ND	ND	ND	0	4	ND	ND	ND	ND	ND	0
113	4	ND	ND	3	2	4	4	ND	ND	4	4
115	0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
116	2	ND	ND	4	3	4	3	ND	ND	4	3
117	0	2	ND	3	0	2	4	ND	ND	1	0
118	3	ND	ND	3	1	1	ND	ND	ND	4	3
120	1	ND	ND	2	4	ND	ND	ND	ND	ND	ND
121	4	ND	ND	ND	4	0	1	ND	ND	ND	ND
122	0	ND	ND	ND	4	ND	ND	ND	ND	ND	ND
123	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
124	0	ND	ND	ND	1	4	4	ND	ND	1	0
127	3	4	ND	4	3	3	0	ND	ND	4	4
128	3	ND	ND	3	3	3	ND	ND	ND	3	0
131	ND	ND	ND	ND	3	2	ND	ND	ND	0	ND
132	ND	3	ND	4	4	4	4	ND	ND	3	3
133	ND	ND	ND	4	ND	ND	ND	ND	ND	3	2
136	3	ND	ND	ND	ND	0	ND	ND	ND	ND	ND
137	4	ND	ND	ND	ND	3	ND	ND	ND	ND	ND

Table 5 Standard Reference Water Sample No. M102  
Overall Laboratory Performance (MAJOR CONSTITUENTS)

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) > 2.00 Std. Dev.  
ND Not determined  
NR Not rated

LAB	NA	P, TOTAL	PH	PO4-P	SIO2	SO4	SP. COND.	SR	V	N	Avg.
1	3	4	4	4	4	3	4	3	2	18	3.11
2	ND	ND	3	3	ND	3	ND	ND	ND	8	2.63
3	4	4	3	ND	3	4	ND	ND	13	3.69	
4	4	4	3	3	3	0	3	ND	13	2.92	
5	4	3	3	3	3	4	4	ND	ND	15	3.40
6	ND	ND	4	ND	ND	4	4	ND	ND	8	2.63
7	ND	ND	ND	ND	0	0	ND	2	ND	10	1.40
8	0	ND	ND	ND	ND	4	4	ND	ND	9	3.56
9	3	ND	3	ND	ND	4	4	ND	ND	11	3.73
10	ND	ND	4	4	ND	4	4	ND	ND	6	3.17
11	ND	ND	3	ND	ND	4	ND	ND	ND	7	3.43
12	2	ND	ND	2	ND	4	ND	ND	ND	8	2.75
13	ND	4	4	4	ND	4	4	ND	ND	7	3.71
14	4	2	0	4	ND	4	4	ND	ND	12	3.17
15	4	3	1	4	ND	3	3	ND	ND	13	2.62
16	3	4	3	4	4	4	4	2	NR	17	3.53
17	4	4	3	4	4	3	3	3	ND	17	3.20
18	ND	4	3	0	4	3	4	ND	ND	10	2.50
19	0	ND	ND	ND	ND	ND	ND	ND	ND	4	2.75
20	4	ND	4	ND	2	3	4	ND	ND	11	3.09
21	ND	ND	4	ND	2	3	4	ND	ND	ND	ND
22	0	ND	ND	ND	4	4	ND	ND	ND	12	3.17
23	ND	4	3	1	0	ND	3	ND	ND	9	2.00
24	4	1	ND	ND	0	ND	ND	3	0	9	2.11
25	3	4	3	0	4	4	4	ND	ND	15	3.67
26	2	4	3	0	ND	4	4	0	3	17	3.18
27	4	ND	3	4	4	4	4	ND	ND	14	3.79
28	3	4	3	2	4	3	4	2	ND	17	2.82
29	3	4	3	2	4	4	4	2	0	16	2.63
30	2	ND	3	3	ND	4	4	4	NR	14	3.29
31	2	ND	3	3	ND	3	4	4	ND	14	2.29
32	2	ND	3	ND	ND	4	2	4	ND	14	3.09
33	ND	ND	2	1	ND	4	0	ND	ND	8	2.00
34	2	0	4	4	4	3	3	ND	ND	13	2.23
35	0	4	4	4	3	3	4	ND	ND	14	2.79
36	4	4	4	4	0	0	3	0	ND	15	3.27
37	0	ND	1	ND	0	0	1	ND	ND	10	1.50
38	4	3	4	3	0	0	ND	ND	ND	12	2.50
39	4	4	ND	4	ND	ND	ND	ND	ND	8	3.88
40	2	ND	4	ND	ND	4	4	ND	ND	11	3.09
41	4	ND	3	ND	ND	2	3	3	ND	8	3.75
42	4	ND	3	ND	ND	4	4	ND	ND	14	2.86
43	1	ND	ND	ND	ND	4	ND	ND	ND	6	3.33
44	3	3	3	3	4	4	0	ND	NR	15	2.73
45	ND	4	4	4	1	ND	3	ND	ND	6	2.83
46	2	4	4	4	ND	2	4	4	4	16	3.44
47	3	3	3	3	ND	4	4	4	4	14	3.29
48	2	0	0	0	3	1	4	0	0	17	1.76
49	3	3	3	4	4	3	4	4	4	16	3.38
50	3	2	ND	ND	4	ND	ND	3	NR	8	2.88
51	0	0	ND	ND	ND	ND	ND	3	ND	8	2.75
52	2	4	1	ND	4	3	ND	3	ND	14	3.07
53	ND	ND	4	ND	ND	ND	4	ND	ND	5	3.80
55	3	4	2	4	ND	4	4	4	ND	12	3.42
57	3	4	2	4	2	4	4	3	ND	13	3.46
58	ND	ND	3	0	ND	2	4	3	ND	16	3.13
59	ND	ND	3	3	ND	2	4	0	ND	4	2.00
60	3	3	3	4	ND	2	4	0	NR	13	2.69
61	3	4	3	3	ND	4	4	1	ND	16	2.88
62	4	4	3	3	ND	4	ND	2	ND	14	3.07
63	3	ND	4	3	4	2	ND	4	ND	11	3.36
64	2	ND	4	3	4	4	ND	0	ND	14	3.50
65	0	ND	4	ND	ND	ND	3	ND	ND	7	1.43
66	3	3	2	2	2	ND	0	ND	ND	12	1.75
67	4	ND	0	3	3	ND	2	ND	ND	11	2.55
68	0	ND	4	3	3	3	3	ND	ND	14	2.57
69	4	4	4	4	2	4	4	ND	ND	14	2.71
70	4	0	3	ND	ND	ND	3	ND	ND	9	2.89
71	ND	ND	0	3	ND	2	4	ND	ND	5	1.80
74	4	3	0	3	ND	4	4	ND	ND	14	2.07
75	4	3	0	3	ND	3	2	ND	ND	9	2.44
76	4	ND	3	3	ND	3	2	ND	ND	13	3.15
77	4	4	0	4	3	1	0	ND	ND	13	2.38
78	3	4	4	4	4	ND	3	ND	ND	13	3.23
79	ND	ND	3	3	4	ND	4	3	ND	6	2.50
80	4	3	3	2	ND	4	4	3	ND	13	3.46
81	3	4	2	2	3	ND	4	3	ND	13	2.92
83	3	3	3	4	2	4	ND	3	ND	15	3.07
84	3	2	4	ND	4	0	ND	3	ND	10	2.80
85	3	3	2	4	4	0	2	ND	ND	11	2.45
86	3	3	3	4	4	0	3	4	ND	13	2.62
87	0	4	4	4	3	3	4	1	ND	17	2.65
88	3	ND	4	4	4	4	3	0	ND	15	2.40
91	3	.	ND	4	4	4	4	2	ND	15	3.40

Table 5 Standard Reference Water Sample No. M102  
Overall Laboratory Performance

(MAJOR CONSTITUENTS)

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) > 2.00 Std. Dev.  
 ND Not determined  
 NR Not rated

LAB	NA	P, TOTAL	PH	PO4-P	SIO2	SO4	SP.	COND.	SR	V	N	Avg.
93	0	ND	0	ND	ND	3	0	ND	ND	8	1	2.25
94	1	2	3	0	1	3	3	ND	ND	15	2	2.13
96	3	ND	2	4	ND	4	4	ND	ND	9	3	4.44
98	3	4	3	4	ND	ND	4	ND	ND	11	3	3.36
99	1	ND	4	ND	3	2	4	ND	ND	12	2	2.75
100	4	3	4	3	1	ND	4	ND	ND	11		2.64
101	ND	3	ND	4	0	0	ND	ND	ND	7	2	2.43
102	ND	0	ND	1	4	3	4	ND	ND	6	2	2.33
103	3	4	4	0	3	4	0	ND	ND	11	2	2.91
104	ND	0	4	4	ND	ND	ND	ND	ND	4	3	3.00
105	1	1	4	0	ND	3	0	ND	ND	10	2	2.10
106	ND	3	1	1	ND	ND	3	ND	ND	5	2	2.40
107	1	ND	3	2	ND	3	4	ND	ND	13	3	3.15
108	4	ND	2	4	ND	3	4	ND	ND	13	2	2.69
109	ND	4	ND	4	ND	ND	ND	ND	ND	2	4	0.00
110	4	ND	1	ND	3	0	4	ND	ND	13	3	3.15
111	4	4	3	4	ND	4	4	ND	ND	14	3	3.14
112	ND	ND	4	ND	ND	4	4	ND	ND	6	2	2.67
113	4	3	3	ND	ND	3	4	ND	ND	12	3	3.50
115	ND	1	3	ND	ND	ND	ND	ND	ND	3	1	3.33
116	3	4	3	4	4	4	2	ND	ND	14	3	3.36
117	3	3	4	0	0	4	4	2	ND	17	2	2.00
118	4	ND	0	ND	ND	0	0	ND	ND	10	1	1.90
120	4	0	ND	4	ND	ND	ND	ND	ND	6	2	2.50
121	ND	4	4	4	4	4	1	ND	ND	10	3	3.00
122	ND	ND	4	ND	ND	ND	ND	ND	ND	3	2	2.67
123	ND	ND	4	ND	ND	ND	ND	ND	ND	2	3	3.50
124	4	4	2	4	ND	0	2	ND	ND	13	2	2.23
127	4	4	0	3	4	4	4	ND	ND	3	1	3.53
128	3	4	0	4	ND	4	ND	ND	ND	11	2	2.73
131	3	ND	ND	ND	ND	4	2	ND	ND	6	2	2.33
132	3	3	4	3	2	4	4	4	ND	16	3	3.50
133	1	ND	ND	ND	ND	ND	ND	ND	ND	4	2	2.50
136	ND	ND	0	ND	ND	ND	2	ND	ND	4	1	2.25
137	ND	3	3	2	ND	4	ND	ND	ND	6	3	3.17

Table 6 . Statistics by method for standard reference sample M102

Determination	Method	Range: from	to	Mean	Standard Deviation	N
ALK(CACO3)	OTHER TITRATION, COLORIMETRIC TITRATION, ELECTROMETRIC OVER-ALL	168.000	- 183.000	175.667	7.506	3
		148.000	- 202.000	178.214	4.191	14
		117.000	- 520.000	176.185	4.408	65
		117.000	- 520.000	176.412	4.709	85
B	COLORIMETRIC, AZOMETHINE COLORIMETRIC, CURCUMIN EMISSION, IC PLASMA OVER-ALL	250.000	- 400.000	320.000	54.314	5
		271.000	- 470.000	379.000	72.346	9
		30.000	- 340.000	294.111	21.638	18
		30.000	- 2000.000	323.432	55.566	37
BR	ION CHROMATOGRAPHY OVER-ALL	10.000	- 120.000	103.333	28.868	3
		10.000	- 420.000	100.143	22.438	-
CA	ATOMIC ABSORPTION, DIRECT, AIR ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE EMISSION, IC PLASMA OTHER TITRATION, EDTA OVER-ALL	18.000	- 108.000	80.652	5.318	46
		56.000	- 83.000	80.750	1.708	4
		77.000	- 92.000	83.074	4.113	27
		82.000	- 94.000	86.000	4.690	5
		79.000	- 221.000	85.000	5.477	5
		18.000	- 221.000	81.711	5.305	90
CL	COLORIMETRIC, FERRIC THIOCYANATE ION CHROMATOGRAPHY ION SELECTIVE ELECTRODE NOT REPORTED TITRATION, MERCURIC NITRATE TITRATION, SILVER NITRATE OVER-ALL	40.000	- 50.000	43.710	2.327	31
		31.000	- 52.000	43.875	3.423	16
		41.000	- 53.000	42.600	1.140	5
		39.000	- 43.000	41.667	2.309	3
		38.000	- 80.000	43.688	2.983	16
		9.000	- 60.000	44.091	1.900	22
		9.000	- 80.000	43.699	2.523	93
DSRD 180	NOT REPORTED RESIDUE ON EVAPORATION RESIDUE, FILTRABLE OVER-ALL	864.000	- 934.000	892.333	36.856	3
		816.000	- 928.000	882.467	26.601	30
		806.000	- 927.000	872.447	26.155	38
		806.000	- 934.000	877.521	26.971	71
F	COLORIMETRIC, CEROUS ALIZARIN "COMPLEXONE" ION CHROMATOGRAPHY ION SELECTIVE ELECTRODE OTHER OVER-ALL	0.990	- 1.200	1.097	0.105	3
		0.650	- 1.690	1.081	0.168	29
		0.800	- 30.800	1.031	0.059	21
		1.000	- 1.080	1.040	0.034	6
		0.650	- 30.800	1.074	0.144	66
K	ATOMIC ABSORPTION, DIRECT, AIR EMISSION, FLAME PHOTOMETRIC EMISSION, IC PLASMA OTHER OVER-ALL	5.300	- 10.000	7.027	0.833	54
		6.500	- 8.800	7.264	0.823	9
		4.740	- 11.400	6.968	0.591	17
		7.000	- 12.000	7.633	0.777	3
		4.740	- 12.000	7.021	0.819	86
MG	ATOMIC ABSORPTION, DIRECT, AIR ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE EMISSION, IC PLASMA OTHER OVER-ALL	11.300	- 116.000	57.028	3.183	46
		57.100	- 59.000	57.867	1.002	3
		54.500	- 66.000	59.536	2.591	28
		55.800	- 60.000	57.725	2.590	4
		16.600	- 83.000	60.080	4.633	5
		11.300	- 116.000	58.270	3.377	89
NA	ATOMIC ABSORPTION, DIRECT, AIR EMISSION, FLAME EMISSION, IC PLASMA OTHER OVER-ALL	19.300	- 120.900	106.108	4.123	53
		106.000	- 112.000	109.400	2.191	5
		101.000	- 120.000	109.729	4.958	24
		102.000	- 132.000	107.125	5.633	4
		19.300	- 132.000	107.530	4.778	88
P, TOTAL	COLORIMETRIC, H <sub>2</sub> SO <sub>4</sub> /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD COLORIMETRIC, BLK DIG, H <sub>2</sub> SO <sub>4</sub> , K&HG <sub>2</sub> SO <sub>4</sub> , PHOSPHOMOLYBDATE EMISSION, IC PLASMA OVER-ALL	0.140	- 1.380	0.455	0.035	47
		0.380	- 0.970	0.454	0.031	12
		0.400	- 0.610	0.520	0.095	5
		0.140	- 1.380	0.458	0.049	70
PH	ELECTROMETRIC OVER-ALL	7.800	- 8.840	8.406	0.146	94
		7.800	- 8.840	8.408	0.145	96
PO4-P	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE ION CHROMATOGRAPHY OVER-ALL	0.240	- 0.840	0.435	0.024	56
		0.100	- 0.520	0.447	0.038	7
		0.100	- 0.840	0.436	0.028	67
SIO2	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE COLORIMETRIC, ASCORBIC ACID REDUCTION TO MOLYBDATE BLUE COLORIMETRIC, MOLYBDOSILICIC ACID COLORIMETRIC, AMINO-NAPHTHOL SULFONIC ACID REDUCE-HETEROPOLY BLUE EMISSION, IC PLASMA OVER-ALL	6.000	- 9.000	7.188	1.063	8
		5.800	- 8.900	7.025	0.785	12
		2.300	- 17.000	6.878	0.944	9
		6.000	- 10.000	7.050	0.746	8
		6.100	- 8.800	7.042	0.402	19
		2.300	- 17.000	7.035	0.753	60
SO4	COLORIMETRIC, METHYL THYMOL BLUE GRAVIMETRIC, BARIUM SULFATE ION CHROMATOGRAPHY NOT REPORTED THORIN TITRATION TURBIDIMETRIC, BARIUM SULFATE OVER-ALL	85.000	- 437.000	406.526	20.900	19
		42.000	- 438.000	421.692	11.397	13
		359.000	- 440.000	415.050	13.145	20
		398.000	- 430.000	413.000	16.093	3
		386.000	- 430.000	405.333	22.480	3
		82.000	- 1017.000	426.150	32.968	20
		42.000	- 1017.000	414.427	27.569	82
SP. COND.	DIRECT READING INSTRUMENT WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER OVER-ALL	680.000	- 1430.000	1227.619	78.703	42
		980.000	- 1350.000	1197.750	85.590	40
		680.000	- 1430.000	1213.448	81.752	87
SR	ATOMIC ABSORPTION, DIRECT, AIR EMISSION, IC PLASMA OVER-ALL	1060.000	- 4400.000	1310.625	163.673	8
		1210.000	- 1510.000	1333.524	77.862	21
		1060.000	- 4400.000	1328.677	109.207	31
V	EMISSION, IC PLASMA OVER-ALL	9.000	- 100.000	15.475	5.399	12
OK,		8.000	- 200.000	15.175	5.987	16

Table 7 Standard Reference Water Sample No. N19  
 Overall Laboratory Performance (NUTRIENTS)

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) > 2.00 Std. Dev.  
 ND Not determined  
 NR Not rated

LAB	NH3+ORG-N	NH3-N	NO2-N	NO3-N	P, TOTAL	PO4-P	N	Avg.
1	2	2	3	4	4	4	6	3.17
5	2	4	3	3	ND	ND	6	2.17
8	0	4	4	3	4	4	2.75	
10	ND	ND	ND	4	ND	4	4	
12	ND	ND	ND	3	ND	ND	1	3.00
13	ND	ND	ND	ND	4	4	2	4.00
14	4	NR	4	3	4	4	5	3.60
15	2	4	4	0	3	4	6	2.83
16	1	3	4	3	3	4	6	3.00
19	4	ND	3	4	4	0	5	3.00
22	ND	ND	ND	4	ND	ND	1	4.00
23	4	3	4	3	2	4	6	3.33
25	4	4	0	3	3	4	6	3.00
26	ND	0	0	4	1	4	5	1.80
27	4	3	3	ND	3	4	5	2.80
28	ND	3	ND	3	ND	3	3	3.00
29	3	3	4	4	4	4	6	3.67
30	3	4	4	3	3	4	6	3.50
33	ND	1	ND	2	ND	3	3	2.00
34	4	4	ND	4	ND	4	4	4.00
35	2	4	4	4	3	4	6	3.50
36	4	4	4	3	3	4	6	3.67
38	2	4	0	4	3	4	6	2.83
40	ND	ND	ND	3	ND	ND	1	3.00
41	ND	3	ND	2	ND	ND	2	2.50
44	3	3	0	ND	0	3	5	1.80
45	ND	3	2	3	0	0	5	1.60
48	ND	ND	ND	4	4	0	3	2.67
49	4	4	4	4	3	4	6	3.83
52	ND	ND	0	ND	3	4	3	2.33
54	4	2	4	3	4	4	6	3.50
55	4	3	4	4	4	ND	5	3.80
58	ND	4	4	4	3	3	5	3.60
59	ND	ND	ND	3	ND	2	2	2.50
60	2	3	ND	3	0	4	5	2.40
61	4	3	2	4	0	2	6	2.50
63	ND	4	ND	3	ND	2	2	3.00
64	3	3	4	3	4	2	6	3.50
66	0	1	0	4	2	4	6	1.83
67	ND	1	4	3	ND	1	4	2.25
68	ND	3	ND	3	ND	4	3	3.33
69	4	3	4	1	4	0	6	2.67
70	ND	ND	ND	4	1	ND	1	1.00
73	4	3	ND	ND	4	0	5	3.00
74	0	4	4	4	0	0	6	2.00
75	4	0	4	0	1	ND	5	1.80
76	ND	4	0	4	ND	4	4	3.00
77	4	0	3	3	4	2	6	2.67
78	4	0	4	4	4	1	6	2.83
79	ND	4	ND	4	ND	4	3	4.00
80	4	2	ND	ND	4	ND	3	3.33
81	ND	1	ND	4	4	4	5	3.40
84	ND	ND	NR	4	4	4	4	4.00
85	0	4	2	4	0	4	6	2.33
86	ND	0	0	0	1	4	5	1.00
87	ND	3	4	0	0	4	5	2.60
88	ND	0	3	0	ND	0	4	0.75
91	4	0	4	4	3	4	6	3.83
94	4	0	4	4	4	2	6	2.83
96	ND	ND	4	2	ND	4	3	3.33
98	4	NR	ND	4	ND	2	4	3.50
101	ND	0	ND	4	2	3	3	2.33
102	4	3	4	3	2	2	6	3.00
104	2	1	3	3	4	3	6	2.67
105	3	2	ND	3	0	4	6	2.67
106	2	ND	0	4	2	1	5	1.80
108	ND	ND	1	1	ND	2	3	1.33
109	ND	4	0	4	3	4	6	3.00
110	ND	0	0	2	ND	ND	3	0.67
111	3	4	4	2	4	4	6	3.50
113	ND	4	ND	4	2	ND	3	3.33
115	1	4	0	ND	0	ND	4	1.25
117	0	3	4	4	4	0	6	2.33
120	ND	0	0	ND	0	0	4	0.00
121	ND	0	4	3	3	4	5	2.80
124	1	3	1	0	0	4	6	1.33
127	4	4	4	4	4	3	6	3.83
128	ND	ND	4	4	4	4	4	4.00
132	4	4	ND	4	3	4	5	3.80
133	ND	ND	ND	0	ND	ND	1	0.00
136	4	0	ND	1	4	3	4	3.00
137	1	1	ND	1	4	3	6	2.33

Table 8 . Statistics by method for standard reference sample N19

Determination	Method		Range: from	to	Mean	Standard Deviation	N
NH3+ORG-N	COLORIMETRIC, BLOCK DIGESTION, SALICYLATE HYPOCHLORITE COLORIMETRIC, DIGESTION, DISTILLATION, NESSLERIZATION COLORIMETRIC, DIGESTION, DISTILLATION, PHENATE DIGESTION, DISTILLATION, ION SELECTIVE ELECTRODE OTHER _OVER-ALL_		1.070	-	2.800	1.684	0.302 18
			0.540	-	5.210	1.718	0.847 5
			1.600	-	2.600	2.140	0.470 4
			0.460	-	2.340	1.565	0.792 6
			1.000	-	2.990	1.348	0.296 6
			0.460	-	5.210	1.730	0.554 45
NH3-N	COLORIMETRIC, DISTILLATION, NESSLERIZATION COLORIMETRIC, INDOPHENOL COLORIMETRIC, PHENATE ION SELECTIVE ELECTRODE OTHER _OVER-ALL_		0.120	-	2.000	0.194	0.056 7
			0.060	-	0.200	0.126	0.050 5
			0.030	-	0.840	0.128	0.063 27
			0.110	-	1.800	0.139	0.021 11
			0.090	-	0.250	0.165	0.073 4
			0.030	-	2.000	0.144	0.060 55
NO2-N	COLORIMETRIC, DIAZOTIZATION _OVER-ALL_		0.060	-	0.580	0.256	0.017 43
			0.060	-	3.200	0.256	0.017 47
NO3-N	COLORIMETRIC, BRUCINE COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION COLORIMETRIC, HYDRAZINE REDUCTION, DIAZOTIZATION ION CHROMATOGRAPHY NOT REPORTED OTHER _OVER-ALL_		3.160	-	3.710	3.402	0.194 11
			1.500	-	4.660	3.467	0.246 42
			3.220	-	4.500	4.037	0.709 3
			3.270	-	3.470	3.384	0.077 5
			3.260	-	4.500	3.787	0.641 3
			3.350	-	6.400	3.502	0.158 5
			1.500	-	6.400	3.509	0.318 71
P, TOTAL	COLORIMETRIC, H <sub>2</sub> S <sub>0</sub> 4/PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD COLORIMETRIC, BLK DIG, H <sub>2</sub> S <sub>0</sub> 4, K&HG <sub>2</sub> S <sub>0</sub> 4, PHOSPHOMOLYBDATE _OVER-ALL_		0.910	-	4.040	1.863	0.138 38
			0.970	-	3.210	1.866	0.155 10
			0.910	-	4.040	1.873	0.140 55
PO4-P	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE NOT REPORTED _OVER-ALL_		0.440	-	1.730	0.645	0.077 58
			0.480	-	0.740	0.613	0.130 3
			0.440	-	1.730	0.642	0.078 65

Table 9 Standard Reference Water Sample No. HG2  
Overall Laboratory Performance

(MERCURY)

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) > 2.00 Std. Dev.  
ND Not determined  
NR Not rated

LAB	N	Avg.
1	4	1 4.00
4	4	1 4.00
5	4	1 4.00
6	0	1 0.00
10	0	1 0.00
11	0	1 0.00
14	3	1 3.00
17	2	1 2.00
25	4	1 4.00
30	2	1 2.00
35	4	1 4.00
40	4	1 4.00
41	1	1 1.00
44	4	1 4.00
46	3	1 3.00
47	2	1 2.00
48	0	1 0.00
49	4	1 4.00
51	4	1 4.00
52	4	1 4.00
53	4	1 4.00
61	4	1 4.00
64	4	1 4.00
67	4	1 4.00
69	4	1 4.00
70	0	1 0.00
75	4	1 4.00
76	4	1 4.00
78	4	1 4.00
81	4	1 4.00
83	3	1 3.00
85	2	1 2.00
86	4	1 4.00
87	3	1 3.00
91	4	1 4.00
93	4	1 4.00
98	4	1 4.00
101	4	1 4.00
108	2	1 2.00
109	4	1 4.00
110	3	1 3.00
116	4	1 4.00
117	4	1 4.00
120	3	1 3.00
124	2	1 2.00
127	4	1 4.00
128	4	1 4.00
132	4	1 4.00
137	4	1 4.00

Table 10. Statistics by method for standard reference sample HG2

Determination	Method	Range: from	to	Mean	Standard Deviation	N
	ATOMIC ABSORPTION, FLAMELESS, COLD VAPOR	1.740	-	6.900	3.980	0.793 44
	OTHER	3.500	-	6.100	4.600	1.345 3
	<u>OVER-ALL</u>	1.740	-	6.900	4.059	0.924 49

Table 11 Standard Reference Water Sample T101 Report for AG

Code Number	Reported value	Pct. dev. from mean	Methods	References
1	5.0	-4.9	ATOMIC ABSORPTION, FLAMELESS	3
2	4.9	-6.8	ATOMIC ABSORPTION, FLAMELESS	3
4	4.4	-16.3	ATOMIC ABSORPTION, FLAMELESS	3
5	4.8	-8.7	ATOMIC ABSORPTION, FLAMELESS	3
6	4.7	-10.6	ATOMIC ABSORPTION, FLAMELESS	3
8	7.5	42.6	ATOMIC ABSORPTION, FLAMELESS	3
11	2.7	-48.7	ATOMIC ABSORPTION, FLAMELESS	3
12	4.2	-20.1	MASS SPECTROMETRY, IC PLASMA	5
14	4.0	-23.9	ATOMIC ABSORPTION, FLAMELESS	3
16	5.0	-4.9	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3
17	4.7	-10.6	ATOMIC ABSORPTION, FLAMELESS	3
21	3.0	-42.9	ATOMIC ABSORPTION, FLAMELESS	3
25	4.0	-23.9	ATOMIC ABSORPTION, FLAMELESS	3
29	< 10.0		IGNORED ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3
30	5.0	-4.9	EMISSION, IC PLASMA	3
34	12.0	128.2	REJECT ATOMIC ABSORPTION, FLAMELESS	3
35	< 40.0		IGNORED NOT REPORTED	3
41	4.7	-10.6	ATOMIC ABSORPTION, FLAMELESS	3
44	< 5.0		IGNORED EMISSION, IC PLASMA	3
46	< 3.0		IGNORED EMISSION, IC PLASMA	3
48	< 10.0		IGNORED ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3
49	4.5	-14.4	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3
50	< 10.0		IGNORED EMISSION, IC PLASMA	3
51	6.0	14.1	EMISSION, IC PLASMA	3
53	4.7	-10.6	ATOMIC ABSORPTION, FLAMELESS	3
57	6.0	14.1	EMISSION, IC PLASMA	3
58	5.8	10.3	ATOMIC ABSORPTION, FLAMELESS	3
60	< 20.0		IGNORED ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3
61	2.4	-54.4	NOT REPORTED	3
62	5.0	-4.9	ATOMIC ABSORPTION, FLAMELESS	3
63	8.7	65.5	ATOMIC ABSORPTION, FLAMELESS	3
64	7.5	42.6	ATOMIC ABSORPTION, FLAMELESS	3
67	2.4	-54.4	ATOMIC ABSORPTION, FLAMELESS	3
68	3.5	-33.4	ATOMIC ABSORPTION, FLAMELESS	3
69	< 50.0		IGNORED ATOMIC ABSORPTION, FLAMELESS	3
74	5.0	-4.9	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3
75	4.2	-20.1	ATOMIC ABSORPTION, FLAMELESS	3
77	9.0	71.2	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3
78	6.0	14.1	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3
79	9.7	84.5	ATOMIC ABSORPTION, FLAMELESS	3
83	6.0	14.1	ATOMIC ABSORPTION, FLAMELESS	3
84	5.9	12.2	ATOMIC ABSORPTION, FLAMELESS	3
87	< 1.0		IGNORED EMISSION, IC PLASMA	3
97	4.7	-10.6	ATOMIC ABSORPTION, FLAMELESS	3
101	4.4	-16.3	ATOMIC ABSORPTION, FLAMELESS	3
108	7.4	40.7	ATOMIC ABSORPTION, FLAMELESS	3
110	< 10.0		IGNORED ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3
111	9.0	71.2	ATOMIC ABSORPTION, FLAMELESS	3
113	5.0	-4.9	EMISSION, DC PLASMA	5
116	4.6	-12.5	ATOMIC ABSORPTION, FLAMELESS	3
117	5.0	-4.9	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3
124	6.0	14.1	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3
127	4.1	-22.0	EMISSION, IC PLASMA	3
132	< 10.0		IGNORED EMISSION, IC PLASMA	3
137	5.0	-4.9	ATOMIC ABSORPTION, FLAMELESS	3

55 Labs had a total range of 1.0 to 50.0 and a mean of 5.26 with a standard deviation of 1.69 and a 95% confidence interval of the mean +/- 0.52.

Table 11 Standard Reference Water Sample T101 Report for AL

Code Number	Reported value	Pct. dev. from mean	Methods	References	
1	80	-23.0	EMISSION, IC PLASMA	3, 4	
2	71	-31.6	SPECTROPHOTOMETRIC, ERYOCHROME CYANINE	1	
4	100	-3.7	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1, 2, 3, 4	
5	103	-0.8	ATOMIC ABSORPTION, DIRECT, FLAMELESS	3	
7	2000	1825.5	X-RAY FLUORESCENCE	5	
11	< 1000	REJECT	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1, 2, 3, 4	
12	89	-14.3	MASS SPECTROMETRY, IC PLASMA	5	
14	< 100	IGNORED	EMISSION, IC PLASMA	3, 4	
16	< 100	IGNORED	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1, 2, 3, 4	
17	100	-3.7	EMISSION, IC PLASMA	3, 4	
21	51	-50.9	ATOMIC ABSORPTION, DIRECT, FLAMELESS	3	
22	< 140	IGNORED	EMISSION, IC PLASMA	3, 4	
24	106	2.1	EMISSION, IC PLASMA	3, 4	
25	94	-9.5	ATOMIC ABSORPTION, DIRECT, FLAMELESS	3	
26	134	29.0	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1, 2, 3, 4	
29	< 100	IGNORED	EMISSION, IC PLASMA	3, 4	
30	< 300	IGNORED	EMISSION, IC PLASMA	3, 4	
32	300	188.8	REJECT	EMISSION, IC PLASMA	3, 4
34	165	58.9	ATOMIC ABSORPTION, DIRECT, FLAMELESS	3	
35	< 100	IGNORED	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1, 2, 3, 4	
38	114	9.8	ATOMIC ABSORPTION, DIRECT, FLAMELESS	3	
42	73	-29.7	ATOMIC ABSORPTION, DIRECT, FLAMELESS	3	
44	90	-13.4	EMISSION, IC PLASMA	3, 4	
46	80	-23.0	EMISSION, IC PLASMA	3, 4	
47	104	0.1	EMISSION, IC PLASMA	3, 4	
48	200	92.6	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1, 2, 3, 4	
49	136	30.9	EMISSION, IC PLASMA	3, 4	
50	83	-20.1	EMISSION, IC PLASMA	3, 4	
51	73	-29.7	EMISSION, IC PLASMA	3, 4	
55	59	-43.2	EMISSION, IC PLASMA	3, 4	
58	232	123.4	ATOMIC ABSORPTION, DIRECT, FLAMELESS	3	
60	< 200	IGNORED	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1, 2, 3, 4	
61	197	89.7	ATOMIC ABSORPTION, DIRECT, FLAMELESS	3	
62	76	-26.8	EMISSION, IC PLASMA	3, 4	
69	230	121.4	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1, 2, 3, 4	
70	94	-9.5	EMISSION, IC PLASMA	3, 4	
75	100	-3.7	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1, 2, 3, 4	
78	96	-7.6	ATOMIC ABSORPTION, DIRECT, FLAMELESS	3	
83	100	-3.7	EMISSION, IC PLASMA	3, 4	
87	30	-71.1	EMISSION, IC PLASMA	3, 4	
111	80	-23.0	ATOMIC ABSORPTION, DIRECT, FLAMELESS	3	
113	85	-18.2	EMISSION, DC PLASMA	5	
116	71	-31.6	EMISSION, IC PLASMA	3, 4	
117	103	-0.8	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1, 2, 3, 4	
124	70	-32.6	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1, 2, 3, 4	
127	86	-17.2	EMISSION, DC PLASMA	5	
128	104	0.1	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1, 2, 3, 4	
132	88	-15.3	EMISSION, IC PLASMA	3, 4	

48 Labs had a total range of 30 to 2000 and a mean of 103.9  
with a standard deviation of 45.3 and a 95% confidence interval of the mean +/- 14.9.

Table 11 Standard Reference Water Sample T101 Report for AS

Code Number	Reported value	Pct. dev. from mean	Methods	References
1	8.0	13.0	ATOMIC ABSORPTION, HYDRIDE, (NABH4)	1, 4
2	8.2	15.8	ATOMIC ABSORPTION, HYDRIDE, (NABH4)	1, 4
4	6.7	-5.4	ATOMIC ABSORPTION, FLAMELESS	3
5	7.7	8.7	ATOMIC ABSORPTION, FLAMELESS	3
6	9.0	27.1	ATOMIC ABSORPTION, FLAMELESS	3
7	7.8	10.2	X-RAY FLUORESCENCE	5
8	7.3	3.1	ATOMIC ABSORPTION, HYDRIDE (NABH4)	1, 4
10	< 12.1	70.9	ATOMIC ABSORPTION, FLAMELESS	3
11	< 10.0		SPECTROPHOTOMETRIC, SILVER DIETHYL DITHIOCARBAMATE	2, 3, 4
12	9.0	27.1	MASS SPECTROMETRY, IC PLASMA	5
14	6.0	-15.3	ATOMIC ABSORPTION, FLAMELESS	3
16	6.0	-15.3	ATOMIC ABSORPTION, HYDRIDE (NABH4)	1, 4
17	7.0	-1.1	ATOMIC ABSORPTION, FLAMELESS	3
24	90.0	1171.0	REJECT EMISSION, IC PLASMA	3
25	6.0	-15.3	ATOMIC ABSORPTION, HYDRIDE, (NABH4)	1, 4
26	5.4	-23.7	ATOMIC ABSORPTION, HYDRIDE, (ZINC)	1, 2, 3, 4
29	< 5.0		ATOMIC ABSORPTION, FLAMELESS	3
30	< 60.0		EMISSION, IC PLASMA	3
34	24.0	238.9	REJECT ATOMIC ABSORPTION, FLAMELESS	3
35	8.8	24.3	ATOMIC ABSORPTION, FLAMELESS	3
36	7.4	4.5	ATOMIC ABSORPTION, FLAMELESS	3
40	8.0	13.0	ATOMIC ABSORPTION, HYDRIDE, (NABH4)	1, 4
42	6.0	-15.3	ATOMIC ABSORPTION, HYDRIDE, (NABH4)	1, 4
44	6.5	-8.2	ATOMIC ABSORPTION, FLAMELESS	3
46	6.8	-4.0	ATOMIC ABSORPTION, HYDRIDE, (NABH4)	1, 4
47	1.0	-85.9	REJECT ATOMIC ABSORPTION, HYDRIDE, (NABH4)	1, 4
48	6.0	-15.3	ATOMIC ABSORPTION, HYDRIDE, (NABH4)	1, 4
49	7.7	8.7	ATOMIC ABSORPTION, FLAMELESS	3
50	< 5.0		EMISSION, IC PLASMA	3
51	< 20.0		IGNORED EMISSION, IC PLASMA	3
52	7.0	-1.1	ATOMIC ABSORPTION, HYDRIDE (NABH4)	1, 4
53	5.6	-20.9	ATOMIC ABSORPTION, FLAMELESS	3
55	5.8	-18.1	ATOMIC ABSORPTION, FLAMELESS	3
58	5.6	-20.9	ATOMIC ABSORPTION, FLAMELESS	3
60	5.0	-29.4	ATOMIC ABSORPTION, FLAMELESS	3
61	4.6	-35.0	ATOMIC ABSORPTION, FLAMELESS	3
62	10.0	41.2	ATOMIC ABSORPTION, FLAMELESS	3
63	7.6	7.3	ATOMIC ABSORPTION, FLAMELESS	3
64	8.8	24.3	ATOMIC ABSORPTION, HYDRIDE (NABH4)	1, 4
67	5.3	-25.1	ATOMIC ABSORPTION, FLAMELESS	3
68	7.0	-1.1	ATOMIC ABSORPTION, FLAMELESS	3
69	3.4	-52.0	ATOMIC ABSORPTION, FLAMELESS	3
70	6.3	-11.0	ATOMIC ABSORPTION, HYDRIDE, (NABH4)	1, 4
74	6.2	-12.4	ATOMIC ABSORPTION, HYDRIDE, (NABH4)	1, 4
75	6.9	-2.6	ATOMIC ABSORPTION, FLAMELESS	3
76	7.9	11.6	ATOMIC ABSORPTION, HYDRIDE, (NABH4)	1, 4
77	7.0	-1.1	ATOMIC ABSORPTION, FLAMELESS	3
78	8.0	13.0	ATOMIC ABSORPTION, FLAMELESS	3
79	10.0	41.2	ATOMIC ABSORPTION, FLAMELESS	3
81	< 1.0		REJECT ATOMIC ABSORPTION, FLAMELESS	3
83	7.0	-1.1	ATOMIC ABSORPTION, FLAMELESS	3
87	7.8	10.2	ATOMIC ABSORPTION, HYDRIDE, (NABH4)	1, 4
91	6.0	-15.3	ATOMIC ABSORPTION, HYDRIDE, (NABH4)	1, 4
101	9.0	27.1	ATOMIC ABSORPTION, FLAMELESS	3
108	5.2	-26.6	ATOMIC ABSORPTION, HYDRIDE, (ZINC)	1, 2, 3, 4
110	22.4	216.3	REJECT ATOMIC ABSORPTION, HYDRIDE, (NABH4)	1, 4
111	4.2	-40.7	ATOMIC ABSORPTION, HYDRIDE, (ZINC)	1, 2, 3, 4
113	< 16.0		IGNORED EMISSION, DC PLASMA	5
116	< 10.0		IGNORED ATOMIC ABSORPTION, FLAMELESS	3
117	8.0	13.0	ATOMIC ABSORPTION, FLAMELESS	3
124	< 10.0		IGNORED ATOMIC ABSORPTION, FLAMELESS	3
127	8.3	17.2	ATOMIC ABSORPTION, HYDRIDE, (NABH4)	1, 4
128	9.6	35.6	ATOMIC ABSORPTION, HYDRIDE, (NABH4)	1, 4
132	6.7	-5.4	ATOMIC ABSORPTION, HYDRIDE, (NABH4)	1, 4
137	5.0	-29.4	ATOMIC ABSORPTION, FLAMELESS	3

65 Labs had a total range of 1.0 to 90.0 and a mean of 7.08  
with a standard deviation of 1.63 and a 95% confidence interval of the mean +/- 0.45.

Table 11 Standard Reference Water Sample T101 Report for B

Code Number	Reported value	Pct. dev. from mean	Methods	References
1	350	-4.3	EMISSION, IC PLASMA	3
12	405	10.8	MASS SPECTROMETRY, IC PLASMA	5
17	310	-15.2	EMISSION, IC PLASMA	3
19	1400	283.0	REJECT NOT REPORTED	
22	380	4.0	EMISSION, IC PLASMA	3
24	350	-4.3	EMISSION, IC PLASMA	3
25	400	9.4	EMISSION, IC PLASMA	3
26	460	25.8	COLORIMETRIC, CURCUMIN	1, 2, 3, 4
29	370	1.2	EMISSION, IC PLASMA	3
30	350	-4.3	EMISSION, IC PLASMA	3
32	350	-4.3	EMISSION, IC PLASMA	3
40	500	36.8	COLORIMETRIC, AZOMETHINE	4
44	360	-1.5	EMISSION, IC PLASMA	3
46	360	-1.5	EMISSION, IC PLASMA	3
47	355	-2.9	EMISSION, IC PLASMA	3
48	340	-7.0	COLORIMETRIC, CURCUMIN	1, 2, 3, 4
50	325	-11.1	EMISSION, IC PLASMA	3
51	400	9.4	EMISSION, IC PLASMA	3
52	320	-12.5	COLORIMETRIC, DIANTHRIMIDE	4
57	325	-11.1	EMISSION, IC PLASMA	3
58	355	-2.9	EMISSION, IC PLASMA	3
60	< 200	IGNORED	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	5
62	340	-7.0	EMISSION, IC PLASMA	3
68	380	4.0	COLORIMETRIC, AZOMETHINE	4
70	340	-7.0	EMISSION, IC PLASMA	3
87	270	-26.1	EMISSION, IC PLASMA	3
88	740	102.4	REJECT COLORIMETRIC, CURCUMIN	1, 2, 3, 4
94	320	-12.5	COLORIMETRIC, AZOMETHINE	4
107	170	-53.5	REJECT COLORIMETRIC, CARMINE (CARMINIC ACID)	2, 4
110	140	-61.7	REJECT COLORIMETRIC, CURCUMIN	1, 2, 3, 4
117	500	36.8	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	5
127	360	-1.5	EMISSION, DC PLASMA	5
132	360	-1.5	EMISSION, IC PLASMA	3

33. Labs had a total range of 140 to 1400 and a mean of 365.5 with a standard deviation of 51.8 and a 95% confidence interval of the mean +/- 20.1.

Table 11 Standard Reference Water Sample T101 Report for BA

Code Number	Reported value	Pct. dev. from mean	Methods	References	
1	60	-13.0	EMISSION, IC PLASMA	3, 4	
2	19	-72.5	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1, 2, 3, 4	
4	54	-21.7	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1, 2, 3, 4	
5	63	-8.7	EMISSION, IC PLASMA	3, 4	
8	75	8.7	ATOMIC ABSORPTION, FLAMELESS	3	
11	< 500	IGNORED	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1, 2, 3, 4	
12	62	-10.1	MASS SPECTROMETRY, IC PLASMA	1, 2, 3, 4	
16	80	15.9	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1, 2, 3, 4	
17	60	-13.0	EMISSION, IC PLASMA	3, 4	
19	54	-21.7	NOT REPORTED		
21	100	44.9	ATOMIC ABSORPTION, FLAMELESS	3	
22	60	-13.0	EMISSION, IC PLASMA	3, 4	
24	60	-13.0	EMISSION, IC PLASMA	3, 4	
25	67	-2.9	EMISSION, IC PLASMA	3, 4	
26	110	59.4	ATOMIC ABSORPTION, FLAMELESS	3	
29	58	-15.9	EMISSION, IC PLASMA	3, 4	
30	60	-13.0	ATOMIC ABSORPTION, FLAMELESS	3	
32	60	-13.0	EMISSION, IC PLASMA	3, 4	
35	< 150	IGNORED	GRAVIMETRIC, SULFATE	4	
40	49	-29.0	ATOMIC ABSORPTION, FLAMELESS	3	
44	60	-13.0	EMISSION, IC PLASMA	3, 4	
46	57	-17.4	EMISSION, IC PLASMA	3, 4	
47	60	-13.0	EMISSION, IC PLASMA	3, 4	
48	100	44.9	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1, 2, 3, 4	
49	56	-18.8	EMISSION, IC PLASMA	3, 4	
50	56	-18.8	EMISSION, IC PLASMA	3, 4	
51	63	-8.7	EMISSION, IC PLASMA	3, 4	
52	62	-10.1	EMISSION, IC PLASMA	3, 4	
53	66	-4.3	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1, 2, 3, 4	
55	61	-11.6	EMISSION, IC PLASMA	3, 4	
57	60	-13.0	OTHER		
58	53	-23.2	EMISSION, IC PLASMA	3, 4	
60	< 200	IGNORED	ATOMIC ABSORPTION, FLAMELESS	3	
61	136	97.1	ATOMIC ABSORPTION, FLAMELESS	3	
62	60	-13.0	EMISSION, IC PLASMA	3, 4	
63	100	44.9	ATOMIC ABSORPTION, FLAMELESS	3	
64	104	50.7	ATOMIC ABSORPTION, FLAMELESS	3	
67	96	39.1	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1, 2, 3, 4	
68	< 40	IGNORED	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1, 2, 3, 4	
69	64	-7.2	ATOMIC ABSORPTION, FLAMELESS	3	
74	55	-20.3	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1, 2, 3, 4	
75	101	46.4	ATOMIC ABSORPTION, FLAMELESS	3	
77	< 80	IGNORED	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1, 2, 3, 4	
78	80	15.9	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1, 2, 3, 4	
83	60	-13.0	EMISSION, IC PLASMA	3, 4	
87	110	59.4	EMISSION, IC PLASMA	3, 4	
88	1670	2320.3	REJECT	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1, 2, 3, 4
91	100	44.9	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1, 2, 3, 4	
101	77	11.6	ATOMIC ABSORPTION, FLAMELESS	3	
103	63	-8.7	EMISSION, IC PLASMA	3, 4	
108	160	131.9	REJECT	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1, 2, 3, 4
111	50	-27.5	ATOMIC ABSORPTION, FLAMELESS	3	
113	65	-5.8	EMISSION, DC PLASMA	2, 5	
116	56	-18.8	EMISSION, IC PLASMA	3, 4	
117	88	27.5	ATOMIC ABSORPTION, FLAMELESS	3	
124	79	14.5	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1, 2, 3, 4	
127	59	-14.5	EMISSION, IC PLASMA	3, 4	
128	20	-71.0	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1, 2, 3, 4	
132	60	-13.0	EMISSION, IC PLASMA	3, 4	

59 Labs had a total range of 19 to 1670 and a mean of 69.0  
 with a standard deviation of 21.8 and a 95% confidence interval of the mean +/- 6.1.

Table 11 Standard Reference Water Sample T101 Report for BE

Code Number	Reported value	Pct. dev. from mean	Methods	References	
1	16	10.9	EMISSION, IC PLASMA	3, 4	
4	15	4.0	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1, 2, 3, 4	
5	12	-16.8	EMISSION, IC PLASMA	3, 4	
12	17	17.9	MASS SPECTROMETRY, IC PLASMA	5	
14	< 20	IGNORED	EMISSION, IC PLASMA	3, 4	
16	15	4.0	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1, 2, 3, 4	
17	14	-2.9	EMISSION, IC PLASMA	3, 4	
24	13	-9.9	EMISSION, IC PLASMA	3, 4	
29	16	10.9	EMISSION, IC PLASMA	3, 4	
30	11	-23.7	EMISSION, IC PLASMA	3, 4	
35	< 30	IGNORED	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1, 2, 3, 4	
44	10	-30.7	EMISSION, IC PLASMA	3, 4	
46	15	4.0	EMISSION, IC PLASMA	3, 4	
49	12	-16.8	EMISSION, IC PLASMA	3, 4	
50	155	974.7	REJECT	EMISSION, IC PLASMA	3, 4
51	16	10.9	EMISSION, IC PLASMA	3, 4	
57	16	10.9	EMISSION, IC PLASMA	3, 4	
58	14	-2.9	EMISSION, IC PLASMA	3, 4	
60	< 20	IGNORED	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1, 2, 3, 4	
61	35	142.7	REJECT	ATOMIC ABSORPTION, FLAMELESS	3
62	15	4.0	EMISSION, IC PLASMA	3, 4	
75	10	-30.7	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1, 2, 3, 4	
83	15	4.0	ATOMIC ABSORPTION, FLAMELESS	3	
85	18	24.8	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1, 2, 3, 4	
87	13	-9.9	EMISSION, IC PLASMA	3, 4	
111	15	4.0	ATOMIC ABSORPTION, FLAMELESS	3	
117	16	10.9	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1, 2, 3, 4	
127	13	-9.9	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1, 2, 3, 4	
128	13	-9.9	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1, 2, 3, 4	
132	17	17.9	EMISSION, IC PLASMA	3, 4	
137	18	24.8	ATOMIC ABSORPTION, FLAMELESS	3	

31 Labs had a total range of 10 to 155 and a mean of 14.4  
with a standard deviation of 2.2 and a 95% confidence interval of the mean +/- 0.9.

Table 11 Standard Reference Water Sample T101 Report for BR

Code Number	Reported value	Pct. dev. from mean	Methods	References
1	260	78.1	COLORIMETRIC, CHLORAMINE-T	1
7	275	88.4	X-RAY FLUORESCENCE	5
22	110	-24.7	OTHER	
26	50	-65.8	OTHER	
76	< 10	IGNORED	ION CHROMATOGRAPHY	2, 3, 4
111	< 100	IGNORED	COLORIMETRIC, CHLORAMINE-T	1
127	35	-76.0	COLORIMETRIC, CHLORAMINE-T	1

7 Labs had a total range of 10 to 275.  
INSUFFICIENT DATA TO DEFINE MEAN AND STANDARD DEVIATION.

Table 11 Standard Reference Water Sample T101 Report for CA

Code Number	Reported value	Pct. dev. from mean	Methods	References
1	75	3.7	EMISSION, IC PLASMA	3,4,5
2	49	-32.3	REJECT ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
7	100	38.2	REJECT X-RAY FLUORESCENCE	5
8	76	5.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
11	72	-0.5	TITRATION, EDTA	1,3
14	77	6.4	EMISSION, IC PLASMA	3,4,5
16	72	-0.5	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
17	71	-1.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
22	73	0.9	EMISSION, IC PLASMA	3,4,5
24	79	9.2	EMISSION, IC PLASMA	3,4,5
25	71	-1.9	EMISSION, IC PLASMA	3,4,5
26	66	-8.8	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
29	70	-3.3	EMISSION, IC PLASMA	3,4,5
30	79	9.2	EMISSION, IC PLASMA	3,4,5
32	71	-1.9	EMISSION, IC PLASMA	3,4,5
34	68	-6.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
35	64	-11.5	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
36	70	-3.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
38	73	0.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
39	70	-3.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
40	72	-0.5	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
44	74	2.3	EMISSION, IC PLASMA	3,4,5
46	69	-4.6	EMISSION, IC PLASMA	3,4,5
47	73	0.9	EMISSION, IC PLASMA	3,4,5
48	64	-11.5	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1,5
49	71	-1.9	EMISSION, IC PLASMA	3,4,5
50	71	-1.9	EMISSION, IC PLASMA	3,4,5
51	72	-0.5	EMISSION, IC PLASMA	3,4,5
52	72	-0.5	EMISSION, IC PLASMA	3,4,5
55	73	0.9	EMISSION, IC PLASMA	3,4,5
57	72	-0.5	EMISSION, IC PLASMA	3,4,5
58	73	0.9	EMISSION, IC PLASMA	3,4,5
60	74	2.3	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1,5
61	70	-3.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
62	69	-4.6	EMISSION, IC PLASMA	3,4,5
63	73	0.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
64	70	-3.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
66	68	-6.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
67	72	-0.5	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
68	16	-77.9	REJECT ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
69	74	2.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
70	76	5.0	EMISSION, IC PLASMA	3,4,5
74	75	3.7	TITRATION, EDTA	1,3
75	70	-3.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
76	74	2.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
77	68	-6.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
78	70	-3.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
81	82	13.3	EMISSION, IC PLASMA	3,4,5
83	76	5.0	EMISSION, IC PLASMA	3,4,5
84	101	39.6	REJECT ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
85	78	7.8	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
86	8	-88.9	REJECT ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
87	82	13.3	EMISSION, IC PLASMA	3,4,5
88	65	-10.2	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1,5
91	71	-1.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
93	71	-1.9	TITRATION, EDTA	1,3
94	89	23.0	REJECT ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
101	74	2.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
107	73	0.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
110	77	6.4	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
111	70	-3.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
112	51	-29.5	REJECT ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1,5
113	72	-0.5	EMISSION, DC PLASMA	5
116	72	-0.5	EMISSION, IC PLASMA	3,4,5
117	75	3.7	OTHER	
118	59	-18.5	REJECT ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
124	72	-0.5	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
127	74	2.3	EMISSION, IC PLASMA	3,4,2
128	89	23.0	REJECT ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
132	71	-1.9	EMISSION, IC PLASMA	3,4,5
133	75	3.7	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4

71. Labs had a total range of 8 to 101 and a mean of 72.4 with a standard deviation of 3.6 and a 95% confidence interval of the mean +/- 0.9.

Table 11 Standard Reference Water Sample T101 Report for CD

Code Number	Reported value	Pct. dev. from mean	Methods	References
1	8.0	-17.7	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
2	8.2	-15.7	ATOMIC ABSORPTION, FLAMELESS	3
4	9.9	1.8	ATOMIC ABSORPTION, FLAMELESS	3
5	9.7	-0.2	ATOMIC ABSORPTION, FLAMELESS	3
6	34.0	249.7	REJECT	3
8	12.8	31.6	ATOMIC ABSORPTION, FLAMELESS	3
10	12.0	23.4	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
11	7.7	-20.8	ATOMIC ABSORPTION, FLAMELESS	3
12	9.6	-1.3	MASS SPECTROMETRY, IC PLASMA	5
14	8.0	-17.7	ATOMIC ABSORPTION, FLAMELESS	3
16	8.0	-17.7	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
17	10.7	10.0	ATOMIC ABSORPTION, EXTRACTION, (APDC/MIBK)	1, 4
21	9.0	-7.4	ATOMIC ABSORPTION, FLAMELESS	3
22	11.0	13.1	ATOMIC ABSORPTION, FLAMELESS	3
24	11.0	13.1	EMISSION, IC PLASMA	3, 4
25	11.0	13.1	ATOMIC ABSORPTION, FLAMELESS	3
26	9.9	1.8	ATOMIC ABSORPTION, FLAMELESS	3
29	7.5	-22.9	ATOMIC ABSORPTION, FLAMELESS	3
30	12.0	23.4	EMISSION, IC PLASMA	3, 4
32	< 10.0	IGNORED	EMISSION, IC PLASMA	3, 4
34	7.0	-28.0	ATOMIC ABSORPTION, FLAMELESS	3
35	13.0	33.7	ATOMIC ABSORPTION, FLAMELESS	3
36	9.6	-1.3	ATOMIC ABSORPTION, FLAMELESS	3
40	7.0	-28.0	ATOMIC ABSORPTION, FLAMELESS	3
41	< 15.0	IGNORED	OTHER	
42	9.0	-7.4	ATOMIC ABSORPTION, FLAMELESS	3
44	< 10.0	IGNORED	EMISSION, IC PLASMA	3, 4
46	10.7	10.0	EMISSION, IC PLASMA	3, 4
47	14.0	44.0	EMISSION, IC PLASMA	3, 4
48	18.0	85.1	REJECT	1, 2, 3, 4
49	11.0	13.1	ATOMIC ABSORPTION, FLAMELESS	3
50	6.5	-33.1	EMISSION, IC PLASMA	3, 4
51	9.2	-5.4	EMISSION, IC PLASMA	3, 4
53	9.8	0.8	ATOMIC ABSORPTION, FLAMELESS	3
55	9.7	-0.2	ATOMIC ABSORPTION, FLAMELESS	3
57	9.0	-7.4	EMISSION, IC PLASMA	3, 4
58	10.4	7.0	ATOMIC ABSORPTION, FLAMELESS	3
60	< 10.0	IGNORED	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
61	10.6	9.0	ATOMIC ABSORPTION, FLAMELESS	3
62	9.1	-6.4	ATOMIC ABSORPTION, FLAMELESS	3
63	10.0	2.8	ATOMIC ABSORPTION, FLAMELESS	3
64	10.0	2.8	ATOMIC ABSORPTION, FLAMELESS	3
66	10.0	2.8	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
67	8.6	-11.6	ATOMIC ABSORPTION, FLAMELESS	3
68	11.4	17.2	ATOMIC ABSORPTION, FLAMELESS	3
69	8.2	-15.7	ATOMIC ABSORPTION, FLAMELESS	3
70	11.0	13.1	EMISSION, IC PLASMA	3, 4
74	10.4	7.0	ATOMIC ABSORPTION, EXTRACTION, (APDC/MIBK)	1, 4
75	10.0	2.8	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
76	9.8	0.8	ATOMIC ABSORPTION, FLAMELESS	3
77	9.0	-7.4	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
78	11.0	13.1	ATOMIC ABSORPTION, FLAMELESS	3
79	10.0	2.8	ATOMIC ABSORPTION, FLAMELESS	3
81	11.0	13.1	EMISSION, IC PLASMA	3, 4
83	11.0	13.1	ATOMIC ABSORPTION, FLAMELESS	3
84	11.9	22.4	ATOMIC ABSORPTION, FLAMELESS	3
85	19.0	95.4	REJECT	ANODIC STRIPPING VOLAMMETRY, DIFFERENTIAL PULSE
86	10.0	2.8	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
87	17.0	74.8	REJECT	EMISSION, IC PLASMA
88	13.0	33.7	ATOMIC ABSORPTION, EXTRACTION, (PDCA/CHCL3)	2, 3
91	10.0	2.8	ATOMIC ABSORPTION, EXTRACTION, (APDC/MIBK)	1, 4
97	9.8	0.8	ATOMIC ABSORPTION, EXTRACTION, (APDC/MIBK)	1, 4
101	4.4	-54.7	ATOMIC ABSORPTION, FLAMELESS	3
106	7.0	-28.0	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
108	4.4	-54.7	ATOMIC ABSORPTION, FLAMELESS	3
110	12.0	23.4	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
111	8.5	-12.6	ATOMIC ABSORPTION, FLAMELESS	3
113	9.0	-7.4	EMISSION, DC PLASMA	5
117	13.0	33.7	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
118	12.0	23.4	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
122	10.0	2.8	ATOMIC ABSORPTION, FLAMELESS	3
124	11.0	13.1	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
127	8.3	-14.6	EMISSION, IC PLASMA	3, 4
128	6.0	-38.3	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
132	9.0	-7.4	EMISSION, IC PLASMA	3, 4
133	9.8	0.8	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
137	8.8	-9.5	ATOMIC ABSORPTION, FLAMELESS	3

77 Labs had a total range of 4.4 to 34.0 and a mean of 9.72 with a standard deviation of 1.89 and a 95% confidence interval of the mean +/- 0.45.

Table 11 Standard Reference Water Sample T101 Report for CO

Code Number	Reported value	Pct. dev. from mean		Methods	References
1	9.0	-25.7		EMISSION, IC PLASMA	3,4
4	50.0	312.9	REJECT	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
5	13.0	7.3		EMISSION, IC PLASMA	3,4
7	12.0	-0.9		X-RAY FLUORESCENCE	5
12	11.1	-8.3		MASS SPECTROMETRY, IC PLASMA	5
16	20.0	65.1		ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
17	10.0	-17.4		ATOMIC ABSORPTION, FLAMELESS	3
24	10.0	-17.4		EMISSION, IC PLASMA	3,4
26	11.0	-9.2		ATOMIC ABSORPTION, FLAMELESS	3
29	< 50.0		IGNORED	EMISSION, IC PLASMA	3,4
30	<100.0		IGNORED	EMISSION, IC PLASMA	3,4
34	17.0	40.4		ATOMIC ABSORPTION, FLAMELESS	3
44	< 20.0		IGNORED	EMISSION, IC PLASMA	3,4
47	10.0	-17.4		EMISSION, IC PLASMA	3,4
48	30.0	147.7	REJECT	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
49	18.0	48.6		EMISSION, IC PLASMA	3,4
50	8.0	-33.9		EMISSION, IC PLASMA	3,4
51	9.4	-22.4		EMISSION, IC PLASMA	3,4
57	11.0	-9.2		EMISSION, IC PLASMA	3,4
60	< 50.0		IGNORED	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
61	10.4	-14.1		ATOMIC ABSORPTION, FLAMELESS	3
62	11.0	-9.2		EMISSION, IC PLASMA	3,4
63	11.0	-9.2		ATOMIC ABSORPTION, FLAMELESS	3
64	13.0	7.3		ATOMIC ABSORPTION, FLAMELESS	3
68	9.0	-25.7		ATOMIC ABSORPTION, FLAMELESS	3
83	10.0	-17.4		EMISSION, IC PLASMA	3,4
85	< 50.0		IGNORED	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
86	30.0	147.7	REJECT	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
87	21.0	73.4		EMISSION, IC PLASMA	3,4
91	10.0	-17.4		ATOMIC ABSORPTION, EXTRACTION (APDC/MIBK)	1,4
101	51.0	321.1	REJECT	ATOMIC ABSORPTION, FLAMELESS	3
111	13.0	7.3		ATOMIC ABSORPTION, FLAMELESS	3
113	7.0	-42.2		EMISSION, DC PLASMA	5
117	18.0	48.6		ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
124	16.0	32.1		ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
127	9.2	-24.0		EMISSION, IC PLASMA	3,4
132	11.0	-9.2		EMISSION, IC PLASMA	3,4

37 Labs had a total range of 7.0 to 100.0 and a mean of 12.11 with a standard deviation of 3.66 and a 95% confidence interval of the mean +/- 1.42.

Table 11 Standard Reference Water Sample T101 Report for CR TOT

Code Number	Reported value	Pct. dev. from mean	Methods	References
1	16	-13.6	EMISSION, IC PLASMA	3, 5
2	22	18.8	ATOMIC ABSORPTION, FLAMELESS	3
4	10	-46.0	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
5	24	29.6	ATOMIC ABSORPTION, FLAMELESS	3
6	5	-73.0	ATOMIC ABSORPTION, FLAMELESS	3
7	40	116.6	X-RAY FLUORESCENCE	5
8	27	45.8	REJECT ATOMIC ABSORPTION, FLAMELESS	3
10	< 30		IGNORED ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
11	20	8.0	ATOMIC ABSORPTION, FLAMELESS	3
12	17	-8.2	MASS SPECTROMETRY, IC PLASMA	5
14	< 20		IGNORED EMISSION, IC PLASMA	3, 5
16	35	89.0	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1
17	23	24.2	ATOMIC ABSORPTION, FLAMELESS	3
21	20	8.0	ATOMIC ABSORPTION, FLAMELESS	3
22	14	-24.4	REJECT EMISSION, IC PLASMA	3, 5
24	50	170.1	EMISSION, IC PLASMA	3, 5
25	18	-2.8	ATOMIC ABSORPTION, FLAMELESS	3
26	20	8.0	ATOMIC ABSORPTION, FLAMELESS	3
29	18	-2.8	ATOMIC ABSORPTION, FLAMELESS	3
30	17	-8.2	EMISSION, IC PLASMA	3, 5
34	14	-24.4	ATOMIC ABSORPTION, FLAMELESS	3
35	18	-2.8	OTHER	3
36	18	-2.8	ATOMIC ABSORPTION, FLAMELESS	3
40	16	-13.6	ATOMIC ABSORPTION, FLAMELESS	3
41	10	-46.0	OTHER	3
42	18	-2.8	ATOMIC ABSORPTION, FLAMELESS	3
44	20	8.0	EMISSION, IC PLASMA	3, 5
46	19	2.6	EMISSION, IC PLASMA	3, 5
47	16	-13.6	EMISSION, IC PLASMA	3, 5
48	10	-46.0	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
49	18	-2.8	ATOMIC ABSORPTION, FLAMELESS	3
50	15	-19.0	EMISSION, IC PLASMA	3, 5
51	20	8.0	EMISSION, IC PLASMA	3, 5
52	19	2.6	EMISSION, IC PLASMA	3, 5
53	19	2.6	ATOMIC ABSORPTION, FLAMELESS	3
55	22	18.8	EMISSION, IC PLASMA	3, 5
57	20	8.0	EMISSION, IC PLASMA	3, 5
58	17	-8.2	ATOMIC ABSORPTION, FLAMELESS	3
61	29	56.6	ATOMIC ABSORPTION, FLAMELESS	3
62	18	-2.8	EMISSION, IC PLASMA	3, 5
64	17	-8.2	ATOMIC ABSORPTION, FLAMELESS	3
66	< 40		IGNORED ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
67	17	-8.2	ATOMIC ABSORPTION, FLAMELESS	3
68	16	-13.6	ATOMIC ABSORPTION, FLAMELESS	3
69	17	-8.2	ATOMIC ABSORPTION, FLAMELESS	3
70	36	94.4	EMISSION, IC PLASMA	3, 5
73	16	-13.6	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
74	19	2.6	ATOMIC ABSORPTION, FLAMELESS	3
75	18	-2.8	ATOMIC ABSORPTION, FLAMELESS	3
76	15	-19.0	ATOMIC ABSORPTION, FLAMELESS	3
77	18	-2.8	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
78	17	-8.2	ATOMIC ABSORPTION, FLAMELESS	3
79	25	35.0	ATOMIC ABSORPTION, FLAMELESS	3
83	20	8.0	EMISSION, IC PLASMA	3, 5
84	21	13.4	ATOMIC ABSORPTION, FLAMELESS	3
85	8	-56.8	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
86	31	67.4	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
87	33	78.2	EMISSION, IC PLASMA	3, 5
88	< 50		IGNORED OTHER	3, 5
91	18	-2.8	ATOMIC ABSORPTION, EXTRACTION (APDC/MIBK)	1, 3, 4
97	16	-13.6	ATOMIC ABSORPTION, FLAMELESS	3
101	17	-8.2	ATOMIC ABSORPTION, FLAMELESS	3
106	25	35.0	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
108	10	-46.0	ATOMIC ABSORPTION, FLAMELESS	3
110	< 30		IGNORED ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
111	13	-29.8	ATOMIC ABSORPTION, FLAMELESS	3
113	16	-13.6	EMISSION, DC PLASMA	5
116	16	-13.6	ATOMIC ABSORPTION, FLAMELESS	3
117	17	-8.2	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
118	12	-35.2	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
120	2700	1E+04	REJECT ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
122	23	24.2	ATOMIC ABSORPTION, FLAMELESS	3
124	17	-8.2	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
127	16	-13.6	EMISSION, IC PLASMA	3, 5
128	23	24.2	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1
132	16	-13.6	EMISSION, IC PLASMA	3, 5
133	11	-40.6	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
137	24	29.6	ATOMIC ABSORPTION, FLAMELESS	3

78 Labs had a total range of 5 to 2700 and a mean of 18.5 with a standard deviation of 5.7 and a 95% confidence interval of the mean +/- 1.4.

Table 11 Standard Reference Water Sample T101 Report for CU

Code Number	Reported value	Pct. dev. from mean	Methods	References
1	32	-35.5	EMISSION, IC PLASMA	3, 4
2	53	6.9	ATOMIC ABSORPTION, FLAMELESS	3
4	50	0.8	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
5	57	14.9	ATOMIC ABSORPTION, FLAMELESS	3
6	16	-67.7	REJECT ATOMIC ABSORPTION, FLAMELESS	3
7	66	33.1	X-RAY FLUORESCENCE	5
8	42	-15.3	ATOMIC ABSORPTION, FLAMELESS	3
10	54	8.9	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
11	42	-15.3	ATOMIC ABSORPTION, FLAMELESS	3
12	50	0.8	MASS SPECTROMETRY, IC PLASMA	5
14	48	-3.2	ATOMIC ABSORPTION, FLAMELESS	3
16	52	4.8	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
17	52	4.8	ATOMIC ABSORPTION, FLAMELESS	3
21	42	-15.3	ATOMIC ABSORPTION, FLAMELESS	3
22	46	-7.3	EMISSION, IC PLASMA	3, 4
24	12	-75.8	REJECT EMISSION, IC PLASMA	3, 4
25	70	41.1	EMISSION, IC PLASMA	3, 4
26	42	-15.3	ATOMIC ABSORPTION, FLAMELESS	3
29	48	-3.2	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
30	46	-7.3	EMISSION, IC PLASMA	3, 4
34	43	-13.3	ATOMIC ABSORPTION, FLAMELESS	3
35	56	12.9	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
36	54	8.9	ATOMIC ABSORPTION, FLAMELESS	3
39	55	10.9	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
40	50	0.8	ATOMIC ABSORPTION, FLAMELESS	3
41	55	10.9	OTHER	
42	46	-7.3	ATOMIC ABSORPTION, FLAMELESS	3
44	50	0.8	EMISSION, IC PLASMA	3, 4
46	48	-3.2	EMISSION, IC PLASMA	3, 4
47	49	-1.2	EMISSION, IC PLASMA	3, 4
48	120	141.9	REJECT ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
49	52	4.8	EMISSION, IC PLASMA	3, 4
50	40	-19.4	EMISSION, IC PLASMA	3, 4
51	49	-1.2	EMISSION, IC PLASMA	3, 4
52	48	-3.2	EMISSION, IC PLASMA	3, 4
53	51	2.8	ATOMIC ABSORPTION, FLAMELESS	3
55	48	-3.2	ATOMIC ABSORPTION, FLAMELESS	3
57	46	-7.3	EMISSION, IC PLASMA	3, 4
58	45	-9.3	EMISSION, IC PLASMA	3, 4
60	40	-19.4	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
61	79	59.3	REJECT ATOMIC ABSORPTION, FLAMELESS	3
62	42	-15.3	EMISSION, IC PLASMA	3, 4
64	60	21.0	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
66	70	41.1	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
67	54	8.9	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
68	50	0.8	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
69	80	61.3	REJECT ATOMIC ABSORPTION, FLAMELESS	3
70	50	0.8	EMISSION, IC PLASMA	3, 4
73	49	-1.2	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
74	46	-7.3	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
75	40	-19.4	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
77	54	8.9	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
81	44	-11.3	EMISSION, IC PLASMA	3, 4
83	60	21.0	EMISSION, IC PLASMA	3, 4
84	58	16.9	ATOMIC ABSORPTION, FLAMELESS	3
85	50	0.8	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
86	54	8.9	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
87	75	51.2	REJECT EMISSION, IC PLASMA	3, 4
88	40	-19.4	ATOMIC ABSORPTION, EXTRACTION (PDCA/CHCL3)	2, 3
91	47	-5.2	ATOMIC ABSORPTION, EXTRACTION (APDC/MIBK)	1, 4
97	59	19.0	ATOMIC ABSORPTION, EXTRACTION (PDCA/CHCL3)	2, 3
106	42	-15.3	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
110	47	-5.2	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
111	50	0.8	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
113	54	8.9	OTHER	
116	49	-1.2	EMISSION, IC PLASMA	3, 4
117	45	-9.3	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
118	52	4.8	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
120	43	-13.3	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
122	56	12.9	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
124	47	-5.2	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
127	49	-1.2	EMISSION, IC PLASMA	3, 4
128	51	2.8	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
132	45	-9.3	EMISSION, IC PLASMA	3, 4
133	50	0.8	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
137	48	-3.2	ATOMIC ABSORPTION, FLAMELESS	3

76. Labs had a total range of 12 to 120 and a mean of 49.6 with a standard deviation of 6.7 and a 95% confidence interval of the mean +/- 1.6.

Table 11 Standard Reference Water Sample T101 Report for PE

Code Number	Reported value	Pct. dev. from mean	Methods	References
1	175	-9.2	EMISSION, IC PLASMA	3, 4
2	180	-6.6	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
4	210	9.0	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
5	165	-14.4	EMISSION, IC PLASMA	3, 4
6	105	-45.5	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
7	210	9.0	X-RAY FLUORESCENCE	5
8	220	14.2	ATOMIC ABSORPTION, FLAMELESS	3
10	135	-30.0	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
11	180	-6.6	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
13	180	-6.6	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
14	180	-6.6	EMISSION, IC PLASMA	3, 4
16	190	-1.4	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
17	200	3.8	EMISSION, IC PLASMA	3, 4
19	190	-1.4	NOT REPORTED	
21	140	-27.4	ATOMIC ABSORPTION, FLAMELESS	3
22	190	-1.4	EMISSION, IC PLASMA	3, 4
23	195	1.2	OTHER	
24	190	-1.4	EMISSION, IC PLASMA	3, 4
25	210	9.0	EMISSION, IC PLASMA	3, 4
26	130	-32.5	ATOMIC ABSORPTION, FLAMELESS	3
29	180	-6.6	EMISSION, IC PLASMA	3, 4
30	195	1.2	EMISSION, IC PLASMA	3, 4
34	250	29.7	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
35	170	-11.8	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
36	275	42.7	OTHER	
38	180	-6.6	ATOMIC ABSORPTION, FLAMELESS	3
39	185	-4.0	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
40	160	-17.0	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
41	290	50.5	OTHER	
42	155	-19.6	ATOMIC ABSORPTION, FLAMELESS	3
44	210	9.0	EMISSION, IC PLASMA	3, 4
46	185	-4.0	EMISSION, IC PLASMA	3, 4
47	195	1.2	EMISSION, IC PLASMA	3, 4
48	240	24.5	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
49	205	6.4	EMISSION, IC PLASMA	3, 4
50	180	-6.6	EMISSION, IC PLASMA	3, 4
51	180	-6.6	EMISSION, IC PLASMA	3, 4
52	185	-4.0	EMISSION, IC PLASMA	3, 4
53	220	14.2	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
55	245	27.1	EMISSION, IC PLASMA	3, 4
57	195	1.2	EMISSION, IC PLASMA	3, 4
58	185	-4.0	EMISSION, IC PLASMA	3, 4
60	190	-1.4	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
61	120	-37.7	ATOMIC ABSORPTION, FLAMELESS	3
62	205	6.4	EMISSION, IC PLASMA	3, 4
63	200	3.8	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
64	225	16.7	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
66	200	3.8	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
67	170	-11.8	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
68	160	-17.0	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
69	200	3.8	ATOMIC ABSORPTION, FLAMELESS	3
70	200	3.8	EMISSION, IC PLASMA	3, 4
71	230	19.3	OTHER	
74	130	-32.5	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
75	170	-11.8	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
77	205	6.4	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
78	165	-14.4	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
83	200	3.8	EMISSION, IC PLASMA	3, 4
85	205	6.4	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
87	215	11.6	EMISSION, IC PLASMA	3, 4
88	90	-53.3	ATOMIC ABSORPTION, EXTRACTION (PDCA/CHCL3)	2, 3
91	170	-11.8	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
93	300	55.7	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
94	230	19.3	OTHER	
99	220	14.2	OTHER	
106	260	34.9	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
107	185	-4.0	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
110	210	9.0	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
111	200	3.8	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
113	200	3.8	EMISSION, DC PLASMA	5
116	170	-11.8	EMISSION, IC PLASMA	3, 4
117	195	1.2	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
118	190	-1.4	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
120	220	14.2	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
124	185	-4.0	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
127	195	1.2	EMISSION, IC PLASMA	3, 4
128	170	-11.8	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
132	190	-1.4	EMISSION, IC PLASMA	3, 4
133	215	11.6	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4

79 Labs had a total range of 90 to 300 and a mean of 192.7 with a standard deviation of 35.6 and a 95% confidence interval of the mean +/- 8.0.

Table 11 Standard Reference Water Sample T101 Report for K

Code Number	Reported value	Pct. dev. from mean	Methods	References	
1	2900	-15.6	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4	
2	3400	-1.0	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4	
7	5000	45.6	X-RAY FLUORESCENCE	5	
8	3300	-3.9	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4	
11	3800	10.6	EMISSION, FLAME, PHOTOMETRIC	1, 2, 3, 4	
14	3000	-12.7	EMISSION, IC PLASMA	3, 4	
16	3300	-3.9	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4	
17	3200	-6.8	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4	
22	3500	1.9	EMISSION, IC PLASMA	3, 4	
24	100	-97.1	EMISSION, IC PLASMA	3, 5	
		REJECT			
25	3200	6.8	EMISSION, IC PLASMA	3, 5	
26	2500	-27.2	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4	
29	4900	42.7	EMISSION, FLAME, PHOTOMETRIC	1, 2	
30	3000	-12.7	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4	
32	3200	-6.8	EMISSION, IC PLASMA	3, 5	
34	4700	36.8	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4	
35	2600	-24.3	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4	
36	3100	-9.7	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4	
38	4200	22.3	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4	
39	3100	-9.7	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4	
40	4300	25.2	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4	
44	3700	7.7	EMISSION, IC PLASMA	3, 5	
46	3100	-9.7	EMISSION, IC PLASMA	3, 5	
47	3800	10.6	EMISSION, IC PLASMA	3, 5	
48	3600	4.8	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4	
49	3500	1.9	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4	
50	2800	-18.5	EMISSION, IC PLASMA	3, 5	
51	3400	-1.0	EMISSION, IC PLASMA	3, 5	
52	3400	-1.0	EMISSION, IC PLASMA	3, 5	
55	3300	-3.9	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4	
57	3200	-6.8	EMISSION, IC PLASMA	3, 5	
58	4300	25.2	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4	
60	3500	1.9	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4	
61	3000	-12.7	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4	
62	3300	-3.9	EMISSION, IC PLASMA	3, 5	
63	3200	-6.8	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4	
64	3900	13.5	EMISSION, FLAME, PHOTOMETRIC	1, 2	
66	5000	45.6	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4	
67	3400	-1.0	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4	
68	3100	-9.7	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4	
69	3100	-9.7	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4	
70	3000	-12.7	EMISSION, IC PLASMA	3, 5	
74	4300	25.2	EMISSION, FLAME, PHOTOMETRIC	1, 2	
75	3500	1.9	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4	
76	3300	-3.9	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4	
77	2800	-18.5	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4	
78	3000	-12.7	ATOMIC ABSORPTION, DIRECT, AIR	1, 2	
81	3400	-1.0	EMISSION, FLAME, PHOTOMETRIC	1, 2, 3, 4	
83	3300	-3.9	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4	
84	3600	4.8	EMISSION, IC PLASMA	3, 5	
85	3200	-6.8	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4	
86	3300	-3.9	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4	
87	2900	-15.6	EMISSION, IC PLASMA	3, 5	
88	3300	-3.9	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4	
91	3500	1.9	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4	
94	3700	7.7	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4	
107	3400	-1.0	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4	
110	3400	-1.0	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4	
111	6000	74.7	REJECT	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
113	2600	-24.3	ION SELECTIVE ELECTRODE	1, 2, 3, 4	
117	3500	1.9	OTHER		
118	2500	-27.2	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4	
120	3500	1.9	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4	
124	4200	22.3	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4	
127	3100	-9.7	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4	
128	3200	-6.8	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4	
132	2900	-15.6	EMISSION, IC PLASMA	3, 5	
133	4500	31.0	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4	

68. Labs had a total range of 100 to 6000 and a mean of 3440 with a standard deviation of 567 and a 95% confidence interval of the mean +/- 139.

Table 11 Standard Reference Water Sample T101 Report for Li

Code Number	Reported value	Pct. dev. from mean	Methods	References
1	70	2.5	EMISSION, IC PLASMA	3, 4
12	75	9.8	MASS SPECTROMETRY, IC PLASMA	5
16	65	-4.8	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 4
17	70	2.5	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 4
24	75	9.8	EMISSION, IC PLASMA	3, 4
29	< 100		IGNORED	3, 4
42	65	-4.8	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 4
47	79	15.7	EMISSION, IC PLASMA	3, 4
48	70	2.5	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 4
49	61	-10.7	EMISSION, IC PLASMA	3, 4
50	38	-44.4	REJECT	3, 4
51	74	8.4	EMISSION, IC PLASMA	3, 4
52	67	-1.9	EMISSION, IC PLASMA	3, 4
57	66	-3.4	EMISSION, IC PLASMA	3, 4
62	71	4.0	EMISSION, IC PLASMA	3, 4
88	67	-1.9	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 4
117	63	-7.8	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 4
127	65	-4.8	EMISSION, IC PLASMA	3, 4
132	58	-15.1	EMISSION, IC PLASMA	3, 4

19. Labs had a total range of 38 to 100 and a mean of 68.3 with a standard deviation of 5.5 and a 95% confidence interval of the mean +/- 2.8.

Table 11 Standard Reference Water Sample T101 Report for MG

Code Number	Reported value	Pct. dev. from mean	Methods	References	
1	55	4.2	EMISSION, IC PLASMA	3, 4	
2	54	2.3	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4	
7	80	51.6	REJECT	X-RAY FLUORESCENCE	
8	55	4.2	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4	
11	50	-5.3	TITRATION, EDTA	2	
14	53	0.4	EMISSION, IC PLASMA	3, 4	
16	52	-1.5	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4	
17	51	-3.4	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4	
22	52	-1.5	EMISSION, IC PLASMA	3, 4	
24	60	13.7	EMISSION, IC PLASMA	3, 4	
25	52	-1.5	EMISSION, IC PLASMA	3, 4	
26	50	-5.3	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4	
29	51	-3.4	EMISSION, IC PLASMA	3, 4	
30	57	8.0	EMISSION, IC PLASMA	3, 4	
32	51	-3.4	EMISSION, IC PLASMA	3, 4	
34	51	-3.4	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4	
35	52	-1.5	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4	
36	53	0.4	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4	
38	51	-3.4	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4	
39	53	0.4	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4	
40	52	-1.5	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4	
44	55	4.2	EMISSION, IC PLASMA	3, 4	
46	52	-1.5	EMISSION, IC PLASMA	3, 4	
47	54	2.3	EMISSION, IC PLASMA	3, 4	
48	53	0.4	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1, 5	
49	56	6.1	EMISSION, IC PLASMA	3, 4	
50	50	-5.3	EMISSION, IC PLASMA	3, 4	
51	54	2.3	EMISSION, IC PLASMA	3, 4	
52	53	0.4	EMISSION, IC PLASMA	3, 4	
55	51	-3.4	EMISSION, IC PLASMA	3, 4	
57	53	0.4	EMISSION, IC PLASMA	3, 4	
58	55	4.2	EMISSION, IC PLASMA	3, 4	
60	54	2.3	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4	
61	50	-5.3	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4	
62	50	-5.3	EMISSION, IC PLASMA	3, 4	
63	58	9.9	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4	
64	53	0.4	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4	
66	52	-1.5	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4	
67	52	-1.5	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4	
68	10	-81.1	REJECT	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
69	51	-3.4	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4	
70	55	4.2	EMISSION, IC PLASMA	3, 4	
74	24	-54.5	REJECT	TITRATION, EDTA	2
75	48	-9.0	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4	
76	53	0.4	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4	
77	47	-10.9	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4	
78	51	-3.4	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4	
81	57	8.0	EMISSION, IC PLASMA	3, 4	
83	55	4.2	EMISSION, IC PLASMA	3, 4	
84	51	-3.4	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4	
86	54	2.3	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4	
87	53	0.4	EMISSION, IC PLASMA	3, 4	
88	106	100.9	REJECT	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
91	52	-1.5	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4	
93	52	-1.5	TITRATION, EDTA	2	
94	54	2.3	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4	
101	43	-18.5	REJECT	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
107	52	-1.5	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4	
110	51	-3.4	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4	
111	46	-12.8	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4	
112	79	49.7	REJECT	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
113	55	4.2	EMISSION, DC PLASMA	5	
116	52	-1.5	EMISSION, IC PLASMA	3, 4	
117	58	9.9	TITRATION, EDTA	2	
118	42	-20.4	REJECT	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
124	50	-5.3	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4	
127	53	0.4	EMISSION, IC PLASMA	3, 4	
128	58	9.9	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4	
132	54	2.3	EMISSION, IC PLASMA	3, 4	
133	6	-88.6	REJECT	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4

70 Labs had a total range of 6 to 106 and a mean of 52.8  
with a standard deviation of 2.6 and a 95% confidence interval of the mean +/- 0.7.

Table 11 Standard Reference Water Sample T101 Report for MN

Code Number	Reported value	Pct. dev. from mean	Methods	References
1	44	-11.6	EMISSION, IC PLASMA ATOMIC ABSORPTION, FLAMELESS ATOMIC ABSORPTION, DIRECT, AIR EMISSION, IC PLASMA ATOMIC ABSORPTION, DIRECT, AIR X-RAY FLUORESCENCE ATOMIC ABSORPTION, FLAMELESS ATOMIC ABSORPTION, DIRECT, AIR ATOMIC ABSORPTION, DIRECT, AIR MASS SPECTROMETRY, IC PLASMA	3, 4
2	51	2.4		3
4	60	20.5		1, 2, 3, 4
5	46	-7.6		3, 4
6	66	32.6		1, 2, 3, 4
7	70	40.6		5
8	54	8.5		3
10	46	-7.6		1, 2, 3, 4
11	< 50			1, 2, 3, 4
12	54	8.5		5
13	54	8.5		1, 2, 3, 4
14	40	-19.7		3, 4
16	52	4.4	ATOMIC ABSORPTION, DIRECT, AIR EMISSION, IC PLASMA ATOMIC ABSORPTION, DIRECT, AIR EMISSION, IC PLASMA ATOMIC ABSORPTION, FLAMELESS EMISSION, IC PLASMA EMISSION, IC PLASMA EMISSION, IC PLASMA EMISSION, IC PLASMA REJECT ATOMIC ABSORPTION, EXTRACTION (PDCA/CHCL3) EMISSION, IC PLASMA	1, 2, 3, 4
17	50	0.4		3, 4
21	54	8.5		3
22	50	0.4		3, 4
24	55	10.5		3, 4
25	50	0.4		3, 4
26	74	48.6		2, 3
29	53	6.4		3, 4
30	53	6.4		3, 4
32	50	0.4		3, 4
34	30	-39.7		1, 2, 3, 4
35	40	-19.7		1, 2, 3, 4
36	53	6.4		3
38	49	-1.6		3
39	48	-3.6		1, 2, 3, 4
40	45	-9.6		1, 2, 3, 4
41	55	10.5		3
42	50	0.4		3
44	50	0.4	EMISSION, IC PLASMA EMISSION, IC PLASMA EMISSION, IC PLASMA REJECT ATOMIC ABSORPTION, DIRECT, AIR EMISSION, IC PLASMA EMISSION, IC PLASMA EMISSION, IC PLASMA EMISSION, IC PLASMA EMISSION, IC PLASMA EMISSION, IC PLASMA EMISSION, IC PLASMA	3, 4
46	49	-1.6		3, 4
47	50	0.4		3, 4
48	40	-19.7		1, 2, 3, 4
49	47	-5.6		3, 4
50	47	-5.6		3, 4
51	50	0.4		3, 4
52	48	-3.6		3, 4
53	58	16.5		3
55	48	-3.6		3, 4
57	48	-3.6		3, 4
58	53	6.4		3, 4
60	40	-19.7	EMISSION, IC PLASMA ATOMIC ABSORPTION, DIRECT, AIR ATOMIC ABSORPTION, FLAMELESS EMISSION, IC PLASMA ATOMIC ABSORPTION, DIRECT, AIR ATOMIC ABSORPTION, FLAMELESS	1, 2, 3, 4
61	47	-5.6		3
62	50	0.4		3, 4
63	35	-29.7		1, 2, 3, 4
64	49	-1.6		1, 2, 3, 4
66	50	0.4		1, 2, 3, 4
67	53	6.4		1, 2, 3, 4
68	54	8.5		3
69	< 50		IGNORED ATOMIC ABSORPTION, FLAMELESS EMISSION, IC PLASMA ATOMIC ABSORPTION, DIRECT, AIR ATOMIC ABSORPTION, DIRECT, AIR ATOMIC ABSORPTION, DIRECT, AIR ATOMIC ABSORPTION, DIRECT, AIR EMISSION, IC PLASMA EMISSION, IC PLASMA ATOMIC ABSORPTION, DIRECT, AIR ATOMIC ABSORPTION, DIRECT, AIR ATOMIC ABSORPTION, DIRECT, AIR	3
70	52	4.4		3, 4
73	50	0.4		1, 2, 3, 4
74	42	-15.6		1, 2, 3, 4
75	50	0.4		1, 2, 3, 4
77	31	-37.7		1, 2, 3, 4
78	51	2.4		1, 2, 3, 4
81	52	4.4		3, 4
83	50	0.4		3, 4
84	56	12.5		1, 2, 3, 4
85	46	-7.6	ATOMIC ABSORPTION, DIRECT, AIR ATOMIC ABSORPTION, DIRECT, AIR EMISSION, IC PLASMA ATOMIC ABSORPTION, EXTRACTION (PDCA/CHCL3) ATOMIC ABSORPTION, DIRECT, AIR ATOMIC ABSORPTION, DIRECT, AIR ATOMIC ABSORPTION, FLAMELESS EMISSION, IC PLASMA ATOMIC ABSORPTION, DIRECT, AIR ATOMIC ABSORPTION, DIRECT, AIR ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
86	54	8.5		1, 2, 3, 4
87	48	-3.6		3, 4
88	60	20.5		2, 3
91	60	20.5		1, 2, 3, 4
94	52	4.4		1, 2, 3, 4
101	45	-9.6		3
103	55	10.5		3, 4
107	47	-5.6		1, 2, 3, 4
110	43	-13.6		1, 2, 3, 4
111	50	0.4		1, 2, 3, 4
113	59	18.5	ATOMIC ABSORPTION, DIRECT, AIR OTHER EMISSION, IC PLASMA REJECT ATOMIC ABSORPTION, DIRECT, AIR ATOMIC ABSORPTION, DIRECT, AIR ATOMIC ABSORPTION, DIRECT, AIR ATOMIC ABSORPTION, DIRECT, AIR ATOMIC ABSORPTION, DIRECT, AIR EMISSION, IC PLASMA ATOMIC ABSORPTION, DIRECT, AIR	3, 4
116	48	-3.6		1, 2, 3, 4
117	50	0.4		1, 2, 3, 4
118	24	-51.8		1, 2, 3, 4
124	50	0.4		1, 2, 3, 4
127	50	0.4		1, 2, 3, 4
128	47	-5.6		1, 2, 3, 4
132	50	0.4		1, 2, 3, 4
133	48	-3.6		1, 2, 3, 4

80 Labs had a total range of 24 to 74 and a mean of 49.8 with a standard deviation of 6.4 and a 95% confidence interval of the mean +/- 1.5.

Table 11 Standard Reference Water Sample T101 Report for MO

Code Number	Reported value	Pct. dev. from mean	Methods	References	
1	45	-10.2	EMISSION, IC PLASMA	3, 4	
5	58	15.8	ATOMIC ABSORPTION, FLAMELESS	3	
7	45	-10.2	X-RAY FLUORESCENCE	5	
8	47	-6.2	ATOMIC ABSORPTION, FLAMELESS	3	
11	50	-0.2	ATOMIC ABS, EXTRACTION, 8 HYDROXYQUINOLINE/MIBK, NITROUS OXIDE	4	
12	47	-6.2	MASS SPECTROMETRY, IC PLASMA	5	
14	< 100	IGNORED	EMISSION, IC PLASMA	3, 4	
16	45	-10.2	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1, 2, 3	
17	< 50	IGNORED	EMISSION, IC PLASMA	3, 4	
24	64	27.8	EMISSION, IC PLASMA	3, 4	
26	115	129.6	REJECT ATOMIC ABSORPTION, FLAMELESS	3	
29	< 50	IGNORED	EMISSION, IC PLASMA	3, 4	
30	< 100	IGNORED	EMISSION, IC PLASMA	3, 4	
32	< 100	IGNORED	EMISSION, IC PLASMA	3, 4	
40	50	-0.2	ATOMIC ABSORPTION, FLAMELESS	3	
42	50	-0.2	ATOMIC ABSORPTION, FLAMELESS	3	
47	49	-2.2	EMISSION, IC PLASMA	3, 4	
48	100	99.7	REJECT ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1, 2, 3	
49	186	271.4	REJECT	EMISSION, IC PLASMA	3, 4
50	50	-0.2	EMISSION, IC PLASMA	3, 4	
51	49	-2.2	EMISSION, IC PLASMA	3, 4	
52	49	-2.2	EMISSION, IC PLASMA	3, 4	
58	56	11.8	EMISSION, IC PLASMA	3, 4	
60	< 200	IGNORED	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1, 2, 3	
61	36	-28.1	ATOMIC ABSORPTION, FLAMELESS	3	
62	50	-0.2	EMISSION, IC PLASMA	3, 4	
68	51	1.8	ATOMIC ABSORPTION, FLAMELESS	3	
70	66	31.8	ATOMIC ABSORPTION, FLAMELESS	3	
83	50	-0.2	EMISSION, IC PLASMA	3, 4	
87	74	47.7	REJECT EMISSION, IC PLASMA	3, 4	
111	50	-0.2	ATOMIC ABSORPTION, FLAMELESS	3	
117	139	177.5	REJECT ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1, 2, 3	
127	49	-2.2	EMISSION, IC PLASMA	3, 4	
132	46	-8.2	EMISSION, IC PLASMA	3, 4	

34 Labs had a total range of 36 to 200 and a mean of 50.1  
 with a standard deviation of 6.3 and a 95% confidence interval of the mean +/- 2.7.

Table 11 Standard Reference Water Sample T101 Report for NA

Code Number	Reported value	Pct. dev. from mean	Methods	References
1	98	1.8	EMISSION, IC PLASMA	3,4
2	108	12.2	ION SELECTIVE ELECTRODE	1,2,3,4
7	105	9.1	X-RAY FLUORESCENCE	5
8	92	-4.4	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
11	90	-6.5	EMISSION, FLAME	1,2
13	100	3.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
14	97	0.8	EMISSION, IC PLASMA	3,4
16	91	-5.5	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
17	92	-4.4	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
22	98	1.8	EMISSION, IC PLASMA	3,4
24	34	-64.7	REJECT	
25	95	-1.3	EMISSION, IC PLASMA	3,4
26	93	-3.4	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
29	96	-0.3	EMISSION, IC PLASMA	3,4
30	102	6.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
32	95	-1.3	EMISSION, IC PLASMA	3,4
34	48	-50.1	REJECT	
35	83	-13.8	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
36	96	-0.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
38	98	1.8	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
39	93	-3.4	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
40	102	6.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
44	92	-4.4	EMISSION, IC PLASMA	3,4
46	94	-2.3	EMISSION, IC PLASMA	3,4
47	98	1.8	EMISSION, IC PLASMA	3,4
48	98	1.8	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
49	97	0.8	EMISSION, IC PLASMA	3,4
50	100	3.9	EMISSION, IC PLASMA	3,4
51	103	7.0	EMISSION, IC PLASMA	3,4
52	95	-1.3	EMISSION, IC PLASMA	3,4
55	94	-2.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
57	99	2.8	EMISSION, IC PLASMA	3,4
58	101	4.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
60	99	2.8	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
61	88	-8.6	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
62	96	-0.3	EMISSION, IC PLASMA	3,4
63	95	-1.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
64	92	-4.4	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
66	95	-1.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
67	96	-0.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
68	17	-82.3	REJECT	
69	95	-1.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
70	103	7.0	EMISSION, IC PLASMA	3,4
74	96	-0.3	EMISSION, FLAME	1,2
75	98	1.8	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
76	95	-1.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
77	96	-0.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
78	102	6.0	EMISSION, FLAME	1,2
81	97	0.8	EMISSION, IC PLASMA	3,4
83	99	2.8	EMISSION, IC PLASMA	3,4
84	88	-8.6	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
85	103	7.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
86	92	-4.4	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
87	103	7.0	EMISSION, IC PLASMA	3,4
88	98	1.8	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
91	95	-1.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
93	162	68.3	REJECT	
94	92	-4.4	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
107	92	-4.4	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
110	98	1.8	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
111	96	-0.3	EMISSION, FLAME	1,2
113	98	1.8	EMISSION, DC PLASMA	5
116	96	-0.3	EMISSION, IC PLASMA	3,4
117	107	11.2	OTHER	
118	84	-12.7	REJECT	
120	3	-96.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
124	96	-0.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
127	95	-1.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
128	90	-6.5	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
132	100	3.9	EMISSION, FLAME	1,2
133	93	-3.4	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4

71 Labs had a total range of 3 to 162 and a mean of 96.3 with a standard deviation of 4.8 and a 95% confidence interval of the mean +/- 1.2.

Table 11 Standard Reference Water Sample T101 Report for NI

Code Number	Reported value	Pot. dev. from mean	Methods	References
1	35	9.0	EMISSION, IC PLASMA	3, 4, 5
2	37	15.2	ATOMIC ABSORPTION, FLAMELESS	3
4	55	71.2	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
5	33	2.7	ATOMIC ABSORPTION, FLAMELESS	3
7	46	43.2	X-RAY FLUORESCENCE	5
8	38	18.3	ATOMIC ABSORPTION, FLAMELESS	3
10	39	21.4	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
11	< 100		ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
12	31	-3.5	MASS SPECTROMETRY, IC PLASMA	5
14	< 20		EMISSION, IC PLASMA	3, 4, 5
16	15	-53.3	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
17	33	2.7	ATOMIC ABSORPTION, FLAMELESS	3
24	295	818.4	REJECT	3, 4, 5
25	21	-34.6	EMISSION, IC PLASMA	3
26	25	-22.2	ATOMIC ABSORPTION, FLAMELESS	3
29	< 50		ATOMIC ABSORPTION, FLAMELESS	3, 4, 5
30	36	12.1	EMISSION, IC PLASMA	3, 4, 5
34	25	-22.2	ATOMIC ABSORPTION, FLAMELESS	3
35	< 40		ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
36	45	40.1	ATOMIC ABSORPTION, FLAMELESS	3
40	29	-9.7	ATOMIC ABSORPTION, FLAMELESS	3
41	20	-37.7	OTHER	
42	32	-0.4	ATOMIC ABSORPTION, FLAMELESS	3
44	30	-6.6	EMISSION, IC PLASMA	3, 4, 5
46	33	2.7	EMISSION, IC PLASMA	3, 4, 5
47	27	-15.9	EMISSION, IC PLASMA	3, 4, 5
48	60	86.8	REJECT	1, 2, 3, 4
49	42	30.8	ATOMIC ABSORPTION, DIRECT, AIR	3, 4, 5
50	25	-22.2	EMISSION, IC PLASMA	3, 4, 5
51	30	-6.6	EMISSION, IC PLASMA	3, 4, 5
52	28	-12.8	EMISSION, IC PLASMA	3, 4, 5
55	22	-31.5	EMISSION, IC PLASMA	3, 4, 5
57	30	-6.6	EMISSION, IC PLASMA	3, 4, 5
58	29	-9.7	ATOMIC ABSORPTION, FLAMELESS	3
60	< 20		ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
61	32	-0.4	ATOMIC ABSORPTION, FLAMELESS	3
62	29	-9.7	EMISSION, IC PLASMA	3, 4, 5
64	28	-12.8	ATOMIC ABSORPTION, FLAMELESS	3
66	30	-6.6	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
68	33	2.7	ATOMIC ABSORPTION, FLAMELESS	3
69	70	117.9	REJECT	1, 2, 3, 4
70	33	2.7	ATOMIC ABSORPTION, FLAMELESS	3, 4, 5
73	39	21.4	EMISSION, IC PLASMA	1, 2, 3, 4
75	32	-0.4	ATOMIC ABSORPTION, DIRECT, AIR	3
77	50	55.7	ATOMIC ABSORPTION, FLAMELESS	1, 2, 3, 4
78	42	30.8	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
79	41	27.6	ATOMIC ABSORPTION, DIRECT, AIR	3
81	93	189.5	REJECT	3, 4, 5
83	30	-6.6	EMISSION, IC PLASMA	3, 4, 5
84	38	18.3	ATOMIC ABSORPTION, FLAMELESS	3
85	26	-19.1	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
86	12	-62.6	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
87	30	-6.6	EMISSION, IC PLASMA	3, 4, 5
91	28	-12.8	ATOMIC ABSORPTION, EXTRACTION (APDC/MIBK)	1, 4
97	29	-9.7	ATOMIC ABSORPTION, EXTRACTION (PDCA/CHCL3)	2, 3
106	28	-12.8	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
110	35	9.0	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
111	< 100		IGNORED	1, 2, 3, 4
113	32	-0.4	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
116	27	-15.9	EMISSION, DC PLASMA	5
			EMISSION, IC PLASMA	3, 4, 5
117	33	2.7	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
118	40	24.5	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
124	40	24.5	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
127	33	2.7	EMISSION, IC PLASMA	3, 4, 5
128	33	2.7	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
132	23	-28.4	EMISSION, IC PLASMA	3, 4, 5
133	34	5.9	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
137	32	-0.4	ATOMIC ABSORPTION, FLAMELESS	3

68 Labs had a total range of 12 to 295 and a mean of 32.1 with a standard deviation of 7.7 and a 95% confidence interval of the mean +/- 2.0.

Table 11 Standard Reference Water Sample T101 Report for PB

Code Number	Reported value	Pct. dev. from mean	Methods	References
1	8	-63.6	ATOMIC ABSORPTION, FLAMELESS	3
2	10	-54.4	ATOMIC ABSORPTION, FLAMELESS	3
4	21	-4.3	ATOMIC ABSORPTION, FLAMELESS	3
5	18	-18.0	ATOMIC ABSORPTION, FLAMELESS	3
6	21	-4.3	ATOMIC ABSORPTION, FLAMELESS	3
7	24	9.3	X-RAY FLUORESCENCE	5
8	12	-45.3	ATOMIC ABSORPTION, FLAMELESS	3
10	27	23.0	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
11	6	-72.7	ATOMIC ABSORPTION, FLAMELESS	3
12	20	-8.9	MASS SPECTROMETRY, IC PLASMA,	5
14	< 10	IGNORED	ATOMIC ABSORPTION, FLAMELESS	3
16	< 20	IGNORED	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
17	20	-8.9	ATOMIC ABSORPTION, FLAMELESS	3
21	7	-68.1	ATOMIC ABSORPTION, FLAMELESS	3
22	< 100	IGNORED	EMISSION, IC PLASMA	3, 4
24	40	82.2	EMISSION, IC PLASMA	3, 4
25	18	-18.0	ATOMIC ABSORPTION, FLAMELESS	3
29	12	-45.3	ATOMIC ABSORPTION, FLAMELESS	3
30	< 30	IGNORED	EMISSION, IC PLASMA	3, 4
34	12	-45.3	ATOMIC ABSORPTION, FLAMELESS	3
35	12	-45.3	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
36	15	-31.7	ATOMIC ABSORPTION, FLAMELESS	3
40	18	-18.0	ATOMIC ABSORPTION, FLAMELESS	3
41	40	82.2	OTHER	
42	18	-18.0	NOT REPORTED	
44	< 50	IGNORED	EMISSION, IC PLASMA	3, 4
46	19	-13.5	ATOMIC ABSORPTION, FLAMELESS	3
48	13	-40.8	ATOMIC ABSORPTION, FLAMELESS	3
49	20	-8.9	ATOMIC ABSORPTION, FLAMELESS	3
50	250	1038.8	REJECT EMISSION, IC PLASMA	3, 4
51	20	8.9	EMISSION, IC PLASMA	3, 4
53	6	-72.7	ATOMIC ABSORPTION, FLAMELESS	3
55	25	13.9	ATOMIC ABSORPTION, FLAMELESS	3
57	< 10	IGNORED	EMISSION, IC PLASMA	3, 4
58	18	-18.0	ATOMIC ABSORPTION, FLAMELESS	3
60	40	82.2	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
61	9	-59.0	ATOMIC ABSORPTION, FLAMELESS	3
62	17	-22.6	ATOMIC ABSORPTION, FLAMELESS	3
63	18	-18.0	ATOMIC ABSORPTION, FLAMELESS	3
64	17	-22.6	ATOMIC ABSORPTION, FLAMELESS	3
66	20	-8.9	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
67	19	-13.5	ATOMIC ABSORPTION, FLAMELESS	3
68	20	-8.9	ATOMIC ABSORPTION, FLAMELESS	3
69	30	36.7	ATOMIC ABSORPTION, FLAMELESS	3
70	26	18.4	EMISSION, IC PLASMA	3, 4
73	45	105.0	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
74	15	-31.7	ATOMIC ABSORPTION, FLAMELESS	3
75	23	4.8	ATOMIC ABSORPTION, FLAMELESS	3
76	18	-18.0	ATOMIC ABSORPTION, FLAMELESS	3
77	< 20	IGNORED	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
78	57	159.6	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
79	52	136.9	ATOMIC ABSORPTION, FLAMELESS	3
81	< 1	IGNORED	ATOMIC ABSORPTION, FLAMELESS	3
83	19	-13.5	ATOMIC ABSORPTION, FLAMELESS	3
85	7	-68.1	ATOMIC ABSORPTION, FLAMELESS	3
86	50	127.8	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
87	39	77.7	EMISSION, IC PLASMA	3, 4
88	18	-18.0	ATOMIC ABSORPTION, EXTRACTION (PDCA/CHCL3)	2, 3
91	32	45.8	ATOMIC ABSORPTION, EXTRACTION (APDC/MIBK)	1, 4
97	19	-13.5	ATOMIC ABSORPTION, EXTRACTION (APDC/MIBK)	1, 4
101	56	155.1	ATOMIC ABSORPTION, FLAMELESS	3
108	8	-63.6	ATOMIC ABSORPTION, FLAMELESS	3
110	10	-54.4	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
111	16	-27.1	ATOMIC ABSORPTION, FLAMELESS	3
113	11	-49.9	EMISSION, DC PLASMA	5
116	18	-18.0	ATOMIC ABSORPTION, FLAMELESS	3
117	19	-13.5	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
118	50	127.8	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
122	26	18.4	ATOMIC ABSORPTION, FLAMELESS	3
124	< 50	IGNORED	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
127	13	-40.8	ATOMIC ABSORPTION, EXTRACTION (APDC/MIBK)	1, 4
128	17	-22.6	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
132	< 50	IGNORED	EMISSION, IC PLASMA	3, 4
133	35	59.4	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
137	16	-27.1	ATOMIC ABSORPTION, FLAMELESS	3

75 Labs had a total range of 1 to 250 and a mean of 22.0 with a standard deviation of 12.6 and a 95% confidence interval of the mean +/- 3.1.

Table 11 Standard Reference Water Sample T101 Report for SB

Code Number	Reported value	Pct. dev. from mean	Methods	References
1	12.0	15.5	ATOMIC ABSORPTION, FLAMELESS	3
12	10.0	-3.8	MASS SPECTROMETRY, IC PLASMA	, 5
14	<100.0		EMISSION, IC PLASMA	3
16	< 50.0		IGNORED	1, 3
17	12.0	15.5	ATOMIC ABSORPTION, DIRECT, AIR	3
26	11.4	9.7	ATOMIC ABSORPTION, FLAMELESS	3
29	< 10.0		ATOMIC ABSORPTION, FLAMELESS	3
30	<350.0		ATOMIC ABSORPTION, FLAMELESS	3
48	100.0	862.5	IGNORED	3
49	9.3	-10.5	REJECT	1, 3
			ATOMIC ABSORPTION, DIRECT, AIR	3
			ATOMIC ABSORPTION, FLAMELESS	3
50	0.9	-91.3	REJECT	3
51	50.0	381.2	REJECT	3
58	10.0	-3.8	ATOMIC ABSORPTION, FLAMELESS	3
62	< 25.0		IGNORED	3
75	8.2	-21.1	ATOMIC ABSORPTION, FLAMELESS	3
83	9.0	-13.4	ATOMIC ABSORPTION, FLAMELESS	3
87	< 1.0		IGNORED	3
111	25.0	140.6	REJECT	3
117	10.0	-3.8	ATOMIC ABSORPTION, FLAMELESS	3
124	78.0	650.7	REJECT	1, 3
			ATOMIC ABSORPTION, DIRECT, AIR	3
132	< 40.0		IGNORED	3
137	12.0	15.5	ATOMIC ABSORPTION, FLAMELESS	3

22. Labs had a total range of 0.9 to 350.0 and a mean of 10.39  
with a standard deviation of 1.38 and a 95% confidence interval of the mean +/- 0.99.

Table 11 Standard Reference Water Sample T101 Report for SE

Code Number	Reported value	Pct. dev. from mean	Methods	References
1	7.0	0.5	ATOMIC ABSORPTION, FLAMELESS	3
2	4.4	-36.8	ATOMIC ABSORPTION, HYDRIDE	1, 2, 3, 4
4	< 0.1		IGNORED	3
5	7.9	13.4	ATOMIC ABSORPTION, FLAMELESS	3
6	4.0	-42.6	ATOMIC ABSORPTION, FLAMELESS	3
7	14.0	101.0	X-RAY FLUORESCENCE	5
8	8.5	22.0	ATOMIC ABSORPTION, HYDRIDE	1, 2, 3, 4
11	8.4	20.6	OTHER	
12	21.0	201.5	REJECT	5
14	7.0	0.5	MASS SPECTROMETRY, IC PLASMA	3
			ATOMIC ABSORPTION, FLAMELESS	3
15	6.5	-6.7	ATOMIC ABSORPTION, HYDRIDE	1, 2, 3, 4
16	7.5	7.7	ATOMIC ABSORPTION, HYDRIDE	1, 2, 3, 4
17	9.0	29.2	ATOMIC ABSORPTION, HYDRIDE	1, 2, 3, 4
24	210.0	2915.3	REJECT	3
25	8.0	14.9	ATOMIC ABSORPTION, HYDRIDE	1, 2, 3, 4
26	< 5.0		IGNORED	3
29	< 5.0		ATOMIC ABSORPTION, FLAMELESS	3
30	< 70.0		IGNORED	5
34	35.0	402.6	REJECT	3
35	10.0	43.6	ATOMIC ABSORPTION, HYDRIDE	1, 2, 3, 4
40	8.0	14.9	ATOMIC ABSORPTION, HYDRIDE	1, 2, 3, 4
42	8.0	14.9	ATOMIC ABSORPTION, HYDRIDE	1, 2, 3, 4
43	8.5	22.0	ATOMIC ABSORPTION, HYDRIDE	1, 2, 3, 4
44	5.2	-25.3	ATOMIC ABSORPTION, FLAMELESS	3
46	8.3	19.2	ATOMIC ABSORPTION, HYDRIDE	1, 2, 3, 4
48	10.0	43.6	ATOMIC ABSORPTION, HYDRIDE	1, 2, 3, 4
49	6.9	-0.9	ATOMIC ABSORPTION, FLAMELESS	3
50	1.7	-75.6	EMISSION, IC PLASMA	3
51	< 30.0		IGNORED	3
52	8.5	22.0	EMISSION, IC PLASMA	3
			ATOMIC ABSORPTION, HYDRIDE	1, 2, 3, 4
53	4.5	-35.4	ATOMIC ABSORPTION, FLAMELESS	3
58	6.6	-5.2	ATOMIC ABSORPTION, FLAMELESS	3
60	<500.0		IGNORED	3
61	2.4	-65.5	ATOMIC ABSORPTION, FLAMELESS	3
62	13.0	86.7	ATOMIC ABSORPTION, FLAMELESS	3
63	22.0	215.9	REJECT	3
64	1.7	-75.6	ATOMIC ABSORPTION, HYDRIDE	1, 2, 3, 4
67	8.2	17.7	ATOMIC ABSORPTION, FLAMELESS	3
68	5.0	-28.2	ATOMIC ABSORPTION, FLAMELESS	3
69	3.3	-52.6	ATOMIC ABSORPTION, FLAMELESS	3
74	0.1	-98.6	ATOMIC ABSORPTION, HYDRIDE	1, 2, 3, 4
75	< 2.0		IGNORED	3
76	9.3	33.5	ATOMIC ABSORPTION, FLAMELESS	1, 2, 3, 4
78	12.0	72.3	ATOMIC ABSORPTION, FLAMELESS	3
79	8.0	14.9	ATOMIC ABSORPTION, FLAMELESS	3
83	8.0	14.9	ATOMIC ABSORPTION, FLAMELESS	3
87	0.8	-88.5	ATOMIC ABSORPTION, HYDRIDE	1, 2, 3, 4
91	8.0	14.9	ATOMIC ABSORPTION, HYDRIDE	1, 2, 3, 4
93	9.5	36.4	ATOMIC ABSORPTION, HYDRIDE	1, 2, 3, 4
108	5.4	-22.5	ATOMIC ABSORPTION, FLAMELESS	3
110	7.4	6.3	ATOMIC ABSORPTION, HYDRIDE	1, 2, 3, 4
111	7.0	0.5	ATOMIC ABSORPTION, HYDRIDE	1, 2, 3, 4
113	< 20.0		IGNORED	5
117	7.0	0.5	EMISSION, DC PLASMA	3
124	< 10.0		IGNORED	3
127	8.0	14.9	ATOMIC ABSORPTION, FLAMELESS	1, 2, 3, 4
128	3.9	-44.0	ATOMIC ABSORPTION, HYDRIDE	1, 2, 3, 4
137	7.0	0.5	ATOMIC ABSORPTION, FLAMELESS	3

58. Labs had a total range of 0.1 to 500.0 and a mean of 6.96  
with a standard deviation of 2.95 and a 95% confidence interval of the mean +/- 0.89.

Table 11 Standard Reference Water Sample T101 Report for SiO<sub>2</sub>

Code Number	Reported value	Pct. dev. from mean	Methods	References
1	7100	1.5	EMISSION, IC PLASMA	5
2	8000	14.4	COLORIMETRIC, MOLYBDOSILICIC ACID	1, 2, 3
7	11000	57.3	REJECT X-RAY FLUORESCENCE	5
17	6900	-1.4	EMISSION, IC PLASMA	5
19	6700	-4.2	NOT REPORTED	
22	6800	-2.8	EMISSION, IC PLASMA	5
24	8240	17.8	EMISSION, IC PLASMA	5
25	7000	0.1	EMISSION, IC PLASMA	5
29	6680	-4.5	COLORIMETRIC, MOLYBDOSILICIC ACID	1, 2, 3
32	7700	10.1	EMISSION, IC PLASMA	5
34	6800	-2.8	COLORIMETRIC, AMINO-NAPTHOL SULFONIC ACID REDUCE-HETEROPOLY BLUE	3
35	6700	-4.2	COLORIMETRIC, AMINO-NAPTHOL SULFONIC ACID REDUCE-HETEROPOLY BLUE	3
36	7240	3.5	COLORIMETRIC, ASCORBIC ACID REDUCTION TO MOLYBDATE BLUE	4
44	6640	-5.1	EMISSION, IC PLASMA	5
45	8450	20.8	COLORIMETRIC, MOLYBDOSILICIC ACID	1, 2, 3
47	7200	2.9	EMISSION, IC PLASMA	5
48	5560	-20.5	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	4
49	7260	3.8	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	4
50	6800	-2.8	EMISSION, IC PLASMA	5
51	7060	0.9	EMISSION, IC PLASMA	5
52	6900	-1.4	EMISSION, IC PLASMA	5
57	6750	-3.5	EMISSION, IC PLASMA	5
58	7170	2.5	EMISSION, IC PLASMA	5
60	8000	14.4	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	4
61	2780	-60.3	REJECT COLORIMETRIC, MOLYBDOSILICIC ACID	1, 2, 3
62	7050	0.8	EMISSION, IC PLASMA	5
63	5000	-28.5	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	4
64	6940	-0.8	COLORIMETRIC, AMINO-NAPTHOL SULFONIC ACID REDUCE-HETEROPOLY BLUE	3
68	6500	-7.1	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	4
69	6800	-2.8	COLORIMETRIC, MOLYBDOSILICIC ACID	1, 2, 3
74	7790	11.4	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	4
76	6820	-2.5	COLORIMETRIC, ASCORBIC ACID REDUCTION TO MOLYBDATE BLUE	4
77	7680	9.8	COLORIMETRIC, MOLYBDOSILICIC ACID	1, 2, 3
78	6800	-2.8	COLORIMETRIC, MOLYBDOSILICIC ACID	1, 2, 3
83	7000	0.1	COLORIMETRIC, ASCORBIC ACID REDUCTION TO MOLYBDATE BLUE	4
85	6570	-6.1	COLORIMETRIC, MOLYBDOSILICIC ACID	1, 2, 3
86	17000	143.0	REJECT COLORIMETRIC, MOLYBDOSILICIC ACID	1, 2, 3
87	7240	3.5	EMISSION, IC PLASMA	5
88	6400	-8.5	COLORIMETRIC, MOLYBDOSILICIC ACID	1, 2, 3
94	8670	23.9	COLORIMETRIC, AMINO-NAPTHOL SULFONIC ACID REDUCE-HETEROPOLY BLUE	3
107	7000	0.1	EMISSION, IC PLASMA	5
110	5930	-15.2	COLORIMETRIC, AMINO-NAPTHOL SULFONIC ACID REDUCE-HETEROPOLY BLUE	3
117	10000	43.0	REJECT COLORIMETRIC, AMINO-NAPTHOL SULFONIC ACID REDUCE-HETEROPOLY BLUE	3
127	7060	0.9	EMISSION, IC PLASMA	5
132	5900	-15.7	EMISSION, IC PLASMA	5

45 Labs had a total range of 2780 to 17000 and a mean of 7000 with a standard deviation of 711 and a 95% confidence interval of the mean +/- 224.

Table 11 Standard Reference Water Sample T101 Report for SR

Code Number	Reported value	Pct. dev. from mean	Methods	References
1	1200	0.3	EMISSION, IC PLASMA	4
5	990	-17.3	EMISSION, IC PLASMA	4
7	1200	0.3	X-RAY FLUORESCENCE	5
12	1440	20.4	MASS SPECTROMETRY, IC PLASMA	5
16	1340	12.0	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 4
17	1280	7.0	EMISSION, IC PLASMA	4
24	1250	4.5	MASS SPECTROMETRY, IC PLASMA	5
26	1050	-12.2	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 4
29	1090	-8.9	EMISSION, IC PLASMA	4
30	1200	0.3	EMISSION, IC PLASMA	4
32	1140	-4.7	EMISSION, IC PLASMA	4
36	1630	36.2	REJECT ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 4
42	1200	0.3	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 4
46	1170	-2.2	EMISSION, IC PLASMA	4
47	1170	-2.2	EMISSION, IC PLASMA	4
48	1310	9.5	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 4
49	1120	-6.4	EMISSION, IC PLASMA	4
50	1100	-8.1	EMISSION, IC PLASMA	4
51	1220	2.0	EMISSION, IC PLASMA	4
52	1160	-3.0	EMISSION, IC PLASMA	4
55	1170	-2.2	EMISSION, IC PLASMA	4
57	1210	1.1	EMISSION, IC PLASMA	4
61	1120	-6.4	ATOMIC ABSORPTION, FLAMELESS	5
62	1290	7.8	EMISSION, IC PLASMA	4
63	1140	-4.7	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 4
83	1200	0.3	EMISSION, IC PLASMA	4
87	1350	12.8	EMISSION, IC PLASMA	4
88	4080	241.0	REJECT ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 4
91	1200	0.3	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 4
103	1220	2.0	EMISSION, IC PLASMA	4
117	1250	4.5	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 4
127	1180	-1.4	EMISSION, IC PLASMA	4
132	1130	-5.6	EMISSION, IC PLASMA	4

33 Labs had a total range of 990 to 4080 and a mean of 1196 with a standard deviation of 91 and a 95% confidence interval of the mean +/- 33.

Table 11 Standard Reference Water Sample T101 Report for V

Code Number	Reported value	Pct. dev. from mean	Methods	References
1	10	-48.6	EMISSION, IC PLASMA	3, 4
7	40	105.6	X-RAY FLUORESCENCE	5
12	18	-7.5	MASS SPECTROMETRY, IC PLASMA	5
16	< 100		ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1, 3
17	10	-48.6	EMISSION, IC PLASMA	3, 4
24	31	59.3	EMISSION, IC PLASMA	3, 4
26	19	-2.3	ATOMIC ABSORPTION, FLAMELESS	3, 4
29	49	151.9	EMISSION, IC PLASMA	3, 4
30	< 100		EMISSION, IC PLASMA	3, 4
44	10	-48.6	EMISSION, IC PLASMA	3, 4
46	16	-17.8	EMISSION, IC PLASMA	3, 4
47	16	-17.8	EMISSION, IC PLASMA	3, 4
48	100	414.0	REJECT ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1, 3
49	22	13.1	EMISSION, IC PLASMA	3, 4
50	13	-33.2	EMISSION, IC PLASMA	3, 4
51	18	-7.5	EMISSION, IC PLASMA	3, 4
52	18	-7.5	EMISSION, IC PLASMA	3, 4
57	19	-2.3	EMISSION, IC PLASMA	3, 4
58	20	2.8	EMISSION, IC PLASMA	3, 4
60	< 200		IGNORED ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1, 3
61	34	74.8	ATOMIC ABSORPTION, FLAMELESS	3
62	28	43.9	EMISSION, IC PLASMA	3, 4
83	20	2.8	EMISSION, IC PLASMA	3, 4
87	< 21	7.9	EMISSION, IC PLASMA	3, 4
111	< 50		IGNORED ATOMIC ABSORPTION, FLAMELESS	3
117	16	-17.8	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1, 3
127	15	-22.9	EMISSION, IC PLASMA	3, 4
132	14	-28.0	EMISSION, IC PLASMA	3, 4

28 Labs had a total range of 10 to 200 and a mean of 19.5  
 with a standard deviation of 7.7 and a 95% confidence interval of the mean +/- 3.4.

Table 11 Standard Reference Water Sample T101 Report for ZN

Code Number	Reported value	Pct. dev. from mean	Methods	References
1	61	-7.1	EMISSION, IC PLASMA	3, 4
2	65	-1.0	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
4	50	-23.9	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
5	56	-14.7	EMISSION, IC PLASMA	3,
6	4	-93.9	REJECT ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
7	78	18.8	X-RAY FLUORESCENCE	5
8	75	14.2	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
10	66	0.5	NOT REPORTED	
11	90	37.0	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
12	74	12.7	MASS SPECTROMETRY, IC PLASMA	5
14	60	-8.6	EMISSION, IC PLASMA	3, 4
16	65	-1.0	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
17	70	6.6	EMISSION, IC PLASMA	3, 4
21	42	-36.0	ATOMIC ABSORPTION, FLAMELESS	3
22	70	6.6	EMISSION, IC PLASMA	3, 4
24	63	-4.1	EMISSION, IC PLASMA	3, 4
25	74	12.7	EMISSION, IC PLASMA	3, 4
26	60	-8.6	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
29	60	-8.6	EMISSION, IC PLASMA	3, 4
30	72	9.6	EMISSION, IC PLASMA	3, 4
34	29	-55.8	REJECT ATOMIC ABSORPTION, FLAMELESS	3
35	64	-2.5	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
36	61	-7.1	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
39	64	-2.5	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
40	67	2.0	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
41	60	-8.6	OTHER	
42	57	-13.2	ATOMIC ABSORPTION, FLAMELESS	3
44	70	6.6	EMISSION, IC PLASMA	3, 4
46	74	12.7	EMISSION, IC PLASMA	3, 4
47	63	-4.1	EMISSION, IC PLASMA	3, 4
48	100	52.3	REJECT ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
49	75	14.2	EMISSION, IC PLASMA	3, 4
50	62	-5.6	EMISSION, IC PLASMA	3, 4
51	63	-4.1	EMISSION, IC PLASMA	3, 4
52	67	2.0	EMISSION, IC PLASMA	3, 4
53	68	3.5	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
55	63	-4.1	EMISSION, IC PLASMA	3, 4
57	67	2.0	EMISSION, IC PLASMA	3, 4
58	65	-1.0	EMISSION, IC PLASMA	3, 4
60	70	6.6	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
61	91	38.6	ATOMIC ABSORPTION, FLAMELESS	3
62	66	0.5	EMISSION, IC PLASMA	3, 4
63	75	14.2	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
64	72	9.6	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
66	70	6.6	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
67	67	2.0	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
68	73	11.2	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
69	60	-8.6	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
70	48	-26.9	EMISSION, IC PLASMA	3, 4
73	66	0.5	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
74	61	-7.1	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
75	60	-8.6	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
76	68	3.5	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
77	66	0.5	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
81	65	-1.0	EMISSION, IC PLASMA	3, 4
83	70	6.6	EMISSION, IC PLASMA	3, 4
84	66	0.5	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
85	70	6.6	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
86	22	-66.5	REJECT ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
87	60	-8.6	EMISSION, IC PLASMA	3, 4
88	100	52.3	REJECT ATOMIC ABSORPTION, EXTRACTION (PDCA/CHCL3)	2
91	70	6.6	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
97	10	-84.8	REJECT ATOMIC ABSORPTION, EXTRACTION (PDCA/CHCL3)	2
106	48	-26.9	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
110	57	-13.2	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
111	85	29.4	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
113	68	3.5	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
116	57	-13.2	EMISSION, IC PLASMA	3, 4
117	72	9.6	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
118	150	128.4	REJECT ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
122	52	-20.8	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
124	60	-8.6	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
127	65	-1.0	EMISSION, IC PLASMA	3, 4
128	61	-7.1	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
132	65	-1.0	EMISSION, IC PLASMA	3, 4
133	64	-2.5	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
137	68	3.5	ATOMIC ABSORPTION, FLAMELESS	3

77. Labs had a total range of 4 to 150 and a mean of 65.7  
with a standard deviation of 8.4 and a 95% confidence interval of the mean +/- 2.0.

Table 12 Standard Reference Water Sample M102 Report for ALK(CACO3)

Code Number	Reported value	Pct. dev. from mean	Methods	References	
1	177	0.3	TITRATION, ELECTROMETRIC	1,2,3,4	
2	171	-3.1	TITRATION, ELECTROMETRIC	1,2,3,4	
3	176	-0.2	TITRATION, COLORIMETRIC	1,2,3	
4	168	-4.8	OTHER		
5	171	-3.1	TITRATION, ELECTROMETRIC	1,2,3,4	
6	171	-3.1	TITRATION, ELECTROMETRIC	1,2,3,4	
8	178	0.9	TITRATION, COLORIMETRIC	1,2,3	
9	178	0.9	TITRATION, ELECTROMETRIC	1,2,3,4	
11	170	-3.6	TITRATION, COLORIMETRIC	1,2,3	
13	174	-1.4	TITRATION, ELECTROMETRIC	1,2,3,4	
14	168	-4.8	TITRATION, ELECTROMETRIC	1,2,3,4	
15	172	-2.5	TITRATION, ELECTROMETRIC	1,2,3,4	
16	180	2.0	TITRATION, ELECTROMETRIC	1,2,3,4	
17	176	-0.2	TITRATION, ELECTROMETRIC	1,2,3,4	
19	180	2.0	NOT REPORTED		
21	182	3.2	TITRATION, ELECTROMETRIC	1,2,3,4	
22	181	2.6	TITRATION, ELECTROMETRIC	1,2,3,4	
23	520	194.8	REJECT	TITRATION, ELECTROMETRIC	1,2,3,4
25	184	4.3	TITRATION, COLORIMETRIC	1,2,3	
26	180	2.0	TITRATION, ELECTROMETRIC	1,2,3,4	
27	180	2.0	TITRATION, ELECTROMETRIC	1,2,3,4	
29	172	-2.5	TITRATION, ELECTROMETRIC	1,2,3,4	
30	182	3.2	TITRATION, COLORIMETRIC	1,2,3	
31	176	-0.2	TITRATION, ELECTROMETRIC	1,2,3,4	
33	186	5.4	TITRATION, COLORIMETRIC	1,2,3	
34	166	-5.9	TITRATION, ELECTROMETRIC	1,2,3,4	
35	180	2.0	TITRATION, ELECTROMETRIC	1,2,3,4	
36	178	0.9	TITRATION, COLORIMETRIC	1,2,3	
37	177	0.3	TITRATION, ELECTROMETRIC	1,2,3,4	
38	177	0.3	TITRATION, ELECTROMETRIC	1,2,3,4	
40	176	-0.2	TITRATION, ELECTROMETRIC	1,2,3,4	
42	179	1.5	TITRATION, ELECTROMETRIC	1,2,3,4	
44	180	2.0	TITRATION, ELECTROMETRIC	1,2,3,4	
45	168	-4.8	TITRATION, ELECTROMETRIC	1,2,3,4	
46	183	3.7	OTHER		
47	171	-3.1	TITRATION, ELECTROMETRIC	1,2,3,4	
48	177	0.3	TITRATION, ELECTROMETRIC	1,2,3,4	
49	178	0.9	TITRATION, ELECTROMETRIC	1,2,3,4	
52	175	-0.8	TITRATION, ELECTROMETRIC	1,2,3,4	
53	179	1.5	TITRATION, ELECTROMETRIC	1,2,3,4	
55	174	-1.4	TITRATION, ELECTROMETRIC	1,2,3,4	
57	171	-3.1	TITRATION, ELECTROMETRIC	1,2,3,4	
58	178	0.9	TITRATION, ELECTROMETRIC	1,2,3,4	
60	175	-0.8	TITRATION, COLORIMETRIC	1,2,3	
61	180	2.0	TITRATION, ELECTROMETRIC	1,2,3,4	
62	176	-0.2	TITRATION, ELECTROMETRIC	1,2,3,4	
63	177	0.3	TITRATION, ELECTROMETRIC	1,2,3,4	
64	180	2.0	TITRATION, ELECTROMETRIC	1,2,3,4	
67	176	-0.2	TITRATION, COLORIMETRIC	1,2,3,4	
68	174	-1.4	TITRATION, COLORIMETRIC	1,2,3	
69	172	-2.5	TITRATION, ELECTROMETRIC	1,2,3,4	
71	329	86.5	REJECT	TITRATION, ELECTROMETRIC	1,2,3,4
74	178	0.9	TITRATION, ELECTROMETRIC	1,2,3,4	
75	180	2.0	TITRATION, ELECTROMETRIC	1,2,3,4	
76	180	2.0	TITRATION, ELECTROMETRIC	1,2,3,4	
77	174	-1.4	TITRATION, ELECTROMETRIC	1,2,3,4	
78	175	-0.8	TITRATION, ELECTROMETRIC	1,2,3,4	
79	180	2.0	TITRATION, COLORIMETRIC	1,2,3	
80	176	-0.2	OTHER		
81	180	2.0	TITRATION, ELECTROMETRIC	1,2,3,4	
83	180	2.0	TITRATION, ELECTROMETRIC	1,2,3,4	
84	170	-3.6	TITRATION, ELECTROMETRIC	1,2,3,4	
85	118	-33.1	REJECT	TITRATION, ELECTROMETRIC	1,2,3,4
86	173	-1.9	TITRATION, ELECTROMETRIC	1,2,3,4	
87	180	2.0	TITRATION, COLORIMETRIC	1,2,3	
88	181	2.6	TITRATION, ELECTROMETRIC	1,2,3,4	
91	173	-1.9	TITRATION, ELECTROMETRIC	1,2,3,4	
93	202	14.5	REJECT	TITRATION, COLORIMETRIC	1,2,3
94	180	2.0	TITRATION, COLORIMETRIC	1,2,3	
96	177	0.3	TITRATION, ELECTROMETRIC	1,2,3,4	
98	162	-8.2	TITRATION, COLORIMETRIC	1,2,3	
99	179	1.5	TITRATION, ELECTROMETRIC	1,2,3,4	
100	178	0.9	TITRATION, ELECTROMETRIC	1,2,3,4	
101	183	3.7	TITRATION, ELECTROMETRIC	1,2,3,4	
107	201	13.9	REJECT	TITRATION, ELECTROMETRIC	1,2,3,4
108	169	-4.2	TITRATION, ELECTROMETRIC	1,2,3,4	
110	179	1.5	TITRATION, ELECTROMETRIC	1,2,3,4	
111	176	-0.2	TITRATION, COLORIMETRIC	1,2,3	
113	177	0.3	TITRATION, ELECTROMETRIC	1,2,3,4	
115	166	-5.9	TITRATION, ELECTROMETRIC	1,2,3,4	
116	182	3.2	TITRATION, ELECTROMETRIC	1,2,3,4	
117	117	-33.7	REJECT	TITRATION, ELECTROMETRIC	1,2,3,4
118	180	2.0	TITRATION, ELECTROMETRIC	1,2,3,4	
120	168	-4.8	TITRATION, ELECTROMETRIC	1,2,3,4	
121	175	-0.8	TITRATION, ELECTROMETRIC	1,2,3,4	
122	148	-16.1	REJECT	TITRATION, COLORIMETRIC	1,2,3
123	179	1.5	TITRATION, ELECTROMETRIC	1,2,3,4	
124	186	5.4	TITRATION, ELECTROMETRIC	1,2,3,4	
127	180	2.0	TITRATION, ELECTROMETRIC	1,2,3,4	
128	174	-1.4	TITRATION, ELECTROMETRIC	1,2,3,4	
136	180	2.0	TITRATION, ELECTROMETRIC	1,2,3,4	
137	175	-0.8	TITRATION, ELECTROMETRIC	1,2,3,4	

92 Labs had a total range of 117 to 520 and a mean of 176.4  
 with a standard deviation of 4.7 and a 95% confidence interval of the mean +/- 1.0.

Table 12 Standard Reference Water Sample M102 Report for B

Code Number	Reported value	Pct. dev. from mean	Methods	References	
1	300	-7.2	EMISSION, IC PLASMA	3	
3	320	-1.1	COLORIMETRIC, CARMINE (CARMINIC ACID)	2,4	
4	360	11.3	COLORIMETRIC, CURCUMIN	1,2,3,4	
5	300	7.2	COLORIMETRIC, AZOMETHINE	4	
16	370	14.4	COLORIMETRIC, CURCUMIN	1,2,3,4	
17	240	-25.8	EMISSION, IC PLASMA	3	
19	580	79.3	REJECT	NOT REPORTED	3
22	340	5.1	EMISSION, IC PLASMA	3	
24	310	-4.2	EMISSION, IC PLASMA	3	
25	300	-7.2	EMISSION, IC PLASMA	3	
26	460	42.2	COLORIMETRIC, CURCUMIN	1,2,3,4	
27	310	-4.2	COLORIMETRIC, CURCUMIN	1,2,3,4	
29	310	-4.2	EMISSION, IC PLASMA	3	
30	271	-16.2	EMISSION, IC PLASMA	3	
31	270	-16.5	EMISSION, IC PLASMA	3	
32	30	-90.7	REJECT	EMISSION, IC PLASMA	3
40	400	23.7	COLORIMETRIC, AZOMETHINE	4	
42	320	-1.1	COLORIMETRIC, AZOMETHINE	4	
44	320	-1.1	MASS SPECTROMETRY, IC PLASMA	5	
46	318	-1.7	EMISSION, IC PLASMA	3	
47	301	-6.9	EMISSION, IC PLASMA	3	
48	440	36.0	COLORIMETRIC, CURCUMIN	1,2,3,4	
50	290	-10.3	EMISSION, IC PLASMA	3	
51	300	-7.2	EMISSION, IC PLASMA	3	
57	278	-14.0	EMISSION, IC PLASMA	3	
58	300	-7.2	EMISSION, IC PLASMA	3	
60	< 2000		IGNORED	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	5
62	293	-9.4	EMISSION, IC PLASMA	3	
68	330	2.0	COLORIMETRIC, AZOMETHINE	4	
70	291	-10.0	EMISSION, IC PLASMA	3	
78	470	45.3	COLORIMETRIC, CURCUMIN	1,2,3,4	
80	302	-6.6	EMISSION, IC PLASMA	3	
87	122	-62.3	REJECT	EMISSION, IC PLASMA	3
88	310	-4.2	COLORIMETRIC, CURCUMIN	1,2,3,4	
93	< 1000		IGNORED	COLORIMETRIC, CARMINE (CARMINIC ACID)	2,4
94	250	-22.7	COLORIMETRIC, AZOMETHINE	2,4	
107	310	-4.2	COLORIMETRIC, CARMINE (CARMINIC ACID)	2,4	
108	650	101.0	REJECT	COLORIMETRIC, CARMINE (CARMINIC ACID)	2,4
110	271	-16.2	COLORIMETRIC, CURCUMIN	1,2,3,4	
111	420	29.9	COLORIMETRIC, CURCUMIN	1,2,3,4	
117	400	23.7	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	5	
127	312	-3.5	EMISSION, DC PLASMA	5	
132	280	-13.4	EMISSION, IC PLASMA	3	

43 Labs had a total range of 30 to 2000 and a mean of 323.4 with a standard deviation of 55.6 and a 95% confidence interval of the mean +/- 18.5.

Table 12 Standard Reference Water Sample M102 Report for BR

Code Number	Reported value	Pct. dev. from mean	Methods	References	
1	< 50		IGNORED	COLORIMETRIC, CHLORAMINE-T	1
7	420	319.4	REJECT	X-RAY FLUORESCENCE	5
16	120	19.8		ION CHROMATOGRAPHY	2,3,4
17	80	-20.1		NOT REPORTED	
22	120	19.8		OTHER	
26	80	-20.1		OTHER	
30	< 10		IGNORED	COLORIMETRIC, CATALYTIC OXIDATION	2,4
32	70	-30.1		ION CHROMATOGRAPHY	2,3,4
76	< 10		IGNORED	ION CHROMATOGRAPHY	2,3,4
83	120	19.8		ION CHROMATOGRAPHY	2,3,4
111	< 100		IGNORED	COLORIMETRIC, CHLORAMINE-T	1
127	111	10.8		COLORIMETRIC, CHLORAMINE-T	1

12 Labs had a total range of 10 to 420 and a mean of 100.1 with a standard deviation of 22.4 and a 95% confidence interval of the mean +/- 20.8.

Table 12 Standard Reference Water Sample M102 Report for CA

Code Number	Reported value	Pct. dev. from mean	Methods	References	
1	85	-4.0	EMISSION, IC PLASMA	3,4,5	
3	79	-3.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
4	84	2.8	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
5	79	-3.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
6	152	86.0	REJECT	TITRATION, EDTA	1,3
7	80	-2.1	X-RAY FLUORESCENCE	5	
8	85	4.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
9	81	-0.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
11	80	-2.1	TITRATION, EDTA	1,2,3,4	
12	82	0.4	OTHER	1,3	
14	82	0.4	EMISSION, IC PLASMA	3,4,5	
15	70	-14.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
16	81	-0.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
17	86	5.2	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
20	80	-2.1	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
21	84	2.8	OTHER	1,2,3,4	
22	85	4.0	EMISSION, IC PLASMA	3,4,5	
23	88	7.7	TITRATION, EDTA	1,3	
24	90	10.1	EMISSION, IC PLASMA	3,4,5	
25	81	-0.9	EMISSION, IC PLASMA	3,4,5	
26	74	-9.4	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
27	82	0.4	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
29	86	5.2	TITRATION, EDTA	1,3	
30	88	7.7	EMISSION, IC PLASMA	3,4,5	
31	80	-2.1	EMISSION, IC PLASMA	3,4,5	
32	78	-4.5	EMISSION, IC PLASMA	3,4,5	
34	84	2.8	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
35	79	-3.3	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1,5	
36	81	-0.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
37	81	-0.9	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1,5	
38	79	-3.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
39	80	-2.1	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
40	82	0.4	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
41	83	1.6	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
42	74	-9.4	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
43	84	2.8	OTHER	1,2,3,4	
44	85	4.0	EMISSION, IC PLASMA	3,4,5	
46	79	-3.3	EMISSION, IC PLASMA	3,4,5	
47	85	4.0	EMISSION, IC PLASMA	3,4,5	
48	64	-21.7	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1,5	
49	77	-5.8	EMISSION, IC PLASMA	3,4,5	
50	83	1.6	EMISSION, IC PLASMA	3,4,5	
51	83	1.6	EMISSION, IC PLASMA	3,4,5	
52	79	-3.3	EMISSION, IC PLASMA	3,4,5	
55	79	-3.3	EMISSION, IC PLASMA	3,4,5	
57	82	0.4	EMISSION, IC PLASMA	3,4,5	
58	83	1.6	EMISSION, IC PLASMA	3,4,5	
60	83	1.6	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1,5	
61	79	-3.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
62	77	-5.8	EMISSION, IC PLASMA	3,4,5	
63	82	0.4	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
64	79	-3.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
65	94	15.0	OTHER	1,2,3,4	
66	79	-3.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
67	66	-19.2	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
68	18	-78.0	REJECT	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
69	76	-7.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
70	86	5.2	EMISSION, IC PLASMA	3,4,5	
74	221	170.5	REJECT	TITRATION, EDTA	1,3
75	87	6.5	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
76	83	1.6	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
77	79	-3.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
78	78	-4.5	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
80	78	-4.5	EMISSION, IC PLASMA	3,4,5	
81	91	11.4	EMISSION, IC PLASMA	3,4,5	
83	86	5.2	EMISSION, IC PLASMA	3,4,5	
84	108	32.2	REJECT	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
85	87	6.5	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
86	83	1.6	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
87	92	12.6	EMISSION, IC PLASMA	3,4,5	
88	80	-2.1	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1,5	
91	79	-3.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
93	79	-3.3	TITRATION, EDTA	1,3	
94	97	18.7	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
96	82	0.4	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
98	87	6.5	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
99	70	-14.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
100	104	27.3	REJECT	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
101	84	2.8	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
103	81	-0.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
105	84	2.8	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
107	83	1.6	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
108	92	12.6	TITRATION, EDTA	1,3	
110	86	5.2	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
111	80	-2.1	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
112	56	-31.5	REJECT	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1,5
113	79	-3.3	EMISSION, DC PLASMA	5	
116	83	1.6	EMISSION, IC PLASMA	3,4,5	
117	86	5.2	OTHER	1,2,3,4	
118	87	6.5	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
120	75	-8.2	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
124	72	-11.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
127	84	2.8	EMISSION, IC PLASMA	3,4,5	
128	79	-3.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
132	82	0.4	EMISSION, IC PLASMA	3,4,5	
133	82	0.4	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	

96 Labs had a total range of 18 to 221 and a mean of 81.7  
 with a standard deviation of 5.3 and a 95% confidence interval of the mean +/- 1.1.

Table 12 Standard Reference Water Sample M102 Report for CL

Code Number	Reported value	Pct. dev. from mean	Methods	References
1	41	-6.2	COLORIMETRIC, FERRIC THIOCYANATE	1, 2, 3, 4
3	43	-1.6	COLORIMETRIC, FERRIC THIOCYANATE	1, 2, 3, 4
4	42	-3.9	COLORIMETRIC, FERRIC THIOCYANATE	1, 2, 3, 4
5	46	5.3	COLORIMETRIC, FERRIC THIOCYANATE	1, 2, 3, 4
6	45	3.0	TITRATION, SILVER NITRATE	1, 2, 4
7	30	-31.3	REJECT X-RAY FLUORESCENCE	5
8	42	-3.9	COLORIMETRIC, FERRIC THIOCYANATE	1, 2, 3, 4
9	43	-1.6	COLORIMETRIC, FERRIC THIOCYANATE	1, 2, 3, 4
10	58	32.7	REJECT TITRATION, MERCURIC NITRATE	1, 2, 3, 4
11	42	-3.9	TITRATION, SILVER NITRATE	1, 2, 4
12	42	-3.9	ION CHROMATOGRAPHY	2, 3, 4, 5
13	45	3.0	COLORIMETRIC, FERRIC THIOCYANATE	1, 2, 3, 4
14	44	0.7	COLORIMETRIC, FERRIC THIOCYANATE	1, 2, 3, 4
15	42	-3.9	ION CHROMATOGRAPHY	2, 3, 4, 5
16	44	0.7	ION CHROMATOGRAPHY	2, 3, 4, 5
17	45	3.0	COLORIMETRIC, FERRIC THIOCYANATE	1, 2, 3, 4
19	39	-10.8	NOT REPORTED	1, 2, 3, 4
21	39	-10.8	ION CHROMATOGRAPHY	2, 3, 4, 5
22	44	0.7	ION SELECTIVE ELECTRODE	1, 2, 3, 4
25	43	-1.6	TITRATION, SILVER NITRATE	1, 2, 4
26	38	-13.0	ION CHROMATOGRAPHY	2, 3, 4, 5
27	43	-1.6	TITRATION, SILVER NITRATE	1, 2, 4
29	44	0.7	TITRATION, MERCURIC NITRATE	1, 2, 3, 4
30	49	12.1	TITRATION, MERCURIC NITRATE	1, 2, 3, 4
31	43	-1.6	COLORIMETRIC, FERRIC THIOCYANATE	1, 2, 3, 4
32	31	-29.1	REJECT ION CHROMATOGRAPHY	2, 3, 4, 5
33	43	-1.6	COLORIMETRIC, FERRIC THIOCYANATE	1, 2, 3, 4
34	47	7.6	ION CHROMATOGRAPHY	2, 3, 4, 5
35	42	-3.9	ION SELECTIVE ELECTRODE	1, 2, 3, 4
36	49	12.1	COLORIMETRIC, FERRIC THIOCYANATE	1, 2, 3, 4
38	9	-79.4	REJECT TITRATION, SILVER NITRATE	1, 2, 4
39	44	0.7	TITRATION, SILVER NITRATE	1, 2, 4
40	45	3.0	COLORIMETRIC, FERRIC THIOCYANATE	1, 2, 3, 4
41	44	0.7	COLORIMETRIC, FERRIC THIOCYANATE	1, 2, 3, 4
42	50	14.4	COLORIMETRIC, FERRIC THIOCYANATE	1, 2, 3, 4
43	42	-3.9	ION CHROMATOGRAPHY	2, 3, 4, 5
44	39	-10.8	TITRATION, MERCURIC NITRATE	1, 2, 3, 4
46	43	-1.6	COLORIMETRIC, FERRIC THIOCYANATE	1, 2, 3, 4
47	42	-3.9	COLORIMETRIC, FERRIC THIOCYANATE	1, 2, 3, 4
48	49	12.1	COLORIMETRIC, FERRIC THIOCYANATE	1, 2, 3, 4
49	42	-3.9	ION CHROMATOGRAPHY	2, 3, 4, 5
52	44	0.7	ION CHROMATOGRAPHY	2, 3, 4, 5
53	44	0.7	TITRATION, MERCURIC NITRATE	1, 2, 3, 4
55	43	-1.6	COLORIMETRIC, FERRIC THIOCYANATE	1, 2, 3, 4
57	44	0.7	ION CHROMATOGRAPHY	2, 3, 4, 5
58	46	5.3	ION CHROMATOGRAPHY	2, 3, 4, 5
59	43	-1.6	NOT REPORTED	
60	41	-6.2	TITRATION, SILVER NITRATE	1, 2, 4
61	42	-3.9	COLORIMETRIC, FERRIC THIOCYANATE	1, 2, 3, 4
62	47	7.6	TITRATION, MERCURIC NITRATE	1, 2, 3, 4
63	43	-1.6	COLORIMETRIC, FERRIC THIOCYANATE	1, 2, 3, 4
64	44	0.7	TITRATION, MERCURIC NITRATE	1, 2, 3, 4
65	52	19.0	ION CHROMATOGRAPHY	2, 3, 4, 5
66	47	7.6	TITRATION, SILVER NITRATE	1, 2, 4
67	43	-1.6	TITRATION, SILVER NITRATE	1, 2, 4
68	46	5.3	TITRATION, SILVER NITRATE	1, 2, 4
69	42	-3.9	COLORIMETRIC, FERRIC THIOCYANATE	1, 2, 3, 4
70	43	-1.6	NOT REPORTED	1, 2, 3, 4
71	46	5.3	ION CHROMATOGRAPHY	2, 3, 4, 5
74	45	3.0	TITRATION, SILVER NITRATE	1, 2, 4
75	42	-3.9	TITRATION, MERCURIC NITRATE	1, 2, 3, 4
76	48	9.8	ION CHROMATOGRAPHY	2, 3, 4, 5
77	40	-8.5	COLORIMETRIC, FERRIC THIOCYANATE	1, 2, 3, 4
79	39	-10.8	TITRATION, MERCURIC NITRATE	1, 2, 3, 4
80	44	0.7	COLORIMETRIC, FERRIC THIOCYANATE	1, 2, 3, 4
81	43	-1.6	ION CHROMATOGRAPHY	2, 3, 4, 5
83	53	21.3	REJECT ION SELECTIVE ELECTRODE	1, 2, 3, 4
84	44	0.7	TITRATION, MERCURIC NITRATE	1, 2, 3, 4
85	48	9.8	TITRATION, SILVER NITRATE	1, 2, 3, 4
86	46	5.3	TITRATION, MERCURIC NITRATE	1, 2, 3, 4
87	44	0.7	TITRATION, MERCURIC NITRATE	1, 2, 3, 4
88	38	-13.0	TITRATION, MERCURIC NITRATE	1, 2, 3, 4
91	45	3.0	TITRATION, MERCURIC NITRATE	1, 2, 3, 4
93	60	37.3	REJECT TITRATION, SILVER NITRATE	1, 2, 4
94	46	5.3	TITRATION, MERCURIC NITRATE	1, 2, 3, 4
96	44	0.7	TITRATION, SILVER NITRATE	1, 2, 3, 4
98	43	-1.6	ION SELECTIVE ELECTRODE	1, 2, 3, 4
99	42	-3.9	TITRATION, SILVER NITRATE	1, 2, 4
102	41	-6.2	COLORIMETRIC, FERRIC THIOCYANATE	1, 2, 3, 4
103	45	3.0	COLORIMETRIC, FERRIC THIOCYANATE	1, 2, 3, 4

Table 12 Standard Reference Water Sample M102 Report for CL

Code Number	Reported value	Pct. dev. from mean	Methods	References
105	45	3.0	COLORIMETRIC, FERRIC THIOCYANATE	1,2,3,4
106	43	-1.6	COLORIMETRIC, FERRIC THIOCYANATE	1,2,3,4
107	43	-1.6	TITRATION, SILVER NITRATE	1,2,4
108	45	3.0	TITRATION, MERCURIC NITRATE	1,2,3,4
110	43	-1.6	TITRATION, SILVER NITRATE	1,2,4
111	44	0.7	TITRATION, SILVER NITRATE	1,2,4
112	43	-1.6	ION CHROMATOGRAPHY	2,3,4,5
113	41	-6.2	ION SELECTIVE ELECTRODE	1,2,3,4
116	42	-3.9	COLORIMETRIC, FERRIC THIOCYANATE	1,2,3,4
117	32	-26.8	REJECT	2,3,4,5
118	48	9.8	TITRATION, SILVER NITRATE	1,2,4
120	43	-1.6	ION SELECTIVE ELECTRODE	1,2,3,4
121	44	0.7	TITRATION, SILVER NITRATE	1,2,4
122	43	-1.6	TITRATION, MERCURIC NITRATE	1,2,3,4
124	43	-1.6	TITRATION, SILVER NITRATE	1,2,4
127	42	-3.9	COLORIMETRIC, FERRIC THIOCYANATE	1,2,3,4
128	42	-3.9	TITRATION, SILVER NITRATE	1,2,4
131	45	3.0	TITRATION, SILVER NITRATE	1,2,4
132	44	0.7	COLORIMETRIC, FERRIC THIOCYANATE	1,2,3,4
136	80	83.1	REJECT	1,2,3,4
137	45	3.0	TITRATION, SILVER NITRATE	1,2,4

101 Labs had a total range of 9 to 80 and a mean of 43.7  
 with a standard deviation of 2.5 and a 95% confidence interval of the mean +/- 0.5.

Table 12 Standard Reference Water Sample M102 Report for DSRD 180

Code Number	Reported value	Pct. dev. from mean	Methods	References
1	895	2.0	RESIDUE, FILTRABLE	1, 3
2	806	-8.2	RESIDUE, FILTRABLE	1, 3
3	880	0.3	RESIDUE, FILTRABLE	1, 3
5	886	1.0	RESIDUE ON EVAPORATION	2, 4
6	866	-1.3	RESIDUE ON EVAPORATION	2, 4
9	860	-2.0	RESIDUE, FILTRABLE	1, 3
10	894	1.9	RESIDUE, FILTRABLE	1, 3
11	880	0.3	RESIDUE, FILTRABLE	1, 3
14	887	1.1	RESIDUE, FILTRABLE	1, 3
15	907	3.4	RESIDUE ON EVAPORATION	2, 4
16	894	1.9	RESIDUE, FILTRABLE	1, 3
17	880	0.3	RESIDUE ON EVAPORATION	2, 4
22	886	1.0	RESIDUE ON EVAPORATION	2, 4
23	881	0.4	RESIDUE ON EVAPORATION	2, 4
25	867	-1.2	RESIDUE, FILTRABLE	1, 3
26	862	-1.8	RESIDUE ON EVAPORATION	2, 4
27	894	1.9	RESIDUE ON EVAPORATION	2, 4
29	826	-5.9	RESIDUE, FILTRABLE	1, 3
30	898	2.3	RESIDUE, FILTRABLE	1, 3
31	862	-1.8	RESIDUE, FILTRABLE	1, 3
32	874	-0.4	RESIDUE ON EVAPORATION	2, 4
33	879	0.2	NOT REPORTED	
34	889	1.3	RESIDUE ON EVAPORATION	2, 4
35	820	-6.6	RESIDUE, FILTRABLE	1, 3
36	865	-1.4	RESIDUE ON EVAPORATION	2, 4
40	900	2.6	RESIDUE ON EVAPORATION	2, 4
42	880	0.3	RESIDUE, FILTRABLE	1, 3
44	894	1.9	RESIDUE, FILTRABLE	1, 3
46	838	-4.5	RESIDUE, FILTRABLE	1, 3
48	831	-5.3	RESIDUE ON EVAPORATION	2, 4
49	843	-3.9	RESIDUE, FILTRABLE	1, 3
52	833	-5.1	RESIDUE ON EVAPORATION	2, 4
55	882	0.5	RESIDUE, FILTRABLE	1, 3
58	870	-0.9	RESIDUE, FILTRABLE	1, 3
59	934	6.4	NOT REPORTED	
60	877	-0.1	RESIDUE, FILTRABLE	
61	878	0.1	RESIDUE, FILTRABLE	1, 3
62	850	-3.1	RESIDUE ON EVAPORATION	2, 4
64	878	0.1	RESIDUE, FILTRABLE	1, 3
66	927	5.6	RESIDUE, FILTRABLE	1, 3
68	928	5.8	RESIDUE ON EVAPORATION	2, 4
69	918	4.6	RESIDUE, FILTRABLE	1, 3
74	892	1.6	RESIDUE ON EVAPORATION	2, 4
75	854	-2.7	RESIDUE, FILTRABLE	1, 3
76	890	1.4	RESIDUE ON EVAPORATION	2, 4
77	866	-1.3	RESIDUE, FILTRABLE	1, 3
78	842	-4.0	RESIDUE, FILTRABLE	1, 3
81	840	-4.3	RESIDUE, FILTRABLE	1, 3
83	888	1.2	RESIDUE, FILTRABLE	1, 3
86	881	0.4	RESIDUE ON EVAPORATION	2, 4
87	864	-1.5	NOT REPORTED	
88	893	1.8	RESIDUE ON EVAPORATION	2, 4
91	881	0.4	RESIDUE ON EVAPORATION	2, 4
94	892	1.6	RESIDUE ON EVAPORATION	2, 4
98	868	-1.1	RESIDUE, FILTRABLE	1, 3
99	895	2.0	RESIDUE ON EVAPORATION	2, 4
100	924	5.3	RESIDUE ON EVAPORATION	2, 4
107	862	-1.8	RESIDUE ON EVAPORATION	2, 4
108	855	-2.6	RESIDUE, FILTRABLE	1, 3
110	887	1.1	RESIDUE, FILTRABLE	1, 3
111	875	-0.3	RESIDUE, FILTRABLE	1, 3
113	890	1.4	RESIDUE ON EVAPORATION	2, 4
116	866	-1.3	RESIDUE, FILTRABLE	1, 3
117	914	4.2	RESIDUE ON EVAPORATION	2, 4
118	927	5.6	RESIDUE ON EVAPORATION	2, 4
121	816	-7.0	RESIDUE ON EVAPORATION	2, 4
124	899	2.4	RESIDUE, FILTRABLE	1, 3
127	885	0.9	RESIDUE ON EVAPORATION	2, 4
128	862	-1.8	RESIDUE, FILTRABLE	1, 3
131	906	3.2	RESIDUE, FILTRABLE	1, 3
132	891	1.5	RESIDUE, FILTRABLE	1, 3

71. Labs had a total range of 806 to 934 and a mean of 877.5  
 with a standard deviation of 27.0 and a 95% confidence interval of the mean +/- 6.4.

Table 12 Standard Reference Water Sample M102 Report for F

Code Number	Reported value	Pct. dev. from mean	Methods	References	
1	1.20	11.8	COLORIMETRIC, CEROUS ALIZARIN "COMPLEXONE"	3	
2	1.00	-6.9	ION CHROMATOGRAPHY	2,3,4	
3	1.05	-2.2	ION SELECTIVE ELECTRODE	1,2,3,4	
4	1.10	2.5	ION SELECTIVE ELECTRODE	1,2,3,4	
5	1.01	-5.9	ION CHROMATOGRAPHY	2,3,4	
8	1.00	-6.9	ION SELECTIVE ELECTRODE	1,2,3,4	
9	1.06	-1.3	ION SELECTIVE ELECTRODE	1,2,3,4	
12	1.69	57.4	REJECT	ION CHROMATOGRAPHY	2,3,4
15	30.80	2768.9	REJECT	ION SELECTIVE ELECTRODE	2,3,4
16	1.06	-1.3	ION CHROMATOGRAPHY	1,2,3,4	
17	0.93	-13.4	ION SELECTIVE ELECTRODE	1,2,3,4	
19	1.00	-6.9	NOT REPORTED		
21	0.94	-12.4	ION SELECTIVE ELECTRODE	1,2,3,4	
22	1.00	-6.9	ION SELECTIVE ELECTRODE	1,2,3,4	
25	1.01	-5.9	ION SELECTIVE ELECTRODE	1,2,3,4	
26	1.10	2.5	ION SELECTIVE ELECTRODE	1,2,3,4	
27	1.03	-4.1	ION CHROMATOGRAPHY	2,3,4	
29	1.09	1.5	ION CHROMATOGRAPHY	2,3,4	
30	1.07	-0.3	ION CHROMATOGRAPHY	2,3,4	
31	1.03	-4.1	ION SELECTIVE ELECTRODE	1,2,3,4	
32	1.40	30.4	ION SELECTIVE ELECTRODE	1,2,3,4	
33	1.30	21.1	ION CHROMATOGRAPHY	2,3,4	
35	1.00	-6.9	ION CHROMATOGRAPHY	2,3,4	
36	1.16	8.0	ION CHROMATOGRAPHY	2,3,4	
42	1.00	-6.9	ION SELECTIVE ELECTRODE	1,2,3,4	
44	1.20	11.8	ION CHROMATOGRAPHY	2,3,4	
46	1.05	-2.2	ION CHROMATOGRAPHY	2,3,4	
47	1.00	-6.9	ION CHROMATOGRAPHY	2,3,4	
48	1.21	12.7	COLORIMETRIC, LANTHANUM ALIZARIN "COMPLEXONE"	1	
49	1.22	13.6	ION CHROMATOGRAPHY	2,3,4	
52	1.02	-5.0	ION CHROMATOGRAPHY	2,3,4	
53	1.06	-1.3	ION SELECTIVE ELECTRODE	1,2,3,4	
57	1.30	21.1	ION CHROMATOGRAPHY	2,3,4	
58	1.40	30.4	ION CHROMATOGRAPHY	2,3,4	
60	0.80	-25.5	ION SELECTIVE ELECTRODE	1,2,3,4	
61	1.02	-5.0	ION SELECTIVE ELECTRODE	1,2,3,4	
62	0.99	-7.8	COLORIMETRIC, CEROUS ALIZARIN "COMPLEXONE"	3	
64	1.04	-3.1	ION SELECTIVE ELECTRODE	1,2,3,4	
66	0.89	-17.1	ION CHROMATOGRAPHY	2,3,4	
67	0.91	-15.2	ION SELECTIVE ELECTRODE	1,2,3,4	
68	1.04	-3.1	ION SELECTIVE ELECTRODE	1,2,3,4	
69	1.50	39.7	ION SELECTIVE ELECTRODE	1,2,3,4	
71	0.65	-39.5	ION CHROMATOGRAPHY	2,3,4	
74	1.32	23.0	ION CHROMATOGRAPHY	2,3,4	
76	1.16	8.0	ION SELECTIVE ELECTRODE	1,2,3,4	
78	1.02	-5.0	ION CHROMATOGRAPHY	2,3,4	
79	1.03	-4.1	ION CHROMATOGRAPHY	2,3,4	
81	1.10	2.5	COLORIMETRIC, CEROUS ALIZARIN "COMPLEXONE"	3	
83	1.03	-4.1	ION SELECTIVE ELECTRODE	1,2,3,4	
84	1.04	-3.1	ION SELECTIVE ELECTRODE	1,2,3,4	
85	1.09	1.5	ION CHROMATOGRAPHY	2,3,4	
87	1.03	-4.1	ION CHROMATOGRAPHY	2,3,4	
88	1.10	2.5	ION SELECTIVE ELECTRODE	1,2,3,4	
91	1.20	11.8	COLORIMETRIC, ZIRCONIUM ERIOCHROME	4	
94	1.07	-0.3	OTHER		
99	1.20	11.8	COLORIMETRIC, ZIRCONIUM ERIOCHROME	4	
104	1.04	-3.1	ION SELECTIVE ELECTRODE	1,2,3,4	
107	1.00	-6.9	OTHER		
108	1.13	5.3	ION CHROMATOGRAPHY	2,3,4	
110	1.04	-3.1	OTHER		
111	1.18	9.9	ION CHROMATOGRAPHY	2,3,4	
113	1.02	-5.0	ION CHROMATOGRAPHY	2,3,4	
116	1.00	-6.9	OTHER		
117	1.05	-2.2	ION CHROMATOGRAPHY	2,3,4	
121	1.34	24.8	ION CHROMATOGRAPHY	2,3,4	
124	1.05	-2.2	OTHER		
127	0.70	-34.8	ION CHROMATOGRAPHY	2,3,4	
132	1.08	0.6	OTHER		

68 Labs had a total range of 0.65 to 30.80 and a mean of 1.074 with a standard deviation of 0.144 and a 95% confidence interval of the mean +/- 0.036.

Table 12 Standard Reference Water Sample M102 Report for I

Code Number	Reported value	Pct. dev. from mean	Methods	References	
1	250	165.0	TITRIMETRIC, SODIUM THIOSULFATE	4	
7	30	-68.2	OTHER		
30	7000	7320.5	REJECT	COLORIMETRIC, LEUCO CRYSTAL VIOLET	1
127	3	-96.8		COLORIMETRIC, CERIC ARSENIOUS OXIDATION	2,4

4 Labs had a total range of 3 to 7000.  
INSUFFICIENT DATA TO DEFINE MEAN AND STANDARD DEVIATION.

Table 12 Standard Reference Water Sample M102 Report for K

Code Number	Reported value	Pct. dev. from mean	Methods	References
1	5.95	-15.3	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
3	6.20	-11.7	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
4	6.63	-5.6	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
5	6.26	-10.8	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
7	6.00	-14.5	X-RAY FLUORESCENCE	5
8	6.95	-1.0	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
9	6.94	-1.2	EMISSION, FLAME, PHOTOMETRIC	1, 2
12	7.40	5.4	OTHER	
14	6.60	-6.0	EMISSION, IC PLASMA	3, 5
15	6.83	-2.7	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
16	6.83	-2.7	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
17	7.60	8.2	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
20	7.16	2.0	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
21	6.80	-3.1	EMISSION, FLAME, PHOTOMETRIC	1, 2
22	8.20	16.8	EMISSION, IC PLASMA	3, 5
24	7.00	-0.3	EMISSION, IC PLASMA	3, 5
25	6.80	-3.1	EMISSION, IC PLASMA	3, 5
26	5.30	-24.5	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
27	7.00	-0.3	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
29	8.80	25.3	EMISSION, FLAME, PHOTOMETRIC	1, 2
30	6.60	-6.0	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
31	11.40	62.4	REJECT	
32	5.80	-17.4	EMISSION, IC PLASMA	3, 5
34	8.70	23.9	EMISSION, IC PLASMA	3, 5
35	5.40	-23.1	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
36	6.83	-2.7	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
37	8.97	27.8	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
38	7.84	11.7	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
39	6.28	-10.6	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
40	8.90	26.8	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
42	6.40	-8.8	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
43	7.00	-0.3	OTHER	
44	7.72	10.0	EMISSION, IC PLASMA	3, 5
46	6.80	-3.1	EMISSION, IC PLASMA	3, 5
47	8.00	13.9	EMISSION, IC PLASMA	3, 5
48	6.90	-1.7	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
49	7.12	1.4	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
50	4.74	-32.5	EMISSION, IC PLASMA	3, 5
51	7.10	1.1	EMISSION, IC PLASMA	3, 5
52	6.50	-7.4	EMISSION, FLAME, PHOTOMETRIC	1, 2
55	7.40	5.4	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
57	7.00	-0.3	EMISSION, IC PLASMA	3, 5
58	7.61	8.4	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
60	7.90	12.5	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
61	6.40	-8.8	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
62	6.90	-1.7	EMISSION, IC PLASMA	3, 5
63	6.90	-1.7	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
64	7.70	9.7	EMISSION, FLAME, PHOTOMETRIC	1, 2, 3, 4
65	12.00	70.9	REJECT	
66	9.00	28.2	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
67	7.15	1.8	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
68	7.00	-0.3	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
69	6.30	-10.3	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
70	6.70	-4.6	EMISSION, IC PLASMA	3, 5
74	8.29	18.1	EMISSION, FLAME, PHOTOMETRIC	1, 2
75	7.54	7.4	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
76	6.80	-3.1	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
77	6.11	-13.0	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
78	6.50	-7.4	EMISSION, FLAME, PHOTOMETRIC	1, 2
80	6.29	-10.4	EMISSION, IC PLASMA	3, 5
81	7.30	4.0	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
83	7.10	1.1	EMISSION, IC PLASMA	3, 5
84	7.40	5.4	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
85	6.84	-2.6	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
86	6.20	-11.7	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
87	6.75	-3.9	EMISSION, IC PLASMA	3, 5
88	6.75	-3.9	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
91	6.80	-3.1	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
94	7.50	6.8	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
96	6.52	-7.1	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
98	7.15	1.8	EMISSION, FLAME, PHOTOMETRIC	1, 2
99	6.80	-3.1	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
100	7.50	6.8	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
103	6.30	-10.3	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
105	6.10	-13.1	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
107	6.70	-4.6	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
108	6.70	-4.6	EMISSION, FLAME, PHOTOMETRIC	1, 2
110	6.76	-3.7	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
111	10.00	42.4	REJECT	
113	6.86	-2.3	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
116	7.20	2.6	ION SELECTIVE ELECTRODE	3, 5
117	8.50	21.1	EMISSION, IC PLASMA	
118	7.20	2.6	OTHER	
124	8.34	18.8	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
127	6.73	-4.1	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
128	6.56	-6.6	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
131	8.80	25.3	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
132	6.50	-7.4	EMISSION, IC PLASMA	3, 5
133	7.60	8.2	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4

89 Labs had a total range of 4.74 to 12.00 and a mean of 7.021 with a standard deviation of 0.819 and a 95% confidence interval of the mean +/- 0.176.

Table 12 Standard Reference Water Sample M102 Report for MG

Code Number	Reported value	Pct. dev. from mean	Methods	References	
1	62.0	6.4	EMISSION, IC PLASMA	3,4	
3	57.8	-0.8	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
4	57.5	-1.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
5	59.1	1.4	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
6	16.6	-71.5	REJECT	TITRATION, EDTA	2
7	62.0	6.4	X-RAY FLUORESCENCE	5	
8	57.5	-1.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
9	58.0	-0.5	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
11	58.0	-0.5	TITRATION, EDTA	2	
12	55.9	-4.1	OTHER		
14	58.0	-0.5	EMISSION, IC PLASMA	3,4	
15	59.6	2.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
16	59.7	2.5	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
17	58.0	-0.5	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
20	60.6	4.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
21	60.0	3.0	OTHER		
22	58.0	-0.5	EMISSION, IC PLASMA	3,4	
23	64.1	10.0	TITRATION, EDTA	2	
24	63.0	8.1	EMISSION, IC PLASMA	3,4	
25	57.6	-1.1	EMISSION, IC PLASMA	3,4	
26	54.0	-7.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
27	57.8	-0.8	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
29	57.0	-2.2	EMISSION, IC PLASMA	3,4	
30	62.7	7.6	EMISSION, IC PLASMA	3,4	
31	60.9	4.5	EMISSION, IC PLASMA	3,4	
32	55.9	-4.1	EMISSION, IC PLASMA	3,4	
34	55.6	-4.6	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
35	59.0	1.3	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1,5	
36	57.3	-1.7	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
37	57.5	-1.3	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1,5	
38	56.3	-3.4	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
39	58.7	0.7	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
40	57.4	-1.5	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
41	59.0	1.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
42	63.0	8.1	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
43	59.0	1.3	OTHER		
44	61.7	5.9	EMISSION, IC PLASMA	3,4	
46	57.2	-1.8	EMISSION, IC PLASMA	3,4	
47	61.0	4.7	EMISSION, IC PLASMA	3,4	
48	57.1	-2.0	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1,5	
49	59.7	2.5	EMISSION, IC PLASMA	3,4	
50	56.6	-2.9	EMISSION, IC PLASMA	3,4	
51	60.8	4.3	EMISSION, IC PLASMA	3,4	
52	56.3	-3.4	EMISSION, IC PLASMA	3,4	
55	59.3	1.8	EMISSION, IC PLASMA	3,4	
57	59.7	2.5	EMISSION, IC PLASMA	3,4	
58	60.4	3.7	EMISSION, IC PLASMA	3,4	
60	60.0	3.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
61	55.4	-4.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
62	54.5	-6.5	EMISSION, IC PLASMA	3,4	
63	57.0	-2.2	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
64	58.0	-0.5	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
65	56.0	-3.9	OTHER		
66	56.0	-3.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
67	55.7	-4.4	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
68	11.3	-80.6	REJECT	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
69	55.0	-5.6	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
70	62.0	6.4	EMISSION, IC PLASMA	3,4	
74	83.0	42.4	REJECT	TITRATION, EDTA	2
75	49.9	-14.4	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
76	60.0	3.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
77	52.8	-9.4	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
78	57.3	-1.7	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
80	56.0	-3.9	EMISSION, IC PLASMA	3,4	
81	66.0	13.3	EMISSION, IC PLASMA	3,4	
83	61.0	4.7	EMISSION, IC PLASMA	3,4	
84	57.0	-2.2	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
86	69.0	18.4	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
87	59.3	1.8	EMISSION, IC PLASMA	3,4	
88	116.0	99.1	REJECT	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
91	56.0	-3.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
93	59.0	1.3	TITRATION, EDTA	2	
94	60.0	3.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
96	56.0	-3.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
98	57.3	-1.7	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
99	56.0	-3.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
100	61.9	6.2	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
101	48.0	-17.6	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
103	59.0	1.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
105	56.0	-3.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
107	58.0	-0.5	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
108	54.0	-7.3	TITRATION, EDTA	2	
110	57.7	-1.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
111	52.0	-10.8	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
112	84.7	45.4	REJECT	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
113	59.8	2.6	EMISSION, DC PLASMA	5	
116	60.0	3.0	EMISSION, IC PLASMA	3,4	
117	65.3	12.1	TITRATION, EDTA	2	
118	61.0	4.7	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
124	50.1	-14.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
127	59.8	2.6	EMISSION, IC PLASMA	3,4	
128	51.3	-12.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	
132	60.6	4.0	EMISSION, IC PLASMA	3,4	
133	62.0	6.4	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4	

<sup>94</sup> Labs had a total range of 11.3 to 116.0 and a mean of 58.27 with a standard deviation of 3.38 and a 95% confidence interval of the mean +/- 0.71.

Table 12 Standard Reference Water Sample M102 Report for NA

Code Number	Reported value	Pct. dev. from mean	Methods	References
1	110.0	2.3	EMISSION, IC PLASMA	3, 4
3	107.0	-0.5	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
4	101.0	-6.1	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
5	108.5	0.9	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
7	83.0	-22.8	REJECT	X-RAY FLUORESCENCE
8	104.7	-2.6	ATOMIC ABSORPTION, DIRECT, AIR	5
9	110.0	2.3	EMISSION, FLAME	1, 2, 3, 4
12	102.0	-5.1	OTHER	1, 2
14	107.0	-0.5	EMISSION, IC PLASMA	3, 4
15	109.0	1.4	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
16	103.0	-4.2	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
17	107.0	-0.5	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
20	97.5	-9.3	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
21	107.0	-0.5	OTHER	1, 2, 3, 4
22	120.0	11.6	EMISSION, IC PLASMA	3, 4
24	109.0	1.4	EMISSION, IC PLASMA	3, 4
25	111.8	4.0	EMISSION, IC PLASMA	3, 4
26	102.0	-5.1	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
27	105.5	-1.9	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
29	110.0	2.3	EMISSION, IC PLASMA	3, 4
30	114.0	6.0	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
31	113.0	5.1	EMISSION, IC PLASMA	3, 4
32	101.0	-6.1	EMISSION, IC PLASMA	3, 4
34	101.0	-6.1	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
35	97.0	-9.8	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
36	109.0	1.4	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
37	120.9	12.4	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
38	108.4	0.8	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
39	107.0	-0.5	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
40	113.0	5.1	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
41	106.0	-1.4	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
42	107.0	-0.5	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
43	115.0	6.9	OTHER	1, 2, 3, 4
44	104.0	-3.3	EMISSION, IC PLASMA	3, 4
46	101.5	-5.6	EMISSION, IC PLASMA	3, 4
47	111.0	3.2	EMISSION, IC PLASMA	3, 4
48	101.0	-6.1	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
49	105.0	-2.4	EMISSION, IC PLASMA	3, 4
50	111.5	3.7	EMISSION, IC PLASMA	3, 4
51	118.0	9.7	EMISSION, IC PLASMA	3, 4
52	102.7	-4.5	EMISSION, IC PLASMA	3, 4
55	111.0	3.2	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
57	112.0	4.2	EMISSION, IC PLASMA	3, 4
58	109.0	1.4	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
60	111.0	3.2	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
61	105.0	-2.4	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
62	108.0	0.4	EMISSION, IC PLASMA	3, 4
63	110.0	2.3	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
64	101.0	-6.1	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
65	132.0	22.8	REJECT	OTHER
66	105.0	-2.4	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
67	106.8	-0.7	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
68	19.3	-82.1	REJECT	ATOMIC ABSORPTION, DIRECT, AIR
69	106.0	-1.4	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
70	107.0	-0.5	EMISSION, IC PLASMA	3, 4
74	109.0	1.4	EMISSION, FLAME	1, 2
75	106.0	-1.4	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
76	109.0	1.4	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
77	107.0	-0.5	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
78	110.0	2.3	EMISSION, FLAME	1, 2
80	108.0	0.4	EMISSION, IC PLASMA	3, 4
81	112.0	4.2	EMISSION, IC PLASMA	3, 4
83	112.0	4.2	EMISSION, IC PLASMA	3, 4
84	102.0	-5.1	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
85	112.0	4.2	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
86	104.0	-3.3	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
87	119.0	10.7	EMISSION, IC PLASMA	3, 4
88	110.0	2.3	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
91	110.0	2.3	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
93	85.0	-21.0	REJECT	ATOMIC ABSORPTION, DIRECT, AIR
94	100.0	-7.0	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
96	105.0	-2.4	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
98	110.0	2.3	EMISSION, IC PLASMA	3, 4
99	115.0	6.9	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
100	107.0	-0.5	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
103	104.4	-2.9	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
105	100.0	-7.0	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
107	100.0	-7.0	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
108	106.0	-1.4	EMISSION, FLAME	1, 2
110	108.9	1.3	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
111	107.0	-0.5	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
113	109.0	1.4	EMISSION, DC PLASMA	5
116	110.0	2.3	EMISSION, IC PLASMA	3, 4
117	104.5	-2.8	OTHER	1, 2, 3, 4
118	105.3	-2.1	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
120	108.0	0.4	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
124	107.0	-0.5	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
127	105.9	-1.5	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
128	104.8	-2.5	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
131	112.0	4.2	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4
132	112.0	4.2	EMISSION, FLAME	1, 2
133	100.0	-7.0	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 3, 4

92 Labs had a total range of 19.3 to 132.0 and a mean of 107.5  
 with a standard deviation of 4.78 and a 95% confidence interval of the mean +/- 1.01.

Table 12 Standard Reference Water Sample M102 Report for P, TOTAL

Code Number	Reported value	Pct. dev. from mean	Methods	References	
1	0.45	-1.7	COLORIMETRIC, BLK DIG, H <sub>2</sub> SO <sub>4</sub> , K&HG2SO <sub>4</sub> , PHOSPHOMOLYBDATE	4	
3	0.44	-3.9	COLORIMETRIC, H <sub>2</sub> SO <sub>4</sub> /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1, 2, 3, 4	
4	0.47	2.6	COLORIMETRIC, H <sub>2</sub> SO <sub>4</sub> /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1, 2, 3, 4	
5	0.41	-10.5	COLORIMETRIC, H <sub>2</sub> SO <sub>4</sub> /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1, 2, 3, 4	
13	0.44	-3.9	COLORIMETRIC, BLK DIG, H <sub>2</sub> SO <sub>4</sub> , K&HG2SO <sub>4</sub> , PHOSPHOMOLYBDATE	4	
14	0.51	11.4	COLORIMETRIC, H <sub>2</sub> SO <sub>4</sub> /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1, 2, 3, 4	
15	0.43	-6.1	COLORIMETRIC, H <sub>2</sub> SO <sub>4</sub> /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1, 2, 3, 4	
16	0.46	0.4	COLORIMETRIC, H <sub>2</sub> SO <sub>4</sub> /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1, 2, 3, 4	
17	0.46	0.4	COLORIMETRIC, H <sub>2</sub> SO <sub>4</sub> /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1, 2, 3, 4	
19	0.45	-1.7	NOT REPORTED	1, 2, 3, 4	
23	0.48	4.8	COLORIMETRIC, H <sub>2</sub> SO <sub>4</sub> /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1, 2, 3, 4	
24	0.55	20.1	EMISSION, IC PLASMA	5	
25	0.45	-1.7	COLORIMETRIC, H <sub>2</sub> SO <sub>4</sub> /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1, 2, 3, 4	
26	0.44	-3.9	COLORIMETRIC, H <sub>2</sub> SO <sub>4</sub> /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1, 2, 3, 4	
29	0.48	4.8	COLORIMETRIC, BLK DIG, H <sub>2</sub> SO <sub>4</sub> , K&HG2SO <sub>4</sub> , PHOSPHOMOLYBDATE	4	
30	0.45	-1.7	COLORIMETRIC, H <sub>2</sub> SO <sub>4</sub> /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1, 2, 3, 4	
34	0.14	-69.4	REJECT	COLORIMETRIC, H <sub>2</sub> SO <sub>4</sub> /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1, 2, 3, 4
35	0.46	0.4	COLORIMETRIC, BLK DIG, H <sub>2</sub> SO <sub>4</sub> , K&HG2SO <sub>4</sub> , PHOSPHOMOLYBDATE	4	
36	0.47	2.6	COLORIMETRIC, H <sub>2</sub> SO <sub>4</sub> /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1, 2, 3, 4	
38	0.43	-6.1	COLORIMETRIC, H <sub>2</sub> SO <sub>4</sub> /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1, 2, 3, 4	
39	0.45	-1.7	COLORIMETRIC, H <sub>2</sub> SO <sub>4</sub> /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1, 2, 3, 4	
41	0.43	-6.1	COLORIMETRIC, H <sub>2</sub> SO <sub>4</sub> /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1, 2, 3, 4	
44	0.41	-10.5	COLORIMETRIC, H <sub>2</sub> SO <sub>4</sub> /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1, 2, 3, 4	
45	0.47	2.6	COLORIMETRIC, H <sub>2</sub> SO <sub>4</sub> /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1, 2, 3, 4	
46	0.46	0.4	COLORIMETRIC, H <sub>2</sub> SO <sub>4</sub> /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1, 2, 3, 4	
48	0.31	-32.3	COLORIMETRIC, H <sub>2</sub> SO <sub>4</sub> /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1, 2, 3, 4	
49	0.46	0.4	COLORIMETRIC, H <sub>2</sub> SO <sub>4</sub> /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1, 2, 3, 4	
50	0.40	-12.7	EMISSION, IC PLASMA	5	
51	0.60	31.0	EMISSION, IC PLASMA	5	
52	0.47	2.6	COLORIMETRIC, H <sub>2</sub> SO <sub>4</sub> /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1, 2, 3, 4	
55	0.44	-3.9	EMISSION, IC PLASMA	5	
58	0.40	-12.7	COLORIMETRIC, H <sub>2</sub> SO <sub>4</sub> /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1, 2, 3, 4	
60	0.49	7.0	COLORIMETRIC, H <sub>2</sub> SO <sub>4</sub> /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1, 2, 3, 4	
61	0.48	4.8	COLORIMETRIC, BLK DIG, H <sub>2</sub> SO <sub>4</sub> , K&HG2SO <sub>4</sub> , PHOSPHOMOLYBDATE	4	
62	0.46	0.4	COLORIMETRIC, H <sub>2</sub> SO <sub>4</sub> /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1, 2, 3, 4	
64	0.44	-3.9	COLORIMETRIC, H <sub>2</sub> SO <sub>4</sub> /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1, 2, 3, 4	
66	0.43	-6.1	COLORIMETRIC, H <sub>2</sub> SO <sub>4</sub> /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1, 2, 3, 4	
69	0.44	-3.9	COLORIMETRIC, H <sub>2</sub> SO <sub>4</sub> /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1, 2, 3, 4	
70	0.61	33.2	EMISSION, IC PLASMA	5	
74	0.97	111.8	REJECT	COLORIMETRIC, BLK DIG, H <sub>2</sub> SO <sub>4</sub> , K&HG2SO <sub>4</sub> , PHOSPHOMOLYBDATE	4
75	0.43	-6.1	COLORIMETRIC, BLK DIG, H <sub>2</sub> SO <sub>4</sub> , K&HG2SO <sub>4</sub> , PHOSPHOMOLYBDATE	4	
77	0.46	0.4	COLORIMETRIC, H <sub>2</sub> SO <sub>4</sub> /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1, 2, 3, 4	
78	0.45	-1.7	COLORIMETRIC, H <sub>2</sub> SO <sub>4</sub> /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1, 2, 3, 4	
80	0.42	-8.3	COLORIMETRIC, H <sub>2</sub> SO <sub>4</sub> /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1, 2, 3, 4	
81	0.44	-3.9	COLORIMETRIC, H <sub>2</sub> SO <sub>4</sub> /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1, 2, 3, 4	
83	0.50	9.2	COLORIMETRIC, BLK DIG, H <sub>2</sub> SO <sub>4</sub> , K&HG2SO <sub>4</sub> , PHOSPHOMOLYBDATE	4	
84	0.45	-1.7	COLORIMETRIC, H <sub>2</sub> SO <sub>4</sub> /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1, 2, 3, 4	
85	0.53	15.7	COLORIMETRIC, H <sub>2</sub> SO <sub>4</sub> /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1, 2, 3, 4	
86	0.49	7.0	COLORIMETRIC, H <sub>2</sub> SO <sub>4</sub> /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1, 2, 3, 4	
87	0.46	0.4	COLORIMETRIC, H <sub>2</sub> SO <sub>4</sub> /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1, 2, 3, 4	
91	0.46	0.4	COLORIMETRIC, H <sub>2</sub> SO <sub>4</sub> /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1, 2, 3, 4	
94	0.40	-12.7	COLORIMETRIC, H <sub>2</sub> SO <sub>4</sub> /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1, 2, 3, 4	
98	0.46	0.4	COLORIMETRIC, BLK DIG, H <sub>2</sub> SO <sub>4</sub> , K&HG2SO <sub>4</sub> , PHOSPHOMOLYBDATE	4	
100	0.42	-8.3	COLORIMETRIC, H <sub>2</sub> SO <sub>4</sub> /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1, 2, 3, 4	
101	0.42	-8.3	OTHER		
102	0.56	22.3	COLORIMETRIC, H <sub>2</sub> SO <sub>4</sub> /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1, 2, 3, 4	
103	0.45	-1.7	COLORIMETRIC, H <sub>2</sub> SO <sub>4</sub> /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1, 2, 3, 4	
104	0.60	31.0	COLORIMETRIC, BLK DIG, H <sub>2</sub> SO <sub>4</sub> , K&HG2SO <sub>4</sub> , PHOSPHOMOLYBDATE	4	
105	0.38	-17.0	COLORIMETRIC, H <sub>2</sub> SO <sub>4</sub> /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1, 2, 3, 4	
106	0.43	-6.1	COLORIMETRIC, H <sub>2</sub> SO <sub>4</sub> /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1, 2, 3, 4	
109	0.45	-1.7	COLORIMETRIC, H <sub>2</sub> SO <sub>4</sub> /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1, 2, 3, 4	
111	0.44	-3.9	COLORIMETRIC, H <sub>2</sub> SO <sub>4</sub> /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1, 2, 3, 4	
113	0.41	-10.5	EMISSION, DC PLASMA	5	
115	0.55	20.1	COLORIMETRIC, H <sub>2</sub> SO <sub>4</sub> /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1, 2, 3, 4	
116	0.44	-3.9	COLORIMETRIC, BLK DIG, H <sub>2</sub> SO <sub>4</sub> , K&HG2SO <sub>4</sub> , PHOSPHOMOLYBDATE	4	
117	0.42	-8.3	COLORIMETRIC, H <sub>2</sub> SO <sub>4</sub> /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1, 2, 3, 4	
120	1.38	201.3	REJECT	COLORIMETRIC, H <sub>2</sub> SO <sub>4</sub> /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1, 2, 3, 4
121	0.48	4.8	COLORIMETRIC, H <sub>2</sub> SO <sub>4</sub> /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1, 2, 3, 4	
124	0.45	-1.7	COLORIMETRIC, BLK DIG, H <sub>2</sub> SO <sub>4</sub> , K&HG2SO <sub>4</sub> , PHOSPHOMOLYBDATE	4	
127	0.48	4.8	COLORIMETRIC, BLK DIG, H <sub>2</sub> SO <sub>4</sub> , K&HG2SO <sub>4</sub> , PHOSPHOMOLYBDATE	4	
128	0.45	-1.7	OTHER		
132	0.41	-10.5	COLORIMETRIC, H <sub>2</sub> SO <sub>4</sub> /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1, 2, 3, 4	
137	0.49	7.0	COLORIMETRIC, H <sub>2</sub> SO <sub>4</sub> /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1, 2, 3, 4	

73. Labs had a total range of 0.14 to 1.38 and a mean of 0.458 with a standard deviation of 0.049 and a 95% confidence interval of the mean +/- 0.012.

Table 12 Standard Reference Water Sample M102 Report for PH

Code Number	Reported value	Pct. dev. from mean	Methods	References	
1	8.37	-0.5	ELECTROMETRIC	1,2,3,4	
2	8.50	1.1	ELECTROMETRIC	1,2,3,4	
3	8.51	1.2	ELECTROMETRIC	1,2,3,4	
4	8.50	1.1	ELECTROMETRIC	1,2,3,4	
5	8.52	1.3	ELECTROMETRIC	1,2,3,4	
6	8.40	-0.1	ELECTROMETRIC	1,2,3,4	
9	8.53	1.4	ELECTROMETRIC	1,2,3,4	
10	8.41	0.0	ELECTROMETRIC	1,2,3,4	
11	8.30	-1.3	ELECTROMETRIC	1,2,3,4	
13	8.42	0.1	ELECTROMETRIC	1,2,3,4	
14	7.80	-7.2	REJECT	ELECTROMETRIC	1,2,3,4
15	8.18	-2.7	ELECTROMETRIC	1,2,3,4	
16	8.55	1.7	ELECTROMETRIC	1,2,3,4	
17	8.30	-1.3	ELECTROMETRIC	1,2,3,4	
19	8.50	1.9	NOT REPORTED	1,2,3,4	
21	8.48	0.9	ELECTROMETRIC	1,2,3,4	
23	8.50	1.1	ELECTROMETRIC	1,2,3,4	
25	8.55	1.7	ELECTROMETRIC	1,2,3,4	
26	8.50	1.1	ELECTROMETRIC	1,2,3,4	
27	8.33	-0.9	ELECTROMETRIC	1,2,3,4	
29	8.27	-1.6	ELECTROMETRIC	1,2,3,4	
30	8.30	-1.3	ELECTROMETRIC	1,2,3,4	
31	8.50	1.1	ELECTROMETRIC	1,2,3,4	
32	8.33	-0.9	ELECTROMETRIC	1,2,3,4	
33	8.60	2.3	ELECTROMETRIC	1,2,3,4	
34	8.39	-0.2	ELECTROMETRIC	1,2,3,4	
35	8.48	0.9	ELECTROMETRIC	1,2,3,4	
36	8.48	0.9	ELECTROMETRIC	1,2,3,4	
37	8.13	-3.3	ELECTROMETRIC	1,2,3,4	
38	8.48	0.9	ELECTROMETRIC	1,2,3,4	
40	8.40	-0.1	ELECTROMETRIC	1,2,3,4	
41	8.31	-1.2	ELECTROMETRIC	1,2,3,4	
42	8.30	-1.3	ELECTROMETRIC	1,2,3,4	
44	8.50	1.1	ELECTROMETRIC	1,2,3,4	
45	8.48	0.9	ELECTROMETRIC	1,2,3,4	
46	8.35	-0.7	ELECTROMETRIC	1,2,3,4	
47	8.50	1.1	ELECTROMETRIC	1,2,3,4	
48	8.08	-3.9	ELECTROMETRIC	1,2,3,4	
49	8.50	1.1	ELECTROMETRIC	1,2,3,4	
52	8.63	2.6	ELECTROMETRIC	1,2,3,4	
53	8.48	0.9	ELECTROMETRIC	1,2,3,4	
55	8.23	-2.1	ELECTROMETRIC	1,2,3,4	
57	8.43	0.3	ELECTROMETRIC	1,2,3,4	
58	8.41	0.0	ELECTROMETRIC	1,2,3,4	
60	8.50	1.1	ELECTROMETRIC	1,2,3,4	
61	8.28	-1.5	ELECTROMETRIC	1,2,3,4	
62	8.30	-1.3	ELECTROMETRIC	1,2,3,4	
63	8.40	-0.1	ELECTROMETRIC	1,2,3,4	
64	8.27	-1.6	ELECTROMETRIC	1,2,3,4	
65	8.45	0.5	ELECTROMETRIC	1,2,3,4	
66	8.20	-2.5	ELECTROMETRIC	1,2,3,4	
67	8.10	-3.7	ELECTROMETRIC	1,2,3,4	
68	8.44	0.4	ELECTROMETRIC	1,2,3,4	
69	8.39	-0.2	ELECTROMETRIC	1,2,3,4	
70	8.50	1.1	ELECTROMETRIC	1,2,3,4	
71	8.50	1.1	ELECTROMETRIC	1,2,3,4	
74	8.53	1.4	ELECTROMETRIC	1,2,3,4	
75	8.00	-4.9	ELECTROMETRIC	1,2,3,4	
76	8.49	1.0	ELECTROMETRIC	1,2,3,4	
77	8.00	-4.9	ELECTROMETRIC	1,2,3,4	
78	8.44	0.4	ELECTROMETRIC	1,2,3,4	
79	8.30	-1.3	ELECTROMETRIC	1,2,3,4	
80	8.32	-1.1	ELECTROMETRIC	1,2,3,4	
81	8.60	2.3	ELECTROMETRIC	1,2,3,4	
83	8.45	0.5	ELECTROMETRIC	1,2,3,4	
86	8.35	-0.7	ELECTROMETRIC	1,2,3,4	
87	8.45	0.5	ELECTROMETRIC	1,2,3,4	
88	8.46	0.6	ELECTROMETRIC	1,2,3,4	
91	8.40	-0.1	ELECTROMETRIC	1,2,3,4	
93	7.80	-7.2	REJECT	ELECTROMETRIC	1,2,3,4

Table 12 Standard Reference Water Sample M102 Report for PH

Code Number	Reported value	Pct. dev. from mean	Methods	References
94	8.49	1.0	ELECTROMETRIC	1,2,3,4
96	8.57	1.9	ELECTROMETRIC	1,2,3,4
98	8.50	1.1	NOT REPORTED	
99	8.43	0.3	ELECTROMETRIC	1,2,3,4
100	8.40	-0.1	ELECTROMETRIC	1,2,3,4
103	8.44	0.4	ELECTROMETRIC	1,2,3,4
104	8.44	0.4	ELECTROMETRIC	1,2,3,4
105	8.45	0.5	ELECTROMETRIC	1,2,3,4
106	8.15	-3.1	ELECTROMETRIC	1,2,3,4
107	8.50	1.1	ELECTROMETRIC	1,2,3,4
108	8.20	-2.5	ELECTROMETRIC	1,2,3,4
110	8.65	2.9	ELECTROMETRIC	1,2,3,4
111	8.50	1.1	ELECTROMETRIC	1,2,3,4
112	8.48	0.9	ELECTROMETRIC	1,2,3,4
113	8.52	1.3	ELECTROMETRIC	1,2,3,4
115	8.54	1.6	ELECTROMETRIC	1,2,3,4
116	8.50	1.1	ELECTROMETRIC	1,2,3,4
117	8.35	-0.7	ELECTROMETRIC	1,2,3,4
118	8.84	5.1	ELECTROMETRIC	1,2,3,4
121	8.39	-0.2	ELECTROMETRIC	1,2,3,4
122	8.45	0.5	ELECTROMETRIC	1,2,3,4
123	8.47	0.7	ELECTROMETRIC	1,2,3,4
124	8.62	2.5	ELECTROMETRIC	1,2,3,4
127	8.42	0.1	ELECTROMETRIC	1,2,3,4
128	8.10	-3.7	ELECTROMETRIC	1,2,3,4
132	8.38	-0.3	ELECTROMETRIC	1,2,3,4
136	8.10	-3.7	ELECTROMETRIC	1,2,3,4
137	8.30	-1.3	ELECTROMETRIC	1,2,3,4

98 Labs had a total range of 7.80 to 8.84 and a mean of 8.408 with a standard deviation of 0.145 and a 95% confidence interval of the mean +/- 0.029.

Table 12 Standard Reference Water Sample M102 Report for PO4-P

Code Number	Reported value	Pct. dev. from mean	Methods	References
1	0.43	-1.4	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4
2	0.42	-3.7	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4
5	0.41	-6.0	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4
10	0.45	3.1	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4
12	0.47	7.7	ION CHROMATOGRAPHY	2, 3, 4
13	0.44	0.8	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4
14	0.43	-1.4	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4
15	0.43	-1.4	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4
16	0.43	-1.4	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4
17	0.44	0.8	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4
19	0.37	-15.2	NOT REPORTED	
23	0.48	10.0	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4
25	0.44	0.8	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4
26	0.24	-45.0	REJECT	
27	0.43	-1.4	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4
29	0.40	-8.3	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4
30	0.44	0.8	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4
33	0.39	-10.6	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4
34	0.46	5.4	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4
35	0.45	3.1	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4
36	0.45	3.1	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4
38	0.42	-3.7	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4
39	0.45	3.1	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4
44	0.46	5.4	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4
45	0.45	3.1	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4
48	0.31	-28.9	REJECT	
49	0.44	0.8	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4
52	0.44	0.8	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4
58	0.40	-8.3	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4
59	0.50	14.6	NOT REPORTED	1, 2, 3, 4
61	0.45	3.1	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4
63	0.44	0.8	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4
64	0.44	0.8	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4
66	0.40	-8.3	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4
67	0.42	-3.7	ION CHROMATOGRAPHY	2, 3, 4
68	0.46	5.4	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4
69	0.40	-8.3	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4
74	0.84	92.5	REJECT	
76	0.41	-6.0	ION CHROMATOGRAPHY	2, 3, 4
77	0.43	-1.4	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4
78	0.45	3.1	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4
79	0.43	-1.4	ION CHROMATOGRAPHY	2, 3, 4
81	0.46	5.4	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4
83	0.40	-8.3	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4
84	0.44	0.8	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4
85	0.44	0.8	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4
86	0.45	3.1	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4
87	0.46	5.4	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4
88	0.52	19.2	ION CHROMATOGRAPHY	2, 3, 4
91	0.45	3.1	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4
94	0.38	-12.9	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4
96	0.44	0.8	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4
98	0.44	0.8	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4
100	0.42	-3.7	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4
101	0.43	-1.4	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4
102	0.39	-10.6	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4
103	0.51	16.9	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4
104	0.43	-1.4	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4
105	0.29	-33.5	REJECT	
106	0.39	-10.6	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4
108	0.43	-1.4	OTHER	
109	0.43	-1.4	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4
111	0.43	-1.4	ION CHROMATOGRAPHY	2, 3, 4
116	0.45	3.1	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4
117	0.10	-77.1	REJECT	
120	0.45	3.1	ION CHROMATOGRAPHY	2, 3, 4
121	0.43	-1.4	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4
124	0.45	3.1	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4
127	0.42	-3.7	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4
128	0.45	3.1	OTHER	
132	0.42	-3.7	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4
137	0.47	7.7	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4

72 Labs had a total range of 0.10 to 0.84 and a mean of 0.436  
 with a standard deviation of 0.028 and a 95% confidence interval of the mean +/- 0.007.

Table 12 Standard Reference Water Sample M102 Report for SiO<sub>2</sub>

Code Number	Reported value	Pct. dev. from mean	Methods	References
1	7.3	3.8	EMISSION, IC PLASMA	5
2	7.0	-0.5	COLORIMETRIC, ASCORBIC ACID REDUCTION TO MOLYBDATE BLUE	4
4	6.4	-9.0	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	4
5	6.5	-7.6	EMISSION, IC PLASMA	5
7	3.6	-48.8	X-RAY FLUORESCENCE	5
16	6.9	-1.9	COLORIMETRIC, AMINO-NAPTHOL SULFONIC ACID REDUCE-HETEROPOLY BLUE	3
17	7.1	0.9	EMISSION, IC PLASMA	5
19	6.9	-1.9	NOT REPORTED	5
21	6.0	-14.7	COLORIMETRIC, AMINO-NAPTHOL SULFONIC ACID REDUCE-HETEROPOLY BLUE	3
22	7.0	-0.5	EMISSION, IC PLASMA	5
23	8.9	26.5	COLORIMETRIC, ASCORBIC ACID REDUCTION TO MOLYBDATE BLUE	4
24	8.8	25.1	EMISSION, IC PLASMA	5
25	7.0	-0.5	EMISSION, IC PLASMA	5
27	7.1	0.9	COLORIMETRIC, MOLYBDOSILICIC ACID	1, 2, 3
29	7.2	2.3	COLORIMETRIC, MOLYBDOSILICIC ACID	1, 2, 3
31	7.0	-0.5	EMISSION, IC PLASMA	5
32	7.7	9.5	EMISSION, IC PLASMA	5
34	7.0	-0.5	COLORIMETRIC, AMINO-NAPTHOL SULFONIC ACID REDUCE-HETEROPOLY BLUE	3
35	7.6	8.00	COLORIMETRIC, AMINO-NAPTHOL SULFONIC ACID REDUCE-HETEROPOLY BLUE	3
36	7.7	9.5	COLORIMETRIC, ASCORBIC ACID REDUCTION TO MOLYBDATE BLUE	4
37	9.0	27.9	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	4
38	5.1	-27.5	COLORIMETRIC, MOLYBDOSILICIC ACID	1, 2, 3
39	7.3	3.8	COLORIMETRIC, ASCORBIC ACID REDUCTION TO MOLYBDATE BLUE	4
42	6.1	-13.3	COLORIMETRIC, SODIUM SULFITE REDUCTION TO MOLYBDATE BLUE	4
44	6.9	-1.9	EMISSION, IC PLASMA	5
45	8.4	19.4	COLORIMETRIC, MOLYBDOSILICIC ACID	1, 2, 3
46	6.2	-11.9	COLORIMETRIC, ASCORBIC ACID REDUCTION TO MOLYBDATE BLUE	4
47	7.3	3.8	EMISSION, IC PLASMA	5
48	6.4	-9.0	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	4
49	7.1	0.9	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	4
50	7.1	0.9	EMISSION, IC PLASMA	5
52	6.6	-6.2	EMISSION, IC PLASMA	5
57	6.9	-1.9	EMISSION, IC PLASMA	5
58	7.4	5.2	EMISSION, IC PLASMA	5
60	8.0	13.7	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	4
61	2.3	-67.3	REJECT COLORIMETRIC, MOLYBDOSILICIC ACID	1, 2, 3
62	7.1	0.9	EMISSION, IC PLASMA	5
63	6.0	-14.7	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	4
64	7.3	3.8	COLORIMETRIC, AMINO-NAPTHOL SULFONIC ACID REDUCE-HETEROPOLY BLUE	3
68	6.5	-7.6	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	4
69	6.8	-3.3	COLORIMETRIC, MOLYBDOSILICIC ACID	1, 2, 3
74	8.1	15.1	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	4
76	6.6	-6.2	COLORIMETRIC, ASCORBIC ACID REDUCTION TO MOLYBDATE BLUE	4
77	7.6	8.00	COLORIMETRIC, MOLYBDOSILICIC ACID	1, 2, 3
78	6.8	-3.3	COLORIMETRIC, MOLYBDOSILICIC ACID	1, 2, 3
80	6.7	-4.8	COLORIMETRIC, ASCORBIC ACID REDUCTION TO MOLYBDATE BLUE	4
83	7.1	0.9	COLORIMETRIC, ASCORBIC ACID REDUCTION TO MOLYBDATE BLUE	4
85	3.7	-47.4	REJECT COLORIMETRIC, MOLYBDOSILICIC ACID	1, 2, 3
86	17.0	141.6	REJECT COLORIMETRIC, MOLYBDOSILICIC ACID	1, 2, 3
87	7.5	6.6	EMISSION, IC PLASMA	5
88	5.9	-16.1	COLORIMETRIC, MOLYBDOSILICIC ACID	1, 2, 3
91	6.9	-1.9	COLORIMETRIC, ASCORBIC ACID REDUCTION TO MOLYBDATE BLUE	4
94	8.4	19.4	COLORIMETRIC, AMINO-NAPTHOL SULFONIC ACID REDUCE-HETEROPOLY BLUE	3
99	6.4	-9.0	COLORIMETRIC, SODIUM SULFITE REDUCTION TO MOLYBDATE BLUE	4
100	5.8	-17.6	COLORIMETRIC, ASCORBIC ACID REDUCTION TO MOLYBDATE BLUE	4
101	7.0	-0.5	COLORIMETRIC, MOLYBDOSILICIC ACID	1, 2, 3
102	7.4	5.2	COLORIMETRIC, ASCORBIC ACID REDUCTION TO MOLYBDATE BLUE	4
103	6.5	-7.6	EMISSION, IC PLASMA	5
107	7.5	6.6	EMISSION, IC PLASMA	5
110	6.3	-10.4	COLORIMETRIC, AMINO-NAPTHOL SULFONIC ACID REDUCE-HETEROPOLY BLUE	3
116	6.7	-4.8	COLORIMETRIC, ASCORBIC ACID REDUCTION TO MOLYBDATE BLUE	4
117	10.0	42.1	REJECT COLORIMETRIC, AMINO-NAPTHOL SULFONIC ACID REDUCE-HETEROPOLY BLUE	3
121	6.9	-1.9	COLORIMETRIC, AMINO-NAPTHOL SULFONIC ACID REDUCE-HETEROPOLY BLUE	3
127	7.3	3.8	EMISSION, IC PLASMA	5
132	6.1	-13.3	EMISSION, IC PLASMA	5

65. Labs had a total range of 2.3 to 17.0 and a mean of 7.04 with a standard deviation of 0.75 and a 95% confidence interval of the mean +/- 0.19.

Table 12 Standard Reference Water Sample M102 Report for SO4

Code Number	Reported value	Pct. dev. from mean	Methods	References	
1	437	5.4	COLORIMETRIC, METHYL THYMOL BLUE	1, 3, 4	
2	435	5.0	TURBIDIMETRIC, BARIUM SULFATE	1, 2, 3	
3	412	-0.6	COLORIMETRIC, METHYL THYMOL BLUE	1, 3, 4	
4	330	-20.4	COLORIMETRIC, METHYL THYMOL BLUE	1, 3, 4	
5	419	1.1	GRAVIMETRIC, BARIUM SULFATE	1, 2, 3	
6	426	2.8	GRAVIMETRIC, BARIUM SULFATE	1, 2, 3	
7	480	15.8	X-RAY FLUORESCENCE	5	
8	419	1.1	TURBIDIMETRIC, BARIUM SULFATE	1, 2, 3	
9	417	0.6	TURBIDIMETRIC, BARIUM SULFATE	1, 2, 3	
10	405	-2.3	GRAVIMETRIC, BARIUM SULFATE	1, 2, 3	
11	410	-1.1	GRAVIMETRIC, BARIUM SULFATE	1, 2, 3	
12	411	-0.8	ION CHROMATOGRAPHY	2, 4, 5	
13	420	1.3	COLORIMETRIC, METHYL THYMOL BLUE	1, 3, 4	
14	412	-0.6	COLORIMETRIC, METHYL THYMOL BLUE	1, 3, 4	
15	440	6.2	ION CHROMATOGRAPHY	2, 4, 5	
16	414	-0.1	ION CHROMATOGRAPHY	2, 4, 5	
17	438	5.7	GRAVIMETRIC, BARIUM SULFATE	1, 2, 3	
19	430	3.8	NOT REPORTED		
21	438	5.7	ION CHROMATOGRAPHY	2, 4, 5	
22	410	-1.1	GRAVIMETRIC, BARIUM SULFATE	1, 2, 3	
25	420	1.3	TURBIDIMETRIC, BARIUM SULFATE	1, 2, 3	
26	422	1.8	ION CHROMATOGRAPHY	2, 4, 5	
27	420	1.3	TURBIDIMETRIC, BARIUM SULFATE	1, 2, 3	
29	390	-5.9	TURBIDIMETRIC, BARIUM SULFATE	1, 2, 3	
30	380	-8.3	TURBIDIMETRIC, BARIUM SULFATE	1, 2, 3	
31	416	0.4	ION CHROMATOGRAPHY	2, 4, 5	
32	409	-1.3	ION CHROMATOGRAPHY	2, 4, 5	
33	426	2.8	ION CHROMATOGRAPHY	2, 4, 5	
34	359	-13.4	ION CHROMATOGRAPHY	2, 4, 5	
35	430	3.8	TURBIDIMETRIC, BARIUM SULFATE	1, 2, 3	
36	410	-1.1	ION CHROMATOGRAPHY	2, 4, 5	
37	545	31.5	REJECT	1, 2, 3	
38	42	-89.9	REJECT	1, 2, 3	
40	410	-1.1	GRAVIMETRIC, BARIUM SULFATE	1, 3, 4	
41	425	2.6	COLORIMETRIC, METHYL THYMOL BLUE	1, 3, 4	
42	400	-3.5	COLORIMETRIC, METHYL THYMOL BLUE	1, 3, 4	
43	422	1.8	ION CHROMATOGRAPHY	2, 4, 5	
44	390	-5.9	TURBIDIMETRIC, BARIUM SULFATE	1, 2, 3	
46	415	0.1	COLORIMETRIC, METHYL THYMOL BLUE	1, 3, 4	
47	403	-2.8	COLORIMETRIC, METHYL THYMOL BLUE	1, 3, 4	
48	360	-13.1	COLORIMETRIC, METHYL THYMOL BLUE	1, 3, 4	
49	397	-4.2	ION CHROMATOGRAPHY	2, 4, 5	
52	416	0.4	ION CHROMATOGRAPHY	2, 4, 5	
55	385	-7.1	COLORIMETRIC, METHYL THYMOL BLUE	1, 3, 4	
57	416	0.4	ION CHROMATOGRAPHY	2, 4, 5	
58	442	6.7	TURBIDIMETRIC, BARIUM SULFATE	1, 2, 3	
59	411	-0.8	NOT REPORTED		
60	416	0.4	GRAVIMETRIC, BARIUM SULFATE	1, 2, 3	
61	425	2.6	COLORIMETRIC, METHYL THYMOL BLUE	1, 3, 4	
64	436	5.2	TURBIDIMETRIC, BARIUM SULFATE	1, 2, 3	
66	1017	145.4	REJECT	TURBIDIMETRIC, BARIUM SULFATE	1, 2, 3
67	383	-7.6	COLORIMETRIC, METHYL THYMOL BLUE	1, 2, 4	
68	400	-3.5	THORIN TITRATION	2, 4	
69	368	-11.2	COLORIMETRIC, METHYL THYMOL BLUE	1, 3, 4	
71	393	-5.2	ION CHROMATOGRAPHY	2, 4, 5	
74	418	0.9	ION CHROMATOGRAPHY	2, 4, 5	
76	384	-7.3	ION CHROMATOGRAPHY	2, 4, 5	
77	468	12.9	TURBIDIMETRIC, BARIUM SULFATE	1, 2, 3	
81	420	1.3	ION CHROMATOGRAPHY	2, 4, 5	
84	85	-79.5	REJECT	COLORIMETRIC, METHYL THYMOL BLUE	1, 3, 4
85	451	8.8	TURBIDIMETRIC, BARIUM SULFATE	1, 2, 3	
86	488	17.8	TURBIDIMETRIC, BARIUM SULFATE	1, 2, 3	
87	433	4.5	GRAVIMETRIC, BARIUM SULFATE	1, 2, 3	
88	436	5.2	GRAVIMETRIC, BARIUM SULFATE	1, 2, 3	
91	430	3.8	THORIN TITRATION	2, 4	
93	398	-4.0	NOT REPORTED		
94	360	-13.1	TURBIDIMETRIC, BARIUM SULFATE	1, 2, 3	
99	386	-6.9	THORIN TITRATION	2, 4	
101	329	-20.6	OTHER		
102	432	4.2	COLORIMETRIC, METHYL THYMOL BLUE	1, 3, 4	
103	420	1.3	ION CHROMATOGRAPHY	2, 4, 5	
105	390	-5.9	COLORIMETRIC, METHYL THYMOL BLUE	1, 3, 4	
107	420	1.3	GRAVIMETRIC, BARIUM SULFATE	1, 2, 3	
108	429	3.5	GRAVIMETRIC, BARIUM SULFATE	1, 2, 3	
110	493	19.0	TURBIDIMETRIC, BARIUM SULFATE	1, 2, 3	
111	425	2.6	TURBIDIMETRIC, BARIUM SULFATE	1, 2, 3	
112	415	0.1	ION CHROMATOGRAPHY	2, 4, 5	
113	432	4.2	GRAVIMETRIC, BARIUM SULFATE	1, 2, 3	
116	420	1.3	COLORIMETRIC, METHYL THYMOL BLUE	1, 3, 4	
117	414	-0.1	ION CHROMATOGRAPHY	2, 4, 5	
118	142	-65.7	REJECT	TURBIDIMETRIC, BARIUM SULFATE	1, 2, 3
121	418	0.9	TURBIDIMETRIC, BARIUM SULFATE	1, 2, 3	
124	82	-80.2	REJECT	TURBIDIMETRIC, BARIUM SULFATE	1, 2, 3
127	427	3.0	TURBIDIMETRIC, BARIUM SULFATE	1, 2, 3	
128	415	0.1	COLORIMETRIC, METHYL THYMOL BLUE	1, 3, 4	
131	408	-1.6	GRAVIMETRIC, BARIUM SULFATE	1, 2, 3	
132	412	-0.6	COLORIMETRIC, METHYL THYMOL BLUE	1, 3, 4	
137	414	-0.1	TURBIDIMETRIC, BARIUM SULFATE	1, 2, 3	

88 Labs had a total range of 42 to 1017 and a mean of 414.4 with a standard deviation of 27.6 and a 95% confidence interval of the mean +/- 6.1.

Table 12 Standard Reference Water Sample M102 Report for SP. COND.

Code Number	Reported value	Pct. dev. from mean	Methods	References
1	1190	-1.9	DIRECT READING INSTRUMENT	4
2	1170	-3.6	DIRECT READING INSTRUMENT	4
3	1240	2.2	DIRECT READING INSTRUMENT	4
4	1150	-5.2	DIRECT READING INSTRUMENT	4
5	1250	3.0	DIRECT READING INSTRUMENT	4
6	1230	1.4	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1, 2, 3, 4
8	1240	2.2	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1, 2, 3, 4
9	1250	3.0	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1, 2, 3, 4
10	1230	1.4	DIRECT READING INSTRUMENT	4
13	1250	3.0	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1, 2, 3, 4
14	1180	-2.8	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1, 2, 3, 4
15	1280	5.5	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1, 2, 3, 4
16	1220	0.5	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1, 2, 3, 4
17	1170	-3.6	DIRECT READING INSTRUMENT	4
19	1200	-1.1	NOT REPORTED	
21	1180	-2.8	DIRECT READING INSTRUMENT	4
23	1270	4.7	DIRECT READING INSTRUMENT	4
25	1240	2.2	DIRECT READING INSTRUMENT	4
26	1220	0.5	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1, 2, 3, 4
27	1210	-0.3	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1, 2, 3, 4
29	1190	-1.9	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1, 2, 3, 4
30	1250	3.0	OTHER	
31	1240	2.2	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1, 2, 3, 4
32	1130	-6.9	DIRECT READING INSTRUMENT	4
33	850	-30.0	REJECT	4
34	1290	6.3	DIRECT READING INSTRUMENT	4
35	1200	-1.1	OTHER	
36	1150	-5.2	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1, 2, 3, 4
37	1350	11.3	DIRECT READING INSTRUMENT	4
38	1220	0.5	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1, 2, 3, 4
40	1230	1.4	DIRECT READING INSTRUMENT	4
41	1250	3.0	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1, 2, 3, 4
42	1220	0.5	DIRECT READING INSTRUMENT	4
44	1000	-17.6	DIRECT READING INSTRUMENT	4
45	1270	4.7	DIRECT READING INSTRUMENT	4
46	1240	2.2	DIRECT READING INSTRUMENT	4
47	1250	3.0	DIRECT READING INSTRUMENT	4
48	1250	3.0	DIRECT READING INSTRUMENT	4
49	1240	2.2	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1, 2, 3, 4
53	1230	1.4	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1, 2, 3, 4
55	1210	-0.3	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1, 2, 3, 4
58	1210	-0.3	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1, 2, 3, 4
60	1000	-17.6	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1, 2, 3, 4
61	1200	-1.1	DIRECT READING INSTRUMENT	4
63	1430	17.8	DIRECT READING INSTRUMENT	4
64	1200	-1.1	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1, 2, 3, 4
65	1160	-4.4	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1, 2, 3, 4
66	1420	17.0	DIRECT READING INSTRUMENT	4
67	1120	-7.7	ELECTRODELESS, INDUCTIVE CELL-TYPE	2
68	1230	1.4	DIRECT READING INSTRUMENT	4
69	1190	-1.9	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1, 2, 3, 4
70	1270	4.7	DIRECT READING INSTRUMENT	4
74	1250	3.0	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1, 2, 3, 4
76	1230	1.4	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1, 2, 3, 4
77	980	-19.2	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1, 2, 3, 4
78	1260	3.8	DIRECT READING INSTRUMENT	4
79	980	-19.2	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1, 2, 3, 4
80	1250	3.0	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1, 2, 3, 4
81	1190	-1.9	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1, 2, 3, 4
85	1220	0.5	DIRECT READING INSTRUMENT	4
86	1240	2.2	ELECTRODELESS, INDUCTIVE CELL-TYPE	2
87	1250	3.0	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1, 2, 3, 4
88	1260	3.8	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1, 2, 3, 4
91	1230	1.4	DIRECT READING INSTRUMENT	4
93	1400	15.4	DIRECT READING INSTRUMENT	4
94	1260	3.8	DIRECT READING INSTRUMENT	4
96	1240	2.2	DIRECT READING INSTRUMENT	4
98	1220	0.5	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1, 2, 3, 4
99	1240	2.2	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1, 2, 3, 4
100	1210	-0.3	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1, 2, 3, 4
102	1240	2.2	DIRECT READING INSTRUMENT	4
103	1020	-15.9	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1, 2, 3, 4
105	1000	-17.6	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1, 2, 3, 4
106	1260	3.8	DIRECT READING INSTRUMENT	4
107	1200	-1.1	DIRECT READING INSTRUMENT	4
108	1190	-1.9	DIRECT READING INSTRUMENT	4
110	1210	-0.3	DIRECT READING INSTRUMENT	4
111	1200	-1.1	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1, 2, 3, 4
112	1220	0.5	DIRECT READING INSTRUMENT	4
113	1220	0.5	DIRECT READING INSTRUMENT	4
116	1300	7.1	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1, 2, 3, 4
117	1220	0.5	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1, 2, 3, 4
118	680	-44.0	REJECT	4
121	1350	11.3	DIRECT READING INSTRUMENT	4
124	1100	-9.3	DIRECT READING INSTRUMENT	4
127	1240	2.2	DIRECT READING INSTRUMENT	4
131	1130	-6.9	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1, 2, 3, 4
132	1250	3.0	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1, 2, 3, 4
136	1100	-9.3	DIRECT READING INSTRUMENT	4

89. Labs had a total range of 680 to 1430 and a mean of 1210 with a standard deviation of 82 and a 95% confidence interval of the mean +/- 17.

Table 12 Standard Reference Water Sample M102 Report for SR

Code Number	Reported value	Pct. dev. from mean	Methods	References	
1	1390	4.6	EMISSION, IC PLASMA	4	
7	1200	-9.7	X-RAY FLUORESCENCE	5	
16	1450	9.1	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 4	
17	1410	6.1	EMISSION, IC PLASMA	4	
24	1406	5.8	EMISSION, IC PLASMA	4	
26	1060	-20.2	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 4	
29	1210	-8.9	EMISSION, IC PLASMA	4	
30	1331	0.2	EMISSION, IC PLASMA	4	
31	1300	-2.2	EMISSION, IC PLASMA	4	
32	1280	-3.7	EMISSION, IC PLASMA	4	
36	3400	155.9	REJECT	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 4
37	1500	12.9	OTHER		
42	1400	5.4	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 4	
46	1313	-1.2	EMISSION, IC PLASMA	4	
47	1320	-0.7	EMISSION, IC PLASMA	4	
48	1350	1.6	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 4	
49	1230	-7.4	EMISSION, IC PLASMA	4	
50	1235	-7.1	EMISSION, IC PLASMA	4	
51	1400	5.4	EMISSION, IC PLASMA	4	
52	1250	-5.9	EMISSION, IC PLASMA	4	
55	1300	-2.2	EMISSION, IC PLASMA	4	
57	1369	3.0	EMISSION, IC PLASMA	4	
61	1560	17.4	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 4	
62	1440	8.4	EMISSION, IC PLASMA	4	
63	1300	-2.2	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 4	
80	1260	-5.2	EMISSION, IC PLASMA	4	
83	1400	5.4	EMISSION, IC PLASMA	4	
87	1510	13.6	EMISSION, IC PLASMA	4	
88	4400	231.2	REJECT	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 4
91	1200	-9.7	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 4	
117	1165	-12.3	ATOMIC ABSORPTION, DIRECT, AIR	1, 2, 4	
127	1340	0.9	EMISSION, IC PLASMA	4	
132	1310	-1.4	EMISSION, IC PLASMA	4	

33 Labs had a total range of 1060 to 4400 and a mean of 1330,  
with a standard deviation of 109.2 and a 95% confidence interval of the mean +/- 40.1.

Table 12 Standard Reference Water Sample M102 Report for V

Code Number	Reported value	Pct. dev. from mean	Methods	References	
1	9.0	-40.7	EMISSION, IC PLASMA	3, 4	
16	<100.0	IGNORED	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1, 3	
17	< 10.0	IGNORED	EMISSION, IC PLASMA	3, 4	
24	28.0	84.5	EMISSION, IC PLASMA	3, 4	
26	11.4	-24.9	ATOMIC ABSORPTION, FLAMELESS	3	
29	50.0	229.5	REJECT	EMISSION, IC PLASMA	3
30	<100.0	IGNORED	EMISSION, IC PLASMA	3, 4	
44	< 10.0	IGNORED	EMISSION, IC PLASMA	3, 4	
46	12.7	-16.3	EMISSION, IC PLASMA	3, 4	
47	13.0	-14.3	EMISSION, IC PLASMA	3, 4	
48	100.0	559.0	REJECT	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1, 3
49	18.0	18.6	EMISSION, IC PLASMA	3, 4	
50	< 10.0	IGNORED	EMISSION, IC PLASMA	3, 4	
51	13.0	-14.3	EMISSION, IC PLASMA	3, 4	
57	15.0	1.2	EMISSION, IC PLASMA	3, 4	
58	20.0	31.8	EMISSION, IC PLASMA	3, 4	
60	<200.0	IGNORED	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1, 3	
61	26.7	75.9	ATOMIC ABSORPTION, FLAMELESS	3	
62	21.0	38.4	EMISSION, IC PLASMA	3, 4	
80	12.0	-20.9	EMISSION, IC PLASMA	3, 4	
83	10.0	-34.1	EMISSION, IC PLASMA	3, 4	
87	55.0	262.4	REJECT	EMISSION, IC PLASMA	3, 4
117	8.0	-47.3	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1, 3	
127	11.0	-27.5	COLORIMETRIC, CATALYTIC OXIDATION	4	
132	14.0	-7.7	EMISSION, IC PLASMA	3, 4	

25 Labs had a total range of 8.0 to 200.0 and a mean of 15.18,  
with a standard deviation of 5.99 and a 95% confidence interval of the mean +/- 3.19.

Table 13 Standard Reference Water Sample N19 Report for NH<sub>3</sub>+ORC-N

Code Number	Reported value	Pct. dev. from mean	Methods	References	
1	2.46	42.2	COLORIMETRIC, DIGESTION, DISTILLATION, PHENATE	3,5	
5	2.31	33.5	DIGESTION, DISTILLATION, ION SELECTIVE ELECTRODE	1,2,3	
8	0.54	-68.8	COLORIMETRIC, DIGESTION, DISTILLATION, NESSLERIZATION	2,3,4	
14	2.00	15.6	COLORIMETRIC, BLOCK DIGESTION, SALICYLATE HYPOCHLORITE	3,4	
15	1.14	-34.1	COLORIMETRIC, BLOCK DIGESTION, SALICYLATE HYPOCHLORITE	3,4	
16	2.60	50.3	COLORIMETRIC, DIGESTION, DISTILLATION, PHENATE	3,5	
19	1.83	5.8	NOT REPORTED		
23	1.52	-12.1	OTHER		
25	1.98	14.5	DIGESTION, DISTILLATION, ION SELECTIVE ELECTRODE	1,2,3	
27	1.67	-3.5	COLORIMETRIC, BLOCK DIGESTION, SALICYLATE HYPOCHLORITE	3,4	
29	2.17	25.4	COLORIMETRIC, BLOCK DIGESTION, SALICYLATE HYPOCHLORITE	3,4	
30	1.43	-17.3	DIGESTION, DISTILLATION, TITRATION	2,3,4	
34	1.50	-13.3	DIGESTION, DISTILLATION, ION SELECTIVE ELECTRODE	1,2,3	
35	1.13	-34.7	OTHER		
36	1.78	2.9	COLORIMETRIC, BLOCK DIGESTION, SALICYLATE HYPOCHLORITE	3,4	
38	1.17	-32.4	OTHER		
44	2.20	27.2	COLORIMETRIC, DIGESTION, DISTILLATION, NESSLERIZATION	2,3,4	
49	2.00	15.6	COLORIMETRIC, BLOCK DIGESTION, SALICYLATE HYPOCHLORITE	3,4	
54	1.57	-9.2	COLORIMETRIC, BLOCK DIGESTION, SALICYLATE HYPOCHLORITE	3,4	
55	2.00	15.6	COLORIMETRIC, BLOCK DIGESTION, SALICYLATE HYPOCHLORITE	3,4	
60	1.00	-42.2	OTHER		
61	1.72	-0.6	COLORIMETRIC, BLOCK DIGESTION, SALICYLATE HYPOCHLORITE	3,4	
64	1.41	-18.5	COLORIMETRIC, BLOCK DIGESTION, SALICYLATE HYPOCHLORITE	3,4	
66	2.99	72.8	OTHER		
69	1.78	2.9	OTHER		
73	1.82	5.2	COLORIMETRIC, BLOCK DIGESTION, SALICYLATE HYPOCHLORITE	3,4	
74	0.46	-73.4	DIGESTION, DISTILLATION, ION SELECTIVE ELECTRODE	1,2,3	
75	2.00	15.6	COLORIMETRIC, BLOCK DIGESTION, SALICYLATE HYPOCHLORITE	3,4	
77	1.90	9.8	COLORIMETRIC, DIGESTION, DISTILLATION, PHENATE	3,5	
78	1.49	-13.9	COLORIMETRIC, DIGESTION, DISTILLATION, NESSLERIZATION	2,3,4	
80	1.73	0.0	COLORIMETRIC, BLOCK DIGESTION, SALICYLATE HYPOCHLORITE	3,4	
85	5.21	201.2	REJECT	COLORIMETRIC, DIGESTION, DISTILLATION, NESSLERIZATION	2,3,4
91	1.60	-7.5	COLORIMETRIC, BLOCK DIGESTION, SALICYLATE HYPOCHLORITE	3,4	
94	1.56	-9.8	COLORIMETRIC, DIGESTION, DISTILLATION, NESSLERIZATION	2,3,4	
98	1.74	0.6	COLORIMETRIC, BLOCK DIGESTION, SALICYLATE HYPOCHLORITE	3,4	
102	1.49	-13.9	OTHER		
104	2.34	35.3	DIGESTION, DISTILLATION, ION SELECTIVE ELECTRODE	1,2,3	
105	1.40	-19.1	COLORIMETRIC, BLOCK DIGESTION, SALICYLATE HYPOCHLORITE	3,4	
106	1.07	-38.2	COLORIMETRIC, BLOCK DIGESTION, SALICYLATE HYPOCHLORITE	3,4	
111	2.25	30.1	DIGESTION, DISTILLATION, TITRATION	2,3,4	
115	0.80	-53.8	DIGESTION, DISTILLATION, ION SELECTIVE ELECTRODE	1,2,3	
117	3.80	119.7	REJECT	COLORIMETRIC, DIGESTION, DISTILLATION, NESSLERIZATION	2,3,4
124	2.80	61.8	COLORIMETRIC, BLOCK DIGESTION, SALICYLATE HYPOCHLORITE	3,4	
127	1.60	-7.5	COLORIMETRIC, DIGESTION, DISTILLATION, INDOPHENOL	4	
132	1.60	-7.5	COLORIMETRIC, DIGESTION, DISTILLATION, PHENATE	3,5	
136	1.50	-13.3	COLORIMETRIC, BLOCK DIGESTION, SALICYLATE HYPOCHLORITE	3,4	
137	2.80	61.8	COLORIMETRIC, DIGESTION, DISTILLATION, NESSLERIZATION	2,3,4	

47 Labs had a total range of 0.46 to 5.21 and a mean of 1.730 with a standard deviation of 0.554 and a 95% confidence interval of the mean +/- 0.167.

Table 13 Standard Reference Water Sample N19 Report for NH<sub>3</sub>-N

Code Number	Reported value	Pct. dev. from mean	Methods	References	
1	0.08	-44.3	COLORIMETRIC, PHENATE	1, 2, 3, 5	
5	0.14	-2.4	ION SELECTIVE ELECTRODE	1, 2, 3, 4	
8	0.12	-16.4	ION SELECTIVE ELECTRODE	1, 2, 3, 4	
14	< 0.10		IGNORED		
15	0.13	-9.4	COLORIMETRIC, PHENATE	1, 2, 3, 5	
16	0.10	-30.3	COLORIMETRIC, INDOPHENOL	4	
23	0.11	-23.3	COLORIMETRIC, PHENATE	1, 2, 3, 5	
25	0.16	11.5	ION SELECTIVE ELECTRODE	1, 2, 3, 4	
26	1.80	1154.4	REJECT	1, 2, 3, 4	
27	0.11	-23.3	COLORIMETRIC, PHENATE	1, 2, 3, 5	
28	0.09	-37.3	OTHER	1, 2, 3, 5	
29	0.18	25.4	COLORIMETRIC, PHENATE	1, 4	
30	0.12	-16.4	COLORIMETRIC, DISTILLATION, NESSLERIZATION	1, 2, 3, 5	
33	0.04	-72.1	COLORIMETRIC, PHENATE	1, 2, 3, 4	
34	0.12	-16.4	ION SELECTIVE ELECTRODE	1, 2, 3, 4	
35	0.12	-16.4	COLORIMETRIC, PHENATE	1, 2, 3, 5	
36	0.12	-16.4	COLORIMETRIC, PHENATE	1, 2, 3, 5	
38	0.12	-16.4	COLORIMETRIC, PHENATE	1, 2, 3, 5	
41	0.18	25.4	COLORIMETRIC, PHENATE	1, 2, 3, 5	
44	0.20	39.4	COLORIMETRIC, DISTILLATION, NESSLERIZATION	1, 4	
45	0.10	-30.3	COLORIMETRIC, PHENATE	1, 2, 3, 5	
49	0.15	4.5	COLORIMETRIC, PHENATE	1, 2, 3, 5	
54	0.23	60.3	COLORIMETRIC, PHENATE	1, 2, 3, 5	
55	0.11	-23.3	COLORIMETRIC, PHENATE	1, 2, 3, 5	
58	0.14	-2.4	COLORIMETRIC, PHENATE	1, 2, 3, 5	
60	0.20	39.4	OTHER	1, 2, 3, 5	
61	0.11	-23.3	COLORIMETRIC, PHENATE	1, 2, 3, 5	
63	0.14	-2.4	COLORIMETRIC, PHENATE	1, 2, 3, 5	
64	0.11	-23.3	COLORIMETRIC, INDOPHENOL	4	
66	0.25	74.2	OTHER	1, 2, 3, 5	
67	0.03	-79.1	COLORIMETRIC, PHENATE	1, 2, 3, 5	
68	0.19	32.4	COLORIMETRIC, DISTILLATION, NESSLERIZATION	1, 2, 3, 5	
69	0.11	-23.3	COLORIMETRIC, PHENATE	1, 2, 3, 5	
73	0.11	-23.3	COLORIMETRIC, PHENATE	1, 2, 3, 5	
74	0.14	-2.4	ION SELECTIVE ELECTRODE	1, 2, 3, 4	
75	0.27	88.2	COLORIMETRIC, PHENATE	1, 2, 3, 5	
76	0.13	-9.4	ION SELECTIVE ELECTRODE	1, 2, 3, 4	
77	1.80	1154.4	REJECT	1, 2, 3, 4	
78	0.27	88.2	COLORIMETRIC, DISTILLATION, NESSLERIZATION	1, 2, 3, 4	
79	0.16	11.5	COLORIMETRIC, PHENATE	1, 2, 3, 5	
80	0.06	-58.2	COLORIMETRIC, PHENATE	1, 2, 3, 5	
81	0.04	-72.1	COLORIMETRIC, PHENATE	1, 2, 3, 5	
85	0.13	-9.4	COLORIMETRIC, DISTILLATION, NESSLERIZATION	1, 4	
86	0.40	178.7	REJECT		
87	0.11	-23.3	NOT REPORTED		
88	0.53	269.3	REJECT		
91	0.12	-16.4	COLORIMETRIC, DISTILLATION, NESSLERIZATION	1, 2, 3, 4	
94	0.48	234.5	REJECT		
98	< 1.00		IGNORED		
101	0.84	485.4	REJECT		
102	0.11	-23.3	COLORIMETRIC, PHENATE	1, 2, 3, 5	
104	0.25	74.2	ION SELECTIVE ELECTRODE	1, 2, 3, 4	
105	0.06	-58.2	COLORIMETRIC, INDOPHENOL	4	
109	0.16	11.5	ION SELECTIVE ELECTRODE		
110	0.67	366.9	REJECT		
111	0.16	11.5	COLORIMETRIC, DISTILLATION, NESSLERIZATION	1, 2, 3, 4	
113	0.12	-16.4	ION SELECTIVE ELECTRODE	1, 2, 3, 4	
115	0.17	18.5	ION SELECTIVE ELECTRODE	1, 2, 3, 4	
117	0.20	39.4	COLORIMETRIC, DISTILLATION, NESSLERIZATION	1, 2, 3, 4	
120	2.00	1293.7	REJECT	1, 4	
121	0.41	185.7	REJECT	COLORIMETRIC, PHENATE	1, 2, 3, 5
124	0.20	39.4	COLORIMETRIC, INDOPHENOL	4	
127	0.13	-9.4	COLORIMETRIC, INDOPHENOL	4	
132	0.13	-9.4	COLORIMETRIC, PHENATE	1, 2, 3, 5	
136	0.30	109.1	COLORIMETRIC, PHENATE	1, 2, 3, 5	
137	0.25	74.2	COLORIMETRIC, DISTILLATION, NESSLERIZATION	1, 4	

66. Labs had a total range of 0.03 to 2.00 and a mean of 0.144  
 with a standard deviation of 0.060 and a 95% confidence interval of the mean +/- 0.016.

Table 13 Standard Reference Water Sample N19 Report for NO2-N

Code Number	Reported value	Pct. dev. from mean	Methods	References
1	0.24	-6.4	COLORIMETRIC, DIAZOTIZATION	1,3,4
5	0.27	5.3	COLORIMETRIC, DIAZOTIZATION	1,3,4
8	0.25	-2.5	COLORIMETRIC, DIAZOTIZATION	1,3,4
10	0.30	17.0	COLORIMETRIC, DIAZOTIZATION	1,3,4
14	0.25	-2.5	COLORIMETRIC, DIAZOTIZATION	1,3,4
15	0.26	1.4	COLORIMETRIC, DIAZOTIZATION	1,3,4
16	0.26	1.4	COLORIMETRIC, DIAZOTIZATION	1,3,4
19	0.27	5.3	NOT REPORTED	1,3,4
23	0.26	1.4	COLORIMETRIC, DIAZOTIZATION	1,3,4
25	0.06	-76.6	REJECT COLORIMETRIC, DIAZOTIZATION	1,3,4
26	0.21	-18.1	COLORIMETRIC, DIAZOTIZATION	1,3,4
29	0.25	-2.5	COLORIMETRIC, DIAZOTIZATION	1,3,4
30	0.26	1.4	COLORIMETRIC, DIAZOTIZATION	1,3,4
35	0.26	1.4	COLORIMETRIC, DIAZOTIZATION	1,3,4
36	0.26	1.4	COLORIMETRIC, DIAZOTIZATION	1,3,4
38	0.22	-14.2	COLORIMETRIC, DIAZOTIZATION	1,3,4
44	0.82	219.8	REJECT OTHER	1,3,4
45	0.28	9.2	COLORIMETRIC, DIAZOTIZATION	1,3,4
49	0.25	-2.5	COLORIMETRIC, DIAZOTIZATION	1,3,4
52	3.20	1148.0	REJECT NOT REPORTED	1,3,4
54	0.25	-2.5	COLORIMETRIC, DIAZOTIZATION	1,3,4
55	0.26	1.4	COLORIMETRIC, DIAZOTIZATION	1,3,4
58	0.26	1.4	COLORIMETRIC, DIAZOTIZATION	1,3,4
61	0.28	9.2	COLORIMETRIC, DIAZOTIZATION	1,3,4
64	0.26	1.4	COLORIMETRIC, DIAZOTIZATION	1,3,4
66	0.33	28.7	REJECT COLORIMETRIC, DIAZOTIZATION	1,3,4
67	0.26	1.4	COLORIMETRIC, DIAZOTIZATION	1,3,4
69	0.25	-2.5	COLORIMETRIC, DIAZOTIZATION	1,3,4
74	0.25	-2.5	COLORIMETRIC, DIAZOTIZATION	1,3,4
75	0.26	1.4	COLORIMETRIC, DIAZOTIZATION	1,3,4
76	0.14	-45.4	REJECT COLORIMETRIC, DIAZOTIZATION	1,3,4
77	0.27	5.3	COLORIMETRIC, DIAZOTIZATION	1,3,4
78	0.25	-2.5	COLORIMETRIC, DIAZOTIZATION	1,3,4
81	0.25	-2.5	COLORIMETRIC, DIAZOTIZATION	1,3,4
84	< 0.10	IGNORED	COLORIMETRIC, DIAZOTIZATION	1,3,4
85	0.28	9.2	COLORIMETRIC, DIAZOTIZATION	1,3,4
86	0.33	28.7	REJECT NOT REPORTED	1,3,4
87	0.26	1.4	COLORIMETRIC, DIAZOTIZATION	1,3,4
88	0.24	-6.4	COLORIMETRIC, DIAZOTIZATION	1,3,4
91	0.25	-2.5	ION CHROMATOGRAPHY	2,3,4
94	0.25	-2.5	COLORIMETRIC, DIAZOTIZATION	1,3,4
96	0.26	1.4	COLORIMETRIC, DIAZOTIZATION	1,3,4
102	0.25	-2.5	COLORIMETRIC, DIAZOTIZATION	1,3,4
104	0.24	-6.4	COLORIMETRIC, DIAZOTIZATION	1,3,4
105	0.25	-2.5	COLORIMETRIC, DIAZOTIZATION	1,3,4
106	0.12	-53.2	REJECT COLORIMETRIC, DIAZOTIZATION	1,3,4
108	0.29	13.1	COLORIMETRIC, DIAZOTIZATION	1,3,4
109	0.58	126.2	REJECT COLORIMETRIC, DIAZOTIZATION	1,3,4
110	0.22	-14.2	COLORIMETRIC, DIAZOTIZATION	1,3,4
111	0.26	1.4	COLORIMETRIC, DIAZOTIZATION	1,3,4
115	3.05	1089.5	REJECT ION CHROMATOGRAPHY	2,3,4
117	0.26	1.4	COLORIMETRIC, DIAZOTIZATION	1,3,4
120	0.17	-33.7	REJECT COLORIMETRIC, DIAZOTIZATION	1,3,4
121	0.26	1.4	COLORIMETRIC, DIAZOTIZATION	1,3,4
124	0.29	13.1	ION CHROMATOGRAPHY	2,3,4
127	0.26	1.4	COLORIMETRIC, DIAZOTIZATION	1,3,4
128	0.25	-2.5	OTHER	1,3,4
137	0.23	-10.3	COLORIMETRIC, DIAZOTIZATION	1,3,4

58 Labs had a total range of 0.06 to 3.20 and a mean of 0.256 with a standard deviation of 0.017 and a 95% confidence interval of the mean +/- 0.005.

Table 13 Standard Reference Water Sample N19 Report for NO3-N

Code Number	Reported value	Pct. dev. from mean	Methods	References	
1	3.58	2.0	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1, 2, 3, 4	
5	3.26	-7.9	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1, 2, 3, 4	
8	3.68	4.9	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1, 2, 3, 4	
10	3.41	-2.8	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1, 2, 3, 4	
12	3.27	-6.8	ION CHROMATOGRAPHY	2, 3, 4, 5	
14	3.22	-8.2	COLORIMETRIC, HYDRAZINE REDUCTION, DIAZOTIZATION	3	
15	4.39	25.1	COLORIMETRIC, HYDRAZINE REDUCTION, DIAZOTIZATION	3	
16	3.23	-7.9	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1, 2, 3, 4	
19	3.60	2.6	NOT REPORTED		
22	3.60	2.6	OTHER		
23	3.30	-5.9	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1, 2, 3, 4	
25	3.71	5.7	COLORIMETRIC, BRUCINE	1, 2, 3, 4	
26	3.47	-1.1	ION CHROMATOGRAPHY	2, 3, 4, 5	
27	2.79	-20.5	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1, 2, 3, 4	
28	3.69	5.2	DEVARDA'S ALLOY REDUCTION, DIAZOTIZATION	1	
29	3.48	-0.8	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1, 2, 3, 4	
30	3.30	-5.9	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1, 2, 3, 4	
33	3.16	-9.9	COLORIMETRIC, BRUCINE	1, 2, 3, 4	
34	3.35	-4.5	ION CHROMATOGRAPHY	2, 3, 4, 5	
35	3.62	3.2	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1, 2, 3, 4	
36	3.21	-8.5	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1, 2, 3, 4	
38	3.63	3.5	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1, 2, 3, 4	
40	3.80	8.3	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1, 2, 3, 4	
41	3.96	12.9	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1, 2, 3, 4	
45	3.33	-5.1	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1, 2, 3, 4	
48	3.65	4.0	COLORIMETRIC, BRUCINE	1, 2, 3, 4	
49	3.40	-3.1	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1, 2, 3, 4	
54	3.27	-6.8	COLORIMETRIC, BRUCINE	1, 2, 3, 4	
55	3.51	0.0	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1, 2, 3, 4	
58	3.40	-3.1	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1, 2, 3, 4	
59	3.26	-7.1	NOT REPORTED		
60	3.80	8.3	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1, 2, 3, 4	
61	3.53	0.6	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1, 2, 3, 4	
64	3.24	-7.7	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1, 2, 3, 4	
66	3.36	-4.2	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1, 2, 3, 4	
67	3.29	-6.2	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1, 2, 3, 4	
68	3.73	6.3	OTHER		
69	4.00	14.0	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1, 2, 3, 4	
73	3.44	-2.0	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1, 2, 3, 4	
74	3.41	-2.8	COLORIMETRIC, BRUCINE	1, 2, 3, 4	
75	4.50	28.3	COLORIMETRIC, HYDRAZINE REDUCTION, DIAZOTIZATION	3	
76	3.43	-2.2	ION CHROMATOGRAPHY	2, 3, 4, 5	
77	3.23	-7.9	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1, 2, 3, 4	
78	3.53	0.6	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1, 2, 3, 4	
79	3.40	-3.1	ION CHROMATOGRAPHY	2, 3, 4, 5	
81	3.40	-3.1	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1, 2, 3, 4	
84	3.66	4.3	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1, 2, 3, 4	
85	3.56	1.5	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1, 2, 3, 4	
86	4.50	28.3	NOT REPORTED		
87	1.50	-57.2	REJECT	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1, 2, 3, 4
88	1.64	-53.3	REJECT	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1, 2, 3, 4
91	3.42	-2.5	COLORIMETRIC, BRUCINE	1, 2, 3, 4	
94	3.37	-3.9	COLORIMETRIC, BRUCINE	1, 2, 3, 4	
96	3.18	-9.4	COLORIMETRIC, BRUCINE	1, 2, 3, 4	
98	3.60	2.6	COLORIMETRIC, BRUCINE	1, 2, 3, 4	
101	3.54	0.9	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1, 2, 3, 4	
102	3.21	-8.5	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1, 2, 3, 4	
104	3.70	5.5	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1, 2, 3, 4	
105	3.75	6.9	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1, 2, 3, 4	
106	3.39	-3.4	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1, 2, 3, 4	
108	2.96	-15.6	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1, 2, 3, 4	
109	3.43	-2.2	OTHER		
110	3.18	-9.4	COLORIMETRIC, BRUCINE	1, 2, 3, 4	
111	3.84	9.4	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1, 2, 3, 4	
113	3.47	-1.1	COLORIMETRIC, BRUCINE	1, 2, 3, 4	
117	3.40	-3.1	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1, 2, 3, 4	
121	3.73	6.3	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1, 2, 3, 4	
124	4.46	27.1	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1, 2, 3, 4	
127	3.36	-4.2	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1, 2, 3, 4	
128	3.35	-4.5	OTHER		
132	3.42	-2.5	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1, 2, 3, 4	
133	6.40	82.4	REJECT	OTHER	
136	3.40	-3.1	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1, 2, 3, 4	
137	3.40	-3.1	OTHER		

74 Labs had a total range of 1.50 to 6.40 and a mean of 3.509  
with a standard deviation of 0.318 and a 95% confidence interval of the mean +/- 0.076.

Table 13 Standard Reference Water Sample N19 Report for P, TOTAL

Code Number	Reported value	Pct. dev. from mean	Methods	References	
1	1.89	0.9	COLORIMETRIC, BLK DIG, H <sub>2</sub> SO <sub>4</sub> , K&HG2SO <sub>4</sub> , PHOSPHOMOLYBDATE	4	
5	1.62	-13.5	COLORIMETRIC, H <sub>2</sub> SO <sub>4</sub> /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4	
10	1.92	2.5	COLORIMETRIC, H <sub>2</sub> SO <sub>4</sub> /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4	
13	1.90	1.5	OTHER		
14	1.76	-6.0	COLORIMETRIC, H <sub>2</sub> SO <sub>4</sub> /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4	
15	1.75	-6.5	COLORIMETRIC, H <sub>2</sub> SO <sub>4</sub> /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4	
16	1.80	-3.9	COLORIMETRIC, H <sub>2</sub> SO <sub>4</sub> /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4	
19	1.92	2.5	NOT REPORTED		
23	2.02	7.9	COLORIMETRIC, H <sub>2</sub> SO <sub>4</sub> /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4	
25	2.00	6.8	COLORIMETRIC, H <sub>2</sub> SO <sub>4</sub> /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4	
26	2.10	12.1	COLORIMETRIC, H <sub>2</sub> SO <sub>4</sub> /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4	
27	1.77	-5.5	COLORIMETRIC, H <sub>2</sub> SO <sub>4</sub> /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4	
29	1.94	3.6	COLORIMETRIC, BLK DIG, H <sub>2</sub> SO <sub>4</sub> , K&HG2SO <sub>4</sub> , PHOSPHOMOLYBDATE	4	
30	1.95	4.1	COLORIMETRIC, H <sub>2</sub> SO <sub>4</sub> /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4	
35	1.80	-3.9	COLORIMETRIC, BLK DIG, H <sub>2</sub> SO <sub>4</sub> , K&HG2SO <sub>4</sub> , PHOSPHOMOLYBDATE	4	
36	1.99	6.3	COLORIMETRIC, H <sub>2</sub> SO <sub>4</sub> /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4	
38	2.00	6.8	COLORIMETRIC, H <sub>2</sub> SO <sub>4</sub> /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4	
44	1.01	-46.1	REJECT	COLORIMETRIC, H <sub>2</sub> SO <sub>4</sub> /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
45	1.53	-18.3	COLORIMETRIC, H <sub>2</sub> SO <sub>4</sub> /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4	
48	1.91	2.0	COLORIMETRIC, H <sub>2</sub> SO <sub>4</sub> /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4	
49	2.00	6.8	COLORIMETRIC, H <sub>2</sub> SO <sub>4</sub> /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4	
52	1.95	4.1	COLORIMETRIC, H <sub>2</sub> SO <sub>4</sub> /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4	
54	1.85	-1.2	COLORIMETRIC, H <sub>2</sub> SO <sub>4</sub> /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4	
55	1.92	2.5	EMISSION, IC PLASMA	5	
58	1.80	-3.9	COLORIMETRIC, H <sub>2</sub> SO <sub>4</sub> /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4	
60	2.50	33.5	REJECT	COLORIMETRIC, H <sub>2</sub> SO <sub>4</sub> /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
61	2.20	17.5	COLORIMETRIC, BLK DIG, H <sub>2</sub> SO <sub>4</sub> , K&HG2SO <sub>4</sub> , PHOSPHOMOLYBDATE	4	
64	1.92	2.5	COLORIMETRIC, H <sub>2</sub> SO <sub>4</sub> /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4	
66	2.04	8.9	COLORIMETRIC, H <sub>2</sub> SO <sub>4</sub> /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4	
69	1.84	-1.7	COLORIMETRIC, H <sub>2</sub> SO <sub>4</sub> /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4	
70	2.11	12.7	EMISSION, IC PLASMA	5	
73	3.21	71.4	REJECT	COLORIMETRIC, BLK DIG, H <sub>2</sub> SO <sub>4</sub> , K&HG2SO <sub>4</sub> , PHOSPHOMOLYBDATE	4
74	0.97	-48.2	REJECT	COLORIMETRIC, BLK DIG, H <sub>2</sub> SO <sub>4</sub> , K&HG2SO <sub>4</sub> , PHOSPHOMOLYBDATE	4
75	1.60	-14.6	COLORIMETRIC, BLK DIG, H <sub>2</sub> SO <sub>4</sub> , K&HG2SO <sub>4</sub> , PHOSPHOMOLYBDATE	4	
77	1.90	1.5	COLORIMETRIC, H <sub>2</sub> SO <sub>4</sub> /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4	
78	1.81	-3.3	COLORIMETRIC, H <sub>2</sub> SO <sub>4</sub> /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4	
80	1.92	2.5	COLORIMETRIC, H <sub>2</sub> SO <sub>4</sub> /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4	
81	1.90	1.5	COLORIMETRIC, H <sub>2</sub> SO <sub>4</sub> /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4	
84	1.85	-1.2	COLORIMETRIC, H <sub>2</sub> SO <sub>4</sub> /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4	
85	0.91	-51.4	REJECT	COLORIMETRIC, H <sub>2</sub> SO <sub>4</sub> /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
86	2.10	12.1	NOT REPORTED		
87	1.68	-10.3	COLORIMETRIC, H <sub>2</sub> SO <sub>4</sub> /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4	
91	1.75	-6.5	COLORIMETRIC, H <sub>2</sub> SO <sub>4</sub> /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4	
94	1.75	-6.5	COLORIMETRIC, H <sub>2</sub> SO <sub>4</sub> /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4	
98	1.90	1.5	COLORIMETRIC, BLK DIG, H <sub>2</sub> SO <sub>4</sub> , K&HG2SO <sub>4</sub> , PHOSPHOMOLYBDATE	4	
102	1.68	-10.3	COLORIMETRIC, H <sub>2</sub> SO <sub>4</sub> /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4	
104	1.90	1.5	COLORIMETRIC, H <sub>2</sub> SO <sub>4</sub> /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4	
105	2.81	50.1	REJECT	COLORIMETRIC, BLK DIG, H <sub>2</sub> SO <sub>4</sub> , K&HG2SO <sub>4</sub> , PHOSPHOMOLYBDATE	4
106	1.70	-9.2	COLORIMETRIC, H <sub>2</sub> SO <sub>4</sub> /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4	
109	1.79	-4.4	COLORIMETRIC, H <sub>2</sub> SO <sub>4</sub> /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4	
111	1.85	-1.2	COLORIMETRIC, H <sub>2</sub> SO <sub>4</sub> /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4	
113	1.72	-8.1	EMISSION, DC PLASMA	5	
115	2.22	18.6	COLORIMETRIC, H <sub>2</sub> SO <sub>4</sub> /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4	
117	1.80	-3.9	COLORIMETRIC, H <sub>2</sub> SO <sub>4</sub> /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4	
120	4.04	115.8	REJECT	COLORIMETRIC, H <sub>2</sub> SO <sub>4</sub> /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
121	1.97	5.2	COLORIMETRIC, H <sub>2</sub> SO <sub>4</sub> /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4	
124	1.75	-6.5	COLORIMETRIC, BLK DIG, H <sub>2</sub> SO <sub>4</sub> , K&HG2SO <sub>4</sub> , PHOSPHOMOLYBDATE	4	
127	1.90	1.5	COLORIMETRIC, BLK DIG, H <sub>2</sub> SO <sub>4</sub> , K&HG2SO <sub>4</sub> , PHOSPHOMOLYBDATE	4	
128	1.87	-0.1	OTHER		
132	1.78	-4.9	COLORIMETRIC, BLK DIG, H <sub>2</sub> SO <sub>4</sub> , K&HG2SO <sub>4</sub> , PHOSPHOMOLYBDATE	4	
136	1.90	1.5	COLORIMETRIC, BLK DIG, H <sub>2</sub> SO <sub>4</sub> , K&HG2SO <sub>4</sub> , PHOSPHOMOLYBDATE	4	
137	1.80	-3.9	COLORIMETRIC, H <sub>2</sub> SO <sub>4</sub> /PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4	

62 Labs had a total range of 0.91 to 4.04 and a mean of 1.873  
 with a standard deviation of 0.140 and a 95% confidence interval of the mean +/- 0.038.

Table 13 Standard Reference Water Sample N19 Report for PO<sub>4</sub>-P

Code Number	Reported value	Pct. dev. from mean	Methods	References	
1	0.61	-4.9	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4	
5	0.47	-26.8	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4	
10	0.64	-0.3	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4	
13	0.65	1.3	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4	
14	0.62	-3.4	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4	
15	0.64	-0.3	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4	
16	0.63	-1.8	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4	
19	0.48	-25.2	NOT REPORTED	1, 2, 3, 4	
23	0.63	-1.8	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4	
25	0.62	-3.4	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4	
26	0.62	-3.4	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4	
27	0.62	-3.4	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4	
28	0.58	-9.6	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4	
29	0.67	4.4	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4	
30	0.63	-1.8	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4	
33	0.60	-6.5	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4	
34	0.66	2.9	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4	
35	0.64	-0.3	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4	
36	0.66	2.9	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4	
38	0.61	-4.9	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4	
44	0.60	-6.5	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4	
45	0.81	26.2	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4	
48	0.44	-31.4	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4	
49	0.65	1.3	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4	
52	0.65	1.3	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4	
54	0.66	2.9	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4	
58	0.70	9.1	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4	
59	0.74	15.3	NOT REPORTED	1, 2, 3, 4	
60	0.66	2.9	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4	
61	0.74	15.3	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4	
63	0.72	12.2	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4	
64	0.63	-1.8	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4	
66	0.62	-3.4	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4	
67	0.79	23.1	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4	
68	0.68	6.0	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4	
69	0.46	-28.3	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4	
73	0.64	-0.3	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4	
74	0.84	30.9	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4	
76	0.65	1.3	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4	
77	0.75	16.9	ION CHROMATOGRAPHY	2, 3, 4	
			COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4	
78	0.77	20.0	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4	
79	0.62	-3.4	ION CHROMATOGRAPHY	2, 3, 4	
81	0.65	1.3	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4	
84	0.62	-3.4	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4	
85	0.64	-0.3	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4	
86	0.62	-3.4	NOT REPORTED	1, 2, 3, 4	
87	0.66	2.9	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4	
88	1.73	169.6	REJECT	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4
91	0.62	-3.4	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4	
94	0.54	-15.8	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4	
96	0.61	-4.9	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4	
98	0.74	15.3	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4	
101	0.60	-6.5	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4	
102	0.54	-15.8	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4	
104	0.59	-8.1	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4	
105	0.61	-4.9	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4	
106	0.77	20.0	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4	
108	0.54	-15.8	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4	
109	0.64	-0.3	OTHER	1, 2, 3, 4	
111	0.64	-0.3	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4	
117	1.00	55.8	REJECT	ION CHROMATOGRAPHY	2, 3, 4
120	1.32	105.7	REJECT	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4
121	0.65	1.3	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4	
124	0.80	24.7	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4	
127	0.58	-9.6	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4	
128	0.63	-1.8	OTHER	1, 2, 3, 4	
132	0.65	1.3	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4	
137	0.67	4.4	COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE	1, 2, 3, 4	

68 Labs had a total range of 0.44 to 1.73 and a mean of 0.642 with a standard deviation of 0.078 and a 95% confidence interval of the mean +/- 0.019.

Table 14 Standard Reference Water Sample HG2 Report for HG

Code Number	Reported value	Pct. dev. from mean	Methods	References
1	3.80	-6.4	ATOMIC ABSORPTION, FLAMELESS, COLD VAPOR	1,2,3,4
4	4.50	10.9	ATOMIC ABSORPTION, FLAMELESS, COLD VAPOR	1,2,3,4
5	4.20	3.5	OTHER	
6	2.00	-50.7	ATOMIC ABSORPTION, FLAMELESS, COLD VAPOR	1,2,3,4
10	1.74	-57.1	ATOMIC ABSORPTION, FLAMELESS, COLD VAPOR	1,2,3,4
11	6.30	55.2	ATOMIC ABSORPTION, FLAMELESS, COLD VAPOR	1,2,3,4
14	4.80	18.3	ATOMIC ABSORPTION, FLAMELESS, COLD VAPOR	1,2,3,4
17	5.00	23.2	ATOMIC ABSORPTION, FLAMELESS, COLD VAPOR	1,2,3,4
25	4.00	-1.4	ATOMIC ABSORPTION, FLAMELESS, COLD VAPOR	1,2,3,4
30	3.03	-25.3	NOT REPORTED	1,2,3,4
35	4.37	7.7	ATOMIC ABSORPTION, FLAMELESS, COLD VAPOR	1,2,3,4
40	4.10	1.0	ATOMIC ABSORPTION, FLAMELESS, COLD VAPOR	1,2,3,4
41	2.38	-41.4	ATOMIC ABSORPTION, FLAMELESS, COLD VAPOR	1,2,3,4
44	4.07	0.3	ATOMIC ABSORPTION, FLAMELESS, COLD VAPOR	1,2,3,4
46	3.45	-15.0	ATOMIC ABSORPTION, FLAMELESS, COLD VAPOR	1,2,3,4
47	3.00	-26.1	ATOMIC ABSORPTION, FLAMELESS, COLD VAPOR	1,2,3,4
48	6.10	50.3	OTHER	
49	4.40	8.4	ATOMIC ABSORPTION, FLAMELESS, COLD VAPOR	1,2,3,4
51	4.10	1.0	ATOMIC ABSORPTION, FLAMELESS, COLD VAPOR	1,2,3,4
52	3.88	-4.4	ATOMIC ABSORPTION, FLAMELESS, COLD VAPOR	1,2,3,4
53	3.80	-6.4	ATOMIC ABSORPTION, FLAMELESS, COLD VAPOR	1,2,3,4
61	4.02	-1.0	ATOMIC ABSORPTION, FLAMELESS, COLD VAPOR	1,2,3,4
64	4.07	0.3	ATOMIC ABSORPTION, FLAMELESS, COLD VAPOR	1,2,3,4
67	4.14	2.0	ATOMIC ABSORPTION, FLAMELESS, COLD VAPOR	1,2,3,4
69	4.30	5.9	ATOMIC ABSORPTION, FLAMELESS, COLD VAPOR	1,2,3,4
70	6.90	70.0	ATOMIC ABSORPTION, FLAMELESS, COLD VAPOR	1,2,3,4
75	3.60	-11.3	ATOMIC ABSORPTION, FLAMELESS, COLD VAPOR	1,2,3,4
76	3.70	-8.8	ATOMIC ABSORPTION, FLAMELESS, COLD VAPOR	1,2,3,4
78	4.15	2.3	ATOMIC ABSORPTION, FLAMELESS, COLD VAPOR	1,2,3,4
81	4.07	0.3	ATOMIC ABSORPTION, FLAMELESS, COLD VAPOR	1,2,3,4
83	3.50	-13.8	OTHER	
85	5.00	23.2	ATOMIC ABSORPTION, FLAMELESS, COLD VAPOR	1,2,3,4
86	3.80	-6.4	ATOMIC ABSORPTION, FLAMELESS, COLD VAPOR	1,2,3,4
87	4.61	13.6	ATOMIC ABSORPTION, FLAMELESS, COLD VAPOR	1,2,3,4
91	3.60	-11.3	ATOMIC ABSORPTION, FLAMELESS, COLD VAPOR	1,2,3,4
93	4.00	-1.4	ATOMIC ABSORPTION, FLAMELESS, COLD VAPOR	1,2,3,4
98	4.10	1.0	ATOMIC ABSORPTION, FLAMELESS, COLD VAPOR	1,2,3,4
101	4.00	-1.4	ATOMIC ABSORPTION, FLAMELESS, COLD VAPOR	1,2,3,4
108	5.30	30.6	ATOMIC ABSORPTION, FLAMELESS, COLD VAPOR	1,2,3,4
109	4.50	10.9	ATOMIC ABSORPTION, FLAMELESS, COLD VAPOR	1,2,3,4
110	4.92	21.2	ATOMIC ABSORPTION, FLAMELESS, COLD VAPOR	1,2,3,4
116	3.60	-11.3	ATOMIC ABSORPTION, FLAMELESS, COLD VAPOR	1,2,3,4
117	3.92	-3.4	ATOMIC ABSORPTION, FLAMELESS, COLD VAPOR	1,2,3,4
120	3.40	-16.2	ATOMIC ABSORPTION, FLAMELESS, COLD VAPOR	1,2,3,4
124	3.00	-26.1	ATOMIC ABSORPTION, FLAMELESS, COLD VAPOR	1,2,3,4
127	3.87	-4.6	ATOMIC ABSORPTION, FLAMELESS, COLD VAPOR	1,2,3,4
128	3.70	-8.8	ATOMIC ABSORPTION, FLAMELESS, COLD VAPOR	1,2,3,4
132	3.88	-4.4	ATOMIC ABSORPTION, FLAMELESS, COLD VAPOR	1,2,3,4
137	4.20	3.5	ATOMIC ABSORPTION, FLAMELESS, COLD VAPOR	1,2,3,4

49 Labs had a total range of 1.74 to 6.90 and a mean of 4.059 with a standard deviation of 0.924 and a 95% confidence interval of the mean +/- 0.265.

Table 15 Most Probable Values (Means) for Constituents in the Standard Reference Samples

Min - lowest value reported  
 Max - highest value reported  
 Mean - the average of all the reported values  
 (except for the rejected or ignored values)

Std. Dev. - Standard Deviation  
 98% +/- 95% confidence interval of the mean +/-  
 N - the number of labs reporting a value

## Values based on Laboratories having average ratings of at least 2.60 for sample T101

Parameter	Min	Max	Mean	Std. Dev.	95% +-	N
AG	2.40	9.00	4.94	1.11	0.40	32.00
AL	59.00	300.00	87.65	13.62	5.50	26.00
AS	1.00	22.40	6.91	1.26	0.42	36.00
B	140.00	1,400.00	371.36	48.28	21.41	22.00
BA	19.00	104.00	65.00	15.93	5.09	40.00
BE	10.00	18.00	14.45	2.24	0.99	22.00
BR	35.00	260.00	135.00	114.56	284.62	3.00
CA	16.00	101.00	72.49	2.40	0.72	45.00
CD	7.00	14.00	9.93	1.49	0.43	48.00
CO	7.00	50.00	11.94	3.50	1.64	20.00
CR TOT	10.00	36.00	18.00	3.22	0.94	47.00
CU	32.00	70.00	49.96	6.62	1.84	52.00
FE	155.00	275.00	191.25	18.39	5.11	52.00
K	2,600.00	6,000.00	3,480.43	512.78	152.27	46.00
LI	58.00	79.00	67.79	5.74	3.31	14.00
MG	6.00	58.00	52.65	2.21	0.66	46.00
MN	40.00	60.00	50.41	4.09	1.12	54.00
MO	45.00	186.00	49.50	3.29	1.64	18.00
NA	17.00	108.00	96.77	4.11	1.19	48.00
NI	15.00	55.00	31.81	5.78	1.80	42.00
PB	6.00	57.00	17.90	6.08	1.97	39.00
SB	8.20	78.00	10.28	1.42	1.09	9.00
SE	1.70	21.00	7.51	2.05	0.73	32.00
SIO2	5,900.00	10,000.00	6,966.67	472.28	186.87	27.00
SR	990.00	1,630.00	1,198.70	88.13	38.11	23.00
V	10.00	49.00	16.88	4.72	2.51	16.00
ZN	10.00	90.00	66.25	7.58	2.11	52.00

## Values based on Laboratories having average ratings of at least 2.60 for sample M102

Parameter	Min	Max	Mean	Std. Dev.	95% +-	N
ALK(CACO3)	148.00	201.00	176.03	4.39	1.10	64.00
B	122.00	650.00	310.24	38.14	14.50	29.00
BR	80.00	120.00	120.00	0.00	0.00	3.00
CA	56.00	152.00	81.82	4.12	1.02	65.00
CL	39.00	58.00	43.60	2.02	0.49	68.00
DSRD 180	806.00	924.00	872.75	25.03	6.89	53.00
F	0.70	30.80	1.06	0.12	0.03	49.00
I	3.00	7,000.00	2,417.67	3,970.34	9,863.66	3.00
K	4.74	11.40	6.90	0.67	0.17	63.00
MG	16.60	84.70	58.48	2.51	0.62	66.00
NA	97.00	120.00	107.98	4.62	1.14	66.00
P, TOTAL	0.40	0.61	0.45	0.03	0.01	49.00
PH	7.80	8.65	8.42	0.11	0.03	69.00
PO4-P	0.40	0.51	0.44	0.02	0.01	47.00
SIO2	2.30	17.00	6.92	0.54	0.16	45.00
SO4	85.00	493.00	415.70	15.88	4.22	57.00
SP. COND.	1,000.00	1,430.00	1,223.39	31.23	8.36	56.00
SR	1,200.00	3,400.00	1,342.83	93.08	39.31	24.00
V	9.00	55.00	20.03	14.02	7.77	15.00

## Values based on Laboratories having average ratings of at least 2.60 for sample N19

Parameter	Min	Max	Mean	Std. Dev.	95% +-	N
NH3+ORG-N	0.54	2.60	1.70	0.41	0.14	34.00
NH3-N	0.04	1.80	0.13	0.05	0.02	38.00
NO2-N	0.06	0.58	0.26	0.01	0.00	31.00
NO3-N	1.50	4.39	3.48	0.20	0.06	48.00
P, TOTAL	1.68	3.21	1.87	0.09	0.03	41.00
PO4-P	0.44	0.77	0.63	0.06	0.02	46.00

## Values based on Laboratories having average ratings of at least 2.60 for sample HG2

Parameter	Min	Max	Mean	Std. Dev.	95% +-	N
HG	3.40	4.92	4.03	0.36	0.12	37.00