

**REPORT OF THE U.S. GEOLOGICAL SURVEY'S EVALUATION PROGRAM FOR
STANDARD REFERENCE SAMPLES DISTRIBUTED IN APRIL 1993 T-123
(TRACE CONSTITUENTS), T-125 (TRACE CONSTITUENTS), M-126 (MAJOR
CONSTITUENTS, N-38 (NUTRIENTS), N-39 (NUTRIENTS), P-20 (LOW IONIC
STRENGTH, AND Hg-16 (MERCURY)**

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REPORT ON THE U.S. GEOLOGICAL SURVEY'S EVALUATION PROGRAM FOR STANDARD
REFERENCE SAMPLES DISTRIBUTED IN APRIL 1993 T-123 (TRACE CONSTITUENTS), T-125
(TRACE CONSTITUENTS), M-126 (MAJOR CONSTITUENTS), N-38 (NUTRIENTS), N-39
(NUTRIENTS), P-20 (LOW IONIC STRENGTH), and Hg-16 (MERCURY)

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ABSTRACT

This report presents the results of the U.S. Geological Survey's analytical evaluation program for seven standard reference samples--T-123 (trace constituents), T-125 (trace constituents), M-126 (major constituents), N-38 (nutrients), N-39 (nutrients), P-20 (precipitation-low ionic strength), and Hg-16 (mercury)--that were distributed in April 1993 to 175 laboratories registered in the U.S. Geological Survey sponsored interlaboratory testing program. Analytical data received from 131 of the laboratories were evaluated with respect to: overall laboratory performance and relative laboratory performance for each analyte in the seven reference samples. Results of these evaluations are presented in tabular form. Also presented are tables and graphs summarizing the analytical data provided by each laboratory for each analyte in the seven standard reference samples. The most probable value for each analyte was determined using nonparametric statistics.

INTRODUCTION

The U.S. Geological Survey (USGS) conducts an interlaboratory evaluation program semiannually. This program provides a variety of reference materials to accomplish quality assurance testing of laboratories and to provide an adequate supply of samples that contribute to quality control programs of participating laboratories. Natural-matrix reference materials are preferred for use in this interlaboratory evaluation program. A series of samples are prepared and distributed each spring and fall. Occasionally, sediment samples are provided.

The program began in 1962 with a single sample containing major constituents that was prepared from distilled water and reagent grade chemicals. Twenty-three USGS laboratories participated in the 1962 determinations of six analytes in the major standard reference sample (SRS). Since that time, objectives of the program have been to:

- (1) evaluate and improve the performance of USGS and other participating laboratories;
- (2) provide a library of carefully prepared, homogeneous, stable reference materials for use in the quality control programs of laboratories;
- (3) identify analytical problem areas;
- (4) identify quality assurance needs with respect to environmental analyses and develop new reference materials to meet these needs; and
- (5) ascertain the accuracy and precision of analytical methods.

One hundred ninety-four USGS and non-USGS laboratories are registered in the program, which can currently provide eight standard reference sample types:

1. Trace constituents.
2. Major constituents.
3. Nutrients.
4. Low ionic strength.
5. Mercury.
6. Water and suspended sediment mixtures for trace metals.
7. Acid mine drainage
8. Sediment (bed material) for major and trace constituents.

When sufficient data are available, a most probable value is statistically determined for each analyte in the SRS.

Though this is not a laboratory certification program, participation in this continuing quality assurance program is mandatory for all laboratories providing water-analyses data for USGS data storage or use (publications). Federal, State, municipal, and university laboratories can participate even though they do not provide data to the USGS. Analyses of these SRS provides the means to alert participating laboratories of possible deficiencies in their analytical operations, and also provides reference materials for in-house quality control programs. Participating laboratories are identified only by a confidential code number.

A library of SRS, from previous evaluations, is available on request. Participating laboratories can request previous SRS for further testing, continuing quality assurance, and quality control programs by contacting:

Chief Laboratory Section, BQA
U.S. Geological Survey
Branch of Quality Assurance
Denver Federal Center
Box 25046 MS 401
Denver, CO 80225

Purpose and Scope

This report summarizes the analytical results submitted by 131 of the 175 laboratories (table 1) that requested and were shipped SRS for the April 1993 evaluation. Not all SRS are requested, nor necessarily analyzed by all the laboratories; nor do all laboratories enrolled in the program participate in each evaluation. Analytical results for the following, which were mailed the week of April 26, 1993, are presented in this report:

T-123 Trace constituents
T-125 Trace constituents
M-126 Major constituents
N-38 Nutrients--low level concentrations (analytes < 0.5 milligrams per Liter)
N-39 Nutrients--high level concentrations (analytes > 0.5 milligrams per Liter)
P-20 Precipitation (low ionic strength)
Hg-16 Mercury

The USGS requested that analytical results be returned by July 15, 1993, for evaluation and preparation of this report. Each participating laboratory is requested to perform those determinations routinely made on the respective SRS for USGS investigations and to indicate the analytical method used to determine the concentration of each analyte. When analytical-method information was provided, it has been included in the respective data table. The analytical data are presented in ways that allow participants to evaluate data distribution, scatter, outliers, central tendency, bias, skewness, and method relationships.

Table 1.--Laboratory participants in the analyses of standard reference samples distributed in April 1993

State	City	Participating Laboratory
Alabama	Tuscaloosa	Geological Survey of Alabama
Arizona	Phoenix	Arizona Department of Health Services
	Phoenix	Westech Laboratories, Inc.
Arkansas	Arkadelphia	Ouachita Baptist University
	Little Rock	Arkansas Department of Pollution Control and Ecology
California	Castaic	Castaic Chemical Laboratory, Department of Water Resources
	Davis	University of California - Davis
	La Mesa	San Diego Water Utility
	La Verne	Metropolitan Water District of Southern California
	Lakeside	Helix Water District
	Martinez	Central Contra Costa Sanitary District

Table 1.—Laboratory participants in the analyses of standard reference samples distributed in April 1993 — (Continued)

State	City	Participating Laboratory
California	Oakland	East Bay Municipal Utility District
	Riverside	University of California - Riverside
	Riverside	USDA, Bureau of Forestry
	Sacramento	Anlab
	Sacramento	US Bureau of Reclamation
	Sacramento	USGS
	Santa Barbara	University of California - Santa Barbara
	Santa Fe Springs	West Coast Analytical Service, Inc.
	West Sacramento	California Department of Water Resources
Colorado	Alamosa	US Bureau of Reclamation
	Arvada	USGS National Water Quality Laboratory
	Aurora	Core Laboratories, Inc.
	Denver	Denver Water Department
	Denver	Metro Wastewater Reclamation
	Denver	US Bureau of Reclamation
	Denver	USGS
	Englewood	Public Service Company of Colorado
	Fort Collins	City of Fort Collins - Water Quality
	Fort Collins	US Forest Service
	Golden	EG & G, Rock Flats Plant
	Golden	Huffman Laboratories
	Loveland	Northern Colorado Water Conservation
	Northglenn	Northglenn Water Treatment Plant
	Westminster	City of Westminster
Florida	Brooksville	Southwest Florida Water Management District
	Ocala	USGS
	Orlando	Orange County
	Orlando	Post, Buckley, Schuh, and Jernigan, Inc.
	Palatka	St. John's River Management District
	Tallahassee	City of Tallahassee
	Tallahassee	Savannah Laboratories
	Tampa	Hillsborough County Environmental Protection Commission
	West Palm Beach	South Florida Water Management District
Georgia	Albany	WG & L Water Laboratory
	Athens	University of Georgia
	Atlanta	Georgia Department of Natural Resources
	Atlanta	USGS
	Decatur	Dekalb County Water Quality Laboratory
	Tifton	US Department of Agriculture
Hawaii	Honolulu	University of Hawaii - Manoa, Dep't of Oceanography
Idaho	Boise	US Bureau of Reclamation
Illinois	Champaign	Illinois Environmental Protection Agency
	Champaign	Hazardous Waste Research Center
	Chicago	Illinois Environmental Protection Agency
Indiana	Indianapolis	Indianapolis Department of Public Works
	Valparaiso	Coast to Coast Analytical Services, Inc. Laboratories
Iowa	Des Moines	University Hygienic Laboratory, Des Moines Branch
Kansas	Lawrence	Kansas Geological Survey
	Topoka	Kansas Department of Health and Environment
Kentucky	Frankfort	Division of Environmental Services
	Lexington	Kentucky Geological Survey
	Lexington	Lexington Commonwealth Technology
	Louisville	Metropolitan Sewer District

Table 1.--Laboratory participants in the analyses of standard reference samples distributed in April 1993 -- (Continued)

State	City	Participating Laboratory
Maine	Orono	University of Maine - Sawyer Environmental Center
	Orono	University of Maine - Department of Plant, Soil and Environment
Maryland	Baltimore	Martel Laboratory Services, Inc.
	Baltimore	Maryland Department of Health and Mental Hygiene
Massachusetts	Wellesley Hills	Massachusetts Department of Public Works
Michigan	Ann Arbor	University of Michigan - Department of Geological Sciences
	Ann Arbor	University of Michigan - School of Natural Resources
Minnesota	Minneapolis	Braun Intertec Environmental, Inc.
	Minneapolis	University of Minnesota, Dept of Geology and Geophysics
	St. Paul	University of Minnesota, Research Analytical Laboratory
Missouri	Jefferson City	Missouri Department of Health
Montana	Butte	Montana Bureau of Mines and Geology
Nebraska	McCook	Olson's Agriculture Laboratory
Nevada	Las Vegas	City of Las Vegas
	Las Vegas	University of Nevada - Las Vegas
	Reno	Desert Research Institute
	Reno	Nevada State Health Laboratory
	Sutcliffe	Pyramid Lake Fisheries
	Gallup	Bureau of Indian Affairs, Natural Resources Laboratory
New Mexico	Albany	New York State Department of Health
	Albany	USGS
	Brockport	State University of New York - Brockport
	Buffalo	Erie County Laboratory
	Grahamsville	New York City Department of Environmental Protection
	Hempstead	Nassau County Department of Health
	Milbrook	Institute of Ecosystem Studies
	North Babylon	EcoTest Laboratories, Inc.
	Oakdale	Suffolk County Water Authority
	Port Washington	New York Test Environmental, Inc.
	Rochester	Monroe County Environmental Health Laboratory
	Syracuse	Onodaga County Department of Drainage and Sanitation
	Syracuse	State University of New York, Syracuse
	Valhalla	Department of Environmental Protection
	Wantagh	Cedar Creek Projects Laboratory
North Carolina	Charlotte	Mecklenburg County - Department of Environmental Protection
	Durham	City of Durham, - Department of Water Resources
	Greensboro	City of Greensboro
North Dakota	Bismarck	North Dakota State Water Commission
	Bismarck	North Dakota Health Department
Ohio	Columbus	City of Columbus - Division of Water
	Columbus	Surveillance Laboratory
	Franklin	Franklin EOS
	Medina	Medina County Sanitary Engineer
	Tiffin	Heidelberg College, Water Quality Laboratory
Oklahoma	Norman	Oklahoma Geological Survey
	Oklahoma City	Oklahoma State Department of Health
Oregon	Corvallis	US Department of Agriculture
	Tigard	Unified Sewerage Agency
Pennsylvania	Harrisburg	Pennsylvania Department of Environmental Resources
	Somerset	Geochemical Testing
Puerto Rico	San Juan	Department of Natural Resources
South Dakota	Brookings	Northern Great Plains Laboratory
	Vermillion	South Dakota Geological Survey

Table 1.—Laboratory participants in the analyses of standard reference samples distributed in April 1993 — (Continued)

State	City	Participating Laboratory
Tennessee	Chattanooga	Tennessee Valley Authority
	Nashville	USGS
Texas	Tyler	Analytical Testing Laboratories
Vermont	Waterbury	Vermont Agency of Natural Resources
Virginia	Culpepper	ESS Laboratories
	Manassas	Ocoquan Watershed Monitoring Lab
	Reston	USGS
	Richmond	Consolidated Laboratory Services
	Virginia Beach	Hampton Road Sanitation District
Washington	Seattle	Brooks-Rand, Ltd.
West Virginia	Morgantown	University of West Virginia
Wisconsin	Green Bay	Green Bay Metro Sewerage District
	Madison	State Laboratory of Hygiene
	Milwaukee	Milwaukee Metro Sewerage District
Wyoming	Casper	Core Laboratories, Inc.
	Cheyenne	Department of Environmental Quality
	Laramie	Wyoming Department of Agriculture

Preparation of Standard Reference Samples

All the SRS used in this evaluation were prepared by personnel of the USGS in Golden, Colo. and were analyzed for analyte concentrations and physical property values prior to mailing.

Trace-constituent samples T-123 and T-125 were prepared using water collected from the Big Thompson River near Loveland, Colorado. The water was pumped through 2- and 0.1- μ m filters, in series, into a 1300-L polypropylene drum. The water was continuously circulated and passed through a 0.1- μ m filter and ultraviolet sterilizer for 72 hours. Following this circulation, the water was acidified to pH 1.5 with nitric acid, chlorinated to 5-ppm free chlorine, and then supplemented with reagent-grade chemicals to achieve selected analyte concentrations. The water was circulated for an additional 24 hours prior to bottling. Each sample was bottled after being pumped through an ultraviolet sterilizer and a 0.1- μ m filter. Bottles used were recycled, acid leached, deionized-water rinsed, autoclave sterilized, 500-mL polypropylene bottles. Samples not mailed for this SRS evaluation are stored until requested for use.

Major constituent sample M-126 was prepared using water collected from the Big Thompson River, near Loveland, Colorado. The water was pumped through 2- and 0.1- μ m filters, in series, into a 1300-L polypropylene drum. The water was chlorinated to 5-ppm free chlorine, supplemented with reagent-grade chemicals to adjust analyte concentrations, and continuously circulated and passed through a 0.1- μ m filter and ultraviolet sterilizer for 72 hours. Bottles used were recycled, acid leached, deionized-water rinsed, autoclave sterilized, 500-mL polypropylene bottles. Samples not mailed for this SRS evaluation are stored until requested for use.

Nutrient samples N-38 and N-39 were prepared using water collected from the Fall River, near Idaho Springs, Colorado. These samples were prepared the week prior to the mailing for this SRS evaluation. The water was pumped through 2- and 0.1- μ m filters, in series, into a 600-L polypropylene drum and continuously circulated and passed through a 0.1- μ m filter for 48 hours. The desired nutrient concentrations were obtained by adding reagent-grade chemicals. The water was circulated for an additional 24 hours. A number of nonpreserved samples were bottled from this solution. The remaining water was preserved with mercuric chloride, to a concentration of 50 mg/L, and with sodium chloride, to a concentration of 450 mg/L. The preserved water was continuously circulated for 24 hours after which

preserved samples were bottled. Bottles used were new, amber, acid leached, deionized-water rinsed, 250 mL polyethylene bottles. (Nonpreserved nutrient sample use will not be encouraged because USGS protocol calls for field preservation of nutrient samples with mercuric chloride.) Samples not mailed for this SRS evaluation are refrigerated at 4 °C until requested for use.

Sample P-20 was snow collected in 50-gallon polypropylene drums from near Genesse, Colorado. The collected snow was allowed to melt; after which the snowmelt was pumped through 2- and 0.1- μ m filters, in series, into a 400-L polypropylene tank. After this initial circulation, desired phosphate and fluoride concentrations were obtained by adding reagent-grade chemicals. Following 48 hours of additional circulation and circulation through a 0.1- μ m filter, each sample was bottled after being pumped through an ultraviolet sterilizer and a 0.1- μ m filter. Bottles used were, recycled, acid leached, deionized water rinsed, autoclave sterilized, 500-mL polypropylene bottles. Samples not mailed for this SRS evaluation are stored until requested for use.

Sample Hg-16 was prepared using water collected from the Fall River, near Idaho Springs, Colo. The sample was prepared in a 190-L polypropylene drum. The creek water was pumped into this drum through 2- and 0.1- μ m filters in series. The water was continuously circulated and passed through a 0.1- μ m filter and ultraviolet sterilizer for 72 hours. Nitric acid (5-percent, v/v) and dichromate ion (0.05-percent, w/w) were added to stabilize the sample. The desired mercury concentration was obtained by adding a mercury standard solution. Following an additional 24 hours of circulation, each sample was bottled after being pumped through a 0.1-mm filter. Bottles used were new, acid leached, deionized-water rinsed, 125 mL glass bottles with tetrafluoroethylene fluorocarbon resin caps. Samples not mailed for this SRS evaluation are stored until requested for use.

LABORATORY ANALYSES

The participating laboratories were asked to determine analytes which are summarized in table 2. The number of analytes varied from 26 in T-123 (trace constituents) to 1 in Hg-16 (mercury).

Table 2.--Analytes determined in standard reference samples distributed in April 1993

[mg/L, milligrams per liter, µg/L, micrograms per liter, µS/cm, microsiemens per centimeter at 25 degrees Celsius]

Analyte or property		Units	T-123,125	M-124	N-38,39	P-20	Hg-16
Alk	Alkalinity as CaCO ₃	mg/L		X			
Acid	Acidity as CaCO ₃	mg/L				X	
Ag	Silver	µg/L	X				
Al	Aluminum	µg/L	X				
As	Arsenic	µg/L	X				
B	Boron	µg/L	X				
Ba	Barium	µg/L	X				
Be	Beryllium	µg/L	X				
Ca	Calcium	mg/L	X	X		X	
Cd	Cadmium	µg/L	X				
Cl	Chloride	mg/L		X		X	
Co	Cobalt	µg/L	X				
Cr	Chromium, total	µg/L	X				
Cu	Copper	µg/L	X				
DSRD	Dissolved solids	mg/L		X			
F	Fluoride	mg/L		X		X	
Fe	Iron	µg/L	X				
Hg	Mercury	µg/L					X
K	Potassium	mg/L	X	X		X	
Li	Lithium	µg/L	X				
Mg	Magnesium	mg/L	X	X		X	
Mn	Manganese	µg/L	X				
Mo	Molybdenum	µg/L	X				
Na	Sodium	mg/L	X	X		X	
NH ₃ as N	Ammonia	mg/L			X		
NH ₃ +org N as N	Ammonia+Organic N	mg/L			X		
Ni	Nickel	µg/L	X				
NO ₃ +NO ₂ as N	Nitrate + Nitrite	mg/L			X		
Pb	Lead	µg/L	X				
pH		unit		X		X	
PO ₄ as P	Orthophosphate	mg/L			X	X	
total P as P	Phosphorus	mg/L		X	X		
Sb	Antimony	µg/L	X				
Se	Selenium	µg/L	X				
SiO ₂	Silica	mg/L	X	X			
SO ₄	Sulfate	mg/L		X		X	
Sp Cond	Specific conductance	µS/cm		X		X	
Sr	Strontium	µg/L	X	X			
V	Vanadium	µg/L	X	X			
Zn	Zinc	µg/L	X				

Laboratories were requested to identify the method used for each analyte according to table 3 codes.

Table 3.--*Analytical-method codes*

Code	Method
0	Other
1	Atomic absorption: direct, air
2	Atomic absorption: direct, nitrous oxide
3	Atomic absorption: graphite furnace
4	Inductively coupled argon plasma
5	Direct current plasma
6	Inductively coupled argon plasma/Mass spectrometry/
7	Ion chromatography
8	Atomic absorption: cold vapor
10	Atomic absorption: extraction [<i>specify chelating agents</i>]
11	Atomic absorption: hydride [<i>specify reducing agent</i>]
12	Flame photometric
20	Titration: colorimetric [<i>specify color reagent</i>]
22	Colorimetric: [<i>specify reducing or oxidizing agent/color reagent</i>]
40	Selective ion electrode
41	Electrometric [<i>pH and Specific Conductance</i>]
50	Gravimetric: [<i>specify filtration, evaporation, and so forth</i>]

Participating laboratories were also asked to use the references listed below to further define the methods.

1. American Public Health Association and others, 1989, Standard methods for the examination of water and wastewater 17th ed: Washington, D.C., American Public Health Association, 1527 p.
2. American Society for Testing and Materials, 1990, Annual book of ASTM standards: Philadelphia, v. 11.01, and v. 11.02.
3. Kopp, J.F., and McKee, G.F., 1979, Methods for chemical analysis of water and wastes: Cincinnati, U.S. Environmental Protection Agency, EPA 600/4-79-020, rev. 1983, 460 p.
4. Fishman, M.J., and Friedman, L.C., eds., 1989. Methods for determination of inorganic substances in water and fluvial sediments (3d ed.): U.S. Geological Survey Techniques of Water-Resources Investigations, Book 5, Chapter A1, 545 p.
5. Miscellaneous manufacturers' instrument manuals or references.

LABORATORY PERFORMANCE RATINGS

To facilitate interlaboratory performance comparisons, laboratory performance ratings, based on the analyses reported for each SRS, are included in tables 4 through 11 in this report. Averages of the analyte ratings and the number of analyte values reported for each SRS are given for each participating laboratory. Laboratory performance for each analyte is rated on a scale 4 to 0, based on the absolute Z-value, as listed on the next page:

Rating	Absolute Z-value
4 (Excellent)	0.00 to 0.50
3 (Good)	0.51 to 1.00
2 (Satisfactory)	1.01 to 1.50
1 (Questionable)	1.51 to 2.00
0 (Poor)	Greater than 2.00

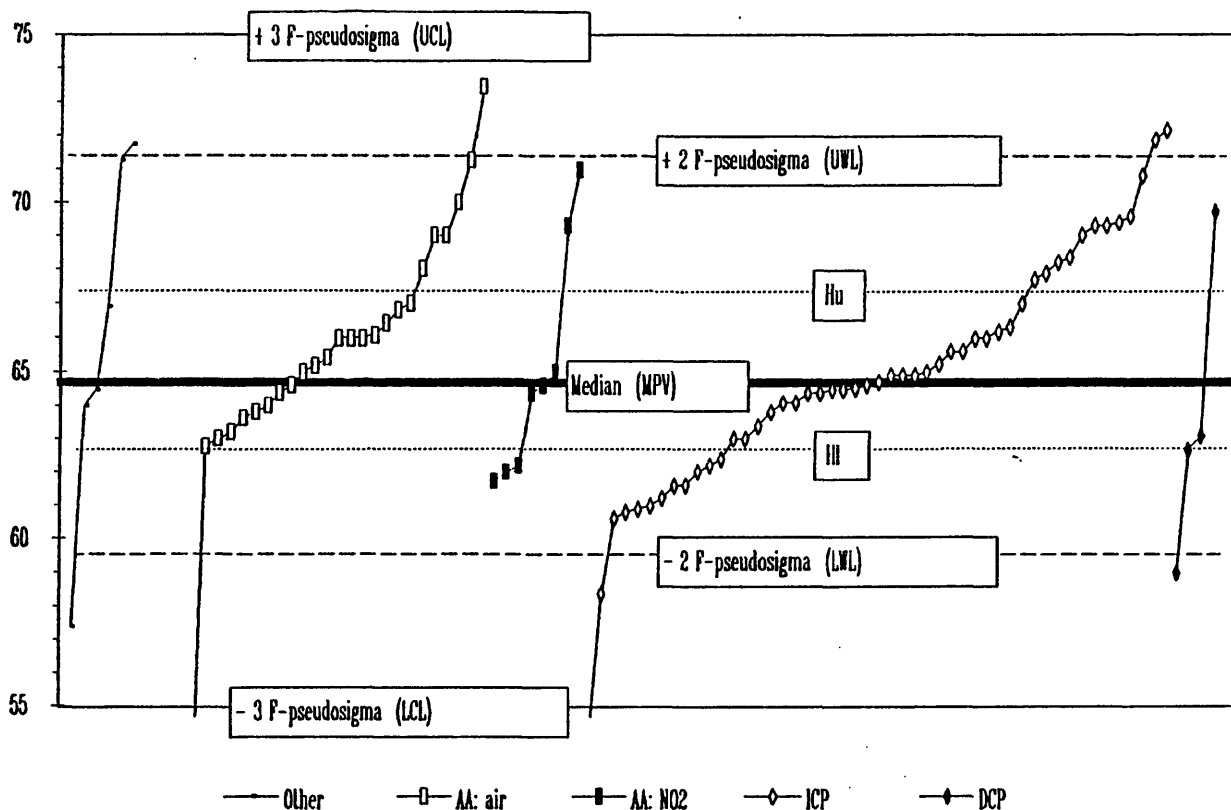
STATISTICAL PRESENTATION OF DATA

Data in this report have been evaluated using nonparametric statistics as described by Hoaglin and others (1983). This statistical approach is a resistant statistic because the median is not influenced by outliers as is the mean in traditional statistics.

Analytical data for each analyte are presented in tabular and graphical forms in tables 12 through 18. Tabulated data for each analyte include the laboratory code number, reported values, analytical method, most probable value (MPV), number of reported values - excluding less than values (N), data range, Z-value, and the F-pseudosigma. (The Z-value is equivalent to the Z-score of traditional statistics, being the number of deviations the reported value is from the MPV. The F-pseudosigma is equivalent to the standard deviation (σ) of traditional statistics when the data have a Gaussian distribution.) If an analyte has a sufficient number of determinations by a given method, usually 10, the σ for that analytical method is reported in the block of data listed for each analyte.

The median value is considered the MPV. Reported values of "less than" are used to establish the median, but are not considered in determining the data range. The median (midpoint) divides the ordered data into halves and is designated the MPV. The hinges include the middle 50-percent of the data and are the mid-values of the upper and lower halves of the data. (The hinges are similar to quartiles, but are not mathematically equivalent.) The range of data between the upper hinge (Hu) and the lower hinge (Hl), the hinge spread (H-spr), is used to calculate the F-pseudosigma, the 95-percent confidence level MPV, the laboratory performance rating, the upper warning level (UWL) and lower warning level (LWL), the upper control level (UCL) and the lower control level (LCL). The F-pseudosigma is calculated by comparison of the H-spr value to the Gaussian distribution relation; 67.45 percent of the data "hinges" between plus and minus 1σ , resulting in a H-spr of $2 \times 0.6745 = 1.349\sigma$. This relation allows the calculation of the F-pseudosigma = $(H-spr)/1.349\sigma$. The 95-percent confidence level MPV is expressed as the median $\pm (1.96 \times F-pseudosigma)/N$. Laboratories reporting "less than" values are not performance rated unless their reported "less than" values are greater than two Z-values from the MPV.

The graphical plot of the reported data is shown in figure 1. The upper and lower boundaries of the graphical plots generally are +3 and -3 F-pseudosigma deviations from the median. (Computer-program scaling constraints do not permit these boundaries to always be graphed at exactly these values.) The graphical plot is a modified control chart with reported values grouped by analytical method in ascending order of value. Lines designate the MPV, Hu, Hl, and the (UWL) and (LWL) at +2 and -2 F-pseudosigma, respectively. "Less than" values are not plotted.



NOTE: vertical scale is the concentration value of the individual analyte in appropriate units (see table 2.) Methods shown are defined in Tables 3 and 11 through 18.

Figure 1.--Statistical parameters shown on reported-data graphs

DISCUSSION

Users need to review the tabulated and graphical plots for individual analytes because these tables and plots give indications of the method and instrumentation precision, and help provide additional evidence as to the desirability of upgrading methods or equipment or both.

REFERENCE

Hoaglin, D.C., Mosteller, F., and Tukey, J.W., eds., 1983, *Understanding Robust and Exploratory Data Analysis*: John Wiley and Sons, Inc., 447p.

Table 4. Overall laboratory performance ratings for standard reference water samples distributed in April 1993

[Lab, laboratory number; OWR, overall weighted rating for all sample types; OLR, overall laboratory rating for reported values of a sample type; V/99, number of reported values of 99 total possible values from all sample types; V/26, V/26, V/15, V/20, V/11, and V/1 are number of reported values possible for T-123, T-125, M-126, N-38, N-39, P-20, and Hg-16, respectively]

Standard reference sample =			T-123		T-125		M-126		N-38		N-39		P-20		Hg-16	
Lab	OWR	V/99	OLR	V/26	OLR	V/26	OLR	V/15	OLR	V/10	OLR	V/10	OLR	V/11	OLR	V/1
1	3.7	88	3.9	25	3.7	26	3.3	15	3.8	5	3.6	5	4.0	11	2	1
2	2.3	16	0.0	1			1.0	4	2.8	4			3.0	7		
3	2.5	74	2.7	21	2.3	25	2.4	14			2.8	4	2.7	9	2	1
4	2.6	41	2.7	15	2.5	17	2.7	9								
5	3.0	50	3.1	14	3.6	16	2.6	11	2.0	1	4	1	2.4	7		
7	2.5	69	2.6	20	2.6	20	2.6	12	2.4	9	1.3	4	2.3	3	3	1
8	1.8	54	1.8	17	1.6	19	1.5	13			2.8	5				
9	2.6	42	2.3	12	2.3	12	2.8	13			3.8	5				
10	3.2	33	3.1	8	3.1	8	3.5	12	3.0	5						
11	2.8	86	3.4	23	2.6	23	2.6	14	1.6	8	3.1	8	2.8	9	4	1
12	2.3	40	2.4	9	2.6	10	1.8	12	2.0	3	2.2	5			4	1
13	2.9	52	2.8	13	2.8	15	2.8	13	2.6	5	3.6	5			4	1
15	2.6	92	2.7	26	2.9	26	2.3	15	3.0	5	2.5	8	2.1	11	4	1
16	2.7	64	2.7	20	2.4	21	3.2	13	2.0	4	2.6	5			3	1
18	2.8	43	2.7	18			2.8	14	2.0	5	3.4	5			4	1
19	3.1	36	2.7	9	3.1	8	3.2	11	2.8	4	3.8	4				
21	3.5	10	4.0	1	4.0	1			3.3	7	4	1				
23	2.8	58	2.6	19	3.0	13	2.6	10	2.2	5	3	5	3.7	6		
24	2.8	34	2.6	21			3.1	12							3	1
25	2.4	46	2.6	14	2.9	14	1.8	12	2.0	2	2	4				
26	2.5	11					2.5	11								
29	1.7	45	1.1	12	0.6	12	2.8	12	1.8	4	3.3	4			4	1
30	2.5	39	3.0	17	2.7	17	0.4	5		0						
32	3.1	74	3.3	24	3.4	24	2.6	13	2.7	3	3.7	3	2.0	6	3	1
33	2.3	50	1.8	11	2.1	11	2.2	12	2.3	3	0.7	3	3.6	10		
34	4.0	1													4	1
35	4.0	1	4.0	1												
36	1.2	64	0.4	20	0.3	21	2.8	13	3.0	4	3	5			0	1
37	3.2	50	3.6	16	3.5	16	2.6	8	2.6	5	2.2	5				
38	3.6	28					3.6	10	3.4	5	3.6	5	3.6	8		
39	2.8	46	2.7	15	2.7	13	2.6	10	4.0	1	3	1	3.6	5	4	1
41	0.5	8					0.0	1	1.3	3	0	3	0.0	1		
42	3.2	63	3.4	21	3.3	20	2.9	13	2.8	4	3.8	4			4	1
43	3.7	26	3.9	7	3.7	7	3.8	10	3.0	1	1	1				
44	3.8	6											3.8	6		
45	2.6	77	3.1	21	2.7	21	2.9	14	1.9	10	1.2	10			3	1
46	3.1	77	3.1	22	3.2	22	3.3	14	3.5	4	3.4	5	2.7	9	0	1
50	3.3	27	3.3	15			3.4	11							4	1
51	2.8	32			2.3	15	3.3	11	3.8	5					0	1
52	2.8	83	2.8	22	2.7	22	2.7	13	3.5	10	3.2	10	1.2	5	4	1
53	1.3	4							0.5	2	2	2				
54	3.5	16	3.3	4			3.6	12								
55	2.8	65	2.6	20	2.8	21	2.7	13	3.6	5	3.6	5			3	1
56	2.3	13					2.3	9	2.3	4						
57	2.1	31	2.5	13			1.8	13			2	5				
58	1.2	81	1.1	23	1.0	23	1.4	13	1.4	5	2	5	1.6	11	0	1
59	3.4	49	3.4	17	3.6	18	4.0	2	3.2	5	3.4	5	4.0	1	2	1
60	2.5	16					2.2	6			2.6	10				
61	2.5	62	2.2	15	2.6	15	2.5	13	3.0	5	3.2	5	2.3	8	3	1
62	2.0	3											2.0	3		
63	2.5	82	2.3	24	2.4	21	2.7	14	2.8	8	1.6	9	3.8	5	4	1
64	3.4	19					3.9	10					2.8	9		
68	2.5	64	2.5	22	2.3	20	3.0	11	2.6	5	3	5			0	1
69	3.3	43	3.4	15	3.3	15	2.9	10	3.0	1	4	1			4	1
70	2.9	54	2.7	13	3.0	16	2.6	14	3.0	5	3.4	5			3	1
73	3.5	8	3.7	3	3.4	5										
74	3.5	16							3.6	5	3	5	3.8	5	4	1
75	3.3	46	3.7	16	3.3	16	2.7	6	3.3	4	2.5	4				
76	3.1	27	3.0	7	2.9	8	3.3	7	3.0	2	3.5	2			3	1
78	2.5	73	3.6	20	3.3	20	1.7	13	0.7	6	1.8	6	1.4	7	2	1
79	2.3	30	1.7	11	2.3	12	4.0	4			3.5	2			1	1
81	1.9	22	1.8	21											4	1
84	2.0	20	3.0	5	1.8	5	1.4	8			2	2				
85	3.2	56	3.3	16	3.4	16	2.6	14	3.8	5	2.8	5				
86	3.2	29	3.3	20			2.8	8							4	1

Table 4. Overall laboratory performance ratings for standard reference water samples distributed in April 1993--Continued

Standard reference sample =			T-123		T-125		M-126		N-38		N-39		P-20		Hg-16	
Lab	OWR	V/99	OLR	V/26	OLR	V/26	OLR	V/15	OLR	V/10	OLR	V/10	OLR	V/11	OLR	V/1
87	2.0	42	2.0	11	2.0	12	3.0	9	0.4	5	1.8	5				
88	1.8	21							0.0	6	1.5	6	3.1	9		
89	3.0	59	2.7	13	2.5	15	2.7	13	3.8	9	3.7	9				
90	2.7	42	2.3	12	3.1	12	2.6	7	2.8	5	3	5			2	1
91	2.3	15	3.0	2	2.0	5			1.3	4	3.5	4				
92	2.5	19	2.2	5			2.6		2.7	7	2.4	7				
93	3.2	12					2.8	5	4.0	1	4	1	3.2	5		
94	3.1	68	3.0	22	3.2	24	3.2	14	3.0	4	3.3	4				
96	3.1	29	3.5	11			2.9	7	2.2	5	3.8	5			0	1
97	2.6	82	2.3	24	2.2	24	3.0	13	3.0	10	3.3	10			1	1
101	2.8	50	3.1	17	2.9	17	2.7	9					2.3	7		
102	2.4	41	2.5	21			1.9	10	2.8	5	2.8	5				
103	2.0	29	2.3	21			1.4	8								
104	3.7	12	4.0	1			3.3	3	3.8	4	3.8	4				
107	2.9	50	3.1	17	2.7	17	2.8	6	3.5	4			2.8	6		
108	2.2	14	2.5	8			0.0	1	1.8	4					4	1
109	2.9	45	3.1	15	3.4	15	2.2	14							2	1
110	3.1	8											3.1	8		
111	3.5	12	3.2	5			2.0	1	4.0	3	4	3				
112	3.6	9			3.0	1							3.6	8		
113	3.2	42			3.5	19	2.9	13	2.5	4	3	5			4	1
114	2.4	49	2.5	24			2.4	11	2.5	6	2.1	8				
116	2.7	44	2.6	24	2.6	11	3.1	9								
118	2.7	54	2.5	19	2.5	8	2.8	6	3.1	10	3.1	10			0	1
119	2.8	55			2.9	21	3.1	13	2.7	10	2	10			3	1
120	2.7	61	2.8	20	2.4	19	2.6	11	3.0	5	3.6	5			3	1
121	3.3	35	3.0	24			4.0	8	4.0	3						
122	2.6	54	2.0	6	2.1	17	2.7	11	3.5	10	3	10			NR	
124	1.6	41	2.4	8	0.9	12	2.2	9	1.0	2	1	2	1.1	7	4	1
126	0.0	1									0	1				
127	3.4	71	2.7	19	3.7	26	3.6	15	4.0	5	3.4	5			3	1
128	2.8	20					2.6	12	2.3	3	3.5	4			3	1
133	2.1	45	1.3	21	2.5	14			3.5	4	3	5			4	1
134	3.4	89	3.2	21	3.0	24	3.5	14	3.9	10	3.6	10	3.6	9	4	1
138	3.1	76	2.7	21	3.3	22	3.2	13	3.8	5	3.4	5	3.1	9	4	1
139	2.3	51	0.0	1	2.5	12	2.5	10	2.5	10	2.4	10	1.6	7	4	1
140	2.5	29	2.3	8			2.4	11	2.4	5	3.2	5				
141	2.8	52	2.5	4	3.0	24	2.8	14	0.8	4	3	5			4	1
142	2.9	62	3.3	21	2.9	21	2.2	14	3.6	5					4	1
145	3.1	84	3.2	21	2.9	20	3.4	13	2.6	10	3.2	10	3.1	9	4	1
146	2.0	35	1.5	6	2.3	12	1.8	12	2.0	2	2	2			3	1
149	1.7	20	1.8	12	1.1	7									4	1
151	3.1	40	3.2	20	2.8	12	3.0	2	3.7	3	3	3				
153	3.1	44	3.5	22	2.3	12	3.4	10								
161	2.4	38	3.0	12	3.2	12	2.2	6	0.5	4	0.5	4				
164	2.7	29	2.7	15	3.0	4	2.3	6					3.0	4		
179	2.3	35	3.8	6			1.1	8	3.5	10	1.2	10			3	1
180	3.0	66	3.2	19	3.1	16	2.5	11	3.3	10	2.8	10				
182	1.6	65	2.8	25	0.9	23	0.8	12	0.0	2	1.5	2			0	1
183	1.9	37			1.7	13	1.7	11	3.3	3	2	2	1.9	8		
184	1.9	55	1.9	14	1.9	14	2.0	13	1.3	3	2	5	1.8	5	4	1
189	1.7	56	2.5	2	1.4	21	2.1	14	2.4	5	2.4	5	1.0	8	0	1
190	2.3	49			2.9	17	2.6	13	2.0	5	2.2	5	1.1	9		
191	3.2	13					3.6	7	2.0	3	3.3	3				
193	2.5	29	2.0	11	2.8	13	3.3	3	1.0	1	3	1				
194	2.9	25	2.9	16			2.6	5	3.0	3					4	1
196a	3.1	38			3.7	19	1.6	7	1.5	2	3.5	2	3.0	8		
196b	2.6	23	2.9	14	2.2	9										
197	2.4	51	2.1	22	3.3	4	2.2	10	2.0	3	3	3	2.9	9		
198	1.9	15	1.1	7					2.3	4	2.7	3			3	1
202	2.6	26					1.9	10	3.2	5	3.6	5	2.0	5	4	1
205	1.7	3									1.7	3				
206	0.0	4							0.0	2	0	2				
207	1.5	29			0.4	7	2.4	11	1.2	5	1.8	5			0	1
209	1.0	18	0.6	13			2.0	4	3.0	1						
210	0.7	10							0.0	5	1.4	5				

Table 5. --Laboratory performance ratings for standard reference water sample T-123
(trace constituent)

[MPV, most probable value; ug/L, microgram per liter; mg/L, milligrams per liter; Lab, laboratory number; OLR, overall laboratory rating for all values; V/26, number of reported values of 26 values; RV, reported value; <, less than]

Rating	Absolute Z-value	Rating	Absolute Z-value
4 (Excellent)	0.00-0.50	1 (Questionable)	1.51-2.00
3 (Good)	0.51-1.00	0 (Poor)	greater than 2.00
2 (Satisfactory)	1.01-1.50	NR (Not Rated)	

Analyte = Ag (Silver)					Al (Aluminum)		As (Arsenic)		B (Boron)		Ba (Barium)		Be (Beryllium)	
MPV = 1.44 μ g/L					10.0	μ g/L	20.2	μ g/L	11.3	μ g/L	7.65	μ g/L	8.10	μ g/L
F-pseudosigma = 0.601					12.02		2.11		6.30		0.945		0.778	
Lab	OLR	V/26	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating
1	3.9	25	1.30	4	6.7	4	20.3	4	9.75	4	7.25	4	8.10	4
2	0.0	1												
3	2.7	21	1.43	4	36.0	0	20.4	4	< 10	NR	8.00	4	8.5	3
4	2.7	15			55.0	0			10	4	10.00	0	9	2
5	3.1	14	< 4	NR	< 30	NR					7.38	4	8.192	4
7	2.6	20	5.00	0	21.0	3					6.80	3	7.2	2
8	1.8	17					16.0	1			7.00	3	7.5	3
9	2.3	12												
10	3.1	8					20.1	4						
11	3.4	23	1.33	4	4.0	4	21.5	3	9	4	8.00	4	8	4
12	2.4	9	1.00	3	< 100	NR	23.0	2					< 20	NR
13	2.8	13	< 2	NR	10.9	4	22.3	3			< 10	NR		
15	2.7	26	1.42	4	6.4	4	17.6	2	10.8	4	1.00	0	3.93	0
16	2.7	20	< 7	NR	76.0	0	21.7	3	< 500	NR	7.60	4	10.3	0
18	2.7	18	< 5	NR	< 100	NR	23.4	1	< 5	NR	7.50	4	7.6	3
19	2.7	9												
21	4.0	1												
23	2.6	19	1.53	4	11.3	4	27.0	0			< 20	NR	8.11	4
24	2.6	21	1.60	4	23.1	2					7.10	3	9.5	1
25	2.6	14	< 6	NR	< 19	NR	< 50	NR	18.5	2	8.00	4	7.2	2
29	1.1	12	1.13	3	140.0	0	34.6	0			20.00	0		
30	3.0	17	2.12	2	8.6	4					7.75	4	10.36	0
32	3.3	24	1.25	4	8.5	4	18.7	3	12	4	6.99	3	7.2	2
33	1.8	11			10.0	4					8.16	3		
35	4.0	1					20.3	4						
36	0.4	20	0.00	0	0.0	NR	0.0	0			0.01	0	0.0	0
37	3.6	16	1.35	4	6.9	4	22.0	3			7.23	4	8.75	3
39	2.7	15			20.0	3	19.0	3	18	2	8.00	4	9	2
42	3.4	21	1.30	4			20.3	4			6.00	1		
43	3.9	7												
45	3.1	21	1.56	4	7.5	4	20.8	4	18.6	2	7.20	4	8.20	4
46	3.1	22	1.25	4	7.8	4	18.9	3	27.6	0	7.40	4	8.01	4
50	3.3	15	1.00	3	7.0	4	19.0	3			< 50	NR		
52	2.8	22	1.44	4	24.6	2	20.4	4	< 300	NR	10.50	0	16.3	0
54	3.3	4												
55	2.6	20	1.20	4			18.5	3					8.60	3
57	2.5	13	1.00	3	< 200	NR	19.8	4	< 100	NR	< 50	NR	7.0	2
58	1.1	23	5.00	0	70.0	0	15.6	0	63	0	30.00	0	8	4
59	3.4	17	1.00	3	< 10	NR	21.0	4			7.00	3		
61	2.2	15	< 10	NR	< 50	NR	18.8	3	< 50	NR	< 10	NR	8.5	3
63	2.3	24	1.54	4	< 100	NR	21.0	4	< 100	NR	45.00	0	7.19	2
68	2.5	22	0.90	3			18.6	3			9.60	0	8.3	4
69	3.4	15	1.49	4	9.0	4	19.1	3			12.00	0	8.28	4
70	2.7	13	< 2	NR	< 50	NR	22.1	3	< 50	NR	< 10	NR	< 10	NR
73	3.7	3												
75	3.7	16							9.6	4	7.40	4	7.7	3
76	3.0	7					24.2	1						
78	3.6	20	1.30	4	3.0	3	19.8	4			7.30	4	8.2	4
79	1.7	11	1.40	4			19.0	3					< 10	NR
81	1.8	21	2.00	3	6.0	4	26.0	0			7.00	3	7.0	2
84	3.0	5												
85	3.3	16	< 5	NR	< 20	NR	24.0	1	< 20	NR	7.90	4	8.3	4
86	3.3	20			5.3	4	21.8	3	10.3	4			7.24	2
87	2.0	11	7.00	0							< 40	NR		
89	2.7	13	2.63	1	< 100	NR	19.9	4			< 100	NR		

Table 5. --Laboratory performance ratings for standard reference water sample T-123
(trace constituent)—Continued

Analyte = Ag (Silver)					Al (Aluminum)		As (Arsenic)		B (Boron)		Ba (Barium)		Be (Beryllium)	
MPV = 1.44 μ g/L					10.0 μ g/L		20.2 μ g/L		11.3 μ g/L		7.65 μ g/L		8.10 μ g/L	
F-pseudosigma = 0.601					12.02		2.11		6.30		0.945		0.778	
Lab	OLR	V/26	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating
90	2.3	12	0.36	1			19.9	4			12.70	0		
91	3.0	2												
92	2.2	5												
94	3.0	22	<3	NR	< 20	NR	1800.0	0	8.9	4	7.30	4	8.3	4
96	3.5	11	1.44	4			20.1	4			7.50	4		
97	2.3	24	0.84	3	1.7	3	13.4	0			10.90	0	7.93	4
101	3.1	17	1.00	3	97.6	0					6.70	2		
102	2.5	21	0.60	2	< 50.0	NR	36.7	0			8.40	3	8.4	4
103	2.3	21	<5	NR	< 30	NR	12.0	0	11	4	5.50	0	7.5	3
104	4.0	1												
107	3.1	17	1.61	4	10.0	4	21.9	3			6.72	3		
108	2.5	8	1.00	3			18.6	3			13.00	0		
109	3.1	15					20.1	4	15.7	3				
111	3.2	5												
112	4.0	1												
113	3.5	19	1.50	4	4.8	4	21.2	4					7.75	4
114	1.5	11	<10	NR	< 10	NR							10	0
116	2.9	8	<100	NR					< 10	NR	8.00	4		
118	2.8	8	1.00	3			22.5	2						
119	2.9	20	1.00	3	0.0	NR	19.0	3	70	0	12.00	0	8.1	4
120	3.2	18	1.21	4	14.1	4	19.5	4			11.50	0	8.64	3
121	1.1	21	3.20	0	21.4	3			< 10	NR	15.00	0		
122	2.3	15	2.60	1	10.8	4	25.3	0	< 0.1	NR	7.52	4		
124	1.1	8	<20	NR	< 100	NR	< 500	NR	< 50	NR	< 10	NR	10	0
126	0.8	5					30.0	0						
127	3.9	26	1.45	4	7.3	4	20.0	4	11.3	4	7.50	4	8.30	4
133	2.6	14	2.20	2			21.0	4			7.70	4	9.7	0
134	3.2	22	1.40	4	< 20	NR	21.0	4	< 20	NR	5.00	0	7.4	3
138	3.5	22	1.67	4			20.1	4			8.48	3	8.84	3
139	2.2	12			< 500	NR	22.2	3						
140	3.1	12												
141	2.9	24	0.95	3	13.3	4	18.0	2	< 10	NR	7.87	4	7.77	4
142	2.7	21	1.57	4			19.5	4	15.7	3	7.41	4	8.37	4
145	2.9	20			< 13.4	NR	19.0	3	9.75	4	7.70	4	8.95	2
146	2.9	13					20.0	4					7.4	3
149	1.9	7	0.90	3										
151	2.9	12	<10	NR			18.8	3			8.50	3	7.72	4
153	2.5	11	2.50	1							8.20	3		
161	3.5	8	<50	NR	< 100	NR	< 100	NR	< 500	NR	< 10	NR	< 10	NR
164	1.8	4												
179	2.7	16	1.30	4			18.2	3					6.2	0
180	2.0	23	4.80	0	24.2	2	16.8	1	10.5	4	7.40	4	7.9	4
182	1.1	23	2.50	1	100.0	0	21.0	4			85.00	0	5	0
184	2.0	13	<5	NR	< 200	NR			19.4	2	8.35	3	8.20	4
189	1.6	17	2.10	2	50.0	0	20.0	4	< 10	NR	< 10	NR	8.6	3
190	3.1	17	1.35	4	9.5	4	21.1	4						
193	3.0	11	<1	NR			19.0	3			7.00	3		
194	3.1	12	1.60	4			20.0	4					7.60	3
196a	3.2	9	1.72	4										
196b	3.7	19	1.46	4	7.5	4	21.3	3			7.25	4	8.05	4
197	3.3	4												
198	3.1	14	1.52	4	< 10	NR	20.4	4			< 10	NR	7.07	2
202	3.2	17	1.62	4			19.2	4					7.76	4
209	2.5	2			< 0.03	NR								

**Table 5. --Laboratory performance ratings for standard reference water sample T-123
(trace constituent)--Continued**

[MPV, most probable value; ug/L, microgram per liter; mg/L, milligrams per liter; Lab, laboratory number; OLR, overall laboratory rating for all values; V/26, number of reported values of 26 values; RV, reported value; <, less than]

		Rating		Absolute Z-value		Rating		Absolute Z-value						
		4 (Excellent)		0.00-0.50		1 (Questionable)		1.51-2.00						
		3 (Good)		0.51-1.00		0 (Poor)		greater than 2.00						
		2 (Satisfactory)		1.01-1.50		NR (Not Rated)								
MPV = F-pseudosigma = Lab	Ca (Calcium)		Cd (Cadmium)		Co (Cobalt)		Cr Chromium)		Cu (Copper)		Fe (Iron)		K (Potassium)	
	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating
1	9.06	4	5.90	4	5.50	4	10.7	4	10.5	4	57.1	4	1.08	3
2														
3	9.07	4	6.60	3	6.00	3	10.0	3	11.0	3	73.0	0	2.30	0
4	8.94	4	11.00	0	< 5	NR	12.0	2	8.0	1	57.0	4		
5	9.06	4	6.19	4	6.18	2	13.1	1	10.9	3	56.4	4	1.41	0
7	9.10	4	5.70	4	5.70	4	9.8	3	8.2	1	58.3	4	1.23	3
8	8.40	2	6.70	3	4.00	2	11.0	4	11.1	3	0.5	0	1.02	2
9	9.30	4	5.17	3			9.7	3			52.0	2	1.12	4
10			5.40	3			9.5	2	9.3	3	58.0	4		
11	9.36	4	4.70	2	4.00	2	11.0	4	11.0	3	60.0	3	1.21	3
12	9.00	4	7.80	0			< 20	NR	11.0	3	< 50	NR	1.00	1
13	8.66	3	6.52	3			12.3	2	< 50	NR	61.3	3	1.14	4
15	10.30	1	5.41	3	5.08	4	12.8	1	10.7	4	61.2	3	1.19	4
16	8.50	3	5.10	3	5.80	3	10.8	4	7.0	0	55.0	3	1.30	2
18	9.40	4	4.74	2	7.00	1	11.0	4	9.0	2	65.0	1	1.10	3
19	9.09	4	5.00	3			10.0	3			54.0	3	1.30	2
21											56.0	4		
23	9.48	3	6.05	4			16.7	0	9.6	3	62.1	3	1.10	3
24	8.87	4	6.60	3	3.40	0	8.4	1	6.9	0	59.2	4	1.14	4
25	9.84	2	< 6	NR	< 12	NR	12.0	2	10.0	4	56.0	4	1.66	0
29	6.00	0					9.4	2	6.0	0				
30			7.48	1	5.50	4	9.3	2	9.6	3				
32	8.84	4	5.44	4	5.52	4	10.7	4	13.6	0			1.23	3
33	9.21	4									32.5	0	1.22	3
35														
36	7.64	0	0.00	0	0.01	0	0.0	0	0.0	0	0.1	0	1.00	1
37			5.91	4			10.6	4	10.5	4			1.03	2
39	9.75	2			5.00	4	11.0	4	13.0	0	70.0	0		
42	9.40	4	5.60	4			10.1	3	9.4	3	58.0	4	1.30	2
43	9.20	4									54.0	3	1.20	4
45	8.53	3	5.62	4			10.7	4	8.9	2	60.0	3	1.13	4
46	10.10	1	5.72	4	6.00	3	10.5	4	11.3	2	60.0	3	1.24	3
50			6.00	4	6.00	3	10.0	3	10.0	4	57.0	4		
52	9.16	4	5.64	4	5.00	4	12.4	2	9.6	3	49.9	1	1.12	4
54	8.60	3											1.10	3
55	9.16	4	6.80	2	4.40	2	12.5	1	10.1	4	45.0	0	1.12	4
57	8.60	3	6.20	4			9.3	2	< 20	NR	< 100	NR	1.30	2
58	7.03	0	7.10	2	4.00	2	11.0	4	14.0	0	50.0	1	1.21	3
59	8.90	4	5.70	4			9.9	3	12.7	0	61.0	3	1.20	4
61	9.00	4	8.00	0	9.00	0	9.0	2	< 10	NR	58.0	4	1.70	0
63	9.97	2	5.25	3	4.70	3	11.0	4	9.9	4	< 20	0	1.07	3
68	9.20	4	6.60	3	5.90	3	12.0	2	12.0	1	57.0	4	1.00	1
69	8.60	3	5.96	4			10.8	4	11.0	3			1.20	4
70	9.58	3	5.36	3	< 50	NR	11.6	3	< 20	NR	51.9	2	0.99	1
73			6.00	4							53.0	3		
75			6.20	4	5.10	4	11.6	3	10.9	3	57.2	4		
76			6.39	3			11.0	4						
78	11.90	0	6.10	4			9.8	3	10.1	4	59.5	4	1.20	4
79			7.10	2			8.2	0	8.6	2	45.0	0		
81	8.08	1	8.00	0	< 1	0	13.0	1	10.0	4	45.0	0	1.07	3
84	9.35	4									60.0	3		
85	9.03	4	5.50	4	< 20	NR	10.0	3	11.0	3	58.0	4	1.22	3
86	9.26	4	4.91	2	4.85	4	9.4	2	9.8	4	51.1	2	1.14	4
87	7.60	0	2.00	0					11.0	3	96.0	0	1.14	4
89	10.00	2	6.72	3	< 10	NR	12.5	2	< 10	NR	51.6	2	1.14	4

Table 5. --Laboratory performance ratings for standard reference water sample T-123
(trace constituent)--Continued

F-pseudosigma =	Ca (Calcium)			Cd (Cadmium)		Co (Cobalt)		Cr Chromium		Cu (Copper)		Fe (Iron)		K (Potassium)	
	MPV =	9.10	m g/L	5.86	μ g/L	5.27	μ g/L	10.7	μ g/L	10.2	μ g/L	57.5	μ g/L	1.16	m g/L
	Lab	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating
90				5.67	4			9.6	3	12.5	0	57.5	4		
91												57.2	4		
92	9.30	4												1.70	0
94	9.19	4		5.30	3	5.00	4	10.8	4	7.2	0	55.0	3	1.10	3
96				5.38	3			10.2	4	10.8	3	60.5	3		
97	8.14	1		4.00	0	6.10	3	10.5	4	9.3	3	57.9	4	1.10	3
101	9.1	4		6.70	3			11.1	4	9.7	4	60.0	3	1.20	4
102	8.7	3		6.10	4	5.10	4	9.1	2	9.4	3	61.0	3	< 1	NR
103	8.1	1		5.00	3	4.40	2	9.6	3	9.5	3	52.0	2	1.10	3
104															
107	18.5	0		5.89	4			11.8	3	13.4	0	59.0	4	1.15	4
108				7.00	2			9.3	2	10.0	4				
109	8.93	4		5.56	4							56.2	4	1.11	4
111								11.3	3	9.4	3				
112															
113	8.5	3		5.82	4			10.2	4	10.7	4	59.0	4	1.10	3
114	8.70	3		10.00	0			< 10	NR	10.0	4	50.0	1	0.68	0
116	8.93	4										50.0	1	< 1.3	NR
118				5.90	4			9.4	2	8.3	1				
119	9.3	4		5.90	4			10.0	3	10.0	4	55.0	3	1.40	0
120	8.21	2		5.51	4			11.0	4	10.9	3			1.03	2
121	9.4	4		7.00	2	11.00	0	7.3	0	20.8	0	100.0	0	1.05	2
122	8.71	3		6.34	3			11.8	3	9.7	4	50.2	2	1.08	3
124	9.530	3		< 10	NR	50.00	0	< 50	NR	11.0	3	66.0	1		
126										< 20	NR	65.0	1		
127	8.67	3		5.70	4	5.22	4	11.2	4	9.3	3	57.4	4	1.18	4
133	9.10	4		7.40	1			10.8	4	6.5	0	55.5	4		
134	8.7	3		5.70	4	5.10	4			11.2	3	48.0	1	1.10	3
138	9.60	3		5.54	4	4.62	3	10.8	4	10.3	4	60.4	3	1.16	4
139	10.61	0		5.70	4			11.7	3	10.2	4	45.0	0	1.14	4
140	9.0	4		6.28	4			11.7	3	11.6	2	62.5	2	1.15	4
141	9.51	3		5.55	4	5.60	4	11.8	3	11.4	2	53.3	3	1.26	2
142	10.4	0		5.54	4			10.2	4	9.4	3	47.6	1	1.40	0
145	9.59	3		7.30	1	5.35	4	11.6	3	9.4	3	61.3	3	1.06	3
146	8.6	3		7.60	1			11.0	4			61.0	3		
149				5.70	4					7.0	0	60.0	3		
151				6.76	2			10.0	3	12.2	1				
153	8.42	2		5.44	4			9.3	2	10.8	3			1.04	2
161	9.32	4		5.00	3	< 5	NR	11.0	4	9.0	2	60.0	3	< 2	NR
164	8.8216	4										1.1	0		
179	6.3	0		5.80	4			10.4	4	9.7	4	60.0	3	1.16	4
180	9.49	3		7.40	1	5.00	4	10.7	4	8.8	2	450.0	0	2.95	0
182	12.2	0		0.50	0	13.00	0	11.0	4	10.0	4	55.0	3	1.00	1
184	9.51	3		< 10	NR	< 10	NR	14.0	0	12.0	1	53.7	3	1.33	1
189	9.70	3		4.40	1	< 20	NR	7.5	0	8.5	1	< 50	NR	1.16	4
190	8.11	1		5.60	4			10.1	4	7.5	0	56.5	4	1.19	4
193	9	4		5.00	3	< 25	NR	9.0	2	< 25	NR	64.0	2	1.16	4
194	8.86	4		7.17	1			12.0	2	< 10	NR			1.39	0
196a	10.08	1		5.50	4									1.21	3
196b				5.57	4	5.32	4	10.6	4	10.9	3				
197	8.56	3												1.11	4
198	9.57	3		5.82	4			10.4	4	< 50	NR	56.3	4	1.41	0
202	9.24	4		7.05	2			10.7	4	10.4	4	73.0	0	1.07	3
209	9.79	2													

**Table 5. --Laboratory performance ratings for standard reference water sample T-123
(trace constituent)--Continued**

[MPV, most probable value; ug/L, microgram per liter; mg/L, milligrams per liter; Lab, laboratory number; OLR, overall laboratory rating for all values; V/26, number of reported values of 26 values; RV, reported value; <, less than]

Rating	Absolute Z-value	Rating	Absolute Z-value
4 (Excellent)	0.00-0.50	1 (Questionable)	1.51-2.00
3 (Good)	0.51-1.00	0 (Poor)	greater than 2.00
2 (Satisfactory)	1.01-1.50	NR (Not Rated)	

Analyte = Li (Lithium)			Mg (Magnesium)			Mn (Manganese)			Mo (Molybdenum)			Na (Sodium)			Ni (Nickel)			Pb (Lead)		
MPV =	9.68	μ g/L	1.80	m g/L	13.6	μ g/L	9.20	μ g/L	19.3	m g/L	4.30	μ g/L	9.80	μ g/L						
F-pseudosigma =	1.149		0.126		1.07		1.308		1.04		1.119		1.557							
Lab	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating				
1	9.04	3	1.80	4	13.3	4	8.90	4	19.5	4	5.10	3	9.55	4						
2																				
3	< 10	NR	1.88	3	11.0	0	< 10	NR	20.3	3	< 10	NR	11.70	2						
4	10	4	1.77	4	13.0	3	< 10	NR	18.8	4	< 20	NR	< 20	NR						
5			1.81	4	13.5	4			19.6	4										
7			1.77	4	13.1	4	10.00	3	18.7	3	14.00	0								
8			1.73	3	9.7	0	7.00	1	20.3	3										
9			1.60	1	10.8	0			19.9	3	4.10	4	10.50	4						
10					15.0	2							8.60	3						
11			1.94	2	13.0	3	9.00	4	20.8	2			9.60	4						
12			1.80	4	< 20	NR	< 30	NR	18.0	2	< 20	NR	< 10	NR						
13			1.75	4	15.8	1			19.3	4	< 50	NR	12.20	1						
15	11.3	2	2.04	1	7.7	0	9.28	4	21.3	1	3.73	3	9.83	4						
16	< 500	NR	1.80	4	13.9	4	15.30	0	20.0	3	< 25	NR	9.00	3						
18			1.80	4	14.0	4			20.0	3	< 15	NR	13.40	0						
19			1.68	3	12.0	2			19.0	4			47.00	0						
21																				
23			1.77	4	13.7	4	6.45	0	17.0	0	3.64	3	10.06	4						
24			1.76	4	13.3	4			18.8	4	4.00	4	8.00	2						
25	9	3	1.93	2	14.0	4			20.6	2	< 49	NR	< 71	NR						
29					8.0	0	6.60	1					10.00	4						
30	9.757	4	1.81	4	13.2	4	8.05	3			4.59	4	9.71	4						
32	9.68	4	1.89	3	14.3	3	7.52	2			4.30	4	9.91	4						
33			1.93	2	17.5	0			16.1	0			5.83	0						
35																				
36			1.67	2	0.0	0			18.3	3	0.01	0	0.01	0						
37					14.0	4					4.54	4	10.90	3						
39			1.86	4	15.0	2			20.0	3										
42	10	4	1.90	3	13.1	4	8.50	3	18.6	3	4.40	4	10.00	4						
43			1.80	4	14.0	4			19.7	4										
45			1.60	1			9.81	4	19.0	4	3.71	3	8.34	3						
46			1.84	4	14.3	3			19.0	4	3.34	3	8.30	3						
50	< 50	NR			13.0	3	10.00	3			4.00	4	11.00	3						
52			1.75	4	12.8	3	6.90	1	19.3	4	3.98	4	12.90	1						
54			1.70	3					19.0	4										
55	7.00	0	1.70	3	6.0	0			19.0	4	5.00	3	8.60	3						
57			1.70	3	< 20	NR	< 100	NR	18.0	2	< 100	NR	10.00	4						
58			1.71	3	15.0	2	20.00	0	129.0	0	6.00	1	11.00	3						
59			1.80	4	13.5	4			19.0	4	4.80	4	10.90	3						
61			1.80	4	13.0	3	< 50	NR	19.0	4	< 25	NR	8.00	2						
63	10	4	1.62	2	17.0	0	9.70	4	20.8	2	4.00	4	11.80	2						
68	11	2	1.80	4	13.0	3	13.00	0	20.0	3	8.30	0	12.30	1						
69			1.80	4					17.9	2	4.00	4	9.80	4						
70			1.81	4	13.9	4	< 50	NR	20.1	3	< 50	NR	11.70	2						
73								NR												
75	9.1	4	1.90	3	13.9	4	8.70	4	18.7	3										
76					13.2	4			19.3	4			9.71	4						
78			1.80	4	12.5	2			19.8	4	4.30	4	9.90	4						
79					25.0	0					2.60	1	8.00	2						
81			1.75	4	10.0	0	3.00	0	20.3	3	8.00	0	8.00	2						
84			1.75	4	10.0	0			19.3	4										
85	10.3	3	1.76	4	16.5	0	< 20	NR	19.2	4	< 20	NR	< 50	NR						
86			1.91	3	12.2	2	9.05	4	19.8	3	3.98	4	9.11	4						
87			1.66	2			9.20	4	18.0	2	< 10	NR	< 20	NR						
89			1.90	3	13.8	4			20.1	3	< 25	NR	11.14	3						

**Table 5. --Laboratory performance ratings for standard reference water sample T-123
(trace constituent)--Continued**

Analyte = Li (Lithium)			Mg (Magnesium)			Mn (Manganese)			Mo (Molybdenum)			Na (Sodium)			Ni (Nickel)			Pb (Lead)		
MPV = 9.68 μ g/L			1.80 m g/L			13.6 μ g/L			9.20 μ g/L			19.3 m g/L			4.30 μ g/L			9.80 μ g/L		
F-pseudosigma = 1.149			0.126			1.07			1.308			1.04			1.119			1.557		
Lab	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating		
90							15.5	1					20.6	2		5.64	2		9.58	4
91							15.2	2												
92													21.4	1						
94							13.0	3	7.90	3			18.9	4		6.00	1		9.40	4
96							13.6	4											8.63	3
97							13.6	4	9.20	4			18.2	2		5.03	3		12.10	2
101							13.5	4					19.5	4		5.50	2		14.60	0
102							13.2	4					18.3	3		3.30	3		11.00	3
103	8	2					13.0	3	7.30	2			21.0	1		3.80	4		< 20	NR
104																				
107							13.6	4					18.4	3		4.40	4		10.50	4
108																			10.00	4
109	11.1	2					13.8	4	10.13	3			18.0	2					8.60	3
111																3.50	3		9.80	4
112																				
113							13.5	4					19.5	4		3.40	3		9.71	4
114							20.0	0					21.0	1		< 10	NR		< 10	NR
116	< 45	NR					14.0	4					18.1	2						
118																4.00	4		9.20	4
119							13.0	3					19.1	4		6.20	1		11.20	3
120							13.6	4	9.76	4			18.1	2		3.51	3		9.43	4
121	16	0					18.0	0	16.00	0			22.0	0		12.00	0		8.90	3
122							12.5	2					20.9	1					14.30	0
124							10.0	0	70.00	0						< 50	NR		< 50	NR
126							160.0	0											9.00	3
127	9.47	4					13.3	4	8.76	4			18.9	4		4.00	4		9.06	4
133																4.90	3		5.20	0
134	18	0					13.0	3	< 10	NR			19.0	4		4.30	4		9.30	4
138							14.2	3	9.25	4			20.2	3		4.30	4		10.90	3
139							< 10	0					19.2	4		< 40	NR		14.70	0
140							13.2	4					19.2	4		5.48	2		15.01	0
141							14.2	3	10.70	2			20.9	1		11.40	0		8.20	2
142							13.1	4	9.26	4			21.9	0		4.30	4		9.38	4
145	8.75	3					14.6	3	10.50	3			20.0	3		3.00	2		< 14.8	NR
146							14.0	4					19.0	4		10.00	0		10.00	4
149							5.0	0											6.70	1
151							25.6	0	8.66	4						3.94	4		10.20	4
153							16.5	0					19.0	4					10.00	4
161							14.0	4	< 50	NR			18.8	4		< 10	NR		< 20	NR
164	1.767	0											18.7	3						
179							10.0	0	10.00	3			18.4	3		4.50	4		6.70	1
180							14.0	4	10.40	3			19.9	3		10.30	0		27.80	0
182	8	2					15.0	2	20.00	0			15.6	0		20.00	0		5.00	0
184							13.7	4					21.1	1		< 10	NR		< 50	NR
189	< 500	NR					16.0	0	< 10	NR			21.5	0		< 20	NR		46.00	0
190							12.8	3					19.4	4		5.35	3		7.84	2
193													18.3	3		< 5	NR		9.00	3
194													20.3	3					10.00	4
196a							13.8	4					19.3	4		5.85	2		8.57	3
196b	8.10	2					12.8	3	8.02	3						4.29	4		9.40	4
197													18.3	3						
198							14.6	3					20.5	2		< 10	NR		8.93	3
202							19.0	0	9.00	4						4.60	4		10.50	4
209																				

**Table 5. —Laboratory performance ratings for standard reference water sample T-123
(trace constituent)—Continued**

[MPV, most probable value; ug/L, microgram per liter; mg/L, milligrams per liter; Lab, laboratory number; OLR, overall laboratory rating for all values; V/26, number of reported values of 26 values; RV, reported value; <, less than]

Rating	Absolute Z-value	Rating	Absolute Z-value
4 (Excellent)	0.00-0.50	1 (Questionable)	1.51-2.00
3 (Good)	0.51-1.00	0 (Poor)	greater than 2.00
2 (Satisfactory)	1.01-1.50	NR (Not Rated)	

MPV = F-pseudosigma = Lab	Sb (Antimony)		Se (Selenium)		SiO ₂ (Silica)		Sr (Strontium)		V (Vanadium)		Zn (Zinc)	
	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating
1	7.18	4	5.20	4	6.08	4	48.6	4	< 6	NR	5.22	4
2					4.70	0						
3	8.20	3	5.23	4	6.70	2	49.0	4	< 10	NR	7.70	4
4					6.06	4	48.0	4	< 10	NR	< 10	NR
5					6.15	4			5.72	1	< 4	NR
7	24.00	0					48.4	4	7.00	0	3.40	3
8			3.00	1	13.00	0	56.0	0				
9					3.46	0	< 24	0			< 2	NR
10			5.50	4								
11	6.75	4	5.44	4	6.18	4			4.00	4	6.00	4
12	< 100	NR	4.00	3							< 20	NR
13			5.80	4	4.95	1					< 10	NR
15	5.23	2	5.17	4	6.59	3	47.7	4	4.82	3	5.50	4
16	6.80	4	< 3	NR			46.3	3	4.90	3	5.80	4
18	6.50	4	7.10	2			50.0	3	< 5	NR	7.00	4
19												
21												
23	7.34	4	4.24	3			42.9	0			< 20	NR
24	4.80	2	1.30	0	4.81	0	48.5	4			6.20	4
25	< 51	NR	< 129	NR	6.46	3	51.0	3	< 4	NR	< 4	NR
29			9.35	0							10.00	3
30			8.18	0					4.26	4	6.64	4
32	6.99	4	7.00	2	6.03	4	47.5	4	3.30	3	6.40	4
33					25.70	0	48.7	4				
35												
36	0.01	0	0.01	0	12.40	0					0.01	2
37			6.60	3	6.12	4			4.05	4	5.40	4
39							51.0	3			5.00	4
42			5.40	4	6.30	4	53.0	1	3.60	4	4.80	4
43					6.10	4						
45	4.54	1	5.01	4	6.20	4			8.70	0		
46	10.00	1	5.10	4			49.2	4	3.00	3	< 8	NR
50			6.00	3			< 100	NR	6.00	1	4.00	4
52	< 6	NR	< 5	NR	5.53	3	48.9	4	3.82	4	12.60	2
54												
55	7.30	4	4.90	4	6.37	3	44.0	1				
57	9.00	2	2.70	1	5.10	1			< 50	NR	< 20	NR
58	3.40	0	0.67	0	3.74	0					16.00	0
59	6.00	3					50.0	3			5.10	4
61	< 50	NR	5.50	4	2.90	0			9.40	0	< 10	NR
63	8.40	3	5.80	4	8.13	0	54.0	0	10.00	0	11.00	2
68	< 5.0	NR	5.90	4			46.0	3	4.00	4	11.00	2
69			5.40	4								
70			6.42	3	5.80	4	< 10	0	< 50	NR	< 10	NR
73											4.00	4
75			4.99	4					4.30	4	5.30	4
76			7.31	1								
78	6.50	4	5.30	4	6.00	4					7.00	4
79			4.60	4							14.00	1
81	4.00	1	4.00	3					< 2	NR	4.00	4
84												
85	< 100	NR	5.10	4			48.6	4	< 20	NR	5.00	4
86			3.86	3					3.44	3	7.83	4
87					6.10	4					10.00	3
89			2.02	0	6.13	4					< 40	NR

**Table 5. --Laboratory performance ratings for standard reference water sample T-123
(trace constituent)--Continued**

Lab	Sb (Antimony)			Se (Selenium)			SiO ₂ (Silica)			Sr (Strontium)			V (Vanadium)			Zn (Zinc)		
	MPV = F-pseudosigma =	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	RV	Rating	RV	Rating	RV	Rating
90	6.99			5.23		6.08		48.6		4.00		6.00						
91	1.483			1.371		0.571		2.59		1.105		4.448						
92																		
94	8.10	3		3.30	2	5.60	3	48.0	4	3.60	4	8.50	3					
96				5.74	4							10.00	3					
97	6.81	4		< 0.22	0	6.23	4	41.9	0	2.84	2	3.59	3					
101						5.67	3			3.50	4	7.50	4					
102	2.90	0		12.90	0	6.02	4	53.0	1	2.20	1	4.50	4					
103						4.50	0	46.0	3	2.80	2	4.50	4					
104						5.89	4											
105																		
107				6.10	3							3.00	3					
108				3.20	2													
109				4.25	3	7.25	1	44.8	2									
111												3.40	3					
112						6.08	4											
113	8.60	2		5.60	4	6.00	4	< 200	NR			10.50	2					
114	30.00	0										10.00	3					
116						4.96	1	50.0	3			< 5	NR					
118				3.20	2													
119	6.80	4		4.50	3	6.00	4					9.00	3					
120	7.65	4		5.15	4													
121						5.09	1	45.0	2	5.00	3	3.00	3					
122				< 1	0							< 5	NR					
124	< 100	NR		< 200	NR					< 10	NR	< 10	NR					
126				< 1	0													
127	6.99	4		6.11	3	6.22	4	48.9	4	4.08	4	4.94	4					
133				4.20	3							6.10	4					
134	7.60	4		5.20	4	6.09	4	47.0	3	4.10	4	5.30	4					
138				4.80	4	6.50	3	50.4	3	3.80	4	5.00	4					
139				7.40	1							< 10	NR					
140												7.04	4					
141	7.17	4		5.85	4	5.06	1	46.5	3	4.25	4	7.47	4					
142	7.42	4		6.12	3	7.25	0			2.80	2							
145						6.43	3	50.5	3	2.00	1	< 0.7	NR					
146						5.00	1	48.0	4									
149	5.00	2																
151	5.57	3		5.00	4							< 20	NR					
153																		
161				< 100	NR			< 100	NR	< 100	NR	< 5	NR					
164																		
179	8.00	3		< 5	NR							< 5	NR					
180	18.90	0		29.60	0							2.50	3					
182	100.00	0		5.80	4			200.0	0			15.00	1					
184	< 50	NR		< 0.005	0	9.28	0			< 10	NR	< 10	NR					
189	4.30	1		6.80	2	5.95	4	36.5	0	< 8	NR	< 20	NR					
190				6.70	2	5.78	3					9.95	3					
193				5.00	4							< 25	NR					
194	7.40	4		5.23	4													
196a																		
196b	6.78	4		5.47	4			49.1	4	3.94	4	4.48	4					
197																		
198	6.24	3		4.60	4							< 50	NR					
202	6.70	4		5.60	4							9.50	3					
209																		

Table 6. Laboratory performance ratings for standard reference water sample T-125
(trace constituent)

[MPV, most probable value; ug/L, microgram per liter; mg/L, milligrams per liter; Lab, laboratory number; OLR, overall laboratory rating for all values; V/26, number of reported values of 26 values; RV, reported value; <, less than]

Rating	Absolute Z-value	Rating	Absolute Z-value
4 (Excellent)	0.00-0.50	1 (Questionable)	1.51-2.00
3 (Good)	0.51-1.00	0 (Poor)	greater than 2.00
2 (Satisfactory)	1.01-1.50	NR (Not Rated)	

Analyte = Ag (Silver)						Al (Aluminum)				As (Arsenic)				B (Boron)				Ba (Barium)				Be (Beryllium)			
MPV = 3.83						24.0				10.2				19.4				16.9				15.0			
F-pseudosigma = 0.604						8.56				1.54				8.02				1.67				1.19			
Lab	OLR	V/26	RV	Rating		RV	Rating			RV	Rating			RV	Rating			RV	Rating			RV	Rating		
1	3.7	26	3.83	4		20.5	4			11.08	3			19.21	4			16.3	4			14.9	4		
3	2.3	25	4.20	3		10.0	1			8.03	2			11	2			15.3	3			14.2	3		
4	2.5	17				78.0	0							20.00	4			18.0	3			16.0	3		
5	3.6	16	4.08	4		37.2	1											16.2	4			14.9	4		
7	2.6	20	5.00	1		21.0	4											15.5	3			13.6	2		
8	1.6	19				24.0	4			8	2							16.3	4			16.7	2		
9	2.3	12																							
10	3.1	8								10.6	4														
11	2.6	23	3.10	2		24.0	4			6.03	0			17.00	4			16.0	3			16.0	3		
12	2.6	10	3.30	3		< 100	NR			10	4											< 20	NR		
13	2.8	15	2.90	1		20.3	4			10.3	4							19.0	2						
15	2.9	26	3.88	4		19.0	3			8.58	2			19.20	4			18.9	2			15.8	3		
16	2.4	21	5.00	1		92.0	0			11.2	3			< 500	NR			16.0	3			16.6	2		
19	3.1	8																							
21	4.0	1																							
23	3.0	13	3.66	4		21.5	4			11.3	3							< 100	NR						
25	2.9	14	< 6	NR		< 19	NR			< 50	NR			15.60	4			16.9	4			14.9	4		
29	0.6	12	4.20	3		100.0	0			18.6	0							25.0	0						
30	2.7	17	3.95	4		21.0	4											15.4	3			18.9	0		
32	3.4	24	4.07	4		22.1	4			10.2	4			23.00	4			15.6	3			16.2	2		
33	2.1	11				20.0	4											18.0	3						
36	0.3	21	0.00	0		0.0	0			0.018	0							0.0	0			0.0	0		
37	3.5	16	3.47	3		20.9	4			10.7	4							15.5	3			16.0	3		
39	2.7	13								9	3							17.0	4			17.0	1		
42	3.3	20	3.70	4						10.0	4							14.8	2						
43	3.7	7																							
45	2.7	21	3.66	4		25.8	4			10.2	4			36.30	0			17.4	4			15.1	4		
46	3.2	22	2.56	0		23.0	4			10.6	4			27.20	3			17.0	4			14.5	4		
51	2.3	15								16	0														
52	2.7	22	3.57	4		28.4	3			10.9	4			< 300	NR			21.1	0			25.0	0		
55	2.8	21	3.30	3						8.80	3							15.0	2			13.7	2		
58	1.0	23	7.00	0		66.0	0			6.9	0			125.00	0			29.0	0			8.0	0		
59	3.6	18	4.00	4		19.0	3			8.7	3							16.0	3						
61	2.6	15	< 10	NR		< 50	NR			9.0	3			< 50	NR			15.7	3			16.0	3		
63	2.4	21	3.10	2		< 100	NR			11.5	3			< 100	NR			45.0	0			13.7	2		
68	2.3	20	3.50	3						10.0	4							18.0	3			16.0	3		
69	3.3	15	3.82	4		25.0	4			9.1	3							22.0	0			14.8	4		
70	3.0	16	4.33	3		< 50	NR			11.2	3			< 50	NR			17.0	4			14.9	4		
73	3.4	5																							
75	3.3	16												19.50	4			16.4	4			14.3	3		
76	2.9	8	2.61	1						11.8	2														
78	3.3	20	4.20	3		17.0	3			10.2	4							19.0	2			14.3	3		
79	2.3	12	3.50	3						8.4	2											15.0	4		
84	1.8	5																							
85	3.4	16	< 5	NR		25.0	4			10.3	4			< 20	NR			17.0	4			15.0	4		
87	2.0	12	< 2	0														< 40	NR						
89	2.5	15	4.56	2		< 100	NR			10.65	4							< 100	NR						
90	3.1	12	2.04	0						10.45	4							21.0	0						
92	2.0	5																							
94	3.2	24	3.50	3		24.0	4			7.4	1			20.00	4			16.0	3			15.0	4		
97	2.2	24	2.34	0		10.4	1			8.06	2							22.8	0			14.2	3		
101	2.9	17	3.60	4		115.0	0											15.8	3						
107	2.7	17	4.05	4		33.8	2			11.1	3							16.0	3						
109	3.4	15								9.78	4			32.90	1										
112	3.0	1																							

Table 6. Laboratory performance ratings for standard reference water sample T-125
(trace constituent)—Continued

Analyte = Ag (Silver)					Al (Aluminum)		As (Arsenic)		B (Boron)		Ba (Barium)		Be (Beryllium)	
MPV = 3.83 μ g/L					24.0 μ g/L		10.2 μ g/L		19.4 μ g/L		16.9 μ g/L		15.0 μ g/L	
F-pseudosigma = 0.604					8.56		1.54		8.02		1.67		1.19	
Lab	OLR	V/26	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating
113	3.5	19	3.75	4	17.3	3	10.5	4					14.3	3
116	2.6	11			< 100	NR			16.00	4	17.0	4		
118	2.5	8	3.00	2			11.3	3						
119	2.9	21	4.00	4	15.0	2	8	2	30.00	2	20.0	1	14.6	4
120	2.4	19	2.85	1	32.7	2	11.9	2			26.5	0	21.2	0
122	2.1	17	5.00	1	28.9	3	11.8	2	< 0.1	0	14.9	2		
124	0.9	12	< 20	NR	< 100	NR	300	0	< 50	NR	< 10	0	17.0	1
127	3.7	26	3.87	4	20.5	4	9.79	4	19.20	4	16.0	3	15.0	4
133	2.5	14	4.50	2			13	1			16.8	4	16.7	2
134	3.0	24	3.80	4	32.0	3	10.7	4	< 20	NR	13.0	0	14.0	3
138	3.3	22	4.23	3			10.2	4			17.1	4	15.9	3
139	2.5	12			< 500	NR	12.5	2						
141	3.0	24	3.00	2	27.5	4	11.2	3	< 10	NR	17.1	4	14.7	4
142	2.9	21	3.70	4			9.25	3	32.90	1	16.7	4	15.4	4
145	2.9	20			< 13.4	NR	8.7	3	18.15	4	17.1	4	16.3	2
146	2.3	12									16.0	3	16.0	3
149	1.1	7	25.60	0										
151	2.8	12	< 10	NR			9.34	3			13.9	1	14.6	4
153	2.3	12	6.80	0					17.40	4	17.4	4		
161	3.2	12	< 50	NR	< 100	NR	< 100	NR			17.0	4	15.0	4
164	3.0	4												
180	3.1	16	< 4.8	NR	< 24.2	NR	10.9	4	19.20	4	17.0	4	14.7	4
182	0.9	23	4.00	4	225.0	0	9	3			60.0	0	5.0	0
183	1.7	13	4.50	2	28.4	3	10	4			6.2	0	13.0	1
184	1.9	14	< 5	NR	< 200	NR	10.6	4			17.6	4	14.9	4
189	1.4	21	4.90	1	55.0	0	10	4	< 10	NR	15.0	2	15.6	3
190	2.9	17	3.95	4	20.5	4	10.1	4						
193	2.8	13	2.80	1			9	3			15.0	2		
196a	3.7	19	3.91	4	21.1	4	10.65	4			16.5	4	15.4	4
196b	2.2	9	4.92	1										
197	3.3	4												
207	0.4	7												

**Table 6. Laboratory performance ratings for standard reference water sample T-125
(trace constituent)—Continued**

[MPV, most probable value; ug/L, microgram per liter; mg/L, milligrams per liter; Lab, laboratory number; OLR, overall laboratory rating for all values; V/26, number of reported values of 26 values; RV, reported value; <, less than]

		Rating		Absolute Z-value		Rating		Absolute Z-value	
		4 (Excellent)		0.00-0.50		1 (Questionable)		1.51-2.00	
		3 (Good)		0.51-1.00		0 (Poor)		greater than 2.00	
		2 (Satisfactory)		1.01-1.50		NR (Not Rated)			
		Ca (Calcium)		Cd (Cadmium)		Co (Cobalt)		Cr Chromium)	
		m g/L		μ g/L		μ g/L		μ g/L	
		RV		RV		RV		RV	
		Rating		Rating		Rating		Rating	
		RV		RV		RV		RV	
		Rating		Rating		Rating		Rating	
		RV		RV		RV		RV	
		Rating		Rating		Rating		Rating	
		RV		RV		RV		RV	
		Rating		Rating		Rating		Rating	
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		Rating		Rating		Rating		Rating	
		RV		RV		RV		RV	
		Rating		Rating		Rating		Rating	
		RV		RV		RV		RV	
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Table 6. Laboratory performance ratings for standard reference water sample T-125
(trace constituent)—Continued

Lab	Ca (Calcium)		Cd (Cadmium)		Co (Cobalt)		Cr Chromium		Cu (Copper)		Fe (Iron)		K (Potassium)	
	MPV = 9.34 m g/L		7.20 μ g/L		9.45 μ g/L		3.99 μ g/L		17.4 μ g/L		97.9 μ g/L		1.04 m g/L	
	F-pseudosigma = 0.526		0.749		0.778		0.712		2.08		7.34		0.074	
Lab	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating
113	9.10	4	7.22	4			3.73	4	18.3	4	101.0	4	1.01	4
116	9.16	4									91.0	3	1.60	0
118			7.00	4			3.20	2	14.4	2				
119	9.30	4	7.00	4			4.20	4	18.0	4	95.0	4	1.30	0
120	8.68	2	7.46	4			3.74	4	17.4	4			0.94	2
122	9.03	3	7.80	3			4.70	3	16.7	4	110.0	1	1.00	3
124	9.79	3	< 10	NR	< 10	NR	< 50	NR	10.0	0	120.0	0		
127	8.97	3	6.83	4	9.81	4	3.90	4	16.6	4	98.1	4	1.06	4
133	9.35	4	9.20	0			3.30	3	13.2	1	97.5	4		
134	9.20	4	7.30	4	9.30	4			18.6	3	85.0	1	1.00	3
138	9.90	2	7.00	4	9.10	4	4.56	3	16.3	3	105.8	2	1.04	4
139	11.00	0	7.67	3			3.90	4	17.9	4	91.0	3	1.03	4
141	9.78	3	6.60	3	8.85	3	4.27	4	17.9	4	95.8	4	1.13	2
142	10.30	1	6.83	4			3.75	4	17.2	4	74.9	0	1.10	3
145	9.88	2	8.50	1	9.15	4	4.90	2	16.3	3	100.5	4	0.95	2
146	8.50	1	6.90	4							94.0	3		
149			7.70	3					16.0	3	110.0	1		
151			8.36	1			3.58	3	18.2	4				
153	8.61	2	6.27	2			1.10	0	16.8	4			0.92	1
161	9.44	4	7.00	4	10.00	3	< 5	NR	19.0	3	101.0	4	< 2	NR
164	9.16	4											0.97	3
180	9.78	3	7.70	3	8.90	3	< 3.8	NR	15.6	3	91.7	3	2.66	0
182	12.20	0	1.00	0	15.00	0	9.00	0	20.0	2	120.0	0	0.90	1
183			8.00	2			7.00	0	15.0	2				
184	9.76	3	8.60	1	12.20	0	< 10	NR	20.8	1	87.5	2	1.24	0
189	9.03	3	5.60	0	16.00	0	< 2	0	14.5	2	< 50	0	0.84	0
190	8.42	1	6.50	3			3.70	4	14.3	2	9.3	0	1.09	3
193	9.27	4	6.00	1	< 25	NR	3.00	2	< 25	NR	102.0	3	1.06	4
196a			7.09	4	9.83	4	4.00	4	18.8	3				
196b	10.75	0	6.73	3									1.09	3
197	8.87	3											1.03	4
207	10.30	1					10.40	0					1.43	0

**Table 6. Laboratory performance ratings for standard reference water sample T-125
(trace constituent)—Continued**

[MPV, most probable value; ug/L, microgram per liter; mg/L, milligrams per liter; Lab, laboratory number; OLR, overall laboratory rating for all values; V/26, number of reported values of 26 values; RV, reported value; <, less than]

		Rating		Absolute Z-value		Rating		Absolute Z-value	
		4 (Excellent)		0.00-0.50		1 (Questionable)		1.51-2.00	
		3 (Good)		0.51-1.00		0 (Poor)		greater than 2.00	
		2 (Satisfactory)		1.01-1.50		NR (Not Rated)			

Analyte =	Li (Lithium)			Mg (Magnesium)			Mn (Manganese)			Mo (Molybdenum)			Na (Sodium)			Ni (Nickel)			Pb (Lead)		
MPV =	16.2 μ g/L			2.00 m g/L			18.0 μ g/L			20.1 μ g/L			22.3 m g/L			11.2 μ g/L			8.11 μ g/L		
F-pseudosigma =	1.58			0.111			1.22			1.78			1.19			1.04			1.216		
Lab	RV	Rating		RV	Rating		RV	Rating		RV	Rating		RV	Rating		RV	Rating		RV	Rating	
1	16.3	4		2.00	4		17.8	4		20.1	4		22.5	4		11.0	4		8.37	4	
3	20.0	0		2.08	3		18.0	4		21.0	3		23.8	2		20.0	0		10.00	1	
4	16.0	4		1.98	4		18.0	4		< 20	NR		21.8	4		< 20	NR		< 20	NR	
5				1.99	4		17.8	4		20.4	4		23.0	3							
7				1.99	4		17.8	4		17.3	1		22.3	4		15.3	0				
8				1.83	1		2.4	0		20.7	4		24.0	2		23.0	0				
9				1.76	0		14.8	0					23.2	3		10.3	3		8.47	4	
10							21.0	0											7.80	4	
11				2.16	2		18.0	4		16.0	0		24.3	1					7.40	3	
12				2.00	4		< 20	NR		< 30	NR		21.0	2		< 20	NR		< 10	NR	
13				1.92	3		20.3	1					22.3	4		< 50	NR		5.20	0	
15	17.0	3		2.15	2		20.0	1		20.6	4		24.6	1		11.3	4		8.11	4	
16	< 500	NR		2.00	4		17.0	3		25.8	0		24.3	1		< 25	NR		7.70	4	
19				1.86	2		17.0	3					22.0	4							
21																					
23				1.99	4		17.3	3		< 100	NR		21.5	3		< 20	NR		6.61	2	
25	16.0	4		2.15	2		17.0	3					24.1	1		< 49	NR		< 71	NR	
29							14.0	0		15.2	0								22.80	0	
30	15.3	3		1.99	4		18.0	4		19.5	4					11.7	4		8.61	4	
32	16.8	4		2.06	3		18.9	3		18.0	2					10.8	4		8.68	4	
33				2.14	2		22.5	0					18.0	0					4.88	0	
36				1.90	3		0.1	0					21.1	2		0.0	0		0.01	0	
37							18.3	4								11.2	4		8.86	3	
39	17.0	3		2.07	3		19.0	3		18.0	2		23.2	3							
42	18.0	2		2.00	4		17.3	3		18.8	3		21.8	4		11.4	4		8.30	4	
43				2.00	4		18.0	4					23.1	3							
45				1.73	0					21.4	3		22.3	4		10.5	3		7.22	3	
46				1.99	4		18.0	4					22.0	4		10.3	3		1.30	0	
51				2.00	4		24.0	0					22.5	4		12.0	3		7.00	3	
52				1.92	3		16.9	3		21.2	3		22.4	4		10.9	4		10.40	1	
55	12.0	0		1.84	2		14.1	0					22.1	4		10.7	4		8.40	4	
58				1.81	1		24.0	0		41.0	0		122.0	0		10.7	4		10.00	1	
59				2.00	4		18.0	4					22.0	4		11.9	3		8.40	4	
61				2.00	4		18.0	4		< 50	NR		23.0	3		< 25	NR		9.00	3	
63	< 100	NR		1.82	1		17.0	3		19.2	3		20.0	1		11.8	3		8.10	4	
68	18.0	2		2.20	1					25.0	0		23.0	3		14.0	0		9.10	3	
69				2.00	4								20.7	2		11.0	4		8.00	4	
70				2.02	4		18.0	4		< 50	NR		22.8	4		< 50	NR		9.33	2	
73																10.0	2				
75	15.6	4		2.10	3		18.4	4		20.7	4		21.7	3							
76							16.8	3					22.5	4					7.71	4	
78				2.00	4		16.8	3					23.0	3		10.6	3		8.40	4	
79							25.0	0								14.0	0		7.00	3	
84				1.90	3		20.0	1					22.2	4							
85	17.1	3		1.95	4		19.0	3		< 20	NR		22.1	4		< 20	NR		< 50	NR	
87				1.84	2								20.6	2		12.0	3		24.00	0	
89				2.10	3		18.6	4					23.0	3		7.8	0		7.53	4	
90							17.5	4					22.4	4		11.5	4		8.30	4	
92				2.00	4								23.7	2							
94				1.89	3		17.0	3		17.6	2		21.8	4		12.0	3		7.60	4	
97				1.86	2		17.8	4		20.3	4		21.2	3		13.0	1		9.36	2	
101				2.00	4		16.9	3					22.5	4		11.8	3		12.60	0	
107				2.23	0		17.4	4					21.3	3		10.6	3		8.09	4	
109	15.5	4		2.00	4		18.6	4		21.6	3		21.1	3					8.10	4	
112																					

**Table 6. Laboratory performance ratings for standard reference water sample T-125
(trace constituent)—Continued**

Analyte =	Li (Lithium)			Mg (Magnesium)			Mn (Manganese)			Mo (Molybdenum)			Na (Sodium)			Ni (Nickel)			Pb (Lead)		
MPV =	16.2 μ g/L			2.00 m g/L			18.0 μ g/L			20.1 μ g/L			22.3 m g/L			11.2 μ g/L			8.11 μ g/L		
F-pseudosigma =	1.58			0.111			1.22			1.78			1.19			1.04			1.216		
Lab	RV	Rating		RV	Rating		RV	Rating		RV	Rating		RV	Rating		RV	Rating		RV	Rating	
113				2.15	2		18.2	4					23.1	3		10.6	3		8.25	4	
116	54.0	0		2.00	4		18.0	4					20.8	2							
118																10.3	3		8.40	4	
119				2.00	4		18.0	4		22.3	2		10.7	0		9.7	2				
120				1.92	3		1.7	0		21.1	3		22.3	4		9.3	1		6.82	2	
122				1.96	4		16.7	2					24.4	1					10.40	1	
124				1.98	4		20.0	1		< 20	NR					50.0	0		< 50	NR	
127	16.1	4		1.99	4		17.2	3		18.8	3		22.0	4		10.8	4		7.42	3	
133				1.95	4											11.8	3		5.90	1	
134	22.0	0		1.90	3		18.0	4		15.0	0		22.0	4		10.4	3		7.70	4	
138				2.09	3		18.7	3		19.0	3		23.4	3		11.7	4		9.84	2	
139				1.91	3		< 10	0					22.5	4		< 40	NR		12.50	0	
141				2.06	3		18.7	3		22.8	1		24.3	1		11.2	4		7.07	3	
142				2.20	1		17.9	4		21.4	3		24.5	1		11.3	4		8.00	4	
145	15.0	3		2.04	4		19.2	3		21.0	3		23.3	3		8.7	0		< 14.8	NR	
146				1.80	1		16.0	1		19.0	3		21.0	2					8.70	4	
149							9.0	0											5.30	0	
151							30.4	0		18.8	3					10.0	2		8.37	4	
153				1.90	3		19.5	2					21.5	3					9.10	3	
161				2.02	4		18.0	4		< 50	NR		22.3	4		16.0	0		< 20	NR	
164				1.94	3								21.1	2							
180				2.16	2		18.6	4		19.7	4		23.1	3		11.5	4		< 27.8	NR	
182	14.0	2		1.60	0		15.0	0		20.0	4		17.6	0		15.0	0		10.00	1	
183							20.0	1					21.6	3		9.0	0		8.20	4	
184				2.06	3		18.0	4					24.5	1		< 10	NR		< 50	NR	
189	< 500	NR		2.01	4		17.0	3		< 10	0		24.7	1		< 20	NR		3.90	0	
190				2.07	3		16.5	2					22.5	4		10.8	4		6.98	3	
193				1.84	2								21.2	3		11.0	4		7.00	3	
196a	14.0	2					17.5	4		17.7	2					11.4	4		8.03	4	
196b				2.05	4		17.5	4		23.6	1					13.3	1		7.22	3	
197				1.90	3								21.4	3							
207				1.86	2					6.0	0		18.8	0					3.48	0	

**Table 6. --Laboratory performance ratings for standard reference water sample T-125
(trace constituent)--Continued**

[MPV, most probable value; ug/L, microgram per liter; mg/L, milligrams per liter; Lab, laboratory number; OLR, overall laboratory rating for all values; V/26, number of reported values of 26 values; RV, reported value; <, less than]

Rating		Absolute Z-value		Rating		Absolute Z-value	
4 (Excellent)		0.00-0.50		1 (Questionable)		1.51-2.00	
3 (Good)		0.51-1.00		0 (Poor)		greater than 2.00	
2 (Satisfactory)		1.01-1.50		NR (Not Rated)			

F-pseudosigma =	Sb (Antimony)			Se (Selenium)			SiO ₂ (Silica)			Sr (Strontium)			V (Vanadium)			Zn (Zinc)		
	MPV =		μ g/L	9.78		μ g/L	5.18		m g/L	46.0		μ g/L	6.56		μ g/L	5.95		μ g/L
	Lab	RV	Rating	RV	Rating		RV	Rating		RV	Rating		RV	Rating		RV	Rating	
	1	6.05	4	9.80	4		5.09	4		45.5	4		6.52	4		8.12	3	
	3	6.20	4	8.56	3		5.63	2		46.0	4		< 10	NR		6.70	4	
	4						5.12	4		46.0	4		3.00	0		< 10	NR	
	5						5.18	4					7.66	2		4.73	4	
	7	24.00	0							45.9	4		8.30	1		3.90	3	
	8			8.00	3		4.40	0		48.3	3							
	9						7.18	0		< 27	0					< 4	NR	
	10			10.50	4													
	11	5.70	4	10.80	3		5.18	4					6.00	3		25.00	0	
	12	< 100	NR	8.00	3											< 20	NR	
	13			10.60	4		5.83	1								< 10	NR	
	15	4.77	2	9.60	4		5.49	3		45.3	4		8.10	1		5.10	4	
	16	6.50	4	6.50	1					43.7	3		7.40	3		4.20	4	
	19																	
	21																	
	23			5.45	0											< 20	NR	
	25	< 51	NR	< 129	NR		5.63	2		48.0	3		6.00	3		< 4	NR	
	29			16.60	0											15.00	0	
	30			16.09	0								7.11	3		10.89	2	
	32	6.39	4	11.00	3		5.21	4		47.4	3		7.00	4		4.40	4	
	33						5.35	3		46.0	4							
	36	0.01	0	0.02	0		10.80	0								0.00	2	
	37			12.10	2		5.29	4					6.96	4		4.39	4	
	39									48.0	3					5.00	4	
	42			10.30	4		5.00	3		4.8	0		6.30	4				
	43						5.10	4										
	45	3.17	0	8.88	4		5.39	3					13.90	0				
	46	6.30	4	6.90	1								6.00	3		9.32	3	
	51						5.22	4								5.00	4	
	52	< 6	NR	< 5	0		4.64	1		44.8	3		6.56	4		< 10	NR	
	55	6.80	4	10.00	4		5.19	4		43.0	2							
	58	2.40	0	0.67	0		4.06	0								24.00	0	
	59	5.00	3							47.0	4					4.20	4	
	61	< 50	NR	10.40	4		2.50	0					10.00	0		< 10	NR	
	63	7.60	2	10.00	4		5.35	3		51.1	0		< 10	NR		11.00	2	
	68	< 5	NR	9.00	4					44.0	3		8.00	1		3.90	3	
	69			9.30	4													
	70			11.00	3		4.95	3		< 10	0		< 50	NR		< 10	NR	
	73															6.00	4	
	75			9.75	4								7.90	1		4.60	4	
	76			12.50	2													
	78	6.80	4	10.00	4		5.20	4								3.80	3	
	79			9.40	4											7.80	4	
	84																	
	85	< 100	NR	9.30	4					44.8	3		< 20	NR		9.40	3	
	87						4.80	2								5.00	4	
	89			< 2	0		5.14	4								< 40	NR	
	90															8.00	3	
	92						4.60	1										
	94	7.20	3	7.00	2					45.0	4		6.20	4		6.00	4	
	97	6.11	4	0.78	0		5.30	4		35.8	0		5.11	1		9.13	3	
	101						4.70	1					6.30	4		5.90	4	
	107			10.80	3											20.00	0	
	109			9.13	4		6.16	0		46.0	4							
	112						4.98	3										

**Table 6. --Laboratory performance ratings for standard reference water sample T-125
(trace constituent)--Continued**

F-pseudosigma =	Sb (Antimony)			Se (Selenium)			SiO ₂ (Silica)			Sr (Strontium)			V (Vanadium)			Zn (Zinc)		
	MPV = 6.24 μ g/L			9.78 μ g/L			5.18 m g/L			46.0 μ g/L			6.56 μ g/L			5.95 μ g/L		
	1.305			1.853			0.319			2.29			0.890			4.007		
Lab	RV	Rating		RV	Rating		RV	Rating		RV	Rating		RV	Rating		RV	Rating	
113	8.10	2		9.60	4		5.19	4		< 200	NR					10.80	2	
116							4.15	0		46.0	4					< 5	NR	
118				5.90	0													
119	5.60	4		8.40	3		5.00	3								5.00	4	
120	6.28	4		10.30	4											2.41	3	
122				< 1	0											10.00	2	
124	100.00	0		260.00	0								< 10	NR		10.00	2	
127	5.04	3		11.80	2		5.25	4		46.0	4		7.31	3		6.50	4	
133				8.30	3											8.90	3	
134	6.20	4		9.60	4		5.10	4		43.0	2		7.10	3		4.60	4	
138				10.60	4		5.60	2		47.1	4		6.20	4		4.20	4	
139				10.90	3											< 10	NR	
141	6.83	4		11.60	3		3.94	0		44.0	3		6.50	4		4.03	4	
142	6.59	4		11.50	3		6.16	0					6.25	4				
145							5.38	3		47.2	4		6.20	4		< 0.7	NR	
146							4.00	0		44.0	3							
149	4.10	1																
151	6.32	4		9.85	4											< 20	NR	
153																		
161	< 50	NR		< 100	NR					< 100	NR		< 100	NR		21.00	0	
164																		
180	< 18.9	NR		< 29.6	NR								5.60	2		< 3	NR	
182	150.00	0		9.80	4					240.0	0					15.00	0	
183				3.00	0													
184	< 50	NR		0.01	0		8.34	0					< 10	NR		< 10	NR	
189	5.00	3		4.20	0		5.05	4		32.8	0		< 8	NR		< 20	NR	
190				10.85	3		4.71	2								4.20	4	
193				9.00	4											< 25	NR	
196a	5.97	4		10.58	4					47.1	4		6.72	4		4.07	4	
196b																		
197																		
207																		

Table 7. —Laboratory performance ratings for standard reference water sample M-126 (major constituent)

[MPV, most probable value; ug/L, microgram per liter; mg/L, milligrams per liter; Lab, laboratory number; OLR, overall laboratory rating for all values; V/15, number of reported values of 15 values; RV, reported value; <, less than]

Rating		Absolute Z-value		Rating		Absolute Z-value	
4 (Excellent)		0.00-0.50		1 (Questionable)		1.51-2.00	
3 (Good)		0.51-1.00		0 (Poor)		greater than 2.00	
2 (Satisfactory)		1.01-1.50		NR (Not Rated)			

Analyte = Alk (Alkalinity)					B (Boron)		Ca (Calcium)		Cl (Chloride)		DSRD	
MPV = 27.0 m g/L					9.6 μ g/L		7.62 m g/L		20.7 m g/L		88.0 m g/L	
F-pseudosigma = 1.48					1.67		0.460		0.93		7.78	
Lab	OLR	V/15	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating
1	3.3	15	28.6	2	8.4	4	7.50	4	20.2	3	85	4
2	1.0	4	546.0	0								
3	2.4	14	26.3	4	< 10	NR	7.51	4	21.2	3	70	0
4	2.7	9			10.0	4	7.25	3	18.6	0		
5	2.6	11	33.5	0			7.68	4	18.8	0	86	4
7	2.6	12	28.7	2			7.99	3	21.6	3		
8	1.5	13	28.0	3			4.91	0	20.4	4		
9	2.8	13	27.0	4			7.20	3	19.6	2	88	4
10	3.5	12	27.5	4			7.70	4	21.6	3	88	4
11	2.6	14	26.2	3	11.0	4	7.89	3	22.1	1	89	4
12	1.8	12	28.0	3			8.00	3	25.0	0	94	3
13	2.8	13	25.9	3			7.23	3	19.7	2	83	3
15	2.3	15	27.0	4	9.6	4	9.93	0	20.9	4	73	1
16	3.2	13	31.3	0	< 500	NR	7.30	3	20.6	4	89	4
18	2.8	14	25.0	2	< 5	0	7.80	4	19.8	3	94	3
19	3.2	11	27.9	3			7.60	4	20.0	3	94	3
23	2.6	10					7.31	3	21.8	2	71	0
24	3.1	12	27.0	4			7.52	4	20.9	4		
25	1.8	12	32.0	0	< 23	NR	8.38	1			92	3
26	2.5	11	26.0	3			8.50	1	20.3	4	88	4
29	2.8	12	27.0	4	10.0	4	6.00	0	21.1	4	86	4
30	0.4	5					0.75	0	6.0	0		
32	2.6	13	26.8	4			7.40	4	21.1	4	196	0
33	2.2	12	26.0	3			7.77	4	17.2	0		
36	2.8	13	28.0	3			6.17	0	20.0	3	89	4
37	2.6	8	26.7	4					19.3	1		
38	3.6	10	27.6	4			7.51	4			86	4
39	2.6	10	27.0	4			8.26	2	20.0	3		
41	0.0	1										
42	2.9	13	30.3	0			7.50	4	20.8	4		
43	3.8	10	28.0	3			7.80	4	20.0	3	88	4
45	2.9	14	27.9	3	10.3	4	7.27	3	21.0	4	101	1
46	3.3	14	27.3	4	5.9	0	7.36	3	21.0	4	84	3
50	3.4	11	27.0	4	< 50	NR	7.60	4	20.0	3		
51	3.3	11	26.0	3			7.12	2	21.6	3	85	4
52	2.7	13	30.0	1	< 300	NR	7.71	4	21.2	3	84	3
54	3.6	12	27.0	4			7.50	4	21.4	3	85	4
55	2.7	13	29.3	1			7.59	4	21.0	4	78	2
56	2.3	9	27.4	4			7.90	3	20.9	4		
57	1.8	13	24.0	1	< 50	NR	6.70	0	22.0	2	66	0
58	1.4	13	28.0	3	114.0	0	6.07	0	21.2	3		
59	4.0	2										
60	2.2	6	26.9	4					24.1	0	63	0
61	2.5	13	21.6	0	< 50	NR	7.40	4	20.4	4	98	2
63	2.7	14	26.3	4	< 100	NR	7.99	3	19.0	1	95	3
64	3.9	10					7.64	4	20.5	4		
68	3.0	11	32.3	0			7.80	4	21.7	2		
69	2.9	10	27.7	4			7.50	4	20.4	4	92	3
70	2.6	14	24.5	1	< 50	NR	7.78	4	20.2	3	94	3
75	2.7	6	28.0	3					20.2	3	88	4
76	3.3	7	24.2	1					20.7	4	80	2
78	1.7	13	28.5	2			9.80	0	25.0	0	320	0
79	4.0	4	27.0	4					21.0	4		
84	1.4	8	26.2	3			9.65	0	24.8	0		
85	2.6	14	24.7	1	< 20	NR	7.83	3	21.8	2	83	3
86	2.8	8					7.75	4	22.0	2		
87	3.0	9	28.0	3					22.0	2	122	0
89	2.7	13	27.8	3			8.50	1	2.0	0	87	4
90	2.6	7	26.0	3			8.10	2			89	4
92	2.6	12	24.8	2			7.80	4	21.1	4	91	4
93	2.8	5							20.7	4		
94	3.2	14	26.0	3	11.0	4	7.90	3	20.9	4	94	3
96	2.9	7	29.0	2					20.4	4	78	2
97	3.0	13	26.3	4			7.18	3	21.3	3	86	4
101	2.7	9					7.70	4	20.3	4	73	1

Table 7. —Laboratory performance ratings for standard reference water sample M-126 (major constituent)

(major constituent)—Continued

Analyte = Alk (Alkalinity)			B (Boron)		Ca (Calcium)		Cl (Chloride)		DSRD	
MPV = 27 m g/L			9.6 μ g/L		7.62 m g/L		20.7 m g/L		88.0 m g/L	
F-pseudosigma = 1.42			1.67		0.460		0.93		7.76	
Lab	OLR	V/15	RV	Rating	RV	Rating	RV	Rating	RV	Rating
102	1.9	10			7.50	4	19.0	1		
103	1.4	8			6.80	1				
104	3.3	3								
107	2.8	6	26.0	3			24.0	0		
108	0.0	1								
109	2.2	14	28.1	3	7.9	2	22.7	0	94	3
111	2.0	1								
113	2.9	13	27.2	4			18.9	1	79	2
114	2.4	11	27.0	4			21.5	3		
116	3.1	9	25.9	3	< 10	NR	20.4	4		
118	2.8	6	30.0	1					93	3
119	3.1	13	22.0	0			21.0	4	84	3
120	2.6	11	27.0	4			21.0	4	104	0
121	4.0	8			< 10	NR	20.6	4		
122	2.7	11	27.5	4	< 0.1	0	21.7	2	101	1
124	2.2	9	27.0	4			21.0	4		
127	3.6	15	27.7	4	10.0	4	19.3	1	89	4
128	2.6	12	31.0	0	< 10	NR	19.8	3		
134	3.5	14	27.1	4	< 20	NR	20.2	3	58	0
138	3.2	13	26.7	4			20.4	4	84	3
139	2.5	10	32.0	0			19.7	2		
140	2.4	11					21.0	4	80	2
141	2.8	14	26.0	3			20.2	3	88	4
142	2.2	14	27.0	4	7.9	2	20.6	4	95	3
145	3.4	13	25.5	2	9.2	4	20.7	4		
146	1.8	12	24.1	1			22.0	2	85	4
151	3.0	2	28.0	3						
153	3.4	10	26.6	4			26.0	0		
161	2.2	6	33.8	0			21.1	4		
164	2.3	6					21.1	4		
179	1.1	8					26.0	0		
180	2.5	11	27.5	4	7.7	2	20.7	4		
182	0.8	12	24.0	1			10.0	0	18	0
183	1.7	11	28.0	3			0.3	0	107	0
184	2.0	13	25.0	2			21.0	4	92	3
189	2.1	14	21.0	0	< 10	NR	20.0	3	140	0
190	2.6	13	25.0	2			19.6	2	85	4
191	3.6	7					20.7	4		
193	3.3	3					19.4	2		
194	2.6	5	27.9	3			20.0	3		
196	1.6	7					19.4	2		
197	2.2	10	27.7	4			20.0	3		
202	1.9	10	29.6	1			28.0	0	70	0
207	2.4	11	27.0	4			23.0	0		
209	2.0	4					0.6	0		

**Table 7. —Laboratory performance ratings for standard reference water sample M-126
(major constituent)—Continued**

[MPV, most probable value; ug/L, microgram per liter; mg/L, milligrams per liter; Lab, laboratory number; OLR, overall laboratory rating for all values; V/18, number of reported values of 18 values; RV, reported value; <, less than]

Rating	Absolute Z-value	Rating	Absolute Z-value
4 (Excellent)	0.00-0.50	1 (Questionable)	1.51-2.00
3 (Good)	0.51-1.00	0 (Poor)	greater than 2.00
2 (Satisfactory)	1.01-1.50	NR (Not Rated)	

Analyte = F (Fluoride)			K (Potassium)			Mg (Magnesium)			Na (Sodium)			P (total Phosphorus)		
MPV = 0.59 m g/L			2.62 m g/L			1.62 m g/L			17.8 m g/L			0.197 m g/L		
F-pseudosigma = 0.048			0.178			0.078			0.77			0.009		
Lab	RV	Rating	RV	Rating		RV	Rating		RV	Rating		RV	Rating	
1	1.04	0	2.73	3		1.51	2		17.8	4		0.194	4	
2														
3	0.67	1	4.30	0		1.72	2		18.7	2		0.215	1	
4	0.90	0				1.59	4		17.2	3				
5			2.75	3		1.65	4		17.9	4				
7	8.20	0	2.51	3		1.68	3		17.5	4		0.270	0	
8	0.60	4	1.80	0		1.64	4		23.3	0		0.140	0	
9	0.60	4	2.67	4		1.45	0		18.3	3		0.191	3	
10	0.59	4	2.70	4		1.70	2		17.7	4				
11	0.57	4	1.99	0		1.78	1		18.8	2		0.200	4	
12	1.50	0	2.60	4		1.60	4		16.0	0		0.210	2	
13	0.57	4	2.26	1		1.61	4		18.2	3		0.210	2	
15	0.54	3	2.72	3		1.99	0		21.0	0		0.191	3	
16	0.57	4	2.60	4		1.60	4		19.0	1		0.192	3	
18	0.58	4	2.80	2		1.70	2		18.4	3		0.185	2	
19			2.27	1		1.53	2		17.5	4		0.190	3	
23	0.57	4				1.60	4		17.7	4		0.186	2	
24	0.62	3	2.62	4		1.62	4		17.3	3				
25	0.58	4	3.11	0		1.78	0		19.2	1		2.260	0	
26	0.92	0	2.76	3		1.55	3		18.3	3				
29	0.59	4	2.70	4		3.70	0		15.4	0				
30						0.84	0							
32	1.03	0	2.92	1		1.74	1		17.9	4				
33	1.05	0	2.84	2		1.76	1		15.6	0				
36	0.56	3	2.40	2		1.55	3		18.5	3		0.195	4	
37	0.56	3	2.48	3								0.169	0	
38			2.64	4		1.63	4		16.5	1		0.189	3	
39	0.58	4				1.73	2		18.6	2				
41														
42	1.03	0	2.30	1		1.60	4		17.3	3		0.197	4	
43			2.70	4		1.60	4		18.0	4				
45	0.66	2	2.63	4		1.60	4		17.6	4		0.235	0	
46	0.59	4	2.55	4		1.58	3		17.4	4		0.190	3	
50	0.56	3	2.60	4		1.40	0		18.0	4				
51			2.78	3		1.69	3		17.5	4				
52	0.49	0	2.57	4		1.63	4		17.6	4		0.202	3	
54	0.58	4	2.60	4		1.60	4		18.0	4		0.200	4	
55	0.61	4	2.58	4		1.58	4		17.7	4		0.220	0	
56			2.43	2		1.55	3		16.3	1				
57	0.58	4	3.05	0		1.50	1		15.9	0		0.200	4	
58	0.59	4	2.52	3		1.47	1		12.6	0		0.138	0	
59												0.200	4	
60												0.200	4	
61	0.57	4	2.60	4		1.60	4		18.0	4		0.169	0	
63	0.59	4	2.57	4		1.72	2		17.9	4		0.200	4	
64			2.61	4		1.69	3		18.1	4		0.200	4	
68			2.90	1		1.60	4		18.0	4		0.191	3	
69			2.90	1		1.60	4		16.8	2				
70	0.57	4	2.10	0		1.63	4		18.6	2		0.200	4	
75												0.210	2	
76									17.9	4				
78	0.54	2	2.40	2		1.60	4		17.2	3		0.198	4	
79														
84						1.60	4		18.0	4				
85	0.69	0	2.82	2		1.64	4		17.8	4		0.190	3	
86			2.72	3		1.74	1		18.3	3				
87						1.65	4					0.200	4	
89	0.58	4	2.70	4		1.80	0		18.2	3		0.193	4	
90	0.65	2							17.7	4				
92			2.20	0		1.60	4		12.9	0		0.160	0	
93	1.20	0												
94	0.56	3	2.50	3		1.58	3		17.5	4		0.180	1	
96	0.61	4												
97	0.54	3	2.45	3		1.60	4		16.8	2				
101			2.60	4		1.70	2		17.4	4				

Table 7. —Laboratory performance ratings for standard reference water sample M-126

(major constituent)—Continued

Analyte = F (Fluoride)			K (Potassium)		Mg (Magnesium)		Na (Sodium)		P (Total Phosphorus)	
MPV = 0.59 m g/L			2.62 m g/L		1.62 m g/L		17.8 m g/L		0.197 m g/L	
F-pseudosigma = 0.048			0.175		0.078		0.77		0.009	
Lab	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating
102			1.60	0	1.90	0	17.1	3	0.200	4
103			2.80	2	1.60	4	20.5	0	0.160	0
104									0.197	4
107	0.59	4							0.191	3
108									0.260	0
109	0.58	4	2.43	2	1.60	4	17.0	3		
111									0.207	2
113	0.59	4	2.63	4	1.57	3	23.2	0	0.188	2
114	0.59	4	1.48	0	1.70	2	25.0	0	0.188	2
116			2.60	4	1.69	3	17.1	3		
118									0.200	4
119	0.57	4	2.80	2	1.70	2	17.7	4	0.200	4
120	0.58	4	2.60	4	1.61	4	17.2	3	0.180	1
121			2.65	4	1.65	4	17.8	4		
122	0.58	4	2.62	4	1.64	4	19.1	1		
124	0.50	1	7.60	0	1.80	0	21.0	0		
127	0.60	4	2.70	4	1.68	3	17.6	4	0.208	2
128	0.56	3	2.70	4	1.70	2	17.8	4	0.180	1
134	0.59	4	2.60	4	1.60	4	18.0	4	0.195	4
138	0.60	4	2.70	4	1.74	1	18.6	2	0.196	4
139			2.73	3	1.59	4	18.3	3	0.199	4
140	0.59	4	2.63	4	1.60	4	17.4	4	0.030	0
141	0.58	4	2.88	2	1.62	4	17.6	4	0.210	2
142	0.54	2	2.80	2	1.80	0	19.1	1	0.200	4
145	0.58	4	2.47	3	1.60	4	17.6	4		
146	1.76	0	1.76	0	1.53	2	16.7	2		
151										
153	0.60	4	2.54	4	1.65	4	17.7	4		
161	0.52	2								
164			2.20	0	1.40	0	16.9	2		
179			2.72	3	1.68	3	17.2	3	0.220	0
180	0.65	2	3.81	0	1.18	0	18.7	2	0.196	4
182	0.72	0	2.60	4	1.20	0	14.6	0		
183	0.60	4			1.62	4	17.6	4	0.960	0
184	0.55	3	2.84	2	1.72	2	19.5	0	0.180	1
189	0.57	4	2.75	3	1.59	4	20.1	0	0.200	4
190	0.61	4	2.53	3	1.79	0	17.9	4	0.134	0
191			2.72	3	1.70	2	17.9	4		
193										
194	0.61	4								
196	0.93	0	2.88	2	1.72	2	14.8	0		
197	1.09	0	2.42	2	1.54	2	17.0	2		
202	0.58	4	2.60	4	1.70	2			0.120	0
207			3.31	0	1.67	3	18.0	4	0.200	4
209					1.73	2				

**Table 7. —Laboratory performance ratings for standard reference water sample M-126
(major constituent)—Continued**

[MPV, most probable value; ug/L, microgram per liter; mg/L, milligrams per liter; Lab, laboratory number; OLR, overall laboratory rating for all values; V/16, number of reported values of 26 values; RV, reported value; <, less than]

Rating			Absolute Z-value			Rating			Absolute Z-value		
4 (Excellent)			0.00-0.50			1 (Questionable)			1.51-2.00		
3 (Good)			0.51-1.00			0 (Poor)			greater than 2.00		
2 (Satisfactory)			1.01-1.50			NR (Not Rated)					

Analyte = pH			SiO2 (Silica)			SO4 (Sulfate)			Sp Cond			Sr (Strontium)			V (Vanadium)		
MPV = 7.43			4.04 m g/L			6.06 m g/L			148 μ S/cm			41.0 μ g/L			insufficient data		
F-pseudosigma = 0.263			0.300			0.504			8.1			2.08					
Lab	RV	Rating	RV	Rating		RV	Rating		RV	Rating		RV	Rating		RV	Rating	
1	7.65	3	4.07	4		6.06	4		149	4		40.2	4		4.1		
2	7.51	4	3.36	0					129	0							
3	7.49	4	4.62	1		6.04	4		148	4		39.0	3		< 3		
4			4.04	4		6.50	3					39.0	3		< 1		
5	6.34	0	4.06	4		6.00	4		157	2					< 4		
7	7.00	1				5.90	4		152	4		41.2	4		7.0		
8	6.84	0	5.10	0		6.00	4		129	0		46.9	0				
9			3.89	4		5.80	3		142	3		107.0	0				
10	7.68	3	3.90	4		5.50	2		149	4							
11	7.40	4	4.19	4		5.80	3		89	0					1.0		
12	7.10	2				4.00	0		131	0							
13	7.60	3	4.03	4		8.60	0		150	4							
15	6.98	1	4.45	2		6.58	2		154	3		40.0	4		0.9		
16	7.20	3				6.26	4		151	4		39.0	3		< 10		
18	7.63	3	3.98	4		6.77	2		162	1		41.0	4		< 5		
19	7.45	4				5.99	4		149	4							
23	7.25	3				5.82	4		96	0							
24	7.40	4	3.34	0		4.10	0		154	3		40.3	4		< 4		
25	7.43	4	4.51	1					151	4		42.8	3				
26	7.80	2				5.90	4		164	1							
29	7.67	3				5.80	3		148	4							
30	7.07	2				19.66	0										
32	7.20	3	4.40	2		5.91	4		147	4		42.2	3		0.3		
33	7.47	4	4.26	3		5.40	2		143	3		40.9	4				
36	7.40	4	7.71	0		5.97	4		155	3							
37	7.24	3	4.29	3		< 6	NR		146	4							
38	7.50	4	4.00	4					150	4							
39	7.60	3	3.23	0		5.77	3					43.0	3				
41	6.78	0															
42	7.36	4	4.00	4		5.92	4		160	2		42.0	4				
43	7.38	4	4.10	4		< 10	NR		149	4							
45	7.64	3	4.32	3		6.80	2		149	4							
46	7.50	4				5.96	4		146	4		38.8	2		< 6		
50	7.30	4	4.00	4		5.80	3		151	4							
51	7.53	4	4.19	4		6.38	3		143	3							
52	7.32	4	3.70	2		< 10	NR		134	1		38.6	2		< 2		
54	7.61	3				7.00	1		149	4							
55	7.49	4	4.24	3		7.00	1					36.0	0				
56	7.42	4				7.60	0		125	0							
57	7.60	3	3.20	0		6.00	4		150	4		< 100	NR		< 50		
58	7.30	4	3.28	0		4.73	0		124	0							
59			3.90	4													
60	7.60	3							138	2							
61	7.45	4	2.00	0		2.10	0		140	3					< 10		
63	7.47	4	4.51	1		15.00	0		152	4		45.5	0		< 10		
64	7.55	4	3.90	4		5.90	4		151	4							
68	7.40	4	4.14	4					149	4		39.0	3		< 3.0		
69	7.53	4				7.20	0		155	3							
70	7.38	4	4.00	4		5.57	3		132	1		< 10	0		< 50		
75	6.76	0				< 10	NR		147	4							
76	7.39	4				6.22	4		151	4							
78	7.60	3	4.40	2		2.50	0		108	0							
79	7.50	4							150	4							
84	5.89	0				0.40	0		169	0							
85	7.70	2	4.20	3		6.06	4		139	2		40.5	4		< 20		
86	6.95	1				6.09	4		152	4							
87	7.43	4	4.00	4		6.50	3		140	3							
89	7.42	4	4.00	4		4.00	0		145	4							
90	8.39	0							153	3							
92	7.49	4	3.70	2		6.50	3		148	4							
93	7.60	3				5.90	4		141	3							
94	7.61	3				5.70	3		150	4		41.0	4		< 5		
96	7.22	3				5.50	2		154	3							
97	7.35	4	3.73	2		5.60	3		152	4		34.2	0		1.1		
101	6.85	0	3.70	2					141	3							

Table 7. --Laboratory performance ratings for standard reference water sample M-126

(major constituent)--Continued

Analyte = pH			SiO ₂ (Silica)		SO ₄ (Sulfate)		Sp Cond		Sr (Strontium)		V (Vanadium)	
MPV = 7.43			4.04 m g/L		6.06 m g/L		148 μ S/cm		41.0 μ g/L		μ g/L	
F-pseudosigma = 0.263			0.300		0.504		8.1		2.08		insufficient data	
Lab	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating
102			12.00	0	6.20	4	136	2	45.0	1	3.9	
103			3.00	0					41.0	4	< 10	
104	7.82	2	4.01	4								
107	7.25	3					149	4				
108												
109	7.11	2	4.93	0	7.41	0	148	4	36.0	0		
111												
113	7.44	4	4.16	4	5.96	4	152	4	< 200	NR		
114	7.23	3			7.85	0	149	4				
116			3.34	0	6.00	4			41.0	4		
118	7.80	2	4.18	4			140	3				
119	7.93	1	4.00	4	6.00	4	148	4				
120	7.60	3			5.00	0						
121			4.05	4	6.10	4			41.0	4		
122	7.60	3					148	4				
124	7.45	4			< 10	NR	145	4				
127	7.53	4	4.17	4	6.03	4	147	4	41.4	4	< 2	
128	7.58	3	4.12	4	7.02	1	144	4	< 5	NR		
134	7.65	3	4.09	4	6.20	4	151	4	39.0	3	< 1	
138	7.46	4	4.55	1	5.90	4			42.0	4	< 3	
139	7.20	3			5.50	2	147	4				
140	6.88	0	2.00	0	144.00	0						
141	7.60	3	3.40	0	6.62	2	151	4	46.0	0	< 1	
142	7.06	2	4.93	0	7.00	1	147	4				
145	7.60	3	3.95	4	6.11	4	134	1	39.0	3	< 1.3	
146	7.40	4	2.85	0			153	3	38.8	2		
151	7.23	3										
153	7.25	3			6.06	4	155	3				
161	7.66	3			6.44	3	134	1				
164					6.11	4						
179	6.10	0					130	0				
180	7.37	4			6.23	4					< 3.0	
182	7.44	4			1.00	0	1333	0	220.0	0	60.0	
183	7.27	3			1.00	0	133	1				
184	7.10	2	6.52	0	6.20	4	1500	0			< 10	
189	6.40	0	4.32	3	< 1	0	147	4	30.5	0	23.9	
190	7.33	4	3.85	3	7.06	1	149	4				
191					6.08	4			42.0	4		
193					5.81	4	145	4				
194	7.62	3			< 10	NR	1444	0				
196					5.90	4						
197	7.42	4			6.27	4	124	0				
202	7.44	4					132	1				
207	7.60	3	3.00	0	5.77	3	164.4	4				
209					0.06	0						

Table 8. --Laboratory performance ratings for standard reference water sample N-38 (preserved nutrients)
(MPV, most probable value; ug/L, micrograms per liter; mg/L, milligrams per liter; Lab, laboratory number; OLR, overall laboratory rating for all reported values;
V/5, number of reported values of 5 possible values; RV, reported value; <, less than)

Rating		Absolute Z-value		Rating		Absolute Z-value	
4 (Excellent)		0.00 - 0.50		1 (Questionable)		1.51 - 2.00	
3 (Good)		0.51 - 1.00		0 (Poor)		greater than 2.00	
2 (Satisfactory)		1.01 - 1.50		NR (Not Rated)			

Analyte = NH3 as N (Ammonia)						NH3 + Org N as N (Ammonia+Organic N)				NO3 + NO2 as N (Nitrate & Nitrite)				total P as P (Phosphorus)				PO4 as P (Orthophosphate)			
MPV = 0.086 mg/L						0.289 mg/L				0.209 mg/L				0.125 mg/L				0.091 mg/L			
F-pseudosigma = 0.0274						0.1779				0.0163				0.0163				0.0274			
Lab	OLR	V/5	RV	Rating		RV	Rating			RV	Rating			RV	Rating			RV	Rating		
1	3.8	5	0.081	4		0.156	3			0.208	4			0.117	4			0.081	4		
7	1.8	4	0.059	3						0.212	4			0.290	0			0.300	0		
11	1.5	4	0.120	2						0.22	3			0.150	1			0.840	0		
15	3.5	2	0.071	3		< 0.5	NR							0.126	4						
21	3.0	2				0.196	3			0.195	3										
29	2.0	2								0.21	4							0.170	0		
39	4.0	1								0.204	4										
42	3.0	3								0.241	1			0.131	4			0.089	4		
43	3.0	1								0.20	3										
45	2.2	5	0.218	0		0.417	3			0.232	2			0.141	3			0.107	3		
52	3.6	5	0.106	3		0.129	3			0.212	4			0.120	4			0.087	4		
53	0.5	2								0.130	0			0.097	1						
56	3.0	3				0.390	3							0.110	3			0.070	3		
61	3.0	5	0.138	1		0.160	3			0.217	4			0.117	4			0.106	3		
63	3.0	4	< 0.3	NR		0.600	1			0.22	3			0.120	4			0.100	4		
68	3.3	3	0.070	3		0.460	3							0.125	4						
75	3.3	4	0.128	1						0.206	4			0.132	4			0.083	4		
78	0.7	3								0.227	2			0.090	0			0.151	0		
88	0.0	3	0.230	0						0.403	0							0.674	0		
89	3.5	4	0.099	4		0.110	2							0.125	4			0.086	4		
90	3.5	2	0.088	4														0.077	3		
92	3.0	3								0.202	4			0.100	1			0.102	4		
93	4.0	1	0.073	4																	
97	3.2	5	0.080	4		0.160	3			0.21	4			0.140	3			0.120	2		
108	1.8	4	0.084	4						0.200	3			0.250	0			0.180	0		
114	2.3	3	< 0.10	NR		0.400	3			0.33	0			0.120	4						
118	2.6	5	0.060	3		0.520	2			0.24	1			0.110	3			0.080	4		
119	3.0	5	0.110	3		0.280	4			0.16	0			0.130	4			0.080	4		
120	3.5	2	0.088	4		0.154	3														
121	4.0	3	0.079	4						0.206	4							0.085	4		
122	3.6	5	0.086	4		0.220	4			0.207	4			0.104	2			0.080	4		
124	1.0	2	0.200	0						0.23	2										
133	3.5	4	0.100	3		0.410	3							0.130	4			0.080	4		
134	4.0	5	0.084	4		0.298	4			0.207	4			0.128	4			0.092	4		
139	2.8	5	0.058	2		0.598	1			0.194	3			0.132	4			0.085	4		
140	2.4	5	0.080	4		0.330	4			0.201	4			0.020	0			0.020	0		
141	0.8	4	0.700	0		< 0.10	NR			0.252	0			0.185	0			0.118	3		
145	2.6	5	0.030	1		0.140	3			0.19	2			0.110	3			0.090	4		
179	3.8	5	0.103	3		0.300	4			0.206	4			0.124	4			0.096	4		
180	3.2	5	0.068	3		0.176	3			0.211	4			0.102	2			0.095	4		

Table 8. --Laboratory performance ratings for standard reference water sample N-38 (nonpreserved nutrients)

		Analyte = NH ₃ as N (Ammonia)			NH ₃ + Org N as N (Ammonia+Organic N)		NO ₃ + NO ₂ as N (Nitrate & Nitrite)		total P as P (Phosphorus)		PO ₄ as P (Orthophosphate)	
		MPV = 0.087 mg/L			0.200 mg/L		0.210 mg/L		0.120 mg/L		0.120 mg/L	
		F-pseudosigma = 0.0170			0.1579		0.0178		0.0126		0.0141	
Lab	OLR	V/5	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating
2	2.8	4	0.077	3	< 1	NR	0.187	2	0.134	2	0.122	4
5	2.0	1							0.106	2		
10	3.0	5	0.100	3	0.120	3	0.210	4	0.140	1	0.124	4
11	1.8	4	0.180	0			0.210	4	0.130	3	0.890	0
12	2.0	3	< 0.2	NR	< 0.3	NR	0.220	3	0.150	0	0.110	3
13	2.6	5	0.090	4	0.630	0	0.190	2	0.130	3	0.120	4
15	2.7	3	< 0.05	0	< 0.5	NR	< 0.5	NR	0.126	4	0.122	4
16	2.0	4	< 0.1	NR	0.334	3	0.407	0	0.136	2	0.111	3
18	2.0	5	0.051	0	0.354	3	0.187	2	0.114	4	0.144	1
19	2.8	4	0.068	2			0.240	1	0.120	4	0.122	4
21	3.4	5	0.096	3	0.146	4	0.220	3	0.130	3	0.123	4
23	2.2	5	0.099	3	0.532	0	0.212	4	0.122	4	0.082	0
25	2.0	2	0.090	4			0.420	0	< 0.121	NR	< 0.168	NR
29	1.5	2					0.200	3			0.190	0
32	2.7	3	0.133	0			0.213	4			0.116	4
33	2.3	3	0.090	4			0.140	0			0.130	3
36	3.0	4	< 0.10	NR	0.384	2	0.200	3	0.120	4	0.109	3
37	2.6	5	0.086	4	0.266	4	0.216	4	0.098	1	0.193	0
38	3.4	5	0.096	3	0.150	4	0.219	3	0.128	3	0.118	4
41	1.3	3	0.006	0	1.470	0	0.205	4				
42	2.0	1					0.234	2				
45	1.6	5	0.289	0	0.366	2	0.229	2	0.140	1	0.133	3
46	3.5	4	0.103	3	< 0.2	NR	0.214	4	0.114	4	0.111	3
51	3.8	5	0.080	4	0.220	4	0.210	4	0.117	4	0.107	3
52	3.4	5	0.106	2	0.126	4	0.212	4	0.113	3	0.119	4
55	3.6	5	0.080	4	0.190	4	0.220	3	0.110	3	0.120	4
56	0.0	1					0.170	0				
58	1.4	5	0.053	1	0.382	2	0.250	0	0.218	0	0.119	4
59	3.2	5	0.080	4	0.100	3	0.210	4	0.100	1	0.120	4
63	2.5	4	< 0.3	NR	1.700	0	0.200	3	0.120	4	0.130	3
68	1.5	2	0.002	0			0.200	3				
69	3.0	1					0.200	3				
70	3.0	5	0.080	4	0.430	2	0.220	3	0.120	4	0.100	2
74	3.6	5	0.100	3	0.094	3	0.204	4	0.124	4	0.124	4
76	3.0	2	0.075	3			0.227	3				
78	0.7	3					0.175	1	0.140	1	< 0.05	0
79	NR	<			< 0.2	NR			< 0.2	NR		
85	3.8	5	0.087	4	0.100	3	0.210	4	0.120	4	0.120	4
87	0.4	5	0.165	0	0.872	0	0.190	2	0.316	0	0.153	0
88	0.0	3	0.019	0			0.400	0			0.703	0
89	4.0	5	0.095	4	0.140	4	0.208	4	0.114	4	0.121	4
90	2.3	3			0.138	4	0.224	3	0.151	0		
91	1.3	4	0.060	1	0.120	3	0.180	1	0.160	0		
92	2.5	4	0.140	0			0.204	4	0.110	3	0.110	3
94	3.0	4	0.100	3	0.280	3	0.190	2	0.120	4		
96	2.2	5	0.061	1	0.140	4	0.208	4	0.094	0	0.105	2
97	2.8	5	0.090	4	0.120	3	0.220	3	0.160	0	0.120	4
102	2.8	5	0.070	3	0.150	4	0.220	3	0.124	4	0.085	0
104	3.8	4	0.083	4			0.217	4	0.128	3	0.120	4
107	3.5	4	0.089	4	0.326	3	0.202	4	0.112	3		
111	4.0	3	0.080	4					0.119	4	0.116	4
113	2.5	4	0.050	0	< 0.5	NR	0.189	2	0.120	4	0.115	4
114	2.7	3	< 0.1	NR	0.240	4	0.300	0	0.120	4		
118	3.6	5	0.080	4	0.170	4	0.210	4	0.110	3	0.110	3
119	2.4	5	0.110	2	0.200	4	0.160	0	0.130	3	0.110	3
120	2.7	3					0.200	3	0.110	3	0.100	2
122	3.4	5	0.085	4	0.180	4	0.208	4	0.096	1	0.115	4
127	4.0	5	0.088	4	0.148	4	0.203	4	0.120	4	0.119	4
128	2.3	3	0.070	3	< 0.5	NR	0.250	0	0.120	4		
134	3.8	5	0.079	4	0.352	3	0.204	4	0.121	4	0.116	4
138	3.8	5	0.094	4	0.182	4	0.193	3	0.115	4	0.124	4
139	2.2	5	0.077	3	0.223	4	0.186	2	0.135	2	0.091	0
142	3.6	5	0.081	4	0.198	4	0.211	4	0.104	2	0.124	4
145	2.6	5	0.050	0	0.110	3	0.200	3	0.110	3	0.120	4
146	2.0	2					0.295	0			0.119	4
151	3.7	3	0.100	3			0.210	4			0.120	4
161	0.5	4	0.123	0			0.396	0	0.136	2	0.030	0
179	3.2	5	0.112	2	0.200	4	0.205	4	0.121	4	0.135	2
180	3.4	5	0.087	4	0.162	4	0.203	4	0.098	1	0.126	4
182	0.0	2	0.440	0							0.160	0
183	3.3	3			0.320	3			0.115	4	0.107	3
184	1.3	3	< 0.1	NR	< 0.1	NR	0.210	4	0.860	0	2.600	0
189	2.4	5	0.080	4	1.090	0	0.330	0	0.120	4	0.120	4
190	2.0	5	0.114	1	0.120	3	0.221	3	0.113	3	1.390	0
191	2.0	3					0.195	3	0.092	0	0.110	3
193	1.0	1					0.180	1				
194	3.0	3	< 0.1	NR	0.120	3	0.220	3	0.130	3		
196	1.5	2					0.293	0			0.129	3
197	2.0	3	0.078	3			0.240	1			0.101	2
198	2.3	4	0.099	3	< 0.1	NR	0.240	1	0.138	2	0.131	3
202	3.2	5	0.110	2	0.200	4	0.230	2	0.120	4	0.120	4
206	0.0	2					0.810	0			0.360	0
207	1.2	5	0.077	3	0.290	3	0.310	0	0.060	0	0.080	0
209	3.0	1	0.096	3								
210	0.0	5	0.420	0	1.050	0	0.168	0	0.150	0	0.151	0

Table 9. --Laboratory performance ratings for standard reference water sample N-39 (preserved nutrients)

(MPV, most probable value; ug/L, micrograms per liter; mg/L, milligrams per liter; Lab, laboratory number; OLR, overall laboratory rating for all reported values; V/5, number of reported values of 5 possible values; RV, reported value; <, less than)

Rating		Absolute Z-value		Rating		Absolute Z-value	
4 (Excellent)		0.00 - 0.50		1 (Questionable)		1.51 - 2.00	
3 (Good)		0.51 - 1.00		0 (Poor)		greater than 2.00	
2 (Satisfactory)		1.01 - 1.50		NR (Not Rated)			

Analyte = NH3 as N (Ammonia)					NH3 + Org N as N (Ammonia+Organic N)		NO3 + NO2 as N (Nitrate & Nitrite)		total P as P (Phosphorus)		PO4 as P (Orthophosphate)	
MPV = 0.890 mg/L					1.22 mg/L		0.9075 mg/L		0.920 mg/L		0.883 mg/L	
F-pseudosigma = 0.1134					0.430		0.0430		0.044		0.0487	
Lab	OLR	V/5	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating
1	3.6	5	0.907	4	1.02	4	0.901	4	0.967	2	0.880	4
7	1.3	4	0.870	4			1.040	0	0.990	1	1.400	0
11	3.3	4	0.960	3			0.920	4	0.890	3	0.840	3
15	1.7	3	1.070	1	1.15	4			1.020	0		
29	3.0	2					0.930	3			0.840	3
39	3.0	1					0.879	3				
42	3.7	3					0.874	3	0.940	4	0.884	4
43	1.0	1					0.980	1				
45	1.4	5	1.290	0	1.31	4	0.936	3	1.040	0	1.030	0
52	3.2	5	0.972	3	0.89	3	0.888	4	0.973	2	0.885	4
53	2.0	2					0.500	0	0.910	4		
60	2.4	5	1.120	1	2.21	0	0.910	4	0.890	3	0.890	4
61	3.2	5	0.992	3	1.73	2	0.910	4	0.894	3	0.889	4
63	1.4	5	< 0.3	0	1.90	1	0.860	2	0.920	4	1.000	0
68	3.7	3	0.820	3	1.22	4			0.924	4		
75	2.5	4	1.210	0			0.898	4	0.970	2	0.888	4
78	2.3	3					0.924	4	0.880	3	0.565	0
88	1.3	3	0.063	0			1.014	0			0.888	4
89	3.5	4	0.881	4	0.99	3			0.950	3	0.872	4
90	3.5	2	0.983	3							0.906	4
92	3.0	3					0.881	3	0.860	2	0.890	4
93	4.0	1	0.913	4								
97	3.2	5	0.820	3	0.98	3	0.950	3	0.900	4	0.910	3
114	2.5	4	0.910	4	1.72	2	1.220	0	0.900	4		
118	2.6	5	0.700	1	1.50	3	0.920	4	0.950	3	0.930	2
119	2.0	5	0.830	3	1.66	2	1.000	0	0.940	4	0.810	1
120	3.5	2	0.856	4	0.95	3						
122	3.2	5	0.216	0	1.09	4	0.905	4	0.940	4	0.881	4
124	1.0	2	1.200	0			0.850	2				
133	3.0	4	0.900	4	1.24	4			0.850	1	0.850	3
134	3.6	5	0.883	4	1.04	4	0.958	2	0.939	4	0.904	4
139	2.6	5	0.830	3	2.31	0	0.874	3	0.879	3	0.883	4
140	3.2	5	0.890	4	1.28	4	0.878	3	0.880	3	0.830	2
141	3.0	5	0.886	4	0.86	3	0.925	4	0.965	2	0.945	2
145	2.6	5	0.710	1	0.99	3	0.870	3	0.910	4	0.830	2
179	1.0	5	1.090	1	1.22	4	0.807	0	0.200	0	0.082	0
180	2.8	5	0.801	3	1.01	4	0.890	4	0.814	0	0.915	3

Table 9. --Laboratory performance ratings for standard reference water sample N-39 (nonpreserved nutrients)

Lab	Analyte = NH3 as N (Ammonia)				NH3 + Org N as N (Ammonia+Organic N)				NO3 + NO2 as N (Nitrate & Nitrite)				total P as P (Phosphorus)				PO4 as P (Orthophosphate)			
	MPV = 0.922 mg/L				1.04 mg/L				0.912 mg/L				0.930 mg/L				0.908 mg/L			
	F-pseudosigma = 0.0815				0.196				0.0649				0.0493				0.0489			
	OLR	V/S	RV	Rating		RV	Rating		RV	Rating		RV	Rating		RV	Rating		RV	Rating	
3	2.8	4	0.930	4					0.799	1		0.979	3		0.945	3				
5	4.0	1										0.941	4							
9	2.8	5	0.932	4	1.03	4			0.823	2		0.880	2		0.851	2				
10	3.8	5	0.980	3	1.04	4			0.910	4		0.940	4		0.930	4				
11	3.0	4	1.600	0					0.920	4		0.930	4		0.890	4				
12	2.2	5	1.100	0	0.70	1			0.900	4		0.990	2		0.930	4				
13	3.6	5	0.910	4	1.26	2			0.890	4		0.950	4		0.930	4				
15	3.0	5	0.916	4	1.06	4			0.856	0		0.944	4		0.950	3				
16	2.6	5	0.890	4	0.92	3			1.250	0		0.938	4		0.846	2				
18	3.4	5	0.921	4	1.25	2			0.858	3		0.923	4		0.923	4				
19	3.8	4	0.920	4					0.880	4		0.900	3		0.900	4				
21	4.0	1			1.10	4														
23	3.0	5	0.915	4	1.35	1			0.949	3		0.946	4		0.886	3				
25	2.0	4	0.905	4					3.010	0		0.928	4		1.320	0				
29	3.5	2							0.930	4					0.880	3				
32	3.7	3	0.941	4					0.948	3					0.927	4				
33	0.7	3	1.100	0					0.860	0					0.980	2				
36	3.0	5	0.880	3	1.92	0			0.882	4		0.913	4		0.890	4				
37	2.2	5	0.943	4	1.49	0			0.868	3		0.810	0		0.932	4				
38	3.6	5	1.038	2	0.95	4			0.914	4		0.935	4		0.891	4				
41	0.0	3	0.665	0	1.66	0			0.762	0										
42	4.0	1							0.881	4										
45	1.0	5	0.867	0	1.27	2			0.958	3		1.040	0		1.040	0				
46	3.4	5	0.943	4	0.92	3			0.874	3		0.912	4		0.873	3				
52	3.2	5	1.000	3	0.88	3			0.884	4		0.957	3		0.933	3				
55	3.6	5	0.930	4	1.01	4			0.930	4		0.960	3		0.950	3				
57	2.0	5	1.010	2	2.60	0			0.950	3		0.950	4		0.830	1				
58	2.0	5	0.770	1	2.95	0			0.970	3		0.883	3		0.871	3				
59	3.4	5	0.980	3	1.00	4			0.930	4		0.900	3		0.950	3				
60	2.8	5	0.910	4	1.95	0			0.850	3		0.950	4		0.940	3				
63	1.8	4	1.100	0					0.870	3		0.960	3		1.000	1				
68	2.0	2	0.154	0					0.900	4										
69	4.0	1							0.910	4										
70	3.4	5	0.870	3	1.01	4			0.960	3		0.930	4		0.880	3				
74	3.0	5	1.021	2	1.00	4			0.876	3		0.957	3		0.957	3				
76	3.5	2	0.922	4					0.880	3										
78	1.3	3							0.838	2		0.800	0		0.845	2				
79	3.5	2			0.86	3						0.920	4							
84	2.0	2	0.940	4					0.700	0										
85	2.8	5	1.010	2	1.10	4			0.920	4		0.850	1		0.860	3				
87	1.8	5	0.376	0	1.04	4			0.910	4		1.240	0		0.983	1				
88	1.7	3	0.065	0					1.018	1					0.910	4				
89	3.8	5	0.910	4	0.97	4			0.910	4		0.947	4		0.938	3				
90	2.7	3			1.03	4			0.920	4		1.050	0							
91	3.5	4	0.890	4	1.04	4			0.850	3		0.960	3							
92	2.0	4	1.310	0					0.855	3		0.880	2		0.880	3				
94	3.3	4	1.010	2	1.11	4			0.850	3		0.950	4							
96	3.8	5	0.911	4	1.04	4			0.890	4		0.891	3		0.892	4				
97	3.4	5	1.010	2	0.95	4			0.940	4		0.910	4		0.880	3				
102	2.8	5	0.800	2	1.00	4			0.900	4		0.921	4		0.510	0				
104	3.8	4	0.906	4					0.914	4		0.953	4		0.940	3				
111	4.0	3	0.900	4								0.938	4		0.900	4				
113	3.0	5	1.070	1	1.18	3			0.861	3		0.931	4		0.896	4				
114	1.8	4	0.930	4	1.41	1			1.180	0		0.860	2							
118	3.6	5	0.890	4	0.88	3			0.900	4		0.930	4		0.950	3				
119	2.0	5	0.860	3	1.78	0			1.060	0		0.920	4		0.860	3				
120	3.7	3							0.920	4		0.930	4		0.860	3				
122	2.8	5	0.216	0	0.94	3			0.938	4		0.968	3		0.908	4				
126	0.0	1							0.450	0										
127	3.4	5	0.976	3	1.02	4			0.913	4		0.963	3		0.954	3				
128	3.5	4	0.880	3	0.91	3			0.920	4		0.910	4							
133	3.0	1							0.960	3										
134	3.6	5	0.905	4	1.15	3			0.957	3		0.942	4		0.921	4				
138	3.4	5	0.980	3	1.00	4			0.870	3		0.910	4		0.950	3				
139	2.2	5	0.933	4	1.97	0			0.857	3		0.879	2		0.857	2				
145	3.8	5	0.890	4	0.91	3			0.890	4		0.930	4		0.890	4				
146	2.0	2							1.180	0					0.890	4				
151	3.0	3	0.940	4					0.863	3					0.850	2				
161	0.5	4	0.799	2					1.067	0		0.136	0		0.030	0				
179	1.4	5	1.075	1	1.21	3			0.830	2		0.720	0		0.834	1				
180	2.8	5	1.000	3	0.98	4			0.889	4		0.800	0		0.952	3				
182	1.5	2	1.880	0											0.950	3				
183	2.0	2			1.96	0									0.900	4				
184	2.0	5	0.820	2	1.10	4			0.890	4		0.160	0		0.320	0				
189	2.4	5	0.900	4	1.82	0			1.270	0		0.910	4		0.910	4				
190	2.2	5	0.221	0	1.09	4			0.931	4		0.884	3		4.590	0				
191	3.3	3							0.900	4		0.877	2		0.900	4				
193	3.0	1							0.970	3										
196	3.5	2							0.948	3					0.906	4				
197	3.0	3	0.911	4					0.995	2					0.935	3				
198	2.7	3			1.00	4			0.960	3										

Table 10. --Laboratory performance ratings for standard reference water sample P-20 (low ionic strength)
(MPV, most probable value; ug/L, micrograms per liter; mg/L, milligrams per liter; Lab, laboratory number; OLR, overall laboratory rating for all reported values;
V/5, number of reported values of 5 possible values; RV, reported value; <, less than)

Rating		Absolute Z-value		Rating		Absolute Z-value	
4 (Excellent)		0.00 - 0.50		1 (Questionable)		1.51 - 2.00	
3 (Good)		0.51 - 1.00		0 (Poor)		greater than 2.00	
2 (Satisfactory)		1.01 - 1.50		NR (Not Rated)			

Analyte = Acidity as CaCO ₃					Ca (Calcium)		Cl (Chloride)		F (Fluoride)		K (Potassium)	
MPV =					0.160 mg/L		0.140 mg/L		0.100 mg/L		0.100 mg/L	
F-pseudosigma =					0.0178		0.2898		0.0126		0.0285	
Lab	OLR	V/11	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating
1	4.0	11	1.74	4	0.157	4	0.102	4	0.103	4	0.086	4
2	3.0	7					0.091	4			0.084	3
3	2.7	9	1.68	4	0.150	3	< 0.5	NR	0.139	0	1.500	0
5	2.4	7	2.84	3	0.158	4					< 1	NR
7	2.3	3	2.40	4			< 1	NR	< 0.5	NR		
11	2.8	9	1.58	4	0.180	2			0.099	4	0.047	1
15	2.1	11	38.30	0	0.163	4	1.160	0	0.097	4	0.089	4
23	3.7	6	2.00	4	0.150	3	0.366	3	0.105	4		
32	2.0	6	3.62	2			0.061	4	0.082	2		
33	3.6	10			0.160	4	0.110	4	0.090	3	0.110	4
38	3.6	8	1.72	4	0.170	3					0.100	4
39	3.6	5			0.170	3	< 2	NR	0.100	4		
41	0.0	1										
44	3.8	6			0.160	4	0.150	4			0.110	4
46	2.7	9			0.150	3	0.087	4	0.091	3	0.140	2
52	1.2	5	5.00	0	< 0.6	NR	< 0.5	NR	0.077	1	< 0.2	NR
58	1.6	11	5.38	0	0.280	0	0.600	1	0.086	2	0.120	3
59	4.0	1										
61	2.3	8	2.80	3	0.156	4	0.300	3	0.090	3	< 0.5	NR
62	2.0	3	0.15	1								
63	3.8	5	2.00	4	< 0.2	NR	< 2	NR	0.100	4	< 0.2	NR
64	2.8	9			0.140	2	0.110	4			0.890	0
74	3.8	5					0.350	3	0.096	4		
78	1.4	7	2.50	4			0.500	2	0.120	1		
89	3.1	9	1.88	4	0.160	4	< 0.04	NR	0.095	4	0.100	4
93	3.2	5			0.190	1	0.000	NR	0.100	4		
101	2.3	7			0.180	2	0.690	1			0.100	4
107	2.8	6	1.00	3			3.330	0	0.098	4		
110	3.1	8			0.160	4	0.275	4			0.080	3
112	3.6	8			0.152	4	0.130	4	0.100	4	0.097	4
124	1.1	7			1.200	0	2.000	0	< 0.1	NR	2.400	0
134	3.6	9			0.150	3	0.130	4	0.100	4	0.100	4
138	3.1	9			0.164	4	0.109	4	0.093	3	0.130	2
139	1.6	7			0.270	0	< 1	NR			0.090	4
145	3.1	9	2.00	4	0.170	3	< 0.2	NR	0.050	0	0.090	4
164	3.0	4			0.155	4					0.087	4
183	1.9	8			0.017	0	0.070	4	0.110	3		
184	1.8	5	< 10	NR	< 1	NR	< 1	NR	0.150	0	< 1	NR
189	1.0	8	5.20	0	0.250	0	< 1	NR	0.130	0	< 0.5	NR
190	1.1	9	0.00	NR			0.600	1	0.110	3	0.220	0
196	3.0	8			0.135	2	0.113	4	0.136	0	0.074	3
197	2.9	9					0.084	4	0.101	4	0.070	2
202	2.0	5					0.600	1	0.120	1		

Table 10. --Laboratory performance ratings for standard reference water sample P-20 (low ionic strength)-- Continued

Analyte = Mg (Magnesium)			Na (Sodium)		pH		PO4 as P		SO4 (Sulfate)		Sp. Cond.	
MPV = 0.020 mg/L			0.168 mg/L		5.53 mg/L		0.058 mg/L		0.831 mg/L		7.42 µ g/L	
F-pseudosigma = 0.0101			0.0124		0.204		0.0089		0.2157		0.615	
Lab	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating
1	0.017	4	0.168	4	5.56	4	0.054	4	0.822	4	7.44	4
2			0.165	4	5.57	4	0.005	0	0.864	4	6.75	2
3	0.010	3	< 0.2	NR	5.39	3	0.052	3	0.792	4	7.40	4
5	0.017	4	0.173	4	5.26	2			2.470	0	5.80	0
7					6.40	0	< 0.01	NR	< 1	NR	7.00	3
11	0.025	4	0.200	0	5.66	3	0.050	3			7.50	4
15	0.020	4	0.160	3	4.54	0	0.594	0	2.260	0	7.57	4
23	< 0.5	NR	< 2	NR	5.56	4			< 10	NR	7.71	4
32					6.40	0			0.831	4	9.99	0
33	0.020	4	0.160	3	5.56	4	0.070	2	0.740	4	7.33	4
38	0.022	4	0.170	4	5.70	3	0.058	4			7.80	3
39			0.171	4	5.40	3			0.841	4		
41					4.54	0						
44	0.020	4	0.160	3					0.830	4		
46	0.140	0	0.150	2	5.53	4			0.780	4	8.30	2
52	< 0.05	NR	< 0.4	NR	5.91	1	0.055	4	< 10	NR	186.00	0
58	0.056	0	0.280	0	5.53	4	0.059	4	0.820	4	10.50	0
59							0.060	4				
61	< 0.1	NR	< 0.5	NR	5.79	2	0.083	0	0.300	0	6.97	3
62					5.39	3					6.58	2
63	< 0.2	NR	< 0.2	NR	5.71	3	0.060	4	< 3	NR	7.58	4
64	0.150	0	0.160	3	5.56	4	0.060	4	0.800	4	7.62	4
74					5.50	4			0.800	4	7.26	4
78					5.73	3	0.113	0	3.500	0	12.10	0
89	< 0.025	NR	0.130	0	5.67	3	0.058	4	1.100	2	7.08	3
93	0.000	NR			5.40	3			0.810	4	7.12	4
101	0.020	4	0.180	3	4.20	0					6.60	2
107					5.35	3	0.053	3			7.32	4
110	0.020	4	0.130	0	5.40	3			0.809	4	7.83	3
112	0.017	4	0.159	3	5.52	4			1.120	2		
124	0.300	0	1.000	0	5.59	4			< 10	NR	7.55	4
134	< 0.01	NR	0.170	4	5.39	3	0.050	3	0.829	4	7.00	3
138	0.031	2	0.170	4	5.16	1	0.057	4	0.756	4		
139	< 0.01	NR	0.210	0	4.88	0	0.056	4	1.500	0	6.90	3
145	0.030	3	0.160	3	5.60	4			0.840	4	7.00	3
164			0.192	1					0.962	3		
183	0.014	3	0.140	0	5.84	1			0.900	4	< 0.2	0
184	< 1	NR	< 1	NR	5.70	3	0.060	4	1.100	2	1200.00	0
189	0.016	4	0.149	1	4.80	0	0.180	0	< 1	NR	8.00	3
190	0.180	0	0.440	0	5.28	2	0.913	0	3.070	0	7.19	4
196	0.017	4	0.170	4			0.065	3	0.839	4		
197	0.013	3	0.163	4	5.63	4	0.038	0	0.817	4	6.18	1
202					5.39	3	0.050	3			8.34	2

Table 11. --Laboratory performance ratings for standard reference water sample Hg-16 (mercury)

[MPV, most probable value; ug/L, milligrams per liter; Lab, laboratory number;
V/1, number of reported values of 1 value; RV, reported value; <, less than]

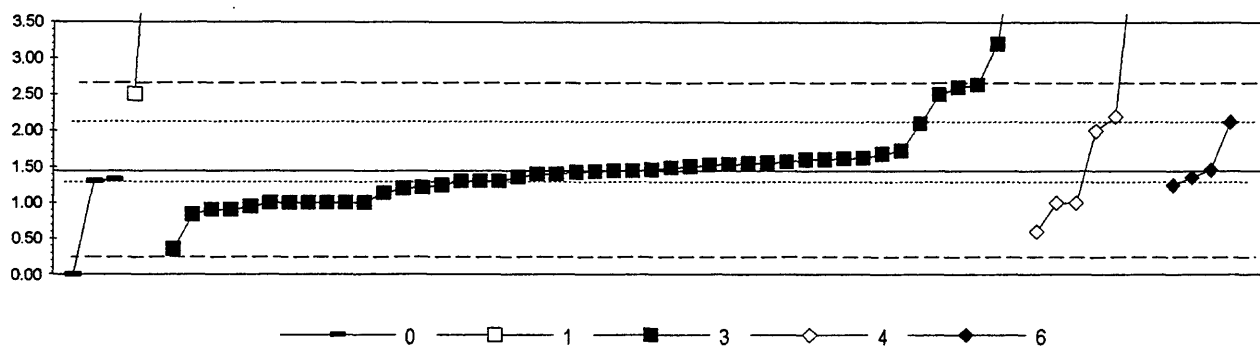
Rating	Absolute Z-value	Rating	Absolute Z-value
4 (Excellent)	0.00-0.50	1 (Questionable)	1.51-2.00
3 (Good)	0.51-1.00	0 (Poor)	greater than 2.00
2 (Satisfactory)	1.01-1.50	NR (Not Rated)	

Analyte = Mercury			
MPV =		1.30	μ g/L
F-pseudosigma =		0.222	
Lab	V/1	RV	Rating
1		1.61	2
3		1.56	2
7		1.09	3
11		1.23	4
12		1.30	4
13		1.38	4
15		1.35	4
16		1.50	3
18		1.37	4
24		1.50	3
29		1.35	4
32		1.48	3
34		1.28	4
36		0.00	0
39		1.25	4
42		1.34	4
45		1.17	3
46		0.01	0
50		1.30	4
51		1.90	0
52		1.26	4
55		1.50	3
58		0.20	0
59		1.60	2
61		1.10	3
63		1.20	4
68		1.90	0
69		1.22	4
70		1.12	3
74		1.30	4
76		1.16	3
78		1.60	2
79		1.66	1
81		1.30	4
86		1.24	4
90		0.97	2
96		1.80	0
97		0.89	1
108		1.33	4
109		1.55	2
113		1.30	4
118		0.80	0
119		1.50	3
120		1.42	3
122		< 1.0	NR
124		1.20	4
127		1.17	3
128		1.50	3
133		1.20	4
134		1.20	4
138		1.34	4
139		1.36	4
141		1.39	4
142		1.27	4
145		1.34	4
146		1.10	3
149		1.40	4
179		1.10	3
182		2.30	0
184		1.24	4
189		2.30	0
194		1.37	4
198		1.44	3
202		1.23	4
207		0.70	0

Table 12. *Statistical summary of reported data for standard reference sample T-123 (trace constituents)*

Definition of analytical methods, abbreviations, and symbols			
<u>Analytical methods</u>			
0. Other/Not reported			
1. AA: direct, air	=	atomic absorption: direct,air	
2. AA: direct, N ₂ O	=	atomic absorption: direct,nitrous oxide	
3. AA: graphite furnace	=	atomic absorption: graphite furnace	
4. ICP	=	inductively coupled plasma	
5. DCP	=	direct coupled plasma	
6. MS/ICP	=	mass spectrometry/inductively coupled plasma	
10. AA: extraction	=	atomic absorption: extraction [chelating agent(s) specified]	
11. AA: hydride	=	atomic absorption: hydride [reducing agent specified]	
22. Color:	=	colorimetric [color reagent specified]	
<u>Abbreviations and symbols</u>			
	N =	number of samples	
	St dev =	traditional standard deviation	
	MPV =	95% confidence most probable value	
	F-pseudosigma =	nonparametric statistic deviation	
	Hu =	upper hinge value	
	Hi =	lower hinge value	
	μ g/L =	micrograms per liter	
	mg/L =	milligrams per liter	
	Lab =	laboratory code number	
	NR =	not rated, less than value reported	
	< =	less than	
<u>Constituent</u>			
Ag	Silver	43	
Al	Aluminium	44	
As	Arsenic	45	
B	Boron	46	
Ba	Barium	47	
Be	Beryllium	48	
Ca	Calcium	49	
Cd	Cadmium	50	
Co	Cobalt	51	
Cr	Chromium	52	
Cu	Copper	53	
Fe	Iron	54	
K	Potassium	55	
<u>Constituent</u>			
Li	Lithium	56	
Mg	Magnesium	57	
Mn	Manganese	58	
Mo	Molybdenum	59	
Na	Sodium	60	
Ni	Nickel	61	
Pb	Lead	62	
Sb	Antimony	63	
Se	Selenium	64	
SiO ₂	Silica	65	
Sr	Strontium	66	
V	Vanadium	67	
Zn	Zinc	68	

Table 12. Statistical summary of reported data for standard reference water sample T-123 (trace constituent)—Continued
Ag (Silver)
μ g/L



0. Other	4. ICP
1. AA: direct air	6. ICP/MS
3. AA: graphite furnace	
N = 3	2 45 7 4
Minimum = 0.00	2.50 0.36 0.60 1.25
Maximum = 1.33	7.00 5.00 5.00 2.12
Median =	1.43 2.00
St Dev =	0.5182 0.6986

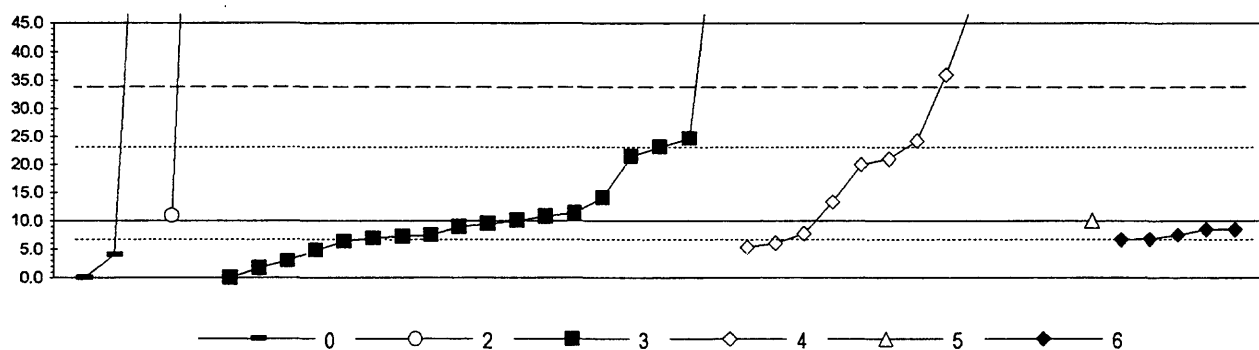
MPV = 1.44
F-pseudosigma = 0.601
N = 77
Hu = 2.11
HI = 1.30

Lab	Rating	Z-value	0	1	3	4	6
1	4	-0.22			1.30		
3	4	-0.01			1.43		
5	NR					< 4	
7	0	5.93				5.00	
11	4	-0.17	1.33				
12	3	-0.72			1.00		
13	NR				< 2		
15	4	-0.02			1.42		
16	NR					< 7	
18	NR					< 5	
23	4	0.16			1.53		
24	4	0.27			1.60		
25	NR					< 6	
29	3	-0.51			1.13		
30	2	1.14					2.12
32	4	-0.31					1.25
36	0	-2.39	0.00				
37	4	-0.14					1.35
42	4	-0.22	1.30				
45	4	0.21			1.56		
46	4	-0.31			1.25		
50	3	-0.72			1.00		
52	4	0.01			1.44		
55	4	-0.39			1.20		
57	3	-0.72			1.00		
58	0	5.93			5.00		
59	3	-0.72				1.00	
61	NR					< 10	
63	4	0.17			1.54		
68	3	-0.89			0.90		
69	4	0.09			1.49		
70	NR				< 2		
78	4	-0.22			1.30		
79	4	-0.06			1.40		
81	3	0.94					2.00
85	NR			< 5			
87	0	9.26		7.00			
89	1	1.99			2.63		
90	1	-1.79			0.36		
94	NR					< 3	
96	4	0.01			1.44		
97	3	-0.99			0.84		
101	3	-0.72				1.00	
102	2	-1.39				0.60	
103	NR					< 5	
107	4	0.29			1.61		
108	3	-0.72			1.00		
113	4	0.11			1.50		
114	NR		< 10				
116	NR					< 100	

Lab	Rating	Z-value	0	1	3	4	6
118	3	-0.72			1.00		
119	3	-0.72			1.00		
120	4	-0.37			1.21		
121	0	2.94			3.20		
122	1	1.94			2.60		
124	NR		< 20				
127	4	0.02			1.45		
133	2	1.27				2.20	
134	4	-0.06			1.40		
138	4	0.39			1.67		
141	3	-0.81			0.95		
142	4	0.22			1.57		
149	3	-0.89			0.90		
151	NR			< 10			
153	1	1.77			2.50		
161	NR					< 50	
179	4	-0.22			1.30		
180	0	5.60				4.80	
182	1	1.77		2.50			
184	NR					< 5	
189	2	1.11			2.10		
190	4	-0.14			1.35		
193	NR				< 1		
194	4	0.27			1.60		
196a	4	0.47			1.72		
196b	4	0.04					1.46
198	4	0.14			1.52		
202	4	0.31			1.62		

Table 12. Statistical summary of reported data for standard reference water sample T-123 (trace constituent)--Continued

Al (Aluminum)

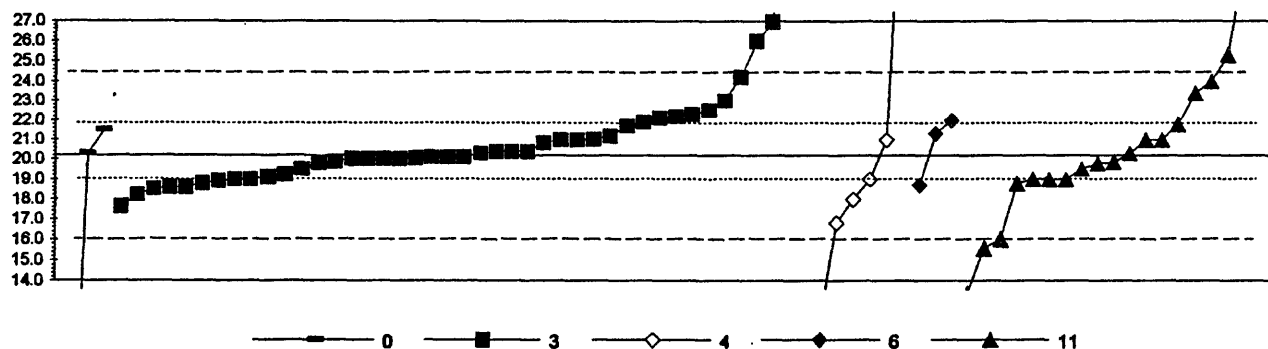
 μ g/L

0. Other			4. ICP			
2. AA: direct nitrous oxide			5. DCP			
3. AA: graphite furnace			6. ICP/MS			
N =	3	2	18	12	1	5
Minimum =	0.0	10.9	0.0	5.3	10.0	6.7
Maximum =	100.0	140.0	70.0	97.6		8.6
Median =			9.3	16.7		
St Dev =			6.87	10.64		

MPV = 10.0
 F-pseudosigma = 12.02
 N = 41
 Hu = 23.1
 HI = 6.9

Lab	Rating	Z-value	0	2	3	4	5	6
1	4	-0.27						6.7
3	0	2.16				36.0		
4	0	3.74				55.0		
5	NR					< 30		
7	3	0.91				21.0		
11	4	-0.50	4.0					
12	NR					< 100		
13	4	0.07		10.9				
15	4	-0.30			6.4			
16	0	5.49				76.0		
18	NR					< 100		
23	4	0.11			11.3			
24	2	1.09			23.1			
25	NR					< 19		
29	0	10.81		140.0				
30	4	-0.12						8.6
32	4	-0.12						8.5
33	4	0.00					10.0	
36	3	-0.83	0.0					
37	4	-0.26						6.9
39	3	0.83				20.0		
45	4	-0.21			7.5			
46	4	-0.19				7.8		
50	4	-0.25			7.0			
52	2	1.21			24.6			
57	NR					< 200		
58	0	4.99			70.0			
59	NR					< 10		
61	NR					< 50		
63	NR					< 100		
69	4	-0.08			9.0			
70	NR					< 50		
78	3	-0.58			3.0			
81	4	-0.33				6.0		
85	NR					< 20		
86	4	-0.39				5.3		
89	NR				< 100			
94	NR					< 20		
97	3	-0.69			1.7			
101	0	7.29				97.6		
102	NR					< 50		
103	NR					< 30		
107	4	0.00			10.0			
113	4	-0.43			4.8			
114	NR			< 10				
119	NR	-0.83			0.0			
120	4	0.34			14.1			
121	3	0.95			21.4			
122	4	0.07			10.8			
124	NR		< 100					

Table 12. Statistical summary of reported data for standard reference water sample T-123 (trace constituent)—Continued
As (Arsenic) μ g/L



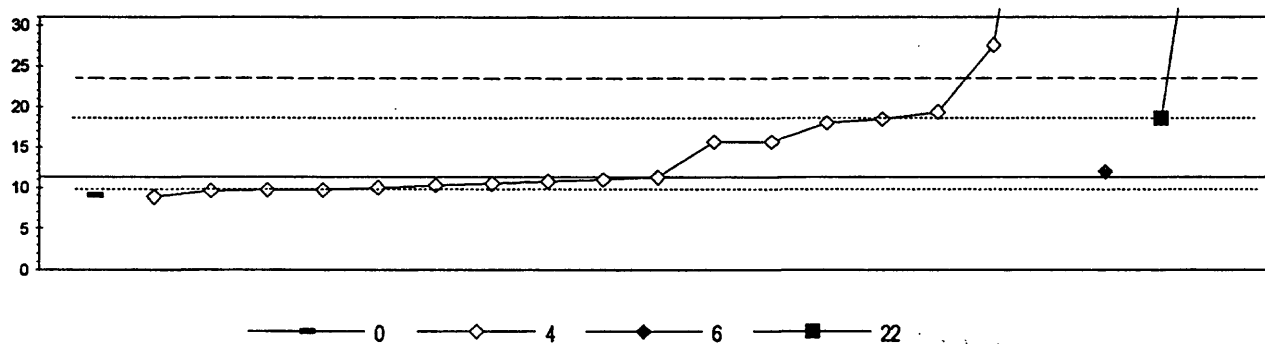
0. Other	6. ICP/MS				
3. AA: graphite furnace	11. AA: hydride				
4. ICP					
N =	3	43	6	3	18
Minimum =	0.0	17.6	12.0	18.7	13.4
Maximum =	21.5	1800.0	36.7	22.0	30.0
Median =		20.1			19.9
St Dev =		1.4			1.6

MPV = 20.2
F-pseudosigma = 2.11
N = 73
Hu = 21.9
Hi = 19.0

Lab	Rating	Z-value	0	3	4	6	11
1	4	0.04		20.3			
3	4	0.09		20.4			
8	1	-1.99					16.0
10	4	-0.05		20.1			
11	3	0.61	21.5				
12	2	1.32		23.0			
13	3	0.99		22.3			
15	2	-1.23		17.6			
16	3	0.71		21.7			
18	1	1.51					23.4
23	0	3.19		27.0			
25	NR				< 50		
29	0	6.81		34.6			
32	3	-0.71				18.7	
35	4	0.05					20.3
36	0	-9.55	0.0				
37	3	0.85				22.0	
39	3	-0.57					19.0
42	4	0.04	20.3				
45	4	0.28		20.8			
46	3	-0.62		18.9			
50	3	-0.57					19.0
52	4	0.09		20.4			
55	3	-0.81		18.5			
57	4	-0.19					19.8
58	0	-2.18					15.6
59	4	0.38			21.0		
61	3	-0.67		18.8			
63	4	0.38		21.0			
68	3	-0.76		18.6			
69	3	-0.52		19.1			
70	3	0.90		22.1			
76	1	1.89		24.2			
78	4	-0.19		19.8			
79	3	-0.57		19.0			
81	0	2.74		26.0			
85	1	1.80					24.0
86	3	0.75					21.8
89	4	-0.17					19.9
90	4	-0.15		19.9			
94	0	842.44	1800.0				
96	4	-0.04		20.1			
97	0	-3.22					13.4
102	0	7.81			36.7		
103	0	-3.88			12.0		
107	3	0.80		21.9			
108	3	-0.76		18.6			
109	4	-0.07		20.1			
113	4	0.47		21.2			
118	2	1.09		22.5			

Lab	Rating	Z-value	0	3	4	6	11
119	3	-0.57					19.0
120	4	-0.33					19.5
122	0	2.41					25.3
124	NR		< 500				
126	0	4.64					30.0
127	4	-0.10		20.0			
133	4	0.38		21.0			
134	4	0.38					21.0
138	4	-0.05		20.1			
139	3	0.94		22.2			
141	2	-1.04			18.0		
142	4	-0.33		19.5			
145	3	-0.57			19.0		
146	4	-0.10		20.0			
151	3	-0.67					18.8
161	NR			< 100			
179	3	-0.95		18.2			
180	1	-1.61			16.8		
182	4	0.38					21.0
189	4	-0.10		20.0			
190	4	0.40		21.1			
193	3	-0.57		19.0			
194	4	-0.10		20.0			
196	3	0.53				21.3	
198	4	0.09		20.4			
202	4	-0.48		19.2			

Table 12. Statistical summary of reported data for standard reference water sample T-123 (trace constituent)—Continued
B (Boron) μ g/L

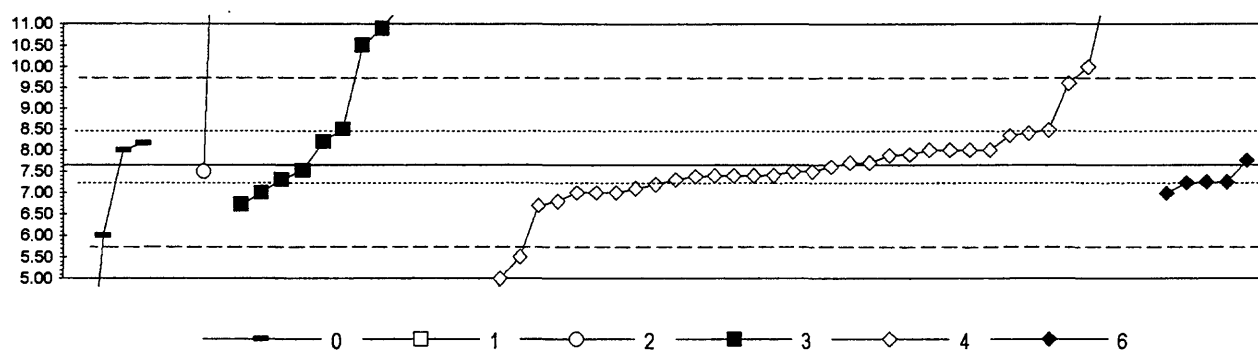


0. Other	22. Colorimetric
4. ICP	
6. ICP/MS	
N =	1 17 1 2
Minimum =	9.0 8.9 12.0 18.6
Maximum =	70.0 63.0
Median =	11.0
St Dev =	5.18

MPV = 11.3
F-pseudosigma = 6.30
N = 21
Hu = 18.5
Hi = 10.0

Lab	Rating	Z-value	0	4	6	22
1	4	-0.25		9.8		
3	NR			< 10		
4	4	-0.21		10.0		
11	4	-0.37	9.0			
15	4	-0.08		10.8		
16	NR			< 500		
18	NR			< 5		
25	2	1.14		18.5		
32	4	0.11			12.0	
39	2	1.06		18.0		
45	2	1.16				18.5
46	0	2.59		27.6		
52	NR			< 300		
57	NR			< 100		
58	0	8.21				63.0
61	NR			< 50		
63	NR			< 100		
70	NR			< 50		
75	4	-0.27		9.6		
85	NR			< 20		
86	4	-0.16		10.3		
94	4	-0.38		8.9		
103	4	-0.05		11.0		
109	3	0.70		15.7		
116	NR			< 10		
119	0	9.32		70.0		
121	NR			< 10		
122	NR					< 0.1
124	NR		< 50			
127	4	0.00		11.3		
134	NR			< 20		
141	NR			< 10		
142	3	0.70		15.7		
145	4	-0.25		9.8		
161	NR			< 500		
180	4	-0.13		10.5		
184	2	1.29		19.4		
189	NR			< 10		

Table 12. Statistical summary of reported data for standard reference water sample T-123 (trace constituent)—Continued

Ba (Barium) μ g/L

0. Other	3. AA: graphite furnace					
1. AA: direct air	4. ICP					
2. AA: direct nitrous oxide	6. ICP/MS					
N =	4	2	2	12	35	5
Minimum =	0.01	12.70	7.50	6.72	1.00	6.99
Maximum =	8.16	85.00	20.00	30.00	45.00	7.75
Median =				7.86	7.46	
St Dev =				1.578	1.487	

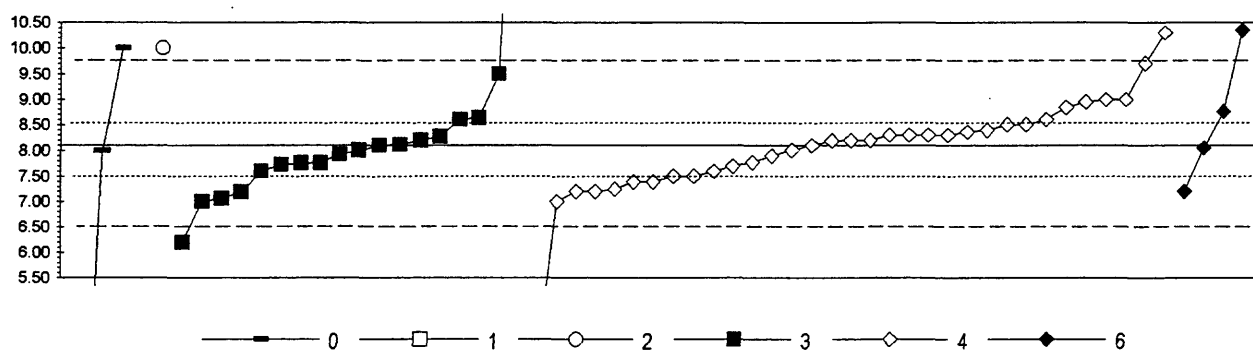
MPV = 7.65
 F-pseudosigma = 0.945
 N = 60
 Hu = 8.49
 Hi = 7.22

Lab	Rating	Z-value	0	1	2	3	4	6
1	4	-0.42					7.25	
3	4	0.37				8.00		
4	0	2.49				10.00		
5	4	-0.29				7.38		
7	3	-0.90				6.80		
8	3	-0.69				7.00		
11	4	0.37	8.00					
13	NR				< 10			
15	0	-7.04				1.00		
16	4	-0.05				7.60		
18	4	-0.16				7.50		
23	NR				< 20			
24	3	-0.58				7.10		
25	4	0.37				8.00		
29	0	13.07		20.00				
30	4	0.11					7.75	
32	3	-0.70					6.99	
33	3	0.54	8.16					
36	0	-8.08	0.01					
37	4	-0.44					7.23	
39	4	0.37				8.00		
42	1	-1.75	6.00					
45	4	-0.48				7.20		
46	4	-0.26				7.40		
50	NR				< 50			
52	0	3.02			10.50			
57	NR				< 50			
58	0	23.65			30.00			
59	3	-0.69				7.00		
61	NR				< 10			
63	0	39.52				45.00		
68	0	2.06				9.60		
69	0	4.60			12.00			
70	NR				< 10			
75	4	-0.26				7.40		
78	4	-0.37			7.30			
81	3	-0.69				7.00		
85	4	0.26				7.90		
87	NR			< 40				
89	NR			< 100				
90	0	5.34	12.70					
94	4	-0.37				7.30		
96	4	-0.16		7.50				
97	0	3.44			10.90			
101	2	-1.01				6.70		
102	3	0.79				8.40		
103	0	-2.27				5.50		
107	3	-0.98			6.72			
108	0	5.66			13.00			
116	4	0.37				8.00		

Lab	Rating	Z-value	0	1	2	3	4	6
119	0	4.60					12.00	
120	0	4.07				11.50		
121	0	7.78					15.00	
122	4	-0.14				7.52		
124	NR		< 10					
127	4	-0.16					7.50	
133	4	0.05					7.70	
134	0	-2.80					5.00	
138	3	0.88					8.48	
141	4	0.23					7.87	
142	4	-0.25					7.41	
145	4	0.05					7.70	
151	3	0.90				8.50		
153	3	0.58				8.20		
161	NR						< 10	
180	4	-0.26					7.40	
182	0	81.84		85.00				
184	3	0.74					8.35	
189	NR						< 10	
193	3	-0.69				7.00		
196	4	-0.42						7.25
198	NR						< 10	

Table 12. Statistical summary of reported data for standard reference water sample T-123 (trace constituent)—Continued

Be (Beryllium)

 μ g/L

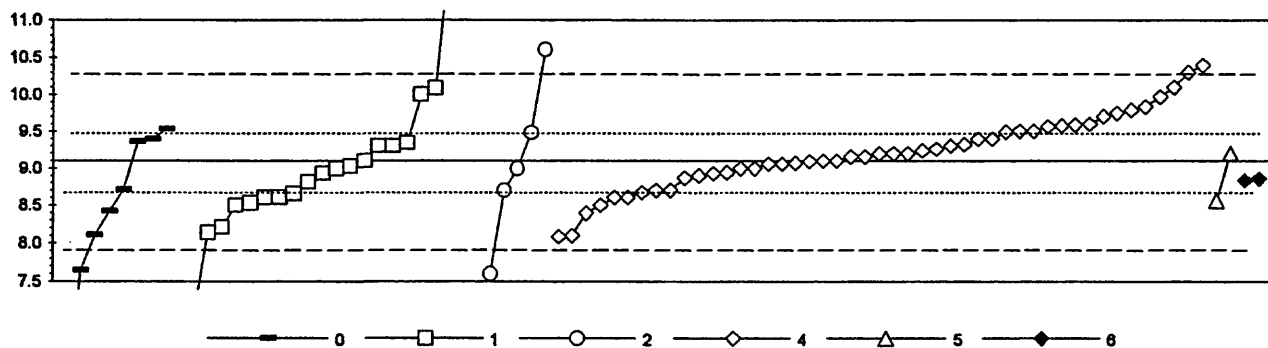
0. Other	3. AA: graphite furnace					
1. AA: direct air	4. ICP					
2. AA: direct nitrous oxide	6. ICP/MS					
N =	3	1	1	18	33	4
Minimum =	0.01	5.00	10.00	6.20	3.93	7.20
Maximum =	10.00			16.30	10.30	10.36
Median =				7.93	8.20	
St Dev =				0.748	0.738	

MPV = 8.10
 F-pseudosigma = 0.778
 N = 60
 Hu = 8.55
 Hl = 7.50

Lab	Rating	Z-value	0	1	2	3	4	6
1	4	0.00					8.10	
3	3	0.51					8.50	
4	2	1.16					9.00	
5	4	0.12					8.19	
7	2	-1.16					7.20	
8	3	-0.77					7.50	
11	4	-0.13	8.00					
12	NR						< 20	
15	0	-5.36					3.93	
16	0	2.83					10.30	
18	3	-0.64					7.60	
23	4	0.01				8.11		
24	1	1.80				9.50		
25	2	-1.16					7.20	
30	0	2.90						10.36
32	2	-1.16						7.20
36	0	-10.39	0.01					
37	3	0.84						8.75
39	2	1.16					9.00	
45	4	0.13					8.20	
46	4	-0.12					8.01	
52	0	10.54				16.30		
55	3	0.64				8.60		
57	2	-1.41					7.00	
58	4	-0.13				8.00		
61	3	0.51					8.50	
63	2	-1.17				7.19		
68	4	0.26					8.30	
69	4	0.23				8.28		
70	NR						< 10	
75	3	-0.51					7.70	
78	4	0.13				8.20		
79	NR						< 10	
81	2	-1.41				7.00		
85	4	0.26					8.30	
86	2	-1.10					7.24	
94	4	0.26					8.30	
97	4	-0.22				7.93		
102	4	0.39					8.40	
103	3	-0.77					7.50	
113	4	-0.45				7.75		
114	0	2.44			10.00			
119	4	0.00				8.10		
120	3	0.69				8.64		
124	0	2.44	10.00					
127	4	0.26					8.30	
133	0	2.06					9.70	
134	3	-0.90					7.40	
138	3	0.95					8.84	
141	4	-0.42					7.77	

Lab	Rating	Z-value	0	1	2	3	4	6
142	4	0.35					8.37	
145	2	1.09					8.95	
146	3	-0.90					7.40	
151	4	-0.49				7.72		
161	NR						< 10	
179	0	-2.44				6.20		
180	4	-0.26					7.90	
182	0	-3.98		5.00				
184	4	0.13					8.20	
189	3	0.64					8.60	
194	3	-0.64				7.60		
196	4	-0.06						8.05
198	2	-1.32				7.07		
202	4	-0.44				7.76		

Table 12. Statistical summary of reported data for standard reference water sample T-123 (trace constituent)--Continued
Ca (Calcium) m g/L



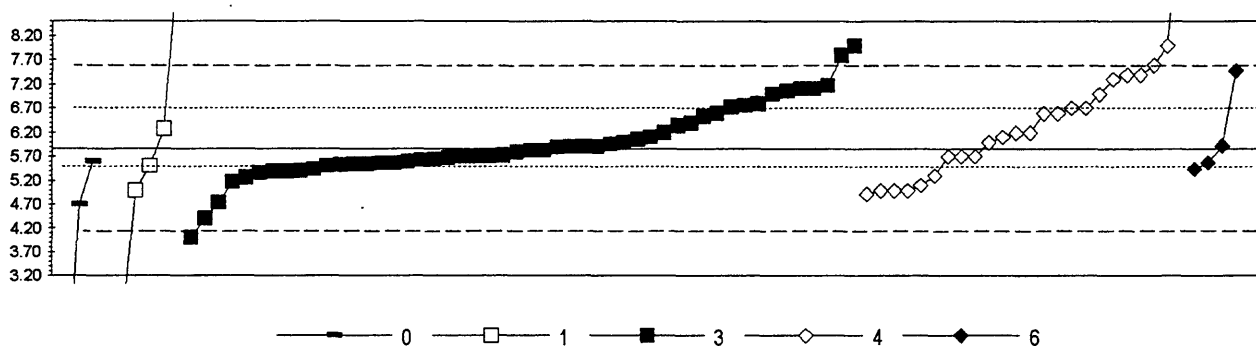
0. Other						
1. AA: direct air						
2. AA: direct N2O						
N =	8	22	5	47	2	2
Minimum =	6.00	6.30	7.60	8.08	8.56	8.84
Maximum =	9.53	18.50	10.61	10.40	9.21	8.86
Median =	8.71	8.93		9.19		
SI Dev =	0.725	0.545	0.510			

MPV = 9.10
F-pseudosigma = 0.608
N = 86
Hu = 9.49
Hl = 8.67

Lab	Rating	Z-value	0	1	2	4	5	6
1	4	-0.06				9.06		
3	4	-0.04				9.07		
4	4	-0.25				8.94		
5	4	-0.06				9.06		
7	4	0.01				9.10		
8	2	-1.14				8.40		
9	4	0.34		9.30				
11	4	0.44	9.36					
12	4	-0.16				9.00		
13	3	-0.72		8.66				
15	1	1.98				10.30		
16	3	-0.98				8.50		
18	4	0.50				9.40		
19	4	-0.01				9.09		
23	3	0.63			9.48			
24	4	-0.37				8.87		
25	2	1.23				9.84		
29	0	-5.09	6.00					
32	4	-0.42						8.84
33	4	0.19					9.21	
36	0	-2.39	7.64					
39	2	1.08				9.75		
42	4	0.50	9.40					
43	4	0.17				9.20		
45	3	-0.93		8.53				
46	1	1.65				10.10		
52	4	0.11				9.16		
54	3	-0.81		8.60				
55	4	0.11				9.16		
57	3	-0.81				8.60		
58	0	-3.40		7.03				
59	4	-0.32				8.90		
61	4	-0.16				9.00		
63	2	1.44				9.97		
68	4	0.17				9.20		
69	3	-0.81		8.60				
70	3	0.80				9.58		
78	0	4.61		11.90				
81	1	-1.67				8.06		
84	4	0.42		9.35				
85	4	-0.11		9.03				
86	4	0.27				9.26		
87	0	-2.46			7.60			
89	2	1.49		10.00				
92	4	0.34		9.30				
94	4	0.16				9.19		
97	1	-1.57		8.14				
101	4	0.01		9.10				
102	3	-0.65				8.70		
103	1	-1.64				8.10		

Lab	Rating	Z-value	0	1	2	4	5	6
107	0	15.47		18.50				
109	4	-0.27		8.93				
113	3	-0.98		8.50				
114	3	-0.65			8.70			
116	4	-0.27				8.93		
119	4	0.34				9.30		
120	2	-1.46		8.21				
121	4	0.50				9.40		
122	3	-0.63	8.71					
124	3	0.72	9.53					
127	3	-0.70				8.67		
133	4	0.01				9.10		
134	3	-0.65				8.70		
138	3	0.83				9.60		
139	0	2.49			10.61			
140	4	-0.16		9.00				
141	3	0.68				9.51		
142	0	2.15				10.40		
145	3	0.81				9.59		
146	3	-0.81				8.60		
153	2	-1.11	8.42					
161	4	0.37				9.32		
164	4	-0.45		8.82				
179	0	-4.60		6.30				
180	3	0.65				9.49		
182	0	5.11		12.20				
184	3	0.68				9.51		
189	3	1.00				9.70		
190	1	-1.62	8.11					
193	4	-0.16			9.00			
194	4	-0.39						8.86
196	1	1.62		10.08				
197	3	-0.88					8.56	
198	3	0.78				9.57		
202	4	0.24				9.24		
209	2	1.14				9.79		

Table 12. Statistical summary of reported data for standard reference water sample T-123 (trace constituent)--Continued
Cd (Cadmium) μ g/L



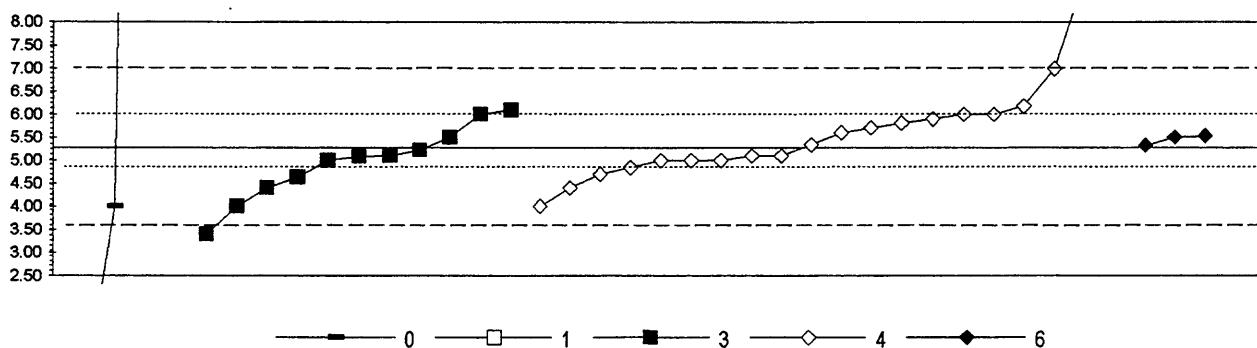
0. Other	4. ICP
1. AA: direct air	6. ICP/MS
3. AA: graphite furnace	
N =	3 6 50 24 4
Minimum =	0.00 0.50 4.00 4.91 5.44
Maximum =	5.60 10.00 8.00 11.00 7.48
Median =	5.81 6.19
St Dev =	0.773 0.942

MPV = 5.86
F-pseudosigma = 0.871
N = 87
Hu = 6.70
Hi = 5.53

Lab	Rating	Z-value	0	1	3	4	6
1	4	0.05			5.90		
3	3	0.86				6.60	
4	0	5.91				11.00	
5	4	0.38				6.19	
7	4	-0.18				5.70	
8	3	0.97				6.70	
9	3	-0.79			5.17		
10	3	-0.52			5.40		
11	2	-1.33	4.70				
12	0	2.23			7.80		
13	3	0.76			6.52		
15	3	-0.51			5.41		
16	3	-0.87				5.10	
18	2	-1.28			4.74		
19	3	-0.98				5.00	
23	4	0.22			6.05		
24	3	0.86			6.60		
25	NR					< 6	
30	1	1.87					7.48
32	4	-0.48					5.44
36	0	-6.72	0.00				
37	4	0.06					5.91
42	4	-0.29	5.60				
45	4	-0.27			5.62		
46	4	-0.15			5.72		
50	4	0.17			6.00		
52	4	-0.25			5.64		
55	2	1.08			6.80		
57	4	0.40			6.20		
58	2	1.43			7.10		
59	4	-0.18				5.70	
61	0	2.46				8.00	
63	3	-0.69			5.25		
68	3	0.86				6.60	
69	4	0.12			5.96		
70	3	-0.57			5.36		
73	4	0.17				6.00	
75	4	0.40				6.20	
76	3	0.61			6.39		
78	4	0.28			6.10		
79	2	1.43			7.10		
81	0	2.46			8.00		
85	4	-0.41	5.50				
86	2	-1.08				4.91	
87	0	-4.43	2.00				
89	3	0.99			6.72		
90	4	-0.21			5.67		
94	3	-0.64				5.30	
96	3	-0.55			5.38		
97	0	-2.13			4.00		

Lab	Rating	Z-value	0	1	3	4	6
101	3	0.97				6.70	
102	4	0.28				6.10	
103	3	-0.98				5.00	
107	4	0.04			5.89		
108	2	1.31			7.00		
109	4	-0.34			5.56		
113	4	-0.04			5.82		
114	0	4.76	10.00				
118	4	0.05			5.90		
119	4	0.05			5.90		
120	4	-0.40			5.51		
121	2	1.31				7.00	
122	3	0.56			6.34		
124	NR		< 10				
127	4	-0.18				5.70	
133	1	1.77				7.40	
134	4	-0.18			5.70		
138	4	-0.36			5.54		
139	4	-0.18			5.70		
140	4	0.49		6.28			
141	4	-0.35			5.55		
142	4	-0.36			5.54		
145	1	1.66				7.30	
146	1	2.00				7.60	
149	4	-0.18			5.70		
151	2	1.04			6.76		
153	4	-0.48			5.44		
161	3	-0.98				5.00	
179	4	-0.06			5.80		
180	1	1.77				7.40	
182	0	-5.15		0.50			
184	NR					< 10	
189	1	-1.67			4.40		
190	4	-0.29			5.60		
193	3	-0.98		5.00			
194	1	1.51			7.17		
196a	4	-0.41			5.50		
196b	4	-0.33				5.57	
198	4	-0.04			5.82		
202	2	1.37			7.05		

Table 12. Statistical summary of reported data for standard reference water sample T-123 (trace constituent)—Continued
Co (Cobalt)
μ g/L

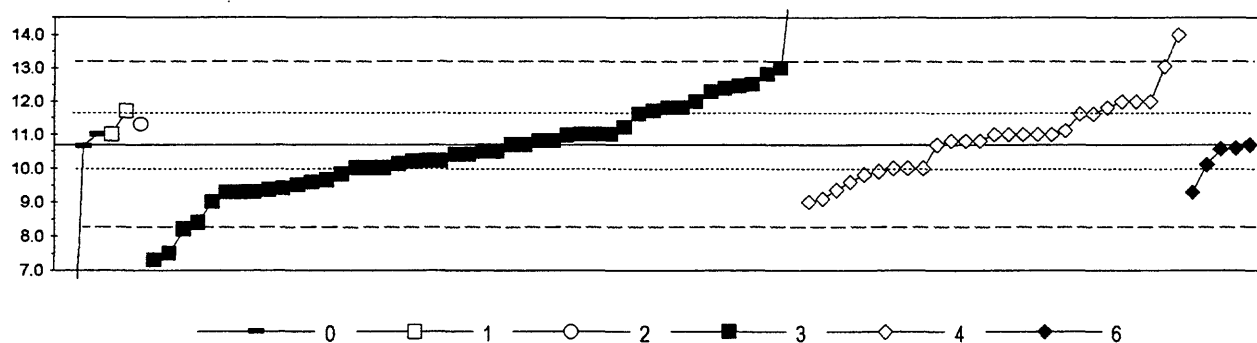


0. Other	4. ICP
1. AA: direct air	6. ICP/MS
3. AA: graphite furnace	
N = 3	1 11 20 3
Minimum = 0.01	13.00 3.40 4.00 5.32
Maximum = 50.00	6.10 11.00 5.52
Median =	5.08 5.23
St Dev =	0.810 0.720

MPV = 5.27
F-pseudosigma = 0.852
N = 38
Hu = 6.00
Hi = 4.85

Lab	Rating	Z-value	0	1	3	4	6
1	4	0.27			5.50		
3	3	0.86				6.00	
4	NR					< 5	
5	2	1.07				6.18	
7	4	0.50				5.70	
8	2	-1.49				4.00	
11	2	-1.49	4.00				
15	4	-0.22			5.08		
16	3	0.62				5.80	
18	1	2.03				7.00	
24	0	-2.19			3.40		
25	NR					< 12	
30	4	0.27					5.50
32	4	0.29					5.52
36	0	-6.17	0.01				
39	4	-0.32				5.00	
46	3	0.86				6.00	
50	3	0.86			6.00		
52	4	-0.32			5.00		
55	2	-1.02			4.40		
58	2	-1.49			4.00		
61	0	4.38				9.00	
63	3	-0.67				4.70	
68	3	0.74				5.90	
70	NR					< 50	
75	4	-0.20				5.10	
81	0				< 1		
85	NR					< 20	
86	4	-0.49				4.85	
89	NR				< 10		
94	4	-0.32				5.00	
97	3	0.97			6.10		
102	4	-0.20				5.10	
103	2	-1.02				4.40	
121	0	6.72				11.00	
124	0	52.47	50.00				
127	4	-0.06			5.22		
134	4	-0.20			5.10		
138	3	-0.76			4.62		
141	4	0.39				5.60	
145	4	0.09				5.35	
161	NR					< 5	
180	4	-0.32				5.00	
182	0	9.07		13.00			
184	NR					< 10	
189	NR					< 20	
193	NR			< 25			
196.2	4	0.06				5.32	

Table 12. Statistical summary of reported data for standard reference water sample T-123 (trace constituent)--Continued
Cr (Chromium) $\mu\text{g/L}$



0. Other	3. AA: graphite furnace
1. AA: direct air	4. ICP
2. AA: direct nitrous oxide	6. ICP/MS
N = 3	2 1 46 27 5
Minimum = 0.0	11.0 11.3 7.3 9.0 9.3
Maximum = 11.0	11.7 16.7 14.0 10.7
Median =	10.4 11.0
St Dev =	1.34 1.17

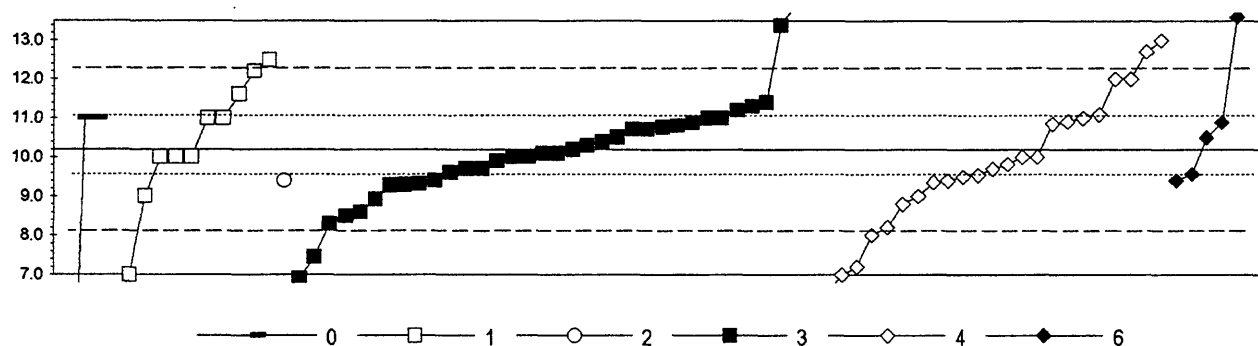
MPV = 10.7
F-pseudosigma = 1.19
N = 84
Hu = 11.6
HI = 10.0

Lab	Rating	Z-value	0	1	2	3	4	6
1	4	-0.03	10.7					
3	3	-0.59					10.0	
4	2	1.10					12.0	
5	1	1.99					13.1	
7	3	-0.76					9.8	
8	4	0.25					11.0	
9	3	-0.89				9.7		
10	2	-1.01				9.5		
11	4	0.25	11.0					
12	NR						< 20	
13	2	1.35				12.3		
15	1	1.77				12.8		
16	4	0.08					10.8	
18	4	0.25					11.0	
19	3	-0.59					10.0	
23	0	5.04				16.7		
24	1	-1.94				8.4		
25	2	1.10					12.0	
29	2	-1.12				9.4		
30	2	-1.19						9.3
32	4	0.00						10.7
36	0	-9.01	0.0					
37	4	-0.08						10.6
39	4	0.25					11.0	
42	3	-0.51						10.1
45	4	0.00				10.7		
46	4	-0.17				10.5		
50	3	-0.59				10.0		
52	2	1.43				12.4		
55	1	1.52				12.5		
57	2	-1.18				9.3		
58	4	0.25				11.0		
59	3	-0.67					9.9	
61	2	-1.43					9.0	
63	4	0.25				11.0		
68	2	1.10					12.0	
69	4	0.08				10.8		
70	3	0.76					11.6	
75	3	0.76				11.6		
76	4	0.25				11.0		
78	3	-0.76				9.8		
79	0	-2.11				8.2		
81	1	1.94				13.0		
85	3	-0.59					10.0	
86	2	-1.13					9.4	
89	2	1.49				12.5		
90	3	-0.94				9.6		
94	4	0.08					10.8	
96	4	-0.40				10.2		
97	4	-0.17				10.5		

Lab	Rating	Z-value	0	1	2	3	4	6
101	4	0.34					11.1	
102	2	-1.35					9.1	
103	3	-0.93					9.6	
107	3	0.93				11.8		
108	2	-1.18				9.3		
111	3	0.51			11.3			
113	4	-0.42				10.2		
114	NR				< 10			
118	2	-1.10				9.4		
119	3	-0.59				10.0		
120	4	0.24				11.0		
121	0	-2.87				7.3		
122	3	0.93				11.8		
124	NR		< 50					
127	4	0.42				11.2		
133	4	0.08					10.8	
138	4	0.08				10.8		
139	3	0.84				11.7		
140	3	0.83		11.7				
141	3	0.93					11.8	
142	4	-0.40				10.2		
145	3	0.76					11.6	
146	4	0.25					11.0	
151	3	-0.59				10.0		
153	2	-1.18				9.3		
161	4	0.25					11.0	
179	4	-0.25				10.4		
180	4	0.00					10.7	
182	4	0.25		11.0				
184	0	2.78					14.0	
189	0	-2.70				7.5		
190	4	-0.49				10.1		
193	2	-1.43				9.0		
194	2	1.10				12.0		
196b	4	-0.12						10.6
198	4	-0.25				10.4		
202	4	0.00				10.7		

Table 12. Statistical summary of reported data for standard reference water sample T-123 (trace constituent)—Continued

Cu (Copper)

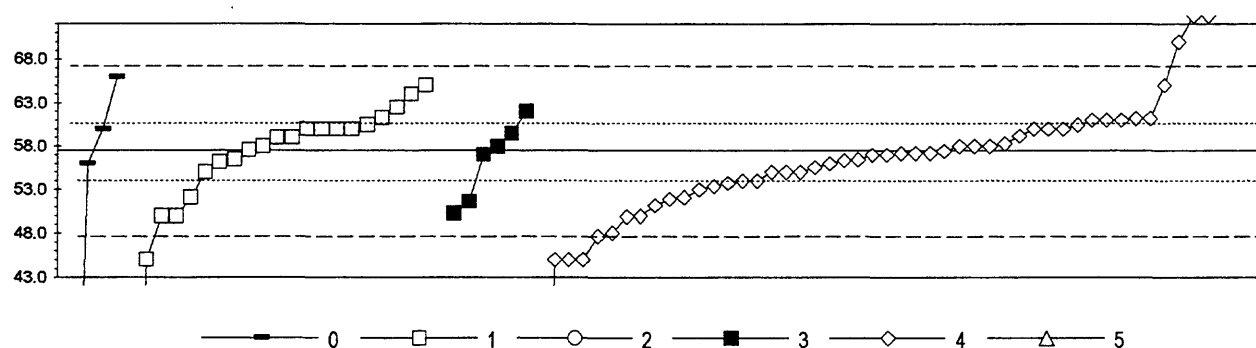
 μ g/L

0. Other						
1. AA: direct air						
2. AA: direct nitrous oxide						
N =	3	11	1	35	23	5
Minimum =	0.0	6.0	9.4	6.9	6.5	9.4
Maximum =	11.0	12.5		20.8	13.0	13.6
Median =		10.5		10.1	9.8	
St Dev =		1.63		1.23	1.63	

MPV = 10.2
 F-pseudosigma = 1.07
 N = 78
 Hu = 11.1
 Hl = 9.6

Lab	Rating	Z-value	0	1	2	3	4	6
1	4	0.28				10.5		
3	3	0.74					11.0	
4	1	-2.05					8.0	
5	3	0.60					10.9	
7	1	-1.86					8.2	
8	3	0.84					11.1	
10	3	-0.84				9.3		
11	3	0.74	11.0					
12	3	0.74				11.0		
13	NR					< 50		
15	4	0.47				10.7		
16	0	-2.98					7.0	
18	2	-1.12		9.0				
23	3	-0.56				9.6		
24	0	-3.07				6.9		
25	4	-0.19					10.0	
29	0	-3.91		6.0				
30	3	-0.59						9.6
32	0	3.16						13.6
36	0	-9.48	0.0					
37	4	0.28						10.5
39	0	2.60					13.0	
42	3	-0.74						9.4
45	2	-1.19				8.9		
46	2	1.02				11.3		
50	4	-0.19				10.0		
52	3	-0.60					9.6	
55	4	-0.09				10.1		
57	NR			< 20				
58	0	3.54				14.0		
59	0	2.33					12.7	
61	NR						< 10	
63	4	-0.28				9.9		
68	1	1.67					12.0	
69	3	0.74				11.0		
70	NR						< 20	
75	3	0.65					10.9	
78	4	-0.09				10.1		
79	2	-1.49				8.6		
81	4	-0.19				10.0		
85	3	0.74		11.0				
86	4	-0.34					9.8	
87	3	0.74		11.0				
89	NR					< 10		
90	0	2.14		12.5				
94	0	-2.79					7.2	
96	3	0.53				10.8		
97	3	-0.83				9.3		
101	4	-0.47					9.7	
102	3	-0.74					9.4	
103	3	-0.65						9.5
107	0	2.98					13.4	
108	4	-0.19		10.0				
111	3	-0.74			9.4			
113	4	0.47					10.7	
114	4	-0.19		10.0				
118	1	-1.77					8.3	
119	4	-0.19						10.0
120	3	0.62					10.9	
121	0	9.86					20.8	
122	4	-0.47					9.7	
124	3	0.74	11.0					
126	NR			< 20				
127	3	-0.86					9.3	
133	0	-3.44						6.5
134	3	0.93					11.2	
138	4	0.09					10.3	
139	4	0.00					10.2	
140	2	1.30		11.6				
141	2	1.12					11.4	
142	3	-0.74					9.4	
145	3	-0.79						9.4
149	0	-2.98		7.0				
151	1	1.86		12.2				
153	3	0.56					10.8	
161	2	-1.12						9.0
179	4	-0.47					9.7	
180	2	-1.30						8.8
182	4	-0.19		10.0				
184	1	1.67						12.0
189	1	-1.58					8.5	
190	0	-2.56					7.5	
193	NR			< 25				
194	NR						< 10	
196	3	0.63						10.9
198	NR							< 50
202	4	0.19					10.4	

Table 12. Statistical summary of reported data for standard reference water sample T-123 (trace constituent)—Continued
Fe (Iron) μ g/L

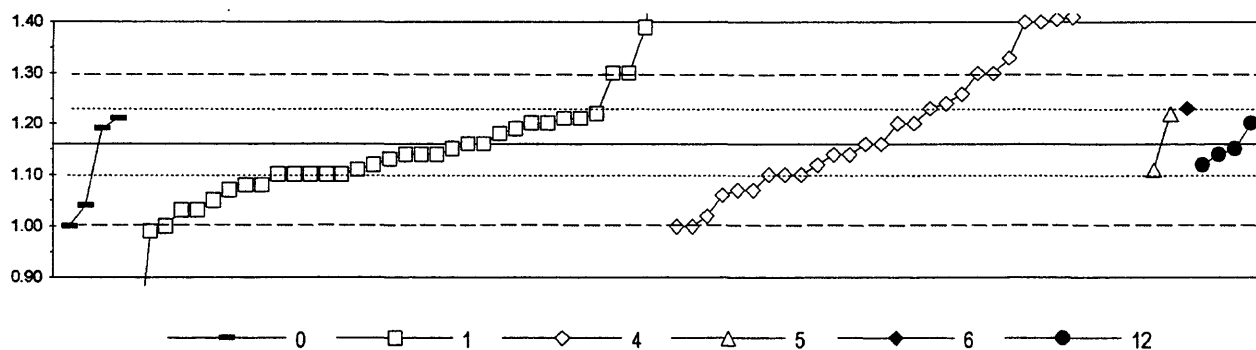


0. Other	3. AA: graphite furnace				
1. AA: direct air	4. ICP				
2. AA: direct nitrous oxide	5. DCP				
N = 4	25	1	6	49	1
Minimum = 0.1	0.0	96.0	50.2	0.5	32.5
Maximum = 66.0	65.0		62.1	450.0	
Median = 59.0				56.7	
St Dev = 5.05				5.21	

MPV = 57.5
F-pseudosigma = 4.82
N = 82
Hu = 60.5
Hi = 54.0

Lab	Rating	Z-value	0	1	2	3	4	5
1	4	-0.07				57.1		
3	0	3.23				73.0		
4	4	-0.09				57.0		60.0
5	4	-0.22				56.4		52.0
7	4	0.18				58.3		
8	0	-11.82				0.5		
9	2	-1.13		52.0				
10	4	0.11		58.0				
11	3	0.53	60.0					
12	NR					< 50		
13	3	0.80		61.3				
15	3	0.78				61.2		
16	3	-0.51				55.0		
18	1	1.57				65.0		
19	3	-0.72				54.0		
21	4	-0.30	56.0					
23	3	0.95				62.1		
24	4	0.36				59.2		
25	4	-0.30				56.0		
33	0	-5.18						32.5
36	0	-11.91	0.1					
39	0	2.60				70.0		
42	4	0.11				58.0		
43	3	-0.72				54.0		
45	3	0.53		60.0				
46	3	0.53				60.0		
50	4	-0.09				57.0		
52	1	-1.57				49.9		
55	0	-2.58				45.0		
57	NR		< 100					
58	1	-1.55	50.0					
59	3	0.74				61.0		
61	4	0.11				58.0		
63	0		< 20					
68	4	-0.09				57.0		
70	2	-1.15				51.9		
73	3	-0.92				53.0		
75	4	-0.05				57.2		
78	4	0.43				59.5		
79	0	-2.58				45.0		
81	0	-2.58				45.0		
84	3	0.53		60.0				
85	4	0.11				58.0		
86	2	-1.32				51.1		
87	0	8.00			96.0			
89	2	-1.21				51.6		
90	4	0.01		57.5				
91	4	-0.05				57.2		
94	3	-0.51				55.0		
96	3	0.63		60.5				
97	4	0.09				57.9		
101	3	0.53						60.0
102	3	0.74						61.0
103	2	-1.13						52.0
107	4	0.32		59.0				
109	4	-0.26		56.2				
113	4	0.32		59.0				
114	1	-1.55		50.0				
116	1	-1.55						50.0
119	3	-0.51						55.0
121	0	8.83						100.0
122	2	-1.50						50.2
124	1	1.77	66.0					
126	1	1.57		65.0				
127	4	-0.01						57.4
133	4	-0.40						55.5
134	1	-1.96						48.0
138	3	0.61						60.4
139	0	-2.58		45.0				
140	2	1.05		62.5				
141	3	-0.86						53.3
142	1	-2.04						47.6
145	3	0.79						61.3
146	3	0.74						61.0
149	3	0.53		60.0				
161	3	0.53						60.0
164	0	-11.70		1.1				
179	3	0.53		60.0				
180	0	81.47						450.0
182	3	-0.51		55.0				
184	3	-0.78						53.7
189	NR							< 50
190	4	-0.20		56.5				
193	2	1.36		64.0				
198	4	-0.24						56.3
202	0	3.23						73.0

Table 12. Statistical summary of reported data for standard reference water sample T-123 (trace constituent)—Continued
K (Potassium)
m g/L

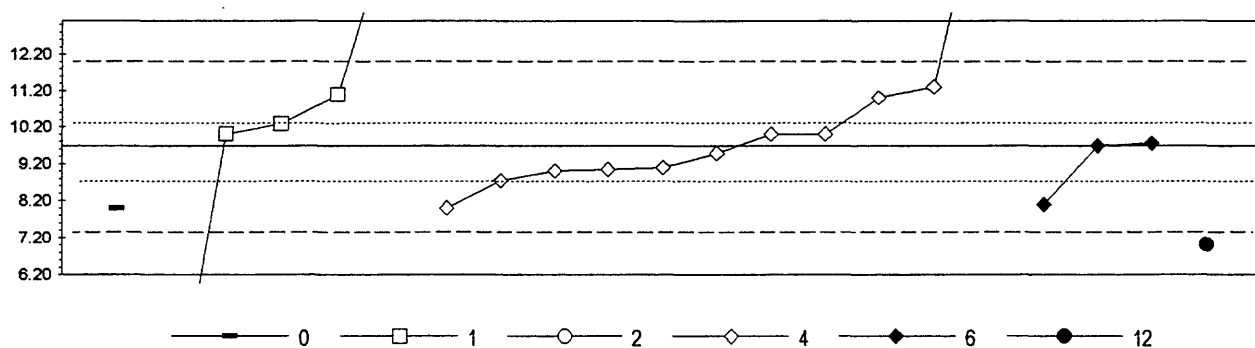


0. Other							
1. AA: direct air							
4. ICP							
N =	4	34	30	2	1	4	
Minimum =	1.00	0.68	1.00	1.11	1.23	1.12	
Maximum =	1.21	1.70	2.95	1.22		1.20	
Median =	1.14	1.16					
St Dev =	0.088	0.129					

MPV = 1.16
F-pseudosigma = 0.096
N = 75
Hu = 1.23
Hi = 1.10

Lab	Rating	Z-value	0	1	4	5	6	12
1	3	-0.78		1.08				
3	0	11.88			2.30			
5	0	2.60			1.41			
7	3	0.78			1.23			
8	2	-1.40			1.02			
9	4	-0.36		1.12				
11	3	0.57	1.21					
12	1	-1.61			1.00			
13	4	-0.16		1.14				
15	4	0.36		1.19				
16	2	1.50		1.30				
18	3	-0.57			1.10			
19	2	1.50			1.30			
23	3	-0.57		1.10				
24	4	-0.16			1.14			
25	0	5.24			1.66			
32	3	0.78				1.23		
33	3	0.67				1.22		
36	1	-1.61	1.00					
37	2	-1.30		1.03				
42	2	1.50			1.30			
43	4	0.47			1.20			
45	4	-0.26		1.13				
46	3	0.88			1.24			
52	4	-0.36			1.12			
54	3	-0.57		1.10				
55	4	-0.36					1.12	
57	2	1.50		1.30				
58	3	0.57		1.21				
59	4	0.47			1.20			
61	0	5.66			1.70			
63	3	-0.88		1.07				
68	1	-1.61			1.00			
69	4	0.47					1.20	
70	1	-1.71		0.99				
78	4	0.47		1.20				
81	3	-0.88			1.07			
85	3	0.67		1.22				
86	4	-0.16			1.14			
87	4	-0.16		1.14				
89	4	-0.16		1.14				
92	0	5.66		1.70				
94	3	-0.57			1.10			
97	3	-0.57		1.10				
101	4	0.47		1.20				
102	NR				< 1			
103	3	-0.57			1.10			
107	4	-0.05					1.15	
109	4	-0.47		1.11				
113	3	-0.57		1.10				
114	0	-4.93		0.68				
116	NR				< 1.3			
119	0	2.54			1.40			
120	2	-1.30		1.03				
121	2	-1.09		1.05				
122	3	-0.78		1.08				
127	4	0.26		1.18				
134	3	-0.57		1.10				
138	4	0.05			1.16			
139	4	-0.16					1.14	
140	4	-0.05		1.15				
141	2	1.09			1.26			
142	0	2.54			1.40			
145	3	-0.99			1.06			
153	2	-1.19	1.04					
161	NR				< 2			
179	4	0.05		1.16				
180	0	18.63			2.95			
182	1	-1.61		1.00				
184	1	1.82			1.33			
189	4	0.05			1.16			
190	4	0.36	1.19					
193	4	0.05		1.16				
194	0	2.44		1.39				
196	3	0.57		1.21				
197	4	-0.47					1.11	
198	0	2.65			1.41			
202	3	-0.88			1.07			

Table 12. Statistical summary of reported data for standard reference water sample T-123 (trace constituent)—Continued
Li (Lithium) μ g/L

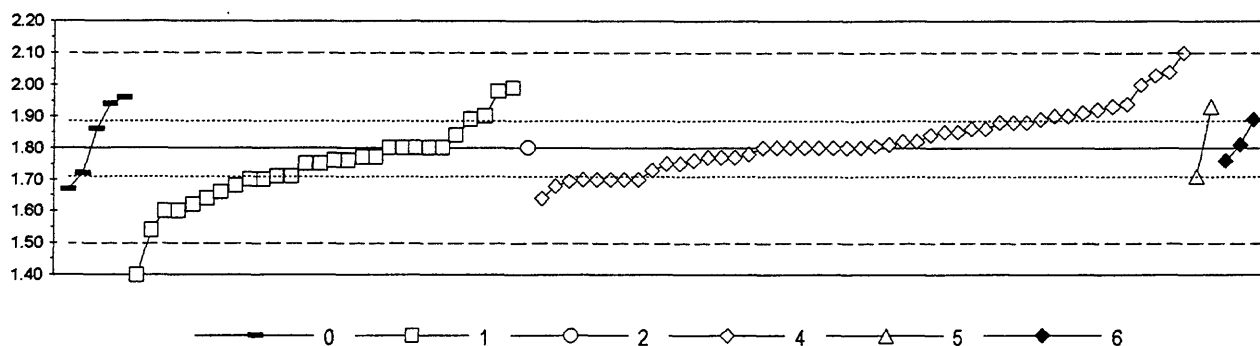


0. Other						4. ICP
1. AA: direct air						6. ICP/MS
2. AA: direct nitrous oxide						12. AA: flame emission
N =	1	5	0	11	3	1
Minimum =	8.00	1.77		8.00	8.10	7.00
Maximum =		16.00		18.00	9.76	
Median =				9.29		
St Dev =				1.021		

MPV = 9.68
F-pseudosigma = 1.149
N = 21
Hu = 10.30
Hi = 8.75

Lab	Rating	Z-value	0	1	2	4	6	12
1	3	-0.56				9.04		
3	NR					< 10		
4	4	0.28				10.00		
15	2	1.41				11.30		
16	NR					< 500		
25	3	-0.59				9.00		
30	4	0.07					9.76	
32	4	0.00					9.68	
42	4	0.28				10.00		
50	NR				< 50			
55	0	-2.33						7.00
63	4	0.28		10.00				
68	2	1.15				11.00		
75	4	-0.50				9.10		
85	3	0.54		10.30				
103	2	-1.46				8.00		
109	2	1.24		11.10				
116	NR					< 45		
121	0	5.50		16.00				
127	4	-0.18				9.47		
134	0	7.24				18.00		
145	3	-0.81				8.75		
164	0	-6.89		1.77				
182	2	-1.46	8.00					
189	NR					< 500		
196	2	-1.38					8.10	

Table 12. Statistical summary of reported data for standard reference water sample T-123 (trace constituent)—Continued
Mg (Magnesium) m g/L

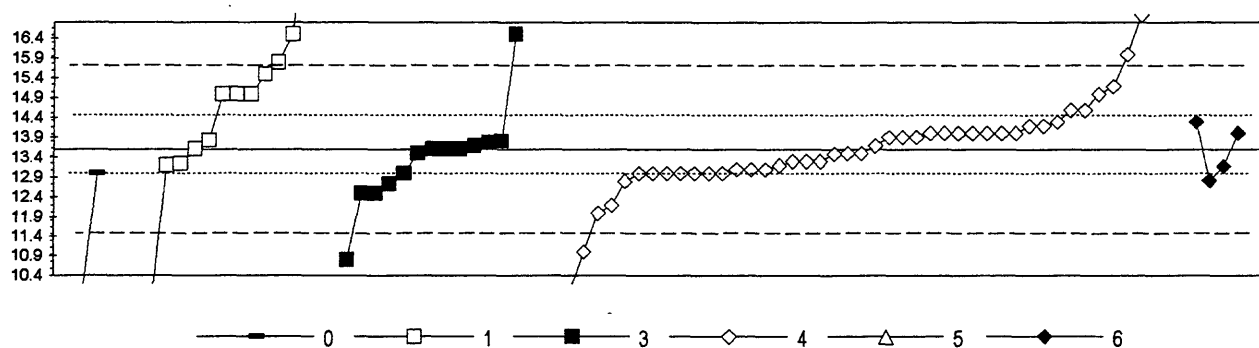


0. Other	4. ICP					
1. AA: direct air	5. DCP					
2. AA: direct nitrous oxide	6. MS/ICP					
N =	5	28	1	47	2	3
Minimum =	1.67	1.40	1.80	1.64	1.71	1.76
Maximum =	1.96	1.99		2.10	1.93	1.89
Median =		1.76		1.80		
St Dev =		0.127		0.099		

MPV = 1.80
F-pseudsigma = 0.126
N = 86
Hu = 1.88
Hl = 1.71

Lab	Rating	Z-value	0	1	2	4	5	6
1	4	0.00		1.80				
3	3	0.63				1.88		
4	4	-0.24				1.77		
5	4	0.04				1.81		
7	4	-0.24				1.77		
8	3	-0.56				1.73		
9	1	-1.59		1.60				
11	2	1.11	1.94					
12	4	0.00				1.80		
13	4	-0.40		1.75				
15	1	1.90				2.04		
16	4	0.00				1.80		
18	4	0.00				1.80		
19	3	-0.95				1.68		
23	4	-0.24		1.77				
24	4	-0.32				1.76		
25	2	1.03				1.93		
30	4	0.08						1.81
32	3	0.71						1.89
33	2	1.03						1.93
36	2	-1.03	1.67					
39	4	0.48				1.86		
42	3	0.79				1.90		
43	4	0.00				1.80		
45	1	-1.59		1.60				
46	4	0.32				1.84		
52	4	-0.40				1.75		
54	3	-0.79		1.70				
55	3	-0.83				1.70		
57	3	-0.79				1.70		
58	3	-0.71		1.71				
59	4	0.00				1.80		
61	4	0.00				1.80		
63	2	-1.43		1.62				
68	4	0.00				1.80		
69	4	0.00		1.80				
70	4	0.08				1.81		
75	3	0.79				1.90		
78	4	0.00		1.80				
81	4	-0.40				1.75		
84	4	-0.40		1.75				
85	4	-0.32		1.76				
86	3	0.87				1.91		
87	2	-1.11		1.66				
89	3	0.79		1.90				
92	3	-0.79		1.70				
94	3	-0.79				1.70		
97	0	-2.06		1.54				
101	4	0.00		1.80				
102	1	1.59				2.00		
103	3	-0.79						1.70
107	2	1.43				1.98		
109	4	0.00				1.80		
113	1	1.51				1.99		
114	4	0.00					1.80	
116	4	0.16						1.82
119	4	0.00						1.80
120	3	-0.71				1.71		
121	1	1.83						2.03
122	4	-0.32				1.76		
124	2	1.27	1.96					
127	4	-0.16						1.78
133	4	-0.24						1.77
134	3	-0.79						1.70
138	3	0.63						1.88
139	3	-0.95				1.68		
140	4	-0.24				1.77		
141	4	0.48						1.86
142	0	2.38						2.10
145	4	0.40						1.85
146	3	-0.79						1.70
153	3	-0.63	1.72					
161	4	0.16						1.82
179	3	0.71				1.89		
180	2	1.11						1.94
182	0	-3.17				1.40		
184	4	0.40						1.85
189	2	-1.27						1.64
190	4	0.48	1.86					
193	2	-1.27				1.64		
194	4	-0.32						1.76
196	4	0.32				1.84		
197	3	-0.71						1.71
198	3	0.95						1.92
202	3	0.63						1.88
209	3	0.71						1.89

Table 12. Statistical summary of reported data for standard reference water sample T-123 (trace constituent)—Continued
Mn (Manganese)
μ g/L



0. Other			4. ICP		
1. AA: direct air			5. DCP		
3. AA: graphite furnace			6. MS/ICP		
N =	3	17	13	48	1
Minimum =	0.0	5.0	10.8	6.0	17.5
Maximum =	13.0	160.0	16.5	25.0	14.3
Median =		15.0	13.6	13.5	
St Dev =		1.14	1.26	0.88	

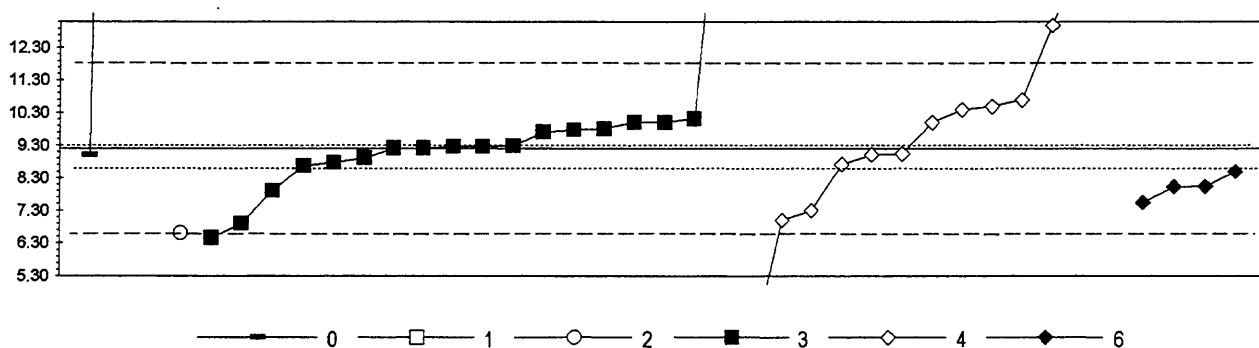
MPV = 13.6
F-pseudosigma = 1.07
N = 86
Hu = 14.5
Hl = 13.0

Lab	Rating	Z-value	0	1	3	4	5	6
1	4	-0.28				13.3		
3	0	-2.42				11.0		
4	3	-0.56				13.0		
5	4	-0.11				13.5		
7	4	-0.47				13.1		
8	0	-3.63				9.7		
9	0	-2.60			10.8			
10	2	1.30		15.0				
11	3	-0.56	13.0					
12	NR					< 20		
13	1	2.05		15.8				
15	0	-5.46				7.7		
16	4	0.28				13.9		
18	4	0.37				14.0		
19	2	-1.49				12.0		
23	4	0.08			13.7			
24	4	-0.28				13.3		
25	4	0.37				14.0		
29	0	-5.21		8.0				
30	4	-0.39						12.8
32	3	0.65						14.0
33	0	3.63					17.5	14.3
36	0	-12.64	0.0					
37	4	0.37						13.2
39	2	1.30				15.0		
42	4	-0.47				13.1		
43	4	0.37				14.0		
46	3	0.65				14.3		
50	3	-0.56			13.0			
52	3	-0.74				12.8		
55	0	-7.07				6.0		
57	NR			< 20				
58	2	1.30		15.0				
59	4	-0.09				13.5		
61	3	-0.56				13.0		
63	0	3.16				17.0		
68	3	-0.56				13.0		
70	4	0.28				13.9		
75	4	0.28				13.9		
76	4	-0.37		13.2				
78	2	-1.02			12.5			
79	0	10.61				25.0		
81	0	-3.35				10.0		
84	0	-3.35		10.0				
85	0	2.70		16.5				
86	2	-1.30				12.2		
89	4	0.19			13.8			
90	1	1.77		15.5				
91	2	1.49				15.2		
94	3	-0.56				13.0		

Lab	Rating	Z-value	0	1	3	4	5	6
96	4	0.00		13.6				
97	4	0.00			13.6			
101	4	-0.09				13.5		
102	4	-0.37				13.2		
103	3	-0.56				13.0		
107	4	0.00			13.6			
109	4	0.21		13.8				
113	4	-0.09			13.5			
114	0	5.95		20.0				
116	4	0.37				14.0		
119	3	-0.56				13.0		
120	4	0.00			13.6			
121	0	4.09				18.0		
122	2	-1.02			12.5			
124	0	-3.35	10.0					
126	0	136.20		160.0				
127	4	-0.28				13.3		
134	3	-0.56				13.0		
138	3	0.56				14.2		
139	0	0.00		< 10				
140	4	-0.33		13.2				
141	3	0.56				14.2		
142	4	-0.47				13.1		
145	3	0.93				14.6		
146	4	0.37				14.0		
149	0	-8.00		5.0				
151	0	11.16		25.6				
153	0	2.70			16.5			
161	4	0.37				14.0		
179	0	-3.35		10.0				
180	4	0.37				14.0		
182	2	1.30		15.0				
184	4	0.09				13.7		
189	0	2.23				16.0		
190	3	-0.79			12.8			
196a	4	0.16			13.8			
196b	3	-0.73						
198	3	0.93				14.6		
202	0	5.02				19.0		

Table 12. Statistical summary of reported data for standard reference water sample T-123 (trace constituent)--Continued

Mo (Molybdenum)

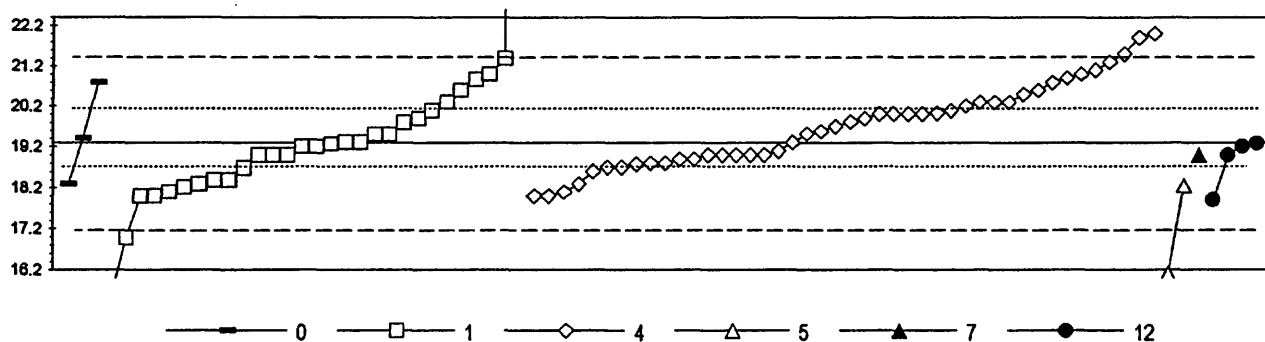
 μ g/L

0. Other	3. AA: graphite furnace					
1. AA: direct air	4. ICP					
2. AA: direct nitrous oxide	6. MS/ICP					
N =	2	1	1	18	13	4
Minimum =	9.00	20.00	6.60	6.45	3.00	7.52
Maximum =	70.00			20.00	16.00	8.50
Median =				9.25	9.53	
St Dev =				1.049	1.760	

MPV = 9.20
 F-pseudosigma = 1.308
 N = 39
 Hu = 9.27
 HI = 8.60

Lab	Rating	Z-value	0	1	2	3	4	6
1	4	-0.23				8.90		
3	NR						< 10	
4	NR						< 10	
7	3	0.61					10.00	
8	1	-1.68					7.00	
11	4	-0.15	9.00					
12	NR						< 30	
15	4	0.06				9.28		
16	0	4.66					15.30	
23	0	-2.10				6.45		
29	1	-1.99			6.60			
30	3	-0.88						8.05
32	2	-1.28						7.52
42	3	-0.54						8.50
45	4	0.47				9.81		
50	3	0.61				10.00		
52	1	-1.76				6.90		
57	NR						< 100	
58	0	8.25				20.00		
61	NR						< 50	
63	4	0.38				9.70		
68	0	2.90					13.00	
70	NR						< 50	
75	4	-0.38					8.70	
81	0	-4.74					3.00	
85	NR						< 20	
86	4	-0.11					9.05	
87	4	0.00				9.20		
94	3	-0.99				7.90		
97	4	0.00				9.20		
103	2	-1.45					7.30	
109	3	0.71				10.13		
120	4	0.43				9.76		
121	0	5.20					16.00	
124	0	46.47	70.00					
127	4	-0.34				8.76		
134	NR						< 10	
138	4	0.04				9.25		
141	2	1.15					10.70	
142	4	0.05				9.26		
145	3	0.99					10.50	
151	4	-0.41				8.66		
161	NR						< 50	
179	3	0.61				10.00		
180	3	0.92					10.40	
182	0	8.25	20.00					
189	NR						< 10	
196	3	-0.90						8.02
202	4	-0.15					9.00	

Table 12. Statistical summary of reported data for standard reference water sample T-123 (trace constituent)—Continued
Na (Sodium) m g/L



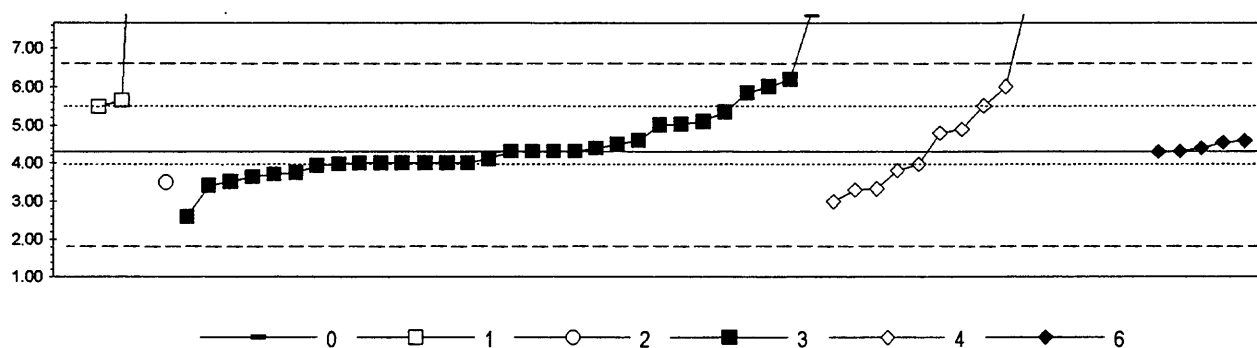
0. Other							
1. AA: direct air							
4. ICP							
	N =	3	29	44	2	1	4
	Minimum =	18.3	15.6	18.0	16.1	19.0	17.9
	Maximum =	20.8	129.0	22.0	18.3		19.3
	Median =		19.2	19.8			
	St Dev =		1.04	1.03			

MPV = 19.3
F-pseudosigma = 1.04
N = 83
Hu = 20.2
Hi = 18.7

Lab	Rating	Z-value	0	1	4	5	7	12
1	4	0.23			19.5			
3	3	0.98			20.3			
4	4	-0.47			18.8			
5	4	0.29			19.6			
7	3	-0.56			18.7			
8	3	0.98			20.3			
9	3	0.60		19.9				
11	2	1.46	20.8					
12	2	-1.23			18.0			
13	4	0.02		19.3				
15	1	1.94			21.3			
16	3	0.69			20.0			
18	3	0.69			20.0			
19	4	-0.27			19.0			
23	0	-2.20		17.0				
24	4	-0.46			18.8			
25	2	1.27			20.6			
33	0	-3.05				16.1		
36	3	-0.94	18.3					
39	3	0.69			20.0			
42	3	-0.65			18.8			
43	4	0.40			19.7			
45	4	-0.27		19.0				
46	4	-0.27			19.0			
52	4	0.02			19.3			
54	4	-0.27		19.0				
55	4	-0.27					19.0	
57	2	-1.23			18.0			
58	0	105.35		129.0				
59	4	-0.27			19.0			
61	4	-0.27			19.0			
63	2	1.46			20.8			
68	3	0.69			20.0			
69	2	-1.32					17.9	
70	3	0.79			20.1			
75	3	-0.56			18.7			
76	4	0.02		19.3				
78	4	0.50		19.8				
81	3	0.98			20.3			
84	4	0.00					19.3	
85	4	-0.08		19.2				
86	3	0.51			19.8			
87	2	-1.23		18.0				
89	3	0.79		20.1				
90	2	1.27		20.6				
92	1	2.04		21.4				
94	4	-0.36			18.9			
97	2	-1.04		18.2				
101	4	0.21		19.5				
102	3	-0.94			18.3			

Lab	Rating	Z-value	0	1	4	5	7	12
103	1	1.65			21.0			
107	3	-0.84		18.4				
109	2	-1.23		18.0				
113	4	0.21		19.5				
114	1	1.65		21.0				
116	2	-1.13			18.1			
119	4	-0.17			19.1			
120	2	-1.13		18.1				
121	0	2.61			22.0			
122	1	1.54		20.9				
127	4	-0.36			18.9			
134	4	-0.27		19.0				
138	3	0.88			20.2			
139	4	-0.07						19.2
140	4	-0.08		19.2				
141	1	1.56			20.9			
142	0	2.52			21.9			
145	3	0.72			20.0			
146	4	-0.27			19.0			
153	4	-0.27					19.0	
161	4	-0.46			18.8			
164	3	-0.57		18.7				
179	3	-0.84		18.4				
180	3	0.60			19.9			
182	0	-3.49		15.6				
184	1	1.75			21.1			
189	0	2.13			21.5			
190	4	0.12	19.4					
193	3	-0.94		18.3				
194	3	0.98		20.3				
196	4	-0.02		19.3				
197	3	-0.99				18.3		
198	2	1.17			20.5			

Table 12. Statistical summary of reported data for standard reference water sample T-123 (trace constituent)--Continued
Ni (Nickel) $\mu\text{g/L}$

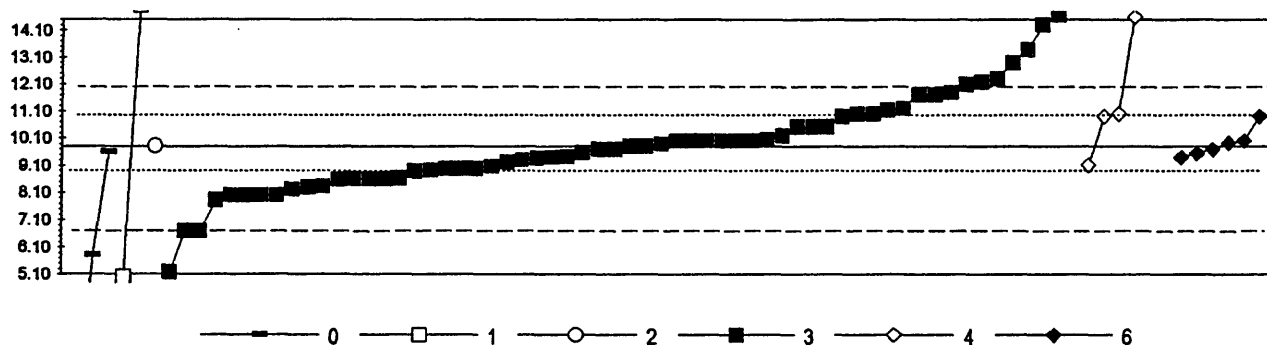


0. Other	3. AA: graphite furnace
1. AA: direct air	4. ICP
2. AA: direct nitrous oxide	6. MS/ICP
N =	1 3 1 30 15 5
Minimum =	0.01 5.48 3.50 2.60 3.00 4.29
Maximum =	20.00 8.00 14.00 4.59
Median =	4.10 3.98
St Dev =	0.802 1.055

MPV = 4.30
F-pseudosigma = 1.119
N = 55
Hu = 5.49
HI = 3.98

Lab	Rating	Z-value	0	1	2	3	4	6
1	3	0.71				5.10		
3	NR						< 10	
4	NR						< 20	
7	0	8.67					14.00	
9	4	-0.18				4.10		
12	NR						< 20	
13	NR		< 50					
15	3	-0.51				3.73		
16	NR						< 25	
18	NR						< 15	
23	3	-0.59				3.64		
24	4	-0.27				4.00		
25	NR						< 49	
30	4	0.26						4.59
32	4	0.00						4.30
36	0	-3.84	0.01					
37	4	0.21						4.54
42	4	0.09						4.40
45	3	-0.53				3.71		
46	3	-0.86					3.34	
50	4	-0.27				4.00		
52	4	-0.29				3.98		
55	3	0.63				5.00		
57	NR		< 100					
58	1	1.52				6.00		
59	4	0.45					4.80	
61	NR						< 25	
63	4	-0.27				4.00		
68	0	3.57					8.30	
69	4	-0.27				4.00		
70	NR						< 50	
78	4	0.00				4.30		
79	1	-1.52				2.60		
81	0	3.31				8.00		
85	NR						< 20	
86	4	-0.29					3.98	
87	NR		< 10					
89	NR					< 25		
90	2	1.20	5.64					
94	1	1.52					6.00	
97	3	0.65				5.03		
101	2	1.07					5.50	
102	3	-0.89					3.30	
103	4	-0.45					3.80	
107	4	0.09				4.40		
111	3	-0.71			3.50			
113	3	-0.80				3.40		
114	NR		< 10					
118	4	-0.27				4.00		
119	1	1.70				6.20		
120	3	-0.71					3.51	
121	0	6.88						12.00
124	NR		< 50					
127	4	-0.27					4.00	
133	3	0.54						4.90
134	4	0.00					4.30	
138	4	0.00					4.30	
139	NR			< 40				
140	2	1.05		5.48				
141	0	6.34						11.40
142	4	0.00					4.30	
145	2	-1.16						3.00
146	0	5.09						10.00
151	4	-0.32					3.94	
161	NR							< 10
179	4	0.18					4.50	
180	0	5.36						10.30
182	0	14.03		20.00				
184	NR							< 10
189	NR							< 20
190	3	0.94					5.35	
193	NR						< 5	
196.1	2	1.38					5.85	
196.2	4	-0.01						4.29
198	NR							< 10
202	4	0.27					4.60	

Table 12. Statistical summary of reported data for standard reference water sample T-123 (trace constituent)—Continued
Pb (Lead) μ g/L



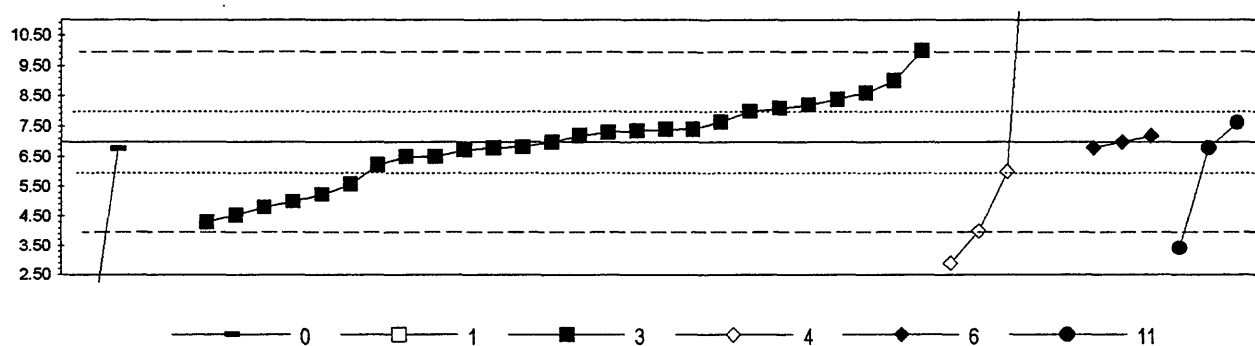
0. Other	3. AA: graphite furnace					
1. AA: direct air	4. ICP					
2. AA: direct nitrous oxide	6. MS/ICP					
N =	3	3	1	60	6	6
Minimum =	0.01	5.00	9.80	5.20	9.11	9.40
Maximum =	9.60	15.01		46.00	47.00	10.90
Median =				9.71		
St Dev =				1.662		

MPV = 9.80
F-pseudosigma = 1.557
N = 78
Hu = 11.00
Hi = 8.90

Lab	Rating	Z-value	0	1	2	3	4	6
1	4	-0.16						9.55
3	2	1.22				11.70		
4	NR						< 20	
9	4	0.45				10.50		
10	3	-0.77				8.60		
11	4	-0.13	9.60					
12	NR					< 10		
13	1	1.54				12.20		
15	4	0.02				9.83		
16	3	-0.51				9.00		
18	0	2.31				13.40		
19	0	23.90					47.00	
23	4	0.17				10.06		
24	2	-1.16				8.00		
25	NR						< 71	
29	4	0.13				10.00		
30	4	-0.06						9.71
32	4	0.07						9.91
33	0	-2.55	5.83					
36	0	-6.29	0.01					
37	3	0.71						10.90
42	4	0.13						10.00
45	3	-0.94				8.34		
46	3	-0.96				8.30		
50	3	0.77				11.00		
52	1	1.99				12.90		
55	3	-0.77				8.60		
57	4	0.13				10.00		
58	3	0.77				11.00		
59	3	0.71					10.90	
61	2	-1.16				8.00		
63	2	1.28				11.80		
68	1	1.61				12.30		
69	4	0.00				9.80		
70	2	1.22				11.70		
76	4	-0.06				9.71		
78	4	0.06				9.90		
79	2	-1.16				8.00		
81	2	-1.16				8.00		
85	NR		< 50					
86	4	-0.44					9.11	
87	NR		< 20					
89	3	0.86				11.14		
90	4	-0.14				9.58		
94	4	-0.26				9.40		
96	3	-0.75				8.63		
97	2	1.48				12.10		
101	0	3.08					14.60	
102	3	0.77					11.00	
103	NR						< 20	

Lab	Rating	Z-value	0	1	2	3	4	6
107	4	0.45				10.50		
108	4	0.13				10.00		
109	3	-0.77				8.60		
111	4	0.00			9.80			
113	4	-0.06				9.71		
114	NR			< 10				
118	4	-0.39				9.20		
119	3	0.90				11.20		
120	4	-0.24				9.43		
121	3	-0.58				8.90		
122	0	2.89				14.30		
124	NR		< 50					
126	3	-0.51				9.00		
127	4	-0.48				9.06		
133	0	-2.95				5.20		
134	4	-0.32				8.30		
138	3	0.71				10.90		
139	0	3.15				14.70		
140	0	3.35		15.01				
141	2	-1.03				8.20		
142	4	-0.27				9.38		
145	NR						< 14.8	
146	4	0.13				10.00		
149	1	-1.99				6.70		
151	4	0.26				10.20		
153	4	0.13				10.00		
161	NR						< 20	
179	1	-1.99				6.70		
180	0	11.58					27.80	
182	0	-3.08		5.00				
184	NR						< 50	
189	0	23.25				46.00		
190	2	-1.26				7.84		
193	3	-0.51				9.00		
194	4	0.13				10.00		
196a	3	-0.79				8.57		
196b	4	-0.26					9.40	
196	3	-0.58				8.93		
202	4	0.45				10.50		

Table 12. Statistical summary of reported data for standard reference water sample T-123 (trace constituent)—Continued
Sb (Antimony) μ g/L

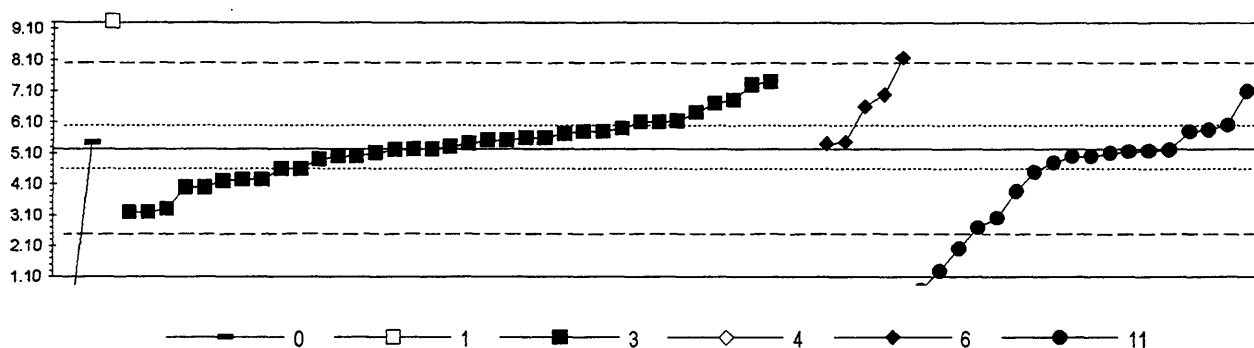


0. Other	4. ICP
1. AA: direct air	6. ICP/MS
3. AA: graphite furnace	11. AA: hydride
N = 2	2
Minimum = 0.01	30.00
Maximum = 6.75	100.00
Median = 7.08	7.08
St Dev = 1.424	1.424

MPV = 6.99
F-pseudosigma = 1.483
N = 41
Hu = 8.00
Hl = 6.00

Lab	Rating	Z-value	0	1	3	4	6	11
1	4	0.13					7.18	
3	3	0.82			8.20			
7	0	11.47				24.00		
11	4	-0.16	6.75					
12	NR					< 100		
15	2	-1.19			5.23			
16	4	-0.13			6.80			
18	4	-0.33			6.50			
23	4	0.24			7.34			
24	2	-1.48			4.80			
25	NR					< 51		
32	4	0.00					6.99	
36	0	-4.71	0.01					
45	1	-1.65			4.54			
46	1	2.03			10.00			
52	NR				< 6			
55	4	0.21			7.30			
57	2	1.36			9.00			
58	0	-2.42						3.40
59	3	-0.67				6.00		
61	NR					< 50		
63	3	0.95			8.40			
68	NR				< 5			
78	4	-0.33			6.50			
81	1	-2.02				4.00		
85	NR					< 100		
94	3	0.75			8.10			
97	4	-0.12			6.81			
102	0	-2.76				2.90		
113	2	1.09			8.60			
114	0	15.52	30.00					
119	4	-0.13						6.80
120	4	0.45			7.65			
124	NR		< 100					
127	4	0.00			6.99			
134	4	0.41						7.60
141	4	0.12			7.17			
142	4	0.29			7.42			
149	2	-1.34			5.00			
151	3	-0.96			5.57			
179	3	0.68			8.00			
180	0	8.03				18.90		
182	0	62.74	100.00					
184	NR					< 50		
189	1	-1.81			4.30			
194	4	0.28			7.40			
196	4	-0.14						6.78
198	3	-0.51			6.24			
202	4	-0.20			6.70			

Table 12. Statistical summary of reported data for standard reference water sample T-123 (trace constituent)--Continued
Se (Selenium) μ g/L



0. Other						
1. AA: direct air						
3. AA: graphite furnace						
N =	2	1	35	2	5	18
Minimum =	0.01	9.35	3.20	12.90	5.40	0.67
Maximum =	5.44		7.40	29.60	8.18	7.10
Median =			5.30			5.00
St Dev =			1.060			1.522

MPV = 5.23
F-pseudosigma = 1.371
N = 63
Hu = 5.95
HI = 4.55

Lab	Rating	Z-value	0	1	3	4	6	11
1	4	-0.02			5.20			
3	4	0.00			5.23			
8	1	-1.63						3.00
10	4	0.20			5.50			
11	4	0.15	5.44					
12	3	-0.90			4.00			
13	4	0.42			5.80			
15	4	-0.04						5.17
16	NR				< 3			
18	2	1.36						7.10
23	3	-0.72			4.24			
24	0	-2.87						1.30
25	NR							
29	0	3.00		9.35				
30	0	2.15					8.18	
32	2	1.29					7.00	
36	0	-3.81	0.01					
37	3	1.00					6.60	
42	4	0.12					5.40	
45	4	-0.16			5.01			
46	4	-0.09			5.10			
50	3	0.56						6.00
52	NR							< 5
55	4	-0.24			4.90			
57	1	-1.84						2.70
58	0	-3.33						0.67
61	4	0.20			5.50			
63	4	0.42			5.80			
68	4	0.49			5.90			
69	4	0.12			5.40			
70	3	0.87			6.42			
75	4	-0.18						4.99
76	1	1.52			7.31			
78	4	0.05			5.30			
79	4	-0.46			4.60			
81	3	-0.90			4.00			
85	4	-0.09						5.10
86	3	-1.00						3.86
89	0	-2.34						2.02
94	2	-1.41			3.30			
96	4	0.37			5.74			
97	0							< 0.22
102	0	5.59				12.90		
107	3	0.63			6.10			
108	2	-1.48			3.20			
109	3	-0.71			4.25			
113	4	0.27			5.60			
118	2	-1.48			3.20			
119	3	-0.53						4.50
120	4	-0.06						5.15

Lab	Rating	Z-value	0	1	3	4	6	11
122	0							< 1
124	NR		< 200					
126	0							< 1
127	3	0.64			6.11			
133	3	-0.75			4.20			
134	4	-0.02						5.20
138	4	-0.31						4.80
139	1	1.58			7.40			
141	4	0.45						5.85
142	3	0.65			6.12			
151	4	-0.17						5.00
161	NR					< 100		
179	NR				< 5			
180	0	17.77				29.60		
182	4	0.42						5.80
184	0				< 0.005			
189	2	1.14			6.80			
190	2	1.07			6.70			
193	4	-0.17			5.00			
194	4	0.00			5.23			
196	4	0.18					5.47	
198	4	-0.46			4.60			
202	4	0.27			5.60			

SiO₂ (Silica)

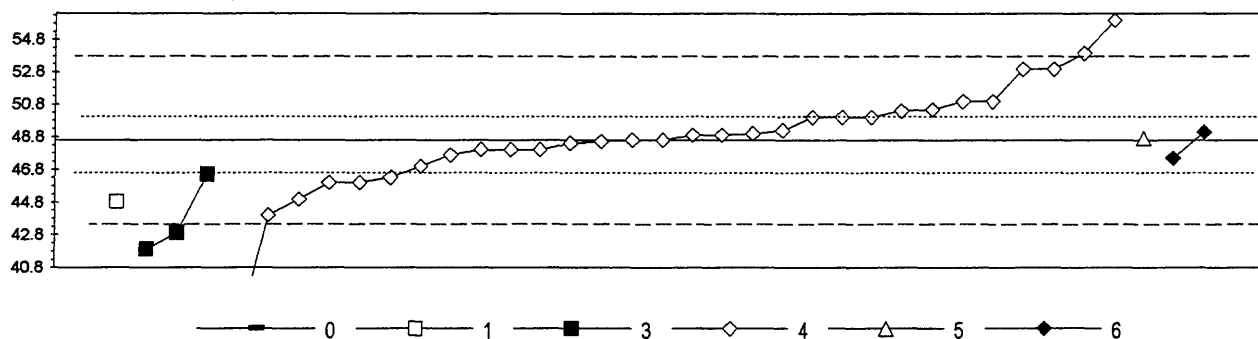
0. Other	5. DCP					
2. AA: direct nitrous oxide	6. ICP/MS					
4. ICP	22m. Color: molybdate blue					
N =	3	1	29	2	1	15
Minimum =	5.78	6.00	2.90	6.08	6.03	3.46
Maximum =	12.40		13.00	25.70		6.50
Median =			6.09			5.85
St Dev =			0.713			0.748

MPV = 6.08
F-pseudosigma = 0.571
N = 51
Hu = 6.34
HI = 5.57

Lab	Rating	Z-value	0	2	4	5	6	22m
1	4	0.00			6.08			
2	0	-2.42						4.70
3	2	1.09			6.70			
4	4	-0.04			6.06			
5	4	0.11			6.15			
8	0	12.12			13.00			
9	0	-4.59						3.46
11	4	0.18	6.18					
13	1	-1.98						4.95
15	3	0.89			6.59			
24	0	-2.22			4.81			
25	3	0.67			6.46			
32	4	-0.09					6.03	
33	0	34.37				25.70		
36	0	11.07	12.40					
37	4	0.07						6.12
42	4	0.39			6.30			
43	4	0.04			6.10			
45	4	0.21			6.20			
52	3	-0.96						5.53
55	3	0.51			6.37			
57	1	-1.72			5.10			
58	0	-4.10						3.74
61	0	-5.57			2.90			
63	0	3.59			8.13			
70	4	-0.49						5.80
78	4	-0.14		6.00				
87	4	0.04						6.10
89	4	0.09						6.13
92	3	-0.84						5.60
97	4	0.26						6.23
101	3	-0.72			5.67			
102	4	-0.11			6.02			
103	0	-2.77			4.50			
104	4	-0.33						5.89
109	1	2.05			7.25			
112	4	0.00				6.08		
113	4	-0.14						6.00
116	1	-1.96			4.96			
119	4	-0.14			6.00			
121	1	-1.73			5.09			
127	4	0.25			6.22			
134	4	0.02			6.09			
138	3	0.74						6.50
141	1	-1.79						5.06
142	0	2.05			7.25			
145	3	0.61			6.43			
146	1	-1.89			5.00			
184	0	5.61			9.28			
189	4	-0.23			5.95			

Lab	Rating	Z-value	0	2	4	5	6	22m
190	3	-0.53	5.78					

Table 12. Statistical summary of reported data for standard reference water sample T-123 (trace constituent)—Continued
Sr (Strontium)
 μ g/L

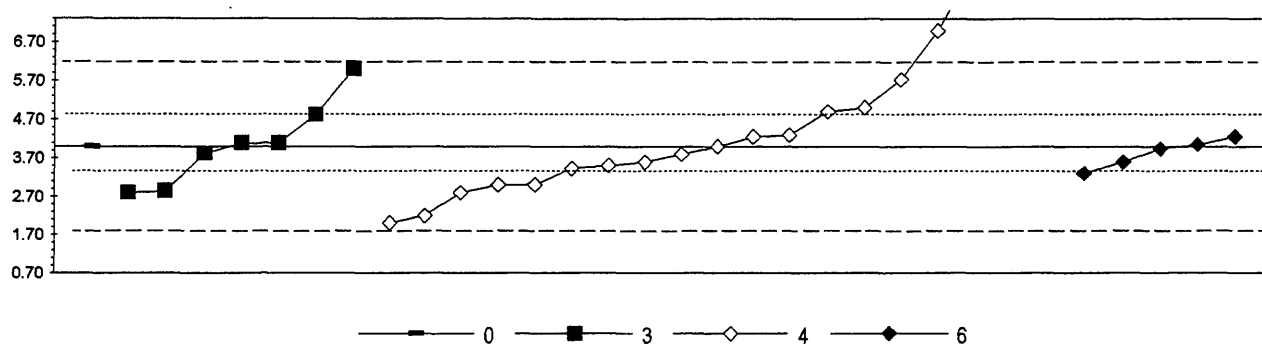


0. Other	4. ICP
1. AA: direct air	5. DCP
3. AA: graphite furnace	6. MS/ICP
N = 1	1
Minimum = 200.0	44.8
Maximum =	41.9
Median =	36.5
St Dev =	46.5
	56.0
	48.9
	2.65

MPV = 48.6
F-pseudosigma = 2.59
N = 38
Hu = 50.0
Hi = 46.5

Lab	Rating	Z-value	0	1	3	4	5	6
1	4	0.00				48.6		
3	4	0.15				49.0		
4	4	-0.23				48.0		
7	4	-0.08				48.4		
8	0	2.85				56.0		
9	0		< 24					
15	4	-0.35				47.7		
16	3	-0.89				46.3		
18	3	0.54				50.0		
23	0	-2.19			42.9			
24	4	-0.04				48.5		
25	3	0.92				51.0		
32	4	-0.43					47.5	
33	4	0.04					48.7	
39	3	0.92				51.0		
42	1	1.69				53.0		
46	4	0.23				49.2		
50	NR		< 100					
52	4	0.11				48.9		
55	1	-1.77				44.0		
59	3	0.54				50.0		
63	0	2.08				54.0		
68	3	-1.00				46.0		
70	0					< 10		
85	4	0.00				48.6		
94	4	-0.23				48.0		
97	0	-2.58			41.9			
102	1	1.69				53.0		
103	3	-1.00				46.0		
109	2	-1.45			44.8			
113	NR		< 200					
116	3	0.54				50.0		
121	2	-1.39				45.0		
127	4	0.11				48.9		
134	3	-0.62				47.0		
138	3	0.69				50.4		
141	3	-0.81			46.5			
145	3	0.73				50.5		
146	4	-0.23				48.0		
161	NR					< 100		
182	0	58.35	200.0					
189	0	-4.67				36.5		
196	4	0.19						49.1

Table 12. Statistical summary of reported data for standard reference water sample T-123 (trace constituent)--Continued
V (Vanadium) $\mu\text{ g/L}$

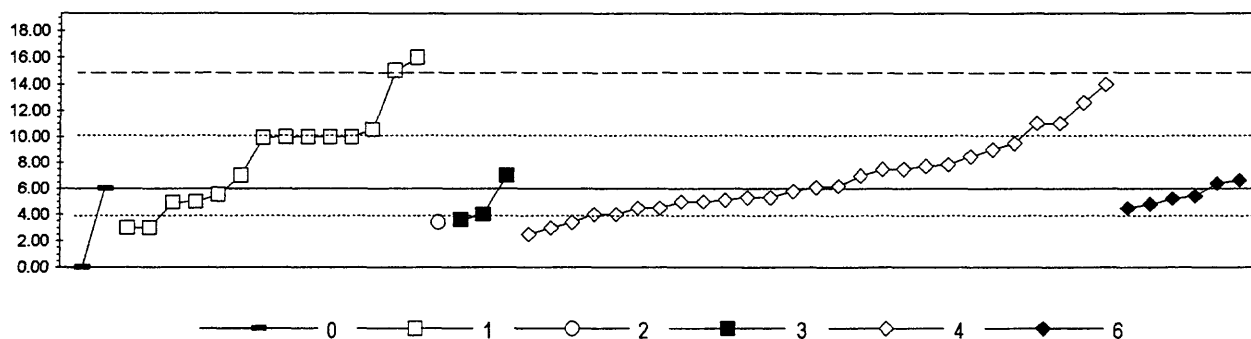


0. Other					6. ICP/MS
3. AA: graphite furnace					
4. ICP					
	N =	1	7	19	5
	Minimum =	4.00	2.80	2.00	3.30
	Maximum =		6.00	10.00	4.26
	Median =		4.08	3.70	
	St Dev =		1.116	1.297	

MPV = 4.00
F-pseudosigma = 1.105
N = 32
Hu = 4.86
Hi = 3.37

Lab	Rating	Z-value	0	3	4	6
1	NR				< 6	
3	NR				< 10	
4	NR				< 10	
5	1	1.56			5.72	
7	0	2.72			7.00	
11	4	0.00	4.00			
15	3	0.74		4.82		
16	3	0.81			4.90	
18	NR				< 5	
25	NR				< 4	
30	4	0.23				4.26
32	3	-0.63				3.30
37	4	0.05				4.05
42	4	-0.36				3.60
45	0	4.26			8.70	
46	3	-0.91			3.00	
50	1	1.81		6.00		
52	4	-0.16		3.82		
57	NR				< 50	
61	0	4.89			9.40	
63	0	5.43			10.00	
68	4	0.00			4.00	
70	NR				< 50	
75	4	0.27			4.30	
81	NR				< 2	
85	NR				< 20	
86	3	-0.51			3.44	
94	4	-0.36			3.60	
97	2	-1.05		2.84		
101	4	-0.45			3.50	
102	1	-1.63			2.20	
103	2	-1.09			2.80	
121	3	0.91			5.00	
124	NR		< 10			
127	4	0.07		4.08		
134	4	0.09		4.10		
138	4	-0.18			3.80	
141	4	0.23			4.25	
142	2	-1.09		2.80		
145	1	-1.81			2.00	
161	NR				< 100	
180	3	-0.91			3.00	
184	NR				< 10	
189	NR				< 8	
196	4	-0.05				3.94

Table 12. Statistical summary of reported data for standard reference water sample T-123 (trace constituent)--Continued
Zn (Zinc) μ g/L



0. Other							
1. AA: direct air							
2. AA: direct nitrous oxide							
	N =	2	14	1	3	27	6
	Minimum =	0.01	3.00	3.40	3.59	2.50	4.48
	Maximum =	6.00	16.00		7.00	14.00	6.64
	Median =		9.98			6.10	
	St Dev =		4.020			2.942	

MPV = 6.00
F-pseudosigma = 4.448
N = 53
Hu = 10.00
HI = 4.00

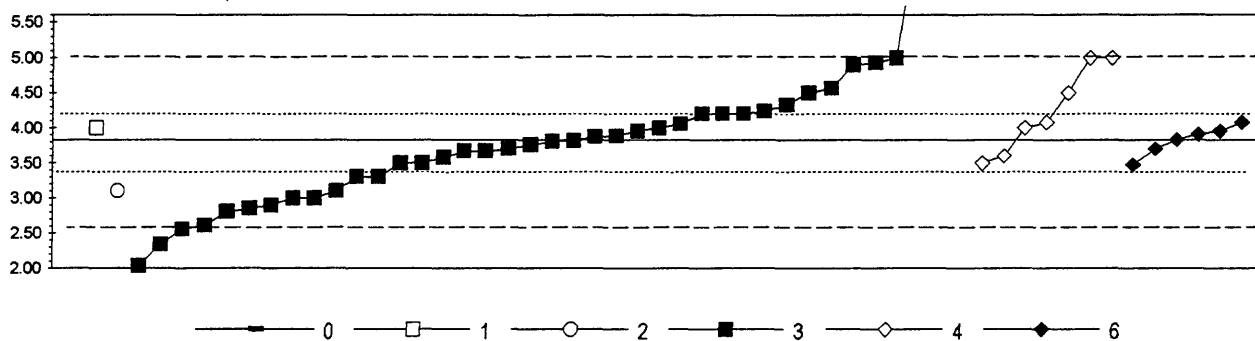
Lab	Rating	Z-value	0	1	2	3	4	6
1	4	-0.18						5.22
3	4	0.38					7.70	
4	NR						< 10	
5	NR						< 4	
7	3	-0.58					3.40	
9	NR			< 2				
11	4	0.00	6.00					
12	NR						< 20	
13	NR			< 10				
15	4	-0.11		5.50				
16	4	-0.04					5.80	
18	4	0.22					7.00	
23	NR			< 20				
24	4	0.04					6.20	
25	NR						< 4	
29	3	0.90		10.00				
30	4	0.14						6.64
32	4	0.09						6.40
36	2	-1.35	0.01					
37	4	-0.13						5.40
39	4	-0.22					5.00	
42	4	-0.27						4.80
46	NR						< 8	
50	4	-0.45				4.00		
52	2	1.48					12.60	
57	NR			< 20				
58	0	2.25		16.00				
59	4	-0.20					5.10	
61	NR						< 10	
63	2	1.12					11.00	
68	2	1.12					11.00	
70	NR						< 10	
73	4	-0.45					4.00	
75	4	-0.16					5.30	
78	4	0.22				7.00		
79	1	1.80					14.00	
81	4	-0.45					4.00	
85	4	-0.22		5.00				
86	4	0.41					7.83	
87	3	0.90		10.00				
89	NR			< 40				
90	3	-0.67		3.00				
94	3	0.56					8.50	
96	3	0.90		10.00				
97	3	-0.54				3.59		
101	4	0.34					7.50	
102	4	-0.34					4.50	
103	4	-0.34					4.50	
107	3	-0.67		3.00				
111	3	-0.58			3.40			

Lab	Rating	Z-value	0	1	2	3	4	6
113	2	1.01		10.50				
114	3	0.90		10.00				
116	NR						< 5	
119	3	0.67					9.00	
121	3	-0.67					3.00	
122	NR					< 5		
124	NR		< 10					
127	4	-0.24		4.94				
133	4	0.02					6.10	
134	4	-0.16					5.30	
138	4	-0.22					5.00	
139	NR			< 10				
140	4	0.23		7.04				
141	4	0.33					7.47	
145	NR						< 0.7	
151	NR			< 20				
161	NR						< 5	
179	NR			< 5				
180	3	-0.79					2.50	
182	1	2.02		15.00				
184	NR						< 10	
189	NR						< 20	
190	3	0.89		9.95				
193	NR			< 25				
196	4	-0.34						4.48
198	NR						< 50	
202	3	0.79					9.50	

Table 13. *Statistical summary of reported data for standard reference sample T-125 (trace constituents)*

Definition of analytical methods, abbreviations, and symbols					
<u>Analytical methods</u>					
0. Other/Not reported					
1. AA: direct, air	=	atomic absorption: direct,air			
2. AA: direct, N2O	=	atomic absorption: direct,nitrous oxide			
3. AA: graphite furnace	=	atomic absorption: graphite furnace			
4. ICP	=	inductively coupled plasma			
5. DCP	=	direct coupled plasma			
6. MS/ICP	=	mass spectrometry/inductively coupled plasma			
10. AA: extraction	=	atomic absorption: extraction [chelating agent(s) specified]			
11. AA: hydride	=	atomic absorption: hydride [reducing agent specified]			
22. Color:	=	colorimetric [color reagent specified]			
<u>Abbreviations and symbols</u>					
	N =	number of samples			
	St dev =	traditional standard deviation			
	MPV =	95% confidence most probable value			
	F-pseudosigma =	nonparametric statistic deviation			
	Hu =	upper hinge value			
	Hi =	lower hinge value			
	μ g/L =	micrograms per liter			
	mg/L =	milligrams per liter			
	Lab =	laboratory code number			
	NR =	not rated, less than value reported			
	< =	less than			
<u>Constituent</u>					
Ag	Silver	70			
Al	Aluminium	71			
As	Arsenic	72			
B	Boron	73			
Ba	Barium	74			
Be	Beryllium	75			
Ca	Calcium	76			
Cd	Cadmium	77			
Co	Cobalt	78			
Cr	Chromium	79			
Cu	Copper	80			
Fe	Iron	81			
K	Potassium	82			
			<u>Constituent</u>		
			Li	Lithium	83
			Mg	Magnesium	84
			Mn	Manganese	85
			Mo	Molybdenum	86
			Na	Sodium	87
			Ni	Nickel	88
			Pb	Lead	89
			Sb	Antimony	90
			Se	Selenium	91
			SiO2	Silica	92
			Sr	Strontium	93
			V	Vanadium	94
			Zn	Zinc	95

Table 13. Statistical summary of reported data for standard reference water sample T-125 (trace constituent)—Continued
Ag (Silver)
 μ g/L



0. Other	3. AA: graphite furnace					
1. AA: direct air	4. ICP					
2. AA: direct nitrous oxide	6. ICP/MS					
N =	1	1	1	39	7	6
Minimum =	0.00	4.00	3.10	2.04	3.50	3.47
Maximum =				25.60	5.00	4.07
Median =				3.73	4.08	
St Dev =				0.732	0.614	

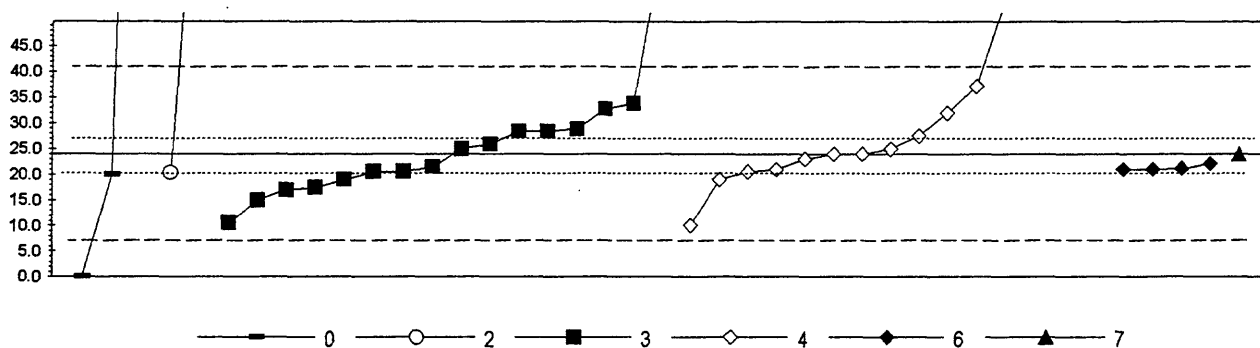
MPV = 3.83
F-pseudosigma = 0.604
N = 55
Hu = 4.20
Hi = 3.39

Lab	Rating	Z-value	0	1	2	3	4	6
1	4	0.00						3.83
3	3	0.61				4.20		
5	4	0.41					4.08	
7	1	1.94					5.00	
11	2	-1.21			3.10			
12	3	-0.88				3.30		
13	1	-1.54				2.90		
15	4	0.08				3.88		
16	1	1.94					5.00	
23	4	-0.28				3.66		
25	NR							< 6
29	3	0.61				4.20		
30	4	0.21						3.95
32	4	0.40						4.07
36	0	-6.34	0.00					
37	3	-0.60						3.47
42	4	-0.22						3.70
45	4	-0.28				3.66		
46	0	-2.10				2.56		
52	4	-0.43				3.57		
55	3	-0.88				3.30		
58	0	5.25				7.00		
59	4	0.28					4.00	
61	NR							< 10
63	2	-1.21				3.10		
68	3	-0.55				3.50		
69	4	-0.02				3.82		
70	3	0.83				4.33		
76	1	-2.02				2.61		
78	3	0.61				4.20		
79	3	-0.55				3.50		
85	NR			< 5				
87	0			< 2				
89	2	1.21				4.56		
90	0	-2.96				2.04		
94	3	-0.55					3.50	
97	0	-2.47				2.34		
101	4	-0.38					3.60	
107	4	0.36				4.05		
113	4	-0.13				3.75		
118	2	-1.37				3.00		
119	4	0.28				4.00		
120	1	-1.62				2.85		
122	1	1.94				5.00		
124	NR		< 20					
127	4	0.07				3.87		
133	2	1.11					4.50	
134	4	-0.05				3.80		
138	3	0.66				4.23		
141	2	-1.37				3.00		

Lab	Rating	Z-value	0	1	2	3	4	6
142	4	-0.22				3.70		
149	0	36.03				25.60		
151	NR			< 10				
153	0	4.92				6.80		
161	NR							< 50
180	NR							< 4.8
182	4	0.28		4.00				
183	2	1.11				4.50		
184	NR							< 5
189	1	1.77				4.90		
190	4	0.20				3.95		
193	1	-1.70				2.80		
196a	4	0.13						3.91
196b	1	1.80				4.92		

Table 13. Statistical summary of reported data for standard reference water sample T-125 (trace constituent)--Continued

Al (Aluminum)

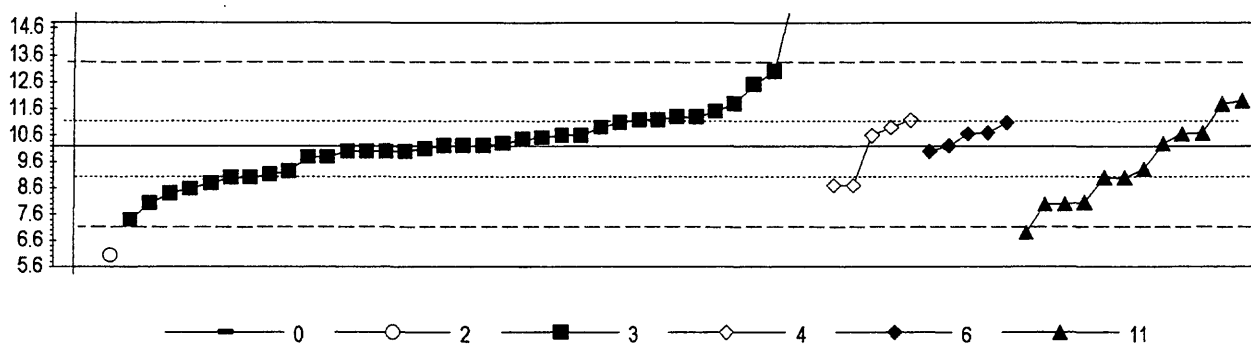
 μ g/L

0. Other						4. ICP
2. AA: direct nitrous oxide						6. ICP/MS
3. AA: graphite furnace						7. IC
N =	3	2	16	15	4	1
Minimum =	0.0	20.3	10.4	10.0	20.9	24.0
Maximum =	225.0	100.0	66.0	115.0	22.1	
Median =			21.5	24.0		
St Dev =			6.75	7.03		

MPV = 24.0
 F-pseudosigma = 8.56
 N = 41
 Hu = 32.0
 HI = 20.5

Lab	Rating	Z-value	0	2	3	4	6	7
1	4	-0.41				20.5		
3	1	-1.64				10.0		
4	0	6.31				78.0		
5	1	1.54				37.2		
7	4	-0.35				21.0		
8	4	0.00				24.0		
11	4	0.00						24.0
12	NR					< 100		
13	4	-0.43		20.3				
15	3	-0.58			19.0			
16	0	7.94				92.0		
23	4	-0.29			21.5			
25	NR					< 19		
29	0	8.88		100.0				
30	4	-0.35				21.0		
32	4	-0.22				22.1		
33	4	-0.47	20.0					
36	0	-2.80	0.0					
37	4	-0.36					20.9	
45	4	0.21			25.8			
46	4	-0.12				23.0		
52	3	0.51			28.4			
58	0	4.91			66.0			
59	3	-0.58				19.0		
61	NR					< 50		
63	NR					< 100		
69	4	0.12			25.0			
70	NR					< 50		
78	3	-0.82			17.0			
85	4	0.12				25.0		
89	NR				< 100			
94	4	0.00				24.0		
97	1	-1.59			10.4			
101	0	10.63				115.0		
107	2	1.14			33.8			
113	3	-0.78			17.3			
116	NR					< 100		
119	2	-1.05			15.0			
120	2	1.02			32.7			
122	3	0.57			28.9			
124	NR		< 100					
127	4	-0.41			20.5			
134	3	0.93				32.0		
139	NR			< 500				
141	4	0.41				27.5		
145	NR					< 13.4		
161	NR					< 100		
180	NR					< 24.2		
182	0	23.48	225.0					
183	3	0.51			28.4			

Table 13. Statistical summary of reported data for standard reference water sample T-125 (trace constituent)--Continued
As (Arsenic) $\mu\text{ g/L}$



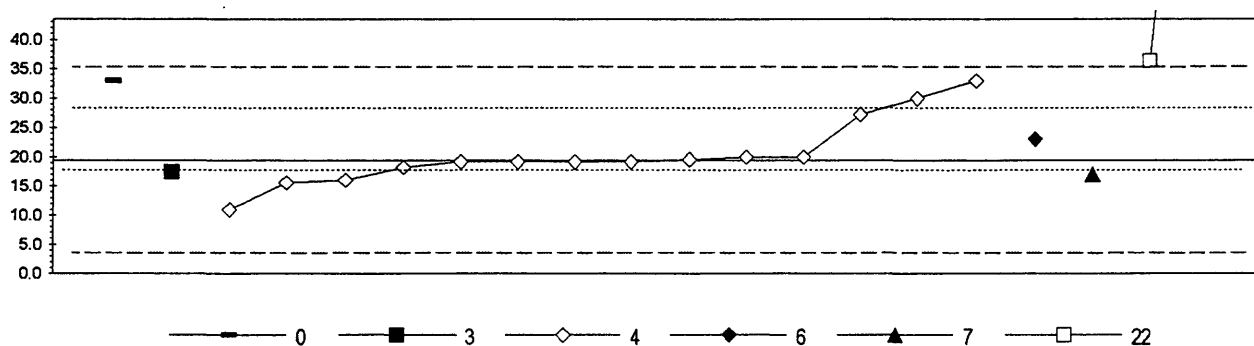
0. Other	4. ICP
2. AA: direct nitrous oxide	6. ICP/MS
3. AA: graphite furnace	11. AA: hydride
N = 2	1 36 5 5 12
Minimum = 0.0	6.0 7.4 8.7 10.0 6.9
Maximum = 300.0	18.6 11.2 11.1 11.9
Median = 10.2	9.2
St Dev = 1.22	1.60

MPV = 10.2
F-pseudosigma = 1.54
N = 61
Hu = 11.1
HI = 9.0

Lab	Rating	Z-value	0	2	3	4	6	11
1	3	0.57					11.1	
3	2	-1.41			8.0			
8	2	-1.43						8.0
10	4	0.26			10.6			
11	0	-2.70		6.0				
12	4	-0.13			10.0			
13	4	0.06			10.3			
15	2	-1.05			8.6			
16	3	0.65			11.2			
23	3	0.71			11.3			
25	NR					< 50		
29	0	5.45			18.6			
32	4	0.00					10.2	
36	0	-6.60	0.0					
37	4	0.32					10.7	
39	3	-0.78						9.0
42	4	-0.13					10.0	
45	4	0.00			10.2			
46	4	0.26			10.6			
51	0	3.76			16.0			
52	4	0.45			10.9			
55	3	-0.91			8.8			
58	0	-2.14						6.9
59	3	-0.97				8.7		
61	3	-0.78			9.0			
63	3	0.84			11.5			
68	4	-0.13			10.0			
69	3	-0.71			9.1			
70	3	0.65			11.2			
76	2	1.04			11.8			
78	4	0.00			10.2			
79	2	-1.17			8.4			
85	4	0.06						10.3
89	4	0.29						10.7
90	4	0.16			10.5			
94	1	-1.82			7.4			
97	2	-1.39						8.1
107	3	0.58			11.1			
109	4	-0.27			9.8			
113	4	0.19			10.5			
118	3	0.71			11.3			
119	2	-1.43						8.0
120	2	1.10						11.9
122	2	1.04						11.8
124	0	187.95	300.0					
127	4	-0.27			9.8			
133	1	1.82			13.0			
134	4	0.32						10.7
138	4	0.00			10.2			
139	2	1.49			12.5			

Lab	Rating	Z-value	0	2	3	4	6	11
141	3	0.65				11.2		
142	3	-0.62			9.3			
145	3	-0.97				8.7		
151	3	-0.56						9.3
161	NR					< 100		
180	4	0.45				10.9		
182	3	-0.78						9.0
183	4	-0.13			10.0			
184	4	0.26				10.6		
189	4	-0.13			10.0			
190	4	-0.06			10.1			
193	3	-0.78			9.0			
196	4	0.29					10.7	

Table 13. Statistical summary of reported data for standard reference water sample T-125 (trace constituent)—Continued

B (Boron) μ g/L

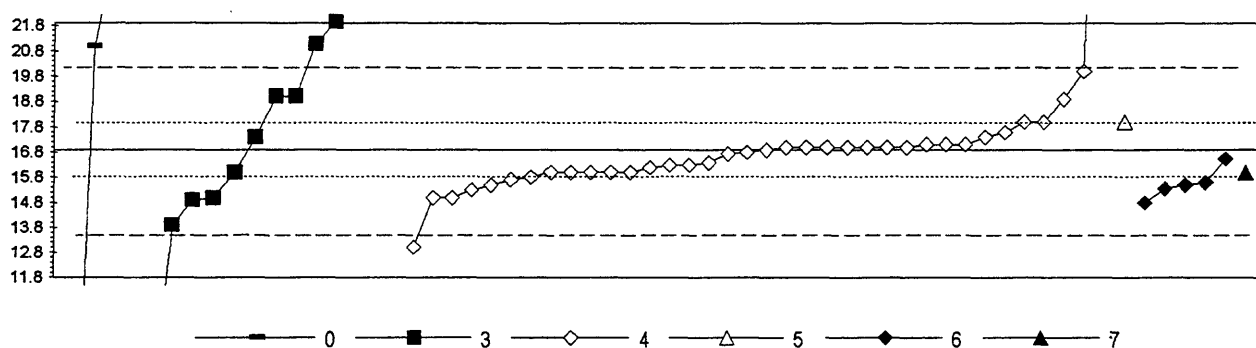
0. Other	6. ICP/MS					
3. AA: graphite furnace	7. IC					
4. ICP	22. Colorimetric					
N =	3	3	14	1	1	3
Minimum =	32.9	0.0	11.0	23.0	17.0	36.3
Maximum =	125.0	17.4	32.9			125.0
Median =			19.2			
St Dev =			5.80			

MPV = 19.4
 F-pseudosigma = 8.02
 N = 20
 Hu = 28.6
 HI = 17.8

Lab	Rating	Z-value	0	3	4	6	7	22
1	4	-0.02			19.2			
3	2	-1.04			11.0			
4	4	0.08			20.0			
11	4	-0.29				17.0		
15	4	-0.02			19.2			
16	NR				< 500			
25	4	-0.47			15.6			
32	4	0.45				23.0		
45	0	2.11						36.3
46	3	0.98			27.2			
52	NR				< 300			
58	0	13.17						125.0
61	NR				< 50			
63	NR				< 100			
70	NR				< 50			
75	4	0.02			19.5			
85	NR				< 20			
94	4	0.08			20.0			
109	1	1.69	32.9					
116	4	-0.42			16.0			
119	2	1.33			30.0			
122	0							< 0.1
124	NR		< 50					
127	4	-0.02			19.2			
134	NR				< 20			
141	NR				< 10			
142	1	1.69			32.9			
145	4	-0.15			18.2			
153	4	-0.24		17.4				
180	4	-0.02			19.2			
189	NR				< 10			

Table 13. Statistical summary of reported data for standard reference water sample T-125 (trace constituent)--Continued

Ba (Barium)

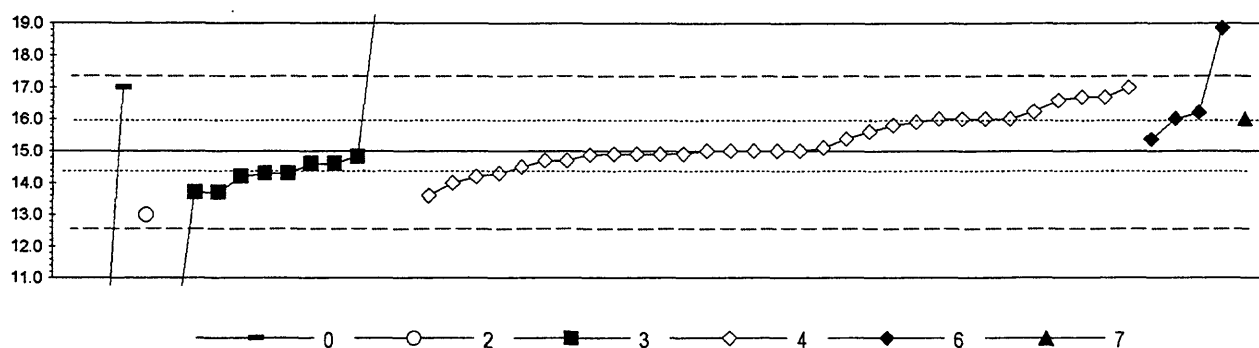
 μ g/L

0. Other							
3. AA: graphite furnace							
4. ICP							
	N =	4	13	36	1	5	1
	Minimum =	0.0	6.2	13.0	18.0	14.8	16.0
	Maximum =	60.0	29.0	45.0		16.5	
	Median =			16.8			
	St Dev =			1.20			

MPV = 16.9
 F-pseudosigma = 1.67
 N = 60
 Hu = 18.0
 HI = 15.8

Lab	Rating	Z-value	0	3	4	5	6	7
1	4	-0.34			16.3			
3	3	-0.93			15.3			
4	3	0.69			18.0			
5	4	-0.40			16.2			
7	3	-0.81			15.5			
8	4	-0.33			16.3			
11	3	-0.51						16.0
13	2	1.29		19.0				
15	2	1.23			18.9			
16	3	-0.51			16.0			
23	NR		< 100					
25	4	0.03			16.9			
29	0	4.89	25.0					
30	3	-0.90					15.4	
32	3	-0.75					15.6	
33	3	0.69			18.0			
36	0	-10.09	0.0					
37	3	-0.81					15.5	
39	4	0.09			17.0			
42	2	-1.23					14.8	
45	4	0.33			17.4			
46	4	0.09			17.0			
52	0	2.55		21.1				
55	2	-1.11			15.0			
58	0	7.28		29.0				
59	3	-0.51			16.0			
61	3	-0.69			15.7			
63	0	16.88			45.0			
68	3	0.69			18.0			
69	0	3.09		22.0				
70	4	0.09			17.0			
75	4	-0.27			16.4			
78	2	1.29		19.0				
85	4	0.09			17.0			
87	NR		< 40					
89	NR		< 100					
90	0	2.48	21.0					
94	3	-0.51			16.0			
97	0	3.57		22.8				
101	3	-0.63			15.8			
107	3	-0.51		16.0				
116	4	0.09			17.0			
119	1	1.89			20.0			
120	0	5.79		26.5				
122	2	-1.17		14.9				
124	0		< 10					
127	3	-0.51			16.0			
133	4	-0.03			16.8			
134	0	-2.31			13.0			
138	4	0.15			17.1			

Table 13. Statistical summary of reported data for standard reference water sample T-125 (trace constituent)—Continued
Be (Beryllium) $\mu\text{ g/L}$



0. Other	4. ICP
2. AA: direct nitrous oxide	6. ICP/MS
3. AA: graphite furnace	7. IC
N = 3	1 11 31 4 1
Minimum = 0.0	13.0 8.0 13.6 15.4 16.0
Maximum = 17.0	25.0 17.0 18.9
Median = 14.3	15.0
St Dev = 0.41	0.85

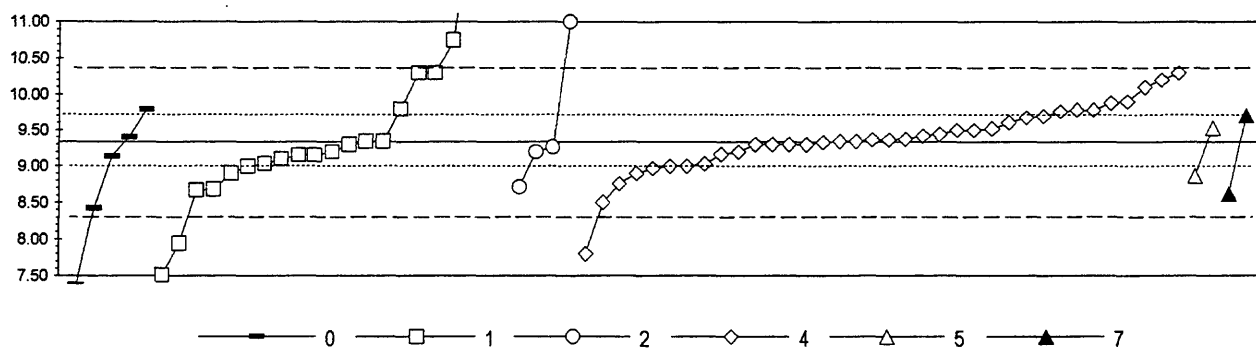
MPV = 15.0
F-pseudosigma = 1.19
N = 51
Hu = 16.0
Hi = 14.4

Lab	Rating	Z-value	0	2	3	4	6	7
1	4	-0.10				14.9		
3	3	-0.67				14.2		
4	3	0.84				16.0		
5	4	-0.07				14.9		
7	2	-1.18				13.6		
8	2	1.43				16.7		
11	3	0.84						16.0
12	NR					< 20		
15	3	0.67				15.8		
16	2	1.35				16.6		
25	4	-0.08				14.9		
30	0	3.26					18.9	
32	2	1.01					16.2	
36	0	-12.63	0.0					
37	3	0.84					16.0	
39	1	1.69				17.0		
45	4	0.08				15.1		
46	4	-0.42				14.5		
52	0	8.43			25.0			
55	2	-1.10			13.7			
58	0	-5.90			8.0			
61	3	0.84				16.0		
63	2	-1.10			13.7			
68	3	0.84				16.0		
69	4	-0.13			14.8			
70	4	-0.08				14.9		
75	3	-0.59				14.3		
78	3	-0.59			14.3			
79	4	0.00				15.0		
85	4	0.00				15.0		
94	4	0.00				15.0		
97	3	-0.67			14.2			
113	3	-0.59			14.3			
119	4	-0.34			14.6			
120	0	5.23			21.2			
124	1	1.69	17.0					
127	4	0.00				15.0		
133	2	1.43				16.7		
134	3	-0.84				14.0		
138	3	0.76				15.9		
141	4	-0.25				14.7		
142	4	0.32				15.4		
145	2	1.05				16.3		
146	3	0.84				16.0		
151	4	-0.34			14.6			
161	4	0.00				15.0		
180	4	-0.25				14.7		
182	0	-8.43	5.0					
183	1	-1.69		13.0				
184	4	-0.08				14.9		

Table 13. Statistical summary of reported data for standard reference water sample T-125 (trace constituent)—Continued

Ca (Calcium)

m g/L



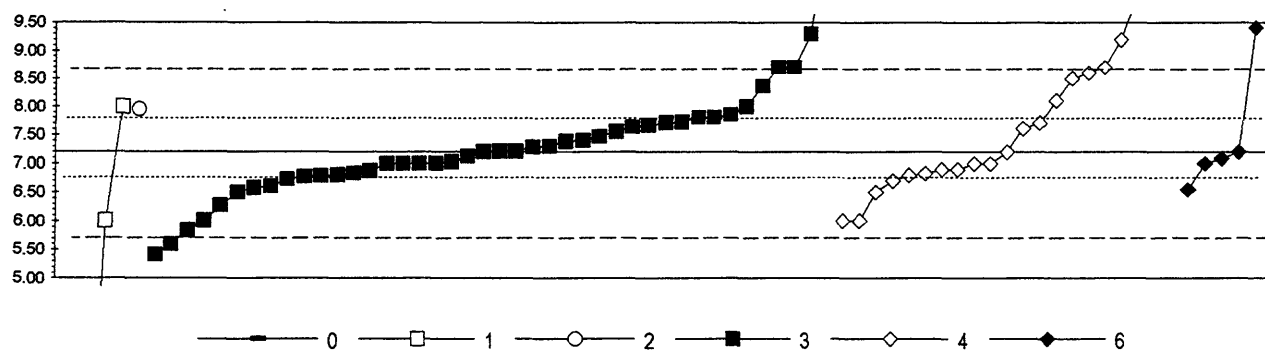
0. Other						
1. AA: direct air						
2. AA: direct nitrous oxide						
N =	5	21	4	36	2	2
Minimum =	7.37	7.51	8.71	7.80	8.87	8.61
Maximum =	9.79	19.00	11.00	10.30	9.53	9.71
Median =		9.16		9.36		
St Dev =		0.680		0.474		

MPV = 9.34
 F-pseudosigma = 0.526
 N = 70
 Hu = 9.71
 Hl = 9.00

Lab	Rating	Z-value	0	1	2	4	5	7
1	4	0.05				9.36		
3	4	0.05				9.36		
4	4	-0.01				9.33		
5	4	0.15				9.42		
7	3	0.64				9.67		
8	0	-2.92				7.80		
9	4	-0.26		9.20				
11	3	0.71						9.71
12	3	-0.64				9.00		
13	4	-0.09		9.29				
15	1	1.64				10.20		
16	3	-0.83				8.90		
19	4	0.03				9.35		
23	2	-1.19			8.71			
25	2	1.45				10.10		
32	4	-0.39	9.13					
33	4	0.37						9.53
36	0	-3.73	7.37					
42	4	-0.07				9.30		
43	4	0.31				9.50		
45	2	-1.26		8.67				
46	4	0.33				9.51		
51	2	-1.09				8.76		
52	4	0.07				9.37		
55	4	-0.07				9.30		
58	0	-3.47		7.51				
59	4	-0.07				9.30		
61	3	-0.64				9.00		
63	4	0.12	9.40					
68	4	0.50				9.60		
69	3	-0.64		9.00				
70	3	0.67				9.69		
78	0	6.77		12.90				
84	0	-2.65		7.94				
85	4	0.01		9.34				
87	4	-0.26			9.20			
89	1	1.83		10.30				
92	3	0.88		9.80				
94	4	0.31				9.50		
97	3	-0.83		8.90				
101	4	0.03		9.35				
107	0	18.36		19.00				
109	4	-0.35		9.15				
113	4	-0.45		9.10				
116	4	-0.33				9.16		
119	4	-0.07				9.30		
120	2	-1.24		8.68				
122	3	-0.58		9.03				
124	3	0.86	9.79					
127	3	-0.69				8.97		

Lab	Rating	Z-value	0	1	2	4	5	7
133	4	0.03				9.35		
134	4	-0.26				9.20		
138	2	1.07				9.90		
139	0	3.16			11.00			
141	3	0.85				9.78		
142	1	1.83				10.30		
145	2	1.04				9.88		
146	1	-1.59				8.50		
153	2	-1.38						8.61
161	4	0.20				9.44		
164	4	-0.34		9.16				
180	3	0.85				9.78		
182	0	5.44		12.20				
184	3	0.81				9.76		
189	3	-0.58				9.03		
190	1	-1.74	8.42					
193	4	-0.12			9.27			
196	0	2.69		10.75				
197	3	-0.88						8.87
207	1	1.83		10.30				

Table 13. Statistical summary of reported data for standard reference water sample T-125 (trace constituent)--Continued
Cd (Cadmium) μ g/L



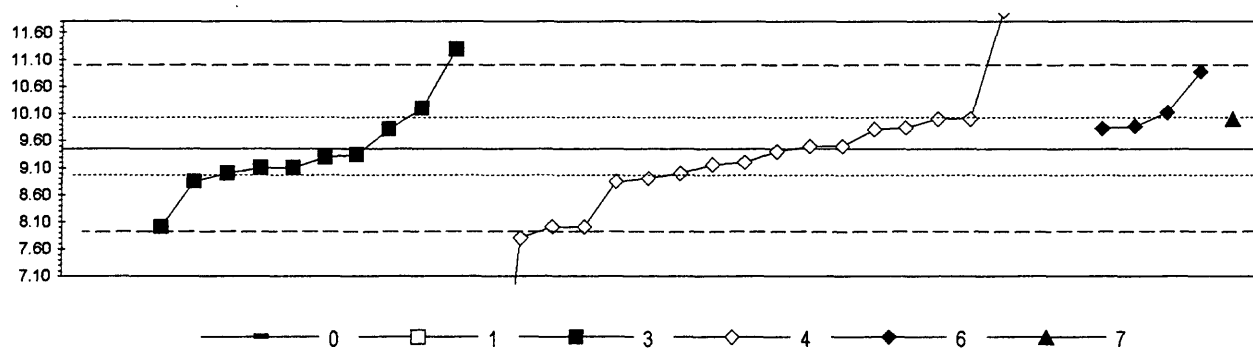
0. Other	3. AA: graphite furnace					
1. AA: direct air	4. ICP					
2. AA: direct nitrous oxide	6. ICP/MS					
N =	1	3	1	42	21	5
Minimum =	0.01	1.00	7.95	5.41	6.00	6.55
Maximum =		8.00		11.60	13.00	9.41
Median =				7.20	7.00	
St Dev =				0.800	0.937	

MPV = 7.20
F-pseudosigma = 0.749
N = 73
Hu = 7.80
HI = 6.79

Lab	Rating	Z-value	0	1	2	3	4	6
1	4	0.00				7.20		
3	2	1.20					8.10	
4	0	7.75					13.00	
5	3	0.54					7.61	
7	4	0.00					7.20	
8	0	3.74					10.00	
9	4	-0.43				6.88		
10	3	-0.53				6.80		
11	3	1.00			7.95			
12	0	5.88				11.60		
13	4	0.47				7.55		
15	3	-0.57				6.77		
16	3	-0.67					6.70	
19	1	-1.60					6.00	
23	3	-0.83				6.58		
25	1	-1.60					6.00	
29	4	0.27				7.40		
30	0	2.96						9.41
32	3	-0.87						6.55
36	0	-9.61	0.01					
37	4	0.00					7.20	
42	4	-0.27					7.00	
45	3	-0.55				6.79		
46	4	-0.09				7.13		
51	1	-1.60				6.00		
52	4	0.24				7.38		
55	1	2.00				8.70		
58	1	2.00				8.70		
59	4	-0.40					6.90	
61	0	3.74					10.00	
63	4	-0.27				7.00		
69	3	0.71				7.73		
70	1	-1.82				5.84		
73	4	-0.27					7.00	
75	1	2.00					8.70	
76	3	0.87				7.85		
78	3	0.80				7.80		
79	0	2.80				9.30		
85	2	1.07		8.00				
87	0			< 2				
89	3	0.59				7.64		
90	4	0.01				7.21		
94	3	-0.53					6.80	
97	0	-2.39				5.41		
101	3	-0.93					6.50	
107	4	0.11				7.28		
109	4	-0.24				7.02		
113	4	0.03				7.22		
118	4	-0.27				7.00		
119	4	-0.27				7.00		

Lab	Rating	Z-value	0	1	2	3	4	6
120	4	0.35				7.46		
122	3	0.80				7.80		
124	NR		< 10					
127	4	-0.49					6.83	
133	0	2.67					9.20	
134	4	0.13				7.30		
138	4	-0.27				7.00		
139	3	0.63				7.67		
141	3	-0.80				6.60		
142	4	-0.49				6.83		
145	1	1.74					8.50	
146	4	-0.40					6.90	
149	3	0.67				7.70		
151	1	1.55				8.36		
153	2	-1.24				6.27		
161	4	-0.27					7.00	
180	3	0.67					7.70	
182	0	-8.28		1.00				
183	2	1.07				8.00		
184	1	1.87					8.60	
189	0	-2.14				5.60		
190	3	-0.93				6.50		
193	1	-1.60		6.00				
196a	4	-0.15						7.09
196b	3	-0.63				6.73		

Table 13. Statistical summary of reported data for standard reference water sample T-125 (trace constituent)—Continued
Co (Cobalt) μ g/L

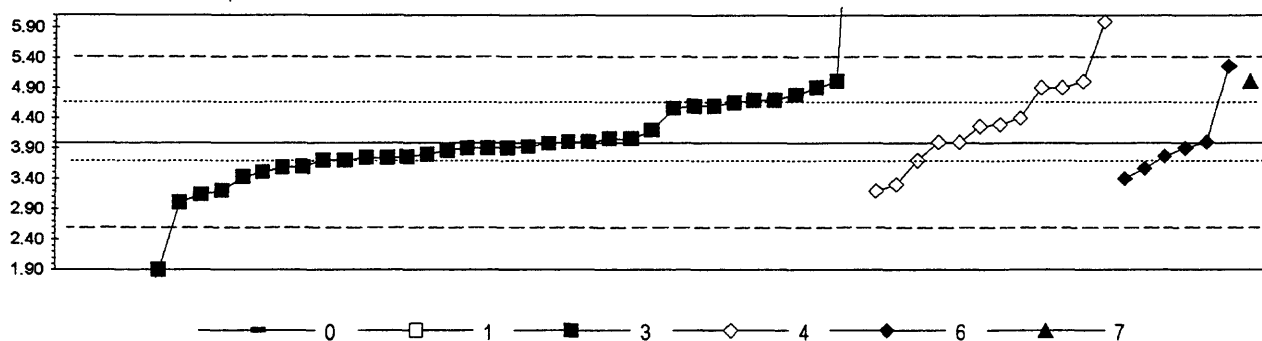


0. Other	4. ICP
1. AA: direct air	6. ICP/MS
3. AA: graphite furnace	7. IC
N = 1	10
Minimum = 0.02	15.00
Maximum = 11.30	16.00
Median = 9.20	9.20
St Dev = 0.885	0.721

MPV = 9.45
F-pseudosigma = 0.778
N = 36
Hu = 10.00
Hi = 8.95

Lab	Rating	Z-value	0	1	3	4	6	7
1	1	1.82					10.87	
3	1	-1.86				8.00		
4	0	-9.57				2.00		
5	4	0.50				9.84		
7	4	-0.32				9.20		
8	1	-1.86				8.00		
11	3	0.71						10.00
15	4	-0.14			9.34			
16	0	-2.12				7.80		
25	NR					< 12		
30	3	0.86					10.12	
32	3	0.53					9.86	
36	0	-12.12	0.02					
39	3	0.71				10.00		
46	3	-0.58				9.00		
51	1	-1.86			8.00			
52	3	-0.78			8.84			
55	4	-0.45			9.10			
58	3	-0.58			9.00			
61	4	0.06				9.50		
63	4	-0.06				9.40		
68	0	3.28				12.00		
70	NR					< 50		
75	4	0.45				9.80		
85	NR					< 20		
89	0	2.38			11.30			
94	4	0.06				9.50		
97	3	0.96			10.20			
124	NR		< 10					
127	4	0.46			9.81			
134	4	-0.19			9.30			
138	4	-0.45			9.10			
141	3	-0.77				8.85		
145	4	-0.39				9.15		
161	3	0.71				10.00		
180	3	-0.71				8.90		
182	0	7.13		15.00				
184	0	3.53				12.20		
189	0	8.42				16.00		
193	NR		< 25					
196	4	0.49					9.83	

Table 13. Statistical summary of reported data for standard reference water sample T-125 (trace constituent)—Continued
Cr (Chromium) $\mu\text{g/L}$



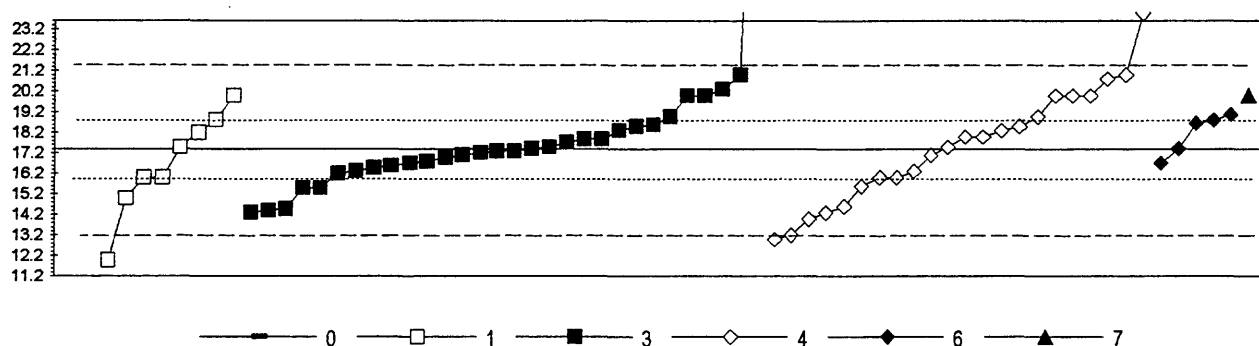
0. Other						4. ICP
1. AA: direct air						6. ICP/MS
3. AA: graphite furnace						7. IC
N = 1	2	36	12	6	1	
Minimum = 0.00	7.00	1.10	3.20	3.40	5.00	
Maximum =	9.00	10.40	6.00	5.26		
Median =		3.90	4.29			
St Dev =		0.628	0.789			

MPV = 3.99
F-pseudosigma = 0.712
N = 58
Hu = 4.66
Hl = 3.70

Lab	Rating	Z-value	0	1	3	4	6	7
1	3	-0.59					3.57	
3	3	0.58				4.40		
4	0	2.82				6.00		
5	NR					< 10		
7	2	1.42				5.00		
8	4	0.01				4.00		
9	3	-0.80			3.42			
10	3	-0.69			3.50			
11	2	1.42						5.00
12	NR					< 20		
13	3	0.86			4.60			
15	2	1.11			4.78			
16	NR					< 10		
19	4	0.01				4.00		
23	3	0.94			4.66			
25	NR					< 8		
29	0	-2.94			1.90			
30	1	1.78					5.26	
32	4	-0.13					3.90	
36	0	-5.60	0.00					
37	4	-0.31					3.77	
42	3	-0.83					3.40	
45	4	0.08			4.05			
46	3	-0.55			3.60			
51	4	0.01			4.00			
52	4	0.08			4.05			
55	3	1.00			4.70			
58	4	0.01			4.00			
59	4	-0.41				3.70		
61	NR					< 5		
63	NR				< 5			
68	2	1.28				4.90		
69	4	-0.41			3.70			
70	4	-0.08			3.93			
75	2	1.28			4.90			
76	4	-0.01			3.98			
78	4	-0.13			3.90			
79	4	-0.27			3.80			
85	NR					< 10		
89	2	1.42			5.00			
90	2	-1.21			3.13			
94	4	0.44				4.30		
97	4	-0.18			3.86			
101	2	-1.11				3.20		
107	3	0.86			4.60			
113	4	-0.37			3.73			
118	2	-1.11			3.20			
119	4	0.30			4.20			
120	4	-0.35			3.74			
122	3	1.00			4.70			

Lab	Rating	Z-value	0	1	3	4	6	7
124	NR		< 50					
127	4	-0.13			3.90			
133	3	-0.97				3.30		
138	3	0.80			4.56			
139	4	-0.13			3.90			
141	4	0.39				4.27		
142	4	-0.34			3.75			
145	2	1.28				4.90		
151	3	-0.58			3.58			
153	0	-4.06			1.10			
161	NR					< 5		
180	NR					< 3.8		
182	0	7.04		9.00				
183	0	4.23		7.00				
184	NR					< 10		
189	0				< 2			
190	4	-0.41			3.70			
193	2	-1.39			3.00			
196	4	0.01					4.00	
207	0	9.01			10.40			

Table 13. Statistical summary of reported data for standard reference water sample T-125 (trace constituent)—Continued
Cu (Copper) μ g/L



0. Other	4. ICP					
1. AA: direct air	6. ICP/MS					
3. AA: graphite furnace	7. IC					
N =	2	8	30	22	5	1
Minimum =	0.0	12.0	14.3	13.0	16.7	20.0
Maximum =	10.0	20.0	42.5	24.0	19.1	
Median =		16.8	17.3	17.5		
St Dev =		2.51	1.70	2.49		

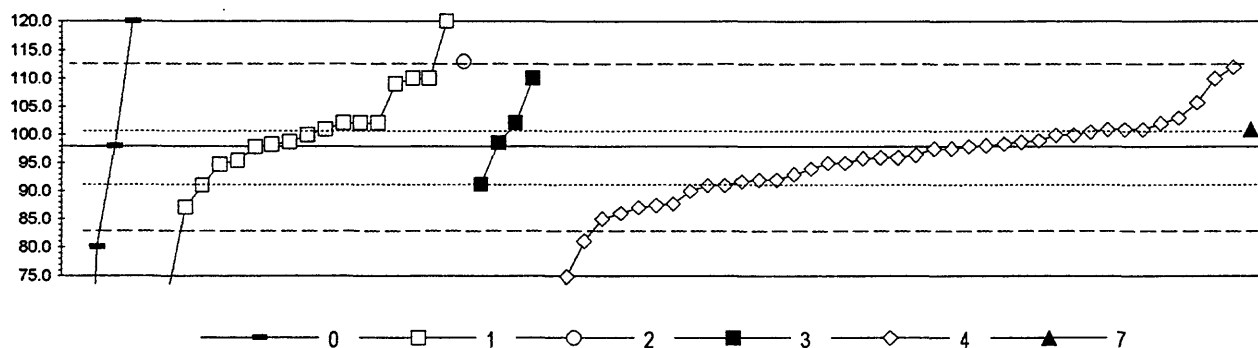
MPV = 17.4
F-pseudosigma = 2.08
N = 68
Hu = 18.8
Hi = 16.0

Lab	Rating	Z-value	0	1	3	4	6	7
1	4	0.05			17.5			
3	1	1.74				21.0		
4	3	-0.67				16.0		
5	4	0.44				18.3		
7	2	-1.49				14.3		
8	0	3.18				24.0		
10	4	-0.43			16.5			
11	2	1.26						20.0
12	2	1.26			20.0			
13	NR				< 50			
15	3	0.77			19.0			
16	2	-1.35				14.6		
23	4	0.15			17.7			
25	4	0.29				18.0		
29	0	-2.60		12.0				
30	3	0.60					18.7	
32	3	0.82					19.1	
36	0	-8.37	0.0					
37	4	0.00					17.4	
39	2	1.26				20.0		
42	4	-0.33					16.7	
45	0	12.10			42.5			
46	4	-0.14			17.1			
51	2	1.26			20.0			
52	3	-0.91			15.5			
55	4	-0.05			17.3			
58	1	1.74			21.0			
59	2	1.26				20.0		
61	1	-1.64				14.0		
63	3	0.53			18.5			
68	2	1.26				20.0		
69	4	-0.19			17.0			
70	4	0.05				17.5		
73	3	-0.67				16.0		
75	3	0.53				18.5		
78	4	-0.05			17.3			
79	3	-0.91			15.5			
85	3	0.68		18.8				
87	3	-0.67		16.0				
89	NR				< 10			
90	4	0.05		17.5				
94	0	-2.12				13.0		
97	3	-0.58			16.2			
101	4	-0.14				17.1		
107	2	1.40			20.3			
113	4	0.44			18.3			
118	2	-1.44			14.4			
119	4	0.29				18.0		
120	4	0.00			17.4			
122	4	-0.33			16.7			

Lab	Rating	Z-value	0	1	3	4	6	7
124	0	-3.56	10.0					
127	4	-0.38			16.6			
133	1	-2.02				13.2		
134	3	0.58			18.6			
138	3	-0.53			16.3			
139	4	0.24			17.9			
141	4	0.24			17.9			
142	4	-0.09			17.2			
145	3	-0.53				16.3		
149	3	-0.67		16.0				
151	4	0.39		18.2				
153	4	-0.29			16.8			
161	3	0.77				19.0		
180	3	-0.86				15.6		
182	2	1.26		20.0				
183	2	-1.15		15.0				
184	1	1.64				20.8		
189	2	-1.39			14.5			
190	2	-1.49			14.3			
193	NR			< 25				
196	3	0.68					18.8	

Table 13. Statistical summary of reported data for standard reference water sample T-125 (trace constituent)--Continued

Fe (Iron)

 μ g/L

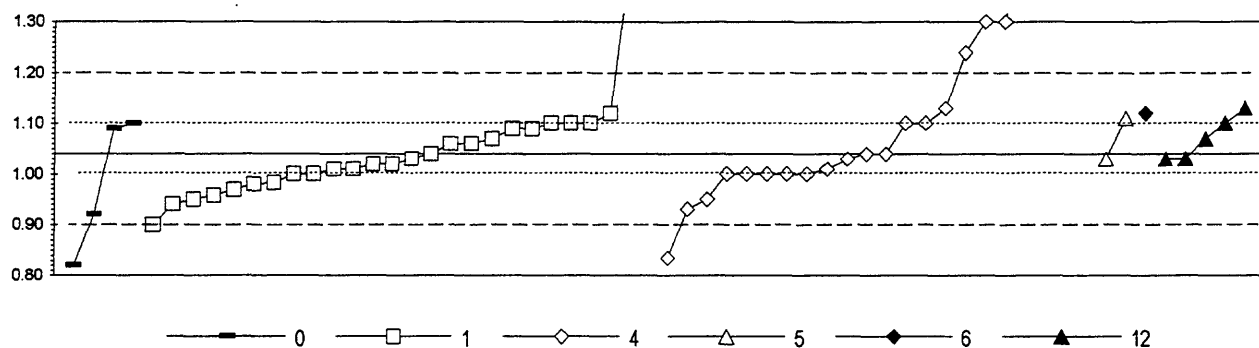
0. Other						
1. AA: direct air						
2. AA: direct nitrous oxide						
N =	4	18	1	4	40	1
Minimum =	0.1	9.3	113.0	91.2	54.0	101.0
Maximum =	120.0	120.0		110.0	112.0	
Median =		100.5			96.3	
St Dev =		8.08			6.60	

MPV = 97.9
 F-pseudosigma = 7.34
 N = 68
 Hu = 101.0
 Hl = 91.1

Lab	Rating	Z-value	0	1	2	3	4	7
1	4	0.07					98.4	
3	3	-0.94					91.0	
4	1	1.92					112.0	
5	4	-0.05					97.5	
7	4	-0.19					96.5	
8	1	-1.62					86.0	
9	2	-1.49		87.0				
10	3	0.56		102.0				
11	4	0.42						101.0
12	2	-1.08					90.0	
13	3	0.56		102.0				
15	3	0.56					102.0	
16	4	-0.26					96.0	
19	3	-0.80					92.0	
21	4	0.01	98.0					
23	4	-0.42		94.8				
25	4	0.11					98.7	
33	0	-2.44	80.0					
36	0	-13.33	0.1					
39	1	1.65					110.0	
42	3	-0.80					92.0	
43	4	0.01					98.0	
45	4	0.10		98.6				
46	4	-0.26					96.0	
51	1	1.51		109.0				
52	2	-1.47					87.1	
55	0	-2.30					81.0	
58	4	0.29		100.0				
59	4	0.42					101.0	
61	4	0.29					100.0	
63	0	-3.53		72.0				
68	4	0.15					99.0	
70	2	-1.38					87.8	
73	4	-0.40					95.0	
75	4	0.29					100.0	
78	4	0.08				98.5		
79	0	-5.98					54.0	
84	1	1.65		110.0				
85	4	0.42					101.0	
87	0	2.06			113.0			
89	3	-0.91				91.2		
90	4	-0.33		95.5				
94	3	-0.67					93.0	
97	3	0.56				102.0		
101	3	0.69					103.0	
107	4	0.05		98.3				
109	4	-0.01		97.8				
113	4	0.42		101.0				
116	3	-0.94					91.0	
119	4	-0.40					95.0	

Lab	Rating	Z-value	0	1	2	3	4	7
122	1	1.65				110.0		
124	0	3.01	120.0					
127	4	0.03					98.1	
133	4	-0.05					97.5	
134	1	-1.76					85.0	
138	2	1.08					105.8	
139	3	-0.94		91.0				
141	4	-0.29					95.8	
142	0	-3.13					74.9	
145	4	0.35					100.5	
146	3	-0.53					94.0	
149	1	1.65		110.0				
161	4	0.42					101.0	
180	3	-0.84					91.7	
182	0	3.01		120.0				
184	2	-1.42					87.5	
189	0						< 50	
190	0	-12.07		9.3				
193	3	0.56		102.0				

Table 13. Statistical summary of reported data for standard reference water sample T-125 (trace constituent)—Continued
K (Potassium) **m g/L**



0. Other						
1. AA: direct air						
4. ICP						
	N =	4	26	22	2	1
	Minimum =	0.82	0.90	0.84	1.03	1.03
	Maximum =	1.10	1.70	3.20	1.11	1.13
	Median =		1.02	1.01		
	St Dev =		0.059	0.091		

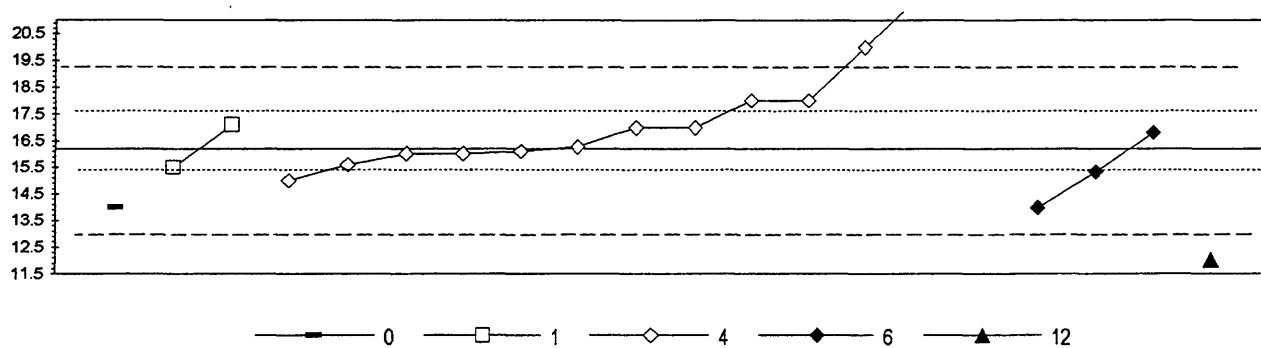
MPV = 1.04
 F-pseudosigma = 0.074
 N = 60
 Hu = 1.10
 HI = 1.00

Lab	Rating	Z-value	0	1	4	5	6	12
1	3	-0.77		0.98				
3	0	29.14			3.20			
7	2	-1.48			0.93			
8	0	6.21			1.50			
9	4	-0.27		1.02				
11	3	0.81		1.10				
12	3	-0.54			1.00			
13	4	0.00		1.04				
15	4	0.00			1.04			
16	3	0.81		1.10				
19	4	-0.13			1.03			
25	NR			< 1.21				
32	2	1.08				1.12		
33	3	0.94				1.11		
36	0	-2.97	0.82					
37	2	-1.11		0.96				
42	3	-0.54			1.00			
43	3	-0.54			1.00			
45	4	0.40		1.07				
46	3	-0.54			1.00			
51	2	1.21						1.13
52	3	-0.54			1.00			
55	4	-0.13						1.03
58	3	0.67		1.09				
59	3	0.81			1.10			
61	NR			< 1				
63	2	-1.21		0.95				
68	0	3.51			1.30			
69	3	0.81						1.10
70	NR			< 1				
78	3	0.81		1.10				
85	2	1.08			1.12			
87	4	-0.40		1.01				
89	4	-0.13		1.03				
92	0	8.90		1.70				
94	4	-0.40			1.01			
97	3	-0.81		0.98				
101	3	0.81	1.10					
107	4	0.40						1.07
109	4	-0.27		1.02				
113	4	-0.40		1.01				
116	0	7.55			1.60			
119	0	3.51			1.30			
120	2	-1.35		0.94				
122	3	-0.54		1.00				
127	4	0.27		1.06				
134	3	-0.54		1.00				
138	4	0.00			1.04			
139	4	-0.13						1.03
141	2	1.21			1.13			

Lab	Rating	Z-value	0	1	4	5	6	12
142	3	0.81			1.10			
145	2	-1.21			0.95			
153	1	-1.62	0.92					
161	NR				< 2			
164	3	-0.95		0.97				
180	0	21.85			2.66			
182	1	-1.89		0.90				
184	0	2.70			1.24			
189	0	-2.77			0.84			
190	3	0.67	1.09					
193	4	0.27		1.06				
196	3	0.67		1.09				
197	4	-0.13				1.03		
207	0	5.26		1.43				

Table 13. Statistical summary of reported data for standard reference water sample T-125 (trace constituent)—Continued

Li (Lithium)

 μ g/L

0. Other					
1. AA: direct air					
4. ICP					
N =	1	2	13	3	1
Minimum =	14.0	15.5	15.0	14.0	12.0
Maximum =		17.1	54.0	16.8	
Median =			16.3		
St Dev =			1.41		

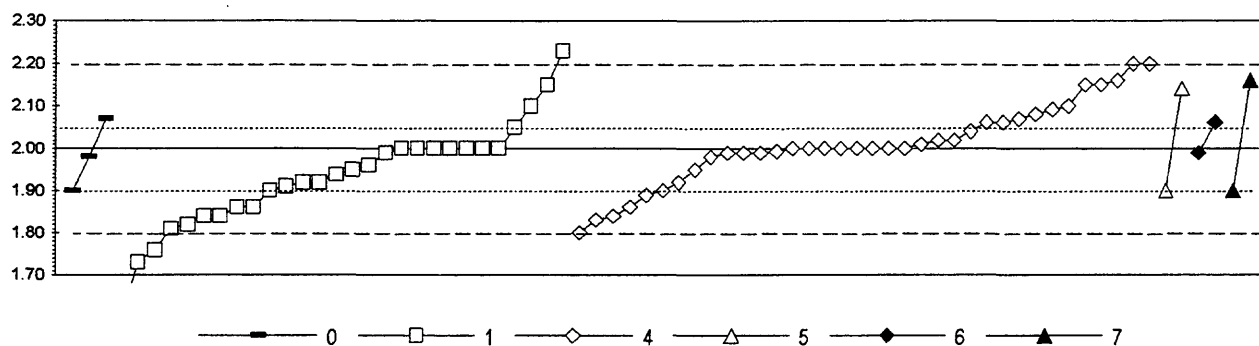
MPV = 16.2
 F-pseudosigma = 1.58
 N = 20
 Hu = 17.6
 Hl = 15.4

Lab	Rating	Z-value	0	1	4	6	12
1	4	0.06			16.3		
3	0	2.41			20.0		
4	4	-0.12			16.0		
15	3	0.51			17.0		
16	NR				< 500		
25	4	-0.12			16.0		
30	3	-0.54				15.3	
32	4	0.39				16.8	
39	3	0.51			17.0		
42	2	1.15			18.0		
55	0	-2.65					12.0
63	NR			< 100			
68	2	1.15			18.0		
75	4	-0.37			15.6		
85	3	0.58			17.1		
109	4	-0.44			15.5		
116	0	23.95			54.0		
127	4	-0.06			16.1		
134	0	3.68			22.0		
145	3	-0.75			15.0		
182	2	-1.39	14.0				
189	NR				< 500		
196	2	-1.41				14.0	

Table 13. Statistical summary of reported data for standard reference water sample T-125 (trace constituent)—Continued

Mg (Magnesium)

m g/L



0. Other							
1. AA: direct air							
4. ICP							
	N =	3	28	36	2	2	2
	Minimum =	1.90	1.60	1.80	1.90	1.99	1.90
	Maximum =	2.07	2.23	2.20	2.14	2.06	2.16
	Median =		1.95	2.00			
	St Dev =		0.114	0.097			

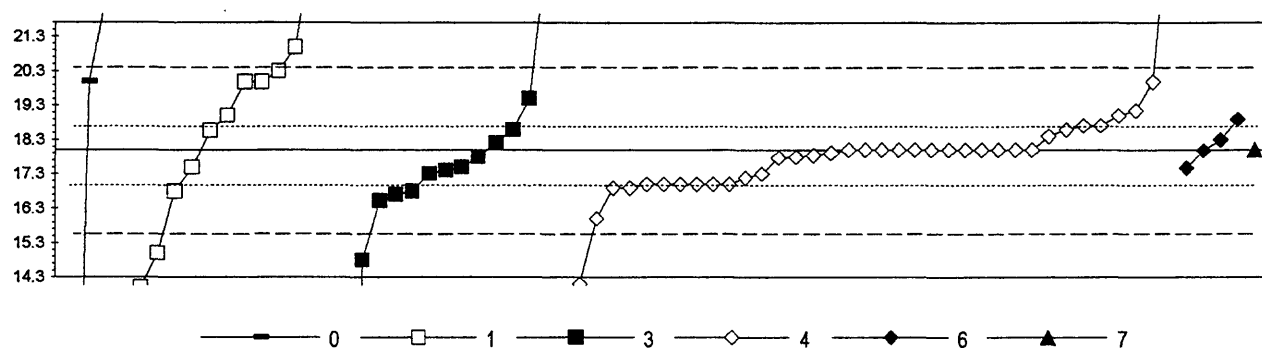
MPV = 2.00
 F-pseudosigma = 0.111
 N = 73
 Hu = 2.05
 Hl = 1.90

Lab	Rating	Z-value	0	1	4	5	6	7
1	4	0.00		2.00				
3	3	0.72			2.08			
4	4	-0.18			1.98			
5	4	-0.06			1.99			
7	4	-0.09			1.99			
8	1	-1.53			1.83			
9	0	-2.16		1.76				
11	2	1.44						2.16
12	4	0.00			2.00			
13	3	-0.72		1.92				
15	2	1.35			2.15			
16	4	0.00			2.00			
19	2	-1.26			1.86			
23	4	-0.09		1.99				
25	2	1.35			2.15			
30	4	-0.10				1.99		
32	3	0.54				2.06		
33	2	1.26				2.14		
36	3	-0.90	1.90					
39	3	0.63			2.07			
42	4	0.00			2.00			
43	4	0.00			2.00			
45	0	-2.43		1.73				
46	4	-0.09			1.99			
51	4	0.00		2.00				
52	3	-0.72			1.92			
55	2	-1.44			1.84			
58	1	-1.71		1.81				
59	4	0.00			2.00			
61	4	0.00			2.00			
63	1	-1.62		1.82				
68	1	1.80			2.20			
69	4	0.00		2.00				
70	4	0.18			2.02			
75	3	0.90			2.10			
78	4	0.00		2.00				
84	3	-0.90		1.90				
85	4	-0.45		1.95				
87	2	-1.44		1.84				
89	3	0.90		2.10				
92	4	0.00		2.00				
94	3	-0.99			1.89			
97	2	-1.26		1.86				
101	4	0.00		2.00				
107	0	2.07		2.23				
109	4	0.00		2.00				
113	2	1.35		2.15				
116	4	0.00			2.00			
119	4	0.00			2.00			
120	3	-0.72		1.92				

Lab	Rating	Z-value	0	1	4	5	6	7
122	4	-0.36		1.96				
124	4	-0.18	1.98					
127	4	-0.09			1.99			
133	4	-0.45			1.95			
134	3	-0.90			1.90			
138	3	0.81			2.09			
139	3	-0.81		1.91				
141	3	0.54			2.06			
142	1	1.80			2.20			
145	4	0.36			2.04			
146	1	-1.80			1.80			
153	3	-0.90						1.90
161	4	0.18			2.02			
164	3	-0.56		1.94				
180	2	1.44			2.16			
182	0	-3.60		1.60				
184	3	0.54			2.06			
189	4	0.09			2.01			
190	3	0.63	2.07					
193	2	-1.44		1.84				
196	4	0.45		2.05				
197	3	-0.90				1.90		
207	2	-1.26		1.86				

Table 13. Statistical summary of reported data for standard reference water sample T-125 (trace constituent)--Continued

Mn (Manganese)

 μ g/L

0. Other	4. ICP					
1. AA: direct air	6. ICP/MS					
3. AA: graphite furnace	7. IC					
N =	3	13	13	37	4	1
Minimum =	0.1	9.0	1.7	2.4	17.5	18.0
Maximum =	22.5	30.4	24.0	25.0	18.9	
Median =		19.0	17.4	18.0		
St Dev =		1.94	1.23	0.79		

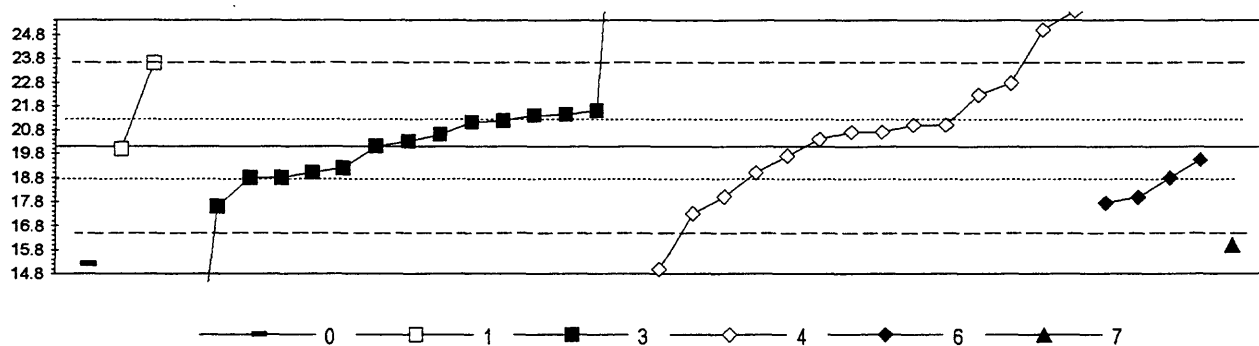
MPV = 18.0
 F-pseudosigma = 1.22
 N = 71
 Hu = 18.7
 HI = 17.0

Lab	Rating	Z-value	0	1	3	4	6	7
1	4	-0.13				17.8		
3	4	0.00				18.0		
4	4	0.00				18.0		
5	4	-0.18				17.8		
7	4	-0.16				17.8		
8	0	-12.75				2.4		
9	0	-2.62			14.8			
10	0	2.45	21.0					
11	4	0.00						18.0
12	NR					< 20		
13	1	1.88	20.3					
15	1	1.64				20.0		
16	3	-0.82				17.0		
19	3	-0.82				17.0		
23	3	-0.57			17.3			
25	3	-0.82				17.0		
29	0	-3.27	14.0					
30	4	-0.02					18.0	
32	3	0.74					18.9	
33	0	3.68	22.5					
36	0	-14.67	0.1					
37	4	0.25					18.3	
39	3	0.82				19.0		
42	3	-0.57				17.3		
43	4	0.00				18.0		
46	4	0.00				18.0		
51	0	4.91			24.0			
52	3	-0.90				16.9		
55	0	-3.19				14.1		
58	0	4.91	24.0					
59	4	0.00				18.0		
61	4	0.00				18.0		
63	3	-0.82				17.0		
70	4	0.00				18.0		
75	4	0.33				18.4		
76	3	-0.98	16.8					
78	3	-0.98			16.8			
79	0	5.72				25.0		
84	1	1.64	20.0					
85	3	0.82	19.0					
89	4	0.49				18.6		
90	4	-0.41	17.5					
94	3	-0.82				17.0		
97	4	-0.16				17.8		
101	3	-0.90				16.9		
107	4	-0.49				17.4		
109	4	0.47	18.6					
113	4	0.16			18.2			
116	4	0.00				18.0		
119	4	0.00				18.0		

120	0	-13.33				1.7		
122	2	-1.06				16.7		
124	1	1.64	20.0					
127	3	-0.65					17.2	
134	4	0.00					18.0	
138	3	0.57					18.7	
139	0		< 10					
141	3	0.57					18.7	
142	4	-0.08					17.9	
145	3	0.94					19.2	
146	1	-1.64					16.0	
149	0	-7.36		9.0				
151	0	10.14		30.4				
153	2	1.23			19.5			
161	4	0.00					18.0	
180	4	0.49					18.6	
182	0	-2.45		15.0				
183	1	1.64		20.0				
184	4	0.00					18.0	
189	3	-0.82					17.0	
190	2	-1.23				16.5		
196a	4	-0.43					17.5	
196b	4	-0.42				17.5		

Table 13. Statistical summary of reported data for standard reference water sample T-125 (trace constituent)--Continued

Mo (Molybdenum)

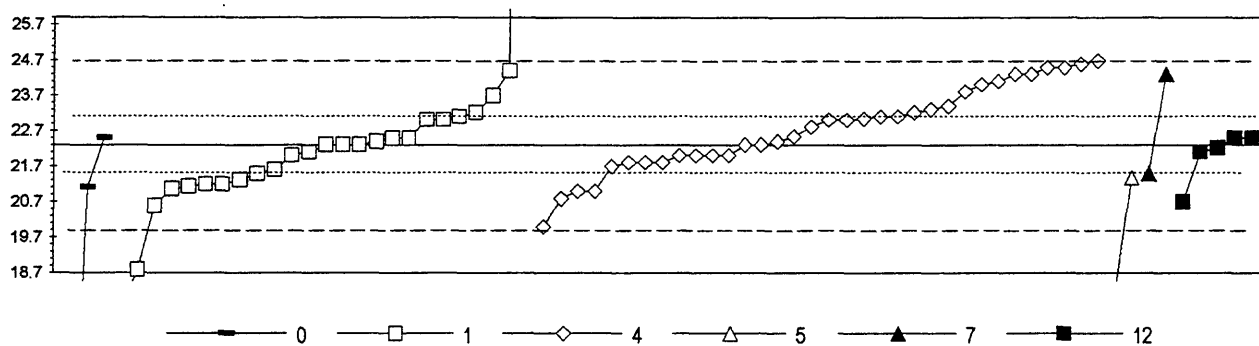
 μ g/L

0. Other	4. ICP					
1. AA: direct air	6. ICP/MS					
3. AA: graphite furnace	7. IC					
N = 1	2	15	14	4	1	
Minimum = 15.2	20.0	6.0	15.0	17.7	16.0	
Maximum =	23.6	41.0	25.8	19.5		
Median =		20.3	20.7			
St Dev =		1.29	2.55			

MPV = 20.1
 F-pseudosigma = 1.78
 N = 37
 Hu = 21.2
 Hl = 18.8

Lab	Rating	Z-value	0	1	3	4	6	7
1	4	0.00			20.1			
3	3	0.51				21.0		
4	NR					< 20		
5	4	0.17				20.4		
7	1	-1.57				17.3		
8	4	0.34				20.7		
11	0	-2.30						16.0
12	NR					< 30		
15	4	0.28			20.6			
16	0	3.20				25.8		
23	NR		< 100					
29	0	-2.75	15.2					
30	4	-0.32					19.5	
32	2	-1.19					18.0	
39	2	-1.18				18.0		
42	3	-0.73					18.8	
45	3	0.73			21.4			
52	3	0.62			21.2			
58	0	11.75			41.0			
61	NR					< 50		
63	3	-0.51			19.2			
68	0	2.75				25.0		
70	NR					< 50		
75	4	0.34				20.7		
85	NR					< 20		
94	2	-1.41			17.6			
97	4	0.11			20.3			
109	3	0.85			21.6			
119	2	1.24				22.3		
120	3	0.56			21.1			
124	NR		< 20					
127	3	-0.73			18.8			
134	0	-2.87				15.0		
138	3	-0.62			19.0			
141	1	1.52				22.8		
142	3	0.75			21.4			
145	3	0.51				21.0		
146	3	-0.62				19.0		
151	3	-0.73			18.8			
161	NR					< 50		
180	4	-0.22				19.7		
182	4	-0.06		20.0				
189	0					< 10		
196a	2	-1.33					17.7	
196b	1	1.98		23.6				
207	0	-7.94			6.0			

Table 13. Statistical summary of reported data for standard reference water sample T-125 (trace constituent)—Continued
Na (Sodium) m g/L



0. Other						
1. AA: direct air						
4. ICP						
	N =	3	25	34	2	2
	Minimum =	10.7	17.6	20.0	18.0	21.5
	Maximum =	22.5	122.0	24.7	21.4	24.3
	Median =		22.3	22.9		
	St Dev =		1.17	1.21		

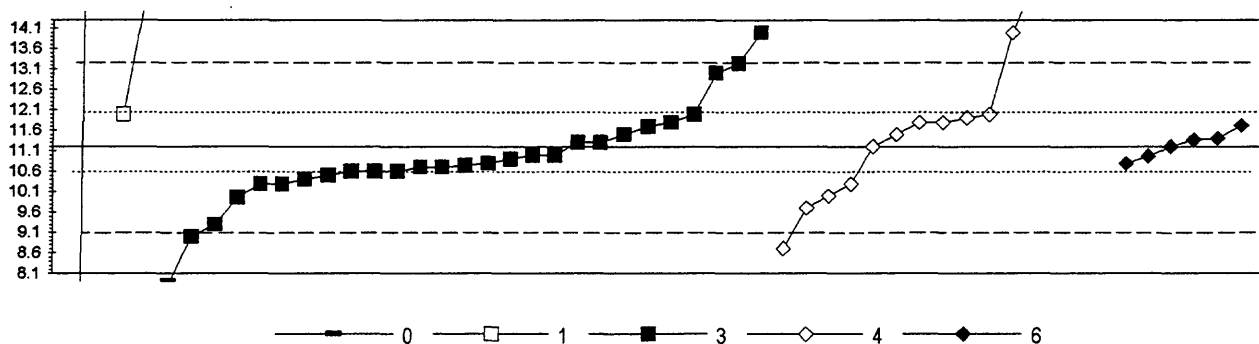
MPV = 22.3
F-pseudosigma = 1.19
N = 71
Hu = 23.1
Hi = 21.5

Lab	Rating	Z-value	0	1	4	5	7	12
1	4	0.19			22.5			
3	2	1.26			23.8			
4	4	-0.42			21.8			
5	3	0.62			23.0			
7	4	0.00			22.3			
8	2	1.43			24.0			
9	3	0.76		23.2				
11	1	1.69				24.3		
12	2	-1.10			21.0			
13	4	0.00		22.3				
15	1	1.94			24.6			
16	1	1.69			24.3			
19	4	-0.25			22.0			
23	3	-0.67		21.5				
25	1	1.52			24.1			
33	0	-3.63				18.0		
36	2	-1.01	21.1					
39	3	0.76			23.2			
42	4	-0.42			21.8			
43	3	0.67			23.1			
45	4	0.00		22.3				
46	4	-0.25			22.0			
51	4	0.17					22.5	
52	4	0.08			22.4			
55	4	-0.17						22.1
58	0	84.06		122.0				
59	4	-0.25			22.0			
61	3	0.59			23.0			
63	1	-1.94			20.0			
68	3	0.59			23.0			
69	2	-1.35						20.7
70	4	0.42			22.8			
75	3	-0.51			21.7			
76	4	0.17		22.5				
78	3	0.59		23.0				
84	4	-0.08						22.2
85	4	-0.17		22.1				
87	2	-1.43		20.6				
89	3	0.59		23.0				
90	4	0.08		22.4				
92	2	1.18		23.7				
94	4	-0.41			21.8			
97	3	-0.93		21.2				
101	4	0.17		22.5				
107	3	-0.84		21.3				
109	3	-0.99		21.1				
113	3	0.67		23.1				
116	2	-1.26			20.8			
119	0	-9.78	10.7					
120	4	0.00		22.3				

Lab	Rating	Z-value	0	1	4	5	7	12
122	1	1.77		24.4				
127	4	-0.25			22.0			
134	4	-0.25		22.0				
138	3	0.93			23.4			
139	4	0.17						22.5
141	1	1.69			24.3			
142	1	1.85			24.5			
145	3	0.86			23.3			
146	2	-1.10			21.0			
153	3	-0.67					21.5	
161	4	0.00			22.3			
164	2	-1.04		21.1				
180	3	0.67			23.1			
182	0	-3.93		17.6				
183	3	-0.59		21.6				
184	1	1.85			24.5			
189	1	2.02			24.7			
190	4	0.17	22.5					
193	3	-0.93		21.2				
197	3	-0.78					21.4	
207	0	-2.95		18.8				

Table 13. Statistical summary of reported data for standard reference water sample T-125 (trace constituent)—Continued

Ni (Nickel)

 μ g/L

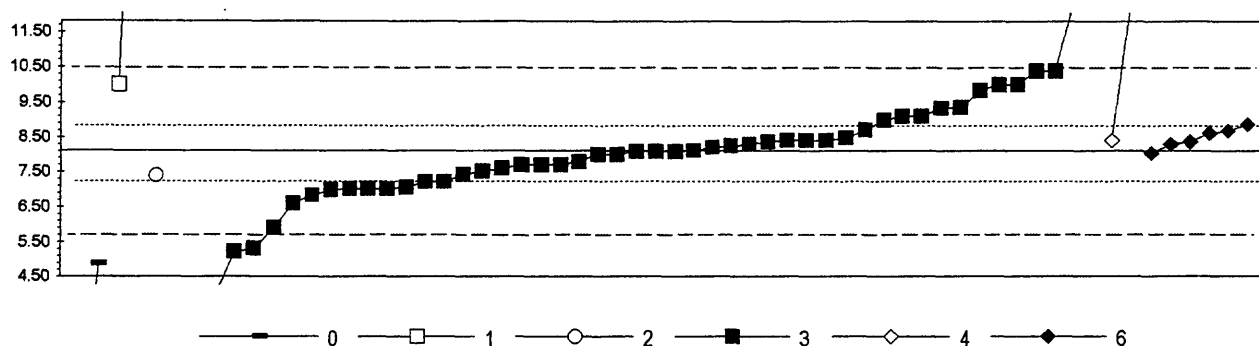
0. Other	4. ICP				
1. AA: direct air	6. ICP/MS				
3. AA: graphite furnace					
N =	2	2	27	15	6
Minimum =	0.0	12.0	7.8	8.7	10.8
Maximum =	50.0	15.0	14.0	23.0	11.7
Median =			10.8	11.5	
St Dev =			1.11	1.43	

MPV = 11.2
 F-pseudosigma = 1.04
 N = 52
 Hu = 12.0
 HI = 10.6

Lab	Rating	Z-value	0	1	3	4	6
1	4	-0.22					11.0
3	0	8.48				20.0	
4	NR					< 20	
7	0	3.95				15.3	
8	0	11.37				23.0	
9	3	-0.87			10.3		
12	NR				< 20		
13	NR			< 50			
15	4	0.10			11.3		
16	NR				< 25		
23	NR				< 20		
25	NR				< 49		
30	4	0.49					11.7
32	4	-0.39					10.8
36	0	-10.78	0.0				
37	4	0.00					11.2
42	4	0.19					11.4
45	3	-0.67			10.5		
46	3	-0.87				10.3	
51	3	0.77			12.0		
52	4	-0.29			10.9		
55	4	-0.48			10.7		
58	4	-0.48			10.7		
59	3	0.67				11.9	
61	NR				< 25		
63	3	0.58			11.8		
68	0	2.70				14.0	
69	4	-0.19			11.0		
70	NR				< 50		
73	2	-1.16			10.0		
78	3	-0.58			10.6		
79	0	2.70			14.0		
85	NR				< 20		
87	3	0.77		12.0			
89	0	-3.28			7.8		
90	4	0.29			11.5		
94	3	0.77				12.0	
97	1	1.73			13.0		
101	3	0.58				11.8	
107	3	-0.58			10.6		
113	3	-0.58			10.6		
118	3	-0.87			10.3		
119	2	-1.45				9.7	
120	1	-1.83			9.3		
124	0	37.39	50.0				
127	4	-0.39			10.8		
133	3	0.58				11.8	
134	3	-0.77			10.4		
138	4	0.48			11.7		
139	NR			< 40			

Lab	Rating	Z-value	0	1	3	4	6
141	4	0.00					11.2
142	4	0.10			11.3		
145	0	-2.41				8.7	
151	2	-1.19			10.0		
161	0	4.63				16.0	
180	4	0.29				11.5	
182	0	3.66		15.0			
183	0	-2.12			9.0		
184	NR					< 10	
189	NR					< 20	
190	4	-0.43			10.8		
193	4	-0.19			11.0		
196a	4	0.16					11.4
196b	1	1.98			13.3		

Table 13. Statistical summary of reported data for standard reference water sample T-125 (trace constituent)—Continued
Pb (Lead) $\mu\text{g/L}$



0. Other	3. AA: graphite furnace
1. AA: direct air	4. ICP
2. AA: direct nitrous oxide	6. ICP/MS
N =	2 2 1 49 2 6
Minimum =	0.01 10.00 7.40 1.30 8.40 8.03
Maximum =	4.88 24.00 22.80 12.60 8.86
Median =	8.10
St Dev =	1.196

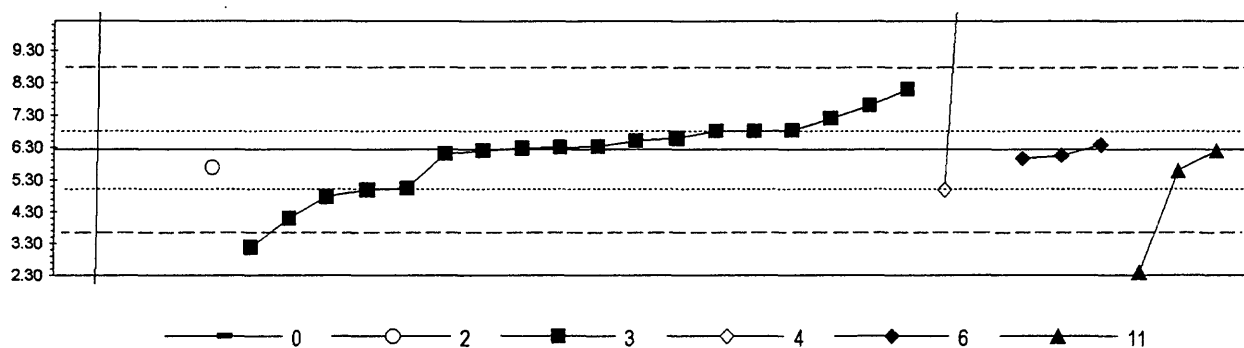
MPV = 8.11
F-pseudostigma = 1.216
N = 62
Hu = 8.86
HI = 7.22

Lab	Rating	Z-value	0	1	2	3	4	6
1	4	0.22						8.37
3	1	1.56			10.00			
4	NR						< 20	
9	4	0.30				8.47		
10	4	-0.25				7.80		
11	3	-0.58		7.40				
12	NR					< 10		
13	0	-2.39				5.20		
15	4	0.00				8.11		
16	4	-0.33				7.70		
23	2	-1.23				6.61		
25	NR							< 71
29	0	12.09				22.80		
30	4	0.41						8.61
32	4	0.47						8.68
33	0	-2.65	4.88					
36	0	-6.66	0.01					
37	3	0.62						8.86
42	4	0.16						8.30
45	3	-0.73				7.22		
46	0	-5.60				1.30		
51	3	-0.91				7.00		
52	1	1.89				10.40		
55	4	0.24				8.40		
58	1	1.56				10.00		
59	4	0.24						8.40
61	3	0.74				9.00		
63	4	0.00				8.10		
68	3	0.82				9.10		
69	4	-0.09				8.00		
70	2	1.01				9.33		
76	4	-0.32				7.71		
78	4	0.24				8.40		
79	3	-0.91				7.00		
85	NR			< 50				
87	0	13.07		24.00				
89	4	-0.47				7.53		
90	4	0.16				8.30		
94	4	-0.42				7.60		
97	2	1.03				9.36		
101	0	3.70						12.60
107	4	-0.01				8.09		
109	4	0.00				8.10		
113	4	0.12				8.25		
118	4	0.24				8.40		
120	2	-1.06				6.82		
122	1	1.89				10.40		
124	NR			< 50				
127	3	-0.56				7.42		
133	1	-1.81				5.90		

Lab	Rating	Z-value	0	1	2	3	4	6
134	4	-0.33					7.70	
138	2	1.43					9.84	
139	0	3.62					12.50	
141	3	-0.85					7.07	
142	4	-0.09					8.00	
145	NR							< 14.8
146	4	0.49					8.70	
149	0	-2.31					5.30	
151	4	0.22					8.37	
153	3	0.82					9.10	
161	NR							< 20
180	NR							< 27.8
182	1	1.56		10.00				
183	4	0.08					8.20	
184	NR							< 50
189	0	-3.46					3.90	
190	3	-0.93					6.98	
193	3	-0.91					7.00	
196a	4	-0.06						8.03
196b	3	-0.73					7.22	
207	0	-3.80					3.48	

Table 13. Statistical summary of reported data for standard reference water sample T-125 (trace constituent)--Continued

Sb (Antimony)

 μ g/L

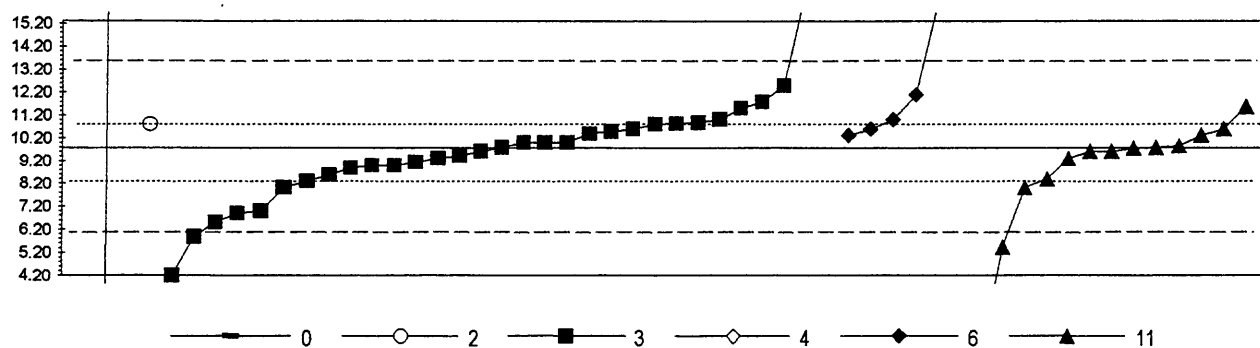
0. Other	4. ICP
2. AA: direct nitrous oxide	6. ICP/MS
3. AA: graphite furnace	11. AA: hydride
N = 3	1 18 2 3 3
Minimum = 0.01	5.70 3.17 5.00 5.97 2.40
Maximum = 150.00	8.10 24.00 6.39 6.20
Median =	6.31
St Dev =	1.241

MPV = 6.24
 F-pseudosigma = 1.305
 N = 30
 Hu = 6.80
 Hl = 5.04

Lab	Rating	Z-value	0	2	3	4	6	11
1	4	-0.15					6.05	
3	4	-0.03			6.20			
7	0	13.61				24.00		
11	4	-0.41		5.70				
12	NR					< 100		
15	2	-1.13			4.77			
16	4	0.20			6.50			
25	NR					< 51		
32	4	0.11					6.39	
36	0	-4.78	0.01					
45	0	-2.35			3.17			
46	4	0.05			6.30			
52	NR				< 6			
55	4	0.43			6.80			
58	0	-2.94						2.40
59	3	-0.95				5.00		
61	NR					< 50		
63	2	1.04			7.60			
68	NR				< 5			
78	4	0.43			6.80			
85	NR					< 100		
94	3	0.74			7.20			
97	4	-0.10			6.11			
113	2	1.43			8.10			
119	4	-0.49						5.60
120	4	0.03			6.28			
124	0	71.86	100.00					
127	3	-0.92			5.04			
134	4	-0.03						6.20
141	4	0.45			6.83			
142	4	0.27			6.59			
149	1	-1.64			4.10			
151	4	0.06			6.32			
161	NR					< 50		
180	NR					< 18.9		
182	0	110.19	150.00					
184	NR					< 50		
189	3	-0.95			5.00			
196	4	-0.21					5.97	

Table 13. Statistical summary of reported data for standard reference water sample T-125 (trace constituent)--Continued

Se (Selenium)

 μ g/L

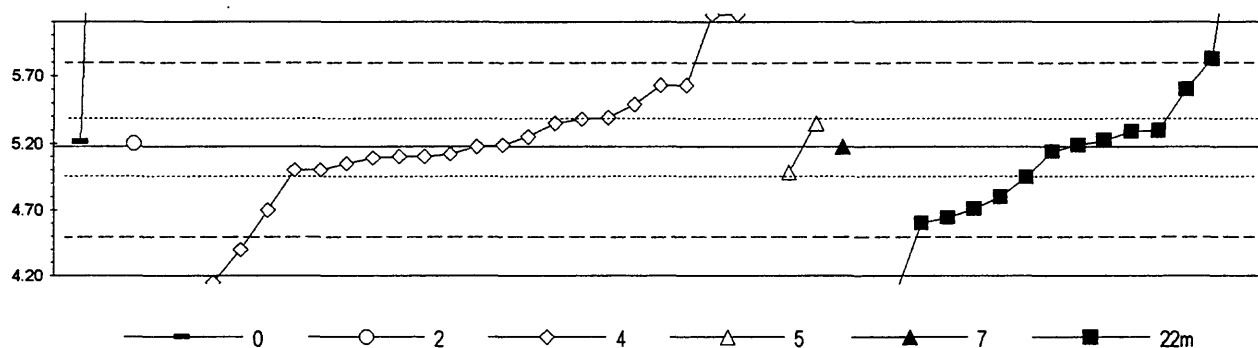
0. Other	4. ICP
2. AA: direct nitrous oxide	6. ICP/MS
3. AA: graphite furnace	11. AA: hydride
N = 3	1 30 1 5 14
Minimum = 0.02	10.80 4.20 0.01 10.30 0.67
Maximum = 260.00	16.60 16.09 11.60
Median = 9.60	9.68
St Dev = 1.868	1.5434

MPV = 9.78
 F-pseudosigma = 1.853
 N = 54
 Hu = 10.80
 HI = 8.30

Lab	Rating	Z-value	0	2	3	4	6	11
1	4	0.01			9.80			
3	3	-0.66			8.56			
8	3	-0.96					8.00	
10	4	0.39			10.50			
11	3	0.55		10.80				
12	3	-0.96			8.00			
13	4	0.45			10.60			
15	4	-0.09					9.60	
16	1	-1.77			6.50			
23	0	-2.33						5.45
25	NR				< 129			
29	0	3.68			16.60			
30	0	3.41				16.09		
32	3	0.66				11.00		
36	0	-5.27	0.02					
37	2	1.25				12.10		
42	4	0.28				10.30		
45	4	-0.48			8.88			
46	1	-1.55			6.90			
52	0							< 5
55	4	0.12			10.00			
58	0	-4.91						0.67
61	4	0.34			10.40			
63	4	0.12			10.00			
68	4	-0.42			9.00			
69	4	-0.26			9.30			
70	3	0.66			11.00			
75	4	-0.01						9.75
76	2	1.47			12.50			
78	4	0.12			10.00			
79	4	-0.20			9.40			
85	4	-0.26						9.30
89	0							< 2
94	2	-1.50			7.00			
97	0	-4.85						0.78
107	3	0.55			10.80			
109	4	-0.35			9.13			
113	4	-0.09			9.60			
118	0	-2.09			5.90			
119	3	-0.74						8.40
120	4	0.28						10.30
122	0							< 1
124	0	135.02 260.00						
127	2	1.09			11.80			
133	3	-0.80			8.30			
134	4	-0.09						9.60
138	4	0.45						10.60
139	3	0.61			10.90			
141	3	0.98						11.60
142	3	0.93			11.50			

Lab	Rating	Z-value	0	2	3	4	6	11
151	4	0.04						9.85
161	NR					< 100		
180	NR					< 29.6		
182	4	0.01						9.80
183	0	-3.66	3.00					
184	0	-5.27				0.01		
189	0	-3.01			4.20			
190	3	0.58			10.85			
193	4	-0.42			9.00			
196	4	0.43						10.58

Table 13. Statistical summary of reported data for standard reference water sample T-125 (trace constituent)--Continued
SiO₂ (Silica) m g/L

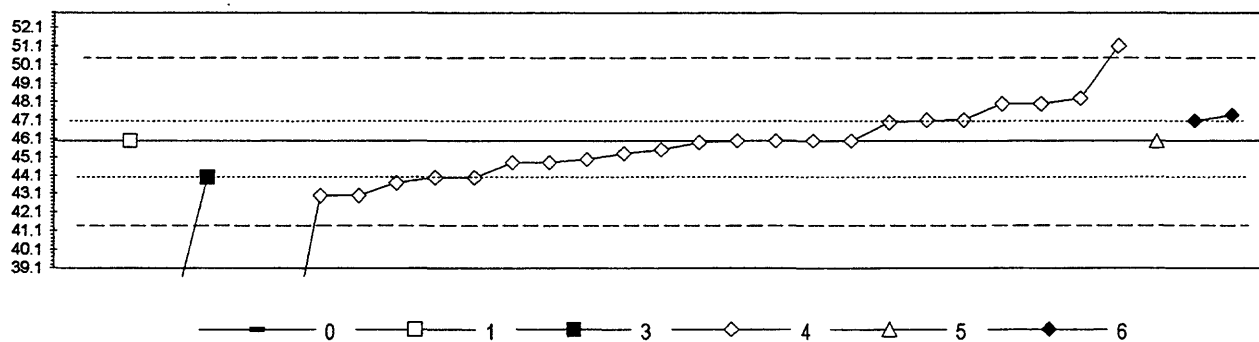


0. Other	5. DCP
2. AA: direct nitrous oxide	7. Ion chromatography
4. ICP	22m. Color: molybdate blue
N = 2	1 24 2 1 15
Minimum = 5.21	5.20 2.50 4.98 5.18 3.94
Maximum = 10.80	8.34 5.35 7.18
Median =	5.15 5.14
St Dev =	0.303 0.773

MPV = 5.18
F-pseudosigma = 0.319
N = 45
Hu = 5.38
Hi = 4.95

Lab	Rating	Z-value	0	2	4	5	7	22m
1	4	-0.28			5.09			
3	2	1.41			5.63			
4	4	-0.19			5.12			
5	4	0.00			5.18			
8	0	-2.45			4.40			
9	0	6.27						7.18
11	4	0.00				5.18		
13	1	2.04						5.83
15	3	0.97			5.49			
25	2	1.41			5.63			
32	4	0.09	5.21					
33	3	0.53			5.35			
36	0	17.63	10.80					
37	4	0.35						5.29
42	3	-0.56			5.00			
43	4	-0.25			5.10			
45	3	0.66			5.39			
51	4	0.13						5.22
52	1	-1.69						4.64
55	4	0.03			5.19			
58	0	-3.51						4.06
61	0	-8.41			2.50			
63	3	0.53			5.35			
70	3	-0.72						4.95
78	4	0.06		5.20				
87	2	-1.19						4.80
89	4	-0.13						5.14
92	1	-1.82						4.60
97	4	0.38						5.30
101	1	-1.51			4.70			
109	0	3.07			6.16			
112	3	-0.63				4.98		
113	4	0.03						5.19
116	0	-3.23			4.15			
119	3	-0.56			5.00			
127	4	0.22			5.25			
134	4	-0.25			5.10			
138	2	1.32						5.60
141	0	-3.89						3.94
142	0	3.07			6.16			
145	3	0.63			5.38			
146	0	-3.70			4.00			
184	0	9.91			8.34			
189	4	-0.41			5.05			
190	2	-1.47						4.71

Table 13. Statistical summary of reported data for standard reference water sample T-125 (trace constituent)—Continued
Sr (Strontium) μ g/L

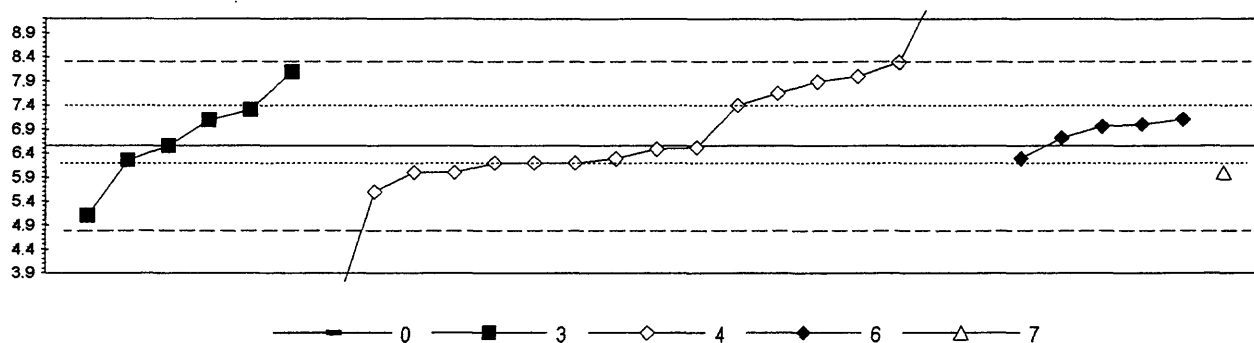


0. Other	4. ICP					
1. AA: direct air	5. DCP					
3. AA: graphite furnace	6. ICP/MS					
N =	1	1	2	24	1	2
Minimum =	240.0	46.0	35.8	4.8	46.0	47.1
Maximum =			44.0	51.1		47.4
Median =				46.0		
St Dev =				1.93		

MPV = 46.0
F-pseudosigma = 2.29
N = 31
Hu = 47.1
Hi = 44.0

Lab	Rating	Z-value	0	1	3	4	5	6
1	4	-0.22				45.5		
3	4	0.00				46.0		
4	4	0.00				46.0		
7	4	-0.04				45.9		
8	3	1.00				48.3		
9	0		< 27					
15	4	-0.31				45.3		
16	3	-1.00				43.7		
25	3	0.87				48.0		
32	3	0.61					47.4	
33	4	0.00					46.0	
39	3	0.87				48.0		
42	0	-17.96				4.8		
52	3	-0.52				44.8		
55	2	-1.31				43.0		
59	4	0.44				47.0		
63	0	2.22				51.1		
68	3	-0.87				44.0		
70	0					<10		
85	3	-0.52				44.8		
94	4	-0.44				45.0		
97	0	-4.45			35.8			
109	4	0.00		46.0				
113	NR			< 200				
116	4	0.00				46.0		
127	4	0.00				46.0		
134	2	-1.31				43.0		
138	4	0.48				47.1		
141	3	-0.87			44.0			
145	4	0.50				47.2		
146	3	-0.87				44.0		
161	NR					< 100		
182	0	84.56	240.0					
189	0	-5.75				32.8		
196	4	0.48					47.1	

Table 13. Statistical summary of reported data for standard reference water sample T-125 (trace constituent)—Continued
V (Vanadium) $\mu\text{ g/L}$

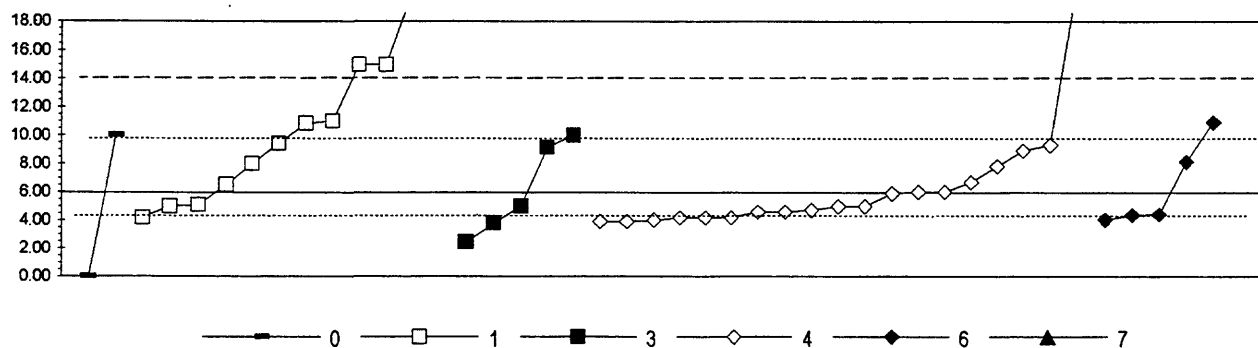


0. Other	6. ICP/MS
3. AA: graphite furnace	7. Ion chromatography
4. ICP	
N = 0	6 17 5 1
Minimum =	5.11 3.00 6.30 6.00
Maximum =	8.10 13.90 7.11
Median =	6.40
St Dev =	1.295

MPV = 6.56
F-pseudosigma = 0.890
N = 29
Hu = 7.40
HI = 6.20

Lab	Rating	Z-value	0	3	4	6	7
1	4	-0.04			6.52		
3	NR				< 10		
4	0	-4.00			3.00		
5	2	1.23			7.66		
7	1	1.96			8.30		
11	3	-0.63					6.00
15	1	1.73		8.10			
16	3	0.94			7.40		
25	3	-0.63			6.00		
30	3	0.62				7.11	
32	4	0.49				7.00	
37	4	0.45				6.96	
42	4	-0.29				6.30	
45	0	8.25			13.90		
46	3	-0.63			6.00		
52	4	0.00		6.56			
61	0	3.87			10.00		
63	NR				< 10		
68	1	1.62			8.00		
70	NR				< 50		
75	1	1.51			7.90		
85	NR				< 20		
94	4	-0.40			6.20		
97	1	-1.63		5.11			
101	4	-0.29			6.30		
124	NR		< 10				
127	3	0.84		7.31			
134	3	0.61		7.10			
138	4	-0.40			6.20		
141	4	-0.07			6.50		
142	4	-0.35		6.25			
145	4	-0.40			6.20		
161	NR				< 100		
180	2	-1.08			5.60		
184	NR				< 10		
189	NR				< 8		
196	4	0.18				6.72	

Table 13. Statistical summary of reported data for standard reference water sample T-125 (trace constituent)—Continued
Zn (Zinc)
μ g/L



0. Other	4. ICP					
1. AA: direct air	6. ICP/MS					
3. AA: graphite furnace	7. IC					
N =	2	12	5	19	5	1
Minimum =	0.00	4.20	2.41	3.90	4.07	25.00
Maximum =	10.00	24.00	10.00	21.00	10.89	
Median =		8.70		4.87		
St Dev =		3.957		1.691		

MPV = 5.95
F-pseudosigma = 4.007
N = 44
Hu = 9.70
Hi = 4.30

Lab	Rating	Z-value	0	1	3	4	6	7
1	3	0.54					8.12	
3	4	0.19				6.70		
4	NR					< 10		
5	4	-0.30				4.73		
7	3	-0.51				3.90		
9	NR		< 4					
11	0	4.75						25.00
12	NR					< 20		
13	NR		< 10					
15	4	-0.21		5.10				
16	4	-0.44				4.20		
23	NR		< 20					
25	NR					< 4		
29	0	2.26		15.00				
30	2	1.23					10.89	
32	4	-0.39					4.40	
36	2	-1.48	0.00					
37	4	-0.39					4.39	
39	4	-0.24				5.00		
46	3	0.84				9.32		
51	4	-0.24			5.00			
52	NR					< 10		
58	0	4.50		24.00				
59	4	-0.44				4.20		
61	NR					< 10		
63	2	1.26		11.00				
68	3	-0.51				3.90		
70	NR					< 10		
73	4	0.01				6.00		
75	4	-0.34				4.60		
78	3	-0.54			3.80			
79	4	0.46				7.80		
85	3	0.86		9.40				
87	4	-0.24		5.00				
89	NR			< 40				
90	3	0.51		8.00				
94	4	0.01				6.00		
97	3	0.79			9.13			
101	4	-0.01				5.90		
107	0	3.51		20.00				
113	2	1.21		10.80				
116	NR					< 5		
119	4	-0.24				5.00		
120	3	-0.88			2.41			
122	2	1.01			10.00			
124	2	1.01	10.00					
127	4	0.14		6.50				
133	3	0.74				8.90		
134	4	-0.34				4.60		
138	4	-0.44				4.20		

Lab	Rating	Z-value	0	1	3	4	6	7
139	NR			< 10				
141	4	-0.48				4.03		
145	NR					< 0.7		
151	NR			< 20				
161	0	3.76				21.00		
180	NR					< 3		
182	0	2.26		15.00				
184	NR					< 10		
189	NR					< 20		
190	4	-0.44		4.20				
193	NR			< 25				
196	4	-0.47					4.07	

Table 14.-- *Statistical summary of reported data for standard reference sample M-126 (major constituents)*

Definition of analytical methods, abbreviations, and symbols

Analytical methods

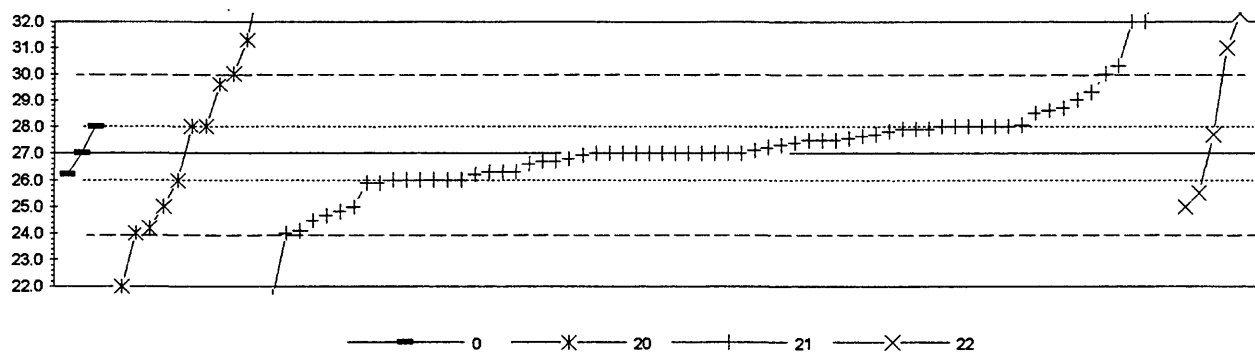
0. Other/Not reported	=	
1. AA: direct, air	=	atomic absorption: direct,air
2. AA: direct, N ₂ O	=	atomic absorption: direct,nitrous oxide
3. AA: graphite furnace	=	atomic absorption: graphite furnace
4. ICP	=	inductively coupled plasma
5. DCP	=	direct current plasma
6. ICP/MS	=	mass spectrometry/inductively coupled plasma
7. IC	=	ion chromatography
12. Flame photo	=	flame photometric
20. Titrate: color	=	titration: colorimetric [color reagent specified]
21. Titrate: electro	=	titration: electrometric
22. Color:	=	colorimetric [color reagent specified]
40. Ion electrode	=	ion selective electrode
41. Electro	=	electrometric: [type meter specified]
50. Gravimetric	=	gravimetric: [precipitate specified]

Abbreviations and symbols

N	=	number of samples
St dev	=	traditional standard deviation
MPV	=	95% confidence most probable value
F-pseudosigma	=	nonparametric statistic deviation
Hu	=	upper hinge value
Hi	=	lower hinge value
m g/L	=	milligrams per liter
μ g/L	=	micrograms per liter
μ S/cm	=	microsiemens per centimeter at 25 C
Lab	=	laboratory code number
NR	=	not rated, less than value reported
<	=	less than

<u>Constituent</u>	<u>page</u>
Alk Alkalinity as CaCO ₃	97
B Boron	98
Ca Calcium	99
Cl Chloride	100
DSRD Dissolved solids	101
F Fluoride	102
K Potassium	103
Mg Magnesium	104
Na Sodium	105
total P Phosphorus	106
pH	107
SiO ₂ Silica	108
SO ₄ Sulfate	109
Sp Cond Specific Conductance	110
Sr Strontium	111
V Vanadium	112

Table 14. Statistical summary of reported data for standard reference water sample M-126 (major constituent)—Continued
Alk (Alkalinity as calcium carbonate) mg/L



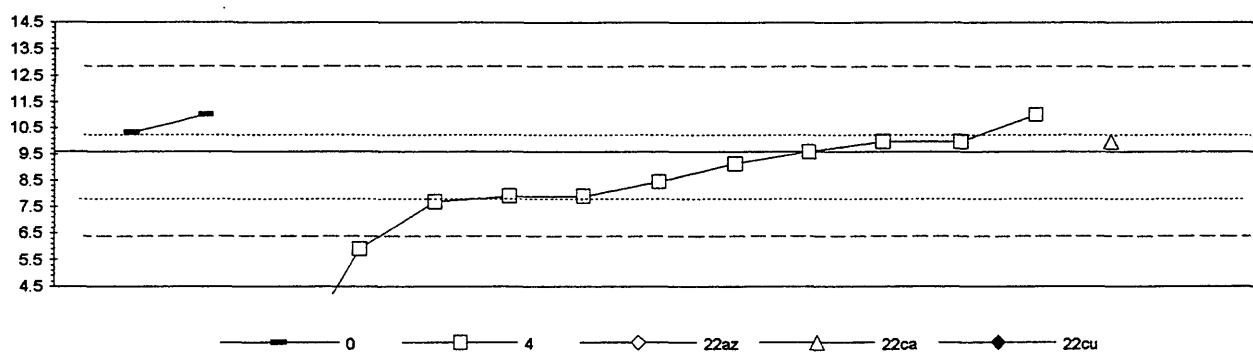
0. Other	22. Colorimetric
20. Titrate: colorimetric	0. Other
21. Titrate: electrometric	
N = 3	12 68 5
Minimum = 26.2	21.0 21.6 25.0
Maximum = 28.0	33.8 546.0 32.3
Median = 26.0	27.0
St Dev = 2.67	1.26

MPV = 27.0
F-pseudosigma = 1.48
N = 88
Hu = 28.0
HI = 26.0

Lab	Rating	Z-value	0	20	21	22
1	2	1.08			28.6	
2	0	350.07			546.0	
3	4	-0.47			26.3	
5	0	4.38			33.5	
7	2	1.15			28.7	
8	3	0.67		28.0		
9	4	0.00			27.0	
10	4	0.34			27.5	
11	3	-0.54	26.2			
12	3	0.67			28.0	
13	3	-0.74			25.9	
15	4	0.00			27.0	
16	0	2.90		31.3		
18	2	-1.35				25.0
19	3	0.61			27.9	
24	4	0.00			27.0	
25	0	3.37			32.0	
26	3	-0.67			26.0	
29	4	0.00			27.0	
32	4	-0.13			26.8	
33	3	-0.67			26.0	
36	3	0.67	28.0			
37	4	-0.20			26.7	
38	4	0.39			27.6	
39	4	0.00			27.0	
42	0	2.23			30.3	
43	3	0.67			28.0	
45	3	0.61			27.9	
46	4	0.20			27.3	
50	4	0.00			27.0	
51	3	-0.67			26.0	
52	1	2.02			30.0	
54	4	0.00			27.0	
55	1	1.55			29.3	
56	4	0.27			27.4	
57	1	-2.02	24.0			
58	3	0.67			28.0	
60	4	-0.07			26.9	
61	0	-3.64			21.6	
63	4	-0.47			26.3	
68	0	3.57				32.3
69	4	0.47				27.7
70	1	-1.69			24.5	
75	3	0.67			28.0	
76	1	-1.89	24.2			
78	2	1.01			28.5	
79	4	0.00			27.0	
84	3	-0.54			26.2	
85	1	-1.57			24.7	
87	3	0.67			28.0	

Lab	Rating	Z-value	0	20	21	22
89	3	0.54			27.8	
90	3	-0.67			26.0	
92	2	-1.46			24.8	
94	3	-0.67		26.0		
96	2	1.35			29.0	
97	4	-0.47			26.3	
107	3	-0.67			26.0	
109	3	0.71			28.1	
113	4	0.13			27.2	
114	4	0.00			27.0	
116	3	-0.74			25.9	
118	1	2.02		30.0		
119	0	-3.37		22.0		
120	4	0.00			27.0	
122	4	0.34			27.5	
124	4	0.00	27.0			
127	4	0.47			27.7	
128	0	2.70				31.0
134	4	0.09			27.1	
138	4	-0.20			26.7	
139	0	3.37			32.0	
141	3	-0.67			26.0	
142	4	0.00			27.0	
145	2	-1.01				25.5
146	1	-1.96			24.1	
151	3	0.67			28.0	
153	4	-0.27			26.6	
161	0	4.59		33.8		
180	4	0.34			27.5	
182	1	-2.02			24.0	
183	3	0.67		28.0		
184	2	-1.35		25.0		
189	0	-4.05		21.0		
190	2	-1.35			25.0	
194	3	0.61			27.9	
197	4	0.44			27.7	
202	1	1.75		29.6		
207	4	0.00			27.0	

Table 14. Statistical summary of reported data for standard reference water sample M-126 (major constituent)—Continued

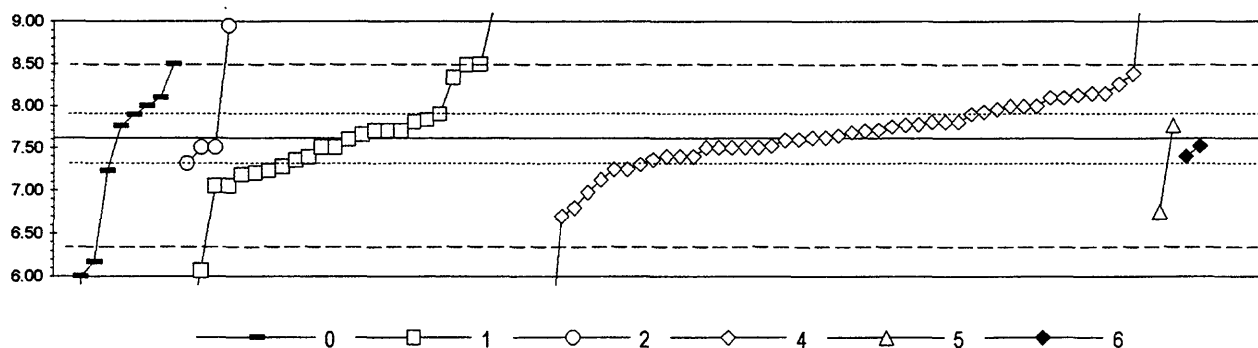
B (Boron) μ g/L

0. Other					
4. ICP					
22az. Color: azomethine					
N =	2	11	0	1	1
Minimum =	10.3	1.1		10.0	114.0
Maximum =	11.0	11.0		10.0	114.0
Median =	8.4				
St Dev =	1.48				

MPV = 9.6
 F-pseudosigma = 1.67
 N = 15
 Hu = 10.2
 HI = 7.9

Lab	Rating	Z-value	0	4	22az	22ca	22cu
1	3	-0.70		8.4			
3	NR			< 10			
4	4	0.24		10.0			
11	3	0.84	11.0				
15	4	0.00		9.6			
16	NR			< 500			
18	NR			< 5			
25	NR			< 23			
29	4	0.24				10.0	
45	4	0.42	10.3				
46	0	-2.22		5.9			
50	NR			< 50			
52	NR			< 300			
57	NR			< 50			
58	0	62.59					114.0
61	NR			< 50			
63	NR			< 100			
70	NR			< 50			
85	NR			< 20			
94	3	0.84		11.0			
103	0	-5.10		1.1			
109	2	-1.02		7.9			
116	NR			< 10			
121	NR			< 10			
122	0			< 0.1			
127	4	0.23		10.0			
128	NR			< 10			
134	NR			< 20			
142	2	-1.02		7.9			
145	4	-0.27		9.2			
180	2	-1.14		7.7			
189	NR			< 10			

Table 14. Statistical summary of reported data for standard reference water sample M-126 (major constituent)--Continued
Ca (Calcium) m g/L

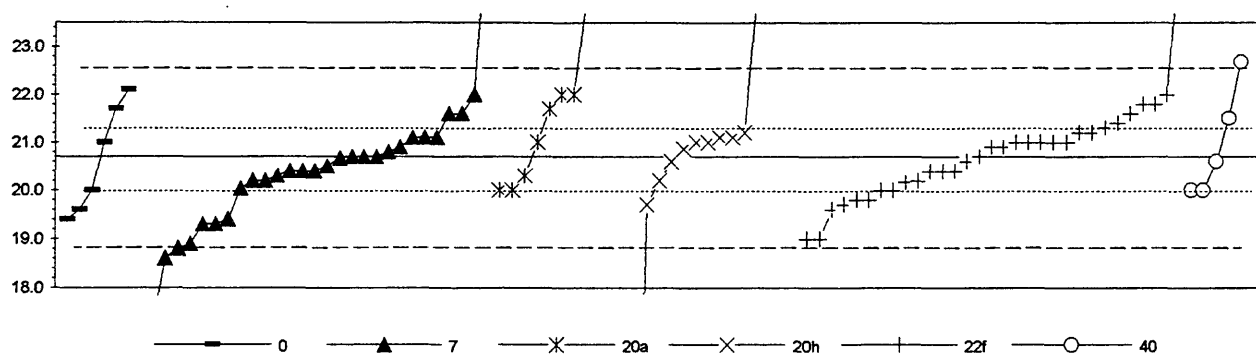


0. Other	4. ICP					
1. AA: direct air	5. DCP					
2. AA: direct nitrous oxide	6. ICP/MS					
N = 9	26	5	46	2	2	
Minimum = 0.99	5.30	0.75	4.91	6.76	7.40	
Maximum = 8.50	9.80	8.95	9.93	7.77	7.52	
Median = 7.76	7.63		7.66			
St Dev = 0.762	0.529		0.368			

MPV = 7.62
F-pseudostigma = 0.460
N = 90
Hu = 7.93
HI = 7.31

Lab	Rating	Z-value	0	1	2	4	5	6
1	4	-0.25				7.40		
3	4	-0.23				7.50		
4	3	-0.79				6.80		
5	4	0.14				7.60		
7	3	0.82				7.90		
8	0	-5.89						7.40
9	3	-0.90		7.20				
10	4	0.18		7.70				
11	3	0.60	7.89					
12	3	0.84				7.93		
13	3	-0.84		7.23				
15	0	5.04				8.15		
16	3	-0.69				6.98		
18	4	0.40				7.77		
19	4	-0.03				7.51		
23	3	-0.66				8.26		
24	4	-0.21				7.50		
25	1	1.66				8.13		
26	1	1.93	8.50					
29	0	-3.51	6.00					
30	0	-14.94				8.15		
32	4	-0.47						
33	4	0.34						
36	0	-3.14	6.17					
38	4	-0.23				9.93		
39	2	1.40				8.10		
42	4	-0.25				7.40		
43	4	0.40				7.75		
45	3	-0.75		7.27				
46	3	-0.55				7.12		
50	4	-0.03		7.60				
51	2	-1.08				4.91		
52	4	0.21				7.62		
54	4	-0.25		7.50				
55	4	-0.05				7.50		
56	3	0.62		7.90				
57	1	-1.99						7.52
58	0	-3.36		6.07	7.50			
61	4	-0.47				7.30		
63	3	0.82				7.80		
64	4	0.05				7.59		
68	4	0.40				7.71		
69	4	-0.25		7.50				
70	4	0.36				7.70		
78	0	4.75		9.80				
84	0	4.43		9.65				
85	4	0.47		7.83				
86	4	0.29				7.64		
89	1	1.93		8.50				
90	2	1.06	8.10					
92	4	0.40				7.80		
94	3	0.62						7.78
97	3	-0.95				7.18		
101	4	0.18				7.70		
102	4	-0.25						7.36
103	1	-1.77						6.76
109	4	0.08				7.65		
113	2	-1.23				7.05	8.95	
114	4	-0.25						8.38
116	3	-0.79						6.70
119	4	-0.47						7.25
120	2	-1.23				7.05	7.51	
121	4	0.18						7.61
122	3	-0.58				7.35		
124	3	0.84	8.00					
127	4	-0.23						7.40
128	2	1.12						7.99
134	4	-0.47						7.25
138	2	1.06						7.99
139	0	2.90					0.75	
140	4	0.18				7.70		
141	4	0.01						7.52
142	2	1.06						7.96
145	4	-0.01						7.51
146	2	-1.38						7.77
153	4	0.32	7.76					
164	4	-0.49				7.39		
179	0	-5.04				5.30	7.31	
180	2	1.16						8.10
182	0	3.45				9.20		
183	0	-14.41	0.99					
184	3	0.75						7.80
189	4	0.34						7.68
190	3	-0.84	7.23					
191	4	-0.21						
196	1	1.88				8.48		
197	1	-1.86						
202	3	0.69						7.80
207	1	1.56				8.33		
207	2	1.16						8.00

Table 14. Statistical summary of reported data for standard reference water sample M-126 (major constituent)--Continued
Cl (Chloride) mg/L



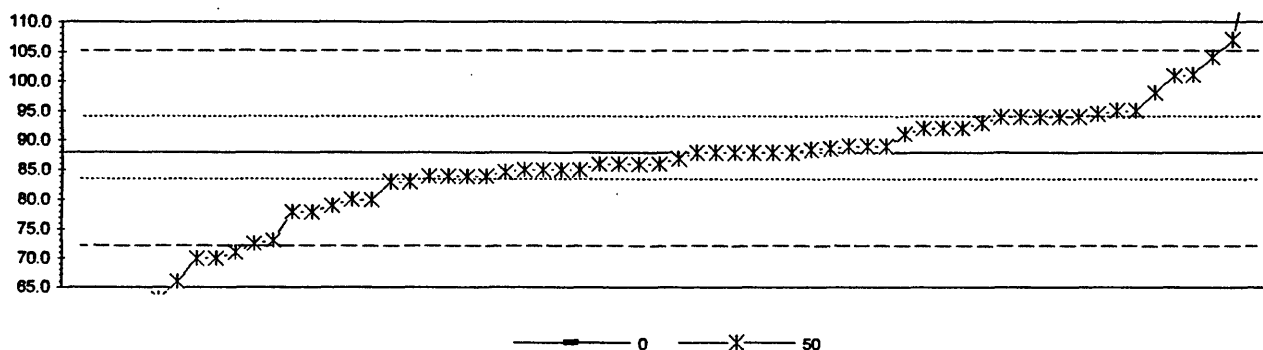
0. Other	20h: Titrate: mercury					
7. Ion chromatography	22f. Color: FeSCN					
20a: Titrate: silver	40. Selective ion electrode					
N =	7	29	9	17	31	5
Minimum =	19.4	6.0	20.0	0.3	19.0	20.0
Maximum =	22.1	26.0	28.0	26.0	25.0	22.7
Median =	20.4	21.7	21.0	20.9		
St Dev =	0.88	0.91	1.16	0.79		

MPV = 20.7
F-pseudosigma = 0.93
N = 98
Hu = 21.3
HI = 20.0

Lab	Rating	Z-value	0	7	20a	20h	22f	40
1	3	-0.57					20.2	
3	3	0.54					21.2	
4	0	-2.27		18.6				
5	0	-2.05		18.8				
7	3	0.97		21.6				
8	4	-0.32		20.4				
9	2	-1.19					19.6	
10	3	0.97					21.6	
11	1	1.51	22.1					
12	0	4.64					25.0	
13	2	-1.08					19.7	
15	4	0.22		20.9				
16	4	-0.11					20.6	
18	3	-0.97					19.8	
19	3	-0.76			20.0			
23	2	1.19					21.8	
24	4	0.22					20.9	
26	4	-0.43		20.3				
29	4	0.43				21.1		
30	0	-15.89		6.0				
32	4	0.43		21.1				
33	0	-3.78		17.2				
36	3	-0.76	20.0					
37	1	-1.51		19.3				
39	3	-0.76			20.0			
42	4	0.11		20.8				
43	3	-0.76						20.0
45	4	0.32					21.0	
46	4	0.32					21.0	
50	3	-0.76					20.0	
51	3	0.97		21.6				
52	3	0.54					21.2	
54	3	0.76					21.4	
55	4	0.32					21.0	
56	4	0.19				20.9		
57	2	1.40			22.0			
58	3	0.54				21.2		
60	0	3.67				24.1		
61	4	-0.32					20.4	
63	1	-1.83					19.0	
64	4	-0.22		20.5				
68	2	1.08	21.7					
69	4	-0.32					20.4	
70	3	-0.54				20.2		
75	3	-0.54		20.2				
76	4	0.00		20.7				
78	0	4.64					25.0	
79	4	0.32					21.0	
84	0	4.42					24.8	
85	2	1.19					21.8	

Lab	Rating	Z-value	0	7	20a	20h	22f	40
86	2	1.40		22.0				
87	2	1.40						22.0
89	0	-20.18				2.0		
92	4	0.43				21.1		
93	4	0.00		20.7				
94	4	0.22					20.9	
96	4	-0.32					20.4	
97	3	0.65					21.3	
101	4	-0.43			20.3			
102	1	-1.83					19.0	
107	0	3.56			24.0			
109	0	2.14						22.7
113	1	-1.94		18.9				
114	3	0.86						21.5
116	4	-0.32		20.4				
119	4	0.32				21.0		
120	4	0.32			21.0			
121	4	-0.11						20.6
122	2	1.08			21.7			
124	4	0.32	21.0					
127	1	-1.51		19.3				
128	3	-0.97					19.8	
134	3	-0.54		20.2				
138	4	-0.32		20.4				
139	2	-1.08				19.7		
140	4	0.32					21.0	
141	3	-0.54					20.2	
142	4	-0.11				20.6		
145	4	-0.02		20.7				
146	2	1.40			22.0			
153	0	5.72		26.0				
161	4	0.43		21.1				
164	4	0.43		21.1				
179	0	5.72				26.0		
180	4	0.00					20.7	
182	0	-11.55				10.0		
183	0	-22.07				0.3		
184	4	0.32					21.0	
189	3	-0.76					20.0	
190	2	-1.19	19.6					
191	4	0.00		20.7				
193	2	-1.40	19.4					
194	3	-0.76						20.0
196	2	-1.40		19.4				
197	3	-0.71		20.0				
202	0	7.88			28.0			
207	0	2.47				23.0		
209	0	-21.59	0.62					

Table 14. Statistical summary of reported data for standard reference water sample M-126 (major constituent)--Continued
DSRD (Dissolved solids) mg/L



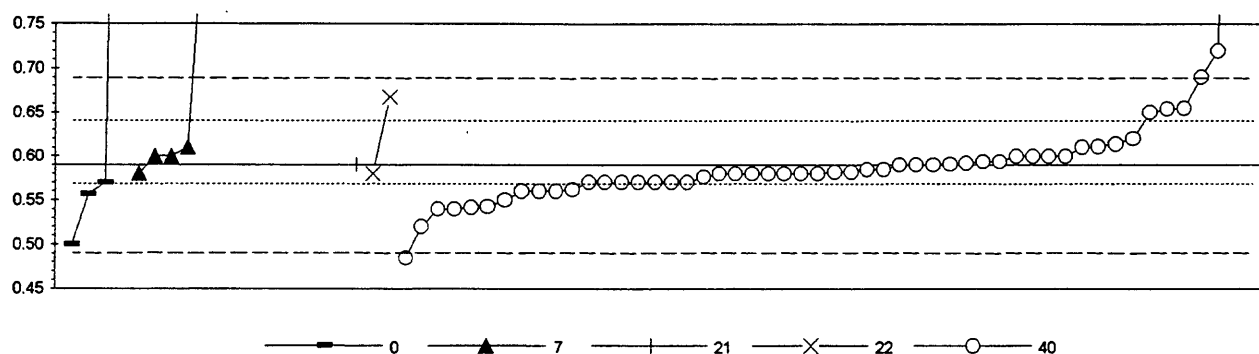
0. Other
50. Gravimetric
N = 2 61
Minimum = 196.0 18.0
Maximum = 320.0 140.0
Median = 88.0
St Dev = 8.39

MPV = 88.0
F-pseudosigma = 7.78
N = 63
Hu = 94.0
HI = 83.5

Lab	Rating	Z-value	0	50
1	4	-0.42		84.7
3	0	-2.31		70.0
5	4	-0.26		86.0
9	4	0.00		88.0
10	4	0.00		88.0
11	4	0.13		89.0
12	3	0.77		94.0
13	3	-0.64		83.0
15	1	-1.99		72.5
16	4	0.09		88.7
18	3	0.77		94.0
19	3	0.82		94.4
23	0	-2.18		71.0
25	3	0.51		92.0
26	4	0.00		88.0
29	4	-0.26		86.0
32	0	13.88	196.0	
36	4	0.06		88.5
38	4	-0.26		86.0
43	4	0.00		88.0
45	1	1.67		101.0
46	3	-0.51		84.0
51	4	-0.39		85.0
52	3	-0.51		84.0
54	4	-0.39		85.0
55	2	-1.28		78.0
57	0	-2.83		66.0
60	0	-3.21		63.0
61	2	1.28		98.0
63	3	0.90		95.0
69	3	0.51		92.0
70	3	0.77		94.0
75	4	0.00		88.0
76	2	-1.03		80.0
78	0	29.81	320.0	
85	3	-0.64		83.0
87	0	4.37		122.0
89	4	-0.13		87.0
90	4	0.13		89.0
92	4	0.39		91.0
94	3	0.77		94.0
98	2	-1.28		78.0
97	4	-0.26		86.0
101	1	-1.93		73.0
109	3	0.77		94.0
113	2	-1.16		79.0
118	3	0.64		93.0
119	3	-0.51		84.0
120	0	2.06		104.0
122	1	1.64		100.8

Lab	Rating	Z-value	0	50
127	4	0.13		89.0
134	0	-3.85		58.0
138	3	-0.51		84.0
140	2	-1.03		80.0
141	4	0.00		88.0
142	3	0.90		95.0
146	4	-0.39		85.0
182	0	-8.99		18.0
183	0	2.44		107.0
184	3	0.51		92.0
189	0	6.68		140.0
190	4	-0.39		85.0
202	0	-2.31		70.0

Table 14. Statistical summary of reported data for standard reference water sample M-126 (major constituent)—Continued
F (Fluoride) mg/L



0. Other	22. Colorimetric
7. Ion chromatography	40. Selective ion electrode
21. Titrate: electrometric	
N = 4	13
Minimum = 0.50	0.58
Maximum = 1.76	0.59
Median = 0.93	0.58
St Dev = 0.202	0.039

MPV = 0.59
F-pseudostigma = 0.048
N = 72
Hu = 0.64
Hi = 0.57

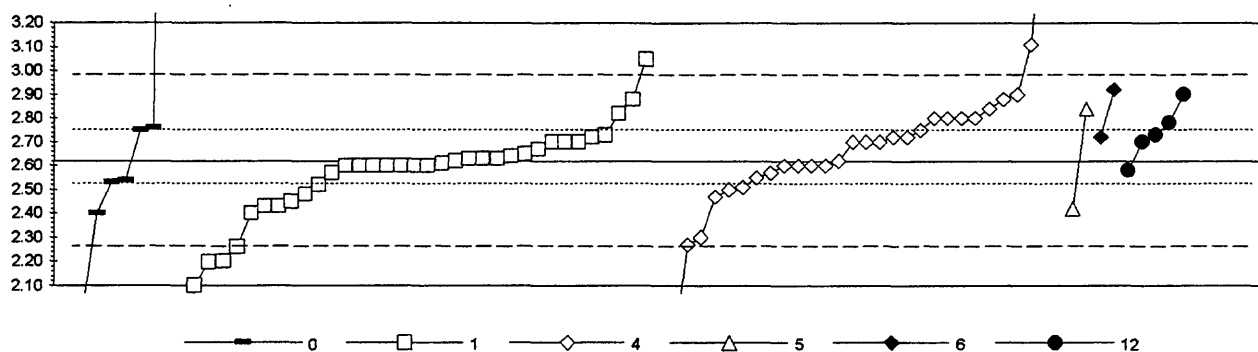
Lab	Rating	Z-value	0	7	21	22	40
1	0	9.34		1.04			
3	1	1.60				0.67	
4	0	6.43		0.90			
7	0	157.94		8.20			
8	4	0.21					0.60
9	4	0.21					0.60
10	4	0.00					0.59
11	4	-0.42	0.57				
12	0	18.89					1.50
13	4	-0.42					0.57
15	3	-1.00					0.54
16	4	-0.42					0.57
18	4	-0.21					0.58
23	4	-0.42					0.57
24	3	0.62					0.62
25	4	-0.21					0.58
26	0	6.85		0.92			
29	4	0.00					0.59
32	0	9.13		1.03			
33	0	9.55		1.05			
36	3	-0.68	0.56				
37	3	-0.58					0.56
39	4	-0.21					0.58
42	0	9.13		1.03			
45	2	1.35					0.66
46	4	0.08					0.59
50	3	-0.62					0.56
52	0	-2.18					0.49
54	4	-0.29					0.58
55	4	0.42		0.61			
57	4	-0.21					0.58
58	4	-0.10					0.59
61	4	-0.42					0.57
63	4	0.00					0.59
70	4	-0.42					0.57
78	2	-1.04					0.54
85	0	2.08					0.69
89	4	-0.17					0.58
90	2	1.25					0.65
93	0	12.66					1.20
94	3	-0.62					0.56
96	4	0.44					0.61
97	3	-0.98					0.54
107	4	0.04					0.59
109	4	-0.21					0.58
113	4	0.02					0.59
114	4	-0.10					0.59
119	4	-0.42					0.57
120	4	-0.21				0.58	
122	4	-0.21					0.58

Lab	Rating	Z-value	0	7	21	22	40
124	1	-1.87	0.50				
127	4	0.21					0.60
128	3	-0.62					0.56
134	4	0.00			0.59		
138	4	0.21		0.60			
140	4	0.08					0.59
141	4	-0.17					0.58
142	2	-1.04					0.54
145	4	-0.21		0.58			
146	0	24.28	1.76				
153	4	0.21		0.60			
161	2	-1.45					0.52
180	2	1.31					0.65
182	0	2.70					0.72
183	4	0.21					0.60
184	3	-0.83					0.55
189	4	-0.42					0.57
190	4	0.50					0.61
194	4	0.42					0.61
196	0	7.08		0.93			
197	0	10.38		1.09			
202	4	-0.21					0.58

Table 14. Statistical summary of reported data for standard reference water sample M-126 (major constituent)—Continued

K (Potassium)

mg/L



0. Other							
1. AA: direct air							
4. ICP							
	N =	8	36	30	2	2	5
	Minimum =	1.60	1.48	1.76	2.42	2.72	2.58
	Maximum =	7.60	3.05	4.30	2.84	2.92	2.90
	Median =	2.54	2.60	2.70			
	St Dev =	1.892	0.265	0.468			

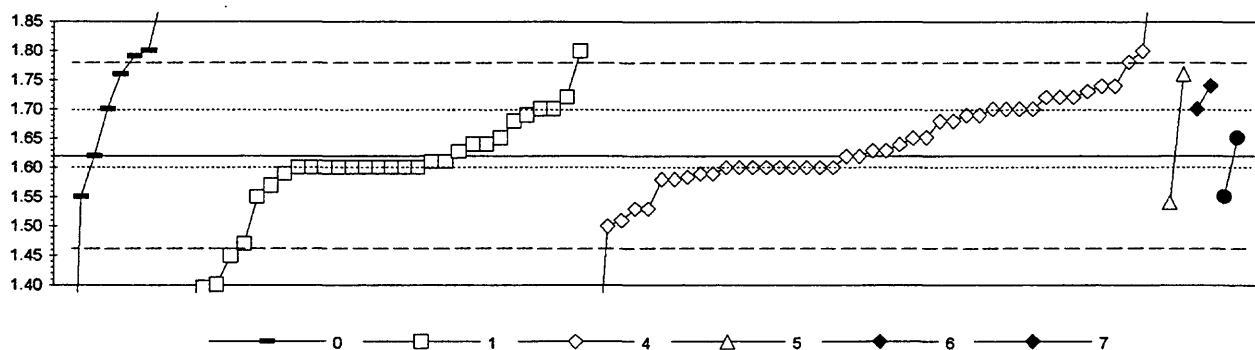
MPV = 2.62
 F-pseudosigma = 0.178
 N = 83
 Hu = 2.75
 HI = 2.51

Lab	Rating	Z-value	0	1	4	5	6	12
1	3	0.62		2.73				
3	0	9.44			4.30			
5	3	0.73			2.75			
7	3	-0.62			2.51			
8	0	-4.61			1.80			
9	4	0.28		2.67				
10	4	0.45		2.70				
11	0	-3.54	1.99					
12	4	-0.11			2.60			
13	1	-2.02		2.26				
15	3	0.56			2.72			
16	4	-0.11		2.60				
18	2	1.01			2.80			
19	1	-1.97			2.27			
24	4	0.00			2.62			
25	0	2.75			3.11			
26	3	0.79	2.76					
29	4	0.45						2.70
32	1	1.69				2.92		
33	2	1.24			2.84			
36	2	-1.24	2.40					
37	3	-0.79		2.48				
38	4	0.11		2.64				
42	1	-1.80			2.30			
43	4	0.45			2.70			
45	4	0.06		2.63				
46	4	-0.39			2.55			
50	4	-0.11		2.60				
51	3	0.90						2.78
52	4	-0.28			2.57			
54	4	-0.11		2.60				
55	4	-0.22						2.58
56	2	-1.07		2.43				
57	0	2.42		3.05				
58	3	-0.56		2.52				
61	4	-0.11			2.60			
63	4	-0.28		2.57				
64	4	-0.06		2.61				
68	1	1.57			2.90			
69	1	1.57						2.90
70	0	-2.92		2.10				
78	2	-1.24		2.40				
85	2	1.12		2.82				
86	3	0.56			2.72			
89	4	0.45		2.70				
92	0	-2.36		2.20				
94	3	-0.67			2.50			
97	3	-0.96		2.45				
101	4	-0.11		2.60				
102	0	-5.73	1.60					
103	2	1.01			2.80			
109	2	-1.07		2.43				
113	4	0.06		2.63				
114	0	-6.41		1.48				
116	4	-0.11			2.60			
119	2	1.01			2.80			
120	4	-0.11		2.60				
121	4	0.17		2.65				
122	4	0.00		2.62				
124	0	27.99	7.60					
127	4	0.45		2.70				
128	4	0.45			2.70			
134	4	-0.11		2.60				
138	4	0.45			2.70			
139	3	0.62						2.73
140	4	0.06		2.63				
141	2	1.46			2.88			
142	2	1.01			2.80			
145	3	-0.84			2.47			
146	0	-4.83			1.76			
153	4	-0.45	2.54					
164	0	-2.37		2.20				
179	3	0.56		2.72				
180	0	6.69			3.81			
182	4	-0.11		2.60				
184	2	1.24			2.84			
189	3	0.73	2.75					
190	3	-0.51	2.53					
191	3	0.56						2.72
196	2	1.46		2.88				
197	2	-1.12						2.42
202	4	-0.11			2.60			
207	0	3.31		3.21				

Table 14. Statistical summary of reported data for standard reference water sample M-126 (major constituent)--Continued

Mg (Magnesium)

mg/L

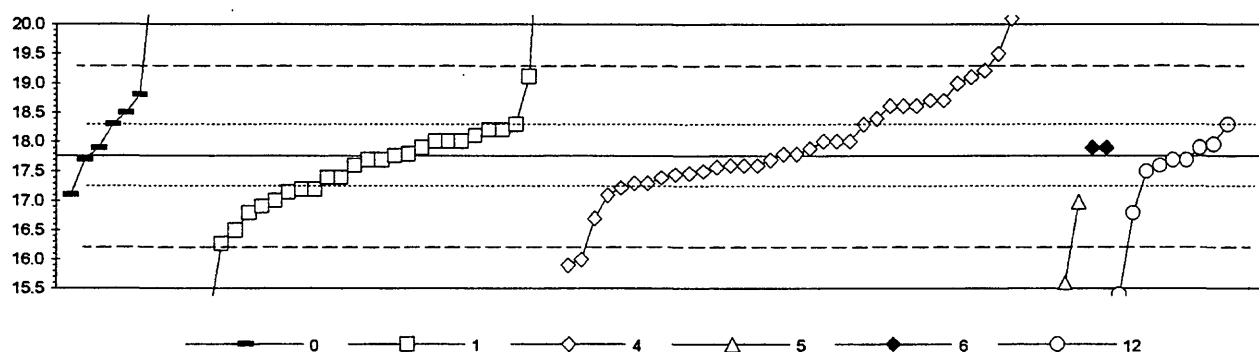


0. Other							
1. AA: direct air							
4. ICP							
	N =	9	31	44	2	2	2
	Minimum =	0.84	1.20	1.18	1.54	1.70	1.55
	Maximum =	3.70	1.80	1.99	1.76	1.74	1.65
	Median =	1.76	1.60	1.63			
	St Dev =	0.118	0.089	0.072			

MPV = 1.62
 F-pseudostigma = 0.078
 N = 90
 Hu = 1.70
 HI = 1.60

Lab	Rating	Z-value	0	1	4	5	6	7
1	2	-1.41			1.51			
3	2	1.28			1.72			
4	4	-0.39			1.59			
5	4	0.42			1.65			
7	3	0.77			1.68			
8	4	0.26			1.64			
9	0	-2.18		1.45				
10	2	1.03		1.70				
11	1	1.80	1.76					
12	4	-0.26			1.60			
13	4	-0.13		1.61				
15	0	4.75			1.99			
16	4	-0.26			1.60			
18	2	1.03			1.70			
19	2	-1.16			1.53			
23	4	-0.26		1.60				
24	4	0.00			1.62			
25	0	2.06			1.78			
26	3	-0.90						1.55
29	0	26.72	3.70					
30	0	-10.02	0.84					
32	1	1.54				1.74		
33	1	1.80				1.76		
36	3	-0.90	1.55					
38	4	0.10		1.63				
39	2	1.41			1.73			
42	4	-0.26			1.60			
43	4	-0.26			1.60			
45	4	-0.26		1.60				
46	3	-0.51			1.58			
50	0	-2.83		1.40				
51	3	0.90		1.69				
52	4	0.13			1.63			
54	4	-0.26		1.60				
55	4	-0.46			1.58			
56	3	-0.90		1.55				
57	1	-1.54			1.50			
58	1	-1.93		1.47				
61	4	-0.26			1.60			
63	2	1.28			1.72			
64	3	0.90			1.69			
68	4	-0.26			1.60			
69	4	-0.26		1.60				
70	4	0.13			1.63			
78	4	-0.26		1.60				
84	4	-0.26		1.60				
85	4	0.26		1.64				
86	1	1.54			1.74			
87	4	0.39			1.65			
89	0	2.31		1.80				
92	4	-0.26		1.60				
94	3	-0.51			1.58			
97	4	-0.26		1.60				
101	2	1.03		1.70				
102	0	3.60	1.90					
103	4	-0.26			1.60			
109	4	-0.26		1.60				
113	3	-0.64		1.57				
114	2	1.03	1.70					
116	3	0.90			1.69			
119	2	1.03			1.70			
120	4	-0.13		1.61				
121	4	0.39			1.65			
122	4	0.26		1.64				
124	0	2.31	1.80					
127	3	0.77			1.68			
128	2	1.03			1.70			
134	4	-0.26			1.60			
138	1	1.54			1.74			
139	4	-0.39		1.59				
140	4	-0.26		1.60				
141	4	0.00			1.62			
142	0	2.31			1.80			
145	4	-0.26			1.60			
146	2	-1.16			1.53			
153	4	0.39						1.65
164	0	-2.89		1.40				
179	3	0.77		1.68				
180	0	-5.65			1.18			
182	0	-5.40		1.20				
183	4	0.00	1.62					
184	2	1.28			1.72			
189	4	-0.39			1.59			
190	0	2.18	1.79					
191	2	1.03						1.70
196	2	1.28		1.72				
197	2	-1.03					1.54	
202	2	1.03			1.70			
207	3	0.64		1.67				
209	2	1.41			1.73			

Table 14. Statistical summary of reported data for standard reference water sample M-126 (major constituent)—Continued
Na (Sodium) mg/L

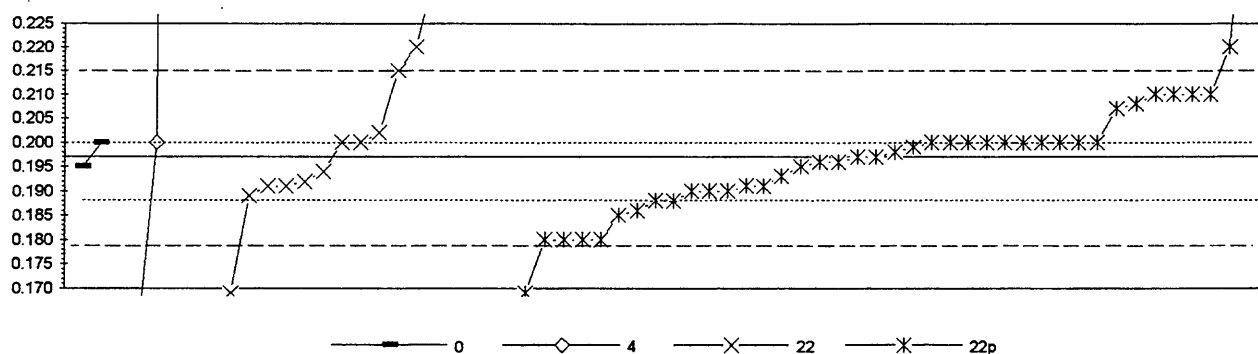


0. Other							
1. AA: direct air							
4. ICP							
	N =	7	31	37	2	2	9
	Minimum =	17.1	12.6	15.9	15.6	17.9	15.4
	Maximum =	21.0	25.0	23.3	17.0	17.9	18.3
	Median =		17.7	17.9			17.7
	St Dev =		0.84	0.90			0.86

MPV = 17.8
F-pseudosigma = 0.77
N = 88
Hu = 18.3
Hi = 17.3

Lab	Rating	Z-value	0	1	4	5	6	12
1	4	0.00		17.8				
3	2	1.21			18.7			
4	3	-0.71			17.2			
5	4	0.14			17.9			
7	4	-0.35			17.5			
8	0	7.17			23.3			
9	3	0.69		18.3				
10	4	-0.09		17.7				
11	2	1.34	18.8					
12	0	-2.30			16.0			
13	3	0.56		18.2				
15	0	4.19			21.0			
16	1	1.60			19.0			
18	3	0.82			18.4			
19	4	-0.39			17.5			
23	4	-0.09		17.7				
24	3	-0.61			17.3			
25	1	1.85			19.2			
26	3	0.69	18.3					
29	0	-3.07						15.4
32	4	0.17				17.9		
33	0	-2.81			15.6			
36	3	0.95	18.5					
38	1	-1.65		16.5				
39	2	1.08			18.6			
42	3	-0.61			17.3			
43	4	0.30			18.0			
45	4	-0.22		17.6				
46	4	-0.48			17.4			
50	4	0.30		18.0				
51	4	-0.35						17.5
52	4	-0.22			17.6			
54	4	0.30		18.0				
55	4	-0.09						17.7
56	1	-1.96		16.3				
57	0	-2.43			15.9			
58	0	-6.71		12.6				
61	4	0.30			18.0			
63	4	0.17		17.9				
64	4	0.43		18.1				
68	4	0.30			18.0			
69	2	-1.26						16.8
70	2	1.08			18.6			
76	4	0.17						17.9
78	3	-0.74		17.2				
84	4	0.25						18.0
85	4	0.04		17.8				
86	3	0.69			18.3			
89	3	0.56		18.2				
90	4	-0.09						17.7
92	0	-6.32		12.9				
94	4	-0.42					17.5	
97	2	-1.26		16.8				
101	4	-0.48		17.4				
102	3	-0.87	17.1					
103	0	3.54						20.5
109	3	-1.00		17.0				
113	0	7.04		23.2				
114	0	9.38		25.0				
116	3	-0.87					17.1	
119	4	-0.09					17.7	
120	3	-0.80		17.2				
121	4	0.04					17.8	
122	1	1.75		19.1				
124	0	4.19	21.0					
127	4	-0.22					17.6	
128	4	0.04					17.8	
134	4	0.30		18.0				
138	2	1.08					18.6	
139	3	0.69						18.3
140	4	-0.48		17.4				
141	4	-0.22					17.6	
142	1	1.73					19.1	
145	4	-0.26					17.6	
146	2	-1.39					16.7	
153	4	-0.09	17.7					
164	2	-1.12		16.9				
179	3	-0.74		17.2				
180	2	1.21					18.7	
182	0	-4.06		14.6				
183	4	-0.22						17.6
184	0	2.24					19.5	
189	0	3.02					20.1	
190	4	0.17	17.9					
191	4	0.17						17.9
196	0	-3.83		14.8				
197	2	-1.01					17.0	
207	4	0.30		18.0				

Table 14. Statistical summary of reported data for standard reference water sample M-126 (major constituent)—Continued
total P (total Phosphorus) mg/L



0. Other	22p: Color: phosphomolybdate			
4. ICP				
22. Colorimetric				
N =	2	4	15	45
Minimum =	0.195	0.140	0.030	0.120
Maximum =	0.200	2.260	0.270	0.960
Median =			0.194	0.197
St Dev =			0.014	0.010

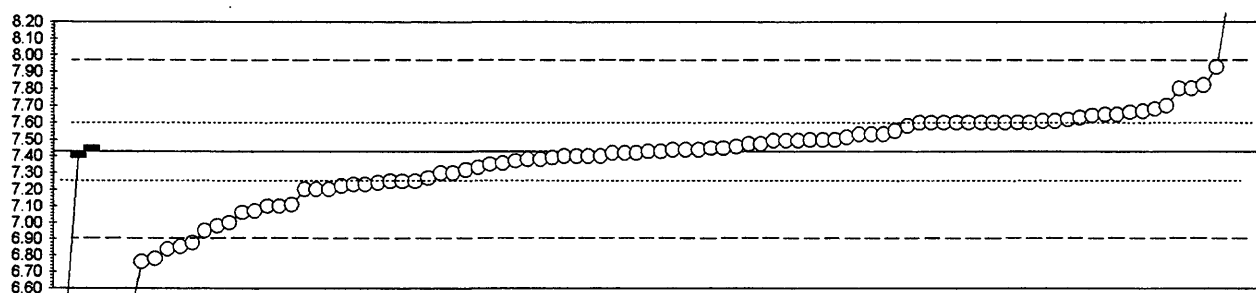
MPV = 0.197
F-pseudosigma = 0.009
N = 66
Hu = 0.200
Hi = 0.188

Lab	Rating	Z-value	0	4	22	22p
1	4	-0.34			0.194	
3	1	2.02			0.215	
7	0	8.21			0.270	
8	0	-6.41		0.140		
9	3	-0.67				0.191
11	4	0.34	0.200			
12	2	1.46			0.210	
13	2	1.46			0.210	
15	3	-0.67			0.191	
16	3	-0.56			0.192	
18	2	-1.35			0.185	
19	3	-0.79			0.190	
23	2	-1.24			0.186	
25	0	231.92		2.260		
36	4	-0.22	0.195			
37	0	-3.15			0.169	
38	3	-0.90			0.189	
42	4	0.00				0.197
45	0	4.27			0.235	
46	3	-0.79				0.190
52	3	0.56			0.202	
54	4	0.34				0.200
55	0	2.59				0.220
57	4	0.34				0.200
58	0	-6.63				0.138
59	4	0.34				0.200
60	4	0.34			0.200	
61	0	-3.15				0.169
63	4	0.34		0.200		
64	4	0.34				0.200
68	3	-0.67			0.191	
70	4	0.34				0.200
75	2	1.46				0.210
78	4	0.11				0.198
85	3	-0.79				0.190
87	4	0.34				0.200
89	4	-0.45				0.193
92	0	-4.16				0.160
94	1	-1.91				0.180
102	4	0.34				0.200
103	0	-4.16		0.160		
104	4	0.00				0.197
107	3	-0.67			0.191	
108	0	7.08				0.260
111	2	1.12				0.207
113	2	-1.01				0.188
114	2	-1.01				0.188
118	4	0.34				0.200
119	4	0.34				0.200
120	1	-1.91				0.180

Lab	Rating	Z-value	0	4	22	22p
127	2	1.24				0.208
128	1	-1.91				0.180
134	4	-0.22				0.195
138	4	-0.11				0.196
139	4	0.22				0.199
140	0	-18.77			0.030	
141	2	1.46				0.210
142	4	0.34				0.200
179	0	2.59			0.220	
180	4	-0.11				0.196
183	0	85.77				0.960
184	1	-1.91				0.180
189	4	0.34			0.200	
190	0	-7.08			0.134	
202	0	-8.66				0.120
207	4	0.34				0.20

Table 14. Statistical summary of reported data for standard reference water sample M-126 (major constituent)--Continued

pH



0. Other

41. Direct reading

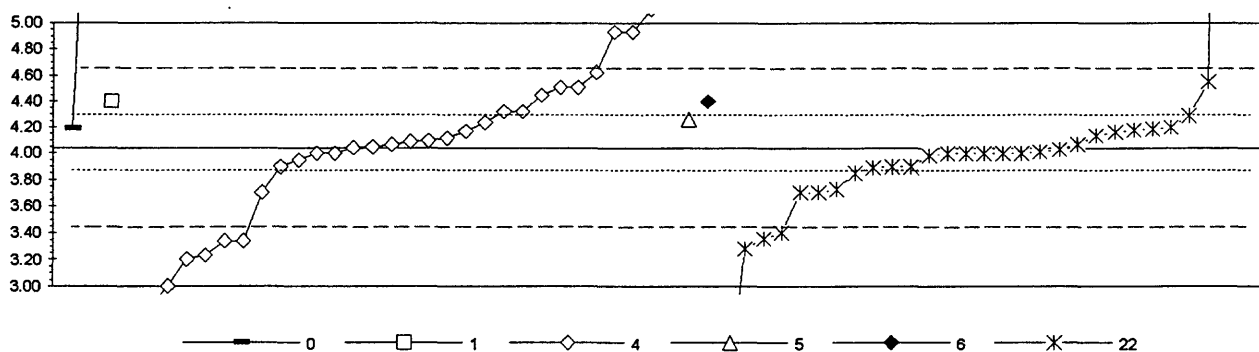
N = 3 93
 Minimum = 6.34 5.89
 Maximum = 7.45 8.39
 Median = 7.44
 St Dev = 0.351

MPV = 7.43
 F-pseudsigma = 0.263
 N = 96
 Hu = 7.60
 Hl = 7.25

Lab	Rating	Z-value	0	41
1	3	0.84		7.65
2	4	0.30		7.51
3	4	0.23		7.49
5	0	-4.14	6.34	
7	1	-1.63		7.00
8	0	-2.24		6.84
10	3	0.95		7.68
11	4	-0.11		7.40
12	2	-1.25		7.10
13	3	0.65		7.60
15	1	-1.71		6.98
16	3	-0.87		7.20
18	3	0.76		7.63
19	4	0.08		7.45
23	3	-0.68		7.25
24	4	-0.11		7.40
25	4	0.00		7.43
26	2	1.41		7.80
29	3	0.91		7.67
30	2	-1.37		7.07
32	3	-0.87		7.20
33	4	0.15		7.47
36	4	-0.11	7.40	
37	3	-0.72		7.24
38	4	0.27		7.50
39	3	0.65		7.60
41	0	-2.47		6.78
42	4	-0.27		7.36
43	4	-0.19		7.38
45	3	0.80		7.64
46	4	0.27		7.50
50	4	-0.49		7.30
51	4	0.38		7.53
52	4	-0.42		7.32
54	3	0.68		7.61
55	4	0.23		7.49
56	4	-0.04		7.42
57	3	0.65		7.60
58	4	-0.49		7.30
60	3	0.65		7.60
61	4	0.08		7.45
63	4	0.15		7.47
64	4	0.46		7.55
68	4	-0.11		7.40
69	4	0.38		7.53
70	4	-0.19		7.38
75	0	-2.55		6.76
76	4	-0.15		7.39
78	3	0.65		7.60
79	4	0.27		7.50

Lab	Rating	Z-value	0	41
84	0	-5.85		5.89
85	2	1.03		7.70
86	1	-1.82		6.95
87	4	0.00		7.43
89	4	-0.04		7.42
90	0	3.65		8.39
92	4	0.23		7.49
93	3	0.65		7.60
94	3	0.68		7.61
96	3	-0.80		7.22
97	4	-0.30		7.35
101	0	-2.20		6.85
104	2	1.48		7.82
107	3	-0.68		7.25
109	2	-1.22		7.11
113	4	0.04		7.44
114	3	-0.76		7.23
118	2	1.41		7.80
119	1	1.90		7.93
120	3	0.65		7.60
122	3	0.65		7.60
124	4	0.08	7.45	
127	4	0.38		7.53
128	3	0.57		7.58
134	3	0.84		7.65
138	4	0.11		7.46
139	3	-0.87		7.20
140	0	-2.09		6.88
141	3	0.65		7.60
142	2	-1.41		7.06
145	3	0.65		7.60
146	4	-0.11		7.40
151	3	-0.76		7.23
153	3	-0.68		7.25
161	3	0.87		7.66
179	0	-5.05		6.10
180	4	-0.23		7.37
182	4	0.04		7.44
183	3	-0.61		7.27
184	2	-1.25		7.10
189	0	-3.91		6.40
190	4	-0.38		7.33
194	3	0.72		7.62
197	4	-0.04		7.42
202	4	0.04		7.44
207	3	0.65		7.60

Table 14. Statistical summary of reported data for standard reference water sample M-126 (major constituent)—Continued
SiO₂ (Silica) mg/L



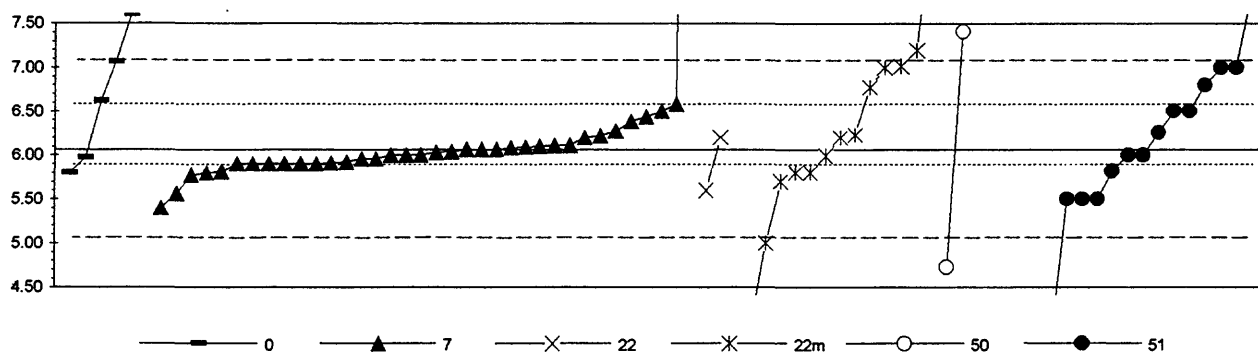
0. Other							
1. AA: direct air							
4. ICP							
	N =	2	1	30	1	1	29
	Minimum =	4.19	4.40	2.00	4.26	4.40	2.00
	Maximum =	7.71	4.40	6.52	4.26	4.40	12.00
	Median =			4.08			4.00
	St Dev =			0.465			0.287

MPV = 4.04
F-pseudosigma = 0.300
N = 64
Hu = 4.28
Hi = 3.87

Lab	Rating	Z-value	0	1	4	5	6	22
1	4	0.10						4.07
2	0	-2.26						3.36
3	1	1.93			4.62			
4	4	0.00			4.04			
5	4	0.08			4.06			
8	0	3.53			5.10			
9	4	-0.50						3.89
10	4	-0.47						3.90
11	4	0.50	4.19					
13	4	-0.03						4.03
15	2	1.37			4.45			
18	4	-0.20						3.98
24	0	-2.33			3.34			
25	1	1.57			4.51			
32	2	1.20					4.40	
33	3	0.73			4.26			
36	0	12.22	7.71					
37	3	0.83						4.29
38	4	-0.13						4.00
39	0	-2.70			3.23			
42	4	-0.13			4.00			
43	4	0.20			4.10			
45	3	0.93			4.32			
50	4	-0.13						4.00
51	4	0.50						4.19
52	2	-1.13						3.70
55	3	0.67			4.24			
57	0	-2.80			3.20			
58	0	-2.53						3.28
59	4	-0.47						3.90
61	0	-6.79			2.00			
63	1	1.57			4.51			
64	4	-0.47			3.90			
68	4	0.33						4.14
70	4	-0.13						4.00
78	2	1.20	4.40					
85	3	0.53						4.20
87	4	-0.13						4.00
89	4	-0.13						4.00
92	2	-1.13						3.70
97	2	-1.03						3.73
101	2	-1.13			3.70			
102	0	26.51						12.00
103	0	-3.46			3.00			
104	4	-0.10						4.01
109	0	2.96			4.93			
113	4	0.40						4.16
116	0	-2.33			3.34			
118	4	0.47						4.18
119	4	-0.13			4.00			

Lab	Rating	Z-value	0	1	4	5	6	22
121	4	0.03			4.05			
127	4	0.43			4.17			
128	4	0.27			4.12			
134	4	0.17			4.09			
138	1	1.70						4.55
140	0	-6.79						2.00
141	0	-2.13						3.40
142	0	2.97			4.93			
145	4	-0.30			3.95			
146	0	-3.96			2.85			
184	0	8.26			6.52			
189	3	0.93			4.32			
190	3	-0.63						3.85
207	0	-3.46						3.00

Table 14. Statistical summary of reported data for standard reference water sample M-126 (major constituent)—Continued
SO4 (Sulfate) mg/L



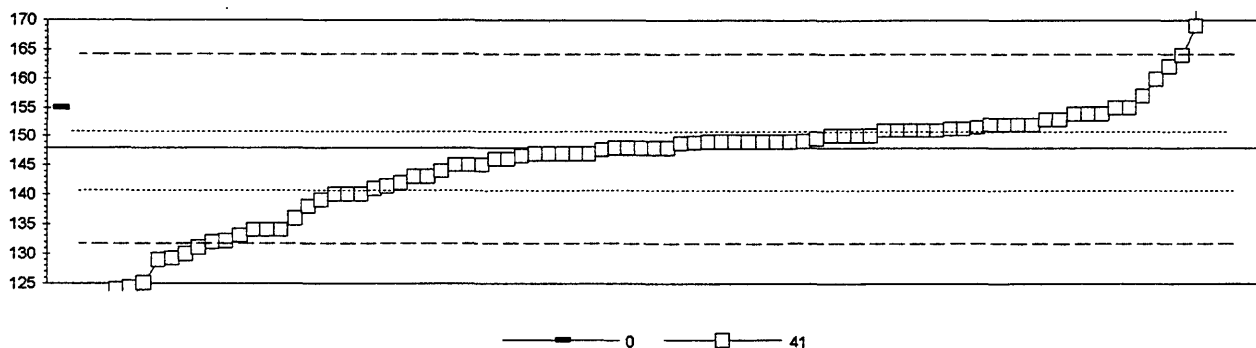
0. Other						
7. Ion chromatography						
22. Colorimetric						
N =	7	36	2	14	2	21
Minimum =	5.80	5.40	5.60	4.00	4.73	0.40
Maximum =	144.00	19.66	6.20	8.60	7.41	15.00
Median =	6.02			6.10		5.91
St Dev =	0.235		0.683	0.922		

MPV = 6.06
F-pseudosigma = 0.504
N = 82
Hu = 6.58
HI = 5.90

Lab	Rating	Z-value	0	7	22	22m	50	51
1	4	0.00		6.06				
3	4	-0.04		6.04				
4	3	0.87		6.50				
5	4	-0.12		6.00				
7	4	-0.32		5.90				
8	4	-0.12		6.00				
9	3	-0.52			5.80			
10	2	-1.11					5.50	
11	3	-0.52	5.80					
12	0	-4.09			4.00			
13	0	5.04			8.60			
15	2	1.03		6.58				
16	4	0.40					6.26	
18	2	1.41			6.77			
19	4	-0.14			5.99			
23	4	-0.48					5.82	
24	0	-3.89			4.10			
26	4	-0.32		5.90				
29	3	-0.52		5.80				
30	0	26.98		19.66				
32	4	-0.30		5.91				
33	2	-1.31		5.40				
36	4	-0.18	5.97					
37	NR			< 6				
39	3	-0.58		5.77				
42	4	-0.28		5.92				
43	NR				< 10			
45	2	1.47					6.80	
46	4	-0.20		5.96				
50	3	-0.52			5.80			
51	3	0.63		6.38				
52	NR						< 10	
54	1	1.86					7.00	
55	1	1.86			7.00			
56	0	3.06	7.60					
57	4	-0.12					6.00	
58	0	-2.64				4.73		
61	0	-7.86					2.10	
63	0	17.74					15.00	
64	4	-0.32		5.90				
69	0	2.26			7.20			
70	3	-0.97		5.57				
75	NR			< 10				
76	4	0.32		6.22				
78	0	-7.06					2.50	
84	0	-11.23					0.40	
85	4	0.00		6.06				
86	4	0.06		6.09				
87	3	0.87					6.50	
89	0	-4.09					4.00	

Lab	Rating	Z-value	0	7	22	22m	50	51
92	3	0.87						6.50
93	4	-0.32		5.90				
94	3	-0.71				5.70		
96	2	-1.11						5.50
97	3	-0.91			5.60			
102	4	0.28				6.20		
109	0	2.68					7.41	
113	4	-0.20		5.96				
114	0	3.55						7.85
116	4	-0.12		6.00				
119	4	-0.12						6.00
120	0	-2.10				5.00		
121	4	0.08		6.10				
124	NR		< 10					
127	4	-0.06		6.03				
128	1	1.90				7.02		
134	4	0.28		6.20				
138	4	-0.32		5.90				
139	2	-1.11						5.50
140	0	273.65	144.00					
141	2	1.11	6.62					
142	1	1.86						7.00
145	4	0.10		6.11				
153	4	0.00		6.06				
161	3	0.75		6.44				
164	4	0.10		6.11				
180	4	0.34				6.23		
182	0	-10.04						1.00
183	0	-10.04						1.00
184	4	0.28			6.20			
189	0							< 1
190	1	1.98	7.06					
191	4	0.04		6.08				
193	4	-0.50		5.81				
194	NR					< 10		
196	4	-0.32		5.90				
197	4	0.42		6.27				
207	3	-0.58						5.77
209	0	-10.77	0.63					

Table 14. Statistical summary of reported data for standard reference water sample M-126 (major constituent)--Continued
Sp Cond (Specific Conductance) μ S/cm



0. Other
41. Direct reading

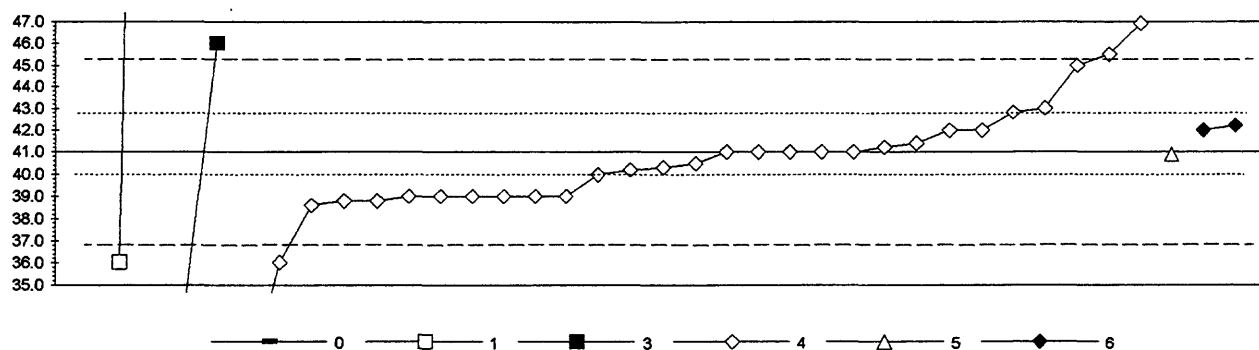
N = 1 88
Minimum = 155 89
Maximum = 155 1500
Median = 148
St Dev = 8.9

MPV = 148
F-pseudosigma = 8.1
N = 89
Hu = 151
Hl = 141

Lab	Rating	Z-value	0	41
1	4	0.12		149
2	0	-2.35		129
3	4	0.00		148
5	2	1.11		157
7	4	0.50		152
8	0	-2.33		129
9	3	-0.74		142
10	4	0.12		149
11	0	-7.31		89
12	0	-2.10		131
13	4	0.20		150
15	3	0.74		154
16	4	0.42		151
18	1	1.73		162
19	4	0.09		149
23	0	-6.45		96
24	3	0.74		154
25	4	0.37		151
26	1	1.98		164
29	4	0.00		148
32	4	-0.12		147
33	3	-0.62		143
36	3	0.87	155	
37	4	-0.25		146
38	4	0.26		150
42	2	1.49		160
43	4	0.12		149
45	4	0.12		149
46	4	-0.25		146
50	4	0.37		151
51	3	-0.62		143
52	1	-1.73		134
54	4	0.12		149
56	0	-2.85		125
57	4	0.25		150
58	0	-2.97		124
60	2	-1.24		138
61	3	-0.99		140
63	4	0.45		152
64	4	0.42		151
68	4	0.12		149
69	3	0.87		155
70	1	-1.98		132
75	4	-0.12		147
76	4	0.37		151
78	0	-4.90		108
79	4	0.25		150
84	0	2.60		169
85	2	-1.11		139
86	4	0.50		152

Lab	Rating	Z-value	0	41
87	3	-0.99		140
89	4	-0.37		145
90	3	0.62		153
92	4	-0.05		148
93	3	-0.82		141
94	4	0.25		150
96	3	0.74		154
97	4	0.50		152
101	3	-0.87		141
102	2	-1.49		136
107	4	0.15		149
109	4	0.00		148
113	4	0.50		152
114	4	0.12		149
118	3	-0.99		140
119	4	0.00		148
122	4	0.00		148
124	4	-0.37		145
127	4	-0.12		147
128	4	-0.50		144
134	4	0.37		151
139	4	-0.12		147
141	4	0.37		151
142	4	-0.17		147
145	1	-1.73		134
146	3	0.62		153
153	3	0.87		155
161	1	-1.73		134
179	0	-2.23		130
182	0	146.72		1333
183	1	-1.86		133
184	0	167.40		1500
189	4	-0.12		147
190	4	0.11		149
193	4	-0.37		145
194	0	160.47		1444
197	0	-2.93		124
202	1	-1.96		132
207	4	-0.25		146

Table 7. Statistical summary of reported data for standard reference water sample M-126 (major constituent)—Continued
Sr (Strontium) μ g/L



0. Other	4. ICP					
1. AA: direct air	5. DCP					
3. AA: graphite furnace	6. ICP/MS					
N =	1	2	2	29	1	2
Minimum =	220.0	36.0	34.2	30.5	40.9	42.0
Maximum =	220.0	107.0	46.0	46.9	40.9	42.2
Median =				40.5		
St Dev =				2.58		

MPV = 41.0
F-pseudosigma = 2.08
N = 37
Hu = 42.8
Hi = 40.0

Lab	Rating	Z-value	0	1	3	4	5	6
1	4	-0.39				40.2		
3	3	-0.96				39.0		
4	3	-0.96				39.0		
7	4	0.10				41.2		
8	0	2.84				46.9		
9	0	31.80		107.0				
15	4	-0.48				40.0		
16	3	-0.96				39.0		
18	4	0.00				41.0		
24	4	-0.34				40.3		
25	3	0.87				42.8		
32	3	0.58						42.2
33	4	-0.05					40.9	
39	3	0.96				43.0		
42	4	0.48				42.0		
46	2	-1.06				38.8		
52	2	-1.16				38.6		
55	0	-2.41				36.0		
57	NR					< 100		
63	0	2.17				45.5		
68	3	-0.96				39.0		
70	0					< 10		
85	4	-0.24				40.5		
94	4	0.00				41.0		
97	0	-3.28			34.2			
102	1	1.93				45.0		
103	4	0.00				41.0		
109	0	-2.41		36.0				
113	NR			< 200				
116	4	0.00				41.0		
121	4	0.00				41.0		
127	4	0.19				41.4		
128	NR					< 5		
134	3	-0.96				39.0		
138	4	0.48				42.0		
141	0	2.41			46.0			
145	3	-0.96				39.0		
146	2	-1.06				38.8		
182	0	86.24	220.0					
189	0	-5.06				30.5		
191	4	0.48						42.0

Table 14. *Statistical summary of reported data for standard reference water sample M-126 (major constituent)--Continued*
V (Vanadium) μ g/L

0. Other							
1. AA: Direct air							
3. AA: graphite furnace							
N =	2	1	2	3	1	1	
Minimum =	1.0	60.0	0.9	3.9	0.3	4.1	
Maximum =	60.0	60.0	1.1	23.9	0.3	4.1	
Median =							
St Dev =							

MPV = insufficient data
F-pseudosigma =
N =
Hu =
Hl =

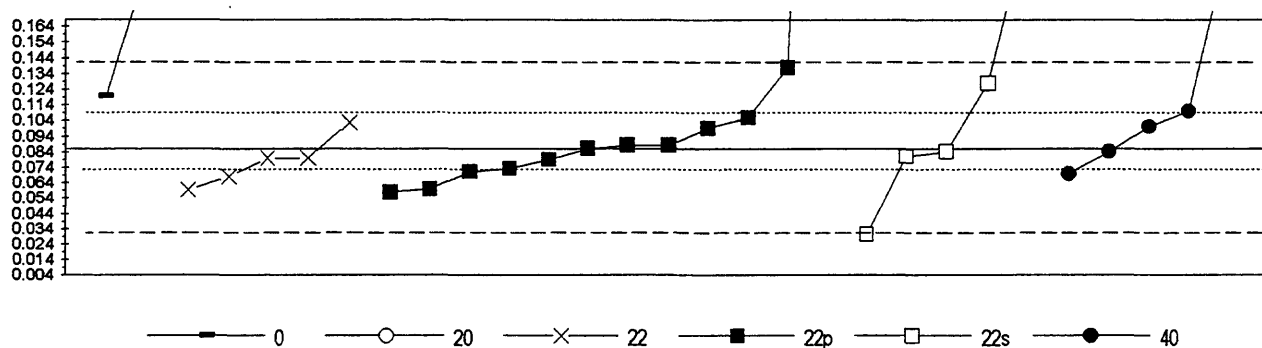
Lab	Rating	Z-value	0	1	3	4	6	22
1								4.1
3						< 3		
4						< 1		
5						< 4		
7						7.0		
11			1.0					
15					0.9			
16						< 10		
18						< 5		
25						< 4		
32							0.3	
46						< 6		
52					< 2			
57						< 50		
61						< 10		
63						< 10		
68						< 3		
70						< 50		
85						< 20		
94						< 5		
97					1.1			
102						3.9		
103						< 10		
127					< 2			
134					< 1			
138						< 3		
141						< 1		
145						< 1.3		
180						< 3.0		
182			60.0	60.0				
184						< 10		
189						23.9		

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Table 15.-- *Statistical summary of reported data for standard reference sample N-38 (nutrients)*

Definition of analytical methods, abbreviations, and symbols		
<u>Analytical methods</u>		
0. Other/Not reported		
7. IC	=	ion chromatography
22. Color:	=	colorimetric [color reagent specified]
40. Ion electrode	=	ion selective electrode
<u>Abbreviations and symbols</u>		
	N =	number of samples
	St dev =	traditional standard deviation
	MPV =	95% confidence most probable value
	F-pseudosigma =	nonparametric statistic deviation
	Hu =	upper hinge value
	Hi =	lower hinge value
	mg/L =	milligrams per liter
	Lab =	laboratory code number
	NR =	not rated, less than value reported
	< =	less than
<u>Constituent</u>		
NH3 as N	Ammonia as nitrogen	<u>page</u> 114
NH3+Org N as N	Ammonia plus organic nitrogen	116
NO3+NO2 as N	Nitrate plus nitrite as nitrogen	118
Total P as P	Total Phosphorus as phosphorus	120
PO4 as P	Orthophosphate as phosphorus	122

Table 15. Statistical summary of reported data for standard reference water sample N-38 (preserved nutrients)--Continued
NH3 as N (Ammonia) **mg/L**



0. Other	22p. Color: phenate
20. Titrate: colorimetric	22s. Color: salicylate
22. Colorimetric	40. Ion electrode
N = 2	0 5 12 5 5
Minimum = 0.120	0.059 0.058 0.030 0.070
Maximum = 0.200	0.103 0.700 0.230 0.218
Median =	0.086
St Dev =	0.0228

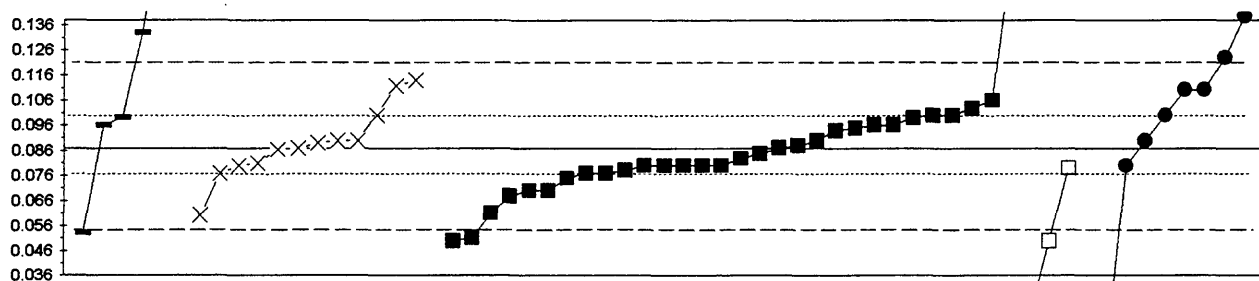
MPV = 0.086
F-pseudosigma = 0.0274
N = 29
Hu = 0.110
Hi = 0.073

Lab	Rating	Z-value	0	20	22	22p	22s	40
1	4	-0.18					0.081	
7	3	-0.98			0.059			
11	2	1.24	0.120					
15	3	-0.55				0.071		
45	0	4.81						0.218
52	3	0.73				0.106		
61	1	1.90				0.138		
63	NR			< 0.3				
68	3	-0.58						0.070
75	1	1.53					0.128	
88	0	5.25					0.230	
89	4	0.47				0.099		
90	4	0.07				0.088		
93	4	-0.47				0.073		
97	4	-0.22			0.080			
108	4	-0.07						0.084
114	NR							< 0.10
118	3	-0.95				0.060		
119	3	0.88						0.110
120	4	0.07				0.088		
121	4	-0.26				0.079		
122	4	0.00				0.086		
124	0	4.16	0.200					
133	3	0.51						0.100
134	4	-0.07					0.084	
139	2	-1.02				0.058		
140	4	-0.22			0.080			
141	0	22.39				0.700		
145	1	-2.04					0.030	
179	3	0.62			0.103			
180	3	-0.66			0.068			

Table 15. Statistical summary of reported data for standard reference water sample N-38 (nonpreserved nutrients)—Continued

NH₃ as N (Ammonia)

m g/L



—●— 0 —x— 22 —◇— 22n —■— 22p —□— 22s —■— 40

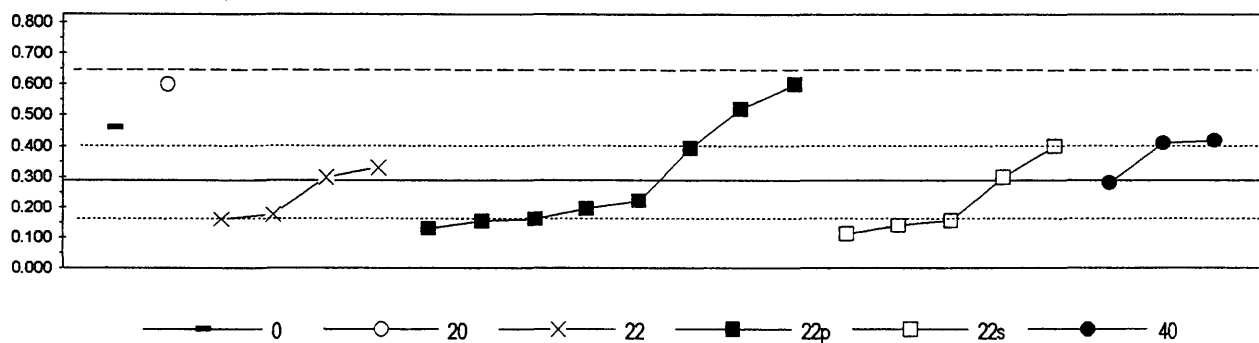
0. Other						
22. Colorimetric						
22n. Color: Nesslerization						
N =	6	12	1	30	3	10
Minimum =	0.053	0.060	0.440	0.050	0.019	0.002
Maximum =	0.420	0.114		0.165	0.079	0.289
Median =		0.088		0.080		0.105
St Dev =		0.0148		0.0144		0.0155

MPV = 0.087
 F-pseudosigma = 0.0170
 N = 61
 Hu = 0.100
 HI = 0.077

Lab	Rating	Z-value	0	22	22n	22p	22s	40
2	3	-0.59		0.077				
10	3	0.76			0.100			
11	0	5.45	0.180					
12	NR				< 0.2			
13	4	0.18			0.090			
15	0				< 0.05			
16	NR		< 0.1					
18	0	-2.11			0.051			
19	2	-1.11			0.068			
21	3	0.53			0.096			
23	3	0.70			0.099			
25	4	0.18					0.090	
32	0	2.70	0.133					
33	4	0.18		0.090				
36	NR		< 0.10					
37	4	-0.04		0.086				
38	3	0.53			0.096			
41	0	-4.75					0.006	
45	0	11.85					0.289	
46	3	0.94			0.103			
51	4	-0.41					0.080	
52	2	1.11			0.106			
55	4	-0.41			0.080			
58	1	-1.99	0.053					
59	4	-0.41			0.080			
63	NR		< 0.3					
68	0	-4.99					0.002	
70	4	-0.41			0.080			
74	3	0.76		0.100				
76	3	-0.70			0.075			
85	4	0.00			0.087			
87	0	4.57			0.165			
88	0	-3.99				0.019		
89	4	0.47			0.095			
91	1	-1.58		0.060				
92	0	3.11					0.140	
94	3	0.76			0.100			
96	1	-1.52			0.061			
97	4	0.18		0.090				
102	3	-1.00			0.070			
104	4	-0.23			0.083			
107	4	0.12		0.089				
111	4	-0.41			0.080			
113	0	-2.17			0.050			
114	NR						< 0.10	
118	4	-0.41			0.080			
119	2	1.35					0.110	
122	4	-0.12			0.085			
127	4	0.06			0.088			
128	3	-1.00			0.070			

Lab	Rating	Z-value	0	22	22n	22p	22s	40
134	4	-0.47					0.079	
138	4	0.41				0.094		
139	3	-0.59				0.077		
142	4	-0.35		0.081				
145	0	-2.17					0.050	
151	3	0.76						0.100
161	0	2.11						0.123
179	2	1.47		0.112				
180	4	0.00		0.087				
182	0	20.70			0.440			
184	NR		< 0.1					
189	4	-0.41		0.080				
190	1	1.58		0.114				
194	NR		< 0.10					
197	3	-0.53				0.078		
198	3	0.71	0.099					
202	2	1.35						0.110
207	3	-0.59				0.077		
209	3	0.53	0.096					
210	0	19.53	0.420					

Table 15. Statistical summary of reported data for standard reference water sample N-38 (preserved nutrients)—Continued
 NH3 + Org. N as N (Ammonia + Organic N) m g/L

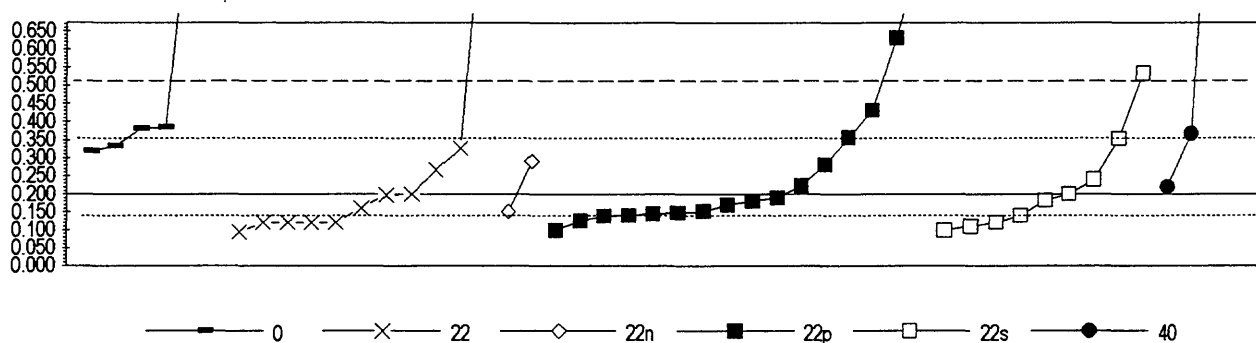


0. Other	22p. Color: phenate					
20. Titrate: colorimetric	22s. Color: salicylate					
22. Colorimetric	40. Ion electrode					
N =	1	1	4	8	5	3
Minimum =	0.460	0.600	0.160	0.129	0.110	0.280
Maximum =			0.330	0.598	0.400	0.417
Median =				0.208		
St Dev =				0.1823		

MPV = 0.289
 F-pseudosigma = 0.178
 N = 22
 Hu = 0.400
 HI = 0.160

Lab	Rating	Z-value	0	20	22	22p	22s	40
1	3	-0.75				0.156		
15	NR					< 0.5		
21	3	-0.52				0.196		
45	3	0.72						0.417
52	3	-0.90				0.129		
56	3	0.57				0.390		
61	3	-0.73				0.160		
63	1	1.75		0.600				
68	3	0.96	0.460					
89	2	-1.01					0.110	
97	3	-0.73			0.160			
114	3	0.62					0.400	
118	2	1.30				0.520		
119	4	-0.05						0.280
120	3	-0.76				0.154		
122	4	-0.39				0.220		
133	3	0.68						0.410
134	4	0.05					0.298	
139	1	1.74				0.598		
140	4	0.23			0.330			
141	NR					< 0.10		
145	3	-0.84					0.140	
179	4	0.06			0.300			
180	3	-0.64			0.176			

Table 15. Statistical summary of reported data for standard reference water sample N-38 (nonpreserved nutrients)—Continued
NH3 + Org N as N (Ammonia + Organic N) **mg/L**



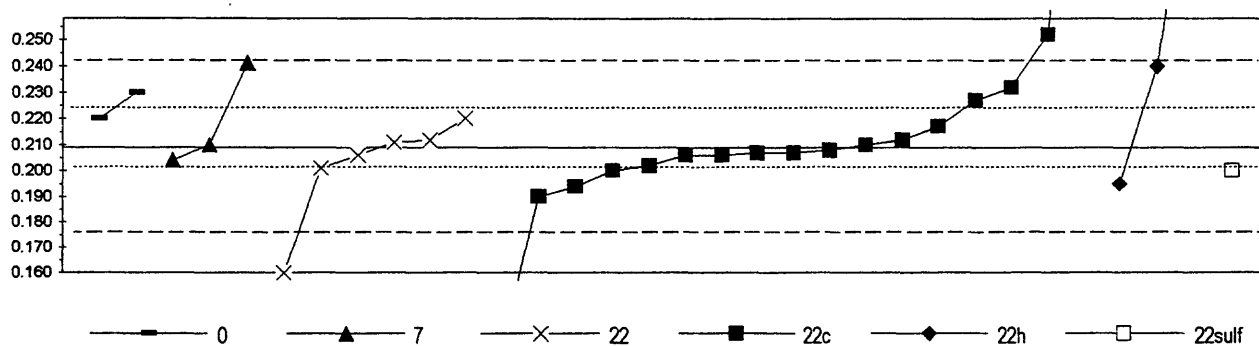
0. Other	22p. Color: phenate					
22. Colorimetric	22s. Color: salicylate					
22n. Color: Nesslerization	40. Ion electrode					
N =	6	11	2	16	9	4
Minimum =	0.320	0.094	0.150	0.100	0.100	0.200
Maximum =	1.700	1.090	0.290	0.872	0.532	1.470
Median =		0.141		0.160	0.182	
St Dev =		0.0753		0.0944	0.1414	

MPV = 0.200
F-pseudosigma = 0.158
N = 48
Hu = 0.353
HI = 0.140

Lab	Rating	Z-value	0	22	22n	22p	22s	40
2	NR	< 1						
10	3	-0.51				0.120		
12	NR				< 0.3			
13	0	2.72			0.630			
15	NR				< 0.5			
16	3	0.85	0.334					
18	3	0.98			0.354			
21	4	-0.34			0.146			
23	0	2.10				0.532		
36	2	1.17	0.384					
37	4	0.42		0.266				
38	4	-0.32			0.150			
41	0	8.04					1.470	
45	2	1.05					0.366	
46	NR				< 0.2			
51	4	0.13					0.220	
52	4	-0.47			0.126			
55	4	-0.06			0.190			
58	2	1.15	0.382					
59	3	-0.63				0.100		
63	0	9.50	1.700					
70	2	1.46			0.430			
74	3	-0.67		0.094				
79	NR					< 0.2		
85	3	-0.63			0.100			
87	0	4.26			0.872			
89	4	-0.38				0.140		
90	4	-0.39			0.138			
91	3	-0.51		0.120				
94	3	0.51			0.280			
96	4	-0.38			0.140			
97	3	-0.51		0.120				
102	4	-0.32			0.150			
107	3	0.80		0.326				
113	NR					< 0.5		
114	4	0.25				0.240		
118	4	-0.19			0.170			
119	4	0.00					0.200	
122	4	-0.13			0.180			
127	4	-0.33			0.148			
128	NR				< 0.5			
134	3	0.96				0.352		
138	4	-0.11				0.182		
139	4	0.15			0.223			
142	4	-0.01		0.198				
145	3	-0.57				0.110		
179	4	0.00		0.200				
180	4	-0.24		0.162				
183	3	0.76	0.320					
184	NR		< 0.1					

Lab	Rating	Z-value	0	22	22n	22p	22s	40
189	0	5.64		1.090				
190	3	-0.51		0.120				
194	3	-0.51		0.120				
198	NR		< 0.1					
202	4	0.00					0.200	
207	3	0.57			0.290			
210	0	5.38	1.050					

Table 15. Statistical summary of reported data for standard reference water sample N-38 (preserved nutrients)—Continued
NO₃ + NO₂ as N (Nitrate + Nitrite) m g/L

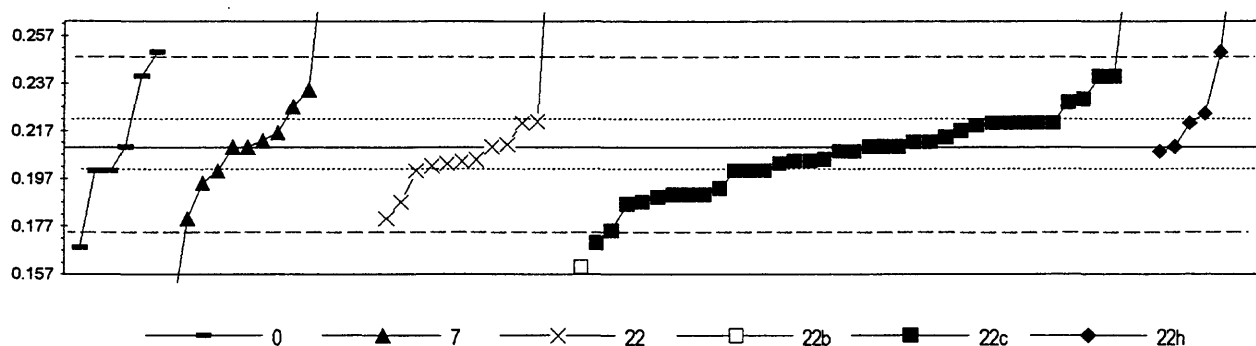


0. Other	22c. Color: Cd diazo					
7. Ion chromatography	22h. Color: hydrazine diazo					
22. Colorimetric	22sulf. Color: sulfanilamide					
N =	2	3	6	17	3	1
Minimum =	0.220	0.204	0.160	0.130	0.195	0.200
Maximum =	0.230	0.241	0.220	0.403	0.330	
Median =				0.207		
St Dev =				0.0157		

MPV = 0.209
F-pseudosigma = 0.0163
N = 32
Hu = 0.224
Hi = 0.202

Lab	Rating	Z-value	0	7	22	22c	22h	22sulf
1	4	-0.06				0.208		
7	4	0.18			0.212			
11	3	0.67	0.220					
21	3	-0.86					0.195	
29	4	0.06		0.210				
39	4	-0.31		0.204				
42	1	1.96		0.241				
43	3	-0.55						0.200
45	2	1.41				0.232		
52	4	0.18				0.212		
53	0	-4.84				0.130		
61	4	0.49				0.217		
63	3	0.67		0.220				
75	4	-0.18				0.206		
78	2	1.10				0.227		
88	0	11.90				0.403		
92	4	-0.43				0.202		
97	4	0.06				0.210		
108	3	-0.55				0.200		
114	0	7.42					0.330	
118	1	1.90					0.240	
119	0	-3.00		0.160				
121	4	-0.18				0.206		
122	4	-0.12				0.207		
124	2	1.29	0.230					
134	4	-0.12				0.207		
139	3	-0.92				0.194		
140	4	-0.49		0.201				
141	0	2.64				0.252		
145	2	-1.17				0.190		
179	4	-0.18			0.206			
180	4	0.12			0.211			

Table 15. Statistical summary of reported data for standard reference water sample N-38 (nonpreserved nutrients)—Continued
NO3 + NO2 as N (Nitrate + Nitrite) m g/L



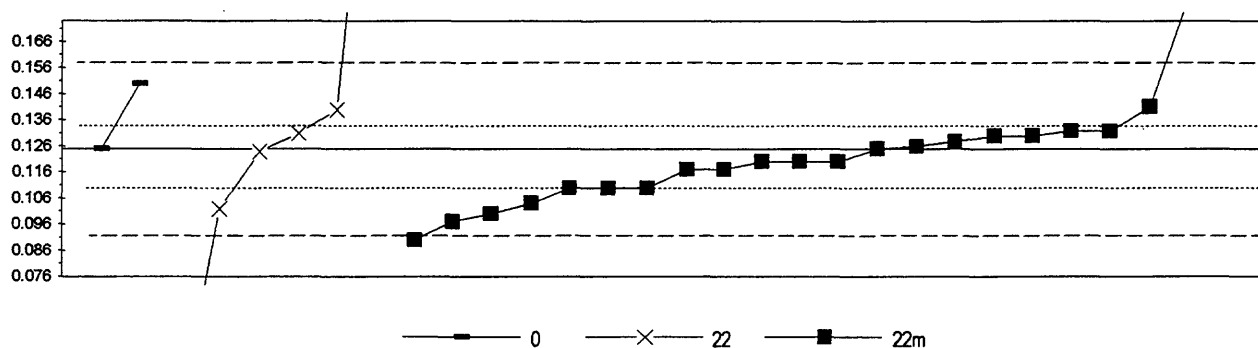
0. Other	22b. Color: brucine	
7. Ion chromatography	22c. Color: Cd diazo	
22. Colorimetric	22h. Color: hydrazine diazo	
N = 6	14	13
Minimum = 0.168	0.140	0.180
Maximum = 0.250	0.810	0.407
Median = 0.210	0.204	0.208
St Dev = 0.0163	0.0123	0.0165
		0.0168

MPV = 0.210
F-pseudosigma = 0.018
N = 78
Hu = 0.224
HI = 0.200

Lab	Rating	Z-value	0	7	22	22b	22c	22h
2	2	-1.29			0.187			
10	4	0.00				0.210		
11	4	0.00	0.210					
12	3	0.56				0.220		
13	2	-1.12				0.190		
15	NR		< 0.5					
16	0	11.07		0.407				
18	2	-1.29				0.187		
19	1	1.69				0.240		
21	3	0.56					0.220	
23	4	0.11				0.212		
25	0	11.80		0.420				
29	3	-0.56		0.200				
32	4	0.17		0.213				
33	0	-3.93		0.140				
36	3	-0.56	0.200					
37	4	0.34		0.216				
38	3	0.51				0.219		
41	4	-0.28				0.205		
42	2	1.35		0.234				
45	2	1.07				0.229		
46	4	0.22				0.214		
51	4	0.00		0.210				
52	4	0.11				0.212		
55	3	0.56				0.220		
56	0	-2.25				0.170		
58	0	2.25	0.250				0.210	
59	4	0.00						
63	3	-0.56			0.200			
68	3	-0.56	0.200					
69	3	-0.56				0.200		
70	3	0.56				0.220		
74	4	-0.34			0.204			
76	3	0.96		0.227				
78	1	-1.97				0.175		
85	4	0.00				0.210		
87	2	-1.12				0.190		
88	0	10.68				0.400		
89	4	-0.11				0.208		
90	3	0.79					0.224	
91	1	-1.69		0.180				
92	4	-0.34				0.204		
94	2	-1.12				0.190		
96	4	-0.11					0.208	
97	3	0.56				0.220		
102	3	0.56				0.220		
104	4	0.39				0.217		
107	4	-0.45		0.202				
113	2	-1.18				0.189		
114	0	5.06					0.300	

Lab	Rating	Z-value	0	7	22	22b	22c	22h
118	4	0.00						0.210
119	0	-2.81				0.160		
120	3	-0.56					0.200	
122	4	-0.11					0.208	
127	4	-0.39					0.203	
128	0	2.25						0.250
134	4	-0.34					0.204	
138	3	-0.96					0.193	
139	2	-1.35					0.186	
142	4	0.06			0.211			
145	3	-0.56					0.200	
146	0	4.78					0.295	
151	4	0.00		0.210				
161	0	10.45		0.396				
179	4	-0.28			0.205			
180	4	-0.39			0.203			
184	4	0.00			0.210			
189	0	6.75			0.330			
190	3	0.62			0.221			
191	3	-0.84		0.195				
193	1	-1.69		0.180				
194	3	0.56			0.220			
196	0	4.67		0.293				
197	1	1.69					0.240	
198	1	1.69	0.240					
202	2	1.12					0.230	
206	0	33.73		0.810				
207	0	5.62						0.310
210	0	-2.36	0.168					

Table 15. Statistical summary of reported data for standard reference water sample N-38 (preserved nutrients)—Continued
Total P as P (total Phosphorus) m g/L



0. Other

22. Colorimetric

22m. Color: phosphomolybdate

N = 2 6 22

Minimum = 0.125 0.020 0.090

Maximum = 0.150 0.290 0.250

Median = 0.120

St Dev = 0.0133

MPV = 0.125

F-pseudosigma = 0.0163

N = 30

Hu = 0.132

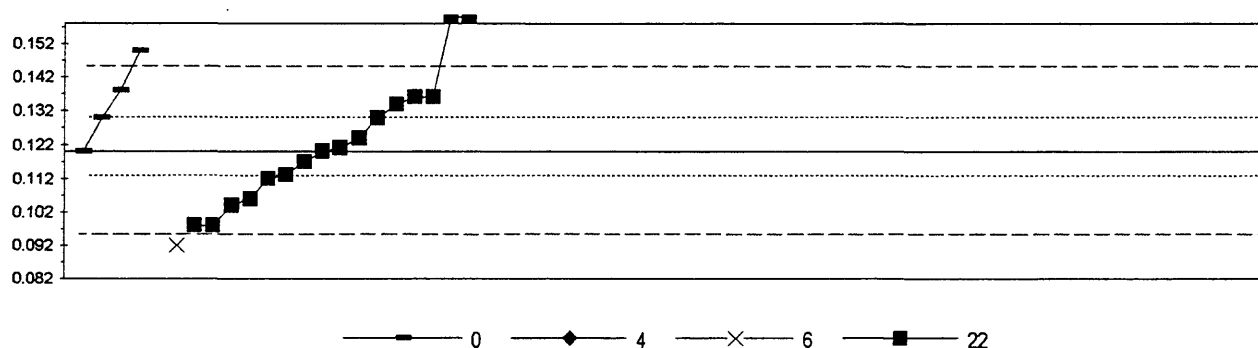
Hi = 0.110

Lab	Rating	Z-value	0	22	22m
1	4	-0.49			0.117
7	0	10.12		0.290	
11	1	1.53	0.150		
15	4	0.06			0.126
42	4	0.37		0.131	
45	3	0.98			0.141
52	4	-0.31			0.120
53	1	-1.72			0.097
56	3	-0.92			0.110
61	4	-0.49			0.117
63	4	-0.31			0.120
68	4	0.00	0.125		
75	4	0.43			0.132
78	0	-2.15			0.090
89	4	0.00			0.125
92	1	-1.53			0.100
97	3	0.92		0.140	
108	0	7.66			0.250
114	4	-0.31			0.120
118	3	-0.92			0.110
119	4	0.31			0.130
122	2	-1.29			0.104
133	4	0.31			0.130
134	4	0.18			0.128
139	4	0.43			0.132
140	0	-6.44	0.020		
141	0	3.68			0.185
145	3	-0.92			0.110
179	4	-0.06	0.124		
180	2	-1.41	0.102		

Table 15. Statistical summary of reported data for standard reference water sample N-38 (nonpreserved nutrients)—Continued

Total P as P (total Phosphorus)

m g/L



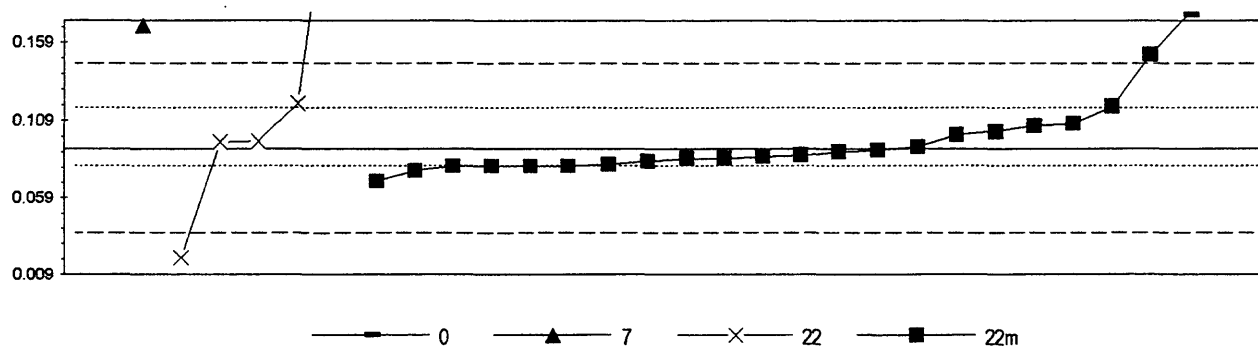
0. Other	22. Colorimetric
4. ICP	22m. Color: phosphomolybdate
6. ICP/MS	
N =	4 0 1 17 43
Minimum =	0.120 0.092 0.098 0.060
Maximum =	0.150 0.860 0.316
Median =	0.119 0.120
St Dev =	0.0133 0.0125

MPV = 0.120
 F-pseudosigma = 0.0126
 N = 65
 Hu = 0.130
 Hl = 0.113

Lab	Rating	Z-value	0	4	6	22	22m
2	2	1.11				0.134	
5	2	-1.11				0.106	
10	1	1.59				0.140	
11	3	0.79	0.130				
12	0	2.38				0.150	
13	3	0.79				0.130	
15	4	0.48				0.126	
16	2	1.27			0.136		
18	4	-0.48				0.114	
19	4	0.00				0.120	
21	3	0.79				0.130	
23	4	0.16				0.122	
25	NR		< 0.121				
36	4	0.00	0.120				
37	1	-1.75			0.098		
38	3	0.63				0.128	
45	1	1.59				0.140	
46	4	-0.48				0.114	
51	4	-0.24			0.117		
52	3	-0.56				0.113	
55	3	-0.79				0.110	
58	0	7.78				0.218	
59	1	-1.59				0.100	
63	4	0.00				0.120	
70	4	0.00				0.120	
74	4	0.32			0.124		
78	1	1.59				0.140	
79	NR					< 0.20	
85	4	0.00				0.120	
87	0	15.55				0.316	
89	4	-0.48				0.114	
90	0	2.46				0.151	
91	0	3.17			0.160		
92	3	-0.79				0.110	
94	4	0.00				0.120	
96	0	-2.06				0.094	
97	0	3.17			0.160		
102	4	0.32				0.124	
104	3	0.63				0.128	
107	3	-0.63			0.112		
111	4	-0.08				0.119	
113	4	0.00				0.120	
114	4	0.00				0.120	
118	3	-0.79				0.110	
119	3	0.79				0.130	
120	3	-0.79				0.110	
122	1	-1.90				0.096	
127	4	0.00				0.120	
128	4	0.00				0.120	
134	4	0.08				0.121	

Lab	Rating	Z-value	0	4	6	22	22m
138	4	-0.40					0.115
139	2	1.19					0.135
142	2	-1.27				0.104	
145	3	-0.79					0.110
161	2	1.27				0.136	
179	4	0.08				0.121	
180	1	-1.75				0.098	
183	4	-0.40					0.115
184	0	58.72				0.860	
189	4	0.00				0.120	
190	3	-0.56				0.113	
191	0	-2.22			0.092		
194	3	0.79				0.130	
198	2	1.43	0.138				
202	4	0.00					0.120
207	0	-4.76					0.060
210	0	2.37	0.150				

Table 15. Statistical summary of reported data for standard reference water sample N-38 (preserved nutrients)—Continued
PO4 as P (Orthophosphate) **m g/L**

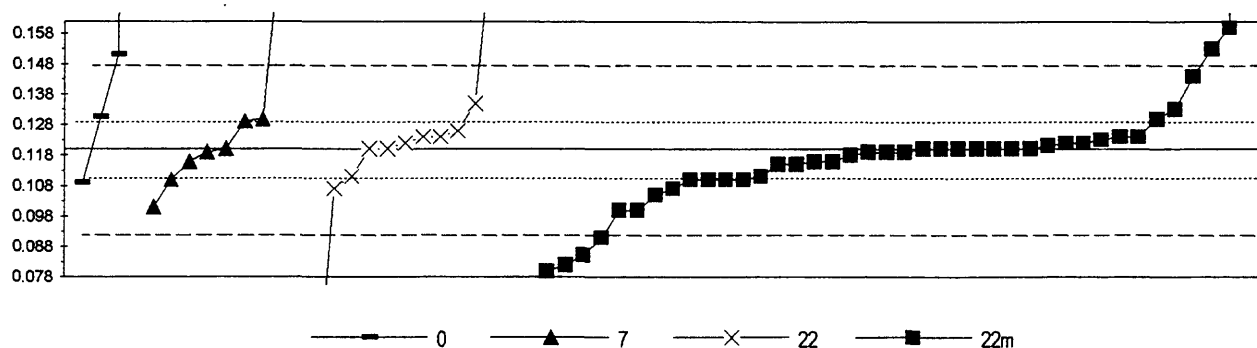


0. Other	22m. Color: phosphomolybdate			
7. Ion chromatography				
22. Colorimetric				
N =	1	1	5	23
Minimum =	0.840	0.170	0.020	0.070
Maximum =			0.300	0.674
Median =				0.086
St Dev =				0.0179

MPV = 0.091
F-pseudosigma = 0.0274
N = 30
Hu = 0.118
Hi = 0.081

Lab	Rating	Z-value	0	7	22	22m
1	4	-0.36				0.081
7	0	7.62			0.300	
11	0	27.31	0.840			
29	0	2.88		0.170		
42	4	-0.07				0.089
45	3	0.58				0.107
52	4	-0.15				0.087
56	3	-0.77				0.070
61	3	0.55				0.106
63	4	0.33				0.100
75	4	-0.29				0.083
78	0	2.19				0.151
88	0	21.26				0.674
89	4	-0.18				0.086
90	3	-0.51				0.077
92	4	0.40				0.102
97	2	1.06			0.120	
108	0	3.24				0.180
118	4	-0.40				0.080
119	4	-0.40				0.080
121	4	-0.22				0.085
122	4	-0.40				0.080
133	4	-0.40				0.080
134	4	0.04				0.092
139	4	-0.22				0.085
140	0	-2.59			0.020	
141	3	0.98				0.118
145	4	-0.04				0.090
179	4	0.18			0.096	
180	4	0.15			0.095	

Table 15. Statistical summary of reported data for standard reference water sample N-38 (nonpreserved nutrients)—Continued
PO4 as P (Orthophosphate) m g/L



0. Other	22e. Color: phosphomolybdate			
7. Ion chromatography				
22. Colorimetric				
N =	4	9	13	40
Minimum =	0.109	0.101	0.030	0.080
Maximum =	0.890	0.360	2.600	0.703
Median =	0.119	0.122	0.119	
St Dev =	0.0102	0.0082	0.0162	

MPV = 0.120
F-pseudosigma = 0.0141
N = 66
Hu = 0.129
HI = 0.110

Lab	Rating	Z-value	0	7	22	22m
2	4	0.14			0.122	
10	4	0.28			0.124	
11	0	54.67	0.890			
12	3	-0.71			0.110	
13	4	0.00			0.120	
15	4	0.14			0.122	
16	3	-0.64		0.111		
18	1	1.70			0.144	
19	4	0.14			0.122	
21	4	0.21			0.123	
23	0	-2.70			0.082	
25	NR			< 0.168		
29	0	4.97		0.190		
32	4	-0.28		0.116		
33	3	0.71		0.130		
36	3	-0.78	0.109			
37	0	5.18		0.193		
38	4	-0.14			0.118	
45	3	0.92			0.133	
46	3	-0.64			0.111	
51	3	-0.92		0.107		
52	4	-0.07			0.119	
55	4	0.00			0.120	
58	4	-0.07			0.119	
59	4	0.00			0.120	
63	3	0.71			0.130	
70	2	-1.42			0.100	
74	4	0.28		0.124		
78	0			< 0.05		
85	4	0.00			0.120	
87	0	2.34			0.153	
88	0	41.39			0.703	
89	4	0.07			0.121	
92	3	-0.71			0.110	
96	2	-1.07			0.105	
97	4	0.00		0.120		
102	0	-2.49			0.085	
104	4	0.00			0.120	
111	4	-0.28			0.116	
113	4	-0.35			0.115	
118	3	-0.71			0.110	
119	3	-0.71			0.110	
120	2	-1.42			0.100	
122	4	-0.35			0.115	
127	4	-0.07		0.119		
134	4	-0.28			0.116	
138	4	0.28			0.124	
139	0	-2.06			0.091	
142	4	0.28		0.124		
145	4	0.00			0.120	

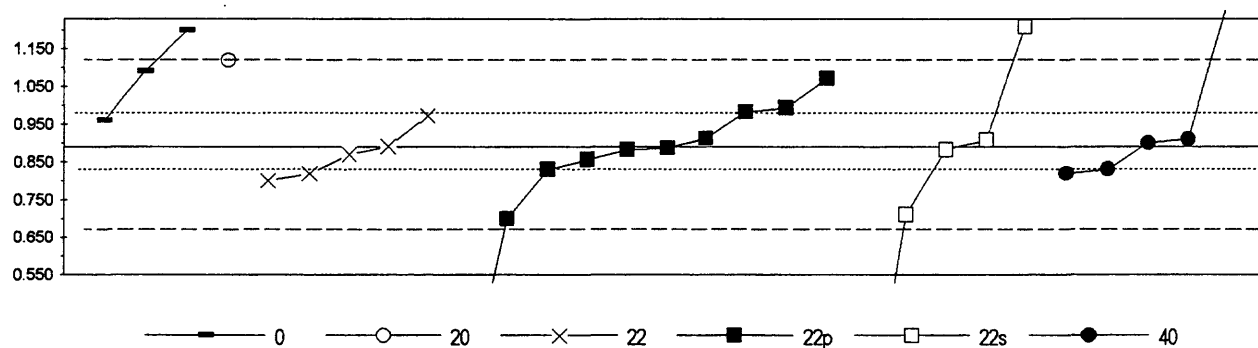
Lab	Rating	Z-value	0	7	22	22m
146	4	-0.07				0.119
151	4	0.00		0.120		
161	0	-6.39			0.030	
179	2	1.07			0.135	
180	4	0.43			0.126	
182	0	2.84				0.160
183	3	-0.92				0.107
184	0	176.08			2.600	
189	4	0.00			0.120	
190	0	90.17			1.390	
191	3	-0.71		0.110		
196	3	0.64		0.129		
197	2	-1.35		0.101		
198	3	0.75	0.131			
202	4	0.00				0.120
206	0	17.04		0.360		
207	0	-2.84				0.080
210	0	2.20	0.151			

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Table 16.-- *Statistical summary of reported data for standard reference sample N-39 (nutrients)*

Definition of analytical methods, abbreviations, and symbols		
<u>Analytical methods</u>		
0. Other/Not reported		
7. IC	=	ion chromatography
22. Color:	=	colorimetric [color reagent specified]
40. Ion electrode	=	ion selective electrode
<u>Abbreviations and symbols</u>		
	N =	number of samples
	St dev =	traditional standard deviation
	MPV =	95% confidence most probable value
	F-pseudosigma =	nonparametric statistic deviation
	Hu =	upper hinge value
	Hi =	lower hinge value
	mg/L =	milligrams per liter
	Lab =	laboratory code number
	NR =	not rated, less than value reported
	< =	less than
<u>Constituent</u>		
NH3 as N	Ammonia as nitrogen	<u>page</u> 125
NH3+Org N as N	Ammonia plus organic nitrogen	127
NO3+NO2 as N	Nitrate plus nitrite as nitrogen	129
Total P as P	Total Phosphorus as phosphorus	131
PO4 as P	Orthophosphate as phosphorus	133

Table 16. Statistical summary of reported data for standard reference water sample N-39 (preserved nutrients)--Continued
NH₃ as N (Ammonia)
m g/L

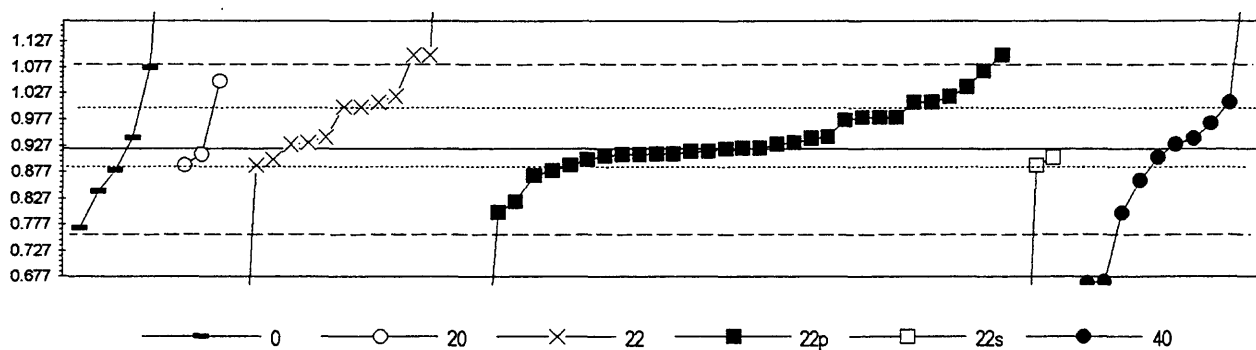


0. Other						
20. Titrate: colorimetric						
22. Colorimetric						
N =	3	1	5	10	5	5
Minimum =	0.960	1.120	0.801	0.216	0.063	0.820
Maximum =	1.200	1.120	0.972	1.070	1.210	1.290
Median =				0.886		
St Dev =				0.1071		

MPV = 0.890
F-pseudosigma = 0.1134
N = 29
Hu = 0.983
Hi = 0.830

Lab	Rating	Z-value	0	20	22	22p	22s	40
1	4	0.15					0.907	
7	4	-0.18			0.870			
11	3	0.62	0.960					
15	1	1.59				1.070		
45	0	3.53						1.290
52	3	0.72			0.972			
60	1	2.03		1.120				
61	3	0.90				0.992		
63	0				< 0.3			
68	3	-0.62						0.820
75	0	2.82					1.210	
88	0	-7.29					0.063	
89	4	-0.08				0.881		
90	3	0.82				0.983		
93	4	0.20				0.913		
97	3	-0.62			0.820			
114	4	0.18						0.910
118	1	-1.68				0.700		
119	3	-0.53						0.830
120	4	-0.30				0.856		
122	0	-5.94				0.216		
124	0	2.73	1.200					
133	4	0.09						0.900
134	4	-0.06					0.883	
139	3	-0.53				0.830		
140	4	0.00			0.890			
141	4	-0.04				0.886		
145	1	-1.59					0.710	
179	1	1.76	1.090					
180	3	-0.78			0.801			

Table 16. Statistical summary of reported data for standard reference water sample N-39 (nonpreserved nutrients)—Continued
NH₃ as N (Ammonia) **m g/L**



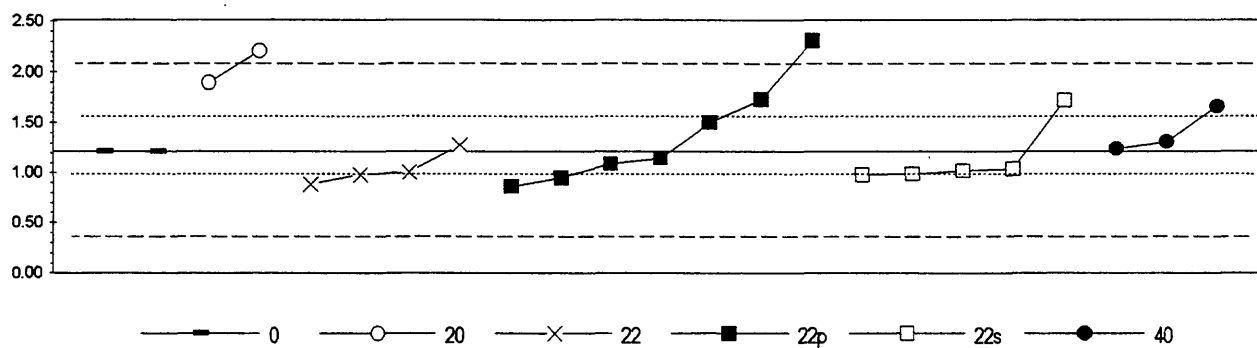
0. Other						
20. Titrate: colorimetric						
22. Colorimetric						
	N =	6	3	13	32	11
	Minimum =	0.770	0.890	0.221	0.216	0.065
	Maximum =	1.600	1.050	1.880	1.100	0.905
	Median =			1.000	0.922	0.930
	St Dev =			0.0726	0.0665	0.0701

MPV = 0.922
F-pseudosigma = 0.0815
N = 68
Hu = 1.000
Hi = 0.890

Lab	Rating	Z-value	0	20	22	22p	22s	40
3	4	0.10			0.930			
9	4	0.13			0.932			
10	3	0.72				0.980		
11	0	8.32	1.600					
12	0	2.19				1.100		
13	4	-0.14				0.910		
15	4	-0.07				0.916		
16	4	-0.39		0.890				
18	4	-0.01				0.921		
19	4	-0.02				0.920		
23	4	-0.08				0.915		
25	4	-0.20					0.905	
32	4	0.24	0.941					
33	0	2.19			1.100			
36	3	-0.51	0.880					
37	4	0.26			0.943			
38	2	1.44				1.039		
41	0	-3.15					0.665	
45	0	-3.12					0.667	
46	4	0.26				0.943		
52	3	0.96			1.000			
55	4	0.10				0.930		
57	2	1.09					1.010	
58	1	-1.86	0.770					
59	3	0.72				0.980		
60	4	-0.14		0.910				
63	0	2.19			1.100			
68	0	-9.41					0.154	
70	3	-0.63				0.870		
74	2	1.22			1.021			
76	4	0.01				0.922		
84	4	0.23				0.940		
85	2	1.09				1.010		
87	0	-6.69				0.376		
88	0	-10.50					0.065	
89	4	-0.14				0.910		
91	4	-0.39		0.890				
92	0	4.76					1.310	
94	2	1.09				1.010		
96	4	-0.13				0.911		
97	2	1.09			1.010			
102	2	-1.49				0.800		
104	4	-0.19				0.906		
111	4	-0.26				0.900		
113	1	1.82				1.070		
114	4	0.10					0.930	
118	4	-0.39				0.890		
119	3	-0.75					0.860	
122	0	-8.65				0.216		
127	3	0.67				0.976		

Lab	Rating	Z-value	0	20	22	22p	22s	40
128	3	-0.51				0.880		
134	4	-0.20					0.905	
138	3	0.72				0.980		
139	4	0.14				0.933		
145	4	-0.39					0.890	
151	4	0.23						0.940
161	2	-1.50						0.799
179	1	1.88	1.075					
180	3	0.96			1.000			
182	0	11.75			1.880			
184	2	-1.24				0.820		
189	4	-0.26			0.900			
190	0	-8.59			0.221			
197	4	-0.13				0.911		
202	3	0.59						0.970
205	1	1.58		1.050				
207	2	1.21				1.020		
210	3	-1.00	0.840					

Table 16. Statistical summary of reported data for standard reference water sample N-39 (preserved nutrients)—Continued
NH₃ + Org N as N (Ammonia + Organic N) **m g/L**

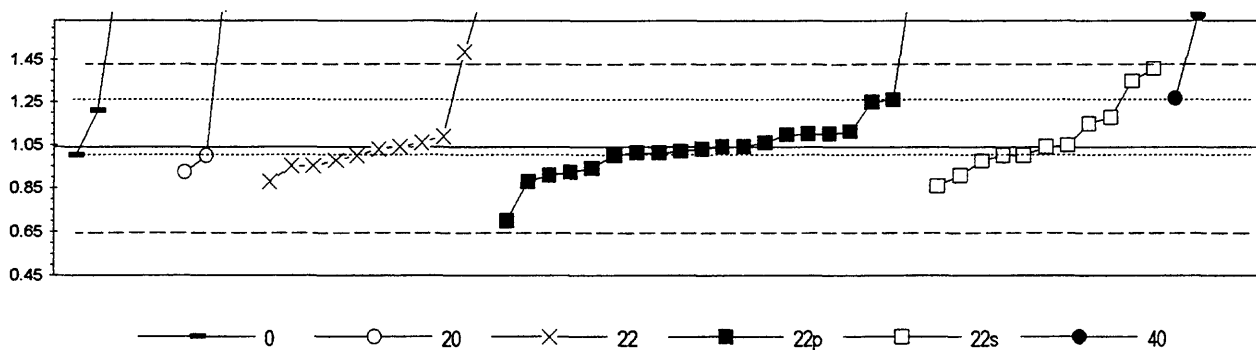


0. Other						
20. Titrate: colorimetric						
22. Colorimetric						
N =	2	2	4	7	5	3
Minimum =	1.22	1.90	0.89	0.86	0.99	1.24
Maximum =	1.22	2.21	1.28	2.31	1.72	1.66
Median =				1.15		
St Dev =				0.515		

MPV = 1.22
F-pseudosigma = 0.430
N = 23
Hu = 1.58
HI = 1.00

Lab	Rating	Z-value	0	20	22	22p	22s	40
1	4	-0.47					1.02	
15	4	-0.16				1.15		
45	4	0.21						1.31
52	3	-0.78			0.89			
60	0	2.30		2.21				
61	2	1.19				1.73		
63	1	1.58		1.90				
68	4	0.00	1.22					
89	3	-0.55					0.99	
97	3	-0.56			0.98			
114	2	1.16					1.72	
118	3	0.65				1.50		
119	2	1.02						1.66
120	3	-0.62				0.95		
122	4	-0.30				1.09		
133	4	0.05						1.24
134	4	-0.42					1.04	
139	0	2.54				2.31		
140	4	0.14			1.28			
141	3	-0.84				0.86		
145	3	-0.53					0.99	
179	4	0.00	1.22					
180	4	-0.49			1.01			

Table 16. Statistical summary of reported data for standard reference water sample N-39 (nonpreserved nutrients)—Continued
NH₃ + Org N as N (Ammonia + Organic N) m g/L



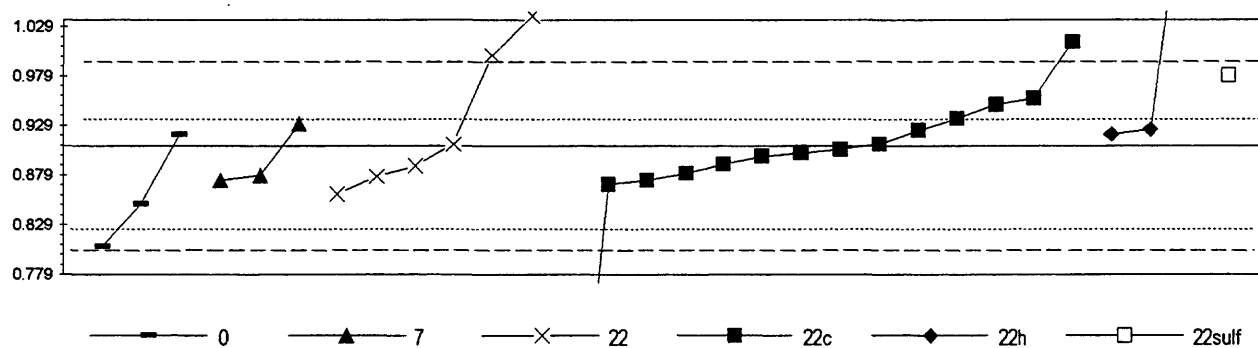
0. Other						
20. Titrate: colorimetric						
22. Colorimetric						
	N =	5	4	11	20	11
Minimum =	1.00	0.92	0.88	0.70	0.86	1.27
Maximum =	2.98	1.96	1.82	1.97	1.41	2.60
Median =			1.02	1.03	1.04	
St Dev =			0.168	0.127	0.173	

MPV = 1.04
F-pseudosigma = 0.196
N = 55
Hu = 1.27
HI = 1.00

Lab	Rating	Z-value	0	20	22	22p	22s	40
3	NR			< 1				
9	4	-0.05			1.03			
10	4	0.00				1.04		
12	1	-1.73				0.70		
13	2	1.12				1.26		
15	4	0.10				1.06		
16	3	-0.61		0.92				
18	2	1.07				1.25		
21	4	0.28				1.10		
23	1	1.58					1.35	
36	0	4.48	1.92					
37	0	2.29			1.49			
38	4	-0.46			0.95			
41	0	3.16						1.66
45	2	1.17						1.27
46	3	-0.61				0.92		
52	3	-0.84			0.88			
55	4	-0.15				1.01		
57	0	7.94						2.60
58	0	9.72	2.95					
59	4	-0.20					1.00	
60	0	4.63		1.95				
70	4	-0.15				1.01		
74	4	-0.20			1.00			
79	3	-0.92					0.86	
85	4	0.31				1.10		
87	4	0.00				1.04		
89	4	-0.34					0.97	
90	4	-0.05				1.03		
91	4	0.00			1.04			
94	4	0.36				1.11		
96	4	0.00				1.04		
97	4	-0.46			0.95			
102	4	-0.20				1.00		
113	3	0.71					1.18	
114	1	1.88					1.41	
118	3	-0.81				0.88		
119	0	3.77						1.78
122	3	-0.51				0.94		
127	4	-0.10				1.02		
128	3	-0.66				0.91		
134	3	0.56					1.15	
138	4	-0.20					1.00	
139	0	4.73				1.97		
145	3	-0.66					0.91	
179	3	0.87	1.21					
180	4	-0.32			0.98			
183	0	4.68		1.96				
184	4	0.31				1.10		
189	0	3.97			1.82			

Lab	Rating	Z-value	0	20	22	22p	22s	40
190	4	0.25			1.09			
198	4	-0.20	1.00					
202	4	0.05						1.05
205	4	-0.20		1.00				
207	4	0.10			1.06			
210	0	9.85	2.98					

Table 16. Statistical summary of reported data for standard reference water sample N-39 (preserved nutrients)—Continued
NO₃ + NO₂ as N (Nitrate + Nitrite) m g/L

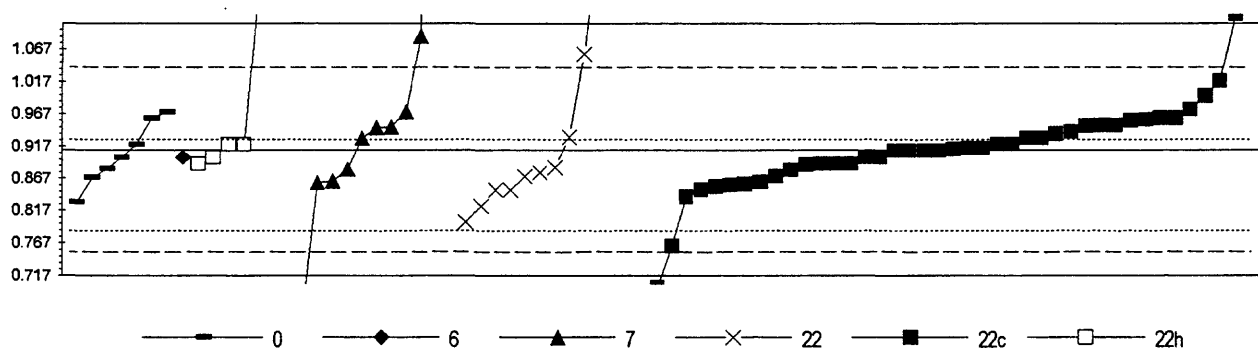


0. Other						
7. Ion chromatography						
22. Colorimetric						
N =	3	3	6	14	3	1
Minimum =	0.807	0.874	0.860	0.500	0.920	0.980
Maximum =	0.920	0.930	1.040	1.014	1.220	
Median =				0.905		
St Dev =				0.0401		

MPV = 0.908
 F-pseudosigma = 0.043
 N = 30
 Hu = 0.936
 HI = 0.878

Lab	Rating	Z-value	0	7	22	22c	22h	22sulf
1	4	-0.15				0.901		
7	0	3.08			1.040			
11	4	0.29	0.920					
29	3	0.52		0.930				
39	3	-0.66		0.879				
42	3	-0.78		0.874				
43	1	1.69						0.980
45	3	0.66				0.936		
52	4	-0.45			0.888			
53	0	-9.48				0.500		
60	4	0.06			0.910			
61	4	0.06				0.910		
63	2	-1.10			0.860			
75	4	-0.22				0.898		
78	4	0.38				0.924		
88	0	2.48				1.014		
92	3	-0.62				0.881		
97	3	0.99				0.950		
114	0	7.27					1.220	
118	4	0.29					0.920	
119	0	2.15			1.000			
122	4	-0.06				0.905		
124	2	-1.34	0.850					
134	2	1.13				0.956		
139	3	-0.78				0.874		
140	3	-0.69			0.878			
141	4	0.41					0.925	
145	3	-0.87				0.870		
179	0	-2.34	0.807					
180	4	-0.41				0.890		

Table 16. Statistical summary of reported data for standard reference water sample N-39 (nonpreserved nutrients)--Continued
NO3 + NO2 as N (Nitrate + Nitrite) m g/L



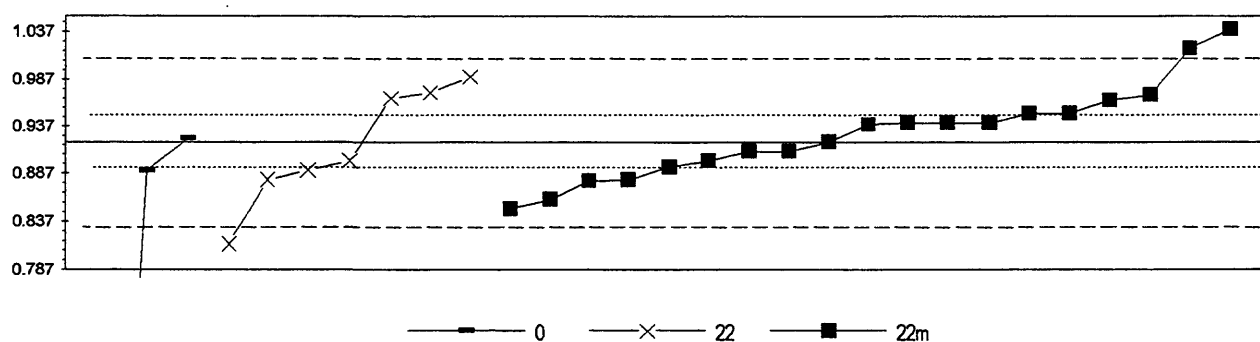
0. Other	22. Colorimetric
6. ICP/MS	22c. Color: Cd diazo
7. Ion chromatography	22h. Color: hydrazine
N = 7	1 12 12 42 6
Minimum = 0.830	0.900 0.656 0.799 0.450 0.890
Maximum = 0.970	3.500 1.276 1.180 1.180
Median = 0.900	0.938 0.870 0.910
St Dev = 0.0500	0.0740 0.0764 0.0484

MPV = 0.912
F-pseudosigma = 0.0649
N = 80
Hu = 0.958
Hi = 0.870

Lab	Rating	Z-value	0	6	7	22	22c	22h
3	1	-1.73				0.799		
9	2	-1.36				0.823		
10	4	-0.02					0.910	
11	4	0.13	0.920					
12	4	-0.18					0.900	
13	4	-0.33					0.890	
15	0	-3.94		0.656				
16	0	5.22			1.250			
18	3	-0.82				0.858		
19	4	-0.49				0.880		
23	3	0.58				0.949		
25	0	32.35			3.010			
29	4	0.29			0.930			
32	3	0.53			0.946			
33	0	-3.88			0.660			
36	4	-0.45	0.882					
37	3	-0.67	0.868					
38	4	0.04				0.914		
41	0	-2.30				0.762		
42	4	-0.47			0.881			
45	3	0.72				0.958		
46	3	0.96				0.974		
52	4	-0.42			0.884			
55	4	0.29				0.930		
57	3	0.59				0.950		
58	3	0.90	0.970					
59	4	0.29				0.930		
60	3	-0.95			0.850			
63	3	-0.64			0.870			
68	4	-0.18	0.900					
69	4	-0.02				0.910		
70	3	0.75				0.960		
74	3	-0.55			0.876			
76	3	-0.79		0.860				
78	2	-1.13				0.838		
84	0	-3.26				0.700		
85	4	0.13				0.920		
87	4	-0.02				0.910		
88	1	1.64				1.018		
89	4	-0.02				0.910		
90	4	0.13					0.920	
91	3	-0.95			0.850			
92	3	-0.87				0.855		
94	3	-0.95				0.850		
96	4	-0.33					0.890	
97	4	0.44				0.940		
102	4	-0.18				0.900		
104	4	0.04				0.914		
113	3	-0.78				0.861		
114	0	4.14					1.180	

Lab	Rating	Z-value	0	6	7	22	22c	22h
118	4	-0.18						0.900
119	0	2.29				1.060		
120	4	0.13					0.920	
122	4	0.38					0.936	
126	0	-7.12					0.450	
127	4	0.02					0.913	
128	4	0.13						0.920
133	3	0.75					0.960	
134	3	0.70					0.957	
138	3	-0.64					0.870	
139	3	-0.84					0.857	
145	4	-0.33					0.890	
146	0	4.14					1.180	
151	3	-0.75			0.863			
161	0	2.71			1.087			
179	2	-1.26	0.830					
180	4	-0.35					0.889	
184	4	-0.33					0.890	
189	0	5.53				1.270		
190	4	0.30				0.931		
191	4	-0.18		0.900				
193	3	0.90			0.970			
196	3	0.56			0.948			
197	2	1.29					0.995	
198	3	0.75	0.960					
202	3	0.59					0.950	
205	0	3.21					1.120	
206	0	39.91			3.500			
207	0	3.99						1.170
210	0	5.62				1.276		

Table 16. Statistical summary of reported data for standard reference water sample N-39 (preserved nutrients)--Continued
Total P as P (total Phosphorus) m g/L



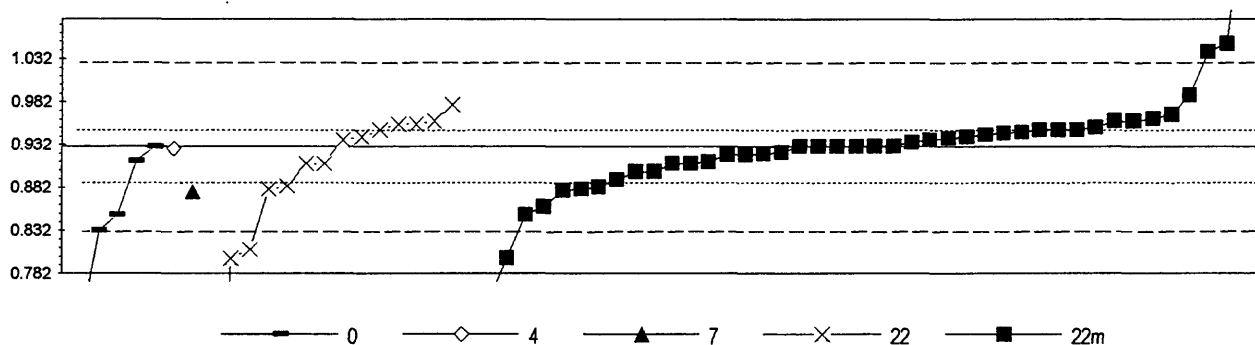
0. Other				
22. Colorimetric				
22m. Color: phosphomolybdate				
N =	3	7	19	
Minimum =	0.200	0.814	0.850	
Maximum =	0.924	0.990	1.040	
Median =	0.900	0.939		
St Dev =	0.063	0.049		

MPV = 0.920
F-pseudosigma = 0.044
N = 29
Hu = 0.950
Hi = 0.890

Lab	Rating	Z-value	0	22	22m
1	2	1.06		0.967	
7	1	1.57		0.990	
11	3	-0.67	0.890		
15	0	2.25			1.020
42	4	0.45			0.940
45	0	2.70			1.040
52	2	1.19		0.973	
53	4	-0.22			0.910
60	3	-0.67		0.890	
61	3	-0.58			0.894
63	4	0.00			0.920
68	4	0.09	0.924		
75	2	1.12			0.970
78	3	-0.90			0.880
89	3	0.67			0.950
92	2	-1.35			0.860
97	4	-0.45		0.900	
114	4	-0.45			0.900
118	3	0.67			0.950
119	4	0.45			0.940
122	4	0.45			0.940
133	1	-1.57			0.850
134	4	0.43			0.939
139	3	-0.92			0.879
140	3	-0.90		0.880	
141	2	1.01			0.965
145	4	-0.22			0.910
179	0	-16.19	0.200		
180	0	-2.38	0.814		

Table 16. Statistical summary of reported data for standard reference water sample N-39 (nonpreserved nutrients)—Continued

Total P as P (total Phosphorus) m g/L



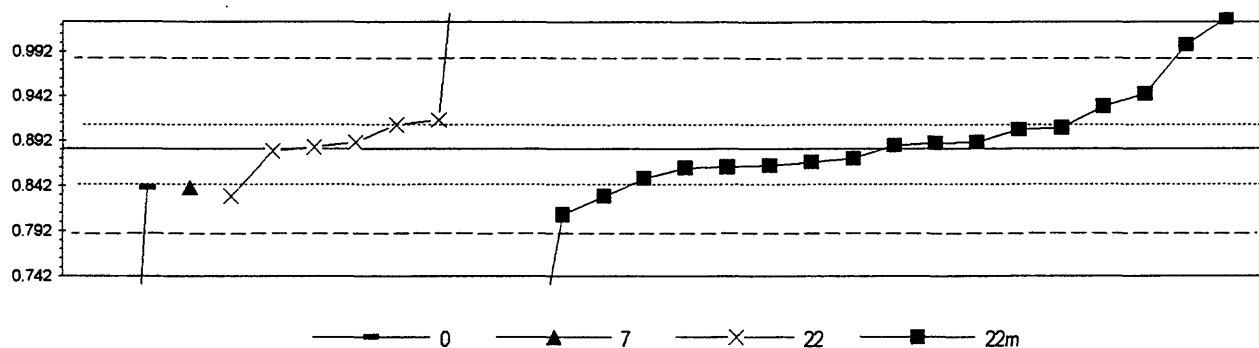
0. Other	22. Colorimetric
4. ICP	22m. Color: phosphomolybdate
7. Ion chromatography	
N = 5	1
Minimum = 0.720	0.928
Maximum = 0.930	0.877
Median = 0.938	0.136
St Dev = 0.057	0.160
	0.979
	1.240
	0.930
	0.045

MPV = 0.930
 F-pseudosigma = 0.0493
 N = 64
 Hu = 0.950
 HI = 0.884

Lab	Rating	Z-value	0	4	7	22	22m
3	3	0.99				0.979	
5	4	0.22				0.941	
9	2	-1.01				0.880	
10	4	0.20					0.940
11	4	0.00	0.930				
12	2	1.22					0.990
13	4	0.41					0.950
15	4	0.28					0.944
16	4	0.16			0.938		
18	4	-0.14				0.923	
19	3	-0.61				0.900	
23	4	0.32				0.946	
25	4	-0.04		0.928			
36	4	-0.34	0.913				
37	0	-2.43				0.810	
38	4	0.10					0.935
45	0	2.23					1.040
46	4	-0.37					0.912
52	3	0.55				0.957	
55	3	0.61					0.960
57	4	0.41					0.950
58	3	-0.95					0.883
59	3	-0.61					0.900
60	4	0.41			0.950		
63	3	0.61					0.960
70	4	0.00					0.930
74	3	0.55				0.957	
78	0	-2.64					0.800
79	4	-0.20					0.920
85	1	-1.62					0.850
87	0	6.29					1.240
89	4	0.34					0.947
90	0	2.43					1.050
91	3	0.61				0.960	
92	2	-1.01					0.880
94	4	0.41					0.950
96	3	-0.79					0.891
97	4	-0.41				0.910	
102	4	-0.18					0.921
104	4	0.47					0.953
111	4	0.16					0.938
113	4	0.02					0.931
114	2	-1.42					0.860
118	4	0.00					0.930
119	4	-0.20					0.920
120	4	0.00					0.930
122	3	0.77					0.968
127	3	0.67					0.963
128	4	-0.41					0.910
134	4	0.24					0.942

Lab	Rating	Z-value	0	4	7	22	22m
138	4	-0.41					0.910
139	2	-1.03					0.879
145	4	0.00					0.930
161	0	-16.11				0.136	
179	0	-4.26	0.720				
180	0	-2.64				0.800	
184	0	-15.62					0.160
189	4	-0.41				0.910	
190	3	-0.93				0.884	
191	2	-1.08			0.877		
198	1	-1.62	0.850				
202	4	0.00					0.930
207	0	-3.65					0.750
210	1	-1.98	0.833				

Table 16. Statistical summary of reported data for standard reference water sample N-39 (preserved nutrients)—Continued
PO₄ as P (Orthophosphate) **m g/L**

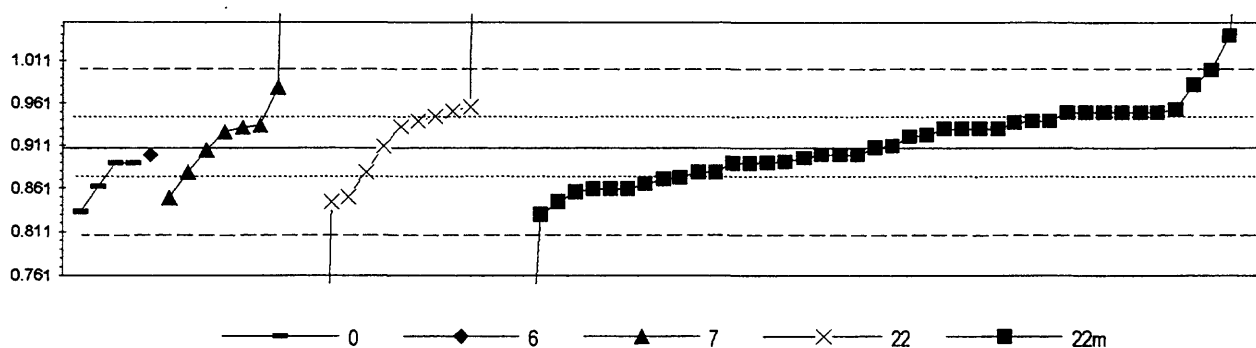


0. Other	22m. Color: phosphomolybdate			
7. Ion chromatography				
22. Colorimetric				
N =	2	1	7	18
Minimum =	0.082	0.840	0.830	0.565
Maximum =	0.840		1.400	1.030
Median =			0.888	0.879
St Dev =			0.0303	0.0458

MPV = 0.883
F-pseudosigma = 0.0467
N = 28
Hu = 0.908
HI = 0.845

Lab	Rating	Z-value	0	7	22	22m
1	4	-0.05			0.880	
7	0	11.08			1.400	
11	3	-0.91	0.840			
29	3	-0.91		0.840		
42	4	-0.40				0.864
45	0	3.16				1.030
52	4	0.05			0.885	
60	4	0.16			0.890	
61	4	0.14				0.889
63	0	2.52				1.000
75	4	-0.31				0.868
78	0	-6.80				0.565
88	4	0.07				0.886
89	4	-0.22				0.872
90	4	0.50				0.906
92	4	0.16				0.890
97	3	0.59			0.910	
118	2	1.02				0.930
119	1	-1.55				0.810
122	4	-0.46				0.861
133	3	-0.70				0.850
134	4	0.46				0.904
139	4	-0.42				0.863
140	2	-1.12			0.830	
141	2	1.34				0.945
145	2	-1.12				0.830
179	0	-17.14	0.082			
180	3	0.70			0.915	

Table 16. Statistical summary of reported data for standard reference water sample N-39 (nonpreserved nutrients)—Continued
PO₄ as P (Orthophosphate) m g/L



0. Other	22. Colorimetric
6. ICP/MS	22m. Color: phosphomolybdate
7. Ion chromatography	
N = 4	1 8 11 43
Minimum = 0.834	0.900 0.850 0.030 0.320
Maximum = 0.890	2.700 4.590 1.320
Median = 0.927	0.933 0.909
St Dev = 0.0420	0.0434 0.0440

MPV = 0.908
F-pseudosigma = 0.0489
N = 67
Hu = 0.943
Hi = 0.877

Lab	Rating	Z-value	0	6	7	22	22m
3	3	0.76				0.945	
9	2	-1.17				0.851	
10	4	0.45					0.930
11	4	-0.37	0.890				
12	4	0.45					0.930
13	4	0.45					0.930
15	3	0.86					0.950
16	2	-1.27			0.846		
18	4	0.31				0.923	
19	4	-0.16				0.900	
23	3	-0.86					0.866
25	0	8.42					1.320
29	3	-0.57			0.880		
32	4	0.39			0.927		
33	2	1.47			0.980		
36	4	-0.37	0.890				
37	4	0.49			0.932		
38	4	-0.35					0.891
45	0	2.70					1.040
46	3	-0.72					0.873
52	3	0.51				0.933	
55	3	0.86					0.950
57	1	-1.59					0.830
58	3	-0.76					0.871
59	3	0.86					0.950
60	3	0.65				0.940	
63	1	1.88					1.000
70	3	-0.57					0.880
74	3	1.00				0.957	
78	2	-1.29					0.845
85	3	-0.98					0.860
87	1	1.53					0.983
88	4	0.04					0.910
89	3	0.61					0.938
92	3	-0.57					0.880
96	4	-0.33					0.892
97	3	-0.57			0.880		
102	0	-8.13					0.510
104	3	0.65					0.940
111	4	-0.16					0.900
113	4	-0.25					0.896
118	3	0.86					0.950
119	3	-0.98					0.860
120	3	-0.98					0.860
122	4	0.00					0.908
127	3	0.94					0.954
134	4	0.27					0.921
138	3	0.86					0.950
139	2	-1.04					0.857
145	4	-0.37					0.890

Lab	Rating	Z-value	0	6	7	22	22m
146	4	-0.37					0.890
151	2	-1.19			0.850		
161	0	-17.95				0.030	
179	1	-1.51	0.834				
180	3	0.90				0.952	
182	3	0.86					0.950
183	4	-0.16					0.900
184	0	-12.02					0.320
189	4	0.04				0.910	
190	0	75.26				4.590	
191	4	-0.16		0.900			
196	4	-0.04			0.906		
197	3	0.55			0.935		
202	4	0.45					0.930
206	0	36.63			2.700		
207	3	0.65					0.940
210	3	-0.93	0.863				

Table 17.-- *Statistical summary of reported data for standard reference sample P-20 (low ionic strength constituents)*

Definition of analytical methods, abbreviations, and symbols

Analytical methods

0. Other/Not reported	=	
1. AA: direct, air	=	atomic absorption: direct,air
2. AA: direct, N2O	=	atomic absorption: direct,nitrous oxide
4. ICP	=	inductively coupled plasma
5. DCP	=	direct current plasma
6. ICP/MS	=	mass spectrometry/inductively coupled plasma
7. IC	=	ion chromatography
20. Titrate: color	=	titration: colorimetric [color reagent specified]
21. Titrate: electro	=	titration: electrometric
22. Color:	=	colorimetric [color reagent specified]
40. Ion electrode	=	ion selective electrode
41. Electro	=	electrometric: [type meter specified]
50. Gravimetric	=	gravimetric: [precipitate specified]
51. Turbidimetric	=	turbidimetric: [suspension specified]

Abbreviations and symbols

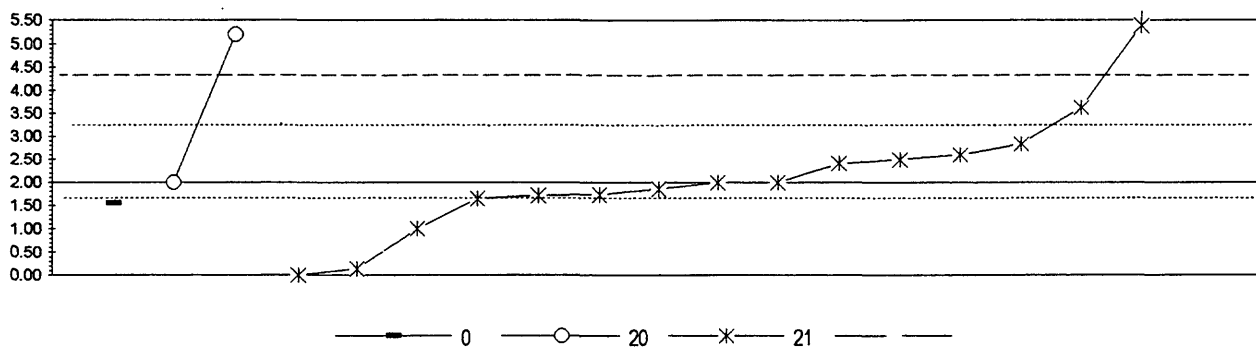
N	=	number of samples
St dev	=	traditional standard deviation
MPV	=	95% confidence most probable value
F-pseudosigma	=	nonparametric statistic deviation
Hu	=	upper hinge value
Hi	=	lower hinge value
m g/L	=	milligrams per liter
μ S/cm	=	microsiemens per centimeter at 25 C
Lab	=	laboratory code number
NR	=	not rated, less than value reported
<	=	less than

<u>Constituent</u>	<u>page</u>
Acid Acidity as CaCO ₃	136
Ca Calcium	137
Cl Chloride	138
F Fluoride	139
K Potassium	140
Mg Magnesium	141
Na Sodium	142
pH	143
PO ₄ as P Orthophosphate as Phosphorus	144
SO ₄ Sulfate	145
Sp Cond Specific Conductance	146

Table 17. Statistical summary of reported data for standard reference water sample P-20 (low ionic strength)—Continued

Acidity as CaCO₃

m g/L



0. Other				
20. Titrate: colorimetric				
21. Titrate: electrometric				
N =	1	2	16	1
Minimum =	1.56	2.00	0.00	5.00
Maximum =		5.20	38.30	
Median =			2.00	
St Dev =			1.312	

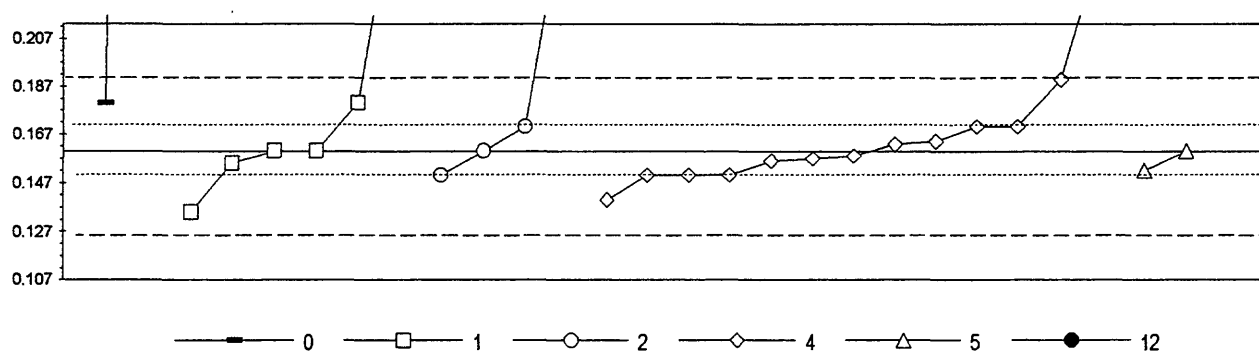
MPV = 2.00
 F-pseudosigma = 1.142
 N = 20
 Hu = 3.23
 Hl = 1.69

Lab	Rating	Z-value	0	20	21
1	4	-0.23			1.74
3	4	-0.30			1.66
5	3	0.74			2.84
7	4	0.35			2.40
11	4	-0.39	1.56		
15	0	31.80			38.30
23	4	0.00			2.00
32	2	1.42			3.62
38	4	-0.25			1.72
52	0	2.63			
58	0	2.96			5.38
61	3	0.53			2.60
62	1	-1.62			0.15
63	4	0.00		2.00	
78	4	0.44			2.50
89	4	-0.12			1.86
107	3	-0.88			1.00
145	4	0.00			2.00
184	NR			< 10	
189	0	2.80		5.20	
190	NR	-1.75			0.00

Table 17. Statistical summary of reported data for standard reference water sample P-20 (low ionic strength)--Continued

Ca (Calcium)

m g/L

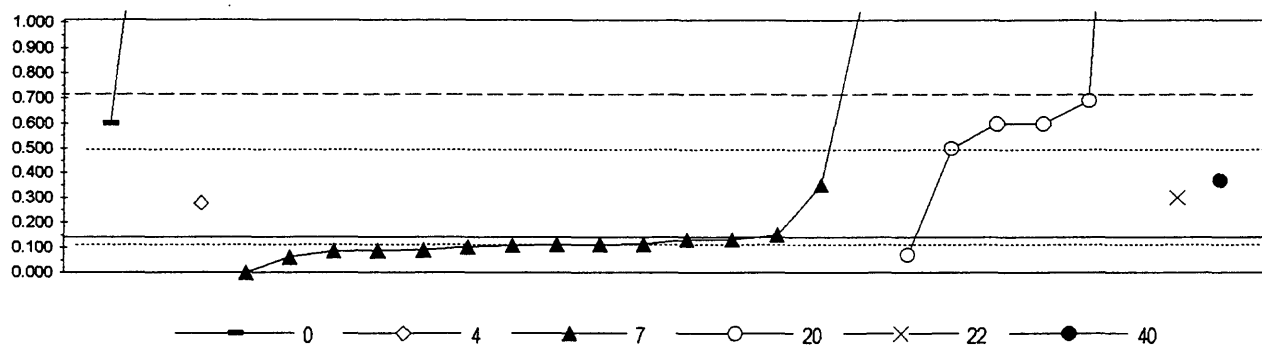


0. Other	4. ICP					
1. AA: direct air	5. DCP					
2. AA: direct nitrous oxide	12. AA: flame emission					
N =	2	6	4	13	2	1
Minimum =	0.180	0.135	0.150	0.140	0.152	0.017
Maximum =	1.200	0.280	0.270	0.250	0.160	
Median =			0.158			
St Dev =			0.013			

MPV = 0.160
 F-pseudosigma = 0.018
 N = 28
 Hu = 0.175
 HI = 0.151

Lab	Rating	Z-value	0	1	2	4	5	12
1	4	-0.17				0.157		
3	3	-0.56				0.150		
5	4	-0.11				0.158		
11	2	1.12	0.180					
15	4	0.17				0.163		
23	3	-0.56			0.150			
33	4	0.00					0.160	
38	3	0.56			0.170			
39	3	0.56				0.170		
44	4	0.00			0.160			
46	3	-0.56				0.150		
52	NR					< 0.6		
58	0	6.75		0.280				
61	4	-0.22				0.156		
63	NR			< 0.2				
64	2	-1.12				0.140		
89	4	0.00		0.160				
93	1	1.69				0.190		
101	2	1.12		0.180				
110	4	0.00		0.160				
112	4	-0.45					0.152	
124	0	58.46	1.200					
134	3	-0.56				0.150		
138	4	0.22				0.164		
139	0	6.18			0.270			
145	3	0.56				0.170		
164	4	-0.28		0.155				
183	0	-8.04						0.017
184	NR					< 1		
189	0	5.06				0.250		
196	2	-1.41		0.135				

Table 17. Statistical summary of reported data for standard reference water sample P-20 (low ionic strength)—Continued
Cl (Chloride) m g/L



0. Other	20. Titrate: colorimetric					
4. ICP	22. Colorimetric					
7. Ion chromatography	40. Selective ion electrode					
N =	2	1	15	6	1	1
Minimum =	0.600	0.275	0.000	0.070	0.300	0.366
Maximum =	2.000		1.160	3.330		
Median =			0.110			
St Dev =			0.0763			

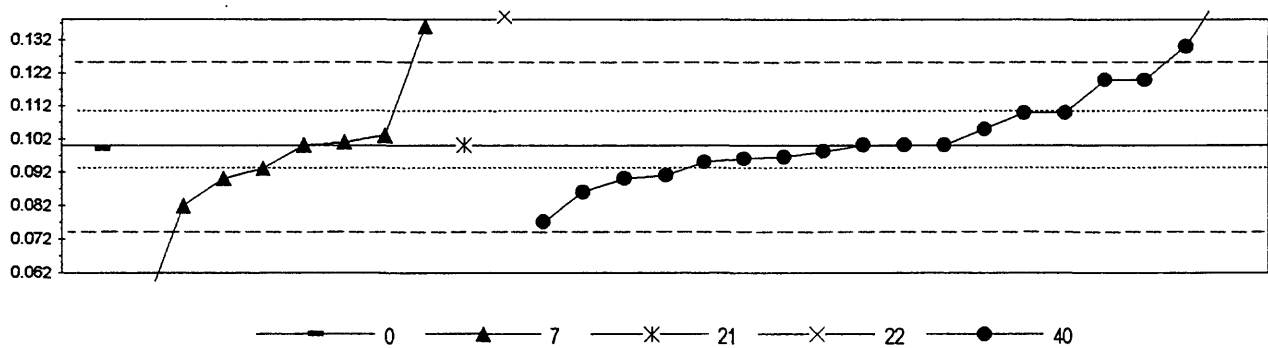
MPV = 0.140
F-pseudosigma = 0.2898
N = 26
Hu = 0.500
Hi = 0.109

Lab	Rating	Z-value	0	4	7	20	22	40
1	4	-0.13			0.102			
2	4	-0.17			0.091			
3	NR						< 0.5	
7	NR				< 1			
15	0	3.52			1.160			
23	3	0.78						0.366
32	4	-0.27			0.061			
33	4	-0.10			0.110			
39	NR						< 2	
44	4	0.03			0.150			
46	4	-0.18			0.087			
52	NR						< 0.5	
58	1	1.59				0.600		
61	3	0.55					0.300	
63	NR						< 2	
64	4	-0.10			0.110			
74	3	0.72			0.350			
78	2	1.24					0.500	
89	NR						< 0.04	
93	NR	-0.48			0.000			
101	1	1.90				0.690		
107	0	11.01				3.330		
110	4	0.47		0.275				
112	4	-0.03			0.130			
124	0	6.42	2.000					
134	4	-0.03			0.130			
138	4	-0.11			0.109			
139	NR						< 1	
145	NR				< 0.2			
183	4	-0.24				0.070		
184	NR						< 1	
189	NR						< 1	
190	1	1.59	0.600					
196	4	-0.09			0.113			
197	4	-0.19			0.084			
202	1	1.59				0.600		

Table 17. Statistical summary of reported data for standard reference water sample P-20 (low ionic strength)—Continued

F (Fluoride)

m g/L

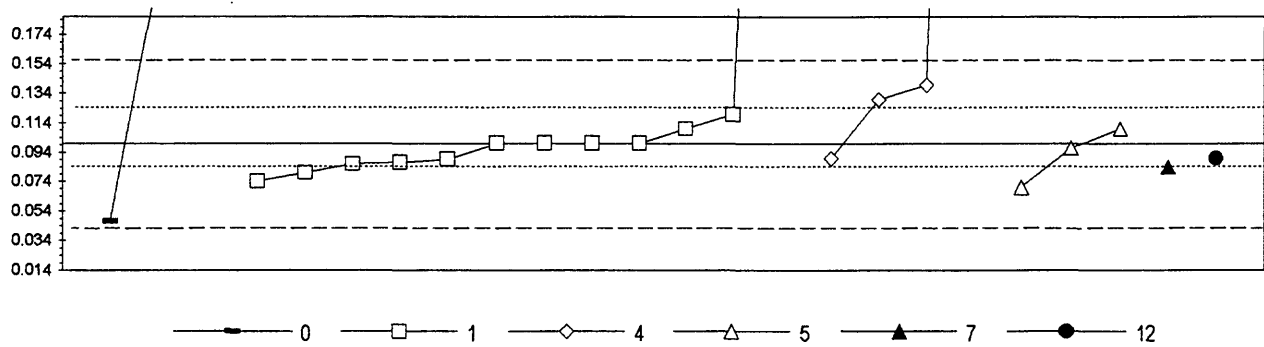


0. Other	22. Colorimetric
7. Ion chromatography	40. Selective ion electrode
21. Titrate: electrometric	
N =	1 8 1 1 18
Minimum =	0.099 0.050 0.100 0.139 0.077
Maximum =	0.136 0.150
Median =	0.100 0.100
St Dev =	0.0172 0.0134

MPV = 0.100
 F-pseudosigma = 0.0126
 N = 29
 Hu = 0.110
 HI = 0.093

Lab	Rating	Z-value	0	7	21	22	40
1	4	0.24		0.103			
3	0	3.09				0.139	
7	NR			< 0.5			
11	4	-0.08	0.099				
15	4	-0.28					0.097
23	4	0.40					0.105
32	2	-1.43		0.082			
33	3	-0.79		0.090			
39	4	0.00					0.100
46	3	-0.71					0.091
52	1	-1.83					0.077
58	2	-1.11					0.086
61	3	-0.79					0.090
63	4	0.00					0.100
74	4	-0.32					0.096
78	1	1.59					0.120
89	4	-0.40					0.095
93	4	0.00					0.100
107	4	-0.16					0.098
112	4	0.00		0.100			
124	NR		< 0.1				
134	4	0.00			0.100		
138	3	-0.56		0.093			
145	0	-3.97		0.050			
183	3	0.79					0.110
184	0	3.97					0.150
189	0	2.38					0.130
190	3	0.79					0.110
196	0	2.86		0.136			
197	4	0.08		0.101			
202	1	1.59					0.120

Table 17. Statistical summary of reported data for standard reference water sample P-20 (low ionic strength)—Continued

K (Potassium)**m g/L**

0. Other							
1. AA: direct air							
4. ICP							
	N =	3	12	4	3	1	1
	Minimum =	0.047	0.074	0.090	0.070	0.084	0.090
	Maximum =	2.400	0.890	1.500	0.110		
	Median =		0.100				
	St Dev =		0.0134				

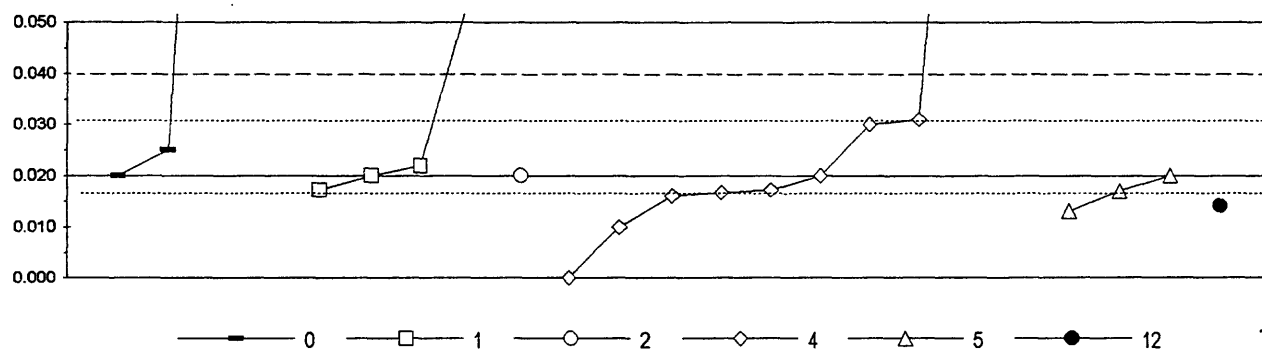
MPV = 0.100
 F-pseudosigma = 0.0285
 N = 24
 Hu = 0.125
 HI = 0.087

Lab	Rating	Z-value	0	1	4	5	7	12
1	4	-0.49		0.086				
2	3	-0.56				0.084		
3	0	49.05			1.500			
5	NR				< 1			
11	1	-1.86	0.047					
15	4	-0.39		0.089				
33	4	0.35				0.110		
38	4	0.00		0.100				
44	4	0.35		0.110				
46	2	1.40			0.140			
52	NR				< 0.2			
58	3	0.70		0.120				
61	NR				< 0.5			
63	NR			< 0.2				
64	0	27.68		0.890				
89	4	0.00		0.100				
101	4	0.00		0.100				
110	3	-0.70		0.080				
112	4	-0.11				0.097		
124	0	80.59	2.400					
134	4	0.00		0.100				
138	2	1.05			0.130			
139	4	-0.35					0.090	
145	4	-0.35			0.090			
164	4	-0.46		0.087				
184	NR				< 1			
189	NR				< 0.5			
190	0	4.20	0.220					
196	3	-0.91		0.074				
197	2	-1.05				0.070		

Table 17. Statistical summary of reported data for standard reference water sample P-20 (low ionic strength)--Continued

Mg (Magnesium)

m g/L



0. Other	4. ICP
1. AA: direct air	5. DCP
2. AA: direct nitrous oxide	12. Flame emission
N = 4	N = 4
Minimum = 0.020	0.017
Maximum = 0.300	0.056
Median = 0.017	0.017
St Dev = 0.0101	0.0101

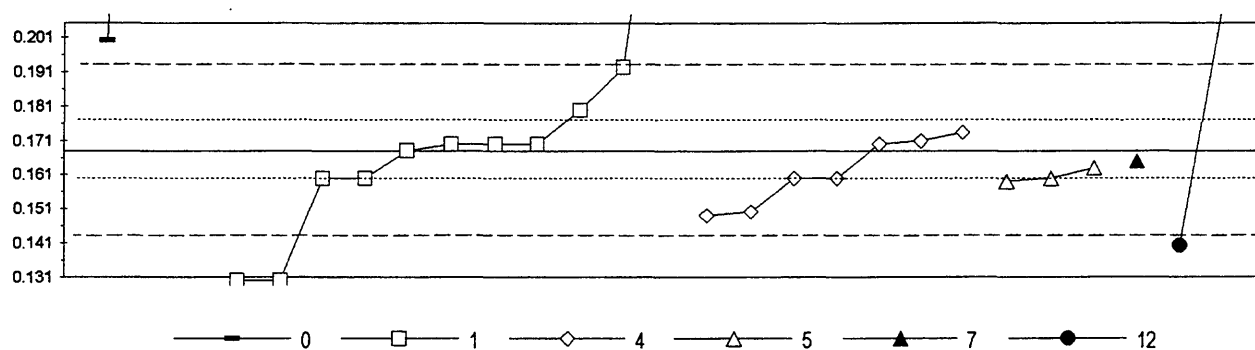
MPV = 0.020
 F-pseudosigma = 0.0101
 N = 23
 Hu = 0.031
 HI = 0.017

Lab	Rating	Z-value	0	1	2	4	5	12
1	4	-0.28				0.017		
3	3	-0.99				0.010		
5	4	-0.33				0.017		
11	4	0.49	0.025					
15	4	0.00				0.020		
23	NR			< 0.5				
33	4	0.00					0.020	
38	4	0.20		0.022				
44	4	0.00			0.020			
46	0	11.86				0.140		
52	NR					< 0.05		
58	0	3.56		0.056				
61	NR					< 0.1		
63	NR			< 0.2				
64	0	12.85				0.150		
89	NR			< 0.025				
93	NR	-1.98				0.000		
101	4	0.00		0.020				
110	4	0.00	0.020					
112	4	-0.30					0.017	
124	0	27.67	0.300					
134	NR					< 0.01		
138	2	1.09				0.031		
139	NR			< 0.01				
145	3	0.99				0.030		
183	3	-0.59						0.014
184	NR					< 1		
189	4	-0.40				0.016		
190	0	15.81	0.180					
196	4	-0.28		0.017				
197	3	-0.69					0.013	

Table 17. Statistical summary of reported data for standard reference water sample P-20 (low ionic strength)--Continued

Na (Sodium)

m g/L

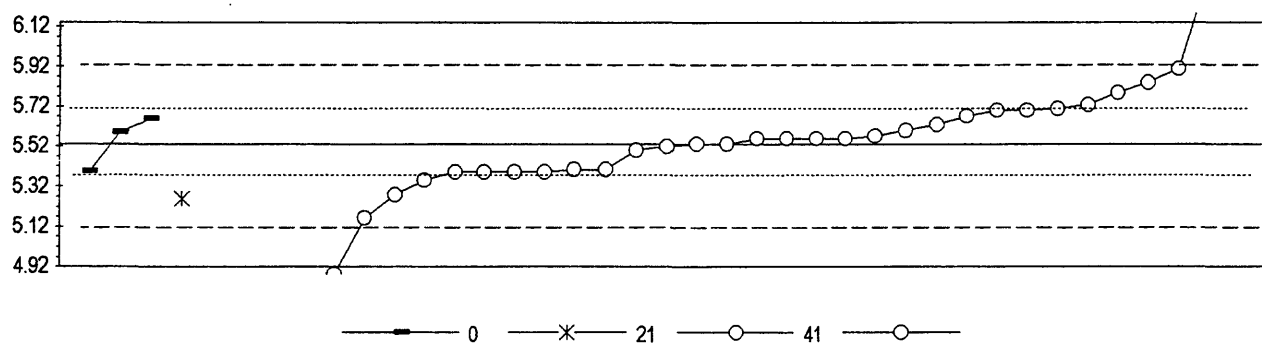


0. Other							
1. AA: direct air							
4. ICP							
	N =	3	11	7	3	1	2
	Minimum =	0.200	0.130	0.149	0.159	0.165	0.140
	Maximum =	1.000	0.280	0.173	0.163		0.210
	Median =		0.169	0.160			
	St Dev =		0.0399	0.0100			

MPV = 0.168
 F-pseudosigma = 0.0124
 N = 27
 Hu = 0.177
 HI = 0.160

Lab	Rating	Z-value	0	1	4	5	7	12
1	4	0.00		0.168				
2	4	-0.24				0.165		
3	NR				< 0.2			
5	4	0.44			0.173			
11	0	2.58	0.200					
15	3	-0.65			0.160			
23	NR		< 2					
33	3	-0.65				0.160		
38	4	0.16		0.170				
39	4	0.24			0.171			
44	3	-0.65		0.160				
46	2	-1.45			0.150			
52	NR				< 0.4			
58	0	9.05		0.280				
61	NR				< 0.5			
63	NR			< 0.2				
64	3	-0.65		0.160				
89	0	-3.07		0.130				
101	3	0.97		0.180				
110	0	-3.07		0.130				
112	3	-0.73				0.159		
124	0	67.21	1.000					
134	4	0.16		0.170				
138	4	0.16			0.170			
139	0	3.39						0.210
145	3	-0.65			0.160			
164	1	1.95		0.192				
183	0	-2.26						0.140
184	NR				< 1			
189	1	-1.53			0.149			
190	0	21.97	0.440					
196	4	0.16		0.170				
197	4	-0.40				0.163		

Table 17. Statistical summary of reported data for standard reference water sample P-20 (low ionic strength)—Continued
pH

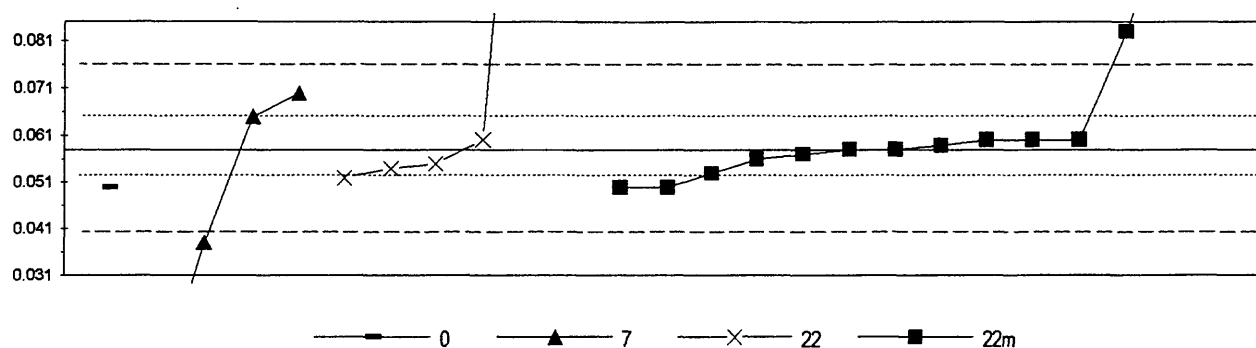


0. Other				
21. Titrate: electrometric				
41. Direct reading				
N =	3	1	35	
Minimum =	5.40	5.26	4.20	
Maximum =	5.66		6.40	
Median =			5.56	
St Dev =			0.174	

MPV = 5.53
F-pseudosigma = 0.204
N = 39
Hu = 5.67
Hi = 5.39

Lab	Rating	Z-value	0	21	41
1	4	0.15			5.56
2	4	0.20			5.57
3	3	-0.69			5.39
5	2	-1.32		5.26	
7	0	4.27			6.40
11	3	0.64	5.66		
15	0	-4.86			4.54
23	4	0.15			5.56
32	0	4.27			6.40
33	4	0.15			5.56
38	3	0.83			5.70
39	3	-0.64			5.40
41	0	-4.86			4.54
46	4	0.00			5.53
52	1	1.86			5.91
58	4	0.00			5.53
61	2	1.28			5.79
62	3	-0.69			5.39
63	3	0.88			5.71
64	4	0.15			5.56
74	4	-0.15			5.50
78	3	0.98			5.73
89	3	0.69			5.67
93	3	-0.64			5.40
101	0	-6.52			4.20
107	3	-0.88			5.35
110	3	-0.66	5.40		
112	4	-0.05			5.52
124	4	0.29	5.59		
134	3	-0.69			5.39
138	1	-1.82			5.16
139	0	-3.19			4.88
145	4	0.34			5.60
183	1	1.52			5.84
184	3	0.83			5.70
189	0	-3.58			4.80
190	2	-1.23			5.28
197	4	0.49			5.63
202	3	-0.69			5.39

Table 17. Statistical summary of reported data for standard reference water sample P-20 (low ionic strength)--Continued
PO4 as P (Orthophosphate) **m g/L**



0. Other	22m Color: phosphomolybdate			
7. Ion chromatography				
22. Colorimetric				
N =	1	4	6	14
Minimum =	0.050	0.005	0.052	0.050
Maximum =		0.070	0.913	0.594
Median =				0.058
St Dev =				0.0085

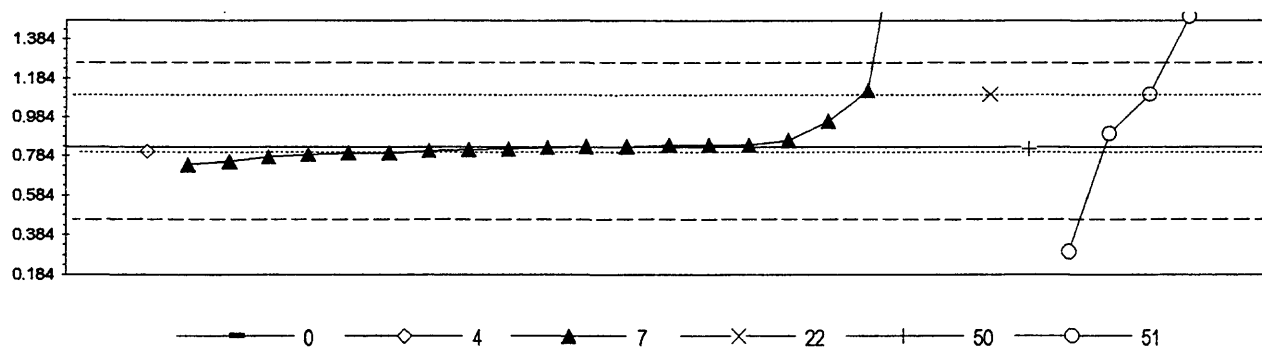
MPV = 0.058
F-pseudosigma = 0.0089
N = 25
Hu = 0.065
HI = 0.053

Lab	Rating	Z-value	0	7	22	22m
1	4	-0.45			0.054	
2	0	-5.96		0.005		
3	3	-0.67			0.052	
7	NR				< 0.01	
11	3	-0.90	0.050			
15	0	60.26				0.594
33	2	1.35		0.070		
38	4	0.00				0.058
52	4	-0.34			0.055	
58	4	0.11				0.059
59	4	0.22				0.060
61	0	2.81				0.083
63	4	0.22				0.060
64	4	0.22				0.060
78	0	6.18				0.113
89	4	0.00				0.058
107	3	-0.56				0.053
134	3	-0.90				0.050
138	4	-0.11				0.057
139	4	-0.22				0.056
184	4	0.22			0.060	
189	0	13.71			0.180	
190	0	96.12			0.913	
196	3	0.79		0.065		
197	0	-2.25		0.038		
202	3	-0.90				0.050

Table 17. Statistical summary of reported data for standard reference water sample P-20 (low ionic strength)—Continued

SO₄ (Sulfate)

m g/L

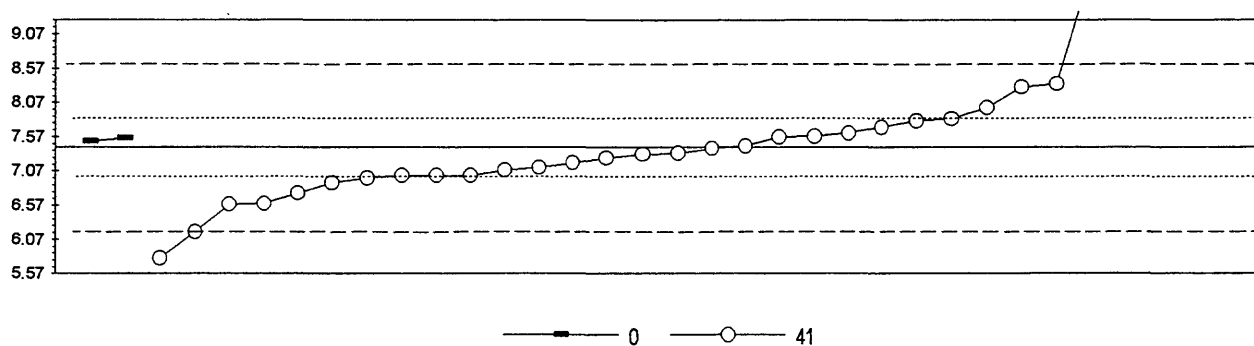


0. Other							
4. ICP							
7. Ion chromatography							
	N =	1	1	20	1	1	5
	Minimum =	3.070	0.809	0.740	1.100	0.820	0.300
	Maximum =	3.070		2.470			3.500
	Median =			0.826			
	St Dev =			0.0847			

MPV = 0.831
 F-pseudosigma = 0.2157
 N = 29
 Hu = 1.100
 HI = 0.809

Lab	Rating	Z-value	0	4	7	22	50	51
1	4	-0.04			0.822			
2	4	0.15			0.864			
3	4	-0.18			0.792			
5	0	7.60			2.470			
7	NR				< 1			
15	0	6.62			2.260			
23	NR							< 10
32	4	0.00			0.831			
33	4	-0.42			0.740			
39	4	0.05			0.841			
44	4	0.00			0.830			
46	4	-0.24			0.780			
52	NR							< 10
58	4	-0.05				0.820		
61	0	-2.46						0.300
63	NR							< 3
64	4	-0.14			0.800			
74	4	-0.14			0.800			
78	0	12.37						3.500
89	2	1.25						1.100
93	4	-0.10			0.810			
110	4	-0.10		0.809				
112	2	1.34			1.120			
124	NR		< 10					
134	4	-0.01			0.829			
138	4	-0.35			0.756			
139	0	3.10						1.500
145	4	0.04			0.840			
164	3	0.61			0.962			
183	4	0.32						0.900
184	2	1.25				1.100		
189	NR							< 1
190	0	10.38	3.070					
196	4	0.04			0.839			
197	4	-0.06			0.817			

Table 17. Statistical summary of reported data for standard reference water sample P-20 (low ionic strength)—Continued
Specific Conductance μ S/cm



0. Other
41. Direct reading

N =	2	32
Minimum =	7.50	5.80
Maximum =	7.55	1200
Median =		7.26
St Dev =		0.586

MPV =	7.42
F-pseudostigma =	0.615
N =	34
Hu =	7.83
Hi =	7.00

Lab	Rating	Z-value	0	41
1	4	0.03		7.44
2	2	-1.09		6.75
3	4	-0.03		7.40
5	0	-2.63		5.80
7	3	-0.68		7.00
11	4	0.13	7.50	
15	4	0.24		7.57
23	4	0.47		7.71
32	0	4.18		9.99
33	4	-0.15		7.33
38	3	0.62		7.80
46	2	1.43		8.30
52	0	290.25		186.00
58	0	5.01		10.50
61	3	-0.73		6.97
62	2	-1.37		6.58
63	4	0.26		7.58
64	4	0.33		7.62
74	4	-0.26		7.26
78	0	7.61		12.10
89	3	-0.55		7.08
93	4	-0.49		7.12
101	2	-1.33		6.60
107	4	-0.16		7.32
110	3	0.67		7.83
124	4	0.21	7.55	
134	3	-0.68		7.00
139	3	-0.85		6.90
145	3	-0.68		7.00
183	0			< 0.2
184	0	1938.30		1200
189	3	0.94		8.00
190	4	-0.37		7.19
197	1	-2.02		6.18
202	2	1.50		8.34

Table 18-- *Statistical summary of reported data for standard reference sample Hg-15 (Mercury)*

Definition of analytical methods, abbreviations, and symbols

Analytical methods

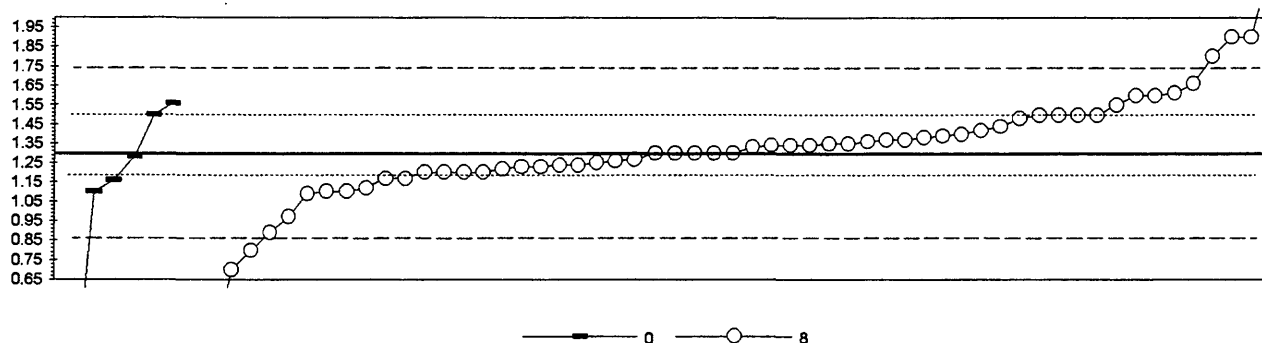
0. Other/Not reported
 11. AA: cold vapor = atomic absorption: cold vapor
-

Abbreviations and symbols

- N = number of samples
 St dev = traditional standard deviation
 MPV = 95% confidence most probable value
 F-pseudosigma = nonparametric statistic deviation
 Hu = upper hinge value
 Hl = lower hinge value
 μ g/L = micrograms per liter
 Lab = laboratory code number
 NR = not rated, less than value reported
 < = less than
-

<u>Constituent</u>	<u>page</u>
Hg Mercury	148

Table 18. --Statistical summary of reported data for standard reference water sample Hg-16 (mercury)--Continued
Hg (mercury)
μ g/L



0. Other			
8. AA: cold vapor			
N =	6	58	
Minimum =	0.00	0.01	
Maximum =	1.56	2.30	
Median =	1.22	1.32	
St Dev =	0.5684	0.3676	

MPV = 1.30
F-pseudosigma = 0.222
N = 64
Hu = 1.50
HI = 1.20

Lab	Rating	Z-value	0	8
1	2	1.39		1.61
3	2	1.17	1.56	
7	3	-0.94		1.09
11	4	-0.31		1.23
12	4	0.00		1.30
13	4	0.36		1.38
15	4	0.22		1.35
16	3	0.90	1.50	
18	4	0.31		1.37
24	3	0.90		1.50
29	4	0.22		1.35
32	3	0.80		1.48
34	4	-0.09	1.28	
36	0	-5.84	0.00	
39	4	-0.22		1.25
42	4	0.18		1.34
45	3	-0.58		1.17
46	0	-5.78		0.01
50	4	0.00		1.30
51	0	2.70		1.90
52	4	-0.18		1.26
55	3	0.90		1.50
58	0	-4.95		0.20
59	2	1.35		1.60
61	3	-0.90		1.10
63	4	-0.45		1.20
68	0	2.70		1.90
69	4	-0.36		1.22
70	3	-0.81		1.12
74	4	0.00		1.30
76	3	-0.63	1.16	
78	2	1.35		1.60
79	1	1.62		1.66
81	4	0.00		1.30
86	4	-0.27		1.24
90	2	-1.48		0.97
96	0	2.25		1.80
97	1	-1.84		0.89
108	4	0.13		1.33
109	2	1.12		1.55
113	4	0.00		1.30
118	0	-2.25		0.80
119	3	0.90		1.50
120	3	0.54		1.42
122	NR			< 1.0
124	4	-0.45		1.20
127	3	-0.58		1.17
128	3	0.90		1.50
133	4	-0.45		1.20
134	4	-0.45		1.20

Lab	Rating	Z-value	0	8
138	4	0.18		1.34
139	4	0.27		1.36
141	4	0.40		1.39
142	4	-0.13		1.27
145	4	0.18		1.34
146	3	-0.90		1.10
149	4	0.45		1.40
179	3	-0.90	1.10	
182	0	4.50		2.30
184	4	-0.27		1.24
189	0	4.50		2.30
194	4	0.31		1.37
198	3	0.63		1.44
202	4	-0.32		1.23
207	0	-2.70		0.70

Table 19. --Most probable values for constituents and properties in standard reference samples distributed in April 1993

[MPV, most probable value; ug/L, microgram per liter; mg/L, milligram per liter; uS/cm, microsiemen per centimeter at 25 degrees Celsius]

T-123 (trace constituents)

Analyte	MPV		F-pseudosigma	Analyte	MPV		F-pseudosigma
Ag	1.44	μ g/L	0.601	Li	9.68	μ g/L	1.149
Al	10.0	μ g/L	12.02	Mg	1.80	m g/L	0.126
As	20.2	μ g/L	2.11	Mn	13.6	μ g/L	1.07
B	11.3	μ g/L	6.30	Mo	9.20	μ g/L	1.308
Ba	7.65	μ g/L	0.945	Na	19.3	m g/L	1.04
Be	8.10	μ g/L	0.778	Ni	4.30	μ g/L	1.119
Ca	9.10	m g/L	0.608	Pb	9.80	μ g/L	1.557
Cd	5.86	μ g/L	0.871	Sb	6.99	μ g/L	1.483
Co	5.27	μ g/L	0.852	Se	5.23	μ g/L	1.371
Cr	10.7	μ g/L	1.19	SiO ₂	6.08	m g/L	0.571
Cu	10.2	μ g/L	1.07	Sr	48.6	μ g/L	2.59
Fe	57.5	μ g/L	4.82	V	4.00	μ g/L	1.105
K	1.16	m g/L	0.096	Zn	6.00	μ g/L	4.448

T-125 (trace constituents)

Analyte	MPV		F-pseudosigma	Analyte	MPV		F-pseudosigma
Ag	3.83	μ g/L	0.604	Li	16.2	μ g/L	1.58
Al	24.0	μ g/L	8.56	Mg	2.00	m g/L	0.111
As	10.2	μ g/L	1.54	Mn	18.0	μ g/L	1.22
B	19.4	μ g/L	8.02	Mo	20.1	μ g/L	1.78
Ba	16.9	μ g/L	1.67	Na	22.3	m g/L	1.19
Be	15.0	μ g/L	1.19	Ni	11.2	μ g/L	1.04
Ca	9.34	m g/L	0.526	Pb	8.11	μ g/L	1.216
Cd	7.20	μ g/L	0.749	Sb	6.24	μ g/L	1.305
Co	9.45	μ g/L	0.778	Se	9.78	μ g/L	1.853
Cr	3.99	μ g/L	0.712	SiO ₂	5.18	m g/L	0.319
Cu	17.4	μ g/L	2.08	Sr	46.0	μ g/L	2.29
Fe	97.9	μ g/L	7.34	V	6.56	μ g/L	0.890
K	1.04	m g/L	0.074	Zn	5.95	μ g/L	4.007

M-126 (major constituents)

Analyte	MPV		F-pseudosigma	Analyte	MPV		F-pseudosigma
Alkalinity	27.0	m g/L	1.48	Na	17.8	m g/L	0.77
B	9.6	μ g/L	1.67	total P	0.197	m g/L	0.009
Ca	7.61	m g/L	0.441	pH	7.43		0.263
Cl	20.7	m g/L	0.93	SiO ₂	4.04	m g/L	0.300
DSRD	88.0	m g/L	7.78	SO ₄	6.06	m g/L	0.504
F	0.59	m g/L	0.048	Sp Cond	148	μ S/cm	8.1
K	2.62	m g/L	0.178	Sr	41.0	μ g/L	2.08
Mg	1.62	m g/L	0.078	V	insufficient data		

N-38 (preserved nutrients)

Analyte	MPV		F-pseudosigma
NH ₃ as N	0.086	m g/L	0.0274
NH ₃ +OrgN as N	0.289	m g/L	0.1780
NO ₃ +NO ₂ as N	0.209	m g/L	0.0163
total P as P	0.125	m g/L	0.0163
PO ₄ as P	0.091	m g/L	0.0274

N-38 (nonpreserved nutrients)

Analyte	MPV		F-pseudosigma
NH ₃ as N	0.087	m g/L	0.0170
NH ₃ +OrgN as N	0.200	m g/L	0.158
NO ₃ +NO ₂ as N	0.210	m g/L	0.018
total P as P	0.120	m g/L	0.0126
PO ₄ as P	0.120	m g/L	0.0141

N-39 (preserved nutrients)

Analyte	MPV		F-pseudosigma
NH ₃ as N	0.890	m g/L	0.113
NH ₃ +OrgN as N	1.22	m g/L	0.430
NO ₃ +NO ₂ as N	0.908	m g/L	0.043
Total P as P	0.920	m g/L	0.044
PO ₄ as P	0.883	m g/L	0.0467

N-39 (nonpreserved nutrients)

Analyte	MPV		F-pseudosigma
NH ₃ as N	0.922	m g/L	0.0815
NH ₃ +OrgN as N	1.040	m g/L	0.196
NO ₃ +NO ₂ as N	0.912	m g/L	0.0649
total P as P	0.930	m g/L	0.0493
PO ₄ as P	0.908	m g/L	0.0489

P-20 (low ionic strength constituents)

Analyte	MPV		F-pseudosigma	Analyte	MPV		F-pseudosigma
Acidity	2.00	m g/L	1.142	Na	0.168	m g/L	0.0124
Ca	0.160	m g/L	0.0180	pH	5.53		0.204
Cl	0.140	m g/L	0.2900	PO ₄ as P	0.058	m g/L	0.0089
F	0.100	m g/L	0.0126	SO ₄	0.831	m g/L	0.2157
K	0.100	m g/L	0.0290	Sp Cond	7.42	μ S/cm	0.615
Mg	0.020	m g/L	0.0100				

Hg-16 (mercury)

Analyte	MPV		F-pseudosigma
Hg	1.30	μ g/L	0.222