REPORT ON THE U.S. GEOLOGICAL SURVEY'S EVALUATION PROGRAM FOR STANDARD REFERENCE SAMPLES DISTRIBUTED IN OCTOBER 1992 T-121 (TRACE CONSTITUENTS), M-124 (MAJOR CONSTITUENTS), N-36 (NUTRIENTS), N-37 (NUTRIENTS), P-19 (LOW IONIC STRENGTH) and Hg-15 (MERCURY)

by H. Keith Long and Jerry W. Farrar

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ABSTRACT

This report presents the results of the U.S. Geological Survey's analytical evaluation program for six standard reference samples--T-121 (trace constituents), M-124 (major constituents), N-36 (nutrients), N-37 (nutrients), P-19 (low ionic strength), and Hg-15 (mercury)--that were distributed in October 1992 to 174 laboratories registered in the U.S. Geological Survey sponsored interlaboratory testing program. Analytical data that were received from 130 of the laboratories were evaluated with respect to: overall laboratory performance and relative laboratory performance for each analyte in the six 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 six 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 seventy-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 identifed only by a confidential code number.

A library of SRS, from previous evaluations, are 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 130 of the 149 laboratories (table 1) that requested and were shipped SRS for the October 1992 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 October 13, 1992, are presented in this report:

T-121	Trace constituents
M-124	Major constituents
N-36	Nutrients--low level concentrations (analytes < 0.5 milligrams per Liter)
N-37	Nutrients--high level concentrations (analytes > 0.5 milligrams per Liter)
P-19	Low ionic strength (precipitation)
Hg-15	Mercury

The USGS requested that analytical results be returned by November 30, 1992, 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 October 1992*

State	City	Participating Laboratory
Alabama	Tuscaloosa	Geological Survey of Alabama
Alaska	Soldotna	Alaska Department of Game and Fish
Arizona	Yuma	Burns and Roe Services Corporation
Arkansas	Arkadelphia	Ouachita Baptist University
	Little Rock	Arkansas Department of Pollution Control and Ecology
California	Castiac	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
	Oakland	East Bay Muncipal Utility District
	Riverside	University of California - Riverside
	Riverside	USDA Department of Forestry
	Sacramento	Anlab
	Sacramento	US Bureau of Reclamation
	Sacramento	USGS
	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	US Bureau of Reclamation
	Denver	Denver Water Department
	Denver	Metro Wastewater Reclamation
	Englewood	Public Service Company of Colorado
	Fort Collins	City of Fort Collins - Water Quality
	Fort Collins	CSU - Soil Testing Laboratory
	Fort Collins	USDA US Forest Service
	Golden	Huffman Laboratories
	Loveland	Northern Colorado Water Conservation
	Northglenn	Northglenn Water Treatment Plant
	Pueblo	Pueblo Board of Water Works
	Westminster	City of Westminster
Florida	Ocala	USGS
	Orlando	Orange County
	Orlando	Post, Buckley, Schuh, and Jernigan, Inc.
	Ormand Beach	Environmental Laboratory
	Palatka	St. John's River Management District
	Tallahassee	City of Tallahassee
	Tallahassee	Florida Department of Environmental Regulations

Table 1.--*Laboratory participants in the analyses of standard reference samples distributed in October 1992--Continued*

State	City	Participating Laboratory
Florida	Tallahassee	Savannah Laboratories
	Tampa	Hillsborough County Environmental Protection Commission
	West Palm Beach	South Florida Water Management District
Georgia	Atlanta	Georgia Department of Natural Resources
	Atlanta	USGS WRD
	Decatur	Dekalb County Water Quality Laboratory
	Tifton	USDA Agriculture Research Station
Hawaii	Honolulu	University of Hawaii - Manoa, Department 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
Iowa	Davenport	City of Davenport
	Des Moines	University Hygienic Laboratory, Des Moines Branch
Kansas	Lawrence	Kansas Geological Survey
	Topeka	Kansas Department of Health and Environment
Kentucky	Frankfort	Division of Environmental Services
	Lexington	Kentucky Geological Survey
	Louisville	Metropolitan Sewer District
Maine	Orono	Sawyer Environmental Center, University of Maine
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 Science
	Ann Arbor	University of Michigan - School of Natural Resources
	Houghton	Michigan Technical University
Minnesota	Minneapolis	Braun Intertec Environmental, Inc.
	Minneapolis	University of Minnesota, Department of Geology and Geophysics
	St. Paul	Metropolitan Waste Control Commission
	St. Paul	University of Minnesota, Research Analytical Laboratory
Missouri	Columbia	University of Missouri, School of Natural Resources
	Jefferson City	Missouri Department of Health
Montana	Butte	Montana Bureau of Mines and Geology
Nevada	Boulder City	US Bureau of Reclamation
	Las Vegas	Clark County Sanitation District
	Las Vegas	University of Nevada - Las Vegas
	Reno	Desert Research Institute
	Reno	Nevada State Health Laboratory
	Sutcliffe	Pyramid Lake Fisheries
New Mexico	Albuquerque	City of Albuquerque
	Gallup	BIA - Navajo Area Office, Natural Resources Laboratory
New York	Albany	New York State Department of Health
	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	Sufflok County Water Authority
	Port Washington	New York Test Environmental, Inc.
	Rochester	Monroe County
	Syracuse	Onondaga County Department of Drainage and Sanitation

Table 1.--*Laboratory participants in the analyses of standard reference samples distributed in October 1992--Continued*

State	City	Participating Laboratory
New York	Valhalla	Department of Environmental Protection
	Wantaugh	Cedar Creek Projects Laboratory
North Carolina	Charlotte	Mecklenburg County - Department of Environmental Protection
	Durham	Duke University
	Durham	Department of Water Resources
	Greensboro	City of Greensboro
North Dakota	Bismarck	North Dakota State Water Commission
Ohio	Cincinnati	US EPA
	Columbus	City of Columbus
	Franklin	Franklin EOS
	Medina	Medina County Sanitary Engineer
	Tiffin	Heidelberg College
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
	Brookings	SDSU - Water Quality Laboratory
	Vermillion	South Dakota Geological Survey
Tennessee	Chattanooga	Tennessee Valley Authority
Texas	Tyler	Analytical Testing Laboratories
Utah	Salt Lake City	Utah State Department of Health
Vermont	Waterbury	Vermont Agency of Natural Resources
Virginia	Culpepper	ESS Laboratories
	Manassas	Occoquan Watershed Monitoring Lab
	Richmond	Consolidated Laboratory Services
	Virginia Beach	Hampton Road Sanitation District
Washington	Richland	Battelle - Pacific Northwest
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	Laramie	Wyoming Department of Agriculture

Preparation of Standard Reference Samples

All of 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 sample T-121 was prepared using water collected from the Fall River near Idaho Springs, Colo. The water was pumped through 2- and 0.1-µm filters, in series, into a 1300-L polypropylene drum. The water was continuously circulated and passed through a 0.1-µm filter and ultraviolet sterilizer for 24 hours. Following this circulation, the water was acidified to pH 1.5 with nitric acid and then supplemented with reagent-grade chemicals to achieve selected analyte concentrations. The water was circulated an additional 24 hours

prior to bottling. Each sample was bottled after being pumped through an ultraviolet sterilizer and a 0.1-µm filter. Bottles used were new and 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-124 was prepared using water collected from the North Platte River near Ogallala, Nebr. The water was pumped through 5- and 0.45-µm filters, in series, into a 1300-L polypropylene drum. The water was continuously circulated and passed through a 0.1-µm filter and ultraviolet sterilizer for 72 hours. The water was not supplemented with reagent-grade chemicals to modify analyte concentrations. Each sample was bottled after being pumped through an ultraviolet sterilizer and a 0.1-µm filter. Bottles used were new and 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-36 and N-37 were prepared using water collected from the Fall River near Idaho Springs, Colo. These samples were prepared the week prior to the mailing for this SRS evaluation. The water was pumped through 2- and 0.1-µm filters, in series, into a 600-L polypropylene drum and continuously circulated and passed through a 0.1-µm filter for 48 hours. The desired nutrient concentrations were obtained by adding reagent-grade chemicals. The water was circulated 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-19 was prepared in a 400-L polypropylene drum using snowmelt collected near Echo Lake, west of Idaho Springs, Colo. The collected snow was allowed to melt: after which the snowmelt was pumped into the drum through 2- and 0.1-µm filters in series. The snowmelt was continuously mixed for 48 hours while being circulated through a 0.1-µm filter and an ultraviolet sterlizer. Following this mixing each sample was bottled after being pumped through an ultraviolet sterlizer and a 0.1-µm filter. Bottles used were acid leached, deionized water rinsed, autoclave sterilized, 500 mL polypropylene bottles. Samples are stored in a warehouse until requested for use.

Sample Hg-15 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-µm filters in series. The water was continuously circulated and passed through a 0.1-µm 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. 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-121 (trace constituents) to 1 in Hg-15 (mercury).

Table 2.--*Analytes determined in standard reference samples distributed in October 1992*

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

Analyte or property		Units	T-121	M-124	N-36-37	P-19	Hg-15
Acidity	Acidity as $CaCO_3$	mg/L				X	
Alk	Alkalinity 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	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				
Sc	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 analytical method 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 [*specify chelating agents*]
11	Atomic absorption: hydride [*specify reducing agent*]
12	Flame emission
20	Titration: colorimetric [*specify color reagent*]
22	Colorimetric: [*specify reducing or oxidizing agent/color reagent*]
40	Selective ion electrode
41	Electrometric [*pH and Specific Conductance*]
50	Gravimetric: [*specify filtration, evaporation,and so forth*]
51	Turbidimetric

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, 1527p.

2. American Society for Testing and Materials, 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 manufacturer's 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 10 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 below:

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

Overall laboratory performance ratings greater than 2.4 are considered satisfactory. Overall laboratory performance ratings between 2.0 and 2.35 are considered marginal; those less than 2.0 are considered poor.

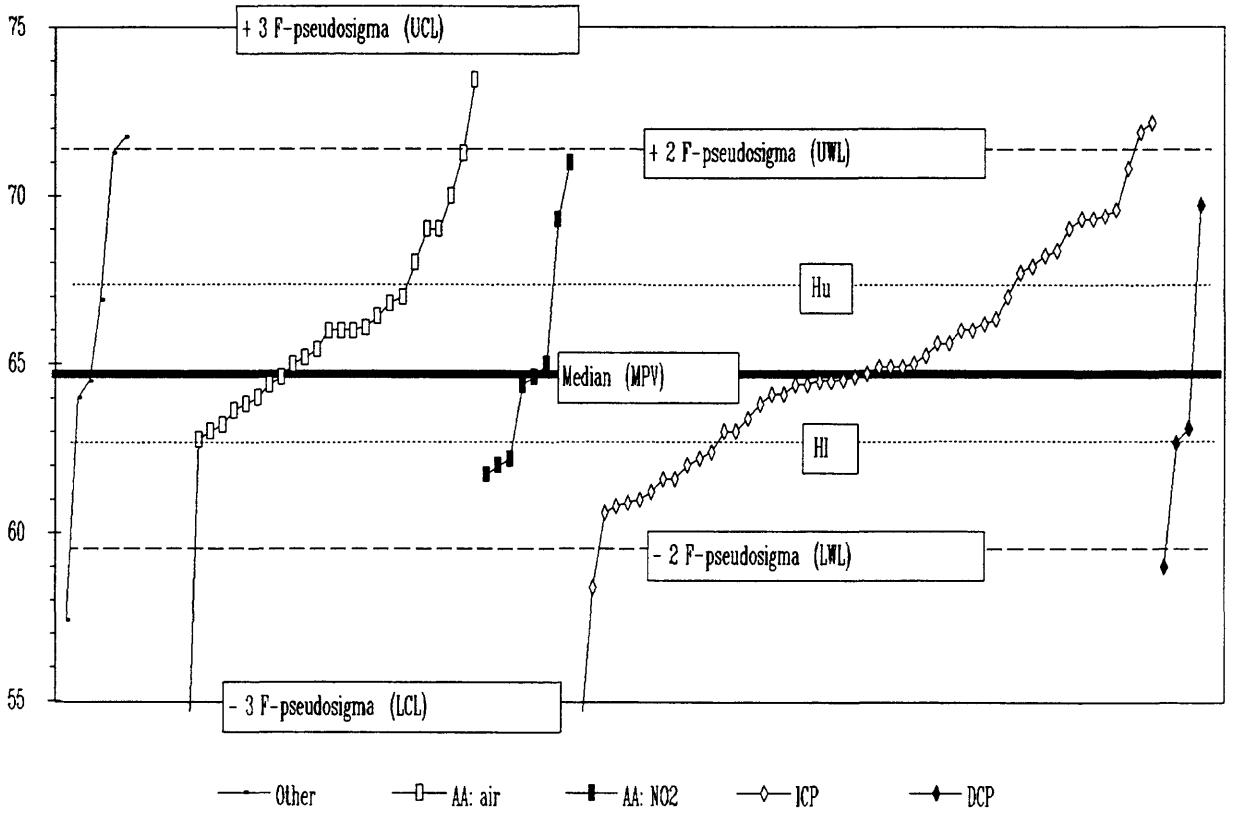
STATISTICAL PRESENTATION OF DATA

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 11 through 17. 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 has 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. The 95-percent confidence level MPV is expressed as the median +/- (1.96 x F-pseudosigma)/$\sqrt{N}$. 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 October 1992*

(Lab, laboratory number; OWR, overall weighted rating for all sample types;OLR, overall laboratory rating for reported values of a sample type; V/72,number of reported values of 72 possible values from all sample types; V/26,V/16,V/10,V/10,V/9 and V/1, number of reported values possible for T-121, M-124, N-36, N-37, P-19 and Hg-15, respectively)

Standard Reference Sample			T-121		M-124		N-36		N-37		P-19		Hg-15	
Lab	OWR	V/72	OLR	V/26	OLR	V/16	OLR	V/10	OLR	V/10	OLR	V/9	OLR	V/1
1	3.5	62	3.6	26	3.4	16	3.8	5	3.8	5	3.3	9	4	1
2	3.4	11	4.0	1	1.5	2					3.8	8		
3	2.6	54	2.7	20	3.0	15	1.6	5	2.2	5	2.1	8	3	1
5	3.2	25	3.7	13	2.8	12								
6	2.5	25	3.0	9	2.6	8	1.5	4	2.3	4				
8	1.9	38	2.3	18	1.6	14	0.0	3	2.3	3				
9	2.5	32	2.4	13	2.7	10	2.8	4	2.2	5				
10	3.5	23			3.2	13	4.0	5	3.8	5				
11	2.2	59	1.9	26	3.2	13	0.8	5	1.4	5	2.9	9	0	1
12	2.5	31	2.5	10	2.6	12	2.7	3	2.6	5			2	1
13	2.9	39	2.7	15	2.8	13	3.2	5	3.8	5			3	1
15	2.6	67	3.0	26	2.0	15	2.4	9	2.5	9	2.9	8		
16	2.6	38	2.8	13	2.8	14	2.4	5	1.4	5			4	1
18	2.7	49	2.0	22	3.2	16	3.0	5	3.2	5			4	1
19	2.8	29	2.1	9	2.8	12	3.3	4	3.8	4				
20	3.4	12					4.0	6	2.7	6				
21	3.1	8	4.0	1			3.0	7						
22	4.0	2					4.0	1	4.0	1				
23	2.6	47	2.5	20	2.0	13	4.0	4	3.2	5	3.2	5		
24	3.2	40	2.9	26	3.8	13							3	1
25	2.6	37	2.7	14	2.5	15	1.8	4	3.0	4				
26	2.5	15	3.0	4	2.3	11								
28	0.8	45	1.0	21			0.0	8	0.6	8	1.3	7	4	1
29	2.0	36	2.1	15	2.3	12	0.0	4	1.8	4			3	1
30	3.4	25	3.7	20	2.2	5								
32	2.4	44	2.4	23	2.6	14	1.7	3	2.3	3			3	1
33	2.9	37	3.2	11	2.8	12	1.0	3	1.0	3	4.0	8		
35	4.0	2	4.0	2										
36	2.0	34	2.0	20	2.0	13							4	1
37	2.8	44	3.4	20	3.3	12	1.3	3	1.7	3	1.0	5	3	1
38	3.3	26			3.0	9	3.0	5	3.8	5	3.7	7		
39	2.6	33	2.4	19	2.9	9					2.8	5		
40	3.6	14			3.6	14								
41	0.6	5			0.0	1			1.0	3	0.0	1		
42	2.8	41	3.1	22	2.3	12	3.0	2	3.0	2	2.7	3		
43	3.3	20	3.4	7	3.3	11	2.0	1	4.0	1				
45	3.3	49	2.8	22	3.7	14	3.7	6	3.7	6			4	1
46	3.3	48	3.2	17	3.0	12	3.8	5	3.8	5	3.5	8	4	1
48	2.3	50	2.3	20	2.9	12	2.8	5	2.2	5	1.1	8		
50	3.3	27	3.8	14	2.8	13								
51	2.7	32	2.3	15	3.2	11	2.8	5					3	1
52	2.8	58	3.0	23	2.9	14	2.4	8	2.1	8	2.5	4	4	1
53	1.5	2					0.0	1	3.0	1				
54	3.6	16	3.5	6	3.6	10								
55	3.0	52	2.9	25	2.9	16	3.4	5	3.4	5			4	1
56	2.7	13			2.4	9	3.3	4						
57	2.0	35	2.4	16	2.0	14			0.8	5				
58	1.8	33	2.0	11	1.3	9	1.8	4	0.0	4	3.8	5		
59	3.0	33	3.6	16	2.2	6	2.0	5	3.2	5			3	1
61	2.7	48	2.4	16	2.7	15	3.6	5	3.6	5	1.8	6	4	1
63	2.6	54	2.8	24	2.5	14	3.3	3	2.4	5	1.3	7	4	1
64	3.2	21	3.8	5	2.7	9					3.6	7		
68	2.3	47	2.1	24	2.2	12	3.0	5	2.6	5			2	1
69	3.1	30	2.9	16	3.4	11	3.0	1	4.0	1			3	1
70	3.0	38	3.3	19	3.2	14	1.5	2	0.5	2			3	1
73	2.3	7	2.3	7										
74	3.0	58	2.9	23	2.7	16	3.8	5	3.0	5	3.4	8	4	1
75	3.3	31	3.4	11	3.3	11	2.8	4	3.8	4			3	1
76	3.1	19	3.5	8	2.3	7	4.0	2	3.0	2				
78	2.1	51	2.7	20	2.0	13	1.7	3	1.2	6	1.8	9		
79	1.5	15	1.9	8	2.0	3	0.5	2	0.5	2				
80	2.4	5	2.4	5										
81	1.7	23			1.5	13	2.2	5	1.8	5				
83	2.8	23	2.7	9	3.2	10	3.0	2	1.0	2				
84	1.8	17	1.2	5	2.8	8	0.0	1	1.0	3				

Table 4. *--Overall laboratory performance ratings for standard reference water samples distributed in October 1992 --Continued*

Standard Reference Sample			T-121		M-124		N-36		N-37		P-19		Hg-15	
Lab	OWR	V/72	OLR	V/26	OLR	V/16	OLR	V/10	OLR	V/10	OLR	V/9	OLR	V/1
85.	3.2	37	2.8	14	3.5	13	3.8	5	3.4	5				
87.	2.6	38	2.6	15	2.8	12	1.8	5	3.0	5			3	1
88.	0.6	12					0.0	6	1.2	6				
89.	3.1	55	2.0	15	3.7	13	3.8	9	3.6	9	3.1	8	3	1
90.	2.2	27	1.9	13	0.8	5	3.5	4	3.8	4			1	1
91.	2.9	17	3.5	2	2.8	6	2.8	4	2.8	4			4	1
92.	2.4	44	2.4	14	2.3	12	2.8	5	3.4	5	1.5	8		
94.	3.2	38	3.2	18	3.4	12	3.3	4	2.8	4				
96.	3.3	33	3.5	15	2.7	7	3.4	5	3.4	5			4	1
97.	2.6	57	2.6	24	2.1	15	2.9	9	3.1	8			3	1
100.	2.7	53	2.3	26	3.1	16	2.8	5	3.0	5			3	1
101.	2.9	33	3.0	16	3.1	10					2.4	7		
102.	2.6	15			2.8	5	3.0	5	2.0	5				
103.	2.0	31	2.1	23	1.5	8								
104.	3.3	17	3.0	1	3.3	4	3.3	6	3.3	6				
105.	3.0	56	3.5	24	2.6	14	2.4	5	2.8	5	2.4	7	4	1
107.	2.6	25	2.9	15	1.8	6	2.8	4						
108.	2.1	16	2.1	8	4.0	1	1.3	3	2.0	3			2	1
109.	3.1	24	2.7	12	3.5	11							4	1
111.	2.7	26	3.7	10	2.2	10	2.0	3	1.7	3				
113.	2.7	42	2.6	18	3.4	14	2.0	4	2.0	5			4	1
114.	1.4	29	0.8	13	1.9	10	2.3	3	1.3	3				
116.	2.6	11	2.7	6	2.6	5								
118.	1.9	27	4.0	1	0.5	6	1.9	10	2.5	10				
119.	3.1	56	3.4	21	3.4	14	2.4	10	2.7	10			3	1
120.	2.6	41	2.1	20	3.1	11	3.0	5	3.4	4			4	1
121.	3.0	30	3.3	22	2.1	8								
122.	2.4	27	3.0	15	1.8	12								
123.	1.9	28	1.9	8	2.5	6	0.5	4	1.0	4	3.0	6		
126.	3.5	20	2.8	4	3.6	16								
127.	3.4	51	3.5	26	3.1	14	3.4	5	3.8	5			4	1
128.	1.0	1											1	1
129.	2.2	40	0.9	7	1.8	13	3.0	10	2.9	10				
131.	3.0	21	3.1	9	2.8	12								
133.	2.0	43	1.9	22	2.4	8	2.5	6	1.4	6			2	1
134.	3.3	69	2.9	24	3.6	16	3.5	10	3.6	10	3.3	8	3	1
136.	2.2	41	2.8	20	2.3	11					0.9	9	0	1
138.	3.4	49	3.6	24	3.2	14	3.2	5	3.2	5			4	1
139.	2.1	35	1.6	14	1.4	10	3.6	5	3.8	5			0	1
140.	2.9	33	2.9	12	3.2	11	2.0	5	3.2	5				
141.	3.1	58	3.2	25	3.1	16	3.4	5	3.8	5	2.0	6	4	1
144.	2.0	11	2.1	7	1.3	3							3	1
145.	2.3	57	1.8	16	1.8	15	3.2	10	3.1	10	1.7	6		
146.	2.2	41	2.1	24	2.0	12	3.5	2	3.0	2			2	1
149.	2.6	28	2.7	15	2.5	6	2.3	3	2.3	3			4	1
151.	3.3	21	3.5	8	3.4	11	4.0	1	0.0	1				
153.	2.4	21	3.2	10	1.7	11								
155.	2.4	25	2.0	4	2.3	8	3.6	5	2.6	5	1.0	3		
158.	2.5	25	1.6	5	3.0	6	2.5	4	2.0	4	3.2	6		
161.	1.8	27	1.8	9	1.7	11	2.0	3	2.0	4				
164.	2.3	10	2.8	4							2.0	6		
167.	3.0	45	2.5	16	3.2	13	3.5	6	3.5	6	2.7	3	1	1
179.	1.8	23	1.8	15	1.9	7							2	1
180.	3.0	39	2.9	16	2.9	13	3.6	5	3.2	5				
182.	1.0	50	0.7	19	1.3	14	0.5	8	1.1	8			3	1
183.	1.9	25	2.7	10	1.6	9	1.7	3	0.7	3				
185.	1.7	3	0.5	2			4.0	1						
191.	2.7	22	3.2	9	2.9	8	0.5	2	1.5	2	4.0	1		
193.	2.6	15	2.5	10	2.3	3	4.0	1	3.0	1				
196.1	2.5	34	2.9	18	0.9	7			1.0	2	4.0	6	0	1
196.2	2.8	6	2.8	6										
197.	2.7	15			2.6	5	1.3	3	2.7	3	4.0	4		
198.	2.4	10					2.8	5	2.0	5				
201.	1.4	25	1.0	9	1.9	9	0.0	3	2.3	4				
202.	2.6	40	2.9	18	2.9	9	2.0	5	1.8	5	1.7	3		
204.	1.6	34	1.6	18	1.6	11	1.6	5						

Table 5. *--Laboratory performance ratings for standard reference water sample T-121 (trace constituents)*

(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/26, number of reported values of 26 possible values; RV, reported value; <, less than)

Rating	Absolute Z-value	Rating	Absolute Z-value
4 (Excellent)	0.00 - 0.50	1 (Questionabl	1.51 - 2.00
3 (Good)	0.51 - 1.00	O (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 =	0.90 µg/L		85.5 µg/L		8.00 µg/L		90 µg/L		46.3 µg/L		10.6 µg/L	
			F-pseudosigma =	0.36		12.9		1.11		9		4.3		1.0	
Lab	OLR	V/26		RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating
1	3.6	26		0.90	4	80.0	4	9.20	2	93	4	46.3	4	11.2	3
2	4.0	1													
3	2.7	20		< 5	NR	80.0	4	6.50	2	80	2	44.0	3	10.0	3
5	3.7	13				83.4	4	8.45	4	89	4	46.6	4		
6	3.0	9		0.70	3							44.1	3	12.0	2
8	2.3	18				102.3	2	4.00	0			39.6	1	12.3	1
9	2.4	13													
11	1.9	26		1.60	1	80.0	4	5.89	1	100	2	50.0	3	10.0	3
12	2.5	10		1.20	3	< 100	NR	< 10	NR					< 20	NR
13	2.7	15		< 2	NR	97.3	3	8.00	4			51.3	2		
15	3.0	26		0.61	3	82.8	4	7.00	3	84	3	45.0	4	11.9	2
16	2.8	13		< 7	NR	< 300	NR	7.00	3	< 200	NR	47.0	4	10.0	3
18	2.0	22		2.00	0	86.6	4	9.23	2	91	4	42.3	3	9.4	2
19	2.1	9										43.3	3		
21	4.0	1													
23	2.5	20		1.14	3	80.2	4	8.25	4			50.8	2	11.4	3
24	2.9	26		0.90	4	73.0	3	3.70	0	95	3	45.9	4	10.4	4
25	2.7	14				60.5	1			91	4	45.3	4	10.2	4
26	3.0	4		< 10	NR	< 250	NR	8.00	4	< 100	NR	< 250	NR		
28	1.0	21		< 100	NR	100.0	2	8.00	4	150	0	50.0	3	< 100	NR
29	2.1	15		0.80	4	200.0	0	9.80	1			50.0	3		
30	3.7	20		0.88	4	85.2	4	8.51	4			46.6	4	10.6	4
32	2.4	23		1.60	1			8.70	3			45.5	4	14.3	0
33	3.2	11				87.0	4					45.0	4		
35	4.0	2						8.23	4						
36	2.0	20		1.74	0	75.8	3	4.92	0			52.8	1	11.0	4
37	3.4	20		0.80	4	90.0	4	8.63	3	84	3	44.1	3	12.5	1
39	2.4	19				98.0	3	7.60	4	98	3	49.0	3	13.0	0
42	3.1	22				90.0	4	7.40	3	90	4	43.0	3		
43	3.4	7													
45	2.8	22		0.58	3	88.7	4	6.40	2	105	1	47.5	4	11.4	3
46	3.2	17		0.78	4	97.4	3	6.60	2	40	0	47.5	4	11.2	3
48	2.3	20		0.80	4	111.0	1	7.10	3	100	2	51.0	2	11.6	3
50	3.8	14		< 5	NR	85.0	4	8.00	4			< 50	NR	11.0	4
51	2.3	15						6.60	2						
52	3.0	23		< 1	NR	64.0	1	8.50	4	< 170	NR	43.5	3	11.8	2
54	3.5	6													
55	2.9	25		1.00	4	75.0	3	8.50	4	67	0	46.3	4	10.8	4
57	2.4	16		1.30	2	< 250	NR	8.00	4	200	0	50.0	3	9.0	1
58	2.0	11		1.00	4			6.10	1	88	4			3.3	0
59	3.6	16		< 10	NR	< 100	NR	7.00	3			46.0	4		
61	2.4	16		< 5	NR	70.0	2	8.50	4	92	4	42.7	3	11.0	4
63	2.8	24		1.10	3	143.0	0	8.00	4	85	3	115.0	0	10.1	3
64	3.8	5													
68	2.1	24		0.85	4	250.0	0	7.50	4			48.0	4	10.0	3
69	2.9	16		0.94	4	90.0	4	8.20	4			58.0	0	10.5	4
70	3.3	19		3.10	0	84.0	4	8.20	4	88	4	47.0	4	10.3	4
73	2.3	7				92.0	4								
74	2.9	23		0.59	3	77.0	3	8.60	3			42.0	2	10.2	4
75	3.4	11						7.65	4			49.2	3		
76	3.5	8						8.77	3			45.5	4		
78	2.7	20		1.50	1	79.2	4	8.00	4			51.1	2	11.7	2
79	1.9	8		43.00	0			6.40	2						
80	2.4	5		< 1	NR			9.00	3						
83	2.7	9													

Table 5. *--Laboratory performance ratings for standard reference water sample T-121 (trace constituents)--Continued*

	Analyte =	Ag (Silver)		Al (Aluminum)		As (Arsenic)		B (Boron)		Ba (Barium)		Be (Beryllium)	
	MPV =	0.90 µg/L		85.5 µg/L		8.00 µg/L		90 µg/L		46.3 µg/L		10.6 µg/L	
	F-pseudosigma =	0.36		12.9		1.11		9		4.3		1.0	
Lab	OLR	V/26	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating
84.	1.2	5												
85.	2.8	14	< 5	NR	90.0	4	7.50	4						
87.	2.6	15	< 2	NR			7.00	3			66.0	0		
89.	2.0	15	4.57	0	137.0	0	7.22	3			116.0	0		
90.	1.9	13	0.56	3			8.70	3			80.4	0		
91.	3.5	2												
92.	2.4	14												
94.	3.2	18	< 4	NR			7.83	4			44.6	4	10.3	4
96.	3.5	15	1.34	2			8.06	4			47.0	4		
97.	2.6	24	1.02	4	118.0	0	8.62	3			44.4	4	8.8	1
100.	2.3	26	0.89	4	73.4	3	9.50	2	140	0	46.3	4	10.4	4
101.	3.0	16			147.0	0					45.2	4		
103.	2.1	23	< 5	NR	85.0	4	7.00	3	60	0	38.0	1	10.0	3
104.	3.0	1												
105.	3.5	24	1.20	3	85.0	4	8.00	4			44.0	3	10.3	4
107.	2.9	15	0.90	4	70.2	2	8.46	4			44.5	4		
108.	2.1	8	0.50	2			7.00	3			49.0	3		
109.	2.7	12					6.96	3						
111.	3.7	10												
113.	2.6	18	0.58	3	83.8	4	7.75	4			57.8	0		
114.	0.8	13	< 10	NR	20.0	0							20.0	0
116.	2.7	6												
118.	4.0	1												
119.	3.4	21	1.00	4	102.0	2	7.50	4	88	4	48.0	4	8.2	0
120.	2.1	20	0.78	4	85.5	4	7.94	4			56.1	0	10.8	4
121.	3.3	22	0.55	3	89.0	4			90	4	46.0	4		
122.	3.0	15	< 1	NR	100.0	2			60	0	44.8	4		
123.	1.9	8					5.85	1						
126.	2.8	4	< 10	NR							< 200.0	NR		
127.	3.5	26	0.55	3	69.6	2	7.74	4	90	4	45.6	4	10.6	4
129.	0.9	7							200	0				
131.	3.1	9	< 10	NR	< 100	NR	< 50	NR	88	4	45.0	4		
133.	1.9	22	3.20	0	93.0	3	7.46	4			43.7	3	10.7	4
134.	2.9	24	1.30	2	93.7	3	7.60	4	82	3	48.6	3	8.5	0
136.	2.8	20			89.0	4	8.00	4			44.0	3		
138.	3.6	24	1.03	4	100.6	2	8.80	3			45.6	4	10.5	4
139.	1.6	14			51.0	0	8.98	3						
140.	2.9	12												
141.	3.2	25	1.00	4	82.2	4	8.50	4	95	3	45.0	4	11.7	2
144.	2.1	7	0.20	1										
145.	1.8	16			80.0	4	< 21	NR	65	0	43.7	3	9.9	3
146.	2.1	24	< 10	NR	103.0	2	8.00	4	95	3	48.9	3	10.6	4
149.	2.7	15	0.78	4	80.0	4	6.40	2			66.0	0	10.4	4
151.	3.5	8			80.0	4								
153.	3.2	10	0.81	4							47.0	4		
155.	2.0	4												
158.	1.6	5												
161.	1.8	9			123.0	0			4300	0	46.0	4		
164.	2.8	4												
167.	2.5	16	< 2	NR	< 100	NR	10.00	1	86	4	0.0	0	11.0	4
179.	1.8	15	17.80	0			6.80	2					9.3	2
180.	2.9	16	< 4	NR	57.1	0	< 18	NR	96	3	47.2	4	10.5	4
182.	0.7	19	< 1	NR	< 1000	NR	8.00	4	< 100	NR	100.0	0	10.0	3
183.	2.7	10			92.9	3	7.40	3			32.2	0		
185.	0.5	2			108.0	1								
191.	3.2	9									451.0	0		
193.	2.5	10	< 1	NR			7.00	3			42.0	2		
196.1	2.9	18	0.57	3	86.4	4	8.04	4			44.0	3	12.7	0
196.2	2.8	6	0.76	4			9.00	3						
201.	1.0	9	< 2	NR										
202.	2.9	18	0.54	2	80.0	4	7.80	4					12.0	2
204.	1.6	18	1.20	3	78.8	3	6.50	2			58.7	0		

Table 5. *--Laboratory performance ratings for standard reference water sample T-121 (trace constituents)--Continued*

(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/26, number of reported values of 26 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 =	Ca (Calcium)		Cd (Cadmium)		Co (Cobalt)		Cr (Chromium)		Cu (Copper)		Fe (Iron)		K (Potasium)	
MPV =	5.13	m g/L	7.17	µ g/L	4.6	µ g/L	16.0	µ g/L	4.80	µ g/L	140	µ g/L	0.45	m g/L
F-pseudosigma =	0.28		1.05		0.7		1.6		0.67		12		0.06	
Lab	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating
1	5.18	4	7.30	4	4.8	4	16.3	4	4.90	4	142	4	0.43	4
2														
3	5.20	4	7.80	3	< 10	NR	14.0	2	< 5	NR	130	3	0.36	2
5	5.26	4					16.8	3			149	3		
6			8.14	3			16.1	4	4.55	4				
8	5.36	3	6.10	2	3.9	3	9.1	0	3.60	1	143	4	0.51	3
9	4.30	0	6.80	4			17.1	3	4.00	2	135	4	0.38	2
11	5.07	4	3.74	0	6.0	1	20.0	0	3.00	0	150	3	0.44	4
12	5.00	4	7.10	4			< 20	NR	6.00	1	140	4	0.30	0
13	4.92	3	8.86	1			12.8	0	< 50	NR	134	3	0.41	3
15	5.08	4	6.87	4	4.5	4	16.8	3	2.70	0	128	2	0.47	4
16	4.90	3	8.00	3	< 10	NR	19.0	1	< 10	NR	138	4	0.40	3
18	5.60	1	6.98	4	4.0	3	13.0	1	4.40	3	117	1	0.70	0
19	4.85	3	5.50	1			14.0	2			132	3		
21											144	4		
23	4.86	3	5.72	2			15.6	4	3.70	1	122	1	0.43	4
24	5.23	4	7.50	4	5.4	2	15.5	4	4.80	4	137	4	0.25	0
25	5.58	1					17.1	3			129	3		
26			7.00	4	< 10	NR	< 20	NR	< 100	NR	< 200	NR		
28	10.40	0	10.00	0	< 100	NR	30.0	0	20.00	0	170	0	2.10	0
29			7.20	4			14.5	3	< 4	NR	125	2		
30			7.34	4	4.6	4	16.0	4	4.87	4	148	3		
32	5.30	3	7.90	3	4.6	4	16.0	4	5.60	2	205	0	0.50	3
33	5.06	4									135	4	0.48	3
35														
36	4.79	2	7.05	4	7.9	0	18.5	1	13.30	0	130	3	0.32	0
37			7.10	4	4.8	4	17.0	3	4.93	4	150	3		
39	5.97	0	7.20	4			16.0	4	6.00	1				
42	5.10	4	5.20	1			16.0	4	4.40	3	142	4	0.70	0
43	5.10	4									148	3	0.40	3
45	5.04	4	7.13	4			14.7	3	4.73	4	134	3	0.44	4
46	5.31	3	7.10	4	< 10	NR	14.4	2			147	3	0.49	3
48	5.31	3	7.70	3	< 10	NR	16.4	4	4.80	4	160	1	640	0
50			7.00	4	5.0	3	15.0	3	5.00	4	129	3		
51	5.26	4	10.00	0	4.0	3	8.0	0	4.00	2	141	4	1.54	0
52	4.90	3	6.51	3	4.1	3	17.1	3	4.94	4	133	3	0.45	4
54	5.10	4									140	4	0.45	4
55	5.18	4	8.60	2	4.0	3	16.5	4	4.10	2	140	4	0.43	4
57	5.00	4	7.50	4	< 100	NR	15.0	3	< 20	NR	120	1	0.50	3
58							17.4	3	4.40	3	86	0		
59	5.20	4	7.00	4			16.0	4	5.00	4	145	4	0.45	4
61	4.90	3	9.60	0	< 5	NR	13.2	1	< 5	NR	126	2	< 1	NR
63	5.39	3	7.70	3	46.0	0	16.4	4	5.00	4	137	4	0.52	2
64	5.04	4											0.42	4
68	4.90	3	4.80	0	3.1	0	26.0	0	6.30	0	140	4	1.00	0
69	4.80	2	7.03	4			15.8	4	6.00	1	144	4	0.50	3
70	5.26	4	5.05	0	< 10	NR	16.5	4	< 10	NR	120	1	< 0.5	NR
73			7.00	4			20.6	0	8.00	0	158	1		
74	4.80	2	6.00	2	4.0	3	14.0	2	5.00	4	130	3	0.48	4
75	4.78	2					16.0	4	4.40	3			< 1	NR
76			7.52	4			17.4	3			144	4		
78	4.65	1	5.40	1			16.3	4	3.67	1	140	4	0.46	4
79			10.60	0			16.0	4	3.00	0				
80							21.0	0	4.00	2				
83	5.27	3							4.50	4	138	4	0.48	4

Table 5. *--Laboratory performance ratings for standard reference water sample T-121 (trace constituents)--Continued*

Analyte =	Ca (Calcium)		Cd (Cadmium)		Co (Cobalt)		Cr (Chromium)		Cu (Copper)		Fe (Iron)		K (Potasium)	
MPV =	5.13	m g/L	7.17	µ g/L	4.6	µ g/L	16.0	µ g/L	4.80	µ g/L	140	µ g/L	0.45	m g/L
F-pseudosigma =	0.28		1.05		0.7		1.6		0.67		12		0.06	
Lab	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating
84.	3.90	0									150	3		
85.	5.22	4	12.00	0			< 20	NR	< 5	NR	143	4	0.51	3
87.	6.40	0	0.01	0			13.2	1	< 5	NR	157	2	0.44	4
89.	4.69	1	6.22	3	< 10	NR	15.0	3	< 10	NR	131	3	0.50	3
90.			8.40	2			32.1	0	6.10	1	138	4		
91.											144	4		
92.	4.55	0	7.00	4	5.0	3	16.0	4	5.00	4	106	0	1.55	0
94.	5.06	4	6.58	3	4.1	3	15.5	4	8.00	0	144	4	0.46	4
96.	4.98	3	7.23	4			16.5	4	4.48	4	143	4	0.49	3
97.	4.92	3	5.94	2	4.4	4	14.1	2	4.66	4	140	4	0.36	2
100.	5.41	2	7.20	4	5.4	2	15.8	4	12.20	0	138	4	0.44	4
101.	5.15	4	7.70	3			16.5	4	4.20	3	149	3	0.50	3
103.	4.90	3	6.00	2	4.0	3	12.3	0	4.00	2	130	3	0.40	3
104.														
105.	4.73	2	7.30	4	< 10	NR	17.3	3	5.00	4	133	3	0.43	4
107.	9.29	0	8.52	2			14.9	3	4.75	4	135	4		
108.			8.00	3			14.0	2	6.00	1				
109.	5.60	1	6.77	4							149	3	0.42	4
111.	5.26	4	6.20	3			16.4	4	4.30	3			0.48	4
113.	5.20	4	6.90	4			16.9	3	5.02	4	0	0	0.52	2
114.	3.00	0	< 10	NR			80.0	0	20.00	0	150	3	0.22	0
116.	5.89	0									146	3		
118.														
119.	5.15	4	7.30	4			15.5	4	5.00	4	140	4	0.43	4
120.	4.54	0	7.78	3			14.7	3	4.26	3	118	1	0.25	0
121.	5.20	4	7.00	4	7.0	0	18.0	2	5.40	3	150	3	0.44	4
122.	5.24	4	6.47	3			15.6	4	4.66	4	115	0	0.46	4
123.	4.98	3					16.7	4	4.40	3			0.28	0
126.	5.00	4					26.0	0	< 20	NR				
127.	5.14	4	7.10	4	4.2	3	15.8	4	4.96	4	140	4	0.54	2
129.	9.00	0									135	4	0.20	0
131.	4.90	3	< 10	NR	< 10	NR	< 10	NR	< 10	NR	140	4	< 2	NR
133.	4.92	3	8.26	2	12.5	0	14.6	3	7.97	0	147	3	0.37	2
134.	4.96	3	7.20	4	4.6	4	16.6	4	4.40	3	131	3	0.70	0
136.	4.60	1	10.00	0	5.0	3	11.0	0	4.00	2	150	3	0.40	3
138.	5.26	4	8.30	2	4.5	4	15.3	4	4.80	4	136	4	0.45	4
139.	5.93	0	9.22	1					4.70	4	120	1	0.54	2
140.	5.00	4	7.60	4			17.5	3	5.30	3	140	4	0.64	0
141.	5.25	4	6.70	4	5.1	3	14.4	2	5.90	1	136	4	0.42	4
144.			6.30	3			15.0	3	5.20	3				
145.	5.11	4	3.18	0	< 5	NR	7.6	0	< 3	NR	126	2	< 0.1	0
146.	5.83	0	8.60	2	4.5	4	16.1	4	12.00	0	160	1	1.56	0
149.			7.60	4			14.5	3	< 9	NR	155	2		
151.	5.10	4											0.42	4
153.	5.10	4	8.60	2			16.9	3	4.60	4			0.43	4
155.	5.75	0									131	3		
158.			6.00	2			11.4	0	4.00	2				
161.							16.0	4	5.00	4	154	2		
164.	5.39	3											0.40	3
167.	5.00	4	8.00	3	< 40	NR	15.0	3	< 20	NR	0	0	< 1	NR
179.	8.00	0	7.10	4			16.5	4	2.40	0			0.40	3
180.	5.54	2	6.50	3	4.1	3	16.0	4	5.00	4	132	3	0.55	1
182.	6.90	0	10.00	0	10.0	0	10.0	0	< 20	NR	< 200	NR	0.10	0
183.			9.21	1			15.8	4	4.77	4				
185.														
191.	5.26	4									150	3	0.48	4
193.	5.15	4	6.00	2	< 10	NR	14.0	2	< 10	NR	142	4	0.45	4
196.1			6.57	3	4.4	4	17.4	3	4.83	4				
196.2			8.10	3			15.9	4						
201.	2.75	0	7.50	4			< 2	NR	8.20	0			0.51	3
202.	5.19	4	7.80	3			15.4	4	4.50	4	134	3	0.53	2
204.	5.82	0	6.50	3			14.8	3	4.30	3	176	0	0.46	4

Table 5. *--Laboratory performance ratings for standard reference water sample T-121 (trace constituents)--Continued*

(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/26, number of reported values of 26 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 =	Li (Lithium)		Mg (Magnesium)		Mn (Manganese)		Mo (Molybdenum)		Na (Sodium)		Ni (Nickel)		Pb (Lead)	
MPV =	25.0 µg/L		1.24 mg/L		28.5 µg/L		12.0 µg/L		7.19 mg/L		8.29 µg/L		7.75 µg/L	
F-pseudosigma =	2.2		0.07		2.2		1.8		0.30		1.26		1.03	
Lab	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Ratin	RV	Rating	RV	Rating
1	26.1	4	1.26	4	29.4	4	11.5	4	6.90	3	8.70	4	8.00	4
2														
3	27.0	3	1.20	3	27.0	3	< 10	NR	7.50	2	< 20	NR	5.20	0
5			1.25	4	28.9	4	11.1	4	7.35	3			< 30	NR
6											7.61	3	7.16	3
8			1.23	4	28.1	4			6.92	3				
9			1.20	3	27.9	4			7.40	3	7.00	2	10.00	0
11	11.0	0	1.26	4	30.0	3	10.0	2	7.06	4	4.10	0	9.80	1
12			1.30	3	30.0	3	< 20	NR	8.00	0	< 20	NR	< 10	NR
13			1.17	3	27.1	3			8.00	0	< 50	NR	8.48	3
15	23.6	3	1.26	4	24.6	1	12.3	4	7.63	2	7.80	4	7.05	3
16	< 200	NR	1.20	3	28.0	4	< 30	NR	< 10	NR	< 25	NR	< 30	NR
18			1.40	0	25.0	1			7.40	3	6.00	1	7.00	3
19			1.23	4	25.7	2			6.49	0				
21														
23			1.27	4	30.7	2			7.51	2	6.27	1	7.07	3
24	25.0	4	1.31	3	28.4	4	11.9	4	7.43	3	9.70	2	8.00	4
25	26.4	3	1.30	3	28.8	4			7.68	1				
26	< 100	NR			< 200	NR	< 50	NR			< 10	NR	6.00	1
28	< 100	NR	2.40	0	30.0	3	20.0	0	15.70	0	10.00	2	245	0
29	20.0	0			26.0	2	50.0	0			< 10	NR	7.43	4
30	22.4	2	1.15	2	28.6	4	12.5	4			8.33	4	7.89	4
32	28.8	1	1.42	0	29.6	3	11.8	4	8.40	0	9.30	3	8.10	4
33			1.24	4	31.0	2			6.94	3			35.30	0
35														
36			1.24	4	26.1	2			7.01	3	8.24	4	6.78	3
37					31.3	2			7.24	4	8.55	4	7.74	4
39	25.0	4	1.23	4	32.0	1	9.0	1	7.60	2				
42	24.0	4	1.30	3	28.0	4	10.3	3	7.00	3	6.80	2	7.75	4
43			1.20	3	29.0	4			7.00	3				
45			1.24	4	34.0	0	15.5	1	6.53	0	3.94	0	7.20	3
46			1.25	4	29.2	4	< 140	NR	7.36	3	< 25	NR	7.40	4
48			1.34	2	40.0	0	< 10	NR	7.40	3	7.60	3	7.50	4
50	< 50	NR			29.0	4	12.0	4			8.00	4	8.00	4
51			1.22	4	30.0	3			6.90	3	7.00	2	4.00	0
52			1.21	4	27.1	3	13.7	3	7.01	3	7.80	4	7.78	4
54			1.20	3	26.0	2			7.20	4				
55	23.0	3	1.20	3	26.9	3			7.16	4	8.40	4	7.10	3
57			1.10	1	35.0	0			6.90	3	< 100	NR	8.00	4
58					27.0	3					8.60	4		
59			1.20	3	28.0	4			7.40	3	10.00	2	7.00	3
61			1.10	1	30.0	3	< 10	NR	7.00	3	< 10	NR	6.10	1
63	26.0	4	1.18	3	29.0	4			7.82	0	8.70	4	6.60	2
64			1.25	4					7.22	4				
68	25.0	4	1.30	3	27.0	3	17.0	0	7.50	2	9.30	3	6.10	1
69			1.40	0					7.00	3	9.00	3	7.00	3
70	25.0	4	1.30	3	29.0	4	< 50	NR	7.25	4	< 50	NR	7.80	4
73											9.00	3		
74			1.08	0	27.0	3	10.3	3	7.31	4	8.00	4	6.80	3
75			< 2	NR			12.5	4	6.95	3	7.33	3		
76					29.0	4							8.72	3
78			1.23	4	27.9	4			6.90	3	10.40	1	7.50	4
79													7.60	4
80													8.00	4
83			1.19	3	32.3	1			7.35	3			6.20	2

Table 5. *--Laboratory performance ratings for standard reference water sample T-121 (trace constituents)--Continued*

Analyte =	Li (Lithium)		Mg (Magnesium)		Mn (Manganese)		Mo (Molybdenum)		Na (Sodium)		Ni (Nickel)		Pb (Lead)	
MPV =	25.0 µg/L		1.24 mg/L		28.5 µg/L		12.0 µg/L		7.19 mg/L		8.29 µg/L		7.75 µg/L	
F-pseudosigma =	2.2		0.07		2.2		1.8		0.30		1.26		1.03	
Lab	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Ratin	RV	Rating	RV	Rating
84.			1.62	0	30.0	3			8.46	0				
85.	28.0	2	1.26	4	24.0	0	< 50	NR	7.22	4	< 10	NR	7.00	3
87.			1.22	4	28.0	4			7.20	4	< 10	NR	6.60	2
89.			1.10	1	23.8	0			6.98	3	< 25	NR	9.09	2
90.					23.0	0			7.40	3	9.50	3	8.90	2
91.					30.0	3								
92.			1.25	4	26.0	2			7.45	3	9.00	3	9.00	2
94.			1.21	4	28.0	4			7.06	4	7.95	4	6.16	1
96.			1.24	4	29.0	4			7.04	4			7.91	4
97.			1.19	3	31.2	2	14.0	2	7.05	4	8.91	4	9.25	2
100.	25.0	4	1.35	2	31.5	2	11.8	4	7.90	0	10.10	2	9.80	1
101.			1.25	4	29.4	4			7.10	4	8.90	4	10.80	0
103.	18.0	0	1.30	3	24.0	0	12.0	4	7.50	2	7.50	3	9.00	2
104.														
105.	25.0	4	1.18	3	28.0	4	12.0	4	6.91	3	8.00	4	8.90	2
107.			1.21	4	28.5	4			6.87	2			6.72	3
108.													10.00	0
109.	25.5	4	1.40	0	28.0	4			7.20	4			3.10	0
111.			1.25	4					7.19	4	7.50	3	7.70	4
113.			1.40	0	27.7	4			7.70	1	8.64	4	7.67	4
114.			0.85	0	30.0	3			5.45	0	10.00	2	< 10	NR
116.			1.26	4	32.0	1			7.10	4				
118.														
119.			1.29	3	28.0	4			7.05	4	10.50	1	8.30	3
120.			0.98	0	26.3	3	18.8	0	6.69	1	7.23	3	7.53	4
121.	25.0	4	1.20	3	27.0	3	13.0	3	7.20	4	10.00	2	8.20	4
122.			1.23	4	25.4	2			7.38	3			8.00	4
123.			1.12	1					7.35	3				
126.			1.20	3									8.00	4
127.	27.6	2	1.18	3	28.7	4	13.2	3	6.94	3	8.22	4	7.05	3
129.			65.00	0	20.0	0			6.80	2				
131.	< 50	NR	1.32	2	< 10	0	< 100	NR	7.06	4	< 26	NR	< 100	NR
133.			1.07	0	28.6	4	6.9	0	7.08	4	11.40	0	22.20	0
134.	32.8	0	1.21	4	24.0	0			7.00	3	8.90	4	7.80	4
136.			1.20	3	30.0	3	12.0	4	7.00	3	8.00	4	7.00	3
138.			1.24	4	28.2	4	11.8	4	7.16	4	7.30	3	7.60	4
139.			1.28	3	31.0	2			6.66	1	7.25	3	10.02	0
140.			1.20	3	28.1	4			7.00	3	8.60	4	10.00	0
141.			1.25	4	28.6	4	11.4	4	7.26	4	8.00	4	6.40	2
144.											6.10	1	5.00	0
145.	14.9	0	1.10	1	27.7	4	< 4	0	7.18	4	< 5	NR	< 25	NR
146.			1.36	1	31.3	2	11.4	4	7.78	1	7.99	4	< 3	0
149.					29.0	4	15.7	0			8.00	4	6.00	1
151.			1.20	3			10.9	3	7.00	3				
153.			1.20	3	24.9	1			6.90	3				
155.			1.11	1										
158.													6.70	2
161.					21.0	0								
164.			1.26	4					7.78	1				
167.			1.20	3			5.0	0	7.20	4	8.00	4	8.00	4
179.			1.80	0	11.0	0			5.10	0	6.60	2	7.70	4
180.			1.31	3	31.1	2			7.34	3	< 7	NR	< 12	NR
182.	< 1	0	1.10	1	20.0	0	50.0	0	6.00	0	10.00	2	20.00	0
183.							13.1	3			10.40	1	8.26	4
185.														
191.			1.30	3	30.0	3			7.30	4				
193.			1.38	1					8.80	0	< 10	NR	< 10	NR
196.1					31.1	2	10.5	3			7.79	4	7.89	4
196.2													8.30	3
201.			2.24	0					6.45	0	15.10	0	< 2	0
202.			1.30	3	28.0	4	5.0	0			8.40	4	9.30	1
204.			1.51	0	32.5	1			6.80	2	9.70	2	4.30	0

Table 5. *--Laboratory performance ratings for standard reference water sample T-121 (trace constituents)--Continued*

(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/26, number of reported values of 26 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 =	Sb (Antimony)		Se (Selenium)		SiO2 (Silica)		Sr (Strontium)		V (Vanadium)		Zn (Zinc)	
MPV =	7.61	µg/L	8.12	µg/L	4.64	mg/L	44.0	µg/L	4.00	µg/L	18.0	µg/L
F-pseudosigma =	1.20		1.41		0.26		4.9		0.76		2.7	
Lab	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating
1	10.90	0	8.80	4	4.66	4	45.6	4	3.44	3	21.3	2
2					4.77	4						
3	9.60	1	6.90	3	4.70	4	40.0	3	< 10	NR	17.0	4
5			< 40	NR	4.73	4					19.8	3
6											21.3	2
8			5.00	0	4.44	3	43.3	4			18.2	4
9					4.10	0	< 30	NR			17.0	4
11	11.30	0	5.30	0	13.10	0	50.0	2	4.00	4	20.0	3
12	< 100	NR	9.00	3							< 20	NR
13			8.50	4	4.51	4					18.0	4
15	3.35	0	8.08	4	4.45	3	41.4	3	3.54	3	18.8	4
16	< 60	NR	7.00	3			39.0	2	< 10	NR	11.0	0
18			10.10	2			49.0	2	3.00	2	16.0	3
19											12.6	1
21												
23	9.78	1	3.11	0	4.71	4					15.2	2
24	4.70	0	10.40	1	4.95	2	42.9	4	7.60	0	17.1	4
25					1.89	0	48.2	3			17.9	4
26			9.00	3			< 250	NR	< 100	NR	< 250	NR
28	< 100	NR	8.00	4	4.25	2	90.0	0	20.00	0	30.0	0
29			9.40	3	4.28	2	15.0	0			17.0	4
30	7.60	4	8.37	4					4.03	4	16.6	3
32	8.40	3			5.60	0	47.6	3	4.20	4	19.0	4
33					4.61	4	41.3	3				
35			8.13	4								
36	9.51	1	7.01	3							22.3	1
37	7.53	4	9.43	3			45.5	4	4.13	4	19.8	3
39			7.80	4	4.34	2	49.0	2	6.90	0	20.0	3
42			9.70	2	4.70	4	46.0	4	3.20	2	18.4	4
43					4.70	4						
45	7.61	4	7.66	4	4.64	4					16.6	3
46			8.70	4							17.9	4
48	4.80	0	7.00	3					< 200	NR	50.0	0
50			8.00	4					< 5	NR	18.0	4
51					4.65	4					19.0	4
52	7.13	4	8.22	4	3.00	0	42.0	4	2.18	0	18.2	4
54												
55	6.10	2	10.40	1	4.99	2	19.0	0	2.50	1	17.2	4
57	< 10	NR	8.00	4	4.30	2			< 100	NR	< 20	NR
58			4.50	0	0.08	0						
59	8.00	4					45.0	4			18.0	4
61	< 50	NR	7.80	4	2.20	0			< 5	NR	17.0	4
63	7.50	4	7.30	3	4.64	4	47.9	3	< 10	NR	17.0	4
64					4.41	3						
68	6.50	3	8.70	4			40.0	3	6.10	0	14.0	2
69			8.40	4								
70			7.30	3	4.88	3	44.0	4	< 10	NR	17.0	4
73											18.5	4
74	7.50	4	8.20	4			37.0	2	3.20	2	16.6	3
75			8.12	4	4.68	4					16.6	3
76			9.05	3								
78	8.60	3	6.70	2	8.00	0					17.5	4
79			10.00	2							16.0	3
80			9.00	3								
83											9.2	0

Table 5. *--Laboratory performance ratings for standard reference water sample T-121 (trace constituents)--Continued*

Analyte =	Sb (Antimony)		Se (Selenium)		SiO2 (Silica)		Sr (Strontium)		V (Vanadium)		Zn (Zinc)	
MPV =	7.61 µg/L		8.12 µg/L		4.64 mg/L		44.0 µg/L		4.00 µg/L		18.0 µg/L	
F-pseudosigma =	1.20		1.41		0.26		4.9		0.76		2.7	
Lab	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating
84.												
85.	4.00	0	8.10	4							16.2	3
87.	8.00	4	8.20	4	4.90	3					19.0	4
89.			7.63	4	4.52	4					< 40	NR
90.			11.30	0							17.0	4
91.												
92.					4.43	3					14.0	2
94.			7.73	4					3.30	3	24.0	0
96.			9.07	3							22.0	2
97.	7.06	4	9.00	3	3.20	0	50.8	2	6.25	0	16.4	3
100.	12.00	0	5.00	0	4.60	4	39.3	3	3.13	2	36.2	0
101.					4.56	4			4.00	4	25.5	0
103.					4.20	1	38.0	2	3.00	2	16.0	3
104.					4.50	3						
105.	7.90	4	8.44	4	4.52	4	44.0	4	3.00	2	18.0	4
107.			12.40	0							15.8	3
108.			6.80	3								
109.			7.00	3			50.0	2				
111.											18.6	4
113.			7.70	4	5.11	1	< 200	NR			26.0	0
114.	150	0									20.0	3
116.							46.0	4				
118.					4.70	4						
119.	7.90	4	7.10	3	4.78	3					18.0	4
120.	6.98	3	15.70	0							13.6	1
121.					4.60	4	44.0	4	4.00	4	22.0	2
122.			7.25	3							17.8	4
123.											25.2	0
126.												
127.	7.00	4	7.51	4	4.53	4	42.9	4	4.25	4	19.5	3
129.												
131.	< 50	NR	< 100	NR	4.48	3	44.0	4			< 50	NR
133.	5.50	1	5.90	1					4.70	3	20.8	2
134.			8.20	4	4.76	4	41.0	3	4.10	4	16.0	3
136.	7.00	4	9.00	3					4.00	4	15.0	2
138.	6.60	3	8.80	4	4.79	3	42.7	4	3.60	3	18.1	4
139.			11.02	0							15.0	2
140.											19.5	3
141.	8.20	4	9.00	3	5.20	0	40.0	3	3.70	4	23.6	0
144.											19.0	4
145.					8.61	0	41.6	4	< 2	0	9.8	0
146.	7.73	4	5.40	1	2.45	0	46.7	3	3.90	4	29.4	0
149.	7.00	4	6.20	2							22.0	2
151.					4.70	4					19.6	3
153.												
155.					4.74	4						
158.											15.0	2
161.					2.11	0					15.0	2
164.												
167.			7.00	3	4.80	3			< 30	NR	26.0	0
179.	8.30	3	7.00	3								
180.	< 13	NR	< 13	NR					4.60	3	19.3	4
182.	100	0	8.00	4			200.0	0	< 200	NR	10.0	0
183.			8.30	4								
185.					5.16	0						
191.					4.64	4	45.0	4				
193.			7.00	3							< 40	NR
196.1	9.65	1	8.38	4			15.1	0	4.29	4	16.3	3
196.2			12.00	0								
201.											21.5	2
202.	6.00	2	7.60	4							16.0	3
204.			12.40	0	4.94	2					25.1	0

Table 6. --*Laboratory performance ratings for standard reference water sample M-124 (major constituents)*

(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/16, number of reported values of 16 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 =	Alkalinity		B (Boron)		Ca (Calcium)		Cl (Chloride)		DSRD	
			MPV =	234	m g/L	294	µ g/L	154	m g/L	82.8	m g/L	1309	m g/L
			F-pseudosigma =	5		34		9		2.4		33	
Lab	OLR	V/16		RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating
1	3.4	16		238	3	295	4	155	4	83.3	4	1325	4
2	1.5	2											
3	3.0	15		235	4	270	3	158	4	86.0	2	1330	3
5	2.8	12		237	4	277	4	159	3	84.2	3	1460	0
6	2.6	8		232	4					78.0	1	1336	3
8	1.6	14		238	3			177	0	86.1	2	1270	2
9	2.7	10						148	3	85.8	2	1330	3
10	3.2	13		238	3	325	3	157	4	81.5	3	1357	2
11	3.2	13		230	3	300	4	149	3	85.8	2		
12	2.6	12		240	2			161	3	97.0	0	1310	4
13	2.8	13		222	0			149	3	86.2	2	1310	4
15	2.0	15		230	3	259	2	169	1	97.2	0	1300	4
16	2.8	14		232	4	347	1	143	2	84.2	3	1323	4
18	3.2	16		222	0	254	2	154	4	82.3	4	1302	4
19	2.8	12		231	3			152	4	81.5	3	1316	4
23	2.0	13		212	0			148	3	78.8	1	330	0
24	3.8	13		234	4	283	4	155	4	81.4	3		
25	2.5	15		246	0	288	4	162	3	81.8	4	1350	2
26	2.3	11		235	4			164	2	72.0	0	1330	3
29	2.3	12		233	4	2150	0	158	4	101.0	0	1308	4
30	2.2	5						166	2	61.6	0		
32	2.6	14		255	0	299	4	165	2	82.4	4	1285	3
33	2.8	12		236	4			161	3	89.0	0		
36	2.0	13		233	4			134	0	84.5	3	1330	3
37	3.3	12		231	3	262	3	129	0	82.2	4		
38	3.0	9		58	0			153	4				
39	2.9	9		233	4	297	4						
40	3.6	14		238	3	278	4	161	3	80.3	2	1317	4
41	0.0	1											
42	2.3	12		234	4			170	1	66.0	0		
43	3.3	11		237	3			150	4	85.0	3	1340	3
45	3.7	14		237	3	287	4	154	4	82.7	4	1300	4
46	3.0	12		236	4	114	0	152	4	80.9	3	1104	0
48	2.9	12		233	4	310	4	130	0	83.0	4	668	0
50	2.8	13		233	4	328	2	153	4	79.0	1	1310	4
51	3.2	11		236	4			146	3	88.6	0	1269	2
52	2.9	14		236	4	277	4	154	4	81.3	3	1290	3
54	3.6	10		232	4			155	4			1285	3
55	2.9	16		230	3	260	2	148	3	84.0	4	1280	3
56	2.4	9		240	2			143	2	83.5	4		
57	2.0	14		234	4	310	4	167	2	79.0	1	1400	0
58	1.3	9				386	0	128	0				
59	2.2	6						165	2				
61	2.7	15		244	1	277	4	141	2	84.0	4	1380	0
63	2.5	14		206	0	< 100	0	156	4	84.0	4		
64	2.7	9						160	3	83.0	4		
68	2.2	12		237	3			140	1	83.9	4		
69	3.4	11		235	4			143	2	84.0	4	1340	3
70	3.2	14		230	3	268	3	157	4	80.8	3	1321	4
74	2.7	16		236	4	313	3	155	4	21.4	0	1315	4
75	3.3	11		231	3			154	4	84.0	4	1330	3
76	2.3	7		238	3					74.9	0	1280	3
78	2.0	13		215	0			153	4	76.0	0	644	0
79	2.0	3		230	3					85.0	3		
81	1.5	13		231	3			169	1	65.7	0	1290	3

Table 6. *--Laboratory performance ratings for standard reference water sample M-124 (major constituents)--Continued*

	Analyte =	Alkalinity		B (Boron)		Ca (Calcium)		Cl (Chloride)		DSRD	
	MPV =	234	m g/L	294	µ g/L	154	m g/l	82.8	m g/L	1309	m g/L
	F-pseudosigma =	5		34		9		2.4		33	
Lab	OLR V/16	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating
83	3.2 10	237	4			162	3	82.5	4		
84	2.8 8	239	3			145	2	79.6	2		
85	3.5 13	239	3			151	4	83.0	4	1307	4
87	2.8 12	230	3			147	3	81.0	3	1287	3
89	3.7 13	235	4			150	4	82.8	4	1340	3
90	0.8 5	246	0			167	2			1260	2
91	2.8 6	229	3							1276	2
92	2.3 12	190	0			95	0	85.7	2	1293	4
94	3.4 12	236	4			155	4	83.3	4	1318	4
96	2.7 7	240	2					84.0	4	1315	4
97	2.1 15	227	2			150	4	83.2	4	1317	4
100	3.1 16	234	4	339	2	162	3	80.7	3	1304	4
101	3.1 10					155	4	86.7	1	1284	3
102	2.8 5							82.0	4		
103	1.5 8			220	0	148	3				
104	3.3 4	230	3								
105	2.6 14	237	4			158	4	80.0	2	1280	3
107	1.8 6	228	2					93.6	0		
108	4.0 1										
109	3.5 11	236	4			150	4	82.5	4	1316	4
111	2.2 10	241	2			181	0	76.7	0		
113	3.4 14	228	2			152	4	81.5	3	1290	3
114	1.9 10	234	4			80	0	83.5	4		
116	2.6 5	218	0			162	3				
118	0.5 6	231	3							1230	0
119	3.4 14	240	2	300	4	153	4	83.0	4	1308	4
120	3.1 11	231	3			169	1	82.4	4	1285	3
121	2.1 8			320	3	158	4				
122	1.8 12	113	0	290	4	76	0	78.5	1	1330	3
123	2.5 6					156	4				
127	3.6 16	236	4	288	4	156	4	81.5	3	1340	3
128	3.1 14	229	3	245	2	153	4	83.0	4		
129	1.8 13	237	3	390	0	164	2	78.7	1	1214	0
131	2.8 12			300	4	150	4	81.4	3		
133	2.4 8	614	0			151	4				
134	3.6 16	239	3	284	4	155	4	80.7	3	1315	4
136	2.3 11	252	0			144	2	83.0	4	1353	2
138	3.2 14	222	0			153	4	82.2	4	1276	2
139	1.4 10	23	0			169	1	70.0	0		
140	3.2 11					149	3	85.0	3	1321	4
141	3.1 16	236	4	337	2	159	3	83.0	4	1349	2
144	1.3 3										
145	1.8 15	226	1	327	3	152	4	83.3	4		
146	2.0 12	237	3	280	4	150	4	139.0	0	1370	1
149	2.5 6					148	3			1290	3
151	3.4 11	240	2			155	4	84.0	4	1294	4
153	1.7 11	230	3			148	3	89.3	0		
155	2.3 8	232	4			170	1			1291	3
158	3.0 6	223	0					83.1	4	1306	4
161	1.7 11	250	0	5640	0	156	4	78.0	1		
167	3.2 13	234	4	284	4			87.4	1	1320	4
179	1.9 7					117	0	77.0	0		
180	2.9 13	236	4	294	4	163	2	85.6	2		
182	1.3 14	250	0	400	0	182	0	85.0	3	1288	3
183	1.6 9	222	0					83.1	4	1296	4
191	2.9 8					149	3	81.2	3		
193	2.3 3							81.4	3		
196	0.9 7					165	2	79.5	2		
197	2.6 5	231	3					82.1	4		
201	1.9 9	258	0			112	0	81.8	4		
202	2.9 9	234	4			154	4	88.5	0	1320	4
204	1.6 11	229	3			167	2	82.4	4		

Table 6. *--Laboratory performance ratings for standard reference water sample M-124 (major constituents)--Continued*

(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/16, number of reported values of 16 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 =	F (Fluoride)		K (Potassium)		Mg (Magnesium)		Na (Sodium)		(total Phosphorus) as P	
MPV =	0.93	m g/L	13.9	m g/L	58.4	m g/L	166	m g/L	0.110	m g/L
F-pseudosigma =	0.07		1.0		2.7		6		0.013	
Lab	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating
1	0.81	1	14.0	4	55.6	2	161	3	0.107	4
2										
3	1.00	3	11.8	0	60.7	3	173	2	0.094	2
5			14.2	4	59.2	4	166	4		
6	0.87	3							< 0.050	0
8	0.80	1	15.6	1	60.7	3	176	1	0.190	0
9			12.7	2	60.9	3	171	3		
10	0.84	2	14.0	4	58.9	4	165	4		
11	0.87	3	14.5	3	59.1	4	165	4	0.110	4
12	1.00	3	13.9	4	60.2	3	168	4	0.150	0
13	0.97	3	13.4	4	63.2	1	170	3	0.100	3
15			16.4	0	60.6	3	194	0	0.111	4
16	0.92	4	12.9	3	55.0	2	162	3	0.095	2
18	0.88	3	14.0	4	58.0	4	169	3	0.106	4
19	0.89	3	11.8	0	61.2	2	156	1	0.110	4
23	0.94	4	12.3	1	73.4	0	168	4	0.100	3
24	0.93	4	13.4	4	57.9	4	166	4		
25	0.95	4	14.4	4	59.4	4	172	2	0.268	0
26	2.00	0	13.0	3	52.0	0	173	2		
29	2.03	0	14.9	3	56.0	3	172	2		
30					60.3	3				
32			13.8	4	63.8	1	170	3		
33	< 0.01	0	13.9	4	61.2	2	161	3		
36	0.90	4	11.1	0	53.6	1	173	2	0.109	4
37			13.0	3	57.6	4	162	3		
38			13.7	4	59.6	4	158	2	0.113	4
39					57.0	3	174	2		
40	0.91	4	13.6	4	60.9	3	167	4		
41										
42	0.85	2	12.9	3	62.2	2	167	4		
43			14.0	4	56.5	3	170	3		
45	0.94	4	13.6	4	60.5	3	169	3	0.104	4
46	0.93	4	14.3	4	56.6	3			0.103	3
48			13.8	4	59.0	4	136	0	0.110	4
50	1.00	3	13.0	3	64.0	0	168	4		
51			14.4	4	61.0	3	165	4		
52			13.3	3	57.8	4	166	4		
54	0.91	4	13.7	4	57.0	3	165	4		
55	0.95	4	14.5	3	61.2	2	165	4	0.110	4
56			14.8	3	53.4	1	148	0		
57	0.98	3	18.0	0	58.0	4	172	2	0.300	0
58			12.5	2	61.8	2	248	0	0.108	4
59			14.6	3	65.0	0	177	1		
61	0.93	4	14.2	4	54.0	1	163	3	0.103	3
63	0.95	4	12.8	2	57.3	4	151	0	0.105	4
64			12.5	2	62.5	2	175	2	0.120	3
68			12.0	1	54.0	1	160	2	0.114	4
69	0.92	4	14.0	4	56.2	3	157	2		
70	0.89	3	14.0	4	61.0	3	164	4		
74	0.91	4	14.2	4	55.0	2	177	1	0.114	4
75			13.4	4	57.8	4	170	3	0.097	3
76	0.85	2								
78	0.92	4	14.0	4	57.2	4	149	0	0.131	1
79										
81	0.81	1	14.7	3	61.7	2	172	2	0.358	0

Table 6. *--Laboratory performance ratings for standard reference water sample M-124 (major constituents)--Continued*

Analyte =	F (Fluoride)		K (Potassium)		Mg (Magnesium)		Na (Sodium)		(total Phosphorus) as P	
MPV =	0.93	m g/L	13.9	m g/L	58.4	m g/L	166	m g/L	0.110	m g/L
F-pseudosigma =	0.07		1.0		2.7		6		0.013	
Lab	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating
83	0.99	3	14.7	3	60.0	3	177	1	0.100	3
84					55.9	3	167	4		
85	1.00	3	13.9	4	58.3	4	162	3	0.105	4
87			13.6	4	57.6	4	166	4	0.080	0
89	0.93	4	13.2	3	57.9	4	161	3	0.105	4
90										
91	0.95	4							0.220	0
92			12.0	1	55.0	2	152	0	0.104	4
94	0.86	3	12.9	3	59.2	4	166	4	0.074	0
96	1.00	3								
97	5.19	0	12.9	3	61.2	2	168	4	0.170	0
100	0.86	3	13.6	4	62.9	1	176	1	0.110	4
101			13.9	4	58.0	4	166	4		
102									0.019	0
103			12.0	1	60.0	3	163	3	< 0.1	NR
104									0.114	4
105	0.83	2	12.1	1	53.9	1	181	0	0.118	3
107	1.01	2							0.098	3
108									0.110	4
109	0.91	4	13.9	4	56.3	3	160	3		
111			16.2	0	61.0	3	170	3	0.098	3
113	0.89	4	13.9	4	58.4	4	166	4	0.101	3
114			60.0	0	40.0	0	82	0	0.110	4
116					59.0	4	162	3		
118									0.070	0
119	0.88	3	13.0	3	57.0	3	168	4	0.110	4
120	0.98	3	14.5	3	59.5	4	172	3	0.100	3
121	13.90	0	59.0	0	167.0	0				
122	0.93	4	11.7	0	52.5	0	172	3		
123			13.4	4	70.5	0	168	4	0.200	0
127	0.93	4	13.7	4	57.8	4	165	4	0.100	3
128	0.88	3	13.0	3	56.8	3	164	4	0.100	3
129	0.53	0	14.0	4	57.0	3	159	2	2.128	0
131	1.10	0	10.0	0	60.6	3	167	4	< 0.1	NR
133			17.0	0	57.9	4	163	4	0.130	1
134	0.81	1	14.0	4	59.0	4	168	4	0.100	3
136			15.8	1	60.0	3	170	3		
138	0.83	2	13.2	3	58.3	4	166	4	0.110	4
139			15.4	2	57.6	4	156	1	0.093	2
140	0.96	4	13.7	4	58.0	4	165	4	0.140	0
141	0.93	4	13.8	4	59.0	4	165	4	0.120	3
144									0.130	1
145	1.71	0	13.2	3	57.2	4	166	4	< 0.02	0
146			75.0	0	58.0	4	160	2		
149	0.92	4	13.9	4	33.7	0	175	1		
151			13.4	4	57.2	4	161	3		
153	1.08	0	14.0	4	59.0	4	170	3	0.325	0
155					44.3	0			0.098	3
158										
161	0.87	3			58.3	4			0.116	3
167	0.88	3	13.2	3	57.6	4	166	4	0.108	4
179			14.0	4	69.0	0	166	4		
180	0.98	3	14.1	4	60.2	3	154	0	0.114	4
182	1.16	0	5.1	0	58.0	4	150	0	0.100	3
183	1.10	0					278	0	0.110	4
191			13.9	4	57.8	4	155	1		
193										
196	0.73	0	17.7	0	65.5	0	159	2		
197										
201			15.8	1	89.4	0	163	4		
202			14.5	3	58.5	4			0.010	0
204			16.0	0	69.0	0	163	3	0.088	1

Table 6. *--Laboratory performance ratings for standard reference water sample M-124 (major constituents)--Continued*

(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/16, number of reported values of 16 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 =	pH		SiO2 (Silica)		SO4 (Sulfate)		Sp Cond		Sr (Strontium)		V (Vanadium)	
MPV =	8.47		19.4	m g/L	621	m g/L	1738	µ S/cm	1669	µ g/L	7.5	µ g/L
F-pseudosigma =	0.08		1.1		23		88		99		3.0	
Lab	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating
1	8.39	2	18.7	3	619	4	1753	4	1684	4	6.5	4
2	8.53	3	10.3	0								
3	8.43	4	19.7	4	621	4	1670	3	1650	4	< 10	NR
5	8.34	1	19.8	4	644	2	1340	0				
6	8.50	4			593	2	1737	4				
8	8.33	1	21.3	1	665	1	1700	4	1748	3		
9			19.7	4	634	3	1801	3	1520	1		
10	8.50	4	20.7	2	609	3	1758	4				
11	8.43	4	9.7	0	612	4	1664	3				
12	8.50	4			534	0	1740	4				
13	8.54	3	19.9	4	597	2	1700	4				
15	8.28	0	18.4	3	598	3	1800	3	1490	1	10.2	3
16	8.35	2			622	4	1766	4	1492	1	< 10	NR
18	8.51	4	20.3	3	604	3	1623	2	1643	4	5.0	3
19	8.55	3			628	4	1786	3				
23	8.54	3	19.4	4	702	0	1652	3				
24	8.45	4	20.5	3	612	4	1780	4	1650	4		
25	8.45	4	24.2	0	709	0	1770	4	1760	3		
26	8.50	4			642	3	1765	4				
29	8.49	4			705	0	1770	4				
30	8.40	3			599	3						
32	8.32	1	24.4	0	640	3	1780	4	1745	3	8.5	4
33	8.42	3	19.5	4	609	3	1712	4	1715	4		
36	8.56	2	37.2	0	634	3	82	0				
37	8.48	4			625	4	1701	4	1651	4	7.6	4
38	8.60	1	19.1	4			1717	4				
39	8.50	4	18.2	2			1750	4	1870	0	9.0	3
40	8.45	4	19.7	4	624	4	1711	4	1619	3		
41	8.66	0										
42	8.54	3	20.1	3	487	0	1674	3	1807	2		
43	8.33	1	19.4	4	618	4	1770	4				
45	8.51	4	18.5	3	623	4	1750	4				
46	8.40	3			614	4	1750	4				
48	8.50	4			614	4	1805	3			< 200	NR
50	8.30	0	19.0	4	625	4	1770	4				
51	8.52	3	19.9	4	624	4	1742	4				
52	8.46	4	15.5	0	666	1	1650	3	1600	3	12.5	1
54	8.50	4			634	3	1673	3				
55	8.52	3	20.4	3	650	2	1880	1	1600	3	3.6	2
56	8.47	4			625	4	1647	2				
57	8.10	0	21.0	2	600	3	1810	3			< 100	NR
58	8.43	4	0.7	0			1465	0				
59			18.8	3					1700	4		
61	8.42	3	9.2	0	615	4	1704	4			9.5	3
63	8.40	3	18.2	2	625	4	1700	4			15.0	0
64	8.48	4	26.4	0	630	4						
68	8.20	0	18.2	2			1771	4	1450	0	8.0	4
69	8.49	4			634	3	1760	4				
70	8.46	4	18.6	3	565	0	1664	3	1680	4	< 10	NR
74	8.50	4	20.6	2	597	2	1915	0	1540	2	5.0	3
75	8.30	0	19.6	4			1750	4				
76	8.42	3			595	2	1807	3				
78	8.43	4	17.5	1	390	0	1761	4				
79							1470	0				
81	8.20	0					1750	4	2	0	0.0	0

Table 6. *--Laboratory performance ratings for standard reference water sample M-124 (major constituents)--Continued*

Analyte =	pH		SiO2 (Silica)		SO4 (Sulfate)		Sp Cond		Sr (Strontium)		V (Vanadium)	
MPV =	8.47		19.4	m g/L	621	m g/L	1738	µ S/cm	1669	µ g/L	7.5	µ g/L
F-pseudosigma =	0.08		1.1		23		88		99		3.0	
Lab	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating
83			19.7	4	621	4						
84	8.48	4			560	0	1754	4				
85	8.51	4	19.2	4	632	4	1500	0				
87	8.52	3	21.1	1	579	1	1780	4				
89	8.48	4	19.8	4	628	4	1690	3				
90	8.75	0					1443	0				
91	8.44	4					1739	4				
92	8.44	4	18.9	4	642	3	1752	4				
94	8.48	4			609	3	1748	4			< 10	NR
96	8.60	1			588	2	1660	3				
97	8.52	3	17.7	1	674	0	1756	4	1963	0	46.5	0
100	8.58	2	19.8	4	616	4	1754	4	1718	4	5.5	3
101	7.79	0	19.6	4			1702	4			10.0	3
102			18.8	3	627	4	1650	3				
103			18.0	2	1460	0	< 5	0				
104			18.8	3			1790	3				
105	8.43	4	18.9	4	625	4	1646	2	1720	3	< 25	NR
107	8.48	4					1396	0				
108												
109	8.25	0			619	4	1747	4				
111			19.5	4	604	3	1730	4				
113	8.44	4	18.8	3	628	4	1725	4	1840	1		
114	8.40	3			428	0	1757	4				
116									1740	3		
118	8.10	0	4.0	0			1200	0				
119	8.26	0	19.0	4	628	4	1743	4				
120	8.40	3			610	4						
121			19.2	4					1660	4	4.0	2
122	8.48	4			577	1	1580	1				
123	8.40	3										
127	8.33	1	19.0	4	628	4	1700	4	1680	4	8.1	4
128	8.60	1	18.8	3	622	4	1690	3			5.8	3
129	8.44	4			650	2	1813	3				
131	8.50	4	19.6	4	620	4	1748	4	175	0		
133	8.40	3									5.9	3
134	8.50	4	19.0	4	620	4	1780	4	1640	4	7.4	4
136	8.50	4			650	2	1030	0			7.0	4
138	8.50	4	20.4	3	613	4			1632	4	5.1	3
139	8.46	4			1559	0	1964	0				
140	8.47	4			665	1	1780	4				
141	8.30	0	20.1	3	625	4	1759	4	1900	0	6.5	4
144	8.55	3					1200	0				
145	8.30	0	37.1	0	671	0	1525	0	1607	3	12.9	1
146	8.60	1	9.4	0			1870	1	1700	4	< 10	NR
149												
151	8.45	4	19.9	4	524	0	1779	4				
153	8.13	0			483	0	1620	2				
155	8.22	0	19.1	4			1814	3				
158	8.47	4			601	3	1790	3				
161	8.58	2	8.6	0	563	0	1610	2				
167	8.30	0	18.4	3	620	4	1722	4			< 30	NR
179	8.40	3					1610	2				
180	8.50	4			594	2	1675	3			9.1	3
182	8.50	4			450	0	1600	1	1900	0	< 200	NR
183	8.60	1			585	1	1300	0				
191			21.1	1	609	3			1669	4		
193					628	4	1552	0				
196					673	0						
197	8.58	2			605	3	1589	1				
201	8.51	4			627	4	1380	0				
202	8.53	3					1749	4				
204	8.24	0	20.6	2	605	3	1561	0				

Table 7. *--Laboratory performance ratings for standard reference water sample N-36 (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 =	0.113	m g/L	0.246	m g/L	0.182	m g/L	0.220	m g/L	0.210	m g/L
			F-pseudosigma =	0.019		0.129		0.023		0.021		0.010	
Lab	OLR	V/5		RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating
1	3.8	5		0.119	4	0.187	4	0.182	4	0.217	4	0.204	3
11	0.8	5		0.110	4	0.630	0	0.130	0	0.300	0	0.270	0
15	3.0	4		0.106	4	0.290	4			0.110	0	0.206	4
20	4.0	3		< 2	NR	< 5	NR	0.183	4	0.220	4	0.210	4
21	3.0	2				0.231	4	0.213	2				
23	4.0	4		0.121	4	< 0.5	NR	0.180	4	0.230	4	0.210	4
28	0.0	4				0.600	0	0.520	0	< 0.1	0	1.200	0
29	0.0	2						0.420	0			0.290	0
42	4.0	1						0.172	4				
43	2.0	1						0.150	2				
45	4.0	3						0.191	4	0.220	4	0.207	4
48	2.8	5		0.080	1	0.200	4	0.140	1	0.210	4	0.207	4
52	2.5	4		0.126	3	0.070	2	0.173	4			0.230	1
53	0.0	1						0.124	0				
56	3.7	3				0.150	3			0.210	4	0.210	4
61	3.6	5		0.109	4	0.271	4	0.180	4	0.225	4	0.198	2
63	3.5	2								0.210	4	0.220	3
68	2.7	3		0.100	3	0.390	2			0.238	3		
74	3.8	5		0.111	4	0.134	3	0.192	4	0.227	4	0.205	4
75	2.8	4		0.123	3			0.180	4	2.270	0	0.208	4
78	0.0	3						0.267	0	0.340	0	0.115	0
79	0.5	2				0.500	1			0.130	0		
81	2.2	5		0.122	4	0.168	3	0.181	4	0.505	0	0.400	0
88	0.0	3		0.065	0			0.692	0			0.450	0
89	3.8	4		0.127	3	0.232	4			0.210	4	0.207	4
90	3.5	4		0.109	4	0.204	4	0.206	2			0.205	4
92	3.5	2								0.213	4	0.219	3
97	2.5	4		0.100	3	0.150	3	0.200	3			0.230	1
104	1.0	1		0.082	1								
105	2.4	5		0.245	0	0.560	0	0.172	4	0.223	4	0.209	4
118	2.2	5		0.090	2	0.410	2	0.160	3	0.260	1	0.200	3
119	2.6	5		0.192	0	0.350	3	0.170	4	0.200	3	0.200	3
120	3.5	2		0.115	4	0.176	3						
129	3.2	5		0.173	0	0.192	4	0.189	4	0.211	4	0.212	4
133	3.3	3						0.150	2	0.210	4	0.210	4
134	3.8	5		0.100	3	0.280	4	0.180	4	0.210	4	0.210	4
139	3.5	4		0.102	3	0.145	3	0.186	4	0.213	4		
140	2.0	5		0.150	1	0.270	4	0.171	4	0.140	0	0.190	1
141	3.4	5		0.100	3	0.260	4	0.200	3	0.220	4	0.220	3
145	3.2	5		0.080	1	0.300	4	0.160	3	0.220	4	0.210	4
151	4.0	1		0.120	4								
167	3.7	3		0.119	4			0.202	3			0.212	4
182	0.5	4		0.420	0			1.200	0	0.260	1	0.230	1
201	0.0	3		0.660	0			0.270	0	0.275	0		

Table 7. *--Laboratory performance ratings for standard reference water sample N-36 (nonpreserved nutrients)--Continued*

			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 =	0.110 m g/L		0.209 m g/L		0.180 m g/L		0.210 m g/L		0.208 m g/L	
			F-pseudosigma =	0.015		0.091		0.016		0.015		0.010	
Lab	OLR	V/5		RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating
3	1.6	5		0.083	1	0.570	0	0.212	1	0.198	3	0.200	3
6	1.5	4		0.082	1			0.220	0	0.237	1	0.213	4
8	0.0	3						0.220	0	0.300	0	0.300	0
9	2.8	4		0.102	3			0.190	3	0.199	3	0.196	2
10	4.0	5		0.110	4	0.190	4	0.180	4	0.210	4	0.210	4
12	2.7	3		< 0.2	NR	< 0.3	NR	0.180	4	0.260	0	0.210	4
13	3.2	5		0.105	4	0.297	3	0.150	1	0.210	4	0.208	4
15	2.0	5		0.122	3	0.284	3	0.090	0	0.120	0	0.208	4
16	2.4	5		0.100	3	0.187	4	0.250	0	0.235	1	0.206	4
18	3.0	5		0.049	0	0.181	4	0.167	3	0.216	4	0.208	4
19	3.3	4		0.120	3			0.190	3	0.210	4	0.200	3
20	4.0	3		< 2	NR	< 5	NR	0.184	4	0.210	4	0.210	4
21	3.0	5		0.107	4	0.184	4	0.218	0	0.214	4	0.214	3
22	4.0	1								0.216	4		
25	1.8	4		0.100	3			0.188	4	0.175	0	0.230	0
28	0.0	4		< 0.1	NR	0.900	0	0.620	0	< 0.1	0	1.000	0
29	0.0	2						0.240	0			0.300	0
32	1.7	3		0.082	1			0.171	3			0.188	1
33	1.0	3		0.120	3			0.120	0			0.230	0
37	1.3	3		0.195	0			0.178	4			0.565	0
38	3.0	5		0.207	0	0.160	3	0.181	4	0.209	4	0.206	4
42	2.0	1						0.160	2				
45	3.3	3						0.180	4	0.230	2	0.205	4
46	3.8	5		0.111	4	0.190	4	0.181	4	0.207	4	0.199	3
51	2.8	5		0.110	4	0.360	1	0.180	4	0.206	4	0.189	1
52	2.3	4		0.127	2	0.140	3	0.172	4			0.230	0
55	3.4	5		0.100	3	0.260	3	0.170	3	0.210	4	0.210	4
56	2.0	1						0.200	2				
58	1.8	4		0.124	3			0.331	0	0.203	4	0.066	0
59	2.0	5		0.100	3	0.400	0	0.180	4	0.300	0	0.200	3
63	3.0	1		< 0.6	NR	< 0.09	NR	0.195	3				
68	3.5	2		0.103	4			0.170	3				
69	3.0	1						0.170	3				
70	1.5	2		0.090	2			0.150	1				
76	4.0	2		0.105	4			0.188	4				
78	1.7	3						0.250	0	0.214	4	0.192	1
83	3.0	2						0.160	2			0.210	4
84	0.0	1		0.270	0								
85	3.8	5		0.107	4	0.180	4	0.180	4	0.217	4	0.214	3
87	1.8	5		0.100	3	0.310	2	0.180	4	0.156	0	0.156	0
88	0.0	3		0.069	0			0.688	0			0.439	0
89	3.8	5		0.113	4	0.152	3	0.188	4	0.210	4	0.212	4
91	2.8	4		0.110	4	0.170	4	0.140	0	0.220	3		
92	2.3	3		0.120	3					0.234	1	0.214	3
94	3.3	4		0.120	3	0.200	4	0.165	3	0.220	3		
96	3.4	5		0.113	4	0.181	4	0.174	4	0.190	2	0.215	3
97	3.2	5		0.110	4	0.150	3	0.180	4	0.220	3	0.220	2
100	2.8	5		0.108	4	0.330	2	0.190	3	0.210	4	0.190	1
102	3.0	5		0.120	3	0.210	4	0.180	4	0.034	0	0.210	4
104	3.8	5		0.113	4	0.190	4	0.173	4	0.213	4	0.214	3
107	2.8	4		0.143	0			0.190	3	0.205	4	0.208	4
108	1.3	3						0.150	1	0.250	0	0.200	3
111	2.0	3		0.094	2					0.202	3	0.227	1
113	2.0	4		0.066	0	< 0.5	NR	0.177	4	0.190	2	0.197	2
114	2.3	3		0.104	4			0.091	0	0.200	3		
118	1.6	5		0.090	2	0.260	3	0.140	0	0.240	0	0.200	3
119	2.2	5		0.192	0	0.320	2	0.170	3	0.200	3	0.200	3
120	2.7	3						0.160	2	0.200	3	0.198	3
123	0.5	4		0.350	0	0.340	2	0.430	0	0.260	0		
127	3.4	5		0.105	4	0.105	2	0.170	3	0.211	4	0.206	4
129	2.8	5		0.228	0	0.345	2	0.182	4	0.211	4	0.209	4
133	1.7	3		0.130	2	0.160	3	0.130	0				
134	3.2	5		0.100	3	0.270	3	0.180	4	0.200	3	0.200	3
138	3.2	5		0.120	3	0.200	4	0.170	3	0.200	3	0.200	3
139	4.0	1										0.208	4
145	3.2	5		0.100	3	0.210	4	0.160	2	0.220	3	0.210	4
146	3.5	2						0.168	3			0.208	4
149	2.3	3		0.100	3			0.107	0	0.210	4		
155	3.6	5		0.110	4	0.175	4	0.169	3	0.209	4	0.198	3
158	2.5	4		0.039	0			0.187	4	0.226	2	0.212	4
161	2.0	3		0.186	0					0.228	2	0.209	4
167	3.3	3		0.109	4			0.194	3			0.199	3
180	3.6	5		0.119	3	0.209	4	0.174	4	0.217	4	0.218	3
182	0.5	4		0.400	0			1.100	0	0.260	0	0.220	2
183	1.7	3				0.020	0			0.220	3	0.220	2
185	4.0	1		0.106	4								
191	0.5	2						0.150	1			0.160	0
193	4.0	1						0.180	4				
197	1.3	3		0.127	2			0.162	2			0.181	0
198	2.8	5		0.112	4	0.250	4	0.180	4	0.195	2	0.300	0
202	2.0	5		0.100	3	0.220	4	0.170	3	0.130	0	0.130	0
204	1.6	5		0.110	4	0.390	1	0.170	3	0.243	0	0.250	0

Table 8. *--Laboratory performance ratings for standard reference water sample N-37 (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 =	0.876	m g/L	1.10	m g/L	0.857	m g/L	1.19	m g/L	1.07	m g/L
			F-pseudosigma =	0.121		0.22		0.099		0.07		0.10	
Lab	OLR	V/5		RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating
1	3.8	5		0.876	4	1.06	4	0.853	4	1.23	3	1.05	4
11	1.4	5		0.920	4	1.52	1	0.690	1	1.35	0	1.23	1
15	2.8	4		0.772	3	1.02	4			0.56	0	1.03	4
20	3.3	3		< 2	NR	< 5	NR	0.863	4	1.24	3	1.16	3
23	3.2	5		0.910	4	1.22	3	0.870	4	1.23	3	1.17	2
28	0.3	4				1.50	1	2.700	0	< 0.1	0	5.60	0
28	1.5	2						1.050	1			0.96	2
42	3.0	1						0.806	3				
43	4.0	1						0.860	4				
45	4.0	3						0.872	4	1.16	4	1.09	4
48	2.2	5		0.610	0	1.10	4	0.780	3	1.20	4	0.10	0
52	2.8	4		0.880	4	0.75	1	0.807	4			1.20	2
53	3.0	1						0.765	3				
61	3.6	5		0.879	4	0.94	3	0.850	4	1.23	3	1.03	4
63	2.4	5		1.100	1	1.40	2	1.020	1	1.20	4	1.10	4
68	2.0	3		0.770	3	0.95	3			0.12	0		
74	3.0	5		0.938	3	1.10	4	0.914	3	1.24	3	1.18	2
75	3.8	4		0.847	4			0.865	4	1.19	4	1.00	3
78	1.3	3						1.140	0	1.57	0	1.12	4
79	0.5	2				0.68	1			0.96	0		
81	1.8	5		1.010	2	0.99	3	0.853	4	3.11	0	2.05	0
88	1.7	3		0.729	2			1.309	0			1.16	3
89	3.8	4		0.858	4	1.00	4			1.15	3	1.05	4
90	3.8	4		0.905	4	1.09	4	0.785	3			1.07	4
92	3.5	2								1.15	3	1.07	4
97	3.3	4		0.860	4	0.94	3	0.940	3			1.14	3
104	2.0	1		0.714	2								
105	2.8	5		1.050	2	1.44	1	0.790	3	1.17	4	1.06	4
118	3.4	5		0.780	3	1.36	2	0.820	4	1.20	4	1.03	4
119	3.0	5		0.820	4	1.15	4	0.970	2	1.12	2	1.01	3
120	3.5	2		0.802	3	1.13	4						
129	2.0	5		1.051	2	1.89	0	0.901	4	1.07	1	1.02	3
133	1.7	3						0.560	0	1.11	2	1.02	3
134	4.0	5		0.870	4	1.10	4	0.850	4	1.20	4	1.10	4
139	3.8	4		0.861	4	1.05	4	0.799	3	1.16	4		
140	3.2	5		1.040	2	1.29	3	0.808	4	1.20	4	0.98	3
141	3.8	5		0.870	4	1.10	4	0.840	4	1.24	3	1.10	4
145	3.2	5		0.720	2	1.12	4	0.780	3	1.14	3	1.07	4
151	0.0	1		1.630	0								
167	3.3	3		0.895	4			0.894	4			1.19	2
182	0.8	4		1.440	0			4.100	0	1.12	2	1.25	1
201	2.3	4		1.050	2			1.312	0	1.18	4	1.02	3

Table 8. *--Laboratory performance ratings for standard reference water sample N-37 (nonpreserved nutrients)--Continued*

		Analyte =	NH3 as N (Amonia)		NH3 + Org N as N (Amonia+Organic N)		NO3 + NO2 as N (Nitrate & Nitrite)		total P as P (Phosphorus)		PO4 as P (Orthophosphate)	
		MPV =	0.920 m g/L		1.06 m g/L		0.850 m g/L		1.17 m g/L		1.15 m g/L	
		F-pseudosigma =	0.058		0.08		0.054		0.06		0.04	
Lab	OLR	V/5	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating
3	2.2	5	0.873	3	1.16	2	0.837	4	1.08	1	1.07	1
6	2.3	4	0.900	4			1.100	0	1.26	1	1.16	4
8	2.3	3					1.160	0	1.19	4	1.11	3
9	2.2	5	0.841	2	1.15	2	0.892	3	1.16	4	1.05	0
10	3.8	5	0.920	4	1.06	4	0.860	4	1.19	4	1.19	3
12	2.6	5	0.900	4	0.80	0	0.820	3	1.25	2	1.15	4
13	3.8	5	0.905	4	1.11	3	0.877	4	1.17	4	1.14	4
15	2.2	5	0.930	4	1.02	3	1.140	0	0.62	0	1.15	4
16	1.4	5	0.728	0	0.86	0	1.090	0	1.17	4	1.12	3
18	3.2	5	0.804	1	1.05	4	0.813	3	1.17	4	1.17	4
19	3.8	4	0.920	4			0.860	4	1.16	4	1.12	3
20	2.0	3	< 2	NR	< 5	NR	0.859	4	1.38	0	1.08	2
22	4.0	1							1.16	4		
25	3.0	4	0.940	4			0.865	4	1.10	2	1.20	2
28	0.8	4			1.00	3	5.000	0	< 0.1	0	4.10	0
28	2.0	2					0.850	4			1.04	0
32	2.3	3	0.792	0			0.811	3			1.15	4
33	1.0	3	1.050	0			0.570	0			1.17	3
37	1.7	3	1.030	1			0.863	4			3.58	0
38	3.8	5	0.948	4	0.99	3	0.862	4	1.17	4	1.15	4
41	1.0	3	0.950	3	3.85	0	1.160	0				
42	3.0	1					0.797	3				
45	3.3	3					0.874	4	1.12	3	1.17	3
46	3.8	5	0.891	4	1.03	4	0.882	3	1.16	4	1.14	4
52	1.3	4	0.990	2	0.82	0	0.811	3			1.34	0
55	3.4	5	0.900	4	1.10	3	0.820	3	1.20	3	1.14	4
57	0.8	5	0.820	1	1.50	0	0.530	0	1.20	3	1.00	0
58	0.0	4	0.765	0			1.110	0	1.02	0	0.33	0
59	3.2	5	0.940	4	1.00	3	0.850	4	1.10	2	1.12	3
68	3.5	2	0.930	4			0.810	3				
69	4.0	1					0.870	4				
70	0.5	2	0.830	1			0.740	0				
76	3.0	2	0.914	4			0.785	2				
78	1.0	3					1.120	0	1.27	1	1.08	2
83	1.0	2					0.700	0			1.21	2
84	1.0	3	1.820	0			1.550	0			1.17	3
85	3.4	5	0.900	4	1.10	3	0.840	4	1.13	3	1.12	3
87	3.0	5	0.850	2	1.10	3	0.850	4	1.12	3	1.12	3
88	0.7	3	1.071	0			1.315	0			1.19	2
89	3.4	5	0.910	4	0.94	1	0.861	4	1.18	4	1.16	4
91	2.8	4	0.920	4	1.04	4	0.700	0	1.20	3		
92	3.3	3	0.950	3					1.17	4	1.17	3
94	2.8	4	0.950	3	1.07	4	0.795	2	1.25	2		
96	3.4	5	0.904	4	0.99	3	0.834	4	1.19	4	1.10	2
97	2.8	4	0.980	2	1.04	4	0.930	2			1.18	3
100	3.0	5	0.934	4	2.26	0	0.876	4	1.18	4	1.12	3
102	2.0	5	0.960	3	1.11	3	0.800	3	0.32	0	1.07	1
104	3.6	5	0.939	4	1.09	4	0.831	4	1.23	3	1.18	3
108	2.0	3					0.810	3	1.26	1	1.08	2
111	1.7	3	0.982	2					1.11	3	1.40	0
113	2.0	5	0.999	2	0.96	2	0.699	0	1.10	2	1.15	4
114	1.3	3	0.816	1			0.417	0	1.14	3		
118	1.6	5	0.830	1	1.20	1	0.790	2	1.20	3	1.06	1
119	2.4	5	0.870	3	1.03	4	1.000	0	1.11	2	1.12	3
120	3.3	3					0.840	4	1.12	3	1.12	3
123	1.0	4	2.920	0	1.59	0	2.130	0	1.17	4		
127	3.8	5	0.951	3	1.08	4	0.852	4	1.18	4	1.16	4
129	3.8	5	0.924	4	1.05	4	0.857	4	1.12	3	1.14	4
133	1.0	3	0.950	3	0.21	0	0.980	0				
134	3.2	5	0.900	4	1.10	3	0.850	4	1.20	3	1.20	2
138	3.2	5	0.950	3	1.06	4	0.850	4	1.11	2	1.12	3
139	4.0	1									1.16	4
145	3.0	5	0.890	3	1.06	4	0.780	2	1.14	3	1.17	3
146	3.0	2					0.797	3			1.11	3
149	2.3	3	0.900	4			0.810	3	0.87	0		
155	2.6	5	0.901	4	1.01	3	0.759	1	1.11	3	1.08	2
158	2.0	4	0.748	0			0.863	4	1.35	0	1.15	4
161	2.0	4	0.483	0			0.786	2	1.22	3	1.11	3
167	3.7	3	0.937	4			0.904	3			1.13	4
180	3.2	5	0.991	2	1.02	3	0.825	4	1.18	4	1.17	3
182	1.3	4	1.440	0			3.700	0	1.12	3	1.10	2
183	0.7	3			5.23	0			5.84	0	1.21	2
191	1.5	2					0.810	3			1.04	0
193	3.0	1					0.880	3				
196	1.0	2					0.583	0			1.10	2
197	2.7	3	0.984	2			0.807	3			1.17	3
198	2.0	5	0.800	0	1.20	1	0.860	4	1.20	3	1.20	2
202	1.8	5	0.850	2	1.24	0	0.780	2	1.20	3	1.20	2

Table 9. *--Laboratory performance ratings for standard reference water sample P-19 (low ionic strength constituents)*

(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/9, number of reported values of 9 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 CaCO3		Ca (Calcium)		Cl (Chloride)		F (Fluoride)		K (Potassium)	
			MPV =	3.43	m g/L	0.24	m g/L	1.14	m g/L	INSUFF DATA		0.170	m g/L
			F-pseudosigma =	3.54		0.03		0.19				0.033	
Lab	OLR	V/9		RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating
1	3.3	9		0.02	3	0.24	4	1.13	4	0.025	NR	0.015	0
2	3.8	8				0.25	4	1.13	4			0.146	3
3	2.1	8		7.00	2	0.30	0	1.30	3	< 0.1	NR	0.190	3
11	2.9	9		3.85	4	0.22	3	1.20	4	0.009	NR	0.075	0
15	2.9	8		3.96	4	0.23	4	1.35	2			0.150	3
23	3.2	5		2.50	4	< 1	NR			< 0.1	NR	0.155	4
28	1.3	7				12.60	0	1.30	3	< 0.1	NR	2.500	0
33	4.0	8				0.25	4	1.15	4	< 0.01	NR	0.170	4
37	1.0	5				< 0.244	NR	< 6	NR			0.330	0
38	3.7	7		0.15	3	0.25	4					0.160	4
39	2.8	5				0.26	3						
41	0.0	1											
42	2.7	3						1.14	4	0.060	NR		
46	3.5	8				0.22	3	0.87	2	0.013	NR	0.190	3
48	1.1	8				0.45	0	1.00	3			0.360	0
52	2.5	4		11.60	0	< 0.6	NR	1.31	3	< 0.1	NR	< 0.2	NR
58	3.8	5				0.23	4					0.180	4
61	1.8	6		1.25	3	0.22	3	0.62	0	0.015	NR	< 1	NR
63	1.3	7		6.00	3	0.22	3	0.19	0	< 0.2	NR	< 0.2	NR
64	3.6	7				0.22	3	0.97	3			0.150	3
74	3.4	8				0.24	4	1.53	0	< 0.02	NR	0.180	4
78	1.8	9		1.00	3	0.23	4	1.50	1	< 0.1	NR	0.090	0
89	3.1	8		2.74	4	0.21	3	1.52	0	< 0.1	NR	0.185	4
92	1.5	8		2.19	4	0.35	0	2.20	0			5.750	0
101	2.4	7				0.24	4	2.30	0			0.160	4
105	2.4	7		5.40	3	0.25	4	2.00	0	< 0.2	NR	< 0.4	NR
123	3.0	6				0.25	4					0.100	0
134	3.3	8				0.22	3	1.12	4	< 1	NR	0.330	0
136	0.9	9		15.80	0	0.30	0	8.00	0			0.070	0
141	2.0	6		9.50	1	0.19	1	1.10	4	< 0.1	NR	0.340	0
145	1.7	6				0.18	1	0.99	3	< 0.2	NR	< 0.1	0
155	1.0	3				0.75	0						
158	3.2	6		3.00	4	0.31	0	1.10	4				
164	2.0	6				0.23	4					0.106	1
167	2.7	3				< 1	NR	< 1	NR	< 0.05	NR	< 1	NR
191	4.0	1						1.12	4				
196	4.0	6				0.23	4	1.19	4	0.051	NR	0.170	4
197	4.0	4						1.12	4				
202	1.7	3						0.85	1				

Table 9. *--Laboratory performance ratings for standard reference water sample P-19 (low ionic strength constituents)-- Continued*

Analyte =	Mg (Magnesium)		Na (Sodium)		pH		PO4 as P		SO4 (Sulfate)		Sp. Cond.	
MPV =	0.045	m g/L	0.060	m g/L	4.72		INSUFF DATA		0.45	m g/L	12.0	µ S/cm
F-pseudosigma =	0.031		0.162		0.13				0.51		1.5	
Lab	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating
1	0.038	4	0.049	4	4.64	3	0.003	NR	0.32	4	12.7	4
2	0.055	4	0.066	4	4.69	4			0.30	4	10.9	3
3	< 0.1	NR	1.800	0	4.86	2	< 0.01	NR	0.50	4	11.0	3
11	0.030	4	0.060	4	5.00	0	< 0.02	NR	0.15	3	12.7	4
15	0.048	4	0.188	3	3.79	0					13.1	3
23	< 0.2	NR	< 0.1	NR	5.38	0	< 0.01	NR	0.60	4	12.1	4
28	2.800	0			4.90	2	< 0.1	NR	0.50	4	8.4	0
33	0.040	4	0.060	4	4.76	4	< 0.01	NR	0.32	4	12.2	4
37	0.138	0	0.364	1	6.04	0	< 0.3	NR	< 6	NR	11.8	4
38	0.046	4	0.060	4	4.80	3	0.001	NR			11.4	4
39	0.048	4	0.051	4	5.17	0					11.0	3
41					7.30	0						
42					4.72	4					132.0	0
46	0.038	4	0.043	4	4.68	4	0.002	NR	0.32	4	12.6	4
48	0.250	0	0.360	1	7.80	0	0.005	NR	1.00	2	10.9	3
52	< 0.05	NR	< 0.03	NR	4.78	4	0.005	NR	< 10	NR	13.4	3
58	0.028	3			4.67	4	0.003	NR			12.0	4
61	< 1	NR	< 1	NR	4.82	3	< 0.02	NR	1.80	0	10.4	2
63	< 0.2	NR	0.630	0	4.30	0	< 0.01	NR	2.00	0	11.0	3
64	0.040	4	0.060	4	4.72	4			0.30	4		
74	0.050	4	0.140	4	4.64	3	0.002	NR	0.50	4	12.7	4
78	0.460	0	0.160	3	4.79	3	< 0.05	NR	1.00	2	8.9	0
89	0.036	4	0.050	4	4.73	4	0.101	NR	< 2	NR	10.2	2
92	0.080	2	0.400	0	4.77	4	0.005	NR	1.00	2		
101	0.040	4	0.050	4	4.49	1					81.8	0
105	0.045	4	< 0.2	NR	4.78	4	0.002	NR	0.97	2	15.0	0
123	0.040	4	0.030	4	4.80	3					12.9	3
134	0.036	4	0.090	4	4.68	4	< 0.01	NR	0.37	4	13.0	3
136	0.200	0	0.060	4	4.60	3			63.00	0	9.3	1
141					4.60	3	< 0.05	NR	< 5	NR	13.0	3
145	0.025	NR	< 0.04	NR	4.10	0	< 0.01	NR	0.40	4	10.0	2
155	0.000	NR			4.30	0	0.000	NR			13.4	3
158					4.63	3			0.40	4	12.0	4
164	0.339	0	0.446	0	4.64	3			0.30	4		
167	< 1	NR	< 1	NR	4.74	4	0.025	NR	6.63	0	11.6	4
191												
196	0.042	4	0.060	4			< 0.03	NR	0.37	4		
197					4.72	4			0.28	4	11.4	4
202					4.71	4	0.011	NR			21.2	0

Table 10. --*Laboratory performance ratings for standard reference water sample Hg-15 (mercury)*

(MPV,most probable value; ug/L, micrograms per liter; mg/L, Lab, laboratory number)

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	O (Poor)	greater than 2.00
2 (Satisfactory)	1.01 - 1.50	NR (Not Rated)	

Analyte = Hg (Mercury)
MPV = 0.41
F-pseudosigma + 0.20

Lab	Rating	RV
1	4	0.34
3	3	0.60
11	0	2.00
12	2	0.70
13	3	0.56
16	4	0.45
18	4	0.34
24	3	0.30
28	4	0.40
29	3	0.22
32	3	0.57
36	4	0.49
37	3	0.56
39	NR	< 0.5
45	4	0.39
46	4	0.37
48	NR	< 0.2
51	3	0.22
52	4	0.49
55	4	0.47
59	3	0.30
61	4	0.40
63	4	0.49
68	2	0.20
69	3	0.22
70	3	0.30
74	4	0.32
75	3	0.57
87	3	0.30
89	3	0.26
90	1	0.74
92	4	0.43
96	4	0.40
97	3	0.26
100	3	0.30
105	4	0.36
108	2	0.61
109	4	0.41
113	4	0.45
119	3	0.57
120	4	0.39
127	4	0.42
128	1	0.80
133	2	0.70
134	3	0.28
136	0	0.90
138	4	0.40
139	0	2.85
141	4	0.45
144	3	0.25
146	2	0.20
149	4	0.40
167	1	0.71
179	2	0.20
182	3	0.60
196	0	1.20
202	NR	< 0.3

Table 11. *--Statistical summary of reported data for standard reference sample T-121 (trace constituents)*

Definition of analytical methods, abbreviations, and symbols

Analytical methods

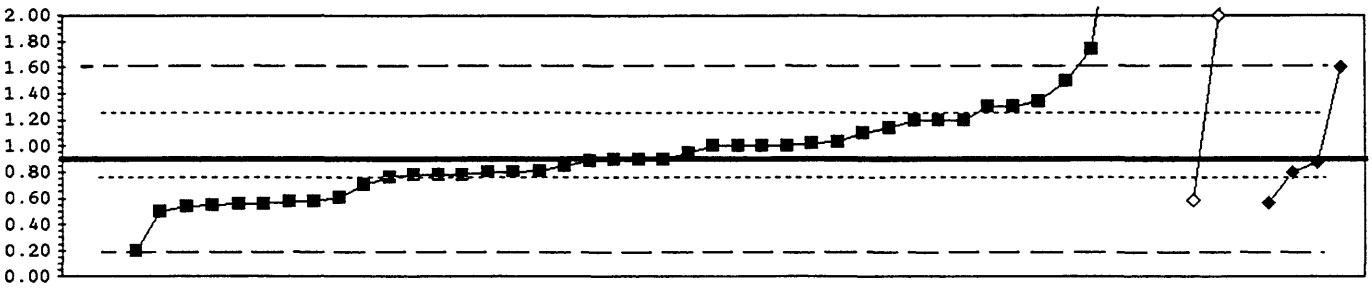
0. Other/Not reported		
1. AA: direct, air	=	atomic absorption: direct,air
2. AA: direct, N2O	=	atomic absorption: direct,nitrous oxide
3. AA: graphite furnace	=	atomic absorption: graphite furnace
4. ICP	=	inductively coupled plasma
5. DCP	=	direct current plasma
6. ICP/MS	=	inductively coupled plasma/mass spectrometry
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]

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
m g/L =	milligrams per liter
Lab =	laboratory code number
NR =	not rated, less than value reported
< =	less than

Table 11. *--Statistical summary of reported data for standard reference water sample T-121 (trace constituent)--Continued*

Ag (Silver) µ g/L



0 1 2 3 4 6

0. Other
1. AA: direct air
2. AA: direct N2O
3. AA: graphite furnace
4. ICP
6. ICP/MS

	1	0	1	42	3	4
N =						
Minimum =	1.60		17.80	0.20	0.59	0.57
Maximum =				43.00	3.20	1.60
Median =				0.90		
St Dev =				0.31		

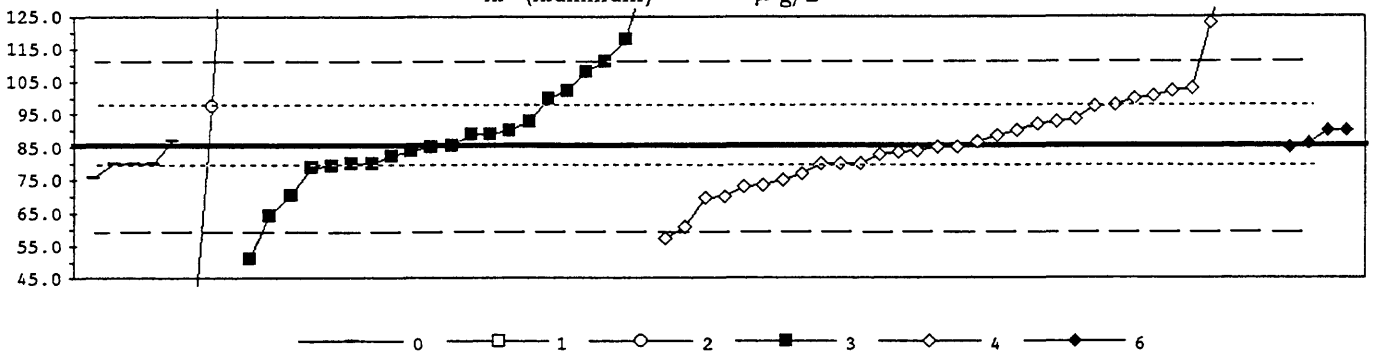
MPV = 0.90 +/- 0.07
F-pseudosigma = 0.36
N = 51
Hu = 1.25
Hl = 0.77

Lab	Rating	Z-value	0	1	2	3	4	6
1	4	0.00				0.90		
3	NR						< 5	
6	3	-0.56				0.70		
11	1	1.97	1.60					
12	3	0.84				1.20		
13	NR					< 2		
15	3	-0.82				0.61		
16	NR						< 7	
18	0	3.09					2.00	
23	3	0.67				1.14		
24	4	0.00				0.90		
26	NR					< 10		
28	NR			< 100				
29	4	-0.28				0.80		
30	4	-0.06						0.88
32	1	1.97						1.60
36	0	2.36				1.74		
37	4	-0.28						0.80
45	3	-0.91				0.58		
46	4	-0.34				0.78		
48	4	-0.28				0.80		
50	NR					< 5		
52	NR					< 1		
55	4	0.28				1.00		
57	2	1.12				1.30		
58	4	0.28				1.00		
59	NR						< 10	
61	NR						< 5	
63	3	0.56				1.10		
68	4	-0.14				0.85		
69	4	0.11				0.94		
70	0	6.18				3.10		
74	3	-0.87					0.59	
78	1	1.69				1.50		
79	0	118.32				43.00		
80	NR					< 1		
85	NR			< 5				
87	NR			< 2				
89	0	10.31				4.57		
90	3	-0.96				0.56		
94	NR						< 4	
96	2	1.24				1.34		
97	4	0.34				1.02		
100	4	-0.03				0.89		
103	NR						< 5	
105	3	0.84				1.20		
107	4	0.00				0.90		
108	2	-1.12				0.50		
113	3					0.58		
114	NR			< 10				

Lab	Rating	Z-value	0	1	2	3	4	6
119.	4	0.28				1.00		
120.	4	-0.34				0.78		
121.	3	-0.98				0.55		
122.	NR					< 1		
126.	NR					< 10		
127.	3	-0.97				0.55		
131.	NR						< 10	
133.	0	6.46					3.20	
134.	2	1.12				1.30		
138.	4	0.37				1.03		
141.	4	0.28				1.00		
144.	1	-1.97				0.20		
146.	NR						< 10	
149.	4	-0.34				0.78		
153.	4	-0.25				0.81		
167.	NR					< 2		
179.	0	47.50			17.80			
180.	NR						< 4	
182.	NR			< 1				
193.	NR					< 1		
196.1	3	-0.93						0.57
196.2	4	-0.39				0.76		
201.	NR			< 2				
202.	2	-1.01				0.54		
204.	3	0.84				1.20		

Table 11. *--Statistical summary of reported data for standard reference water sample T-121 (trace constituent)--Continued*

Al (Aluminum) µ g/L



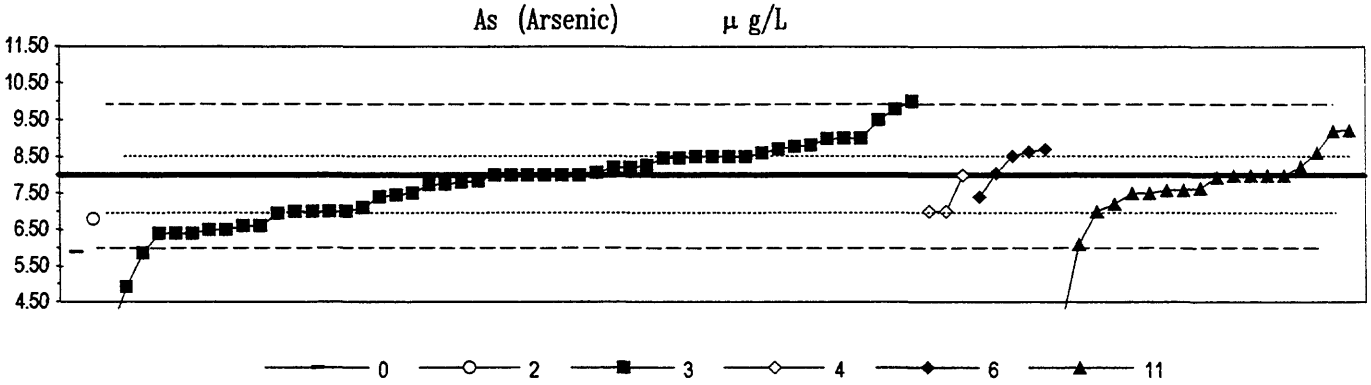
0. Other		3. AA: graphite furnace					
1. AA: direct air		4. ICP					
2. AA: direct N20		6. ICP/MS					
	N =	5	0	3	21	32	4
	Minimum =	75.8		20.0	51.0	57.1	85.2
	Maximum =	87.0		200.0	137.0	250.0	90.0
	Median =				85.3	85.0	
	St Dev =				15.9	13.9	

MPV = 85.5 +/- 2.2
F-pseudosigma = 12.9
N = 65
Hu = 97.4
Hl = 80.0

Lab	Rating	Z-value	0	1	2	3	4	6
1	4	-0.43	80.0					
3	4	-0.43					80.0	
5	4	-0.16					83.4	
8	2	1.30					102.3	
11	4	-0.43	80.0					
12	NR						< 100	
13	3	0.91				97.3		
15	4	-0.21					82.8	
16	NR						< 300	
18	4	0.09					86.6	
23	4	-0.41	80.2					
24	3	-0.97					73.0	
25	1	-1.94					60.5	
26	NR						< 250	
28	2	1.12					100.0	
29	0	8.88				200.0		
30	4	-0.02						85.2
33	4	0.12	87.0					
36	3	-0.75	75.8					
37	4	0.35						90.0
39	3	0.97					98.0	
42	4	0.35						90.0
45	4	0.25					88.7	
46	3	0.92					97.4	
48	1	1.98				111.0		
50	4	-0.04				85.0		
52	1	-1.67				64.0		
55	3	-0.81					75.0	
57	NR						< 250	
59	NR						< 100	
61	2	-1.20					70.0	
63	0	4.46					143.0	
68	0	12.75					250.0	
69	4	0.35				90.0		
70	4	-0.12					84.0	
73	4	0.50					92.0	
74	3	-0.66					77.0	
78	4	-0.49				79.2		
85	4	0.35					90.0	
89	0	3.99				137.0		
97	0	2.52				118.0		
100	3	-0.94					73.4	
101	0	4.77					147.0	
103	4	-0.04					85.0	
105	4	-0.04					85.0	
107	2	-1.19				70.2		
113	4	-0.13				83.8		
114	0	-5.08				20.0		
119	2	1.28				102.0		
120	4	0.00				85.5		

Lab	Rating	Z-value	0	1	2	3	4	6
121	4	0.27				89.0		
122	2	1.12				100.0		
127	2	-1.23					69.6	
131	NR						< 100	
133	3	0.58					93.0	
134	3	0.64					93.7	
136	4	0.27				89.0		
138	2	1.17					100.6	
139	0	-2.67				51.0		
141	4	-0.26				82.2		
145	4	-0.43					80.0	
146	2	1.36					103.0	
149	4	-0.43				80.0		
151	4	-0.43				80.0		
161	0	2.91					123.0	
167	NR						< 100	
180	0	-2.20					57.1	
182	NR			< 1000				
183	3	0.57				92.9		
185	1	1.74				108.0		
196	4	0.07						86.4
202	4	-0.43					80.0	
204	3	-0.52				78.8		

Table 11. *--Statistical summary of reported data for standard reference water sample T-121 (trace constituent)--Continued*



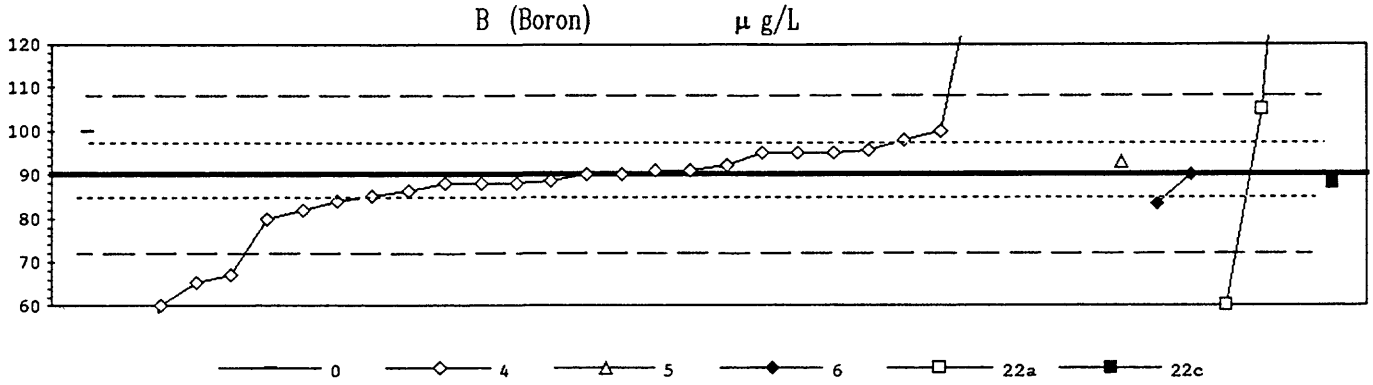
0. Other			4. ICP					
2. AA: direct N2O			6. ICP/MS					
3. AA: graphite furnace			11. AA: hydride					
	N =	1	1	49	3	5	18	
	Minimum =	5.89	6.80	3.70	7.00	7.40	4.00	
	Maximum =			10.00	8.00	8.70	9.23	
	Median =			8.00			7.94	
	St Dev =			0.97			0.76	

MPV = 8.00 +/- 0.17
F-pseudosigma = 1.11
N = 77
Hu = 8.50
Hl = 7.00

Lab	Rating	Z-value	0	2	3	4	6	11
1	2	1.08						9.20
3	2	-1.35			6.50			
5	4	0.40			8.45			
8	0	-3.60						4.00
11	1	-1.90	5.89					
12	NR				< 10			
13	4	0.00			8.00			
15	3	-0.90			7.00			
16	3	-0.90			7.00			
18	2	1.11						9.23
23	4	0.22			8.25			
24	0	-3.87			3.70			
26	4	0.00						8.00
28	4	0.00				8.00		
29	1	1.62			9.80			
30	4	0.46					8.51	
32	3	0.63					8.70	
35	4	0.21						8.23
36	0	-2.77			4.92			
37	3	0.57					8.63	
39	4	-0.36						7.60
42	3	-0.54					7.40	
45	2	-1.44			6.40			
46	2	-1.26			6.60			
48	3	-0.81			7.10			
50	4	0.00						8.00
51	2	-1.26			6.60			
52	4	0.45			8.50			
55	4	0.45			8.50			
57	4	0.00						8.00
58	1	-1.71						6.10
59	3	-0.90				7.00		
61	4	0.45			8.50			
63	4	0.00			8.00			
68	4	-0.45			7.50			
69	4	0.18			8.20			
70	4	0.18			8.20			
74	3	0.54			8.60			
75	4	-0.31						7.65
76	3	0.69			8.77			
78	4	0.00			8.00			
79	2	-1.44			6.40			
80	3	0.90			9.00			
85	4	-0.45						7.50
87	3	-0.90						7.00
89	3	-0.70						7.22
90	3	0.63			8.70			
94	4	-0.15			7.83			
96	4	0.05			8.06			
97	3	0.56						8.62

Lab	Rating	Z-value	0	2	3	4	6	11
100.	2	1.35			9.50			
103.	3	-0.90				7.00		
105.	4	0.00			8.00			
107.	4	0.41			8.46			
108.	3	-0.90			7.00			
109.	3	-0.94			6.96			
113.	4	-0.22			7.75			
119.	4	-0.45						7.50
120.	4	-0.05						7.94
123.	1	-1.93			5.85			
127.	4	-0.23			7.74			
131.	NR					< 50		
133.	4	-0.49			7.46			
134.	4	-0.36						7.60
136.	4	0.00			8.00			
138.	3	0.72			8.80			
139.	3	0.88			8.98			
141.	4	0.45			8.50			
145.	NR					< 21		
146.	4	0.00			8.00			
149.	2	-1.44			6.40			
167.	1	1.80			10.00			
179.	2	-1.08		6.80				
180.	NR					< 18		
182.	4	0.00						8.00
183.	3	-0.54			7.40			
193.	3	-0.90			7.00			
196.1	4	0.04					8.04	
196.2	3	0.90			9.00			
202.	4	-0.18			7.80			
204.	2	-1.35			6.50			

Table 11. *--Statistical summary of reported data for standard reference water sample T-121 (trace constituent)--Continued*

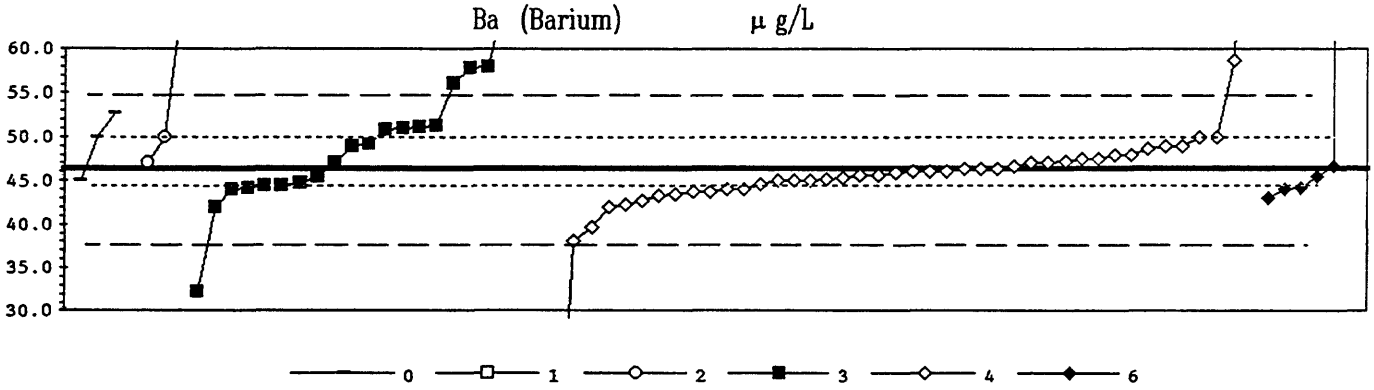


0. Other		6. ICP/MS						
4. ICP		22a. Colorimetric: azomethine						
5. DCP		22c. Colorimetric: curcumin						
	N =	1	28	1	2	3	1	
	Minimum =	100	40	93	84	60	88	
	Maximum =		4300		90	200		
	Median =		89					
	St Dev =		9					

Lab	Rating	Z-value	0	4	5	6	22a	22c
1	4	0.32			93			
3	2	-1.11		80				
5	4	-0.18		89				
11	2	1.09	100					
15	3	-0.67		84				
16	NR			< 200				
18	4	0.10		91				
24	3	0.54		95				
25	4	0.10		91				
26	NR						< 100	
28	0	6.60		150				
37	3	-0.73				84		
39	3	0.87		98				
42	4	-0.01				90		
45	1	1.64					105	
46	0	-5.52		40				
48	2	1.09		100				
52	NR			< 170				
55	0	-2.54		67				
57	0	12.10		200				
58	4	-0.23						88
61	4	0.21		92				
63	3	-0.56		85				
70	4	-0.23		88				
100	0	5.50		140				
103	0	-3.31		60				
119	4	-0.23		88				
121	4	-0.01		90				
122	0	-3.31					60	
127	4	0.01		90				
129	0	12.10					200	
131	4	-0.23		88				
134	3	-0.89		82				
141	3	0.55		95				
145	0	-2.74		65				
146	3	0.53		95				
161	0	463.60		4300				
167	4	-0.41		86				
180	3	0.59		96				
182	NR							< 100

MPV =	90	+/- 2
F-pseudosigma =	9	
N =	36	
Hu =	97	
Hl =	85	

Table 11. *--Statistical summary of reported data for standard reference water sample T-121 (trace constituent)--Continued*



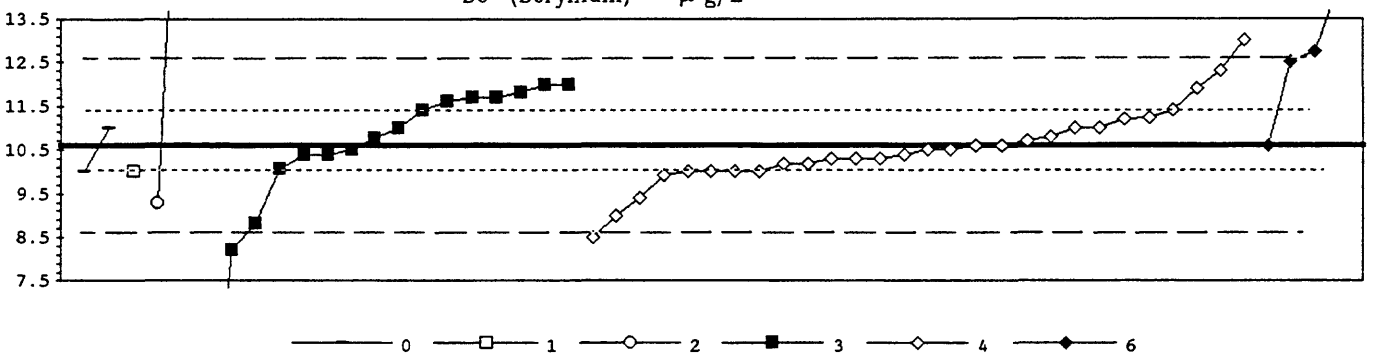
0. Other		3. AA: graphite furnace						
1. AA: direct air		4. ICP						
2. AA: direct N2O		6. ICP/MS						
	N =	3	2	3	21	42	6	
	Minimum =	45.0	12.0	47.0	32.2	0.0	43.0	
	Maximum =	52.8	100.0	66.0	116.0	115.0	451.0	
	Median =				49.0	46.0		
	St Dev =				5.0	3.3		

MPV = 46.3 +/- 0.7
F-pseudosigma = 4.3
N = 76
Hu = 50.0
Hl = 44.3

Lab	Rating	Z-value	0	1	2	3	4	6
1	4	0.00					46.3	
3	3	-0.54					44.0	
5	4	0.07					46.6	
6	3	-0.51				44.1		
8	1	-1.57					39.6	
11	3	0.87	50.0					
13	2	1.18				51.3		
15	4	-0.30					45.0	
16	4	0.17					47.0	
18	3	-0.94					42.3	
19	3	-0.70					43.3	
23	2	1.06				50.8		
24	4	-0.09					45.9	
25	4	-0.23					45.3	
26	NR						< 250	
28	3	0.87					50.0	
29	3	0.87			50.0			
30	4	0.07						46.6
32	4	-0.19						45.5
33	4	-0.30	45.0					
36	1	1.53	52.8					
37	3	-0.51						44.1
39	3	0.64					49.0	
42	3	-0.77						43.0
45	4	0.28					47.5	
46	4	0.28					47.5	
48	2	1.11				51.0		
50	NR					< 50		
52	3	-0.65					43.5	
55	4	0.00					46.3	
57	3	0.87					50.0	
59	4	-0.07					46.0	
61	3	-0.84					42.7	
63	0	16.12					115.0	
68	4	0.40					48.0	
69	0	2.75				58.0		
70	4	0.17					47.0	
74	2	-1.01					42.0	
75	3	0.68				49.2		
76	4	-0.19				45.5		
78	2	1.13				51.1		
87	0	4.62			66.0			
89	0	16.35				116.0		
90	0	8.00				80.4		
94	4	-0.40					44.6	
96	4	0.17			47.0			
97	4	-0.44				44.4		
100	4	0.00					46.3	
101	4	-0.26					45.2	
103	1	-1.94					38.0	
105	3	-0.54					44.0	
107	4	-0.42				44.5		
108	3	0.64				49.0		
113	0	2.70				57.8		
119	4	0.40					48.0	
120	0	2.30				56.1		
121	4	-0.07					46.0	
122	4	-0.35				44.8		
126	NR					< 200		
127	4	-0.16					45.6	
131	4	-0.30					45.0	
133	3	-0.61					43.7	
134	3	0.54					48.6	
136	3	-0.54				44.0		
138	4	-0.16					45.6	
141	4	-0.30					45.0	
145	3	-0.61					43.7	
146	3	0.61					48.9	
149	0	4.62				66.0		
153	4	0.17				47.0		
161	4	-0.07					46.0	
167	0	-10.85					0.0	
180	4	0.21					47.2	
182	0	12.60		100.0				
183	0	-3.31				32.2		
191	0	94.95						451.0
193	2	-1.01				42.0		
196	3	-0.53						44.0
204	0	2.91					58.7	

Table 11. *--Statistical summary of reported data for standard reference water sample T-121 (trace constituent)--Continued*

Be (Beryllium) µ g/L



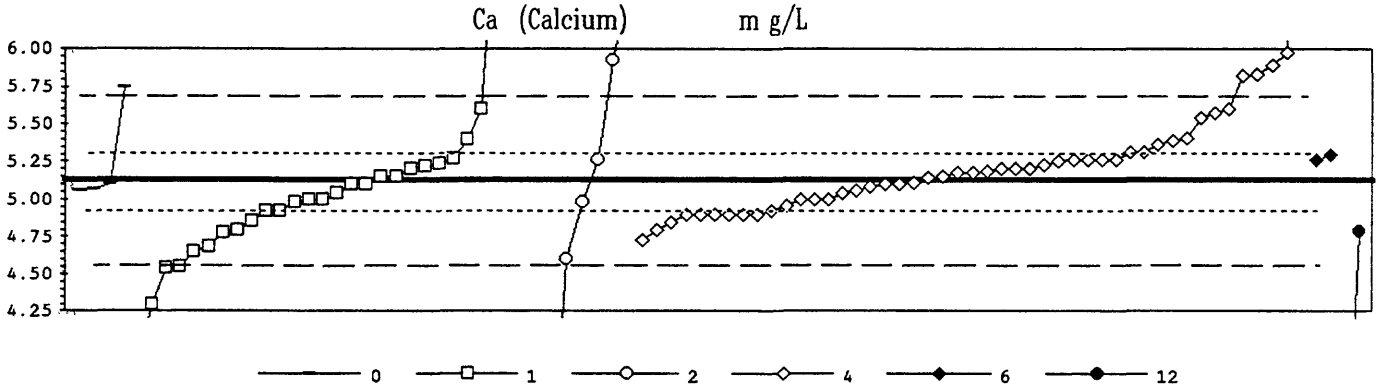
0. Other		3. AA: graphite furnace						
1. AA: direct air		4. ICP						
2. AA: direct N2O		6. ICP/MS						
	N =	2	1	2	16	28	4	
	Minimum =	10.0	10.0	9.3	3.3	8.5	10.6	
	Maximum =	11.0	10.0	20.0	12.0	13.0	14.3	
	Median =				11.0	10.5		
	St Dev =				1.1	0.9		

MPV =	10.6	+/- 0.2
F-pseudosigma =	1.0	
N =	53	
Hu =	11.4	
Hl =	10.0	

Lab	Rating	Z-value	0	1	2	3	4	6
1	3	0.60					11.2	
3	3	-0.58					10.0	
6	2	1.35				12.0		
8	1	1.64					12.3	
11	3	-0.58	10.0					
12	NR						< 20	
15	2	1.25					11.9	
16	3	-0.58					10.0	
18	2	-1.16					9.4	
23	3	0.77				11.4		
24	4	-0.19				10.4		
25	4	-0.39					10.2	
28	NR				< 100			
30	4	0.00						10.6
32	0	3.57						14.3
36	4	0.39	11.0					
37	1	1.83						12.5
39	0	2.31					13.0	
45	3	0.77					11.4	
46	3	0.58					11.2	
48	3	0.96				11.6		
50	4	0.39				11.0		
52	2	1.16				11.8		
55	4	0.19					10.8	
57	1	-1.54					9.0	
58	0	-7.03				3.3		
61	4	0.39					11.0	
63	3	-0.51				10.1		
68	3	-0.58					10.0	
69	4	-0.10				10.5		
70	4	-0.29					10.3	
74	4	-0.39					10.2	
78	2	1.06				11.7		
94	4	-0.29					10.3	
97	1	-1.72				8.8		
100	4	-0.19					10.4	
103	3	-0.58					10.0	
105	4	-0.29					10.3	
114	0	9.06			20.0			
119	0	-2.31				8.2		
120	4	0.17				10.8		
127	4	0.00					10.6	
133	4	0.10					10.7	
134	0	-2.02					8.5	
138	4	-0.10					10.5	
141	2	1.06				11.7		
145	3	-0.66					9.9	
146	4	0.00					10.6	
149	4	-0.19				10.4		
167	4	0.39					11.0	

Lab	Rating	Z-value	0	1	2	3	4	6
179	2	-1.25			9.3			
180	4	-0.10					10.5	
182	3	-0.58		10.0				
196	0	2.06						12.7
202	2	1.35				12.0		

Table 11. *--Statistical summary of reported data for standard reference water sample T-121 (trace constituent)--Continued*



0. Other			4. ICP					
1. AA: direct air			6. ICP/MS					
2. AA: direct N2O			12. AA: flame emission					
	N =	4	29	6	47	2	2	
	Minimum =	5.06	3.90	3.00	4.73	5.26	2.75	
	Maximum =	5.75	9.29	6.40	10.40	5.30	4.79	
	Median =		5.00		5.18			
	St Dev =		0.30		0.29			

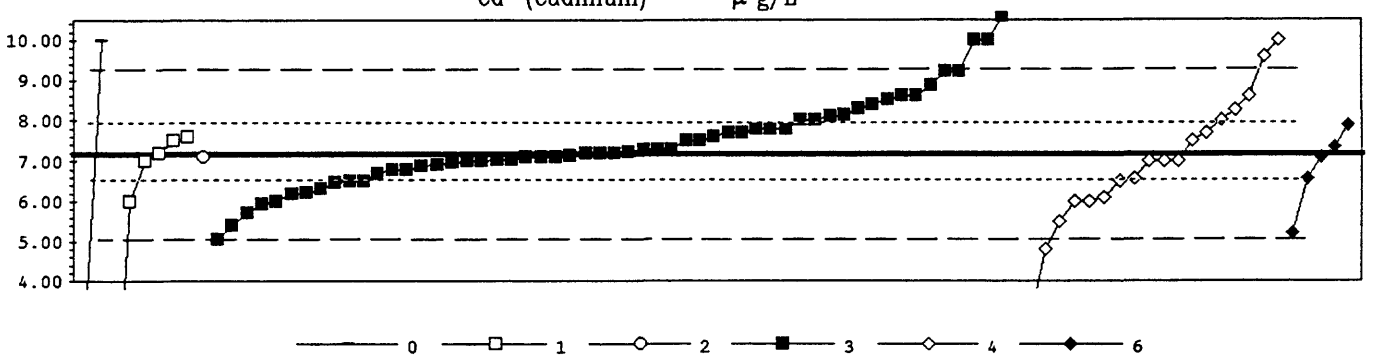
MPV = 5.13 +/- 0.04
F-pseudosigma = 0.28
N = 90
Hu = 5.30
Hl = 4.92

Lab	Rating	Z-value	0	1	2	4	6	12
1	4	0.20				5.18		
3	4	0.27				5.20		
5	4	0.48				5.26		
8	3	0.83				5.36		
9	0	-2.93		4.30				
11	4	-0.20	5.07					
12	4	-0.44				5.00		
13	3	-0.73		4.92				
15	4	-0.16				5.08		
16	3	-0.80				4.90		
18	1	1.69				5.60		
19	3	-0.98				4.85		
23	3	-0.94		4.86				
24	4	0.37				5.23		
25	1	1.62				5.58		
28	0	18.73				10.40		
32	3	0.62					5.30	
33	4	-0.24	5.06					
36	2	-1.19						4.79
39	0	3.00				5.97		
42	4	-0.09				5.10		
43	4	-0.09				5.10		
45	4	-0.30		5.04				
46	3	0.66				5.31		
48	3	0.66				5.31		
51	4	0.48				5.26		
52	3	-0.80				4.90		
54	4	-0.09		5.10				
55	4	0.20				5.18		
57	4	-0.44				5.00		
59	4	0.27				5.20		
61	3	-0.80				4.90		
63	3	0.94				5.39		
64	4	-0.30				5.04		
68	3	-0.80				4.90		
69	2	-1.15		4.80				
70	4	0.48				5.26		
74	2	-1.15				4.80		
75	2	-1.22		4.78				
78	1	-1.69		4.65				
83	3	0.51		5.27				
84	0	-4.35		3.90				
85	4	0.34		5.22				
87	0	4.53			6.40			
89	1	-1.54		4.69				
92	0	-2.04		4.55				
94	4	-0.23				5.06		
96	3	-0.51			4.98			
97	3	-0.73		4.92				
100	2	1.01				5.41		

Lab	Rating	Z-value	0	1	2	4	6	12
101	4	0.09		5.15				
103	3	-0.80				4.90		
105	2	-1.40				4.73		
107	0	14.79		9.29				
109	1	1.69		5.60				
111	4	0.48			5.26			
113	4	0.27		5.20				
114	0	-7.54			3.00			
116	0	2.72				5.89		
119	4	0.09				5.15		
120	0	-2.08		4.54				
121	4	0.27				5.20		
122	4	0.41		5.24				
123	3	-0.51		4.98				
126	4	-0.44		5.00				
127	4	0.05				5.14		
129	0	13.76		9.00				
131	3	-0.80				4.90		
133	3	-0.73				4.92		
134	3	-0.59				4.96		
136	1	-1.86			4.60			
138	4	0.48				5.26		
139	0	2.84			5.93			
140	4	-0.44		5.00				
141	4	0.44				5.25		
145	4	-0.05				5.11		
146	0	2.50				5.83		
151	4	-0.09		5.10				
153	4	-0.09	5.10					
155	0	2.22	5.75					
164	3	0.95		5.39				
167	4	-0.44				5.00		
179	0	10.21		8.00				
180	2	1.47				5.54		
182	0	6.30		6.90				
191	4	0.48					5.26	
193	4	0.09		5.15				
201	0	-8.44						2.75
202	4	0.23				5.19		
204	0	2.47				5.82		

Table 11. *--Statistical summary of reported data for standard reference water sample T-121 (trace constituent)--Continued*

Cd (Cadmium) µg/L



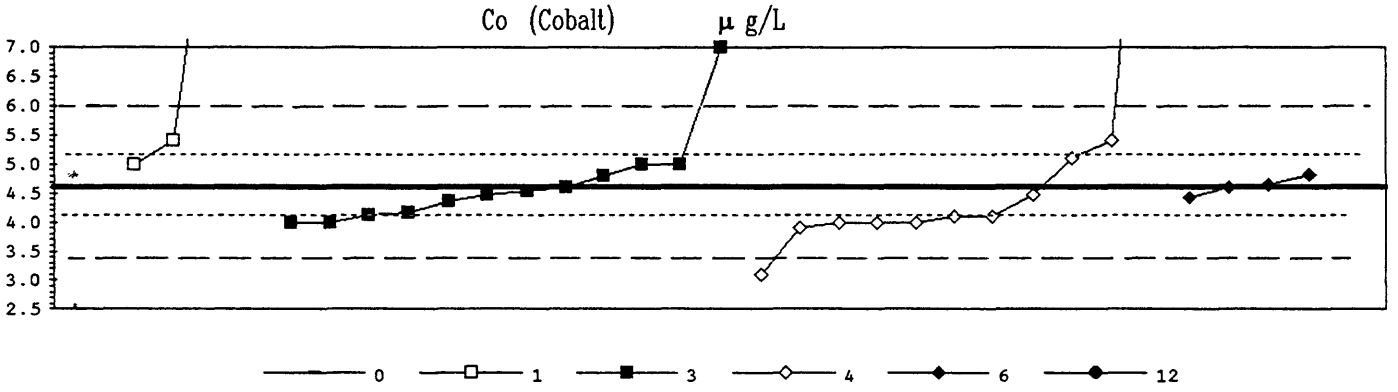
0. Other		3. AA: graphite furnace						
1. AA: direct air		4. ICP						
2. AA: direct N2O		6. ICP/MS						
	N =	2	6	1	56	18	5	
	Minimum =	3.74	0.01	7.10	5.05	3.18	5.20	
	Maximum =	10.00	7.60		12.00	10.00	7.90	
	Median =				7.20	7.00		
	St Dev =				1.11	1.40		

MPV =	7.17 +/- 0.15
F-pseudosigma =	1.05
N =	88
Hu =	7.95
Hl =	6.54

Lab	Rating	Z-value	0	1	2	3	4	6
1	4	0.13				7.30		
3	3	0.61				7.80		
6	3	0.93				8.14		
8	2	-1.02					6.10	
9	4	-0.35				6.80		
11	0	-3.28	3.74					
12	4	-0.06				7.10		
13	1	1.62				8.86		
15	4	-0.28				6.87		
16	3	0.80					8.00	
18	4	-0.18				6.98		
19	1	-1.59					5.50	
23	2	-1.38				5.72		
24	4	0.32					7.50	
26	4	-0.16				7.00		
28	0	2.71					10.00	
29	4	0.03				7.20		
30	4	0.17						7.34
32	3	0.70						7.90
36	4	-0.11				7.05		
37	4	-0.06						7.10
39	4	0.03				7.20		
42	1	-1.88						5.20
45	4	-0.03				7.13		
46	4	-0.06				7.10		
48	3	0.51				7.70		
50	4	-0.16				7.00		
51	0	2.71				10.00		
52	3	-0.63				6.51		
55	2	1.37				8.60		
57	4	0.32				7.50		
59	4	-0.16					7.00	
61	0	2.33					9.60	
63	3	0.51				7.70		
68	0	-2.26					4.80	
69	4	-0.13				7.03		
70	0	-2.02				5.05		
73	4	-0.16					7.00	
74	2	-1.11					6.00	
76	4	0.34				7.52		
78	1	-1.69				5.40		
79	0	3.29				10.60		
85	0	4.63				12.00		
87	0	-6.85		0.01				
89	3	-0.90				6.22		
90	2	1.18				8.40		
92	4	-0.16		7.00				
94	3	-0.56					6.58	
96	4	0.06				7.23		
97	2	-1.17				5.94		

Lab	Rating	Z-value	0	1	2	3	4	6
100.	4	0.03		7.20				
101.	3	0.51					7.70	
103.	2	-1.11					6.00	
105.	4	0.13				7.30		
107.	2	1.30				8.52		
108.	3	0.80				8.00		
109.	4	-0.38				6.77		
111.	3	-0.92				6.20		
113.	4	-0.25				6.90		
114.	NR			< 10				
119.	4	0.13				7.30		
120.	3	0.59				7.78		
121.	4	-0.16					7.00	
122.	3	-0.66				6.47		
127.	4	-0.06				7.10		
131.	NR						< 10	
133.	2	1.05					8.26	
134.	4	0.03				7.20		
136.	0	2.71				10.00		
138.	2	1.09				8.30		
139.	1	1.97				9.22		
140.	4	0.42		7.60				
141.	4	-0.44				6.70		
144.	3	-0.83				6.30		
145.	0	-3.81					3.18	
146.	2	1.37					8.60	
149.	4	0.42				7.60		
153.	2	1.37				8.60		
158.	2	-1.11				6.00		
167.	3	0.80				8.00		
179.	4	-0.06			7.10			
180.	3	-0.64					6.50	
182.	0	2.71	10.00					
183.	1	1.96				9.21		
193.	2	-1.11		6.00				
196.1	3	-0.57						6.57
196.2	3	0.89				8.10		
201.	4	0.32		7.50				
202.	3	0.61				7.80		
204.	3	-0.64				6.50		

Table 11. *--Statistical summary of reported data for standard reference water sample T-121 (trace constituent)--Continued*

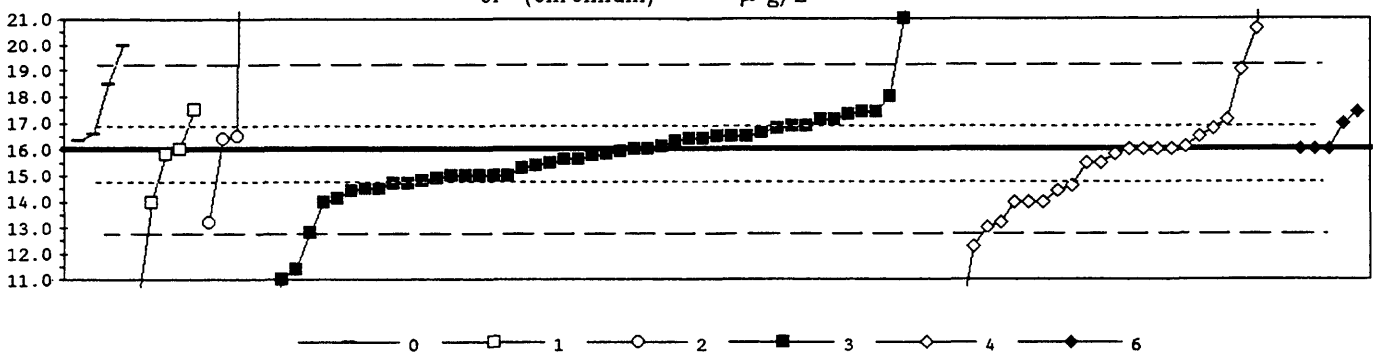


0. Other			4. ICP					
1. AA: direct air			6. ICP/MS					
3. AA: graphite furnace			12. AA: flame emission					
		N =	1	4	12	11	4	1
		Minimum =	6.0	5.0	4.0	3.1	4.4	7.9
		Maximum =		46.0	7.0	12.5	4.8	
		Median =			4.5	4.1		
		St Dev =			0.4	0.6		
Lab	Rating	Z-value	0	1	3	4	6	12
1	4	0.27			4.8			
3	NR					< 10		
8	3	-0.94				3.9		
11	1	1.89	6.0					
15	4	-0.09			4.5			
16	NR					< 10		
18	3	-0.81				4.0		
24	2	1.08				5.4		
26	NR				< 10			
28	NR			< 100				
30	4	0.05					4.6	
32	4	0.00					4.6	
36	0	4.48						7.9
37	4	0.28					4.8	
46	NR					< 10		
48	NR	NR				< 10		
50	3	0.54			5.0			
51	3	-0.81			4.0			
52	3	-0.65			4.1			
55	3	-0.81			4.0			
57	NR					< 100		
61	NR					< 5		
63	0	55.85		46.0				
68	0	-2.02				3.1		
70	NR					< 10		
74	3	-0.81				4.0		
89	NR				< 10			
92	3	0.54		5.0				
94	3	-0.67				4.1		
97	4	-0.32			4.4			
100	2	1.08		5.4				
103	3	-0.81				4.0		
105	NR					< 10		
121	0	3.24			7.0			
127	3	-0.58			4.2			
131	NR					< 10		
133	0	10.66				12.5		
134	4	0.00			4.6			
136	3	0.54			5.0			
138	4	-0.19			4.5			
141	3	0.67				5.1		
145	NR					< 5		
146	4	-0.19				4.5		
167	NR					< 40		
180	3	-0.67				4.1		
182	0	7.28		10.0				
193	NR			< 10				
196	4	-0.24					4.4	

MPV =	4.6 +/- 0.2
F-pseudosigma =	0.7
N =	33
Hu =	5.1
Hl =	4.1

Table 11. *--Statistical summary of reported data for standard reference water sample T-121 (trace constituent)--Continued*

Cr (Chromium) μ g/L



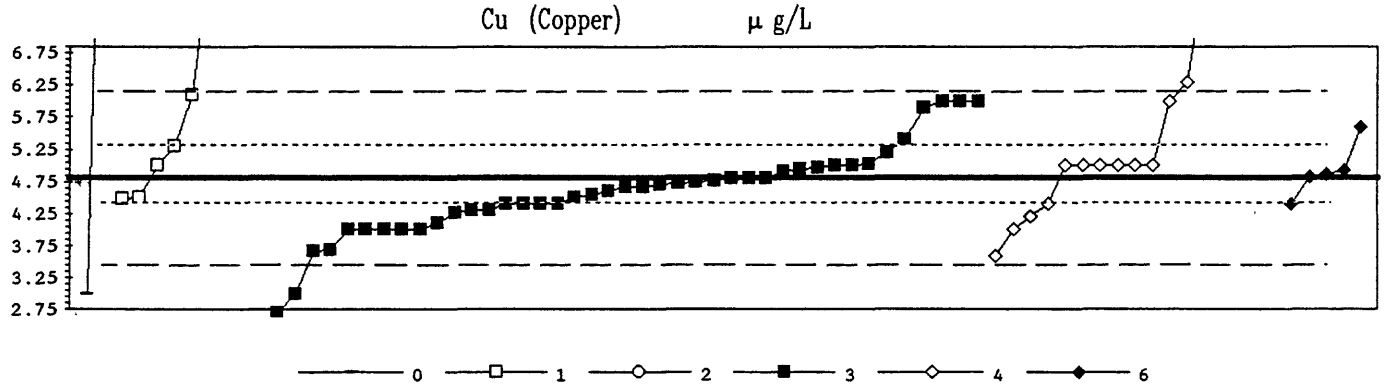
0. Other		3. AA: graphite furnace					
1. AA: direct air		4. ICP					
2. AA: direct N2O		6. ICP/MS					
	N =	4	5	4	48	25	5
	Minimum =	16.3	10.0	13.2	8.0	7.6	16.0
	Maximum =	20.0	17.5	80.0	32.1	30.0	17.4
	Median =				15.8	15.8	
	St Dev =				1.5	1.9	

MPV = 16.0 +/- 0.2
F-pseudosigma = 1.6
N = 91
Hu = 16.8
Hl = 14.7

Lab	Rating	Z-value	0	1	2	3	4	6
1	4	0.21	16.3					
3	2	-1.28					14.0	
5	3	0.51					16.8	
6	4	0.06				16.1		
8	0	-4.42					9.1	
9	3	0.70				17.1		
11	0	2.56	20.0					
12	NR						< 20	
13	0	-2.05				12.8		
15	3	0.51				16.8		
16	1	1.92					19.0	
18	1	-1.92					13.0	
19	2	-1.28					14.0	
23	4	-0.26				15.6		
24	4	-0.32					15.5	
25	3	0.70					17.1	
26	NR					< 20		
28	0	8.97					30.0	
29	3	-0.96				14.5		
30	4	0.00						16.0
32	4	0.00						16.0
36	1	1.60	18.5					
37	3	0.64						17.0
39	4	0.00					16.0	
42	4	0.00						16.0
45	3	-0.83				14.7		
46	2	-1.03				14.4		
48	4	0.26				16.4		
50	3	-0.64				15.0		
51	0	-5.13				8.0		
52	3	0.70				17.1		
55	4	0.32				16.5		
57	3	-0.64				15.0		
58	3	0.90				17.4		
59	4	0.00					16.0	
61	1	-1.79					13.2	
63	4	0.26				16.4		
68	0	6.41					26.0	
69	4	-0.13				15.8		
70	4	0.32				16.5		
73	0	2.95					20.6	
74	2	-1.28					14.0	
75	4	0.00				16.0		
76	3	0.90				17.4		
78	4	0.19				16.3		
79	4	0.00				16.0		
80	0	3.20				21.0		
85	NR						< 20	
87	1	-1.79			13.2			
89	3	-0.64				15.0		

Lab	Rating	Z-value	0	1	2	3	4	6
90.	0	10.32				32.1		
92.	4	0.00		16.0				
94.	4	-0.32					15.5	
96.	4	0.33				16.5		
97.	2	-1.22				14.1		
100.	4	-0.13		15.8				
101.	4	0.32					16.5	
103.	0	-2.37					12.3	
105.	3	0.83				17.3		
107.	3	-0.70				14.9		
108.	2	-1.28				14.0		
111.	4	0.26			16.4			
113.	3	0.58				16.9		
114.	0	41.01			80.0			
119.	4	-0.32				15.5		
120.	3	-0.84				14.7		
121.	2	1.28				18.0		
122.	4	-0.26				15.6		
123.	4	0.42				16.7		
126.	0	6.41				26.0		
127.	4	-0.13					15.8	
131.	0						< 10	
133.	3	-0.90					14.6	
134.	4	0.38	16.6					
136.	0	-3.20				11.0		
138.	4	-0.45				15.3		
140.	3	0.96		17.5				
141.	2	-1.03					14.4	
144.	3	-0.64				15.0		
145.	0	-5.38					7.6	
146.	4	0.06					16.1	
149.	3	-0.96				14.5		
153.	3	0.58				16.9		
158.	0	-2.95				11.4		
161.	4	0.00					16.0	
167.	3	-0.64				15.0		
179.	4	0.32			16.5			
180.	4	0.00					16.0	
182.	0	-3.85		10.0				
183.	4	-0.13				15.8		
193.	2	-1.28		14.0				
196.1	3	0.91						17.4
196.2	4	-0.06				15.9		
201.	0			< 2				
202.	4	-0.38				15.4		
204.	3	-0.77				14.8		

Table 11. *--Statistical summary of reported data for standard reference water sample T-121 (trace constituent)--Continued*



0. Other
1. AA: direct air
2. AA: direct N2O
3. AA: graphite furnace
4. ICP
6. ICP/MS

	0	1	2	3	4	6
N =	2	8	1	41	17	5
Minimum =	3.00	4.48	2.40	2.70	3.60	4.40
Maximum =	13.30	20.00		6.00	20.00	5.60
Median =		5.15		4.66	5.00	
St Dev =		1.41		0.71	1.46	

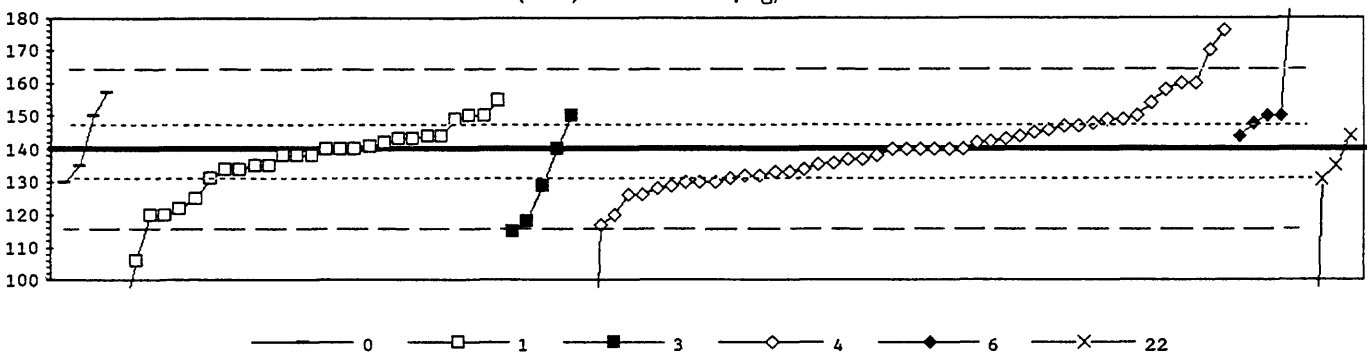
MPV = 4.80 +/- 0.10
F-pseudosigma = 0.67
N = 74
Hu = 5.30
Hl = 4.40

Lab	Rating	Z-value	0	1	2	3	4	6
1	4	0.15				4.90		
3	NR						< 5	
6	4	-0.37				4.55		
8	1	-1.80					3.60	
9	2	-1.20				4.00		
11	0	-2.70	3.00					
12	1	1.80				6.00		
13	NR					< 50		
15	0	-3.15				2.70		
16	NR						< 10	
18	3	-0.60					4.40	
23	1	-1.65				3.70		
24	4	0.00				4.80		
26	NR						< 100	
28	0	22.78					20.00	
29	NR			< 4				
30	4	0.10						4.87
32	2	1.20						5.60
36	0	12.74	13.30					
37	4	0.19						4.93
39	1	1.80					6.00	
42	3	-0.60						4.40
45	4	-0.10				4.73		
48	4	0.00				4.80		
50	4	0.30				5.00		
51	2	-1.20				4.00		
52	4	0.21				4.94		
55	2	-1.05				4.10		
57	NR			< 20				
58	3	-0.60				4.40		
59	4	0.30					5.00	
61	NR						< 5	
63	4	0.30				5.00		
68	0	2.25					6.30	
69	1	1.80				6.00		
70	NR						< 10	
73	0	4.80					8.00	
74	4	0.30					5.00	
75	3	-0.60				4.40		
78	1	-1.69				3.67		
79	0	-2.70				3.00		
80	2	-1.20				4.00		
83	4	-0.45		4.50				
85	NR			< 5				
87	NR			< 5				
89	NR					< 10		
90	1	1.95		6.10				
92	4	0.30		5.00				
94	0	4.80					8.00	
96	4	-0.48		4.48				

Lab	Rating	Z-value	0	1	2	3	4	6
97	4	-0.21				4.66		
100	0	11.09		12.20				
101	3	-0.90					4.20	
103	2	-1.20					4.00	
105	4	0.30					5.00	
107	4	-0.07				4.75		
108	1	1.80				6.00		
111	3	-0.75				4.30		
113	4	0.33				5.02		
114	0	22.78		20.00				
119	4	0.30					5.00	
120	3	-0.81				4.26		
121	3	0.90				5.40		
122	4	-0.21				4.66		
123	3	-0.60				4.40		
126	NR			< 20				
127	4	0.24				4.96		
131	NR						< 10	
133	0	4.75					7.97	
134	3	-0.60				4.40		
136	2	-1.20				4.00		
138	4	0.00				4.80		
139	4	-0.15				4.70		
140	3	0.75		5.30				
141	1	1.65				5.90		
144	3	0.60				5.20		
145	NR						< 3	
146	0	10.79					12.00	
149	NR			< 9				
153	4	-0.30				4.60		
158	2	-1.20				4.00		
161	4	0.30					5.00	
167	NR						< 20	
179	0	-3.60			2.40			
180	4	0.30					5.00	
182	NR			< 20				
183	4	-0.04				4.77		
193	NR			< 10				
196	4	0.04						4.83
201	0	5.10		8.20				
202	4	-0.45				4.50		
204	3	-0.75				4.30		

Table 11. *--Statistical summary of reported data for standard reference water sample T-121 (trace constituent)--Continued*

Fe (Iron) µ g/L



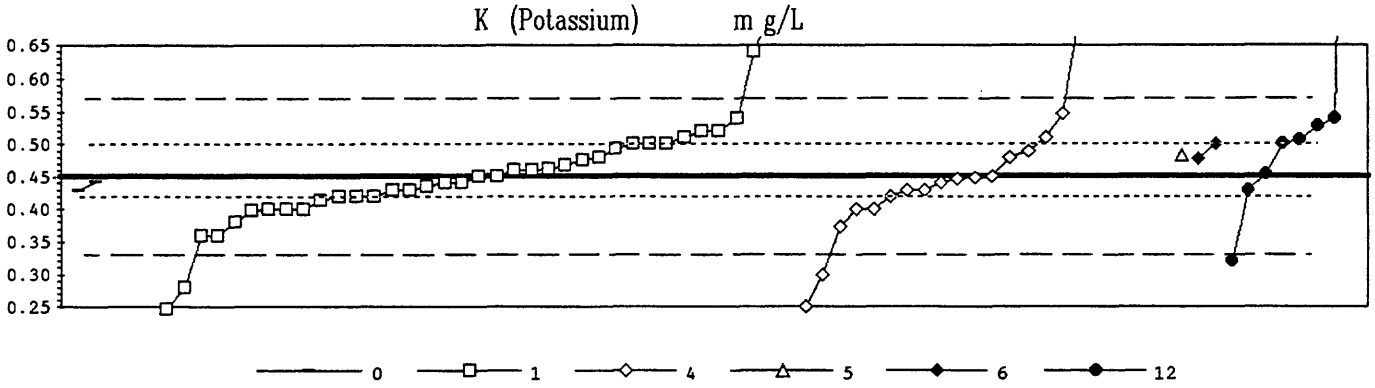
0. Other			4. ICP					
1. AA: direct air			6. ICP/MS					
3. AA: graphite furnace			22. Color: phenanthroline					
	N =	4	27	5	45	5	4	
	Minimum =	130	86	115	0	144	0	
	Maximum =	157	155	150	176	205	144	
	Median =		139		140			
	St Dev =		11		12			

MPV = 140 +/- 2
F-pseudosigma = 12
N = 90
Hu = 147
Hl = 131

Lab	Rating	Z-value	0	1	3	4	6	22
1	4	0.21				142		
3	3	-0.84				130		
5	3	0.76				149		
8	4	0.25				143		
9	4	-0.42		135				
11	3	0.84	150					
12	4	0.00				140		
13	3	-0.51		134				
15	2	-1.01				128		
16	4	-0.17				138		
18	1	-1.94				117		
19	3	-0.67				132		
21	4	0.34						144
23	1	-1.52		122				
24	4	-0.25				137		
25	3	-0.93				129		
26	NR					< 200		
28	0	2.53				170		
29	2	-1.26		125				
30	3	0.67					148	
32	0	5.48					205	
33	4	-0.42	135					
36	3	-0.84	130					
37	3	0.84					150	
42	4	0.17				142		
43	3	0.67				148		
45	3	-0.51		134				
46	3	0.59				147		
48	1	1.69				160		
50	3	-0.93			129			
51	4	0.08		141				
52	3	-0.59				133		
54	4	0.00		140				
55	4	0.00				140		
57	1	-1.69		120				
58	0	-4.55		86				
59	4	0.42				145		
61	2	-1.18				126		
63	4	-0.25				137		
68	4	0.00				140		
69	4	0.34		144				
70	1	-1.69				120		
73	1	1.52				158		
74	3	-0.84				130		
76	4	0.34		144				
78	4	0.00		140				
83	4	-0.17		138				
84	3	0.84		150				
85	4	0.25		143				
87	2	1.43	157					

Lab	Rating	Z-value	0	1	3	4	6	22
89	3	-0.76		131				
90	4	-0.17		138				
91	4	0.34					144	
92	0	-2.87		106				
94	4	0.34				144		
96	4	0.25		143				
97	4	0.00			140			
100	4	-0.17		138				
101	3	0.76				149		
103	3	-0.84				130		
105	3	-0.59				133		
107	4	-0.42		135				
109	3	0.76		149				
113	0	-11.79						0.13
114	3	0.84		150				
116	3	0.51				146		
119	4	0.00				140		
120	1	-1.86			118			
121	3	0.84				150		
122	0	-2.11			115			
127	4	0.00				140		
129	4	-0.42						135
131	4	0.00				140		
133	3	0.59				147		
134	3	-0.73				131		
136	3	0.84			150			
138	4	-0.38				136		
139	1	-1.69		120				
140	4	0.00		140				
141	4	-0.34				136		
145	2	-1.18				126		
146	1	1.69				160		
149	2	1.26		155				
155	3	-0.79						131
161	2	1.18				154		
167	0	-11.79				0.14		
180	3	-0.67				132		
182	NR			< 200				
191	3	0.84					150	
193	4	0.17		142				
202	3	-0.51				134		
204	0	3.04				176		

Table 11. *--Statistical summary of reported data for standard reference water sample T-121 (trace constituent)--Continued*



0. Other 5. DCP
1. AA: direct air 6. ICP/MS
4. ICP 12. AA: flame emission

	0	1	4	5	6	12
N =	2	40	22	1	2	8
Minimum =	0.43	0.10	0.25	0.48	0.48	0.32
Maximum =	0.44	1.55	640		0.50	1.54
Median =		0.44	0.44			0.50
St Dev =		0.05	0.06			0.08

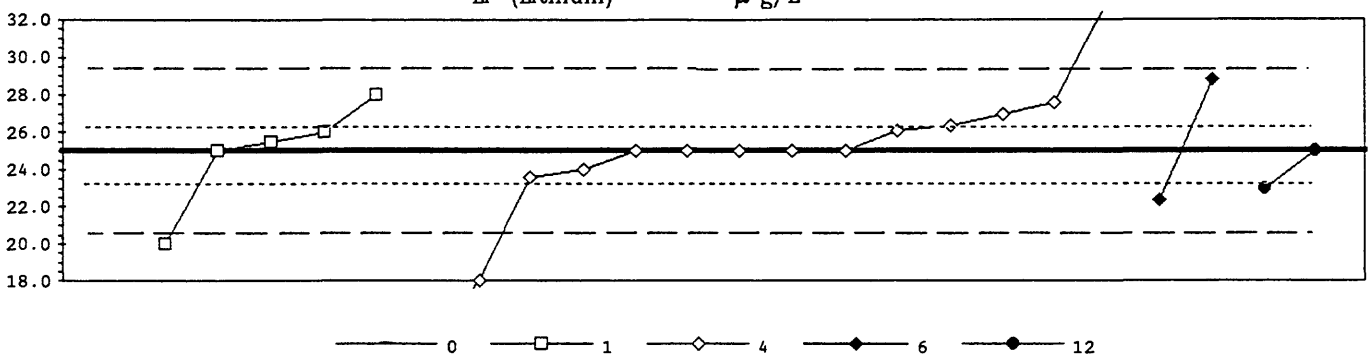
MPV = 0.45 +/- 0.01
F-pseudosigma = 0.06
N = 75
Hu = 0.50
Hl = 0.42

Lab	Rating	Z-value	0	1	4	5	6	12
1	4	-0.31		0.43				
3	2	-1.41		0.36				
8	3	0.94			0.51			
9	2	-1.10		0.38				
11	4	-0.13	0.44					
12	0	-2.35			0.30			
13	3	-0.56		0.41				
15	4	0.27		0.47				
16	3	-0.78		0.40				
18	0	3.92			0.70			
23	4	-0.31		0.43				
24	0	-3.14			0.25			
28	0	25.88			2.10			
32	3	0.78					0.50	
33	3	0.53				0.48		
36	0	-2.02						0.32
42	0	3.92			0.70			
43	3	-0.78			0.40			
45	4	-0.24		0.44				
46	3	0.63			0.49			
48	0	10032			640			
51	0	17.10						1.54
52	4	-0.03			0.45			
54	4	0.00		0.45				
55	4	-0.31						0.43
57	3	0.78		0.50				
59	4	0.00			0.45			
61	NR				< 1			
63	2	1.10		0.52				
64	4	-0.47		0.42				
68	0	8.63			1.00			
69	3	0.78						0.50
70	NR			< 0.5				
74	4	0.47			0.48			
75	NR			< 1				
78	4	0.16		0.46				
83	4	0.47		0.48				
85	3	0.94		0.51				
87	4	-0.16		0.44				
89	3	0.78		0.50				
92	0	17.25		1.55				
94	4	0.19		0.46				
96	3	0.66		0.49				
97	2	-1.41		0.36				
100	4	-0.16			0.44			
101	3	0.78		0.50				
103	3	-0.78			0.40			
105	4	-0.31			0.43			
109	4	-0.47		0.42				
111	4	0.39		0.48				

Lab	Rating	Z-value	0	1	4	5	6	12
113	2	1.10		0.52				
114	0	-3.61		0.22				
119	4	-0.31			0.43			
120	0	-3.20		0.25				
121	4	-0.16		0.44				
122	4	0.16		0.46				
123	0	-2.67		0.28				
127	2	1.41		0.54				
129	0	-3.92		0.20				
131	NR				< 2			
133	2	-1.21			0.37			
134	0	3.92		0.70				
136	3	-0.78		0.40				
138	4	-0.06			0.45			
139	2	1.41						0.54
140	0	2.98		0.64				
141	4	-0.47			0.42			
145	0				< 0.1			
146	0	17.41			1.56			
151	4	-0.47		0.42				
153	4	-0.31	0.43					
164	3	-0.82		0.40				
167	NR				< 1			
179	3	-0.78		0.40				
180	1	1.52			0.55			
182	0	-5.49		0.10				
191	4	0.44					0.48	
193	4	0.00		0.45				
201	3	0.88						0.51
202	2	1.21						0.53
204	4	0.08						0.46

Table 11. *--Statistical summary of reported data for standard reference water sample T-121 (trace constituent)--Continued*

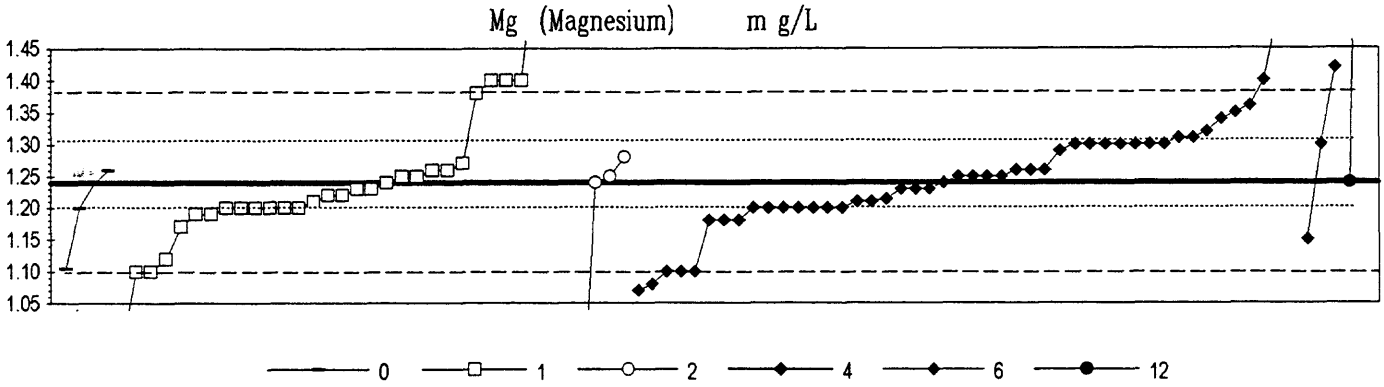
Li (Lithium) µ g/L



0. Other			6. ICP/MS				
1. AA: direct air			12. AA: flame emission				
4. ICP							
		N =	1	5	14	2	2
		Minimum =	11.0	20.0	14.9	22.4	23.0
		Maximum =		28.0	32.8	28.8	25.0
		Median =			25.0		
		St Dev =			3.2		
Lab	Rating	Z-value	0	1	4	6	12
1	4	0.49			26.1		
3	3	0.92			27.0		
11	0	-6.43	11.0				
15	3	-0.64			23.6		
16	NR				< 200		
24	4	0.00			25.0		
25	3	0.64			26.4		
26	NR				< 100		
28	NR			< 100			
29	0	-2.30		20.0			
30	2	-1.20				22.4	
32	1	1.75				28.8	
39	4	0.00			25.0		
42	4	-0.46			24.0		
50	NR						< 50
55	3	-0.92					23.0
63	4	0.46		26.0			
68	4	0.00			25.0		
70	4	0.00			25.0		
85	2	1.38		28.0			
100	4	0.00		25.0			
103	0	-3.22			18.0		
105	4	0.00			25.0		
109	4	0.23		25.5			
121	4	0.00					25.0
127	2	1.20			27.6		
131	NR				< 50		
134	0	3.59			32.8		
145	0	-4.63			14.9		
182	0		< 1				

MPV =	25.0 +/- 0.6
F-pseudosigma =	2.2
N =	24
Hu =	26.2
Hl =	23.3

Table 11. *--Statistical summary of reported data for standard reference water sample T-121 (trace constituent)--Continued*



0. Other			4. ICP					
1. AA: direct air			6. ICP/MS					
2. AA: direct N2O			12. AA: flame emission					
	N =	4	31	4	46	3	2	
	Minimum =	1.11	0.98	0.85	1.07	1.15	1.24	
	Maximum =	1.26	65	1.28	2.40	1.42	2.24	
	Median =		1.22		1.25			
	St Dev =		0.08		0.08			

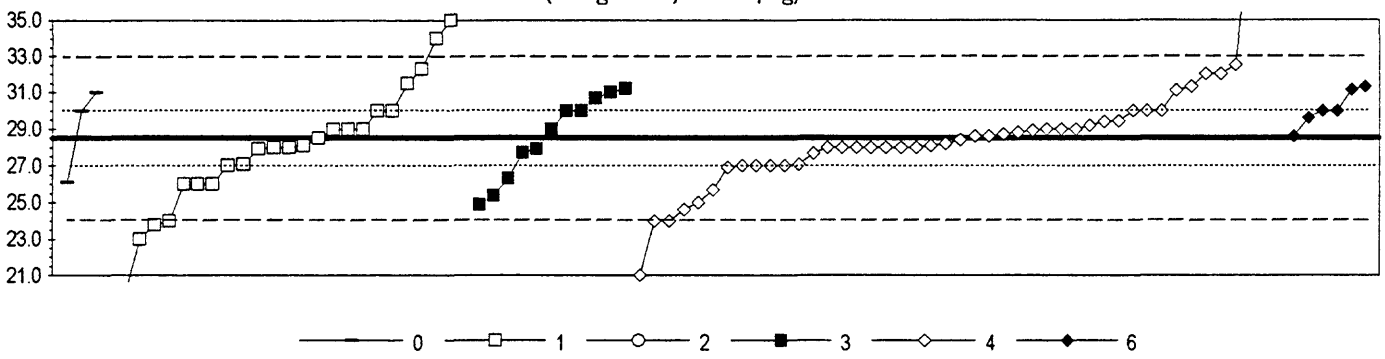
MPV = 1.24 +/- 0.01
F-pseudosigma = 0.07
N = 90
Hu = 1.30
Hl = 1.20

Lab	Rating	Z-value	0	1	2	4	6	12
1	4	0.27				1.26		
3	3	-0.54				1.20		
5	4	0.13				1.25		
8	4	-0.13				1.23		
9	3	-0.54		1.20				
11	4	0.27	1.26					
12	3	0.81				1.30		
13	3	-0.94		1.17				
15	4	0.27				1.26		
16	3	-0.54				1.20		
18	0	2.16				1.40		
19	4	-0.13				1.23		
23	4	0.40		1.27				
24	3	0.94				1.31		
25	3	0.81				1.30		
28	0	15.65				2.40		
30	2	-1.21					1.15	
32	0	2.43					1.42	
33	4	-0.01	1.24					
36	4	0.00						1.24
39	4	-0.13				1.23		
42	3	0.81				1.30		
43	3	-0.54				1.20		
45	4	0.00		1.24				
46	4	0.13				1.25		
48	2	1.35				1.34		
51	4	-0.27		1.22				
52	4	-0.40				1.21		
54	3	-0.54		1.20				
55	3	-0.54				1.20		
57	1	-1.89				1.10		
59	3	-0.54				1.20		
61	1	-1.89				1.10		
63	3	-0.81				1.18		
64	4	0.13				1.25		
68	3	0.81				1.30		
69	0	2.16		1.40				
70	3	0.81				1.30		
74	0	-2.16				1.08		
75	NR			< 2				
78	4	-0.13		1.23				
83	3	-0.67		1.19				
84	0	5.13		1.62				
85	4	0.27		1.26				
87	4	-0.27		1.22				
89	1	-1.89		1.10				
92	4	0.13		1.25				
94	4	-0.35				1.21		
96	4	0.00			1.24			
97	3	-0.67		1.19				

Lab	Rating	Z-value	0	1	2	4	6	12
100	2	1.48				1.35		
101	4	0.13		1.25				
103	3	0.81				1.30		
105	3	-0.81				1.18		
107	4	-0.40		1.21				
109	0	2.16		1.40				
111	4	0.13			1.25			
113	0	2.16		1.40				
114	0	-5.26			0.85			
116	4	0.27				1.26		
119	3	0.67				1.29		
120	0	-3.49		0.98				
121	3	-0.54				1.20		
122	4	-0.13		1.23				
123	1	-1.62		1.12				
126	3	-0.54		1.20				
127	3	-0.81				1.18		
129	0	860.12		65				
131	2	1.08				1.32		
133	0	-2.29				1.07		
134	4	-0.40				1.21		
136	3	-0.54		1.20				
138	4	0.00				1.24		
139	3	0.54			1.28			
140	3	-0.54		1.20				
141	4	0.13				1.25		
145	1	-1.89				1.10		
146	1	1.62				1.36		
151	3	-0.54		1.20				
153	3	-0.54	1.20					
155	1	-1.82	1.11					
164	4	0.26		1.26				
167	3	-0.54				1.20		
179	0	7.55		1.80				
180	3	0.94				1.31		
182	1	-1.89		1.10				
191	3	0.81					1.30	
193	1	1.89		1.38				
201	0	13.49						2.24
202	3	0.81				1.30		
204	0	3.64				1.51		

Table 11. *--Statistical summary of reported data for standard reference water sample T-121 (trace constituent)--Continued*

Mn (Manganese) μ g/L



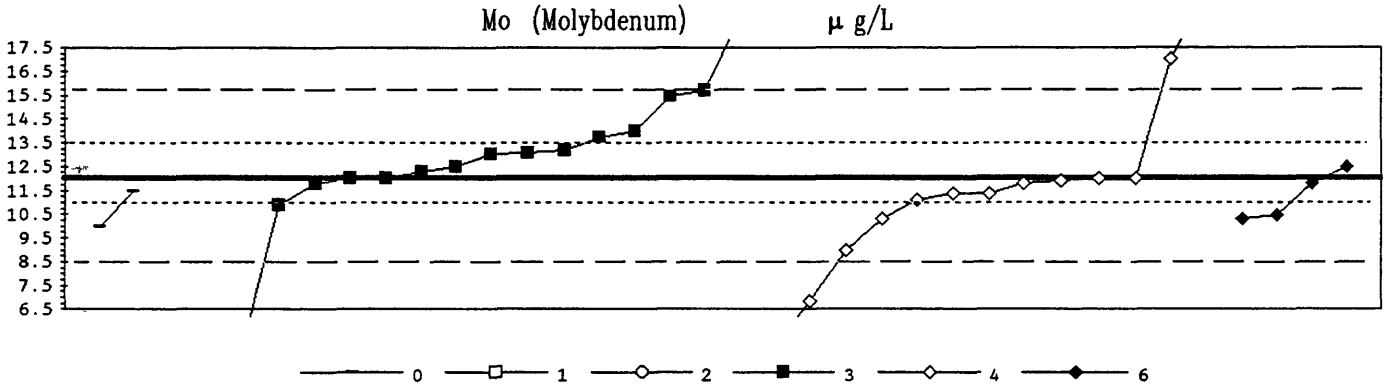
0. Other		3. AA: graphite furnace					
1. AA: direct air		4. ICP					
2. AA: direct N2O		6. ICP/MS					
	N =	3	24	1	11	43	6
	Minimum =	26.1	20.0	11.0	24.9	21.0	28.6
	Maximum =	31.0	35.0		31.2	40.0	31.3
	Median =		28.1		29.0	28.2	
	St Dev =		3.1		2.3	2.0	

MPV = 28.5 +/- 0.3
F-pseudosigma = 2.2
N = 88
Hu = 30.0
Hl = 27.0

Lab	Rating	Z-value	0	1	2	3	4	6
1	4	0.44					29.4	
3	3	-0.65					27.0	
5	4	0.20					28.9	
8	4	-0.16					28.1	
9	4	-0.25				27.9		
11	3	0.70	30.0					
12	3	0.70					30.0	
13	3	-0.61		27.1				
15	1	-1.73					24.6	
16	4	-0.20					28.0	
18	1	-1.55					25.0	
19	2	-1.24					25.7	
23	2	1.01				30.7		
24	4	-0.02					28.4	
25	4	0.16					28.8	
26	NR						< 200	
28	3	0.70					30.0	
29	2	-1.10		26.0				
30	4	0.07						28.6
32	3	0.52						29.6
33	2	1.15	31.0					
36	2	-1.06	26.1					
37	2	1.28						31.3
39	1	1.60					32.0	
42	4	-0.20					28.0	
43	4	0.25					29.0	
45	0	2.50		34.0				
46	4	0.34					29.2	
48	0	5.19					40.0	
50	4	0.25				29.0		
51	3	0.70				30.0		
52	3	-0.61					27.1	
54	2	-1.10		26.0				
55	3	-0.70					26.9	
57	0	2.95		35.0				
58	3	-0.65		27.0				
59	4	-0.20					28.0	
61	3	0.70					30.0	
63	4	0.25					29.0	
68	3	-0.65					27.0	
70	4	0.25					29.0	
74	3	-0.65					27.0	
76	4	0.25		29.0				
78	4	-0.25		27.9				
83	1	1.73		32.3				
84	3	0.70		30.0				
85	0	-2.00		24.0				
87	4	-0.20		28.0				
89	0	-2.09		23.8				
90	0	-2.45		23.0				

Lab	Rating	Z-value	0	1	2	3	4	6
91	3	0.70						30.0
92	2	-1.10		26.0				
94	4	-0.20					28.0	
96	4	0.25		29.0				
97	2	1.24				31.2		
100	2	1.37		31.5				
101	4	0.43					29.4	
103	0	-2.00					24.0	
105	4	-0.20					28.0	
107	4	0.02		28.5				
109	4	-0.20		28.0				
113	4	-0.34				27.7		
114	3	0.70		30.0				
116	1	1.60					32.0	
119	4	-0.20					28.0	
120	3	-0.97				26.3		
121	3	-0.65					27.0	
122	2	-1.37				25.4		
127	4	0.11					28.7	
129	0	-3.80		20.0				
131	0						< 10	
133	4	0.07					28.6	
134	0	-2.00					24.0	
136	3	0.70				30.0		
138	4	-0.11					28.2	
139	2	1.15				31.0		
140	4	-0.16		28.1				
141	4	0.07					28.6	
145	4	-0.35					27.7	
146	2	1.28					31.3	
149	4	0.25		29.0				
153	1	-1.60				24.9		
161	0	-3.35					21.0	
179	0	-7.85			11.0			
180	2	1.19					31.1	
182	0	-3.80		20.0				
191	3	0.70						30.0
196	2	1.21						31.1
202	4	-0.20					28.0	
204	1	1.82					32.5	

Table 11. *--Statistical summary of reported data for standard reference water sample T-121 (trace constituent)--Continued*

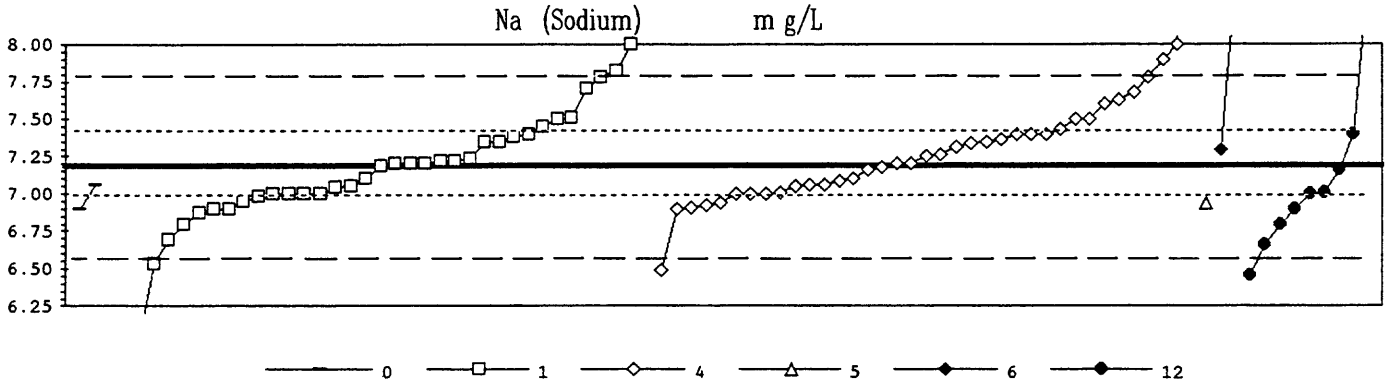


0. Other			3. AA: graphite furnace					
1. AA: direct air			4. ICP					
2. AA: direct N2O			6. ICP/MS					
		N =	2	1	1	15	13	4
		Minimum =	10.0	50.0	50.0	5.0	5.0	10.3
		Maximum =	11.5			18.8	20.0	12.5
		Median =				13.0	11.4	
		St Dev =				1.4	1.0	

Lab	Rating	Z-value	0	1	2	3	4	6
1	4	-0.28	11.5					
3	NR						< 10	
5	4	-0.50					11.1	
11	2	-1.10	10.0					
12	NR						< 20	
15	4	0.17				12.3		
16	NR						< 30	
24	4	-0.06					11.9	
26	NR						< 50	
28	0	4.40					20.0	
29	0	20.92			50.0			
30	4	0.28						12.5
32	4	-0.11						11.8
39	1	-1.65					9.0	
42	3	-0.94						10.3
45	1	1.93				15.5		
46	NR						< 140	
48	NR						< 10	
50	4	0.00				12.0		
52	3	0.94				13.7		
61	NR						< 10	
68	0	2.75					17.0	
70	NR						< 50	
74	3	-0.94					10.3	
75	4	0.28				12.5		
85	NR						< 50	
97	2	1.10				14.0		
100	4	-0.11					11.8	
103	4	0.00					12.0	
105	4	0.00					12.0	
120	0	3.72				18.8		
121	3	0.55				13.0		
127	3	0.66				13.2		
131	NR						< 100	
133	0	-2.83					6.9	
136	4	0.00				12.0		
138	4	-0.11				11.8		
141	4	-0.33					11.4	
145	0						< 4	
146	4	-0.33					11.4	
149	0	2.04				15.7		
151	3	-0.61				10.9		
167	0	-3.85				5.0		
182	0	20.92		50.0				
183	3	0.61				13.1		
196	3	-0.85						10.5
202	0	-3.85					5.0	

MPV =	12.0	+/- 0.4
F-pseudosigma =	1.8	
N =	36	
Hu =	13.5	
Hl =	11.0	

Table 11. *--Statistical summary of reported data for standard reference water sample T-121 (trace constituent)--Continued*



0. Other			5. DCP					
1. AA: direct air			6. ICP/MS					
4. ICP			12. AA: flame emission					
	N =	2	38	37	1	2	9	
	Minimum =	6.90	5.10	6.49	6.94	7.30	6.45	
	Maximum =	7.06	8.80	15.70		8.40	8.46	
	Median =		7.20	7.25			6.95	
	St Dev =		0.33	0.31			0.29	

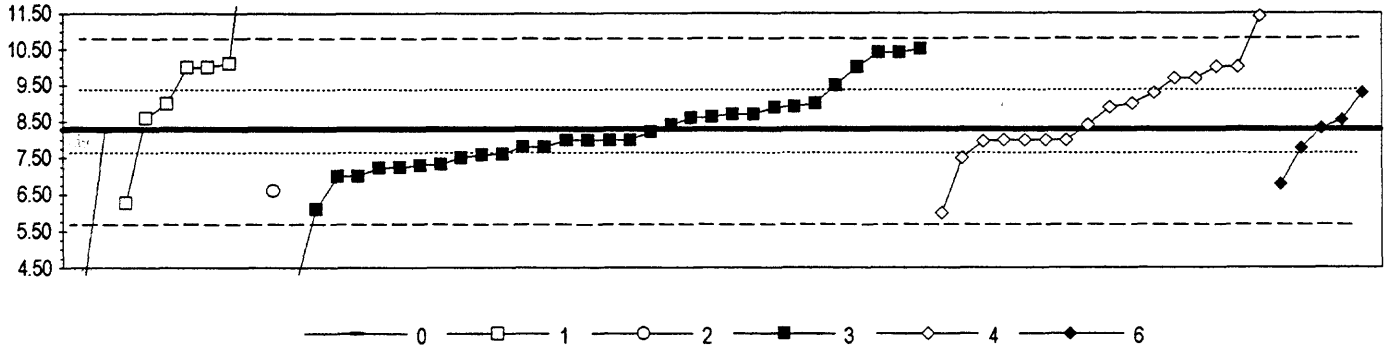
MPV = 7.19 +/- 0.04
F-pseudosigma = 0.30
N = 88
Hu = 7.40
Hl = 6.99

Lab	Rating	Z-value	0	1	4	5	6	12
1	3	-0.94		6.90				
3	2	1.04		7.50				
5	3	0.54			7.35			
8	3	-0.87			6.92			
9	3	0.71		7.40				
11	4	-0.41	7.06					
12	0	2.68			8.00			
13	0	2.68		8.00				
15	2	1.46			7.63			
16	NR				< 10			
18	3	0.71			7.40			
19	0	-2.29			6.49			
23	2	1.07		7.51				
24	3	0.81			7.43			
25	1	1.63			7.68			
28	0	28.02			15.70			
32	0	4.00					8.40	
33	3	-0.82				6.94		
36	3	-0.58						7.01
37	4	0.18		7.24				
39	2	1.37			7.60			
42	3	-0.61			7.00			
43	3	-0.61			7.00			
45	0	-2.16		6.53				
46	3	0.58			7.36			
48	3	0.71			7.40			
51	3	-0.94						6.90
52	3	-0.58			7.01			
54	4	0.05		7.20				
55	4	-0.08						7.16
57	3	-0.94			6.90			
59	3	0.71			7.40			
61	3	-0.61			7.00			
63	0	2.09		7.82				
64	4	0.12		7.22				
68	2	1.04			7.50			
69	3	-0.61						7.00
70	4	0.21			7.25			
74	4	0.41			7.31			
75	3	-0.77		6.95				
78	3	-0.94		6.90				
83	3	0.54		7.35				
84	0	4.20						8.46
85	4	0.12		7.22				
87	4	0.05		7.20				
89	3	-0.67		6.98				
90	3	0.71						7.40
92	3	0.87		7.45				
94	4	-0.40			7.06			
96	4	-0.48		7.04				

Lab	Rating	Z-value	0	1	4	5	6	12
97	4	-0.44		7.05				
100	0	2.35			7.90			
101	4	-0.28		7.10				
103	2	1.04			7.50			
105	3	-0.90			6.91			
107	2	-1.04		6.87				
109	4	0.05		7.20				
111	4	0.02		7.19				
113	1	1.69		7.70				
114	0	-5.71		5.45				
116	4	-0.28			7.10			
119	4	-0.44			7.05			
120	1	-1.62		6.69				
121	4	0.05			7.20			
122	3	0.64		7.38				
123	3	0.54		7.35				
127	3	-0.81			6.94			
129	2	-1.27		6.80				
131	4	-0.41			7.06			
133	4	-0.35			7.08			
134	3	-0.61		7.00				
136	3	-0.61		7.00				
138	4	-0.08			7.16			
139	1	-1.73						6.66
140	3	-0.61		7.00				
141	4	0.25			7.26			
145	4	-0.02			7.18			
146	1	1.96			7.78			
151	3	-0.61		7.00				
153	3	-0.94	6.90					
164	1	1.96		7.78				
167	4	0.05			7.20			
179	0	-6.86		5.10				
180	3	0.51			7.34			
182	0	-3.90		6.00				
191	4	0.38					7.30	
193	0	5.31		8.80				
201	0	-2.41						6.45
204	2	-1.27						6.80

Table 11. *--Statistical summary of reported data for standard reference water sample T-121 (trace constituent)--Continued*

Ni (Nickel) µ g/L



0. Other			3. AA: graphite furnace					
1. AA: direct air			4. ICP					
2. AA: direct N2O			6. ICP/MS					
		N =	2	7	1	31	16	5
		Minimum =	4.10	6.27	6.60	3.94	6.00	6.80
		Maximum =	8.24	15.10		10.50	11.40	9.30
		Median =		9.50		8.00	8.65	
		St Dev =		1.47		1.09	1.28	

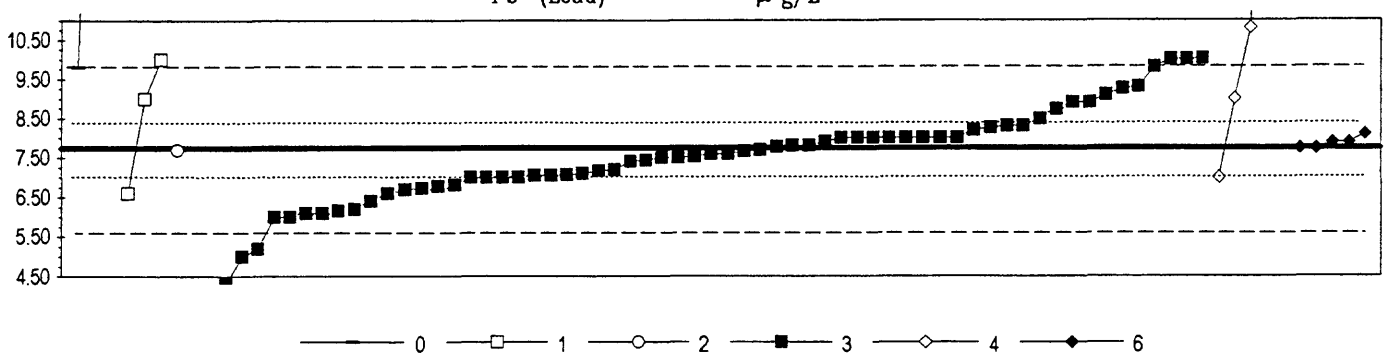
		MPV =	8.29	+/-	0.22			
		F-pseudosigma =	1.26					
		N =	62					
		Hu =	9.30					
		Hl =	7.60					

Lab	Rating	Z-value	0	1	2	3	4	6
1	4	0.33				8.70		
3	NR						< 20	
6	3	-0.54				7.61		
9	2	-1.02				7.00		
11	0	-3.32	4.10					
12	NR						< 20	
13	NR			< 50				
15	4	-0.38				7.80		
16	NR						< 25	
18	1	-1.81					6.00	
23	1	-1.60		6.27				
24	2	1.12					9.70	
26	NR					< 10		
28	2	1.36					10.00	
29	NR					< 10		
30	4	0.04						8.33
32	3	0.81						9.30
36	4	-0.04	8.24					
37	4	0.21						8.55
42	2	-1.18						6.80
45	0	-3.45				3.94		
46	NR						< 25	
48	3	-0.54				7.60		
50	4	-0.23				8.00		
51	2	-1.02				7.00		
52	4	-0.38				7.80		
55	4	0.09					8.40	
57	NR			< 100				
58	4	0.25				8.60		
59	2	1.36					10.00	
61	NR						< 10	
63	4	0.33				8.70		
68	3	0.81					9.30	
69	3	0.57				9.00		
70	NR						< 50	
73	3	0.57					9.00	
74	4	-0.23					8.00	
75	3	-0.76				7.33		
78	1	1.68				10.40		
85	NR						< 10	
87	NR			< 10				
89	NR					< 25		
90	3	0.96				9.50		
92	3	0.57		9.00				
94	4	-0.27					7.95	
97	4	0.50				8.91		
100	2	1.44		10.10				
101	4	0.49					8.90	
103	3	-0.62					7.50	
105	4	-0.23					8.00	

Lab	Rating	Z-value	0	1	2	3	4	6
111	3	-0.62				7.50		
113	4	0.28				8.64		
114	2	1.36		10.00				
119	1	1.76				10.50		
120	3	-0.84				7.23		
121	2	1.36				10.00		
127	4	-0.05				8.22		
131	NR						< 26	
133	0	2.47					11.40	
134	4	0.49				8.90		
136	4	-0.23				8.00		
138	3	-0.78				7.30		
139	3	-0.82				7.25		
140	4	0.25		8.60				
141	4	-0.23					8.00	
144	1	-1.73				6.10		
145	0						< 5	
146	4	-0.23					7.99	
149	4	-0.23				8.00		
167	4	-0.23				8.00		
179	2	-1.34			6.60			
180	NR						< 7	
182	2	1.36		10.00				
183	1	1.68				10.40		
193	NR			< 10				
196	4	-0.39						7.79
201	0	5.41		15.10				
202	4	0.09				8.40		
204	2	1.12					9.70	

Table 11. *--Statistical summary of reported data for standard reference water sample T-121 (trace constituent)--Continued*

Pb (Lead) μ g/L



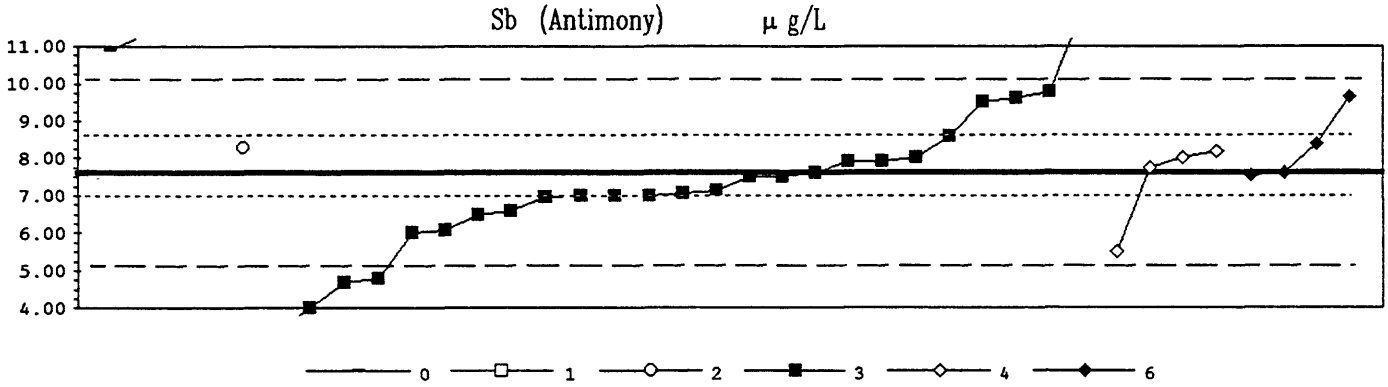
0. Other		3. AA: graphite furnace						
1. AA: direct air		4. ICP						
2. AA: direct N2O		6. ICP/MS						
	N =	3	3	1	63	5	5	
	Minimum =	9.80	6.60	7.70	3.10	7.00	7.74	
	Maximum =	35.30	10.00		10.02	245	8.10	
	Median =				7.60			
	St Dev =				1.11			

MPV =	7.75 +/- 0.16
F-pseudosigma =	1.03
N =	80
Hu =	8.39
Hl =	7.00

Lab	Rating	Z-valu	0	1	2	3	4	6
1	4	0.25				8.00		
3	0	-2.47				5.20		
5	NR						< 30	
6	3	-0.57				7.16		
9	0	2.19				10.00		
11	1	1.99	9.80					
12	NR					< 10		
13	3	0.71				8.48		
15	3	-0.67				7.05		
16	NR						< 30	
18	3	-0.72				7.00		
23	3	-0.66				7.07		
24	4	0.25				8.00		
26	1	-1.69				6.00		
28	0	230.26					245	
29	4	-0.31				7.43		
30	4	0.14						7.89
32	4	0.34						8.10
33	0	26.74	35.30					
36	3	-0.94				6.78		
37	4	0.00						7.74
42	4	0.00						7.75
45	3	-0.53				7.20		
46	4	-0.33				7.40		
48	4	-0.24				7.50		
50	4	0.25				8.00		
51	0	-3.63				4.00		
52	4	0.03				7.78		
55	3	-0.63				7.10		
57	4	0.25				8.00		
59	3	-0.72					7.00	
61	1	-1.60				6.10		
63	2	-1.11				6.60		
68	1	-1.60				6.10		
69	3	-0.72				7.00		
70	4	0.05				7.80		
74	3	-0.92				6.80		
76	3	0.95				8.72		
78	4	-0.24				7.50		
79	4	-0.14				7.60		
80	4	0.25				8.00		
83	2	-1.50				6.20		
85	3	-0.72				7.00		
87	2	-1.11		6.60				
89	2	1.31				9.09		
90	2	1.12				8.90		
92	2	1.22		9.00				
94	1	-1.54				6.16		
96	4	0.16				7.91		
97	2	1.46				9.25		

Lab	Rating	Z-value	0	1	2	3	4	6
100.	1	1.99				9.80		
101.	0	2.96					10.80	
103.	2	1.22					9.00	
105.	2	1.12				8.90		
107.	3	-0.99				6.72		
108.	0	2.19				10.00		
109.	0	-4.51				3.10		
111.	4	-0.04				7.70		
113.	4	-0.07				7.67		
114.	NR			< 10				
119.	3	0.54				8.30		
120.	4	-0.21				7.53		
121.	4	0.44				8.20		
122.	4	0.25				8.00		
126.	4	0.25				8.00		
127.	3	-0.67				7.05		
131.	NR						< 100	
133.	0	14.03					22.20	
134.	4	0.05				7.80		
136.	3	-0.72				7.00		
138.	4	-0.14				7.60		
139.	0	2.21				10.02		
140.	0	2.19		10.00				
141.	2	-1.31				6.40		
144.	0	-2.66				5.00		
145.	NR						< 25	
146.	0					< 3		
149.	1	-1.69				6.00		
158.	2	-1.01				6.70		
167.	4	0.25				8.00		
179.	4	-0.04			7.70			
180.	NR						< 12	
182.	0	11.89	20.00					
183.	4	0.50				8.26		
193.	NR			< 10				
196.1	4	0.14						7.89
196.2	3	0.54				8.30		
201.	0			< 2				
202.	1	1.51				9.30		
204.	0	-3.34				4.30		

Table 11. *--Statistical summary of reported data for standard reference water sample T-121 (trace constituent)--Continued*

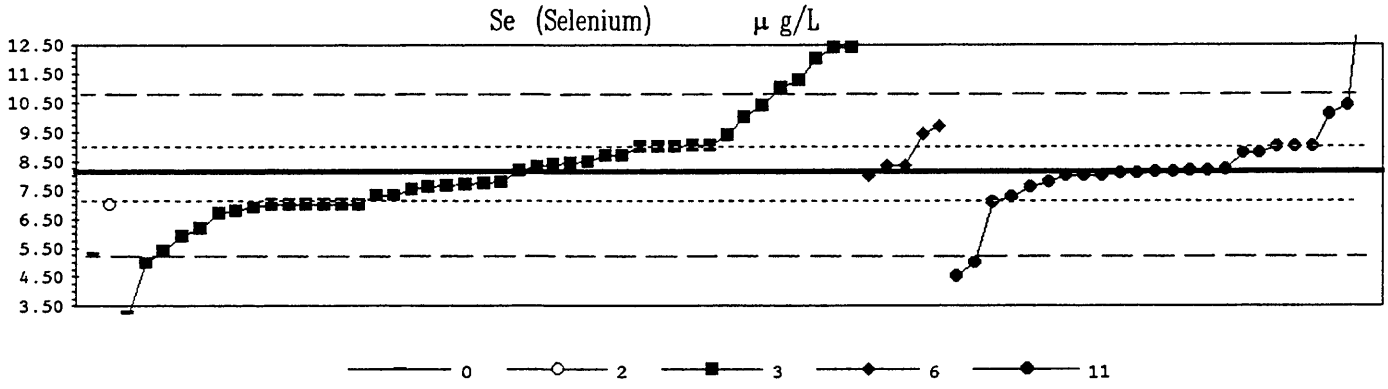


0. Other			3. AA: graphite furnace					
1. AA: direct air			4. ICP					
2. AA: direct N2O			6. ICP/MS					
		N =	2	2	1	25	4	4
		Minimum =	10.90	100	8.30	3.35	5.50	7.53
		Maximum =	11.30	150		12.00	8.20	9.65
		Median =				7.06		
		St Dev =				1.47		

Lab	Rating	Z-value	0	1	2	3	4	6
1	0	2.74	10.90					
3	1	1.66				9.60		
11	0	3.08	11.30					
12	NR						< 100	
15	0	-3.54				3.35		
16	NR						< 60	
23	1	1.81				9.78		
24	0	-2.42				4.70		
28	NR			< 100				
30	4	0.00						7.60
32	3	0.66						8.40
36	1	1.59				9.51		
37	4	-0.06						7.53
45	4	0.00				7.61		
48	0	-2.34				4.80		
52	4	-0.40				7.13		
55	2	-1.25				6.10		
57	NR					< 10		
59	4	0.33					8.00	
61	NR						< 50	
63	4	-0.09				7.50		
68	3	-0.92				6.50		
74	4	-0.09				7.50		
78	3	0.83				8.60		
85	0	-3.00				4.00		
87	4	0.33				8.00		
97	4	-0.45				7.06		
100	0	3.66				12.00		
105	4	0.25				7.90		
114	0	118.57		150				
119	4	0.25				7.90		
120	3	-0.52				6.98		
127	4	-0.50				7.00		
131	NR						< 50	
133	1	-1.75					5.50	
136	4	-0.50				7.00		
138	3	-0.84				6.60		
141	4	0.50					8.20	
146	4	0.10					7.73	
149	4	-0.50				7.00		
179	3	0.58			8.30			
180	NR						< 13	
182	0	76.94		100				
196	1	1.70						9.65
202	2	-1.34				6.00		

MPV =	7.61	+/- 0.26
F-pseudosigma =	1.20	
N =	38	
Hu =	8.60	
Hl =	6.98	

Table 11. *--Statistical summary of reported data for standard reference water sample T-121 (trace constituent)--Continued*



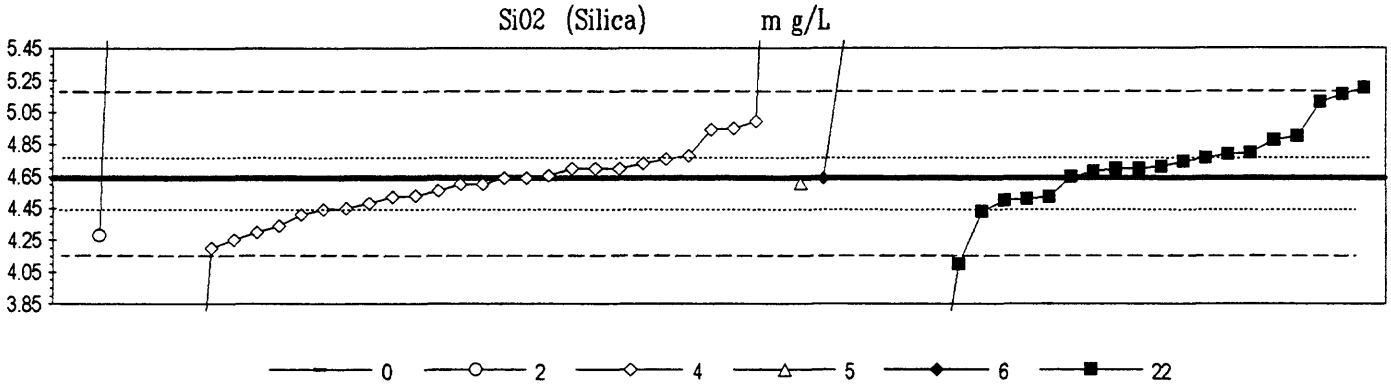
0. Other			4. ICP					
2. AA: direct N2O			6. ICP/MS					
3. AA: graphite furnace			11. AA: hydride					
	N =	1	1	42	0	5	24	
	Minimum =	5.30	7.00	3.11		8.00	4.50	
	Maximum =			12.40		9.70	15.70	
	Median =			7.73			8.12	
	St Dev =			1.54			1.30	

Lab	Rating	Z-value	0	2	3	4	6	11
1	4	0.48						8.80
3	3	-0.87			6.90			
5	NR					< 40		
8	0	-2.22						5.00
11	0	-2.00	5.30					
12	3	0.62			9.00			
13	4	0.27			8.50			
15	4	-0.03						8.08
16	3	-0.80			7.00			
18	2	1.41						10.10
23	0	-3.56			3.11			
24	1	1.62						10.40
26	3	0.62						9.00
28	4	-0.09					8.00	
29	3	0.91			9.40			
30	4	0.18					8.37	
35	4	0.01						8.13
36	3	-0.79			7.01			
37	3	0.93					9.43	
39	4	-0.23						7.80
42	2	1.12					9.70	
45	4	-0.33			7.66			
46	4	0.41			8.70			
48	3	-0.80			7.00			
50	4	-0.09						8.00
52	4	0.07						8.22
55	1	1.62			10.40			
57	4	-0.09						8.00
58	0	-2.57						4.50
61	4	-0.23			7.80			
63	3	-0.58			7.30			
68	4	0.41			8.70			
69	4	0.20			8.40			
70	3	-0.58			7.30			
74	4	0.06			8.20			
75	4	0.00						8.12
76	3	0.66			9.05			
78	2	-1.01			6.70			
79	2	1.33			10.00			
80	3	0.62			9.00			
85	4	-0.01						8.10
87	4	0.06						8.20
89	4	-0.35						7.63
90	0	2.26			11.30			
94	4	-0.28			7.73			
96	3	0.67			9.07			
97	3	0.62						9.00
100	0	-2.22			5.00			
105	4	0.23			8.44			
107	0	3.04			12.40			

MPV =	8.12	+/- 0.22
F-pseudosigma =	1.41	
N =	73	
Hu =	9.00	
Hl =	7.10	

Lab	Rating	Z-value	0	2	3	4	6	11
108.	3	-0.94			6.80			
109.	3	-0.80			7.00			
113.	4	-0.30			7.70			
119.	3	-0.72						7.10
120.	0	5.38						15.70
122.	3	-0.62						7.25
127.	4	-0.43			7.51			
131.	NR					< 100		
133.	1	-1.58			5.90			
134.	4	0.06						8.20
136.	3	0.62			9.00			
138.	4	0.48						8.80
139.	0	2.06			11.02			
141.	3	0.62						9.00
146.	1	-1.93			5.40			
149.	2	-1.36			6.20			
167.	3	-0.80			7.00			
179.	3	-0.80		7.00				
180.	NR					< 13		
182.	4	-0.09						8.00
183.	4	0.13			8.30			
193.	3	-0.80			7.00			
196.1	4	0.18					8.38	
196.2	0	2.75			12.00			
202.	4	-0.37			7.60			
204.	0	3.04			12.40			

Table 11. *--Statistical summary of reported data for standard reference water sample T-121 (trace constituent)--Continued*



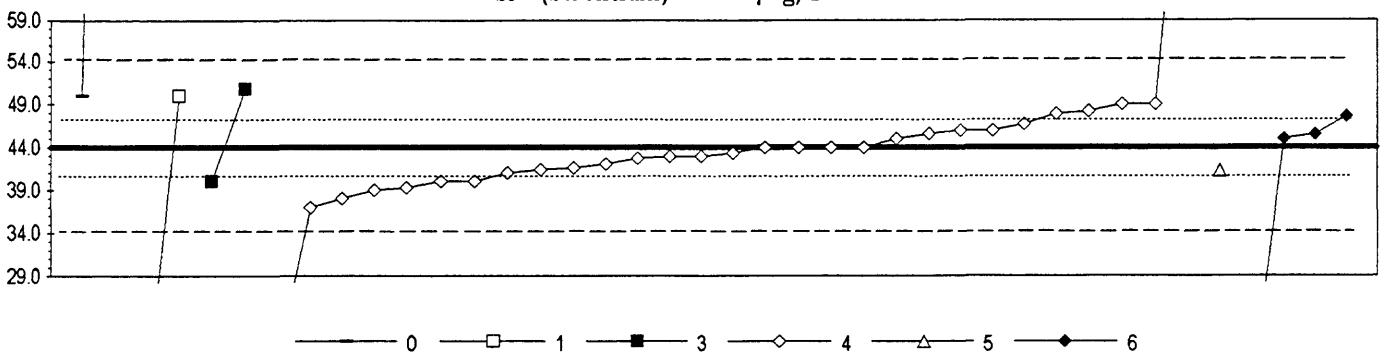
0. Other			5. DCP					
2. AA: direct N2O			6. ICP/MS					
4. ICP			22. Color: molybdate					
		N =	1	2	29	1	2	23
		Minimum =	13.10	4.28	1.89	4.61	4.64	0.08
		Maximum =		8.00	8.61		5.60	5.20
		Median =			4.60			4.71
		St Dev =			0.21			0.26

Lab	Rating	Z-value	0	2	4	5	6	22
1	4	0.06			4.66			
2	4	0.49						4.77
3	4	0.23			4.70			
5	4	0.35			4.73			
8	3	-0.77			4.44			
9	0	-2.08						4.10
11	0	32.61	13.10					
13	4	-0.50						4.51
15	3	-0.73			4.45			
23	4	0.27						4.71
24	2	1.19			4.95			
25	0	-10.60			1.89			
28	2	-1.50			4.25			
29	2	-1.39		4.28				
32	0	3.70					5.60	
33	4	-0.12				4.61		
39	2	-1.16			4.34			
42	4	0.23			4.70			
43	4	0.23			4.70			
45	4	0.00			4.64			
51	4	0.04						4.65
52	0	-6.32						3.00
55	2	1.36			4.99			
57	2	-1.31			4.30			
58	0	-17.57						0.08
61	0	-9.40			2.20			
63	4	0.00			4.64			
64	3	-0.89			4.41			
70	3	0.93						4.88
75	4	0.15						4.68
78	0	12.95		8.00				
87	3	1.00						4.90
89	4	-0.46						4.52
92	3	-0.81						4.43
97	0	-5.55						3.20
100	4	-0.15			4.60			
101	4	-0.31			4.56			
103	1	-1.70			4.20			
104	3	-0.54						4.50
105	4	-0.46			4.52			
113	1	1.81						5.11
118	4	0.23						4.70
119	3	0.54			4.78			
121	4	-0.15			4.60			
127	4	-0.42			4.53			
131	3	-0.62			4.48			
134	4	0.46			4.76			
138	3	0.58						4.79
141	0	2.16						5.20
145	0	15.30			8.61			

MPV =	4.64	+/- 0.05
F-pseudosigma =	0.26	
N =	58	
Hu =	4.78	
Hl =	4.43	

Lab	Rating	Z-value	0	2	4	5	6	22
146	0	-8.44			2.45			
151	4	0.23						4.70
155	4	0.39						4.74
161	0	-9.75						2.11
167	3	0.62						4.80
185	0	2.00						5.16
191	4	0.00					4.64	
204	2	1.16			4.94			

Table 11. *--Statistical summary of reported data for standard reference water sample T-121 (trace constituent)--Continued*



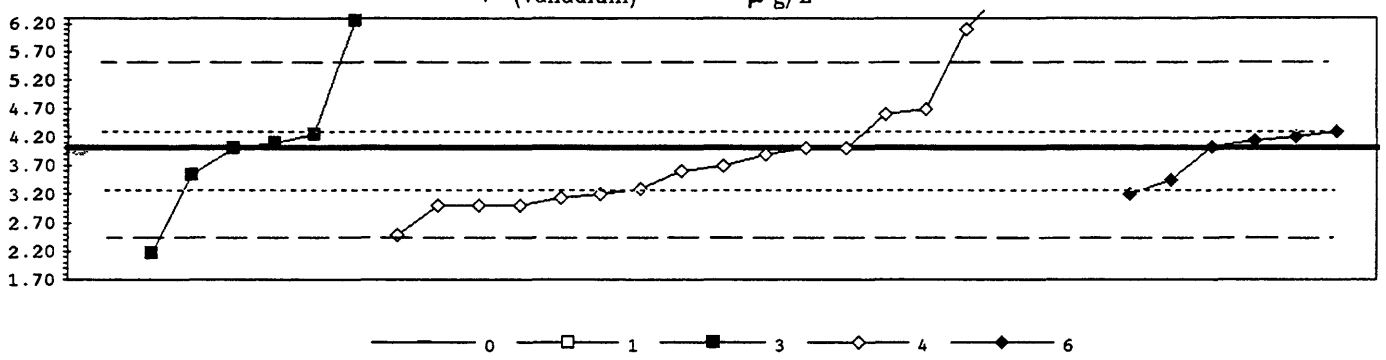
0. Other			4. ICP					
1. AA: direct air			5. DCP					
3. AA: graphite furnace			6. ICP/MS					
		N =	2	2	2	29	1	4
		Minimum =	50.0	15.0	40.0	19.0	41.3	15.1
		Maximum =	200.0	50.0	50.8	90.0		47.6
		Median =				43.3		
		St Dev =				3.3		

Lab	Rating	Z-value	0	1	3	4	5	6
1	4	0.32				45.6		
3	3	-0.81				40.0		
8	4	-0.14				43.3		
9	0			< 30				
11	2	1.22	50.0					
15	3	-0.53				41.4		
16	2	-1.01				39.0		
18	2	1.01				49.0		
24	4	-0.22				42.9		
25	3	0.85				48.2		
26	NR					< 250		
28	0	9.33				90.0		
29	0	-5.88		15.0				
32	3	0.73						47.6
33	3	-0.55					41.3	
37	4	0.30						45.5
39	2	1.01				49.0		
42	4	0.41				46.0		
52	4	-0.41				42.0		
55	0	-5.07				19.0		
59	4	0.20				45.0		
63	3	0.79				47.9		
68	3	-0.81				40.0		
70	4	0.00				44.0		
74	2	-1.42				37.0		
97	2	1.38			50.8			
100	3	-0.95				39.3		
103	2	-1.22				38.0		
105	4	0.00				44.0		
109	2	1.22		50.0				
113	NR		< 200					
116	4	0.41				46.0		
121	4	0.00				44.0		
127	4	-0.22				42.9		
131	4	0.00				44.0		
134	3	-0.61				41.0		
138	4	-0.26				42.7		
141	3	-0.81			40.0			
145	4	-0.50				41.6		
146	3	0.55				46.7		
182	0	31.65	200.0					
191	4	0.20						45.0
196	0	-5.87						15.1

MPV =	44.0 +/- 1.1
F-pseudosigma =	4.9
N =	40
Hu =	47.2
Hl =	40.5

Table 11. *--Statistical summary of reported data for standard reference water sample T-121 (trace constituent)--Continued*

V (Vanadium) μg/L

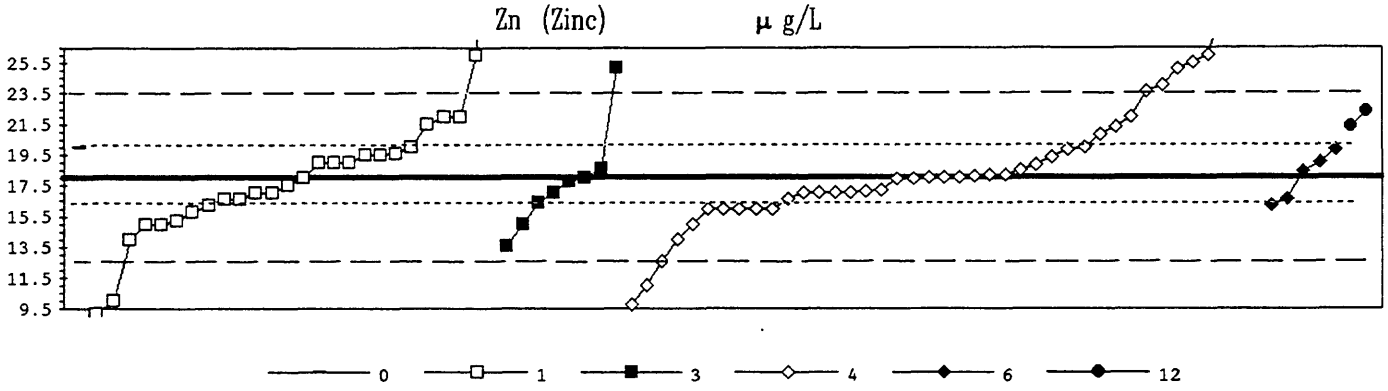


0. Other		4. ICP				
1. AA: direct air		6. ICP/MS				
3. AA: graphite furnace						
	N =	1	0	6	18	6
	Minimum =	4.00		2.18	2.50	3.20
	Maximum =			6.25	20.00	4.29
	Median =				3.60	
	St Dev =				0.90	

Lab	Rating	Z-value	0	1	3	4	6
1	3	-0.74					3.44
3	NR					< 10	
11	4	0.00	4.00				
15	3	-0.61			3.54		
16	NR					< 10	
18	2	-1.32				3.00	
24	0	4.76				7.60	
26	NR					< 100	
28	0	21.16				20.00	
30	4	0.04					4.03
32	4	0.26					4.20
37	4	0.17					4.13
39	0	3.84				6.90	
42	2	-1.06					3.20
48	NR					< 200	
50	NR				< 5		
52	0	-2.41			2.18		
55	1	-1.98				2.50	
57	NR					< 100	
61	NR					< 5	
63	NR					< 10	
68	0	2.78				6.10	
70	NR					< 10	
74	2	-1.06				3.20	
94	3	-0.93				3.30	
97	0	2.98			6.25		
100	2	-1.15				3.13	
101	4	0.00				4.00	
103	2	-1.32				3.00	
105	2	-1.32				3.00	
121	4	0.00				4.00	
127	4	0.33			4.25		
133	3	0.93				4.70	
134	4	0.13			4.10		
136	4	0.00			4.00		
138	3	-0.53				3.60	
141	4	-0.40				3.70	
145	0					< 2	
146	4	-0.13				3.90	
167	NR					< 30	
180	3	0.79				4.60	
182	NR			< 200			
196	4	0.38					4.29

MPV =	4.00	+/- 0.18
F-pseudosigma =	0.76	
N =	31	
Hu =	4.27	
Hl =	3.25	

Table 11. *--Statistical summary of reported data for standard reference water sample T-121 (trace constituent)--Continued*



0. Other			4. ICP					
1. AA: direct air			6. ICP/MS					
3. AA: graphite furnace			12. AA: flame emission					
	N =	1	26	8	41	5	2	
	Minimum =	20.0	9.2	13.6	9.8	16.3	21.3	
	Maximum =		36.2	25.2	50.0	19.8	22.3	
	Median =		17.8		18.0			
	St Dev =		5.1		6.5			

MPV = 18.0 +/- 0.4
F-pseudosigma = 2.7
N = 83
Hu = 20.0
Hl = 16.3

Lab	Rating	Z-value	0	1	3	4	6	12
1	2	1.21				21.3		
3	4	-0.37				17.0		
5	3	0.66				19.8		
6	2	1.21						21.3
8	4	0.07				18.2		
9	4	-0.37			17.0			
11	3	0.73	20.0					
12	NR					< 20		
13	4	0.00		18.0				
15	4	0.29				18.8		
16	0	-2.57				11.0		
18	3	-0.73				16.0		
19	1	-1.98				12.6		
23	2	-1.03		15.2				
24	4	-0.33				17.1		
25	4	-0.04				17.9		
26	NR					< 250		
28	0	4.40				30.0		
29	4	-0.37		17.0				
30	3	-0.51					16.6	
32	4	0.37					19.0	
36	1	1.58						22.3
37	3	0.66					19.8	
39	3	0.73				20.0		
42	4	0.15					18.4	
45	3	-0.51		16.6				
46	4	-0.04				17.9		
48	0	11.75				50.0		
50	4	0.00			18.0			
51	4	0.37		19.0				
52	4	0.07				18.2		
55	4	-0.29				17.2		
57	NR			< 20				
59	4	0.00				18.0		
61	4	-0.37				17.0		
63	4	-0.37				17.0		
68	2	-1.47				14.0		
70	4	-0.37				17.0		
73	4	0.18				18.5		
74	3	-0.51				16.6		
75	3	-0.51		16.6				
78	4	-0.18		17.5				
79	3	-0.73				16.0		
83	0	-3.23		9.2				
85	3	-0.66		16.2				
87	4	0.37		19.0				
89	NR			< 40				
90	4	-0.37		17.0				
92	2	-1.47		14.0				
94	0	2.20				24.0		

Lab	Rating	Z-value	0	1	3	4	6	12
96	2	1.47		22.0				
97	3	-0.59			16.4			
100	0	6.68		36.2				
101	0	2.75				25.5		
103	3	-0.73				16.0		
105	4	0.00				18.0		
107	3	-0.81		15.8				
111	4	0.22			18.6			
113	0	2.94		26.0				
114	3	0.73		20.0				
119	4	0.00				18.0		
120	1	-1.62			13.6			
121	2	1.47				22.0		
122	4	-0.07			17.8			
123	0	2.62			25.2			
127	3	0.55		19.5				
131	NR					< 50		
133	2	1.03				20.8		
134	3	-0.73				16.0		
136	2	-1.10			15.0			
138	4	0.04				18.1		
139	2	-1.10		15.0				
140	3	0.55		19.5				
141	0	2.06				23.6		
144	4	0.37		19.0				
145	0	-3.01				9.8		
146	0	4.18				29.4		
149	2	1.47		22.0				
151	3	0.59		19.6				
158	2	-1.10		15.0				
161	2	-1.10				15.0		
167	0	2.94				26.0		
180	4	0.48				19.3		
182	0	-2.94		10.0				
193	NR			< 40				
196	3	-0.64					16.3	
201	2	1.28		21.5				
202	3	-0.73				16.0		
204	0	2.61				25.1		

Table 12.-- *Statistical summary of reported data for standard reference sample M-124 (major constituents)*

Definition of analytical methods, abbreviations, and symbols

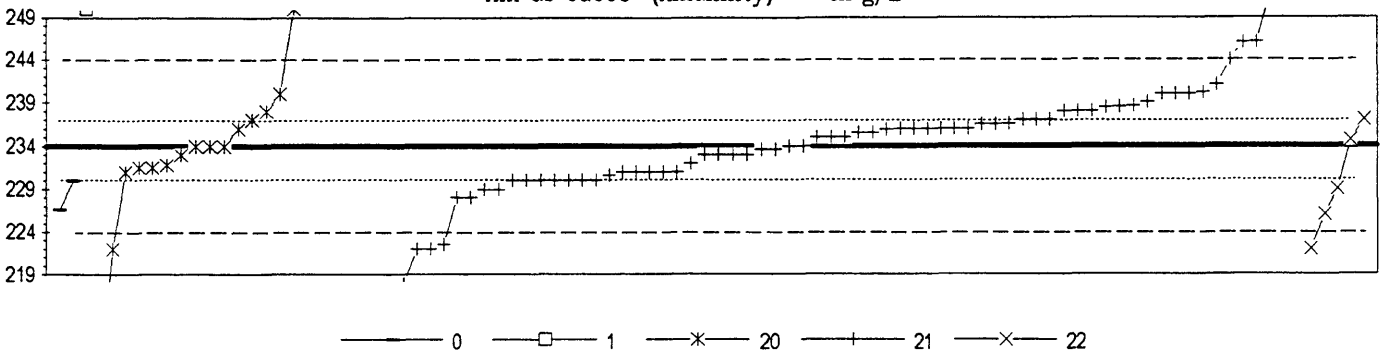
Analytical methods

	0. Other/Not reported		
	1. AA: direct, air	=	atomic absorption: direct,air
***	2. AA: direct, N2O	=	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
Hl =	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

Table 12. *--Statistical summary of reported data for standard reference water sample M-124 (major constituent)--Continued*



0. Other			21. Titration: electro				
1. AA: direct air			22. Colorimetric				
20. Titration: color							
	N =	2	1	16	72	5
	Minimum =	227	250	206	23	222
	Maximum =	230		255	614	237
	Median =			234	235	
	St Dev =			4	5	

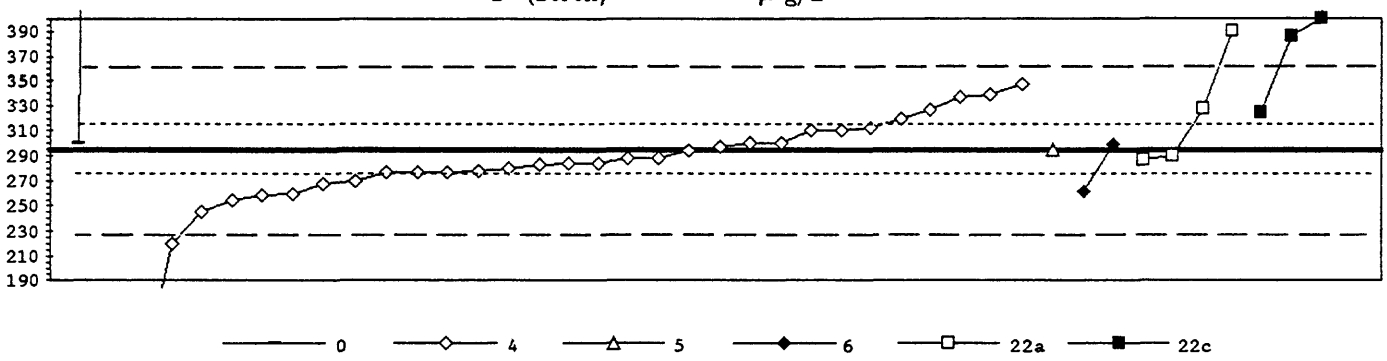
MPV =	234	+/-	1				
F-pseudosigma =	5						
N =	96						
Hu =	237						
Hl =	230						

Lab	Rating	Z-value	0	1	20	21	22
1	3	0.85				238	
3	4	0.19				235	
5	4	0.48				237	
6	4	-0.48			232		
8	3	0.77				238	
10	3	0.77				238	
11	3	-0.77	230				
12	2	1.16				240	
13	0	-2.31				222	
15	3	-0.77				230	
16	4	-0.42			232		
18	0	-2.31					222
19	3	-0.58				231	
23	0	-4.24				212	
24	4	-0.08				234	
25	0	2.31				246	
26	4	0.19				235	
29	4	-0.19				233	
32	0	4.05			255		
33	4	0.37				236	
36	4	-0.19				233	
37	3	-0.58				231	
38	0	-33.91				58	
39	4	-0.19				233	
40	3	0.77				238	
42	4	-0.08				234	
43	3	0.58				237	
45	3	0.58				237	
46	4	0.39				236	
48	4	-0.19			233		
50	4	-0.19				233	
51	4	0.39				236	
52	4	0.39				236	
54	4	-0.39				232	
55	3	-0.77				230	
56	2	1.18				240	
57	4	0.00			234		
61	1	1.93				244	
63	0	-5.40			206		
68	3	0.58					237
69	4	0.12					235
70	3	-0.77				230	
74	4	0.39				236	
75	3	-0.58				231	
76	3	0.77			238		
78	0	-3.66				215	
79	3	-0.77				230	
81	3	-0.58				231	
83	4	0.48				237	
84	3	0.87				239	

Lab	Rating	Z-value	0	1	20	21	22
85	3	0.89				239	
87	3	-0.77				230	
89	4	0.19				235	
90	0	2.33				246	
91	3	-0.96				229	
92	0	-8.54				190	
94	4	0.39			236		
96	2	1.16				240	
97	2	-1.43	227				
100	4	0.00				234	
104	3	-0.77				230	
105	4	0.50				237	
107	2	-1.16				228	
109	4	0.29				236	
111	2	1.35				241	
113	2	-1.16				228	
114	4	0.00			234		
116	0	-3.08				218	
118	3	-0.58			231		
119	2	1.16			240		
120	3	-0.58				231	
122	0	-23.41				113	
127	4	0.39				236	
128	3	-0.96					229
129	3	0.58			237		
133	0	73.23				614	
134	3	0.96				239	
136	0	3.47				252	
138	0	-2.31				222	
139	0	-40.64				23	
141	4	0.29				236	
145	1	-1.54					226
146	3	0.58				237	
151	2	1.16				240	
153	3	-0.77				230	
155	4	-0.48			232		
158	0	-2.22				223	
161	0	3.08			250		
167	4	0.00				234	
180	4	0.39				236	
182	0	3.08		250			
183	0	-2.31			222		
197	3	-0.66				231	
201	0	4.63				258	
202	4	0.00			234		
204	3	-0.96				229	

Table 12. *--Statistical summary of reported data for standard reference water sample M-124 (major constituent)--Continued*

B (Boron) µ g/L



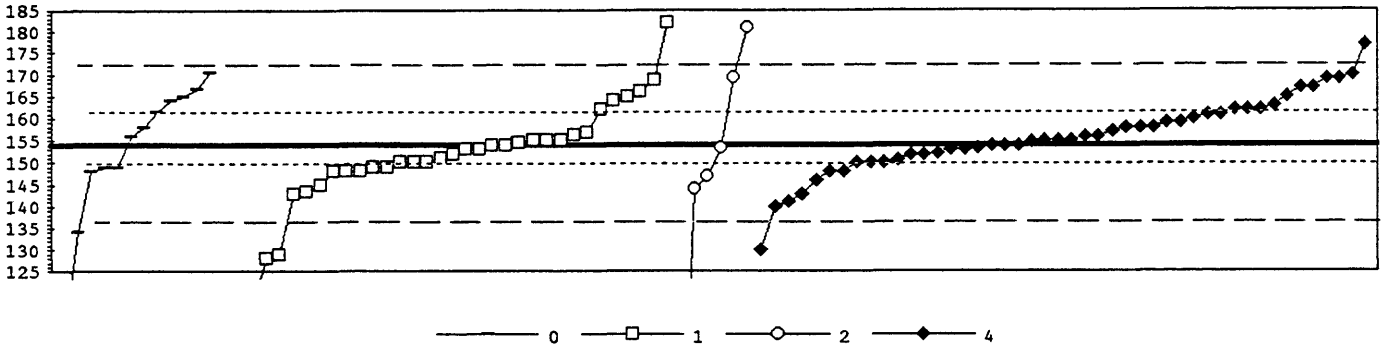
0. Other			6. ICP/MS					
4. ICP			22a. Color: azomethine					
5. DCP			22c. Color: curcumin					
		N =	2	31	1	2	4	4
		Minimum =	300	0	295	262	287	325
		Maximum =	2150	347		299	390	5640
		Median =		284				
		St Dev =		29				

Lab	Rating	Z-value	0	4	5	6	22a	22c
1	4	0.03			295			
3	3	-0.71		270				
5	4	-0.50		277				
10	3	0.92						325
11	4	0.18	300	0				
15	2	-1.04		259				
16	1	1.57		347				
18	2	-1.19		254				
24	4	-0.33		283				
25	4	-0.18		288				
29	0	55.03	2150					
32	4	0.15				299		
37	3	-0.95				262		
39	4	0.09		297				
40	4	-0.47		278				
45	4	-0.21					287	
46	0	-5.34		114				
48	4	0.47		310				
50	2	1.01					328	
52	4	-0.50		277				
55	2	-1.01		260				
57	4	0.47		310				
58	0	2.73						386
61	4	-0.50		277				
63	0			< 100				
70	3	-0.77		268				
74	3	0.56		313				
100	2	1.33		339				
103	0	-2.19		220				
119	4	0.18		300				
121	3	0.77		320				
122	4	-0.12					290	
127	4	-0.18		288				
128	2	-1.45		245				
129	0	2.85					390	
131	4	0.18		300				
134	4	-0.30		284				
141	2	1.27		337				
145	3	0.97		327				
146	4	-0.42		280				
161	0	158.50						5640
167	4	-0.30		284				
180	4	0.00		294				
182	0	3.14						400

MPV =	294	+/- 7
F-pseudosigma =	34	
N =	43	
Hu =	323	
Hl =	277	

Table 12. *--Statistical summary of reported data for standard reference water sample M-124 (major constituent)--Continued*

Ca (Calcium) m g/L



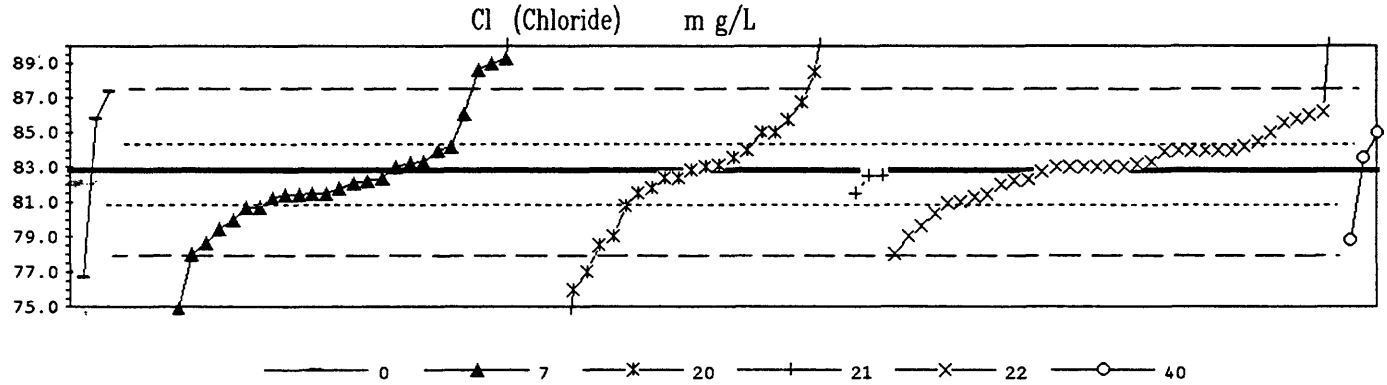
0. Other		4. ICP			
1. AA: direct air					
2. AA: direct N2O					
N =	12	39	6	46	
Minimum =	112	5	80	130	
Maximum =	170	182	181	177	
Median =	160	153		156	
St Dev =	8	7		3	

Lab	Rating	Z-value	0	1	2	4
1	4	0.11		155		
3	4	0.45				158
5	3	0.56				159
8	0	2.59				177
9	3	-0.67		148		
10	4	0.30		157		
11	3	-0.56	149			
12	3	0.79				161
13	3	-0.56		149		
15	1	1.69				169
16	2	-1.24				143
18	4	0.00				154
19	4	-0.19				152
23	3	-0.67		148		
24	4	0.11				155
25	3	0.90				162
26	2	1.12	164			
29	4	0.45	158			
30	2	1.35		166		
32	2	1.24	165			
33	3	0.82	161			
36	0	-2.25	134			
37	0	-2.81		129		
38	4	-0.08			153	
40	3	0.79				161
42	1	1.80				170
43	4	-0.45				150
45	4	0.00		154		
46	4	-0.22				152
48	0	-2.70				130
50	4	-0.11		153		
51	3	-0.90				146
52	4	0.00				154
54	4	0.11		155		
55	3	-0.67				148
56	2	-1.26		143		
57	2	1.46				167
58	0	-2.92		128		
59	2	1.24				165
61	2	-1.46				141
63	4	0.22				156
64	3	0.69				160
68	1	-1.57				140
69	2	-1.19		143		
70	4	0.34				157
74	4	0.11				155
75	4	0.00		154		
78	4	-0.11		153		
81	1	1.69				169
83	3	0.90		162		

MPV =	154 +/- 1
F-pseudosigma =	9
N =	98
Hu =	161
Hl =	149

Lab	Rating	Z-value	0	1	2	4
84	2	-1.01		145		
85	4	-0.34		151		
87	3	-0.79			147	
89	4	-0.45		150		
90	2	1.42	167			
92	0	-6.63		95		
94	4	0.09				155
97	4	-0.45		150		
100	3	0.90				162
101	4	0.06		155		
103	3	-0.67				148
105	4	0.45				158
109	4	-0.45		150		
111	0	3.04			181	
113	4	-0.22		152		
114	0	-8.32			80	
116	3	0.90				162
119	4	-0.11				153
120	1	1.65		169		
121	4	0.45				158
122	0	-8.79		76		
123	4	0.25		156		
127	4	0.22				156
128	4	-0.11				153
129	2	1.12		164		
131	4	-0.45				150
133	4	-0.37				151
134	4	0.11				155
136	2	-1.12			144	
138	4	-0.07				153
139	1	1.71			169	
140	3	-0.56		149		
141	3	0.56				159
145	4	-0.25				152
146	4	-0.45				150
149	3	-0.67		148		
151	4	0.11		155		
153	3	-0.67	148			
155	1	1.84	170			
161	4	0.22	156			
179	0	-4.16		117		
180	2	1.01				163
182	0	3.15		182		
191	3	-0.56	149			
196	2	1.24		165		
201	0	-4.73	112			
202	4	0.00				154
204	2	1.46				167

Table 12. *--Statistical summary of reported data for standard reference water sample M-124 (major constituent)--Continued*



0. Other			21. Titration: electro					
7. IC			22. Color: Fe(SCN)					
20. Titration: color			40. Ion electrode					
		N =	3	31	23	3	34	3
		Minimum =	76.7	21.4	65.7	81.5	78.0	78.8
		Maximum =	87.4	101.0	139.0	82.5	97.0	85.0
		Median =		81.5	82.9		83.0	
		St Dev =		1.9	2.2		3.1	

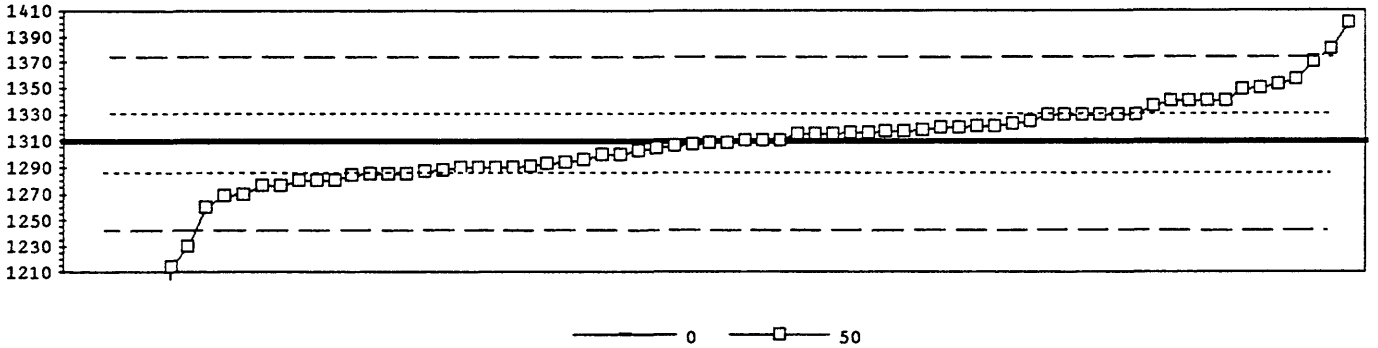
Lab	Ratin	Z-value	0	7	20	21	22	40
1	4	0.20		83.3				
3	2	1.31					86.0	
5	3	0.57		84.2				
6	1	-1.96					78.0	
8	2	1.35		86.1				
9	2	1.23					85.8	
10	3	-0.53				81.5		
11	2	1.23	85.8					
12	0	5.80					97.0	
13	2	1.39					86.2	
15	0	5.89		97.2				
16	3	0.57					84.2	
18	4	-0.20					82.3	
19	3	-0.53			81.5			
23	1	-1.64						78.8
24	3	-0.57					81.4	
25	4	-0.41		81.8				
26	0	-4.41		72.0				
29	0	7.44		101.0				
30	0	-8.67		61.6				
32	4	-0.16		82.4				
33	0	2.53		89.0				
36	3	0.69					84.5	
37	4	-0.25		82.2				
40	2	-1.02					80.3	
42	0	-6.87		66.0				
43	3	0.90						85.0
45	4	-0.04					82.7	
46	3	-0.78					80.9	
48	4	0.08					83.0	
50	1	-1.55					79.0	
51	0	2.37		88.6				
52	3	-0.61					81.3	
55	4	0.49					84.0	
56	4	0.29			83.5			
57	1	-1.55			79.0			
61	4	0.49					84.0	
63	4	0.49					84.0	
64	4	0.08					83.0	
68	4	0.45					83.9	
69	4	0.49					84.0	
70	3	-0.82			80.8			
74	0	-25.10		21.4				
75	4	0.49					84.0	
76	0	-3.23		74.9				
78	0	-2.78			76.0			
79	3	0.90			85.0			
81	0	-6.99			65.7			
83	4	-0.13				82.5		
84	2	-1.29					79.6	

MPV =	82.8	+/- 0.3
F-pseudosigma =	2.4	
N =	97	
Hu =	84.2	
Hl =	80.9	

Lab	Rating	Z-value	0	7	20	21	22	40
85	4	0.08					83.0	
87	3	-0.74					81.0	
89	4	0.00			82.8			
92	2	1.19			85.7			
94	4	0.20					83.3	
96	4	0.49			84.0			
97	4	0.16					83.2	
100	3	-0.86		80.7				
101	1	1.59			86.7			
102	4	-0.33					82.0	
105	2	-1.14		80.0				
107	0	4.41			93.6			
109	4	-0.12				82.5		
111	0	-2.49	76.7					
113	3	-0.53		81.5				
114	4	0.29						83.5
119	4	0.08			83.0			
120	4	-0.16			82.4			
122	1	-1.76			78.5			
127	3	-0.53		81.5				
128	4	0.08					83.0	
129	1	-1.68		78.7				
131	3	-0.57		81.4				
134	3	-0.86		80.7				
136	4	0.08		83.0				
138	4	-0.25					82.2	
139	0	-5.23			70.0			
140	3	0.90					85.0	
141	4	0.08					83.0	
145	4	0.19		83.3				
146	0	22.97			139.0			
151	4	0.49		84.0				
153	0	2.66		89.3				
158	4	0.11					83.1	
161	1	-1.96		78.0				
167	1	1.88	87.4					
179	0	-2.37			77.0			
180	2	1.14					85.6	
182	3	0.90			85.0			
183	4	0.12			83.1			
191	3	-0.65		81.2				
193	3	-0.57		81.4				
196	2	-1.35		79.5				
197	4	-0.29		82.1				
201	4	-0.41			81.8			
202	0	2.33			88.5			
204	4	-0.16			82.4			

Table 12. *--Statistical summary of reported data for standard reference water sample M-124 (major constituent)--Continued*

DSRD (Dissolved Solids) m g/L



0. Other				
50. Gravimetric				
		N =	1	71
		Minimum =	1460	330
		Maximum =		1400
		Median =		1310
		St Dev =		26

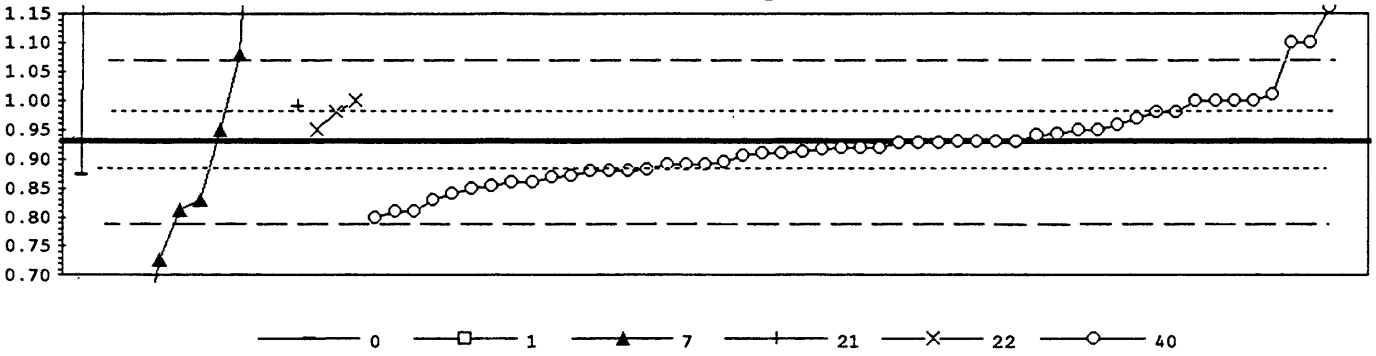
Lab	Rating	Z-value	0	50
1	4	0.49		1325
3	3	0.64		1330
5	0	4.63	1460	
6	3	0.83		1336
8	2	-1.20		1270
9	3	0.64		1330
10	2	1.47		1357
12	4	0.03		1310
13	4	0.03		1310
15	4	-0.28		1300
16	4	0.43		1323
18	4	-0.21		1302
19	4	0.21		1316
23	0	-30.02		330
25	2	1.26		1350
26	3	0.64		1330
29	4	-0.03		1308
32	3	-0.74		1285
36	3	0.64		1330
40	4	0.25		1317
43	3	0.95		1340
45	4	-0.28		1300
46	0	-6.29		1104
48	0	-19.65		668
50	4	0.03		1310
51	2	-1.23		1269
52	3	-0.58		1290
54	3	-0.74		1285
55	3	-0.89		1280
57	0	2.79		1400
61	0	2.18		1380
69	3	0.95		1340
70	4	0.37		1321
74	4	0.18		1315
75	3	0.64		1330
76	3	-0.89		1280
78	0	-20.39		644
81	3	-0.58		1290
85	4	-0.06		1307
87	3	-0.67		1287
89	3	0.95		1340
90	2	-1.50		1260
91	2	-1.01		1276
92	4	-0.49		1293
94	4	0.28		1318
96	4	0.18		1315
97	4	0.25		1317
100	4	-0.15		1304
101	3	-0.77		1284
105	3	-0.89		1280

MPV =	1309	+/- 5
F-pseudosigma =	33	
N =	72	
Hu =	1330	
Hl =	1286	

Lab	Rating	Z-value	0	50
109	4	0.21		1316
113	3	-0.58		1290
118	0	-2.42		1230
119	4	-0.03		1308
120	3	-0.74		1285
122	3	0.64		1330
127	3	0.95		1340
129	0	-2.91		1214
134	4	0.18		1315
136	2	1.35		1353
138	2	-1.01		1276
140	4	0.37		1321
141	2	1.23		1349
146	1	1.87		1370
149	3	-0.58		1290
151	4	-0.46		1294
155	3	-0.56		1291
158	4	-0.09		1306
167	4	0.34		1320
182	3	-0.64		1288
183	4	-0.40		1296
202	4	0.34		1320

Table 12. *--Statistical summary of reported data for standard reference water sample M-124 (major constituent)--Continued*

F (Fluoride) m g/L



0. Other			21. Titration: electro					
1. AA: direct air			22. Colorimetric					
7. IC			40. Ion electrode					
		N =	2	1	8	1	3	51
		Minimum =	0.87	13.90	0.53	0.99	0.95	0.80
		Maximum =	5.19		2.00		1.00	2.03
		Median =						0.92
		St Dev =						0.05

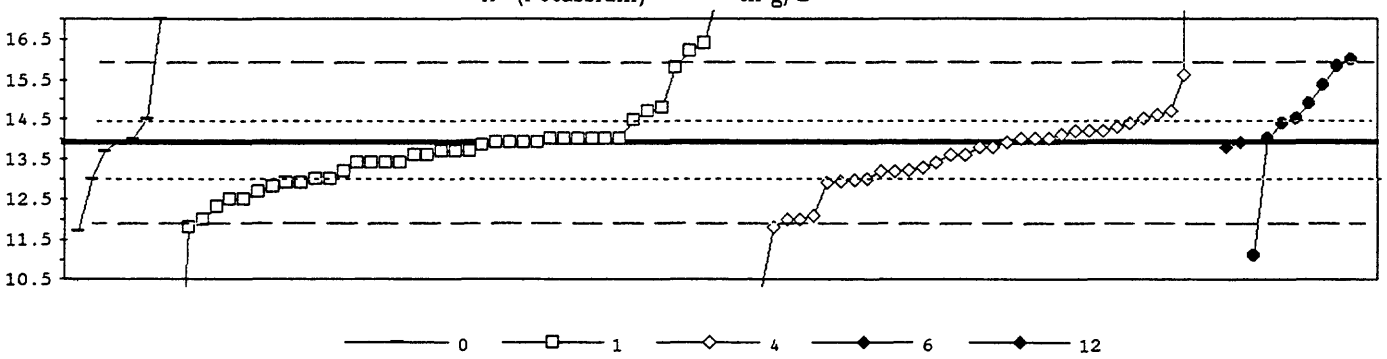
Lab	Rating	Z-value	0	1	7	21	22	40
1	1	-1.56			0.81			
3	3	0.98					1.00	
6	3	-0.78						0.87
8	1	-1.72						0.80
10	2	-1.18						0.84
11	3	-0.74	0.87					
12	3	0.98						1.00
13	3	0.57						0.97
16	4	-0.15						0.92
18	3	-0.61						0.88
19	3	-0.51						0.89
23	4	0.17						0.94
24	4	0.03						0.93
25	4	0.30						0.95
26	0	14.47			2.00			
29	0	14.87						2.03
33	0			< 0.01				
36	4	-0.44						0.90
40	4	-0.20						0.91
42	2	-1.05						0.85
45	4	0.21						0.94
46	4	-0.01						0.93
50	3	0.98						1.00
54	4	-0.24						0.91
55	4	0.30			0.95			
57	3	0.71						0.98
61	4	0.03						0.93
63	4	0.30						0.95
69	4	-0.10						0.92
70	3	-0.51						0.89
74	4	-0.30						0.91
76	2	-1.01						0.85
78	4	-0.10						0.92
81	1	-1.59						0.81
83	3	0.84				0.99		
85	3	0.98						1.00
89	4	0.01						0.93
91	4	0.30					0.95	
94	3	-0.91						0.86
96	3	0.98						1.00
97	0	57.50	5.19					
100	3	-0.91						0.86
105	2	-1.32			0.83			
107	2	1.11						1.01
109	4	-0.24						0.91
113	4	-0.49						0.89
119	3	-0.64						0.88
120	3	0.71					0.98	
121	0	175.00		13.90				
122	4	0.03						0.93

MPV =	0.93	+/- 0.01
F-pseudosigma =	0.07	
N =	66	
Hu =	0.98	
Hl =	0.88	

Lab	Rating	Z-value	0	1	7	21	22	40
127	4	0.01						0.93
128	3	-0.64						0.88
129	0	-5.32			0.53			
131	0	2.33						1.10
134	1	-1.59						0.81
138	2	-1.32						0.83
140	4	0.41						0.96
141	4	0.03						0.93
145	0	10.56			1.71			
149	4	-0.10						0.92
153	0	2.06			1.08			
161	3	-0.80						0.87
167	3	-0.64						0.88
180	3	0.71						0.98
182	0	3.14						1.16
183	0	2.33						1.10
196	0	-2.70			0.73			

Table 12. *--Statistical summary of reported data for standard reference water sample M-124 (major constituent)--Continued*

K (Potassium) m g/L



0. Other
1. AA: direct air
4. ICP
6. ICP/MS
12. AA: flame emission

	0	1	4	6	12
N =	7	42	34	2	8
Minimum =	11.7	5.1	10.0	13.8	11.1
Maximum =	17.0	60.0	75.0	13.9	16.0
Median =	13.8	13.7	13.8		14.7
St Dev =	1.0	0.8	0.9		1.5

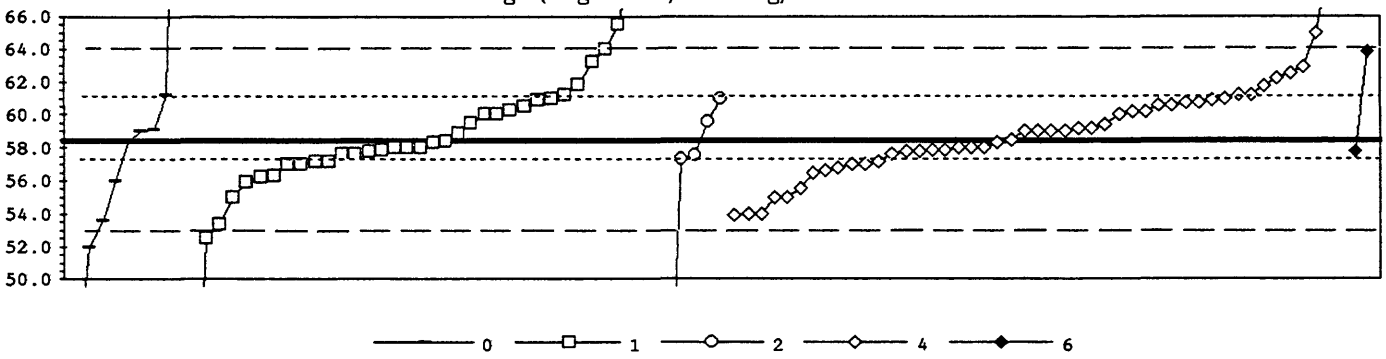
MPV = 13.9 +/- 0.1
F-pseudosigma = 1.0
N = 93
Hu = 14.4
Hl = 13.0

Lab	Rating	Z-value	0	1	4	6	12
1	4	0.10		14.0			
3	0	-2.02		11.8			
5	4	0.29			14.2		
8	1	1.64			15.6		
9	2	-1.16		12.7			
10	4	0.10		14.0			
11	3	0.58	14.5				
12	4	0.00			13.9		
13	4	-0.48		13.4			
15	0	2.41		16.4			
16	3	-0.96		12.9			
18	4	0.10			14.0		
19	0	-2.02			11.8		
23	1	-1.54		12.3			
24	4	-0.48			13.4		
25	4	0.48			14.4		
26	3	-0.87	13.0				
29	3	0.96					14.9
32	4	-0.10				13.8	
33	4	0.04	13.9				
36	0	-2.70					11.1
37	3	-0.87		13.0			
38	4	-0.19	13.7				
40	4	-0.29			13.6		
42	3	-0.96			12.9		
43	4	0.10			14.0		
45	4	-0.29		13.6			
46	4	0.39			14.3		
48	4	-0.10			13.8		
50	3	-0.87		13.0			
51	4	0.48					14.4
52	3	-0.58			13.3		
54	4	-0.19		13.7			
55	3	0.58					14.5
56	3	0.87		14.8			
57	0	3.95		18.0			
58	2	-1.35		12.5			
59	3	0.67			14.6		
61	4	0.29			14.2		
63	2	-1.06		12.8			
64	2	-1.35		12.5			
68	1	-1.83			12.0		
69	4	0.10					14.0
70	4	0.10			14.0		
74	4	0.29			14.2		
75	4	-0.48		13.4			
78	4	0.10		14.0			
81	3	0.77			14.7		
83	3	0.77		14.7			
85	4	0.00		13.9			

Lab	Rating	Z-value	0	1	4	6	12
87	4	-0.29		13.6			
89	3	-0.67		13.2			
92	1	-1.83		12.0			
94	3	-0.93			12.9		
97	3	-0.96		12.9			
100	4	-0.29			13.6		
101	4	0.00		13.9			
103	1	-1.83			12.0		
105	1	-1.73			12.1		
109	4	-0.05		13.9			
111	0	2.22		16.2			
113	4	0.00		13.9			
114	0	44.42		60.0			
119	3	-0.87			13.0		
120	3	0.57		14.5			
121	0	43.46			59.0		
122	0	-2.09	11.7				
123	4	-0.48		13.4			
127	4	-0.19		13.7			
128	3	-0.90			13.0		
129	4	0.10		14.0			
131	0	-3.76			10.0		
133	0	2.99	17.0				
134	4	0.10		14.0			
136	1	1.83		15.8			
138	3	-0.66			13.2		
139	2	1.40					15.4
140	4	-0.19		13.7			
141	4	-0.10			13.8		
145	3	-0.67			13.2		
146	0	58.87			75.0		
149	4	0.00		13.9			
151	4	-0.48		13.4			
153	4	0.10	14.0				
167	3	-0.67			13.2		
179	4	0.10		14.0			
180	4	0.19			14.1		
182	0	-8.48		5.1			
191	4	0.00				13.9	
196	0	3.66		17.7			
201	1	1.85					15.8
202	3	0.58			14.5		
204	0	2.02					16.0

Table 12. *--Statistical summary of reported data for standard reference water sample M-124 (major constituent)--Continued*

Mg (Magnesium) m g/L



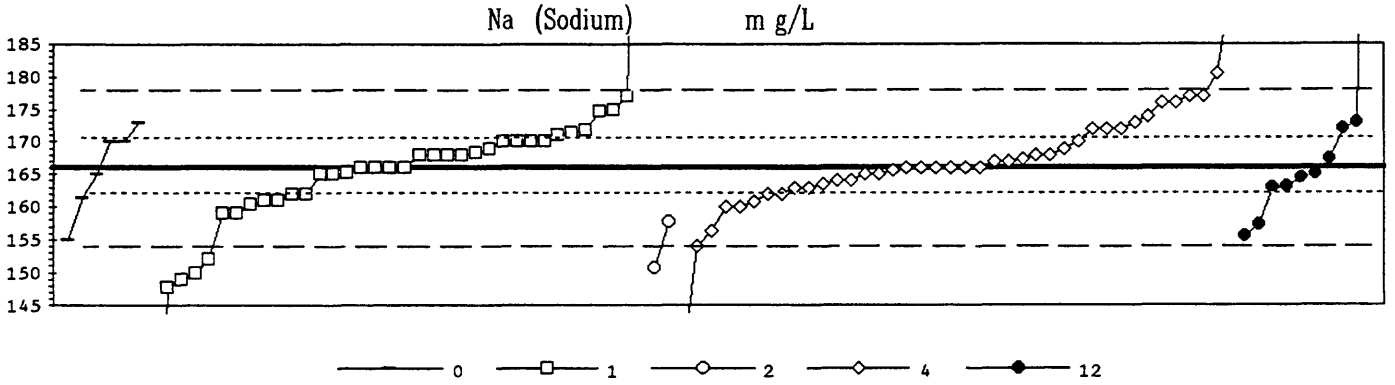
0. Other		4. ICP					
1. AA: direct air		6. ICP/MS					
2. AA: direct N2O							
	N =	9	36	5	47	2	
	Minimum =	44.3	33.7	40.0	53.9	57.8	
	Maximum =	89.4	73.4	61.0	167.0	63.8	
	Median =		58.0		58.8		
	St Dev =		2.2		2.3		

MPV = 58.4 +/- 0.4
F-pseudosigma = 2.7
N = 99
Hu = 60.8
Hl = 57.1

Lab	Rating	Z-value	0	1	2	4	6
1	2	-1.04				55.6	
3	3	0.84				60.7	
5	4	0.29				59.2	
8	3	0.84				60.7	
9	3	0.91		60.9			
10	4	0.18		58.9			
11	4	0.26	59.1				
12	3	0.66				60.2	
13	1	1.75		63.2			
15	3	0.80				60.6	
16	2	-1.24				55.0	
18	4	-0.15				58.0	
19	2	1.02				61.2	
23	0	5.47		73.4			
24	4	-0.18				57.9	
25	4	0.36				59.4	
26	0	-2.33	52.0				
29	3	-0.88	56.0				
30	3	0.69		60.3			
32	1	1.97					63.8
33	2	1.02	61.2				
36	1	-1.75	53.6				
37	4	-0.29		57.6			
38	4	0.42			59.6		
39	3	-0.51				57.0	
40	3	0.91				60.9	
42	2	1.39				62.2	
43	3	-0.69				56.5	
45	3	0.77		60.5			
46	3	-0.66				56.6	
48	4	0.22				59.0	
50	0	2.04		64.0			
51	3	0.95		61.0			
52	4	-0.22				57.8	
54	3	-0.51		57.0			
55	2	1.02				61.2	
56	1	-1.83		53.4			
57	4	-0.15				58.0	
58	2	1.24		61.8			
59	0	2.41				65.0	
61	1	-1.60				54.0	
63	4	-0.40			57.3		
64	2	1.49				62.5	
68	1	-1.60				54.0	
69	3	-0.80		56.2			
70	3	0.95				61.0	
74	2	-1.24				55.0	
75	4	-0.22		57.8			
78	4	-0.44		57.2			
81	2	1.20				61.7	

Lab	Rating	Z-value	0	1	2	4	6
83	3	0.58		60.0			
84	3	-0.91		55.9			
85	4	-0.04		58.3			
87	4	-0.29		57.6			
89	4	-0.18		57.9			
92	2	-1.24		55.0			
94	4	0.28				59.2	
97	2	1.02		61.2			
100	1	1.64				62.9	
101	4	-0.15		58.0			
103	3	0.58				60.0	
105	1	-1.64				53.9	
109	3	-0.77		56.3			
111	3	0.95			61.0		
113	4	0.00		58.4			
114	0	-6.71			40.0		
116	4	0.22				59.0	
119	3	-0.51				57.0	
120	4	0.40		59.5			
121	0	39.59				167.0	
122	0	-2.14		52.5			
123	0	4.41		70.5			
127	4	-0.22				57.8	
128	3	-0.58				56.8	
129	3	-0.51		57.0			
131	3	0.80				60.6	
133	4	-0.18				57.9	
134	4	0.22				59.0	
136	3	0.58		60.0			
138	4	-0.03				58.3	
139	4	-0.30			57.6		
140	4	-0.15		58.0			
141	4	0.22				59.0	
145	4	-0.44				57.2	
146	4	-0.15				58.0	
149	0	-9.01		33.7			
151	4	-0.44		57.2			
153	4	0.22	59.0				
155	0	-5.14	44.3				
161	4	-0.04	58.3				
167	4	-0.29				57.6	
179	0	3.86		69.0			
180	3	0.66				60.2	
182	4	-0.15		58.0			
191	4	-0.22					57.8
196	0	2.59		65.5			
201	0	11.29	89.4				
202	4	0.04				58.5	
204	0	3.86				69.0	

Table 12. *--Statistical summary of reported data for standard reference water sample M-124 (major constituent)--Continued*



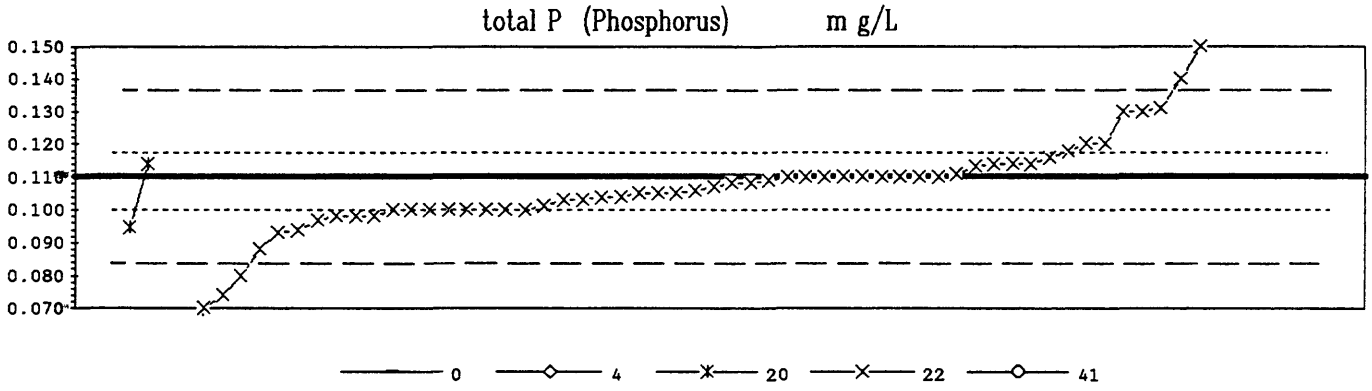
0. Other		4. ICP				
1. AA: direct air		12. AA: flame emission				
2. AA: direct N2O						
	N =	6	36	2	40	10
	Minimum =	155	82	151	136	156
	Maximum =	173	248	158	194	278
	Median =		168		166	165
	St Dev =		5		5	6

Lab	Rating	Z-value	0	1	2	4	12
1	3	-0.89				161	
3	2	1.18				173	
5	4	0.00				166	
8	1	1.69				176	
9	3	0.84		171			
10	4	-0.12		165			
11	4	-0.17	165				
12	4	0.34				168	
13	3	0.67		170			
15	0	4.72				194	
16	3	-0.67				162	
18	3	0.51				169	
19	1	-1.64				156	
23	4	0.34		168			
24	4	0.00				166	
25	2	1.01				172	
26	2	1.18	173				
29	2	1.01					172
32	3	0.67	170				
33	3	-0.79	161				
36	2	1.18					173
37	3	-0.67		162			
38	2	-1.42			158		
39	2	1.35				174	
40	4	0.17				167	
42	4	0.24				167	
43	3	0.67				170	
45	3	0.51		169			
48	0	-5.06				136	
50	4	0.34		168			
51	4	-0.17					165
52	4	0.00				166	
54	4	-0.17		165			
55	4	-0.25					165
56	0	-3.07		148			
57	2	1.01				172	
58	0	13.83		248			
59	1	1.85				177	
61	3	-0.51				163	
63	0	-2.58			151		
64	2	1.47		175			
68	2	-1.01				160	
69	2	-1.48					157
70	4	-0.34				164	
74	1	1.85				177	
75	3	0.67		170			
78	0	-2.87		149			
81	2	1.01				172	
83	1	1.85		177			
84	4	0.24					167

MPV =	166 +/- 1
F-pseudosigma =	6
N =	94
Hu =	170
Hl =	162

Lab	Rating	Z-value	0	1	2	4	12
85	3	-0.67		162			
87	4	0.00		166			
89	3	-0.84		161			
92	0	-2.36		152			
94	4	0.02				166	
97	4	0.34		168			
100	1	1.69				176	
101	4	0.00		166			
103	3	-0.51				163	
105	0	2.45				181	
109	3	-0.96		160			
111	3	0.67		170			
113	4	0.00		166			
114	0	-14.16		82			
116	3	-0.67				162	
119	4	0.34				168	
120	3	0.98		172			
122	3	0.93		172			
123	4	0.40		168			
127	4	-0.17				165	
128	4	-0.34				164	
129	2	-1.18		159			
131	4	0.17				167	
133	4	-0.44				163	
134	4	0.34		168			
136	3	0.67		170			
138	4	-0.07				166	
139	1	-1.75					156
140	4	-0.17		165			
141	4	-0.17				165	
145	4	0.00				166	
146	2	-1.01				160	
149	1	1.52		175			
151	3	-0.84		161			
153	3	0.67	170				
167	4	0.00				166	
179	4	0.00		166			
180	0	-2.02				154	
182	0	-2.70		150			
183	0	18.89					278
191	1	-1.85	155				
196	2	-1.18		159			
201	4	-0.49					163
204	3	-0.51					163

Table 12. *--Statistical summary of reported data for standard reference water sample M-124 (major constituent)--Continued*



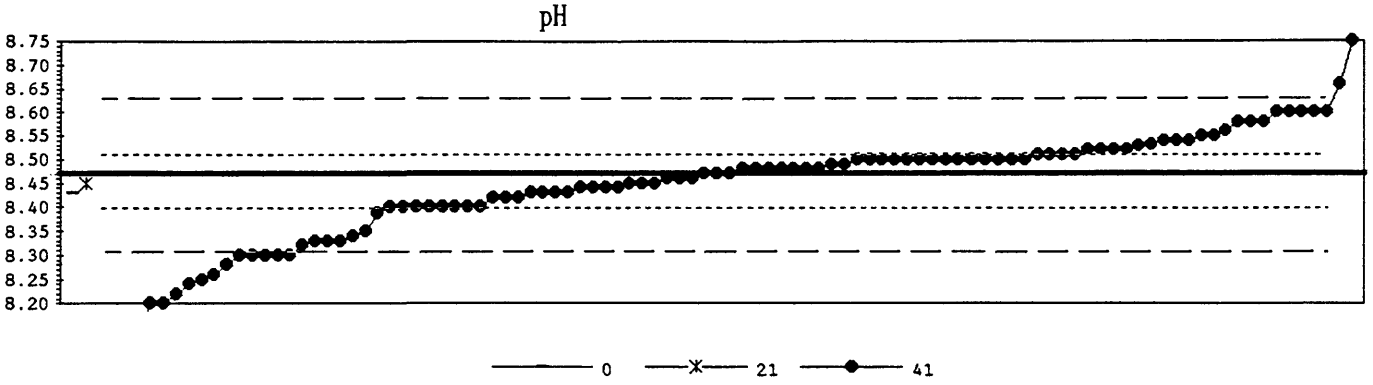
0. Other			22. Color: phosphomolybdate				
4. ICP			41. Electrometric				
20. Titration: color							
	N =	1	1	2	63	1	
	Minimum =	0.110	0.268	0.095	0.010	0.325	
	Maximum =			0.114	2.128		
	Median =				0.108		
	St Dev =				0.258		

MPV = 0.110 +/- 0.002
F-pseudosigma = 0.013
N = 68
Hu = 0.117
Hl = 0.100

Lab	Rating	Z-value	0	4	20	22	41
1	4	-0.20				0.107	
3	2	-1.23				0.094	
6	0				<	0.050	
8	0	6.39				0.190	
11	4	0.04	0.110				
12	0	3.21				0.150	
13	3	-0.75				0.100	
15	4	0.12				0.111	
16	2	-1.19			0.095		
18	4	-0.28				0.106	
19	4	0.04				0.110	
23	3	-0.75				0.100	
25	0	12.58		0.268			
36	4	-0.04				0.109	
38	4	0.28				0.113	
45	4	-0.44				0.104	
46	3	-0.52				0.103	
48	4	0.04				0.110	
55	4	0.04				0.110	
57	0	15.12				0.300	
58	4	-0.12				0.108	
61	3	-0.52				0.103	
63	4	-0.36				0.105	
64	3	0.83				0.120	
68	4	0.36				0.114	
74	4	0.36			0.114		
75	3	-0.99				0.097	
78	1	1.71				0.131	
81	0	19.72				0.358	
83	3	-0.75				0.100	
85	4	-0.36				0.105	
87	0	-2.34				0.080	
89	4	-0.36				0.105	
91	0	8.77				0.220	
92	4	-0.44				0.104	
94	0	-2.82				0.074	
97	0	4.80				0.170	
100	4	0.04				0.110	
102	0	-7.18				0.019	
103	NR			< 0.1			
104	4	0.36				0.114	
105	3	0.67				0.118	
107	3	-0.91				0.098	
108	4	0.04				0.110	
111	3	-0.91				0.098	
113	3	-0.67				0.101	
114	4	0.04				0.110	
118	0	-3.13				0.070	
119	4	0.04				0.110	
120	3	-0.75				0.100	

Lab	Rating	Z-value	0	4	20	22	41
123	0	7.18				0.200	
127	3	-0.75				0.100	
128	3	-0.75				0.100	
129	0	160.17				2.128	
131	NR			< 0.1			
133	1	1.63				0.130	
134	3	-0.75				0.100	
138	4	0.04				0.110	
139	2	-1.31				0.093	
140	0	2.42				0.140	
141	3	0.83				0.120	
144	1	1.63				0.130	
145	0					< 0.02	
153	0	17.10					0.325
155	3	-0.90				0.098	
161	3	0.52				0.116	
167	4	-0.12				0.108	
180	4	0.36				0.114	
182	3	-0.75				0.100	
183	4	0.04				0.110	
202	0	-7.90				0.010	
204	1	-1.71				0.088	

Table 12. *--Statistical summary of reported data for standard reference water sample M-124 (major constituent)--Continued*

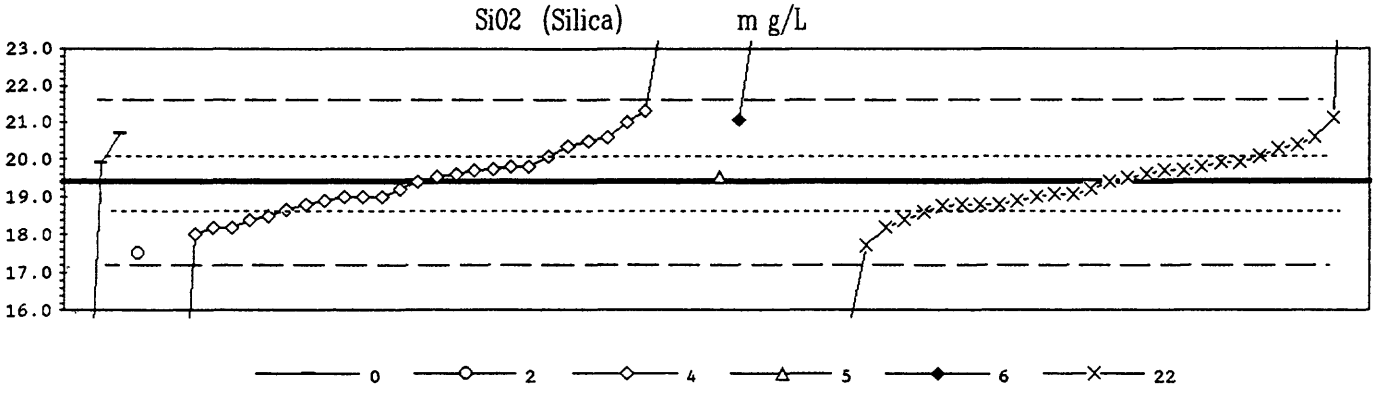


0. Other			
21. Titration: Electro			
41. Electrometric			
N =	1	1	100
Minimum =	8.43	8.45	7.79
Maximum =			8.75
Median =			8.48
St Dev =			0.07

MPV = 8.47 +/- 0.01
F-pseudosigma = 0.08
N = 102
Hu = 8.51
Hl = 8.40

Lab	Rating	Z-value	0	21	41
1	2	-1.01			8.39
2	3	0.76			8.53
3	4	-0.49			8.43
5	1	-1.59			8.34
6	4	0.37			8.50
8	1	-1.72			8.33
10	4	0.37			8.50
11	4	-0.49	8.43		
12	4	0.37			8.50
13	3	0.86			8.54
15	0	-2.33			8.28
16	2	-1.47			8.35
18	4	0.49			8.51
19	3	0.98			8.55
23	3	0.86			8.54
24	4	-0.25			8.45
25	4	-0.25			8.45
26	4	0.37			8.50
29	4	0.25			8.49
30	3	-0.86			8.40
32	1	-1.84			8.32
33	3	-0.61			8.42
36	2	1.10			8.56
37	4	0.12			8.48
38	1	1.59			8.60
39	4	0.37			8.50
40	4	-0.25			8.45
41	0	2.33			8.66
42	3	0.86			8.54
43	1	-1.72			8.33
45	4	0.49			8.51
46	3	-0.86			8.40
48	4	0.37			8.50
50	0	-2.08			8.30
51	3	0.61			8.52
52	4	-0.12			8.46
54	4	0.37			8.50
55	3	0.61			8.52
56	4	0.00			8.47
57	0	-4.54			8.10
58	4	-0.49			8.43
61	3	-0.61			8.42
63	3	-0.86			8.40
64	4	0.12			8.48
68	0	-3.31			8.20
69	4	0.25			8.49
70	4	-0.12			8.46
74	4	0.37			8.50
75	0	-2.08			8.30
76	3	-0.61			8.42
78	4	-0.49			8.43
81	0	-3.31			8.20
84	4	0.12			8.48
85	4	0.49			8.51
87	3	0.61			8.52
89	4	0.12			8.48
90	0	3.43			8.75
91	4	-0.37			8.44
92	4	-0.37			8.44
94	4	0.12			8.48
96	1	1.59			8.60
97	3	0.61			8.52
100	2	1.35			8.58
101	0	-8.34			7.79
105	4	-0.49			8.43
107	4	0.12			8.48
109	0	-2.70			8.25
113	4	-0.37			8.44
114	3	-0.86			8.40
118	0	-4.54			8.10
119	0	-2.58			8.26
120	3	-0.86			8.40
122	4	0.12			8.48
123	3	-0.86			8.40
127	1	-1.72			8.33
128	1	1.59			8.60
129	4	-0.37			8.44
131	4	0.37			8.50
133	3	-0.86			8.40
134	4	0.37			8.50
136	4	0.37			8.50
138	4	0.37			8.50
139	4	-0.12			8.46
140	4	0.00			8.47
141	0	-2.08			8.30
144	3	0.98			8.55
145	0	-2.08			8.30
146	1	1.59			8.60
151	4	-0.25		8.45	
153	0	-4.17			8.13
155	0	-3.07			8.22
158	4	0.00			8.47
161	2	1.35			8.58
167	0	-2.08			8.30
179	3	-0.86			8.40
180	4	0.37			8.50
182	4	0.37			8.50
183	1	1.59			8.60
197	2	1.35			8.58
201	4	0.49			8.51
202	3	0.74			8.53
204	0	-2.82			8.24

Table 12. *--Statistical summary of reported data for standard reference water sample M-124 (major constituent)--Continued*



0. Other			5. DCP					
2. AA: direct N2O			6. ICP/MS					
4. ICP			22. Color: molybdate					
	N =	3	1	30	1	2	32	
	Minimum =	9.7	17.5	9.2	19.5	21.1	0.7	
	Maximum =	20.7		37.1		24.4	37.2	
	Median =			19.4			19.3	
	St Dev =			0.9			0.8	

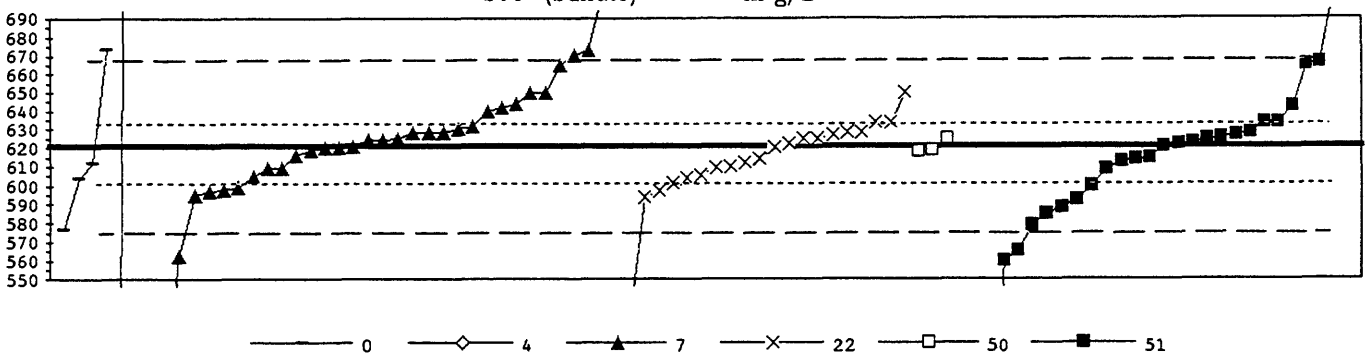
Lab	Rating	Z-value	0	2	4	5	6	22
1	3	-0.67			18.7			
2	0	-8.22						10.3
3	4	0.27			19.7			
5	4	0.36			19.8			
8	1	1.71			21.3			
9	4	0.27						19.7
10	2	1.17	20.7					
11	0	-8.72	9.7					
13	4	0.45						19.9
15	3	-0.90			18.4			
18	3	0.81						20.3
23	4	0.00						19.4
24	3	0.99			20.5			
25	0	4.32			24.2			
32	0	4.50					24.4	
33	4	0.12				19.5		
36	0	16.01						37.2
38	4	-0.31						19.1
39	2	-1.08			18.2			
40	4	0.31			19.7			
42	3	0.63			20.1			
43	4	0.00			19.4			
45	3	-0.81			18.5			
50	4	-0.36						19.0
51	4	0.45						19.9
52	0	-3.51						15.5
55	3	0.86			20.4			
57	2	1.44			21.0			
58	0	-16.82						0.7
59	3	-0.54						18.8
61	0	-9.17			9.2			
63	2	-1.08			18.2			
64	0	6.30			26.4			
68	2	-1.08						18.2
70	3	-0.72						18.6
74	2	1.08						20.6
75	4	0.18						19.6
78	1	-1.71		17.5				
83	4	0.27						19.7
85	4	-0.18						19.2
87	1	1.53						21.1
89	4	0.36						19.8
92	4	-0.45						18.9
97	1	-1.53						17.7
100	4	0.36			19.8			
101	4	0.13			19.6			
102	3	-0.54						18.8
103	2	-1.26			18.0			
104	3	-0.58						18.8
105	4	-0.45			18.9			

MPV =	19.4	+/- 0.2
F-pseudosigma =	1.1	
N =	69	
Hu =	20.1	
Hl =	18.6	

Lab	Rating	Z-value	0	2	4	5	6	22
111	4	0.09						19.5
113	3	-0.54						18.8
118	0	-13.89						4.0
119	4	-0.36			19.0			
121	4	-0.18			19.2			
127	4	-0.36			19.0			
128	3	-0.54			18.8			
131	4	0.18			19.6			
134	4	-0.37			19.0			
138	3	0.90						20.4
141	3	0.63						20.1
145	0	15.88			37.1			
146	0	-8.99			9.4			
151	4	0.45	19.9					
155	4	-0.31						19.1
161	0	-9.74						8.6
167	3	-0.90						18.4
191	1	1.51				21.1		
204	2	1.08			20.6			

Table 12. *--Statistical summary of reported data for standard reference water sample M-124 (major constituent)--Continued*

SO4 (Sulfate) m g/L



0. Other			22. Color: methyl thymol blue					
4. ICP			50. Gravimetric					
7. IC			51. Turbidimetric					
		N =	5	2	33	19	3	28
		Minimum =	577	524	483	534	618	390
		Maximum =	674	1460	709	650	625	1559
		Median =			624	620		622
		St Dev =			18	15		23

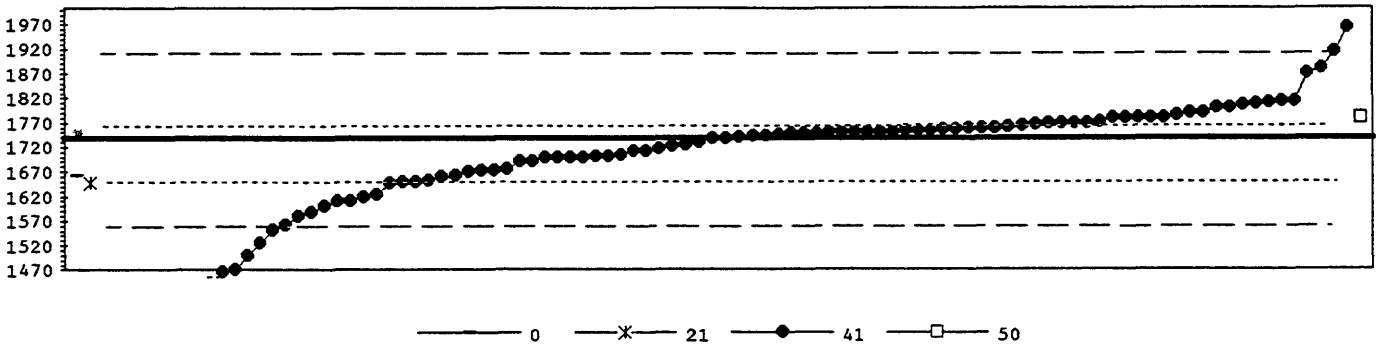
Lab	Rating	Z-value	0	4	7	22	50	51
1	4	-0.08			619			
3	4	0.01			621			
5	2	1.01			644			
6	2	-1.23						593
8	1	1.93			665			
9	3	0.58				634		
10	3	-0.53						609
11	4	-0.38	612					
12	0	-3.77				534		
13	2	-1.03				597		
15	3	-0.99			598			
16	4	0.07						622
18	3	-0.73				604		
19	4	0.32				628		
23	0	3.54						702
24	4	-0.38				612		
25	0	3.84			709			
26	3	0.93			642			
29	0	3.67			705			
30	3	-0.94			599			
32	3	0.84			640			
33	3	-0.51			609			
36	3	0.58						634
37	4	0.19			625			
40	4	0.14			624			
42	0	-5.82			487			
43	4	-0.12					618	
45	4	0.10						623
46	4	-0.29				614		
48	4	-0.29						614
50	4	0.19				625		
51	4	0.14			624			
52	1	1.97						666
54	3	0.58						634
55	2	1.28				650		
56	4	0.20						625
57	3	-0.90						600
61	4	-0.25						615
63	4	0.19					625	
64	4	0.40			630			
69	3	0.58				634		
70	0	-2.42						565
74	2	-1.03			597			
76	2	-1.12			595			
78	0	-10.04						390
83	4	0.01						621
84	0	-2.64						560
85	4	0.49			632			
87	1	-1.81						579
89	4	0.32						628

MPV =	621 +/- 3
F-pseudosigma =	23
N =	90
Hu =	632
Hl =	601

Lab	Rating	Z-value	0	4	7	22	50	51
92	3	0.94						642
94	3	-0.51				609		
96	2	-1.42						588
97	0	2.32	674					
100	4	-0.20			616			
102	4	0.27				627		
103	0	36.52		1460				
105	4	0.19				625		
109	4	-0.07					619	
111	3	-0.73	604					
113	4	0.32			628			
114	0	-8.39						428
119	4	0.32	628					
120	4	-0.47				610		
122	1	-1.90	577					
127	4	0.32			628			
128	4	0.06				622		
129	2	1.28			650			
131	4	-0.03			620			
134	4	-0.02			620			
136	2	1.28			650			
138	4	-0.34						613
139	0	40.82						1559
140	1	1.93						665
141	4	0.19						625
145	0	2.17			671			
151	0	-4.21		524				
153	0	-5.99			483			
158	3	-0.86				601		
161	0	-2.53			563			
167	4	-0.01				620		
180	2	-1.16				594		
182	0	-7.43						450
183	1	-1.55						585
191	3	-0.51			609			
193	4	0.32			628			
196	0	2.28			673			
197	3	-0.69			605			
201	4	0.27						627
204	3	-0.68				605		

Table 12. *--Statistical summary of reported data for standard reference water sample M-124 (major constituent)--Continued*

Sp Cond (Specific Conductance) µ S/cm



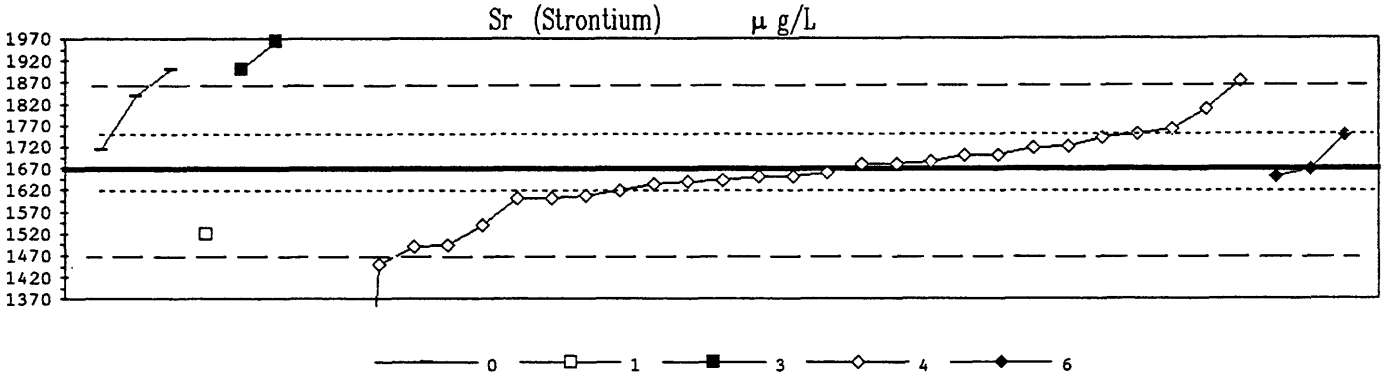
0. Other			41. Electrometric				
4. ICP			50. Gravimetric				
21. Titration: electro							
	N =	1	0	1	97	1	
	Minimum =	1664		1646	82	1780	
	Maximum =				1964		
	Median =				1739		
	St Dev =				222		

Lab	Rating	Z-value	0	4	21	41	50
1	4	0.17				1753	
3	3	-0.78				1670	
5	0	-4.54				1340	
6	4	-0.01				1737	
8	4	-0.43				1700	
9	3	0.72				1801	
10	4	0.23				1758	
11	3	-0.84	1664				
12	4	0.02				1740	
13	4	-0.43				1700	
15	3	0.71				1800	
16	4	0.32				1766	
18	2	-1.31				1623	
19	3	0.55				1786	
23	3	-0.98				1652	
24	4	0.48				1780	
25	4	0.37				1770	
26	4	0.31				1765	
29	4	0.37				1770	
32	4	0.48					1780
33	4	-0.30				1712	
36	0	-18.90				82	
37	4	-0.42				1701	
38	4	-0.24				1717	
39	4	0.14				1750	
40	4	-0.31				1711	
42	3	-0.73				1674	
43	4	0.37				1770	
45	4	0.14				1750	
46	4	0.14				1750	
48	3	0.76				1805	
50	4	0.37				1770	
51	4	0.05				1742	
52	3	-1.00				1650	
54	3	-0.74				1673	
55	1	1.62				1880	
56	2	-1.04				1647	
57	3	0.82				1810	
58	0	-3.12				1465	
61	4	-0.39				1704	
63	4	-0.43				1700	
68	4	0.38				1771	
69	4	0.25				1760	
70	3	-0.84				1664	
74	0	2.02				1915	
75	4	0.14				1750	
76	3	0.79				1807	
78	4	0.26				1761	
79	0	-3.06				1470	
81	4	0.14				1750	
84	4	0.18				1754	

MPV =	1738	+/- 12
F-pseudosigma =	88	
N =	100	
Hu =	1768	
Hl =	1650	

Lab	Rating	Z-value	0	4	21	41	50
85	0	-2.72				1500	
87	4	0.48				1780	
89	3	-0.55				1690	
90	0	-3.37				1443	
91	4	0.01				1739	
92	4	0.16				1752	
94	4	0.11				1748	
96	3	-0.89				1660	
97	4	0.21				1756	
100	4	0.18				1754	
101	4	-0.41				1702	
102	3	-1.00				1650	
103	0			< 5			
104	3	0.59				1790	
105	2	-1.05			1646		
107	0	-3.90				1396	
109	4	0.10				1747	
111	4	-0.09				1730	
113	4	-0.15				1725	
114	4	0.22				1757	
118	0	-6.14				1200	
119	4	0.06				1743	
122	1	-1.80				1580	
127	4	-0.43				1700	
128	3	-0.55				1690	
129	3	0.86				1813	
131	4	0.11				1748	
134	4	0.48				1780	
136	0	-8.08				1030	
139	0	2.58				1964	
140	4	0.48				1780	
141	4	0.24				1759	
144	0	-6.14				1200	
145	0	-2.43				1525	
146	1	1.51				1870	
151	4	0.47				1779	
153	2	-1.35				1620	
155	3	0.87				1814	
158	3	0.59				1790	
161	2	-1.46				1610	
167	4	-0.18				1722	
179	2	-1.46				1610	
180	3	-0.72				1675	
182	1	-1.58				1600	
183	0	-5.00				1300	
193	0	-2.12				1552	
197	1	-1.70				1589	
201	0	-4.09				1380	
202	4	0.13				1749	
204	0	-2.02				1561	

Table 12. *--Statistical summary of reported data for standard reference water sample M-124 (major constituent)--Continued*

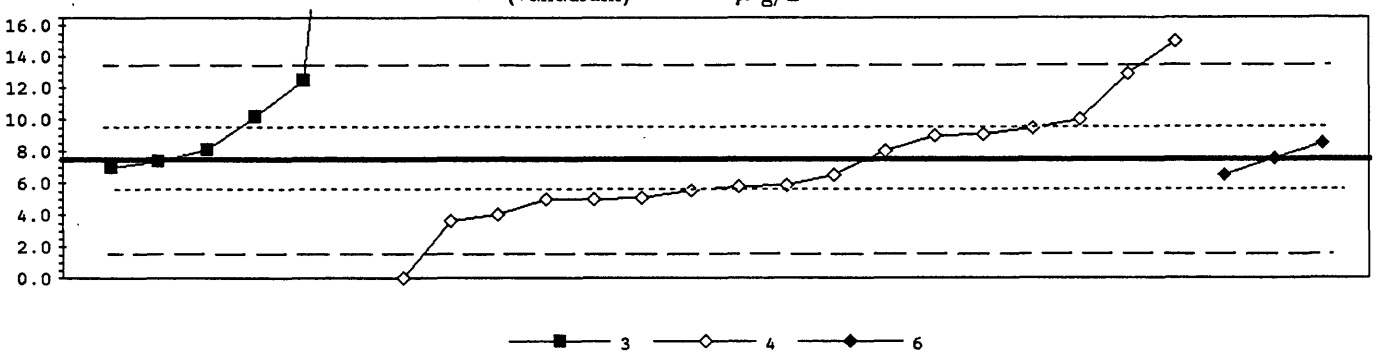


0. Other			4. ICP				
1. AA: direct air			6. ICP/MS				
3. AA: graphite furnace							
		N =	3	1	2	28	3
		Minimum =	1715	1520	1900	2	1651
		Maximum =	1900		1963	1870	1745
		Median =				1660	
		St Dev =				88	
Lab	Rating	Z-value	0	1	3	4	6
1	4	0.15				1684	
3	4	-0.19				1650	
8	3	0.80				1748	
9	1	-1.51		1520			
15	1	-1.81				1490	
16	1	-1.79				1492	
18	4	-0.26				1643	
24	4	-0.19				1650	
25	3	0.92				1760	
32	3	0.77					1745
33	4	0.47	1715				
37	4	-0.18					1651
39	0	2.03				1870	
40	3	-0.51				1619	
42	2	1.40				1807	
52	3	-0.70				1600	
55	3	-0.70				1600	
59	4	0.31				1700	
68	0	-2.21				1450	
70	4	0.11				1680	
74	2	-1.30				1540	
81	0	-16.86				2	
97	0	2.97			1963		
100	4	0.50				1718	
105	3	0.52				1720	
113	1	1.73	1840				
116	3	0.72				1740	
121	4	-0.09				1660	
127	4	0.11				1680	
131	0	-15.11				175	
134	4	-0.29				1640	
138	4	-0.37				1632	
141	0	2.34			1900		
145	3	-0.63				1607	
146	4	0.31				1700	
182	0	2.34	1900				
191	4	0.00					1669

MPV =	1669	+/- 22
F-pseudosigma =	99	
N =	37	
Hu =	1740	
Hl =	1607	

Table 12. *--Statistical summary of reported data for standard reference water sample M-124 (major constituent)--Continued*

V (Vanadium) µg/L



1. AA: direct air	6. ICP/MS
3. AA: graphite furnace	
4. ICP	

N =	0	6	17	3
Minimum =		7.0	0.0	6.5
Maximum =		46.5	15.0	8.5
Median =			5.9	
St Dev =			2.6	

Lab	Rating	Z-value	1	3	4	6
1	4	-0.34				6.5
3	NR				< 10	
15	3	0.92		10.2		
16	NR				< 10	
18	3	-0.84			5.0	
32	4	0.34				8.5
37	4	0.03				7.6
39	3	0.51			9.0	
48	NR				< 200	
52	1	1.70		12.5		
55	2	-1.32			3.6	
57	NR				< 100	
61	3	0.68			9.5	
63	0	2.55			15.0	
68	4	0.17			8.0	
70	NR				< 10	
74	3	-0.84			5.0	
81	0	-2.53			0.0	
94	NR				< 10	
97	0	13.22		46.5		
100	3	-0.67			5.5	
101	3	0.85			10.0	
105	NR				< 25	
121	2	-1.18			4.0	
127	4	0.22		8.1		
128	3	-0.57			5.8	
133	3	-0.55			5.9	
134	4	-0.03		7.4		
136	4	-0.17		7.0		
138	3	-0.81			5.1	
141	4	-0.34			6.5	
145	1	1.83			12.9	
146	NR				< 10	
167	NR				< 30	
180	3	0.55			9.1	
182	NR		< 200			

MPV =	7.5 +/- 0.8
F-pseudosigma =	3.0
N =	26
Hu =	9.5
Hl =	5.5

Table 13.-- *Statistical summary of reported data for standard reference sample N-36 (nutrients)*

Definition of analytical methods, abbreviations, and symbols

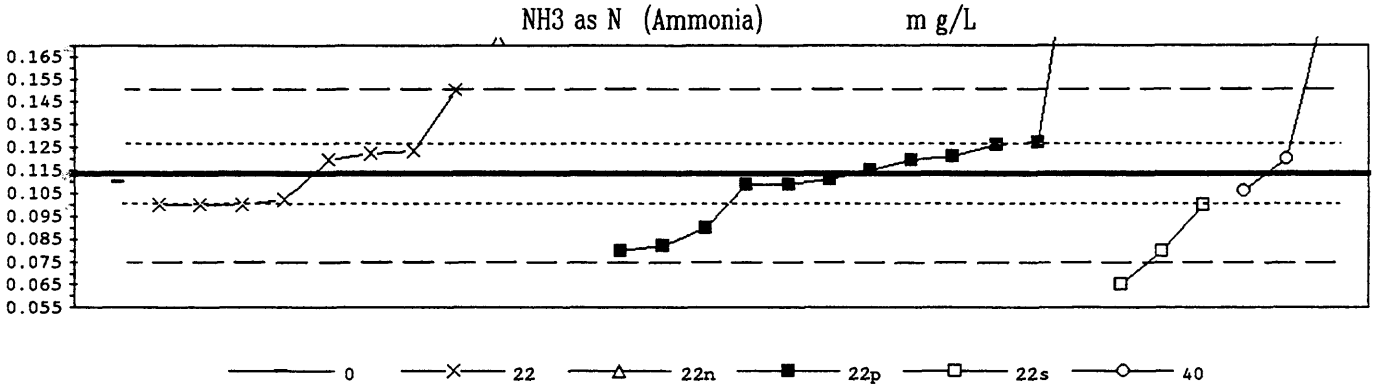
Analytical methods

0. Other/Not reported		
7. IC	=	ion chromatography
22. Color:	=	colorimetric [color reagent specified]
40. Ion electrode	=	specific ion electrode

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
mg/L =	milligrams per liter
Lab =	laboratory code number
NR =	not rated, less than value reported
< =	less than

Table 13. *--Statistical summary of reported data for standard reference water sample N-36 (preserved nutrients)--Continued*

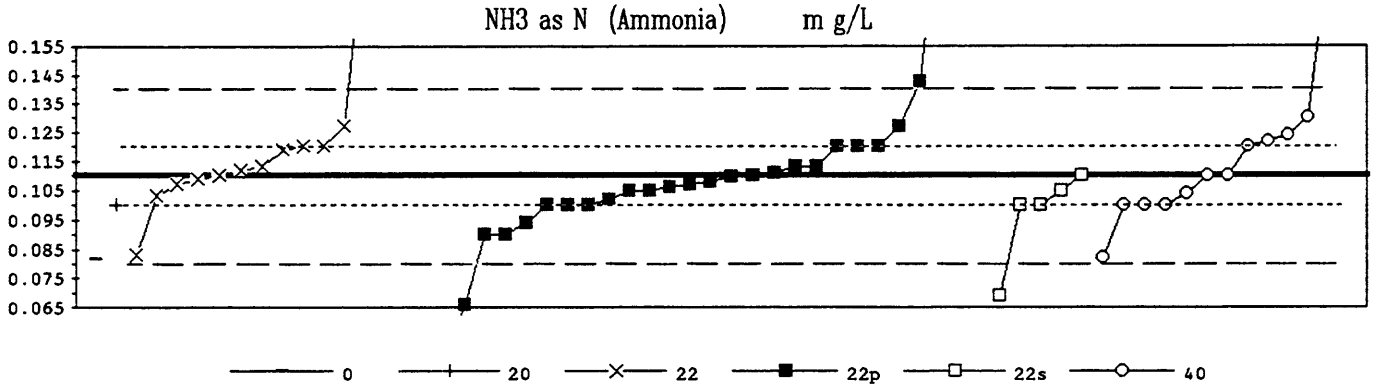


0. Other			22p. Color: indophenol				
22. Color: other			22s. Color: salicylate				
22n. Color: Nesslerization			40. Ion electrode				
N =		1	8	3	12	3	3
Minimum =		0.110	0.100	0.173	0.080	0.065	0.106
Maximum =			0.150	0.660	0.245	0.100	0.192
Median =			0.111		0.111		
St Dev =			0.018		0.017		

MPV =	0.113	+/-	0.005
F-pseudosigma =	0.019		
N =	30		
Hu =	0.126		
Hl =	0.100		

Lab	Rating	Z-value	0	22	22n	22p	22s	40
1	4	0.31				0.119		
11	4	-0.16	0.110					
15	4	-0.36						0.106
20	NR		< 2					
23	4	0.42				0.121		
48	1	-1.71				0.080		
52	3	0.67				0.126		
61	4	-0.21				0.109		
68	3	-0.67		0.100				
74	4	-0.10				0.111		
75	3	0.52		0.123				
81	4	0.47		0.122				
88	0	-2.49					0.065	
89	3	0.73				0.127		
90	4	-0.21				0.109		
97	3	-0.67		0.100				
104	1	-1.61				0.082		
105	0	6.85				0.245		
118	2	-1.19				0.090		
119	0	4.10						0.192
120	4	0.10				0.115		
129	0	3.11			0.173			
134	3	-0.67					0.100	
139	3	-0.57		0.102				
140	1	1.92		0.150				
141	3	-0.67		0.100				
145	1	-1.71					0.080	
151	4	0.36						0.120
167	4	0.31		0.119				
182	0	15.93			0.420			
201	0	28.38			0.660			

Table 13. *--Statistical summary of reported data for standard reference water sample N-36 (nonpreserved nutrients)--Continued*



0. Other			22p. Color: indophenol					
20. Titration: color			22s. Color: salicylate					
22. Color: other			40. Ion electrode					
	N =	1	1	14	28	5	13	
	Minimum =	0.082	0.100	0.083	0.039	0.069	0.082	
	Maximum =			0.400	0.350	0.110	0.192	
	Median =			0.116	0.107		0.110	
	St Dev =			0.012	0.010		0.014	

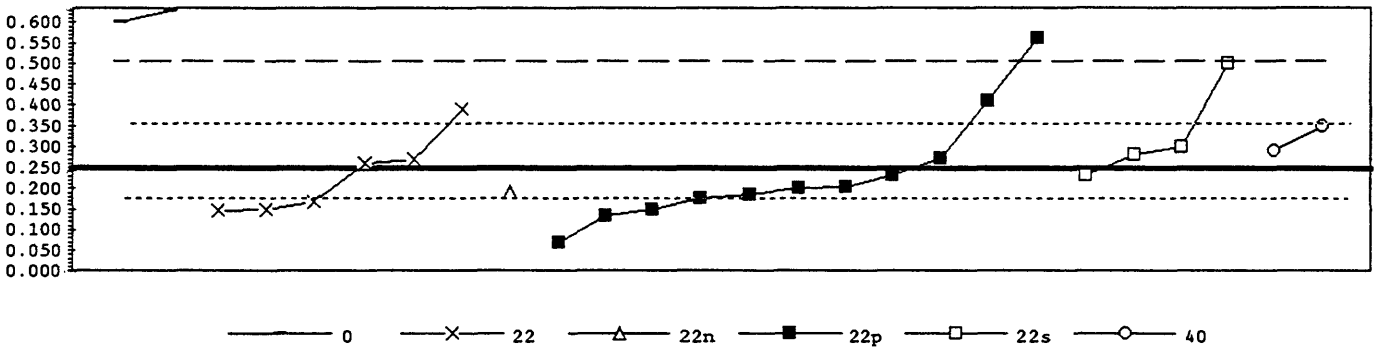
	MPV =	0.110	+/-	0.003					
F-pseudosigma =		0.015							
	N =	62							
	Hu =	0.120							
	Hl =	0.100							

Lab	Rating	Z-value	0	20	22	22p	22s	40
3	1	-1.81			0.083			
6	1	-1.88						0.082
9	3	-0.53				0.102		
10	4	0.01						0.110
12	NR					< 0.2		
13	4	-0.33				0.105		
15	3	0.82						0.122
16	3	-0.66		0.100				
18	0	-4.10				0.049		
19	3	0.68			0.120			
20	NR		< 2					
21	4	-0.19				0.107		
25	3	-0.66						0.100
28	NR		< 0.1					
32	1	-1.90	0.082					
33	3	0.68			0.120			
37	0	5.74			0.195			
38	0	6.55				0.207		
46	4	0.08				0.111		
51	4	0.01						0.110
52	2	1.16				0.127		
55	3	-0.66				0.100		
58	3	0.95						0.124
59	3	-0.66				0.100		
63	NR			< 0.6				
68	4	-0.46			0.103			
70	2	-1.34				0.090		
76	4	-0.33				0.105		
84	0	10.80				0.270		
85	4	-0.19			0.107			
87	3	-0.66				0.100		
88	0	-2.76					0.069	
89	4	0.21				0.113		
91	4	0.01				0.110		
92	3	0.68						0.120
94	3	0.68				0.120		
96	4	0.21			0.113			
97	4	0.01			0.110			
100	4	-0.12				0.108		
102	3	0.68				0.120		
104	4	0.21				0.113		
107	0	2.24				0.143		
111	2	-1.07				0.094		
113	0	-2.96				0.066		
114	4	-0.39						0.104
118	2	-1.34				0.090		
119	0	5.54						0.192
123	0	16.20				0.350		
127	4	-0.33					0.105	
129	0	7.97			0.228			

Lab	Rating	Z-value	0	20	22	22p	22s	40
133	2	1.36						0.130
134	3	-0.66					0.100	
138	3	0.68				0.120		
145	3	-0.66					0.100	
149	3	-0.66						0.100
155	4	-0.01				0.110		
158	0	-4.78				0.039		
161	0	5.14						0.186
167	4	-0.06			0.109			
180	3	0.62			0.119			
182	0	19.57			0.400			
185	4	-0.26				0.106		
197	2	1.16			0.127			
198	4	0.15			0.112			
202	3	-0.66						0.100
204	4	0.01					0.110	

Table 13. *--Statistical summary of reported data for standard reference water sample N-36 (preserved nutrients)--Continued*

NH3 + Org N as N (Ammonia + Organic N) m g/L



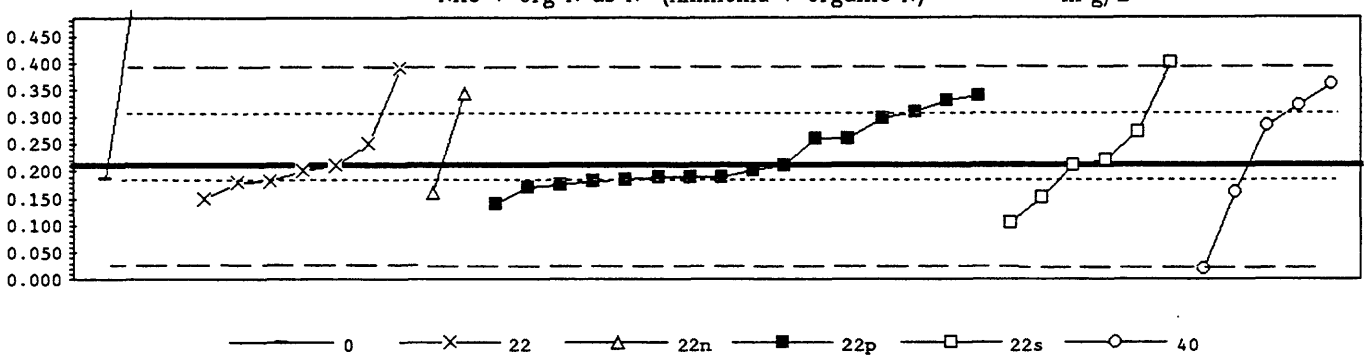
0. Other				22p. Color: indophenol				
22. Color: other				22s. Color: salicylate				
22n. Color: Nesslerization				40. Ion electrode				
		N =	2	6	1	11	4	2
		Minimum =	0.600	0.145	0.192	0.070	0.232	0.290
		Maximum =	0.630	0.390		0.560	0.500	0.350
		Median =				0.200		
		St Dev =				0.138		

Lab	Rating	Z-value	0	22	22n	22p	22s	40
1	4	-0.46				0.187		
11	0	2.98	0.630					
15	4	0.34						0.290
20	NR					< 5		
21	4	-0.12				0.231		
23	NR						< 0.5	
28	0	2.74	0.600					
48	4	-0.36				0.200		
52	2	-1.36				0.070		
56	3	-0.74				0.150		
61	4	0.19				0.271		
68	2	1.12		0.390				
74	3	-0.87				0.134		
79	1	1.97					0.500	
81	3	-0.60		0.168				
89	4	-0.11					0.232	
90	4	-0.33				0.204		
97	3	-0.74		0.150				
105	0	2.43				0.560		
118	2	1.27				0.410		
119	3	0.81						0.350
120	3	-0.54				0.176		
129	4	-0.42			0.192			
134	4	0.26					0.280	
139	3	-0.78		0.145				
140	4	0.19		0.270				
141	4	0.11		0.260				
145	4	0.42					0.300	

MPV =	0.246	+/- 0.034
F-pseudosigma =	0.129	
N =	26	
Hu =	0.350	
Hl =	0.176	

Table 13. *--Statistical summary of reported data for standard reference water sample N-36 (nonpreserved nutrients)--Continued*

NH3 + Org N as N (Ammonia + Organic N) m g/L

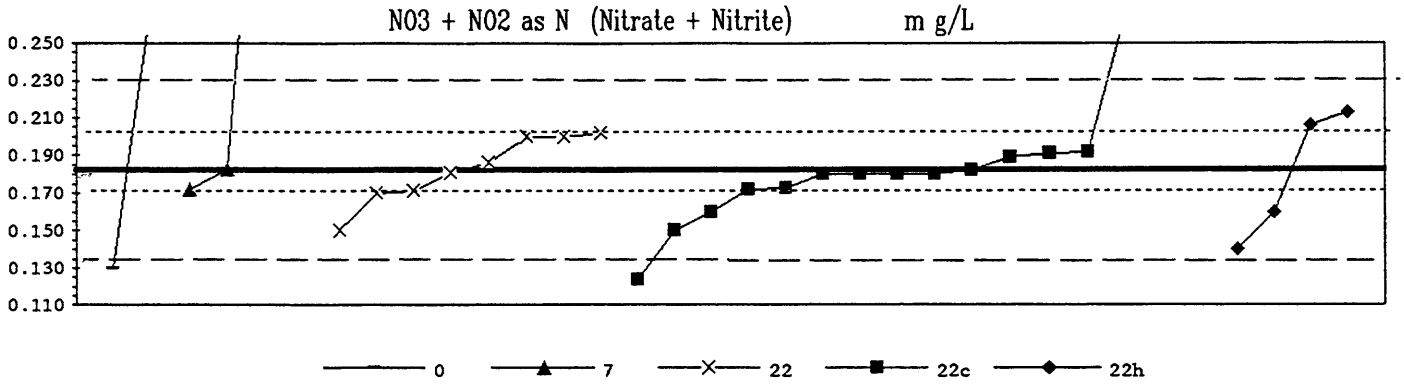


0. Other				22p. Color: indophenol				
22. Color: other				22s. Color: salicylate				
22n. Color: Nesslerization				40. Ion electrode				
		N =	3	7	2	16	6	5
		Minimum =	0.187	0.150	0.160	0.140	0.105	0.020
		Maximum =	0.900	0.390	0.345	0.340	0.400	0.360
		Median =		0.200		0.195		
		St Dev =		0.080		0.063		

Lab	Rating	Z-value	0	22	22n	22p	22s	40
3	0	3.96	0.570					
10	4	-0.21				0.190		
12	NR					< 0.3		
13	3	0.97				0.297		
15	3	0.82						0.284
16	4	-0.24	0.187					
18	4	-0.31				0.181		
20	NR					< 5		
21	4	-0.27				0.184		
28	0	7.58	0.900					
38	3	-0.54			0.160			
46	4	-0.21				0.190		
51	1	1.66						0.360
52	3	-0.76				0.140		
55	3	0.56				0.260		
59	0	2.09					0.400	
63	NR		< 0.09					
85	4	-0.32		0.180				
87	2	1.11				0.310		
89	3	-0.63					0.152	
91	4	-0.43				0.170		
94	4	-0.10				0.200		
96	4	-0.31		0.181				
97	3	-0.65		0.150				
100	2	1.33				0.330		
102	4	0.01				0.210		
104	4	-0.21				0.190		
113	NR						< 0.5	
118	3	0.56				0.260		
119	2	1.22						0.320
123	2	1.44				0.340		
127	2	-1.14					0.105	
129	2	1.49			0.345			
133	3	-0.54						0.160
134	3	0.67					0.270	
138	4	-0.10		0.200				
145	4	0.01					0.210	
155	4	-0.38				0.175		
180	4	0.00		0.209				
183	0	-2.07						0.020
198	4	0.45		0.250				
202	4	0.12					0.220	
204	1	1.99		0.390				

MPV =	0.209	+/-	0.020
F-pseudosigma =	0.091		
N =	39		
Hu =	0.304		
Hl =	0.181		

Table 13. *--Statistical summary of reported data for standard reference water sample N-36 (preserved nutrients)--Continued*



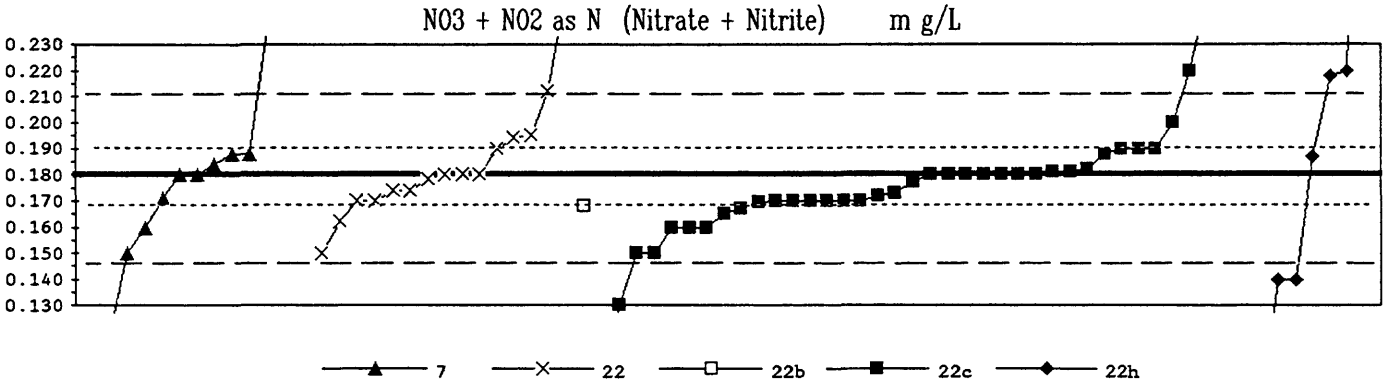
0. Other
7. IC
22. Color: other
22c. Color: Cd diazo
22h. Color: hydrazine diazo

	2	4	8	16	4
N =					
Minimum =	0.130	0.172	0.150	0.124	0.140
Maximum =	0.270	0.520	0.202	1.200	0.213
Median =			0.186	0.180	
St Dev =			0.014	0.012	

Lab	Rating	Z-value	0	7	22	22c	22h
1	4	0.02				0.182	
11	0	-2.24	0.130				
20	4	0.07		0.183			
21	2	1.37					0.213
23	4	-0.07				0.180	
28	0	14.73		0.520			
29	0	10.38		0.420			
42	4	-0.41		0.172			
43	2	-1.37			0.150		
45	4	0.41				0.191	
48	1	-1.81					0.140
52	4	-0.37				0.173	
53	0	-2.50				0.124	
61	4	-0.07				0.180	
74	4	0.46				0.192	
75	4	-0.07				0.180	
78	0	3.72				0.267	
81	4	-0.02			0.181		
88	0	22.21				0.692	
90	2	1.07					0.206
97	3	0.81			0.200		
105	4	-0.41				0.172	
118	3	-0.94					0.160
119	4	-0.50			0.170		
129	4	0.33				0.189	
133	2	-1.37				0.150	
134	4	-0.07				0.180	
139	4	0.20			0.186		
140	4	-0.46			0.171		
141	3	0.81			0.200		
145	3	-0.94				0.160	
167	3	0.89			0.202		
182	0	44.32				1.200	
201	0	3.85	0.270				

MPV =	0.182 +/- 0.005
F-pseudosigma =	0.023
N =	34
Hu =	0.202
Hl =	0.171

Table 13. *--Statistical summary of reported data for standard reference water sample N-36 (nonpreserved nutrients)--Continued*



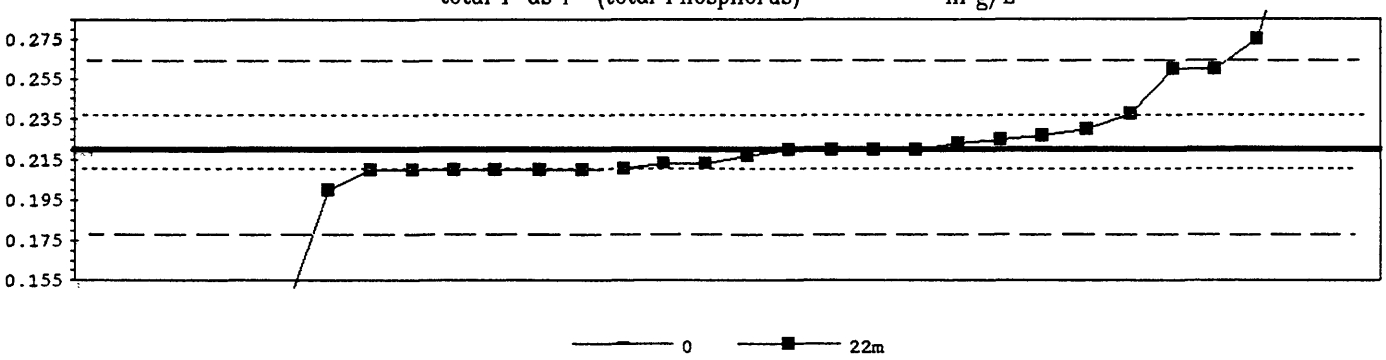
7. IC			22c. Color: Cd diazo			
22. Color: other			22h. Color: hydrazine diazo			
22b. Color: brucine						
N =	13	15	1	38	7	
Minimum =	0.107	0.150	0.168	0.090	0.091	
Maximum =	0.620	0.250		1.100	0.430	
Median =	0.180	0.178		0.175	0.187	
St Dev =	0.014	0.015		0.011	0.051	

MPV = 0.180 +/- 0.003
F-pseudosigma = 0.016
N = 74
Hu = 0.190
Hl = 0.168

Lab	Rating	Z-value	7	22	22b	22c	22h
3	1	1.96		0.212			
6	0	2.45				0.220	
8	0	2.45					0.220
9	3	0.61				0.190	
10	4	0.00				0.180	
12	4	0.00				0.180	
13	1	-1.84				0.150	
15	0	-5.54				0.090	
16	0	4.29		0.250			
18	3	-0.80				0.167	
19	3	0.61		0.190			
20	4	0.25	0.184				
21	0	2.33					0.218
25	4	0.49	0.188				
28	0	26.98	0.620				
29	0	3.68	0.240				
32	3	-0.55	0.171				
33	0	-3.68	0.120				
37	4	-0.12		0.178			
38	4	0.06				0.181	
42	2	-1.23	0.160				
45	4	0.00				0.180	
46	4	0.06				0.181	
51	4	0.00	0.180				
52	4	-0.49				0.172	
55	3	-0.61				0.170	
56	2	1.23				0.200	
58	0	9.26	0.331				
59	4	0.00				0.180	
63	3	0.92		0.195			
68	3	-0.61		0.170			
69	3	-0.61				0.170	
70	1	-1.84				0.150	
76	4	0.49	0.188				
78	0	4.29				0.250	
83	2	-1.23				0.160	
85	4	0.00		0.180			
87	4	0.00				0.180	
88	0	31.15				0.688	
89	4	0.49				0.188	
91	0	-2.45					0.140
94	3	-0.92				0.165	
96	4	-0.37		0.174			
97	4	0.00		0.180			
100	3	0.61				0.190	
102	4	0.00				0.180	
104	4	-0.43				0.173	
107	3	0.61				0.190	
108	1	-1.84		0.150			
113	4	-0.18				0.177	

Lab	Rating	Z-value	7	22	22b	22c	22h
114	0	-5.46					0.091
118	0	-2.45					0.140
119	3	-0.61		0.170			
120	2	-1.23				0.160	
123	0	15.33					0.430
127	3	-0.61				0.170	
129	4	0.12				0.182	
133	0	-3.07				0.130	
134	4	0.00				0.180	
138	3	-0.61				0.170	
145	2	-1.23				0.160	
146	3	-0.74			0.168		
149	0	-4.48	0.107				
155	3	-0.66				0.169	
158	4	0.43					0.187
167	3	0.86		0.194			
180	4	-0.37		0.174			
182	0	56.41				1.100	
191	1	-1.84	0.150				
193	4	0.00	0.180				
197	2	-1.10		0.162			
198	4	0.00		0.180			
202	3	-0.61				0.170	
204	3	-0.61				0.170	

Table 13. *--Statistical summary of reported data for standard reference water sample N-36 (preserved nutrients)--Continued*



0. Other
4. ICP
22m. Color: phosphomolybdate

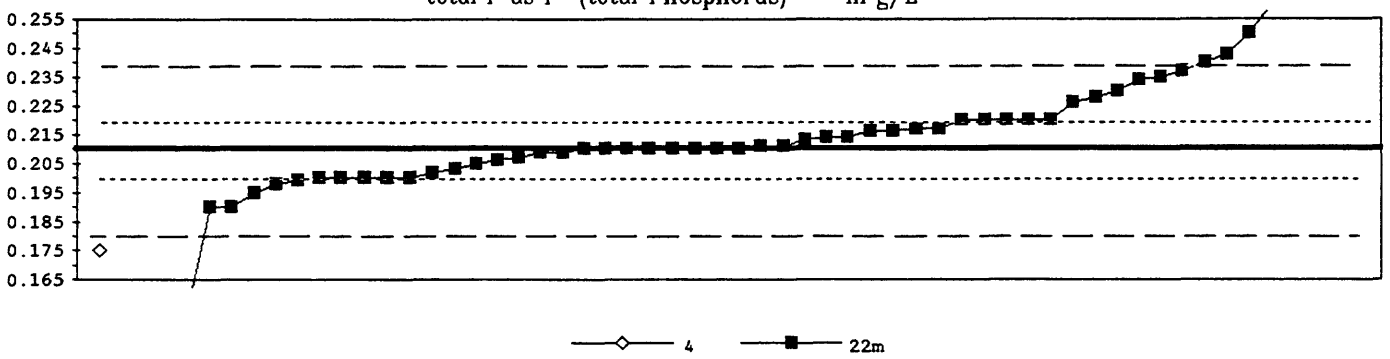
	N =	Minimum =	Maximum =	Median =	St Dev =
1	0	0.300			
23	0	0.110	2.270	0.219	0.015

Lab	Rating	Z-value	0	4	22m
1	4	-0.14			0.217
11	0	3.85	0.300		
15	0	-5.30			0.110
20	4	0.00			0.220
23	4	0.48			0.230
28	0			< 0.1	
45	4	0.00			0.220
48	4	-0.48			0.210
56	4	-0.48			0.210
61	4	0.24			0.225
63	4	-0.48			0.210
68	3	0.87			0.238
74	4	0.34			0.227
75	0	98.77			2.270
78	0	5.78			0.340
79	0	-4.34			0.130
81	0	13.73			0.505
89	4	-0.48			0.210
92	4	-0.34			0.213
105	4	0.14			0.223
118	1	1.93			0.260
119	3	-0.96			0.200
129	4	-0.43			0.211
133	4	-0.48			0.210
134	4	-0.48			0.210
139	4	-0.34			0.213
140	0	-3.85			0.140
141	4	0.00			0.220
145	4	0.00			0.220
182	1	1.93			0.260
201	0	2.65			0.275

MPV =	0.220	+/- 0.005
F-pseudosigma =	0.021	
N =	30	
Hu =	0.238	
Hl =	0.210	

Table 13. *--Statistical summary of reported data for standard reference water sample N-36 (nonpreserved nutrients)--Continued*

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



4. ICP
22m. Color: phosphomolybdate

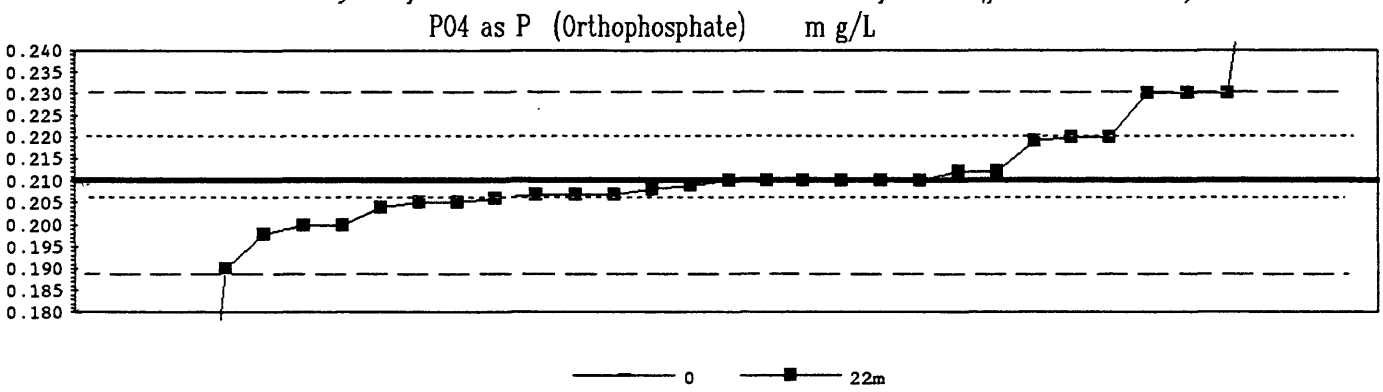
		4	22m
N =		1	57
Minimum =		0.175	0.034
Maximum =			0.300
Median =			0.210
St Dev =			0.012

Lab	Rating	Z-value	4	22m
3	3	-0.81		0.198
6	1	1.82		0.237
8	0	6.07		0.300
9	3	-0.74		0.199
10	4	0.00		0.210
12	0	3.37		0.260
13	4	0.00		0.210
15	0	-6.07		0.120
16	1	1.69		0.235
18	4	0.40		0.216
19	4	0.00		0.210
20	4	0.00		0.210
21	4	0.27		0.214
22	4	0.40		0.216
25	0	-2.36	0.175	
28	0		< 0.1	
38	4	-0.07		0.209
45	2	1.35		0.230
46	4	-0.20		0.207
51	4	-0.27		0.206
55	4	0.00		0.210
58	4	-0.47		0.203
59	0	6.07		0.300
78	4	0.27		0.214
85	4	0.47		0.217
87	0	-3.64		0.156
89	4	0.00		0.210
91	3	0.67		0.220
92	1	1.62		0.234
94	3	0.67		0.220
96	2	-1.35		0.190
97	3	0.67		0.220
100	4	0.00		0.210
102	0	-11.87		0.034
104	4	0.20		0.213
107	4	-0.34		0.205
108	0	2.70		0.250
111	3	-0.54		0.202
113	2	-1.35		0.190
114	3	-0.67		0.200
118	0	2.02		0.240
119	3	-0.67		0.200
120	3	-0.67		0.200
123	0	3.37		0.260
127	4	0.07		0.211
129	4	0.07		0.211
134	3	-0.67		0.200
138	3	-0.67		0.200
145	3	0.67		0.220
149	4	0.00		0.210

MPV =	0.210	+/-	0.003
F-pseudosigma =	0.015		
N =	58		
Hu =	0.220		
Hl =	0.200		

Lab	Rating	Z-value	4	22m
155	4	-0.07		0.209
158	2	1.08		0.226
161	2	1.21		0.228
180	4	0.47		0.217
182	0	3.37		0.260
183	3	0.67		0.220
198	2	-1.01		0.195
202	0	-5.40		0.130
204	0	2.23		0.243

Table 13. *--Statistical summary of reported data for standard reference water sample N-36 (preserved nutrients)--Continued*



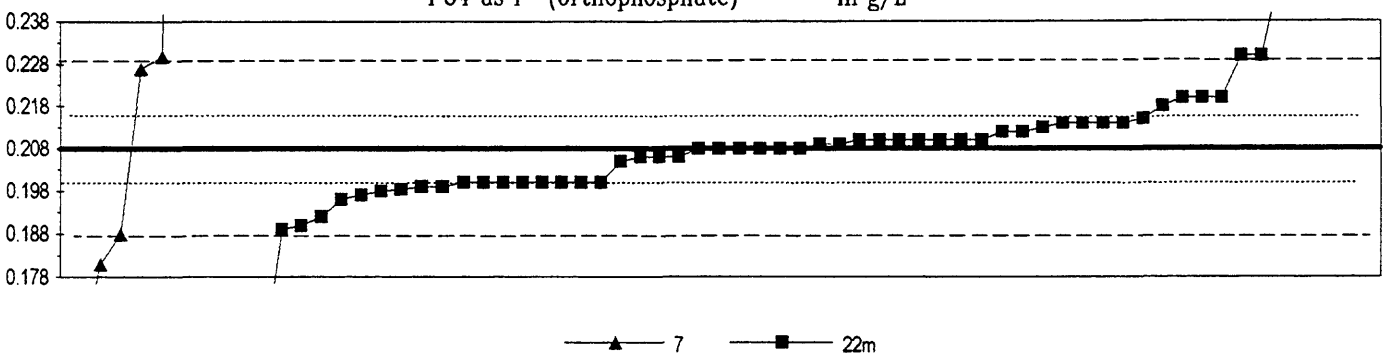
0. Other
22m. Color: phosphomolybdate

N =	2	31
Minimum =	0.270	0.115
Maximum =	1.200	0.450
Median =		0.210
St Dev =		0.010

MPV = 0.210 +/- 0.002
F-pseudosigma = 0.010
N = 33
Hu = 0.220
Hl = 0.206

Lab	Rating	Z-value	0	22m
1	3	-0.58		0.204
11	0	5.78	0.270	
15	4	-0.39		0.206
20	4	0.00		0.210
23	4	0.00		0.210
28	0	95.39	1.200	
29	0	7.71		0.290
45	4	-0.29		0.207
48	4	-0.29		0.207
52	1	1.93		0.230
56	4	0.00		0.210
61	2	-1.16		0.198
63	3	0.96		0.220
74	4	-0.48		0.205
75	4	-0.19		0.208
78	0	-9.15		0.115
81	0	18.31		0.400
88	0	23.13		0.450
89	4	-0.29		0.207
90	4	-0.48		0.205
92	3	0.87		0.219
97	1	1.93		0.230
105	4	-0.10		0.209
118	3	-0.96		0.200
119	3	-0.96		0.200
129	4	0.19		0.212
133	4	0.00		0.210
134	4	0.00		0.210
140	1	-1.93		0.190
141	3	0.96		0.220
145	4	0.00		0.210
167	4	0.19		0.212
182	1	1.93		0.230

Table 13. *--Statistical summary of reported data for standard reference water sample N-36 (nonpreserved nutrients)--Continued*



7. IC
22m. Color: phosphomolybdate

	7	58
N =		
Minimum =	0.160	0.066
Maximum =	1.000	0.439
Median =	0.188	0.208
St Dev =	0.030	0.008

Lab	Rating	Z-value	7	22m
3	3	-0.77		0.200
6	4	0.48		0.213
8	0	8.86		0.300
9	2	-1.16		0.196
10	4	0.19		0.210
12	4	0.19		0.210
13	4	0.00		0.208
15	4	0.00		0.208
16	4	-0.19		0.206
18	4	0.00		0.208
19	3	-0.77		0.200
20	4	0.19		0.210
21	3	0.58		0.214
25	0	2.12		0.230
28	0	76.31	1.000	
29	0	8.86		0.300
32	1	-1.93	0.188	
33	0	2.12	0.230	
37	0	34.40	0.565	
38	4	-0.19		0.206
45	4	-0.29		0.205
46	3	-0.87		0.199
51	1	-1.83		0.189
52	0	2.12		0.230
55	4	0.19		0.210
58	0	-13.68		0.066
59	3	-0.77		0.200
78	1	-1.54		0.192
83	4	0.19		0.210
85	3	0.58		0.214
87	0	-5.01		0.156
88	0	22.26		0.439
89	4	0.39		0.212
92	3	0.58		0.214
96	3	0.67		0.215
97	2	1.16		0.220
100	1	-1.73		0.190
102	4	0.19		0.210
104	3	0.58		0.214
107	4	0.00		0.208
108	3	-0.77		0.200
111	1	1.83	0.227	
113	2	-1.06		0.197
118	3	-0.77		0.200
119	3	-0.77		0.200
120	3	-0.96		0.198
127	4	-0.19		0.206
129	4	0.10		0.209
134	3	-0.77		0.200
138	3	-0.77		0.200

MPV =	0.208	+/- 0.002
F-pseudosigma =	0.010	
N =	65	
Hu =	0.214	
Hl =	0.200	

Lab	Rating	Z-value	7	22m
139	4	0.00		0.208
145	4	0.19		0.210
146	4	0.00		0.208
155	3	-0.93		0.198
158	4	0.39		0.212
161	4	0.10		0.209
167	3	-0.87		0.199
180	3	0.96		0.218
182	2	1.16		0.220
183	2	1.16		0.220
191	0	-4.63	0.160	
197	0	-2.60	0.181	
198	0	8.86		0.300
202	0	-7.52		0.130
204	0	4.05		0.250

Table 14.-- *Statistical summary of reported data for standard reference sample N-37 (nutrients)*

Definition of analytical methods, abbreviations, and symbols

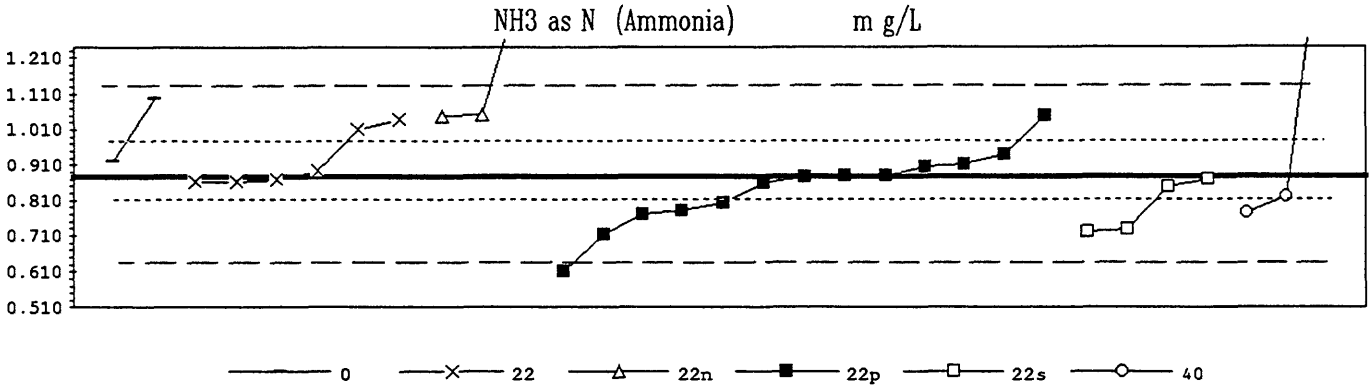
Analytical methods

0. Other/Not reported		
7. IC	=	ion chromatography
22. Color:	=	colorimetric [color reagent specified]
40. Ion electrode	=	specific ion electrode

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
mg/L =	milligrams per liter
Lab =	laboratory code number
NR =	not rated, less than value reported
< =	less than

Table 14. *--Statistical summary of reported data for standard reference water sample N-37 (preserved nutrients)--Continued*

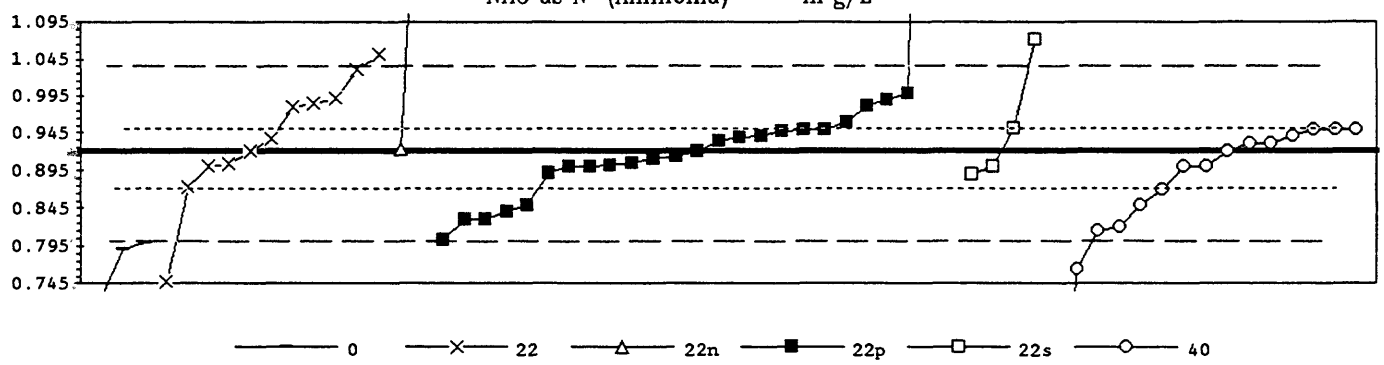


0. Other				22p. Color: indophenol				
22. Color: other				22s. Colori: salicylate				
22n. Color: Nesslerization				40. Ion electrode				
		N =	2	6	3	13	4	3
		Minimum =	0.920	0.860	1.050	0.610	0.720	0.772
		Maximum =	1.100	1.040	1.440	1.050	0.870	1.630
		Median =				0.878		
		St Dev =				0.089		

Lab	Rating	Z-value	0	22	22n	22p	22s	40
1	4	0.00				0.876		
11	4	0.36	0.920					
15	3	-0.86						0.772
20	NR		< 2					
23	4	0.28				0.910		
48	0	-2.20				0.610		
52	4	0.03				0.880		
61	4	0.02				0.879		
63	1	1.85	1.100					
68	3	-0.88				0.770		
74	3	0.51				0.938		
75	4	-0.24					0.847	
81	2	1.11		1.010				
88	2	-1.22					0.729	
89	4	-0.15				0.858		
90	4	0.24				0.905		
97	4	-0.13		0.860				
104	2	-1.34				0.714		
105	2	1.44				1.050		
118	3	-0.79				0.780		
119	4	-0.46						0.820
120	3	-0.61				0.802		
129	2	1.45			1.051			
134	4	-0.05					0.870	
139	4	-0.12		0.861				
140	2	1.36		1.040				
141	4	-0.05		0.870				
145	2	-1.29					0.720	
151	0	6.24						1.630
167	4	0.16		0.895				
182	0	4.67			1.440			
201	2	1.44			1.050			

MPV =	0.876	+/- 0.029
F-pseudosigma =	0.121	
N =	31	
Hu =	0.974	
Hl =	0.811	

Table 14. *--Statistical summary of reported data for standard reference water sample N-37 (nonpreserved nutrients)--Continued*



0. Other
22. Color: other
22n. Color:Nesslerization
22p. Color: indophenol
22s. Color: salicylate
40. Ion electrode

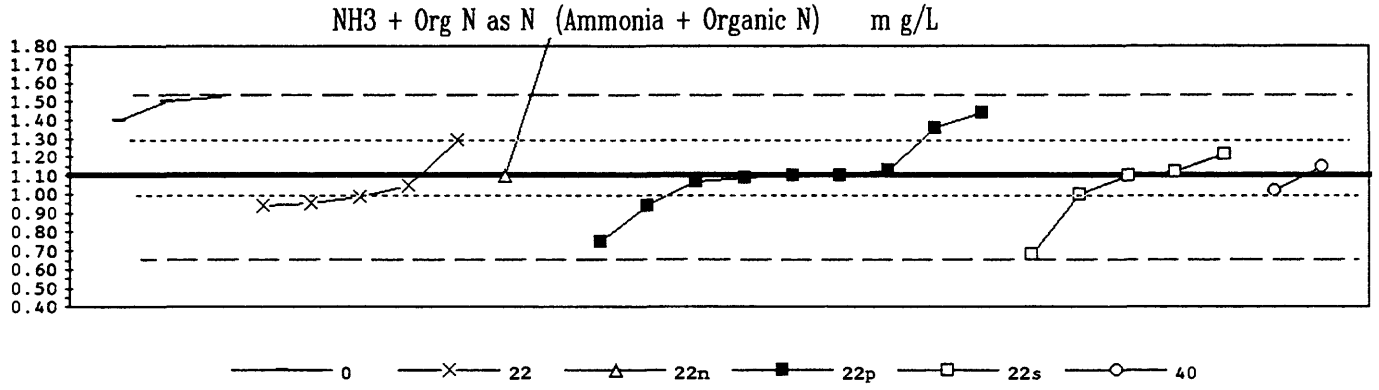
	0	22	22n	22p	22s	40
N =	3	11	2	25	4	15
Minimum =	0.728	0.748	0.924	0.804	0.890	0.483
Maximum =	0.800	1.050	1.440	2.920	1.071	0.950
Median =		0.937		0.914		0.920
St Dev =		0.052		0.053		0.048

MPV = 0.920 +/- 0.010
F-pseudosigma = 0.058
N = 60
Hu = 0.950
Hl = 0.872

Lab	Rating	Z-value	0	22	22n	22p	22s	40
3	3	-0.81		0.873				
6	4	-0.34						0.900
9	2	-1.36				0.841		
10	4	0.00						0.920
12	4	-0.34				0.900		
13	4	-0.26				0.905		
15	4	0.17						0.930
16	0	-3.30	0.728					
18	1	-1.99				0.804		
19	4	0.00		0.920				
20	NR		< 2					
25	4	0.34						0.940
32	0	-2.20	0.792					
33	0	2.23		1.050				
37	1	1.89		1.030				
38	4	0.48				0.948		
41	3	0.52						0.950
46	4	-0.50				0.891		
52	2	1.20				0.990		
55	4	-0.34				0.900		
57	1	-1.72						0.820
58	0	-2.66						0.765
59	4	0.34				0.940		
68	4	0.17						0.930
70	1	-1.55				0.830		
76	4	-0.10				0.914		
84	0	15.47				1.820		
85	4	-0.34		0.900				
87	2	-1.20				0.850		
88	0	2.59					1.071	
89	4	-0.17				0.910		
91	4	0.00				0.920		
92	3	0.52						0.950
94	3	0.52				0.950		
96	4	-0.27		0.904				
97	2	1.03		0.980				
100	4	0.24				0.934		
102	3	0.69				0.960		
104	4	0.33				0.939		
111	2	1.07				0.982		
113	2	1.36				0.999		
114	1	-1.79						0.816
118	1	-1.55				0.830		
119	3	-0.86						0.870
123	0	34.37				2.920		
127	3	0.53					0.951	
129	4	0.07			0.924			
133	3	0.52						0.950
134	4	-0.34					0.900	
138	3	0.52				0.950		

Lab	Rating	Z-value	0	22	22n	22p	22s	40
145	3	-0.52					0.890	
149	4	-0.34						0.900
155	4	-0.32				0.901		
158	0	-2.96		0.748				
161	0	-7.51						0.483
167	4	0.29		0.937				
180	2	1.22		0.991				
182	0	8.94			1.440			
197	2	1.10		0.984				
198	0	-2.06	0.800					
202	2	-1.20						0.850

Table 14. *--Statistical summary of reported data for standard reference water sample N-37 (preserved nutrients)--Continued*



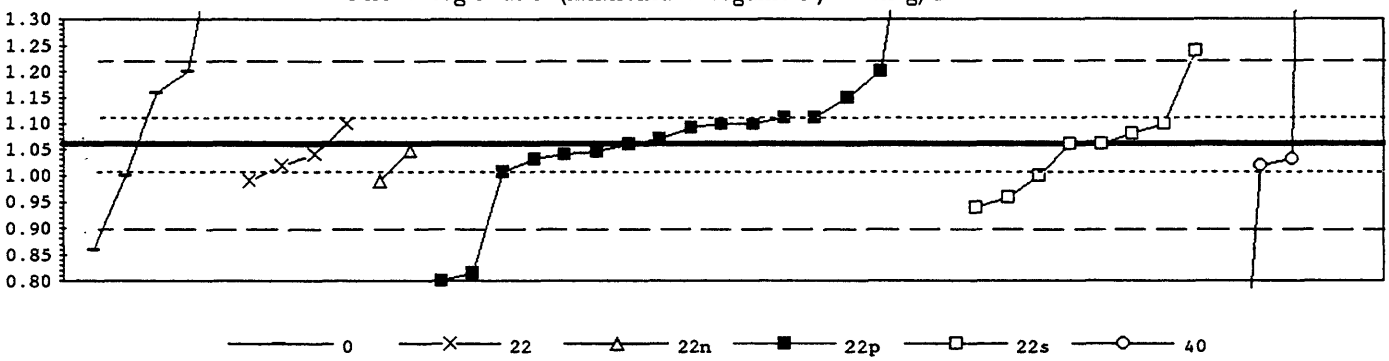
0. Other				22p. Color: indophenol				
22. Color: other				22s. Color: salicylate				
22n. Color: Nesslerization				40. Ion electrode				
		N =	3	5	2	9	5	2
		Minimum =	1.40	0.94	1.10	0.75	0.68	1.02
		Maximum =	1.52	1.29	1.89	1.44	1.22	1.15
		Median =				1.10		
		St Dev =				0.20		

Lab	Rating	Z-value	0	22	22n	22p	22s	40
1	4	-0.17				1.06		
11	1	1.95	1.52					
15	4	-0.37						1.02
20	NR					< 5		
23	3	0.56					1.22	
28	1	1.85	1.50					
48	4	0.00				1.10		
52	1	-1.61				0.75		
61	3	-0.74				0.94		
63	2	1.39	1.40					
68	3	-0.70		0.95				
74	4	0.00				1.10		
79	1	-1.95					0.68	
81	3	-0.51		0.99				
89	4	-0.47					1.00	
90	4	-0.05				1.09		
97	3	-0.74		0.94				
105	1	1.58				1.44		
118	2	1.21				1.36		
119	4	0.23						1.15
120	4	0.13				1.13		
129	0	3.65			1.89			
134	4	0.00					1.10	
139	4	-0.23		1.05				
140	3	0.88		1.29				
141	4	0.00			1.10			
145	4	0.09					1.12	

MPV =	1.10	+/- 0.06
F-pseudosigma =	0.22	
N =	26	
Hu =	1.29	
Hl =	1.00	

Table 14. *--Statistical summary of reported data for standard reference water sample N-37 (nonpreserved nutrients)--Continued*

NH3 + Org N as N (Ammonia + Organic N) m g/L

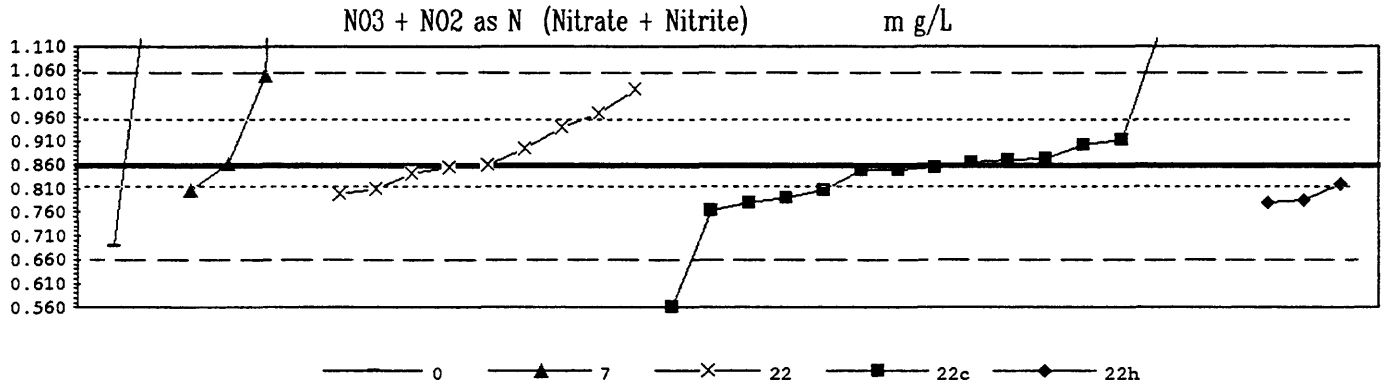


0. Other					22p. Color: indophenol			
22. Color: other					22s. Color: salicylate			
22n. Color: Nesslerization					40. Ion electrode			
		N =	5	4	2	17	8	5
		Minimum =	0.86	0.99	0.99	0.80	0.94	0.21
		Maximum =	1.50	1.10	1.05	2.26	1.24	5.23
		Median =				1.09	1.06	
		St Dev =				0.05	0.09	

			MPV =	1.06 +/- 0.02
			F-pseudosigma =	0.08
			N =	41
			Hu =	1.11
			Hl =	1.01

Lab	Rating	Z-value	0	22	22n	22p	22s	40
3	2	1.30	1.16					
9	2	1.17				1.15		
10	4	0.00				1.06		
12	0	-3.38				0.80		
13	3	0.65				1.11		
15	3	-0.52						1.02
16	0	-2.61	0.86					
18	4	-0.18				1.05		
20	NR					< 5		
28	3	-0.78	1.00					
38	3	-0.91			0.99			
41	0	36.29						3.85
46	4	-0.39				1.03		
52	0	-3.17				0.82		
55	3	0.52				1.10		
57	0	5.72	1.50					
59	3	-0.78					1.00	
85	3	0.52		1.10				
87	3	0.52				1.10		
89	1	-1.59					0.94	
91	4	-0.26				1.04		
94	4	0.13				1.07		
96	3	-0.92		0.99				
97	4	-0.26		1.04				
100	0	15.61				2.26		
102	3	0.65				1.11		
104	4	0.40				1.09		
113	2	-1.31					0.96	
118	1	1.82				1.20		
119	4	-0.39						1.03
123	0	6.89				1.59		
127	4	0.26					1.08	
129	4	-0.16			1.05			
133	0	-11.06						0.21
134	3	0.52					1.10	
138	4	0.00					1.06	
145	4	0.00					1.06	
155	3	-0.70				1.01		
180	3	-0.52		1.02				
183	0	54.25						5.23
198	1	1.82	1.20					
202	0	2.34					1.24	

Table 14. *--Statistical summary of reported data for standard reference water sample N-37 (preserved nutrients)--Continued*

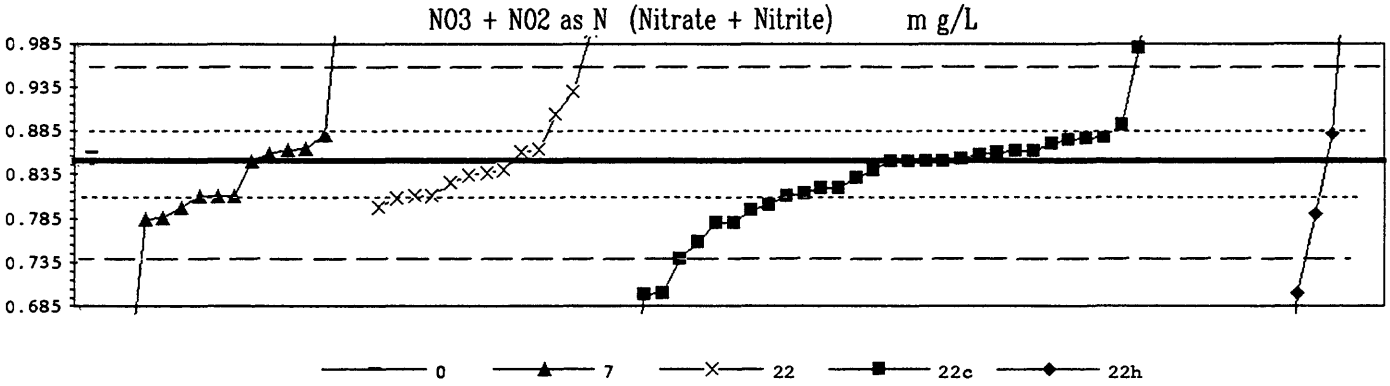


0. Other			22c. Color: Cd diazo				
7. IC			22h. Color: hydrazine diazo				
22. Color: other							
		N =	2	4	9	16	3
		Minimum =	0.690	0.806	0.799	0.560	0.780
		Maximum =	1.312	2.700	1.020	4.100	0.820
		Median =			0.857	0.852	
		St Dev =			0.081	0.047	

Lab	Rating	Z-value	0	7	22	22c	22h
1	4	-0.04				0.853	
11	1	-1.68	0.690				
20	4	0.07		0.863			
23	4	0.14				0.870	
28	0	18.56		2.700			
29	1	1.95		1.050			
42	3	-0.51		0.806			
43	4	0.04			0.860		
45	4	0.16				0.872	
48	3	-0.77					0.780
52	4	-0.50				0.807	
53	3	-0.92				0.765	
61	4	-0.07				0.850	
63	1	1.65			1.020		
74	3	0.58				0.914	
75	4	0.09				0.865	
78	0	2.85				1.140	
81	4	-0.04			0.853		
88	0	4.56				1.309	
90	3	-0.72					0.785
97	3	0.84			0.940		
105	3	-0.67				0.790	
118	4	-0.37					0.820
119	2	1.14			0.970		
129	4	0.45				0.901	
133	0	-2.98				0.560	
134	4	-0.07				0.850	
139	3	-0.58			0.799		
140	4	-0.49			0.808		
141	4	-0.17			0.840		
145	3	-0.77				0.780	
167	4	0.38			0.894		
182	0	32.65				4.100	
201	0	4.59	1.312				

MPV =	0.857	+/- 0.023
F-pseudosigma =	0.099	
N =	34	
Hu =	0.940	
Hl =	0.806	

Table 14. *--Statistical summary of reported data for standard reference water sample N-37 (nonpreserved nutrients)--Continued*



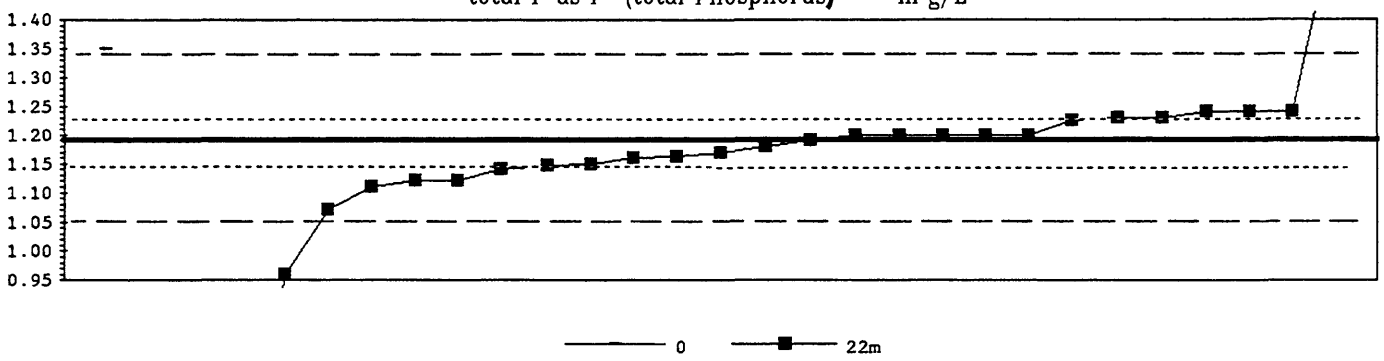
0. Other
7. IC
22. Color: other
22c. Color: Cd diazo
22h. Color: hydrazine diazo

	1	15	14	37	6
N =					
Minimum =	0.860	0.570	0.797	0.530	0.417
Maximum =		5.000	1.090	3.700	2.130
Median =		0.811	0.834	0.850	
St Dev =		0.035	0.037	0.048	

MPV = 0.850 +/- 0.009
F-pseudosigma = 0.054
N = 73
Hu = 0.880
Hl = 0.807

Lab	Rating	Z-value	0	7	22	22c	22h
3	4	-0.24			0.837		
6	0	4.62				1.100	
8	0	5.73					1.160
9	3	0.78				0.892	
10	4	0.18				0.860	
12	3	-0.55				0.820	
13	4	0.50				0.877	
15	0	5.36				1.140	
16	0	4.44			1.090		
18	3	-0.68				0.813	
19	4	0.18			0.860		
20	4	0.17		0.859			
25	4	0.28		0.865			
28	0	76.69		5.000			
29	4	0.00		0.850			
32	3	-0.72		0.811			
33	0	-5.17		0.570			
37	4	0.24		0.863			
38	4	0.22				0.862	
41	0	5.73				1.160	
42	3	-0.98		0.797			
45	4	0.44				0.874	
46	3	0.59					0.882
52	3	-0.72				0.811	
55	3	-0.55				0.820	
57	0	-5.91				0.530	
58	0	4.81		1.110			
59	4	0.00				0.850	
68	3	-0.74			0.810		
69	4	0.37				0.870	
70	0	-2.03				0.740	
76	2	-1.20		0.785			
78	0	4.99				1.120	
83	0	-2.77				0.700	
84	0	12.94				1.550	
85	4	-0.18			0.840		
87	4	0.00				0.850	
88	0	8.59				1.315	
89	4	0.20				0.861	
91	0	-2.77					0.700
94	2	-1.02				0.795	
96	4	-0.30			0.834		
97	2	1.48			0.930		
100	4	0.48				0.876	
102	3	-0.92				0.800	
104	4	-0.35				0.831	
108	3	-0.74			0.810		
113	0	-2.79				0.699	
114	0	-8.00					0.417
118	2	-1.11					0.790
119	0	2.77			1.000		
120	4	-0.18				0.840	
123	0	23.65					2.130
127	4	0.04				0.852	
129	4	0.13				0.857	
133	0	2.40				0.980	
134	4	0.00				0.850	
138	4	0.00				0.850	
145	2	-1.29				0.780	
146	3	-0.98			0.797		
149	3	-0.74		0.810			
155	1	-1.69				0.759	
158	4	0.24			0.863		
161	2	-1.18		0.786			
167	3	1.00			0.904		
180	4	-0.46			0.825		
182	0	52.67				3.700	
191	3	-0.74		0.810			
193	3	0.55		0.880			
196	0	-4.93		0.583			
197	3	-0.79			0.807		
198	4	0.18	0.860				
202	2	-1.29				0.780	

Table 14. *--Statistical summary of reported data for standard reference water sample N-37 (preserved nutrients)--Continued*



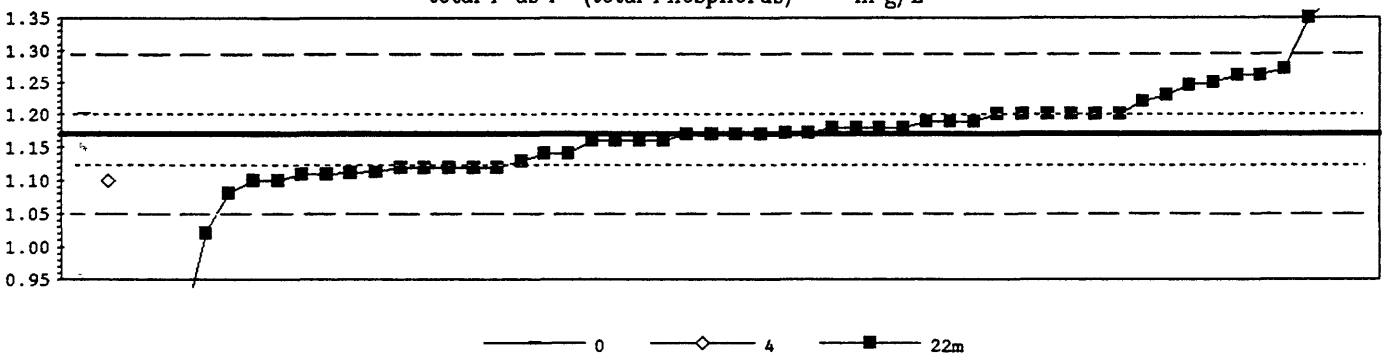
0. Other					
4. ICP					
22m. Color: phosphomolybdate					
		N =	1	0	28
		Minimum =	1.35		0.12
		Maximum =			3.11
		Median =			1.19
		St Dev =			0.05

Lab	Rating	Z-value	0	4	22m
1	3	0.54			1.23
11	0	2.40	1.35		
15	0	-9.44			0.56
20	3	0.75			1.24
23	3	0.60			1.23
28	0			< 0.1	
45	4	-0.45			1.16
48	4	0.15			1.20
61	3	0.60			1.23
63	4	0.15			1.20
68	0	-16.07			0.12
74	3	0.75			1.24
75	4	0.00			1.19
78	0	5.70			1.57
79	0	-3.45			0.96
81	0	28.78			3.11
89	3	-0.60			1.15
92	3	-0.66			1.15
105	4	-0.30			1.17
118	4	0.15			1.20
119	2	-1.05			1.12
129	1	-1.80			1.07
133	2	-1.20			1.11
134	4	0.15			1.20
139	4	-0.42			1.16
140	4	0.15			1.20
141	3	0.75			1.24
145	3	-0.75			1.14
182	2	-1.05			1.12
201	4	-0.16			1.18

MPV =	1.19	+/- 0.02
F-pseudosigma =	0.07	
N =	29	
Hu =	1.23	
Hl =	1.14	

Table 14. *--Statistical summary of reported data for standard reference water sample N-37 (nonpreserved nutrients)--Continued*

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



0. Other
4. ICP
22. Color: phosphomolybdate

N =	1	1	52
Minimum =	1.20	1.10	0.32
Maximum =			5.84
Median =			1.17
St Dev =			0.05

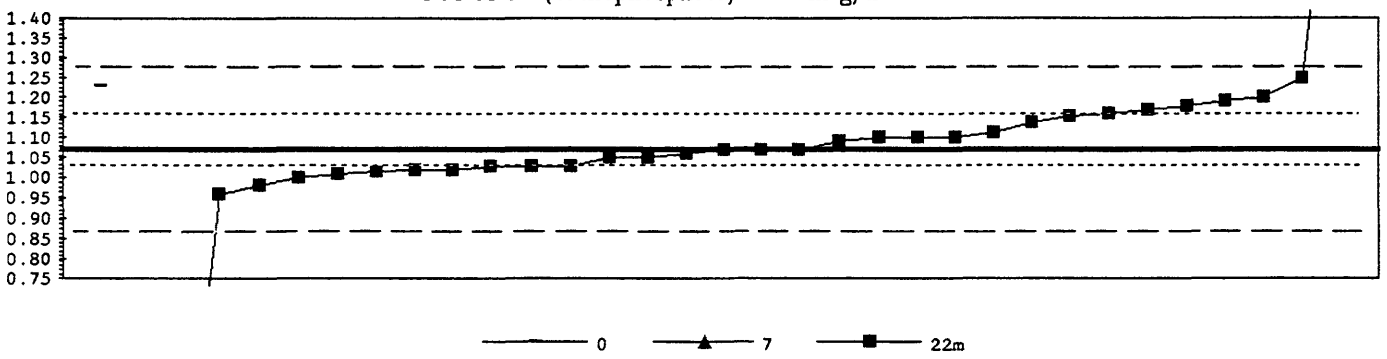
Lab	Rating	Z-value	0	4	22m
3	1	-1.52			1.08
6	1	1.52			1.26
8	4	0.34			1.19
9	4	-0.17			1.16
10	4	0.34			1.19
12	2	1.35			1.25
13	4	0.00			1.17
15	0	-9.27			0.62
16	4	0.00			1.17
18	4	0.00			1.17
19	4	-0.17			1.16
20	0	3.54			1.38
22	4	-0.17			1.16
25	2	-1.18		1.10	
28	0			< 0.1	
38	4	0.02			1.17
45	3	-0.84			1.12
46	4	-0.17			1.16
55	3	0.51			1.20
57	3	0.51			1.20
58	0	-2.53			1.02
59	2	-1.18			1.10
78	1	1.69			1.27
85	3	-0.67			1.13
87	3	-0.84			1.12
89	4	0.17			1.18
91	3	0.51			1.20
92	4	0.02			1.17
94	2	1.26			1.25
96	4	0.34			1.19
100	4	0.17			1.18
102	0	-14.33			0.32
104	3	0.99			1.23
108	1	1.52			1.26
111	3	-0.96			1.11
113	2	-1.18			1.10
114	3	-0.51			1.14
118	3	0.51			1.20
119	2	-1.01			1.11
120	3	-0.84			1.12
123	4	0.00			1.17
127	4	0.17			1.18
129	3	-0.86			1.12
134	3	0.51			1.20
138	2	-1.01			1.11
145	3	-0.51			1.14
149	0	-5.06			0.87
155	3	-0.99			1.11
158	0	3.04			1.35
161	3	0.84			1.22

MPV =	1.17	+/- 0.01
F-pseudosigma =	0.06	
N =	54	
Hu =	1.20	
Hl =	1.12	

Lab	Rating	Z-value	0	4	22m
180	4	0.17			1.18
182	3	-0.84			1.12
183	0	78.75			5.84
198	3	0.51		1.20	
202	3	0.51			1.20

Table 14. *--Statistical summary of reported data for standard reference water sample N-37 (preserved nutrients)--Continued*

P04 as P (Orthophosphate) m g/L



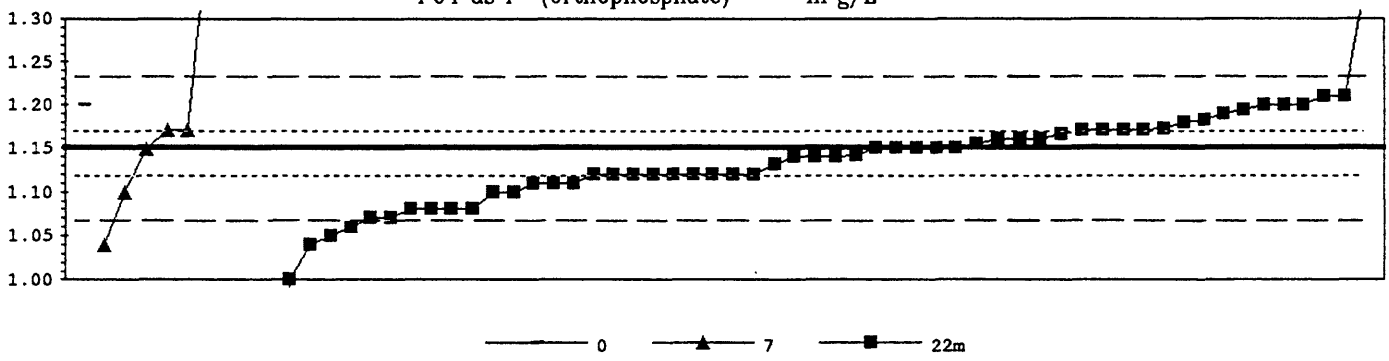
0. Other
7. IC
22m. Color: phosphomolybdate

N =	1	1	31
Minimum =	1.23	5.60	0.10
Maximum =			2.05
Median =			1.07
St Dev =			0.07

MPV = 1.07 +/- 0.02
F-pseudosigma = 0.10
N = 33
Hu = 1.16
Hl = 1.03

Lab	Rating	Z-value	0	7	22m
1	4	-0.20			1.05
11	1	1.66	1.23		
15	4	-0.42			1.03
20	3	0.93			1.16
23	2	1.04			1.17
28	0	47.01		5.60	
29	2	-1.14			0.96
45	4	0.21			1.09
48	0	-10.02			0.10
52	2	1.35			1.20
61	4	-0.42			1.03
63	4	0.31			1.1
74	2	1.14			1.18
75	3	-0.73			1.00
78	4	0.47			1.12
81	0	10.17			2.05
88	3	0.89			1.16
89	4	-0.21			1.05
90	4	0.00			1.07
92	4	0.00			1.07
97	3	0.73			1.14
105	4	-0.10			1.06
118	4	-0.42			1.03
119	3	-0.62			1.01
129	3	-0.55			1.02
133	3	-0.52			1.02
134	4	0.31			1.10
140	3	-0.93			0.98
141	4	0.31			1.10
145	4	0.00			1.07
167	2	1.26			1.19
182	1	1.87			1.25
201	3	-0.54			1.02

Table 14. *--Statistical summary of reported data for standard reference water sample N-37 (nonpreserved nutrients)--Continued*



0. Other
7. IC
22m. Color: phosphomolybdate

	1	8	55
N =	1	8	55
Minimum =	1.20	1.04	0.33
Maximum =		4.10	1.34
Median =		1.15	1.15
St Dev =		0.06	0.04

MPV = 1.15 +/- 0.01
F-pseudosigma = 0.04
N = 64
Hu = 1.17
Hl = 1.11

Lab	Rating	Z-value	0	7	22m
3	1	-1.70			1.07
6	4	0.33			1.16
8	3	-0.80			1.11
9	0	-2.15			1.05
10	3	1.00			1.19
12	4	0.10			1.15
13	4	-0.12			1.14
15	4	0.10			1.15
16	3	-0.57			1.12
18	4	0.46			1.17
19	3	-0.57			1.12
20	2	-1.47			1.08
25	2	1.23			1.20
28	0	66.43		4.10	
29	0	-2.37			1.04
32	4	0.08		1.15	
33	3	0.55		1.17	
37	0	54.74		3.58	
38	4	0.12			1.15
45	3	0.55			1.17
46	4	-0.12			1.14
52	0	4.37			1.34
55	4	-0.12			1.14
57	0	-3.27			1.00
58	0	-18.27			0.33
59	3	-0.57			1.12
78	2	-1.47			1.08
83	2	1.45			1.21
84	3	0.55			1.17
85	3	-0.57			1.12
87	3	-0.57			1.12
88	2	1.09			1.19
89	4	0.33			1.16
92	3	0.60			1.17
96	2	-1.02			1.10
97	3	0.78			1.18
100	3	-0.57			1.12
102	1	-1.70			1.07
104	3	0.82			1.18
108	2	-1.47			1.08
111	0	5.72		1.40	
113	4	0.10			1.15
118	1	-1.92			1.06
119	3	-0.57			1.12
120	3	-0.57			1.12
127	4	0.33			1.16
129	4	-0.08			1.14
134	2	1.23			1.20
138	3	-0.57			1.12
139	4	0.21			1.16
145	3	0.55			1.17
146	3	-0.80			1.11
155	2	-1.47			1.08
158	4	0.10			1.15
161	3	-0.80			1.11
167	4	-0.33			1.13
180	3	0.55			1.17
182	2	-1.02			1.10
183	2	1.45			1.21
191	0	-2.37		1.04	
196	2	-1.02		1.10	
197	3	0.55		1.17	
198	2	1.23	1.20		
202	2	1.23			1.20

Table 15.-- *Statistical summary of reported data for standard reference sample P-19 (low ionic strength constituents)*

Definition of analytical methods, abbreviations, and symbols

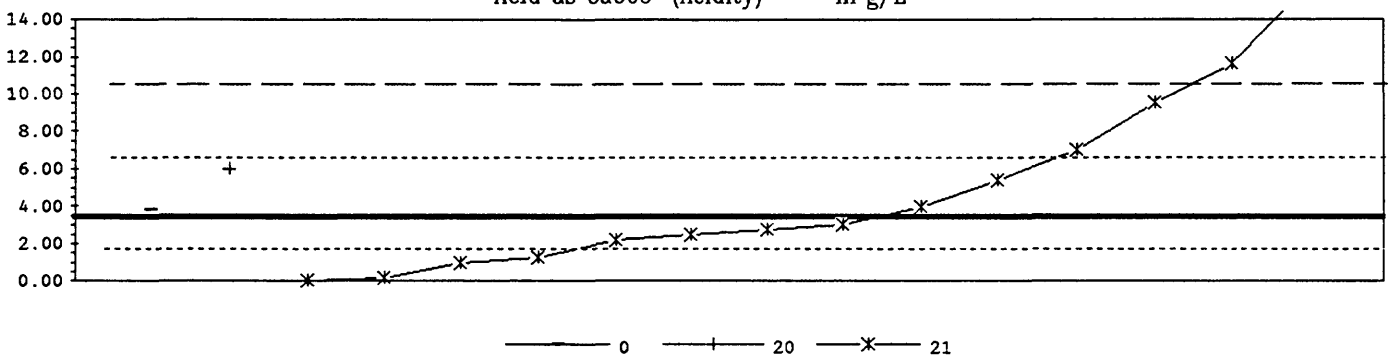
Analytical methods

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	=	specific ion 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
Hl =	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

Table 15. *--Statistical summary of reported data for standard reference water sample P-19 (low ionic strength)--Continued*

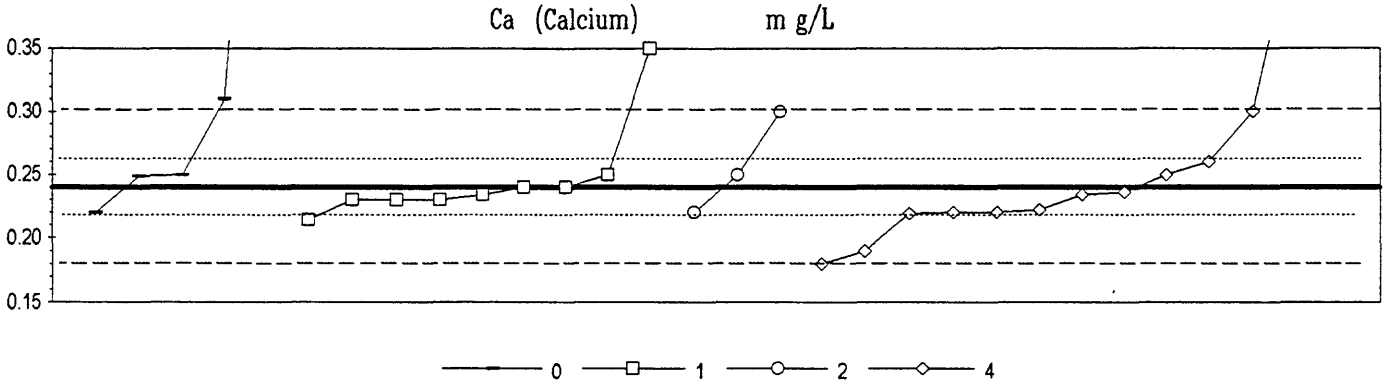


0. Other			
20. Titration: colorimetric			
21. Titration: electrometric			
N =	1	1	14
Minimum =	3.85	6.00	0.02
Maximum =			15.80
Median =			2.50
St Dev =			2.15

Lab	Rating	Z-value	0	20	21
1	3	-0.96			0.02
3	2	1.01			7.00
11	4	0.12	3.85		
15	4	0.15			3.96
23	4	-0.26			2.50
38	3	-0.92			0.15
52	0	2.31			11.60
61	3	-0.61			1.25
63	3	0.73		6.00	
78	3	-0.68			1.00
89	4	-0.19			2.74
92	4	-0.35			2.19
105	3	0.56			5.40
136	0	3.49			15.80
141	1	1.71			9.50
158	4	-0.12			3.00

MPV =	3.43	+/- 1.20
F-pseudosigma =	3.54	
N =	16	
Hu =	6.50	
Hl =	1.72	

Table 15. *--Statistical summary of reported data for standard reference water sample P-19 (low ionic strength)--Continued*

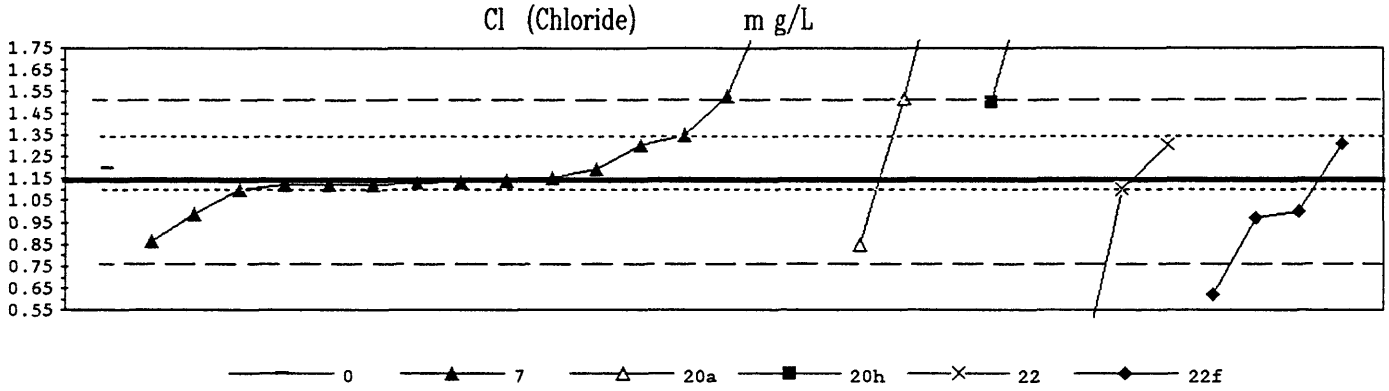


0. Other			4. ICP			
1. AA: direct air						
2. AA: direct N2O						
	N =		5	9	3	13
	Minimum =		0.22	0.21	0.22	0.18
	Maximum =		0.75	0.35	0.30	12.60
	Median =			0.23		0.22
	St Dev =			0.01		0.03

Lab	Rating	Z-value	0	1	2	4
1	4	0.07		0.24		
2	4	0.37	0.25			
3	0	2.09				0.30
11	3	-0.61	0.22			
15	4	-0.13				0.23
23	NR				< 1	
28	0	416.91				12.60
33	4	0.40	0.25			
37	NR	< 0.244				
38	4	0.40			0.25	
39	3	0.74				0.26
46	3	-0.54				0.22
48	0	7.15				0.45
52	NR					< 0.6
58	4	-0.27		0.23		
61	3	-0.64				0.22
63	3	-0.61			0.22	
64	3	-0.61				0.22
74	4	-0.07				0.24
78	4	-0.27		0.23		
89	3	-0.81		0.21		
92	0	3.78		0.35		
101	4	0.07		0.24		
105	4	0.40				0.25
123	4	0.40		0.25		
134	3	-0.61				0.22
136	0	2.09			0.30	
141	1	-1.62				0.19
145	1	-1.96				0.18
155	0	17.27	0.75			
158	0	2.43	0.31			
164	4	-0.13		0.23		
167	NR					< 1
196	4	-0.27		0.23		

MPV =	0.24	+/- 0.01
F-pseudosigma =	0.03	
N =	30	
Hu =	0.26	
Hl =	0.22	

Table 15. *--Statistical summary of reported data for standard reference water sample P-19 (low ionic strength)--Continued*



0. Other				20h. Titration: Hg				
7. IC				22. Color: other				
20a. Titration:Ag				22f. Color: Fe(SCN)				
		N =	1	16	3	2	3	4
		Minimum =	1.20	0.87	0.85	1.50	0.19	0.62
		Maximum =		8.00	2.30	2.20	1.30	1.31
		Median =		1.13				
		St Dev =		0.16				

Lab	Rating	Z-value	0	7	20a	20h	22	22f
1	4	-0.04		1.13				
2	4	-0.07		1.13				
3	3	0.86					1.30	
11	4	0.32	1.20					
15	2	1.13		1.35				
28	3	0.86		1.30				
33	4	0.05		1.15				
37	NR			< 6				
42	4	0.00		1.14				
46	2	-1.48		0.87				
48	3	-0.76						1.00
52	3	0.92						1.31
61	0	-2.81						0.62
63	0	-5.13					0.19	
64	3	-0.92						0.97
74	0	2.10		1.53				
78	1	1.94				1.50		
89	0	2.05			1.52			
92	0	5.72				2.20		
101	0	6.26			2.30			
105	0	4.64		2.00				
134	4	-0.11		1.12				
136	0	37.02		8.00				
141	4	-0.22					1.10	
145	3	-0.81		0.99				
158	4	-0.22		1.10				
167	NR		< 1					
191	4	-0.09		1.12				
196	4	0.27		1.19				
197	4	-0.09		1.12				
202	1	-1.56			0.85			

MPV =	1.14	+/- 0.05
F-pseudosigma =	0.19	
N =	29	
Hu =	1.35	
Hl =	1.10	

Table 15. *--Statistical summary of reported data for standard reference water sample P-19 (low ionic strength)--Continued*

F (Fluoride) m g/L

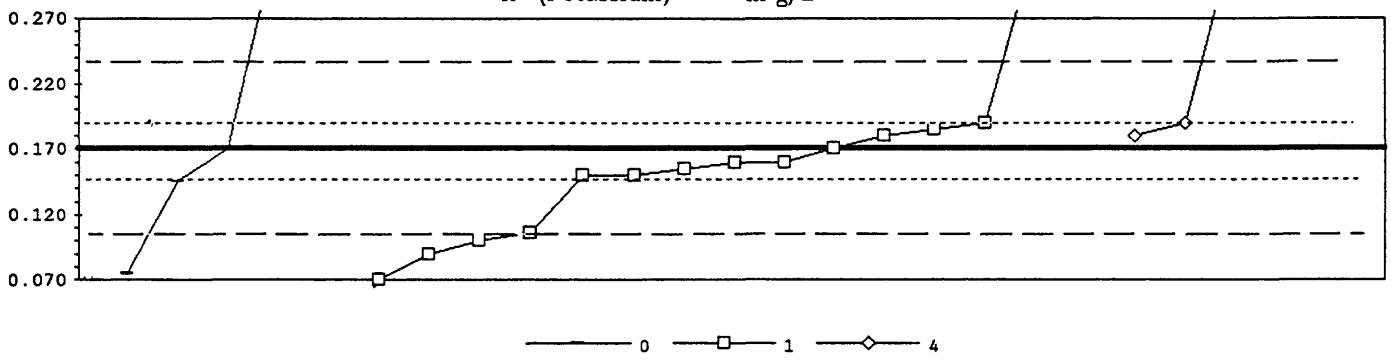
0. Other		40. Ion electrode			
7. IC					
22. Colorimetric					
N =	1	3	0	3	
Minimum =	0.01	0.00		0.01	
Maximum =		0.05		0.06	
Median =					
St Dev =					

Lab	Rating	Z-value	0	7	22	40	
1				0.025			
3					< 0.1		INSUFFICIENT DATA
11			0.009	0			
23						< 0.1	NOT RATED
28				< 0.1			
33				< 0.01			
42						0.060	
46						0.013	
52						< 0.1	
61						0.015	
63						< 0.2	
74						< 0.02	
78						< 0.10	
89						< 0.100	
105				< 0.2			
134						< 1.0	
141						< 0.1	
145				< 0.20			
167						< 0.05	
196				0.051			

MPV =	0.020	+/- 0.015
F-pseudosigma =	0.028	
N =	6	
Hu =	0.051	
Hl =	0.013	

Table 15. *--Statistical summary of reported data for standard reference water sample P-19 (low ionic strength)--Continued*

K (Potassium) m g/L



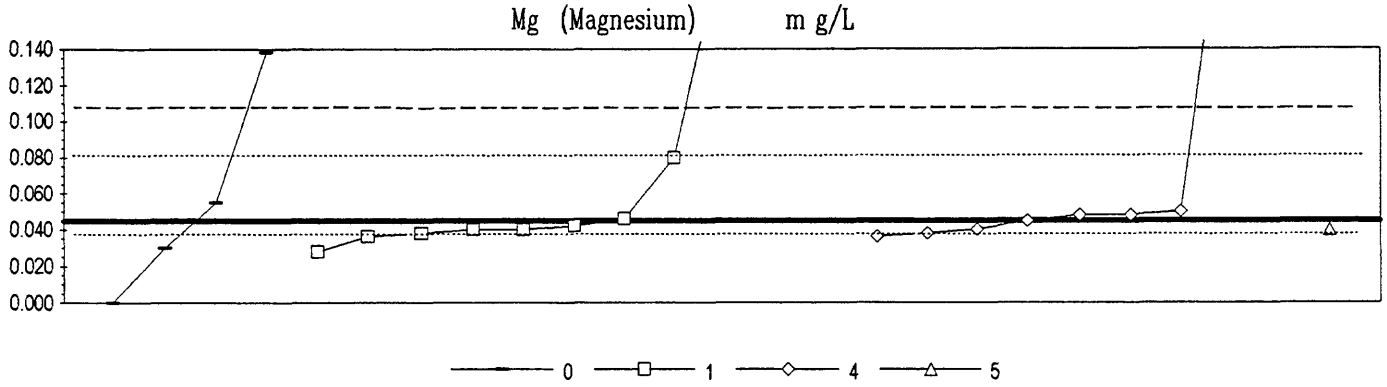
0. Other
1. AA: direct air
4. ICP

N =	3	16	5
Minimum =	0.075	0.015	0.180
Maximum =	0.330	5.750	2.500
Median =		0.160	
St Dev =		0.024	

MPV = 0.170 +/- 0.009
F-pseudosigma = 0.033
N = 25
Hu = 0.190
Hl = 0.146

Lab	Rating	Z-value	0	1	4
1	0	-4.75		0.015	
2	3	-0.74	0.146		
3	3	0.61		0.190	
11	0	-2.91	0.075		
15	3	-0.61		0.150	
23	4	-0.46		0.155	
28	0	71.44			2.500
33	4	0.00	0.170		
37	0	4.91	0.330		
38	4	-0.31		0.160	
46	3	0.61			0.190
48	0	5.83			0.360
52	NR				< 0.2
58	4	0.31		0.180	
61	NR				< 1
63	NR			< 0.2	
64	3	-0.61		0.150	
74	4	0.31			0.180
78	0	-2.45		0.090	
89	4	0.46		0.185	
92	0	171.08		5.750	
101	4	-0.31		0.160	
105	NR				< 0.4
123	0	-2.15		0.100	
134	0	4.91		0.330	
136	0	-3.07		0.070	
141	0	5.21			0.340
145	0				< 0.1
164	1	-1.96		0.106	
167	NR				< 1
196	4	0.00		0.170	

Table 15. *--Statistical summary of reported data for standard reference water sample P-19 (low ionic strength)--Continued*



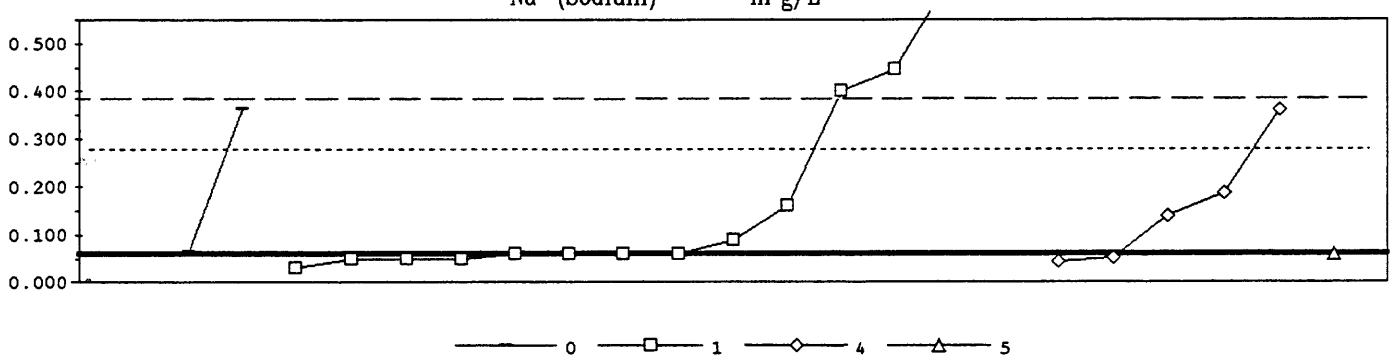
0. Other			4. ICP				
1. AA: direct air			5. DCP				
2. AA: direct N2O							
		N =	4	29	0	9	1
		Minimum =	0.00	0.03		0.04	0.04
		Maximum =	0.14	7.00		2.80	
		Median =		4.00		0.05	
		St Dev =		2.23		0.91	

Lab	Rating	Z-value	0	1	2	4	5
1	4	-0.22		0.038			
2	4	0.32	0.055				
3	NR					< 0.1	
11	4	-0.48	0.030				
15	4	0.10				0.048	
23	NR			< 0.2			
28	0	88.49				2.800	
33	4	-0.16					0.040
37	0	2.99	0.138				
38	4	0.03		0.046			
39	4	0.10				0.048	
46	4	-0.22				0.038	
48	0	6.58				0.250	
52	NR					< 0.05	
58	3	-0.55		0.028			
61	NR					< 1	
63	NR				< 0.2		
64	4	-0.16				0.040	
74	4	0.16				0.050	
78	0	13.33		0.460			
89	4	-0.29		0.036			
92	2	1.12		0.080			
101	4	-0.16		0.040			
105	4	0.00				0.045	
123	4	-0.16		0.040			
134	4	-0.29				0.036	
136	0	4.98		0.200			
145	NR					< 0.025	
155	NR	-1.45	0.000				
164	0	9.43		0.339			
167	NR					< 1	
196	4	-0.10		0.042			

MPV =	0.045 +/- 0.008
F-pseudosigma =	0.031
N =	25
Hu =	0.080
Hl =	0.038

Table 15. *--Statistical summary of reported data for standard reference water sample P-19 (low ionic strength)--Continued*

Na (Sodium) m g/L

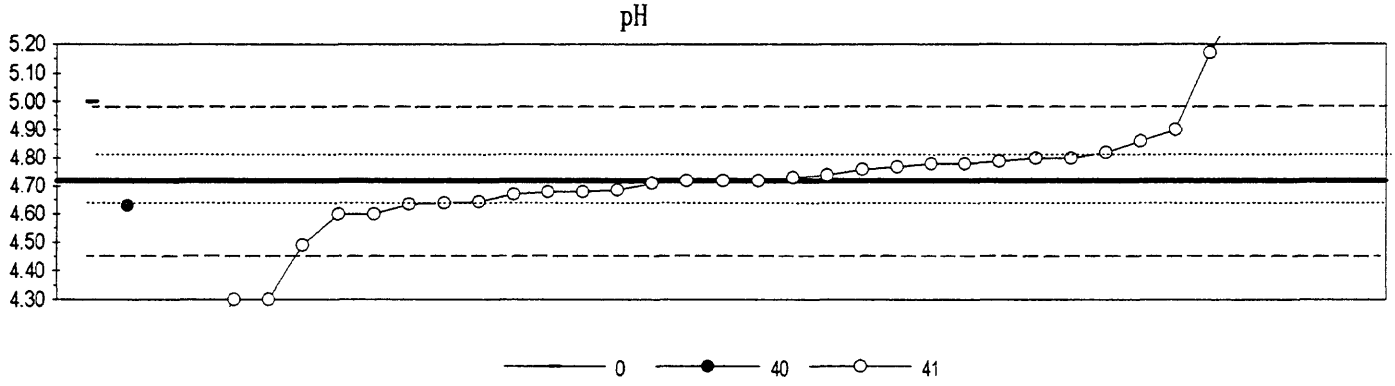


0. Other			5. DCP			
1. AA: direct air						
4. ICP						
	N =	3	14	5	1	
	Minimum =	0.060	0.030	0.043	0.060	
	Maximum =	0.364	1.800	0.360		
	Median =		0.060			
	St Dev =		0.036			

Lab	Rating	Z-value	0	1	4	5
1	4	-0.07		0.049		
2	4	0.04	0.066			
3	0	10.74		1.800		
11	4	0.00	0.060			
15	3	0.79			0.188	
23	NR			< 0.1		
33	4	0.00				0.060
37	1	1.88	0.364			
38	4	0.00		0.060		
39	4	-0.06			0.051	
46	4	-0.10			0.043	
48	1	1.85			0.360	
52	NR				< 0.03	
61	NR				< 1	
63	0	3.52		0.630		
64	4	0.00		0.060		
74	4	0.49			0.140	
78	3	0.62		0.160		
89	4	-0.06		0.050		
92	0	2.10		0.400		
101	4	-0.06		0.050		
105	NR				< 0.2	
123	4	-0.19		0.030		
134	4	0.19		0.090		
136	4	0.00		0.060		
145	NR				< 0.04	
164	0	2.38		0.446		
167	NR				< 1	
196	4	0.00		0.060		

MPV =	0.060	+/- 0.046
F-pseudosigma =	0.162	
N =	23	
Hu =	0.274	
Hl =	0.056	

Table 15. *--Statistical summary of reported data for standard reference water sample P-19 (low ionic strength)--Continued*



0. Other					
40. Ion electrode					
41. Electrometric					
	N =		1	1	35
	Minimum =		5.00	4.63	3.79
	Maximum =				7.80
	Median =				4.72
	St Dev =				0.09

Lab	Rating	Z-value	0	40	41
1	3	-0.60			4.64
2	4	-0.27			4.69
3	2	1.09			4.86
11	0	2.19	5.00		
15	0	-7.27			3.79
23	0	5.16			5.38
28	2	1.41			4.90
33	4	0.31			4.76
37	0	10.32			6.04
38	3	0.63			4.80
39	0	3.52			5.17
41	0	20.18			7.30
42	4	0.00			4.72
46	4	-0.31			4.68
48	0	24.09			7.80
52	4	0.47			4.78
58	4	-0.39			4.67
61	3	0.78			4.82
63	0	-3.28			4.30
64	4	0.00			4.72
74	3	-0.63			4.64
78	3	0.55			4.79
89	4	0.08			4.73
92	4	0.39			4.77
101	1	-1.80			4.49
105	4	0.47			4.78
123	3	0.63			4.80
134	4	-0.31			4.68
136	3	-0.94			4.60
141	3	-0.94			4.60
145	0	-4.85			4.10
155	0	-3.28			4.30
158	3	-0.70		4.63	
164	3	-0.66			4.64
167	4	0.16			4.74
197	4	0.00			4.72
202	4	-0.08			4.71

MPV =	4.72	+/- 0.03
F-pseudosigma =	0.13	
N =	37	
Hu =	4.81	
Hl =	4.64	

Table 15. *--Statistical summary of reported data for standard reference water sample P-19 (low ionic strength)--Continued*

P04 as P (Orthophosphate) m g/L

0. Other		22. Colorimetric				
7. IC		22m. Color: phosphomolybdate				
20. Titration: Color						
	N =	0	0	0	1	6
	Minimum =				0.003	0.000
	Maximum =					0.101
	Median =					
	St Dev =					

Lab	Rating Z-value	0	7	20	22	22m
1						0.003
3					< 0.01	
11		< 0.02				
23						< 0.01
28			< 0.1			
33			< 0.01			
37			< 0.3			
38						0.001
46						< 0.002
48						< 0.005
52						< 0.005
58					0.003	
61						< 0.02
63					< 0.01	
74				< 0.002		
78						< 0.05
89						0.101
92						< 0.005
105					< 0.002	
134						< 0.01
141						< 0.05
145						< 0.01
155						0.000
167						0.025
196			< 0.03			
202						0.011

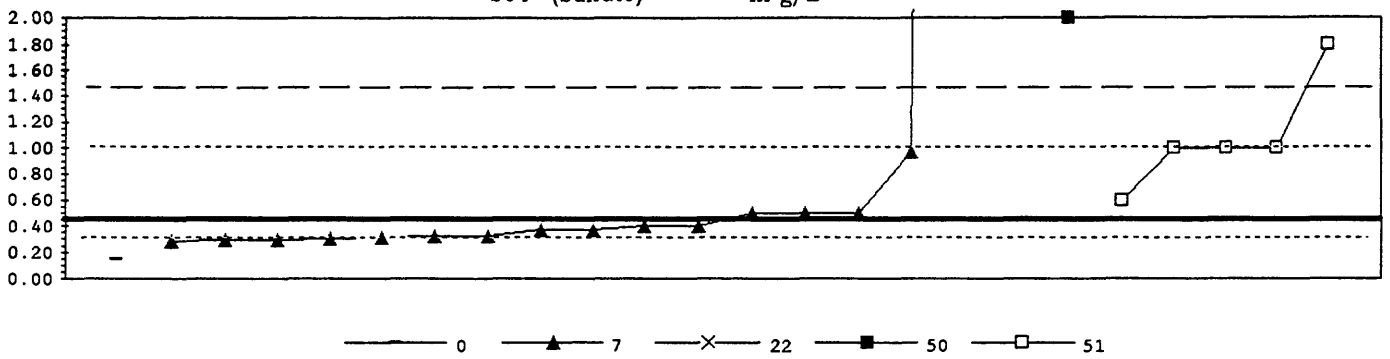
MPV =	0.003 +/- 0.006
F-pseudosigma =	0.012
N =	7
Hu =	0.018
Hl =	0.002

INSUFFICIENT DATA

NOT RATED

Table 15. *--Statistical summary of reported data for standard reference water sample P-19 (low ionic strength)--Continued*

SO4 (Sulfate) m g/L

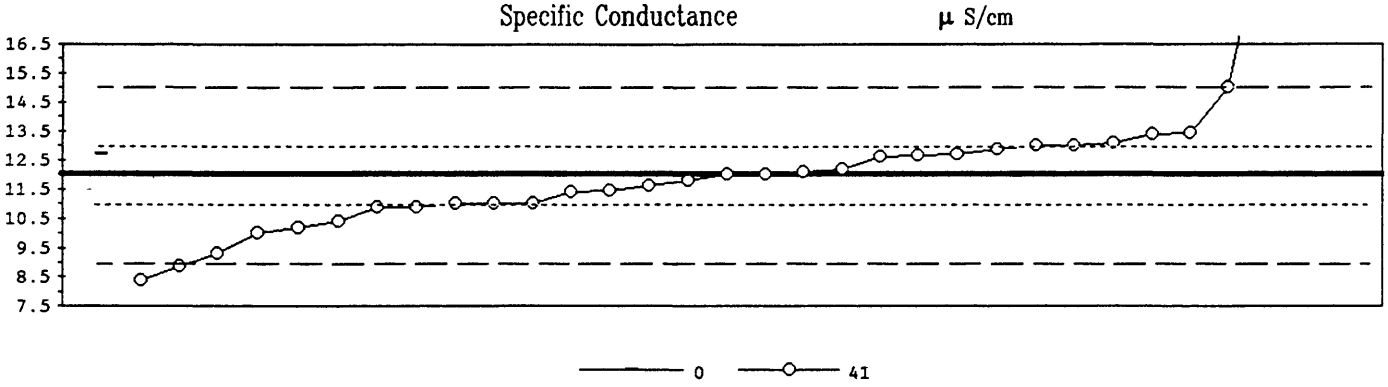


0. Other			50. Gravimetric				
7. IC			51. Turbidimetric				
22. Color: methyl thymol blue							
		N =	1	16	1	1	5
		Minimum =	0.15	0.28	6.63	2.00	0.60
		Maximum =		63.00			1.80
		Median =		0.37			
		St Dev =		0.17			

Lab	Rating	Z-value	0	7	22	50	51
1	4	-0.26		0.32			
2	4	-0.30		0.30			
3	4	0.10		0.50			
11	3	-0.59	0.15				
23	4	0.30					0.60
28	4	0.10		0.50			
33	4	-0.25		0.32			
37	NR			< 6			
46	4	-0.25		0.32			
48	2	1.09					1.00
52	NR						< 10
61	0	2.67					1.80
63	0	3.07				2.00	
64	4	-0.29		0.30			
74	4	0.09		0.50			
78	2	1.09					1.00
89	NR						< 2
92	2	1.09					1.00
105	2	1.03		0.97			
134	4	-0.15		0.37			
136	0	123.64		63.00			
141	NR						< 5
145	4	-0.09		0.40			
158	4	-0.09		0.40			
164	4	-0.29		0.30			
167	0	12.22			6.63		
196	4	-0.16		0.37			
197	4	-0.33		0.28			

MPV =	0.45 +/- 0.14
F-pseudosigma =	0.51
N =	24
Hu =	1.00
Hl =	0.32

Table 15. *--Statistical summary of reported data for standard reference water sample P-19 (low ionic strength)--Continued*



0. Other
41. Electrometric

	1	32
N =		
Minimum =	12.7	8.4
Maximum =		132.0
Median =		12.0
St Dev =		24.3

Lab	Rating	Z-value	0	41
1	4	0.44		12.7
2	3	-0.76		10.9
3	3	-0.67		11.0
11	4	0.47	12.7	
15	3	0.74		13.1
23	4	0.07		12.1
28	0	-2.43		8.4
33	4	0.13		12.2
37	4	-0.13		11.8
38	4	-0.40		11.4
39	3	-0.67		11.0
42	0	80.94		132.0
46	4	0.40		12.6
48	3	-0.76		10.9
52	3	0.94		13.4
58	4	0.00		12.0
61	2	-1.08		10.4
63	3	-0.67		11.0
74	4	0.47		12.7
78	0	-2.10		8.9
89	2	-1.21		10.2
101	0	47.08		81.8
105	0	2.02		15.0
123	3	0.61		12.9
134	3	0.67		13.0
136	1	-1.82		9.3
141	3	0.67		13.0
145	2	-1.35		10.0
155	3	0.96		13.4
158	4	0.00		12.0
167	4	-0.27		11.6
197	4	-0.38		11.4
202	0	6.21		21.2

MPV =	12.0 +/- 0.3
F-pseudosigma =	1.5
N =	33
Hu =	13.0
Hl =	11.0

Table 16-- *Statistical summary of reported data for standard reference sample Hg-15 (Mercury)*

Definition of analytical methods, abbreviations, and symbols

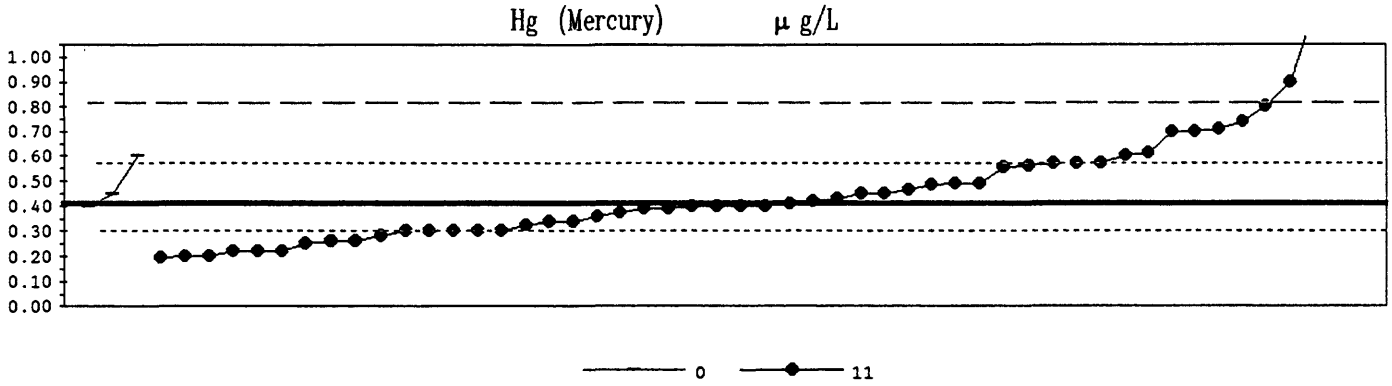
Analytical methods

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

Table 16. *--Statistical summary of reported data for standard reference water sample Hg-15 (mercury)--Continued*



0. Other 11. AA: Cold vapor				
		N =	3	51
		Minimum =	0.40	0.20
		Maximum =	0.60	2.85
		Median =		0.40
		St Dev =		0.16
Lab	Rating	Z-value	0	11
1	4	-0.32		0.34
3	3	0.97	0.60	
11	0	7.97		2.00
12	2	1.47		0.70
13	3	0.79		0.56
16	4	0.22	0.45	
18	4	-0.32		0.34
24	3	-0.52		0.30
28	4	-0.02		0.40
29	3	-0.92		0.22
32	3	0.82		0.57
36	4	0.41		0.49
37	3	0.76		0.56
39	NR			< 0.5
45	4	-0.08		0.39
46	4	-0.16		0.37
48	NR			< 0.2
51	3	-0.92		0.22
52	4	0.42		0.49
55	4	0.31		0.47
59	3	-0.52		0.30
61	4	-0.02		0.40
63	4	0.41		0.49
68	2	-1.02		0.20
69	3	-0.92		0.22
70	3	-0.52		0.30
74	4	-0.42		0.32
75	3	0.82		0.57
87	3	-0.52		0.30
89	3	-0.70		0.26
90	1	1.67		0.74
92	4	0.12		0.43
96	4	-0.02	0.40	
97	3	-0.72		0.26
100	3	-0.52		0.30
105	4	-0.22		0.36
108	2	1.02		0.61
109	4	0.02		0.41
113	4	0.22		0.45
119	3	0.82		0.57
120	4	-0.07		0.39
127	4	0.06		0.42
128	1	1.97		0.80
133	2	1.47		0.70
134	3	-0.62		0.28
136	0	2.47		0.90
138	4	-0.02		0.40
139	0	12.22		2.85
141	4	0.22		0.45
144	3	-0.77		0.25

MPV =	0.41	+/- 0.04
F-pseudosigma =	0.20	
N =	54	
Hu =	0.57	
Hl =	0.30	

Lab	Rating	Z-value	0	11
146	2	-1.05		0.20
149	4	-0.02		0.40
167	1	1.52		0.71
179	2	-1.02		0.20
182	3	0.97		0.60
196	0	3.97		1.20
202	NR			< 0.3

Table 17. *--Most probable values for constituents and properties in standard reference samples distributed in October 1992*

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

T-121 (trace constituents)

Analyte	MPV		F-pseudosigma	Analyte	MPV		F-pseudosigma
Ag	0.90	µg/L	0.36	Li	25.0	µg/L	2.2
Al	85.5	µg/L	12.9	Mg	1.24	mg/L	0.07
As	8.00	µg/L	1.11	Mn	28.5	µg/L	2.2
B	90	µg/L	9	Mo	12.0	µg/L	1.8
Ba	46.3	µg/L	4.3	Na	7.19	mg/L	0.30
Be	10.6	µg/L	1.0	Ni	8.29	µg/L	1.26
Ca	5.13	mg/L	0.28	Pb	7.75	µg/L	1.03
Cd	7.17	µg/L	1.05	Sb	7.61	µg/L	1.20
Co	4.6	µg/L	0.7	Se	8.12	µg/L	1.41
Cr	16.0	µg/L	1.6	SiO2	4.64	mg/L	0.26
Cu	4.80	µg/L	0.67	Sr	44.0	µg/L	4.9
Fe	140	µg/L	12	V	4.00	µg/L	0.76
K	0.45	mg/L	0.06	Zn	18.0	µg/L	2.7

M-124 (major constituents)

Analyte	MPV		F-pseudosigma	Analyte	MPV		F-pseudosigma
Alkalinity	234	mg/L	5	Na	166.0	mg/L	6.0
B	294	µg/L	34	total P	0.110	mg/L	0.013
Ca	154	mg/L	9	pH	8.47		0.08
Cl	82.8	mg/L	2.4	SiO2	19.4	mg/L	1.1
DSRD	1309	mg/L	33	SO4	621	mg/L	23
F	0.93	mg/L	0.07	Sp Cond	1738	µS/cm	88
K	13.9	mg/L	1.0	Sr	1669	µg/L	99
Mg	58.4	mg/L	2.7	V	7.5	µg/L	3.0

N-36 (preserved nutrients)

Analyte	MPV		F-pseudosigma
NH3 as N	0.113	mg/L	0.019
NH3+OrgN as N	0.246	mg/L	0.129
NO3+NO2 as N	0.182	mg/L	0.023
total P as P	0.220	mg/L	0.021
PO4 as P	0.210	mg/L	0.010

N-36 (nonpreserved nutrients)

Analyte	MPV		F-pseudosigma
NH3 as N	0.110	mg/L	0.015
NH3+OrgN as N	0.209	mg/L	0.091
NO3+NO2 as N	0.180	mg/L	0.016
total P as P	0.210	mg/L	0.015
PO4 as P	0.208	mg/L	0.010

N-37 (preserved nutrients)

Analyte	MPV		F-pseudosigma
NH3 as N	0.876	mg/L	0.121
NH3+OrgN as N	1.10	mg/L	0.22
NO3+NO2 as N	0.857	mg/L	0.099
total P as P	1.19	mg/L	0.07
PO4 as P	1.07	mg/L	0.10

N-37 (nonpreserved nutrients)

Analyte	MPV		F-pseudosigma
NH3 as N	0.920	mg/L	0.058
NH3+OrgN as N	1.06	mg/L	0.08
NO3+NO2 as N	0.850	mg/L	0.054
total P as P	1.17	mg/L	0.06
PO4 as P	1.15	mg/L	0.04

P-19 (low ionic strength constituents)

Analyte	MPV		F-pseudosigma	Analyte	MPV		F-pseudosigma
Acidity	3.43	mg/L	3.54	Na	0.060	mg/L	0.162
Ca	0.24	mg/L	0.03	pH	4.72		0.13
Cl	1.14	mg/L	0.19	PO4 as P	insufficient data		
F	insufficient data			SO4	0.45	mg/L	0.51
K	0.170	mg/L	0.033	Sp Cond	12.0	µS/cm	1.5
Mg	0.045	mg/L	0.031				

Hg-15 (mercury)

Analyte	MPV		F-pseudosigma
Hg	0.41	µg/L	0.20