RESULTS OF THE U.S. GEOLOGICAL SURVEY'S ANALYTICAL EVALUATION PROGRAM FOR STANDARD REFERENCE SAMPLES : T-147 (TRACE CONSTITUENTS), T-149 (TRACE CONSTITUENTS), M-142 (MAJOR CONSTITUENTS), N-53 (NUTRIENT CONSTITUENTS), N-54 (NUTRIENT CONSTITUENTS), P-28 (LOW IONIC STRENGTH CONSTITUENTS) GW-1 (GROUND-WATER CONSTITUENTS), AND Hg-24 (MERCURY) DISTRIBUTED IN APRIL 1997

by Jerry W. Farrar

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ABSTRACT

This report presents the results of the U.S. Geological Survey's analytical evaluation program for eight standard reference samples -- T-147 (trace constituents), T-149 (trace constituents), M-142 (major constituents), N-53 (nutrient constituents), N-54 (nutrient constituents), P-28 (low ionic strength constituents), GW-1 (ground-water constituents), and Hg-24 (mercury) -- that were distributed in April 1997 to 170 laboratories enrolled in the U.S. Geological Survey sponsored interlaboratory testing program. Analytical data that were received from 147 of the laboratories were evaluated with respect to: overall laboratory performance and relative laboratory performance for each analyte in the eight 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 eight 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 analytical evaluation program semiannually. This program provides a variety of standard reference samples (SRSs) 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.

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 first analytical evaluation program. 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) evaluate the accuracy and precision of analytical methods.

A total of 230 USGS and non-USGS laboratories are enrolled in the program, which can currently provide eight different types of SRSs:

1. Trace constituents.
2. Major constituents.
3. Nutrient constituents.
4. Low ionic strength constituents.
5. Mercury.
6. Whole water (water with suspended sediment).
7. Acid mine drainage constituents.
8. Ground-water constituents

Though this is not a laboratory certification program, participation in this continuing quality assurance program is mandatory for all laboratories providing water-quality data for USGS sponsored reports or storage in the USGS national data bases. Federal, State, municipal, and university laboratories can participate even though they do not provide data to the USGS. SRS results can be used to alert participating laboratories of possible deficiencies in their analytical operations, and provide reference materials for laboratory quality-control programs. Participating laboratories are identified only by a confidential laboratory code number.

A library of SRSs, from previous evaluations, is available. USGS offices and participating laboratories can request these SRSs for further testing, continuing quality assurance, and quality-control programs by contacting:

U.S. Geological Survey
Branch of Technical Development and Quality Systems
Denver Federal Center, Bldg. 53
P. O. Box 25046 MS 401
Denver, Colorado 80225-0046
(303) 236-1870

PURPOSE AND SCOPE

This report summarizes the analytical results submitted by 147 of the 170 laboratories that requested and were shipped SRS for the August 1997 evaluation (table 1). Not all SRSs are requested or necessarily analyzed by all the laboratories; nor do all laboratories enrolled in the program participate in each evaluation. Analytical results for the following, which were mailed the week of April 7, 1997, are presented in this report

T-147	Trace constituents	N-54	Nutrient constituents
T-149	Trace constituents	P-28	Low ionic strength constituents
M-142	Major constituents	GW-1	Ground-water constituents
N-53	Nutrient constituents	Hg-24	Mercury

The USGS requested that analytical results be returned by May 19, 1997 for evaluation and preparation of this report. Laboratories that are providing analytical services to USGS offices are requested to analyze the appropriate SRSs for the same analytes requested by the USGS offices. All laboratories are requested to include the analytical methods used to determine the concentration of each analyte. When analytical-method information was provided, it has been included in tables 13 - 20.

Table 1.-*Laboratory participants in the analyses of standard reference samples distributed in April 1997*

State	City	Participating Laboratory
Alabama	Mobile	Alabama Department of Environmental Management
	Tuscaloosa	Geological Survey of Alabama
Arizona	Yuma	Burns and Roe Services Corporation
Arkansas	Arkadelphia	Ouachita Baptist University
	Fayetteville	University of Arkansas
	Little Rock	Arkansas Department of Pollution Control and Ecology
California	Davis	University of California - Davis
	La Verne	Metropolitan Water District
	Oakland	East Bay Municipal Utility District
	Santa Fe Springs	West Coast Analytical Service, Inc.
	Tahoe City	Tahoe Research Group
	West Sacramento	California Department of Water Resources
	West Sacramento	Quanterra Environmental Services
Colorado	Alamosa	Bureau of Reclamation
	Arvada	Quanterra Environmental Services
	Arvada	USGS NWQL
	Aurora	Core Laboratories, Inc.
	Boulder	USGS
	Boulder	USGS
	Colorado Springs	City of Colorado Springs
	Denver	USGS/WRD Acid Rain Global Climate
	Denver	Denver Water Department
	Denver	Metro Wastewater Reclamation
	Denver	USGS
	Denver	USGS Colorado District Upper Arkansas Toxic Project
	Fort Collins	City of Fort Collins - Water Quality
	Fort Collins	USDA Forest Service
	Greeley	Central Colorado Water Conservation
	Lakewood	U.S. EPA
	Loveland	Northern Colorado Water Conservation
	Northglenn	Northglenn Water Treatment Plant
	Westminster	City of Westminster
Florida	Brooksville	SW Florida Water Management District
	Ocala	USGS WRD QWSU
	Orlando	Post, Bucklye, Schuh, and Jernigan, Inc.
	Ormond Beach	Environmental Laboratory
	Palatka	St. John's River Management District
	Tallahassee	City of Tallahassee
	Tallahassee	Florida Department of Environmental Regulations
	Tallahassee	Savannah Laboratories
	Tampa	Hillsborough County Environmental Protection Commission
	West Palm Beach	South Florida Water Management District
Georgia	Athens	University of Georgia
	Atlanta	Georgia Department of Natural Resources
	Atlanta	USGS WRD
	Decatur	Dekalb County Water Quality Laboratory
Hawaii	Honolulu	University of Hawaii - SOEST Analytical Services
Idaho	Boise	US Bureau of Reclamation
	Pocatello	Idaho State University
Illinois	Champaign	Hazardous Waste Research Center
	Champaign	Illinois Environmental Protection Agency
Iowa	Des Moines	University Hygienic Laboratory, Des Moines Branch

Table 1.-*Laboratory participants in the analyses of standard reference samples distributed in April 1997 --continued*

State	City	Participating Laboratory
Kansas	Lawrence	Kansas Geological Survey
	Topeka	City of Topeka
	Wichita	City of Wichita
Kentucky	Frankfort	Division of Environmental Studies
	Lexington	Kentucky Geological Survey
	Louisville	Metropolitan Sewer District
Maine	Orono	University of Maine
	Orono	Environmental Chemistry Lab
Maryland	Baltimore	Maryland Department of Health and Mental Hygiene
Michigan	Detroit	Detroit Water and Sewerage Department
Minnesota	Minneapolis	University of Minnesota, Department of Geology and Geophysics
	St. Paul	Metro Waste Control Commission
	St. Paul	University of Minnesota
Missouri	Columbia	University of Missouri
	Jefferson City	Missouri Department of Health
Montana	Butte	Montana Bureau of Mines & Geology
	Helena	Department of Health & Environmental Sciences
	Jefferson City	Montana Tunnels Laboratory
Nevada	Boulder City	U.S. Bureau of Reclamation
	Las Vegas	University of Nevada - Las Vegas
	Reno	Desert Research Institute
	Reno	Nevada State Health Laboratory
	Reno	Reno-Sparks Wastewater Treatment
	Sutcliffe	Pyramid Lake Fisheries
New York	Buffalo	Erie County Public Health Lab
	Grahamsville	New York City Department of Environmental Protection
	Hauppauge	Suffolk County Water Authority
	Hempstead	Nassau County Department of Health
	Milbrook	Institute of Ecosystem Studies
	North Babylon	Ecotest Laboratories
	Port Washington	Nytest Environmental, Inc.
	Rochester	Monroe County
	Shokan	New York City Department of Environmental Protection
	Syracuse	Onandaga County DDS
	Syracuse	SUNY CESF
	Troy	USGS WRD
	Valhalla	Department of Environmental Protection
	Wantagh	Cedar Creeks Projects laboratory
	Yorktown	New York City Department of Environmental
North Carolina	Chapel Hill	City of Durham Water Resources
	Charlotte	Mecklenburg County
	Durham	Duke University
North Dakota	Bismarck	North Dakota Health Department
	Bismarck	North Dakota State Water Commission
	Bismarck	U.S. Bureau of Reclamation
Ohio	Cincinnati	U.S. EPA
	Cuyahoga Heights	Northeast Ohio Regional Sewer District
	Medina	Medina County Sanitary Engineering
	Tiffin	Heidelberg College
	Wooster	The Ohio State University
Oklahoma	Norman	Oklahoma Geological Survey
	Oklahoma City	Oklahoma Department of Environmental Quality
Oregon	Corvallis	USDA
	Corvallis	USDA CCAL

Table 1.-*Laboratory participants in the analyses of standard reference samples distributed in April 1997 --continued*

State	City	Participating Laboratory
Oregon Tigard	Unified Sewerage Agency	
Pennsylvania	Harrisburg	Pennsylvania Department of Environmental Resources
	Somerset	Geochemical Testing
Puerto Rico	San Juan	Department of Natural Resources
South Carolina	Cayce	Shealy Environmental Testing
	Columbia	Columbia Analytical Services
South Dakota	Brookings	SDSU - Water Quality Laboratory
	Brookings	Northern Great Plains
Tennessee	Chattanooga	TVA Environmental Chemistry
Texas	Austin	Lower Colorado River Authority
	College Station	Texas A & M
	College Station	Intermountain Labs
Vermont	Waterbury	Vermont Agency of Natural Resources
Virginia	Chesapeake	City of Chesapeake
	Manassas	Occoquan Watershed Monitoring Laboratory
	Richmond	Consolidated Laboratory Services
Washington	Richland	Battelle Pacific NW
	Seattle	Frontier Geoscience
	Seattle	Brooks-Rand, Ltd.
Wisconsin	Madison	University of Wisconsin, Department of Hygiene
	Milwaukee	Milwaukee Metro Sewerage District
Wyoming	Wyoming	Department of Agriculture

European Laboratories

Location		Participating Laboratory
Norway	Oslo	Norwegian Institute for Water Research

Middle East Laboratories

Location	Participating Laboratory
Gaza	Al-Azar University, Water Research Center Laboratory
	Birzeit University - Gaza
	Ministry of Agriculture Laboratory
	Ministry of Health, Public Health Laboratory
Israel	Geological Survey of Israel Laboratory
	Israeli Hydrological Service Laboratory
	Mekeroth Water Company, Ashqelon Laboratory
	Mekeroth Water Company, Central Laboratory
	Mekeroth Water Company, Dan Sewage Treatment Plant
	Mekeroth Water Company, Eylat Laboratory
	Mekeroth Water Company, Lake Kinneret Laboratory
	Mekeroth Water Company, Rosh Ha'ayn Laboratory
	Water Resources Research Center, Institute for Desert Research
Jordan	Royal Scientific Society of Jordan, Environmental Research Center Laboratory
	Water Authority of Jordan, Central Laboratory
West Bank	Al-Quds University, College of Science and Technology, Water Research Center
	Bethlehem University , Water and Soil Environmental Research Unit
	Birzeit University, Center for Environmental & Occupational Health Sciences
	Najah Water & Environmental Studies Center

PREPARATION OF STANDARD REFERENCE SAMPLES

All of the SRSs used in this evaluation were prepared by USGS personnel located in Lakewood, Colorado and were analyzed for analyte concentrations and physical property values prior to mailing. A library of these SRSs is maintained and can be requested by participating laboratories and USGS offices for use in their quality-control programs.

Trace constituents sample T-147 was prepared using water collected from the Rio Grande River near Alde, New Mexico. The water was pumped through 0.45- 0.2- and 0.1-μm filters, in series, into a 1200-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 1.3 with nitric acid and chlorinated to 5 ppm free chlorine with sodium hypochlorite. The trace constituent concentrations were adjusted by adding reagent grade chemicals. The sample was circulated an additional 24 hours prior to bottling. During bottling, the sample was pumped through an ultraviolet sterilizer and a 0.1 μm filter. The polypropylene bottles used were acid leached, deionized-water rinsed, and autoclave sterilized.

Trace constituents sample T-149 was prepared using water collected from the Gunnison River near Delta, Colorado. The water was pumped through 0.45- 0.2- and 0.1-μm filters, in series, into a 1200-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 1.3 with nitric acid and chlorinated to 5 ppm free chlorine with sodium hypochlorite. The trace constituent concentrations were adjusted by adding reagent grade chemicals. The sample was circulated an additional 24 hours prior to bottling. During bottling the sample was pumped through an ultraviolet sterilizer and a 0.1-μm filter. The 500-mL polypropylene bottles used were acid leached, deionized-water rinsed, and autoclave sterilized.

Major constituents sample M-142 was prepared using water collected from the Missouri River near Omaha, Nebraska. The water was pumped through 0.45- 0.2- and 0.1-μm filters, in series, into a 1200-L polypropylene drum. The water was chlorinated to 5-ppm free chlorine with sodium hypochlorite, continuously circulated, and passed through a 0.1-μm filter and ultraviolet sterilizer for 24 hours prior to bottling. During bottling the sample was pumped through an ultraviolet sterilizer and a 0.1-μm filter. The 500-mL polypropylene bottles used were acid leached, deionized-water rinsed, and autoclave sterilized.

Nutrient constituents sample N-53 was prepared using deionized water. These samples were prepared the week prior to the mailing for this SRS evaluation. The water was pumped through 0.45- 0.2- 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 24 hours. The desired nutrient concentrations were obtained by adding reagent-grade chemicals. The sample was continuously circulated for 24 hours prior to being bottled. The 30-mL glass vials used were new, amber, acid leached, and deionized-water rinsed.

Nutrient constituents sample N-54 was prepared using water collected from the Fall River near Idaho Springs, Colorado. These samples were prepared the week prior to the mailing for this SRS evaluation. The water was pumped through 0.45- 0.2- 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 24 hours. The desired nutrient concentrations were obtained by adding reagent-grade chemicals. The sample was continuously circulated for 24 hours prior to being bottled. The 250-mL polyethylene bottles used were new, amber, acid leached, and deionized-water rinsed.

Low ionic strength constituents sample P-28 was prepared in a 400-L polypropylene drum using snow collected from the Squaw pass near Idaho Springs, Colorado. The water was pumped into the drum through 0.45- 0.2- and 0.1-μm filters in series. Desired phosphate and fluoride concentrations were obtained by adding reagent-grade chemicals. Prior to bottling, the sample was continuously mixed for 24 hours while being circulated through a 0.1-μm filter and an ultraviolet sterlizer. During bottling the sample was pumped through an ultraviolet sterilizer and a 0.1-μm filter. The 500-mL polypropylene bottles used were acid leached, deionized-water rinsed, and autoclave sterilized.

Ground-water constituents sample GW-1 was prepared using water collected from a well in Ohio. The water was pumped through 0.45- 0.2- and 0.1-μm filters, in series, into a 200-L polypropylene drum. The water was acidified to a pH of about 1.0 with nitric acid. During bottling the sample was pumped through an ultraviolet sterilizer and a 0.1-μm filter. The 250-mL polyethylene bottles used were acid leached, and deionized-water rinsed.

Mercury sample Hg-24 was prepared using water collected from the Fall River near Idaho Springs, Colorado. The sample was prepared in a 190-L polypropylene drum. The river water was pumped into this drum through 0.45- 0.2- and 0.1-μm filters in series. The water was continuously circulated and passed through a 0.1-μm filter and ultraviolet sterilizer for 48 hours. Nitric acid (5-percent, by volume) and dichromate compound (0.05-percent, by weight) 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, the sample was bottled. The 250-mL glass bottles and tetrafluoroethylene fluorocarbon resin caps used were new, acid leached, and deionized-water rinsed.

LABORATORY ANALYSES

The participating laboratories were asked to determine constituents that are summarized in table 2. The number of analytes varied from 28 in T-147 & T-149 (trace constituents) and GW-1 (ground-water constituents) to 1 in Hg-24 (mercury).

Table 2.-*Constituents determined in standard reference samples distributed in April 1997*

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

Constituent or property		Units	T-147,T-149	M-142	N-53, N-54	P-28	GW-1	Hg-24
Acidity	Acidity as $CaCO_3$	mg/L				X		
Alk	Alkalinity as $CaCO_3$	mg/L		X				
Ag	Silver	µg/L	X				X	
Al	Aluminum	µg/L	X				X	
As	Arsenic	µg/L	X				X	
B	Boron	µg/L	X				X	
Ba	Barium	µg/L	X				X	
Be	Beryllium	µg/L	X				X	
Ca	Calcium	mg/L	X	X		X	X	
Cd	Cadmium	µg/L	X				X	
Cl	Chloride	mg/L		X			X	
Co	Cobalt	µg/L	X				X	
Cr	Chromium	µg/L	X				X	
Cu	Copper	µg/L	X				X	
DSRD	Dissolved solids	mg/L		X				
F	Fluoride	mg/L		X		X		
Fe	Iron	µg/L	X				X	
Hg	Mercury	µg/L						X
K	Potassium	mg/L	X	X		X	X	
Li	Lithium	µg/L	X					
Mg	Magnesium	mg/L	X	X		X	X	
Mn	Manganese	µg/L	X				X	
Mo	Molybdenum	µg/L	X				X	
Na	Sodium	mg/L	X	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				X	
NO_3+NO_2 as N	Nitrate + Nitrite	mg/L			X			
Pb	Lead	µg/L	X				X	
pH		unit		X		X		
PO_4 as P	Orthophosphate	mg/L			X			
total P as P	Phosphorus	mg/L		X	X	X		
Sb	Antimony	µg/L	X				X	
Se	Selenium	µg/L	X				X	
SiO_2	Silica	mg/L	X	X			X	
SO_4	Sulfate	mg/L		X		X	X	
Sp Cond	Specific conductance	µS/cm		X		X		
Sr	Strontium	µg/L	X	X			X	
Tl	Thallium	µg/L	X				X	
U	Uranium	µg/L	X					
V	Vanadium	µg/L	X	X			X	
Zn	Zinc	µg/L	X				X	

Laboratories were requested to identify the method used for each constituent 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 plasma
5	Direct current plasma
6	Inductively coupled plasma/mass spectrometry
7	Ion chromatography
8	Atomic absorption: cold vapor
9	Atomic fluoresence
10	Atomic absorption: extraction [*specify chelating agents*]
11	Atomic absorption: hydride [*specify reducing agent*]
12	Flame emission
20	Titration: colorimetric [*specify color reagent*]
21	Titration: electrometric [*specify reducing or oxidizing agent/color reagent*]
22	Colorimetric: [*specify reducing or oxidizing agent/color reagent*]
40	Ion selective electrode
41	Electrometric [*pH and specific conductance*]
50	Gravimetric: [*specify filtration, evaporation,and so forth*]
51	Turbidimetric

Participating laboratories were also asked to identify the method used, such as those references listed next, to further define the methods.

1. American Public Health Association and others, 1992, Standard methods for the examination of water and wastewater (18th ed.): Washington, D.C., American Public Health Association, 981 p.

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 laboratory intercomparison, laboratory performance ratings, based on the analyses reported for each SRS, are included in tables 4 through 12 in this report. For each SRS, averages of all the analyte ratings and the number of analyte values reported are given for each participating laboratory. In some cases, laboratory reported values in tables 4 - 12 may have been reformatted in terms of significant figures to meet publication criteria. For example, a reported value of 15 may have been changed to 15.0 or a value of 102.86 may have changed to 102.9 in these tables. However, the actual reported values by all the laboratories were used to calculate the statistical results and performance ratings presented in the report.

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

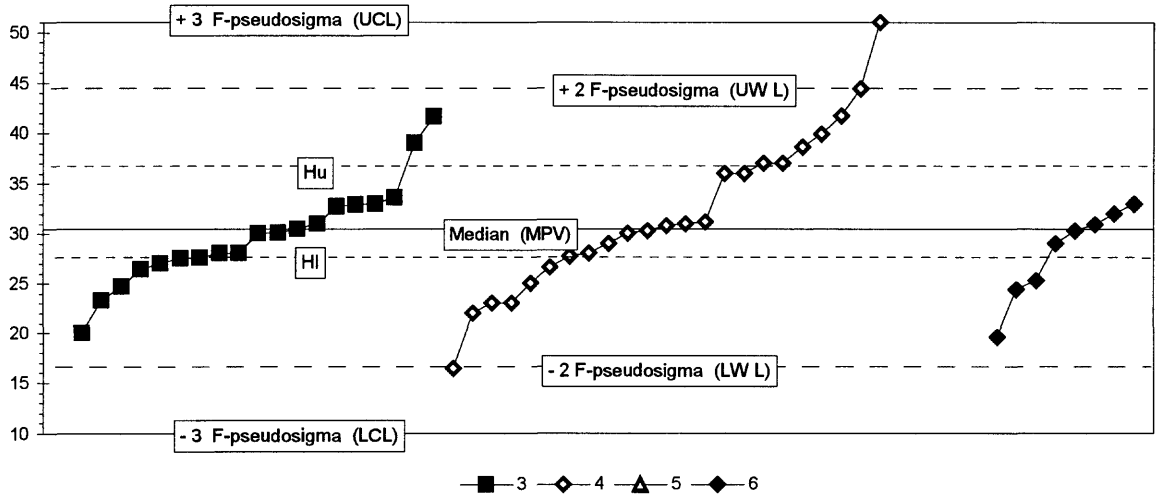
Overall laboratory performance ratings greater than 2.4 are considered satisfactory. Overall laboratory performance ratings between 2.0 and 2.39 are considered marginal; those less than 2.0 are considered poor. These ratings should be reviewed and evaluated on a case-by-case basis for each laboratory considering such factors as methods used and data needs of specific USGS projects using the laboratory data.

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 13 through 20. 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 7, the F-pseudosigma for that analytical method is reported in the block of data listed for each analyte.

The median value is considered the MPV. 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 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. 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 are shown in the graphical plot. 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.) Horizontal scale is the laboratory reported values separated by method (different symbols) and plotted by increasing values. Numbers next to each symbol at the bottom of the figure are method codes that are described in table 3.

Figure 1.-Statistical parameters shown on reported-data graphs in tables 13 - 20

REFERENCE

Hoaglin, D.C., Mosteller, F., and Tukey, J.W., eds., 1983, Understanding robust and exploratory data analysis: New York, NY, John Wiley, Inc., 447 p.

Table 4. *Overall laboratory performance ratings for standard reference water samples distributed in April 1997*

[SRS, standard reference sample; Lab, laboratory number; OWR, overall weighted rating for all sample types; OLR, overall laboratory rating for reported values of a sample type; V/123, number of reported values of 123 total possible values from all sample types; V/28,V/28,V/16,V/5,V/5,V/12, and V/28 are number of reported values possible for T-147,T-149, M-142, N-53,N-54, P-28, and GW-1 respectively, NR, not rated]

		SRS =	T-147		T-149		M-142		N-53		N-54		P-28		GW-1		Hg-24
Lab	OWR	V/123	OLR	V/28	OLR	V/28	OLR	V/16	OLR	V/5	OLR	V/5	OLR	V/12	OLR	V/28	OLR
1	3.4	104	3.7	26	3.8	24	3.6	16	1.4	5	3.0	5	4.0	9	2.9	18	3
2	2.8	8											2.8	8			
3	2.8	92	2.4	22	2.8	20	3.1	16			3.2	5	3.0	8	3.1	20	0
4	2.6	25	2.6	11	2.6	14											
9	3.1	24	2.3	12			3.8	6	3.8	4	4.0	2					
10	3.5	38	3.0	7	2.9	7	3.8	13	4.0	5	3.8	5					4
11	2.3	90	2.1	20	2.1	20	2.8	14	1.0	5	1.0	5	2.1	8	3.2	17	2
12	2.5	51	1.3	9	3.1	10	3.1	9	2.6	5	2.4	5			2.8	12	0
13	2.7	69	2.9	17	2.1	16	3.0	12	1.8	4	4.0	4			3.1	15	0
16	2.9	93	3.0	26	3.2	23	3.0	15	1.4	5	1.8	5			2.8	19	
18	3.3	79	2.9	18	3.6	17	3.4	16	3.4	5	3.4	5			3.2	17	3
19	3.2	33	2.1	8	2.7	7	3.8	10	4.0	4	3.5	4					
21	3.5	2	3.0	1	4.0	1											
22	3.3	3					4.0	1	2.0	1	4.0	1					
23	2.9	48	2.8	11	2.3	14	3.0	7	2.3	4	3.6	5	3.7	7			
24	3.4	27	3.0	7	3.4	7	3.5	13									
25	2.3	53	1.9	17	1.7	13	2.8	15					2.9	8			
26	3.5	89	3.5	23	3.5	20	3.8	13	4.0	2	3.3	3	2.9	7	3.5	20	4
30	2.7	61	3.0	20	2.8	18	3.0	5			2.5	2			2.3	15	0
32	2.9	62			3.2	24	2.7	15							3.0	22	0
33	2.6	40	2.8	8	2.1	9	2.5	10	0.5	2	3.7	3	3.3	8			
34	3.0	14	2.8	6	3.2	5									2.5	2	4
36	2.4	69	2.2	15	2.4	14	3.2	11	1.7	3	2.4	5	2.1	7	2.6	13	0
38	3.1	27					3.6	10	3.0	5	2.4	5	3.0	7			
39	2.9	46	3.1	20			2.8	15			2.5	4	3.2	6			3
40	2.6	44	2.9	17	2.7	13	2.2	14									
42	2.0	78	2.4	25	1.7	22	1.3	12	0.0	1					2.5	17	3
43	3.6	32	3.8	6	3.9	7	3.5	11							3.1	8	
45	2.9	20	2.8	4	3.3	4	2.5	6	3.0	3	3.0	3					
46	3.3	80	3.3	16	3.3	15	3.8	14	4.0	5	3.6	5	2.8	8	2.8	16	4
48	2.6	94	3.3	22	3.3	21	1.9	13	1.2	5	2.6	5	2.1	8	2.2	19	4
50	3.0	34	2.6	20			3.7	13									2
51	2.9	23	2.3	4	3.0	4	2.9	10	3.3	4							4
53	0.5	4							0.5	2	0.5	2					
55	3.0	9							2.3	4	3.5	4					4
57	2.4	17					2.9	13			0.8	4					
59	2.7	62	2.2	17	3.5	14	0.0	3	3.4	5	4.0	5	1.8	6	3.0	11	2
61	2.1	84	2.1	21	2.4	19	1.3	15	1.8	5	3.2	5			2.3	18	0
64	3.5	31	3.0	4	3.8	4	3.5	8	4.0	3	4.0	1	3.5	8	3.7	3	
68	2.7	69	2.7	24	2.3	21	3.2	13	2.5	4	3.5	4			3.0	2	2
69	3.0	58	2.4	18	2.9	14	3.5	10	4.0	1	4.0	1			3.2	13	3
70	3.3	52	2.9	14	3.2	13	3.7	14	3.8	5	3.0	5					4
76	3.7	31	3.7	10	3.7	9	3.7	7	3.0	1	4.0	1			4.0	2	4
80	2.5	26	2.9	7	1.8	5	3.4	10			0.7	3			0.0	1	
81	2.7	93	3.0	22	2.7	18	3.4	14	2.4	5	2.8	5	2.1	10	2.3	18	4
83	2.2	62	2.2	14	2.5	12	1.9	7	1.3	4	1.8	4	2.3	6	2.3	15	
84	2.4	24	2.7	6	2.7	6	2.9	8	1.0	2	0.5	2					
85	3.0	44	2.2	20			3.6	14	3.8	5	3.8	5					
86	2.8	75	2.8	16	2.5	16	3.0	11	3.3	3	2.7	3	2.7	7	2.9	18	3
87	2.1	54	2.0	16	2.1	15	2.2	12	2.6	5	2.0	5					0
89	2.9	85	2.7	20	2.3	15	3.2	14	3.6	5	3.6	5	2.9	9	3.0	16	4
90	1.9	11					3.0	5	1.0	3	1.0	3					
91	3.5	11	4.0	1	4.0	2			3.8	4	2.8	4					
92	1.6	53			0.9	12	2.8	11	1.5	4	3.3	4	1.1	8	0.9	14	
93	2.1	22	2.0	4			1.9	9					2.4	9			
96	3.2	42	2.7	11	3.2	9	4.0	7	3.4	5	3.8	5	2.3	4			1
97	2.6	64	2.8	24	2.6	20	3.4	14	0.0	5							1
102	2.1	21					1.7	11	2.2	5	3.0	5					
104	3.5	14	3.0	1	3.0	1	4.0	2	3.0	5	4.0	5					
105	3.0	76	2.7	23	3.0	19	3.1	15	3.0	5	3.4	5	3.4	8			3
107	3.1	34	2.7	11			3.4	9	3.5	4	2.8	4	3.2	6			
108	1.0	35	0.7	14	1.2	13	1.3	3			1.8	4					0
109	3.4	36	3.1	12	3.6	12	3.5	11									3
110	3.1	11			2.0	4							3.7	7			
111	2.4	65	2.2	13	2.3	14	2.7	11	1.3	3	3.5	2	3.4	9	2.2	12	0
113	2.8	86	2.9	21	3.1	19	3.1	14	3.3	4	2.8	4	2.9	9	1.9	14	4
114	2.5	31	1.7	9	2.1	7	3.4	9	3.3	3	2.7	3					
118	2.6	26			2.1	9	2.1	7	3.2	5	3.6	5					
119	2.9	105	2.9	26	2.8	24	3.1	16	3.6	5	3.2	5	2.8	9	2.4	19	4
121	3.5	34	3.1	14	3.7	13	3.9	7									
126	1.6	19			1.8	9	4.0	1			4.0	1			0.8	8	
127	3.2	70	3.0	24			3.3	16	3.6	5	3.6	5			3.1	19	3
129	2.2	48	0.7	7	2.0	7	2.0	14	3.4	5	3.8	5			2.4	10	
131	2.1	54	1.8	21	2.2	19	2.6	14									
133	2.4	37	2.6	12	2.5	8	2.7	6	2.0	5	1.6	5					3

Table 4. *Overall laboratory performance ratings for standard reference water samples distributed in April 1997--continued*

[SRS, standard reference sample; Lab, laboratory number; OWR, overall weighted rating for all sample types; OLR, overall laboratory rating for reported values of a sample type; V/123, number of reported values of 123 total possible values from all sample types; V/28,V/28,V/16,V/5,V/5,V/12, and V/28 are number of reported values possible for T-147,T-149, M-142, N-53,N-54, P-28, and GW-1 respectively, NR, not rated]

		SRS =	T-147		T-149		M-142		N-53		N-54		P-28		GW-1		Hg-24
Lab	OWR	V/123	OLR	V/28	OLR	V/28	OLR	V/16	OLR	V/5	OLR	V/5	OLR	V/12	OLR	V/28	OLR
134	3.6	103	3.6	26	3.7	23	3.8	16	3.2	5	4.0	5	3.6	8	3.4	19	4
138	3.6	101	3.5	25	3.6	22	3.8	16	3.8	5	3.4	5	3.6	8	3.7	19	2
140	2.4	75	2.1	15	2.1	14	3.3	12	0.8	5	2.6	5	2.7	9	2.7	15	
141	2.8	86	2.4	20	2.1	16	3.3	13	3.0	5	2.4	5	3.2	9	3.4	17	3
142	3.1	96	3.0	26	3.1	24	3.1	15	3.0	5	4.0	5			2.9	20	3
143	3.3	26	4.0	5	3.6	5	3.0	4	2.2	5	3.4	5	4.0	2			
145	2.3	75	2.3	22	1.9	21	2.5	14	3.2	5	3.6	5	2.1	7			0
146	2.7	73	2.7	14	3.0	11	2.8	13	2.0	5	2.4	5	2.6	9	2.6	15	3
147	3.4	84	3.7	26	3.6	24	3.9	9					2.8	5	2.5	19	3
149	2.8	48	2.8	13	3.0	10	3.0	12	2.3	3					2.4	9	4
151	3.0	72	3.3	22	3.4	17	3.6	12	1.7	3					2.3	18	
154	2.3	79	2.3	21	2.6	19	2.6	14	2.8	5	3.0	5			1.4	15	
158	2.8	67	3.2	17	2.6	16	3.3	6	3.4	5	2.8	5	2.3	4	2.4	14	
180	3.0	77	2.9	16	2.7	13	2.9	12	3.4	5	3.6	5	3.6	7	3.1	19	
183	1.3	33	1.4	10	1.6	8	0.7	6	1.3	4	1.3	3	1.5	2			
185	2.7	42	2.5	6	3.0	7	3.2	9	1.5	4	1.8	4	3.6	7	2.4	5	
190	2.7	68	2.4	15	2.3	14	3.2	12	3.0	5	3.8	5	2.8	9	1.9	8	
191	3.3	72	3.3	18	2.8	18	4.0	8	3.5	2	4.0	2	3.1	7	3.5	17	
193	2.7	27	2.8	12	2.6	9	4.0	2	0.0	1	3.0	1	3.0	1			3
196	3.2	63	3.7	24			2.3	10			2.0	2	2.4	9	3.4	18	
198	3.3	29	3.3	16	3.3	12											4
203	2.7	41			2.5	13	3.1	7	3.5	4	2.5	4	2.0	4	2.7	9	
204	3.1	9	1.0	1	3.0	1	4.0	3					4.0	3	0.0	1	
209	1.7	16	0.5	2	0.0	2	2.7	3	0.0	2	0.0	2	3.6	5			
212	3.0	92	2.9	23	3.1	23	2.9	15	2.4	5	2.6	5			3.2	20	3
213	2.7	29	2.7	10	2.5	8	1.8	4	3.3	4	4.0	2					4
215	2.5	92	2.5	21	2.2	18	2.8	14	3.2	5	3.0	5	2.5	10	2.4	18	2
217	3.1	46	3.0	26			3.2	15	3.4	5							
218	1.5	22	1.3	7	1.9	7	1.4	8									
219	3.3	57	2.9	17	3.9	14	3.0	10			0.0	1			3.6	14	4
220	3.2	64	3.4	16	2.9	14	3.3	7	2.5	2	3.3	3	3.2	6	3.1	15	4
221	3.1	66	3.8	15	3.1	14	3.6	7	1.6	5	2.6	5	3.1	7	2.5	12	3
224	1.7	79	1.1	17	1.8	15	2.4	13	1.4	5	2.6	5	1.6	10	1.6	14	
234	3.1	74	3.0	26	3.2	24	3.4	16	2.3	4	2.7	3					0
235	2.5	59	2.7	19	2.6	19	2.3	3					1.0	3	2.2	14	4
236	2.3	56	2.0	22	2.2	19	2.9	15									
237	2.9	36	2.6	15	2.9	14							3.7	7			
238	1.8	10									2.0	1	1.8	9			
241	2.9	91	2.5	23	2.7	19	3.4	12	3.6	5	3.3	4	2.9	9	3.1	18	4
244	4.0	5					4.0	3					4.0	2			
245	2.9	35	2.9	18	2.9	16											4
247	1.5	88	0.3	23	0.1	21	2.5	11	0.0	2	2.3	3	3.0	10	3.4	17	4
252	2.3	48	2.2	15	2.6	12	2.6	10	2.0	5	2.4	5					0
255	3.6	74	3.7	18	3.1	17	3.8	13	4.0	1	4.0	3	3.3	6	3.7	15	3
256	1.0	68	0.9	18	0.9	15	1.8	12					0.1	9	1.2	13	0
257	2.0	63	1.7	16	1.8	15	2.8	12					2.7	6	1.6	13	0
258	2.6	10					2.6	10									
259	3.4	64	3.2	18	3.4	16	3.7	15							3.5	14	4
261	1.7	10					1.7	10									
262	2.7	28	2.0	2	4.0	2	3.5	10					1.8	9	2.6	5	
263	2.9	8					2.9	8									
264	3.5	11					3.5	11									
265	3.4	95	3.4	26	3.6	25	3.2	13					3.1	8	3.4	22	4
266	3.2	13					3.2	13									
267	3.8	6					3.8	6									
268	2.1	30	1.0	4	1.5	4	2.1	8					3.4	8	1.5	6	
269	3.4	8					3.4	8									
270	0.7	10					1.2	6							0.0	4	
272	1.7	15			2.0	4	1.9	9							0.0	2	
273	2.1	80	2.2	20	2.1	19	1.7	15					2.5	10	2.0	16	
274	0.6	55	0.3	11	0.0	11	0.7	12					1.4	9	0.7	12	
275	1.9	15			1.5	4	1.9	10	3.0	1							
276	2.7	12					3.0	6	2.0	5	4.0	1					
282	2.6	77	2.4	14	2.7	15	3.0	14	0.6	5	1.8	5	3.4	7	2.7	17	NR
284	1.6	97	1.3	24	1.2	22	2.7	13	1.2	5	0.8	5	2.1	7	2.1	20	1
285	2.7	6							2.0	2	3.0	4					
287	2.3	63	1.5	13	2.3	13	2.7	10	3.0	5	3.3	3	2.3	8	2.1	11	
289	2.5	78	2.3	21	2.3	19			3.3	3	3.8	5	3.4	9	2.2	20	3
290	2.5	11					2.8	5	2.0	2	2.7	3			1.0	1	
291	2.3	7					4.0	1	3.0	4	0.0	2					
292	3.2	61	2.6	19	3.4	15	3.3	11	3.0	3	3.8	4			3.7	9	NR
294	4.0	3									4.0	3					

Table 5. *Laboratory performance ratings for standard reference water sample T-147 (trace constituents)*

(MPV,most probable value; µg/L, micrograms per liter; mg/L, milligrams per liter; Lab, laboratory number; OLR, overall laboratory rating for all reported values; V/28, number of reported valuas of 28 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 =	Ag (Silver)		Al (Aluminium)		As (Arsenic)		B (Boron)		Ba (Barium)		Be (Beryllium)		Ca (Calcium)	
			MPV =	7.60	µg/L	14.0	µg/L	2.39	µg/L	50.0	µg/L	73.0	µg/L	16.0	µg/L	41.1	mg/L
			F-pseudosigma =	0.75		7.5		0.67		5.8		3.2		1.1		1.7	
Lab	OLR	V/28		RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating
1	3.7	26		7.36	4	12.0	4	2.20	4	50.4	4	73.4	4	15.9	4	40.5	4
3	2.4	22		10.00	0	< 30	NR	< 5	NR	53.0	3	75.0	3	17.0	3	43.8	1
4	2.6	11				< 500	NR			53.0	3	74.0	4	15.0	3	45.0	0
9	2.3	12														37.0	0
10	3.0	7															
11	2.1	20		7.00	3					138.0	0	75.0	3	17.0	3	44.2	1
12	1.3	9		9.80	0											41.0	4
13	2.9	17		6.31	1	11.1	4	< 5	NR			75.6	3	16.6	3	43.1	2
16	3.0	26		7.40	4	12.6	4	2.30	4	157.0	0	71.2	3	13.9	1	43.0	2
18	2.9	18		7.00	3	< 100	NR	2.30	4	< 50	NR	71.0	3	15.0	3	40.6	4
19	2.1	8										75.9	3				
21	3.0	1															
23	2.8	11		7.22	3	< 50	NR	2.81	3							46.1	0
24	3.0	7								47.4	4					40.1	3
25	1.9	17		< 6	0	< 19	NR	< 50	NR	< 23	0	68.4	2	15.7	4	43.4	2
26	3.5	23		7.61	4	11.5	4	2.28	4	44.9	3	74.9	3	16.6	3	41.3	4
30	3.0	20		7.50	4	13.2	4	3.00	3			75.0	3	16.7	3	42.0	3
33	2.8	8				< 10	NR					79.0	1			41.8	4
34	2.8	6		8.37	2	26.8	1	2.10	4								
36	2.2	15						2.00	3					16.1	4	43.0	2
39	3.1	20						2.20	4	58.1	2	71.5	4	15.4	3	40.2	3
40	2.9	17								45.2	3	71.7	4	15.2	3	39.4	3
42	2.4	25		7.60	4	14.2	4	3.50	1	49.0	4	74.0	4	15.8	4	45.8	0
43	3.8	6														40.7	4
45	2.8	4														41.3	4
46	3.3	16		7.09	3			2.67	4	45.2	3	70.3	3	15.4	3	40.8	4
48	3.3	22		7.60	4	13.8	4	2.80	3	20.0	0	72.7	4	16.7	3	43.6	2
50	2.6	20		7.80	4	10.8	4	2.70	4			69.2	2	13.8	1		
51	2.3	4														38.7	2
59	2.2	17		6.60	2			2.30	4			73.0	4	14.0	1	42.0	3
61	2.1	21		8.10	3	62.0	0	< 4.5	NR	35.5	0	77.5	2	16.4	4	43.7	2
64	3.0	4															
68	2.7	24		8.40	2	42.0	0	2.80	3	88.0	0	73.0	4	16.0	4	41.0	4
69	2.4	18		6.60	2	13.0	4	< 5	NR			80.5	0	15.2	3	40.1	3
70	2.9	14		< 10	NR	< 100	NR	< 10	NR	< 100	NR	72.4	4	16.0	4	42.5	3
76	3.7	10														41.6	4
80	2.9	7						2.40	4								
81	3.0	22		8.00	3	< 32	NR	3.00	3			74.0	4	15.0	3	41.8	4
83	2.2	14				< 25	NR					66.3	0	14.3	2	38.4	1
84	2.7	6														40.5	4
85	2.2	20		9.00	1			4.00	0	47.0	3	74.0	4	15.0	3	41.0	4
86	2.8	16						1.56	2	46.1	3	73.5	4	16.1	4	42.9	2
87	2.0	16		13.00	0			2.70	4			72.4	4			38.1	1
89	2.7	20		7.33	4	16.9	4	2.25	4			89.6	0	14.1	1	40.0	3
91	4.0	1															
93	2.0	4														40.3	4
96	2.7	11		8.10	3			2.00	3			< 100	NR	15.0	3		
97	2.8	24		4.96	0	15.0	4	1.96	3			75.0	3	16.9	3	41.2	4
104	3.0	1															
105	2.7	23		6.50	2	15.2	4	< 4	NR			66.9	1	12.8	0	41.1	4
107	2.7	11		7.50	4			< 5	NR			71.0	3				
108	0.7	14		3.00	0			1.55	2							175.0	0
109	3.1	12						1.80	3							40.5	4
111	2.2	13						3.30	2							48.2	0
113	2.9	21		7.48	4	12.3	4	2.07	4			68.2	1	15.7	4	45.2	0
114	1.7	9		< 10	NR									< 10	0	37.0	0
119	2.9	26		8.00	3	13.2	4	2.40	4	55.0	3	75.0	3	15.7	4	42.2	3
121	3.1	14										70.0	3	17.0	3	40.8	4
127	3.0	24		7.25	4	< 30	NR	2.05	3	44.8	3	72.5	4	15.1	3	40.2	3
129	0.7	7								15.0	0					47.0	0

Table 5. *Laboratory performance ratings for standard reference water sample T-147 (trace constituents)*

(MPV,most probable value; µg/L, micrograms per liter; mg/L, milligrams per litar; Lab, laboratory number; OLR, overall laboratory rating for all reported values; V/28, number of reported values of 28 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 =	Ag (Silver)		Al (Aluminium)		As (Arsenic)		B (Boron)		Ba (Barium)		Be (Beryllium)		Ca (Calcium)	
			MPV =	7.60	µg/L	14.0	µg/L	2.39	µg/L	50.0	µg/L	73.0	µg/L	16.0	µg/L	41.1	mg/L
			F-pseudosigma =	0.75		7.5		0.67		5.8		3.2		1.1		1.7	
Lab	OLR	V/28		RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating
131	1.8	21				< 100	NR	12.00	0	50.0	4	75.5	3	14.0	1	42.7	3
133	2.6	12		8.04	3			< 5	NR			76.5	2	17.6	2	43.3	2
134	3.6	26		7.11	3	12.3	4	2.16	4	50.4	4	71.9	4	15.5	4	40.0	3
138	3.5	25		7.03	3	12.4	4	1.98	3	51.4	4	72.0	4	15.9	4	41.4	4
140	2.1	15		7.00	3							245.0	0			37.0	0
141	2.4	20		8.30	3	< 50	NR	< 5	NR	50.0	4	77.4	2	16.6	3	43.5	2
142	3.0	26		3.97	0	< 50	NR	2.22	4	48.1	4	75.0	3	18.5	0	40.8	4
143	4.0	5						2.09	4								
145	2.3	22				< 50	NR	10.00	0	38.0	0	74.0	4	16.0	4	42.1	3
146	2.7	14		< 10	NR	< 200	NR	< 10	NR			77.6	2	16.7	3	41.9	4
147	3.7	26		7.50	4	13.0	4	2.38	4	52.0	4	70.0	3	15.8	4	41.0	4
149	2.8	13		8.00	3			2.00	3					15.0	3	38.7	2
151	3.3	22		7.80	4	14.2	4	2.60	4			80.3	0	16.1	4	42.4	3
154	2.3	21				6.0	2	1.40	2	49.3	4	65.0	0	16.6	3	40.2	3
158	3.2	17				24.9	2			49.8	4	70.8	3	16.0	4	41.6	4
180	2.9	16		8.90	1	27.5	1	< 40.1	NR	48.3	4	70.7	3	14.9	3	41.6	4
183	1.4	10		8.42	2							84.7	0			31.4	0
185	2.5	6				22.6	2									40.3	4
190	2.4	15		8.83	1	11.5	4									42.7	3
191	3.3	18				14.0	4	2.90	3			76.7	2			40.3	4
193	2.8	12		7.50	4			< 5	NR					15.0	3	38.5	2
196	3.7	24		7.46	4	13.5	4	2.49	4			73.3	4	16.6	3	41.2	4
198	3.3	16		8.10	3	15.9	4	2.66	4			75.6	3	17.2	2	42.6	3
204	1.0	1															
209	0.5	2														44.1	1
212	2.9	23		6.85	3	< 100	NR	2.65	4	55.2	3	68.4	2	12.6	0	42.0	3
213	2.7	10		8.03	3			2.60	4					19.2	0		
215	2.5	21		8.00	3	< 50	NR	< 5	NR	50.0	4	73.0	4	16.0	4	40.3	4
217	3.0	26		7.80	4	34.2	0	1.09	1	39.2	1	72.4	4	16.4	4	40.8	4
218	1.3	7				120.7	0									44.0	1
219	2.9	17				14.0	4			50.0	4	70.0	3	16.0	4	40.0	3
220	3.4	16						1.95	3			72.8	4	15.6	4	39.0	2
221	3.8	15		7.43	4	9.9	3									40.5	4
224	1.1	17				11.3	4	4.20	0			87.5	0	11.4	0	22.2	0
234	3.0	26		7.66	4	16.1	4	3.31	2	48.6	4	76.4	2	16.6	3	42.0	3
235	2.7	19				14.4	4	3.88	0			78.8	1	16.3	4	36.7	0
236	2.0	22		6.00	0	16.0	4	< 35	NR	39.0	1	71.0	3	16.0	4	39.5	3
237	2.6	15				30.0	0					71.0	3	16.0	4	40.3	4
241	2.5	23		6.10	1	11.8	4	1.80	3			59.3	0	8.4	0	42.0	3
245	2.9	18		7.63	4	11.0	4	2.91	3			73.5	4	16.7	3		
247	0.3	23		< 1	0	35.5	0	< 5	NR	127.0	0	42.9	0	< 1	0	40.8	4
252	2.2	15		7.34	4			1.95	3					26.0	0		
255	3.7	18		8.04	3	< 34	NR	< 5.6	NR	50.2	4	74.6	3	16.0	4	40.8	4
256	0.9	18		10.00	0			2.90	3	< 10	0	< 50	0			41.3	4
257	1.7	16		8.76	1	25.9	1	2.70	4							43.0	2
259	3.2	18		7.60	4	12.3	4	2.00	3	65.0	0	70.0	3				
262	2.0	2														41.5	4
265	3.4	26		8.50	2	14.8	4	3.00	3	52.0	4	75.0	3	16.7	3	40.5	4
268	1.0	4														33.5	0
273	2.2	20		9.14	0	21.8	2			90.1	0	63.4	0			42.4	3
274	0.3	11														27.0	0
282	2.4	14		< 10	NR	< 100	NR	< 5	NR	< 50	NR	71.6	4	15.8	4	41.8	4
284	1.3	24		7.00	3	29.0	1	2.00	3			76.0	3	39.0	0	38.1	1
287	1.5	13				2.0	1									36.9	0
289	2.3	21		8.80	1	10.4	4	< 5	NR	30.0	0	67.0	1	18.0	1	38.5	2
292	2.6	19		7.00	3	< 100	NR	3.00	3			72.0	4	19.0	0	43.1	2

Table 5. *Laboratory performance ratings for standard reference water sample T-147 (trace constituents)--Continued*

(MPV,most probable value; µg/L, micrograms per liter; mg/L, milligrams per liter; Lab, laboratory number; OLR, overall laboratory rating for all reported values; V/28, number of reported values of 28 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 =	Cd (Cadmium)		Co (Cobalt)		Cr (Chromium)		Cu (Copper)		Fe (Iron)		K (Potassium)		Li (Lithium)	
MPV =	15.9	µg/L	insuff. data		12.8	µg/L	11.4	µg/L	8.4	µg/L	3.52	mg/L	18.0	µg/L
F-pseudosigma =	1.2				1.2		1.3		6.4		0.19		1.3	
Lab	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating
1	15.4	4	< 1	NR	11.4	2	11.0	4	< 10	NR	3.48	4	17.3	3
3	158.0	0	< 5	NR	13.0	4	12.0	4	< 30	NR	3.10	0	18.0	4
4	16.0	4	< 100	NR	< 40	NR	7.7	0	< 30	NR			< 20	NR
9	15.7	4			13.5	3	6.0	0			3.40	3		
10	15.0	3			12.8	4	10.8	4	17.0	2				
11	17.0	3			18.0	0	14.0	0			3.67	3	15.0	0
12	17.0	3			< 20	NR	10.0	2	60.0	0	3.00	0		
13	15.6	4	< 10	NR	12.4	4	< 20	NR	< 10	NR	3.69	3		
16	15.8	4	< 1	NR	11.2	2	11.1	4	8.4	4	3.60	4	14.9	0
18	15.0	3	< 10	NR	11.0	2	11.0	4	< 50	NR	3.30	2		
19	14.6	2			11.4	2	9.0	1						
21									12.0	3				
23	14.4	2			12.6	4	11.6	4	< 100	NR	3.34	3		
24											3.26	2		
25	16.0	4	< 12	NR	< 8	0	10.0	2	< 6	NR	3.59	4	19.0	3
26	17.4	2	< 6	NR	13.2	4	11.3	4	5.2	4	3.58	4	17.8	4
30	16.6	3	< 1	NR	12.5	4	11.6	4			3.30	2		
33									< 20	NR	3.60	4		
34	16.0	4												
36	15.0	3			13.4	4	9.7	2			3.50	4		
39	16.0	4			12.2	4	12.5	3					16.9	3
40	16.3	4			12.0	3	9.1	1	6.7	4	3.47	4	17.0	3
42	17.6	2	< 2	NR	11.2	2	12.1	3	10.0	4	3.65	3		
43									< 10	NR	3.50	4		
45											3.61	4		
46	15.0	3			12.5	4	12.3	3			3.65	3		
48	16.2	4	< 50	NR	12.1	3	12.1	3	< 30	NR	3.44	4		
50	14.6	2	< 1	NR	11.2	2	13.7	1	2.4	3			16.4	2
51								*			3.82	1		
59	14.0	1			11.0	2	140.0	0						
61	16.2	4	< 1.7	NR	13.5	3	11.0	4	< 34	NR	6.14	0		
64											3.72	2		
68	17.0	3	< 80	NR	13.0	4	11.0	4	< 39	NR	3.60	4	18.0	4
69	15.1	3			11.6	3	9.2	1	< 50	NR	3.82	1	18.1	4
70	18.4	0	< 50	NR	14.2	2	11.4	4	< 20	NR	3.54	4		
76	16.5	3			12.2	4							16.8	3
80	16.0	4					8.4	0	< 11	NR				
81	16.0	4	< 7	NR	13.0	4	11.0	4	< 9	NR	3.59	4		
83	16.6	3			13.4	4	12.5	3	8.1	4	3.61	4		
84							11.3	4						
85	15.0	3	< 10	NR	< 10	0	17.0	0	< 10	NR	3.56	4	18.0	4
86	16.1	4					13.6	1			3.42	3		
87	17.0	3			11.9	3	14.0	0	< 40	NR	3.39	3		
89	15.9	4	< 10	NR	14.1	2	< 10	NR	< 50	NR	3.34	3		
91									< 10	NR				
93											3.24	1		
96	17.3	2			13.3	4	14.0	0	< 50	NR				
97	15.2	3	< 0.5	NR	15.2	1	13.5	1	9.4	4	3.49	4		
104														
105	14.0	1	< 1	NR	11.0	2	10.8	4	< 10	NR	3.62	3	15.3	0
107					14.0	3	12.3	3	40.0	0	3.49	4		
108	10.1	0			10.0	0	12.0	4	63.0	0	340.00	0		
109									9.4	4	3.73	2	18.1	4
111	14.3	2			13.9	3	13.2	2			3.60	4		
113	15.9	4			12.0	3	12.8	2	6.4	4	3.93	0		
114	20.0	0			13.0	4	< 10	NR	< 10	NR	3.65	3		
119	14.7	2	0.16	NR	12.8	4	12.0	4	15.0	2	3.20	1		
121	16.5	3	4.00	NR			14.0	0	9.6	4				
127	15.8	4	< 0.8	NR	11.8	3	10.5	3	< 5	NR	3.41	3	17.3	3
129									48.0	0				

Table 5. *Laboratory performance ratings for standard reference water sample T-147 (trace constituents)--Continued*

(MPV,most probable value; µg/L, micrograms per liter; mg/L, milligrams per liter; Lab, laboratory number; OLR, overall laboratory rating for all reported values; V/28, number of reported values of 28 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 =	Cd (Cadmium)		Co (Cobalt)		Cr (Chromium)		Cu (Copper)		Fe (Iron)		K (Potassium)		Li (Lithium)	
MPV =	15.9	µg/L	insuff. data		12.8	µg/L	11.4	µg/L	8.4	µg/L	3.52	mg/L	18.0	µg/L
F-pseudosigma =	1.2				1.2		1.3		6.4		0.19		1.3	
Lab	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating
131	15.0	3	4.00	NR	17.0	0	9.0	1	8.4	4	3.70	3	19.7	2
133	17.7	1			14.7	1	10.6	3	7.0	4				
134	15.3	4	< 1	NR	11.7	3	11.6	4	7.3	4	3.50	4	18.5	4
138	15.3	3	< 0.5	NR	11.4	2	11.2	4	5.7	4	3.30	2		
140	15.2	3			21.0	0	13.0	2	6.0	4	3.52	4		
141	16.5	3	< 10	NR	15.3	1	10.8	4	< 50	NR	3.72	2		
142	15.7	4	< 1	NR	11.7	3	11.1	4	13.0	3	3.51	4	19.0	3
143					12.7	4								
145	18.0	1	3.00	NR	14.0	3	16.0	0	7.0	4	3.55	4	18.0	4
146	16.3	4	< 10	NR	14.1	2	< 25	NR	< 50	NR	4.45	0		
147	15.5	4	0.08	NR	13.1	4	11.2	4	8.0	4			17.7	4
149							11.0	4	< 10	NR	3.40	3		
151	16.6	3			11.5	2	12.6	3	< 10	NR	3.40	3	16.9	3
154	16.3	4			11.8	3	9.6	2	3.0	3	3.30	2		
158	15.7	4			16.8	0	11.9	4	4.6	3	3.26	2		
180	16.5	3	< 5.22	NR	12.2	4	12.9	2	< 3.33	NR	3.74	2		
183	17.6	2			13.2	4	11.4	4						
185											3.41	3		
190	0.1	0			12.9	4	11.2	4	15.6	2	3.61	4		
191	17.1	2	0.15	NR	12.9	4	11.9	4	170.0	0	3.47	4		
193	15.0	3			12.9	4	< 25	NR			3.50	4		
196	15.8	4	0.13	NR	12.3	4	11.9	4			3.56	4	19.0	3
198	15.5	4			13.6	3	12.1	3	< 50	NR	3.49	4		
204														
209														
212	16.1	4	0.16	NR	9.1	0	11.2	4	< 100	NR	3.65	3	< 50	NR
213	12.6	0	< 0.68	NR	14.0	3	11.8	4	8.2	4				
215	14.0	1	< 1	NR	12.0	3	13.2	2	10.0	4	1.00	0		
217	15.1	3			13.8	3	9.7	2	27.7	0	3.28	2	17.0	3
218									8.8	4	3.73	2		
219	14.0	1			12.0	3	8.0	0			3.50	4	17.0	3
220	13.9	1	1.80	NR			11.3	4	6.8	4	3.31	2	17.9	4
221	16.2	4	0.50	NR	12.4	4	11.2	4	7.6	4	3.52	4		
224	15.3	3	< 3	NR			14.8	0	50.4	0	3.21	1		
234	15.9	4	0.33	NR	14.4	2	12.0	4	7.1	4	3.63	3	17.0	3
235	17.0	3			12.7	4	11.3	4	< 10	NR				
236	17.0	3	8.00	NR	13.0	4	8.0	0	7.0	4	3.06	0	16.0	1
237	18.0	1	< 10	NR	< 10	0	11.0	4	20.0	1			20.0	1
241	15.6	4			12.8	4	10.1	2	7.0	4	3.40	3		
245	15.2	3	0.21	NR	11.2	2	11.0	4	147.0	0				
247	2.3	0	< 1	NR	44.5	0	7.3	0			1.80	0	36.6	0
252	14.6	2			12.9	4	11.1	4	1.0	2				
255	16.4	4	< 4.1	NR	10.8	1	11.8	4	< 68	NR	3.58	4		
256	18.9	0	< 50	NR	15.0	1	10.0	2	< 10	NR	4.30	0	120.0	0
257	18.0	1	< 0.04	NR	17.7	0	14.0	0	< 0.02	NR	4.10	0	18.0	4
259	15.0	3			11.8	3	11.5	4	8.0	4	3.50	4		
262														
265	16.5	3	0.04	NR	13.4	4	12.6	3	< 10	NR	3.52	4	18.0	4
268											4.53	0		
273	9.4	0	6.70	NR	13.0	4	12.5	3	7.2	4	3.50	4	21.2	0
274	7.6	0					17.0	0	453.7	0	4.85	0		
282	16.1	4	< 20	NR	13.5	3	< 10	NR	< 50	NR	4.20	0		
284	20.0	0	20.00	NR	8.0	0	8.0	0	11.0	4	3.99	0		
287	17.1	2			12.0	3	15.0	0	31.0	0	5.05	0		
289	17.7	1					12.3	3	7.0	4	3.30	2	25.0	0
292	14.9	3			12.0	3	13.0	2	10.0	4	3.40	3		

Table 5. *Laboratory performance ratings for standard reference water sample T-147 (trace constituents)--Continued*

(MPV,most probable value; µg/L, micrograms per liter; mg/L, milligrams per liter; Lab, laboratory number; OLR, overall laboratory rating for all reported values; V/28, number of reported values of 28 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 =	Mg (Magnesium)		Mn (Manganese)		Mo (Molybdenum)		Na (Sodium)		Ni (Nickel)		Pb (Lead)		Sb (Antimony)	
MPV =	8.20	mg/L	17.2	µg/L	11.8	µg/L	52.6	mg/L	13.6	µg/L	13.8	µg/L	10.5	µg/L
F-pseudosigma =	0.30		1.4		1.3		2.2		1.5		1.1		0.9	
Lab	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating
1	8.04	3	15.9	3	10.9	3	53.7	4	13.0	4	14.0	4	11.0	3
3	8.08	4	18.0	3	14.0	1	55.8	2	14.0	4	15.0	2	10.0	3
4	8.40	3	17.0	4	< 20	NR	57.0	1	< 20	NR	< 200	NR		
9	8.20	4	20.4	0			51.0	3	14.0	4	15.0	2		
10			20.0	1							13.2	3		
11	8.79	1	18.0	3	13.0	3	50.3	2	17.0	0	14.0	4		
12	9.10	0	< 30	NR	< 30	NR	54.0	3	< 20	NR	< 10	0		
13	8.28	4	18.0	3			56.5	1	< 20	NR	13.9	4	12.6	0
16	8.50	3	15.4	2	12.0	4	54.0	3	13.0	4	13.3	4	9.7	3
18	8.00	3	17.0	4	< 20	NR	52.4	4	< 25	NR	12.5	2	8.7	1
19			17.3	4					24.3	0	12.0	1		
21														
23			17.6	4			50.6	3	< 20	NR	13.7	4		
24	7.88	2					51.4	3						
25	8.33	4	18.0	3			55.0	2	< 49	NR	< 71	NR	< 51	NR
26	8.45	3	17.2	4	10.6	3	51.8	4	13.6	4	14.3	4		
30	8.10	4	16.8	4	10.6	3			14.8	3	13.8	4	22.0	0
33	8.23	4	20.0	1			53.9	3						
34											14.6	3		
36	8.72	1	16.1	3			57.4	0	11.6	2	11.7	1	9.5	2
39	8.16	4	17.2	4	9.0	0	52.3	4	12.7	3	11.0	0	10.2	4
40	8.27	4	16.8	4	21.5	0	53.2	4						
42	9.40	0	15.4	2	12.6	3	55.1	2	17.0	0	14.7	3	11.4	3
43	8.10	4	18.0	3			52.1	4						
45	8.00	3					58.0	0						
46	7.96	3	16.4	3			51.8	4			13.2	3		
48	8.16	4	17.3	4	12.9	3	52.1	4	14.0	4	14.3	4	10.7	4
50			15.2	2	13.8	1			12.9	4	15.3	2	10.4	4
51	8.16	4					49.6	2						
59	8.40	3	14.0	0			51.0	3	11.0	1	13.0	3	10.0	3
61	8.86	0	18.2	3	< 17.2	NR	48.6	1	12.6	3	13.0	3	< 7.6	0
64	7.84	2					53.6	4						
68	8.20	4	17.0	4	14.0	1	53.0	4	14.0	4	15.4	2	13.9	0
69	8.30	4	21.0	0			50.2	2	12.6	3	12.9	3	7.7	0
70	8.34	4	< 20	NR	< 50	NR	53.6	4	< 50	NR	19.9	0	13.5	0
76	8.31	4					53.7	4	13.3	4	13.9	4	11.2	3
80			15.4	2							13.3	4		
81	8.51	2	17.0	4	12.0	4	55.3	2	12.0	2	13.0	3	8.0	0
83	7.53	0	16.0	3			48.9	1	16.4	1				
84	7.90	3	14.4	1			52.6	4			17.4	0		
85	8.40	3	17.0	4	< 10	NR	53.2	4	18.0	0	< 10	0		
86	8.15	4	16.8	4			54.7	3			14.8	3		
87	7.76	2	19.0	2	12.2	4	50.0	2	< 15	NR	16.7	0		
89	7.86	2	17.1	4			49.4	2	13.9	4	11.4	0	10.8	4
91			16.9	4										
93	8.41	3					10.7	0						
96			< 20	NR					14.8	3	15.0	2	10.0	3
97	7.95	3	17.2	4	11.2	4	53.0	4	14.5	3	14.6	3	10.4	4
104														
105	7.90	3	14.9	1	12.2	4	52.2	4	12.9	4	13.6	4	9.6	3
107	8.09	4	19.0	2							10.6	0		
108			20.0	1	14.5	0			11.0	1	12.4	2		
109	8.38	3	17.0	4	11.4	4	52.4	4			11.9	1		
111	7.90	3					49.0	1	13.6	4	19.6	0		
113	9.21	0	16.3	3			48.3	1	13.3	4	14.7	3	10.9	4
114	8.35	4	22.0	0			52.0	4	< 10	NR	< 10	0		
119	8.40	3	18.0	3	12.4	4	54.1	3	12.5	3	15.0	2	11.0	3
121	8.00	3	18.0	3			53.4	4	15.0	3				
127	7.99	3	18.1	3	11.3	4	50.2	2	13.2	4	12.1	2	11.3	3
129	13.00	0	10.0	0			49.0	1						

Table 5. *Laboratory performance ratings for standard reference water sample T-147 (trace constituents)--Continued*

(MPV,most probable value; µg/L, micrograms per liter; mg/L, milligrams per liter; Lab, laboratory number; OLR, overall laboratory rating for all reported values; V/28, number of reported values of 28 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 =	Mg (Magnesium)		Mn (Manganese)		Mo (Molybdenum)		Na (Sodium)		Ni (Nickel)		Pb (Lead)		Sb (Antimony)	
MPV =	8.20	mg/L	17.2	µg/L	11.8	µg/L	52.6	mg/L	13.6	µg/L	13.8	µg/L	10.5	µg/L
F-pseudosigma =	0.30		1.4		1.3		2.2		1.5		1.1		0.9	
Lab	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating
131	7.57	0	17.6	4	< 15	NR	45.0	0	44.0	0	< 30	NR	12.0	1
133	8.56	2							13.5	4	< 20	NR		
134	7.92	3	16.8	4	11.8	4	48.7	1	13.4	4	12.8	3	9.8	3
138	8.12	4	15.8	3	11.2	4	51.6	4	12.9	4	14.1	4	10.5	4
140	7.80	2	15.0	1			51.5	4	14.0	4	16.0	1		
141	8.55	2	17.6	4	14.7	0	54.7	3	13.5	4	16.9	0	8.0	0
142	8.04	3	16.0	3	12.3	4	54.0	3	13.7	4	13.5	4	12.2	1
143					11.8	4			13.3	4				
145	8.49	3	18.0	3	11.0	3	53.6	4	16.0	1	28.0	0		
146	8.13	4	18.1	3	12.0	4	56.2	1	< 40	NR	15.1	2	< 50	NR
147	8.40	3	18.4	3	12.5	3	56.0	1	13.0	4	13.8	4	10.5	4
149	7.70	1	12.0	0	12.0	4	52.0	4			13.0	3	10.0	3
151	8.00	3	16.8	4	12.2	4	53.0	4	13.1	4	14.2	4	11.3	3
154	8.20	4	14.0	0			57.4	0	14.0	4	14.5	3	10.0	3
158	8.34	4	17.2	4			50.6	3	13.1	4	11.6	1		
180	8.18	4	17.5	4	9.8	1	52.1	4	< 16.3	NR	< 31.9	NR	< 27.8	NR
183	6.20	0							15.2	2	9.3	0		
185	7.96	3					53.9	3						
190	8.37	3	21.9	0			52.7	4	16.8	0	13.7	4		
191	8.18	4	17.0	4			52.3	4	15.0	3	14.5	3		
193	7.45	0					51.4	3	< 50	NR	13.8	4	11.0	3
196	8.06	4	17.0	4	11.6	4	54.9	2	14.0	4	13.5	4	10.2	4
198	8.06	4	18.5	3			52.8	4	< 50	NR	13.3	4	10.4	4
204														
209	9.00	0												
212	8.40	3	15.1	2	11.7	4	55.8	2	13.2	4	14.2	4	9.4	2
213									13.2	4	14.8	3		
215	8.00	3	17.0	4	11.6	4	51.2	3	12.6	3	13.0	3	< 7	0
217	8.20	4	18.1	3	11.1	3	52.6	4			14.1	4	10.3	4
218	9.06	0					59.9	0						
219	8.00	3	22.0	0			52.0	4	15.0	3				
220	7.97	3	16.1	3			52.5	4	13.7	4				
221	7.86	2	17.7	4	11.6	4	53.4	4	13.3	4	14.1	4		
224	7.37	0	17.6	4	< 5	0	47.3	0	< 24	NR	13.5	4		
234	8.45	3	18.2	3	16.2	0	53.0	4	16.5	1	14.4	3	8.9	1
235	7.57	0	15.5	2	11.8	4			13.0	4	14.3	4	11.4	3
236	8.10	4	16.0	3	15.0	0	50.3	2	13.0	4	< 19	NR	< 100	NR
237	8.10	4	17.0	4	< 50	NR	52.1	4	< 9	NR	< 40	NR		
241	8.40	3	19.0	2	9.4	1	55.0	2	13.9	4	11.8	1	10.4	4
245			15.0	1	11.7	4			13.2	4	14.0	4	10.5	4
247	12.80	0	11.9	0	1.2	0	42.8	0	36.2	0	8.8	0	19.3	0
252	8.70	1	< 40	NR	8.0	0	50.0	2	15.2	2	12.0	1	10.2	4
255	8.27	4	17.3	4	11.3	4	53.1	4	13.9	4	13.6	4	< 24	NR
256	9.20	0	20.0	1			48.5	1	45.5	0	9.0	0		
257	7.00	0	19.1	2	< 20	NR	46.6	0	20.0	0	14.3	4	10.6	4
259			15.8	3	11.7	4	52.9	4	13.2	4	12.6	2		
262	9.30	0												
265	8.10	4	17.5	4	14.0	1	52.8	4	13.5	4	13.6	4	11.0	3
268	8.35	4					61.9	0						
273	8.30	4	15.2	2			54.3	3	14.0	4	15.5	2		
274	9.15	0	20.4	0			66.4	0			11.1	0		
282	8.43	3	17.4	4	< 50	NR	53.3	4	< 50	NR	11.0	0	8.6	0
284	8.56	2	25.0	0	84.0	0	58.0	0	12.0	2	13.0	3	25.0	0
287	8.35	4	23.0	0			51.3	3	32.0	0	14.2	4		
289	7.77	2	16.8	4	14.4	0	49.3	2	13.3	4	13.0	3		
292	8.80	1	17.0	4	10.0	2	53.6	4	< 20	NR	13.0	3	11.0	3

Table 5. *Laboratory performance ratings for standard reference water sample T-147 (trace constituents)--Continued*

(MPV,most probable value; µg/L, micrograms per liter; mg/L, milligrams per liter; Lab, laboratory number; OLR, overall laboratory rating for all reported values; V/28, number of reported values of 28 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 =	Se (Selenium)		SiO2 (Silica)		Sr (Strontium)		Tl (Thallium)		U (Uranium)		V (Vanadium)		Zn (Zinc)	
MPV =	10.1	µg/L	24.0	mg/L	313	µg/L	20.0	µg/L	3.21	µg/L	15.2	µg/L	14.0	µg/L
F-pseudosigma =	1.8		1.4		13		2.1		0.59		1.4		2.2	
Lab	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating
1	9.4	4	24.2	4	304	3	19.1	4	3.00	4	15.3	4	12.6	3
3	< 10	NR	25.1	3	338	1	17.0	2			16.0	3	17.0	2
4			25.0	3							< 20	NR	13.0	4
9					287	1							13.0	4
10													15.0	4
11			23.1	3	320	3	20.0	4			16.0	3		
12													< 20	NR
13	8.8	3	25.2	3			19.3	4			< 50	NR	13.7	4
16	11.8	3			299	2	19.4	4	3.50	4	15.7	4	10.8	2
18	12.0	2			304	3	18.4	3			14.0	3	< 100	NR
19													14.2	4
21														
23	8.8	1											< 20	NR
24			25.0	3	313	4								
25	< 129	NR	12.1	0	328	2					13.0	1	146.0	0
26	8.2	2	25.1	3							14.1	3	11.9	3
30	16.0	0							4.00	2	15.8	4	15.5	3
33			25.9	2	325	3								
34	8.8	3												
36	7.9	2					7.0	0						
39	12.0	2			304	3	21.9	3					13.8	4
40			22.5	2	24	0							13.0	4
42	13.9	0	26.9	0	326	3	21.5	3			14.0	3	14.7	4
43			23.9	4										
45														
46	11.0	3									15.4	4		
48	11.4	3					20.5	4			15.3	4	18.1	1
50	11.0	3			328	2	21.8	3			13.6	2	12.7	3
51														
59	10.0	4					18.0	3					18.0	1
61	8.9	3	11.9	0			19.6	4			16.2	3	15.7	3
64			23.4	4										
68	3.9	0			310	4	21.5	3			14.0	3	24.0	0
69	10.0	4					18.0	3					< 50	NR
70	< 10	NR	24.4	4	317	4	18.5	3			< 50	NR	< 20	NR
76							20.7	4						
80	11.0	3											16.0	3
81	9.0	3	26.4	1	324	3	19.0	4			13.0	1	13.0	4
83			21.6	1									13.1	4
84														
85	7.0	1			331	2					11.0	0	16.0	3
86	5.6	0			310	4					21.3	0	12.8	3
87	3.9	0	23.3	4									19.0	0
89	3.5	0	24.0	4			19.8	4			21.0	0	13.4	4
91														
93														
96	9.4	4											16.0	3
97	9.1	3	23.3	4	252	0	23.1	2			16.1	3	< 8.4	0
104			25.2	3										
105	11.2	3	24.6	4	316	4	18.6	3			13.9	3	16.6	2
107			24.8	3									15.0	4
108	20.0	0											22.0	0
109	9.8	4			349	0								
111	7.8	2	24.0	4							17.6	1		
113	10.1	4	25.3	3	313	4	19.1	4						
114													< 10	NR
119	10.1	4	26.0	2	178	0	21.6	3	2.90	3	16.2	3	11.0	2
121			23.8	4	316	4					15.0	4	11.0	2
127	10.7	4	22.9	3	306	3	16.6	1			14.6	4	10.2	1
129			24.3	4										

Table 5. *Laboratory performance ratings for standard reference water sample T-147 (trace constituents)--Continued*

(MPV,most probable value; µg/L, micrograms per liter; mg/L, milligrams per liter; Lab, laboratory number; OLR, overall laboratory rating for all reported values; V/28, number of reported values of 28 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 =	Se (Selenium)		SiO2 (Silica)		Sr (Strontium)		Tl (Thallium)		U (Uranium)		V (Vanadium)		Zn (Zinc)	
MPV =	10.1	µg/L	24.0	mg/L	313	µg/L	20.0	µg/L	3.21	µg/L	15.2	µg/L	14.0	µg/L
F-pseudosigma =	1.8		1.4		13		2.1		0.59		1.4		2.2	
Lab	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating
131	15.0	0	24.4	4	3	0					11.0	0	13.0	4
133	9.7	4											15.9	3
134	10.7	4	24.1	4	308	4	21.6	3			14.5	3	14.0	4
138	11.2	3	24.2	4	308	4	21.4	3			14.2	3	12.3	3
140			24.0	4									21.0	0
141	8.9	3					34.2	0			14.1	3	14.6	4
142	12.4	2	28.2	0	321	3	20.5	4	3.01	4	14.8	4	15.0	4
143	9.7	4												
145			25.0	3	316	4	< 3	0			19.0	0	16.0	3
146	12.5	2					20.5	4			16.0	3	< 20	NR
147	10.4	4	24.6	4	309	4	19.5	4	3.20	4	15.9	4	13.1	4
149													15.0	4
151	11.6	3			322	3	21.2	3					14.5	4
154	9.5	4			302	3					21.0	0	8.0	0
158											14.5	4	14.4	4
180	< 53.2	NR					< 40.1	NR			16.0	3	12.5	3
183											21.2	0		
185			27.7	0										
190			11.7	0									12.1	3
191			23.9	4	310	4	21.2	3					15.3	3
193	9.0	3					3.0	0					< 50	NR
196	13.1	1			313	4	19.0	4	3.21	4	15.4	4	13.4	4
198	< 20	NR					16.6	1					< 25	NR
204			26.2	1										
209														
212	11.0	3	24.1	4	313	4	20.9	4			13.1	2	15.3	3
213							17.1	2					< 38	NR
215	12.0	2	21.1	0			7.0	0					11.0	2
217	10.4	4	23.3	4	320	3	20.8	4	3.80	3	15.2	4	13.6	4
218					330	2								
219					303	3					15.0	4	12.0	3
220	10.3	4									14.7	4	15.0	4
221	9.2	4												
224	37.0	0									11.6	0	11.5	2
234	9.7	4	24.8	3	314	4	22.5	2			16.0	3	13.4	4
235	10.2	4			268	0	20.7	4			17.0	2	14.8	4
236	93.0	0	12.2	0	304	3					10.0	0	< 1	0
237			23.2	3	307	4					17.0	2	< 10	NR
241	10.5	4	23.5	4			6.2	0			14.8	4	7.0	0
245	12.6	2					20.4	4			13.2	2	25.4	0
247	7.4	2			334	1	31.2	0			31.0	0	3.2	0
252	9.2	4											7.0	0
255	9.4	4					< 59	NR			14.8	4	14.1	4
256	3.2	0	21.4	1									15.0	4
257											< 100	NR	14.0	4
259	11.2	3			306	3							11.7	2
262														
265	13.5	1	24.0	4	303	3	20.5	4	3.00	4	15.5	4	14.0	4
268														
273			23.1	3	332	2	9.5	0					12.5	3
274			20.9	0									15.5	3
282	< 5	0	11.7	0			20.3	4			< 20	NR	< 20	NR
284	10.0	4	17.4	0	322	3	9.0	0			266.0	0	10.4	1
287													12.0	3
289	8.0	2	23.9	4	308	4					15.1	4		
292	10.0	4					23.0	2					20.0	0

Table 6. *Laboratory performance ratings for standard reference water sample T-149 (trace constituents)*

(MPV,most probable value; µg/L, micrograms per liter; mg/L, milligrams per liter; Lab, laboratory number; OLR, overall laboratory rating for all reported values; V/28, number of reported values of 28 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 Ratad)	

	Analyte =	Ag (Silver)		Al (Aluminium)		As (Arsenic)		B (Boron)		Ba (Barium)		Be (Beryllium)		Ca (Calcium)	
	MPV =	insufficient data		35.5	µg/L	1.0	µg/L	128	µg/L	42.5	µg/L	insufficient data		42.3	mg/L
	F-pseudosigma =			9.0		0.6		10		2.5				1.9	
Lab	OLR	V/28	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating
1	3.8	24	< 1	NR	32.5	4	< 1	NR	124	4	42.1	4	< 0.5	NR	42.0	4
3	2.8	20	< 5	NR	< 30	NR	< 5	NR	133	4	43.0	4	< 1	NR	45.6	1
4	2.6	14			< 500	NR			< 50	0	44.0	3	< 10	NR	45.0	2
10	2.9	7														
11	2.1	20			270.0	0			53	0	44.0	3			46.1	0
12	3.1	10													42.0	4
13	2.1	16	< 10	NR	30.2	3	< 5	NR			44.4	3	< 5	NR	44.8	2
16	3.2	23	< 1	NR	34	4	0.9	4	262	0	41.2	3	< 1	NR	45.0	2
18	3.6	17	< 3	NR	< 100	NR	< 1	NR	128	4	40.0	3	< 1	NR	41.7	4
19	2.7	7									44.1	3				
21	4.0	1														
23	2.3	14			44.2	3							< 0.5	NR	55.3	0
24	3.4	7							126	4					42.2	4
25	1.7	13	< 6	NR	< 19	NR	< 50	NR	< 23	0	37.9	1	< 2.4	NR	46.0	1
26	3.5	20	< 0.2	NR	32.8	4	1.0	4	119	3	42.7	4	< 1	NR	42.8	4
30	2.8	18	< 1	NR	36	4	1.1	4			44.6	3	< 1	NR	43.0	4
32	3.2	24	< 0.1	NR	35.5	4	1.0	4	103	0	42.5	4	< 0.1	NR	43.0	4
33	2.1	9			20	1					52.0	0			42.8	4
34	3.2	5	< 0.2	NR	45.0	2	0.9	4								
36	2.4	14	< 50	NR	< 1000	NR	0.9	4							41.0	3
40	2.7	13							119	3	41.7	4			41.0	3
42	1.7	22	< 1	NR	27.3	3	1.7	2	146	1	34.8	0	< 2	NR	47.8	0
43	3.9	7													42.0	4
45	3.3	4													42.1	4
46	3.3	15			36.2	4			130	4					41.1	3
48	3.3	21	< 0.6	NR	37.2	4	0.9	4	100	0	40.6	3	< 0.4	NR	43.1	4
51	3.0	4													41.1	3
59	3.5	14	< 5	NR			< 2	NR			42.0	4	< 2	NR	43.0	4
61	2.4	19	< 2	NR	83.2	0	< 4.5	NR	134	3	45.2	2	0.25	NR	44.7	2
64	3.8	4														
68	2.3	21	< 0.3	NR	61	0	2.8	0	170	0	43.0	4	50.00	NR	42.0	4
69	2.9	14	< 1	NR	29.5	3	< 5	NR			< 50	NR	< 1	NR	40.7	3
70	3.2	13	< 10	NR	< 100	NR	< 10	NR	132	4	< 50	NR	< 2	NR	44.0	3
76	3.7	9													42.5	4
80	1.8	5					2.0	1								
81	2.7	18	< 1	NR	< 32	NR	< 2	NR			43.0	4	< 1	NR	43.8	3
83	2.5	12			< 25	NR					38.4	1	< 0.2	NR	39.6	2
84	2.7	6													41.6	4
86	2.5	16					0.4	3	124	4	42.7	4			44.5	2
87	2.1	15	9.00	NR			< 2	NR			37.3	0			42.0	4
89	2.3	15	< 2	NR	164	0	< 2	NR			< 50	NR	< 2	NR	40.9	3
91	4.0	2														
92	0.9	12													35.5	0
98	3.2	9	< 1	NR			1.1	4			< 100	NR	< 10	NR		
97	2.6	20	0.94	NR	40.4	3	< 0.9	NR			45.0	3	< 0	NR	41.6	4
104	3.0	1														
105	3.0	19	< 0.4	NR	31.4	4	< 4	NR			39.2	2	< 1	NR	41.6	4
108	1.2	13	0.40	NR			0.4	2							130.0	0
109	3.6	12					0.5	3							41.5	4
110	2.0	4													42.9	4
111	2.3	14			46.6	2	< 2	NR							48.7	0
113	3.1	19	< 0.5	NR	34.5	4	< 1.5	NR			40.1	3	< 0.1	NR	45.9	1
114	2.1	7	< 10	NR									< 10	NR	37.0	0
118	2.1	9	< 0.5	NR	< 2000	NR	< 4	NR								
119	2.8	24	1.00	NR	36.5	4	0.9	4	109	1	44.0	3	0.01	NR	43.6	3
121	3.7	13									41.0	3	< 1	NR	42.0	4
126	1.8	9	0.40	NR												
129	2.0	7							170	0					45.0	2
131	2.2	19	< 10	NR	< 100	NR			128	4	43.1	4			42.8	4
133	2.5	8	< 6	NR			< 5	NR			44.4	3	< 0.5	NR	43.9	3

Table 6. *Laboratory performance ratings for standard reference water sample T-149 (trace constituents)--continued*

(MPV,most probable value; µg/L, micrograms per liter; mg/L, milligrams per liter; Lab, laboratory number; OLR, overall laboratory rating for all reported values; V/28, number of reported values of 28 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 =	Ag (Silver)		Al (Aluminium)		As (Arsenic)		B (Boron)		Ba (Barium)		Be (Beryllium)		Ca (Calcium)	
	MPV =	insufficient data		35.5	µg/L	1.0	µg/L	128	µg/L	42.5	µg/L	insufficient data		42.3	mg/L
	F-pseudosigma =			9.0		0.6		10		2.5				1.9	
Lab	OLR	V/28	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating
134	3.7	23	< 1	NR	35.3	4	0.6	3	130	4	42.3	4	< 0.5	NR	41.8	4
138	3.6	22	0.06	NR	35.1	4	< 1	NR	129	4	41.6	4	< 0.03	NR	42.6	4
140	2.1	14	2.50	NR							326.0	0			39.0	1
141	2.1	16	< 10	NR	< 100	NR	< 5	NR	141	2	45.3	2	< 5	NR	45.1	1
142	3.1	24	7.16	NR	< 50	NR	0.4	2	123	4	43.2	4	< 1	NR	42.3	4
143	3.6	5					0.5	3								
145	1.9	21			77	0	12.0	0	121	3	44.0	3	< 1	NR	43.4	3
146	3.0	11	< 10	NR	< 200	NR	< 10	NR			44.5	3	< 4	NR	41.9	4
147	3.6	24	0.60	NR	36	4	0.9	4	129	4	41.0	3	< 0.03	NR	43.0	4
149	3.0	10	< 0.1	NR			< 1	NR					< 0.5	NR	40.7	3
151	3.4	17	0.25	NR	52.6	1	0.9	4			45.1	2	0.02	NR		
154	2.6	19			30.0	3			128	4	37.2	0			42.3	4
158	2.6	16			42.1	3			125	4	41.0	3			43.2	4
180	2.7	13	< 3.22	NR	< 20.2	NR	< 40.1	NR	142	2	40.8	3	< 0.667	NR	42.1	4
183	1.6	8									54.0	0			35.8	0
185	3.0	7			62.1	0									41.0	3
190	2.3	14	0.00	NR	33.6	4									50.1	0
191	2.8	18			52	1	1.4	3			45.6	2			41.0	3
193	2.6	9	< 5	NR			< 5	NR					< 1	NR	40.9	3
198	3.3	12	< 2.5	NR	34.3	4	< 2	NR			45.6	2	< 0.5	NR	44.8	2
203	2.5	13	< 2	NR	35.5	4	< 5	NR			51.6	0			41.4	4
204	3.0	1														
209	0.0	2													46.3	0
212	3.1	23	0.15	NR	158	0	0.9	4	135	3	39.4	2	< 0.1	NR	43.6	3
213	2.5	8	< 0.11	NR			1.7	2					< 0.11	NR		
215	2.2	18	< 1	NR	< 50	NR	< 5	NR	120	3	40.0	3	1.00	NR	41.1	3
218	1.9	7			150.66	0									44.0	3
219	3.9	14			35	4					42.0	4			43.0	4
220	2.9	14					< 1	NR			42.3	4	< 1	NR	40.2	2
221	3.1	14	0.20	NR	33.5	4									41.3	3
224	1.8	15			30.7	3	< 12	NR			50.9	0	< 0.5	NR	39.5	1
234	3.2	24	0.40	NR	32.7	4	1.5	3	127	4	43.3	4	0.24	NR	43.4	3
235	2.6	19			36.5	4	1.9	1			45.7	2			38.4	0
236	2.2	19	5.00	NR	37	4	< 35	NR	111	1	41.0	3	< 0	NR	40.4	2
237	2.9	14			93	0					44.0	3	< 1	NR	42.5	4
241	2.7	19	1.00	NR	33.1	4	0.8	4			35.1	0	< 1	NR	43.0	4
245	2.9	16	0.11	NR	31.2	4	1.1	4			42.5	4	0.02	NR		
247	0.1	21	4.20	NR	12.7	0	< 5	NR	49	0	73.7	0	14.10	NR	40.0	2
252	2.6	12	< 0.75	NR			0.9	4					< 1	NR		
255	3.1	17	< 4.6	NR	33.52	4	< 5.6	NR	136	3	42.5	4	< 0.6	NR	41.8	4
256	0.9	15	< 10	NR			1.6	2	< 10	0	< 50	NR			40.0	2
257	1.8	15	< 0.01	NR	106.19	0	< 0.3	NR							43.0	4
259	3.4	16			31.4	4			145	1	40.6	3				
262	4.0	2													42.4	4
265	3.6	25	0.02	NR	35	4	1.0	4	120	3	41.0	3	0.03	NR	40.5	3
268	1.5	4													39.1	1
272	2.0	4													43.3	3
273	2.1	19	0.98	NR	37.7	4			131	4	33.7	0			44.6	2
274	0.0	11													53.7	0
275	1.5	4													40.0	2
282	2.7	15	< 10	NR	< 100	NR	< 5	NR	131	4	42.1	4	< 5	NR	43.2	4
284	1.2	22	7.00	NR	36	4	3.0	0			51.0	0	< 1	NR	41.2	3
287	2.3	13			9.07	0									41.3	3
289	2.3	19	< 0.5	NR	34.3	4	5.0	0	101	0	39.0	2	2.00	NR	42.3	4
292	3.4	15	< 3	NR	< 100	NR	< 3	NR			42.0	4	< 1	NR	41.8	4

Table 6. *Laboratory performance ratings for standard reference water sample T-149 (trace constituents)--Continued*

(MPV,most probable value; µg/L, micrograms per liter; mg/L, milligrams per liter; Lab, laboratory number; OLR, ovarall laboratory rating for all reported values; V/28, number of reported values of 28 possible values; RV, reported value; <, less than)

Rating	Absoluta Z-value	Rating	Absoluta Z-value
4 (Excellant)	0.00 - 0.50	1 (Questionable)	1.51 - 2.00
3 (Good)	0.51 - 1.00	O (Poor)	graater than 2.00
2 (Satisfactory)	1.01 - 1.50	NR (Not Rated)	

Analyte =	Cd (Cadmium)		Co (Cobalt)		Cr (Chromium)		Cu (Copper)		Fe (Iron)		K (Potassium)		Li (Lithium)	
MPV =	2.18	µg/L	insufficient data		48.8	µg/L	8.00	µg/L	70.0	µg/L	2.00	mg/L	44.2	µg/L
F-pseudosigma =	0.30				2.9		1.21		11.5		0.14		3.2	
Lab	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating
1	2.30	4	< 1	NR	46.7	3	7.60	4	67.7	4	1.88	3	43.5	4
3	2.30	4	< 5	NR	50.0	4	8.00	4	80.0	3	1.70	0	48.0	2
4	< 10	NR	< 100	NR	49.0	4	< 5	0	67.0	4			43.0	4
10	2.40	3			49.3	4	6.60	2	77.0	3				
11	2.00	3			58.0	0	11.00	0	190.0	0	2.04	4	45.0	4
12	2.20	4			50.0	4	7.00	3	80.0	3	2.00	4		
13	2.07	4	< 10	NR	48.9	4	< 20	NR	49.6	1	1.96	4		
16	2.20	4	< 1	NR	47.8	4	8.20	4	74.9	4	2.30	0	44.2	4
18	< 3	NR	< 10	NR	47.0	3	8.00	4	70.0	4	2.00	4		
19					47.7	4	6.00	1	69.6	4				
21									69.0	4				
23					46.7	3	9.01	3	96.4	0	1.80	2		
24											1.79	2		
25	< 6	NR	< 12	NR	46.0	3	< 7	NR	54.0	2	1.92	3	47.0	3
26	2.07	4	< 6	NR	40.0	0	8.00	4	71.9	4	1.98	4	45.6	4
30	2.90	0	< 1	NR	49.5	4	8.30	4			1.80	2		
32	2.18	4	0.20	NR	49.0	4	9.20	3	160.0	0	1.94	4	42.5	3
33									37.0	0	2.00	4		
34	2.29	4												
36	2.00	3			50.0	4	6.50	2			2.00	4		
40					44.1	1			68.6	4	1.93	4	42.5	3
42	3.20	0	< 2	NR	38.8	0	7.10	3	83.0	2	2.00	4		
43									71.0	4	1.90	3		
45											2.05	4		
46	2.00	3			44.9	2	8.97	3	67.2	4	2.02	4		
48	2.30	4	< 50	NR	46.8	3	8.20	4	< 30	0	1.92	3		
51											2.08	3		
59	2.00	3			47.0	3	8.00	4						
61	2.00	3	< 1.7	NR	50.8	3	7.40	4	78.5	3	3.49	0		
64											2.06	4		
68	2.54	2	< 8	NR	46.0	3	7.00	3	100.0	0	1.90	3	44.0	4
69	1.96	3			45.2	2	6.10	1	69.5	4	2.10	3	47.0	3
70	2.67	1	< 50	NR	49.6	4	< 10	NR	64.0	3	1.96	4		
76	2.25	4			45.1	2							41.3	3
80	< 2	NR					4.80	0	70.0	4				
81	2.00	3	231	NR	53.0	2	7.00	3	50.0	1	2.01	4		
83	< 5	NR			46.7	3	7.40	4	66.2	4	1.97	4		
84							8.26	4						
86					48.6	4	16.50	0	40.0	0	1.94	4		
87	2.00	3			47.5	4	7.00	3	57.0	2	0.90	0		
89	1.78	2	< 10	NR	53.8	1	< 10	NR	106.0	0	1.96	4		
91									68.4	4				
92	4.00	0	2.00	NR	17.5	0	10.00	1	100.0	0	1.80	2		
96	2.20	4			52.3	2	6.60	2	80.0	3				
97	2.14	4	< 0.29	NR	57.8	0	9.10	3	72.4	4	1.90	3		
104														
105	1.90	3	< 1	NR	44.0	1	7.60	4	63.0	3	1.94	4	39.2	1
108	1.35	0			39.0	0	8.00	4	107.0	0	540.00	0		
109									68.3	4	2.08	3	44.9	4
110											2.31	0		
111	2.00	3			58.5	0	6.90	3	80.0	3	1.95	4		
113	2.33	3			48.1	4	8.19	4	70.0	4	2.17	2		
114	< 10	NR			56.0	0	< 10	NR			2.15	2		
118	2.00	3			57.3	0	7.90	4						
119	2.04	4	0.15	NR	50.2	4	12.00	0	75.0	4	2.80	0		
121	2.40	3	3.00	NR			8.00	4	68.0	4				
126	2.00	3			42.0	0	20.00	0	85.0	2				
129									75.0	4	2.70	0		
131	2.00	3	3.00	NR	55.7	0	< 8	NR	77.1	3	2.00	4	47.5	2
133	< 2	NR			55.3	0	7.06	3	80.2	3				

Table 6. *Laboratory performance ratings for standard reference water sample T-149 (trace constituents)--Continued*

(MPV,most probable value; µg/L, micrograms per liter; mg/L, milligrems per liter; Lab, laboratory number; OLR, overall laboratory rating for all reported values; V/28, number of reported values of 28 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 =	Cd (Cadmium)		Co (Cobalt)		Cr (Chromium)		Cu (Copper)		Fe (Iron)		K (Potassium)		Li (Lithium)	
MPV =	2.18	µg/L	insufficient data		48.8	µg/L	8.00	µg/L	70.0	µg/L	2.00	mg/L	44.2	µg/L
F-pseudosigma =	0.30				2.9		1.21		11.5		0.14		3.2	
Lab	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating
134	2.11	4	< 1	NR	47.9	4	7.75	4	68.0	4	1.90	3	43.4	4
138	2.12	4	< 0.5	NR	44.3	1	7.71	4	62.2	3	1.81	2		
140	2.75	1			50.0	4	12.50	0	60.0	3	1.96	4		
141	2.36	3	< 10	NR	58.9	0	6.90	3	51.6	1	2.09	3		
142	1.65	1	< 1	NR	47.5	4	7.40	4	60.0	3	1.91	3	45.0	4
143					50.2	4								
145	4.00	0	4.00	NR	54.0	1	15.00	0	63.0	3	2.06	4	46.0	3
146	< 5	NR	< 10	NR	50.6	3	< 25	NR	76.6	3	2.35	0		
147	2.14	4	0.08	NR	49.0	4	7.70	4	0.1	0			44.0	4
149							7.00	3	70.0	4	2.00	4		
151	2.30	4			46.6	3	8.60	4	56.2	2			44.2	4
154	2.30	4			50.0	4	5.70	1	43.0	0	1.82	2		
158	1.29	0			60.6	0	8.40	4	61.6	3	1.64	0		
180	< 4.11	NR	< 5.22	NR	49.1	4	9.20	3	53.0	2	2.26	1		
183	2.58	2			51.6	3	8.40	4						
185									70.0	4	1.86	3		
190	2.50	2			48.8	4	7.50	4	78.4	3	1.88	3		
191	2.58	2	0.18	NR	52.3	2	8.46	4	85.0	2	1.81	2		
193	2.00	3			50.4	3	< 25	NR			1.92	3		
198	1.92	3			52.8	2	< 10	NR	< 100	NR	1.94	4		
203	2.87	0					9.50	2	80.0	3	2.26	1		
204														
209														
212	2.28	4	0.18	NR	45.3	2	7.86	4	108.0	0	2.06	4	43.6	4
213	1.71	1	< 0.68	NR	52.1	2	7.94	4	69.8	4				
215	2.00	3	< 1	NR	47.0	3	8.00	4	73.0	4	1.00	0		
218									78.5	3	2.18	2		
219					48.0	4			65.0	4	2.00	4	42.0	3
220	2.80	0	3.20	NR			9.30	2	95.6	0	2.02	4	42.4	3
221	2.18	4	0.10	NR	45.8	2	7.65	4	81.0	3	1.93	4		
224	1.80	2	< 3	NR			9.20	3	86.1	2	2.13	3		
234	3.64	0	0.40	NR	46.2	3	8.02	4	66.8	4	1.99	4	44.9	4
235	2.19	4			50.2	4	7.75	4	50.0	1				
236	2.00	3	4.00	NR	48.0	4	5.00	0	67.0	4	1.43	0	41.0	2
237	< 10	NR	< 10	NR	51.0	3	8.00	4	48.0	1			52.0	0
241	2.20	4			47.4	4	8.60	4	59.0	3	1.80	2		
245	2.16	4	0.19	NR	45.3	2	7.41	4	206.0	0				
247	15.50	0	< 1	NR	12.6	0	10.80	0			3.39	0	13.1	0
252	2.28	4			48.6	4	7.60	4	89.0	1				
255	1.51	0	< 4.1	NR	51.2	3	8.02	4	81.5	3	1.93	4		
256	2.58	2	< 50	NR	40.0	0	10.00	1	55.0	2	3.13	0	180.0	0
257	4.00	0	< 0.04	NR	70.2	0	12.00	0	77.6	3	2.60	0	48.0	2
259	2.08	4			46.8	3	7.40	4	69.7	4	2.03	4		
262														
265	2.50	2	0.05	NR	49.6	4	8.50	4	74.5	4	1.93	4	43.0	4
268											2.51	0		
272											2.00	4		
273	15.90	0	8.36	NR	48.8	4	8.82	3	64.5	4	2.05	4	52.7	0
274	11.47	0					5.00	0	121.5	0	2.41	0		
275											2.00	4		
282	2.10	4	< 20	NR	49.9	4	< 10	NR	68.4	4	2.31	0		
284	2.00	3	< 10	NR	35.0	0	6.00	1	76.0	3	2.26	1		
287	2.12	4			49.0	4	10.00	1	88.0	1	3.49	0		
289	2.40	3					6.00	1	89.0	1	1.89	3	63.0	0
292	2.00	3			47.0	3	7.00	3	70.0	4	1.80	2		

Table 6. *Laboratory performance ratings for standard reference water sample T-149 (trace constituents)--Continued*

(MPV,most probable value; µg/L, micrograms per liter; mg/L, milligrams per litar; Lab, laboratory number; OLR, overall laboratory rating for all reported values; V/28, number of reported values of 28 possibla values; RV, reported value; <, less than)

Rating	Absoluta Z-value	Rating	Absolute Z-value
4 (Excellant)	0.00 - 0.50	1 (Questionable)	1.51 - 2.00
3 (Good)	0.51 - 1.00	O (Poor)	graater than 2.00
2 (Satisfactory)	1.01 - 1.50	NR (Not Ratad)	

Analyte =	Mg (Magnesium)		Mn (Manganese)		Mo (Molybdenum)		Na (Sodium)		Ni (Nickel)		Pb (Lead)		Sb (Antimony)	
MPV =	13.1	mg/L	11.8	µg/L	1.25	µg/L	42.8	mg/L	31.2	µg/L	8.84	µg/L	21.1	µg/L
F-pseudosigma =	0.7		1.0		0.41		2.7		2.2		1.17		2.4	
Lab	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating
1	13.1	4	11.2	3	1.14	4	43.0	4	33.1	3	8.60	4	22.1	4
3	13.1	4	12.0	4	< 5	NR	45.2	3	36.0	0	11.00	1	20.0	4
4	13.0	4	12.0	4	< 20	NR	46.0	2	30.0	3	< 200	NR		
10			15.0	0							8.40	4		
11	14.2	1	13.0	2			40.8	3	37.0	0	9.70	3	22.0	4
12	14.6	0	< 30	NR	< 30	NR	45.0	3	30.0	3	< 10	NR		
13	13.5	3	12.8	2			45.8	2	27.7	1	5.50	0	25.2	1
18	13.7	3	11.6	4	1.60	3	43.0	4	31.0	4	8.80	4	19.1	3
18	12.8	4	11.0	3	< 20	NR	42.1	4	33.0	3	8.50	4	17.7	2
19			11.6	4					37.0	0	8.00	3		
21														
23	13.5	3	12.0	4	< 3	NR	43.9	4			8.40	4	18.3	2
24	13.0	4					42.6	4						
25	14.1	1	< 2	0			45.4	3	< 49	NR	< 71	NR	< 51	NR
26	13.5	3	11.5	4	< 4	NR	42.4	4	32.6	3	8.10	3		
30	13.1	4	11.7	4	2.00	1			32.0	4	8.70	4	44.0	0
32	12.9	4	12.0	4	1.13	4	40.0	2	32.2	4	9.95	3	19.2	3
33	12.9	4	< 20	NR			45.1	3						
34											9.66	3		
36	14.1	1	11.0	3			45.3	3	24.5	0	7.32	2	16.5	1
40	13.6	3	10.3	1			43.4	4						
42	15.3	0	8.4	0	< 10	NR	45.4	3	27.2	1	8.00	3	18.6	2
43	13.0	4	12.0	4			41.9	4						
45	12.9	4					47.1	1						
46	12.7	3	10.7	2			42.9	4	31.7	4	7.92	3	23.3	3
48	13.0	4	11.6	4	1.30	4	43.0	4	30.6	4	9.50	3	21.7	4
51	13.0	4					39.9	2						
59	13.0	4	11.0	3			41.0	3	30.0	3	9.50	3	22.0	4
61	14.2	1	12.5	3	< 17.2	NR	40.4	3	31.9	4	6.80	1	22.0	4
64	13.0	4					43.4	4						
68	13.0	4	12.0	4	< 7	NR	43.0	4	30.0	3	19.40	0	31.1	0
69	13.2	4	< 20	NR			41.3	3	31.7	4	7.75	3	16.9	1
70	13.5	3	< 20	NR	< 50	NR	43.5	4	< 50	NR	8.20	3	25.2	1
76	13.3	4					42.6	4	30.2	4	8.76	4	21.4	4
80			10.3	1							8.10	3		
81	13.9	2	12.0	4	< 5	NR	45.3	3	28.0	2	8.00	3	17.0	1
83	12.1	1	10.8	2			39.2	2	30.2	4				
84	12.3	2	9.8	0			42.4	4			10.40	2		
86	13.3	4	12.3	3			44.6	3	40.2	0	9.40	4		
87	12.6	3	11.0	3	1.40	4	40.0	2	29.0	3	10.90	1		
89	13.2	4	11.3	3			41.0	3	29.6	3	5.57	0	19.6	3
91			11.6	4										
92	12.5	3	13.0	2			15.5	0	23.0	0	10.00	3		
96			< 20	NR					32.3	4	9.50	3	19.7	3
97	12.9	4	11.0	3	< 1.05	NR	43.0	4	32.4	3	9.10	4	19.8	3
104														
105	12.3	2	10.5	2	< 4	NR	41.8	4	28.7	2	8.60	4	18.5	2
108			15.0	0	1.10	4			28.0	2	9.90	3		
109	13.1	4	11.0	3	0.97	3	42.1	4			8.70	4		
110	12.9	4					37.1	0						
111	13.0	4					40.0	2	31.4	4	12.10	0		
113	14.6	0	11.0	3			38.2	1	30.8	4	9.15	4	20.3	4
114	13.4	4	13.0	2			42.5	4	29.0	3	< 10	NR		
118			15.2	0			43.0	4	29.7	3	9.80	3		
119	13.5	3	13.0	2	1.68	2	43.8	4	28.6	2	9.60	3	21.8	4
121	13.0	4	12.0	4			43.0	4	33.0	3				
126			10.0	1			44.5	3	60.0	0	9.50	3		
129	14.0	2					39.0	2						
131	11.9	1	11.8	4	< 15	NR	37.6	1	49.0	0	20.00	0	24.0	2
133	13.6	3							35.5	1	< 20	NR		

Table 6. *Laboratory performance ratings for standard reference water sample T-149 (trace constituents)--Continued*

(MPV,most probable valua; µg/L, micrograms per liter; mg/L, milligrams per liter; Lab, laboratory number; OLR, overall laboratory rating for all raportad values; V/28, number of reportad valuas of 28 possible values; RV, reported value; <, less than)

Rating	Absoluta Z-value	Rating	Absolute Z-value
4 (Excellent)	0.00 - 0.50	1 (Questionabla)	1.51 - 2.00
3 (Good)	0.51 - 1.00	0 (Poor)	graater than 2.00
2 (Satisfactory)	1.01 - 1.50	NR (Not Ratad)	

Analyte =	Mg (Magnesium)		Mn (Manganese)		Mo (Molybdenum)		Na (Sodium)		Ni (Nickel)		Pb (Lead)		Sb (Antimony)	
MPV =	13.1	mg/L	11.8	µg/L	1.25	µg/L	42.8	mg/L	31.2	µg/L	8.84	µg/L	21.1	µg/L
F-pseudosigma =	0.7		1.0		0.41		2.7		2.2		1.17		2.4	
Lab	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating
134	12.9	4	11.5	4	< 2	NR	39.6	2	31.7	4	8.87	4	18.9	3
138	13.0	4	11.2	3	1.06	4	41.9	4	30.8	4	8.79	4	21.3	4
140	12.6	3	10.0	1			40.0	2	32.5	3	12.50	0		
141	13.7	3	12.3	3	< 10	NR	44.8	3	32.1	4	10.90	1	24.1	2
142	13.4	3	10.0	1	1.25	4	43.7	4	31.3	4	8.66	4	23.4	3
143					1.36	4			30.2	4				
145	13.7	3	12.0	4	< 4	NR	43.3	4	38.0	0	28.00	0		
146	13.0	4	11.7	4	< 10	NR	46.1	2	< 40	NR	10.30	2	< 50	NR
147	13.5	3	12.2	4	1.15	4	48.0	1	31.0	4	8.70	4	21.1	4
149	12.4	2	10.0	1	< 2	NR	42.0	4			8.00	3	18.0	2
151			11.8	4	1.20	4			29.6	3	9.20	4	22.4	3
154	13.6	3	9.0	0			46.8	2	31.0	4	9.10	4	20.5	4
158	13.4	3	11.7	4			39.3	2	33.5	2	7.10	2		
180	13.0	4	11.8	4	< 5.11	NR	42.1	4	40.1	0	< 31.9	NR	< 27.8	NR
183	10.1	0							32.8	3				
185	12.8	4					44.8	3						
190	12.9	4	13.8	0			42.8	4	37.9	0	6.82	1		
191	13.3	4	11.3	3			42.1	4	34.6	1	9.68	3		
193	12.1	1					41.4	3	< 50	NR	9.40	4	23.0	3
198	13.0	4	12.4	3			42.9	4	< 50	NR	8.72	4	20.7	4
203	13.3	4	10.0	1			40.5	3			8.30	4		
204														
209	14.9	0												
212	13.5	3	< 10	NR	1.13	4	45.5	3	31.1	4	9.16	4	18.8	3
213									29.4	3	8.43	4		
215	12.7	3	12.0	4	2.00	1	41.2	3	31.0	4	7.00	1	16.0	0
218	14.7	0					47.6	1						
219	13.0	4	12.0	4			43.0	4	31.0	4				
220	13.0	4	11.3	3			42.4	4	31.8	4				
221	13.1	4	14.7	0	2.00	1	43.5	4	32.1	4	8.15	3		
224	12.2	2	11.9	4	< 5	NR	39.8	2	11.8	0	6.13	0		
234	13.6	3	12.4	3	0.44	1	42.8	4	34.8	1	10.60	2	20.3	4
235	12.4	2	10.5	2	1.63	3			30.1	4	9.33	4	23.2	3
236	13.0	4	12.0	4	< 11	NR	40.6	3	32.0	4	< 19	NR	< 100	NR
237	13.2	4	12.0	4	< 50	NR	43.2	4	32.0	4	< 40	NR		
241	14.0	2	15.0	0	< 5	NR	46.0	2	32.8	3	7.20	2	22.2	4
245			10.3	1	1.15	4			29.2	3	8.99	4	21.2	4
247	8.1	0	17.0	0	11.60	0	53.6	0	18.9	0	13.40	0	9.1	0
252	15.4	0	< 40	NR	< 1	NR	40.5	3	34.0	2	6.13	0	20.5	4
255	13.1	4	12.1	4	< 5.1	NR	42.9	4	34.9	1	8.87	4	26.1	1
256	15.5	0	15.0	0			40.3	3	37.3	0	6.88	1		
257	13.0	4	16.6	0	< 20	NR	38.0	1	28.0	2	10.01	3	21.2	4
259			10.7	2	1.20	4	42.2	4	30.0	3	8.00	3		
262	13.4	4												
265	12.9	4	11.8	4	0.80	2	42.0	4	31.0	4	8.50	4	20.5	4
268	13.1	4					48.4	1						
272	27.7	0					38.0	1						
273	13.5	3	10.7	2			46.9	2	35.6	1	9.60	3		
274	7.1	0	16.5	0			53.6	0			11.93	0		
275	6.8	0					50.0	0						
282	13.5	3	11.8	4	< 50	NR	44.4	3	< 50	NR	6.00	0	16.0	0
284	13.4	4	16.0	0	47.00	0	47.3	1	26.0	0	8.00	3	35.0	0
287	13.1	4	13.0	2			41.6	4	44.0	0	8.84	4		
289	12.6	3	10.2	1	1.70	2	37.5	1	30.7	4	9.00	4		
292	13.2	4	12.0	4	< 5	NR	41.8	4	30.0	3	11.00	1	22.0	4

Table 6. *Laboratory performance ratings for standard reference water sample T-149 (trace constituents)--Continued*

(MPV,most probable value; µg/L, micrograms per litar; mg/L, milligrams per liter; Lab, laboratory number; OLR, overall laboratory rating for all reported values; V/28, number of raported valuas of 28 possibla 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	O (Poor)	greater than 2.00
2 (Satisfactory)	1.01 - 1.50	NR (Not Rated)	

Analyte =	Se (Selenium)		SiO2 (Silica)		Sr (Strontium)		Tl (Thallium)		U (Uranium)		V (Vanadium)		Zn (Zinc)	
MPV =	2.10	µg/L	11.8	mg/L	331	µg/L	31.4	µg/L	2.71	µg/L	31.0	µg/L	5.80	µg/L
F-pseudosigma =	0.80		0.7		17		4.0		0.43		2.8		2.15	
Lab	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating
1	1.30	3	11.8	4	323	4	31.0	4	2.40	3	31.0	4	4.90	4
3	< 10	NR	12.4	3	359	1	27.0	2			32.0	4	7.00	3
4			12.0	4							20.0	0	4.50	3
10													5.00	4
11			11.8	4	340	3	33.0	4			33.0	3		
12						3							< 20	NR
13	< 5	NR	12.2	3			24.9	1			20.9	0	< 10	NR
16	< 5	NR			317	3	31.8	4	2.90	4	33.0	3	3.60	2
18	2.50	4			323	4	30.5	4			30.0	4	< 100	NR
19														
21														
23					329	4	44.0	0			36.9	0		
24			12.5	3	342	3								
25	< 129	NR	14.4	0	358	1					30.0	4	< 4	NR
26	1.60	3	11.7	4							31.3	4	3.85	3
30	5.00	0							3.40	1	32.0	4	6.40	4
32	< 6	NR	11.6	4	354	2	35.8	2	3.15	2	31.7	4	6.20	4
33			9.8	0	346	3								
34	1.62	3												
36	1.80	4					10.5	0						
40			11.0	2	262	0					29.3	3		
42	2.70	3	13.2	1	359	1	30.4	4			24.9	0	5.00	4
43			11.9	4										
45														
46											30.7	4		
48	2.00	4					33.8	3			30.0	4	8.30	2
51														
59	2.70	3					33.0	4					6.00	4
61	< 2.5	NR	5.8	0			36.4	2			33.4	3	6.40	4
64			11.4	3										
68	< 2.6	NR			330	4	38.4	1			33.0	3	7.40	3
69	< 5	NR					31.4	4					< 50	NR
70	< 10	NR	11.5	4	338	4	29.1	3			< 50	NR	< 20	NR
76														
80	< 2	NR											< 2	NR
81	< 2	NR	12.2	3	351	2	30.0	4			33.0	3	3.00	2
83			10.5	1									2.90	2
84														
86	0.71	1			332	4					41.1	0		
87	< 2	NR	5.9	0									11.00	0
89	< 2	NR	12.0	4			31.2	4			42.8	0	< 5	NR
91														
92													12.00	0
96	1.70	4											< 10	NR
97	3.03	2	10.6	1	277	0	34.1	3			23.2	0	< 0	0
104			12.4	3										
105	< 7	NR	11.8	4	332	4	31.6	4			28.9	3	< 5	NR
108	30.00	0											20.00	0
109	1.30	3			325	4								
110														
111	0.93	2	11.6	4							35.9	1		
113	1.85	4	12.2	3	331	4	28.5	3					5.00	4
114													< 10	NR
118	3.30	2	8.0	0									< 15	NR
119	2.17	4	13.0	1	134	0	35.0	3	2.90	4	33.1	3	5.30	4
121			11.5	4	335	4					30.0	4	4.00	3
126													6.00	4
129			11.6	4										
131	13.00	0	11.8	4	333	4					27.0	2	19.00	0
133	< 5	NR											6.02	4

Table 6. *Laboratory performance ratings for standard reference water sample T-149 (trace constituents)--Continued*

(MPV,most probable value; µg/L, micrograms per liter; mg/L, milligrams per liter; Lab, laboratory number; OLR, overall laboratory rating for all reported valuas; V/28, number of reported values of 28 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 =	Se (Selenium)		SiO2 (Silica)		Sr (Strontium)		Tl (Thallium)		U (Uranium)		V (Vanadium)		Zn (Zinc)	
MPV =	2.10	µg/L	11.8	mg/L	331	µg/L	31.4	µg/L	2.71	µg/L	31.0	µg/L	5.80	µg/L
F-pseudosigma =	0.80		0.7		17		4.0		0.43		2.8		2.15	
Lab	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating
134	2.32	4	11.9	4	331	4	34.5	3			30.8	4	4.47	3
138	2.12	4	11.8	4	328	4	33.3	4			31.0	4	4.50	3
140			11.6	4									7.50	3
141	< 2	NR					49.5	0			29.2	3	< 5	NR
142	1.47	3	13.5	0	343	3	34.0	3	2.51	4	30.9	4	1.85	1
143	1.55	3												
145			12.2	3	336	4	< 3	0			37.0	0	8.00	2
146	< 10	NR					33.3	4			31.0	4	< 20	NR
147	1.70	4	12.2	3	325	4	31.0	4	2.50	4	31.5	4	5.90	4
149													6.00	4
151	2.20	4			326	4	34.1	3					5.30	4
154	1.57	3			325	4					37.0	0	5.00	4
158											30.7	4	5.70	4
180	< 53.2	NR					< 40.1	NR			13.3	0	5.00	4
183											35.5	1		
185			12.1	4										
190			5.8	0									4.25	3
191			11.3	3	328	4	33.5	3					5.40	4
193	< 5	NR					5.0	0					< 50	NR
198	< 5	NR					31.4	4					< 25	NR
203			12.4	3									7.50	3
204			12.2	3										
209														
212	2.25	4	12.4	3	331	4	34.4	3			28.9	3	6.28	4
213							21.2	0					< 38	NR
215	< 5	NR	10.2	0			18.0	0					10.00	1
218					339	4								
219					330	4					29.0	3	5.00	4
220	2.10	4									30.0	4	4.30	3
221	1.67	3												
224	41.00	0									25.5	1	4.80	4
234	1.72	4	12.1	4	331	4	30.0	4			31.5	4	8.30	2
235	1.08	2			287	0	33.6	3			34.7	2	5.56	4
236	90.00	0	5.9	0	320	3					26.0	1	< 1	0
237			11.6	4	336	4					35.0	2	< 10	NR
241	2.70	3	11.3	3			10.7	0			30.8	4	< 10	NR
245	1.99	4					33.9	3			28.1	2	17.20	0
247	14.00	0			305	1	20.0	0			14.5	0	12.00	0
252	1.18	2											4.00	3
255	< 2	NR					< 59	NR			31.4	4	8.00	2
256	< 1	NR	10.5	1									< 10	NR
257											< 100	NR	5.00	4
259	2.30	4			326	4							5.20	4
262														
265	2.50	4	12.0	4	325	3	30.5	4	2.40	3	30.0	4	4.50	3
268														
272														
273			11.6	4	378	0	20.6	0					25.90	0
274			14.8	0									15.71	0
275														
282	< 5	NR	5.9	0			27.7	3			30.3	4	< 20	NR
284	4.00	0	8.7	0	338	4	10.0	0			561.0	0	17.00	0
287													7.00	3
289	< 5	NR	11.2	3	323	4					31.7	4		
292	2.00	4					33.0	4					< 10	NR

Table 7. *Laboratory performance ratings for standard reference water sample M-142 (major constituents)*

(MPV,most probable value; µg/L, micrograms per liter; mg/L, milligrams per liter; µS/cm, microsiemens per centimeter; 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 (Dissolved Solids)	
			MPV = 180 mg/L		121 µg/L		67.6 mg/L		132 mg/L		746 mg/L	
			F-pseudosigma = 9		10		3.4		7		37	
Lab	OLR	V/16	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating
1	3.6	16	182	4	114	3	65.4	3	135	3	748	4
3	3.1	16	180	4	124	4	71.3	2	129	3	420	0
9	3.8	6	179	4					134	3	744	4
10	3.8	13	182	4	128	3	66.7	4	134	3	759	4
11	2.8	14	205	0	113	3	73.7	1	130	4	700	2
12	3.1	9	179	4			69.0	4	133	4	755	4
13	3.0	12	180	4			67.0	4	129	3	723	3
16	3.0	15	181	4	249	0	70.0	3	134	3	743	4
18	3.4	16	183	4	119	4	66.8	4	140	0	706	2
19	3.8	10	175	3			66.8	4	130	4	747	4
22	4.0	1										
23	3.0	7	181	4			74.6	0			744	4
24	3.5	13	181	4	119	4	67.5	4	131	4		
25	2.8	15	184	4	< 23	0	72.7	1	129	3	736	4
26	3.8	13	182	4	109	2	68.3	4	133	4	744	4
30	3.0	5					73.5	1	128	2		
32	2.7	15	183	4	104	1	68.8	4	134	3	752	4
33	2.5	10	182	4			67.6	4	121	0		
36	3.2	11	220	0			70.5	3	132	4	769	3
38	3.6	10	183	4			66.6	4			754	4
39	2.8	15	170	2	119	4	65.0	3	120	0	745	4
40	2.2	14	168	2	105	1	61.7	1	129	3	744	4
42	1.3	12	165	1	102	1	76.7	0	28	0		
43	3.5	11	180	4			69.8	3	134	3	746	4
45	2.5	6					68.8	4				
46	3.8	14	182	4	121	4	65.6	3	133	4	760	4
48	1.9	13	161	0	70	0	73.0	1	123	0	770	3
50	3.7	13	190	2	130	3	67.0	4	133	4	744	4
51	2.9	10	182	4			63.6	2	137	2	738	4
57	2.9	13	180	4	< 100	NR	65.0	3	130	4	770	3
59	0.0	3					81.0	0				
61	1.3	15	180	4	129	3	77.1	0	124	0	477	0
64	3.5	8							133	4		
68	3.2	13	184	4	180	0	67.0	4	134	3		
69	3.5	10	179	4			65.8	3	129	3	744	4
70	3.7	14	180	4	125	4	70.6	3	129	3	750	4
76	3.7	7	175	3							746	4
80	3.4	10	179	4			75.0	0	132	4	746	4
81	3.4	14	182	4			70.2	3	130	4	745	4
83	1.9	7					62.9	2				
84	2.9	8					69.1	4	191	0		
85	3.6	14	182	4	112	3	69.4	3	134	3	742	4
86	3.0	11			114	3	70.5	3	148	0		
87	2.2	12	180	4			67.6	4	109	0	704	2
89	3.2	14	179	4			65.0	3	134	3	729	4
90	3.0	5	163	1			65.8	3			722	3
92	2.8	11	181	4			58.0	0	134	3	764	4
93	1.9	9					64.2	2	29	0		
96	4.0	7	184	4					132	4	748	4
97	3.4	14	181	4			67.1	4	129	3	763	4
102	1.7	11					72.0	2	119	0		
104	4.0	2										
105	3.1	15	180	4			66.7	4	131	4	776	2
107	3.4	9	177	4					129	3		
108	1.3	3					175.0	0				
109	3.5	11	192	2			66.8	4	130	4	751	4
111	2.7	11	179	4			93.7	0	147	0		
113	3.1	14	184	4			70.9	3	134	3	734	4
114	3.4	9	184	4					130	4	763	4
118	2.1	7	190	2							750	4
119	3.1	16	178	4	103	1	67.6	4	129	3	729	4
121	3.9	7			124	4	66.0	4				
126	4.0	1										
127	3.3	16	180	4	119	4	66.7	4	134	3	747	4
129	2.0	14	182	4	198	0	74.0	1	131	4	719	3
131	2.6	14			123	4	71.4	2	125	1		
133	2.7	6	181	4			72.5	2				
134	3.8	16	182	4	121	4	65.0	3	133	4	759	4
138	3.8	16	189	2	121	4	68.0	4	132	4	736	4
140	3.3	12					68.0	4	131	4	722	3

Table 7. *Laboratory performance ratings for standard reference water sample M-142 (major constituents)–continued*

(MPV,most probable value; µg/L, micrograms per liter; mg/L, milligrams per liter; µS/cm, microsiemens per centimeter; 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 (Dissolved Solids)		
			MPV =	180 mg/L		121 µg/L		67.6 mg/L		132 mg/L		746 mg/L		
			F-pseudosigma =	9		10		3.4		7		37		
Lab	OLR	V/16		RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating	
141	3.3	13		181	4	133	2	71.2	2	127	2	734	4	
142	3.1	15		181	4	116	4	66.0	4	138	1	773	3	
143	3.0	4								126	1	745	4	
145	2.5	14		159	0	123	4	73.1	1	137	2			
146	2.8	13		183	4			68.5	4	139	1	747	4	
147	3.9	9				128	3	67.0	4	131	4			
149	3.0	12		260	0			64.0	2	136	2	732	4	
151	3.6	12		180	4			71.2	2	132	4	756	4	
154	2.6	14		176	4	116	4	63.6	2	123	0			
158	3.3	6		177	4					129	3	746	4	
180	2.9	12		185	3	128	3	67.5	4	133	4			
183	0.7	6						38.2	0	131	4			
185	3.2	9		177	4			65.5	3	132	4			
190	3.2	12		179	4			64.0	2	127	2	742	4	2.84
191	4.0	8						67.0	4	132	4			
193	4.0	2		184	4									
196	2.3	10		161	0			70.4	3	127	2			
203	3.1	7		169	2					132	4			
204	4.0	3												
209	2.7	3						70.6	3					
212	2.9	15		178	4	133	2	69.7	3	140	0	741	4	
213	1.8	4		33	0					121	0			
215	2.8	14		182	4	120	4	67.6	4	144	0	743	4	
217	3.2	15		181	4	118	4	67.8	4	131	4	764	4	
218	1.4	8		160	0			72.4	2					
219	3.0	10				120	4	65.0	3	150	0			
220	3.3	7		173	3			67.0	4	136	3			
221	3.6	7						65.1	3	129	3			
224	2.4	13		178	4			57.7	0	130	3	727	4	
234	3.4	16		173	3	119	4	70.9	3	134	3	744	4	
235	2.3	3						67.2	4					
236	2.9	15		183	4	112	3	66.4	4	129	3	753	4	
241	3.4	12						71.0	3	132	4			
244	4.0	3		182	4									
247	2.5	11		6	0			66.7	4	119	0	729	4	
252	2.6	10		173	3					135	3			
255	3.8	13		174	3	123	4	68.2	4	133	4	753	4	
256	1.8	12		174	3	< 10	0	65.5	3	130	3			
257	2.8	12		180	4			70.0	3	136	2	754	4	
258	2.6	10		191	2			67.7	4	139	1			
259	3.7	15		180	4	135	2	66.0	4	133	4	749	4	
261	1.7	10		273	0			66.2	4	130	3			
262	3.5	10		179	4			68.5	4	131	4			
263	2.9	8		171	2			64.0	2	129	3			
264	3.5	11		180	4			68.0	4	133	4			
265	3.2	13		212	0	122	4	68.6	4	138	1			
266	3.2	13		177	4	141	1	68.0	4	134	3	752	4	
267	3.8	6		180	4			68.0	4	131	4			
268	2.1	8						62.5	1	133	4			
269	3.4	8		179	4			66.0	4	135	3	785	2	
270	1.2	6		199	0			45.9	0					
272	1.9	9		241	0			64.2	2	128	2			
273	1.7	15		148	0	52	0	72.1	2	132	4	820	1	
274	0.7	12		151	0			29.4	0	127	2			
275	1.9	10		168	2			68.0	4	142	0			
276	3.0	6		185	3			62.4	1	131	4			
282	3.0	14		176	4	125	4	69.5	3	133	4	730	4	
284	2.7	13		182	4			67.8	4	131	4			
287	2.7	10		168	2			67.4	4	138	1			
290	2.8	5								119	0			
291	4.0	1												
292	3.3	11		180	4			69.5	3	136	2			

Table 7. *Laboratory performance ratings for standard reference water sample M-142 (major constituents)–Continued*

(MPV,most probable value; µg/L, micrograms per liter; mg/L, milligrams per liter; µS/cm, microsiemens per centimeter; 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 =	0.460 mg/L		5.72 mg/L		25.3 mg/L		153 mg/L		0.02 mg/L	
F-pseudosigma =	0.054		0.39		1.3		7		0.01	
Lab	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating
1	0.500	3	5.60	4	24.4	3	150	4	0.01	3
3	0.470	4	6.05	3	24.6	3	158	3	0.02	4
9	0.440	4								
10	0.460	4	5.59	4	25.5	4	153	4		
11	0.440	4	6.17	2	27.0	2	144	2		
12			6.00	3	28.2	0	149	3	< 0.02	NR
13	0.331	0	5.69	4	25.1	4	144	2	<0.05	NR
16	0.440	4	5.30	2	25.5	4	154	4	0.05	0
18	0.490	3	5.60	4	24.5	3	152	4	0.02	4
19			5.40	3	25.1	4	154	4		
22									0.02	4
23			5.54	4			149	3		
24	0.460	4	5.22	2	25.0	4	153	4		
25	0.420	3	5.74	4	26.1	3	161	2	< 0.121	NR
26			5.75	4	25.8	4	157	3		
30					25.7	4				
32	0.530	2	5.70	4	27.2	2	166	1		
33			5.77	4	24.8	4	157	3		
36	0.427	3	5.54	4	25.9	4	162	2	< 0.025	NR
38			6.06	3	25.3	4	143	2	0.02	4
39	0.580	0			24.4	3	149	3	0.02	4
40	0.431	3	5.34	3	20.9	0	144	2		
42			5.95	3	29.7	0	167	0		
43			6.00	3	26.1	3	158	3		
45	0.449	4	3.61	0	25.2	4	168	0		
46	0.460	4	5.72	4	24.4	3	148	3		
48	0.068	0	5.30	2	23.9	2	140	1		
50	0.460	4	5.40	3	25.0	4	154	4		
51			6.32	1	21.8	0	151	4		
57	0.420	3	7.80	0	25.0	4	150	4	0.02	4
59					30.0	0	183	0		
61	0.420	3	12.90	0	29.2	0	136	0	0.05	0
64			6.43	1			148	3	0.02	4
68			5.80	4	25.0	4	150	4	0.03	2
69	0.450	4	6.14	2	25.2	4	146	3		
70	0.450	4	5.68	4	25.8	4	156	3	< 0.1	NR
76	0.504	3			25.5	4	149	4		
80			6.00	3	25.0	4	150	4		
81			6.10	3	26.3	3	163	1	0.01	3
83			5.73	4	22.4	0	137	0	0.02	4
84	0.410	3			25.6	4	155	4		
85	0.440	4	6.04	3	25.4	4	155	4	0.02	4
86			5.75	4	25.2	4	159	3		
87			5.39	3	24.6	3	145	2	0.02	4
89	0.490	3	5.35	3	25.0	4	139	1	0.02	4
90										
92			5.30	2	24.0	2	130	0	0.02	4
93	0.710	0	5.50	3	25.0	4	62	0		
96	0.478	4								
97	0.411	3	5.57	4	25.0	4	154	4		
102			5.00	1	27.0	2	136	0	0.01	3
104									0.02	4
105	0.380	2	5.44	3	23.3	1	151	4	0.02	4
107	0.443	4	5.56	4	20.6	0			0.02	4
108			5.40	3					0.04	1
109	0.450	4	6.37	1	24.9	4	151	4		
111			5.50	3	26.7	2	145	2	0.02	4
113	0.501	3	7.98	0	27.2	2	154	4	0.02	4
114	0.461	4							0.02	4
118							145	2	0.03	3
119	0.430	3	5.20	2	25.0	4	154	4	0.02	4
121					25.7	4	156	3		
126							155	4		
127	0.507	3	5.38	3	25.2	4	138	0	0.03	3
129	0.313	0	7.90	0	29.0	0	137	0	0.04	1
131	0.440	4	6.20	2	23.6	2	143	2	0.09	0
133					26.6	2			0.01	4
134	0.440	4	5.61	4	24.0	2	152	4	0.02	4
138	0.435	4	5.40	3	24.9	4	154	4	0.02	4
140	0.472	4	5.52	3	25.0	4	154	4	0.07	0

Table 7. *Laboratory performance ratings for standard reference water sample M-142 (major constituents)--Continued*

(MPV,most probable value; µg/L, micrograms per liter; mg/L, milligrams per liter; µS/cm, microsiemens per centimeter; 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	O (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 =	0.460 mg/L		5.72 mg/L		25.3 mg/L		153 mg/L		0.02 mg/L	
F-pseudosigma =	0.054		0.39		1.3		7		0.01	
Lab	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating
141	0.465	4	5.97	3	25.6	4	159	3	< 0.05	NR
142	0.560	1	5.56	4	25.7	4	162	2	< 0.018	NR
143									0.01	3
145	0.400	2	5.89	4	27.2	2	160	2	0.02	4
146	0.464	4	8.74	0	25.8	4	157	3	0.03	2
147					25.3	4	150	4		
149	0.460	4	5.40	3	24.0	2	151	4		
151	0.455	4	5.52	3	25.0	4	152	4		
154	0.420	3	5.97	3	24.5	3	152	4	0.02	4
158									0.03	2
180	< 0.1	0	5.47	3	24.6	3	150	4	< 0.025	NR
183	4.400	0			17.9	0				
185			5.54	4	24.8	4	162	2		
190	0.488	3	5.83	4	24.9	4	154	4		
191			5.80	4	25.4	4	151	4		
193										
196	0.443	4	5.73	4	23.8	2	161	2		
203									0.01	2
204									0.01	4
209					27.4	1				
212	0.390	2	5.91	4	25.9	4	160	2	< 0.05	NR
213									0.03	3
215	0.420	3	4.70	0	24.5	3	146	3	0.01	3
217	0.400	2	5.12	1	25.5	4	156	3		
218			6.01	3	27.7	1	176	0		
219			5.70	4	25.0	4	157	3		
220			6.23	2	24.7	4	153	4		
221			5.60	4	25.2	4	153	4		
224	0.588	0	0.46	0	23.5	2	145	2	0.02	4
234	0.353	1	5.86	4	25.6	4	162	2	0.02	4
235					24.5	3				
236	0.970	0	5.24	2	25.8	4	148	3	< 0.006	NR
241	0.496	3	5.50	3	25.0	4	150	4	0.02	4
244										
247	0.476	4	5.55	4	25.4	4	153	4		
252	0.670	0			30.0	0	150	4	0.01	3
255	0.520	2	5.83	4	25.5	4	153	4		
256	0.520	2	8.99	0	25.8	4	143	2		
257	0.450	4	7.20	0	26.0	3	149	3	0.16	0
258	0.820	0	6.25	2	26.0	3	156	3		
259	0.480	4	5.60	4	25.7	4	151	4	0.01	3
261			4.16	0	26.1	3	0	0	0.20	0
262	0.445	4	5.95	3	26.0	3	149	3		
263	0.460	4			24.0	2				
264			6.00	3	26.0	3	155	4	0.01	3
265	0.410	3	5.50	3	25.5	4	152	4		
266	0.500	3	6.20	2	25.0	4	157	3		
267					26.0	3				
268			6.60	0	25.4	4	178	0		
269	0.500	3			26.0	3				
270			7.22	0			146	3		
272	0.474	4	5.00	1	46.9	0	170	0		
273	79.920	0	5.60	4	22.5	0	166	1	0.13	0
274	0.770	0	7.23	0	7.8	0	160	2	1.35	0
275	0.340	0	6.00	3	17.5	0	165	1	0.00	NR
276					25.5	4				
282	0.400	2	5.49	3	25.9	4	158	3	< 0.1	NR
284	0.460	4	6.75	0	24.7	4	171	0	< 0.1	NR
287	0.500	3	10.40	0	25.5	4	144	2	< 0.1	NR
290									0.01	3
291										
292	0.360	1	5.80	4	25.8	4	145	2	0.02	4

Table 7. *Laboratory performance ratings for standard reference water sample M-142 (major constituents)--Continued*

(MPV,most probable value; µg/L, micrograms per liter; mg/L, milligrams per liter; µS/cm, microsiemens per centimeter; 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		SiO_2 (Silica)		SO_4 (Sulfate)		Sp Cond		Sr (Strontium)		V (Vanadium)	
MPV =	8.54		7.67 mg/L		231 mg/L		1200 µS/cm		646 µg/L		22.7 µg/L	
F-pseudosigma =	0.43		0.50		12		60		32		3.7	
Lab	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating
1	8.52	4	7.44	4	232	4	1204	4	650	4	22.7	4
3	8.52	4	8.09	3	217	2	1190	4	686	2	24.0	4
9					228	4	1210	4				
10	8.67	4	7.64	4	231	4	1227	4				
11	8.46	4	7.30	3	236	4	1190	4	647	4		
12	8.60	4			248	2						
13	8.57	4	8.97	0	228	4	1214	4			< 50	NR
16	8.50	4			234	4	1175	4	616	3	27.0	2
18	8.37	4	7.43	4	231	4	1166	3	630	4	22.0	4
19	8.50	4			229	4	1194	4				
22												
23					225	3	1252	3				
24	8.45	4	8.45	1	234	4	1200	4	665	3		
25	8.62	4	12.00	0	228	4	1199	4	689	2	22.0	4
26	8.53	4	7.78	4	233	4	1214	4			22.1	4
30	8.75	4			228	4						
32	8.60	4	8.60	1	231	4	1160	3	745	0	26.4	3
33	8.57	4	5.88	0	216	2	622	0				
36	8.51	4			233	4	1180	4				
38	8.50	4	7.65	4			1244	3				
39	8.60	4	7.67	4	236	4	1090	1	619	3	25.8	3
40	8.59	4	6.60	0			1190	4	513	0	22.4	4
42			8.83	0	103	0	1171	3	668	3	22.0	4
43	8.46	4	7.90	4	232	4	1202	4				
45					221	3						
46	8.65	4	7.45	4	235	4	1190	4			22.4	4
48	8.40	4			237	4	1217	4			23.4	4
50	8.54	4	7.67	4	234	4	1210	4				
51	8.64	4			234	4	1173	4				
57	7.74	1	7.40	3	230	4	1090	1			< 100	NR
59												
61	8.54	4	3.86	0	174	0	1218	4			27.0	2
64	8.63	4	7.59	4	232	4	1207	4				
68	8.78	3	7.27	3			1248	3	640	4	23.0	4
69	8.60	4			231	4						
70	8.57	4	7.93	3	226	4	1200	4	659	4	< 50	NR
76	8.65	4					1203	4				
80	8.43	4			238	3	1202	4				
81	8.63	4	7.56	4	229	4	1220	4	678	3	21.0	4
83			6.68	1	214	2						
84	8.35	4			299	0	1184	4				
85	8.60	4			230	4	1190	4	690	2	< 20	NR
86	8.47	4			236	4	1230	4	642	4	33.1	0
87	8.18	3	3.87	0	250	1	520	0				
89	8.62	4	7.80	4	236	4	1210	4			31.4	0
90	8.43	4					1189	4				
92	8.38	4			232	4	1201	4				
93	8.63	4			44	0	1205	4				
96	8.59	4			236	4	1216	4				
97	8.61	4	7.83	4	221	3	1213	4	557	0	25.4	3
102			7.33	3	342	0	1208	4	1680	0	21.0	4
104			7.92	4								
105	8.48	4	7.58	4	219	2	1205	4	631	4	28.8	1
107	8.53	4	7.47	4			1184	4				
108												
109	8.63	4			233	4	1167	3				
111	8.51	4	7.66	4	227	4	1160	3				
113	8.50	4	8.27	2	224	3	1203	4	630	4		
114	8.44	4			239	3	1197	4			1197.0	0
118	8.40	4	11.97	0			725	0				
119	8.70	4	8.00	3	232	4	1203	4	496	0	27.3	2
121			7.80	4					652	4	22.0	4
126												
127	8.56	4	6.99	2	226	4	1180	4	638	4	20.0	3
129	8.37	4	7.80	4	233	4	1133	3				
131	8.56	4	7.88	4	188	0	1190	4	652	4	22.0	4
133	8.43	4					1000	0				
134	8.60	4	7.62	4	232	4	1203	4	635	4	21.8	4
138	8.53	4	7.71	4	237	4	1170	4	644	4	22.4	4
140	8.54	4	8.00	3	241	3	1180	4				

Table 7. *Laboratory performance ratings for standard reference water sample M-142 (major constituents)--Continued*

(MPV,most probable value; µg/L, micrograms per liter; mg/L, milligrams per liter; µS/cm, microsiemens per centimeter; 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	O (Poor)	greater than 2.00
2 (Satisfactory)	1.01 - 1.50	NR (Not Rated)	

Analyte =	pH		SiO_2 (Silica)		SO_4 (Sulfate)		Sp Cond		Sr (Strontium)		V (Vanadium)	
MPV =	8.54		7.67 mg/L		231 mg/L		1200 µS/cm		646 µg/L		22.7 µg/L	
F-pseudosigma =	0.43		0.50		12		60		32		3.7	
Lab	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating
141	8.65	4			241	3	1212	4			21.1	4
142	8.49	4	8.39	2	236	4	1201	4	668	3	28.1	2
143	8.65	4										
145			7.76	4	228	4	1140	3	682	2	29.7	1
146	8.54	4			216	2	1090	1			23.6	4
147			7.90	4	229	4			630	4	22.3	4
149	8.60	4	7.20	3	234	4	1205	4				
151	8.61	4	8.32	2	234	4	1216	4				
154	8.55	4			200	0	1232	3	595	1	29.5	1
158	8.55	4			224	3						
180	8.60	4			230	4	1240	3			10.4	0
183			223.80	0							31.8	0
185	8.56	4	6.30	0			1197	4				
190	8.50	4	3.70	0	225	3	1201	4				
191			7.62	4	231	4			644	4		
193							1170	4				
196	8.70	4			219	2	7380	0				
203	8.56	4	8.11	3	225	3	1199	4				
204	8.74	4					1184	4				
209	8.39	4										
212	8.60	4	8.18	2	244	2	1170	4	640	4	24.8	3
213	8.52	4										
215	8.50	4	6.71	1	248	2	1170	4				
217	8.60	4	23.30	0	223	3	1160	3	652	4	22.5	4
218	8.63	4					692	0	701	1		
219					240	3	1130	2	637	4	19.0	3
220					225	3						
221	8.89	3			235	4						
224	8.47	4			230	4	1220	4			0.0	0
234	8.59	4	8.03	3	232	4	1210	4	649	4	22.2	4
235											< 10	0
236	8.58	4	3.98	0	232	4	1131	2	628	3	19.0	3
241	8.39	4	7.50	4	233	4	1050	0			23.0	4
244	8.63	4					1198	4				
247	8.59	4			2	0	871	0				
252	8.50	4	7.80	4	240	3	1130	2				
255	8.58	4	7.69	4			1170	4			22.7	4
256	8.27	3	6.90	1	206	0	1321	1				
257	8.28	3			232	4	1209	4			< 100	NR
258	8.55	4			238	3	1182	4				
259	8.55	4	7.40	3	227	4	1215	4	626	3		
261	8.41	4			2600	0	1139	3				
262	8.47	4			217	2	1218	4				
263	8.30	3			224	3	1192	4				
264	8.62	4	7.20	3	240	3	1184	4				
265	8.64	4	7.50	4	246	2			649	4	22.0	4
266	8.30	3	7.70	4	242	3	1210	4				
267	8.60	4					1209	4				
268	8.24	3			232	4	1300	1				
269	8.51	4					1209	4				
270	8.60	4					1480	0				
272	8.47	4					1217	4				
273	8.50	4	7.12	2	227	4	1221	4	712	0		
274	8.59	4	11.67	0	193	0	969	0				
275	8.38	4			243	2	1260	3				
276	8.10	2					1230	4				
282	8.50	4	3.81	0	241	3	1090	1			26.0	3
284	8.24	3	7.86	4	194	0	1207	4	639	4	185.0	0
287	8.34	4			223	3	1215	4				
290	8.50	4			233	4	1146	3				
291	8.34	4										
292	8.71	4			227	4	1209	4				

Table 8. *Laboratory performance ratings for standard reference water sample N-53 (nutrient constituents)*

(MPV,most probable value 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	O (Poor)	greater than 2.00
2 (Satisfactory)	1.01 - 1.50	NR (Not Rated)	

	Analyte =	NH_3 as N (Ammonia)		NH_3 + Org N as N (Ammonia+Organic N)		NO_3 + NO_2 as N (Nitrate + Nitrite)		total P as P (total Phosphorus)		PO_4 as P (Orthophosphate as P)	
	MPV =	3.50 mg/L		3.95 mg/L		2.57 mg/L		2.32 mg/L		2.12 mg/L	
	F-pseudosigma =	0.17		0.28		0.13		0.11		0.11	
Lab	OLR	V/5	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating
1	1.4	5	3.70	2	4.20	3	2.81	1	2.47	2	2.28	1
9	3.8	4	3.55	4	3.81	3	2.55	4			2.09	4
10	4.0	5	3.50	4	3.92	4	2.57	4	2.30	4	2.12	4
11	1.0	5	4.10	0	4.25	2	2.62	4	1.95	0	1.90	0
12	2.6	5	3.10	0	3.80	3	2.62	4	2.26	3	2.15	4
13	1.8	4	3.19	1			2.57	4	2.21	2	1.94	1
16	1.4	5	2.89	0	3.05	0	2.28	0	2.40	3	2.13	4
18	3.4	5	3.73	2	4.10	3	2.56	4	2.28	4	2.13	4
19	4.0	4	3.53	4			2.57	4	2.29	4	2.15	4
22	2.0	1							2.18	2		
23	2.3	4	3.29	2			2.41	2	2.22	3	2.17	4
25												
26	4.0	2	3.49	4							2.15	4
33	0.5	2	4.35	0							2.00	2
36	1.7	3					2.57	4	2.15	1	2.30	1
38	3.0	5	3.86	0	3.72	3	2.56	4	2.30	4	2.14	4
42	0.0	1					1.45	0				
45	3.0	3	3.41	3	4.36	2	2.61	4				
46	4.0	5	3.51	4	4.00	4	2.55	4	2.31	4	2.13	4
48	1.2	5	4.00	0	4.40	1	2.32	1	2.20	2	2.16	4
51	3.3	4	3.62	3			2.68	3	2.35	4	2.12	4
53	0.5	2					2.89	0			2.25	2
55	2.3	4	3.41	3	4.24	2	2.54	4	2.58	0		
59	3.4	5	3.43	4	3.90	4	2.54	4	2.50	1	2.09	4
61	1.8	5	3.61	3	4.36	2	2.40	2	2.41	3	1.83	0
64	4.0	3	3.51	4			2.61	4	2.37	4		
68	2.5	4	3.85	1	4.08	4	2.73	2	2.36	4		
69	4.0	1					2.58	4				
70	3.8	5	3.43	4	4.12	3	2.57	4	2.37	4	2.09	4
76	3.0	1	3.39	3								
81	2.4	5	3.88	0	4.15	3	2.61	4	2.13	1	2.15	4
83	1.3	4	0.89	0			2.48	3	2.17	2	0.56	0
84	1.0	2					2.42	2			2.00	2
85	3.8	5	3.49	4	4.00	4	2.64	3	2.29	4	2.13	4
86	3.3	3	3.43	4			2.57	4	2.44	2		
87	2.6	5	3.55	4	4.28	2	2.48	3	2.54	1	2.08	4
89	3.6	5	3.57	4	4.05	4	2.70	2	2.36	4	2.13	4
90	1.0	3	3.60	3	< 0.1	0	2.99	0				
91	3.8	4	3.38	3	3.90	4	2.60	4	2.32	4		
92	1.5	4	4.00	0			2.20	0	2.26	3	2.17	4
96	3.4	5	3.40	3	3.90	4	2.60	4	2.20	2	2.10	4
97	0.0	5	0.95	0	1.17	0	1.15	0	1.70	0	1.68	0
102	2.2	5	1.79	0	3.63	2	2.53	4	2.16	2	2.06	3
104	3.0	5	3.43	4	4.60	0	2.66	4	2.30	4	2.15	4
105	3.0	5	3.42	4	3.58	2	2.52	4	2.33	4	2.20	3
107	3.5	4	3.58	4			2.61	4	2.36	4	2.04	3
111	1.3	3	2.90	0			2.58	4	2.04	0		
113	3.3	4			3.72	3	2.51	4	2.22	3	2.09	4
114	3.3	3	3.28	2			2.59	4	2.32	4		
118	3.2	5	3.39	3	4.05	4	2.39	2	2.34	4	2.12	4
119	3.6	5	3.38	3	3.95	4	2.61	4	2.38	3	2.14	4
127	3.6	5	3.53	4	4.11	3	2.53	4	2.32	4	2.19	3
129	3.4	5	3.29	2	3.96	4	2.62	4	2.30	4	2.12	4
133	2.0	5	1.81	0	1.89	0	2.45	3	2.35	4	2.13	4
134	3.2	5	3.57	4	3.81	3	2.62	4	2.16	2	2.15	4
138	3.8	5	3.58	4	3.89	4	2.48	3	2.32	4	2.13	4
140	0.8	5	4.21	0	4.33	2	2.68	3	1.90	0	1.87	0
141	3.0	5	3.50	4	4.08	4	2.56	4	2.24	3	2.34	0
142	3.0	5	3.48	4	3.58	2	2.66	3	2.37	4	2.02	3
143	2.2	5	3.47	4	3.96	4	2.49	3	2.08	0	2.27	2

Table 8. *Laboratory performance ratings for standard reference water sample N-53 (nutrient constituents)--continued*

(MPV,most probable value 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	O (Poor)	greater than 2.00
2 (Satisfactory)	1.01 - 1.50	NR (Not Rated)	

			Analyte =	NH_3 as N (Ammonia)		NH_3 + Org N as N (Ammonia+Organic N)		NO_3 + NO_2 as N (Nitrate + Nitrite)		total P as P (total Phosphorus)		PO_4 as P (Orthophosphate as P)	
			MPV =	3.50 mg/L		3.95 mg/L		2.57 mg/L		2.32 mg/L		2.12 mg/L	
			F-pseudosigma =	0.17		0.28		0.13		0.11		0.11	
Lab	OLR	V/5		RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating
145	3.2	5		3.76	2	3.84	4	2.50	3	2.34	4	2.07	4
146	2.0	5		3.30	2	3.96	4	2.88	0	2.33	4	2.46	0
149	2.3	3		0.55	0			2.60	4			2.06	3
151	1.7	3						2.48	3	2.06	0	2.21	3
154	2.8	5		3.48	4	3.92	4	2.84	0	2.21	2	2.09	4
158	3.4	5		3.63	3	4.19	3	2.58	4	2.36	4	2.06	3
180	3.4	5		3.54	4	3.94	4	2.48	3	2.42	3	2.06	3
183	1.3	4		3.93	0			5.50	0	2.31	4	2.23	1
185	1.5	4		3.76	2			2.57	4	2.56	0	1.73	0
190	3.0	5		3.70	2	3.82	4	2.54	4	2.29	4	2.01	1
191	3.5	2						2.57	4			2.08	3
193	0.0	1						2.23	0				
203	3.5	4		3.46	4			2.55	4	2.36	4	2.20	2
209	0.0	2				0.29	0	5.60	0				
212	2.4	5		3.40	3	3.60	2	2.60	4	2.40	3	2.30	0
213	3.3	4		3.50	4	4.50	1			2.35	4	2.12	4
215	3.2	5		3.46	4	3.61	2	2.63	4	2.33	4	2.06	3
217	3.4	5		3.40	3	4.00	4	2.60	4	2.20	2	2.10	4
220	2.5	2		3.26	2			2.49	3				
221	1.6	5		1.72	0	4.21	3	2.89	0	2.30	4	2.24	1
224	1.4	5		3.97	0	7.56	0	2.69	3	2.28	4	2.24	1
234	2.3	4		3.71	2			2.50	3	2.34	4	1.90	0
241	3.6	5		3.57	4	3.68	3	2.54	4	2.40	3	2.13	4
247	0.0	2						2.36	1			1.94	0
252	2.0	5		3.83	1	4.11	3	2.68	3	2.52	1	2.05	3
255	4.0	1						2.56	4				
276	3.0	1											
282	2.0	5		3.46	4	4.66	0	2.65	3	2.40	3	2.20	2
284	0.6	5		4.25	0	4.93	0	2.74	2	2.14	1	1.63	0
285	1.2	5		2.47	0	3.56	2	2.48	3	2.19	2	3.13	0
287	2.0	2								2.49	1	1.10	0
289	3.0	5		3.46	4	3.84	4	2.49	3	2.34	4	1.78	0
290	3.3	3		3.51	4	3.59	2	2.53	4	2.32	4		
291	2.0	2						3.20	0				
292	3.0	4		3.20	1			2.64	3	2.34	4	2.09	4
294	3.0	3		3.58	4			2.40	2	2.28	4	2.13	4

Table 9. *Laboratory performance ratings for standard reference water sample N-54 (nutrient constituents)*

(MPV,most probable value; 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 =	NH_3 as N (Ammonia)		NH_3 + Org N as N (Ammonia+Organic N)		NO_3 + NO_2 as N (Nitrate + Nitrite)		total P as P (total Phosphorus)		PO_4 as P (Orthophosphate as P)	
			MPV =	1.00 mg/L		1.26 mg/L		1.17 mg/L		1.78 mg/L		1.72 mg/L	
			F-pseudosigma =	0.08		0.13		0.09		0.09		0.09	
Lab	OLR	V/5		RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating
1	3.0	5		1.01	4	1.30	4	1.21	4	1.89	2	1.88	1
3	3.2	5		0.92	3	1.00	1	1.20	4	1.70	4	1.70	4
9	4.0	2						1.17	4			1.75	4
10	3.8	5		0.98	4	1.18	3	1.19	4	1.79	4	1.75	4
11	1.0	5		1.18	0	1.52	1	1.72	0	1.42	0	1.71	4
12	2.4	5		1.10	2	0.80	0	1.14	4	1.67	2	1.71	4
13	4.0	4		0.97	4			1.19	4	1.76	4	1.69	4
16	1.8	5		0.85	1	1.02	1	1.04	2	1.94	1	1.74	4
18	3.4	5		1.08	3	1.34	3	1.11	3	1.74	4	1.73	4
19	3.5	4		0.99	4			1.28	2	1.79	4	1.69	4
22	4.0	1								1.81	4		
23	3.6	5		0.98	4	1.26	4	1.15	4	1.67	2	1.76	4
26	3.3	3		0.94	3			1.22	3			1.79	4
30	2.5	2						1.16	4			1.87	1
33	3.7	3		0.98	4	1.34	3					1.65	4
36	2.4	5		1.08	3	1.10	2	1.16	4	1.90	2	1.90	1
38	2.4	5		1.16	1	1.16	3	1.41	0	1.74	4	1.68	4
39	2.5	4		0.76	0			1.13	4	1.87	2	1.74	4
45	3.0	3		1.06	3	1.46	2	1.17	4				
46	3.6	5		0.90	2	1.20	4	1.16	4	1.77	4	1.80	4
48	2.6	5		0.86	1	1.20	4	0.96	0	1.70	4	1.76	4
53	0.5	2						1.01	1			1.91	0
55	3.5	4		0.97	4	1.20	4	1.26	2	1.77	4		
57	0.8	4		0.90	2	2.40	0	1.90	0	1.60	1		
59	4.0	5		1.04	4	1.30	4	1.14	4	1.70	4	1.70	4
61	3.2	5		1.10	2	1.30	4	1.27	2	1.78	4	1.71	4
64	4.0	1		1.01	4								
68	3.5	4		1.01	4	1.43	2	1.17	4	1.79	4		
69	4.0	1						1.16	4				
70	3.0	5		0.93	3	1.34	3	1.03	1	1.84	4	1.68	4
76	4.0	1		0.98	4								
80	0.7	3		1.12	2			0.57	0			1.47	0
81	2.8	5		1.13	1	1.33	3	1.16	4	1.74	4	1.60	2
83	1.8	4		0.94	3			1.10	3	1.61	1	0.45	0
84	0.5	2						0.32	0			1.58	1
85	3.8	5		1.00	4	1.35	3	1.19	4	1.84	4	1.76	4
86	2.7	3		1.00	4			1.44	0	1.82	4		
87	2.0	5		1.05	3	1.53	1	1.18	4	1.98	0	1.81	2
89	3.6	5		0.92	3	1.19	3	1.20	4	1.80	4	1.69	4
90	1.0	3		1.40	0	0.75	0	1.12	3				
91	2.8	4		0.94	3	1.35	3	1.00	1	1.82	4		
92	3.3	4		1.10	2			1.25	3	1.77	4	1.71	4
96	3.8	5		1.00	4	1.18	3	1.18	4	1.82	4	1.72	4
102	3.0	5		1.20	0	1.18	3	1.18	4	1.76	4	1.70	4
104	4.0	5		0.99	4	1.30	4	1.17	4	1.77	4	1.76	4
105	3.4	5		0.95	3	1.21	4	1.19	4	1.69	2	1.71	4
107	2.8	4		0.95	3			1.25	3	1.85	4	1.86	1
108	1.8	4		1.06	3	1.15	3	1.03	1	1.42	0		
111	3.5	2		1.02	4			1.11	3				
113	2.8	4				1.33	3	0.97	0	1.75	4	1.72	4
114	2.7	3		0.96	4			1.99	0	1.80	4		
118	3.6	5		0.94	3	1.36	3	1.15	4	1.78	4	1.72	4
119	3.2	5		1.02	4	1.50	1	1.10	3	1.78	4	1.68	4
126	4.0	1						1.21	4				
127	3.6	5		1.00	4	1.18	3	1.12	3	1.80	4	1.80	4
129	3.8	5		0.95	3	1.24	4	1.15	4	1.75	4	1.71	4
133	1.6	5		0.71	0	0.74	0	1.56	0	1.76	4	1.72	4
134	4.0	5		0.98	4	1.30	4	1.17	4	1.86	4	1.78	4
138	3.4	5		0.94	3	1.17	3	1.09	3	1.76	4	1.71	4
140	2.6	5		0.94	3	1.46	2	0.81	0	1.78	4	1.74	4

Table 9. *Laboratory performance ratings for standard reference water sample N-54 (nutrient constituents)--continued*

(MPV,most probable value; 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 =	NH_3 as N (Ammonia)		NH_3 + Org N as N (Ammonia+Organic N)		$NO_3 + NO_2$ as N (Nitrate + Nitrite)		total P as P (total Phosphorus)		PO_4 as P (Orthophosphate as P)	
			MPV =	1.00 mg/L		1.26 mg/L		1.17 mg/L		1.78 mg/L		1.72 mg/L	
			F-pseudosigma =	0.08		0.13		0.09		0.09		0.09	
Lab	OLR	V/5		RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating
141	2.4	5		0.94	3	1.12	2	1.12	3	1.70	4	1.92	0
142	4.0	5		1.01	4	1.30	4	1.17	4	1.82	4	1.72	4
143	3.4	5		0.94	3	1.28	4	1.20	4	1.65	2	1.76	4
145	3.6	5		1.03	4	1.31	4	1.08	2	1.71	4	1.72	4
146	2.4	5		0.91	2	1.14	3	1.32	1	1.75	4	1.82	2
154	3.0	5		1.01	4	1.02	1	1.30	2	1.81	4	1.72	4
158	2.8	5		0.99	4	1.43	2	7.26	0	1.79	4	1.74	4
180	3.6	5		0.96	4	1.23	4	1.15	4	1.67	2	1.71	4
183	1.3	3		1.20	0			0.62	0			1.78	4
185	1.8	4		1.00	4			1.08	2	1.92	1	1.49	0
190	3.8	5		1.02	4	1.35	3	1.17	4	1.73	4	1.68	4
191	4.0	2						1.15	4			1.73	4
193	3.0	1						1.23	3				
196	2.0	2						1.73	0			1.69	4
203	2.5	4		1.06	3			1.17	4	1.88	2	1.86	1
209	0.0	2				0.57	0	1.88	0				
212	2.6	5		1.10	2	1.20	4	1.10	3	1.80	4	2.00	0
213	4.0	2		< 1	NR	< 1	NR			1.73	4	1.64	4
215	3.0	5		0.94	3	0.96	0	1.18	4	1.77	4	1.75	4
219	0.0	1										0.94	0
220	3.3	3		0.94	3			1.23	3			1.80	4
221	2.6	5		0.66	3	1.62	0	1.30	2	1.83	4	1.74	4
224	2.6	5		1.05	3	2.13	0	1.16	4	1.76	4	1.85	2
234	2.7	3		1.07				1.22	3	1.61	1	1.69	4
238	2.0	1			2								
241	3.3	4		1.09		1.13	3	1.04	2	1.81	4	1.80	4
247	2.3	3			3			0.97	0			1.72	4
252	2.4	5		1.07	4	1.25	4	3.64	0	1.97	0	1.67	4
255	4.0	3		1.00				1.16	4	1.74	4	1.76	4
276	4.0	1			4								
282	1.8	5		1.01	0	1.80	0	1.21	4	1.92	1	1.72	4
284	0.8	5		0.70	4	1.73	0	2.31	0	2.12	0	1.51	0
285	3.0	4		1.01		1.08	2	1.17	4	1.86	4	1.81	2
287	3.3	3			4					1.91	2	1.70	4
289	3.8	5		0.96	4	1.26	4	1.10	3	1.78	4	1.76	4
290	2.7	3		1.02		1.42	2	1.27	2	1.78	4		
291	0.0	2			0			3.20	0				
292	3.8	4		1.17	4			1.09	3	1.76	4	1.71	4
294	4.0	3		1.00				1.14	4	1.80	4	1.77	4

Table 10. *Laboratory performance ratings for standard reference water sample P-28 (low ionic strength)*

(MPV,most probable velue; mg/L, milligrems per liter; µs/cm, microseimens per centimeter at 25 degrees celsius; Leb, laboretory number; OLR, overall labiratory rating for all reported values; V/12, number of reported values of 12 possible values; RV, reported value; <, less than)

Rating	Absolute Z-velue	Reting	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 =	Acidity as $CaCO_3$		Ca (Calcium)		Cl (Chloride)		F (Fluoride)		I (Iodine)		K (Potassium)	
			MPV =	2.5 mg/L		1.64 mg/L		3.30 mg/L		0.06 mg/L		insufficient data		0.14 mg/L	
			F-pseudosigma =	1.1		0.10		0.26		0.03				0.04	
Lab	OLR	V/12		RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating
1	4.0	9		2.0	4	1.68	4	3.33	4	< 0.1	NR	0.021	NR	0.14	4
2	2.8	8				1.55	3	3.07	3					0.13	4
3	3.0	8		< 10	NR	1.79	2	3.80	1	< 0.1	NR			0.09	2
11	2.1	8				1.80	1	2.89	1					0.13	4
23	3.7	7				< 2	NR	3.22	4	0.05	4			< 0.2	NR
25	2.9	8		< 8	NR	1.68	4	3.30	4	0.08	3			< 1.2	NR
26	2.9	7				2.26	0	3.24	4					< 0.2	NR
33	3.3	8				1.48	1	3.30	4					0.12	4
36	2.1	7				1.60	4	3.10	3						
38	3.0	7		4.3	1	1.58	3							0.15	4
39	3.2	6		4.0	2			3.60	2	0.07	4				
46	2.8	8				1.70	3	3.20	4	0.04	3				
48	2.1	8				1.49	2	3.00	2	0.45	0			0.20	2
59	1.8	6				16.00	0	3.48	3	< 0.2	NR				
64	3.5	8				1.64	4	3.34	4					0.14	4
81	2.1	10		0.2	0	1.44	1	3.50	3	0.06	4			0.23	1
83	2.3	6				1.54	3			0.46	0			0.12	4
86	2.7	7				1.43	1	4.00	0						
89	2.9	9		2.6	4	1.32	0	3.30	4	< 0.1	NR			0.12	4
92	1.1	8		1.6	3	1.20	0	3.40	4					0.40	0
93	2.4	9				1.61	4	3.28	4	0.04	3			0.21	1
96	2.3	4						2.89	1						
105	3.4	8		3.6	3	1.64	4	3.16	3	< 0.2	NR			< 0.5	NR
107	3.2	6						3.50	3	0.03	3			0.13	4
110	3.7	7				1.64	4	3.39	4	0.04	3				
111	3.4	9		2.7	4	1.84	1	3.37	4					0.13	4
113	2.9	9				1.86	0	3.25	4	0.06	4			0.11	3
119	2.8	9				1.68	4	3.17	3	0.03	3			1.04	0
134	3.6	8				1.65	4	3.45	3	< 0.1	NR			0.08	2
138	3.6	8				1.71	3	3.14	3	< 0.10	NR			0.12	4
140	2.7	9				1.61	4	3.28	4	0.04	3			0.13	4
141	3.2	9		2.5	4	1.71	3	3.25	4	0.04	3			< 0.2	NR
143	4.0	2						3.35	4						
145	2.1	7				1.73	3	3.37	4	< 0.2	NR			0.27	0
146	2.6	9		2.8	4	1.64	4	3.49	3	0.05	4			< 1	NR
147	2.8	5				1.69	4	3.50	3	< 0.05	NR				
158	2.3	4						4.79	0						
180	3.6	7				1.69	4	2.89	1	< 0.05	NR			< 0.422	NR
183	1.5	2						3.04	2						
185	3.6	7				1.57	3							0.13	4
190	2.8	9				1.22	0	3.20	4	0.06	4			0.15	4
191	3.1	7				1.57	3	3.30	4	0.02	2			0.09	2
193	3.0	1													
196	2.4	9				1.67	4	2.97	2	0.07	4			0.15	4
203	2.0	4						3.10	3						
204	4.0	3													
209	3.6	5				1.57	3	3.39	4						
215	2.5	10		3.0	4	1.70	3	0.60	0	0.05	4			1.30	0
220	3.2	6				1.65	4	3.60	2					0.08	2
221	3.1	7				1.62	4	2.94	2					0.15	4
224	1.6	10		1.9	3	15.28	0	3.41	4	0.20	0			1.39	0
235	1.0	3				1.74	3								
237	3.7	7		2.5	4	1.69	4							0.13	4
238	1.8	9		0.0	0	2.21	0	3.00	2					0.12	4
241	2.9	9				1.60	4	2.89	1	0.07	4			0.13	4
244	4.0	2													
247	3.0	10		1.2	2	1.57	3	2.96	2	0.07	4			0.11	3
255	3.3	6				1.63	4	3.43	3	< 0.2	NR			< 0.313	NR
256	0.1	9		8.5	0	4.00	0	4.26	0	0.11	1			0.00	NR
257	2.7	6				< 1.5	NR	3.90	0	0.08	3			0.15	4

Table 10. *Laboratory performance ratings for standard reference water sample P-28 (low ionic strength)--continued*

(MPV,most probable value; mg/L, milligrams per liter; µs/cm, microseimens per centimeter at 25 degrees celsius; Lab, laboratory number; OLR, overall labIratory rating for all reported values; V/12, number of reported values of 12 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	O (Poor)	greater than 2.00
2 (Satisfactory)	1.01 - 1.50	NR (Not Rated)	

			Analyte =	Acidity as $CaCO_3$		Ca (Calcium)		Cl (Chloride)		F (Fluoride)		I (Iodine)		K (Potassium)	
			MPV =	2.5 mg/L		1.64 mg/L		3.30 mg/L		0.06 mg/L		insufficient data		0.14 mg/L	
			F-pseudosigma =	1.1		0.10		0.26		0.03				0.04	
Lab	OLR	V/12		RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating
262	1.8	9				8.40	0	3.80	1	0.06	4			0.17	3
265	3.1	8				1.61	4	2.91	1	0.05	4	0.020	NR	0.18	3
268	3.4	8				1.55	3	3.41	4					0.15	4
273	2.5	10		1.6	3	1.56	3	3.28	4	0.71	0			1.00	0
274	1.4	9		0.9	2	22.10	0	29.29	0	0.00	NR	0.000	NR	0.17	3
282	3.4	7		3.3	3	1.57	3	3.18	4	< 0.1	NR			< 1	NR
284	2.1	7				1.60	4	< 5	NR	< 0.1	NR			0.18	3
287	2.3	8				1.54	3	6.56	0	< 0.1	NR			0.19	2
289	3.4	9		2.5	4	1.64	4	3.30	4					0.14	4

Table 10. *Laboratory performance ratings for standard reference water sample P-28 (low ionic strength)--continued*

(MPV,most probable value; mg/L, milligrams per liter; µs/cm, microseimens per centimeter at 25 degrees celsius; Lab, laboratory number; OLR, overall labIratory rating for all reported values; V/12, number of reported values of 12 possible values; RV, reported value; <, less then)

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 =	Mg (Magnesium)		Na (Sodium)		pH		PO_4 as P		SO_4 (Sulfate)		Specific Conductance	
MPV =	0.883 mg/L		3.25 mg/L		6.75		Insuff. data		6.14 mg/L		36.6	µS/cm
F-pseudosigma =	0.044		0.16		0.21				0.25		1.4	
Lab	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating
1	0.868	4	3.30	4	6.82	4	< 0.01	NR	6.28	4	36.8	4
2	1.047	0	3.40	3	6.43	3			5.95	3	35.6	3
3	0.880	4	3.40	3	6.79	4	< 0.01	NR	6.00	4	36.0	4
11	0.973	1	3.04	2	6.72	4			7.02	0	36.1	4
23	0.830	2	3.22	4	6.76	4	< 0.01	NR	6.24	4	36.0	4
25	0.910	3	3.40	3	7.10	2			6.90	0	37.0	4
26	1.070	0	3.30	4	6.70	4	< 0.5	NR	6.23	4	36.1	4
33	0.820	2	3.22	4	6.72	4	< 0.02	NR	6.12	4	38.3	3
36	0.800	1	3.45	2	7.10	2			5.38	0	35.0	3
38	0.665	4	3.06	2	6.90	4	0.000	NR			37.8	3
39					6.70	4	0.004	NR	5.85	3	36.0	4
46	0.890	4	3.21	4	8.93	0			6.00	4	53.6	0
48	0.940	2	3.18	4	6.20	1	0.031	NR			36.0	4
59	0.900	4	3.20	4	5.76	0	0.020	NR	6.97	0		
64	0.870	4	3.26	4	6.86	4			6.13	4	32.9	0
81	0.796	1	3.19	4	6.99	3			7.88	0	37.4	4
83	0.837	2	2.99	1			0.016	NR	6.03	4		
86	0.871	4	3.27	4	6.96	3			6.28	4	37.8	3
89	0.820	2	3.16	3	7.18	2	< 0.002	NR	6.00	4	37.8	3
92	0.700	0	2.30	0	6.36	2	< 0.005	NR	5.30	0		
93	0.940	2	2.91	0	6.71	4			5.76	2	39.1	2
96					7.08	3	< 0.01	NR	6.40	3	38.7	2
105	0.860	4	3.30	4	6.23	1	< 0.002	NR	6.03	4	36.3	4
107	0.810	1			6.77	4	< 0.002	NR			36.6	4
110	0.850	3	3.20	4	6.94	4			6.18	4		
111	0.900	4	3.10	3	6.73	4			6.04	4	34.9	3
113	1.030	0	3.36	3	6.71	4	< 0.004	NR	6.26	4	36.0	4
119	0.940	2	3.30	4	6.61	4	0.000	NR	5.65	1	37.0	4
134	0.868	4	3.19	4	6.81	4	< 0.002	NR	6.23	4	36.8	4
138	0.900	4	3.18	4	7.11	3	< 0.004	NR	6.26	4	36.9	4
140	0.844	3	3.35	3	7.53	0	0.020	NR	5.00	0	38.0	3
141	0.919	3	3.47	2	6.78	4	< 0.05	NR	6.26	4	38.8	2
143					6.70	4	0.002	NR				
145	0.970	1	3.21	4			0.010	NR	6.31	3	< 1	0
146	0.868	4	3.03	2	7.21	2	< 0.05	NR	5.18	0	40.4	0
147	0.910	3	3.80	0					6.16	4		
158					6.44	3			6.13	4	34.1	2
180	0.880	4	3.32	4	6.70	4	< 0.01	NR	6.25	4	37.0	4
183									5.60	1		
165	0.863	4	3.39	3	6.80	4			6.28	4	35.3	3
190	0.600	1	3.24	4	6.60	4			6.00	4	40.3	0
191	0.910	3	3.28	4			< 0.02	NR	6.17	4		
193											35.5	3
196	0.870	4	3.55	1	7.15	2	< 0.03	NR	6.62	1	865.0	0
203					6.51	3	0.005	NR	5.73	2	41.5	0
204					6.65	4	< 0.002	NR	6.07	4	36.5	4
209	0.840	3			6.89	4			6.22	4		
215	0.910	3	3.10	3	6.70	4	< 0.01	NR	7.00	0	36.6	4
220	0.890	4	3.35	3					6.25	4		
221	0.887	4	3.28	4	6.90	4			11.50	0		
224	8.629	0	29.90	0	6.62	4	0.006	NR	6.53	2	37.5	3
235	0.976	0							7.22	0		
237	0.900	4	3.39	3	6.85	4					35.3	3
236	0.880	4	3.26	4	5.87	0			5.81	2	32.0	0
241	0.900	4	3.20	4	6.26	2			5.90	3	30.0	0
244					6.78	4					35.8	4
247	0.697	4	3.25	4	6.86	4			5.33	0	36.3	4
255	0.879	4	3.17	3	7.00	3					35.1	3
256	0.400	0	2.76	0	8.15	0	< 0.02	NR	9.60	0	44.9	0
257	< 1.5	NR	2.98	1			< 0.1	NR	6.10	4	36.3	4

Table 10. *Laboratory performance ratings for standard reference water sample P-28 (low ionic strength)--continued*

(MPV,most probable value; mg/L, milligrams per liter; µs/cm, microseimens per centimeter at 25 degrees celsius; Lab, laboratory number; OLR, overall labiratory rating for all reported values; V/12, number of reported values of 12 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	O (Poor)	greater than 2.00
2 (Satisfactory)	1.01 - 1.50	NR (Not Reted)	

Analyte =	Mg (Magnesium)		Na (Sodium)		pH		PO_4 as P		SO_4 (Sulfate)		Specific Conductance	
MPV =	0.883 mg/L		3.25 mg/L		6.75		Insuff. data		6.14 mg/L		36.6	µS/cm
F-pseudosigma =	0.044		0.16		0.21				0.25		1.4	
Lab	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating
262	0.950	1	2.90	0	6.73	4			4.05	0	38.0	3
265	0.890	4	3.23	4	6.39	2			5.90	3		
268	0.825	2	3.46	2	6.90	4			6.15	4	36.2	4
273	0.936	2	3.42	2	6.77	4	0.003	NR	6.14	4	37.4	3
274	6.090	0	15.48	0	6.70	4	0.033	NR	6.10	4	33.4	0
282	< 1	NR	3.23	4	6.50	3	< 0.1	NR	6.32	3	36.0	4
284	0.899	4	3.48	2	6.27	2	< 0.1	NR	5.46	0	45.0	0
287	0.883	4	4.60	0	6.36	2	< 0.1	NR	6.30	3	37.1	4
289	0.850	3	3.03	2	6.73	4			6.10	4	35.1	2

Table 11. *Laboratory performance ratings for standard reference water sample GW-1 (ground-water constituents)*

(MPV,most probable valua; µg/L, micrograms per liter; mg/L, milligrams per litar; Lab, laboratory number; OLR, overall laboratory rating for all raportad valuas; V/28, number of reported values of 28 possible valuas; RV, reported value; <, less than)

Rating	Absoluta Z-value	Rating	Absolute Z-value
4 (Excellant)	0.00 - 0.50	1 (Questionable)	1.51 - 2.00
3 (Good)	0.51 - 1.00	O (Poor)	greatar than 2.00
2 (Satisfactory)	1.01 - 1.50	NR (Not Rated)	

Analyte =		Ag (Silver)			Al (Aluminium)		As (Arsenic)		B (Boron)		Ba (Barium)		Be (Beryllium)		Ca (Calcium)	
MPV =		insufficient data			538	µg/L	1.0	µg/L	349	µg/L	17.7	µg/L	6.00	µg/L	357	mg/L
F-pseudosigma =					67		0.7		76		2.3		1.17		23	
Lab	OLR	V/28	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating
1	2.9	18	< 1	NR	514	4	< 1	NR	440	2	17.0	4	6.72	3	283	0
3	3.1	20	7.00	NR	510	4	< 5	NR	329	4	7.0	0	6.00	4	388	2
11	3.2	17			530	4			371	4	18.0	4			375	3
12	2.8	12	< 0.2	NR											460	0
13	3.1	15	< 10	NR	513	4	< 5	NR			17.9	4	2.20	0	389	2
16	2.8	19	< 1	NR	464	2	1.6	3	449	2	19.1	3	5.70	4	358	4
18	3.2	17	< 3	NR	497	3	< 1	NR	349	4	18.0	4	6.20	4	337	3
26	3.5	20	< 0.2	NR	550	4	0.5	3	299	3	18.7	4	5.28	3	352	4
30	2.3	15	< 1	NR	620	2	1.0	4			12.5	0	4.20	1	337	3
32	3.0	22	< 0.1	NR	565	4	0.9	4	310	3	17.6	4	6.60	3	355	4
34	2.5	2	< 0.2	NR	578	3	0.2	2								
36	2.6	13											3.90	1	310	1
42	2.5	17	< 1	NR	582	3	1.3	4	348	4	18.0	4	4.70	2	397	1
43	3.1	8													357	4
46	2.8	16			538	4			356	4	3.0	0	5.51	4	349	4
48	2.2	19	< 0.6	NR	532	4	0.7	4	860	0	16.5	4	3.90	1	417	0
59	3.0	11	< 5	NR	500	3	< 2	NR			17.0	4	4.00	1	370	3
61	2.3	18	< 2	NR	619	2	< 4.5	NR	222	1	19.8	3	6.40	4	343	3
64	3.7	3														
68	3.0	2													380	3
69	3.2	13	< 1	NR	508	4	< 5	NR			< 50	NR	6.95	3	356	4
76	4.0	2														
80	0.0	1					6.3	0								
81	2.3	18	< 1	NR	608	2	< 2	NR			13.0	1	4.00	1	336	3
83	2.3	15			479	3					16.3	3	5.20	3	325	2
86	2.9	18			579	3	0.4	3	312	4	17.4	4	7.20	2	376	3
89	3.0	16	< 2	NR	446	2	< 2	NR			< 50	NR	6.78	3	340	3
92	0.9	14													300	0
111	2.2	12			626	2	< 2	NR							379	3
113	1.9	14	< 0.5	NR	544	4	< 1.5	NR			14.8	2	5.85	4	402	1
119	2.4	19			447	2	1.6	3					5.33	3	369	3
126	0.8	8	0.30	NR												
127	3.1	19	< 0.2	NR	539	4	< 2	NR	343	4	15.8	3	5.03	3	306	0
129	2.4	10							770	0					385	2
134	3.4	19	< 1	NR	794	0	1.1	4	346	4	18.0	4	6.45	4	363	4
138	3.7	19	0.09	NR	547	4	< 1	NR	350	4	15.8	3	6.44	4	360	4
140	2.7	15	20.00	NR							1516	0			372	3
141	3.4	17	39.10	NR	471	3	< 5	NR	497	1	17.0	4	7.00	3	349	4
142	2.9	20	2.51	NR	542	4	0.4	3	414	3	19.1	3	6.68	3	327	2
146	2.6	15	< 10	NR	518	4	23.1	0			16.2	3	7.18	2	320	1
147	2.5	19	< 0.2	NR	480	3	0.7	4	320	4	15.0	2	4.20	1	355	4
149	2.4	9	< 0.1	NR			< 1	NR					6.00	4	96	0
151	2.3	18	0.02	NR	643	1	0.8	4			19.4	3	8.00	1	42	0
154	1.4	15			117	0			337	4	11.0	0	7.20	2	326	2
158	2.4	14			638	2			342	4	43.1	0			362	4
180	3.1	19	< 3.22	NR	520	4	310.0	0	244	2	17.7	4	5.80	4	357	4
185	2.4	5													359	4
190	1.9	8	0.35	NR	616	2										
191	3.5	17			535	4	1.4	3			20.4	2			349	4
196	3.4	18	0.09	NR	558	4	1.0	4			16.8	4	6.51	4	370	3
203	2.7	9	< 2	NR	691	0									382	2
204	0.0	1														
212	3.2	20	0.14	NR	350	0	0.2	2	443	2	16.0	3	4.42	2	352	4
215	2.4	18	<1	NR	847	0	<5	NR	350	4	40.0	0	6.00	4	370	3
219	3.6	14			630	2					17.0	4	6.00	4	367	4
220	3.1	15									18.8	3	6.23	4	352	4
221	2.5	12	0.10	NR	634	2									147	0
224	1.6	14			220	0	< 12	NR			19.9	3	2.80	0	364	4
235	2.2	14	< 5	NR	521	4	2.3	1			20.9	2			303	0
241	3.1	18	< 1	NR	536	4	0.5	3			16.0	3	5.10	3	370	3

Table 11. *Laboratory performance ratings for standard reference water sample GW-1 (ground-water constituents)--continued*

(MPV,most probable value; µg/L, micrograms per liter; mg/L, milligrams per liter; Lab, laboratory number; OLR, overall laboratory rating for all reported values; V/28, number of reported values of 28 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 then 2.00
2 (Setisfactory)	1.01 - 1.50	NR (Not Rated)	

			Analyte =	Ag (Silver)		Al (Aluminium)		As (Arsenic)		B (Boron)		Ba (Barium)		Be (Beryllium)		Ca (Calcium)	
			MPV =	insufficient data		538	µg/L	1.0	µg/L	349	µg/L	17.7	µg/L	6.00	µg/L	357	mg/L
			F-pseudosigma =			67		0.7		76		2.3		1.17		23	
Lab	OLR	V/28	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating
247	3.4	17	< 1	NR	564	4	< 5	NR	290	3	17.0	4	5.10	3	362	4
255	3.7	15	0.26	NR	549	4	< 5.6	NR	368	4	18.4	4	6.19	4	347	4
256	1.2	13	13.00	NR			1.6	3			<50	NR			360	4
257	1.6	13	1.89	NR	234	0	<0.3	NR								
259	3.5	14	2.30	NR	452	2			370	4	17.9	4				
262	2.6	5													370	3
265	3.4	22	0.03	NR	600	3	1.0	4	330	4	18.2	4	7.30	2	363	4
268	1.5	6													399	1
270	0.0	4									520.0	0			452	0
272	0.0	4													0	0
273	2.0	16	36.50	NR	429	1			245	2	46.7	0			355	4
274	0.7	12													29	0
282	2.7	17	< 10	NR	566	4	< 5	NR	604	0	16.0	3	6.20	4	342	3
284	2.1	20	3.00	NR	452	2	1.0	4			72.0	0	9.00	0	402	1
287	2.1	11			595	3									355	4
289	2.2	20	< 0.5	NR	530	4	8.0	0	500	1	12.0	0	7.00	3	350	4
290	1.0	1														
292	3.7	9													356	4

Table 11. *Laboratory performance ratings for standard reference water sample GW-1 (ground-water constituents)--continued*

(MPV,most probabla valua; µg/L, micrograms per liter; mg/L, milligrams per liter; Lab, laboratory number; OLR, overall laboratory rating for all reported valuas; V/28, number of reported values of 28 possible valuas; RV, reported value; <, less than)

Rating	Absolute Z-value	Rating	Absolute Z-value
4 (Excellent)	0.00 - 0.50	1 (Questionabla)	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 =	Cd (Cadmium)		Cl (Chloride)		Co (Cobalt)		Cr (Chromium)		Cu (Copper)		Fe (Iron)		K (Potassium)	
MPV =	insufficient data		50.3	mg/L	0.20	µg/L	38.3	µg/L	25.0	µg/L	341	mg/L	79.0	mg/L
F-pseudosigma =			9.7		0.01		5.9		7.6		26		4.5	
Lab	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating
1	< 1	NR			0.20	4	36.4	4	21.3	4	323	3	78.3	4
3	< 0.5	NR	50.5	4	0.20	4	47.0	2	26.0	4	366	3	80.1	4
11			37.8	2			42.0	3	28.0	4	335	4	79.0	4
12	< 0.1	NR	46.0	4			60.0	0	20.0	3	331	4	79.0	4
13	18.00	NR			0.18	3	26.9	1	29.5	3	341	4	79.9	4
16	0.40	NR			0.19	4	37.0	4	22.6	4	315	3	72.0	1
18	< 3	NR			0.19	3	34.0	3	25.0	4	326	3	79.0	4
26	< 0.2	NR	44.8	3	0.19	4	33.7	3	23.2	4	351	4	82.9	3
30	< 1	NR			0.20	4	85.0	0	24.0	4	330	4	74.0	2
32	< 0.1	NR	52.4	4	0.17	1	39.0	4	31.7	3	390	1	80.3	4
34	0.06	NR												
36			49.7	4			35.0	3	20.1	3	355	3	84.0	2
42	< 2	NR					32.3	2	9.8	1	385	1	84.2	2
43			53.4	4							34	0	81.6	3
46					0.17	1	33.7	3	20.4	3	332	4	74.9	3
48	0.10	NR	44.0	3	0.18	2	40.7	4	25.8	4	< 0.03	0	75.4	3
59	< 2	NR					38.0	4	23.0	4	310	2		
61	< 0.5	NR	48.4	4	0.20	4	31.8	2	26.2	4	406	0	103.0	0
64													83.2	3
68														
69	< 1	NR					34.2	3	20.2	3	324	3	80.3	4
76														
80														
81	< 2	NR	7.0	0	0.20	4	52.0	0	23.0	4	357	3	83.8	2
83	<5	NR					40.1	4	<3	0	287	0	84.5	2
86	36.20	NR	99.0	0	0.22	0	33.2	3	50.1	0	349	4	78.8	4
89	< 1	NR	150.0	0	0.19	4	39.8	4	39.6	1	328	4	75.0	3
92	8.50	NR	59.6	3	0.10	0	24.0	0	37.0	1	151	0	73.0	2
111	< 0.5	NR					52.0	0	30.3	3	336	4	83.0	3
113	46.40	NR					39.9	4	< 1.2	0	371	2	68.2	0
119	0.06	NR	44.0	3	0.19	4	38.7	4	50.0	0	375	2	82.0	3
126	< 1	NR					51.0	0	57.0	0	455	0		
127	< 3	NR			0.20	4	37.5	4	23.5	4	342	4	82.0	3
129			34.0	1							346	4	73.0	2
134	< 1	NR			0.20	4	39.0	4	22.6	4	349	4	76.8	4
138	0.04	NR			0.20	4	33.9	3	21.4	4	348	4	78.4	4
140	0.03	NR	52.0	4			160.0	0	40.0	1	314	2	79.5	4
141	< 0.5	NR	46.6	4	0.20	4	49.7	1	26.7	4	338	4	82.3	3
142	< 2	NR			0.22	1	40.5	4	24.4	4	366	3	77.1	4
146	7.33	NR			0.19	4	30.9	2	25.9	4	367	3	91.0	0
147	0.04	NR			0.17	0	34.0	3	25.0	4	390	1		
149									41.0	0	326	3	79.4	4
151	< 0.04	NR					38.1	4	23.3	4	334	4	3.4	0
154							40.2	4	19.8	3	305	2	597.0	0
158			50.0	4			24.3	0	45.1	0	318	3	60.2	0
180	< 4.11	NR	57.9	3	0.21	3	24.5	0	28.7	4	346	4	78.7	4
185													73.7	2
190	16.00	NR					35.3	3	20.6	3	351	4		
191	1.06	NR			0.21	3	40.5	4	24.9	4	348	4	83.1	3
196	0.22	NR			0.20	3	40.6	4	27.0	4			79.9	4
203	< 0.5	NR							33.5	2	348	4	81.5	3
204														
212	< 0.1	NR			0.19	4	37.7	4	26.8	4	333	4	77.7	4
215	<1	NR	133.0	0	0.21	2	26.0	0	59.0	0	350	4	81.0	4
219					0.20	4					337	4	81.0	4
220	16.50	NR	45.2	3	0.19	4			37.0	1	302	2	75.9	3
221	0.07	NR					41.0	4	22.6	4	311	2	77.5	4
224	7.70	NR			0.16	0			< 6	0	401	0	76.0	3
235	0.06	NR			0.19	3	38.3	4	< 10	NR	300	1		
241	0.30	NR	68.5	1			38.4	4	17.9	3	344	4	77.0	4

Table 11. *Laboratory performance ratings for standard reference water sample GW-1 (ground-water constituents)--continued*

(MPV,most probable value; µg/L, micrograms per liter; mg/L, milligrams per liter; Lab, laboratory number; OLR, overall laboratory rating for all reported values; V/28, number of reported values of 28 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 =	Cd (Cadmium)		Cl (Chloride)		Co (Cobalt)		Cr (Chromium)		Cu (Copper)		Fe (Iron)		K (Potassium)	
MPV =	insufficient data		50.3	mg/L	0.20	µg/L	38.3	µg/L	25.0	µg/L	341	mg/L	79.0	mg/L
F-pseudosigma =			9.7		0.01		5.9		7.6		26		4.5	
Lab	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating
247	< 1	NR	53.3	4	0.19	3	37.2	4	21.1	3			79.0	4
255	< 0.28	NR			0.18	3	31.2	2	22.4	4	318	3	79.0	4
256	< 1	NR			0.36	0	68.0	0	34.0	2	248	0	58.7	0
257	4.00	NR	40.0	2	31.90	0	61.8	0	18.0	3	162	0	70.8	1
259	18.30	NR			0.20	4	47.8	1	27.0	4	351	4	80.4	4
262	56.80	NR											83.0	3
265	0.85	NR	55.0	4	0.21	3	43.0	3	21.0	3	350	4	79.1	4
268			131.7	0									91.7	0
270													94.9	0
272													60.0	0
273					2.11	0	34.4	3	57.2	0	357	3	78.3	4
274	23.49	NR	34.2	1					29.0	3	1	0	101.2	0
282	< 1	NR	64.4	2	0.19	4	34.6	3	< 10	NR	311	2	76.5	3
284	< 1	NR	46.6	4	0.21	3	26.0	0	13.0	1	377	2	79.8	4
287	< 1	NR					51.0	0	40.0	1	360	3	43.5	0
289	0.10	NR			0.18	2	71.0	0	20.9	3	360	3	74.0	2
290														
292			52.3	4							337	4	77.7	4

Table 11. *Laboratory performance ratings for standard reference water sample GW-1 (ground-water constituents)--continued*

(MPV,most probable value; µg/L, micrograms per liter; mg/L, milligrams per liter; Lab, laboratory number; OLR, overall laboratory rating for all reported values; V/28, number of reported values of 28 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 =	225	µg/L	200	mg/L	19.7	µg/L	insufficient data		12.3	mg/L	428	µg/L	1.21	µg/L
F-pseudosigma =	33		10		1.1				0.9		30		0.52	
Lab	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating
1	294	0	188	2	19.2	4	< 1	NR	11.2	2	434	4	< 1	NR
3	244	3	199	4	20.4	3	< 5	NR	13.2	3	427	4	< 3	NR
11	210	4	213	2	19.8	4			11.2	2	43	0		
12			144	0	18.7	3	< 30	NR	12.0	4	420	4	< 10	NR
13			201	4	20.4	3			12.4	4	402	3	< 5	NR
16	218	4	200	4	18.5	2	1.00	NR	10.0	0	416	4	1.50	3
18			193	3	18.4	2	< 20	NR	12.0	4	411	3	1.80	2
26	236	4	201	4	19.7	4	< 4	NR	12.0	4	421	4	< 1	NR
30			203	4	260.0	0	2.20	NR			483	1	1.00	4
32	236	4	225	0	22.7	0	0.50	NR	12.4	4	436	4	1.30	4
34													< 1	NR
36			202	4	20.5	3			12.5	4	450	3		
42			230	0	20.1	4	< 10	NR	12.9	3	407	3	< 2	NR
43			197	4	19.7	4			11.3	2				
46			194	3	19.5	4			11.4	3	385	2	2.00	1
48			232	0	23.8	0	0.60	NR	18.3	0	444	3	1.40	4
59			205	4	20.0	4			12.0	4	500	0	< 2	NR
61			207	3	19.4	4	< 17.2	NR	14.6	0	440	4	< 1.6	NR
64									11.9	4				
68			210	3										
69	218	4	198	4	18.8	3			12.7	4	546	0	< 5	NR
76			205	4					12.4	4				
80														
81			198	4	18.8	3	< 5	NR	12.4	4	537	0	< 2	NR
83			177	0	18.0	2			11.1	2	396	2		
86			200	4	18.7	3	124.00	NR	12.0	4	436	4		
89			147	0	19.4	4			12.4	4	441	4	< 5	NR
92			190	3	0.0	0			9.0	0	300	0	40.00	0
111			206	3	20.7	3			14.0	1	513	0	< 2	NR
113			228	0	21.1	2			11.1	2	383	2	< 0.8	NR
119			203	4	20.6	3			12.0	4	474	1	15.20	0
126					21.3	2			9.4	0	650	0	0.80	3
127	199	3	202	4	171.0	0	< 2	NR	10.1	0	446	3	1.13	4
129			200	4	2.2	0			12.5	4				
134	195	3	193	3	20.3	3	2.88	NR	12.7	4	445	3	< 1	NR
138			199	4	19.5	4	< 0.2	NR	12.0	4	438	4	1.30	4
140			196	4	20.5	3			13.6	2	420	4	0.25	1
141			197	4	19.4	4	< 10	NR	12.1	4	409	3	< 5	NR
142	213	4	196	4	20.5	3	0.59	NR	9.2	0	454	3	0.66	2
146			201	4	19.9	4	< 10	NR	14.5	0	430	4	< 5	NR
147	220	4	198	4	17.0	0	0.97	NR	13.0	3	310	0	0.98	4
149			189	2	19.4	4	< 2	NR	11.0	2			< 2	NR
151	257	3	8	0	18.4	2	0.53	NR	52.6	0	414	4	1.34	4
154			188	2	16.9	0			17.9	0	349	0		
158			205	4	20.0	4					443	3		
180			197	4	19.9	4	< 5.11	NR	11.8	3	418	4	98.80	0
185			190	2					12.2	4				
190					25.3	0					561	0	0.00	NR
191			196	4	20.0	4			12.3	4	453	3	1.41	4
196	239	4	186	2	20.0	4	0.54	NR	12.6	4	471	2	1.01	4
203			209	3	20.5	3			12.0	4			< 2	NR
204														
212	212	4	202	4	18.8	3	< 0.1	NR	11.0	2	414	4	1.21	4
215			204	4	19.1	4	4.00	NR	12.2	4	425	4	<3	NR
219	230	4	200	4	19.7	4			14.0	1	420	4		
220	203	3	202	4	17.8	1			13.0	3	457	3		
221					18.7	3	1.00	NR	12.3	4	13	0	0.48	2
224			204	4	19.5	4	< 5	NR	12.4	4	0	0	27.40	0
235			187	2	19.7	4	3.38	NR			394	2	1.43	4
241			200	4	18.8	3	< 5	NR	16.0	0	428	4	0.30	1

Table 11. *Laboratory performance ratings for standard reference water sample GW-1 (ground-water constituents)--continued*

(MPV,most probable value; µg/L, micrograms per liter; mg/L, milligrams per liter; Lab, laboratory number; OLR, overall laboratory rating for all reported values; V/28, number of reported values of 28 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 =	225	µg/L	200	mg/L	19.7	µg/L	insufficient data		12.3	mg/L	428	µg/L	1.21	µg/L
F-pseudosigma =	33		7		1.1				0.9		30		0.52	
Lab	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating
247	184	2	199	4			< 1	NR	12.0	4	434	4	< 5	NR
255			199	4	19.2	4	< 5.1	NR	12.0	4	414	4	< 2.35	NR
256	1460	0	270	0	19.3	4			16.3	0	29	0	< 5	NR
257	220	4			0.0	0	< 20	NR	12.8	3	409	3	0.74	3
259					19.5	4			11.8	3	450	3		
262			186	2					13.5	2				
265	322	0	202	4	19.2	4	1.00	NR	12.3	4	410	3	1.20	4
268			202	4					14.9	0				
270									23.6	0				
272			0	0					50.0	0				
273	370	0	202	4	20.1	4			11.6	3	185	0		
274			19	0	0.2	0			20.8	0			7.20	0
282			193	3	18.4	2	< 50	NR	12.3	4	410	3	< 5	NR
284			222	0	19.9	4	26.00	NR	13.2	3	430	4	1.00	4
287			201	4	19.7	4			14.7	0	547	0	< 1	NR
289	400	0	195	4	19.9	4	4.90	NR	12.5	4	486	1	0.54	2
290														
292			193	3	20.6	3			11.9	4				

Table 11. *Laboratory performance ratings for standard reference water sample GW-1 (ground-water constituents)--continued*

(MPV,most probable value; µg/L, micrograms per liter; mg/L, milligrams per liter; Lab, laboratory number; OLR, overall laboratory rating for all reported values; V/28, number of reported values of 28 possible values; RV, reported value; <, lass than)

Rating	Absolute Z-value	Rating	Absoluta 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 =	Sb (Antimony)		Se (Selenium)		SiO2 (Silica)		SO_4 (Sulfate)		Sr (Strontium)		V (Vanadium)		Zn (Zinc)	
MPV =	insufficient data		insufficient data		11.1	mg/L	2345	mg/L	2.97	µg/L	insufficient data		568	µg/L
F-pseudosigma =					1.8		326		0.13				42	
Lab	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating
1	< 1	NR	< 1	NR	11.4	4			2.96	4	< 30	NR	499	1
3	10.00	NR	< 10	NR	12.2	3	2430	4	3.27	0	< 5	NR	589	3
11					11.6	4			2.94	4			539	3
12							2400	4					580	4
13	< 5	NR	< 100	NR	12.5	3					< 50	NR	586	4
16	< 1	NR	8.20	NR					2.78	2	3.3	NR	492	1
18	< 1	NR	< 2	NR					2.90	3	< 5	NR	530	3
26			< 0.8	NR	10.5	4	106	0			77.0	NR	565	4
30	< 5	NR	< 2	NR							< 10	NR	632	1
32	< 0.1	NR	< 6	NR	11.8	4	2330	4	3.30	0	< 0.5	NR	543	3
34			< 1	NR										
36							2550	3					57	0
42	< 2	NR	1.50	NR	13.3	2			2.97	4	< 5	NR	606	3
43					11.2	4								
46											8.4	NR	506	2
48	< 0.2	NR	1.50	NR			2771	2			< 4	NR	545	3
59	< 2	NR	< 2	NR										
61	14.50	NR	< 2.5	NR	5.7	0	89	0			9.7	NR	586	4
64					10.8	4								
68														
69	< 5	NR	< 5	NR									591	3
76														
60			< 2	NR										
81	< 2	NR	< 2	NR	9.3	3	206	0	2.89	3	< 3	NR	568	4
83					10.8	4	2110	3					558	4
66									2.87	3	77.8	NR	579	4
89	< 10	NR	< 2	NR	11.0	4	2300	4			24.8	NR	573	4
92							2064	3					54	0
111			< 0.5	NR	9.3	2	2810	2			< 5	NR		
113	< 2.2	NR	< 1	NR	8.8	2			3.14	2				
119	0.07	NR	1.50	NR	13.0	2	393	0	3.29	0	0.4	NR	580	4
126													640	1
127	< 3	NR	< 3	NR	11.4	4			3.03	4	< 3	NR	583	4
129					12.3	3	2436	4						
134	< 1	NR	4.08	NR	11.6	4			3.05	3	< 1	NR	619	2
138	< 0.2	NR	< 1	NR	8.6	2	2170	3	3.01	4	1.1	NR	565	4
140					11.7	4	2400	4					560	4
141	5.12	NR	< 2	NR			2624	3			< 10	NR	582	4
142	0.68	NR	0.77	NR	12.7	3			3.04	3	< 2	NR	614	2
146	< 50	NR	13.60	NR							< 10	NR	549	4
147	0.04	NR	<0.5	NR	11.1	4			2.86	3	0.2	NR	480	0
149	< 3	NR											589	3
151	0.05	NR	1.40	NR	11.4	4			2.49	0			529	3
154									2.72	1	141.0	NR	483	1
158							1765	1					579	4
180	77.60	NR	< 53.2	NR			2360	4			< 4.67	NR	591	3
185					1.2	0								
190					2.3	0							592	3
191					12.1	3			3.03	4			597	3
196	0.07	NR	< 0.2	NR			2166	3	3.16	2	0.3	NR	602	3
203													545	3
204					5.7	0								
212	< 0.1	NR	< 0.5	NR	11.6	4			2.80	2	< 1	NR	533	3
215	<7	NR	<5	NR	9.3	3	3884	0					592	3
219									3.03	4	5.3	NR	550	4
220							2449	4			40.0	NR	578	4
221			1.00	NR			2009	2					538	3
224			300.00	NR							22.4	NR	388	0
235	0.13	NR	0.05	NR			2230	4	2.47	0	< 10	NR	429	0
241	2.50	NR	< 5	NR	11.6	4	2306	4			1.7	NR	573	4

Table 11. *Laboratory performance ratings for standard reference water sample GW-1 (ground-water constituents)--continued*

(MPV,most probable value; µg/L, micrograms per liter; mg/L, milligrams per liter; Lab, laboratory number; OLR, overall laboratory rating for all reported values; V/28, number of reported values of 28 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	O (Poor)	greater than 2.00
2 (Satisfactory)	1.01 - 1.50	NR (Not Rated)	

Analyte =	Sb (Antimony)		Se (Selenium)		SiO_2 (Silica)		SO_4 (Sulfate)		Sr (Strontium)		V (Vanadium)		Zn (Zinc)	
MPV =	insufficient data		insufficient data		11.1	mg/L	2345	mg/L	2.97	µg/L	insufficient data		568	µg/L
F-pseudosigma =					1.8		326		0.13				42	
Lab	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating	RV	Rating
247	< 5	NR	< 6	NR			2145	3	3.05	3	< 1	NR	502	1
255	< 24	NR	< 40	NR							< 3	NR	539	3
256			< 1	NR									604	3
257	< 0.5	NR									< 100	NR	520	2
259					10.9	4			3.00	4			564	4
262							2047	3						
265	0.15	NR	< 1	NR	12.5	3	2380	4	2.93	4	0.3	NR	600	3
268							2284	4						
270														
272														
273									3.00	4			749	0
274					8.1	1	2602	3					14	0
282	< 5	NR	< 5	NR	5.9	0	2730	2			< 20	NR	548	4
284	4.00	NR	2.00	NR	6.9	0	2430	4	2.43	0	421.0	NR	525	2
287													584	4
289			< 5	NR	10.9	4			2.64	0	80.9	NR	600	3
290							2877	1						
292							2640	3					580	4

Table 12. *Laboratory performance ratings for standard reference water sample Hg-24 (mercury)*

(MPV,most probable value; ug/L, micrograms per liter; Lab, laboratory number; V/1 number of reported values of 1 value; RV, reported value; <, less than)

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

Analyte = Hg (Mercury)
MPV = 0.42 µg/L
F-pseudosigma = 0.05

Lab	V/1	RV	Rating
1	1	0.38	3
3	1	0.30	0
10	1	0.44	4
11	1	0.36	2
12	1	< 0.2	0
13	1	0.56	0
18	1	0.38	3
26	1	0.44	4
30	1	0.60	0
32	1	0.53	0
34.1	1	0.41	4
34.2	1	0.34	1
36	1	0.53	0
39	1	0.45	3
42	1	0.45	3
46	1	0.40	4
48	1	0.44	4
50	1	0.36	2
51	1	0.43	4
55	1	0.43	4
59	1	0.35	2
61	1	0.30	0
68	1	0.36	2
69	1	0.39	3
70	1	0.40	4
76	1	0.41	4
81	1	0.40	4
86	1	0.39	3
87	1	0.60	0
89	1	0.40	4
96	1	0.51	1
97	1	0.50	1
105	1	0.45	3
108	1	0.70	0
109	1	0.38	3
111	1	44.20	0
113	1	0.42	4
119	1	0.41	4
127	1	0.37	3
133	1	0.46	3
134	1	0.42	4
138	1	0.37	2
141	1	0.45	3
142	1	0.45	3
145	1	0.61	0
146	1	0.39	3
147	1	0.39	3
149	1	0.40	4
193	1	0.38	3
198	1	0.42	4
212	1	0.45	3
213	1	0.40	4
215	1	0.48	2
219	1	0.40	4
220	1	0.41	4
221	1	0.45	3
234	1	4.25	0
235	1	0.44	4
241	1	0.42	4
245	1	0.40	4
247	1	0.43	4
252	1	0.53	0
255	1	0.37	3
256	1	1.06	0
257	1	5.00	0
259	1	0.40	4
265	1	0.42	4
282	1	< 1	NR
284	1	0.50	1
289	1	0.37	3
292	1	< 0.6	NR

Table 13. *Statistical summary of reported data for standard reference water sample T-147 (trace constituents)*

Definition of analytical methods, abbreviations, and symbols

Analytical methods

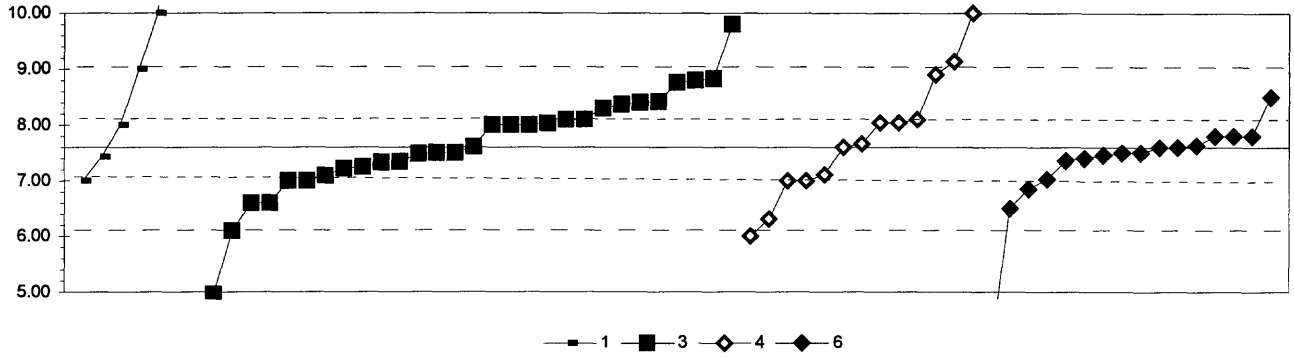
0. Other/Not reported		
1. AA: direct, air	=	atomic absorption: direct,air
2. AA: direct, N_2O	=	atomic absorption: direct,nitrous oxide
3. AA: graphite furnace	=	atomic absorption: graphite furnace
4. ICP	=	inductively coupled plasma
5. DCP	=	direct current plasma
6. ICP/MS	=	inductively coupled plasma/mass spectrometry
7. IC	=	ion chromatography
10. AA: extraction	=	atomic absorption: extraction [chelating agent(s) specified]
11. AA: hydride	=	atomic absorption: hydride [reducing agent specified]
12. AA: flame emission	=	atomic absorption: flame emission
22. Color:	=	colorimetric [color reagent specified]

Abbreviations and symbols

N =	number of samples
MPV =	most probable value
F-pseudosigma =	nonparametric statistic deviation
Hu =	upper hinge value
Hl =	lower hinge value
µg/L =	micrograms per liter
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 T-147 (trace constituents)--Continued*

Ag (Silver) µg/L



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

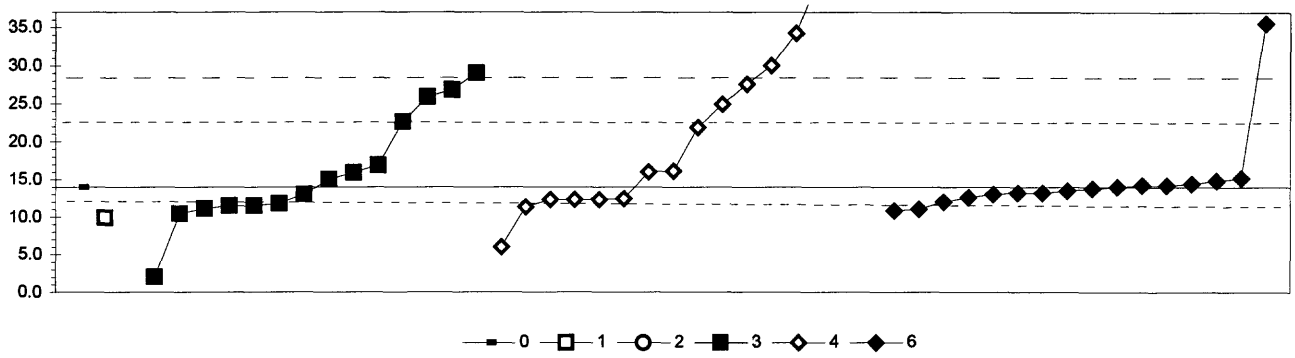
	1	3	4	6
N =	6	30	13	16
Minimum =	7.00	3.00	6.00	3.97
Maximum =	13.00	9.80	10.00	8.50
Median =		7.56	7.66	7.50
F-pseudosigma =		0.90	0.82	0.39

MPV = 7.60
F-pseudosigma = 0.75
N = 65
Hu = 8.10
HI = 7.09

Lab	Rating	Z-value	1	3	4	6
1	4	-0.32				7.36
3	0	3.21			10.00	
11	3	-0.80			7.00	
12	0	2.94		9.80		
13	1	-1.72			6.31	
16	4	-0.27				7.40
18	3	-0.80			7.00	
23	3	-0.51		7.22		
25	0	-2.14			< 6	
26	4	0.01		7.61		
30	4	-0.13				7.50
34	2	1.03		8.37		
42	4	0.00				7.60
46	3	-0.68		7.09		
48	4	0.00				7.60
50	4	0.27				7.80
59	2	-1.34		6.60		
61	3	0.67			8.10	
68	2	1.07		8.40		
69	2	-1.34		6.60		
70	NR			< 10		
81	3	0.53		8.00		
85	1	1.87	9.00			
87	0	7.21	13.00			
89	4	-0.36		7.33		
96	3	0.67		8.10		
97	0	-3.53		4.96		
105	2	-1.47				6.50
107	4	-0.13		7.50		
108	0	-6.14		3.00		
113	4	-0.16		7.48		
114	NR		< 10			
119	3	0.53	8.00			
127	4	-0.47		7.25		
133	3	0.59			8.04	
134	3	-0.65			7.11	
138	3	-0.76				7.03
140	3	-0.80	7.00			
141	3	0.93		8.30		
142	0	-4.85				3.97
146	NR				< 10	
147	4	-0.13				7.50
149	3	0.53		8.00		
151	4	0.27				7.80
180	1	1.74			8.90	
183	2	1.10		8.42		
190	1	1.64		8.83		
193	4	-0.13		7.50		
196	4	-0.19				7.46
198	3	0.67		8.10		
212	3	-1.00				6.85
213	3	0.57		8.03		
215	3	0.53		8.00		
217	4	0.27				7.80
221	4	-0.23	7.43			
234	4	0.08			7.66	
236	0	-2.14			6.00	
241	1	-2.00		6.10		
245	4	0.04				7.63
247	0	-8.80		< 1		
252	4	-0.35		7.34		
255	3	0.59			8.04	
256	0	3.21	10.00			
257	1	1.55		8.76		
259	4	0.00			7.60	
265	2	1.20				8.50
273	0	2.06			9.14	
282	NR					< 10
284	3	-0.80		7.00		
289	1	1.60		8.80		
292	3	-0.80		7.00		

Table 13. *Statistical summary of reported data for standard reference water sample T-147 (trace constituents)--Continued*

Al (Aluminum) µg/L



0. Other			3. AA: graphite furnace					
1. AA: direct air			4. ICP					
2. AA: direct nitrous oxide			6. ICP/MS					
		N =	1	1	0	14	16	16
		Minimum =	14.0	9.9	< 50	2.0	6.0	10.8
		Maximum =				29.0	120.7	35.5
		Median =				14.0	19.0	13.7
		F-pseudosigma =				8.2	14.7	1.1

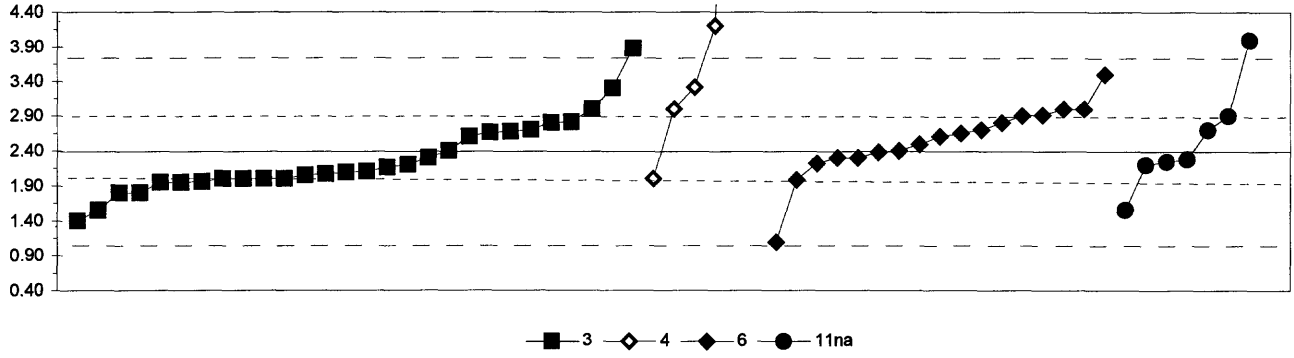
Lab	Rating	Z-value	0	1	2	3	4	6
1	4	-0.27						12.0
3	NR						< 30	
4	NR						< 500	
13	4	-0.39				11.1		
16	4	-0.19						12.6
18	NR						< 100	
23	NR				< 50			
25	NR						< 19	
26	4	-0.34				11.5		
30	4	-0.11						13.2
33	NR		< 10					
34	1	1.72				26.8		
42	4	0.03						14.2
48	4	-0.03						13.8
50	4	-0.43						10.8
61	0	6.44					62.0	
68	0	3.75					42.0	
69	4	-0.13				13.0		
70	NR						< 100	
81	NR						< 32	
83	NR						< 25	
89	4	0.39				16.9		
97	4	0.13				15.0		
105	4	0.16						15.2
113	4	-0.23					12.3	
119	4	-0.11						13.2
127	NR						< 30	
131	NR						< 100	
134	4	-0.23					12.3	
138	4	-0.21					12.4	
141	NR						< 50	
142	NR						< 50	
145	NR						< 50	
146	NR						< 200	
147	4	-0.13						13.0
151	4	0.03						14.2
154	2	-1.07					6.0	
158	2	1.46					24.9	
180	1	1.81					27.5	
185	2	1.15				22.6		
190	4	-0.34				11.5		
191	4	0.00						14.0
196	4	-0.07						13.5
198	4	0.25				15.9		
212	NR						< 100	
215	NR						< 50	
217	0	2.71					34.2	
218	0	14.30					120.7	
219	4	0.00	14.0					
221	3	-0.55		9.9				

MPV =	14.0
F-pseudosigma =	7.5
N =	48
Hu =	22.2
HI =	12.1

Lab	Rating	Z-value	0	1	2	3	4	6
224	4	-0.36					11.3	
234	4	0.28					16.1	
235	4	0.05						14.4
236	4	0.27					16.0	
237	0	2.15					30.0	
241	4	-0.30				11.8		
245	4	-0.40						11.0
247	0	2.88						35.5
255	NR						< 34	
257	1	1.59				25.9		
259	4	-0.23					12.3	
265	4	0.11						14.8
273	2	1.05					21.8	
282	NR							< 100
284	1	2.01				29.0		
287	1	-1.61				2.0		
289	4	-0.48				10.4		
292	NR						< 100	

Table 13. *Statistical summary of reported data for standard reference water sample T-147 (trace constituents)--Continued*

As (Arsenic) µg/L



3. AA: graphite furnace
4. ICP
6. ICP/MS
11na. AA: hydride $NaBH_4$

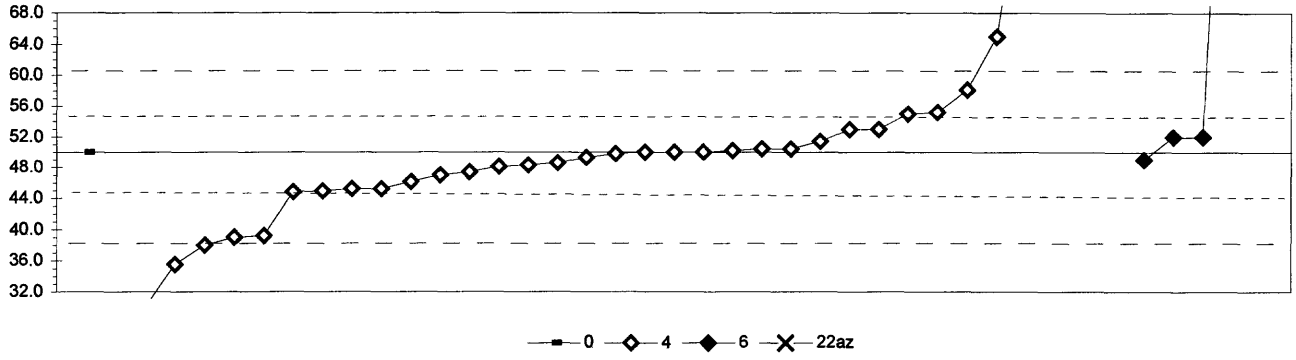
	3	4	6	11na
N =	28	6	17	7
Minimum =	1.40	2.00	1.09	1.56
Maximum =	3.88	12.00	3.50	4.00
Median =	2.10		2.60	2.28
F-pseudosigma =	0.51		0.44	0.43

MPV = 2.39
F-pseudosigma = 0.67
N = 58
Hu = 2.90
HI = 2.00

Lab	Rating	Z-value	3	4	6	11na
1	4	-0.28	2.20			
3	NR			< 5		
13	NR		< 5			
16	4	-0.13			2.30	
18	4	-0.13	2.30			
23	3	0.63	2.81			
25	NR			< 50		
26	4	-0.16				2.28
30	3	0.91			3.00	
34	4	-0.43	2.10			
36	3	-0.58	2.00			
39	4	-0.28				2.20
42	1	1.66			3.50	
46	4	0.42	2.67			
48	3	0.61			2.80	
50	4	0.46			2.70	
59	4	-0.13			2.30	
61	NR			< 4.5		
68	3	0.61	2.80			
69	NR		< 5			
70	NR		< 10			
80	4	0.01	2.40			
81	3	0.91		3.00		
85	0	2.41				4.00
86	2	-1.24				1.56
87	4	0.46				2.70
89	4	-0.21				2.25
96	3	-0.58	2.00			
97	3	-0.64	1.96			
105	NR				< 4	
107	NR		< 5			
108	2	-1.26	1.55			
109	3	-0.88	1.80			
111	2	1.36	3.30			
113	4	-0.48	2.07			
119	4	0.01			2.40	
127	3	-0.51	2.05			
131	0	14.40		12.00		
133	NR		< 5			
134	4	-0.34	2.16			
138	3	-0.61			1.98	
141	NR		< 5			
142	4	-0.25			2.22	
143	4	-0.45	2.09			
145	0	11.41		10.00		
146	NR			< 10		
147	4	-0.01			2.38	
149	3	-0.58	2.00			
151	4	0.31			2.60	
154	2	-1.48	1.40			
180	NR			< 40.1		
191	3	0.76			2.90	
193	NR		< 5			
196	4	0.15			2.49	
198	4	0.40	2.66			
212	4	0.39			2.65	
213	4	0.31	2.60			
215	NR		< 5			
217	1	-1.95			1.09	
220	3	-0.66	1.95			
224	0	2.71		4.20		
234	2	1.38		3.31		
235	0	2.23	3.88			
236	NR			< 35		
241	3	-0.88	1.80			
245	3	0.78			2.91	
247	NR		< 5			
252	3	-0.66	1.95			
255	NR		< 5.6			
256	3	0.76				2.90
257	4	0.46	2.70			
259	3	-0.58		2.00		
265	3	0.91			3.00	
282	NR					< 5
284	3	-0.58	2.00			
289	NR		< 5			
292	3	0.91	3.00			

Table 13. *Statistical summary of reported data for standard reference water sample T-147 (trace constituents)--Continued*

B (Boron) µg/L



0. Other
4. ICP
6. ICP/MS

22az. Color: azomethine

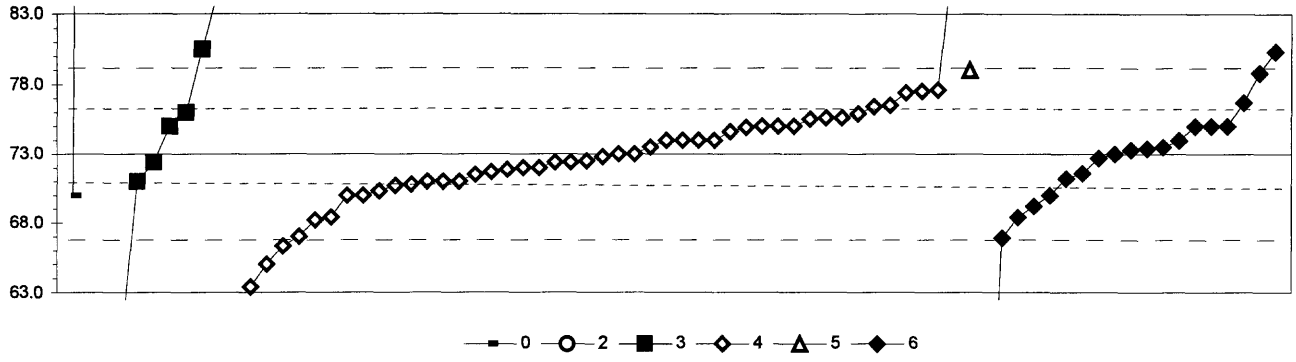
N =	1	35	4	1
Minimum =	50.0	20.0	49.0	15.0
Maximum =		157.0	127.0	
Median =		49.8		
F-pseudosigma =		5.8		

MPV = 50.0
F-pseudosigma = 5.8
N = 41
Hu = 53.0
Hl = 45.2

Lab	Rating	Z-value	0	4	6	22az
1	4	0.07		50.4		
3	3	0.52		53.0		
4	3	0.52		53.0		
11	0	15.22		138.0		
16	0	18.51		157.0		
18	NR			< 50		
24	4	-0.45		47.4		
25	0	-4.66		< 23		
26	3	-0.88		44.9		
39	2	1.40		58.1		
40	3	-0.83		45.2		
42	4	-0.17			49.0	
46	3	-0.83		45.2		
48	0	-5.19		20.0		
61	0	-2.51		35.5		
88	0	6.57		88.0		
70	NR			< 100		
85	3	-0.52		47.0		
86	3	-0.67		46.1		
119	3	0.86		55.0		
127	3	-0.90		44.8		
129	0	-6.05				15.0
131	4	0.00		50.0		
134	4	0.07		50.4		
138	4	0.24		51.4		
141	4	0.00		50.0		
142	4	-0.33		48.1		
145	0	-2.08		38.0		
147	4	0.35			52.0	
154	4	-0.12		49.3		
158	4	-0.03		49.8		
180	4	-0.29		48.3		
212	3	0.90		55.2		
215	4	0.00		50.0		
217	1	-1.87		39.2		
219	4	0.00	50.0			
234	4	-0.24		48.6		
236	1	-1.90		39.0		
247	0	13.32			127.0	
255	4	0.03		50.2		
256	0	-6.90				< 10
259	0	2.59		65.0		
265	4	0.35			52.0	
273	0	6.94		90.1		
282	NR				< 50	
289	0	-3.46		30.0		

Table 13. *Statistical summary of reported data for standard reference water sample T-147 (trace constituents)--Continued*

Ba (Barium) µg/L



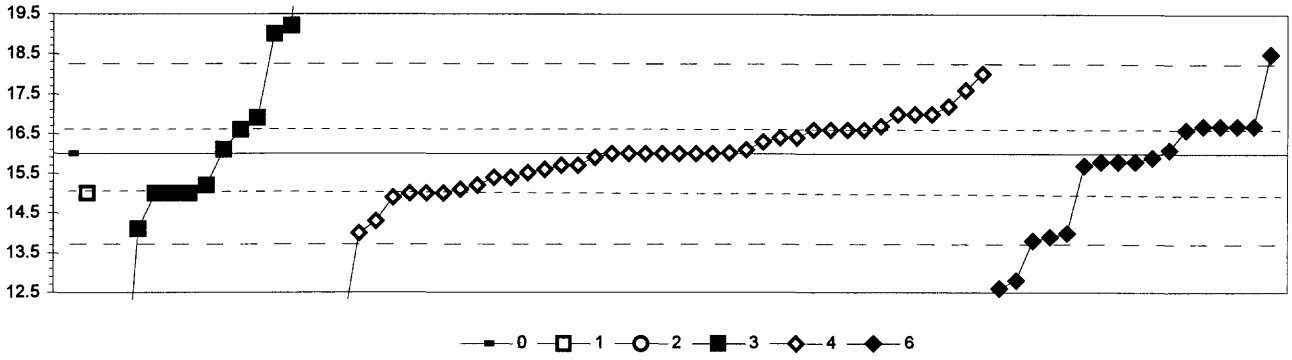
0. Other
2. AA: direct nitrous oxide
3. AA: graphite furnace
4. ICP
5. DCP
6. ICP/MS

MPV = 73.0
F-pseudosigma = 3.2
N = 75
Hu = 75.3
HI = 71.0

			0	2	3	4	5	6
		N =	2	0	8	45	1	19
		Minimum =	70.0	< 50	59.3	63.4	79.0	42.9
		Maximum =	245.0	< 100	89.6	87.5		80.3
		Median =			75.5	72.8		73.3
		F-pseudosigma =			8.1	3.0		3.3
Lab	Rating	Z-value	0	2	3	4	5	6
1	4	0.13						73.4
3	3	0.63				75.0		
4	4	0.32				74.0		
11	3	0.63				75.0		
13	3	0.83				75.6		
16	3	-0.57						71.2
18	3	-0.63				71.0		
19	3	0.92				75.9		
25	2	-1.46				68.4		
26	3	0.60				74.9		
30	3	0.63						75.0
33	1	1.90					79.0	
39	4	-0.48				71.5		
40	4	-0.41				71.7		
42	4	0.32						74.0
46	3	-0.86				70.3		
48	4	-0.10						72.7
50	2	-1.21						69.2
59	4	0.00						73.0
61	2	1.43				77.5		
68	4	0.00				73.0		
69	0	2.38			80.5			
70	4	-0.19				72.4		
81	4	0.32				74.0		
83	0	-2.13				66.3		
85	4	0.32				74.0		
86	4	0.16				73.5		
87	4	-0.19			72.4			
89	0	5.27			89.6			
96	NR			< 100				
97	3	0.63			75.0			
105	1	-1.94						66.9
107	3	-0.63			71.0			
113	1	-1.52				68.2		
119	3	0.63				75.0		
121	3	-0.95				70.0		
127	4	-0.16				72.5		
131	3	0.79				75.5		
133	2	1.11				76.5		
134	4	-0.37				71.9		
138	4	-0.32				72.0		
140	0	54.59	245.0					
141	2	1.40				77.4		
142	3	0.63						75.0
145	4	0.32				74.0		
146	2	1.46				77.6		
147	3	-0.95						70.0
151	0	2.32						80.3
154	0	-2.54				65.0		
158	3	-0.70				70.8		
180	3	-0.73				70.7		
183	0	3.71			84.7			
191	2	1.17						76.7
196	4	0.10						73.3
198	3	0.83				75.6		
212	2	-1.46						68.4
215	4	0.00				73.0		
217	4	-0.19				72.4		
219	3	-0.95	70.0					
220	4	-0.06				72.8		
224	0	4.60				87.5		
234	2	1.08				76.4		
235	1	1.84						78.8
236	3	-0.63				71.0		
237	3	-0.63				71.0		
241	0	-4.35			59.3			
245	4	0.16						73.5
247	0	-9.55						42.9
255	3	0.51				74.6		
256	0	-7.19		< 50				
259	3	-0.95				70.0		
265	3	0.63						75.0
273	0	-3.05				63.4		
282	4	-0.44						71.6
284	3	0.95			76.0			
289	1	-1.90				67.0		
292	4	-0.32				72.0		

Table 13. *Statistical summary of reported data for standard reference water sample T-147 (trace constituents)--Continued*

Be (Beryllium) µg/L



0. Other			3. AA: graphite furnace					
1. AA: direct air			4. ICP					
2. AA: direct nitrous oxide			6. ICP/MS					
		N =	1	1	0	13	39	17
		Minimum =	16.0	15.0	< 10	8.4	11.4	12.6
		Maximum =				39.0	18.0	18.5
		Median =				16.1	16.0	15.8
		F-pseudosigma =				3.0	0.9	2.0

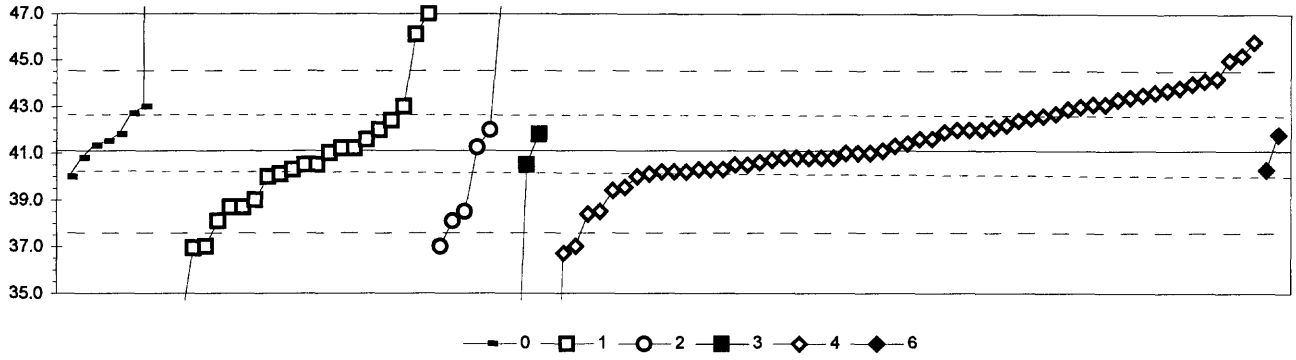
Lab	Rating	Z-value	0	1	2	3	4	6
1	4	-0.09						15.9
3	3	0.87					17.0	
4	3	-0.87					15.0	
11	3	0.87					17.0	
13	3	0.52					16.6	
16	1	-1.83						13.9
18	3	-0.87					15.0	
25	4	-0.26					15.7	
26	3	0.52					16.6	
30	3	0.61						16.7
36	4	0.09				16.1		
39	3	-0.52					15.4	
40	3	-0.70					15.2	
42	4	-0.17						15.8
46	3	-0.52					15.4	
48	3	0.61						16.7
50	1	-1.91						13.8
59	1	-1.74						14.0
61	4	0.35					16.4	
68	4	0.00					16.0	
69	3	-0.70				15.2		
70	4	0.00					16.0	
81	3	-0.87				15.0		
63	2	-1.48					14.3	
65	3	-0.87					15.0	
86	4	0.09					16.1	
89	1	-1.65				14.1		
96	3	-0.87		15.0				
97	3	0.78				16.9		
105	0	-2.79						12.8
113	4	-0.26					15.7	
114	0	-5.46			< 10			
119	4	-0.26						15.7
121	3	0.87					17.0	
127	3	-0.78					15.1	
131	1	-1.74					14.0	
133	2	1.39					17.6	
134	4	-0.42					15.5	
138	4	-0.09					15.9	
141	3	0.52					16.6	
142	0	2.18						18.5
145	4	0.00					16.0	
146	3	0.61					16.7	
147	4	-0.17						15.8
149	3	-0.87				15.0		
151	4	0.09						16.1
154	3	0.52				16.6		
158	4	0.00					16.0	
180	3	-0.96					14.9	
193	3	-0.87				15.0		

MPV =	16.0
F-pseudosigma =	1.1
N =	71
Hu =	16.6
HI =	15.1

Lab	Rating	Z-value	0	1	2	3	4	6
196	3	0.52						16.6
198	2	1.04					17.2	
212	0	-2.96						12.6
213	0	2.79				19.2		
215	4	0.00					16.0	
217	4	0.35					16.4	
219	4	0.00	16.0					
220	4	-0.35					15.6	
224	0	-4.00					11.4	
234	3	0.52					16.6	
235	4	0.26					16.3	
236	4	0.00					16.0	
237	4	0.00					16.0	
241	0	-6.61				8.4		
245	3	0.61						16.7
247	0	-13.64						< 1
252	0	8.70				26.0		
255	4	0.02					16.0	
265	3	0.61						16.7
282	4	-0.17						15.8
284	0	20.02				39.0		
289	1	1.74					18.0	
292	0	2.61				19.0		

Table 13. *Statistical summary of reported data for standard reference water sample T-147 (trace constituents)--Continued*

Ca (Calcium) mg/L



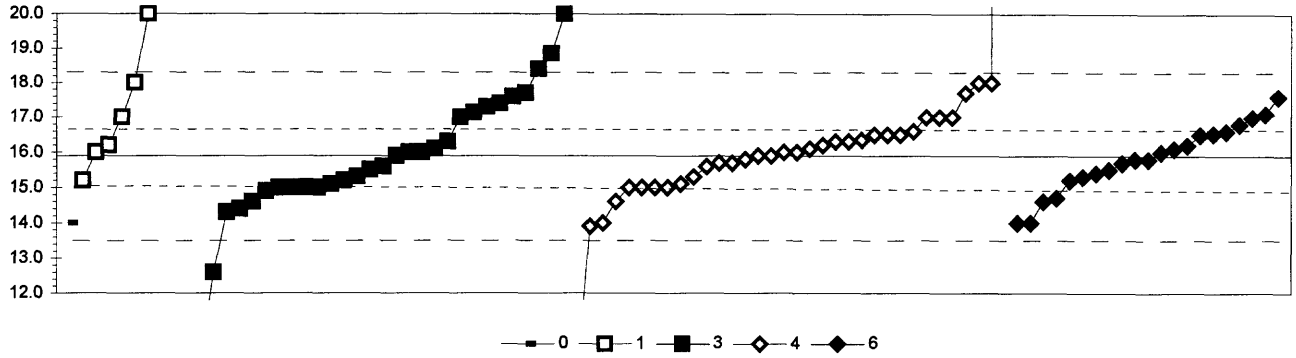
0. Other			3. AA: graphite furnace				
1. AA: direct air			4. ICP				
2. AA: direct nitrous oxide			6. ICP/MS				
	N =	8	22	6	3	58	2
	Minimum =	40.0	31.4	37.0	27.0	22.2	40.3
	Maximum =	175.0	47.0	48.2	41.8	45.8	41.8
	Median =	41.7	40.4			41.4	
	F-pseudosigma =	1.3	2.1			2.0	

MPV = 41.1
F-pseudosigma = 1.7
N = 99
Hu = 42.6
HI = 40.2

Lab	Rating	Z-value	0	1	2	3	4	6
1	4	-0.34					40.5	
3	1	1.55					43.8	
4	0	2.24					45.0	
9	0	-2.35					37.0	
11	1	1.78					44.2	
12	4	-0.06					41.0	
13	2	1.15					43.1	
16	2	1.09					43.0	
18	4	-0.29					40.6	
23	0	2.87		46.1				
24	3	-0.57					40.1	
25	2	1.32					43.4	
26	4	0.11					41.3	
30	3	0.52			42.0			
33	4	0.40	41.8					
36	2	1.09		43.0				
39	3	-0.52					40.2	
40	3	-0.98					39.4	
42	0	2.70					45.8	
43	4	-0.23					40.7	
45	4	0.11	41.3					
46	4	-0.17					40.8	
48	2	1.44					43.6	
51	2	-1.38		38.7				
59	3	0.52					42.0	
61	2	1.49					43.7	
68	4	-0.06					41.0	
69	3	-0.57		40.1				
70	3	0.80					42.5	
76	4	0.27		41.6				
81	4	0.40				41.8		
83	1	-1.55					38.4	
84	4	-0.34		40.5				
85	4	-0.06		41.0				
86	2	1.03					42.9	
87	1	-1.72			38.1			
89	3	-0.63		40.0				
93	4	-0.46					40.3	
97	4	0.06		41.2				
105	4	0.00					41.1	
108	0	76.86	175.0					
109	4	-0.34		40.5				
111	0	4.08			48.2			
113	0	2.35					45.2	
114	0	-2.35			37.0			
119	3	0.83					42.2	
121	4	-0.17					40.8	
127	3	-0.52					40.2	
129	0	3.39		47.0				
131	3	0.92					42.7	
133	2	1.26					43.3	
134	3	-0.64					40.0	
138	4	0.17					41.4	
140	0	-2.35		37.0				
141	2	1.38					43.5	
142	4	-0.17					40.8	
145	3	0.57					42.1	
146	4	0.46					41.9	
147	4	-0.06					41.0	
149	2	-1.38		38.7				
151	3	0.75		42.4				
154	3	-0.52					40.2	
158	4	0.29					41.6	
180	4	0.29					41.6	
183	0	-5.57		31.4				
185	4	-0.46		40.3				
190	3	0.92	42.7					
191	4	-0.46						40.3
193	2	-1.49			38.5			
196	4	0.06		41.2				
198	3	0.86					42.6	
209	1	1.72					44.1	
212	3	0.52					42.0	
215	4	-0.46					40.3	
217	4	-0.17					40.8	
218	1	1.65					44.0	
219	3	-0.63	40.0					
220	2	-1.21		39.0				
221	4	-0.34				40.5		
224	0	-10.84					22.2	
234	3	0.52					42.0	
235	0	-2.53					36.7	
236	3	-0.90					39.5	
237	4	-0.46					40.3	
241	3	0.52		42.0				
247	4	-0.17	40.8					
255	4	-0.18					40.8	
256	4	0.09			41.3			
257	2	1.09	43.0					
282	4	0.23	41.5					
265	4	-0.34					40.5	
268	0	-4.36		33.5				
273	3	0.75					42.4	
274	0	-8.12				27.0		
282	4	0.40						41.8
284	1	-1.72		38.1				
287	0	-2.39		36.9				
289	2	-1.49					38.5	
292	2	1.15					43.1	

Table 13. *Statistical summary of reported data for standard reference water sample T-147 (trace constituents)--Continued*

Cd (Cadmium) µg/L



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

	0	1	3	4	6
N =	1	6	32	34	21
Minimum =	14.0	15.2	0.1	9.4	14.0
Maximum =		20.0	20.0	158.0	17.6
Median =		16.6	15.4	16.0	15.8
F-pseudosigma =			1.7	1.0	0.9

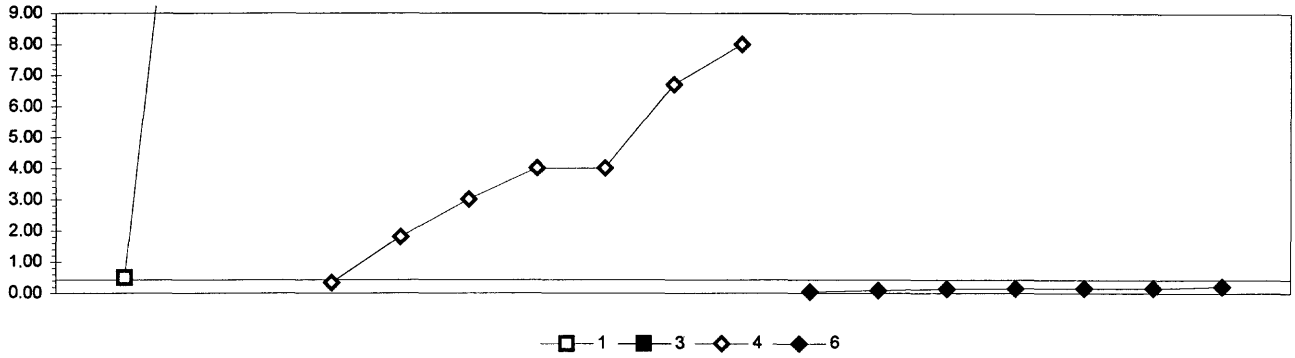
MPV = 15.9
F-pseudosigma = 1.2
N = 94
Hu = 16.6
Hl = 15.0

Lab	Rating	Z-value	0	1	3	4	6
1	4	-0.42					15.4
3	0	119.81				158.0	
4	4	0.08				16.0	
9	4	-0.17				15.7	
10	3	-0.76			15.0		
11	3	0.93				17.0	
12	3	0.93			17.0		
13	4	-0.25				15.6	
16	4	-0.08					15.8
18	3	-0.76				15.0	
19	2	-1.10				14.6	
23	2	-1.26			14.4		
25	4	0.08				16.0	
26	2	1.26			17.4		
30	3	0.76					16.8
34	4	0.08			16.0		
36	3	-0.76			15.0		
39	4	0.08					16.0
40	4	0.34				16.3	
42	2	1.43					17.6
46	3	-0.76			15.0		
48	4	0.25					16.2
50	2	-1.10					14.6
59	1	-1.60					14.0
61	4	0.25				16.2	
68	3	0.93				17.0	
69	3	-0.67			15.1		
70	0	2.11			18.4		
76	3	0.53					16.5
80	4	0.08		16.0			
81	4	0.08			16.0		
83	3	0.59				16.6	
85	3	-0.76				15.0	
86	4	0.17				16.1	
87	3	0.93		17.0			
89	4	0.00			15.9		
96	2	1.18			17.3		
97	3	-0.59			15.2		
105	1	-1.60					14.0
108	0	-4.89			10.1		
111	2	-1.35			14.3		
113	4	0.00				15.9	
114	0	3.46		20.0			
119	2	-1.01					14.7
121	3	0.51				16.5	
127	4	-0.08				15.8	
131	3	-0.76				15.0	
133	1	1.52				17.7	
134	4	-0.50			15.3		
138	3	-0.51					15.3

Lab	Rating	Z-value	0	1	3	4	6
140	3	-0.59		15.2			
141	3	0.51				16.5	
142	4	-0.17					15.7
145	1	1.77				18.0	
146	4	0.34				16.3	
147	4	-0.34					15.5
151	3	0.59					16.6
154	4	0.34			16.3		
158	4	-0.17				15.7	
180	3	0.51				16.5	
183	2	1.43			17.6		
190	0	-13.32			0.1		
191	2	1.01					17.1
193	3	-0.76			15.0		
196	4	-0.08					15.8
198	4	-0.34			15.5		
212	4	0.17					16.1
213	0	-2.78			12.6		
215	1	-1.60				14.0	
217	3	-0.67				15.1	
219	1	-1.60	14.0				
220	1	-1.69				13.9	
221	4	0.25		16.2			
224	3	-0.51				15.3	
234	4	0.00				15.9	
235	3	0.93					17.0
236	3	0.93				17.0	
237	1	1.77				18.0	
241	4	-0.25			15.6		
245	3	-0.59					15.2
247	0	-11.47			2.3		
252	2	-1.10			14.6		
255	4	0.38				16.4	
256	0	2.49			18.9		
257	1	1.77		18.0			
259	3	-0.76				15.0	
265	3	0.51					16.5
273	0	-5.48				9.4	
274	0	-7.04			7.6		
282	4	0.17			16.1		
284	0	3.46			20.0		
287	2	1.05			17.1		
289	1	1.52			17.7		
292	3	-0.84			14.9		

Table 13. *Statistical summary of reported data for standard reference water sample T-147 (trace constituents)--Continued*

Co (Cobalt) µg/L



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

	1	3	4	6
N =	2	0	7	7
Minimum =	0.50	< 0.04	0.33	0.04
Maximum =	20.00	< 10	8.00	0.21
Median =			4.00	0.15
F-pseudosigma =			2.19	0.04

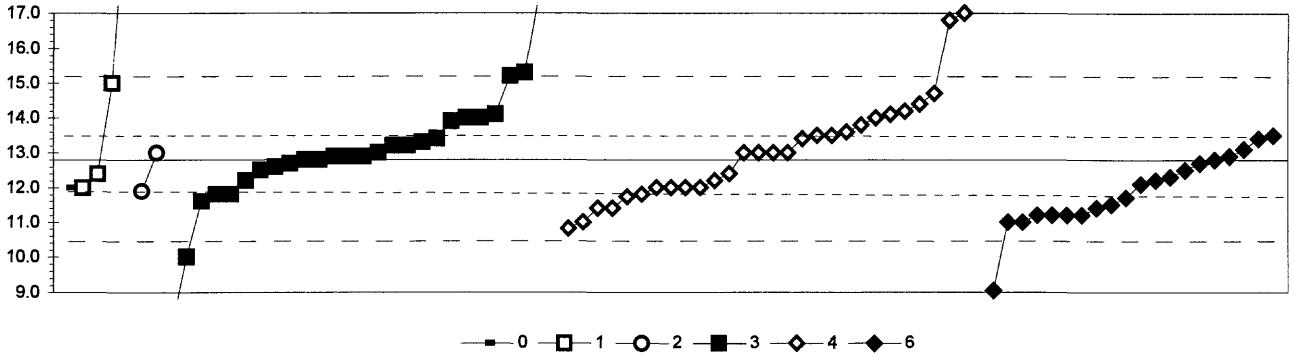
MPV = insufficient data
F-pseudosigma =
N = 16
Hu =
HI =

Lab	Rating	Z-value	1	3	4	6
1	NR					< 1
3	NR				< 5	
4	NR				< 100	
13	NR				< 10	
16	NR					< 1
18	NR				< 10	
25	NR				< 12	
26	NR				< 6	
30	NR					< 1
42	NR					< 2
48	NR				< 50	
50	NR					< 1
61	NR				< 1.7	
68	NR				< 80	
70	NR				< 50	
81	NR				< 7	
85	NR				< 10	
89	NR			< 10		
97	NR			< 0.5		
105	NR					< 1
119	NR	-0.09				0.16
121	NR	1.26			4.00	
127	NR			< 0.8		
131	NR	1.26			4.00	
134	NR				< 1	
138	NR					< 0.5
141	NR				< 10	
142	NR					< 1
145	NR	0.91			3.00	
146	NR				< 10	
147	NR	-0.12				0.08
180	NR				< 5.22	
191	NR	-0.09				0.15
196	NR	-0.10				0.13
212	NR	-0.09				0.16
213	NR			< 0.68		
215	NR			< 1		
220	NR	0.49			1.80	
221	NR	0.03	0.50			
224	NR				< 3	
234	NR	-0.03			0.33	
236	NR	2.66			8.00	
237	NR				< 10	
245	NR	-0.07				0.21
247	NR					< 1
255	NR				< 4.1	
256	NR		< 50			
257	NR			< 0.04		
265	NR	-0.13				0.04
273	NR	2.21			6.70	

Lab	Rating	Z-value	1	3	4	6
282	NR					< 20
284	NR	6.87	20.00			

Table 13. *Statistical summary of reported data for standard reference water sample T-147 (trace constituents)--Continued*

Cr (Chromium) µg/L



0. Other			3. AA: graphite furnace					
1. AA: direct air			4. ICP					
2. AA: direct nitrous oxide			6. ICP/MS					
		N =	1	4	2	27	29	20
		Minimum =	12.0	12.0	11.9	8.0	10.8	9.1
		Maximum =		21.0	13.0	44.5	18.0	13.5
		Median =				12.9	13.0	11.9
		F-pseudosigma =				1.0	1.5	1.2

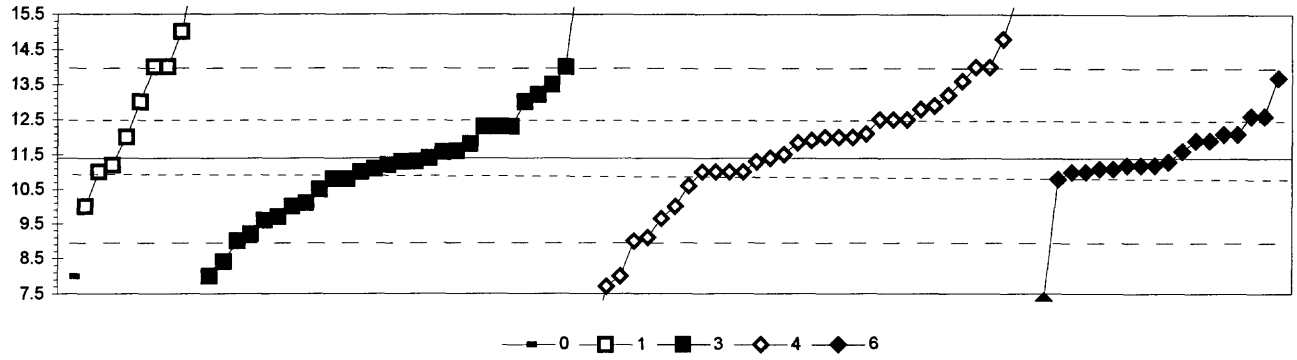
Lab	Rating	Z-value	0	1	2	3	4	6
1	2	-1.14						11.4
3	4	0.16					13.0	
4	NR						< 40	
9	3	0.57					13.5	
10	4	0.00				12.8		
11	0	4.25					18.0	
12	NR						< 20	
13	4	-0.33					12.4	
16	2	-1.31						11.2
18	2	-1.47					11.0	
19	2	-1.14					11.4	
23	4	-0.16				12.6		
25	0	-4.00					< 8	
26	4	0.33				13.2		
30	4	-0.25						12.5
36	4	0.49				13.4		
39	4	-0.49				12.2		
40	3	-0.65					12.0	
42	2	-1.31						11.2
46	4	-0.25				12.5		
48	3	-0.57						12.1
50	2	-1.31						11.2
59	2	-1.47						11.0
61	3	0.57					13.5	
68	4	0.16					13.0	
69	3	-0.98				11.6		
70	2	1.14					14.2	
76	4	-0.48						12.2
81	4	0.16				13.0		
83	4	0.49					13.4	
85	0	-2.29					< 10	
87	3	-0.74			11.9			
89	2	1.06				14.1		
96	4	0.41				13.3		
97	1	1.96				15.2		
105	2	-1.47						11.0
107	3	0.98				14.0		
108	0	-2.29				10.0		
111	3	0.90				13.9		
113	3	-0.65					12.0	
114	4	0.16			13.0			
119	4	0.00						12.8
127	3	-0.82				11.8		
131	0	3.43					17.0	
133	1	1.55					14.7	
134	3	-0.87					11.7	
138	2	-1.14					11.4	
140	0	6.70		21.0				
141	1	2.04				15.3		
142	3	-0.90						11.7

MPV =	12.8
F-pseudosigma =	1.2
N =	83
Hu =	13.5
Hl =	11.9

Lab	Rating	Z-value	0	1	2	3	4	6
143	4	-0.08				12.7		
145	3	0.98					14.0	
146	2	1.06					14.1	
147	4	0.25						13.1
151	2	-1.06						11.5
154	3	-0.82				11.8		
158	0	3.27					16.8	
180	4	-0.49					12.2	
183	4	0.33				13.2		
190	4	0.08				12.9		
191	4	0.08						12.9
193	4	0.08				12.9		
196	4	-0.41						12.3
198	3	0.65					13.6	
212	0	-3.07						9.1
213	3	0.98				14.0		
215	3	-0.65					12.0	
217	3	0.82					13.8	
219	3	-0.65	12.0					
221	4	-0.33		12.4				
234	2	1.31					14.4	
235	4	-0.08						12.7
236	4	0.16					13.0	
237	0	-2.29					< 10	
241	4	0.00				12.8		
245	2	-1.31						11.2
247	0	25.92				44.5		
252	4	0.08				12.9		
255	1	-1.63					10.8	
256	1	1.80		15.0				
257	0	3.97				17.7		
259	3	-0.82					11.8	
265	4	0.49						13.4
273	4	0.16					13.0	
282	3	0.57						13.5
284	0	-3.92				8.0		
287	3	-0.65		12.0				
292	3	-0.65					12.0	

Table 13. *Statistical summary of reported data for standard reference water sample T-147 (trace constituents)--Continued*

Cu (Copper) µg/L



0. Other			4. ICP				
1. AA: direct air			6. ICP/MS				
3. AA: graphite furnace							
		N =	1	9	28	33	18
		Minimum =	8.0	10.0	8.0	6.0	7.3
		Maximum =		17.0	17.0	140.0	13.7
		Median =		13.0	11.3	11.9	11.3
		F-pseudosigma =		2.1	1.7	1.3	0.7

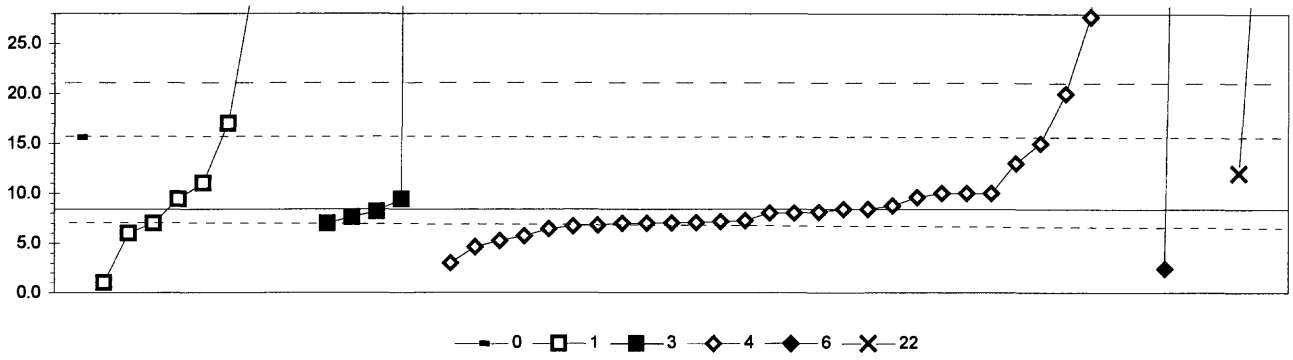
		MPV =	11.4				
		F-pseudosigma =	1.3				
		N =	89				
		Hu =	12.5				
		HI =	10.8				

Lab	Rating	Z-value	0	1	3	4	6
1	4	-0.32					11.0
3	4	0.48				12.0	
4	0	-2.94				7.7	
9	0	-4.29				6.0	
10	4	-0.48			10.8		
11	0	2.06				14.0	
12	2	-1.11			10.0		
13	NR					< 20	
16	4	-0.24					11.1
18	4	-0.32				11.0	
19	1	-1.90			9.0		
23	4	0.16			11.6		
25	2	-1.11				10.0	
26	4	-0.08			11.3		
30	4	0.16					11.6
36	2	-1.35			9.7		
39	3	0.87				12.5	
40	1	-1.83				9.1	
42	3	0.56					12.1
46	3	0.71			12.3		
48	3	0.56					12.1
50	1	1.83					13.7
59	0	102.05				140.0	
61	4	-0.32				11.0	
68	4	-0.32				11.0	
69	1	-1.75			9.2		
70	4	0.00				11.4	
80	0	-2.38			8.4		
81	4	-0.32			11.0		
83	3	0.87				12.5	
84	4	-0.08			11.3		
85	0	4.44		17.0			
86	1	1.75				13.6	
87	0	2.06		14.0			
89	NR				< 10		
96	0	2.06			14.0		
97	1	1.67			13.5		
105	4	-0.48					10.8
107	3	0.71			12.3		
108	4	0.48		12.0			
111	2	1.43			13.2		
113	2	1.11				12.8	
114	NR			< 10			
119	4	0.48				12.0	
121	0	2.06				14.0	
127	3	-0.71			10.5		
131	1	-1.90				9.0	
133	3	-0.63				10.6	
134	4	0.13			11.6		
138	4	-0.16					11.2

Lab	Rating	Z-value	0	1	3	4	6
140	2	1.27		13.0			
141	4	-0.48			10.8		
142	4	-0.24					11.1
145	0	3.65				16.0	
146	NR					< 25	
147	4	-0.16					11.2
149	4	-0.32		11.0			
151	3	0.95					12.6
154	2	-1.43			9.6		
158	4	0.40				11.9	
180	2	1.19				12.9	
183	4	0.00			11.4		
190	4	-0.16			11.2		
191	4	0.40					11.9
193	NR			< 25			
196	4	0.40					11.9
198	3	0.56				12.1	
212	4	-0.16					11.2
213	4	0.32			11.8		
215	2	1.43				13.2	
217	2	-1.39				9.7	
219	0	-2.70	8.0				
220	4	-0.08				11.3	
221	4	-0.16		11.2			
224	0	2.70				14.8	
234	4	0.48				12.0	
235	4	-0.08					11.3
236	0	-2.70				8.0	
237	4	-0.32				11.0	
241	2	-1.03			10.1		
245	4	-0.32					11.0
247	0	-3.25					7.3
252	4	-0.24			11.1		
255	4	0.35				11.8	
256	2	-1.11		10.0			
257	0	2.06		14.0			
259	4	0.08				11.5	
265	3	0.95					12.6
273	3	0.87				12.5	
274	0	4.44			17.0		
282	NR						< 10
284	0	-2.70			8.0		
287	0	2.86		15.0			
289	3	0.71			12.3		
292	2	1.27			13.0		

Table 13. *Statistical summary of reported data for standard reference water sample T-147 (trace constituents)--Continued*

Fe (Iron) µg/L



0. Other				4. ICP				
1. AA: direct air				6. ICP/MS				
3. AA: graphite furnace				22. Colorimetric				
		N =	1	9	5	29	3	2
		Minimum =	15.6	1.0	7.0	3.0	2.4	12.0
		Maximum =		63.0	453.7	60.0	170.0	48.0
		Median =		11.0		8.0		
		F-pseudosigma =		17.8		2.2		

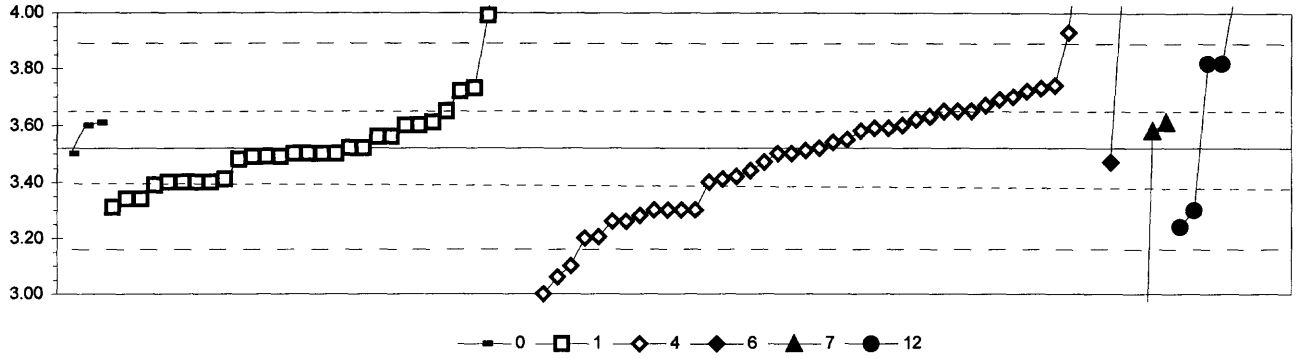
						MPV =	8.4	
						F-pseudosigma =	6.4	
						N =	49	
						Hu =	15.6	
						HI =	7.0	

Lab	Rating	Z-value	0	1	3	4	6	22
1	NR			< 10				
3	NR					< 30		
4	NR					< 30		
10	2	1.35		17.0				
12	0	8.09				60.0		
13	NR					< 10		
16	4	0.00				8.4		
18	NR					< 50		
21	3	0.56						12.0
23	NR			< 100				
25	NR					< 6		
26	4	-0.50				5.2		
33	NR		< 20					
40	4	-0.27				6.7		
42	4	0.25				10.0		
43	NR					< 10		
48	NR					< 30		
50	3	-0.94					2.4	
61	NR					< 34		
68	NR					< 39		
69	NR			< 50				
70	NR					< 20		
80	NR			< 11				
81	NR					< 9		
83	4	-0.05				8.1		
85	NR					< 10		
87	NR			< 40				
89	NR				< 50			
91	NR						< 10	
96	NR			< 50				
97	4	0.16			9.4			
105	NR					< 10		
107	0	4.96		40.0				
108	0	8.56		63.0				
109	4	0.16		9.4				
113	4	-0.31				6.4		
114	NR			< 10				
119	2	1.04				15.0		
121	4	0.19				9.6		
127	NR					< 5		
129	0	6.21						48.0
131	4	0.00				8.4		
133	4	-0.22				7.0		
134	4	-0.18				7.3		
138	4	-0.42				5.7		
140	4	-0.38		6.0				
141	NR					< 50		
142	3	0.72				13.0		
145	4	-0.22				7.0		
146	NR					< 50		

Lab	Rating	Z-value	0	1	3	4	6	22
147	4	-0.06				8.0		
149	NR			< 10				
151	NR						< 10	
154	3	-0.85				3.0		
158	3	-0.60				4.6		
180	NR					< 3.33		
190	2	1.13	15.6					
191	0	25.35					170.0	
198	NR					< 50		
212	NR					< 100		
213	4	-0.04			8.2			
215	4	0.25				10.0		
217	0	3.03				27.7		
218	4	0.05				8.8		
220	4	-0.25				6.8		
221	4	-0.13			7.6			
224	0	6.59				50.4		
234	4	-0.21				7.1		
235	NR					< 10		
236	4	-0.22				7.0		
237	1	1.82				20.0		
241	4	-0.22		7.0				
245	0	21.74					147.0	
252	2	-1.16		1.0				
255	NR					< 68		
256	NR			< 10				
257	NR				< 0.02			
259	4	-0.06				8.0		
265	NR					< 10		
273	4	-0.20				7.2		
274	0	69.85			453.7			
282	NR						< 50	
284	4	0.41		11.0				
287	0	3.55		31.0				
289	4	-0.22			7.0			
292	4	0.25				10.0		

Table 13. *Statistical summary of reported data for standard reference water sample T-147 (trace constituents)--Continued*

K (Potassium) mg/L



0. Other			6. ICP/MS					
1. AA: direct air			7. Ion chromatography					
4. ICP			12. Flame emission					
		N =	3	30	42	2	3	8
		Minimum =	3.50	3.31	1.00	3.47	1.80	3.24
		Maximum =	3.61	5.05	6.14	4.20	3.61	340.00
		Median =		3.50	3.52			3.96
		F-pseudosigma =		0.15	0.26			0.75

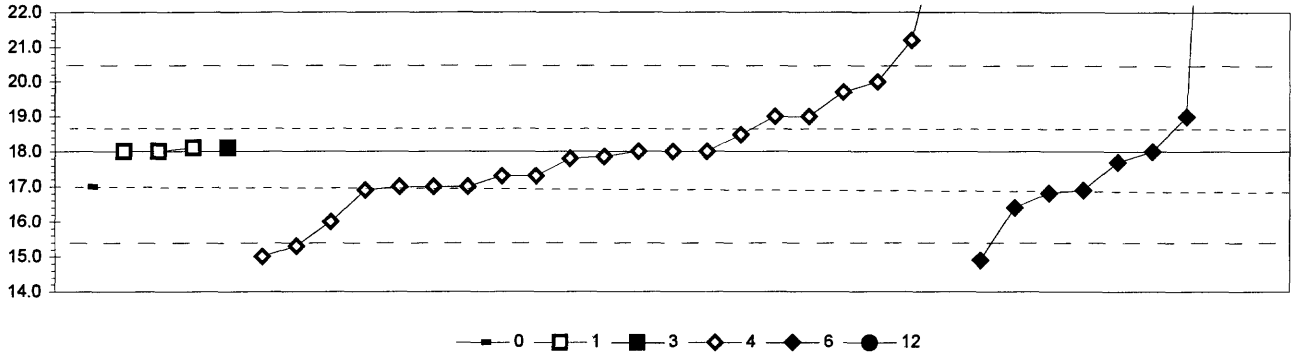
					MPV =	3.52		
					F-pseudosigma =	0.19		
					N =	88		
					Hu =	3.65		
					HI =	3.40		

Lab	Rating	Z-value	0	1	4	6	7	12
1	4	-0.22		3.48				
3	0	-2.26			3.10			
9	3	-0.65			3.40			
11	3	0.81			3.67			
12	0	-2.80			3.00			
13	3	0.92			3.69			
16	4	0.43		3.60				
18	2	-1.18			3.30			
23	3	-0.97		3.34				
24	2	-1.40			3.26			
25	4	0.38			3.59			
26	4	0.32					3.58	
30	2	-1.18						3.30
33	4	0.43	3.60					
36	4	-0.11		3.50				
40	4	-0.27			3.47			
42	3	0.71			3.65			
43	4	-0.11			3.50			
45	4	0.48	3.61					
46	3	0.70			3.65			
48	4	-0.43			3.44			
51	1	1.62						3.82
61	0	14.11			6.14			
64	2	1.08		3.72				
68	4	0.43			3.60			
69	1	1.62						3.82
70	4	0.11			3.54			
81	4	0.38			3.59			
83	4	0.48		3.61				
85	4	0.22		3.56				
86	3	-0.54			3.42			
87	3	-0.70		3.39				
89	3	-0.97		3.34				
93	1	-1.51						3.24
97	4	-0.16		3.49				
105	3	0.54			3.62			
107	4	-0.16		3.49				
108	0	1812					340.00	
109	2	1.13		3.73				
111	4	0.43		3.60				
113	0	2.21			3.93			
114	3	0.70		3.65				
119	1	-1.72			3.20			
127	3	-0.59			3.41			
131	3	0.97			3.70			
134	4	-0.11		3.50				
138	2	-1.18			3.30			
140	4	0.00		3.52				
141	2	1.08			3.72			
142	4	-0.05			3.51			

Lab	Rating	Z-value	0	1	4	6	7	12
145	4	0.16			3.55			
146	0	5.01			4.45			
149	3	-0.65		3.40				
151	3	-0.65		3.40				
154	2	-1.18			3.30			
158	2	-1.40			3.26			
180	2	1.18			3.74			
185	3	-0.59		3.41				
190	4	0.48					3.61	
191	4	-0.27				3.47		
193	4	-0.11		3.50				
196	4	0.22		3.56				
198	4	-0.16		3.49				
212	3	0.70			3.65			
215	0	-13.57			1.00			
217	2	-1.29			3.28			
218	2	1.13			3.73			
219	4	-0.11	3.50					
220	2	-1.13		3.31				
221	4	0.00		3.52				
224	1	-1.70			3.21			
234	3	0.59			3.63			
236	0	-2.48			3.06			
241	3	-0.65		3.40				
247	0	-9.26					1.80	
255	4	0.32			3.58			
256	0	4.20						4.30
257	0	3.12						4.10
259	4	-0.11		3.50				
265	4	0.00			3.52			
268	0	5.44		4.53				
273	4	-0.11			3.50			
274	0	7.16						4.85
282	0	3.66				4.20		
284	0	2.53		3.99				
287	0	8.24		5.05				
289	2	-1.18			3.30			
292	3	-0.65		3.40				

Table 13. *Statistical summary of reported data for standard reference water sample T-147 (trace constituents)--Continued*

Li (Lithium) µg/L



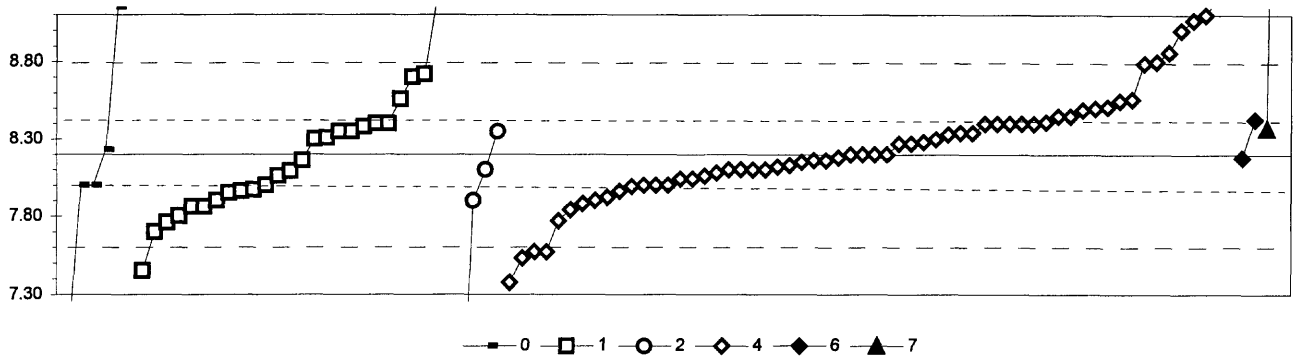
0. Other				4. ICP				
1. AA: direct air				6. ICP/MS				
3. AA: graphite furnace				12. Flame emission				
		N =	1	3	1	21	8	1
		Minimum =	17.0	18.0	18.1	15.0	14.9	120.0
		Maximum =		18.1		25.0	36.6	
		Median =				17.9	17.3	
		F-pseudosigma =				1.5	1.4	

Lab	Rating	Z-value	0	1	3	4	6	12
1	3	-0.54				17.3		
3	4	0.00				18.0		
4	NR					< 20		
11	0	-2.33				15.0		
16	0	-2.40					14.9	
25	3	0.78				19.0		
26	4	-0.16				17.8		
39	3	-0.85				16.9		
40	3	-0.78				17.0		
50	2	-1.24					16.4	
68	4	0.00				18.0		
69	4	0.08			18.1			
76	3	-0.92					16.8	
85	4	0.00		18.0				
105	0	-2.09				15.3		
109	4	0.08		18.1				
127	3	-0.54				17.3		
131	2	1.32				19.7		
134	4	0.37				18.5		
142	3	0.78				19.0		
145	4	0.00				18.0		
147	4	-0.23					17.7	
151	3	-0.85					16.9	
196	3	0.78					19.0	
212	NR					< 50		
217	3	-0.78				17.0		
219	3	-0.78	17.0					
220	4	-0.12				17.9		
234	3	-0.78				17.0		
236	1	-1.55				16.0		
237	1	1.55				20.0		
247	0	14.42					36.6	
256	0	79.08						120.0
257	4	0.00		18.0				
265	4	0.00					18.0	
273	0	2.48				21.2		
289	0	5.43				25.0		

MPV =	18.0
F-pseudosigma =	1.3
N =	35
Hu =	18.7
HI =	17.0

Table 13. *Statistical summary of reported data for standard reference water sample T-147 (trace constituents)--Continued*

Mg (Magnesium) mg/L



0. Other			4. ICP				
1. AA: direct air			6. ICP/MS				
2. AA: direct nitrous oxide			7. Ion chromatography				
N =	6	26	4	60	2	2	
Minimum =	7.00	7.45	6.20	7.37	8.18	8.37	
Maximum =	9.30	13.00	8.35	9.40	8.43	12.80	
Median =		8.13		8.20			
F-pseudosigma =		0.37		0.29			

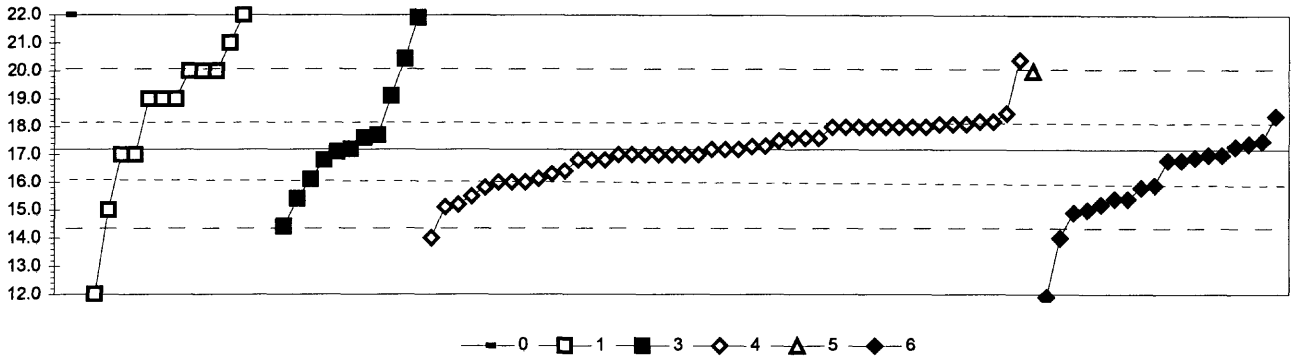
MPV = 8.20
F-pseudosigma = 0.30
N = 100
Hu = 8.41
HI = 8.00

Lab	Rating	Z-value	0	1	2	4	6	7
1	3	-0.53				8.04		
3	4	-0.40				8.08		
4	3	0.67				8.40		
9	4	0.00				8.20		
11	1	1.97				8.79		
12	0	3.00				9.10		
13	4	0.27				8.28		
16	3	1.00				8.50		
18	3	-0.67				8.00		
24	2	-1.07				7.88		
25	4	0.43				8.33		
26	3	0.83				8.45		
30	4	-0.33			8.10			
33	4	0.10	8.23					
36	1	1.73		8.72				
39	4	-0.13				8.16		
40	4	0.23				8.27		
42	0	4.00				9.40		
43	4	-0.33				8.10		
45	3	-0.67	8.00					
46	3	-0.80				7.96		
48	4	-0.13				8.16		
51	4	-0.13		8.16				
59	3	0.67				8.40		
61	0	2.20				8.86		
64	2	-1.20				7.84		
68	4	0.00				8.20		
69	4	0.33		8.30				
70	4	0.47				8.34		
76	4	0.36		8.31				
81	2	1.03				8.51		
83	0	-2.23				7.53		
84	3	-1.00		7.90				
85	3	0.67		8.40				
86	4	-0.17				8.15		
87	2	-1.47		7.76				
89	2	-1.13		7.86				
93	3	0.70				8.41		
97	3	-0.83		7.95				
105	3	-1.00				7.90		
107	4	-0.37		8.09				
109	3	0.60		8.38				
111	3	-1.00			7.90			
113	0	3.36				9.21		
114	4	0.50			8.35			
119	3	0.67				8.40		
121	3	-0.67				8.00		
127	3	-0.70				7.99		
129	0	15.99		13.00				
131	0	-2.10				7.57		

Lab	Rating	Z-value	0	1	2	4	6	7
133	2	1.20				8.56		
134	3	-0.93				7.92		
138	4	-0.27				8.12		
140	2	-1.33		7.80				
141	2	1.17				8.55		
142	3	-0.53				8.04		
145	3	0.97				8.49		
146	4	-0.23				8.13		
147	3	0.67				8.40		
149	1	-1.67		7.70				
151	3	-0.67		8.00				
154	4	0.00				8.20		
158	4	0.47				8.34		
180	4	-0.07				8.18		
183	0	-6.66			6.20			
185	3	-0.80		7.96				
190	3	0.57						8.37
191	4	-0.07					8.18	
193	0	-2.50		7.45				
196	4	-0.47		8.06				
198	4	-0.47				8.06		
209	0	2.66				9.00		
212	3	0.67				8.40		
215	3	-0.67				8.00		
217	4	0.00				8.20		
218	0	2.88				9.06		
219	3	-0.67	8.00					
220	3	-0.77		7.97				
221	2	-1.13		7.86				
224	0	-2.75				7.37		
234	3	0.83				8.45		
235	0	-2.10				7.57		
236	4	-0.33				8.10		
237	4	-0.33				8.10		
241	3	0.67		8.40				
247	0	15.32						12.80
252	1	1.67		8.70				
255	4	0.23				8.27		
256	0	3.33		9.20				
257	0	-4.00	7.00					
262	0	3.66	9.30					
265	4	-0.33				8.10		
268	4	0.50		8.35				
273	4	0.33				8.30		
274	0	3.16	9.15					
282	3	0.77					8.43	
284	2	1.20		8.56				
287	4	0.50		8.35				
289	2	-1.43				7.77		
292	1	2.00				8.80		

Table 13. *Statistical summary of reported data for standard reference water sample T-147 (trace constituents)--Continued*

Mn (Manganese) µg/L



0. Other			4. ICP					
1. AA: direct air			5. DCP					
3. AA: graphite furnace			6. ICP/MS					
		N =	1	15	11	45	1	18
		Minimum =	22.0	10.0	14.4	14.0	20.0	11.9
		Maximum =		25.0	21.9	20.4		18.4
		Median =		19.0	17.2	17.2		16.4
		F-pseudosigma =		2.6	1.5	0.9		1.3

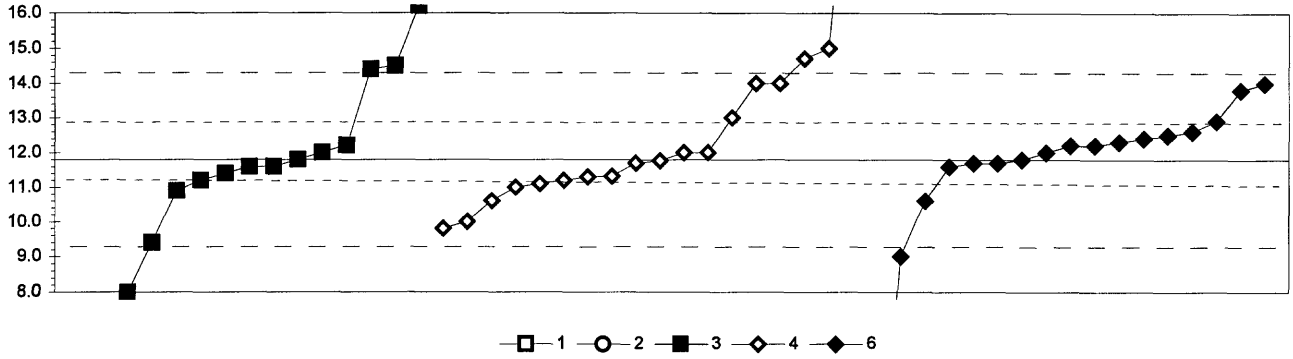
						MPV =		17.2
						F-pseudosigma =		1.4
						N =		91
						Hu =		18.1
						HI =		16.1

Lab	Rating	Z-value	0	1	3	4	5	6
1	3	-0.91						15.9
3	3	0.56				18.0		
4	4	-0.14				17.0		
9	0	2.23				20.4		
10	1	1.95		20.0				
11	3	0.56				18.0		
12	NR					< 30		
13	3	0.56				18.0		
16	2	-1.25						15.4
18	4	-0.14				17.0		
19	4	0.07				17.3		
23	4	0.28			17.6			
25	3	0.56				18.0		
26	4	0.00				17.2		
30	4	-0.28						16.8
33	1	1.95					20.0	
36	3	-0.77			16.1			
39	4	0.00				17.2		
40	4	-0.28				16.8		
42	2	-1.25						15.4
43	3	0.56				18.0		
46	3	-0.56				16.4		
48	4	0.07						17.3
50	2	-1.39						15.2
59	0	-2.23						14.0
61	3	0.70				18.2		
68	4	-0.14				17.0		
69	0	2.65		21.0				
70	NR					< 20		
80	2	-1.25			15.4			
81	4	-0.14				17.0		
83	3	-0.84				16.0		
84	1	-1.95			14.4			
85	4	-0.14		17.0				
86	4	-0.28				16.8		
87	2	1.25		19.0				
89	4	-0.07			17.1			
91	4	-0.21						16.9
96	NR			< 20				
97	4	0.00			17.2			
105	1	-1.60						14.9
107	2	1.25		19.0				
108	1	1.95		20.0				
109	4	-0.14		17.0				
113	3	-0.63				16.3		
114	0	3.35		22.0				
119	3	0.56				18.0		
121	3	0.56				18.0		
127	3	0.63				18.1		
129	0	-5.02		10.0				

Lab	Rating	Z-value	0	1	3	4	5	6
131	4	0.28				17.6		
134	4	-0.27				16.8		
138	3	-0.98						15.8
140	1	-1.53		15.0				
141	4	0.28				17.6		
142	3	-0.84				16.0		
145	3	0.56				18.0		
146	3	0.63				18.1		
147	3	0.84						18.4
149	0	-3.63		12.0				
151	4	-0.28						16.8
154	0	-2.23				14.0		
158	4	0.00				17.2		
180	4	0.21				17.5		
190	0	3.28			21.9			
191	4	-0.14						17.0
196	4	-0.14						17.0
198	3	0.91				18.5		
212	2	-1.46				15.1		
215	4	-0.14				17.0		
217	3	0.63				18.1		
219	0	3.35	22.0					
220	3	-0.75				16.1		
221	4	0.35			17.7			
224	4	0.28				17.6		
234	3	0.70				18.2		
235	2	-1.19				15.5		
236	3	-0.84				16.0		
237	4	-0.14				17.0		
241	2	1.25		19.0				
245	1	-1.53						15.0
247	0	-3.69						11.9
252	NR			< 40				
255	4	0.08				17.3		
256	1	1.95		20.0				
257	2	1.34			19.1			
259	3	-0.98				15.8		
265	4	0.21						17.5
273	2	-1.39				15.2		
274	0	2.26			20.4			
282	4	0.14						17.4
284	0	5.44		25.0				
287	0	4.04		23.0				
289	4	-0.28			16.8			
292	4	-0.14				17.0		

Table 13. *Statistical summary of reported data for standard reference water sample T-147 (trace constituents)--Continued*

Mo (Molybdenum) µg/L



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

	1	2	3	4	6
N =	1	0	13	18	17
Minimum =	84.0	< 20	8.0	9.8	1.2
Maximum =			16.2	21.5	14.0
Median =			11.6	11.7	12.2
F-pseudosigma =			0.7	2.2	0.6

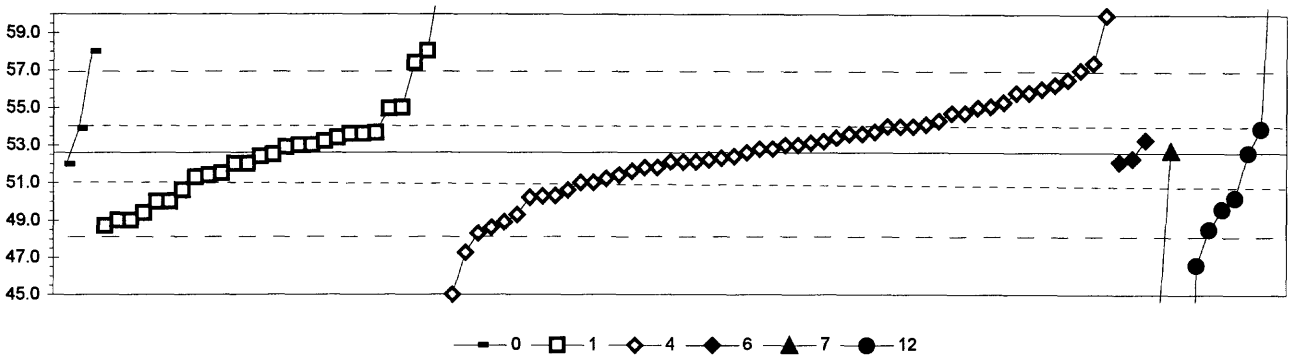
Lab	Rating	Z-value	1	2	3	4	6
1	3	-0.71			10.9		
3	1	1.75				14.0	
4	NR					< 20	
11	3	0.95				13.0	
12	NR					< 30	
16	4	0.16					12.0
18	NR					< 20	
26	3	-0.95				10.6	
30	3	-0.95					10.6
39	0	-2.22					9.0
40	0	7.70				21.5	
42	3	0.63					12.6
48	3	0.87					12.9
50	1	1.59					13.8
61	NR					< 17.2	
68	1	1.75				14.0	
70	NR					< 50	
81	4	0.16				12.0	
85	NR					< 10	
87	4	0.32			12.2		
97	4	-0.48			11.2		
105	4	0.32					12.2
108	0	2.14			14.5		
109	4	-0.32			11.4		
119	4	0.48					12.4
127	4	-0.40				11.3	
131	NR					< 15	
134	4	-0.02				11.8	
138	4	-0.48				11.2	
141	0	2.30				14.7	
142	4	0.40					12.3
143	4	0.00			11.8		
145	3	-0.63				11.0	
146	4	0.16				12.0	
147	3	0.56					12.5
149	4	0.16			12.0		
151	4	0.32					12.2
180	1	-1.59				9.8	
196	4	-0.16					11.6
212	4	-0.08					11.7
215	4	-0.16			11.6		
217	3	-0.56				11.1	
221	4	-0.16			11.6		
224	0	-5.23				< 5	
234	0	3.49			16.2		
235	4	0.00					11.8
236	0	2.54				15.0	
237	NR					< 50	
241	1	-1.90			9.4		
245	4	-0.08					11.7

MPV =	11.8
F-pseudosigma =	1.3
N =	49
Hu =	12.9
HI =	11.2

Lab	Rating	Z-value	1	2	3	4	6
247	0	-8.41					1.2
252	0	-3.02			8.0		
255	4	-0.38				11.3	
257	NR			< 20			
259	4	-0.08				11.7	
265	1	1.75					14.0
282	NR						< 50
284	0	57.29	84.0				
289	0	2.06			14.4		
292	2	-1.43				10.0	

Table 13. *Statistical summary of reported data for standard reference water sample T-147 (trace constituents)--Continued*

Na (Sodium) mg/L



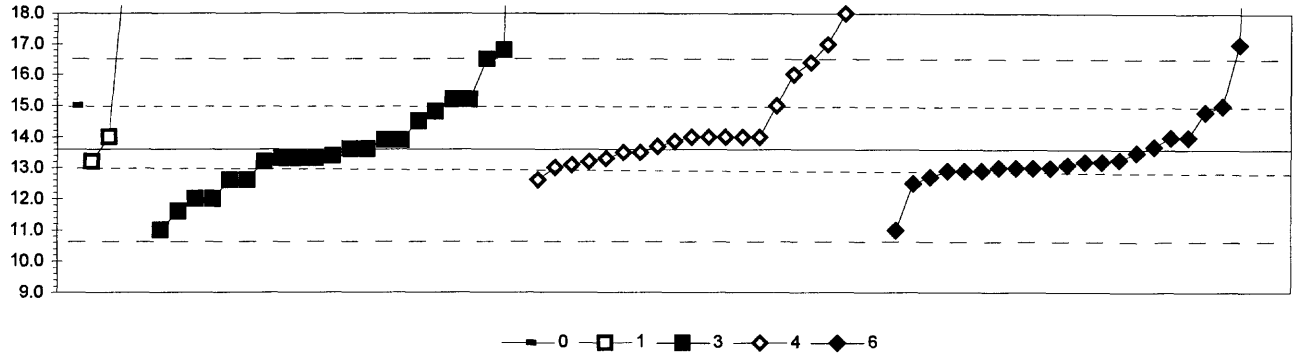
0. Other			6. ICP/MS					
1. AA: direct air			7. Ion chromatography					
4. ICP			12. Flame emission					
		N =	3	27	52	3	2	8
		Minimum =	52.0	48.7	45.0	52.1	42.8	10.7
		Maximum =	58.0	61.9	59.9	53.3	52.7	66.4
		Median =		52.5	52.9			49.9
		F-pseudosigma =		2.0	2.4			4.2

					MPV =	52.6		
					F-pseudosigma =	2.2		
					N =	95		
					Hu =	54.0		
					HI =	51.0		

Lab	Rating	Z-value	0	1	4	6	7	12
1	4	0.49			53.7			
3	2	1.44			55.8			
4	1	1.98			57.0			
9	3	-0.72			51.0			
11	2	-1.03			50.3			
12	3	0.63			54.0			
13	1	1.75			56.5			
16	3	0.63			54.0			
18	4	-0.09			52.4			
23	3	-0.90		50.6				
24	3	-0.54			51.4			
25	2	1.08			55.0			
26	4	-0.36			51.8			
33	3	0.58	53.9					
36	0	2.16		57.4				
39	4	-0.13			52.3			
40	4	0.27			53.2			
42	2	1.11			55.1			
43	4	-0.22			52.1			
45	0	2.43	58.0					
46	4	-0.36			51.8			
48	4	-0.22				52.1		
51	2	-1.35						49.6
59	3	-0.72			51.0			
61	1	-1.80			48.6			
64	4	0.45		53.6				
68	4	0.18			53.0			
69	2	-1.08						50.2
70	4	0.45			53.6			
76	4	0.47		53.7				
81	2	1.21			55.3			
83	1	-1.66			48.9			
84	4	0.00						52.6
85	4	0.27		53.2				
86	3	0.94			54.7			
87	2	-1.17		50.0				
89	2	-1.44		49.4				
93	0	-18.83						10.7
97	4	0.18		53.0				
105	4	-0.18			52.2			
109	4	-0.09		52.4				
111	1	-1.62		49.0				
113	1	-1.93			48.3			
114	4	-0.27		52.0				
119	3	0.67			54.1			
121	4	0.36			53.4			
127	2	-1.08			50.2			
129	1	-1.62		49.0				
131	0	-3.42			45.0			
134	1	-1.75		48.7				
138	4	-0.45			51.6			
140	4	-0.49		51.5				
141	3	0.94			54.7			
142	3	0.63			54.0			
145	4	0.45			53.6			
146	1	1.62			56.2			
147	1	1.53			56.0			
149	4	-0.27		52.0				
151	4	0.18		53.0				
154	0	2.16			57.4			
158	3	-0.90			50.6			
180	4	-0.22			52.1			
185	3	0.58						53.9
190	4	0.04					52.7	
191	4	-0.13				52.3		
193	3	-0.54		51.4				
196	2	1.05		54.9				
198	4	0.09			52.8			
212	2	1.44			55.8			
215	3	-0.63			51.2			
217	4	0.00			52.6			
218	0	3.30			59.9			
219	4	-0.27	52.0					
220	4	-0.04		52.5				
221	4	0.36		53.4				
224	0	-2.40			47.3			
234	4	0.18			53.0			
236	2	-1.05			50.3			
237	4	-0.22			52.1			
241	2	1.08		55.0				
247	0	-4.41					42.8	
252	2	-1.17		50.0				
255	4	0.23			53.1			
256	1	-1.83						48.5
257	0	-2.70						46.6
259	4	0.13		52.9				
265	4	0.09			52.8			
268	0	4.18		61.9				
273	3	0.76			54.3			
274	0	6.21						66.4
282	4	0.31				53.3		
284	0	2.45		58.0				
287	3	-0.58		51.3				
289	2	-1.48			49.3			
292	4	0.45		53.6				

Table 13. *Statistical summary of reported data for standard reference water sample T-147 (trace constituents)--Continued*

Ni (Nickel) µg/L



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

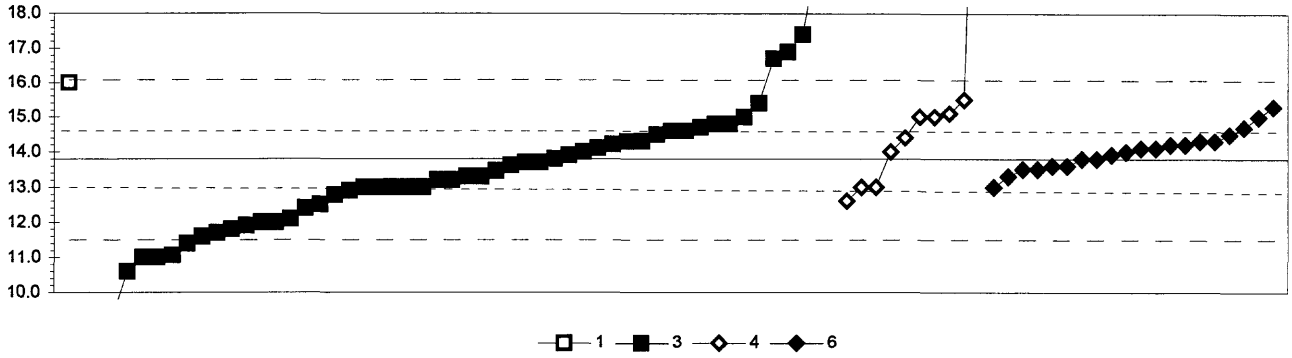
	0	1	3	4	6
N =	1	4	22	21	22
Minimum =	15.0	13.2	11.0	12.6	11.0
Maximum =		32.0	45.5	44.0	36.2
Median =			13.5	14.0	13.2
F-pseudosigma =			1.6	1.9	0.8

MPV = 13.6
F-pseudosigma = 1.5
N = 70
Hu = 15.0
HI = 13.0

Lab	Rating	Z-value	0	1	3	4	6
1	4	-0.40					13.0
3	4	0.27				14.0	
4	NR					< 20	
9	4	0.27				14.0	
11	0	2.29				17.0	
12	NR					< 20	
13	NR					< 20	
16	4	-0.40					13.0
18	NR					< 25	
19	0	7.22				24.3	
23	NR				< 20		
25	NR					< 49	
26	4	0.00			13.6		
30	3	0.81					14.8
36	2	-1.35			11.6		
39	3	-0.61					12.7
42	0	2.29					17.0
48	4	0.27					14.0
50	4	-0.47					12.9
59	1	-1.75					11.0
61	3	-0.67				12.6	
68	4	0.27				14.0	
69	3	-0.67			12.6		
70	NR					< 50	
76	4	-0.22					13.3
81	2	-1.08			12.0		
83	1	1.89				16.4	
85	0	2.97				18.0	
87	NR			< 15			
89	4	0.20			13.9		
96	3	0.81			14.8		
97	3	0.61			14.5		
105	4	-0.47					12.9
108	1	-1.75			11.0		
111	4	0.00			13.6		
113	4	-0.20				13.3	
114	NR			< 10			
119	3	-0.74					12.5
121	3	0.94				15.0	
127	4	-0.27			13.2		
131	0	20.50				44.0	
133	4	-0.07				13.5	
134	4	-0.14			13.4		
138	4	-0.47					12.9
140	4	0.27		14.0			
141	4	-0.07				13.5	
142	4	0.07					13.7
143	4	-0.20			13.3		
145	1	1.62				16.0	
146	NR					< 40	
147	4	-0.40					13.0
151	4	-0.34					13.1
154	4	0.27				14.0	
158	4	-0.34				13.1	
180	NR					< 16.3	
183	2	1.08			15.2		
190	0	2.16			16.8		
191	3	0.94					15.0
193	NR			< 50			
196	4	0.27					14.0
198	NR					< 50	
212	4	-0.27					13.2
213	4	-0.27		13.2			
215	3	-0.67			12.6		
219	3	0.94	15.0				
220	4	0.07				13.7	
221	4	-0.20			13.3		
224	NR					< 24	
234	1	1.96			16.5		
235	4	-0.40					13.0
236	4	-0.40				13.0	
237	NR					< 9	
241	4	0.20			13.9		
245	4	-0.27					13.2
247	0	15.24					36.2
252	2	1.08			15.2		
255	4	0.18				13.9	
256	0	21.52			45.5		
257	0	4.32		20.0			
259	4	-0.27				13.2	
265	4	-0.07					13.5
273	4	0.27				14.0	
282	NR						< 50
284	2	-1.08			12.0		
287	0	12.41		32.0			
289	4	-0.20			13.3		
292	NR					< 20	

Table 13. *Statistical summary of reported data for standard reference water sample T-147 (trace constituents)--Continued*

Pb (Lead) µg/L



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

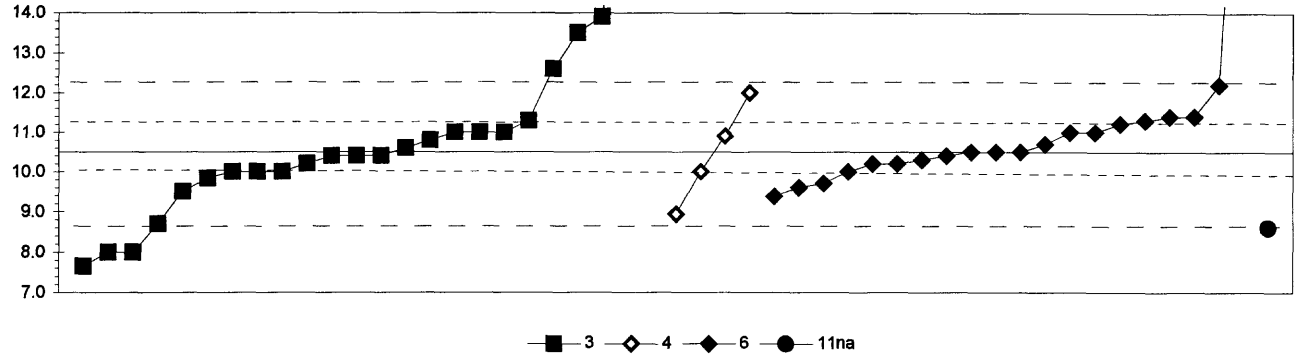
		1	3	4	6
N =		1	52	10	20
Minimum =		16.0	8.8	12.6	13.0
Maximum =			19.9	28.0	15.3
Median =			13.3	14.7	14.1
F-pseudosigma =			1.8	1.6	0.5

MPV = 13.8
F-pseudosigma = 1.1
N = 83
Hu = 14.6
Hl = 13.0

Lab	Rating	Z-value	1	3	4	6
1	4	0.17		14.0		
3	2	1.04			15.0	
4	NR				< 200	
9	2	1.04			15.0	
10	3	-0.52		13.2		
11	4	0.17			14.0	
12	0	-3.455		< 10		
13	4	0.09		13.9		
16	4	-0.44				13.3
18	2	-1.13		12.5		
19	1	-1.57		12.0		
23	4	-0.09		13.7		
25	NR				< 71	
26	4	0.44		14.3		
30	4	0.00				13.8
34	3	0.70		14.6		
36	1	-1.83		11.7		
39	0	-2.44		11.0		
42	3	0.78				14.7
46	3	-0.52		13.2		
48	4	0.44				14.3
50	2	1.31				15.3
59	3	-0.70				13.0
61	3	-0.70			13.0	
68	2	1.39		15.4		
69	3	-0.78		12.9		
70	0	5.31		19.9		
76	4	0.10				13.9
80	4	-0.44		13.3		
81	3	-0.70			13.0	
84	0	3.13		17.4		
85	0	-3.455			< 10	
86	3	0.87		14.8		
87	0	2.52		16.7		
89	0	-2.09		11.4		
96	2	1.04		15.0		
97	3	0.70		14.6		
105	4	-0.17				13.6
107	0	-2.79		10.6		
108	2	-1.22		12.4		
109	1	-1.65		11.9		
111	0	5.05		19.6		
113	3	0.78		14.7		
114	0	-3.455	< 10			
119	2	1.04				15.0
127	2	-1.48		12.1		
131	NR				< 30	
133	NR				< 20	
134	3	-0.89		12.8		
138	4	0.26				14.1
140	1	1.91	16.0			
141	0	2.70		16.9		
142	4	-0.26				13.5
145	0	12.36			28.0	
146	2	1.13			15.1	
147	4	0.00				13.8
149	3	-0.70		13.0		
151	4	0.35				14.2
154	3	0.61		14.5		
158	1	-1.91		11.6		
180	NR				< 31.9	
183	0	-3.92		9.3		
190	4	-0.09		13.7		
191	3	0.61				14.5
193	4	0.00		13.8		
196	4	-0.26				13.5
198	4	-0.44		13.3		
212	4	0.35				14.2
213	3	0.87		14.8		
215	3	-0.70		13.0		
217	4	0.26				14.1
221	4	0.26		14.1		
224	4	-0.30		13.5		
234	3	0.52			14.4	
235	4	0.44				14.3
236	NR				< 19	
237	NR				< 40	
241	1	-1.74		11.8		
245	4	0.17				14.0
247	0	-4.35		8.8		
252	1	-1.57		12.0		
255	4	-0.17		13.6		
256	0	-4.21		9.0		
257	4	0.43		14.3		
259	2	-1.04			12.6	
265	4	-0.17				13.6
273	2	1.48			15.5	
274	0	-2.38		11.1		
282	0	-2.44		11.0		
284	3	-0.70		13.0		
287	4	0.36		14.2		
289	3	-0.70		13.0		
292	3	-0.70		13.0		

Table 13. *Statistical summary of reported data for standard reference water sample T-147 (trace constituents)--Continued*

Sb (Antimony) µg/L



3. AA: graphite furnace
4. ICP
6. ICP/MS
11na. AA: hydride $NaBH_4$

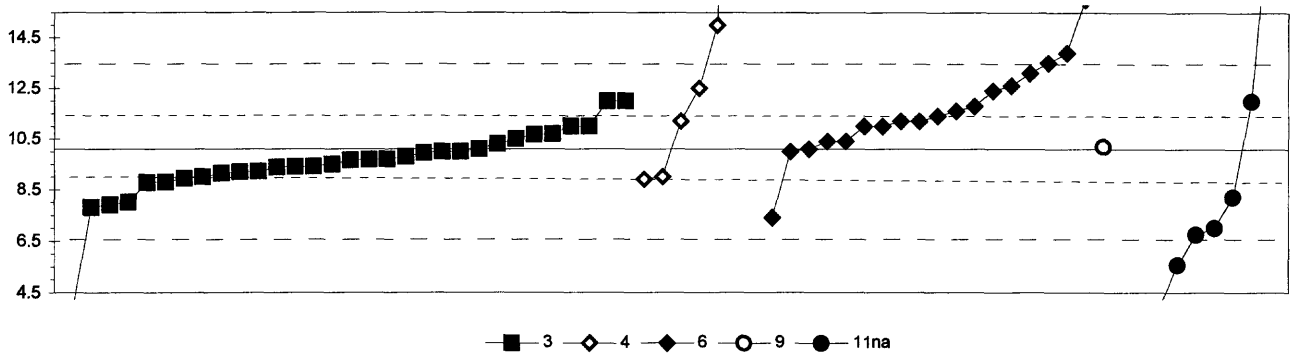
N =	24	4	20	1
Minimum =	7.65	8.93	9.37	8.60
Maximum =	25.00	12.00	22.00	
Median =	10.40		10.50	
F-pseudosigma =	0.91		0.79	

MPV = 10.5
F-pseudosigma = 0.9
N = 49
Hu = 11.2
Hl = 10.0

Lab	Rating	Z-value	3	4	6	11na
1	3	0.55	11.0			
3	3	-0.55		10.0		
13	0	2.32	12.6			
16	3	-0.88			9.7	
18	1	-1.99	8.7			
25	NR			< 51		
30	0	12.72			22.0	
36	2	-1.11	9.5			
39	4	-0.33			10.2	
42	3	1.00			11.4	
48	4	0.22			10.7	
50	4	-0.11			10.4	
59	3	-0.55			10.0	
61	0	-3.22		< 7.6		
68	0	3.76	13.9			
69	0	-3.15	7.7			
70	0	3.32	13.5			
76	3	0.80			11.2	
81	0	-2.76	8.0			
89	4	0.33	10.8			
96	3	-0.55	10.0			
97	4	-0.11	10.4			
105	3	-1.00			9.6	
113	4	0.44		10.9		
119	3	0.55			11.0	
127	3	0.88	11.3			
131	1	1.66		12.0		
134	3	-0.73	9.8			
138	4	0.00			10.5	
141	0	-2.76	8.0			
142	1	1.88			12.2	
146	NR			< 50		
147	4	0.00			10.5	
149	3	-0.55	10.0			
151	3	0.88			11.3	
154	3	-0.55	10.0			
180	NR			< 27.8		
193	3	0.55	11.0			
196	4	-0.33			10.2	
198	4	-0.11	10.4			
212	2	-1.25			9.4	
215	0	-3.89	< 7			
217	4	-0.22			10.3	
234	1	-1.74		8.9		
235	3	1.00			11.4	
236	NR			< 100		
241	4	-0.11	10.4			
245	4	0.00			10.5	
247	0	9.73	19.3			
252	4	-0.33	10.2			
255	NR			< 24		
257	4	0.11	10.6			
265	3	0.55			11.0	
282	0	-2.10				8.6
284	0	16.03	25.0			
292	3	0.55	11.0			

Table 13. *Statistical summary of reported data for standard reference water sample T-147 (trace constituents)--Continued*

Se (Selenium) µg/L



3. AA: graphite furnace			9. Atomic fluorescence				
4. ICP			11na. AA: hydride $NaBH_4$				
6. ICP/MS							
		N =	31	7	18	1	9
		Minimum =	3.9	8.9	7.4	10.2	3.2
		Maximum =	12.0	93.0	16.0		20.0
		Median =	9.7	12.5	11.3		6.8
		F-pseudosigma =	0.8	11.8	1.6		3.2

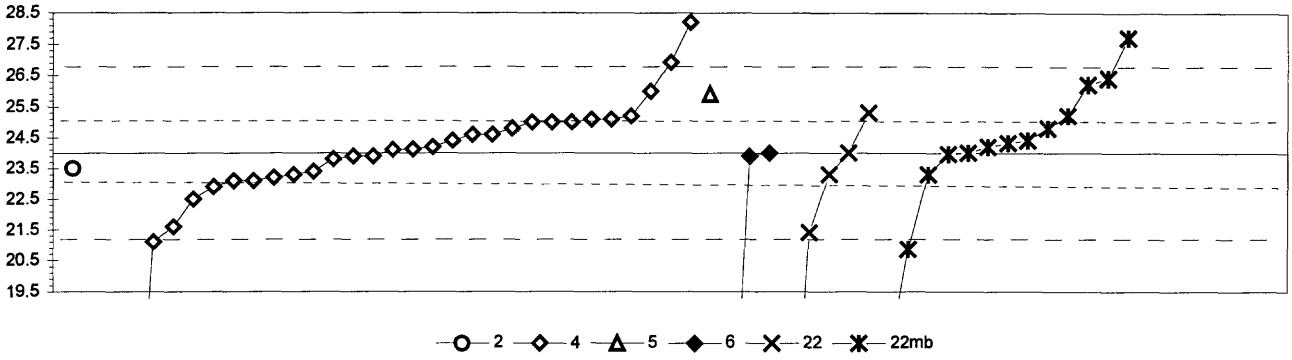
Lab	Rating	Z-value	3	4	6	9	11na
1	4	-0.37	9.4				
3	NR			< 10			
13	3	-0.70	8.8				
16	3	0.98			11.8		
18	2	1.10	12.0				
23	1	-1.85					6.8
25	NR			< 129			
26	2	-1.04					8.2
30	0	3.34			16.0		
34	3	-0.72	8.8				
36	2	-1.21	7.9				
39	2	1.10					12.0
42	0	2.16			13.9		
46	3	0.53	11.0				
48	3	0.76			11.4		
50	3	0.53			11.0		
59	4	-0.03			10.0		
61	3	-0.65		8.9			
68	0	-3.46	3.9				
69	4	-0.06	10.0				
70	NR		< 10				
80	3	0.53	11.0				
81	3	-0.59		9.0			
85	1	-1.71					7.0
86	0	-2.51					5.6
87	0	-3.46					3.9
89	0	-3.69					3.5
96	4	-0.37	9.4				
97	3	-0.51	9.1				
105	3	0.65			11.2		
108	0	5.59					20.0
109	4	-0.14	9.8				
111	2	-1.26	7.8				
113	4	0.03	10.1				
119	4	0.03			10.1		
127	4	0.37	10.7				
131	0	2.78		15.0			
133	4	-0.22	9.7				
134	4	0.35	10.7				
138	3	0.65			11.2		
141	3	-0.62	8.9				
142	2	1.32			12.4		
143	4	-0.20	9.7				
146	2	1.38		12.5			
147	4	0.20			10.4		
151	3	0.87			11.6		
154	4	-0.31	9.5				
180	NR			< 53.2			
193	3	-0.59	9.0				
196	1	1.71			13.1		

MPV =	10.1
F-pseudosigma =	1.8
N =	66
Hu =	11.4
HI =	9.0

Lab	Rating	Z-value	3	4	9	6	11na
198	NR		< 20				
212	3	0.53			11.0		
215	2	1.10	12.0				
217	4	0.20			10.4		
220	4	0.14	10.3				
221	4	-0.48	9.2				
224	0	15.15		37.0			
234	4	-0.20	9.7				
235	4	0.08				10.2	
236	0	46.62		93.0			
241	4	0.25	10.5				
245	2	1.43			12.6		
247	2	-1.49			7.4		
252	4	-0.47	9.2				
255	4	-0.38	9.4				
256	0	-3.85					3.2
259	3	0.65		11.2			
265	1	1.94			13.5		
282	0	-2.84					< 5
284	4	-0.03	10.0				
289	2	-1.15	8.0				
292	4	-0.03	10.0				

Table 13. *Statistical summary of reported data for standard reference water sample T-147 (trace constituents)--Continued*

SiO_2 (Silica) mg/L



2. AA: direct nitrous oxide			6. ICP/MS					
4. ICP			22. Colorimetric					
5. DCP			22mb. Color: molybdate blue					
		N =	1	31	1	3	5	13
		Minimum =	23.5	11.9	25.9	11.7	11.7	17.4
		Maximum =		28.2		24.0	25.3	27.7
		Median =		24.1				24.3
		F-pseudosigma =		1.4				0.9

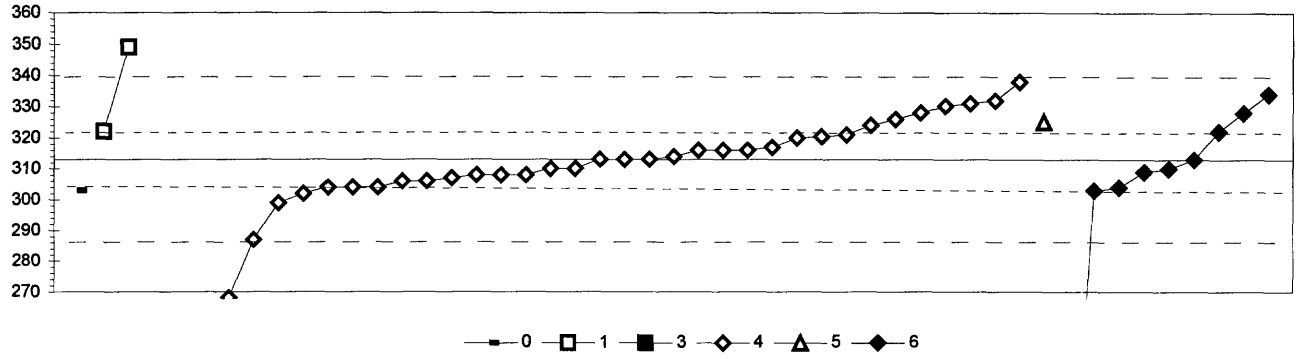
Lab	Rating	Z-value	2	4	5	6	22	22mb
1	4	0.14		24.2				
3	3	0.78		25.1				
4	3	0.71		25.0				
11	3	-0.64		23.1				
13	3	0.85		25.2				
24	3	0.71		25.0				
25	0	-8.45		12.1				
26	3	0.78		25.1				
33	2	1.35			25.9			
40	2	-1.07		22.5				
42	0	2.07		26.9				
43	4	-0.07		23.9				
61	0	-8.59		11.9				
64	4	-0.43		23.4				
70	4	0.28						24.4
81	1	1.70						26.4
83	1	-1.70		21.6				
87	4	-0.50						23.3
89	4	0.00						24.0
97	4	-0.50					23.3	
104	3	0.86						25.2
105	4	0.43		24.6				
107	3	0.57						24.8
111	4	-0.03						24.0
113	3	0.92					25.3	
119	2	1.42		26.0				
121	4	-0.14		23.8				
127	3	-0.78		22.9				
129	4	0.23						24.3
131	4	0.28		24.4				
134	4	0.09		24.1				
138	4	0.14						24.2
140	4	0.00					24.0	
142	0	2.98		28.2				
145	3	0.71		25.0				
147	4	0.43		24.6				
185	0	2.63						27.7
190	0	-8.73					11.7	
191	4	-0.07				23.9		
204	1	1.56						26.2
212	4	0.07		24.1				
215	0	-2.06		21.1				
217	4	-0.50		23.3				
234	3	0.57		24.8				
236	0	-8.38		12.2				
237	3	-0.57		23.2				
241	4	-0.36	23.5					
256	1	-1.85					21.4	
265	4	0.00				24.0		
273	3	-0.64		23.1				

MPV =	24.0
F-pseudosigma =	1.4
N =	54
Hu =	25.0
HI =	23.1

Lab	Rating	Z-value	2	4	5	6	22	22mb
274	0	-2.23						20.9
282	0	-8.73				11.7		
284	0	-4.69						17.4
289	4	-0.07		23.9				

Table 13. *Statistical summary of reported data for standard reference water sample T-147 (trace constituents)--Continued*

Sr (Strontium) µg/L

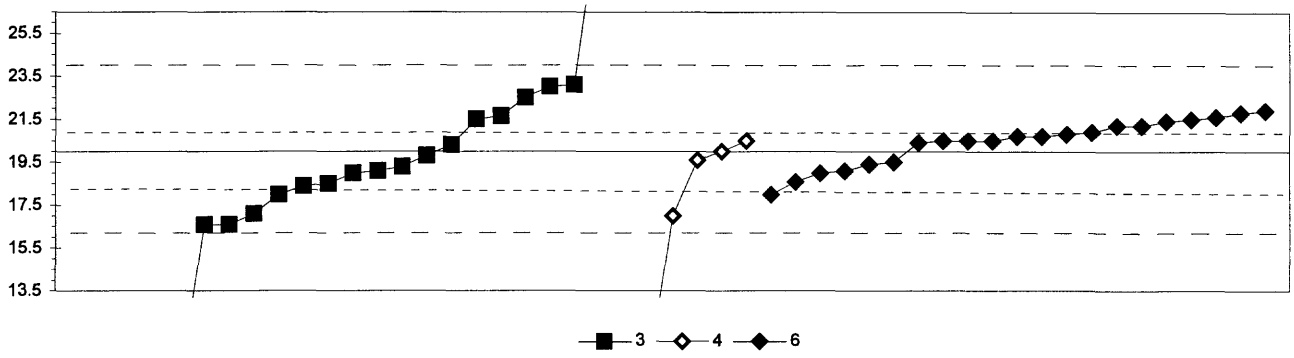


0. Other			4. ICP					
1. AA: direct air			5. DCP					
3. AA: graphite furnace			6. ICP/MS					
		N =	1	2	1	35	1	9
		Minimum =	303	322	252	3	325	178
		Maximum =		349		338		334
		Median =				313		310
		F-pseudosigma =				11		13
Lab	Rating	Z-value	0	1	3	4	5	6
1	3	-0.67						304
3	1	1.87				338		
9	1	-1.95				287		
11	3	0.55				320		
16	2	-1.05				299		
18	3	-0.67				304		
24	4	0.00				313		
25	2	1.12				328		
33	3	0.90					325	
39	3	-0.67				304		
40	0	-21.64				24		
42	3	0.97				326		
50	2	1.12						328
68	4	-0.22				310		
70	4	0.30				317		
81	3	0.82				324		
85	2	1.35				331		
86	4	-0.22				310		
97	0	-4.57			252			
105	4	0.22				316		
109	0	2.70		349				
113	4	0.00				313		
119	0	-10.12						178
121	4	0.22				316		
127	3	-0.52				306		
131	0	-23.21				3		
134	4	-0.37				308		
138	4	-0.37				308		
142	3	0.60				321		
145	4	0.22				316		
147	4	-0.30						309
151	3	0.67						322
154	3	-0.82				302		
191	4	-0.22						310
196	4	0.00						313
212	4	0.00				313		
217	3	0.52				320		
218	2	1.29				330		
219	3	-0.75	303					
234	4	0.07				314		
235	0	-3.37				268		
236	3	-0.67				304		
237	4	-0.45				307		
247	1	1.57						334
259	3	-0.52				306		
265	3	-0.75						303
273	2	1.42				332		
284	3	0.67		322				
289	4	-0.37				308		

MPV =	313
F-pseudosigma =	13
N =	49
Hu =	322
HI =	304

Table 13. *Statistical summary of reported data for standard reference water sample T-147 (trace constituents)--Continued*

Tl (Thallium) µg/L



3. AA: graphite furnace
4. ICP
6. ICP/MS

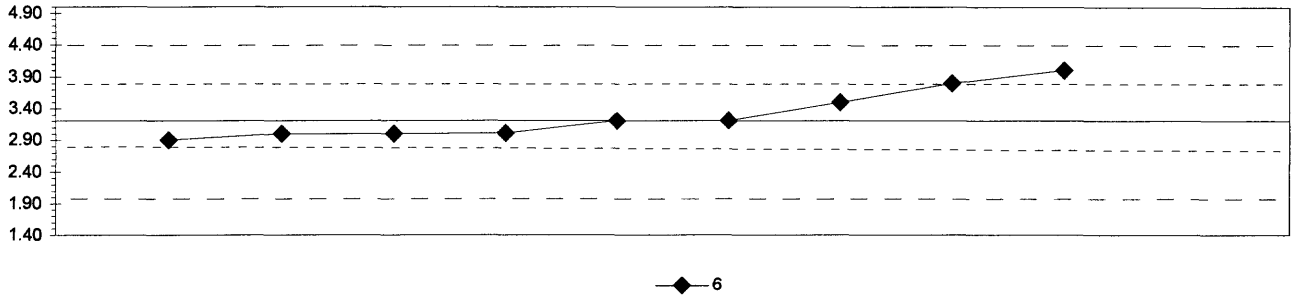
N =	23	5	21
Minimum =	3.0	9.5	18.0
Maximum =	34.2	20.5	21.9
Median =	19.0		20.7
F-pseudosigma =	3.7		1.3

MPV =			20.0
F-pseudosigma =			2.1
N =			49
Hu =			21.2
HI =			18.4

Lab	Rating	Z-value	3	4	6
1	4	-0.43			19.1
3	2	-1.45		17.0	
11	4	0.00		20.0	
13	4	-0.34	19.3		
16	4	-0.29			19.4
18	3	-0.77	18.4		
36	0	-6.26	7.0		
39	3	0.92			21.9
42	3	0.72			21.5
48	4	0.24			20.5
50	3	0.87			21.8
59	3	-0.96			18.0
61	4	-0.19		19.6	
68	3	0.72	21.5		
69	3	-0.96	18.0		
70	3	-0.72	18.5		
76	4	0.34			20.7
81	4	-0.48	19.0		
89	4	-0.10	19.8		
97	2	1.49	23.1		
105	3	-0.67			18.6
113	4	-0.43	19.1		
119	3	0.77			21.6
127	1	-1.64	16.6		
134	3	0.79	21.6		
138	3	0.67			21.4
141	0	6.84	34.2		
142	4	0.24			20.5
145	0	-8.19		< 3	
146	4	0.24		20.5	
147	4	-0.24			19.5
151	3	0.58			21.2
180	NR			< 40.1	
191	3	0.58			21.2
193	0	-8.19	3.0		
196	4	-0.48			19.0
198	1	-1.64	16.6		
212	4	0.43			20.9
213	2	-1.40	17.1		
215	0	-6.26	7.0		
217	4	0.39			20.8
234	2	1.20	22.5		
235	4	0.34			20.7
241	0	-6.65	6.2		
245	4	0.19			20.4
247	0	5.40	31.2		
255	NR			< 59	
265	4	0.24			20.5
273	0	-5.08		9.5	
282	4	0.14	20.3		
284	0	-5.30	9.0		
292	2	1.45	23.0		

Table 13. *Statistical summary of reported data for standard reference water sample T-147 (trace constituents)--Continued*

U (Uranium) µg/L



6. ICP/MS

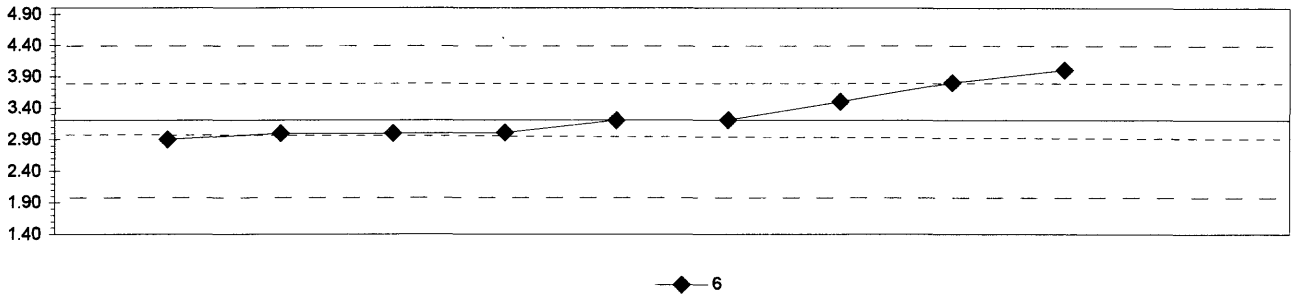
N =	9
Minimum =	2.90
Maximum =	4.00
Median =	3.20
F-pseudosigma =	0.37

Lab	Rating	Z-value	6
1	4	-0.35	3.00
16	4	0.50	3.50
30	2	1.34	4.00
119	3	-0.51	2.90
142	4	-0.33	3.01
147	4	-0.01	3.20
196	4	0.01	3.21
217	3	1.00	3.80
265	4	-0.35	3.00

MPV =	3.21
F-pseudosigma =	0.59
N =	9
Hu =	3.80
HI =	3.00

Table 13. *Statistical summary of reported data for standard reference water sample T-147 (trace constituents)--Continued*

U (Uranium) µg/L



6. ICP/MS

N =	9
Minimum =	2.90
Maximum =	4.00
Median =	3.20
F-pseudosigma =	0.37

Lab	Rating	Z-value	6
1	4	-0.35	3.00
16	4	0.50	3.50
30	2	1.34	4.00
119	3	-0.51	2.90
142	4	-0.33	3.01
147	4	-0.01	3.20
196	4	0.01	3.21
217	3	1.00	3.80
265	4	-0.35	3.00

MPV =	3.21
F-pseudosigma =	0.59
N =	9
Hu =	3.80
HI =	3.00

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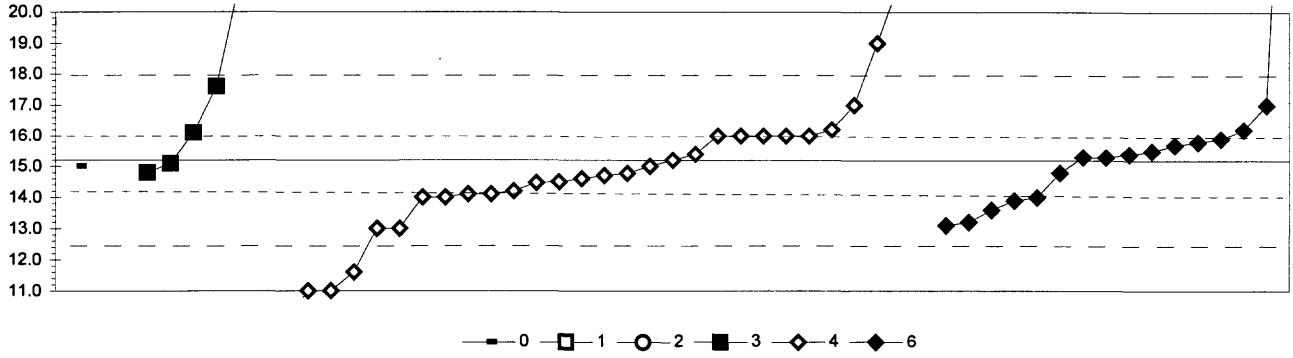
Table 13. *Statistical summary of reported data for standard reference water sample T-147 (trace constituents)--Continued*

V (Vanadium) µg/L



0. Other				3. AA: graphite furnace				
1. AA: direct air				4. ICP				
2. AA: direct nitrous oxide				6. ICP/MS				
		N =	1	1	0	6	29	16
		Minimum =	15.0	266.0	< 100	14.8	10.0	13.1
		Maximum =				21.2	21.3	31.0
		Median =					14.7	15.4
		F-pseudosigma =					1.5	1.4

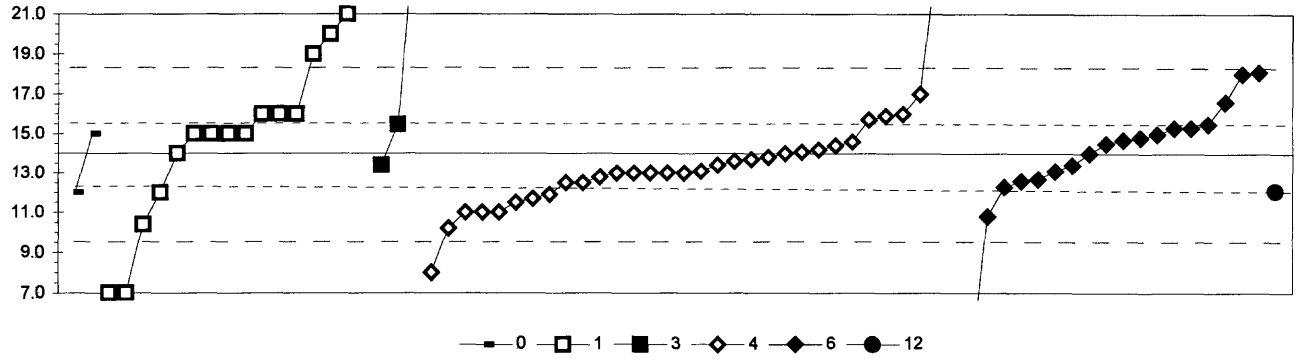
Lab	Rating	Z-value	0	1	2	3	4	6
1	4	0.07						15.3
3	3	0.57					16.0	
4	NR						< 20	
11	3	0.57					16.0	
13	NR						< 50	
16	4	0.36						15.7
18	3	-0.85					14.0	
25	1	-1.56					13.0	
26	3	-0.78					14.1	
30	4	0.43						15.8
42	3	-0.85						14.0
46	4	0.14					15.4	
48	4	0.07						15.3
50	2	-1.14						13.6
61	3	0.71					16.2	
68	3	-0.85					14.0	
70	NR						< 50	
81	1	-1.56					13.0	
85	0	-2.98					11.0	
86	0	4.33					21.3	
89	0	4.12				21.0		
97	3	0.64				16.1		
105	3	-0.92						13.9
111	1	1.70				17.6		
119	3	0.71						16.2
121	4	-0.14					15.0	
127	4	-0.43					14.6	
131	0	-2.98					11.0	
134	3	-0.52					14.5	
138	3	-0.71					14.2	
141	3	-0.78					14.1	
142	4	-0.28						14.8
145	0	2.70					19.0	
146	3	0.57					16.0	
147	4	0.50						15.9
154	0	4.12					21.0	
158	4	-0.50					14.5	
180	3	0.57					16.0	
183	0	4.26				21.2		
196	4	0.14						15.4
212	2	-1.49						13.1
217	4	0.00					15.2	
219	4	-0.14	15.0					
220	4	-0.36					14.7	
224	0	-2.56					11.6	
234	3	0.57					16.0	
235	2	1.28						17.0
236	0	-3.69					10.0	
237	2	1.28					17.0	
241	4	-0.28				14.8		

MPV =	15.2
F-pseudosigma =	1.4
N =	53
Hu =	16.0
Hl =	14.1

Lab	Rating	Z-value	0	1	2	3	4	6
245	2	-1.42						13.2
247	0	11.22						31.0
255	4	-0.30					14.8	
257	NR				< 100			
265	4	0.21						15.5
282	NR							< 20
284	0	178.07		266.0				
289	4	-0.07				15.1		

Table 13. *Statistical summary of reported data for standard reference water sample T-147 (trace constituents)--Continued*

Zn (Zinc) µg/L



0. Other			4. ICP					
1. AA: direct air			6. ICP/MS					
3. AA: graphite furnace			12. Flame emission					
		N =	2	16	3	32	18	1
		Minimum =	12.0	7.0	13.4	8.0	3.2	12.1
		Maximum =	15.0	22.0	25.4	146.0	18.1	
		Median =		15.0		13.1	14.6	
		F-pseudosigma =		3.3		1.6	1.9	

Lab	Rating	Z-value	0	1	3	4	6	12
1	3	-0.63					12.6	
3	2	1.36				17.0		
4	4	-0.45				13.0		
9	4	-0.45				13.0		
10	4	0.45		15.0				
12	NR					< 20		
13	4	-0.14				13.7		
16	2	-1.45					10.8	
18	NR					< 100		
19	4	0.09				14.2		
23	NR			< 20				
25	0	59.75				146.0		
26	3	-0.95				11.9		
30	3	0.68					15.5	
39	4	-0.09				13.8		
40	4	-0.45				13.0		
42	4	0.32					14.7	
48	1	1.86					18.1	
50	3	-0.59					12.7	
59	1	1.81					18.0	
61	3	0.77				15.7		
68	0	4.53				24.0		
69	NR			< 50				
70	NR					< 20		
80	3	0.91		16.0				
81	4	-0.45				13.0		
83	4	-0.41				13.1		
85	3	0.91		16.0				
86	3	-0.54				12.8		
87	0	2.26		19.0				
89	4	-0.27			13.4			
96	3	0.91		16.0				
97	0	-2.54			< 8.4			
105	2	1.18					16.6	
107	4	0.45		15.0				
108	0	3.62		22.0				
114	NR			< 10				
119	2	-1.36				11.0		
121	2	-1.36				11.0		
127	1	-1.72				10.2		
131	4	-0.45				13.0		
133	3	0.86				15.9		
134	4	0.00				14.0		
138	3	-0.77					12.3	
140	0	3.17		21.0				
141	4	0.27				14.6		
142	4	0.45					15.0	
145	3	0.91				16.0		
146	NR					< 20		
147	4	-0.41					13.1	

MPV =	14.0
F-pseudosigma =	2.2
N =	72
Hu =	15.5
HI =	12.5

Lab	Rating	Z-value	0	1	3	4	6	12
149	4	0.45		15.0				
151	4	0.23					14.5	
154	0	-2.72				8.0		
158	4	0.18				14.4		
180	3	-0.68				12.5		
190	3	-0.86						12.1
191	3	0.59					15.3	
193	NR			< 50				
196	4	-0.27					13.4	
198	NR					< 25		
212	3	0.59					15.3	
213	NR			< 38				
215	2	-1.36				11.0		
217	4	-0.18				13.6		
219	3	-0.91	12.0					
220	4	0.45	15.0					
224	2	-1.13				11.5		
234	4	-0.27				13.4		
235	4	0.36					14.8	
236	0	-5.89				< 1		
237	NR					< 10		
241	0	-3.17		7.0				
245	0	5.16			25.4			
247	0	-4.89					3.2	
252	0	-3.17		7.0				
255	4	0.03				14.1		
256	4	0.45		15.0				
257	4	0.00		14.0				
259	2	-1.04				11.7		
265	4	0.00					14.0	
273	3	-0.68				12.5		
274	3	0.66			15.5			
282	NR						< 20	
284	1	-1.63		10.4				
287	3	-0.91		12.0				
292	0	2.72		20.0				

Table 14. *Statistical summary of reported data for standard reference water sample T-149 (trace constituents)*

Definition of analytical methods, abbreviations, and symbols

Analytical methods

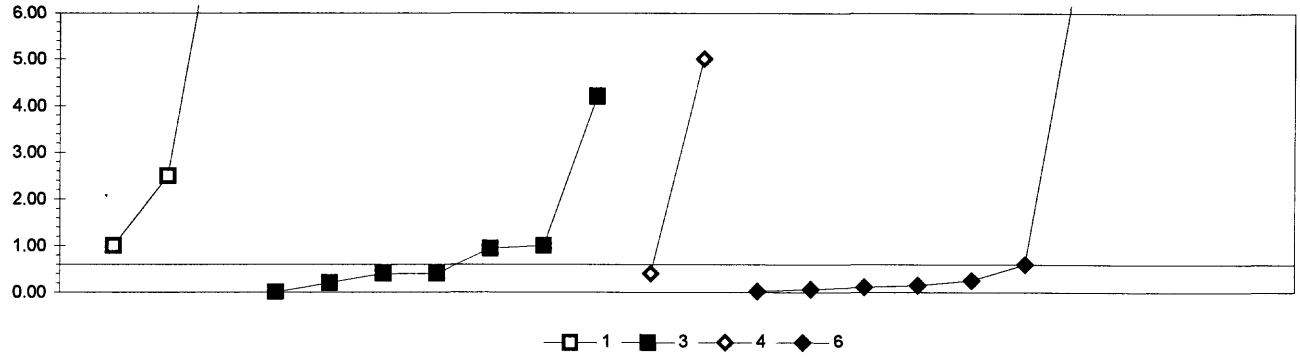
0. Other/Not reported		
1. AA: direct, air	=	atomic absorption: direct,air
2. AA: direct, N_2O	=	atomic absorption: direct,nitrous oxide
3. AA: graphite furnace	=	atomic absorption: graphite furnace
4. ICP	=	inductively coupled plasma
5. DCP	=	direct current plasma
6. ICP/MS	=	inductively coupled plasma/mass spectrometry
10. AA: extraction	=	atomic absorption: extraction [chelating agent(s) specified]
11. AA: hydride	=	atomic absorption: hydride [reducing agent specified]
12. Flame emission	=	flame emission
22. Color:	=	colorimetric [color reagent specified]

Abbreviations and symbols

N =	number of samples
MPV =	most probable value
F-pseudosigma =	nonparametric statistic deviation
Hu =	upper hinge value
Hl =	lower hinge value
µg/L =	micrograms per liter
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 T-149 (trace constituents)–Continued*

Ag (Silver) µg/L



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

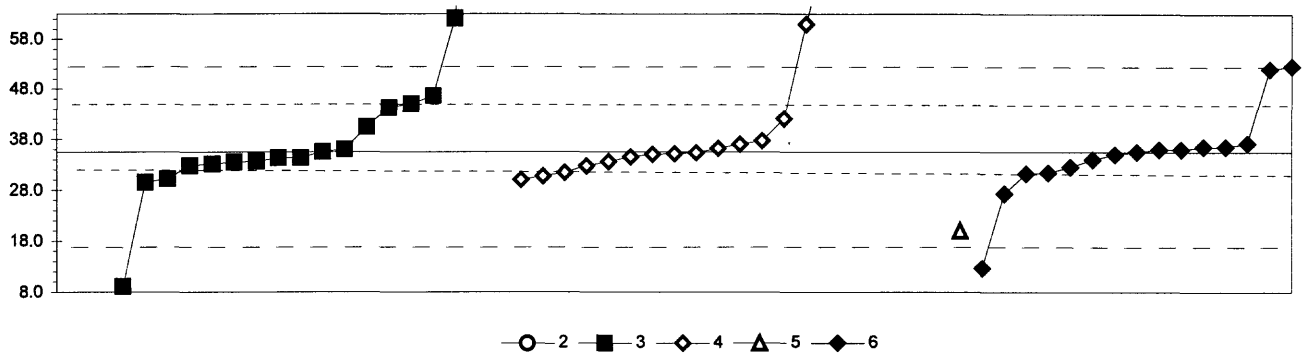
	1	3	4	6
N =	3	8	3	7
Minimum =	1.00	0.00	0.40	0.02
Maximum =	9.00	4.20	5.00	7.16
Median =		0.40		0.15
F-pseudosigma =		0.50		0.25

MPV = insufficient data
F-pseudosigma =
N = 21
Hu =
HI =

Lab	Rating	Z-value	1	3	4	6
1	NR				< 1	
3	NR				< 5	
13	NR				< 10	
16	NR					< 1
18	NR				< 3	
25	NR				< 6	
26	NR			< 0.2		
30	NR					< 1
32	NR					< 0.1
34	NR			< 0.2		
36	NR		< 50			
42	NR					< 1
48	NR					< 0.6
59	NR			< 5		
61	NR				< 2	
68	NR			< 0.3		
69	NR			< 1		
70	NR			< 10		
81	NR			< 1		
87	NR		9.00			
89	NR			< 2		
96	NR			< 1		
97	NR			0.94		
105	NR					< 0.4
108	NR			0.40		
113	NR			< 0.5		
114	NR		< 10			
118	NR			< 0.5		
119	NR		1.00			
126	NR			0.40		
131	NR				< 10	
133	NR				< 6	
134	NR				< 1	
138	NR					0.06
140	NR		2.50			
141	NR				< 10	
142	NR					7.16
146	NR				< 10	
147	NR					0.60
149	NR			< 0.1		
151	NR					0.25
180	NR				< 3.22	
190	NR			0.00		
193	NR			< 5		
198	NR			< 2.5		
203	NR			< 2		
212	NR					0.15
213	NR			< 0.11		
215	NR			< 1		
221	NR			0.20		
234	NR				0.40	
236	NR				5.00	
241	NR			1.00		
245	NR					0.11
247	NR			4.20		
252	NR			< 0.75		
255	NR				< 4.6	
256	NR		< 10			
257	NR			< 0.01		
265	NR					0.02
273	NR				0.98	
282	NR					< 10
284	NR			7.00		
289	NR			< 0.5		
292	NR			< 3		

Table 14. *Statistical summary of reported data for standard reference water sample T-149 (trace constituents)--Continued*

Al (Aluminum) µg/L



2. AA: direct nitrous oxide
3. AA: graphite furnace
4. ICP
5. DCP
6. ICP/MS

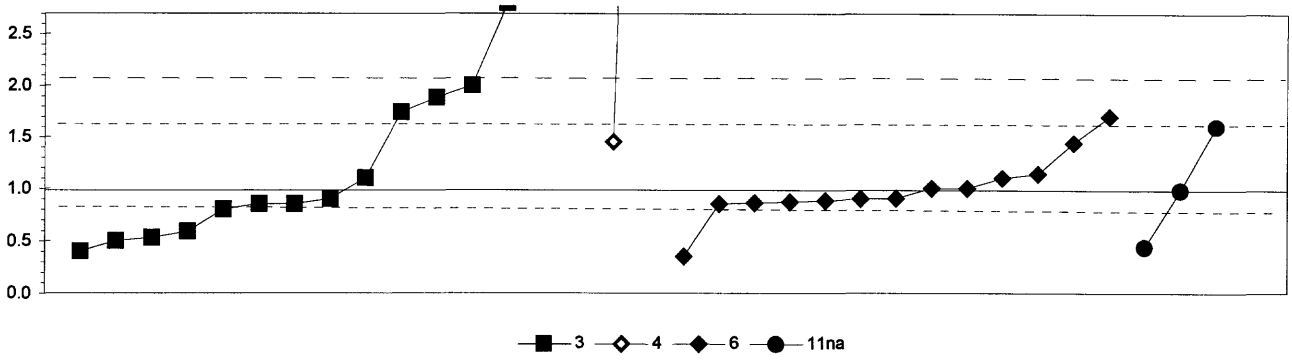
	2	3	4	5	6
N =	0	18	20	1	15
Minimum =	< 1000	9.1	30.0	20.0	12.7
Maximum =	< 2000	164.0	270.0		52.6
Median =		34.9	36.6		35.5
F-pseudosigma =		8.8	34.2		3.4

MPV = 35.5
F-pseudosigma = 9.0
N = 54
Hu = 45.0
HI = 32.8

Lab	Rating	Z-value	2	3	4	5	6
1	4	-0.33					32.5
3	NR				< 30		
4	NR				< 500		
11	0	25.93			270.0		
13	3	-0.59		30.2			
16	4	-0.17					34.0
18	NR				< 100		
23	3	0.96		44.2			
25	NR				< 19		
26	4	-0.30		32.8			
30	4	0.06					36.0
32	4	0.00					35.5
33	1	-1.71				20.0	
34	2	1.05		45.0			
36	NR		< 1000				
42	3	-0.91					27.3
46	4	0.08			36.2		
48	4	0.19					37.2
61	0	5.27			83.2		
68	0	2.82			61.0		
69	3	-0.66		29.5			
70	NR				< 100		
81	NR				< 32		
83	NR				< 25		
89	0	14.21		164.0			
97	3	0.54		40.4			
105	4	-0.45					31.4
111	2	1.23		46.6			
113	4	-0.11			34.5		
118	NR		< 2000				
119	4	0.11					36.5
131	NR				< 100		
134	4	-0.02			35.3		
138	4	-0.04			35.1		
141	NR				< 100		
142	NR				< 50		
145	0	4.59			77.0		
146	NR				< 200		
147	4	0.06					36.0
151	1	1.89					52.6
154	3	-0.61			30.0		
158	3	0.73			42.1		
180	NR				< 20.2		
185	0	2.94		62.1			
190	4	-0.21		33.6			
191	1	1.82					52.0
198	4	-0.13		34.3			
203	4	0.00		35.5			
212	0	13.55			158.0		
215	NR				< 50		
218	0	12.73			150.7		
219	4	-0.06			35.0		
221	4	-0.22		33.5			
224	3	-0.53			30.7		
234	4	-0.31			32.7		
235	4	0.11					36.5
236	4	0.17			37.0		
237	0	6.36			93.0		
241	4	-0.27		33.1			
245	4	-0.48					31.2
247	0	-2.52					12.7
255	4	-0.22			33.5		
257	0	7.82		106.2			
259	4	-0.45			31.4		
265	4	-0.06					35.0
273	4	0.24			37.7		
282	NR						< 100
284	4	0.06		36.0			
287	0	-2.92		9.1			
289	4	-0.13		34.3			
292	NR				< 100		

Table 14. *Statistical summary of reported data for standard reference water sample T-149 (trace constituents)--Continued*

As (Arsenic) µg/L



3. AA: graphite furnace
4. ICP
6. ICP/MS
11na. AA: hydride $NaBH_4$

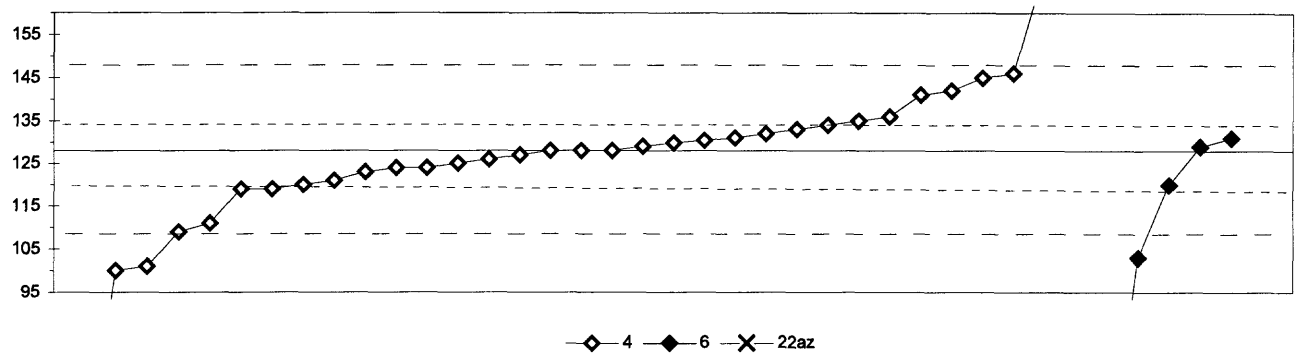
	3	4	6	11na
N =	15	2	13	3
Minimum =	0.4	1.5	0.4	0.4
Maximum =	5.0	12.0	1.7	1.6
Median =	0.9		0.9	
F-pseudosigma =	0.9		0.2	

MPV = 1.0
F-pseudosigma = 0.6
N = 33
Hu = 1.6
HI = 0.9

Lab	Rating	Z-value	3	4	6	11na
1	NR			< 1		
3	NR			< 5		
13	NR		< 5			
16	4	-0.22			0.9	
18	NR		< 1			
25	NR			< 50		
26	4	0.00				1.0
30	4	0.22			1.1	
32	4	0.04			1.0	
34	4	-0.14	0.9			
36	4	-0.23	0.9			
42	2	1.30			1.7	
48	4	-0.14			0.9	
59	NR				< 2	
61	NR			< 4.5		
68	0	3.27	2.8			
69	NR		< 5			
70	NR		< 10			
80	1	1.83	2.0			
81	NR			< 2		
86	3	-0.97				0.4
87	NR					< 2
89	NR					< 2
96	4	0.22	1.1			
97	NR		< 0.9			
105	NR				< 4	
108	2	-1.04	0.4			
109	3	-0.86	0.5			
111	NR		< 2			
113	NR		< 1.5			
118	NR		< 4			
119	4	-0.20			0.9	
133	NR		< 5			
134	3	-0.70	0.6			
138	NR				< 1	
141	NR		< 5			
142	2	-1.13			0.4	
143	3	-0.81	0.5			
145	0	19.82		12.0		
146	NR			< 10		
147	4	-0.18			0.9	
149	NR		< 1			
151	4	-0.23			0.9	
180	NR			< 40.1		
191	3	0.83			1.4	
193	NR		< 5			
198	NR		< 2			
203	NR		< 5			
212	4	-0.14			0.9	
213	2	1.37	1.7			
215	NR		< 5			
220	NR		< 1			
224	NR			< 12		
234	3	0.85		1.5		
235	1	1.62	1.9			
236	NR			< 35		
241	4	-0.32	0.8			
245	4	0.29			1.1	
247	NR		< 5			
252	4	-0.23	0.9			
255	NR		< 5.6			
256	2	1.12				1.6
257	NR		< 0.3			
265	4	0.04			1.0	
282	NR					< 5
284	0	3.63	3.0			
289	0	7.23	5.0			
292	NR		< 3			

Table 14. *Statistical summary of reported data for standard reference water sample T-149 (trace constituents)--Continued*

B (Boron) µg/L



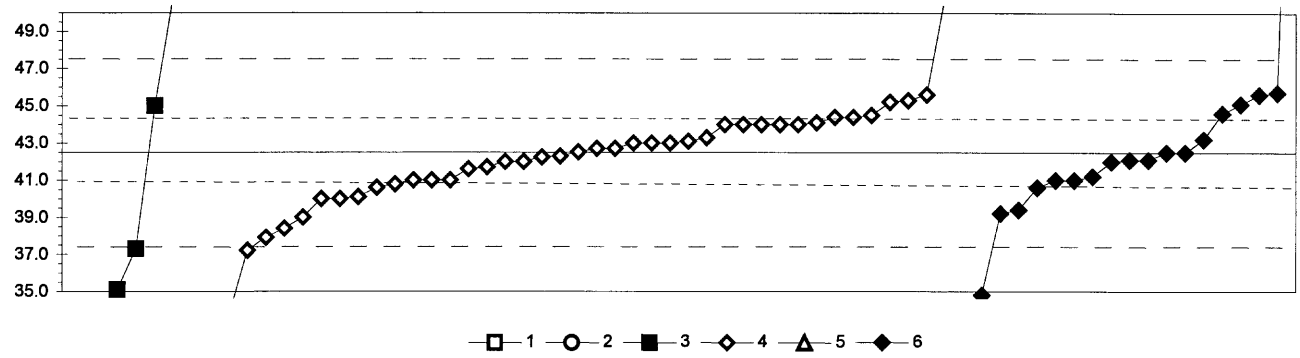
4. ICP					
6. ICP/MS					
22az. Color: azomethine					
		N =	33	5	1
		Minimum =	53	49	170
		Maximum =	262	131	
		Median =	128		
		F-pseudosigma =	10		

MPV =	128				
F-pseudosigma =	10				
N =	39				
Hu =	134				
HI =	120				

Lab	Rating	Z-value	4	6	22az
1	4	-0.40	124		
3	4	0.50	133		
4	0	-7.80	< 50		
11	0	-7.49	53		
16	0	13.39	262		
18	4	0.00	128		
24	4	-0.20	126		
25	0	-10.50	< 23		
26	3	-0.90	119		
32	0	-2.50		103	
40	3	-0.90	119		
42	1	1.80	146		
46	4	0.18	130		
48	0	-2.80	100		
61	3	0.60	134		
68	0	4.20	170		
70	4	0.40	132		
86	4	-0.40	124		
119	1	-1.90	109		
129	0	4.20			170
131	4	0.00	128		
134	4	0.24	130		
138	4	0.10	129		
141	2	1.30	141		
142	4	-0.50	123		
145	3	-0.70	121		
147	4	0.10		129	
154	4	0.00	128		
158	4	-0.30	125		
180	2	1.40	142		
212	3	0.70	135		
215	3	-0.80	120		
234	4	-0.10	127		
236	1	-1.70	111		
247	0	-7.85		49	
255	3	0.79	136		
256	0	-11.79			< 10
259	1	1.70	145		
265	3	-0.80		120	
273	4	0.30	131		
282	4	0.30		131	
289	0	-2.70	101		

Table 14. *Statistical summary of reported data for standard reference water sample T-149 (trace constituents)--Continued*

Ba (Barium) µg/L



1. AA: direct air			4. ICP					
2. AA: direct nitrous oxide			5. DCP					
3. AA: graphite furnace			6. ICP/MS					
		N =	1	0	6	40	1	18
		Minimum =	326.0	< 100	35.1	33.7	52.0	34.8
		Maximum =			54.0	50.9		73.7
		Median =				42.6		42.1
		F-pseudosigma =				2.3		2.7

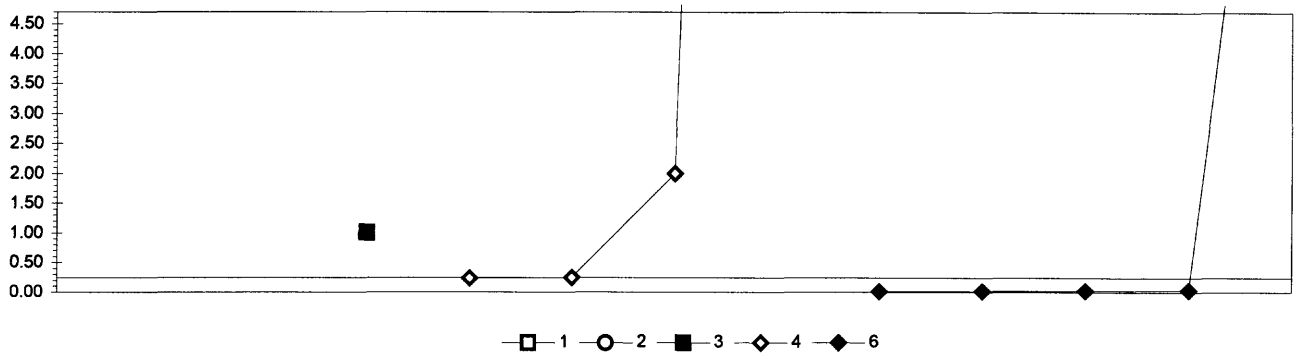
MPV =	42.5
F-pseudosigma =	2.5
N =	66
Hu =	44.4
Hl =	41.0

Lab	Rating	Z-value	1	2	3	4	5	6
1	4	-0.16						42.1
3	4	0.19				43.0		
4	3	0.59				44.0		
11	3	0.59				44.0		
13	3	0.75				44.4		
16	3	-0.52						41.2
18	3	-1.00				40.0		
19	3	0.63				44.1		
25	1	-1.83				37.9		
26	4	0.08				42.7		
30	3	0.83						44.6
32	4	0.00						42.5
33	0	3.77					52.0	
40	4	-0.32				41.7		
42	0	-3.06						34.8
48	3	-0.76						40.6
59	4	-0.20						42.0
61	2	1.07				45.2		
68	4	0.19				43.0		
69	NR				< 50			
70	NR					< 50		
81	4	0.19				43.0		
83	1	-1.63				38.4		
86	4	0.08				42.7		
87	0	-2.07			37.3			
89	NR				< 50			
96	NR			< 100				
97	3	0.99			45.0			
105	2	-1.31						39.2
113	3	-0.96				40.1		
119	3	0.59				44.0		
121	3	-0.60				41.0		
131	4	0.23				43.1		
133	3	0.75				44.4		
134	4	-0.08				42.3		
138	4	-0.36				41.6		
140	0	112.48	326.0					
141	2	1.11				45.3		
142	4	0.27						43.2
145	3	0.59				44.0		
146	3	0.79				44.5		
147	3	-0.60						41.0
151	2	1.03						45.1
154	0	-2.11				37.2		
158	3	-0.60				41.0		
180	3	-0.68				40.8		
183	0	4.56			54.0			
191	2	1.23						45.6
198	2	1.23				45.6		
203	0	3.61			51.6			

Lab	Rating	Z-value	1	2	3	4	5	6
212	2	-1.23						39.4
215	3	-1.00				40.0		
219	4	-0.20				42.0		
220	4	-0.10				42.3		
224	0	3.33				50.9		
234	4	0.31				43.3		
235	2	1.27						45.7
236	3	-0.60				41.0		
237	3	0.59				44.0		
241	0	-2.94			35.1			
245	4	0.00						42.5
247	0	12.38						73.7
255	4	0.00				42.5		
256	NR				< 50			
259	3	-0.76				40.6		
265	3	-0.60						41.0
273	0	-3.50				33.7		
282	4	-0.16						42.1
284	0	3.37			51.0			
289	2	-1.39				39.0		
292	4	-0.20				42.0		

Table 14. *Statistical summary of reported data for standard reference water sample T-149 (trace constituents)--Continued*

Be (Beryllium) µg/L



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

	1	2	3	4	5
N =	0	0	1	4	5
Minimum =	< 10	< 10	1.00	0.24	0.01
Maximum =				50.00	14.10
Median =					
F-pseudosigma =					

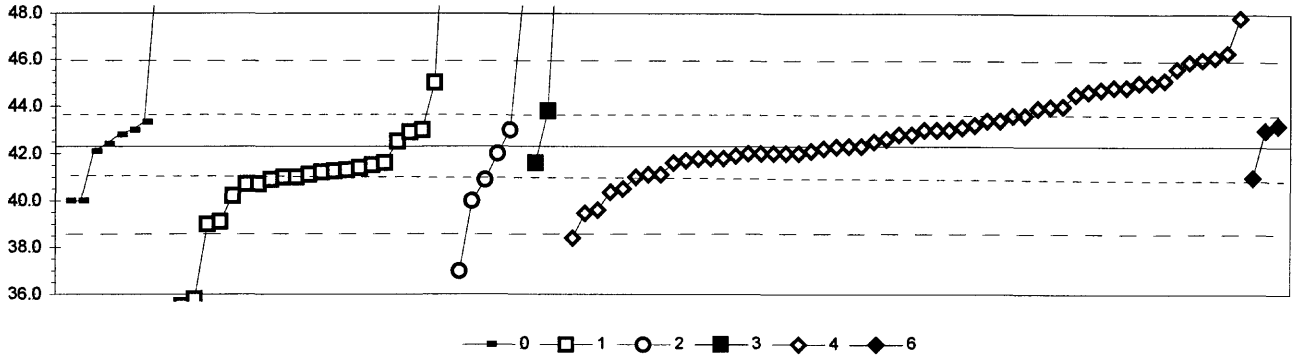
MPV = insufficient data
F-pseudosigma =
N = 10
Hu =
HI =

Lab	Rating	Z-value	1	2	3	4	6
1	NR					< 0.5	
3	NR					< 1	
4	NR					< 10	
13	NR					< 5	
16	NR						< 1
18	NR					< 1	
23	NR				< 0.5		
25	NR					< 2.4	
26	NR					< 1	
30	NR						< 1
32	NR						< 0.1
42	NR						< 2
48	NR						< 0.4
59	NR						< 2
61	NR					0.25	
68	NR					50.00	
69	NR				< 1		
70	NR					< 2	
81	NR				< 1		
83	NR					< 0.2	
89	NR				< 2		
96	NR		< 10				
97	NR				< 0		
105	NR						< 1
113	NR					< 0.1	
114	NR			< 10			
119	NR						0.01
121	NR					< 1	
133	NR					< 0.5	
134	NR					< 0.5	
138	NR						< 0.03
141	NR					< 5	
142	NR						< 1
145	NR					< 1	
146	NR					< 4	
147	NR						< 0.03
149	NR				< 0.5		
151	NR						0.02
180	NR					< 0.667	
193	NR				< 1		
198	NR					< 0.5	
212	NR						< 0.1
213	NR				< 0.11		
215	NR				1.00		
220	NR					< 1	
224	NR					< 0.5	
234	NR					0.24	
236	NR					< 0	
237	NR					< 1	
241	NR				< 1		

Lab	Rating	Z-value	1	2	3	4	6
245	NR						0.02
247	NR						14.10
252	NR				< 1		
255	NR					< 0.6	
265	NR						0.03
282	NR						< 5
284	NR				< 1		
289	NR					2.00	
292	NR				< 1		

Table 14. *Statistical summary of reported data for standard reference water sample T-149 (trace constituents)--Continued*

Ca (Calcium) mg/L



0. Other			3. AA: graphite furnace					
1. AA: direct air			4. ICP					
2. AA: direct nitrous oxide			6. ICP/MS					
		N =	9	22	6	3	54	3
		Minimum =	40.0	35.5	37.0	41.6	38.4	41.0
		Maximum =	130.0	55.3	48.7	53.7	47.8	43.2
		Median =	42.8	41.2			42.8	
		F-pseudosigma =	0.9	0.7			1.9	

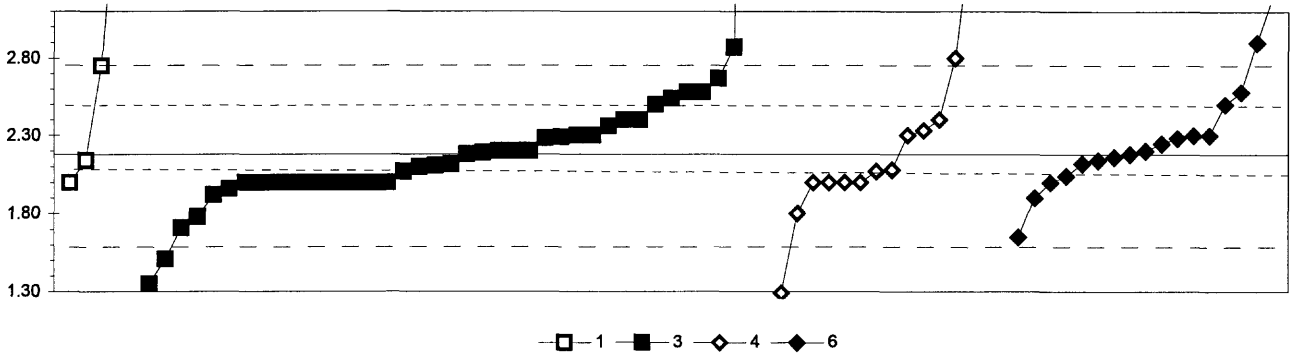
MPV = 42.3
F-pseudosigma = 1.9
N = 97
Hu = 43.6
HI = 41.1

Lab	Rating	Z-value	0	1	2	3	4	6
1	4	-0.16					42.0	
3	1	1.76					45.6	
4	2	1.46					45.0	
11	0	2.05					46.1	
12	4	-0.16					42.0	
13	2	1.35					44.8	
16	2	1.46					45.0	
18	4	-0.32					41.7	
23	0	7.01		55.3				
24	4	-0.05					42.2	
25	1	2.00					46.0	
26	4	0.27					42.8	
30	4	0.38			43.0			
32	4	0.38						43.0
33	4	0.27	42.8					
36	3	-0.70		41.0				
40	3	-0.70					41.0	
42	0	2.99					47.6	
43	4	-0.16					42.0	
45	4	-0.11	42.1					
46	3	-0.65					41.1	
48	4	0.43					43.1	
51	3	-0.65		41.1				
59	4	0.38					43.0	
61	2	1.30					44.7	
68	4	-0.16					42.0	
69	3	-0.86		40.7				
70	3	0.92					44.0	
76	4	0.11		42.5				
81	3	0.81				43.8		
83	2	-1.46					39.6	
84	4	-0.38		41.6				
86	2	1.19					44.5	
87	4	-0.16			42.0			
89	3	-0.76		40.9				
92	0	-3.67		35.5				
97	4	-0.38				41.6		
105	4	-0.38					41.6	
108	0	47.32	130.0					
109	4	-0.43		41.5				
110	4	0.32		42.9				
111	0	3.45			48.7			
113	1	1.94					45.9	
114	0	-2.86			37.0			
119	3	0.70					43.6	
121	4	-0.16					42.0	
129	2	1.46		45.0				
131	4	0.27					42.8	
133	3	0.86					43.9	
134	4	-0.27					41.8	

Lab	Rating	Z-value	0	1	2	3	4	6
138	4	0.16					42.6	
140	1	-1.78		39.0				
141	1	1.51					45.1	
142	4	-0.02					42.3	
145	3	0.59					43.4	
146	4	-0.22					41.9	
147	4	0.38					43.0	
149	3	-0.86		40.7				
154	4	0.00					42.3	
158	4	0.49					43.2	
160	4	-0.11					42.1	
183	0	-3.51		35.8				
185	3	-0.70		41.0				
190	0	4.21	50.1					
191	3	-0.70						41.0
193	3	-0.76			40.9			
198	2	1.35					44.8	
203	4	-0.49		41.4				
209	0	2.16					46.3	
212	3	0.70					43.6	
215	3	-0.65					41.1	
218	3	0.90					44.0	
219	4	0.38					43.0	
220	2	-1.13		40.2				
221	3	-0.54		41.3				
224	1	-1.53					39.5	
234	3	0.59					43.4	
235	0	-2.10					38.4	
236	2	-1.05					40.4	
237	4	0.11					42.5	
241	4	0.38		43.0				
247	2	-1.24	40.0					
255	4	-0.29					41.8	
256	2	-1.24			40.0			
257	4	0.38	43.0					
262	4	0.05	42.4					
265	3	-0.97					40.5	
268	1	-1.73		39.1				
272	3	0.56	43.3					
273	2	1.24					44.6	
274	0	6.15				53.7		
275	2	-1.24	40.0					
282	4	0.49						43.2
284	3	-0.59		41.2				
287	3	-0.56		41.3				
289	4	0.00					42.3	
292	4	-0.27					41.8	

Table 14. *Statistical summary of reported data for standard reference water sample T-149 (trace constituents)--Continued*

Cd (Cadmium) µg/L



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

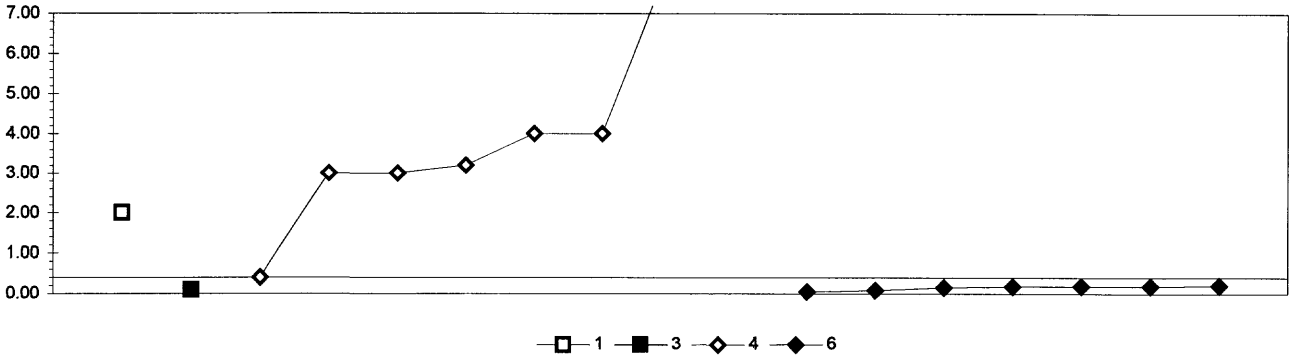
	1	3	4	6
N =	5	40	15	17
Minimum =	2.00	1.35	1.29	1.65
Maximum =	4.00	15.50	15.90	3.20
Median =		2.15	2.08	2.20
F-pseudosigma =		0.28	0.44	0.13

MPV = 2.18
F-pseudosigma = 0.30
N = 77
Hu = 2.40
Hl = 2.00

Lab	Rating	Z-value	1	3	4	6
1	4	0.40		2.30		
3	4	0.40			2.30	
4	NR				< 10	
10	3	0.74		2.40		
11	3	-0.61			2.00	
12	4	0.07		2.20		
13	4	-0.37			2.07	
16	4	0.07				2.20
18	NR				< 3	
25	NR				< 6	
26	4	-0.37		2.07		
30	0	2.43				2.90
32	4	0.00				2.18
34	4	0.37		2.29		
36	3	-0.61		2.00		
42	0	3.44				3.20
46	3	-0.61		2.00		
48	4	0.40				2.30
59	3	-0.61				2.00
61	3	-0.61			2.00	
68	2	1.21		2.54		
69	3	-0.74		1.96		
70	1	1.65		2.67		
76	4	0.22				2.25
80	NR		< 2			
81	3	-0.61		2.00		
83	NR				< 5	
87	3	-0.61	2.00			
89	2	-1.35		1.78		
92	0	6.14	4.00			
96	4	0.07		2.20		
97	4	-0.13	2.14			
105	3	-0.94				1.90
108	0	-2.80		1.35		
111	3	-0.61		2.00		
113	3	0.51			2.33	
114	NR		< 10			
118	3	-0.61		2.00		
119	4	-0.47				2.04
121	3	0.74			2.40	
126	3	-0.61		2.00		
131	3	-0.61			2.00	
133	NR				< 2	
134	4	-0.24		2.11		
138	4	-0.20				2.12
140	1	1.92	2.75			
141	3	0.61		2.36		
142	1	-1.79				1.65
145	0	6.14			4.00	
146	NR				< 5	
147	4	-0.13				2.14
151	4	0.40				2.30
154	4	0.40		2.30		
158	0	-3.00			1.29	
180	NR				< 4.11	
183	2	1.35		2.58		
190	2	1.08		2.50		
191	2	1.35				2.58
193	3	-0.61		2.00		
198	3	-0.88		1.92		
203	0	2.33		2.87		
212	4	0.34				2.28
213	1	-1.59		1.71		
215	3	-0.61		2.00		
220	0	2.09			2.80	
221	4	0.00		2.18		
224	2	-1.28			1.80	
234	0	4.92			3.64	
235	4	0.03		2.19		
236	3	-0.61			2.00	
237	NR				< 10	
241	4	0.07		2.20		
245	4	-0.07				2.16
247	0	44.92		15.50		
252	4	0.34		2.28		
255	0	-2.27		1.51		
256	2	1.35		2.58		
257	0	6.14	4.00			
259	4	-0.34			2.08	
265	2	1.08				2.50
273	0	46.27			15.90	
274	0	31.33		11.47		
282	4	-0.27		2.10		
284	3	-0.61		2.00		
287	4	-0.21		2.12		
289	3	0.74		2.40		
292	3	-0.61		2.00		

Table 14. *Statistical summary of reported data for standard reference water sample T-149 (trace constituents)--Continued*

Co (Cobalt) µg/L



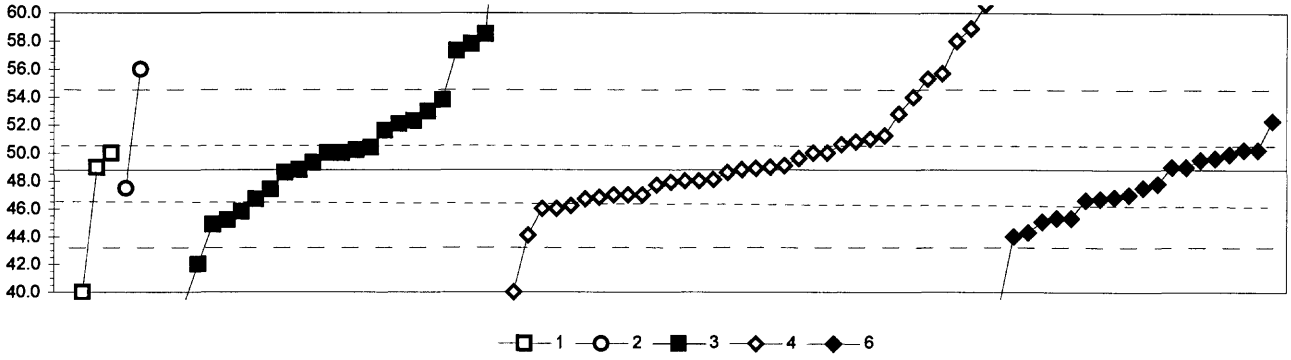
1. AA: direct air
3. AA: graphite furnace
4. ICP
6. ICP/MS

MPV = insufficient data
F-pseudosigma =
N = 17
Hu =
Hl =

	N =	1	1	8	7
	Minimum =	2.00	0.10	0.40	0.05
	Maximum =			231.00	0.20
	Median =			3.60	0.18
	F-pseudosigma =			2.36	0.05
Lab	Rating	Z-value	1	3	4	6
1	NR			< 1		
3	NR				< 5	
4	NR				< 100	
13	NR				< 10	
16	NR					< 1
18	NR				< 10	
25	NR				< 12	
26	NR				< 6	
30	NR					< 1
32	NR					0.20
42	NR					< 2
48	NR				< 50	
61	NR				< 1.7	
68	NR				< 8	
70	NR				< 50	
81	NR				231	
89	NR			< 10		
92	NR		2.00			
97	NR			< 0.29		
105	NR					< 1
119	NR					0.15
121	NR				3.00	
131	NR				3.00	
134	NR				< 1	
138	NR					< 0.5
141	NR				< 10	
142	NR					< 1
145	NR				4.00	
146	NR				< 10	
147	NR					0.08
180	NR				< 5.22	
191	NR					0.18
212	NR					0.18
213	NR			< 0.68		
215	NR				< 1	
220	NR				3.20	
221	NR			0.10		
224	NR				< 3	
234	NR				0.40	
236	NR				4.00	
237	NR				< 10	
245	NR					0.19
247	NR					< 1
255	NR				< 4.1	
256	NR		< 50			
257	NR			< 0.04		
265	NR					0.05
273	NR				8.36	
282	NR					< 20
284	NR		< 10			

Table 14. *Statistical summary of reported data for standard reference water sample T-149 (trace constituents)--Continued*

Cr (Chromium) µg/L



1. AA: direct air			4. ICP				
2. AA: direct nitrous oxide			6. ICP/MS				
3. AA: graphite furnace							
		N =	4	2	25	34	20
		Minimum =	17.5	47.5	12.6	40.0	38.8
		Maximum =	50.0	56.0	70.2	60.6	52.3
		Median =			50.0	48.9	47.3
		F-pseudosigma =			4.8	3.0	3.2

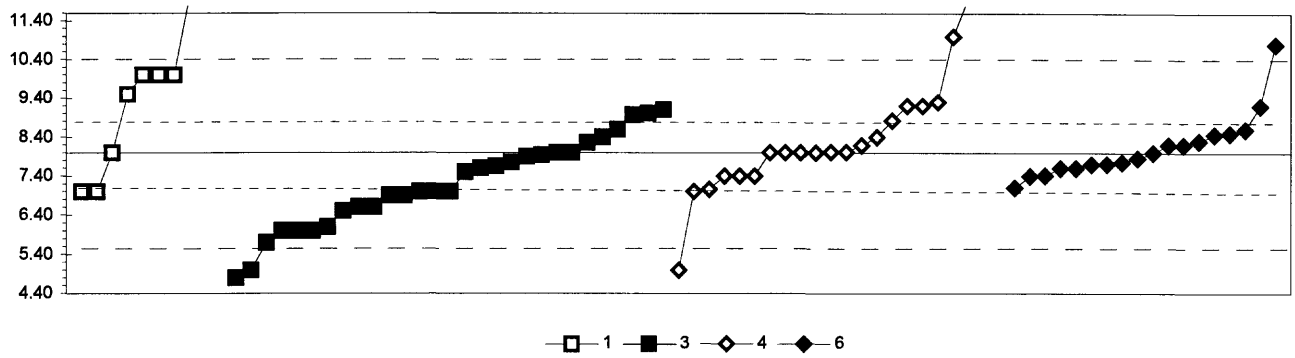
Lab	Rating	Z-value	1	2	3	4	6
1	3	-0.73					46.7
3	4	0.42				50.0	
4	4	0.07				49.0	
10	4	0.17			49.3		
11	0	3.18				58.0	
12	4	0.42				50.0	
13	4	0.03				48.9	
16	4	-0.35					47.8
18	3	-0.62				47.0	
19	4	-0.38				47.7	
23	3	-0.73			46.7		
25	3	-0.97				46.0	
26	0	-3.04				40.0	
30	4	0.24					49.5
32	4	0.07					49.0
36	4	0.42			50.0		
40	1	-1.63				44.1	
42	0	-3.46					38.8
46	2	-1.36			44.9		
48	3	-0.69					46.8
59	3	-0.62					47.0
61	3	0.69				50.8	
68	3	-0.97				46.0	
69	2	-1.25			45.2		
70	4	0.28				49.6	
76	2	-1.29					45.1
81	2	1.45			53.0		
83	3	-0.73				46.7	
86	4	-0.07				48.6	
87	4	-0.45		47.5			
89	1	1.73			53.8		
92	0	-10.83	17.5				
96	2	1.21			52.3		
97	0	3.11			57.8		
105	1	-1.66					44.0
108	0	-3.39			39.0		
111	0	3.36			58.5		
113	4	-0.24				48.1	
114	0	2.49		56.0			
118	0	2.94			57.3		
119	4	0.48					50.2
126	0	-2.35			42.0		
131	0	2.39				55.7	
133	0	2.25				55.3	
134	4	-0.31				47.9	
138	1	-1.56					44.3
140	4	0.42	50.0				
141	0	3.49				58.9	
142	4	-0.45					47.5
143	4	0.48			50.2		

MPV =	48.8
F-pseudosigma =	2.9
N =	85
Hu =	50.6
HI =	46.7

Lab	Rating	Z-value	1	2	3	4	6
145	1	1.80				54.0	
146	3	0.62				50.6	
147	4	0.07					49.0
151	3	-0.76					46.6
154	4	0.42			50.0		
158	0	4.08				60.6	
180	4	0.10				49.1	
183	3	0.97			51.6		
190	4	0.00			48.8		
191	2	1.21					52.3
193	3	0.55			50.4		
198	2	1.38				52.8	
212	2	-1.21					45.3
213	2	1.14			52.1		
215	3	-0.62				47.0	
219	4	-0.28				48.0	
221	2	-1.04			45.8		
234	3	-0.90				46.2	
235	4	0.48					50.2
236	4	-0.28				48.0	
237	3	0.76				51.0	
241	4	-0.48			47.4		
245	2	-1.21					45.3
247	0	-12.52			12.6		
252	4	-0.07			48.6		
255	3	0.84				51.2	
256	0	-3.04	40.0				
257	0	7.41			70.2		
259	3	-0.69				46.8	
265	4	0.28					49.6
273	4	0.00				48.8	
282	4	0.38					49.9
284	0	-4.77			35.0		
287	4	0.07	49.0				
292	3	-0.62				47.0	

Table 14. *Statistical summary of reported data for standard reference water sample T-149 (trace constituents)--Continued*

Cu (Copper) µg/L



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

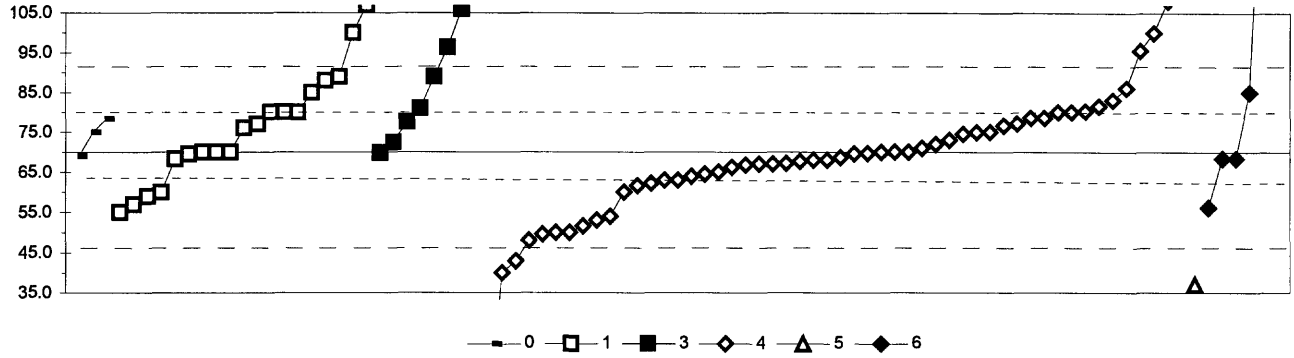
	1	3	4	6
N =	10	29	22	18
Minimum =	7.00	4.80	5.00	7.10
Maximum =	20.00	9.10	16.50	10.80
Median =	10.00	7.00	8.02	7.93
F-pseudosigma =	2.97	1.11	1.33	0.64

MPV = 8.00
F-pseudosigma = 1.21
N = 79
Hu = 8.71
HI = 7.08

Lab	Rating	Z-value	1	3	4	6
1	4	-0.33				7.60
3	4	0.00			8.00	
4	0	-2.48			< 5	
10	2	-1.16		6.60		
11	0	2.48			11.00	
12	3	-0.83		7.00		
13	NR				< 20	
16	4	0.17				8.20
18	4	0.00			8.00	
19	1	-1.66		6.00		
23	3	0.84		9.01		
25	NR				< 7	
26	4	0.00		8.00		
30	4	0.25				8.30
32	3	0.99				9.20
36	2	-1.24		6.50		
42	3	-0.74				7.10
46	3	0.80		8.97		
48	4	0.17				8.20
59	4	0.00				8.00
61	4	-0.50			7.40	
68	3	-0.83			7.00	
69	1	-1.57		6.10		
70	NR				< 10	
80	0	-2.65		4.80		
81	3	-0.83		7.00		
83	4	-0.50			7.40	
84	4	0.22		8.26		
86	0	7.03			16.50	
87	3	-0.83	7.00			
89	NR			< 10		
92	1	1.66	10.00			
96	2	-1.16		6.60		
97	3	0.91		9.10		
105	4	-0.33				7.60
108	4	0.00	8.00			
111	3	-0.91		6.90		
113	4	0.16			8.19	
114	NR		< 10			
118	4	-0.08		7.90		
119	0	3.31			12.00	
121	4	0.00			8.00	
126	0	9.93	20.00			
131	NR				< 8	
133	3	-0.78			7.06	
134	4	-0.21		7.75		
138	4	-0.24				7.71
140	0	3.72	12.50			
141	3	-0.91		6.90		
142	4	-0.50				7.40
145	0	5.79			15.00	
146	NR				< 25	
147	4	-0.25				7.70
149	3	-0.83	7.00			
151	4	0.50				8.60
154	1	-1.90		5.70		
158	4	0.33			8.40	
180	3	0.99			9.20	
183	4	0.33		8.40		
190	4	-0.41		7.50		
191	4	0.38				8.46
193	NR		< 25			
198	NR				< 10	
203	2	1.24	9.50			
212	4	-0.12				7.86
213	4	-0.05		7.94		
215	4	0.00		8.00		
220	2	1.08			9.30	
221	4	-0.29		7.65		
224	3	0.99			9.20	
234	4	0.02			8.02	
235	4	-0.21				7.75
236	0	-2.48			5.00	
237	4	0.00			8.00	
241	4	0.50		8.60		
245	4	-0.49				7.41
247	0	2.32				10.80
252	4	-0.33		7.60		
255	4	0.02			8.02	
256	1	1.66	10.00			
257	0	3.31	12.00			
259	4	-0.50			7.40	
265	4	0.41				8.50
273	3	0.68			8.82	
274	0	-2.48		5.00		
282	NR					< 10
284	1	-1.66		6.00		
287	1	1.66	10.00			
289	1	-1.66		6.00		
292	3	-0.83		7.00		

Table 14. *Statistical summary of reported data for standard reference water sample T-149 (trace constituents)--Continued*

Fe (Iron) µg/L



0. Other			4. ICP				
1. AA: direct air			5. DCP				
3. AA: graphite furnace			6. ICP/MS				
	N =	3	19	8	52	1	6
	Minimum =	69.0	55.0	69.8	0.1	37.0	56.2
	Maximum =	78.4	107.0	121.5	190.0		206.0
	Median =		76.0	85.0	68.3		
	F-pseudosigma =		10.1	19.4	10.6		

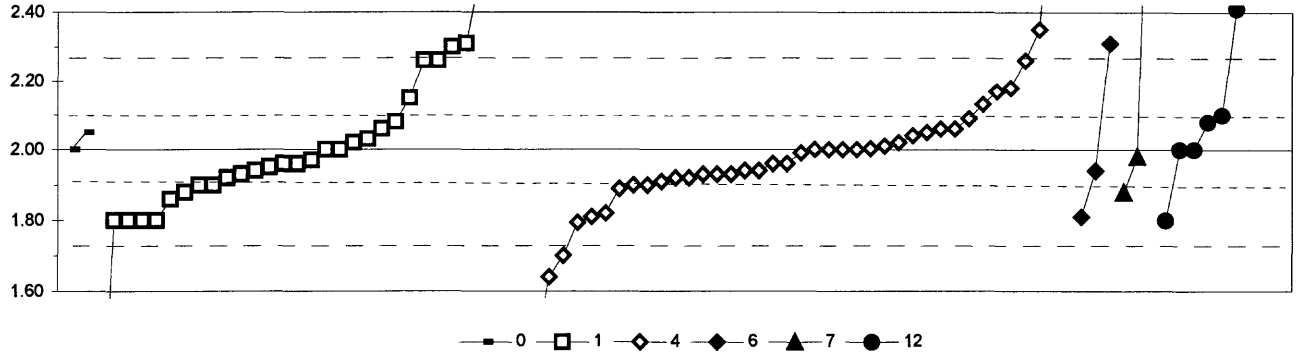
MPV =	70.0
F-pseudosigma =	11.5
N =	89
Hu =	80.0
HI =	64.5

Lab	Rating	Z-value	0	1	3	4	5	6
1	4	-0.20				67.7		
3	3	0.87				80.0		
4	4	-0.26				67.0		
10	3	0.61		77.0				
11	0	10.44				190.0		
12	3	0.87				80.0		
13	1	-1.78				49.6		
16	4	0.43				74.9		
18	4	0.00				70.0		
19	4	-0.03				69.6		
21	4	-0.09	69.0					
23	0	2.30			96.4			
25	2	-1.39				54.0		
26	4	0.17				71.9		
32	0	7.83						160.0
33	0	-2.87					37.0	
40	4	-0.12				68.6		
42	2	1.13				83.0		
43	4	0.09				71.0		
46	4	-0.24				67.2		
48	0	-3.48				< 30		
61	3	0.74				78.5		
68	0	2.61				100.0		
69	4	-0.04		69.5				
70	3	-0.52				64.0		
80	4	0.00		70.0				
81	1	-1.74				50.0		
83	4	-0.33				66.2		
86	0	-2.61				40.0		
87	2	-1.13		57.0				
89	0	3.13			106.0			
91	4	-0.14						68.4
92	0	2.61		100.0				
96	3	0.87		80.0				
97	4	0.21			72.4			
105	3	-0.61				63.0		
108	0	3.22		107.0				
109	4	-0.15		68.3				
111	3	0.87		80.0				
113	4	0.00				70.0		
119	4	0.44				75.0		
121	4	-0.17				68.0		
126	2	1.31		85.0				
129	4	0.44	75.0					
131	3	0.62				77.1		
133	3	0.89				80.2		
134	4	-0.17				68.0		
138	3	-0.68				62.2		
140	3	-0.87		60.0				
141	1	-1.60				51.6		

Lab	Rating	Z-value	0	1	3	4	5	6
142	3	-0.87				60.0		
145	3	-0.61				63.0		
146	3	0.57				76.6		
147	0	-6.09				0.1		
149	4	0.00		70.0				
151	2	-1.20						56.2
154	0	-2.35				43.0		
158	3	-0.73				61.6		
180	2	-1.48				53.0		
185	4	0.00		70.0				
190	3	0.73	78.4					
191	2	1.31						85.0
198	NR					< 100		
203	3	0.87		80.0				
212	0	3.31				108.0		
213	4	-0.02			69.8			
215	4	0.26				73.0		
218	3	0.74				78.5		
219	4	-0.44				65.0		
220	0	2.23				95.6		
221	3	0.96			81.0			
224	2	1.40				86.1		
234	4	-0.28				66.8		
235	1	-1.74				50.0		
236	4	-0.26				67.0		
237	1	-1.91				48.0		
241	3	-0.96		59.0				
245	0	11.84						206.0
252	1	1.65		89.0				
255	3	1.00				81.5		
256	2	-1.31		55.0				
257	3	0.66			77.6			
259	4	-0.03				69.7		
265	4	0.39				74.5		
273	4	-0.48				64.5		
274	0	4.48			121.5			
282	4	-0.14						68.4
284	3	0.52		76.0				
287	1	1.57		88.0				
289	1	1.65			89.0			
292	4	0.00				70.0		

Table 14. *Statistical summary of reported data for standard reference water sample T-149 (trace constituents)--Continued*

K (Potassium) mg/L



0. Other			6. ICP/MS					
1. AA: direct air			7. Ion chromatography					
4. ICP			12. Flame emission					
		N =	2	30	40	3	3	9
		Minimum =	2.00	0.90	1.00	1.81	1.88	1.80
		Maximum =	2.05	3.49	3.49	2.31	3.39	540
		Median =		1.97	1.98			2.10
		F-pseudosigma =		0.19	0.11			0.44

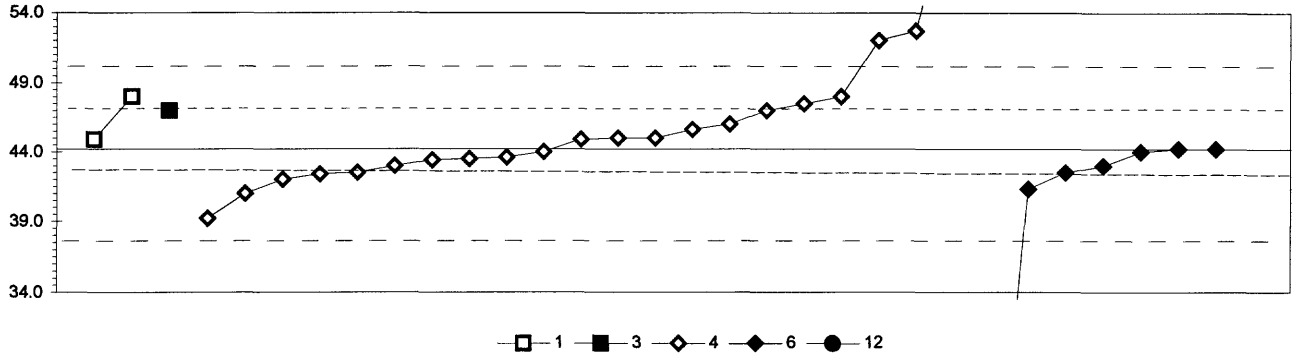
Lab	Rating	Z-value	0	1	4	6	7	12
1	3	-0.85		1.88				
3	0	-2.13			1.70			
11	4	0.28			2.04			
12	4	0.00			2.00			
13	4	-0.28			1.96			
16	0	2.13		2.30				
18	4	0.00			2.00			
23	2	-1.42		1.80				
24	2	-1.47			1.79			
25	3	-0.57			1.92			
26	4	-0.14					1.98	
30	2	-1.42						1.80
32	4	-0.43				1.94		
33	4	0.00	2.00					
36	4	0.00		2.00				
40	4	-0.50			1.93			
42	4	0.02			2.00			
43	3	-0.71			1.90			
45	4	0.35	2.05					
46	4	0.14			2.02			
48	3	-0.57			1.92			
51	3	0.57						2.08
61	0	10.58			3.49			
64	4	0.43		2.06				
68	3	-0.71			1.90			
69	3	0.71						2.10
70	4	-0.28			1.96			
81	4	0.07			2.01			
83	4	-0.21		1.97				
86	4	-0.43			1.94			
87	0	-7.81		0.90				
89	4	-0.28		1.96				
92	2	-1.42		1.80				
97	3	-0.71		1.90				
105	4	-0.43			1.94			
108	0	3820						540
109	3	0.57		2.08				
110	0	2.20		2.31				
111	4	-0.36		1.95				
113	2	1.21			2.17			
114	2	1.07		2.15				
119	0	5.68			2.80			
129	0	4.97		2.70				
131	4	0.00			2.00			
134	3	-0.71		1.90				
138	2	-1.35			1.81			
140	4	-0.28		1.96				
141	3	0.64			2.09			
142	3	-0.64			1.91			
145	4	0.43			2.06			

MPV =	2.00
F-pseudosigma =	0.14
N =	87
Hu =	2.10
HI =	1.91

Lab	Rating	Z-value	0	1	4	6	7	12
146	0	2.49			2.35			
149	4	0.00		2.00				
154	2	-1.28			1.82			
158	0	-2.56			1.64			
180	1	1.85			2.26			
185	3	-0.99		1.86				
190	3	-0.85					1.88	
191	2	-1.35				1.81		
193	3	-0.57		1.92				
198	4	-0.43		1.94				
203	1	1.85		2.26				
212	4	0.43			2.06			
215	0	-7.10			1.00			
218	2	1.28			2.18			
219	4	0.00			2.00			
220	4	0.14		2.02				
221	4	-0.50		1.93				
224	3	0.94			2.13			
234	4	-0.07			1.99			
236	0	-4.07			1.43			
241	2	-1.42		1.80				
247	0	9.87					3.39	
255	4	-0.50			1.93			
256	0	8.02						3.13
257	0	4.26						2.60
259	4	0.21		2.03				
265	4	-0.50			1.93			
268	0	3.62		2.51				
272	4	0.00						2.00
273	4	0.35			2.05			
274	0	2.91						2.41
275	4	0.00						2.00
282	0	2.20				2.31		
284	1	1.85		2.26				
287	0	10.59		3.49				
289	3	-0.78			1.89			
292	2	-1.42		1.80				

Table 14. *Statistical summary of reported data for standard reference water sample T-149 (trace constituents)--Continued*

Li (Lithium) µg/L



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

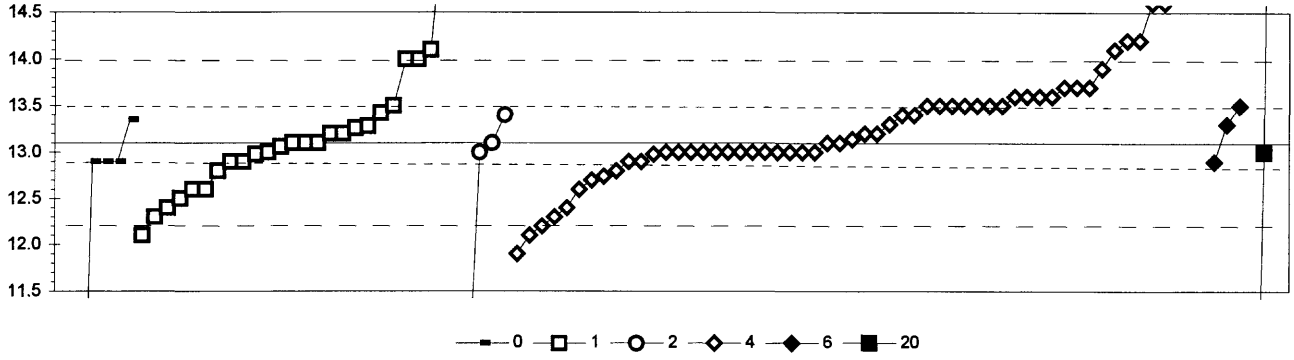
		1	3	4	6	12
N =		2	1	21	7	1
Minimum =		44.9	47.0	39.2	13.1	180.0
Maximum =		48.0		63.0	44.2	
Median =				44.9	43.0	
F-pseudosigma =				3.0	1.6	

MPV = 44.2
F-pseudosigma = 3.2
N = 32
Hu = 47.0
HI = 42.8

Lab	Rating	Z-value	1	3	4	6	12
1	4	-0.22			43.5		
3	2	1.21			48.0		
4	4	-0.38			43.0		
11	4	0.25			45.0		
16	4	0.00				44.2	
25	3	0.89			47.0		
26	4	0.44			45.6		
32	3	-0.54				42.5	
40	3	-0.54			42.5		
68	4	-0.06			44.0		
69	3	0.89		47.0			
76	3	-0.91				41.3	
105	1	-1.59			39.2		
109	4	0.22	44.9				
131	2	1.05			47.5		
134	4	-0.25			43.4		
142	4	0.25			45.0		
145	3	0.57			46.0		
147	4	-0.06				44.0	
151	4	0.00				44.2	
212	4	-0.19			43.6		
219	3	-0.70			42.0		
220	3	-0.58			42.4		
234	4	0.22			44.9		
236	2	-1.02			41.0		
237	0	2.48			52.0		
247	0	-9.87				13.1	
256	0	43.10					180.0
257	2	1.21	48.0				
265	4	-0.38				43.0	
273	0	2.70			52.7		
289	0	5.97			63.0		

Table 14. *Statistical summary of reported data for standard reference water sample T-149 (trace constituents)--Continued*

Mg (Magnesium) mg/L



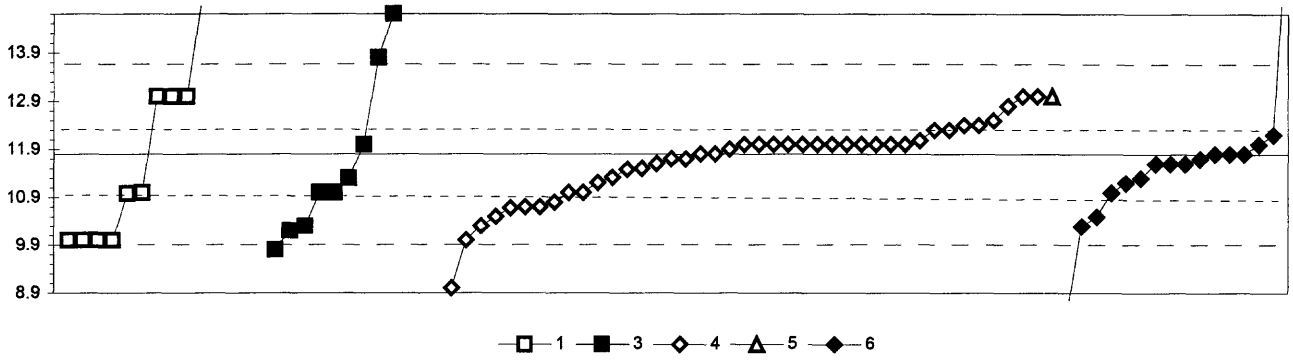
0. Other			4. ICP					
1. AA: direct air			6. ICP/MS					
2. AA: direct nitrous oxide			20. Titrate: colorimetric					
		N =	6	26	4	56	3	3
		Minimum =	7.1	12.1	10.1	11.9	12.9	6.8
		Maximum =	13.4	15.5	13.4	15.3	13.5	27.7
		Median =		13.1		13.2		
		F-pseudosigma =		0.5		0.4		

MPV =	13.1
F-pseudosigma =	0.7
N =	98
Hu =	13.5
Hl =	12.9

Lab	Rating	Z-value	0	1	2	4	6	20
1	4	0.00				13.1		
3	4	0.00				13.1		
4	4	-0.15				13.0		
11	1	1.69				14.2		
12	0	2.31				14.6		
13	3	0.62				13.5		
16	3	0.92				13.7		
18	4	-0.46				12.8		
23	3	0.62		13.5				
24	4	-0.15				13.0		
25	1	1.54				14.1		
26	3	0.62				13.5		
30	4	0.00			13.1			
32	4	-0.31					12.9	
33	4	-0.31	12.9					
36	1	1.54		14.1				
40	3	0.77				13.6		
42	0	3.35				15.3		
43	4	-0.15				13.0		
45	4	-0.31	12.9					
46	3	-0.55				12.7		
48	4	-0.15				13.0		
51	4	-0.15		13.0				
59	4	-0.15				13.0		
61	1	1.69				14.2		
64	4	-0.15				13.0		
68	4	-0.15				13.0		
69	4	0.15		13.2				
70	3	0.62				13.5		
76	4	0.25		13.3				
81	2	1.23				13.9		
83	1	-1.54				12.1		
84	2	-1.23		12.3				
86	4	0.31				13.3		
87	3	-0.77		12.6				
89	4	0.15		13.2				
92	3	-0.92		12.5				
97	4	-0.31		12.9				
105	2	-1.23				12.3		
109	4	0.00		13.1				
110	4	-0.31		12.9				
111	4	-0.15			13.0			
113	0	2.31				14.6		
114	4	0.46			13.4			
119	3	0.62				13.5		
121	4	-0.15				13.0		
129	2	1.38		14.0				
131	1	-1.85				11.9		
133	3	0.77				13.6		
134	4	-0.31				12.9		
138	4	-0.15				13.0		
140	3	-0.77		12.6				
141	3	0.92				13.7		
142	4	0.46				13.4		
145	3	0.92				13.7		
146	4	-0.15				13.0		
147	3	0.62				13.5		
149	2	-1.08		12.4				
154	3	0.77				13.6		
158	4	0.46				13.4		
180	4	-0.15				13.0		
183	0	-4.62			10.1			
185	4	-0.46		12.8				
190	4	-0.31	12.9					
191	4	0.31					13.3	
193	1	-1.54		12.1				
198	4	-0.15				13.0		
203	4	0.28		13.3				
209	0	2.77				14.9		
212	3	0.62				13.5		
215	3	-0.62				12.7		
218	0	2.40				14.7		
219	4	-0.15				13.0		
220	4	-0.18		13.0				
221	4	0.00		13.1				
224	2	-1.38				12.2		
234	3	0.77				13.6		
235	2	-1.08				12.4		
236	4	-0.18				13.0		
237	4	0.15				13.2		
241	2	1.38		14.0				
247	0	-7.71	8.1					
252	0	3.54		15.4				
255	4	0.06				13.1		
256	0	3.69		15.5				
257	4	-0.15						13.0
262	4	0.38	13.4					
265	4	-0.31				12.9		
268	4	0.00		13.1				
272	0	22.42						27.7
273	3	0.62				13.5		
274	0	-9.17	7.1					
275	0	-9.69						6.8
282	3	0.62					13.5	
284	4	0.49		13.4				
287	4	-0.06		13.1				
289	3	-0.77				12.6		
292	4	0.15				13.2		

Table 14. *Statistical summary of reported data for standard reference water sample T-149 (trace constituents)--Continued*

Mn (Manganese) µg/L



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

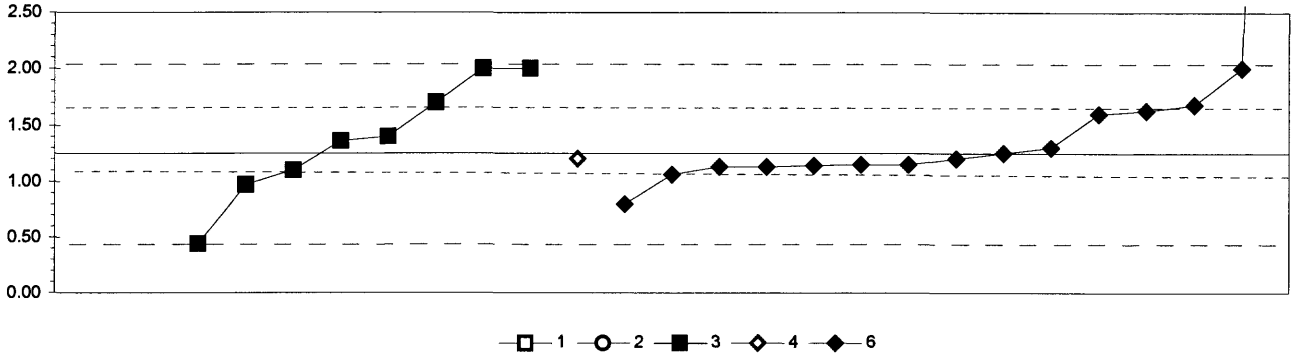
	1	3	4	5	6
N =	14	12	41	0	16
Minimum =	10.0	9.8	9.0	< 20	8.4
Maximum =	16.0	16.6	13.0		17.0
Median =	13.0	11.7	12.0		11.6
F-pseudosigma =	3.7	3.2	0.6		0.5

MPV = 11.8
F-pseudosigma = 1.0
N = 83
Hu = 12.3
Hl = 11.0

Lab	Rating	Z-value	1	3	4	5	6
1	3	-0.62			11.2		
3	4	0.21			12.0		
4	4	0.21			12.0		
10	0	3.32	15.0				
11	2	1.25			13.0		
12	NR				< 30		
13	2	1.04			12.8		
16	4	-0.21					11.6
18	3	-0.83			11.0		
19	4	-0.21			11.6		
23	4	0.21		12.0			
25	0	-10.17			< 2		
26	4	-0.31			11.5		
30	4	-0.10					11.7
32	4	0.21					12.0
33	NR					< 20	
36	3	-0.83		11.0			
40	1	-1.56			10.3		
42	0	-3.53					8.4
43	4	0.21			12.0		
46	2	-1.16			10.7		
48	4	-0.21					11.6
59	3	-0.83					11.0
61	3	0.73			12.5		
68	4	0.21			12.0		
69	NR		< 20				
70	NR				< 20		
80	1	-1.56		10.3			
81	4	0.21			12.0		
83	2	-1.04			10.8		
84	0	-2.08		9.8			
86	3	0.52			12.3		
87	3	-0.83	11.0				
89	3	-0.52		11.3			
91	4	-0.21					11.6
92	2	1.25	13.0				
96	NR		< 20				
97	3	-0.83		11.0			
105	2	-1.35					10.5
108	0	3.32	15.0				
109	3	-0.85	11.0				
113	3	-0.83			11.0		
114	2	1.25	13.0				
118	0	3.53		15.2			
119	2	1.25			13.0		
121	4	0.21			12.0		
126	1	-1.87	10.0				
131	4	0.00			11.8		
134	4	-0.33			11.5		
138	3	-0.62					11.2
140	1	-1.87	10.0				
141	3	0.52			12.3		
142	1	-1.87			10.0		
145	4	0.21			12.0		
146	4	-0.10			11.7		
147	4	0.42					12.2
149	1	-1.87	10.0				
151	4	0.00					11.8
154	0	-2.91			9.0		
158	4	-0.10			11.7		
180	4	0.00			11.8		
190	0	2.08		13.8			
191	3	-0.52					11.3
198	3	0.62			12.4		
203	1	-1.87	10.0				
212	NR				< 10		
215	4	0.21			12.0		
219	4	0.21			12.0		
220	3	-0.51			11.3		
221	0	3.01		14.7			
224	4	0.10			11.9		
234	3	0.62			12.4		
235	2	-1.35			10.5		
236	4	0.21			12.0		
237	4	0.21			12.0		
241	0	3.32	15.0				
245	1	-1.56					10.3
247	0	5.36					17.0
252	NR		< 40				
255	4	0.29			12.1		
256	0	3.32	15.0				
257	0	4.95		16.6			
259	2	-1.14			10.7		
265	4	0.00					11.8
273	2	-1.14			10.7		
274	0	4.88		16.5			
282	4	0.00					11.8
284	0	4.36	16.0				
287	2	1.25	13.0				
289	1	-1.66		10.2			
292	4	0.21			12.0		

Table 14. *Statistical summary of reported data for standard reference water sample T-149 (trace constituents)--Continued*

Mo (Molybdenum) µg/L



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

	1	2	3	4	6
N =	1	0	8	1	15
Minimum =	47.00	< 20	0.44	1.20	0.80
Maximum =			2.00		11.60
Median =			1.38		1.20
F-pseudosigma =			0.60		0.36

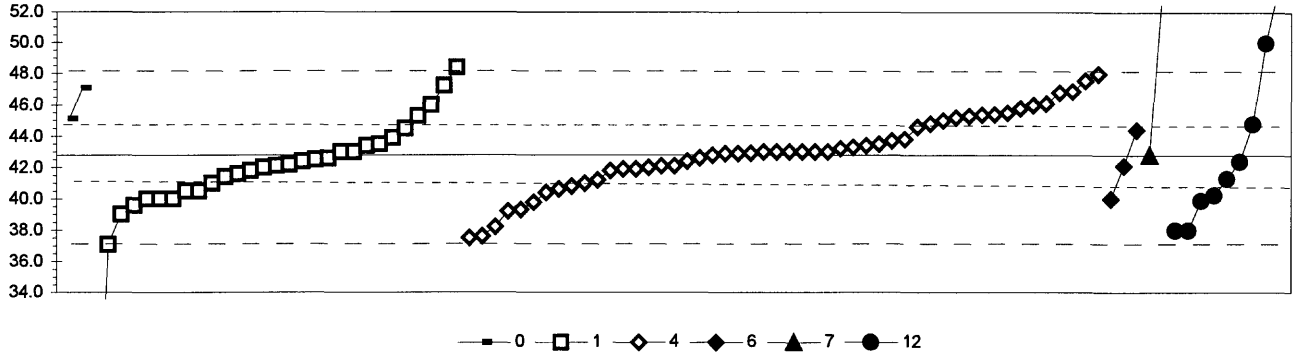
Lab	Rating	Z-value	1	2	3	4	6
1	4	-0.27					1.14
3	NR					< 5	
4	NR					< 20	
12	NR					< 30	
16	3	0.86					1.60
18	NR					< 20	
23	NR				< 3		
26	NR					< 4	
30	1	1.84					2.00
32	4	-0.29					1.13
42	NR						< 10
48	4	0.12					1.30
61	NR					< 17.2	
68	NR					< 7	
70	NR					< 50	
81	NR					< 5	
87	4	0.37			1.40		
97	NR				< 1.05		
105	NR						< 4
108	4	-0.37			1.10		
109	3	-0.69			0.97		
119	2	1.05					1.68
131	NR					< 15	
134	NR					< 2	
138	4	-0.47					1.06
141	NR					< 10	
142	4	0.00					1.25
143	4	0.27			1.36		
145	NR					< 4	
146	NR					< 10	
147	4	-0.25					1.15
149	NR				< 2		
151	4	-0.12					1.20
180	NR					< 5.11	
212	4	-0.29					1.13
215	1	1.84			2.00		
221	1	1.84			2.00		
224	NR					< 5	
234	1	-1.99			0.44		
235	3	0.93					1.63
236	NR					< 11	
237	NR					< 50	
241	NR				< 5		
245	4	-0.25					1.15
247	0	25.39					11.60
252	NR				< 1		
255	NR					< 5.1	
257	NR			< 20			
259	4	-0.12				1.20	
265	2	-1.10					0.80

MPV = 1.25
F-pseudosigma = 0.41
N = 25
Hu = 1.68
HI = 1.13

Lab	Rating	Z-value	1	2	3	4	6
282	NR						< 50
284	0	112.21	47.00				
289	2	1.10			1.70		
292	NR					< 5	

Table 14. *Statistical summary of reported data for standard reference water sample T-149 (trace constituents)--Continued*

Na (Sodium) mg/L



0. Other			6. ICP/MS					
1. AA: direct air			7. Ion chromatography					
4. ICP			12. Flame emission					
		N =	2	29	50	3	2	9
		Minimum =	45.1	15.5	37.5	40.0	42.8	38.0
		Maximum =	47.1	48.4	48.0	44.4	53.6	53.6
		Median =		42.1	43.0			41.3
		F-pseudosigma =		2.1	2.3			3.6

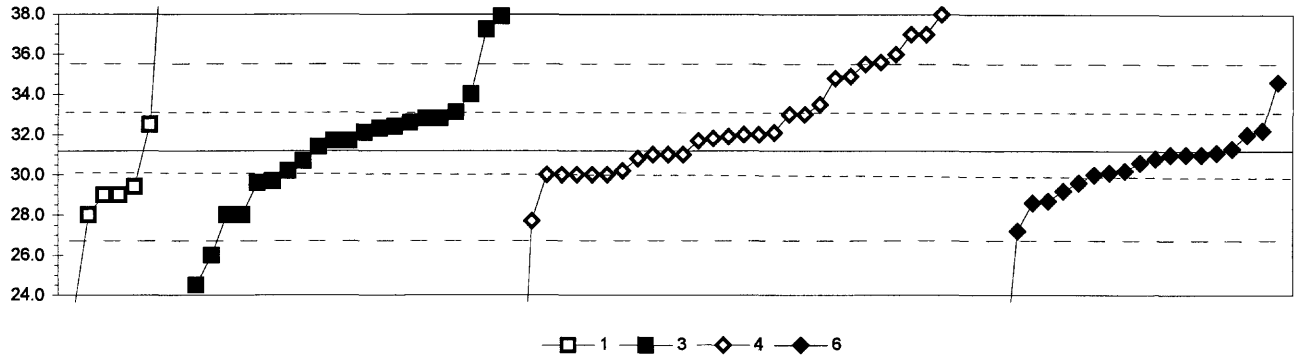
MPV = 42.8
F-pseudosigma = 2.7
N = 95
Hu = 44.7
HI = 41.0

Lab	Rating	Z-value	0	1	4	6	7	12
1	4	0.07			43.0			
3	3	0.88			45.2			
4	2	1.17			46.0			
11	3	-0.73			40.8			
12	3	0.80			45.0			
13	2	1.09			45.8			
16	4	0.07			43.0			
18	4	-0.26			42.1			
23	4	0.40		43.9				
24	4	-0.07			42.6			
25	3	0.95			45.4			
26	4	-0.15			42.4			
32	2	-1.02				40.0		
33	3	0.84	45.1					
36	3	0.91		45.3				
40	4	0.22			43.4			
42	3	0.94			45.4			
43	4	-0.33			41.9			
45	1	1.57	47.1					
46	4	0.04			42.9			
48	4	0.07			43.0			
51	2	-1.06						39.9
59	3	-0.66			41.0			
61	3	-0.88			40.4			
64	4	0.22		43.4				
68	4	0.07			43.0			
69	3	-0.55						41.3
70	4	0.26			43.5			
76	4	-0.08		42.6				
81	3	0.91			45.3			
83	2	-1.31			39.2			
84	4	-0.15						42.4
86	3	0.66			44.6			
87	2	-1.02		40.0				
89	3	-0.66		41.0				
92	0	-9.95		15.5				
97	4	0.07		43.0				
105	4	-0.36			41.8			
109	4	-0.26		42.1				
110	0	-2.09		37.1				
111	2	-1.02		40.0				
113	1	-1.68			38.2			
114	4	-0.11		42.5				
118	4	0.07		43.0				
119	4	0.36			43.8			
121	4	0.07			43.0			
126	3	0.62		44.5				
129	2	-1.39		39.0				
131	1	-1.90			37.6			
134	2	-1.17		39.6				

Lab	Rating	Z-value	0	1	4	6	7	12
138	4	-0.33			41.9			
140	2	-1.02		40.0				
141	3	0.73			44.8			
142	4	0.33			43.7			
145	4	0.18			43.3			
146	2	1.20			46.1			
147	1	1.90			48.0			
149	4	-0.29		42.0				
154	2	1.46			46.8			
158	2	-1.28			39.3			
180	4	-0.26			42.1			
185	3	0.73						44.8
190	4	0.00					42.8	
191	4	-0.26				42.1		
193	3	-0.51		41.4				
198	4	0.04			42.9			
203	3	-0.84		40.5				
212	3	0.98			45.5			
215	3	-0.58			41.2			
218	1	1.74			47.6			
219	4	0.07			43.0			
220	4	-0.15		42.4				
221	4	0.26		43.5				
224	2	-1.10			39.8			
234	4	0.00			42.8			
236	3	-0.79			40.6			
237	4	0.15			43.2			
241	2	1.17		46.0				
247	0	3.94					53.6	
252	3	-0.84		40.5				
255	4	0.04			42.9			
256	3	-0.93						40.3
257	1	-1.75						38.0
259	4	-0.22		42.2				
265	4	-0.29			42.0			
268	1	2.04		48.4				
272	1	-1.75						38.0
273	2	1.49			46.9			
274	0	3.94						53.6
275	0	2.63						50.0
282	3	0.58				44.4		
284	1	1.62		47.3				
287	4	-0.44		41.6				
289	1	-1.93			37.5			
292	4	-0.36		41.8				

Table 14. *Statistical summary of reported data for standard reference water sample T-149 (trace constituents)--Continued*

Ni (Nickel) µg/L



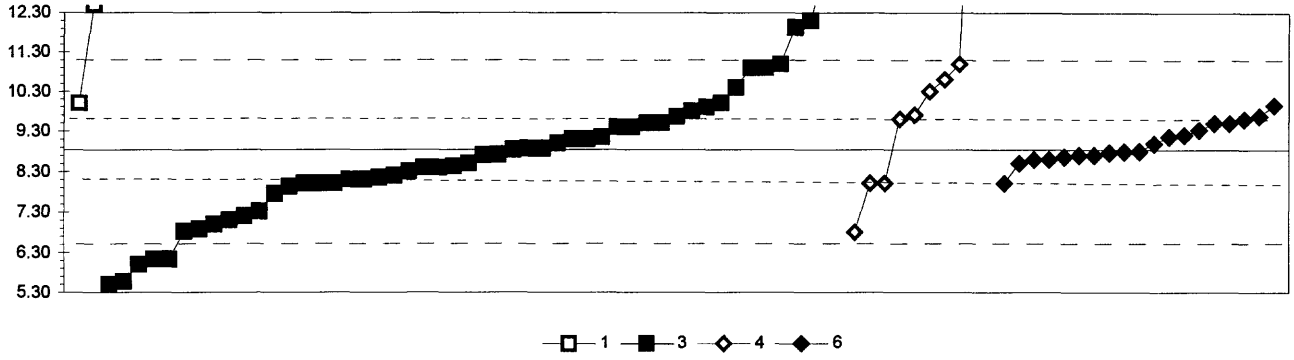
1. AA: direct air			6. ICP/MS			
3. AA: graphite furnace						
4. ICP						
		N =	8	21	32	19
		Minimum =	23.0	24.5	11.8	18.9
		Maximum =	60.0	37.9	49.0	34.6
		Median =	29.2	31.7	32.0	30.6
		F-pseudosigma =	7.2	2.3	3.7	1.2

					MPV =	31.2
					F-pseudosigma =	2.2
					N =	80
					Hu =	33.0
					HI =	30.0

Lab	Rating	Z-value	1	3	4	6
1	3	0.85		33.1		
3	0	2.16			36.0	
4	3	-0.54			30.0	
11	0	2.61			37.0	
12	3	-0.54			30.0	
13	1	-1.57			27.7	
16	4	-0.09				31.0
18	3	0.81			33.0	
19	0	2.61			37.0	
25	NR				< 49	
26	3	0.63		32.6		
30	4	0.36				32.0
32	4	0.45				32.2
36	0	-3.01		24.5		
42	1	-1.80				27.2
46	4	0.22			31.7	
48	4	-0.27				30.6
59	3	-0.54				30.0
61	4	0.31			31.9	
68	3	-0.54			30.0	
69	4	0.22		31.7		
70	NR				< 50	
76	4	-0.45				30.2
81	2	-1.44		28.0		
83	4	-0.45			30.2	
86	0	4.05			40.2	
87	3	-0.99	29.0			
89	3	-0.72		29.6		
92	0	-3.69	23.0			
96	4	0.49		32.3		
97	3	0.54		32.4		
105	2	-1.12				28.7
108	2	-1.44		28.0		
111	4	0.09		31.4		
113	4	-0.18			30.8	
114	3	-0.99	29.0			
118	3	-0.67		29.7		
119	2	-1.17				28.6
121	3	0.81			33.0	
126	0	12.95	60.0			
131	0	8.00			49.0	
133	1	1.93			35.5	
134	4	0.22		31.7		
138	4	-0.18				30.8
140	3	0.58	32.5			
141	4	0.40			32.1	
142	4	0.04				31.3
143	4	-0.45		30.2		
145	0	3.06			38.0	
146	NR				< 40	
147	4	-0.09				31.0
151	3	-0.72				29.6
154	4	-0.09			31.0	
158	2	1.03			33.5	
180	0	4.00			40.1	
183	3	0.72		32.8		
190	0	3.01		37.9		
191	1	1.53				34.6
193	NR		< 50			
198	NR				< 50	
212	4	-0.04				31.1
213	3	-0.81	29.4			
215	4	-0.09			31.0	
219	4	-0.09			31.0	
220	4	0.27			31.8	
221	4	0.40		32.1		
224	0	-8.72			11.8	
234	1	1.62			34.8	
235	4	-0.49				30.1
236	4	0.36			32.0	
237	4	0.36			32.0	
241	3	0.72		32.8		
245	3	-0.90				29.2
247	0	-5.53				18.9
252	2	1.26		34.0		
255	1	1.66			34.9	
256	0	2.72		37.3		
257	2	-1.44	28.0			
259	3	-0.54			30.0	
265	4	-0.09				31.0
273	1	1.98			35.6	
282	NR					< 50
284	0	-2.34		26.0		
287	0	5.76	44.0			
289	4	-0.22		30.7		
292	3	-0.54			30.0	

Table 14. *Statistical summary of reported data for standard reference water sample T-149 (trace constituents)--Continued*

Pb (Lead) µg/L



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

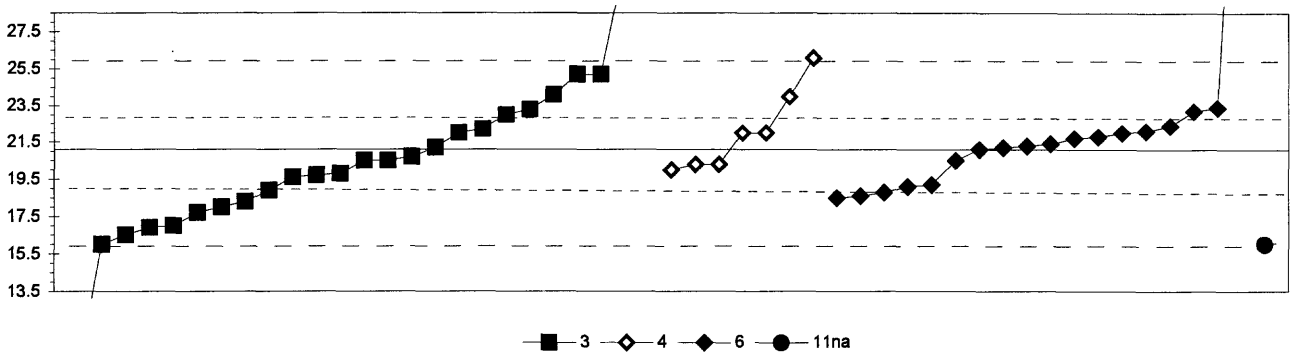
	1	3	4	6
N =	2	50	10	19
Minimum =	10.00	5.50	6.80	8.00
Maximum =	12.50	19.40	28.00	9.95
Median =		8.60	10.00	8.80
F-pseudosigma =		1.17	2.22	0.54

MPV = 8.84
F-pseudosigma = 1.17
N = 81
Hu = 9.68
HI = 8.10

Lab	Rating	Z-value	1	3	4	6
1	4	-0.20				8.60
3	1	1.84			11.00	
4	NR				< 200	
10	4	-0.38		8.40		
11	3	0.73			9.70	
12	NR			< 10		
13	0	-2.85		5.50		
16	4	-0.03				8.80
18	4	-0.29		8.50		
19	3	-0.72		8.00		
23	4	-0.38		8.40		
25	NR				< 71	
26	3	-0.63		8.10		
30	4	-0.12				8.70
32	3	0.95				9.95
34	3	0.70		9.66		
36	2	-1.30		7.32		
42	3	-0.72				8.00
46	3	-0.79		7.92		
48	3	0.56				9.50
59	3	0.56				9.50
61	1	-1.74			6.80	
68	0	9.02		19.40		
69	3	-0.93		7.75		
70	3	-0.55		8.20		
76	4	-0.06				8.76
80	3	-0.63		8.10		
81	3	-0.72			8.00	
84	2	1.33		10.40		
86	4	0.48		9.40		
87	1	1.76		10.90		
89	0	-2.79		5.57		
92	3	0.99	10.00			
96	3	0.56		9.50		
97	4	0.22		9.10		
105	4	-0.20				8.60
108	3	0.91		9.90		
109	4	-0.12		8.70		
111	0	2.78		12.10		
113	4	0.26		9.15		
114	NR		< 10			
118	3	0.82		9.80		
119	3	0.65				9.60
126	3	0.56		9.50		
131	0	9.53			20.00	
133	NR				< 20	
134	4	0.03		8.87		
138	4	-0.04				8.79
140	0	3.12	12.50			
141	1	1.76		10.90		
142	4	-0.15				8.66
145	0	16.36			28.00	
146	2	1.25			10.30	
147	4	-0.12				8.70
149	3	-0.72		8.00		
151	4	0.31				9.20
154	4	0.22		9.10		
158	2	-1.49		7.10		
180	NR				< 31.9	
190	1	-1.72		6.82		
191	3	0.72				9.68
193	4	0.48		9.40		
198	4	-0.10		8.72		
203	4	-0.46		8.30		
212	4	0.27				9.16
213	4	-0.35		8.43		
215	1	-1.57		7.00		
221	3	-0.59		8.15		
224	0	-2.31		6.13		
234	2	1.50			10.60	
235	4	0.42				9.33
236	NR				< 19	
237	NR				< 40	
241	2	-1.40		7.20		
245	4	0.13				8.99
247	0	3.89		13.40		
252	0	-2.31		6.13		
255	4	0.03		8.87		
256	1	-1.67		6.88		
257	3	1.00		10.01		
259	3	-0.72			8.00	
265	4	-0.29				8.50
273	3	0.65			9.60	
274	0	2.64		11.93		
282	0	-2.42		6.00		
284	3	-0.72		8.00		
287	4	0.00		8.84		
289	4	0.14		9.00		
292	1	1.84		11.00		

Table 14. *Statistical summary of reported data for standard reference water sample T-149 (trace constituents)--Continued*

Sb (Antimony) µg/L



3. AA: graphite furnace
4. ICP
6. ICP/MS
11na. AA: hydride $NaBH_4$

	3	4	6	11na
N =	25	7	18	1
Minimum =	9.1	20.0	18.5	16.0
Maximum =	35.0	26.1	44.0	
Median =	20.5	22.0	21.4	
F-pseudosigma =	3.7	2.0	2.1	

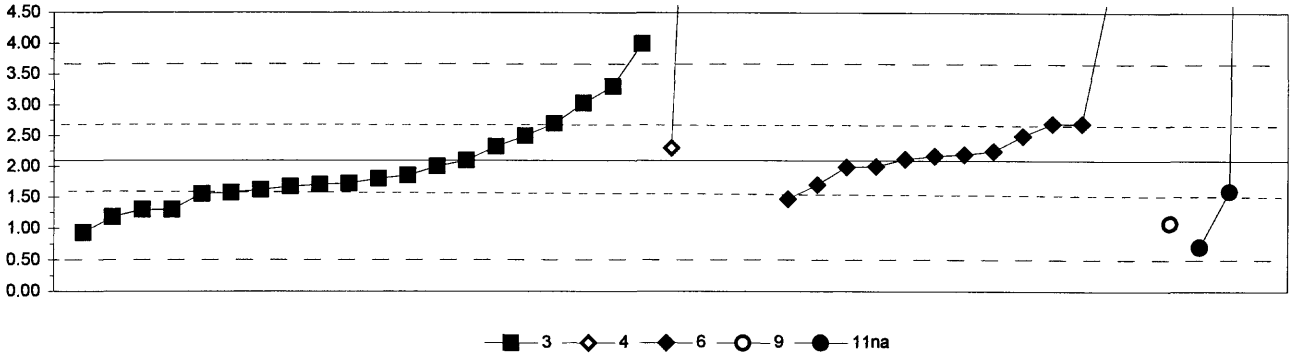
Lab	Rating	Z-value	3	4	6	11na
1	4	0.41			22.1	
3	4	-0.45		20.0		
11	4	0.37		22.0		
13	1	1.67	25.2			
16	3	-0.82			19.1	
18	2	-1.39	17.7			
23	2	-1.14	18.3			
25	NR			< 51		
30	0	9.35			44.0	
32	3	-0.78			19.2	
36	1	-1.88	16.5			
42	2	-1.02			18.6	
46	3	0.90	23.3			
48	4	0.24			21.7	
59	4	0.37			22.0	
61	4	0.37		22.0		
68	0	4.08	31.1			
69	1	-1.71	16.9			
70	1	1.67	25.2			
76	4	0.13			21.4	
81	1	-1.67	17.0			
89	3	-0.61	19.6			
96	3	-0.57	19.7			
97	3	-0.53	19.8			
105	2	-1.06			18.5	
113	4	-0.33		20.3		
119	4	0.29			21.8	
131	2	1.18		24.0		
134	3	-0.90	18.9			
138	4	0.08			21.3	
141	2	1.22	24.1			
142	3	0.94			23.4	
146	NR			< 50		
147	4	0.00			21.1	
149	2	-1.27	18.0			
151	3	0.53			22.4	
154	4	-0.24	20.5			
180	NR			< 27.8		
193	3	0.78	23.0			
198	4	-0.16	20.7			
212	3	-0.94			18.8	
215	0	-2.08	16.0			
234	4	-0.33		20.3		
235	3	0.86			23.2	
236	NR			< 100		
241	4	0.45	22.2			
245	4	0.04			21.2	
247	0	-4.90	9.1			
252	4	-0.24	20.5			
255	1	2.03		26.1		

MPV =	21.1
F-pseudosigma =	2.4
N =	51
Hu =	22.3
HI =	19.0

Lab	Rating	Z-value	3	4	6	11na
257	4	0.04	21.2			
265	4	-0.24			20.5	
282	0	-2.08				16.0
284	0	5.67	35.0			
292	4	0.37	22.0			

Table 14. *Statistical summary of reported data for standard reference water sample T-149 (trace constituents)--Continued*

Se (Selenium) µg/L



3. AA: graphite furnace
4. ICP
6. ICP/MS
9. Atomic fluorensce
11na. AA: hydride $NaBH_4$

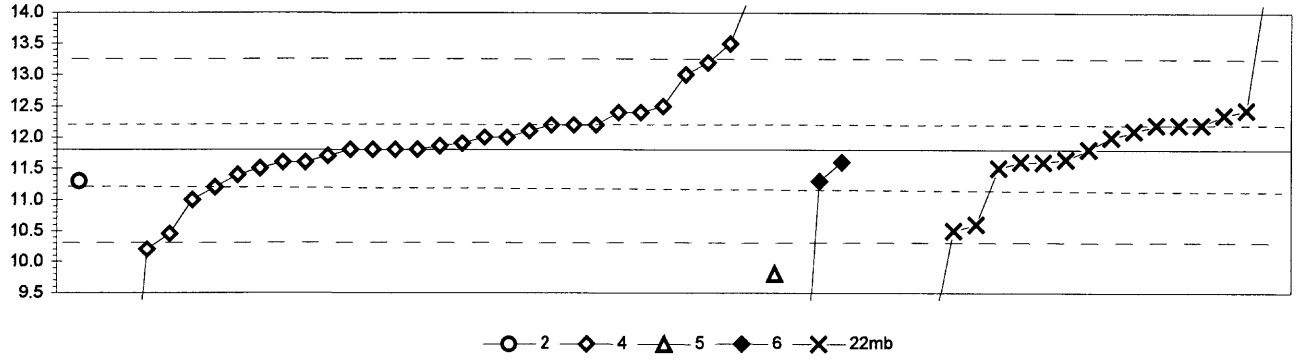
	3	4	6	9	11na
N =	20	4	13	1	3
Minimum =	0.93	2.30	1.47	1.08	0.71
Maximum =	4.00	90.00	14.00		30.00
Median =	1.76		2.20		
F-pseudosigma =	0.63		0.52		

MPV = 2.10
F-pseudosigma = 0.80
N = 41
Hu = 2.70
HI = 1.62

Lab	Rating	Z-value	3	4	6	9	11na
1	3	-1.00	1.30				
3	NR			< 10			
13	NR		< 5				
16	NR				< 5		
18	4	0.50	2.50				
25	NR			< 129			
26	3	-0.62					1.60
30	0	3.62			5.00		
32	NR				< 6		
34	3	-0.60	1.62				
36	4	-0.37	1.80				
42	3	0.75			2.70		
48	4	-0.12			2.00		
59	3	0.75			2.70		
61	NR			< 2.5			
68	NR		< 2.6				
69	NR		< 5				
70	NR		< 10				
80	NR		< 2				
81	NR			< 2			
86	1	-1.74					0.71
87	NR						< 2
89	NR						< 2
96	4	-0.50	1.70				
97	2	1.16	3.03				
105	NR				< 7		
108	0	34.85					30.00
109	3	-1.00	1.30				
111	2	-1.46	0.93				
113	4	-0.31	1.85				
118	2	1.50	3.30				
119	4	0.09			2.17		
131	0	13.61		13.00			
133	NR		< 5				
134	4	0.27	2.32				
138	4	0.02			2.12		
141	NR		< 2				
142	3	-0.79			1.47		
143	3	-0.69	1.55				
146	NR			< 10			
147	4	-0.50			1.70		
151	4	0.12			2.20		
154	3	-0.66	1.57				
180	NR			< 53.2			
193	NR		< 5				
198	NR		< 5				
212	4	0.19			2.25		
215	NR		< 5				
220	4	0.00	2.10				
221	3	-0.54	1.67				
224	0	48.59		41.00			
234	4	-0.47	1.72				
235	2	-1.27				1.08	
236	0	109.79		90.00			
241	3	0.75	2.70				
245	4	-0.14			1.99		
247	0	14.86			14.00		
252	2	-1.15	1.18				
255	NR		< 2				
256	NR						< 1
259	4	0.25		2.30			
265	4	0.50			2.50		
282	NR						< 5
284	0	2.37	4.00				
289	NR		< 5				
292	4	-0.12	2.00				

Table 14. *Statistical summary of reported data for standard reference water sample T-149 (trace constituents)--Continued*

SiO_2 (Silica) mg/L



2. AA: direct nitrous oxide
4. ICP
5. DCP
6. ICP/MS
22mb. Color: molybdate blue

	2	4	5	6	22mb
N =	1	30	1	3	19
Minimum =	11.30	5.83	9.80	5.85	5.80
Maximum =		14.40		11.60	14.76
Median =		11.83			11.64
F-pseudosigma =		0.52			1.22

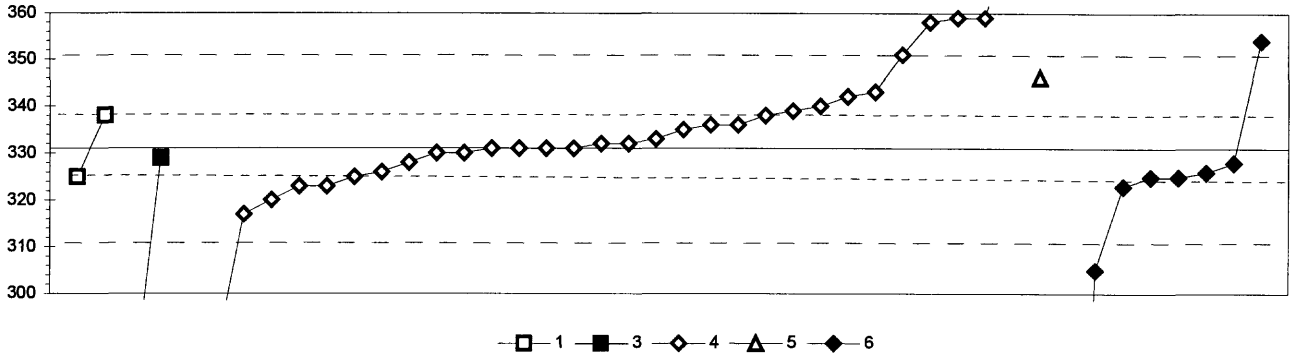
Lab	Rating	Z-value	2	4	5	6	22mb
1	4	0.00		11.8			
3	3	0.81		12.4			
4	4	0.27		12.0			
11	4	0.00		11.8			
13	3	0.54		12.2			
24	3	0.94		12.5			
25	0	3.51		14.4			
26	4	-0.13		11.7			
32	4	-0.27				11.6	
33	0	-2.70			9.8		
40	2	-1.08		11.0			
42	1	1.88		13.2			
43	4	0.13		11.9			
61	0	-8.05		5.8			
64	3	-0.54		11.4			
70	4	-0.40					11.5
81	3	0.54					12.2
83	1	-1.82		10.5			
87	0	-7.96					5.9
89	4	0.27					12.0
97	1	-1.62					10.6
104	3	0.86					12.4
105	4	0.00		11.8			
111	4	-0.22					11.6
113	3	0.54					12.2
118	0	-5.18					8.0
119	1	1.62		13.0			
121	4	-0.40		11.5			
129	4	-0.27					11.6
131	4	0.00		11.8			
134	4	0.08		11.9			
138	4	0.00					11.8
140	4	-0.27					11.6
142	0	2.29		13.5			
145	3	0.54		12.2			
147	3	0.54		12.2			
185	4	0.40					12.1
190	0	-8.09					5.8
191	3	-0.67				11.3	
203	3	0.76					12.4
204	3	0.54					12.2
212	3	0.81		12.4			
215	0	-2.16		10.2			
234	4	0.40		12.1			
236	0	-7.97		5.9			
237	4	-0.27		11.6			
241	3	-0.67	11.3				
256	1	-1.75					10.5
265	4	0.27		12.0			
273	4	-0.27		11.6			

MPV =	11.8
F-pseudosigma =	0.7
N =	54
Hu =	12.2
HI =	11.2

Lab	Rating	Z-value	2	4	5	6	22mb
274	0	3.99					14.8
282	0	-8.03				5.9	
284	0	-4.24					8.7
289	3	-0.81		11.2			

Table 14. *Statistical summary of reported data for standard reference water sample T-149 (trace constituents)--Continued*

Sr (Strontium) µg/L

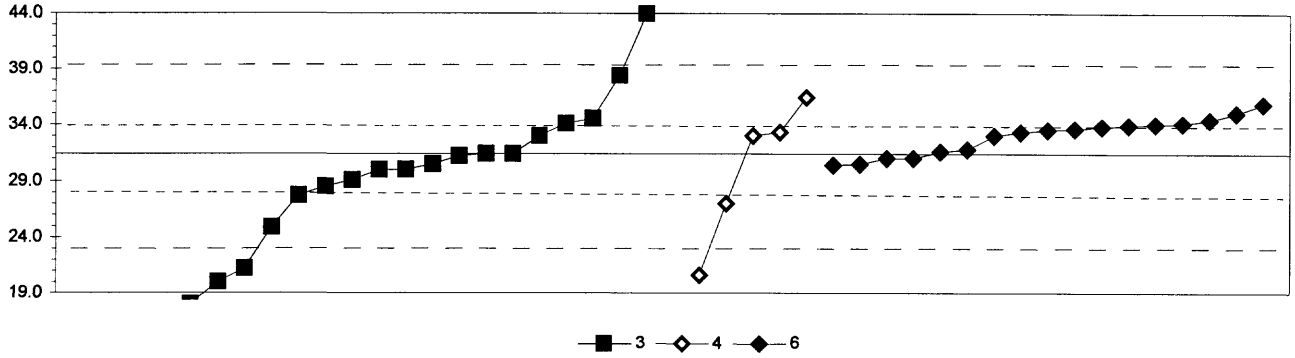


1. AA: direct air				5. DCP			
3. AA: graphite furnace				6. ICP/MS			
4. ICP							
		N =	2	2	31	1	8
		Minimum =	325	277	262	346	134
		Maximum =	338	329	378		354
		Median =			332		325
		F-pseudosigma =			9		10
Lab	Rating	Z-value	1	3	4	5	6
1	4	-0.48					323
3	1	1.70			359		
11	3	0.55			340		
16	3	-0.85			317		
18	4	-0.48			323		
23	4	-0.12		329			
24	3	0.67			342		
25	1	1.64			358		
32	2	1.39					354
33	3	0.91				346	
40	0	-4.18			262		
42	1	1.70			359		
68	4	-0.06			330		
70	4	0.42			338		
81	2	1.21			351		
86	4	0.06			332		
97	0	-3.27		277			
105	4	0.06			332		
109	4	-0.36	325				
113	4	0.00			331		
119	0	-11.94					134
121	4	0.24			335		
131	4	0.12			333		
134	4	0.00			331		
138	4	-0.18			328		
142	3	0.73			343		
145	4	0.30			336		
147	4	-0.36					325
151	4	-0.30					326
154	4	-0.36			325		
191	4	-0.18					328
212	4	0.00			331		
218	4	0.48			339		
219	4	-0.06			330		
234	4	0.00			331		
235	0	-2.67			287		
236	3	-0.67			320		
237	4	0.30			336		
247	1	-1.58					305
259	4	-0.30			326		
265	3	-0.36					325
273	0	2.85			378		
284	4	0.42	338				
289	4	-0.48			323		

MPV =	331
F-pseudosigma =	17
N =	44
Hu =	338
HI =	325

Table 14. *Statistical summary of reported data for standard reference water sample T-149 (trace constituents)--Continued*

Tl (Thallium) µg/L



3. AA: graphite furnace
4. ICP
6. ICP/MS

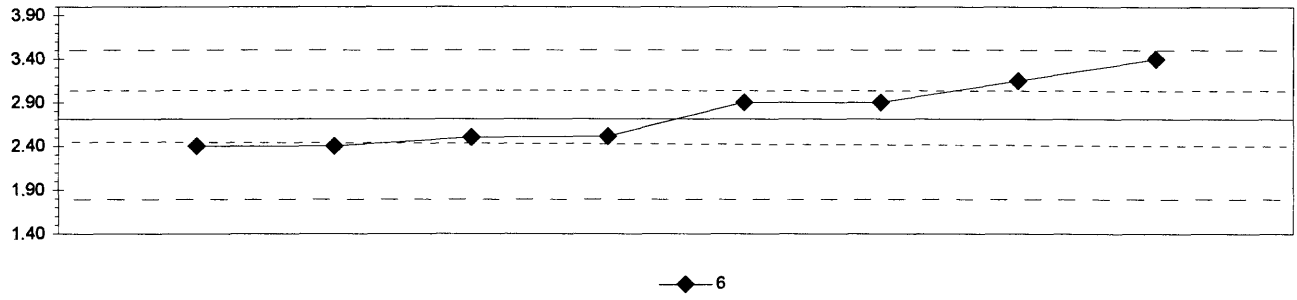
N =	23	5	17
Minimum =	5.0	20.6	30.4
Maximum =	49.5	36.4	35.8
Median =	30.0		33.5
F-pseudosigma =	8.6		1.8

MPV =	31.4
F-pseudosigma =	4.0
N =	45
Hu =	33.9
HI =	28.5

Lab	Rating	Z-value	3	4	6
1	4	-0.10			31.0
3	2	-1.10		27.0	
11	4	0.40		33.0	
13	1	-1.62	24.9		
16	4	0.10			31.8
18	4	-0.22	30.5		
23	0	3.15	44.0		
32	2	1.10			35.8
36	0	-5.22	10.5		
42	4	-0.25			30.4
48	3	0.60			33.8
59	4	0.40			33.0
61	2	1.25		36.4	
68	1	1.75	38.4		
69	4	0.00	31.4		
70	3	-0.57	29.1		
81	4	-0.35	30.0		
89	4	-0.05	31.2		
97	3	0.67	34.1		
105	4	0.05			31.6
113	3	-0.72	28.5		
119	3	0.90			35.0
134	3	0.78	34.5		
138	4	0.47			33.3
141	0	4.52	49.5		
142	3	0.65			34.0
145	0	-7.10		< 3	
146	4	0.47		33.3	
147	4	-0.10			31.0
151	3	0.67			34.1
180	NR			< 40.1	
191	3	0.52			33.5
193	0	-6.60	5.0		
198	4	0.00	31.4		
212	3	0.75			34.4
213	0	-2.55	21.2		
215	0	-3.35	18.0		
234	4	-0.35	30.0		
235	3	0.55			33.6
241	0	-5.17	10.7		
245	3	0.62			33.9
247	0	-2.85	20.0		
255	NR			< 59	
265	4	-0.22			30.5
273	0	-2.70		20.6	
282	3	-0.92	27.7		
284	0	-5.35	10.0		
292	4	0.40	33.0		

Table 14. *Statistical summary of reported data for standard reference water sample T-149 (trace constituents)--Continued*

U (Uranium) µg/L



6. ICP/MS

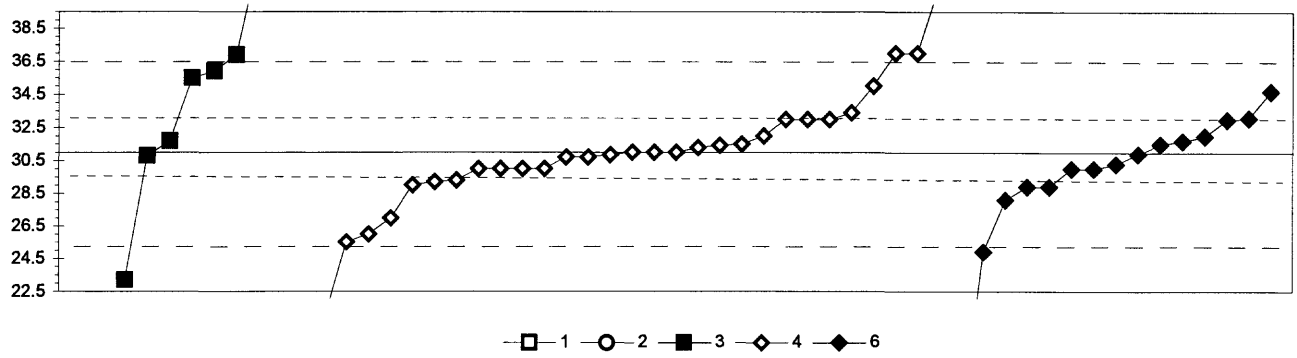
N =	8
Minimum =	2.40
Maximum =	3.40
Median =	2.71
F-pseudosigma =	0.43

Lab	Rating	Z-value	6
1	3	-0.72	2.40
16	4	0.46	2.90
30	1	1.63	3.40
32	2	1.04	3.15
119	4	0.46	2.90
142	4	-0.46	2.51
147	4	-0.48	2.50
265	3	-0.72	2.40

MPV =	2.71
F-pseudosigma =	0.43
N =	8
Hu =	3.03
HI =	2.45

Table 14. *Statistical summary of reported data for standard reference water sample T-149 (trace constituents)--Continued*

V (Vanadium) µg/L



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

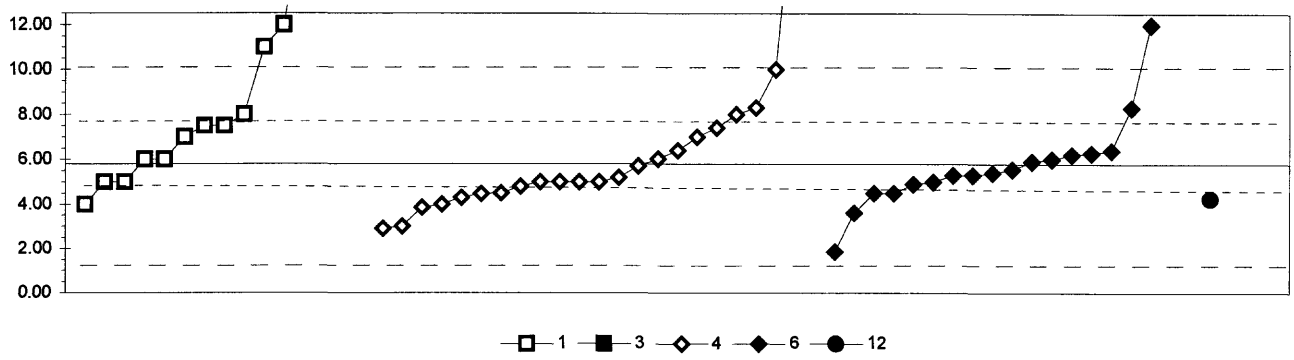
	1	2	3	4	6
N =	1	0	7	31	15
Minimum =	561.0	< 100	23.2	13.3	14.5
Maximum =			42.8	41.1	34.7
Median =			35.5	30.8	30.3
F-pseudosigma =			3.8	2.4	2.2

MPV = 31.0
F-pseudosigma = 2.8
N = 54
Hu = 33.0
HI = 29.2

Lab	Rating	Z-value	1	2	3	4	6
1	4	0.02				31.0	
3	4	0.37				32.0	
4	0	-3.89				20.0	
11	3	0.73				33.0	
13	0	-3.57				20.9	
16	3	0.73					33.0
18	4	-0.34				30.0	
23	0	2.11			36.9		
25	4	-0.34				30.0	
26	4	0.12				31.3	
30	4	0.37					32.0
32	4	0.27					31.7
40	3	-0.59				29.3	
42	0	-2.15					24.9
46	4	-0.09				30.7	
48	4	-0.34					30.0
61	3	0.87				33.4	
68	3	0.73				33.0	
70	NR					< 50	
81	3	0.73				33.0	
86	0	3.60				41.1	
89	0	4.21			42.8		
97	0	-2.75			23.2		
105	3	-0.73					28.9
111	1	1.76			35.9		
119	3	0.76					33.1
121	4	-0.34				30.0	
131	2	-1.40				27.0	
134	4	-0.04				30.8	
138	4	0.02				31.0	
141	3	-0.62				29.2	
142	4	-0.02					30.9
145	0	2.15				37.0	
146	4	0.02				31.0	
147	4	0.20					31.5
154	0	2.15				37.0	
158	4	-0.09				30.7	
180	0	-6.27				13.3	
183	1	1.62			35.5		
212	3	-0.73					28.9
219	3	-0.69				29.0	
220	4	-0.34				30.0	
224	1	-1.93				25.5	
234	4	0.20				31.5	
235	2	1.33					34.7
236	1	-1.76				26.0	
237	2	1.44				35.0	
241	4	-0.05			30.8		
245	2	-1.01					28.1
247	0	-5.84					14.5
255	4	0.17				31.4	
257	NR			< 100			
265	4	-0.34					30.0
282	4	-0.23					30.3
284	0	188.17	561.0				
289	4	0.27			31.7		

Table 14. *Statistical summary of reported data for standard reference water sample T-149 (trace constituents)--Continued*

Zn (Zinc) µg/L



1. AA: direct air			6. ICP/MS				
3. AA: graphite furnace			12. Flame emission				
4. ICP							
		N =	13	2	23	17	1
		Minimum =	4.00	15.71	2.90	1.85	4.25
		Maximum =	20.00	17.20	25.90	12.00	
		Median =	7.50		5.00	5.40	
		F-pseudosigma =	3.71		2.01	1.11	

		MPV =	5.80				
		F-pseudosigma =	2.15				
		N =	56				
		Hu =	7.75				
		HI =	4.85				

Lab	Rating	Z-value	1	3	4	6	12
1	4	-0.42				4.90	
3	3	0.56			7.00		
4	3	-0.60			4.50		
10	4	-0.37	5.00				
12	NR				< 20		
13	NR				< 10		
16	2	-1.02				3.60	
18	NR				< 100		
25	NR				< 4		
26	3	-0.91			3.85		
30	4	0.28				6.40	
32	4	0.19				6.20	
42	4	-0.37				5.00	
48	2	1.16				8.30	
59	4	0.09				6.00	
61	4	0.28			6.40		
68	3	0.74			7.40		
69	NR		< 50				
70	NR				< 20		
80	NR		< 2				
81	2	-1.30			3.00		
83	2	-1.35			2.90		
87	0	2.42	11.00				
89	NR			< 5			
92	0	2.88	12.00				
96	NR		< 10				
97	0	-2.70		< 0			
105	NR					< 5	
108	0	6.61	20.00				
113	4	-0.37			5.00		
114	NR		< 10				
118	NR		< 15				
119	4	-0.23				5.30	
121	3	-0.84			4.00		
126	4	0.09	6.00				
131	0	6.14			19.00		
133	4	0.10			6.02		
134	3	-0.62			4.47		
138	3	-0.60				4.50	
140	3	0.79	7.50				
141	NR				< 5		
142	1	-1.84				1.85	
145	2	1.02			8.00		
146	NR				< 20		
147	4	0.05				5.90	
149	4	0.09	6.00				
151	4	-0.23				5.30	
154	4	-0.37			5.00		
158	4	-0.05			5.70		
180	4	-0.37			5.00		

Lab	Rating	Z-value	1	3	4	6	12
190	3	-0.72					4.25
191	4	-0.19				5.40	
193	NR		< 50				
198	NR				< 25		
203	3	0.79	7.50				
212	4	0.22				6.28	
213	NR		< 38				
215	1	1.95			10.00		
219	4	-0.37			5.00		
220	3	-0.70			4.30		
224	4	-0.47			4.80		
234	2	1.16			8.30		
235	4	-0.11				5.56	
236	0	-2.23			< 1		
237	NR				< 10		
241	NR		< 10				
245	0	5.30		17.20			
247	0	2.88				12.00	
252	3	-0.84	4.00				
255	2	1.02	8.00				
256	NR		< 10				
257	4	-0.37	5.00				
259	4	-0.28			5.20		
265	3	-0.60				4.50	
273	0	9.35			25.90		
274	0	4.61		15.71			
282	NR					< 20	
284	0	5.21	17.00				
287	3	0.56	7.00				
292	NR		< 10				

Table 15. *Statistical summary of reported data for standard reference water sample M-142 (major constituents)*

Definition of analytical methods, abbreviations, and symbols

Analytical methods

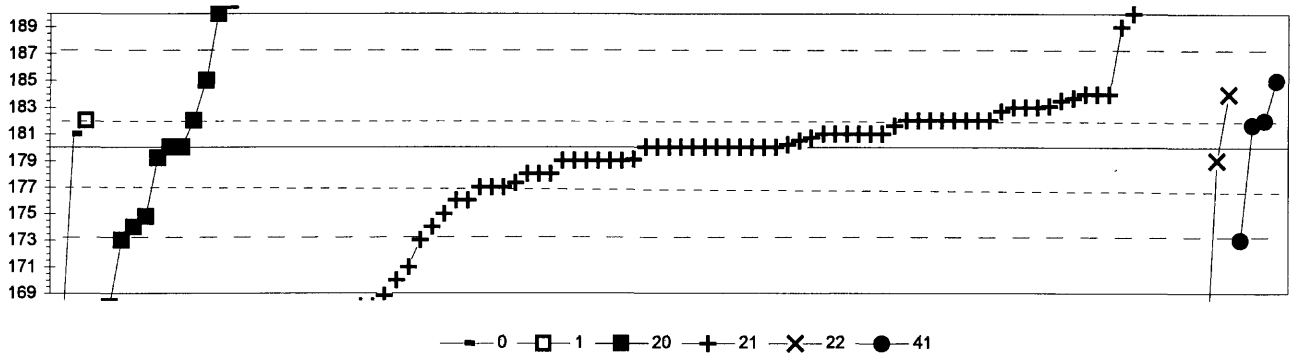
0	Other/Not reported		
1	AA: direct, air	=	atomic absorption: direct,air
2	AA: direct, N_2O	=	atomic absorption: direct,nitrous oxide
3	AA: graphite furnace	=	atomic absorption: graphite furnace
4	ICP	=	inductively coupled plasma
5	DCP	=	direct current plasma
6	ICP/MS	=	inductively coupled plasma/mass spectrometry
7	IC	=	ion chromatography
12	Flame emission	=	flame emission
20	Titrate: color	=	titration: colorimetric [color reagent specified]
21	Titrate: electro	=	titration: electrometric
22	Color:	=	colorimetric [color reagent specified]
40	Ion electrode	=	ion selective electrode
41	Electro	=	electrometric: [type meter specified]
50	Gravimetric	=	gravimetric: [precipitate specified]
51	Turbidimetric	=	turbidimetric: [precipitate specified]

Abbreviations and symbols

N =	number of samples
MPV =	most probable value
F-pseudosigma =	nonparametric statistic deviation
Hu =	upper hinge value
Hl =	lower hinge value
µg/L =	micrograms per liter
mg/L =	milligrams per liter
µS/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 M-142 (major constituents)--Continued*

Alkalinity (as $CaCO_3$) mg/L



0. Other			21. Titrate: electrometric					
1. AA: direct air			22. Colorimetric					
20. Titrate: colorimetric			41. Direct reading					
		N =	2	1	16	76	4	4
		Minimum =	165	182	161	6	159	173
		Maximum =	181		273	220	184	185
		Median =			181	180		
		F-pseudosigma =			18	4		

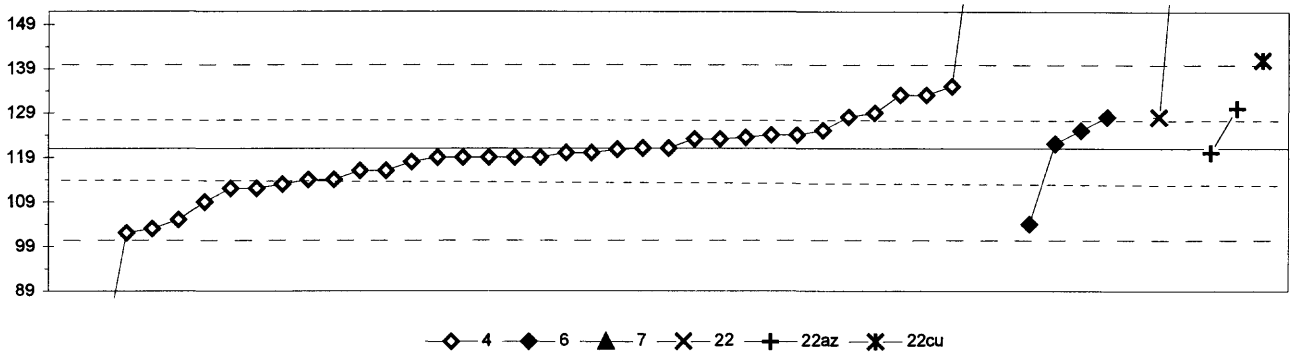
Lab	Rating	Z-value	0	1	20	21	22	41
1	4	0.22						182
3	4	0.00				180		
9	4	-0.11				179		
10	4	0.22				182		
11	0	2.78				205		
12	4	-0.11				179		
13	4	0.00				180		
16	4	0.08				181		
18	4	0.33				183		
19	3	-0.56				175		
23	4	0.11				181		
24	4	0.06				181		
25	4	0.44				184		
26	4	0.22				182		
32	4	0.33				183		
33	4	0.18				182		
36	0	4.44				220		
38	4	0.30				183		
39	2	-1.11				170		
40	2	-1.33				168		
42	1	-1.66	165					
43	4	0.00				180		
46	4	0.22				182		
48	0	-2.11					161	
50	2	1.11				190		
51	4	0.22				182		
57	4	0.00			180			
61	4	0.00				180		
68	4	0.44					184	
69	4	-0.11					179	
70	4	0.00				180		
76	3	-0.58			175			
80	4	-0.09			179			
81	4	0.22				182		
85	4	0.22				182		
87	4	0.00				180		
89	4	-0.11				179		
90	1	-1.89				163		
92	4	0.11				181		
96	4	0.39				184		
97	4	0.11				181		
105	4	0.02				180		
107	4	-0.33				177		
109	2	1.30				192		
111	4	-0.11				179		
113	4	0.44				184		
114	4	0.44				184		
118	2	1.11			190			
119	4	-0.22				178		
127	4	0.00				180		
129	4	0.22			182			
133	4	0.11	181					
134	4	0.19						182
138	2	1.00				189		
141	4	0.11				181		

MPV =	180
F-pseudosigma =	9
N =	103
Hu =	182
HI =	177

Lab	Rating	Z-value	0	1	20	21	22	41
142	4	0.11				181		
145	0	-2.33					159	
146	4	0.33				183		
149	0	8.89			260			
151	4	0.00			180			
154	4	-0.44				176		
158	4	-0.33				177		
180	3	0.56						185
185	4	-0.30				177		
190	4	-0.11				179		
193	4	0.41				184		
196	0	-2.11			161			
203	2	-1.24				169		
212	4	-0.22				178		
213	0	-16.31				33		
215	4	0.22				182		
217	4	0.11				181		
218	0	-2.27				160		
220	3	-0.78				173		
224	4	-0.22				178		
234	3	-0.78			173			
236	4	0.34				183		
244	4	0.22				182		
247	0	-19.34				6		
252	3	-0.78						173
255	3	-0.67				174		
256	3	-0.67			174			
257	4	0.00				180		
258	2	1.22			191			
259	4	0.00				180		
261	0	10.28			273			
262	4	-0.10				179		
263	2	-1.00				171		
264	4	0.00				180		
265	0	3.56			212			
266	4	-0.33				177		
267	4	0.00				180		
269	4	-0.11				179		
270	0	2.08				199		
272	0	6.75			241			
273	0	-3.56				148		
274	0	-3.24				151		
275	2	-1.33			168			
276	3	0.56			185			
282	4	-0.44				176		
284	4	0.22		182				
287	2	-1.33				168		
292	4	0.00				180		

Table 15. *Statistical summary of reported data for standard reference water sample M-142 (major constituents)--Continued*

B (Boron) µg/L



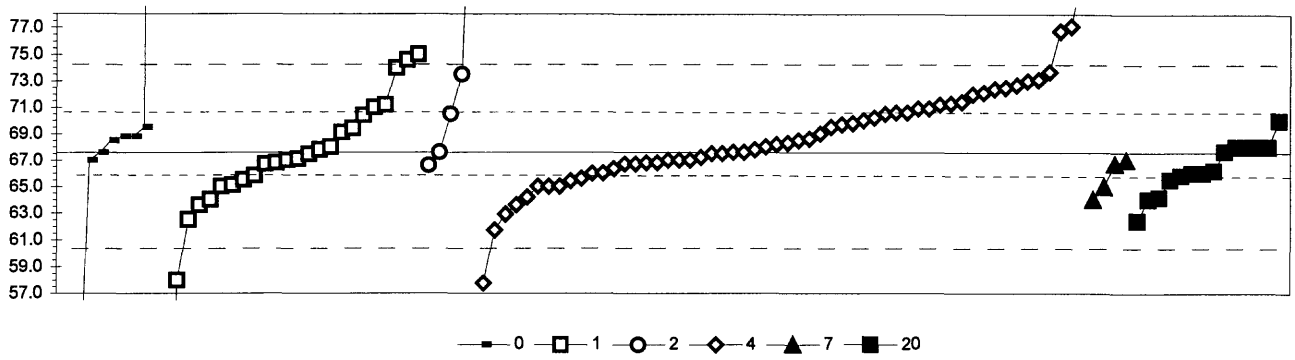
4. ICP				22. Colorimetric				
6. ICP/MS				22az. Color: azomethine				
7. Ion chromatography				22cu. Color: curcumin				
		N =	36	4	0	2	2	1
		Minimum =	52	104	< 100	128	120	141
		Maximum =	249	128		198	130	
		Median =	119					
		F-pseudosigma =	7					

MPV =	121
F-pseudosigma =	10
N =	45
Hu =	128
HI =	114

Lab	Rating	Z-value	4	6	7	22	22az	22cu
1	3	-0.65	114					
3	4	0.32	124					
10	3	0.70				128		
11	3	-0.74	113					
16	0	12.36	249					
18	4	-0.17	119					
24	4	-0.17	119					
25	0	-9.80	< 23					
26	2	-1.13	109					
32	1	-1.61		104				
39	4	-0.17	119					
40	1	-1.51	105					
42	1	-1.80	102					
46	4	0.03	121					
48	0	-4.89	70					
50	3	0.89					130	
57	NR				< 100			
61	3	0.80	129					
68	0	5.71	180					
70	4	0.41	125					
85	3	-0.84	112					
86	3	-0.65	114					
119	1	-1.71	103					
121	4	0.32	124					
127	4	-0.17	119					
129	0	7.45				198		
131	4	0.22	123					
134	4	0.00	121					
138	4	0.03	121					
141	2	1.18	133					
142	4	-0.45	116					
145	4	0.22	123					
147	3	0.70		128				
154	4	-0.45	116					
180	3	0.70	128					
212	2	1.18	133					
215	4	-0.07	120					
217	4	-0.26	118					
219	4	-0.07					120	
234	4	-0.17	119					
236	3	-0.84	112					
255	4	0.26	123					
256	0	-11.10				< 10		
259	2	1.38	135					
265	4	0.12		122				
266	1	1.95						141
273	0	-6.62	52					
282	4	0.41		125				

Table 15. *Statistical summary of reported data for standard reference water sample M-142 (major constituents)--Continued*

Ca (Calcium) mg/L



0. Other
1. AA: direct air
2. AA: direct nitrous oxide
4. ICP
7. Ion chromatography
20. Titrate: colorimetric

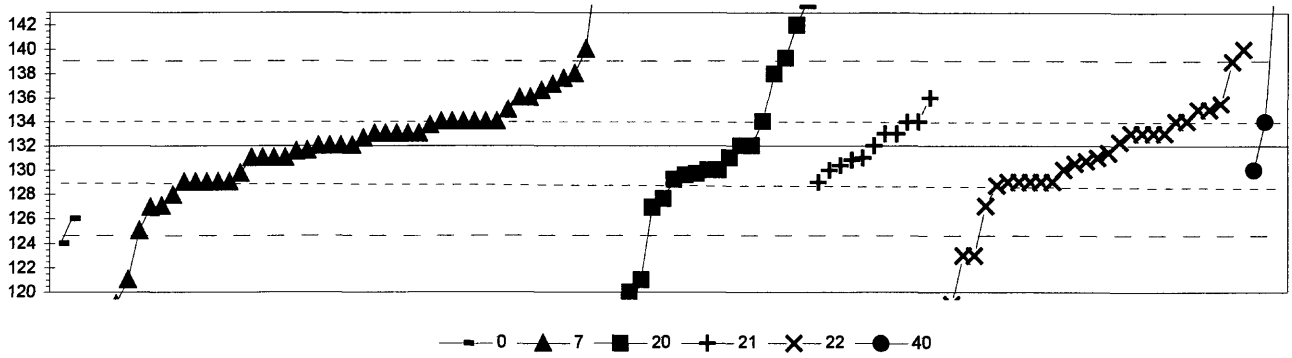
	0	1	2	4	7	20
N =	9	24	5	56	4	14
Minimum =	29.4	38.2	66.6	57.7	64.0	62.4
Maximum =	175.0	75.0	93.7	81.0	67.0	70.0
Median =	68.5	67.1		68.2		66.1
F-pseudosigma =	1.3	3.6		3.2		1.9

MPV = 67.6
F-pseudosigma = 3.4
N = 112
Hu = 70.5
HI = 65.9

Lab	Rating	Z-value	0	1	2	4	7	20
1	3	-0.65				65.4		
3	2	1.09				71.3		
10	4	-0.27		66.7				
11	1	1.80				73.7		
12	4	0.41				69.0		
13	4	-0.18				67.0		
16	3	0.71				70.0		
18	4	-0.24				66.8		
19	4	-0.24				66.8		
23	0	2.07		74.6				
24	4	-0.03				67.5		
25	1	1.51				72.7		
26	4	0.21				68.3		
30	1	1.74			73.5			
32	4	0.35	68.8					
33	4	0.00	67.6					
36	3	0.86			70.5			
38	4	-0.30			66.6			
39	3	-0.77				65.0		
40	1	-1.74				61.7		
42	0	2.70				76.7		
43	3	0.65				69.8		
45	4	0.35	68.8					
46	3	-0.59				65.6		
48	1	1.60				73.0		
50	4	-0.18					67.0	
51	2	-1.18		63.6				
57	3	-0.77					65.0	
59	0	3.96				81.0		
61	0	2.81				77.1		
68	4	-0.18				67.0		
69	3	-0.53		65.8				
70	3	0.89				70.6		
80	0	2.19		75.0				
81	3	0.77				70.2		
83	2	-1.39				62.9		
84	4	0.44		69.1				
85	3	0.53		69.4				
86	3	0.86				70.5		
87	4	0.00			67.6			
89	3	-0.77		65.0				
90	3	-0.53						65.8
92	0	-2.84		58.0				
93	2	-1.01				64.2		
97	4	-0.15		67.1				
102	2	1.30				72.0		
105	4	-0.27				66.7		
108	0	31.74	175.0					
109	4	-0.24		66.8				
111	0	7.71			93.7			
113	3	0.98				70.9		
119	4	0.00				67.6		
121	4	-0.47				66.0		
127	4	-0.27				66.7		
129	1	1.89		74.0				
131	2	1.12				71.4		
133	2	1.45				72.5		
134	3	-0.77				65.0		
138	4	0.12				68.0		
140	4	0.12		68.0				
141	2	1.06				71.2		
142	4	-0.48				66.0		
145	1	1.63				73.1		
146	4	0.27				68.5		
147	4	-0.18				67.0		
149	2	-1.06		64.0				
151	2	1.06		71.2				
154	2	-1.18				63.6		
180	4	-0.03				67.5		
183	0	-8.69		38.2				
185	3	-0.62		65.5				
190	2	-1.06					64.0	
191	4	-0.18	67.0					
196	3	0.83		70.4				
209	3	0.89				70.6		
212	3	0.62				69.7		
215	4	0.00				67.6		
217	4	0.06				67.8		
218	2	1.42				72.4		
219	3	-0.77				65.0		
220	4	-0.18		67.0				
221	3	-0.74		65.1				
224	0	-2.91				57.7		
234	3	0.98				70.9		
235	4	-0.12				67.2		
236	4	-0.37				66.4		
241	3	1.00		71.0				
247	4	-0.27					66.7	
255	4	0.17				68.2		
256	3	-0.62						65.5
257	3	0.71						70.0
258	4	0.02						67.7
259	4	-0.47						66.0
261	4	-0.41						66.2
262	4	0.27	68.5					
263	2	-1.06						64.0
264	4	0.12						68.0
265	4	0.30				68.6		
266	4	0.12						68.0
267	4	0.12						68.0
268	1	-1.51		62.5				
269	4	-0.47						66.0
270	0	-6.41	45.9					
272	2	-1.01						64.2
273	2	1.33				72.1		
274	0	-11.29	29.4					
275	4	0.12						68.0
276	1	-1.54						62.4
282	3	0.56	69.5					
284	4	0.06		67.8				
287	4	-0.05		67.4				
292	3	0.56				69.5		

Table 15. *Statistical summary of reported data for standard reference water sample M-142 (major constituents)--Continued*

Cl (Chloride) mg/L



0. Other			21. Titrate: electrometric				
7. Ion chromatography			22. Colorimetric				
20. Titrate: colorimetric			40. Ion selective electrode				
		N =	2	49	17	11	28	3
		Minimum =	124	28	120	129	109	130
		Maximum =	126	191	144	136	140	148
		Median =		132	130	132	131	
		F-pseudosigma =		4	3	1	3	

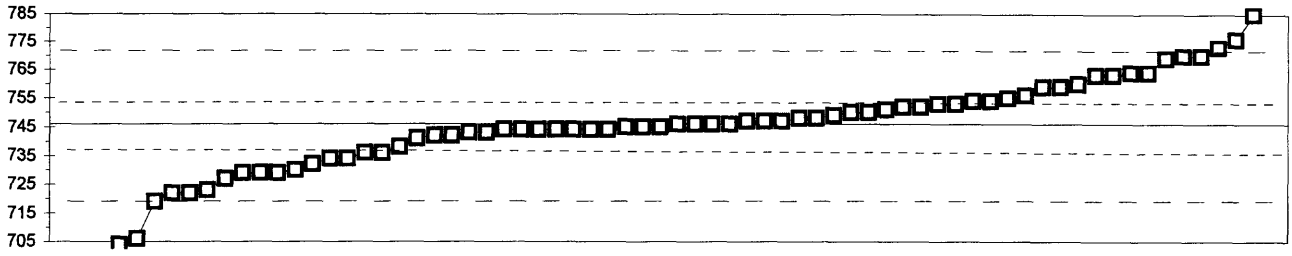
			MPV =	132
			F-pseudosigma =	7
			N =	110
			Hu =	134
			HI =	129

Lab	Rating	Z-value	0	7	20	21	22	40
1	4	0.49		135				
3	4	-0.42					129	
9	4	0.33		134				
10	4	0.33					134	
11	4	-0.27					130	
12	4	0.18					133	
13	4	-0.42		129				
16	4	0.33				134		
18	2	1.24					140	
19	4	-0.27			130			
24	4	-0.17					131	
25	4	-0.42		129				
26	4	0.18		133				
30	3	-0.59		128				
32	4	0.33		134				
33	1	-1.64		121				
36	4	0.03			132			
39	1	-1.79			120			
40	4	-0.42					129	
42	0	-15.73		28				
43	4	0.33						134
46	4	0.18					133	
48	1	-1.34					123	
50	4	0.18					133	
51	3	0.80		137				
57	4	-0.27			130			
61	2	-1.18	124					
64	4	0.18		133				
68	4	0.33					134	
69	4	-0.42					129	
70	4	-0.42		129				
80	4	0.03			132			
81	4	-0.27				130		
84	0	8.98		191				
85	4	0.33		134				
86	0	2.46						148
87	0	-3.46					109	
89	4	0.33		134				
92	4	0.33			134			
93	0	-15.59		29				
96	4	0.08					132	
97	4	-0.42					129	
102	1	-1.94					119	
105	4	-0.12		131				
107	4	-0.42				129		
109	4	-0.21				130		
111	0	2.31		147				
113	4	0.33		134				
114	4	-0.27						130
119	4	-0.42		129				
127	4	0.33		134				
129	4	-0.12		131				
131	2	-1.03		125				
134	4	0.18		133				
138	4	0.03		132				

Lab	Rating	Z-value	0	7	20	21	22	40
140	4	-0.06					131	
141	3	-0.73					127	
142	3	0.88		138				
143	3	-0.88	126					
145	3	0.73		137				
146	2	1.09					139	
147	4	-0.12		131				
149	3	0.64		136				
151	4	0.03		132				
154	2	-1.34					123	
158	4	-0.47					129	
180	4	0.18		133				
183	4	-0.20					131	
185	4	-0.03		132				
190	3	-0.73		127				
191	4	0.03		132				
198	3	-0.74		127				
203	4	0.03				132		
212	2	1.24		140				
213	1	-1.64			121			
215	1	1.85			144			
217	4	-0.12		131				
219	0	2.76		150				
220	3	0.56					136	
221	4	-0.39			129			
224	4	-0.32		130				
234	4	0.29		134				
236	4	-0.42		129				
241	4	0.03		132				
247	1	-1.94		119				
252	4	0.49					135	
255	4	0.18					133	
256	4	-0.34			130			
257	3	0.64				136		
258	2	1.14			139			
259	4	0.18				133		
261	4	-0.32			130			
262	4	-0.15				131		
263	4	-0.42					129	
264	4	0.18				133		
265	2	0.94		138				
266	4	0.33				134		
267	4	-0.12				131		
268	4	0.12		133				
269	4	0.49					135	
272	3	-0.63			128			
273	4	-0.04		132				
274	3	-0.74			127			
275	1	1.55			142			
276	4	-0.12			131			
282	4	0.18		133				
284	4	-0.12					131	
287	1	0.94			138			
290	1	-2.00		119				
292	3	0.64		136				

Table 15. *Statistical summary of reported data for standard reference water sample M-142 (major constituents)--Continued*

DSRD (Dissolved solids) mg/L



50. Gravimetric

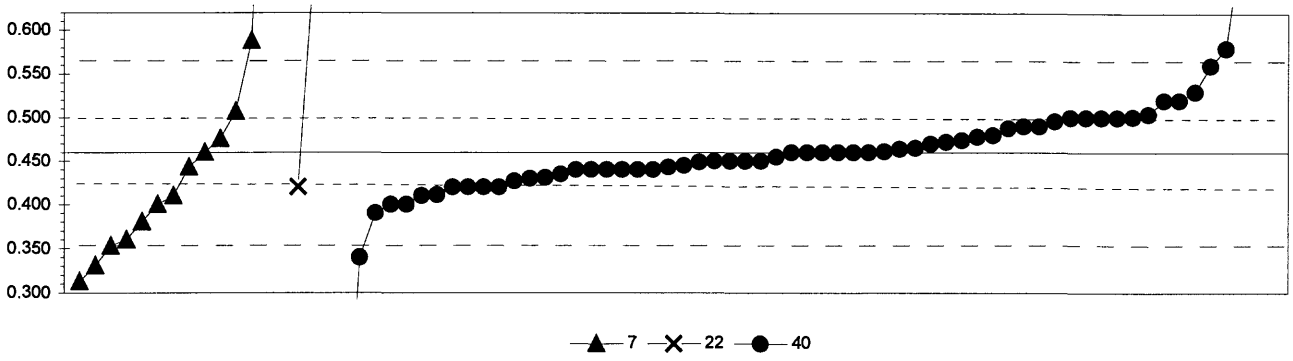
N =	70
Minimum =	420
Maximum =	820
Median =	746
F-pseudosigma =	13

MPV =	746
F-pseudosigma =	37
N =	70
Hu =	754
HI =	736

Lab	Rating	Z-value	50
1	4	0.07	748
3	0	-8.73	420
9	4	-0.04	744
10	4	0.36	759
11	2	-1.22	700
12	4	0.25	755
13	3	-0.60	723
16	4	-0.07	743
18	2	-1.06	706
19	4	0.04	747
23	4	-0.04	744
25	4	-0.25	736
26	4	-0.04	744
32	4	0.17	752
36	3	0.63	769
38	4	0.23	754
39	4	-0.01	745
40	4	-0.04	744
43	4	0.01	746
46	4	0.39	760
48	3	0.66	770
50	4	-0.04	744
51	4	-0.20	738
57	3	0.66	770
61	0	-7.20	477
69	4	-0.04	744
70	4	0.12	750
76	4	0.01	746
80	4	0.01	746
81	4	-0.01	745
85	4	-0.09	742
87	2	-1.11	704
89	4	-0.44	729
90	3	-0.63	722
92	4	0.50	764
96	4	0.07	748
97	4	0.47	763
105	2	0.82	776
109	4	0.15	751
113	4	-0.31	734
114	4	0.47	763
118	4	0.12	750
119	4	-0.44	729
127	4	0.04	747
129	3	-0.71	719
134	4	0.36	759
138	4	-0.25	736
140	3	-0.63	722
141	4	-0.31	734
142	3	0.74	773
143	4	-0.01	745
146	4	0.04	747
149	4	-0.36	732
151	4	0.28	756
158	4	0.01	746
190	4	-0.09	742
212	4	-0.12	741
215	4	-0.07	743
217	4	0.50	764
224	4	-0.50	727
234	4	-0.04	744
236	4	0.20	753
247	4	-0.44	729
255	4	0.20	753
257	4	0.23	754
259	4	0.09	749
266	4	0.17	752
269	2	1.06	785
273	1	2.00	820
282	4	-0.42	730

Table 15. *Statistical summary of reported data for standard reference water sample M-142 (major constituents)--Continued*

F (Fluoride) mg/L



7. Ion chromatography
22. Colorimetric
40. Ion selective electrode

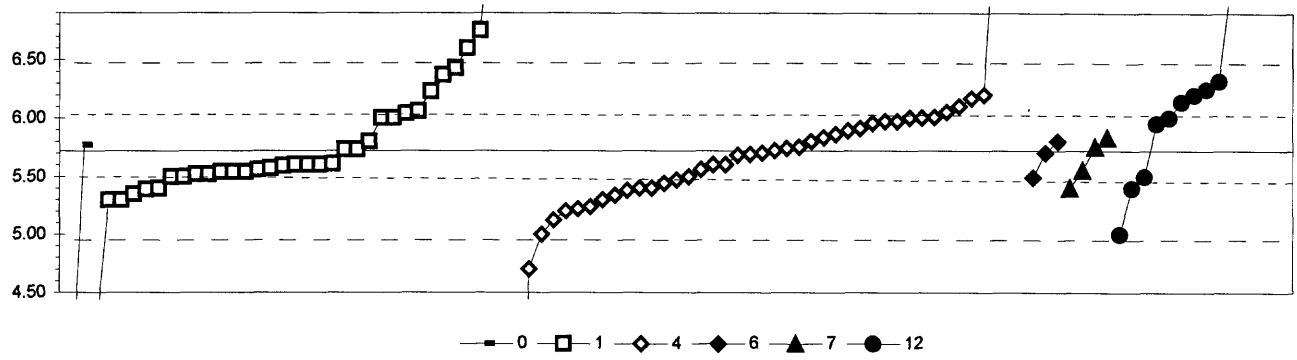
N =	14	3	61
Minimum =	0.313	0.420	0.068
Maximum =	79.92	0.770	4.400
Median =	0.427		0.460
F-pseudosigma =	0.109		0.037

MPV = 0.460
F-pseudosigma = 0.054
N = 78
Hu = 0.500
HI = 0.427

Lab	Rating	Z-value	7	22	40
1	3	0.74			0.500
3	4	0.18			0.470
9	4	-0.37			0.440
10	4	0.00			0.460
11	4	-0.37			0.440
13	0	-2.38	0.331		
16	4	-0.37			0.440
18	3	0.55			0.490
24	4	0.00			0.460
25	3	-0.74			0.420
32	2	1.29			0.530
36	3	-0.61			0.427
39	0	2.22			0.580
40	3	-0.54			0.431
45	4	-0.20			0.449
46	4	0.00			0.460
48	0	-7.24			0.068
50	4	0.00			0.460
57	3	-0.74			0.420
61	3	-0.74			0.420
69	4	-0.18			0.450
70	4	-0.18			0.450
76	3	0.81			0.504
84	3	-0.92	0.410		
85	4	-0.37			0.440
89	3	0.55			0.490
93	0	4.62			0.710
96	4	0.33			0.478
97	3	-0.91			0.411
105	2	-1.48	0.380		
107	4	-0.31			0.443
109	4	-0.18			0.450
113	3	0.76			0.501
114	4	0.02			0.461
119	3	-0.55			0.430
127	3	0.87	0.507		
129	0	-2.72	0.313		
131	4	-0.37			0.440
134	4	-0.37			0.440
138	4	-0.46			0.435
140	4	0.22			0.472
141	4	0.09			0.465
142	1	1.85			0.560
145	2	-1.11	0.400		
146	4	0.07			0.464
149	4	0.00	0.460		
151	4	-0.09			0.455
154	3	-0.74		0.420	
180	0	-6.65	< 0.1		
183	0	72.81			4.400
190	3	0.52			0.488
196	4	-0.31	0.443		
212	2	-1.29			0.390
215	3	-0.74			0.420
217	2	-1.11			0.400
224	0	2.37	0.588		
234	1	-1.98	0.353		
236	0	9.42	0.970		
241	3	0.67			0.496
247	4	0.30	0.476		
252	0	3.88		0.670	
255	2	1.11			0.520
256	2	1.11			0.520
257	4	-0.18			0.450
258	0	6.65			0.820
259	4	0.37			0.480
262	4	-0.28			0.445
263	4	0.00			0.460
265	3	-0.92			0.410
266	3	0.74			0.500
269	3	0.74			0.500
272	4	0.26			0.474
273	0	1468	79.920		
274	0	5.73		0.770	
275	0	-2.22			0.340
282	2	-1.11			0.400
284	4	0.00			0.460
287	3	0.74			0.500
292	1	-1.85	0.360		

Table 15. *Statistical summary of reported data for standard reference water sample M-142 (major constituents)--Continued*

K (Potassium) mg/L



0. Other			6. ICP/MS					
1. AA: direct air			7. Ion chromatography					
4. ICP			12. Flame emission					
		N =	2	34	42	3	4	14
		Minimum =	3.61	4.16	0.46	5.49	5.40	5.00
		Maximum =	5.77	10.40	12.90	5.80	5.83	8.99
		Median =		5.60	5.71			6.23
		F-pseudosigma =		0.39	0.42			0.94

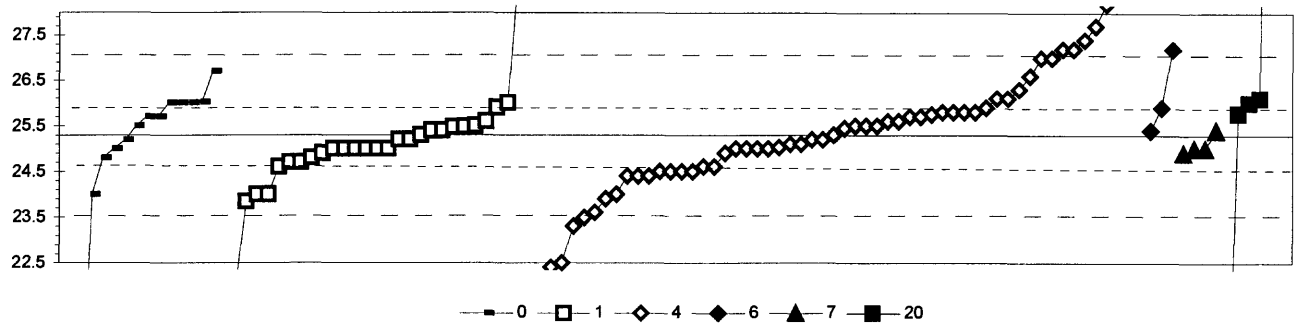
Lab	Rating	Z-value	0	1	4	6	7	12
1	4	-0.31		5.60				
3	3	0.84			6.05			
10	4	-0.33		5.59				
11	2	1.15			6.17			
12	3	0.72			6.00			
13	4	-0.08			5.69			
16	2	-1.07		5.30				
18	4	-0.31			5.60			
19	3	-0.82			5.40			
23	4	-0.46		5.54				
24	2	-1.28			5.22			
25	4	0.05			5.74			
26	4	0.08					5.75	
32	4	-0.05				5.70		
33	4	0.13	5.77					
36	4	-0.46		5.54				
38	3	0.87		6.06				
40	3	-0.97			5.34			
42	3	0.60			5.95			
43	3	0.72			6.00			
45	0	-5.40	3.61					
46	4	0.00			5.72			
48	2	-1.07			5.30			
50	3	-0.82					5.40	
51	1	1.53						6.32
57	0	5.32						7.80
61	0	18.36			12.90			
64	1	1.82		6.43				
68	4	0.20			5.80			
69	2	1.07						6.14
70	4	-0.10			5.68			
80	3	0.72		6.00				
81	3	0.97			6.10			
83	4	0.03		5.73				
85	3	0.82		6.04				
86	4	0.08			5.75			
87	3	-0.84		5.39				
89	3	-0.95		5.35				
92	2	-1.07		5.30				
93	3	-0.56						5.50
97	4	-0.38		5.57				
102	1	-1.84			5.00			
105	3	-0.72			5.44			
107	4	-0.41		5.56				
108	3	-0.82						5.40
109	1	1.66		6.37				
111	3	-0.56		5.50				
113	0	5.78			7.98			
119	2	-1.33			5.20			
127	3	-0.87			5.38			

MPV =	5.72
F-pseudosigma =	0.39
N =	99
Hu =	6.02
HI =	5.50

Lab	Rating	Z-value	0	1	4	6	7	12
129	0	5.58		7.90				
131	2	1.23			6.20			
134	4	-0.28		5.61				
138	3	-0.82			5.40			
140	3	-0.51		5.52				
141	3	0.64			5.97			
142	4	-0.41			5.56			
145	4	0.43			5.89			
146	0	7.72			8.74			
149	3	-0.82		5.40				
151	3	-0.51		5.52				
154	3	0.64			5.97			
180	3	-0.64			5.47			
185	4	-0.46		5.54				
190	4	0.28					5.83	
191	4	0.20				5.80		
196	4	0.03		5.73				
212	4	0.49			5.91			
215	0	-2.61			4.70			
217	1	-1.53			5.12			
218	3	0.73			6.01			
219	4	-0.05			5.70			
220	2	1.30		6.23				
221	4	-0.31		5.60				
224	0	-13.45			0.46			
234	4	0.36			5.86			
236	2	-1.23			5.24			
241	3	-0.56		5.50				
247	4	-0.43					5.55	
255	4	0.29			5.83			
256	0	8.36						8.99
257	0	3.78						7.20
258	2	1.36						6.25
259	4	-0.31		5.60				
261	0	-3.99		4.16				
262	3	0.59						5.95
264	3	0.72		6.00				
265	3	-0.56			5.50			
266	2	1.23						6.20
268	0	2.25		6.60				
270	0	3.84						7.22
272	1	-1.84						5.00
273	4	-0.31			5.60			
274	0	3.86						7.23
275	3	0.72						6.00
282	3	-0.59				5.49		
284	0	2.63		6.75				
287	0	11.97		10.40				
292	4	0.20		5.80				

Table 15. *Statistical summary of reported data for standard reference water sample M-142 (major constituents)--Continued*

Mg (Magnesium) mg/L



0. Other
1. AA: direct air
4. ICP
6. ICP/MS
7. Ion chromatography
20. Titrate: colorimetric

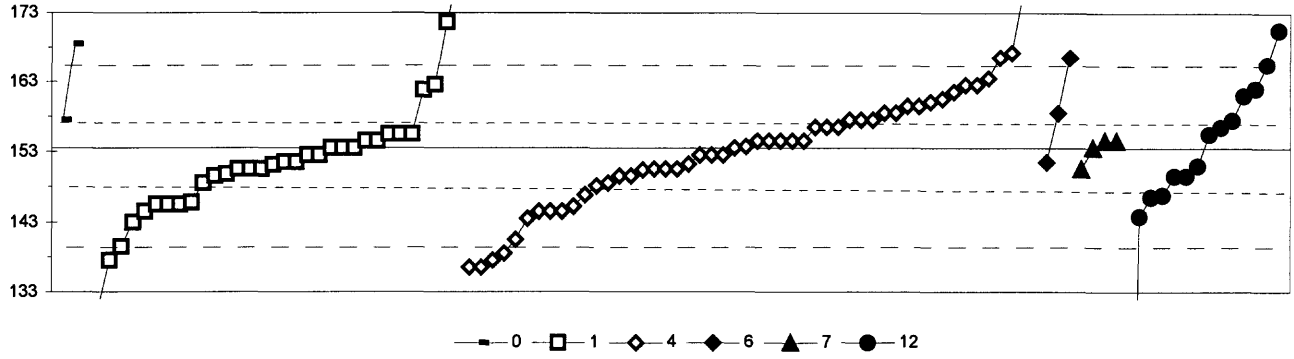
	0	1	4	6	7	20
N =	14	29	56	3	4	5
Minimum =	7.8	20.6	20.9	25.4	24.9	17.5
Maximum =	26.7	30.0	30.0	27.2	25.4	46.9
Median =	25.6	25.0	25.4			
F-pseudosigma =	0.9	0.6	1.1			

MPV = 25.3
F-pseudosigma = 1.3
N = 111
Hu = 25.9
HI = 24.7

Lab	Rating	Z-value	0	1	4	6	7	20
1	3	-0.71			24.4			
3	3	-0.55			24.6			
10	4	0.16		25.5				
11	2	1.34			27.0			
12	0	2.29			28.2			
13	4	-0.16			25.1			
16	4	0.16			25.5			
18	3	-0.63			24.5			
19	4	-0.16			25.1			
24	4	-0.24			25.0			
25	3	0.63			26.1			
26	4	0.40			25.8			
30	4	0.32	25.7					
32	2	1.50				27.2		
33	4	-0.40	24.8					
36	4	0.47		25.9				
38	4	0.00		25.3				
39	3	-0.71			24.4			
40	0	-3.48			20.9			
42	0	3.51			29.7			
43	3	0.63			26.1			
45	4	-0.08	25.2					
46	3	-0.71			24.4			
48	2	-1.11			23.9			
50	4	-0.24					25.0	
51	0	-2.77		21.8				
57	4	-0.24					25.0	
59	0	3.72			30.0			
61	0	3.08			29.2			
68	4	-0.24			25.0			
69	4	-0.08		25.2				
70	4	0.40			25.8			
76	4	0.13		25.5				
80	4	-0.24		25.0				
81	3	0.79			26.3			
83	0	-2.29			22.4			
84	4	0.24		25.6				
85	4	0.08		25.4				
86	4	-0.08			25.2			
87	3	-0.55		24.6				
89	4	-0.24		25.0				
92	2	-1.03		24.0				
93	4	-0.21			25.0			
97	4	-0.24		25.0				
102	2	1.34			27.0			
105	1	-1.58			23.3			
107	0	-3.72		20.6				
109	4	-0.32		24.9				
111	2	1.11	26.7					
113	2	1.50			27.2			
119	4	-0.24			25.0			
121	4	0.32			25.7			
127	4	-0.08			25.2			
129	0	2.92		29.0				
131	2	-1.34			23.6			
133	2	1.03			26.6			
134	2	-1.03			24.0			
138	4	-0.32			24.9			
140	4	-0.24		25.0				
141	4	0.24			25.6			
142	4	0.32			25.7			
145	2	1.50			27.2			
146	4	0.40			25.8			
147	4	0.00			25.3			
149	2	-1.03		24.0				
151	4	-0.24		25.0				
154	3	-0.63			24.5			
180	3	-0.55			24.6			
183	0	-5.85	17.9					
185	4	-0.40		24.8				
190	4	-0.32					24.9	
191	4	0.08				25.4		
196	2	-1.15		23.8				
209	1	1.66			27.4			
212	4	0.47			25.9			
215	3	-0.63			24.5			
217	4	0.16			25.5			
218	1	1.90			27.7			
219	4	-0.24			25.0			
220	4	-0.47		24.7				
221	4	-0.08		25.2				
224	2	-1.43			23.5			
234	4	0.24			25.6			
235	3	-0.63			24.5			
236	4	0.36			25.8			
241	4	-0.24		25.0				
247	4	0.08					25.4	
252	0	3.72		30.0				
255	4	0.12			25.5			
256	4	0.37						25.8
257	3	0.55						26.0
258	3	0.57	26.0					
259	4	0.32	25.7					
261	3	0.63						26.1
262	3	0.55	26.0					
263	2	-1.03	24.0					
264	3	0.55		26.0				
265	4	0.16			25.5			
266	4	-0.24	25.0					
267	3	0.55	26.0					
268	4	0.08		25.4				
269	3	0.55	26.0					
272	0	17.04						46.9
273	0	-2.21			22.5			
274	0	-13.82	7.8					
275	0	-6.17						17.5
276	4	0.16	25.5					
282	4	0.47				25.9		
284	4	-0.47		24.7				
287	4	0.14		25.5				
292	4	0.40			25.8			

Table 15. *Statistical summary of reported data for standard reference water sample M-142 (major constituents)--Continued*

Na (Sodium) mg/L



0. Other
1. AA: direct air
4. ICP
6. ICP/MS
7. Ion chromatography
12. Flame emission

	0	1	4	6	7	12
N =	2	33	50	3	4	14
Minimum =	157	0	136	151	150	62
Maximum =	157	178	183	166	154	170
Median =		151	154			153
F-pseudosigma =		7	7			11

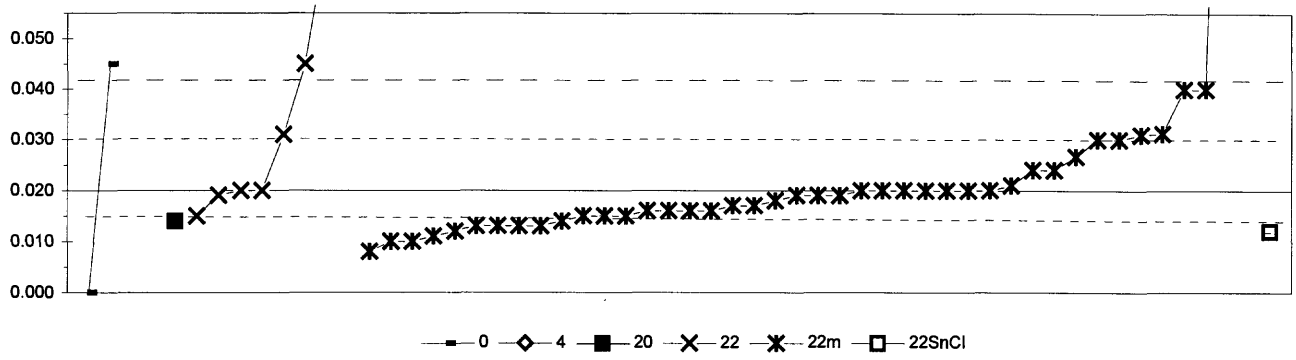
MPV = 153
F-pseudosigma = 7
N = 106
Hu = 157
HI = 148

Lab	Rating	Z-value	0	1	4	6	7	12
1	4	-0.39			150			
3	3	0.82			158			
10	4	0.07		153				
11	2	-1.27			144			
12	3	-0.52			149			
13	2	-1.27			144			
16	4	0.22			154			
18	4	-0.07			152			
19	4	0.22			154			
23	3	-0.52		149				
24	4	0.07			153			
25	2	1.27			161			
26	3	0.67			157			
32	1	2.02				166		
33	3	0.67	157					
36	2	1.42		162				
38	2	-1.50		143				
39	3	-0.52			149			
40	2	-1.27			144			
42	0	2.13			167			
43	3	0.82			158			
45	0	2.32	168					
46	3	-0.67			148			
48	1	-1.87			140			
50	4	0.22					154	
51	4	-0.30						151
57	4	-0.37					150	
59	0	4.57			183			
61	0	-2.47			136			
64	3	-0.67		148				
68	4	-0.37			150			
69	3	-0.97						146
70	3	0.52			156			
76	4	-0.48		149				
80	4	-0.37		150				
81	1	1.57			163			
83	0	-2.32			137			
84	4	0.37						155
85	4	0.37		155				
86	3	0.97			159			
87	2	-1.12		145				
89	1	-2.02		139				
92	0	-3.37		130				
93	0	-13.56						62
97	4	0.22		154				
102	0	-2.47			136			
105	4	-0.27			151			
109	4	-0.28		151				
111	2	-1.12		145				
113	4	0.22			154			
118	2	-1.12		145				
119	4	0.22			154			
121	3	0.52			156			
126	4	0.37		155				
127	0	-2.17			138			

Lab	Rating	Z-value	0	1	4	6	7	12
129	0	-2.32		137				
131	2	-1.42			143			
134	4	-0.07		152				
138	4	0.22			154			
140	4	0.22		154				
141	3	0.97			159			
142	2	1.42			162			
145	2	1.06			160			
146	3	0.67			157			
147	4	-0.37			150			
149	4	-0.22		151				
151	4	-0.07		152				
154	4	-0.07			152			
180	4	-0.37			150			
185	2	1.35						162
190	4	0.22					154	
191	4	-0.22				151		
196	2	1.32		161				
212	2	1.12			160			
215	3	-0.93			146			
217	3	0.52			156			
218	0	3.48			176			
219	3	0.67			157			
220	4	0.07		153				
221	4	0.07		153				
224	2	-1.17			145			
234	2	1.42			162			
236	3	-0.74			148			
241	4	-0.37		150				
247	4	0.07					153	
252	4	-0.37		150				
255	4	0.10			153			
256	2	-1.38						143
257	3	-0.52						149
258	3	0.52						156
259	4	-0.22		151				
261	0	-22.86		0				
262	3	-0.52						149
264	4	0.37		155				
265	4	-0.07			152			
266	3	0.67						157
268	0	3.85		178				
270	3	-0.93						146
272	0	2.62						170
273	1	2.02			166			
274	2	1.20						160
275	1	1.87						165
282	3	0.82				158		
284	0	2.79		171				
287	2	-1.27		144				
292	2	-1.08		145				

Table 15. *Statistical summary of reported data for standard reference water sample M-142 (major constituents)--Continued*

total P as P (total Phosphorus as phosphorus) mg/L



0. Other			22. Colorimetric					
4. ICP			22m. Color:phosphomolybdate					
20. Titrate: colorimetric			22SnCl. Color: stanous chloride					
		N =	2	2	1	8	42	1
		Minimum =	0.00	0.09	0.01	0.02	0.01	0.01
		Maximum =	0.00	0.13		0.20	1.35	
		Median =				0.03	0.02	
		F-pseudosigma =				0.03	0.01	

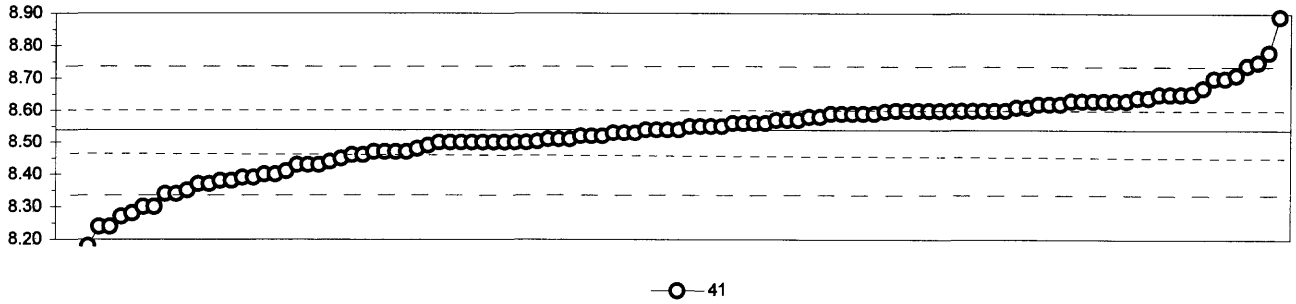
Lab	Rating	Z-value	0	4	20	22	22m	22SnCl
1	3	-0.85					0.01	
3	4	0.04				0.02		
12	NR						< 0.02	
13	NR						<0.05	
16	0	2.29				0.05		
18	4	-0.31					0.02	
22	4	-0.31					0.02	
25	NR			< 0.121				
36	NR				< 0.025			
38	4	0.13					0.02	
39	4	0.40					0.02	
57	4	0.04					0.02	
61	0	2.29	0.05					
64	4	-0.04					0.02	
68	2	1.03				0.03		
70	NR						< 0.1	
81	3	-0.67					0.01	
83	4	-0.04				0.02		
85	4	-0.04					0.02	
87	4	-0.40					0.02	
89	4	0.04					0.02	
92	4	0.04					0.02	
102	3	-0.58					0.01	
104	4	-0.13					0.02	
105	4	0.04				0.02		
107	4	-0.31					0.02	
108	1	1.84					0.04	
111	4	0.40					0.02	
113	4	-0.31					0.02	
114	4	0.04					0.02	
118	3	0.94					0.03	
119	4	0.04					0.02	
127	3	0.65					0.03	
129	1	1.84					0.04	
131	0	6.34		0.09				
133	4	-0.49			0.01			
134	4	-0.40					0.02	
138	4	-0.22					0.02	
140	0	4.54				0.07		
141	NR						< 0.05	
142	NR						< 0.018	
143	3	-0.58					0.01	
145	4	-0.40					0.02	
146	2	1.03					0.03	
154	4	-0.40				0.02		
158	2	1.05					0.03	
180	NR				< 0.025			
203	2	-1.03					0.01	
204	4	-0.49					0.01	
212	NR						< 0.05	

MPV =	0.02
F-pseudosigma =	0.01
N =	56
Hu =	0.03
HI =	0.02

Lab	Rating	Z-value	0	4	20	22	22m	22SnCl
213	3	0.94					0.03	
215	3	-0.85					0.01	
224	4	-0.22					0.02	
234	4	0.04					0.02	
236	NR			< 0.006				
241	4	-0.04					0.02	
252	3	-0.76					0.01	
257	0	12.64					0.16	
259	3	-0.67						0.01
261	0	16.23				0.20		
264	3	-0.58					0.01	
273	0	9.94		0.13				
274	0	119.66					1.35	
275	NR	-1.75	0.00					
282	NR						< 0.1	
284	NR					< 0.1		
287	NR						< 0.1	
290	3	-0.58					0.01	
292	4	0.04					0.02	

Table 15. *Statistical summary of reported data for standard reference water sample M-142 (major constituents)--Continued*

pH



41. Electrometric

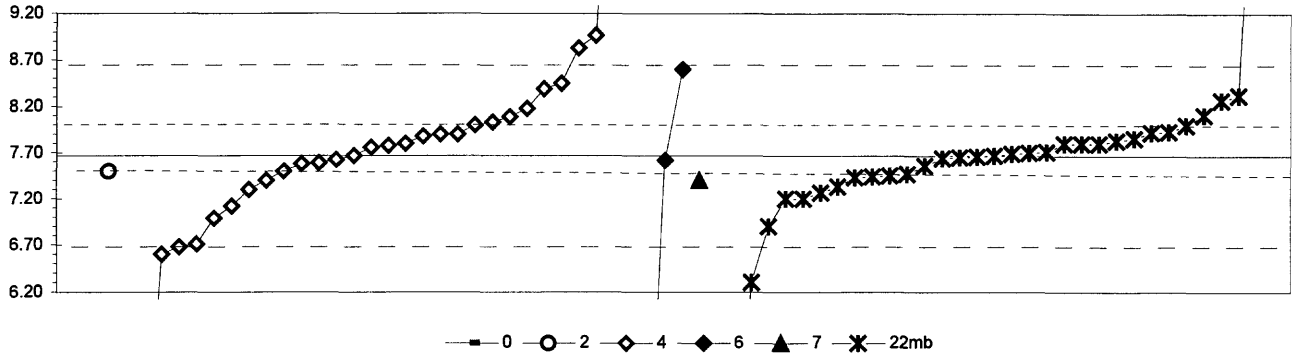
N =	112
Minimum =	7.74
Maximum =	8.89
Median =	8.54
F-pseudosigma =	0.10

MPV =	8.54
F-pseudosigma =	0.43
N =	113
Hu =	8.60
HI =	8.47

Lab	Rating	Z-value	41
1	4	-0.05	8.52
3	4	-0.05	8.52
10	4	0.30	8.67
11	4	-0.19	8.46
12	4	0.14	8.60
13	4	0.07	8.57
16	4	-0.09	8.50
18	4	-0.40	8.37
19	4	-0.09	8.50
24	4	-0.21	8.45
25	4	0.19	8.62
26	4	-0.02	8.53
30	4	0.49	8.75
32	4	0.14	8.60
33	4	0.07	8.57
36	4	-0.07	8.51
38	4	-0.09	8.50
39	4	0.14	8.60
40	4	0.12	8.59
43	4	-0.19	8.46
46	4	0.26	8.65
48	4	-0.33	8.40
50	4	0.00	8.54
51	4	0.23	8.64
57	1	-1.87	7.74
61	4	0.00	8.54
64	4	0.21	8.63
68	3	0.56	8.78
69	4	0.14	8.60
70	4	0.07	8.57
76	4	0.26	8.65
80	4	-0.26	8.43
81	4	0.21	8.63
84	4	-0.44	8.35
85	4	0.14	8.60
86	4	-0.16	8.47
87	3	-0.84	8.18
89	4	0.19	8.62
90	4	-0.26	8.43
92	4	-0.37	8.38
93	4	0.21	8.63
96	4	0.12	8.59
97	4	0.16	8.61
105	4	-0.14	8.48
107	4	-0.02	8.53
109	4	0.21	8.63
111	4	-0.07	8.51
113	4	-0.09	8.50
114	4	-0.23	8.44
118	4	-0.33	8.40
119	4	0.37	8.70
127	4	0.05	8.56
129	4	-0.40	8.37
131	4	0.05	8.56
133	4	-0.26	8.43
134	4	0.13	8.60
138	4	-0.02	8.53
140	4	0.00	8.54
141	4	0.26	8.65
142	4	-0.12	8.49
143	4	0.26	8.65
146	4	0.00	8.54
149	4	0.14	8.60
151	4	0.16	8.61
154	4	0.02	8.55
158	4	0.02	8.55
160	4	0.14	8.60
185	4	0.05	8.56
190	4	-0.09	8.50
196	4	0.37	8.70
203	4	0.05	8.56
204	4	0.47	8.74
209	4	-0.35	8.39
212	4	0.14	8.60
213	4	-0.05	8.52
215	4	-0.09	8.50
217	4	0.14	8.60
218	4	0.21	8.63
221	3	0.82	8.89
224	4	-0.16	8.47
234	4	0.12	8.59
236	4	0.09	8.58
241	4	-0.35	8.39
244	4	0.21	8.63
247	4	0.12	8.59
252	4	-0.09	8.50
255	4	0.09	8.58
256	3	-0.63	8.27
257	3	-0.61	8.28
258	4	0.02	8.55
259	4	0.02	8.55
261	4	-0.30	8.41
262	4	-0.16	8.47
263	3	-0.56	8.30
264	4	0.19	8.62
265	4	0.23	8.64
266	3	-0.56	8.30
267	4	0.14	8.60
268	3	-0.70	8.24
269	4	-0.07	8.51
270	4	0.14	8.60
272	4	-0.16	8.47
273	4	-0.09	8.50
274	4	0.12	8.59
275	4	-0.37	8.38
276	2	-1.03	8.10
282	4	-0.09	8.50
284	3	-0.70	8.24
287	4	-0.47	8.34
290	4	-0.09	8.50
291	4	-0.47	8.34
292	4	0.40	8.71

Table 15. *Statistical summary of reported data for standard reference water sample M-142 (major constituents)--Continued*

SiO_2 (Silica) mg/L



0. Other				6. ICP/MS				
2. AA: direct nitrous oxide				7. Ion chromatography				
4. ICP				22mb. Color: molybdate blue				
		N =	2	1	30	3	1	33
		Minimum =	5.88	7.50	3.86	3.81	7.40	3.70
		Maximum =	223.80		23.30	8.60		11.97
		Median =			7.77			7.67
		F-pseudosigma =			0.59			0.19

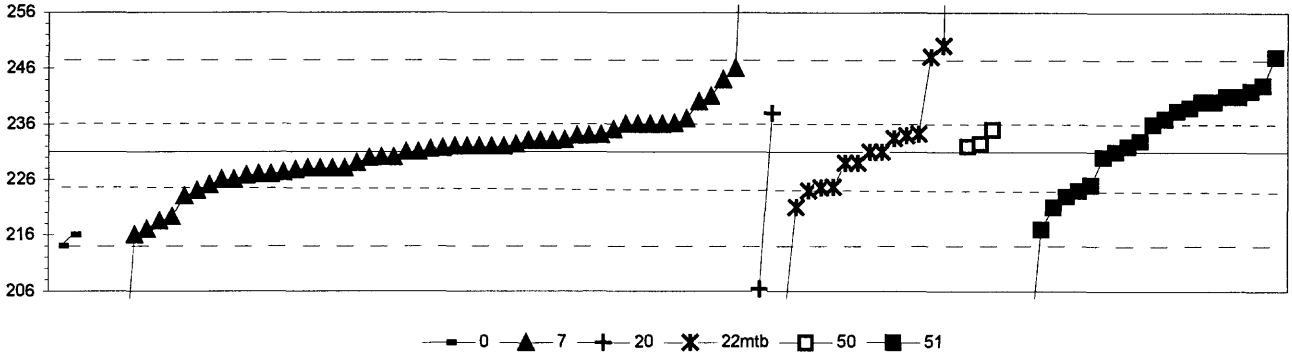
Lab	Rating	Z-value	0	2	4	6	7	22mb
1	4	-0.46						7.44
3	3	0.85			8.09			
10	4	-0.06						7.64
11	3	-0.74			7.30			
13	0	2.62			8.97			
18	4	-0.48						7.43
24	1	1.57			8.45			
25	0	8.72			12.00			
26	4	0.22			7.78			
32	1	1.87				8.60		
33	0	-3.60	5.88					
38	4	-0.04						7.65
39	4	0.00			7.67			
40	0	-2.15			6.60			
42	0	2.34			8.83			
43	4	0.46			7.90			
46	4	-0.44						7.45
50	4	0.00						7.67
57	3	-0.54					7.40	
61	0	-7.67			3.86			
64	4	-0.16			7.59			
68	3	-0.81						7.27
70	3	0.52						7.93
81	4	-0.22						7.56
83	1	-1.99			6.68			
87	0	-7.65						3.87
89	4	0.26						7.80
97	4	0.32						7.83
102	3	-0.68						7.33
104	4	0.50						7.92
105	4	-0.18			7.58			
107	4	-0.40						7.47
111	4	-0.02						7.66
113	2	1.21						8.27
118	0	8.66						11.97
119	3	0.66			8.00			
121	4	0.26			7.80			
127	2	-1.37			6.99			
129	4	0.26						7.80
131	4	0.42			7.88			
134	4	-0.09			7.62			
138	4	0.08						7.71
140	3	0.66						8.00
142	2	1.45			8.39			
145	4	0.18			7.76			
147	4	0.46			7.90			
149	3	-0.95						7.20
151	2	1.31						8.32
183	0	435.16	223.80					
185	0	-2.76						6.30

MPV = 7.67
F-pseudosigma = 0.50
N = 70
Hu = 8.00
Hl = 7.33

Lab	Rating	Z-value	0	2	4	6	7	22mb
190	0	-7.99						3.70
191	4	-0.10				7.62		
203	3	0.89						8.11
212	2	1.03			8.18			
215	1	-1.93			6.71			
217	0	31.47			23.30			
234	3	0.72			8.03			
236	0	-7.43			3.98			
241	4	-0.34		7.50				
252	4	0.26						7.80
255	4	0.04						7.69
256	1	-1.55						6.90
259	3	-0.54			7.40			
264	3	-0.95						7.20
265	4	-0.34			7.50			
268	4	0.06						7.70
273	2	-1.11			7.12			
274	0	8.05						11.67
282	0	-7.77				3.81		
284	4	0.38						7.86

Table 15. *Statistical summary of reported data for standard reference water sample M-142 (major constituents)--Continued*

SO_4 (Sulfate) mg/L



0. Other				22mtb. Color: methyl thymol blue				
7. Ion chromatography				50. Gravimetric				
20. Titrate: colorimetric				51. Turbidimetric				
		N =	2	55	2	15	3	24
		Minimum =	214	2	206	200	232	174
		Maximum =	214	299	238	342	235	2600
		Median =		231		231		233
		F-pseudosigma =		5		0		13

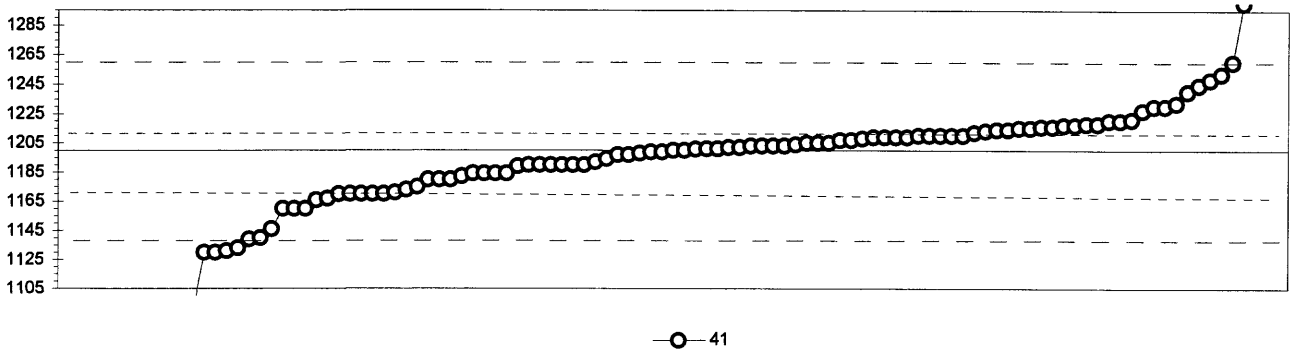
Lab	Rating	Z-value	0	7	20	22mtb	50	51
1	4	0.06		232				
3	2	-1.23		217				
9	4	-0.28		228				
10	4	-0.02						231
11	4	0.41		236				
12	2	1.45				248		
13	4	-0.28		228				
16	4	0.26				234		
18	4	-0.02				231		
19	4	-0.19				229		
23	3	-0.54						225
24	4	0.19				234		
25	4	-0.28		228				
26	4	0.15		233				
30	4	-0.31		228				
32	4	-0.02		231				
33	2	-1.32		216				
36	4	0.15						233
39	4	0.41		236				
42	0	-11.11		103				
43	4	0.06					232	
45	3	-0.89						221
46	4	0.32		235				
48	4	0.50						237
50	4	0.24				234		
51	4	0.25		234				
57	4	-0.11						230
61	0	-4.95						174
64	4	0.06		232				
69	4	-0.02				231		
70	4	-0.45		226				
80	3	0.58			238			
81	4	-0.19				229		
83	2	-1.49	214					
84	0	5.86		299				
85	4	-0.11		230				
86	4	0.41		236				
87	1	1.62				250		
89	4	0.41		236				
92	4	0.06						232
93	0	-16.23		44				
96	4	0.41						236
97	3	-0.89				221		
102	0	9.58				342		
105	2	-1.03		219				
109	4	0.11					233	
111	4	-0.37		227				
113	3	-0.63		224				
114	3	0.67						239
119	4	0.06		232				
127	4	-0.45		226				
129	4	0.15		233				
131	0	-3.74		188				
134	4	0.06		232				
138	4	0.50		237				

MPV =	231
F-pseudosigma =	12
N =	101
Hu =	236
HI =	225

Lab	Rating	Z-value	0	7	20	22mtb	50	51
140	3	0.84						241
141	3	0.84						241
142	4	0.43		236				
145	4	-0.28		228				
146	2	-1.32	216					
147	4	-0.19		229				
149	4	0.24		234				
151	4	0.24		234				
154	0	-2.70				200		
158	3	-0.63				224		
180	4	-0.11		230				
190	3	-0.54		225				
191	4	-0.02		231				
196	2	-1.10		219				
203	3	-0.58				225		
212	2	1.10		244				
215	2	1.45						248
217	3	-0.71		223				
219	3	0.76		240				
220	3	-0.57				225		
221	4	0.32					235	
224	4	-0.12		230				
234	4	0.09		232				
236	4	0.04		232				
241	4	0.15		233				
247	0	-19.83		2				
252	3	0.76						240
256	0	-2.15			206			
257	4	0.06		232				
258	3	0.62						238
259	4	-0.37		227				
261	0	204.91						2600
262	2	-1.23						217
263	3	-0.63						224
264	3	0.76						240
265	2	1.28		246				
266	3	0.93						242
268	4	0.02		232				
273	4	-0.39		227				
274	0	-3.29						193
275	2	1.02						243
282	3	0.84		241				
284	0	-3.22						194
287	3	-0.71						223
290	4	0.17		233				
292	4	-0.34		227				

Table 15. *Statistical summary of reported data for standard reference water sample M-142 (major constituents)--Continued*

Sp Cond (Specific Conductance) µS/cm



41. Electrometric

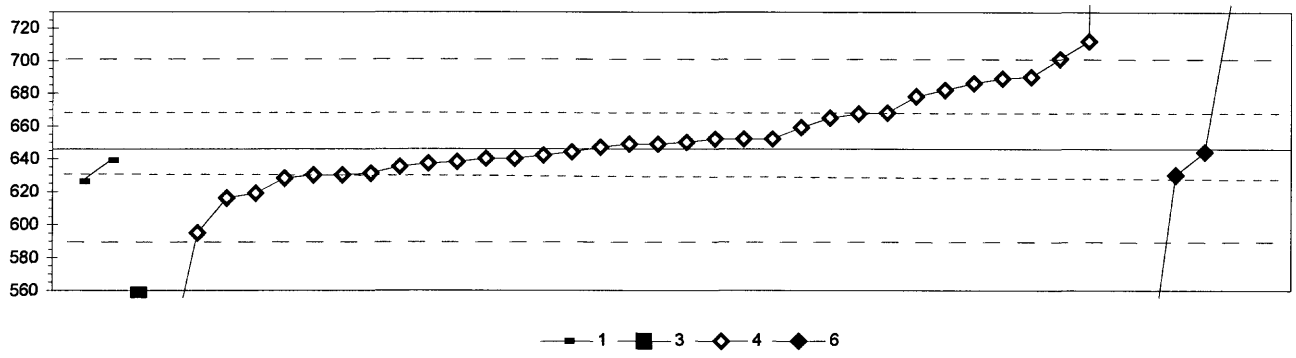
N =	109
Minimum =	520
Maximum =	7380
Median =	1200
F-pseudosigma =	31

MPV =	1200
F-pseudosigma =	60
N =	109
Hu =	1212
HI =	1170

Lab	Rating	Z-value	41
1	4	0.07	1204
3	4	-0.17	1190
9	4	0.17	1210
10	4	0.45	1227
11	4	-0.17	1190
13	4	0.23	1214
16	4	-0.42	1175
18	3	-0.57	1166
19	4	-0.10	1194
23	3	0.87	1252
24	4	0.00	1200
25	4	-0.02	1199
26	4	0.23	1214
32	3	-0.67	1160
33	0	-9.63	622
36	4	-0.33	1180
38	3	0.74	1244
39	1	-1.83	1090
40	4	-0.17	1190
42	3	-0.48	1171
43	4	0.03	1202
46	4	-0.17	1190
48	4	0.28	1217
50	4	0.17	1210
51	4	-0.45	1173
57	1	-1.83	1090
61	4	0.30	1218
64	4	0.12	1207
68	3	0.80	1248
70	4	0.00	1200
76	4	0.05	1203
80	4	0.03	1202
81	4	0.33	1220
84	4	-0.27	1184
85	4	-0.17	1190
86	4	0.50	1230
87	0	-11.33	520
89	4	0.17	1210
90	4	-0.18	1189
92	4	0.01	1201
93	4	0.08	1205
96	4	0.27	1216
97	4	0.22	1213
102	4	0.13	1208
105	4	0.08	1205
107	4	-0.27	1184
109	3	-0.55	1167
111	3	-0.67	1160
113	4	0.05	1203
114	4	-0.05	1197
118	0	-7.92	725
119	4	0.05	1203
127	4	-0.33	1180
129	2	-1.12	1133
131	4	-0.17	1190
133	0	-3.33	1000
134	4	0.05	1203
138	4	-0.50	1170
140	4	-0.33	1180
141	4	0.20	1212
142	4	0.02	1201
145	3	-1.00	1140
146	1	-1.83	1090
149	4	0.08	1205
151	4	0.27	1216
154	3	0.53	1232
180	3	0.67	1240
185	4	-0.05	1197
190	4	0.02	1201
193	4	-0.50	1170
196	0	103.00	7380
203	4	-0.02	1199
204	4	-0.27	1184
212	4	-0.50	1170
215	4	-0.50	1170
217	3	-0.67	1160
218	0	-8.47	692
219	2	-1.17	1130
224	4	0.33	1220
234	4	0.17	1210
236	2	-1.15	1131
241	0	-2.50	1050
244	4	-0.03	1198
247	0	-5.48	871
252	2	-1.17	1130
255	4	-0.50	1170
256	1	2.02	1321
257	4	0.15	1209
258	4	-0.30	1182
259	4	0.25	1215
261	3	-1.02	1139
262	4	0.30	1218
263	4	-0.13	1192
264	4	-0.27	1184
266	4	0.17	1210
267	4	0.15	1209
268	1	1.67	1300
269	4	0.15	1209
270	0	4.67	1480
272	4	0.28	1217
273	4	0.35	1221
274	0	-3.85	969
275	3	1.00	1260
276	4	0.50	1230
282	1	-1.83	1090
284	4	0.12	1207
287	4	0.25	1215
290	3	-0.90	1146
292	4	0.15	1209

Table 15. *Statistical summary of reported data for standard reference water sample M-142 (major constituents)--Continued*

Sr (Strontium) µg/L



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

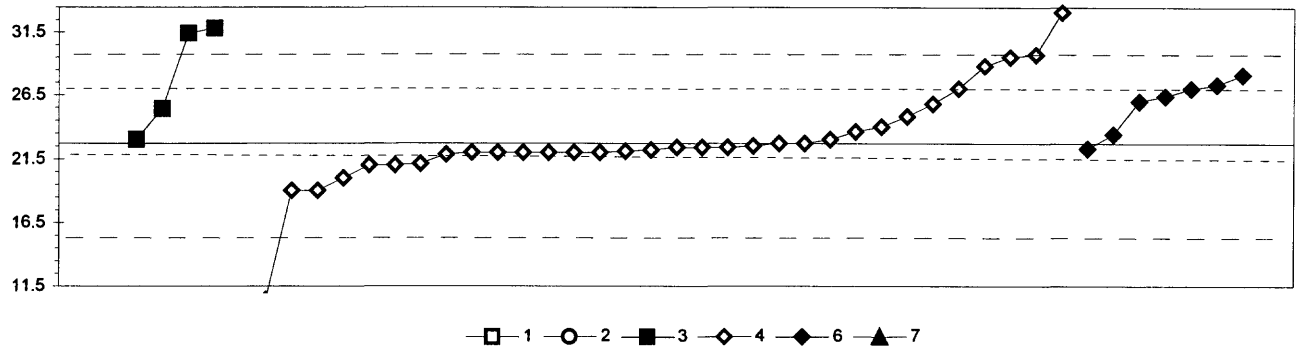
N =	2	1	34	4
Minimum =	626	557	513	496
Maximum =	639		1680	745
Median =			649	
F-pseudosigma =			24	

MPV = 646
F-pseudosigma = 32
N = 42
Hu = 668
HI = 630

Lab	Rating	Z-value	1	3	4	6
1	4	0.14			650	
3	2	1.25			686	
11	4	0.05			647	
16	3	-0.91			616	
18	4	-0.48			630	
24	3	0.60			665	
25	2	1.35			689	
32	0	3.08				745
39	3	-0.82			619	
40	0	-4.10			513	
42	3	0.70			668	
68	4	-0.17			640	
70	4	0.42			659	
81	3	1.01			678	
85	2	1.38			690	
86	4	-0.11			642	
97	0	-2.74		557		
102	0	32.05			1680	
105	4	-0.45			631	
113	4	-0.48			630	
119	0	-4.63				496
121	4	0.20			652	
127	4	-0.23			638	
131	4	0.20			652	
134	4	-0.33			635	
138	4	-0.05			644	
142	3	0.68			668	
145	2	1.13			682	
147	4	-0.48				630
154	1	-1.56			595	
191	4	-0.05				644
212	4	-0.17			640	
217	4	0.20			652	
218	1	1.72			701	
219	4	-0.26			637	
234	4	0.11			649	
236	3	-0.54			628	
259	3	-0.60	626			
265	4	0.11			649	
273	0	2.06			712	
284	4	-0.20	639			

Table 15. *Statistical summary of reported data for standard reference water sample M-142 (major constituents)--Continued*

V (Vanadium) µg/L



1. AA: direct air			4. ICP					
2. AA: direct nitrous oxide			6. ICP/MS					
3. AA: graphite furnace			7. Ion chromatography					
		N =	1	0	4	33	7	0
		Minimum =	185.0	< 100	23.0	0.0	22.3	< 100
		Maximum =			31.8	33.1	28.1	
		Median =				22.2	26.4	
		F-pseudosigma =				1.3	1.8	

Lab	Rating	Z-value	1	2	3	4	6	7
1	4	0.00				22.7		
3	4	0.35				24.0		
13	NR					< 50		
16	2	1.16					27.0	
18	4	-0.19				22.0		
25	4	-0.19				22.0		
26	4	-0.16				22.1		
32	3	1.00					26.4	
39	3	0.84				25.8		
40	4	-0.08				22.4		
42	4	-0.19				22.0		
46	4	-0.08				22.4		
48	4	0.19					23.4	
57	NR							< 100
61	2	1.16				27.0		
68	4	0.08				23.0		
70	NR					< 50		
81	4	-0.46				21.0		
85	NR					< 20		
86	0	2.81				33.1		
89	0	2.35			31.4			
97	3	0.73			25.4			
102	4	-0.46				21.0		
105	1	1.65				28.8		
119	2	1.24					27.3	
121	4	-0.19				22.0		
127	3	-0.73				20.0		
131	4	-0.19				22.0		
134	4	-0.23				21.8		
138	4	-0.08				22.4		
141	4	-0.43				21.1		
142	2	1.46					28.1	
145	1	1.89				29.7		
146	4	0.24				23.6		
147	4	-0.11					22.3	
154	1	1.83				29.5		
180	0	-3.32				10.4		
183	0	2.46			31.8			
212	3	0.57				24.8		
217	4	-0.05				22.5		
219	3	-1.00				19.0		
224	0	-6.12				0.0		
234	4	-0.13				22.2		
235	0	-3.42				< 10		
236	3	-1.00				19.0		
241	4	0.08			23.0			
255	4	0.00				22.7		
257	NR			< 100				
265	4	-0.19				22.0		
282	3	0.89					26.0	

MPV =	22.7
F-pseudosigma =	3.7
N =	45
Hu =	27.0
HI =	22.0

Lab	Rating	Z-value	1	2	3	4	6	7
284	0	43.79	185.0					

Table 16. *Statistical summary of reported data for standard reference water sample N-53 (nutrient constituents)*

Definition of analytical methods, abbreviations, and symbols

Analytical methods

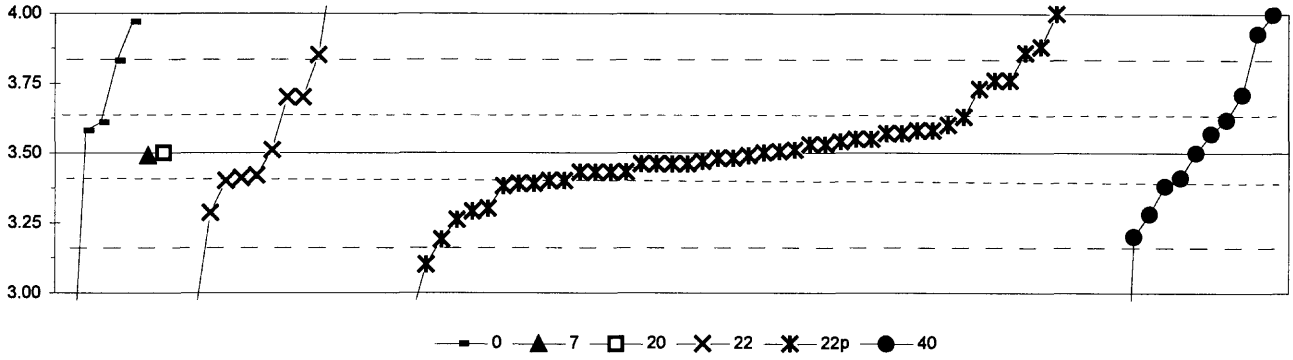
0. Other/Not reported		
4. ICP	=	inductively coupled plasma
5. DCP	=	direct coupled plasma
7. IC	=	ion chromatography
20. Titrate: color	=	titration: colorimetric (color reagent specified)
21. Titrate: electro	=	titration: electrmetric
22. Color:	=	colorimetric [color reagent specified]
40. Ion electrode	=	ion selective electrode

Abbreviations and symbols

N =	number of samples
MPV =	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 16. *Statistical summary of reported data for standard reference water sample N-53 (nutrient constituents)--Continued*

NH_3 as N (Ammonia as nitrogen) mg/L



0. Other			22. Colorimetric					
7. Ion chromatography			22p. Color: phenate					
20. Titrate: colorimetric			40. Ion selective electrode					
		N =	5	1	1	12	48	12
		Minimum =	2.47	3.49	3.50	0.89	0.55	1.72
		Maximum =	3.97			4.25	4.35	4.00
		Median =				3.51	3.48	3.50
		F-pseudosigma =				0.32	0.13	0.32

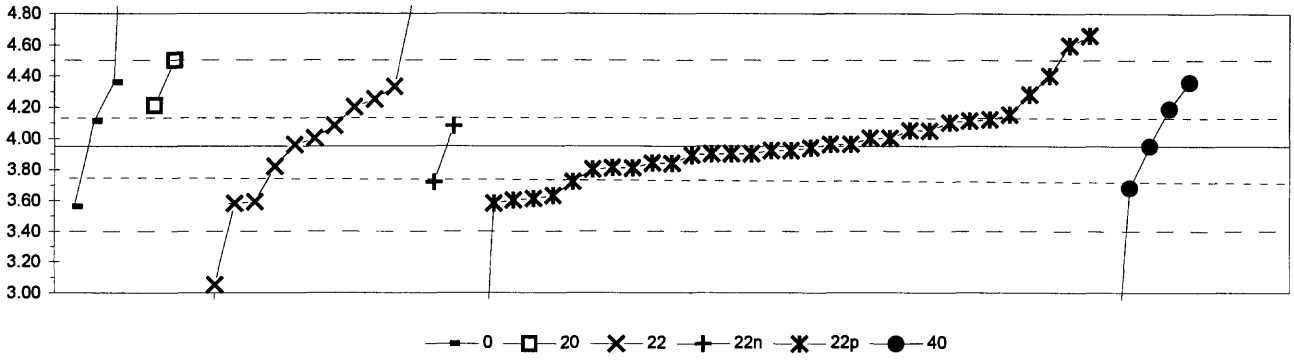
Lab	Rating	Z-value	0	7	20	22	22p	40
1	2	1.15				3.70		
9	4	0.29					3.55	
10	4	0.00						3.50
11	0	3.44					4.10	
12	0	-2.30					3.10	
13	1	-1.78					3.19	
16	0	-3.50				2.89		
18	2	1.32					3.73	
19	4	0.17					3.53	
23	2	-1.21					3.29	
26	4	-0.06		3.49				
33	0	4.88					4.35	
38	0	2.06					3.86	
45	3	-0.53						3.41
46	4	0.03					3.51	
48	0	2.87					4.00	
51	3	0.69						3.62
55	3	-0.53				3.41		
59	4	-0.40					3.43	
61	3	0.63	3.61					
64	4	0.06					3.51	
68	1	2.01				3.85		
70	4	-0.40					3.43	
76	3	-0.63					3.39	
81	0	2.18					3.88	
83	0	-14.98				0.89		
85	4	-0.06					3.49	
86	4	-0.40					3.43	
87	4	0.29					3.55	
89	4	0.40					3.57	
90	3	0.57					3.60	
91	3	-0.69					3.38	
92	0	2.87						4.00
96	3	-0.57					3.40	
97	0	-14.64					0.95	
102	0	-9.82					1.79	
104	4	-0.40					3.43	
105	4	-0.46				3.42		
107	4	0.46					3.58	
111	0	-3.44					2.90	
114	2	-1.26						3.28
118	3	-0.63					3.39	
119	3	-0.69						3.38
127	4	0.17					3.53	
129	2	-1.23				3.29		
133	0	-9.70						1.81
134	4	0.40					3.57	
138	4	0.46					3.58	
140	0	4.08				4.21		
141	4	0.00					3.50	

MPV =	3.50
F-pseudosigma =	0.17
N =	79
Hu =	3.63
HI =	3.39

Lab	Rating	Z-value	0	7	20	22	22p	40
142	4	-0.11					3.48	
143	4	-0.18					3.47	
145	2	1.49					3.76	
146	2	-1.15					3.30	
149	0	-16.93					0.55	
154	4	-0.11					3.48	
158	3	0.75					3.63	
180	4	0.23					3.54	
183	0	2.47						3.93
185	2	1.49					3.76	
190	2	1.15				3.70		
203	4	-0.23					3.46	
212	3	-0.57					3.40	
213	4	0.00			3.50			
215	4	-0.23					3.46	
217	3	-0.57				3.40		
220	2	-1.38					3.26	
221	0	-10.22						1.72
224	0	2.70	3.97					
234	2	1.21						3.71
241	4	0.40						3.57
252	1	1.89	3.83					
282	4	-0.23					3.46	
284	0	4.31				4.25		
285	0	-5.91	2.47					
289	4	-0.23					3.46	
290	4	0.06				3.51		
292	1	-1.72						3.20
294	4	0.46	3.58					

Table 16. *Statistical summary of reported data for standard reference water sample N-53 (nutrient constituents)--Continued*

NH_3 + Org. N as N (Ammonia + Organic nitrogen as nitrogen) mg/L



0. Other
20. Titrate: colorimetric
22. Colorimetric
22n. Color: Nesslerization
22p. Color: phenate
40. Ion selective electrode

	0	20	22	22n	22p	40
N =	4	2	13	2	32	5
Minimum =	3.56	4.21	0.29	3.72	1.17	1.89
Maximum =	7.56	4.50	4.93	4.08	4.66	4.36
Median =			3.98		3.92	
F-pseudosigma =			0.47		0.20	

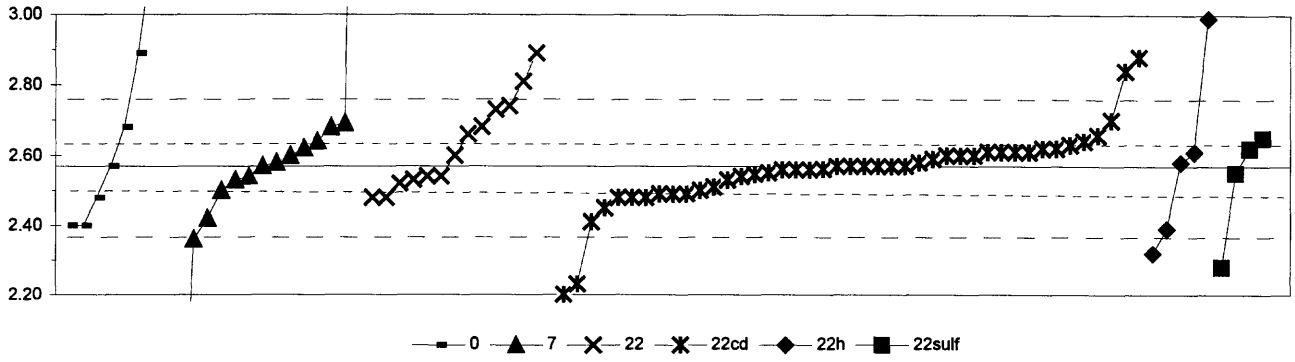
MPV = 3.95
F-pseudosigma = 0.28
N = 58
Hu = 4.14
HI = 3.76

Lab	Rating	Z-value	0	20	22	22n	22p	40
1	3	0.89			4.20			
9	3	-0.52					3.81	
10	4	-0.12					3.92	
11	2	1.07			4.25			
12	3	-0.55					3.80	
16	0	-3.25			3.05			
18	3	0.53					4.10	
38	3	-0.84				3.72		
45	2	1.46						4.36
46	4	0.17					4.00	
48	1	1.61					4.40	
55	2	1.04			4.24			
59	4	-0.19					3.90	
61	2	1.46	4.36					
68	4	0.46			4.08			
70	3	0.60					4.12	
81	3	0.71					4.15	
85	4	0.17					4.00	
87	2	1.17					4.28	
89	4	0.35					4.05	
90	0	-13.75					< 0.1	
91	4	-0.19					3.90	
96	4	-0.19					3.90	
97	0	-10.01					1.17	
102	2	-1.16					3.63	
104	0	2.31					4.60	
105	2	-1.34			3.58			
113	3	-0.84					3.72	
118	4	0.35					4.05	
119	4	-0.01						3.95
127	3	0.56					4.11	
129	4	0.01			3.96			
133	0	-7.42						1.89
134	3	-0.52					3.81	
138	4	-0.23					3.89	
140	2	1.35			4.33			
141	4	0.46				4.08		
142	2	-1.34					3.58	
143	4	0.02					3.96	
145	4	-0.41					3.84	
146	4	0.02					3.96	
154	4	-0.12					3.92	
158	3	0.85						4.19
180	4	-0.05					3.94	
190	4	-0.48			3.82			
209	0	-13.18			0.29			
212	2	-1.27					3.60	
213	1	1.97		4.50				
215	2	-1.24					3.61	
217	4	0.17			4.00			

Lab	Rating	Z-value	0	20	22	22n	22p	40
221	3	0.92		4.21				
224	0	12.96	7.56					
241	3	-0.98						3.68
252	3	0.56	4.11					
282	0	2.54					4.66	
284	0	3.51			4.93			
285	2	-1.42	3.56					
289	4	-0.41					3.84	
290	2	-1.31			3.59			

Table 16. *Statistical summary of reported data for standard reference water sample N-53 (nutrient constituents)--Continued*

$NO_3 + NO_2$ as N (Nitrate + nitrite as nitrogen) mg/L



0. Other
7. Ion chromatography
22. Colorimetric
22cd. Cd diazotization
22h. Color: hydrazine diazotization
22sulf. Color: sulfanilamide

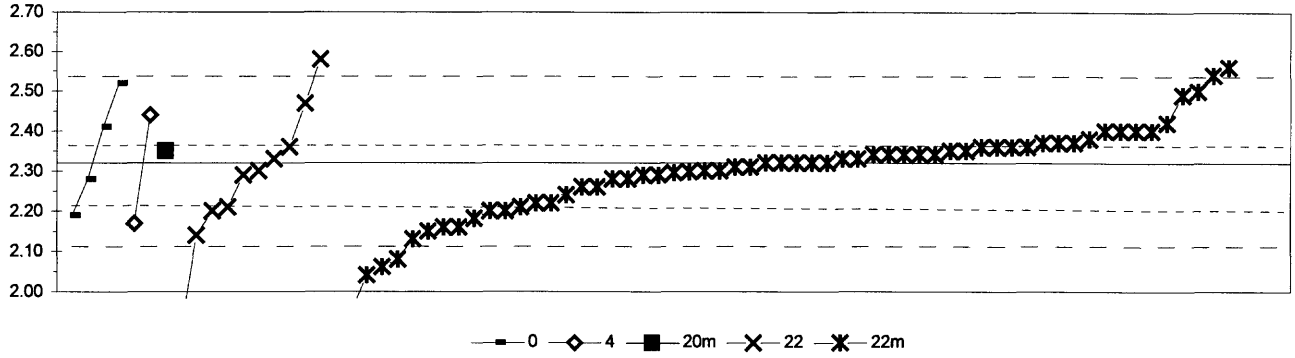
	0	7	22	22cd	22h	22sulf
N =	8	14	14	43	5	4
Minimum =	2.40	1.45	2.48	1.15	2.32	2.28
Maximum =	5.50	5.60	2.89	2.88	2.99	2.65
Median =	2.63	2.58	2.60	2.57		
F-pseudosigma =	0.45	0.10	0.15	0.08		

MPV = 2.57
F-pseudosigma = 0.13
N = 88
Hu = 2.63
HI = 2.50

Lab	Rating	Z-value	0	7	22	22cd	22h	22sulf
1	1	1.86			2.81			
9	4	-0.16				2.55		
10	4	0.00				2.57		
11	4	0.39						2.62
12	4	0.39				2.62		
13	4	0.00		2.57				
16	0	-2.25						2.28
18	4	-0.08				2.56		
19	4	0.00				2.57		
23	2	-1.24				2.41		
36	4	0.00				2.57		
38	4	-0.07				2.56		
42	0	-8.71		1.45				
45	4	0.31				2.61		
46	4	-0.19				2.55		
48	1	-1.94					2.32	
51	3	0.85		2.68				
53	0	2.48	2.89					
55	4	-0.23			2.54			
59	4	-0.23				2.54		
61	2	-1.32	2.40					
64	4	0.31				2.61		
68	2	1.24			2.73			
69	4	0.08				2.58		
70	4	0.00				2.57		
81	4	0.31					2.61	
83	3	-0.70			2.48			
84	2	-1.16		2.42				
85	3	0.54				2.64		
86	4	0.00				2.57		
87	3	-0.70				2.48		
89	3	1.01				2.70		
90	0	3.26					2.99	
91	4	0.23				2.60		
92	0	-2.87				2.20		
96	4	0.23				2.60		
97	0	-11.01				1.15		
102	4	-0.31				2.53		
104	3	0.67				2.66		
105	4	-0.39			2.52			
107	4	0.31				2.61		
111	4	0.08		2.58				
113	4	-0.47				2.51		
114	4	0.16				2.59		
118	2	-1.40					2.39	
119	4	0.31				2.61		
127	4	-0.31		2.53				
129	4	0.40		2.62				
133	3	-0.93				2.45		
134	4	0.39				2.62		
138	3	-0.70				2.48		
140	3	0.86			2.68			
141	4	-0.08				2.56		
142	3	0.70			2.66			
143	3	-0.62				2.49		
145	3	-0.54				2.50		
146	0	2.40				2.88		
149	4	0.23		2.60				
151	3	-0.70			2.48			
154	0	2.09				2.84		
158	4	0.09					2.58	
180	3	-0.70				2.48		
183	0	22.71	5.50					
185	4	0.00				2.57		
190	4	-0.23			2.54			
191	4	0.00	2.57					
193	0	-2.64				2.23		
203	4	-0.16						2.55
209	0	23.49		5.60				
212	4	0.23				2.60		
215	4	0.47				2.63		
217	4	0.23			2.60			
220	3	-0.62				2.49		
221	0	2.48			2.89			
224	3	0.95		2.69				
234	3	-0.54		2.50				
241	4	-0.23		2.54				
247	1	-1.63		2.36				
252	3	0.85	2.68					
255	4	-0.08				2.56		
282	3	0.62						2.65
284	2	1.32			2.74			
285	3	-0.70	2.48					
289	3	-0.62				2.49		
290	4	-0.31			2.53			
291	0	4.88	3.20					
292	3	0.54		2.64				
294	2	-1.32	2.40					

Table 16. *Statistical summary of reported data for standard reference water sample N-53 (nutrient constituents)--Continued*

total P as P (total Phosphorus as phosphorus) mg/L



0. Other			22. Colorimetric				
4. ICP			22m. Color:phosphomolybdate				
20m. Titrate:phosphomolybdate							
		N =	4	2	1	10	59
		Minimum =	2.19	2.17	2.35	1.90	1.70
		Maximum =	2.52	2.44		2.58	2.56
		Median =				2.30	2.32
		F-pseudosigma =				0.12	0.10

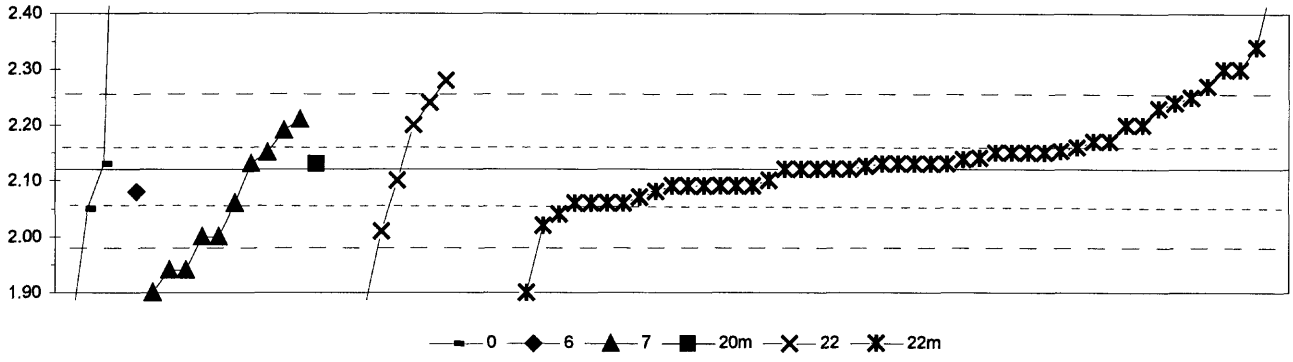
Lab	Rating	Z-value	0	4	20m	22	22m
1	2	1.40				2.47	
10	4	-0.19					2.30
11	0	-3.44					1.95
12	3	-0.56					2.26
13	2	-1.02					2.21
16	3	0.74					2.40
18	4	-0.37					2.28
19	4	-0.28					2.29
22	2	-1.28					2.18
23	3	-0.93					2.22
36	1	-1.58					2.15
38	4	-0.20					2.30
46	4	-0.09					2.31
48	2	-1.12					2.20
51	4	0.28					2.35
55	0	2.42				2.58	
59	1	1.67					2.50
61	3	0.84	2.41				
64	4	0.47					2.37
68	4	0.37				2.36	
70	4	0.47					2.37
81	1	-1.77					2.13
83	2	-1.40		2.17			
85	4	-0.28					2.29
86	2	1.12		2.44			
87	1	2.05					2.54
89	4	0.37					2.36
91	4	0.00					2.32
92	3	-0.56					2.26
96	2	-1.12					2.20
97	0	-5.77					1.70
102	2	-1.49					2.16
104	4	-0.23					2.30
105	4	0.09				2.33	
107	4	0.37					2.36
111	0	-2.60					2.04
113	3	-0.93					2.22
114	4	0.00					2.32
118	4	0.19					2.34
119	3	0.56					2.38
127	4	0.00					2.32
129	4	-0.19					2.30
133	4	0.28			2.35		
134	2	-1.49					2.16
138	4	0.00					2.32
140	0	-3.91				1.90	
141	3	-0.74					2.24
142	4	0.47					2.37
143	0	-2.23					2.08
145	4	0.19					2.34

MPV =	2.32
F-pseudosigma =	0.11
N =	76
Hu =	2.36
HI =	2.22

Lab	Rating	Z-value	0	4	20m	22	22m
146	4	0.09					2.33
151	0	-2.42					2.06
154	2	-1.02				2.21	
158	4	0.37					2.36
180	3	0.93					2.42
183	4	-0.09					2.31
185	0	2.23					2.56
190	4	-0.28				2.29	
203	4	0.37					2.36
212	3	0.74					2.40
213	4	0.28					2.35
215	4	0.09					2.33
217	2	-1.12				2.20	
221	4	-0.19				2.30	
224	4	-0.37					2.28
234	4	0.19					2.34
241	3	0.74					2.40
252	1	1.86	2.52				
282	3	0.74					2.40
284	1	-1.67				2.14	
285	2	-1.21	2.19				
287	1	1.58					2.49
289	4	0.19					2.34
290	4	0.00					2.32
292	4	0.19					2.34
294	4	-0.37	2.28				

Table 16. *Statistical summary of reported data for standard reference water sample N-53 (nutrient constituents)--Continued*

PO_4 as P (Orthophosphate as phosphorus) mg/L



0. Other				20m: Titrate: phosphomolybdate				
6. ICP/MS				22. Colorimetric				
7. Ion chromatography				22m. Color:phosphomolybdate				
		N =	4	1	10	1	8	51
		Minimum =	1.83	2.08	1.90	2.13	0.56	1.10
		Maximum =	3.13		2.21		2.28	2.46
		Median =			2.03		2.06	2.13
		F-pseudosigma =			0.16		0.35	0.05

Lab	Rating	Z-value	0	6	7	20m	22	22m
1	1	1.51					2.28	
9	4	-0.28						2.09
10	4	0.00						2.12
11	0	-2.08						1.90
12	4	0.28						2.15
13	1	-1.70			1.94			
16	4	0.09						2.13
18	4	0.09						2.13
19	4	0.28						2.15
23	4	0.47						2.17
26	4	0.28			2.15			
33	2	-1.13			2.00			
36	1	1.70						2.30
38	4	0.17						2.14
46	4	0.05						2.13
48	4	0.38						2.16
51	4	0.00						2.12
53	2	1.23						2.25
59	4	-0.28						2.09
61	0	-2.74	1.83					
70	4	-0.28						2.09
81	4	0.28						2.15
83	0	-14.72					0.56	
84	2	-1.13			2.00			
85	4	0.09						2.13
87	4	-0.38						2.08
89	4	0.09						2.13
92	4	0.47						2.17
96	4	-0.19						2.10
97	0	-4.15						1.68
102	3	-0.57						2.06
104	4	0.31						2.15
105	3	0.75					2.20	
107	3	-0.75						2.04
113	4	-0.28						2.09
118	4	0.00						2.12
119	4	0.19						2.14
127	3	0.66			2.19			
129	4	0.00						2.12
133	4	0.09				2.13		
134	4	0.28						2.15
138	4	0.09						2.13
140	0	-2.36					1.87	
141	0	2.08						2.34
142	3	-0.94						2.02
143	2	1.42						2.27
145	4	-0.47						2.07
146	0	3.21						2.46
149	3	-0.57			2.06			
151	3	0.85			2.21			

MPV =	2.12
F-pseudosigma =	0.11
N =	75
Hu =	2.16
HI =	2.06

Lab	Rating	Z-value	0	6	7	20m	22	22m
154	4	-0.42						2.09
158	3	-0.84						2.06
180	3	-0.84						2.06
183	1	1.54						2.23
185	0	-5.45						1.73
190	1	-1.54					2.01	
191	3	-0.56		2.08				
203	2	1.12						2.20
212	0	2.52						2.30
213	4	0.00						2.12
215	3	-0.84						2.06
217	4	-0.28					2.10	
221	1	1.68					2.24	
224	1	1.68						2.24
234	0	-3.08			1.90			
241	4	0.14			2.13			
247	0	-2.52			1.94			
252	3	-0.98	2.05					
282	2	1.12						2.20
284	0	-6.85					1.63	
285	0	14.12	3.13					
287	0	-14.26						1.10
289	0	-4.75						1.78
292	4	-0.42						2.09
294	4	0.14	2.13					

Table 17. *Statistical summary of reported data for standard reference water sample N-54 (nutrient constituentss)*

Definition of analytical methods, abbreviations, and symbols

Analytical methods

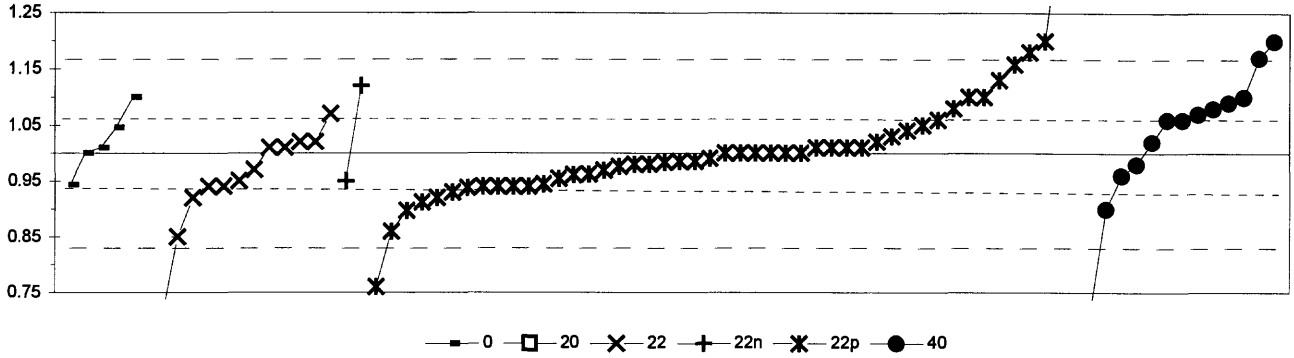
0. Other/Not reported		
4. ICP	=	inductively coupled plasma
5. DCP	=	direct coupled plasma
7. IC	=	ion chromatography
20. Titrate: color	=	titration: colorimetric (color reagent specified)
21. Titrate: electro	=	titration: electrometric
22. Color:	=	colorimetric [color reagent specified]
40. Ion electrode	=	ion selective electrode

Abbreviations and symbols

N	=	number of samples
MPV	=	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 17. *Statistical summary of reported data for standard reference water sample N-54 (nutrient constituents)--Continued*

NH_3 as N (Ammonia as nitrogen) mg/L



0. Other
20. Titrate: colorimetric
22. Colorimetric
22n. Color: Nesslerization
22p. Color: phenate
40. Ion selective electrode

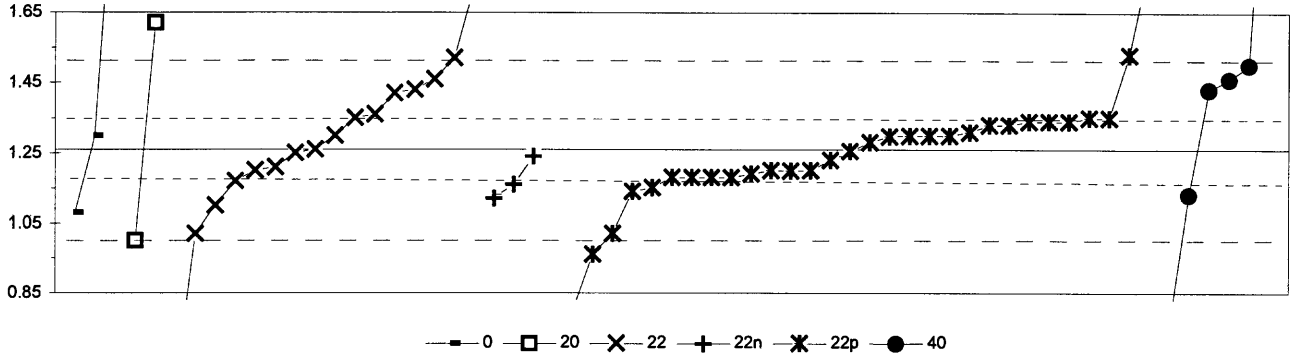
MPV = 1.00
F-pseudosigma = 0.08
N = 79
Hu = 1.06
Hl = 0.94

	0	20	22	22n	22p	40
N =	5	0	12	2	46	14
Minimum =	0.94	< 1	0.70	0.95	0.76	0.66
Maximum =	1.10		1.07	1.12	1.40	1.20
Median =			0.96		1.00	1.06
F-pseudosigma =			0.06		0.06	0.10

Lab	Rating	Z-value	0	20	22	22n	22p	40
1	4	0.12			1.01			
3	3	-0.97			0.92			
10	4	-0.24						0.98
11	0	2.18					1.18	
12	2	1.21					1.10	
13	4	-0.38					0.97	
16	1	-1.81			0.85			
18	3	0.97					1.08	
19	4	-0.12					0.99	
23	4	-0.24					0.98	
26	3	-0.69	0.94					
33	4	-0.24					0.98	
36	3	0.97						1.08
38	1	1.91					1.16	
39	0	-2.90					0.76	
45	3	0.73						1.06
46	2	-1.25					0.90	
48	1	-1.69					0.86	
55	4	-0.36			0.97			
57	2	-1.21						0.90
59	4	0.48					1.04	
61	2	1.21	1.10					
64	4	0.12					1.01	
68	4	0.12			1.01			
70	3	-0.85					0.93	
76	4	-0.20					0.98	
80	2	1.45				1.12		
81	1	1.57					1.13	
83	3	-0.73			0.94			
85	4	0.00					1.00	
86	4	0.00					1.00	
87	3	0.60					1.05	
89	3	-0.97					0.92	
90	0	4.84					1.40	
91	3	-0.73					0.94	
92	2	1.21						1.10
96	4	0.00					1.00	
102	0	2.42					1.20	
104	4	-0.18					0.99	
105	3	-0.60			0.95			
107	3	-0.56					0.95	
108	3	0.73						1.06
111	4	0.24					1.02	
114	4	-0.48						0.96
118	3	-0.73					0.94	
119	4	0.24						1.02
120	3	-0.73			0.94			
127	4	0.00					1.00	
129	3	-0.60				0.95		
133	0	-3.46						0.71
138	3	-0.75					0.94	
140	3	-0.73			0.94			
141	3	-0.68					0.94	
142	4	0.12					1.01	
143	3	-0.73					0.94	
145	4	0.36					1.03	
146	2	-1.06					0.91	
154	4	0.12					1.01	
158	4	-0.18					0.99	
180	4	-0.46					0.96	
183	0	2.42						1.20
185	4	0.00					1.00	
190	4	0.24			1.02			
203	3	0.73					1.06	
212	2	1.21					1.10	
213	NR			< 1				
215	3	-0.73					0.94	
220	3	-0.08			0.935			
221	0	-4.07						0.66
224	3	0.56	1.05					
234	3	0.85						1.07
241	2	1.09						1.09
252	3	0.85			1.07			
255	4	0.00					1.00	
282	4	0.12					1.01	
284	0	-3.62			0.70			
285	4	0.12	1.01					
289	4	-0.47					0.96	
290	4	0.24			1.02			
292	0	2.06						1.17
294	4	0.00	1.00					

Table 17. *Statistical summary of reported data for standard reference water sample N-54 (nutrient constituents)--Continued*

NH_3 + Org. N as N (Ammonia + Organic nitrogen as nitrogen) mg/L



0. Other	22n. Color: Nesslerization
20. Titrate: colorimetric	22p. Color: phenate
22. Colorimetric	40. Ion selective electrode

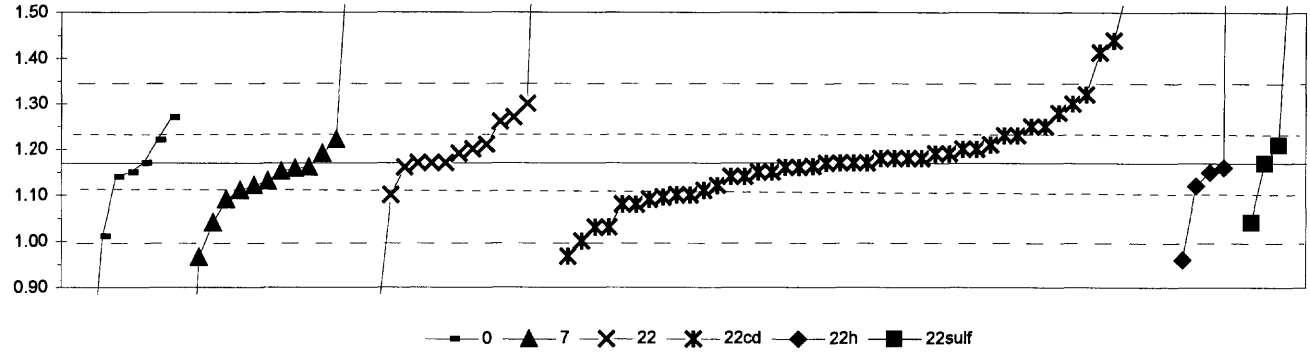
	0	20	22	22n	22p	40
N =	3	2	16	3	31	6
Minimum =	1.08	1.00	0.57	1.12	0.75	0.74
Maximum =	2.13	1.62	1.73	1.24	1.80	2.40
Median =			1.28		1.26	
F-pseudosigma =			0.18		0.11	

MPV = 1.26
F-pseudosigma = 0.13
N = 61
Hu = 1.35
HI = 1.17

Lab	Rating	Z-value	0	20	22	22n	22p	40
1	4	0.30			1.30			
3	1	-1.95		1.00				
10	3	-0.60					1.18	
11	1	1.95			1.52			
12	0	-3.45					0.80	
16	1	-1.80			1.02			
18	3	0.60					1.34	
23	4	0.00			1.26			
33	3	0.60					1.34	
36	2	-1.20			1.10			
38	3	-0.75				1.16		
45	2	1.50						1.46
46	4	-0.45					1.20	
48	4	-0.45					1.20	
55	4	-0.45			1.20			
57	0	8.54						2.40
59	4	0.30					1.30	
61	4	0.30	1.30					
68	2	1.27			1.43			
70	3	0.60					1.34	
81	3	0.52					1.33	
85	3	0.67					1.35	
87	1	2.02					1.53	
89	3	-0.52					1.19	
90	0	-3.82					0.75	
91	3	0.67					1.35	
96	3	-0.60					1.18	
102	3	-0.60					1.18	
104	4	0.28					1.30	
105	4	-0.37			1.21			
108	3	-0.82					1.15	
113	3	0.52					1.33	
118	3	0.75			1.36			
119	1	1.80						1.50
127	3	-0.60					1.18	
129	4	-0.15				1.24		
133	0	-3.89						0.74
134	4	0.30					1.30	
138	3	-0.67			1.17			
140	2	1.50			1.46			
141	2	-1.05				1.12		
142	4	0.30					1.30	
143	4	0.15					1.28	
145	4	0.37					1.31	
146	3	-0.90					1.14	
154	1	-1.80					1.02	
158	2	1.27						1.43
180	4	-0.22					1.23	
190	3	0.67			1.35			
209	0	-5.17			0.57			
212	4	-0.45					1.20	
213	NR			< 1				
215	0	-2.25					0.96	
221	0	2.70		1.62				
224	0	6.51	2.13					
241	3	-0.97						1.13
252	4	-0.07			1.25			
282	0	4.05					1.80	
284	0	3.52			1.73			
285	2	-1.35	1.08					
289	4	-0.04					1.26	
290	2	1.20			1.42			

Table 17. *Statistical summary of reported data for standard reference water sample N-54 (nutrient constituents)--Continued*

$NO_3 + NO_2$ as N (Nitrate + nitrite as nitrogen) mg/L



0. Other				22cd. Cd diazotization				
7. Ion chromatography				22h. Color: hydrazine diazotization				
22. Colorimetric				22sulf. Color: sulfanilamide				
		N =	8	14	14	45	5	4
		Minimum =	0.57	0.32	0.81	0.97	0.96	1.04
		Maximum =	1.27	1.88	3.64	3.20	7.26	1.72
		Median =	1.15	1.14	1.20	1.17		
		F-pseudosigma =	0.08	0.07	0.07	0.08		

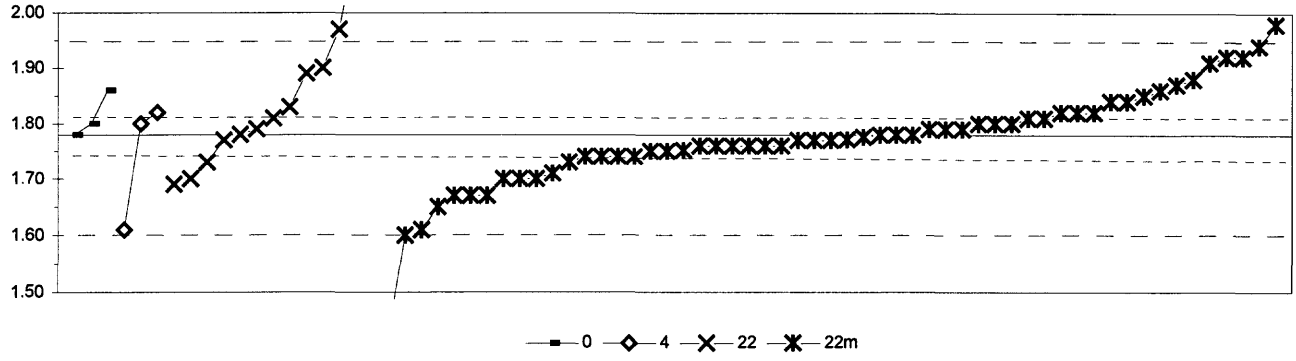
Lab	Rating	Z-value	0	7	22	22cd	22h	22sulf
1	4	0.45			1.21			
3	4	0.34			1.20			
9	4	0.00				1.17		
10	4	0.22				1.19		
11	0	6.18						1.72
12	4	-0.34				1.14		
13	4	0.22		1.19				
16	2	-1.45						1.04
18	3	-0.67				1.11		
19	2	1.24				1.28		
23	4	-0.22				1.15		
26	3	0.56	1.22					
30	4	-0.11		1.16				
36	4	-0.11			1.16			
38	0	2.73				1.41		
39	4	-0.45		1.13				
45	4	0.00				1.17		
46	4	-0.09				1.16		
48	0	-2.36					0.96	
53	1	-1.79	1.01					
55	2	1.01			1.26			
57	0	8.21				1.90		
59	4	-0.34				1.14		
61	2	1.12	1.27					
68	4	0.00			1.17			
69	4	-0.11				1.16		
70	1	-1.57				1.03		
80	0	-6.75	0.57					
81	4	-0.11					1.16	
83	3	-0.79			1.10			
84	0	-9.58		0.32				
85	4	0.22				1.19		
86	0	3.04				1.44		
87	4	0.11				1.18		
89	4	0.34				1.20		
90	3	-0.56					1.12	
91	1	-1.91				1.00		
92	3	0.90				1.25		
96	4	0.11				1.18		
102	4	0.11				1.18		
104	4	-0.01				1.17		
105	4	0.22			1.19			
107	3	0.90				1.25		
108	1	-1.57				1.03		
111	3	-0.67		1.11				
113	0	-2.28				0.97		
114	0	9.22				1.99		
118	4	-0.22					1.15	
119	3	-0.79				1.10		
126	4	0.45				1.21		

MPV =	1.17
F-pseudosigma =	0.09
N =	90
Hu =	1.23
HI =	1.11

Lab	Rating	Z-value	0	7	22	22cd	22h	22sulf
127	3	-0.56		1.12				
129	4	-0.21		1.15				
133	0	4.38				1.56		
134	4	0.00				1.17		
138	3	-0.90				1.09		
140	0	-4.02			0.81			
141	3	-0.56				1.12		
142	4	0.00			1.17			
143	4	0.34				1.20		
145	2	-1.01				1.08		
146	1	1.69				1.32		
154	2	1.46				1.30		
158	0	88.46					7.26	
180	4	-0.22				1.15		
183	0	-6.18	0.62					
185	2	-1.01				1.08		
190	4	0.00			1.17			
191	4	-0.22	1.15					
193	3	0.67				1.23		
196	0	6.30		1.73				
203	4	0.00						1.17
209	0	7.98		1.88				
212	3	-0.79				1.10		
215	4	0.11				1.18		
220	3	0.67				1.23		
221	2	1.46			1.30			
224	4	-0.15		1.16				
234	3	0.56		1.22				
241	2	-1.46		1.04				
247	0	-2.30		0.97				
252	0	27.77			3.64			
255	4	-0.11				1.16		
282	4	0.45						1.21
284	0	12.82			2.31			
285	4	0.00	1.17					
289	3	-0.84				1.10		
290	2	1.12			1.27			
291	0	22.82				3.20		
292	3	-0.90		1.09				
294	4	-0.34	1.14					

Table 17. *Statistical summary of reported data for standard reference water sample N-54 (nutrient constituents)--Continued*

total P as P (total Phosphorus as phosphorus) mg/L



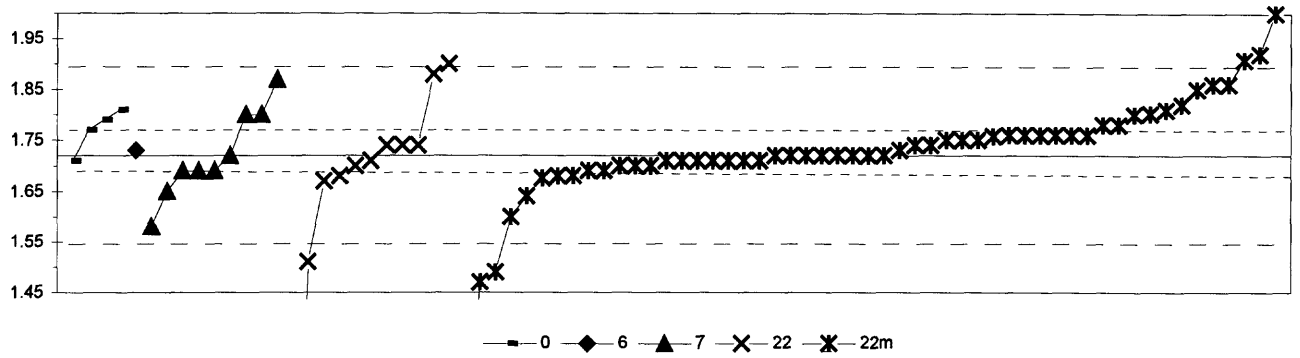
0. Other				22m. Color:phosphomolybdate		
4. ICP						
22. Colorimetric						
		N =	3	3	12	56
		Minimum =	1.78	1.61	1.69	1.42
		Maximum =	1.86	1.82	2.12	1.98
		Median =			1.80	1.77
		F-pseudosigma =			0.11	0.06

					MPV =	1.78
					F-pseudosigma =	0.09
					N =	74
					Hu =	1.82
					HI =	1.74

Lab	Rating	Z-value	0	4	22	22m
1	2	1.24			1.89	
3	4	-0.90			1.70	
10	4	0.11				1.79
11	0	-4.05				1.42
12	2	-1.24				1.67
13	4	-0.22				1.76
16	1	1.80				1.94
18	4	-0.45				1.74
19	4	0.11				1.79
22	4	0.34				1.81
23	2	-1.24				1.67
36	2	1.35			1.90	
38	4	-0.45				1.74
39	2	1.01				1.87
46	4	-0.11				1.77
48	4	-0.90				1.70
55	4	-0.11			1.77	
57	1	-2.02				1.60
59	4	-0.90				1.70
61	4	0.00	1.78			
68	4	0.11			1.79	
70	4	0.67				1.84
81	4	-0.45				1.74
83	1	-1.91		1.61		
85	4	0.67				1.84
86	4	0.45		1.82		
87	0	2.25				1.98
89	4	0.22				1.80
91	4	0.45				1.82
92	4	-0.11				1.77
96	4	0.45				1.82
102	4	-0.22				1.76
104	4	-0.10				1.77
105	2	-1.01			1.69	
107	4	0.79				1.85
108	0	-4.05				1.42
113	4	-0.34				1.75
114	4	0.22				1.80
118	4	0.00				1.78
119	4	0.00				1.78
127	4	0.22		1.80		
129	4	-0.31				1.75
133	4	-0.22				1.76
134	4	0.90				1.86
138	4	-0.22				1.76
140	4	0.00			1.78	
141	4	-0.90				1.70
142	4	0.45				1.82
143	2	-1.46				1.65
145	4	-0.79				1.71
146	4	-0.34				1.75
154	4	0.34			1.81	
158	4	0.11				1.79
180	2	-1.24				1.67
185	1	1.57				1.92
190	4	-0.56			1.73	
203	2	1.12				1.88
212	4	0.22				1.80
213	4	-0.56				1.73
215	4	-0.11				1.77
221	4	0.56			1.83	
224	4	-0.22				1.76
234	1	-1.91				1.61
241	4	0.34				1.81
252	0	2.14			1.97	
255	4	-0.45				1.74
282	1	1.57				1.92
284	0	3.82			2.12	
285	4	0.90	1.86			
287	2	1.46				1.91
289	4	-0.04				1.78
290	4	0.00				1.78
292	4	-0.22				1.76
294	4	0.22	1.80			

Table 17. *Statistical summary of reported data for standard reference water sample N-54 (nutrient constituents)--Continued*

PO_4 as P (Orthophosphate as phosphorus) mg/L



0. Other			22. Colorimetric				
6. ICP/MS			22m. Color:phosphomolybdate				
7. Ion chromatography							
		N =	4	1	9	11	53
		Minimum =	1.71	1.73	1.58	0.45	0.94
		Maximum =	1.81		1.87	1.90	2.00
		Median =			1.69	1.71	1.72
		F-pseudosigma =			0.08	0.05	0.04

Lab	Rating	Z-value	0	6	7	22	22m
1	1	1.80				1.88	
3	4	-0.22				1.70	
9	4	0.34					1.75
10	4	0.34					1.75
11	4	-0.11					1.71
12	4	-0.11					1.71
13	4	-0.34			1.69		
16	4	0.22					1.74
18	4	0.11					1.73
19	4	-0.34					1.69
23	4	0.45					1.76
26	4	0.79	1.79				
30	1	1.69			1.87		
33	4	-0.79			1.65		
36	1	2.02				1.90	
38	4	-0.49					1.68
39	4	0.22				1.74	
46	4	0.90					1.80
48	4	0.45					1.76
53	0	2.11					1.91
59	4	-0.22					1.70
61	4	-0.11	1.71				
70	4	-0.45					1.68
80	0	-2.81					1.47
81	2	-1.35					1.60
83	0	-14.28				0.45	
84	1	-1.57			1.58		
85	4	0.45					1.76
87	2	1.01					1.81
89	4	-0.34					1.69
92	4	-0.11					1.71
96	4	0.00					1.72
102	4	-0.22					1.70
104	4	0.45					1.76
105	4	-0.11				1.71	
107	1	1.57					1.86
113	4	0.00					1.72
118	4	0.00					1.72
119	4	-0.45					1.68
127	4	0.90			1.80		
129	4	-0.11					1.71
133	4	0.00					1.72
134	4	0.67					1.78
138	4	-0.11					1.71
140	4	0.22				1.74	
141	0	2.25					1.92
142	4	0.00					1.72
143	4	0.45					1.76
145	4	0.00					1.72
146	2	1.12					1.82

MPV =	1.72
F-pseudosigma =	0.09
N =	78
Hu =	1.77
HI =	1.70

Lab	Rating	Z-value	0	6	7	22	22m
154	4	0.00					1.72
158	4	0.22					1.74
180	4	-0.11					1.71
183	4	0.67					1.78
185	0	-2.59					1.49
190	4	-0.45				1.68	
191	4	0.11		1.73			
196	4	-0.34			1.69		
203	1	1.57					1.86
212	0	3.15					2.00
213	4	-0.90					1.64
215	4	0.34					1.75
220	0	-8.82					0.94
220	4	0.92					1.80
221	4	0.22				1.74	
224	2	1.46					1.85
234	4	-0.34			1.69		
241	4	0.90			1.80		
247	4	0.00			1.72		
252	4	-0.56				1.67	
255	4	0.45					1.76
282	4	0.00					1.72
284	0	-2.36				1.51	
285	2	1.01	1.81				
287	4	-0.22					1.70
289	4	0.43					1.76
292	4	-0.11					1.71
294	4	0.56	1.77				

Table 18. *Statistical summary of reported data for standard reference water sample P-28 (low ionic strength constituents)*

Definition of analytical methods, abbreviations, and symbols

Analytical methods

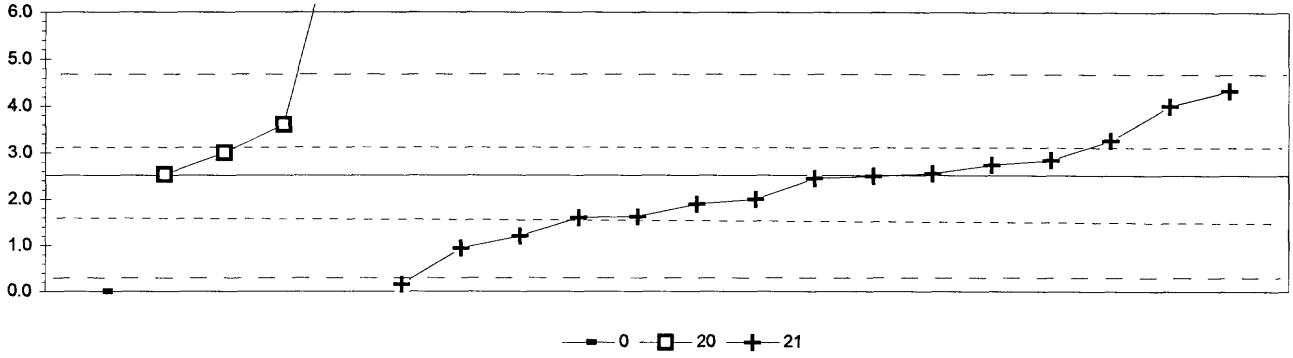
0	Other/Not reported		
1	AA: direct, air	=	atomic absorption: direct,air
2	AA: direct, N_2O	=	atomic absorption: direct,nitrous oxide
3	AA: graphite furnace	=	atomic absorption: graphite furnace
4	ICP	=	inductively coupled plasma
5	DCP	=	direct current plasma
6	ICP/MS	=	inductively coupled plasma/mass spectrometry
7	IC	=	ion chromatography
12	Flame emission	=	flame emission
20	Titrate: color	=	titration: colorimetric [color reagent specified]
21	Titrate: electro	=	titration: electrometric
22	Color:	=	colorimetric [color reagent specified]
40	Ion electrode	=	ion selective electrode
41	Electro	=	electrometric: [type meter specified]
50	Gravimetric	=	gravimetric: [precipitate specified]
51	Turbidimetric	=	turbidimetric: [precipitate specified]

Abbreviations and symbols

N =	number of samples
MPV =	most probable value
F-pseudosigma =	nonparametric statistic deviation
Hu =	upper hinge value
Hl =	lower hinge value
mg/L =	milligrams per liter
µS/cm =	microsiemens per centimeter at 25^0 C
Lab =	laboratory code number
NR =	not rated, less than value reported
< =	less than

Table 18. *Statistical summary of reported data for standard reference water sample P-28 (low ionic strength constituents)--Continued*

Acidity (as $CaCO_3$) mg/L



0. Other
20. Titrate: colorimetric
21. Titrate: electrometric

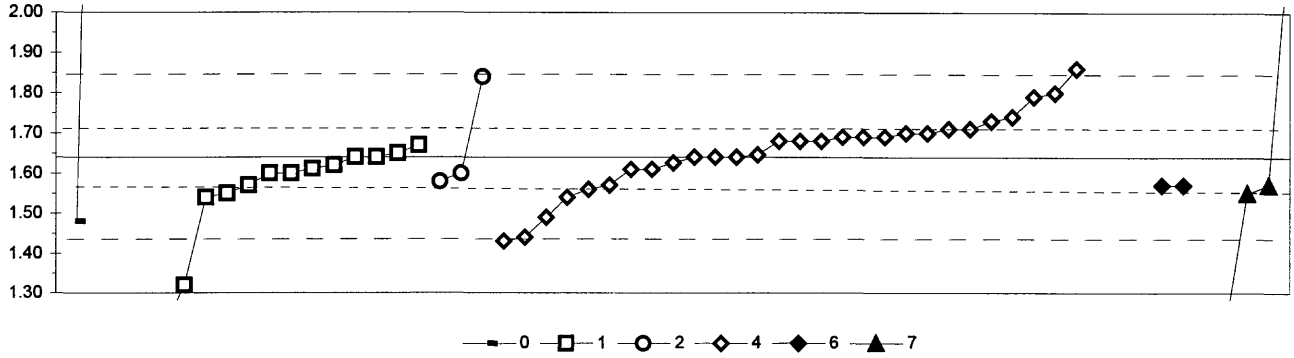
N =	1	4	15
Minimum =	0.0	2.5	0.2
Maximum =		8.5	4.3
Median =			2.5
F-pseudosigma =			0.9

Lab	Rating	Z-value	0	20	21
1	4	-0.46			2.0
3	NR				< 10
25	NR				< 8
38	1	1.61			4.3
39	2	1.32			4.0
81	0	-2.10			0.2
89	4	0.03			2.6
92	3	-0.81			1.6
105	3	0.96		3.6	
111	4	0.20			2.7
141	4	-0.06			2.5
146	4	0.29			2.8
215	4	0.43		3.0	
224	3	-0.55			1.9
237	4	0.01		2.5	
238	0	-2.23	0.0		
247	2	-1.17			1.2
256	0	5.31		8.5	
273	3	-0.79			1.6
274	2	-1.40			0.9
282	3	0.66			3.3
289	4	-0.01			2.5

MPV =	2.5
F-pseudosigma =	1.1
N =	20
Hu =	3.1
HI =	1.6

Table 18. *Statistical summary of reported data for standard reference water sample P-28 (low ionic strength constituents)--Continued*

Ca (Calcium) mg/L



0. Other
1. AA: direct air
2. AA: direct nitrous oxide
4. ICP
6. ICP/MS
7. Ion chromatography

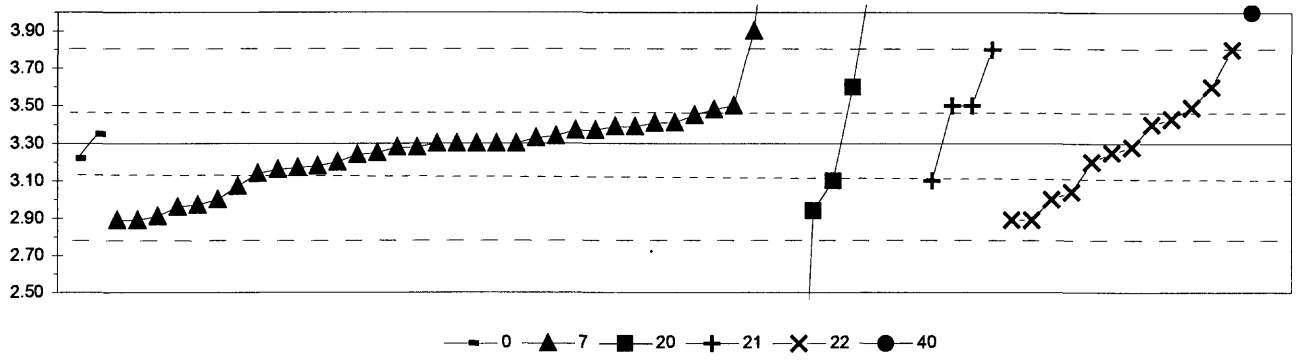
	0	1	2	4	6	7
N =	4	13	3	30	2	5
Minimum =	1.48	1.20	1.58	1.43	1.57	1.22
Maximum =	8.40	1.67	1.84	16.00	1.57	2.26
Median =		1.60		1.68		
F-pseudosigma =		0.07		0.07		

MPV = 1.64
F-pseudosigma = 0.10
N = 57
Hu = 1.71
HI = 1.57

Lab	Rating	Z-value	0	1	2	4	6	7
1	4	0.39				1.68		
2	3	-0.87						1.55
3	2	1.45				1.79		
11	1	1.54				1.80		
23	NR			< 2				
25	4	0.39				1.68		
26	0	5.97						2.26
33	1	-1.54	1.48					
36	4	-0.39			1.60			
38	3	-0.58			1.58			
46	3	0.58				1.70		
48	2	-1.45				1.49		
59	0	138.37				16.00		
64	4	0.00		1.64				
81	1	-1.93				1.44		
83	3	-0.96				1.54		
86	1	-2.02				1.43		
89	0	-3.08		1.32				
92	0	-4.24		1.20				
93	4	-0.29				1.61		
105	4	0.00				1.64		
110	4	0.00		1.64				
111	1	1.93			1.84			
113	0	2.12				1.86		
119	4	0.39				1.68		
134	4	0.06				1.65		
138	3	0.67				1.71		
140	4	-0.28		1.61				
141	3	0.67				1.71		
145	3	0.87				1.73		
146	4	0.00				1.64		
147	4	0.48				1.69		
180	4	0.48				1.69		
185	3	-0.67		1.57				
190	0	-4.05						1.22
191	3	-0.67					1.57	
196	4	0.29		1.67				
209	3	-0.67				1.57		
215	3	0.58				1.70		
220	4	0.10		1.65				
221	4	-0.19		1.62				
224	0	131.44				15.28		
235	3	0.96				1.74		
237	4	0.48				1.69		
238	0	5.49						2.21
241	4	-0.39		1.60				
247	3	-0.67						1.57
255	4	-0.13				1.63		
256	0	22.74	4.00					
257	NR		< 1.5					
262	0	65.14	8.40					
265	4	-0.29				1.61		
268	3	-0.87		1.55				
273	3	-0.77				1.56		
274	0	197.15	22.10					
282	3	-0.67					1.57	
284	4	-0.39		1.60				
287	3	-0.96		1.54				
289	4	0.00				1.64		

Table 18. *Statistical summary of reported data for standard reference water sample P-28 (low ionic strength constituents)--Continued*

Cl (Chloride) mg/L



0. Other				21. Titrate: electrometric				
7. Ion chromatography				22. Colorimetric				
20. Titrate: colorimetric				40. Ion selective electrode				
		N =	2	34	7	4	12	1
		Minimum =	3.22	2.89	0.60	3.10	2.89	4.00
		Maximum =	3.35	4.79	29.29	3.80	3.80	
		Median =		3.30	3.60		3.27	
		F-pseudosigma =		0.17	1.77		0.33	

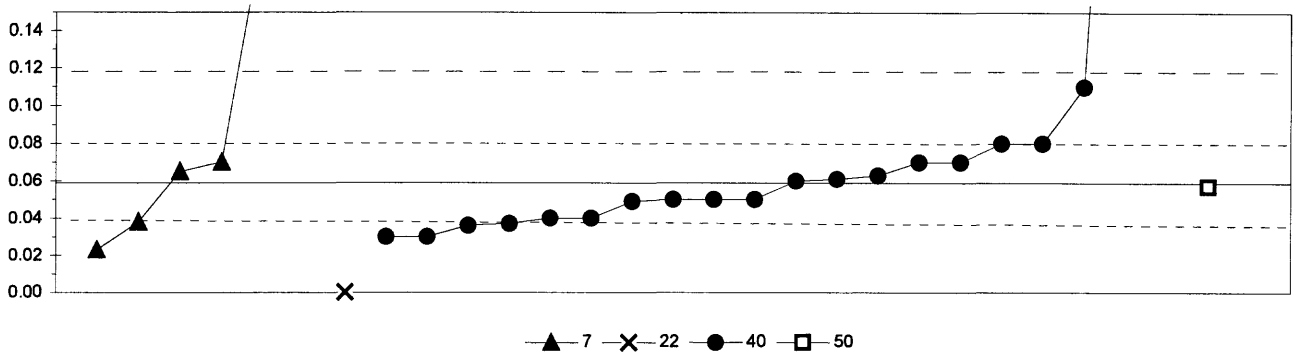
Lab	Rating	Z-value	0	7	20	21	22	40
1	4	0.12		3.33				
2	3	-0.90		3.07				
3	1	1.96					3.80	
11	1	-1.60					2.89	
23	4	-0.31	3.22					
25	4	0.00		3.30				
26	4	-0.23		3.24				
33	4	0.00		3.30				
36	3	-0.78			3.10			
39	2	1.17			3.60			
46	4	-0.39					3.20	
48	2	-1.17					3.00	
59	3	0.70		3.48				
64	4	0.16		3.34				
81	3	0.78				3.50		
86	0	2.74						4.00
89	4	0.00		3.30				
92	4	0.39					3.40	
93	4	-0.08		3.28				
96	1	-1.60					2.89	
105	3	-0.55		3.16				
107	3	0.78				3.50		
110	4	0.35		3.39				
111	4	0.27		3.37				
113	4	-0.20		3.25				
119	3	-0.51		3.17				
134	3	0.59		3.45				
138	3	-0.63		3.14				
140	4	-0.08					3.28	
141	4	-0.20					3.25	
143	4	0.20	3.35					
145	4	0.27		3.37				
146	3	0.74					3.49	
147	3	0.78		3.50				
158	0	5.83		4.79				
180	1	-1.60		2.89				
183	2	-1.02					3.04	
190	4	-0.39		3.20				
191	4	0.00		3.30				
196	2	-1.29		2.97				
203	3	-0.78				3.10		
209	4	0.35		3.39				
215	0	-10.56			0.60			
220	2	1.17					3.60	
221	2	-1.41			2.94			
224	4	0.42		3.41				
238	2	-1.17		3.00				
241	1	-1.60		2.89				
247	2	-1.33		2.96				
255	3	0.51					3.43	

MPV =	3.30
F-pseudosigma =	0.26
N =	60
Hu =	3.47
HI =	3.12

Lab	Rating	Z-value	0	7	20	21	22	40
256	0	3.75			4.26			
257	0	2.35		3.90				
262	1	1.96				3.80		
265	1	-1.52		2.91				
268	4	0.43		3.41				
273	4	-0.08		3.28				
274	0	101.62			29.29			
282	4	-0.47		3.18				
284	NR						< 5	
287	0	12.75			6.56			
289	4	0.00		3.30				

Table 18. *Statistical summary of reported data for standard reference water sample P-28 (low ionic strength constituents)--Continued*

F (Fluoride) mg/L



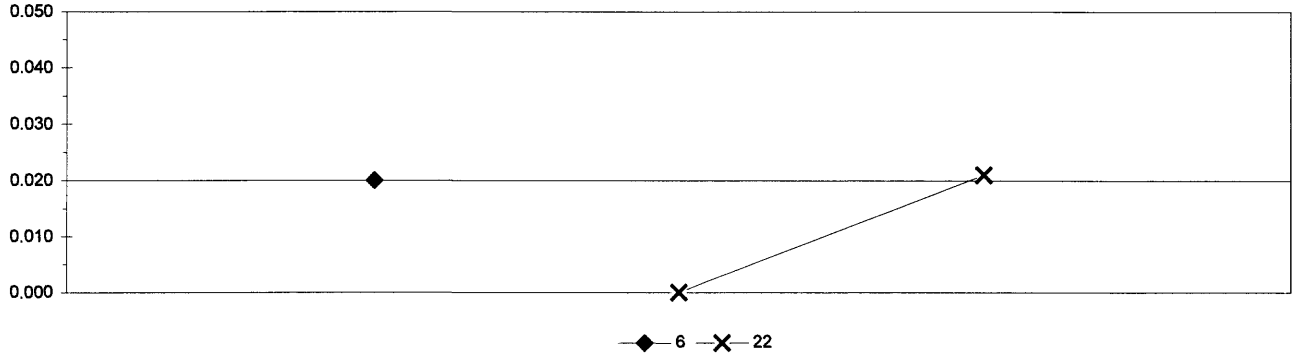
7. Ion chromatography			50. Gravimetric			
22. Colorimetric						
40. Ion selective electrode						
		N =	6	1	20	1
		Minimum =	0.02	0.00	0.03	0.06
		Maximum =	0.71		0.46	
		Median =			0.06	
		F-pseudosigma =			0.03	

MPV =	0.06
F-pseudosigma =	0.03
N =	28
Hu =	0.08
HI =	0.04

Lab	Rating	Z-value	7	22	40	50
1	NR				< 0.1	
3	NR				< 0.1	
23	4	-0.28			0.05	
25	3	0.71			0.08	
39	4	0.38			0.07	
46	3	-0.61			0.04	
48	0	12.98			0.45	
59	NR				< 0.2	
81	4	-0.05				0.06
83	0	13.21			0.46	
89	NR				< 0.1	
93	3	-0.61			0.04	
105	NR		< 0.2			
107	3	-0.94			0.03	
110	3	-0.71			0.04	
113	4	0.05			0.06	
119	3	-0.94			0.03	
134	NR				< 0.1	
138	NR				< 0.10	
140	3	-0.74			0.04	
141	3	-0.67	0.04			
145	NR		< 0.2			
146	4	-0.31			0.05	
147	NR		< 0.05			
180	NR		< 0.05			
190	4	0.15			0.06	
191	2	-1.17	0.02			
196	4	0.21	0.07			
215	4	-0.28			0.05	
224	0	4.52	0.20			
241	4	0.38			0.07	
247	4	0.38	0.07			
255	NR				< 0.2	
256	1	1.69			0.11	
257	3	0.71			0.08	
262	4	0.08			0.06	
265	4	-0.28			0.05	
273	0	21.53	0.71			
274	NR	-1.92		0.00		
282	NR				< 0.1	
284	NR				< 0.1	
287	NR				< 0.1	

Table 18. *Statistical summary of reported data for standard reference water sample P-28 (low ionic strength constituents)--Continued*

I (Iodine) mg/L



6. ICP/MS
22. Colorimetric

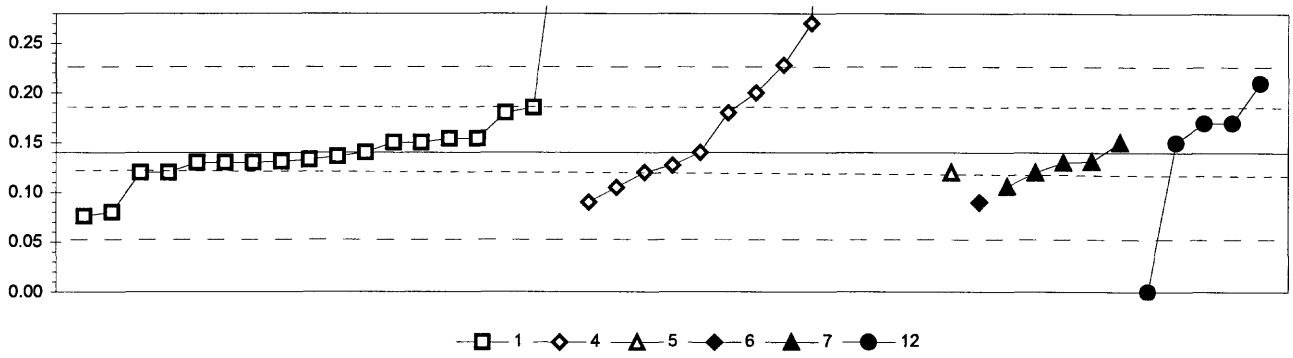
	1	2
N =		
Minimum =	0.020	0.000
Maximum =		0.021
Median =		
F-pseudosigma =		

MPV = insufficient data
F-pseudosigma =
N = 3
Hu =
Hl =

Lab	Rating	Z-value	6	22
1	NR	0.13		0.021
265	NR	0.00	0.020	
274	NR	-2.57		0.000

Table 18. *Statistical summary of reported data for standard reference water sample P-28 (low ionic strength constituents)--Continued*

K (Potassium) mg/L



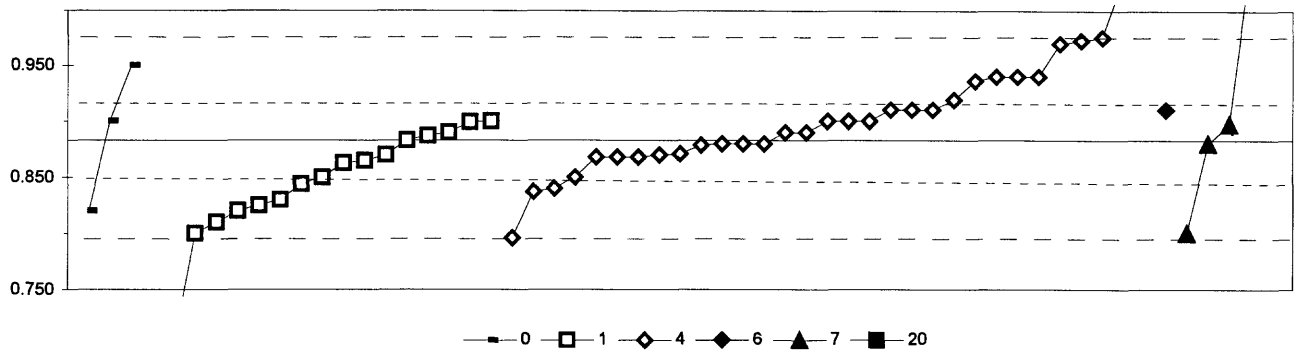
1. AA: direct air			6. ICP/MS					
4. ICP			7. Ion chromatography					
5. DCP			12. Flame emission					
	N =	18	13	1	1	5	5	
	Minimum =	0.08	0.09	0.12	0.09	0.11	0.00	
	Maximum =	0.40	1.39			0.15	0.21	
	Median =	0.13	0.20					
	F-pseudosigma =	0.02	0.64					

						MPV =	0.14	
						F-pseudosigma =	0.04	
						N =	43	
						Hu =	0.18	
						HI =	0.12	

Lab	Rating	Z-value	1	4	5	6	7	12
1	4	-0.09	0.14					
2	4	-0.22					0.13	
3	2	-1.12		0.09				
11	4	-0.29		0.13				
23	NR		< 0.2					
25	NR			< 1.2				
26	NR						< 0.2	
33	4	-0.45			0.12			
38	4	0.22	0.15					
48	2	1.35		0.20				
64	4	0.00	0.14					
81	1	1.98		0.23				
83	4	-0.45	0.12					
89	4	-0.45	0.12					
92	0	5.85	0.40					
93	1	1.57						0.21
105	NR			< 0.5				
107	4	-0.22	0.13					
111	4	-0.22	0.13					
113	3	-0.79		0.11				
119	0	20.24		1.04				
134	2	-1.44	0.08					
138	4	-0.45		0.12				
140	4	-0.20	0.13					
141	NR			< 0.2				
145	0	2.92		0.27				
146	NR			< 1				
180	NR			< 0.422				
185	4	-0.16	0.13					
190	4	0.22					0.15	
191	2	-1.12				0.09		
196	4	0.31	0.15					
215	0	26.08		1.30				
220	2	-1.35	0.08					
221	4	0.22	0.15					
224	0	28.13		1.39				
237	4	-0.20					0.13	
238	4	-0.45					0.12	
241	4	-0.22	0.13					
247	3	-0.76					0.11	
255	NR			< 0.313				
256	NR	-3.15						0.00
257	4	0.22						0.15
262	3	0.67						0.17
285	3	0.90		0.18				
268	4	0.31	0.15					
273	0	19.25		1.00				
274	3	0.67						0.17
282	NR					< 1		
284	3	0.90	0.18					
287	2	1.01	0.185					
289	4	0.00		0.140				

Table 18. *Statistical summary of reported data for standard reference water sample P-28 (low ionic strength constituents)--Continued*

Mg (Magnesium) mg/L



0. Other				6. ICP/MS				
1. AA: direct air				7. Ion chromatography				
4. ICP				20. Titrate: colorimetric				
		N =	4	16	31	1	5	1
		Minimum =	0.820	0.700	0.796	0.910	0.800	0.400
		Maximum =	6.090	0.900	8.629		1.070	
		Median =		0.857	0.900			
		F-pseudosigma =		0.046	0.050			

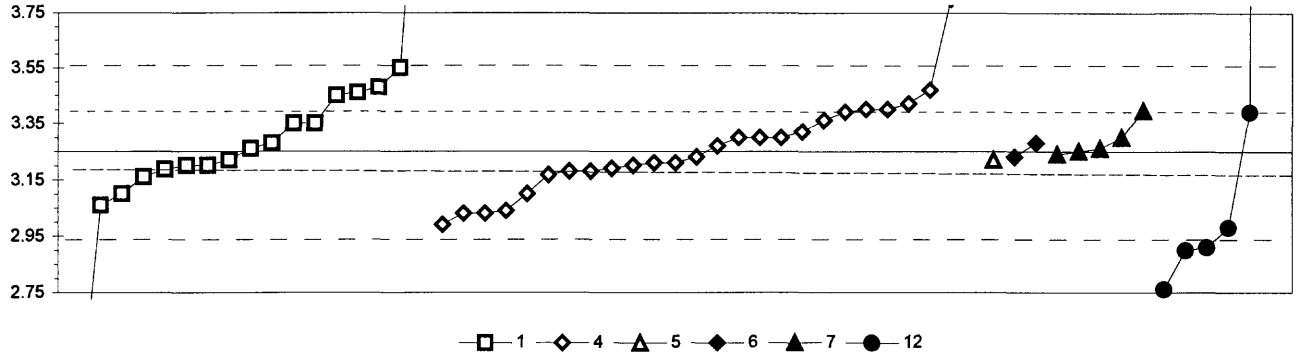
Lab	Rating	Z-value	0	1	4	6	7	20
1	4	-0.34			0.868			
2	0	3.69					1.047	
3	4	-0.07			0.880			
11	1	2.02			0.973			
23	2	-1.19		0.830				
25	3	0.61			0.910			
26	0	4.20					1.070	
33	2	-1.42	0.820					
38	1	-1.87		0.800				
38	4	-0.40		0.865				
46	4	0.16			0.890			
48	2	1.28			0.940			
59	4	0.38			0.900			
64	4	-0.29			0.870			
81	1	-1.96			0.796			
83	2	-1.03			0.837			
86	4	-0.27			0.871			
89	2	-1.42		0.820				
92	0	-4.11		0.700				
93	2	1.28			0.940			
105	4	-0.07			0.880			
107	1	-1.64		0.810				
110	3	-0.74		0.850				
111	4	0.38	0.900					
113	0	3.31			1.030			
119	2	1.28			0.940			
134	4	-0.34			0.868			
138	4	0.38			0.900			
140	3	-0.88		0.844				
141	3	0.81			0.919			
145	1	1.98			0.970			
146	4	-0.34			0.868			
147	3	0.61			0.910			
180	4	-0.07			0.880			
185	4	-0.45		0.863				
190	1	-1.87					0.800	
191	3	0.61				0.910		
196	4	-0.29		0.870				
209	3	-0.97			0.840			
215	3	0.61			0.910			
220	4	0.16		0.890				
221	4	0.09		0.887				
224	0	174.16			8.629			
235	0	2.09			0.976			
237	4	0.38			0.900			
238	4	-0.07					0.880	
241	4	0.38		0.900				
247	4	0.31					0.897	
255	4	-0.10			0.879			
256	0	-10.86						0.400

MPV =	0.883
F-pseudosigma =	0.044
N =	57
Hu =	0.910
HI =	0.850

Lab	Rating	Z-value	0	1	4	6	7	20
257	NR							< 1.5
262	1	1.51	0.950					
265	4	0.16			0.890			
268	2	-1.30		0.825				
273	2	1.19			0.936			
274	0	117.07	6.090					
282	NR					< 1		
284	4	0.36		0.899				
287	4	0.00		0.883				
289	3	-0.74			0.850			

Table 18. *Statistical summary of reported data for standard reference water sample P-28 (low ionic strength constituents)--Continued*

Na (Sodium) mg/L



1. AA: direct air
4. ICP
5. DCP
6. ICP/MS
7. Ion chromatography
12. Flame emission

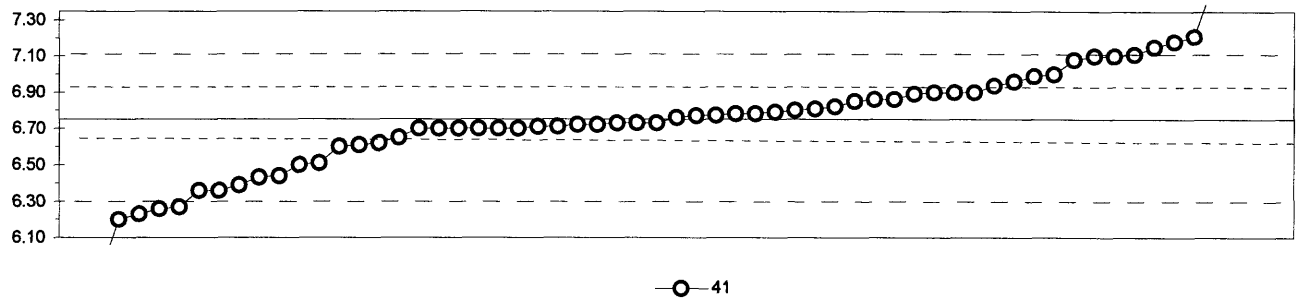
	N =	Minimum =	Maximum =	Median =	F-pseudosigma =
1	17	2.30	4.60	3.26	0.19
4	26	2.99	29.90	3.25	0.16
5	1	3.22			
6	2	3.23	3.28		
7	5	3.24	3.40		
12	6	2.76	15.48		

MPV = 3.25
F-pseudosigma = 0.16
N = 57
Hu = 3.39
HI = 3.18

Lab	Rating	Z-value	1	4	5	6	7	12
1	4	0.32		3.30				
2	3	0.93					3.40	
3	3	0.96		3.40				
11	2	-1.35		3.04				
23	4	-0.19	3.22					
25	3	0.96		3.40				
26	4	0.32					3.30	
33	4	-0.19			3.22			
36	2	1.28	3.45					
38	2	-1.22	3.08					
46	4	-0.26		3.21				
48	4	-0.45		3.18				
59	4	-0.32		3.20				
64	4	0.06	3.26					
81	4	-0.39		3.19				
83	1	-1.67		2.99				
86	4	0.13		3.27				
89	3	-0.58	3.16					
92	0	-6.10	2.30					
93	0	-2.18						2.91
105	4	0.32		3.30				
110	4	-0.32	3.20					
111	3	-0.96	3.10					
113	3	0.71		3.36				
119	4	0.32		3.30				
134	4	-0.40	3.19					
138	4	-0.45		3.18				
140	3	0.64	3.35					
141	2	1.41		3.47				
145	4	-0.26		3.21				
146	2	-1.41		3.03				
147	0	3.53		3.80				
180	4	0.45		3.32				
185	3	0.90						3.39
190	4	-0.06					3.24	
191	4	0.19				3.28		
196	1	1.93	3.55					
215	3	-0.96		3.10				
220	3	0.64	3.35					
221	4	0.19	3.28					
224	0	171.21		29.90				
237	3	0.90		3.39				
238	4	0.06					3.26	
241	4	-0.32	3.20					
247	4	0.00					3.25	
255	3	-0.53		3.17				
256	0	-3.15						2.76
257	1	-1.73						2.98
262	0	-2.25						2.90
265	4	-0.13		3.23				
268	2	1.35	3.46					
273	2	1.09		3.42				
274	0	78.56						15.48
282	4	-0.13				3.23		
284	2	1.48	3.48					
287	0	8.67	4.60					
289	2	-1.41		3.03				

Table 18. *Statistical summary of reported data for standard reference water sample P-28 (low ionic strength constituents)--Continued*

pH



41. Electrometric

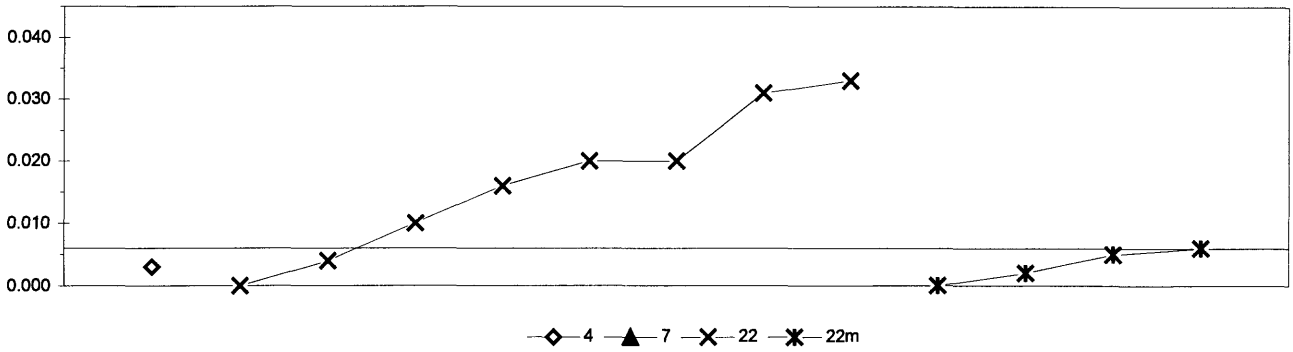
N =	60
Minimum =	5.76
Maximum =	8.93
Median =	6.75
F-pseudosigma =	0.21

MPV =	6.75
F-pseudosigma =	0.34
N =	60
Hu =	6.90
HI =	6.62

Lab	Rating	Z-value	41
1	4	0.21	6.82
2	3	-0.94	6.43
3	4	0.12	6.79
11	4	-0.09	6.72
23	4	0.03	6.76
25	2	1.04	7.10
26	4	-0.15	6.70
33	4	-0.09	6.72
36	2	1.04	7.10
38	4	0.45	6.90
39	4	-0.15	6.70
46	0	6.47	8.93
48	1	-1.63	6.20
59	0	-2.94	5.76
64	4	0.33	6.86
81	3	0.71	6.99
86	3	0.62	6.96
89	2	1.28	7.18
92	2	-1.16	6.36
93	4	-0.12	6.71
96	3	0.98	7.08
105	1	-1.54	6.23
107	4	0.06	6.77
110	4	0.55	6.94
111	4	-0.06	6.73
113	4	-0.12	6.71
119	4	-0.42	6.61
134	4	0.17	6.81
138	3	1.07	7.11
140	0	2.31	7.53
141	4	0.09	6.78
143	4	-0.15	6.70
146	2	1.36	7.21
158	3	-0.92	6.44
180	4	-0.15	6.70
185	4	0.15	6.80
190	4	-0.45	6.60
196	2	1.19	7.15
203	3	-0.71	6.51
204	4	-0.30	6.65
209	4	0.42	6.89
215	4	-0.15	6.70
221	4	0.45	6.90
224	4	-0.39	6.62
237	4	0.30	6.85
238	0	-2.61	5.87
241	2	-1.45	6.26
244	4	0.09	6.78
247	4	0.33	6.86
255	3	0.74	7.00
256	0	4.15	8.15
262	4	-0.06	6.73
265	2	-1.07	6.39
268	4	0.45	6.90
273	4	0.07	6.77
274	4	-0.15	6.70
282	3	-0.74	6.50
284	2	-1.42	6.27
287	2	-1.16	6.36
289	4	-0.06	6.73

Table 18. *Statistical summary of reported data for standard reference water sample P-28 (low ionic strength constituents)--Continued*

PO_4 as P (Orthophosphate as phosphorus) mg/L

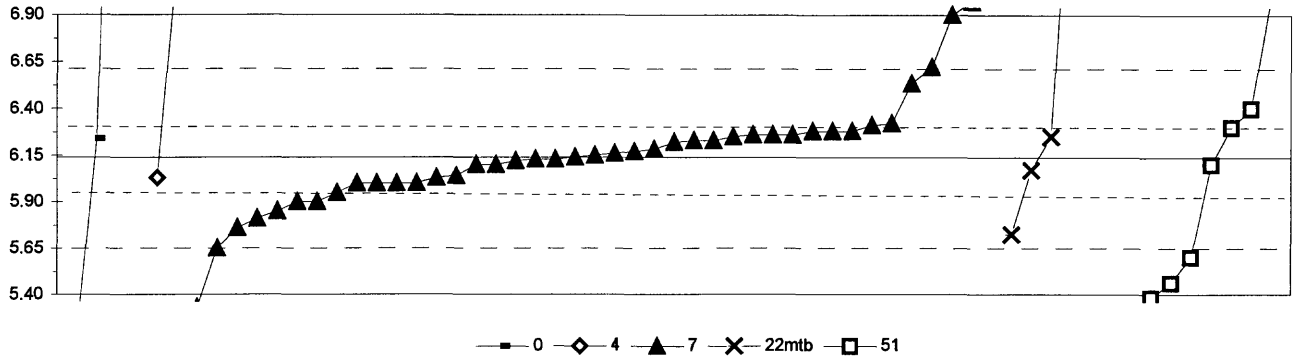


4. ICP				22m. Color:phosphomolybdate		
7. Ion chromatography						
22. Colorimetric						
		N =	1	0	8	4
		Minimum =	0.003	< 0.01	0.000	0.000
		Maximum =		< 0.5	0.033	0.006
		Median =			0.018	
		F-pseudosigma =			0.014	
Lab	Rating	Z-value	4	7	22	22m
1	NR			< 0.01		
3	NR				< 0.01	
23	NR				< 0.01	
26	NR			< 0.5		
33	NR			< 0.02		
38	NR	-0.48			0.000	
39	NR	-0.16			0.004	
48	NR	1.98			0.031	
59	NR	1.11			0.020	
83	NR	0.79			0.016	
89	NR					< 0.002
92	NR					< 0.005
96	NR				< 0.01	
105	NR				< 0.002	
107	NR				< 0.002	
113	NR				< 0.004	
119	NR	-0.48				0.000
134	NR					< 0.002
138	NR				< 0.004	
140	NR	1.11			0.020	
141	NR					< 0.05
143	NR	-0.32				0.002
145	NR	0.32			0.010	
146	NR					< 0.05
180	NR				< 0.01	
191	NR			< 0.02		
196	NR			< 0.03		
203	NR	-0.08				0.005
204	NR					< 0.002
215	NR					< 0.01
224	NR	0.00				0.006
256	NR				< 0.02	
257	NR					< 0.1
273	NR	-0.24	0.003			
274	NR	2.14			0.033	
282	NR			< 0.1		
284	NR				< 0.1	
287	NR					< 0.1

MPV = insufficient data
F-pseudosigma =
N = 13
Hu =
HI =

Table 18. *Statistical summary of reported data for standard reference water sample P-28 (low ionic strength constituents)--Continued*

SO_4 (Sulfate) mg/L



0. Other
4. ICP
7. Ion chromatography
22mtb. Color: methyl thymol blue
51. Turbidimetric

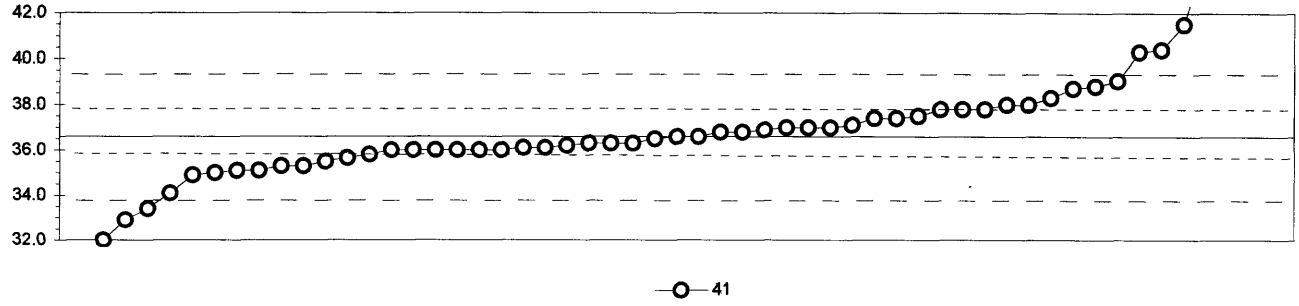
	0	4	7	22mtb	51
N =	4	2	41	4	10
Minimum =	5.18	6.03	5.33	5.73	4.05
Maximum =	11.50	7.22	7.02	7.88	7.00
Median =			6.15		5.53
F-pseudosigma =			0.19		0.74

MPV = 6.14
F-pseudosigma = 0.25
N = 61
Hu = 6.28
HI = 5.95

Lab	Rating	Z-value	0	4	7	22mtb	51
1	3	0.57			6.28		
2	3	-0.78			5.95		
3	3	-0.56			6.00		
11	0	3.58			7.02		
23	4	0.41	6.24				
25	0	3.09			6.90		
26	4	0.37			6.23		
33	4	-0.08			6.12		
36	0	-3.08					5.38
39	2	-1.17			5.85		
46	3	-0.56			6.00		
59	0	3.38			6.97		
64	4	-0.04			6.13		
81	0	7.07				7.88	
83	4	-0.44		6.03			
86	3	0.57			6.28		
89	3	-0.56			6.00		
92	0	-3.41					5.30
93	1	-1.54			5.76		
96	2	1.06					6.40
105	4	-0.44			6.03		
110	4	0.18			6.18		
111	4	-0.40			6.04		
113	4	0.49			6.26		
119	1	-1.99			5.65		
134	4	0.37			6.23		
138	4	0.49			6.26		
140	0	-4.63					5.00
141	4	0.49			6.26		
145	3	0.69			6.31		
146	0	-3.90	5.18				
147	4	0.09			6.16		
158	4	-0.04			6.13		
180	4	0.45			6.25		
183	0	-2.19					5.60
185	3	0.57			6.28		
190	3	-0.56			6.00		
191	4	0.13			6.17		
196	1	1.95			6.62		
203	1	-1.68				5.73	
204	4	-0.28				6.07	
209	4	0.33			6.22		
215	0	3.50					7.00
220	4	0.45				6.25	
221	0	21.78	11.50				
224	1	1.60			6.53		
235	0	4.39		7.22			
238	2	-1.34			5.81		
241	3	-0.97			5.90		
247	0	-3.29			5.33		
256	0	14.06	9.60				
257	4	-0.16			6.10		
262	0	-8.49					4.05
265	3	-0.97			5.90		
268	4	0.04			6.15		
273	4	0.00			6.14		
274	4	-0.16					6.10
282	3	0.74			6.32		
284	0	-2.76					5.46
287	3	0.65					6.30
289	4	-0.16			6.10		

Table 18. *Statistical summary of reported data for standard reference water sample P-28 (low ionic strength constituents)--Continued*

Sp Cond (Specific Conductance) µS/cm



41. Electrometric

N =	55
Minimum =	30.0
Maximum =	865.0
Median =	36.6
F-pseudosigma =	1.4

MPV =	36.6
F-pseudosigma =	1.8
N =	55
Hu =	37.8
HI =	35.9

Lab	Rating	Z-value	41
1	4	0.11	36.8
2	3	-0.52	35.6
3	4	-0.33	36.0
11	4	-0.27	36.1
23	4	-0.33	36.0
25	4	0.22	37.0
26	4	-0.27	36.1
33	3	0.93	38.3
36	3	-0.87	35.0
38	3	0.66	37.8
39	4	-0.33	36.0
46	0	9.40	53.8
48	4	-0.33	36.0
64	0	-2.02	32.9
81	4	0.44	37.4
86	3	0.66	37.8
89	3	0.66	37.8
93	2	1.34	39.1
96	2	1.15	38.7
105	4	-0.16	36.3
107	4	0.00	36.6
111	3	-0.93	34.9
113	4	-0.33	36.0
119	4	0.22	37.0
134	4	0.11	36.8
138	4	0.16	36.9
140	3	0.77	38.0
141	2	1.20	38.8
145	0	-19.45	< 1
146	0	2.08	40.4
158	2	-1.37	34.1
180	4	0.22	37.0
185	3	-0.71	35.3
190	0	2.02	40.3
193	3	-0.60	35.5
196	0	452.68	865.0
203	0	2.68	41.5
204	4	-0.05	36.5
215	4	0.00	36.6
224	4	0.49	37.5
237	3	-0.71	35.3
238	0	-2.51	32.0
241	0	-3.61	30.0
244	4	-0.44	35.8
247	4	-0.16	36.3
255	3	-0.82	35.1
256	0	4.54	44.9
257	4	-0.16	36.3
262	3	0.77	38.0
268	4	-0.22	36.2
273	4	0.44	37.4
274	1	-1.75	33.4
282	4	-0.33	36.0
284	0	4.59	45.0
287	4	0.27	37.1
289	3	-0.82	35.1

Table 19. *Statistical summary of reported data for standard reference water sample GW-1 (ground-water constituents)*

Definition of analytical methods, abbreviations, and symbols

Analytical methods

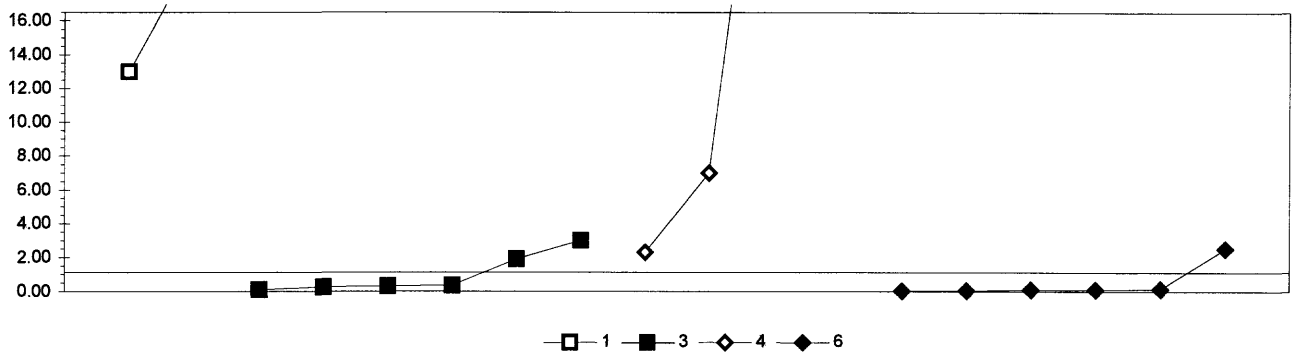
0. Other/Not reported		
1. AA: direct, air	=	atomic absorption: direct,air
2. AA: direct, N_2O	=	atomic absorption: direct,nitrous oxide
3. AA: graphite furnace	=	atomic absorption: graphite furnace
4. ICP	=	inductively coupled plasma
5. DCP	=	direct current plasma
6. ICP/MS	=	inductively coupled plasma/mass spectrometry
10. AA: extraction	=	atomic absorption: extraction [chelating agent(s) specified]
11. AA: hydride	=	atomic absorption: hydride [reducing agent specified]
12. Flame emission	=	flame emission
22. Color:	=	colorimetric [color reagent specified]

Abbreviations and symbols

N =	number of samples
MPV =	most probable value
F-pseudosigma =	nonparametric statistic deviation
Hu =	upper hinge value
Hl =	lower hinge value
µg/L =	micrograms per liter
mg/L =	milligrams per liter
Lab =	laboratory code number
NR =	not rated, less than value reported
< =	less than

Table 19. *Statistical summary of reported data for standard reference water sample GW-1 (ground-water constituents)--Continued*

Ag (Silver) µg/L



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

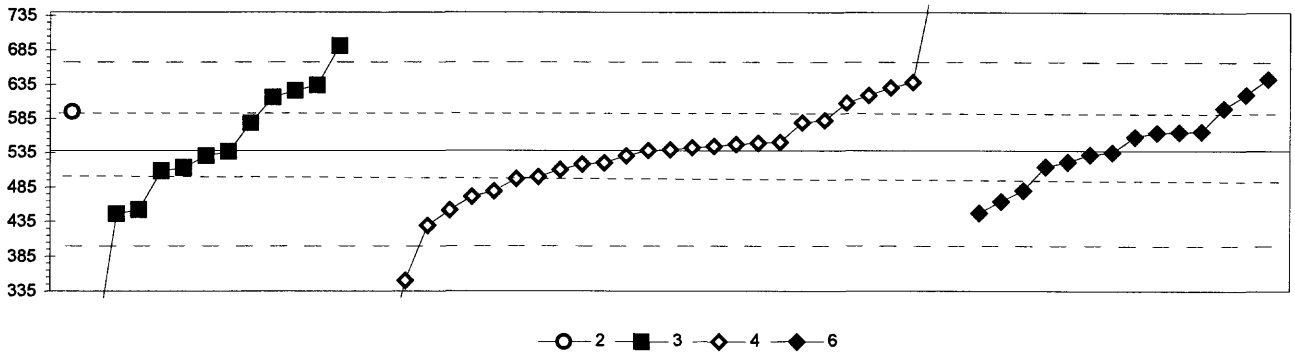
	1	3	4	6
N =	2	6	4	6
Minimum =	13.00	0.10	2.30	0.02
Maximum =	20.00	3.00	39.10	2.51
Median =				
F-pseudosigma =				

MPV = insufficient data
F-pseudosigma =
N = 18
Hu =
Hl =

Lab	Rating	Z-value	1	3	4	6
1	NR			< 1		
3	NR	1.15			7.00	
12	NR			< 0.2		
13	NR				< 10	
16	NR					< 1
18	NR				< 3	
26	NR			< 0.2		
30	NR					< 1
32	NR					< 0.1
34	NR			< 0.2		
42	NR					< 1
48	NR					< 0.6
59	NR			< 5		
61	NR				< 2	
69	NR			< 1		
81	NR			< 1		
89	NR			< 2		
113	NR			< 0.5		
126	NR	-0.16		0.30		
127	NR			< 0.2		
134	NR			< 1		
138	NR	-0.20				0.09
140	NR	3.69	20.00			
141	NR	7.43			39.10	
142	NR	0.27				2.51
146	NR				< 10	
147	NR					< 0.2
149	NR			< 0.1		
151	NR	-0.21				0.02
180	NR				< 3.22	
190	NR	-0.15		0.35		
196	NR	-0.20				0.09
203	NR			< 2		
212	NR	-0.19				0.14
215	NR			<1		
221	NR	-0.20		0.10		
235	NR				< 5	
241	NR			< 1		
247	NR			< 1		
255	NR	-0.17		0.26		
256	NR	2.32	13.00			
257	NR	0.15		1.89		
259	NR	0.23			2.30	
265	NR	-0.21				0.03
273	NR	6.92			36.50	
282	NR					< 10
284	NR	0.37		3.00		
289	NR			< 0.5		

Table 19. *Statistical summary of reported data for standard reference water sample GW-1 (ground-water constituents)--Continued*

Al (Aluminum) µg/L



2. AA: direct nitrous oxide
3. AA: graphite furnace
4. ICP
6. ICP/MS

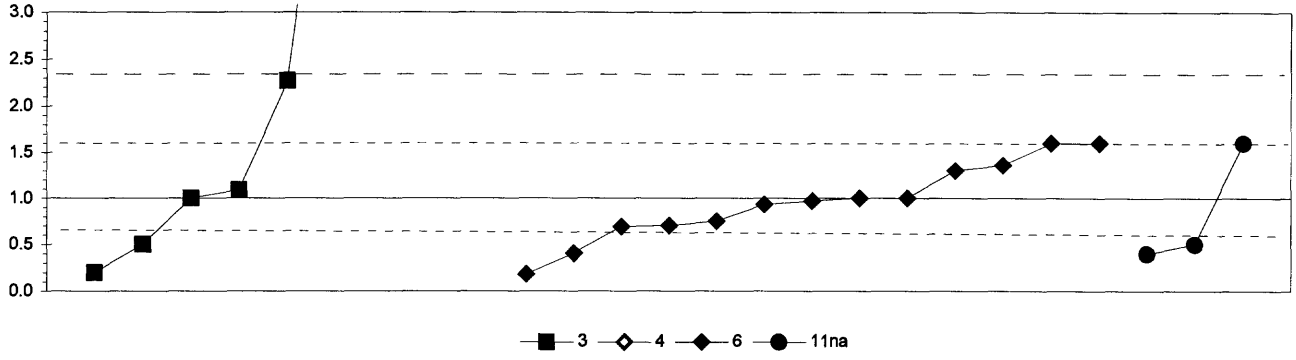
	2	3	4	6
N =	1	12	28	14
Minimum =	595	234	117	447
Maximum =		691	847	643
Median =		533	539	547
F-pseudosigma =		105	69	39

MPV = 538
F-pseudosigma = 67
N = 55
Hu = 589
HI = 499

Lab	Rating	Z-value	2	3	4	6
1	4	-0.36				514
3	4	-0.42			510	
11	4	-0.12			530	
13	4	-0.37		513		
16	2	-1.11				464
18	3	-0.61			497	
26	4	0.18			550	
30	2	1.23				620
32	4	0.40				565
34	3	0.60		578		
42	3	0.66			582	
46	4	0.00			538	
48	4	-0.09				532
59	3	-0.57			500	
61	2	1.21			619	
69	4	-0.45		508		
81	2	1.05			608	
83	3	-0.88			479	
86	3	0.61			579	
89	2	-1.38		446		
111	2	1.32		626		
113	4	0.09			544	
119	2	-1.36				447
127	4	0.01			539	
134	0	3.84			794	
138	4	0.13			547	
141	3	-1.00			471	
142	4	0.06			542	
146	4	-0.30			518	
147	3	-0.87				480
151	1	1.57				643
154	0	-6.31			117	
158	2	1.50			638	
180	4	-0.27			520	
190	2	1.17		616		
191	4	-0.04				535
196	4	0.30				558
203	0	2.29		691		
212	0	-2.82			350	
215	0	4.63			847	
219	2	1.38			630	
221	2	1.44		634		
224	0	-4.77			220	
235	4	-0.25				521
241	4	-0.03		536		
247	4	0.39				564
255	4	0.16			549	
257	0	-4.56		234		
259	2	-1.30			452	
265	3	0.93				600
273	1	-1.63			429	
282	4	0.42				566
284	2	-1.29		452		
287	3	0.85	595			
289	4	-0.12		530		

Table 19. *Statistical summary of reported data for standard reference water sample GW-1 (ground-water constituents)--Continued*

As (Arsenic) µg/L



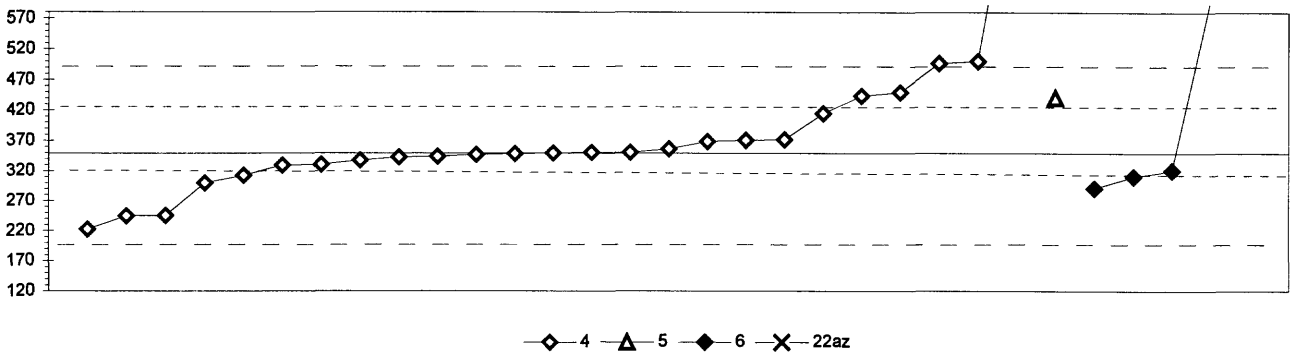
3. AA: graphite furnace
4. ICP
6. ICP/MS
11na. AA: hydride $NaBH_4$

		N =	7	2	13	3
		Minimum =	0.2	23.1	0.2	0.4
		Maximum =	8.0	310.0	1.6	1.6
		Median =	1.1		1.0	
		F-pseudosigma =	2.6		0.4	
Lab	Rating	Z-value	3	4	6	11na
1	NR		< 1			
3	NR			< 5		
13	NR		< 5			
16	3	0.89			1.6	
18	NR		< 1			
26	3	-0.74				0.5
30	4	0.00			1.0	
32	4	-0.10			0.9	
34	2	-1.19	0.2			
42	4	0.44			1.3	
48	4	-0.44			0.7	
59	NR				< 2	
61	NR			< 4.5		
69	NR		< 5			
80	0	7.86	6.3			
81	NR			< 2		
86	3	-0.89				0.4
89	NR					< 2
111	NR		< 2			
113	NR		< 1.5			
119	3	0.89			1.6	
127	NR		< 2			
134	4	0.13	1.1			
138	NR				< 1	
141	NR		< 5			
142	3	-0.88			0.4	
146	0	32.76		23.1		
147	4	-0.46			0.7	
149	NR		< 1			
151	4	-0.37			0.8	
180	0	458.07		310.0		
191	3	0.53			1.4	
196	4	-0.05			1.0	
212	2	-1.21			0.2	
215	NR		<5			
224	NR			< 12		
235	1	1.88	2.3			
241	3	-0.74	0.5			
247	NR		< 5			
255	NR		< 5.6			
256	3	0.89				1.6
257	NR		<0.3			
265	4	0.00			1.0	
282	NR					< 5
284	4	0.00	1.0			
289	0	10.38	8.0			

MPV =	1.0
F-pseudosigma =	0.7
N =	25
Hu =	1.6
HI =	0.7

Table 19. *Statistical summary of reported data for standard reference water sample GW-1 (ground-water constituents)--Continued*

B (Boron) µg/L



4. ICP
5. DCP
6. ICP/MS

22az. Color: azomethine

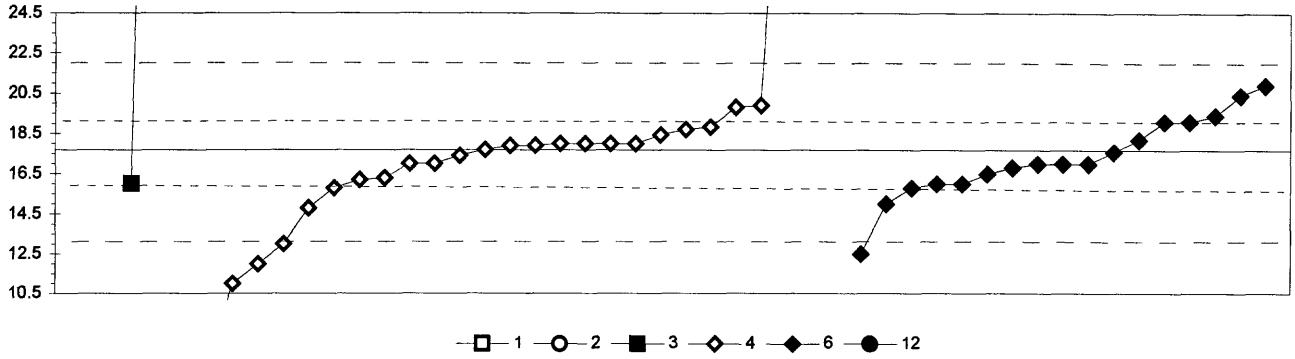
	4	5	6	22az
N =	25	1	4	1
Minimum =	222	440	290	770
Maximum =	860		604	
Median =	349			
F-pseudosigma =	30			

MPV = 349
F-pseudosigma = 76
N = 31
Hu = 427
Hl = 325

Lab	Rating	Z-value	4	5	6	22az
1	2	1.20		440		
3	4	-0.26	329			
11	4	0.29	371			
16	2	1.32	449			
18	4	0.00	349			
26	3	-0.66	299			
32	3	-0.51			310	
42	4	-0.01	348			
46	4	0.09	356			
48	0	6.73	860			
61	1	-1.67	222			
86	4	-0.49	312			
127	4	-0.08	343			
129	0	5.54				770
134	4	-0.03	346			
138	4	0.01	350			
141	1	1.95	497			
142	3	0.86	414			
147	4	-0.38			320	
154	4	-0.16	337			
158	4	-0.09	342			
180	2	-1.38	244			
212	2	1.24	443			
215	4	0.01	350			
247	3	-0.78			290	
255	4	0.25	368			
259	4	0.28	370			
265	4	-0.25	330			
273	2	-1.37	245			
282	0	3.36			604	
289	1	1.99	500			

Table 19. *Statistical summary of reported data for standard reference water sample GW-1 (ground-water constituents)--Continued*

Ba (Barium) µg/L



1. AA: direct air
2. AA: direct nitrous oxide
3. AA: graphite furnace
4. ICP
6. ICP/MS
12. Flame emission

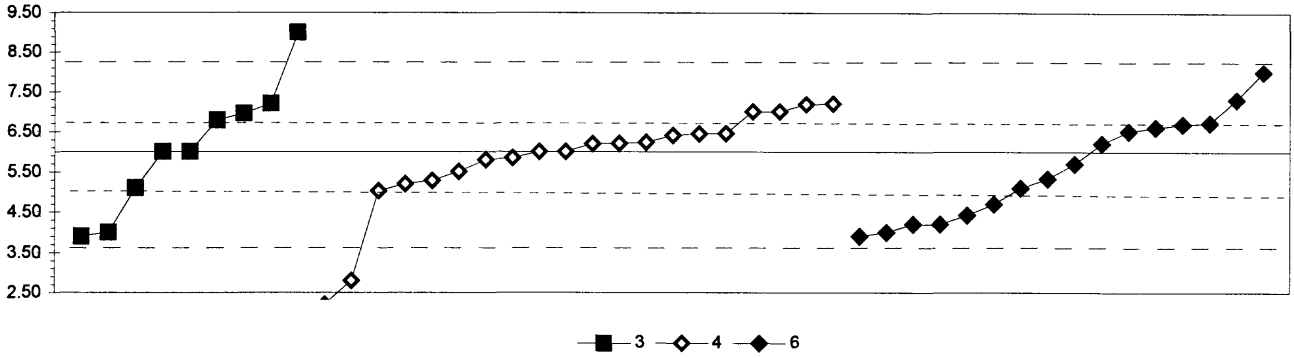
	1	2	3	4	6	12
N =	1	0	2	27	17	1
Minimum =	1516	< 50	16.0	3.0	12.5	520.0
Maximum =			72.0	46.7	20.9	
Median =				17.9	17.0	
F-pseudosigma =				1.9	2.3	

MPV = 17.7
F-pseudosigma = 2.3
N = 48
Hu = 19.1
HI = 16.0

Lab	Rating	Z-value	1	2	3	4	6	12
1	4	-0.28					17.0	
3	0	-4.63				7.0		
11	4	0.15				18.0		
13	4	0.11				17.9		
16	3	0.63					19.1	
18	4	0.15				18.0		
26	4	0.46				18.7		
30	0	-2.24					12.5	
32	4	-0.02					17.6	
42	4	0.15				18.0		
46	0	-6.39				3.0		
48	4	-0.50					16.5	
59	4	-0.28					17.0	
61	3	0.94				19.8		
69	NR				< 50			
81	1	-2.02				13.0		
83	3	-0.59				16.3		
86	4	-0.11				17.4		
89	NR				< 50			
113	2	-1.24				14.8		
127	3	-0.81				15.8		
134	4	0.15				18.0		
138	3	-0.81					15.8	
140	0	652.02	1516.0					
141	4	-0.28				17.0		
142	3	0.63					19.1	
146	3	-0.63				16.2		
147	2	-1.15					15.0	
151	3	0.76					19.4	
154	0	-2.89				11.0		
158	0	11.07				43.1		
180	4	0.02				17.7		
191	2	1.20					20.4	
196	4	-0.37					16.8	
212	3	-0.72					16.0	
215	0	9.73				40.0		
219	4	-0.28				17.0		
220	3	0.51				16.8		
224	3	0.98				19.9		
235	2	1.41					20.9	
241	3	-0.72			16.0			
247	4	-0.28					17.0	
255	4	0.34				18.4		
256	NR			< 50				
259	4	0.11				17.9		
265	4	0.24					18.2	
270	0	218.60						520.0
273	0	12.64				46.7		
282	3	-0.72					16.0	
284	0	23.65			72.0			
289	0	-2.46				12.0		

Table 19. *Statistical summary of reported data for standard reference water sample GW-1 (ground-water constituents)--Continued*

Be (Beryllium) µg/L



3. AA: graphite furnace
4. ICP
6. ICP/MS

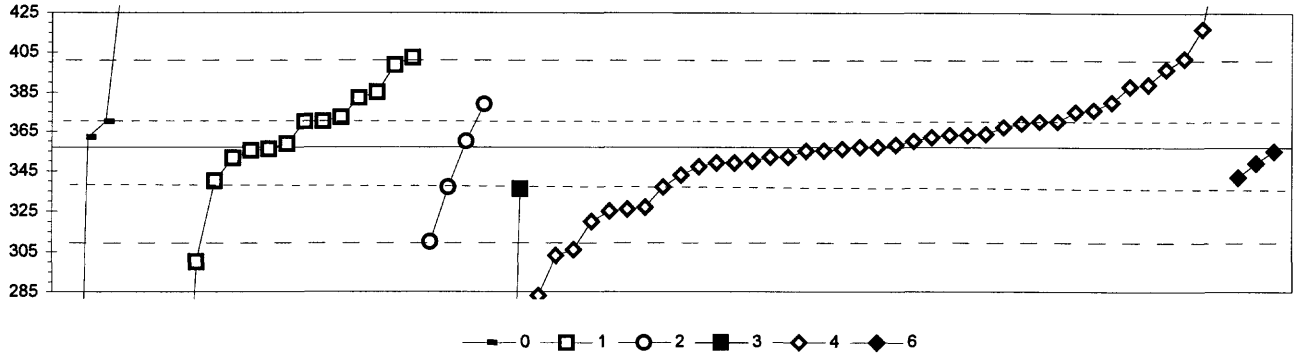
	3	4	6
N =	9	20	16
Minimum =	3.90	2.20	3.90
Maximum =	9.00	7.20	8.00
Median =	6.00	6.10	5.52
F-pseudosigma =	1.37	0.78	1.73

MPV = 6.00
F-pseudosigma = 1.17
N = 45
Hu = 6.68
Hl = 5.10

Lab	Rating	Z-value	3	4	6
1	3	0.61			6.72
3	4	0.00		6.00	
13	0	-3.24		2.20	
16	4	-0.26			5.70
18	4	0.17		6.20	
26	3	-0.61		5.28	
30	1	-1.54			4.20
32	3	0.51			6.60
36	1	-1.79	3.90		
42	2	-1.11			4.70
46	4	-0.42		5.51	
48	1	-1.79			3.90
59	1	-1.71			4.00
61	4	0.34		6.40	
69	3	0.81	6.95		
81	1	-1.71	4.00		
83	3	-0.68		5.20	
86	2	1.02		7.20	
89	3	0.67	6.78		
113	4	-0.13		5.85	
119	3	-0.57			5.33
127	3	-0.83		5.03	
134	4	0.38		6.45	
138	4	0.38		6.44	
141	3	0.85		7.00	
142	3	0.58			6.68
146	2	1.01		7.18	
147	1	-1.54			4.20
149	4	0.00	6.00		
151	1	1.71			8.00
154	2	1.02	7.20		
180	4	-0.17		5.80	
196	4	0.44			6.51
212	2	-1.35			4.42
215	4	0.00	6.00		
219	4	0.00		6.00	
220	4	0.20		6.23	
224	0	-2.73		2.80	
241	3	-0.77	5.10		
247	3	-0.77			5.10
255	4	0.16		6.19	
265	2	1.11			7.30
282	4	0.17			6.20
284	0	2.56	9.00		
289	3	0.85		7.00	

Table 19. *Statistical summary of reported data for standard reference water sample GW-1 (ground-water constituents)--Continued*

Ca (Calcium) mg/L



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

	0	1	2	3	4	6
N =	4	16	4	2	39	3
Minimum =	0	42	310	29	283	342
Maximum =	452	402	379	336	460	355
Median =		357			357	
F-pseudosigma =		42			16	

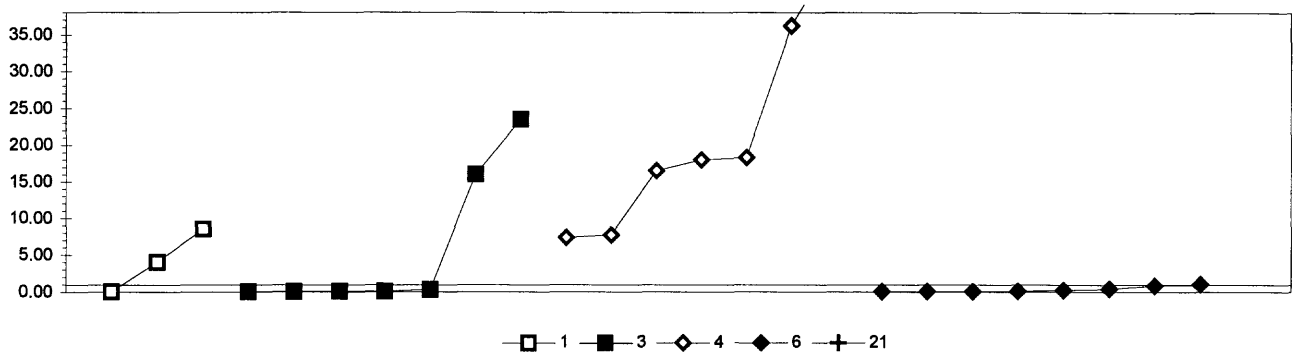
MPV = 357
F-pseudosigma = 23
N = 68
Hu = 370
HI = 339

Lab	Rating	Z-value	0	1	2	3	4	6
1	0	-3.14					283	
3	2	1.34					388	
11	3	0.79					375	
12	0	4.42					460	
13	2	1.39					389	
16	4	0.06					358	
18	3	-0.83					337	
26	4	-0.19					352	
30	3	-0.83			337			
32	4	-0.06						355
36	1	-1.99			310			
42	1	1.71					397	
43	4	0.02					357	
46	4	-0.32					349	
48	0	2.58					417	
59	3	0.58					370	
61	3	-0.58					343	
68	3	1.00					380	
69	4	-0.02		356				
81	3	-0.88				336		
83	2	-1.34					325	
86	3	0.83					376	
89	3	-0.70		340				
92	0	-2.41		300				
111	3	0.96			379			
113	1	1.94					402	
119	3	0.53					369	
127	0	-2.16					306	
129	2	1.22		385				
134	4	0.28					363	
138	4	0.15					360	
140	3	0.66		372				
141	4	-0.32					349	
142	2	-1.26					327	
146	1	-1.56					320	
147	4	-0.06					355	
149	0	-11.12		96				
151	0	-13.41		42				
154	2	-1.30					326	
158	4	0.23					362	
180	4	0.02					357	
185	4	0.09		359				
191	4	-0.32						349
196	3	0.58		370				
203	2	1.09		382				
212	4	-0.19					352	
215	3	0.58					370	
219	4	0.45					367	
220	4	-0.21		352				
221	0	-8.94		147				

Lab	Rating	Z-value	0	1	2	3	4	6
224	4	0.30					364	
235	0	-2.28					303	
241	3	0.58		370				
247	4	0.23	362					
255	4	-0.40					347	
256	4	0.15			360			
262	3	0.57	370					
265	4	0.28					363	
268	1	1.80		399				
270	0	4.06	452					
272	0	-15.22	0					
273	4	-0.06					355	
274	0	-13.97				29		
282	3	-0.62						342
284	1	1.96		402				
287	4	-0.06		355				
289	4	-0.28					350	
292	4	-0.02					356	

Table 19. *Statistical summary of reported data for standard reference water sample GW-1 (ground-water constituents)--Continued*

Cd (Cadmium) µg/L



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

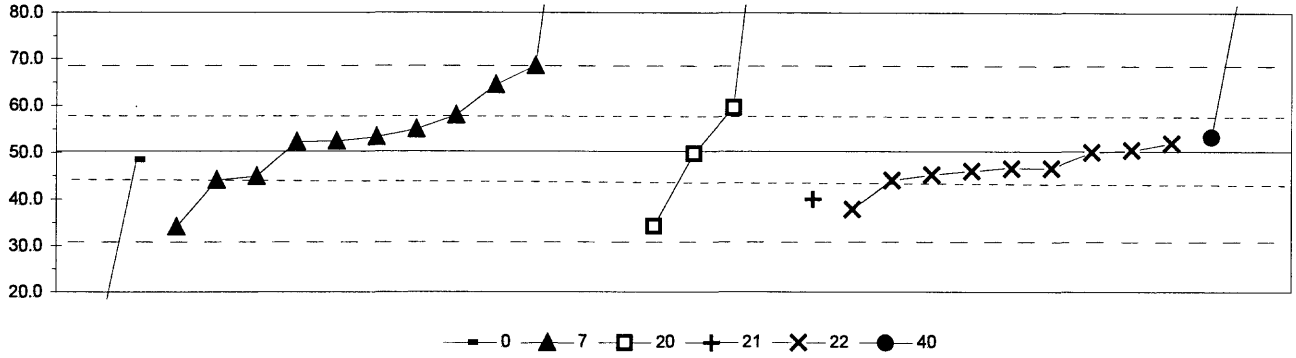
	3	7	7	8	1
N =					
Minimum =	0.03	0.06	7.33	0.04	56.80
Maximum =	8.50	23.49	46.40	1.06	
Median =					
F-pseudosigma =					

MPV = insufficient data
F-pseudosigma =
N = 26
Hu =
Hl =

Lab	Rating	Z-value	1	3	4	6	21
1	NR			< 1			
3	NR				< 0.5		
12	NR			< 0.1			
13	NR				18.00		
16	NR					0.40	
18	NR				< 3		
26	NR			< 0.2			
30	NR					< 1	
32	NR					< 0.1	
34	NR			0.06			
42	NR					< 2	
48	NR					0.10	
59	NR					< 2	
61	NR				< 0.5		
69	NR			< 1			
81	NR			< 2			
83	NR				<5		
86	NR				36.20		
89	NR			< 1			
92	NR		8.50				
111	NR			< 0.5			
113	NR				46.40		
119	NR					0.06	
126	NR			< 1			
127	NR				< 3		
134	NR			< 1			
138	NR					0.04	
140	NR		0.03				
141	NR			< 0.5			
142	NR					< 2	
146	NR				7.33		
147	NR					0.04	
151	NR					< 0.04	
180	NR				< 4.11		
190	NR			16.00			
191	NR					1.06	
196	NR					0.22	
203	NR			< 0.5			
212	NR					< 0.1	
215	NR			<1			
220	NR				16.50		
221	NR			0.07			
224	NR				7.70		
235	NR			0.06			
241	NR			0.30			
247	NR			< 1			
255	NR			< 0.28			
256	NR			< 1			
257	NR		4.00				
259	NR				18.30		
262	NR						56.80
265	NR					0.85	
274	NR			23.49			
282	NR			< 1			
284	NR			< 1			
287	NR			< 1			
289	NR			0.10			

Table 19. *Statistical summary of reported data for standard reference water sample GW-1 (ground-water constituents)--Continued*

Cl (Chloride) mg/L

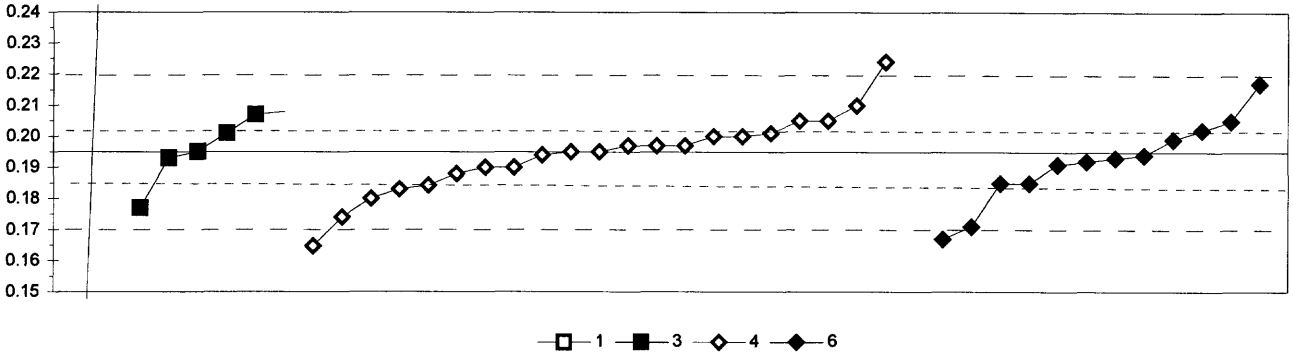


0. Other			21. Titrate: electrometric					
7. Ion chromatography			22. Colorimetric					
20. Titrate: colorimetric			40. Ion selective electrode					
		N =	2	12	4	1	9	2
		Minimum =	7.0	34.0	34.2	40.0	37.8	53.4
		Maximum =	48.4	150.0	133.0		52.0	99.0
		Median =		54.2			46.6	
		F-pseudosigma =		13.3			3.6	
Lab	Rating	Z-value	0	7	20	21	22	40
3	4	0.03					50.5	
11	2	-1.28					37.8	
12	4	-0.44					46.0	
26	3	-0.56		44.8				
32	4	0.22		52.4				
36	4	-0.06			49.7			
43	4	0.32						53.4
48	3	-0.64					44.0	
61	4	-0.19	48.4					
81	0	-4.46	7.0					
86	0	5.02						99.0
89	0	10.27		150.0				
92	3	0.96			59.6			
119	3	-0.64		44.0				
129	1	-1.67		34.0				
140	4	0.18					52.0	
141	4	-0.38					46.6	
158	4	-0.03					50.0	
180	3	0.79		57.9				
215	0	8.52			133.0			
220	3	-0.52					45.2	
241	1	1.88		68.5				
247	4	0.31		53.3				
257	2	-1.06				40.0		
265	4	0.49		55.0				
268	0	8.39		131.7				
274	1	-1.65			34.2			
282	2	1.46		64.4				
284	4	-0.38					46.6	
292	4	0.21		52.3				

MPV =	50.3	3	79.4
F-pseudosigma =	9.7	2	69.7
N =	30	-2	30.8
Hu =	57.9	-3	21.1
HI =	44.8		

Table 19. *Statistical summary of reported data for standard reference water sample GW-1 (ground-water constituents)--Continued*

Co (Cobalt) µg/L



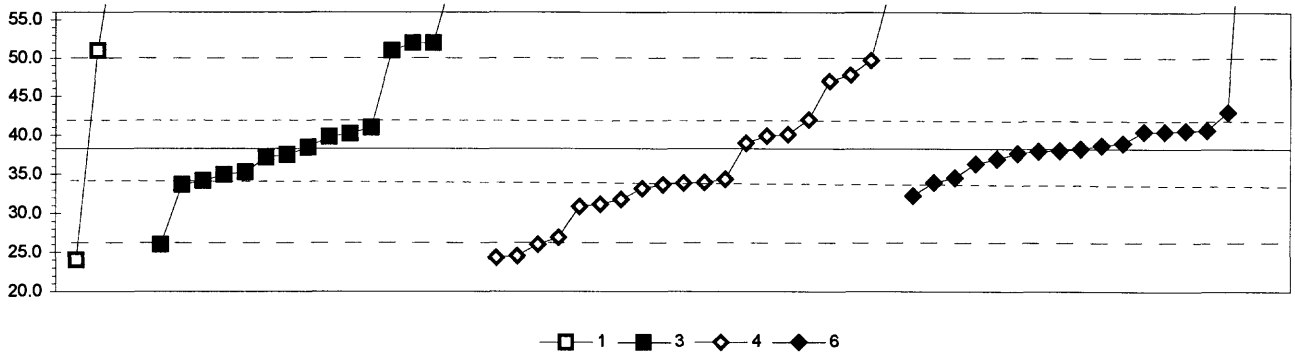
1. AA: direct air
3. AA: graphite furnace
4. ICP
6. ICP/MS

		N =	2	6	22	12
		Minimum =	0.10	0.18	0.16	0.17
		Maximum =	0.36	31.90	2.11	0.22
		Median =			0.20	0.19
		F-pseudosigma =			0.01	0.01
Lab	Rating	Z-value	1	3	4	6
1	4	0.00		0.20		
3	4	0.00			0.20	
13	3	-0.95			0.18	
16	4	-0.24				0.19
18	3	-0.56			0.19	
26	4	-0.40			0.19	
30	4	0.32				0.20
32	1	-1.90				0.17
46	1	-1.67			0.17	
48	2	-1.19			0.18	
61	4	0.40			0.20	
81	4	0.16			0.20	
86	0	2.30			0.22	
89	4	-0.16		0.19		
92	0	-7.22	0.10			
119	4	-0.08				0.19
127	4	0.48		0.20		
134	4	0.16			0.20	
138	4	0.48			0.20	
141	4	0.00			0.20	
142	1	1.75				0.22
146	4	-0.08			0.19	
147	0	-2.22				0.17
180	3	0.79			0.21	
191	3	0.79				0.21
196	3	0.56				0.20
212	4	-0.16				0.19
215	2	1.19			0.21	
219	4	0.40			0.20	
220	4	-0.40			0.19	
224	0	-2.40			0.16	
235	3	-0.79				0.19
247	3	-0.79				0.19
255	3	-0.85			0.18	
256	0	13.09	0.36			
257	0	2516		31.90		
259	4	0.16			0.20	
265	3	0.79			0.21	
273	0	151.96			2.11	
282	4	-0.32				0.19
284	3	0.95		0.21		
289	2	-1.43		0.18		

MPV =	0.20
F-pseudosigma =	0.01
N =	42
Hu =	0.20
HI =	0.19

Table 19. *Statistical summary of reported data for standard reference water sample GW-1 (ground-water constituents)--Continued*

Cr (Chromium) µg/L



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

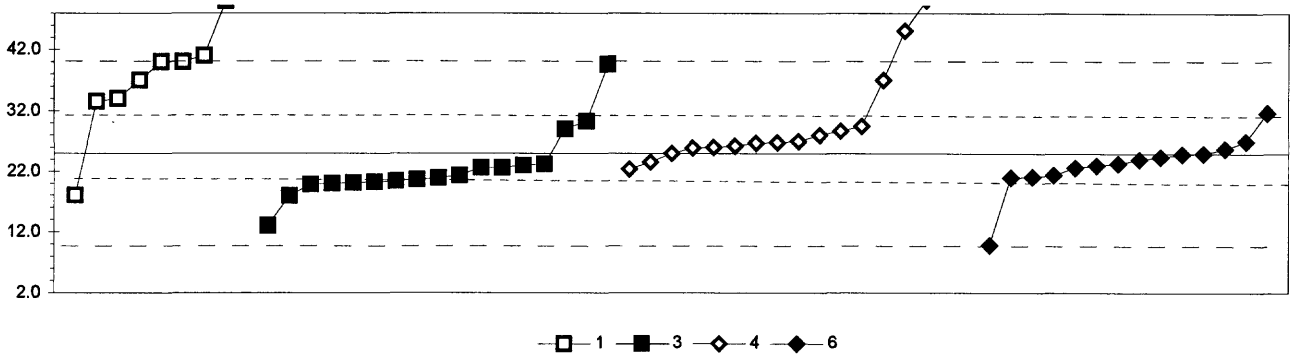
	N =	Minimum =	Maximum =	Median =	F-pseudosigma =
1	4	24.0	160.0		
3	16	26.0	71.0	39.1	12.1
4	20	24.3	60.0	34.0	7.4
6	17	32.3	85.0	38.3	2.6

MPV = 38.3
F-pseudosigma = 5.9
N = 57
Hu = 42.0
Hl = 34.0

Lab	Rating	Z-value	1	3	4	6
1	4	-0.32				36.4
3	2	1.47			47.0	
11	3	0.62			42.0	
12	0	3.66			60.0	
13	1	-1.92			26.9	
16	4	-0.22				37.0
18	3	-0.73			34.0	
26	3	-0.78			33.7	
30	0	7.87				85.0
32	4	0.12				39.0
36	3	-0.56		35.0		
42	2	-1.01				32.3
46	3	-0.78		33.7		
48	4	0.40				40.7
59	4	-0.05				38.0
61	2	-1.10			31.8	
69	3	-0.69		34.2		
81	0	2.31		52.0		
83	4	0.30			40.1	
86	3	-0.86			33.2	
89	4	0.25		39.8		
92	0	-2.41	24.0			
111	0	2.31		52.0		
113	4	0.27			39.9	
119	4	0.07				38.7
126	0	2.14		51.0		
127	4	-0.13		37.5		
134	4	0.12			39.0	
138	3	-0.74			33.9	
140	0	20.52	160.0			
141	1	1.92			49.7	
142	4	0.37				40.5
146	2	-1.25			30.9	
147	3	-0.73				34.0
151	4	-0.03				38.1
154	4	0.32		40.2		
158	0	-2.36			24.3	
180	0	-2.33			24.5	
190	3	-0.51		35.3		
191	4	0.37				40.5
196	4	0.39				40.6
212	4	-0.10				37.7
215	0	-2.07			26.0	
221	4	0.46		41.0		
235	4	0.00				38.3
241	4	0.02		38.4		
247	4	-0.19		37.2		
255	2	-1.20			31.2	
256	0	5.01	68.0			
257	0	3.96		61.8		
259	1	1.60			47.8	
265	3	0.79				43.0
273	3	-0.66			34.4	
282	3	-0.62				34.6
284	0	-2.07		26.0		
287	0	2.14	51.0			
289	0	5.51		71.0		

Table 19. *Statistical summary of reported data for standard reference water sample GW-1 (ground-water constituents)--Continued*

Cu (Copper) µg/L



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

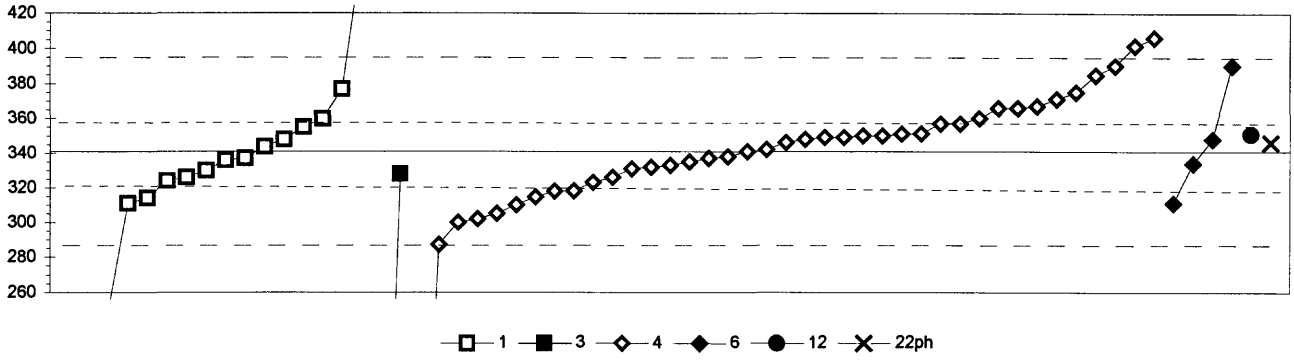
	1	3	4	6
N =	9	17	17	14
Minimum =	18.0	13.0	22.4	9.8
Maximum =	57.0	39.6	59.0	31.7
Median =	40.0	20.9	27.0	23.7
F-pseudosigma =	5.2	2.1	8.2	2.7

MPV = 25.0
F-pseudosigma = 7.6
N = 57
Hu = 31.7
HI = 21.4

Lab	Rating	Z-value	1	3	4	6
1	4	-0.48		21.3		
3	4	0.13			26.0	
11	4	0.39			28.0	
12	3	-0.65		20.0		
13	3	0.59			29.5	
16	4	-0.31				22.6
18	4	0.00			25.0	
26	4	-0.24		23.2		
30	4	-0.13				24.0
32	3	0.88				31.7
36	3	-0.64		20.1		
42	1	-1.99				9.8
46	3	-0.60		20.4		
48	4	0.10				25.8
59	4	-0.26				23.0
61	4	0.16			26.2	
69	3	-0.63		20.2		
81	4	-0.26		23.0		
83	0	.2.89			<3	
86	0	3.29			50.1	
89	1	1.91		39.6		
92	1	1.57	37.0			
111	3	0.69		30.3		
113	0	-3.13			< 1.2	
119	0	3.27	50.0			
126	0	4.19	57.0			
127	4	-0.20			23.5	
134	4	-0.31		22.6		
138	4	-0.47				21.4
140	1	1.96	40.0			
141	4	0.22			26.7	
142	4	-0.08				24.4
146	4	0.12			25.9	
147	4	0.00				25.0
149	0	2.10	41.0			
151	4	-0.22				23.3
154	3	-0.68		19.8		
158	0	2.63			45.1	
180	4	0.48			28.7	
190	3	-0.58		20.6		
191	4	-0.01				24.9
196	4	0.26				27.0
203	2	1.11	33.5			
212	4	0.24			26.8	
215	0	4.45			59.0	
220	1	1.57			37.0	
221	4	-0.31		22.6		
224	0	-2.50			< 6	
235	NR				< 10	
241	3	-0.93		17.9		
247	3	-0.51				21.1
255	4	-0.35			22.4	
256	2	1.18	34.0			
257	3	-0.92	18.0			
259	4	0.26			27.0	
265	3	-0.52				21.0
273	0	4.22			57.2	
274	3	0.52		29.0		
282	NR					< 10
284	1	-1.57		13.0		
287	1	1.96	40.0			
289	3	-0.54		20.9		

Table 19. *Statistical summary of reported data for standard reference water sample GW-1 (ground-water constituents)--Continued*

Fe (Iron) mg/L



1. AA: direct air				6. ICP/MS				
3. AA: graphite furnace				12. Flame emission				
4. ICP				22. Color: phenanthroline				
		N =	16	2	39	5	1	1
		Minimum =	151	1	34	311	351	346
		Maximum =	455	328	406	390		
		Median =	333		346			
		F-pseudosigma =	29		25			

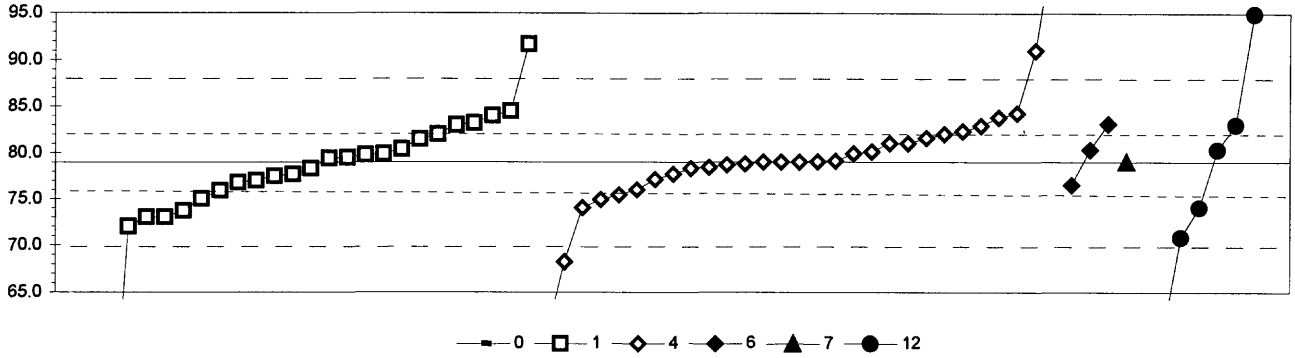
Lab	Rating	Z-value	1	3	4	6	12	22ph
1	3	-0.69			323			
3	3	0.95			366			
11	4	-0.23			335			
12	4	-0.38			331			
13	4	0.00			341			
16	3	-1.00			315			
18	3	-0.57			326			
26	4	0.38			351			
30	4	-0.42	330					
32	1	1.87				390		
36	3	0.53	355					
42	1	1.66			385			
43	0	-11.70			34			
46	4	-0.34			332			
48	0	-13.11			< 0.03			
59	2	-1.18			310			
61	0	2.48			406			
69	3	-0.65	324					
81	3	0.61			357			
83	0	-2.06			287			
86	4	0.30			349			
89	4	-0.50		328				
92	0	-7.24	151					
111	4	-0.19	336					
113	2	1.14			371			
119	2	1.29			375			
126	0	4.34	455					
127	4	0.04			342			
129	4	0.18						346
134	4	0.30			349			
138	4	0.27			348			
140	2	-1.03	314					
141	4	-0.11			338			
142	3	0.95			366			
146	3	0.99			367			
147	1	1.87			390			
149	3	-0.57	326					
151	4	-0.27				334		
154	2	-1.37			305			
158	3	-0.88			318			
180	4	0.19			346			
190	4	0.38					351	
191	4	0.27				348		
203	4	0.27	348					
212	4	-0.30			333			
215	4	0.34			350			
219	4	-0.15			337			
220	2	-1.49			302			
221	2	-1.14	311					
224	0	2.30			401			

MPV =	341
F-pseudosigma =	26
N =	63
Hu =	356
HI =	321

Lab	Rating	Z-value	1	3	4	6	12	22ph
235	1	-1.56			300			
241	4	0.10	344					
255	3	-0.87			318			
256	0	-3.54	248					
257	0	-6.83	162					
259	4	0.39			351			
265	4	0.34			350			
273	3	0.61			357			
274	0	-12.95		1				
282	2	-1.14				311		
284	2	1.36	377					
287	3	0.71	360					
289	3	0.72			360			
292	4	-0.15	337					

Table 19. *Statistical summary of reported data for standard reference water sample GW-1 (ground-water constituents)--Continued*

K (Potassium) mg/L



0. Other
1. AA: direct air
4. ICP
6. ICP/MS
7. Ion chromatography
12. Flame emission

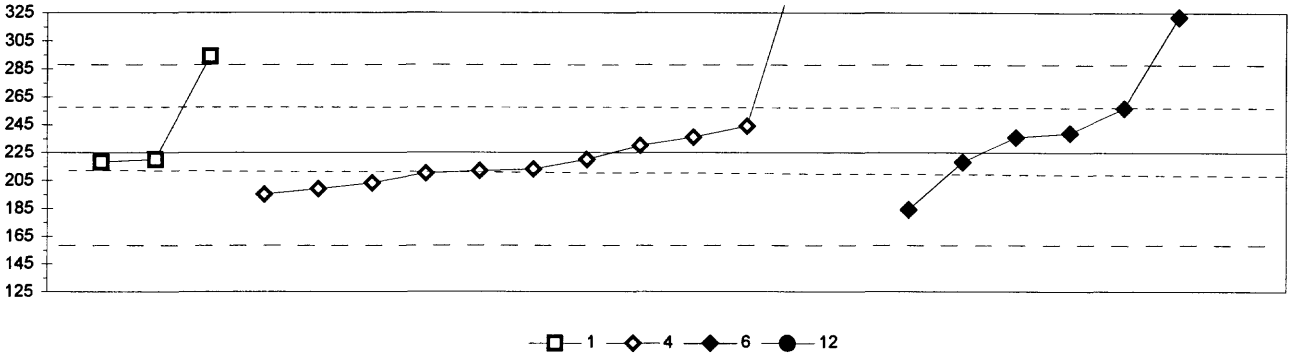
	0	1	4	6	7	12
N =	1	25	29	3	1	8
Minimum =	597.0	3.4	60.2	76.5	79.0	58.7
Maximum =		91.7	103.0	83.1		101.2
Median =		78.3	79.0			77.2
F-pseudosigma =		4.8	2.9			17.5

MPV =	79.0
F-pseudosigma =	4.5
N =	67
Hu =	82.0
HI =	75.9

Lab	Rating	Z-value	0	1	4	6	7	12
1	4	-0.16		78.3				
3	4	0.24			80.1			
11	4	0.00			79.0			
12	4	0.00			79.0			
13	4	0.20			79.9			
16	1	-1.56		72.0				
18	4	0.00			79.0			
26	3	0.87			82.9			
30	2	-1.11						74.0
32	4	0.29				80.3		
36	2	1.11		84.0				
42	2	1.17			84.2			
43	3	0.58			81.6			
46	3	-0.91			74.9			
48	3	-0.80			75.4			
61	0	5.34			103.0			
64	3	0.93		83.2				
69	4	0.29						80.3
81	2	1.07			83.8			
83	2	1.22		84.5				
86	4	-0.04			78.8			
89	3	-0.89		75.0				
92	2	-1.34		73.0				
111	3	0.89		83.0				
113	0	-2.40			68.2			
119	3	0.67			82.0			
127	3	0.67		82.0				
129	2	-1.34		73.0				
134	4	-0.49		76.8				
138	4	-0.13			78.4			
140	4	0.11		79.5				
141	3	0.73			82.3			
142	4	-0.42			77.1			
146	0	2.67			91.0			
149	4	0.09		79.4				
151	0	-16.83		3.4				
154	0	115.31	597.0					
158	0	-4.19			60.2			
180	4	-0.07			78.7			
185	2	-1.18		73.7				
191	3	0.91				83.1		
196	4	0.20		79.9				
203	3	0.56		81.5				
212	4	-0.29			77.7			
215	4	0.45			81.0			
219	4	0.45			81.0			
220	3	-0.69		75.9				
221	4	-0.33		77.5				
224	3	-0.67			76.0			
241	4	-0.45		77.0				
247	4	0.00					79.0	
255	4	0.00			79.0			
256	0	-4.53						58.7
257	1	-1.83						70.8
259	4	0.31		80.4				
262	3	0.89						83.0
265	4	0.02			79.1			
268	0	2.83		91.7				
270	0	3.55						94.9
272	0	-4.23						60.0
273	4	-0.16			78.3			
274	0	4.94						101.2
282	3	-0.56				76.5		
284	4	0.18		79.8				
287	0	-7.89		43.5				
289	2	-1.11			74.0			
292	4	-0.29		77.7				

Table 19. *Statistical summary of reported data for standard reference water sample GW-1 (ground-water constituents)--Continued*

Li (Lithium) µg/L



1. AA: direct air
4. ICP
6. ICP/MS
12. Flame emission

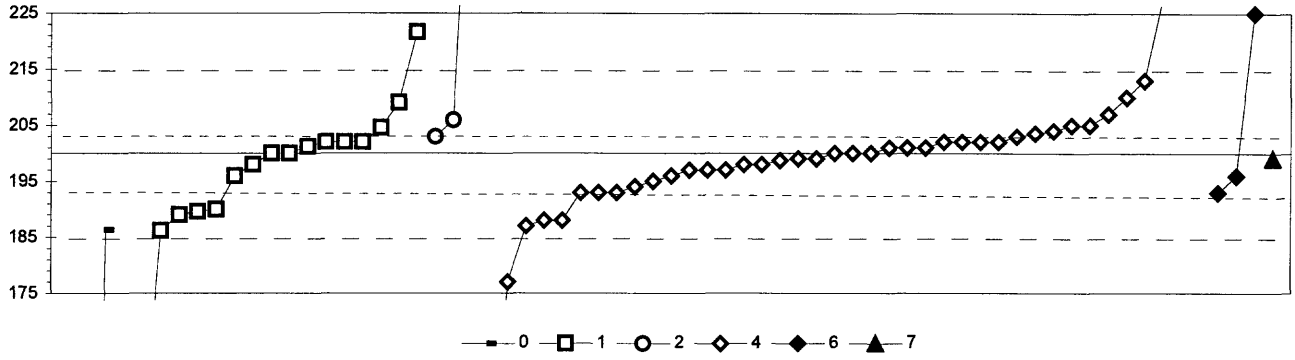
	1	4	6	12
N =	3	12	6	1
Minimum =	218	195	184	1460
Maximum =	294	400	322	
Median =		217		
F-pseudosigma =		25		

Lab	Rating	Z-value	1	4	6	12
1	0	2.07	294			
3	3	0.57		244		
11	4	-0.45		210		
16	4	-0.21			218	
26	4	0.33		236		
32	4	0.33			236	
69	4	-0.21	218			
127	3	-0.78		199		
134	3	-0.90		195		
142	4	-0.36		213		
147	4	-0.15		220		
151	3	0.96			257	
196	4	0.42			239	
212	4	-0.39		212		
219	4	0.15		230		
220	3	-0.65		203		
247	2	-1.23			184	
256	0	37.02				1460
257	4	-0.15	220			
265	0	2.91			322	
273	0	4.35		370		
289	0	5.25		400		

MPV =	225
F-pseudosigma =	33
N =	22
Hu =	257
HI =	212

Table 19. *Statistical summary of reported data for standard reference water sample GW-1 (ground-water constituents)--Continued*

Mg (Magnesium) **mg/L**



0. Other
1. AA: direct air
2. AA: direct nitrous oxide
4. ICP
6. ICP/MS
7. Ion chromatography

	0	1	2	4	6	7
N =	3	17	3	40	3	1
Minimum =	0	8	203	144	193	199
Maximum =	186	222	270	232	225	
Median =		200		200		
F-pseudosigma =		9		6		

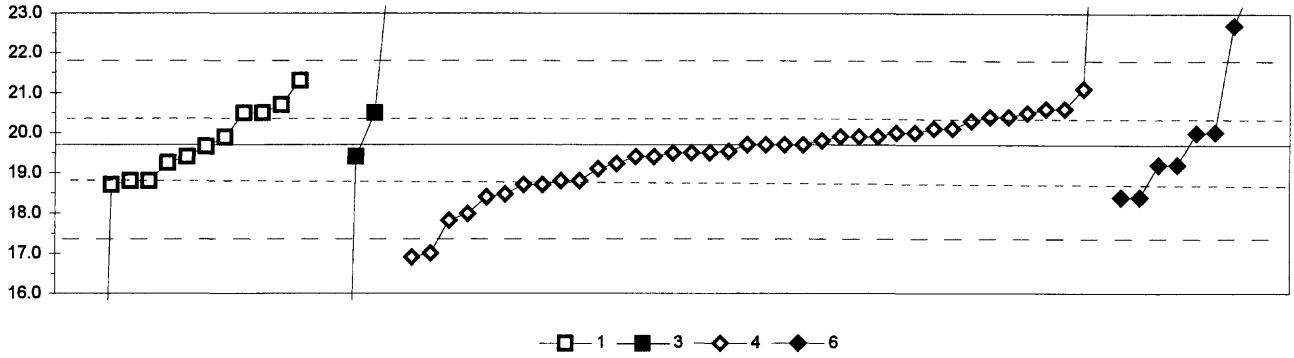
MPV = 200
F-pseudosigma = 10
N = 67
Hu = 203
HI = 193

Lab	Rating	Z-value	0	1	2	4	6	7
1	2	-1.20				188		
3	4	-0.10				199		
11	2	1.30				213		
12	0	-5.60				144		
13	4	0.10				201		
16	4	0.00				200		
18	3	-0.70				193		
26	4	0.10				201		
30	4	0.30			203			
32	0	2.50					225	
36	4	0.20		202				
42	0	2.97				230		
43	4	-0.30				197		
46	3	-0.60				194		
48	0	3.20				232		
59	4	0.50				205		
61	3	0.70				207		
68	3	1.00				210		
69	4	-0.20		198				
76	4	0.46		205				
81	4	-0.20				198		
83	0	-2.30				177		
86	4	0.00				200		
89	0	-5.30		147				
92	3	-1.00		190				
111	3	0.60			206			
113	0	2.80				228		
119	4	0.30				203		
127	4	0.20				202		
129	4	0.00		200				
134	3	-0.70				193		
138	4	-0.10				199		
140	4	-0.40		196				
141	4	-0.30				197		
142	4	-0.40				196		
146	4	0.10				201		
147	4	-0.20				198		
149	2	-1.10		189				
151	0	-19.19		8				
154	2	-1.20				188		
158	4	0.50				205		
180	4	-0.30				197		
185	2	-1.04		190				
191	4	-0.40					196	
196	2	-1.38		186				
203	3	0.90		209				
212	4	0.20				202		
215	4	0.40				204		
219	4	0.00				200		
220	4	0.20		202				

Lab	Rating	Z-value	0	1	2	4	6	7
224	4	0.36				204		
235	2	-1.30				187		
241	4	0.00		200				
247	4	-0.10						199
255	4	-0.13				199		
256	0	7.00			270			
262	2	-1.37	186					
265	4	0.20				202		
268	4	0.20		202				
272	0	-20.00	0					
273	4	0.20				202		
274	0	-18.05	19					
282	3	-0.70					193	
284	0	2.16		222				
287	4	0.12		201				
289	4	-0.50				195		
292	3	-0.70				193		

Table 19. *Statistical summary of reported data for standard reference water sample GW-1 (ground-water constituents)--Continued*

Mn (Manganese) **mg/L**



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

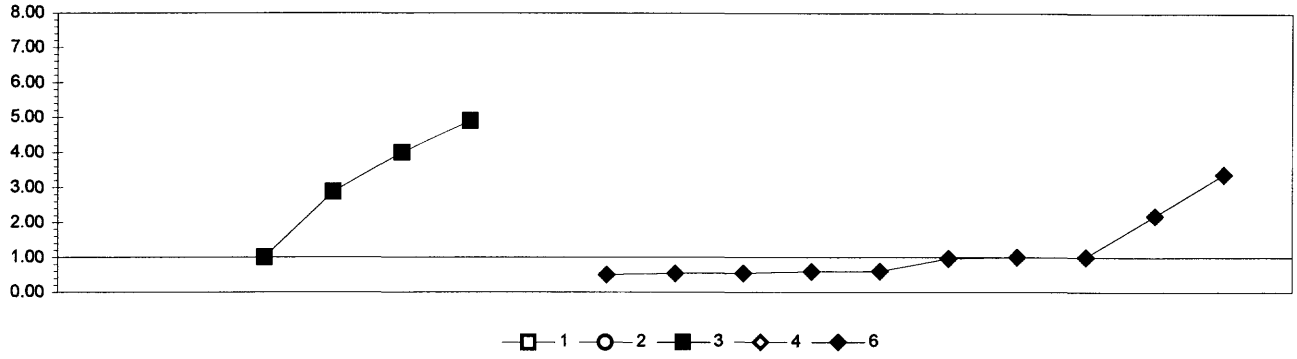
	1	3	4	6
N =	13	5	38	9
Minimum =	0.0	0.0	16.9	18.4
Maximum =	21.3	25.3	171.0	260.0
Median =	19.4		19.7	20.0
F-pseudosigma =	1.3		1.0	2.6

MPV = 19.7
F-pseudosigma = 1.1
N = 65
Hu = 20.3
HI = 18.8

Lab	Rating	Z-value	1	3	4	6
1	4	-0.41				19.2
3	3	0.67			20.4	
11	4	0.13			19.8	
12	3	-0.86			18.7	
13	3	0.67			20.4	
16	2	-1.07			18.5	
18	2	-1.13			18.4	
26	4	0.04			19.7	
30	0	216.15				260.0
32	0	2.73				22.7
36	3	0.76		20.5		
42	4	0.40			20.1	
43	4	0.04			19.7	
46	4	-0.12			19.5	
48	0	3.72				23.8
59	4	0.31			20.0	
61	4	-0.23			19.4	
69	3	-0.77	18.8			
81	3	-0.77			18.8	
83	2	-1.50			18.0	
86	3	-0.86			18.7	
89	4	-0.23		19.4		
92	0	-17.66	0.0			
111	3	0.94	20.7			
113	2	1.30			21.1	
119	3	0.85			20.6	
126	2	1.47	21.3			
127	0	136.11			171.0	
129	0	-15.75	2.2			
134	3	0.58			20.3	
138	4	-0.14			19.5	
140	3	0.76	20.5			
141	4	-0.23			19.4	
142	3	0.76			20.5	
146	4	0.22			19.9	
147	0	-2.39			17.0	
149	4	-0.23	19.4			
151	2	-1.13				18.4
154	0	-2.48			16.9	
158	4	0.31			20.0	
180	4	0.22			19.9	
190	0	5.07		25.3		
191	4	0.31				20.0
196	4	0.32				20.0
203	3	0.76	20.5			
212	3	-0.77			18.8	
215	4	-0.50			19.1	
219	4	0.04			19.7	
220	1	-1.65			17.8	
221	3	-0.86	18.7			
224	4	-0.15			19.5	
235	4	0.04			19.7	
241	3	-0.77	18.8			
255	4	-0.39			19.2	
256	4	-0.37	19.3			
257	0	-17.64		0.0		
259	4	-0.14			19.5	
265	4	-0.41				19.2
273	4	0.40			20.1	
274	0	-17.52		0.2		
282	2	-1.13				18.4
284	4	0.21	19.9			
287	4	0.00	19.7			
289	4	0.22			19.9	
292	3	0.85			20.6	

Table 19. *Statistical summary of reported data for standard reference water sample GW-1 (ground-water constituents)--Continued*

Mo (Molybdenum) µg/L



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

MPV = insufficient data

F-pseudosigma =

	1	2	3	4	6
N =	1	0	4	1	10
Minimum =	26.00	< 20	1.00	124.00	0.50
Maximum =			4.90		3.38
Median =					0.79
F-pseudosigma =					0.00

N = 16

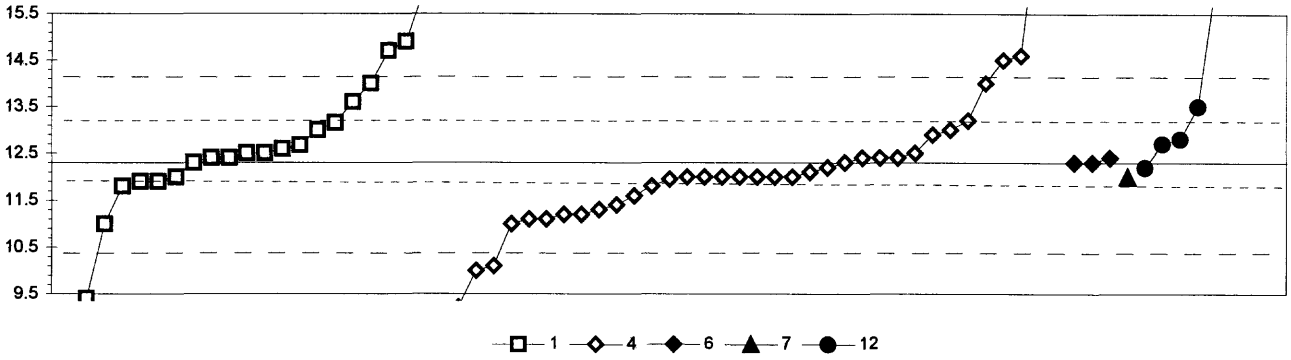
Hu =

Hl =

Lab	Rating	Z-value	1	2	3	4	6
1	NR				< 1		
3	NR					< 5	
12	NR					< 30	
16	NR	0.00					1.00
18	NR					< 20	
26	NR					< 4	
30	NR	0.52					2.20
32	NR	-0.22					0.50
42	NR						< 10
48	NR	-0.17					0.60
61	NR					< 17.2	
81	NR					< 5	
86	NR	53.64				124.00	
127	NR				< 2		
134	NR	0.82			2.88		
138	NR						< 0.2
141	NR					< 10	
142	NR	-0.18					0.59
146	NR					< 10	
147	NR	-0.01					0.97
149	NR				< 2		
151	NR	-0.20					0.53
180	NR					< 5.11	
196	NR	-0.20					0.54
212	NR						< 0.1
215	NR	1.31			4.00		
221	NR	0.00			1.00		
224	NR					< 5	
235	NR	1.04					3.38
241	NR				< 5		
247	NR						< 1
255	NR					< 5.1	
257	NR			< 20			
265	NR	0.00					1.00
282	NR						< 50
284	NR	10.90	26.00				
289	NR	1.70			4.90		

Table 19. *Statistical summary of reported data for standard reference water sample GW-1 (ground-water constituents)--Continued*

Na (Sodium) mg/L



1. AA: direct air
4. ICP
6. ICP/MS
7. Ion chromatography
12. Flame emission

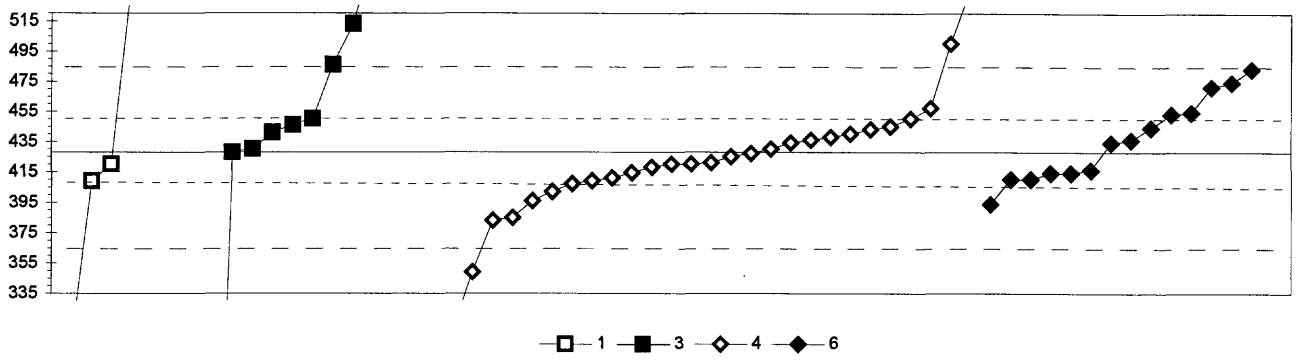
	1	4	6	7	12
N =	22	35	3	1	8
Minimum =	9.0	9.2	12.3	12.0	12.2
Maximum =	52.6	18.3	12.4		50.0
Median =	12.5	12.0			14.9
F-pseudosigma =	1.3	0.8			7.0

MPV = 12.3
F-pseudosigma = 0.9
N = 69
Hu = 13.2
HI = 11.9

Lab	Rating	Z-value	1	4	6	7	12
1	2	-1.19		11.2			
3	3	0.97		13.2			
11	2	-1.19		11.2			
12	4	-0.32		12.0			
13	4	0.11		12.4			
16	0	-2.48		10.0			
18	4	-0.32		12.0			
26	4	-0.32		12.0			
32	4	0.11			12.4		
36	4	0.22	12.5				
42	3	0.64		12.9			
43	2	-1.08		11.3			
46	3	-0.97		11.4			
48	0	6.48		18.3			
59	4	-0.32		12.0			
61	0	2.48		14.6			
64	4	-0.43	11.9				
69	4	0.43					12.7
76	4	0.11	12.4				
81	4	0.11		12.4			
83	2	-1.30		11.1			
86	4	-0.32		12.0			
89	4	0.11	12.4				
92	0	-3.56	9.0				
111	1	1.83	14.0				
113	2	-1.30		11.1			
119	4	-0.32		12.0			
126	0	-3.13	9.4				
127	0	-2.37		10.1			
129	4	0.22	12.5				
134	4	0.40	12.7				
138	4	-0.32		12.0			
140	2	1.40	13.6				
141	4	-0.22		12.1			
142	0	-3.33		9.2			
146	0	2.37		14.5			
147	3	0.76		13.0			
149	2	-1.40	11.0				
151	0	43.49	52.6				
154	0	6.04		17.9			
180	3	-0.54		11.8			
185	4	-0.11					12.2
191	4	0.00			12.3		
196	4	0.31	12.6				
203	4	-0.32	12.0				
212	2	-1.40		11.0			
215	4	-0.11		12.2			
219	1	1.83		14.0			
220	3	0.76	13.0				
221	4	0.00	12.3				
224	4	0.11		12.4			
241	0	3.99	16.0				
247	4	-0.32				12.0	
255	4	-0.38		12.0			
256	0	4.35					16.3
257	3	0.54					12.8
259	3	-0.54	11.8				
262	2	1.30					13.5
265	4	0.00		12.3			
268	0	2.81	14.9				
270	0	12.19					23.6
272	0	40.69					50.0
273	3	-0.76		11.6			
274	0	9.17					20.8
282	4	0.00				12.3	
284	3	0.92	13.2				
287	0	2.59	14.7				
289	4	0.22		12.5			
292	4	-0.43	11.9				

Table 19. *Statistical summary of reported data for standard reference water sample GW-1 (ground-water constituents)--Continued*

Ni (Nickel) µg/L



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

	1	3	4	6
N =	6	10	30	14
Minimum =	300	13	0	394
Maximum =	650	561	537	483
Median =		444	420	435
F-pseudosigma =		43	31	30

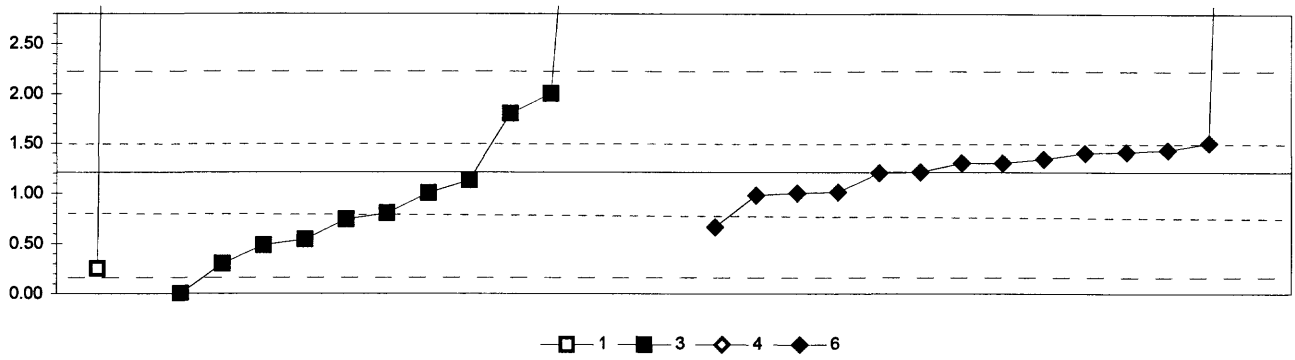
Lab	Rating	Z-value	1	3	4	6
1	4	0.21			434	
3	4	-0.02			427	
11	0	-12.65			43	
12	4	-0.25			420	
13	3	-0.84			402	
16	4	-0.38				416
18	3	-0.54			411	
26	4	-0.21			421	
30	1	1.83				483
32	4	0.28				436
36	3	0.74		450		
42	3	-0.67			407	
46	2	-1.40			385	
48	3	0.54				444
59	0	2.39			500	
61	4	0.41			440	
69	0	3.90	546			
81	0	3.60			537	
83	2	-1.04			396	
86	4	0.28			436	
89	4	0.44		441		
92	0	-4.20	300			
111	0	2.81		513		
113	2	-1.46			383	
119	1	1.53				474
126	0	7.32	650			
127	3	0.61		446		
134	3	0.58			445	
138	4	0.35			438	
140	4	-0.25	420			
141	3	-0.61			409	
142	3	0.87				454
146	4	0.08			430	
147	0	-3.87			310	
151	4	-0.44				414
154	0	-2.58			349	
158	3	0.51			443	
180	4	-0.31			418	
190	0	4.39		561		
191	3	0.84				453
196	2	1.43				471
212	4	-0.44				414
215	4	-0.08			425	
219	4	-0.25			420	
220	3	0.97			457	
221	0	-13.63		13		
224	0	-14.07			0	
235	2	-1.10				394
241	4	0.02		428		
247	4	0.21				434

MPV =	428
F-pseudosigma =	30
N =	60
Hu =	450
HI =	409

Lab	Rating	Z-value	1	3	4	6
255	4	-0.43			414	
256	0	-13.12		29		
257	3	-0.61	409			
259	3	0.74			450	
265	3	-0.58				410
273	0	-7.98			185	
282	3	-0.58				410
284	4	0.08		430		
287	0	3.94	547			
289	1	1.92		486		

Table 19. *Statistical summary of reported data for standard reference water sample GW-1 (ground-water constituents)--Continued*

Pb (Lead) µg/L



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

	1	3	4	6
N =	2	12	1	14
Minimum =	0.25	0.00	98.80	0.66
Maximum =	40.00	27.40		15.20
Median =		0.90		1.30
F-pseudosigma =		1.03		0.30

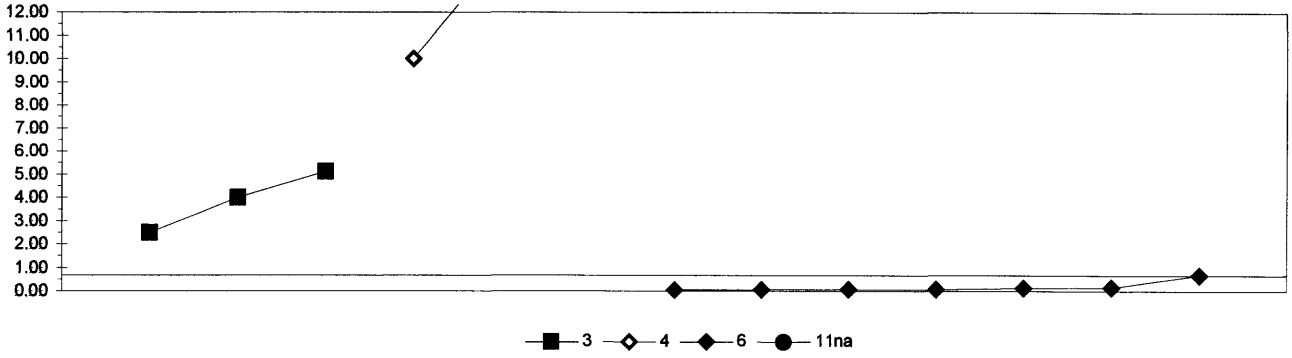
Lab	Rating	Z-value	1	3	4	6
1	NR			< 1		
3	NR				< 3	
12	NR			< 10		
13	NR			< 5		
16	3	0.56				1.50
18	2	1.14		1.80		
26	NR			< 1		
30	4	-0.40				1.00
32	4	0.17				1.30
34	NR			< 1		
42	NR					< 2
46	1	1.52		2.00		
48	4	0.37				1.40
59	NR					< 2
61	NR				< 1.6	
69	NR			< 5		
81	NR				< 2	
89	NR			< 5		
92	0	74.75	40.00			
111	NR			< 2		
113	NR			< 0.8		
119	0	26.96				15.20
126	3	-0.79		0.80		
127	4	-0.15		1.13		
134	NR			< 1		
138	4	0.17				1.30
140	1	-1.85	0.25			
141	NR			< 5		
142	2	-1.05				0.66
146	NR				< 5	
147	4	-0.44				0.98
149	NR			< 2		
151	4	0.25				1.34
180	0	188.07			98.80	
190	NR	-2.33		0.00		
191	4	0.39				1.41
196	4	-0.39				1.01
203	NR			< 2		
212	4	0.00				1.21
215	NR			< 3		
221	2	-1.40		0.48		
224	0	50.47		27.40		
235	4	0.42				1.43
241	1	-1.75		0.30		
247	NR			< 5		
255	NR			< 2.35		
256	NR			< 5		
257	3	-0.91		0.74		
265	4	-0.02				1.20
274	0	11.54		7.20		

MPV =	1.21
F-pseudosigma =	0.52
N =	29
Hu =	1.50
HI =	0.80

Lab	Rating	Z-value	1	3	4	6
282	NR			< 5		
284	4	-0.40		1.00		
287	NR			< 1		
289	2	-1.29		0.54		

Table 19. *Statistical summary of reported data for standard reference water sample GW-1 (ground-water constituents)--Continued*

Sb (Antimony) µg/L



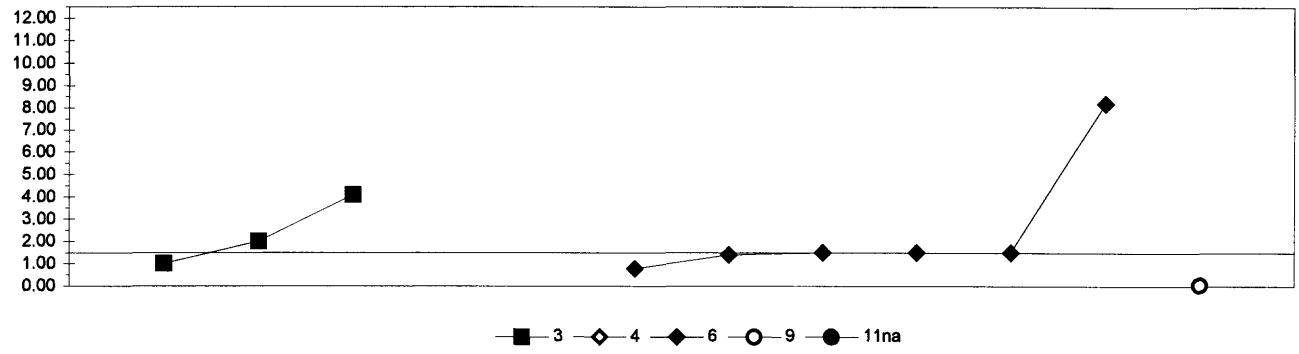
3. AA: graphite furnace
4. ICP
6. ICP/MS
11na. AA: hydride $NaBH_4$

MPV = insufficient data
F-pseudosigma =
N = 13
Hu =
HI =

			3	3	7	0
		N =	3	3	7	0
		Minimum =	2.50	10.00	0.04	< 5
		Maximum =	5.12	77.60	0.68	
		Median =			0.07	
		F-pseudosigma =			0.06	
Lab	Rating	Z-value	3	4	6	11na
1	NR		< 1			
3	NR	2.49		10.00		
13	NR		< 5			
16	NR				< 1	
18	NR		< 1			
30	NR				< 5	
32	NR				< 0.1	
42	NR				< 2	
48	NR				< 0.2	
59	NR				< 2	
61	NR	3.69		14.50		
69	NR		< 5			
81	NR		< 2			
89	NR		< 10			
113	NR			< 2.2		
119	NR	-0.16			0.07	
127	NR		< 3			
134	NR		< 1			
138	NR				< 0.2	
141	NR	1.19	5.12			
142	NR	0.00			0.68	
146	NR			< 50		
147	NR	-0.17			0.04	
149	NR		< 3			
151	NR	-0.17			0.05	
180	NR	20.55		77.60		
196	NR	-0.16			0.07	
212	NR				< 0.1	
215	NR		<7			
235	NR	-0.15			0.13	
241	NR	0.49	2.50			
247	NR		< 5			
255	NR			< 24		
257	NR		< 0.5			
265	NR	-0.14			0.15	
282	NR					< 5
284	NR	0.89	4.00			

Table 19. *Statistical summary of reported data for standard reference water sample GW-1 (ground-water constituents)--Continued*

Se (Selenium) µg/L



3. AA: graphite furnace
4. ICP
6. ICP/MS
8. AA: cold vapor
11na. AA: hydride $NaBH_4$

MPV = insufficient data
F-pseudosigma =

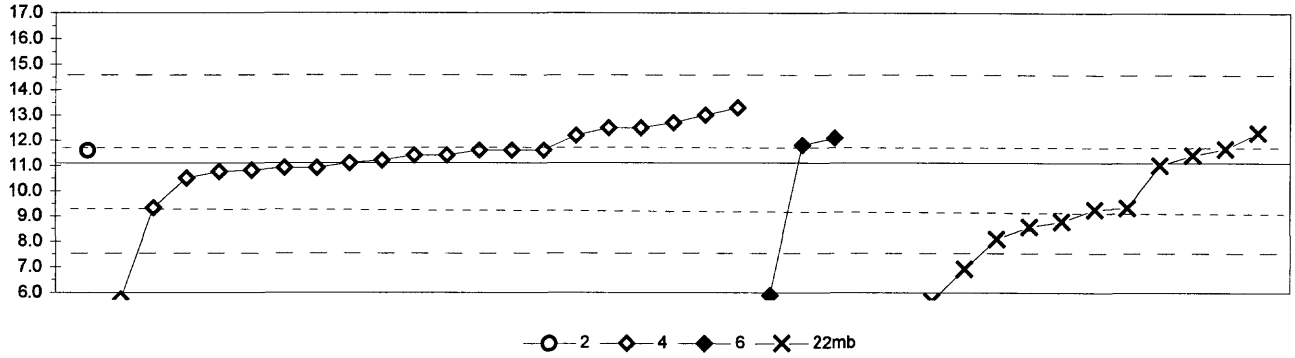
	3	2	6	1	0
N =	3	2	6	1	0
Minimum =	1.00	13.60	0.77	0.05	< 0.8
Maximum =	4.08	300.00	8.20		
Median =					
F-pseudosigma =					

N = 12
Hu =
HI =

Lab	Rating	Z-value	3	4	6	9	11na
1	NR		< 1				
3	NR			< 10			
13	NR		< 100				
16	NR	1.83			8.20		
18	NR		< 2				
26	NR						< 0.8
30	NR				< 2		
32	NR				< 6		
34	NR		< 1				
42	NR	0.00			1.50		
48	NR	0.00			1.50		
59	NR				< 2		
61	NR			< 2.5			
69	NR		< 5				
80	NR		< 2				
81	NR			< 2			
89	NR						< 2
111	NR		< 0.5				
113	NR		< 1				
119	NR	0.00			1.50		
127	NR		< 3				
134	NR	0.70	4.08				
138	NR				< 1		
141	NR		< 2				
142	NR	-0.20			0.77		
146	NR	3.30		13.60			
147	NR				<0.5		
151	NR	-0.03			1.40		
180	NR			< 53.2			
196	NR				< 0.2		
212	NR				< 0.5		
215	NR		<5				
221	NR	-0.14	1.00				
224	NR	81.51		300.00			
235	NR	-0.40				0.05	
241	NR		< 5				
247	NR				< 6		
255	NR			< 40			
256	NR						< 1
265	NR				< 1		
282	NR						< 5
284	NR	0.14	2.00				
289	NR		< 5				

Table 19. *Statistical summary of reported data for standard reference water sample GW-1 (ground-water constituents)--Continued*

SiO_2 (Silica) mg/L



2. AA: direct nitrous oxide 22mb. Color: molybdate blue
4. ICP
6. ICP/MS

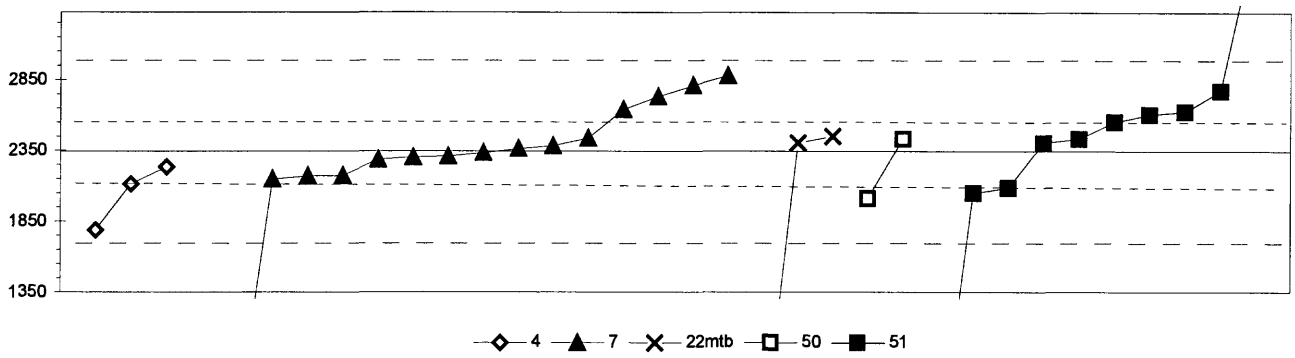
N =	1	20	3	13
Minimum =	11.6	5.7	5.9	1.2
Maximum =		13.3	12.1	12.3
Median =		11.4		8.8
F-pseudosigma =		1.1		3.0

MPV = 11.1
F-pseudosigma = 1.8
N = 37
Hu = 11.7
HI = 9.3

Lab	Rating	Z-value	2	4	6	22mb
1	4	0.17		11.4		
3	3	0.62		12.2		
11	4	0.28		11.6		
13	3	0.79		12.5		
26	4	-0.34		10.5		
32	4	0.39			11.8	
42	2	1.24		13.3		
43	4	0.06		11.2		
61	0	-3.02		5.7		
64	4	-0.17		10.8		
81	3	-0.99				9.3
83	4	-0.20		10.8		
89	4	-0.06				11.0
111	2	-1.04				9.3
113	2	-1.31				8.8
119	2	1.07		13.0		
127	4	0.17		11.4		
129	3	0.67				12.3
134	4	0.28		11.6		
138	2	-1.42				8.6
140	4	0.31				11.7
142	3	0.90		12.7		
147	4	0.00		11.1		
151	4	0.17				11.4
185	0	-5.59				1.2
190	0	-4.95				2.3
191	3	0.56			12.1	
204	0	-3.06				5.7
212	4	0.28		11.6		
215	3	-1.00		9.3		
241	4	0.28	11.6			
259	4	-0.11		10.9		
265	3	0.79		12.5		
274	1	-1.69				8.1
282	0	-2.93			5.9	
284	0	-2.36				6.9
289	4	-0.11		10.9		

Table 19. *Statistical summary of reported data for standard reference water sample GW-1 (ground-water constituents)--Continued*

SO_4 (Sulfate) mg/L



4. ICP
7. Ion chromatography
22mtb. Color: methyl thymol blue
50. Gravimetric
51. Turbidimetric

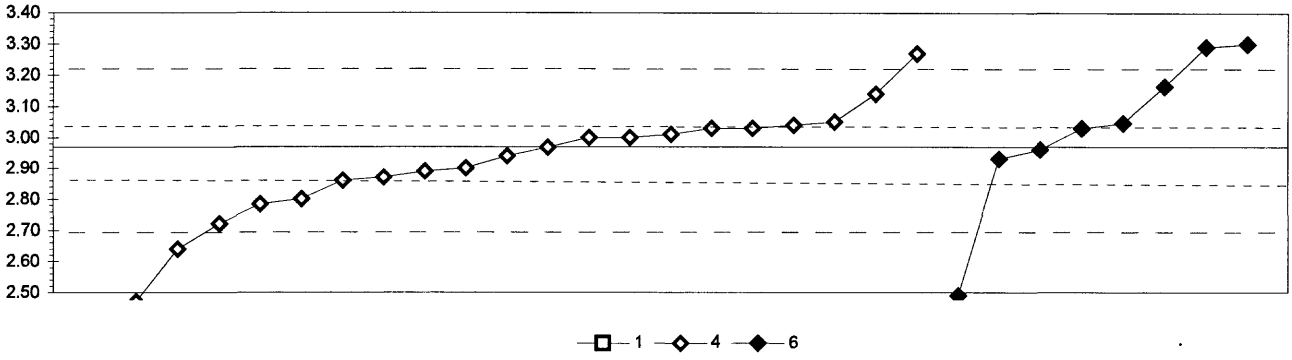
	4	7	22mtb	50	51
N =	3	16	3	2	10
Minimum =	1785	106	206	2009	89
Maximum =	2230	2877	2449	2430	3884
Median =		2318			2490
F-pseudosigma =		274			400

MPV = 2345
F-pseudosigma = 326
N = 34
Hu = 2550
HI = 2110

Lab	Rating	Z-value	4	7	22mtb	50	51
3	4	0.26				2430	
12	4	0.17			2400		
26	0	-6.86		106			
32	4	-0.05		2330			
36	3	0.63					2550
48	2	1.31					2771
61	0	-6.92					89
81	0	-6.56			206		
63	3	-0.72	2110				
89	4	-0.14		2300			
92	3	-0.80					2084
111	2	1.43		2810			
119	0	-5.98		393			
129	4	0.28		2436			
138	3	-0.54		2170			
140	4	0.17					2400
141	3	0.86					2624
158	1	-1.72	1785				
180	4	0.05		2360			
196	3	-0.55		2166			
215	0	4.72					3884
220	4	0.32			2449		
221	2	-1.03				2009	
235	4	-0.35	2230				
241	4	-0.12		2306			
247	3	-0.61		2145			
262	3	-0.91					2047
265	4	0.11		2380			
268	4	-0.19		2284			
274	3	0.79					2602
282	2	1.18		2730			
284	4	0.26					2430
290	1	1.63		2877			
292	3	0.90		2640			

Table 19. *Statistical summary of reported data for standard reference water sample GW-1 (ground-water constituents)--Continued*

Sr (Strontium) mg/L



1. AA: direct air
4. ICP
6. ICP/MS

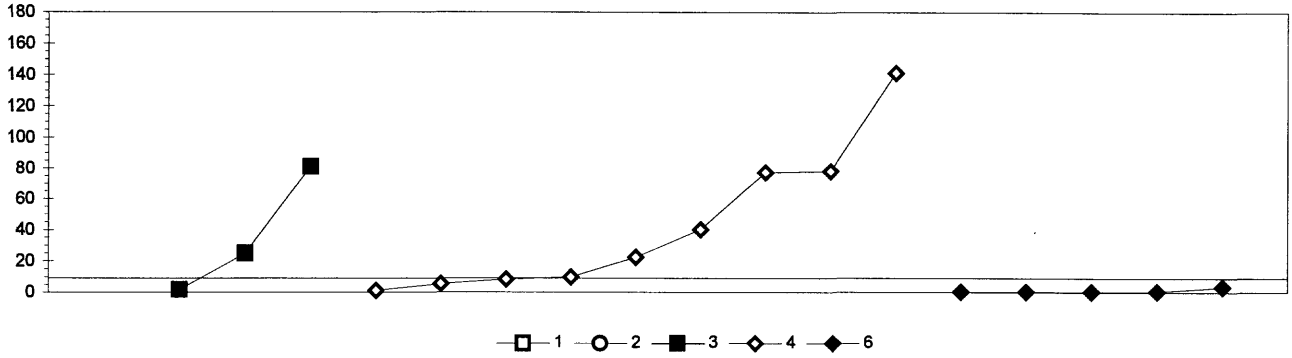
		1	4	6
N =		1	20	8
Minimum =		2.43	2.47	2.49
Maximum =			3.27	3.30
Median =			2.95	3.04
F-pseudosigma =			0.15	0.21

Lab	Rating	Z-value	1	4	6
1	4	-0.06			2.96
3	0	2.26		3.27	
11	4	-0.21		2.94	
16	2	-1.39		2.78	
18	3	-0.51		2.90	
32	0	2.49			3.30
42	4	0.00		2.97	
81	3	-0.58		2.89	
86	3	-0.73		2.87	
113	2	1.29		3.14	
119	0	2.41			3.29
127	4	0.46		3.03	
134	3	0.61		3.05	
138	4	0.31		3.01	
142	3	0.54		3.04	
147	3	-0.81		2.86	
151	0	-3.58			2.49
154	1	-1.86		2.72	
191	4	0.46			3.03
196	2	1.47			3.16
212	2	-1.26		2.80	
219	4	0.46		3.03	
235	0	-3.73		2.47	
247	3	0.58			3.05
259	4	0.24		3.00	
265	4	-0.28			2.93
273	4	0.24		3.00	
284	0	-4.03	2.43		
289	0	-2.46		2.64	

MPV =	2.97
F-pseudosigma =	0.13
N =	29
Hu =	3.04
Hl =	2.86

Table 19. *Statistical summary of reported data for standard reference water sample GW-1 (ground-water constituents)--Continued*

V (Vanadium) µg/L



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

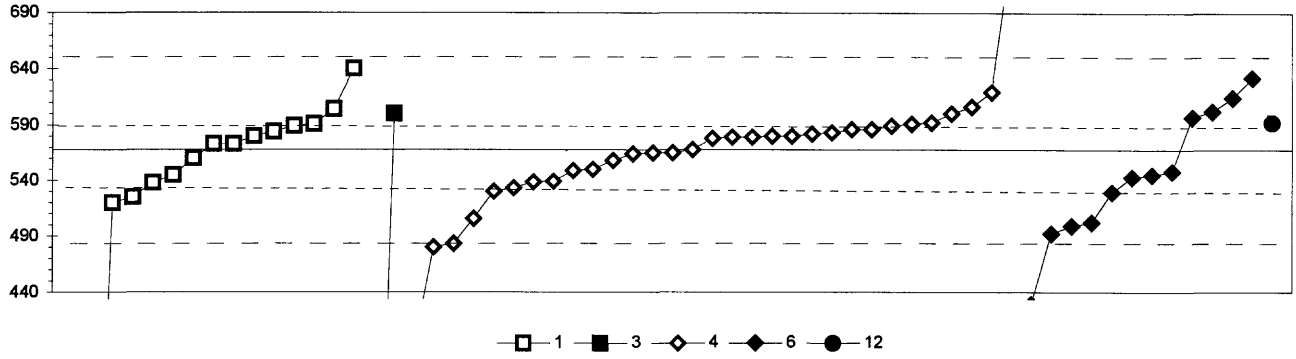
MPV = insufficient data
F-pseudosigma =

	1	0	3	9	5
N =				N =	18
Minimum =	421.0	< 100	1.7	1.1	0.2
Maximum =			80.9	141.0	3.3
Median =				Hu =	
F-pseudosigma =				Hl =	

Lab	Rating	Z-value	1	2	3	4	6
1	NR					< 30	
3	NR					< 5	
13	NR					< 50	
16	NR	-0.10					3.3
18	NR					< 5	
26	NR	1.21				77.0	
30	NR						< 10
32	NR						< 0.5
42	NR						< 5
46	NR	-0.01				8.4	
48	NR						< 4
61	NR	0.01				9.7	
81	NR					< 3	
86	NR	1.22				77.8	
89	NR	0.28			24.8		
111	NR				< 5		
119	NR	-0.15					0.4
127	NR					< 3	
134	NR				< 1		
138	NR	-0.14				1.1	
141	NR					< 10	
142	NR						< 2
146	NR					< 10	
147	NR	-0.16					0.2
154	NR	2.35				141.0	
180	NR					< 4.67	
196	NR	-0.15					0.3
212	NR						< 1
219	NR	-0.07				5.3	
220	NR	0.55				40.0	
224	NR	0.24				22.4	
235	NR					< 10	
241	NR	-0.13			1.7		
247	NR						< 1
255	NR					< 3	
257	NR			< 100			
265	NR	-0.16					0.3
282	NR						< 20
284	NR	7.33	421.0				
289	NR	1.28			80.9		

Table 19. *Statistical summary of reported data for standard reference water sample GW-1 (ground-water constituents)--Continued*

Zn (Zinc) µg/L



1. AA: direct air				6. ICP/MS			
3. AA: graphite furnace				12. Flame emission			
4. ICP							
		N =	15	2	31	12	1
		Minimum =	54	14	388	429	592
		Maximum =	640	600	749	632	
		Median =	573		578	544	
		F-pseudosigma =	41		31	73	

Lab	Rating	Z-value	1	3	4	6	12
1	1	-1.66				499	
3	3	0.51			589		
11	3	-0.70			539		
12	4	0.29			580		
13	4	0.43			586		
16	1	-1.83				492	
18	3	-0.92			530		
26	4	-0.07			565		
30	1	1.54				632	
32	3	-0.60				543	
36	0	-12.31	57				
42	3	0.92			606		
46	2	-1.50			506		
48	3	-0.55				545	
61	4	0.43			586		
69	3	0.55	591				
81	4	0.00			568		
83	4	-0.24			558		
86	4	0.26			579		
89	4	0.12	573				
92	0	-12.37	54				
119	4	0.29			580		
126	1	1.73	640				
127	4	0.36			583		
134	2	1.23			619		
138	4	-0.07			565		
140	4	-0.19	560				
141	4	0.34			582		
142	2	1.11				614	
146	4	-0.46			549		
147	0	-2.12			480		
149	3	0.51	589				
151	3	-0.94				529	
154	1	-2.05			483		
158	4	0.26			579		
180	3	0.55			591		
190	3	0.58					592
191	3	0.70				597	
196	3	0.82				602	
203	3	-0.55	545				
212	3	-0.84			533		
215	3	0.58			592		
219	4	-0.43			550		
220	4	0.24			578		
221	3	-0.72	538				
224	0	-4.34			388		
235	0	-3.35				429	
241	4	0.12	573				
247	1	-1.59				502	
255	3	-0.71			539		

MPV =	568
F-pseudosigma =	42
N =	61
Hu =	589
HI =	533

Lab	Rating	Z-value	1	3	4	6	12
256	3	0.87	604				
257	2	-1.16	520				
259	4	-0.10			564		
265	3	0.77			600		
273	0	4.36			749		
274	0	-13.35		14			
282	4	-0.48				548	
284	2	-1.04	525				
287	4	0.39	584				
289	3	0.77		600			
292	4	0.29	580				

Table 20. *Statistical summary of reported data for standard reference water sample Hg-24 (mercury)*

Definition of analytical methods, abbreviations, and symbols

Analytical methods

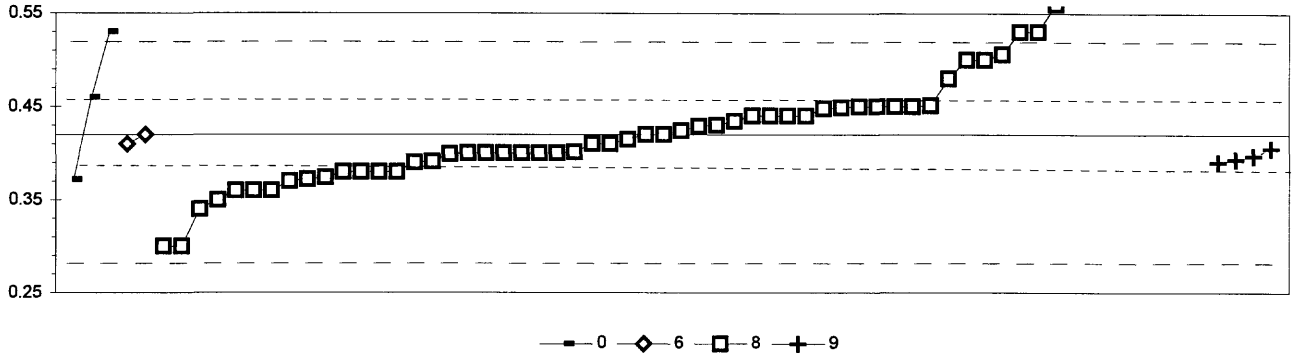
0 Other/Not reported
6 ICP/MS = inductively coupled plasma/mass spectrometry
8 AA: cold vapor = atomic absorption: cold vapor
9 Atomic flouorescence

Abbreviations and symbols

N =	number of samples
MPV =	most probable value
F-pseudosigma =	nonparametric statistic deviation
Hu =	upper hinge value
Hl =	lower hinge value
µg/L =	micrograms per liter
Lab =	laboratory code number
NR =	not rated, less than value reported
< =	less than

Table 20. *Statistical summary of reported data for standard reference water sample Hg-24 (mercury)--Continued*

Hg (Mercury) µg/L



0. Other			9. Atomic fluorescence			
6. ICP/MS						
8. AA: cold vapor						
		N =	3	2	59	4
		Minimum =	0.37	0.41	0.30	0.39
		Maximum =	0.53	0.42	44.20	0.41
		Median =			0.42	
		F-pseudosigma =			0.06	

MPV =	0.42
F-pseudosigma =	0.05
N =	68
Hu =	0.46
Hl =	0.39

Lab	Rating	Z-value	0	6	8	9
1	3	-0.83			0.38	
3	0	-2.49			0.30	
10	4	0.42			0.44	
11	2	-1.25			0.36	
12	0	-4.57			< 0.2	
13	0	2.91			0.56	
18	3	-0.83			0.38	
26	4	0.42			0.44	
30	0	3.74			0.60	
32	0	2.28	0.53			
34.1	4	-0.31				0.41
34.2	1	-1.66			0.34	
36	0	2.28			0.53	
39	3	0.62			0.45	
42	3	0.64			0.45	
46	4	-0.44			0.40	
48	4	0.42			0.44	
50	2	-1.25			0.36	
51	4	0.21			0.43	
55	4	0.29			0.43	
59	2	-1.45			0.35	
61	0	-2.49			0.30	
68	2	-1.25			0.36	
69	3	-0.62			0.39	
70	4	-0.39			0.40	
76	4	-0.21		0.41		
81	4	-0.42			0.40	
86	3	-0.56				0.39
87	0	3.74			0.60	
89	4	-0.42			0.40	
96	1	1.78			0.51	
97	1	1.66			0.50	
105	3	0.60			0.45	
108	0	5.81			0.70	
109	3	-0.83			0.38	
111	0	908.60			44.20	
113	4	0.00			0.42	
119	4	-0.21			0.41	
127	3	-1.00			0.37	
133	3	0.83	0.46			
134	4	0.08			0.42	
138	2	-1.04			0.37	
141	3	0.62			0.45	
142	3	0.58			0.45	
145	0	3.94			0.61	
146	3	-0.60			0.39	
147	3	-0.62				0.39
149	4	-0.42			0.40	
193	3	-0.83			0.38	
198	4	-0.10			0.42	
212	3	0.62			0.45	
213	4	-0.42			0.40	
215	2	1.25			0.48	
219	4	-0.42			0.40	
220	4	-0.21			0.41	
221	3	0.62			0.45	
234	0	79.49			4.25	
235	4	0.42			0.44	
241	4	0.00			0.42	
245	4	-0.48				0.40
247	4	0.19			0.43	
252	0	2.28			0.53	
255	3	-0.95			0.37	
256	0	13.28			1.06	
257	0	95.05			5.00	
259	4	-0.42			0.40	
265	4	0.00		0.42		
282	NR				< 1	
284	1	1.66			0.50	
289	3	-1.00	0.37			
292	NR				< 0.6	

Table 21. *Most probable values for constituents and properties in standard reference samples distributed in April 1997*

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

T-147 (trace constituents)

Analyte	MPV	F-pseudosigma	N	Analyte	MPV	F-pseudosigma	N
Ag	7.60 µg/L	0.75	65	Mg	8.20 mg/L	0.30	100
Al	14.0 µg/L	7.5	48	Mn	17.2 µg/L	1.4	91
As	2.39 µg/L	0.67	58	Mo	11.8 µg/L	1.3	49
B	50.0 µg/L	5.8	41	Na	52.6 mg/L	2.2	95
Ba	73.0 µg/L	3.2	75	Ni	13.6 µg/L	1.5	70
Be	16.0 µg/L	1.1	71	Pb	13.8 µg/L	1.1	83
Ca	41.1 mg/L	1.7	99	Sb	10.5 µg/L	0.9	49
Cd	15.9 µg/L	1.2	94	Se	10.1 µg/L	1.8	66
Co	insufficient data		16	SiO_2	24.0 mg/L	1.4	54
Cr	12.8 µg/L	1.2	83	Sr	313 µg/L	13	49
Cu	11.4 µg/L	1.3	89	Tl	20.0 µg/L	2.1	49
Fe	8.4 µg/L	6.4	49	U	3.21 µg/L	0.59	9
K	3.52 mg/L	0.19	88	V	15.2 µg/L	1.4	53
Li	18.0 µg/L	1.3	35	Zn	14.0 µg/L	2.2	72

T-149 (trace constituents)

Analyte	MPV	F-pseudosigma	N	Analyte	MPV	F-pseudosigma	N
Ag	insufficient data		21	Mg	13.1 mg/L	0.7	98
Al	35.5 µg/L	9.0	54	Mn	11.8 µg/L	1.0	83
As	1.0 µg/L	0.6	33	Mo	1.25 µg/L	0.41	25
B	128 µg/L	10	39	Na	42.8 mg/L	2.7	95
Ba	42.5 µg/L	2.5	66	Ni	31.2 µg/L	2.2	80
Be	insufficient data		10	Pb	8.84 µg/L	1.17	81
Ca	42.3 mg/L	1.9	97	Sb	21.1 µg/L	2.4	51
Cd	2.18 µg/L	0.30	77	Se	2.10 µg/L	0.80	41
Co	insufficient data		17	SiO_2	11.8 mg/L	0.7	54
Cr	48.8 µg/L	2.9	85	Sr	331 µg/L	17	44
Cu	8.00 µg/L	1.21	79	Tl	31.4 µg/L	4.0	45
Fe	70.0 µg/L	11.5	89	U	2.71 µg/L	0.43	8
K	2.00 mg/L	0.14	87	V	31.0 µg/L	2.8	54
Li	44.2 µg/L	3.2	32	Zn	5.80 µg/L	2.15	56

M-142 (major constituents)

Analyte	MPV	F-pseudosigma	N	Analyte	MPV	F-pseudosigma	N
Alkalinity	180 mg/L	9	103	Na	153 mg/L	7	106
B	121 µg/L	10	45	total P	0.02 mg/L	0.01	56
Ca	67.6 mg/L	3.4	112	pH	8.54 units	0.43	113
Cl	132 mg/L	7	110	SiO_2	7.67 mg/L	0.50	70
DSRD	746 mg/L	37	70	SO_4	231 mg/L	12	101
F	0.460 mg/L	0.054	78	Sp Cond	1200 µS/cm	60	109
K	5.72 mg/L	0.39	99	Sr	646 µg/L	32	42
Mg	25.3 mg/L	1.3	111	V	22.7 µg/L	3.7	45

N-53 (nutrient constituents)

Analyte	MPV	F-pseudosigma	N
NH_3 as N	3.50 mg/L	0.17	79
NH_3+OrgN as N	3.95 mg/L	0.28	58
NO_3+NO_2 as N	2.57 mg/L	0.13	88
Total P as P	2.32 mg/L	0.11	76
PO_4 as P	2.12 mg/L	0.11	75

N-54 (nutrient constituents)

Analyte	MPV	F-pseudosigma	N
NH_3 as N	1.00 mg/L	0.08	79
NH_3+OrgN as N	1.26 mg/L	0.13	61
NO_3+NO_2 as N	1.17 mg/L	0.09	90
total P as P	1.78 mg/L	0.09	74
PO_4 as P	1.72 mg/L	0.09	78

P-28 (low ionic strength constituents)

Analyte	MPV	F-pseudosigma	N	Analyte	MPV	F-pseudosigma	N
Acidity	2.5 mg/L	1.1	20	Mg	0.883 mg/L	0.044	57
Ca	1.64 mg/L	0.10	57	Na	3.25 mg/L	0.16	57
Cl	3.30 mg/L	0.26	60	pH	6.75 units	0.21	60
F	0.06 mg/L	0.03	28	PO_4 as P	insufficient data		13
I	insufficient data		3	SO_4	6.14 mg/L	0.25	61
K	0.14 mg/L	0.04	43	Sp Cond	36.6 µS/cm	1.8	55

GW-1 (ground-water constituents)

Analyte	MPV	F-pseudosigma	N	Analyte	MPV	F-pseudosigma	N
Ag	insufficient data		18	Li	225 µg/L	33	22
Al	538 µg/L	67	55	Mg	200 mg/L	10	67
As	1.0 µg/L	0.7	25	Mn	19.7 mg/L	1.1	65
B	349 µg/L	76	31	Mo	insufficient data		16
Ba	17.7 µg/L	2.3	48	Na	12.3 mg/L	0.9	69
Be	6.00 µg/L	1.17	45	Ni	428 µg/L	30	60
Ca	357 mg/L	23	68	Pb	1.21 µg/L	0.52	29
Cd	insufficient data		26	Sb	insufficient data		13
Cl	50.3 mg/L	9.7	30	Se	insufficient data		12
Co	0.20 µg/L	0.01	42	SiO_2	11.1 mg/L	1.8	37
Cr	38.3 µg/L	5.9	57	SO4	2345 mg/L	326	34
Cu	25.0 µg/L	7.6	57	Sr	2.97 mg/L	0.13	29
Fe	341 mg/L	26	63	V	insufficient data		18
K	79.0 mg/L	4.5	67	Zn	568 µg/L	42	61

Hg-24 (mercury)

Analyte	MPV	F-pseudosigma	N
Hg	0.42 µg/L	0.05	68